

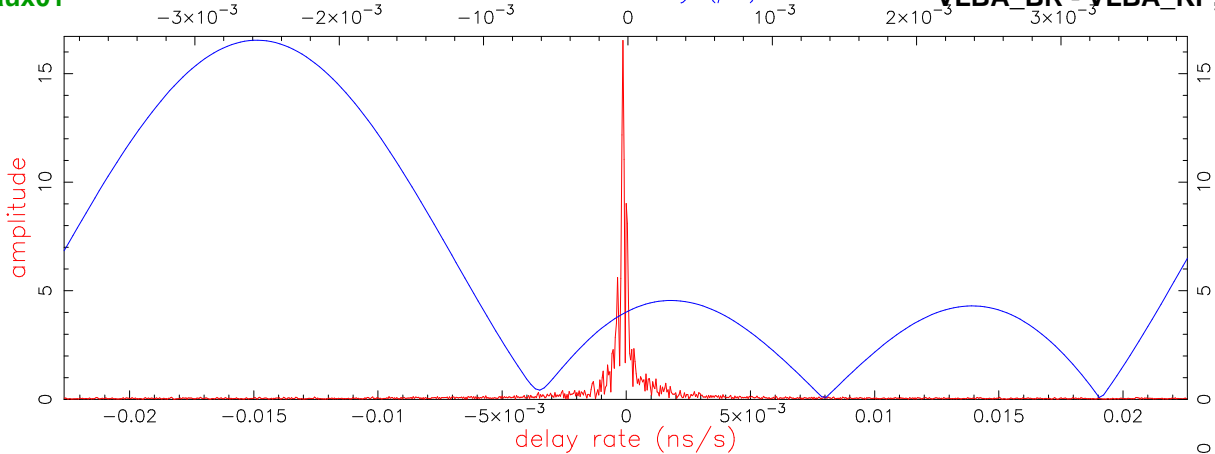
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bk

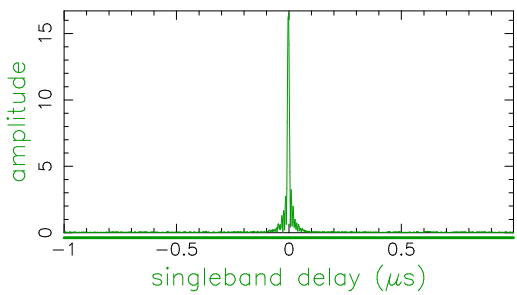
VLBA_BR - VLBA_KP, fgroup Q, pol RR

multiband delay (μ s)

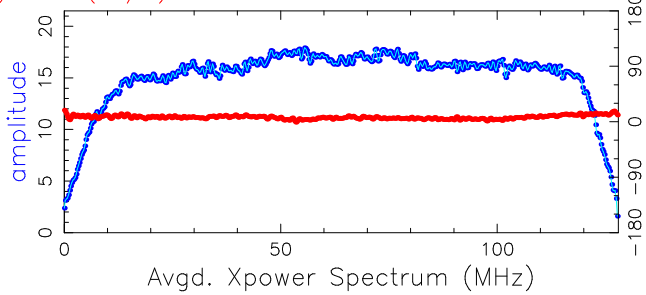


Fringe quality 7

SNR 708.0
 Int time 239.981
 Amp 16.713
 Phase 5.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.002651
 MBD -0.002604
 Fringe rate (Hz)
 -0.005021
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



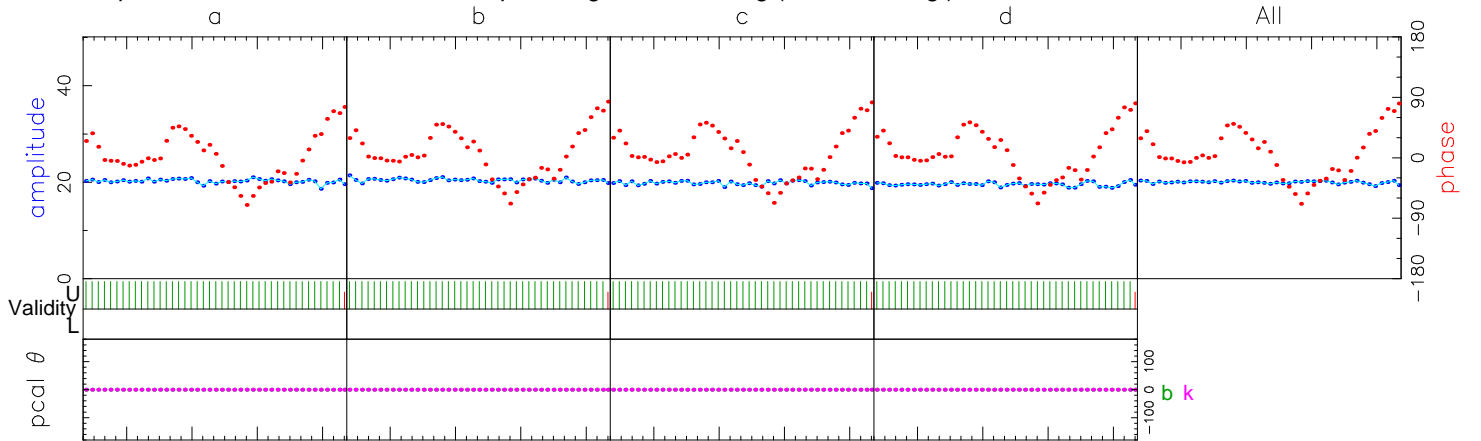
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102421
 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
U/L	469/0	469/0	469/0	469/0		
b	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	42912.00	43040.00	43168.00	43296.00		
Group delay (usec) (SBD)	-3.86111102608E+03			-3.86110842230E+03	Resid mbdelay (usec)	-2.60379E-03 +/- 1.6E-06
Sband delay (usec)	-3.86111107292E+03			4.5036602E+07	Resid sbdelay (usec)	-2.65063E-03 +/- 6.1E-06
Phase delay (usec)	-3.86110842193E+03			4.2423487E-07	Resid phdelay (usec)	3.65310E-07 +/- 1.0E-08
Delay rate (us/s)	8.18416017314E-02			8.18417181255E-02	Resid rate (us/s)	-1.16394E-07 +/- 7.5E-11
Total phase (deg)		-116.0		2.28431932504E-05	Resid phase (deg)	5.7 +/- 0.2

	RMS	Theor.	Amplitude	16.713 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	35.1	0.5	Search (1024X16)	15.727	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	19.8	0.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.0	0.2	Inc. seg. avg.	20.007	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.1	0.3	Inc. frq. avg.	16.543	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 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) -224.904 1036.095 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bk.Q.14.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

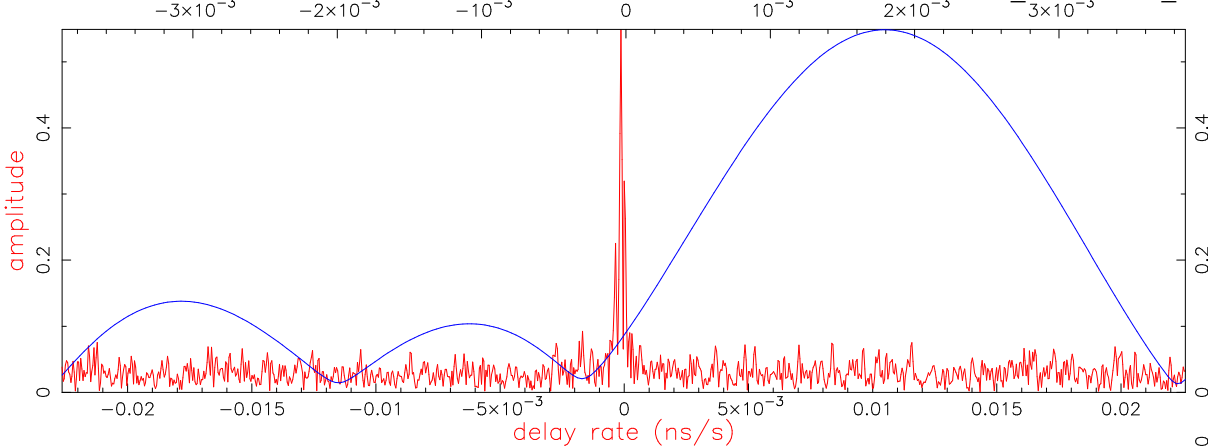
aux01

3C120.3N2DRC, No0552, bk

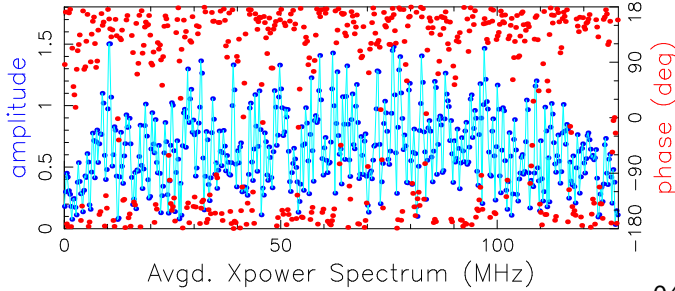
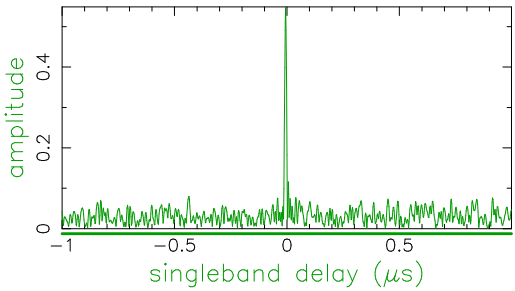
VLBA_BR - VLBA_KP, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 9

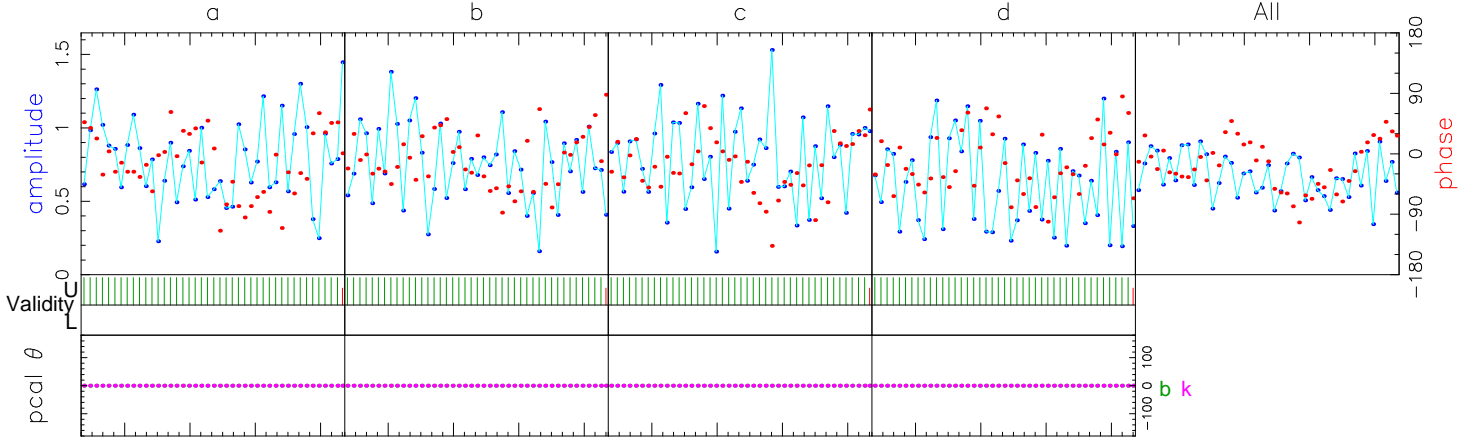


SNR 23.3
 Int time 239.981
 Amp 0.549
 Phase -297.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.006093
 MBD 0.001783
 Fringe rate (Hz)
 -0.004836
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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
	-17.3	-13.8	-19.6	-13.2	Phase	-16.1
	0.5	0.6	0.6	0.5	Ampl.	0.5
	510.3	509.9	509.2	510.2	Sbd box	509.9
U/L	469/0	469/0	469/0	469/0	APs used	
b	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	-3.86111445177E+03	Apriori delay (usec)	-3.86110842230E+03	Resid mbdelay (usec)	1.78302E-03	+/-	4.8E-05
Sband delay (usec)	-3.86111451567E+03	Apriori clock (usec)	4.5036602E+00	Resid sbdelay (usec)	-6.09337E-03	+/-	1.9E-04
Phase delay (usec)	-3.86110842333E+03	Apriori clockrate (us/s)	4.2423487E-07	Resid phdelay (usec)	-1.03550E-06	+/-	3.2E-07
Delay rate (us/s)	8.18416060268E-02	Apriori rate (us/s)	8.18417181255E-02	Resid rate (us/s)	-1.12099E-07	+/-	2.3E-09
Total phase (deg)	-59.0	Apriori accel (us/s/s)	2.28431932504E-05	Resid phase (deg)	-297.3	+/-	4.9

ph/seg (deg)	RMS 36.6	Theor. 16.2	Amplitude Search (1024X16)	0.549 +/- 0.024	0.504	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	35.2	28.2	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)	3.7	4.9	Inc. seg. avg.	0.652	0.652	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	9.6	8.6	Inc. frq. avg.	0.547	0.547	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 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) -224.904 1036.095 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bk.Q.23.3N2DRC

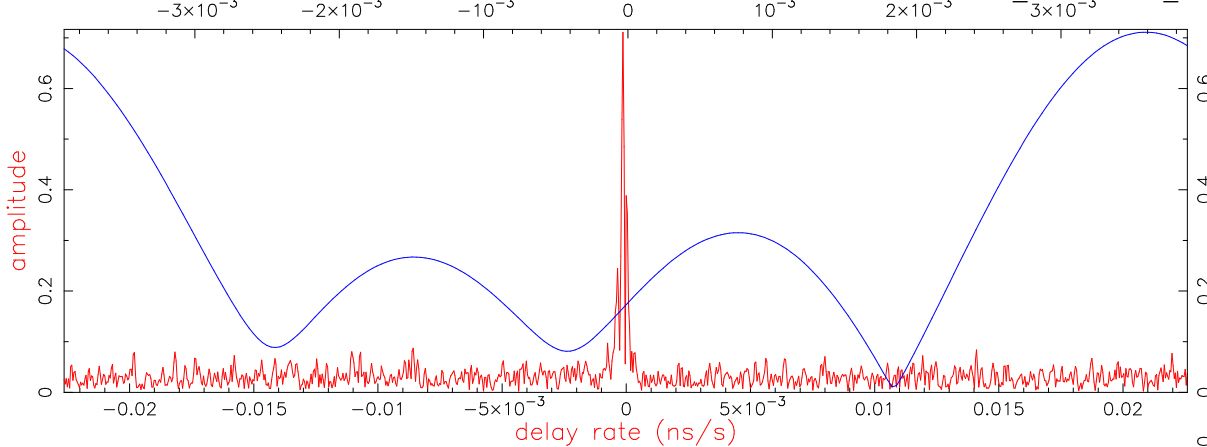
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, bk

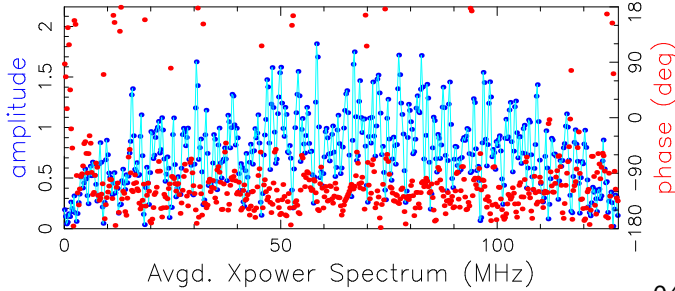
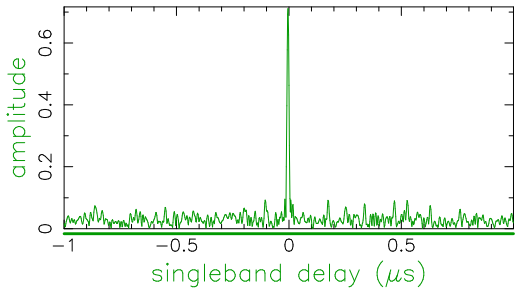
VLBA_BR - VLBA_KP, fgroup Q, pol RL

multiband delay (μ s)



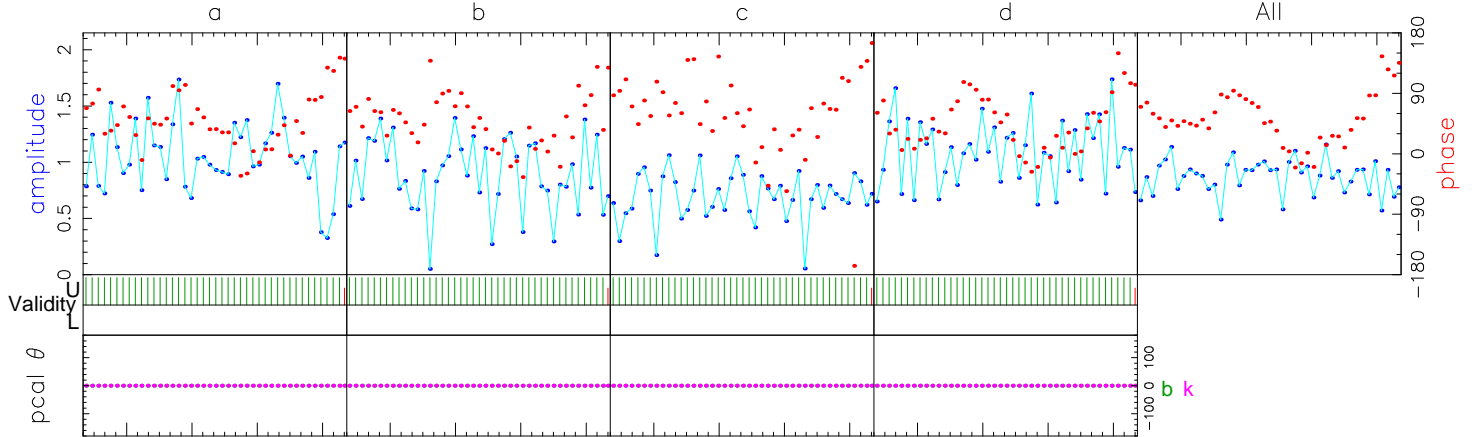
Fringe quality 7

SNR 30.4
 Int time 239.981
 Amp 0.717
 Phase -231.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.004554
 MBD 0.003566
 Fringe rate (Hz)
 -0.005108
 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



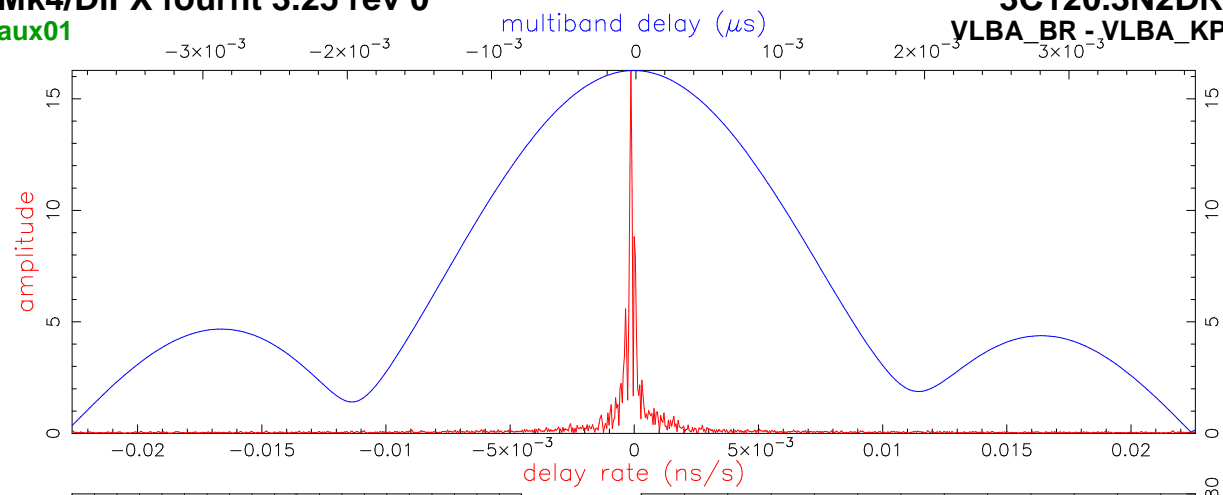
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
45.3	49.6	69.1	44.9	Phase	50.2
0.8	0.7	0.5	0.9	Ampl.	0.7
510.4	511.0	510.8	510.4	Sbd box	510.7
U/L 469/0	469/0	469/0	469/0	APs used	
b 1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	PC freqs	
b:k 0:0	0:0	0:0	0:0	PC phase	
b:k 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000		
b Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
k Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	-3.86111266912E+03	Apriori delay (usec)	-3.86110842230E+03	Resid mbdelay (usec)	3.56568E-03	+/- 3.7E-05
Sband delay (usec)	-3.86111297642E+03	Apriori clock (usec)	4.5036602E+00	Resid sbdelay (usec)	-4.55413E-03	+/- 1.4E-04
Phase delay (usec)	-3.86110841907E+03	Apriori clockrate (us/s)	4.2423487E-07	Resid phdelay (usec)	3.22934E-06	+/- 2.4E-07
Delay rate (us/s)	8.18415997110E-02	Apriori rate (us/s)	8.18417181255E-02	Resid rate (us/s)	-1.18414E-07	+/- 1.8E-09
Total phase (deg)	-352.7	Apriori accel (us/s/s)	2.28431932504E-05	Resid phase (deg)	-231.1	+/- 3.8

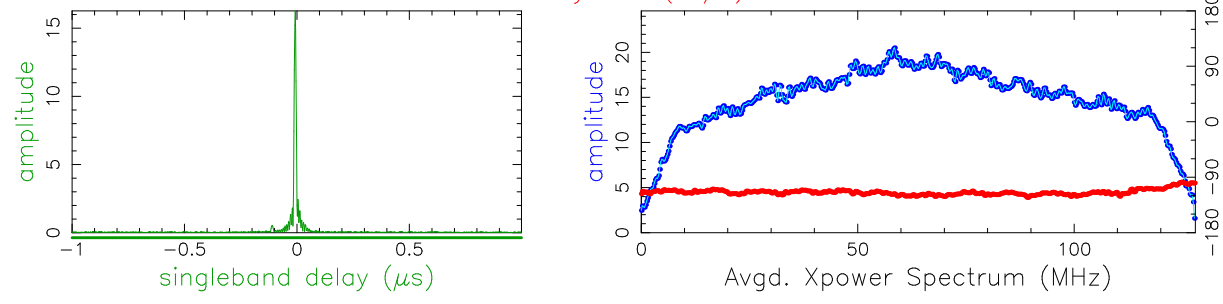
ph/seg (deg)	38.0	Theor.	12.4	Amplitude	0.717 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	30.2		21.6	Search (1024X16)	0.677	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	14.3		3.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	20.4		6.6	Inc. seg. avg.	0.854	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.718	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 150.6 el 43.7 pa -19.0 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) -224.904 1036.095 simultaneous interpolator

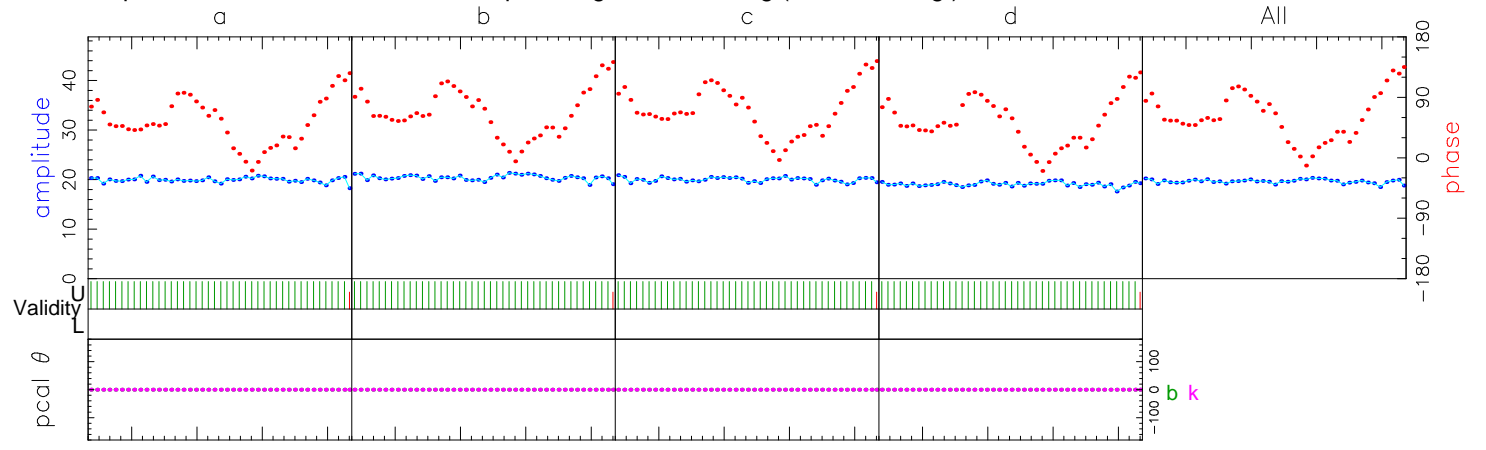
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bk.Q.30.3N2DRC



Fringe quality 5
SNR 689.5
Int time 239.981
Amp 16.276
Phase -219.8
PFD 0.0e+00
Delays (us)
SBD -0.007982
MBD -0.000024
Fringe rate (Hz)
-0.005045
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512
Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 210920.00
Stop 211320.12
FRT 211120.00
Corr/FF/build
2025:048:110113
2025:049:102419
2024:113:095956
RA & Dec (J2000)
04h33m11.095531s
+05°21'15.619266"



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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	469/0	469/0	469/0	469/0		
b	1000	1000	1000	1000		
k	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000		
k	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL		
k	Q00UL	Q01UL	Q02UL	Q03UL		
Group delay (usec) (SBD)	-3.86111625849E+03					
Sband delay (usec)	-3.86111640442E+03					
Phase delay (usec)	-3.86110841834E+03					
Delay rate (us/s)	8.18416011824E-02					
Total phase (deg)		-341.4				
Apriori delay (usec)			-3.86110842230E+03		-2.36952E-05	+/- 1.6E-06
Apriori clock (usec)			4.5036602E+00		-7.98212E-03	+/- 6.2E-06
Apriori clockrate (us/s)			4.2423487E-07		3.95978E-06	+/- 1.1E-08
Apriori rate (us/s)			8.18417181255E-02		-1.16943E-07	+/- 7.7E-11
Apriori accel (us/s/s)			2.28431932504E-05		-219.8	+/- 0.2
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						

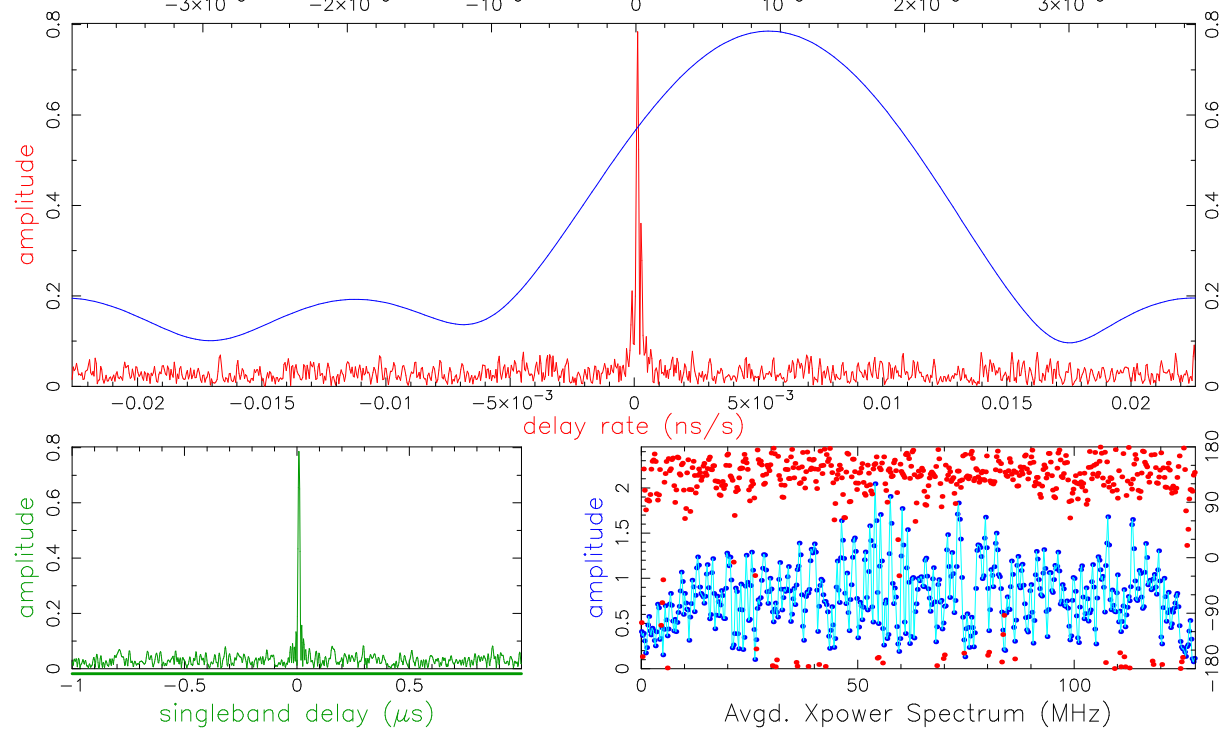
ph/seg (deg) 34.9 0.5 Search (1024X16) 15.594 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 21.0 1.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 11.5 0.2 Inc. seg. avg. 19.673 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%) 2.7 0.3 Inc. frq. avg. 16.435 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
b: az 150.6 el 43.7 pa -19.0 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) -224.904 1036.095 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/bk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/bk.Q.6.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, fk

VLBA_FD - VLBA_KP, fgroup Q, pol LR

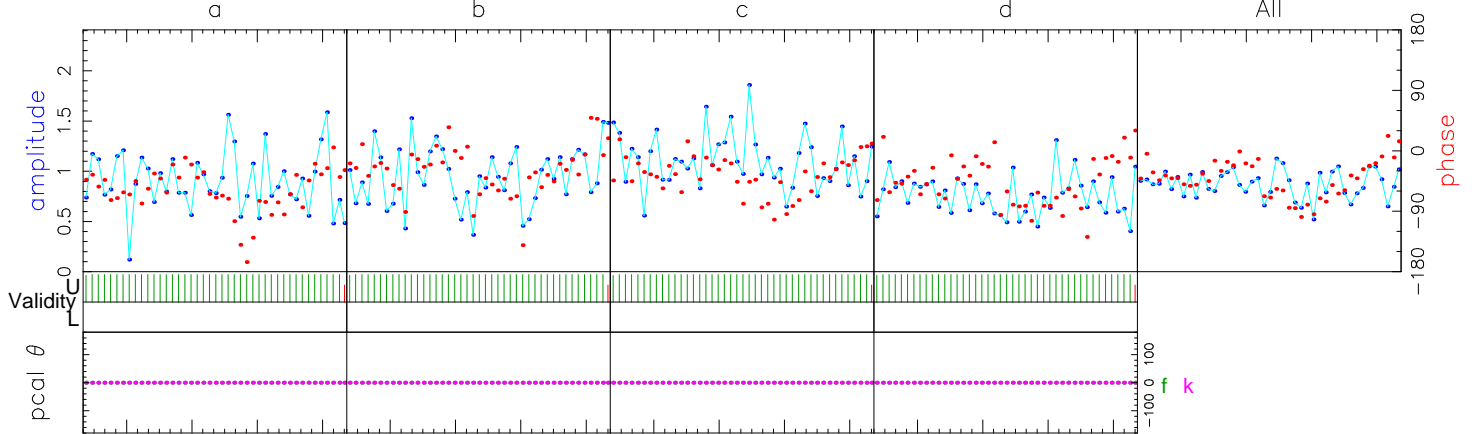


Fringe quality 7

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

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

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



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

	5.52048256932E+02	Apriori delay (usec)	5.52039586362E+02	Resid mbdelay (usec)	8.58070E-04	+/-	3.3E-05
Group delay (usec) (SBD)	5.52048354612E+02	Apriori clock (usec)	-1.0007095E-01	Resid sbdelay (usec)	8.76825E-03	+/-	1.3E-04
Sband delay (usec)	5.52039583784E+02	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-2.57825E-06	+/-	2.2E-07
Phase delay (usec)	-1.72315883333E-01	Apriori rate (us/s)	-1.72316036795E-01	Resid rate (us/s)	1.53462E-07	+/-	1.6E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-3.14546432878E-06	Resid phase (deg)	241.2	+/-	3.4
Total phase (deg)	153.2						

	RMS	Theor.	Amplitude	0.803 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	27.6	11.1	Search (1024X16)	0.724	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	18.9	19.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	17.8	3.4	Inc. seg. avg.	0.857	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	15.9	5.9	Inc. frq. avg.	0.802	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

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

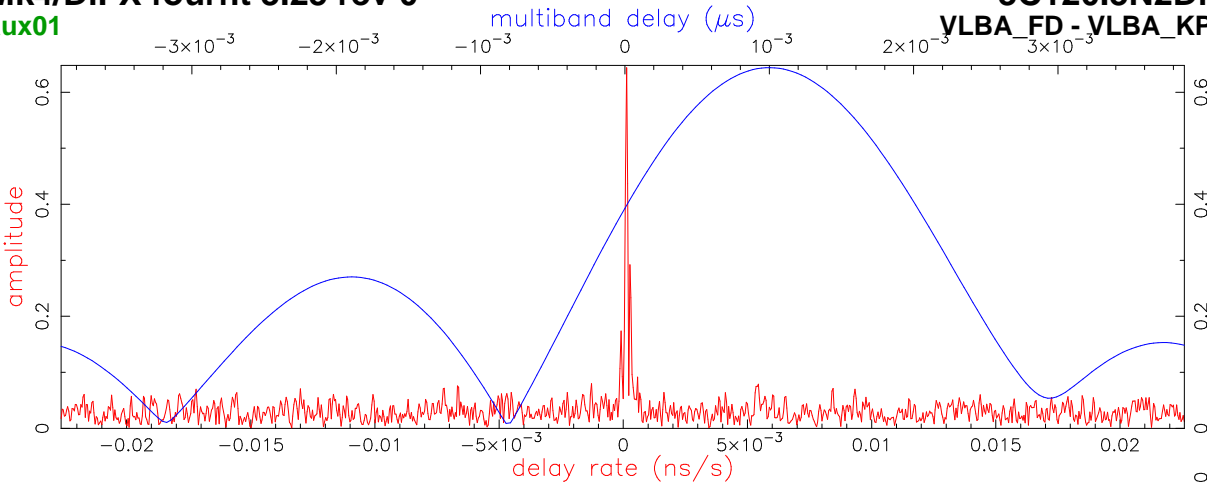
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.101.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

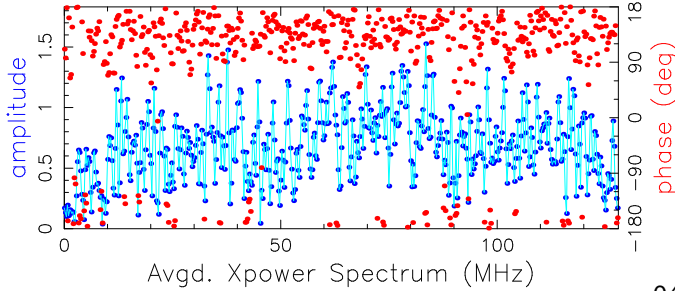
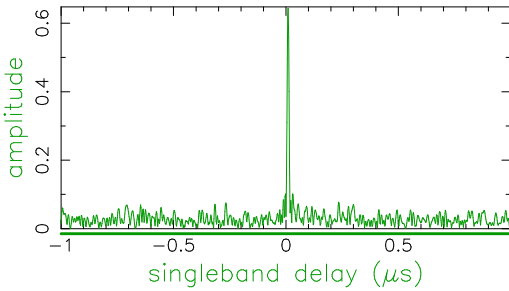
3C120.3N2DRC, No0552, fk

VLBA_FD - VLBA_KP, fgroup Q, pol RL



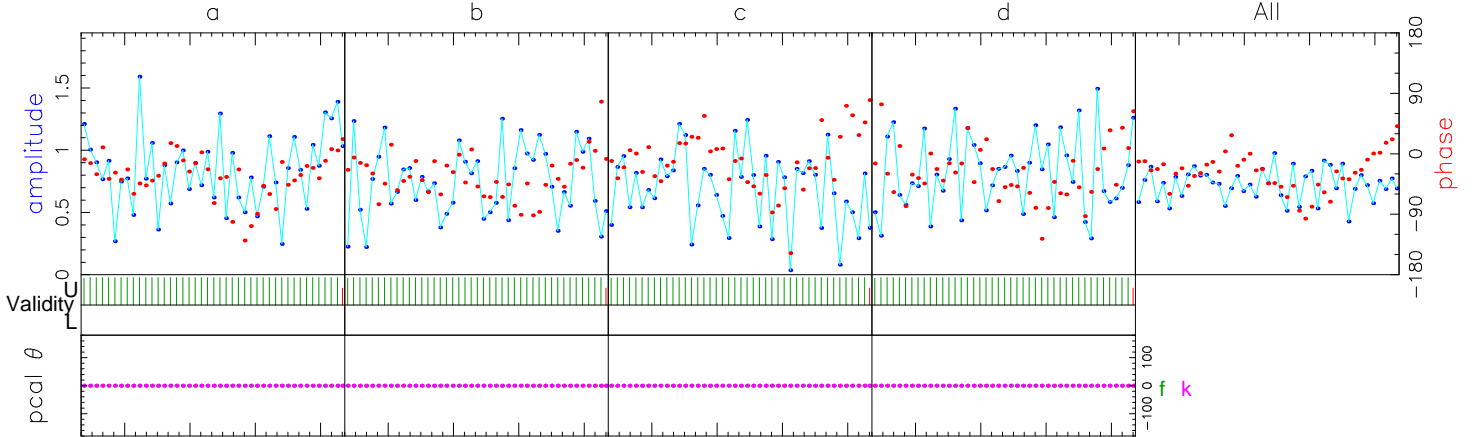
Fringe quality 8

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



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

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



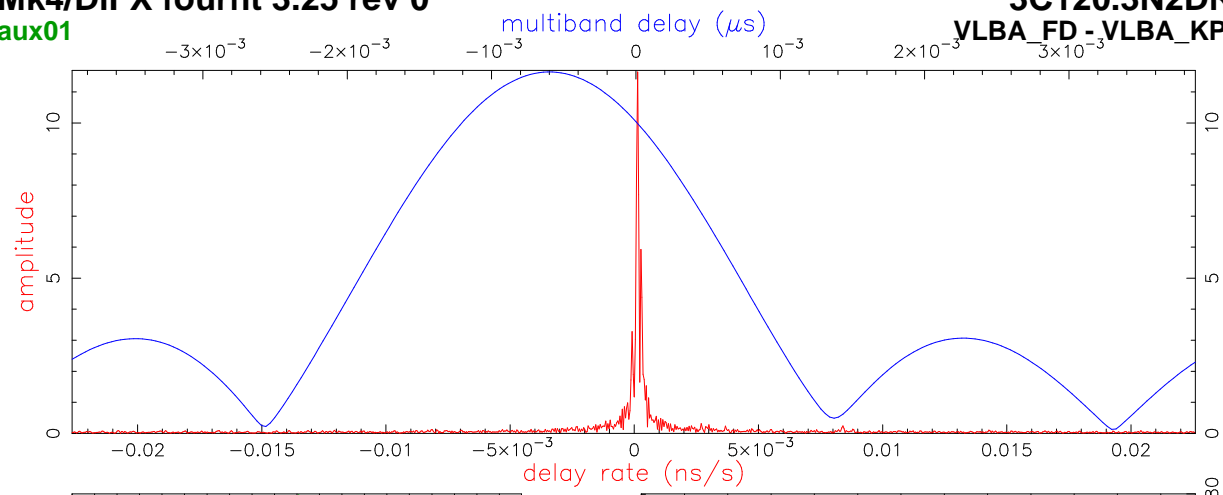
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-29.6	-36.5	-11.2	-32.5	Phase	-28.0
	0.7	0.6	0.6	0.7	Ampl.	0.7
	517.6	517.8	517.9	517.4	Sbd box	517.7
U/L	469/0	469/0	469/0	469/0	APs used	
f	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0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

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

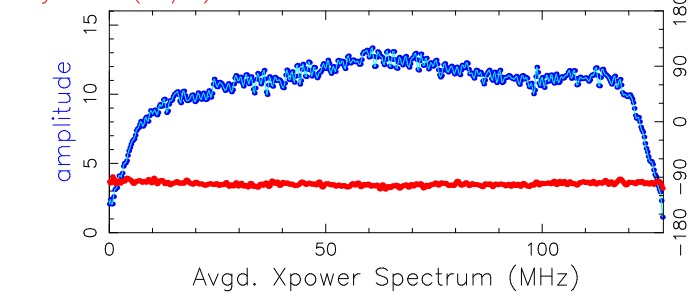
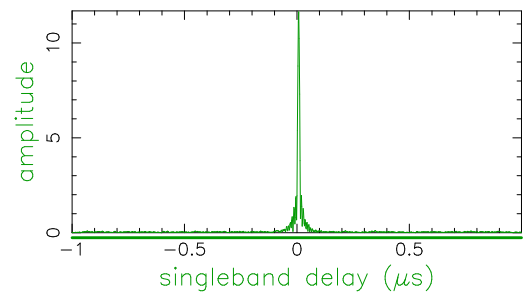
	RMS	Theor.	Amplitude	0.648 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	28.1	13.7	Search (1024X16)	0.606	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	22.5	23.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	13.7	4.2	Inc. seg. avg.	0.704	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	8.4	7.3	Inc. frq. avg.	0.650	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

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

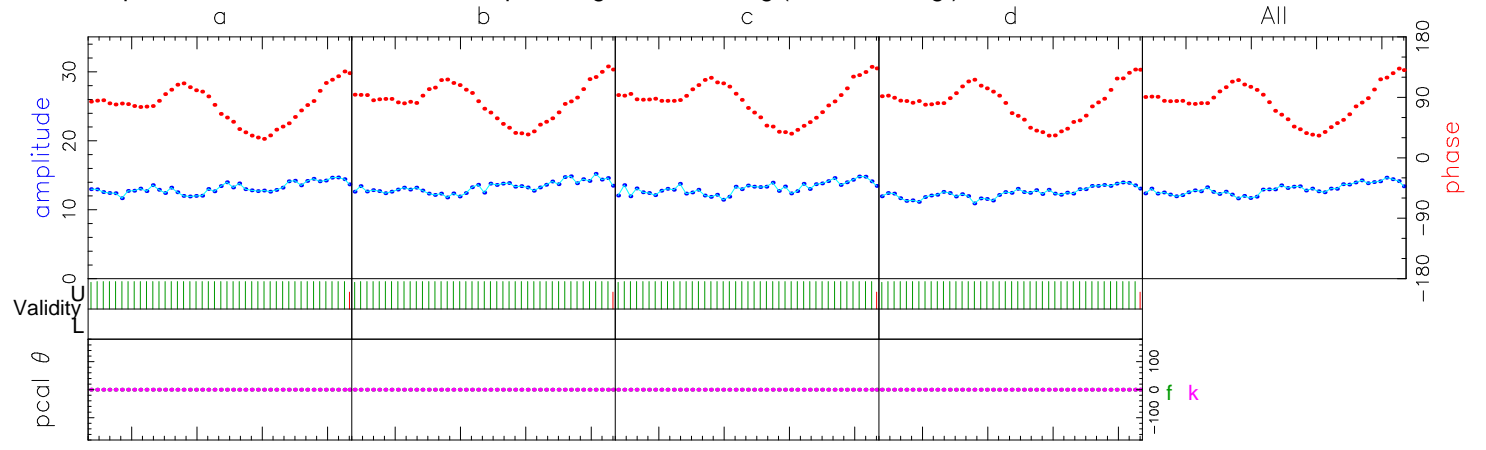
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.120.3N2DRC



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



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



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

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

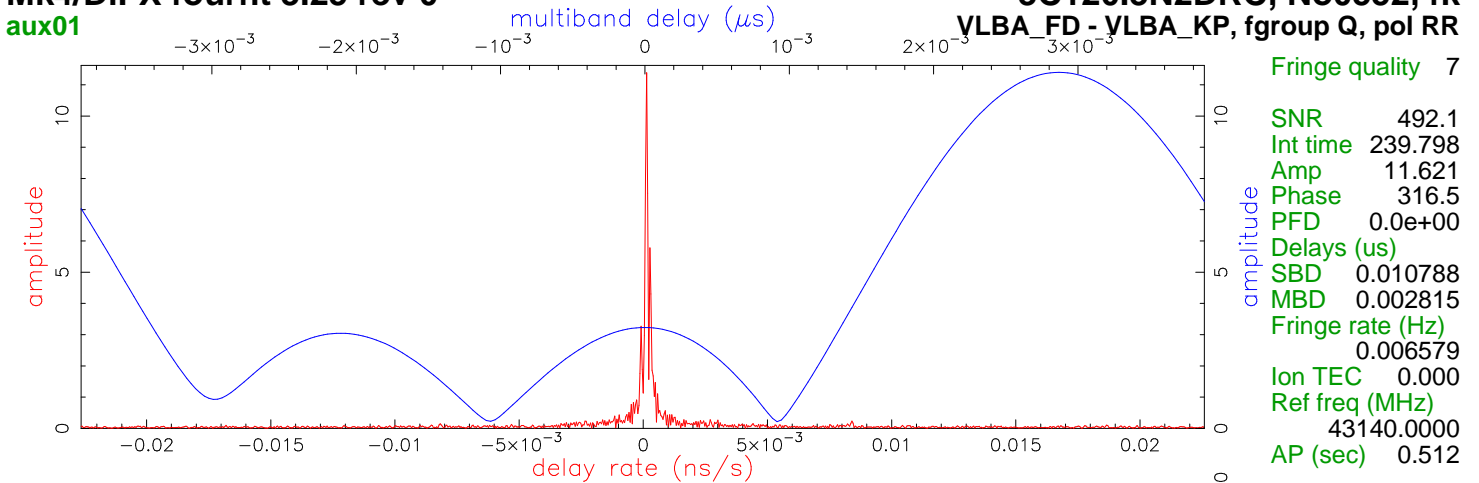
	RMS	Theor.	Amplitude	11.694 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	26.4	0.8	Search (1024X16)	10.743	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	12.8	1.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.9	0.2	Inc. seg. avg.	12.988	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.6	0.4	Inc. frq. avg.	11.655	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 168.1 el 64.3 pa -9.7			k: az 153.1 el 60.9 pa -22.3			u,v (fr/asec) 494.818 -98.393
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/7mm/3001/No0552/fk..3N2DRC			Output file: /Exps/c241c/v2/7mm/3001/No0552/fk.Q.41.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

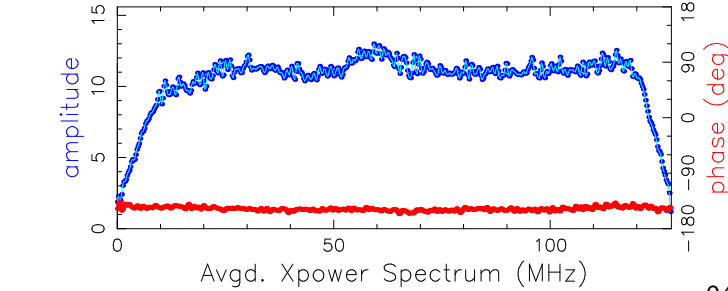
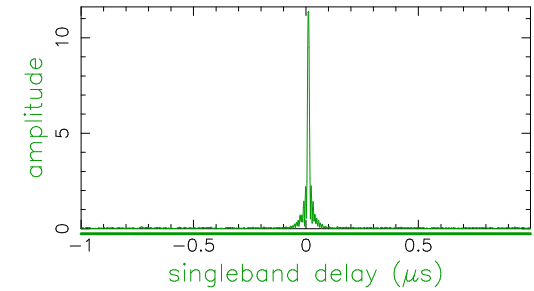
3C120.3N2DRC, No0552, fk

VLBA_FD - VLBA_KP, fgroup Q, pol RR



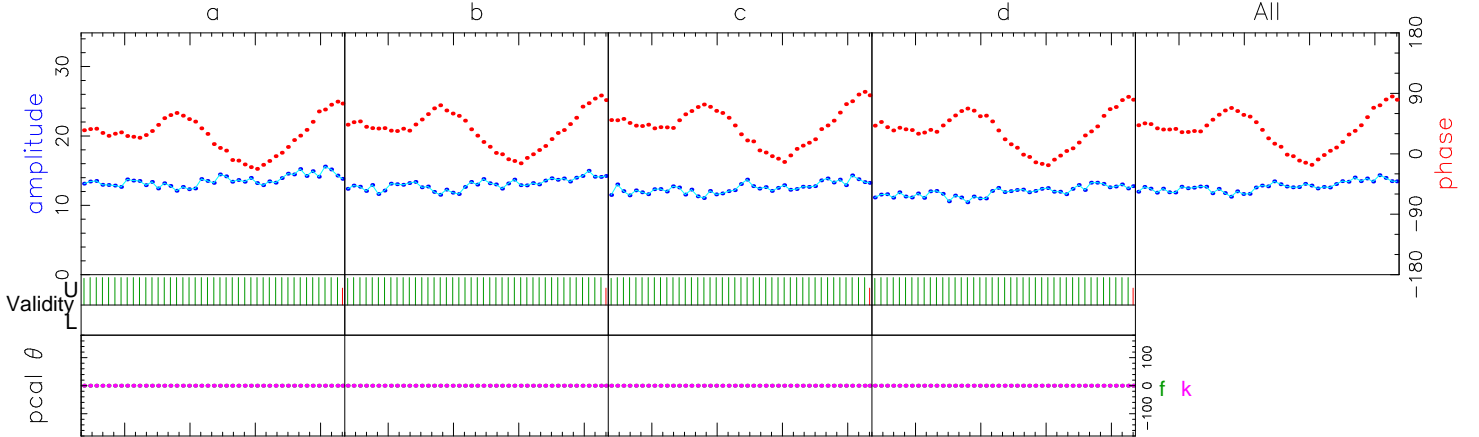
Fringe quality 7

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



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

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



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

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

ph/seg (deg)	RMS 26.5	Theor. 0.8	Amplitude Search (1024X16)	11.621 +/- 0.024	10.599	10.599	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	11.2	1.3	Interp.	0.000	0.000	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	6.9	0.2	Inc. seg. avg.	12.712	12.712	12.712	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	5.0	0.4	Inc. frq. avg.	11.430	11.430	11.430	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

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

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

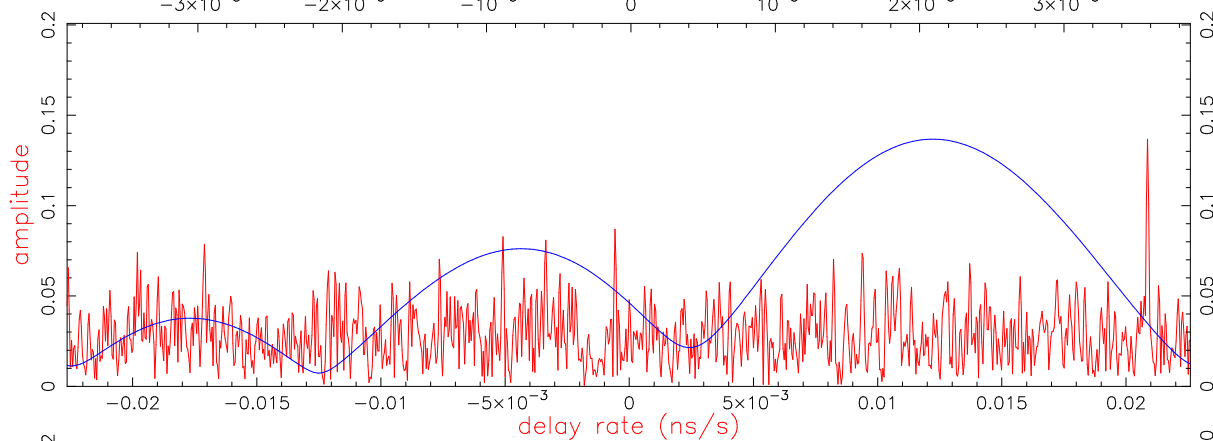
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kc

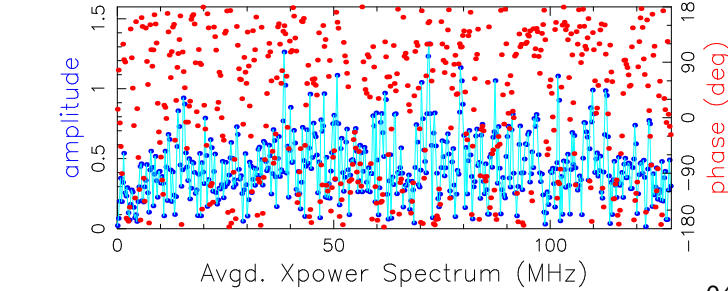
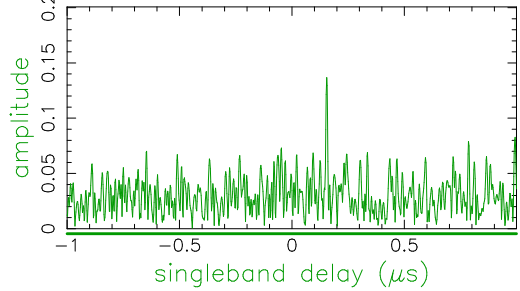
VLBA_KP - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)



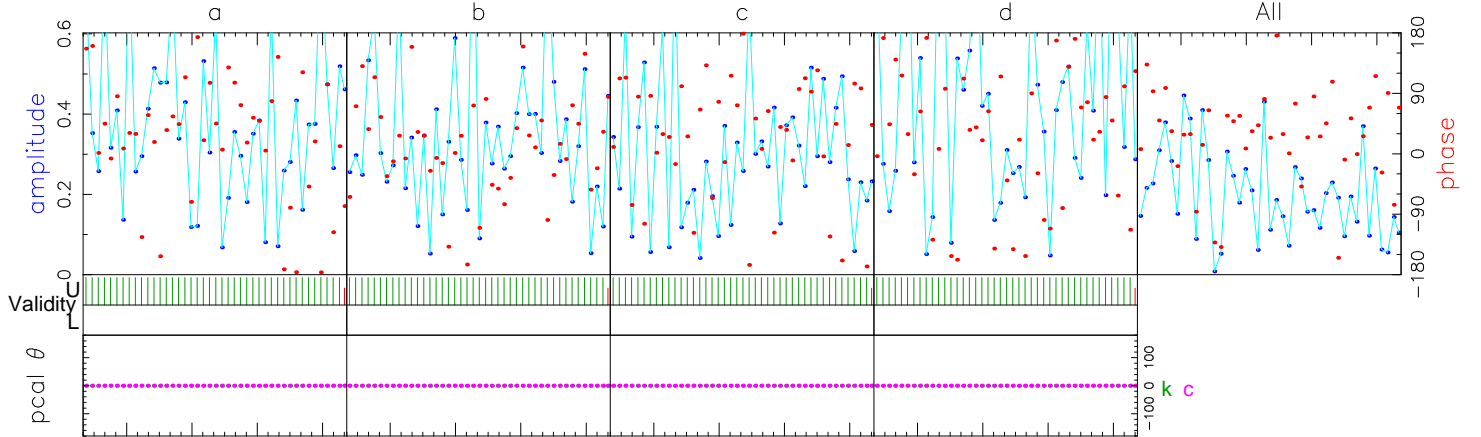
Fringe quality 0

SNR 5.8
 Int time 239.949
 Amp 0.201
 Phase 272.7
 PFD 5.5e-01
 Delays (us)
 SBD 0.154667
 MBD 0.002111
 Fringe rate (Hz)
 0.904176
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	62.6	24.4	52.7	51.3	Phase	47.7
	0.2	0.2	0.1	0.2	Ampl.	0.2
	736.0	928.6	966.0	878.9	Sbd box	592.2
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
k:c	0:0	0:0	0:0	0:0	PC phase	
k:c	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	1.53055838600E+03	Apriori delay (usec)	1.53040002497E+03	Resid mbdelay (usec)	2.11103E-03	+/- 1.9E-04
Group delay (usec) (SBD)	1.53055469159E+03	Apriori clock (usec)	-3.5380116E+00	Resid sbdelay (usec)	1.54667E-01	+/- 7.4E-04
Sband delay (usec)	1.53040002803E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	3.06897E-06	+/- 1.3E-06
Phase delay (usec)	1.11732732730E+00	Apriori rate (us/s)	1.11730636819E+00	Resid rate (us/s)	2.09591E-05	+/- 9.2E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-5.77634030533E-06	Resid phase (deg)	272.7	+/- 19.7
Total phase (deg)	300.4					

	RMS	Theor.	Amplitude	0.201 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.2	64.7	Search (1024X16)	0.135	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	93.7	112.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	20.0	19.7	Inc. seg. avg.	0.182	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	21.9	34.4	Inc. frq. avg.	0.195	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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3224.169 965.401 simultaneous interpolator

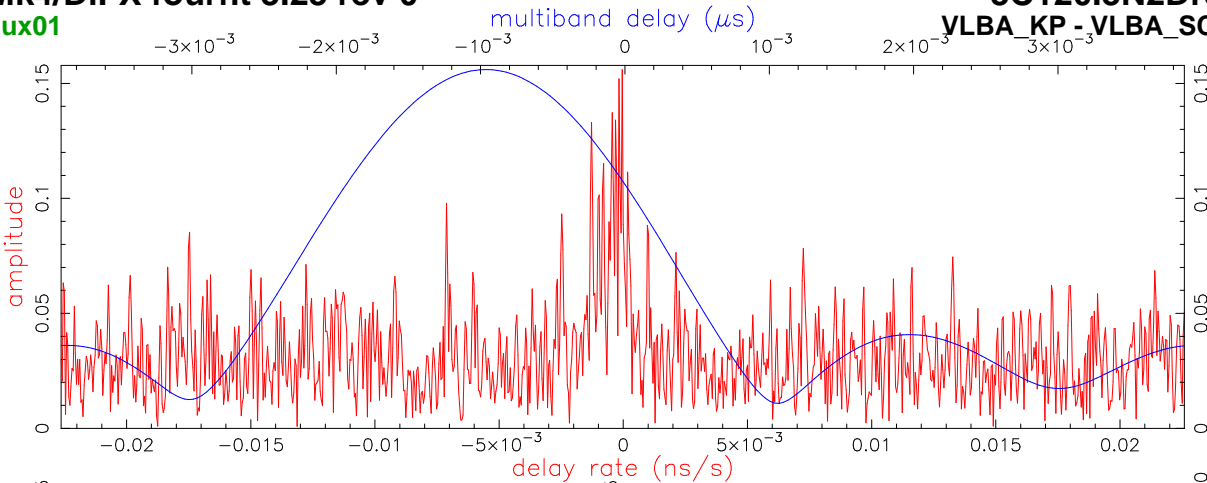
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kc.Q.106.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

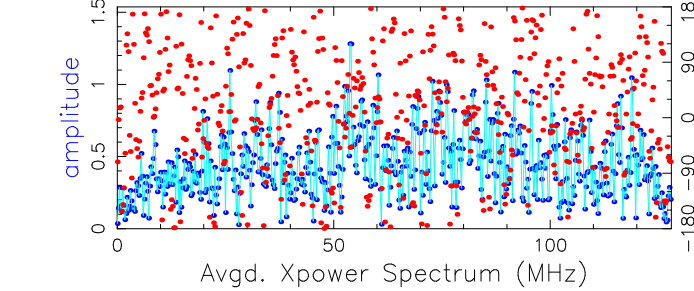
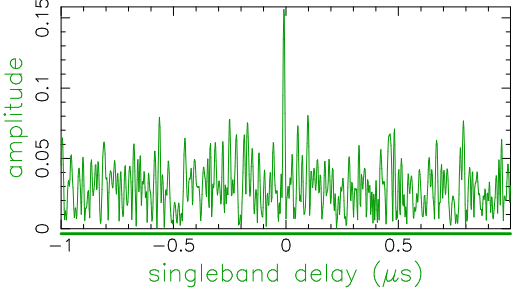
3C120.3N2DRC, No0552, kc

VLBA_KP - VLBA_SC, fgroup Q, pol LL



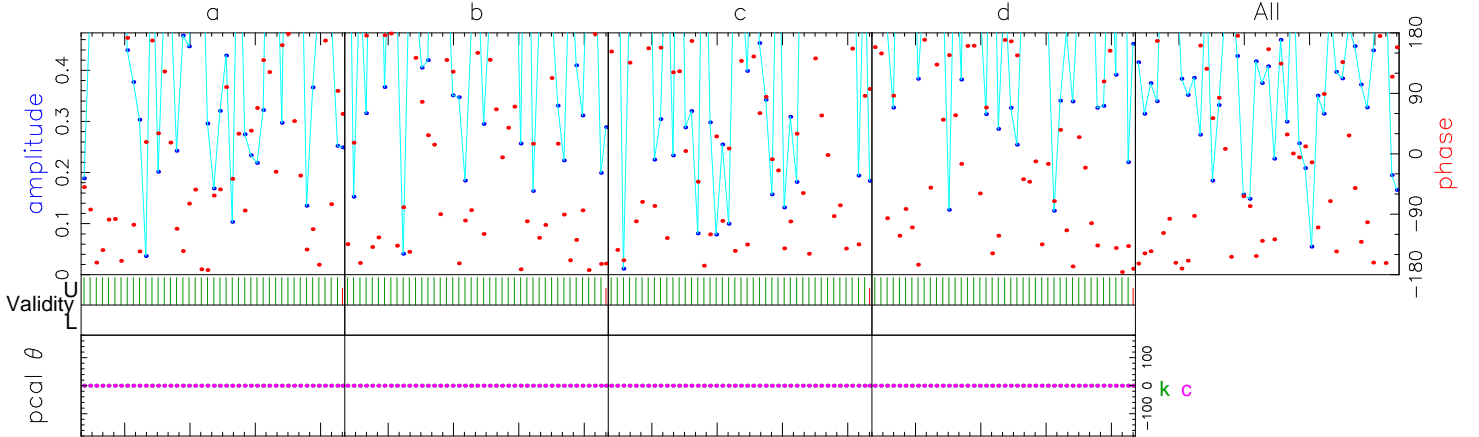
Fringe quality 0

SNR 6.7
 Int time 239.949
 Amp 0.158
 Phase -72.7
 PFD 3.3e-03
 Delays (us)
 SBD -0.009088
 MBD -0.000952
 Fringe rate (Hz)
 -0.001309
 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
	-145.2	-152.7	-161.5	-145.4	Phase	-151.4
	0.1	0.2	0.2	0.2	Ampl.	0.2
	217.4	508.5	728.9	224.8	Sbd box	508.3
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
k:c	0:0	0:0	0:0	0:0	PC phase	
k:c	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

	1.53039126064E+03	Apriori delay (usec)	1.53040002497E+03	Resid mbdelay (usec)	-9.51825E-04	+/- 1.7E-04
Group delay (usec) (SBD)	1.53039126064E+03	Apriori clock (usec)	-3.5380116E+00	Resid sbdelay (usec)	-9.08762E-03	+/- 6.4E-04
Sband delay (usec)	1.53039093734E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	-9.74866E-06	+/- 1.1E-06
Phase delay (usec)	1.53040001522E+03	Apriori rate (us/s)	1.11730636819E+00	Resid rate (us/s)	-3.03365E-08	+/- 8.0E-09
Delay rate (us/s)	1.11730633786E+00	Apriori accel (us/s/s)	-5.77634030533E-06	Resid phase (deg)	-72.7	+/- 17.1
Total phase (deg)	-44.9					

	RMS	Theor.	Amplitude	0.158 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	85.9	56.2	Search (1024X16)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	178.3	98.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	9.4	17.1	Inc. seg. avg.	0.265	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	12.2	29.9	Inc. frq. avg.	0.150	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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3224.169 965.401 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kc.Q.49.3N2DRC

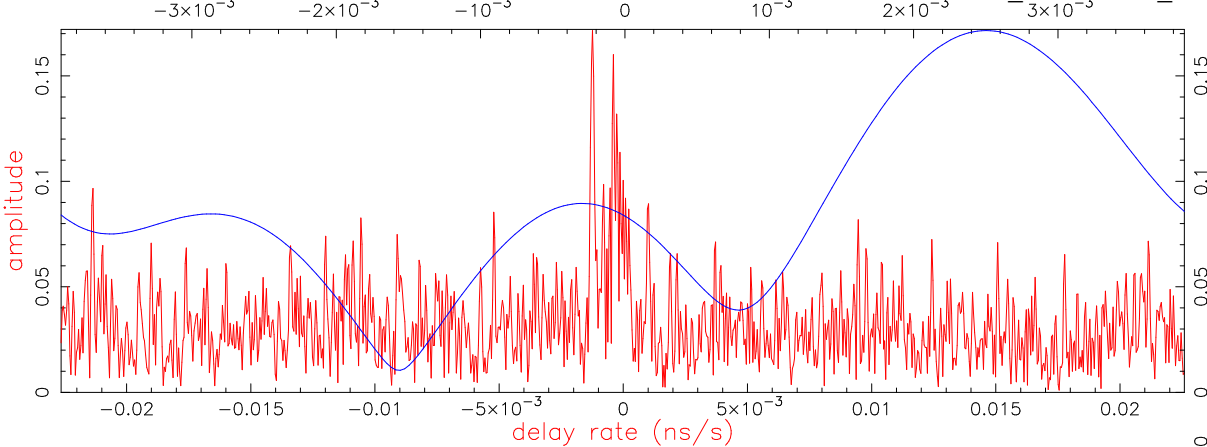
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kc

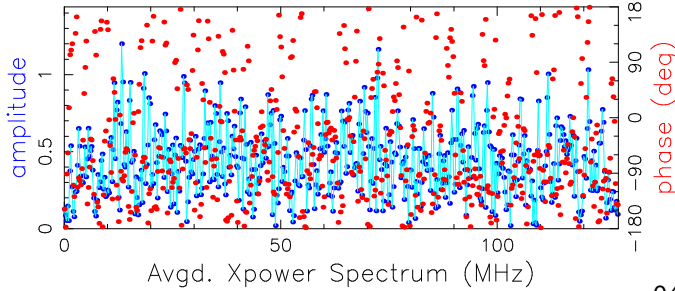
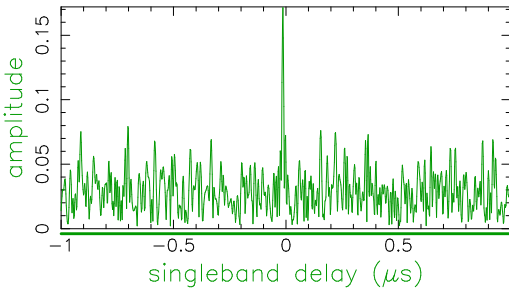
VLBA_KP - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)



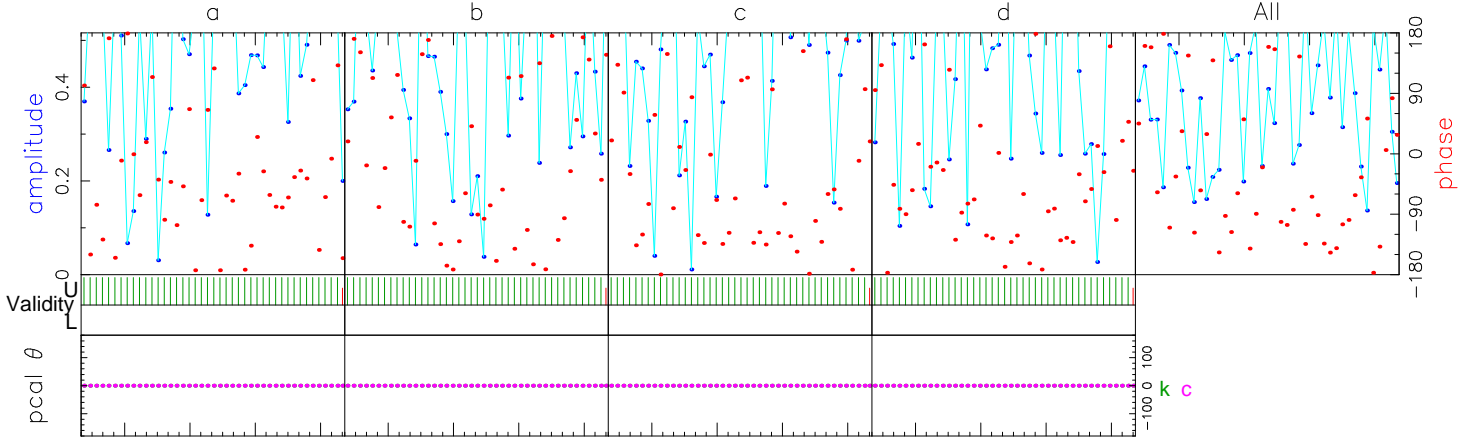
Fringe quality 9

SNR 7.3
 Int time 239.949
 Amp 0.172
 Phase -313.3
 PFD 5.3e-05
 Delays (us)
 SBD -0.013934
 MBD 0.002488
 Fringe rate (Hz)
 -0.054350
 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		
c	1000	1000	1000	1000		
k:c	0:0	0:0	0:0	0:0		
k:c	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000		
c	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR		
c	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.53038688748E+03	Apriori delay (usec)	1.53040002497E+03	Resid mbdelay (usec)	2.48751E-03	+/-	1.5E-04
Sband delay (usec)	1.53038609072E+03	Apriori clock (usec)	-3.5380116E+00	Resid sbdelay (usec)	-1.39342E-02	+/-	5.9E-04
Phase delay (usec)	1.53040001783E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	-7.13385E-06	+/-	1.0E-06
Delay rate (us/s)	1.11730510833E+00	Apriori rate (us/s)	1.11730636819E+00	Resid rate (us/s)	-1.25986E-06	+/-	7.3E-09
Total phase (deg)	-285.6	Apriori accel (us/s/s)	-5.77634030533E-06	Resid phase (deg)	-313.3	+/-	15.7

ph/seg (deg)	82.3	Theor.	51.6	Amplitude	0.172 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	146.3		90.1	Search (1024X16)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	40.6		15.7	Inc. seg. avg.	0.271	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	16.6		27.5	Inc. frq. avg.	0.188	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

k: az 153.1 el 60.9 pa -22.3 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3224.169 965.401 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kc.Q.73.3N2DRC

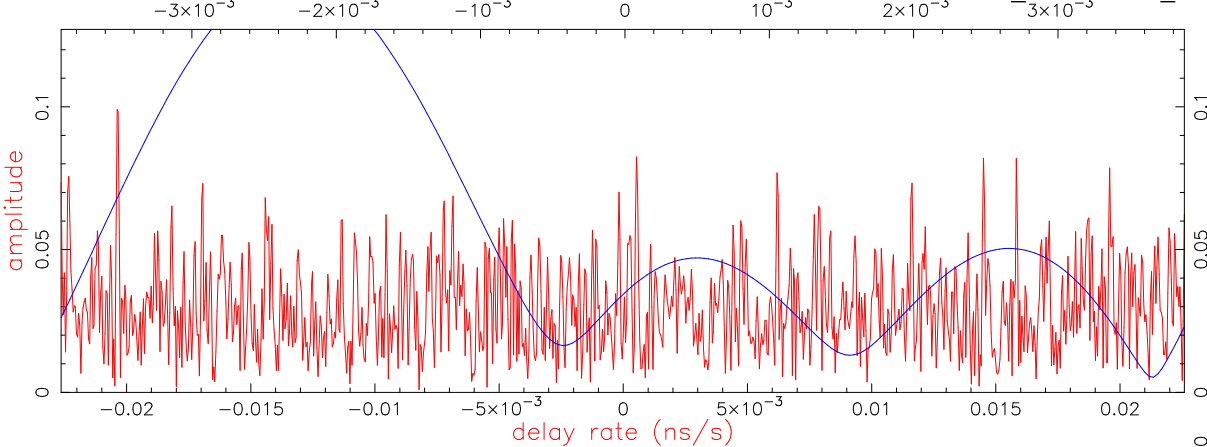
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kc

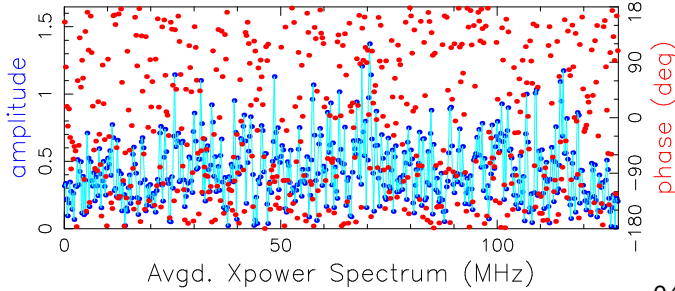
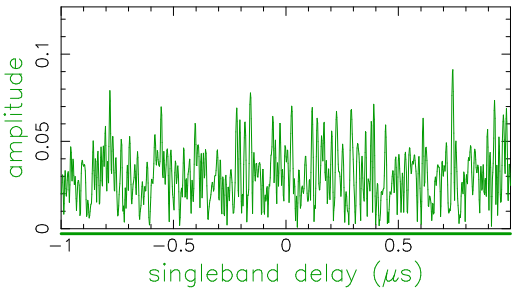
VLBA_KP - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)



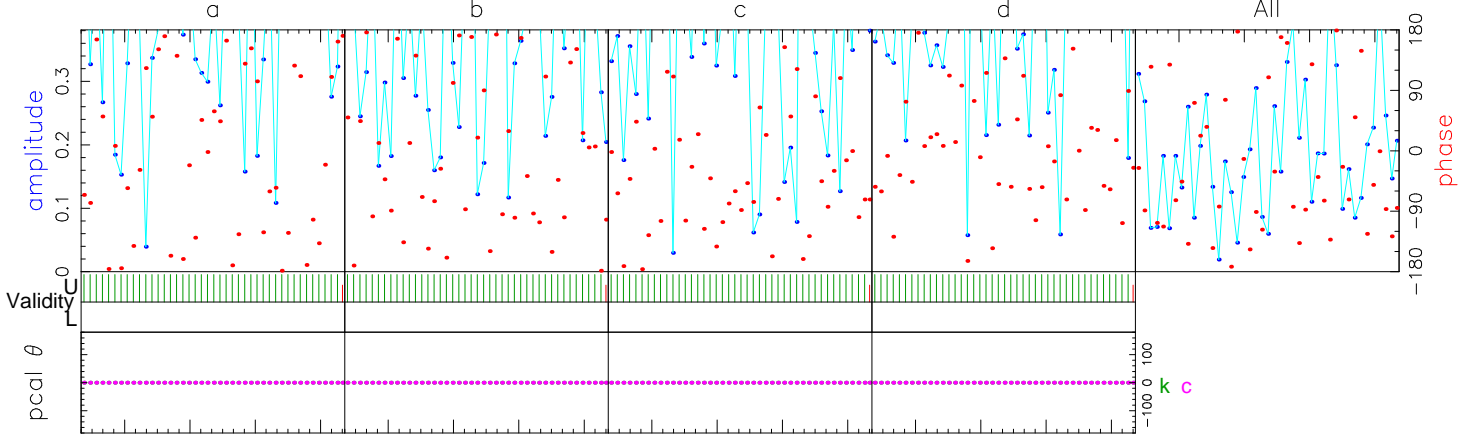
Fringe quality 0

SNR 3.9
 Int time 239.949
 Amp 0.127
 Phase 64.7
 PFD 1.0e+00
 Delays (us)
 SBD 0.742188
 MBD 0.004395
 Fringe rate (Hz)
 0.849584
 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
	-169.6	-129.8	-71.2	-17.1	Phase	-92.8
	0.2	0.2	0.2	0.2	Ampl.	0.2
	432.3	664.4	313.6	101.4	Sbd box	893.0
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	PC freqs	
k:c	0:0	0:0	0:0	0:0	PC phase	
k:c	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	1.53113879450E+03	Apriori delay (usec)	1.53040002497E+03	Resid mbdelay (usec)	4.39453E-03	+/- 2.9E-04
Group delay (usec) (SBD)	1.53114221247E+03	Apriori clock (usec)	-3.5380116E+00	Resid sbdelay (usec)	7.42188E-01	+/- 1.1E-03
Sband delay (usec)	1.53040001899E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	-5.97857E-06	+/- 1.9E-06
Phase delay (usec)	1.11732606184E+00	Apriori rate (us/s)	1.11730636819E+00	Resid rate (us/s)	1.96937E-05	+/- 1.4E-08
Delay rate (us/s)		Apriori accel (us/s/s)	-5.77634030533E-06	Resid phase (deg)	64.7	+/- 29.7
Total phase (deg)	92.4					

	RMS	Theor.	Amplitude	0.127 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	83.5	97.4	Search (1024X16)	0.138	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	161.3	170.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	82.0	29.7	Inc. seg. avg.	0.110	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	65.4	51.8	Inc. frq. avg.	0.180	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 c: az 253.9 el 54.4 pa 66.9 u,v (fr/asec) -3224.169 965.401 simultaneous interpolator

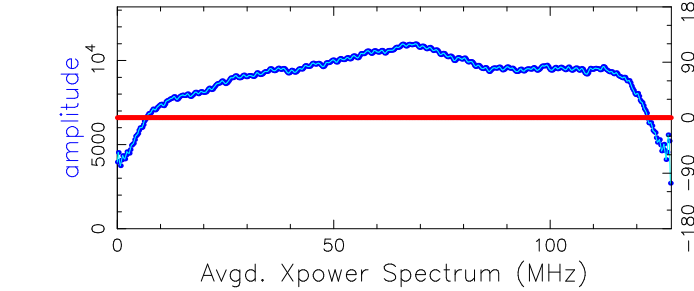
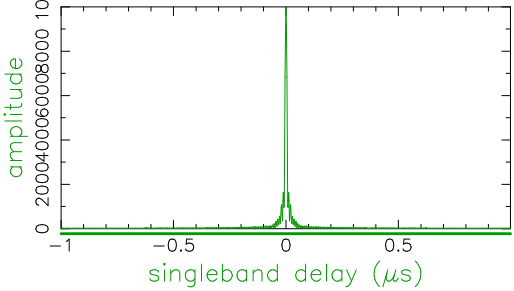
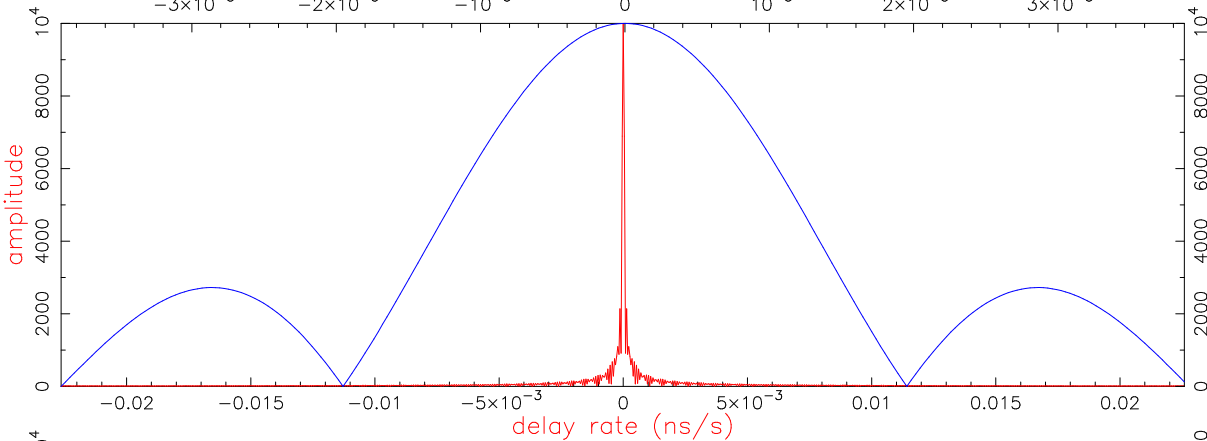
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kc..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kc.Q.90.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

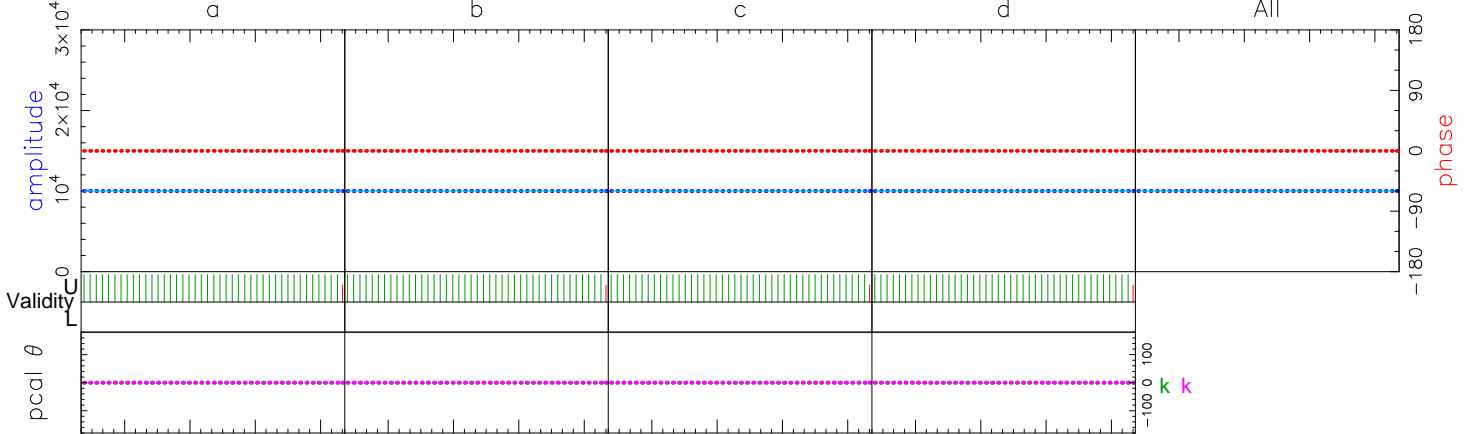
3C120.3N2DRC, No0552, kk

VLBA_KP - VLBA_KP, fgroup Q, pol LL



Fringe quality 9
 SNR 423629.7
 Int time 239.981
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 210920.00
 Stop 211320.12
 FRT 211120.00
 Corr/FF/build
 2025:048:110113
 2025:049:102427
 2024:113:095956
 RA & Dec (J2000)
 04h33m11.095531s
 +05°21'15.619266"

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



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

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

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

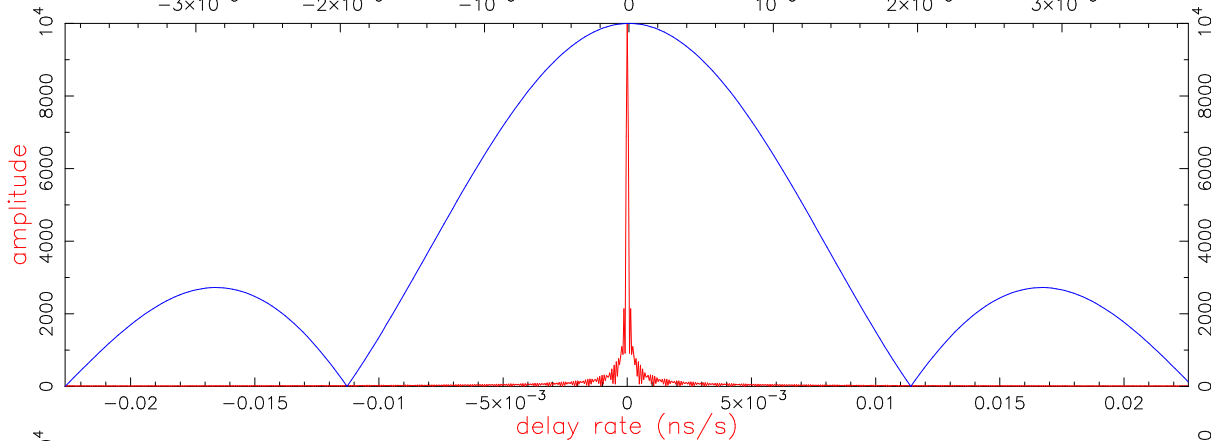
k: az 153.1 el 60.9 pa -22.3 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kk.Q.36.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kk

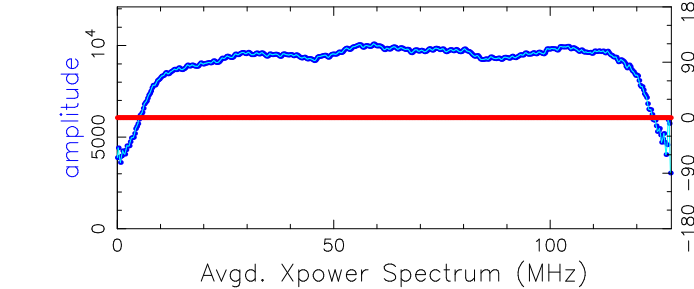
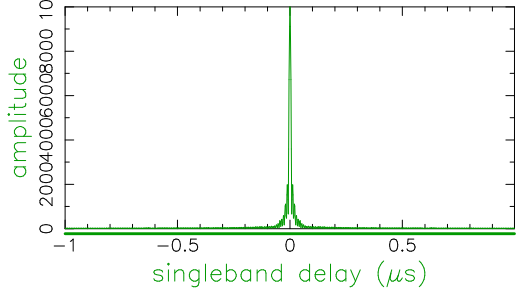
VLBA_KP - VLBA_KP, fgroup Q, pol RR



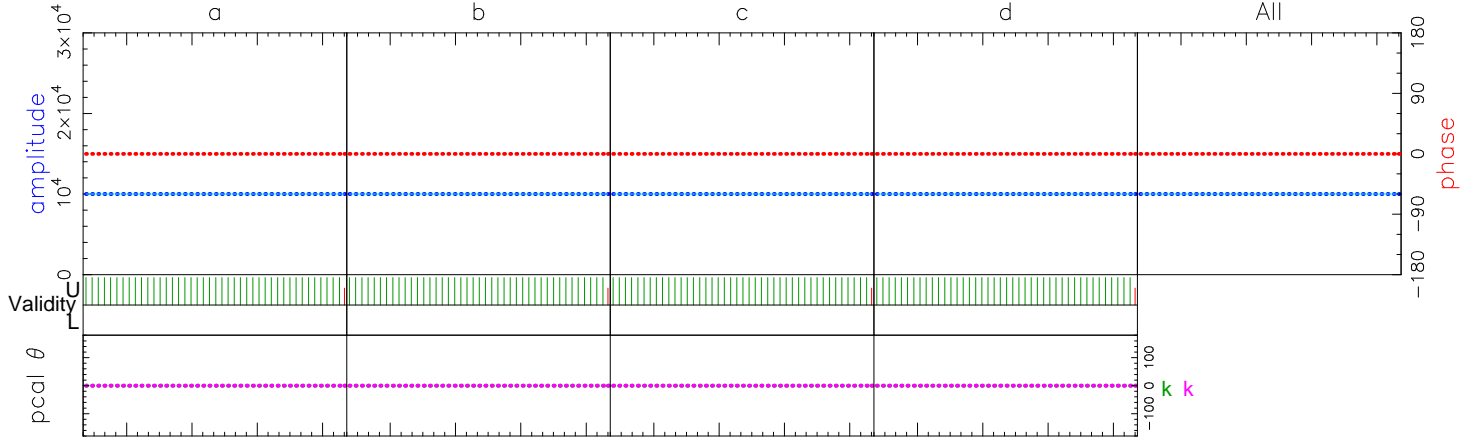
Fringe quality 9

SNR 423629.7
 Int time 239.981
 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
 2025:049:102429
 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		
k	1000	1000	1000	1000		
k:k	0:0	0:0	0:0	0:0		
k:k	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000		
k	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR		
k	Q00UR	Q01UR	Q02UR	Q03UR		

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

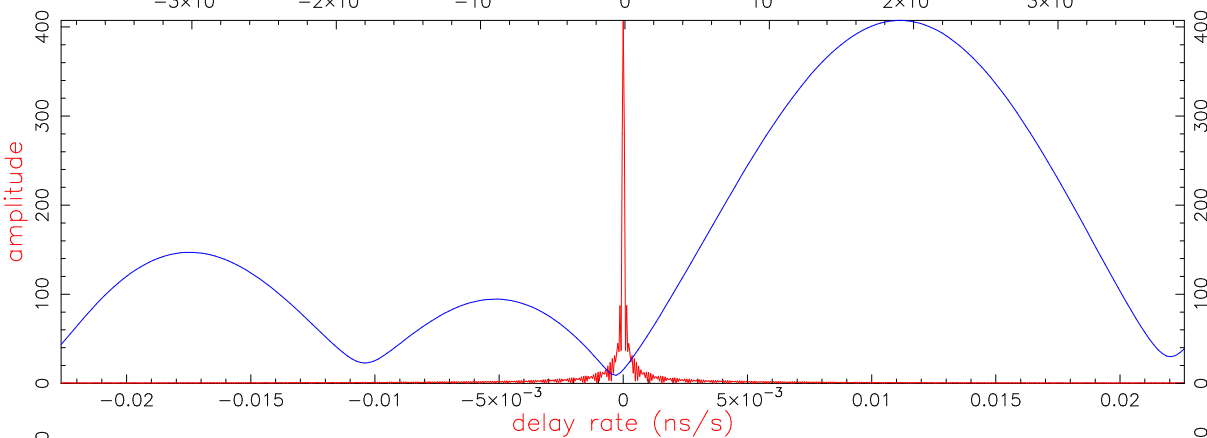
ph/seg (deg) 0.0 0.0 Search (1024X16) 10000.000 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004 0.004
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us dr window (ns/s) -0.023 0.023
 k: az 153.1 el 60.9 pa -22.3 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kk.Q.51.3N2DRC simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

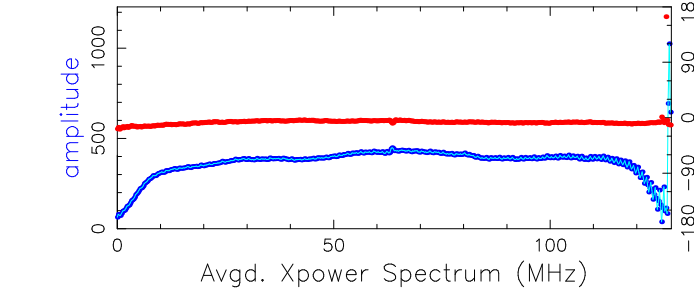
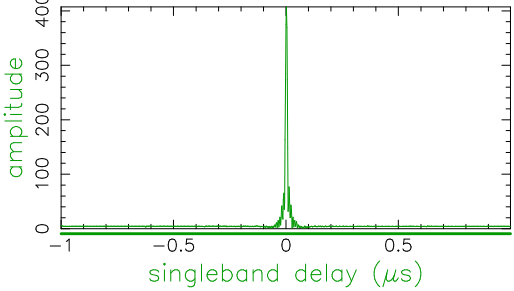
3C120.3N2DRC, No0552, kk

VLBA_KP - VLBA_KP, fgroup Q, pol LR



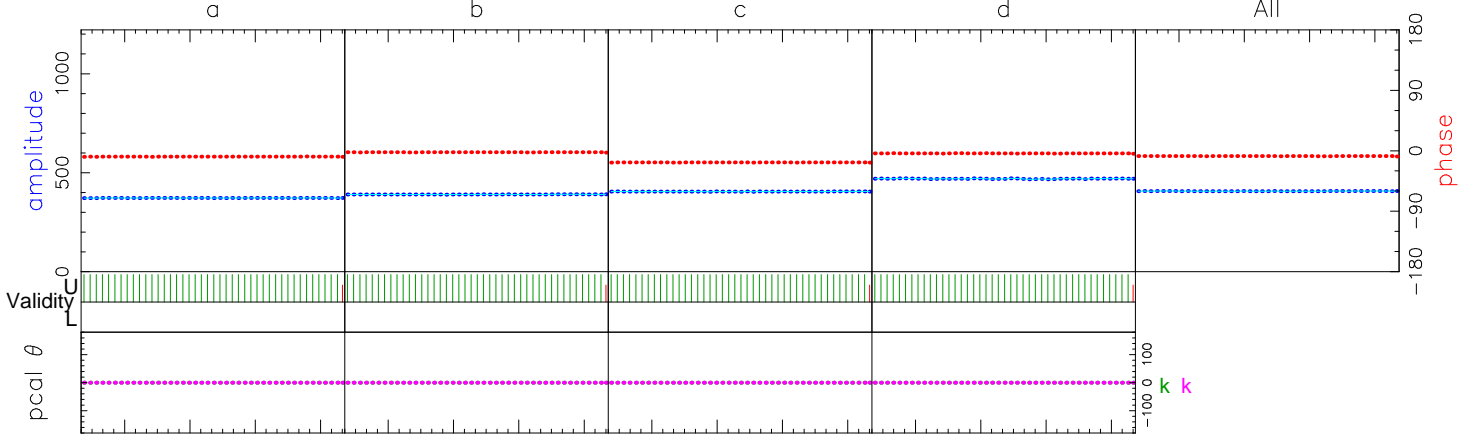
Fringe quality 9

SNR 17258.1
 Int time 239.981
 Amp 407.386
 Phase -7.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.001871
 MBD 0.001902
 Fringe rate (Hz)
 -0.000003
 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



	a	b	c	d	All
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-8.8	-2.2	-17.3	-3.9	Phase	-7.9
372.6	390.5	405.1	469.7	Ampl.	409.5
513.9	513.9	513.8	514.2	Sbd box	514.0
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	PC freqs	
k:k 0:0	0:0	0:0	0:0	PC phase	
k:k 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000		
k Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.90156250000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.90156E-03	+/-	6.4E-08
Sband delay (usec)	1.87137500000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.87138E-03	+/-	2.5E-07
Phase delay (usec)	-5.09094344013E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.09094E-07	+/-	4.3E-10
Delay rate (us/s)	-7.64000528733E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-7.64001E-11	+/-	3.1E-12
Total phase (deg)	-7.9	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-7.9	+/-	0.0

ph/seg (deg)	0.1	Theor.	0.0	Amplitude	407.386 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	0.1	0.0	Search (1024X16)	406.932	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.3	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	9.0	0.0	Inc. seg. avg.	407.324	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	409.480	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 k: az 153.1 el 60.9 pa -22.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

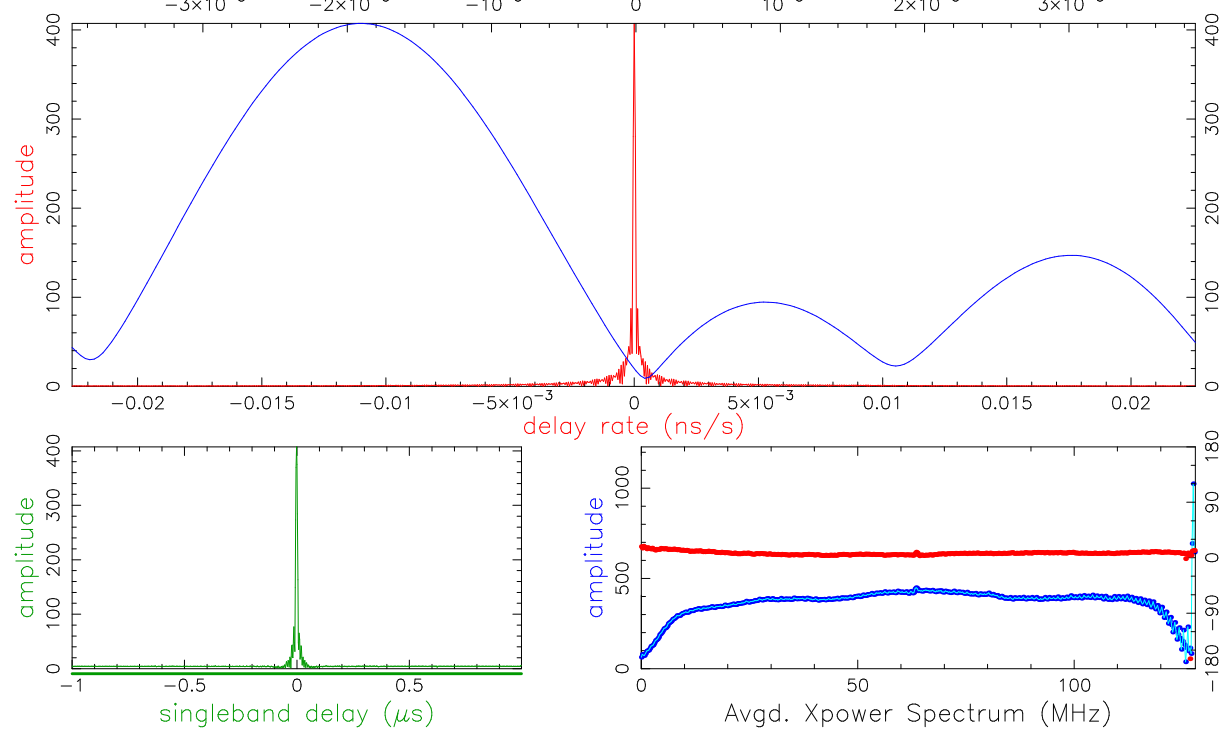
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kk..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kk.Q.69.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kk

VLBA_KP - VLBA_KP, fgroup Q, pol RL

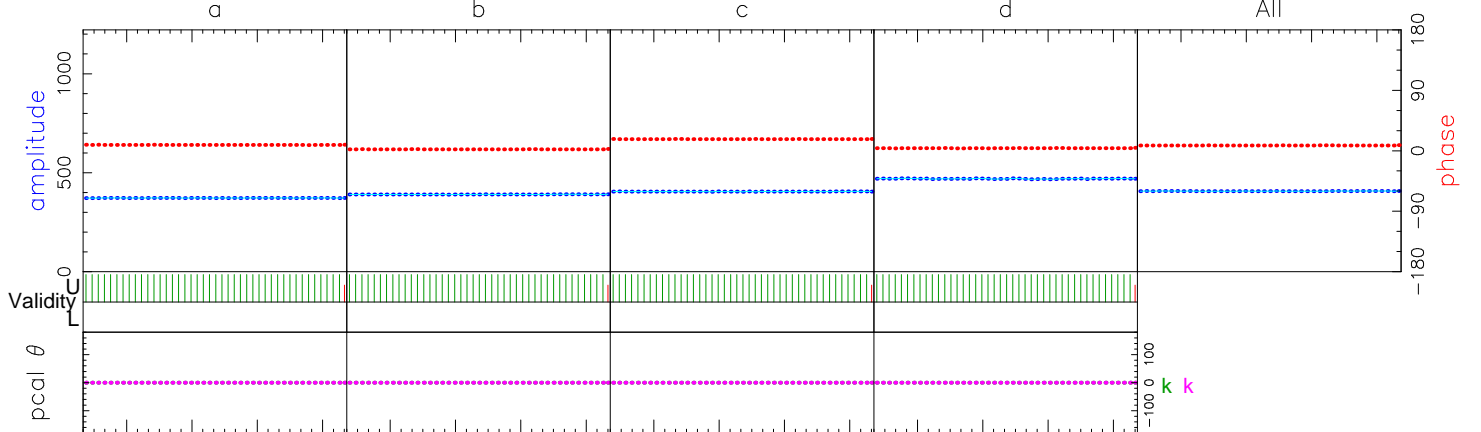


Fringe quality 9

SNR 17258.1
 Int time 239.981
 Amp 407.386
 Phase 7.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.001871
 MBD -0.001902
 Fringe rate (Hz) 0.000003
 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
U/L	469/0	469/0	469/0	469/0	APs used	1000
k	1000	1000	1000	1000	PC freqs	1000
k:k	0:0	0:0	0:0	0:0	PC phase	0:0
k:k	0:0	0:0	0:0	0:0	Manl PC	0:0
k	1000	1000	1000	1000	PC amp	1000
k	1000	1000	1000	1000	Chan ids	Q00UR
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	Q00UL
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	Q01UL
k	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	Q02UL
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	Q03UL
k	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	Q03UL
Group delay (usec) (SBD)	-1.90156250000E-03				Resid mbdelay (usec)	-1.90156E-03 +/- 6.4E-08
Sband delay (usec)	-1.87137500000E-03				Resid sbdelay (usec)	-1.87138E-03 +/- 2.5E-07
Phase delay (usec)	5.09094344200E-07				Resid phdelay (usec)	5.09094E-07 +/- 4.3E-10
Delay rate (us/s)	7.64000528733E-11				Resid rate (us/s)	7.64001E-11 +/- 3.1E-12
Total phase (deg)		7.9			Resid phase (deg)	7.9 +/- 0.0
ph/seg (deg)	0.1	0.0	Search (1024X16)	406.932	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	0.1	0.0	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	8.3	0.0	Inc. seg. avg.	407.324	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	9.0	0.0	Inc. frq. avg.	409.480	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
k: az 153.1 el 60.9 pa -22.3		k: az 153.1 el 60.9 pa -22.3		u,v (fr/asec) 0.000 0.000	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241c/v2/7mm/3001/No0552/kk..3N2DRC		Output file: /Exps/c241c/v2/7mm/3001/No0552/kk.Q.89.3N2DRC		simultaneous interpolator

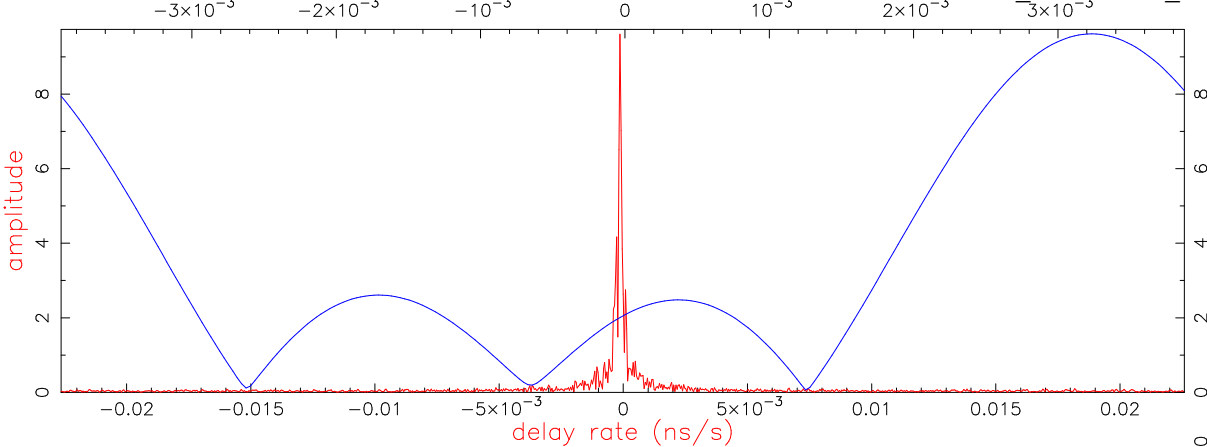
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kl

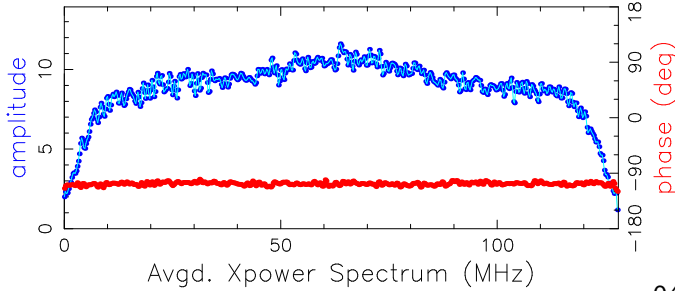
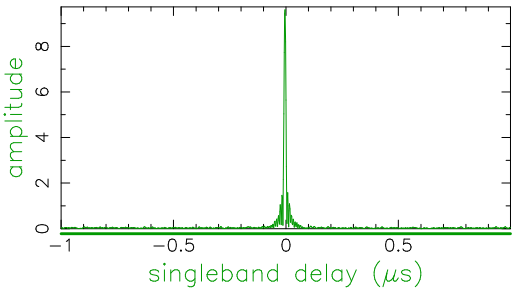
VLBA_KP - VLBA_LA, fgroup Q, pol LL

multiband delay (μ s)



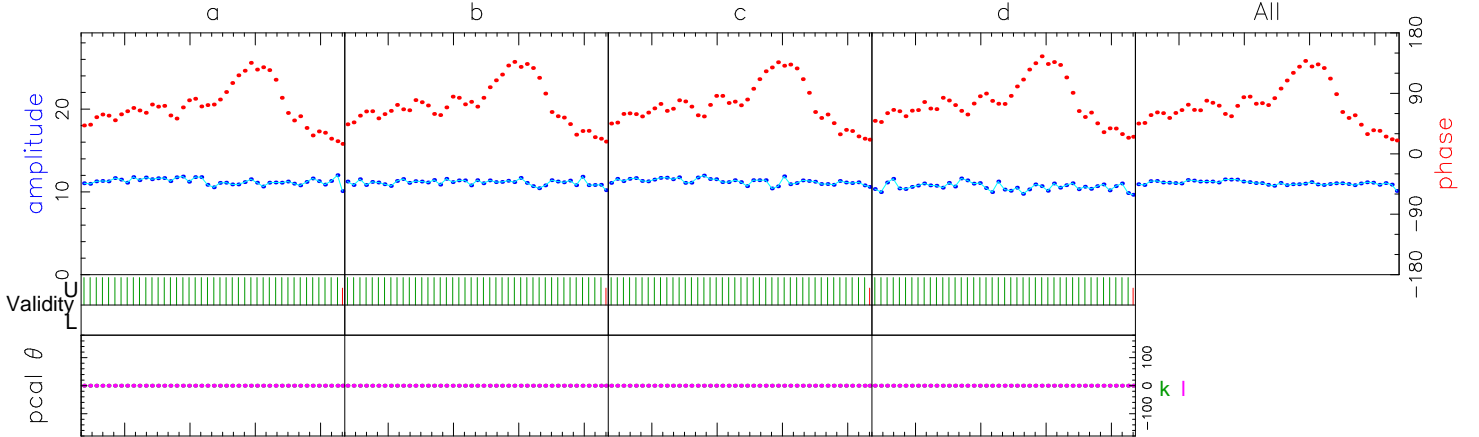
Fringe quality 7

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	APs used	
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	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	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)	4.04823546467E+02	Apriori clock (usec)	8.4781227E+00	Resid sbdelay (usec)	-4.67275E-03	+/- 1.0E-05
Sband delay (usec)	4.04828223844E+02	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	4.62711E-06	+/- 1.8E-08
Phase delay (usec)	1.27813558813E-01	Apriori rate (us/s)	1.27813672145E-01	Resid rate (us/s)	-1.13332E-07	+/- 1.3E-10
Delay rate (us/s)		Apriori accel (us/s/s)	-2.69527415422E-06	Resid phase (deg)	-209.4	+/- 0.3
Total phase (deg)						

	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

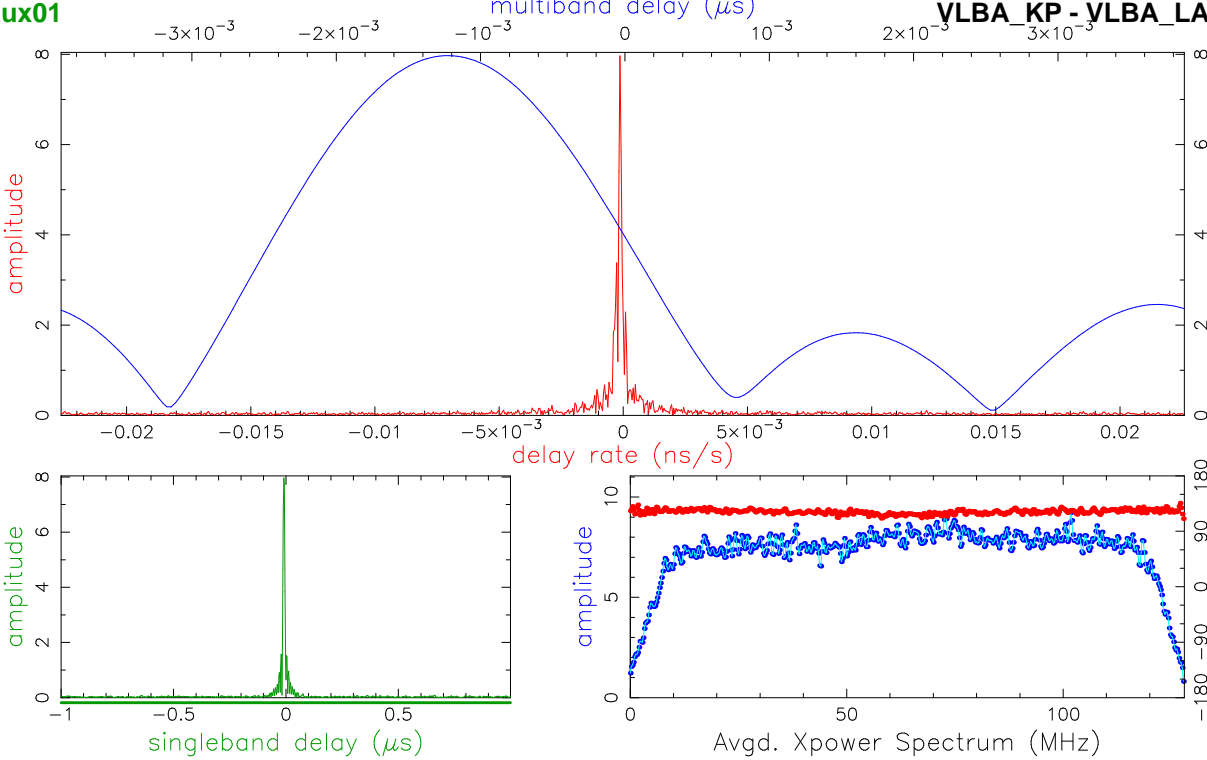
k: az 153.1 el 60.9 pa -22.3 l: az 165.6 el 58.9 pa -11.3 u,v (fr/asec) -369.201 -254.681 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kl.Q.39.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kl

VLBA_KP - VLBA_LA, fgroup Q, pol RR

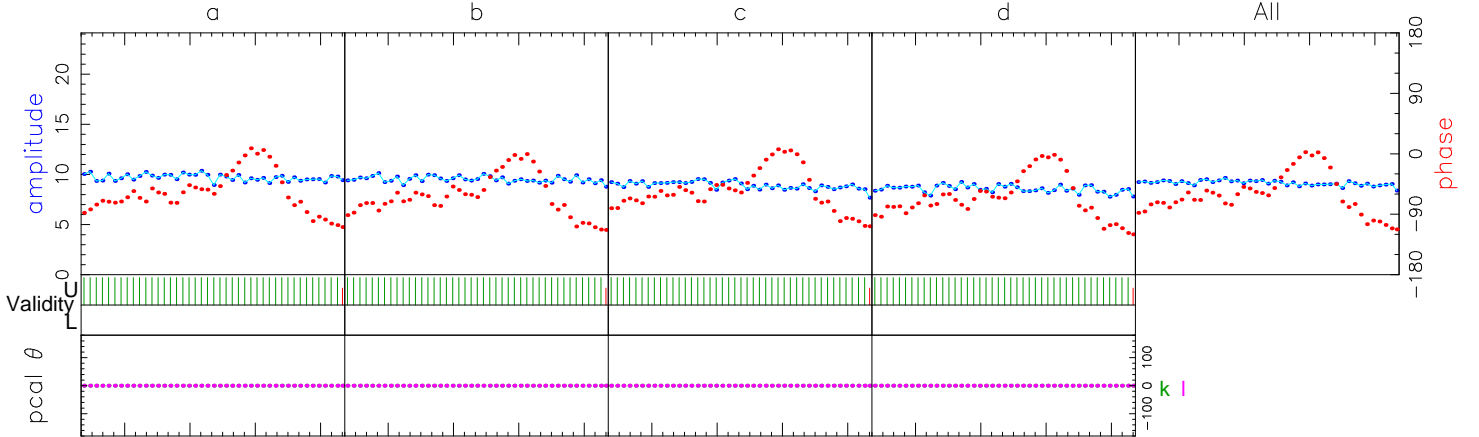


Fringe quality 7

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



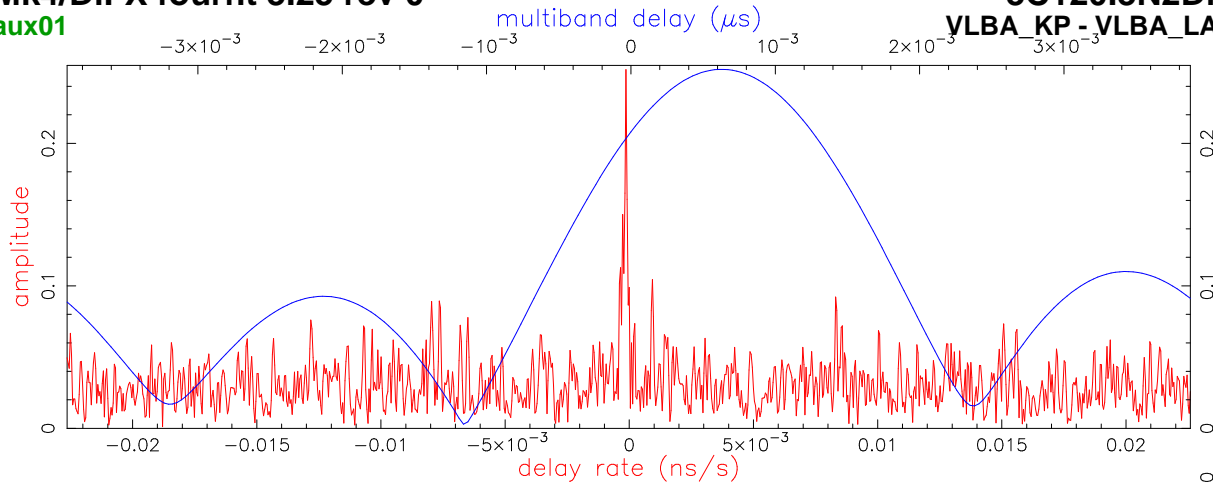
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-58.7	-63.8	-56.4	-66.6	Phase	-61.3
	8.4	8.3	7.8	7.4	Ampl.	8.0
	508.6	508.4	508.5	507.8	Sbd box	508.3
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	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)		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

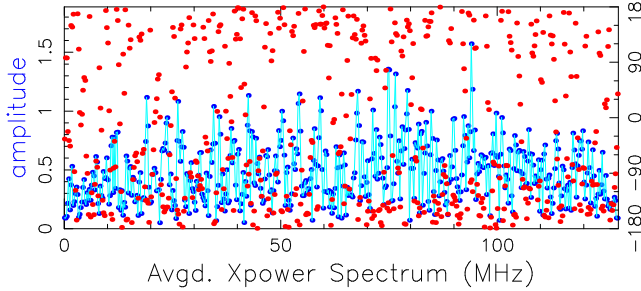
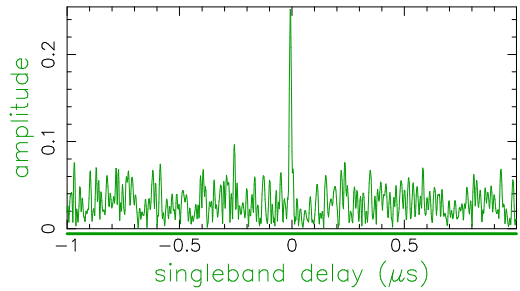
3C120.3N2DRC, No0552, kl

VLBA_KP - VLBA_LA, fgroup Q, pol LR



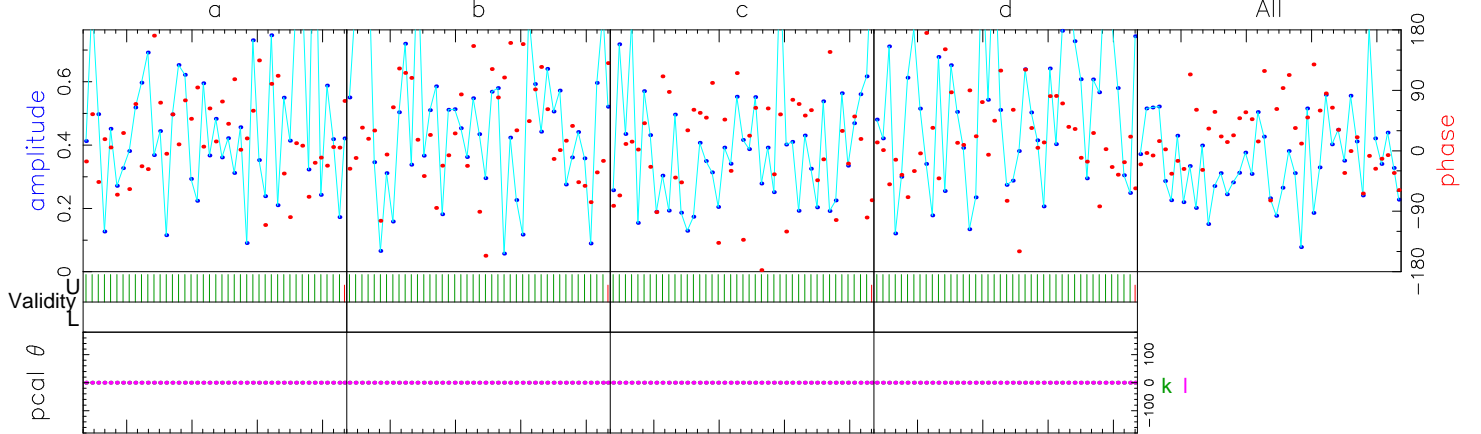
Fringe quality 9

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

	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

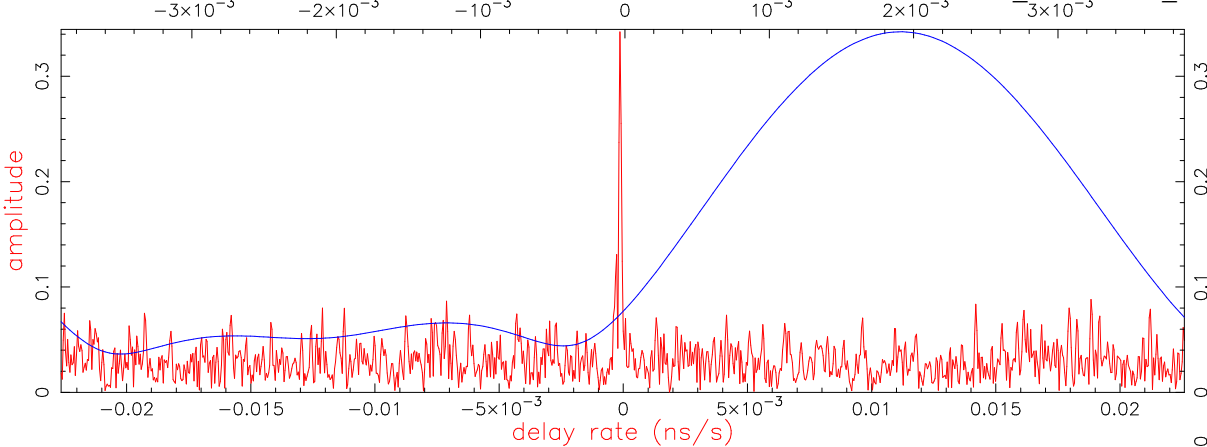
aux01

3C120.3N2DRC, No0552, kl

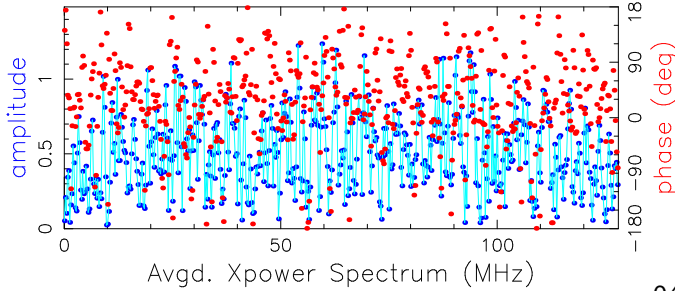
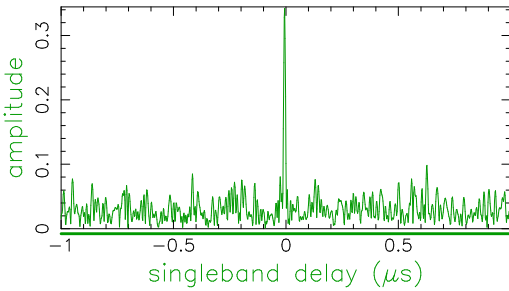
VLBA_KP - VLBA_LA, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 9

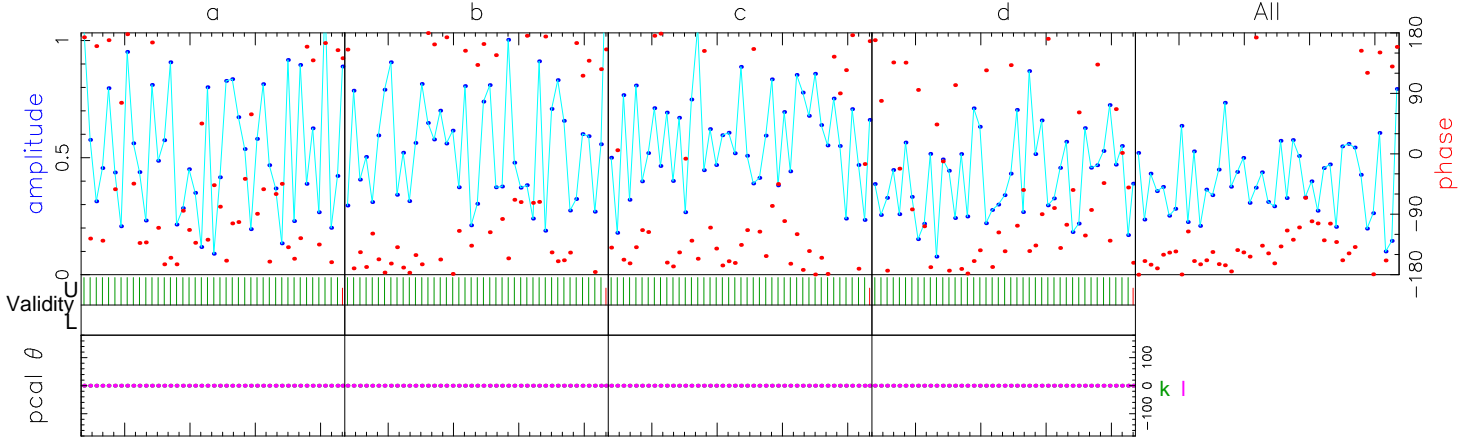


SNR 14.6
 Int time 239.981
 Amp 0.345
 Phase -74.7
 PFD 9.3e-40
 Delays (us)
 SBD -0.006393
 MBD 0.001882
 Fringe rate (Hz)
 -0.005021
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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+00	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	0.326	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	0.326	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	29.0	13.7	Inc. frq. avg.	0.344	0.326	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

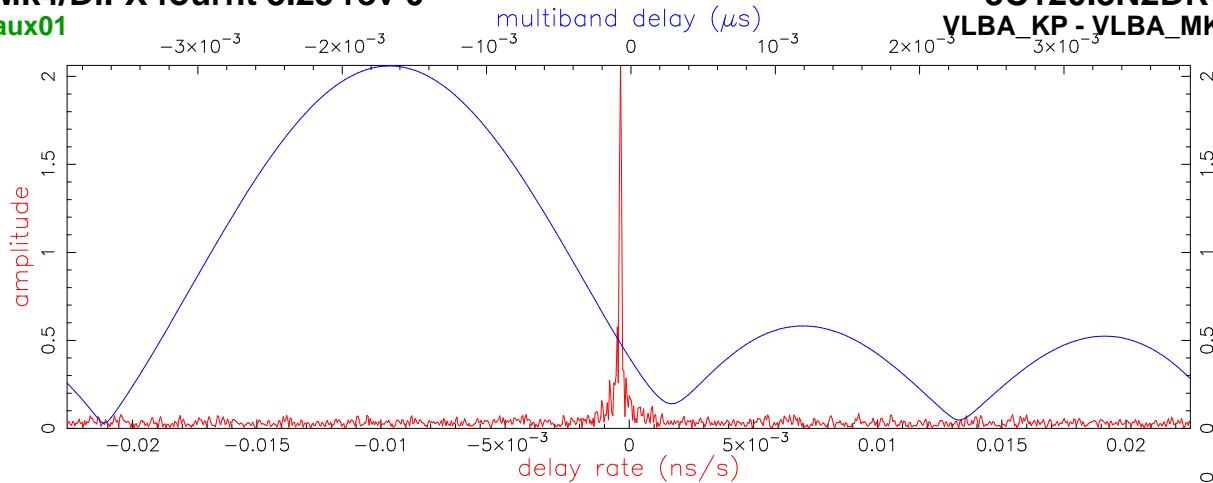
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kl..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kl.Q.95.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

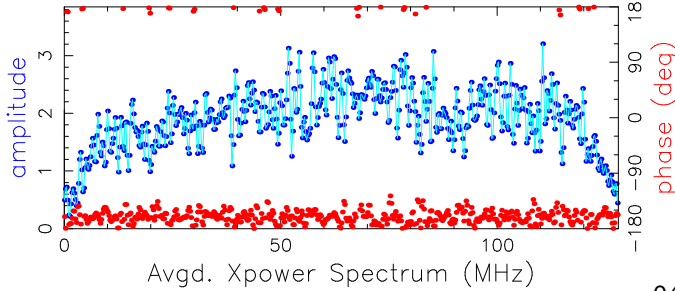
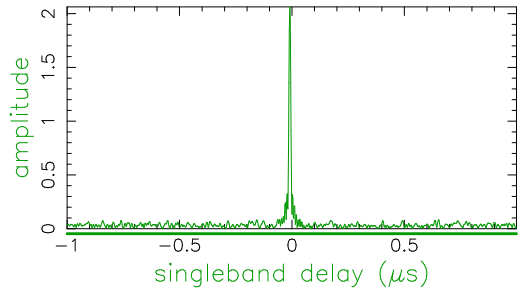
3C120.3N2DRC, No0552, km

VLBA_KP - VLBA_MK, fgroup Q, pol LL



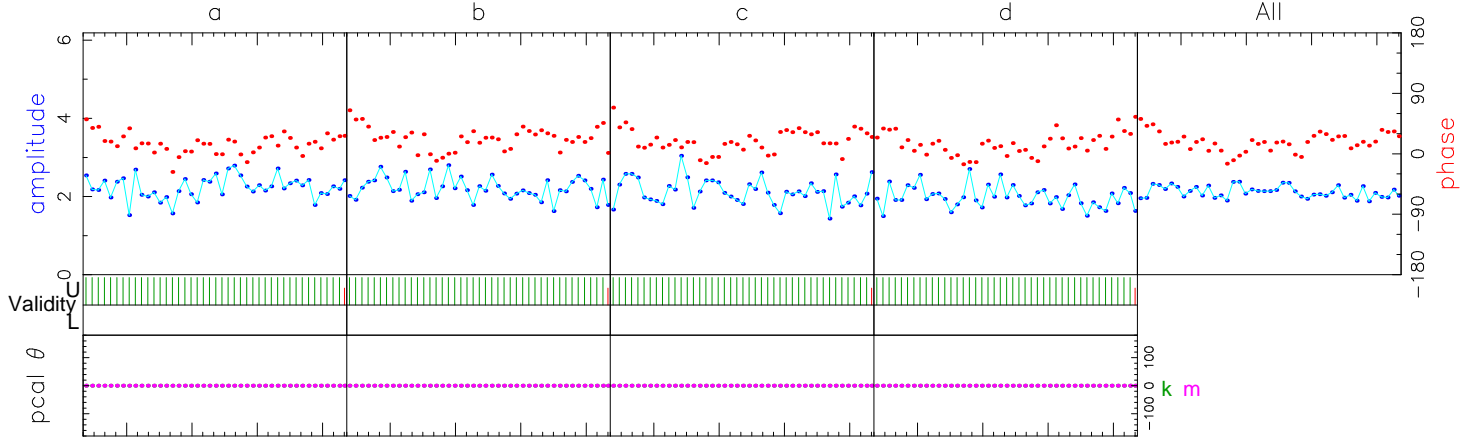
Fringe quality 8

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



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

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



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

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

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

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

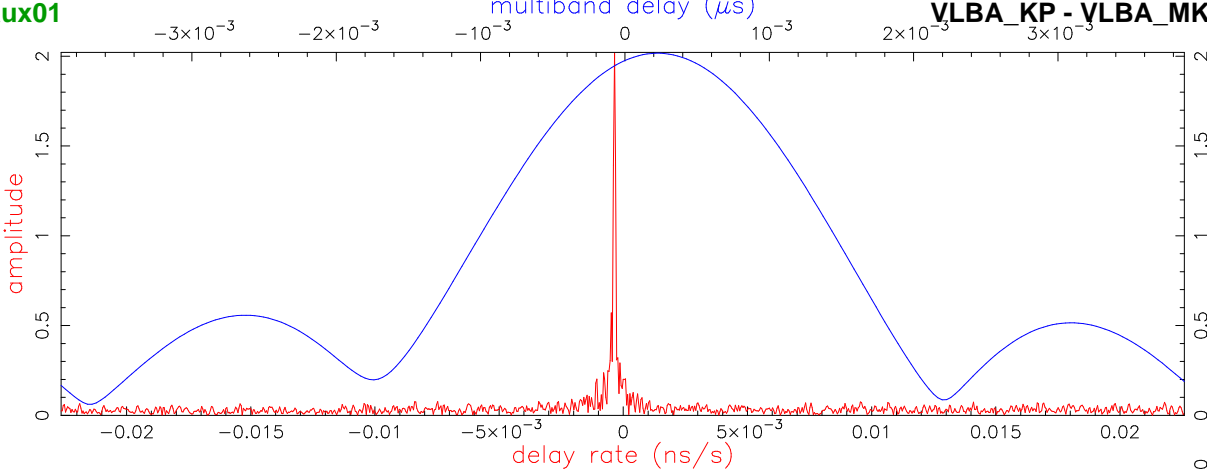
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/km..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/km.Q.40.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

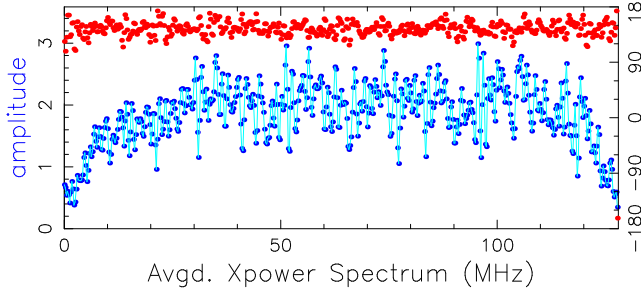
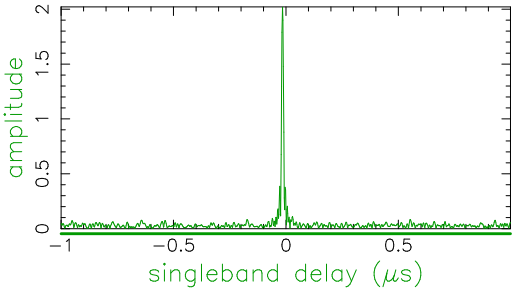
3C120.3N2DRC, No0552, km

VLBA_KP - VLBA_MK, fgroup Q, pol RR



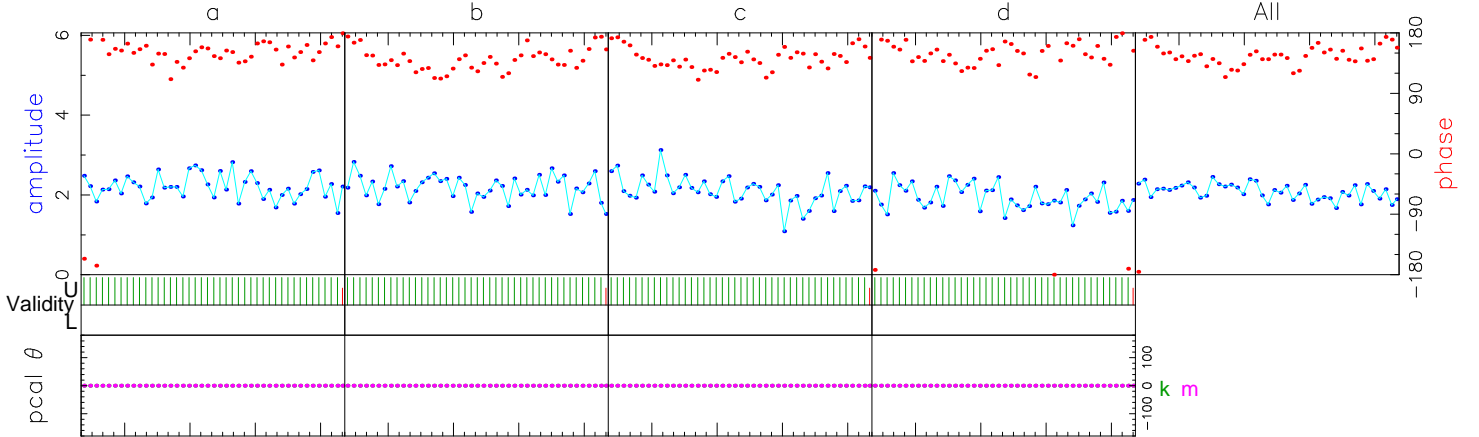
Fringe quality 8

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



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

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



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

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

	RMS	Theor.	Amplitude	2.021 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	15.0	4.4	Search (1024X16)	1.876	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
amp/seg (%)	10.1	7.7	Interp.	0.000	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	nlags: 512 t_cohere infinite	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	8.0	1.3	Inc. seg. avg.	2.082	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00
amp/frq (%)	5.4	2.3	Inc. frq. avg.	2.027					

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

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

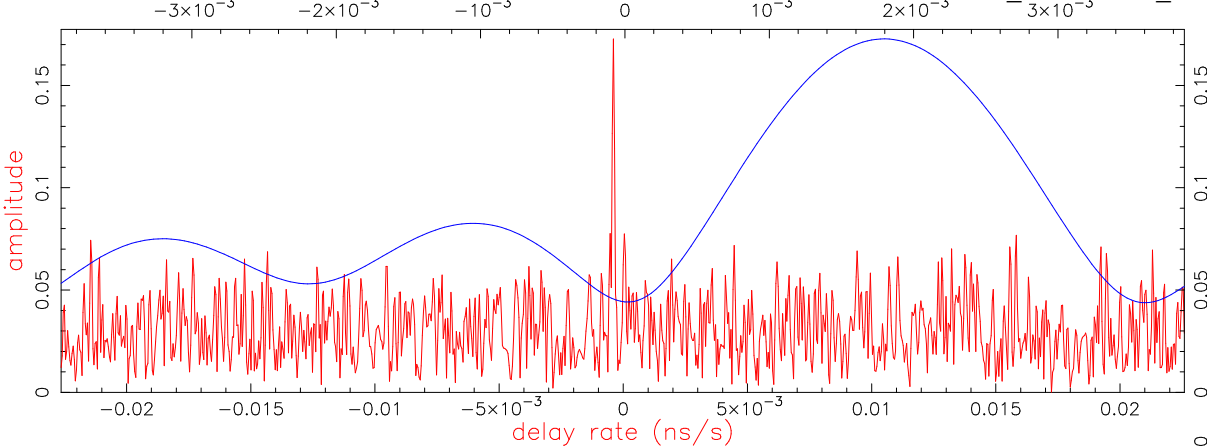
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, km

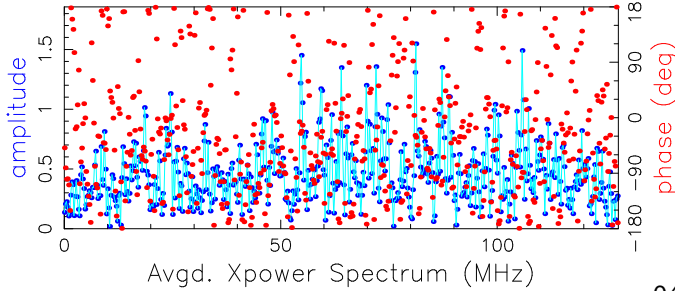
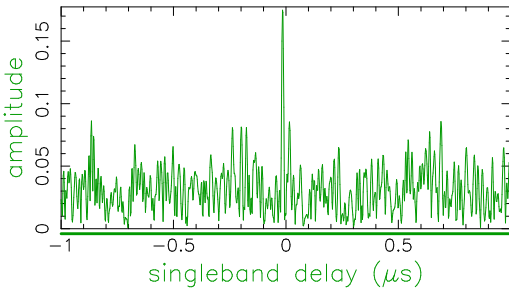
VLBA_KP - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)



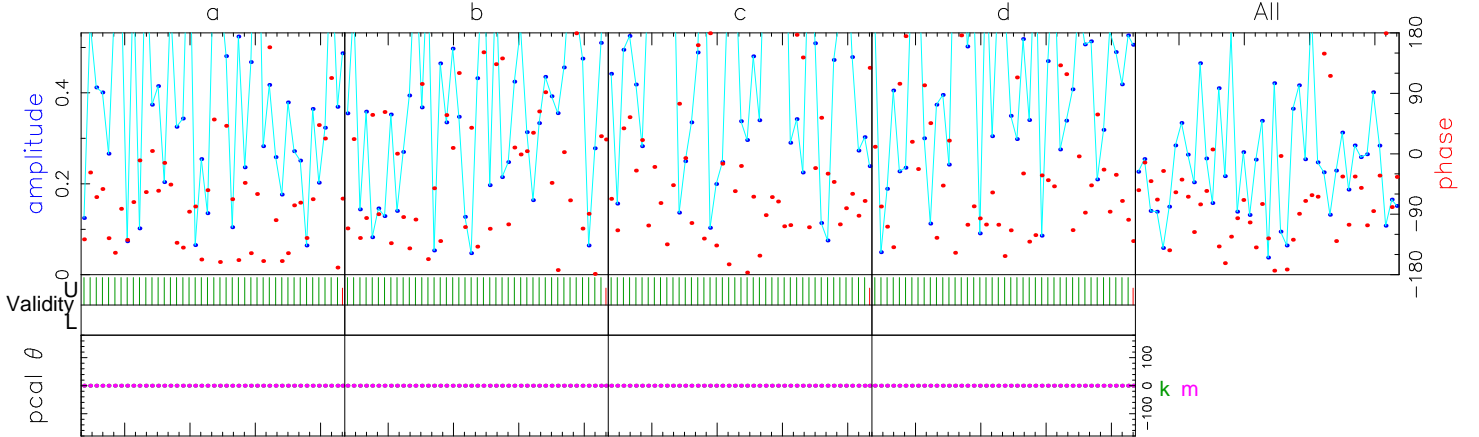
Fringe quality 9

SNR 7.5
 Int time 239.981
 Amp 0.177
 Phase -286.8
 PFD 9.2e-06
 Delays (us)
 SBD -0.014790
 MBD 0.001770
 Fringe rate (Hz)
 -0.016542
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-85.5	-98.4	-81.8	-83.8	Phase	-84.3
	0.2	0.0	0.3	0.2	Ampl.	0.2
	254.5	864.3	505.6	505.3	Sbd box	505.4
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

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

	RMS	Theor.	Amplitude	0.177 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.2	50.0	Search (1024X16)	0.169	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	80.6	87.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	10.2	15.3	Inc. seg. avg.	0.181	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	48.1	26.6	Inc. frq. avg.	0.167	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

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

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

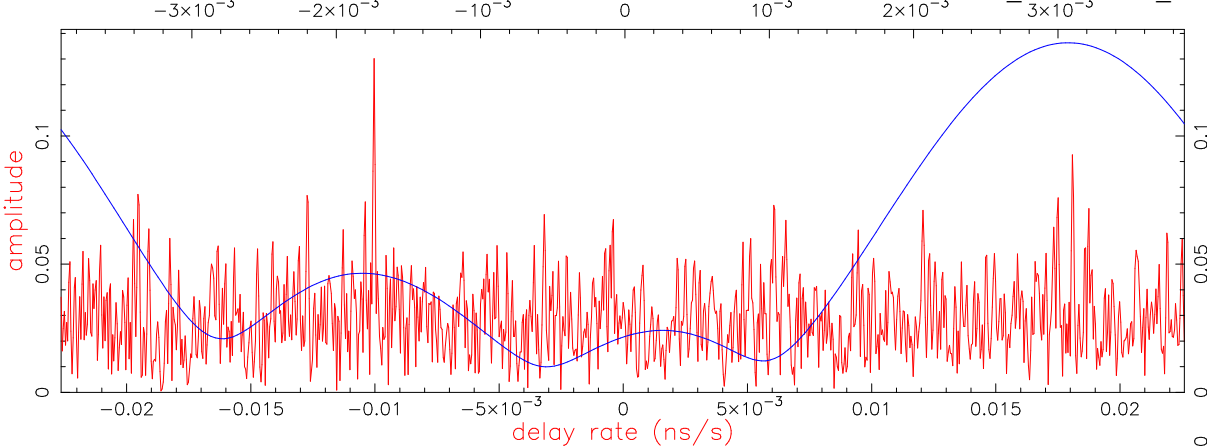
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, km

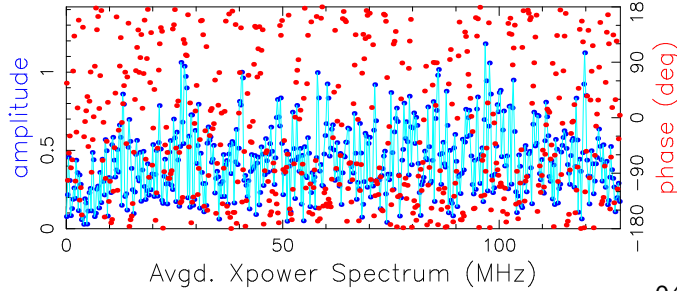
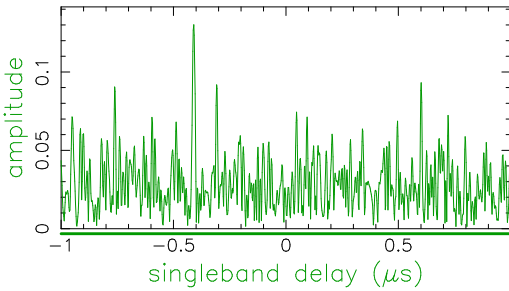
VLBA_KP - VLBA_MK, fgroup Q, pol RL

multiband delay (μ s)



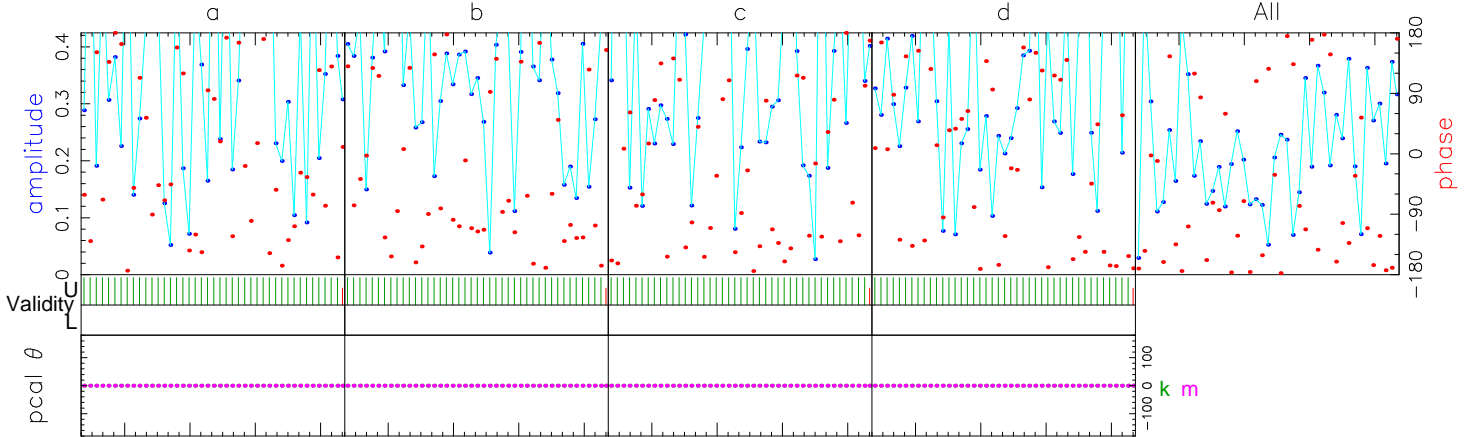
Fringe quality 0

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



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-138.4	-128.3	-152.7	179.2	Phase	-148.8
	0.1	0.2	0.1	0.1	Ampl.	0.1
	66.5	882.1	625.6	822.1	Sbd box	302.8
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

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

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

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

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

Mk4/DiFX fourfit 3.25 rev 0

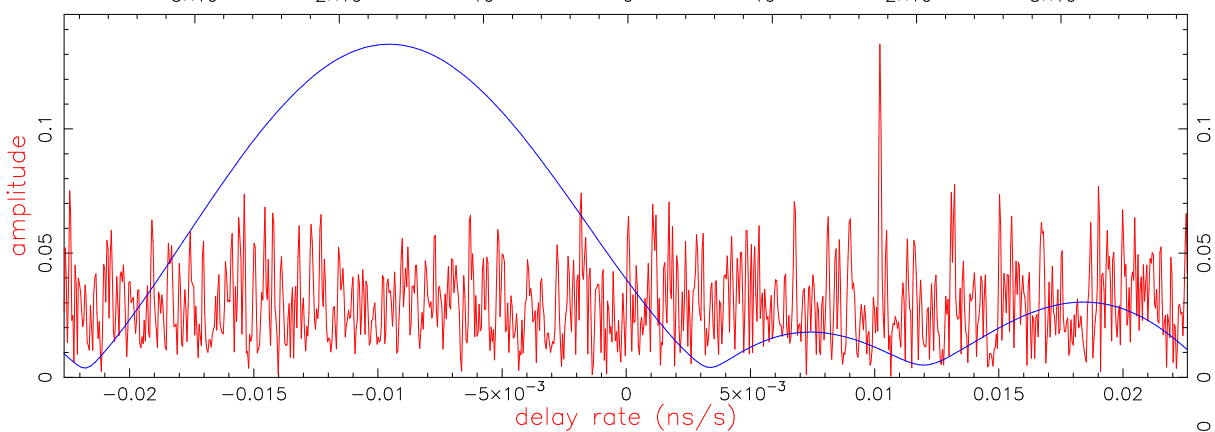
aux01

3C120.3N2DRC, No0552, kn

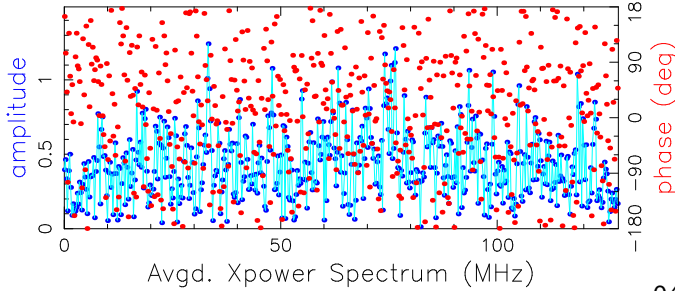
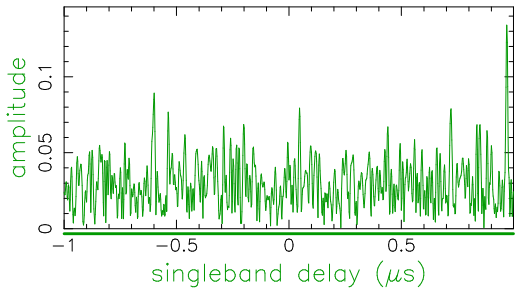
VLBA_KP - VLBA_NL, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

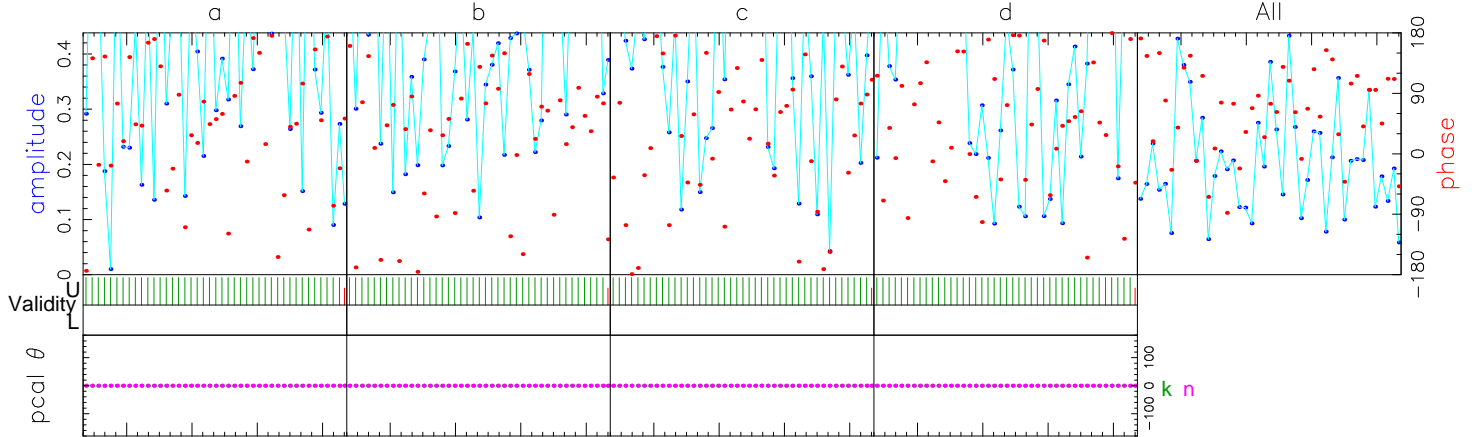


SNR 5.7
 Int time 239.970
 Amp 0.146
 Phase 34.7
 PFD 8.1e-01
 Delays (us)
 SBD 0.968746
 MBD -0.001655
 Fringe rate (Hz)
 0.442299
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

	1.66637521494E+03	Apriori delay (usec)	1.66540812039E+03	Resid mbdelay (usec)	-1.65545E-03	+/- 2.0E-04
Group delay (usec) (SBD)	1.66637521494E+03	Apriori clock (usec)	4.2658615E-01	Resid sbdelay (usec)	9.68746E-01	+/- 7.6E-04
Sband delay (usec)	1.66637686689E+03	Apriori clockrate (us/s)	-1.4505389E-07	Resid phdelay (usec)	5.13280E-06	+/- 1.3E-06
Phase delay (usec)	1.66540812553E+03	Apriori rate (us/s)	4.34029137776E-01	Resid rate (us/s)	1.02526E-05	+/- 9.4E-09
Delay rate (us/s)	4.34039390412E-01	Apriori accel (us/s/s)	-1.03060301883E-05	Resid phase (deg)	34.7	+/- 20.2
Total phase (deg)	147.7					

	RMS	Theor.	Amplitude	0.146 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	64.6	66.1	Search (1024X16)	0.131	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	90.9	115.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	4.7	20.2	Inc. seg. avg.	0.137	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us		ion window (TEC)	0.00	0.00
amp/frq (%)	15.4	35.2	Inc. frq. avg.	0.138	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite			

k: az 153.1 el 60.9 pa -22.3 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -1254.879 -643.332 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kn.Q.112.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

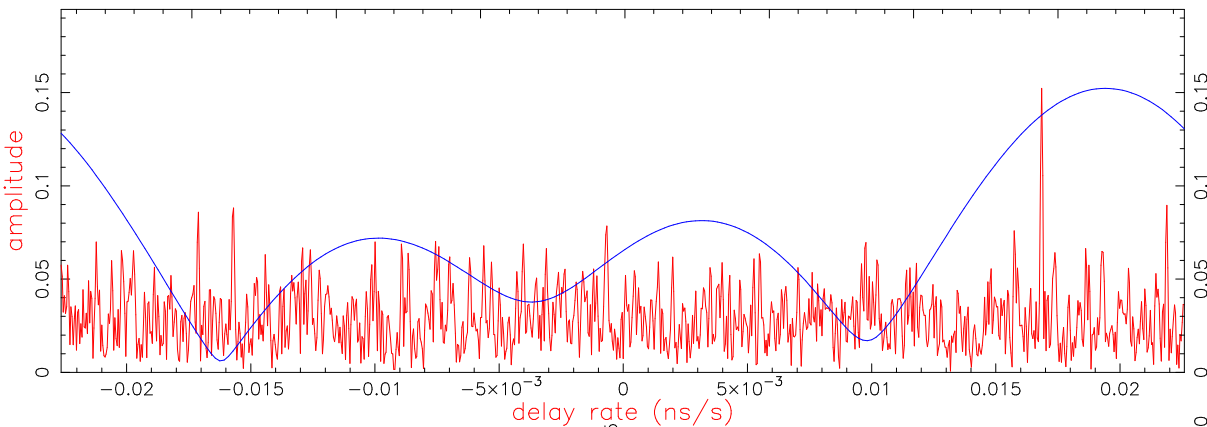
aux01

3C120.3N2DRC, No0552, kn

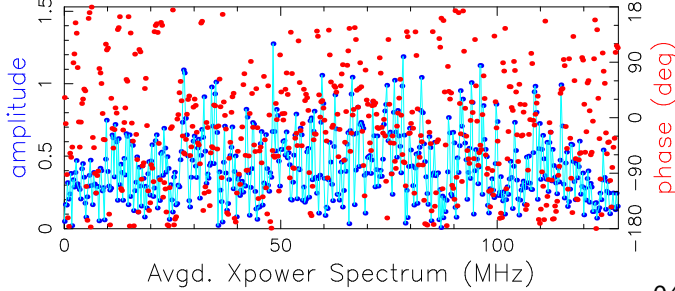
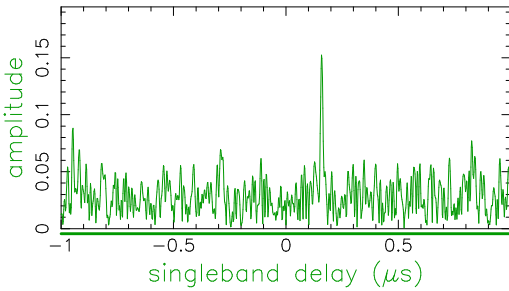
VLBA_KP - VLBA_NL, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 0

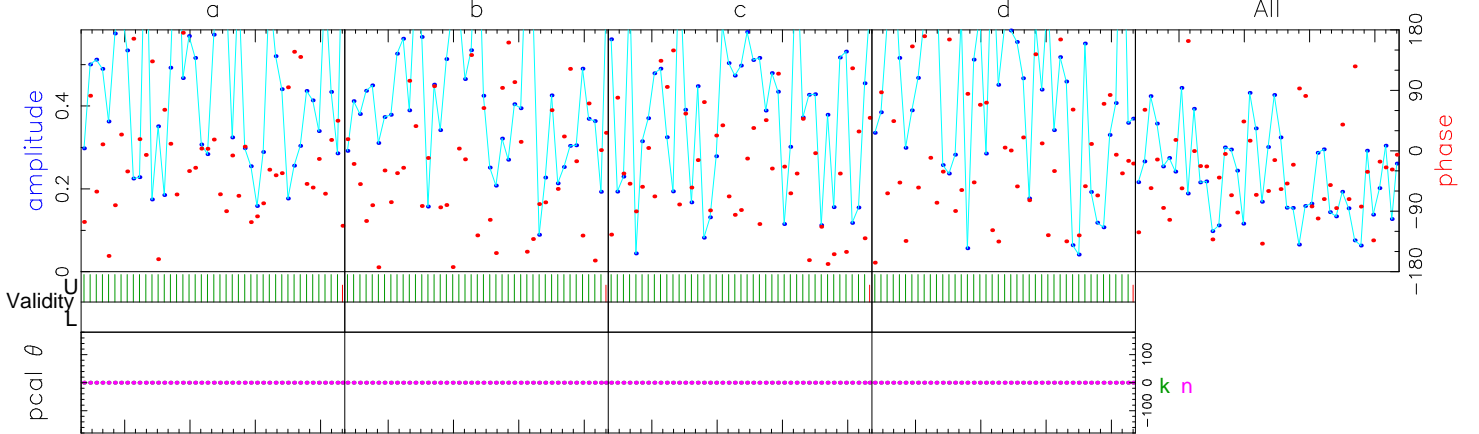


SNR 6.5
 Int time 239.970
 Amp 0.195
 Phase 183.2
 PFD 1.3e-02
 Delays (us)
 SBD 0.158776
 MBD 0.003354
 Fringe rate (Hz)
 0.729885
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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
	-37.3	-57.3	-40.7	-42.2	Phase	-41.8
	0.3	0.1	0.2	0.2	Ampl.	0.2
	594.3	869.0	242.1	594.5	Sbd box	594.3
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	PC phase	
k:n	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec) (SBD)	1.66556772409E+03	Apriori delay (usec)	1.66540812039E+03	Resid mbdelay (usec)	3.35369E-03	+/-	1.7E-04
Sband delay (usec)	1.66556689627E+03	Apriori clock (usec)	4.2658615E-01	Resid sbdelay (usec)	1.58776E-01	+/-	6.6E-04
Phase delay (usec)	1.66540811770E+03	Apriori clockrate (us/s)	-1.4505389E-07	Resid phdelay (usec)	-2.69360E-06	+/-	1.1E-06
Delay rate (us/s)	4.34046056755E-01	Apriori rate (us/s)	4.34029137776E-01	Resid rate (us/s)	1.69190E-05	+/-	8.2E-09
Total phase (deg)	296.1	Apriori accel (us/s/s)	-1.03060301883E-05	Resid phase (deg)	183.2	+/-	17.7

ph/seg (deg)	RMS 64.5	Theor. 58.0	Amplitude Search (1024X16)	0.195 +/- 0.030	0.143	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	85.5	101.2	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)	11.4	17.7	Inc. seg. avg.	0.196	0.186	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	38.9	30.9	Inc. frq. avg.	0.186	0.186	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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -1254.879 -643.332 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kn.Q.52.3N2DRC

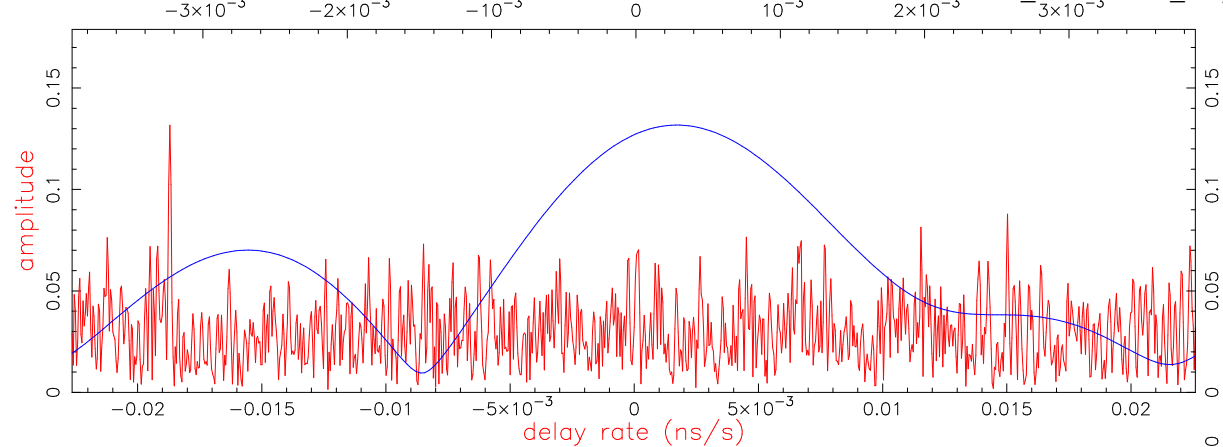
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kn

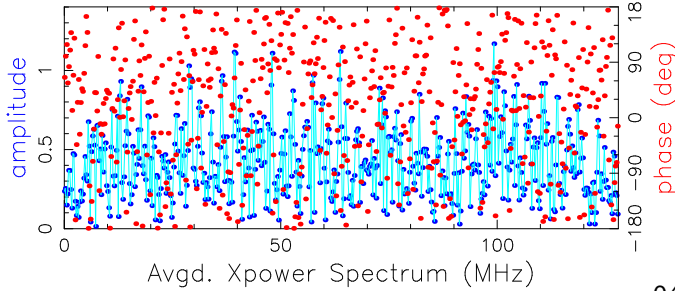
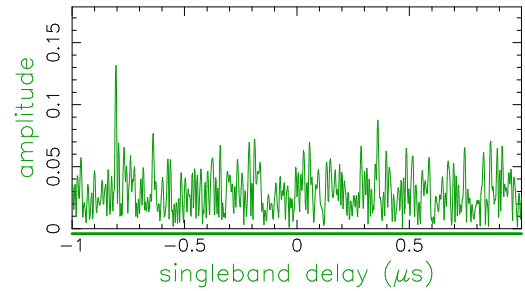
VLBA_KP - VLBA_NL, fgroup Q, pol RR

multiband delay (μ s)



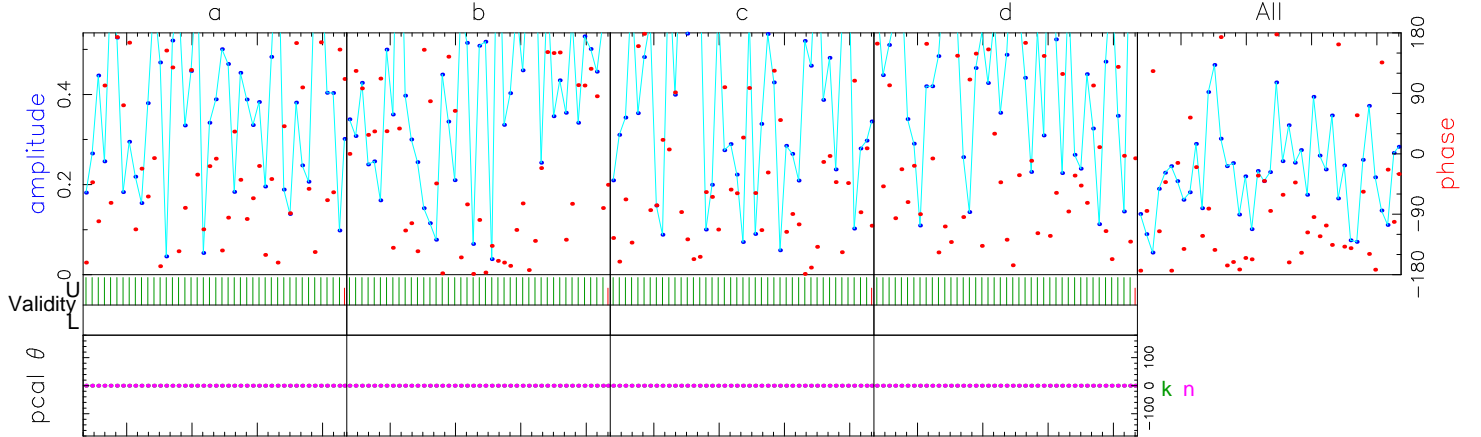
Fringe quality 0

SNR 5.6
 Int time 239.970
 Amp 0.179
 Phase -290.7
 PFD 9.2e-01
 Delays (us)
 SBD -0.805145
 MBD 0.000244
 Fringe rate (Hz)
 -0.810257
 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
-105.1	-163.9	-110.4	-117.9	Phase	-121.9
0.2	0.2	0.2	0.2	Ampl.	0.2
707.2	769.9	815.1	101.6	Sbd box	100.8
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
k:n 0:0	0:0	0:0	0:0	PC phase	
k:n 0:0	0:0	0:0	0:0	ManI PC	
k 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
k Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
n Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec) (SBD)	1.66460367640E+03	Apriori delay (usec)	1.66540812039E+03	Resid mbdelay (usec)	2.43510E-04	+/-	2.0E-04
Sband delay (usec)	1.66460297502E+03	Apriori clock (usec)	4.2658615E-01	Resid sbdelay (usec)	-8.05145E-01	+/-	7.7E-04
Phase delay (usec)	1.66540811254E+03	Apriori clockrate (us/s)	-1.4505389E-07	Resid phdelay (usec)	-7.85020E-06	+/-	1.3E-06
Delay rate (us/s)	4.34010355749E-01	Apriori rate (us/s)	4.34029137776E-01	Resid rate (us/s)	-1.87820E-05	+/-	9.5E-09
Total phase (deg)	-177.7	Apriori accel (us/s/s)	-1.03060301883E-05	Resid phase (deg)	-290.7	+/-	20.4

ph/seg (deg)	RMS 68.3	Theor. 67.0	Amplitude Search (1024X16)	0.179 +/- 0.032	0.129	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	103.2	116.9	Interp.	0.000	0.184	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	33.1	20.4	Inc. seg. avg.	0.184	0.179	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBps	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	19.8	35.7	Inc. frq. avg.	0.179		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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -1254.879 -643.332 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kn.Q.58.3N2DRC

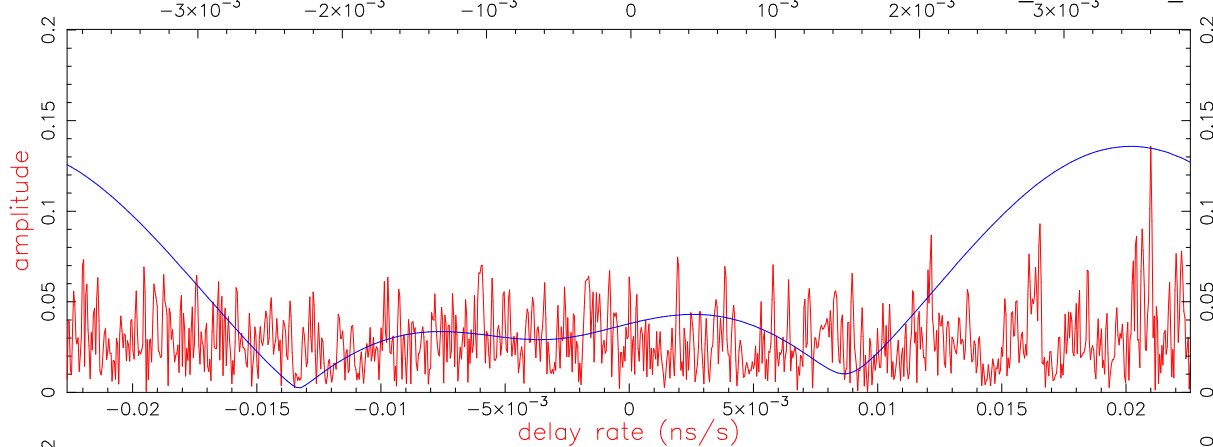
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kn

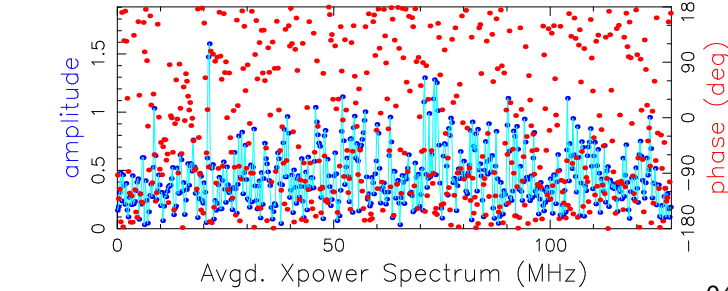
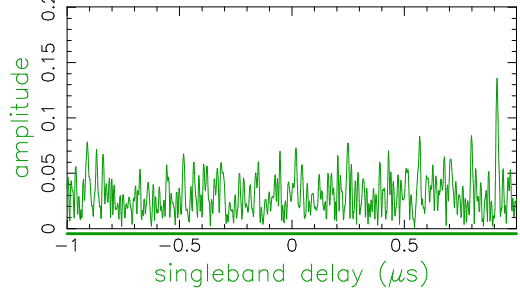
VLBA_KP - VLBA_NL, fgroup Q, pol LR

multiband delay (μ s)



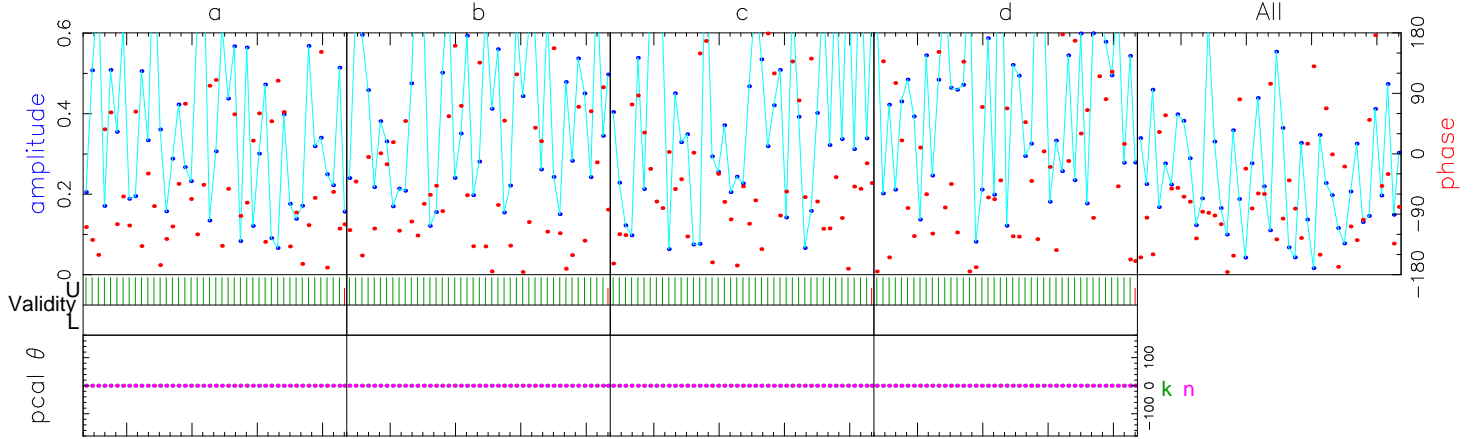
Fringe quality 0

SNR 5.8
Int time 239.970
Amp 0.200
Phase 130.7
PFD 6.5e-01
Delays (us)
SBD 0.911818
MBD 0.003448
Fringe rate (Hz)
0.910900
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
U/L	469/0	469/0	469/0	469/0		
k	1000	1000	1000	1000		
n	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000		
n	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL		
n	Q00UR	Q01UR	Q02UR	Q03UR		

	1.66631781885E+03	Apriori delay (usec)	1.66540812039E+03	Resid mbdelay (usec)	3.44846E-03	+/- 1.9E-04
Group delay (usec) (SBD)	1.66631993852E+03	Apriori clock (usec)	4.2658615E-01	Resid sbdelay (usec)	9.11818E-01	+/- 7.5E-04
Sband delay (usec)	1.66540811432E+03	Apriori clockrate (us/s)	-1.4505389E-07	Resid phdelay (usec)	-6.07316E-06	+/- 1.3E-06
Phase delay (usec)	4.34050252756E-01	Apriori rate (us/s)	4.34029137776E-01	Resid rate (us/s)	2.11150E-05	+/- 9.2E-09
Delay rate (us/s)		Apriori accel (us/s/s)	-1.03060301883E-05	Resid phase (deg)	130.7	+/- 19.9
Total phase (deg)	243.6					

	RMS	Theor.	Amplitude	0.200 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	76.5	65.2	Search (1024X16)	0.126	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	133.5	113.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	4.1	19.9	Inc. seg. avg.	0.223	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	23.5	34.7	Inc. frq. avg.	0.189	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 n: az 192.0 el 53.1 pa 9.3 u,v (fr/asec) -1254.879 -643.332 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/kn..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/kn.Q.86.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

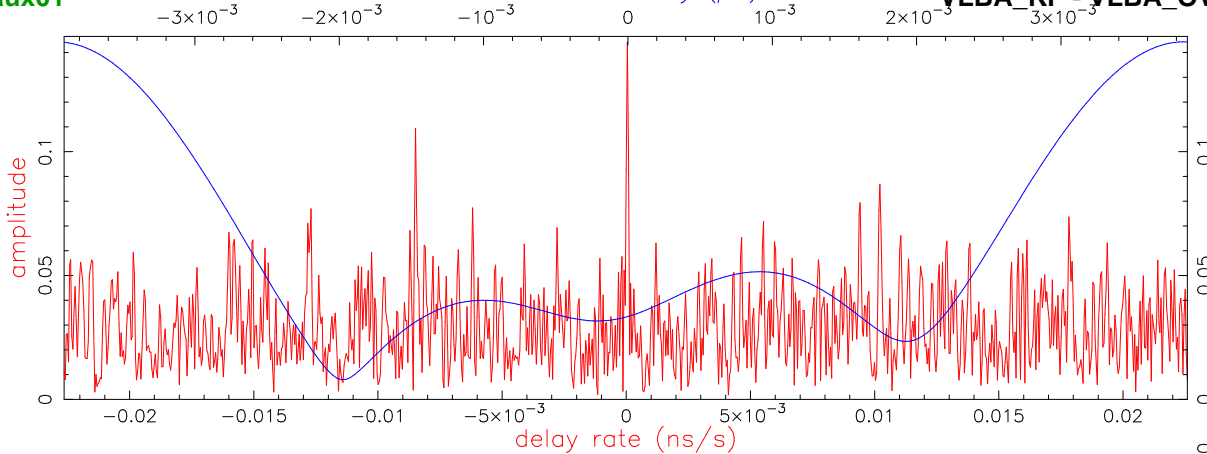
aux01

3C120.3N2DRC, No0552, ko

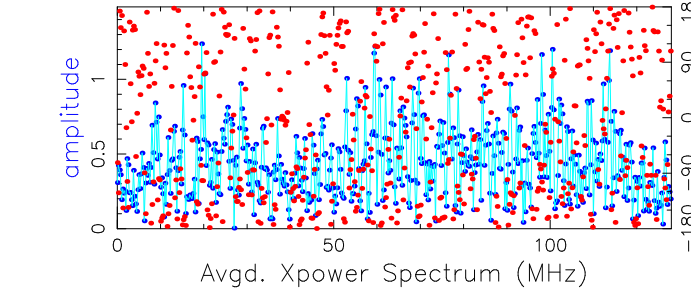
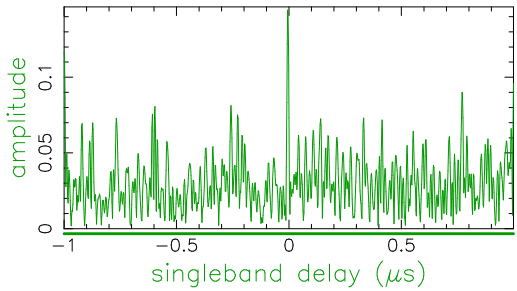
VLBA_KP - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

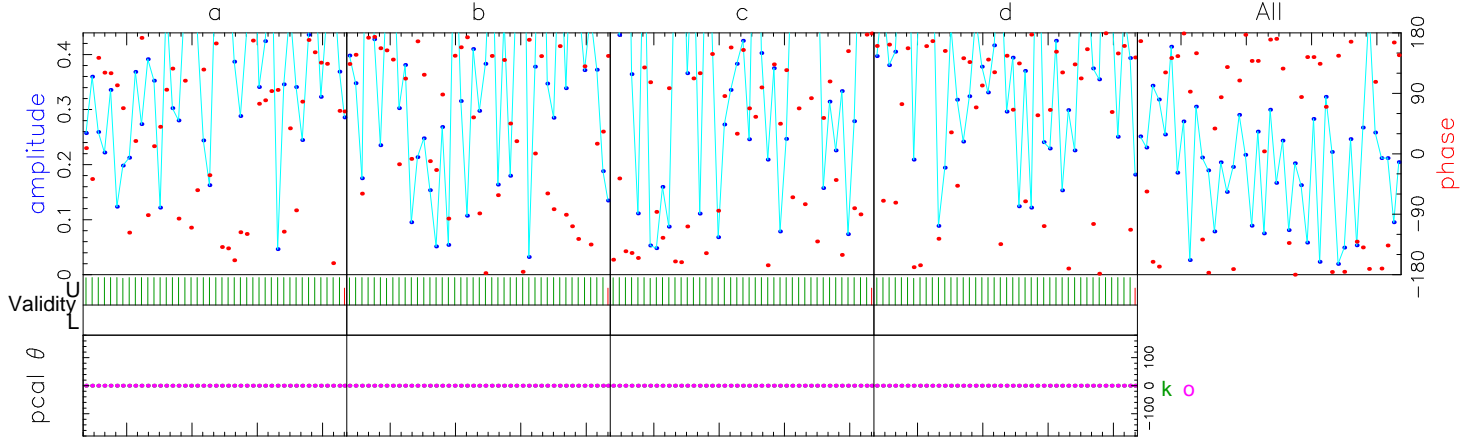


SNR 6.2
Int time 239.795
Amp 0.146
Phase 161.6
PFD 7.1e-02
Delays (us)
SBD -0.005040
MBD -0.003931
Fringe rate (Hz) 0.001524
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
156.8	161.7	-179.8	151.0	Phase	161.6
0.1	0.2	0.1	0.2	Ampl.	0.1
623.8	510.6	684.3	509.8	Sbd box	510.4
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
k:o 0:0	0:0	0:0	0:0	PC phase	
k:o 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
k Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

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

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

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

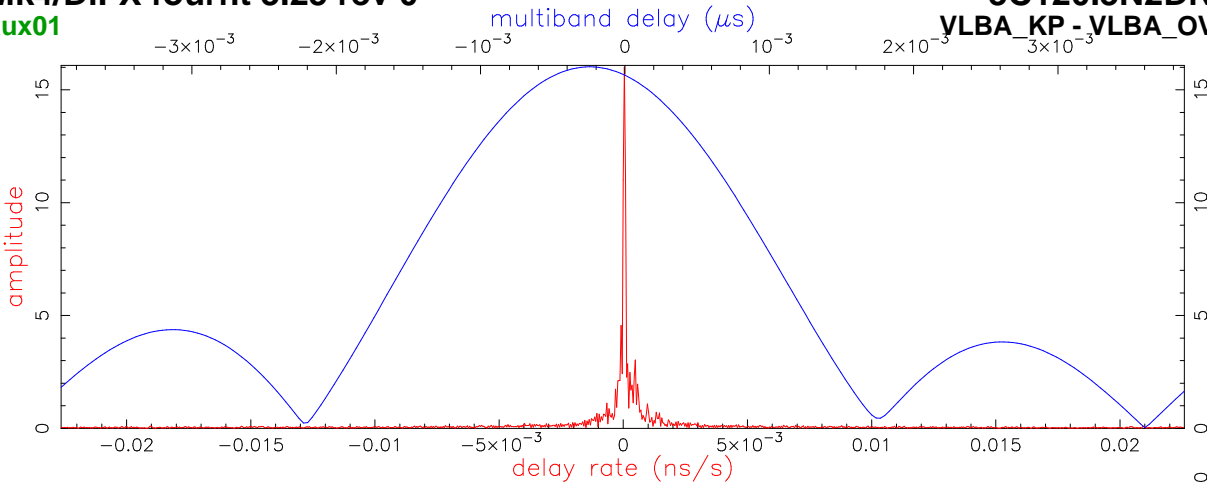
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.116.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

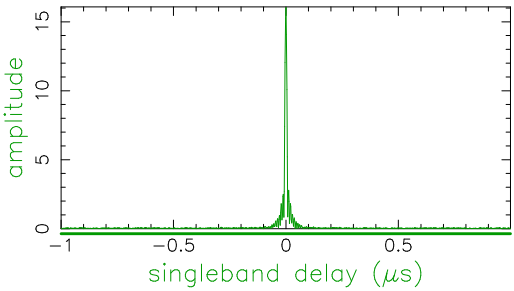
3C120.3N2DRC, No0552, ko

VLBA_KP - VLBA_OV, fgroup Q, pol LL

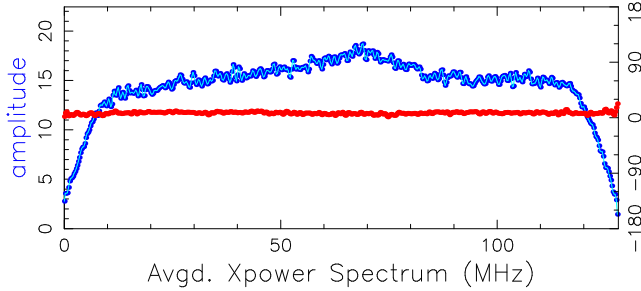


Fringe quality 8

SNR 681.1
 Int time 239.795
 Amp 16.084
 Phase 3.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.000430
 MBD -0.000268
 Fringe rate (Hz)
 0.002498
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



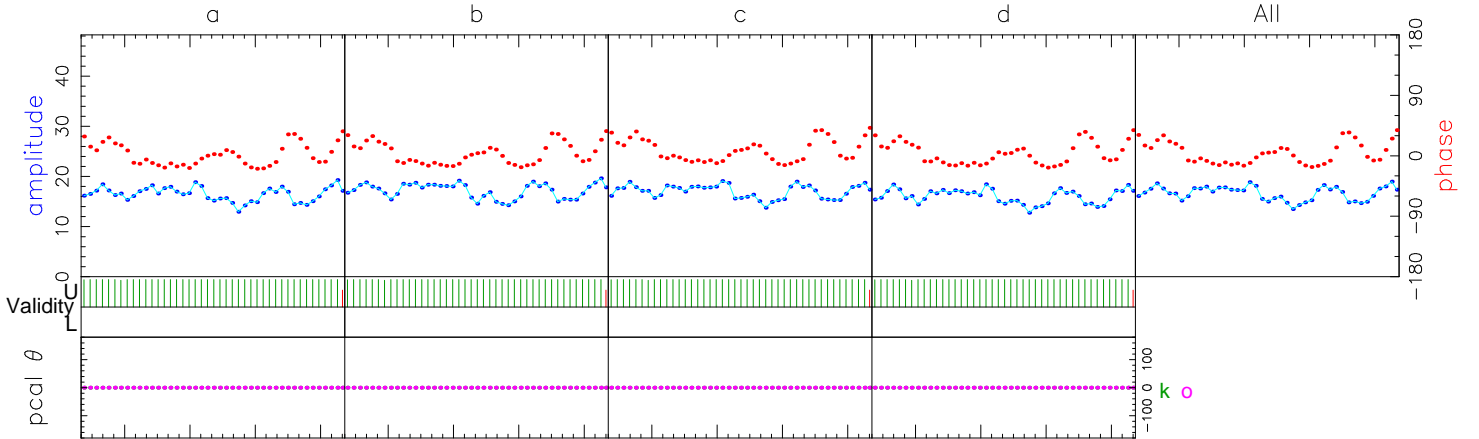
singleband delay (μs)



Avgd. Xpower Spectrum (MHz)

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

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



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

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

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

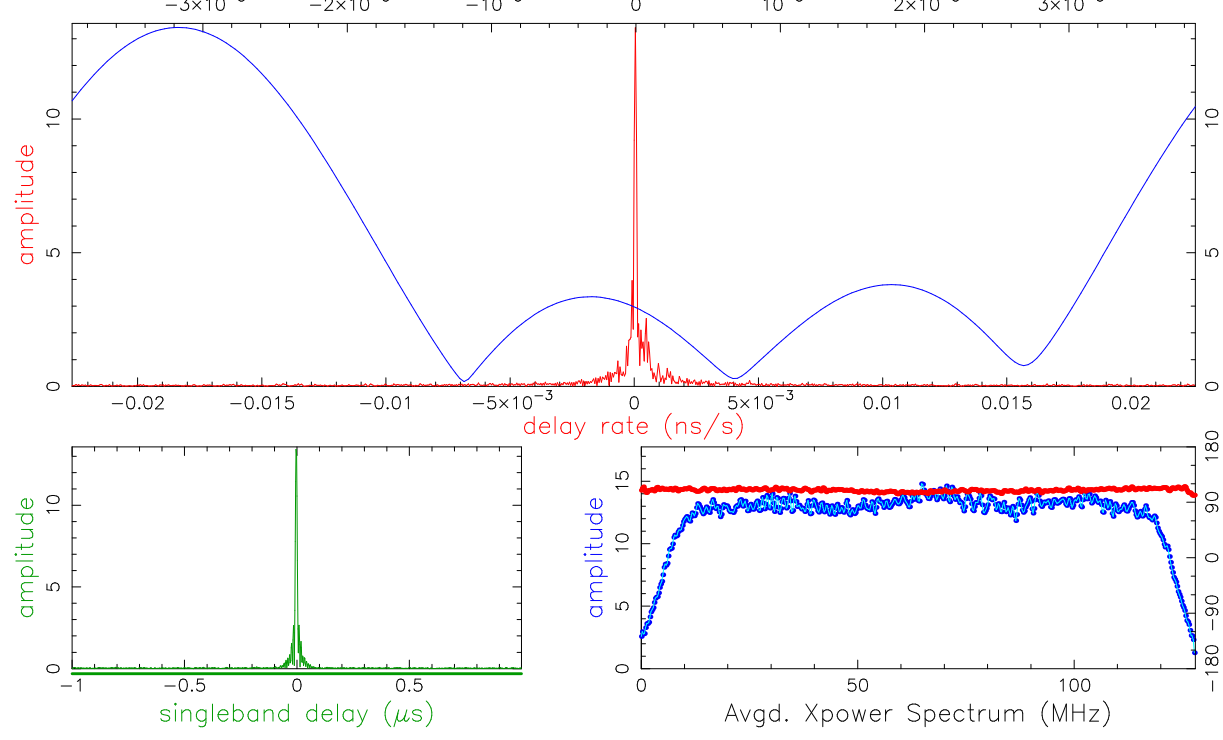
k: az 153.1 el 60.9 pa -22.3 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 345.600 -365.680 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.45.3N2DRC

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, ko

VLBA_KP - VLBA_OV, fgroup Q, pol RR

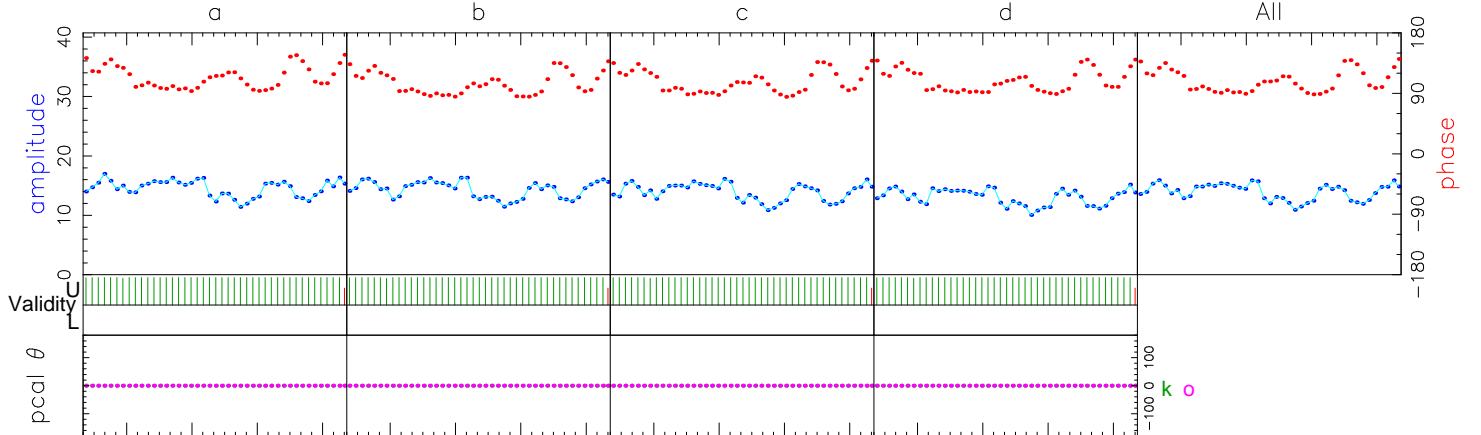


Fringe quality 8

SNR 574.9
 Int time 239.795
 Amp 13.576
 Phase 108.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.003199
 MBD -0.003138
 Fringe rate (Hz)
 0.002492
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	113.7	104.2	106.5	108.3	Phase	108.2
	14.0	13.8	13.4	12.6	Ampl.	13.4
	511.7	511.2	511.6	510.9	Sbd box	511.4
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

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

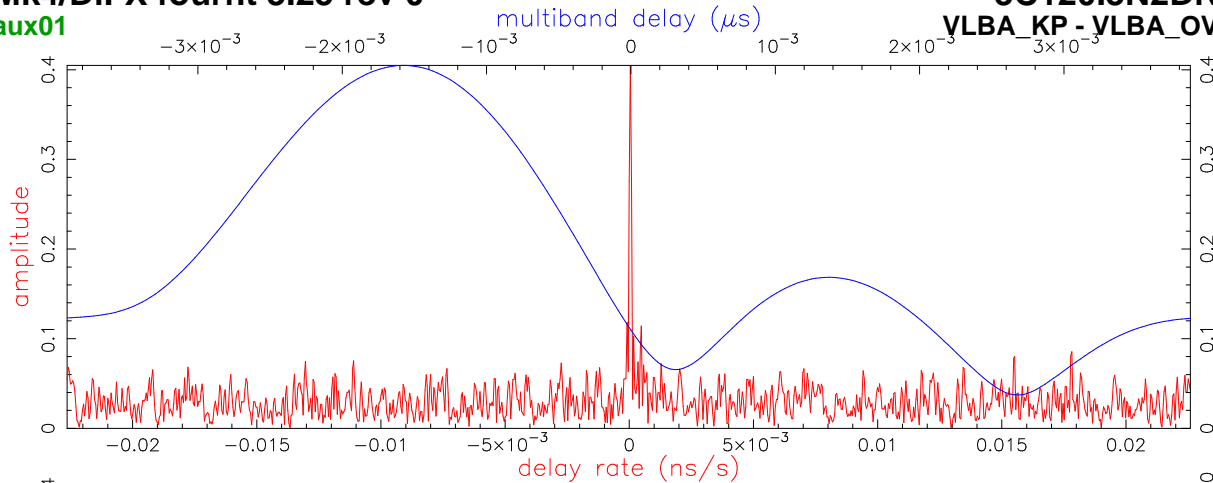
ph/seg (deg) 15.9 0.7 Search (1024X16) 12.676 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.2 1.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.9 0.2 Inc. seg. avg. 13.956 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.004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

Mk4/DiFX fourfit 3.25 rev 0

aux01

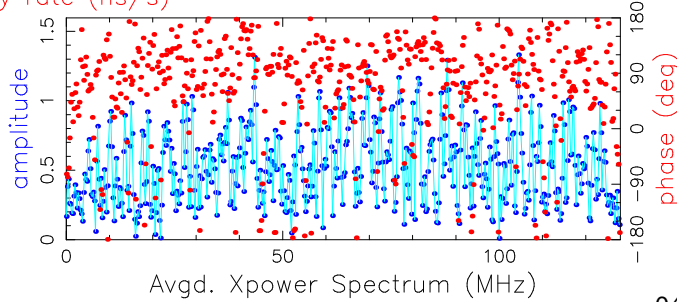
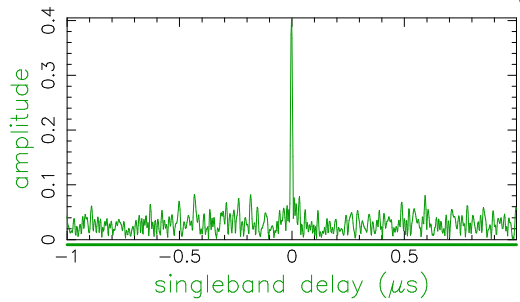
3C120.3N2DRC, No0552, ko

VLBA_KP - VLBA_OV, fgroup Q, pol LR



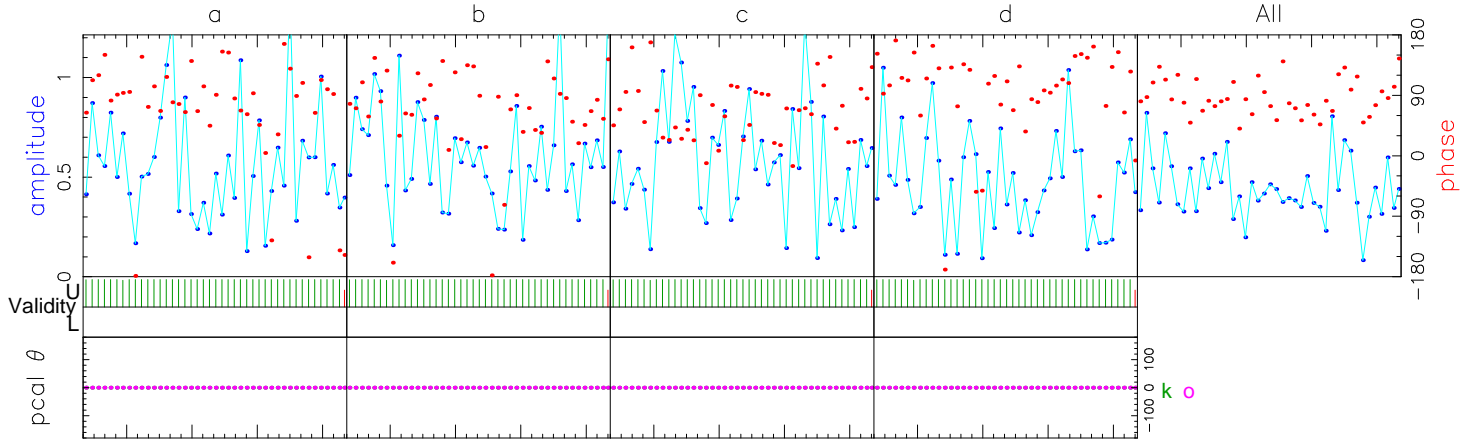
Fringe quality 8

SNR 17.1
 Int time 239.795
 Amp 0.405
 Phase 87.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.002049
 MBD -0.001580
 Fringe rate (Hz)
 0.002616
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

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

ph/seg (deg)	26.2	Theor.	21.9	Amplitude	0.405 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	39.5	Search (1024X16)	0.383	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.8	Inc. seg. avg.	0.417	Inc. frq. avg.	0.432	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004
amp/frq (%)	12.8	Inc. frq. avg.	0.432			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 o: az 146.1 el 53.5 pa -26.2 u,v (fr/asec) 345.600 -365.680 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/7mm/3001/No0552/ko..3N2DRC Output file: /Exps/c241c/v2/7mm/3001/No0552/ko.Q.96.3N2DRC

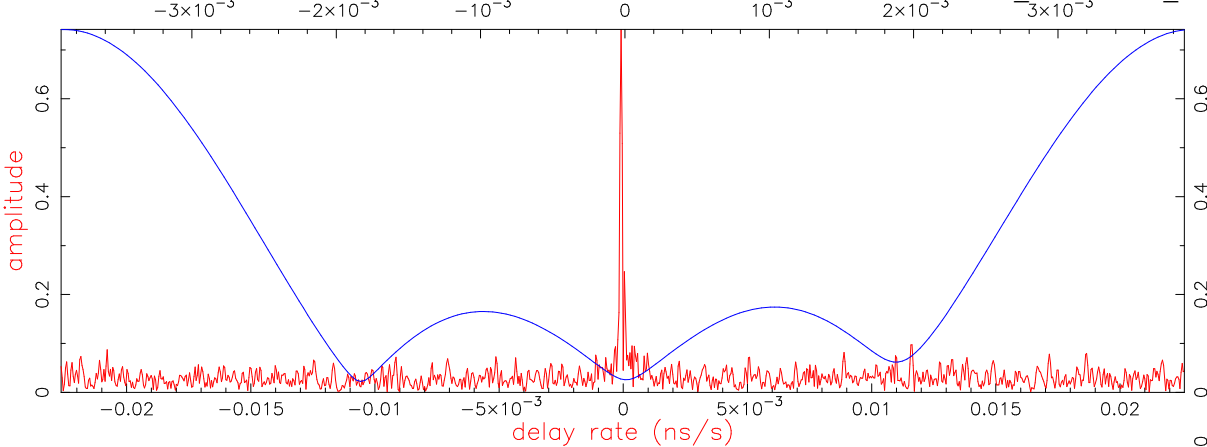
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kp

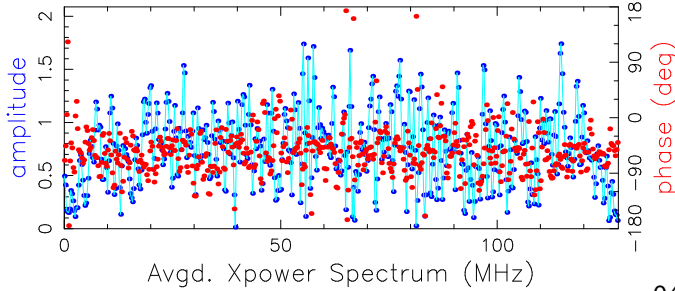
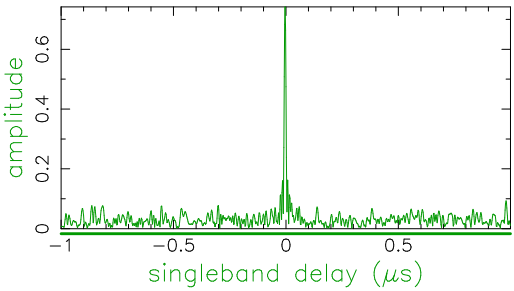
VLBA_KP - VLBA_PT, fgroup Q, pol RL

multiband delay (μ s)



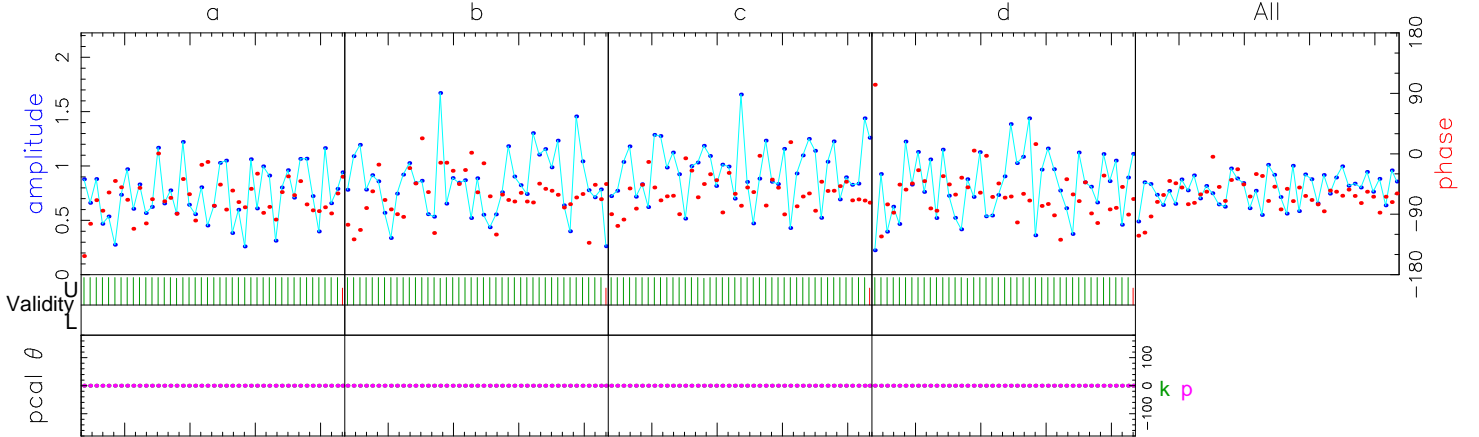
Fringe quality 9

SNR 31.4
 Int time 239.831
 Amp 0.742
 Phase -61.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.004056
 MBD -0.003892
 Fringe rate (Hz)
 -0.003357
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

	1.97000546910E+02	1.97000383504E+02	1.970004439129E+02	1.970004439129E+02	Resid mbdelay (usec)	-3.89222E-03	+/- 3.5E-05
Group delay (usec) (SBD)					Resid sbdelay (usec)	-4.05562E-03	+/- 1.4E-04
Sband delay (usec)					Resid phdelay (usec)	-3.97337E-06	+/- 2.3E-07
Phase delay (usec)					Resid rate (us/s)	-7.78262E-08	+/- 1.7E-09
Delay rate (us/s)	8.37707978725E-02				Resid phase (deg)	-61.7	+/- 3.6
Total phase (deg)	119.7						

	RMS	Theor.	Amplitude	0.742 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	21.4	12.0	Search (1024X16)	0.726	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	19.3	20.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.0	3.6	Inc. seg. avg.	0.774	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	11.4	6.4	Inc. frq. avg.	0.741	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

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

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

Mk4/DiFX fourfit 3.25 rev 0

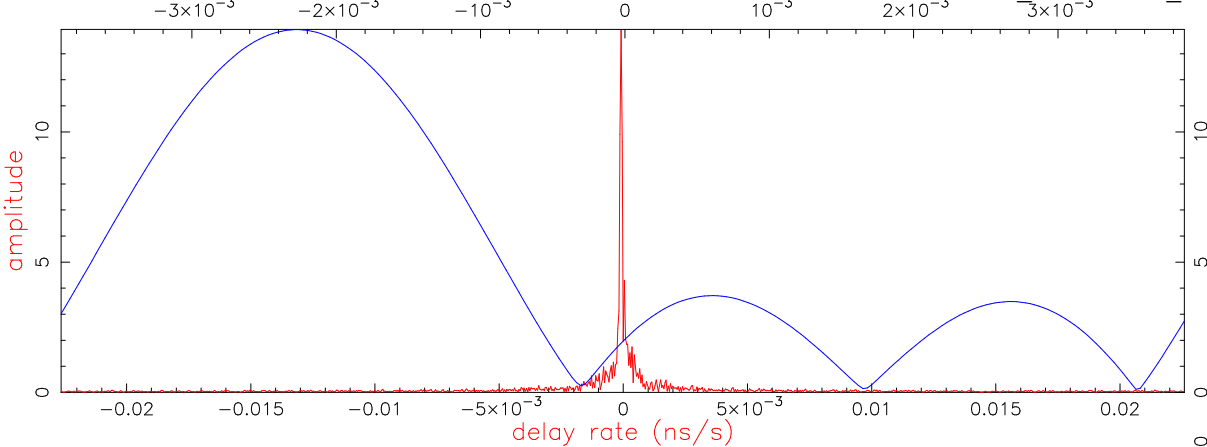
aux01

3C120.3N2DRC, No0552, kp

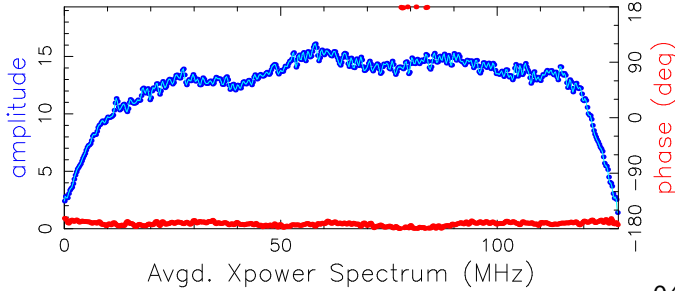
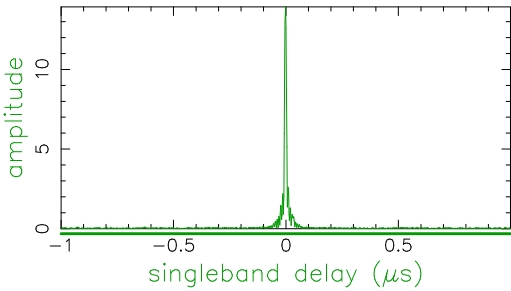
VLBA_KP - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 8

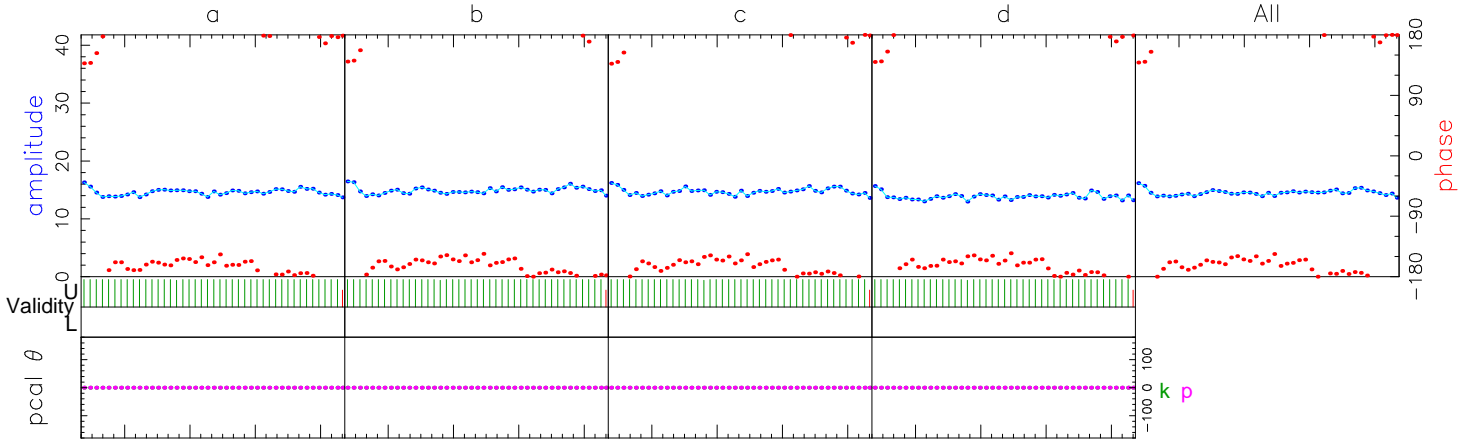


SNR 590.1
 Int time 239.831
 Amp 13.934
 Phase -169.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.002138
 MBD -0.002284
 Fringe rate (Hz)
 -0.003285
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-170.9	-168.2	-169.6	-169.0	Phase	-169.4
	14.0	14.3	14.1	13.3	Ampl.	13.9
	512.2	511.9	511.8	511.8	Sbd box	511.9
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
k:p	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

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

	RMS	Theor.	Amplitude	13.934 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	16.7	0.6	Search (1024X16)	13.379	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	5.6	1.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	1.4	0.2	Inc. seg. avg.	14.543	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	2.8	0.3	Inc. frq. avg.	13.928	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

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

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

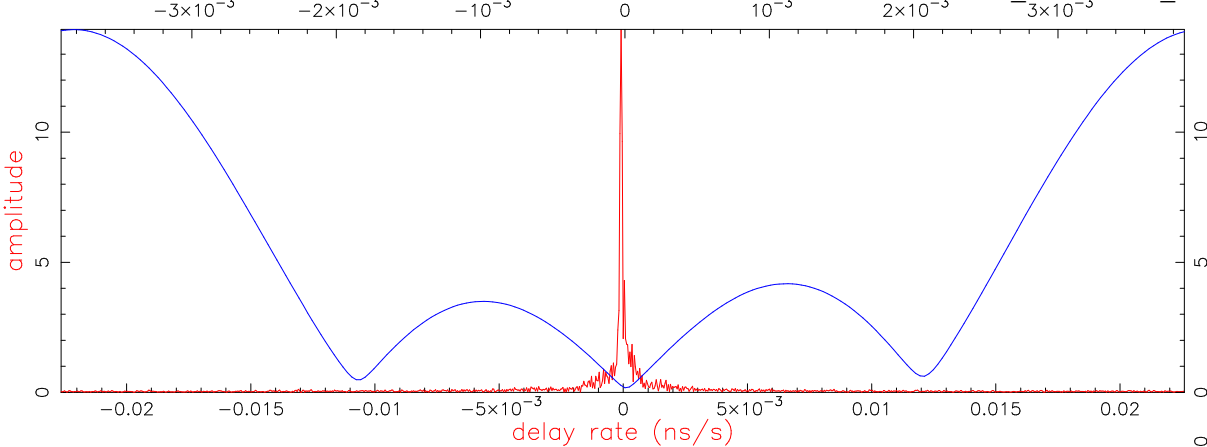
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kp

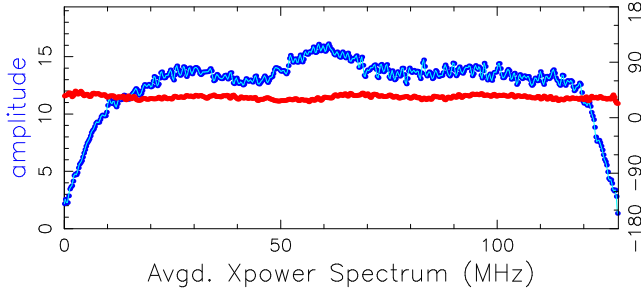
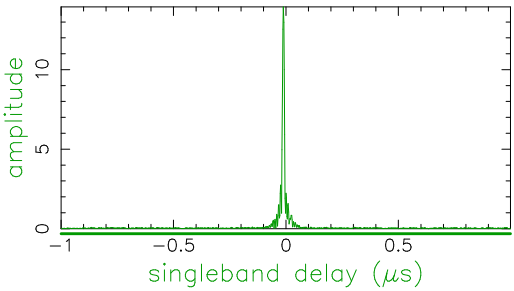
VLBA_KP - VLBA_PT, fgroup Q, pol RR

multiband delay (μ s)



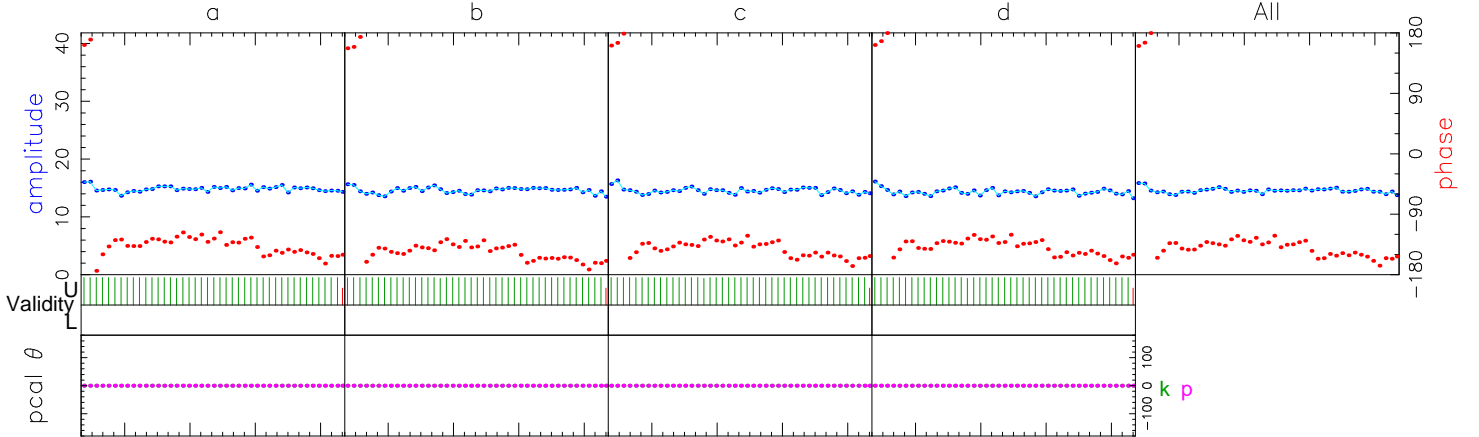
Fringe quality 8

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



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

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



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-140.0	-150.3	-145.1	-142.9	Phase	-144.6
14.2	14.0	14.0	13.7	Ampl.	14.0
507.1	507.0	507.2	507.1	Sbd box	507.1
U/L 469/0	469/0	469/0	469/0	APs used	
k 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
k:p 0:0	0:0	0:0	0:0	PC phase	
k:p 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
k Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

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

ph/seg (deg)	RMS 16.9	Theor. 0.6	Amplitude Search (1024X16)	13.953 +/- 0.024	13.503	13.503	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	5.4	1.1	Interp.	0.000	0.000	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	5.3	0.2	Inc. seg. avg.	14.577	14.577	14.577	Bits/sample: 2x2	Data rate(MSamp/s): 256 MBpts 16 Amb 0.008 us	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	1.2	0.3	Inc. frq. avg.	13.974	13.974	13.974	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

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

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

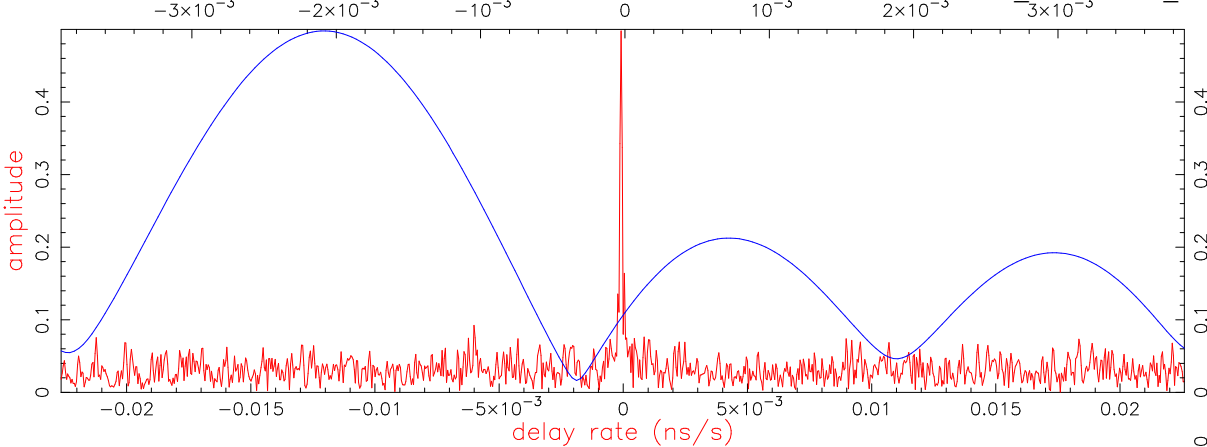
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C120.3N2DRC, No0552, kp

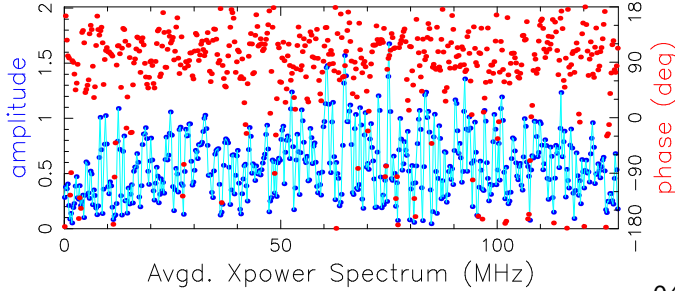
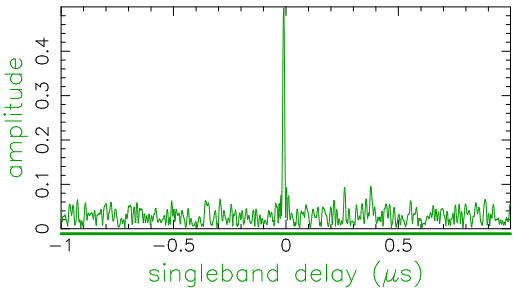
VLBA_KP - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



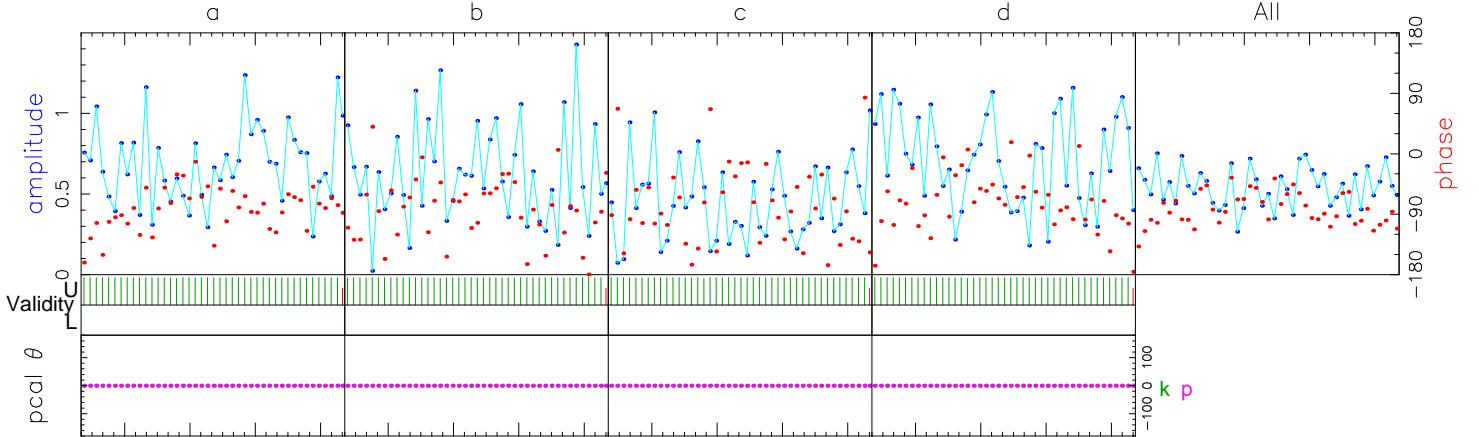
Fringe quality 8

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



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

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



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-82.1	-83.2	-93.8	-78.3	Phase	-83.1
	0.6	0.5	0.3	0.6	Ampl.	0.5
	508.1	508.0	507.1	507.8	Sbd box	507.8
U/L	469/0	469/0	469/0	469/0	APs used	
k	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
k:p	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

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

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

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

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