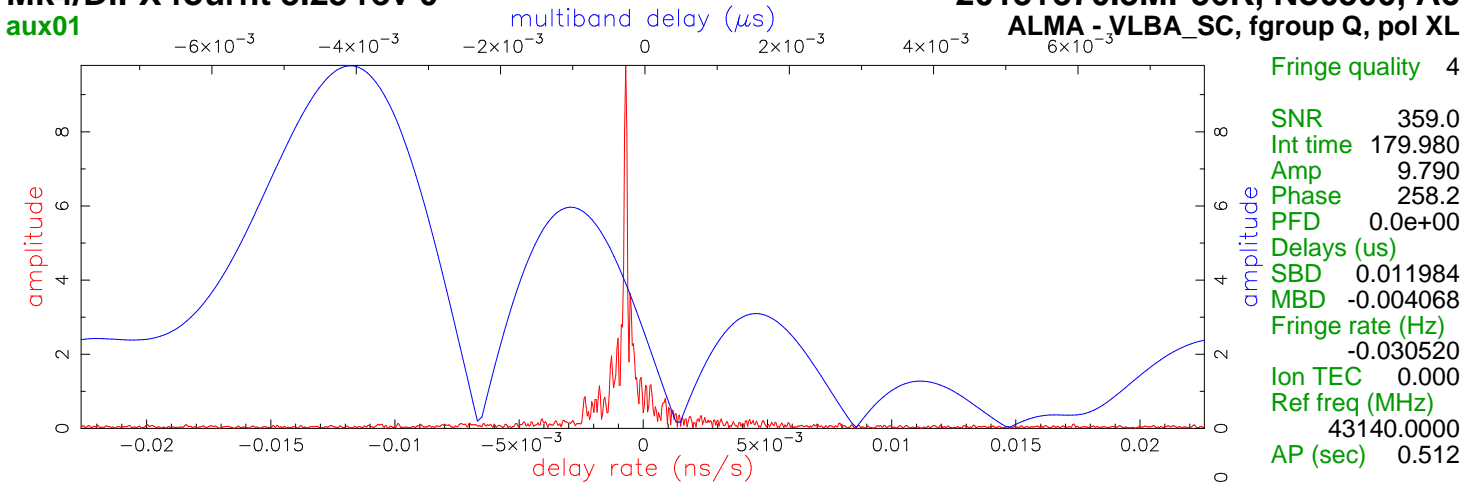


Mk4/DiFX fourfit 3.25 rev 0

aux01

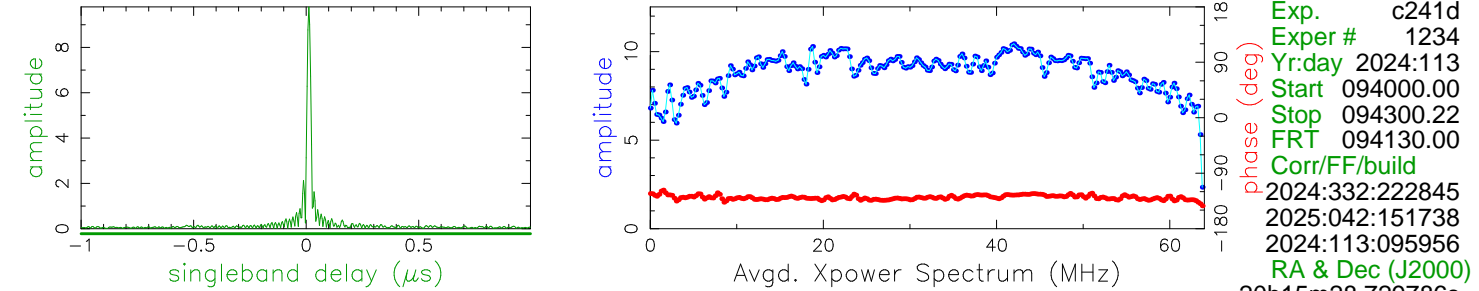
2013+370.3MP56K, No0500, Ac

ALMA - VLBA_SC, fgroup Q, pol XL



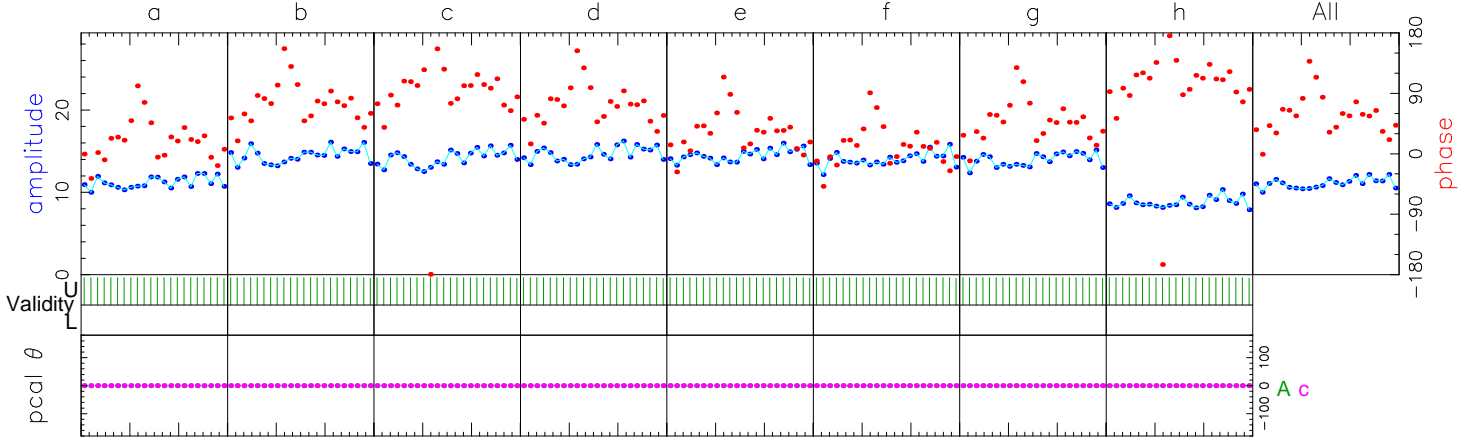
Fringe quality 4

SNR 359.0
 Int time 179.980
 Amp 9.790
 Phase 258.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.011984
 MBD -0.004068
 Fringe rate (Hz)
 -0.030520
 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
 2025:042:151738
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
A	0	0	0	0	0	0	0	0	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:c	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	
c	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.17477197763E+04	Apriori delay (usec)	-1.17477313337E+04	Resid mbdelay (usec)	-4.06761E-03	+/-	3.0E-06
Sband delay (usec)	-1.17477193497E+04	Apriori clock (usec)	-2.1111511E+03	Resid sbdelay (usec)	1.19840E-02	+/-	2.4E-05
Phase delay (usec)	-1.17477313301E+04	Apriori clockrate (us/s)	3.8243811E-07	Resid phdelay (usec)	3.58485E-06	+/-	2.1E-08
Delay rate (us/s)	5.28850264086E-02	Apriori rate (us/s)	5.28857338760E-02	Resid rate (us/s)	-7.07467E-07	+/-	2.0E-10
Total phase (deg)	-6.6	Apriori accel (us/s/s)	3.84623856768E-06	Resid phase (deg)	258.2	+/-	0.3

ph/seg (deg)	29.8	Theor.	0.7	Amplitude	9.790 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	14.7	Search (1024X32)	9.672	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.0	Inc. seg. avg.	11.109	Inc. frq. avg.	11.620	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.8	Inc. frq. avg.	11.620	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
A:	az 14.3 el 27.9 pa -163.6	c:	az 27.3 el 67.5 pa -147.2	u,v (fr/asec)	-195.100 -2334.889	ion window (TEC)	0.00 0.00	simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Ac..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Ac.Q.20.3MP56K

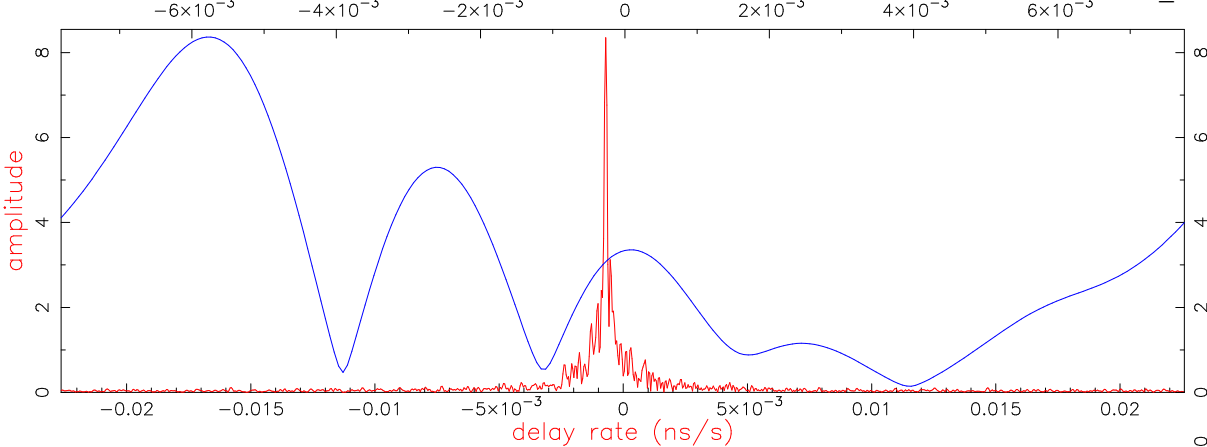
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Ac

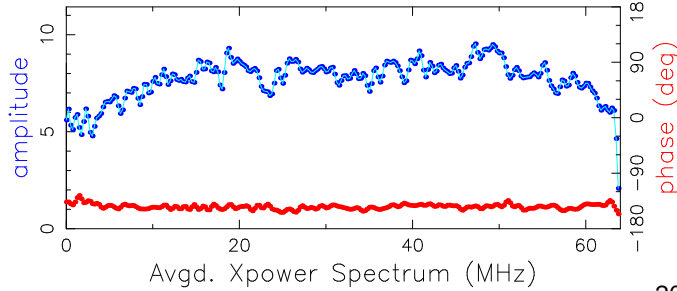
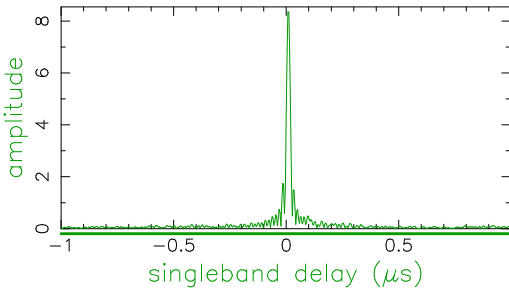
ALMA - VLBA_SC, fgroup Q, pol YR

multiband delay (μ s)



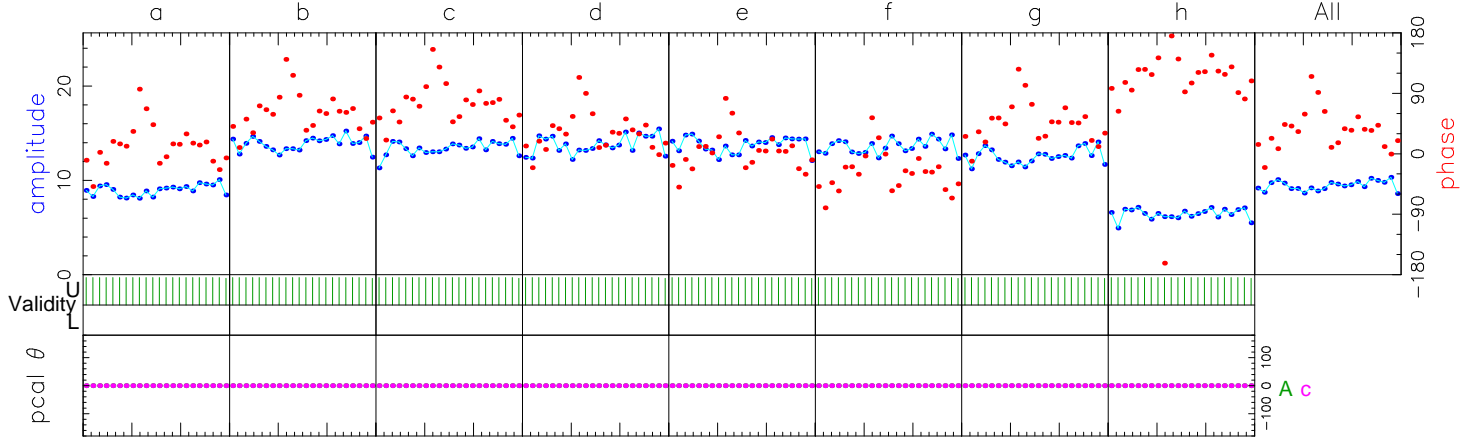
Fringe quality 4

SNR 313.4
 Int time 179.980
 Amp 8.547
 Phase 235.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.009728
 MBD -0.005691
 Fringe rate (Hz)
 -0.030580
 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
	10.1	59.4	73.3	30.9	2.1	-29.7	44.3	118.5	Phase	33.4
	7.9	12.3	11.8	12.2	12.2	12.0	11.1	5.7	Ampl.	10.7
	261.1	259.4	259.3	259.6	259.2	259.6	260.1	261.6	Sbd box	259.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:c	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	
c	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.17477214000E+04	Apriori delay (usec)	-1.17477313337E+04	Resid mbdelay (usec)	-5.69127E-03	+/-	3.5E-06
Sband delay (usec)	-1.17477216059E+04	Apriori clock (usec)	-2.1111511E+03	Resid sbdelay (usec)	9.72775E-03	+/-	2.7E-05
Phase delay (usec)	-1.17477313315E+04	Apriori clockrate (us/s)	3.8243811E-07	Resid phdelay (usec)	2.15351E-06	+/-	2.4E-08
Delay rate (us/s)	5.28850250306E-02	Apriori rate (us/s)	5.28857338760E-02	Resid rate (us/s)	-7.08845E-07	+/-	2.3E-10
Total phase (deg)	-28.8	Apriori accel (us/s/s)	3.84623856768E-06	Resid phase (deg)	235.9	+/-	0.4

ph/seg (deg)	29.4	RMS	29.4	Theor.	0.9	Amplitude	8.547 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	12.2		12.2		1.5	Search (1024X32)	8.256	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	50.2		50.2		0.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.7		36.7		0.9	Inc. seg. avg.	9.467	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	10.657	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 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -195.100 -2334.889 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Ac..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Ac.Q.32.3MP56K

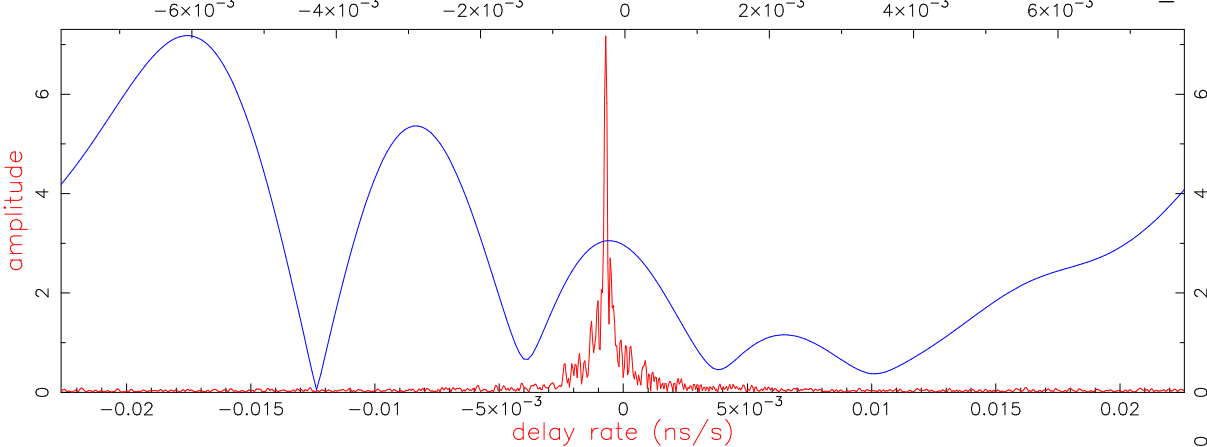
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Ac

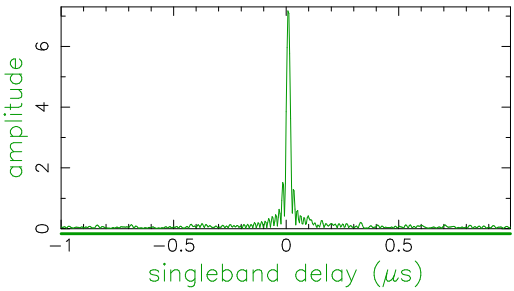
ALMA - VLBA_SC, fgroup Q, pol XR

multiband delay (μ s)

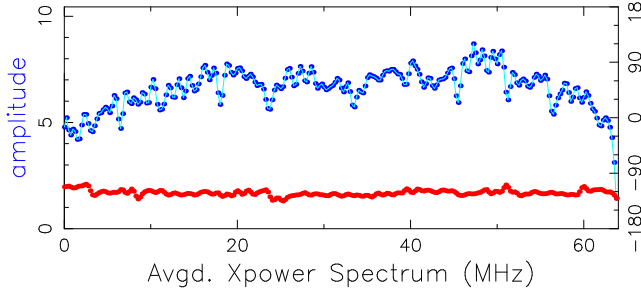


Fringe quality 3

SNR 267.9
 Int time 179.980
 Amp 7.306
 Phase 259.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.009532
 MBD -0.005994
 Fringe rate (Hz)
 -0.030542
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

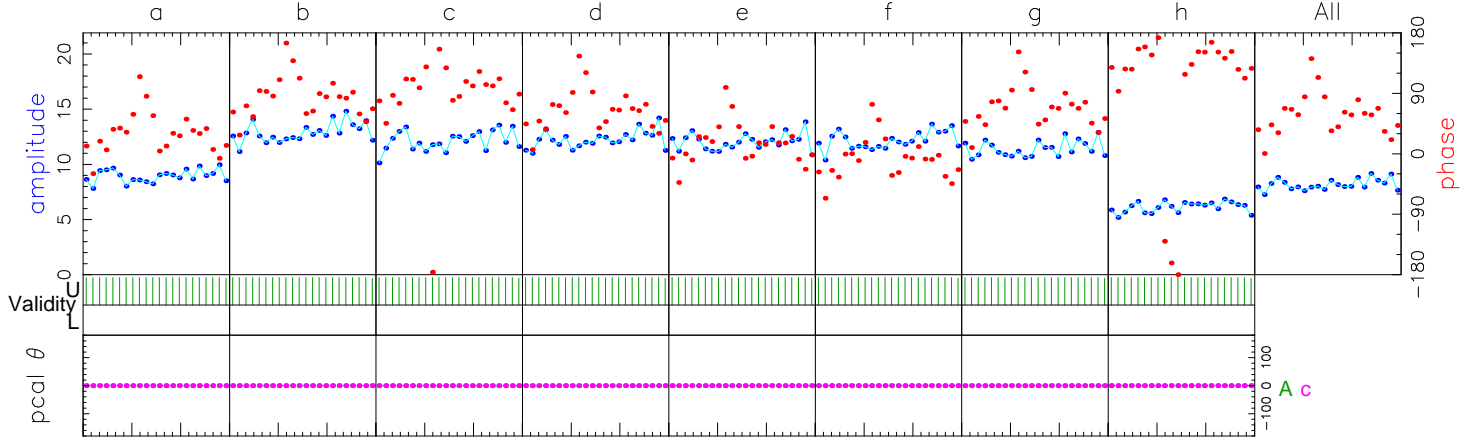


singleband delay (μ s)



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151743
 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
A	0	0	0	0	0	0	0	0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.17477217025E+04	Apriori delay (usec)	-1.17477313337E+04	Resid mbdelay (usec)	-5.99377E-03	+/-	4.1E-06
Sband delay (usec)	-1.17477218019E+04	Apriori clock (usec)	-2.1111511E+03	Resid sbdelay (usec)	9.53175E-03	+/-	3.2E-05
Phase delay (usec)	-1.17477313300E+04	Apriori clockrate (us/s)	3.8243811E-07	Resid phdelay (usec)	3.67284E-06	+/-	2.8E-08
Delay rate (us/s)	5.28850259135E-02	Apriori rate (us/s)	5.28857338760E-02	Resid rate (us/s)	-7.07962E-07	+/-	2.6E-10
Total phase (deg)	-5.2	Apriori accel (us/s/s)	3.84623856768E-06	Resid phase (deg)	259.5	+/-	0.4

ph/seg (deg)	RMS 30.3	Theor. 1.0	Amplitude 7.306 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	13.8	1.8	Search (1024X32) 7.088	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	54.7	0.6	Inc. seg. avg. 8.188	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	41.4	1.1	Inc. frq. avg. 9.669	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			

A: az 14.3 el 27.9 pa -163.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -195.100 -2334.889 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Ac..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Ac.Q.49.3MP56K

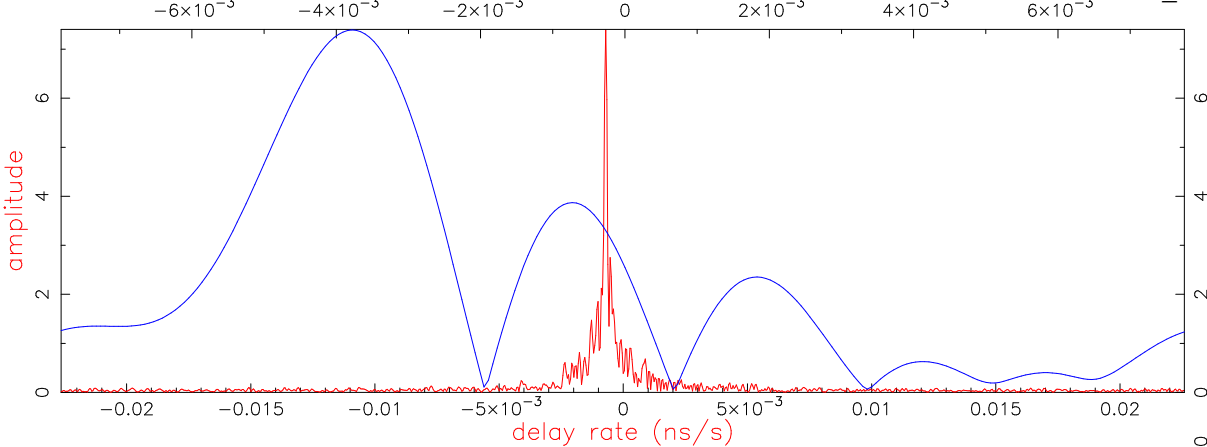
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Ac

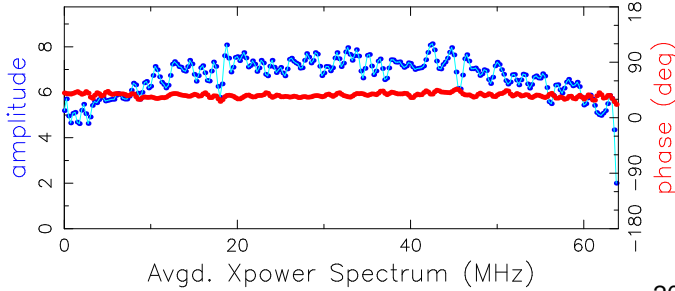
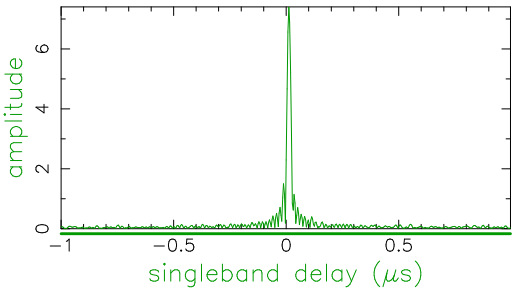
ALMA - VLBA_SC, fgroup Q, pol YL

multiband delay (μ s)



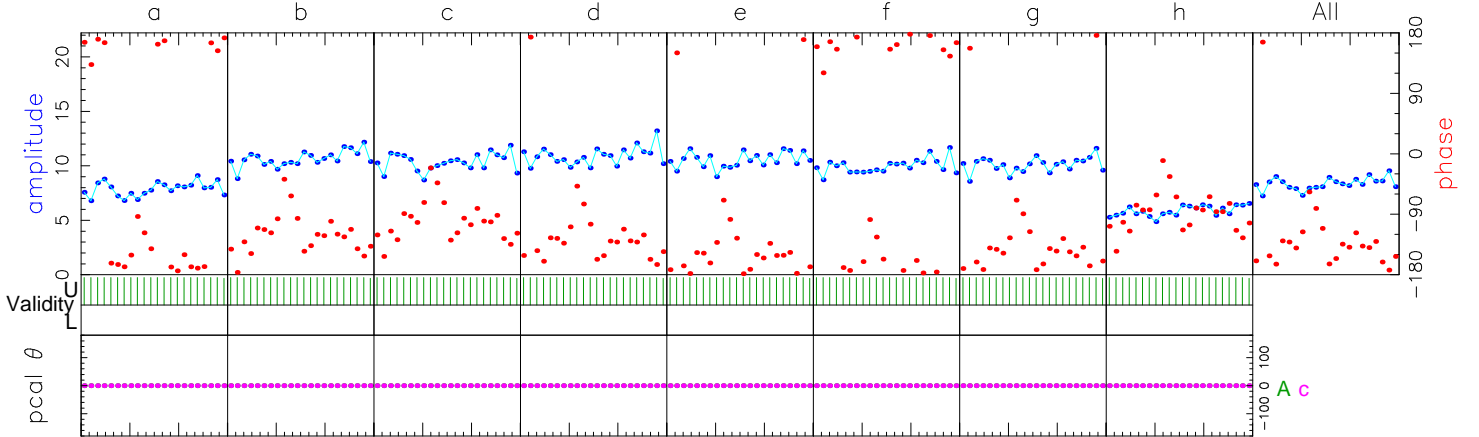
Fringe quality 4

SNR 271.5
 Int time 179.980
 Amp 7.404
 Phase 62.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.012184
 MBD -0.003757
 Fringe rate (Hz)
 -0.030566
 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
	-173.5	-121.5	-102.0	-133.3	-155.5	178.0	-148.4	-88.7	Phase	-139.8
	7.0	9.4	9.1	9.6	9.3	8.8	8.9	5.2	Ampl.	8.4
	261.7	259.9	259.8	260.1	260.0	260.1	260.0	262.0	Sbd box	260.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.17477194659E+04	Apriori delay (usec)	-1.17477313337E+04	Resid mbdelay (usec)	-3.75724E-03	+/-	4.0E-06
Sband delay (usec)	-1.17477191494E+04	Apriori clock (usec)	-2.1111511E+03	Resid sbdelay (usec)	1.21843E-02	+/-	3.2E-05
Phase delay (usec)	-1.17477313427E+04	Apriori clockrate (us/s)	3.8243811E-07	Resid phdelay (usec)	-9.00242E-06	+/-	2.7E-08
Delay rate (us/s)	5.28850253560E-02	Apriori rate (us/s)	5.28857338760E-02	Resid rate (us/s)	-7.08520E-07	+/-	2.6E-10
Total phase (deg)	158.0	Apriori accel (us/s/s)	3.84623856768E-06	Resid phase (deg)	62.7	+/-	0.4

ph/seg (deg)	29.5	1.0	Amplitude	7.404 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	14.9	1.7	Search (1024X32)	7.252	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	35.7	0.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	23.9	1.0	Inc. seg. avg.	8.366	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	8.429	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 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -195.100 -2334.889 simultaneous interpolator

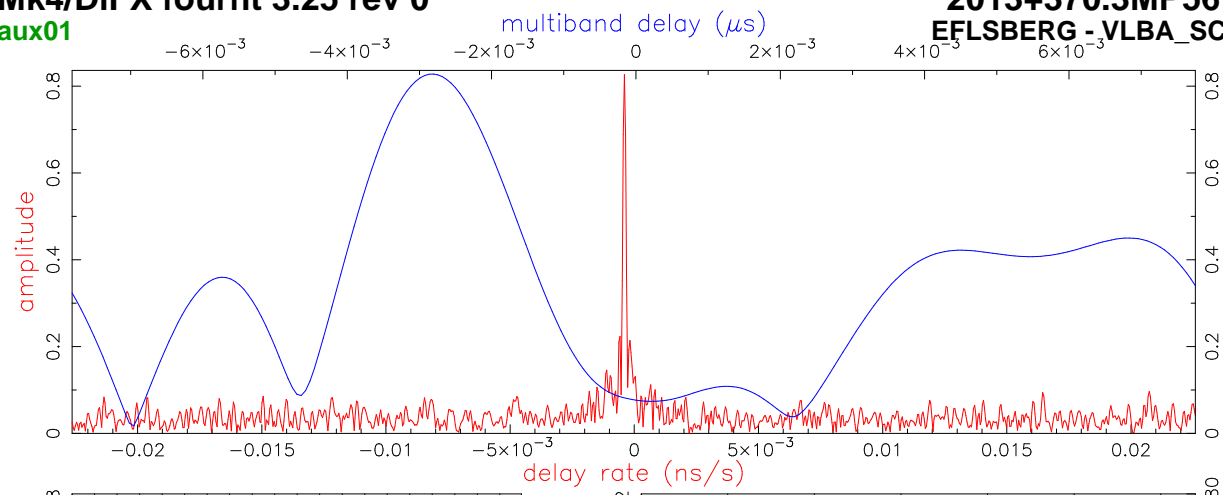
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Ac..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Ac.Q.62.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Bc

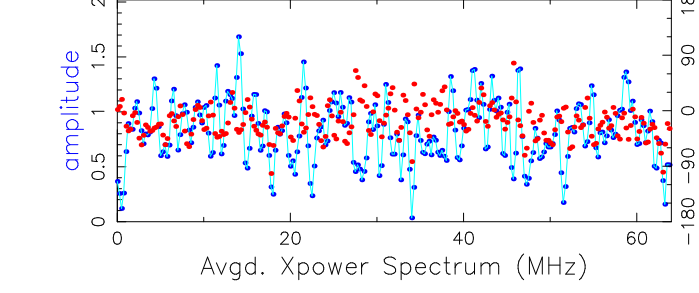
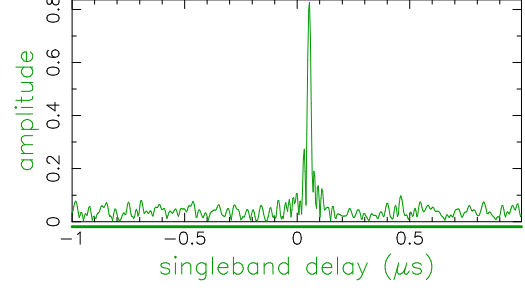
EFLSBERG - VLBA_SC, fgroup Q, pol LL



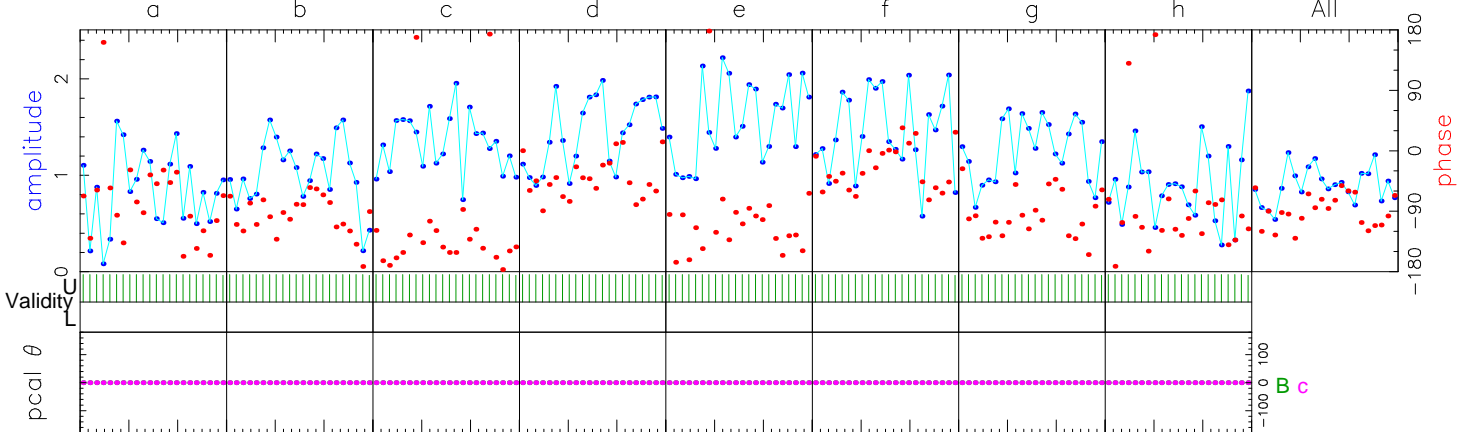
Fringe quality 5

SNR 30.7
 Int time 179.963
 Amp 0.836
 Phase 0.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.053386
 MBD -0.002889
 Fringe rate (Hz)
 -0.018177
 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
 2025:042:151758
 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
	-80.0	-95.2	-145.3	-42.3	-117.1	-26.3	-96.1	-114.6	Phase	-89.5
	0.7	0.9	1.2	1.3	1.3	1.2	1.1	0.7	Ampl.	1.1
	268.3	270.6	271.4	271.4	271.4	271.4	269.8	266.4	Sbd box	270.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-4.26669820125E+03	Apriori delay (usec)	-4.26675781197E+03	Resid mbdelay (usec)	-2.88927E-03	+/-	3.5E-05
Sband delay (usec)	-4.26670442597E+03	Apriori clock (usec)	-3.9121918E+01	Resid sbdelay (usec)	5.33860E-02	+/-	2.8E-04
Phase delay (usec)	-4.26675781774E+03	Apriori clockrate (us/s)	2.0373102E-07	Resid phdelay (usec)	-5.76270E-06	+/-	2.4E-07
Delay rate (us/s)	-9.26923462971E-01	Apriori rate (us/s)	-9.26923041622E-01	Resid rate (us/s)	-4.21349E-07	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	5.43431289657E-05	Resid phase (deg)	0.5	+/-	3.7

ph/seg (deg) 23.5 8.8 Search (1024X32) 0.786 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 22.9 15.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.6 5.3 Inc. seg. avg. 0.887 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.1 9.2 Inc. frq. avg. 1.056 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

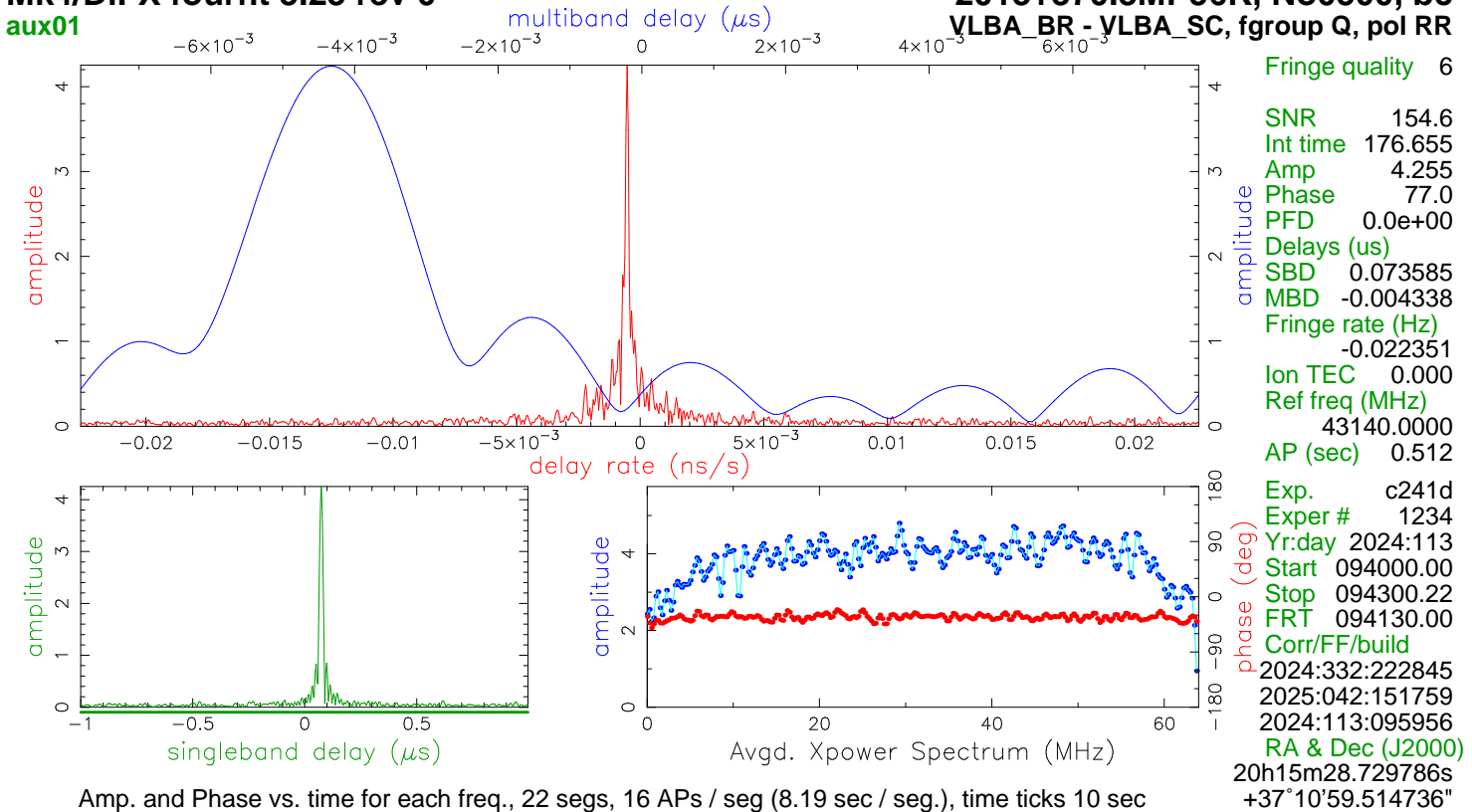
B: az 275.5 el 46.9 pa 52.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3365.229 3251.672 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Bc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Bc.Q.126.3MP56K

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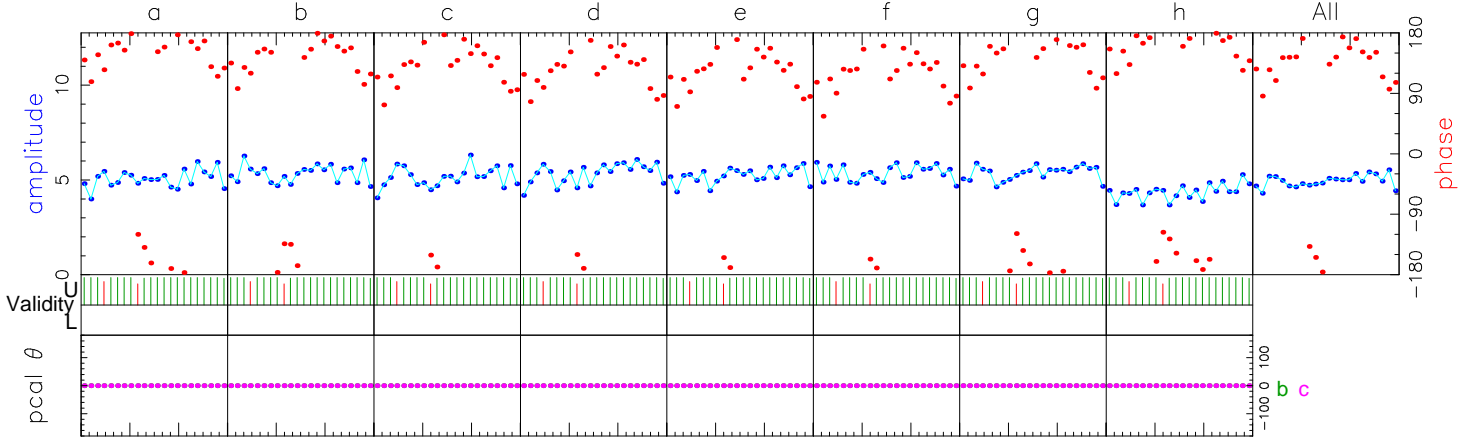
aux01

2013+370.3MP56K, No0500, bc

VLBA_BR - VLBA_SC, 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							
Group delay (usec) (SBD)	160.5	153.0	136.2	130.5	128.8	125.7	155.0	171.8	Phase	144.5							
Sband delay (usec)	4.4	4.6	4.4	4.6	4.4	4.6	4.5	3.8	Ampl.	4.4							
Phase delay (usec)	275.4	275.9	275.7	276.0	275.6	276.4	276.2	275.9	Sbd box	275.8							
Delay rate (us/s)	U/L 348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used								
Total phase (deg)	b 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs								
	c 1000	1000	1000	1000	1000	1000	1000	1000	PC phase								
	b:c 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC								
	b:c 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp								
	b 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids								
	c 1000	1000	1000	1000	1000	1000	1000	1000	Tracks								
	b Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids								
	c Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks								
Group delay (usec) (SBD)	-5.77565863291E+03								Apriori delay (usec)	-5.77573241973E+03	Resid mbdelay (usec)	-4.33818E-03	+/-	7.0E-06			
Sband delay (usec)	-5.77565883448E+03								Apriori clock (usec)	8.9390945E-01	Resid sbdelay (usec)	7.35852E-02	+/-	5.6E-05			
Phase delay (usec)	-5.77573241043E+03								Apriori clockrate (us/s)	9.6971097E-07	Resid phdelay (usec)	9.30630E-06	+/-	4.8E-08			
Delay rate (us/s)	5.10858016555E-01								Apriori rate (us/s)	5.10858534663E-01	Resid rate (us/s)	-5.18108E-07	+/-	4.6E-10			
Total phase (deg)		225.6							Apriori accel (us/s/s)	6.07159630449E-05	Resid phase (deg)	77.0	+/-	0.7			
ph/seg (deg)	RMS 32.3	Theor. 1.7	Amplitude 4.255 +/- 0.028						4.132		PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5					
amp/seg (%)	18.0	3.0	Search (1024X32)	4.132					4.952		PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000			
ph/frq (deg)	18.5	1.0	Interp.	0.000					4.407		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
amp/frq (%)	6.9	1.8	Inc. seg. avg.	4.952							Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023			
			Inc. frq. avg.	4.407							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			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.136.3MP56K						

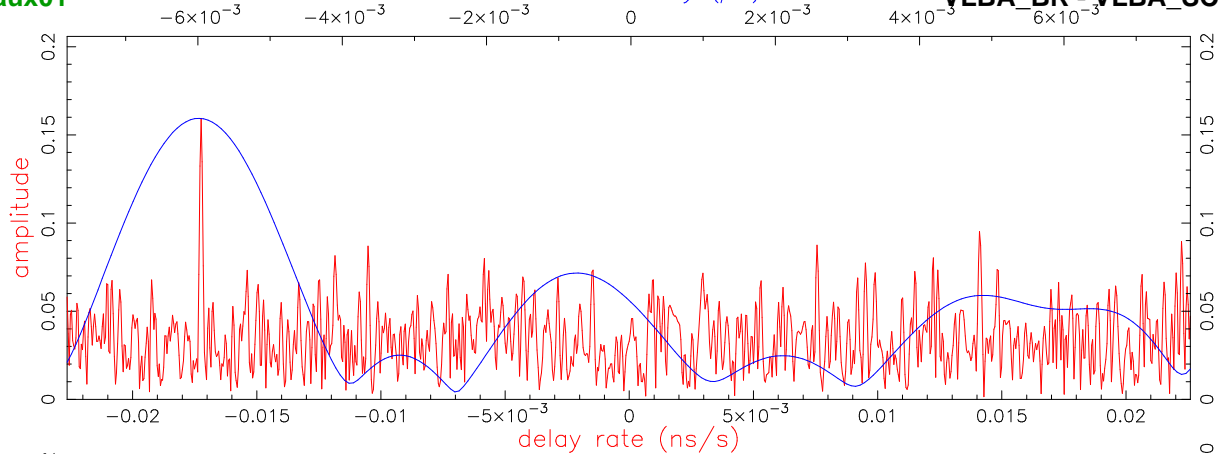
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bc

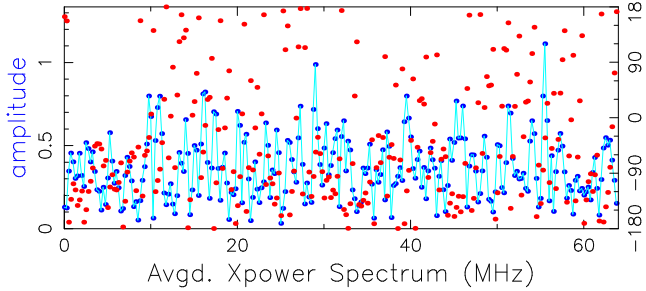
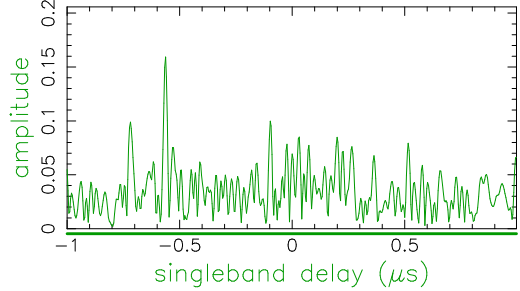
VLBA_BR - VLBA_SC, fgroup Q, pol LR

multiband delay (μs)



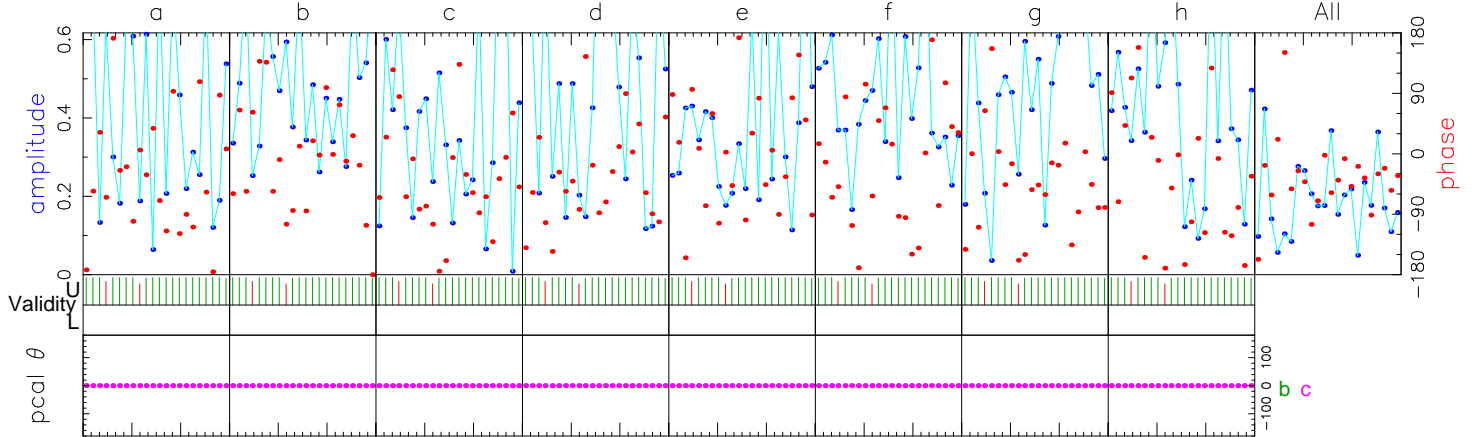
Fringe quality 0

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

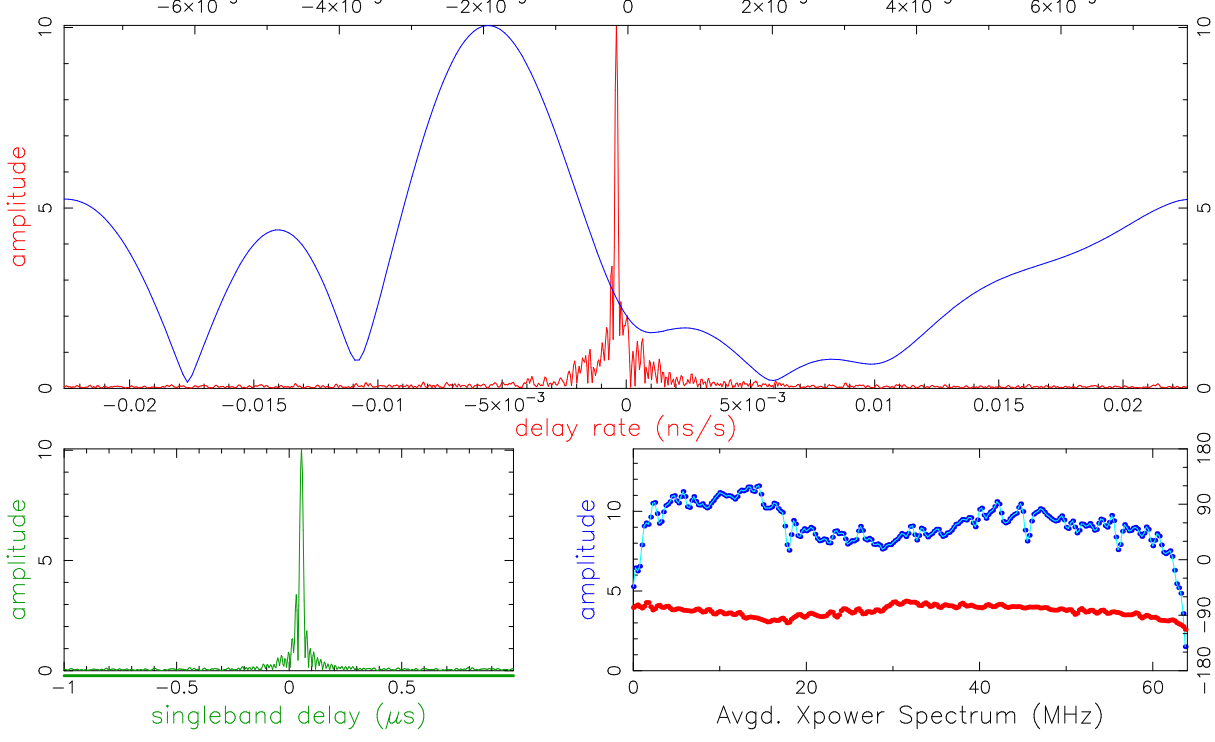
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Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Bc

EFLSBERG - VLBA_SC, fgroup Q, pol RR

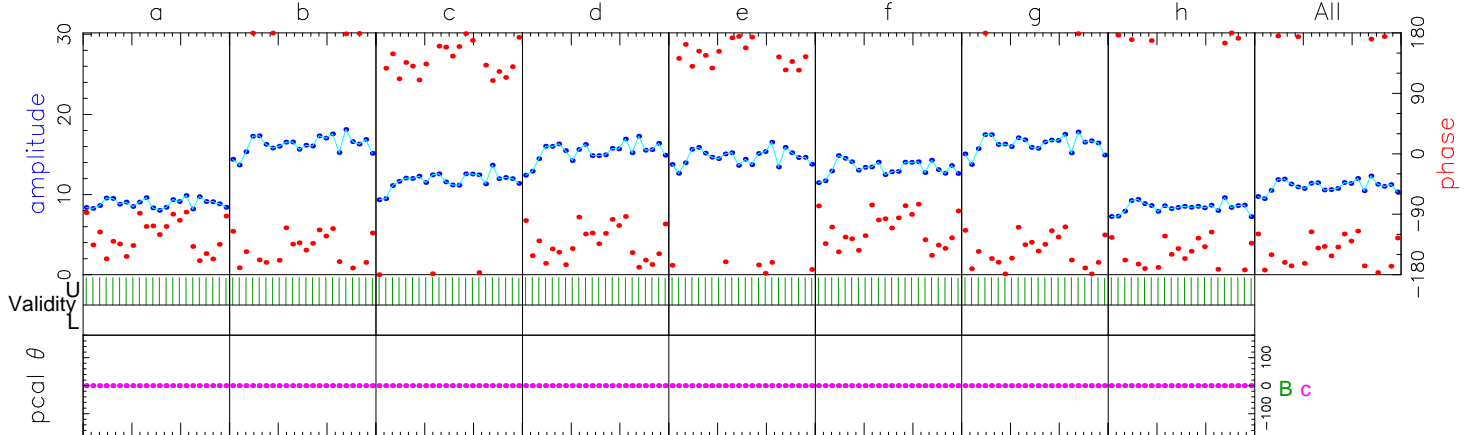


Fringe quality 4

SNR 369.0
 Int time 179.963
 Amp 10.060
 Phase 296.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.054471
 MBD -0.001946
 Fringe rate (Hz)
 -0.017927
 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



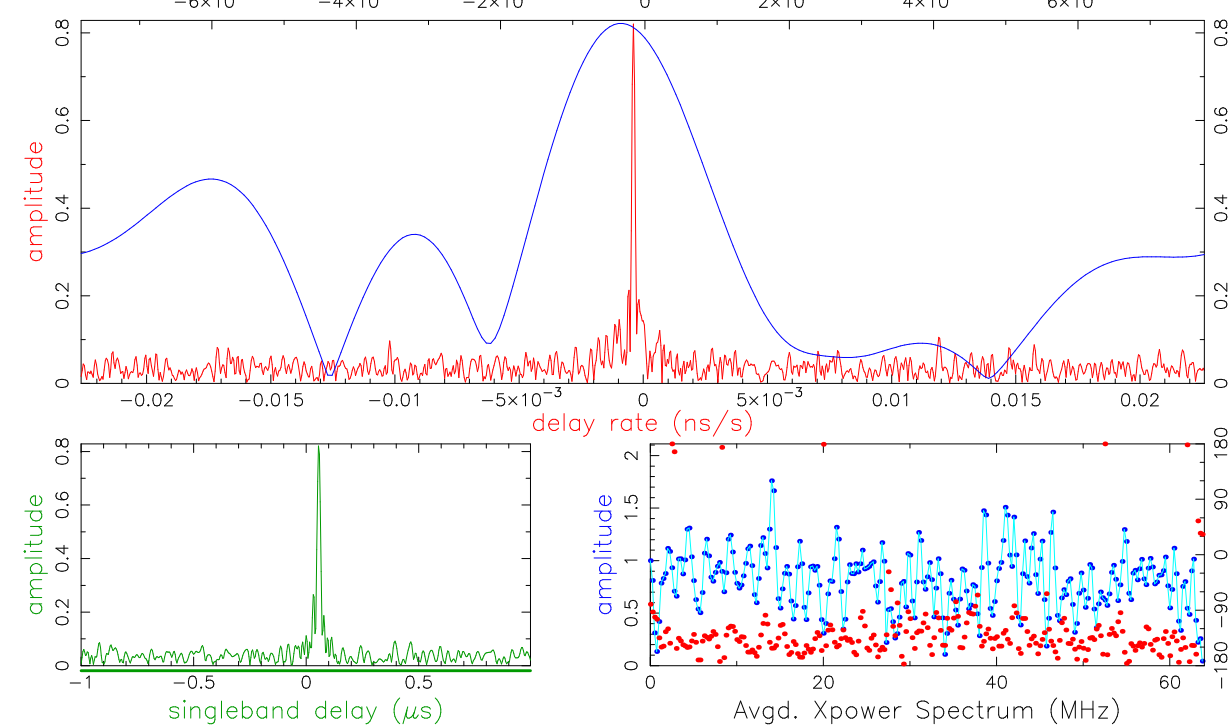
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-122.3	-147.6	144.8	-132.8	160.0	-112.4	-147.2	-159.3	Phase	-153.2
	8.1	14.8	10.7	13.9	13.3	12.1	14.9	7.7	Ampl.	11.9
	267.8	270.7	271.4	271.6	271.7	271.8	270.8	267.5	Sbd box	270.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	-4.26669725794E+03		Apriori delay (usec)		-4.26675781197E+03		Resid mbdelay (usec)		-1.94596E-03	+/- 2.9E-06
Sband delay (usec)	-4.26670334147E+03		Apriori clock (usec)		-3.9121918E+01		Resid sbdelay (usec)		5.44705E-02	+/- 2.3E-05
Phase delay (usec)	-4.26675782184E+03		Apriori clockrate (us/s)		2.0373102E-07		Resid phdelay (usec)		-9.86668E-06	+/- 2.0E-08
Delay rate (us/s)	-9.26923457167E-01		Apriori rate (us/s)		-9.26923041622E-01		Resid rate (us/s)		-4.15546E-07	+/- 1.9E-10
Total phase (deg)			Apriori accel (us/s/s)		5.43431289657E-05		Resid phase (deg)		296.8	+/- 0.3
RMS	24.4	0.7	Amplitude		10.060 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	24.4	0.7	Search (1024X32)		9.709		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
amp/seg (%)	12.0	1.3	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
ph/frq (deg)	39.1	0.4	Inc. seg. avg.		11.052		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.023 0.023	
amp/frq (%)	32.5	0.8	Inc. frq. avg.		11.936		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	
B: az 275.5 el 46.9 pa 52.6	c: az 27.3 el 67.5 pa -147.2		u,v (fr/asec) 3365.229 3251.672						ion window (TEC) 0.00 0.00	
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.151.3MP56K						simultaneous interpolator	

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Bc

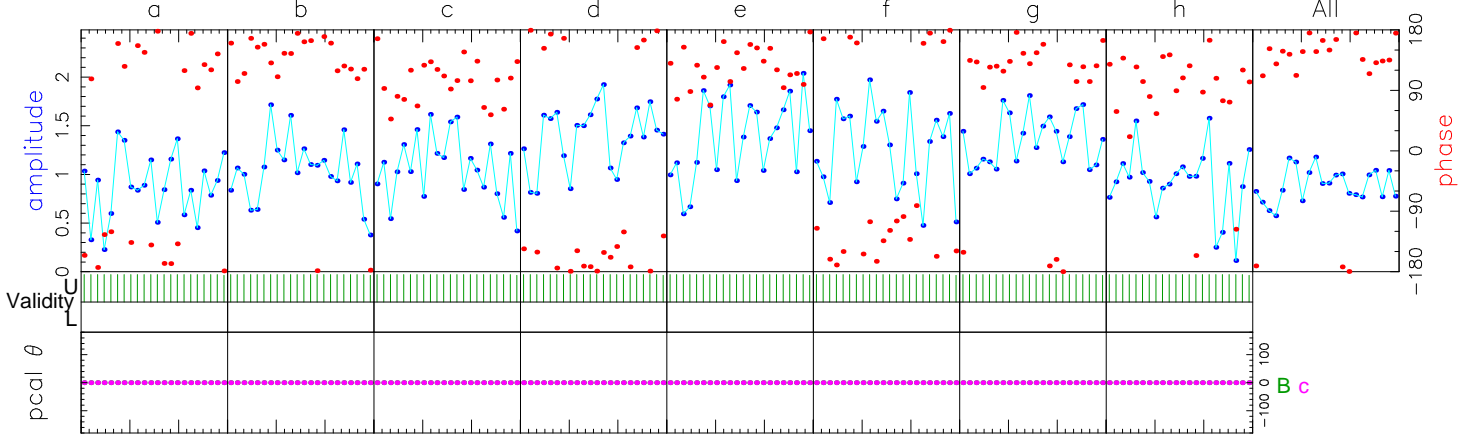
EFLSBERG - VLBA_SC, fgroup Q, pol RL



Fringe quality 5

SNR 30.4
 Int time 179.963
 Amp 0.829
 Phase 239.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.055909
 MBD -0.000259
 Fringe rate (Hz)
 -0.018102
 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
 2025:042:151807
 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	172.9	142.7	101.8	-170.7	123.0	-152.1	142.2	110.7	Phase	149.9
B	0.7	1.0	0.9	1.3	1.2	1.1	1.2	0.7	Ampl.	1.0
c	268.3	271.3	272.2	272.0	272.1	272.1	270.7	268.7	Sbd box	271.3
B:c	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B: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	
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-4.26669557106E+03	Apriori delay (usec)	-4.26675781197E+03	Resid mbdelay (usec)	-2.59086E-04	+/-	3.6E-05
Sband delay (usec)	-4.26670190347E+03	Apriori clock (usec)	-3.9121918E+01	Resid sbdelay (usec)	5.59085E-02	+/-	2.8E-04
Phase delay (usec)	-4.26675780232E+03	Apriori clockrate (us/s)	2.0373102E-07	Resid phdelay (usec)	9.65204E-06	+/-	2.4E-07
Delay rate (us/s)	-9.26923461236E-01	Apriori rate (us/s)	-9.26923041622E-01	Resid rate (us/s)	-4.19615E-07	+/-	2.3E-09
Total phase (deg)	236.8	Apriori accel (us/s/s)	5.43431289657E-05	Resid phase (deg)	239.9	+/-	3.8

ph/seg (deg)	23.2	RMS	8.8	Theor.	23.2	Amplitude	0.829 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	21.5	Search (1024X32)	0.773	Inc. seg. avg.	0.882	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	0.773	sb window (us)	-1.000	1.000	
ph/frq (deg)	41.1	Inc. frq. avg.	0.999	Inc. frq. avg.	0.999	Bits/sample: 2x2	0.882	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	32.5	Inc. frq. avg.	0.999	Inc. frq. avg.	0.999	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	0.999	nlags: 256	dr window (ns/s)	-0.023	0.023
						Data rate(Mb/s): 2048	0.999	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 275.5 el 46.9 pa 52.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3365.229 3251.672 simultaneous interpolator

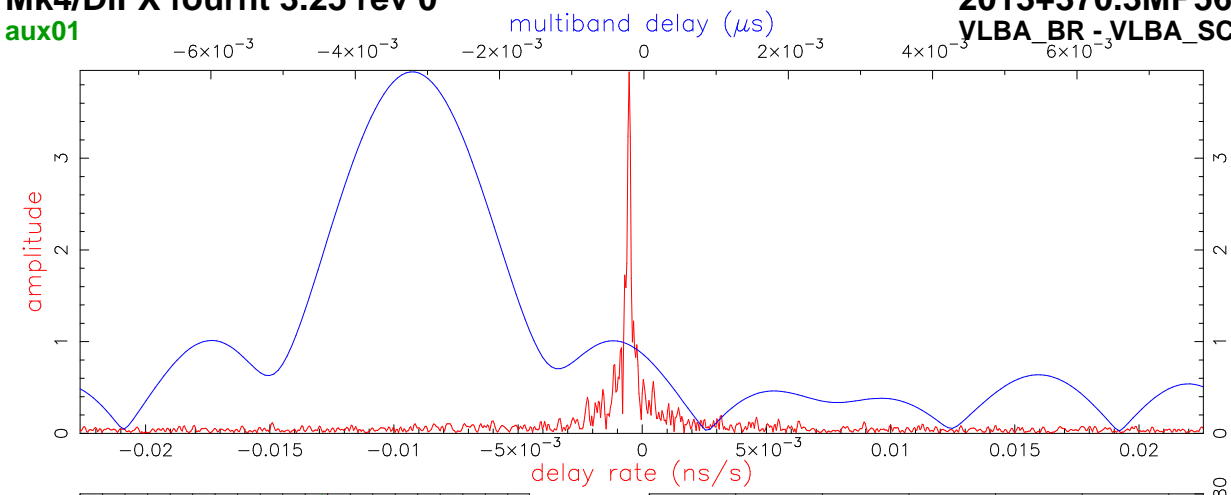
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Bc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Bc.Q.175.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

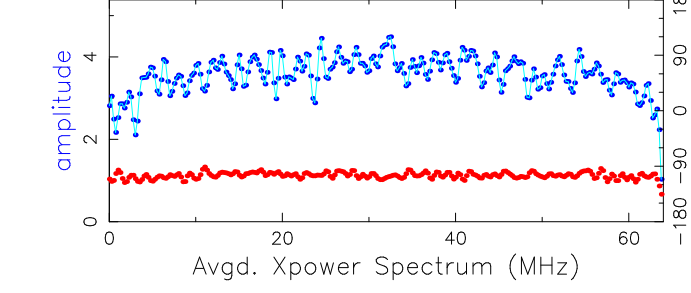
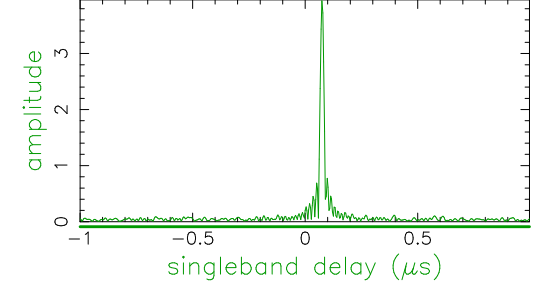
2013+370.3MP56K, No0500, bc

VLBA_BR - VLBA_SC, fgroup Q, pol LL



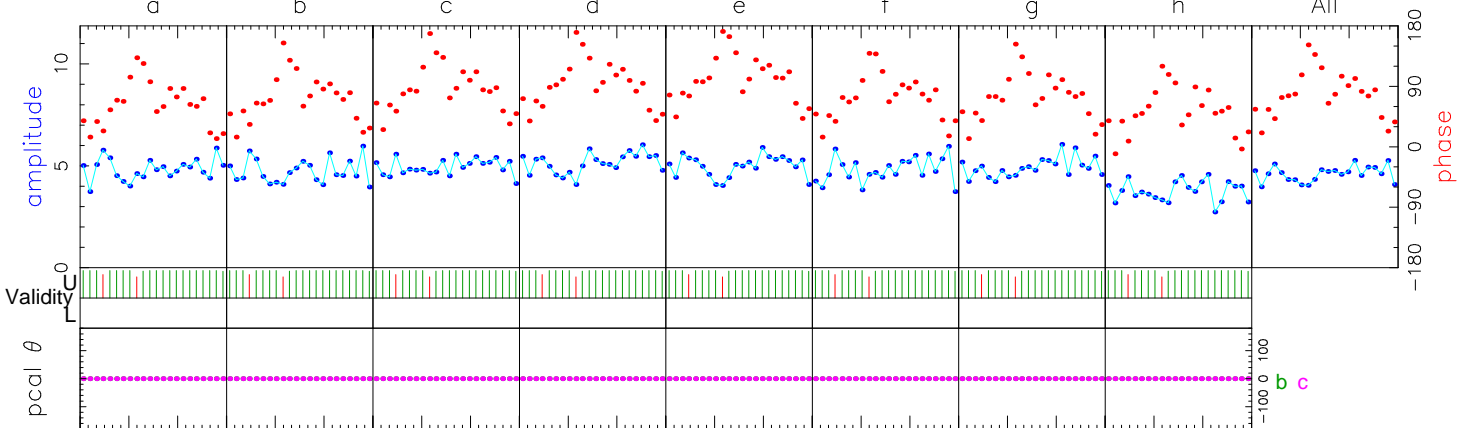
Fringe quality 6

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
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	
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		
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) 32.6 1.9 Search (1024X32) 3.760 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.0 3.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.1 1.1 Inc. seg. avg. 4.613 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.2 2.0 Inc. frq. avg. 4.070 Data rate(Mb/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

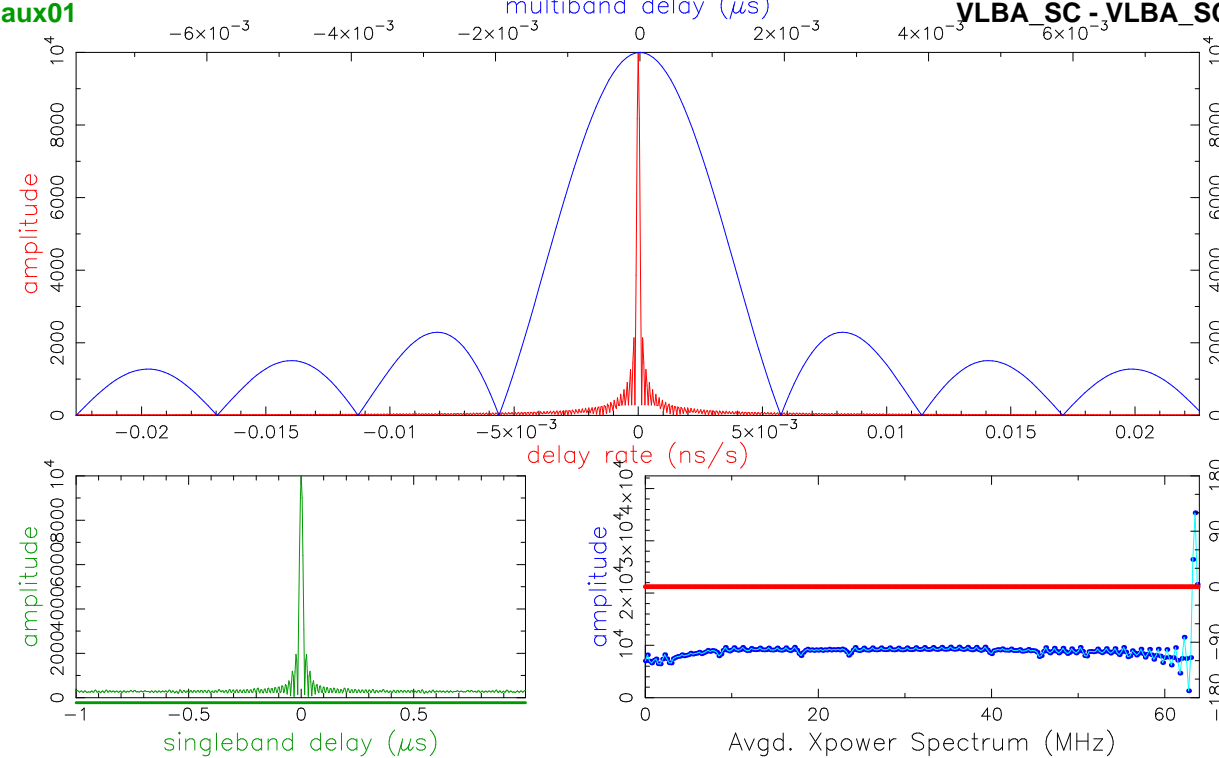
b: az 76.2 el 40.6 pa -54.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1812.745 3379.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bc.Q.80.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, cc

VLBA_SC - VLBA_SC, fgroup Q, pol LL

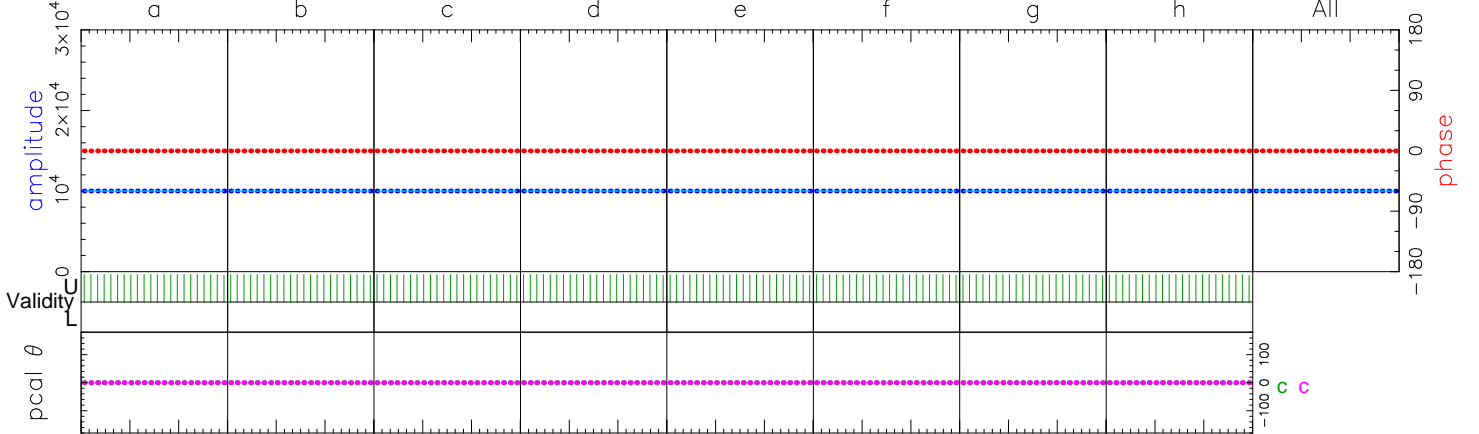


Fringe quality 9

SNR 366868.2
 Int time 179.980
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151836
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	Ampl.	10000.0
c	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
c:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
c:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
c	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	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	+/-	2.3E-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	+/-	1.9E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	0.0		0.0		0.0	Search (1024X32)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	0.0		0.0		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled		dr window (ns/s)	-0.023	0.023
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us			ion window (TEC)	0.00	0.00
						Inc. frq. avg.	10000.000	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite			

c: az 27.3 el 67.5 pa -147.2 c: az 27.3 el 67.5 pa -147.2 u, v (fr/asec) 0.000 0.000 simultaneous interpolator

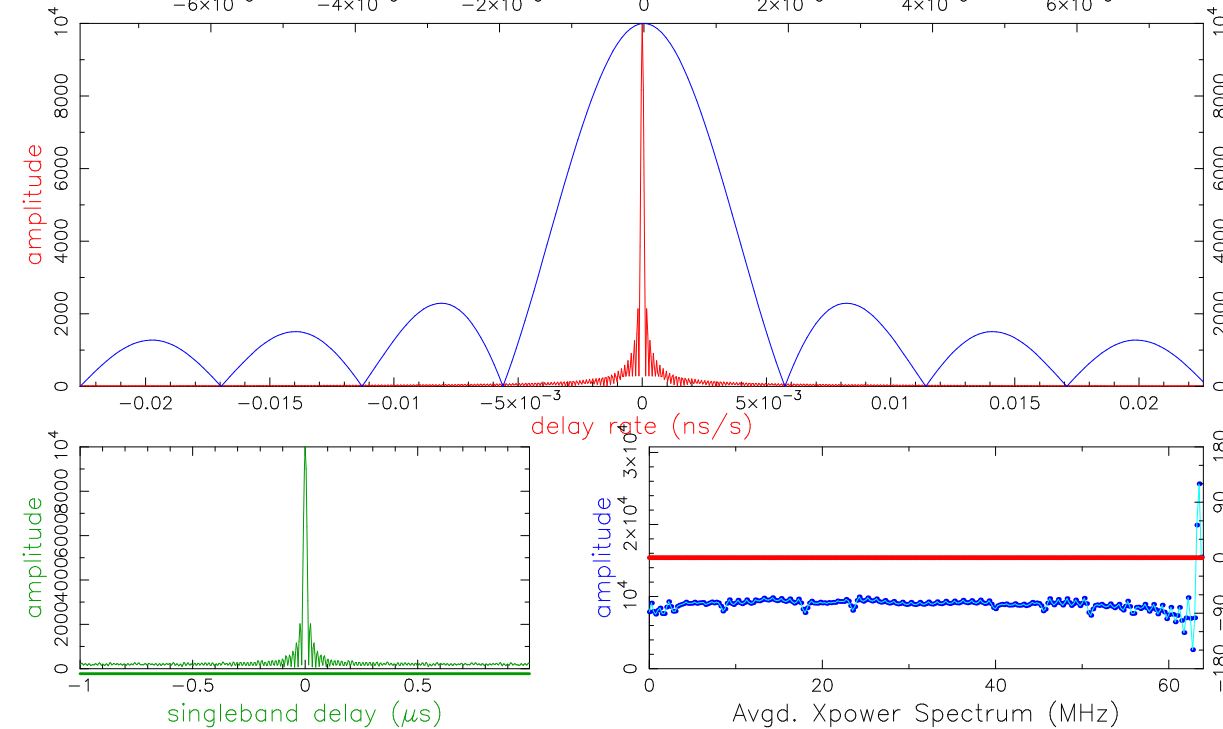
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cc.Q.324.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

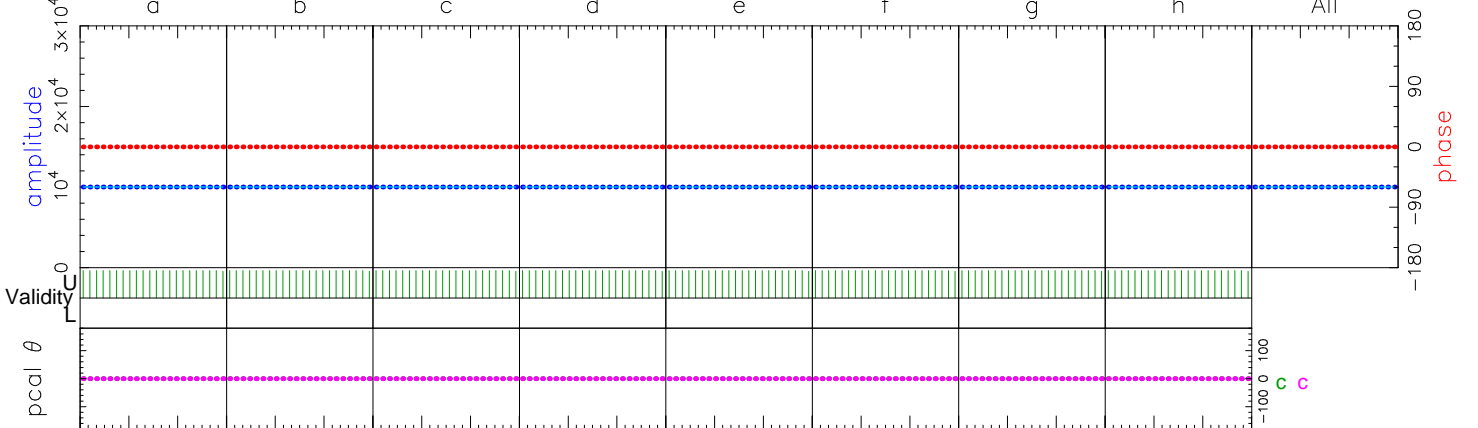
2013+370.3MP56K, No0500, cc

VLBA_SC - VLBA_SC, fgroup Q, pol RR



Fringe quality 9
 SNR 366868.2
 Int time 179.980
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151840
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	Ampl.	10000.0
c	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
c:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
c:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
c	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	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 +/- 2.3E-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 +/- 1.9E-13
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

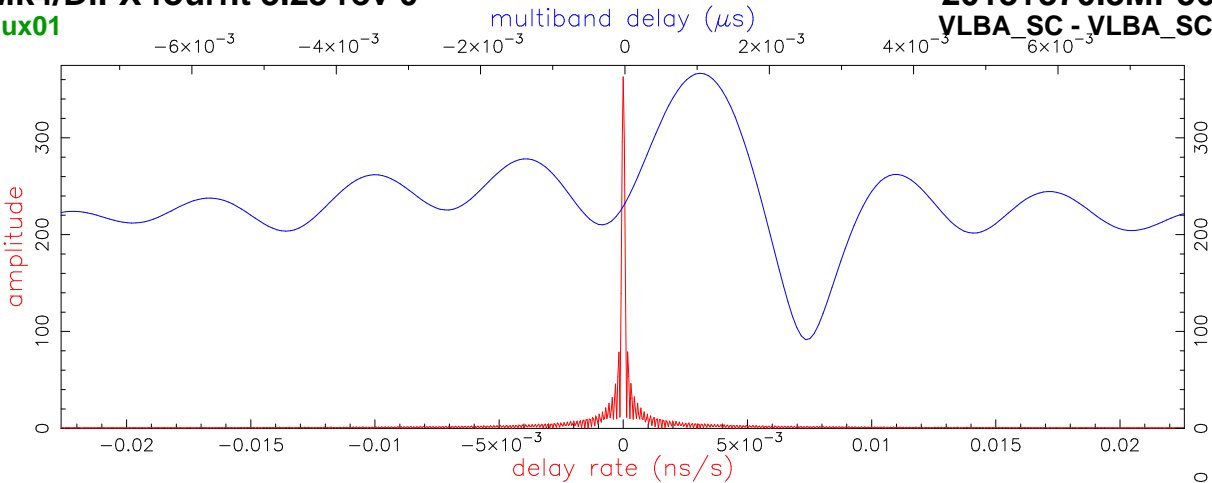
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 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
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 c: az 27.3 el 67.5 pa -147.2 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cc.Q.339.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

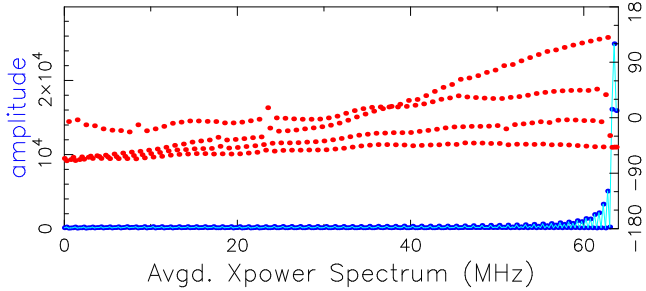
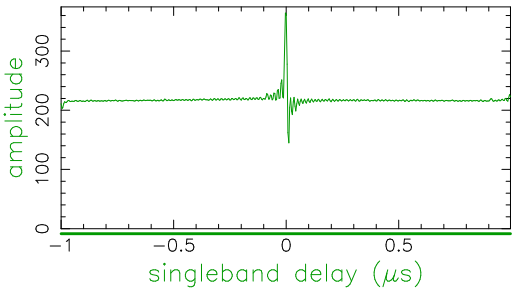
aux01

2013+370.3MP56K, No0500, cc

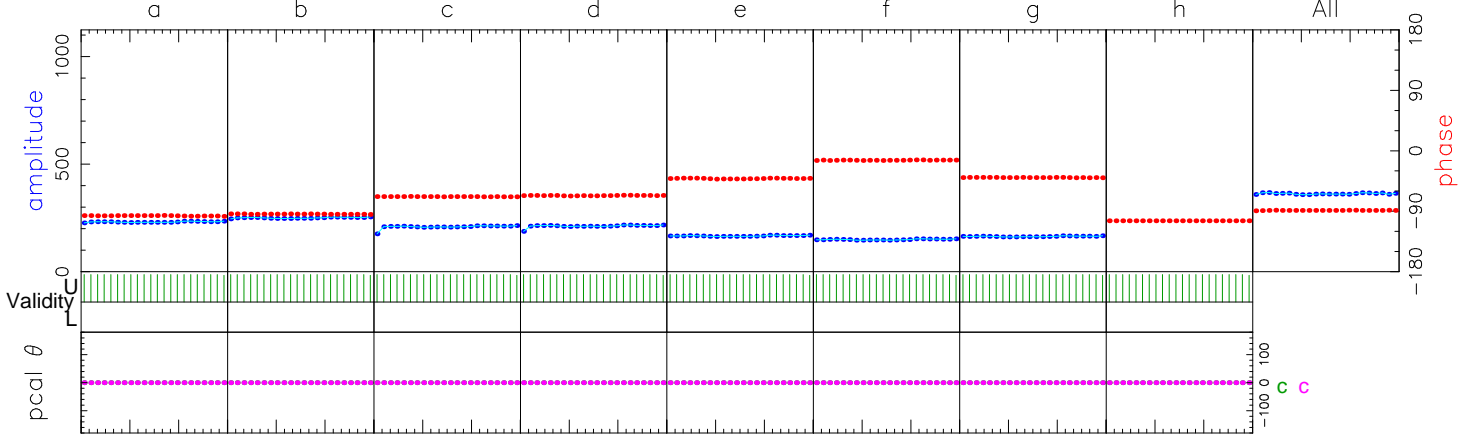
VLBA_SC - VLBA_SC, fgroup Q, pol RL



Fringe quality 5
 Error code G
 SNR 13748.7
 Int time 179.980
 Amp 374.760
 Phase -88.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.002005
 MBD 0.001185
 Fringe rate (Hz)
 0.000003
 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
 2025:042:151853
 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
	-96.7	-94.2	-68.2	-66.6	-41.3	-14.0	-39.8	-104.1	Phase	-88.7
	231.4	250.6	208.9	212.4	166.7	149.8	164.3	1836.8	Ampl.	402.6
	257.6	257.3	257.3	257.5	257.8	257.5	256.9	256.3	Sbd box	256.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
c:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 1.18478125000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.18478E-03 +/- 7.9E-08
 Sband delay (usec) -2.00500000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.00500E-03 +/- 6.3E-07
 Phase delay (usec) -5.71336784862E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.71337E-06 +/- 5.4E-10
 Delay rate (us/s) 6.22518949338E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 6.22519E-11 +/- 5.2E-12
 Total phase (deg) -88.7 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -88.7 +/- 0.0

RMS Theor. Amplitude 374.760 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (1024X32) 365.767 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 3.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.7 0.0 Inc. seg. avg. 362.763 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 145.1 0.0 Inc. frq. avg. 402.614 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cc.Q.365.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

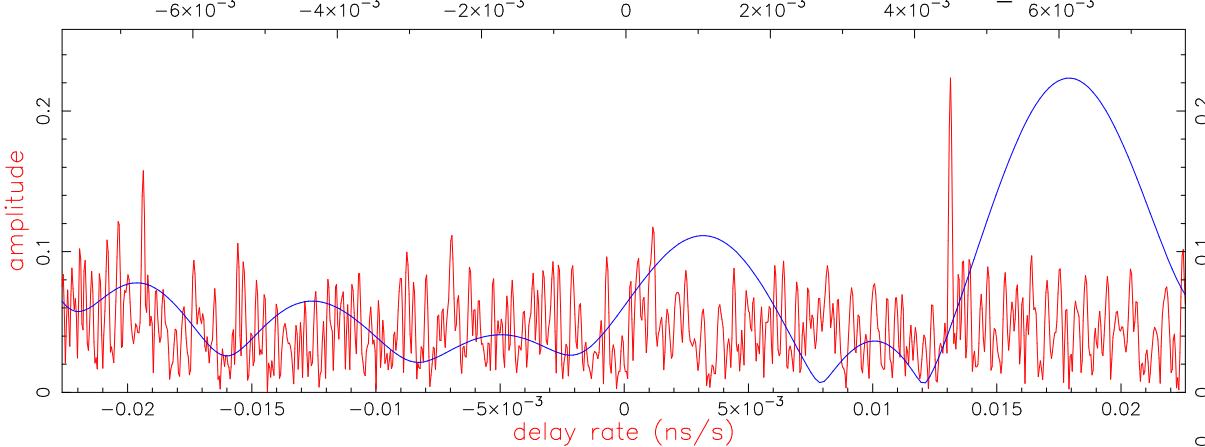
aux01

2013+370.3MP56K, No0500, cY

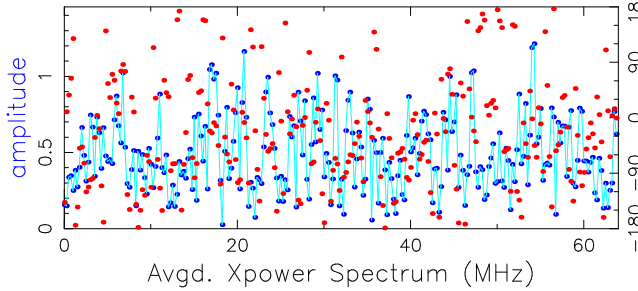
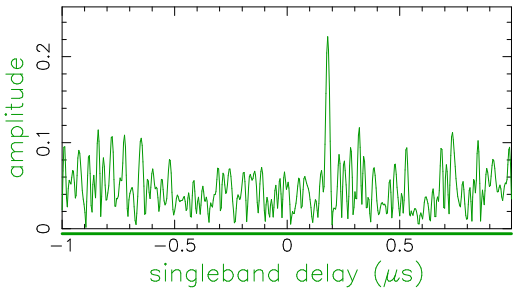
VLBA_SC - YEBES40M, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 0

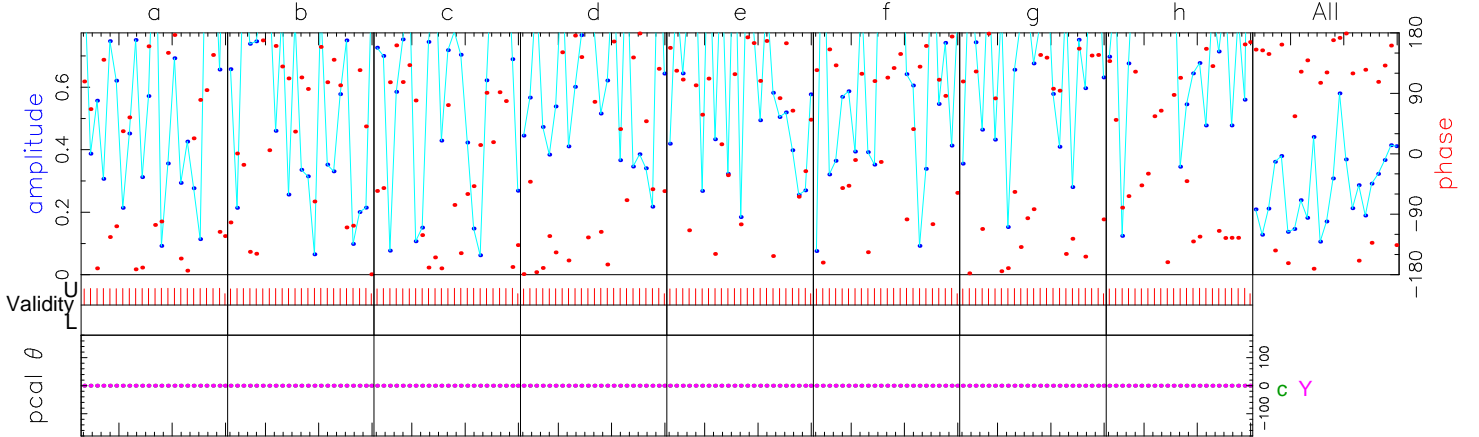


SNR 6.0
 Int time 97.781
 Amp 0.258
 Phase 231.1
 PFD 1.8e-01
 Delays (us)
 SBD 0.179924
 MBD 0.006142
 Fringe rate (Hz) 0.568904
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094017.41
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151857
 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	178.4	151.5	142.1	-174.8	131.4	144.4	177.8	172.6	Phase	163.6
c	0.3	0.2	0.1	0.3	0.4	0.2	0.5	0.2	Ampl.	0.2
Y	300.6	431.8	458.9	71.8	443.3	228.9	302.7	347.0	Sbd box	303.1
c:Y	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
c:Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	3.01601796510E+03	Apriori delay (usec)	3.01583994788E+03	Resid mbdelay (usec)	6.14222E-03	+/-	1.8E-04
Sband delay (usec)	3.01601987188E+03	Apriori clock (usec)	1.1471576E+02	Resid sbdelay (usec)	1.79924E-01	+/-	1.4E-03
Phase delay (usec)	3.01583995841E+03	Apriori clockrate (us/s)	6.1542102E-07	Resid phdelay (usec)	1.05364E-05	+/-	1.2E-06
Delay rate (us/s)	9.62855487198E-01	Apriori rate (us/s)	9.62842299810E-01	Resid rate (us/s)	1.31874E-05	+/-	1.3E-08
Total phase (deg)	357.7	Apriori accel (us/s/s)	-3.89433239328E-05	Resid phase (deg)	231.1	+/-	19.0

ph/seg (deg)	42.0	Theor.	45.5	Amplitude	0.258 +/- 0.043	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	58.7	Search (1024X32)	0.217	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	22.3	Inc. seg. avg.	0.245	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	45.3	Inc. frq. avg.	0.247	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256	dr window (ns/s)	-0.023	0.023
				Data rate(Mb/s): 2048		t_cohere infinite	ion window (TEC)	0.00	0.00

c: az 27.3 el 67.5 pa -147.2 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -3487.484 -2358.607 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cY..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cY.Q.384.3MP56K

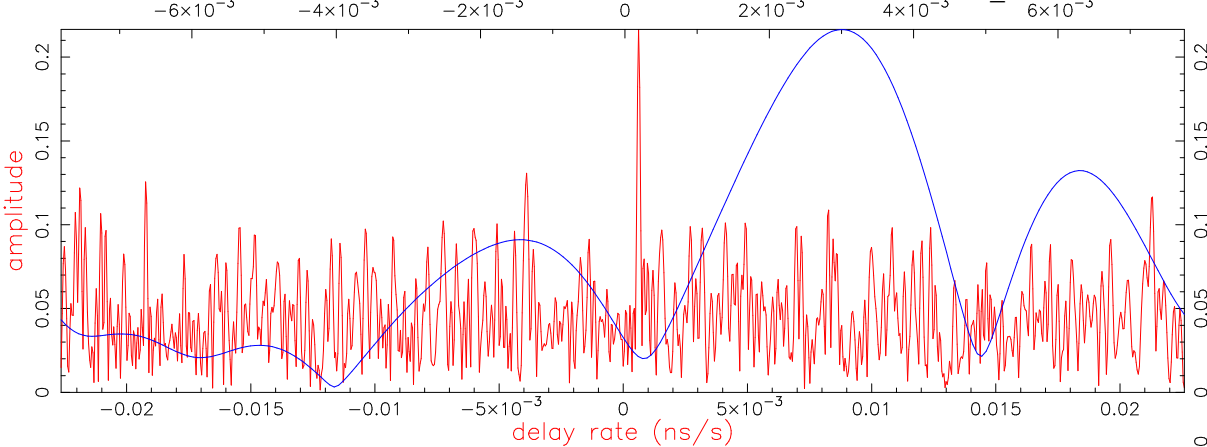
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, cY

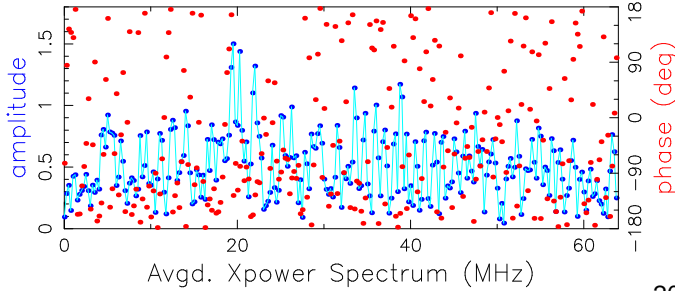
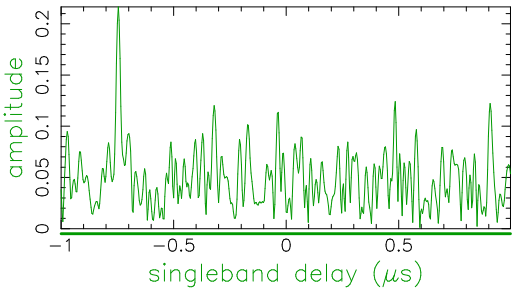
VLBA_SC - YEBES40M, fgroup Q, pol RR

multiband delay (μ s)



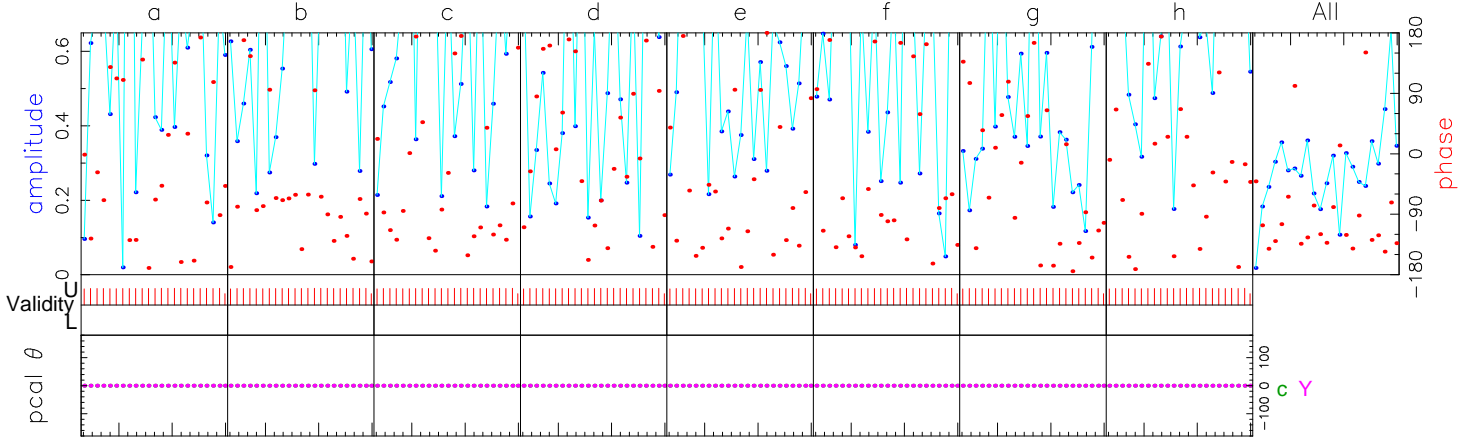
Fringe quality 0

SNR 5.9
 Int time 97.781
 Amp 0.217
 Phase -116.4
 PFD 4.5e-01
 Delays (us)
 SBD -0.745883
 MBD 0.002999
 Fringe rate (Hz)
 0.026349
 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
 2025:042:151903
 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
	-136.1	-98.8	-109.0	-154.3	-123.4	-133.7	-138.4	-23.7	Phase	-116.4
	0.2	0.5	0.3	0.1	0.2	0.4	0.1	0.1	Ampl.	0.2
	397.2	66.4	232.6	270.9	434.5	66.6	425.1	352.8	Sbd box	66.1
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	3.01509294643E+03		Apriori delay (usec)		3.01583994788E+03		Resid mbdelay (usec)		2.99856E-03	+/- 1.9E-04
Sband delay (usec)	3.01509406513E+03		Apriori clock (usec)		1.1471576E+02		Resid sbdelay (usec)		-7.45883E-01	+/- 1.5E-03
Phase delay (usec)	3.01583994039E+03		Apriori clockrate (us/s)		6.1542102E-07		Resid phdelay (usec)		-7.49328E-06	+/- 1.3E-06
Delay rate (us/s)	9.62842910583E-01		Apriori rate (us/s)		9.62842299810E-01		Resid rate (us/s)		6.10773E-07	+/- 1.3E-08
Total phase (deg)			Apriori accel (us/s/s)		-3.89433239328E-05		Resid phase (deg)		-116.4	+/- 19.6

	RMS	Theor.	Amplitude	0.217 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	52.7	46.9	Search (1024X32)	0.214	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	63.6	81.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023 0.023
ph/frq (deg)	44.0	27.7	Inc. seg. avg.	0.213	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 (%)	64.6	48.3	Inc. frq. avg.	0.217	Data rate(Mb/s): 2048			

c: az 27.3 el 67.5 pa -147.2 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -3487.484 -2358.607 simultaneous interpolator

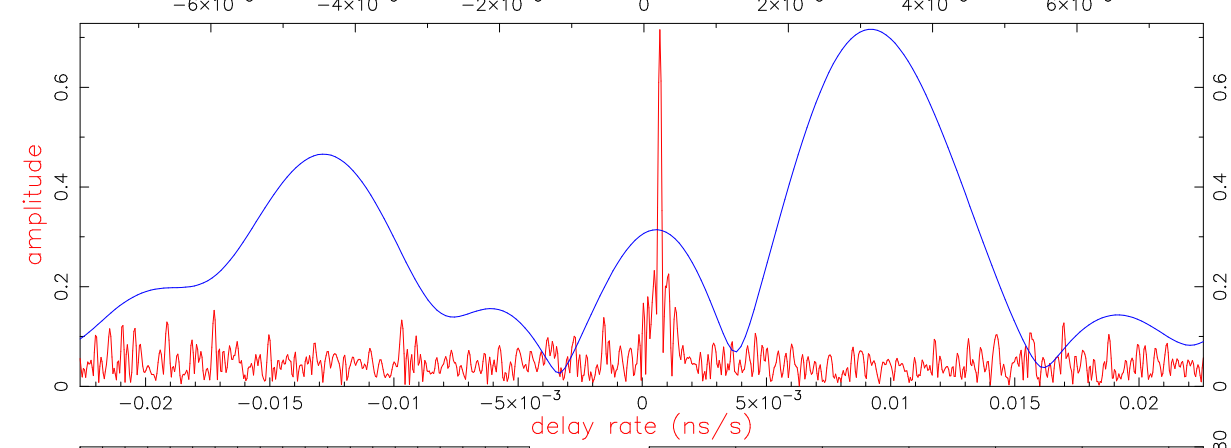
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cY..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cY.Q.399.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, cY

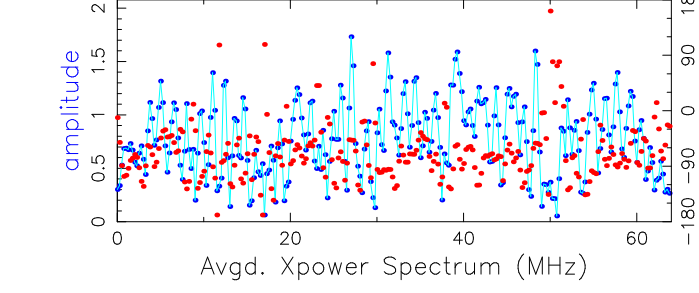
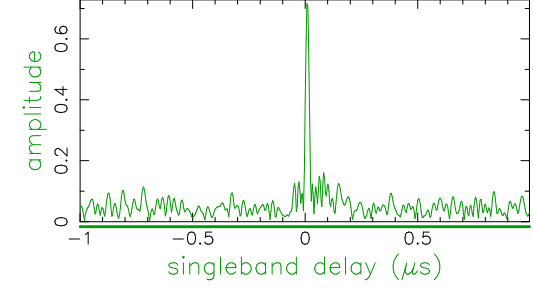
VLBA_SC - YEBES40M, fgroup Q, pol LR



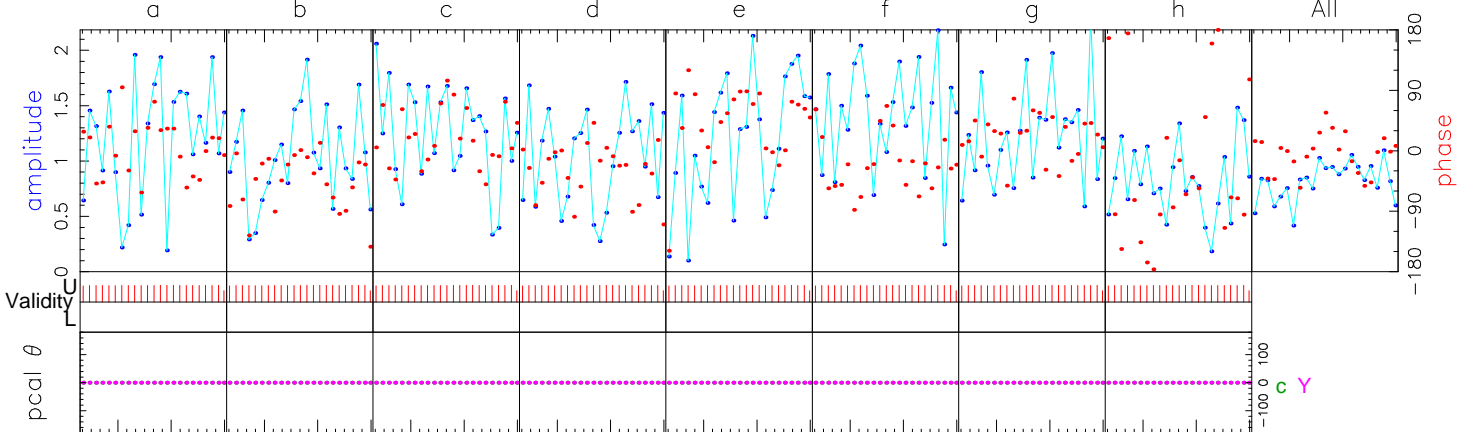
Fringe quality 8

SNR 19.7
 Int time 97.781
 Amp 0.728
 Phase -3.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.009473
 MBD 0.003194
 Fringe rate (Hz) 0.030531
 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
 2025:042:151906
 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	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) 3.01584314174E+03 Apriori delay (usec) 3.01583994788E+03 Resid mbdelay (usec) 3.19386E-03 +/- 5.5E-05
 Sband delay (usec) 3.01584942138E+03 Apriori clock (usec) 1.1471576E+02 Resid sbdelay (usec) 9.47350E-03 +/- 4.4E-04
 Phase delay (usec) 3.01583994765E+03 Apriori clockrate (us/s) 6.1542102E-07 Resid phdelay (usec) -2.25356E-07 +/- 3.7E-07
 Delay rate (us/s) 9.62843007521E-01 Apriori rate (us/s) 9.62842299810E-01 Resid rate (us/s) 7.07711E-07 +/- 4.0E-09
 Total phase (deg) 123.0 Apriori accel (us/s/s) -3.89433239328E-05 Resid phase (deg) -3.5 +/- 5.8

ph/seg (deg) 29.2 14.0 Search (1024X32) 0.705 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 26.2 24.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.8 8.2 Inc. seg. avg. 0.800 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.4 14.4 Inc. frq. avg. 0.888 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

c: az 27.3 el 67.5 pa -147.2 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -3487.484 -2358.607 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cY..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cY.Q.409.3MP56K

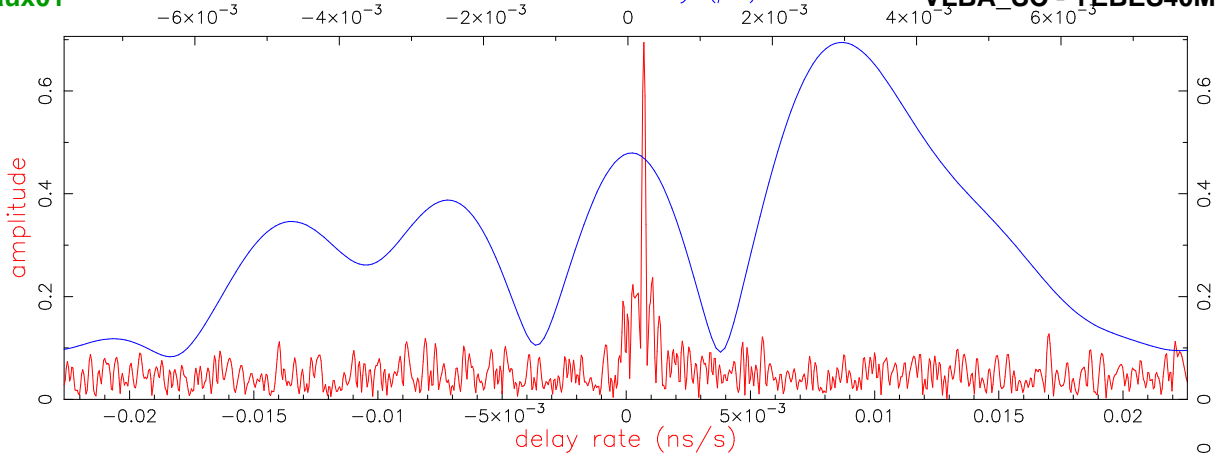
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, cY

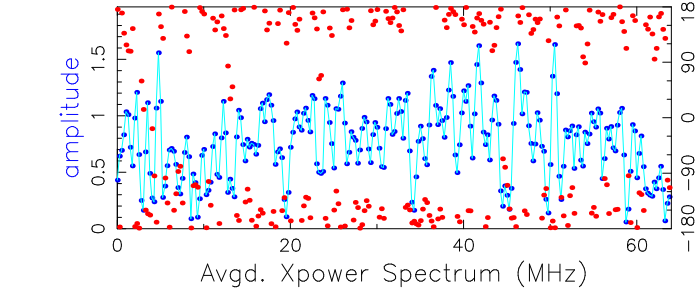
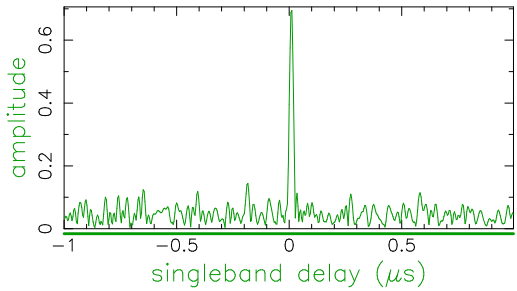
VLBA_SC - YEBES40M, fgroup Q, pol RL

multiband delay (μ s)



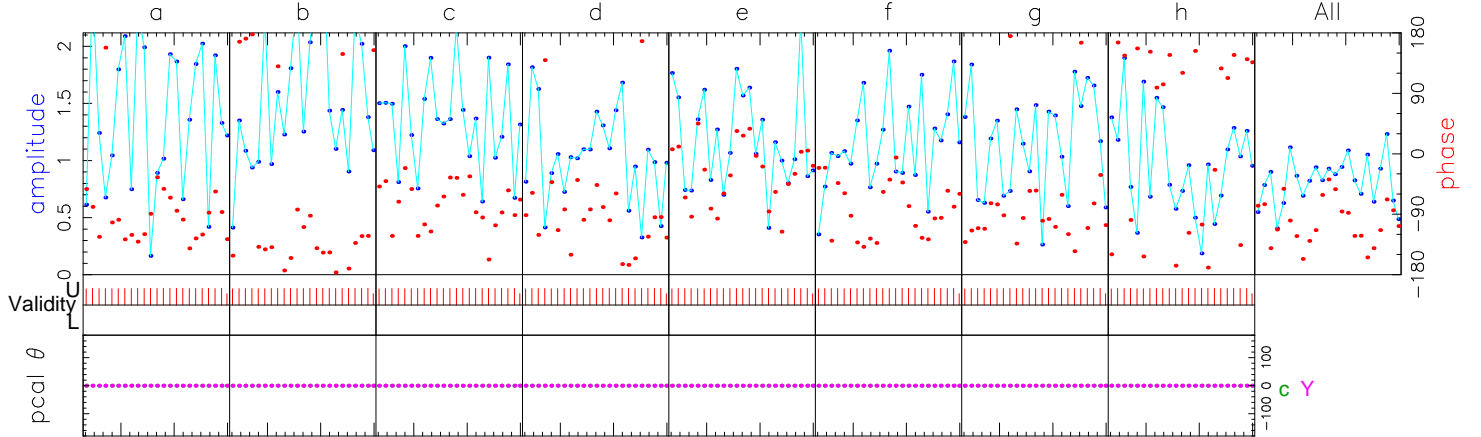
Fringe quality 7

SNR 19.1
 Int time 97.781
 Amp 0.706
 Phase -100.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.009994
 MBD 0.002956
 Fringe rate (Hz)
 0.030318
 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
 2025:042:151908
 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
	-101.4	-147.2	-73.0	-98.6	-14.6	-83.8	-102.5	160.2	Phase	-100.0
	1.2	1.3	1.1	0.8	0.9	0.9	0.9	0.7	Ampl.	1.0
	259.3	259.3	259.6	258.4	259.3	258.5	258.6	257.2	Sbd box	259.6
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
c:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	3.01584290414E+03	Apriori delay (usec)	3.01583994788E+03	Resid mbdelay (usec)	2.95626E-03	+/-	5.7E-05
Sband delay (usec)	3.01584994138E+03	Apriori clock (usec)	1.1471576E+02	Resid sbdelay (usec)	9.99350E-03	+/-	4.5E-04
Phase delay (usec)	3.01583994144E+03	Apriori clockrate (us/s)	6.1542102E-07	Resid phdelay (usec)	-6.44215E-06	+/-	3.9E-07
Delay rate (us/s)	9.62843002592E-01	Apriori rate (us/s)	9.62842299810E-01	Resid rate (us/s)	7.02781E-07	+/-	4.1E-09
Total phase (deg)	26.5	Apriori accel (us/s/s)	-3.89433239328E-05	Resid phase (deg)	-100.0	+/-	6.0

ph/seg (deg)	33.1	Theor.	14.4	Amplitude	0.706 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	33.0		25.1	Search (1024X32)	0.689	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	58.4		8.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.2		14.8	Inc. seg. avg.	0.802	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.952	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

c: az 27.3 el 67.5 pa -147.2 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -3487.484 -2358.607 simultaneous interpolator

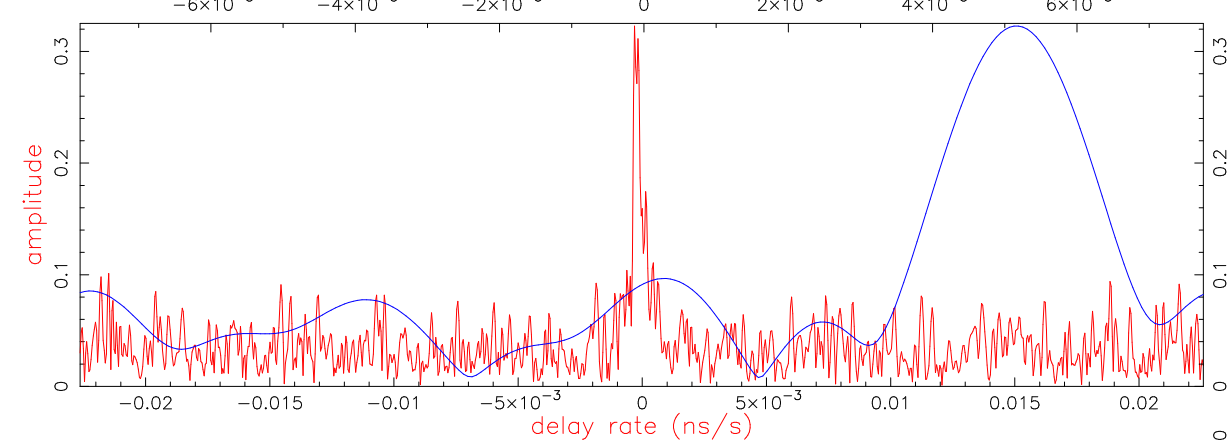
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/cY..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/cY.Q.412.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

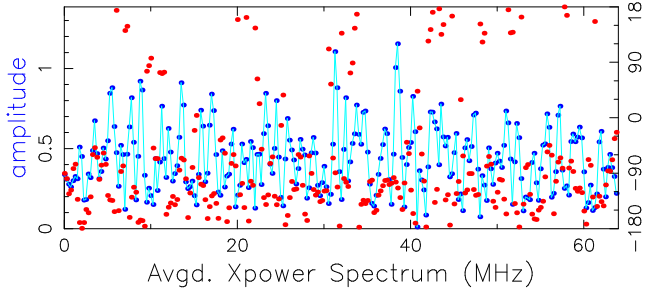
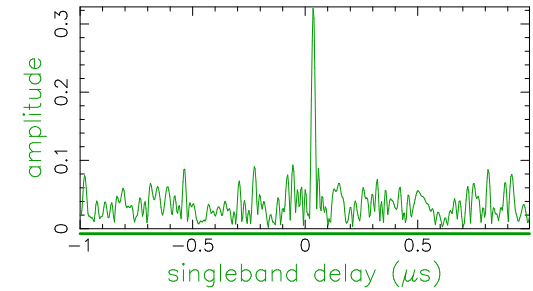
2013+370.3MP56K, No0500, fc

VLBA_FD - VLBA_SC, fgroup Q, pol LL



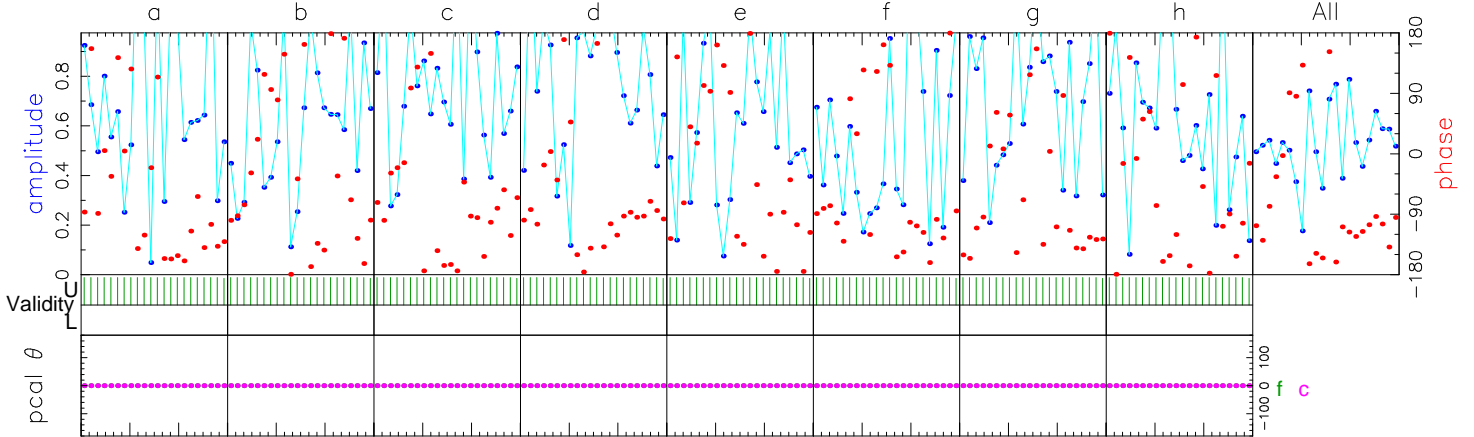
Fringe quality 9

SNR 11.9
 Int time 179.969
 Amp 0.325
 Phase 279.5
 PFD 2.2e-24
 Delays (us)
 SBD 0.036218
 MBD 0.005186
 Fringe rate (Hz)
 -0.013700
 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
	-135.4	-139.7	-118.6	-106.3	-126.5	-119.8	-132.4	-143.3	Phase	-125.5
	0.4	0.2	0.4	0.5	0.2	0.3	0.3	0.3	Ampl.	0.3
	266.1	263.6	265.6	266.4	243.0	266.3	266.9	263.8	Sbd box	266.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-4.10269115751E+03	Apriori delay (usec)	-4.10272759327E+03	Resid mbdelay (usec)	5.18576E-03	+/-	9.1E-05
Sband delay (usec)	-4.10269137527E+03	Apriori clock (usec)	-3.6708946E+00	Resid sbdelay (usec)	3.62180E-02	+/-	7.2E-04
Phase delay (usec)	-4.10272760135E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	-8.07981E-06	+/-	6.2E-07
Delay rate (us/s)	5.83211881842E-01	Apriori rate (us/s)	5.83212199423E-01	Resid rate (us/s)	-3.17581E-07	+/-	5.9E-09
Total phase (deg)	145.0	Apriori accel (us/s/s)	3.57459354443E-05	Resid phase (deg)	279.5	+/-	9.6

ph/seg (deg)	65.3	RMS	22.5	Theor.	Amplitude	0.325 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.2	65.3	39.3	Search (1024X32)	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	13.7	13.6	13.6	Inc. seg. avg.	Inc. frq. avg.	0.494	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.9	23.7	23.7	Inc. frq. avg.	0.321	0.321	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

f: az 66.6 el 46.8 pa -82.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2085.364 1804.109 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.154.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

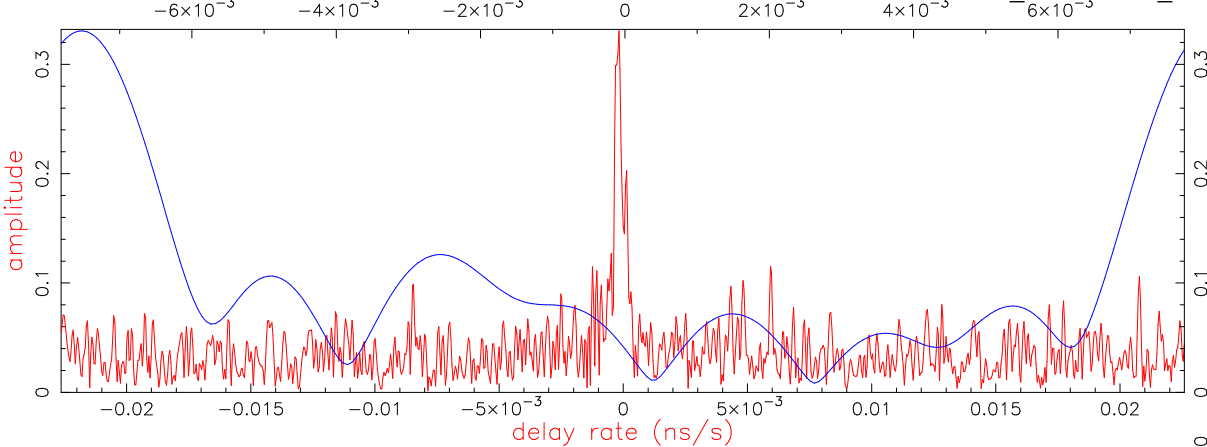
aux01

2013+370.3MP56K, No0500, fc

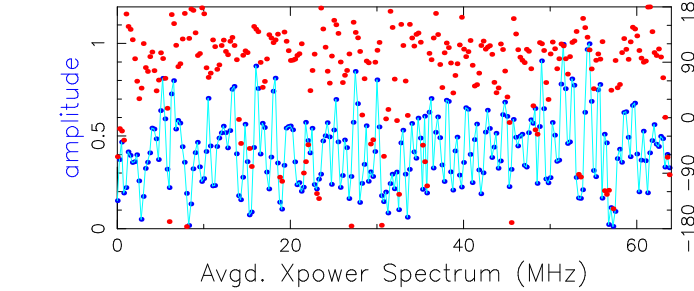
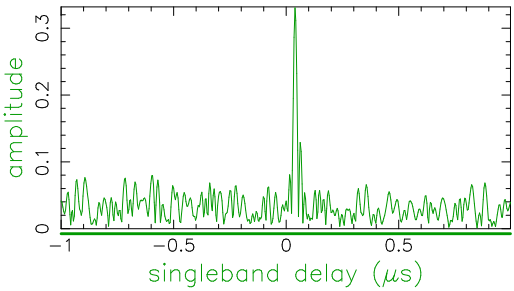
VLBA_FD - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 9

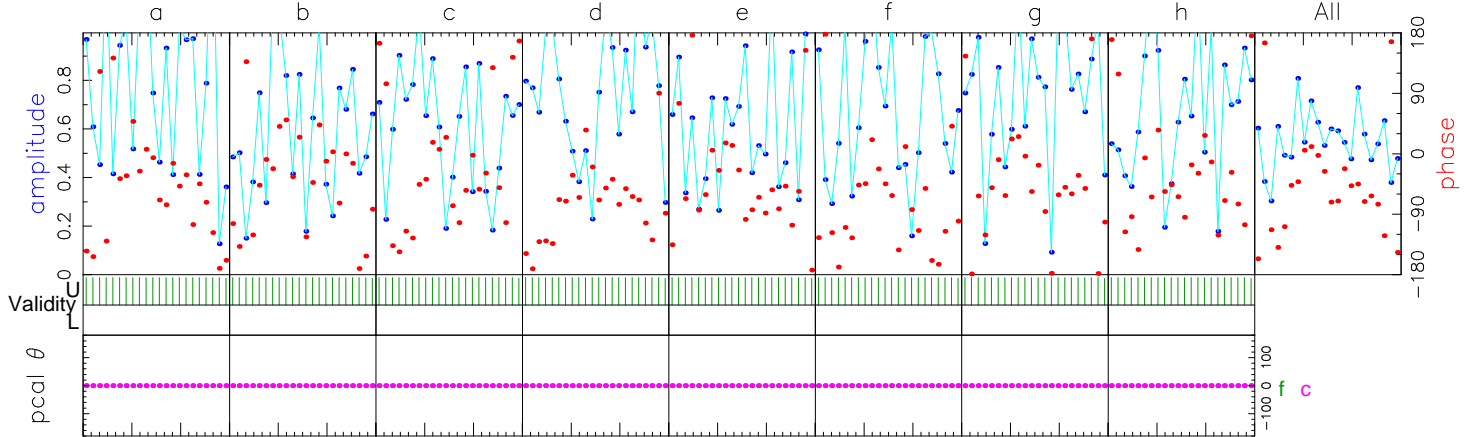


SNR 12.2
 Int time 179.969
 Amp 0.332
 Phase 180.5
 PFD 1.1e-25
 Delays (us)
 SBD 0.039860
 MBD -0.007508
 Fringe rate (Hz)
 -0.007691
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151814
 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
	-66.2	-21.3	-83.2	-85.4	-75.3	-84.9	-54.1	-56.1	Phase	-67.0
	0.4	0.3	0.3	0.5	0.2	0.4	0.4	0.4	Ampl.	0.3
	267.6	267.2	268.3	266.9	26.7	267.1	267.2	267.2	Sbd box	267.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-4.10268822636E+03	Apriori delay (usec)	-4.10272759327E+03	Resid mbdelay (usec)	-7.50809E-03	+/-	8.9E-05
Sband delay (usec)	-4.10268773327E+03	Apriori clock (usec)	-3.6708946E+00	Resid sbdelay (usec)	3.98600E-02	+/-	7.1E-04
Phase delay (usec)	-4.10272759758E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	-4.31341E-06	+/-	6.1E-07
Delay rate (us/s)	5.83212021140E-01	Apriori rate (us/s)	5.83212199423E-01	Resid rate (us/s)	-1.78284E-07	+/-	5.8E-09
Total phase (deg)	46.0	Apriori accel (us/s/s)	3.57459354443E-05	Resid phase (deg)	180.5	+/-	9.4

ph/seg (deg)	60.2	RMS	22.1	Theor.	22.1	Amplitude	0.332 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.7	60.2	38.5	Search (1024X32)	0.325	Search	0.325	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.7	13.3	13.3	Interp.	0.000	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	24.2	23.2	23.2	Inc. seg. avg.	0.515	Inc. seg. avg.	0.515	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.342	Inc. frq. avg.	0.342	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.6 el 46.8 pa -82.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2085.364 1804.109 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.208.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

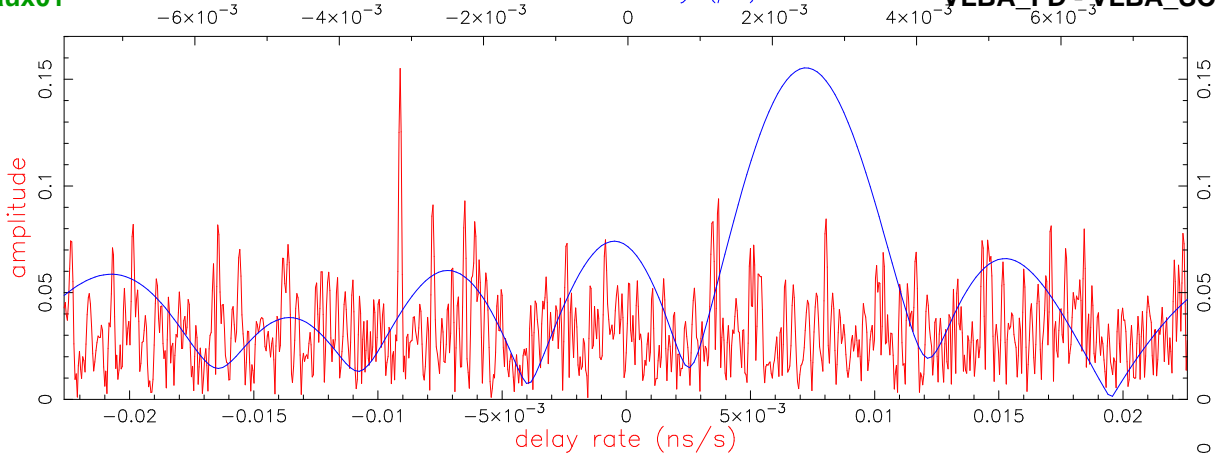
aux01

2013+370.3MP56K, No0500, fc

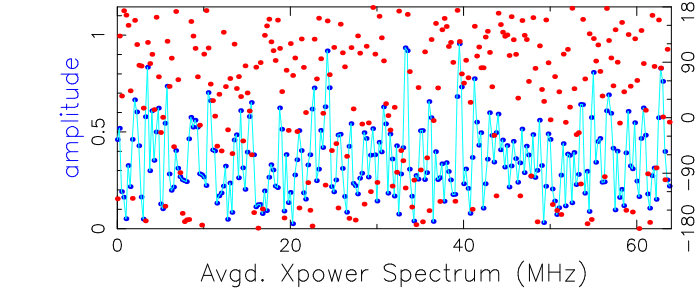
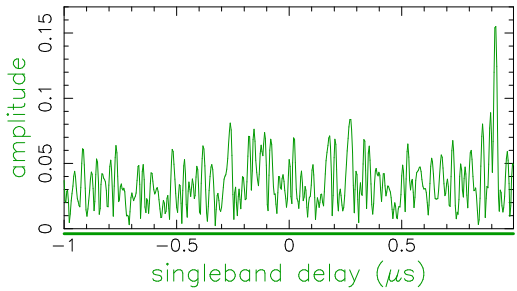
VLBA_FD - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

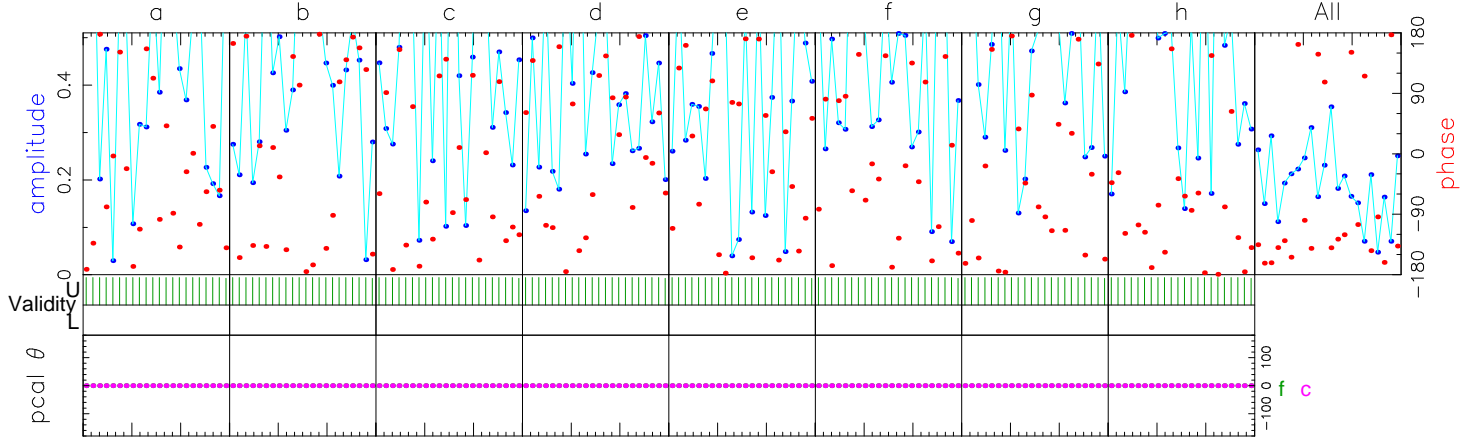


SNR 5.8
 Int time 179.969
 Amp 0.170
 Phase 73.8
 PFD 5.1e-01
 Delays (us)
 SBD 0.916128
 MBD 0.002406
 Fringe rate (Hz)
 -0.395239
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151816
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-4.10181893742E+03	Apriori delay (usec)	-4.10272759327E+03	Resid mbdelay (usec)	2.40584E-03	+/-	1.9E-04
Sband delay (usec)	-4.10181146527E+03	Apriori clock (usec)	-3.6708946E+00	Resid sbdelay (usec)	9.16128E-01	+/-	1.5E-03
Phase delay (usec)	-4.10272760300E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	-9.73670E-06	+/-	1.3E-06
Delay rate (us/s)	5.83203037651E-01	Apriori rate (us/s)	5.83212199423E-01	Resid rate (us/s)	-9.16177E-06	+/-	1.2E-08
Total phase (deg)	299.3	Apriori accel (us/s/s)	3.57459354443E-05	Resid phase (deg)	73.8	+/-	19.7

ph/seg (deg)	43.0	Theor.	46.1	Amplitude	0.170 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	53.0		80.5	Search (1024X32)	0.151	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.7		27.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.5		48.5	Inc. seg. avg.	0.157	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.158	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.6 el 46.8 pa -82.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2085.364 1804.109 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.222.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

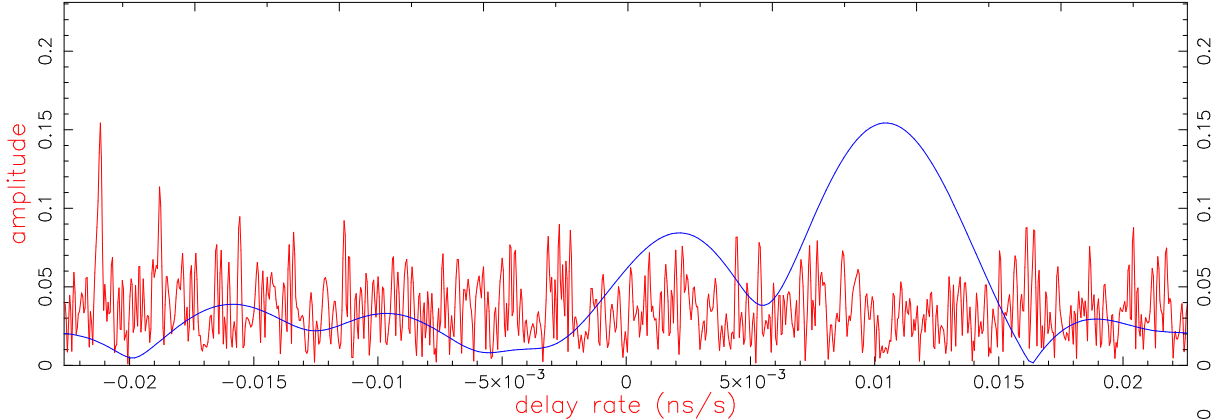
2013+370.3MP56K, No0500, fc

VLBA_FD - VLBA_SC, fgroup Q, pol RL

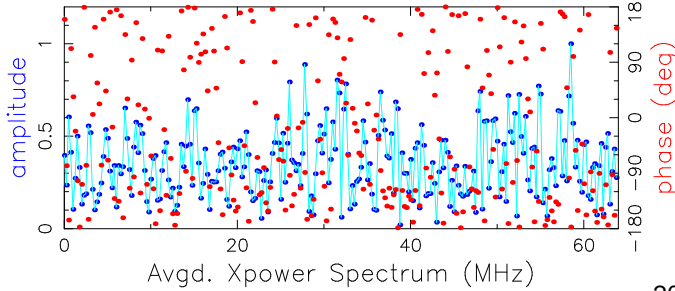
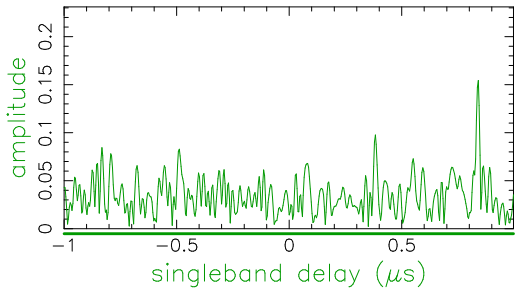
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

Fringe quality 0

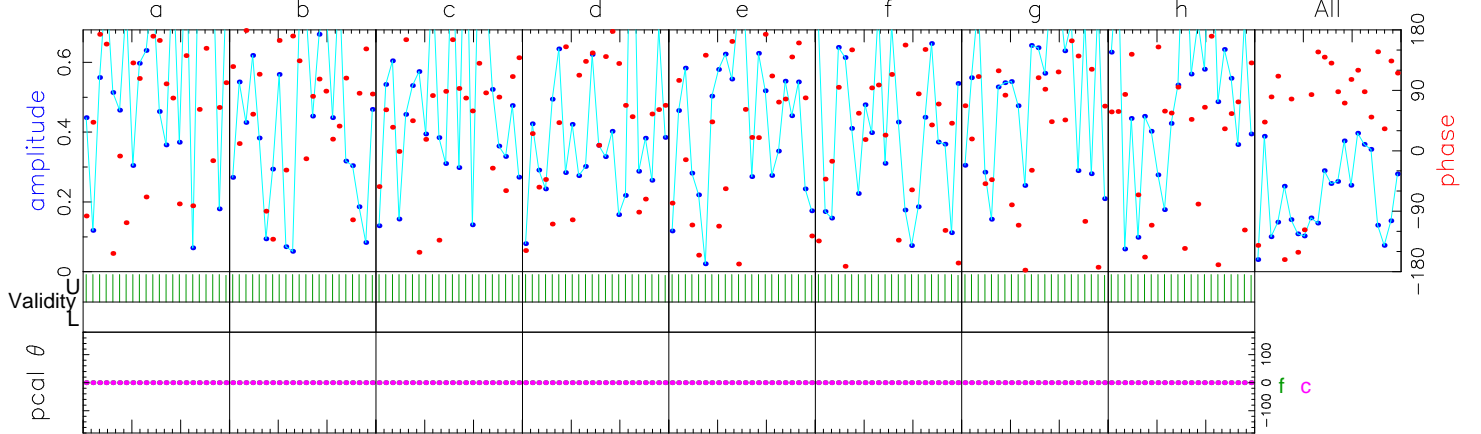


SNR 5.7
 Int time 179.969
 Amp 0.231
 Phase 35.5
 PFD 7.6e-01
 Delays (us)
 SBD 0.838754
 MBD 0.003550
 Fringe rate (Hz)
 -0.919108
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151818
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	103.0	103.0
c	1000	1000	1000	1000	1000	1000	1000	1000	0.2	0.2
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	471.7	471.7
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-4.10189591862E+03	Apriori delay (usec)	-4.10272759327E+03	Resid mbdelay (usec)	3.54965E-03	+/-	1.9E-04
Sband delay (usec)	-4.10188883902E+03	Apriori clock (usec)	-3.6708946E+00	Resid sbdelay (usec)	8.38754E-01	+/-	1.5E-03
Phase delay (usec)	-4.10272758663E+03	Apriori clockrate (us/s)	4.4348997E-07	Resid phdelay (usec)	6.63489E-06	+/-	1.3E-06
Delay rate (us/s)	5.83190894176E-01	Apriori rate (us/s)	5.83212199423E-01	Resid rate (us/s)	-2.13052E-05	+/-	1.2E-08
Total phase (deg)	261.1	Apriori accel (us/s/s)	3.57459354443E-05	Resid phase (deg)	35.5	+/-	20.1

ph/seg (deg)	58.4	Theor.	47.1	Amplitude	0.231 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.2	Search (1024X32)	0.152	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.9	Inc. seg. avg.	0.239	Inc. frq. avg.	0.217	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.8	Inc. frq. avg.	0.217	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
f: az 66.6 el 46.8 pa -82.9		c: az 27.3 el 67.5 pa -147.2		u,v (fr/asec)	-2085.364 1804.109	ion window (TEC)	0.00 0.00	simultaneous interpolator		

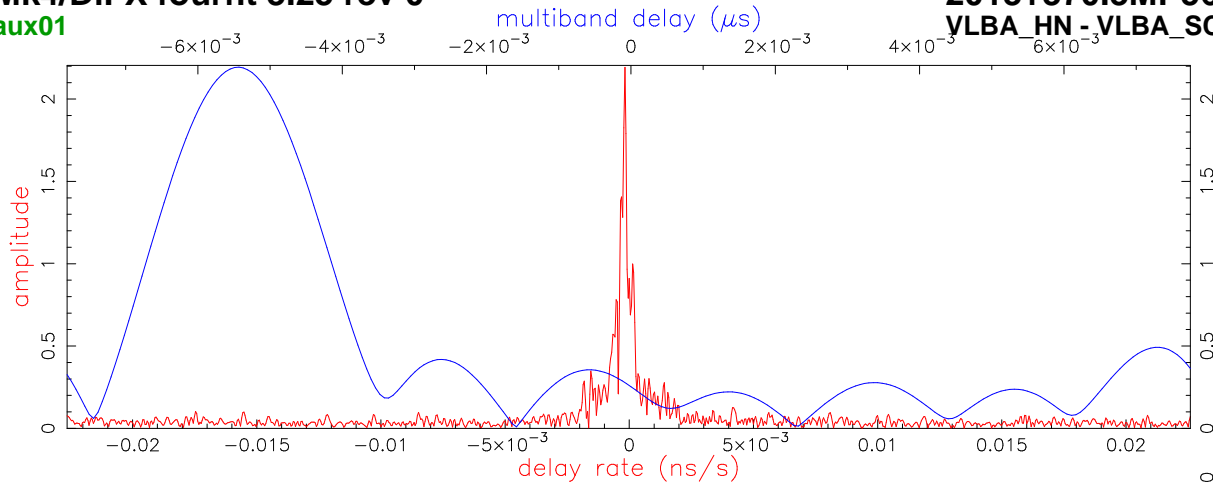
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.236.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

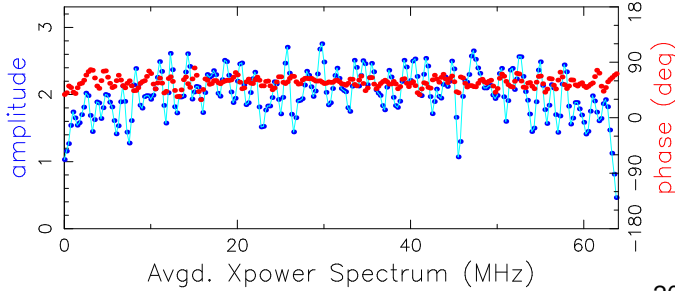
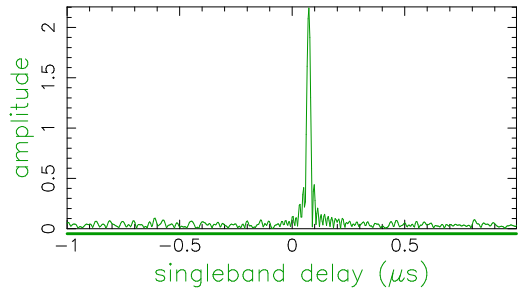
2013+370.3MP56K, No0500, hc

VLBA_HN - VLBA_SC, fgroup Q, pol LL



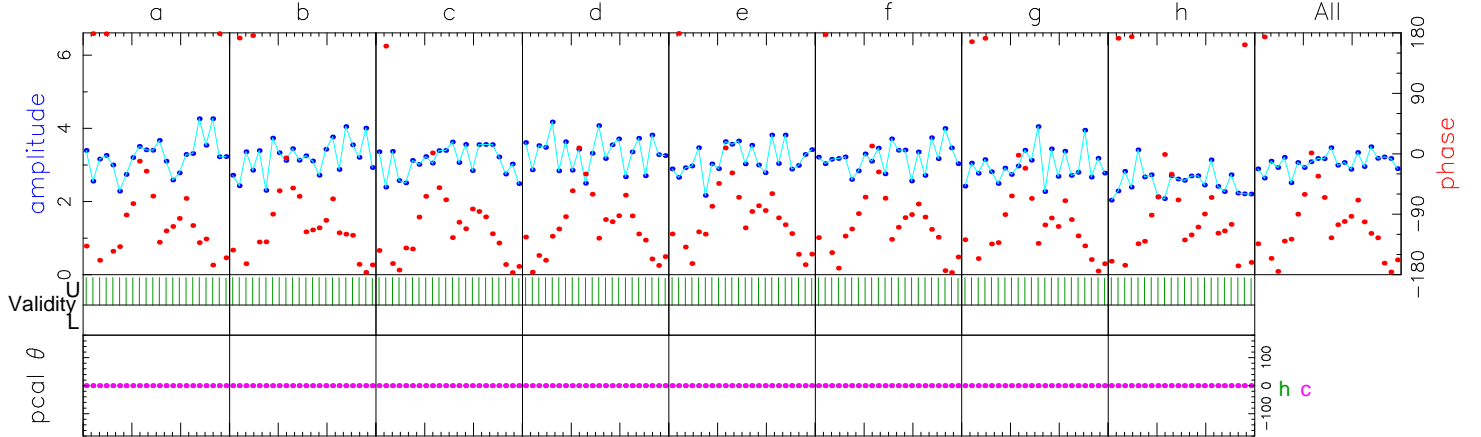
Fringe quality 5

SNR 80.9
 Int time 179.980
 Amp 2.205
 Phase 177.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.073305
 MBD -0.005463
 Fringe rate (Hz)
 -0.007400
 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
 2025:042:151806
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
h	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
h:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	7.61607411048E+02	Apriori delay (usec)	7.61534749544E+02	Resid mbdelay (usec)	-5.46350E-03	+/-	1.3E-05
Sband delay (usec)	7.61608054294E+02	Apriori clock (usec)	8.6938744E+00	Resid sbdelay (usec)	7.33048E-02	+/-	1.1E-04
Phase delay (usec)	7.61534742114E+02	Apriori clockrate (us/s)	4.7220702E-07	Resid phdelay (usec)	-7.42988E-06	+/-	9.1E-08
Delay rate (us/s)	5.43765069077E-02	Apriori rate (us/s)	5.43766784484E-02	Resid rate (us/s)	-1.71541E-07	+/-	8.8E-10
Total phase (deg)	211.4	Apriori accel (us/s/s)	2.16526410195E-05	Resid phase (deg)	177.1	+/-	1.4

ph/seg (deg)	47.0	RMS	47.0	Theor.	3.3	Amplitude	2.205 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	40.4		40.4		5.8	Search (1024X32)	2.180	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	6.7		6.7		2.0	Inc. seg. avg.	3.060	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.4		9.4		3.5	Inc. frq. avg.	2.203	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
h: az 103.5 el 73.6 pa -63.0						u,v (fr/asec)	-184.065 1975.717	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
c: az 27.3 el 67.5 pa -147.2												simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/hc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/hc.Q.168.3MP56K

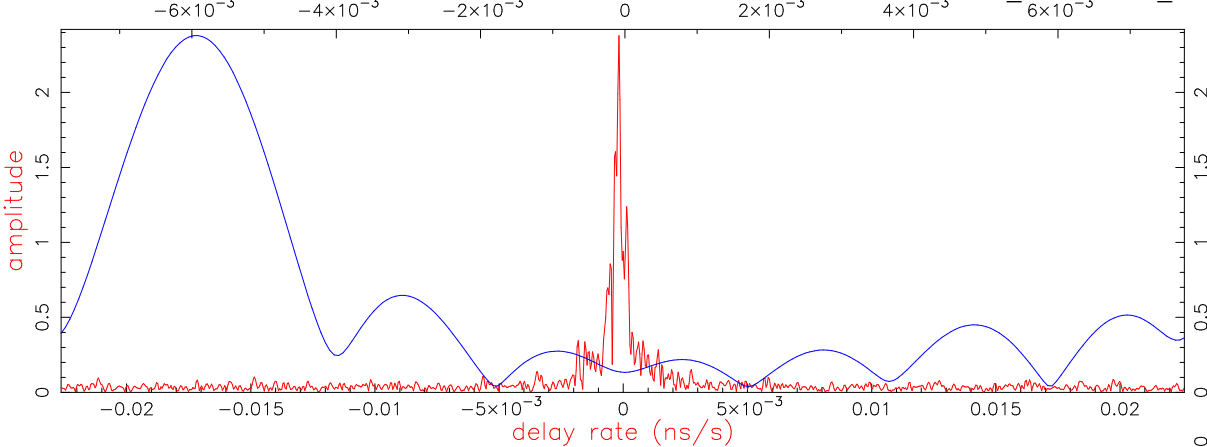
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, hc

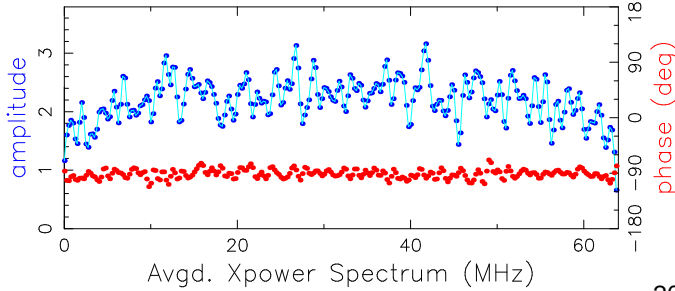
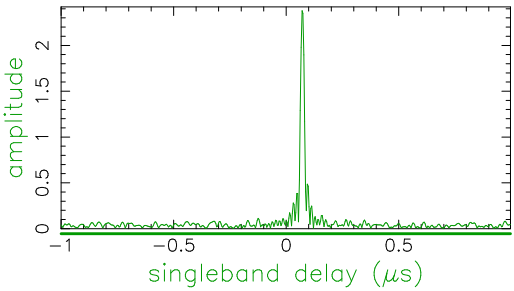
VLBA_HN - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)



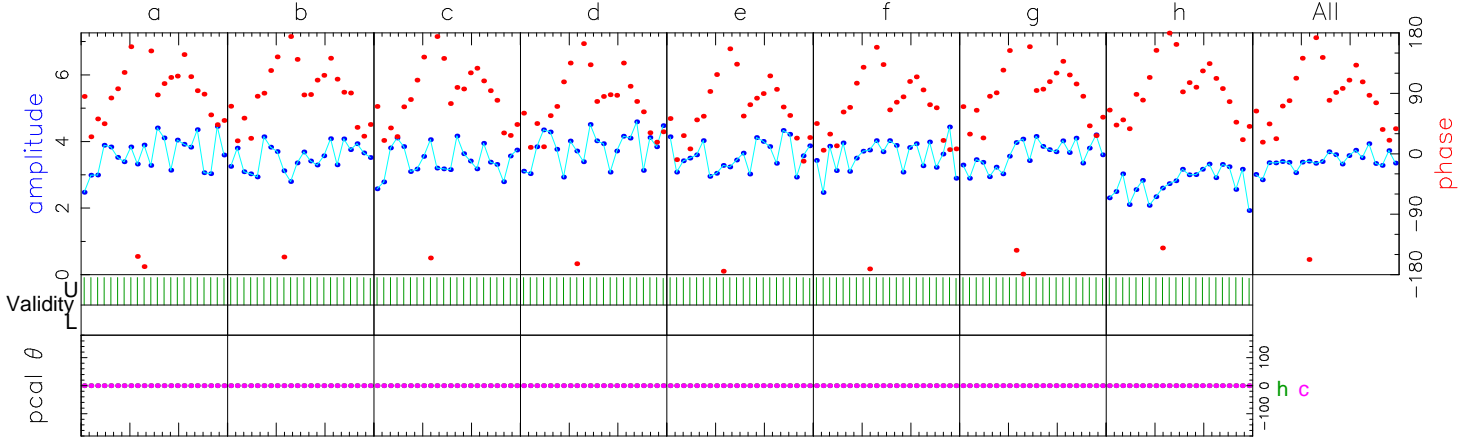
Fringe quality 4

SNR 88.8
 Int time 179.980
 Amp 2.421
 Phase 18.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.072004
 MBD -0.005903
 Fringe rate (Hz) -0.007426
 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
 2025:042:151813
 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
99.4	92.1	87.6	77.5	67.0	74.9	97.9	94.8	86.2	Phase	86.2
2.6	2.5	2.4	2.7	2.5	2.4	2.5	1.9	2.4	Ampl.	2.4
275.4	275.5	275.3	275.1	275.4	275.7	275.7	275.7	275.7	Sbd box	275.4
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
h 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:c 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:c 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
h 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 7.61606971392E+02 Apriori delay (usec) 7.61534749544E+02 Resid mbdelay (usec) -5.90315E-03 +/- 1.2E-05
 Sband delay (usec) 7.61606753294E+02 Apriori clock (usec) 8.6938744E+00 Resid sbdelay (usec) 7.20038E-02 +/- 9.7E-05
 Phase delay (usec) 7.61534755093E+02 Apriori clockrate (us/s) 4.7220702E-07 Resid phdelay (usec) 5.54909E-06 +/- 8.3E-08
 Delay rate (us/s) 5.43765063191E-02 Apriori rate (us/s) 5.43766784484E-02 Resid rate (us/s) -1.72129E-07 +/- 8.0E-10
 Total phase (deg) 53.0 Apriori accel (us/s/s) 2.16526410195E-05 Resid phase (deg) 18.7 +/- 1.3

RMS Theor. Amplitude 2.421 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.7 3.0 Search (1024X32) 2.365 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 42.1 5.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 12.9 1.8 Inc. seg. avg. 3.406 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 8.5 3.2 Inc. frq. avg. 2.424 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

h: az 103.5 el 73.6 pa -63.0 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -184.065 1975.717 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/hc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/hc.Q.203.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

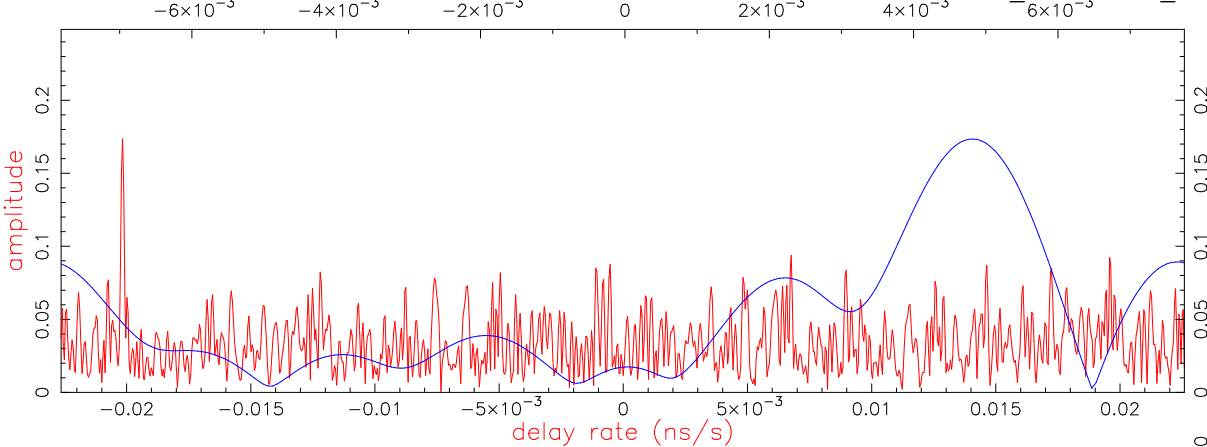
aux01

2013+370.3MP56K, No0500, hc

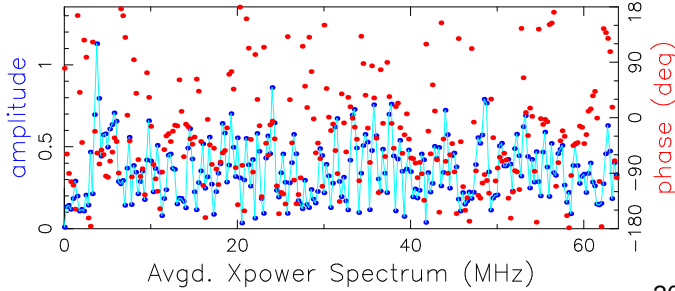
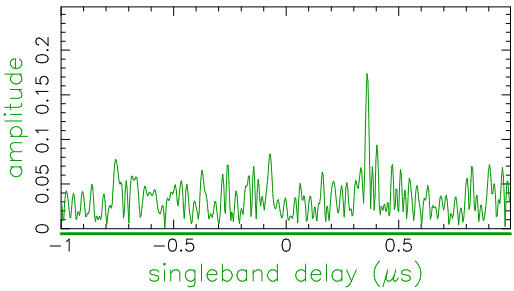
VLBA_HN - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

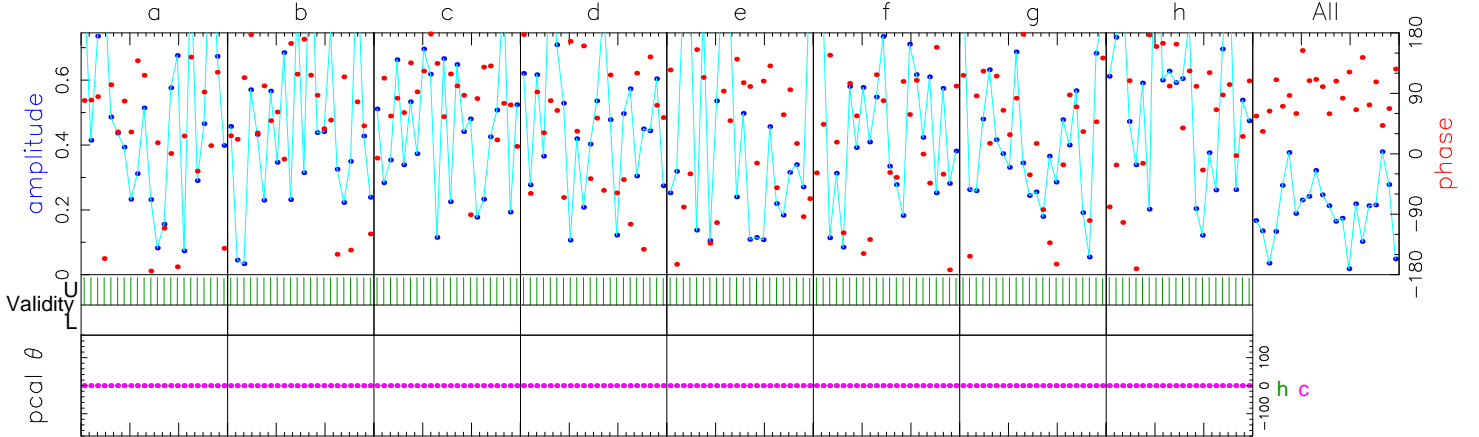


SNR 6.4
 Int time 179.980
 Amp 0.249
 Phase 61.8
 PFD 2.1e-02
 Delays (us)
 SBD 0.360295
 MBD 0.004819
 Fringe rate (Hz) -0.874057
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151815
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
h	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	7.61898943487E+02	Apriori delay (usec)	7.61534749544E+02	Resid mbdelay (usec)	4.81894E-03	+/-	1.7E-04
Sband delay (usec)	7.61895044544E+02	Apriori clock (usec)	8.6938744E+00	Resid sbdelay (usec)	3.60295E-01	+/-	1.3E-03
Phase delay (usec)	7.61534754970E+02	Apriori clockrate (us/s)	4.7220702E-07	Resid phdelay (usec)	5.42570E-06	+/-	1.2E-06
Delay rate (us/s)	5.43564175109E-02	Apriori rate (us/s)	5.43766784484E-02	Resid rate (us/s)	-2.02609E-05	+/-	1.1E-08
Total phase (deg)	96.1	Apriori accel (us/s/s)	2.16526410195E-05	Resid phase (deg)	61.8	+/-	17.9

ph/seg (deg)	31.9	Theor.	42.0	Amplitude	0.249 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	56.4	Search (1024X32)	0.165	Search	0.165	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	24.0	Interp.	0.000	Inc. seg. avg.	0.224	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	40.1	Inc. frq. avg.	0.237	Inc. frq. avg.	0.237	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

h: az 103.5 el 73.6 pa -63.0 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -184.065 1975.717 simultaneous interpolator

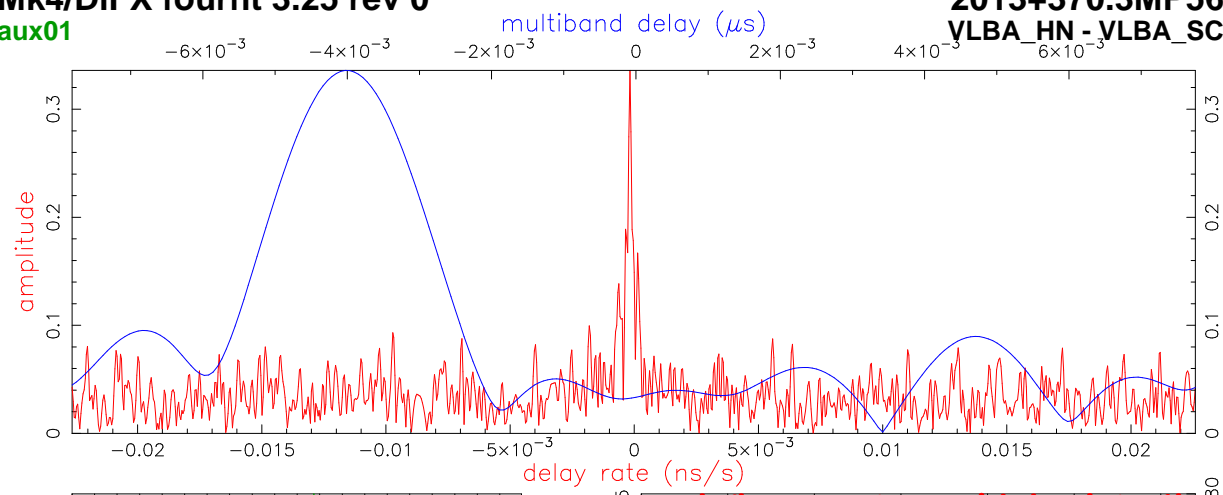
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/hc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/hc.Q.215.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, hc

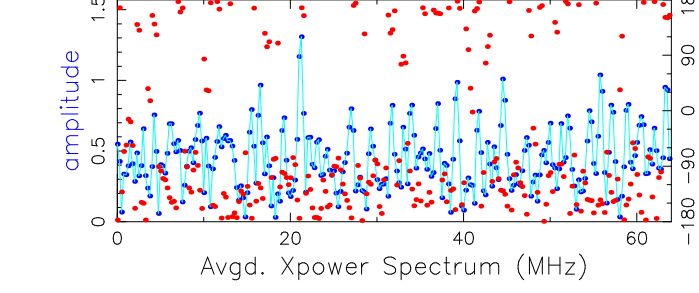
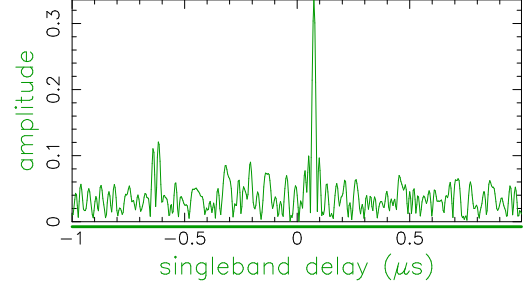
VLBA_HN - VLBA_SC, fgroup Q, pol RL



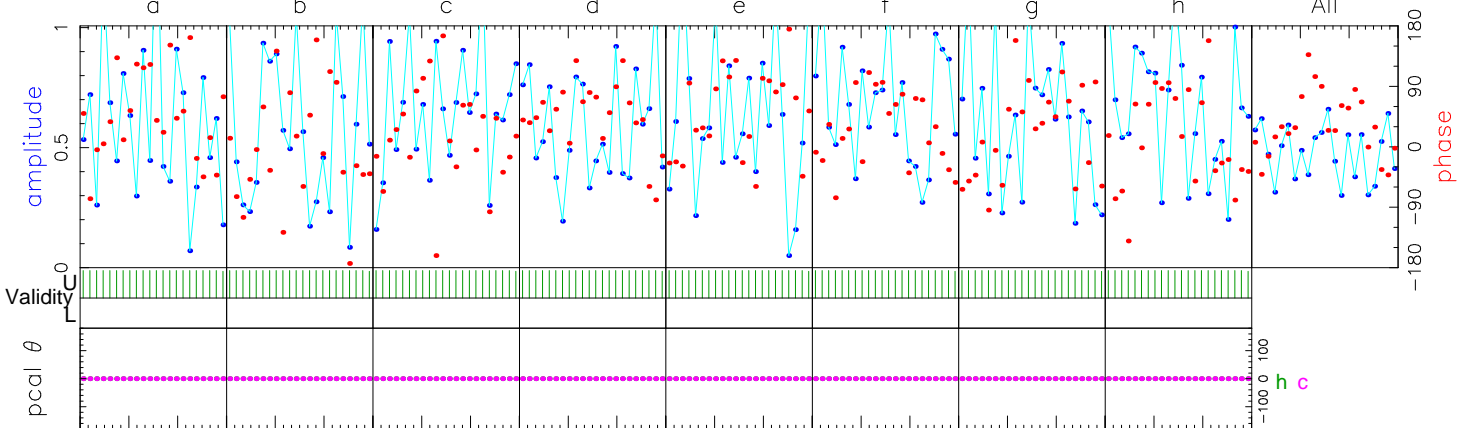
Fringe quality 9

SNR 12.3
 Int time 179.980
 Amp 0.336
 Phase 321.5
 PFD 1.8e-26
 Delays (us)
 SBD 0.074126
 MBD -0.004009
 Fringe rate (Hz)
 -0.007391
 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
 2025:042:151818
 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
	32.7	-3.5	25.2	44.1	52.9	22.0	30.1	16.4	Phase	29.0
	0.4	0.2	0.4	0.4	0.4	0.5	0.3	0.3	Ampl.	0.3
	276.2	202.8	275.8	276.1	275.7	275.7	276.0	275.4	Sbd box	276.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	7.61608865985E+02	Apriori delay (usec)	7.61534749544E+02	Resid mbdelay (usec)	-4.00856E-03	+/-	8.8E-05
Sband delay (usec)	7.61608876044E+02	Apriori clock (usec)	8.6938744E+00	Resid sbdelay (usec)	7.41265E-02	+/-	7.0E-04
Phase delay (usec)	7.61534751410E+02	Apriori clockrate (us/s)	4.7220702E-07	Resid phdelay (usec)	1.86590E-06	+/-	6.0E-07
Delay rate (us/s)	5.43765071142E-02	Apriori rate (us/s)	5.43766784484E-02	Resid rate (us/s)	-1.71334E-07	+/-	5.8E-09
Total phase (deg)	355.8	Apriori accel (us/s/s)	2.16526410195E-05	Resid phase (deg)	321.5	+/-	9.3

ph/seg (deg)	46.7	RMS	21.8	Theor.	0.336 +/- 0.027	Amplitude	0.333	Search (1024X32)	0.333	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	54.2	46.7	21.8	21.8	0.333	Search (1024X32)	0.333	Inc. seg. avg.	0.447	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	18.6	18.0	23.0	23.0	0.339	Inc. frq. avg.	0.339	Inc. frq. avg.	0.339	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.023	0.023
amp/frq (%)	18.0	18.0	23.0	23.0	0.339	Inc. frq. avg.	0.339	Inc. frq. avg.	0.339	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

h: az 103.5 el 73.6 pa -63.0 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -184.065 1975.717 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/hc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/hc.Q.237.3MP56K

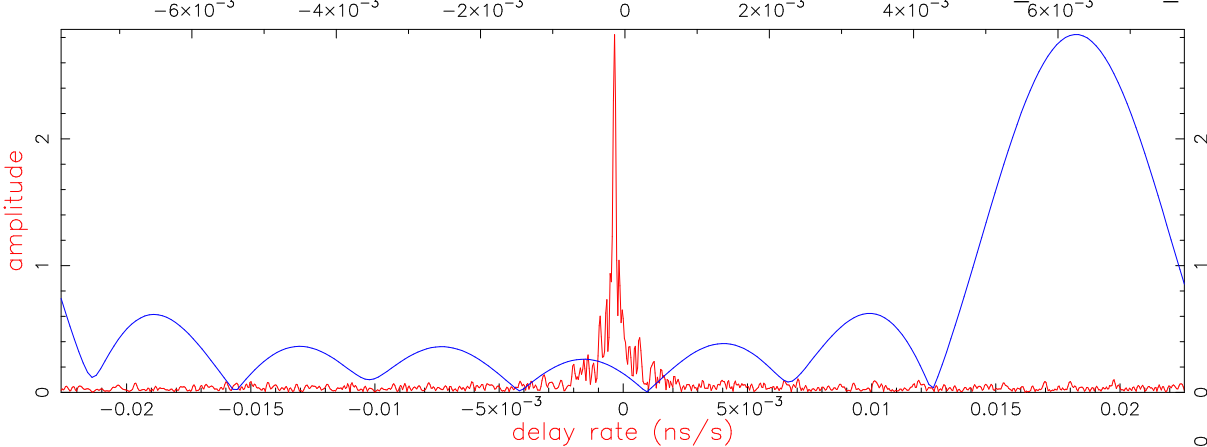
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, kc

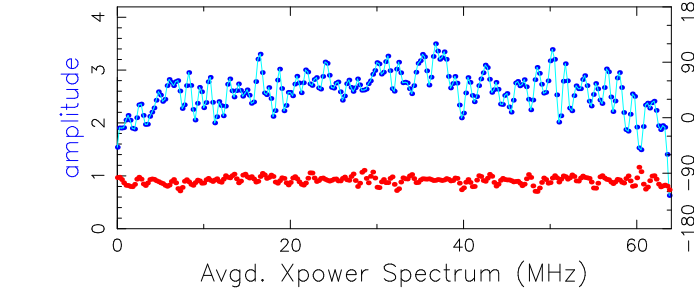
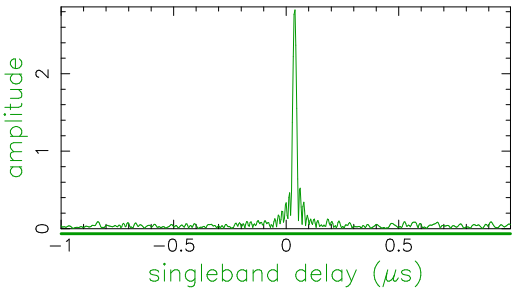
VLBA_KP - VLBA_SC, fgroup Q, pol LL

multiband delay (μ s)



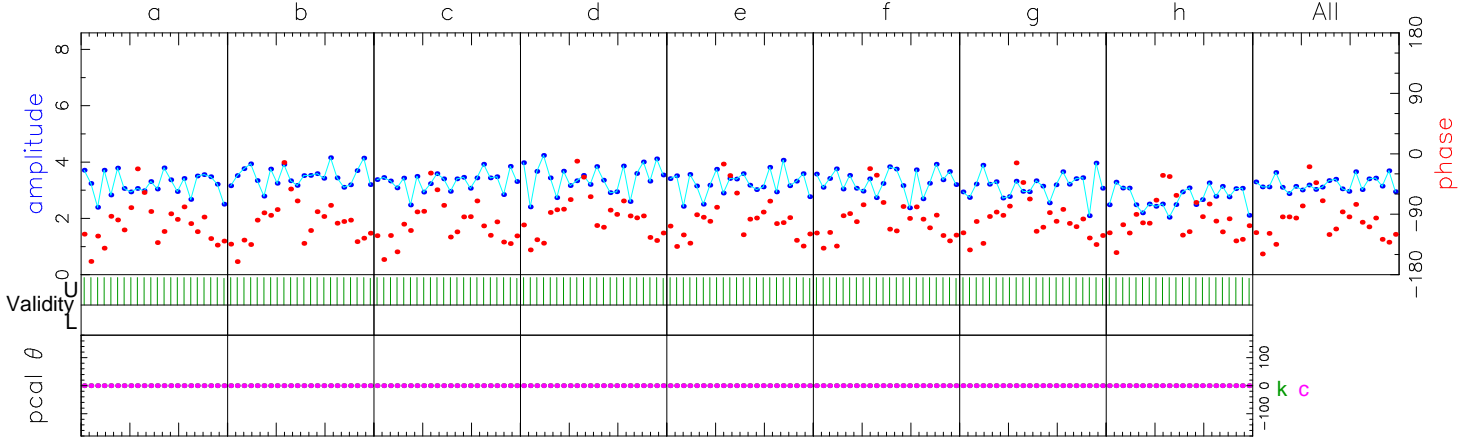
Fringe quality 7

SNR 105.0
 Int time 179.979
 Amp 2.863
 Phase 304.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.037527
 MBD 0.006209
 Fringe rate (Hz)
 -0.014669
 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
 2025:042:151819
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) -5.56074762872E+03 Apriori delay (usec) -5.56078508804E+03 Resid mbdelay (usec) 6.20932E-03 +/- 1.0E-05
 Sband delay (usec) -5.56074756129E+03 Apriori clock (usec) -3.5783672E+00 Resid sbdelay (usec) 3.75267E-02 +/- 8.2E-05
 Phase delay (usec) -5.56078509454E+03 Apriori clockrate (us/s) 5.4547610E-07 Resid phdelay (usec) -6.50393E-06 +/- 7.0E-08
 Delay rate (us/s) 6.51026313119E-01 Apriori rate (us/s) 6.51026653161E-01 Resid rate (us/s) -3.40042E-07 +/- 6.8E-10
 Total phase (deg) 52.8 Apriori accel (us/s/s) 4.48455924657E-05 Resid phase (deg) 304.0 +/- 1.1

ph/seg (deg) 29.6 2.6 Search (1024X32) 2.752 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.6 4.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.1 1.5 Inc. seg. avg. 3.210 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.1 2.7 Inc. frq. avg. 2.826 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

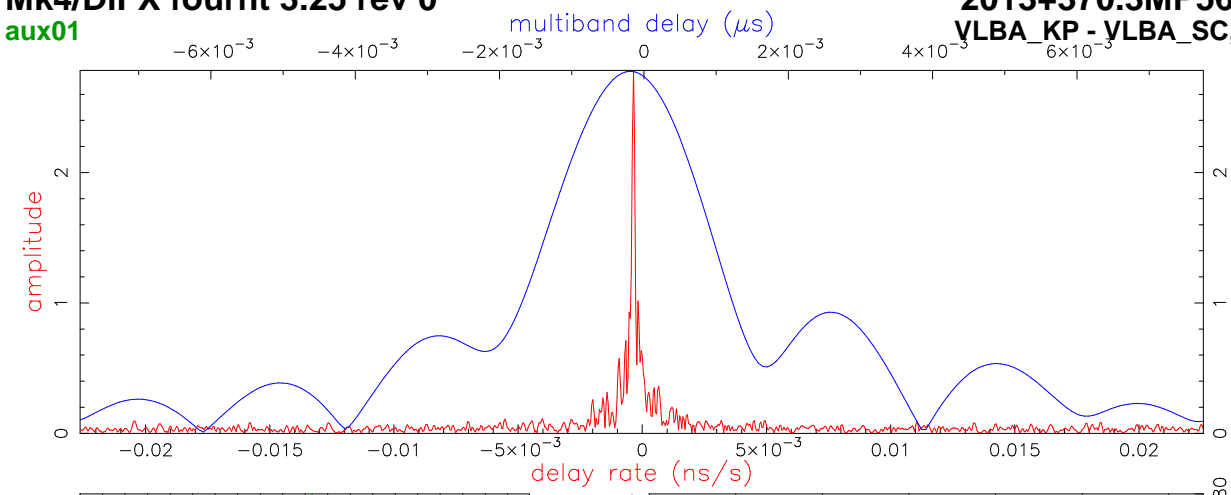
k: az 66.3 el 41.3 pa -77.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2325.926 2147.463 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/kc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kc.Q.242.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

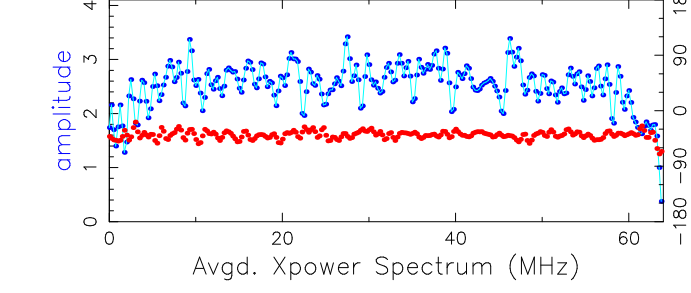
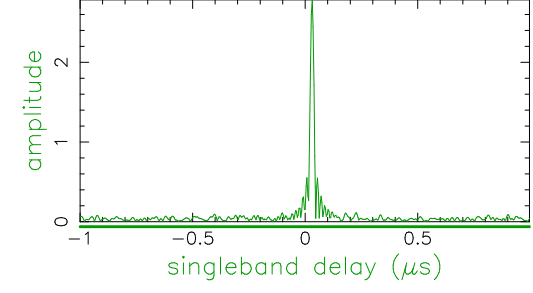
2013+370.3MP56K, No0500, kc

VLBA_KP - VLBA_SC, fgroup Q, pol RR



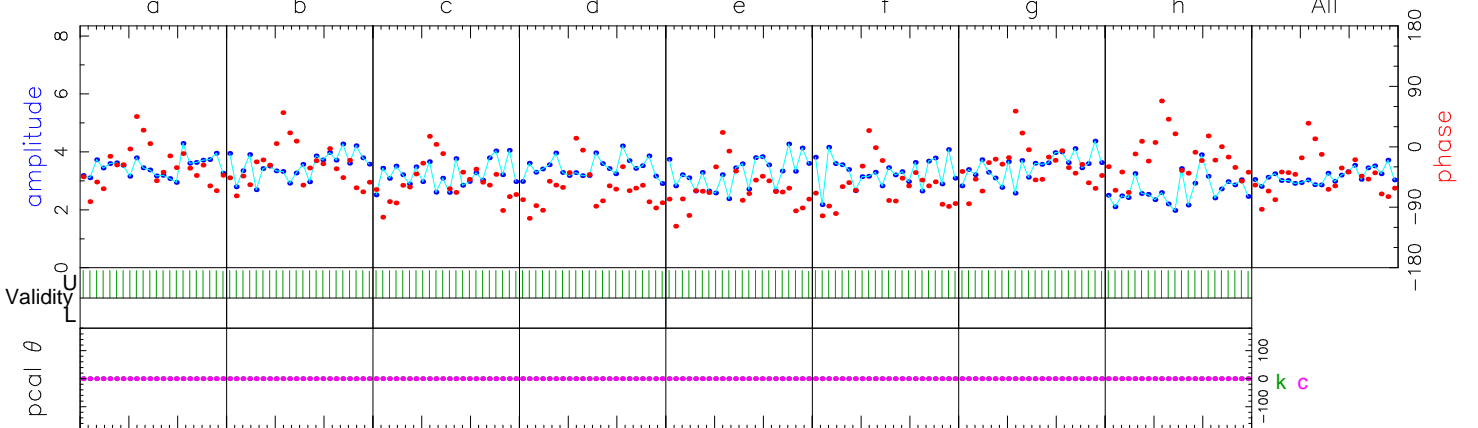
Fringe quality 6

SNR 102.1
 Int time 179.980
 Amp 2.784
 Phase 0.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.030619
 MBD -0.000202
 Fringe rate (Hz)
 -0.014739
 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
 2025:042:151823
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-5.56075403978E+03	Apriori delay (usec)	-5.56078508804E+03	Resid mbdelay (usec)	-2.01743E-04	+/-	1.1E-05
Sband delay (usec)	-5.56075446879E+03	Apriori clock (usec)	-3.5783672E+00	Resid sbdelay (usec)	3.06193E-02	+/-	8.4E-05
Phase delay (usec)	-5.56078509088E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	-2.84114E-06	+/-	7.2E-08
Delay rate (us/s)	6.51026311500E-01	Apriori rate (us/s)	6.51026653161E-01	Resid rate (us/s)	-3.41661E-07	+/-	6.9E-10
Total phase (deg)	109.6	Apriori accel (us/s/s)	4.48455924657E-05	Resid phase (deg)	0.9	+/-	1.1

ph/seg (deg) 29.3 2.6 Search (1024X32) 2.697 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 15.5 4.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.2 1.6 Inc. seg. avg. 3.141 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.8 2.8 Inc. frq. avg. 2.904 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 k: az 66.3 el 41.3 pa -77.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2325.926 2147.463 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/kc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kc.Q.254.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

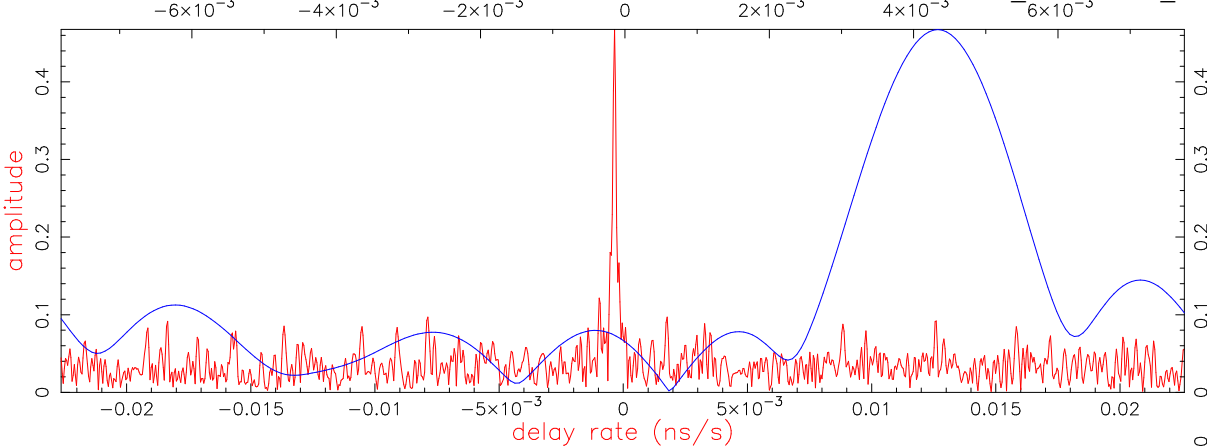
aux01

2013+370.3MP56K, No0500, kc

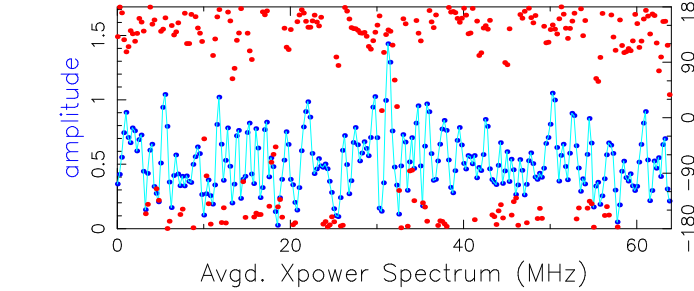
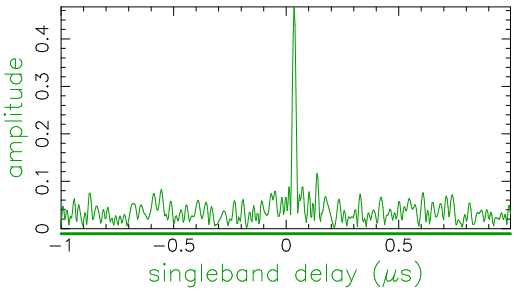
VLBA_KP - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 9

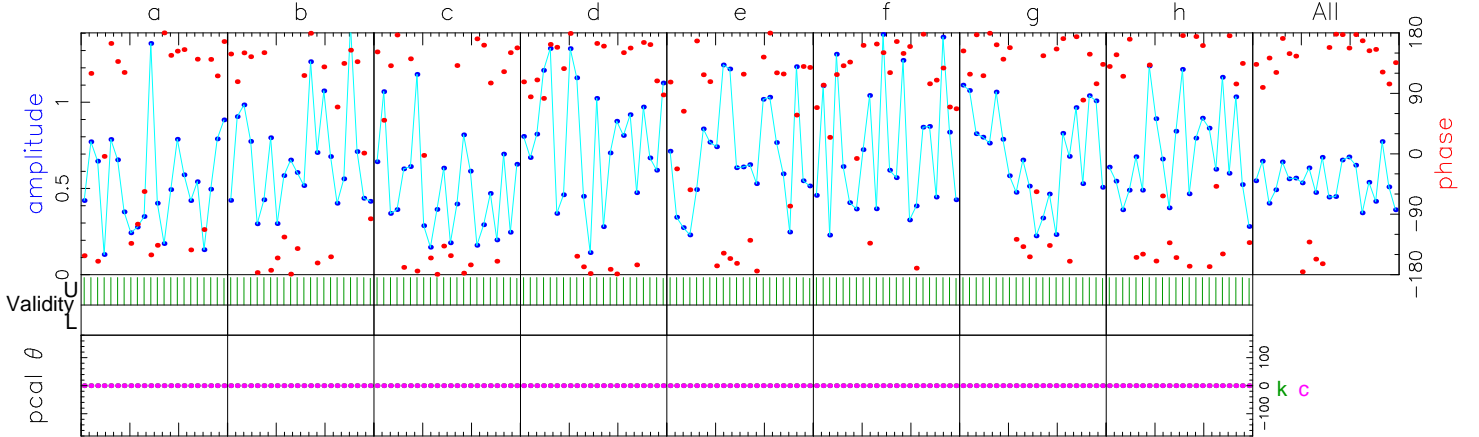


SNR 17.2
 Int time 179.979
 Amp 0.468
 Phase 202.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.035476
 MBD 0.004340
 Fringe rate (Hz)
 -0.014716
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151825
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-5.56074949759E+03	Apriori delay (usec)	-5.56078508804E+03	Resid mbdelay (usec)	4.34044E-03	+/-	6.3E-05
Sband delay (usec)	-5.56074961229E+03	Apriori clock (usec)	-3.5783672E+00	Resid sbdelay (usec)	3.54757E-02	+/-	5.0E-04
Phase delay (usec)	-5.56078507790E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	1.01334E-05	+/-	4.3E-07
Delay rate (us/s)	6.51026312049E-01	Apriori rate (us/s)	6.51026653161E-01	Resid rate (us/s)	-3.41112E-07	+/-	4.1E-09
Total phase (deg)	311.1	Apriori accel (us/s/s)	4.48455924657E-05	Resid phase (deg)	202.4	+/-	6.7

ph/seg (deg)	31.2	Theor.	15.7	Amplitude	0.468 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	29.0		27.3	Search (1024X32)	0.458	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	14.6		9.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	18.3		16.5	Inc. seg. avg.	0.529	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.473	Data rate(Mb/s): 2048				

k: az 66.3 el 41.3 pa -77.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2325.926 2147.463 simultaneous interpolator

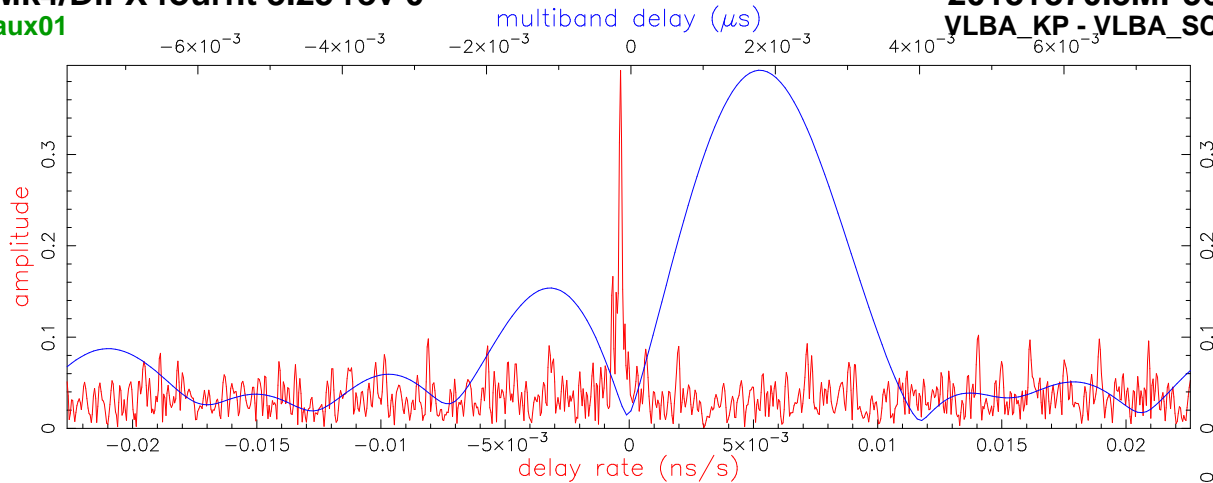
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/kc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kc.Q.270.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

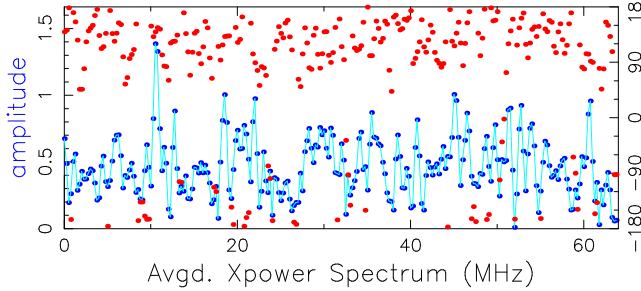
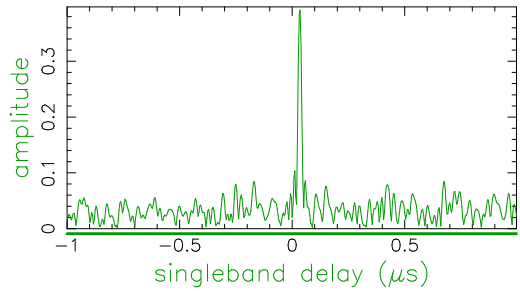
2013+370.3MP56K, No0500, kc

VLBA_KP - VLBA_SC, fgroup Q, pol RL



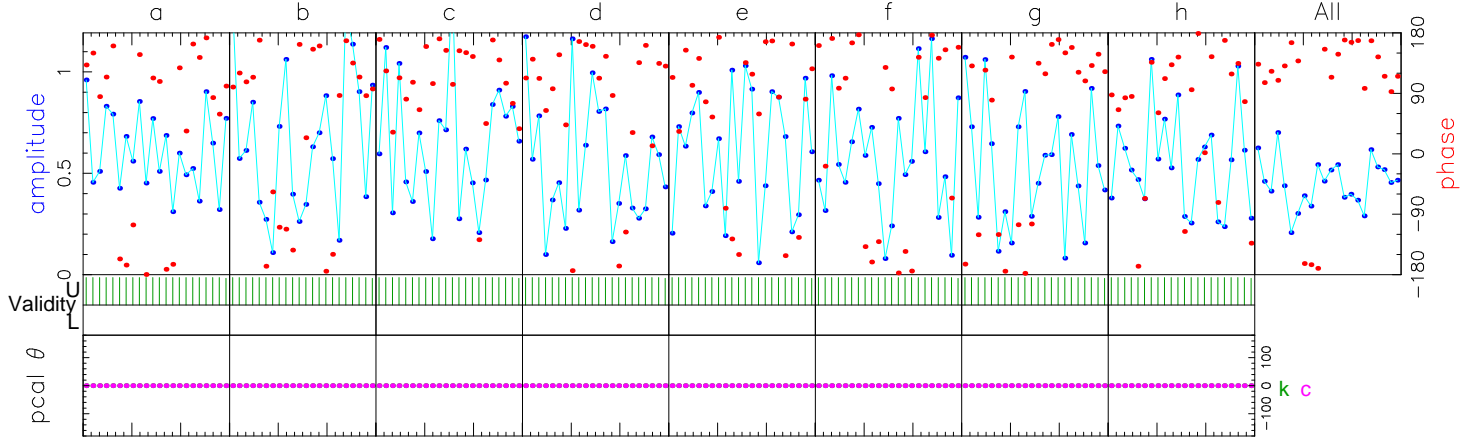
Fringe quality 9

SNR 14.6
 Int time 179.980
 Amp 0.398
 Phase 185.7
 PFD 1.1e-39
 Delays (us)
 SBD 0.033672
 MBD 0.001750
 Fringe rate (Hz)
 -0.014969
 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
 2025:042:151831
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-5.56075208781E+03	Apriori delay (usec)	-5.56078508804E+03	Resid mbdelay (usec)	1.75023E-03	+/-	7.4E-05
Sband delay (usec)	-5.56075141629E+03	Apriori clock (usec)	-3.5783672E+00	Resid sbdelay (usec)	3.36718E-02	+/-	5.9E-04
Phase delay (usec)	-5.56078507897E+03	Apriori clockrate (us/s)	5.4547610E-07	Resid phdelay (usec)	9.06147E-06	+/-	5.1E-07
Delay rate (us/s)	6.51026306186E-01	Apriori rate (us/s)	6.51026653161E-01	Resid rate (us/s)	-3.46975E-07	+/-	4.9E-09
Total phase (deg)	294.5	Apriori accel (us/s/s)	4.48455924657E-05	Resid phase (deg)	185.7	+/-	7.9

ph/seg (deg)	31.1	Theor.	18.4	Amplitude	0.398 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	32.2	Search (1024X32)	0.386	Search	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.6	Inc. seg. avg.	0.431	Inc. seg. avg.	0.431	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	11.6	Inc. frq. avg.	0.399	Inc. frq. avg.	0.399	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

k: az 66.3 el 41.3 pa -77.6 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2325.926 2147.463 simultaneous interpolator

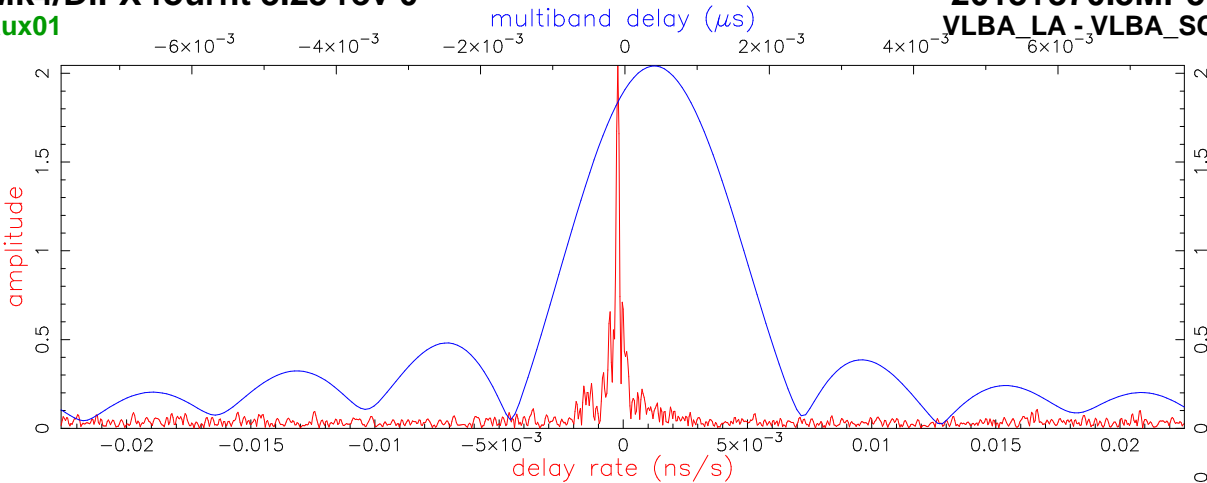
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/kc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kc.Q.298.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

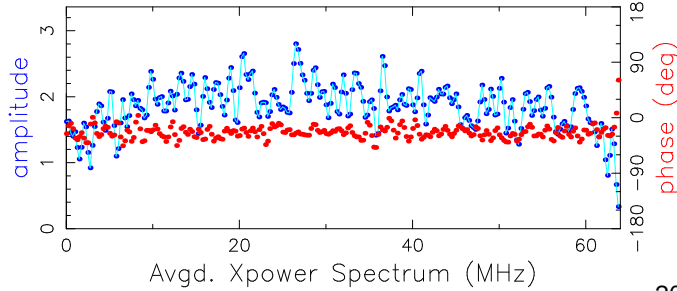
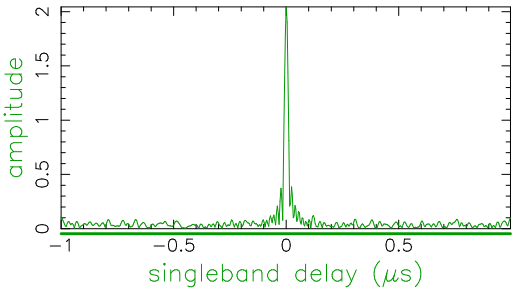
2013+370.3MP56K, No0500, lc

VLBA_LA - VLBA_SC, fgroup Q, pol LL



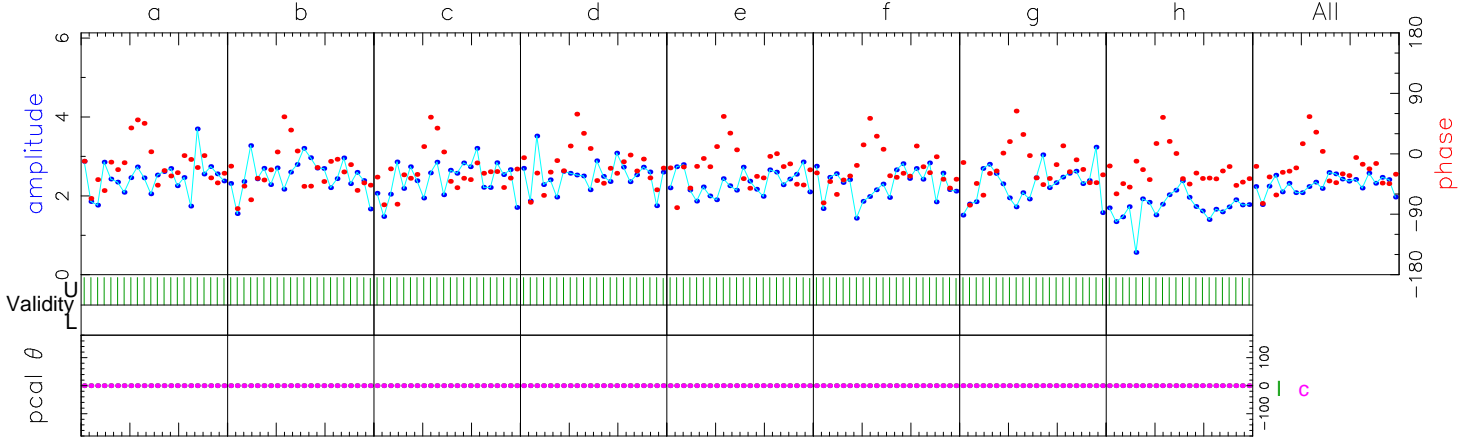
Fringe quality 7

SNR 75.0
 Int time 179.980
 Amp 2.045
 Phase -23.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000513
 MBD 0.000420
 Fringe rate (Hz)
 -0.010336
 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
 2025:042:151826
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-4.10112043878E+03	Apriori delay (usec)	-4.10112085875E+03	Resid mbdelay (usec)	4.19973E-04	+/-	1.4E-05
Sband delay (usec)	-4.10112034575E+03	Apriori clock (usec)	-1.2027918E+01	Resid sbdelay (usec)	5.13000E-04	+/-	1.1E-04
Phase delay (usec)	-4.10112086023E+03	Apriori clockrate (us/s)	1.5926897E-07	Resid phdelay (usec)	-1.47952E-06	+/-	9.8E-08
Delay rate (us/s)	5.60125641583E-01	Apriori rate (us/s)	5.60125881165E-01	Resid rate (us/s)	-2.39582E-07	+/-	9.5E-10
Total phase (deg)	-327.8	Apriori accel (us/s/s)	4.08160537457E-05	Resid phase (deg)	-23.0	+/-	1.5

ph/seg (deg)	28.5	Theor.	3.6	Amplitude	2.045 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	15.7	Search (1024X32)	1.964	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	4.2	Inc. seg. avg.	2.289	Inc. frq. avg.	2.044	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.9	Inc. frq. avg.	2.044			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
l: az 71.2 el 46.9 pa -74.8		c: az 27.3 el 67.5 pa -147.2		u, v (fr/asec)	-1999.525 2220.166	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/lc..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/lc.Q.274.3MP56K						simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

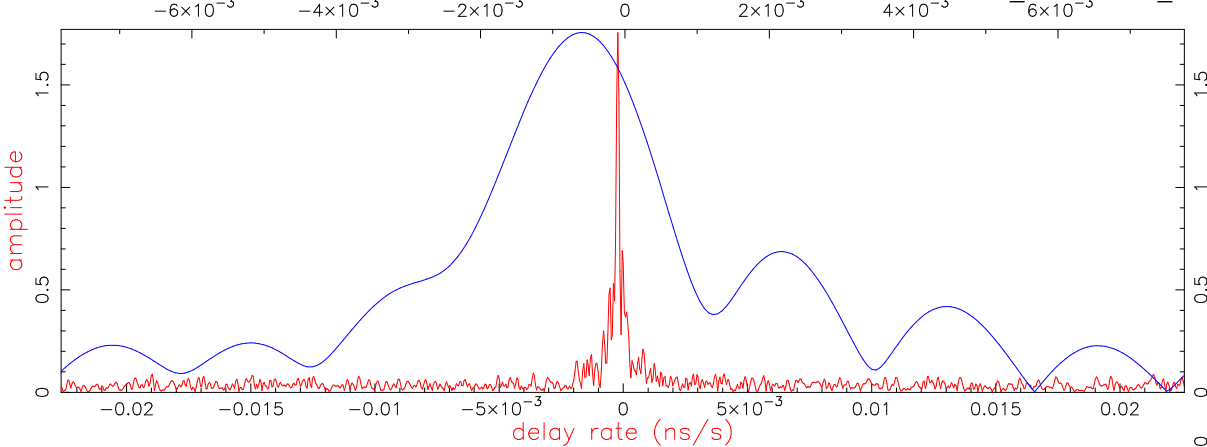
aux01

2013+370.3MP56K, No0500, lc

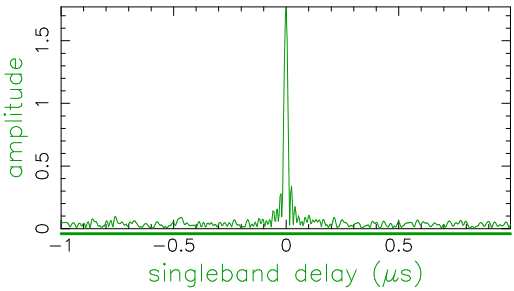
VLBA_LA - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)

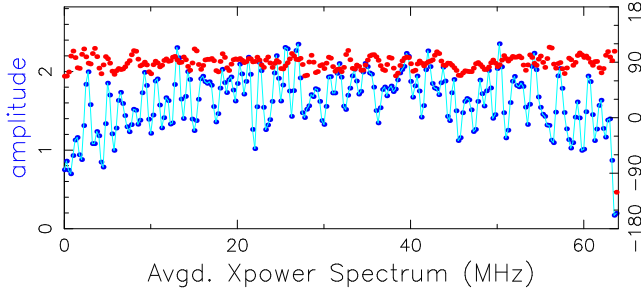
Fringe quality 5



SNR 65.0
 Int time 179.980
 Amp 1.771
 Phase 82.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001218
 MBD -0.000622
 Fringe rate (Hz)
 -0.010324
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



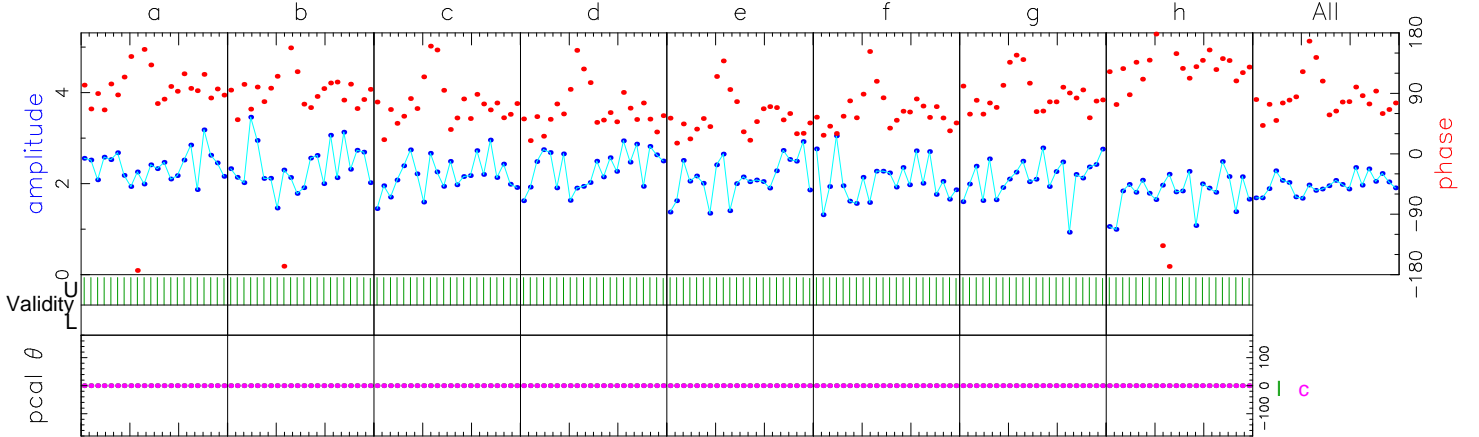
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151832
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) -4.10112148119E+03 Apriori delay (usec) -4.10112085875E+03 Resid mbdelay (usec) -6.22433E-04 +/- 1.7E-05
 Sband delay (usec) -4.10112207675E+03 Apriori clock (usec) -1.2027918E+01 Resid sbdelay (usec) -1.21800E-03 +/- 1.3E-04
 Phase delay (usec) -4.10112085345E+03 Apriori clockrate (us/s) 1.5926897E-07 Resid phdelay (usec) 5.30082E-06 +/- 1.1E-07
 Delay rate (us/s) 5.60125641841E-01 Apriori rate (us/s) 5.60125881165E-01 Resid rate (us/s) -2.39325E-07 +/- 1.1E-09
 Total phase (deg) -222.5 Apriori accel (us/s/s) 4.08160537457E-05 Resid phase (deg) 82.3 +/- 1.8

RMS Theor. Amplitude 1.771 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.9 4.1 Search (1024X32) 1.685 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 16.0 7.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 29.0 2.5 Inc. seg. avg. 1.972 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 12.4 4.4 Inc. frq. avg. 1.914 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

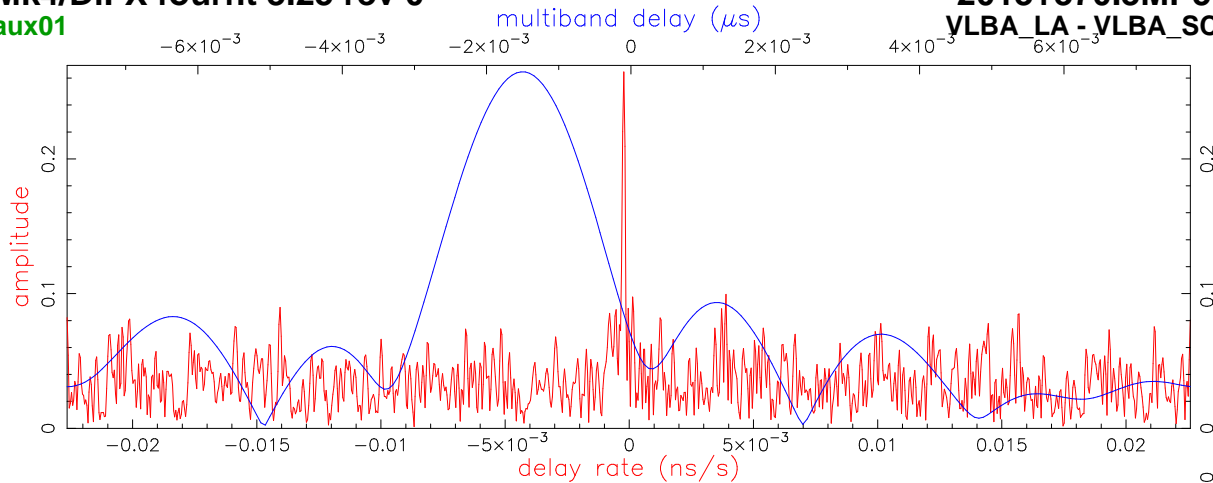
l: az 71.2 el 46.9 pa -74.8 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1999.525 2220.166 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lc.Q.307.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

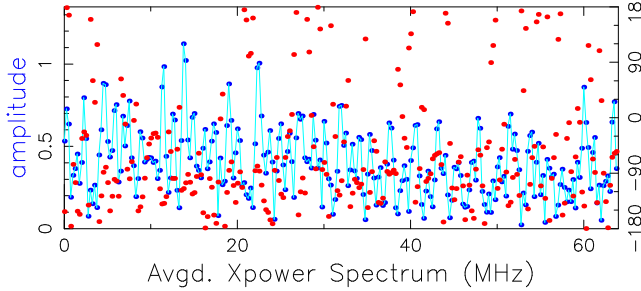
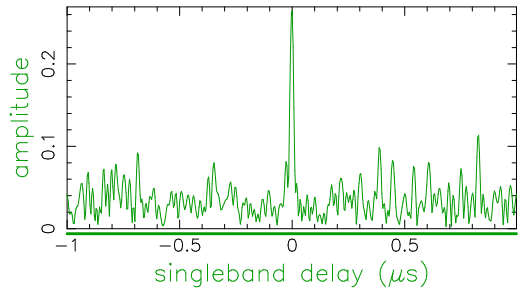
2013+370.3MP56K, No0500, lc

VLBA_LA - VLBA_SC, fgroup Q, pol LR



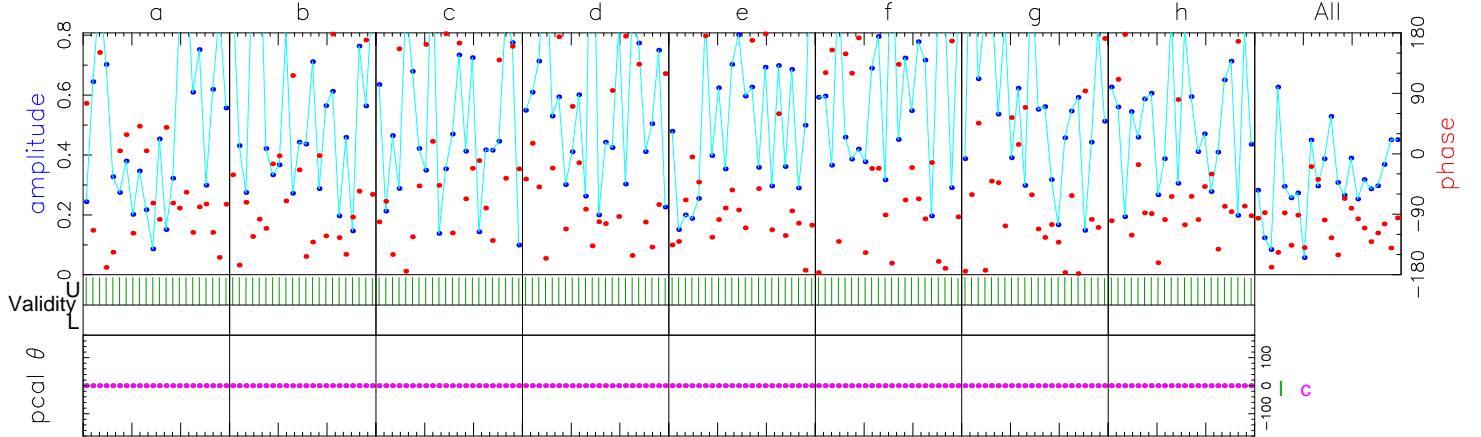
Fringe quality 9

SNR 9.9
 Int time 179.980
 Amp 0.269
 Phase -106.0
 PFD 1.0e-14
 Delays (us)
 SBD -0.001740
 MBD -0.001541
 Fringe rate (Hz)
 -0.010068
 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
 2025:042:151837
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-4.10112239969E+03	Apriori delay (usec)	-4.10112085875E+03	Resid mbdelay (usec)	-1.54093E-03	+/-	1.1E-04
Sband delay (usec)	-4.10112259875E+03	Apriori clock (usec)	-1.2027918E+01	Resid sbdelay (usec)	-1.74000E-03	+/-	8.7E-04
Phase delay (usec)	-4.10112086558E+03	Apriori clockrate (us/s)	1.5926897E-07	Resid phdelay (usec)	-6.82568E-06	+/-	7.5E-07
Delay rate (us/s)	5.60125647783E-01	Apriori rate (us/s)	5.60125881165E-01	Resid rate (us/s)	-2.33382E-07	+/-	7.2E-09
Total phase (deg)	-50.8	Apriori accel (us/s/s)	4.08160537457E-05	Resid phase (deg)	-106.0	+/-	11.6

ph/seg (deg)	35.4	Theor.	Amplitude	0.269 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	52.5	27.2	Search (1024X32)	0.258	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.0	16.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	20.8	28.6	Inc. seg. avg.	0.288	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	0.263	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 71.2 el 46.9 pa -74.8 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1999.525 2220.166 simultaneous interpolator

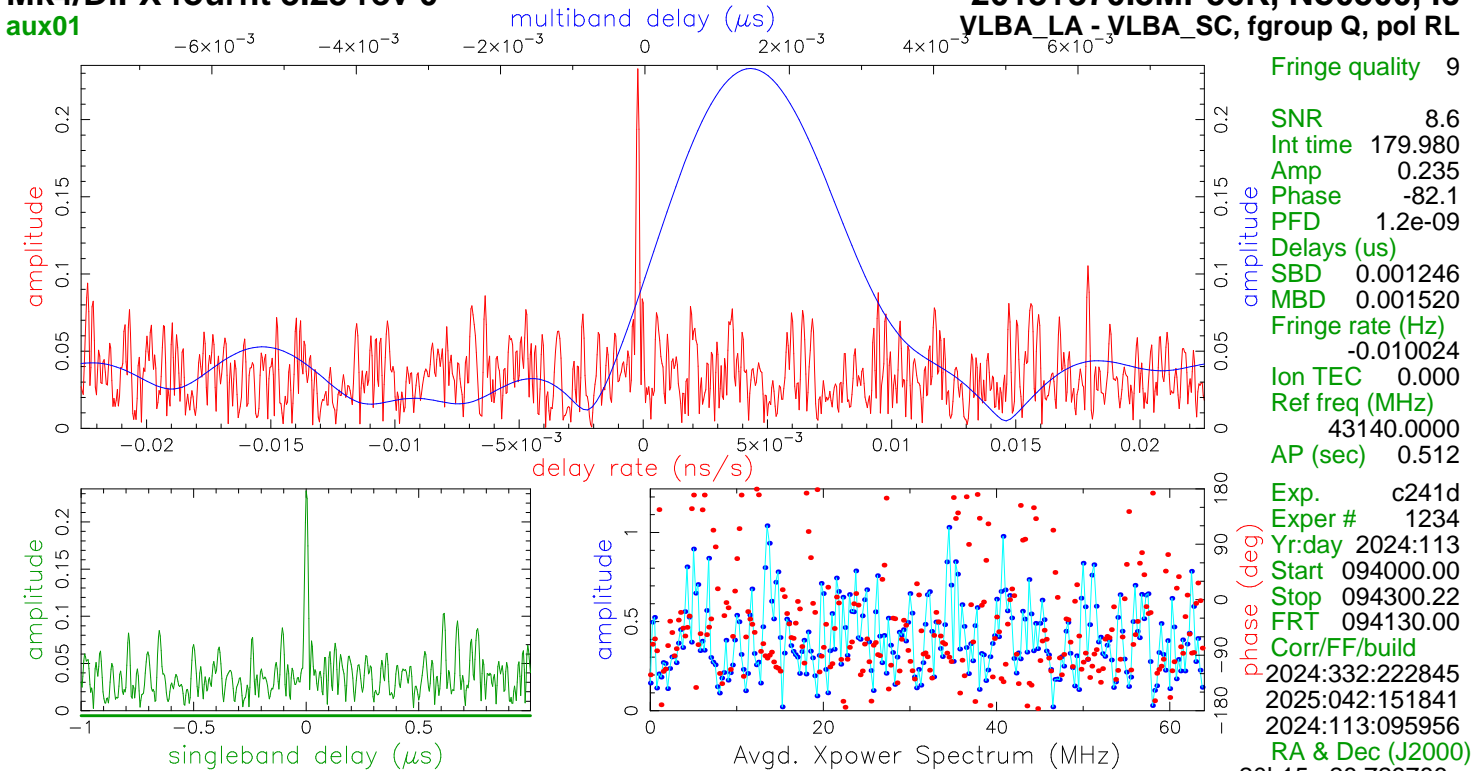
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lc.Q.330.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

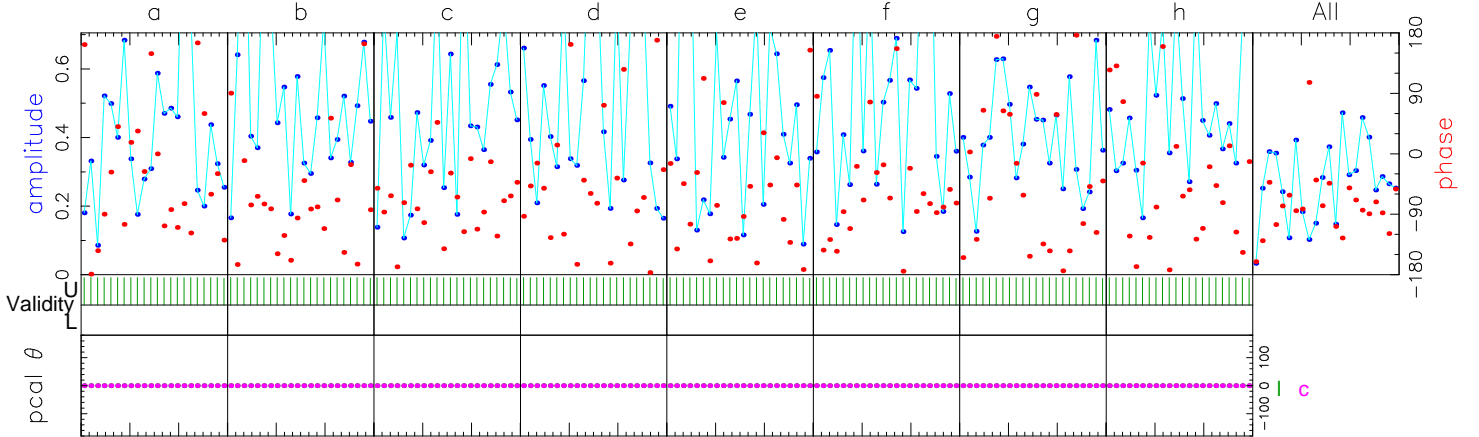
aux01

2013+370.3MP56K, No0500, lc

VLBA_LA - VLBA_SC, 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
	-78.0	-92.9	-71.7	-80.7	-80.8	-66.8	-137.9	-96.0	Phase	-82.1
	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	Ampl.	0.2
	66.1	256.3	257.8	257.9	258.1	4.7	193.5	156.8	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	-4.1011933916E+03								Resid mbdelay (usec)	1.51960E-03 +/- 1.3E-04
Sband delay (usec)	-4.10111961275E+03								Resid sbdelay (usec)	1.24600E-03 +/- 1.0E-03
Phase delay (usec)	-4.10112086404E+03								Resid phdelay (usec)	-5.28613E-06 +/- 8.6E-07
Delay rate (us/s)	5.60125648805E-01								Resid rate (us/s)	-2.32361E-07 +/- 8.2E-09
Total phase (deg)			-26.9						Resid phase (deg)	-82.1 +/- 13.3
	RMS	Theor.	Amplitude	0.235 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	47.6	31.2	Search (1024X32)	0.231					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	50.8	54.4	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	25.1	18.8	Inc. seg. avg.	0.236					SampCntNorm: enabled	dr window (ns/s) -0.023 0.023
amp/frq (%)	33.3	32.8	Inc. frq. avg.	0.228					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
l: az 71.2 el 46.9 pa -74.8			c: az 27.3 el 67.5 pa -147.2						u,v (fr/asec) -1999.525 2220.166	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0500/lc..3MP56K						Output file: /Exps/c241d/v1/7mm/1234/No0500/lc.Q.342.3MP56K	

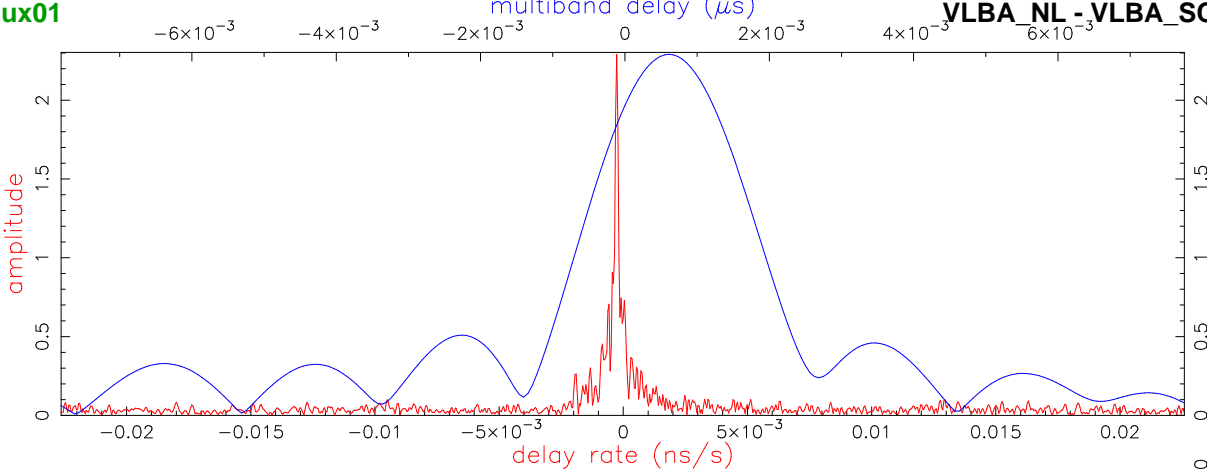
Mk4/DiFX fourfit 3.25 rev 0

aux01

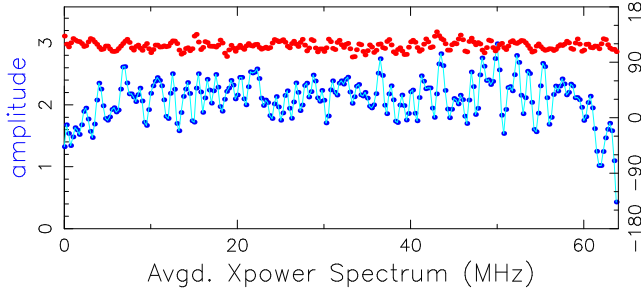
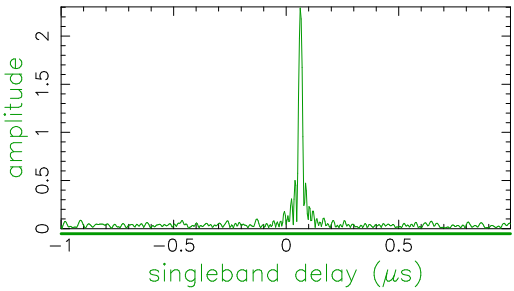
2013+370.3MP56K, No0500, nc

VLBA_NL - VLBA_SC, fgroup Q, pol LL

Fringe quality 6

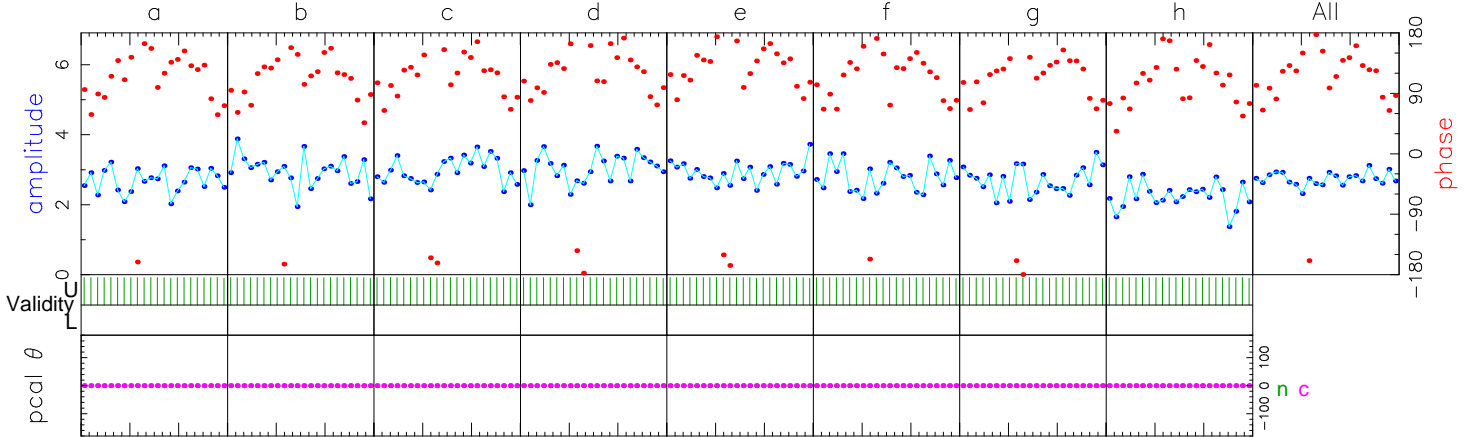


SNR 84.4
Int time 179.673
Amp 2.304
Phase 210.3
PFD 0.0e+00
Delays (us)
SBD 0.063432
MBD 0.000635
Fringe rate (Hz)
-0.011296
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512



Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 094000.00
Stop 094300.22
FRT 094130.00
Corr/FF/build
2024:332:222845
2025:042:151830
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	117.7	114.5	123.2	126.4	134.0	115.6	120.3	106.2	Ampl.	120.3
n	2.2	2.4	2.5	2.5	2.5	2.3	2.2	1.9	Ampl.	2.3
c	273.1	273.3	273.2	273.3	273.0	273.4	273.3	272.7	Sbd box	273.2
n	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.34949529582E+03	Apriori delay (usec)	-1.34955843048E+03	Resid mbdelay (usec)	6.34662E-04	+/-	1.3E-05
Sband delay (usec)	-1.34949499873E+03	Apriori clock (usec)	-4.0156841E+00	Resid sbdelay (usec)	6.34317E-02	+/-	1.0E-04
Phase delay (usec)	-1.34955842273E+03	Apriori clockrate (us/s)	6.9052999E-07	Resid phdelay (usec)	7.74655E-06	+/-	8.7E-08
Delay rate (us/s)	3.33033776894E-01	Apriori rate (us/s)	3.33034038734E-01	Resid rate (us/s)	-2.61840E-07	+/-	8.4E-10
Total phase (deg)	321.6	Apriori accel (us/s/s)	3.17859143135E-05	Resid phase (deg)	210.3	+/-	1.4

ph/seg (deg)	34.4	RMS	3.2	Theor.	3.2	Amplitude	2.304 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	20.6	Search (1024X32)	2.263	Search	2.263	Search	2.263	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	9.1	Interp.	0.000	Interp.	0.000	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.0	Inc. seg. avg.	2.741	Inc. seg. avg.	2.741	Inc. seg. avg.	2.741	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	2.310	Inc. frq. avg.	2.310	Inc. frq. avg.	2.310	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

n: az 85.1 el 59.3 pa -68.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1184.179 2232.273 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/nc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/nc.Q.291.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

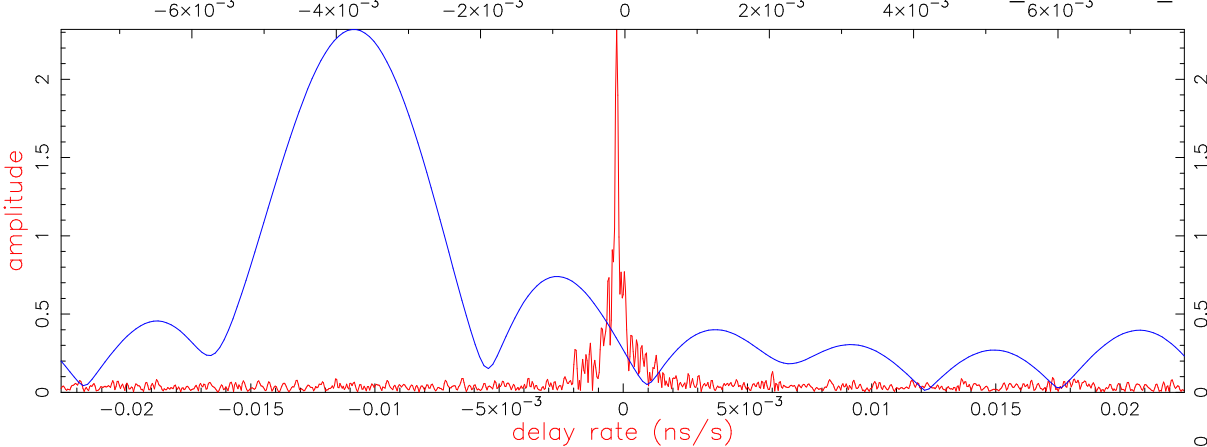
aux01

2013+370.3MP56K, No0500, nc

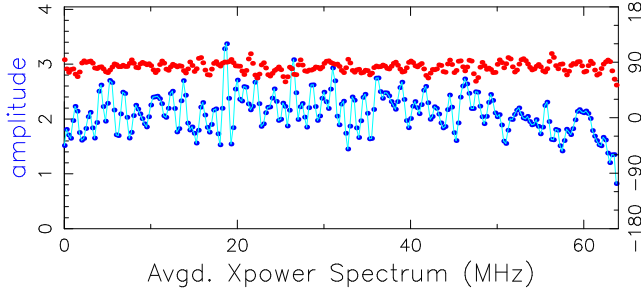
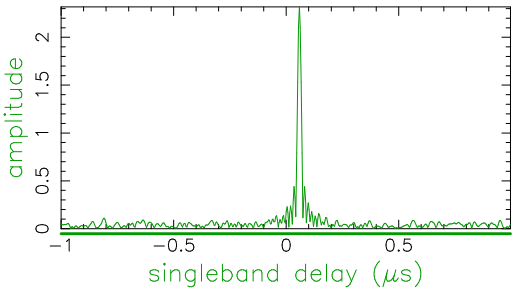
VLBA_NL - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 6

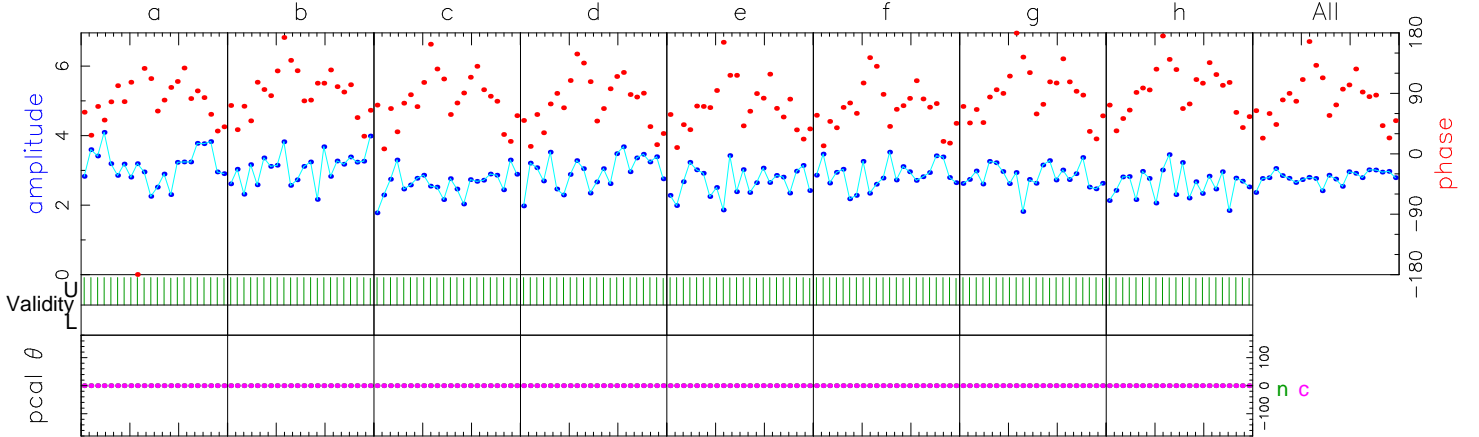


SNR 85.0
 Int time 179.673
 Amp 2.319
 Phase 170.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.058598
 MBD -0.003756
 Fringe rate (Hz)
 -0.011314
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151836
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -1.34949968685E+03 Apriori delay (usec) -1.34955843048E+03 Resid mbdelay (usec) -3.75637E-03 +/- 1.3E-05
 Sband delay (usec) -1.34949983248E+03 Apriori clock (usec) -4.0156841E+00 Resid sbdelay (usec) 5.85980E-02 +/- 1.0E-04
 Phase delay (usec) -1.34955842530E+03 Apriori clockrate (us/s) 6.9052999E-07 Resid phdelay (usec) 5.17321E-06 +/- 8.7E-08
 Delay rate (us/s) 3.33033776461E-01 Apriori rate (us/s) 3.33034038734E-01 Resid rate (us/s) -2.62273E-07 +/- 8.3E-10
 Total phase (deg) 281.6 Apriori accel (us/s/s) 3.17859143135E-05 Resid phase (deg) 170.3 +/- 1.3

RMS Theor. Amplitude 2.319 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.9 3.2 Search (1024X32) 2.280 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 22.0 5.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 10.8 1.9 Inc. seg. avg. 2.794 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 7.6 3.3 Inc. frq. avg. 2.348 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

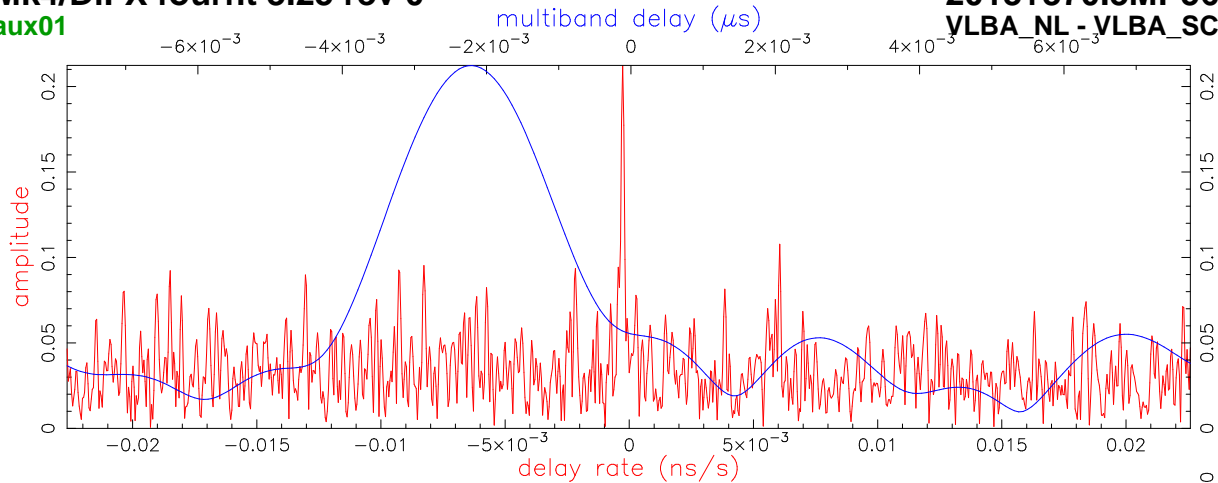
n: az 85.1 el 59.3 pa -68.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1184.179 2232.273 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/nc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/nc.Q.323.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

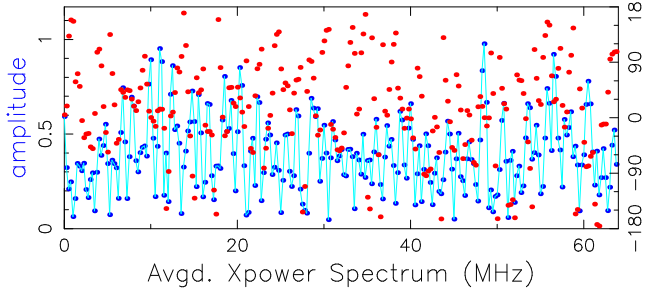
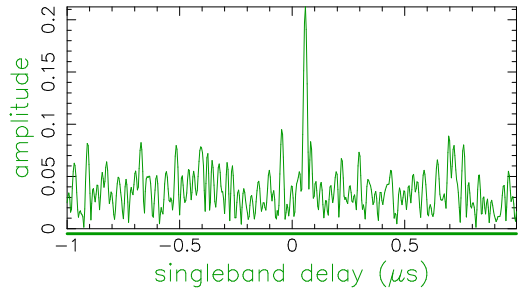
2013+370.3MP56K, No0500, nc

VLBA_NL - VLBA_SC, fgroup Q, pol RL



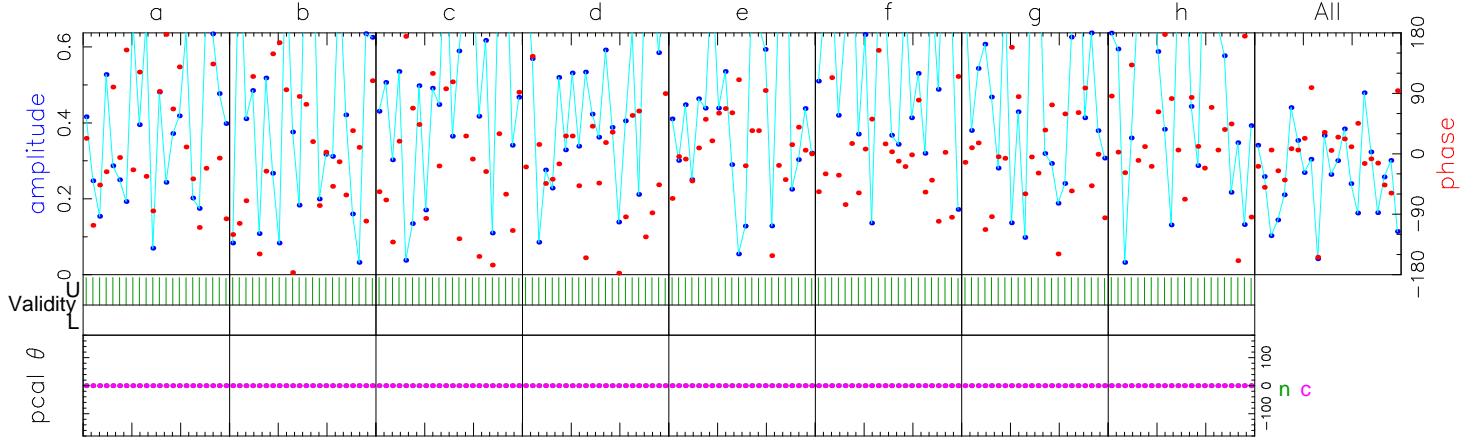
Fringe quality 9

SNR 7.8
 Int time 179.673
 Amp 0.212
 Phase 91.2
 PFD 1.2e-06
 Delays (us)
 SBD 0.058273
 MBD -0.002225
 Fringe rate (Hz)
 -0.011012
 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
 2025:042:151840
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -1.34949815579E+03 Apriori delay (usec) -1.34955843048E+03 Resid mbdelay (usec) -2.22531E-03 +/- 1.4E-04
 Sband delay (usec) -1.34950015748E+03 Apriori clock (usec) -4.0156841E+00 Resid sbdelay (usec) 5.82730E-02 +/- 1.1E-03
 Phase delay (usec) -1.34955843040E+03 Apriori clockrate (us/s) 6.9052999E-07 Resid phdelay (usec) 7.79476E-08 +/- 9.5E-07
 Delay rate (us/s) 3.33033783473E-01 Apriori rate (us/s) 3.33034038734E-01 Resid rate (us/s) -2.55261E-07 +/- 9.1E-09
 Total phase (deg) 202.5 Apriori accel (us/s/s) 3.17859143135E-05 Resid phase (deg) 91.2 +/- 14.7

ph/seg (deg) 51.4 34.5 Search (1024X32) 0.206 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.8 60.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.3 20.8 Inc. seg. avg. 0.224 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.0 36.3 Inc. frq. avg. 0.204 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

n: az 85.1 el 59.3 pa -68.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -1184.179 2232.273 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/nc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/nc.Q.340.3MP56K

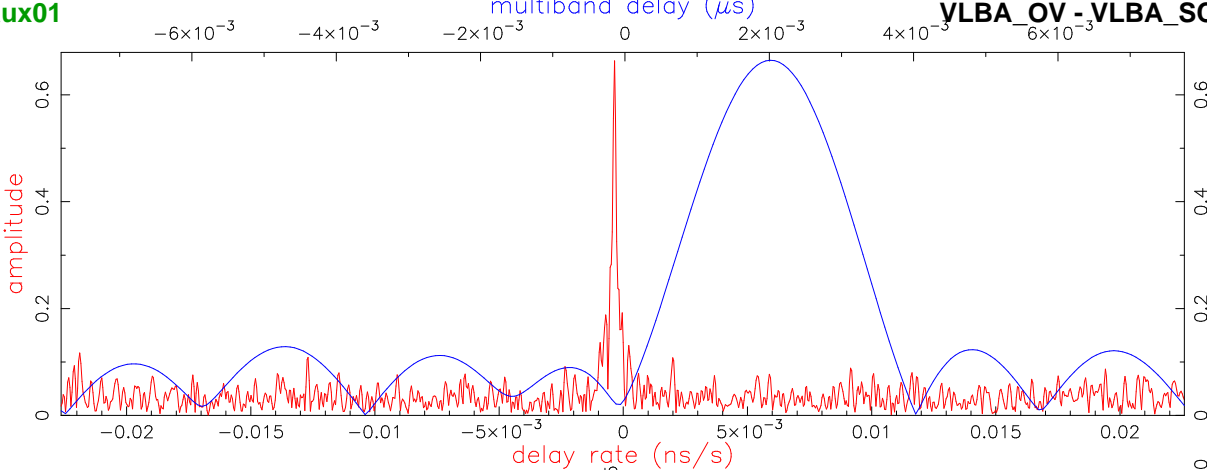
Mk4/DiFX fourfit 3.25 rev 0

aux01

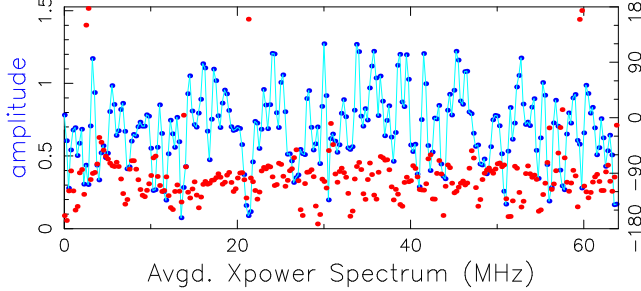
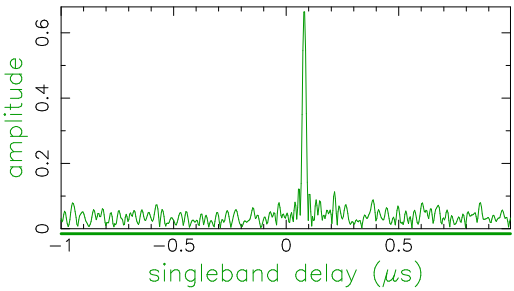
2013+370.3MP56K, No0500, oc

VLBA_OV - VLBA_SC, fgroup Q, pol LL

Fringe quality 8

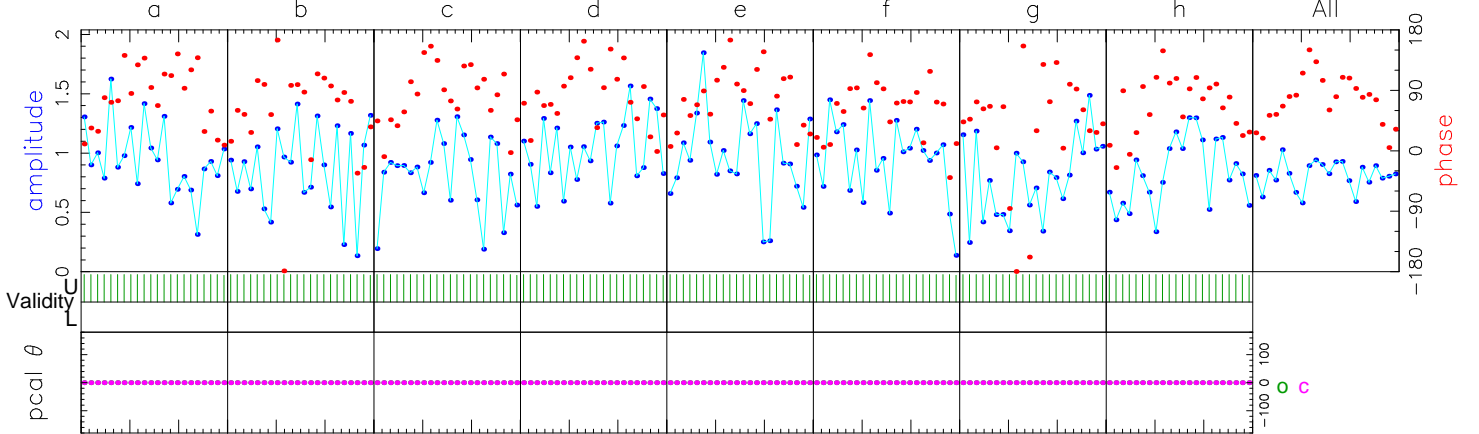


SNR 24.9
 Int time 179.980
 Amp 0.680
 Phase 8.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.080097
 MBD 0.002086
 Fringe rate (Hz)
 -0.015035
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151832
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-6.40912396195E+03	Apriori delay (usec)	-6.40920417293E+03	Resid mbdelay (usec)	2.08598E-03	+/-	4.4E-05
Sband delay (usec)	-6.40912407618E+03	Apriori clock (usec)	2.1324615E+01	Resid sbdelay (usec)	8.00968E-02	+/-	3.5E-04
Phase delay (usec)	-6.40920416804E+03	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	4.88450E-06	+/-	3.0E-07
Delay rate (us/s)	6.48030446493E-01	Apriori rate (us/s)	6.48030794999E-01	Resid rate (us/s)	-3.48506E-07	+/-	2.8E-09
Total phase (deg)		Apriori accel (us/s/s)	5.46568380048E-05	Resid phase (deg)	8.4	+/-	4.6

ph/seg (deg)	36.4	Theor.	10.8	Amplitude	0.680 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	25.9	Search (1024X32)	0.658	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	6.0	Inc. seg. avg.	0.800	Inc. frq. avg.	0.662	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	13.4	Inc. frq. avg.	0.662			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	

o: az 68.4 el 38.3 pa -68.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2310.589 2708.085 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/oc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/oc.Q.304.3MP56K

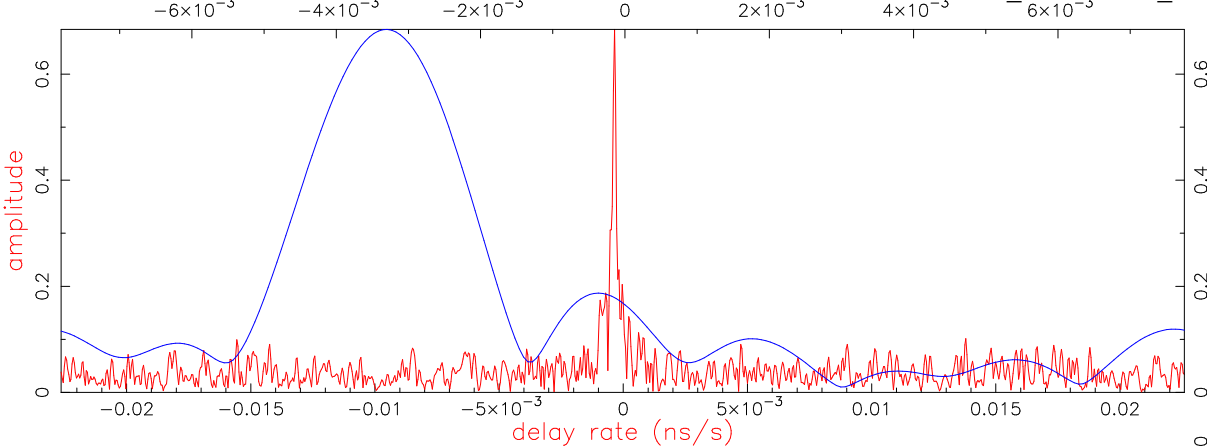
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, oc

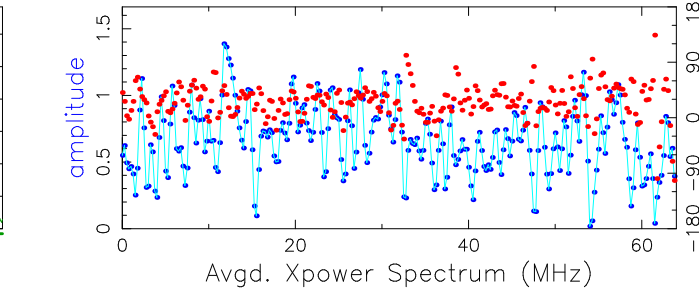
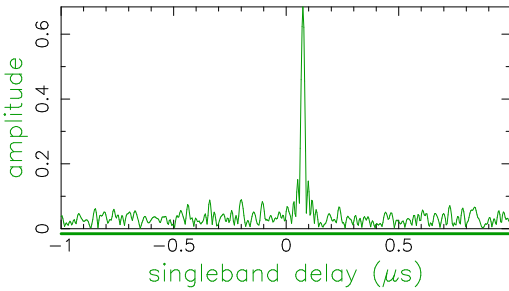
VLBA_OV - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)



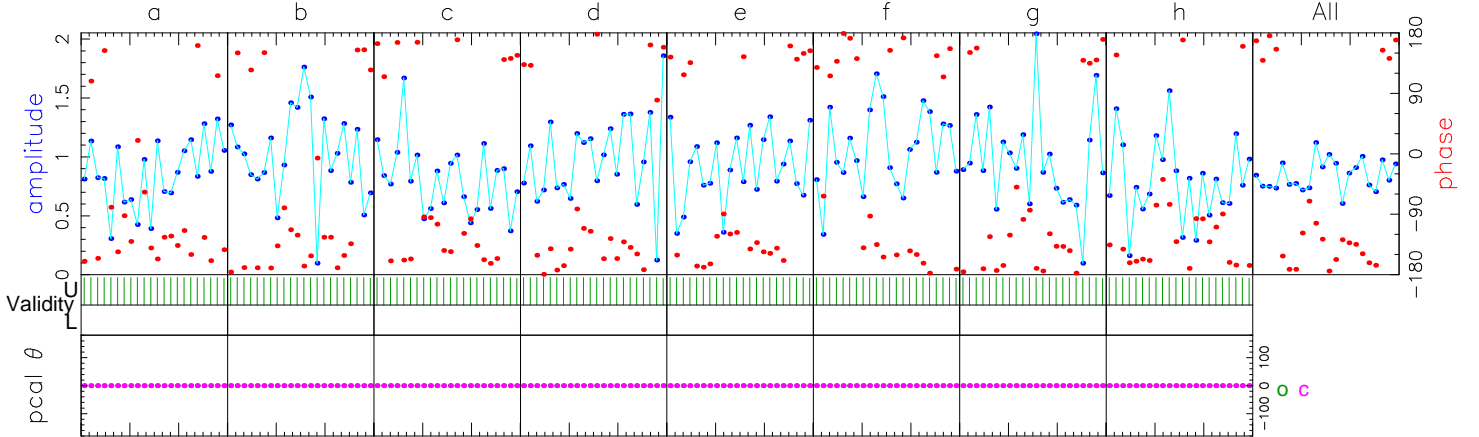
Fringe quality 8

SNR 25.1
 Int time 179.980
 Amp 0.684
 Phase 131.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.074184
 MBD -0.003308
 Fringe rate (Hz)
 -0.015216
 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
 2025:042:151834
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) -6.40912935639E+03 Apriori delay (usec) -6.40920417293E+03 Resid mbdelay (usec) -3.30846E-03 +/- 4.3E-05
 Sband delay (usec) -6.40912998893E+03 Apriori clock (usec) 2.1324615E+01 Resid sbdelay (usec) 7.41840E-02 +/- 3.4E-04
 Phase delay (usec) -6.40920418331E+03 Apriori clockrate (us/s) 8.7454208E-07 Resid phdelay (usec) -1.03802E-05 +/- 2.9E-07
 Delay rate (us/s) 6.48030442297E-01 Apriori rate (us/s) 6.48030794999E-01 Resid rate (us/s) -3.52702E-07 +/- 2.8E-09
 Total phase (deg) 124.0 Apriori accel (us/s/s) 5.46568380048E-05 Resid phase (deg) 131.3 +/- 4.6

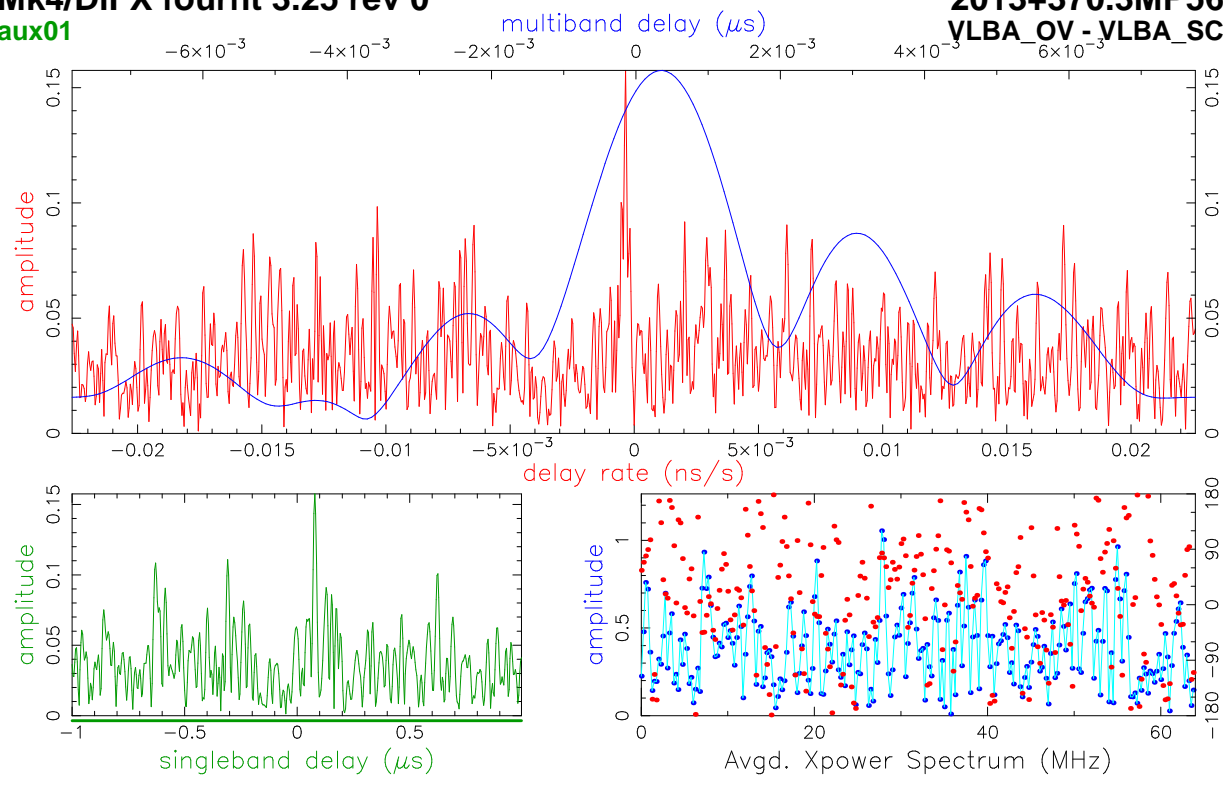
ph/seg (deg) 37.5 10.7 Search (1024X32) 0.676 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.8 18.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.0 6.5 Inc. seg. avg. 0.831 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.5 11.3 Inc. frq. avg. 0.694 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.023 0.023
 o: az 68.4 el 38.3 pa -68.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2310.589 2708.085 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/oc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/oc.Q.310.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

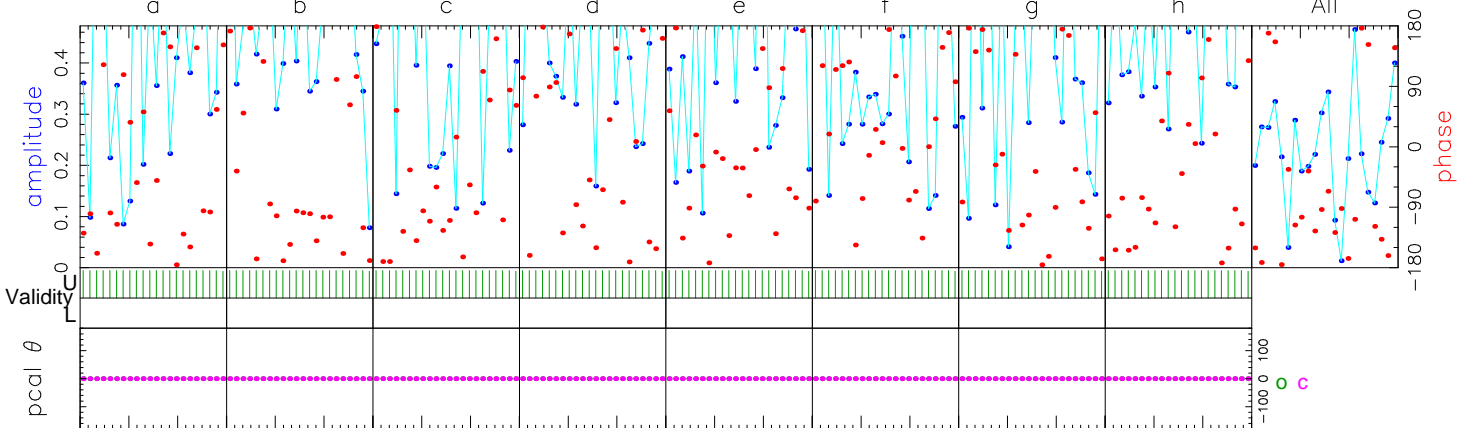
2013+370.3MP56K, No0500, oc

VLBA_OV - VLBA_SC, fgroup Q, pol LR



Fringe quality 0
 SNR 5.8
 Int time 179.980
 Amp 0.158
 Phase 147.8
 PFD 6.1e-01
 Delays (us)
 SBD 0.078044
 MBD 0.000347
 Fringe rate (Hz)
 -0.015515
 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
 2025:042:151841
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
c	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-6.40912570070E+03	Apriori delay (usec)	-6.40920417293E+03	Resid mbdelay (usec)	3.47226E-04	+/-	1.9E-04
Sband delay (usec)	-6.40912612843E+03	Apriori clock (usec)	2.1324615E+01	Resid sbdelay (usec)	7.80445E-02	+/-	1.5E-03
Phase delay (usec)	-6.40920418224E+03	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	-9.31420E-06	+/-	1.3E-06
Delay rate (us/s)	6.48030435367E-01	Apriori rate (us/s)	6.48030794999E-01	Resid rate (us/s)	-3.59632E-07	+/-	1.2E-08
Total phase (deg)	140.6	Apriori accel (us/s/s)	5.46568380048E-05	Resid phase (deg)	147.8	+/-	19.8

ph/seg (deg)	51.8	Theor.	46.5	Amplitude	0.158 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.8	Search (1024X32)	0.155	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.2	Inc. seg. avg.	0.174	Inc. frq. avg.	0.151	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.5	Inc. frq. avg.	0.151			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

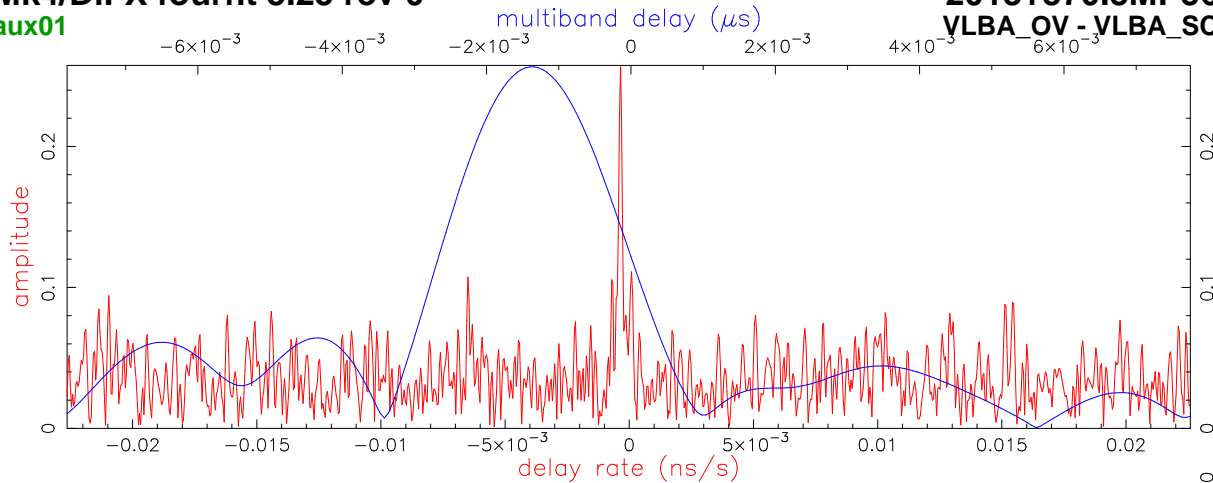
o: az 68.4 el 38.3 pa -68.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2310.589 2708.085 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/oc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/oc.Q.344.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

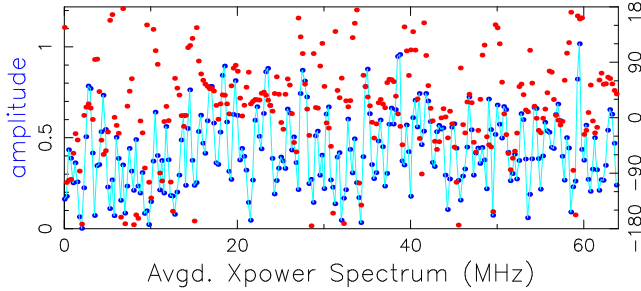
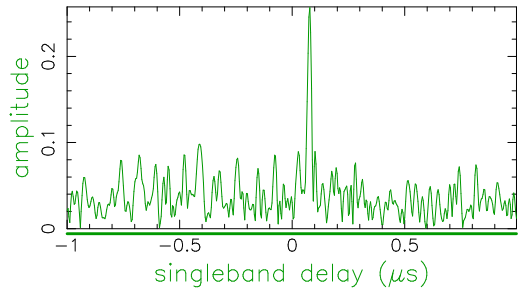
2013+370.3MP56K, No0500, oc

VLBA_OV - VLBA_SC, fgroup Q, pol RL



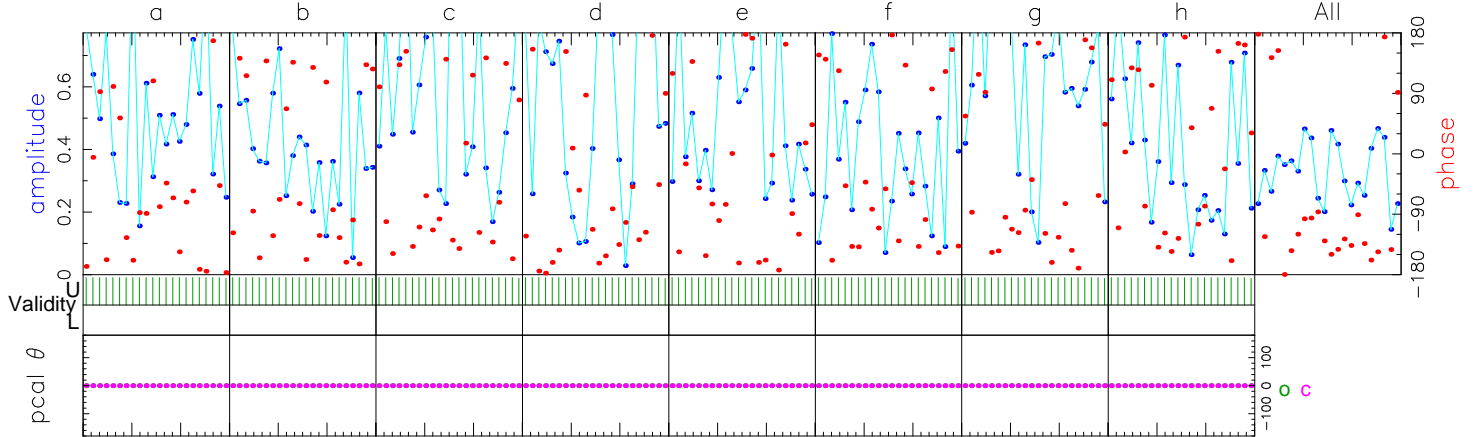
Fringe quality 9

SNR 9.4
 Int time 179.980
 Amp 0.258
 Phase 148.8
 PFD 7.0e-13
 Delays (us)
 SBD 0.077295
 MBD -0.001363
 Fringe rate (Hz)
 -0.014930
 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
 2025:042:151848
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-6.40912741070E+03	Apriori delay (usec)	-6.40920417293E+03	Resid mbdelay (usec)	-1.36277E-03	+/-	1.1E-04
Sband delay (usec)	-6.40912687793E+03	Apriori clock (usec)	2.1324615E+01	Resid sbdelay (usec)	7.72950E-02	+/-	9.1E-04
Phase delay (usec)	-6.40920418218E+03	Apriori clockrate (us/s)	8.7454208E-07	Resid phdelay (usec)	-9.25409E-06	+/-	7.8E-07
Delay rate (us/s)	6.48030448907E-01	Apriori rate (us/s)	6.48030794999E-01	Resid rate (us/s)	-3.46092E-07	+/-	7.5E-09
Total phase (deg)	141.5	Apriori accel (us/s/s)	5.46568380048E-05	Resid phase (deg)	148.8	+/-	12.1

ph/seg (deg)	43.5	Theor.	28.4	Amplitude	0.258 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	46.0	Search (1024X32)	0.253	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	11.5	Inc. seg. avg.	0.293	Inc. frq. avg.	0.249	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.5	Inc. frq. avg.	0.249			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

o: az 68.4 el 38.3 pa -68.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2310.589 2708.085 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/oc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/oc.Q.358.3MP56K

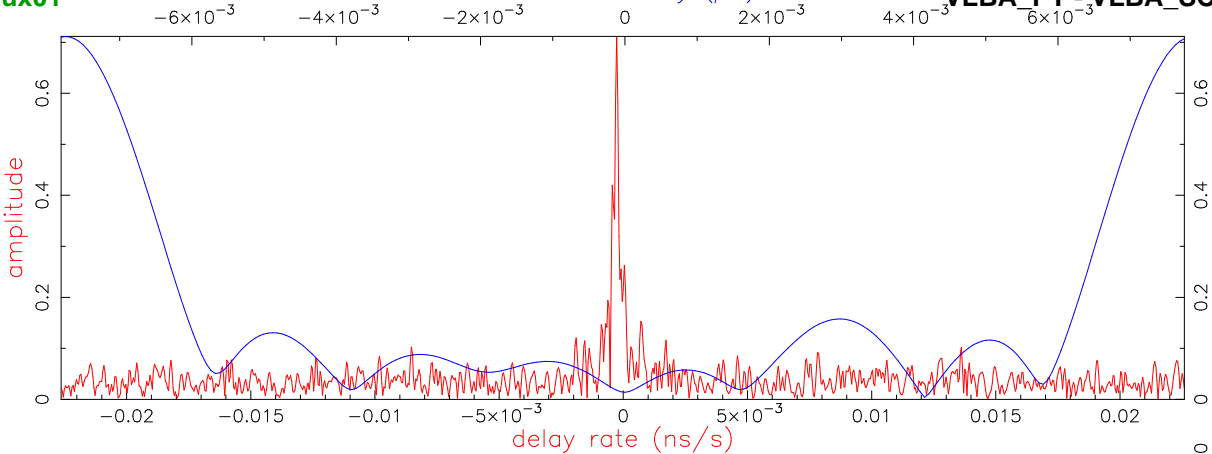
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, pc

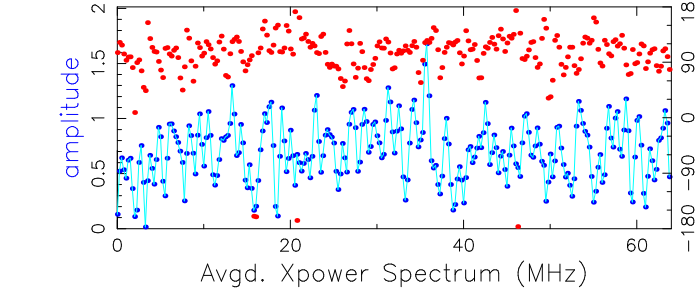
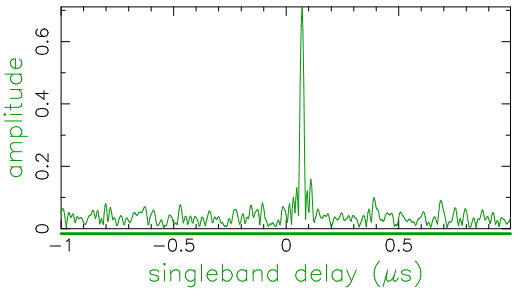
VLBA_PT - VLBA_SC, fgroup Q, pol LL

multiband delay (μ s)



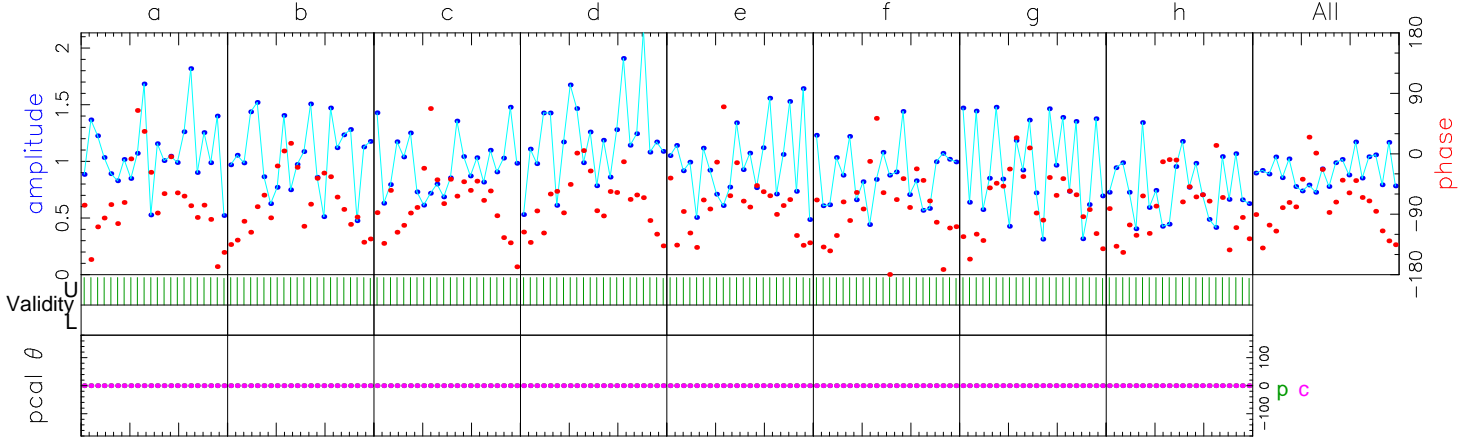
Fringe quality 8

SNR 26.1
 Int time 179.971
 Amp 0.712
 Phase 216.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.070075
 MBD -0.007755
 Fringe rate (Hz)
 -0.012042
 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
 2025:042:151838
 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
	-76.7	-78.1	-79.9	-67.9	-77.3	-84.7	-66.0	-81.9	Phase	-76.1
	0.7	0.8	0.7	0.9	0.8	0.6	0.7	0.6	Ampl.	0.7
	274.5	274.8	274.8	275.4	275.2	275.3	274.6	274.8	Sbd box	274.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -4.58508810094E+03 Apriori delay (usec) -4.58515847103E+03 Resid mbdelay (usec) -7.75491E-03 +/- 4.2E-05
 Sband delay (usec) -4.58508839578E+03 Apriori clock (usec) 1.9721527E+00 Resid sbdelay (usec) 7.00753E-02 +/- 3.3E-04
 Phase delay (usec) -4.58515847593E+03 Apriori clockrate (us/s) 7.7196702E-07 Resid phdelay (usec) -4.89829E-06 +/- 2.8E-07
 Delay rate (us/s) 5.94073253525E-01 Apriori rate (us/s) 5.94073532669E-01 Resid rate (us/s) -2.79143E-07 +/- 2.7E-09
 Total phase (deg) 57.9 Apriori accel (us/s/s) 4.20287430162E-05 Resid phase (deg) 216.4 +/- 4.4

RMS Theor. Amplitude 0.712 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 41.7 10.3 Search (1024X32) 0.694 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 33.9 18.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 7.0 6.2 Inc. seg. avg. 0.901 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 15.0 10.8 Inc. frq. avg. 0.711 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 p: az 69.2 el 44.9 pa -76.1 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2121.539 2182.981 simultaneous interpolator

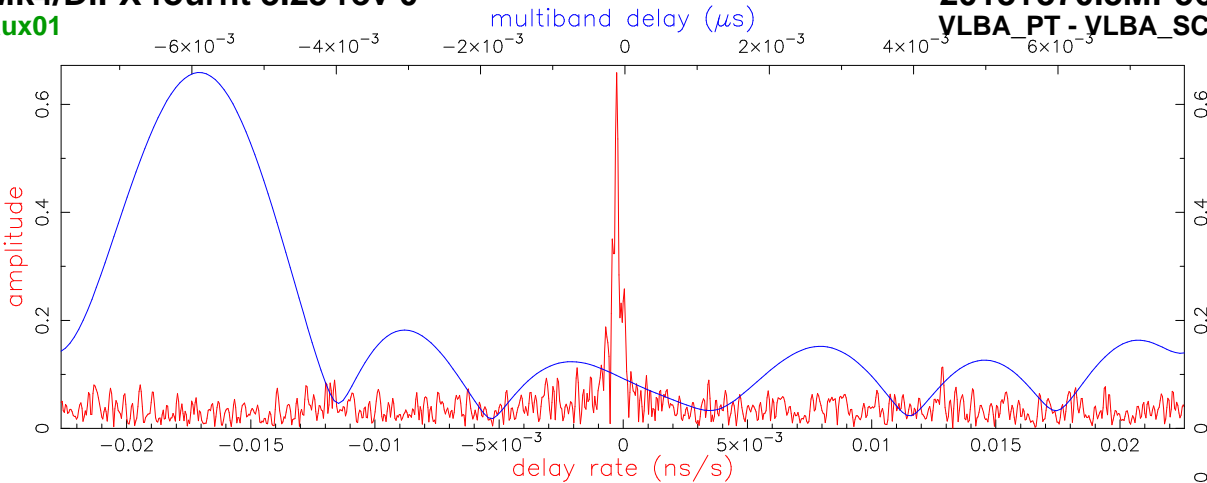
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/pc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/pc.Q.336.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

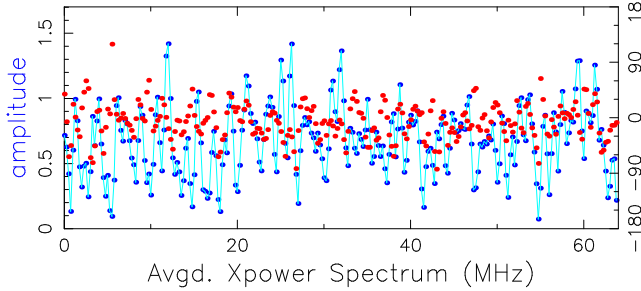
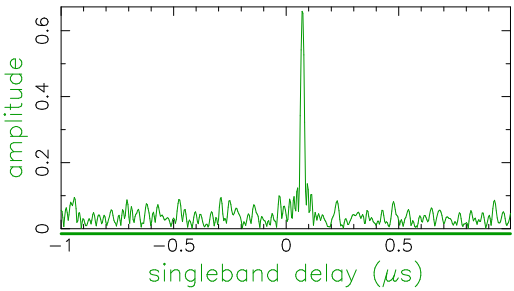
2013+370.3MP56K, No0500, pc

VLBA_PT - VLBA_SC, fgroup Q, pol RR



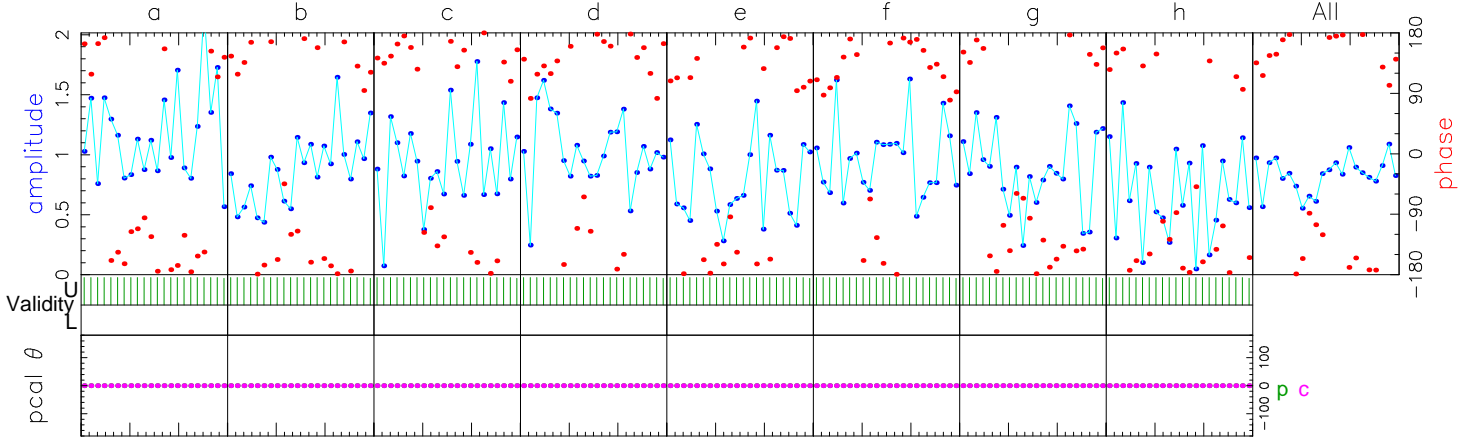
Fringe quality 8

SNR 24.7
 Int time 179.971
 Amp 0.672
 Phase 104.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.072097
 MBD -0.005856
 Fringe rate (Hz)
 -0.012020
 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
 2025:042:151843
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-4.58508620184E+03	Apriori delay (usec)	-4.58515847103E+03	Resid mbdelay (usec)	-5.85581E-03	+/-	4.4E-05
Sband delay (usec)	-4.58508637403E+03	Apriori clock (usec)	1.9721527E+00	Resid sbdelay (usec)	7.20970E-02	+/-	3.5E-04
Phase delay (usec)	-4.58515845995E+03	Apriori clockrate (us/s)	7.7196702E-07	Resid phdelay (usec)	1.10839E-05	+/-	3.0E-07
Delay rate (us/s)	5.94073254052E-01	Apriori rate (us/s)	5.94073532669E-01	Resid rate (us/s)	-2.78617E-07	+/-	2.9E-09
Total phase (deg)	306.1	Apriori accel (us/s/s)	4.20287430162E-05	Resid phase (deg)	104.6	+/-	4.6

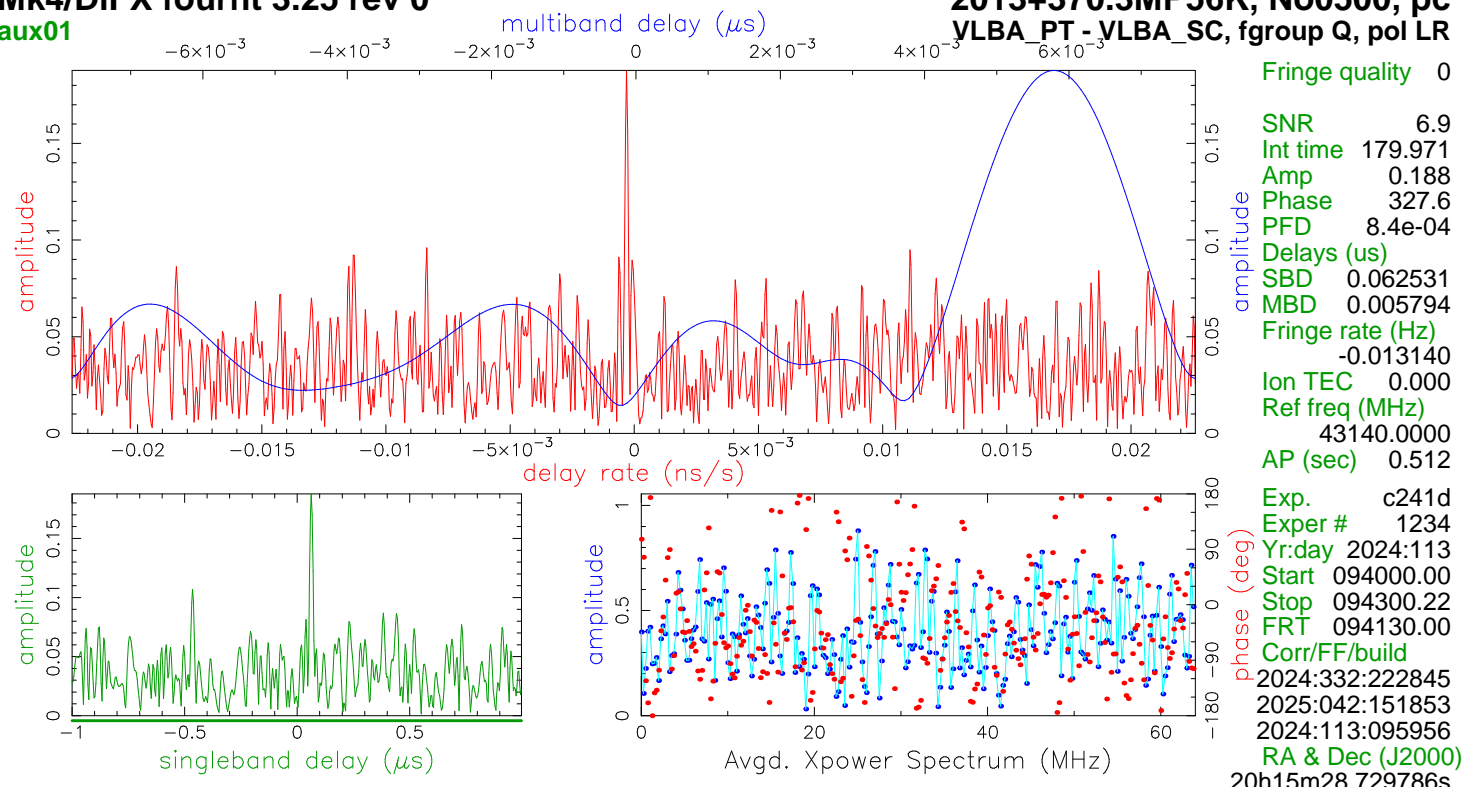
ph/seg (deg) 41.5 10.9 Search (1024X32) 0.645 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.0 19.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.7 6.6 Inc. seg. avg. 0.820 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.3 11.5 Inc. frq. avg. 0.676 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 p: az 69.2 el 44.9 pa -76.1 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2121.539 2182.981 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/pc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/pc.Q.352.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, pc

VLBA_PT - VLBA_SC, fgroup Q, pol LR

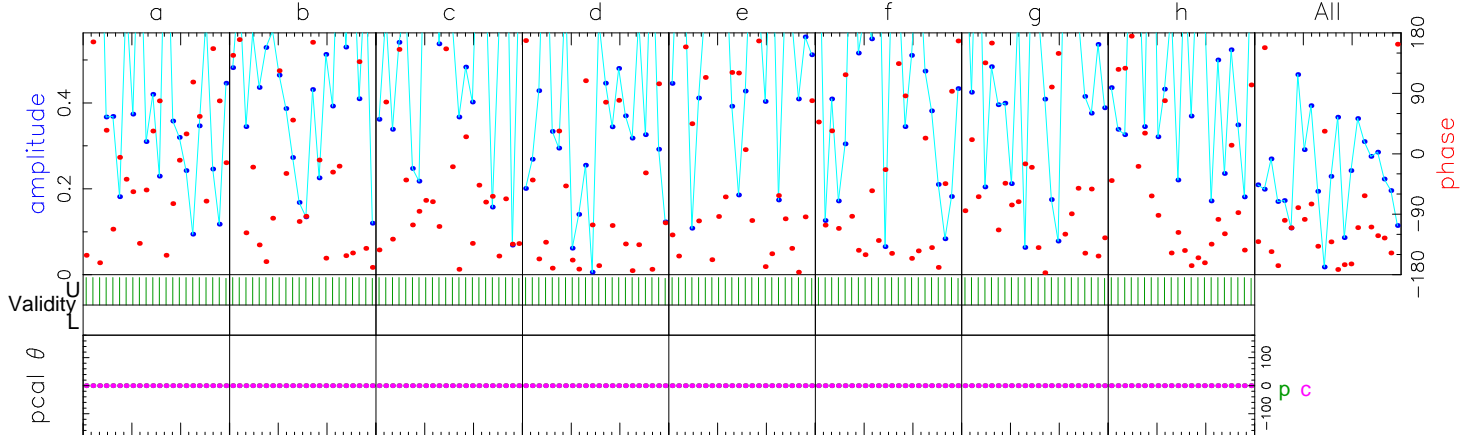


Fringe quality 0

SNR 6.9
 Int time 179.971
 Amp 0.188
 Phase 327.6
 PFD 8.4e-04
 Delays (us)
 SBD 0.062531
 MBD 0.005794
 Fringe rate (Hz)
 -0.013140
 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
 2025:042:151853
 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
	-112.7	-139.4	-89.9	-152.4	-141.3	-147.7	-93.7	-128.5	Phase	-122.4
	0.1	0.2	0.3	0.2	0.3	0.2	0.3	0.2	Ampl.	0.2
	9.1	42.0	199.3	267.0	272.7	89.2	272.3	238.1	Sbd box	273.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -4.58509017702E+03 Apriori delay (usec) -4.58515847103E+03 Resid mbdelay (usec) 5.79401E-03 +/- 1.6E-04
 Sband delay (usec) -4.58509593978E+03 Apriori clock (usec) 1.9721527E+00 Resid sbdelay (usec) 6.25312E-02 +/- 1.3E-03
 Phase delay (usec) -4.58515847891E+03 Apriori clockrate (us/s) 7.7196702E-07 Resid phdelay (usec) -7.87876E-06 +/- 1.1E-06
 Delay rate (us/s) 5.94073228073E-01 Apriori rate (us/s) 5.94073532669E-01 Resid rate (us/s) -3.04596E-07 +/- 1.0E-08
 Total phase (deg) 169.1 Apriori accel (us/s/s) 4.20287430162E-05 Resid phase (deg) 327.6 +/- 16.6

ph/seg (deg) 50.0 39.0 Amplitude 0.188 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.2 68.1 Search (1024X32) 0.187 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.4 23.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.0 41.1 Inc. seg. avg. 0.192 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 p: az 69.2 el 44.9 pa -76.1 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2121.539 2182.981 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/pc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/pc.Q.366.3MP56K simultaneous interpolator

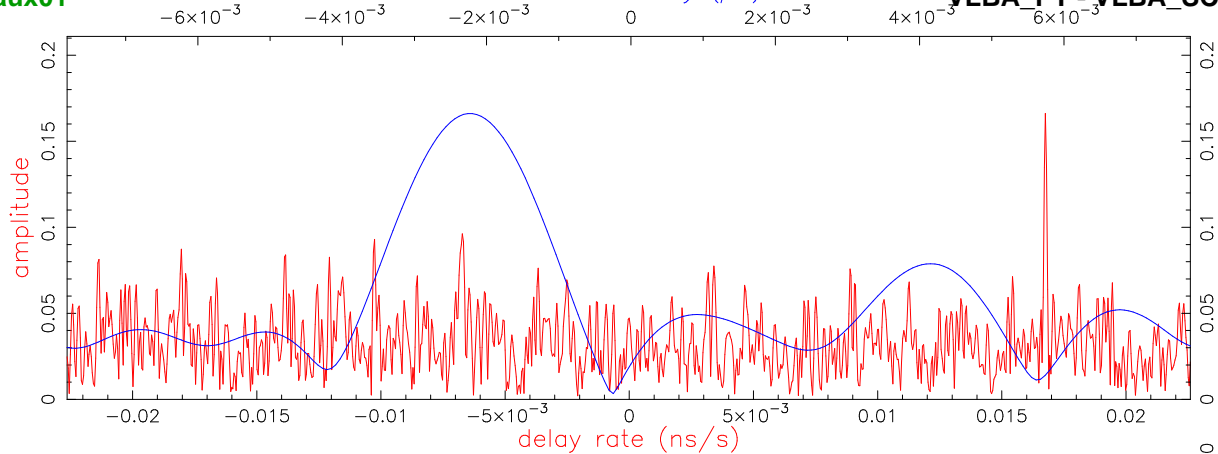
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, pc

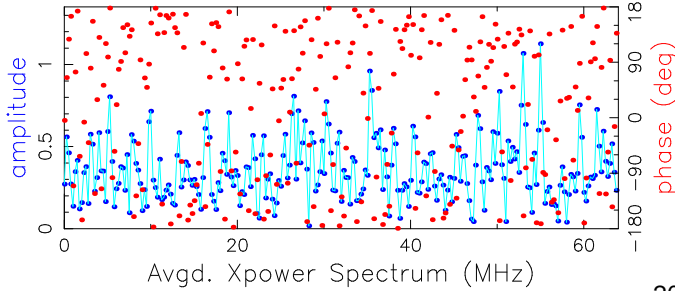
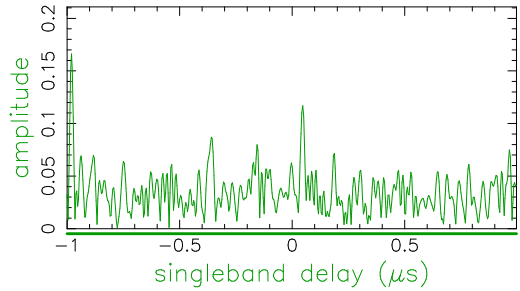
VLBA_PT - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)



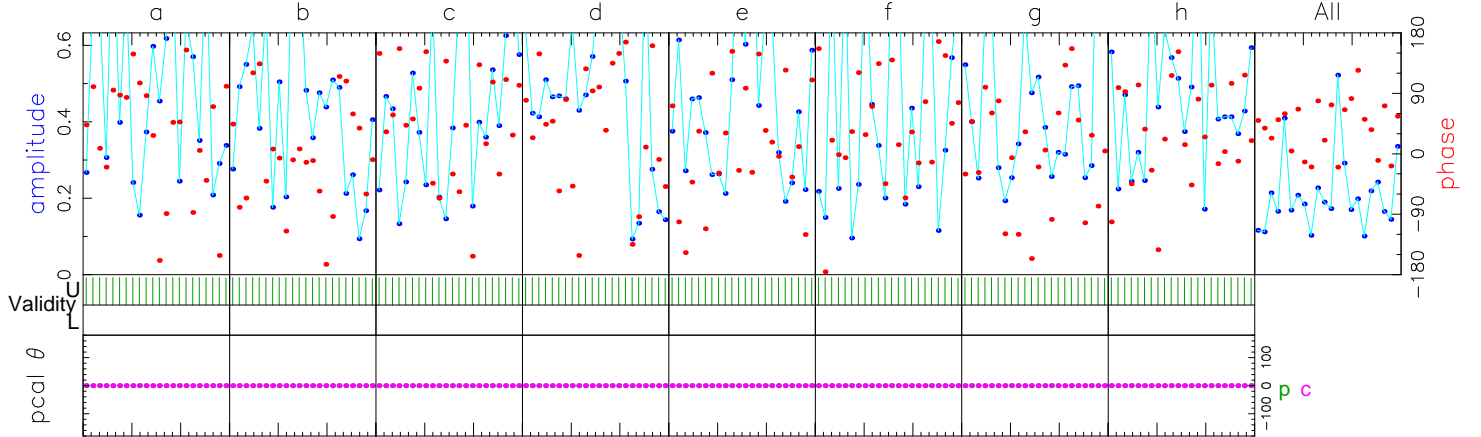
Fringe quality 0

SNR 6.1
 Int time 179.971
 Amp 0.211
 Phase -118.9
 PFD 1.3e-01
 Delays (us)
 SBD -0.980363
 MBD -0.002224
 Fringe rate (Hz)
 0.726242
 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
 2025:042:151855
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
p	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-4.58614507019E+03	Apriori delay (usec)	-4.58515847103E+03	Resid mbdelay (usec)	-2.22416E-03	+/-	1.8E-04
Sband delay (usec)	-4.58613883428E+03	Apriori clock (usec)	1.9721527E+00	Resid sbdelay (usec)	-9.80363E-01	+/-	1.4E-03
Phase delay (usec)	-4.58515846855E+03	Apriori clockrate (us/s)	7.7196702E-07	Resid phdelay (usec)	2.48226E-06	+/-	1.2E-06
Delay rate (us/s)	5.94090367197E-01	Apriori rate (us/s)	5.94073532669E-01	Resid rate (us/s)	1.68345E-05	+/-	1.2E-08
Total phase (deg)	-277.4	Apriori accel (us/s/s)	4.20287430162E-05	Resid phase (deg)	-118.9	+/-	18.8

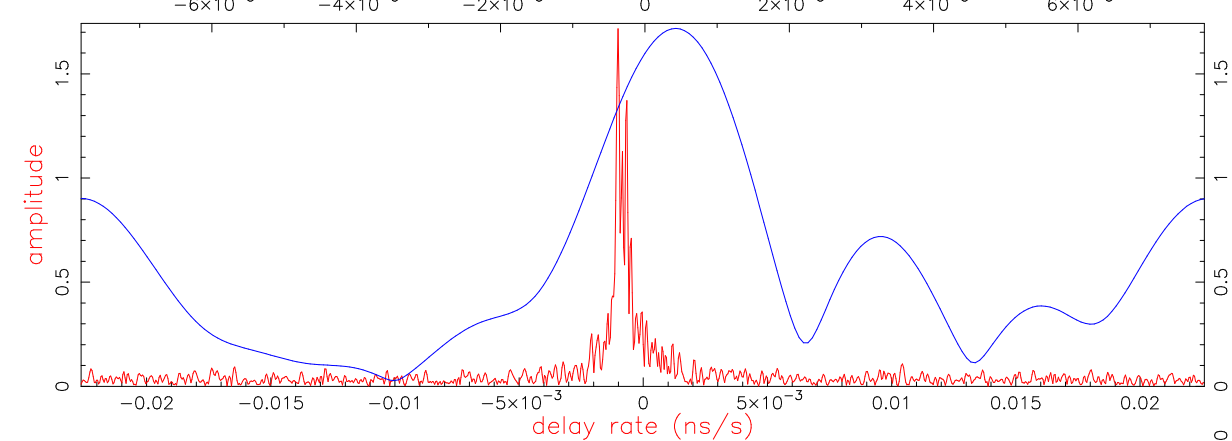
ph/seg (deg) 38.4 44.1 Search (1024X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.8 77.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.2 26.6 Inc. seg. avg. 0.208 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.4 46.4 Inc. frq. avg. 0.216 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 p: az 69.2 el 44.9 pa -76.1 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2121.539 2182.981 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/pc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/pc.Q.375.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

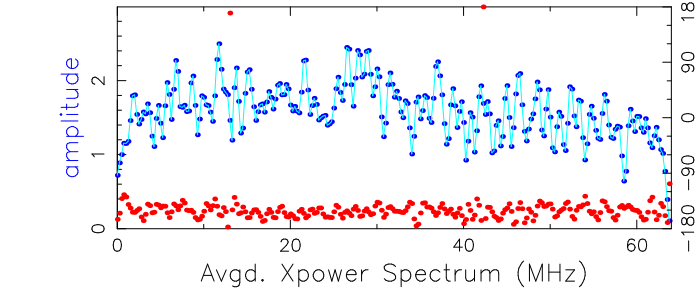
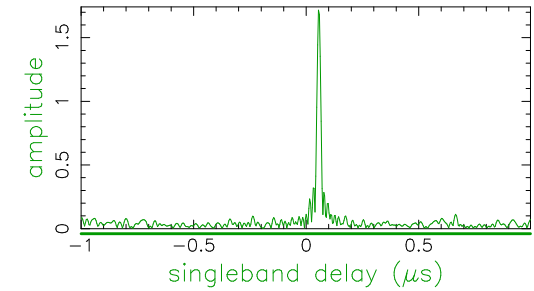
2013+370.3MP56K, No0500, Xc

ONSALA60 - VLBA_SC, fgroup Q, pol LL

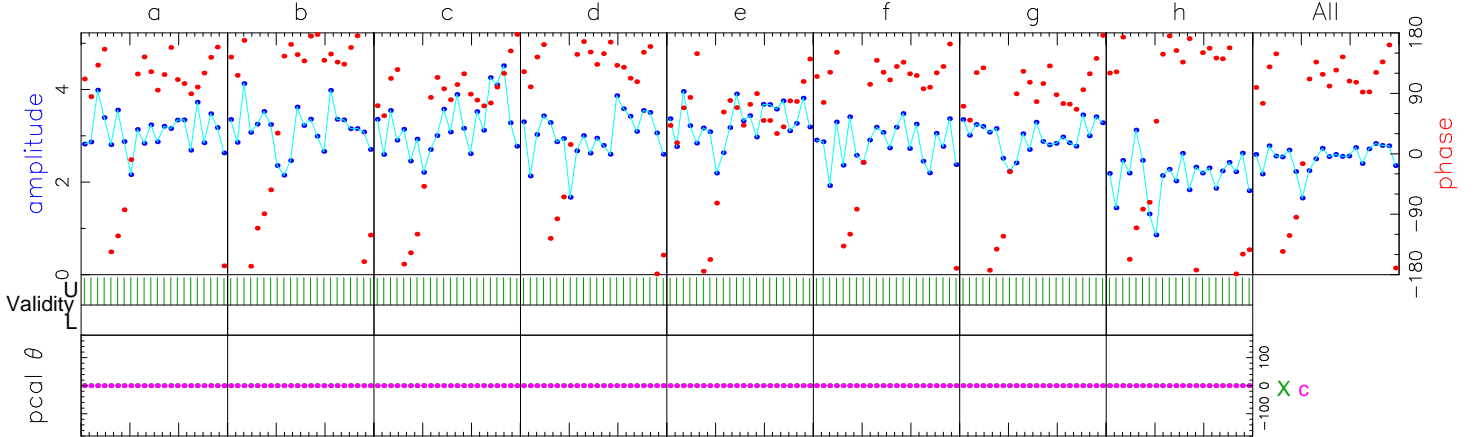


Fringe quality 3

SNR 63.8
 Int time 179.835
 Amp 1.742
 Phase 219.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.056220
 MBD 0.000480
 Fringe rate (Hz)
 -0.044121
 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
 2025:042:151829
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-4.76195459026E+03	Apriori delay (usec)	-4.76201756987E+03	Resid mbdelay (usec)	4.79614E-04	+/-	1.7E-05
Sband delay (usec)	-4.76196134987E+03	Apriori clock (usec)	1.0919189E+02	Resid sbdelay (usec)	5.62200E-02	+/-	1.3E-04
Phase delay (usec)	-4.76201756154E+03	Apriori clockrate (us/s)	1.6098931E-02	Resid phdelay (usec)	8.33459E-06	+/-	1.2E-07
Delay rate (us/s)	-8.52087721195E-01	Apriori rate (us/s)	-8.52086698456E-01	Resid rate (us/s)	-1.02274E-06	+/-	1.1E-09
Total phase (deg)	232.3	Apriori accel (us/s/s)	6.25903928982E-05	Resid phase (deg)	219.4	+/-	1.8

ph/seg (deg)	57.6	RMS	4.2	Theor.	1.742 +/- 0.027	Amplitude	1.694	Search (1024X32)	1.694	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	47.8		7.3		0.000	Interp.	2.525	Inc. seg. avg.	2.525	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	36.6		2.5		2.006	Inc. frq. avg.	2.006	Inc. frq. avg.	2.006	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	19.4		4.4							Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 272.4 el 44.4 pa 42.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3099.482 3749.617 simultaneous interpolator

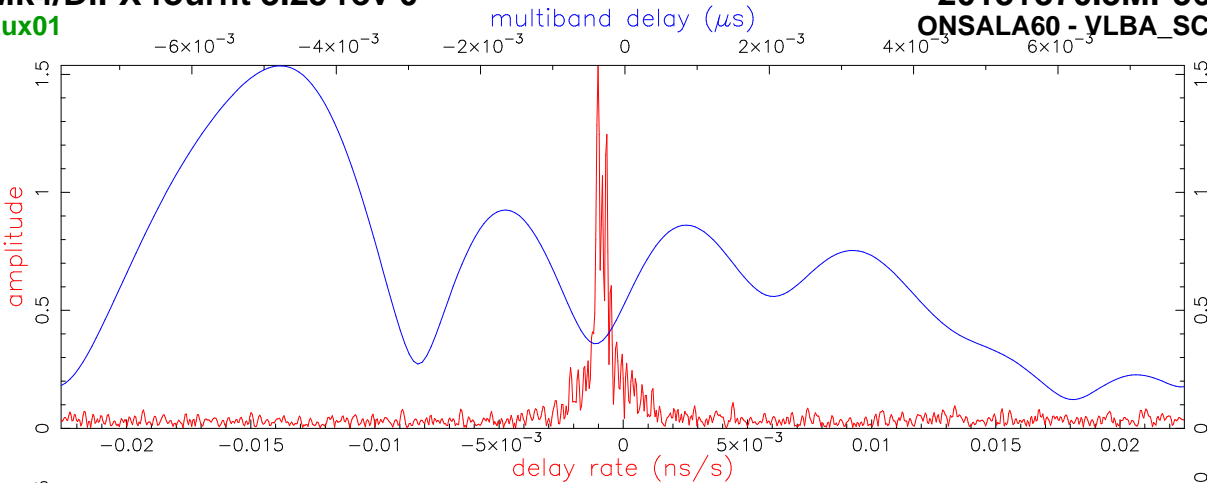
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Xc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Xc.Q.288.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

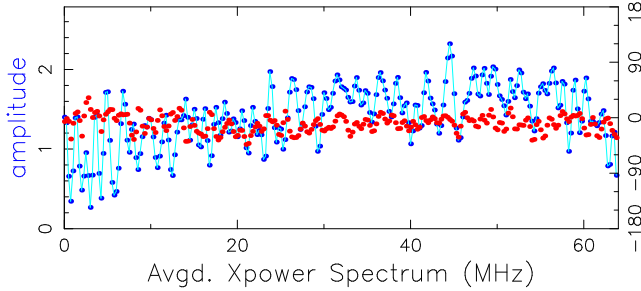
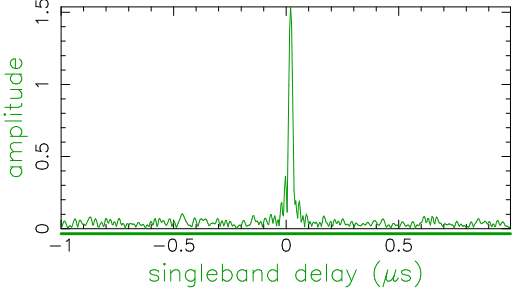
2013+370.3MP56K, No0500, Xc

ONSALA60 - VLBA_SC, fgroup Q, pol RR



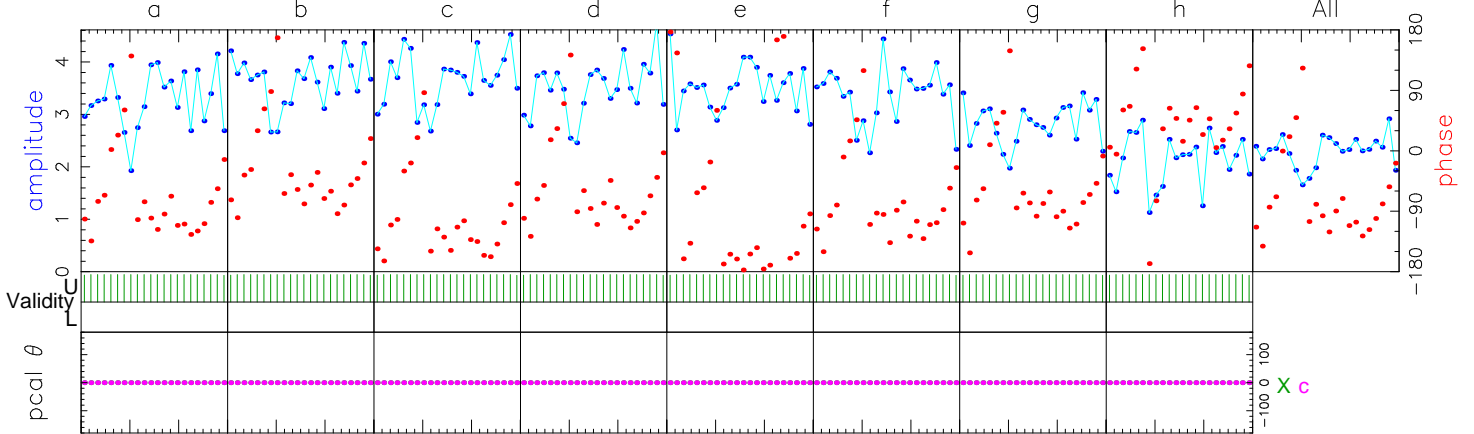
Fringe quality 1

SNR 56.4
 Int time 179.835
 Amp 1.538
 Phase 318.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.019799
 MBD -0.004773
 Fringe rate (Hz)
 -0.044165
 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
 2025:042:151831
 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
	-85.4	-46.1	-114.5	-70.8	-154.4	-94.4	-74.1	53.3	Phase	-86.4
	2.2	2.5	2.4	2.3	2.4	2.3	1.9	1.5	Ampl.	2.2
	262.1	262.2	262.4	262.5	262.6	262.6	263.4	263.9	Sbd box	262.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-4.76199109332E+03	Apriori delay (usec)	-4.76201756987E+03	Resid mbdelay (usec)	-4.77345E-03	+/-	1.9E-05
Sband delay (usec)	-4.76199777112E+03	Apriori clock (usec)	1.0919189E+02	Resid sbdelay (usec)	1.97988E-02	+/-	1.5E-04
Phase delay (usec)	-4.76201757544E+03	Apriori clockrate (us/s)	1.6098931E-06	Resid phdelay (usec)	-5.56458E-06	+/-	1.3E-07
Delay rate (us/s)	-8.5208772225E-01	Apriori rate (us/s)	-8.52086698456E-01	Resid rate (us/s)	-1.02377E-06	+/-	1.3E-09
Total phase (deg)	331.4	Apriori accel (us/s/s)	6.25903928982E-05	Resid phase (deg)	318.6	+/-	2.0

ph/seg (deg)	58.7	Theor.	4.8	Amplitude	1.538 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	53.1		8.3	Search (1024X32)	1.502	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	67.1		2.9	Inc. seg. avg.	2.294	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	45.9		5.0	Inc. frq. avg.	2.168	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
X: az 272.4 el 44.4 pa 42.5		c: az 27.3 el 67.5 pa -147.2		u,v (fr/asec)	3099.482 3749.617			simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Xc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Xc.Q.300.3MP56K

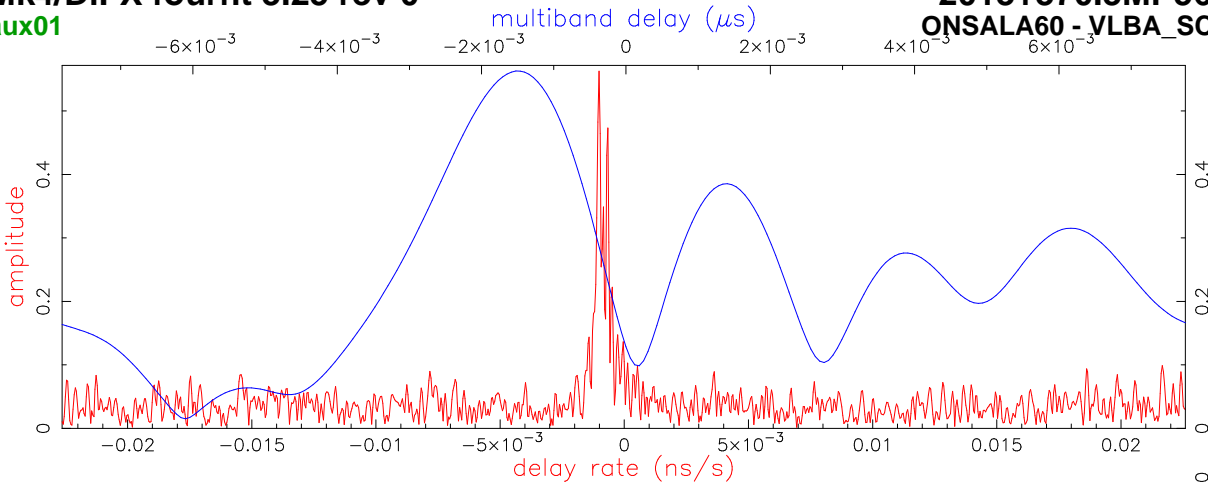
Mk4/DiFX fourfit 3.25 rev 0

aux01

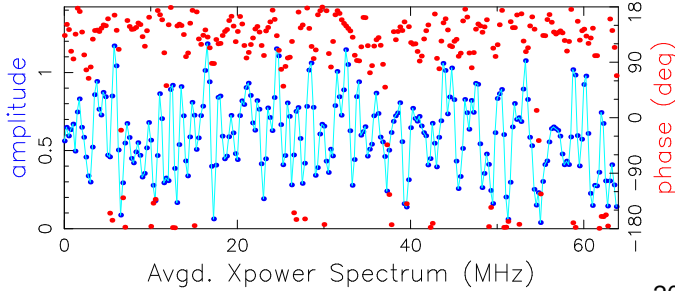
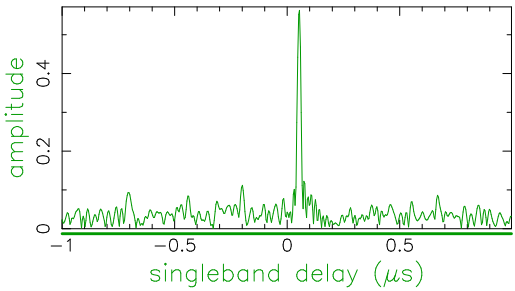
2013+370.3MP56K, No0500, Xc

ONSALA60 - VLBA_SC, fgroup Q, pol LR

Fringe quality 8

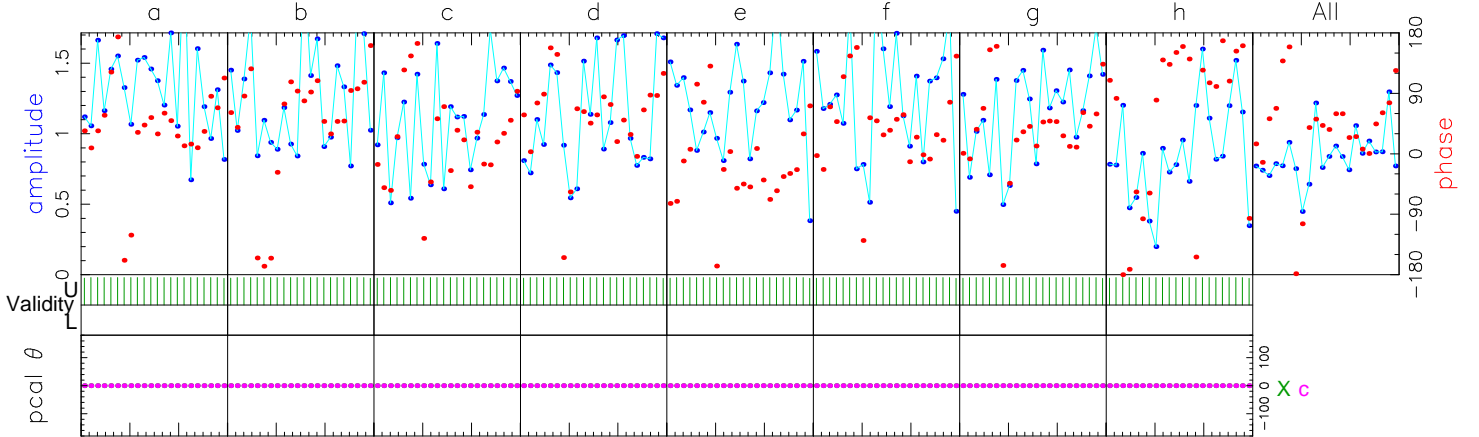


SNR 21.0
 Int time 179.835
 Amp 0.572
 Phase 299.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.053133
 MBD -0.001544
 Fringe rate (Hz)
 -0.044028
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151834
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-4.76197223845E+03	Apriori delay (usec)	-4.76201756987E+03	Resid mbdelay (usec)	-1.54357E-03	+/-	5.2E-05
Sband delay (usec)	-4.76196443687E+03	Apriori clock (usec)	1.0919189E+02	Resid sbdelay (usec)	5.31330E-02	+/-	4.1E-04
Phase delay (usec)	-4.76201756653E+03	Apriori clockrate (us/s)	1.6098931E-06	Resid phdelay (usec)	3.33764E-06	+/-	3.5E-07
Delay rate (us/s)	-8.52087719031E-01	Apriori rate (us/s)	-8.52086698456E-01	Resid rate (us/s)	-1.02057E-06	+/-	3.4E-09
Total phase (deg)	312.2	Apriori accel (us/s/s)	6.25903928982E-05	Resid phase (deg)	299.3	+/-	5.5

ph/seg (deg)	59.7	Theor.	12.8	Amplitude	0.572 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	56.8	Search (1024X32)	0.555	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	55.5	Inc. seg. avg.	0.823	Inc. frq. avg.	0.757	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.6	Inc. frq. avg.	0.757			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

X: az 272.4 el 44.4 pa 42.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3099.482 3749.617 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Xc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Xc.Q.315.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

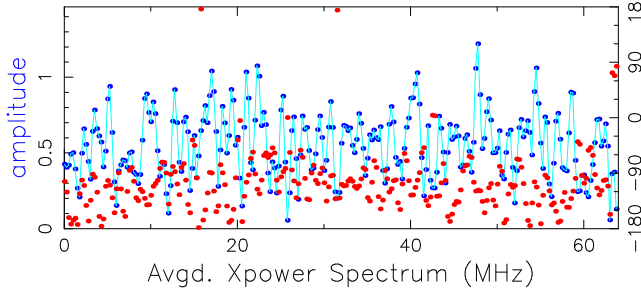
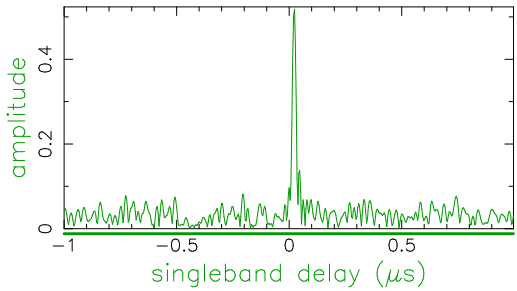
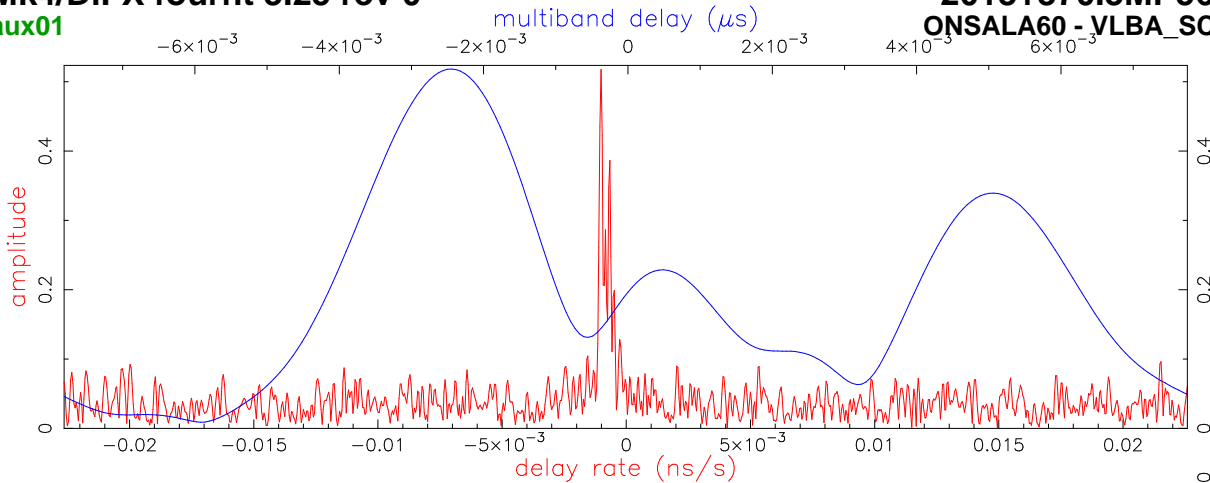
aux01

2013+370.3MP56K, No0500, Xc

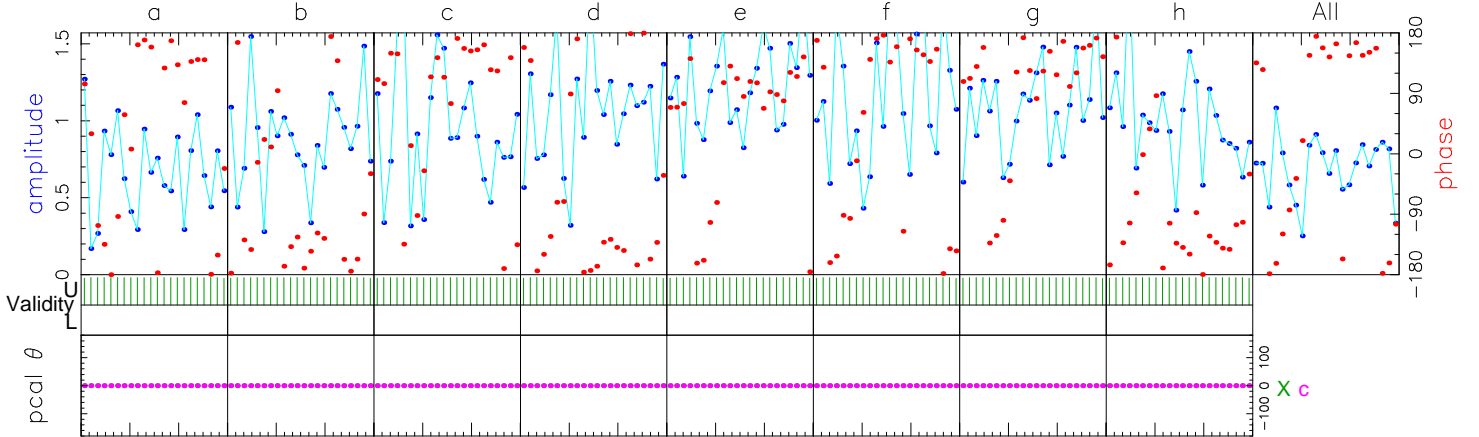
ONSALA60 - VLBA_SC, fgroup Q, pol RL

Fringe quality 8

SNR 19.2
 Int time 179.835
 Amp 0.524
 Phase 216.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.022149
 MBD -0.002511
 Fringe rate (Hz)
 -0.044147
 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
 2025:042:151837
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-4.76198883073E+03	Apriori delay (usec)	-4.76201756987E+03	Resid mbdelay (usec)	-2.51085E-03	+/-	5.7E-05
Sband delay (usec)	-4.76199542087E+03	Apriori clock (usec)	1.0919189E+02	Resid sbdelay (usec)	2.21490E-02	+/-	4.5E-04
Phase delay (usec)	-4.76201755880E+03	Apriori clockrate (us/s)	1.6098931E-06	Resid phdelay (usec)	1.10710E-05	+/-	3.8E-07
Delay rate (us/s)	-8.52087721801E-01	Apriori rate (us/s)	-8.52086698456E-01	Resid rate (us/s)	-1.02334E-06	+/-	3.7E-09
Total phase (deg)	229.8	Apriori accel (us/s/s)	6.25903928982E-05	Resid phase (deg)	216.9	+/-	6.0

ph/seg (deg)	59.7	RMS	14.0	Theor.	14.0	Amplitude	0.524 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	49.6	Search (1024X32)	0.510	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	43.4	Inc. seg. avg.	0.676	Inc. frq. avg.	0.644	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	37.9	Inc. frq. avg.	0.644	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

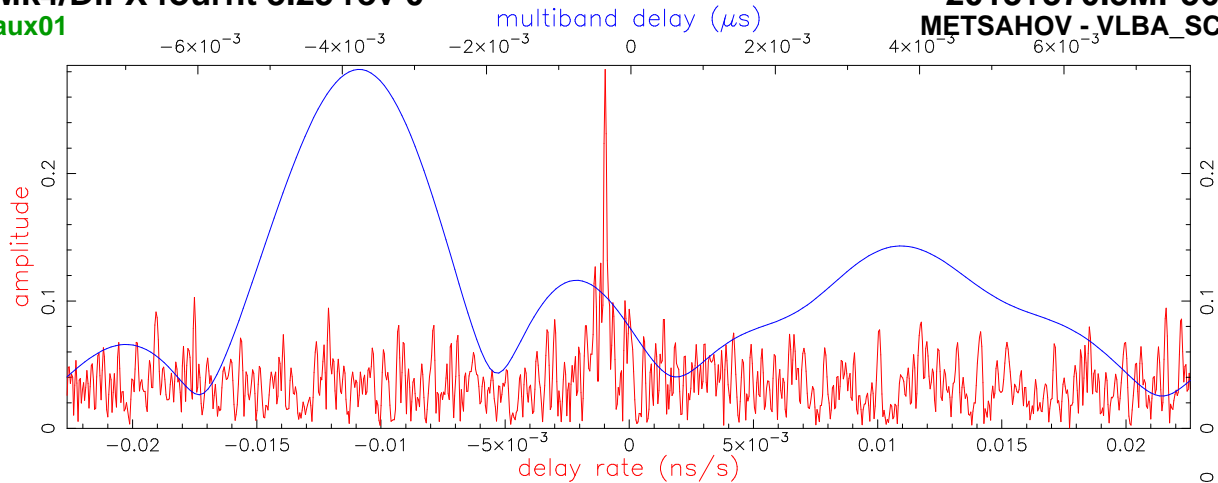
X: az 272.4 el 44.4 pa 42.5 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3099.482 3749.617 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Xc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Xc.Q.326.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Zc

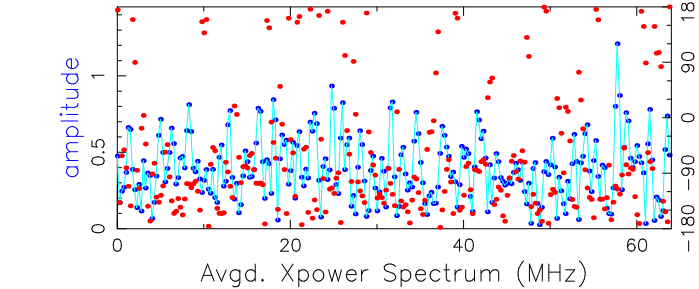
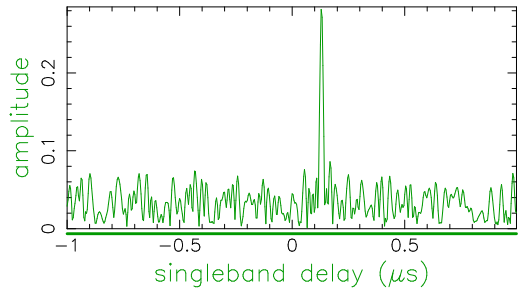
MEṬSAHOV - VLBA_SC, fgroup Q, pol LL



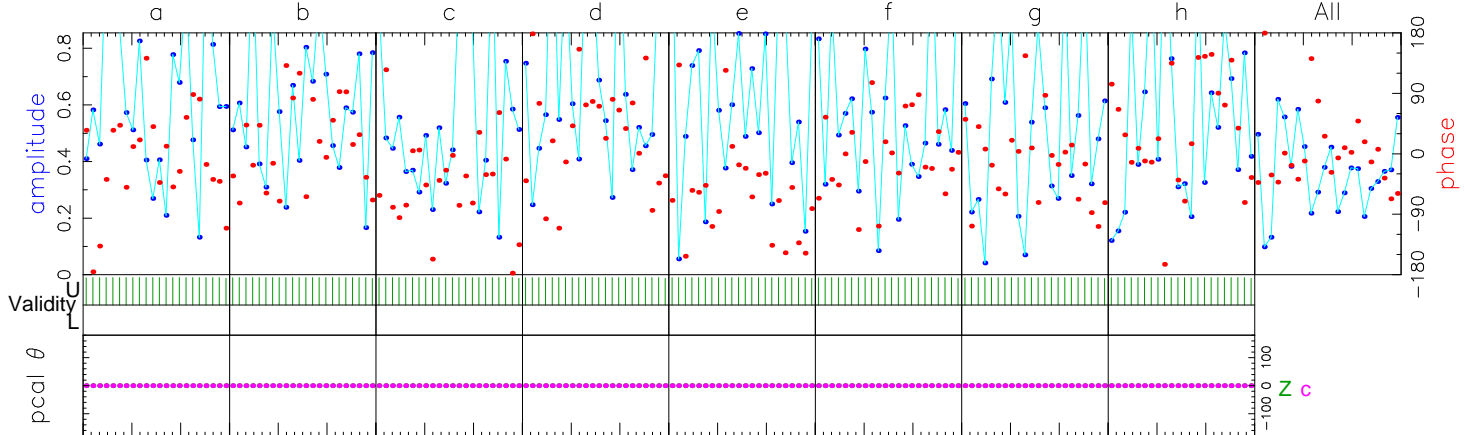
Fringe quality 9

SNR 10.4
 Int time 179.947
 Amp 0.285
 Phase 7.0
 PFD 3.4e-17
 Delays (us)
 SBD 0.130159
 MBD -0.003740
 Fringe rate (Hz)
 -0.042585
 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
 2025:042:151823
 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



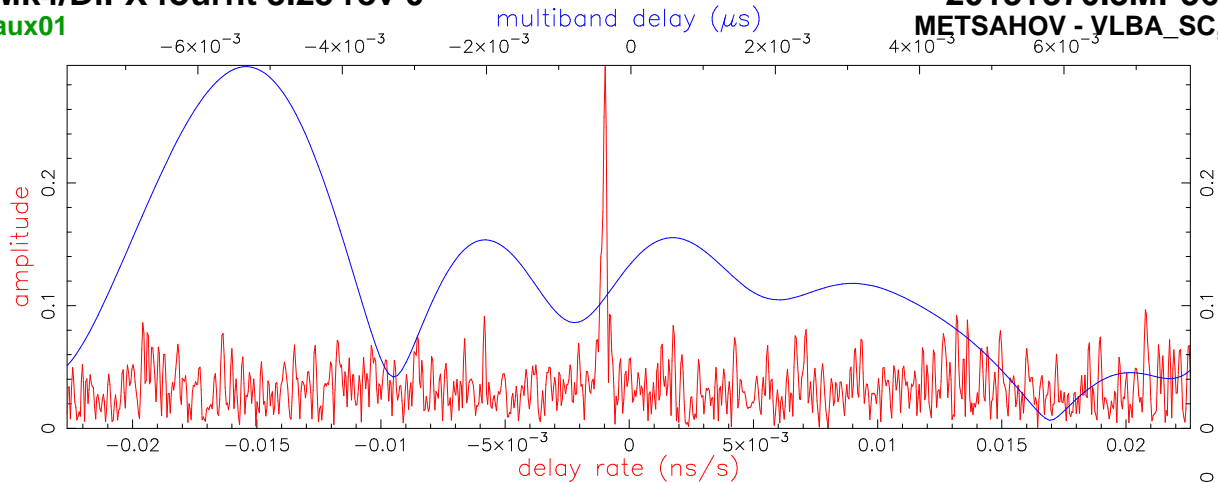
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All		
	-6.0	5.7	-51.1	27.1	-70.8	-4.6	-22.5	55.7	Phase	-15.5		
	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.1	Ampl.	0.3		
	290.8	290.2	291.3	291.0	290.4	291.4	291.5	293.5	Sbd box	290.3		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
Z	0	0	0	0	0	0	0	0	PC freqs			
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
c	1000	1000	1000	1000	1000	1000	1000	1000				
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids			
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks			
									Tracks			
Group delay (usec) (SBD)	-6.58221872981E+03		Apriori delay (usec)		-6.58235561442E+03		Resid mbdelay (usec)		-3.74039E-03	+/- 1.0E-04		
Sband delay (usec)	-6.5822254567E+03		Apriori clock (usec)		-3.6298523E+00		Resid sbdelay (usec)		1.30159E-01	+/- 8.2E-04		
Phase delay (usec)	-6.58235561542E+03		Apriori clockrate (us/s)		1.0031300E-06		Resid phdelay (usec)		-9.95953E-07	+/- 7.1E-07		
Delay rate (us/s)	-8.50075756822E-01		Apriori rate (us/s)		-8.50074769685E-01		Resid rate (us/s)		-9.87137E-07	+/- 6.8E-09		
Total phase (deg)	292.8		Apriori accel (us/s/s)		7.34181101060E-05		Resid phase (deg)		7.0	+/- 11.0		
	RMS	Theor.	Amplitude	0.285 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	59.1	25.7	Search (1024X32)	0.268		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	56.7	44.9	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	44.6	15.5	Inc. seg. avg.	0.333		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023	0.023		
amp/frq (%)	37.3	27.1	Inc. frq. avg.	0.327		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 280.0 el 38.3 pa 37.9	c: az 27.3 el 67.5 pa -147.2		u,v (fr/asec) 3096.735 4163.916						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/Zc..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/Zc.Q.256.3MP56K									

Mk4/DiFX fourfit 3.25 rev 0

aux01

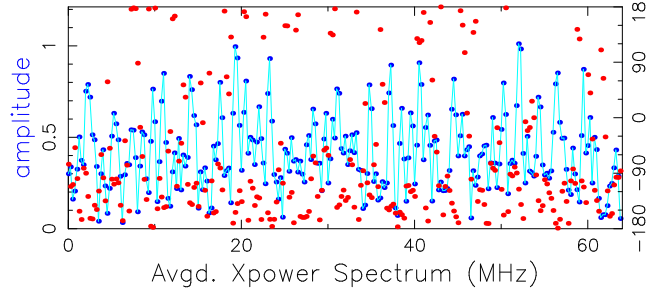
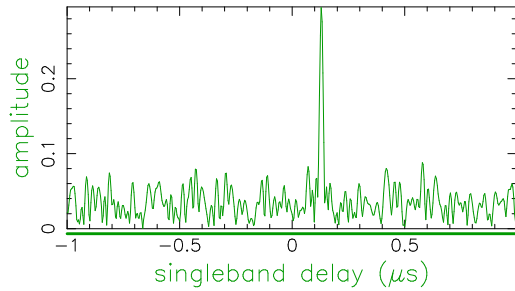
2013+370.3MP56K, No0500, Zc

METSAHOV - VLBA_SC, fgroup Q, pol RR



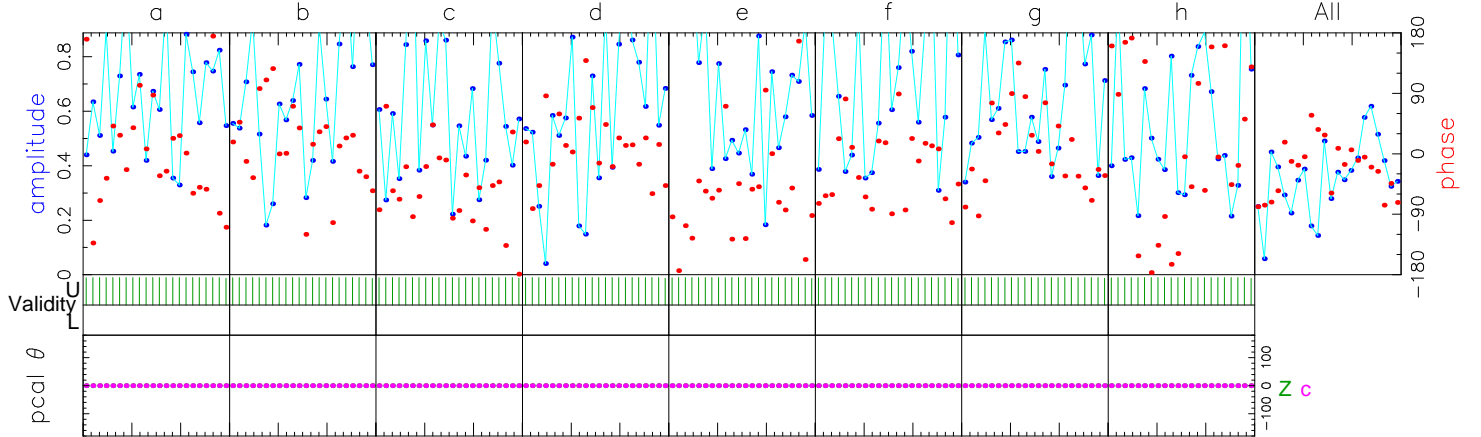
Fringe quality 9

SNR 10.8
 Int time 179.947
 Amp 0.296
 Phase 0.5
 PFD 4.9e-19
 Delays (us)
 SBD 0.129543
 MBD -0.005309
 Fringe rate (Hz)
 -0.042286
 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
 2025:042:151826
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-6.58222029884E+03	Apriori delay (usec)	-6.58235561442E+03	Resid mbdelay (usec)	-5.30942E-03	+/-	1.0E-04
Sband delay (usec)	-6.58222607167E+03	Apriori clock (usec)	-3.6298523E+00	Resid sbdelay (usec)	1.29543E-01	+/-	7.9E-04
Phase delay (usec)	-6.58235561584E+03	Apriori clockrate (us/s)	1.0031300E-06	Resid phdelay (usec)	-1.41820E-06	+/-	6.8E-07
Delay rate (us/s)	-8.50075749895E-01	Apriori rate (us/s)	-8.50074769685E-01	Resid rate (us/s)	-9.80210E-07	+/-	6.5E-09
Total phase (deg)	286.3	Apriori accel (us/s/s)	7.34181101060E-05	Resid phase (deg)	0.5	+/-	10.6

ph/seg (deg)	38.9	Theor.	24.8	Amplitude	0.296 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	49.3		43.3	Search (1024X32)	0.290	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	74.6		14.9	Inc. seg. avg.	0.326	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	47.6		26.1	Inc. frq. avg.	0.373	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 280.0 el 38.3 pa 37.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3096.735 4163.916 simultaneous interpolator

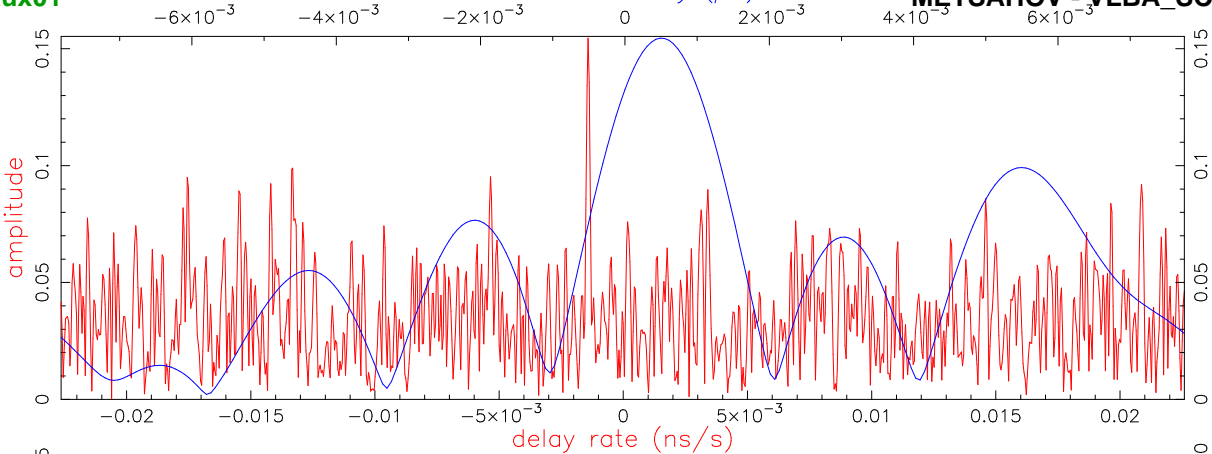
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Zc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Zc.Q.275.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

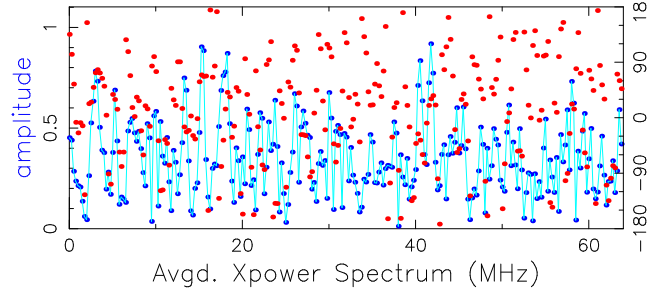
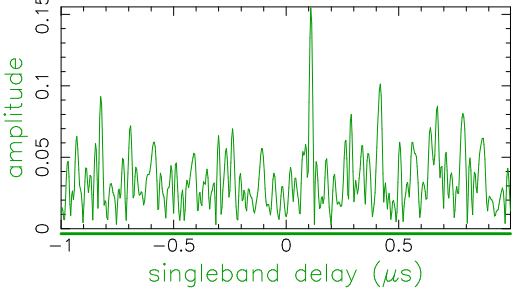
aux01

2013+370.3MP56K, No0500, Zc

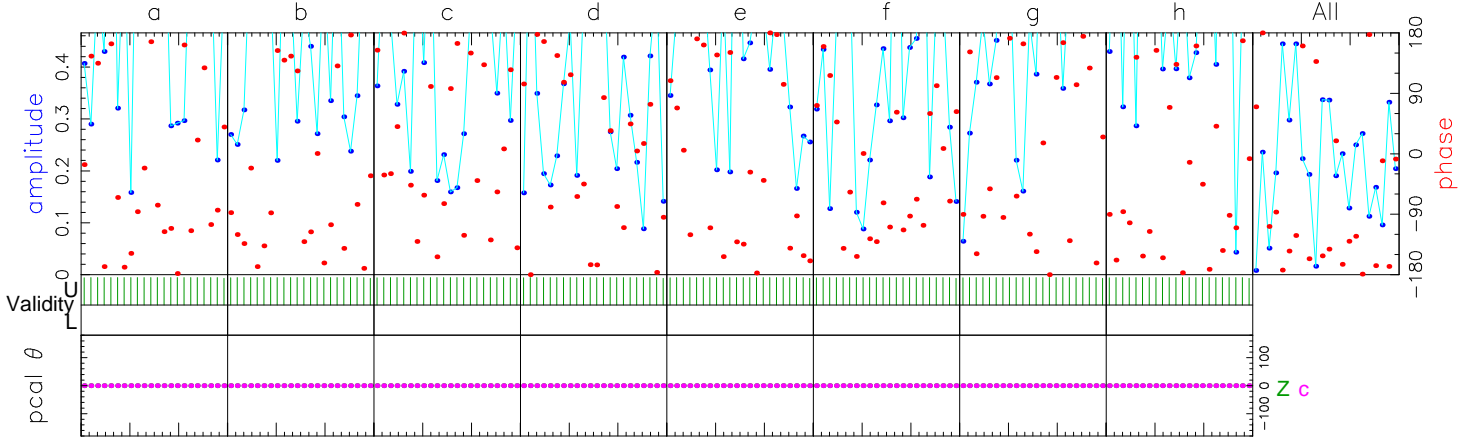
MEṬSAHOV - VLBA_SC, fgroup Q, pol LR



Fringe quality 0
 SNR 5.7
 Int time 179.947
 Amp 0.155
 Phase 186.8
 PFD 8.0e-01
 Delays (us)
 SBD 0.110027
 MBD 0.000509
 Fringe rate (Hz)
 -0.061166
 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
 2025:042:151828
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-6.58224573067E+03	Apriori delay (usec)	-6.58235561442E+03	Resid mbdelay (usec)	5.08748E-04	+/-	1.9E-04
Sband delay (usec)	-6.58224558767E+03	Apriori clock (usec)	-3.6298523E+00	Resid sbdelay (usec)	1.10027E-01	+/-	1.5E-03
Phase delay (usec)	-6.58235562413E+03	Apriori clockrate (us/s)	1.0031300E-06	Resid phdelay (usec)	-9.70343E-06	+/-	1.3E-06
Delay rate (us/s)	-8.50076187526E-01	Apriori rate (us/s)	-8.50074769685E-01	Resid rate (us/s)	-1.41784E-06	+/-	1.2E-08
Total phase (deg)	112.6	Apriori accel (us/s/s)	7.34181101060E-05	Resid phase (deg)	186.8	+/-	20.1

ph/seg (deg)	69.9	Theor.	47.3	Amplitude	0.155 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.9		82.5	Search (1024X32)	0.152	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.9		28.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	52.0		49.7	Inc. seg. avg.	0.162	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.151	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 280.0 el 38.3 pa 37.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3096.735 4163.916 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Zc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Zc.Q.279.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

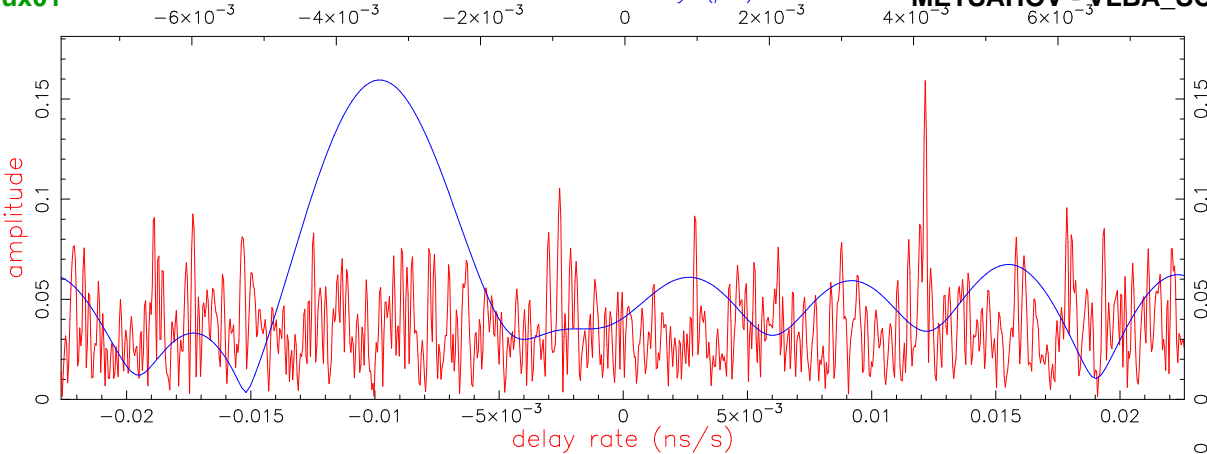
aux01

2013+370.3MP56K, No0500, Zc

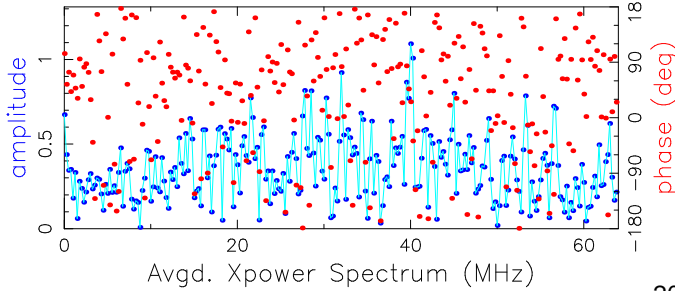
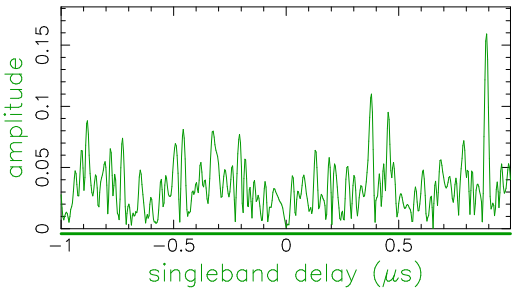
MEṬSAHOV - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

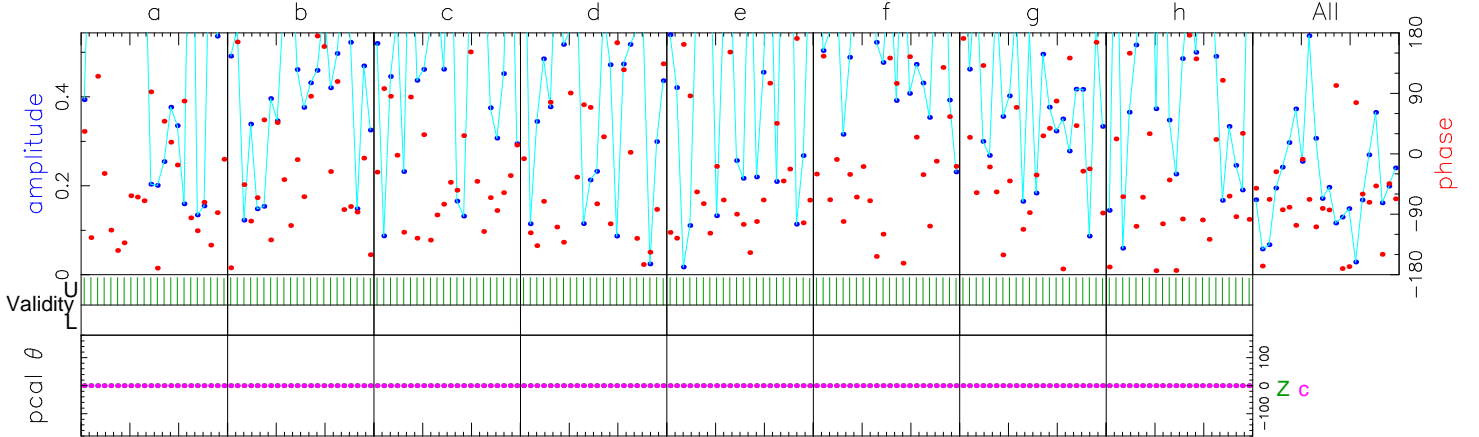


SNR 5.9
 Int time 179.947
 Amp 0.181
 Phase 306.4
 PFD 4.0e-01
 Delays (us)
 SBD 0.889489
 MBD -0.003474
 Fringe rate (Hz)
 0.527023
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151830
 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
	-88.5	-97.1	-51.3	-74.5	-85.4	-52.2	-25.6	-91.8	Phase	-76.1
	0.4	0.1	0.2	0.1	0.3	0.2	0.1	0.2	Ampl.	0.2
	484.2	63.2	466.1	90.4	484.0	355.2	154.6	58.2	Sbd box	484.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-6.58146846358E+03	Apriori delay (usec)	-6.58235561442E+03	Resid mbdelay (usec)	-3.47415E-03	+/-	1.8E-04
Sband delay (usec)	-6.58146612542E+03	Apriori clock (usec)	-3.6298523E+00	Resid sbdelay (usec)	8.89489E-01	+/-	1.5E-03
Phase delay (usec)	-6.58235561932E+03	Apriori clockrate (us/s)	1.0031300E-06	Resid phdelay (usec)	-4.89897E-06	+/-	1.3E-06
Delay rate (us/s)	-8.50062553102E-01	Apriori rate (us/s)	-8.50074769685E-01	Resid rate (us/s)	1.22166E-05	+/-	1.2E-08
Total phase (deg)	232.2	Apriori accel (us/s/s)	7.34181101060E-05	Resid phase (deg)	306.4	+/-	19.5

ph/seg (deg)	66.7	Theor.	45.7	Amplitude	0.181 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	78.3		79.7	Search (1024X32)	0.154	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.9		27.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.5		48.1	Inc. seg. avg.	0.183	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.171	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 280.0 el 38.3 pa 37.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) 3096.735 4163.916 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Zc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Zc.Q.290.3MP56K