

Mk4/DiFX fourfit 3.25 rev 0

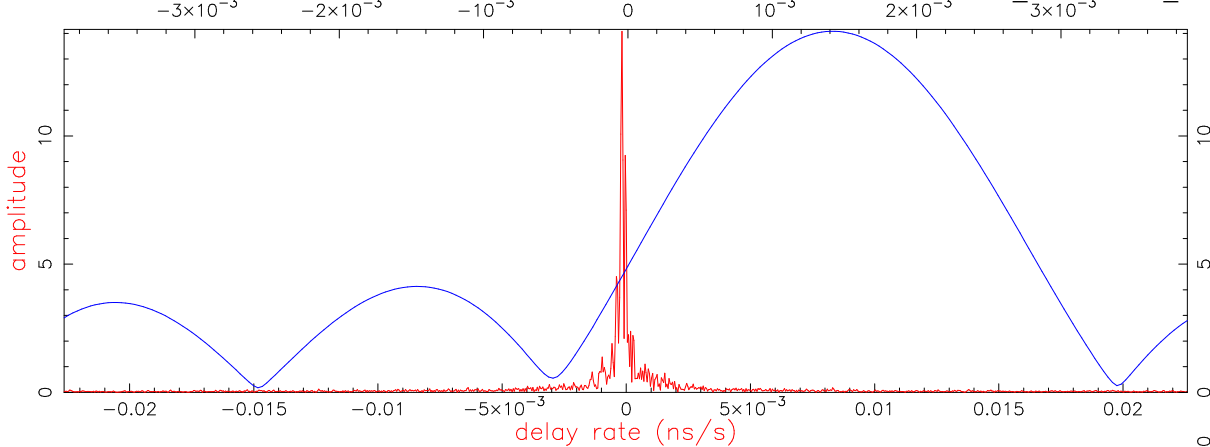
aux01

3C120.3N2DRC, No0552, bp

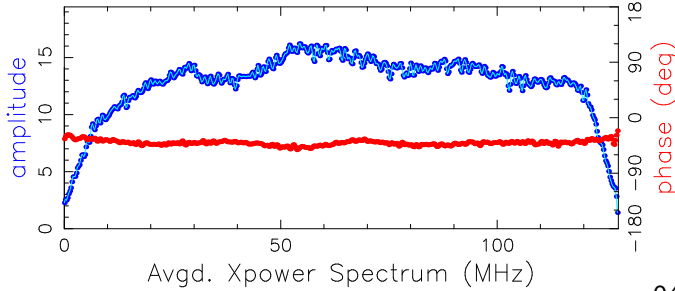
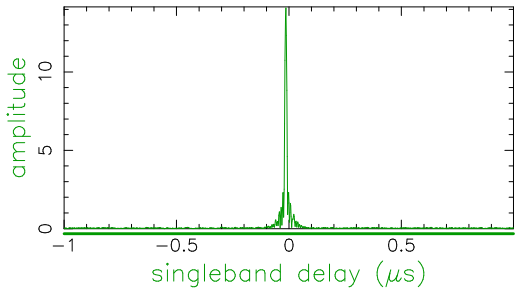
VLBA_BR - VLBA_PT, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 6

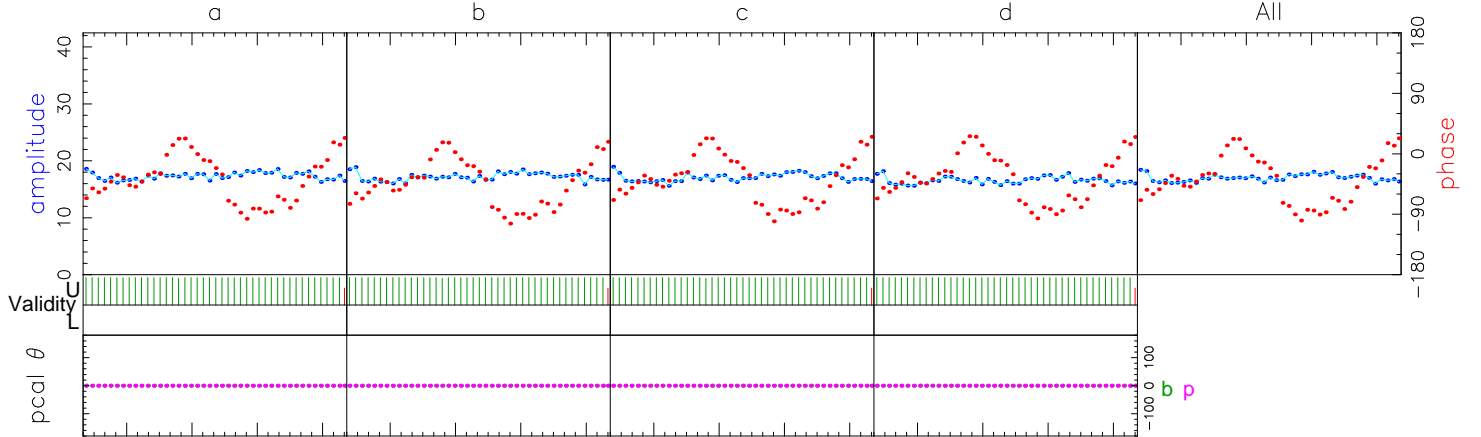


SNR 599.5
 Int time 239.831
 Amp 14.158
 Phase -242.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.014160
 MBD 0.001396
 Fringe rate (Hz)
 -0.008258
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-38.4	-45.3	-39.2	-36.9	Phase	-40.0
	14.4	14.3	14.1	13.7	Ampl.	14.1
	505.6	505.7	505.9	505.9	Sbd box	505.7
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

Group delay (usec) (SBD)	-3.66411821244E+03	Apriori delay (usec)	-3.66410398317E+03	Resid mbdelay (usec)	1.39573E-03	+/- 1.9E-06
Sband delay (usec)	-3.66411814354E+03	Apriori clock (usec)	-1.0636177E+00	Resid sbdelay (usec)	-1.41604E-02	+/- 7.2E-06
Phase delay (usec)	-3.66410398574E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	-2.57274E-06	+/- 1.2E-08
Delay rate (us/s)	1.65612402397E-01	Apriori rate (us/s)	1.65612593824E-01	Resid rate (us/s)	-1.91427E-07	+/- 8.9E-11
Total phase (deg)	-182.6	Apriori accel (us/s/s)	2.14016995146E-05	Resid phase (deg)	-242.5	+/- 0.2

ph/seg (deg)	RMS 34.6	Theor. 0.6	Amplitude Search (1024X16)	14.158 +/- 0.024	13.475	13.475	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	20.7	1.1	Interp.	0.000	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)	4.5	0.2	Inc. seg. avg.	17.019	17.019	17.019	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	2.0	0.3	Inc. frq. avg.	14.103	14.103	14.103	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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -466.719 879.058 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bp.Q.12.3N2DRC

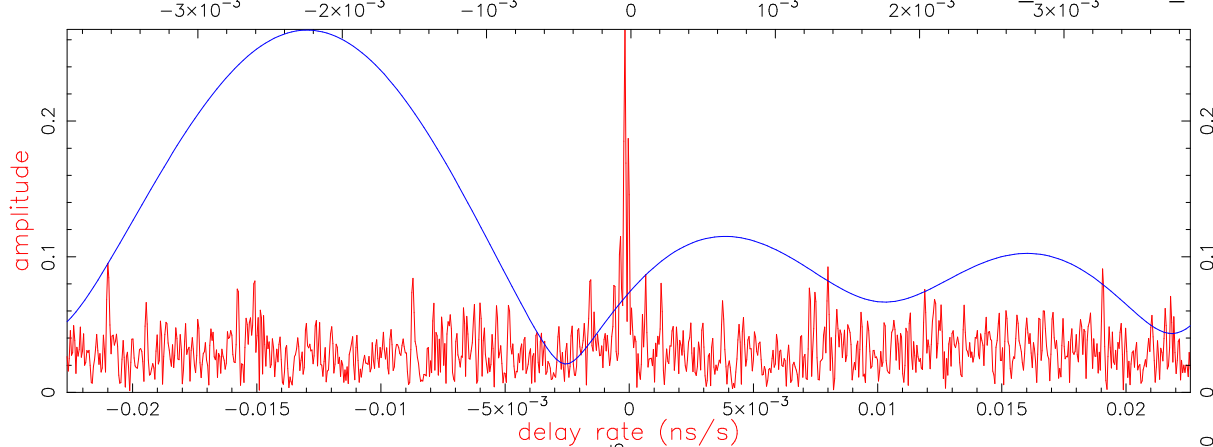
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bp

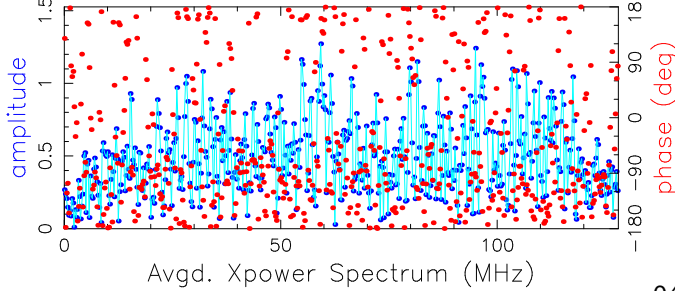
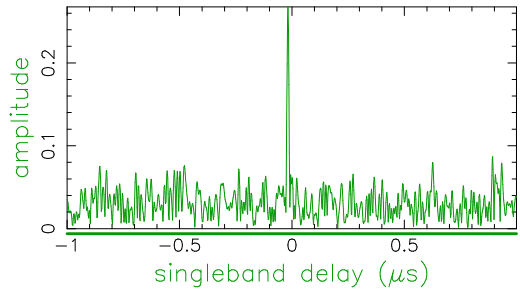
VLBA_BR - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



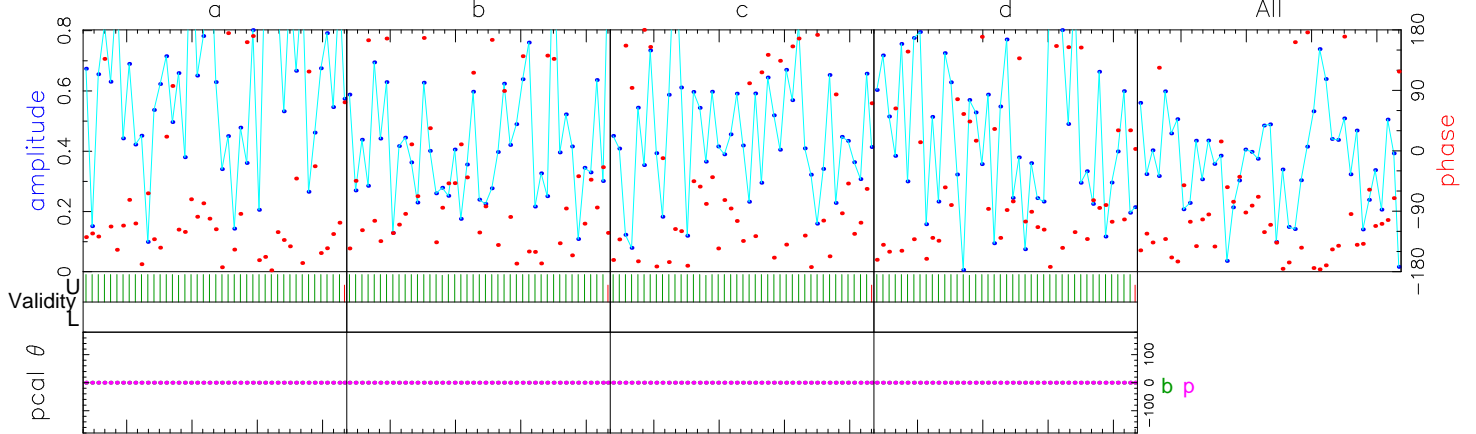
Fringe quality 9

SNR 11.3
 Int time 239.831
 Amp 0.268
 Phase -334.7
 PFD 2.2e-21
 Delays (us)
 SBD -0.017876
 MBD -0.002244
 Fringe rate (Hz)
 -0.008458
 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
	-130.1	-135.8	-137.5	-126.8	Phase	-132.2
	0.4	0.2	0.3	0.2	Ampl.	0.3
	504.4	503.9	503.3	502.9	Sbd box	503.8
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-3.66412185228E+03	Apriori delay (usec)	-3.66410398317E+03	Resid mbdelay (usec)	-2.24411E-03	+/-	9.8E-05
Sband delay (usec)	-3.66412185904E+03	Apriori clock (usec)	-1.0636177E+00	Resid sbdelay (usec)	-1.78759E-02	+/-	3.8E-04
Phase delay (usec)	-3.66410399168E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	-8.51315E-06	+/-	6.5E-07
Delay rate (us/s)	1.65612397770E-01	Apriori rate (us/s)	1.65612593824E-01	Resid rate (us/s)	-1.96054E-07	+/-	4.7E-09
Total phase (deg)	-274.9	Apriori accel (us/s/s)	2.14016995146E-05	Resid phase (deg)	-334.7	+/-	10.1

ph/seg (deg)	50.9	Theor.	33.2	Amplitude	0.268 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.1	Search (1024X16)	0.241	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	6.1	Inc. seg. avg.	0.314	Inc. frq. avg.	0.264	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	33.1	Inc. frq. avg.	0.264			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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -466.719 879.058 simultaneous interpolator

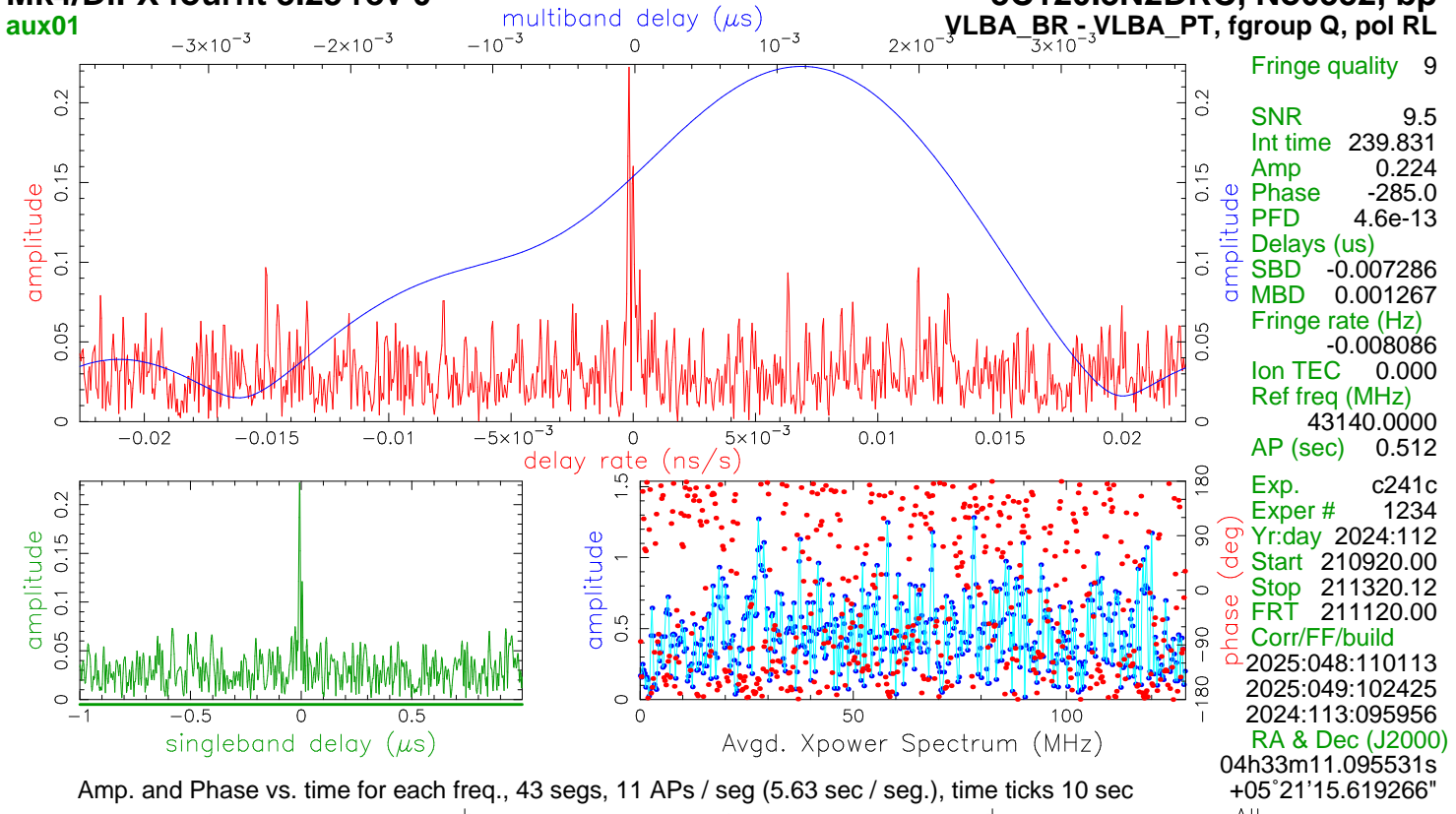
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bp.Q.21.3N2DRC

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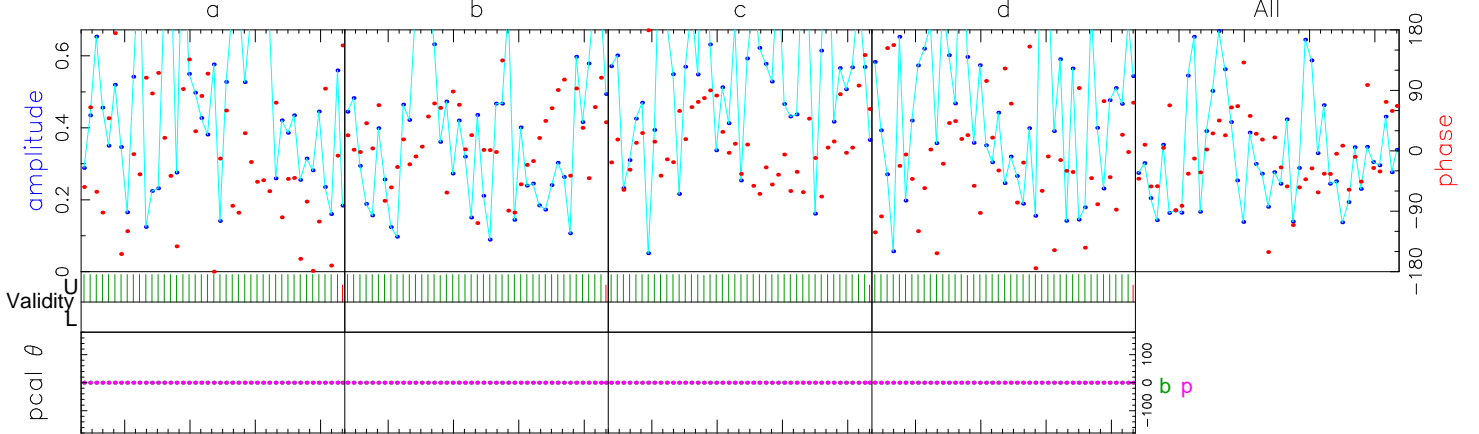
aux01

3C120.3N2DRC, No0552, bp

VLBA_BR - VLBA_PT, 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
	-30.6	23.1	4.7	-26.6	Phase	-3.7
	0.1	0.2	0.4	0.2	Ampl.	0.2
	511.6	514.5	509.2	507.7	Sbd box	509.3
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-3.66411052906E+03	Apriori delay (usec)	-3.66410398317E+03	Resid mbdelay (usec)	1.26660E-03	+/-	1.2E-04
Sband delay (usec)	-3.66411126942E+03	Apriori clock (usec)	-1.0636177E+00	Resid sbdelay (usec)	-7.28625E-03	+/-	4.5E-04
Phase delay (usec)	-3.66410398341E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	-2.40580E-07	+/-	7.8E-07
Delay rate (us/s)	1.65612406389E-01	Apriori rate (us/s)	1.65612593824E-01	Resid rate (us/s)	-1.87435E-07	+/-	5.6E-09
Total phase (deg)		Apriori accel (us/s/s)	2.14016995146E-05	Resid phase (deg)	-285.0	+/-	12.1

ph/seg (deg)	RMS	Theor.	Amplitude	0.224 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	56.9	39.6	Search (1024X16)	0.217	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	79.9	69.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	31.9	12.1	Inc. seg. avg.	0.263	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023	
	35.9	21.1	Inc. frq. avg.	0.232	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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -466.719 879.058 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bp.Q.29.3N2DRC

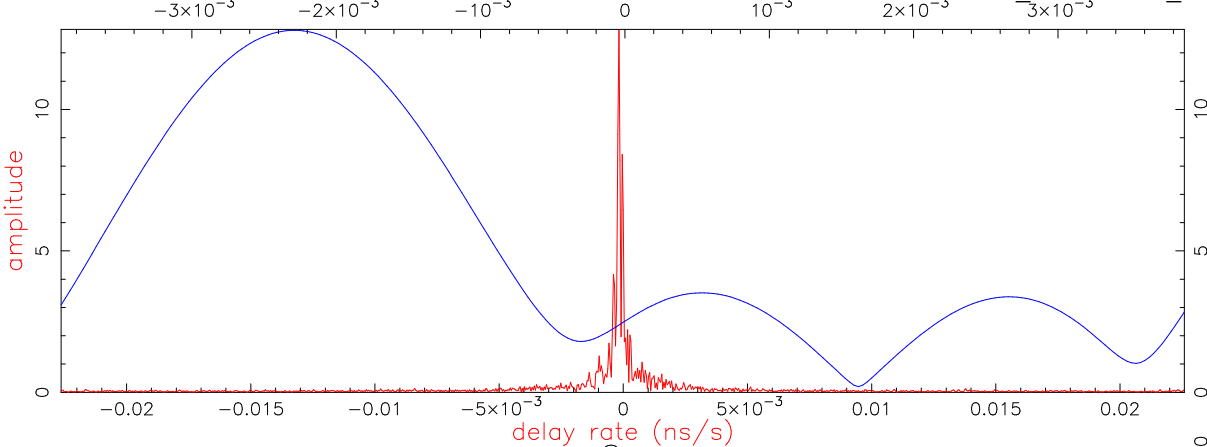
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bp

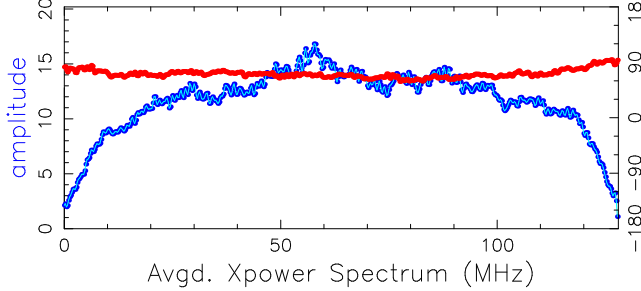
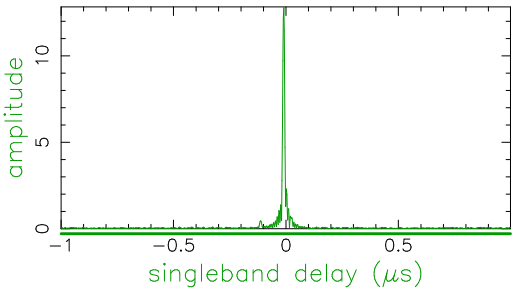
VLBA_BR - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)



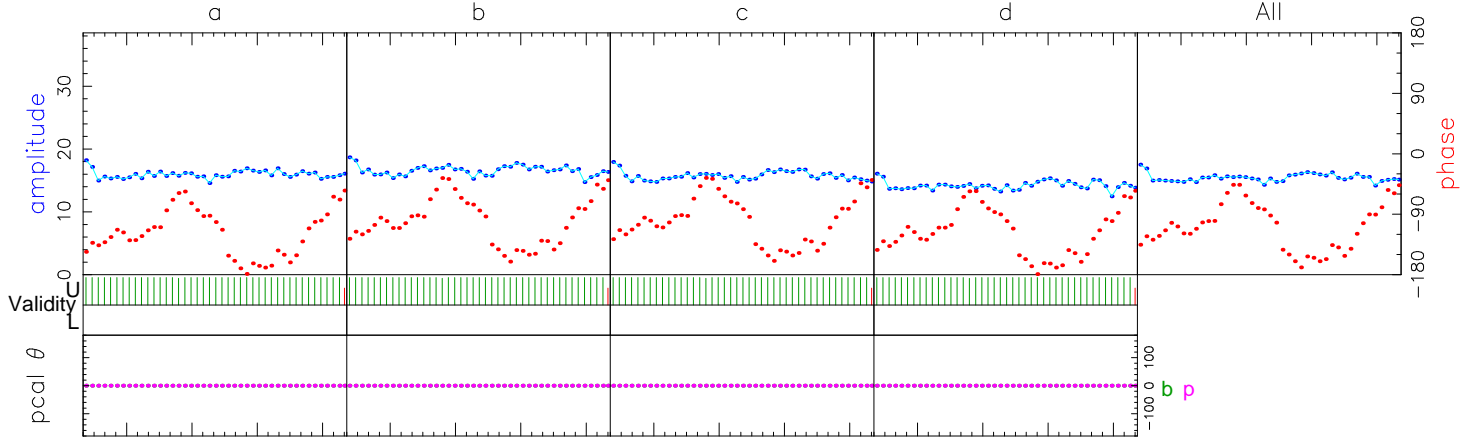
Fringe quality 5

SNR 543.4
 Int time 239.831
 Amp 12.831
 Phase -31.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.010114
 MBD -0.002308
 Fringe rate (Hz)
 -0.008284
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
b	1000	1000	1000	1000		
p	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000		
p	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-3.66411410416E+03	Apriori delay (usec)	-3.66410398317E+03	Resid mbdelay (usec)	-2.30849E-03	+/-	2.0E-06
Sband delay (usec)	-3.66411409692E+03	Apriori clock (usec)	-1.0636177E+00	Resid sbdelay (usec)	-1.01137E-02	+/-	7.9E-06
Phase delay (usec)	-3.66410399024E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	-7.07255E-06	+/-	1.4E-08
Delay rate (us/s)	1.65612401797E-01	Apriori rate (us/s)	1.65612593824E-01	Resid rate (us/s)	-1.92027E-07	+/-	9.8E-11
Total phase (deg)	-331.3	Apriori accel (us/s/s)	2.14016995146E-05	Resid phase (deg)	-31.1	+/-	0.2

ph/seg (deg)	RMS	Theor.	Amplitude	12.831 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	34.5	0.7	Search (1024X16)	12.065	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	21.0	1.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	12.4	0.2	Inc. seg. avg.	15.456	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
	5.9	0.4	Inc. frq. avg.	12.950	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 150.6 el 43.7 pa -19.0 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -466.719 879.058 simultaneous interpolator

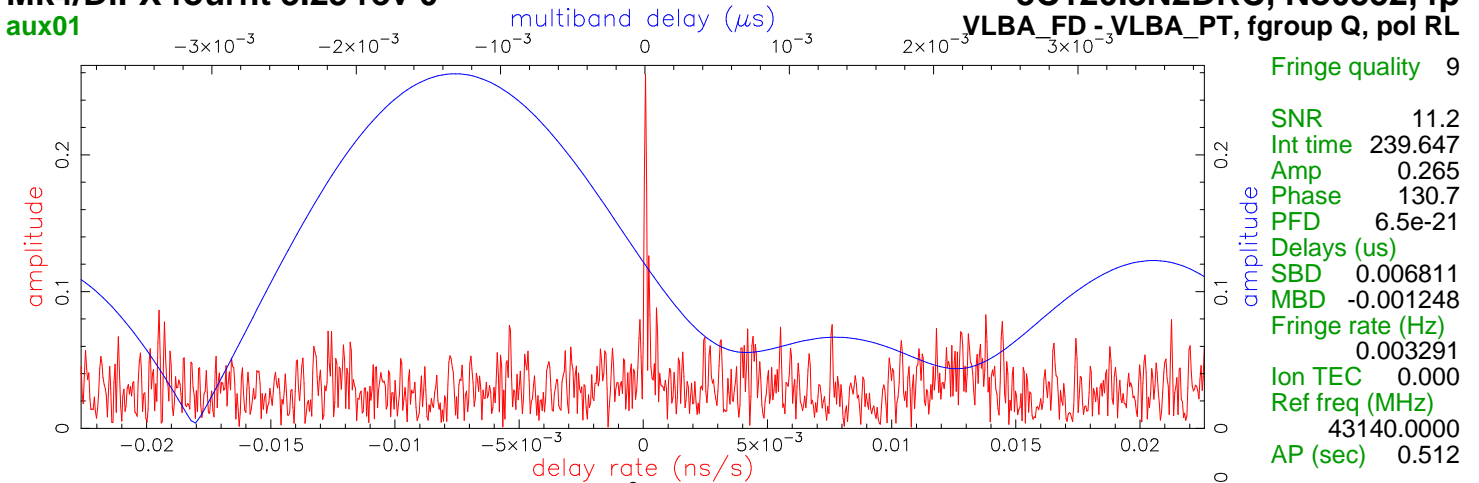
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bp.Q.4.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

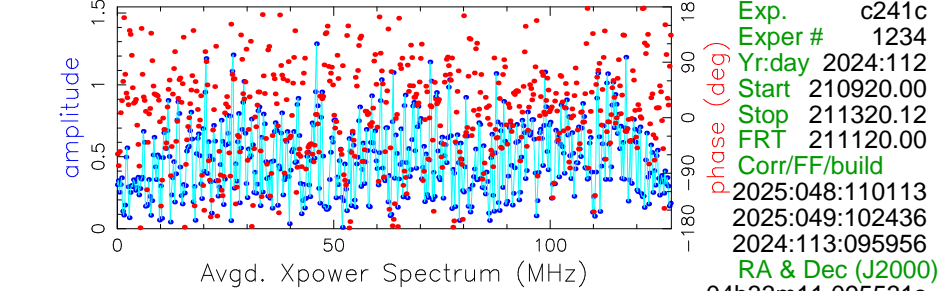
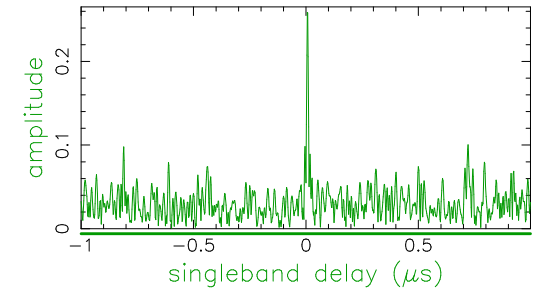
3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol RL



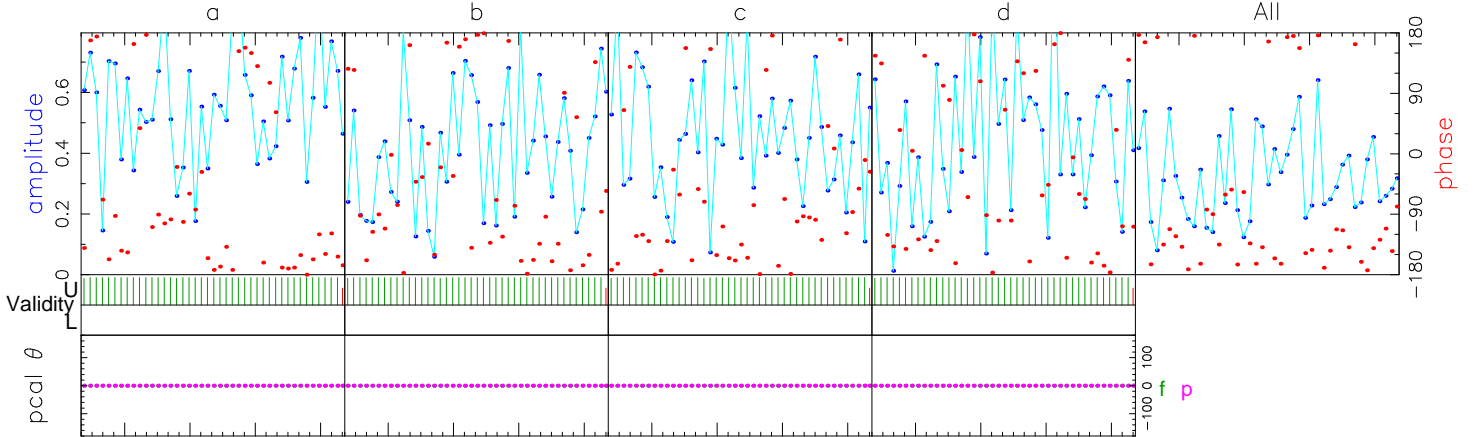
Fringe quality 9

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



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

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



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

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

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

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

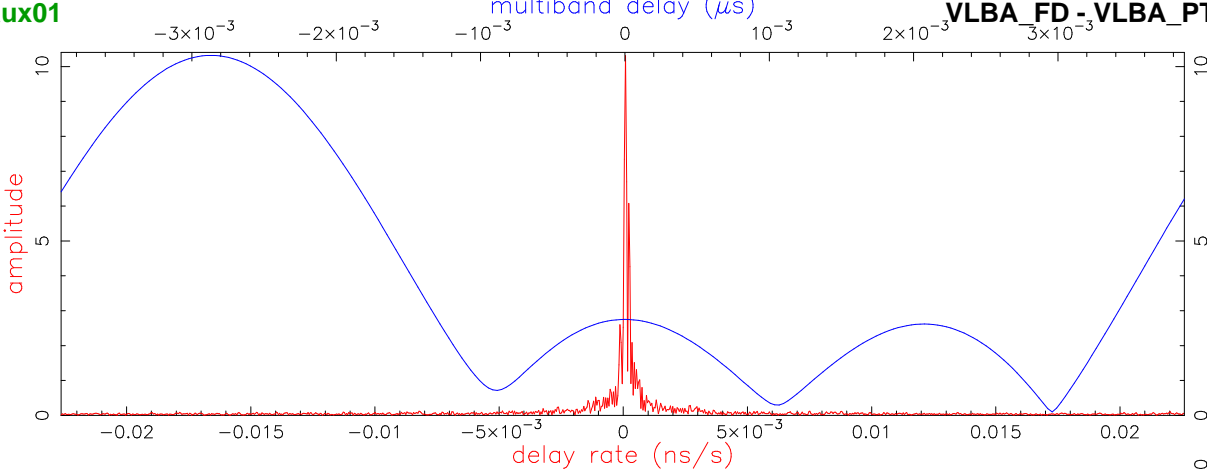
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fp.Q.107.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

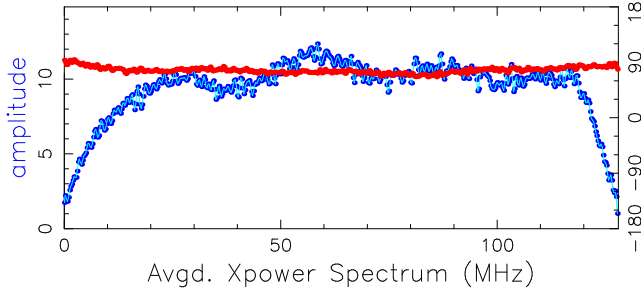
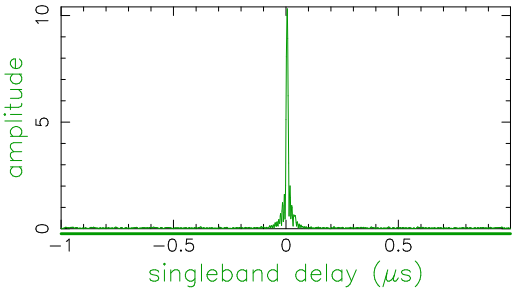
3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol LL



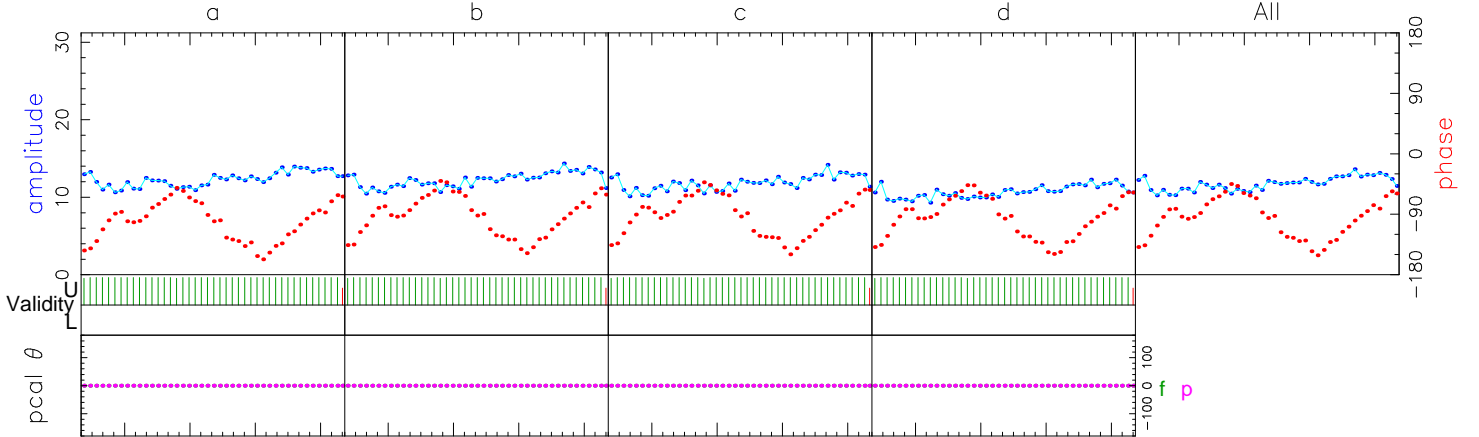
Fringe quality 7

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



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

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



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

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

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

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

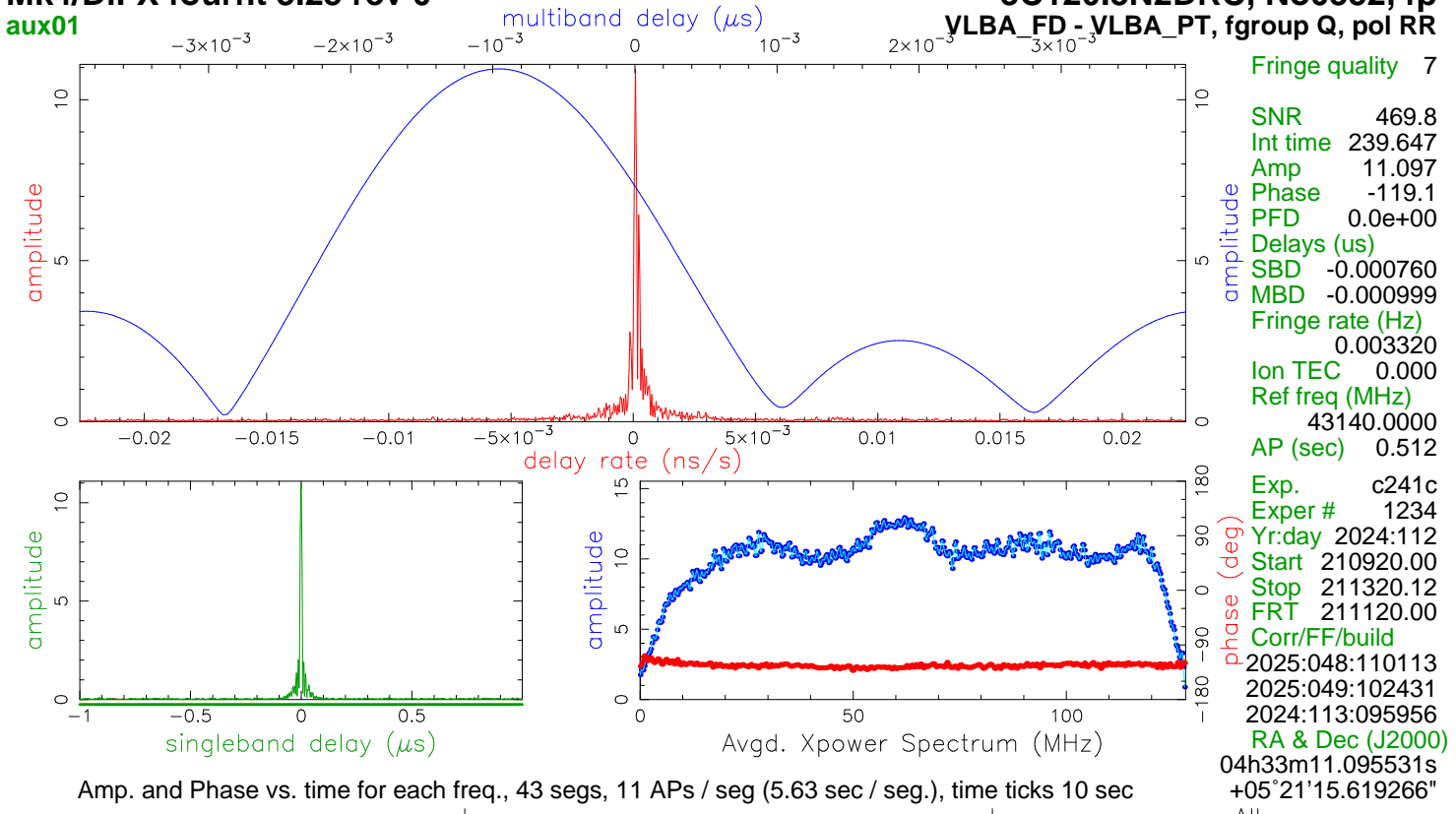
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fp.Q.44.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

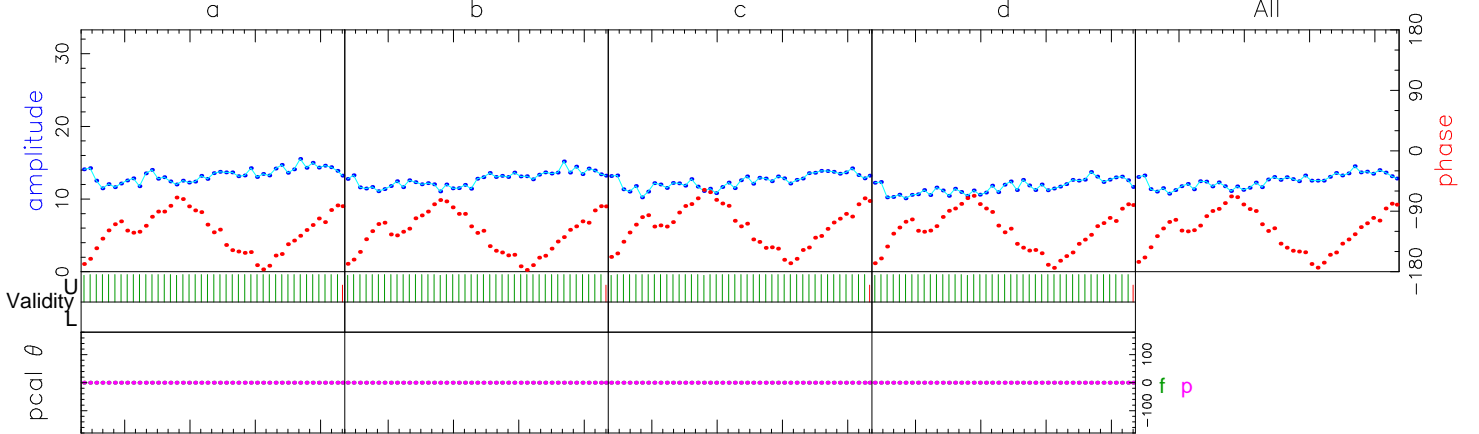
aux01

3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol RR



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



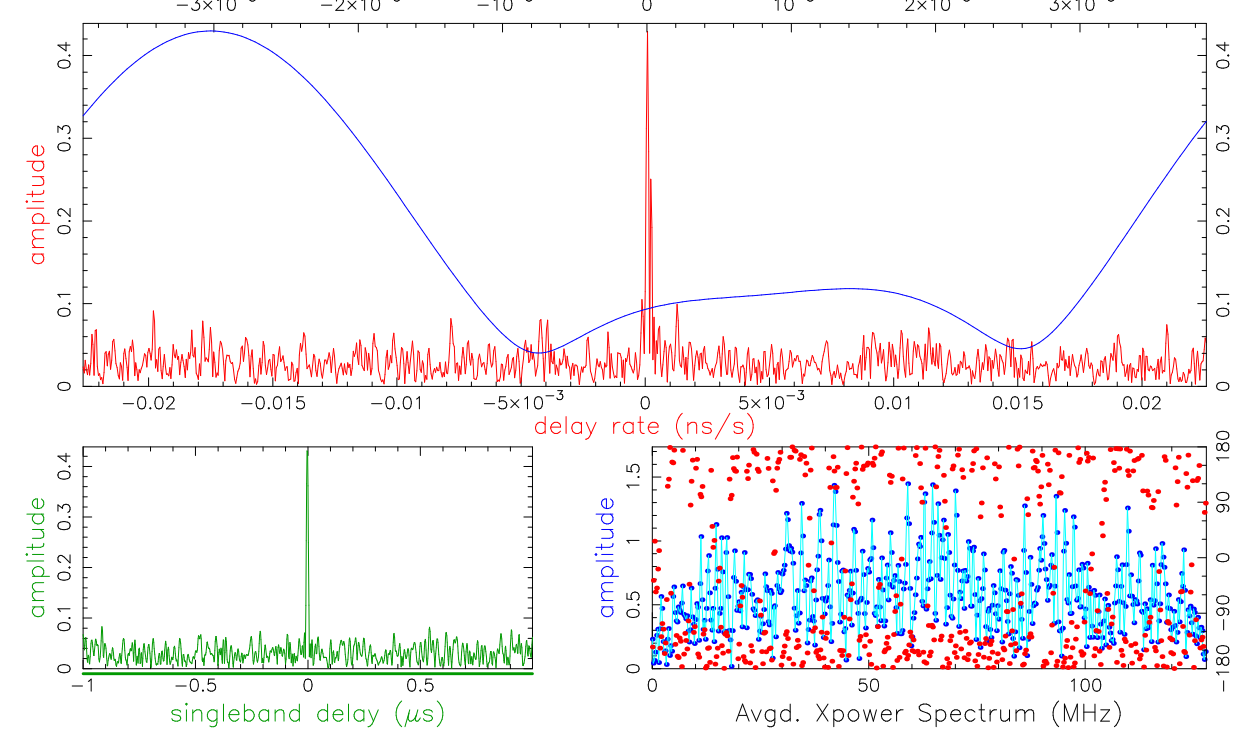
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All	
U/L	469/0	469/0	469/0	469/0			
f	1000	1000	1000	1000			
p	1000	1000	1000	1000			
f:p	0:0	0:0	0:0	0:0			
fp	0:0	0:0	0:0	0:0			
f	1000	1000	1000	1000			
p	1000	1000	1000	1000			
f	Q00UR	Q01UR	Q02UR	Q03UR			
p	Q00UR	Q01UR	Q02UR	Q03UR			
Group delay (usec) (SBD)	7.49043026173E+02			7.49044025491E+02	Resid mbdelay (usec)	-9.99318E-04 +/- 2.4E-06	
Sband delay (usec)	7.49043265366E+02			-5.6673489E+00	Resid sbdelay (usec)	-7.60125E-04 +/- 9.2E-06	
Phase delay (usec)	7.49044017823E+02			-3.2847705E-07	Resid phdelay (usec)	-7.66835E-06 +/- 1.6E-08	
Delay rate (us/s)	-8.85450841417E-02			-8.85451610963E-02	Resid rate (us/s)	7.69547E-08 +/- 1.1E-10	
Total phase (deg)		-25.6		-4.58695806463E-06	Resid phase (deg)	-119.1 +/- 0.2	
ph/seg (deg)	29.2	0.8	Search (1024X16)	10.669	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	15.1	1.4	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	5.8	0.2	Inc. seg. avg.	12.500	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	5.0	0.4	Inc. frq. avg.	10.978	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023	
f: az 168.1 el 64.3 pa -9.7		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) 253.003 -255.431	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/fp..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/fp.Q.61.3N2DRC			simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fp

VLBA_FD - VLBA_PT, fgroup Q, pol LR

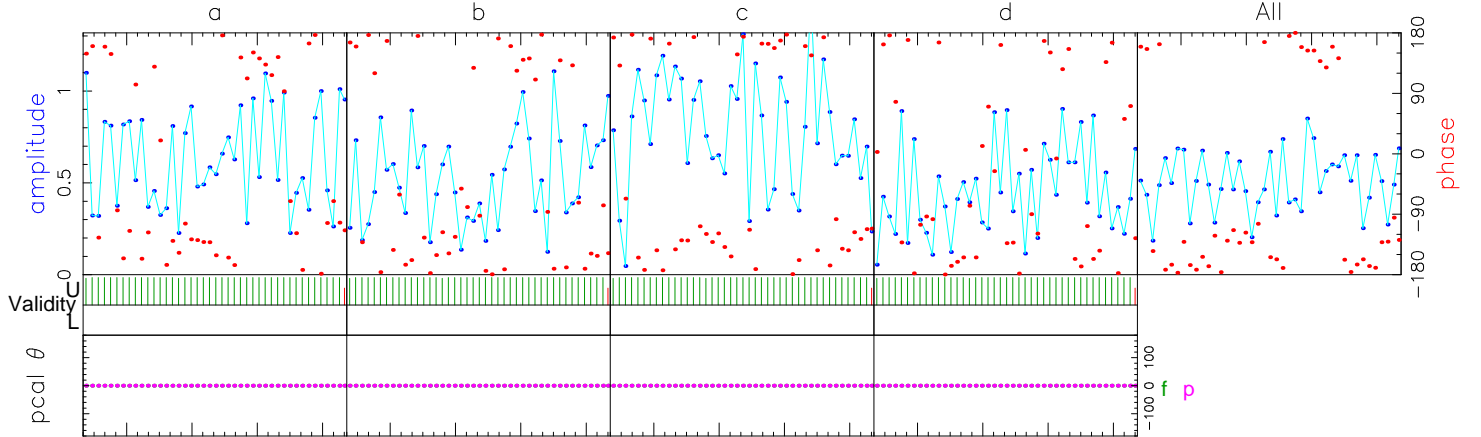


Fringe quality 9

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

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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-171.8	-170.7	-163.8	-165.7	Phase	-167.5
	0.4	0.4	0.7	0.3	Ampl.	0.4
	511.5	511.2	511.4	512.1	Sbd box	511.5
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	7.49040938142E+02		Apriori delay (usec)	7.49044025491E+02	Resid mbdelay (usec)	-3.08735E-03 +/- 6.0E-05
Sband delay (usec)	7.49041043116E+02		Apriori clock (usec)	-5.6673489E+00	Resid sbdelay (usec)	-2.98237E-03 +/- 2.3E-04
Phase delay (usec)	7.49044014705E+02		Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-1.07863E-05 +/- 4.0E-07
Delay rate (us/s)	-8.85450844784E-02		Apriori rate (us/s)	-8.85451610963E-02	Resid rate (us/s)	7.66179E-08 +/- 2.9E-09
Total phase (deg)		-74.0	Apriori accel (us/s/s)	-4.58695806463E-06	Resid phase (deg)	-167.5 +/- 6.2
RMS	33.1	20.2	Amplitude	0.439 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	33.1	20.2	Search (1024X16)	0.417	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	38.7	35.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	4.8	6.2	Inc. seg. avg.	0.477	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	34.7	10.8	Inc. frq. avg.	0.428	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 168.1 el 64.3 pa -9.7		p: az 161.3 el 59.8 pa -15.0		u, v (fr/asec) 253.003 -255.431		simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552//fp..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552//fp.Q.84.3N2DRC		

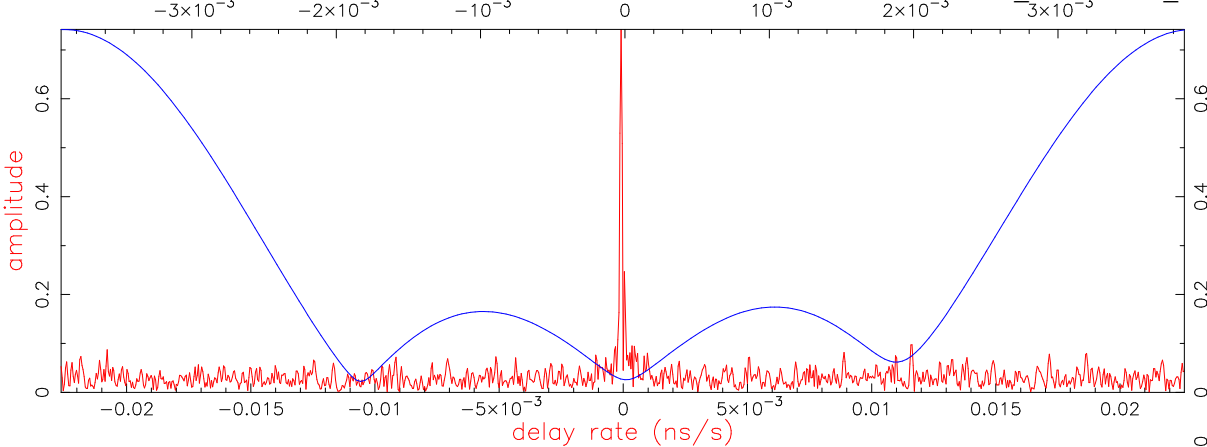
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kp

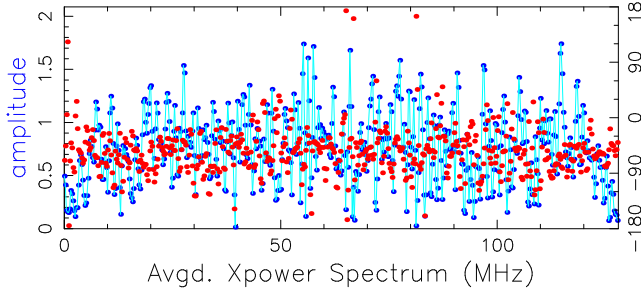
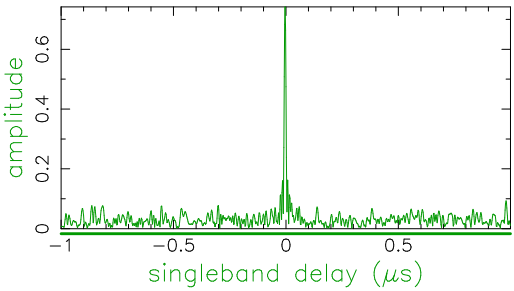
VLBA_KP - VLBA_PT, fgroup Q, pol RL

multiband delay (μ s)



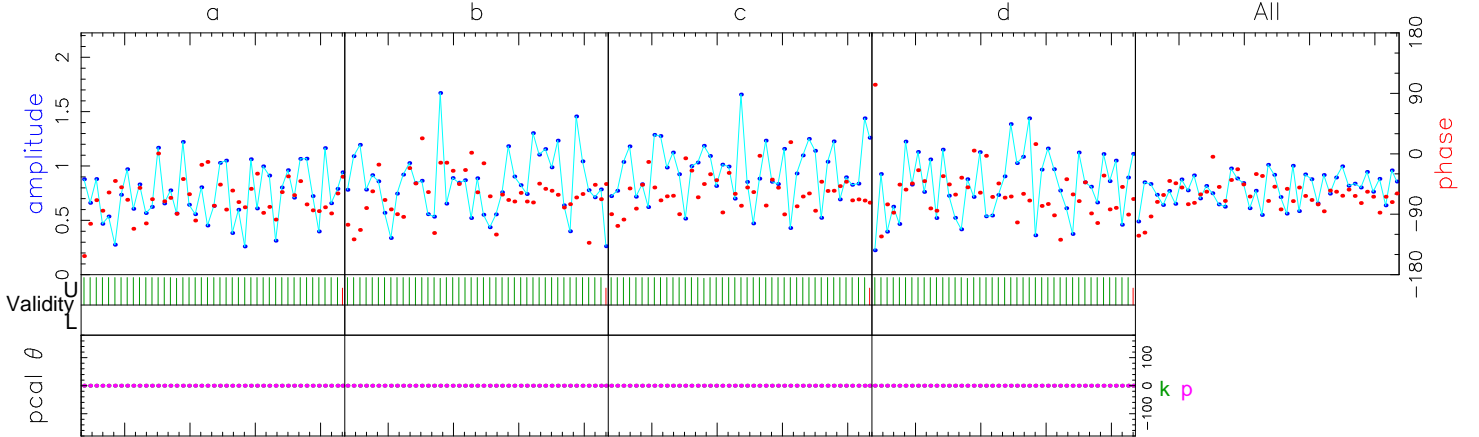
Fringe quality 9

SNR 31.4
 Int time 239.831
 Amp 0.742
 Phase -61.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.004056
 MBD -0.003892
 Fringe rate (Hz)
 -0.003357
 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
	-64.6	-59.9	-59.7	-63.4	Phase	-61.7
	0.7	0.7	0.9	0.9	Ampl.	0.7
	511.3	510.5	511.1	510.7	Sbd box	510.9
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
k:p	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

	1.97000546910E+02	1.97004439129E+02	1.97004439129E+02	1.97004439129E+02	Resid mbdelay (usec)	-3.89222E-03	+/- 3.5E-05
Group delay (usec) (SBD)	1.97000383504E+02	1.97004439129E+02	1.97004439129E+02	1.97004439129E+02	Resid sbdelay (usec)	-4.05562E-03	+/- 1.4E-04
Sband delay (usec)	1.97004435156E+02	1.97004439129E+02	1.97004439129E+02	1.97004439129E+02	Resid phdelay (usec)	-3.97337E-06	+/- 2.3E-07
Phase delay (usec)	8.37707978725E-02	8.37708756987E-02	8.37708756987E-02	8.37708756987E-02	Resid rate (us/s)	-7.78262E-08	+/- 1.7E-09
Delay rate (us/s)					Resid phase (deg)	-61.7	+/- 3.6
Total phase (deg)	119.7						

	RMS	Theor.	Amplitude	0.742 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	21.4	12.0	Search (1024X16)	0.726	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	19.3	20.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.0	3.6	Inc. seg. avg.	0.774	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	11.4	6.4	Inc. frq. avg.	0.741	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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -241.816 -157.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//kp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//kp.Q.104.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

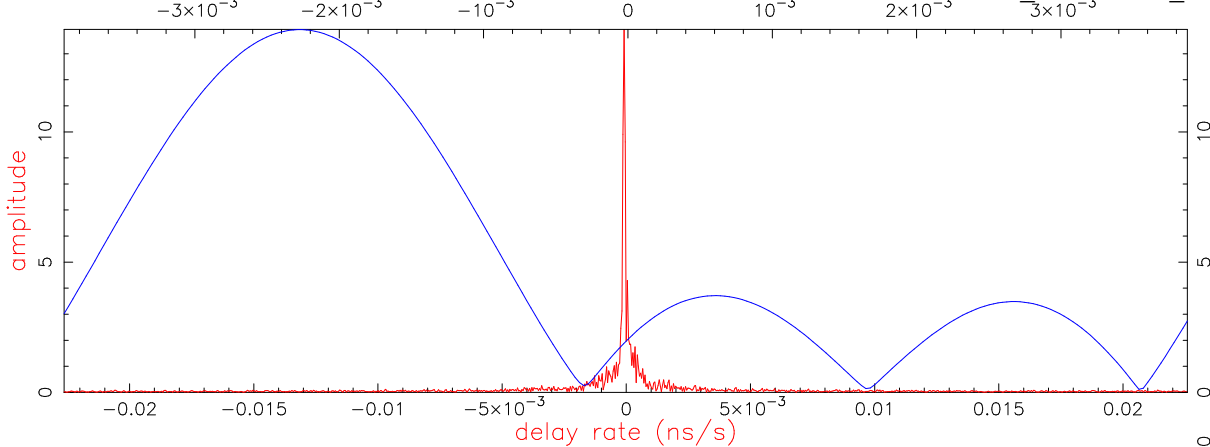
aux01

3C120.3N2DRC, No0552, kp

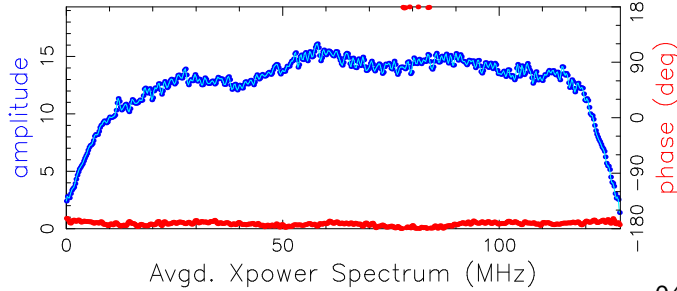
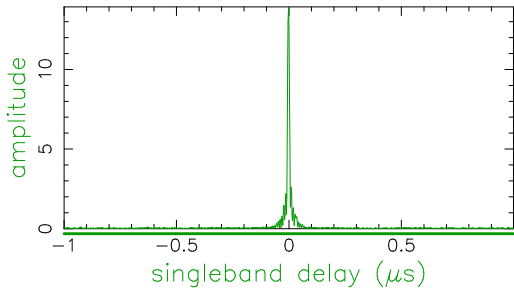
VLBA_KP - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 8

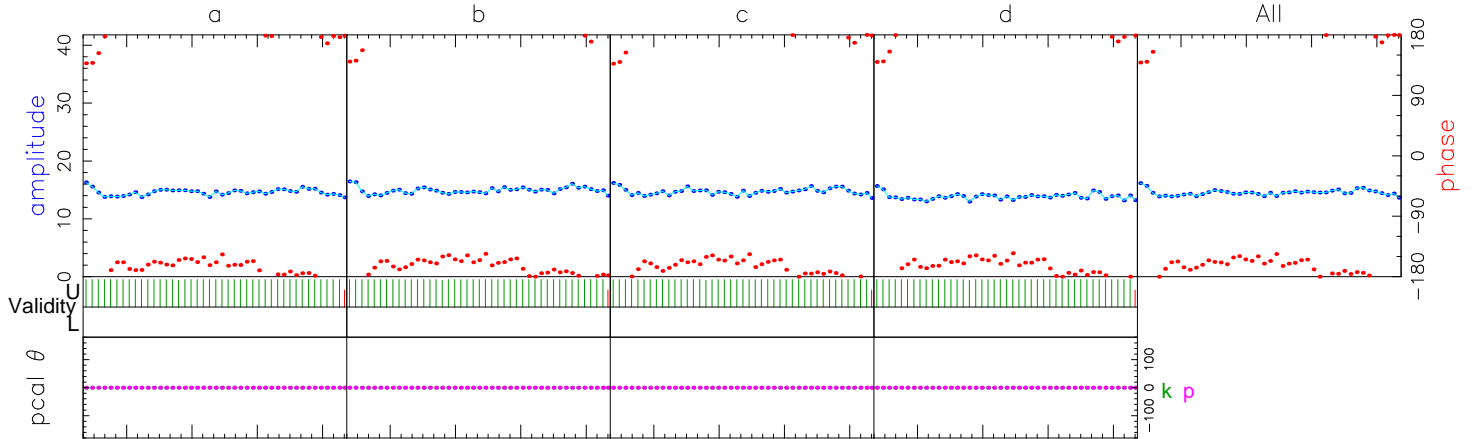


SNR 590.1
 Int time 239.831
 Amp 13.934
 Phase -169.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.002138
 MBD -0.002284
 Fringe rate (Hz)
 -0.003285
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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
	-170.9	-168.2	-169.6	-169.0	Phase	-169.4
	14.0	14.3	14.1	13.3	Ampl.	13.9
	512.2	511.9	511.8	511.8	Sbd box	511.9
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	1.97002155447E+02	Apriori delay (usec)	1.97004439129E+02	Resid mbdelay (usec)	-2.28368E-03	+/- 1.9E-06
Group delay (usec) (SBD)	1.97002300754E+02	Apriori clock (usec)	-5.5672779E+00	Resid sbdelay (usec)	-2.13838E-03	+/- 7.3E-06
Sband delay (usec)	1.97004428220E+02	Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	-1.09093E-05	+/- 1.3E-08
Phase delay (usec)	8.37707995533E-02	Apriori rate (us/s)	8.37708756987E-02	Resid rate (us/s)	-7.61454E-08	+/- 9.0E-11
Delay rate (us/s)		Apriori accel (us/s/s)	-1.44149373585E-06	Resid phase (deg)	-169.4	+/- 0.2
Total phase (deg)	12.0					

	RMS	Theor.	Amplitude	13.934 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	16.7	0.6	Search (1024X16)	13.379	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	5.6	1.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	1.4	0.2	Inc. seg. avg.	14.543	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.8	0.3	Inc. frq. avg.	13.928	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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -241.816 -157.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kp.Q.47.3N2DRC

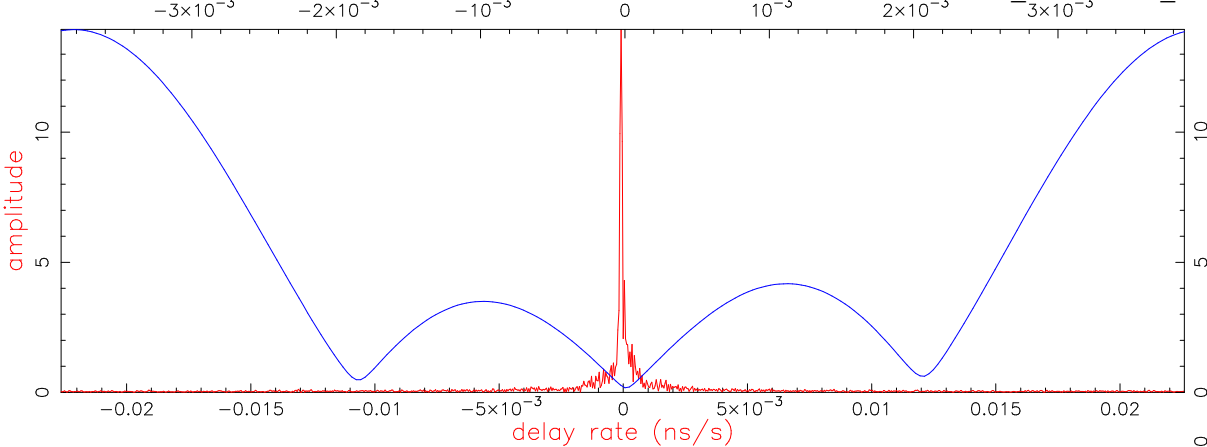
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kp

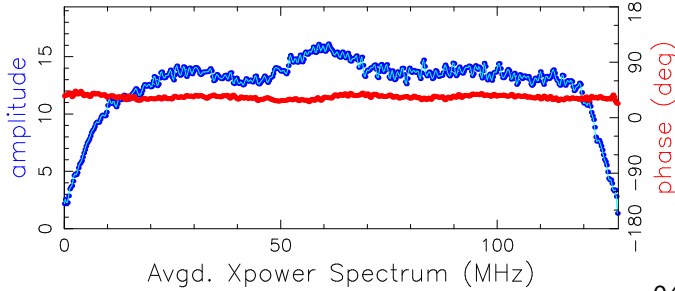
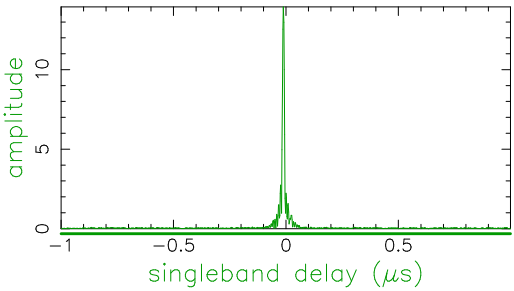
VLBA_KP - VLBA_PT, fgroup Q, pol RR

multiband delay (μ s)



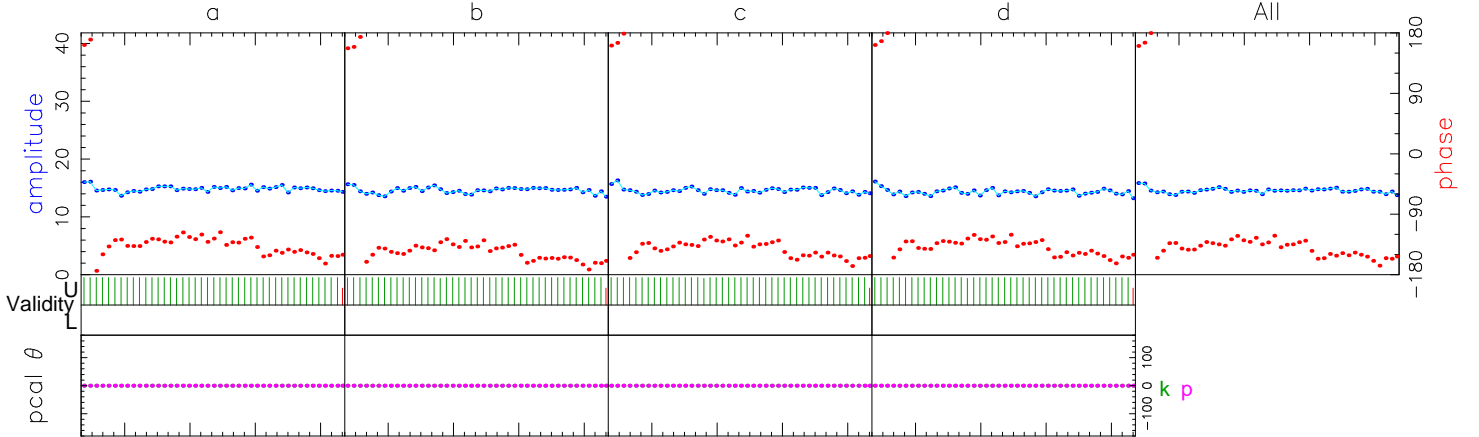
Fringe quality 8

SNR 590.9
 Int time 239.831
 Amp 13.953
 Phase -65.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.011535
 MBD -0.003810
 Fringe rate (Hz)
 -0.003276
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

Group delay (usec) (SBD)	1.96992816567E+02	Apriori delay (usec)	1.97004439129E+02	Resid mbdelay (usec)	-3.81006E-03	+/- 1.9E-06
Sband delay (usec)	1.96992904379E+02	Apriori clock (usec)	-5.5672779E+00	Resid sbdelay (usec)	-1.15348E-02	+/- 7.3E-06
Phase delay (usec)	1.97004429820E+02	Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	-9.30879E-06	+/- 1.2E-08
Delay rate (us/s)	8.37707997599E-02	Apriori rate (us/s)	8.37708756987E-02	Resid rate (us/s)	-7.59388E-08	+/- 9.0E-11
Total phase (deg)	-244.4	Apriori accel (us/s/s)	-1.44149373585E-06	Resid phase (deg)	-65.8	+/- 0.2

ph/seg (deg)	RMS 16.9	Theor. 0.6	Amplitude Search (1024X16)	13.953 +/- 0.024	13.503	13.503	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	5.4	1.1	Interp.	0.000	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)	5.3	0.2	Inc. seg. avg.	14.577	14.577	14.577	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	1.2	0.3	Inc. frq. avg.	13.974	13.974	13.974	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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -241.816 -157.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kp.Q.63.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

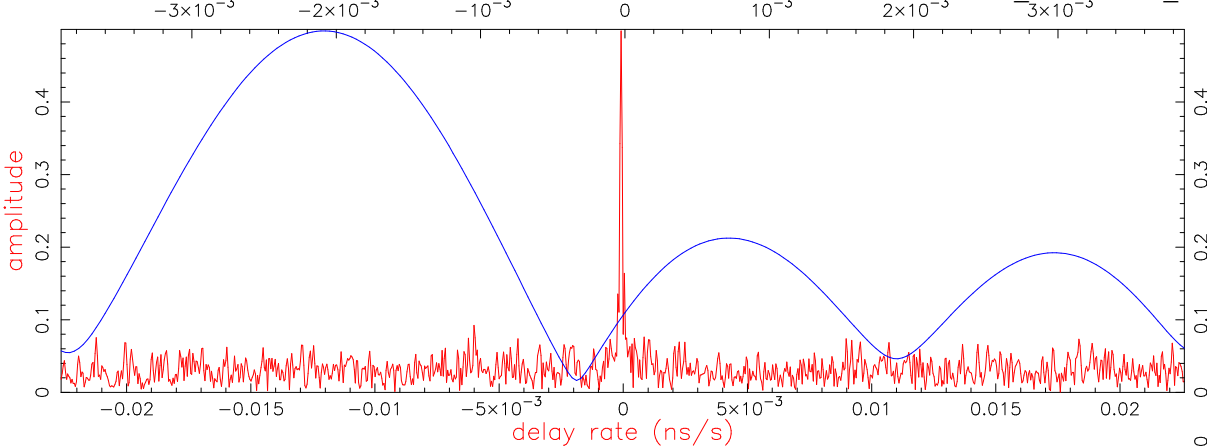
aux01

3C120.3N2DRC, No0552, kp

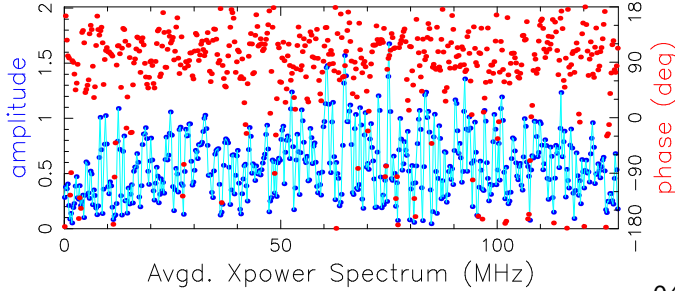
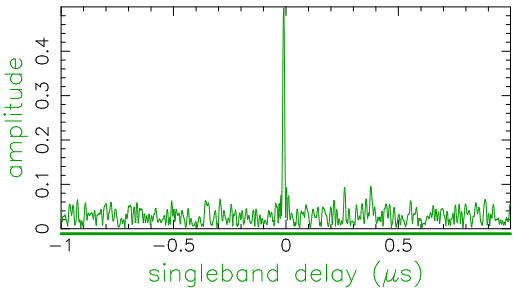
VLBA_KP - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 8

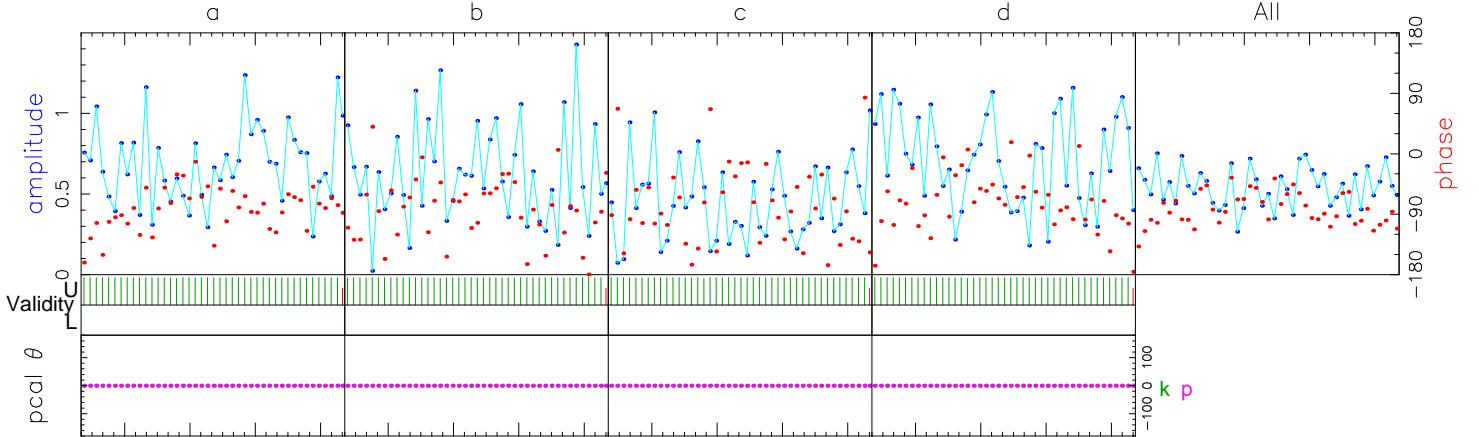


SNR 21.2
 Int time 239.831
 Amp 0.500
 Phase -4.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.010207
 MBD -0.002098
 Fringe rate (Hz)
 -0.003383
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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
	-82.1	-83.2	-93.8	-78.3	Phase	-83.1
	0.6	0.5	0.3	0.6	Ampl.	0.5
	508.1	508.0	507.1	507.8	Sbd box	507.8
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
k:p	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	1.96994528634E+02	Apriori delay (usec)	1.97004439129E+02	Resid mbdelay (usec)	-2.09799E-03	+/- 5.3E-05
Group delay (usec) (SBD)	1.96994528634E+02	Apriori clock (usec)	-5.5672779E+00	Resid sbdelay (usec)	-1.02070E-02	+/- 2.0E-04
Sband delay (usec)	1.96994232129E+02	Apriori clockrate (us/s)	-2.2649092E-07	Resid phdelay (usec)	-5.35342E-06	+/- 3.5E-07
Phase delay (usec)	1.97004433776E+02	Apriori rate (us/s)	8.37708756987E-02	Resid rate (us/s)	-7.84204E-08	+/- 2.5E-09
Delay rate (us/s)	8.37707972783E-02	Apriori accel (us/s/s)	-1.44149373585E-06	Resid phase (deg)	-4.4	+/- 5.4
Total phase (deg)	-182.9					

	RMS	Theor.	Amplitude	0.50 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	23.9	17.7	Search (1024X16)	0.483	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	25.8	31.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	8.3	5.4	Inc. seg. avg.	0.520	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	21.9	9.4	Inc. frq. avg.	0.497	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

k: az 153.1 el 60.9 pa -22.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -241.816 -157.037 simultaneous interpolator

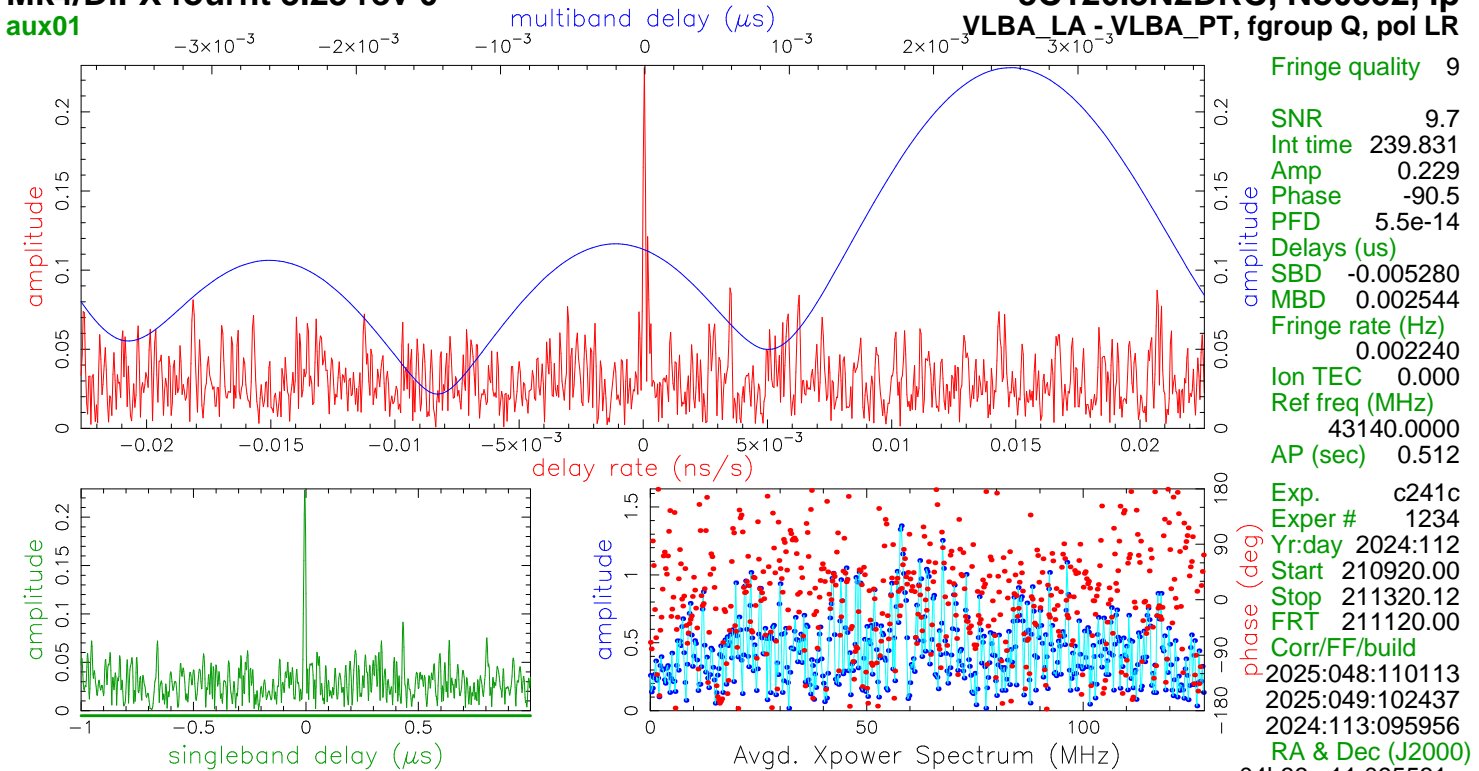
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//kp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//kp.Q.88.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lp

VLBA_LA - VLBA_PT, fgroup Q, pol LR

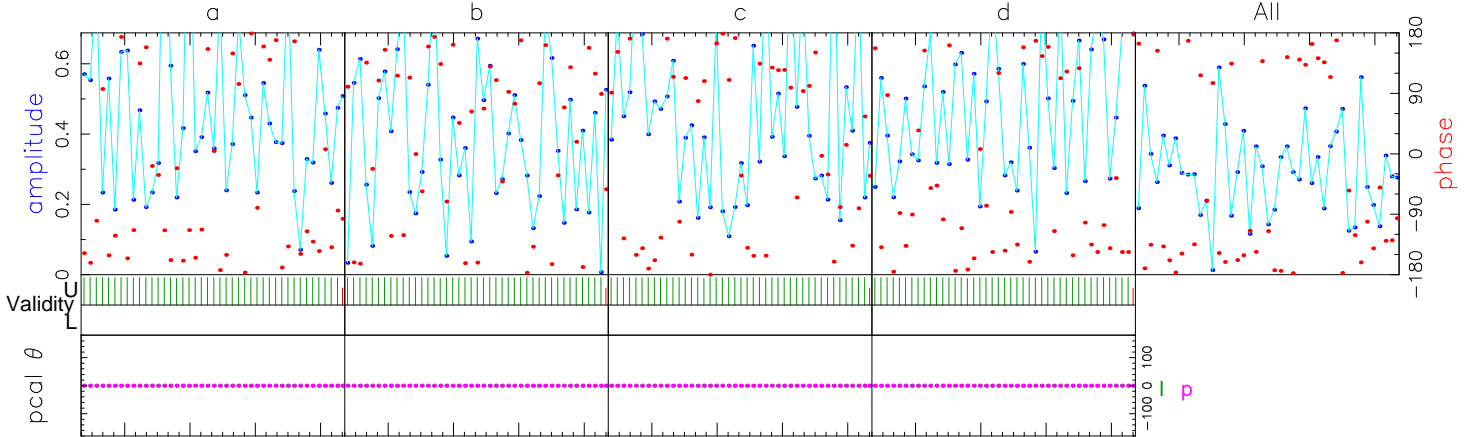


Fringe quality 9

SNR 9.7
 Int time 239.831
 Amp 0.229
 Phase -90.5
 PFD 5.5e-14
 Delays (us)
 SBD -0.005280
 MBD 0.002544
 Fringe rate (Hz) 0.002240
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

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

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



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

Group delay (usec) (SBD)	-2.07829048887E+02	Apriori delay (usec)	-2.07823780088E+02	Resid mbdelay (usec)	2.54370E-03	+/- 1.1E-04
Sband delay (usec)	-2.07829059838E+02	Apriori clock (usec)	-1.4045401E+01	Resid sbdelay (usec)	-5.27975E-03	+/- 4.4E-04
Phase delay (usec)	-2.07823790983E+02	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	-1.08952E-05	+/- 7.6E-07
Delay rate (us/s)	-4.40427445313E-02	Apriori rate (us/s)	-4.40427964466E-02	Resid rate (us/s)	5.19153E-08	+/- 5.5E-09
Total phase (deg)	-44.7	Apriori accel (us/s/s)	1.25378041838E-06	Resid phase (deg)	-90.5	+/- 11.8

ph/seg (deg)	49.7	Theor.	38.7	Amplitude	0.229 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.0		67.5	Search (1024X16)	0.224	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	31.4		11.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	19.0		20.6	Inc. seg. avg.	0.242	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.240	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

l: az 165.6 el 58.9 pa -11.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 127.385 97.644 simultaneous interpolator

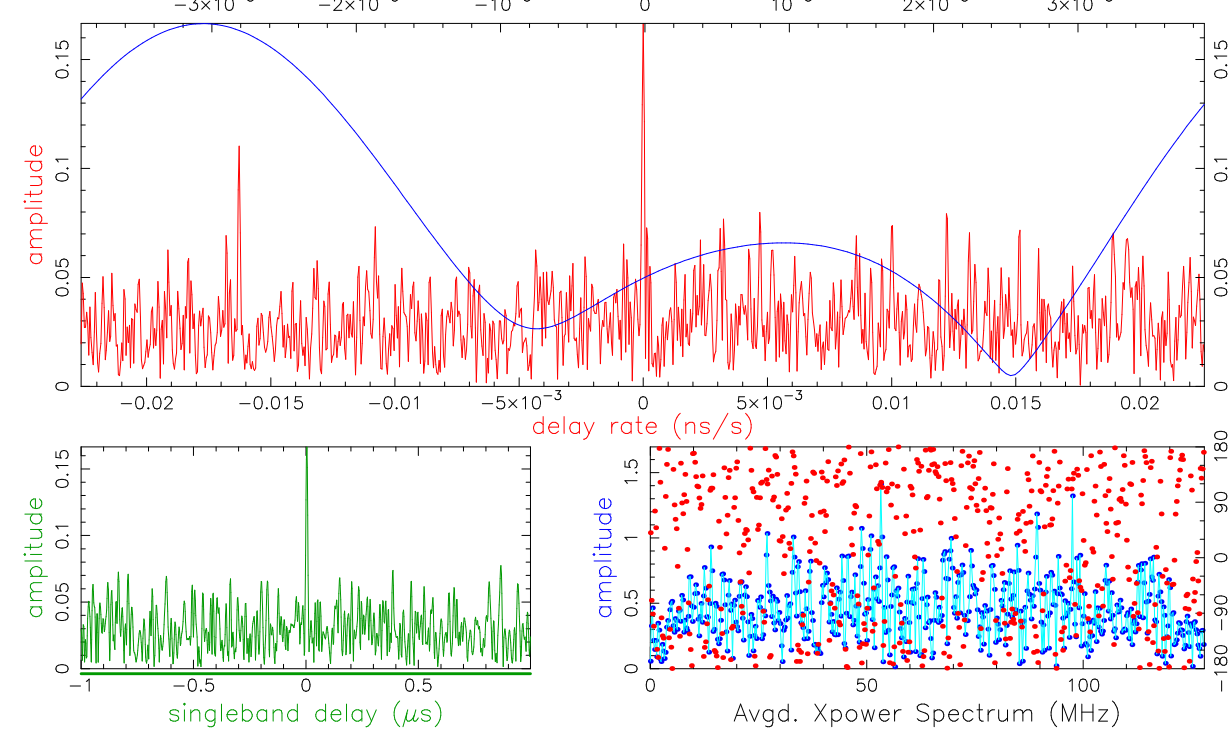
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lp.Q.113.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lp

VLBA_LA - VLBA_PT, fgroup Q, pol RL

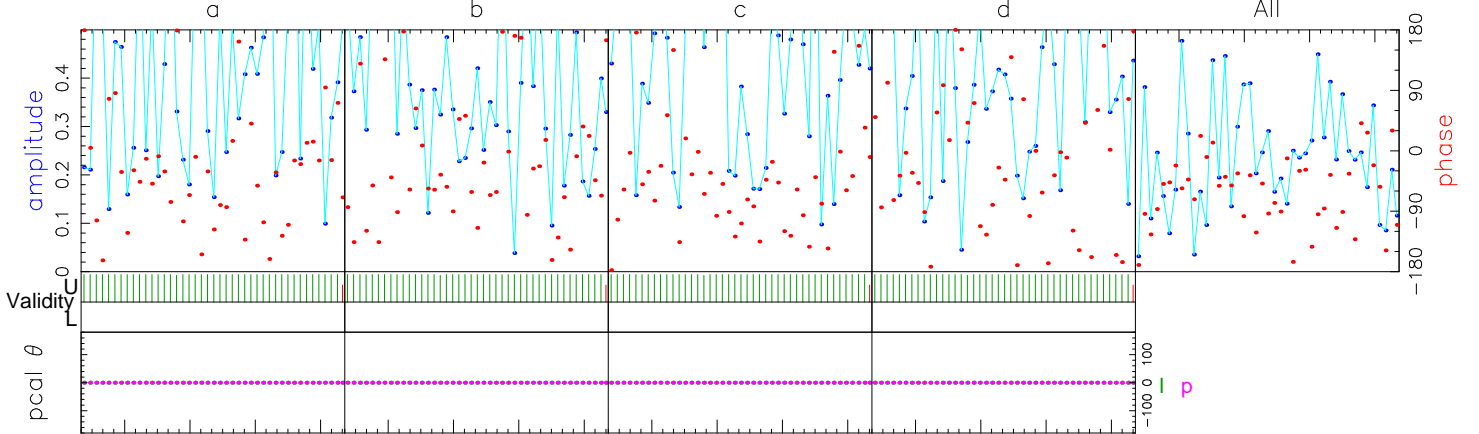


Fringe quality 0

SNR 7.1
 Int time 239.831
 Amp 0.167
 Phase 222.4
 PFD 2.6e-04
 Delays (us)
 SBD 0.003669
 MBD -0.003088
 Fringe rate (Hz) 0.000637
 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		
p	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UL	Q01UL	Q02UL	Q03UL		

Group delay (usec) (SBD)	-2.07819055213E+02	Apriori delay (usec)	-2.07823780088E+02	Resid mbdelay (usec)	-3.08762E-03	+/-	1.6E-04
Sband delay (usec)	-2.07820111588E+02	Apriori clock (usec)	-1.4045401E+01	Resid sbdelay (usec)	3.66850E-03	+/-	6.1E-04
Phase delay (usec)	-2.07823783877E+02	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	-3.78949E-06	+/-	1.0E-06
Delay rate (us/s)	-4.40427816702E-02	Apriori rate (us/s)	-4.40427964466E-02	Resid rate (us/s)	1.47763E-08	+/-	7.5E-09
Total phase (deg)	268.1	Apriori accel (us/s/s)	1.25378041838E-06	Resid phase (deg)	222.4	+/-	16.2

ph/seg (deg)	RMS 52.1	Theor. 53.3	Amplitude Search (1024X16)	0.167 +/- 0.024	PCal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	81.6	92.9	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	12.0	16.2	Inc. seg. avg.	0.167	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	46.1	28.3	Inc. frq. avg.	0.162	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	ion window (ns/s)	-0.023 0.023
					Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite

l: az 165.6 el 58.9 pa -11.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 127.385 97.644 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lp.Q.128.3N2DRC

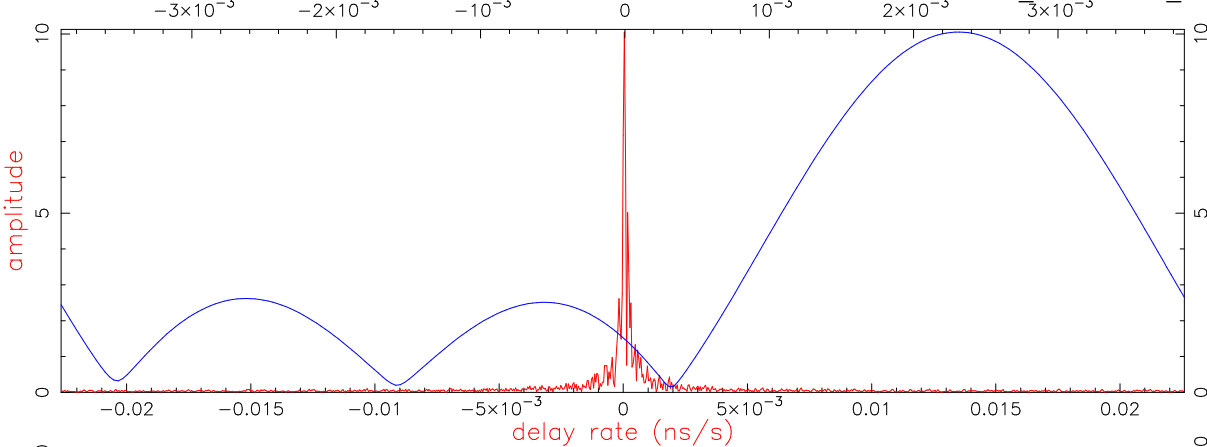
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lp

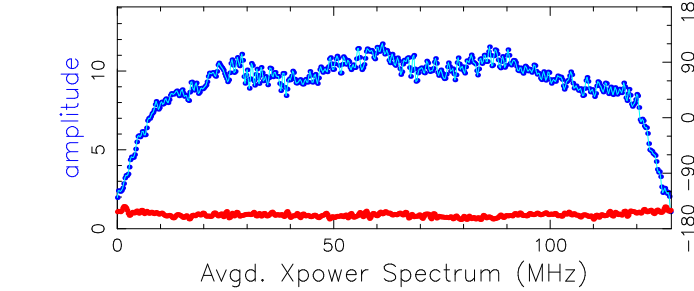
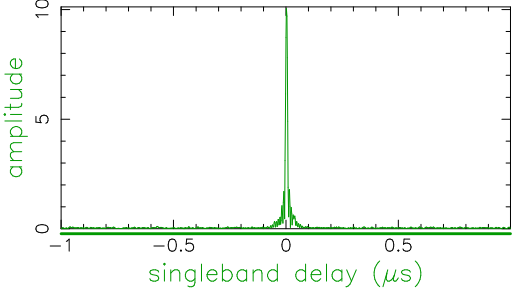
VLBA_LA - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)



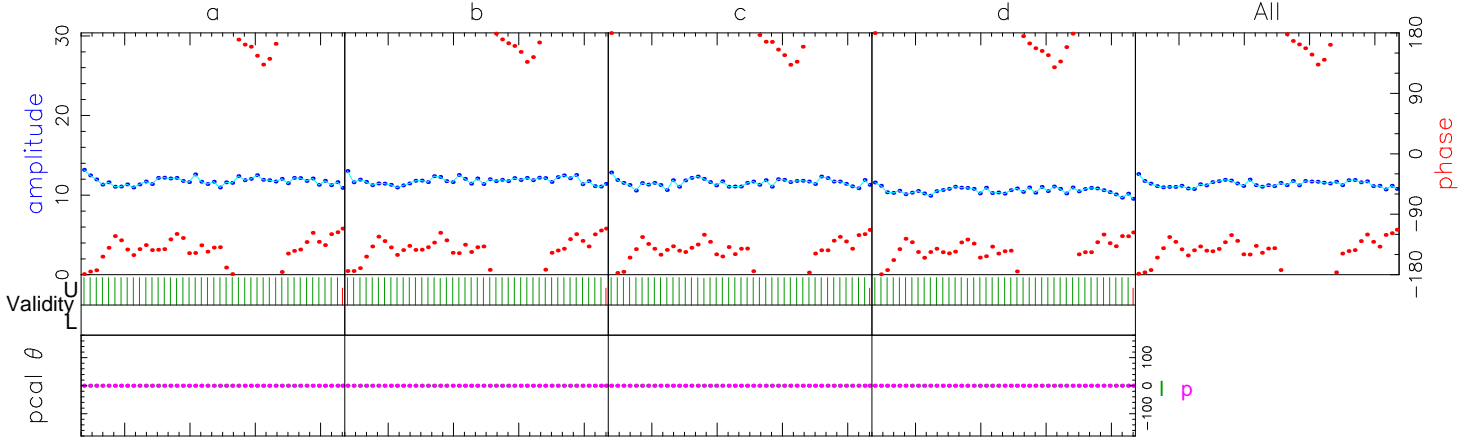
Fringe quality 7

SNR 429.0
 Int time 239.831
 Amp 10.129
 Phase -153.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.002537
 MBD 0.002342
 Fringe rate (Hz)
 0.001634
 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
	-152.4	-151.6	-154.2	-156.2	Phase	-153.5
	10.3	10.4	10.2	9.3	Ampl.	10.1
	514.4	514.3	514.2	514.3	Sbd box	514.3
U/L	469/0	469/0	469/0	469/0	APs used	
l	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-2.07821438137E+02	Apriori delay (usec)	-2.07823780088E+02	Resid mbdelay (usec)	2.34195E-03	+/- 2.6E-06
Sband delay (usec)	-2.07821243213E+02	Apriori clock (usec)	-1.4045401E+01	Resid sbdelay (usec)	2.53687E-03	+/- 1.0E-05
Phase delay (usec)	-2.07823789973E+02	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	-9.88499E-06	+/- 1.7E-08
Delay rate (us/s)	-4.40427585748E-02	Apriori rate (us/s)	-4.40427964466E-02	Resid rate (us/s)	3.78718E-08	+/- 1.2E-10
Total phase (deg)	-107.8	Apriori accel (us/s/s)	1.25378041838E-06	Resid phase (deg)	-153.5	+/- 0.3

	RMS	Theor.	Amplitude	10.129 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	28.8	0.9	Search (1024X16)	9.902	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	13.3	1.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	2.5	0.3	Inc. seg. avg.	11.421	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	4.6	0.5	Inc. frq. avg.	10.056	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 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 127.385 97.644 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lp.Q.76.3N2DRC

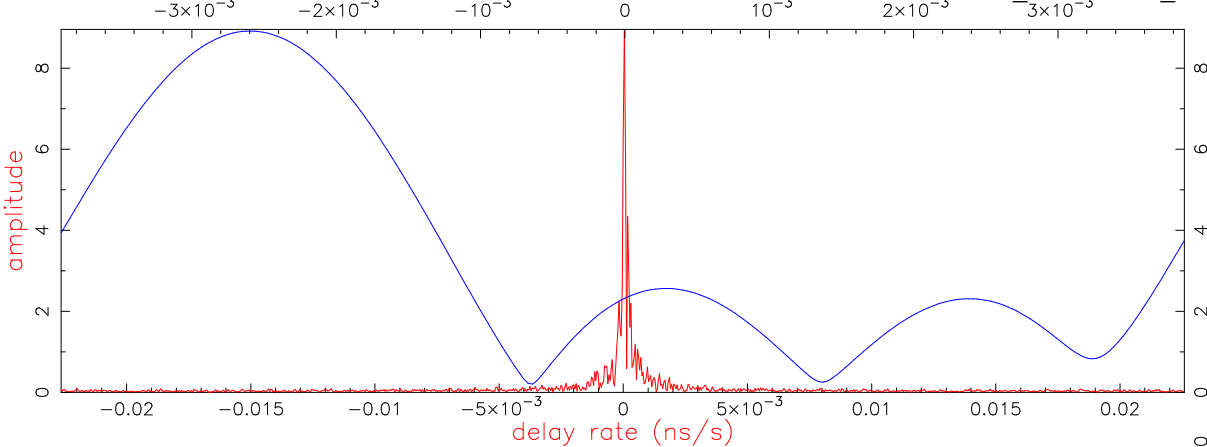
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lp

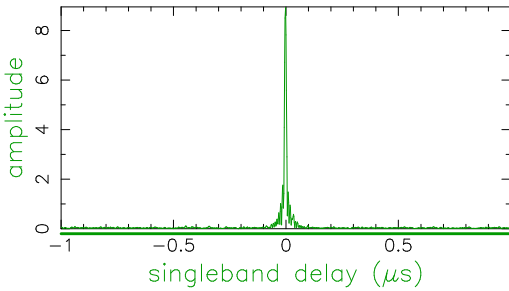
VLBA_LA - VLBA_PT, fgroup Q, pol RR

multiband delay (μ s)

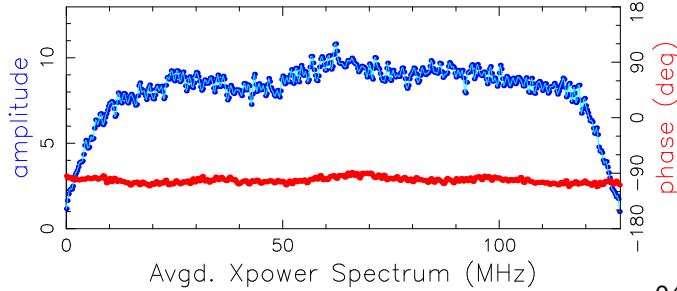


Fringe quality 7

SNR 379.5
 Int time 239.831
 Amp 8.960
 Phase -96.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.002412
 MBD -0.002621
 Fringe rate (Hz)
 0.001657
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



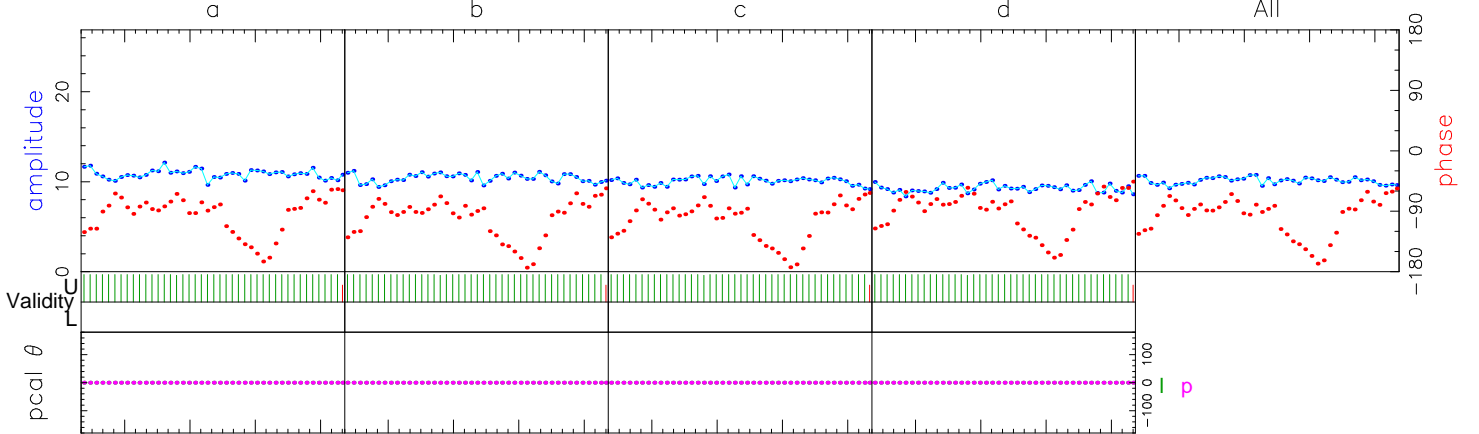
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102435
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

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



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

Group delay (usec) (SBD)	-2.07826401481E+02	Apriori delay (usec)	-2.07823780088E+02	Resid mbdelay (usec)	-2.62139E-03	+/- 2.9E-06
Sband delay (usec)	-2.07826191963E+02	Apriori clock (usec)	-1.4045401E+01	Resid sbdelay (usec)	-2.41187E-03	+/- 1.1E-05
Phase delay (usec)	-2.07823786310E+02	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	-6.22204E-06	+/- 1.9E-08
Delay rate (us/s)	-4.40427580456E-02	Apriori rate (us/s)	-4.40427964466E-02	Resid rate (us/s)	3.84009E-08	+/- 1.4E-10
Total phase (deg)		Apriori accel (us/s/s)	1.25378041838E-06	Resid phase (deg)	-96.6	+/- 0.3

ph/seg (deg)	28.7	Theor. 1.0	Amplitude	8.960 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	13.5	1.7	Search (1024X16)	8.765	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	7.2	0.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	5.8	0.5	Inc. seg. avg.	10.115	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
			Inc. frq. avg.	8.951	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		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) 127.385 97.644		simultaneous interpolator

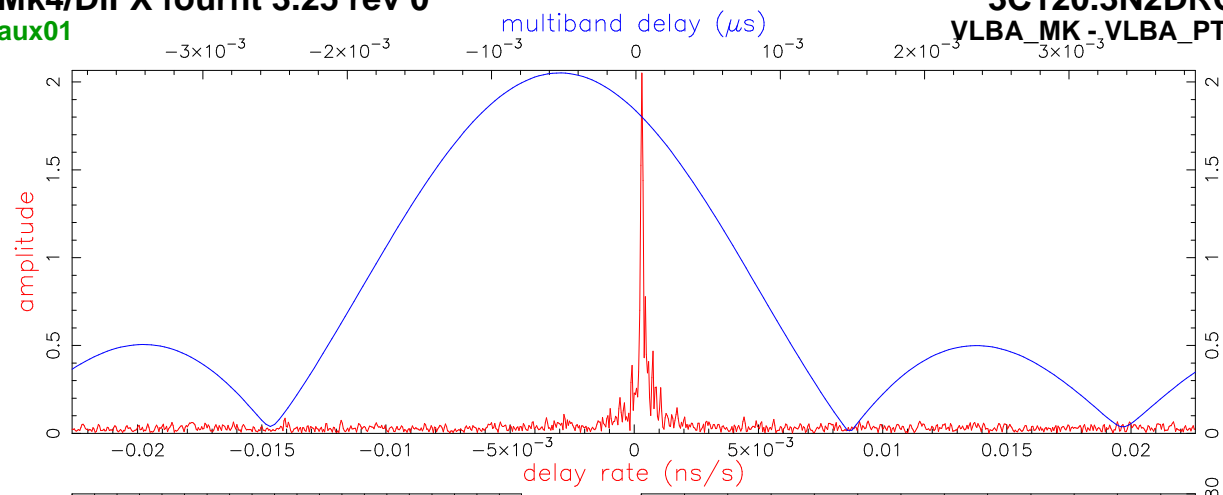
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lp...3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lp.Q.97.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mp

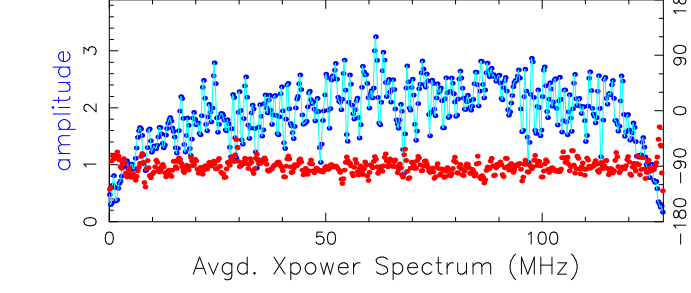
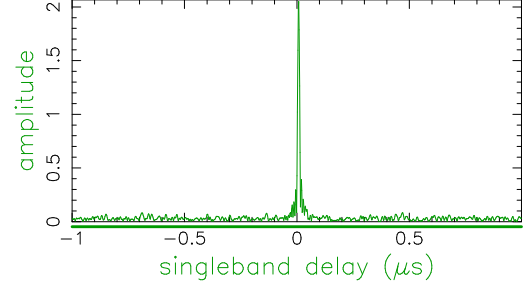
VLBA_MK - VLBA_PT, fgroup Q, pol LL



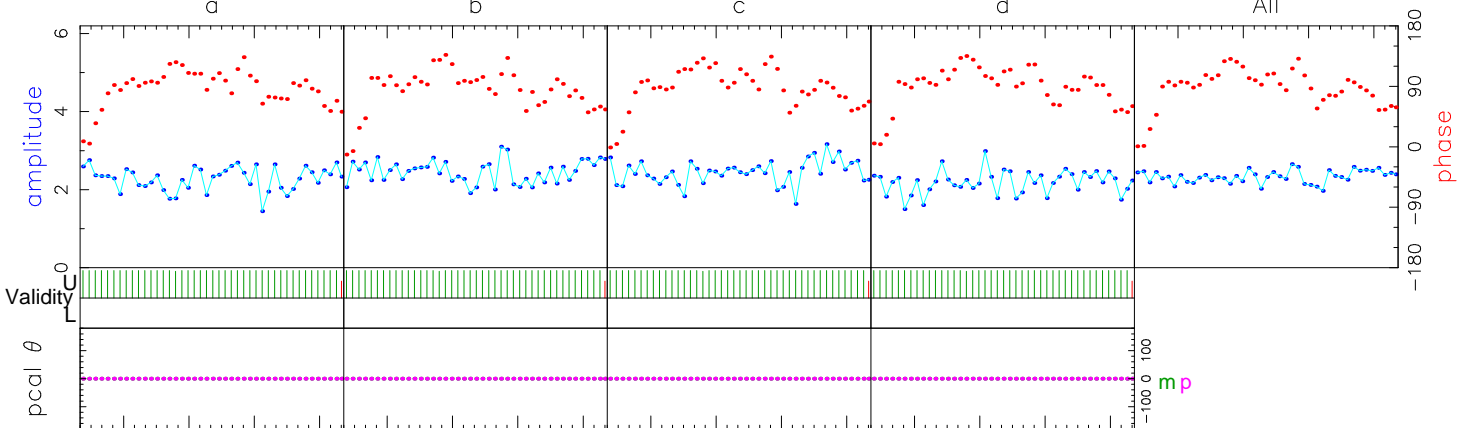
Fringe quality 7

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		

Group delay (usec) (SBD)	-6.57446522814E+03	Apriori delay (usec)	-6.57447248729E+03	Resid mbdelay (usec)	-5.53347E-04	+/-	1.3E-05
Sband delay (usec)	-6.57446524354E+03	Apriori clock (usec)	-5.1858559E+00	Resid sbdelay (usec)	7.24375E-03	+/-	4.9E-05
Phase delay (usec)	-6.57447248163E+03	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	5.65678E-06	+/-	8.4E-08
Delay rate (us/s)	1.01495575722E+00	Apriori rate (us/s)	1.01495546440E+00	Resid rate (us/s)	2.92816E-07	+/-	6.1E-10
Total phase (deg)	332.5	Apriori accel (us/s/s)	3.25478816868E-05	Resid phase (deg)	9.1	+/-	1.3

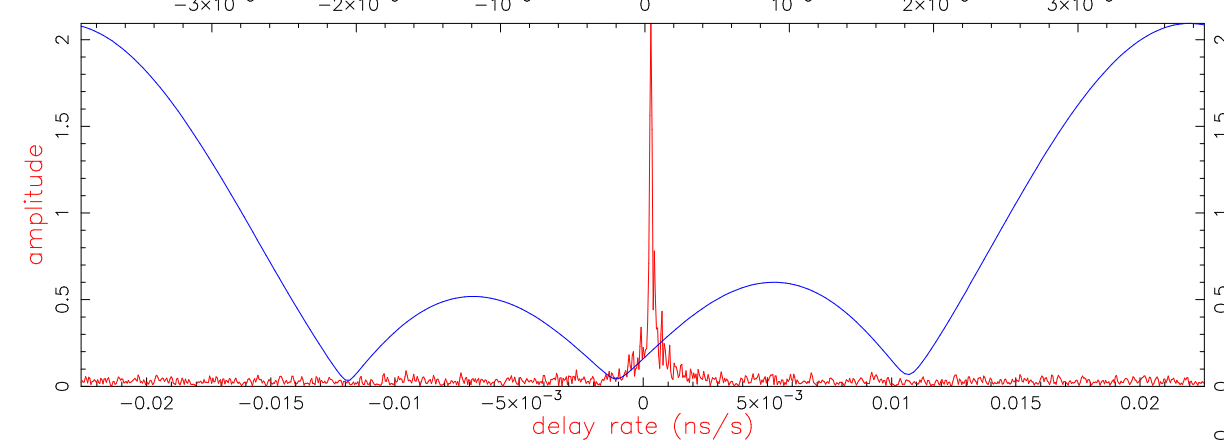
ph/seg (deg) 29.5 4.3 Search (1024X16) 1.942 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 15.2 7.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 2.2 1.3 Inc. seg. avg. 2.330 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 4.6 2.3 Inc. frq. avg. 2.051 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 ion window (TEC) 0.00 0.00
 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 simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mp

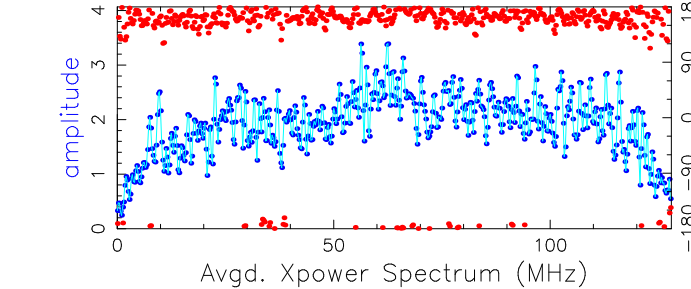
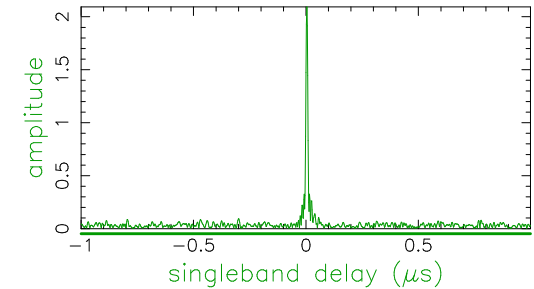
VLBA_MK - VLBA_PT, fgroup Q, pol RR



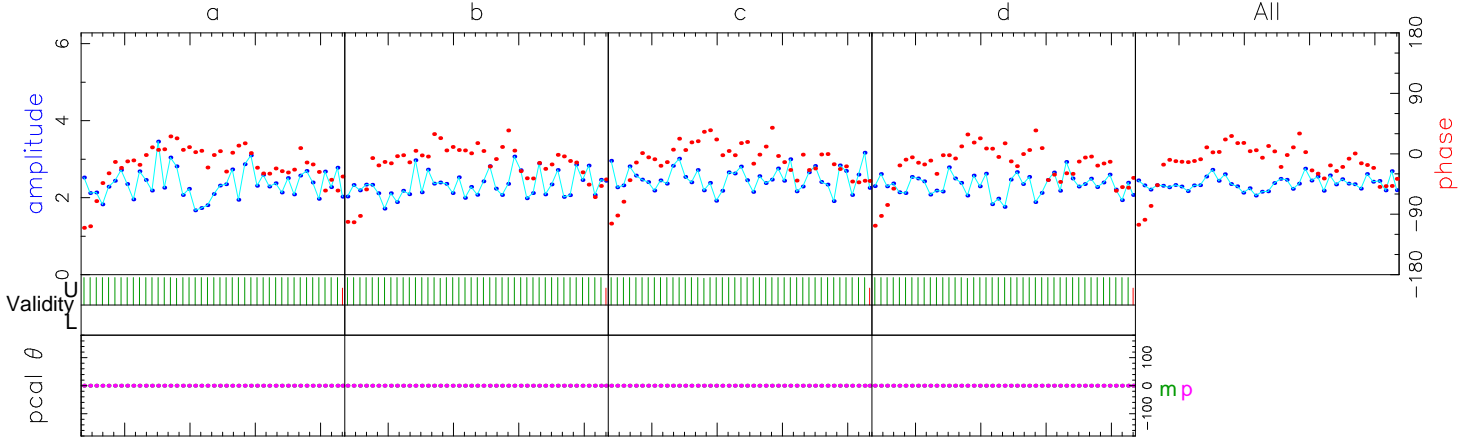
Fringe quality 7

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



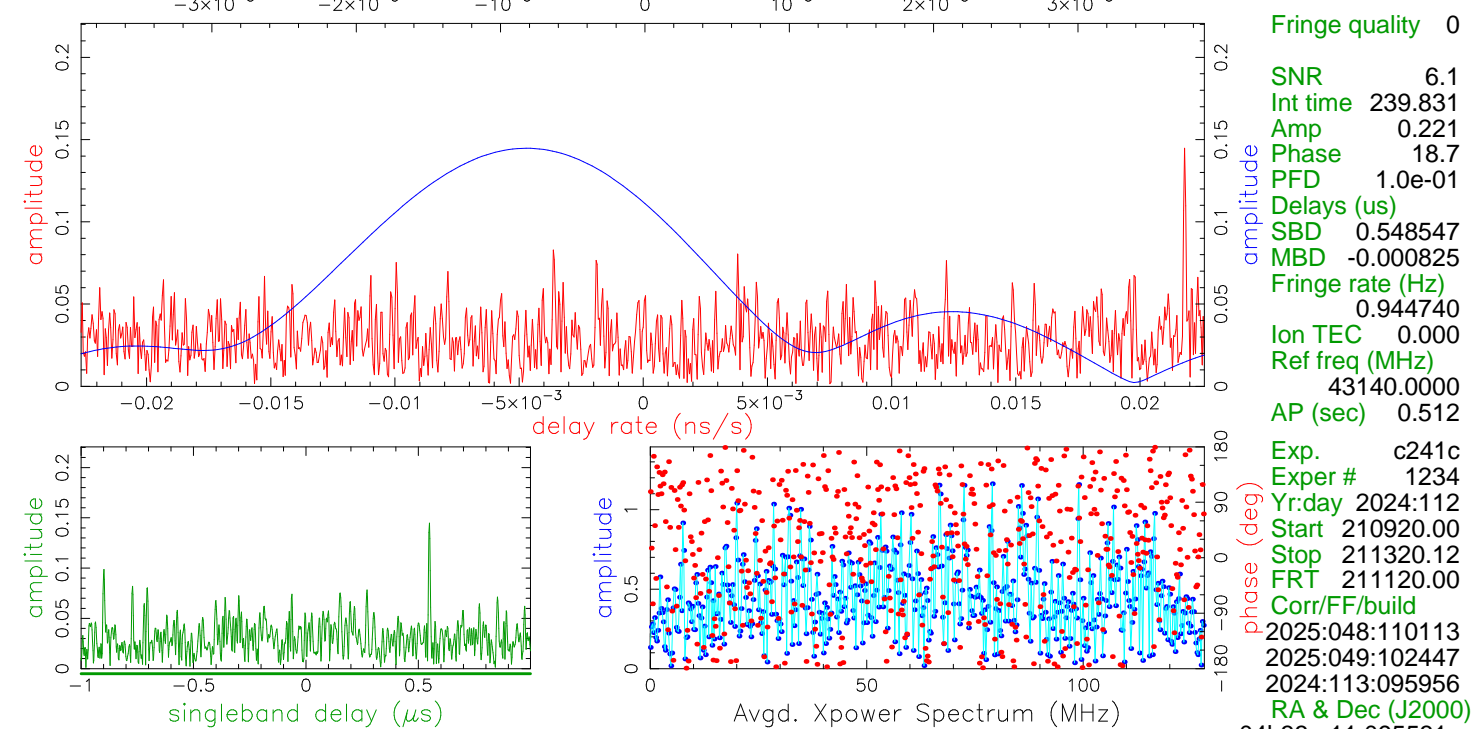
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000		
p	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UR	Q01UR	Q02UR	Q03UR		
Group delay (usec) (SBD)	-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		-4.04232E-03	+/- 1.3E-05
Apriori clock (usec)			-5.1858559E+00		3.86288E-03	+/- 4.9E-05
Apriori clockrate (us/s)			-3.9319698E-07		-8.88786E-07	+/- 8.3E-08
Apriori rate (us/s)			1.01495546440E+00		2.95125E-07	+/- 6.0E-10
Apriori accel (us/s/s)			3.25478816868E-05		267.4	+/- 1.3
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
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

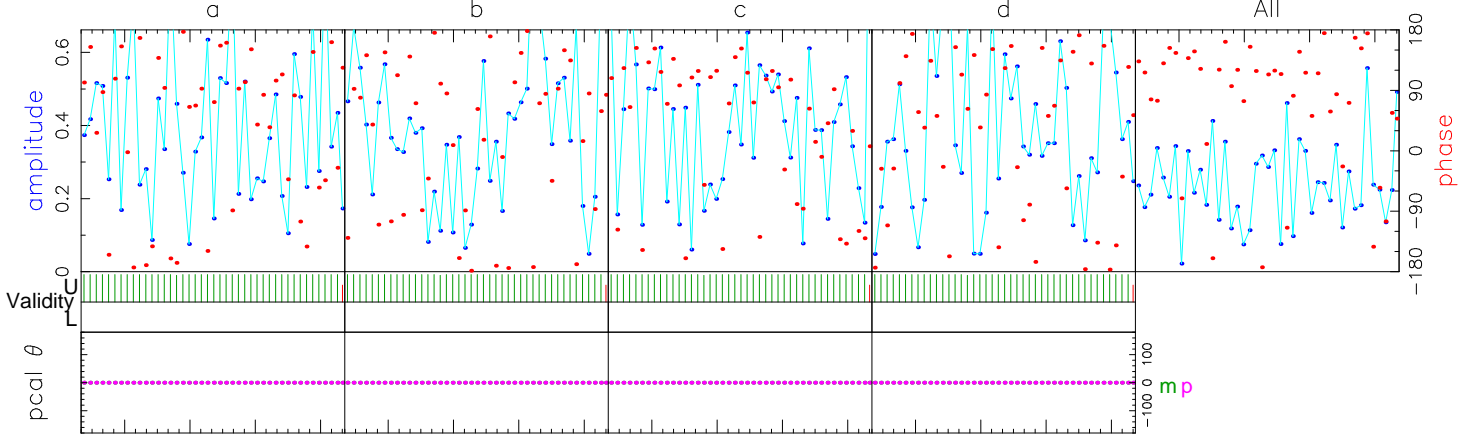


Fringe quality 0

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	1000
m	1000	1000	1000	1000	PC freqs	1000
p	1000	1000	1000	1000	PC freqs	1000
m:p	0:0	0:0	0:0	0:0	PC phase	0:0
m:p	0:0	0:0	0:0	0:0	Manl PC	0:0
m	1000	1000	1000	1000	PC amp	1000
p	1000	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	mb window (us)	-0.004 0.004	
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		
						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.154.3N2DRC

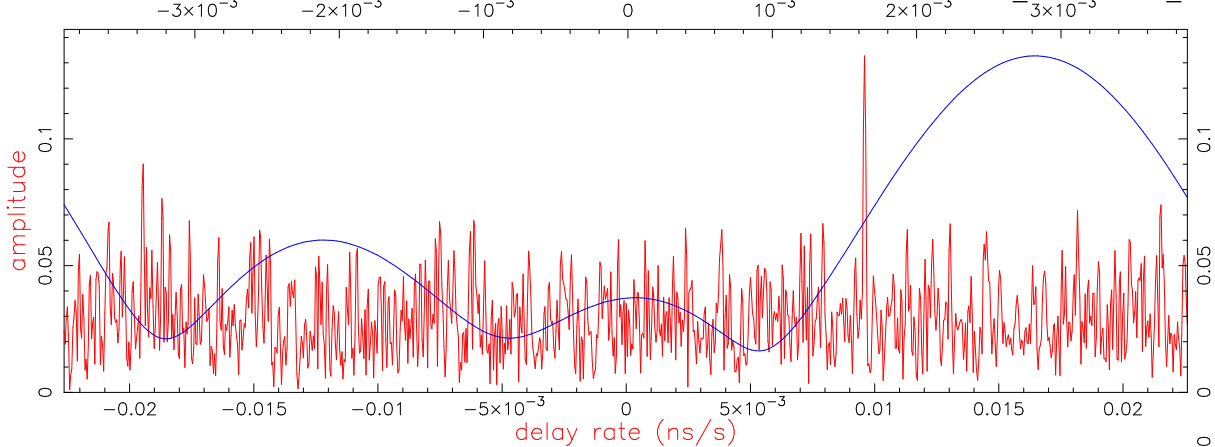
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, mp

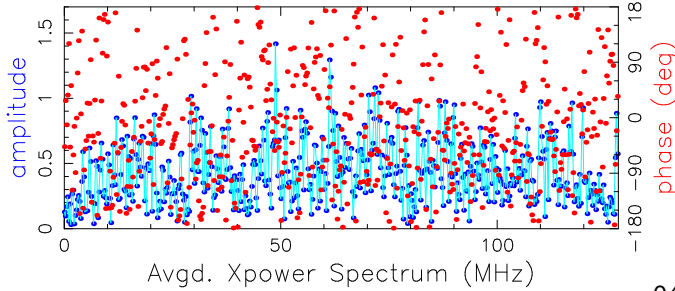
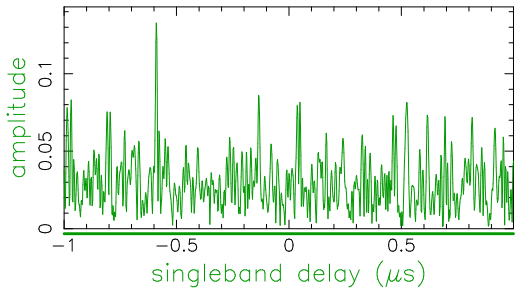
VLBA_MK - VLBA_PT, fgroup Q, pol RL

multiband delay (μ s)



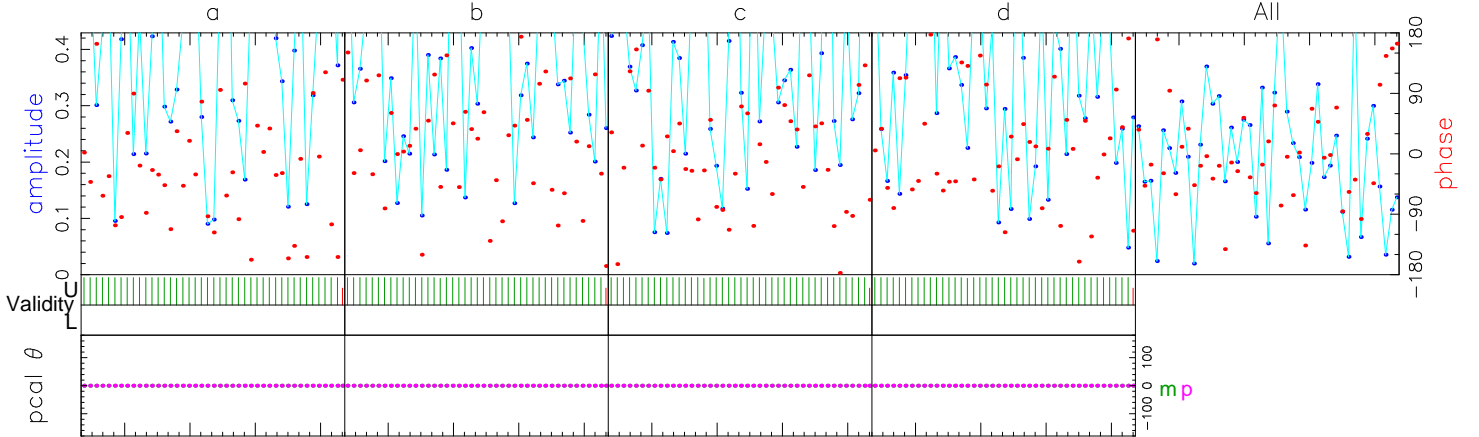
Fringe quality 0

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
	-21.5	19.6	-11.6	-16.4	Phase	-8.8
	0.2	0.1	0.1	0.1	Ampl.	0.1
	929.7	444.4	161.8	171.5	Sbd box	211.1
U/L	469/0	469/0	469/0	469/0	APs used	
m	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	PC phase	
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	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

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

	RMS	Theor.	Amplitude	0.143 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	73.0	66.8	Search (1024X16)	0.129	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	106.8	116.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	22.7	20.4	Inc. seg. avg.	0.139	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	12.9	35.6	Inc. frq. avg.	0.140	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

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

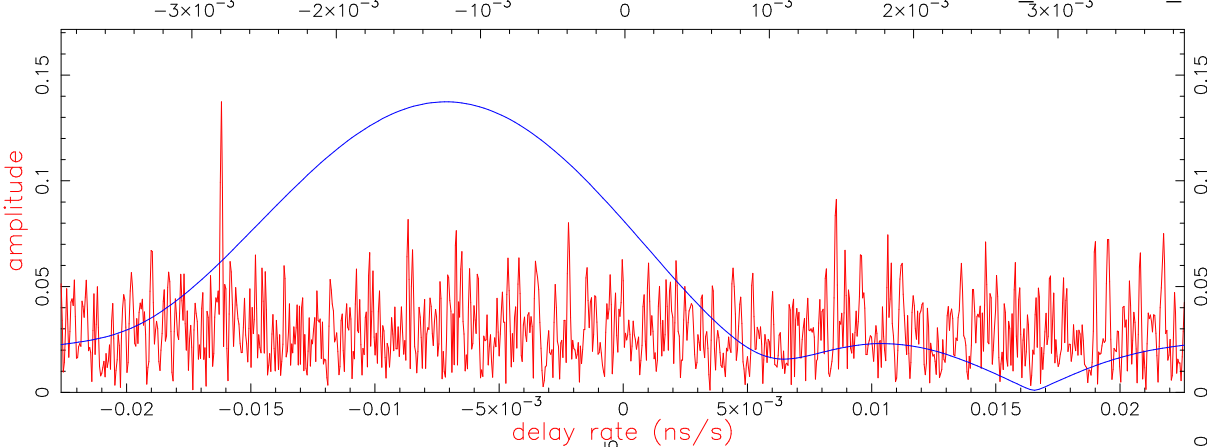
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, np

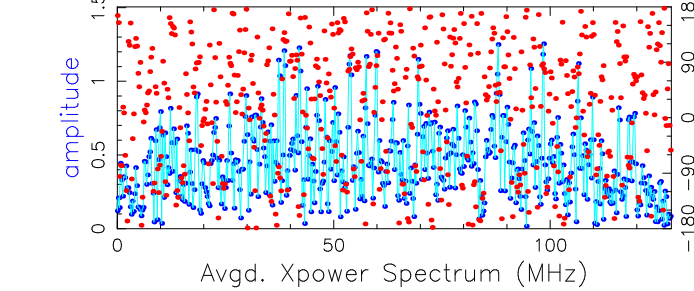
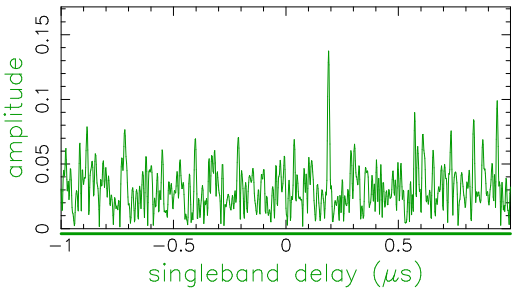
VLBA_NL - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)



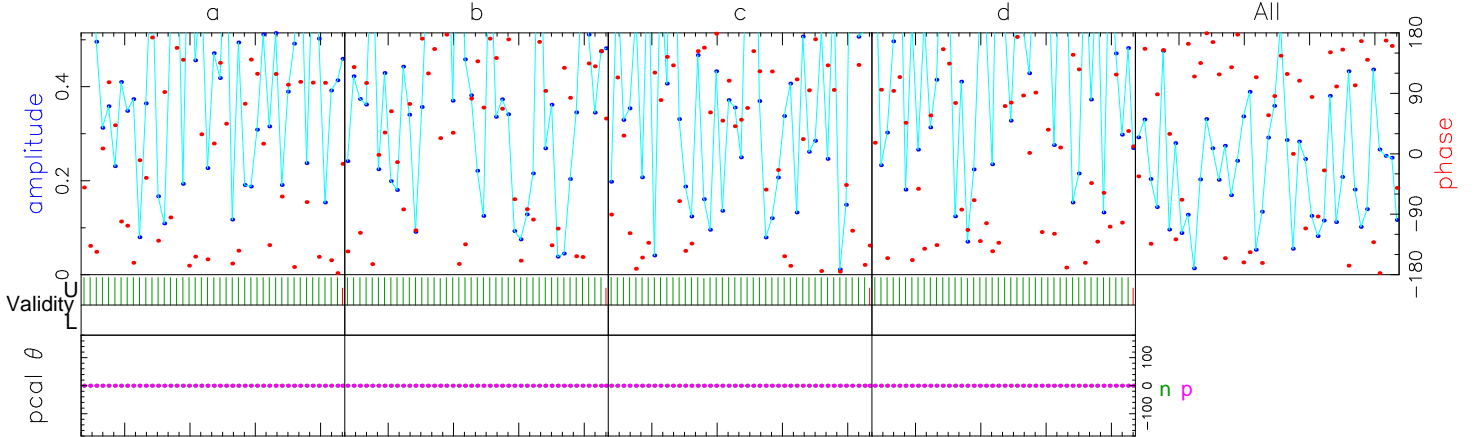
Fringe quality 0

SNR 5.8
 Int time 239.820
 Amp 0.172
 Phase 74.4
 PFD 5.3e-01
 Delays (us)
 SBD 0.189373
 MBD -0.001250
 Fringe rate (Hz)
 -0.702483
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102439
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
n	1000	1000	1000	1000		
p	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000		
p	1000	1000	1000	1000		
n	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UL	Q01UL	Q02UL	Q03UL		
Validity	[Validity bars]					
pcd θ	[pcd θ bars]					

Group delay (usec) (SBD)	-1.46821743095E+03	Apriori delay (usec)	-1.46840368126E+03	Resid mbdelay (usec)	-1.24969E-03	+/- 1.9E-04
Sband delay (usec)	-1.46821430839E+03	Apriori clock (usec)	-5.9938641E+08	Resid sbdelay (usec)	1.89373E-01	+/- 7.4E-04
Phase delay (usec)	-1.46840367067E+03	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	1.05888E-05	+/- 1.3E-06
Delay rate (us/s)	-3.50274545863E-01	Apriori rate (us/s)	-3.50258262078E-01	Resid rate (us/s)	-1.62838E-05	+/- 9.2E-09
Total phase (deg)	143.0	Apriori accel (us/s/s)	8.86453645248E-06	Resid phase (deg)	74.4	+/- 19.7

ph/seg (deg)	RMS 72.1	Theor. 64.6	Amplitude Search (1024X16)	0.172 +/- 0.030	0.130	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	112.1	112.7	Interp.	0.000	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	18.3	19.7	Inc. seg. avg.	0.177	0.165	Bits/sample: 2x2	mb window (us) -0.004 0.004
amp/frq (%)	28.6	34.4	Inc. frq. avg.	0.165	0.165	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
n: az 192.0 el 53.1 pa 9.3			p: az 161.3 el 59.8 pa -15.0			Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

n: az 192.0 el 53.1 pa 9.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 1013.064 486.295 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/np..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/np.Q.124.3N2DRC

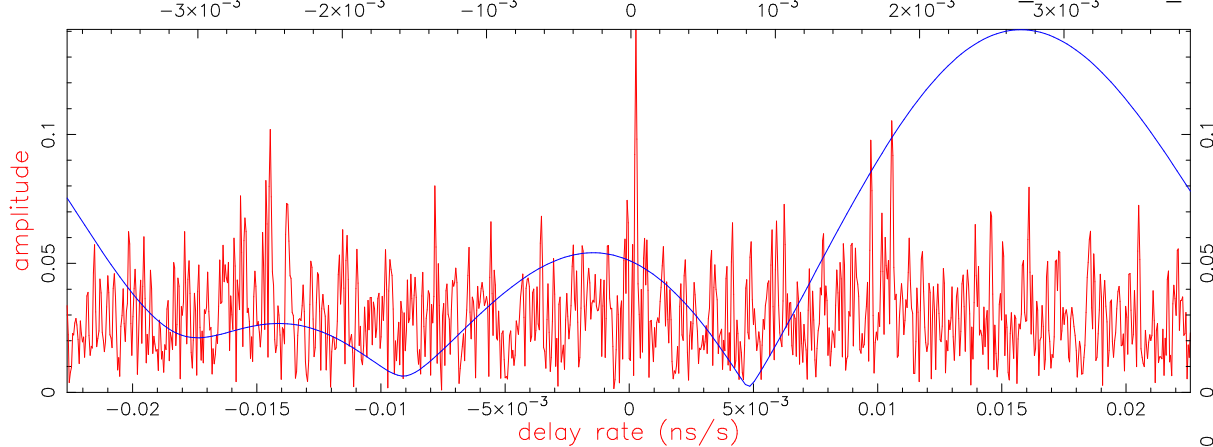
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, np

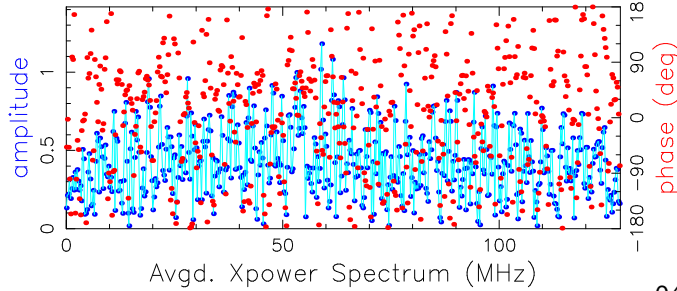
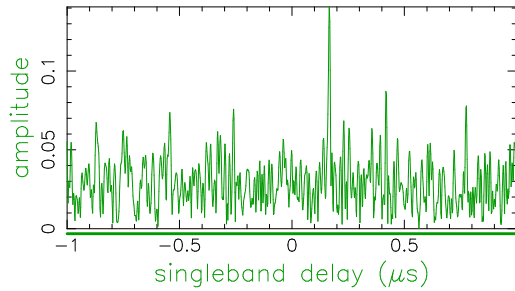
VLBA_NL - VLBA_PT, fgroup Q, pol RR

multiband delay (μ s)



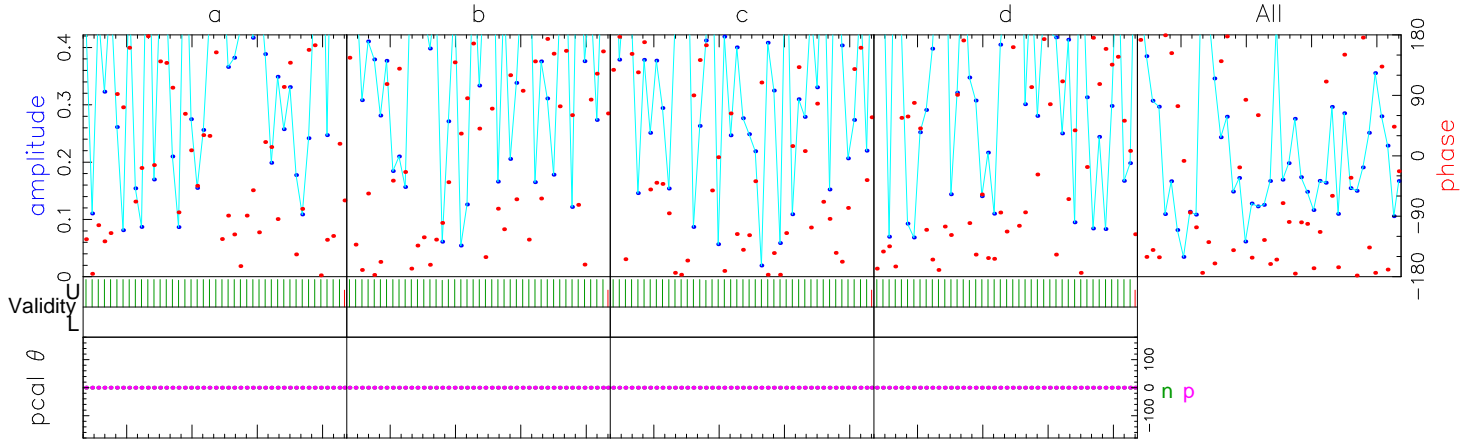
Fringe quality 0

SNR 6.0
 Int time 239.820
 Amp 0.141
 Phase 348.3
 PFD 2.8e-01
 Delays (us)
 SBD 0.166234
 MBD 0.002721
 Fringe rate (Hz)
 0.010882
 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		
n	1000	1000	1000	1000		
p	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000		
p	1000	1000	1000	1000		
n	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-1.46823689803E+03	Apriori delay (usec)	-1.46840368126E+03	Resid mbdelay (usec)	2.72073E-03	+/-	1.9E-04
Sband delay (usec)	-1.46823744739E+03	Apriori clock (usec)	-5.9938641E+08	Resid sbdelay (usec)	1.66234E-01	+/-	7.2E-04
Phase delay (usec)	-1.46840369143E+03	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	-1.01707E-05	+/-	1.2E-06
Delay rate (us/s)	-3.50258009822E-01	Apriori rate (us/s)	-3.50258262078E-01	Resid rate (us/s)	2.52256E-07	+/-	8.9E-09
Total phase (deg)	56.8	Apriori accel (us/s/s)	8.86453645248E-06	Resid phase (deg)	348.3	+/-	19.2

ph/seg (deg)	RMS 70.6	Theor. 63.0	Amplitude Search (1024X16)	0.133	0.141 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	102.4	110.0	Interp.	0.000	0.133	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	15.7	19.2	Inc. seg. avg.	0.136	0.136	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	13.7	33.6	Inc. frq. avg.	0.135	0.135	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023		
						Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00

n: az 192.0 el 53.1 pa 9.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 1013.064 486.295 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/np..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/np.Q.133.3N2DRC

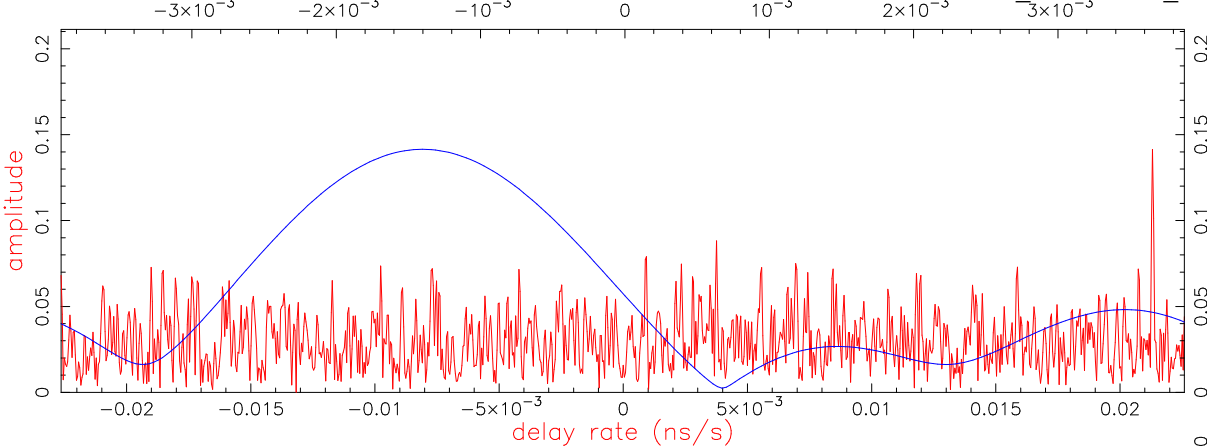
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, np

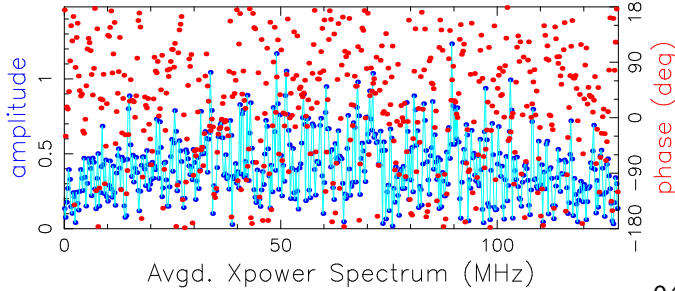
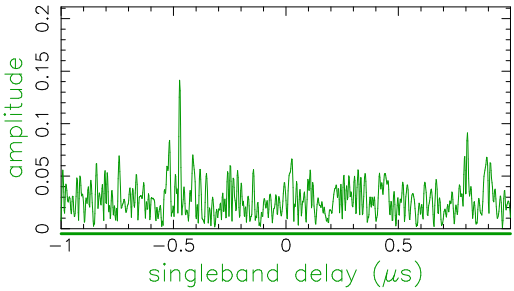
VLBA_NL - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



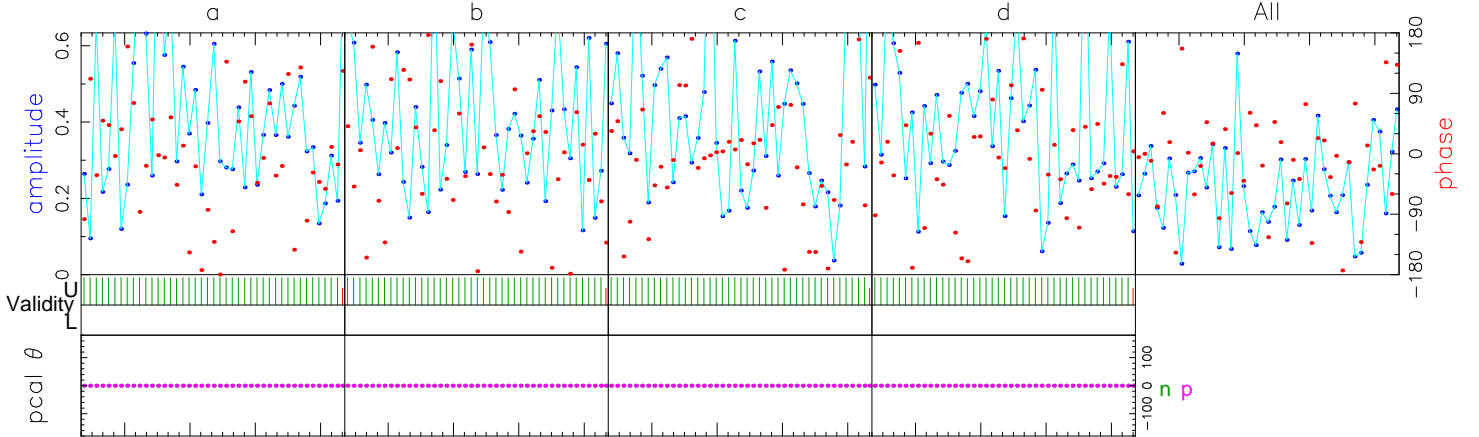
Fringe quality 0

SNR 6.0
 Int time 239.820
 Amp 0.211
 Phase -317.6
 PFD 2.3e-01
 Delays (us)
 SBD -0.472436
 MBD -0.001369
 Fringe rate (Hz)
 0.924640
 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		
n	1000	1000	1000	1000		
p	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000		
p	1000	1000	1000	1000		
n	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UR	Q01UR	Q02UR	Q03UR		

Group delay (usec) (SBD)	-1.46887380003E+03	Apriori delay (usec)	-1.46840368126E+03	Resid mbdelay (usec)	-1.36876E-03	+/-	1.9E-04
Sband delay (usec)	-1.46887611751E+03	Apriori clock (usec)	-5.9938641E+08	Resid sbdelay (usec)	-4.72436E-01	+/-	7.2E-04
Phase delay (usec)	-1.46840368143E+03	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	-1.66645E-07	+/-	1.2E-06
Delay rate (us/s)	-3.50236828595E-01	Apriori rate (us/s)	-3.50258262078E-01	Resid rate (us/s)	2.14335E-05	+/-	8.9E-09
Total phase (deg)	-249.1	Apriori accel (us/s/s)	8.86453645248E-06	Resid phase (deg)	-317.6	+/-	19.1

ph/seg (deg)	RMS 71.7	Theor. 62.7	Amplitude Search (1024X16)	0.211 +/- 0.035	0.138	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	102.1	109.4	Interp.	0.000	0.213	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	8.7	19.1	Inc. seg. avg.	0.213	0.201	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	17.0	33.4	Inc. frq. avg.	0.201		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		

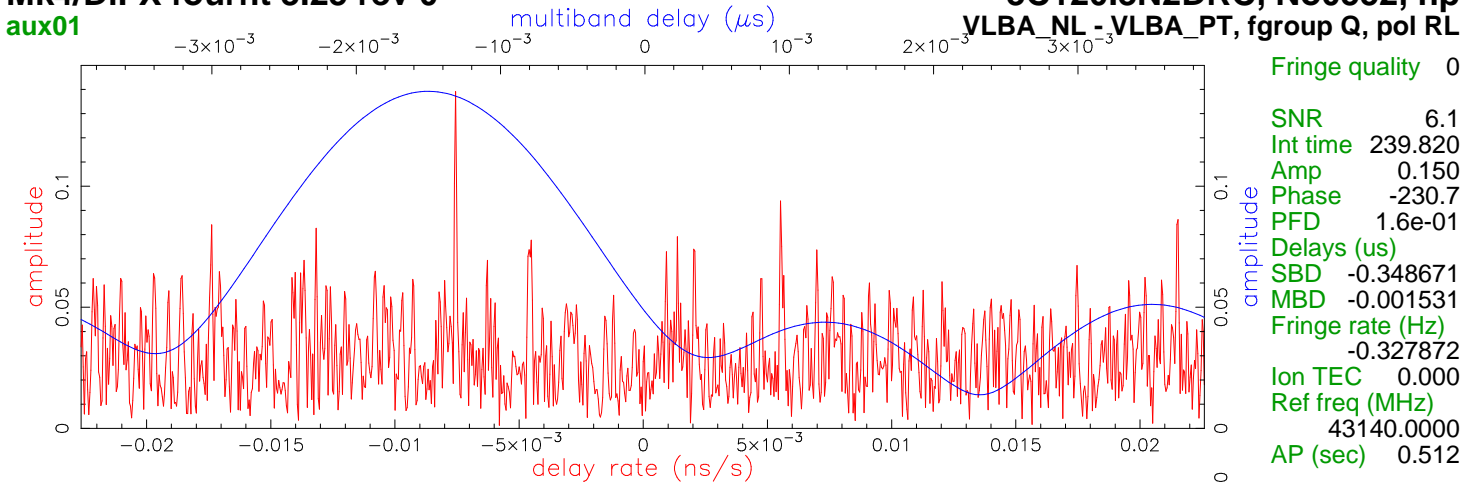
n: az 192.0 el 53.1 pa 9.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 1013.064 486.295 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/np..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/np.Q.144.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

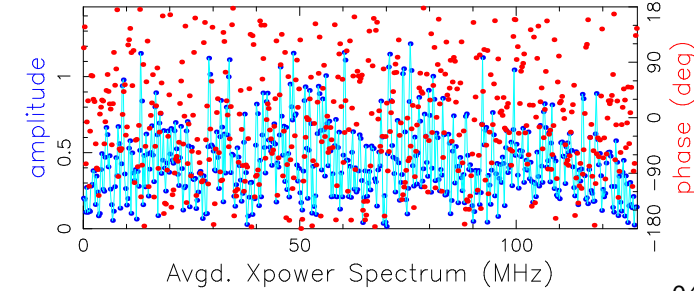
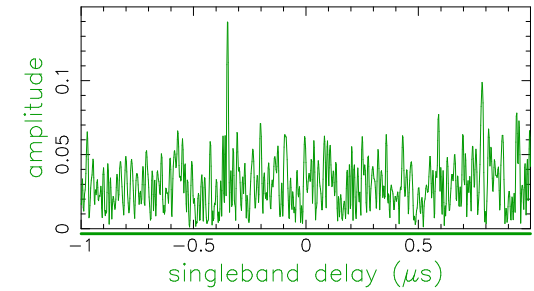
3C120.3N2DRC, No0552, np

VLBA_NL - VLBA_PT, fgroup Q, pol RL



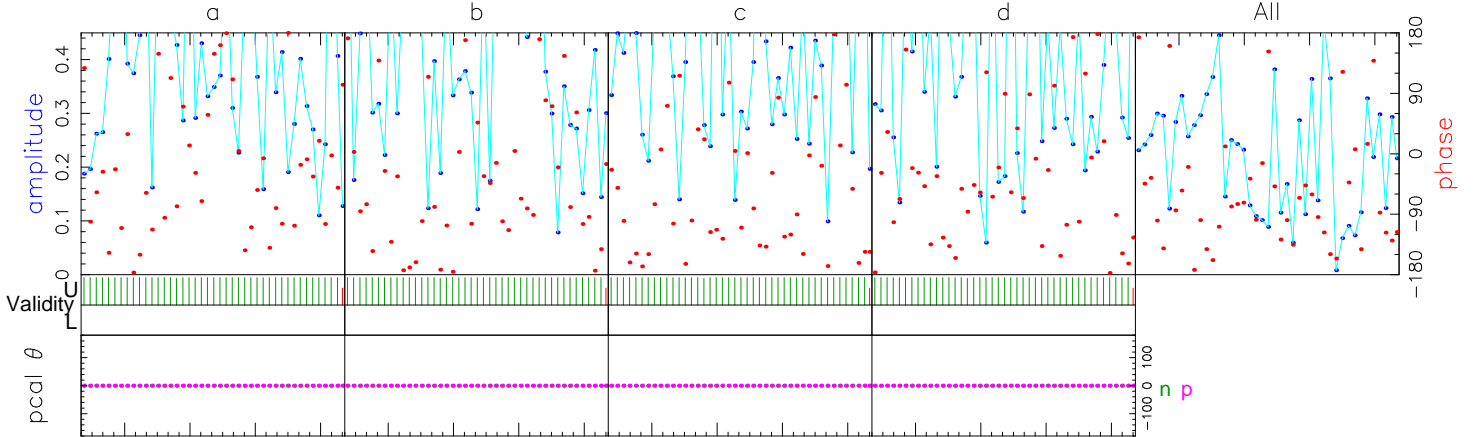
Fringe quality 0

SNR 6.1
 Int time 239.820
 Amp 0.150
 Phase -230.7
 PFD 1.6e-01
 Delays (us)
 SBD -0.348671
 MBD -0.001531
 Fringe rate (Hz)
 -0.327872
 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
-79.4	-110.0	-115.7	-77.3	Phase	-95.7
0.1	0.2	0.1	0.2	Ampl.	0.1
510.7	1012.3	523.5	335.0	Sbd box	334.5
U/L 469/0	469/0	469/0	469/0	APs used	
n 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
n:p 0:0	0:0	0:0	0:0	PC phase	
n:p 0:0	0:0	0:0	0:0	Manl PC	
n 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
n Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-1.46874896206E+03	Apriori delay (usec)	-1.46840368126E+03	Resid mbdelay (usec)	-1.53080E-03	+/- 1.8E-04
Sband delay (usec)	-1.46875235251E+03	Apriori clock (usec)	-5.9938641E+08	Resid sbdelay (usec)	-3.48671E-01	+/- 7.1E-04
Phase delay (usec)	-1.46840368743E+03	Apriori clockrate (us/s)	-8.1437027E-08	Resid phdelay (usec)	-6.16402E-06	+/- 1.2E-06
Delay rate (us/s)	-3.50265862273E-01	Apriori rate (us/s)	-3.50258262078E-01	Resid rate (us/s)	-7.60020E-06	+/- 8.8E-09
Total phase (deg)	-162.2	Apriori accel (us/s/s)	8.86453645248E-06	Resid phase (deg)	-230.7	+/- 18.9

ph/seg (deg)	RMS 62.1	Theor. 62.0	Amplitude Search (1024X16)	0.150 +/- 0.025	0.136	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	97.1	108.2	Interp.	0.000	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	24.6	18.9	Inc. seg. avg.	0.148	0.145	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	9.7	33.0	Inc. frq. avg.	0.145		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

n: az 192.0 el 53.1 pa 9.3 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) 1013.064 486.295 simultaneous interpolator

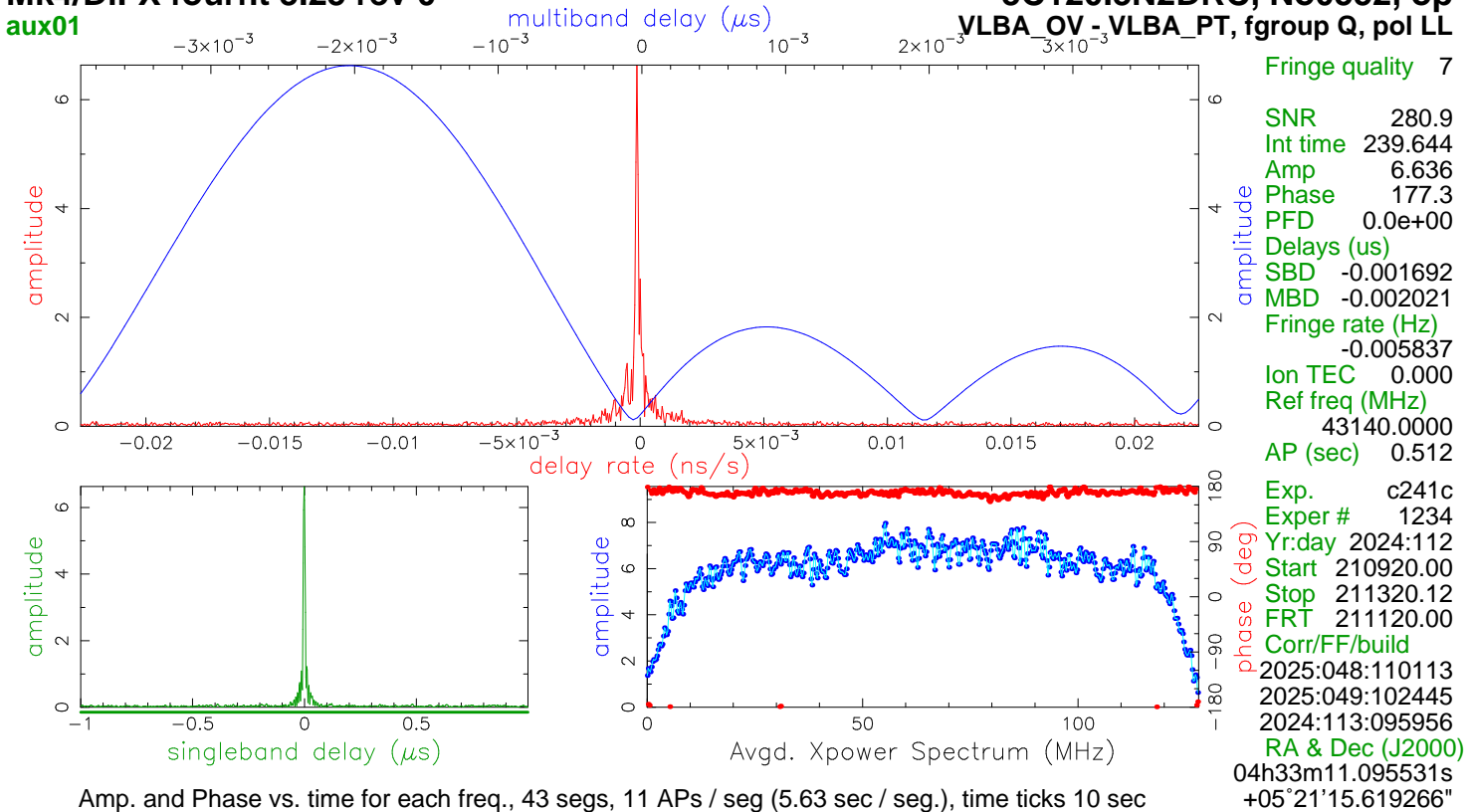
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//np..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//np.Q.157.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

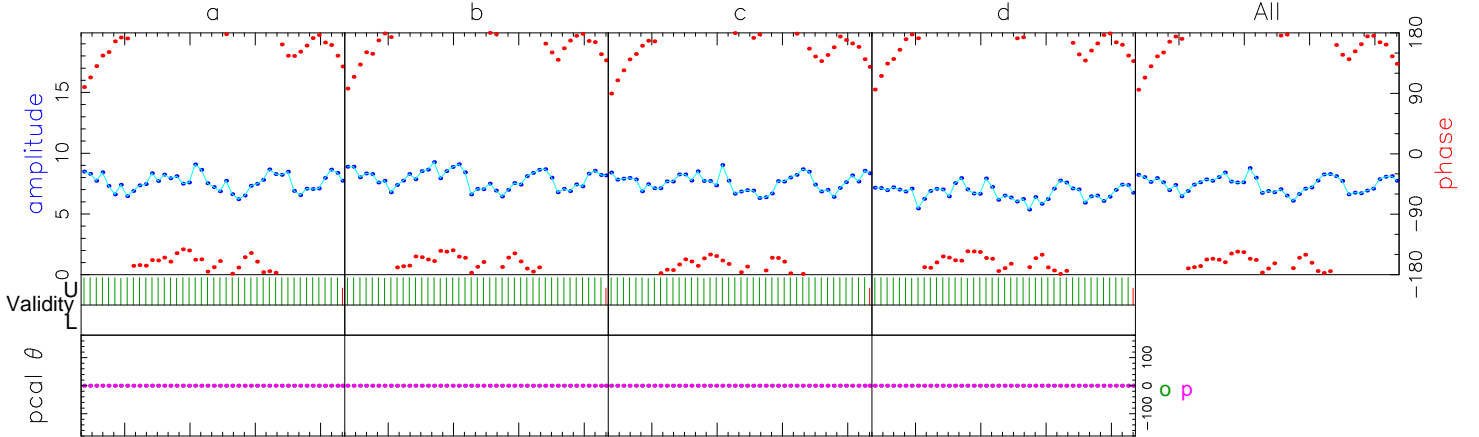
aux01

3C120.3N2DRC, No0552, op

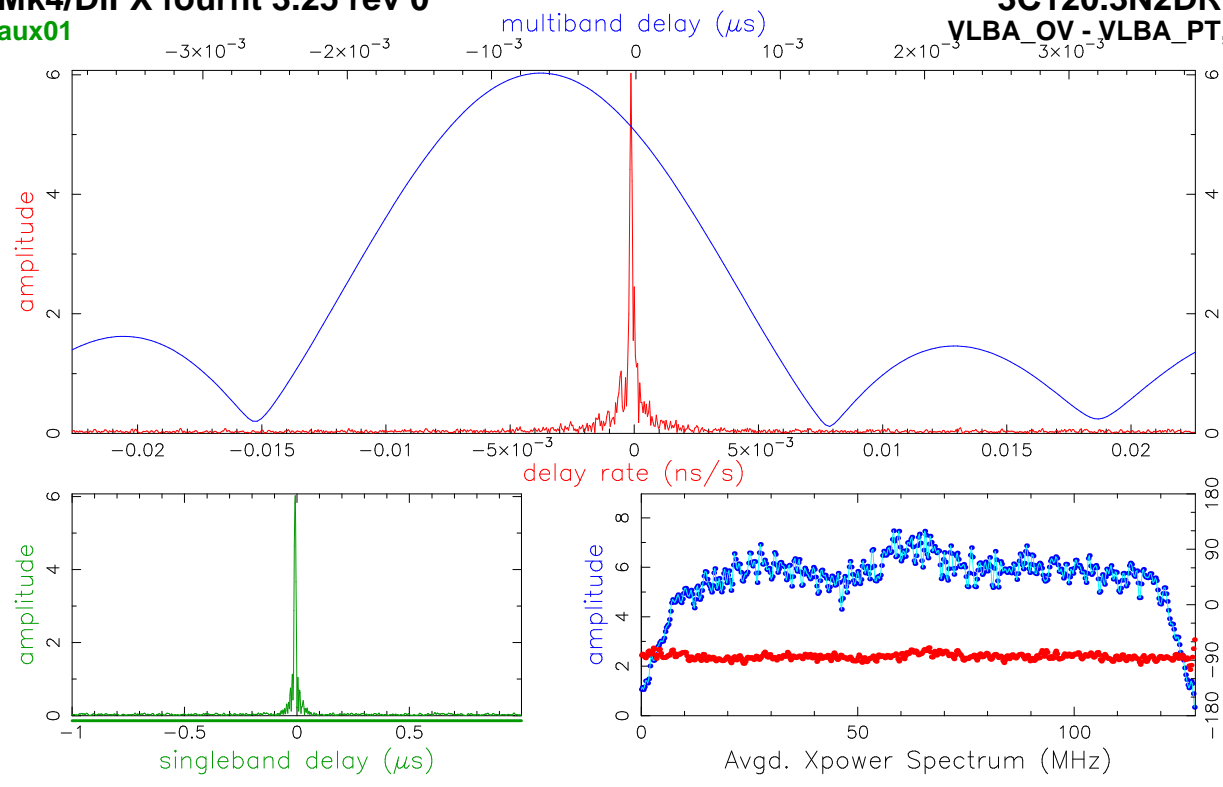
VLBA_OV - VLBA_PT, fgroup Q, pol LL



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



Group delay (usec) (SBD)	-1.22599291368E+03	Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-2.02104E-03	+/-	4.0E-06
Sband delay (usec)	-1.22599258464E+03	Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-1.69200E-03	+/-	1.5E-05
Phase delay (usec)	-1.22599088122E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	1.14189E-05	+/-	2.6E-08
Delay rate (us/s)	2.05156093512E-01	Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.35296E-07	+/-	1.9E-10
Total phase (deg)	138.2	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	177.3	+/-	0.4
ph/seg (deg)	RMS 27.5 Theor. 1.3	Amplitude	6.636 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	15.5 2.3	Search (1024X16)	6.588	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	3.4 0.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	5.4 0.7	Inc. seg. avg.	7.456	Data rate(MSamp/s):	256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023
		Inc. frq. avg.	6.631	Data rate(Mb/s):	2048	nlags: 512 t_cohere infinite	ion window (TEC) 0.00 0.00
o: az 146.1 el 53.5 pa -26.2	p: az 161.3 el 59.8 pa -15.0	u, v (fr/asec)	-587.416 208.643				simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC	Output file:	/Exps/c241c/v2/7mm/3001/No0552//op.Q.139.3N2DRC				

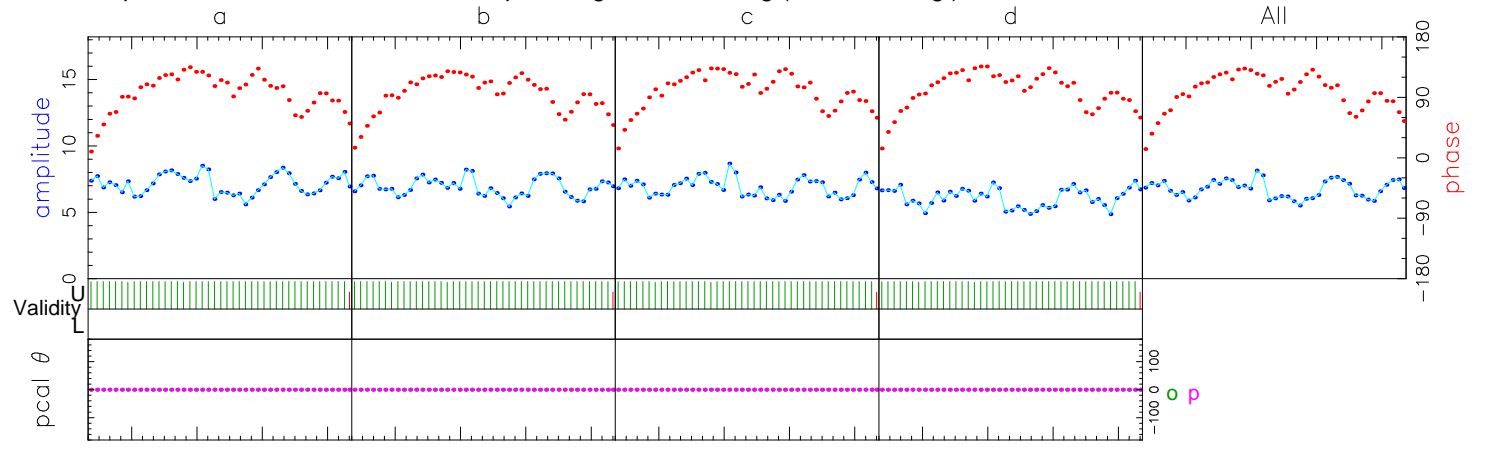


Fringe quality 7

SNR 257.1
Int time 239.644
Amp 6.073
Phase -183.0
PFD 0.0e+00
Delays (us)
SBD -0.008393
MBD -0.000687
Fringe rate (Hz)
-0.005831
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512

Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 210920.00
Stop 211320.12
FRT 211120.00
Corr/FF/build
2025:048:110113
2025:049:102447
2024:113:095956
RA & Dec (J2000)
04h33m11.095531s
+05°21'15.619266"

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
97.5	95.7	99.9	100.2	Phase	98.3
6.3	6.2	6.2	5.4	Ampl.	6.0
508.4	508.8	508.6	509.2	Sbd box	508.7
U/L 469/0	469/0	469/0	469/0	APs used	
o 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
o:p 0:0	0:0	0:0	0:0	PC phase	
o:p 0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
o Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	-1.22599939253E+03	Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-6.87383E-04 +/- 4.3E-06
Sband delay (usec)	-1.22599928602E+03	Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-8.39338E-03 +/- 1.7E-05
Phase delay (usec)	-1.22599088632E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	6.32691E-06 +/- 2.9E-08
Delay rate (us/s)	2.05156093642E-01	Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.35166E-07 +/- 2.1E-10
Total phase (deg)	-222.1	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	-183.0 +/- 0.4
RMS	Theor.	Amplitude	6.073 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
27.4	1.5	Search (1024X16)	5.946	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
15.6	2.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
2.6	0.4	Inc. seg. avg.	6.763	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
6.1	0.8	Inc. frq. avg.	6.029	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
o: az 146.1 el 53.5 pa -26.2		p: az 161.3 el 59.8 pa -15.0		u,v (fr/asec) -587.416 208.643	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.152.3N2DRC	

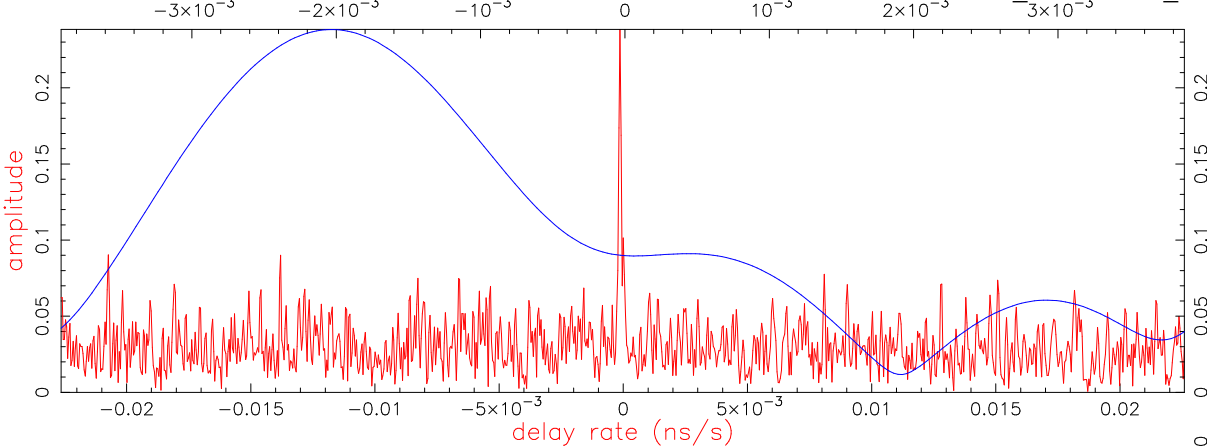
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, op

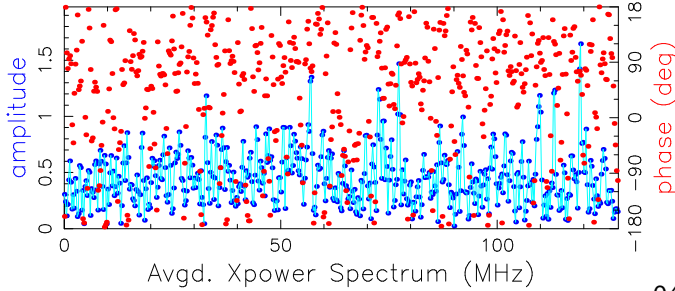
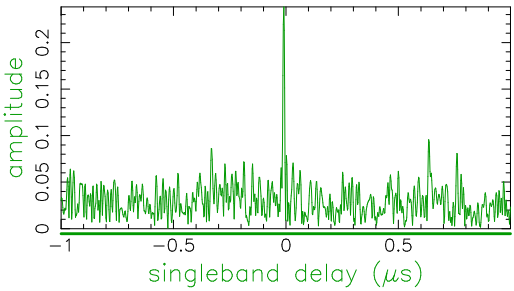
VLBA_OV - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



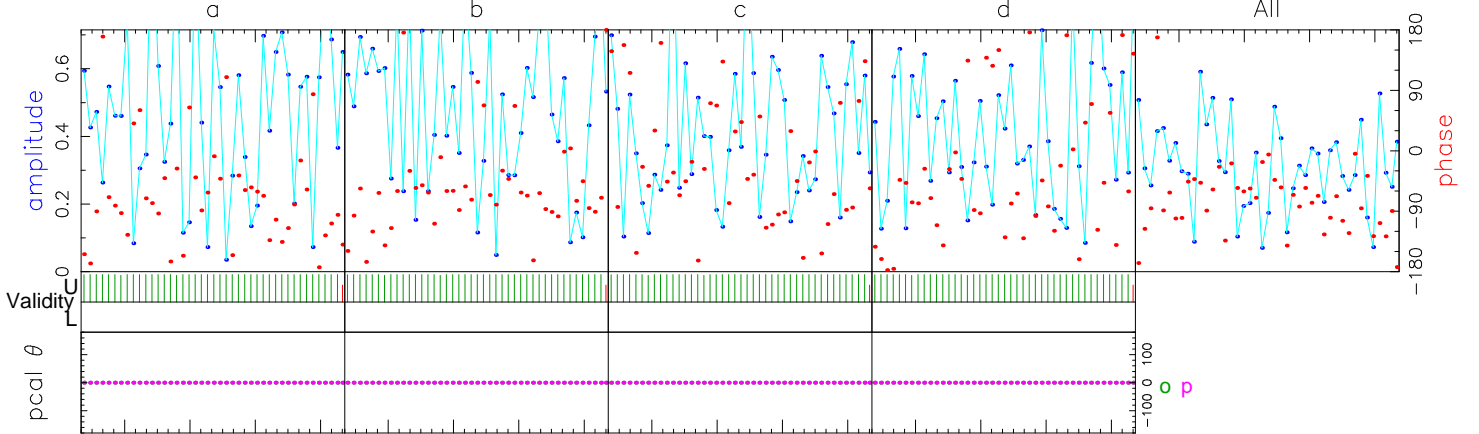
Fringe quality 9

SNR 10.1
 Int time 239.644
 Amp 0.238
 Phase -1.1
 PFD 1.3e-15
 Delays (us)
 SBD -0.009900
 MBD -0.002043
 Fringe rate (Hz)
 -0.005780
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102449
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

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



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

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

ph/seg (deg)	RMS 42.6	Theor. 37.2	Amplitude Search (1024X16)	0.237	0.238 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.5	65.0	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	15.9	11.4	Inc. seg. avg.	0.259		Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	37.6	19.8	Inc. frq. avg.	0.237		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

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

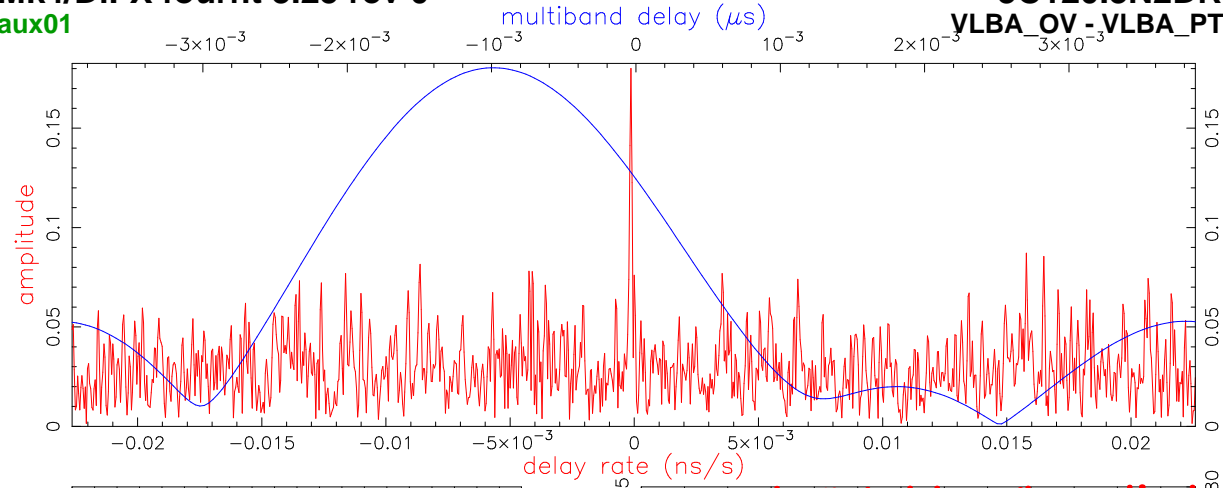
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//op..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.165.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, op

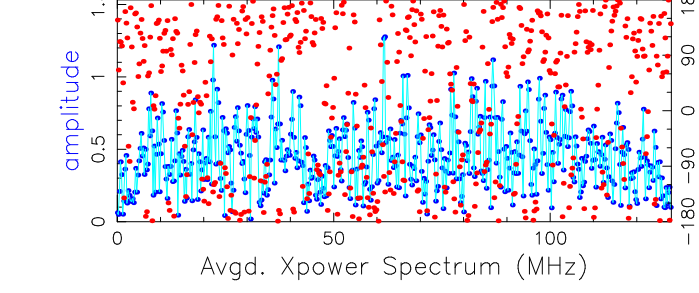
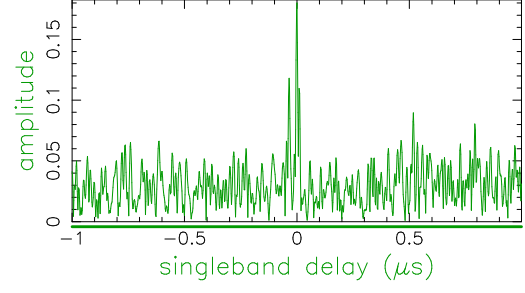
VLBA_OV - VLBA_PT, fgroup Q, pol RL



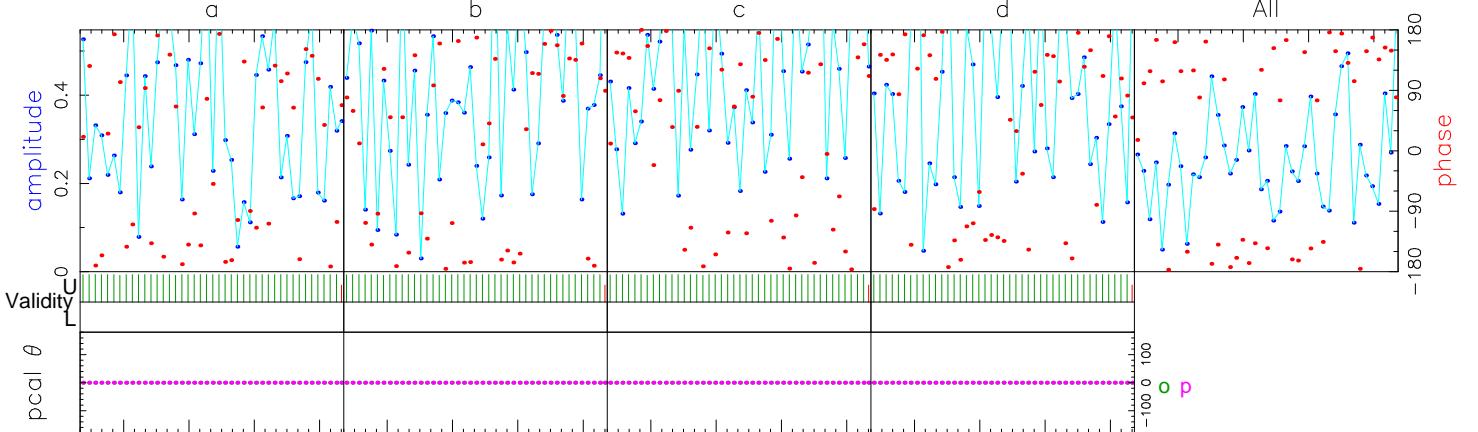
Fringe quality 9

SNR 7.7
 Int time 239.644
 Amp 0.183
 Phase 162.3
 PFD 1.8e-06
 Delays (us)
 SBD -0.000682
 MBD -0.001057
 Fringe rate (Hz)
 -0.005840
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102451
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



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



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

Group delay (usec) (SBD)	-1.22599194928E+03	Apriori delay (usec)	-1.22599089264E+03	Resid mbdelay (usec)	-1.05663E-03	+/- 1.4E-04
Sband delay (usec)	-1.22599157439E+03	Apriori clock (usec)	1.9360050E+01	Resid sbdelay (usec)	-6.81750E-04	+/- 5.6E-04
Phase delay (usec)	-1.22599088219E+03	Apriori clockrate (us/s)	1.0257507E-07	Resid phdelay (usec)	1.04529E-05	+/- 9.5E-07
Delay rate (us/s)	2.05156093436E-01	Apriori rate (us/s)	2.05156228808E-01	Resid rate (us/s)	-1.35372E-07	+/- 6.9E-09
Total phase (deg)	123.2	Apriori accel (us/s/s)	7.06186496353E-06	Resid phase (deg)	162.3	+/- 14.8

ph/seg (deg) 49.0 48.6 Search (1024X16) 0.179 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.0 84.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.0 14.8 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 13.3 25.9 Inc. frq. avg. 0.177 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 o: az 146.1 el 53.5 pa -26.2 p: az 161.3 el 59.8 pa -15.0 u,v (fr/asec) -587.416 208.643 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//op..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//op.Q.175.3N2DRC simultaneous interpolator

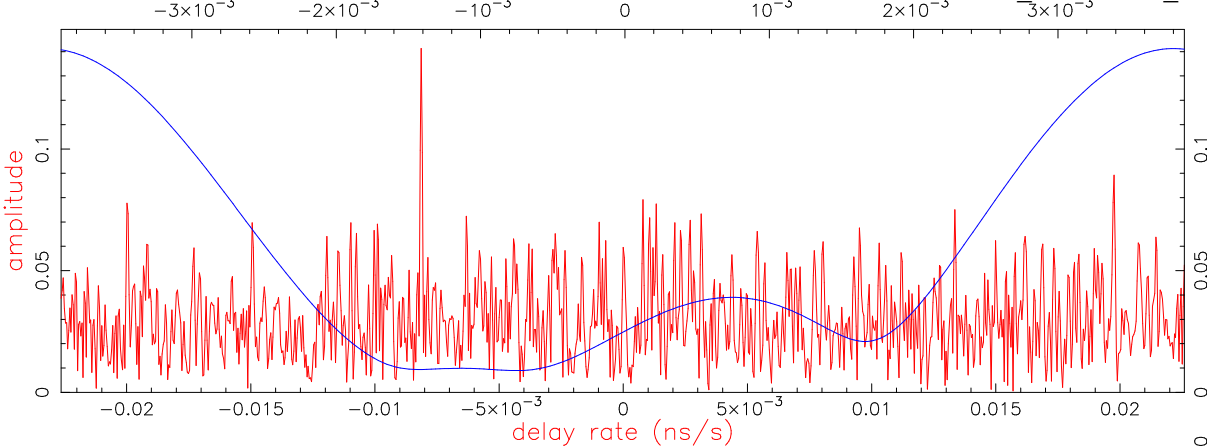
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, pc

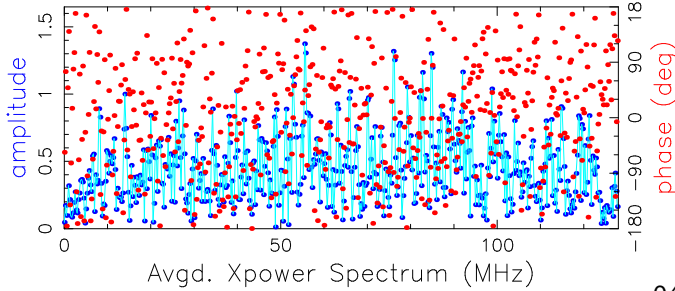
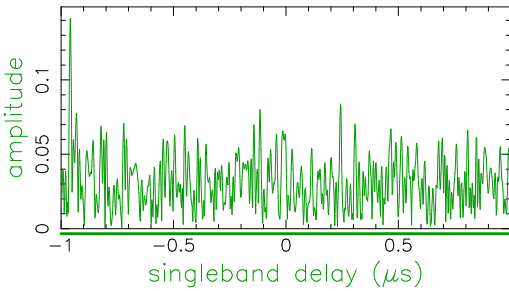
VLBA_PT - VLBA_SC, fgroup Q, pol LL

multiband delay (μ s)



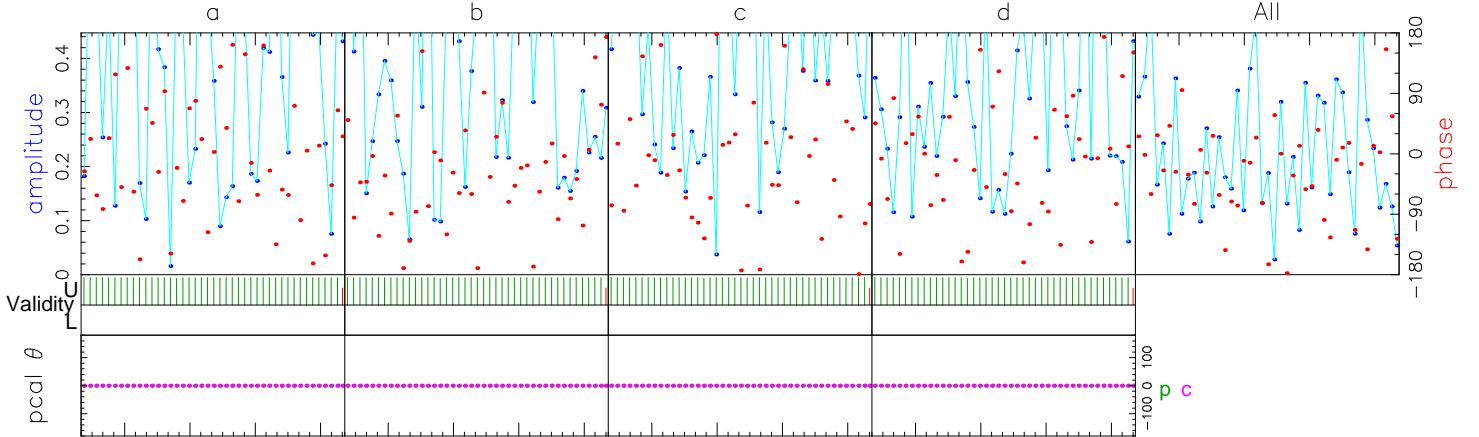
Fringe quality 0

SNR 6.0
 Int time 239.798
 Amp 0.149
 Phase -136.4
 PFD 2.5e-01
 Delays (us)
 SBD -0.959027
 MBD -0.004015
 Fringe rate (Hz)
 -0.352348
 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
 2025:049:102444
 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
	-11.0	-39.6	-18.6	-19.3	Phase	-23.9
	0.1	0.2	0.2	0.1	Ampl.	0.1
	752.4	22.5	571.3	637.7	Sbd box	22.0
U/L	469/0	469/0	469/0	469/0	APs used	
p	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
p:c	0:0	0:0	0:0	0:0	PC phase	
p:c	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
p	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	1.33243844587E+03	Apriori delay (usec)	1.33339558584E+03	Resid mbdelay (usec)	-4.01497E-03	+/- 1.9E-04
Group delay (usec) (SBD)	1.33243844587E+03	Apriori clock (usec)	2.0292664E+07	Resid sbdelay (usec)	-9.59027E-01	+/- 7.2E-04
Sband delay (usec)	1.33243655896E+03	Apriori clockrate (us/s)	7.7196702E-07	Resid phdelay (usec)	-1.53646E-06	+/- 1.2E-06
Phase delay (usec)	1.33339558430E+03	Apriori rate (us/s)	1.03353549249E+00	Resid rate (us/s)	-8.16756E-06	+/- 8.9E-09
Delay rate (us/s)	1.03352732493E+00	Apriori accel (us/s/s)	-4.33484656949E-06	Resid phase (deg)	-136.4	+/- 19.2
Total phase (deg)	-290.1					

	RMS	Theor.	Amplitude	0.149 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.8	62.8	Search (1024X16)	0.136	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	107.6	109.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	15.2	19.2	Inc. seg. avg.	0.152	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	24.2	33.4	Inc. frq. avg.	0.144	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
p: az 161.3 el 59.8 pa -15.0		c: az 253.9 el 54.4 pa 66.9		u,v (fr/asec) -2982.353 1122.438		simultaneous interpolator

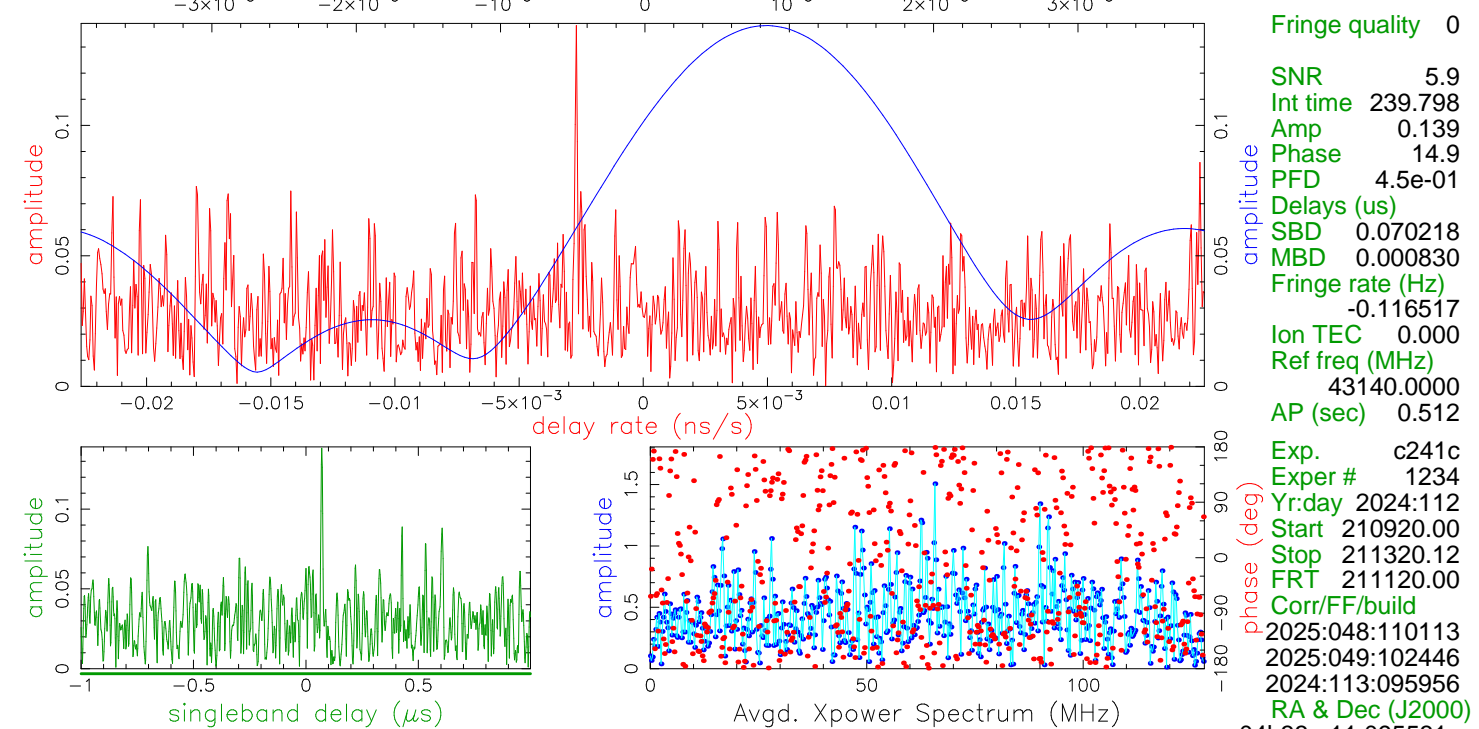
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/pc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pc.Q.138.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

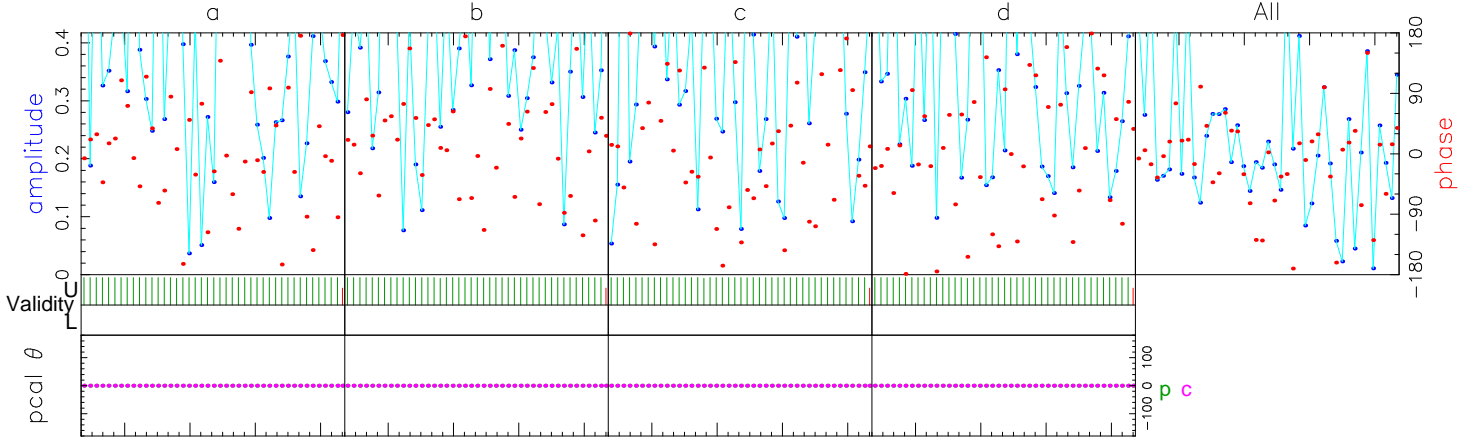
aux01

3C120.3N2DRC, No0552, pc

VLBA_PT - VLBA_SC, fgroup Q, pol RR



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		
p	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	PC freqs	
p:c	0:0	0:0	0:0	0:0	PC freqs	
p:c	0:0	0:0	0:0	0:0	PC phase	
p	1000	1000	1000	1000	Manl PC	
c	1000	1000	1000	1000	PC amp	
p	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.33346672861E+03	Apriori delay (usec)	1.33339558584E+03	Resid mbdelay (usec)	8.30270E-04	+/-	1.9E-04
Sband delay (usec)	1.33346580409E+03	Apriori clock (usec)	2.0292664E+00	Resid sbdelay (usec)	7.02183E-02	+/-	7.4E-04
Phase delay (usec)	1.33339558607E+03	Apriori clockrate (us/s)	7.7196702E-07	Resid phdelay (usec)	2.37538E-07	+/-	1.3E-06
Delay rate (us/s)	1.03353279159E+00	Apriori rate (us/s)	1.03353549249E+00	Resid rate (us/s)	-2.70091E-06	+/-	9.1E-09
Total phase (deg)	221.2	Apriori accel (us/s/s)	-4.33484656949E-06	Resid phase (deg)	14.9	+/-	19.6

ph/seg (deg)	68.3	Theor.	64.2	Amplitude	0.139 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	115.7		112.0	Search (1024X16)	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	15.0		19.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	19.9		34.2	Inc. seg. avg.	0.144	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	mb window (us) -0.004 0.004
				Inc. frq. avg.	0.134	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
							ion window (TEC) 0.00 0.00

p: az 161.3 el 59.8 pa -15.0 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -2982.353 1122.438 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552//pc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552//pc.Q.151.3N2DRC

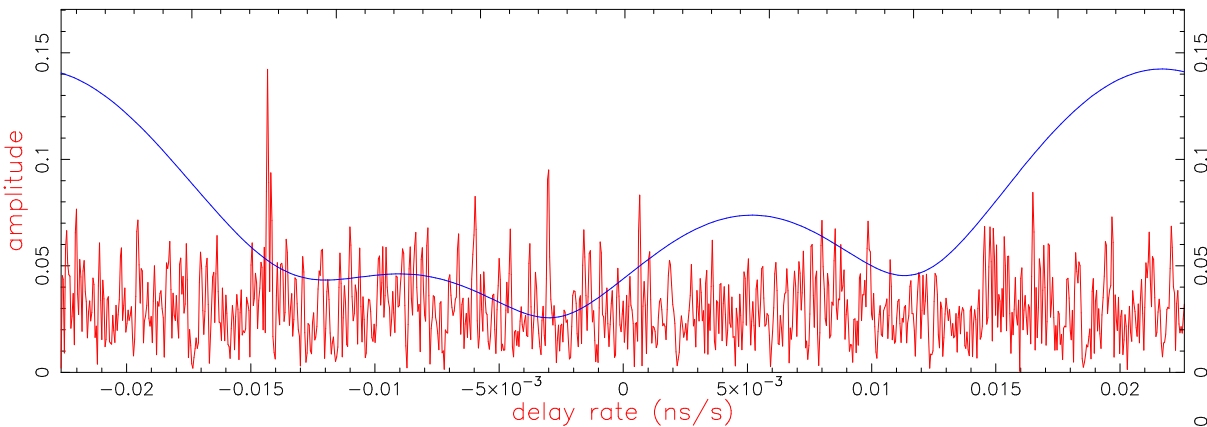
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, pc

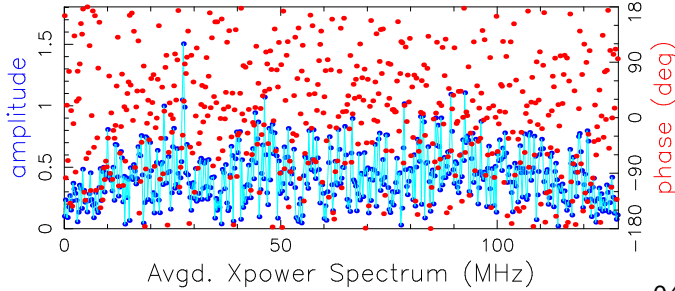
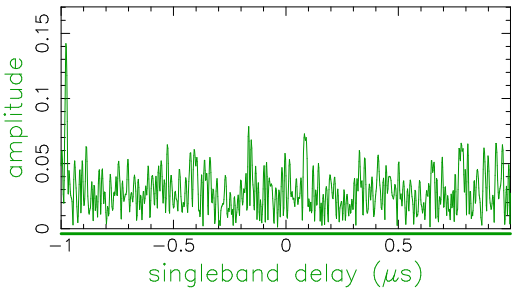
VLBA_PT - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)



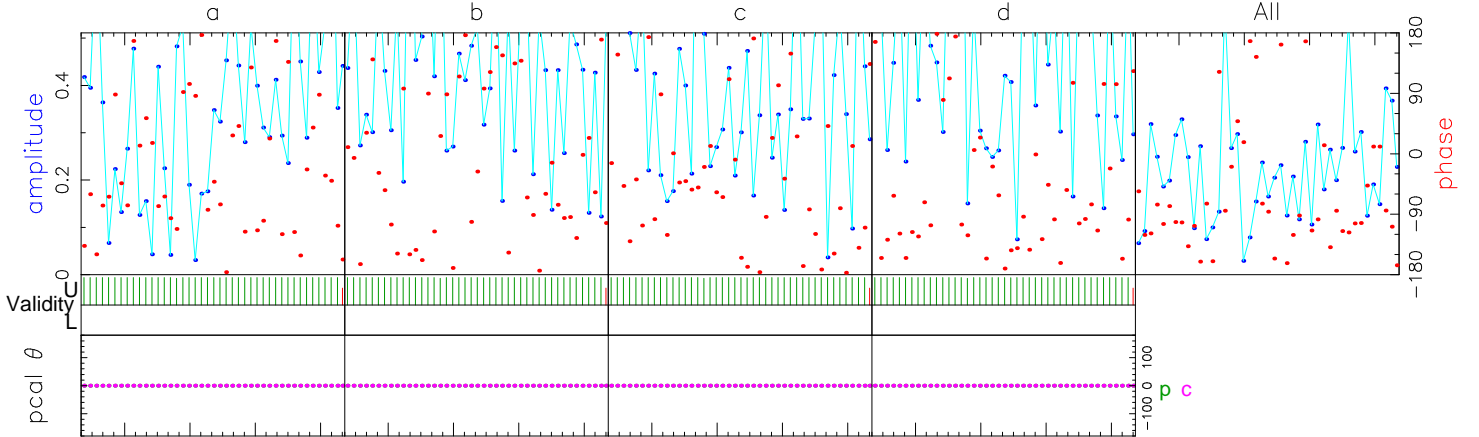
Fringe quality 0

SNR 6.1
 Int time 239.798
 Amp 0.170
 Phase -342.9
 PFD 1.5e-01
 Delays (us)
 SBD -0.977827
 MBD -0.004035
 Fringe rate (Hz)
 -0.621408
 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		
p	1000	1000	1000	1000		
c	1000	1000	1000	1000		
p:c	0:0	0:0	0:0	0:0		
p:c	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000		
c	1000	1000	1000	1000		
p	Q00UL	Q01UL	Q02UL	Q03UL		
c	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

	1.33241498846E+03	Apriori delay (usec)	1.33339558584E+03	Resid mbdelay (usec)	-4.03487E-03	+/- 1.8E-04
Group delay (usec) (SBD)	1.33241775921E+03	Apriori clock (usec)	2.0292664E+00	Resid sbdelay (usec)	-9.77827E-01	+/- 7.1E-04
Sband delay (usec)	1.33339557897E+03	Apriori clockrate (us/s)	7.7196702E-07	Resid phdelay (usec)	-6.86466E-06	+/- 1.2E-06
Phase delay (usec)	1.03352108803E+00	Apriori rate (us/s)	1.03353549249E+00	Resid rate (us/s)	-1.44045E-05	+/- 8.8E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-4.33484656949E-06	Resid phase (deg)	-342.9	+/- 18.9
Total phase (deg)	-136.6					

	RMS	Theor.	Amplitude	0.170 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	63.1	61.9	Search (1024X16)	0.137	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	96.7	108.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	17.9	18.9	Inc. seg. avg.	0.166	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	48.0	32.9	Inc. frq. avg.	0.163	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
p: az 161.3 el 59.8 pa -15.0		c: az 253.9 el 54.4 pa 66.9		u,v (fr/asec) -2982.353 1122.438		simultaneous interpolator

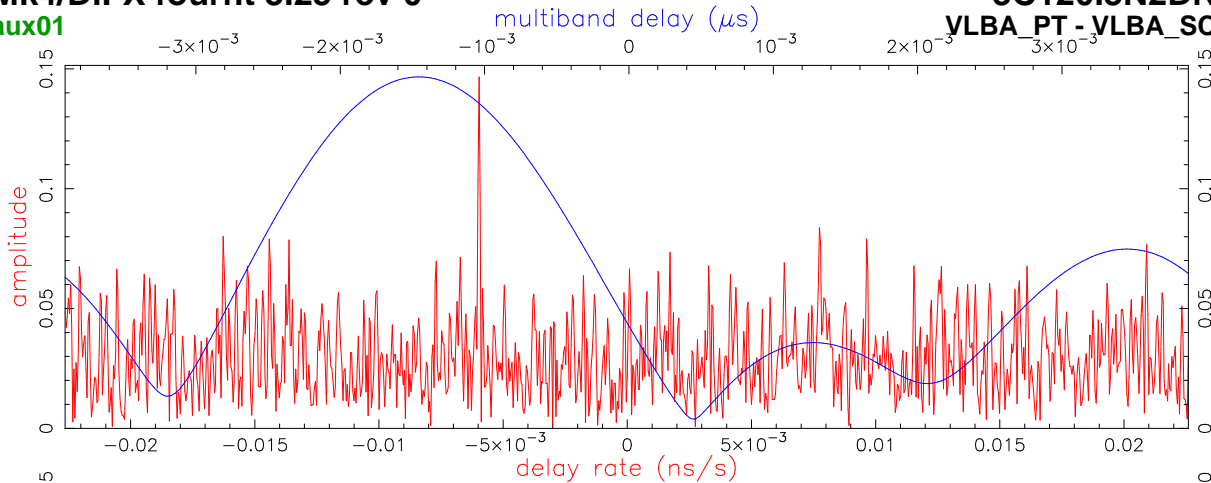
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/pc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pc.Q.164.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

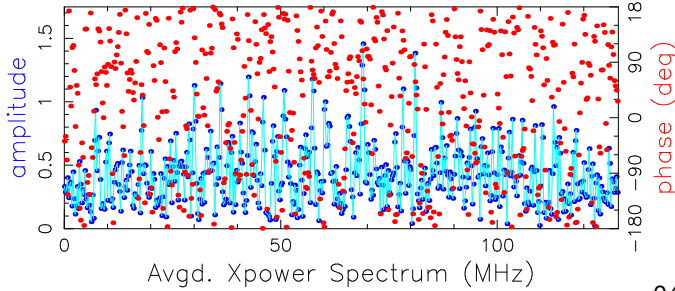
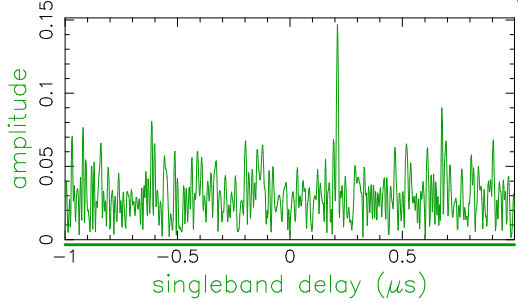
3C120.3N2DRC, No0552, pc

VLBA_PT - VLBA_SC, fgroup Q, pol RL



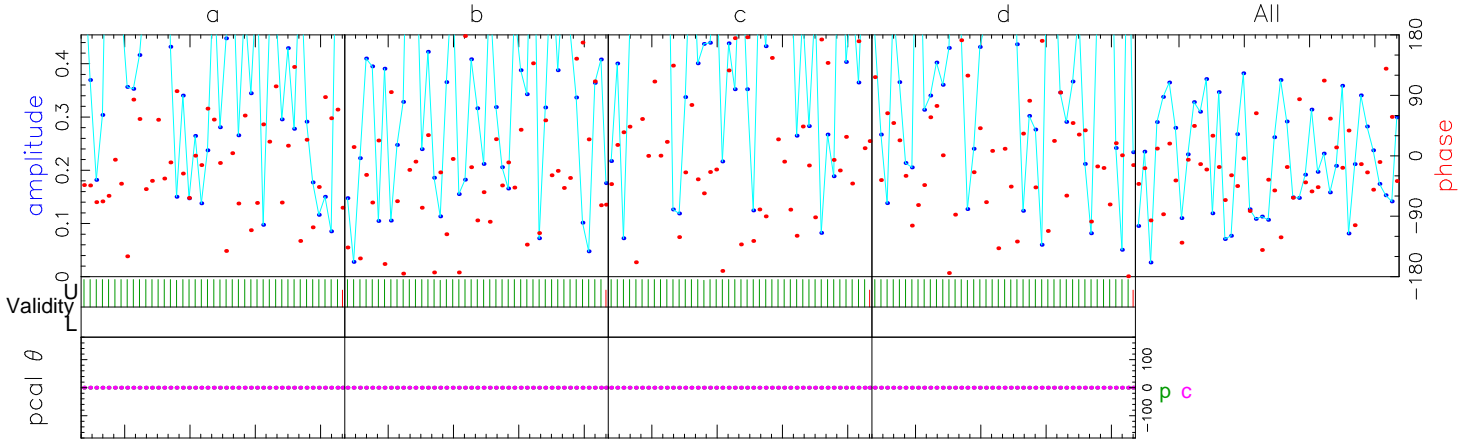
Fringe quality 0

SNR 6.2
 Int time 239.798
 Amp 0.151
 Phase 11.6
 PFD 6.0e-02
 Delays (us)
 SBD 0.211325
 MBD -0.001440
 Fringe rate (Hz)
 -0.258410
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102451
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

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



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

Group delay (usec) (SBD)	1.33360508324E+03	Apriori delay (usec)	1.33339558584E+03	Resid mbdelay (usec)	-1.44010E-03	+/- 1.8E-04
Sband delay (usec)	1.33360691096E+03	Apriori clock (usec)	2.0292664E+00	Resid sbdelay (usec)	2.11325E-01	+/- 6.9E-04
Phase delay (usec)	1.33339558441E+03	Apriori clockrate (us/s)	7.7196702E-07	Resid phdelay (usec)	-1.42550E-06	+/- 1.2E-06
Delay rate (us/s)	1.03352950246E+00	Apriori rate (us/s)	1.03353549249E+00	Resid rate (us/s)	-5.99004E-06	+/- 8.5E-09
Total phase (deg)	217.9	Apriori accel (us/s/s)	-4.33484656949E-06	Resid phase (deg)	11.6	+/- 18.4

ph/seg (deg)	59.6	Theor.	60.3	Amplitude	0.151 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.9	105.2	Search (1024X16)	0.134	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	19.1	18.4	Inc. seg. avg.	0.146	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	nlags: 512 t_cohere infinite	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	18.5	32.1	Inc. frq. avg.	0.147	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00		
p: az 161.3 el 59.8 pa -15.0	c: az 253.9 el 54.4 pa 66.9		u,v (fr/asec) -2982.353 1122.438		simultaneous interpolator					

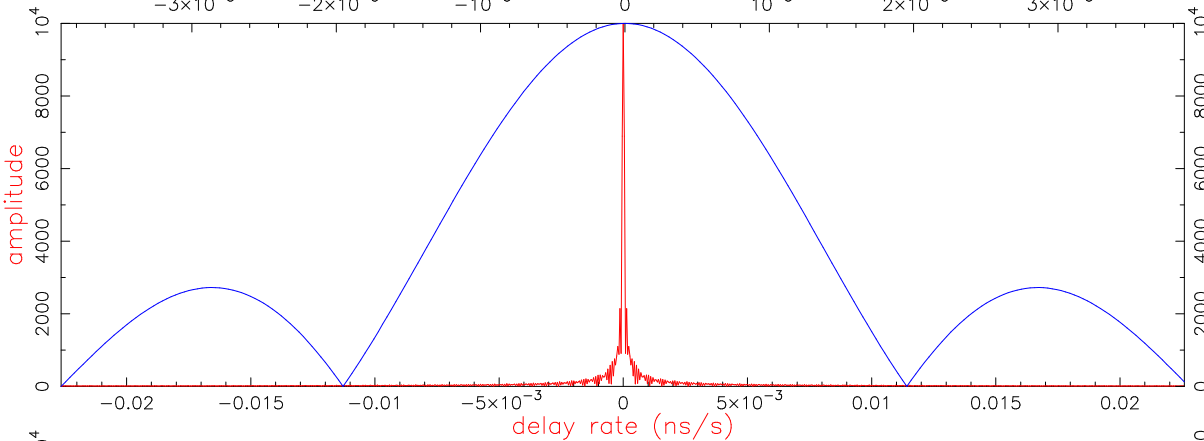
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/pc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pc.Q.177.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

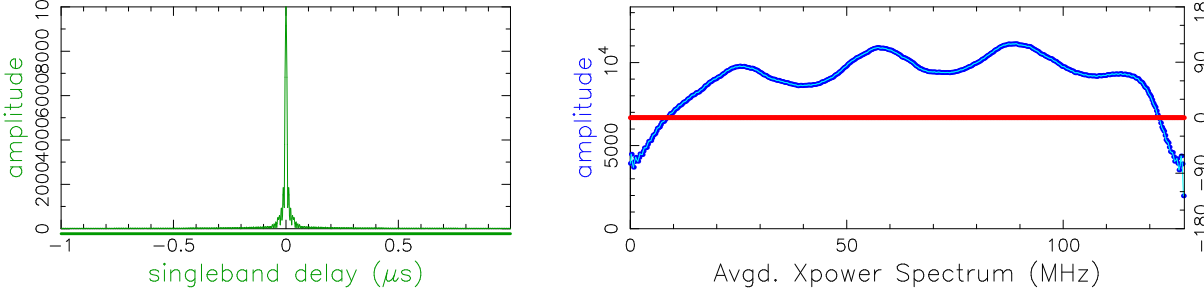
aux01

3C120.3N2DRC, No0552, pp

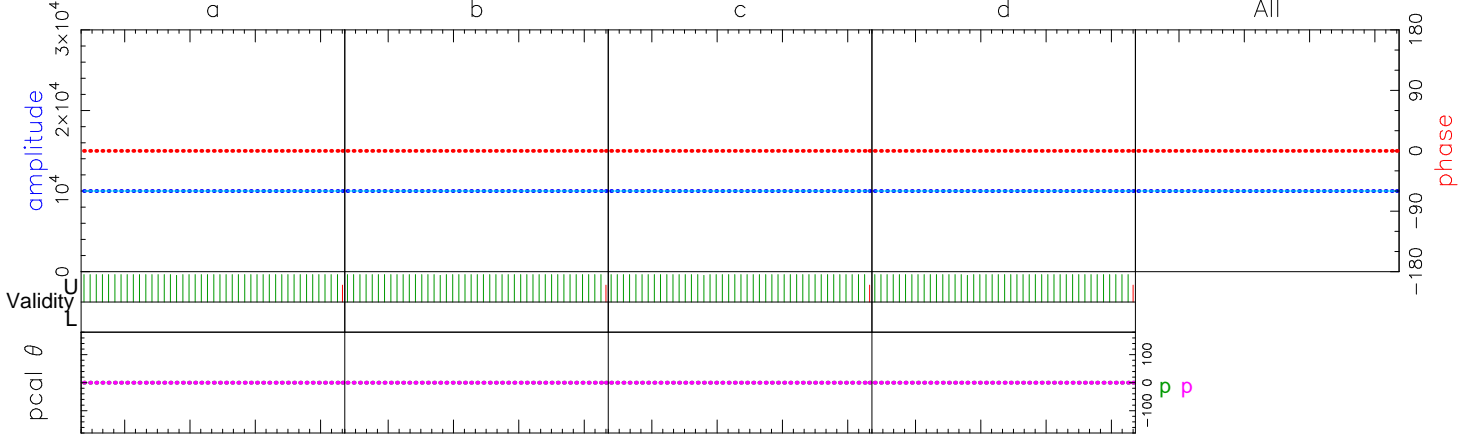
VLBA_PT - VLBA_PT, fgroup Q, pol LL



Fringe quality 9
 SNR 423496.7
 Int time 239.831
 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
 2025:049:102446
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



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



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

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.6E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.0E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.7E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

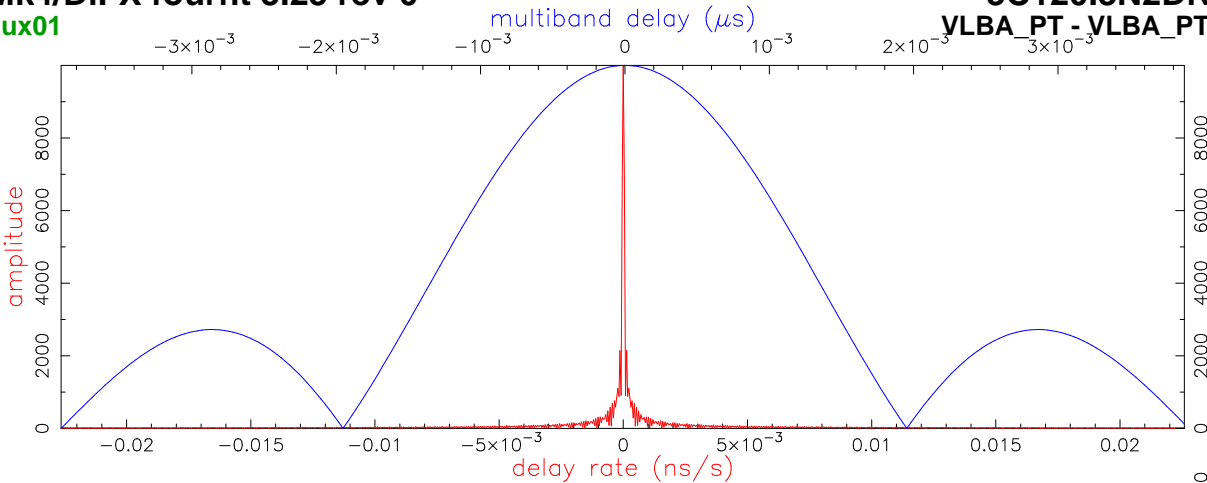
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X16) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 p: az 161.3 el 59.8 pa -15.0 p: az 161.3 el 59.8 pa -15.0 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/pp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pp.Q.148.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

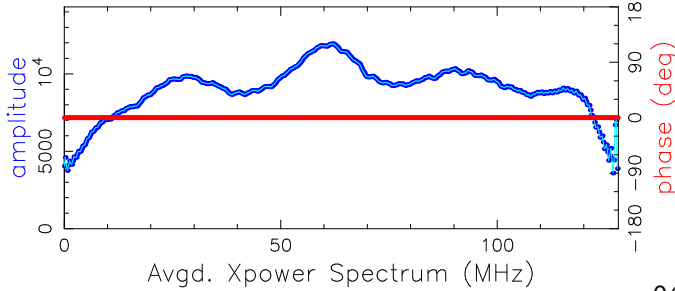
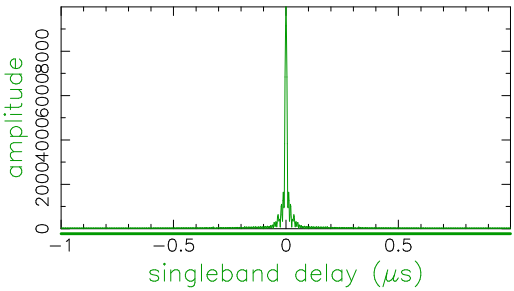
3C120.3N2DRC, No0552, pp

VLBA_PT - VLBA_PT, fgroup Q, pol RR



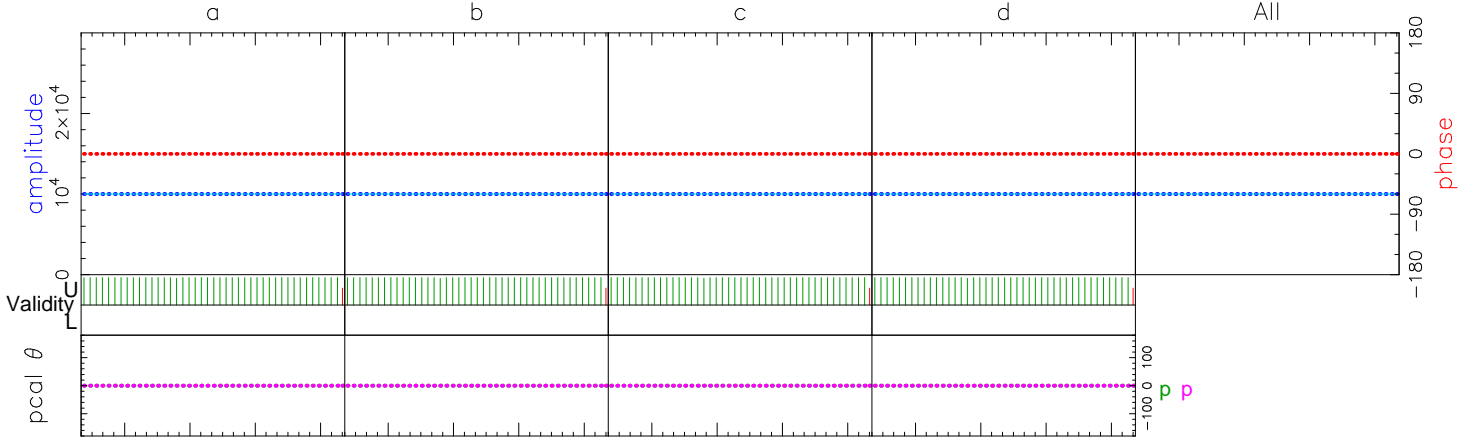
Fringe quality 9

SNR 423496.7
 Int time 239.831
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102448
 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		
p	1000	1000	1000	1000		
p:p	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000		
p	1000	1000	1000	1000		
p	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/- 2.6E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/- 1.0E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/- 1.7E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.000000E+00	+/- 1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/- 0.0

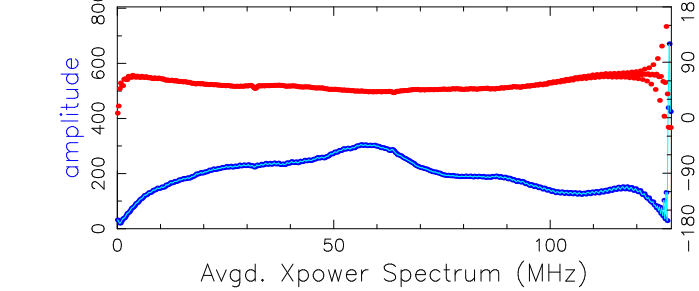
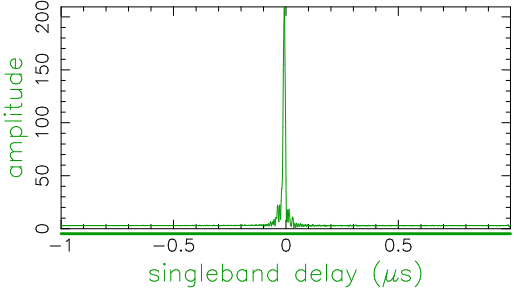
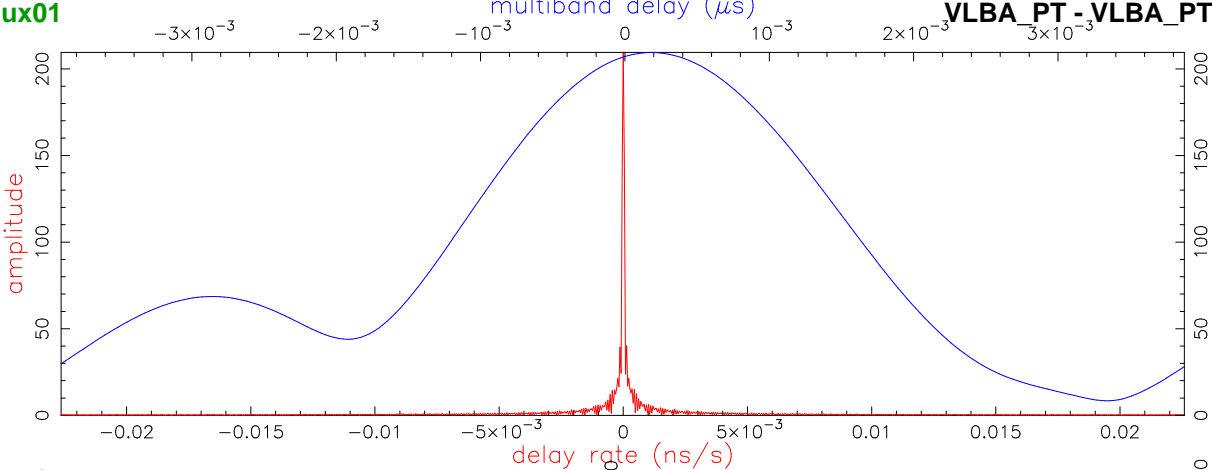
ph/seg (deg) 0.0 0.0 Search (1024X16) 9999.999 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 p: az 161.3 el 59.8 pa -15.0 p: az 161.3 el 59.8 pa -15.0 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/pp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pp.Q.159.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

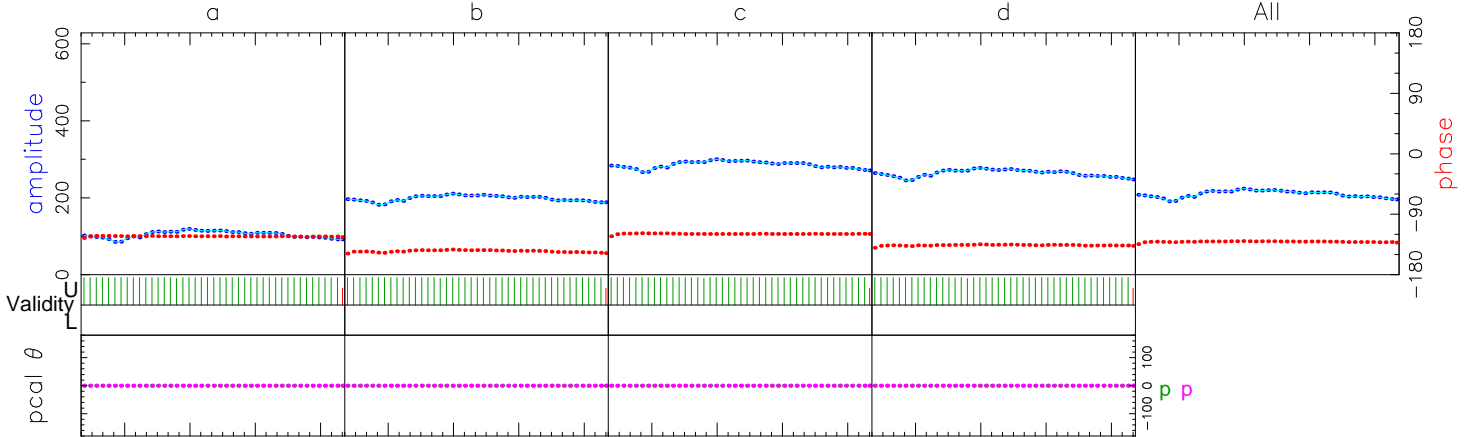
3C120.3N2DRC, No0552, pp

VLBA_PT - VLBA_PT, fgroup Q, pol LR



Fringe quality 7
 Error code G
 SNR 8871.9
 Int time 239.831
 Amp 209.491
 Phase -52.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.007695
 MBD 0.000191
 Fringe rate (Hz)
 0.000008
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102449
 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
	-122.8	-144.9	-119.2	-136.1	Phase	-130.8
	104.3	198.3	285.6	263.4	Ampl.	212.9
	509.4	509.0	509.1	508.9	Sbd box	509.1
U/L	469/0	469/0	469/0	469/0	APs used	
p	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
p:p	0:0	0:0	0:0	0:0	PC phase	
p:p	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
p	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-7.62190625000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.90594E-04	+/-	1.3E-07
Sband delay (usec)	-7.69550000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-7.69550E-03	+/-	4.9E-07
Phase delay (usec)	-8.42392105851E-03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-8.42392E-06	+/-	8.3E-10
Delay rate (us/s)	1.95244579565E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.95245E-10	+/-	6.0E-12
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-52.1	+/-	0.0

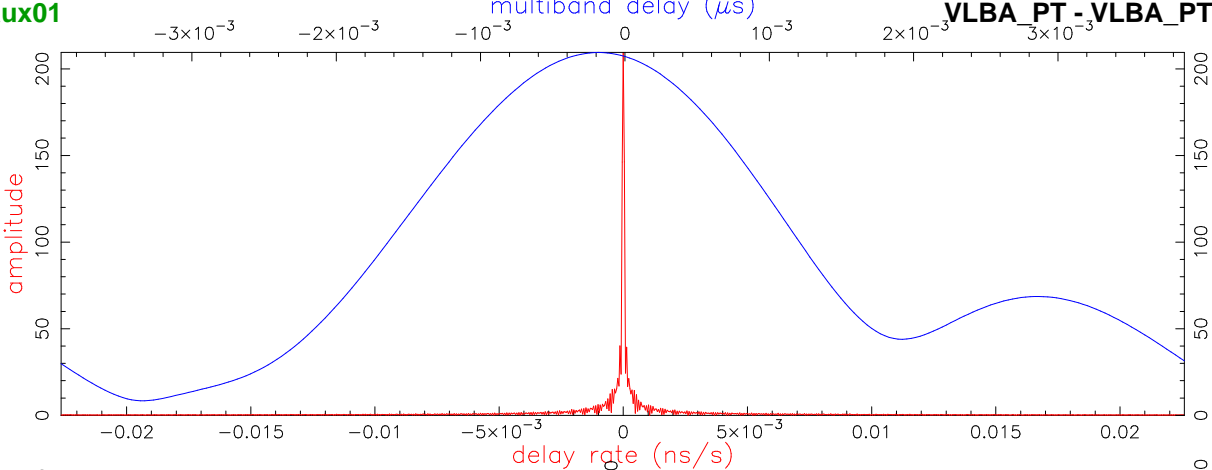
ph/seg (deg) 0.7 0.0 Amplitude 209.491 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.1 0.1 Search (1024X16) 207.133 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 33.7 0.0 Inc. seg. avg. 209.451 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 p: az 161.3 el 59.8 pa -15.0 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/pp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pp.Q.169.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

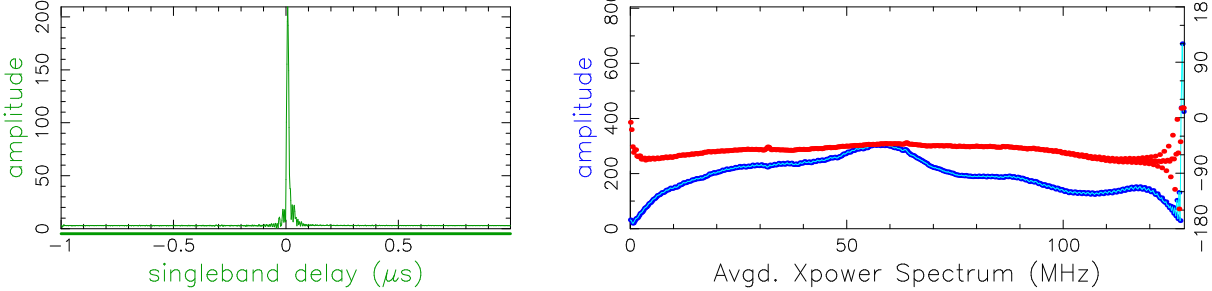
aux01

3C120.3N2DRC, No0552, pp

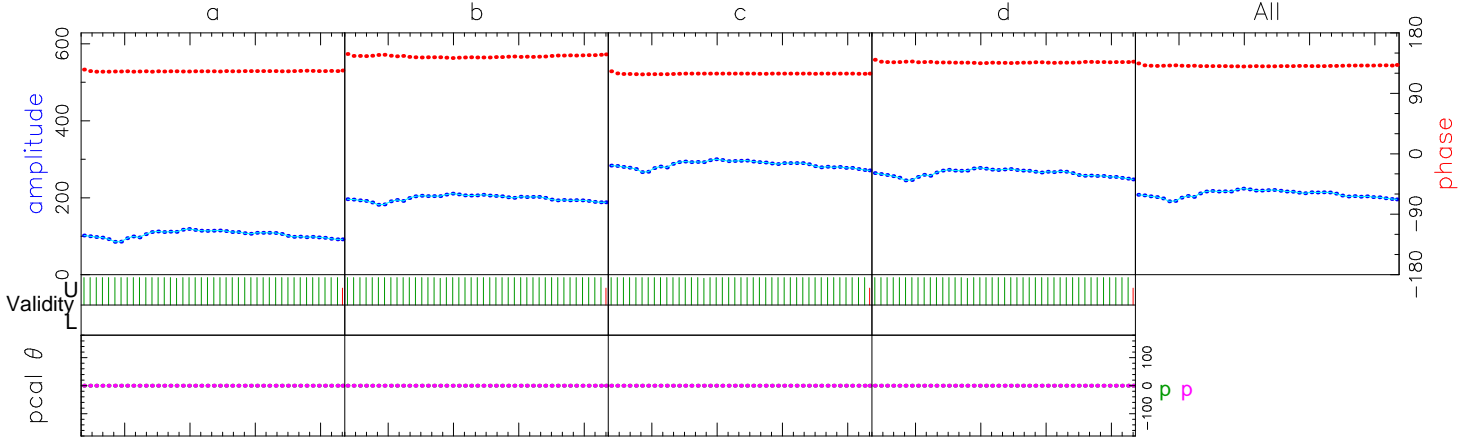
VLBA_PT - VLBA_PT, fgroup Q, pol RL



Fringe quality 7
 Error code G
 SNR 8871.9
 Int time 239.831
 Amp 209.491
 Phase 52.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.007695
 MBD -0.000191
 Fringe rate (Hz)
 -0.000008
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102451
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"



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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	122.8	144.9	119.2	136.1	Phase	130.8
	104.3	198.3	285.6	263.4	Ampl.	212.9
	516.6	517.0	516.9	517.1	Sbd box	516.9
U/L	469/0	469/0	469/0	469/0	APs used	
p	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
p:p	0:0	0:0	0:0	0:0	PC phase	
p:p	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
p	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	7.62190625000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.90594E-04	+/-	1.3E-07
Sband delay (usec)	7.69550000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	7.69550E-03	+/-	4.9E-07
Phase delay (usec)	8.42392105855E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	8.42392E-06	+/-	8.3E-10
Delay rate (us/s)	-1.95244579565E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.95245E-10	+/-	6.0E-12
Total phase (deg)	52.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	52.1	+/-	0.0

ph/seg (deg) 0.7 0.0 Amplitude 209.491 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.1 0.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.6 0.0 Inc. seg. avg. 209.451 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 33.7 0.0 Inc. frq. avg. 212.918 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 p: az 161.3 el 59.8 pa -15.0 p: az 161.3 el 59.8 pa -15.0 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/pp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/pp.Q.178.3N2DRC simultaneous interpolator