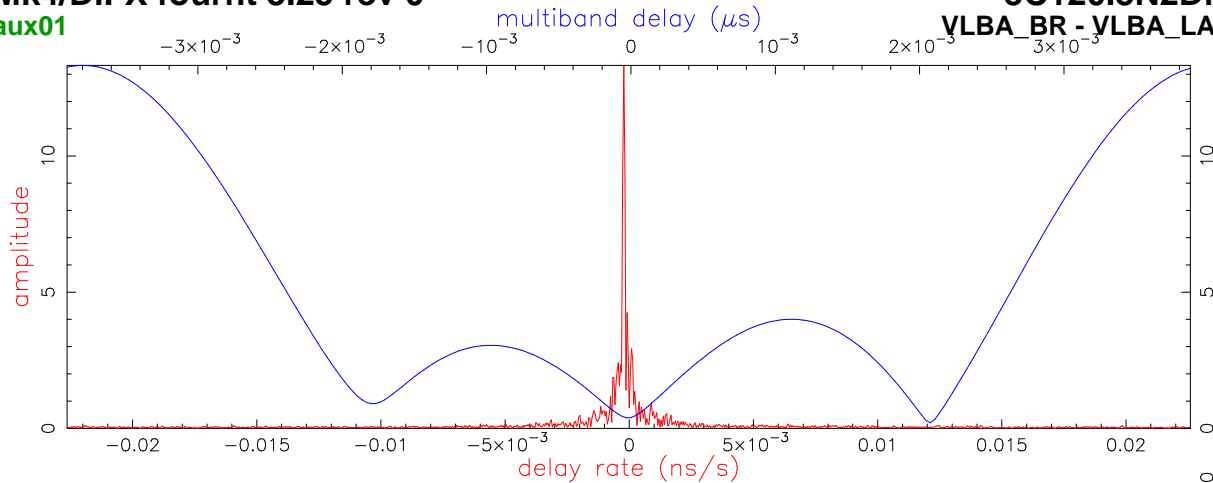


Mk4/DiFX fourfit 3.25 rev 0

aux01

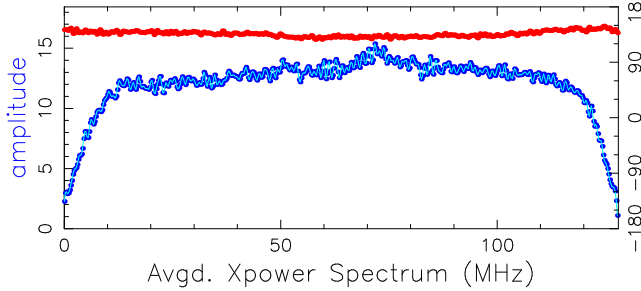
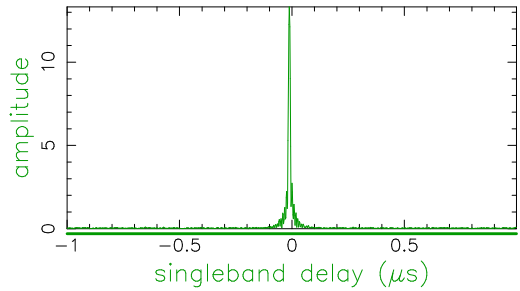
3C120.3N2DRC, No0552, bl

VLBA\_BR - VLBA\_LA, fgroup Q, pol RR



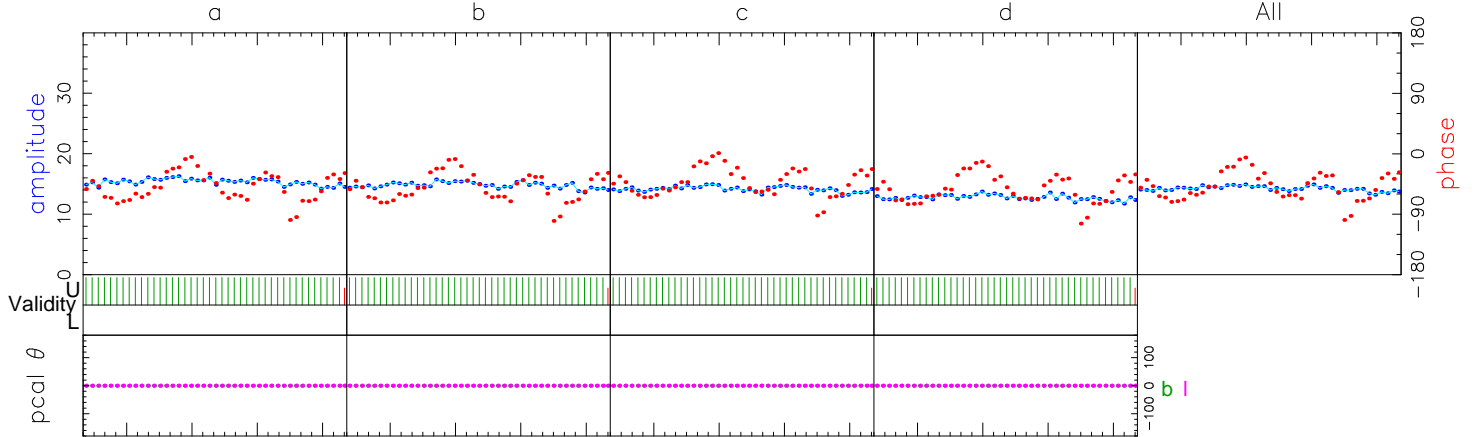
Fringe quality 8

SNR 564.5  
 Int time 239.982  
 Amp 13.325  
 Phase -329.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.011778  
 MBD -0.003801  
 Fringe rate (Hz)  
 -0.009874  
 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
-49.3	-50.1	-41.9	-52.0	Phase	-48.2
14.4	13.9	13.2	11.9	Ampl.	13.4
507.1	507.1	507.1	506.5	Sbd box	507.0
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
b:l 0:0	0:0	0:0	0:0	PC phase	
b:l 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
b Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-3.45629181636E+03	Apriori delay (usec)	-3.45628020308E+03	Resid mbdelay (usec)	-3.80078E-03	+/- 2.0E-06
Sband delay (usec)	-3.45629198158E+03	Apriori clock (usec)	1.2981783E+01	Resid sbdelay (usec)	-1.17785E-02	+/- 7.6E-06
Phase delay (usec)	-3.45628020619E+03	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-3.10640E-06	+/- 1.3E-08
Delay rate (us/s)	2.09655161388E-01	Apriori rate (us/s)	2.09655390271E-01	Resid rate (us/s)	-2.28883E-07	+/- 9.4E-11
Total phase (deg)	-315.4	Apriori accel (us/s/s)	2.01479190962E-05	Resid phase (deg)	-329.5	+/- 0.2

ph/seg (deg)	RMS 20.7	Theor. 0.7	Amplitude Search (1024X16)	13.325 +/- 0.024	13.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	7.5	1.2	Interp.	0.000	14.232	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	5.4	0.2	Inc. seg. avg.	14.232	13.354	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	6.8	0.4	Inc. frq. avg.	13.354		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 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -594.105 781.414 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bl.Q.15.3N2DRC

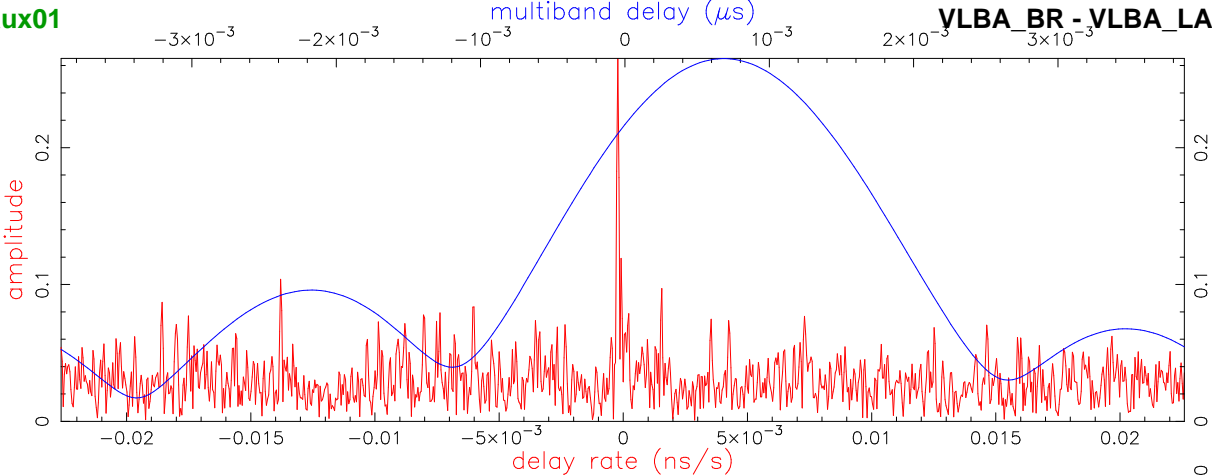
Mk4/DiFX fourfit 3.25 rev 0

aux01

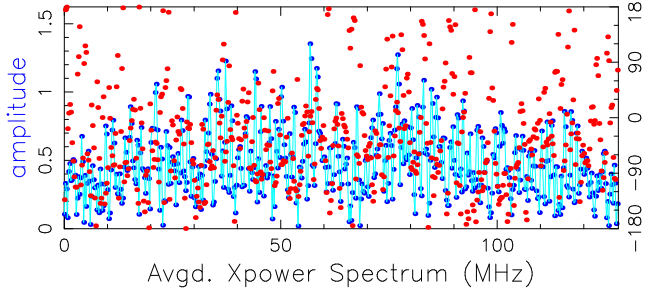
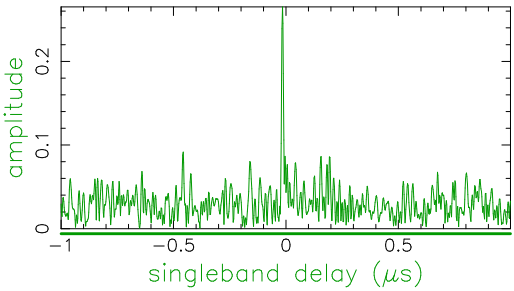
3C120.3N2DRC, No0552, bl

VLBA\_BR - VLBA\_LA, fgroup Q, pol LR

Fringe quality 9

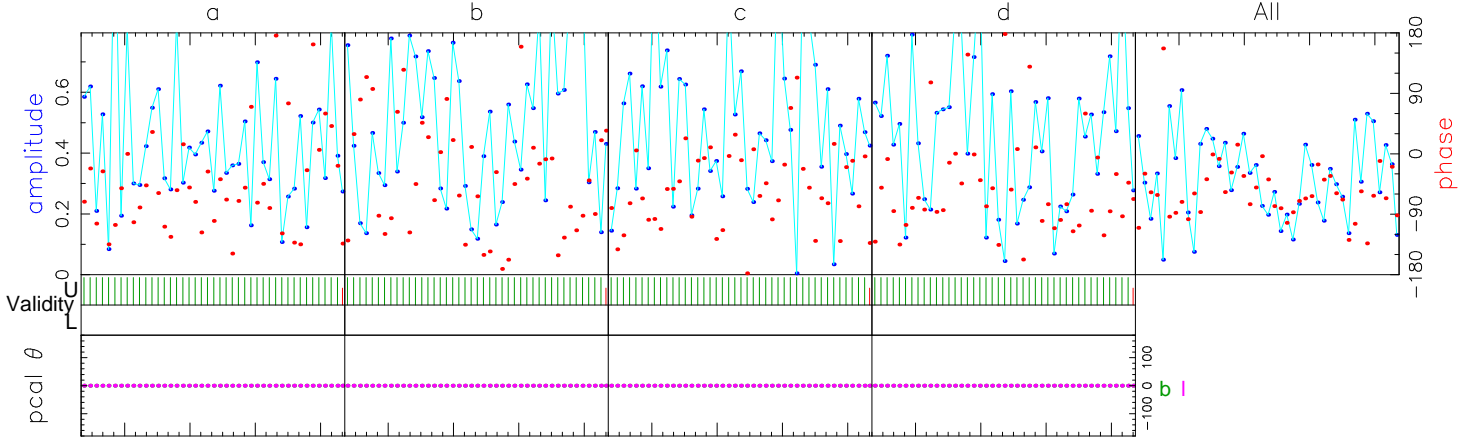


SNR 11.2  
 Int time 239.982  
 Amp 0.265  
 Phase -262.7  
 PFD 6.6e-21  
 Delays (us)  
 SBD -0.015468  
 MBD 0.000694  
 Fringe rate (Hz)  
 -0.009441  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-59.0	-66.1	-54.5	-63.7	Phase	-60.2
0.2	0.2	0.3	0.3	Ampl.	0.3
505.2	504.9	505.4	504.8	Sbd box	505.1
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
b:l 0:0	0:0	0:0	0:0	PC phase	
b:l 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
b Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-3.45629513452E+03	Apriori delay (usec)	-3.45628020308E+03	Resid mbdelay (usec)	6.93560E-04	+/-	9.9E-05
Sband delay (usec)	-3.45629567133E+03	Apriori clock (usec)	1.2981783E+01	Resid sbdelay (usec)	-1.54683E-02	+/-	3.8E-04
Phase delay (usec)	-3.45628020696E+03	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-3.87889E-06	+/-	6.6E-07
Delay rate (us/s)	2.09655171416E-01	Apriori rate (us/s)	2.09655390271E-01	Resid rate (us/s)	-2.18855E-07	+/-	4.7E-09
Total phase (deg)	-248.6	Apriori accel (us/s/s)	2.01479190962E-05	Resid phase (deg)	-262.7	+/-	10.2

ph/seg (deg)	RMS	Theor.	Amplitude	0.265 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	40.3	33.4	Search (1024X16)	0.258	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	55.1	58.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	6.4	10.2	Inc. seg. avg.	0.275	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
	20.0	17.8	Inc. frq. avg.	0.262	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

b: az 150.6 el 43.7 pa -19.0 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -594.105 781.414 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bl.Q.24.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

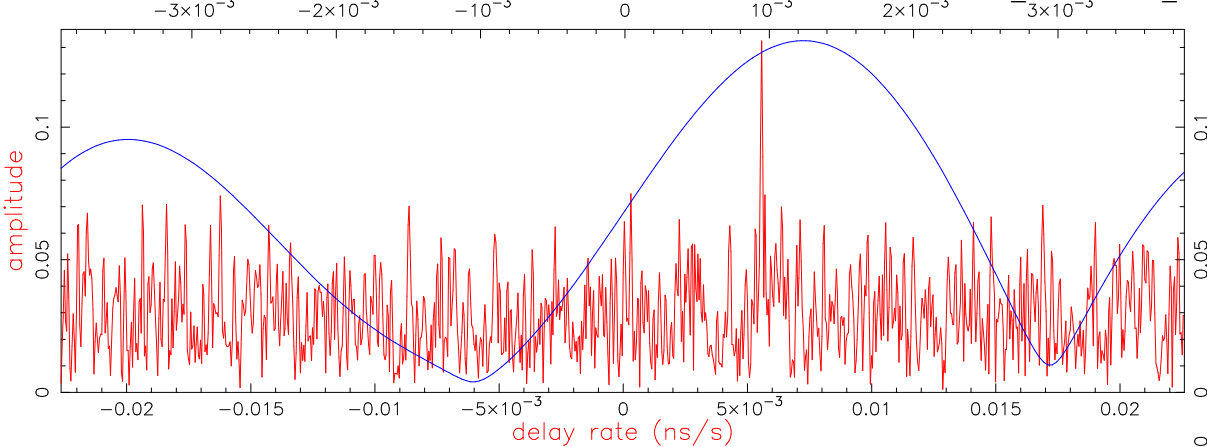
aux01

3C120.3N2DRC, No0552, bl

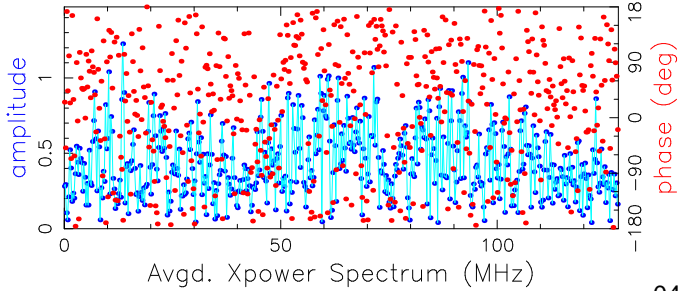
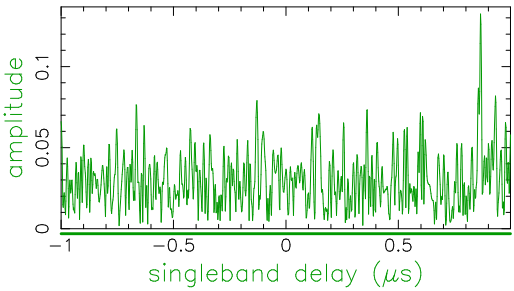
VLBA\_BR - VLBA\_LA, fgroup Q, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

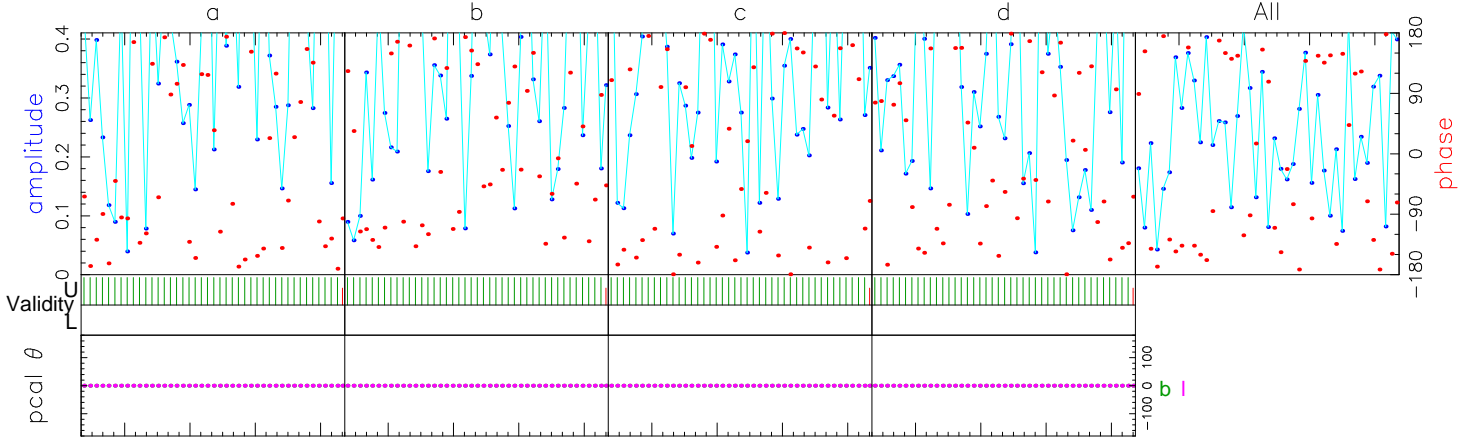


SNR 5.7  
 Int time 239.982  
 Amp 0.137  
 Phase 95.2  
 PFD 8.6e-01  
 Delays (us)  
 SBD 0.865746  
 MBD 0.001278  
 Fringe rate (Hz)  
 0.241937  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 210920.00  
 Stop 211320.12  
 FRT 211120.00  
 Corr/FF/build  
 2025:048:110113  
 2025:049:102426  
 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		
l	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000		
l	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR		
l	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-3.45541173768E+03	Apriori delay (usec)	-3.45628020308E+03	Resid mbdelay (usec)	1.27790E-03	+/-	2.0E-04
Sband delay (usec)	-3.45541445683E+03	Apriori clock (usec)	1.2981783E+01	Resid sbdelay (usec)	8.65746E-01	+/-	7.6E-04
Phase delay (usec)	-3.45628021361E+03	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-1.05285E-05	+/-	1.3E-06
Delay rate (us/s)	2.09660998462E-01	Apriori rate (us/s)	2.09655390271E-01	Resid rate (us/s)	5.60819E-06	+/-	9.4E-09
Total phase (deg)	109.3	Apriori accel (us/s/s)	2.01479190962E-05	Resid phase (deg)	95.2	+/-	20.3

ph/seg (deg)	65.7	Theor.	66.5	Amplitude	0.137 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	111.6	Search (1024X16)	0.129	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	40.1	Inc. seg. avg.	0.145	Inc. frq. avg.	0.143	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	34.6					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 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -594.105 781.414 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bl.Q.31.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

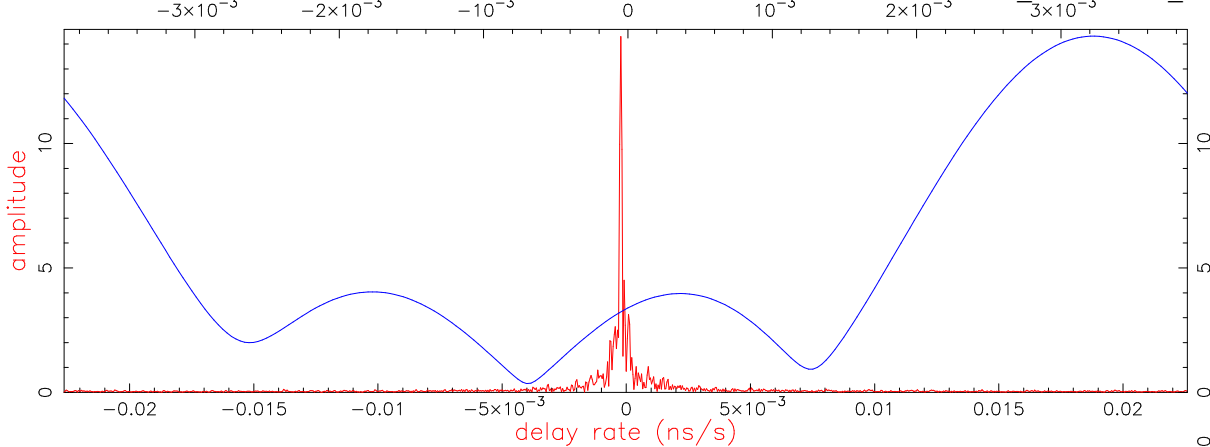
aux01

3C120.3N2DRC, No0552, bl

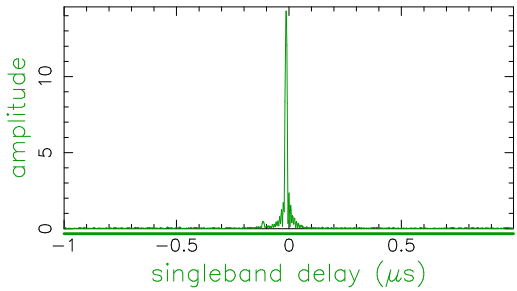
VLBA\_BR - VLBA\_LA, fgroup Q, pol LL

multiband delay ( $\mu$ s)

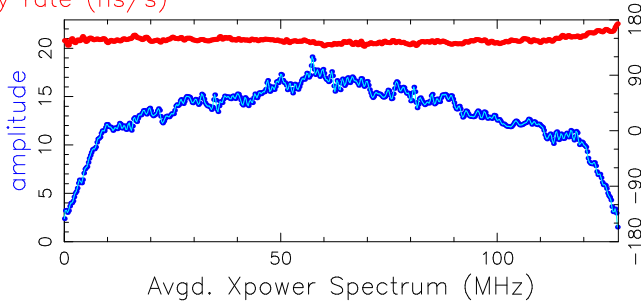
Fringe quality 7



SNR 617.9  
Int time 239.982  
Amp 14.587  
Phase -61.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.012677  
MBD 0.003174  
Fringe rate (Hz)  
-0.009889  
Ion TEC 0.000  
Ref freq (MHz)  
43140.0000  
AP (sec) 0.512

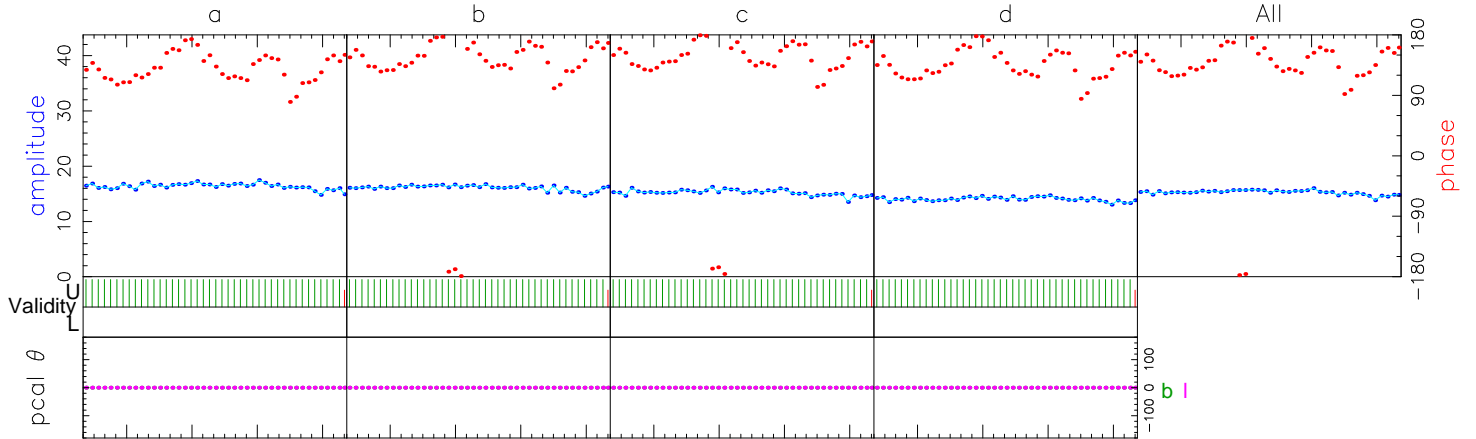


singleband delay ( $\mu$ s)



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
	130.2	148.3	150.7	136.1	Phase	141.3
	15.4	15.1	14.3	13.1	Ampl.	14.5
	507.1	506.6	506.2	506.0	Sbd box	506.5
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-3.45629265421E+03	Apriori delay (usec)	-3.45628020308E+03	Resid mbdelay (usec)	3.17387E-03	+/-	1.8E-06
Sband delay (usec)	-3.45629288020E+03	Apriori clock (usec)	1.2981783E+01	Resid sbdelay (usec)	-1.26771E-02	+/-	7.0E-06
Phase delay (usec)	-3.45628019398E+03	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	9.09897E-06	+/-	1.2E-08
Delay rate (us/s)	2.09655161039E-01	Apriori rate (us/s)	2.09655390271E-01	Resid rate (us/s)	-2.29231E-07	+/-	8.6E-11
Total phase (deg)	-47.1	Apriori accel (us/s/s)	2.01479190962E-05	Resid phase (deg)	-61.2	+/-	0.2

ph/seg (deg)	RMS 20.7	Theor. 0.6	Amplitude Search (1024X16)	14.587 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	5.5	1.1	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)	12.0	0.2	Inc. seg. avg.	15.271	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	6.0	0.3	Inc. frq. avg.	14.464	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 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -594.105 781.414 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bl.Q.7.3N2DRC

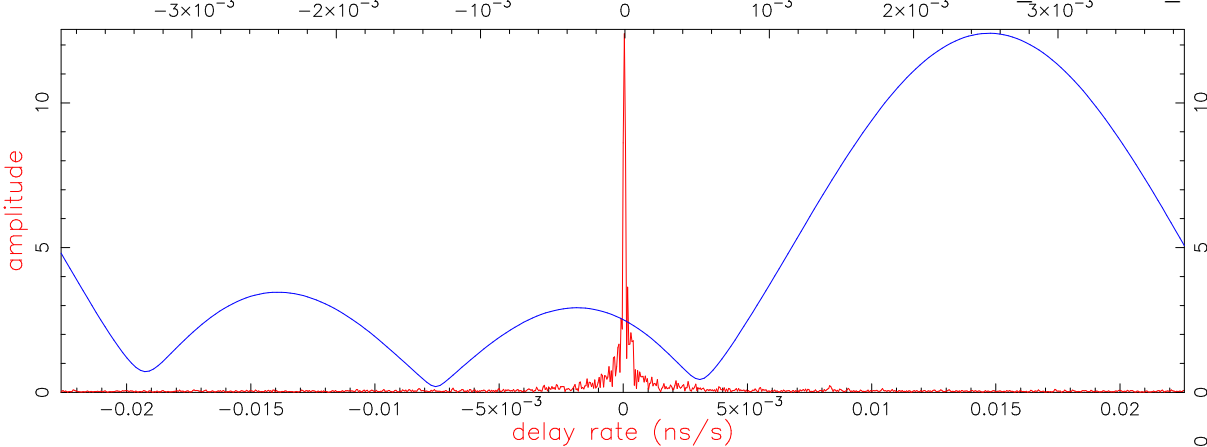
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fl

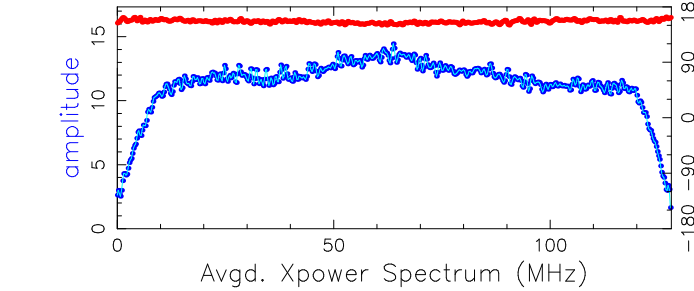
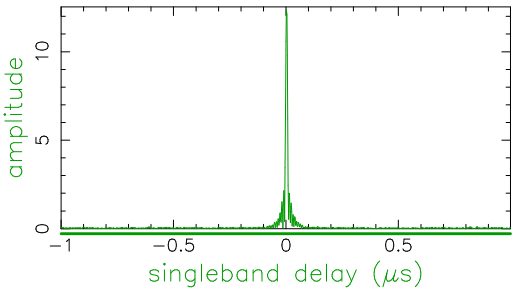
VLBA\_FD - VLBA\_LA, fgroup Q, pol LL

multiband delay ( $\mu$ s)



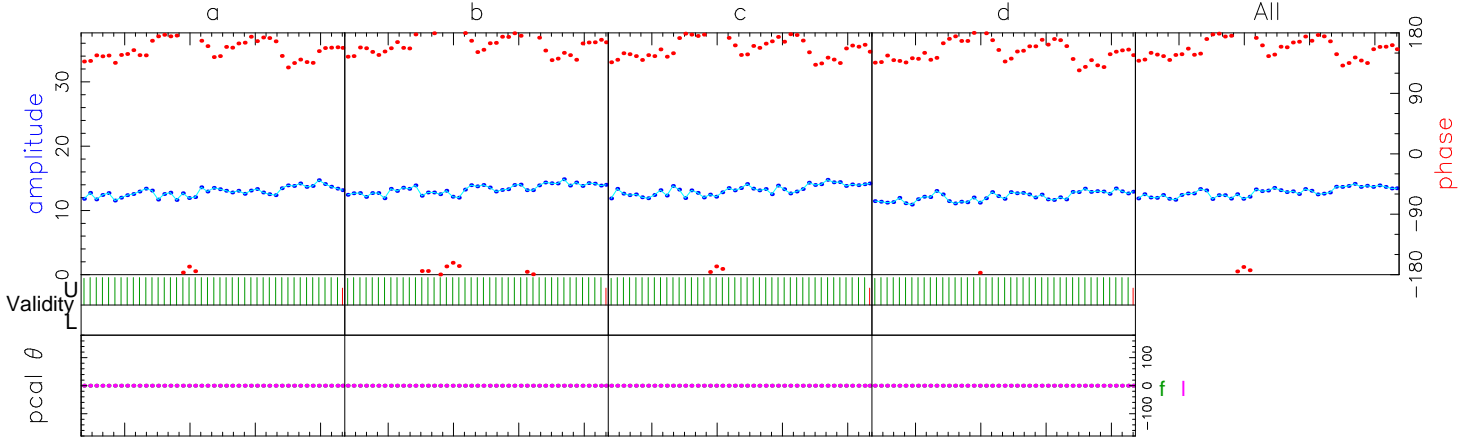
Fringe quality 8

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



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
156.5	165.1	158.2	152.0	Phase	158.1
12.4	12.9	12.7	11.7	Ampl.	12.4
514.7	514.3	514.2	514.2	Sbd box	514.4
U/L 469/0	469/0	469/0	469/0	APs used	
f 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
f:l 0:0	0:0	0:0	0:0	PC phase	
f:l 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
f Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

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

ph/seg (deg)	RMS 15.5	Theor. 0.7	Amplitude Search (1024X16)	12.539 +/- 0.024	12.292	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	6.0	1.2	Interp.	0.000	12.850	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	6.7	0.2	Inc. seg. avg.	12.850	12.436	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	3.6	0.4	Inc. frq. avg.	12.436		Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

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

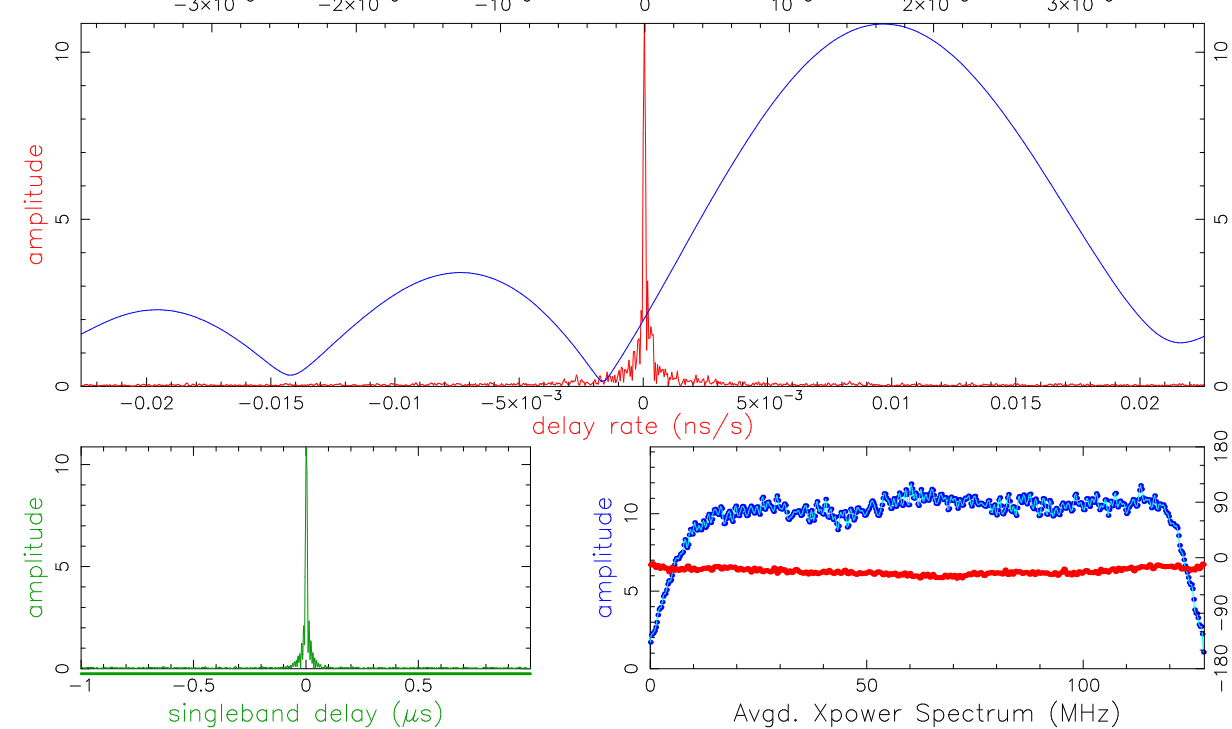
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.37.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fl

VLBA\_FD - VLBA\_LA, fgroup Q, pol RR

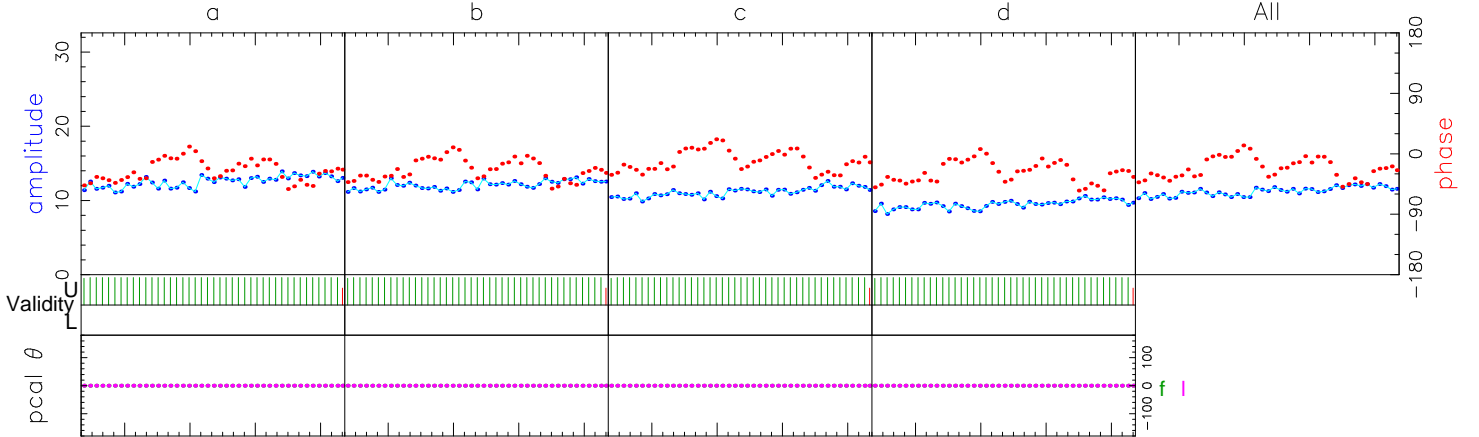


Fringe quality 8

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

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

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



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

	9.56869439154E+02	Apriori delay (usec)	9.56867805579E+02	Resid mbdelay (usec)	1.63358E-03	+/- 2.4E-06
Group delay (usec) (SBD)	9.56869439154E+02	Apriori clock (usec)	8.3780518E+00	Resid sbdelay (usec)	1.66825E-03	+/- 9.4E-06
Sband delay (usec)	9.56869473829E+02	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	-1.40933E-06	+/- 1.6E-08
Phase delay (usec)	9.56867804169E+02	Apriori rate (us/s)	-4.45023646497E-02	Resid rate (us/s)	3.80161E-08	+/- 1.2E-10
Delay rate (us/s)	-4.45023266336E-02	Apriori accel (us/s/s)	-5.84073848301E-06	Resid phase (deg)	-21.9	+/- 0.2
Total phase (deg)	25.9					

	RMS	Theor.	Amplitude	10.865 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	15.6	0.8	Search (1024X16)	10.621	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	6.4	1.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	9.5	0.2	Inc. seg. avg.	11.250	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	10.5	0.4	Inc. frq. avg.	10.917	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

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

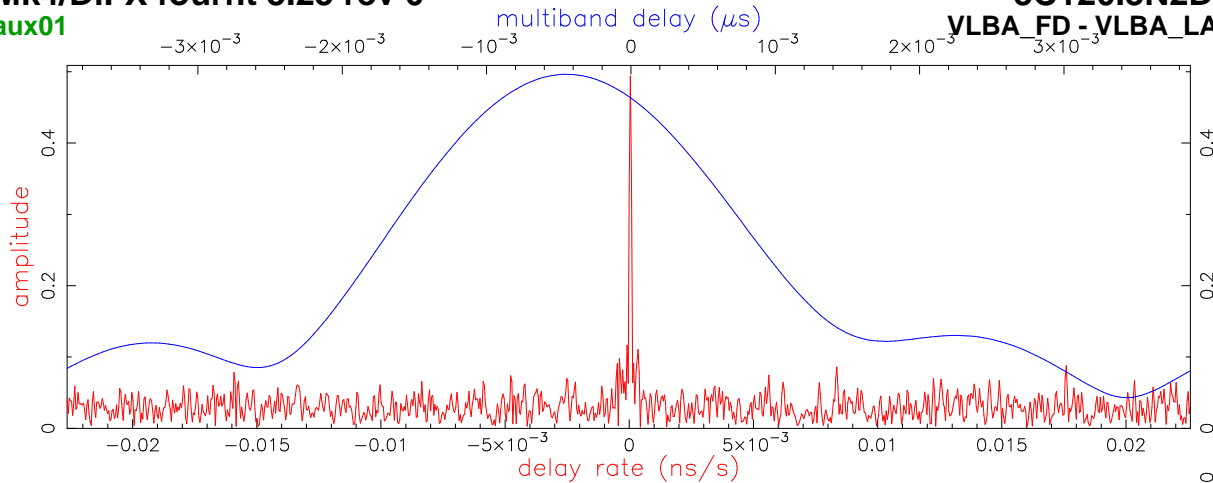
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.53.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

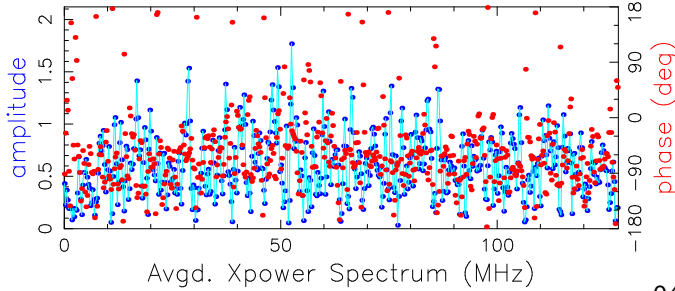
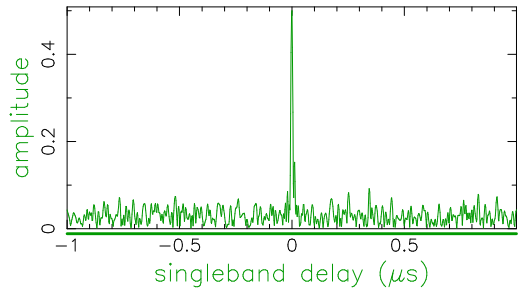
3C120.3N2DRC, No0552, fl

VLBA\_FD - VLBA\_LA, fgroup Q, pol LR



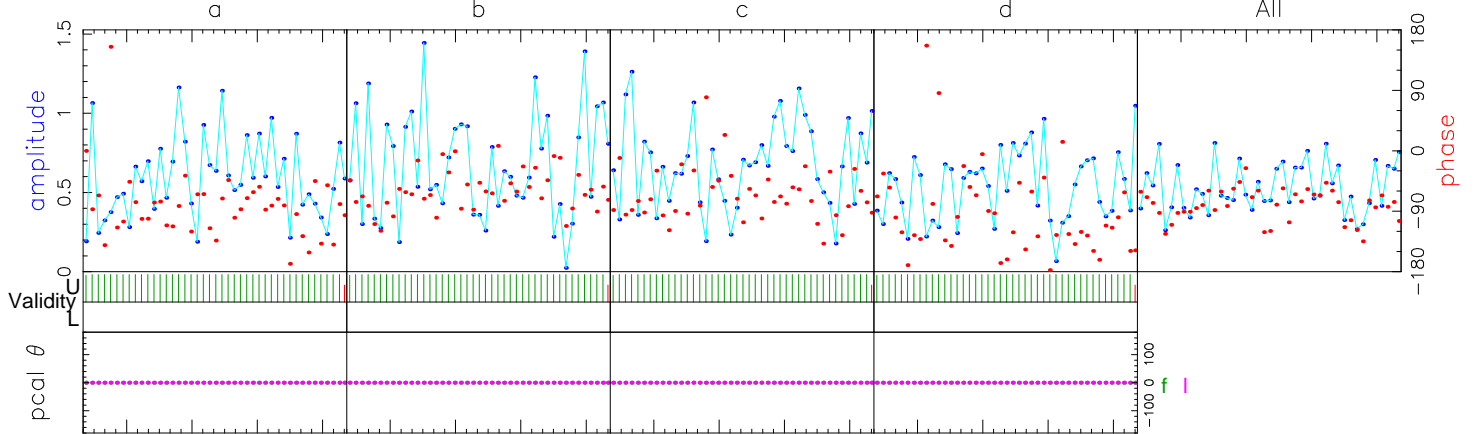
Fringe quality 7

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



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

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



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

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

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

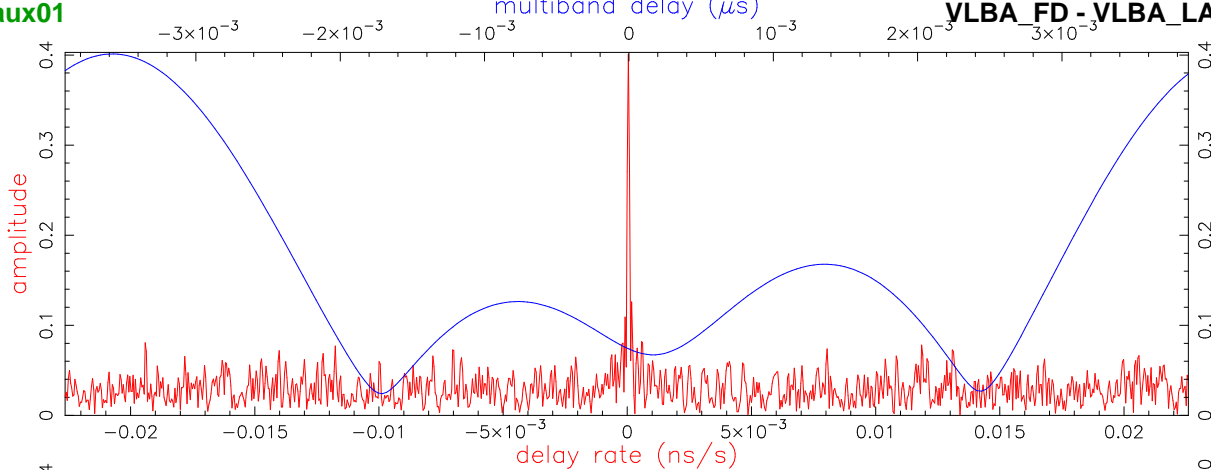
f: az 168.1 el 64.3 pa -9.7 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) 125.617 -353.075 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.59.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

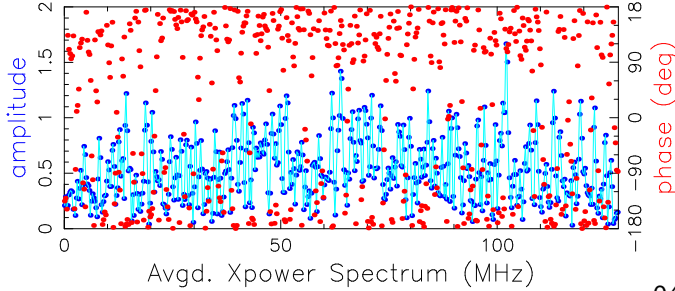
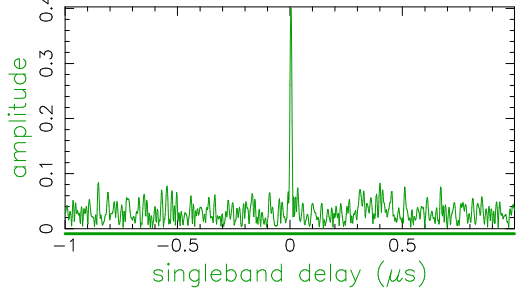
3C120.3N2DRC, No0552, fl

VLBA\_FD - VLBA\_LA, fgroup Q, pol RL



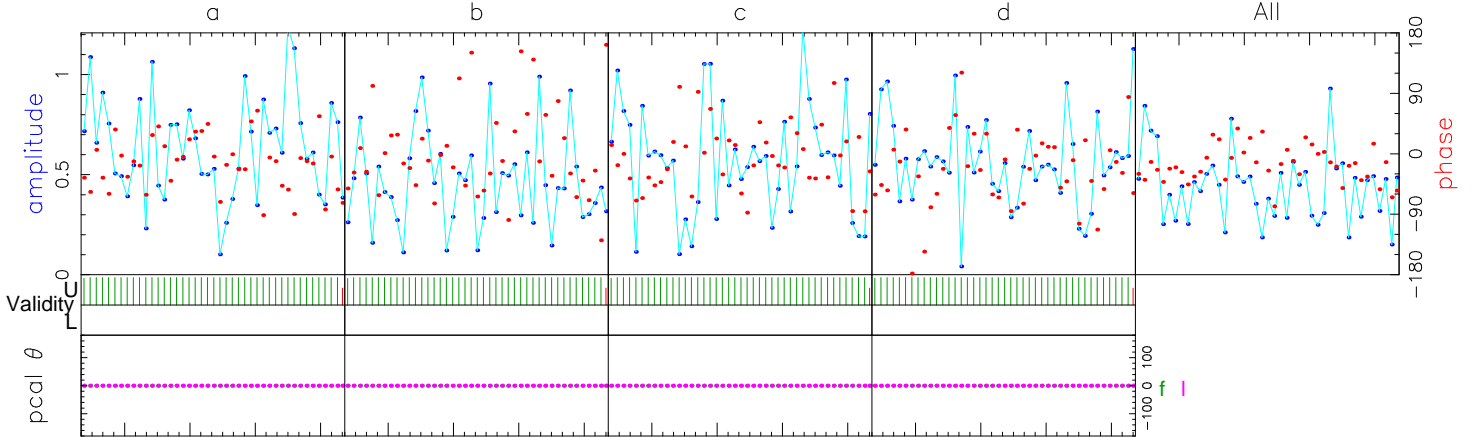
Fringe quality 9

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



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

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



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

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

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

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

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/7mm/3001/No0552/fl..3N2DRC      Output file: /Exps/c241c/v2/7mm/3001/No0552/fl.Q.82.3N2DRC



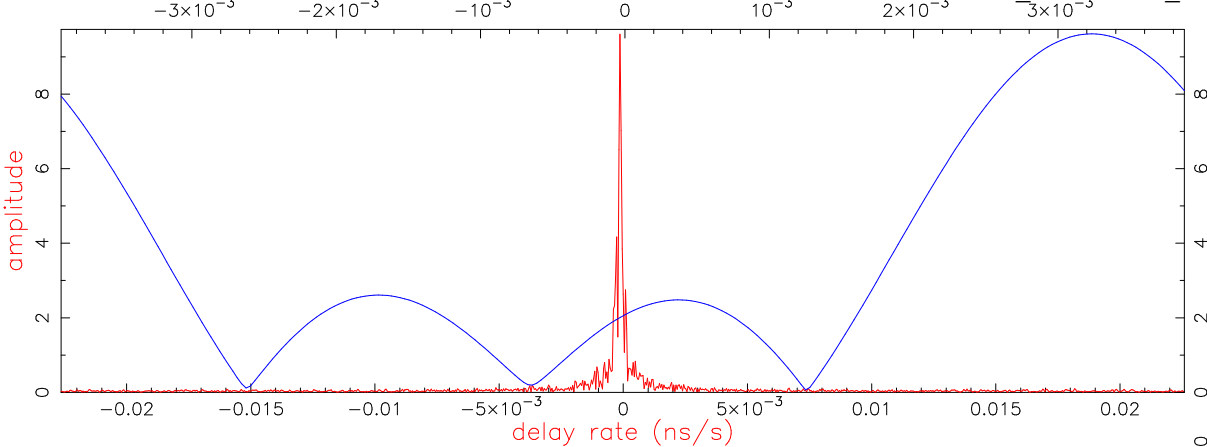
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kl

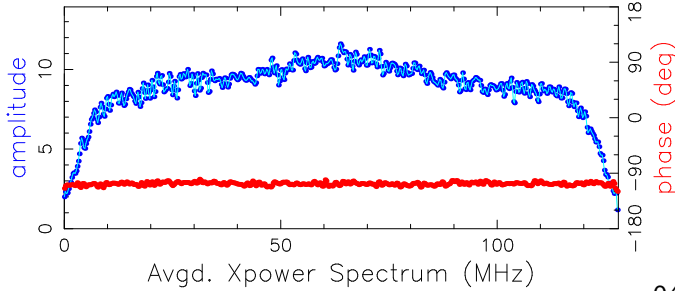
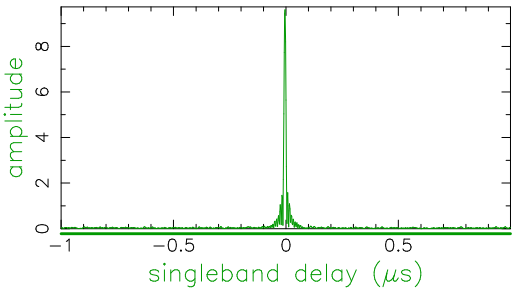
VLBA\_KP - VLBA\_LA, fgroup Q, pol LL

multiband delay ( $\mu$ s)



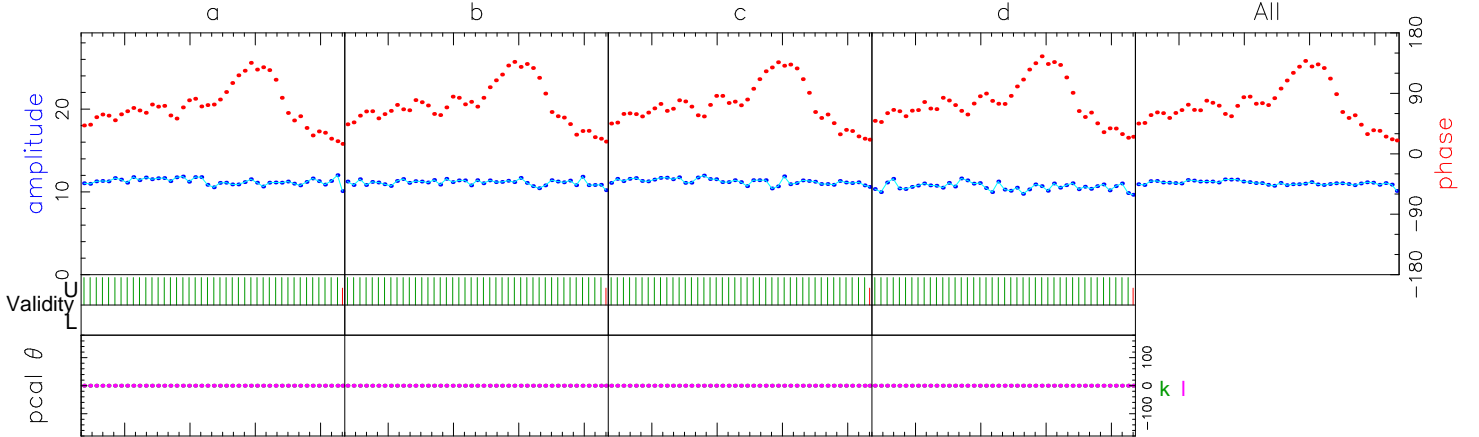
Fringe quality 7

SNR 412.4  
 Int time 239.981  
 Amp 9.735  
 Phase -209.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004673  
 MBD 0.003192  
 Fringe rate (Hz)  
 -0.004889  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



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

	4.04823598490E+02	Apriori delay (usec)	4.04828219217E+02	Resid mbdelay (usec)	3.19177E-03	+/- 2.7E-06
Group delay (usec) (SBD)	4.04823598490E+02	Apriori clock (usec)	8.4781227E+00	Resid sbdelay (usec)	-4.67275E-03	+/- 1.0E-05
Sband delay (usec)	4.04823546467E+02	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	4.62711E-06	+/- 1.8E-08
Phase delay (usec)	4.04828223844E+02	Apriori rate (us/s)	1.27813672145E-01	Resid rate (us/s)	-1.13332E-07	+/- 1.3E-10
Delay rate (us/s)	1.27813558813E-01	Apriori accel (us/s/s)	-2.69527415422E-06	Resid phase (deg)	-209.4	+/- 0.3
Total phase (deg)	-73.7					

	RMS	Theor.	Amplitude	9.735 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	30.6	0.9	Search (1024X16)	8.864	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	14.0	1.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.1	0.3	Inc. seg. avg.	11.073	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.8	0.5	Inc. frq. avg.	9.615	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

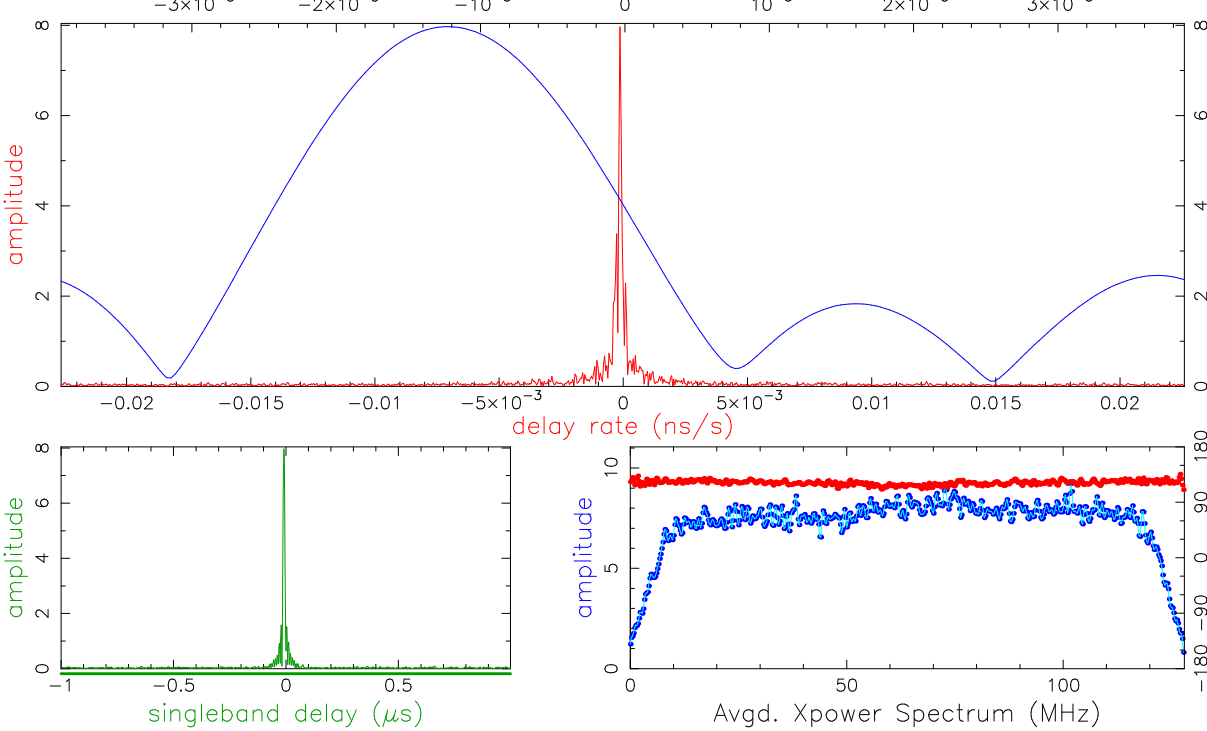
k: az 153.1 el 60.9 pa -22.3 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -369.201 -254.681 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kl.Q.39.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kl

VLBA\_KP - VLBA\_LA, fgroup Q, pol RR

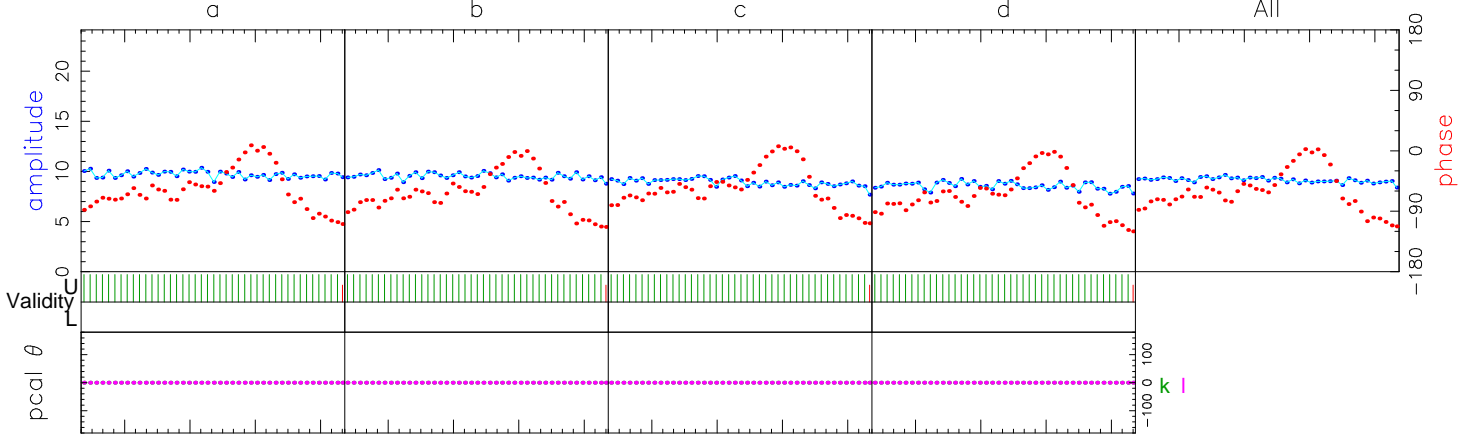


Fringe quality 7

SNR 340.7  
 Int time 239.981  
 Amp 8.042  
 Phase -342.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.009130  
 MBD -0.001192  
 Fringe rate (Hz)  
 -0.004883  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512

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

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



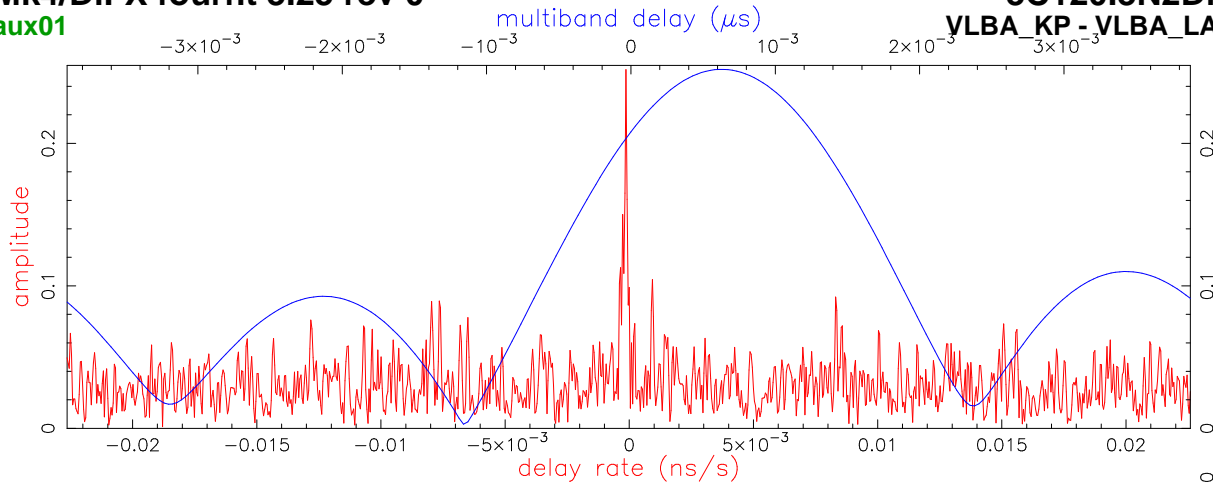
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-58.7	-63.8	-56.4	-66.6	Phase	-61.3
8.4	8.3	7.8	7.4	Ampl.	8.0
508.6	508.4	508.5	507.8	Sbd box	508.3
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
k:l 0:0	0:0	0:0	0:0	PC phase	
k:l 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
k Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec) (SBD)	4.04819214428E+02	Apriori delay (usec)	4.04828219217E+02	Resid mbdelay (usec)	-1.19229E-03 +/- 3.3E-06
Sband delay (usec)	4.04819089467E+02	Apriori clock (usec)	8.4781227E-07	Resid sbdelay (usec)	-9.12975E-03 +/- 1.3E-05
Phase delay (usec)	4.04828215271E+02	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-3.94592E-06 +/- 2.2E-08
Delay rate (us/s)	1.27813558946E-01	Apriori rate (us/s)	1.27813672145E-01	Resid rate (us/s)	-1.13199E-07 +/- 1.6E-10
Total phase (deg)	-206.8	Apriori accel (us/s/s)	-2.69527415422E-06	Resid phase (deg)	-342.5 +/- 0.3
RMS	Theor.	Amplitude	8.042 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	30.4 1.1	Search (1024X16)	7.262	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	14.2 1.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	5.7 0.3	Inc. seg. avg.	9.156	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	5.2 0.6	Inc. frq. avg.	7.986	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	l: az 165.6 el 58.9 pa -11.3	u, v (fr/asec)	-369.201 -254.681		simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/7mm/3001/No0552/kl..3N2DRC	Output file: /Exps/c241c/v2/7mm/3001/No0552/kl.Q.54.3N2DRC			

Mk4/DiFX fourfit 3.25 rev 0

aux01

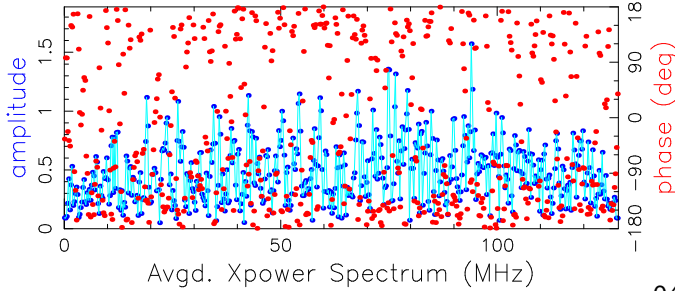
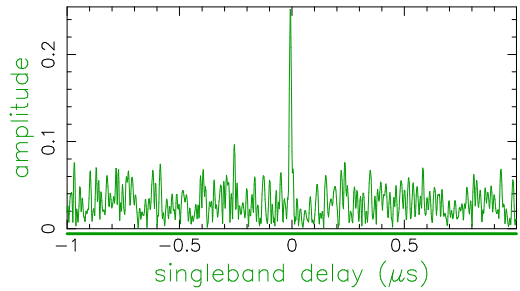
3C120.3N2DRC, No0552, kl

VLBA\_KP - VLBA\_LA, fgroup Q, pol LR



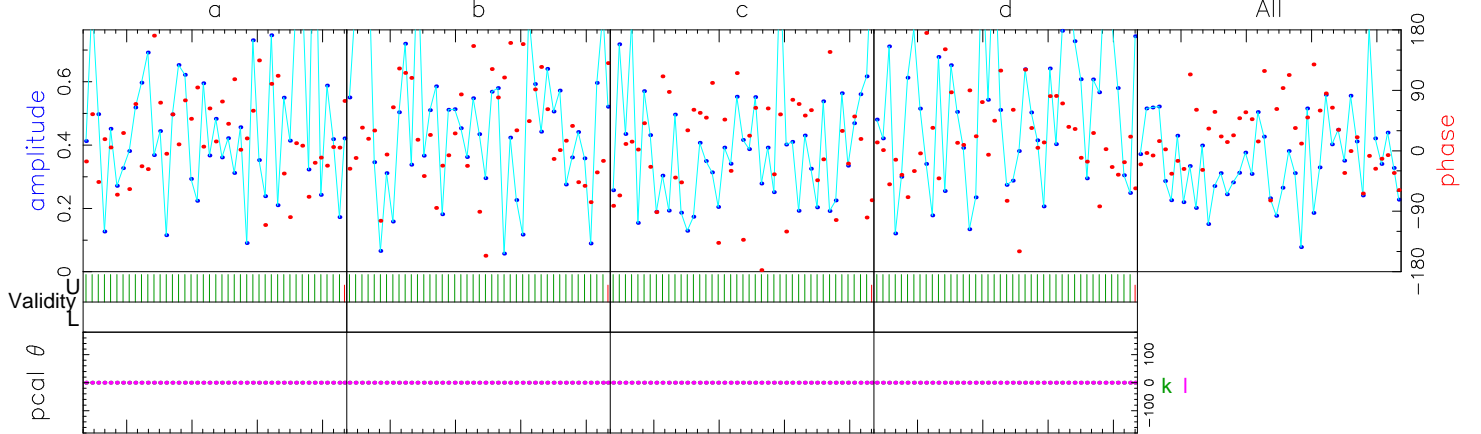
Fringe quality 9

SNR 10.8  
 Int time 239.981  
 Amp 0.255  
 Phase -262.4  
 PFD 8.8e-19  
 Delays (us)  
 SBD -0.007058  
 MBD 0.000669  
 Fringe rate (Hz)  
 -0.005062  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



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

	4.04821075834E+02	Apriori delay (usec)	4.04828219217E+02	Resid mbdelay (usec)	6.69117E-04	+/- 1.0E-04
Group delay (usec) (SBD)	4.04821075834E+02	Apriori clock (usec)	8.4781227E-07	Resid sbdelay (usec)	-7.05775E-03	+/- 4.0E-04
Sband delay (usec)	4.04821161467E+02	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	1.21538E-06	+/- 6.8E-07
Phase delay (usec)	4.04828220432E+02	Apriori rate (us/s)	1.27813672145E-01	Resid rate (us/s)	-1.17342E-07	+/- 4.9E-09
Delay rate (us/s)	1.27813554803E-01	Apriori accel (us/s/s)	-2.69527415422E-06	Resid phase (deg)	-262.4	+/- 10.6
Total phase (deg)	-126.7					

	RMS	Theor.	Amplitude	0.255 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.4	34.8	Search (1024X16)	0.236	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	64.9	60.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	6.6	10.6	Inc. seg. avg.	0.299	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	19.6	18.5	Inc. frq. avg.	0.248	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 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -369.201 -254.681 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kl.Q.66.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

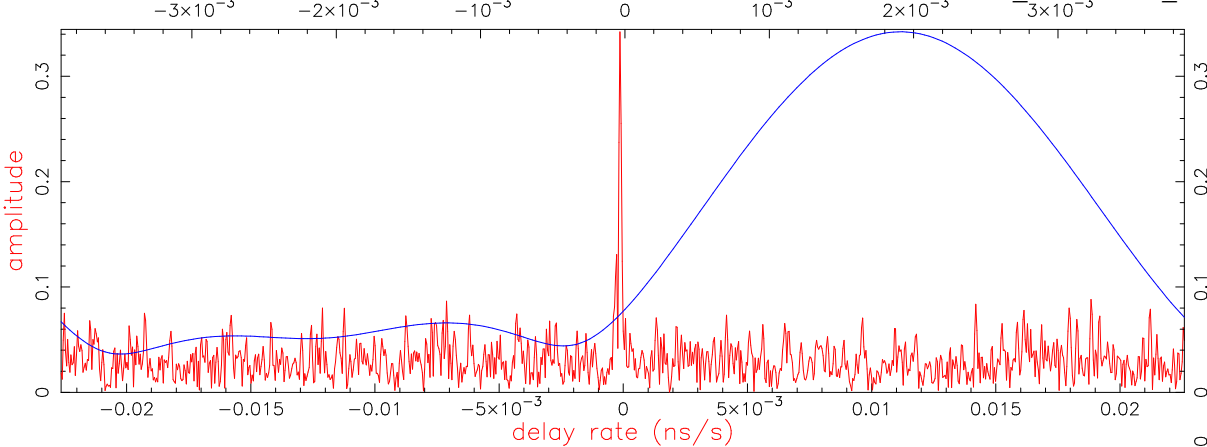
aux01

3C120.3N2DRC, No0552, kl

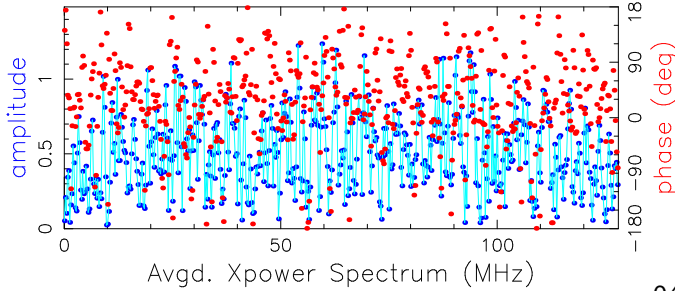
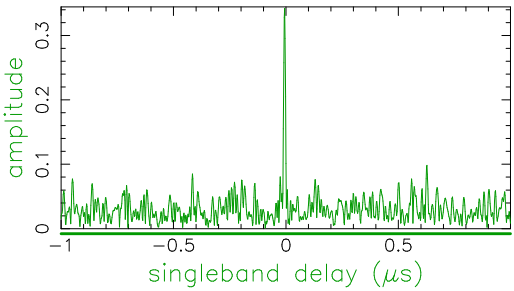
VLBA\_KP - VLBA\_LA, fgroup Q, pol RL

multiband delay ( $\mu$ s)

Fringe quality 9

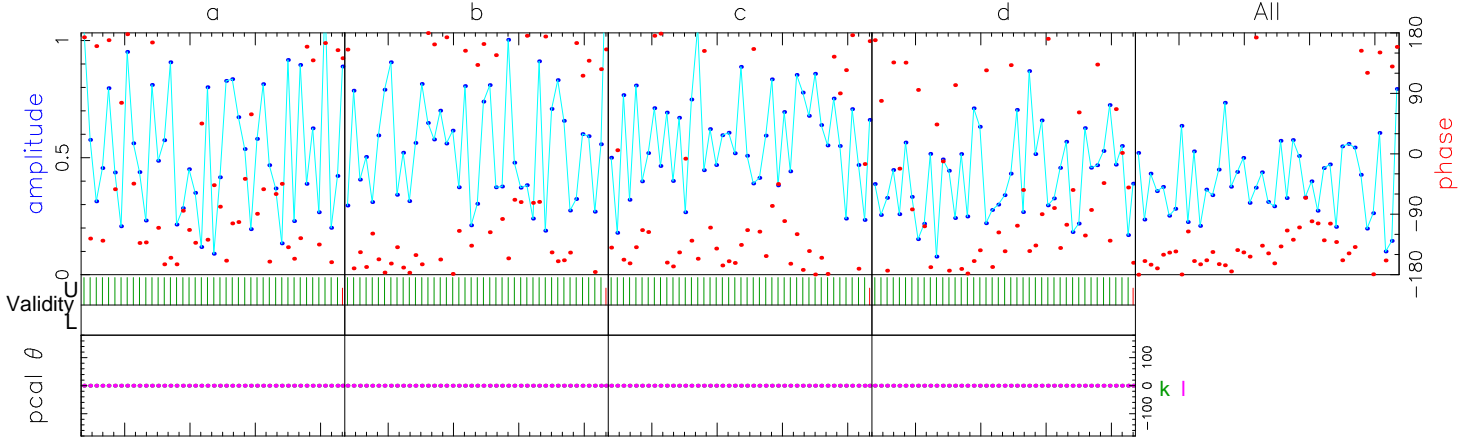


SNR 14.6  
 Int time 239.981  
 Amp 0.345  
 Phase -74.7  
 PFD 9.3e-40  
 Delays (us)  
 SBD -0.006393  
 MBD 0.001882  
 Fringe rate (Hz)  
 -0.005021  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-144.1	-166.9	-152.4	-142.1	Phase	-153.5
0.3	0.4	0.4	0.2	Ampl.	0.3
509.5	509.7	509.9	509.8	Sbd box	509.7
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
k:l 0:0	0:0	0:0	0:0	PC phase	
k:l 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
k Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	4.04822288334E+02	Apriori delay (usec)	4.04828219217E+02	Resid mbdelay (usec)	1.88162E-03	+/-	7.6E-05
Sband delay (usec)	4.04821826342E+02	Apriori clock (usec)	8.4781227E-07	Resid sbdelay (usec)	-6.39288E-03	+/-	3.0E-04
Phase delay (usec)	4.04828209336E+02	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-9.88114E-06	+/-	5.1E-07
Delay rate (us/s)	1.27813555754E-01	Apriori rate (us/s)	1.27813672145E-01	Resid rate (us/s)	-1.16391E-07	+/-	3.6E-09
Total phase (deg)	-299.0	Apriori accel (us/s/s)	-2.69527415422E-06	Resid phase (deg)	-74.7	+/-	7.9

ph/seg (deg)	RMS 33.8	Theor. 25.7	Amplitude Search (1024X16)	0.345 +/- 0.024	0.326	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	46.0	44.9	Interp.	0.000	0.362	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	14.1	7.9	Inc. seg. avg.	0.362	0.344	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	29.0	13.7	Inc. frq. avg.	0.344	0.362	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

k: az 153.1 el 60.9 pa -22.3 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -369.201 -254.681 simultaneous interpolator

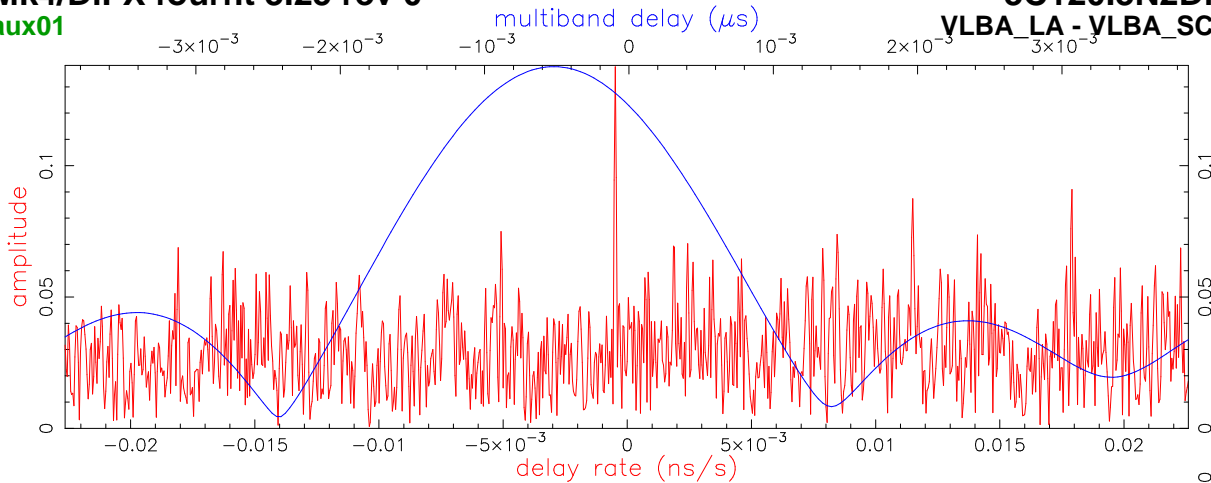
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kl.Q.95.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

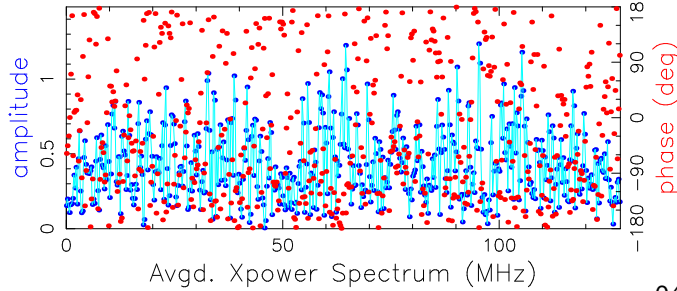
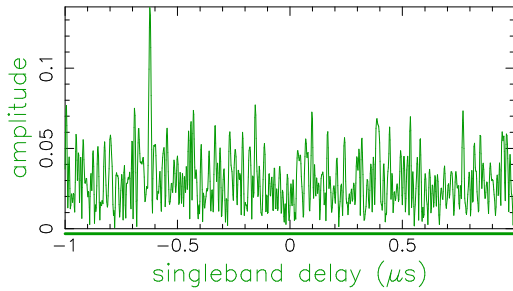
3C120.3N2DRC, No0552, lc

VLBA\_LA - VLBA\_SC, fgroup Q, pol RR



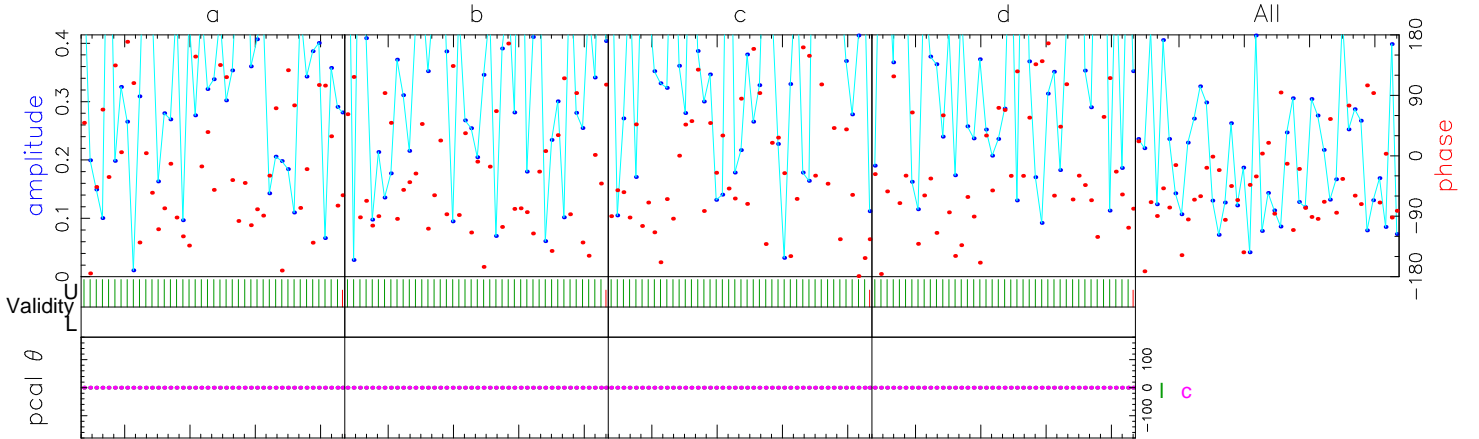
Fringe quality 0

SNR 5.9  
 Int time 239.949  
 Amp 0.138  
 Phase -237.6  
 PFD 4.6e-01  
 Delays (us)  
 SBD -0.622599  
 MBD -0.000513  
 Fringe rate (Hz)  
 -0.020687  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



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

Group delay (usec) (SBD)	1.12494629317E+03	Apriori delay (usec)	1.12557180575E+03	Resid mbdelay (usec)	-5.12580E-04	+/-	1.9E-04
Sband delay (usec)	1.12494920700E+03	Apriori clock (usec)	-1.2016134E+01	Resid sbdelay (usec)	-6.22599E-01	+/-	7.4E-04
Phase delay (usec)	1.12557180204E+03	Apriori clockrate (us/s)	1.5926897E-07	Resid phdelay (usec)	-3.71022E-06	+/-	1.3E-06
Delay rate (us/s)	9.89492216515E-01	Apriori rate (us/s)	9.89492696047E-01	Resid rate (us/s)	-4.79532E-07	+/-	9.1E-09
Total phase (deg)	-345.6	Apriori accel (us/s/s)	-3.08106615111E-06	Resid phase (deg)	-237.6	+/-	19.6

ph/seg (deg)	RMS 64.5	Theor. 64.2	Amplitude Search (1024X16)	0.138 +/- 0.024	0.135	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	92.8	112.1	Interp.	0.000	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	5.6	19.6	Inc. seg. avg.	0.128	0.135	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	14.6	34.2	Inc. frq. avg.	0.130	0.135	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      c: az 253.9 el 54.4 pa 66.9      u,v (fr/asec) -2854.968 1220.082      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/7mm/3001/No0552/lc..3N2DRC      Output file: /Exps/c241c/v2/7mm/3001/No0552/lc.Q.117.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

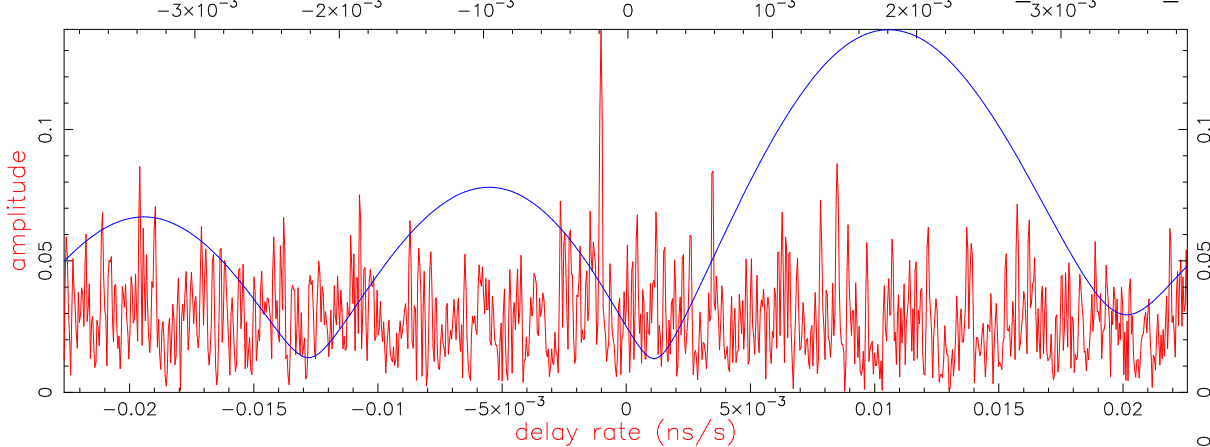
aux01

3C120.3N2DRC, No0552, lc

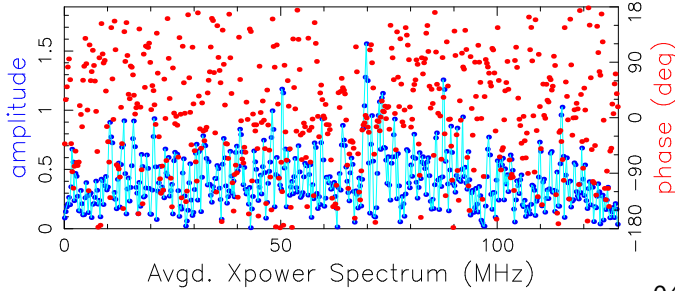
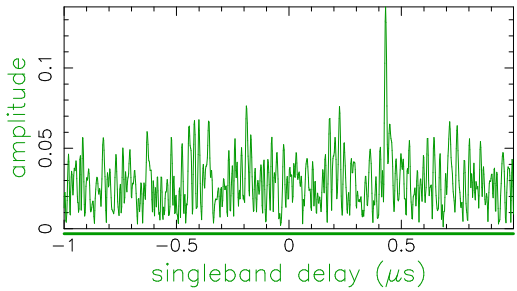
VLBA\_LA - VLBA\_SC, fgroup Q, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

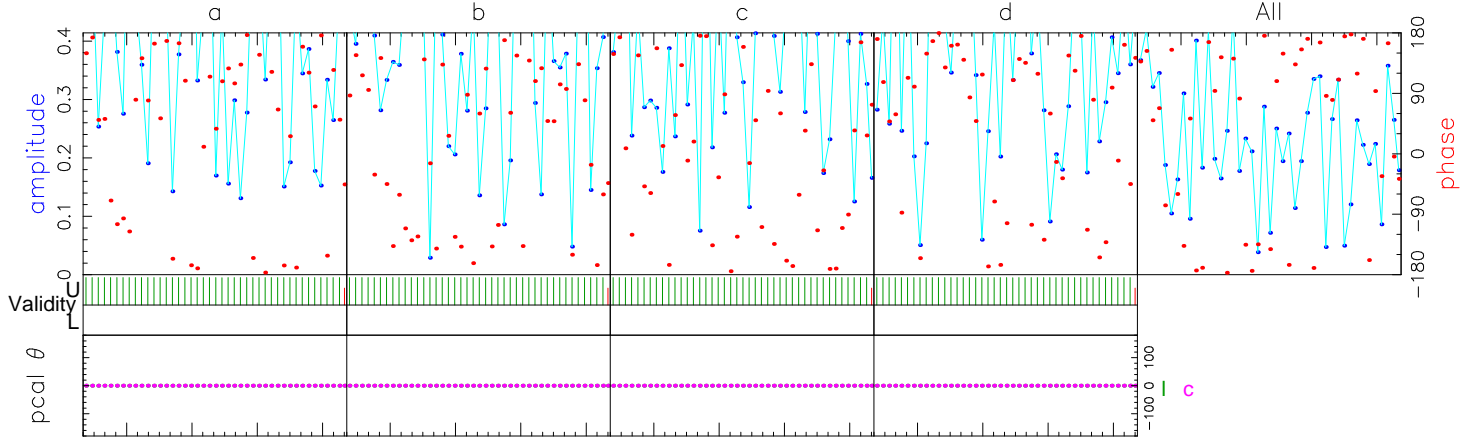


SNR 5.8  
 Int time 239.949  
 Amp 0.138  
 Phase 142.1  
 PFD 4.8e-01  
 Delays (us)  
 SBD 0.429617  
 MBD 0.001802  
 Fringe rate (Hz)  
 -0.043922  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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
	144.3	160.1	-169.8	140.1	Phase	153.3
	0.2	0.1	0.1	0.2	Ampl.	0.1
	734.2	390.8	354.4	732.6	Sbd box	733.0
U/L	469/0	469/0	469/0	469/0	APs used	
l	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
l:c	0:0	0:0	0:0	0:0	PC phase	
l:c	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.12600329561E+03	Apriori delay (usec)	1.12557180575E+03	Resid mbdelay (usec)	1.80236E-03	+/-	1.9E-04
Sband delay (usec)	1.12600142262E+03	Apriori clock (usec)	-1.2016134E+01	Resid sbdelay (usec)	4.29617E-01	+/-	7.4E-04
Phase delay (usec)	1.12557181562E+03	Apriori clockrate (us/s)	1.5926897E-07	Resid phdelay (usec)	9.87332E-06	+/-	1.3E-06
Delay rate (us/s)	9.89491677920E-01	Apriori rate (us/s)	9.89492696047E-01	Resid rate (us/s)	-1.01813E-06	+/-	9.1E-09
Total phase (deg)	34.1	Apriori accel (us/s/s)	-3.08106615111E-06	Resid phase (deg)	142.1	+/-	19.6

ph/seg (deg)	RMS 68.3	Theor. 64.3	Amplitude Search (1024X16)	0.136	0.138 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	103.0	112.2	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	28.8	19.6	Inc. seg. avg.	0.142	0.142	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	28.7	34.2	Inc. frq. avg.	0.137	0.137	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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -2854.968 1220.082 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lc...3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lc.Q.130.3N2DRC

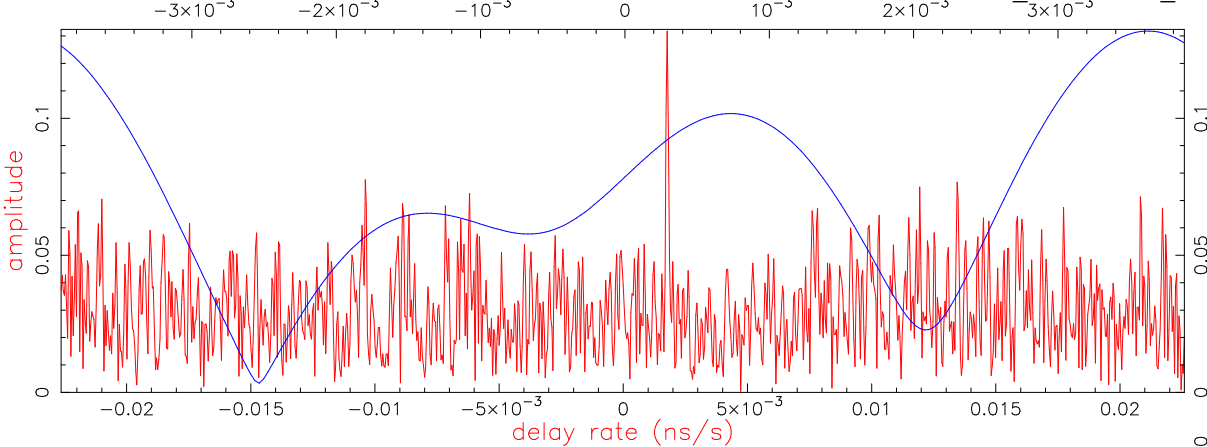
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lc

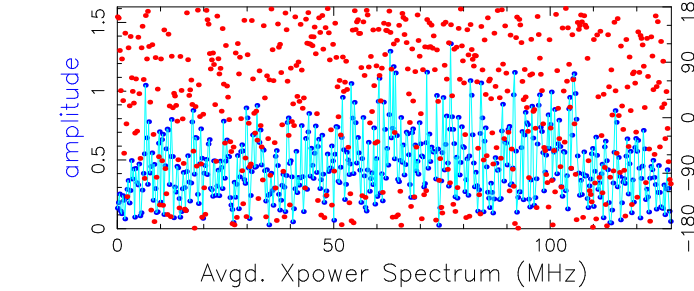
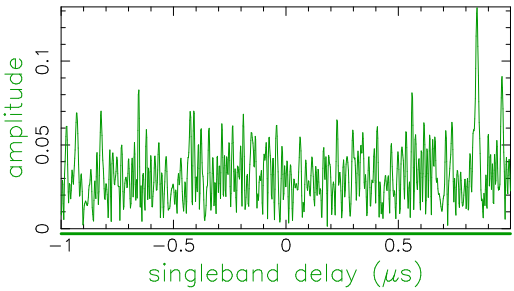
VLBA\_LA - VLBA\_SC, fgroup Q, pol RL

multiband delay ( $\mu$ s)



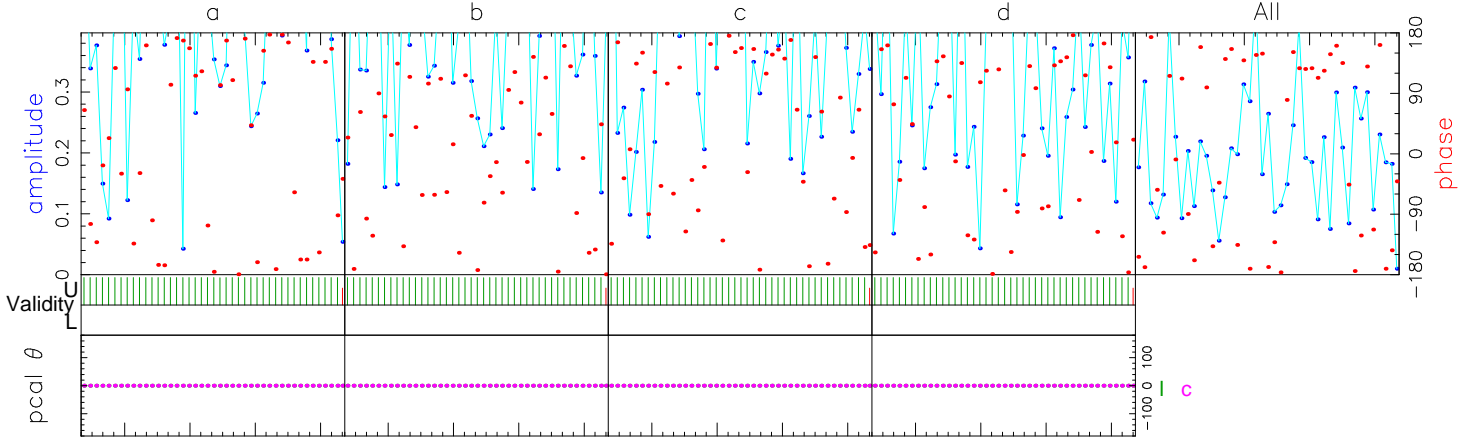
Fringe quality 0

SNR 5.6  
 Int time 239.949  
 Amp 0.132  
 Phase 298.4  
 PFD 9.3e-01  
 Delays (us)  
 SBD 0.849178  
 MBD 0.003615  
 Fringe rate (Hz)  
 0.076440  
 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
U/L	469/0	469/0	469/0	469/0		
l	1000	1000	1000	1000		
c	1000	1000	1000	1000		
l:c	0:0	0:0	0:0	0:0		
l:c	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
c	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
c	Q00UL	Q01UL	Q02UL	Q03UL		

	1.12641917124E+03	1.12642098425E+03	1.12557180575E+03	1.12557180575E+03	3.61549E-03	+/- 2.0E-04
Group delay (usec) (SBD)	1.12641917124E+03	1.12642098425E+03	1.12557180575E+03	1.12557180575E+03	3.61549E-03	+/- 2.0E-04
Sband delay (usec)	1.12642098425E+03	1.12557181627E+03	-1.2016134E+01	-1.2016134E+01	8.49178E-01	+/- 7.7E-04
Phase delay (usec)	1.12557181627E+03	9.89494467957E-01	1.5926897E-07	1.5926897E-07	1.05230E-05	+/- 1.3E-06
Delay rate (us/s)	9.89494467957E-01	0.000E+00	9.89492696047E-01	9.89492696047E-01	1.77191E-06	+/- 9.5E-09
Total phase (deg)	190.4	0.000E+00	-3.08106615111E-06	-3.08106615111E-06	298.4	+/- 20.5

	67.0	67.1	0.130	0.130	0.130	0.130
ph/seg (deg)	67.0	67.1	0.130	0.130	0.130	0.130
amp/seg (%)	89.8	117.2	0.000	0.000	0.000	0.000
ph/frq (deg)	50.7	20.5	0.118	0.118	0.118	0.118
amp/frq (%)	51.2	35.7	0.136	0.136	0.136	0.136

l: az 165.6 el 58.9 pa -11.3      c: az 253.9 el 54.4 pa 66.9      u,v (fr/asec) -2854.968 1220.082      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/7mm/3001/No0552/lc..3N2DRC      Output file: /Exps/c241c/v2/7mm/3001/No0552/lc.Q.136.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

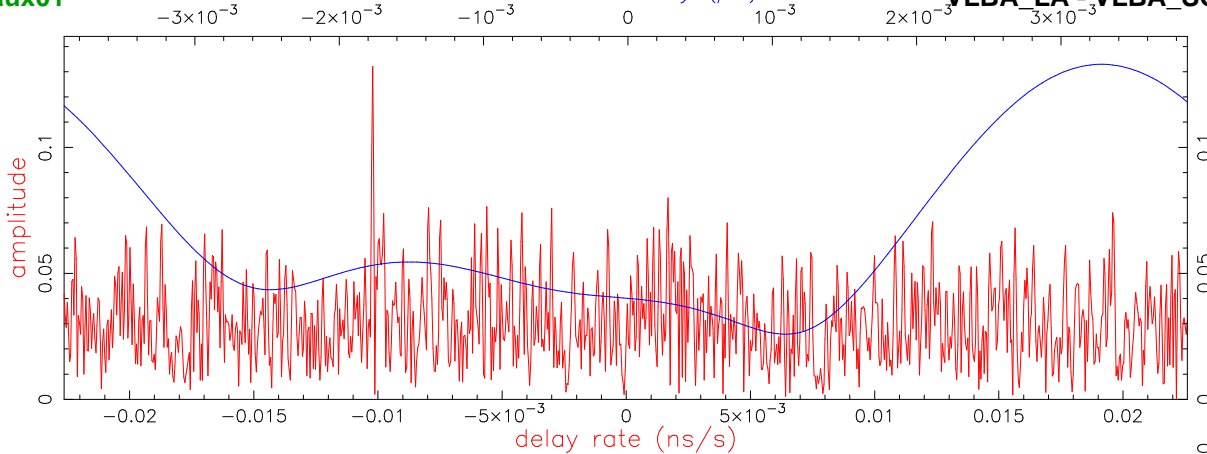
aux01

3C120.3N2DRC, No0552, lc

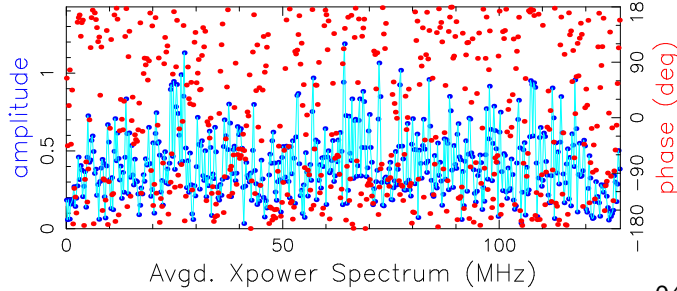
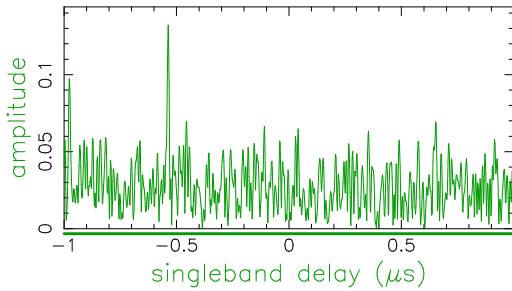
VLBA\_LA - VLBA\_SC, fgroup Q, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

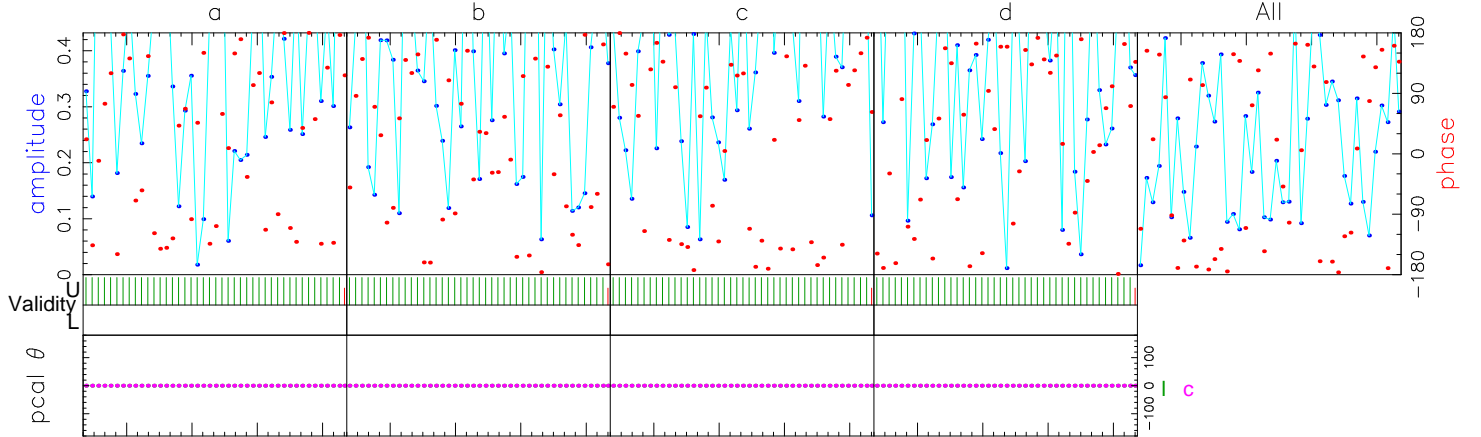


SNR 5.6  
 Int time 239.949  
 Amp 0.144  
 Phase -241.0  
 PFD 9.3e-01  
 Delays (us)  
 SBD -0.537008  
 MBD -0.004395  
 Fringe rate (Hz)  
 -0.442932  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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
	-179.7	162.2	157.9	163.0	Phase	164.0
	0.1	0.1	0.3	0.1	Ampl.	0.1
	34.9	852.4	238.9	782.5	Sbd box	238.1
U/L	469/0	469/0	469/0	469/0	APs used	
l	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
l:c	0:0	0:0	0:0	0:0	PC phase	
l:c	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.12503616122E+03	Apriori delay (usec)	1.12557180575E+03	Resid mbdelay (usec)	-4.39453E-03	+/-	2.0E-04
Sband delay (usec)	1.12503479762E+03	Apriori clock (usec)	-1.2016134E+01	Resid sbdelay (usec)	-5.37008E-01	+/-	7.7E-04
Phase delay (usec)	1.12557181631E+03	Apriori clockrate (us/s)	1.5926897E-07	Resid phdelay (usec)	1.05580E-05	+/-	1.3E-06
Delay rate (us/s)	9.89482428721E-01	Apriori rate (us/s)	9.89492696047E-01	Resid rate (us/s)	-1.02673E-05	+/-	9.5E-09
Total phase (deg)	-349.0	Apriori accel (us/s/s)	-3.08106615111E-06	Resid phase (deg)	-241.0	+/-	20.5

ph/seg (deg)	RMS 70.8	Theor. 67.1	Amplitude Search (1024X16)	0.144 +/- 0.026	0.127	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	122.0	117.1	Interp.	0.000	0.127	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	12.4	20.5	Inc. seg. avg.	0.150	0.127	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	51.7	35.7	Inc. frq. avg.	0.137	0.127	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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -2854.968 1220.082 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lc.Q.77.3N2DRC

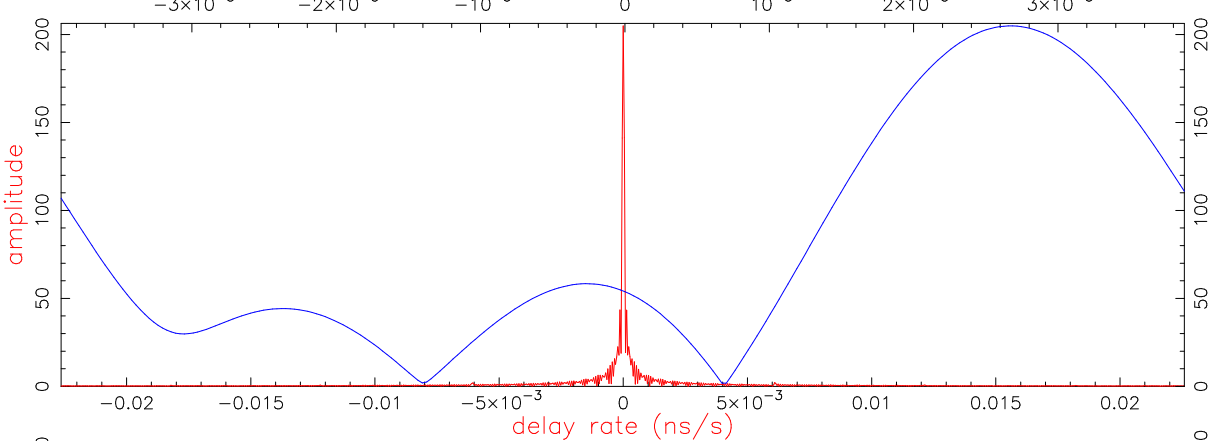


Mk4/DiFX fourfit 3.25 rev 0

aux01

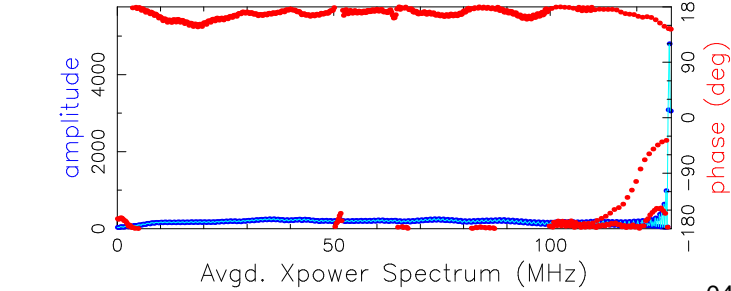
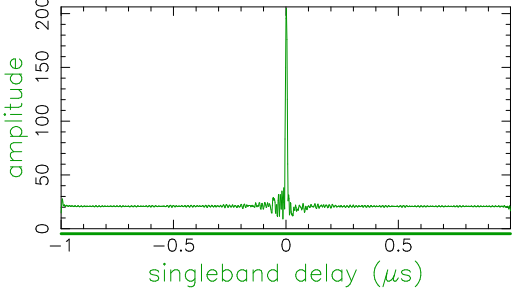
3C120.3N2DRC, No0552, II

VLBA LA - VLBA\_LA, fgroup Q, pol RL



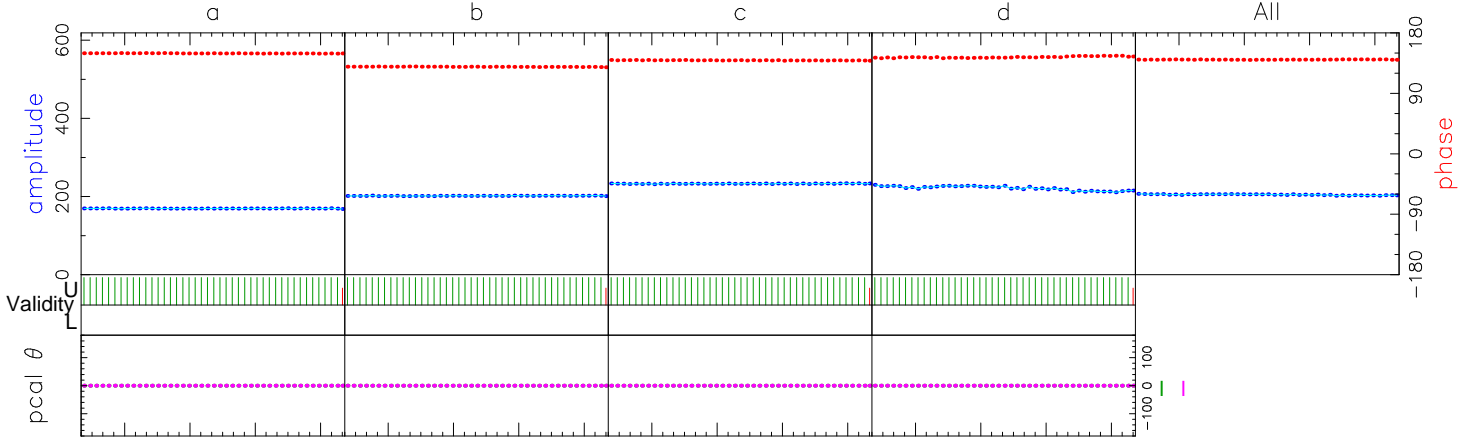
Fringe quality 9

SNR 8739.6  
 Int time 239.982  
 Amp 206.303  
 Phase 140.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.001433  
 MBD 0.002675  
 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  
 2025:049:102435  
 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
149.4	129.4	139.0	143.8	Phase	140.1
169.5	201.8	232.9	221.4	Ampl.	206.4
514.4	513.9	513.7	513.2	Sbd box	513.7
U/L 469/0	469/0	469/0	469/0	APs used	
1000	1000	1000	1000	PC freqs	
1000	1000	1000	1000	PC freqs	
:  0:0	0:0	0:0	0:0	PC phase	
:  0:0	0:0	0:0	0:0	Manl PC	
1000	1000	1000	1000	PC amp	
1000	1000	1000	1000		
Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
				Tracks	
Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
				Tracks	

Group delay (usec) (SBD) 2.67512500000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.67512E-03 +/- 1.3E-07  
 Sband delay (usec) 1.43300000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.43300E-03 +/- 4.9E-07  
 Phase delay (usec) 9.02071610556E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 9.02072E-06 +/- 8.4E-10  
 Delay rate (us/s) 1.92414947977E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.92415E-10 +/- 6.1E-12  
 Total phase (deg) 140.1 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 140.1 +/- 0.0

RMS Theor. Amplitude 206.303 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.0 Search (1024X16) 200.749 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.0 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004  
 ph/frq (deg) 10.4 0.0 Inc. seg. avg. 204.878 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023  
 amp/frq (%) 11.6 0.0 Inc. frq. avg. 206.433 Data rate(Mb/s): 2048 nlags: 512 t\_cohere infinite ion window (TEC) 0.00 0.00  
 I: az 165.6 el 58.9 pa -11.3 I: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

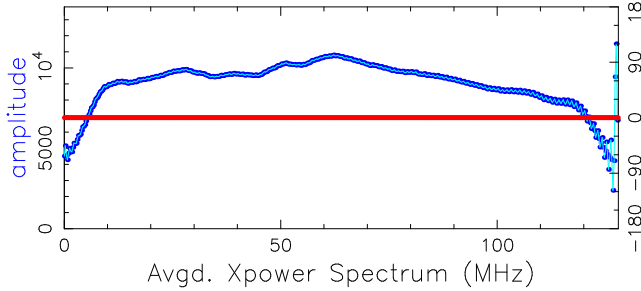
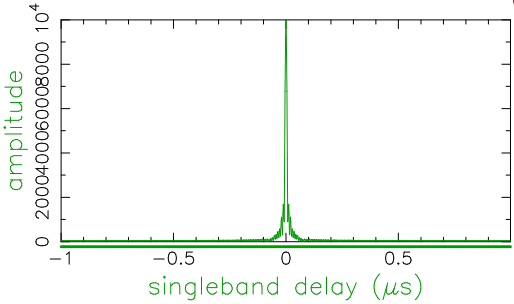
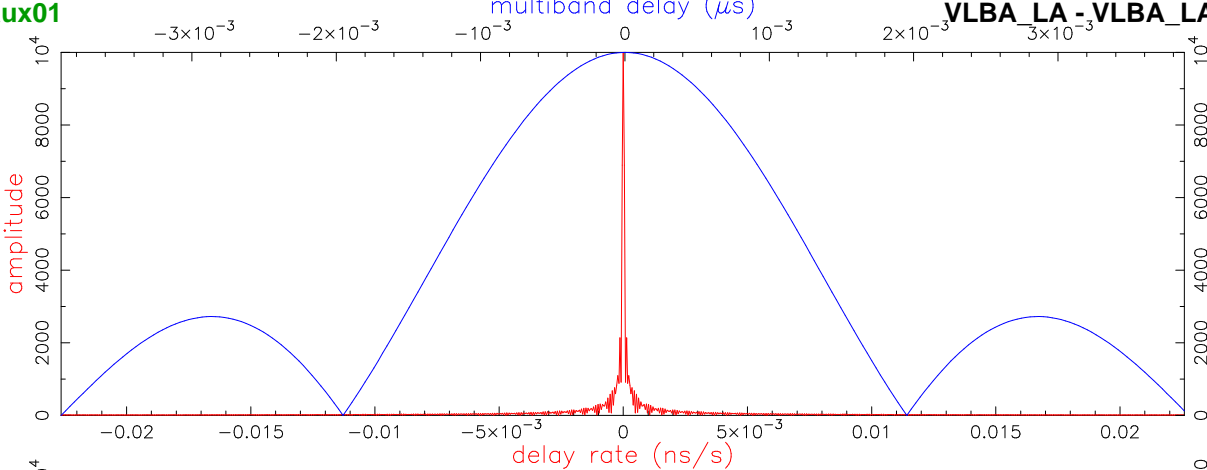
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/II..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/II.Q.100.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

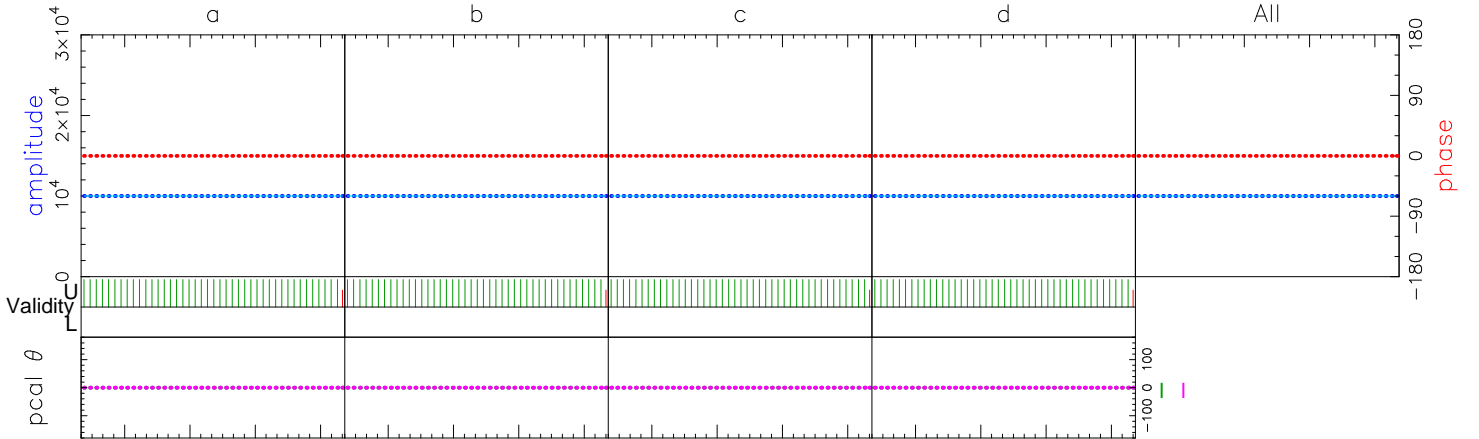
3C120.3N2DRC, No0552, II

VLBA\_LA - VLBA\_LA, fgroup Q, pol LL



Fringe quality 9  
 SNR 423630.0  
 Int time 239.982  
 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  
 2025:049:102428  
 2024:113:095956  
 RA & Dec (J2000)  
 04h33m11.095531s  
 +05°21'15.619266"

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



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

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.6E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.0E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.7E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+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	RMS	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	0.0	0.0	0.0	Search (1024X16)	10000.000	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)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Inc. seg. avg.	10000.000	Data rate(MSamp/s):	256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023		
amp/frq (%)	0.0	0.0	0.0	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Data rate(Mb/s):	2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

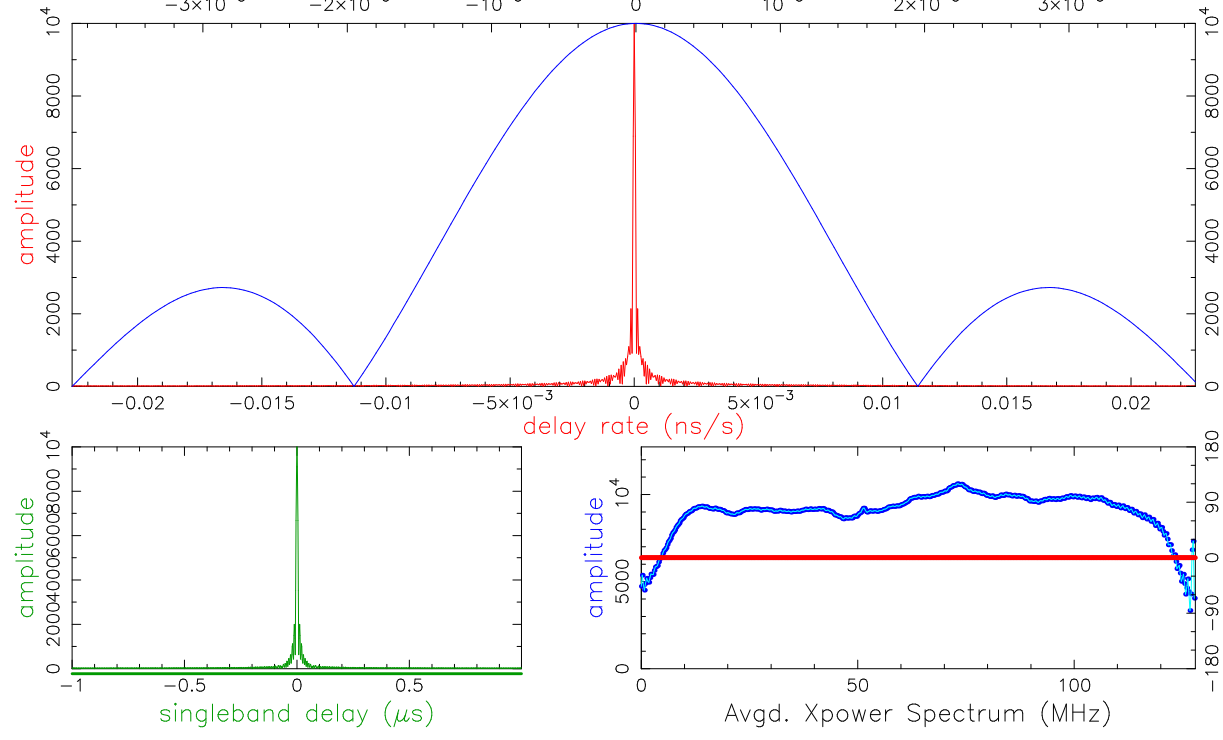
I: az 165.6 el 58.9 pa -11.3 I: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/II..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/II.Q.48.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, II

VLBA LA - VLBA LA, fgroup Q, pol RR

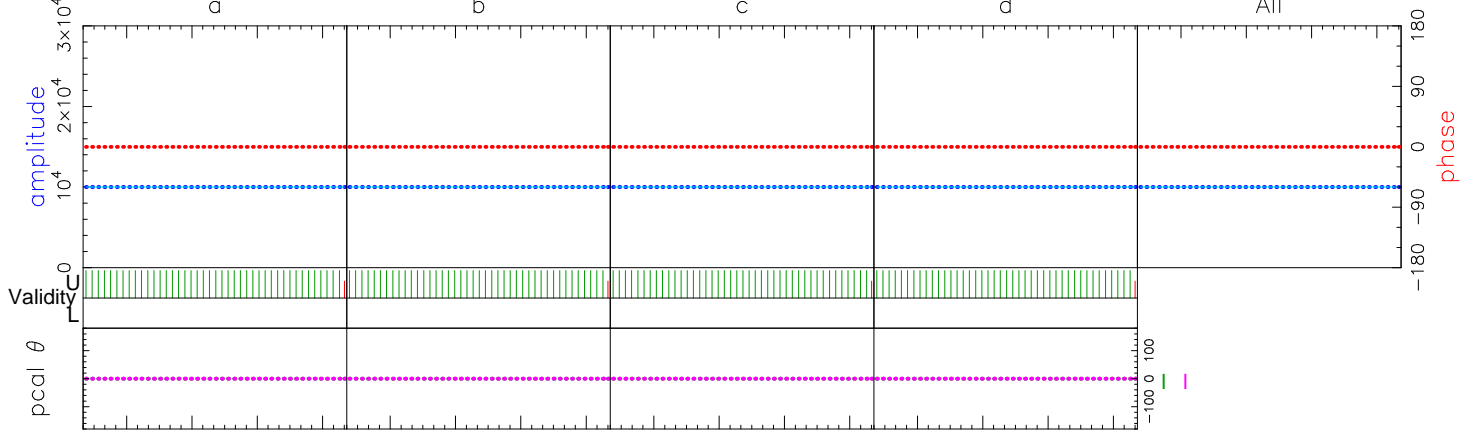


Fringe quality 9

SNR 423630.0  
 Int time 239.982  
 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  
 2025:049:102431  
 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



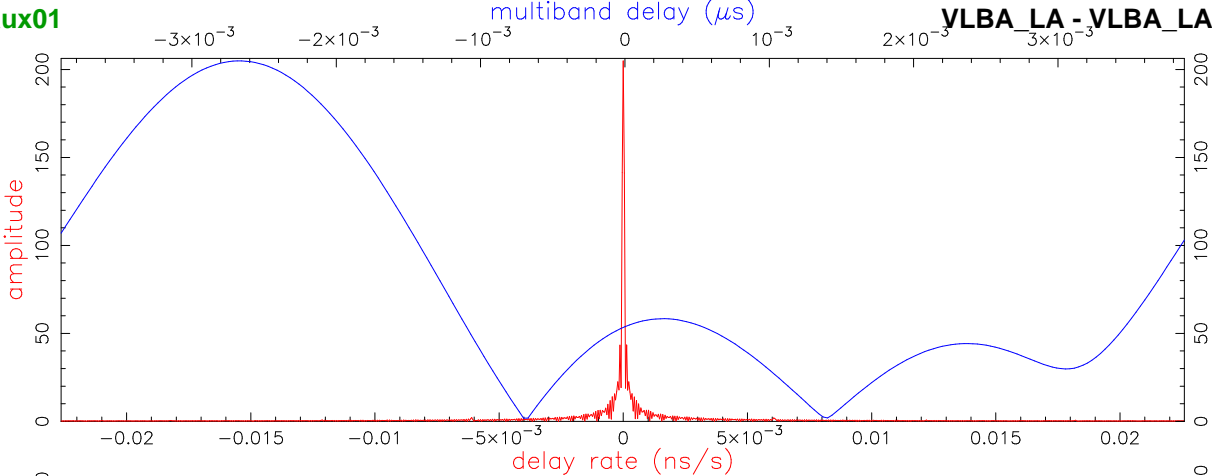
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
513.0	513.0	513.0	513.0	Sbd box	513.0
U/L 469/0	469/0	469/0	469/0	APs used	
I 1000	1000	1000	1000	PC freqs	
I 1000	1000	1000	1000	PC freqs	
I:I 0:0	0:0	0:0	0:0	PC phase	
I:I 0:0	0:0	0:0	0:0	ManI PC	
I 1000	1000	1000	1000	PC amp	
I 1000	1000	1000	1000		
I Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
I Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
I Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
I Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00 +/- 2.6E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.00000000E+00	Resid sbdelay (usec)	0.000000E+00 +/- 1.0E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.00000000E+00	Resid phdelay (usec)	0.000000E+00 +/- 1.7E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00 +/- 1.3E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0 +/- 0.0
RMS	Theor.	Amplitude	10000.000 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.0	Search (1024X16)	10000.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	0.0	Inc. frq. avg.	10000.000	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
I: az 165.6 el 58.9 pa -11.3		I: az 165.6 el 58.9 pa -11.3		u,v (fr/asec) 0.000 0.000	
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/II..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/II.Q.62.3N2DRC	

Mk4/DiFX fourfit 3.25 rev 0

aux01

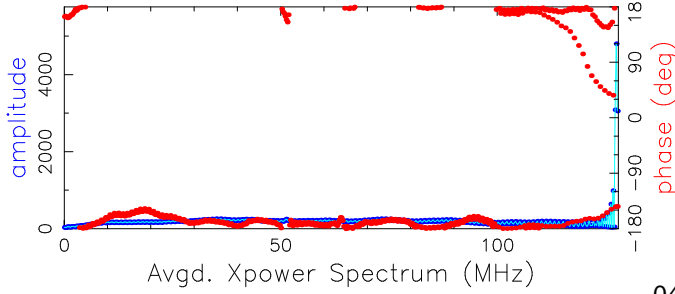
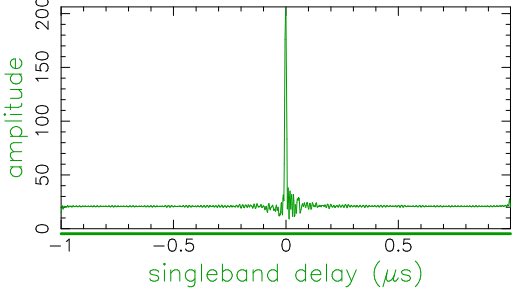
3C120.3N2DRC, No0552, II

VLBA\_LA - VLBA\_LA, fgroup Q, pol LR



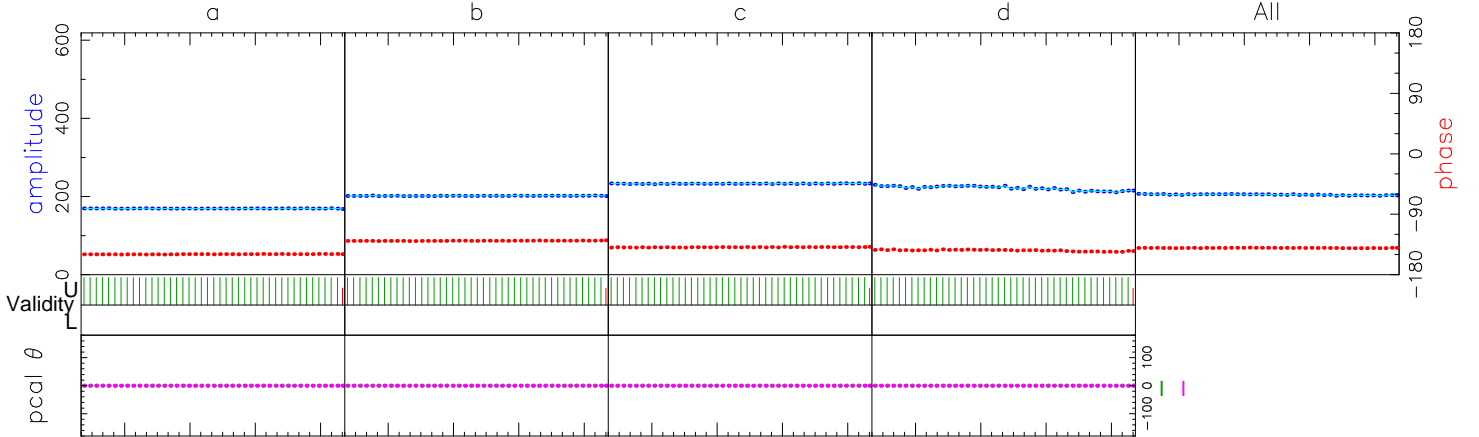
Fringe quality 9

SNR 8739.6  
 Int time 239.982  
 Amp 206.303  
 Phase -140.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001433  
 MBD -0.002675  
 Fringe rate (Hz)  
 -0.000008  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-149.4	-129.4	-139.0	-143.8	Phase	-140.1
169.5	201.8	232.9	221.4	Ampl.	206.4
511.6	512.1	512.3	512.8	Sbd box	512.3
U/L 469/0	469/0	469/0	469/0	APs used	
1000	1000	1000	1000	PC freqs	
1000	1000	1000	1000	PC freqs	
:  0:0	0:0	0:0	0:0	PC phase	
:  0:0	0:0	0:0	0:0	Manl PC	
1000	1000	1000	1000	PC amp	
1000	1000	1000	1000		
Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-2.67512500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.67512E-03	+/-	1.3E-07
Sband delay (usec)	-1.43300000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.43300E-03	+/-	4.9E-07
Phase delay (usec)	-9.02071610603E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-9.02072E-06	+/-	8.4E-10
Delay rate (us/s)	-1.92414947977E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.92415E-10	+/-	6.1E-12
Total phase (deg)	-140.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-140.1	+/-	0.0

ph/seg (deg)	0.2	0.0	Amplitude	206.303 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	1.0	0.1	Search (1024X16)	200.749	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	10.4	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	11.6	0.0	Inc. seg. avg.	204.878	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	206.433	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      l: az 165.6 el 58.9 pa -11.3      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

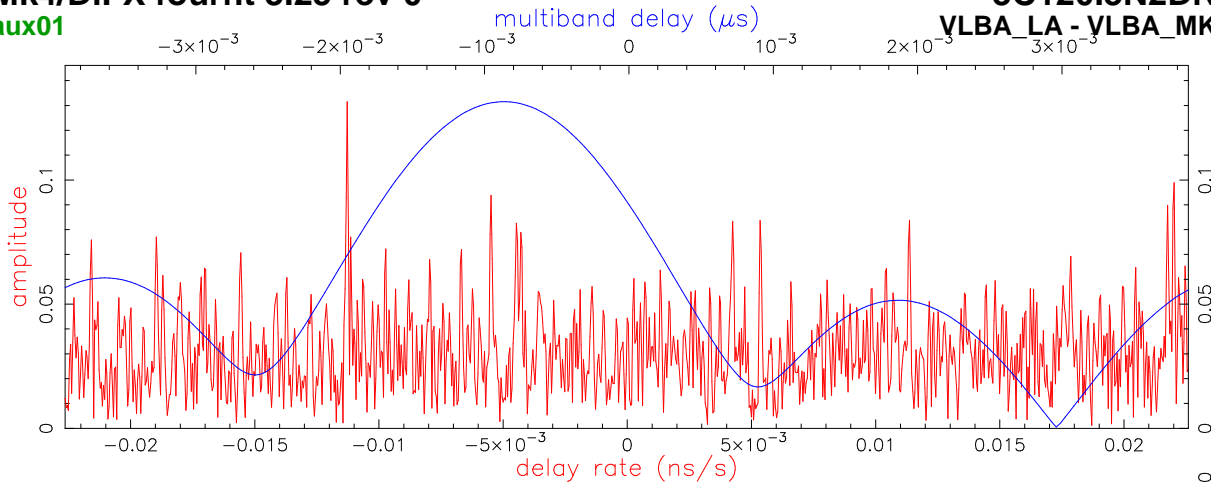
Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/7mm/3001/No0552/II..3N2DRC      Output file: /Exps/c241c/v2/7mm/3001/No0552/II.Q.83.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

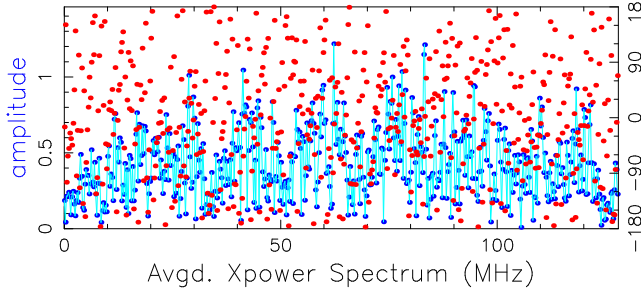
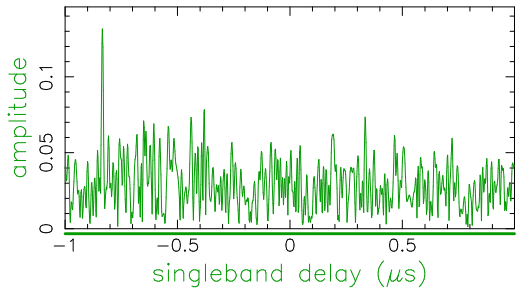
3C120.3N2DRC, No0552, Im

VLBA\_LA - VLBA\_MK, fgroup Q, pol LR



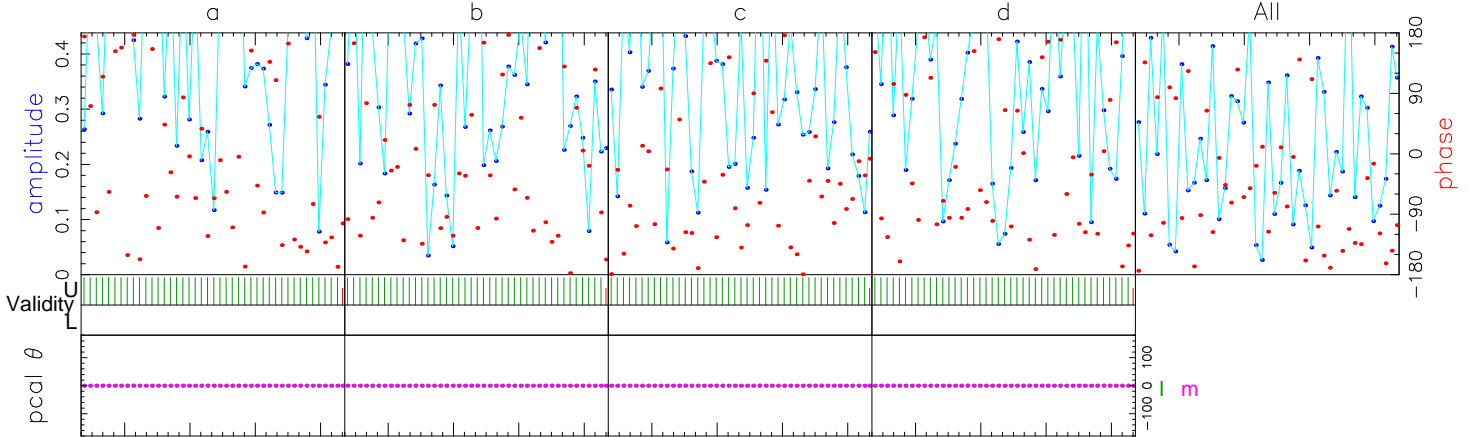
Fringe quality 0

SNR 5.6  
 Int time 239.982  
 Amp 0.146  
 Phase -323.9  
 PFD 9.5e-01  
 Delays (us)  
 SBD -0.834107  
 MBD -0.000877  
 Fringe rate (Hz)  
 -0.488181  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



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

Group delay (usec) (SBD)	6.36581189222E+03	Apriori delay (usec)	6.36664870720E+03	Resid mbdelay (usec)	-8.77482E-04	+/-	2.0E-04
Sband delay (usec)	6.36581460045E+03	Apriori clock (usec)	-8.8595448E+00	Resid sbdelay (usec)	-8.34107E-01	+/-	7.7E-04
Phase delay (usec)	6.36664870011E+03	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-7.09092E-06	+/-	1.3E-06
Delay rate (us/s)	-1.05900957704E+00	Apriori rate (us/s)	-1.05899826085E+00	Resid rate (us/s)	-1.13162E-05	+/-	9.5E-09
Total phase (deg)	-241.5	Apriori accel (us/s/s)	-3.12941012685E-05	Resid phase (deg)	-323.9	+/-	20.6

ph/seg (deg)	83.7	Theor.	67.4	Amplitude	0.146 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	134.5	Search (1024X16)	0.128	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)	19.0	Inc. seg. avg.	0.155	Inc. frq. avg.	0.141	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	17.7	Inc. frq. avg.	0.141			Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 165.6 el 58.9 pa -11.3      m: az 96.6 el 33.2 pa -69.8      u,v (fr/asec) 3030.701 970.010      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC      Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.118.3N2DRC

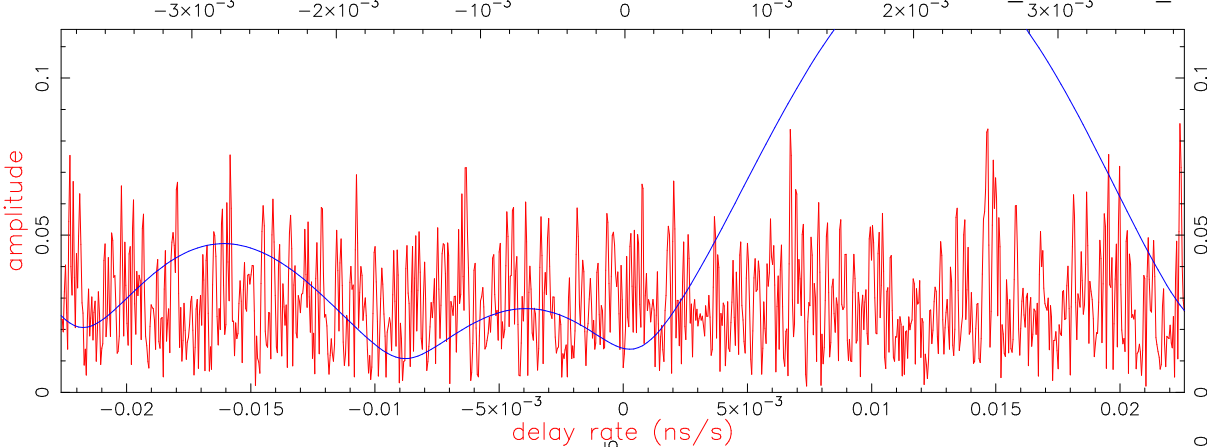
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, Im

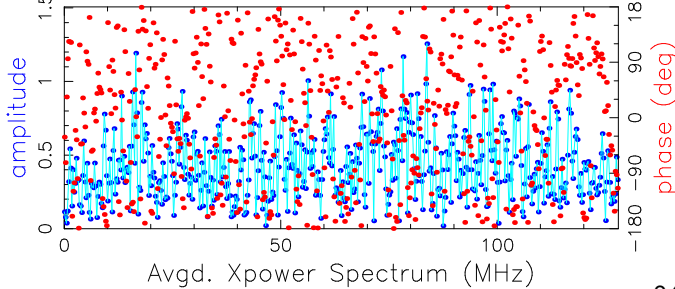
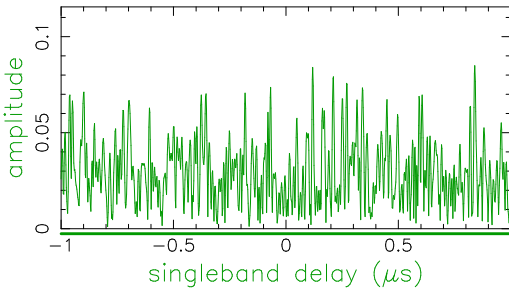
VLBA\_LA - VLBA\_MK, fgroup Q, pol RL

multiband delay ( $\mu$ s)



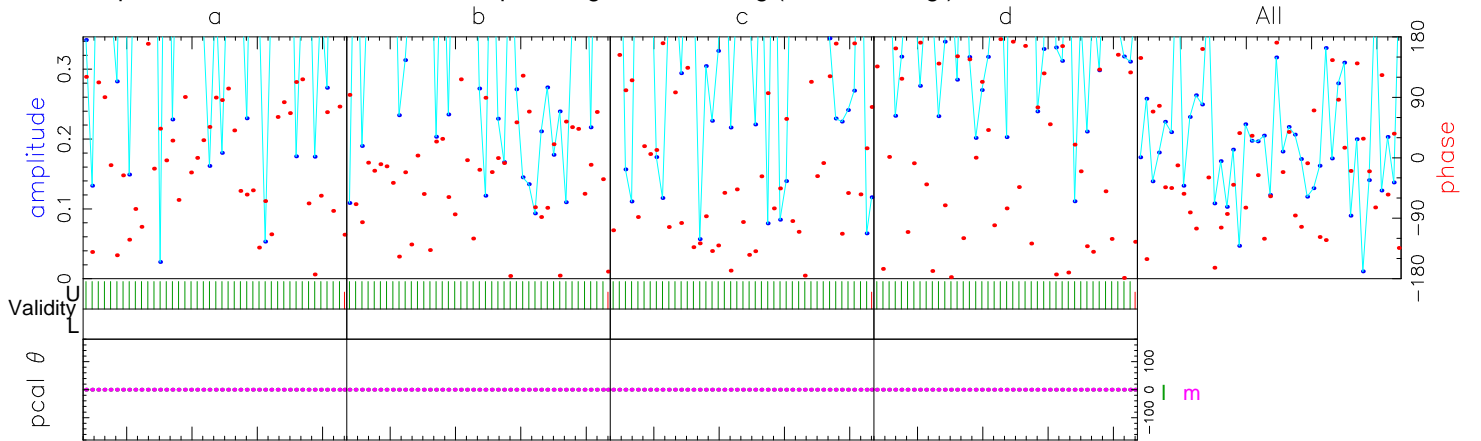
Fringe quality 0

SNR 3.2  
 Int time 239.982  
 Amp 0.115  
 Phase 64.2  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.269531  
 MBD -0.004395  
 Fringe rate (Hz)  
 -0.948602  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 210920.00  
 Stop 211320.12  
 FRT 211120.00  
 Corr/FF/build  
 2025:048:110113  
 2025:049:102441  
 2024:113:095956  
 RA & Dec (J2000)  
 04h33m11.095531s  
 +05°21'15.619266"

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



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

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

ph/seg (deg)	86.3	Theor.	117.3	Amplitude	0.115 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	213.3	Search (1024X16)	0.135	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	95.5	Inc. seg. avg.	0.101	Inc. frq. avg.	0.179	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	88.8	Inc. frq. avg.	0.179			Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
							ion window (TEC) 0.00 0.00

l: az 165.6 el 58.9 pa -11.3 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3030.701 970.010 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.129.3N2DRC

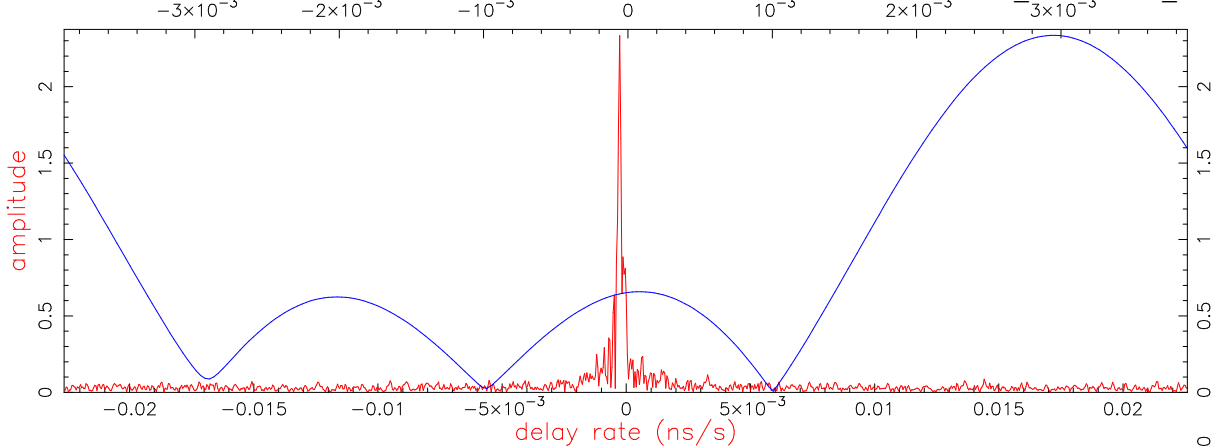
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, Im

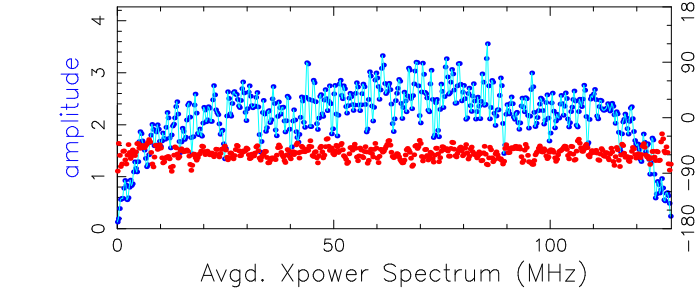
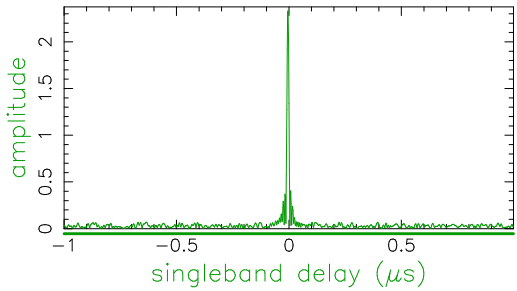
VLBA\_LA - VLBA\_MK, fgroup Q, pol LL

multiband delay ( $\mu$ s)



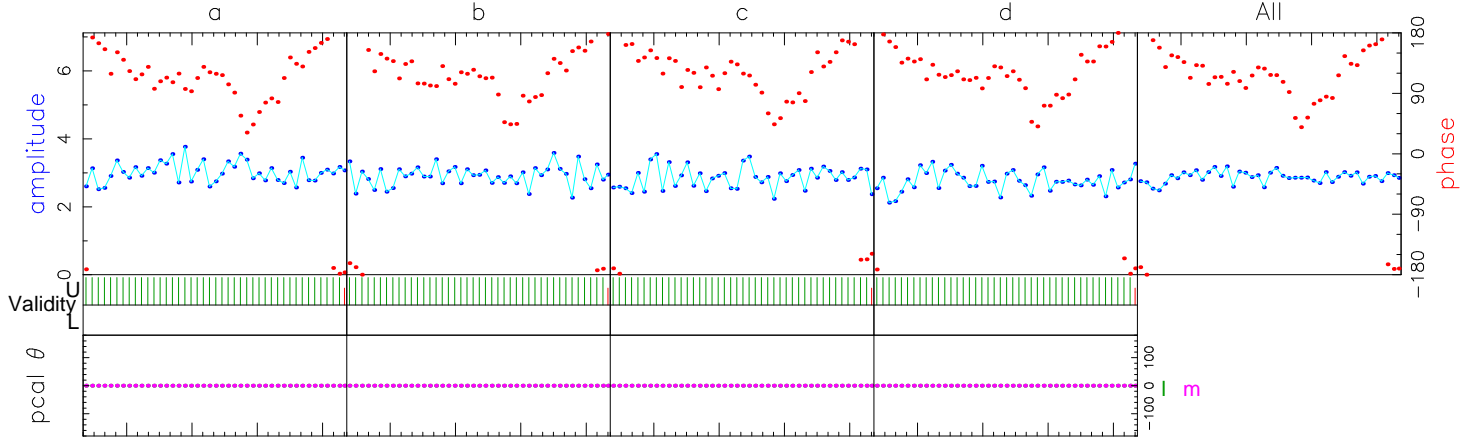
Fringe quality 6

SNR 100.6  
 Int time 239.982  
 Amp 2.375  
 Phase -155.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004789  
 MBD 0.002904  
 Fringe rate (Hz)  
 -0.011105  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



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

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

	RMS	Theor.	Amplitude	2.375 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	37.1	3.7	Search (1024X16)	2.300	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	22.2	6.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	4.0	1.1	Inc. seg. avg.	2.870	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	3.1	2.0	Inc. frq. avg.	2.336	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 165.6 el 58.9 pa -11.3 m: az 96.6 el 33.2 pa -69.8 u,v (fr/asec) 3030.701 970.010 simultaneous interpolator

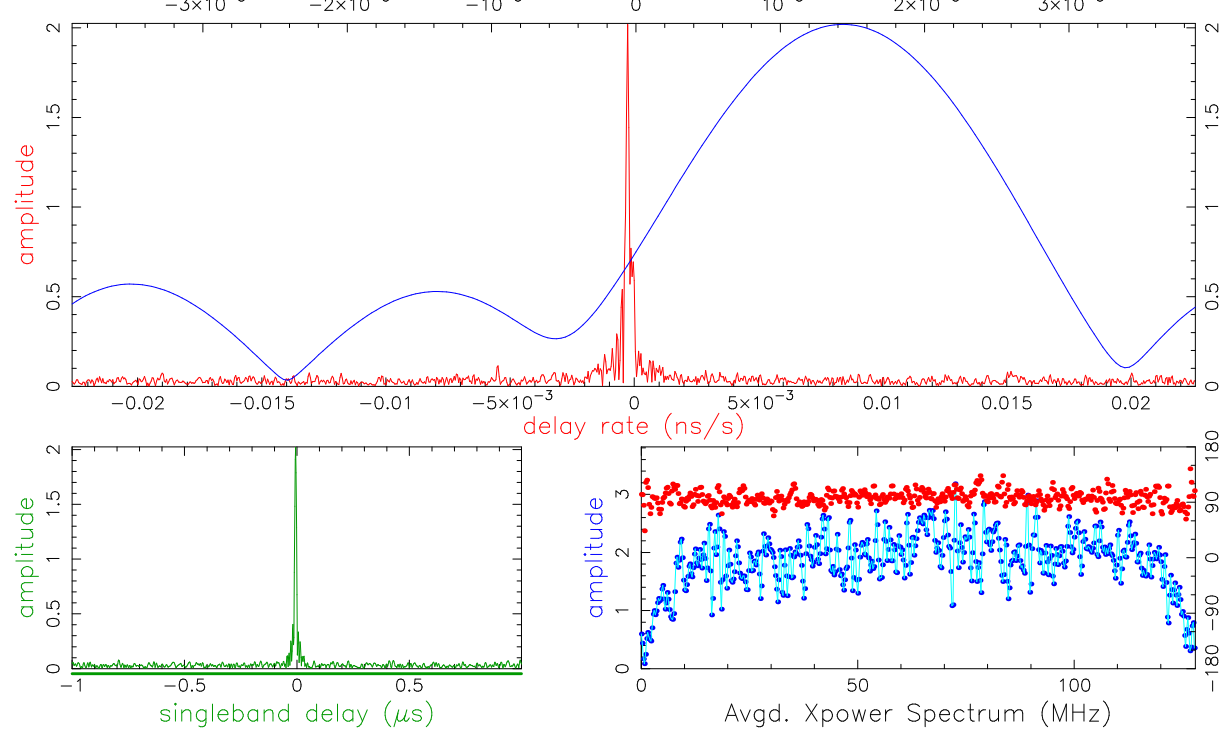
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.71.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, Im

VLBA\_LA - VLBA\_MK, fgroup Q, pol RR

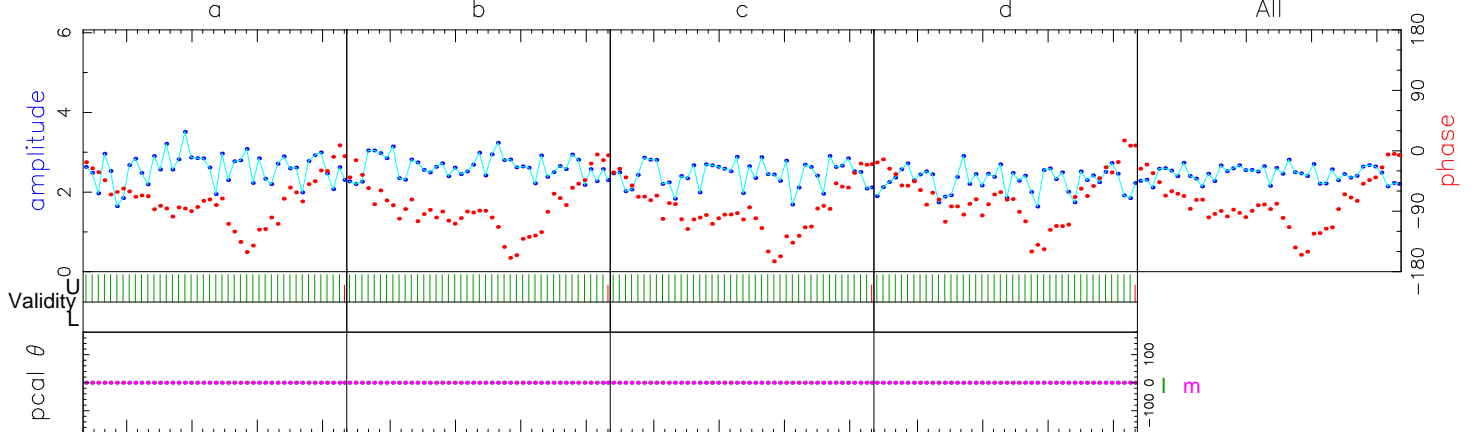


Fringe quality 6

SNR 85.8  
 Int time 239.982  
 Amp 2.024  
 Phase -359.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.006209  
 MBD 0.001410  
 Fringe rate (Hz)  
 -0.011201  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512

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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-73.2	-84.2	-86.4	-67.9	Phase	-78.2
	2.1	2.1	2.0	1.8	Ampl.	2.0
	509.4	509.8	509.8	510.4	Sbd box	509.8
U/L	469/0	469/0	469/0	469/0	APs used	
l	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec) (SBD)	6.36664230516E+03		Apriori delay (usec)	6.36664870720E+03	Resid mbdelay (usec)	1.41045E-03 +/- 1.3E-05
Sband delay (usec)	6.36664249833E+03		Apriori clock (usec)	-8.8595448E+00	Resid sbdelay (usec)	-6.20888E-03 +/- 5.0E-05
Phase delay (usec)	6.36664870217E+03		Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	-5.03391E-06 +/- 8.6E-08
Delay rate (us/s)	-1.05899852050E+00		Apriori rate (us/s)	-1.05899826085E+00	Resid rate (us/s)	-2.59647E-07 +/- 6.2E-10
Total phase (deg)		-277.1	Apriori accel (us/s/s)	-3.12941012685E-05	Resid phase (deg)	-359.4 +/- 1.3
RMS	36.4	4.4	Amplitude	2.024 +/- 0.024	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	36.4	4.4	Search (1024X16)	2.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	23.2	7.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	10.8	1.3	Inc. seg. avg.	2.451	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	6.3	2.3	Inc. frq. avg.	2.036	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
l: az 165.6 el 58.9 pa -11.3		m: az 96.6 el 33.2 pa -69.8		u,v (fr/asec) 3030.701 970.010		simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/Im..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/Im.Q.98.3N2DRC		



Mk4/DiFX fourfit 3.25 rev 0

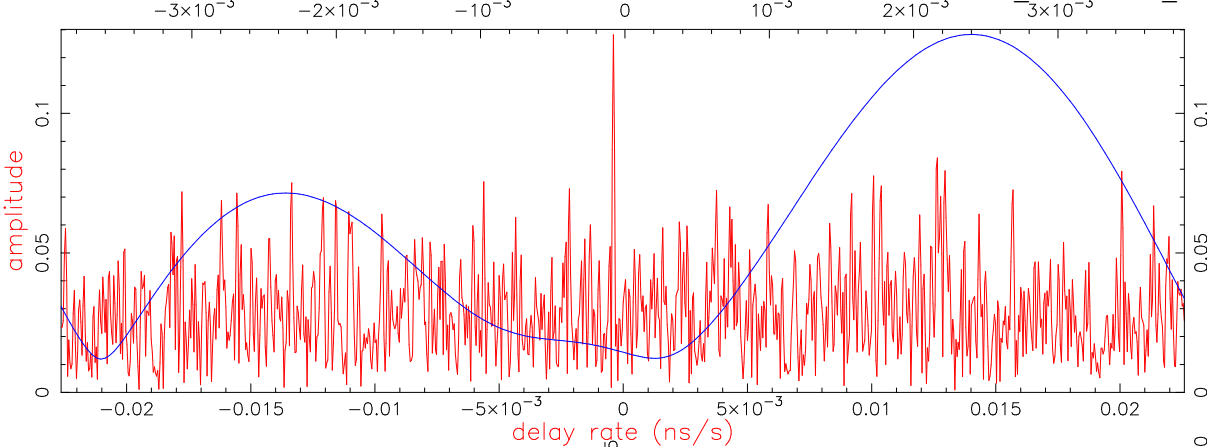
aux01

3C120.3N2DRC, No0552, In

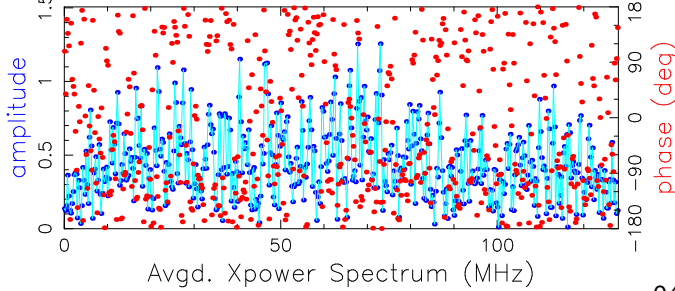
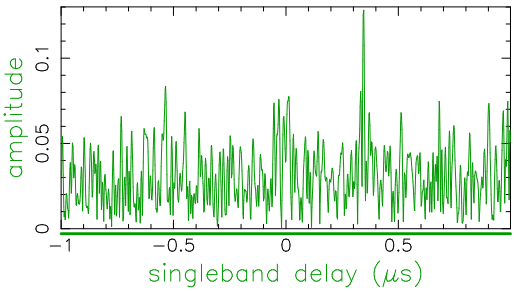
VLBA\_LA - VLBA\_NL, fgroup Q, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

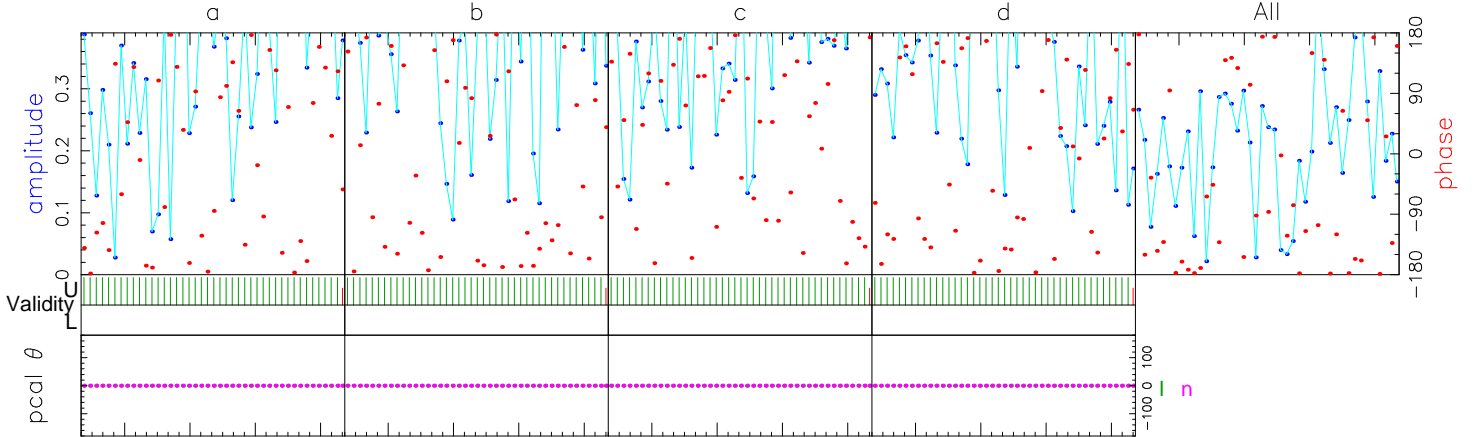


SNR 5.5  
 Int time 239.971  
 Amp 0.130  
 Phase 324.8  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.344940  
 MBD 0.002358  
 Fringe rate (Hz)  
 -0.017409  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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		
n	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
n	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL		
n	Q00UR	Q01UR	Q02UR	Q03UR		

	1.26092600878E+03	1.26057990118E+03	2.35760E-03	2.0E-04
Group delay (usec) (SBD)	1.26092600878E+03	1.26057990118E+03	2.35760E-03	2.0E-04
Sband delay (usec)	1.26092484068E+03	-8.0515366E+00	3.44940E-01	7.8E-04
Phase delay (usec)	1.26057989022E+03	-5.3126102E-07	-1.09598E-05	1.3E-06
Delay rate (us/s)	3.06215062092E-01	3.06215465631E-01	-4.03539E-07	9.7E-09
Total phase (deg)	302.0	-7.61075603410E-06	324.8	20.8

	0.130 +/- 0.024	0.127	0.000E+00, 0.000E+00 (us/s)	5, 5
ph/seg (deg)	69.6	68.2	Search (1024X16)	0.127
amp/seg (%)	100.4	119.0	Interp.	0.000
ph/frq (deg)	29.7	20.8	Inc. seg. avg.	0.123
amp/frq (%)	22.2	36.3	Inc. frq. avg.	0.128

l: az 165.6 el 58.9 pa -11.3 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -885.678 -388.651 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ln..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ln.Q.110.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

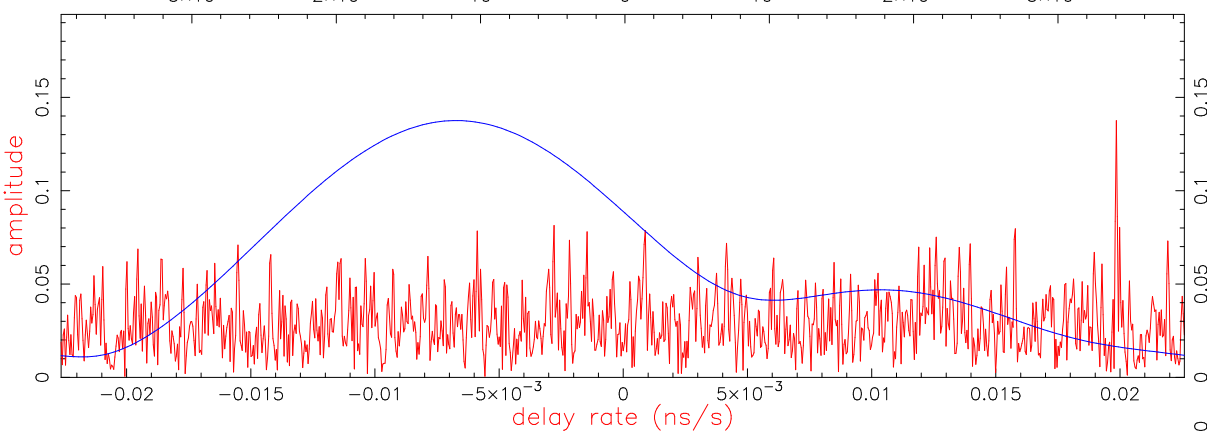
aux01

3C120.3N2DRC, No0552, In

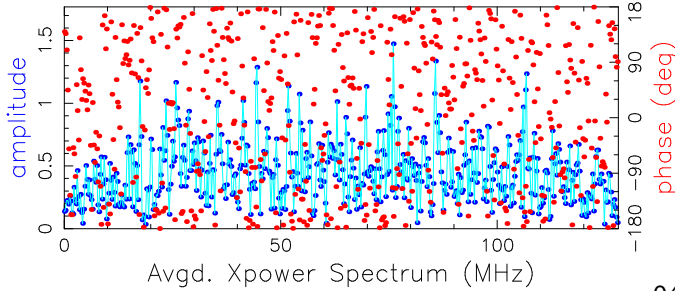
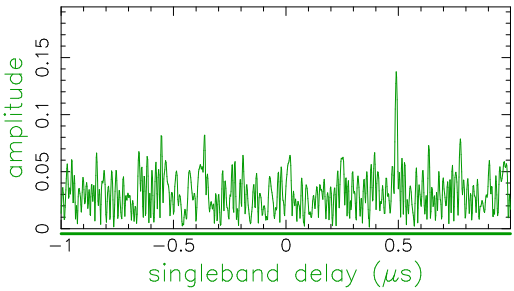
VLBA\_LA - VLBA\_NL, fgroup Q, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

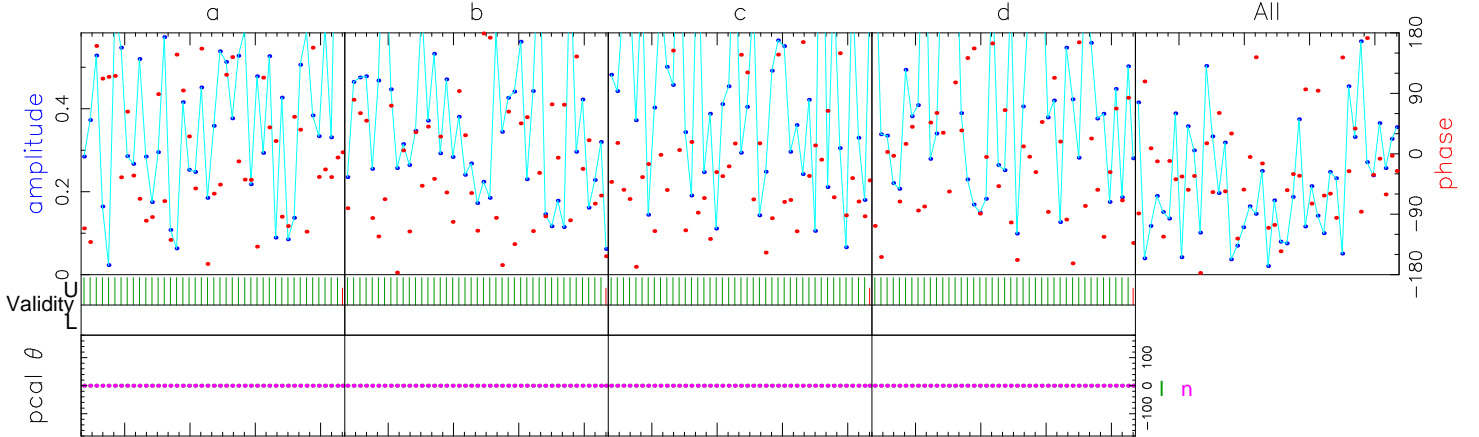


SNR 5.8  
 Int time 239.971  
 Amp 0.194  
 Phase 39.7  
 PFD 4.8e-01  
 Delays (us)  
 SBD 0.490616  
 MBD -0.001177  
 Fringe rate (Hz)  
 0.861872  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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		
l	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.26107091142E+03	Apriori delay (usec)	1.26057990118E+03	Resid mbdelay (usec)	-1.17725E-03	+/- 1.9E-04
Sband delay (usec)	1.26107051718E+03	Apriori clock (usec)	-8.0515366E+00	Resid sbdelay (usec)	4.90616E-01	+/- 7.4E-04
Phase delay (usec)	1.26057989866E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-2.51437E-06	+/- 1.3E-06
Delay rate (us/s)	3.06235444123E-01	Apriori rate (us/s)	3.06215465631E-01	Resid rate (us/s)	1.99785E-05	+/- 9.1E-09
Total phase (deg)	16.9	Apriori accel (us/s/s)	-7.61075603410E-06	Resid phase (deg)	39.7	+/- 19.6

ph/seg (deg)	RMS 75.2	Theor. 64.3	Amplitude Search (1024X16)	0.194 +/- 0.033	0.135	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	114.9	112.3	Interp.	0.000	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	13.7	19.6	Inc. seg. avg.	0.191	0.135	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	41.8	34.2	Inc. frq. avg.	0.186	0.186	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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -885.678 -388.651 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ln..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ln.Q.126.3N2DRC

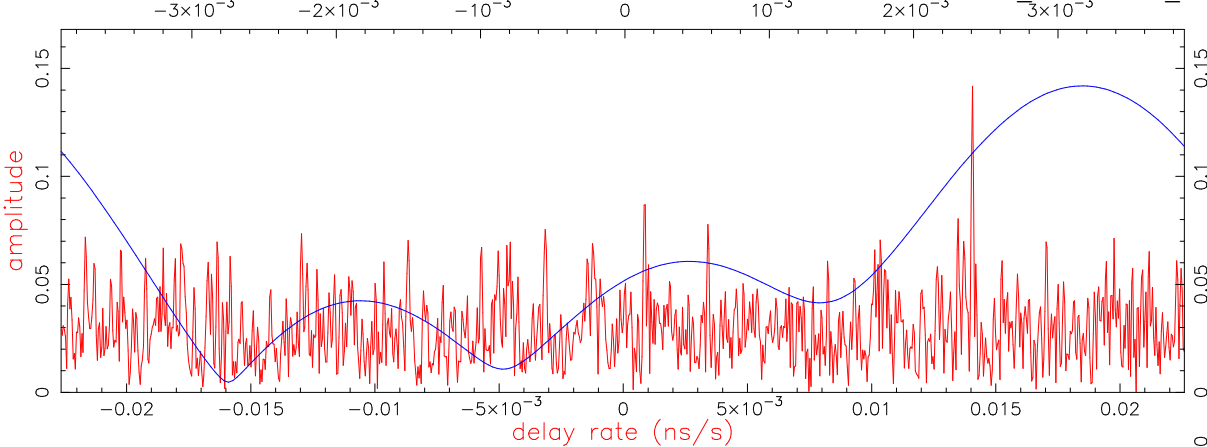
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, In

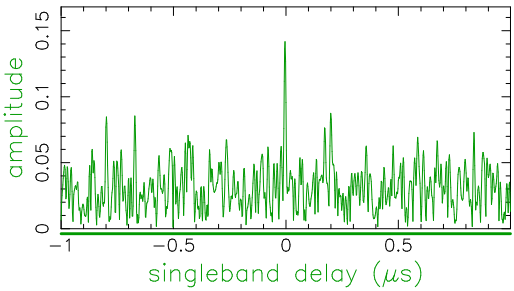
VLBA\_LA - VLBA\_NL, fgroup Q, pol LL

multiband delay ( $\mu$ s)

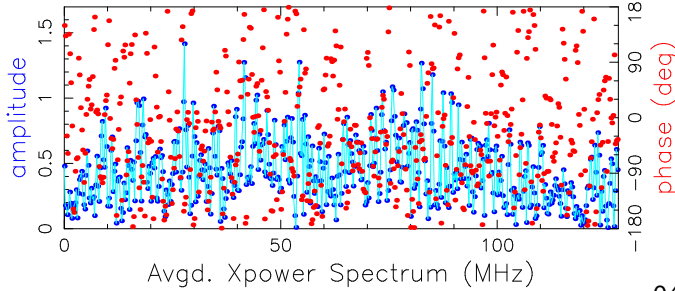


Fringe quality 0

SNR 6.0  
 Int time 239.971  
 Amp 0.168  
 Phase -141.0  
 PFD 1.9e-01  
 Delays (us)  
 SBD -0.004372  
 MBD 0.003115  
 Fringe rate (Hz) 0.610055  
 Ion TEC 0.000  
 Ref freq (MHz) 43140.0000  
 AP (sec) 0.512

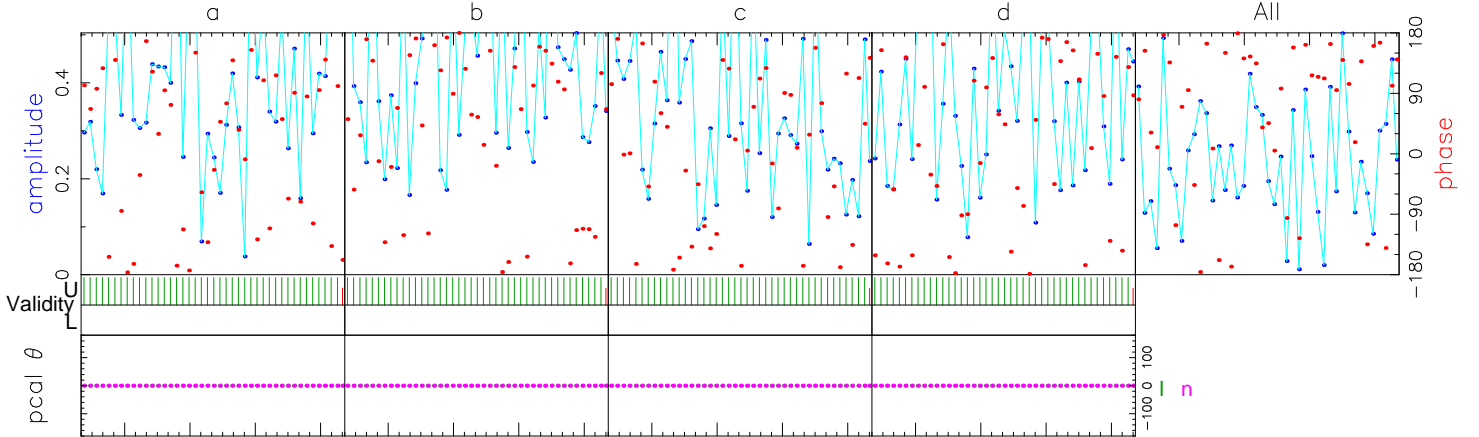


singleband delay ( $\mu$ s)



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



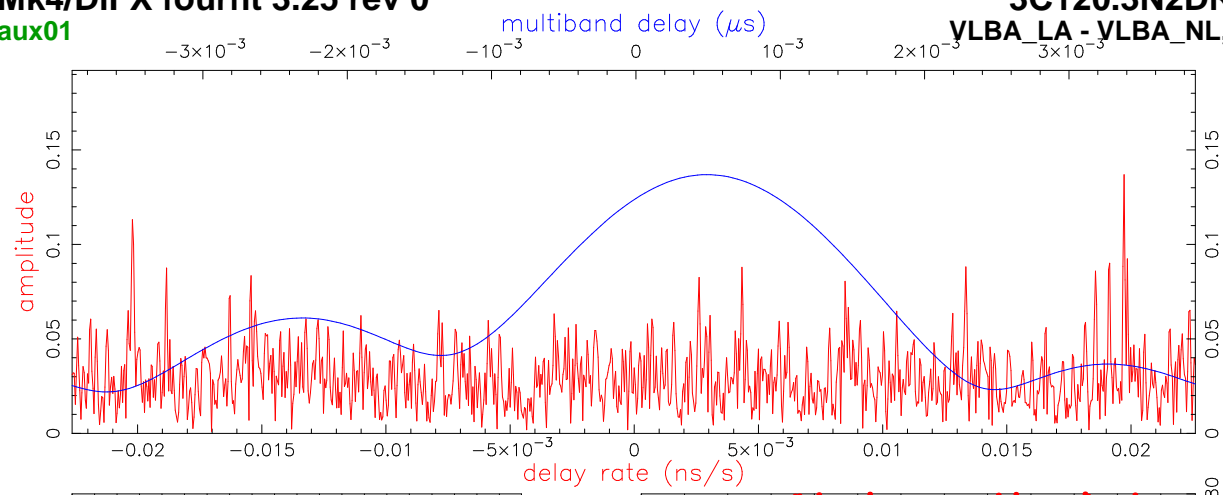
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
146.5	129.2	128.1	155.3	Phase	140.2
0.2	0.2	0.1	0.2	Ampl.	0.2
496.6	510.6	106.6	138.8	Sbd box	510.8
U/L 469/0	469/0	469/0	469/0	APs used	
l 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
l:n 0:0	0:0	0:0	0:0	PC phase	
l:n 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
n Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.26057520374E+03	Apriori delay (usec)	1.26057990118E+03	Resid mbdelay (usec)	3.11506E-03	+/-	1.8E-04
Sband delay (usec)	1.26057552893E+03	Apriori clock (usec)	-8.0515366E+00	Resid sbdelay (usec)	-4.37225E-03	+/-	7.1E-04
Phase delay (usec)	1.26057991021E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	9.03059E-06	+/-	1.2E-06
Delay rate (us/s)	3.06229606916E-01	Apriori rate (us/s)	3.06215465631E-01	Resid rate (us/s)	1.41413E-05	+/-	8.8E-09
Total phase (deg)	-163.8	Apriori accel (us/s/s)	-7.61075603410E-06	Resid phase (deg)	-141.0	+/-	19.0

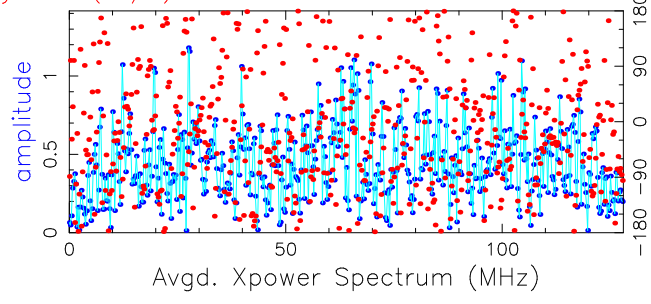
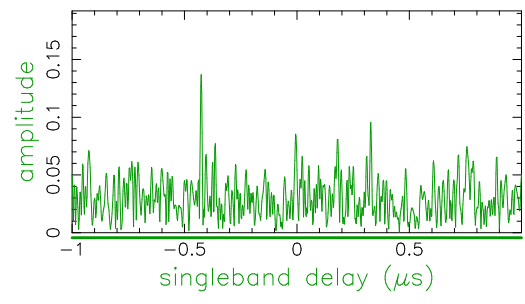
ph/seg (deg)	70.8	Theor.	62.3	Amplitude	0.168 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	111.5	Search (1024X16)	0.139	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	16.4	Inc. seg. avg.	0.178	Inc. frq. avg.	0.162	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	25.6	Inc. frq. avg.	0.162			Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023		
						Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 165.6 el 58.9 pa -11.3 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -885.678 -388.651 simultaneous interpolator

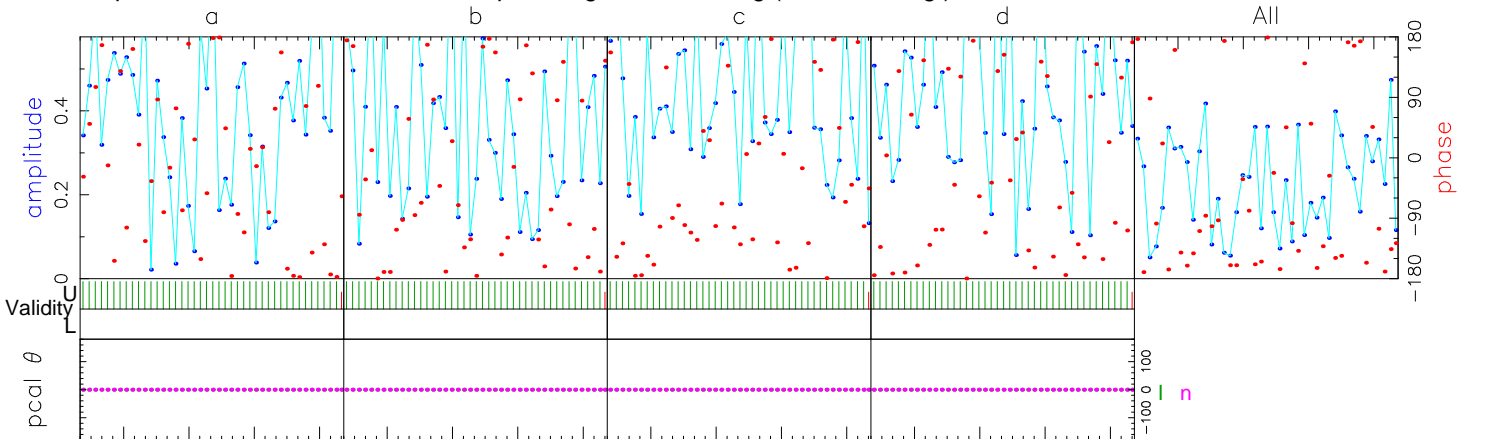
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ln..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ln.Q.78.3N2DRC



Fringe quality 0  
SNR 5.8  
Int time 239.971  
Amp 0.192  
Phase -135.8  
PFD 5.5e-01  
Delays (us)  
SBD -0.426010  
MBD 0.000472  
Fringe rate (Hz) 0.854672  
Ion TEC 0.000  
Ref freq (MHz) 43140.0000  
AP (sec) 0.512  
Exp. c241c  
Exper # 1234  
Yr:day 2024:112  
Start 210920.00  
Stop 211320.12  
FRT 211120.00  
Corr/FF/build  
2025:048:110113  
2025:049:102435  
2024:113:095956  
RA & Dec (J2000)  
04h33m11.095531s  
+05°21'15.619266"



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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-165.0	-144.4	-117.3	-165.2	Phase	-147.0
0.2	0.2	0.2	0.2	Ampl.	0.2
605.1	274.4	294.1	119.2	Sbd box	294.9
U/L 469/0	469/0	469/0	469/0	APs used	
l 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
l:n 0:0	0:0	0:0	0:0	PC phase	
l:n 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
l Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
n Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.26015068534E+03	Apriori delay (usec)	1.26057990118E+03	Resid mbdelay (usec)	4.71664E-04	+/-	1.9E-04
Sband delay (usec)	1.26015389143E+03	Apriori clock (usec)	-8.0515366E+00	Resid sbdelay (usec)	-4.26010E-01	+/-	7.4E-04
Phase delay (usec)	1.26057989171E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-9.46763E-06	+/-	1.3E-06
Delay rate (us/s)	3.06235277229E-01	Apriori rate (us/s)	3.06215465631E-01	Resid rate (us/s)	1.98116E-05	+/-	9.2E-09
Total phase (deg)	-158.6	Apriori accel (us/s/s)	-7.61075603410E-06	Resid phase (deg)	-135.8	+/-	19.7

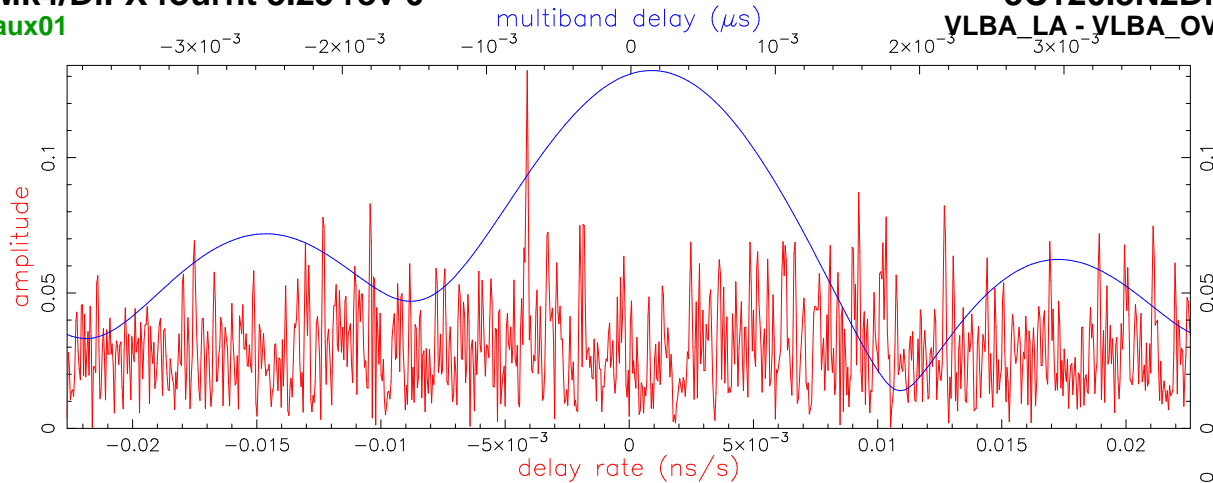
ph/seg (deg) RMS Theor. Amplitude 0.192 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 70.5 64.7 Search (1024X16) 0.134 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 105.1 112.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004  
amp/frq (%) 27.8 19.7 Inc. seg. avg. 0.194 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023  
amp/frq (%) 17.7 34.4 Inc. frq. avg. 0.193 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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -885.678 -388.651 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ln..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ln.Q.94.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

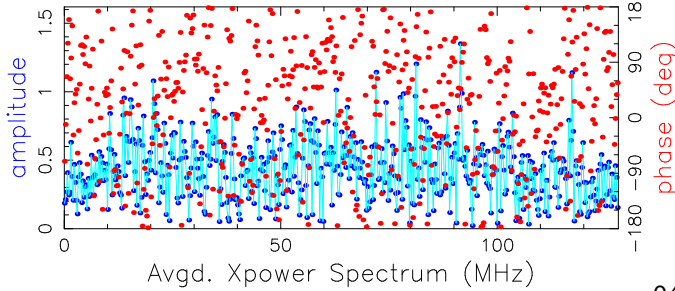
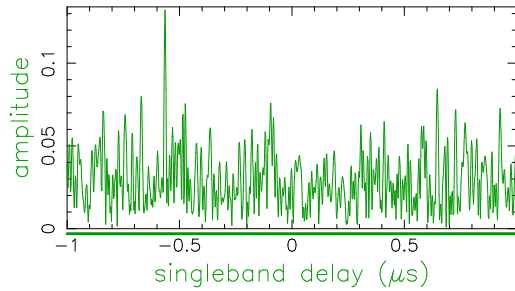
3C120.3N2DRC, No0552, lo

VLBA\_LA - VLBA\_OV, fgroup Q, pol LR



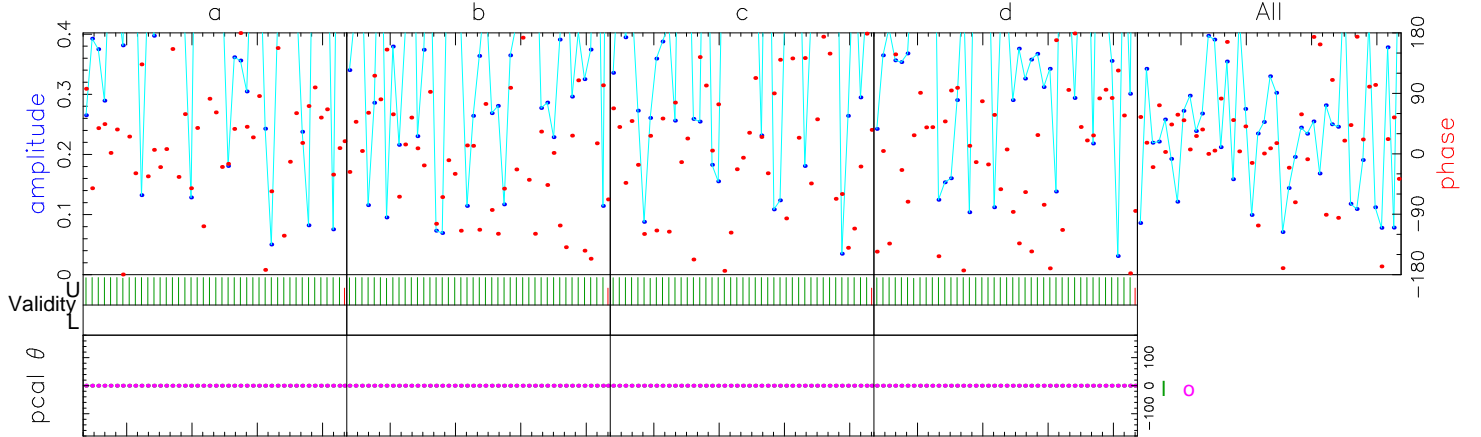
Fringe quality 0

SNR 5.6  
 Int time 239.795  
 Amp 0.134  
 Phase -67.8  
 PFD 9.3e-01  
 Delays (us)  
 SBD -0.564539  
 MBD 0.000137  
 Fringe rate (Hz)  
 -0.178868  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512



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

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



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

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

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

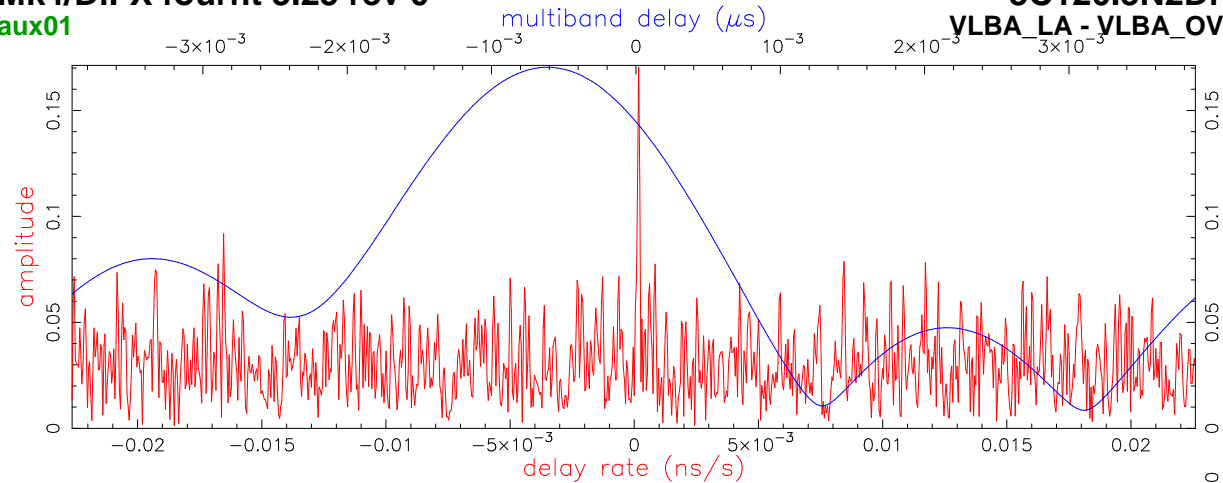
l: az 165.6 el 58.9 pa -11.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 714.801 -110.999 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.114.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

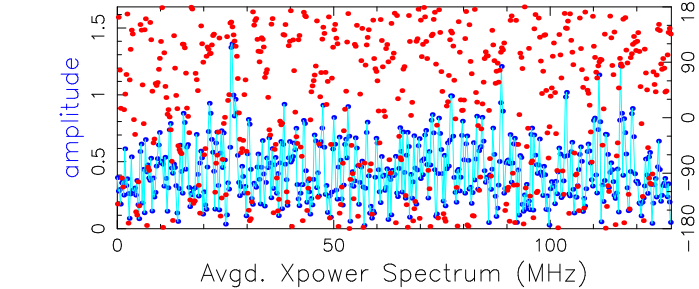
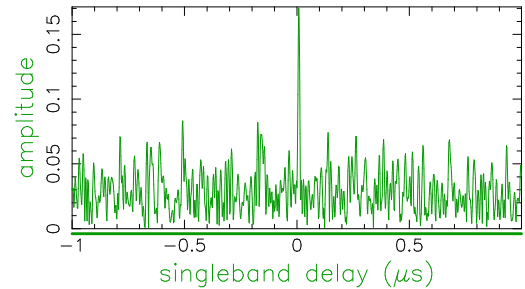
aux01

3C120.3N2DRC, No0552, lo

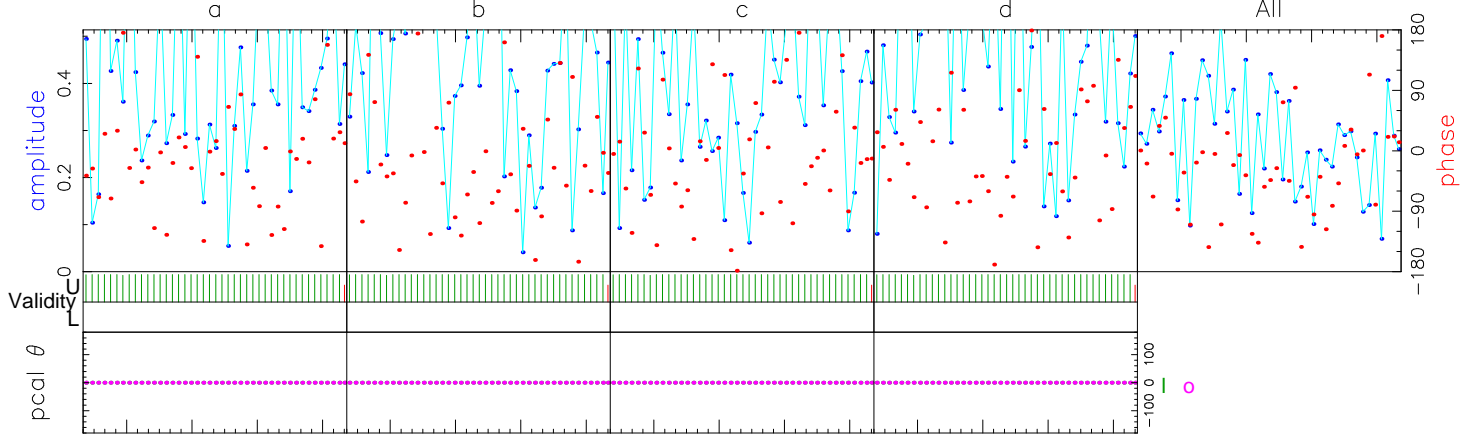
VLBA\_LA - VLBA\_OV, fgroup Q, pol RL



Fringe quality 9  
 SNR 7.3  
 Int time 239.795  
 Amp 0.171  
 Phase 252.8  
 PFD 6.4e-05  
 Delays (us)  
 SBD 0.008281  
 MBD -0.000590  
 Fringe rate (Hz) 0.007209  
 Ion TEC 0.000  
 Ref freq (MHz) 43140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 210920.00  
 Stop 211320.12  
 FRT 211120.00  
 Corr/FF/build  
 2025:048:110113  
 2025:049:102442  
 2024:113:095956  
 RA & Dec (J2000)  
 04h33m11.095531s  
 +05°21'15.619266"



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



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

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

	0.171 +/- 0.024	0.167	0.167	0.167	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	66.1	51.8	51.8	51.8	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	93.1	90.4	90.4	90.4	Bits/sample: 2x2	mb window (us) -0.004 0.004
ph/frq (deg)	14.8	15.8	15.8	15.8	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	28.8	27.6	27.6	27.6	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

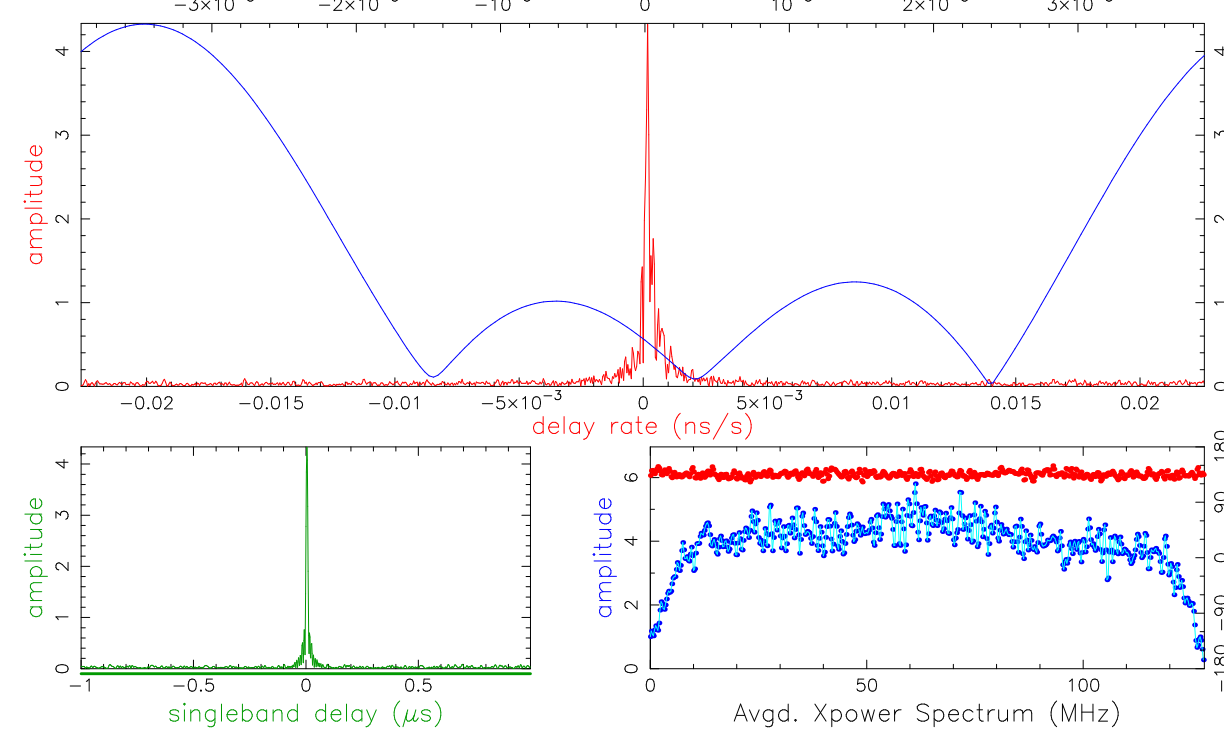
l: az 165.6 el 58.9 pa -11.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 714.801 -110.999 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.132.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lo

VLBA\_LA - VLBA\_OV, fgroup Q, pol LL

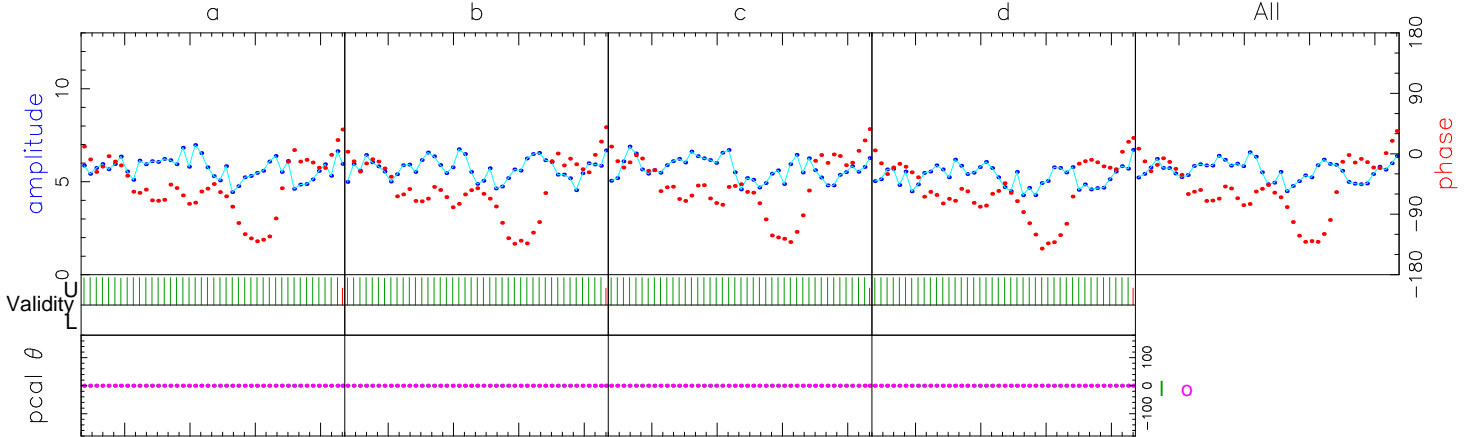


Fringe quality 6

SNR 183.6  
 Int time 239.795  
 Amp 4.336  
 Phase 232.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.004221  
 MBD -0.003449  
 Fringe rate (Hz) 0.007425  
 Ion TEC 0.000  
 Ref freq (MHz) 43140.0000  
 AP (sec) 0.512

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

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



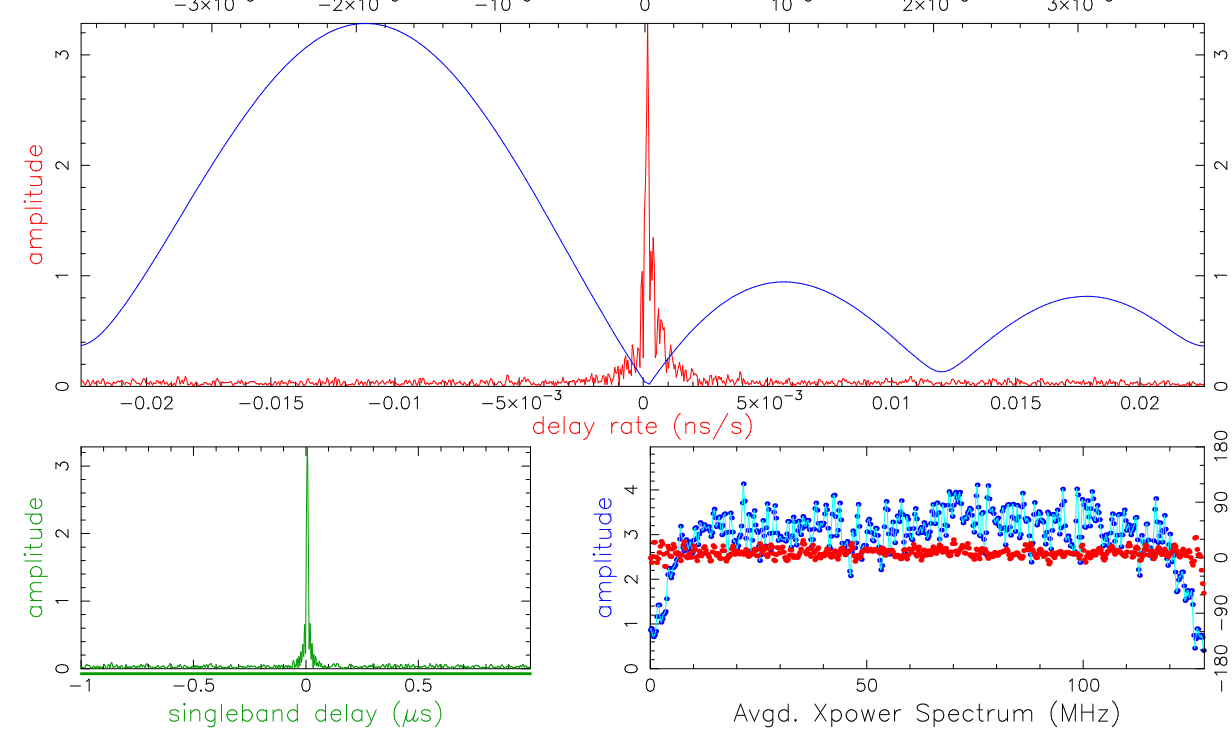
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-47.1	-49.9	-44.8	-51.6	Phase	-48.3
4.4	4.4	4.4	4.1	Ampl.	4.3
515.0	515.4	515.2	515.1	Sbd box	515.2
U/L 469/0	469/0	469/0	469/0	APs used	
l 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
l:o 0:0	0:0	0:0	0:0	PC phase	
l:o 0:0	0:0	0:0	0:0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

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lo

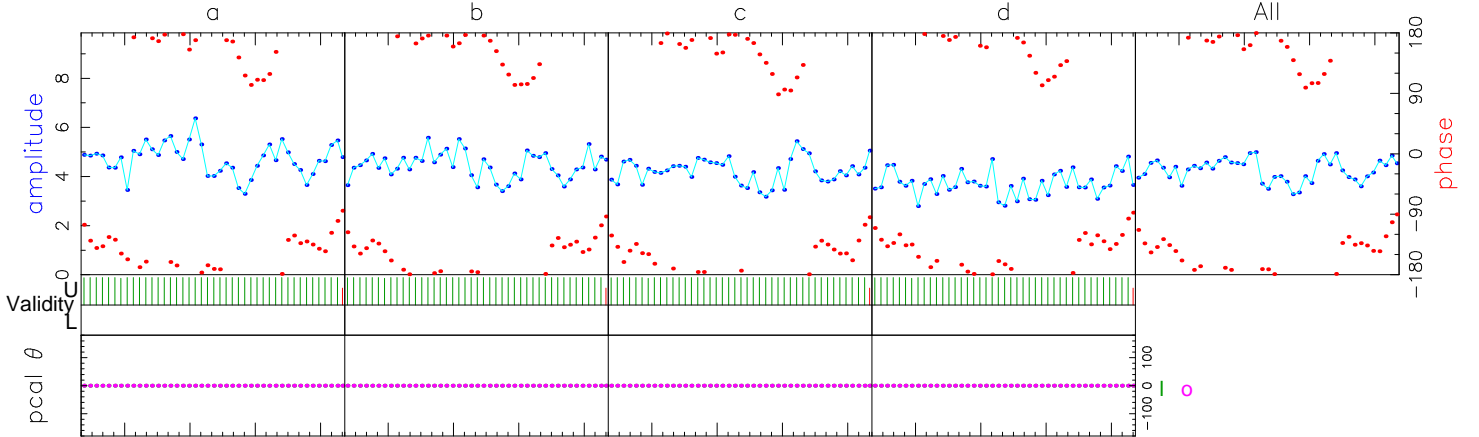
VLBA\_LA - VLBA\_OV, fgroup Q, pol RR



Fringe quality 6

SNR 139.1  
 Int time 239.795  
 Amp 3.285  
 Phase 111.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.005961  
 MBD -0.001930  
 Fringe rate (Hz)  
 0.007435  
 Ion TEC 0.000  
 Ref freq (MHz)  
 43140.0000  
 AP (sec) 0.512  
 Exp. c241c  
 Exper # 1234  
 Yr:day 2024:112  
 Start 210920.00  
 Stop 211320.12  
 FRT 211120.00  
 Corr/FF/build  
 2025:048:110113  
 2025:049:102435  
 2024:113:095956  
 RA & Dec (J2000)  
 04h33m11.095531s  
 +05°21'15.619266"

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



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

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

ph/seg (deg)	41.3	2.7	Search (1024X16)	3.261	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	32.7	4.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	7.0	0.8	Inc. seg. avg.	4.256	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	9.2	1.4	Inc. frq. avg.	3.295	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023	
					Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite	ion window (TEC)	0.00 0.00

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

Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lo..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lo.Q.92.3N2DRC

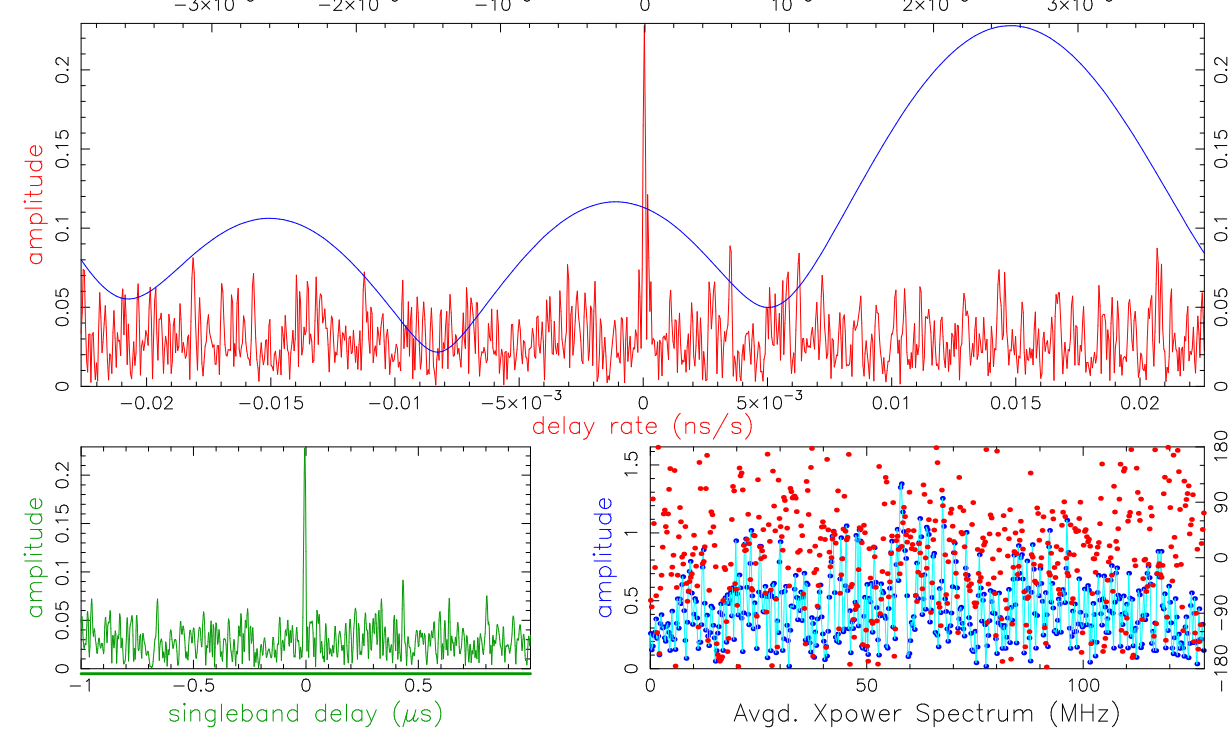


Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, lp

VLBA\_LA - VLBA\_PT, fgroup Q, pol LR

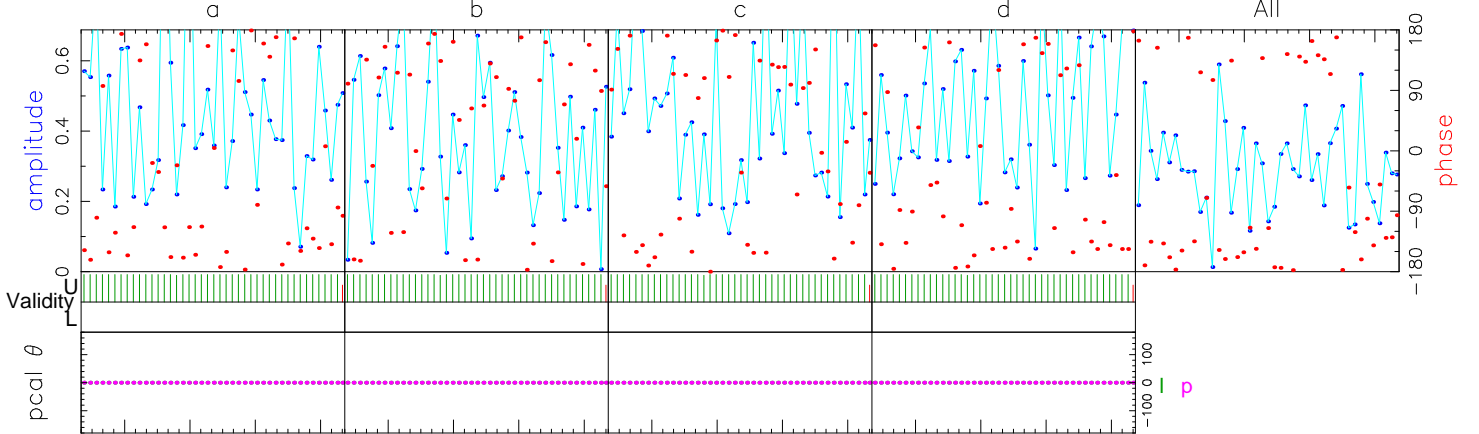


Fringe quality 9

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		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

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)		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
amp/seg (%)	62.0	Search (1024X16)	0.224	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	31.4	Inc. seg. avg.	0.242	Inc. frq. avg.	0.240	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	19.0	Inc. frq. avg.	0.240			Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
							ion window (TEC) 0.00 0.00

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

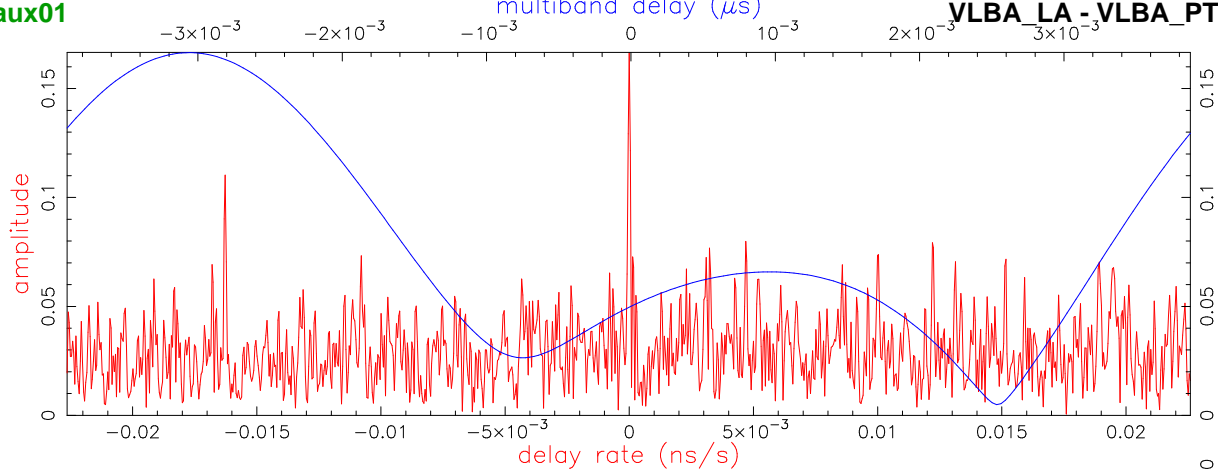
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lp.Q.113.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

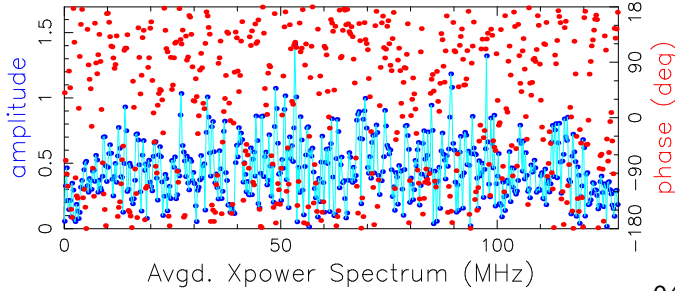
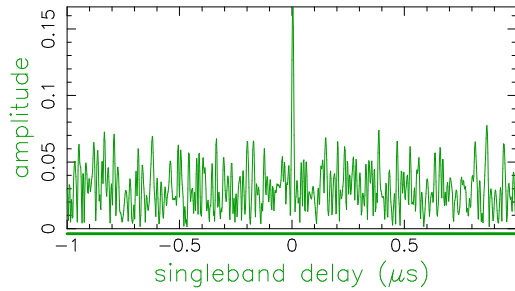
3C120.3N2DRC, No0552, lp

VLBA\_LA - VLBA\_PT, fgroup Q, pol RL



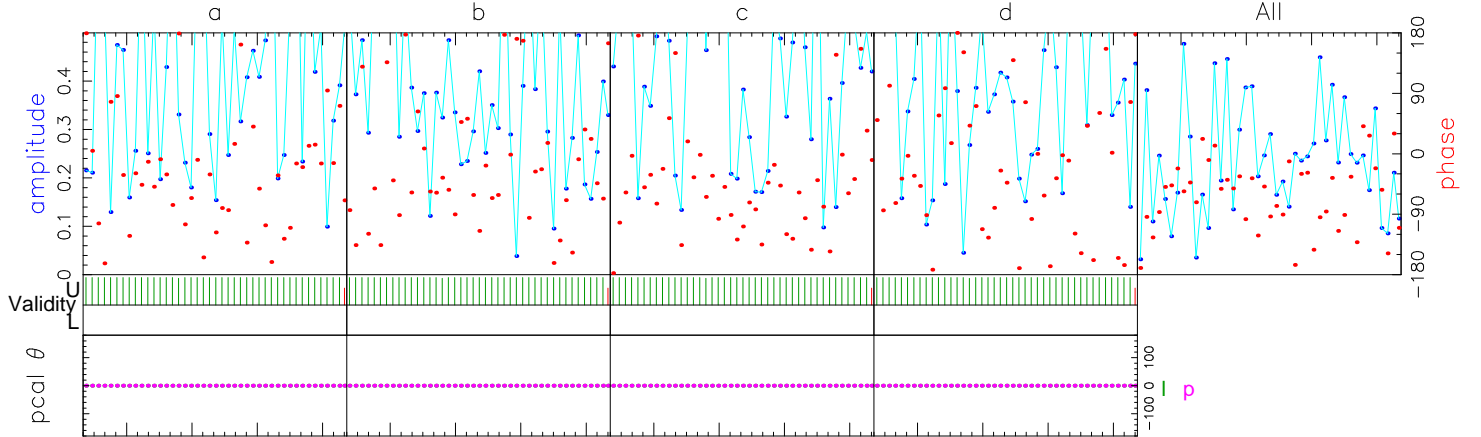
Fringe quality 0

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	Theor.	Amplitude	0.167 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	52.1	53.3	Search (1024X16)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	81.6	92.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.004 0.004
amp/frq (%)	12.0	16.2	Inc. seg. avg.	0.167	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023
	46.1	28.3	Inc. frq. avg.	0.162	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

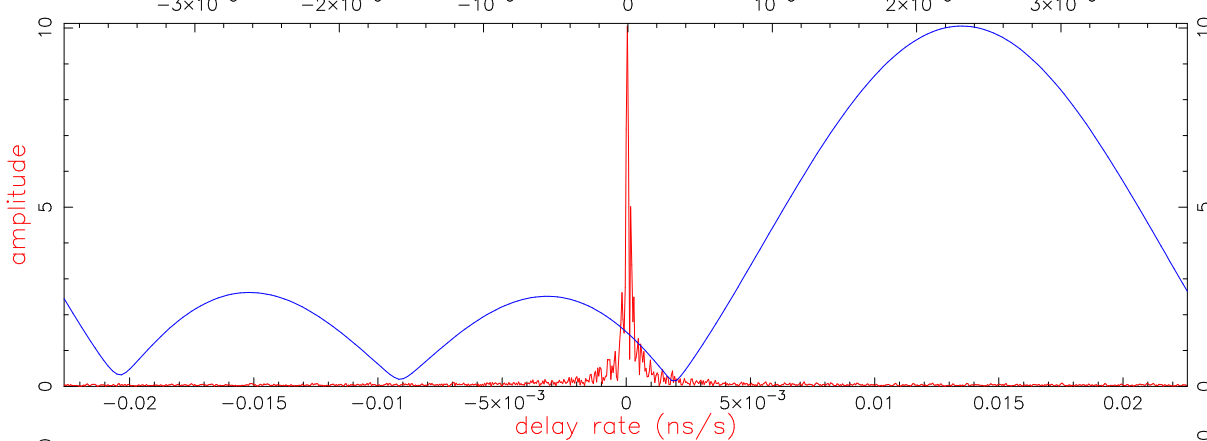
Control file: cf\_1234\_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/lp..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/lp.Q.128.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

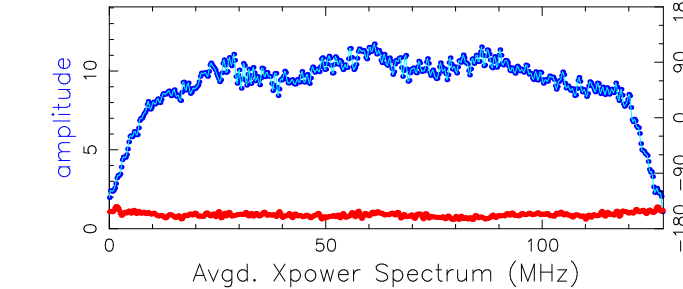
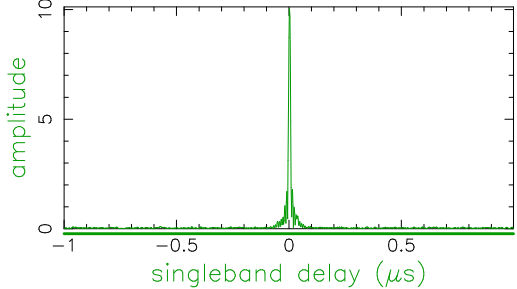
3C120.3N2DRC, No0552, lp

VLBA\_LA - VLBA\_PT, fgroup Q, pol LL



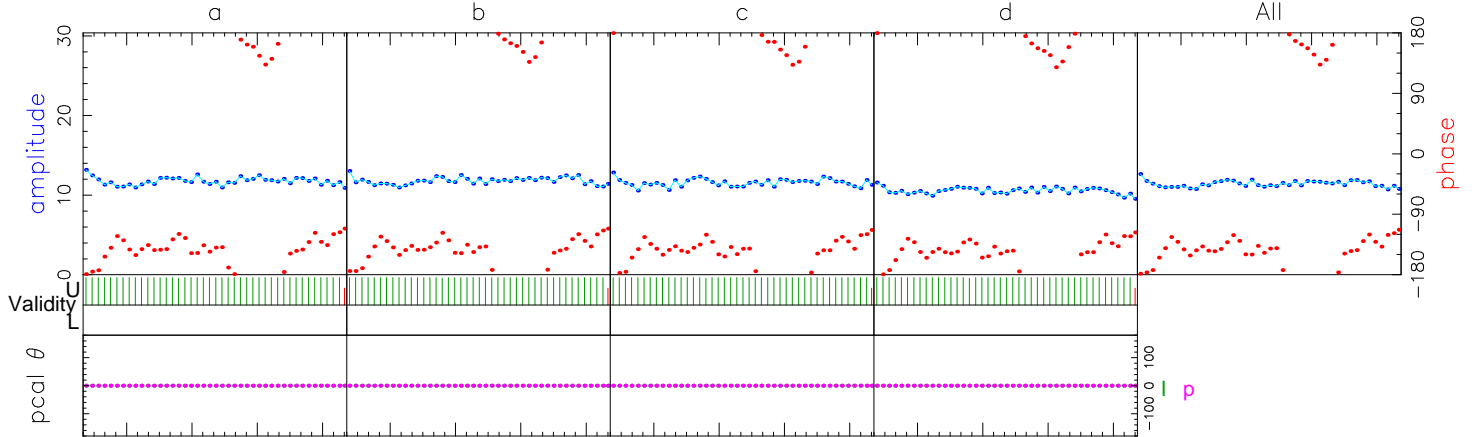
Fringe quality 7

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



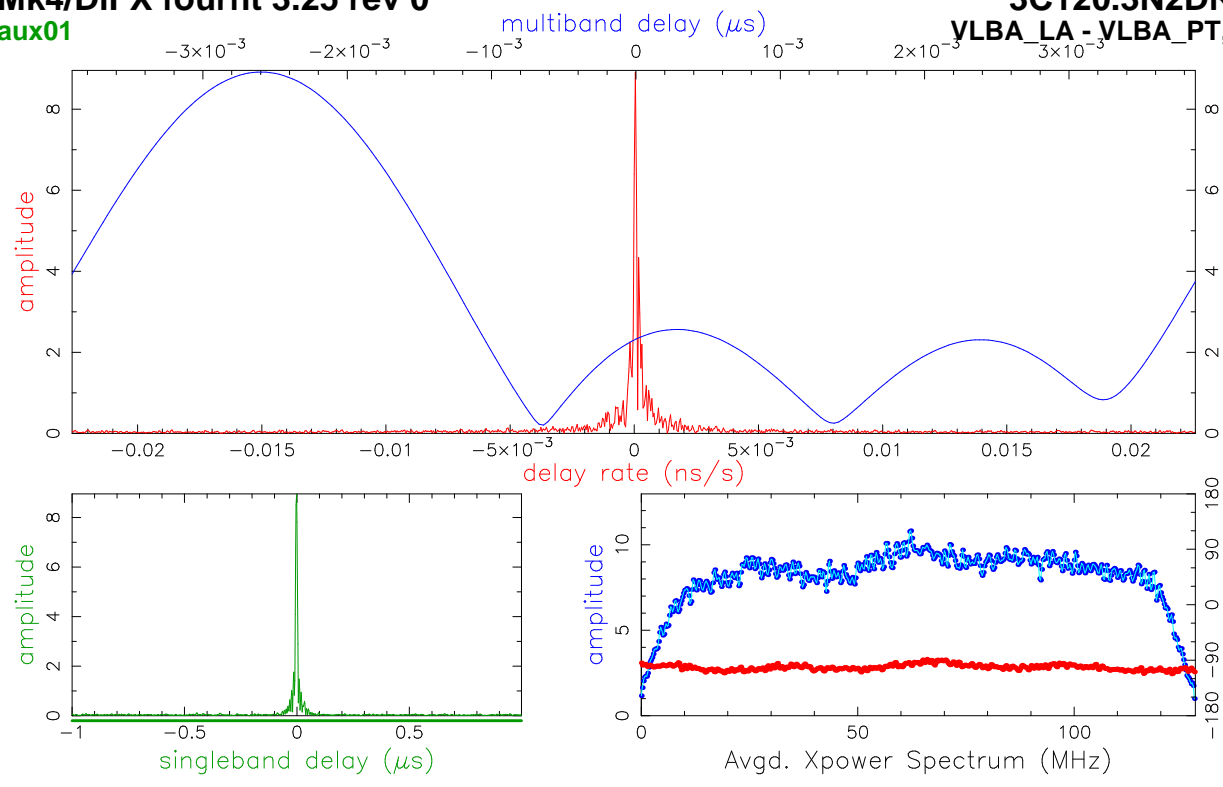
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0		
lp	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks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

ph/seg (deg)	RMS 28.8	Theor. 0.9	Amplitude Search (1024X16)	10.129 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	13.3	1.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	2.5	0.3	Inc. seg. avg.	11.421	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	4.6	0.5	Inc. frq. avg.	10.056	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
					Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 165.6 el 58.9 pa -11.3 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

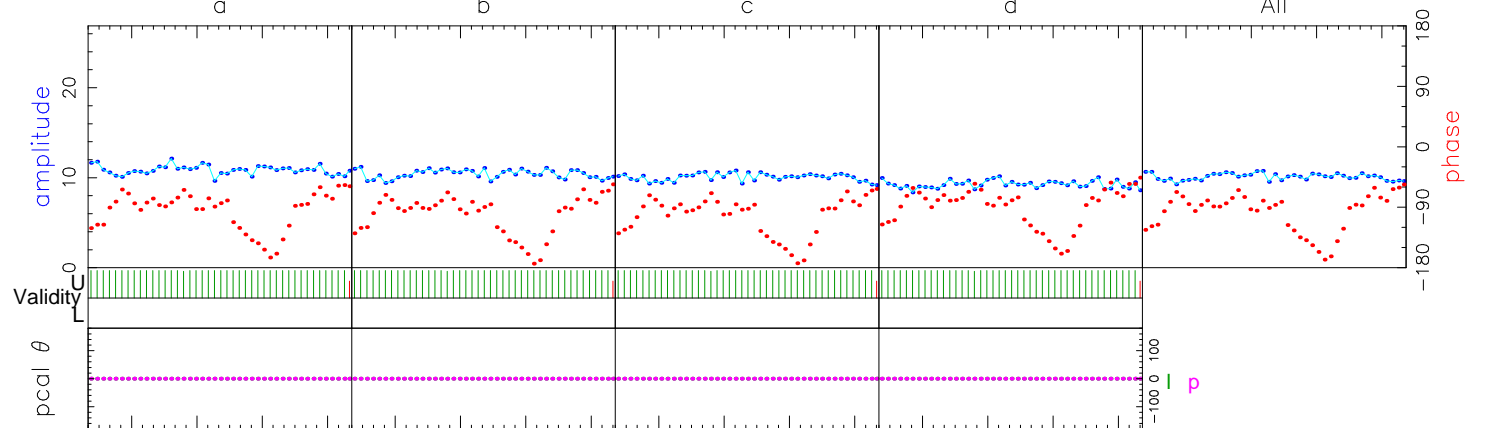


Fringe quality 7

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

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		
Group delay (usec) (SBD)	-2.07826401481E+02		-2.07823780088E+02		-2.62139E-03	+/- 2.9E-06
Sband delay (usec)	-2.07826191963E+02		-1.4045401E+01		-2.41187E-03	+/- 1.1E-05
Phase delay (usec)	-2.07823786310E+02		-6.1269804E-07		-6.22204E-06	+/- 1.9E-08
Delay rate (us/s)	-4.40427580456E-02		-4.40427964466E-02		3.84009E-08	+/- 1.4E-10
Total phase (deg)		-50.9	1.25378041838E-06		-96.6	+/- 0.3
Apriori delay (usec)						
Apriori clock (usec)						
Apriori clockrate (us/s)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
pcal mode: MANUAL, MANUAL						
PCal rate: 0.000E+00, 0.000E+00 (us/s)						
Bits/sample: 2x2						
Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us						
Data rate(Mb/s): 2048						
nlags: 512 t_cohere infinite						
sb window (us)	-1.000	1.000				
mb window (us)	-0.004	0.004				
dr window (ns/s)	-0.023	0.023				
ion window (TEC)	0.00	0.00				
pcal θ						
Chan ids						
Tracks						
Chan ids						
Tracks						
ph/seg (deg)	28.7	1.0	Search (1024X16)	8.765		
amp/seg (%)	13.5	1.7	Interp.	0.000		
ph/frq (deg)	7.2	0.3	Inc. seg. avg.	10.115		
amp/frq (%)	5.8	0.5	Inc. frq. avg.	8.951		
l: az 165.6 el 58.9 pa -11.3			p: az 161.3 el 59.8 pa -15.0			
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			