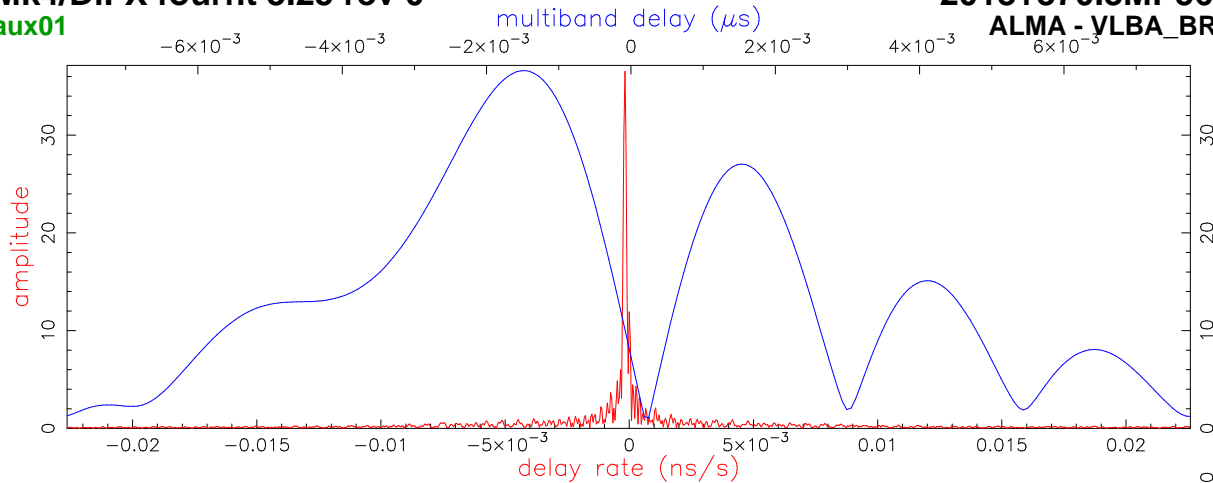


Mk4/DiFX fourfit 3.25 rev 0

aux01

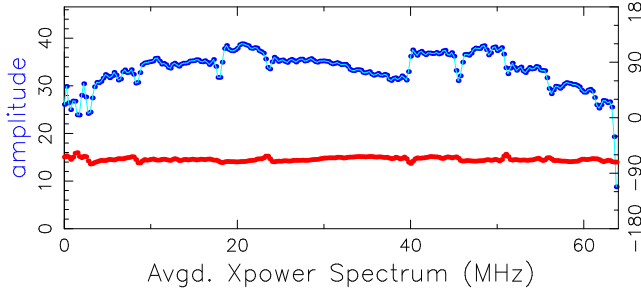
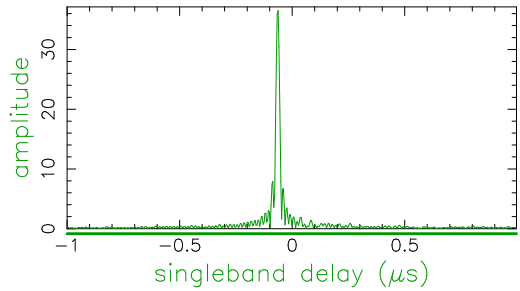
2013+370.3MP56K, No0500, Ab

ALMA - VLBA_BR, fgroup Q, pol XR



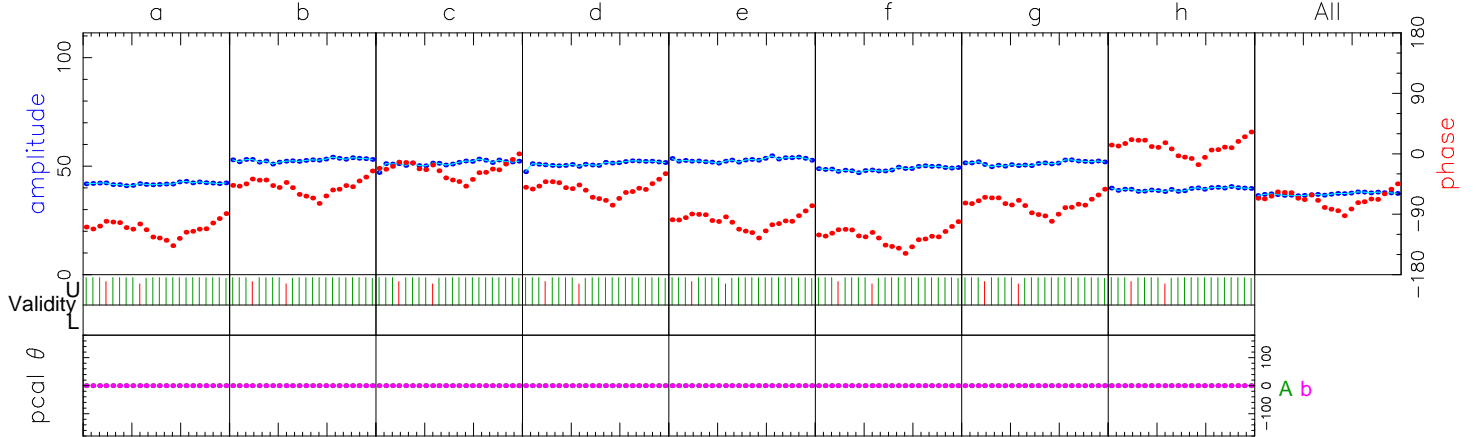
Fringe quality 6

SNR 1349.8
 Int time 176.661
 Amp 37.139
 Phase -157.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.064123
 MBD -0.001565
 Fringe rate (Hz)
 -0.008169
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151736
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-111.8	-49.1	-23.8	-52.6	-100.5	-123.6	-75.8	9.6	Phase	-67.9
	41.2	51.8	50.4	50.1	51.9	47.8	50.4	38.6	Ampl.	47.8
	242.3	240.6	240.6	240.4	240.7	240.2	240.8	242.5	Sbd box	240.6
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-5.97206297926E+03		Apriori delay (usec)		-5.97199891395E+03		Resid mbdelay (usec)		-1.56531E-03	+/- 8.0E-07
Sband delay (usec)	-5.97206303670E+03		Apriori clock (usec)		-2.1120449E+03		Resid sbdelay (usec)		-6.41228E-02	+/- 6.4E-06
Phase delay (usec)	-5.97199891833E+03		Apriori clockrate (us/s)		-5.8727285E-07		Resid phdelay (usec)		-4.37408E-06	+/- 5.5E-09
Delay rate (us/s)	-4.57972990138E-01		Apriori rate (us/s)		-4.57972800787E-01		Resid rate (us/s)		-1.89350E-07	+/- 5.3E-11
Total phase (deg)			Apriori accel (us/s/s)		-5.68697244773E-05		Resid phase (deg)		-157.9	+/- 0.1

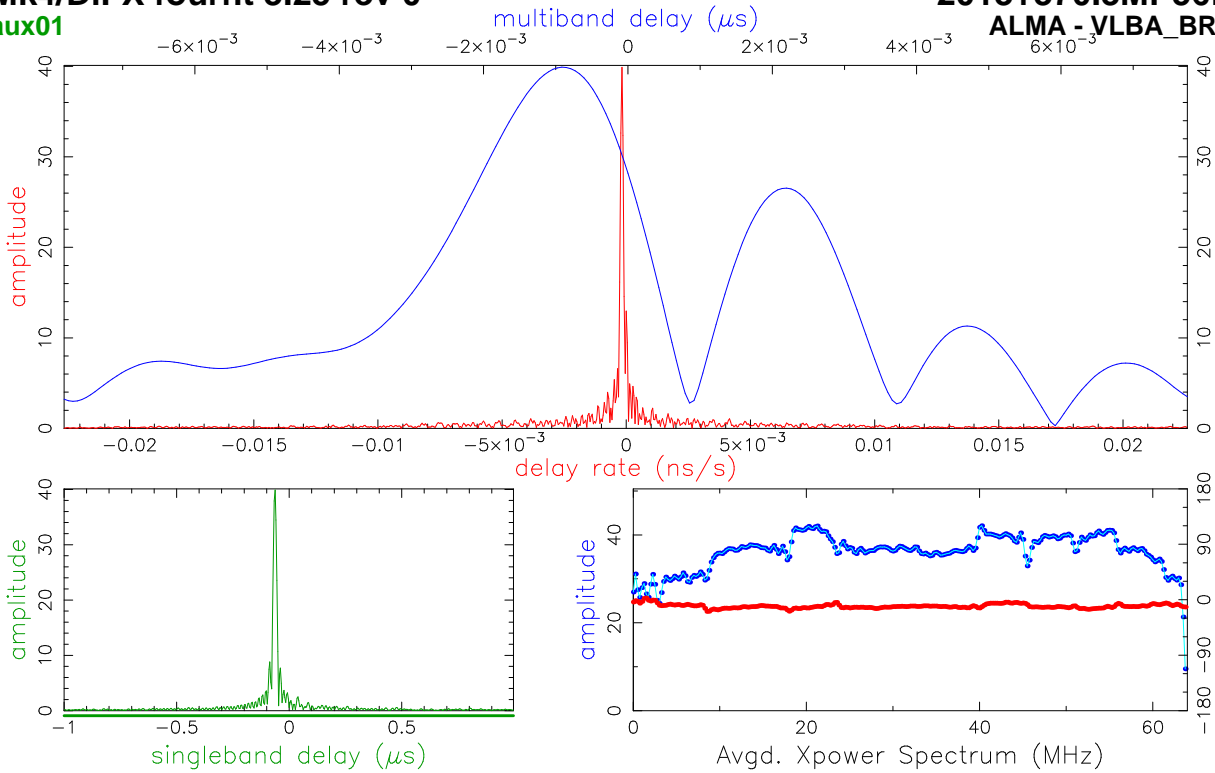
ph/seg (deg) 11.1 0.2 Amplitude 37.139 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.5 0.3 Search (1024X32) 35.967 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.5 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.4 0.2 Inc. seg. avg. 37.230 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 A: az 14.3 el 27.9 pa -163.6 b: az 76.2 el 40.6 pa -54.6 u,v (fr/asec) 1617.645 -5714.190 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Ab..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Ab.Q.12.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Ab

ALMA - VLBA_BR, fgroup Q, pol XL

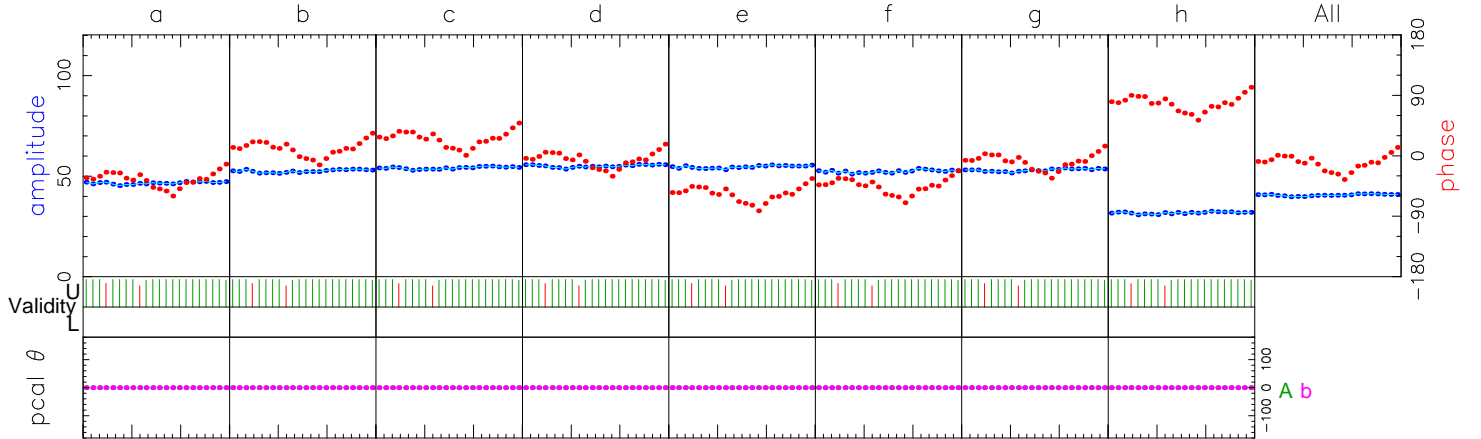


Fringe quality 6

SNR 1457.6
 Int time 176.661
 Amp 40.102
 Phase -100.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.063433
 MBD -0.000945
 Fringe rate (Hz)
 -0.008187
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151732
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-35.2	10.4	25.2	-5.8	-56.8	-44.9	-8.6	78.0	Phase	-10.6
	45.8	51.6	53.1	54.1	53.6	51.4	52.1	31.2	Ampl.	49.1
	242.3	240.3	240.7	240.7	240.9	240.9	240.9	243.2	Sbd box	240.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -5.97206235854E+03 Apriori delay (usec) -5.97199891395E+03 Resid mbdelay (usec) -9.44590E-04 +/- 7.4E-07
 Sband delay (usec) -5.97206234745E+03 Apriori clock (usec) -2.1120449E+03 Resid sbdelay (usec) -6.34335E-02 +/- 5.9E-06
 Phase delay (usec) -5.97199891463E+03 Apriori clockrate (us/s) -5.8727285E-07 Resid phdelay (usec) -6.79327E-07 +/- 5.1E-09
 Delay rate (us/s) -4.57972990568E-01 Apriori rate (us/s) -4.57972800787E-01 Resid rate (us/s) -1.89781E-07 +/- 4.9E-11
 Total phase (deg) -153.8 Apriori accel (us/s/s) -5.68697244773E-05 Resid phase (deg) -100.6 +/- 0.1

RMS Theor. Amplitude 40.102 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 11.1 0.2 Search (1024X32) 39.055 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.7 0.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 47.5 0.1 Inc. seg. avg. 40.645 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 28.7 0.2 Inc. frq. avg. 49.103 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

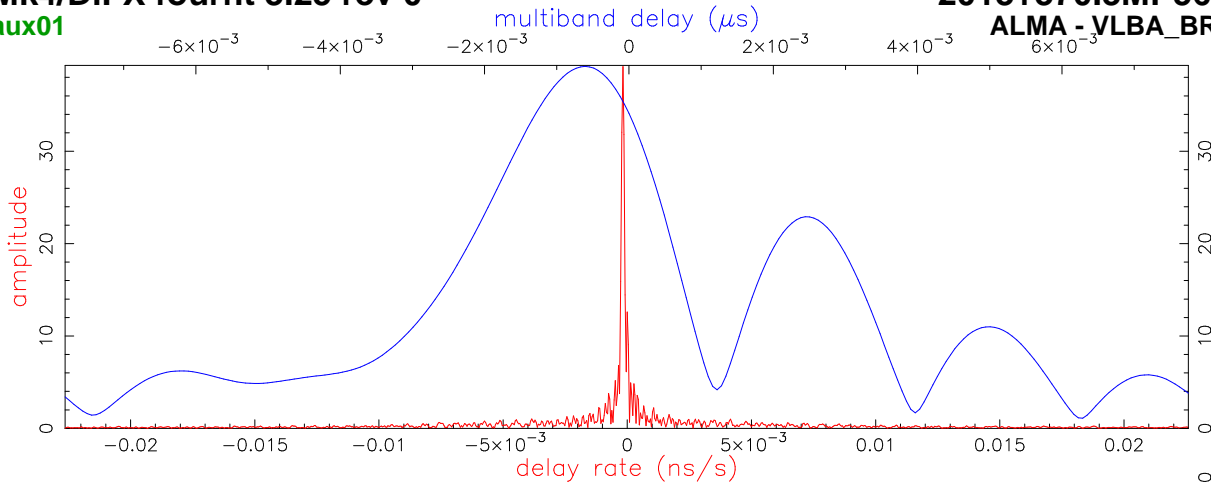
A: az 14.3 el 27.9 pa -163.6 b: az 76.2 el 40.6 pa -54.6 u,v (fr/asec) 1617.645 -5714.190 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Ab..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Ab.Q.2.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

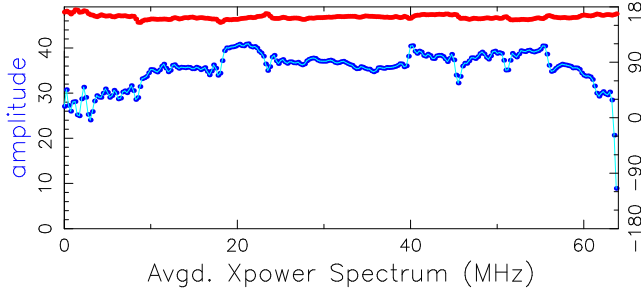
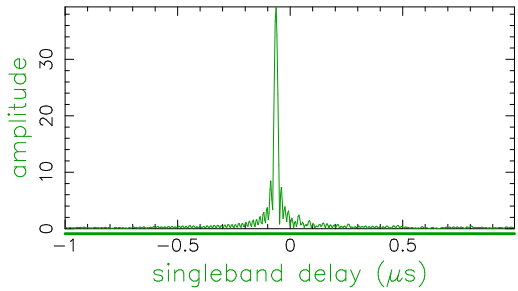
2013+370.3MP56K, No0500, Ab

ALMA - VLBA_BR, fgroup Q, pol YL



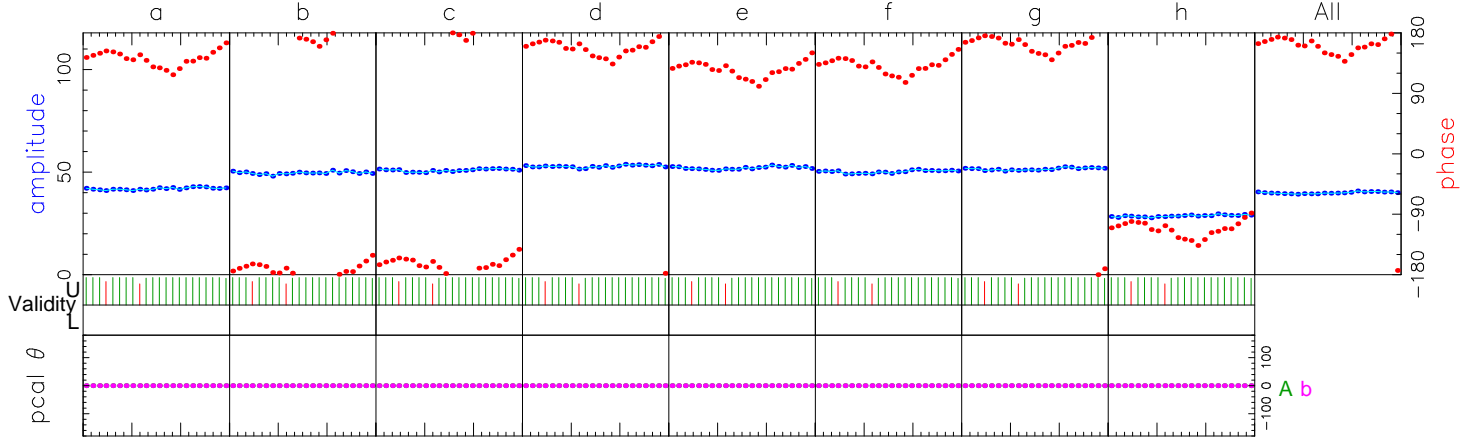
Fringe quality 6

SNR 1428.4
 Int time 176.661
 Amp 39.300
 Phase -287.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.063212
 MBD -0.000641
 Fringe rate (Hz)
 -0.008234
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151740
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
A	0	0	0	0	0	0	0	0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000	1000	1000	1000	1000		
b	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-5.97206205511E+03	Apriori delay (usec)	-5.97199891395E+03	Resid mbdelay (usec)	-6.41153E-04	+/-	7.6E-07
Sband delay (usec)	-5.97206212595E+03	Apriori clock (usec)	-2.1120449E+03	Resid sbdelay (usec)	-6.32120E-02	+/-	6.0E-06
Phase delay (usec)	-5.97199890351E+03	Apriori clockrate (us/s)	-5.8727285E-07	Resid phdelay (usec)	1.04471E-05	+/-	5.2E-09
Delay rate (us/s)	-4.57972991652E-01	Apriori rate (us/s)	-4.57972800787E-01	Resid rate (us/s)	-1.90864E-07	+/-	5.0E-11
Total phase (deg)	-341.0	Apriori accel (us/s/s)	-5.68697244773E-05	Resid phase (deg)	-287.8	+/-	0.1

ph/seg (deg)	11.4	RMS	Theor.	Amplitude	39.300 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	2.0	11.4	0.2	Search (1024X32)	38.200	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.0	2.0	0.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.2	44.0	0.1	Inc. seg. avg.	39.961	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		26.2	0.2	Inc. frq. avg.	46.315	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 14.3 el 27.9 pa -163.6 b: az 76.2 el 40.6 pa -54.6 u,v (fr/asec) 1617.645 -5714.190 simultaneous interpolator

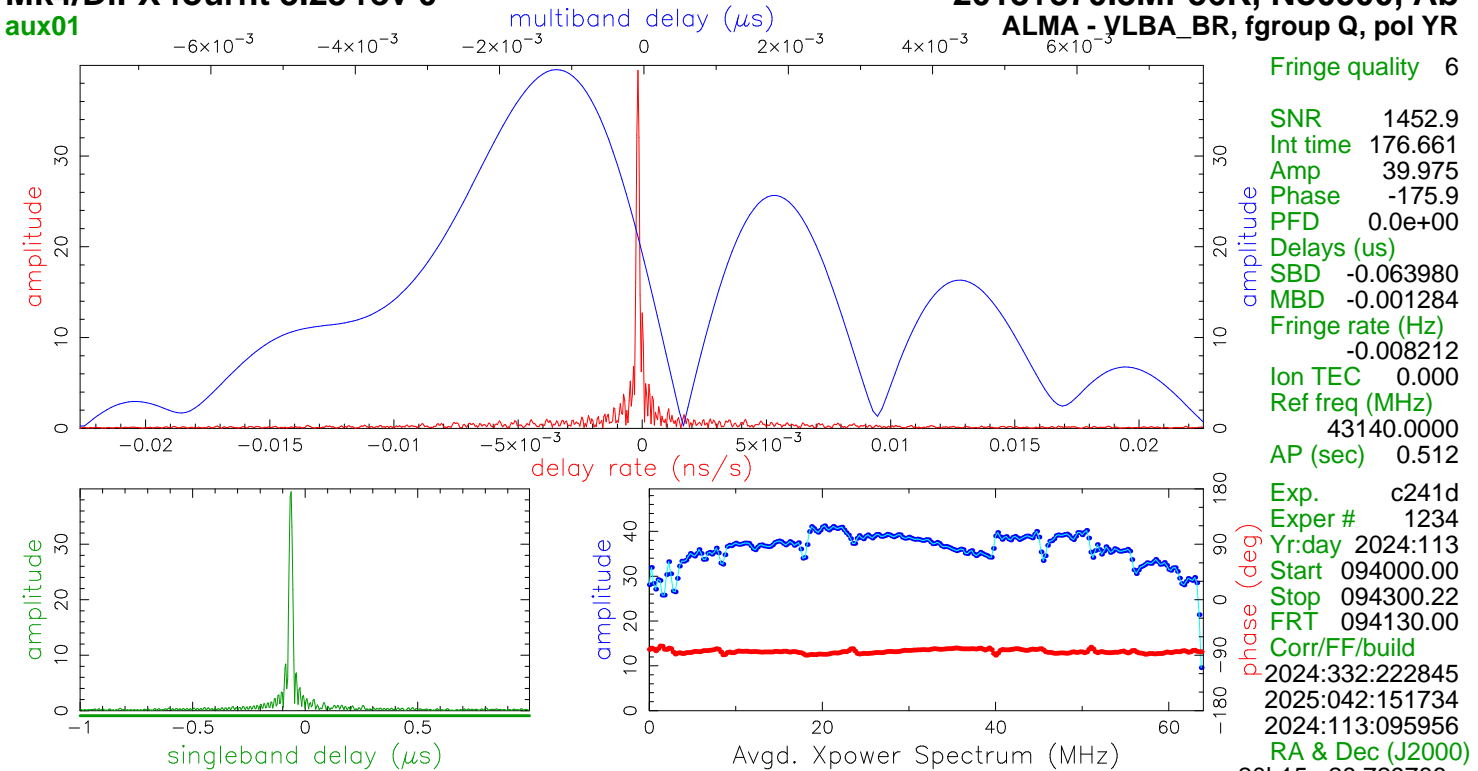
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Ab..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Ab.Q.33.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

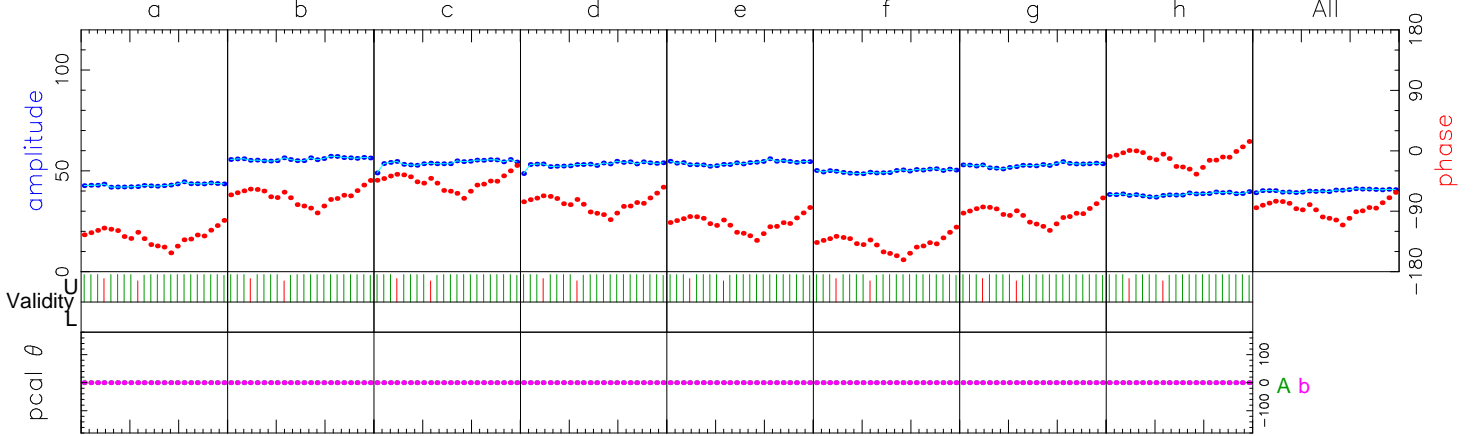
aux01

2013+370.3MP56K, No0500, Ab

ALMA - VLBA_BR, fgroup Q, pol YR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-127.1	-67.6	-46.0	-78.3	-108.6	-138.2	-94.3	-10.3	Phase	-85.9
	42.1	54.8	53.0	52.2	52.9	48.9	51.8	37.7	Ampl.	49.2
	242.5	240.6	240.6	240.4	240.7	240.2	240.9	242.8	Sbd box	240.6
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-5.97206269823E+03		Apriori delay (usec)		-5.97199891395E+03		Resid mbdelay (usec)		-1.28428E-03	+/- 7.5E-07
Sband delay (usec)	-5.97206289445E+03		Apriori clock (usec)		-2.1120449E+03		Resid sbdelay (usec)		-6.39805E-02	+/- 5.9E-06
Phase delay (usec)	-5.97199891948E+03		Apriori clockrate (us/s)		-5.8727285E-07		Resid phdelay (usec)		-5.52837E-06	+/- 5.1E-09
Delay rate (us/s)	-4.57972991154E-01		Apriori rate (us/s)		-4.57972800787E-01		Resid rate (us/s)		-1.90366E-07	+/- 4.9E-11
Total phase (deg)			Apriori accel (us/s/s)		-5.68697244773E-05		Resid phase (deg)		-175.9	+/- 0.1

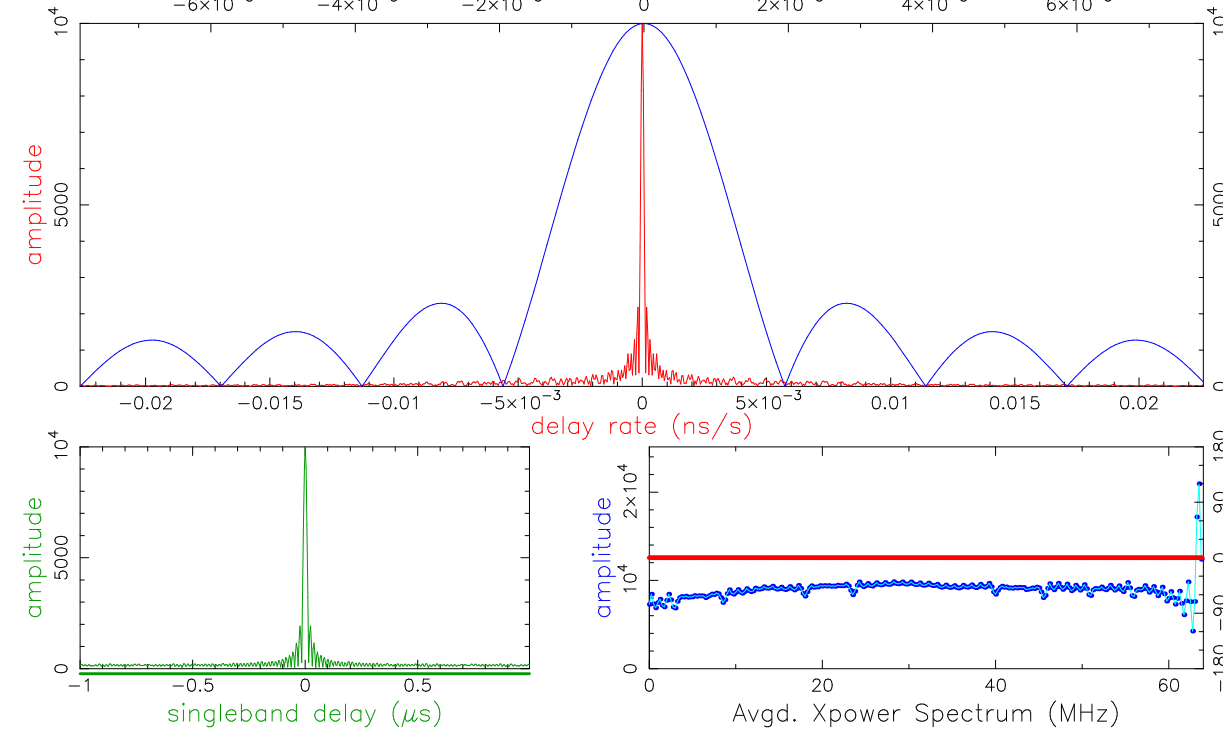
RMS Theor. Amplitude 39.975 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 11.4 0.2 Search (1024X32) 38.046 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.6 0.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 46.0 0.1 Inc. seg. avg. 40.223 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 27.0 0.2 Inc. frq. avg. 49.174 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 14.3 el 27.9 pa -163.6 b: az 76.2 el 40.6 pa -54.6 u,v (fr/asec) 1617.645 -5714.190 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Ab..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Ab.Q.8.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bb

VLBA_BR - VLBA_BR, fgroup Q, pol LL

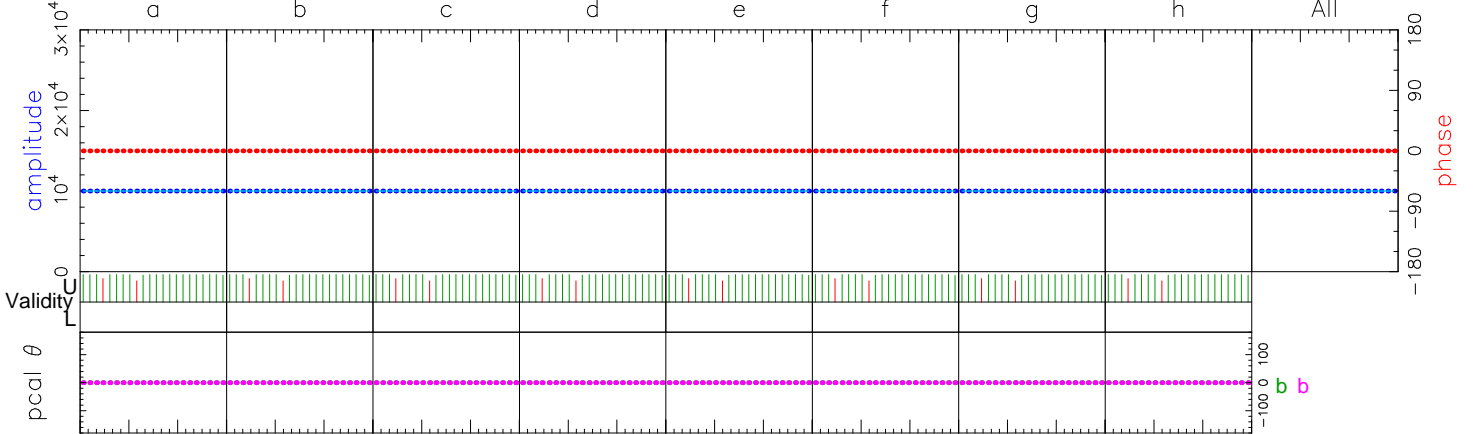


Fringe quality 9

SNR 363469.1
 Int time 176.661
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151737
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	Ampl.	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.4E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	2.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.0E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

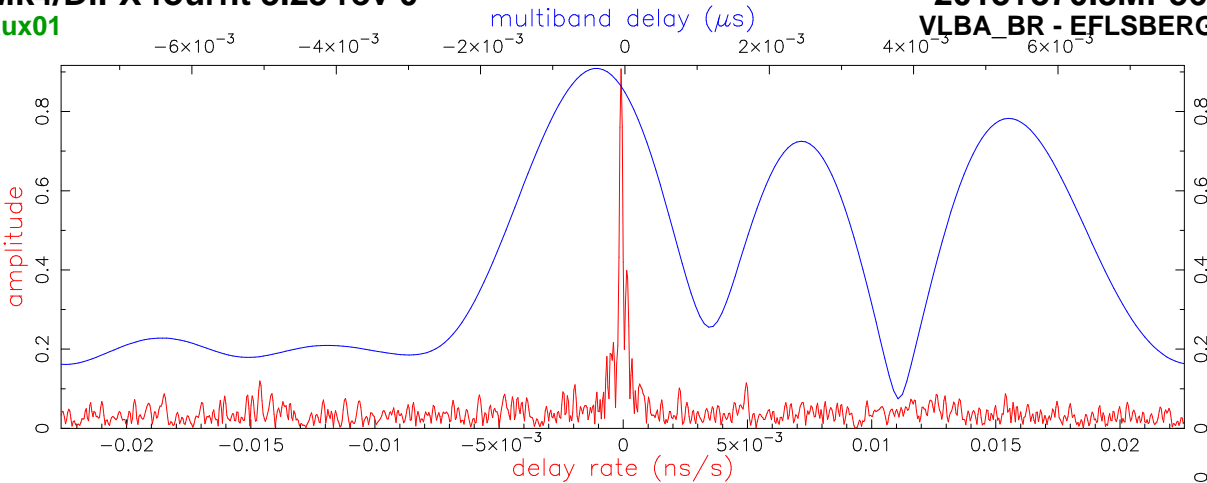
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 b: az 76.2 el 40.6 pa -54.6 b: az 76.2 el 40.6 pa -54.6 u, v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bb..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bb.Q.18.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

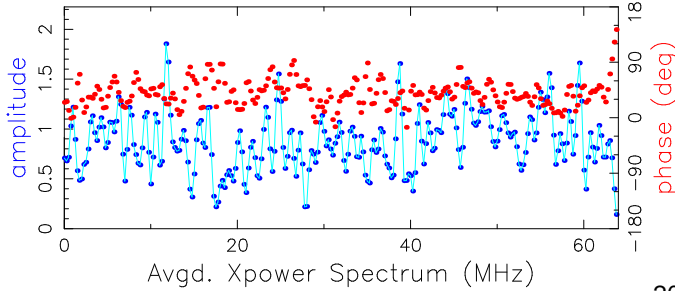
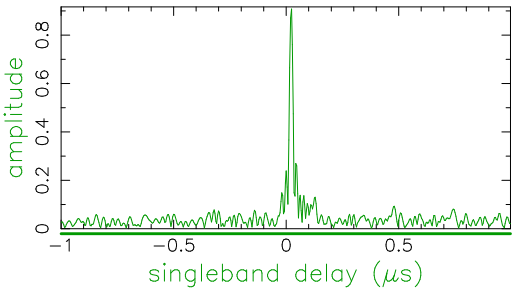
2013+370.3MP56K, No0500, bB

VLBA_BR - EFLSBERG, fgroup Q, pol LL



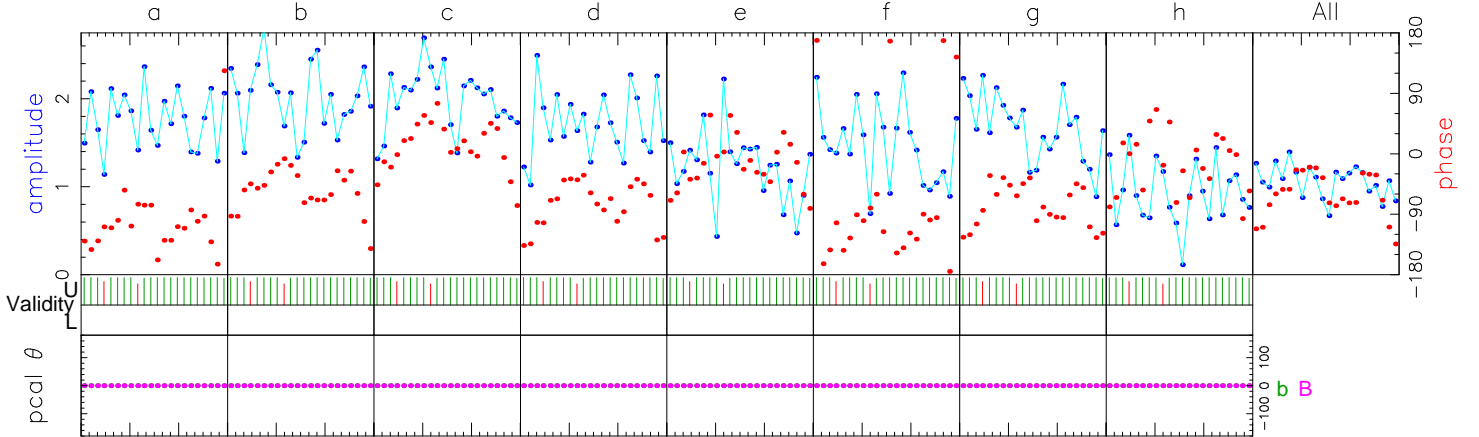
Fringe quality 4

SNR 33.3
 Int time 176.637
 Amp 0.917
 Phase 141.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.022265
 MBD -0.000452
 Fringe rate (Hz)
 -0.004201
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151739
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-112.8	-55.7	15.6	-74.2	-15.5	-132.4	-77.7	-9.5	Phase	-60.6
	1.4	1.7	1.7	1.5	1.0	1.1	1.4	0.7	Ampl.	1.3
	264.6	263.5	261.8	261.9	261.3	261.6	262.9	266.1	Sbd box	262.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.50895943507E+03	Apriori delay (usec)	-1.50897460776E+03	Resid mbdelay (usec)	-4.52311E-04	+/-	3.3E-05
Sband delay (usec)	-1.50895234301E+03	Apriori clock (usec)	4.0015831E+01	Resid sbdelay (usec)	2.22648E-02	+/-	2.6E-04
Phase delay (usec)	-1.50897461166E+03	Apriori clockrate (us/s)	7.6597994E-07	Resid phdelay (usec)	-3.90410E-06	+/-	2.2E-07
Delay rate (us/s)	1.43778147891E+00	Apriori rate (us/s)	1.43778157628E+00	Resid rate (us/s)	-9.73789E-08	+/-	2.2E-09
Total phase (deg)		Apriori accel (us/s/s)	6.37283407926E-06	Resid phase (deg)	141.9	+/-	3.4

ph/seg (deg)	32.4	RMS	8.0	Theor.	0.917 +/- 0.028	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	25.0	Search (1024X32)	0.899	Amplitude		PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	56.0	Interp.	0.000	Inc. seg. avg.	1.053	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	57.0	Inc. frq. avg.	1.309	Inc. frq. avg.	1.309	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 76.2 el 40.6 pa -54.6 B: az 275.5 el 46.9 pa 52.6 u,v (fr/asec) -5177.975 127.629 simultaneous interpolator

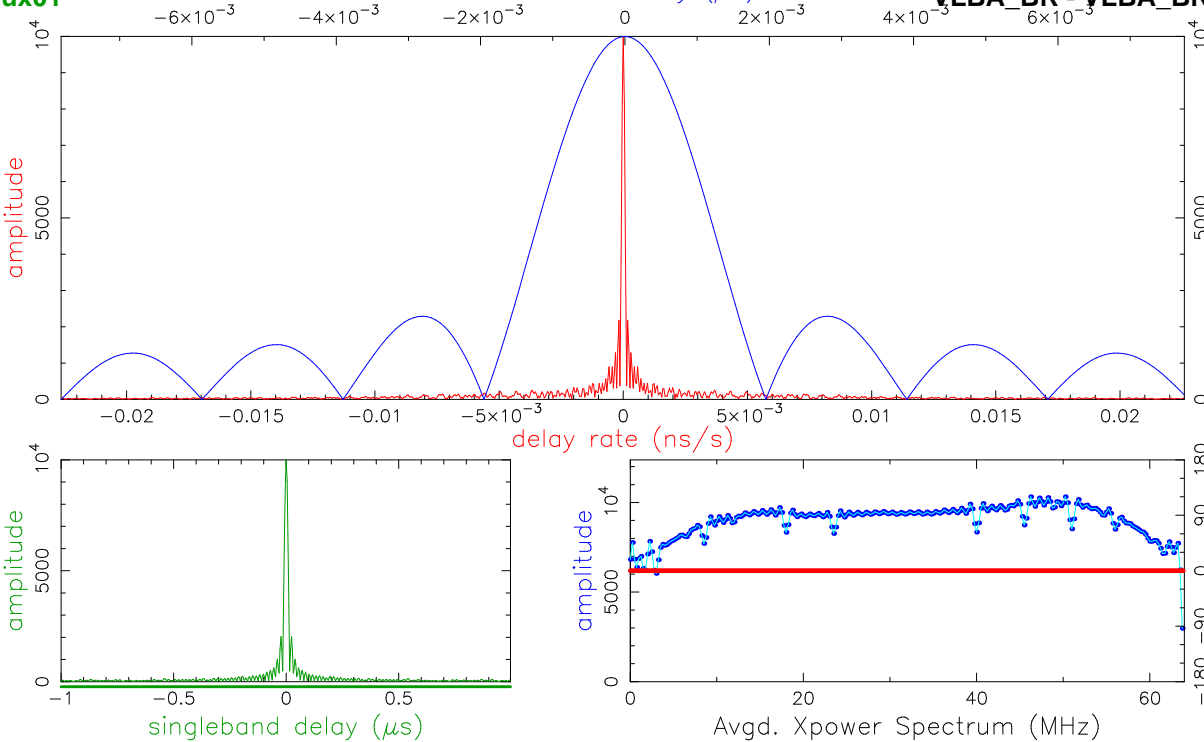
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bB..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bB.Q.30.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

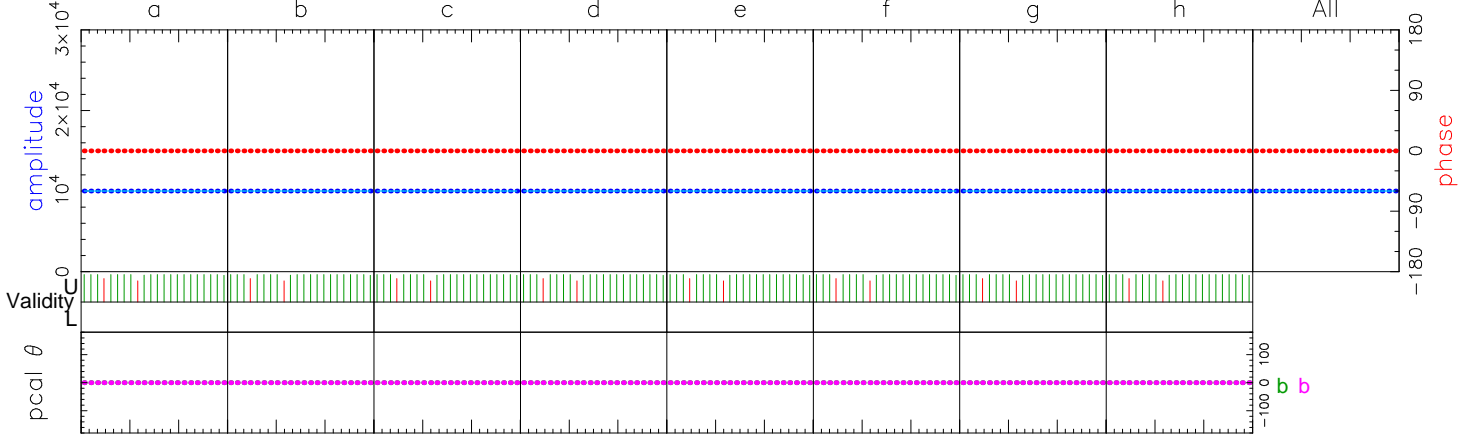
2013+370.3MP56K, No0500, bb

VLBA_BR - VLBA_BR, fgroup Q, pol RR



Fringe quality 9
 SNR 363469.2
 Int time 176.661
 Amp 10000.002
 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. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151740
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 2.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.0E-13
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.002 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.002 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 b: az 76.2 el 40.6 pa -54.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bb..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bb.Q.31.3MP56K

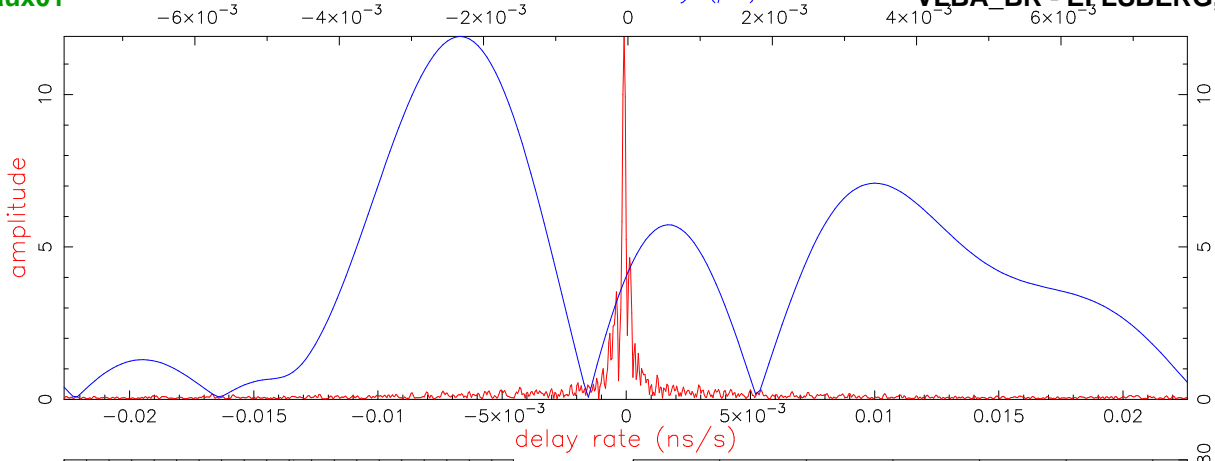
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bB

VLBA_BR - EFLSBERG, fgroup Q, pol RR

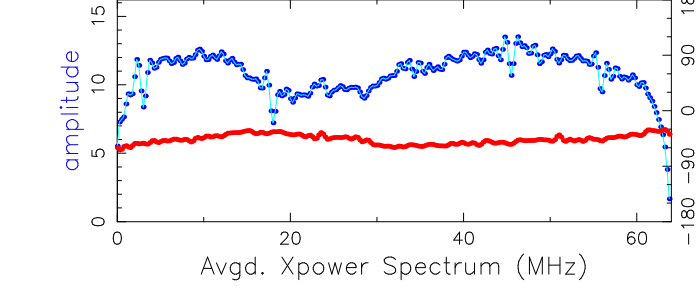
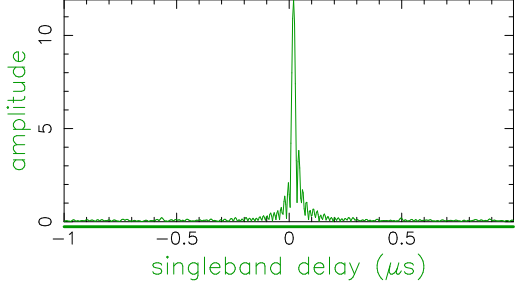
multiband delay (μ s)



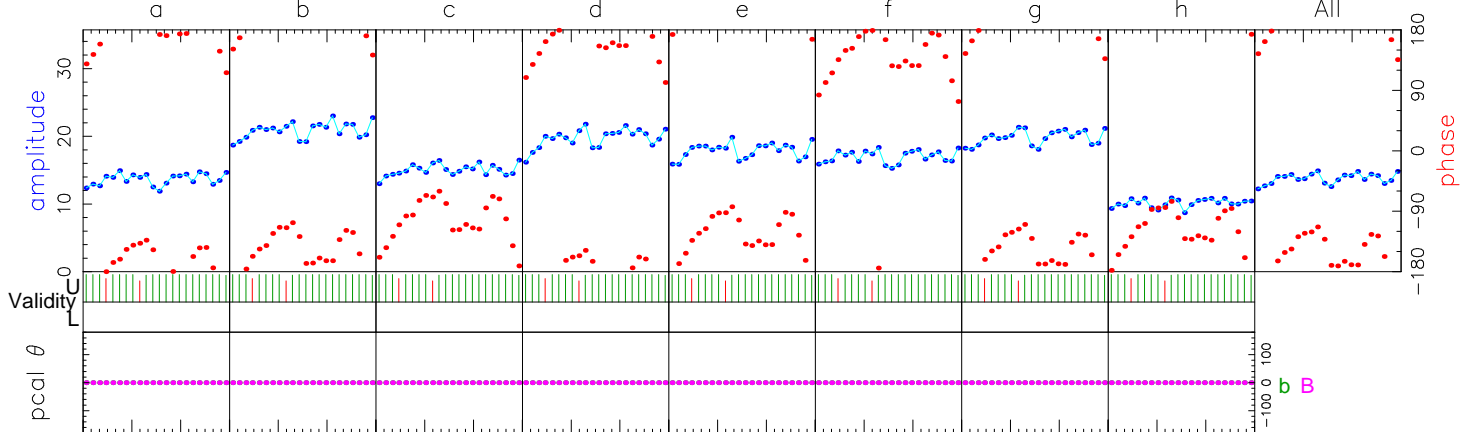
Fringe quality 4

SNR 432.8
 Int time 176.637
 Amp 11.909
 Phase 45.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.019313
 MBD -0.002334
 Fringe rate (Hz) -0.004479
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151741
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-174.5	-152.0	-103.3	168.5	-127.1	140.6	-155.5	-119.8	Phase	-157.4
	11.8	18.0	13.0	17.1	15.4	14.6	17.0	8.8	Ampl.	14.5
	264.7	262.2	261.3	261.5	260.9	261.7	262.4	265.7	Sbd box	261.9
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -1.50896131720E+03 Apriori delay (usec) -1.50897460776E+03 Resid mbdelay (usec) -2.33444E-03 +/- 2.5E-06
 Sband delay (usec) -1.50895529426E+03 Apriori clock (usec) 4.0015831E+01 Resid sbdelay (usec) 1.93135E-02 +/- 2.0E-05
 Phase delay (usec) -1.50897461790E+03 Apriori clockrate (us/s) 7.6597994E-07 Resid phdelay (usec) -1.01359E-05 +/- 1.7E-08
 Delay rate (us/s) 1.43778147245E+00 Apriori rate (us/s) 1.43778157628E+00 Resid rate (us/s) -1.03836E-07 +/- 1.7E-10
 Total phase (deg) 196.7 Apriori accel (us/s/s) 6.37283407926E-06 Resid phase (deg) 45.1 +/- 0.3

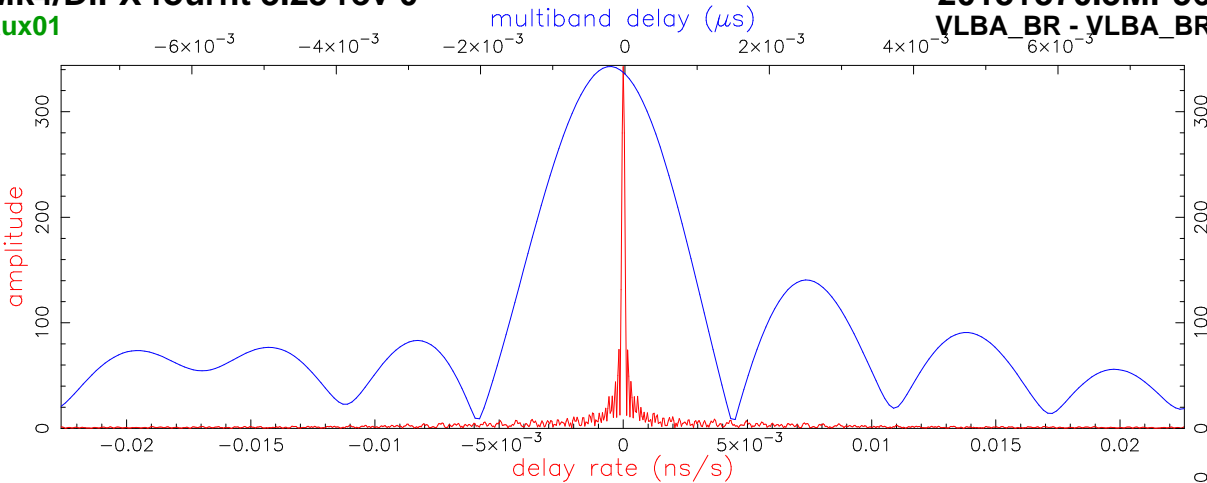
ph/seg (deg) 30.7 0.6 Search (1024X32) 11.571 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 16.9 1.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.0 0.4 Inc. seg. avg. 13.771 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.7 0.7 Inc. frq. avg. 14.480 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 76.2 el 40.6 pa -54.6 B: az 275.5 el 46.9 pa 52.6 u,v (fr/asec) -5177.975 127.629 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bB..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bB.Q.43.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

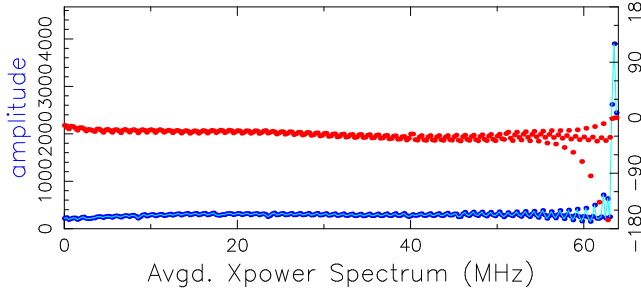
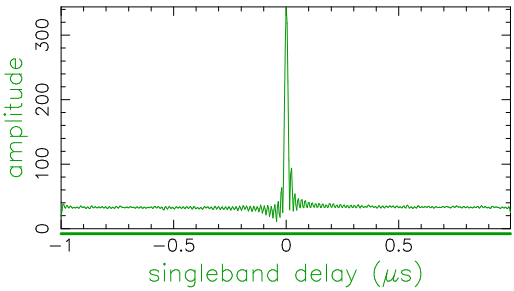
2013+370.3MP56K, No0500, bb

VLBA_BR - VLBA_BR, fgroup Q, pol LR



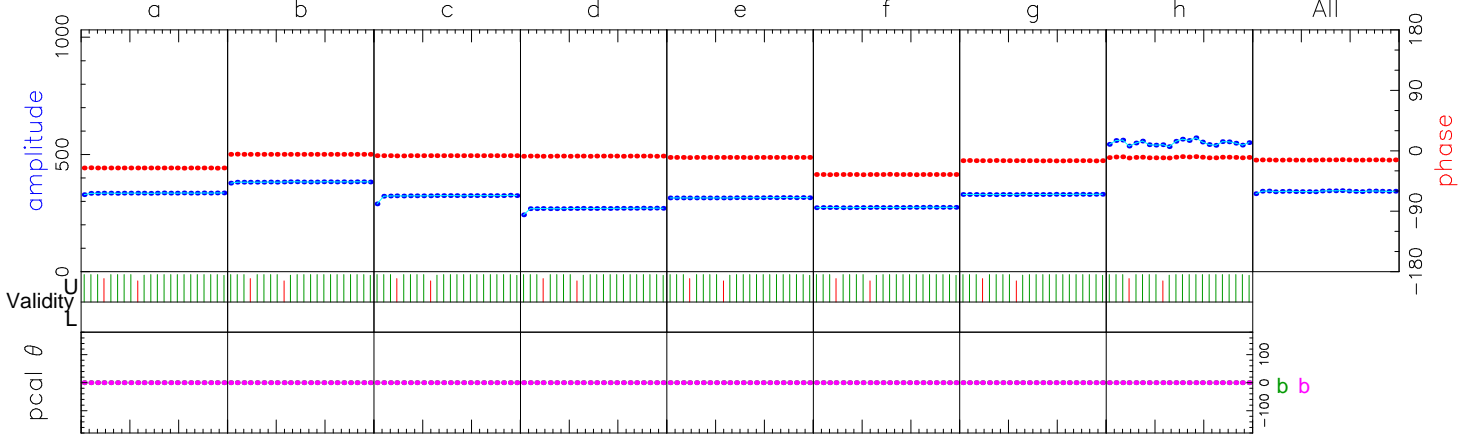
Fringe quality 8

SNR 12501.2
 Int time 176.660
 Amp 343.941
 Phase -13.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.000661
 MBD -0.000205
 Fringe rate (Hz) 0.000002
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151743
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-25.6	-5.3	-7.4	-7.9	-9.9	-35.3	-14.7	-9.8	Phase	-13.7
	335.1	382.6	322.7	268.8	315.5	274.2	329.7	550.1	Ampl.	347.3
	257.3	257.3	256.9	256.8	256.8	256.7	257.1	257.5	Sbd box	257.2
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-2.04593750000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.04594E-04	+/-	8.7E-08
Sband delay (usec)	6.61500000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	6.61500E-04	+/-	6.9E-07
Phase delay (usec)	-8.80651572761E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-8.80652E-07	+/-	5.9E-10
Delay rate (us/s)	3.96148422306E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.96148E-11	+/-	5.7E-12
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-13.7	+/-	0.0

ph/seg (deg)	RMS 0.2	Theor. 0.0	Amplitude	343.941 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	0.8	0.0	Search (1024X32)	335.962	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	11.4	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	24.3	0.0	Inc. seg. avg.	342.852	Data rate (MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	347.341	Data rate (Mb/s): 2048	nlags: 256 t_cohere infinite			
b: az 76.2 el 40.6 pa -54.6			u, v (fr/asec)	0.000					simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bb..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bb.Q.45.3MP56K

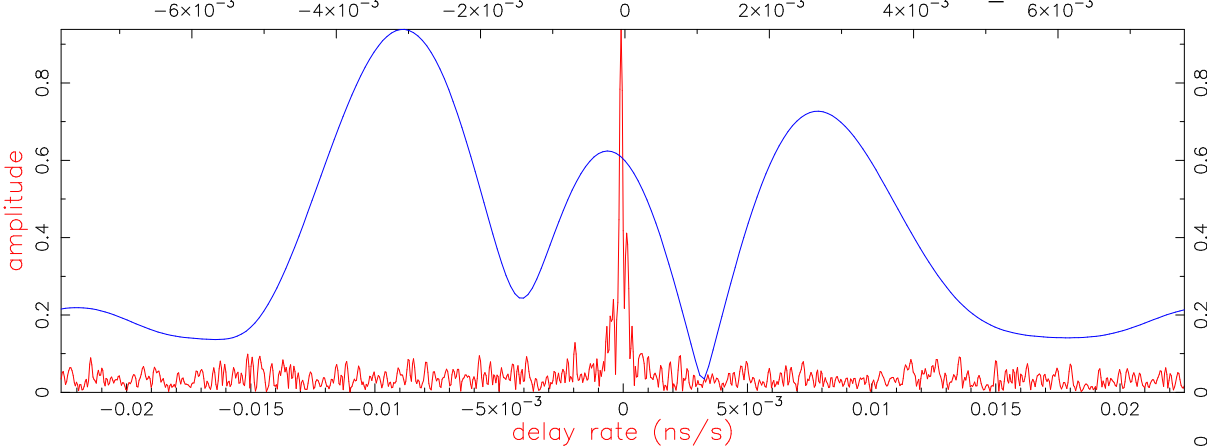
Mk4/DiFX fourfit 3.25 rev 0

aux01

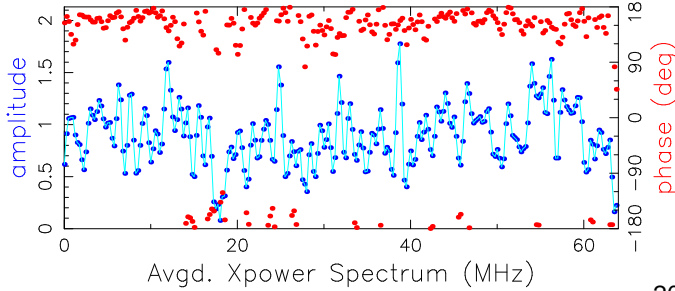
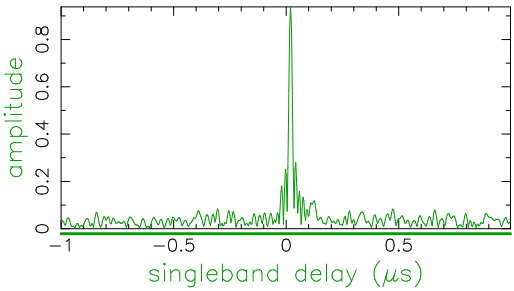
2013+370.3MP56K, No0500, bB

VLBA_BR - EFLSBERG, fgroup Q, pol LR

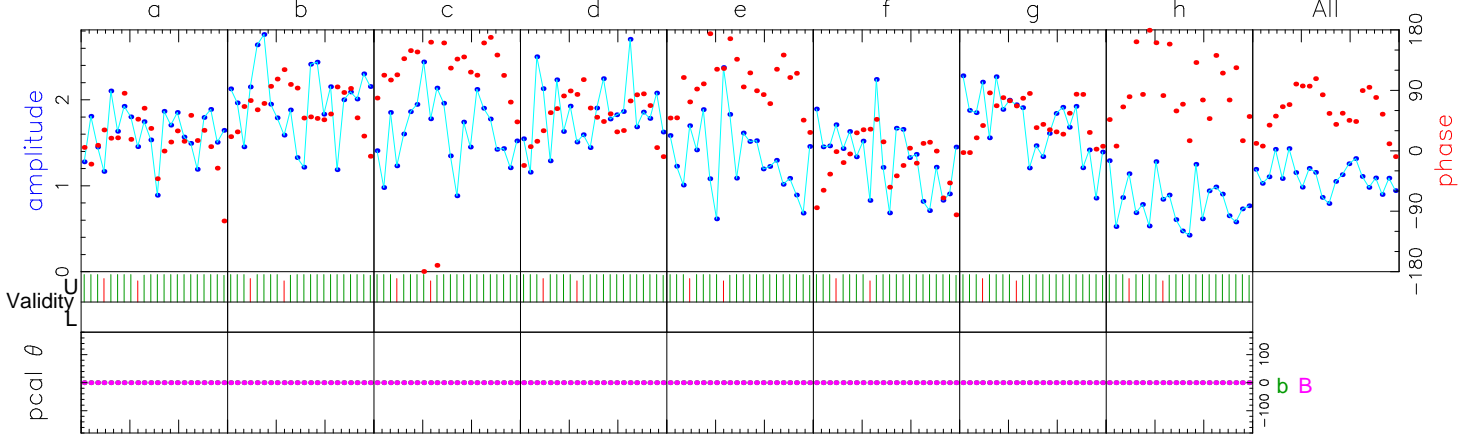
multiband delay (μ s)



Fringe quality 4
 Error code G
 SNR 34.1
 Int time 176.637
 Amp 0.938
 Phase 261.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.019503
 MBD -0.003077
 Fringe rate (Hz)
 -0.004251
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151744
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



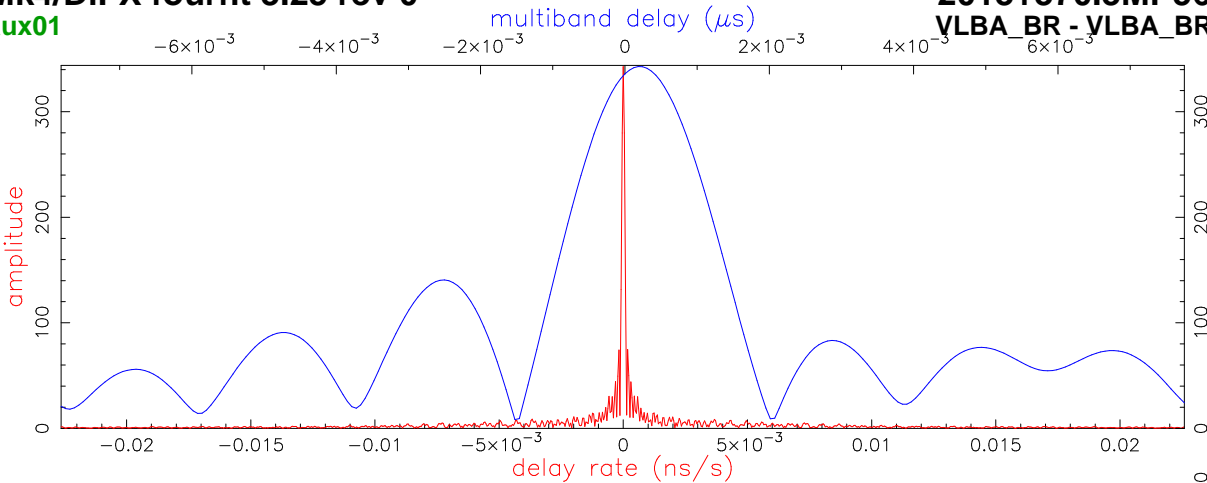
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Group delay (usec) (SBD)	-1.50896205951E+03									
Sband delay (usec)	-1.50895510476E+03									
Phase delay (usec)	-1.50897460398E+03									
Delay rate (us/s)	1.43778147775E+00									
Total phase (deg)			52.8							
Apriori delay (usec)					-1.50897460776E+03				-3.07675E-03	+/- 3.2E-05
Apriori clock (usec)					4.0015831E+01				1.95030E-02	+/- 2.5E-04
Apriori clockrate (us/s)					7.6597994E-07				3.77634E-06	+/- 2.2E-07
Apriori rate (us/s)					1.43778157628E+00				-9.85306E-08	+/- 2.1E-09
Apriori accel (us/s/s)					6.37283407926E-06				261.1	+/- 3.4
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
pcal mode:	MANUAL	MANUAL								
pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Data rate (MSamp/s):	128 MBpts	32 Amb	0.016 us							
Data rate (Mb/s):	2048									
nlags:	256	t_cohere	infinite							
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.023	0.023								
ion window (TEC)	0.00	0.00								
b: az	76.2 el	40.6 pa	-54.6							
B: az	275.5 el	46.9 pa	52.6							
u, v (fr/asec)	-5177.975	127.629								simultaneous interpolator
Control file:	cf_1234_gmva	Input file:	/Exps/c241d/v1/7mm/1234/No0500/bB..3MP56K	Output file:	/Exps/c241d/v1/7mm/1234/No0500/bB.Q.50.3MP56K					

Mk4/DiFX fourfit 3.25 rev 0

aux01

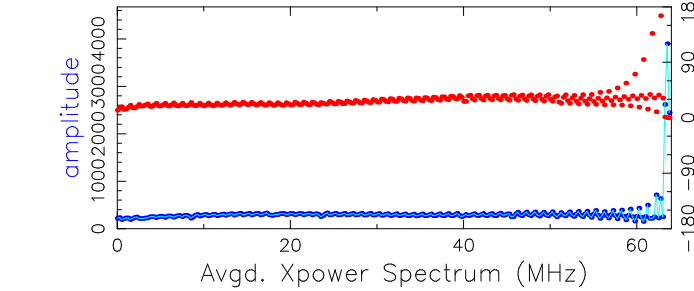
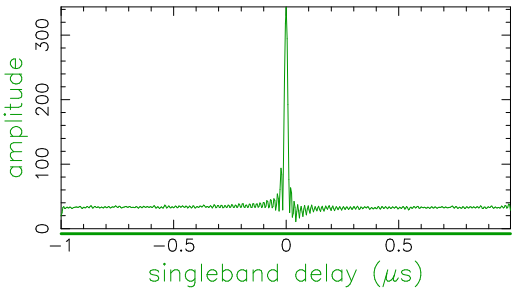
2013+370.3MP56K, No0500, bb

VLBA_BR - VLBA_BR, fgroup Q, pol RL



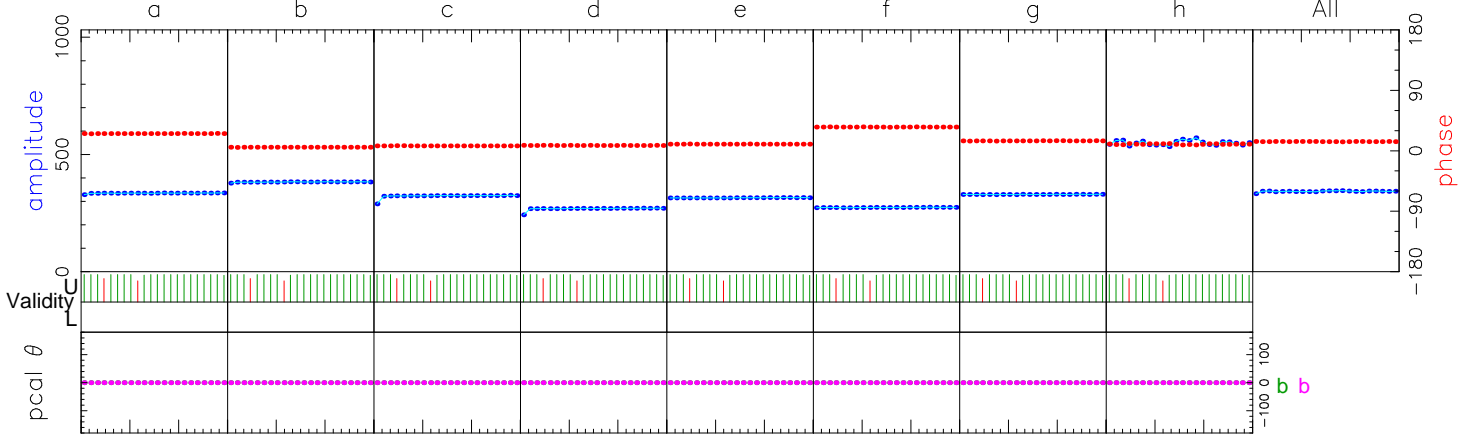
Fringe quality 8

SNR 12501.2
 Int time 176.660
 Amp 343.941
 Phase 13.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.000661
 MBD 0.000205
 Fringe rate (Hz)
 -0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151745
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.04593750000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.04594E-04	+/-	8.7E-08
Sband delay (usec)	-6.61500000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-6.61500E-04	+/-	6.9E-07
Phase delay (usec)	8.80651572761E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	8.80652E-07	+/-	5.9E-10
Delay rate (us/s)	-3.96148422306E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-3.96148E-11	+/-	5.7E-12
Total phase (deg)	13.7	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	13.7	+/-	0.0

ph/seg (deg)	0.2	Theor.	Amplitude	343.941 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	0.8	0.0	Search (1024X32)	335.962	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	11.4	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	24.3	0.0	Inc. seg. avg.	342.852	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	347.341	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

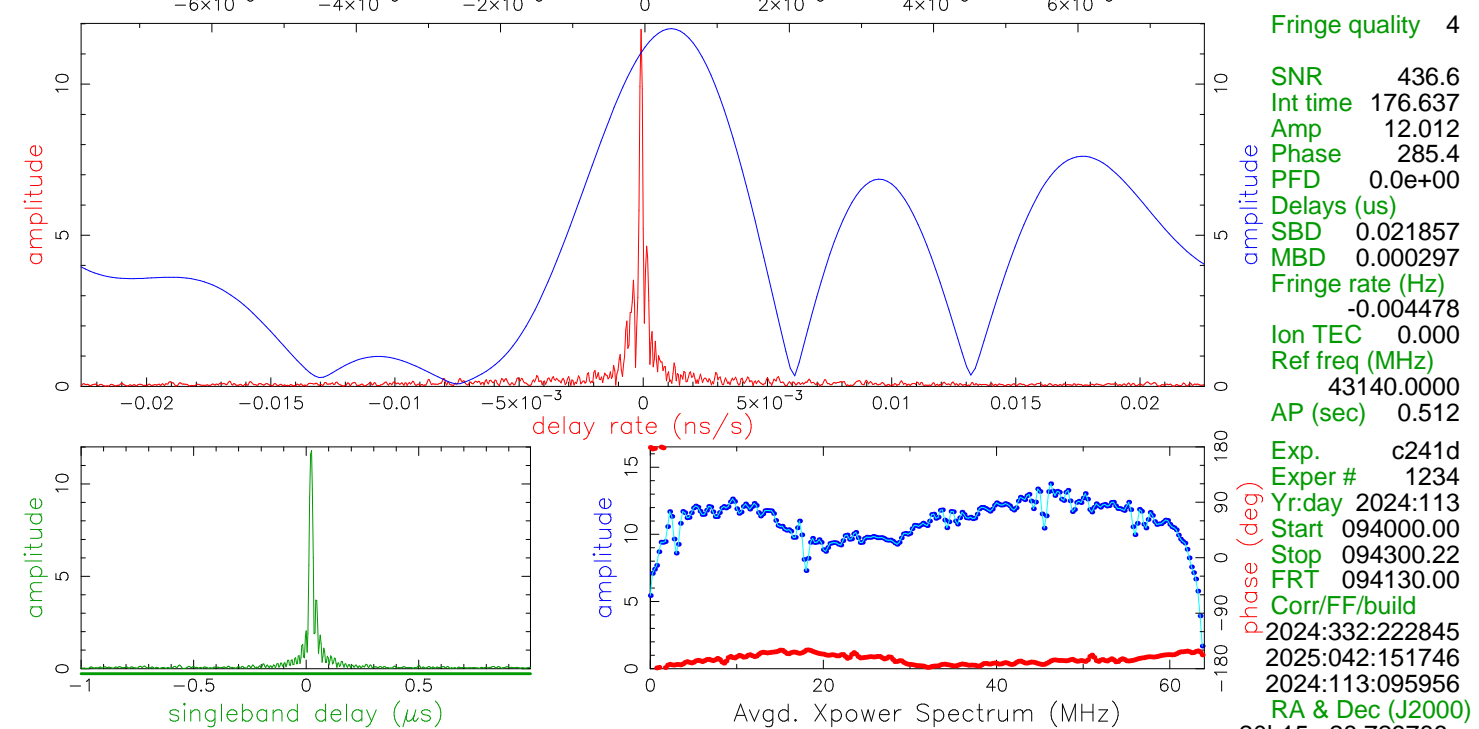
b: az 76.2 el 40.6 pa -54.6 b: az 76.2 el 40.6 pa -54.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bb..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bb.Q.57.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

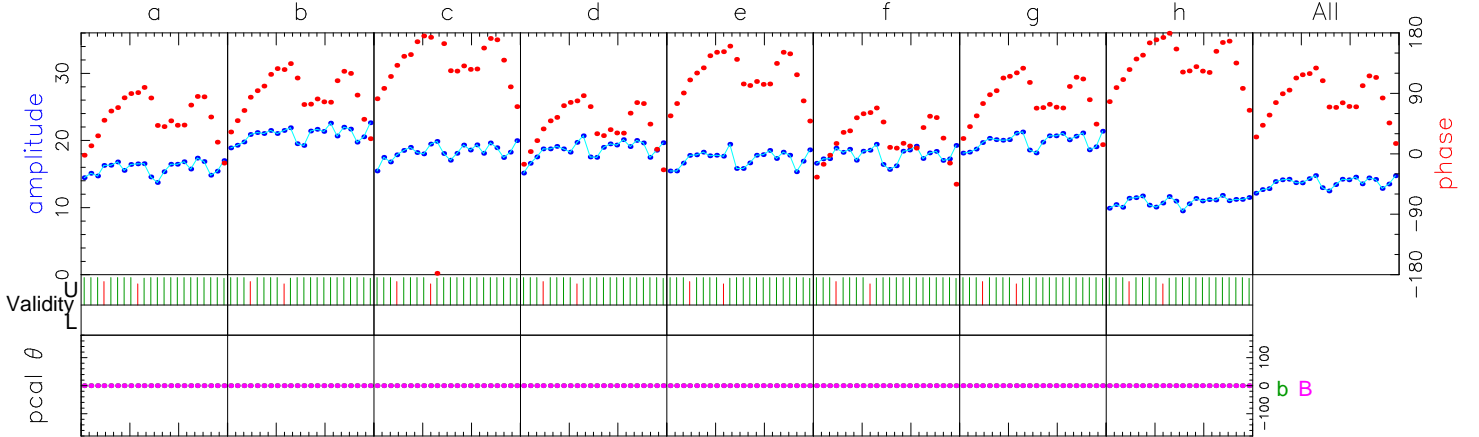
aux01

2013+370.3MP56K, No0500, bB

VLBA_BR - EFLSBERG, fgroup Q, pol RL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All				
54.8	88.8	138.2	43.3	116.1	22.8	81.5	134.6	134.6	Phase	82.9				
13.7	18.0	15.8	16.2	14.9	15.3	17.1	9.5	9.5	Ampl.	15.1				
265.0	263.0	261.9	262.1	261.7	262.4	263.1	266.5	266.5	Sbd box	262.6				
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used					
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	1000	1000	1000	1000	1000	1000	1000	1000						
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids					
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks					
									Tracks					
Group delay (usec) (SBD)	-1.50895868554E+03								Apriori delay (usec)	-1.50897460776E+03	Resid mbdelay (usec)	2.97221E-04	+/-	2.5E-06
Sband delay (usec)	-1.50895275051E+03								Apriori clock (usec)	4.0015831E+01	Resid sbdelay (usec)	2.18573E-02	+/-	2.0E-05
Phase delay (usec)	-1.50897460242E+03								Apriori clockrate (us/s)	7.6597994E-07	Resid phdelay (usec)	5.33669E-06	+/-	1.7E-08
Delay rate (us/s)	1.43778147248E+00								Apriori rate (us/s)	1.43778157628E+00	Resid rate (us/s)	-1.03802E-07	+/-	1.6E-10
Total phase (deg)			77.0						Apriori accel (us/s/s)	6.37283407926E-06	Resid phase (deg)	285.4	+/-	0.3
ph/seg (deg)	RMS 30.9	Theor. 0.6	Amplitude Search (1024X32)	12.012 +/- 0.028	11.510	11.510	11.510	11.510	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	15.3	1.1	Interp.	0.000	0.000	0.000	0.000	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008	
ph/frq (deg)	46.3	0.4	Inc. seg. avg.	13.693	13.693	13.693	13.693	13.693	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	32.6	0.6	Inc. frq. avg.	15.062	15.062	15.062	15.062	15.062	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00	
									Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite			
b: az 76.2 el 40.6 pa -54.6			B: az 275.5 el 46.9 pa 52.6						u,v (fr/asec) -5177.975 127.629					simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0500/bB..3MP56K						Output file: /Exps/c241d/v1/7mm/1234/No0500/bB.Q.67.3MP56K					

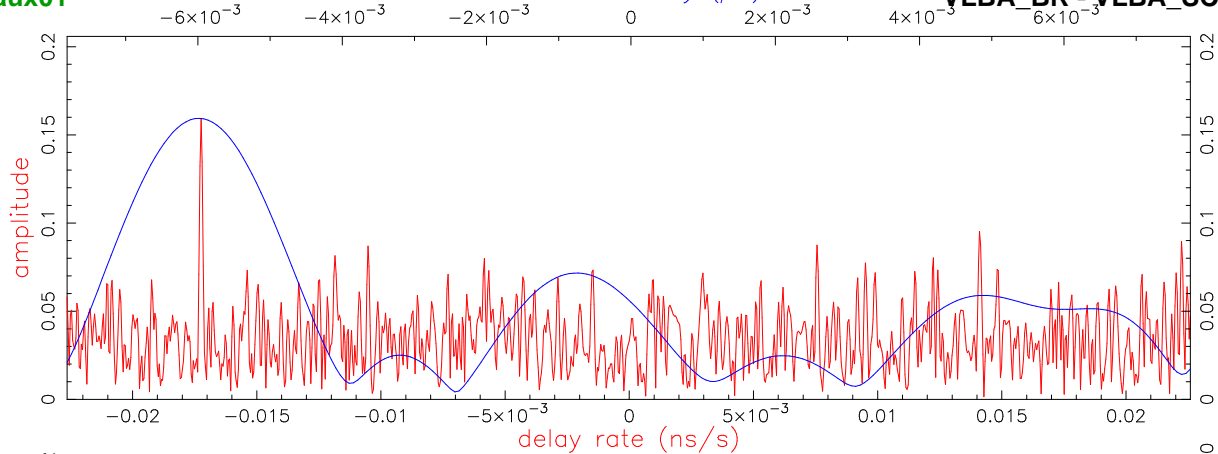
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bc

VLBA_BR - VLBA_SC, fgroup Q, pol LR

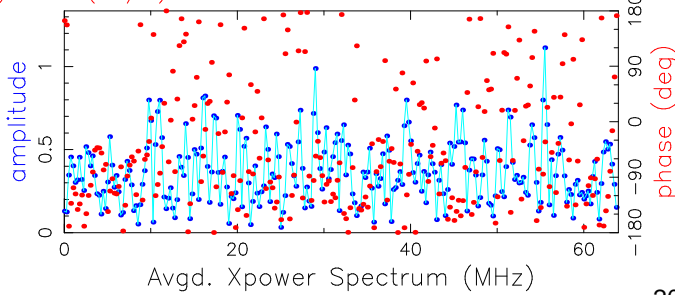
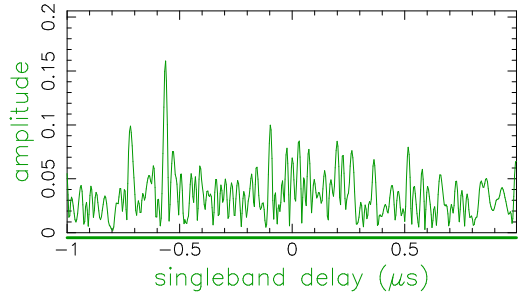
multiband delay (μ s)



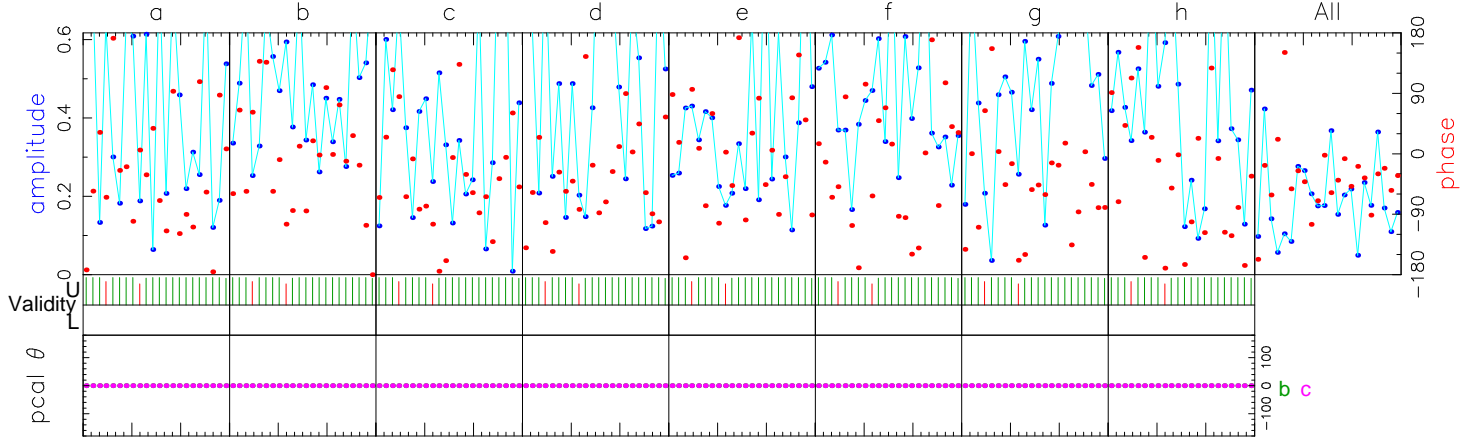
Fringe quality 0

SNR 5.8
 Int time 176.655
 Amp 0.206
 Phase -130.9
 PFD 5.6e-01
 Delays (us)
 SBD -0.563110
 MBD -0.006009
 Fringe rate (Hz)
 -0.747679
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151801
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-63.9	-8.6	-50.8	-52.9	-6.9	-9.8	-47.9	-62.4	Phase	-40.9
	0.2	0.2	0.2	0.3	0.1	0.2	0.4	0.1	Ampl.	0.2
	202.0	70.9	389.3	111.7	483.7	404.6	113.1	478.2	Sbd box	112.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-5.77630092832E+03	Apriori delay (usec)	-5.77573241973E+03	Resid mbdelay (usec)	-6.00858E-03	+/-	1.9E-04
Sband delay (usec)	-5.77629553023E+03	Apriori clock (usec)	8.9390945E-01	Resid sbdelay (usec)	-5.63110E-01	+/-	1.5E-03
Phase delay (usec)	-5.77573242237E+03	Apriori clockrate (us/s)	9.6971097E-07	Resid phdelay (usec)	-2.63281E-06	+/-	1.3E-06
Delay rate (us/s)	5.10841203218E-01	Apriori rate (us/s)	5.10858534663E-01	Resid rate (us/s)	-1.73314E-05	+/-	1.2E-08
Total phase (deg)	-342.3	Apriori accel (us/s/s)	6.07159630449E-05	Resid phase (deg)	-130.9	+/-	19.7

	RMS	Theor.	Amplitude	0.206 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.5	46.0	Search (1024X32)	0.158	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	64.6	80.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	27.2	27.9	Inc. seg. avg.	0.187	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	44.3	48.7	Inc. frq. avg.	0.197	Data rate(Mb/s): 2048				

b: az 76.2 el 40.6 pa -54.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1812.745 3379.301 simultaneous interpolator

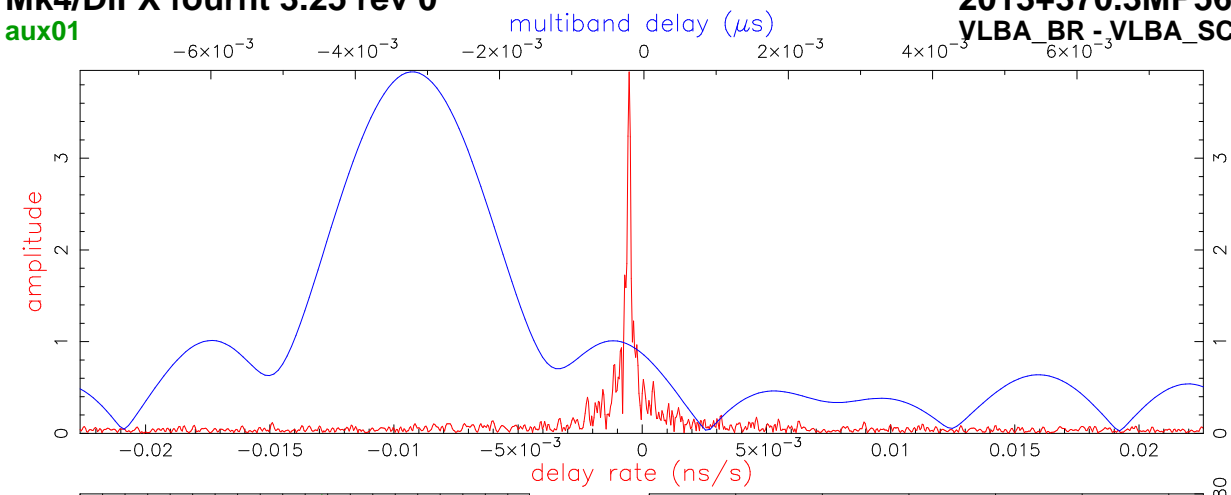
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bc.Q.150.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bc

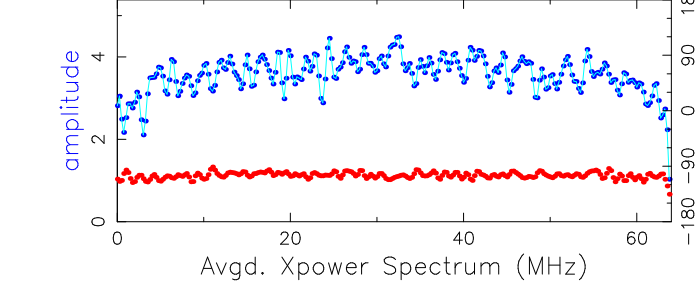
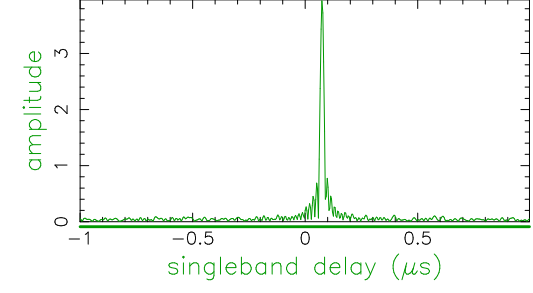
VLBA_BR - VLBA_SC, fgroup Q, pol LL



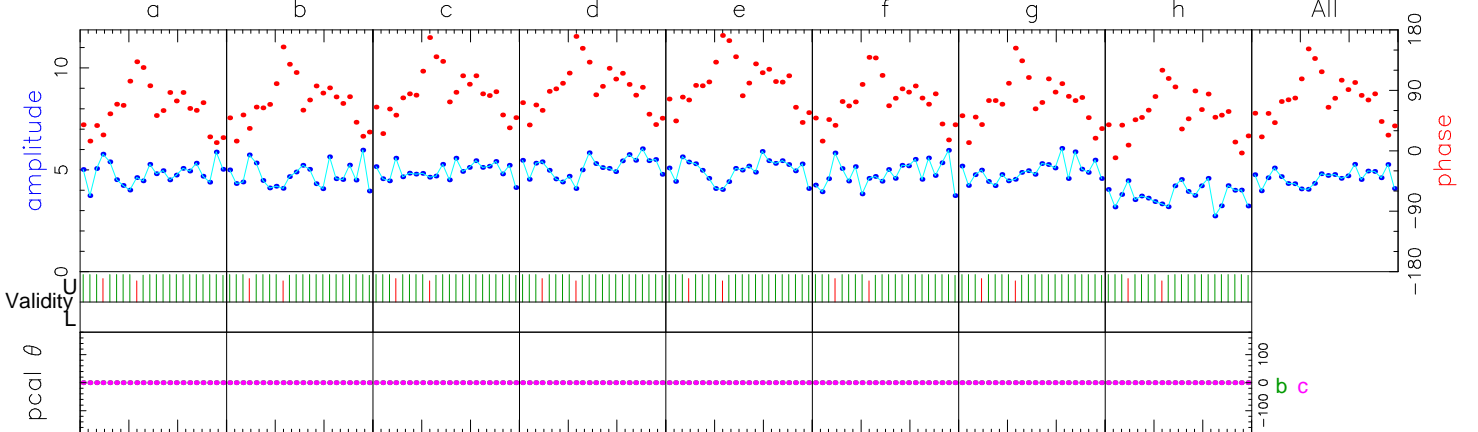
Fringe quality 6

SNR 143.8
 Int time 176.655
 Amp 3.958
 Phase 8.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.075013
 MBD -0.003186
 Fringe rate (Hz) -0.022272
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151748
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



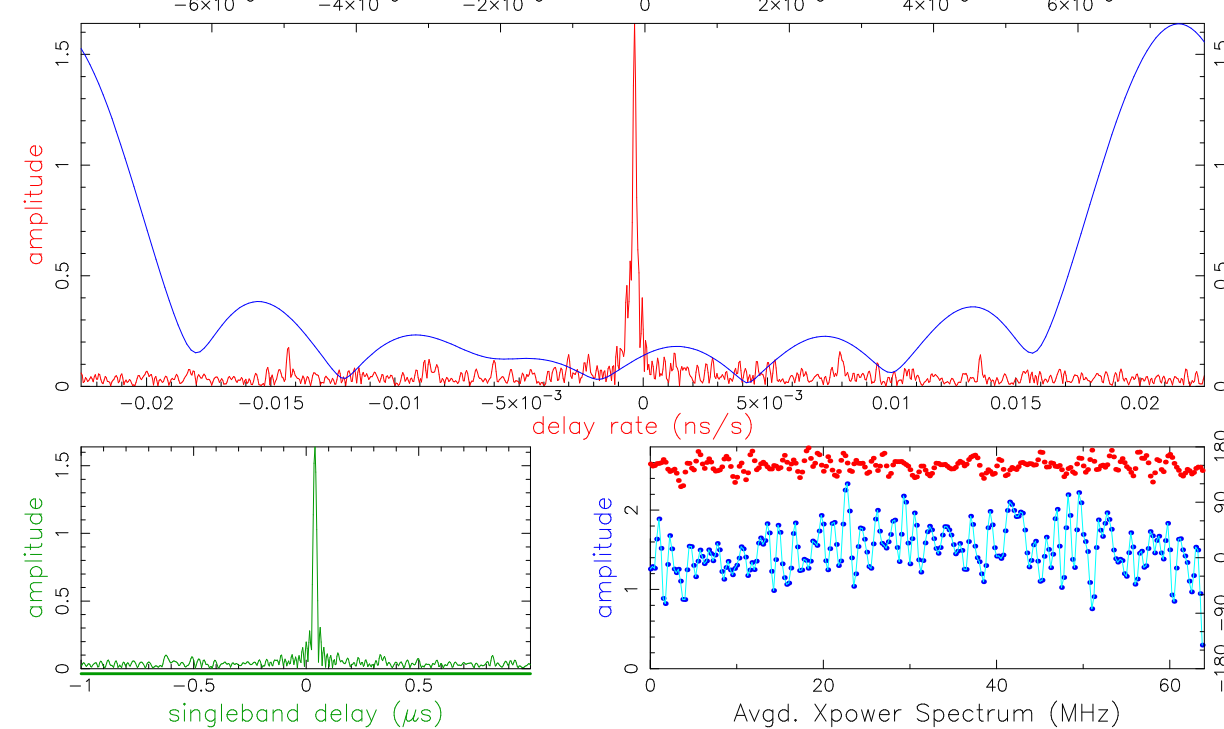
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
60.3	69.8	84.6	90.7	99.0	99.0	71.4	73.5	51.0	Phase	76.0
4.1	4.0	4.2	4.4	4.3	4.3	4.1	4.2	3.2	Ampl.	4.1
276.1	276.6	276.0	276.3	275.9	276.1	276.1	276.1	275.7	Sbd box	276.2
U/L 348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:c 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:c 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
Group delay (usec) (SBD)	-5.77565748097E+03		Apriori delay (usec)		-5.77573241973E+03		Resid mbdelay (usec)		-3.18624E-03	+/- 7.5E-06
Sband delay (usec)	-5.77565740698E+03		Apriori clock (usec)		8.9390945E-01		Resid sbdelay (usec)		7.50128E-02	+/- 6.0E-05
Phase delay (usec)	-5.77573241484E+03		Apriori clockrate (us/s)		9.6971097E-07		Resid phdelay (usec)		4.89366E-06	+/- 5.1E-08
Delay rate (us/s)	5.10858018394E-01		Apriori rate (us/s)		5.10858534663E-01		Resid rate (us/s)		-5.16269E-07	+/- 5.0E-10
Total phase (deg)	157.1		Apriori accel (us/s/s)		6.07159630449E-05		Resid phase (deg)		8.5	+/- 0.8
ph/seg (deg)	RMS 32.6	Theor. 1.9	Amplitude 3.958 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	19.0	3.2	Search (1024X32) 3.760		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	17.1	1.1	Inc. seg. avg. 4.613		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256 t_cohere infinite		dr window (ns/s)	-0.023 0.023
amp/frq (%)	9.2	2.0	Inc. frq. avg. 4.070		Data rate(Mb/s): 2048		ion window (TEC)		0.00 0.00	
b: az 76.2 el 40.6 pa -54.6	c: az 27.3 el 67.5 pa -147.2		u, v (fr/asec) -1812.745 3379.301		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/bc..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/bc.Q.80.3MP56K							

Mk4/DiFX fourfit 3.25 rev 0

aux01

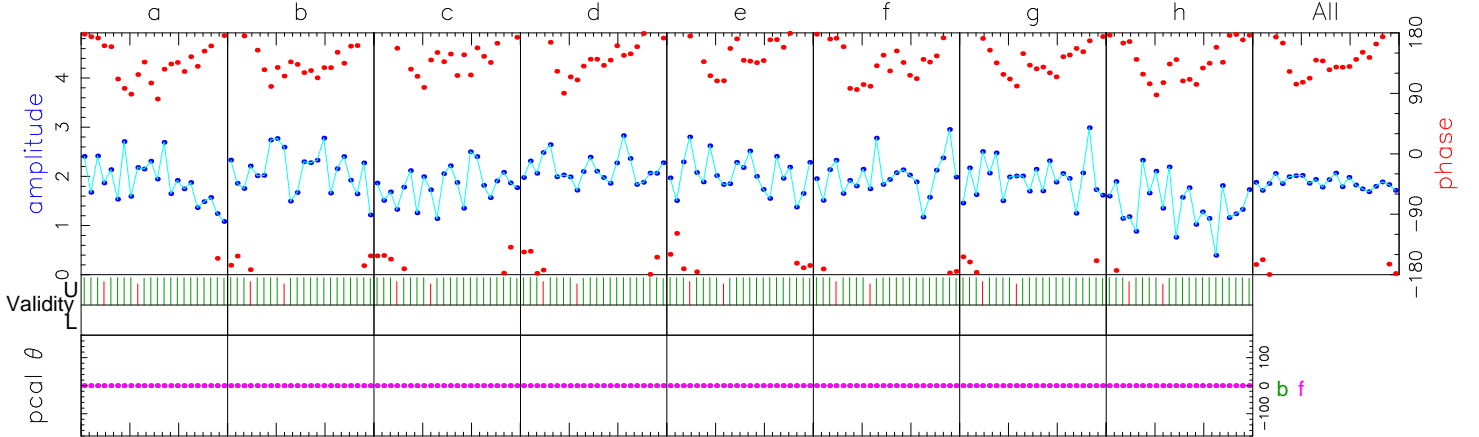
2013+370.3MP56K, No0500, bf

VLBA_BR - VLBA_FD, fgroup Q, pol LL



Fringe quality 7
 SNR 59.6
 Int time 176.648
 Amp 1.640
 Phase 194.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.038633
 MBD 0.007383
 Fringe rate (Hz) -0.014684
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151740
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.67296619387E+03	Apriori delay (usec)	-1.67300482647E+03	Resid mbdelay (usec)	7.38260E-03	+/-	1.8E-05
Sband delay (usec)	-1.67296619372E+03	Apriori clock (usec)	4.5648041E+00	Resid sbdelay (usec)	3.86328E-02	+/-	1.4E-04
Phase delay (usec)	-1.67300481686E+03	Apriori clockrate (us/s)	5.2622099E-07	Resid phdelay (usec)	9.60309E-06	+/-	1.2E-07
Delay rate (us/s)	-7.23540051308E-02	Apriori rate (us/s)	-7.23536647600E-02	Resid rate (us/s)	-3.40371E-07	+/-	1.2E-09
Total phase (deg)	117.2	Apriori accel (us/s/s)	2.49700276007E-05	Resid phase (deg)	194.1	+/-	1.9

ph/seg (deg)	29.3	RMS	4.5	Theor.	1.640 +/- 0.028	Search (1024X32)	1.599	Amplitude	1.640 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	15.8	29.3	4.5	4.5	1.599	Interp.	0.000	1.599	1.599	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	9.7	15.8	7.8	7.8	0.000	Inc. seg. avg.	1.868	1.868	1.868	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	11.2	9.7	2.7	2.7	1.868	Inc. frq. avg.	1.654	1.654	1.654	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023		
		11.2	4.7	4.7	1.654					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 272.619 1575.192 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.35.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

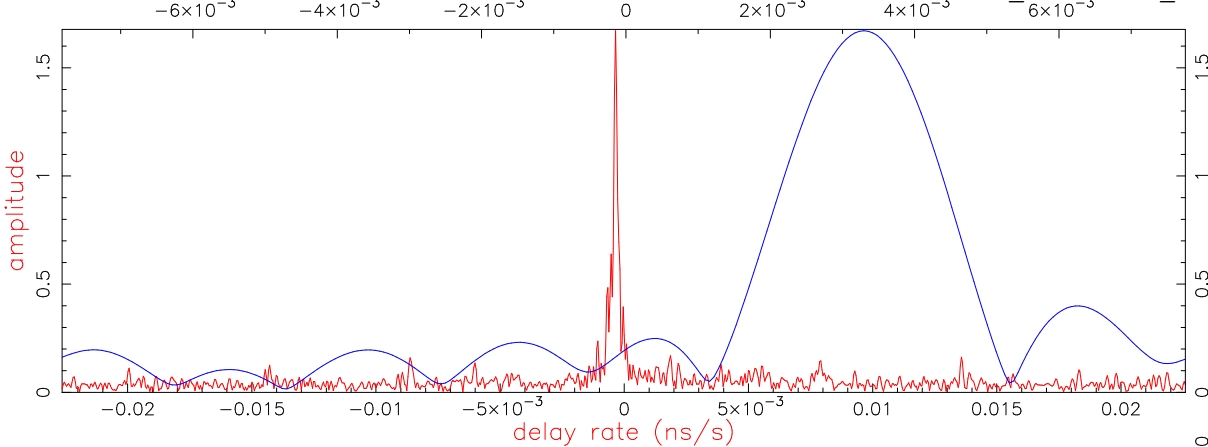
aux01

2013+370.3MP56K, No0500, bf

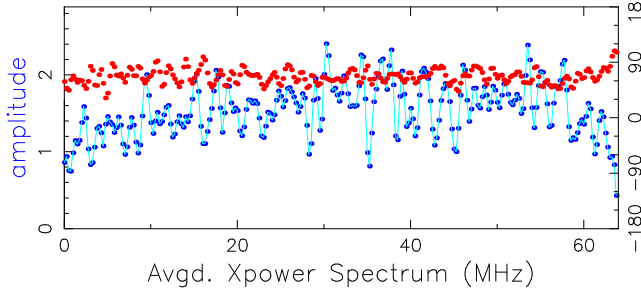
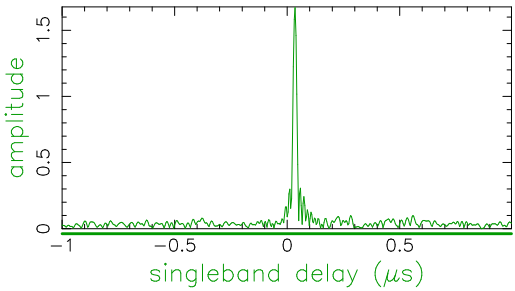
VLBA_BR - VLBA_FD, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 7

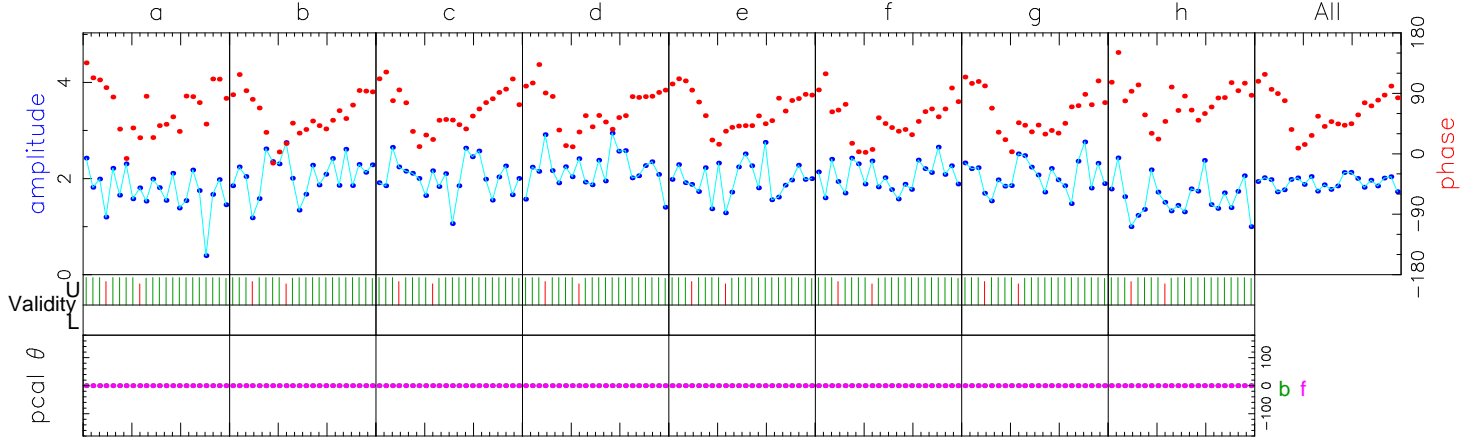


SNR 61.0
 Int time 176.648
 Amp 1.677
 Phase 109.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.034365
 MBD 0.003282
 Fringe rate (Hz)
 -0.014736
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151744
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.67297029455E+03	Apriori delay (usec)	-1.67300482647E+03	Resid mbdelay (usec)	3.28191E-03	+/-	1.8E-05
Sband delay (usec)	-1.67297046147E+03	Apriori clock (usec)	4.5648041E+00	Resid sbdelay (usec)	3.43650E-02	+/-	1.4E-04
Phase delay (usec)	-1.67300482234E+03	Apriori clockrate (us/s)	5.2622099E-07	Resid phdelay (usec)	4.12729E-06	+/-	1.2E-07
Delay rate (us/s)	-7.23540063447E-02	Apriori rate (us/s)	-7.23536647600E-02	Resid rate (us/s)	-3.41585E-07	+/-	1.2E-09
Total phase (deg)		Apriori accel (us/s/s)	2.49700276007E-05	Resid phase (deg)	109.1	+/-	1.9

ph/seg (deg)	RMS 29.6	Theor. 4.4	Amplitude Search (1024X32)	1.637	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	16.3	7.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	9.1	2.7	Inc. seg. avg.	1.915	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	10.3	4.6	Inc. frq. avg.	1.684	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 76.2 el 40.6 pa -54.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 272.619 1575.192 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.56.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

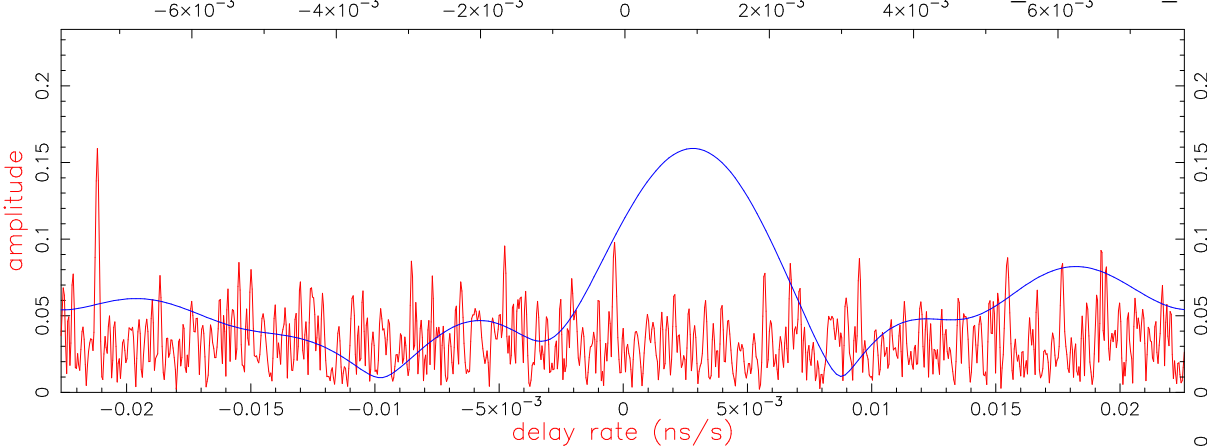
aux01

2013+370.3MP56K, No0500, bf

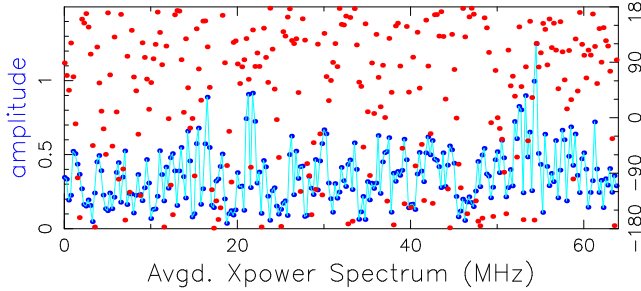
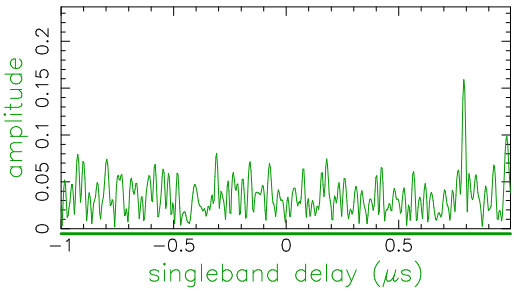
VLBA_BR - VLBA_FD, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

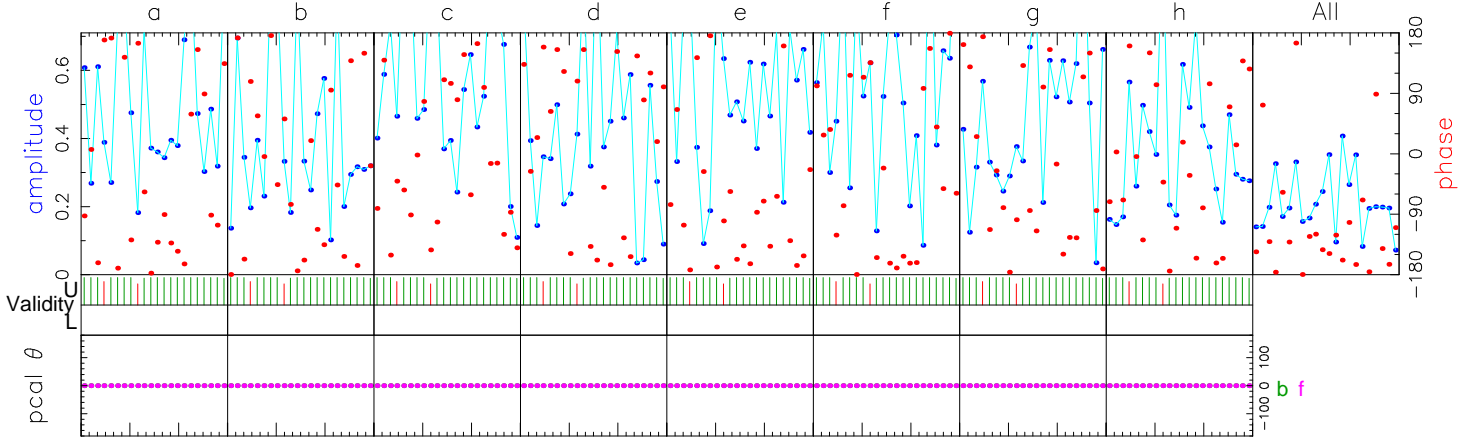


SNR 5.8
 Int time 176.648
 Amp 0.237
 Phase 253.8
 PFD 5.6e-01
 Delays (us)
 SBD 0.789721
 MBD 0.000944
 Fringe rate (Hz)
 -0.918498
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151746
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-163.6	-148.5	-88.7	165.4	-126.7	-165.1	-161.7	-133.1	Phase	-151.2
	0.3	0.2	0.2	0.3	0.5	0.2	0.3	0.0	Ampl.	0.2
	179.0	70.6	43.5	69.4	459.2	425.0	344.6	334.3	Sbd box	459.2
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.67222263257E+03	Apriori delay (usec)	-1.67300482647E+03	Resid mbdelay (usec)	9.43902E-04	+/-	1.9E-04
Sband delay (usec)	-1.67221510572E+03	Apriori clock (usec)	4.5648041E+00	Resid sbdelay (usec)	7.89721E-01	+/-	1.5E-03
Phase delay (usec)	-1.67300483620E+03	Apriori clockrate (us/s)	5.2622099E-07	Resid phdelay (usec)	-9.73494E-06	+/-	1.3E-06
Delay rate (us/s)	-7.23749558476E-02	Apriori rate (us/s)	-7.23536647600E-02	Resid rate (us/s)	-2.12911E-05	+/-	1.2E-08
Total phase (deg)	176.8	Apriori accel (us/s/s)	2.49700276007E-05	Resid phase (deg)	253.8	+/-	19.8

ph/seg (deg)	53.0	Theor.	46.1	Amplitude	0.237 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	65.5		80.4	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.6		27.9	Inc. seg. avg.	0.239	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	55.4		48.8	Inc. frq. avg.	0.242	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 272.619 1575.192 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.66.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

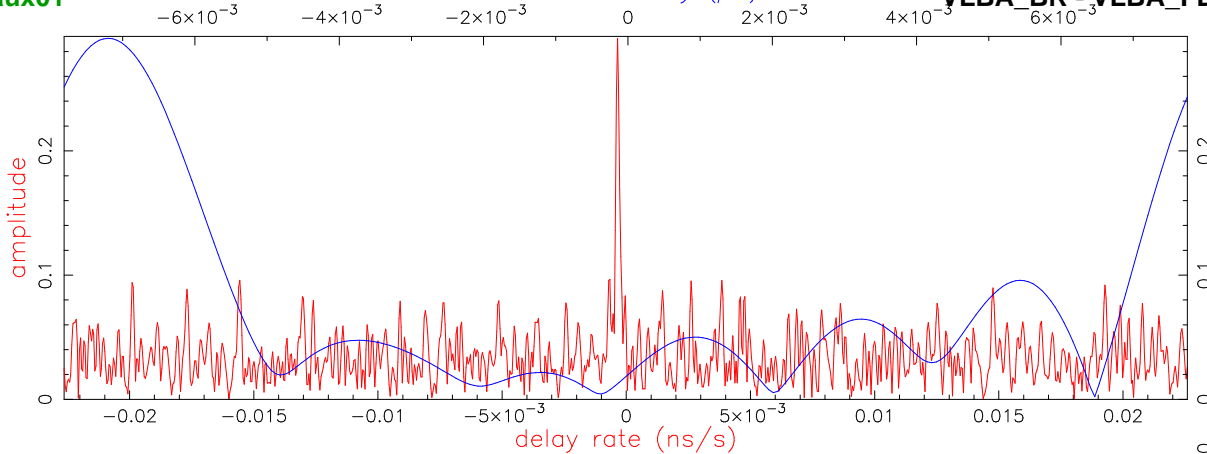
aux01

2013+370.3MP56K, No0500, bf

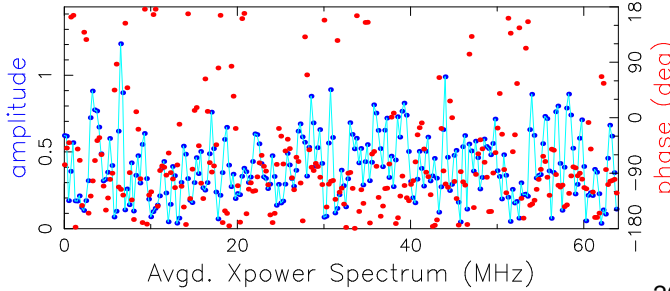
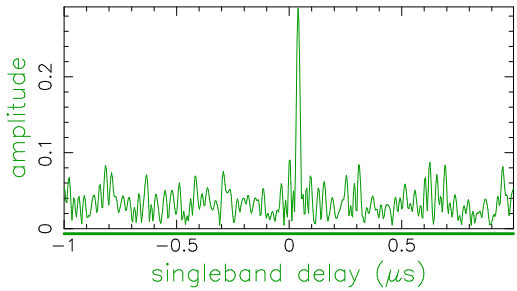
VLBA_BR - VLBA_FD, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 9

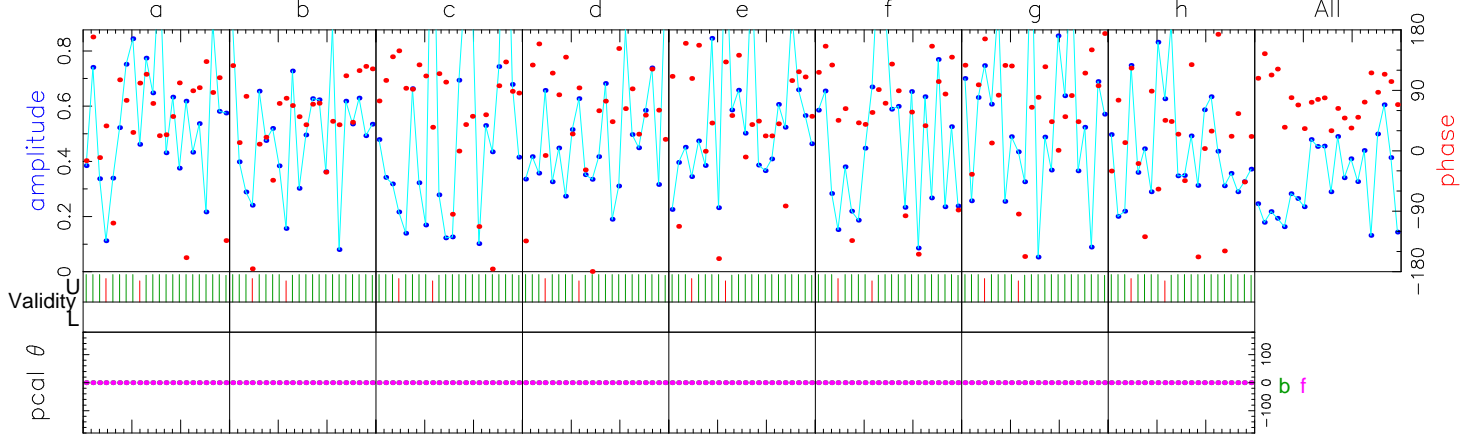


SNR 10.6
 Int time 176.648
 Amp 0.292
 Phase 324.1
 PFD 5.5e-18
 Delays (us)
 SBD 0.039977
 MBD -0.007166
 Fringe rate (Hz)
 -0.014815
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151748
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



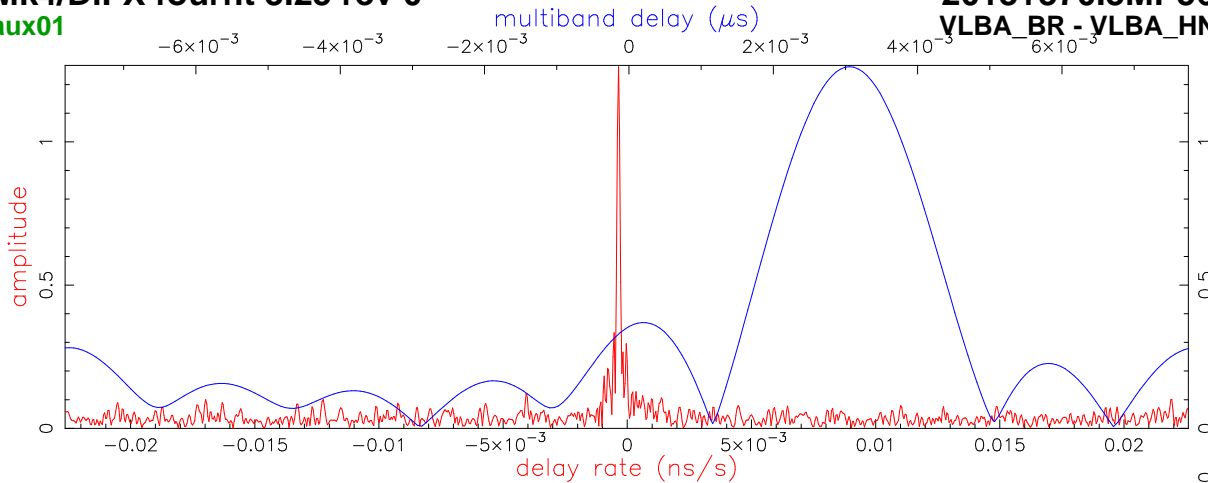
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Group delay (usec) (SBD)	-1.67296511755E+03									
Sband delay (usec)	-1.67296484947E+03									
Phase delay (usec)	-1.67300482154E+03									
Delay rate (us/s)	-7.23540081811E-02									
Total phase (deg)			247.1							
Apriori delay (usec)					-1.67300482647E+03					
Apriori clock (usec)					4.5648041E+00					
Apriori clockrate (us/s)					5.2622099E-07					
Apriori rate (us/s)					-7.23536647600E-02					
Apriori accel (us/s/s)					2.49700276007E-05					
Resid mbdelay (usec)									-7.16609E-03	+/- 1.0E-04
Resid sbdelay (usec)									3.99770E-02	+/- 8.1E-04
Resid phdelay (usec)									4.92932E-06	+/- 6.9E-07
Resid rate (us/s)									-3.43421E-07	+/- 6.8E-09
Resid phase (deg)									324.1	+/- 10.8
PCal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
PCal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.023 0.023							
Data rate (Mb/s):	2048		nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00							
b: az	76.2 el 40.6 pa -54.6		f: az 66.6 el 46.8 pa -82.9		u, v (fr/asec) 272.619 1575.192		simultaneous interpolator			
Control file:	cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.82.3MP56K					

Mk4/DiFX fourfit 3.25 rev 0

aux01

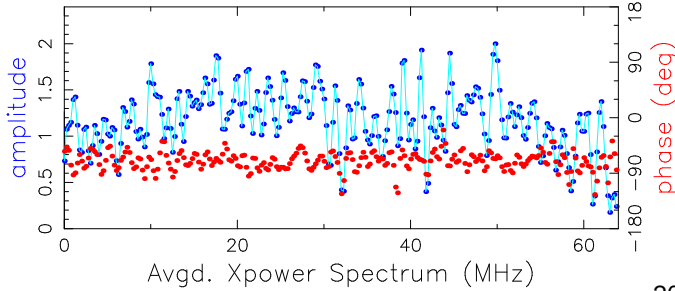
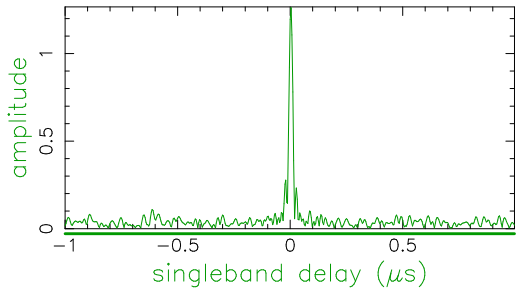
2013+370.3MP56K, No0500, bh

VLBA_BR - VLBA_HN, fgroup Q, pol RL



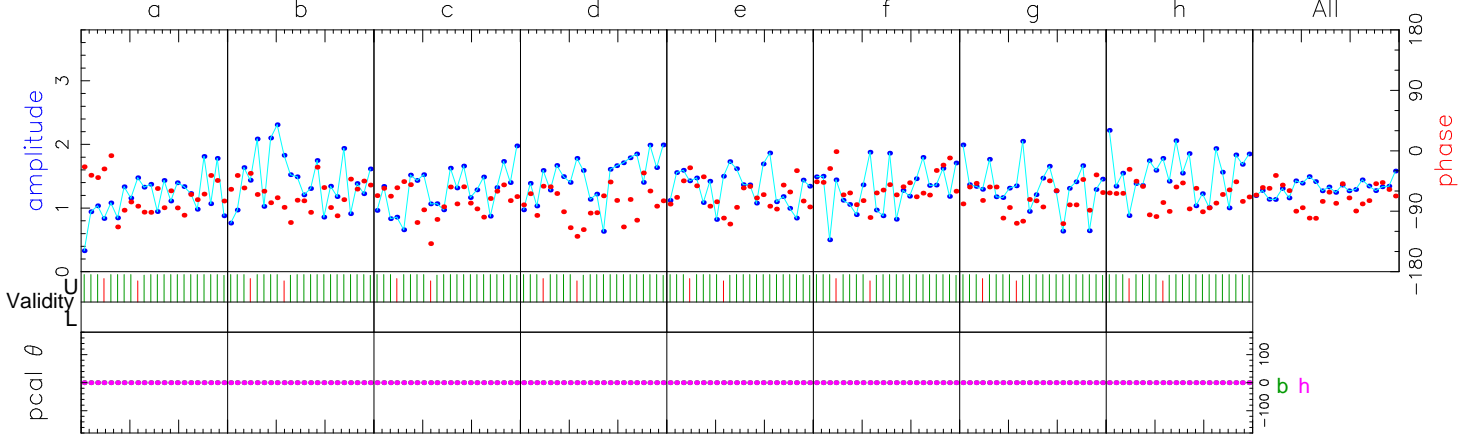
Fringe quality 9

SNR 46.0
 Int time 176.654
 Amp 1.267
 Phase -68.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.003117
 MBD 0.003040
 Fringe rate (Hz)
 -0.015017
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151754
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-67.4	-65.5	-72.8	-80.3	-68.4	-53.2	-70.7	-68.5	Phase	-68.5
	1.1	1.4	1.2	1.4	1.3	1.2	1.3	1.5	Ampl.	1.3
	257.5	257.7	257.3	258.0	257.8	258.3	257.8	257.9	Sbd box	257.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-6.53726412968E+03	Apriori delay (usec)	-6.53726716928E+03	Resid mbdelay (usec)	3.03960E-03	+/-	2.4E-05
Sband delay (usec)	-6.53726405228E+03	Apriori clock (usec)	-7.7999649E+00	Resid sbdelay (usec)	3.11700E-03	+/-	1.9E-04
Phase delay (usec)	-6.53726717369E+03	Apriori clockrate (us/s)	4.9750395E-07	Resid phdelay (usec)	-4.41167E-06	+/-	1.6E-07
Delay rate (us/s)	4.56481508116E-01	Apriori rate (us/s)	4.56481856215E-01	Resid rate (us/s)	-3.48098E-07	+/-	1.6E-09
Total phase (deg)	-314.3	Apriori accel (us/s/s)	3.90633220254E-05	Resid phase (deg)	-68.5	+/-	2.5

ph/seg (deg)	16.9	Theor.	5.8	Amplitude	1.267 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	9.5		10.1	Search (1024X32)	1.240	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.3		3.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.2		6.1	Inc. seg. avg.	1.313	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	1.270	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 76.2 el 40.6 pa -54.6 h: az 103.5 el 73.6 pa -63.0 u,v (fr/asec) -1628.680 1403.584 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bh..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bh.Q.101.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

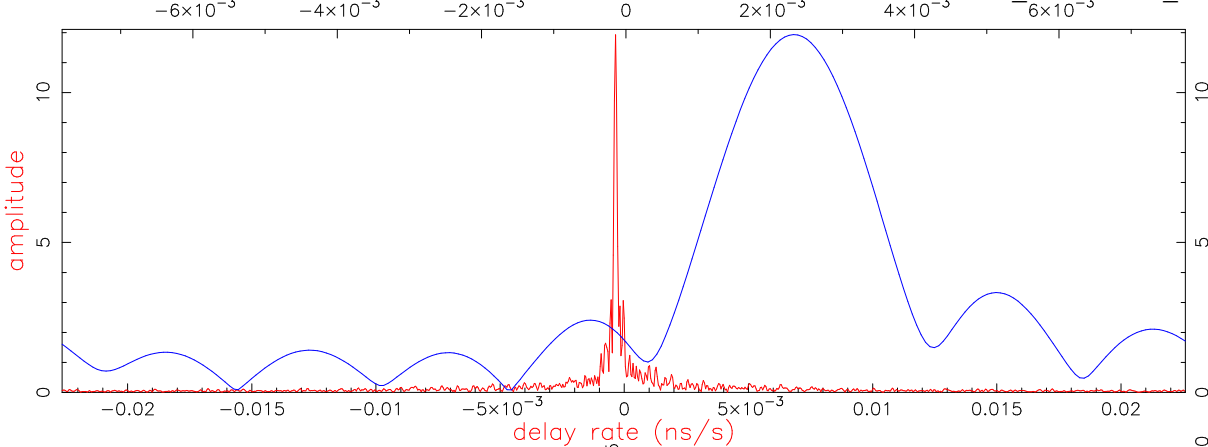
aux01

2013+370.3MP56K, No0500, bh

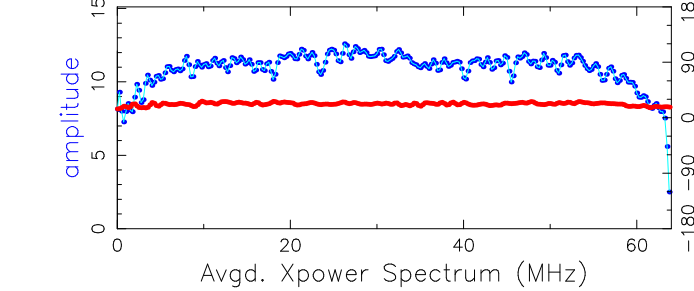
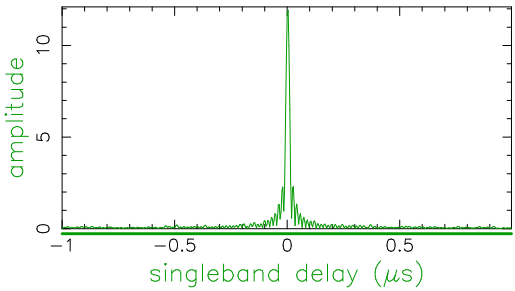
VLBA_BR - VLBA_HN, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 8

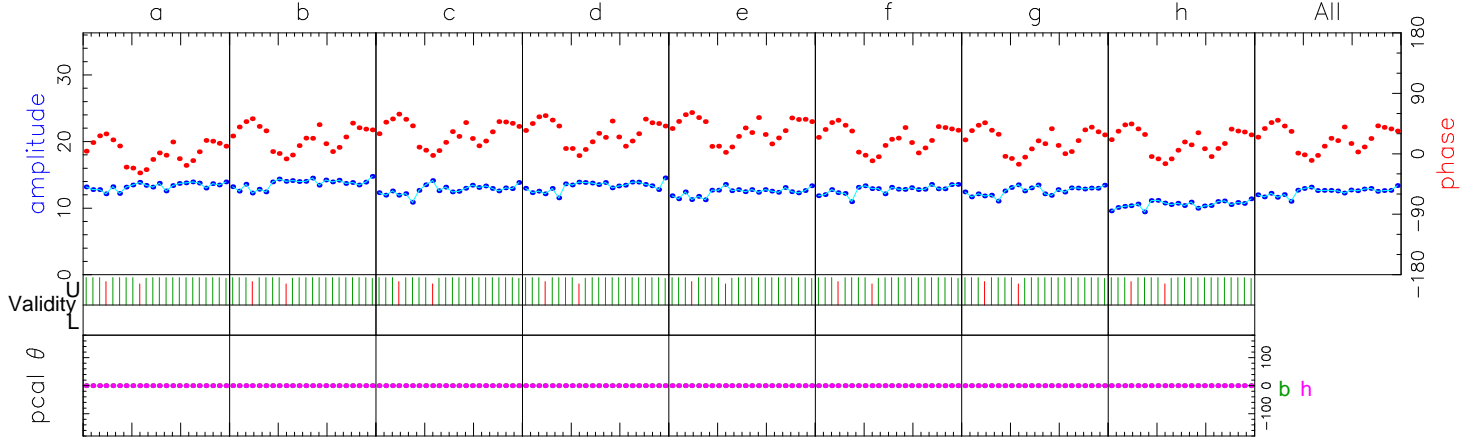


SNR 440.1
 Int time 176.654
 Amp 12.110
 Phase 23.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.002356
 MBD 0.002289
 Fringe rate (Hz)
 -0.014912
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151741
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
h	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-6.53726488071E+03	Apriori delay (usec)	-6.53726716928E+03	Resid mbdelay (usec)	2.28857E-03	+/-	2.5E-06
Sband delay (usec)	-6.53726481278E+03	Apriori clock (usec)	-7.7999649E+00	Resid sbdelay (usec)	2.35650E-03	+/-	2.0E-05
Phase delay (usec)	-6.53726716777E+03	Apriori clockrate (us/s)	4.9750395E-07	Resid phdelay (usec)	1.50537E-06	+/-	1.7E-08
Delay rate (us/s)	4.56481510556E-01	Apriori rate (us/s)	4.56481856215E-01	Resid rate (us/s)	-3.45659E-07	+/-	1.6E-10
Total phase (deg)	-222.4	Apriori accel (us/s/s)	3.90633220254E-05	Resid phase (deg)	23.4	+/-	0.3

ph/seg (deg)	17.2	Theor.	Amplitude	12.110 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	5.3	0.6	Search (1024X32)	11.778	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	11.3	0.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	7.1	0.6	Inc. seg. avg.	12.485	SampCntNorm: enabled	dr window (ns/s) -0.023 0.023
			Inc. frq. avg.	12.108	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	ion window (TEC) 0.00 0.00
					Data rate(Mb/s): 2048	
					nlags: 256 t_cohere infinite	

b: az 76.2 el 40.6 pa -54.6 h: az 103.5 el 73.6 pa -63.0 u,v (fr/asec) -1628.680 1403.584 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bh..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bh.Q.40.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

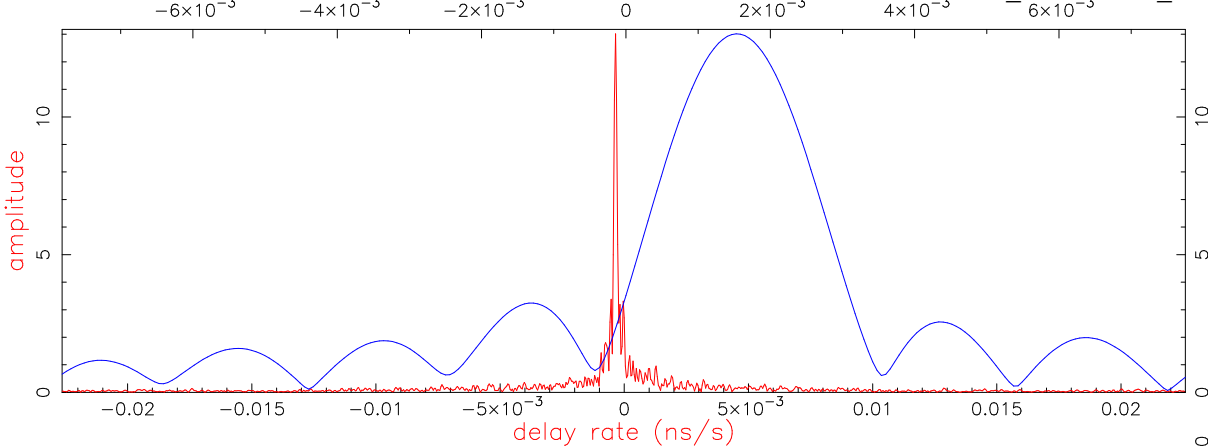
aux01

2013+370.3MP56K, No0500, bh

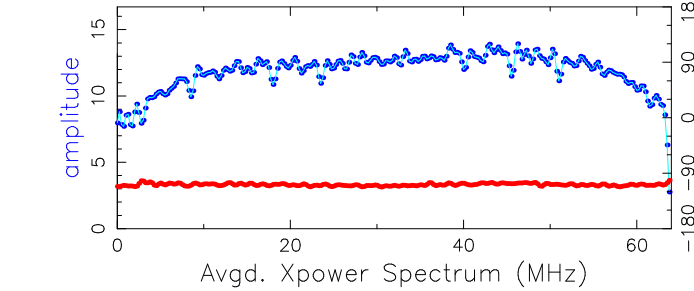
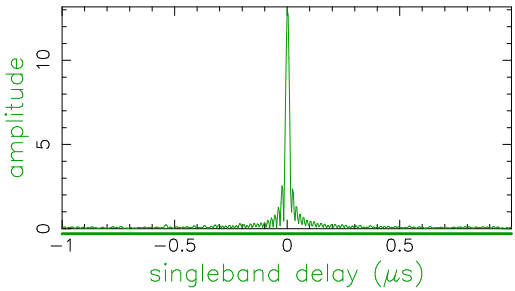
VLBA_BR - VLBA_HN, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 8

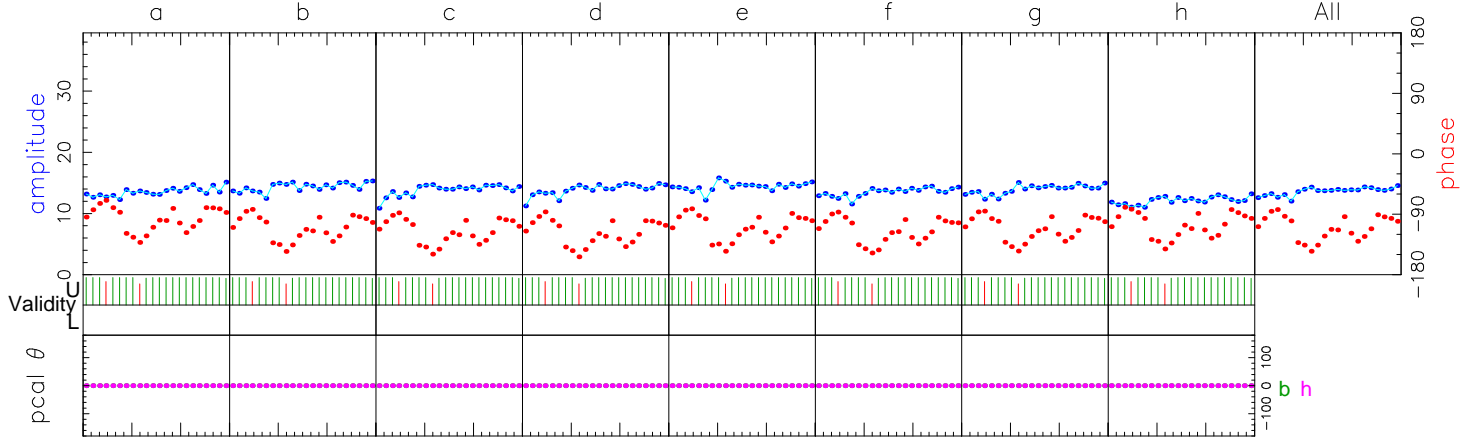


SNR 478.9
 Int time 176.654
 Amp 13.178
 Phase -110.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001425
 MBD 0.001567
 Fringe rate (Hz)
 -0.014890
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151745
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	0:0
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
h	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -6.53726560212E+03 Apriori delay (usec) -6.53726716928E+03 Resid mbdelay (usec) 1.56716E-03 +/- 2.3E-06
 Sband delay (usec) -6.53726574428E+03 Apriori clock (usec) -7.7999649E+00 Resid sbdelay (usec) 1.42500E-03 +/- 1.8E-05
 Phase delay (usec) -6.53726717636E+03 Apriori clockrate (us/s) 4.9750395E-07 Resid phdelay (usec) -7.08496E-06 +/- 1.5E-08
 Delay rate (us/s) 4.56481511062E-01 Apriori rate (us/s) 4.56481856215E-01 Resid rate (us/s) -3.45153E-07 +/- 1.5E-10
 Total phase (deg) -355.8 Apriori accel (us/s/s) 3.90633220254E-05 Resid phase (deg) -110.0 +/- 0.2

RMS Theor. Amplitude 13.178 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 17.4 0.6 Search (1024X32) 12.815 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 5.8 1.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 6.9 0.3 Inc. seg. avg. 13.638 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 4.9 0.6 Inc. frq. avg. 13.085 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 h: az 103.5 el 73.6 pa -63.0 u,v (fr/asec) -1628.680 1403.584 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bh..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bh.Q.58.3MP56K

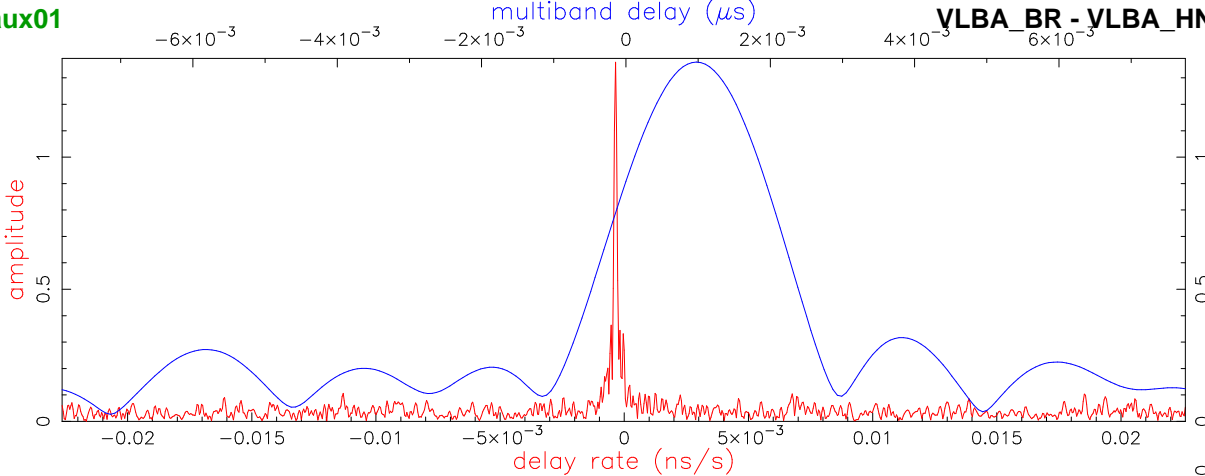
Mk4/DiFX fourfit 3.25 rev 0

aux01

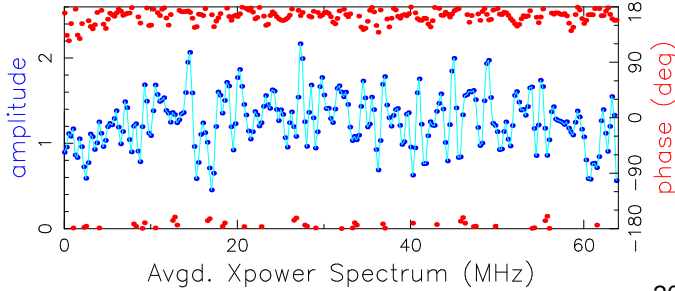
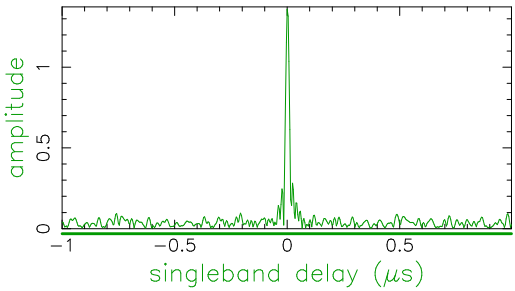
2013+370.3MP56K, No0500, bh

VLBA_BR - VLBA_HN, fgroup Q, pol LR

Fringe quality 7

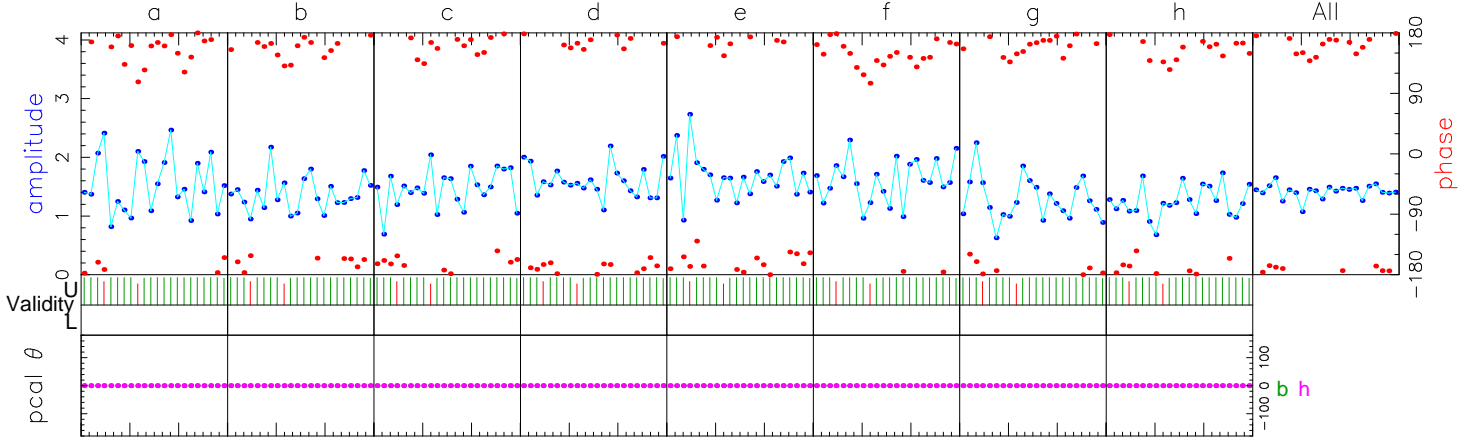


SNR 49.9
 Int time 176.654
 Amp 1.374
 Phase 171.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.001296
 MBD 0.001008
 Fringe rate (Hz)
 -0.015017
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151747
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
h	1000	1000	1000	1000	1000	1000	1000	1000		
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
h	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-6.53726616090E+03	Apriori delay (usec)	-6.53726716928E+03	Resid mbdelay (usec)	1.00838E-03	+/-	2.2E-05
Sband delay (usec)	-6.53726587303E+03	Apriori clock (usec)	-7.7999649E+00	Resid sbdelay (usec)	1.29625E-03	+/-	1.7E-04
Phase delay (usec)	-6.53726715822E+03	Apriori clockrate (us/s)	4.9750395E-07	Resid phdelay (usec)	1.10598E-05	+/-	1.5E-07
Delay rate (us/s)	4.56481508108E-01	Apriori rate (us/s)	4.56481856215E-01	Resid rate (us/s)	-3.48107E-07	+/-	1.4E-09
Total phase (deg)	-74.0	Apriori accel (us/s/s)	3.90633220254E-05	Resid phase (deg)	171.8	+/-	2.3

ph/seg (deg)	16.4	Theor.	5.4	Amplitude	1.374 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	8.9	Search (1024X32)	1.350	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	11.6	Inc. seg. avg.	1.411	Inc. frq. avg.	1.381	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	10.6	Inc. frq. avg.	1.381			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	

b: az 76.2 el 40.6 pa -54.6 h: az 103.5 el 73.6 pa -63.0 u,v (fr/asec) -1628.680 1403.584 simultaneous interpolator

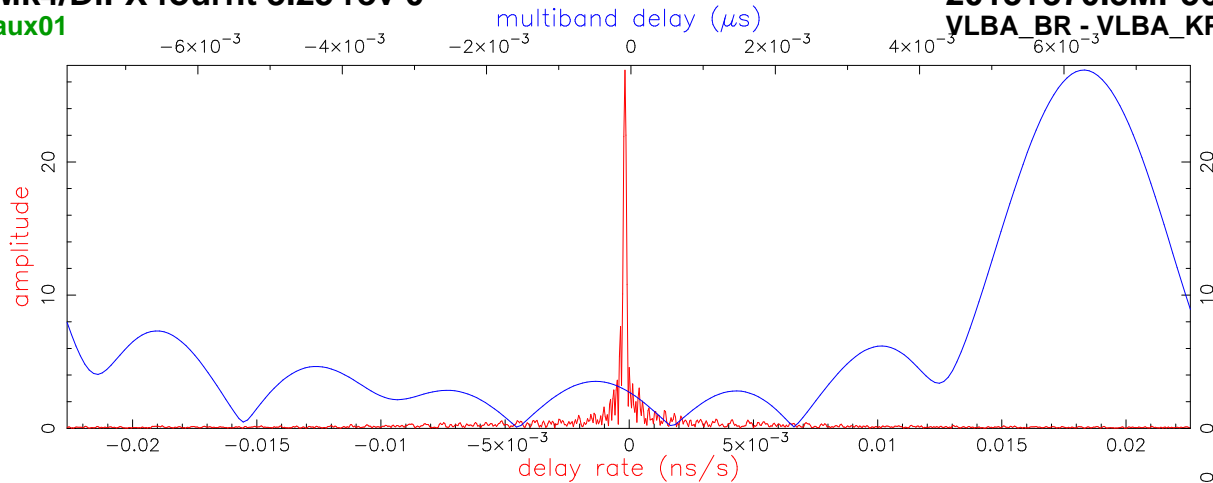
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bh..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bh.Q.70.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

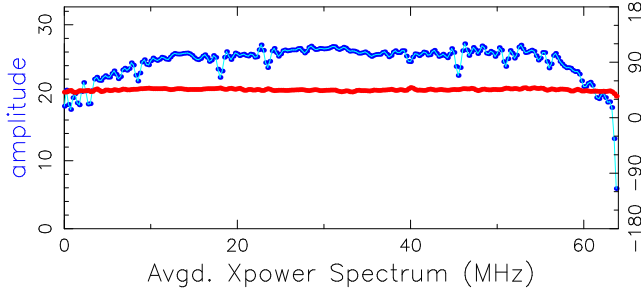
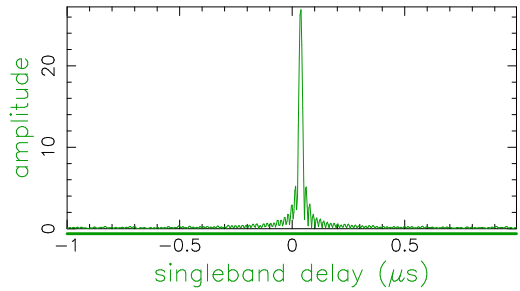
2013+370.3MP56K, No0500, bk

VLBA_BR - VLBA_KP, fgroup Q, pol LL



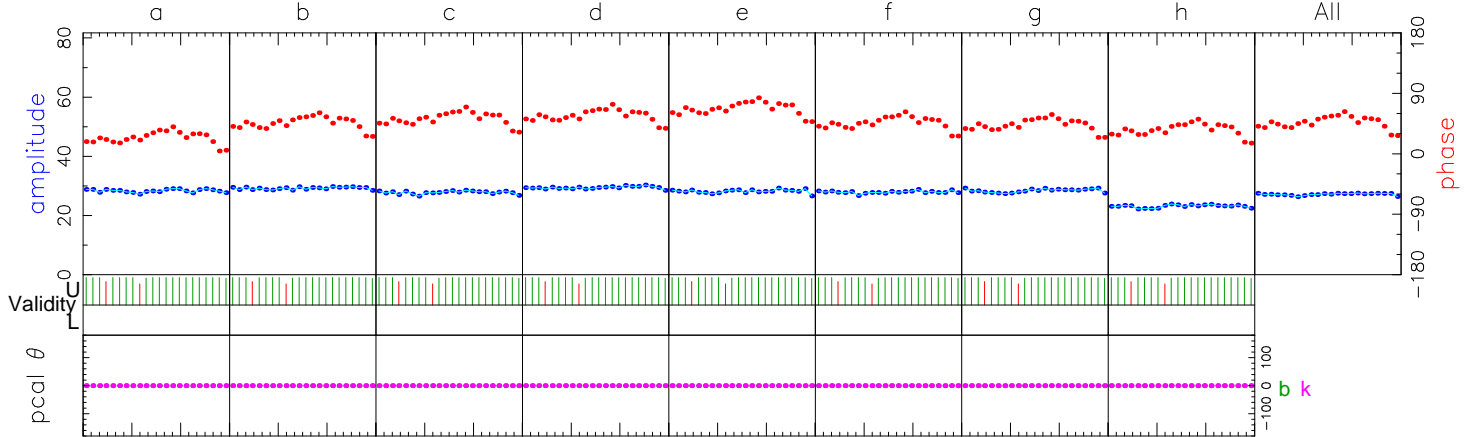
Fringe quality 8

SNR 990.3
 Int time 176.659
 Amp 27.247
 Phase 91.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.037592
 MBD 0.006235
 Fringe rate (Hz)
 -0.007606
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Yr:day 1234
 Start 2024:113
 Stop 2024:113
 FRT 094130.00
 Corr/FF/build
 2025:042:151745
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	0:0
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -2.14909846976E+02 Apriori delay (usec) -2.14947331699E+02 Resid mbdelay (usec) 6.23472E-03 +/- 1.1E-06
 Sband delay (usec) -2.14909739699E+02 Apriori clock (usec) 4.4722767E+00 Resid sbdelay (usec) 3.75920E-02 +/- 8.7E-06
 Phase delay (usec) -2.14947328694E+02 Apriori clockrate (us/s) 4.2423487E-07 Resid phdelay (usec) 3.00460E-06 +/- 7.5E-09
 Delay rate (us/s) -1.40168294810E-01 Apriori rate (us/s) -1.40168118498E-01 Resid rate (us/s) -1.76312E-07 +/- 7.2E-11
 Total phase (deg) 131.4 Apriori accel (us/s/s) 1.58703705792E-05 Resid phase (deg) 91.7 +/- 0.1

RMS Theor. Amplitude 27.247 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 8.8 0.3 Search (1024X32) 26.806 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.3 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 14.2 0.2 Inc. seg. avg. 27.203 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 6.8 0.3 Inc. frq. avg. 27.510 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 k: az 66.3 el 41.3 pa -77.6 u,v (fr/asec) 513.181 1231.838 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bk..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bk.Q.60.3MP56K

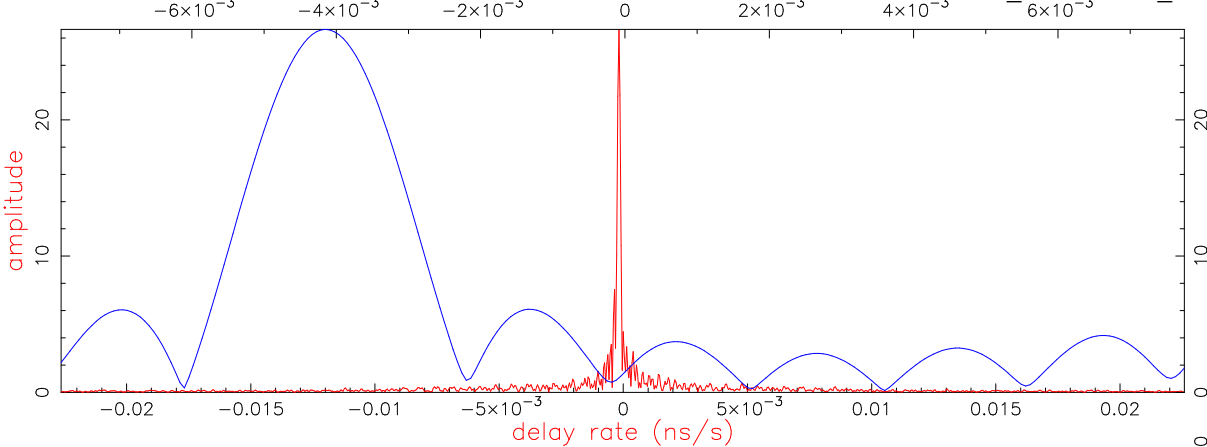
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bk

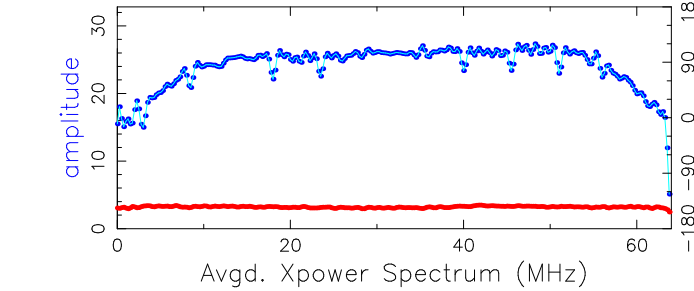
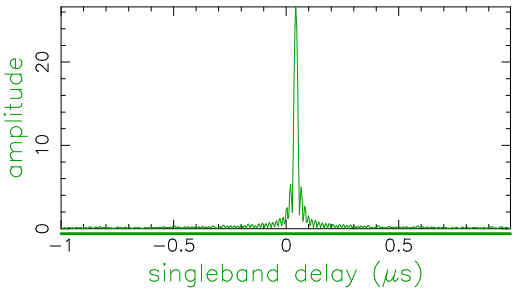
VLBA_BR - VLBA_KP, fgroup Q, pol RR

multiband delay (μ s)

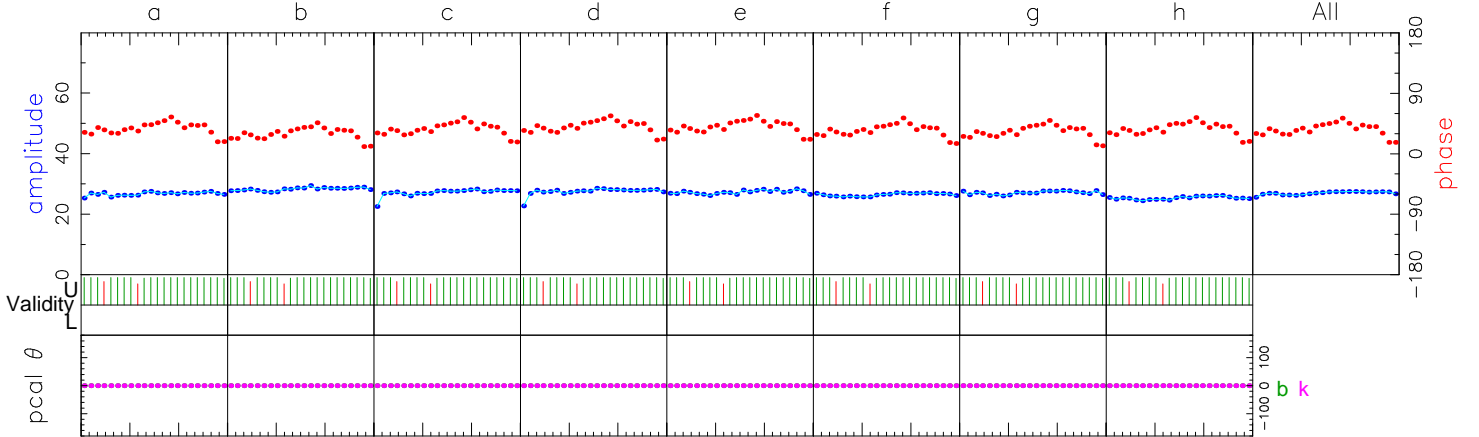


Fringe quality 9

SNR 968.1
 Int time 176.661
 Amp 26.637
 Phase 283.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.042815
 MBD -0.004152
 Fringe rate (Hz)
 -0.007625
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151747
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -2.14904608320E+02 Apriori delay (usec) -2.14947331699E+02 Resid mbdelay (usec) -4.15162E-03 +/- 1.1E-06
 Sband delay (usec) -2.14904516949E+02 Apriori clock (usec) 4.4722767E+00 Resid sbdelay (usec) 4.28148E-02 +/- 8.9E-06
 Phase delay (usec) -2.14947329366E+02 Apriori clockrate (us/s) 4.2423487E-07 Resid phdelay (usec) 2.33236E-06 +/- 7.6E-09
 Delay rate (us/s) -1.40168295251E-01 Apriori rate (us/s) -1.40168118498E-01 Resid rate (us/s) -1.76753E-07 +/- 7.4E-11
 Total phase (deg) 323.5 Apriori accel (us/s/s) 1.58703705792E-05 Resid phase (deg) 283.7 +/- 0.1

RMS Theor. Amplitude 26.637 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 8.9 0.3 Search (1024X32) 26.008 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.3 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 3.9 0.2 Inc. seg. avg. 26.958 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 3.0 0.3 Inc. frq. avg. 26.681 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

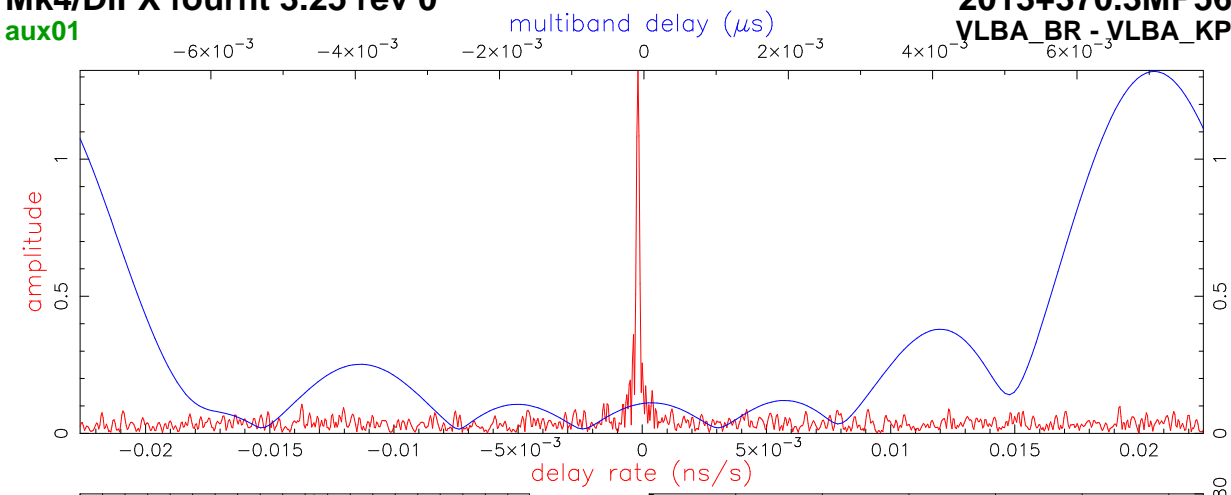
b: az 76.2 el 40.6 pa -54.6 k: az 66.3 el 41.3 pa -77.6 u,v (fr/asec) 513.181 1231.838 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bk..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bk.Q.72.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bk

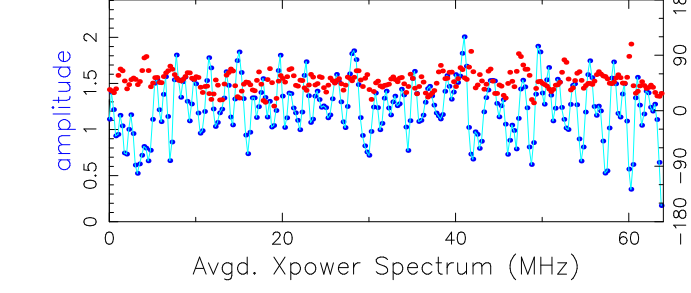
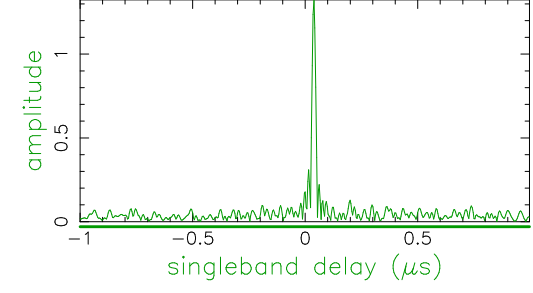
VLBA_BR - VLBA_KP, fgroup Q, pol RL



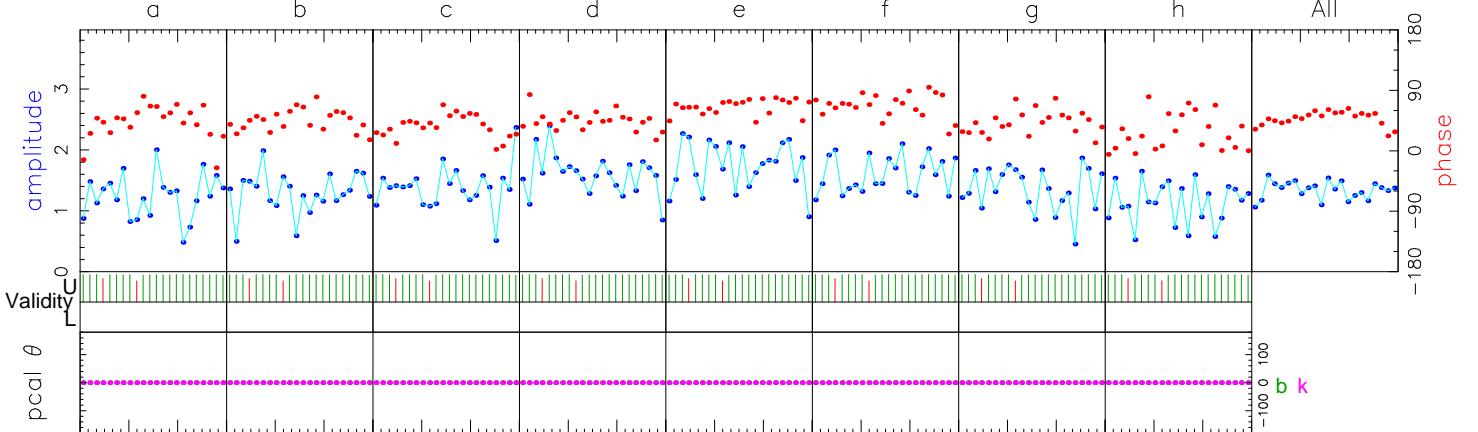
Fringe quality 8

SNR 48.1
 Int time 176.659
 Amp 1.324
 Phase 93.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.038397
 MBD 0.007053
 Fringe rate (Hz) -0.007544
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151753
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	0:0
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
k	1000	1000	1000	1000	1000	1000	1000	1000		1000
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -2.14909028539E+02 Apriori delay (usec) -2.14947331699E+02 Resid mbdelay (usec) 7.05316E-03 +/- 2.3E-05
 Sband delay (usec) -2.14908934449E+02 Apriori clock (usec) 4.4722767E+00 Resid sbdelay (usec) 3.83972E-02 +/- 1.8E-04
 Phase delay (usec) -2.14947328592E+02 Apriori clockrate (us/s) 4.2423487E-07 Resid phdelay (usec) 3.10654E-06 +/- 1.5E-07
 Delay rate (us/s) -1.40168293378E-01 Apriori rate (us/s) -1.40168118498E-01 Resid rate (us/s) -1.74880E-07 +/- 1.5E-09
 Total phase (deg) 133.0 Apriori accel (us/s/s) 1.58703705792E-05 Resid phase (deg) 93.2 +/- 2.4

ph/seg (deg) 10.6 5.6 Search (1024X32) 1.290 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.8 9.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.9 3.4 Inc. seg. avg. 1.336 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 16.4 5.9 Inc. frq. avg. 1.352 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 b: az 76.2 el 40.6 pa -54.6 k: az 66.3 el 41.3 pa -77.6 u, v (fr/asec) 513.181 1231.838 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bk..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bk.Q.96.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

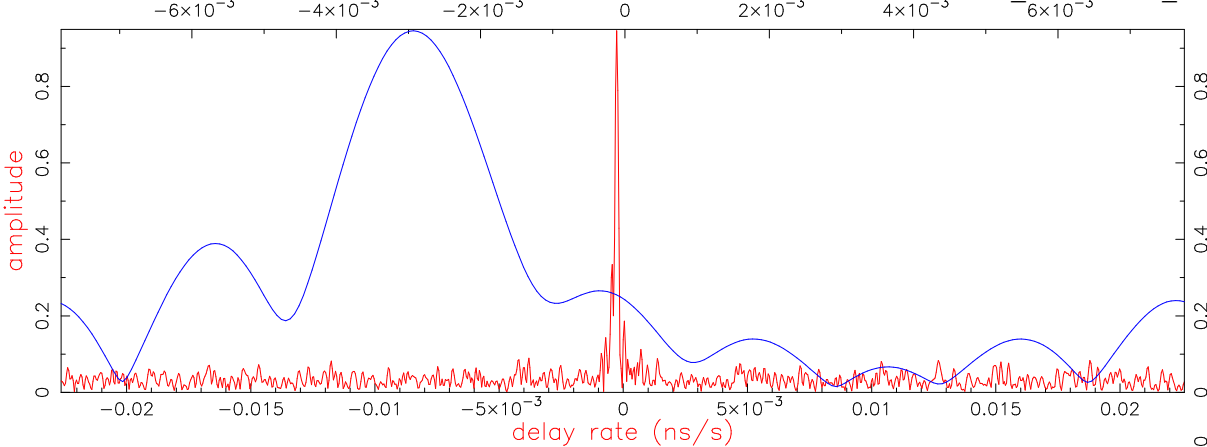
aux01

2013+370.3MP56K, No0500, bl

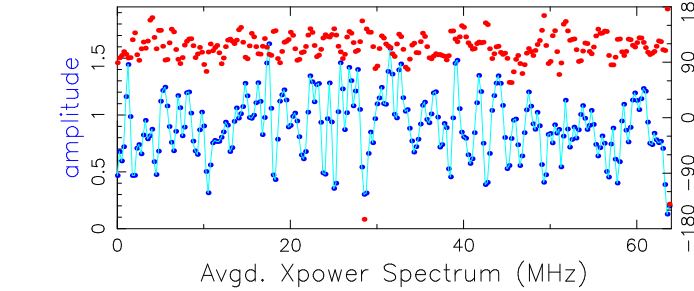
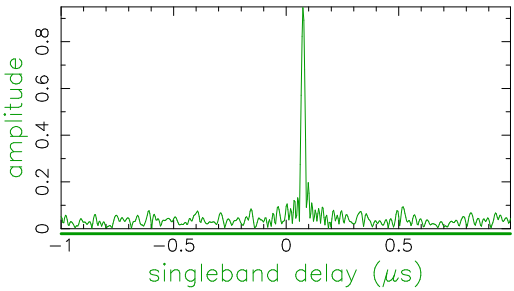
VLBA_BR - VLBA_LA, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 7

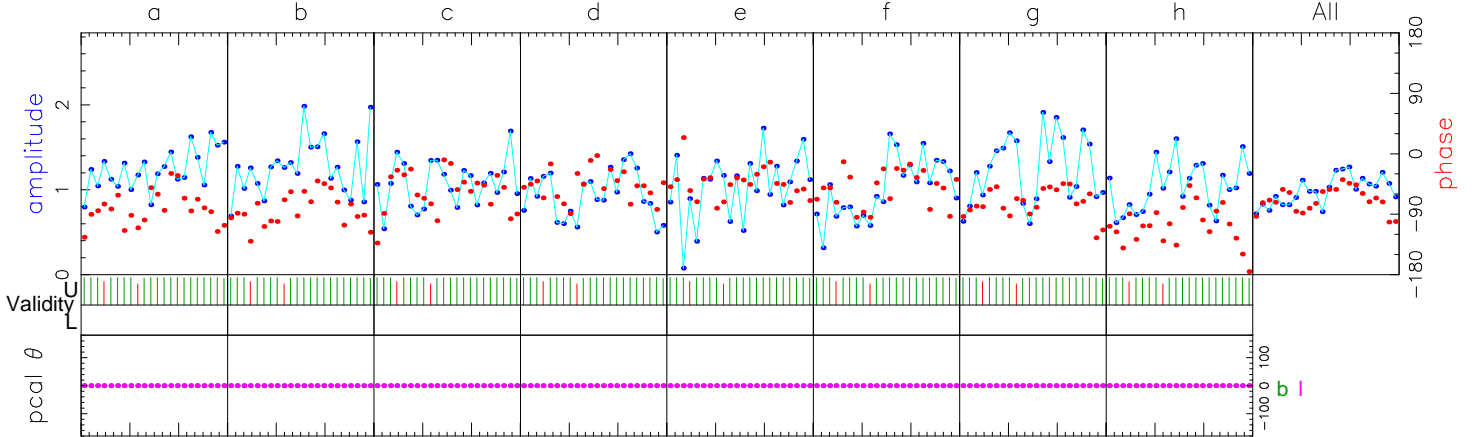


SNR 34.5
 Int time 176.659
 Amp 0.949
 Phase 225.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.075014
 MBD -0.002919
 Fringe rate (Hz)
 -0.012055
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151802
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) -1.67453635516E+03 Apriori delay (usec) -1.67461156098E+03 Resid mbdelay (usec) -2.91918E-03 +/- 3.1E-05
 Sband delay (usec) -1.67453654673E+03 Apriori clock (usec) 1.2921827E+01 Resid sbdelay (usec) 7.50142E-02 +/- 2.5E-04
 Phase delay (usec) -1.67461156531E+03 Apriori clockrate (us/s) 8.1044199E-07 Resid phdelay (usec) -4.33491E-06 +/- 2.1E-07
 Delay rate (us/s) -4.92676259482E-02 Apriori rate (us/s) -4.92673465022E-02 Resid rate (us/s) -2.79446E-07 +/- 2.1E-09
 Total phase (deg) 318.5 Apriori accel (us/s/s) 1.98999092992E-05 Resid phase (deg) 225.2 +/- 3.3

ph/seg (deg) 17.6 7.7 Search (1024X32) 0.926 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 18.0 13.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.2 4.7 Inc. seg. avg. 0.984 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.4 8.2 Inc. frq. avg. 1.003 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

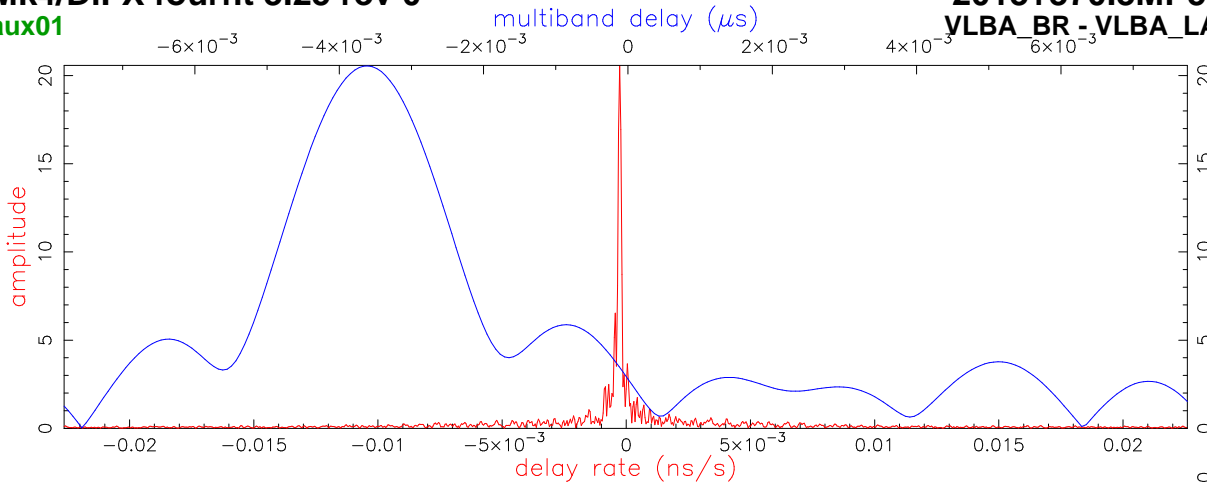
b: az 76.2 el 40.6 pa -54.6 l: az 71.2 el 46.9 pa -74.8 u, v (fr/asec) 186.780 1159.135 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bl.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bl.Q.152.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

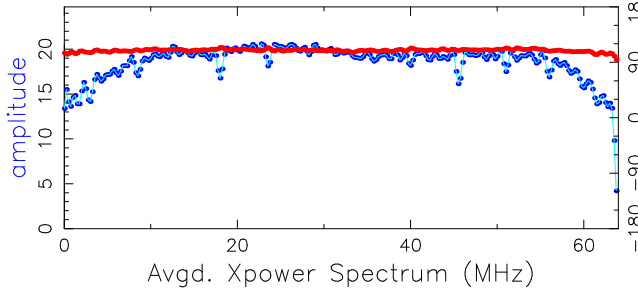
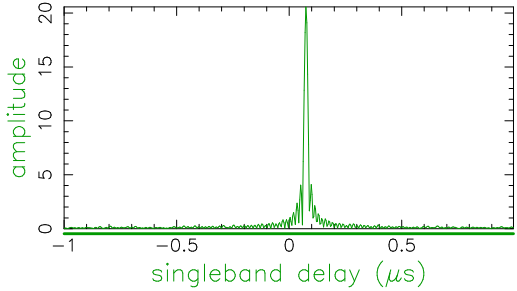
2013+370.3MP56K, No0500, bl

VLBA_BR - VLBA_LA, fgroup Q, pol LL



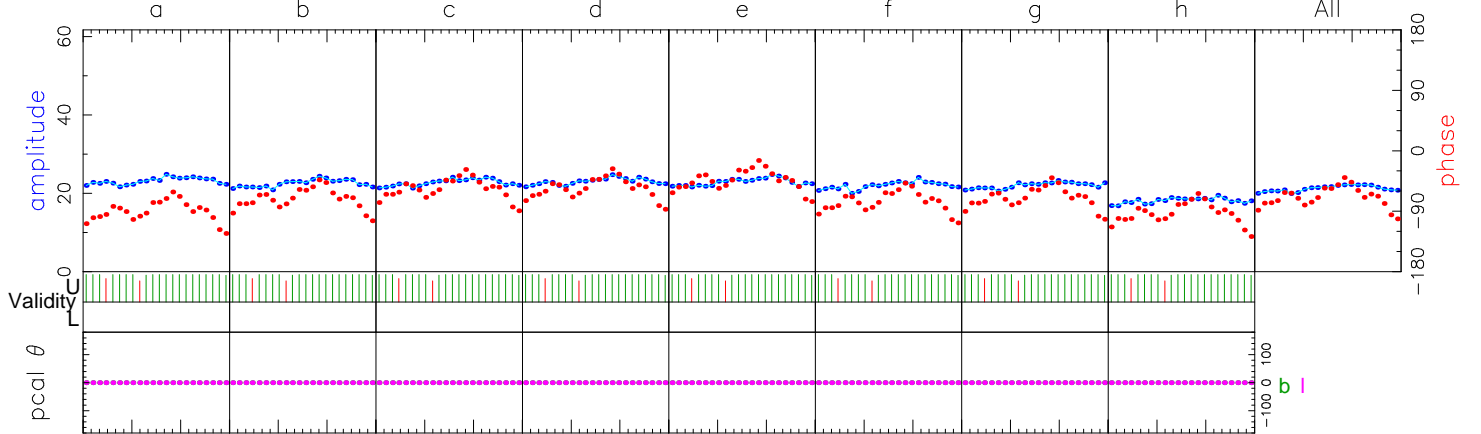
Fringe quality 7

SNR 747.9
 Int time 176.659
 Amp 20.579
 Phase 223.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.074686
 MBD -0.003603
 Fringe rate (Hz)
 -0.012017
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151746
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.67453703879E+03	Apriori delay (usec)	-1.67461156098E+03	Resid mbdelay (usec)	-3.60281E-03	+/-	1.5E-06
Sband delay (usec)	-1.67453687523E+03	Apriori clock (usec)	1.2921827E+01	Resid sbdelay (usec)	7.46858E-02	+/-	1.2E-05
Phase delay (usec)	-1.67461156541E+03	Apriori clockrate (us/s)	8.1044199E-07	Resid phdelay (usec)	-4.42930E-06	+/-	9.9E-09
Delay rate (us/s)	-4.92676250710E-02	Apriori rate (us/s)	-4.92673465022E-02	Resid rate (us/s)	-2.78569E-07	+/-	9.6E-11
Total phase (deg)	317.1	Apriori accel (us/s/s)	1.98999092992E-05	Resid phase (deg)	223.7	+/-	0.2

ph/seg (deg)	14.9	RMS	14.9	Theor.	0.4	Amplitude	20.579 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	4.9	Search (1024X32)	19.898	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	18.4	Inc. seg. avg.	21.257	Inc. frq. avg.	21.348	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	8.2	Inc. frq. avg.	21.348	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 76.2 el 40.6 pa -54.6 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 186.780 1159.135 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bl.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bl.Q.68.3MP56K

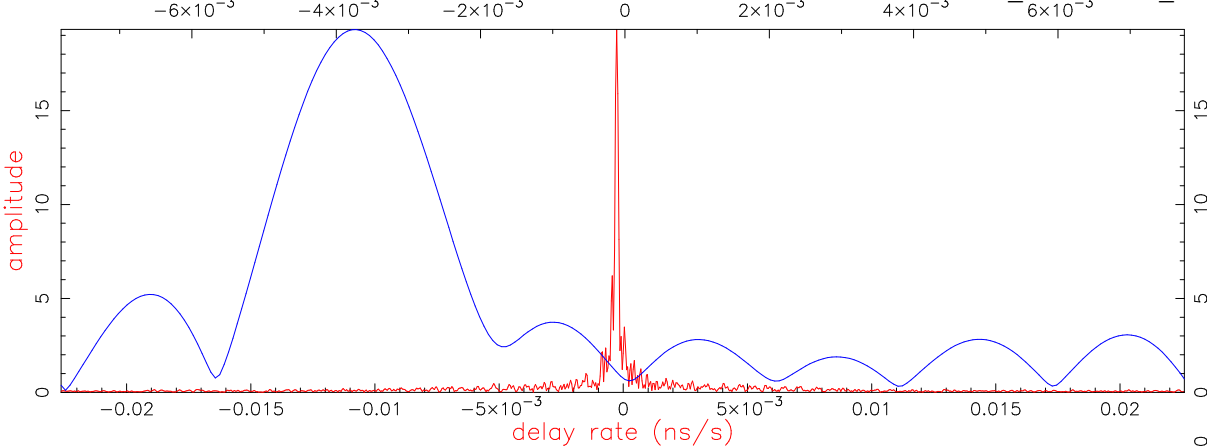
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bl

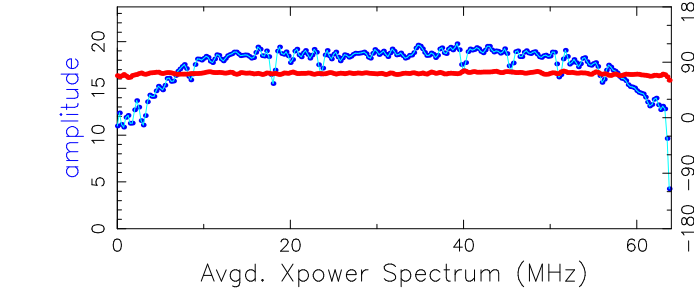
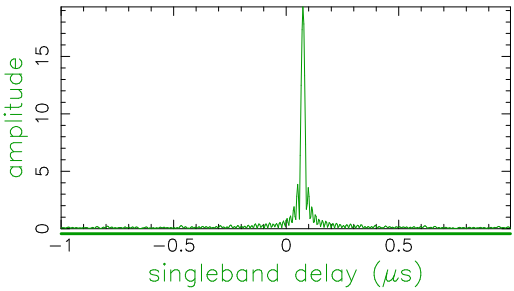
VLBA_BR - VLBA_LA, fgroup Q, pol RR

multiband delay (μ s)



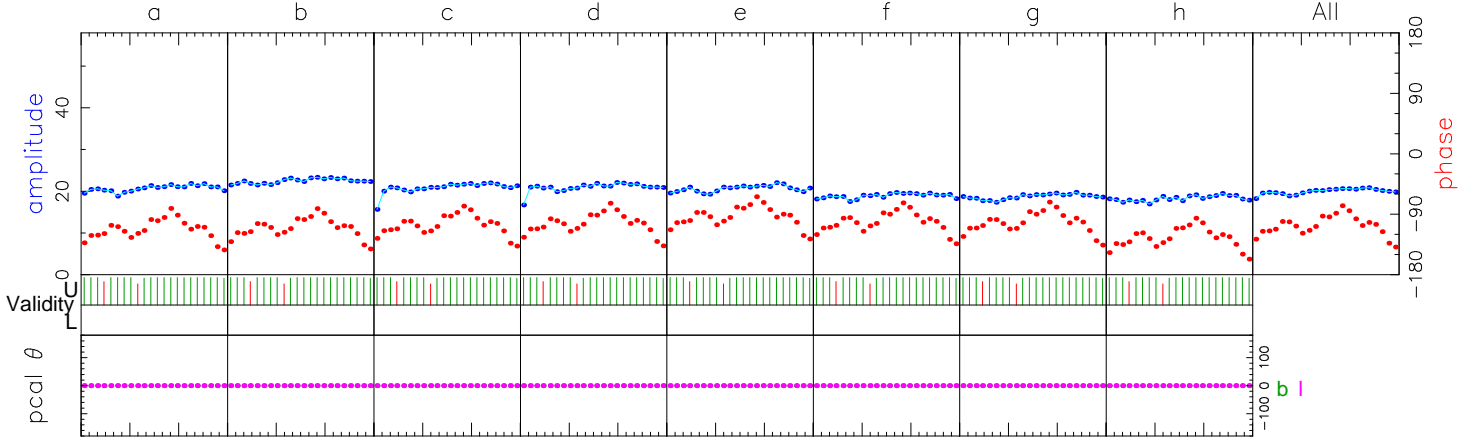
Fringe quality 8

SNR 702.2
 Int time 176.659
 Amp 19.320
 Phase 185.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.074506
 MBD -0.003735
 Fringe rate (Hz)
 -0.012028
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151752
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) -1.67453717076E+03 Apriori delay (usec) -1.67461156098E+03 Resid mbdelay (usec) -3.73478E-03 +/- 1.5E-06
 Sband delay (usec) -1.67453705548E+03 Apriori clock (usec) 1.2921827E+01 Resid sbdelay (usec) 7.45055E-02 +/- 1.2E-05
 Phase delay (usec) -1.67461156784E+03 Apriori clockrate (us/s) 8.1044199E-07 Resid phdelay (usec) -6.86352E-06 +/- 1.1E-08
 Delay rate (us/s) -4.92673465022E-02 Apriori rate (us/s) -4.92673465022E-02 Resid rate (us/s) -2.78806E-07 +/- 1.0E-10
 Total phase (deg) 279.3 Apriori accel (us/s/s) 1.98999092992E-05 Resid phase (deg) 185.9 +/- 0.2

RMS Theor. Amplitude 19.320 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 14.9 0.4 Search (1024X32) 18.634 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 4.8 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 10.1 0.2 Inc. seg. avg. 19.973 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 6.8 0.4 Inc. frq. avg. 19.526 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 186.780 1159.135 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bl_.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bl.Q.90.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

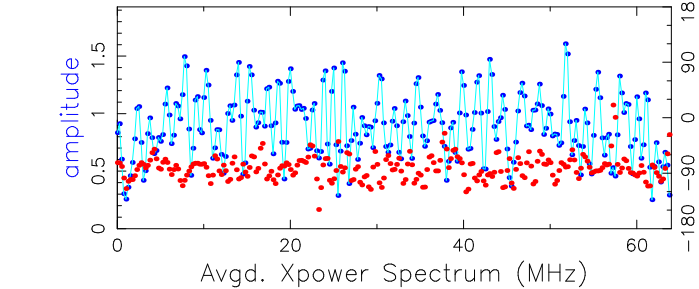
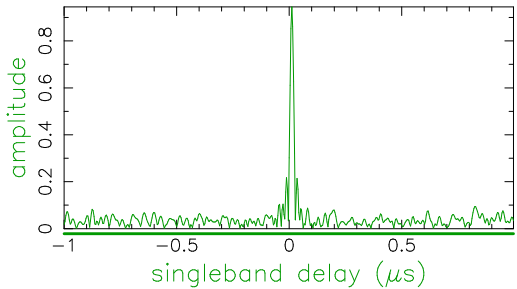
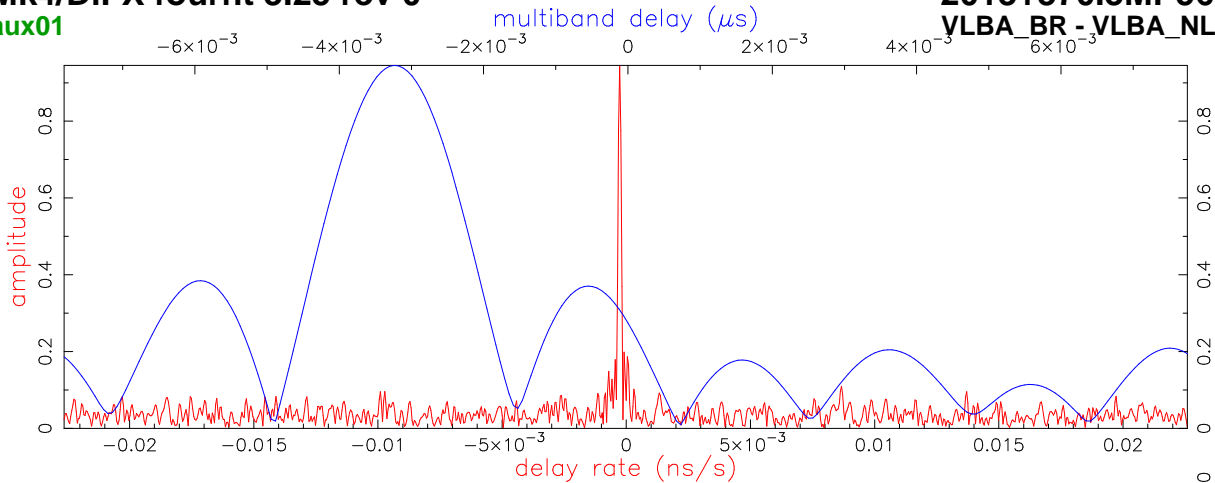
aux01

2013+370.3MP56K, No0500, bn

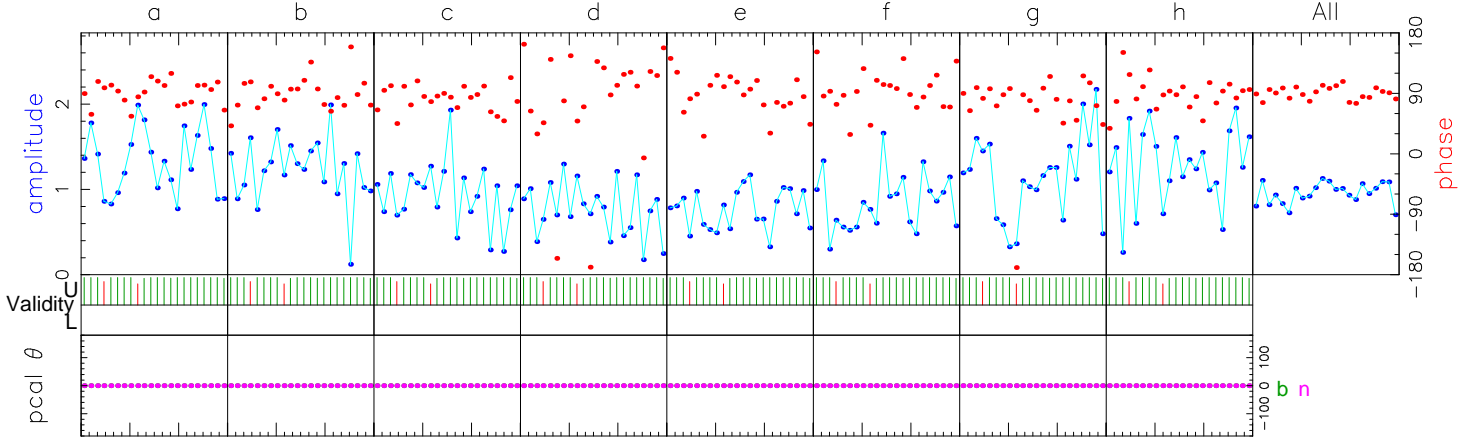
VLBA_BR - VLBA_NL, fgroup Q, pol RL

Fringe quality 8

SNR 34.3
 Int time 176.349
 Amp 0.945
 Phase 293.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.011820
 MBD -0.003228
 Fringe rate (Hz)
 -0.011046
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151754
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	0:0
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
n	1000	1000	1000	1000	1000	1000	1000	1000		1000
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-4.42616159216E+03	Apriori delay (usec)	-4.42617398926E+03	Resid mbdelay (usec)	-3.22790E-03	+/-	3.2E-05
Sband delay (usec)	-4.42616216951E+03	Apriori clock (usec)	4.9095936E+00	Resid sbdelay (usec)	1.18198E-02	+/-	2.5E-04
Phase delay (usec)	-4.42617398343E+03	Apriori clockrate (us/s)	2.7918098E-07	Resid phdelay (usec)	5.83000E-06	+/-	2.1E-07
Delay rate (us/s)	1.77824239879E-01	Apriori rate (us/s)	1.77824495929E-01	Resid rate (us/s)	-2.56051E-07	+/-	2.1E-09
Total phase (deg)		Apriori accel (us/s/s)	2.89300487315E-05	Resid phase (deg)	293.0	+/-	3.3

ph/seg (deg)	9.1	Theor.	7.8	Search (1024X32)	0.912	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	12.9		13.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	9.1		4.7	Inc. seg. avg.	0.949	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	25.4		8.2	Inc. frq. avg.	0.948	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 76.2 el 40.6 pa -54.6 n: az 85.1 el 59.3 pa -68.9 u,v (fr/asec) -628.566 1147.028 simultaneous interpolator

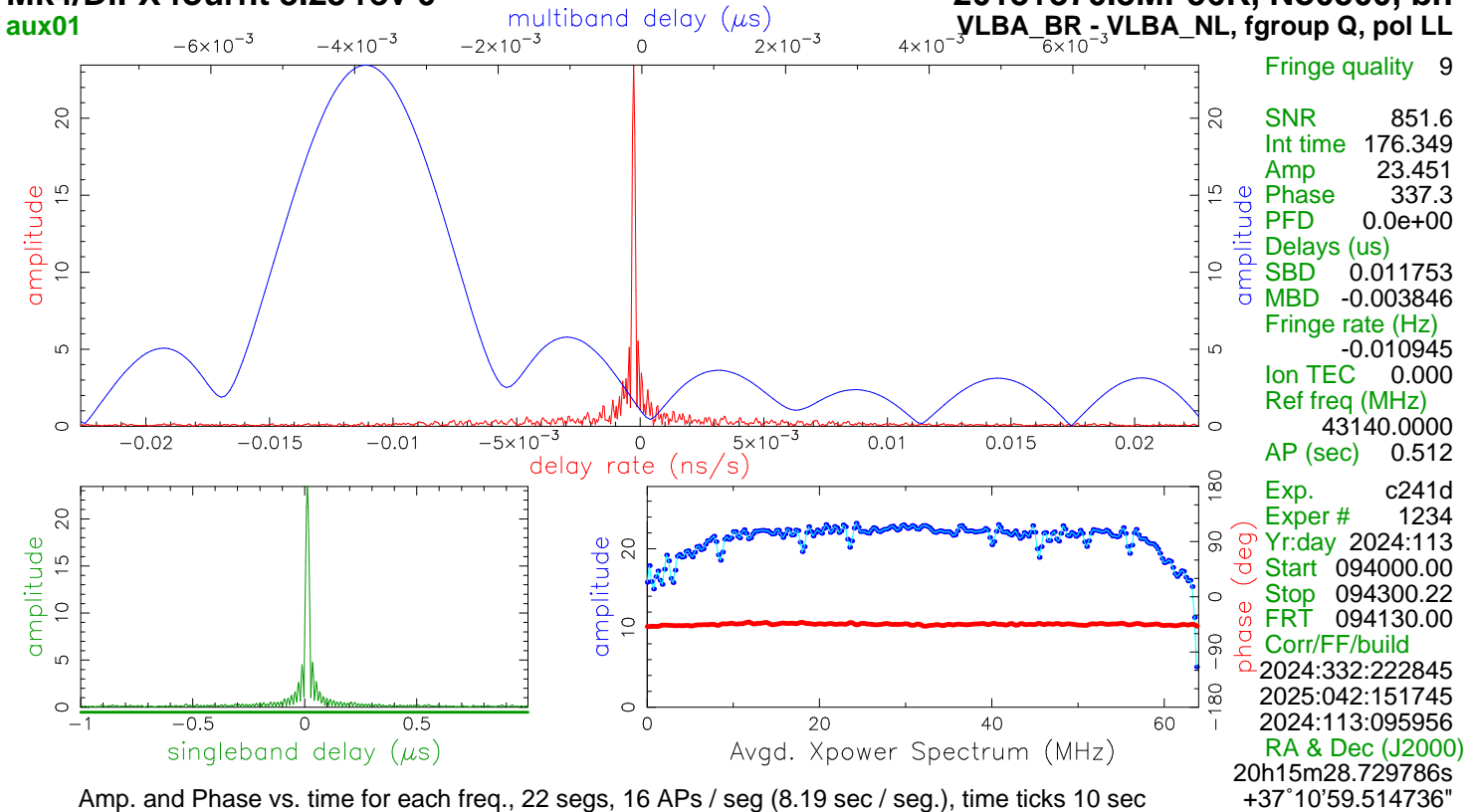
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bn..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bn.Q.104.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bn

VLBA_BR - VLBA_NL, fgroup Q, pol LL

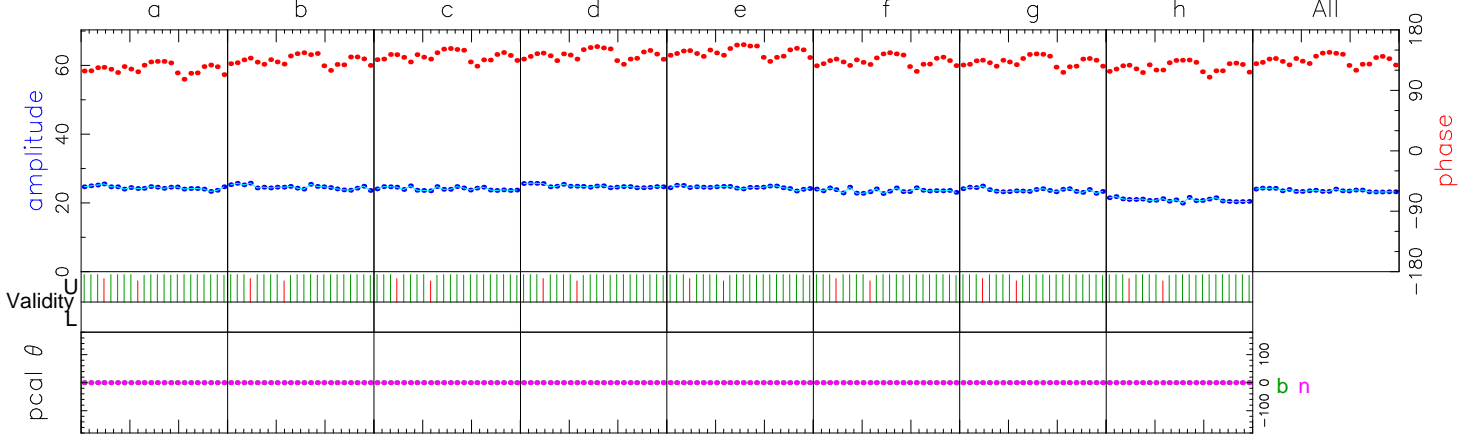


Fringe quality 9

SNR 851.6
 Int time 176.349
 Amp 23.451
 Phase 337.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.011753
 MBD -0.003846
 Fringe rate (Hz)
 -0.010945
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2025:042:151745
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736\"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-4.42616221038E+03	Apriori delay (usec)	-4.42617398926E+03	Resid mbdelay (usec)	-3.84612E-03	+/-	1.3E-06
Sband delay (usec)	-4.42616223626E+03	Apriori clock (usec)	4.9095936E+00	Resid sbdelay (usec)	1.17530E-02	+/-	1.0E-05
Phase delay (usec)	-4.42617398057E+03	Apriori clockrate (us/s)	2.7918098E-07	Resid phdelay (usec)	8.68218E-06	+/-	8.7E-09
Delay rate (us/s)	1.77824242216E-01	Apriori rate (us/s)	1.77824495929E-01	Resid rate (us/s)	-2.53713E-07	+/-	8.4E-11
Total phase (deg)	14.6	Apriori accel (us/s/s)	2.89300487315E-05	Resid phase (deg)	337.3	+/-	0.1

ph/seg (deg)	RMS 6.9	Theor. 0.3	Amplitude Search (1024X32)	23.451 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	1.7	0.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	9.3	0.2	Inc. seg. avg.	23.623	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023
amp/frq (%)	5.1	0.3	Inc. frq. avg.	23.683	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

b: az 76.2 el 40.6 pa -54.6 n: az 85.1 el 59.3 pa -68.9 u,v (fr/asec) -628.566 1147.028 simultaneous interpolator

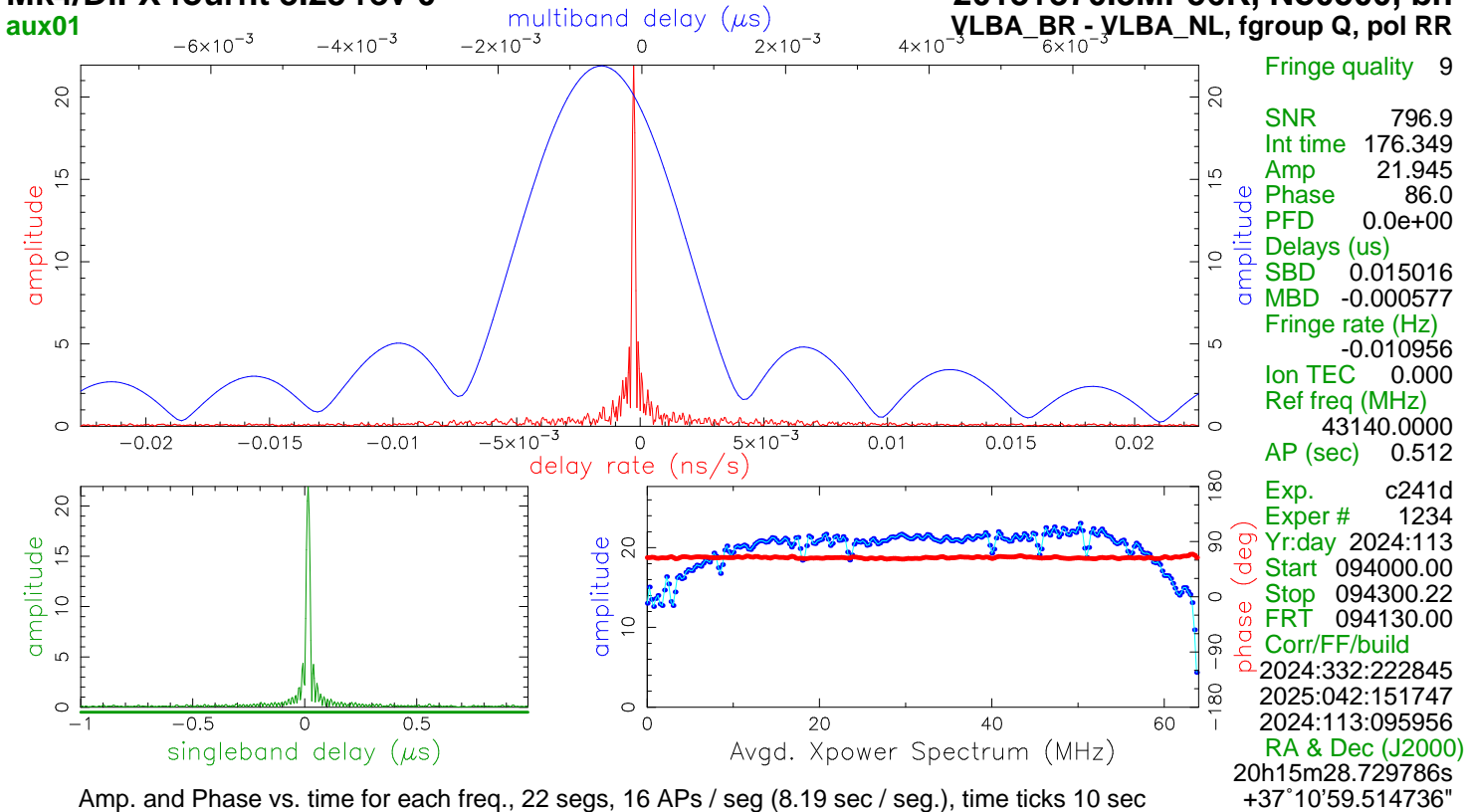
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bn..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bn.Q.59.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

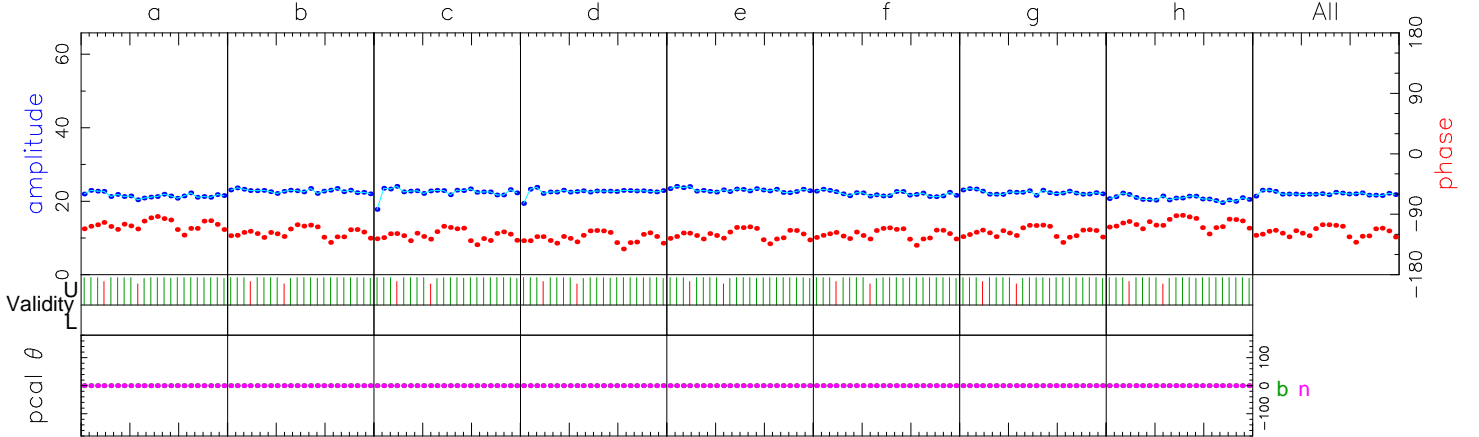
aux01

2013+370.3MP56K, No0500, bn

VLBA_BR - VLBA_NL, fgroup Q, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



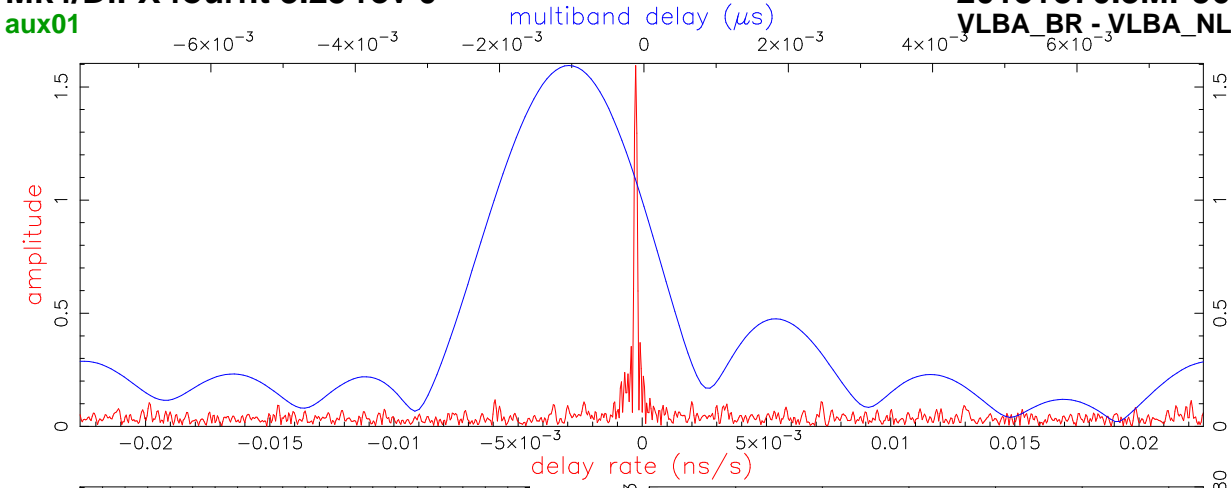
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All				
	-105.8	-117.7	-121.1	-125.4	-120.1	-120.1	-116.8	-103.4	Phase	-116.5				
	21.4	22.7	22.3	22.5	22.9	21.9	22.2	20.6	Ampl.	22.1				
	260.5	260.6	260.9	260.9	260.9	261.0	260.9	261.0	Sbd box	260.8				
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used					
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC					
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
n	1000	1000	1000	1000	1000	1000	1000	1000						
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids					
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks					
									Tracks					
Group delay (usec) (SBD)	-4.42615894147E+03								Apriori delay (usec)	-4.42617398926E+03	Resid mbdelay (usec)	-5.77213E-04	+/-	1.4E-06
Sband delay (usec)	-4.42615897351E+03								Apriori clock (usec)	4.9095936E+00	Resid sbdelay (usec)	1.50158E-02	+/-	1.1E-05
Phase delay (usec)	-4.42617399676E+03								Apriori clockrate (us/s)	2.7918098E-07	Resid phdelay (usec)	-7.50173E-06	+/-	9.3E-09
Delay rate (us/s)	1.77824241964E-01								Apriori rate (us/s)	1.77824495929E-01	Resid rate (us/s)	-2.53965E-07	+/-	9.0E-11
Total phase (deg)			123.2						Apriori accel (us/s/s)	2.89300487315E-05	Resid phase (deg)	86.0	+/-	0.1
	RMS	Theor.	Amplitude	21.945 +/- 0.028					PCal mode: MANUAL, MANUAL		PC period (AP's)	5, 5		
ph/seg (deg)	6.9	0.3	Search (1024X32)	21.526					PCal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	2.0	0.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	8.3	0.2	Inc. seg. avg.	22.055					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023	0.023	
amp/frq (%)	3.2	0.4	Inc. frq. avg.	22.064					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
b: az 76.2 el 40.6 pa -54.6			n: az 85.1 el 59.3 pa -68.9						u,v (fr/asec) -628.566 1147.028					simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0500/bn..3MP56K						Output file: /Exps/c241d/v1/7mm/1234/No0500/bn.Q.73.3MP56K					

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bn

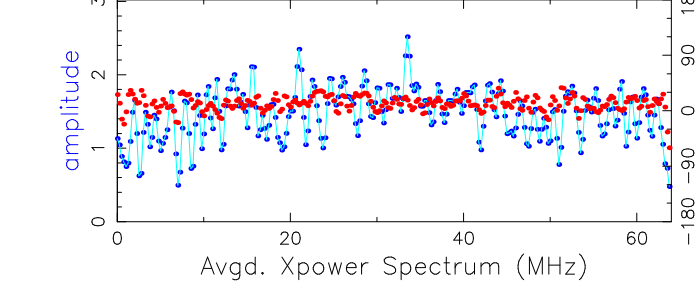
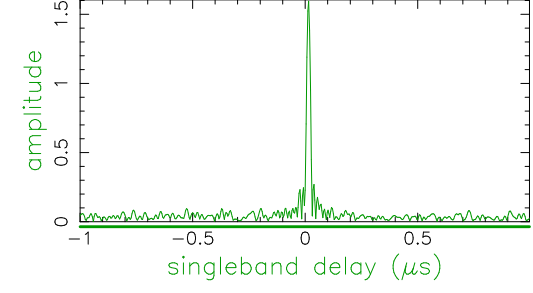
VLBA_BR - VLBA_NL, fgroup Q, pol LR



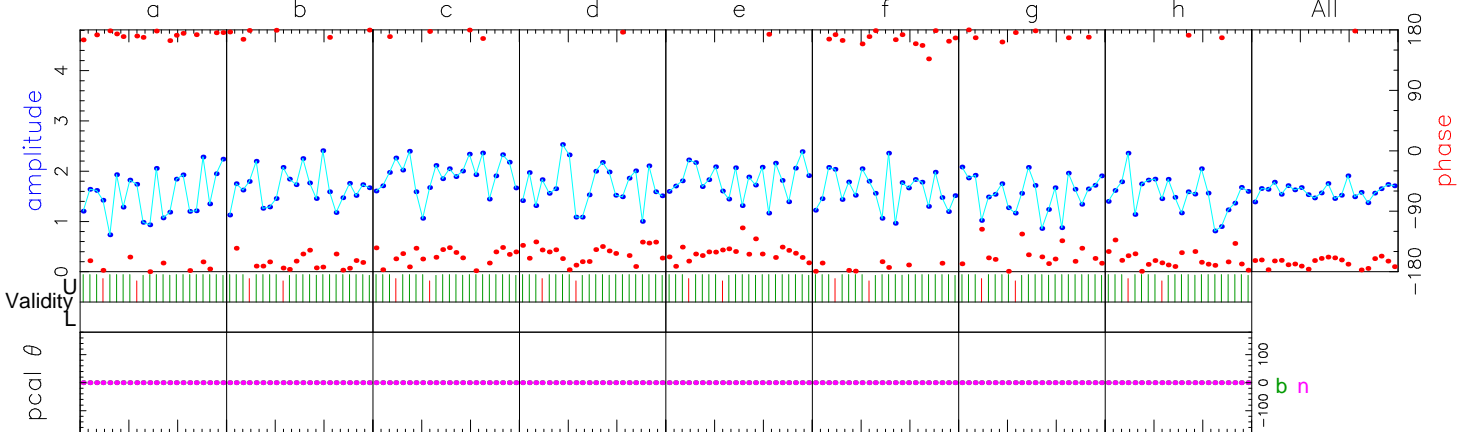
Fringe quality 8

SNR 58.2
 Int time 176.349
 Amp 1.604
 Phase 35.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.014634
 MBD -0.001066
 Fringe rate (Hz)
 -0.011018
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151751
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	179.1	-170.6	-162.2	-154.3	-153.0	173.3	-168.1	-164.0	Phase	-167.0
b	1.5	1.6	1.9	1.7	1.8	1.6	1.5	1.5	Ampl.	1.6
n	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	260.7
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	PC amp	
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
									Tracks	
									Tracks	

Group delay (usec) (SBD) -4.42615943044E+03 Apriori delay (usec) -4.42617398926E+03 Resid mbdelay (usec) -1.06618E-03 +/- 1.9E-05
 Sband delay (usec) -4.42615935526E+03 Apriori clock (usec) 4.9095936E+00 Resid sbdelay (usec) 1.46340E-02 +/- 1.5E-04
 Phase delay (usec) -4.42617400001E+03 Apriori clockrate (us/s) 2.7918098E-07 Resid phdelay (usec) -1.07514E-05 +/- 1.3E-07
 Delay rate (us/s) 1.77824240532E-01 Apriori rate (us/s) 1.77824495929E-01 Resid rate (us/s) -2.55397E-07 +/- 1.2E-09
 Total phase (deg) 72.8 Apriori accel (us/s/s) 2.89300487315E-05 Resid phase (deg) 35.5 +/- 2.0

ph/seg (deg) 7.0 4.6 Search (1024X32) 1.574 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 8.1 8.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.8 2.8 Inc. seg. avg. 1.601 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.2 4.9 Inc. frq. avg. 1.623 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 n: az 85.1 el 59.3 pa -68.9 u,v (fr/asec) -628.566 1147.028 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bn..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bn.Q.85.3MP56K

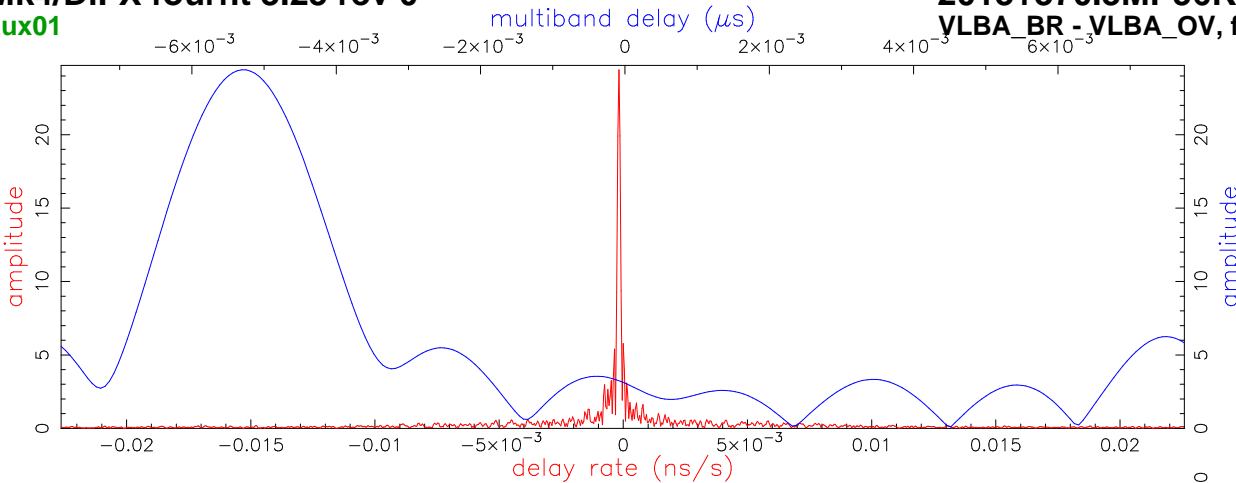
Mk4/DiFX fourfit 3.25 rev 0

aux01

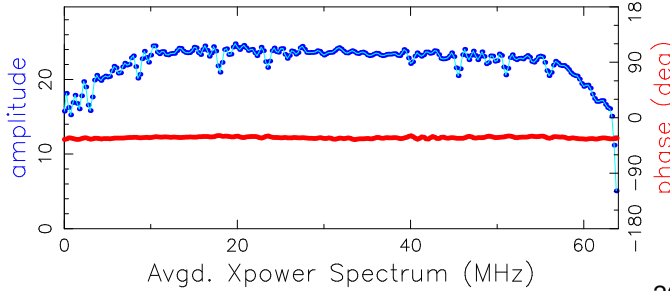
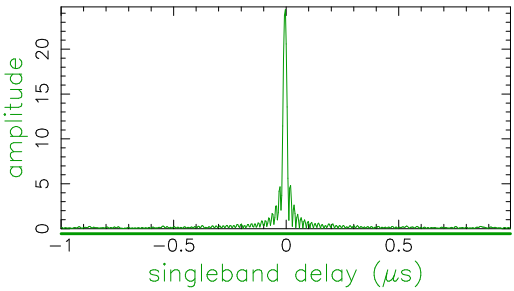
2013+370.3MP56K, No0500, bo

VLBA_BR - VLBA_OV, fgroup Q, pol LL

Fringe quality 8

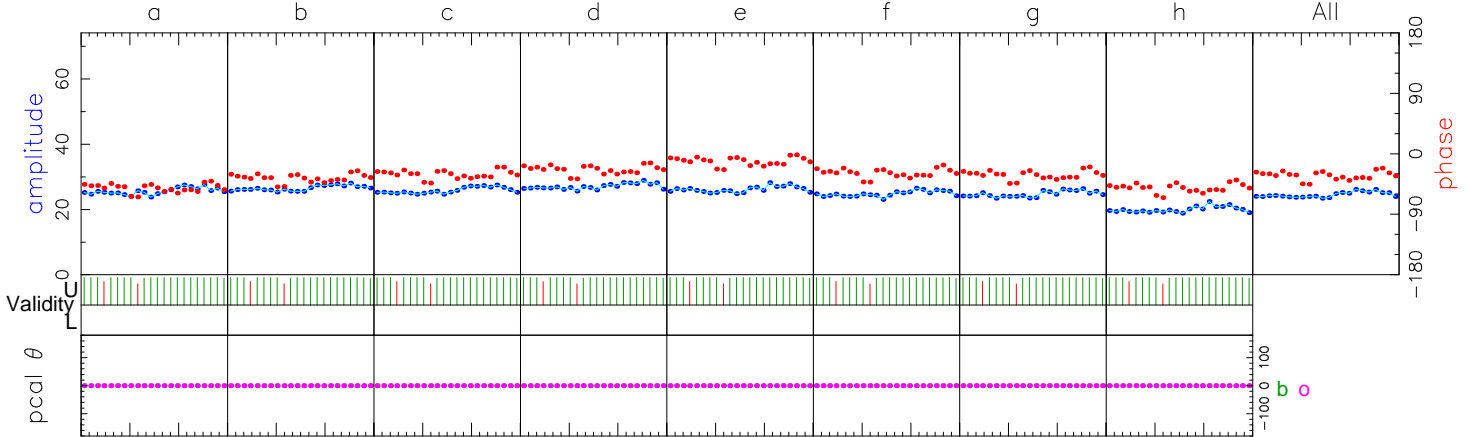


SNR 898.4
 Int time 176.661
 Amp 24.719
 Phase -32.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.005325
 MBD -0.005327
 Fringe rate (Hz)
 -0.007141
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151744
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) 6.33466426136E+02 Apriori delay (usec) 6.33471753195E+02 Resid mbdelay (usec) -5.32706E-03 +/- 1.2E-06
 Sband delay (usec) 6.33466428445E+02 Apriori clock (usec) -2.0430706E+01 Resid sbdelay (usec) -5.32475E-03 +/- 9.6E-06
 Phase delay (usec) 6.33471751131E+02 Apriori clockrate (us/s) 9.5168881E-08 Resid phdelay (usec) -2.06410E-06 +/- 8.2E-09
 Delay rate (us/s) -1.37172425855E-01 Apriori rate (us/s) -1.37172260336E-01 Resid rate (us/s) -1.65519E-07 +/- 8.0E-11
 Total phase (deg) 123.8 Apriori accel (us/s/s) 6.05912504011E-06 Resid phase (deg) -32.1 +/- 0.1

RMS Theor. Amplitude 24.719 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 6.0 0.3 Search (1024X32) 23.966 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 3.3 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 14.4 0.2 Inc. seg. avg. 24.545 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 8.4 0.3 Inc. frq. avg. 24.984 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

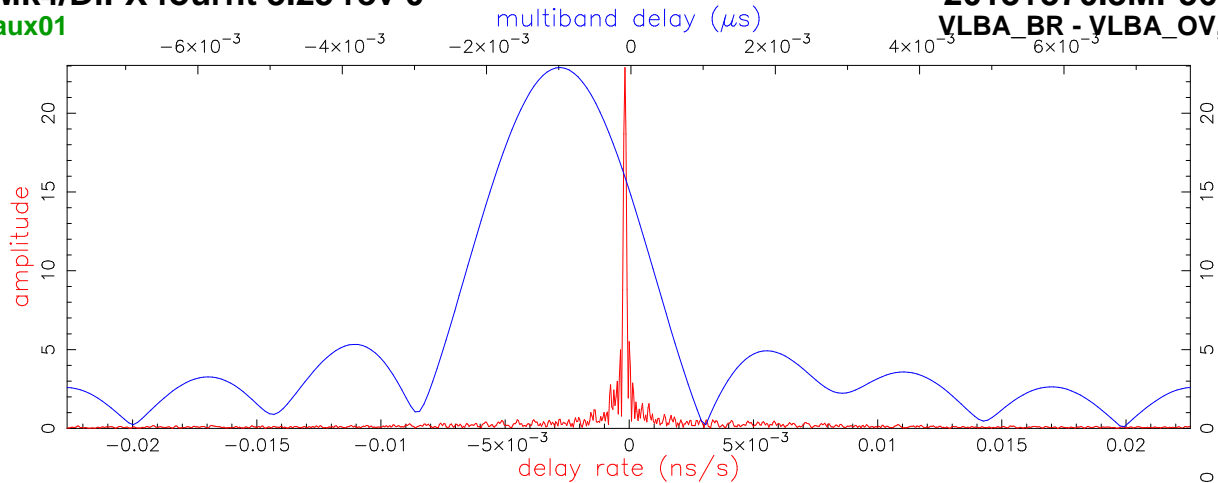
b: az 76.2 el 40.6 pa -54.6 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 497.844 671.216 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bo.Q.55.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

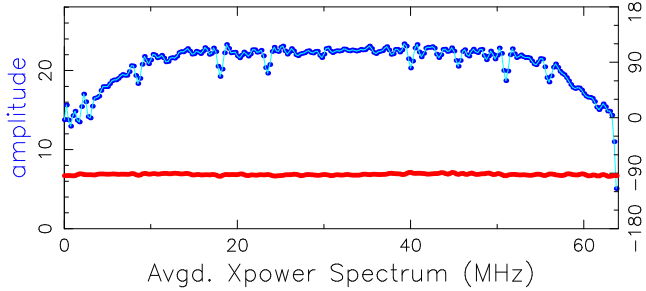
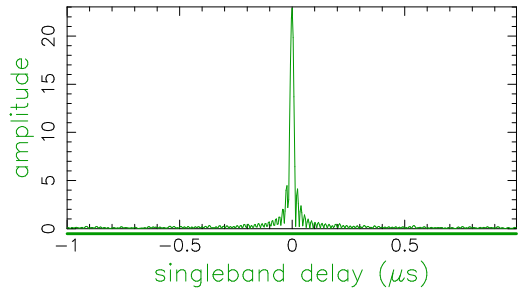
2013+370.3MP56K, No0500, bo

VLBA_BR - VLBA_OV, fgroup Q, pol RR



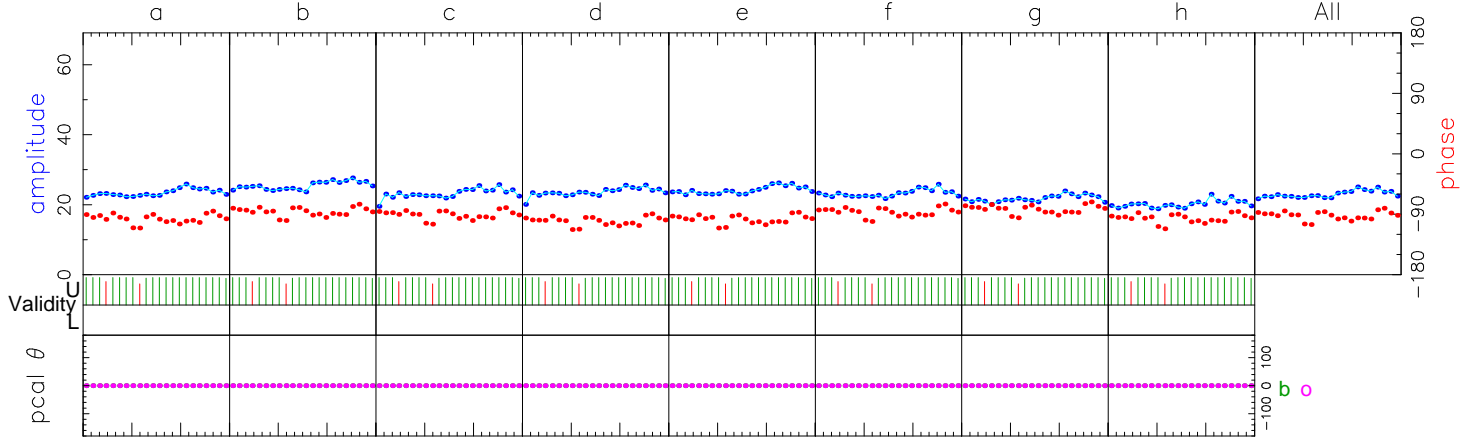
Fringe quality 9

SNR 837.2
 Int time 176.661
 Amp 23.035
 Phase -91.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000992
 MBD -0.001005
 Fringe rate (Hz)
 -0.007149
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151746
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	a	b	c	d	e	f	g	h	All
42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	43424.00	43488.00
-96.5	-86.0	-90.6	-99.8	-97.3	-86.5	-82.4	-95.8	-91.8	-91.8
23.3	25.4	23.1	23.5	24.0	23.1	21.7	20.1	23.0	23.0
256.5	256.8	256.7	256.9	256.8	257.0	256.5	256.6	256.7	256.7
U/L 348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
b:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
b:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
b Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Q08UR	Q09UR
o Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Q08UR	Q09UR

Group delay (usec) (SBD) 6.33470748198E+02 Apriori delay (usec) 6.33471753195E+02 Resid mbdelay (usec) -1.00500E-03 +/- 1.3E-06
 Sband delay (usec) 6.33470761195E+02 Apriori clock (usec) -2.0430706E+01 Resid sbdelay (usec) -9.92000E-04 +/- 1.0E-05
 Phase delay (usec) 6.33471747281E+02 Apriori clockrate (us/s) 9.5168881E-08 Resid phdelay (usec) -5.91410E-06 +/- 8.8E-09
 Delay rate (us/s) -1.37172426045E-01 Apriori rate (us/s) -1.37172260336E-01 Resid rate (us/s) -1.65709E-07 +/- 8.6E-11
 Total phase (deg) 64.0 Apriori accel (us/s/s) 6.05912504011E-06 Resid phase (deg) -91.8 +/- 0.1

RMS Theor. Amplitude 23.035 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 6.1 0.3 Search (1024X32) 22.570 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 4.3 0.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 6.9 0.2 Inc. seg. avg. 23.027 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 6.3 0.3 Inc. frq. avg. 23.022 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

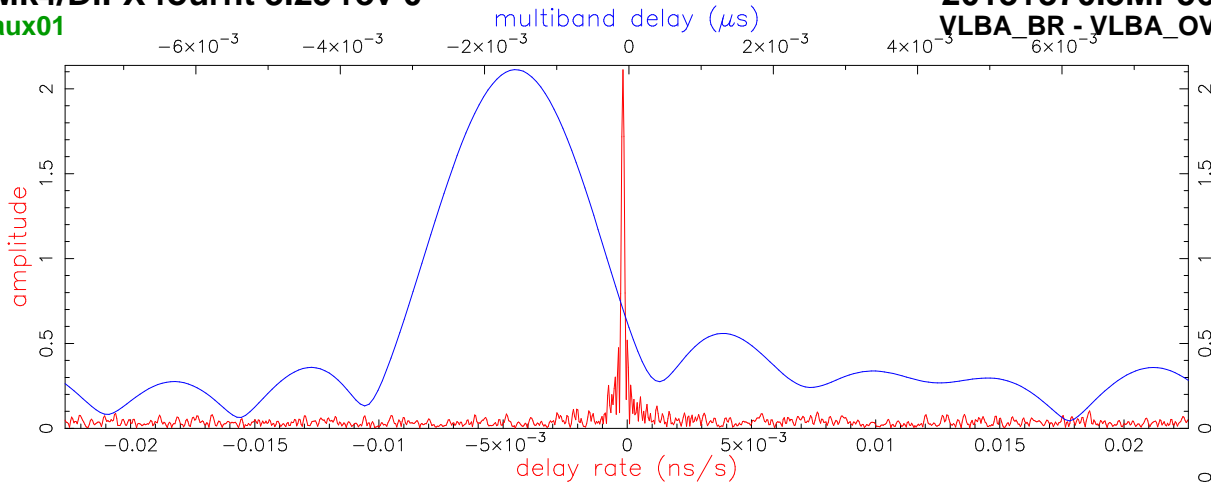
b: az 76.2 el 40.6 pa -54.6 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 497.844 671.216 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bo.Q.65.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

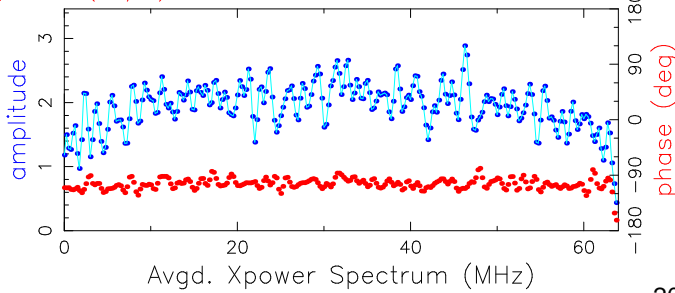
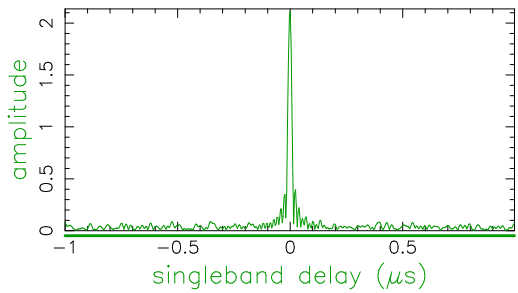
2013+370.3MP56K, No0500, bo

VLBA_BR - VLBA_OV, fgroup Q, pol LR



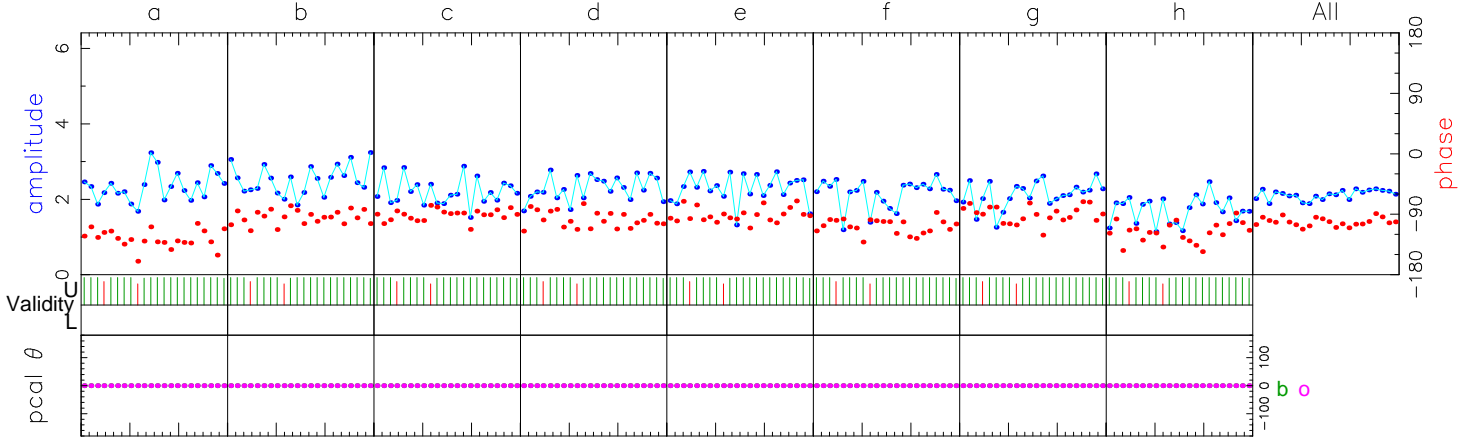
Fringe quality 8

SNR 77.7
 Int time 176.661
 Amp 2.138
 Phase -101.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.001418
 MBD -0.001602
 Fringe rate (Hz)
 -0.007139
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151748
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-125.8	-93.8	-90.8	-97.3	-90.8	-108.3	-89.9	-117.8	Phase	-101.2
	2.3	2.5	2.2	2.2	2.3	2.1	2.1	1.7	Ampl.	2.2
	256.6	257.2	256.6	256.5	256.5	256.5	256.6	255.7	Sbd box	256.6
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	6.33470151073E+02	Apriori delay (usec)	6.33471753195E+02	Resid mbdelay (usec)	-1.60212E-03	+/-	1.4E-05
Sband delay (usec)	6.33470335195E+02	Apriori clock (usec)	-2.0430706E+01	Resid sbdelay (usec)	-1.41800E-03	+/-	1.1E-04
Phase delay (usec)	6.33471746677E+02	Apriori clockrate (us/s)	9.5168881E-08	Resid phdelay (usec)	-6.51784E-06	+/-	9.5E-08
Delay rate (us/s)	-1.37172425816E-01	Apriori rate (us/s)	-1.37172260336E-01	Resid rate (us/s)	-1.65480E-07	+/-	9.2E-10
Total phase (deg)	54.6	Apriori accel (us/s/s)	6.05912504011E-06	Resid phase (deg)	-101.2	+/-	1.5

ph/seg (deg)	6.1	Theor.	3.4	Amplitude	2.138 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	5.8		6.0	Search (1024X32)	2.074	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	15.0		2.1	Inc. seg. avg.	2.120	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	10.5		3.6	Inc. frq. avg.	2.165	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 76.2 el 40.6 pa -54.6 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 497.844 671.216 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bo.Q.79.3MP56K

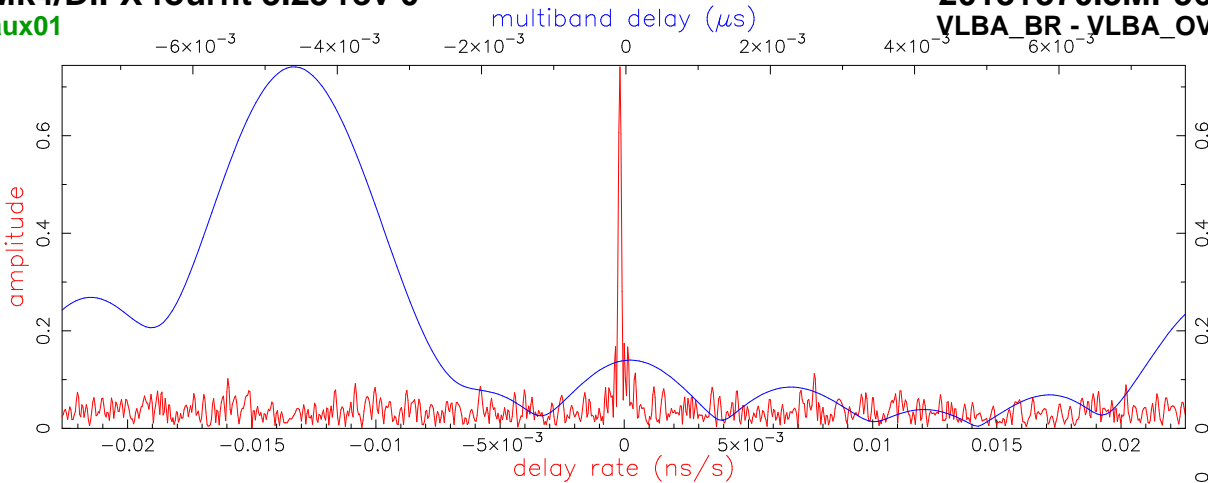
Mk4/DiFX fourfit 3.25 rev 0

aux01

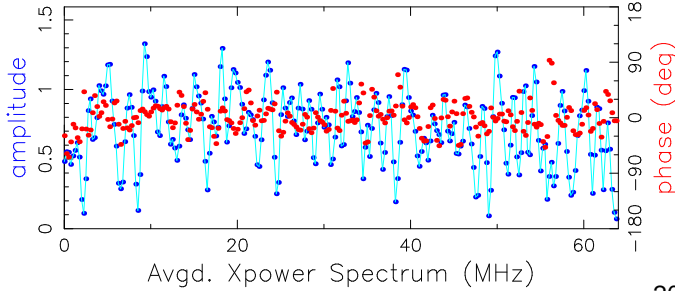
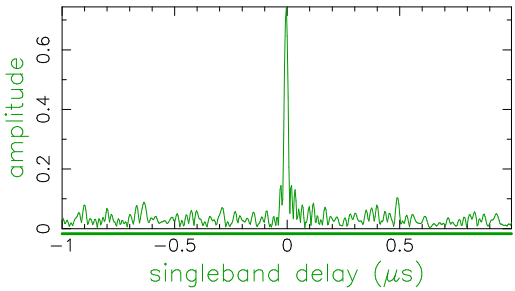
2013+370.3MP56K, No0500, bo

VLBA_BR - VLBA_OV, fgroup Q, pol RL

Fringe quality 9

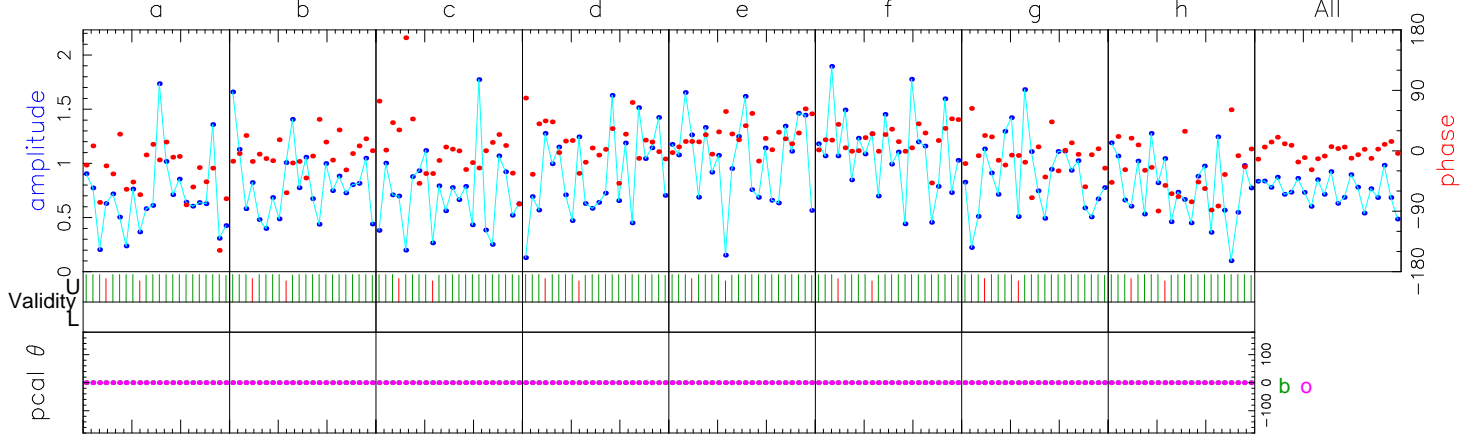


SNR 27.1
 Int time 176.661
 Amp 0.744
 Phase -0.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.004718
 MBD -0.004620
 Fringe rate (Hz)
 -0.007079
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151751
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-23.6	-6.7	-5.4	8.3	21.1	18.1	-9.0	-34.2	Phase	-0.6
	0.6	0.8	0.6	0.8	1.0	1.1	0.8	0.6	Ampl.	0.8
	255.8	256.0	256.1	256.6	255.7	256.0	254.9	255.1	Sbd box	255.8
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 6.33467133542E+02 Apriori delay (usec) 6.33471753195E+02 Resid mbdelay (usec) -4.61965E-03 +/- 4.0E-05
 Sband delay (usec) 6.33467035195E+02 Apriori clock (usec) -2.0430706E+01 Resid sbdelay (usec) -4.71800E-03 +/- 3.2E-04
 Phase delay (usec) 6.33471753158E+02 Apriori clockrate (us/s) 9.5168881E-08 Resid phdelay (usec) -3.64343E-03 +/- 2.7E-07
 Delay rate (us/s) -1.37172424421E-01 Apriori rate (us/s) -1.37172260336E-01 Resid rate (us/s) -1.64085E-07 +/- 2.7E-09
 Total phase (deg) 155.3 Apriori accel (us/s/s) 6.05912504011E-06 Resid phase (deg) -0.6 +/- 4.2

RMS Theor. Amplitude 0.744 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 11.2 9.9 Search (1024X32) 0.718 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 16.3 17.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 21.2 6.0 Inc. seg. avg. 0.745 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 22.7 10.5 Inc. frq. avg. 0.775 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 497.844 671.216 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bo.Q.87.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

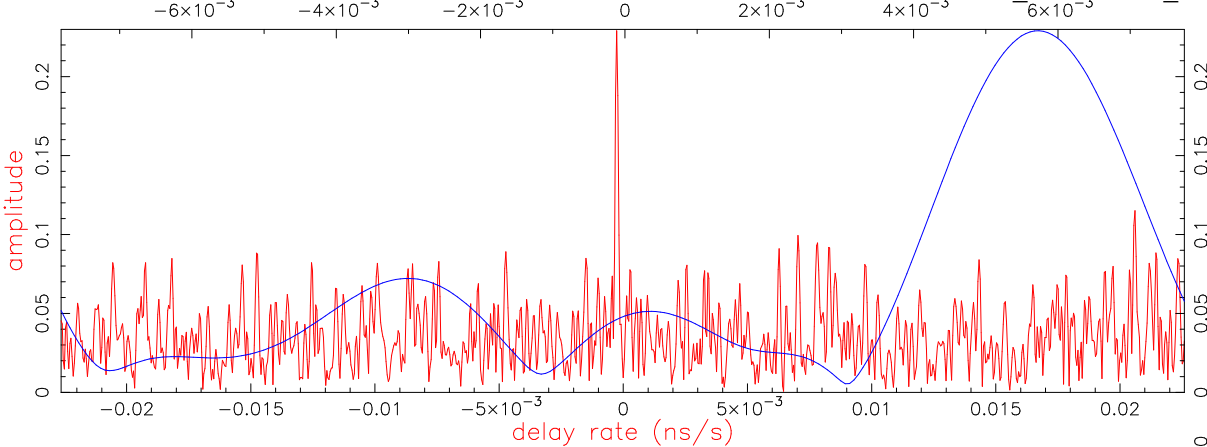
aux01

2013+370.3MP56K, No0500, bp

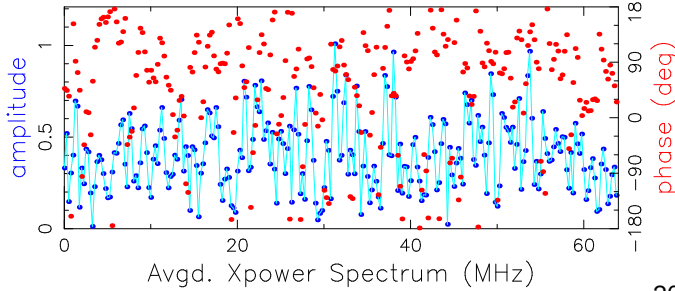
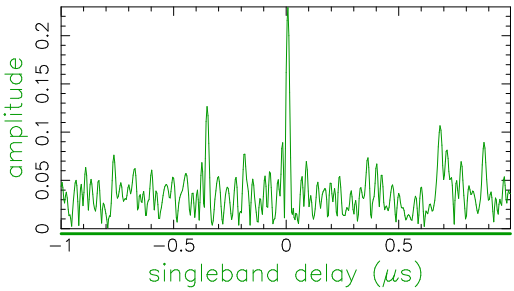
VLBA_BR - VLBA_PT, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 9

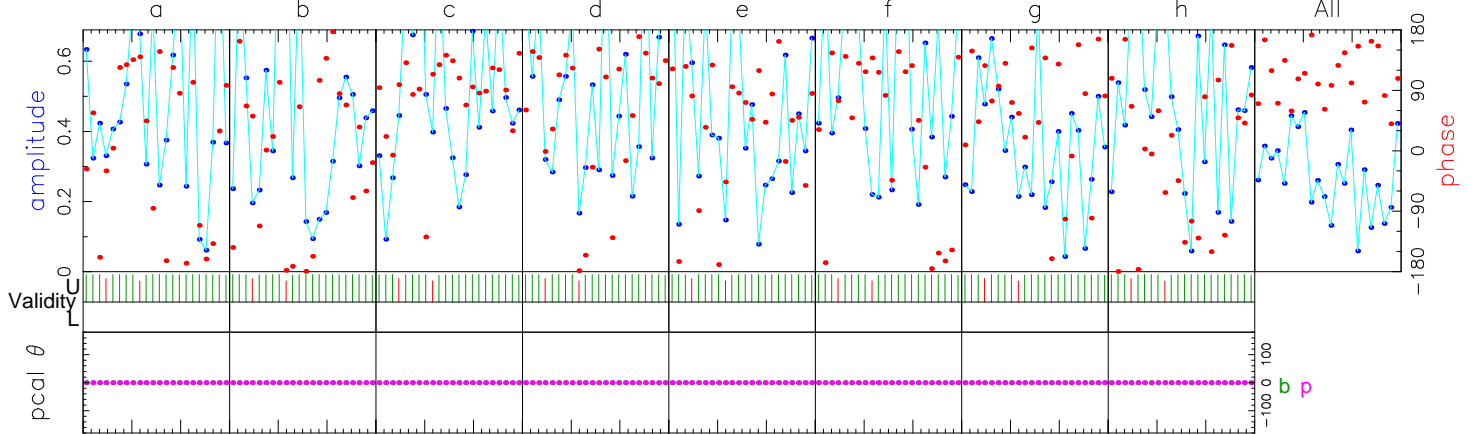


SNR 8.4
 Int time 176.650
 Amp 0.230
 Phase 106.9
 PFD 1.2e-08
 Delays (us)
 SBD 0.007036
 MBD 0.005697
 Fringe rate (Hz) -0.010677
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151759
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	105.0	96.3	106.2	118.8	84.0	131.2	90.0	109.9	Phase	106.9
b	0.2	0.1	0.4	0.3	0.3	0.3	0.2	0.0	Ampl.	0.2
p	423.4	79.2	258.4	258.3	259.5	259.3	406.4	341.2	Sbd box	258.8
b: p	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b: p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b: p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b: p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b: p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b: p	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.19056825204E+03	Apriori delay (usec)	-1.19057394870E+03	Resid mbdelay (usec)	5.69666E-03	+/-	1.3E-04
Sband delay (usec)	-1.19056691245E+03	Apriori clock (usec)	-1.0782433E+00	Resid sbdelay (usec)	7.03625E-03	+/-	1.0E-03
Phase delay (usec)	-1.19057394182E+03	Apriori clockrate (us/s)	1.9774395E-07	Resid phdelay (usec)	6.88267E-06	+/-	8.8E-07
Delay rate (us/s)	-8.32152455132E-02	Apriori rate (us/s)	-8.32149980053E-02	Resid rate (us/s)	-2.47508E-07	+/-	8.6E-09
Total phase (deg)	53.9	Apriori accel (us/s/s)	1.86872200287E-05	Resid phase (deg)	106.9	+/-	13.7

ph/seg (deg)	37.7	Theor.	32.0	Amplitude	0.230 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	51.9	Search (1024X32)	0.220	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	16.7	Inc. seg. avg.	0.239	Inc. frq. avg.	0.225	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	48.9	Inc. frq. avg.	0.225			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 p: az 69.2 el 44.9 pa -76.1 u, v (fr/asec) 308.794 1196.320 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bp.Q.137.3MP56K

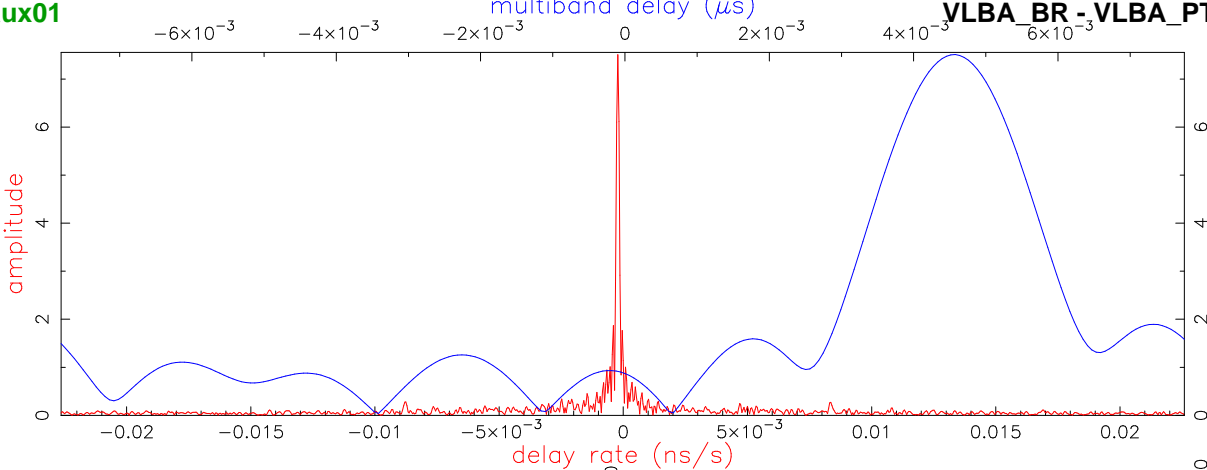
Mk4/DiFX fourfit 3.25 rev 0

aux01

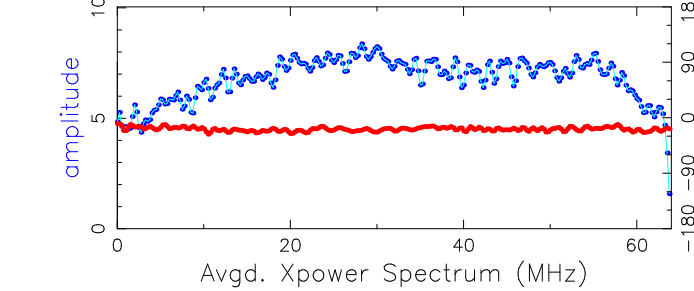
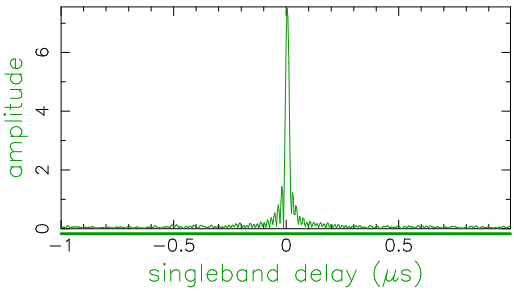
2013+370.3MP56K, No0500, bp

VLBA_BR - VLBA_PT, fgroup Q, pol LL

Fringe quality 8

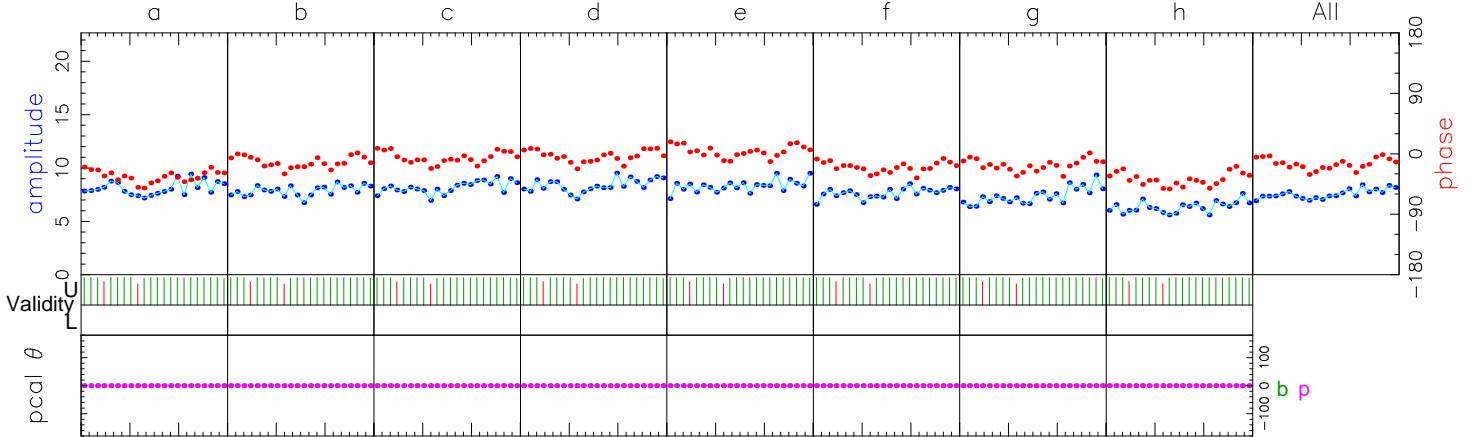


SNR 274.6
 Int time 176.650
 Amp 7.555
 Phase -14.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.004927
 MBD 0.004589
 Fringe rate (Hz)
 -0.010300
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151747
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -1.19056935939E+03 Apriori delay (usec) -1.19057394870E+03 Resid mbdelay (usec) 4.58932E-03 +/- 4.0E-06
 Sband delay (usec) -1.19056902195E+03 Apriori clock (usec) -1.0782433E+00 Resid sbdelay (usec) 4.92675E-03 +/- 3.1E-05
 Phase delay (usec) -1.19057394964E+03 Apriori clockrate (us/s) 1.9774395E-07 Resid phdelay (usec) -9.35912E-07 +/- 2.7E-08
 Delay rate (us/s) -8.32152367611E-02 Apriori rate (us/s) -8.32149980053E-02 Resid rate (us/s) -2.38756E-07 +/- 2.6E-10
 Total phase (deg) -67.5 Apriori accel (us/s/s) 1.86872200287E-05 Resid phase (deg) -14.5 +/- 0.4

ph/seg (deg) 7.9 1.0 Theor. Amplitude 7.555 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 5.6 1.7 Search (1024X32) 7.160 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.6 0.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.6 1.0 Inc. seg. avg. 7.576 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Inc. frq. avg. 7.714 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

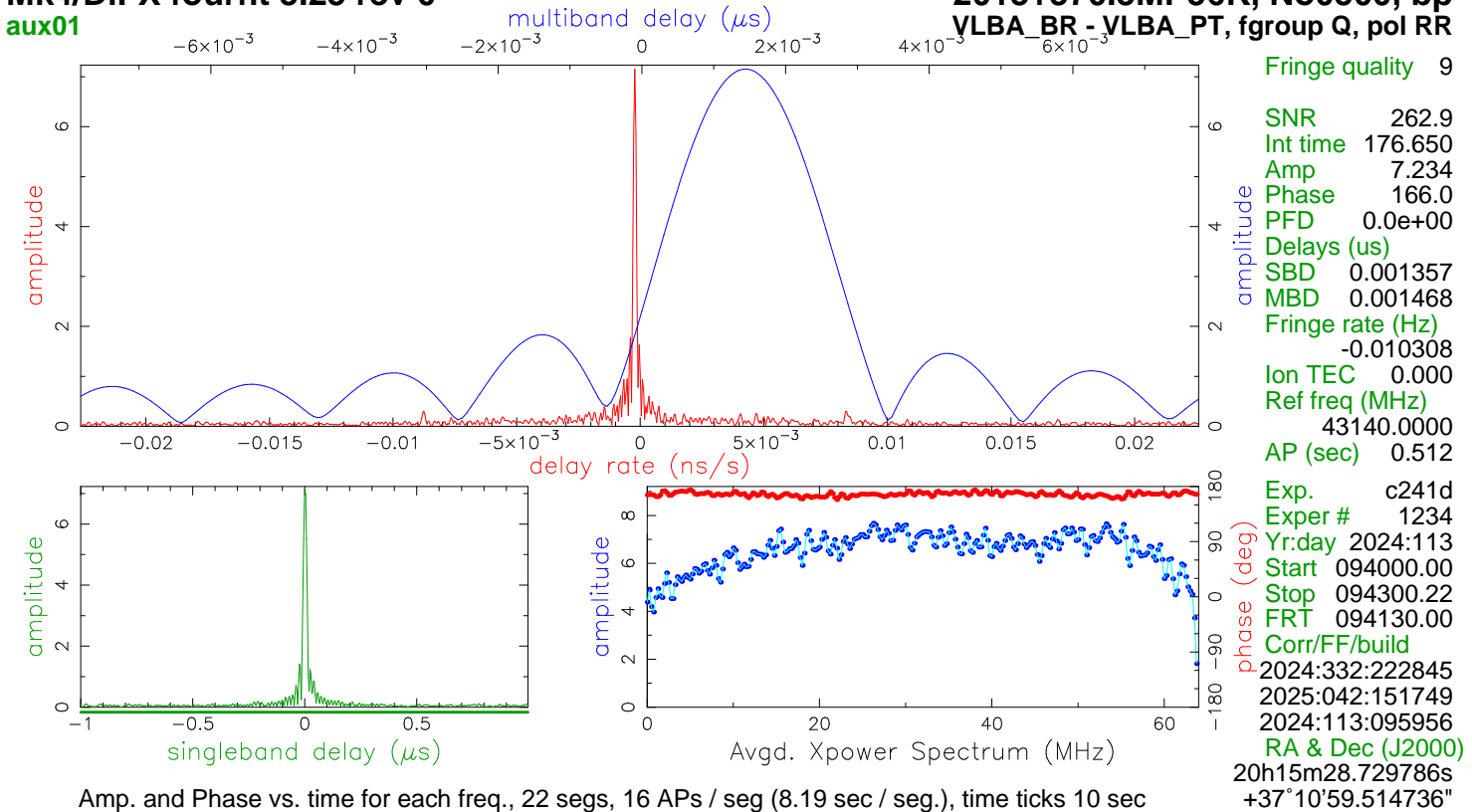
b: az 76.2 el 40.6 pa -54.6 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 308.794 1196.320 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bp.Q.69.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

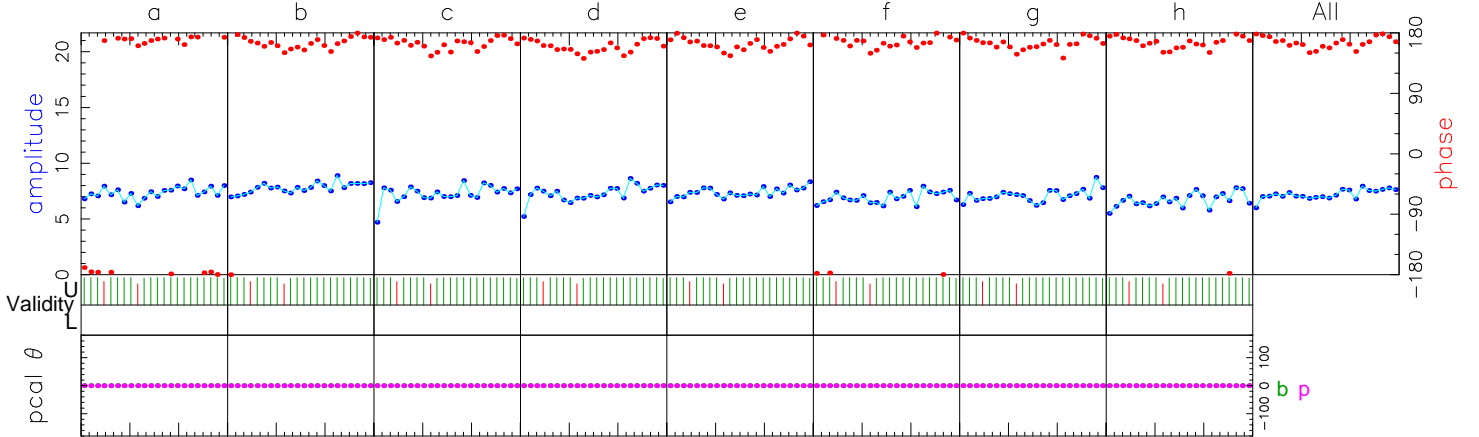
aux01

2013+370.3MP56K, No0500, bp

VLBA_BR - VLBA_PT, fgroup Q, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	175.0	166.0	164.5	159.6	163.8	168.5	164.3	166.6	Phase	166.0
b	7.3	7.7	7.2	7.2	7.3	6.9	7.0	6.6	Ampl.	7.2
p	257.1	257.2	257.3	257.6	257.3	257.6	257.2	257.4	Sbd box	257.3
b:p	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b:p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	-1.19057248039E+03			Apriori delay (usec)	-1.19057394870E+03			Resid mbdelay (usec)	1.46832E-03	+/- 4.1E-06
Sband delay (usec)	-1.19057259195E+03			Apriori clock (usec)	-1.0782433E+00			Resid sbdelay (usec)	1.35675E-03	+/- 3.3E-05
Phase delay (usec)	-1.19057393801E+03			Apriori clockrate (us/s)	1.9774395E-07			Resid phdelay (usec)	1.06912E-05	+/- 2.8E-08
Delay rate (us/s)	-8.32152369507E-02			Apriori rate (us/s)	-8.32149980053E-02			Resid rate (us/s)	-2.38945E-07	+/- 2.7E-10
Total phase (deg)		113.1		Apriori accel (us/s/s)	1.86872200287E-05			Resid phase (deg)	166.0	+/- 0.4
	RMS	Theor.	Amplitude	7.234 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	8.0	1.0	Search (1024X32)	6.911	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	5.9	1.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	4.8	0.6	Inc. seg. avg.	7.220	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023		
amp/frq (%)	4.4	1.1	Inc. frq. avg.	7.171	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
b: az 76.2 el 40.6 pa -54.6			p: az 69.2 el 44.9 pa -76.1							simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0500/bp..3MP56K							Output file: /Exps/c241d/v1/7mm/1234/No0500/bp.Q.84.3MP56K

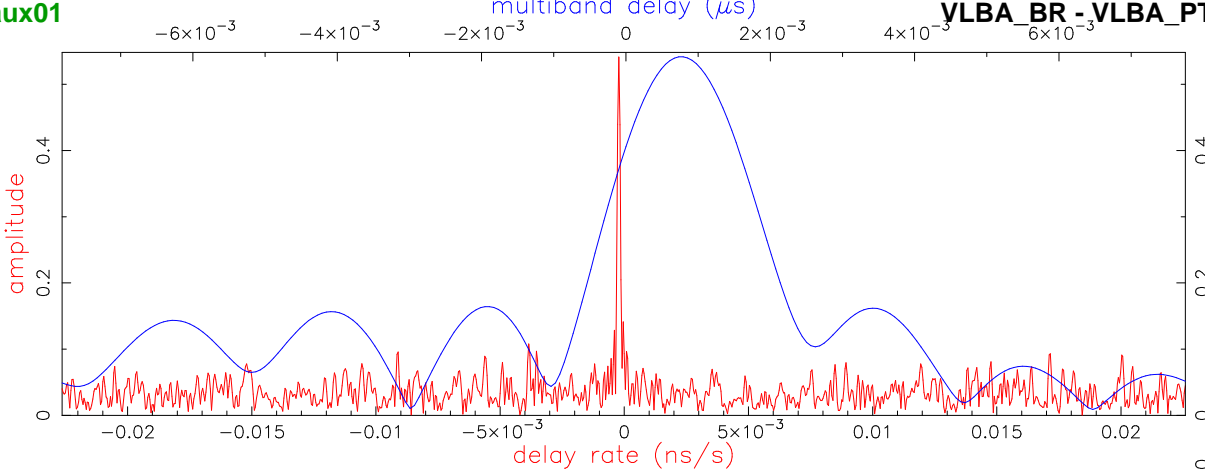
Mk4/DiFX fourfit 3.25 rev 0

aux01

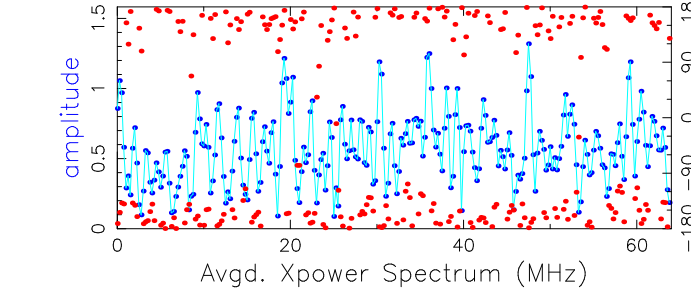
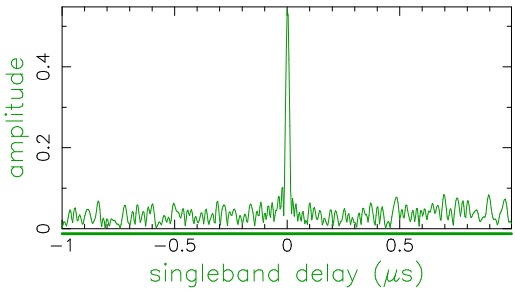
2013+370.3MP56K, No0500, bp

VLBA_BR - VLBA_PT, fgroup Q, pol LR

Fringe quality 9

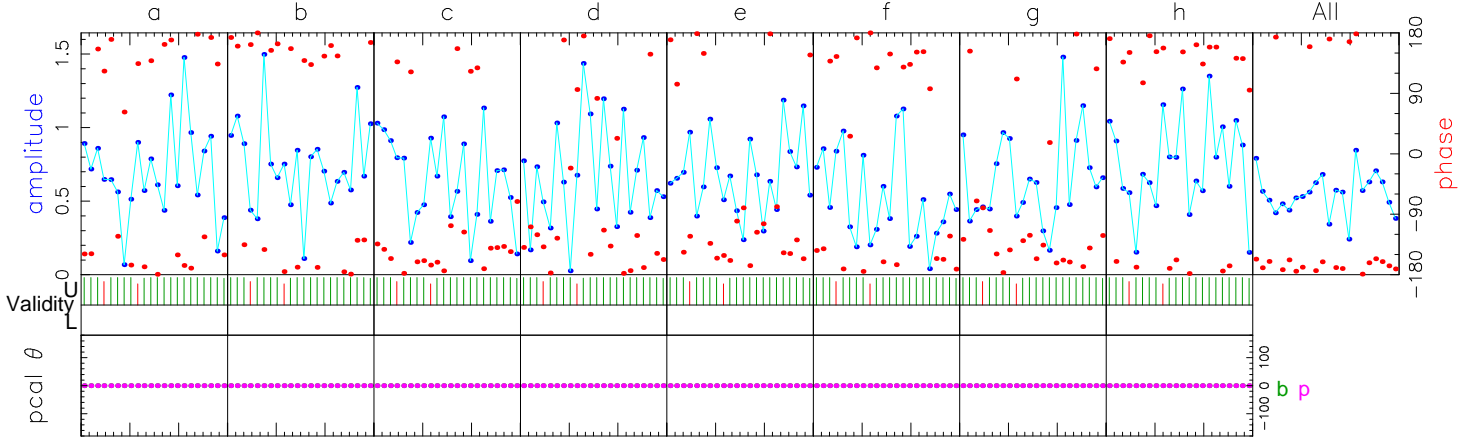


SNR 19.9
Int time 176.650
Amp 0.548
Phase -170.2
PFD 0.0e+00
Delays (us)
SBD 0.001407
MBD 0.000810
Fringe rate (Hz)
-0.010260
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512



Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 094000.00
Stop 094300.22
FRT 094130.00
Corr/FF/build
2024:332:222845
2025:042:151751
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-177.1	-178.5	-159.3	-156.1	-152.3	178.0	-151.7	162.7	Phase	-170.2
	0.6	0.7	0.6	0.5	0.6	0.4	0.5	0.7	Ampl.	0.6
	257.4	257.3	257.3	257.2	257.1	257.6	257.3	256.8	Sbd box	257.4
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -1.19057313839E+03 Apriori delay (usec) -1.19057394870E+03 Resid mbdelay (usec) 8.10317E-04 +/- 5.4E-05
 Sband delay (usec) -1.19057254170E+03 Apriori clock (usec) -1.0782433E+00 Resid sbdelay (usec) 1.40700E-03 +/- 4.3E-04
 Phase delay (usec) -1.19057395966E+03 Apriori clockrate (us/s) 1.9774395E-07 Resid phdelay (usec) -1.09561E-05 +/- 3.7E-07
 Delay rate (us/s) -8.32152358245E-02 Apriori rate (us/s) -8.32149980053E-02 Resid rate (us/s) -2.37819E-07 +/- 3.6E-09
 Total phase (deg) -223.1 Apriori accel (us/s/s) 1.86872200287E-05 Resid phase (deg) -170.2 +/- 5.8

RMS Theor. Amplitude 0.548 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 11.7 13.4 Search (1024X32) 0.515 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 25.2 23.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 18.1 8.1 Inc. seg. avg. 0.537 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 14.7 14.2 Inc. frq. avg. 0.558 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

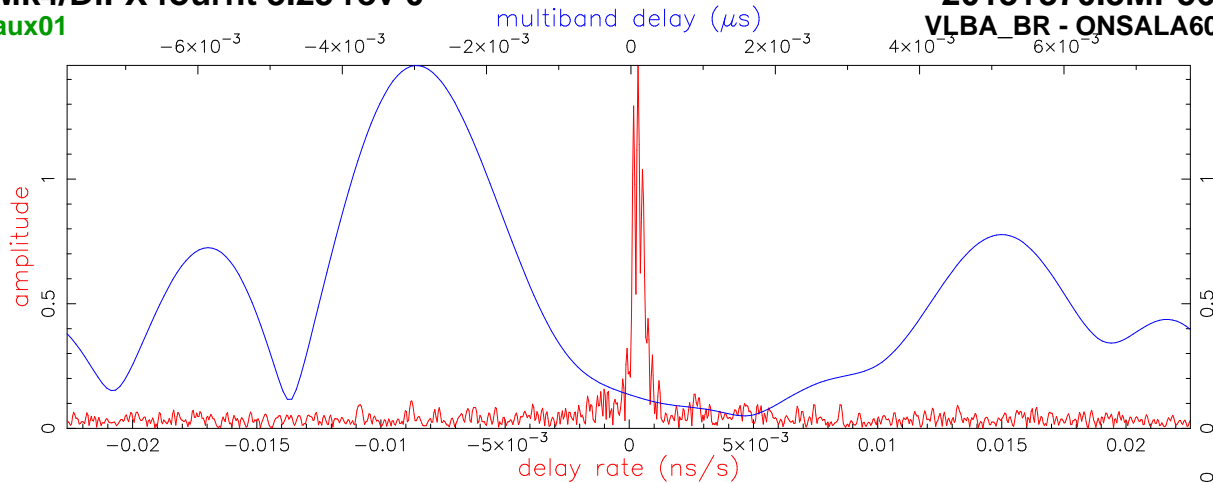
b: az 76.2 el 40.6 pa -54.6 p: az 69.2 el 44.9 pa -76.1 u, v (fr/asec) 308.794 1196.320 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bp.Q.86.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

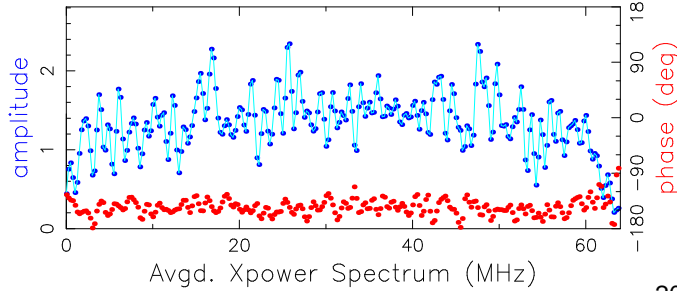
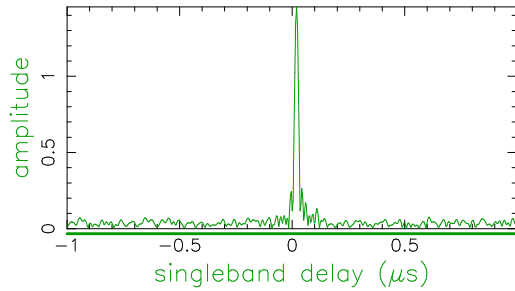
2013+370.3MP56K, No0500, bX

VLBA_BR - ONSALA60, fgroup Q, pol RL



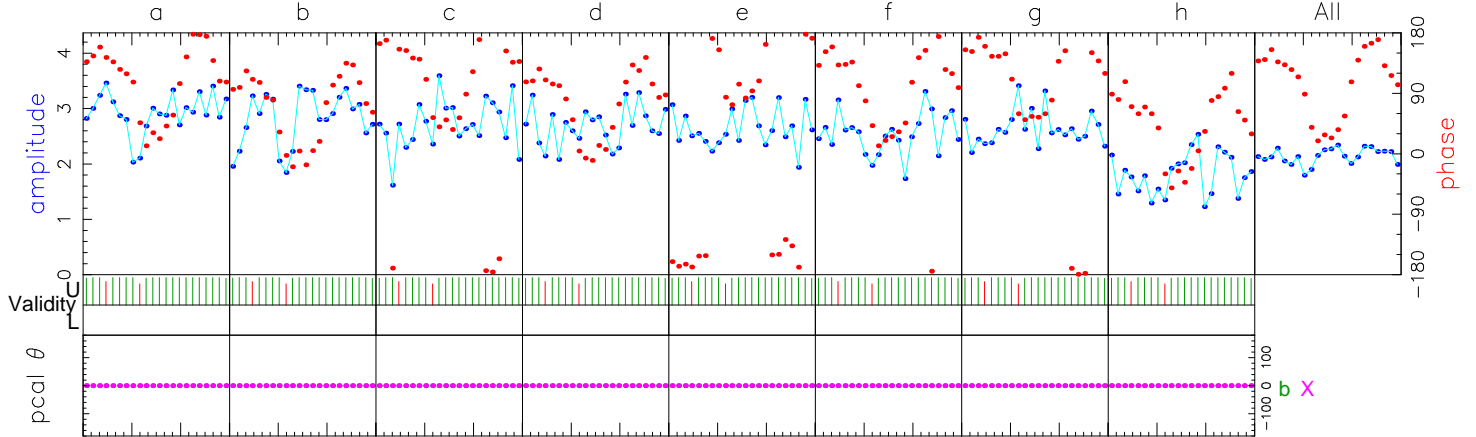
Fringe quality 2

SNR 52.9
 Int time 176.509
 Amp 1.456
 Phase 313.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.019320
 MBD -0.002977
 Fringe rate (Hz)
 0.014534
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151755
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	117.6	75.4	133.1	82.8	170.4	114.5	128.9	47.8	Phase	111.1
b	2.0	1.9	1.7	1.9	1.8	1.7	1.9	1.2	Ampl.	1.7
X	261.8	261.6	261.6	261.6	261.5	261.6	261.3	260.1	Sbd box	261.9
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.01370220146E+03	Apriori delay (usec)	-1.01371484986E+03	Resid mbdelay (usec)	-2.97660E-03	+/-	2.1E-05
Sband delay (usec)	-1.01369552961E+03	Apriori clock (usec)	-1.0829798E+02	Resid sbdelay (usec)	1.93202E-02	+/-	1.6E-04
Phase delay (usec)	-1.01371484271E+03	Apriori clockrate (us/s)	-6.4018213E-07	Resid phdelay (usec)	7.15234E-06	+/-	1.4E-07
Delay rate (us/s)	1.36294557002E+00	Apriori rate (us/s)	1.36294523312E+00	Resid rate (us/s)	3.36896E-07	+/-	1.4E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.87442985329E-06	Resid phase (deg)	313.6	+/-	2.2

ph/seg (deg) 48.5 5.1 Search (1024X32) 1.396 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.2 8.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.7 3.1 Inc. seg. avg. 2.135 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.5 5.3 Inc. frq. avg. 1.743 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 b: az 76.2 el 40.6 pa -54.6 X: az 272.4 el 44.4 pa 42.5 u,v (fr/asec) -4912.227 -370.316 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bX.Q.110.3MP56K

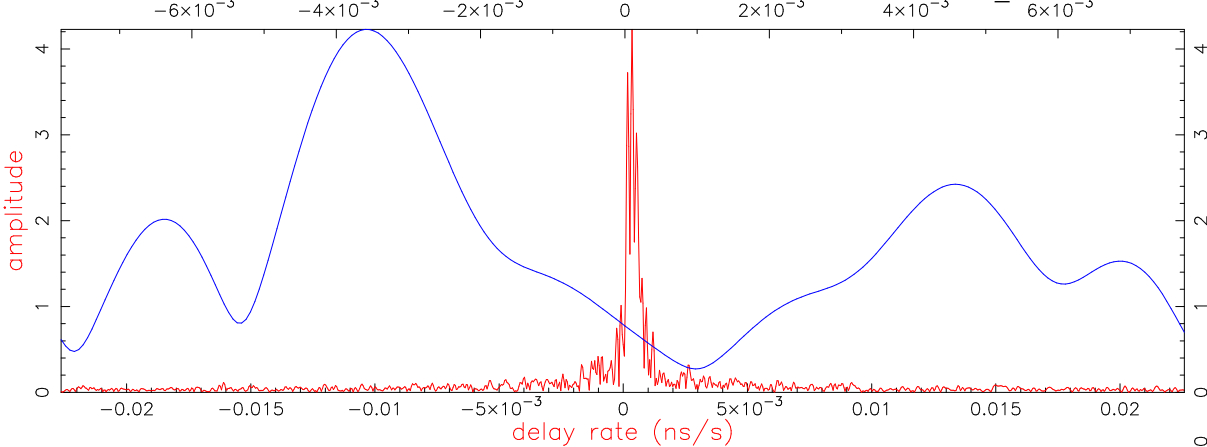
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bX

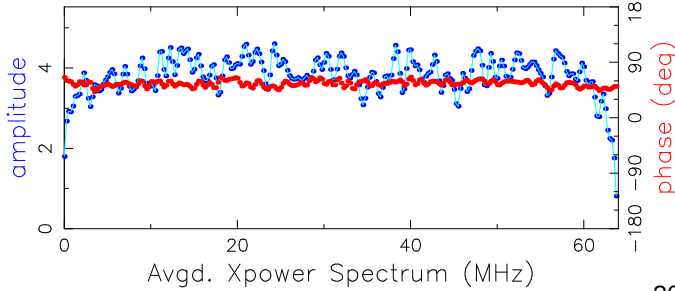
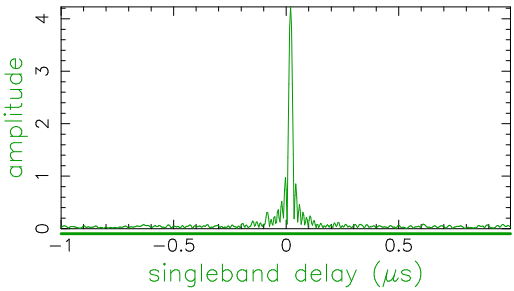
VLBA_BR - QNSALA60, fgroup Q, pol LL

multiband delay (μ s)



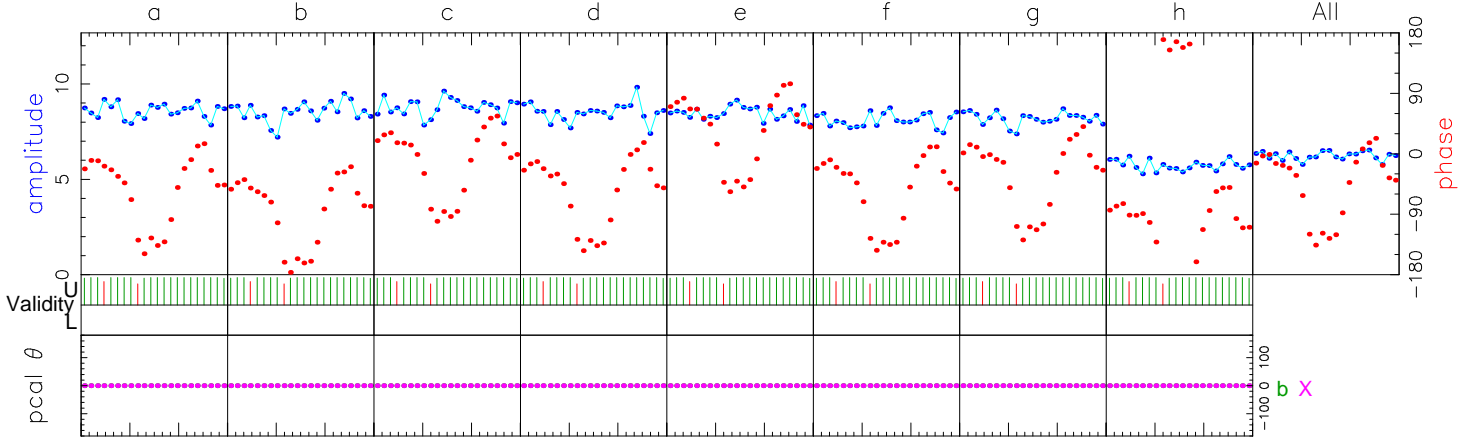
Fringe quality 2

SNR 153.6
 Int time 176.509
 Amp 4.227
 Phase 164.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.019537
 MBD -0.003581
 Fringe rate (Hz)
 0.014500
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151746
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-46.9	-77.6	-5.7	-48.4	40.5	-48.0	-23.0	-109.4	Phase	-38.2
	5.8	5.7	6.0	5.7	5.6	5.4	5.5	3.9	Ampl.	5.4
	261.9	262.0	261.7	261.3	261.1	261.0	261.3	259.6	Sbd box	262.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -1.01370280599E+03 Apriori delay (usec) -1.01371484986E+03 Resid mbdelay (usec) -3.58113E-03 +/- 7.1E-06
 Sband delay (usec) -1.01369531261E+03 Apriori clock (usec) -1.0829798E-02 Resid sbdelay (usec) 1.95372E-02 +/- 5.6E-05
 Phase delay (usec) -1.01371485232E+03 Apriori clockrate (us/s) -6.4018213E-07 Resid phdelay (usec) -2.46249E-06 +/- 4.8E-08
 Delay rate (us/s) 1.36294556923E+00 Apriori rate (us/s) 1.36294523312E+00 Resid rate (us/s) 3.36109E-07 +/- 4.7E-10
 Total phase (deg) -60.0 Apriori accel (us/s/s) -1.87442985329E-06 Resid phase (deg) 164.3 +/- 0.7

RMS Theor. Amplitude 4.227 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 49.4 1.7 Search (1024X32) 3.990 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 48.0 3.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 48.9 1.1 Inc. seg. avg. 6.241 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 32.4 1.8 Inc. frq. avg. 5.446 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

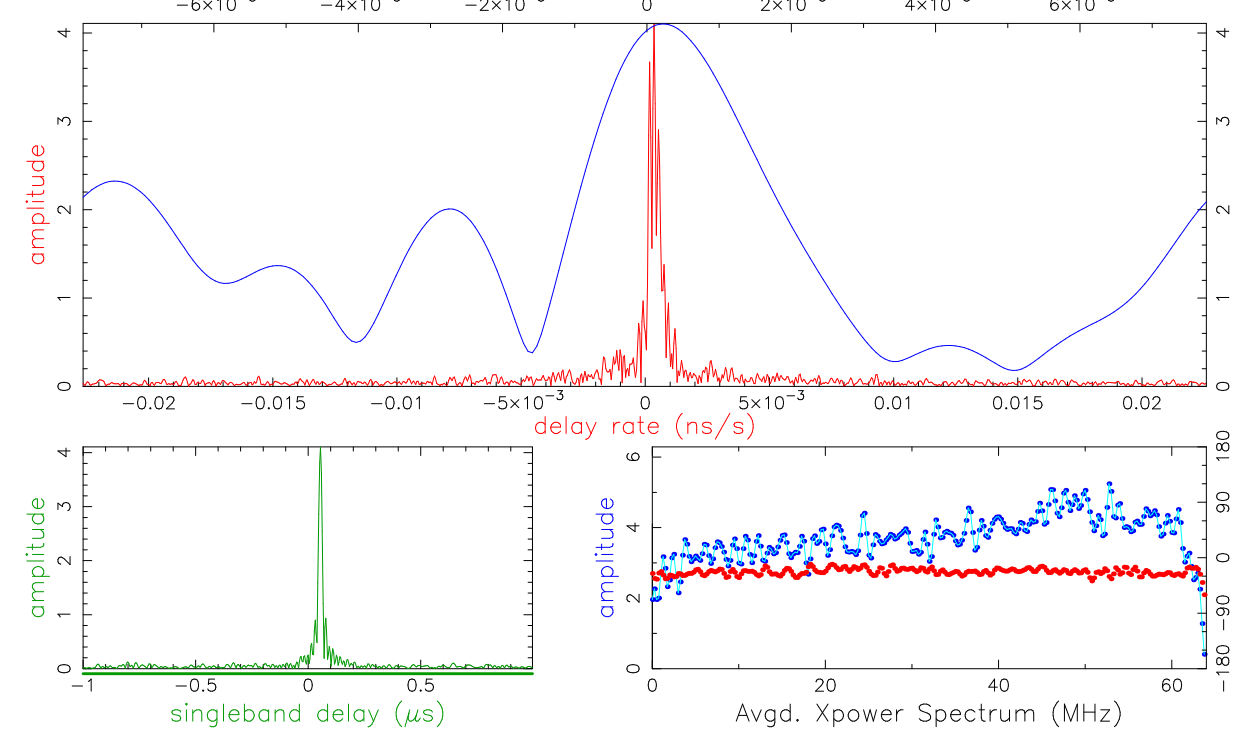
b: az 76.2 el 40.6 pa -54.6 X: az 272.4 el 44.4 pa 42.5 u, v (fr/asec) -4912.227 -370.316 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bX...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bX.Q.64.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

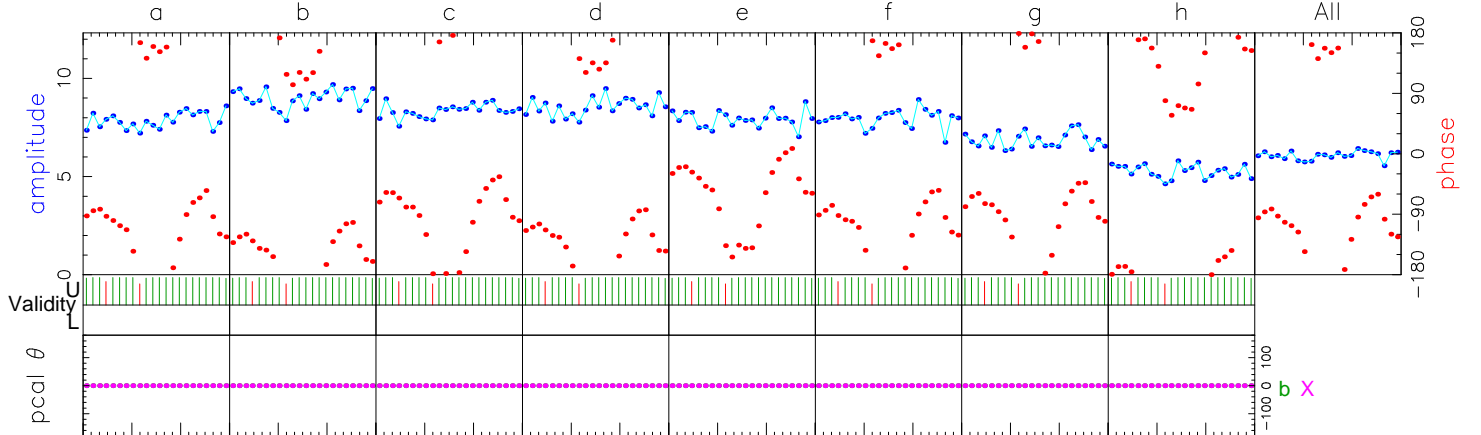
2013+370.3MP56K, No0500, bX

VLBA_BR - ONSALA60, fgroup Q, pol RR



Fringe quality 2
 SNR 149.2
 Int time 176.509
 Amp 4.108
 Phase 126.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.054209
 MBD 0.000209
 Fringe rate (Hz) 0.014527
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151749
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	-118.7	-158.0	-95.8	-143.2	-56.6	-116.8	-99.2	154.2	Phase	-120.8	
	5.3	6.1	5.6	5.8	5.4	5.4	4.6	3.6	Ampl.	5.2	
	270.3	270.6	270.3	270.5	270.0	270.8	269.9	268.9	Sbd box	270.9	
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids		
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.01366776606E+03		Apriori delay (usec)		-1.01371484986E+03		Resid mbdelay (usec)		2.08805E-04	+/- 7.3E-06	
Sband delay (usec)	-1.01366064086E+03		Apriori clock (usec)		-1.0829798E+02		Resid sbdelay (usec)		5.42090E-02	+/- 5.8E-05	
Phase delay (usec)	-1.01371485764E+03		Apriori clockrate (us/s)		-6.4018213E-07		Resid phdelay (usec)		-7.78012E-06	+/- 4.9E-08	
Delay rate (us/s)	1.36294556987E+00		Apriori rate (us/s)		1.36294523312E+00		Resid rate (us/s)		3.36749E-07	+/- 4.8E-10	
Total phase (deg)	262.4		Apriori accel (us/s/s)		-1.87442985329E-06		Resid phase (deg)		126.7	+/- 0.8	
	RMS	Theor.	Amplitude	4.108 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	49.7	1.8	Search (1024X32)	3.886		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	48.3	3.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	48.9	1.1	Inc. seg. avg.	6.078		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023 0.023	
amp/frq (%)	32.3	1.9	Inc. frq. avg.	5.204		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
b: az 76.2 el 40.6 pa -54.6	X: az 272.4 el 44.4 pa 42.5		u, v (fr/asec) -4912.227 -370.316						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/bX...3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/bX.Q.83.3MP56K								

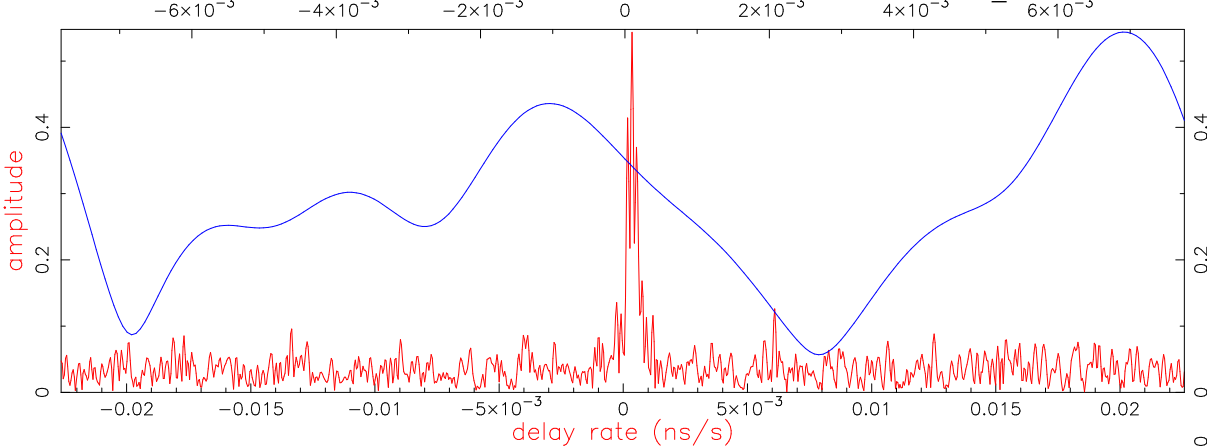
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bX

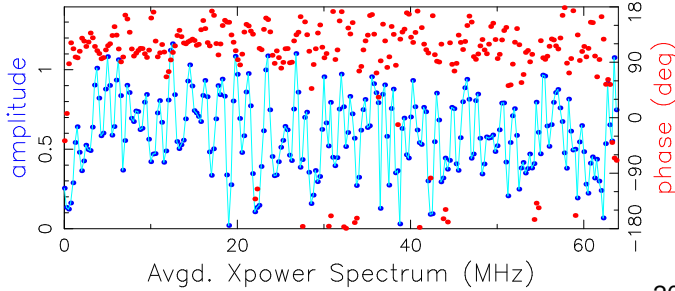
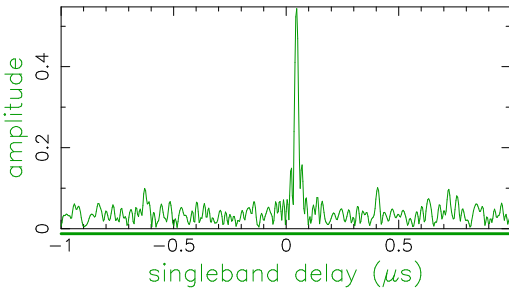
VLBA_BR - ONSALA60, fgroup Q, pol LR

multiband delay (μs)



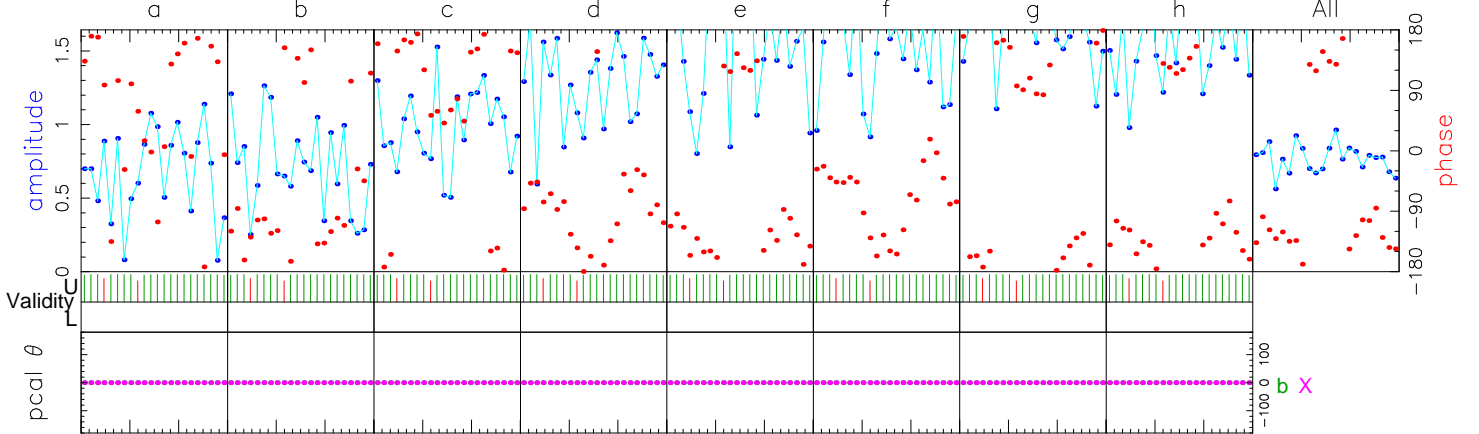
Fringe quality 7

SNR 19.9
 Int time 176.509
 Amp 0.548
 Phase 257.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.045740
 MBD 0.006873
 Fringe rate (Hz)
 0.014441
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151753
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	133.7	-137.9	149.1	-92.0	-154.3	-64.8	170.1	-154.1	Phase	-147.7
	0.3	0.4	0.6	0.9	1.0	1.1	1.2	1.1	Ampl.	0.8
	496.9	270.2	269.8	269.9	269.2	269.9	269.5	268.0	Sbd box	268.7
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.01367672731E+03	Apriori delay (usec)	-1.01371484986E+03	Resid mbdelay (usec)	6.87256E-03	+/-	5.5E-05
Sband delay (usec)	-1.01366910961E+03	Apriori clock (usec)	-1.0829798E+02	Resid sbdelay (usec)	4.57403E-02	+/-	4.3E-04
Phase delay (usec)	-1.01371485937E+03	Apriori clockrate (us/s)	-6.4018213E-07	Resid phdelay (usec)	-9.50954E-06	+/-	3.7E-07
Delay rate (us/s)	1.36294556786E+00	Apriori rate (us/s)	1.36294523312E+00	Resid rate (us/s)	3.34737E-07	+/-	3.6E-09
Total phase (deg)	33.0	Apriori accel (us/s/s)	-1.87442985329E-06	Resid phase (deg)	257.3	+/-	5.8

ph/seg (deg)	46.9	RMS	13.4	Theor.	13.4	Amplitude	0.548 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	44.2	Search (1024X32)	0.518	Search	0.518	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	60.7	Inc. seg. avg.	0.750	Inc. seg. avg.	0.750	Inc. frq. avg.	0.810	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	75.3	Inc. frq. avg.	0.810	Inc. frq. avg.	0.810	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023 0.023
											ion window (TEC)	0.00 0.00

b: az 76.2 el 40.6 pa -54.6 X: az 272.4 el 44.4 pa 42.5 u, v (fr/asec) -4912.227 -370.316 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bX.Q.99.3MP56K

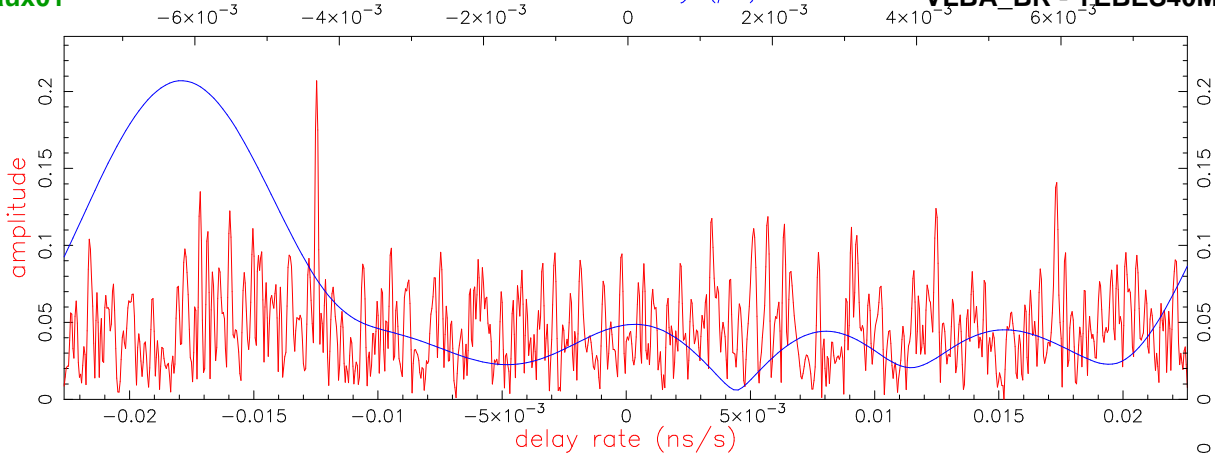
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bY

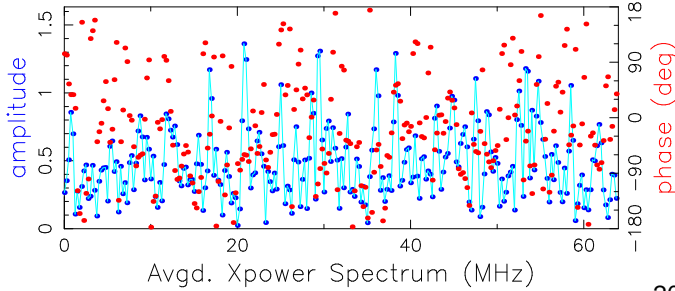
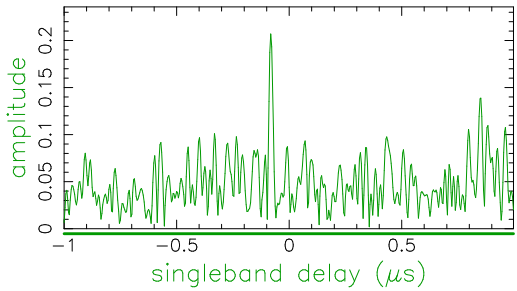
VLBA_BR - YEBES40M, fgroup Q, pol LL

multiband delay (μ s)



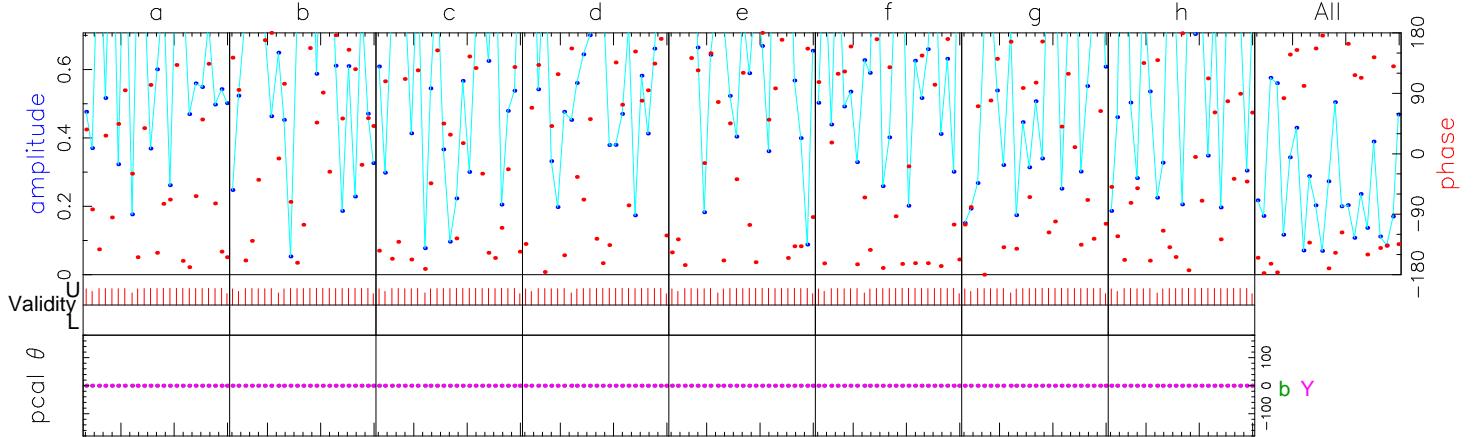
Fringe quality 0

SNR 5.5
 Int time 95.784
 Amp 0.236
 Phase -111.6
 PFD 9.7e-01
 Delays (us)
 SBD -0.081753
 MBD -0.006183
 Fringe rate (Hz)
 -0.541613
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094017.41
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151835
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-152.4	162.1	-173.5	174.8	173.5	176.5	-175.8	-155.2	Phase	-179.1
	0.2	0.1	0.3	0.2	0.5	0.4	0.1	0.2	Ampl.	0.2
	228.9	93.6	312.1	58.7	235.1	236.3	320.3	409.7	Sbd box	236.1
U/L	314/0	314/0	314/0	314/0	314/0	314/0	314/0	314/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-2.75997677964E+03	Apriori delay (usec)	-2.75989247186E+03	Resid mbdelay (usec)	-6.18279E-03	+/-	2.0E-04
Sband delay (usec)	-2.75997422461E+03	Apriori clock (usec)	1.1560967E+02	Resid sbdelay (usec)	-8.17527E-02	+/-	1.6E-03
Phase delay (usec)	-2.75989248339E+03	Apriori clockrate (us/s)	1.5851320E-06	Resid phdelay (usec)	-1.15307E-05	+/-	1.3E-06
Delay rate (us/s)	1.47368827970E+00	Apriori rate (us/s)	1.47370083447E+00	Resid rate (us/s)	-1.25548E-05	+/-	1.4E-08
Total phase (deg)	-196.5	Apriori accel (us/s/s)	2.17726391121E-05	Resid phase (deg)	-111.6	+/-	20.7

ph/seg (deg)	44.1	Theor.	49.3	Amplitude	0.236 +/- 0.043	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	78.7		86.0	Search (1024X32)	0.205	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.3		29.2	Inc. seg. avg.	0.214	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	54.1		51.0	Inc. frq. avg.	0.213	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 76.2 el 40.6 pa -54.6 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -5300.229 1020.693 simultaneous interpolator

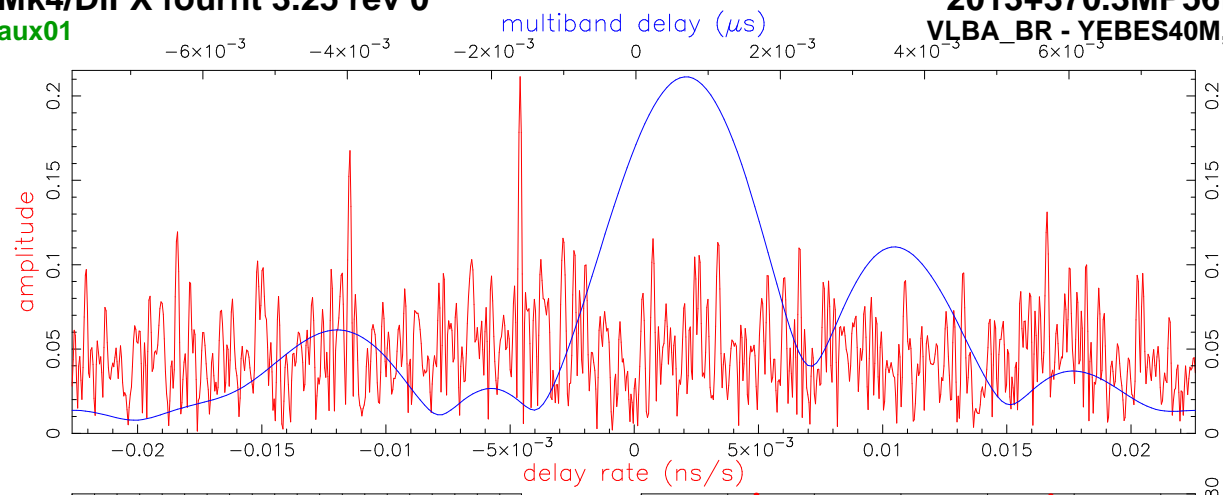
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bY.Q.319.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bY

VLBA_BR - YEBES40M, fgroup Q, pol RR



Fringe quality 0

SNR 5.7

Int time 95.784

Amplitude 0.215

Phase -51.6

PFD 8.4e-01

Delays (us)

SBD -0.409854

MBD 0.000699

Fringe rate (Hz)

-0.198991

Ion TEC 0.000

Ref freq (MHz)

43140.0000

AP (sec) 0.512

Exp. c241d

Exper # 1234

Yr:day 2024:113

Start 094017.41

Stop 094300.22

FRT 094130.00

Corr/FF/build

2024:332:222845

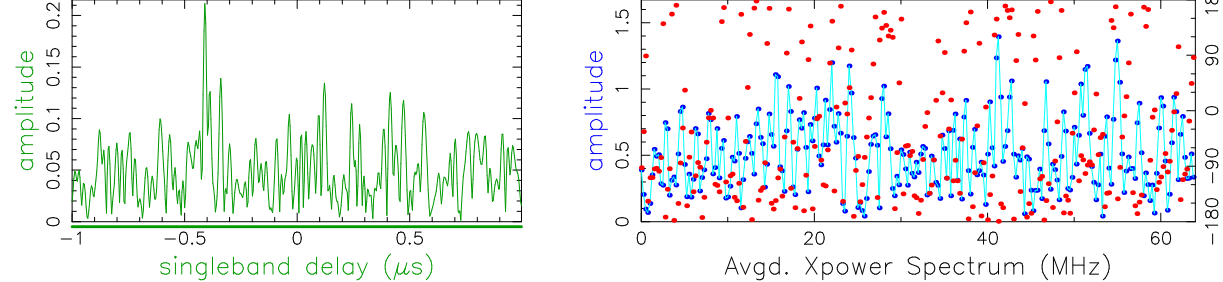
2025:042:151837

2024:113:095956

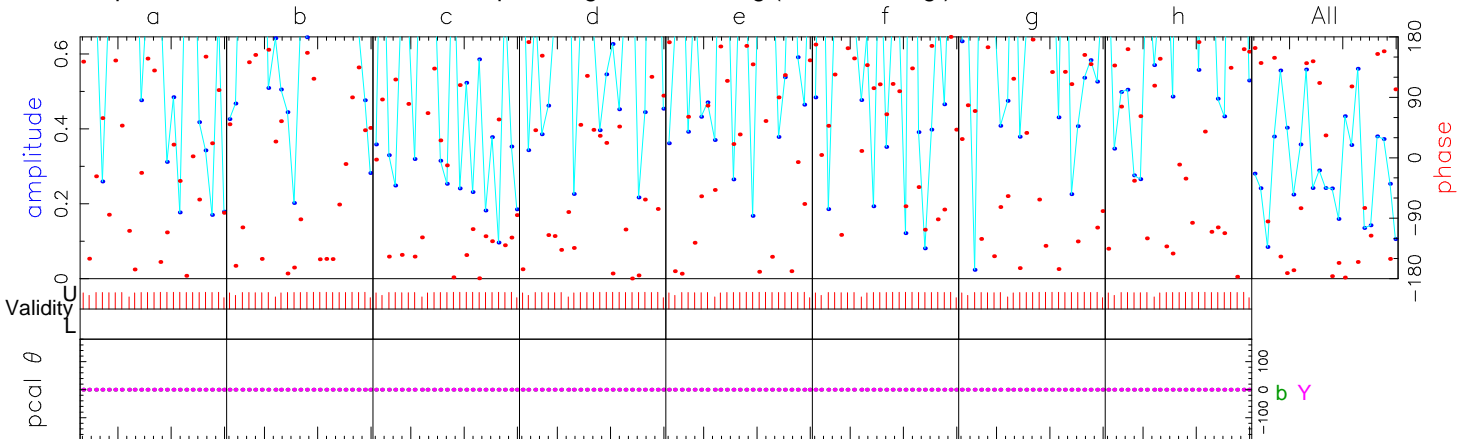
RA & Dec (J2000)

20h15m28.729786s

+37°10'59.514736"



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	314/0	314/0	314/0	314/0	314/0	314/0	314/0	314/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-2.76029802241E+03	Apriori delay (usec)	-2.75989247186E+03	Resid mbdelay (usec)	6.99451E-04	+/-	1.9E-04
Sband delay (usec)	-2.76030232611E+03	Apriori clock (usec)	1.1560967E+02	Resid sbdelay (usec)	-4.09854E-01	+/-	1.5E-03
Phase delay (usec)	-2.75989246069E+03	Apriori clockrate (us/s)	1.5851320E-06	Resid phdelay (usec)	1.11630E-05	+/-	1.3E-06
Delay rate (us/s)	1.47369622180E+00	Apriori rate (us/s)	1.47370083447E+00	Resid rate (us/s)	-4.61268E-06	+/-	1.4E-08
Total phase (deg)	-136.5	Apriori accel (us/s/s)	2.17726391121E-05	Resid phase (deg)	-51.6	+/-	20.2

ph/seg (deg)	58.6	Theor.	48.2	Amplitude	0.215 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	78.7	Search (1024X32)	0.207	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	22.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	27.2	Inc. seg. avg.	0.230	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023	
		Inc. frq. avg.	0.204	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 76.2 el 40.6 pa -54.6 Y: az 281.3 el 52.4 pa 69.4 u, v (fr/asec) -5300.229 1020.693 simultaneous interpolator

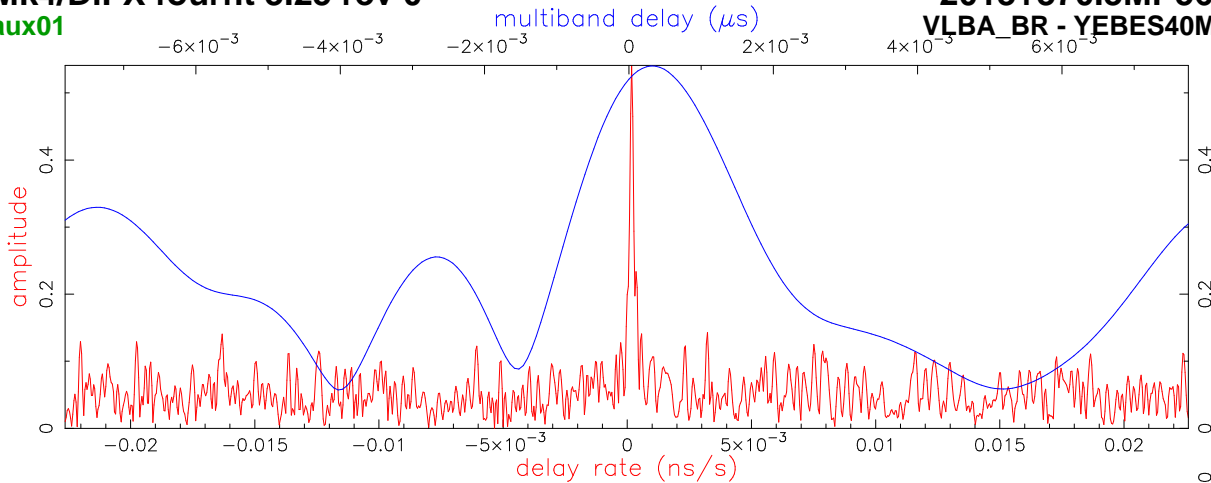
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bY..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bY.Q.328.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

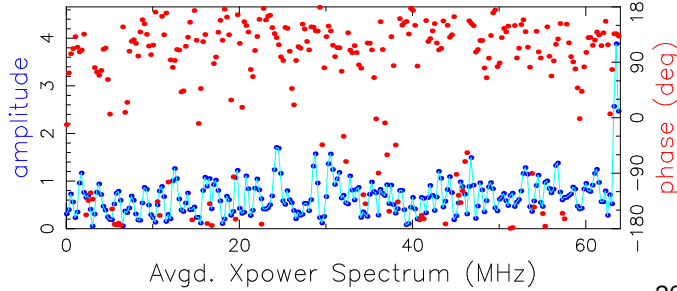
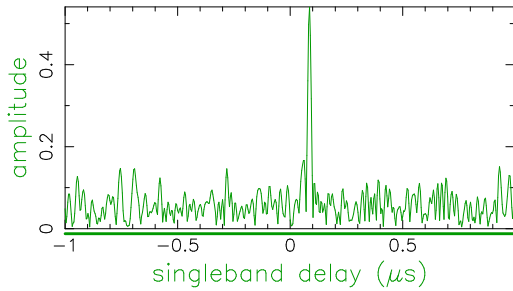
2013+370.3MP56K, No0500, bY

VLBA_BR - YEBES40M, fgroup Q, pol LR



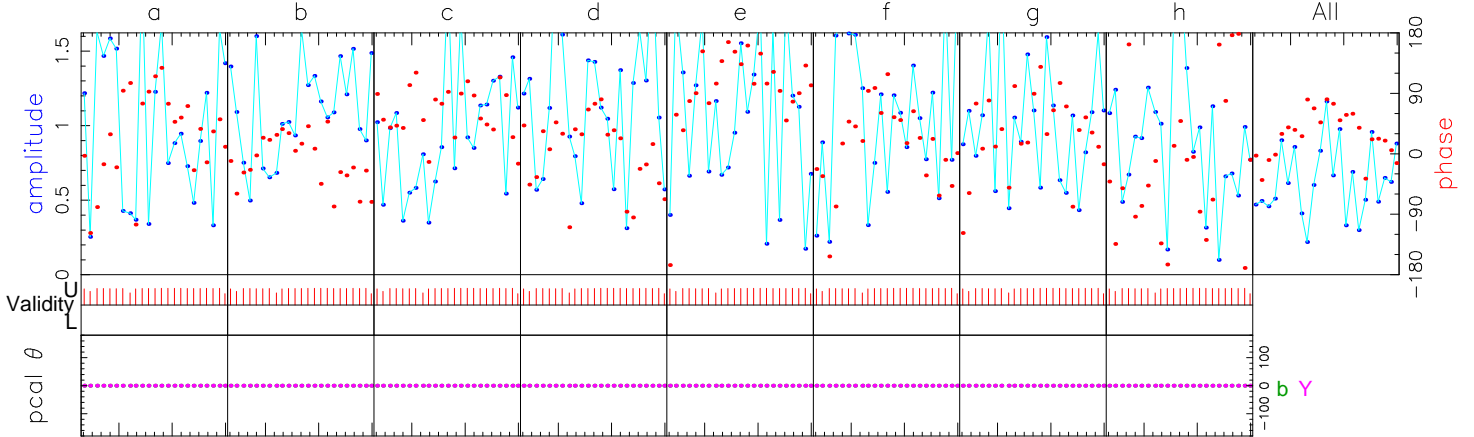
Fringe quality 7

SNR 14.5
 Int time 95.784
 Amp 0.541
 Phase 325.0
 PFD 5.0e-39
 Delays (us)
 SBD 0.085470
 MBD 0.000319
 Fringe rate (Hz) 0.007501
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094017.41
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151841
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	314/0	314/0	314/0	314/0	314/0	314/0	314/0	314/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) -2.75981402744E+03 Apriori delay (usec) -2.75989247186E+03 Resid mbdelay (usec) 3.19418E-04 +/- 7.5E-05
 Sband delay (usec) -2.75980700136E+03 Apriori clock (usec) 1.1560967E+02 Resid sbdelay (usec) 8.54705E-02 +/- 5.9E-04
 Phase delay (usec) -2.75989246976E+03 Apriori clockrate (us/s) 1.5851320E-06 Resid phdelay (usec) 2.09264E-06 +/- 5.1E-07
 Delay rate (us/s) 1.47370100834E+00 Apriori rate (us/s) 1.47370083447E+00 Resid rate (us/s) 1.73867E-07 +/- 5.5E-09
 Total phase (deg) 240.1 Apriori accel (us/s/s) 2.17726391121E-05 Resid phase (deg) 325.0 +/- 7.9

ph/seg (deg) 33.8 RMS 18.9 Theor. Amplitude 0.541 +/- 0.037 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.1 32.9 Search (1024X32) 0.533 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.5 11.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.5 19.5 Inc. seg. avg. 0.603 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Inc. frq. avg. 0.691 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

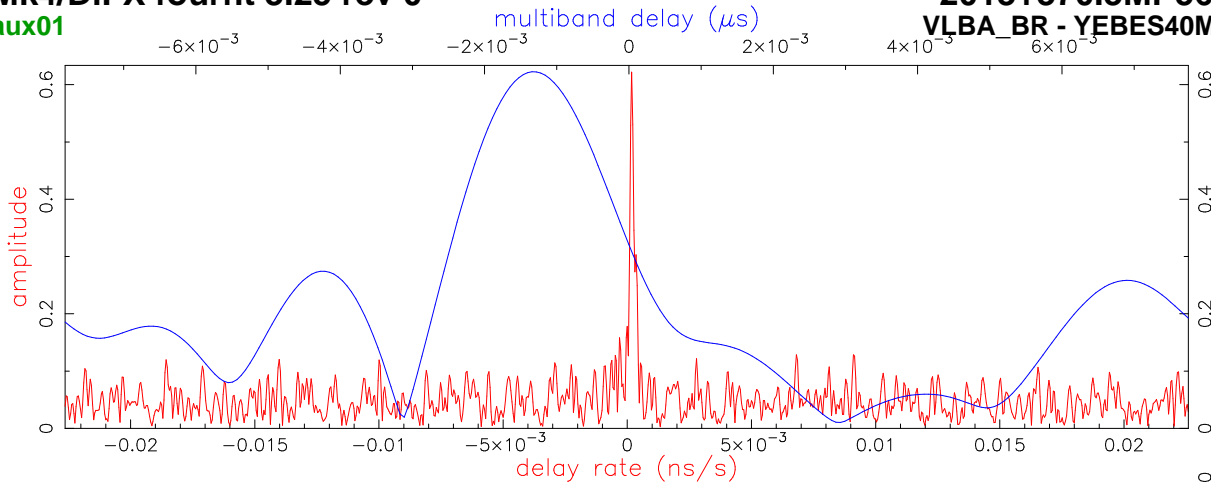
b: az 76.2 el 40.6 pa -54.6 Y: az 281.3 el 52.4 pa 69.4 u, v (fr/asec) -5300.229 1020.693 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bY..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bY.Q.341.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

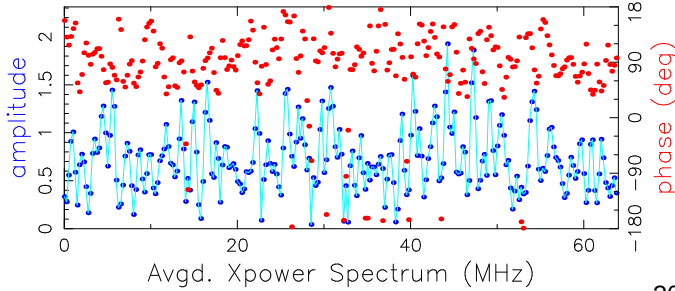
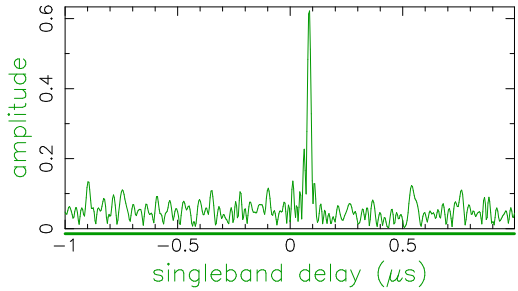
2013+370.3MP56K, No0500, bY

VLBA_BR - YEBES40M, fgroup Q, pol RL



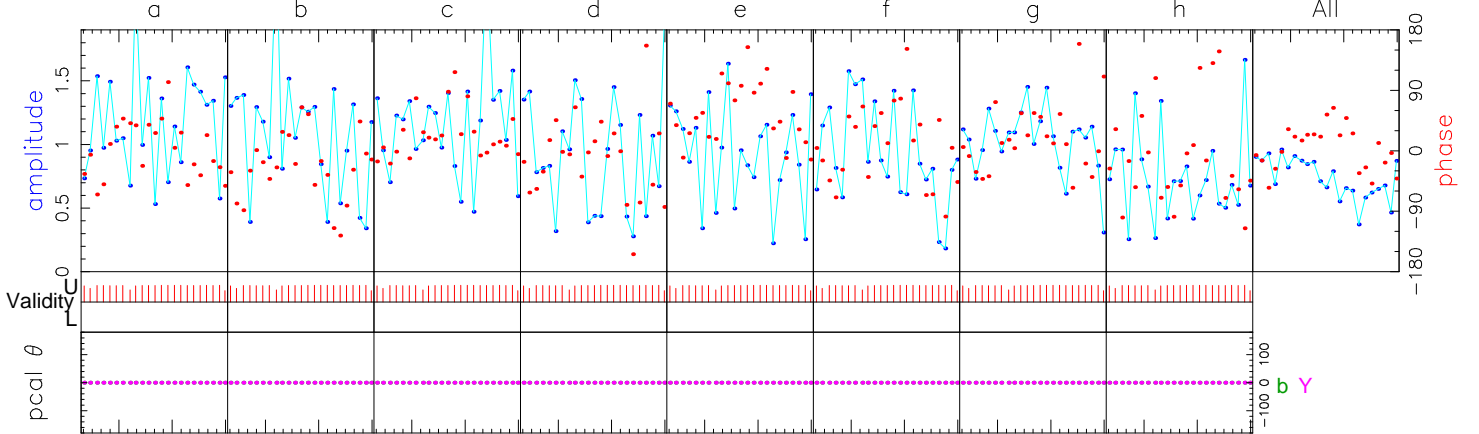
Fringe quality 8

SNR 17.0
 Int time 95.784
 Amp 0.634
 Phase 298.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.084257
 MBD -0.001376
 Fringe rate (Hz)
 0.007769
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094017.41
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151850
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	0.6	-25.4	21.3	-17.7	61.0	15.3	11.1	-46.4	Phase	5.5
b	0.9	0.7	1.0	0.6	0.7	0.6	0.8	0.4	Ampl.	0.7
Y	277.7	278.4	278.5	277.8	278.1	278.1	277.7	275.0	Sbd box	278.6
b:Y	314/0	314/0	314/0	314/0	314/0	314/0	314/0	314/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -2.75981572259E+03 Apriori delay (usec) -2.75989247186E+03 Resid mbdelay (usec) -1.37574E-03 +/- 6.4E-05
 Sband delay (usec) -2.75980821511E+03 Apriori clock (usec) 1.1560967E+02 Resid sbdelay (usec) 8.42568E-02 +/- 5.1E-04
 Phase delay (usec) -2.75989247150E+03 Apriori clockrate (us/s) 1.5851320E-06 Resid phdelay (usec) 3.53306E-07 +/- 4.4E-07
 Delay rate (us/s) 1.47370101456E+00 Apriori rate (us/s) 1.47370083447E+00 Resid rate (us/s) 1.800083E-07 +/- 4.7E-09
 Total phase (deg) 213.1 Apriori accel (us/s/s) 2.17726391121E-05 Resid phase (deg) 298.0 +/- 6.8

RMS Theor. Amplitude 0.634 +/- 0.037 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 32.2 16.1 Search (1024X32) 0.617 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 28.9 28.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 35.8 9.6 Inc. seg. avg. 0.702 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 30.0 16.7 Inc. frq. avg. 0.691 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 Y: az 281.3 el 52.4 pa 69.4 u, v (fr/asec) -5300.229 1020.693 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bY.Q.360.3MP56K

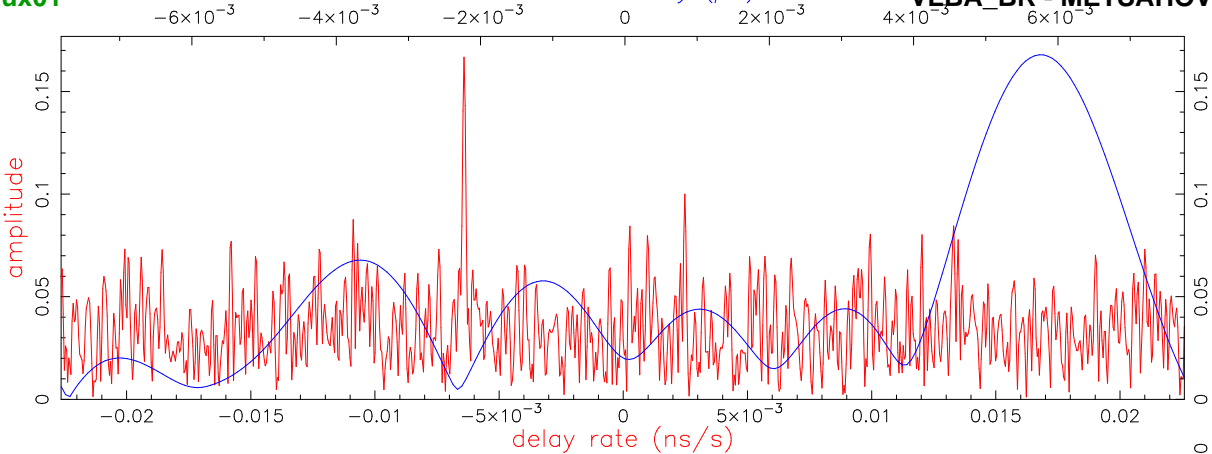
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bZ

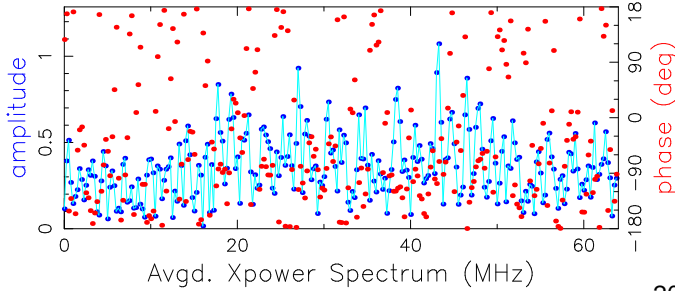
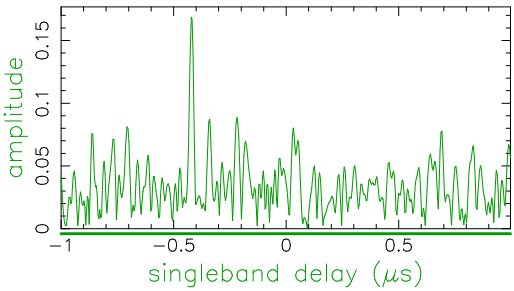
VLBA_BR - METSAHOV, fgroup Q, pol LR

multiband delay (μs)



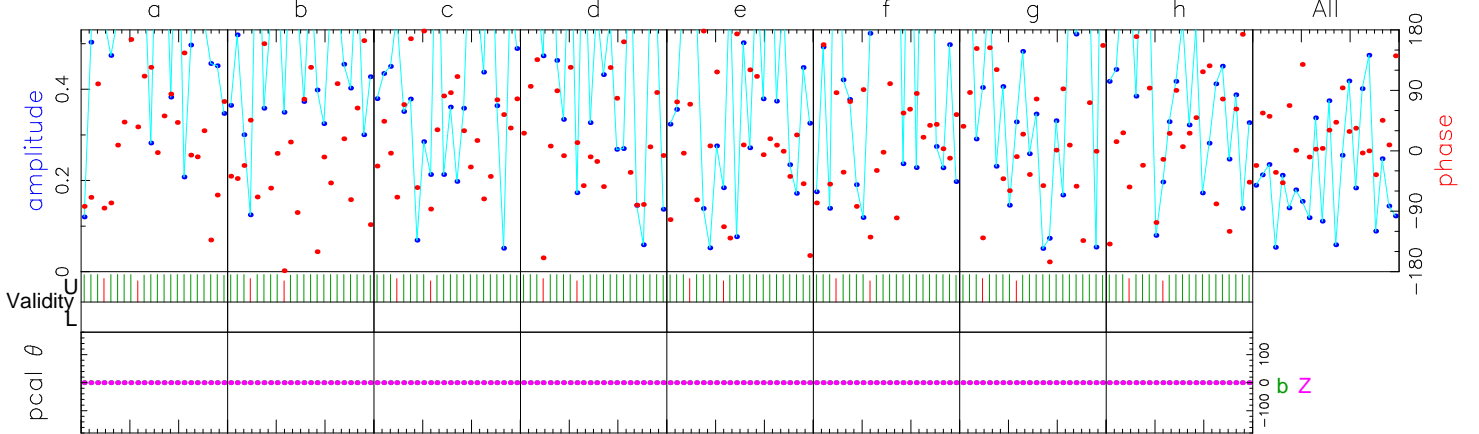
Fringe quality 0

SNR 6.2
 Int time 176.622
 Amp 0.177
 Phase -45.4
 PFD 6.7e-02
 Delays (us)
 SBD -0.420172
 MBD 0.005635
 Fringe rate (Hz)
 -0.278456
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151759
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	31.7	-25.6	16.0	31.4	6.2	28.6	63.7	25.5	Phase	22.1
	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.2
	252.2	124.3	449.0	427.4	375.6	150.2	503.7	85.6	Sbd box	149.4
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	8.06206954506E+02	Apriori delay (usec)	8.06623194687E+02	Resid mbdelay (usec)	5.63482E-03	+/-	1.7E-04
Sband delay (usec)	8.06203022687E+02	Apriori clock (usec)	4.5237617E+08	Resid sbdelay (usec)	-4.20172E-01	+/-	1.4E-03
Phase delay (usec)	8.06623196113E+02	Apriori clockrate (us/s)	-3.3419014E-08	Resid phdelay (usec)	1.42565E-06	+/-	1.2E-06
Delay rate (us/s)	1.36092684964E+00	Apriori rate (us/s)	1.36093330435E+00	Resid rate (us/s)	-6.45471E-06	+/-	1.2E-08
Total phase (deg)	-182.6	Apriori accel (us/s/s)	-1.27021470610E-05	Resid phase (deg)	-45.4	+/-	18.4

ph/seg (deg)	48.8	RMS	43.0	Theor.	43.0	Amplitude	0.177 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5				
amp/seg (%)	73.1	Search (1024X32)	0.166	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	27.5	Inc. seg. avg.	0.174	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	29.6	Inc. frq. avg.	0.166												

b: az 76.2 el 40.6 pa -54.6 Z: az 280.0 el 38.3 pa 37.9 u,v (fr/asec) -4909.480 -784.615 simultaneous interpolator

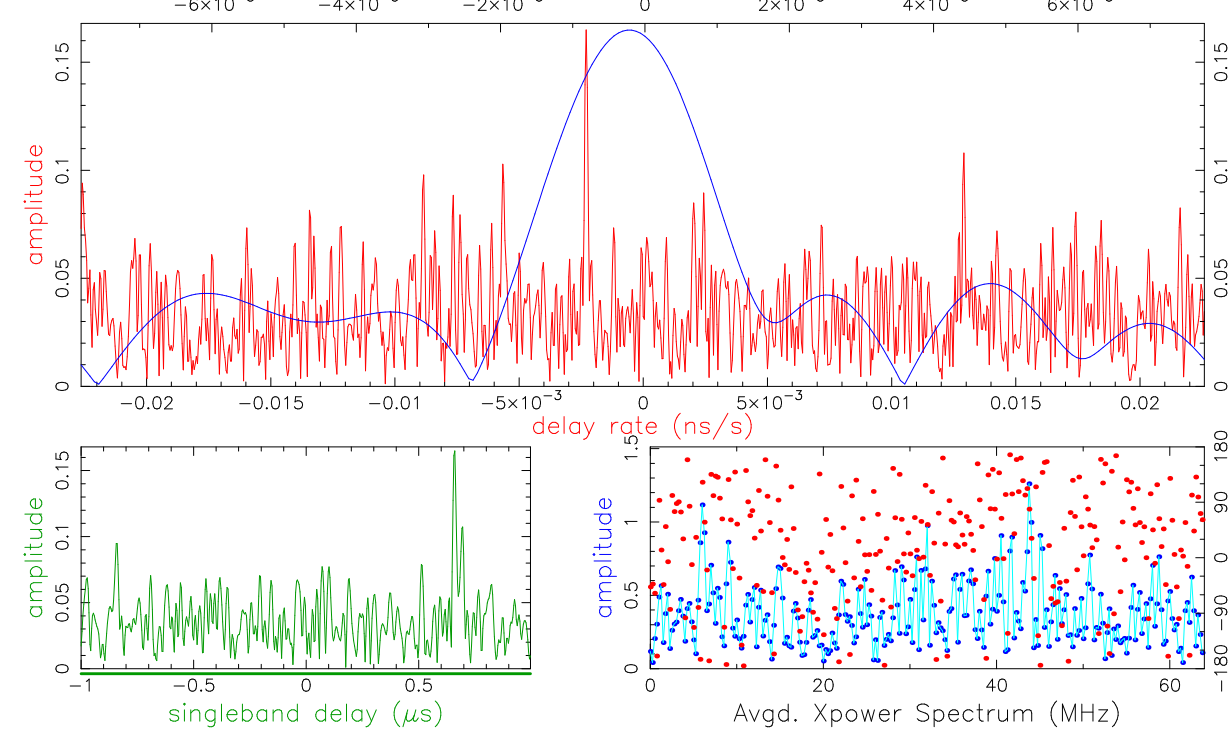
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bZ..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bZ.Q.135.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

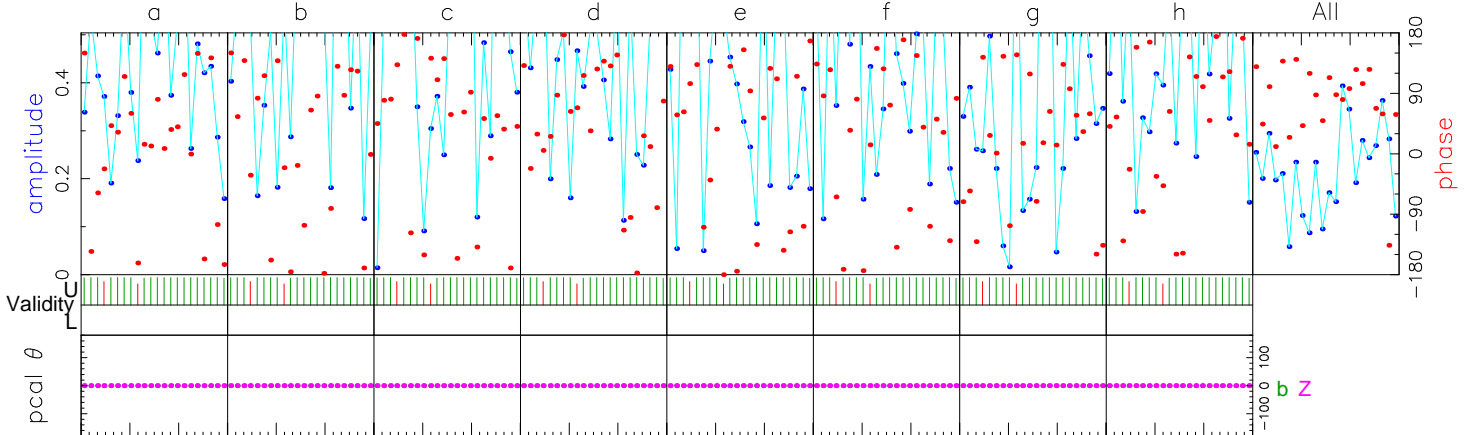
2013+370.3MP56K, No0500, bZ

VLBA_BR - METSAHOV, fgroup Q, pol RL



Fringe quality 0
 SNR 6.1
 Int time 176.622
 Amp 0.168
 Phase 319.4
 PFD 1.5e-01
 Delays (us)
 SBD 0.658642
 MBD -0.000226
 Fringe rate (Hz)
 -0.099211
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151801
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) 8.07279218921E+02 Apriori delay (usec) 8.06623194687E+02 Resid mbdelay (usec) -2.25766E-04 +/- 1.8E-04
 Sband delay (usec) 8.07281836937E+02 Apriori clock (usec) 4.5237617E+00 Resid sbdelay (usec) 6.58642E-01 +/- 1.4E-03
 Phase delay (usec) 8.06623200768E+02 Apriori clockrate (us/s) -3.3419014E-08 Resid phdelay (usec) 6.08089E-06 +/- 1.2E-06
 Delay rate (us/s) 1.36093100460E+00 Apriori rate (us/s) 1.36093330435E+00 Resid rate (us/s) -2.29975E-06 +/- 1.2E-08
 Total phase (deg) 182.2 Apriori accel (us/s/s) -1.27021470610E-05 Resid phase (deg) 319.4 +/- 18.8

ph/seg (deg) 46.5 44.0 Search (1024X32) 0.164 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.3 76.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.9 26.7 Inc. seg. avg. 0.170 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 23.0 46.5 Inc. frq. avg. 0.159 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

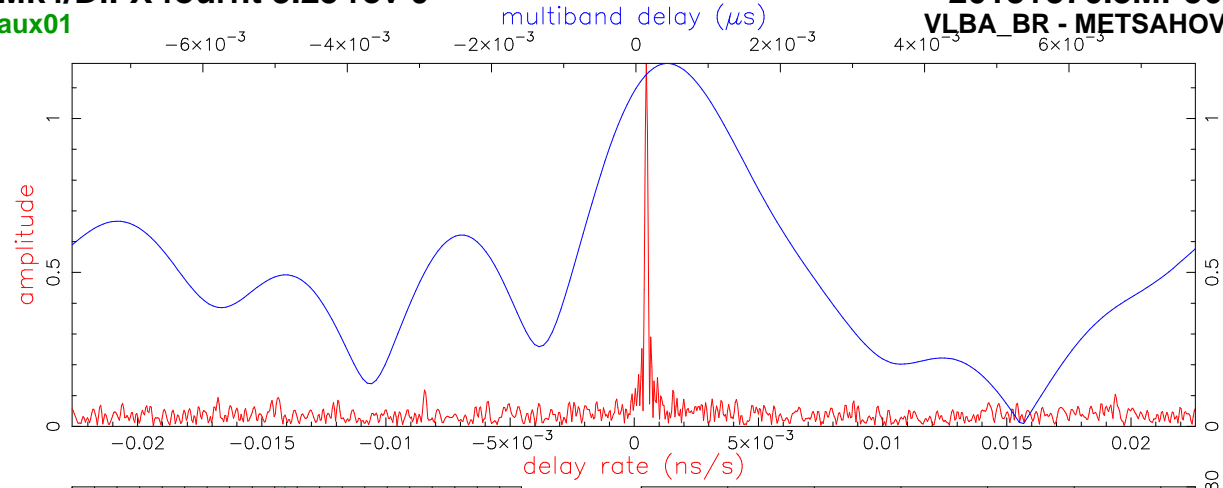
b: az 76.2 el 40.6 pa -54.6 Z: az 280.0 el 38.3 pa 37.9 u,v (fr/asec) -4909.480 -784.615 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bZ..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bZ.Q.148.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bZ

VLBA_BR - METSAHOV, fgroup Q, pol LL



Fringe quality 6

SNR 42.8

Int time 176.622

Amp 1.179

Phase -104.2

PFD 0.0e+00

Delays (us)

SBD -0.054714

MBD 0.000433

Fringe rate (Hz)

0.020256

Ion TEC 0.000

Ref freq (MHz)

43140.0000

AP (sec) 0.512

Exp. c241d

Exper # 1234

Yr:day 2024:113

Start 094000.00

Stop 094300.22

FRT 094130.00

Corr/FF/build

2024:332:222845

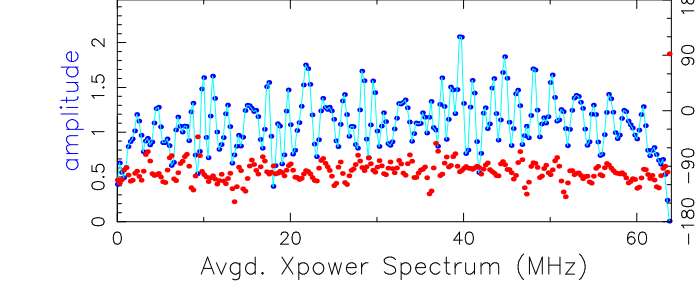
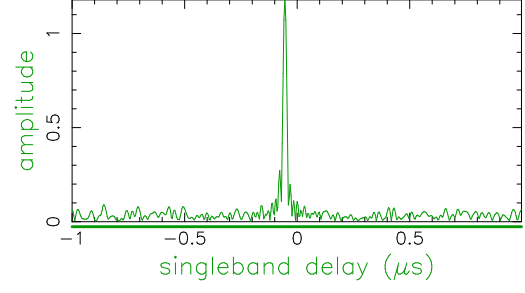
2025:042:151744

2024:113:095956

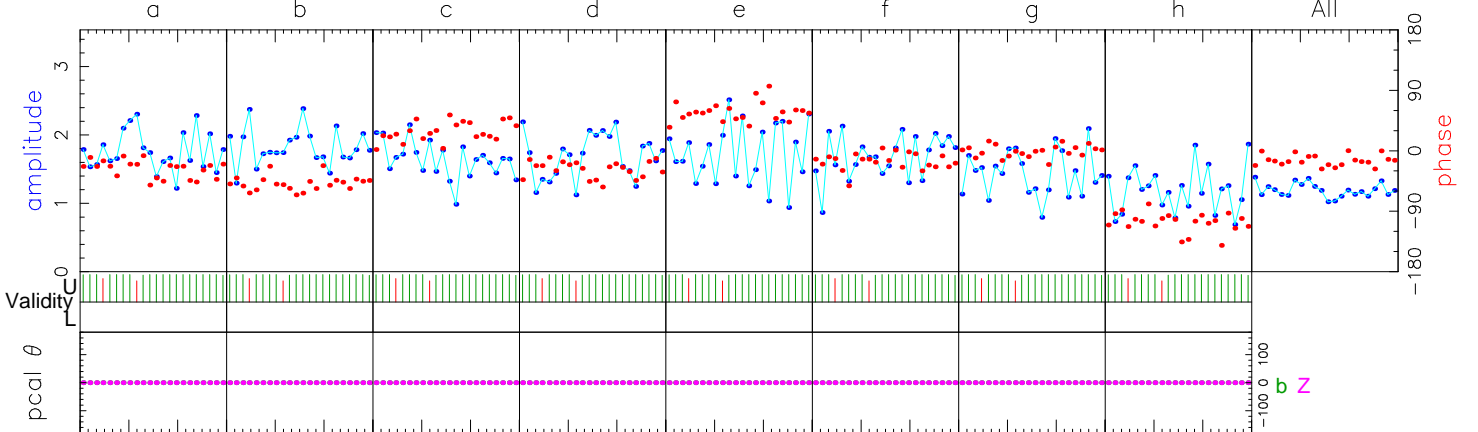
RA & Dec (J2000)

20h15m28.729786s

+37°10'59.514736"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-26.8	-49.0	27.8	-28.4	57.3	-15.6	0.0	-106.9		-14.2
	1.7	1.8	1.6	1.7	1.7	1.7	1.4	1.2		1.6
	242.7	243.4	242.5	242.3	242.1	242.1	241.7	240.7		243.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	8.06561128146E+02	Apriori delay (usec)	8.06623194687E+02	Resid mbdelay (usec)	4.33459E-04	+/-	2.5E-05
Sband delay (usec)	8.06568480437E+02	Apriori clock (usec)	4.5237617E+08	Resid sbdelay (usec)	-5.47143E-02	+/-	2.0E-04
Phase delay (usec)	8.06623193772E+02	Apriori clockrate (us/s)	-3.3419014E-08	Resid phdelay (usec)	-9.15008E-07	+/-	1.7E-07
Delay rate (us/s)	1.36093377390E+00	Apriori rate (us/s)	1.36093330435E+00	Resid rate (us/s)	4.69552E-07	+/-	1.7E-09
Total phase (deg)	-241.4	Apriori accel (us/s/s)	-1.27021470610E-05	Resid phase (deg)	-104.2	+/-	2.7

ph/seg (deg) 8.2 6.2 Amplitude 1.179 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 8.3 10.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 53.6 3.8 Inc. seg. avg. 1.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 37.8 6.6 Inc. frq. avg. 1.579 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023

b: az 76.2 el 40.6 pa -54.6 Z: az 280.0 el 38.3 pa 37.9 u, v (fr/asec) -4909.480 -784.615 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bZ..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bZ.Q.52.3MP56K simultaneous interpolator

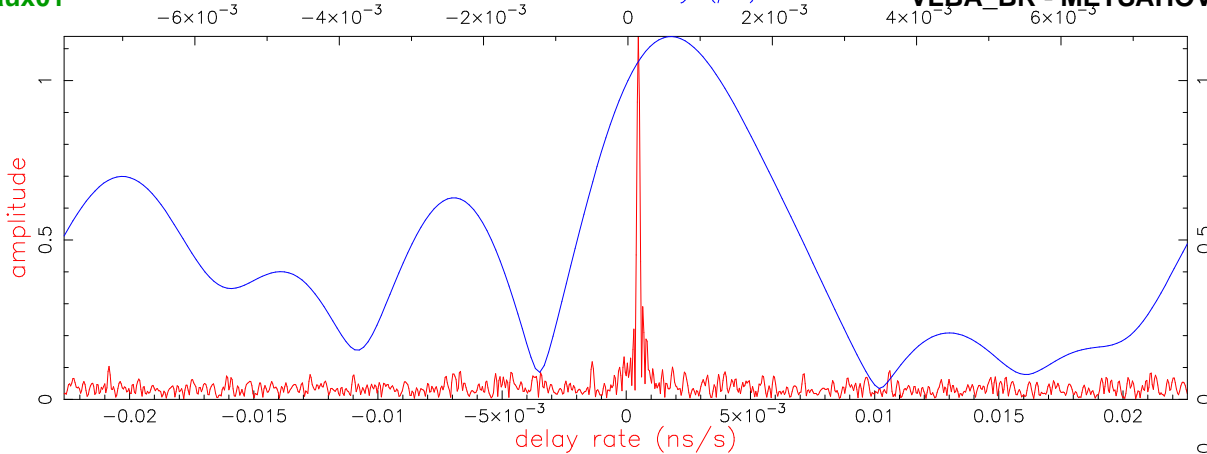
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bZ

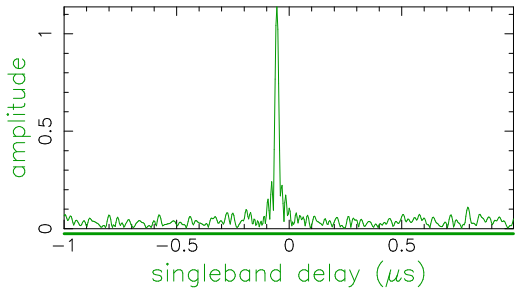
VLBA_BR - METSAHOV, fgroup Q, pol RR

multiband delay (μ s)

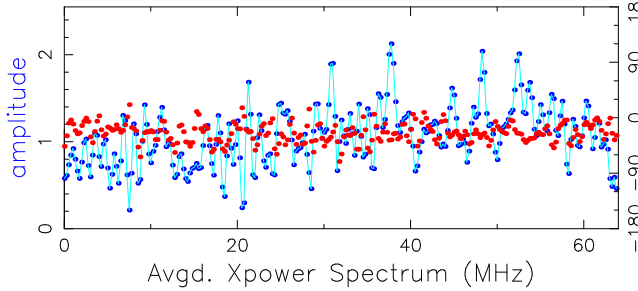


Fringe quality 6

SNR 41.4
 Int time 176.622
 Amp 1.139
 Phase -34.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.054871
 MBD 0.000589
 Fringe rate (Hz) 0.020215
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

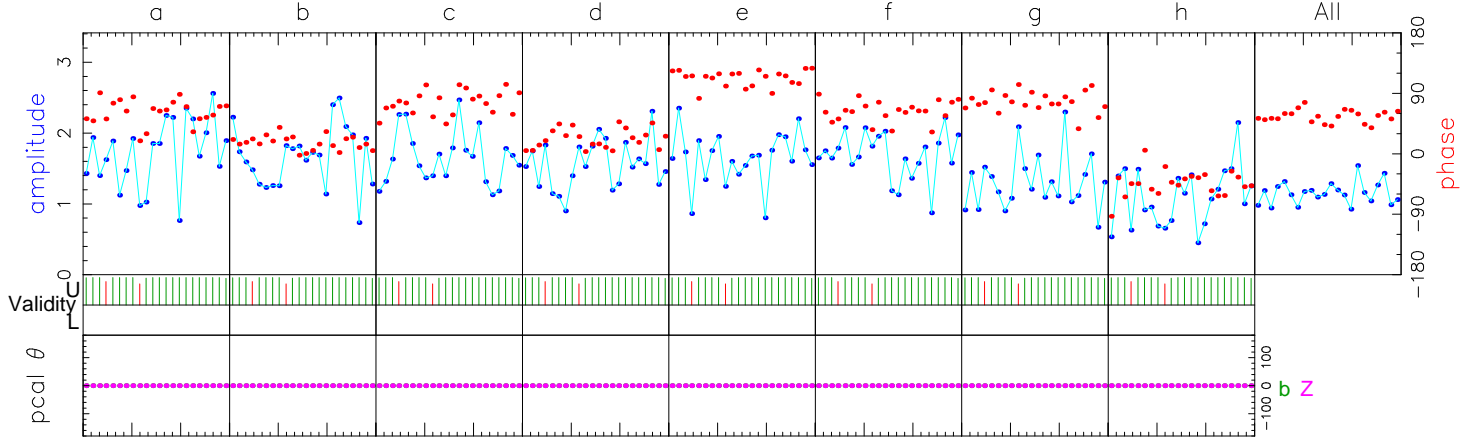


singleband delay (μ s)



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151747
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	62.9	15.8	77.6	22.3	112.5	64.6	79.5	-43.9	Phase	55.7
	1.7	1.6	1.6	1.5	1.6	1.6	1.3	1.1	Ampl.	1.5
	242.5	243.1	242.7	242.6	242.3	242.6	241.6	240.9	Sbd box	243.0
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	8.06561283490E+02	Apriori delay (usec)	8.06623194687E+02	Resid mbdelay (usec)	5.88803E-04	+/-	2.6E-05
Sband delay (usec)	8.06568324187E+02	Apriori clock (usec)	4.5237617E+08	Resid sbdelay (usec)	-5.48705E-02	+/-	2.1E-04
Phase delay (usec)	8.06623198272E+02	Apriori clockrate (us/s)	-3.3419014E-08	Resid phdelay (usec)	3.58505E-06	+/-	1.8E-07
Delay rate (us/s)	1.36093377294E+00	Apriori rate (us/s)	1.36093330435E+00	Resid rate (us/s)	4.68590E-07	+/-	1.7E-09
Total phase (deg)	-171.6	Apriori accel (us/s/s)	-1.27021470610E-05	Resid phase (deg)	-34.3	+/-	2.8

ph/seg (deg)	9.2	Theor.	6.5	Amplitude	1.139 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	13.6	Search (1024X32)	1.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	53.3	Inc. seg. avg.	1.146	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.1	Inc. frq. avg.	1.492	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
b: az 76.2 el 40.6 pa -54.6		Z: az 280.0 el 38.3 pa 37.9		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0500/bZ..3MP56K		u,v (fr/asec) -4909.480 -784.615		simultaneous interpolator		
				Output file: /Exps/c241d/v1/7mm/1234/No0500/bZ.Q.76.3MP56K				