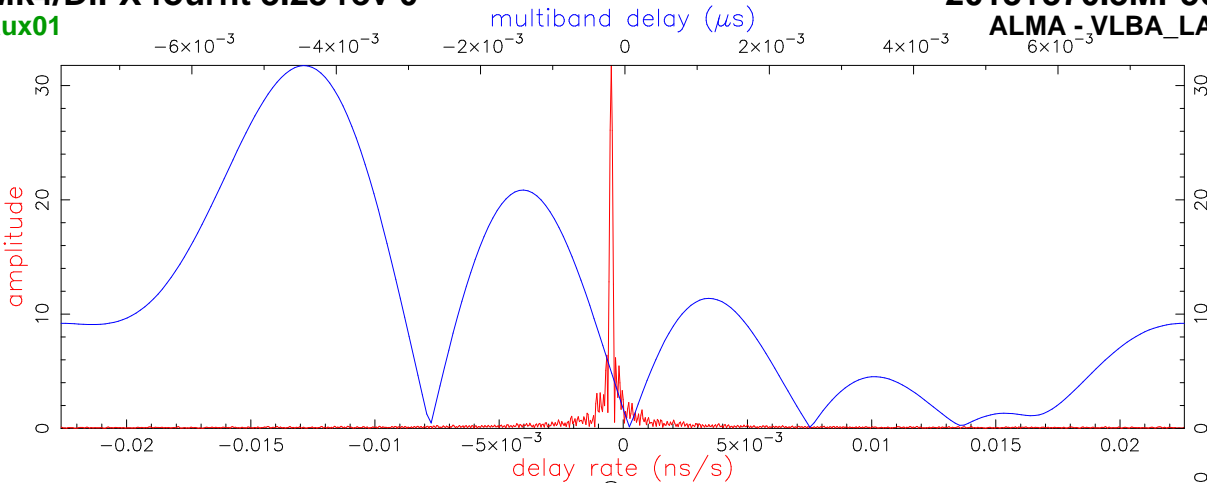


Mk4/DiFX fourfit 3.25 rev 0

aux01

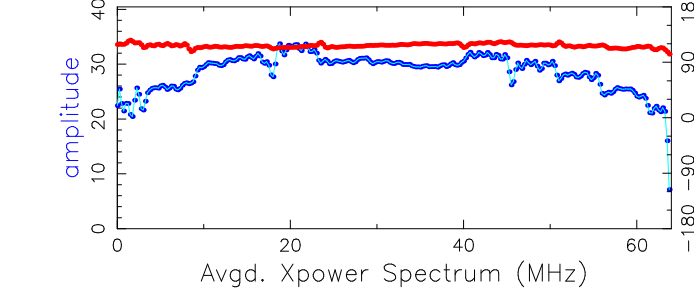
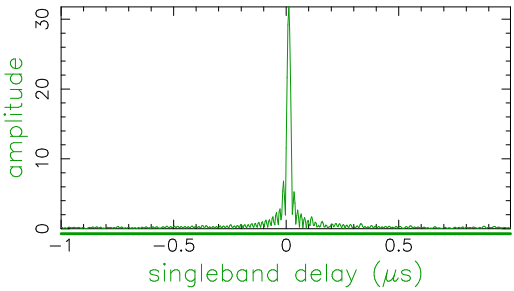
2013+370.3MP56K, No0500, AI

ALMA - VLBA_LA, fgroup Q, pol XL



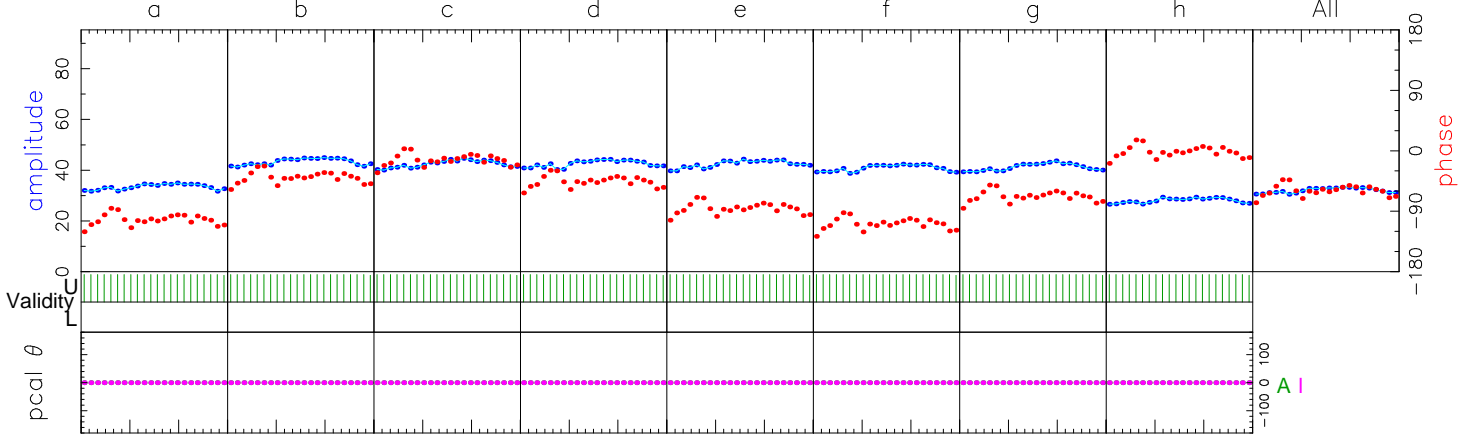
Fringe quality 6

SNR 1165.4
 Int time 179.984
 Amp 31.771
 Phase 143.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.011478
 MBD -0.004459
 Fringe rate (Hz)
 -0.020223
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-102.4	-39.7	-13.5	-45.6	-85.8	-108.7	-67.7	-1.5	Phase	-59.3
	33.1	42.9	42.0	42.2	42.1	40.4	40.9	27.8	Ampl.	38.9
	261.5	259.8	259.8	259.8	259.9	259.8	259.9	261.8	Sbd box	259.9
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	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -7.64659930942E+03 Apriori delay (usec) -7.64661047493E+03 Resid mbdelay (usec) -4.45949E-03 +/- 9.3E-07
 Sband delay (usec) -7.64659899718E+03 Apriori clock (usec) -2.0991233E+03 Resid sbdelay (usec) 1.14777E-02 +/- 7.4E-06
 Phase delay (usec) -7.64661047875E+03 Apriori clockrate (us/s) 2.2316914E-07 Resid phdelay (usec) -3.81788E-06 +/- 6.3E-09
 Delay rate (us/s) -5.07240616072E-01 Apriori rate (us/s) -5.07240147290E-01 Resid rate (us/s) -4.68782E-07 +/- 6.1E-11
 Total phase (deg) 183.3 Apriori accel (us/s/s) -3.69698151780E-05 Resid phase (deg) 143.2 +/- 0.1

RMS Theor. Amplitude 31.771 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 8.2 0.2 Search (1024X32) 30.668 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 3.2 0.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.0 0.1 Inc. seg. avg. 32.076 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 27.7 0.2 Inc. frq. avg. 38.923 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

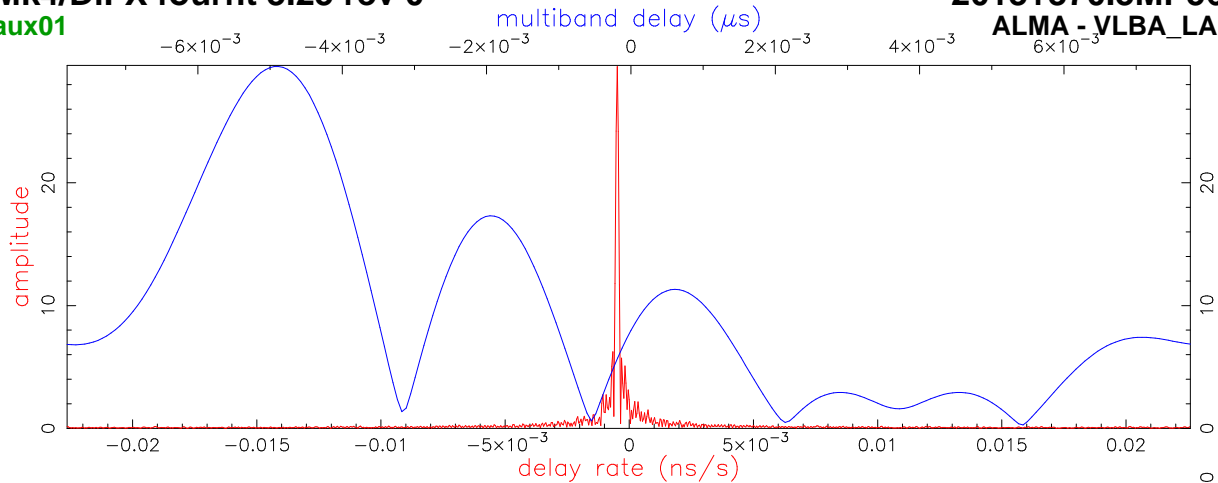
A: az 14.3 el 27.9 pa -163.6 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 1804.425 -4555.055 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//AI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//AI.Q.17.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

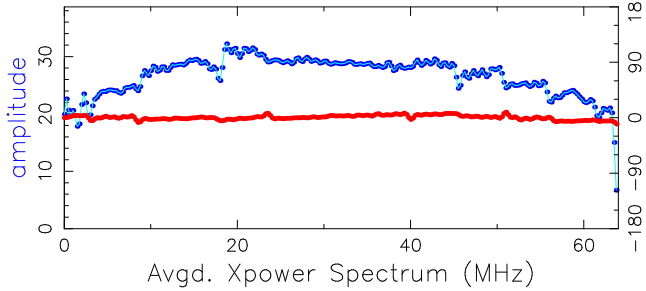
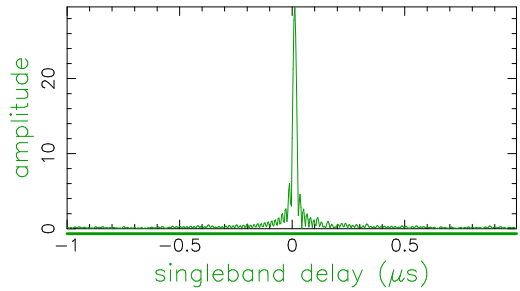
2013+370.3MP56K, No0500, AI

ALMA - VLBA_LA, fgroup Q, pol YR



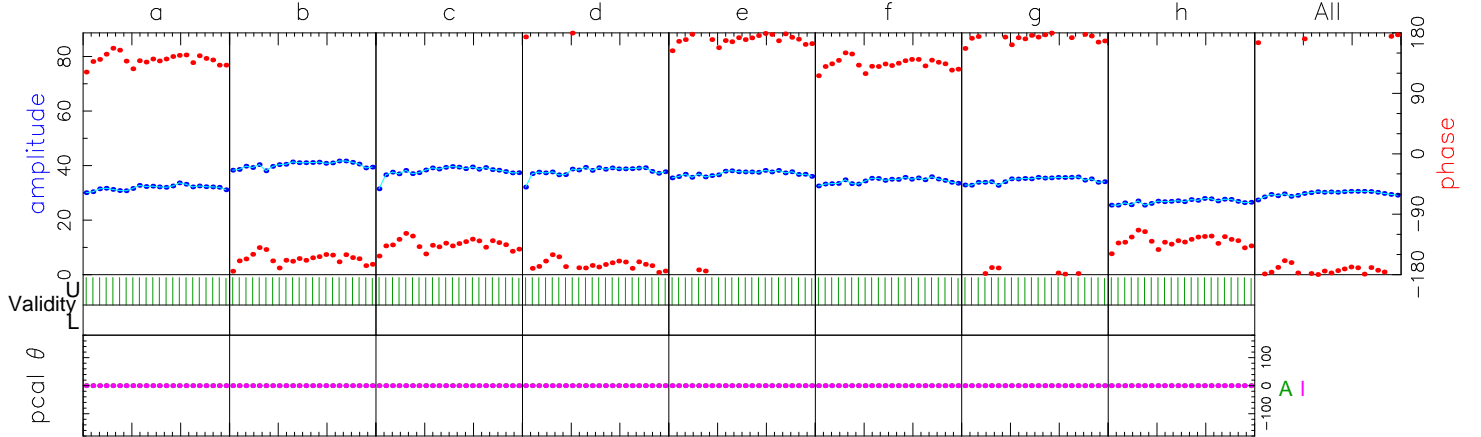
Fringe quality 6

SNR 1084.6
 Int time 179.984
 Amp 29.568
 Phase 27.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.011008
 MBD -0.004939
 Fringe rate (Hz)
 -0.020251
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
A:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Group delay (usec) (SBD)	-7.64659978886E+03									
Sband delay (usec)	-7.64659946718E+03									
Phase delay (usec)	-7.64661048623E+03									
Delay rate (us/s)	-5.07240616711E-01									
Total phase (deg)			67.1							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

ph/seg (deg) 8.0 0.2
 amp/seg (%) 2.8 0.4
 ph/frq (deg) 38.8 0.1
 amp/frq (%) 22.3 0.3

RMS Theor. Amplitude 29.568 +/- 0.027
 Search (1024X32) 28.529
 Interp. 0.000
 Inc. seg. avg. 29.758
 Inc. frq. avg. 34.831

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.023 0.023
 ion window (TEC) 0.00 0.00

A: az 14.3 el 27.9 pa -163.6 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 1804.425 -4555.055 simultaneous interpolator

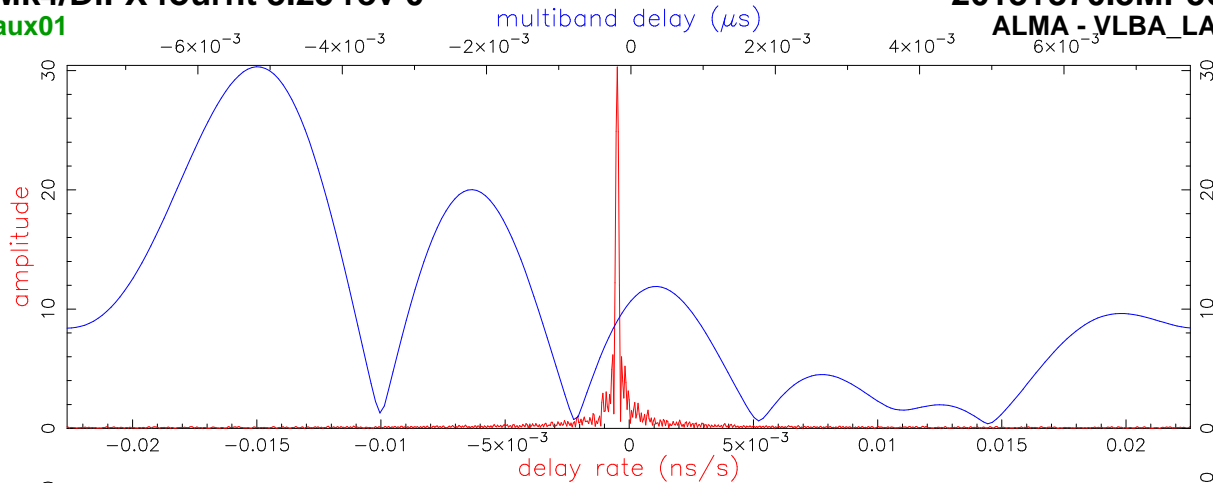
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//AI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//AI.Q.38.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

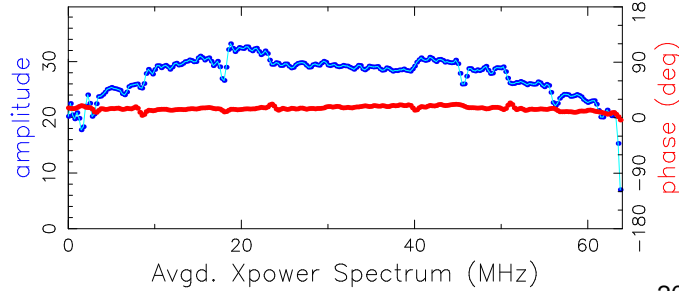
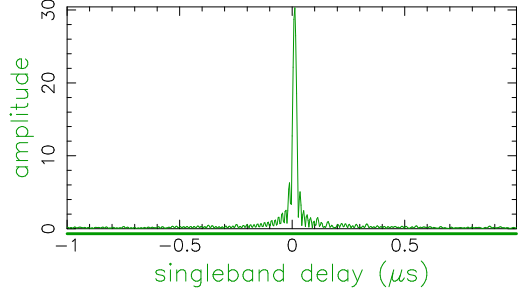
2013+370.3MP56K, No0500, AI

ALMA - VLBA_LA, fgroup Q, pol XR



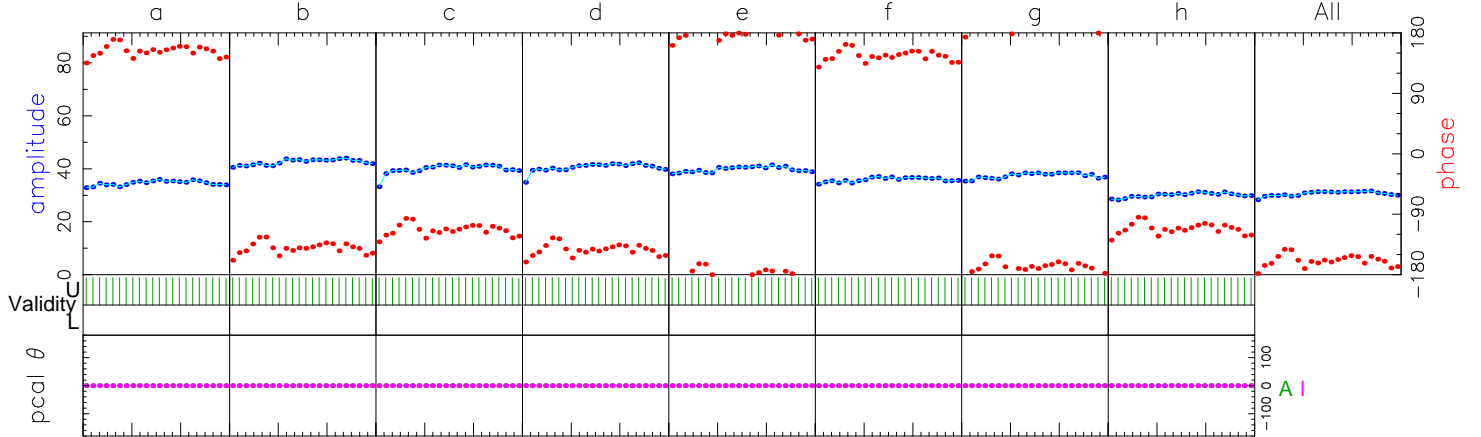
Fringe quality 6

SNR 1116.4
 Int time 179.984
 Amp 30.437
 Phase 43.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.010892
 MBD -0.005210
 Fringe rate (Hz)
 -0.020202
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
A:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-7.64660006008E+03	Apriori delay (usec)	-7.64661047493E+03	Resid mbdelay (usec)	-5.21015E-03	+/-	9.7E-07
Sband delay (usec)	-7.64659958293E+03	Apriori clock (usec)	-2.0991233E+03	Resid sbdelay (usec)	1.08920E-02	+/-	7.7E-06
Phase delay (usec)	-7.64661048518E+03	Apriori clockrate (us/s)	2.2316914E-07	Resid phdelay (usec)	-1.02451E-05	+/-	6.6E-09
Delay rate (us/s)	-5.07240615588E-01	Apriori rate (us/s)	-5.07240147290E-01	Resid rate (us/s)	-4.68298E-07	+/-	6.4E-11
Total phase (deg)		Apriori accel (us/s/s)	-3.69698151780E-05	Resid phase (deg)	43.4	+/-	0.1

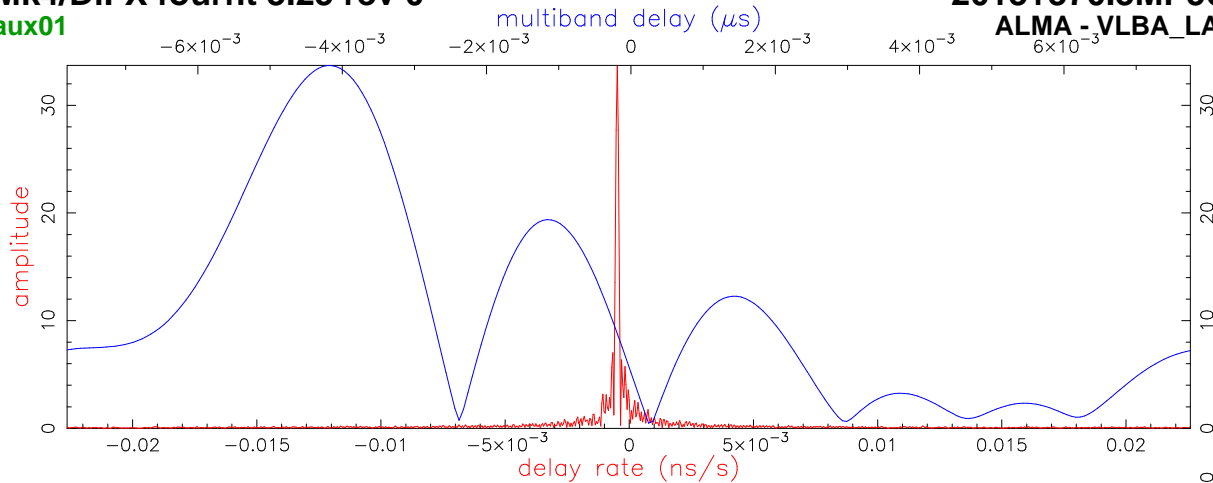
ph/seg (deg) 8.4 0.2 Search (1024X32) 28.618 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.8 0.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.5 0.1 Inc. seg. avg. 30.629 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.4 0.3 Inc. frq. avg. 37.219 Data rate(Mb/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 A: az 14.3 el 27.9 pa -163.6 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 1804.425 -4555.055 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//AI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//AI.Q.47.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

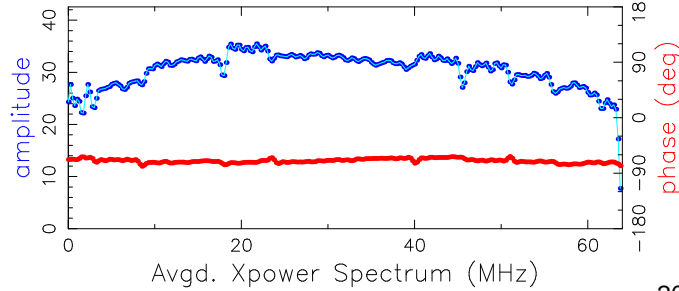
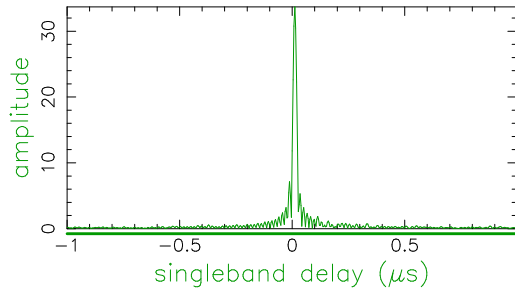
2013+370.3MP56K, No0500, AI

ALMA - VLBA_LA, fgroup Q, pol YL



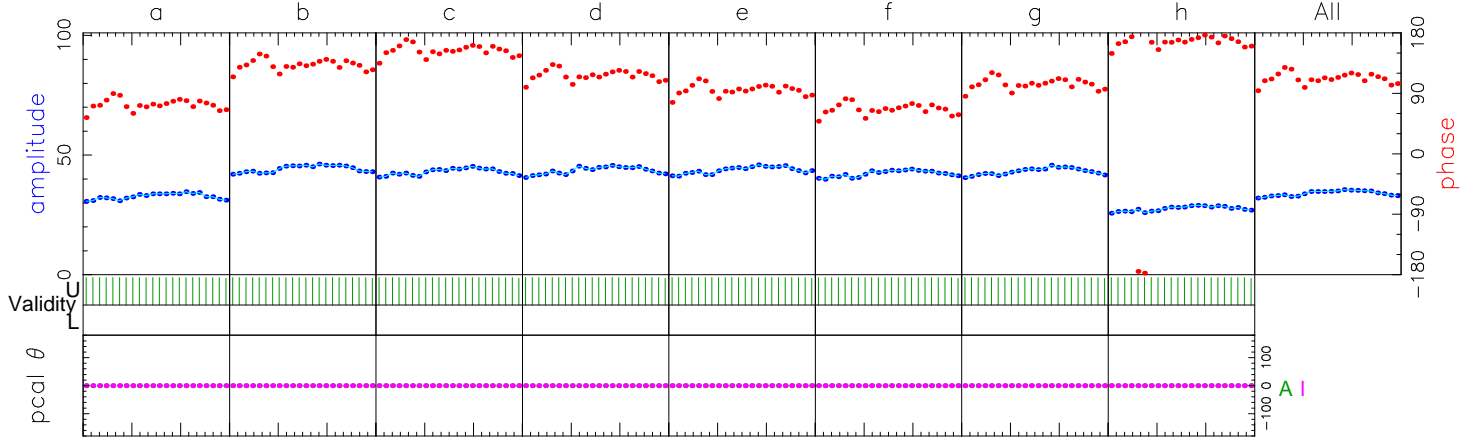
Fringe quality 6

SNR 1236.3
 Int time 179.984
 Amp 33.705
 Phase 314.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.011618
 MBD -0.004182
 Fringe rate (Hz)
 -0.020268
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

Group delay (usec) (SBD)	-7.64659903186E+03	Apriori delay (usec)	-7.64661047493E+03	Resid mbdelay (usec)	-4.18193E-03	+/-	8.8E-07
Sband delay (usec)	-7.64659885643E+03	Apriori clock (usec)	-2.0991233E+03	Resid sbdelay (usec)	1.16185E-02	+/-	7.0E-06
Phase delay (usec)	-7.64661046771E+03	Apriori clockrate (us/s)	2.2316914E-07	Resid phdelay (usec)	7.22360E-06	+/-	6.0E-09
Delay rate (us/s)	-5.07240617110E-01	Apriori rate (us/s)	-5.07240147290E-01	Resid rate (us/s)	-4.69821E-07	+/-	5.7E-11
Total phase (deg)	-5.2	Apriori accel (us/s/s)	-3.69698151780E-05	Resid phase (deg)	314.7	+/-	0.1

	RMS	Theor.	Amplitude	33.705 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	7.9	0.2	Search (1024X32)	32.043	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	3.3	0.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	39.3	0.1	Inc. seg. avg.	34.020	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
amp/frq (%)	24.8	0.2	Inc. frq. avg.	39.683	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

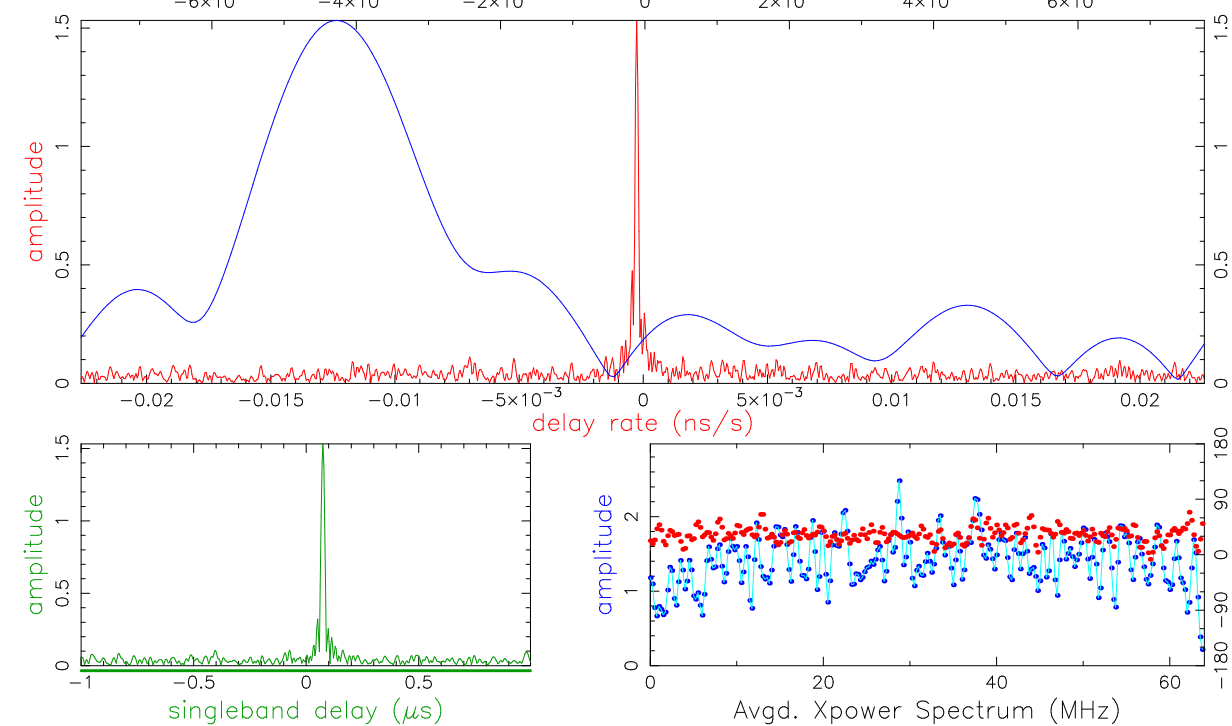
A: az 14.3 el 27.9 pa -163.6 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 1804.425 -4555.055 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//AI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//AI.Q.61.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bl

VLBA_BR - VLBA_LA, fgroup Q, pol LR

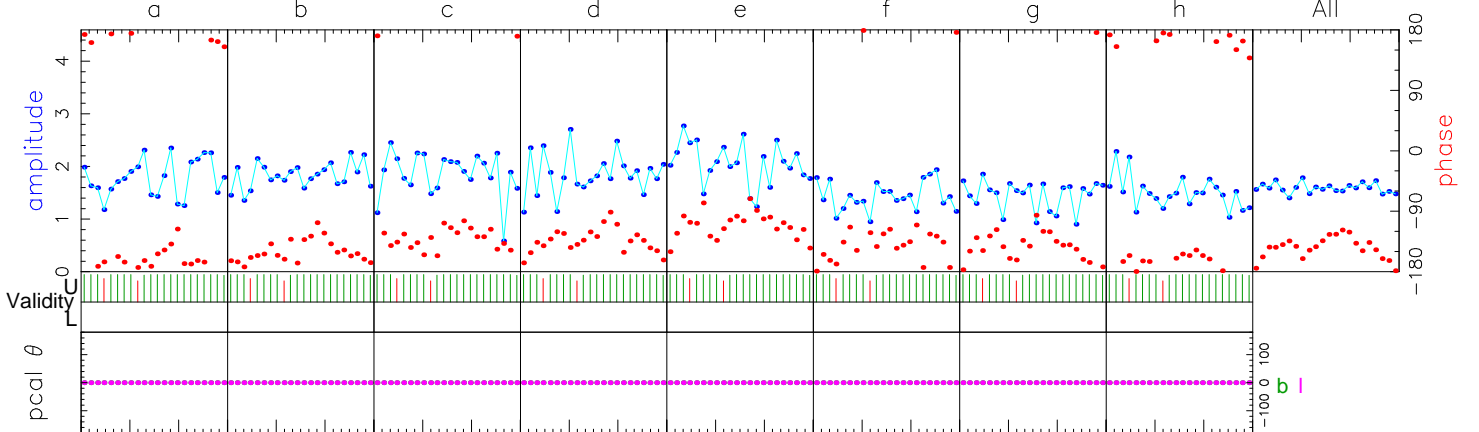


Fringe quality 7

SNR 55.7
 Int time 176.659
 Amp 1.532
 Phase 148.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.074109
 MBD -0.004275
 Fringe rate (Hz)
 -0.012085
 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
 2025:042:151800
 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



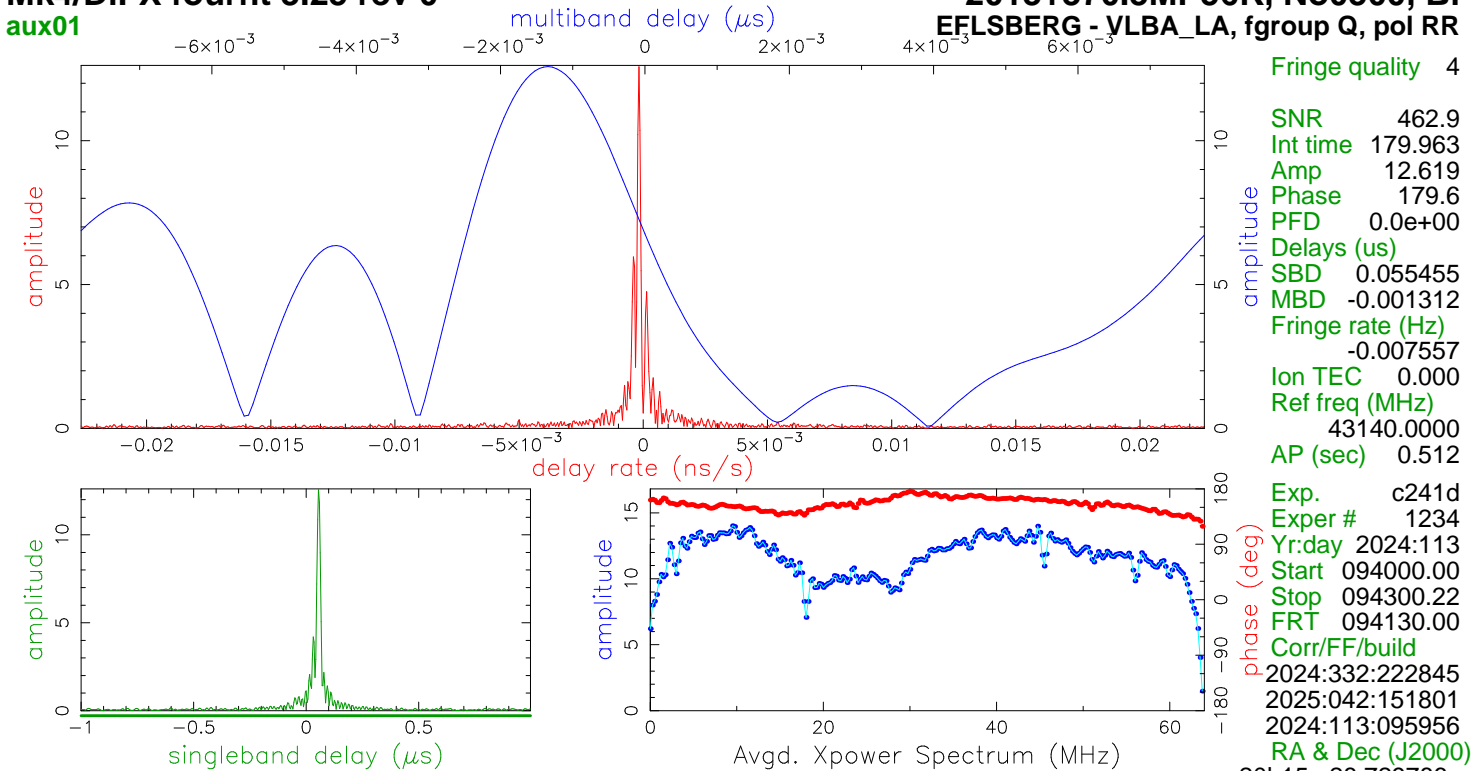
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	-170.7	-149.2	-133.9	-133.6	-111.6	-145.3	-145.8	-177.1	Phase	-144.4	
	1.7	1.8	1.8	1.8	2.0	1.3	1.4	1.4	Ampl.	1.6	
	275.9	276.7	276.0	275.8	275.8	275.4	276.0	275.0	Sbd box	276.0	
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
b:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000			
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.67453771122E+03		Apriori delay (usec)		-1.67461156098E+03		Resid mbdelay (usec)		-4.27524E-03	+/- 1.9E-05	
Sband delay (usec)	-1.67453745198E+03		Apriori clock (usec)		1.2921827E+01		Resid sbdelay (usec)		7.41090E-02	+/- 1.5E-04	
Phase delay (usec)	-1.67461157028E+03		Apriori clockrate (us/s)		8.1044199E-07		Resid phdelay (usec)		-9.29618E-06	+/- 1.3E-07	
Delay rate (us/s)	-4.92676266443E-02		Apriori rate (us/s)		-4.92673465022E-02		Resid rate (us/s)		-2.80142E-07	+/- 1.3E-09	
Total phase (deg)	241.5		Apriori accel (us/s/s)		1.98999092992E-05		Resid phase (deg)		148.1	+/- 2.1	
	RMS	Theor.	Amplitude	1.532 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	16.1	4.8	Search (1024X32)	1.481		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	7.2	8.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	22.7	2.9	Inc. seg. avg.	1.587		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023 0.023	
amp/frq (%)	15.4	5.1	Inc. frq. avg.	1.627		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
b: az 76.2 el 40.6 pa -54.6	l: az 71.2 el 46.9 pa -74.8		u, v (fr/asec) 186.780 1159.135		simultaneous interpolator						
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/bl..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/bl.Q.139.3MP56K								

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, BI

EFLSBERG - VLBA_LA, fgroup Q, pol RR



Fringe quality 4

SNR 462.9

Int time 179.963

Amp 12.619

Phase 179.6

PFD 0.0e+00

Delays (us)

SBD 0.055455

MBD -0.001312

Fringe rate (Hz)

-0.007557

Ion TEC 0.000

Ref freq (MHz)

43140.0000

AP (sec) 0.512

Exp. c241d

Exper # 1234

Yr:day 2024:113

Start 094000.00

Stop 094300.22

FRT 094130.00

Corr/FF/build

2024:332:222845

2025:042:151801

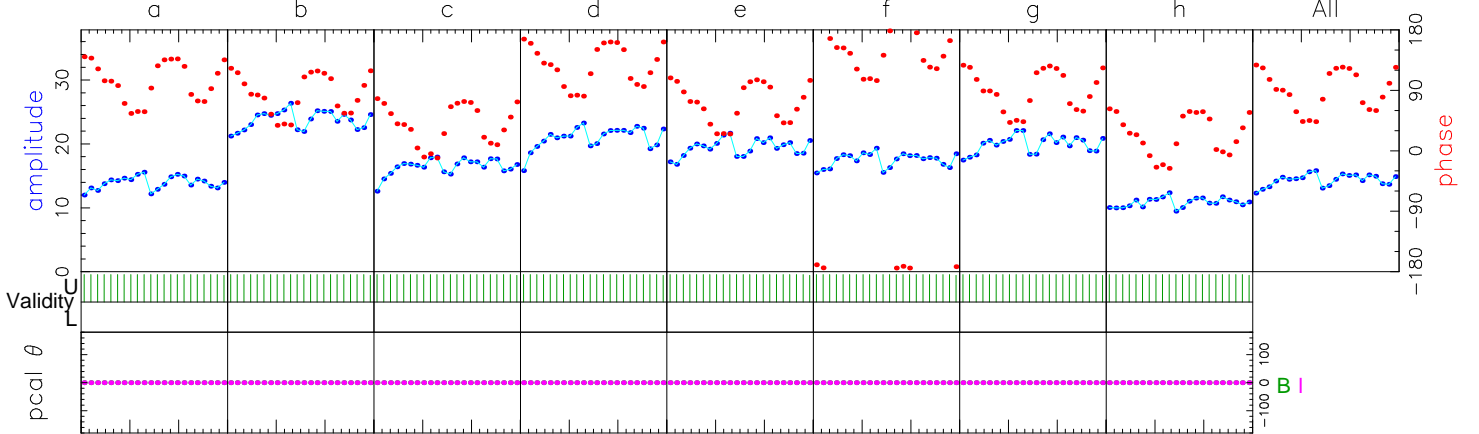
2024:113:095956

RA & Dec (J2000)

20h15m28.729786s

+37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.65575765372E+02	Apriori delay (usec)	-1.65636953220E+02	Resid mbdelay (usec)	-1.31215E-03	+/-	2.3E-06
Sband delay (usec)	-1.65581498220E+02	Apriori clock (usec)	-2.7094002E+01	Resid sbdelay (usec)	5.54550E-02	+/-	1.9E-05
Phase delay (usec)	-1.65636947450E+02	Apriori clockrate (us/s)	4.4462047E-08	Resid phdelay (usec)	5.76972E-06	+/-	1.6E-08
Delay rate (us/s)	-1.48704909796E+00	Apriori rate (us/s)	-1.48704892279E+00	Resid rate (us/s)	-1.75174E-07	+/-	1.5E-10
Total phase (deg)	121.3	Apriori accel (us/s/s)	1.35270752200E-05	Resid phase (deg)	179.6	+/-	0.2

ph/seg (deg)	28.8	RMS	Theor.	Amplitude	12.619 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	15.6	0.6	0.6	Search (1024X32)	12.462	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	46.5	0.4	0.4	Inc. seg. avg.	14.358	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	36.0	0.6	0.6	Inc. frq. avg.	15.630	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 275.5 el 46.9 pa 52.6 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 5364.755 1031.506 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/BI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/BI.Q.149.3MP56K

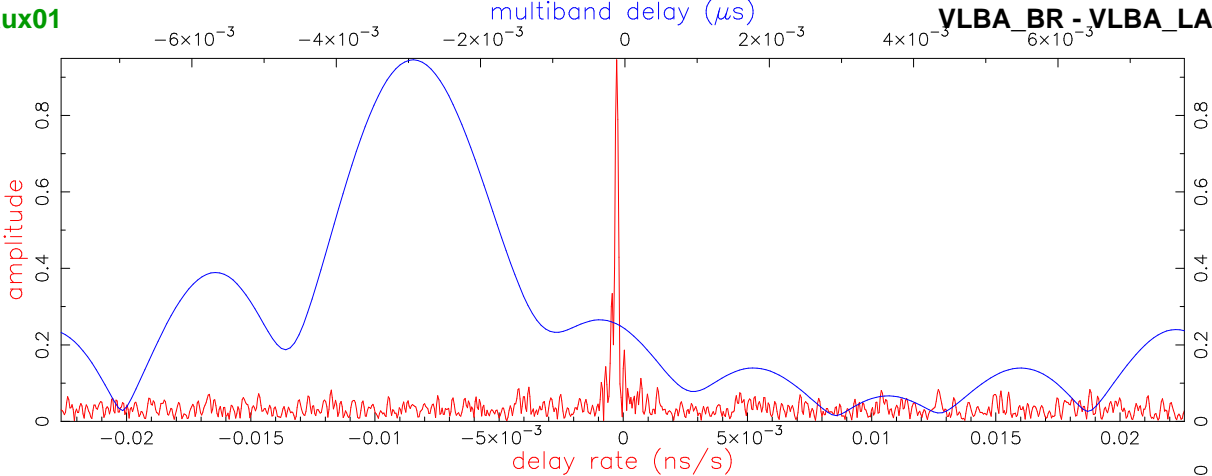
Mk4/DiFX fourfit 3.25 rev 0

aux01

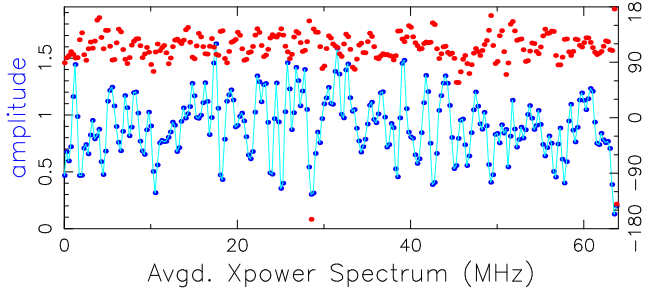
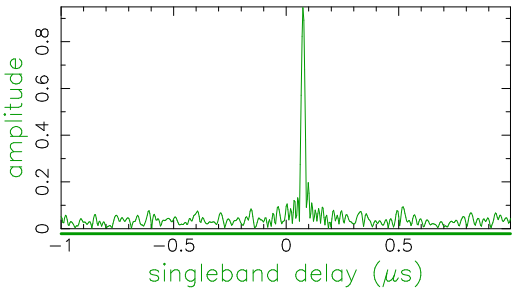
2013+370.3MP56K, No0500, bl

VLBA_BR - VLBA_LA, fgroup Q, pol RL

Fringe quality 7

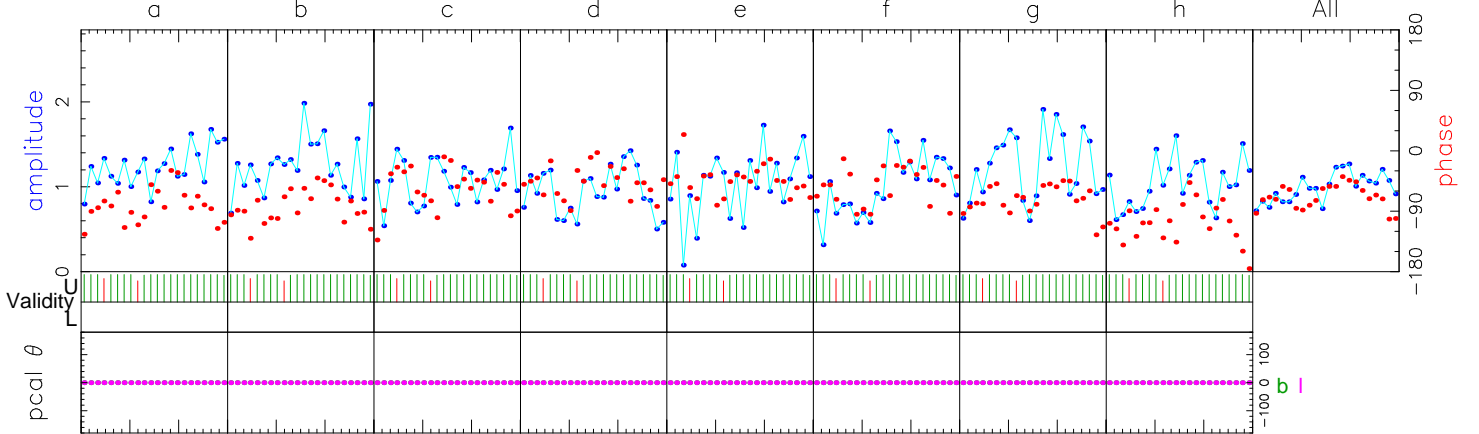


SNR 34.5
Int time 176.659
Amp 0.949
Phase 225.2
PFD 0.0e+00
Delays (us)
SBD 0.075014
MBD -0.002919
Fringe rate (Hz) -0.012055
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512



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

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



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

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

ph/seg (deg)	17.6	Theor.	7.7	Amplitude	0.949 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	18.0		13.5	Search (1024X32)	0.926	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.2		4.7	Inc. seg. avg.	0.984	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	13.4		8.2	Inc. frq. avg.	1.003	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

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

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bl_.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bl.Q.152.3MP56K

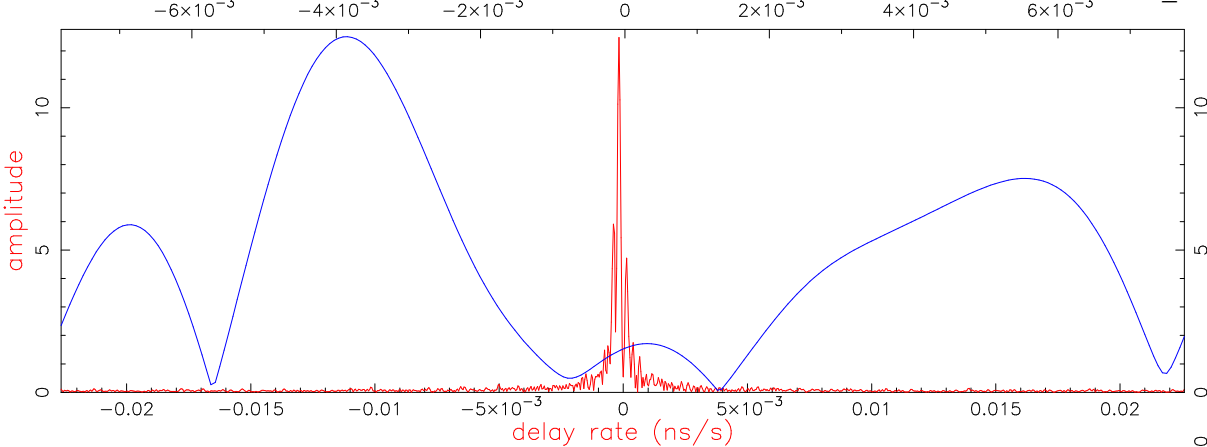
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, BI

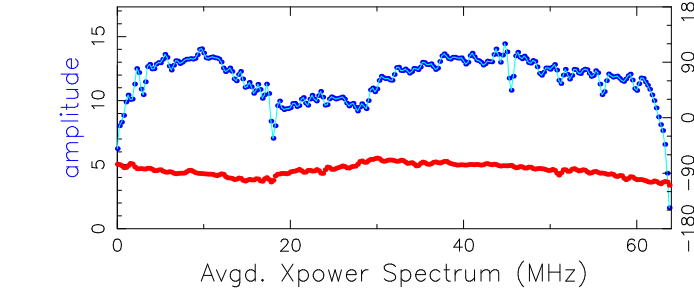
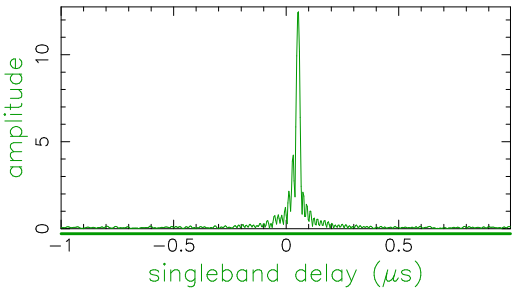
EFLSBERG - VLBA_LA, fgroup Q, pol LR

multiband delay (μ s)



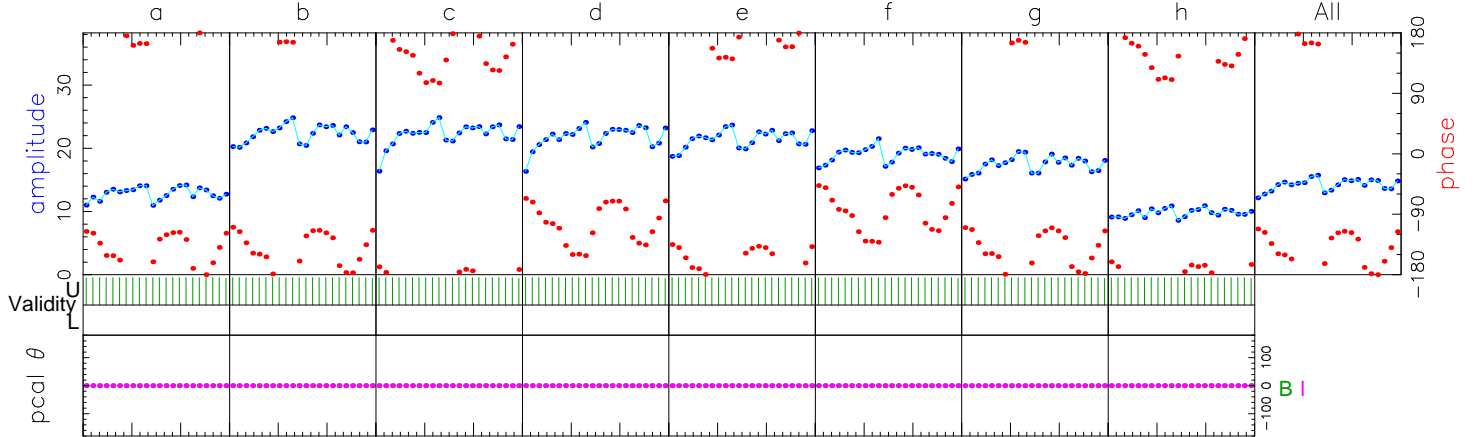
Fringe quality 3

SNR 467.8
 Int time 179.963
 Amp 12.753
 Phase 299.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.052827
 MBD -0.003941
 Fringe rate (Hz)
 -0.007560
 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		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.65578393966E+02	Apriori delay (usec)	-1.65636953220E+02	Resid mbdelay (usec)	-3.94075E-03	+/-	2.3E-06
Sband delay (usec)	-1.65584126720E+02	Apriori clock (usec)	-2.7094002E+01	Resid sbdelay (usec)	5.28265E-02	+/-	1.8E-05
Phase delay (usec)	-1.65636962906E+02	Apriori clockrate (us/s)	4.4462047E-08	Resid phdelay (usec)	-9.68644E-06	+/-	1.6E-08
Delay rate (us/s)	-1.48704909803E+00	Apriori rate (us/s)	-1.48704892279E+00	Resid rate (us/s)	-1.75239E-07	+/-	1.5E-10
Total phase (deg)	241.3	Apriori accel (us/s/s)	1.35270752200E-05	Resid phase (deg)	299.6	+/-	0.2

ph/seg (deg)	28.8	RMS	28.8	Theor.	0.6	Amplitude	12.753 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	13.6		13.6		1.0	Search (1024X32)	12.451	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	46.0		46.0		0.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	40.2		40.2		0.6	Inc. seg. avg.	14.238	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	ion window (TEC)	0.00	0.00
						Inc. frq. avg.	16.085	Data rate (Mb/s):	2048	t_cohere	infinite			

B: az 275.5 el 46.9 pa 52.6 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 5364.755 1031.506 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/BI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/BI.Q.165.3MP56K

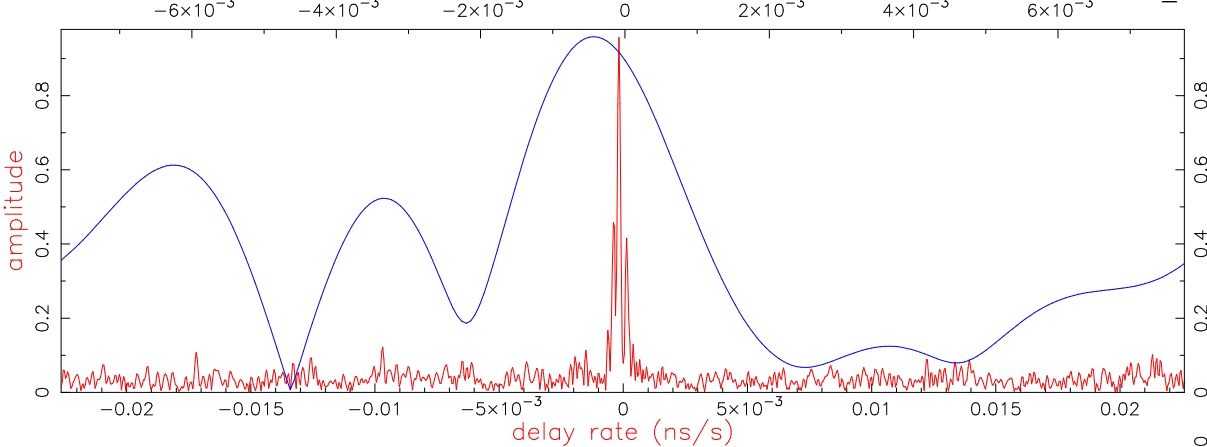
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, BI

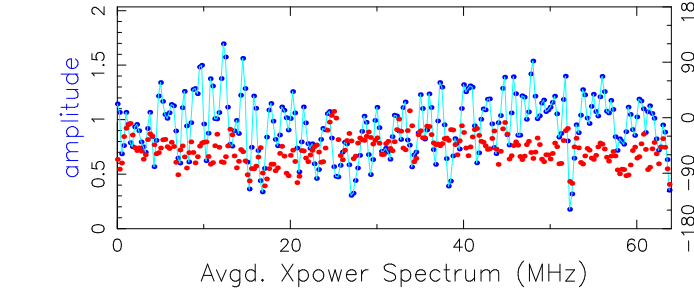
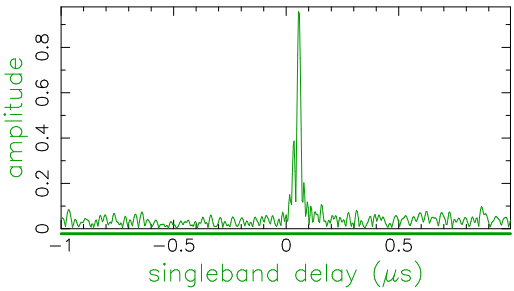
EFLSBERG - VLBA_LA, fgroup Q, pol RL

multiband delay (μ s)



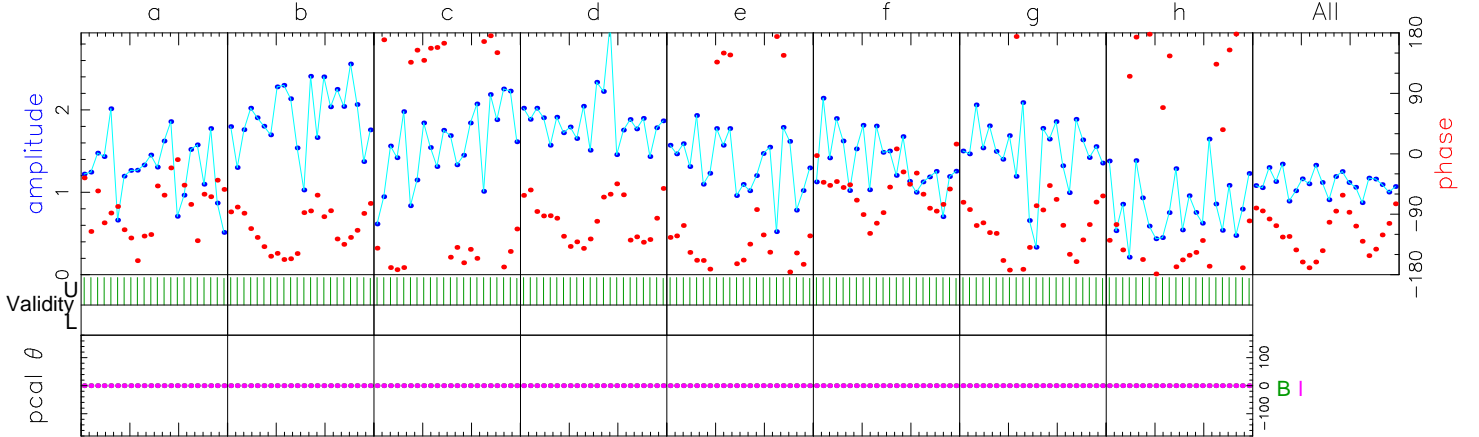
Fringe quality 4

SNR 35.9
 Int time 179.963
 Amp 0.979
 Phase 333.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.056467
 MBD -0.000355
 Fringe rate (Hz)
 -0.007873
 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
 2025:042:151808
 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		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.65574808685E+02	Apriori delay (usec)	-1.65636953220E+02	Resid mbdelay (usec)	-3.55465E-04	+/-	3.0E-05
Sband delay (usec)	-1.65580485720E+02	Apriori clock (usec)	-2.7094002E+01	Resid sbdelay (usec)	5.64675E-02	+/-	2.4E-04
Phase delay (usec)	-1.65636960724E+02	Apriori clockrate (us/s)	4.4462047E-08	Resid phdelay (usec)	-7.50447E-06	+/-	2.1E-07
Delay rate (us/s)	-1.48704910528E+00	Apriori rate (us/s)	-1.48704892279E+00	Resid rate (us/s)	-1.82497E-07	+/-	2.0E-09
Total phase (deg)	275.2	Apriori accel (us/s/s)	1.35270752200E-05	Resid phase (deg)	333.5	+/-	3.2

ph/seg (deg)	30.3	RMS	7.5	Theor.	30.3	Amplitude	0.979 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	18.7	Search (1024X32)	0.951	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	46.7	Inc. seg. avg.	1.102	Inc. frq. avg.	1.211	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	t_cohere	infinite	ion window (ns/s)	-0.023	0.023
amp/frq (%)	40.5	Inc. frq. avg.	1.211	u,v (fr/asec)	5364.755 1031.506	Data rate (Mb/s):	2048	simultaneous interpolator						

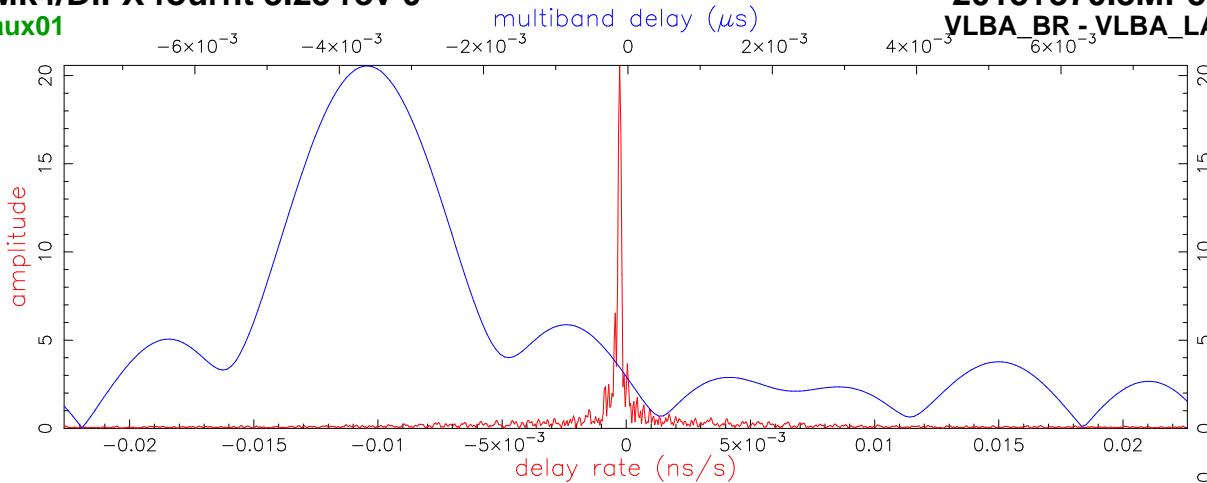
B: az 275.5 el 46.9 pa 52.6 I: az 71.2 el 46.9 pa -74.8 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/BI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/BI.Q.177.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

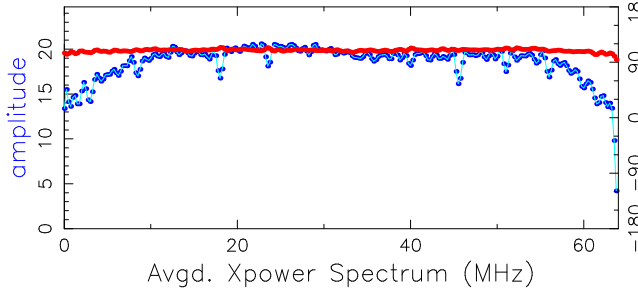
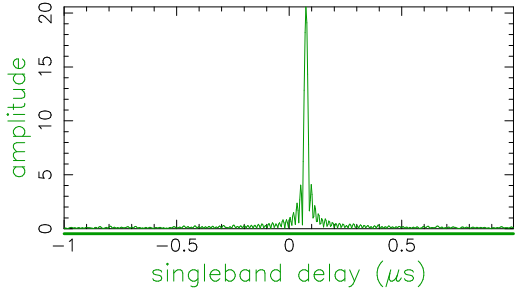
2013+370.3MP56K, No0500, bl

VLBA_BR - VLBA_LA, fgroup Q, pol LL



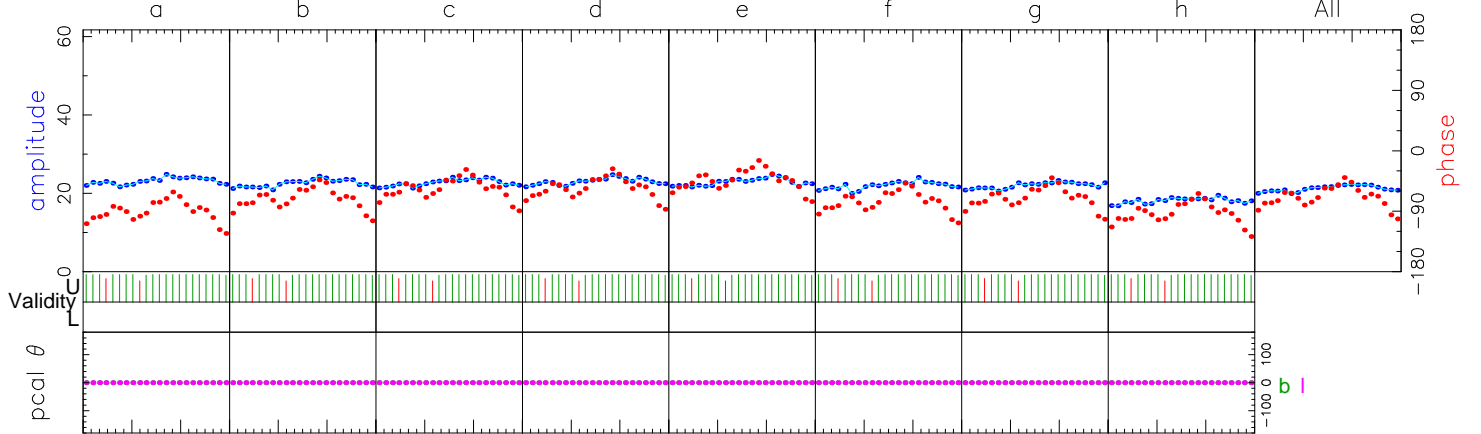
Fringe quality 7

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



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

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



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

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

ph/seg (deg)	14.9	RMS	14.9	Theor.	0.4	Amplitude	20.579 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	4.9		0.6		0.4	Search (1024X32)	19.898	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	18.4		0.2		0.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	8.2		0.4		0.4	Inc. seg. avg.	21.257	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	21.348	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

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

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

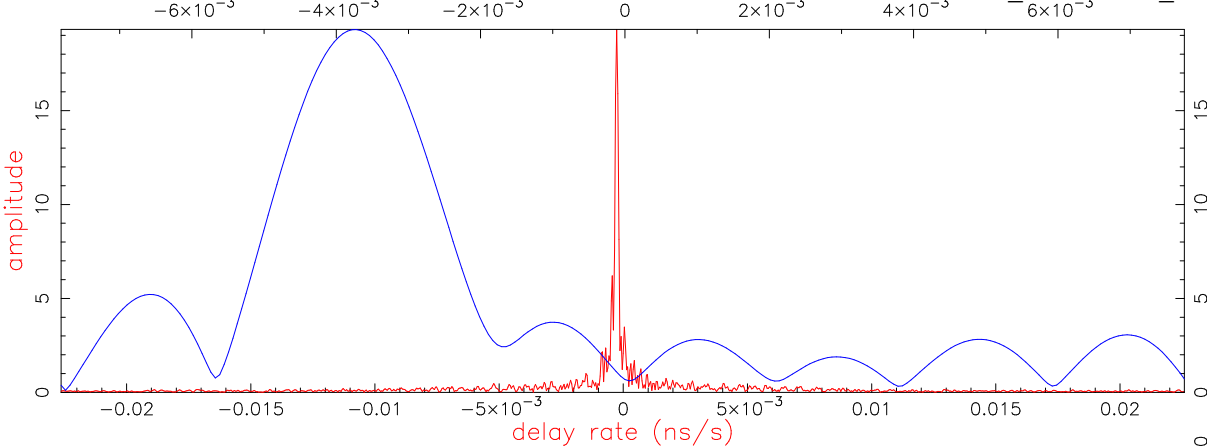
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bl

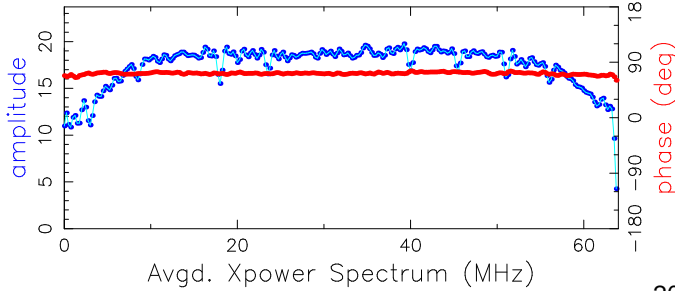
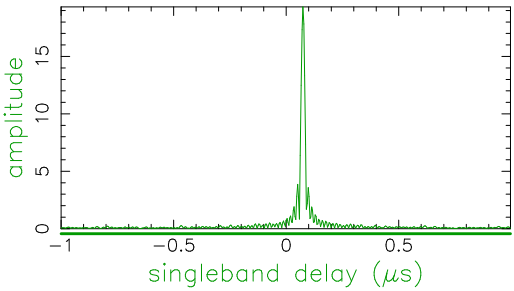
VLBA_BR - VLBA_LA, fgroup Q, pol RR

multiband delay (μ s)



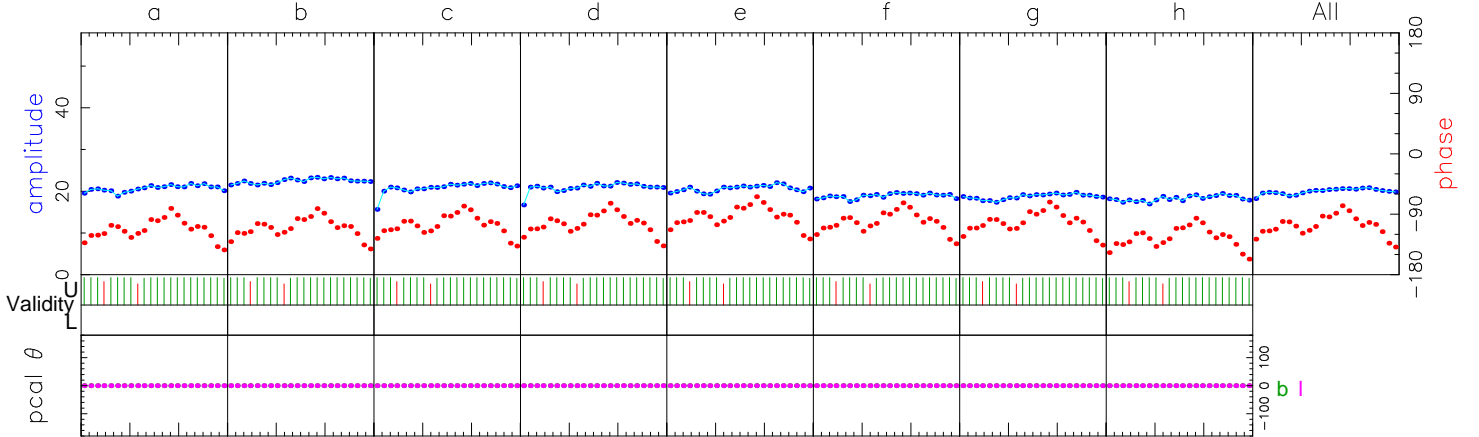
Fringe quality 8

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



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

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



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

Group delay (usec) (SBD) -1.67453717076E+03 Apriori delay (usec) -1.67461156098E+03 Resid mbdelay (usec) -3.73478E-03 +/- 1.5E-06
 Sband delay (usec) -1.67453705548E+03 Apriori clock (usec) 1.2921827E+01 Resid sbdelay (usec) 7.45055E-02 +/- 1.2E-05
 Phase delay (usec) -1.67461156784E+03 Apriori clockrate (us/s) 8.1044199E-07 Resid phdelay (usec) -6.86352E-06 +/- 1.1E-08
 Delay rate (us/s) -4.92676253087E-02 Apriori rate (us/s) -4.92673465022E-02 Resid rate (us/s) -2.78806E-07 +/- 1.0E-10
 Total phase (deg) 279.3 Apriori accel (us/s/s) 1.98999092992E-05 Resid phase (deg) 185.9 +/- 0.2

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

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

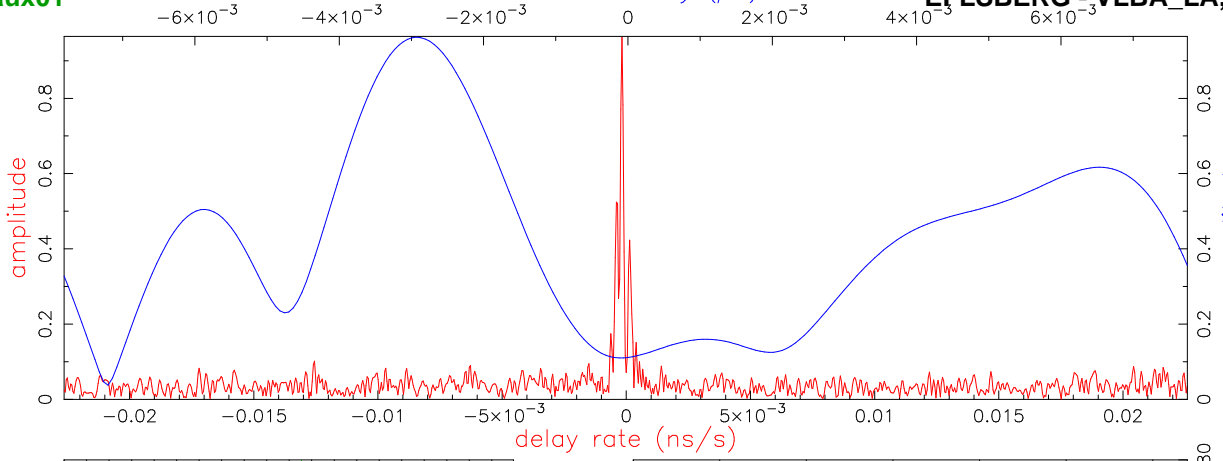
Mk4/DiFX fourfit 3.25 rev 0

aux01

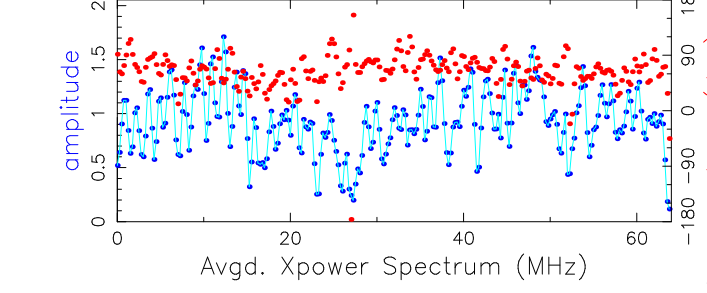
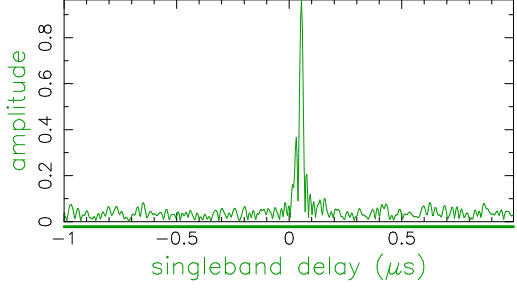
2013+370.3MP56K, No0500, BI

EFLSBERG - VLBA_LA, fgroup Q, pol LL

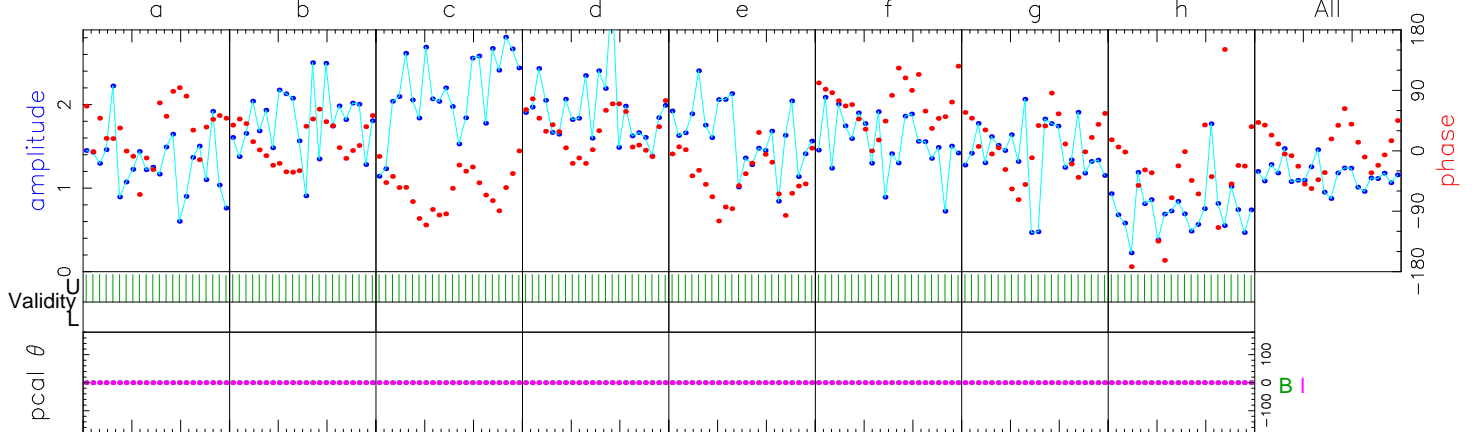
multiband delay (μ s)



Fringe quality 4
 Error code G
 SNR 35.4
 Int time 179.963
 Amp 0.965
 Phase 92.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.054067
 MBD -0.002958
 Fringe rate (Hz)
 -0.007864
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151753
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) -1.6557741185E+02 Apriori delay (usec) -1.65636953220E+02 Resid mbdelay (usec) -2.95797E-03 +/- 3.1E-05
 Sband delay (usec) -1.65582886470E+02 Apriori clock (usec) -2.7094002E+01 Resid sbdelay (usec) 5.40668E-02 +/- 2.4E-04
 Phase delay (usec) -1.65636953045E+02 Apriori clockrate (us/s) 4.4462047E-08 Resid phdelay (usec) 1.75174E-07 +/- 2.1E-07
 Delay rate (us/s) -1.48704910508E+00 Apriori rate (us/s) -1.48704892279E+00 Resid rate (us/s) -1.82291E-07 +/- 2.0E-09
 Total phase (deg) 34.4 Apriori accel (us/s/s) 1.35270752200E-05 Resid phase (deg) 92.7 +/- 3.2

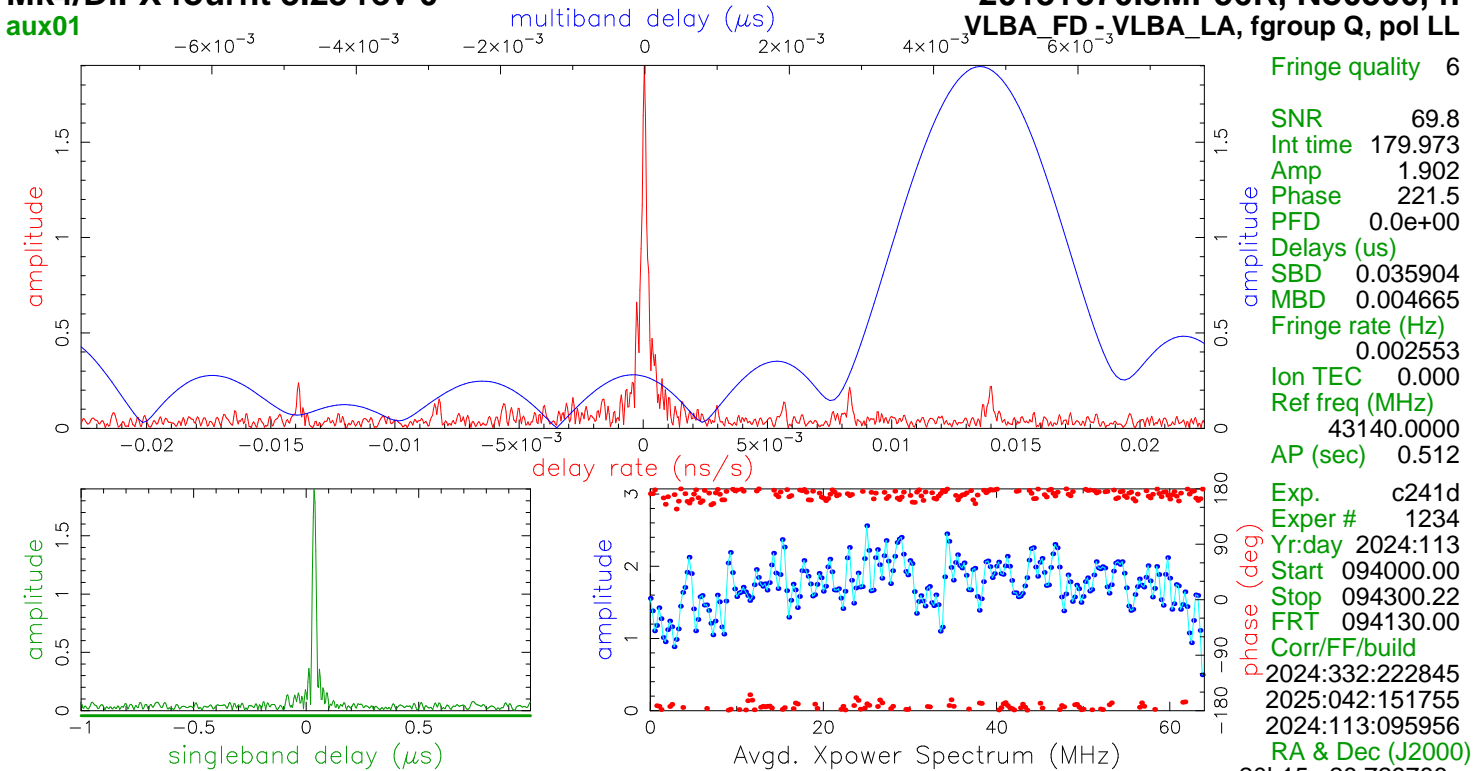
ph/seg (deg) 33.1 7.6 Search (1024X32) 0.957 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 24.2 13.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.1 4.6 Inc. seg. avg. 1.140 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.9 8.0 Inc. frq. avg. 1.284 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 I: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 5364.755 1031.506 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/BI..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/BI.Q.95.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

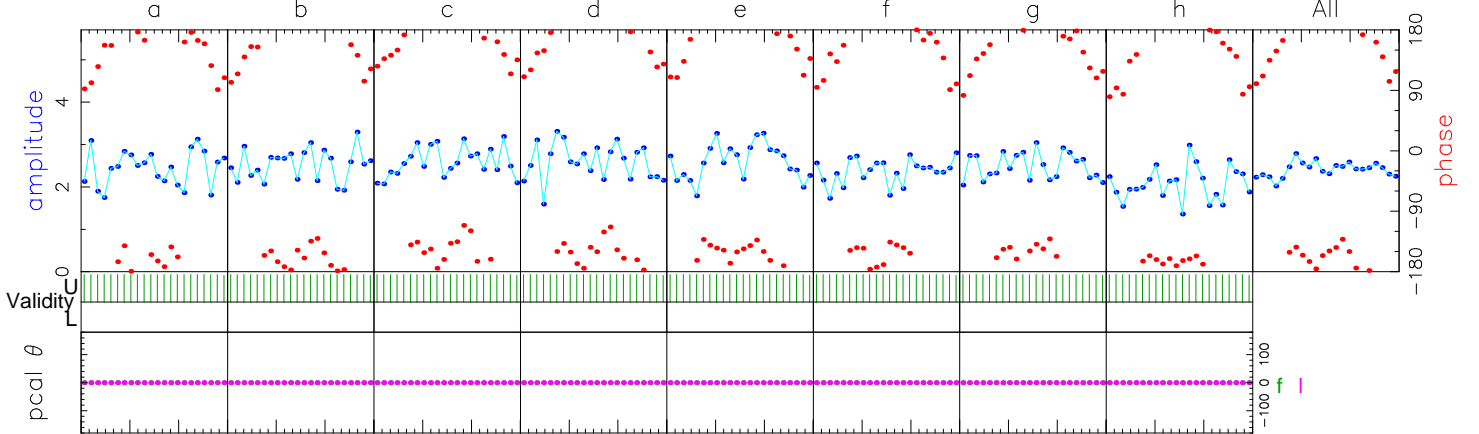
aux01

2013+370.3MP56K, No0500, fl

VLBA_FD - VLBA_LA, fgroup Q, pol LL



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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.57081991957E+00	Apriori delay (usec)	-1.60673451242E+00	Resid mbdelay (usec)	4.66459E-03	+/-	1.6E-05
Sband delay (usec)	-1.57083026242E+00	Apriori clock (usec)	8.3570232E+00	Resid sbdelay (usec)	3.59043E-02	+/-	1.2E-04
Phase delay (usec)	-1.60672314946E+00	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	1.13630E-05	+/-	1.1E-07
Delay rate (us/s)	2.30863774367E-02	Apriori rate (us/s)	2.30863182578E-02	Resid rate (us/s)	5.91789E-08	+/-	1.0E-09
Total phase (deg)	31.8	Apriori accel (us/s/s)	-5.07011830143E-06	Resid phase (deg)	221.5	+/-	1.6

ph/seg (deg)	RMS 39.6	Theor. 3.9	Amplitude Search (1024X32)	1.821	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	28.3	6.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	10.6	2.3	Inc. seg. avg.	2.408	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023
amp/frq (%)	9.4	4.1	Inc. frq. avg.	1.919	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	0.00

f: az 66.6 el 46.8 pa -82.9 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) -85.839 -416.057 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fl.Q.107.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

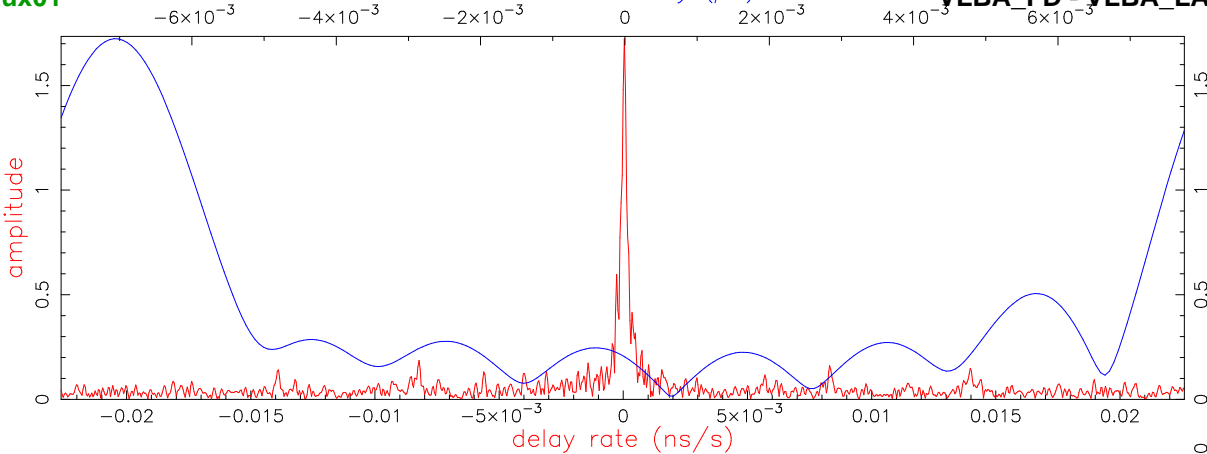
aux01

2013+370.3MP56K, No0500, fl

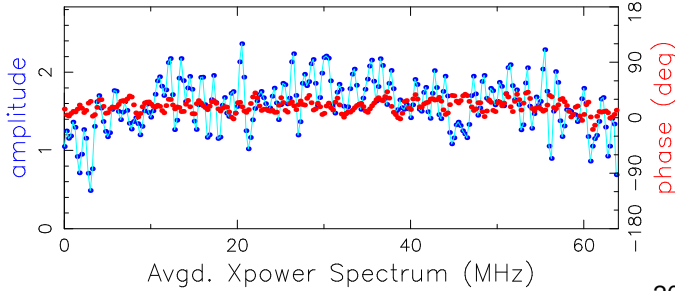
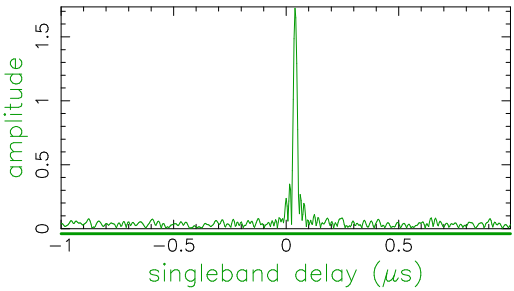
VLBA_FD - VLBA_LA, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 5

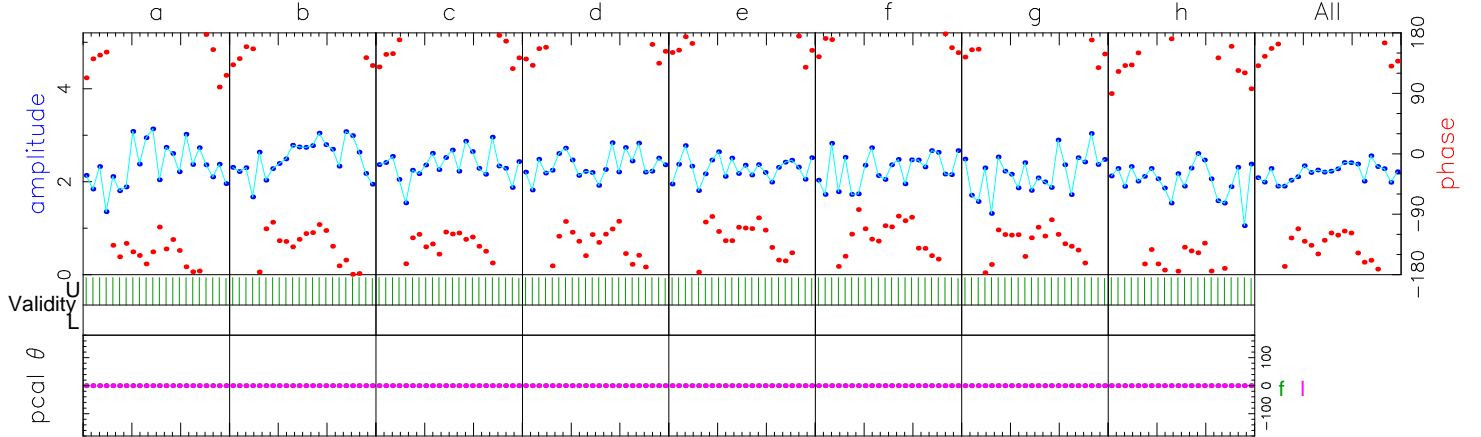


SNR 63.6
 Int time 179.973
 Amp 1.735
 Phase 89.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.040102
 MBD -0.007033
 Fringe rate (Hz)
 0.002739
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151757
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.56689266957E+00	Apriori delay (usec)	-1.60673451242E+00	Resid mbdelay (usec)	-7.03316E-03	+/-	1.7E-05
Sband delay (usec)	-1.56663226242E+00	Apriori clock (usec)	8.3570232E+00	Resid sbdelay (usec)	4.01023E-02	+/-	1.4E-04
Phase delay (usec)	-1.60674471037E+00	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	-1.01980E-05	+/-	1.2E-07
Delay rate (us/s)	2.30863817519E-02	Apriori rate (us/s)	2.30863182578E-02	Resid rate (us/s)	6.34941E-08	+/-	1.1E-09
Total phase (deg)	259.5	Apriori accel (us/s/s)	-5.07011830143E-06	Resid phase (deg)	89.1	+/-	1.8

ph/seg (deg)	RMS 39.6	Theor. 4.2	Amplitude 1.735 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	28.7	7.4	Search (1024X32) 1.636	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	15.9	2.5	Inc. seg. avg. 2.195	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.8	4.4	Inc. frq. avg. 1.767	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
f: az 66.6 el 46.8 pa -82.9	l: az 71.2 el 46.9 pa -74.8	u,v (fr/asec) -85.839 -416.057	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/fl..3MP56K	Output file: /Exps/c241d/v1/7mm/1234/No0500/fl.Q.123.3MP56K			ion window (TEC) 0.00 0.00

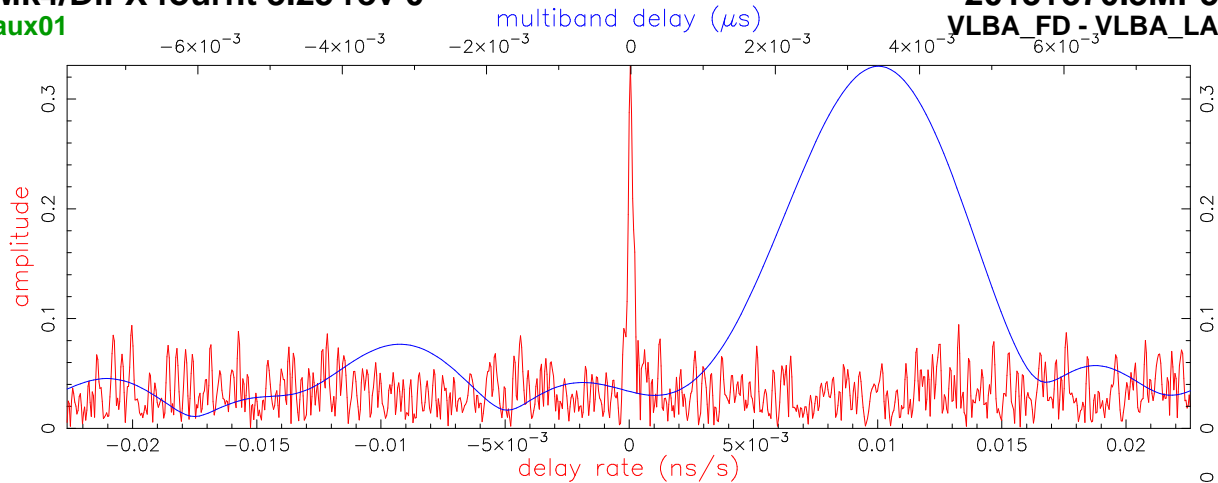
simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

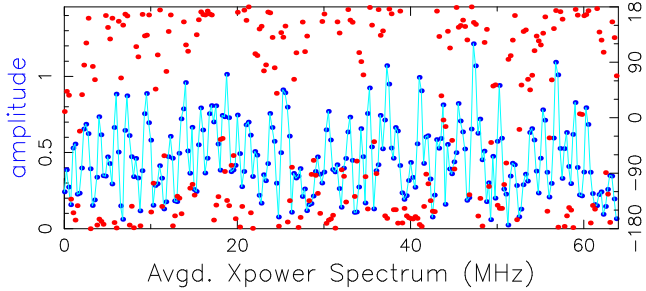
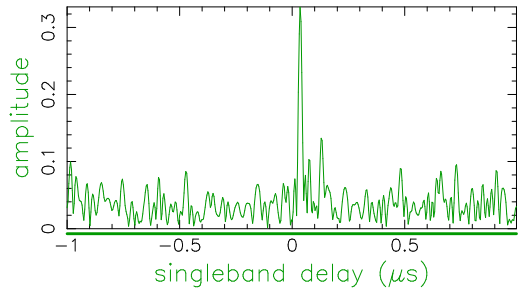
2013+370.3MP56K, No0500, fl

VLBA_FD - VLBA_LA, fgroup Q, pol LR



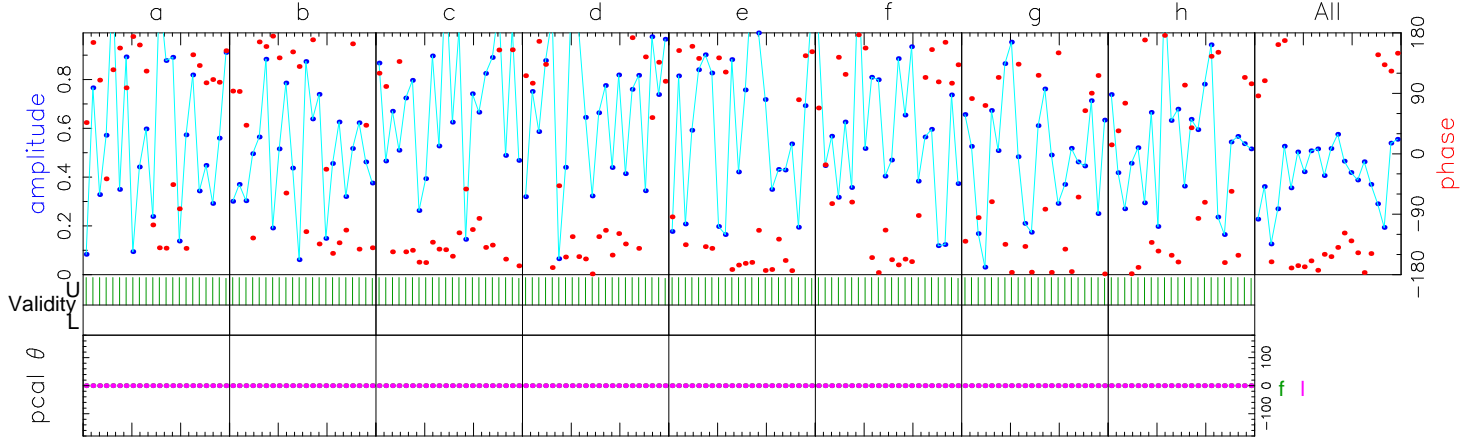
Fringe quality 9

SNR 12.1
 Int time 179.973
 Amp 0.331
 Phase 230.9
 PFD 1.9e-25
 Delays (us)
 SBD 0.035769
 MBD 0.003438
 Fringe rate (Hz)
 0.002178
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.57204629457E+00	Apriori delay (usec)	-1.60673451242E+00	Resid mbdelay (usec)	3.43822E-03	+/-	8.9E-05
Sband delay (usec)	-1.57096576242E+00	Apriori clock (usec)	8.3570232E+00	Resid sbdelay (usec)	3.57688E-02	+/-	7.1E-04
Phase delay (usec)	-1.60674572119E+00	Apriori clockrate (us/s)	2.8422100E-07	Resid phdelay (usec)	-1.12088E-05	+/-	6.1E-07
Delay rate (us/s)	2.30863687384E-02	Apriori rate (us/s)	2.30863182578E-02	Resid rate (us/s)	5.04806E-08	+/-	5.8E-09
Total phase (deg)	41.3	Apriori accel (us/s/s)	-5.07011830143E-06	Resid phase (deg)	230.9	+/-	9.4

ph/seg (deg)	40.3	RMS	22.2	Theor.	Amplitude	0.331 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	43.9	Search (1024X32)	0.329	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	15.7	Inc. seg. avg.	0.381	Inc. frq. avg.	0.330	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	37.0	Inc. frq. avg.	0.330	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
f: az 66.6 el 46.8 pa -82.9		l: az 71.2 el 46.9 pa -74.8		u, v (fr/asec)	-85.839 -416.057							

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fl.Q.164.3MP56K

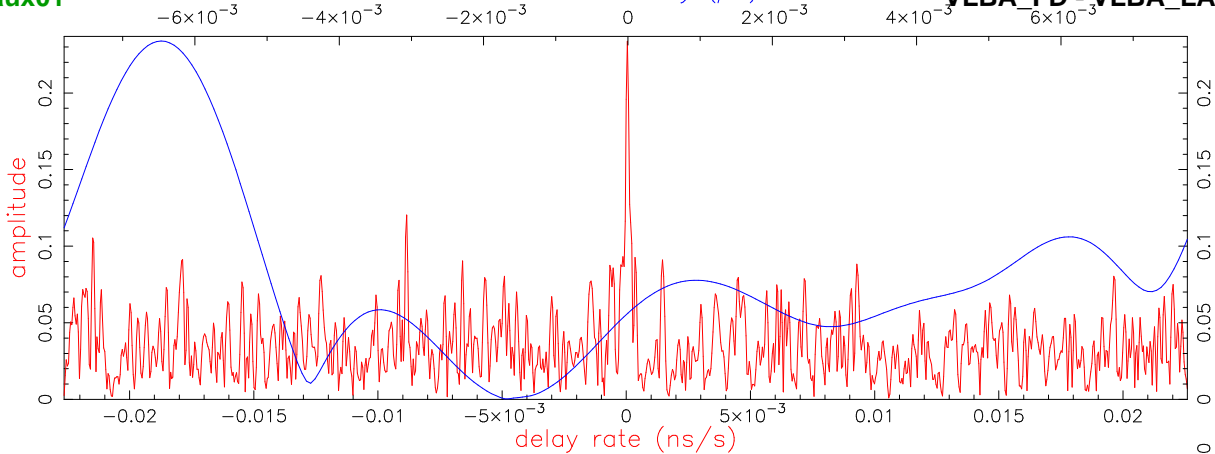
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fl

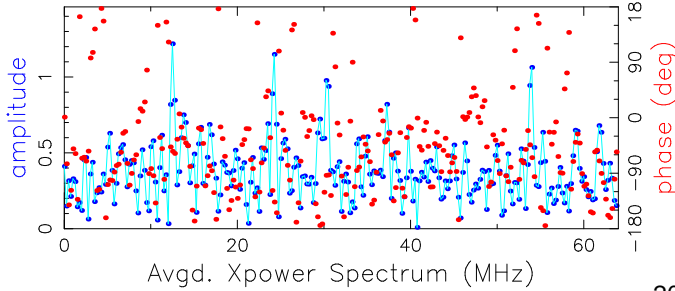
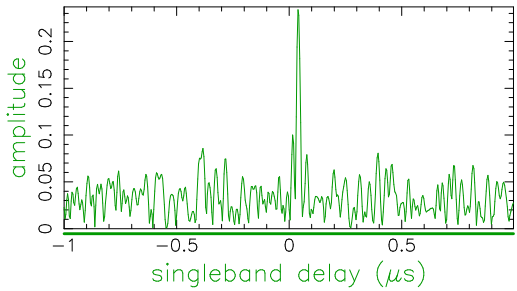
VLBA_FD - VLBA_LA, fgroup Q, pol RL

multiband delay (μ s)



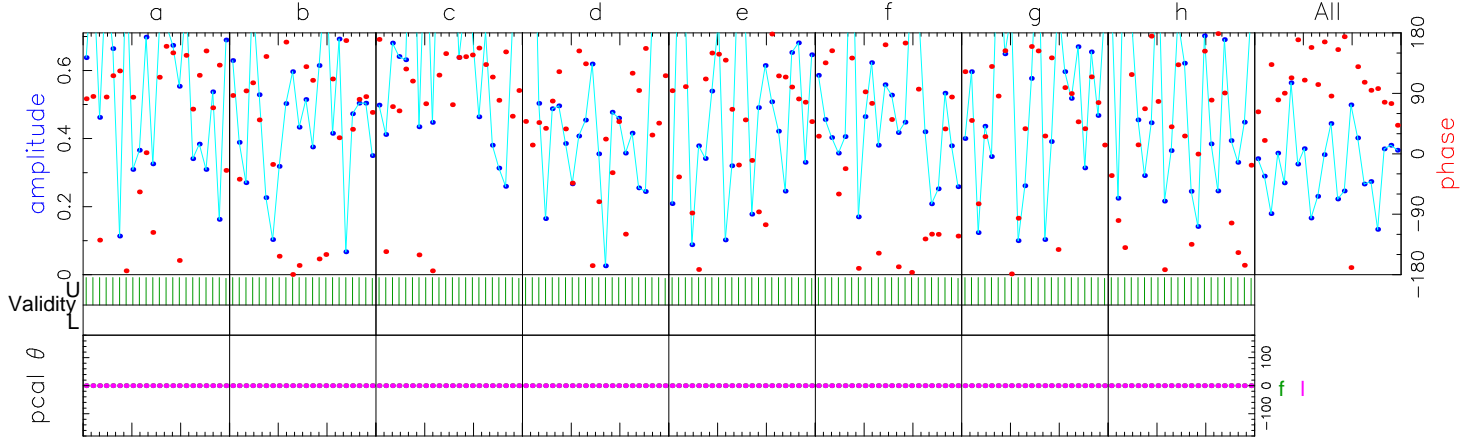
Fringe quality 9

SNR 8.7
 Int time 179.973
 Amp 0.237
 Phase 356.5
 PFD 6.6e-10
 Delays (us)
 SBD 0.040498
 MBD -0.006420
 Fringe rate (Hz)
 0.002392
 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
 2025:042:151808
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) -1.56627991957E+00 Apriori delay (usec) -1.60673451242E+00 Resid mbdelay (usec) -6.42041E-03 +/- 1.2E-04
 Sband delay (usec) -1.56623601242E+00 Apriori clock (usec) 8.3570232E+00 Resid sbdelay (usec) 4.04985E-02 +/- 9.9E-04
 Phase delay (usec) -1.60672749410E+00 Apriori clockrate (us/s) 2.8422100E-07 Resid phdelay (usec) 7.01832E-06 +/- 8.5E-07
 Delay rate (us/s) 2.30863737101E-02 Apriori rate (us/s) 2.30863182578E-02 Resid rate (us/s) 5.54523E-08 +/- 8.2E-09
 Total phase (deg) 166.8 Apriori accel (us/s/s) -5.07011830143E-06 Resid phase (deg) 356.5 +/- 13.2

RMS Theor. Amplitude 0.237 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.8 30.9 Search (1024X32) 0.230 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 56.2 54.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.7 18.6 Inc. seg. avg. 0.280 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 51.3 32.5 Inc. frq. avg. 0.238 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

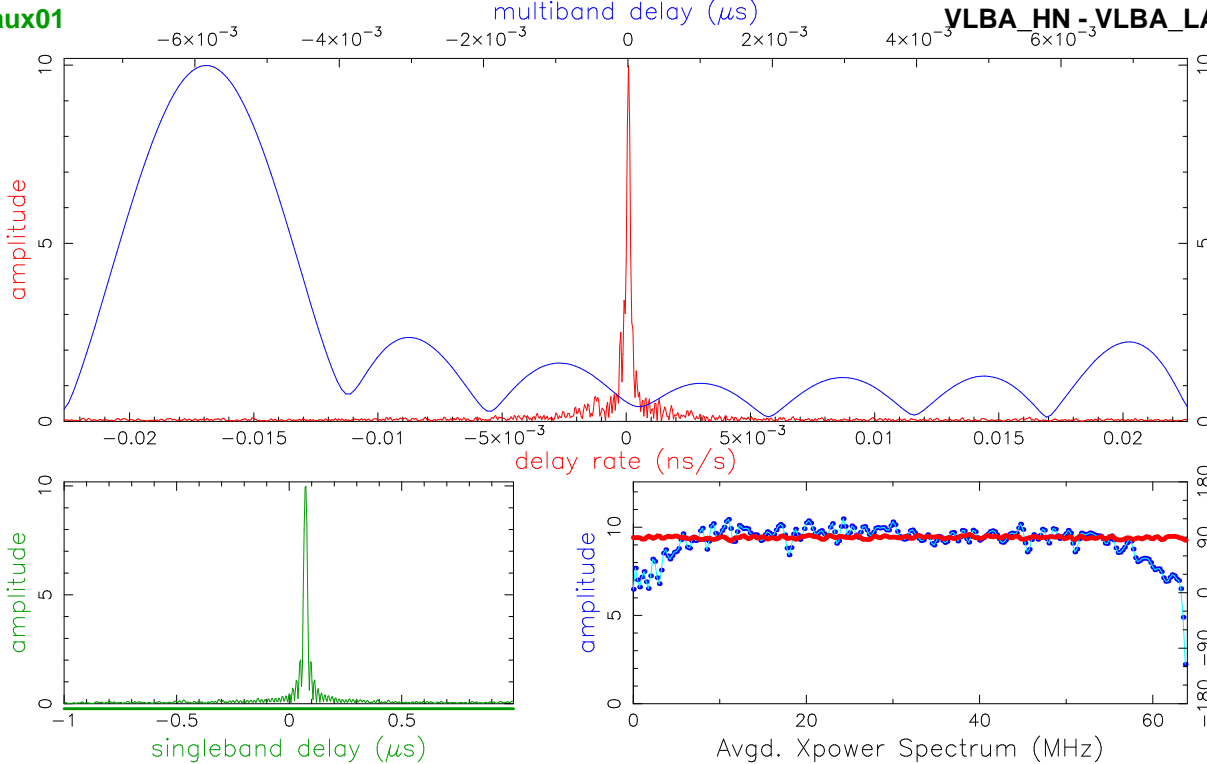
f: az 66.6 el 46.8 pa -82.9 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) -85.839 -416.057 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fl.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fl.Q.178.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, hl

VLBA_HN - VLBA_LA, fgroup Q, pol LL

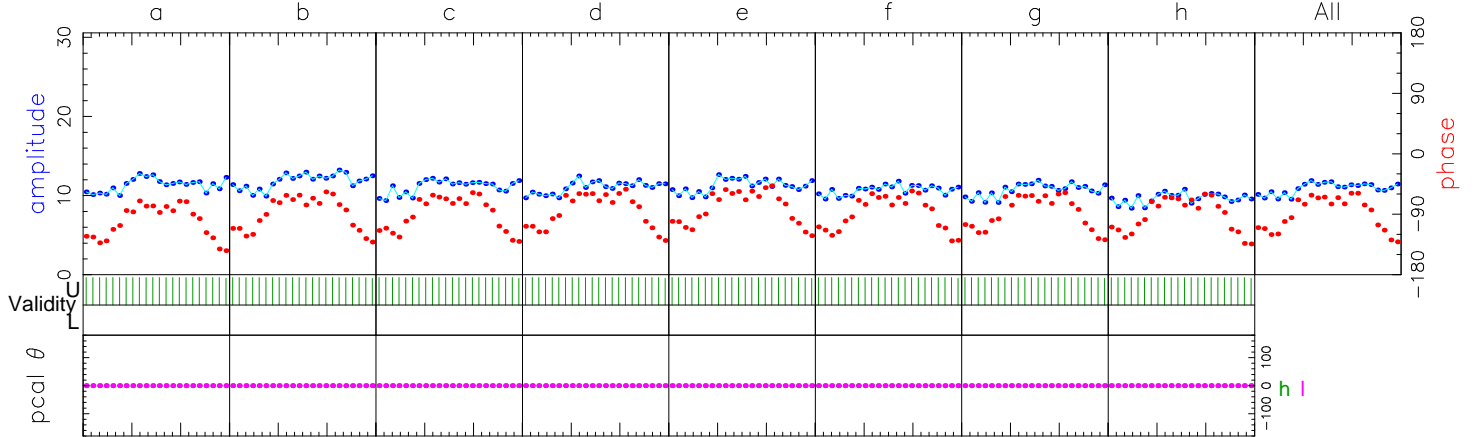


Fringe quality 7

SNR 373.9
 Int time 179.980
 Amp 10.191
 Phase 204.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.072419
 MBD -0.005889
 Fringe rate (Hz) 0.002885
 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



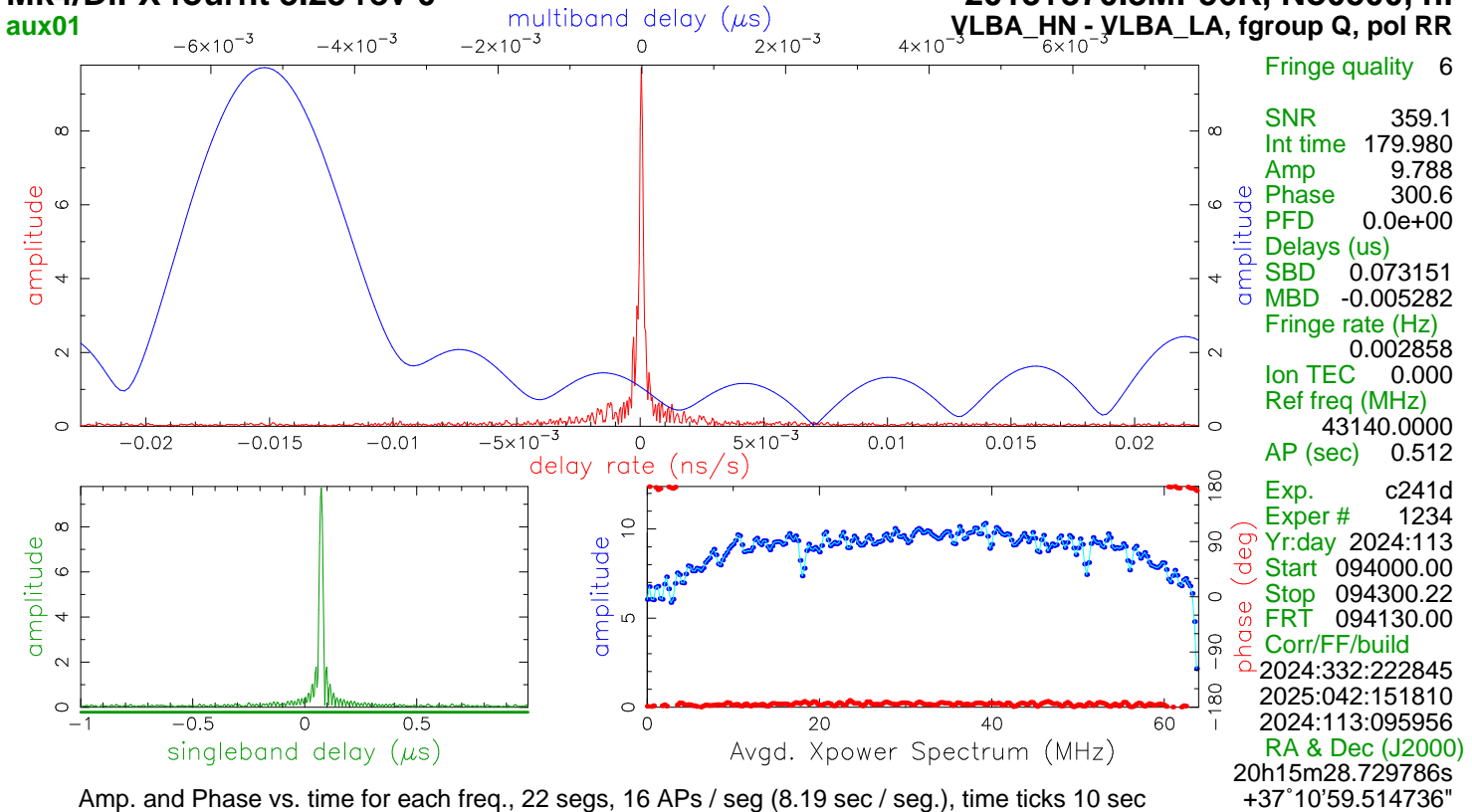
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:l	0:0	0:0	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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	4.86272784473E+03				4.86265560830E+03				Resid mbdelay (usec)	-5.88856E-03 +/- 2.9E-06
Sband delay (usec)	4.86272802680E+03				2.0721792E+01				Resid sbdelay (usec)	7.24185E-02 +/- 2.3E-05
Phase delay (usec)	4.86265560264E+03				3.1293804E-07				Resid phdelay (usec)	-5.66115E-06 +/- 2.0E-08
Delay rate (us/s)	-5.05749135830E-01				-5.05749202717E-01				Resid rate (us/s)	6.68868E-08 +/- 1.9E-10
Total phase (deg)			183.7		-1.91634127262E-05				Resid phase (deg)	204.6 +/- 0.3
ph/seg (deg)	RMS 24.0	Theor. 0.7	Amplitude 10.191 +/- 0.027						PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	9.9	1.3	Search (1024X32) 9.567						PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	6.5	0.4	Interp. 0.000						Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	5.6	0.8	Inc. seg. avg. 10.926						Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
			Inc. frq. avg. 10.035						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
h: az 103.5 el 73.6 pa -63.0			l: az 71.2 el 46.9 pa -74.8							ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0500/hl..3MP56K							simultaneous interpolator
										Output file: /Exps/c241d/v1/7mm/1234/No0500/hl.Q.167.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

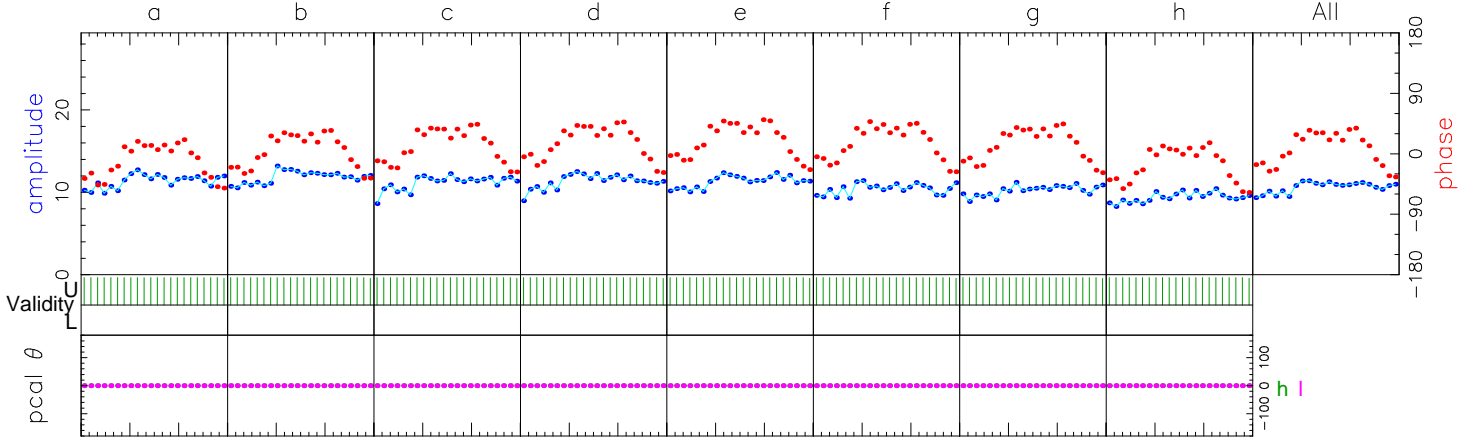
aux01

2013+370.3MP56K, No0500, hl

VLBA_HN - VLBA_LA, fgroup Q, pol RR



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
Group delay (usec) (SBD)	4.86272845177E+03									
Sband delay (usec)	4.86272875980E+03									
Phase delay (usec)	4.86265560882E+03									
Delay rate (us/s)	-5.05749136473E-01									
Total phase (deg)			279.7							
Apriori delay (usec)					4.86265560830E+03					
Apriori clock (usec)					2.0721792E+01					
Apriori clockrate (us/s)					3.1293804E-07					
Apriori rate (us/s)					-5.05749202717E-01					
Apriori accel (us/s/s)					-1.91634127262E-05					
Resid mbdelay (usec)									-5.28153E-03	+/- 3.0E-06
Resid sbdelay (usec)									7.31515E-02	+/- 2.4E-05
Resid phdelay (usec)									5.20704E-07	+/- 2.1E-08
Resid rate (us/s)									6.62445E-08	+/- 2.0E-10
Resid phase (deg)									300.6	+/- 0.3
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Data rate (MSamp/s):	128 MBpts	32 Amb	0.016 us							
Data rate (Mb/s):	2048									
nlags:	256	t_cohere	infinite							
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.023	0.023								
ion window (TEC)	0.00	0.00								
h: az	103.5	el	73.6	pa	-63.0					
l: az	71.2	el	46.9	pa	-74.8					
u,v (fr/asec)	1815.460	-244.450								
Control file:	cf_1234_gmva	Input file:	/Exps/c241d/v1/7mm/1234/No0500/hl..3MP56K	Output file:	/Exps/c241d/v1/7mm/1234/No0500/hl.Q.182.3MP56K					

Mk4/DiFX fourfit 3.25 rev 0

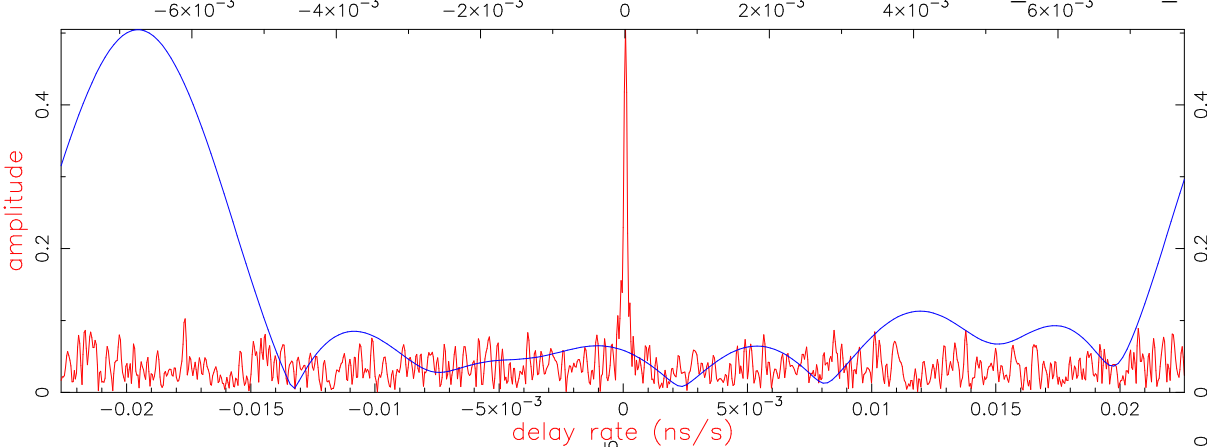
aux01

2013+370.3MP56K, No0500, hl

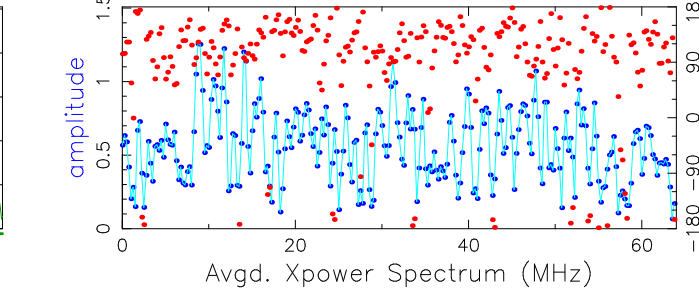
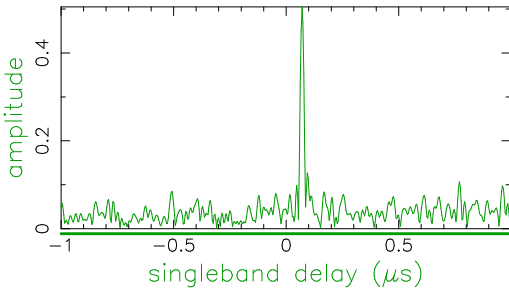
VLBA_HN - VLBA_LA, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 9

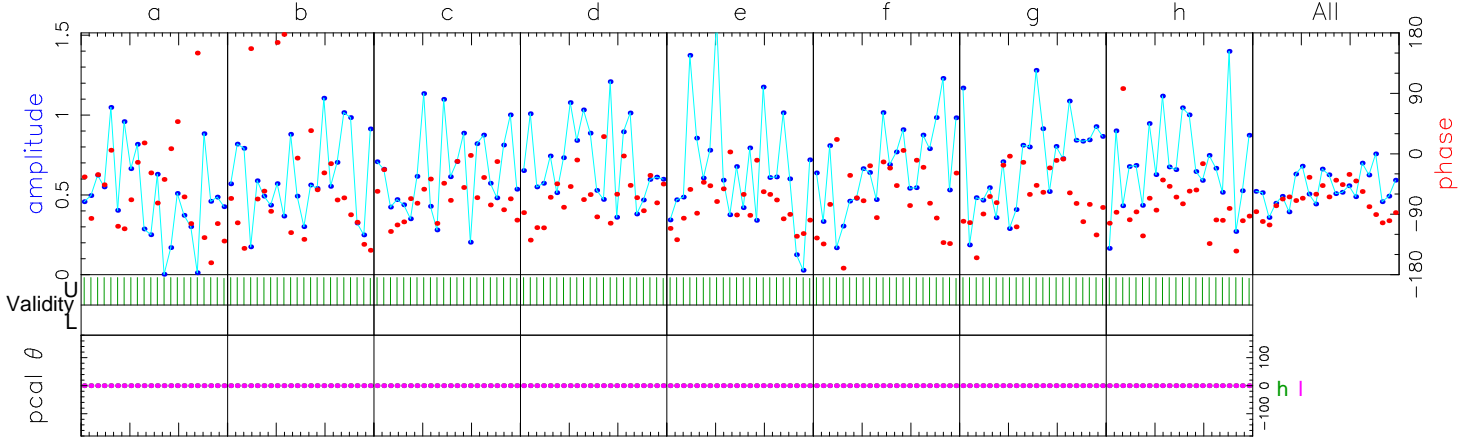


SNR 18.5
 Int time 179.980
 Amp 0.505
 Phase 224.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.070681
 MBD -0.006736
 Fringe rate (Hz) 0.002950
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
h:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) 4.86272699761E+03 Apriori delay (usec) 4.86265560830E+03 Resid mbdelay (usec) -6.73569E-03 +/- 5.9E-05
 Sband delay (usec) 4.86272628980E+03 Apriori clock (usec) 2.0721792E+01 Resid sbdelay (usec) 7.06815E-02 +/- 4.6E-04
 Phase delay (usec) 4.86265560390E+03 Apriori clockrate (us/s) 3.1293804E-07 Resid phdelay (usec) -4.39656E-06 +/- 4.0E-07
 Delay rate (us/s) -5.05749134339E-01 Apriori rate (us/s) -5.05749202717E-01 Resid rate (us/s) 6.83780E-08 +/- 3.8E-09
 Total phase (deg) 203.3 Apriori accel (us/s/s) -1.91634127262E-05 Resid phase (deg) 224.2 +/- 6.2

ph/seg (deg) 22.7 14.5 Search (1024X32) 0.485 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 21.3 25.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.8 8.7 Inc. seg. avg. 0.527 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.1 15.3 Inc. frq. avg. 0.504 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

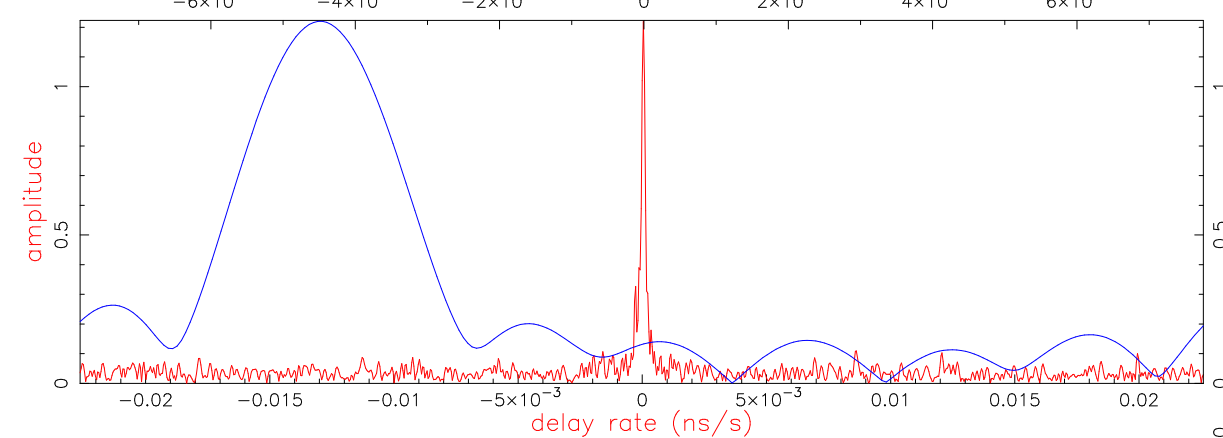
h: az 103.5 el 73.6 pa -63.0 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 1815.460 -244.450 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/hl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/hl.Q.216.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

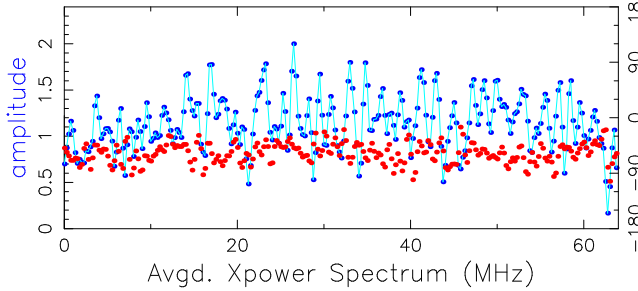
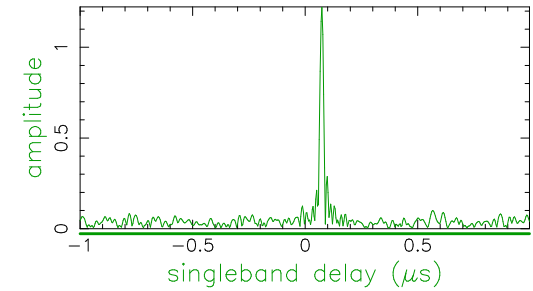
2013+370.3MP56K, No0500, hl

VLBA_HN - VLBA_LA, fgroup Q, pol RL



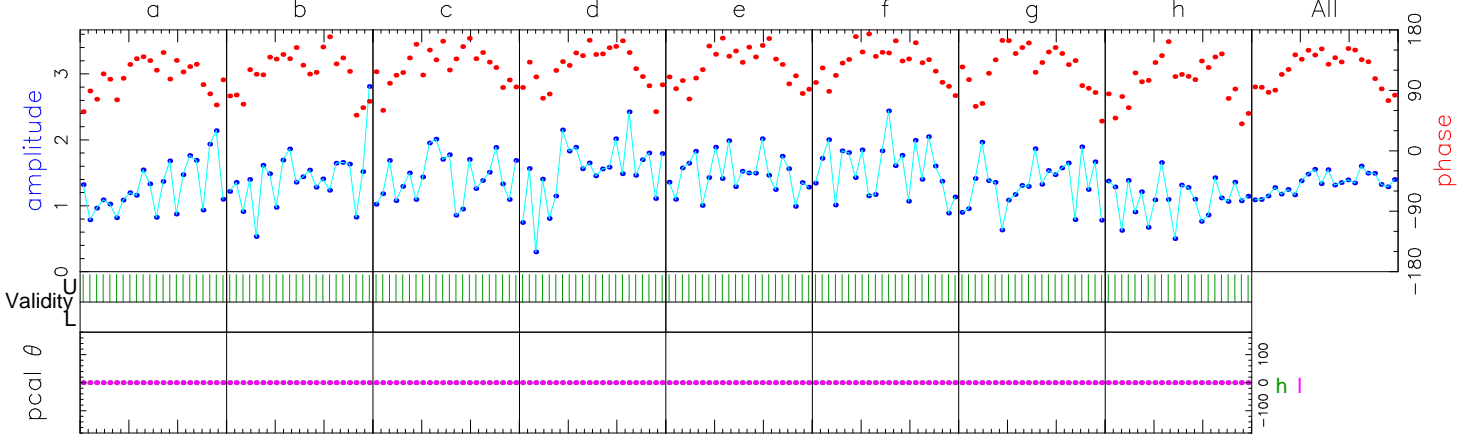
Fringe quality 8

SNR 44.9
Int time 179.980
Amp 1.223
Phase 54.6
PFD 0.0e+00
Delays (us)
SBD 0.073593
MBD -0.004501
Fringe rate (Hz) 0.002844
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512



Exp. c241d
Yr:day 1234
Yr:day 2024:113
Start 094000.00
Stop 094300.22
FRT 094130.00
Corr/FF/build 2024:332:222845
2025:042:151817
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	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:l	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	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 4.86272923220E+03 Apriori delay (usec) 4.86265560830E+03 Resid mbdelay (usec) -4.50109E-03 +/- 2.4E-05
 Sband delay (usec) 4.86272920180E+03 Apriori clock (usec) 2.0721792E+01 Resid sbdelay (usec) 7.35935E-02 +/- 1.9E-04
 Phase delay (usec) 4.86265561616E+03 Apriori clockrate (us/s) 3.1293804E-07 Resid phdelay (usec) 7.86190E-06 +/- 1.6E-07
 Delay rate (us/s) -5.05749136804E-01 Apriori rate (us/s) -5.05749202717E-01 Resid rate (us/s) 6.59134E-08 +/- 1.6E-09
 Total phase (deg) 33.7 Apriori accel (us/s/s) -1.91634127262E-05 Resid phase (deg) 54.6 +/- 2.6

ph/seg (deg) 25.0 6.0 Search (1024X32) 1.163 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 15.3 10.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.9 3.6 Inc. seg. avg. 1.334 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 12.2 6.3 Inc. frq. avg. 1.233 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

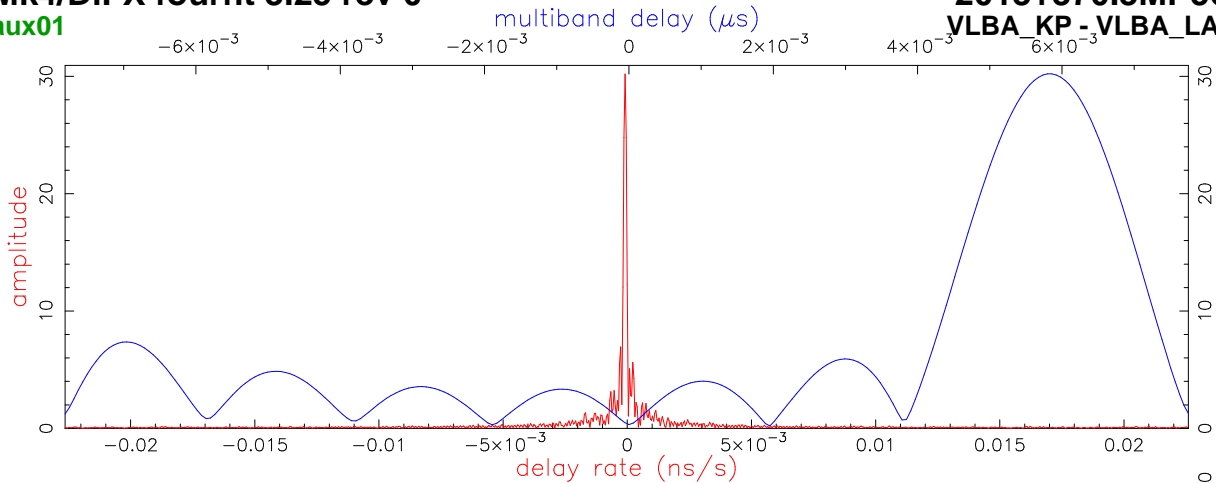
h: az 103.5 el 73.6 pa -63.0 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 1815.460 -244.450 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/hl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/hl.Q.226.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

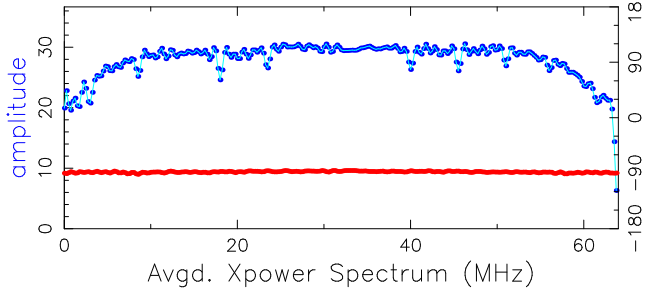
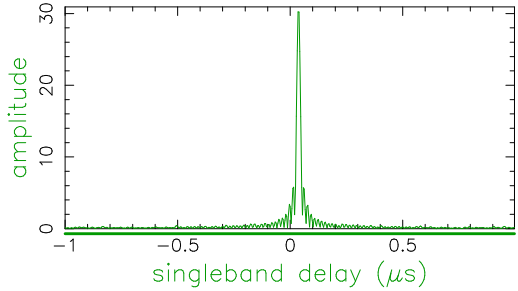
2013+370.3MP56K, No0500, kl

VLBA_KP - VLBA_LA, fgroup Q, pol LL



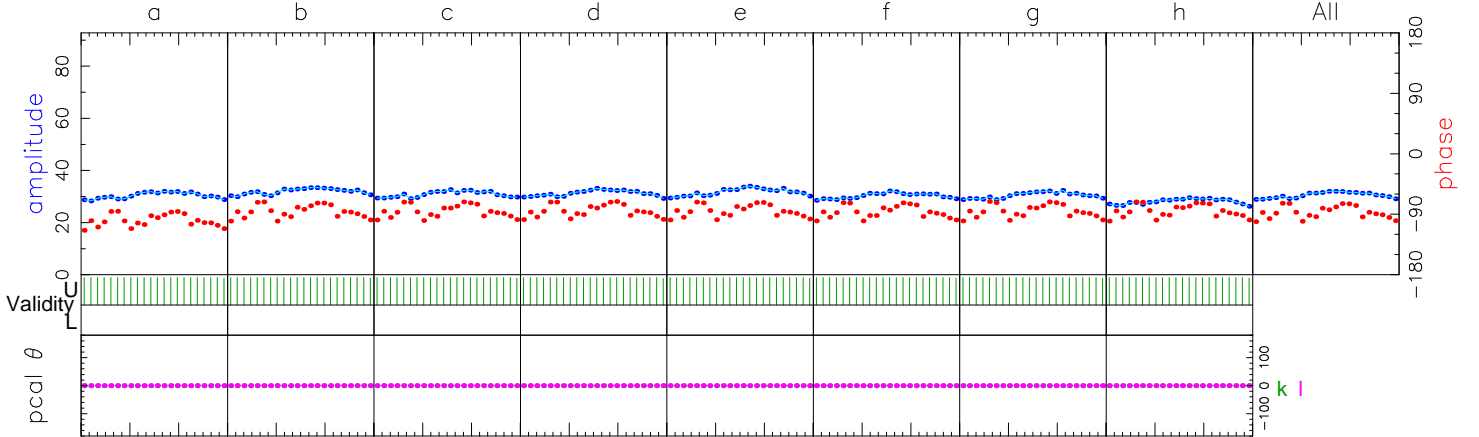
Fringe quality 9

SNR 1135.0
 Int time 179.983
 Amp 30.938
 Phase 318.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.037085
 MBD 0.005781
 Fringe rate (Hz)
 -0.004414
 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
 2025:042:151811
 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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.45962719865E+03	Apriori delay (usec)	-1.45966422928E+03	Resid mbdelay (usec)	5.78063E-03	+/-	9.6E-07
Sband delay (usec)	-1.45962714378E+03	Apriori clock (usec)	8.4495506E+00	Resid sbdelay (usec)	3.70855E-02	+/-	7.6E-06
Phase delay (usec)	-1.45966423489E+03	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-5.60413E-06	+/-	6.5E-09
Delay rate (us/s)	9.09006696848E-02	Apriori rate (us/s)	9.09007719958E-02	Resid rate (us/s)	-1.02311E-07	+/-	6.2E-11
Total phase (deg)	11.5	Apriori accel (us/s/s)	4.02953872001E-06	Resid phase (deg)	318.0	+/-	0.1

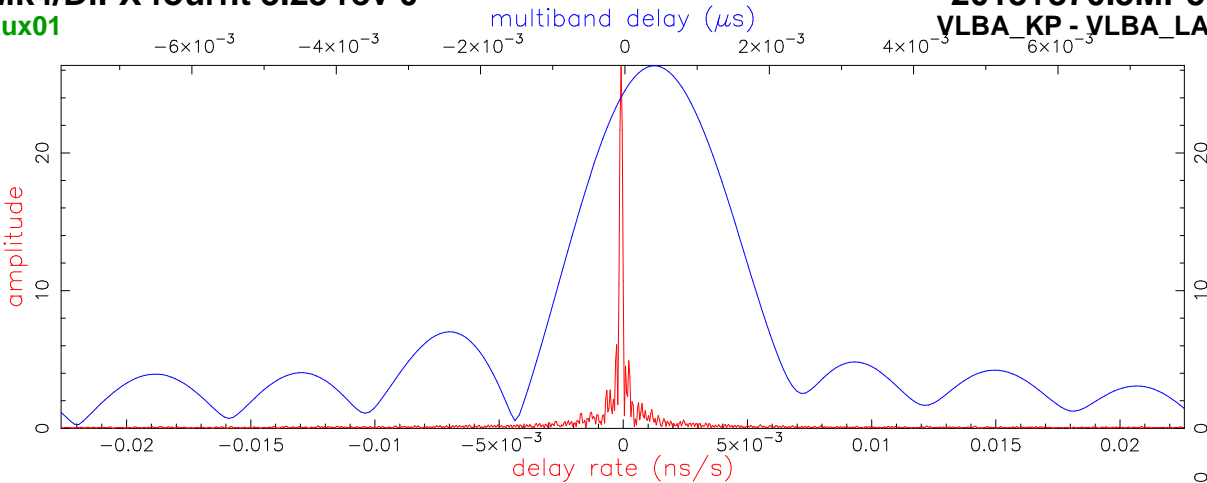
ph/seg (deg) 8.8 0.2 Theor. Amplitude 30.938 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.7 0.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.2 0.1 Inc. seg. avg. 30.551 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 4.1 0.2 Inc. frq. avg. 30.289 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 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) -326.401 -72.703 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/kl.1.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kl.Q.193.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

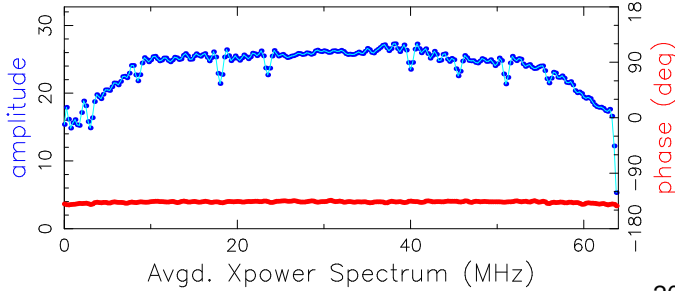
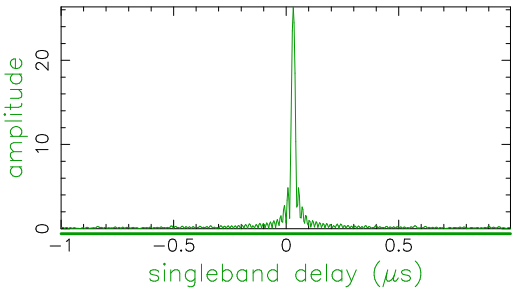
2013+370.3MP56K, No0500, kl

VLBA_KP - VLBA_LA, fgroup Q, pol RR



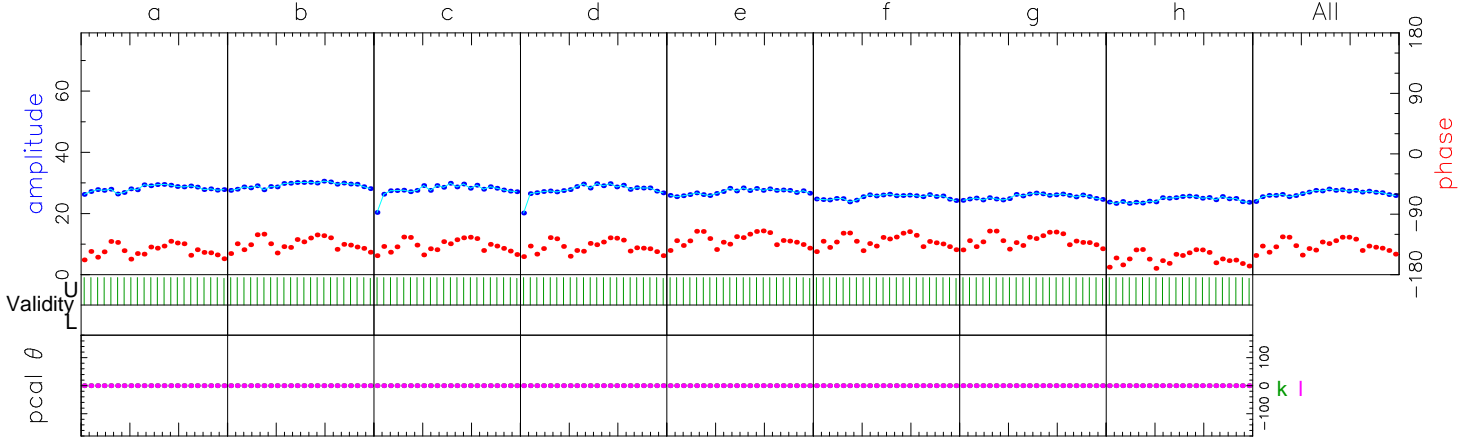
Fringe quality 9

SNR 966.9
 Int time 179.984
 Amp 26.354
 Phase 268.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.031651
 MBD 0.000417
 Fringe rate (Hz)
 -0.004407
 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
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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) -1.45963256222E+03 Apriori delay (usec) -1.45966422928E+03 Resid mbdelay (usec) 4.17064E-04 +/- 1.1E-06
 Sband delay (usec) -1.45963257828E+03 Apriori clock (usec) 8.4495506E+00 Resid sbdelay (usec) 3.16510E-02 +/- 8.9E-06
 Phase delay (usec) -1.45966423810E+03 Apriori clockrate (us/s) 3.8620713E-07 Resid phdelay (usec) -8.81765E-06 +/- 7.6E-09
 Delay rate (us/s) 9.09006698404E-02 Apriori rate (us/s) 0.909007719958E-02 Resid rate (us/s) -1.02155E-07 +/- 7.3E-11
 Total phase (deg) 321.6 Apriori accel (us/s/s) 4.02953872001E-06 Resid phase (deg) 268.1 +/- 0.1

ph/seg (deg) 8.7 0.3 Theor. Amplitude 26.354 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.8 0.5 Search (1024X32) 25.771 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.9 0.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.8 0.3 Inc. seg. avg. 26.634 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 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) -326.401 -72.703 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/kl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kl.Q.206.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

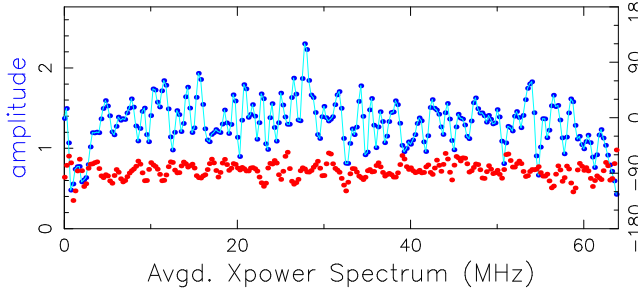
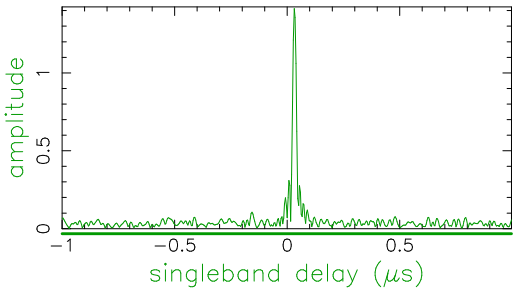
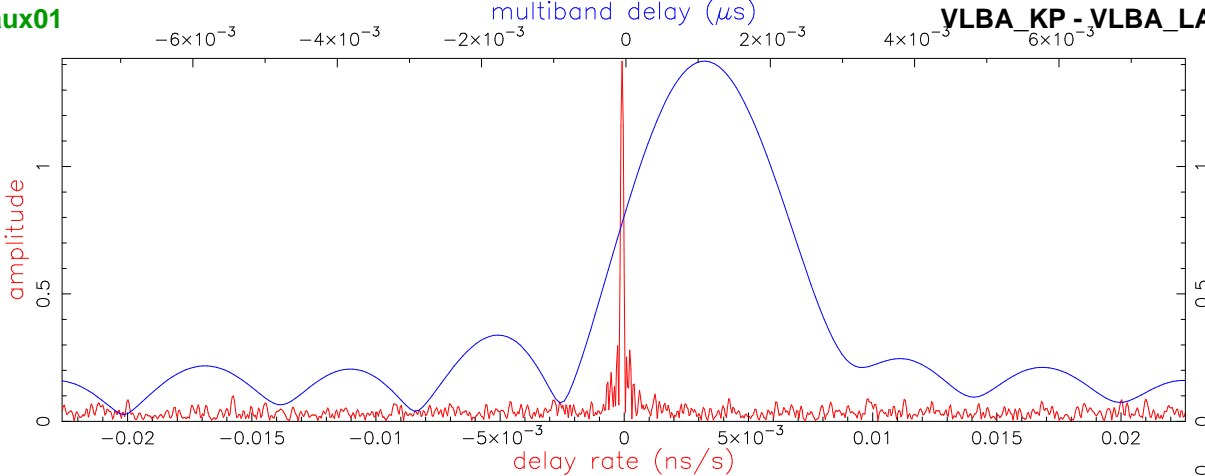
aux01

2013+370.3MP56K, No0500, kl

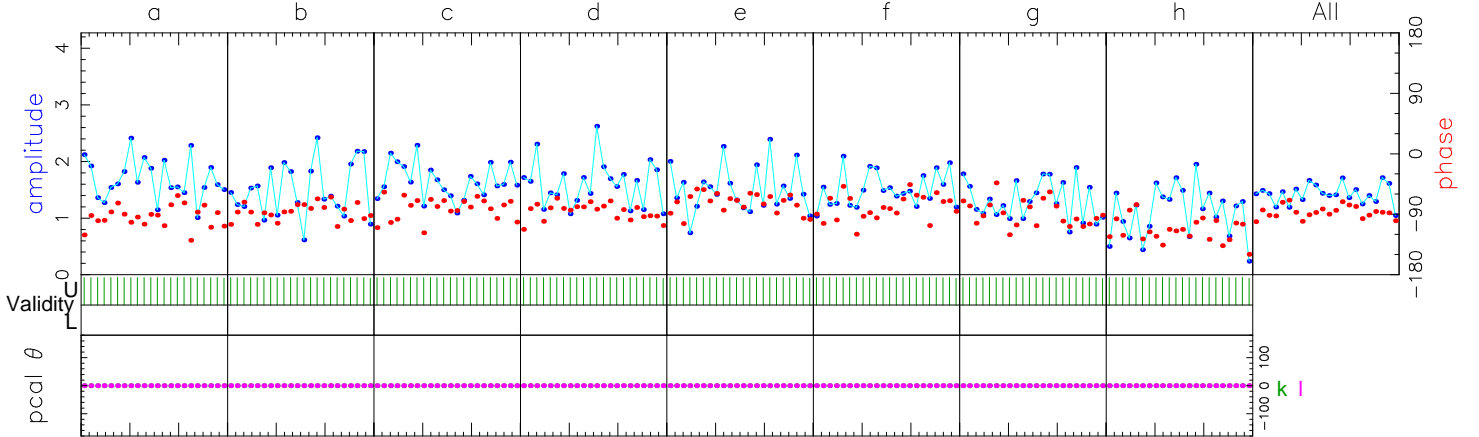
VLBA_KP - VLBA_LA, fgroup Q, pol RL

Fringe quality 8

SNR 52.3
 Int time 179.984
 Amp 1.424
 Phase 318.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.032365
 MBD 0.001116
 Fringe rate (Hz)
 -0.004358
 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
 2025:042:151817
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.45963186375E+03	Apriori delay (usec)	-1.45966422928E+03	Resid mbdelay (usec)	1.11553E-03	+/-	2.1E-05
Sband delay (usec)	-1.45963186403E+03	Apriori clock (usec)	8.4495506E+00	Resid sbdelay (usec)	3.23653E-02	+/-	1.6E-04
Phase delay (usec)	-1.45966423484E+03	Apriori clockrate (us/s)	3.8620713E-07	Resid phdelay (usec)	-5.55662E-06	+/-	1.4E-07
Delay rate (us/s)	9.09006709751E-02	Apriori rate (us/s)	9.09007719958E-02	Resid rate (us/s)	-1.01021E-07	+/-	1.4E-09
Total phase (deg)	12.3	Apriori accel (us/s/s)	4.02953872001E-06	Resid phase (deg)	318.7	+/-	2.2

ph/seg (deg)	8.9	Theor.	5.1	Amplitude	1.424 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	11.8		9.0	Search (1024X32)	1.384	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	13.1		3.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	12.4		5.4	Inc. seg. avg.	1.424	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	1.435	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

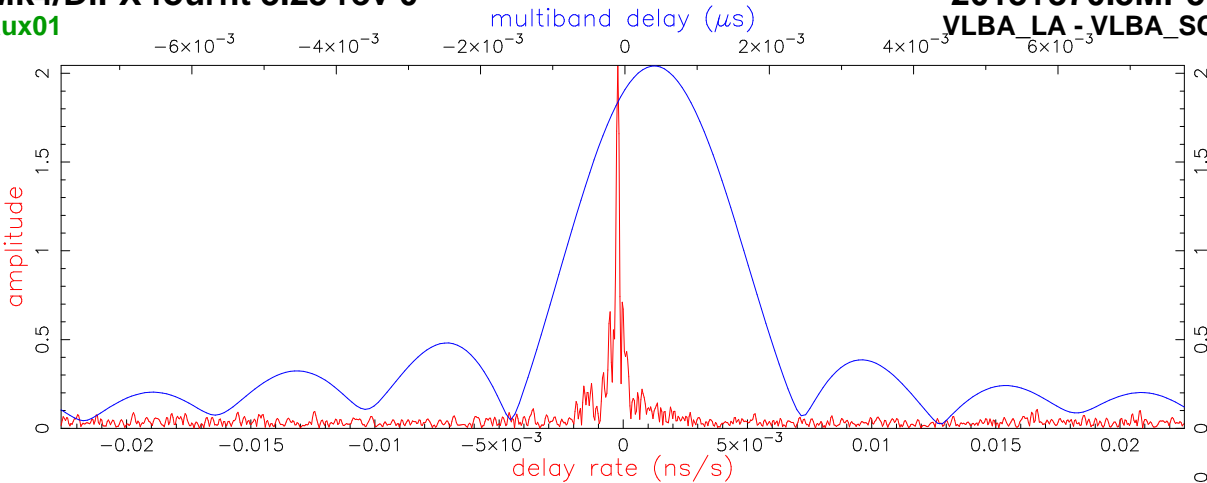
k: az 66.3 el 41.3 pa -77.6 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) -326.401 -72.703 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/kl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/kl.Q.228.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

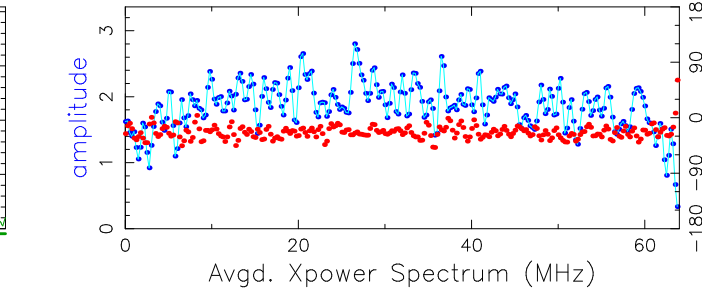
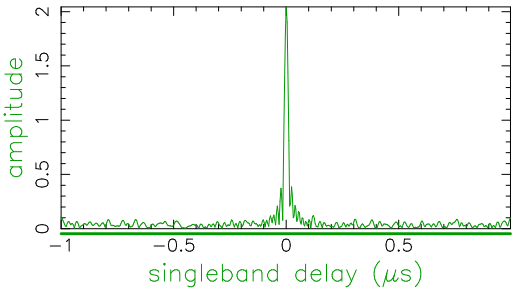
2013+370.3MP56K, No0500, lc

VLBA_LA - VLBA_SC, fgroup Q, pol LL



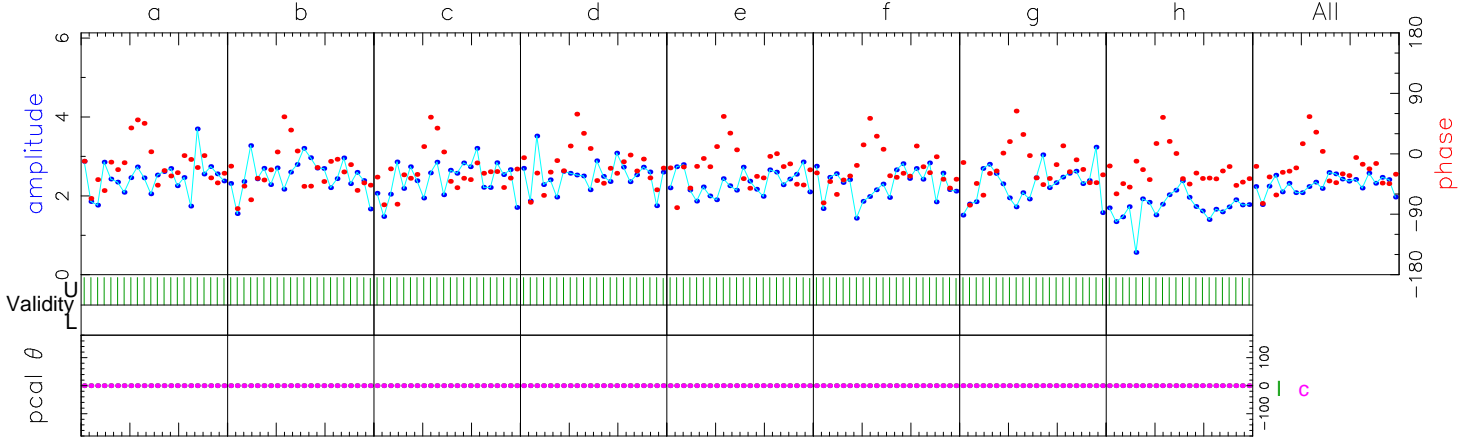
Fringe quality 7

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		
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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

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	RMS	3.6	Theor.	2.045 +/- 0.027	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	15.7	Search (1024X32)	1.964	Amplitude		PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	4.2	Interp.	0.000	Search		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.9	Inc. seg. avg.	2.289	Inc. frq. avg.	2.044	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	2.044			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.274.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

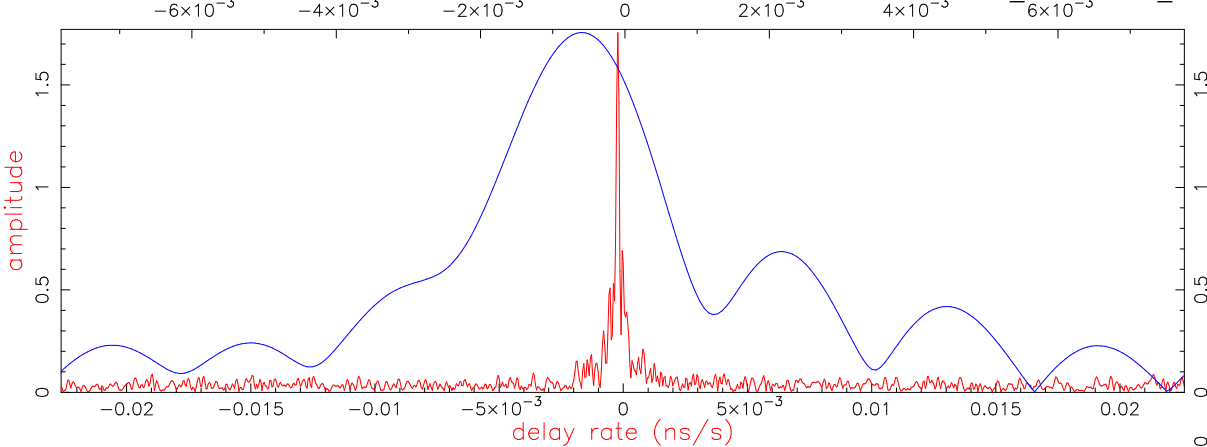
aux01

2013+370.3MP56K, No0500, lc

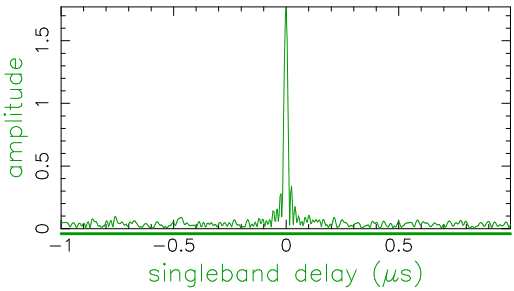
VLBA_LA - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)

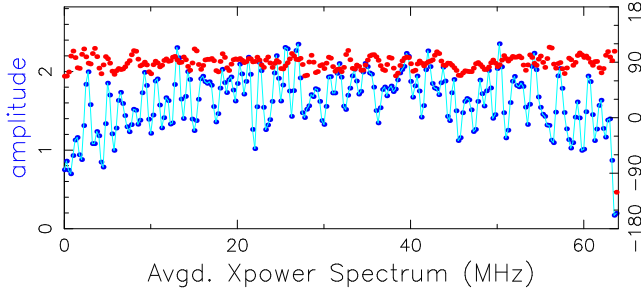
Fringe quality 5



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



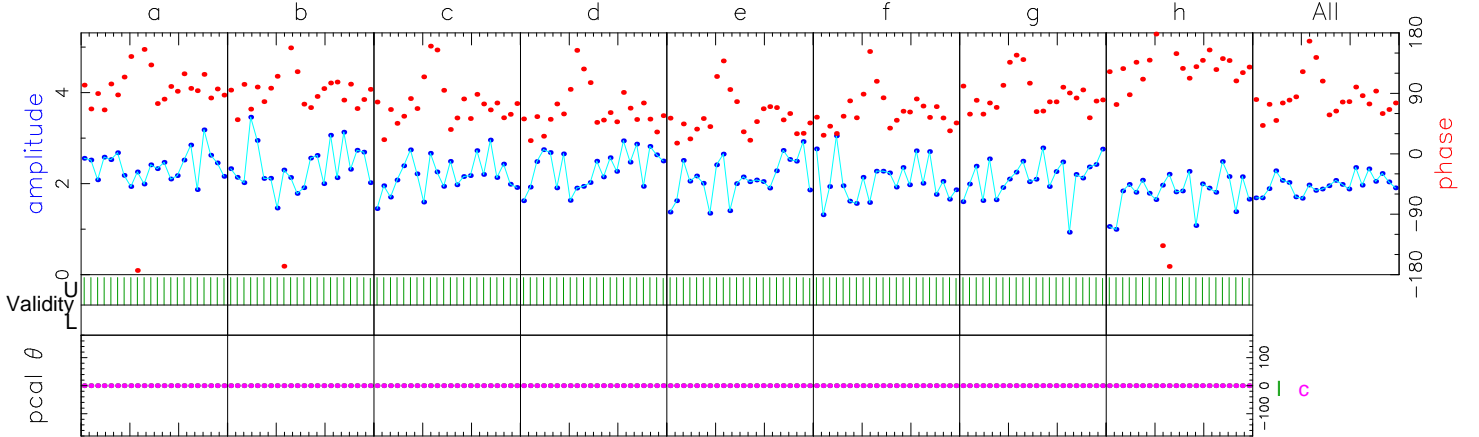
singleband delay (μ s)



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	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	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

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

ph/seg (deg)	28.9	RMS	4.1	Theor.	1.771 +/- 0.027	Search (1024X32)	1.685	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	16.0		7.2	Interp.	0.000	Inc. seg. avg.	1.972	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.0		2.5	Inc. seg. avg.	1.972	Inc. frq. avg.	1.914	Bits/sample: 2x2	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	Data rate(Mb/s): 2048	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

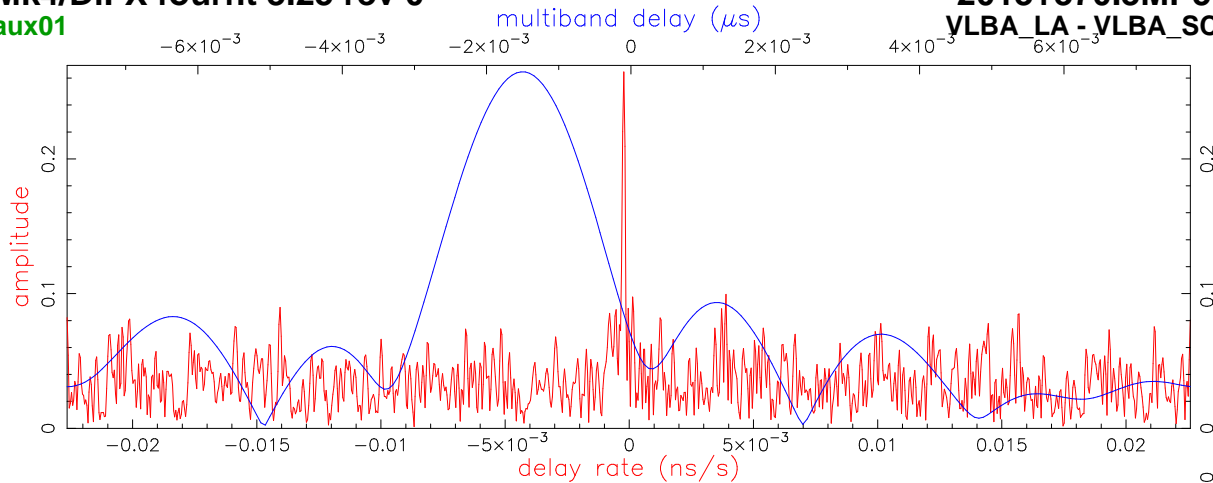
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lc.Q.307.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

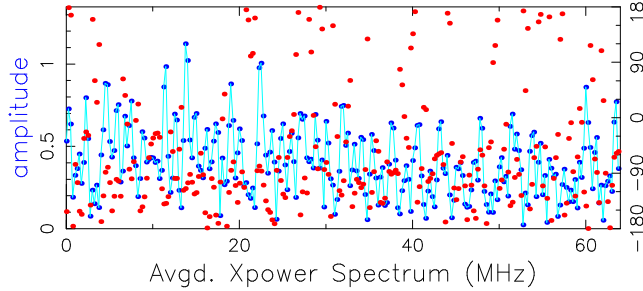
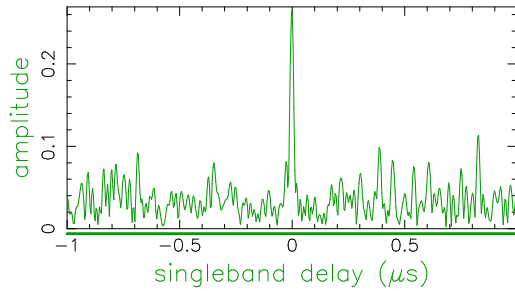
2013+370.3MP56K, No0500, lc

VLBA_LA - VLBA_SC, fgroup Q, pol LR



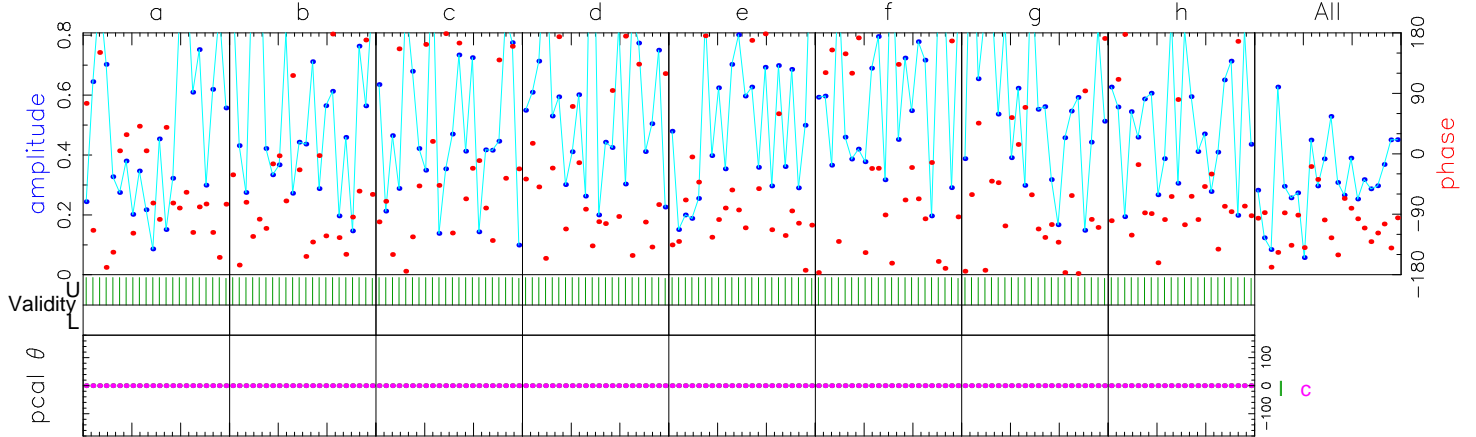
Fringe quality 9

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	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023 0.023
			Inc. frq. avg.	0.263	Data rate(Mb/s): 2048	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

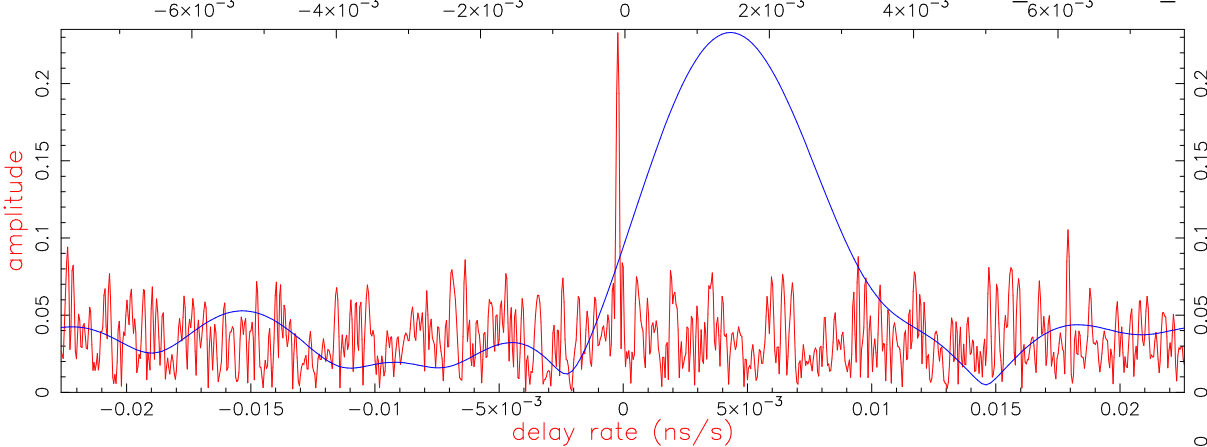
aux01

2013+370.3MP56K, No0500, lc

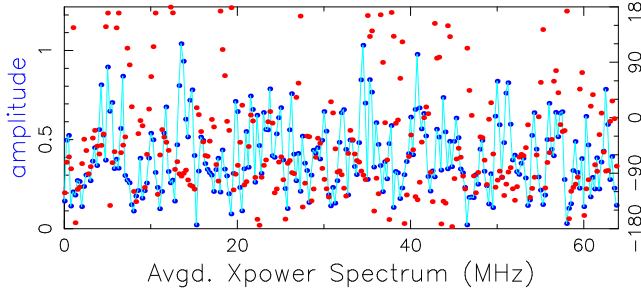
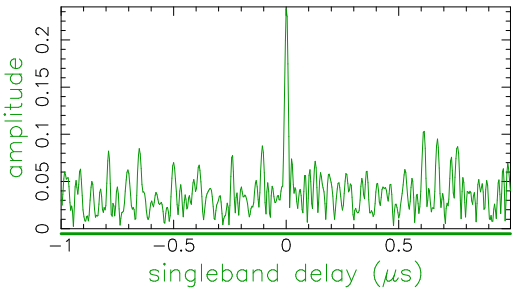
VLBA_LA - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 9

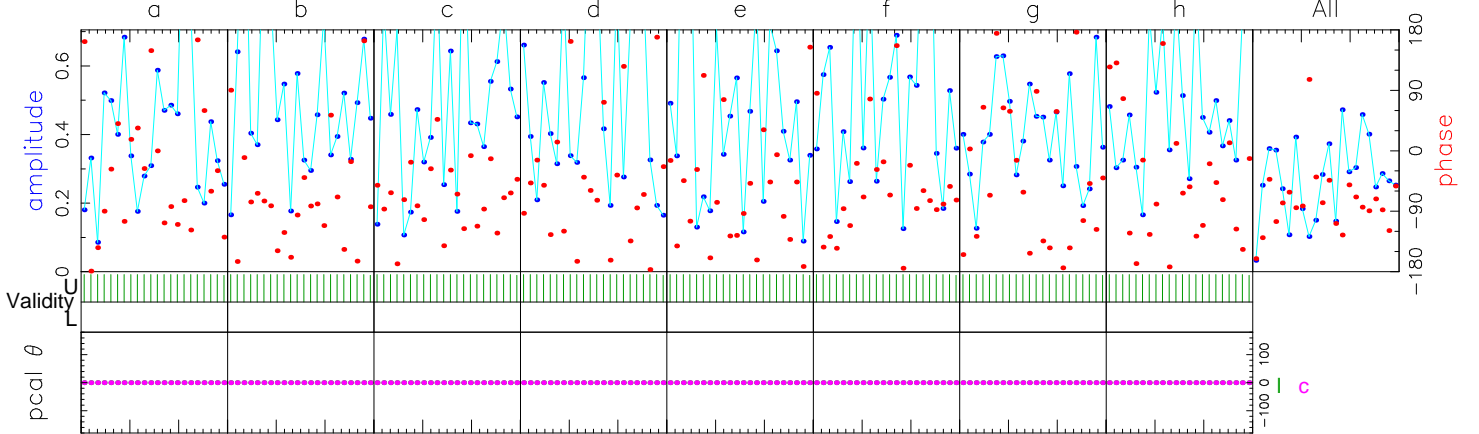


SNR 8.6
 Int time 179.980
 Amp 0.235
 Phase -82.1
 PFD 1.2e-09
 Delays (us)
 SBD 0.001246
 MBD 0.001520
 Fringe rate (Hz)
 -0.010024
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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		
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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-4.1011933916E+03	Apriori delay (usec)	-4.10112085875E+03	Resid mbdelay (usec)	1.51960E-03	+/-	1.3E-04
Sband delay (usec)	-4.10111961275E+03	Apriori clock (usec)	-1.2027918E+01	Resid sbdelay (usec)	1.24600E-03	+/-	1.0E-03
Phase delay (usec)	-4.10112086404E+03	Apriori clockrate (us/s)	1.5926897E-07	Resid phdelay (usec)	-5.28613E-06	+/-	8.6E-07
Delay rate (us/s)	5.60125648805E-01	Apriori rate (us/s)	5.60125881165E-01	Resid rate (us/s)	-2.32361E-07	+/-	8.2E-09
Total phase (deg)	-26.9	Apriori accel (us/s/s)	4.08160537457E-05	Resid phase (deg)	-82.1	+/-	13.3

ph/seg (deg)	47.6	Theor.	31.2	Amplitude	0.235 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	50.8		54.4	Search (1024X32)	0.231	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.1		18.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.3		32.8	Inc. seg. avg.	0.236	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.228	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

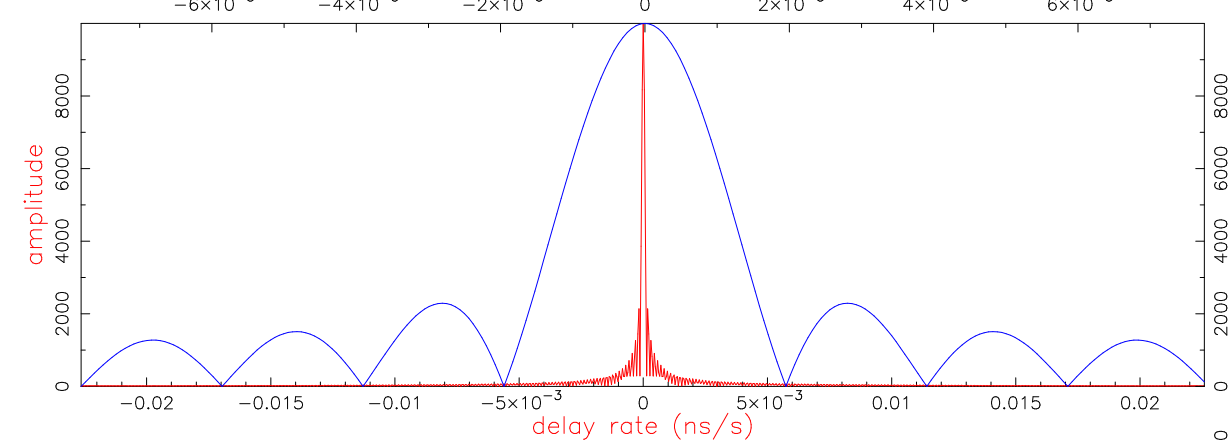
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lc.Q.342.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, II

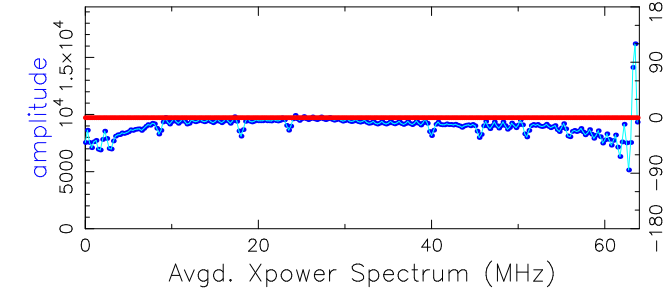
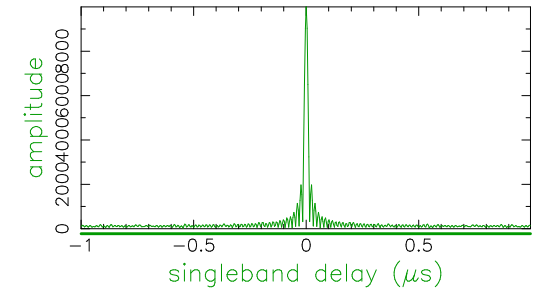
VLBA_LA - VLBA_LA, fgroup Q, pol LL



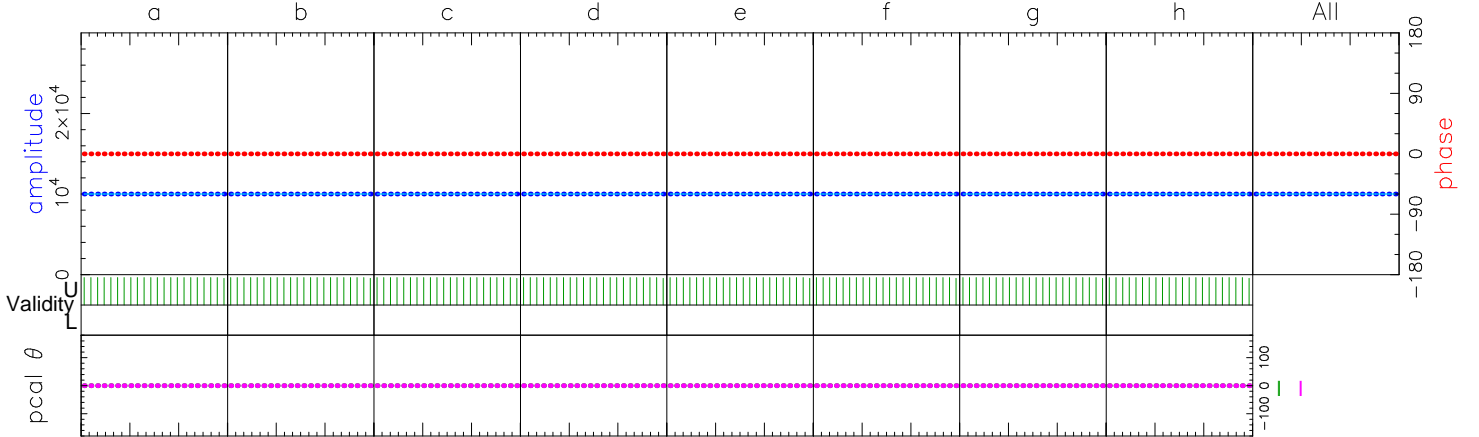
Fringe quality 9

SNR 366872.4
 Int time 179.984
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151812
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Q	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) 0.000000000000E+00 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) 0.000000E+00 +/- 3.0E-09
 Sband delay (usec) 0.000000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.000000E+00 +/- 2.3E-08
 Phase delay (usec) 0.000000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.000000E+00 +/- 2.0E-11
 Delay rate (us/s) 0.000000000000E+00 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 1.9E-13
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.999 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

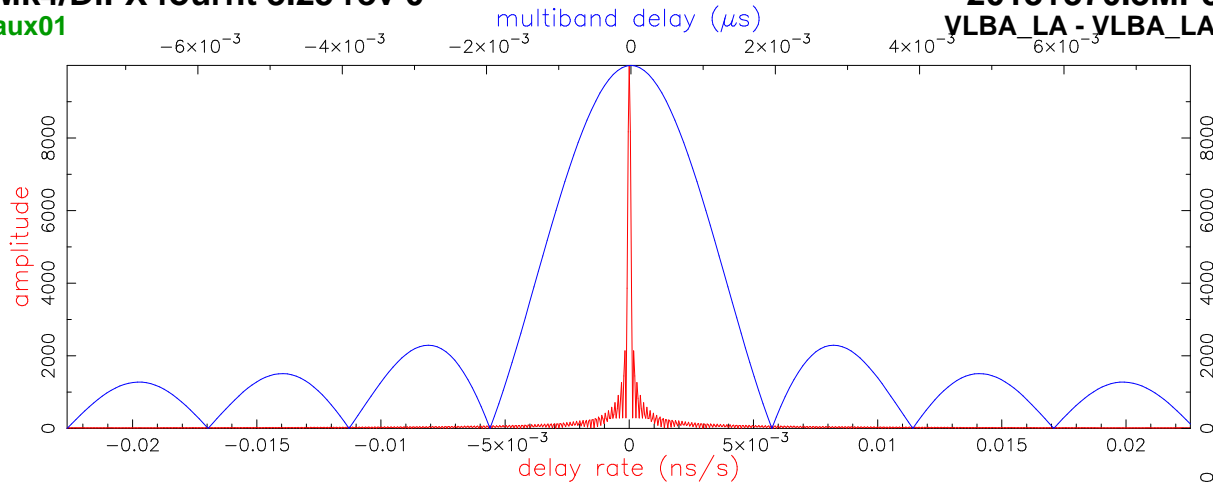
l: az 71.2 el 46.9 pa -74.8 i: az 71.2 el 46.9 pa -74.8 u, v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/II..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/II.Q.198.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

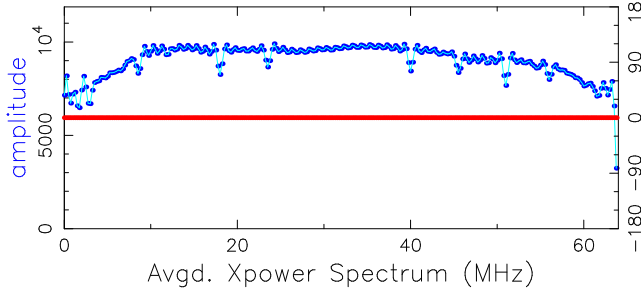
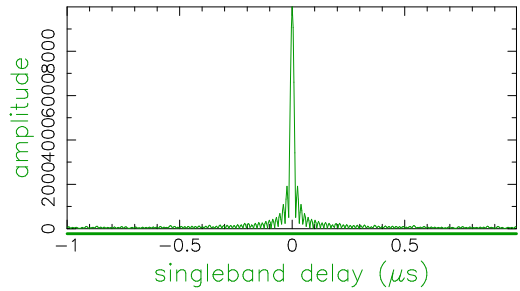
2013+370.3MP56K, No0500, II

VLBA_LA - VLBA_LA, fgroup Q, pol RR



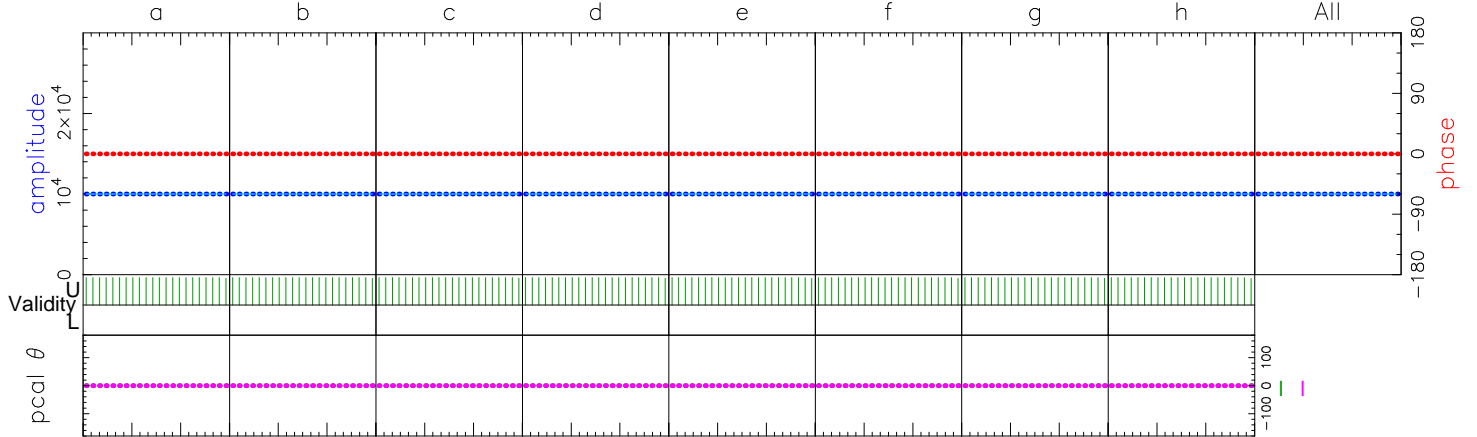
Fringe quality 9

SNR 366872.4
 Int time 179.984
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. 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
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	PC amp	
	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
									Tracks	
									Chan ids	
									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

RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 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 i: az 71.2 el 46.9 pa -74.8 u, v (fr/asec) 0.000 0.000 simultaneous interpolator

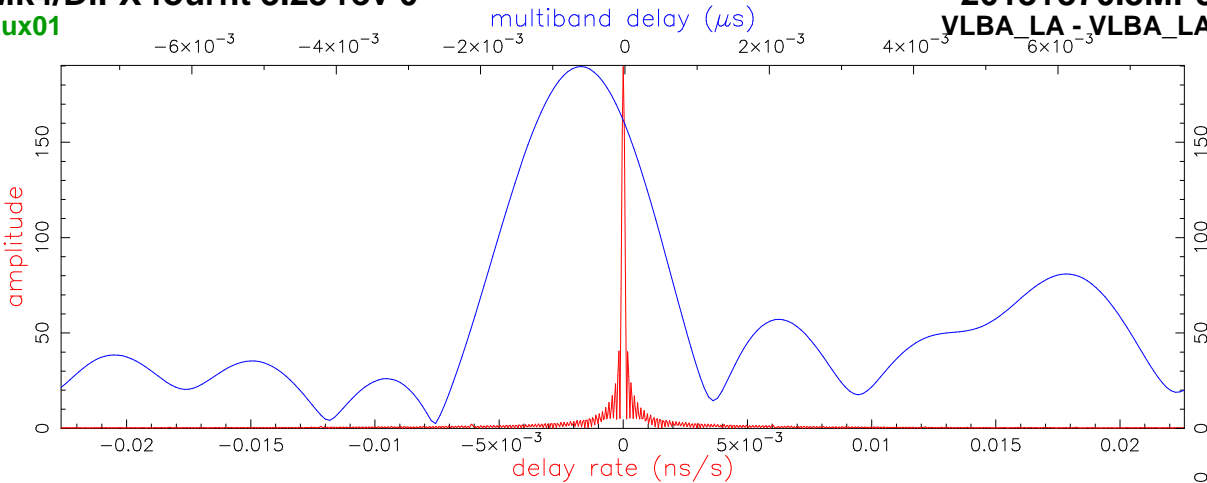
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/II..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/II.Q.210.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

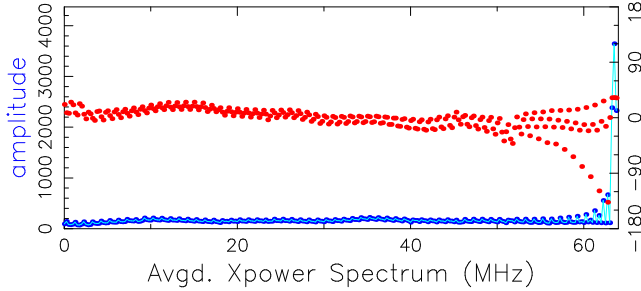
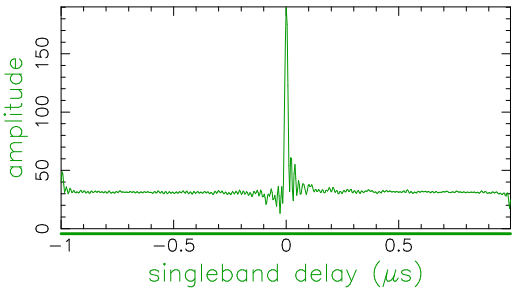
2013+370.3MP56K, No0500, II

VLBA_LA - VLBA_LA, fgroup Q, pol LR



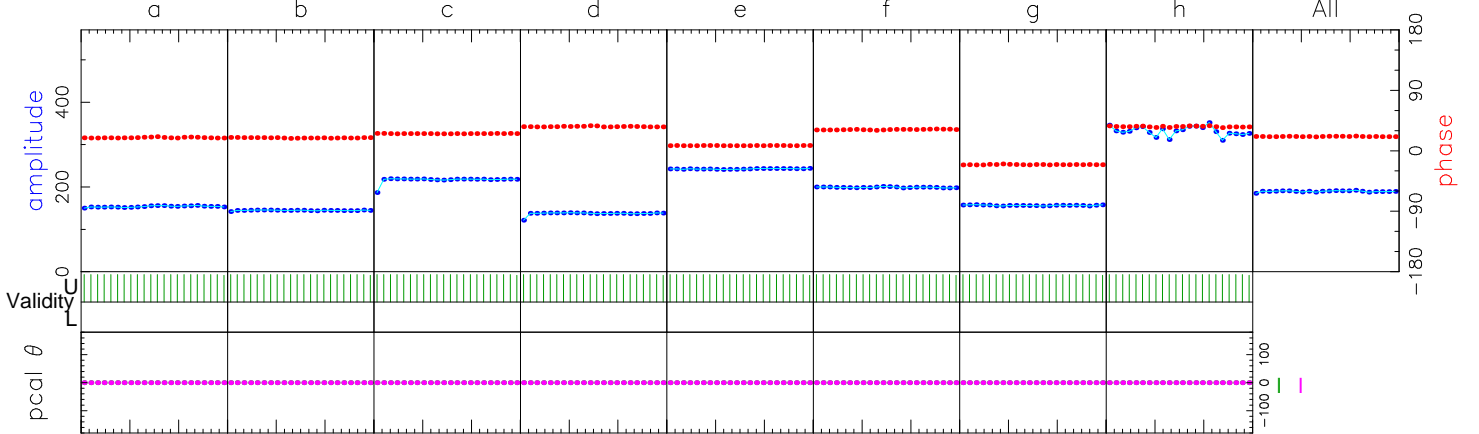
Fringe quality 7

SNR 6982.0
 Int time 179.984
 Amp 190.310
 Phase 21.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.000666
 MBD -0.000626
 Fringe rate (Hz)
 0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Yr:day 1234
 Start 2024:113
 Stop 094000.00
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151817
 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		
	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	1000	1000	1000	1000	1000	1000	1000	1000		
	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-6.258750000000E-04	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	-6.25875E-04	+/-	1.6E-07
Sband delay (usec)	6.660000000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	6.66000E-04	+/-	1.2E-06
Phase delay (usec)	1.36973721624E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.36974E-06	+/-	1.1E-09
Delay rate (us/s)	1.10355631928E-10	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	1.10356E-10	+/-	1.0E-11
Total phase (deg)		Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	21.3	+/-	0.0

ph/seg (deg)	0.2	0.0	RMS	190.310 +/- 0.027	PCal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.9	0.1	Theor.	188.399	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.4	0.0	Search (1024X32)	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.7	0.0	Inc. seg. avg.	189.669	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	197.931	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 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/II..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/II.Q.225.3MP56K

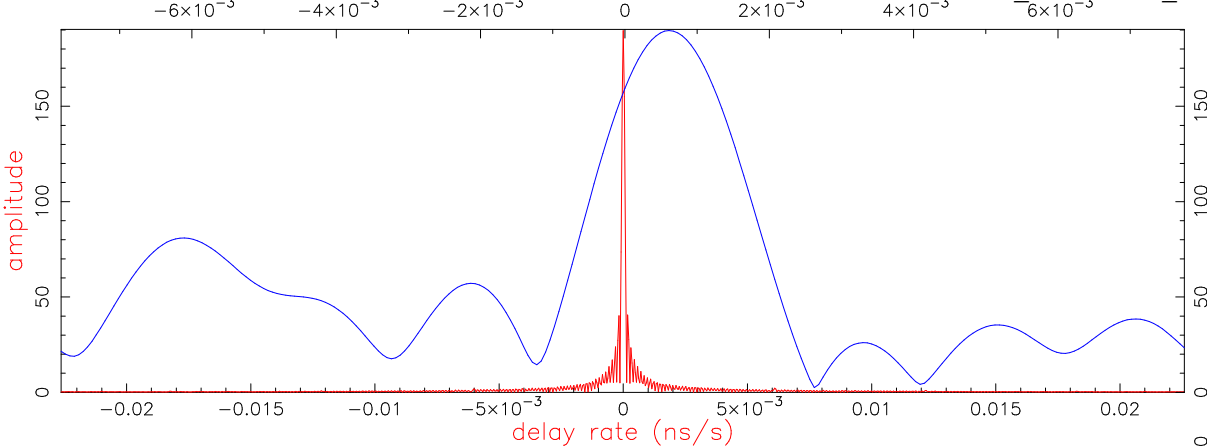
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, II

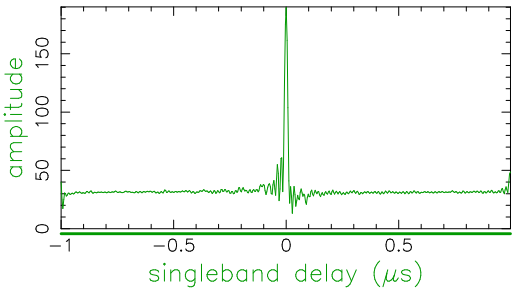
VLBA_LA - VLBA_LA, fgroup Q, pol RL

multiband delay (μ s)

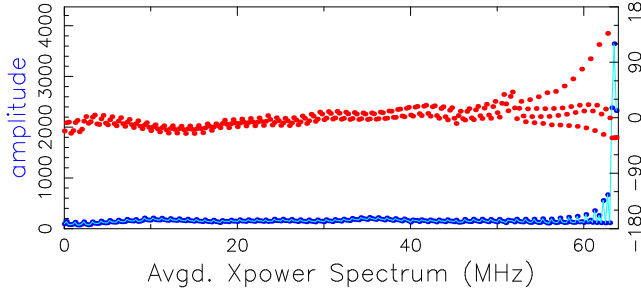


Fringe quality 7

SNR 6982.0
 Int time 179.984
 Amp 190.310
 Phase -21.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.000666
 MBD 0.000626
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

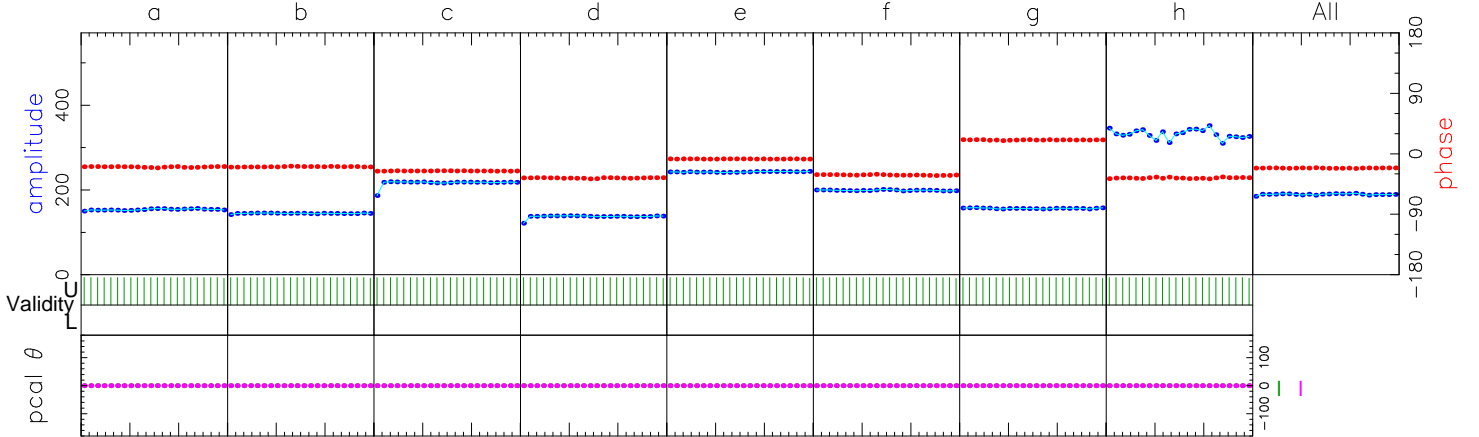


singleband delay (μ s)



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151819
 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
	-19.6	-19.3	-25.5	-36.0	-7.7	-31.5	20.6	-36.0	Phase	-21.3
	153.9	144.8	216.8	137.4	242.7	199.2	156.6	332.0	Ampl.	197.9
	257.2	257.6	256.8	257.8	256.9	257.0	257.4	256.1	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 6.258750000000E-04 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) 6.25875E-04 +/- 1.6E-07
 Sband delay (usec) -6.660000000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -6.66000E-04 +/- 1.2E-06
 Phase delay (usec) -1.36973721624E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.36974E-06 +/- 1.1E-09
 Delay rate (us/s) -1.10355631928E-10 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) -1.10356E-10 +/- 1.0E-11
 Total phase (deg) -21.3 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) -21.3 +/- 0.0

RMS Theor. Amplitude 190.310 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (1024X32) 188.399 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.9 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 20.4 0.0 Inc. seg. avg. 189.669 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 32.7 0.0 Inc. frq. avg. 197.931 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 l: az 71.2 el 46.9 pa -74.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/II..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/II.Q.240.3MP56K

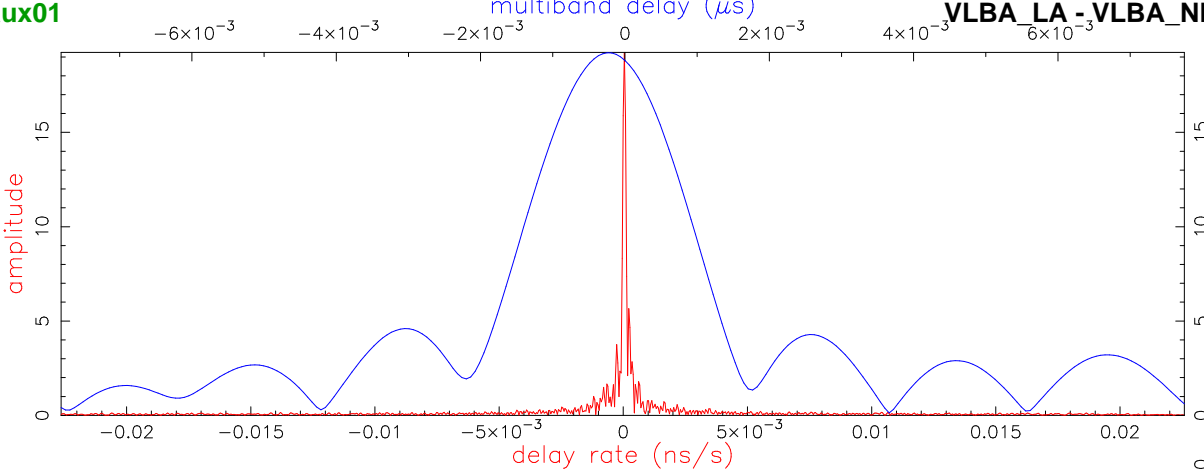
Mk4/DiFX fourfit 3.25 rev 0

aux01

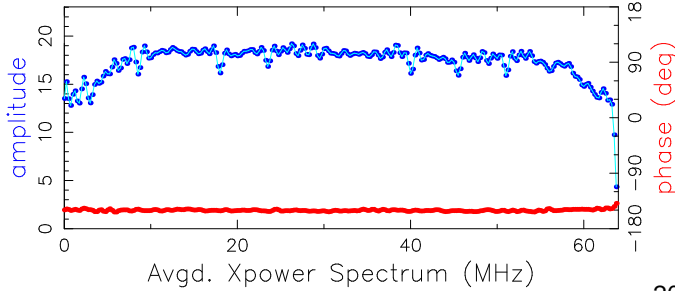
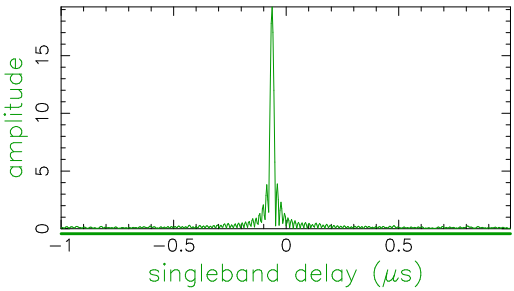
2013+370.3MP56K, No0500, In

VLBA_LA - VLBA_NL, fgroup Q, pol LL

Fringe quality 8

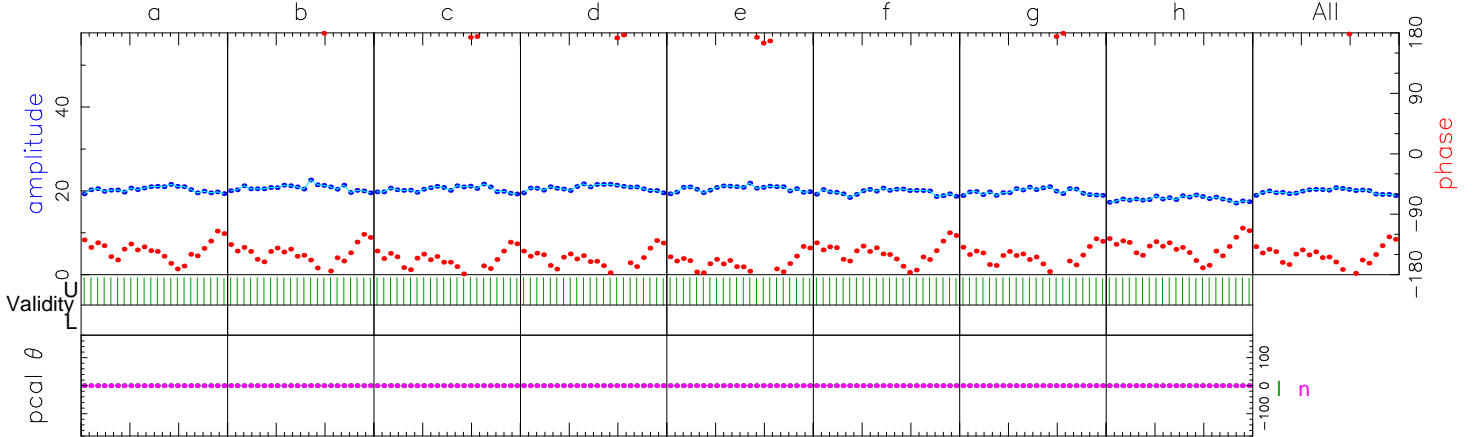


SNR 705.3
Int time 179.674
Amp 19.241
Phase -242.4
PFD 0.0e+00
Delays (us)
SBD -0.062928
MBD -0.000237
Fringe rate (Hz)
0.001047
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512



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		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-2.75162516540E+03	Apriori delay (usec)	-2.75156242828E+03	Resid mbdelay (usec)	-2.37126E-04	+/-	1.5E-06
Sband delay (usec)	-2.75162535653E+03	Apriori clock (usec)	-8.0122337E+00	Resid sbdelay (usec)	-6.29283E-02	+/-	1.2E-05
Phase delay (usec)	-2.75156243809E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-9.81377E-06	+/-	1.0E-08
Delay rate (us/s)	2.27091866701E-01	Apriori rate (us/s)	2.27091842432E-01	Resid rate (us/s)	2.42698E-08	+/-	1.0E-10
Total phase (deg)	-298.5	Apriori accel (us/s/s)	9.03013943223E-06	Resid phase (deg)	-242.4	+/-	0.2

ph/seg (deg)	14.4	RMS	14.4	Theor.	0.4	Amplitude	19.241 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	4.1	Search (1024X32)	18.073	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	9.6	Inc. seg. avg.	19.835	Inc. frq. avg.	19.418	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	4.3	Inc. frq. avg.	19.418	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

l: az 71.2 el 46.9 pa -74.8 n: az 85.1 el 59.3 pa -68.9 u,v (fr/asec) -815.346 -12.107 simultaneous interpolator

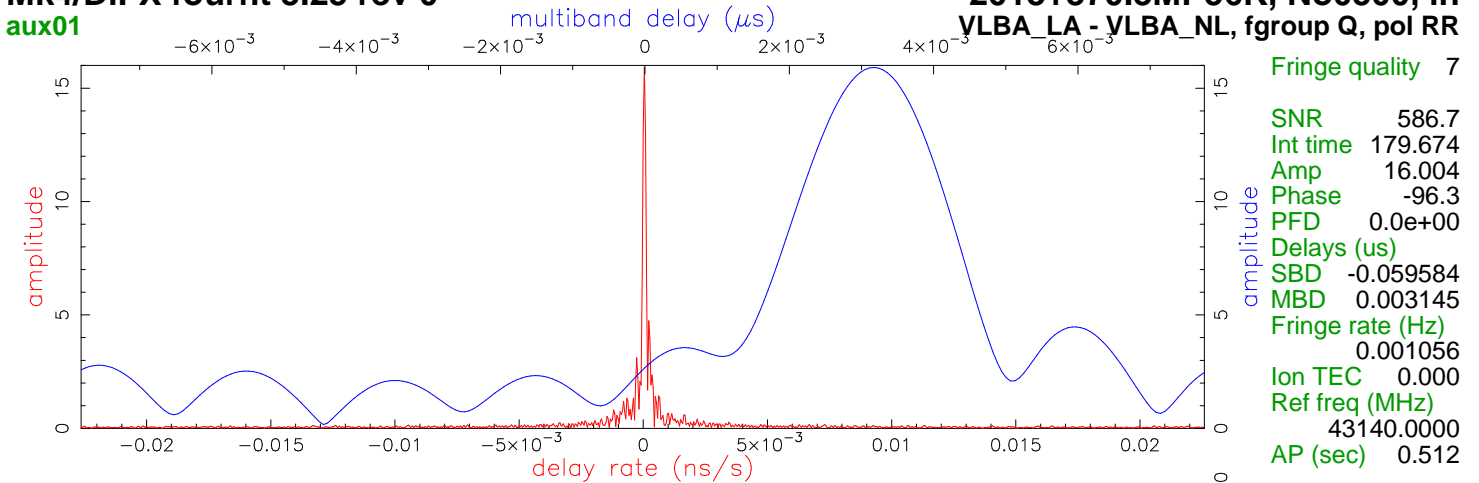
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/ln..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/ln.Q.218.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, In

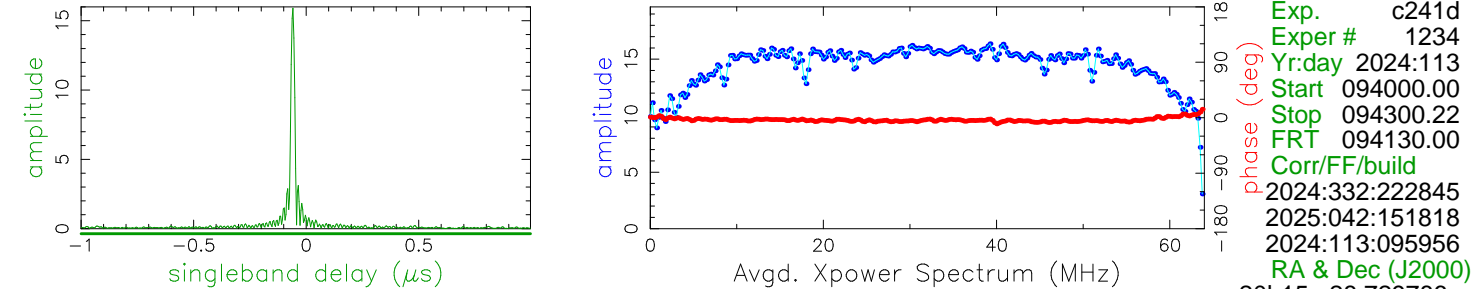
VLBA_LA - VLBA_NL, fgroup Q, pol RR



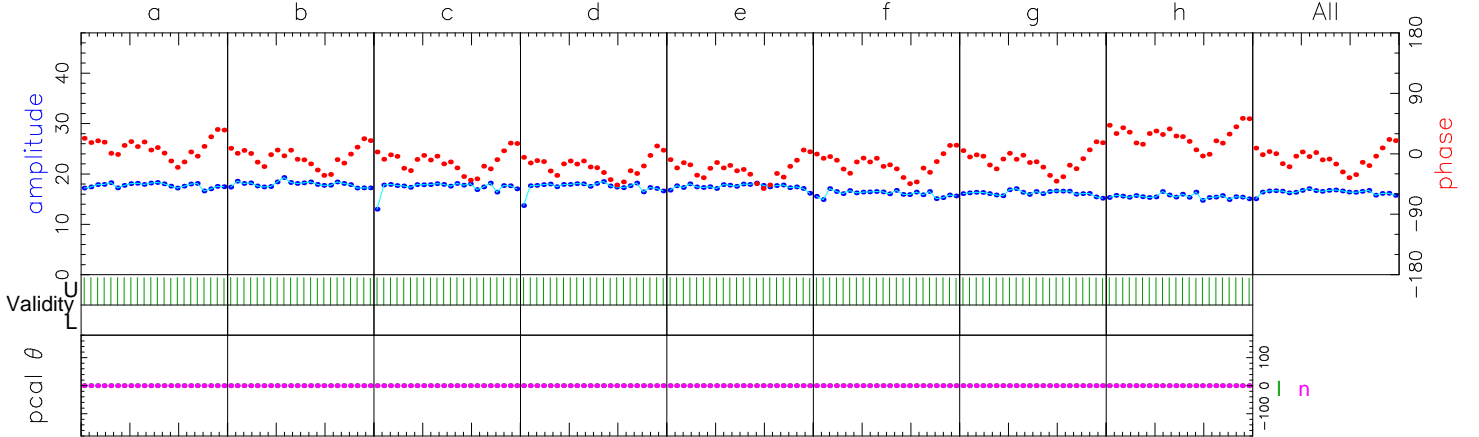
Fringe quality 7

SNR 586.7
 Int time 179.674
 Amp 16.004
 Phase -96.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.059584
 MBD 0.003145
 Fringe rate (Hz) 0.001056
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-2.75162178306E+03	Apriori delay (usec)	-2.75156242828E+03	Resid mbdelay (usec)	3.14522E-03	+/-	1.9E-06
Sband delay (usec)	-2.75162201178E+03	Apriori clock (usec)	-8.0122337E+00	Resid sbdelay (usec)	-5.95835E-02	+/-	1.5E-05
Phase delay (usec)	-2.75156242869E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-4.08470E-07	+/-	1.3E-08
Delay rate (us/s)	2.27091866908E-01	Apriori rate (us/s)	2.27091842432E-01	Resid rate (us/s)	2.44763E-08	+/-	1.2E-10
Total phase (deg)	-152.5	Apriori accel (us/s/s)	9.03013943223E-06	Resid phase (deg)	-96.3	+/-	0.2

ph/seg (deg)	14.4	RMS	14.4	Theor.	0.5	Amplitude	16.004 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	3.7		0.8			Search (1024X32)	14.965	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.8		0.3			Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	6.0		0.5			Inc. seg. avg.	16.418	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	16.470	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 n: az 85.1 el 59.3 pa -68.9 u,v (fr/asec) -815.346 -12.107 simultaneous interpolator

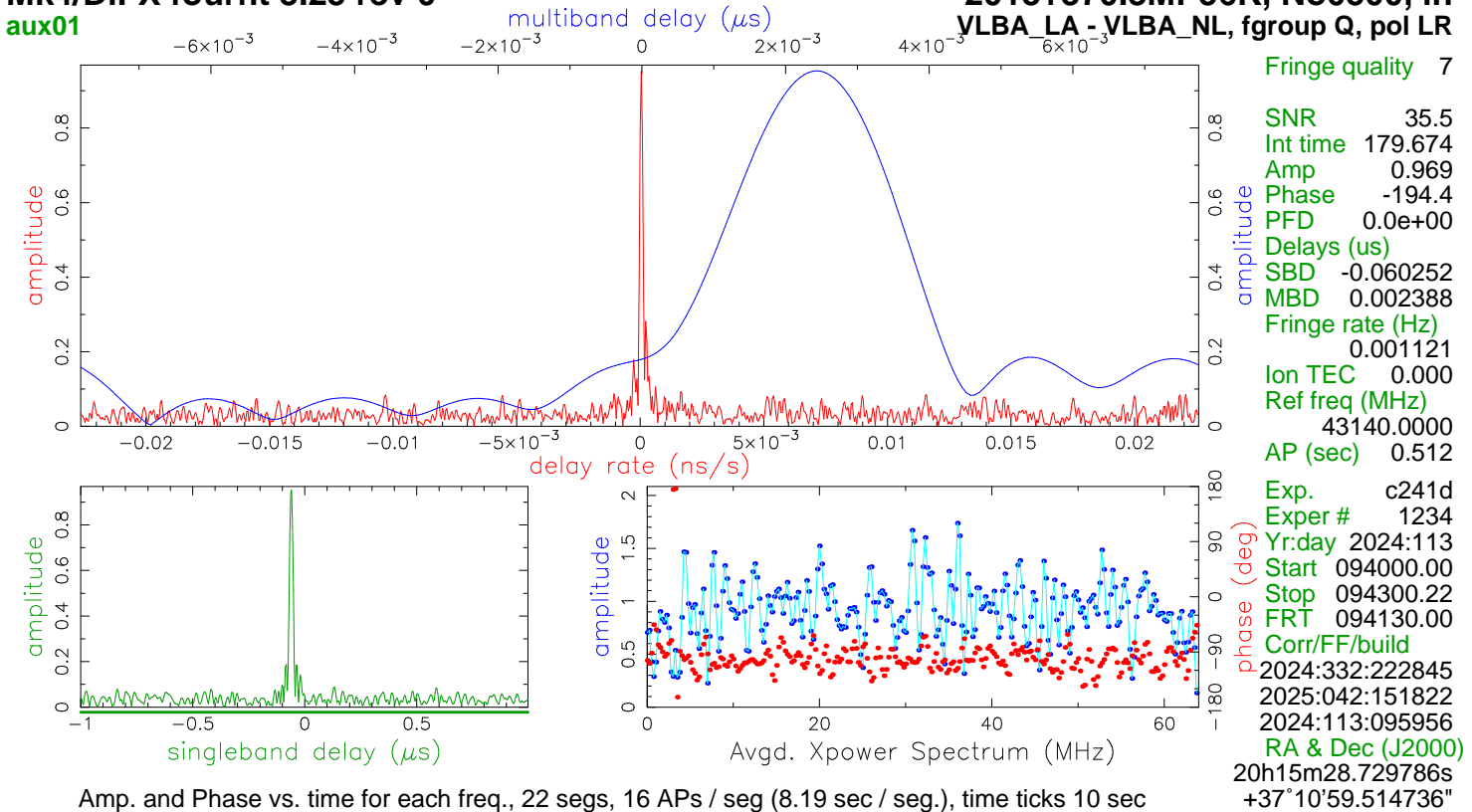
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Mk4/DiFX fourfit 3.25 rev 0

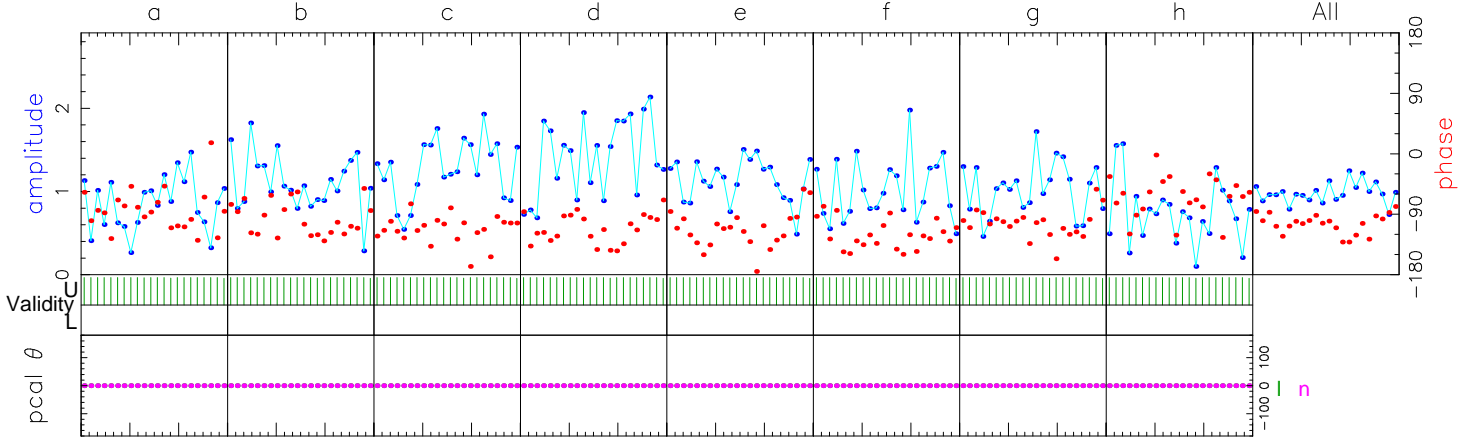
aux01

2013+370.3MP56K, No0500, In

VLBA_LA - VLBA_NL, fgroup Q, pol LR



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



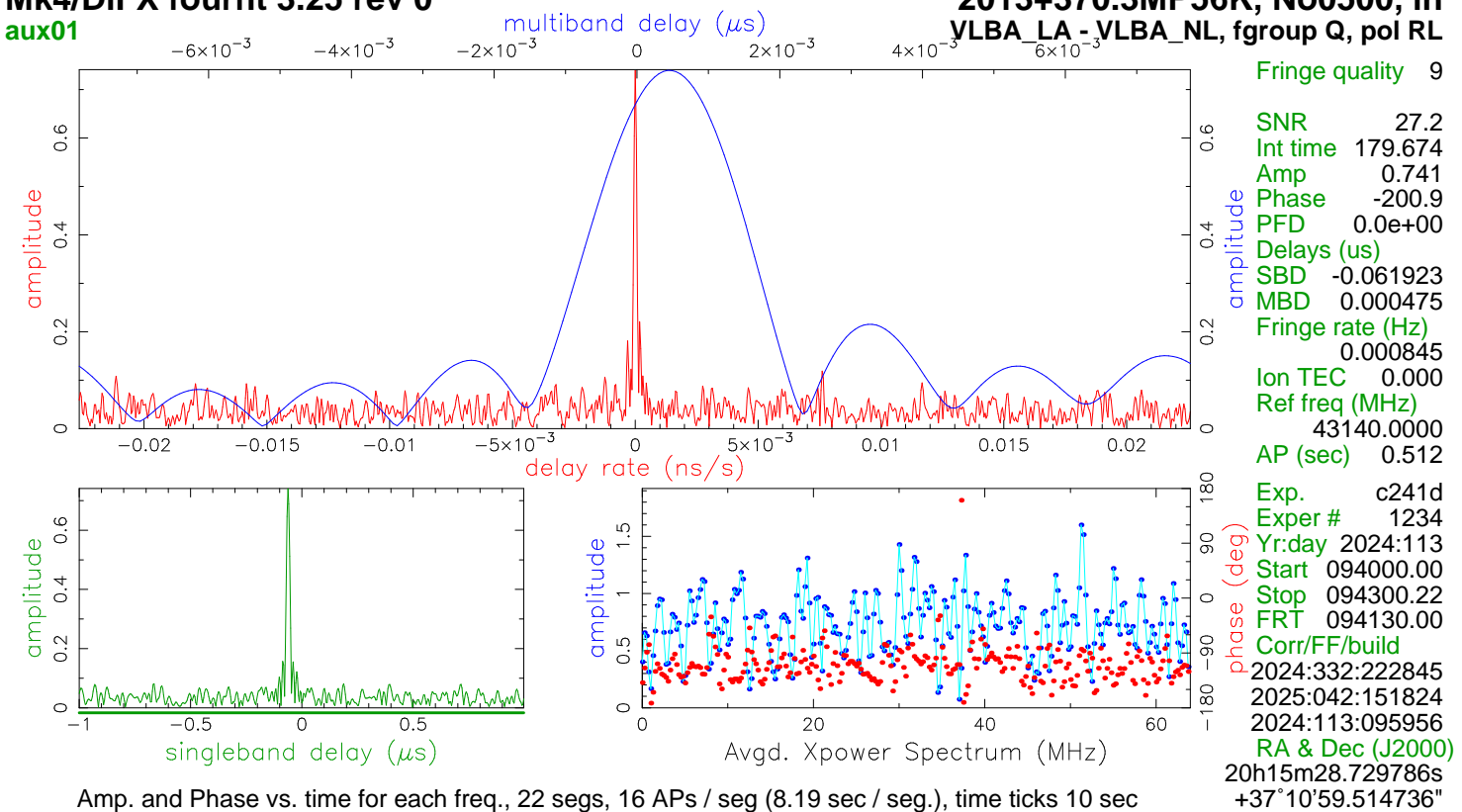
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Group delay (usec) (SBD)	-2.75162254037E+03	-2.75162254037E+03	-2.75162254037E+03	-2.75162254037E+03	-2.75162254037E+03	-2.75162254037E+03	-2.75162254037E+03	-2.75162254037E+03	2.38791E-03	+/- 3.1E-05
Sband delay (usec)	-2.75162268028E+03	-2.75162268028E+03	-2.75162268028E+03	-2.75162268028E+03	-2.75162268028E+03	-2.75162268028E+03	-2.75162268028E+03	-2.75162268028E+03	-6.02520E-02	+/- 2.4E-04
Phase delay (usec)	-2.7516243500E+03	-2.7516243500E+03	-2.7516243500E+03	-2.7516243500E+03	-2.7516243500E+03	-2.7516243500E+03	-2.7516243500E+03	-2.7516243500E+03	-6.72244E-06	+/- 2.1E-07
Delay rate (us/s)	2.27091868410E-01	2.27091868410E-01	2.27091868410E-01	2.27091868410E-01	2.27091868410E-01	2.27091868410E-01	2.27091868410E-01	2.27091868410E-01	2.59788E-08	+/- 2.0E-09
Total phase (deg)			-250.5						-194.4	+/- 3.2
ph/seg (deg)	14.5	7.6	Search (1024X32)	0.918	0.969 +/- 0.027	0.918	0.918	0.918	0.969 +/- 0.027	
amp/seg (%)	12.7	13.2	Interp.	0.000	0.000	0.000	0.000	0.000	0.000	
ph/frq (deg)	20.4	4.6	Inc. seg. avg.	0.976	0.976	0.976	0.976	0.976	0.976	
amp/frq (%)	20.3	8.0	Inc. frq. avg.	0.983	0.983	0.983	0.983	0.983	0.983	
l: az 71.2 el 46.9 pa -74.8	n: az 85.1 el 59.3 pa -68.9		u,v (fr/asec) -815.346 -12.107		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/ln..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/ln.Q.247.3MP56K		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		ion window (TEC) 0.00 0.00	

Mk4/DiFX fourfit 3.25 rev 0

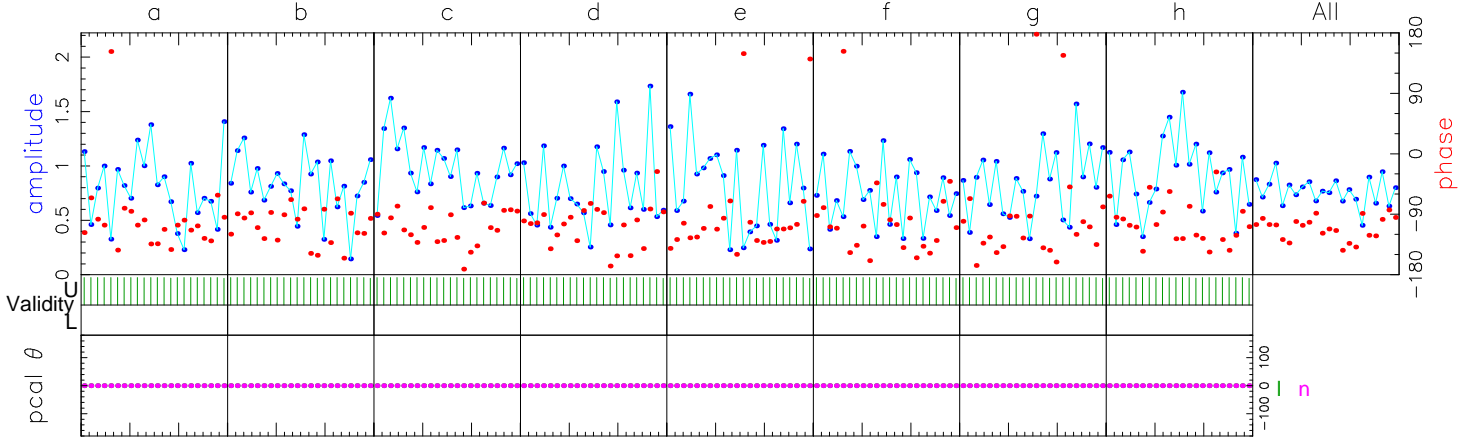
aux01

2013+370.3MP56K, No0500, In

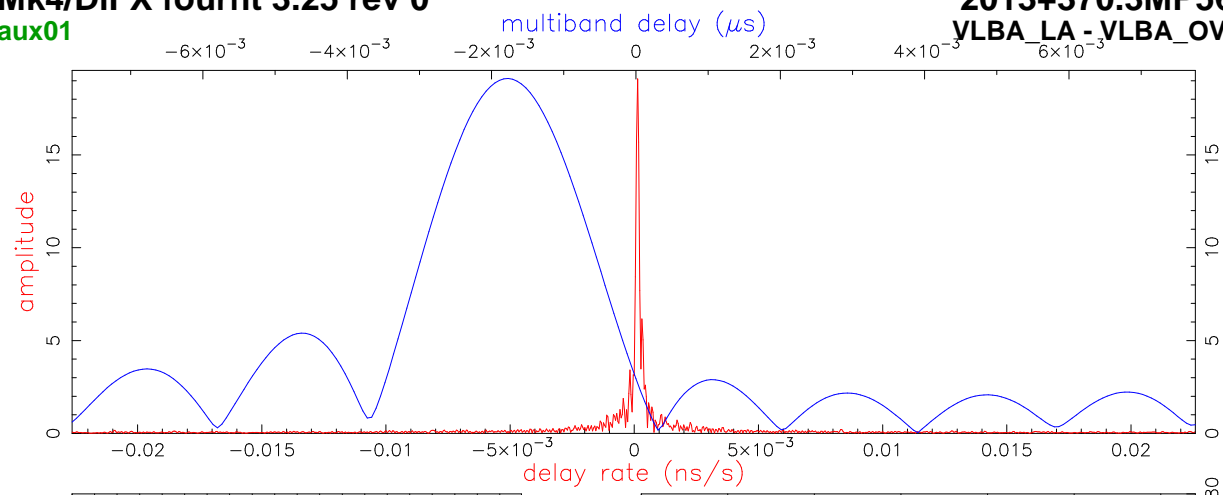
VLBA_LA - VLBA_NL, fgroup Q, pol RL



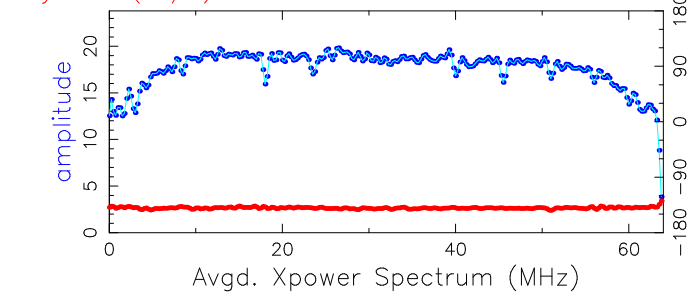
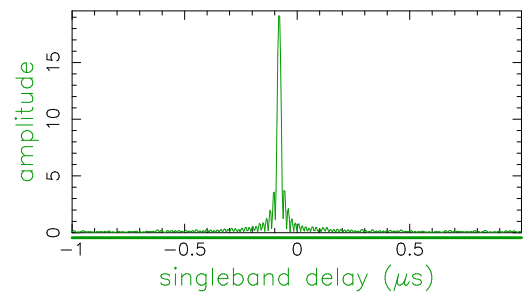
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



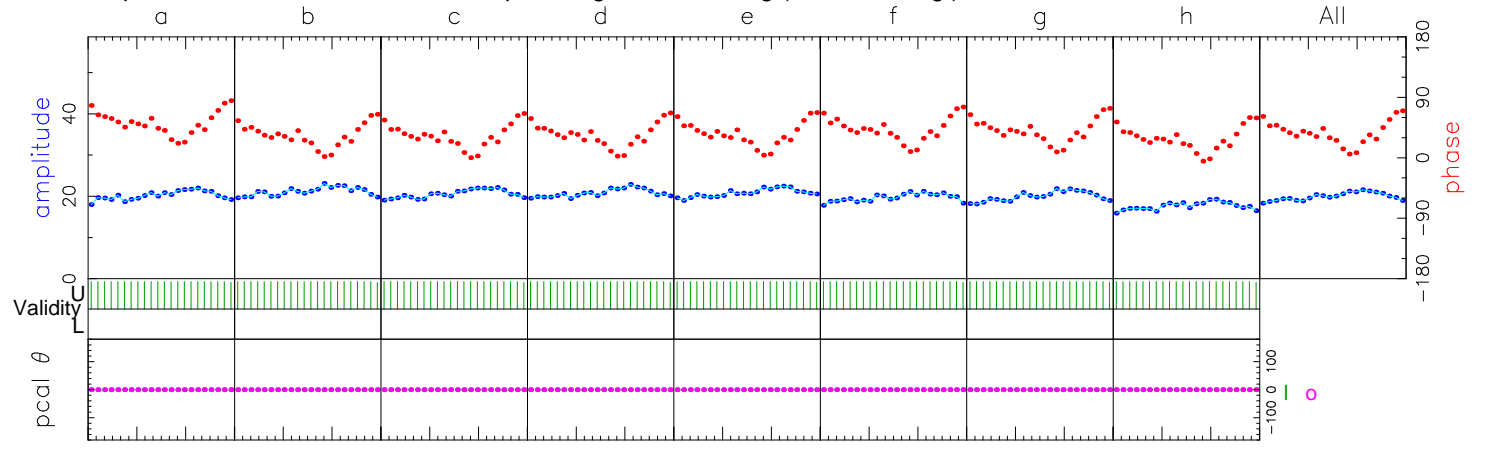
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0						
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
l:n	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					
n	1000	1000	1000	1000	1000	1000	1000	1000						
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids					
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks					
									Tracks					
Group delay (usec) (SBD)	-2.75162445359E+03	-2.75162435078E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	Apriori delay (usec)	-2.7516242828E+03	Resid mbdelay (usec)	4.74687E-04	+/-	4.0E-05
Sband delay (usec)	-2.75162435078E+03	-2.75162435078E+03	-2.75162435078E+03	-2.75162435078E+03	-2.75162435078E+03	-2.75162435078E+03	-2.75162435078E+03	-2.75162435078E+03	Apriori clock (usec)	-8.0122337E+00	Resid sbdelay (usec)	-6.19225E-02	+/-	3.2E-04
Phase delay (usec)	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	-2.7516243542E+03	Apriori clockrate (us/s)	-5.3126102E-07	Resid phdelay (usec)	-7.14077E-06	+/-	2.7E-07
Delay rate (us/s)	2.27091862010E-01	2.27091862010E-01	2.27091862010E-01	2.27091862010E-01	2.27091862010E-01	2.27091862010E-01	2.27091862010E-01	2.27091862010E-01	Apriori rate (us/s)	2.27091842432E-01	Resid rate (us/s)	1.95782E-08	+/-	2.6E-09
Total phase (deg)			-257.0						Apriori accel (us/s/s)	9.03013943223E-06	Resid phase (deg)	-200.9	+/-	4.2
RMS	16.6	9.9							PCal mode: MANUAL, MANUAL		PC period (AP's)	5, 5		
ph/seg (deg)	16.6	9.9							Search (1024X32)	0.712	PCal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
amp/seg (%)	16.8	17.3							Interp.	0.000	SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	7.8	6.0							Inc. seg. avg.	0.757	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023
amp/frq (%)	10.7	10.4							Inc. frq. avg.	0.741	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
l: az 71.2 el 46.9 pa -74.8									u,v (fr/asec)	-815.346 -12.107	nlags: 256 t_cohere infinite		simultaneous interpolator	
Control file: cf_1234_gmva									Input file: /Exps/c241d/v1/7mm/1234/No0500/ln..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/ln.Q.263.3MP56K			



Fringe quality 8
SNR 717.5
Int time 179.984
Amp 19.558
Phase -255.4
PFD 0.0e+00
Delays (us)
SBD -0.080077
MBD -0.001731
Fringe rate (Hz) 0.004866
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		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	2.30800345789E+03					2.30808331417E+03			Resid mbdelay (usec)	-1.73128E-03 +/- 1.5E-06
Sband delay (usec)	2.30800323767E+03					-3.3352531E+01			Resid sbdelay (usec)	-8.00765E-02 +/- 1.2E-05
Phase delay (usec)	2.30808331656E+03					-7.1527311E-07			Resid phdelay (usec)	2.38794E-06 +/- 1.0E-08
Delay rate (us/s)	-8.79048010391E-02					-8.79049138338E-02			Resid rate (us/s)	1.12795E-07 +/- 9.9E-11
Total phase (deg)			-193.0			-1.38407842591E-05			Resid phase (deg)	-255.4 +/- 0.2
	RMS	Theor.	Amplitude	19.558 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	16.9	0.4	Search (1024X32)	18.178					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	5.1	0.7	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	8.1	0.2	Inc. seg. avg.	19.961					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	5.3	0.4	Inc. frq. avg.	19.240					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		o: az 68.4 el 38.3 pa -68.5		u,v (fr/asec) 311.064 -487.919		simultaneous interpolator				
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0500/lo..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/lo.Q.220.3MP56K						

Mk4/DiFX fourfit 3.25 rev 0

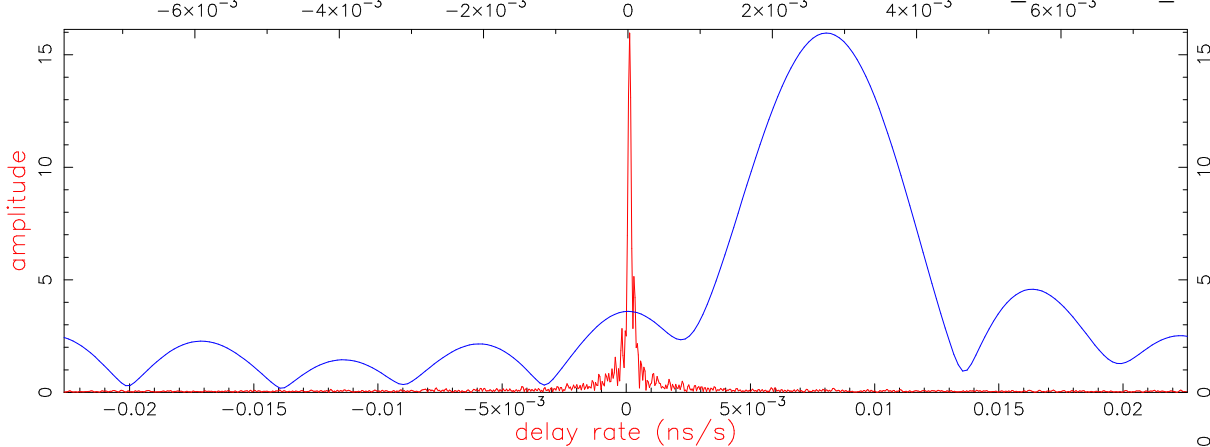
aux01

2013+370.3MP56K, No0500, lo

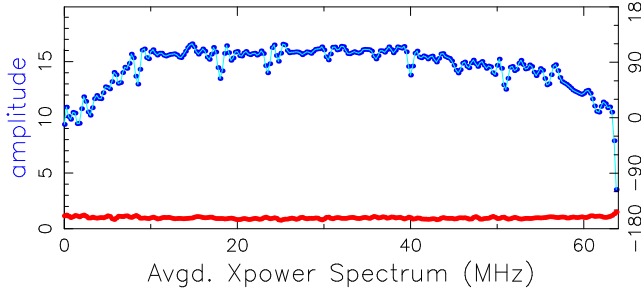
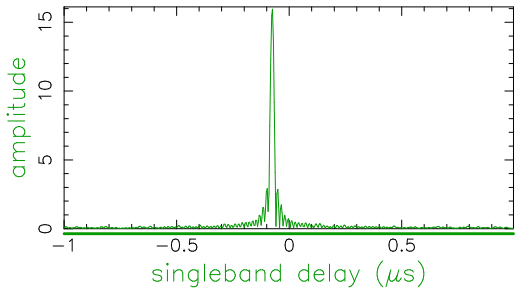
VLBA_LA - VLBA_OV, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 7

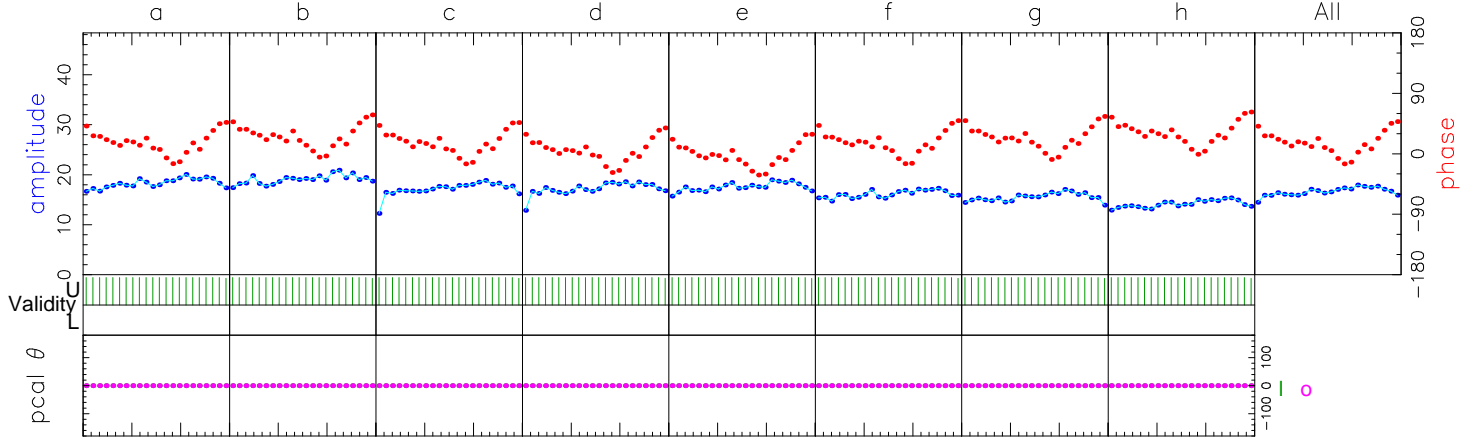


SNR 591.6
 Int time 179.984
 Amp 16.126
 Phase -276.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.075526
 MBD 0.002722
 Fringe rate (Hz)
 0.004885
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 2.30800791089E+03 Apriori delay (usec) 2.30808331417E+03 Resid mbdelay (usec) 2.72172E-03 +/- 1.8E-06
 Sband delay (usec) 2.30800778767E+03 Apriori clock (usec) -3.3352531E+01 Resid sbdelay (usec) -7.55265E-02 +/- 1.5E-05
 Phase delay (usec) 2.30808331522E+03 Apriori clockrate (us/s) -7.1527311E-07 Resid phdelay (usec) 1.04370E-06 +/- 1.2E-08
 Delay rate (us/s) -8.79048005976E-02 Apriori rate (us/s) -8.79049138338E-02 Resid rate (us/s) 1.13236E-07 +/- 1.2E-10
 Total phase (deg) -213.8 Apriori accel (us/s/s) -1.38407842591E-05 Resid phase (deg) -276.3 +/- 0.2

RMS Theor. Amplitude 16.126 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 16.5 0.5 Search (1024X32) 15.135 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 5.9 0.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 11.7 0.3 Inc. seg. avg. 16.635 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 8.8 0.5 Inc. frq. avg. 16.210 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

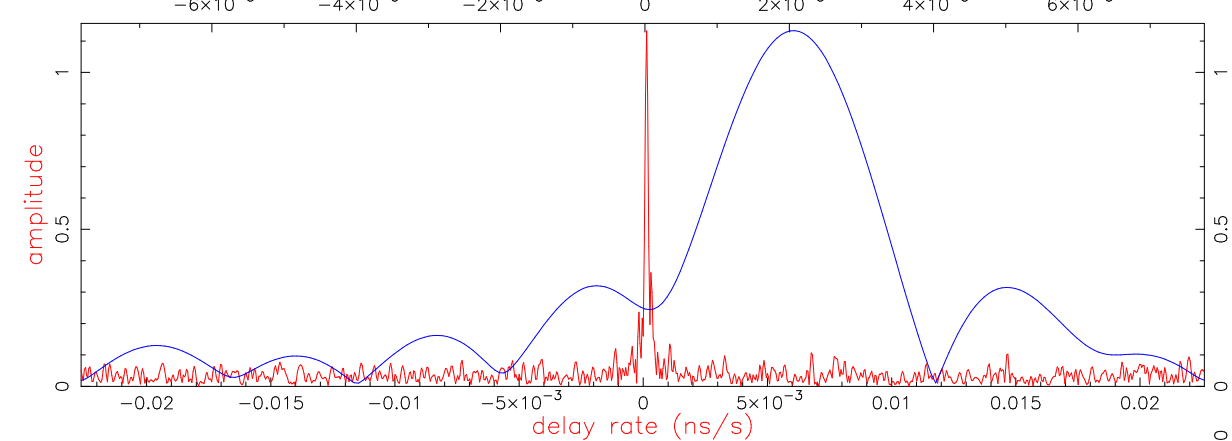
l: az 71.2 el 46.9 pa -74.8 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 311.064 -487.919 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lo.Q.253.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

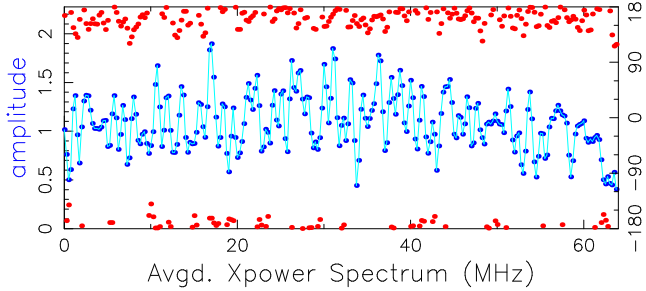
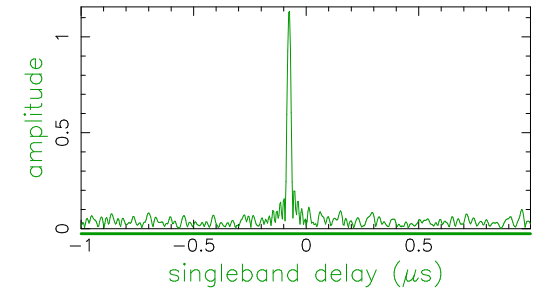
2013+370.3MP56K, No0500, lo

VLBA_LA - VLBA_OV, fgroup Q, pol LR



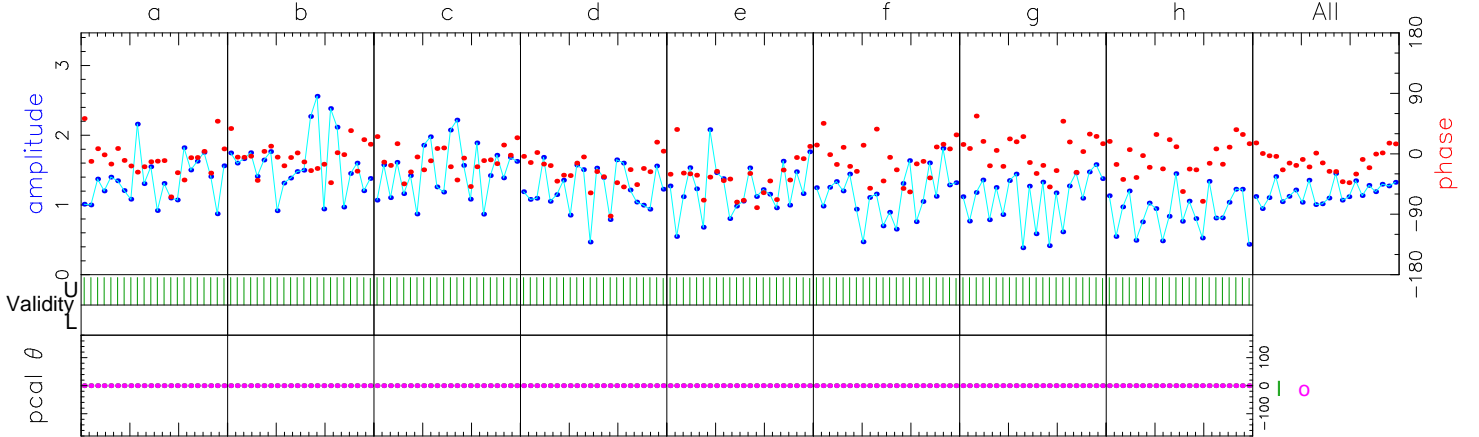
Fringe quality 8

SNR 42.4
 Int time 179.984
 Amp 1.156
 Phase -303.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.076068
 MBD 0.002018
 Fringe rate (Hz)
 0.004843
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) 2.30800720702E+03 Apriori delay (usec) 2.30808331417E+03 Resid mbdelay (usec) 2.01784E-03 +/- 2.6E-05
 Sband delay (usec) 2.30800724617E+03 Apriori clock (usec) -3.3352531E+01 Resid sbdelay (usec) -7.60680E-02 +/- 2.0E-04
 Phase delay (usec) 2.30808331344E+03 Apriori clockrate (us/s) -7.1527311E-07 Resid phdelay (usec) -7.31983E-07 +/- 1.7E-07
 Delay rate (us/s) -8.79048015710E-02 Apriori rate (us/s) -8.79049138338E-02 Resid rate (us/s) 1.12263E-07 +/- 1.7E-09
 Total phase (deg) -241.4 Apriori accel (us/s/s) -1.38407842591E-05 Resid phase (deg) -303.9 +/- 2.7

RMS Theor. Amplitude 1.156 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 16.5 6.3 Search (1024X32) 1.083 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 12.2 11.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 13.6 3.8 Inc. seg. avg. 1.173 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 17.9 6.7 Inc. frq. avg. 1.152 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

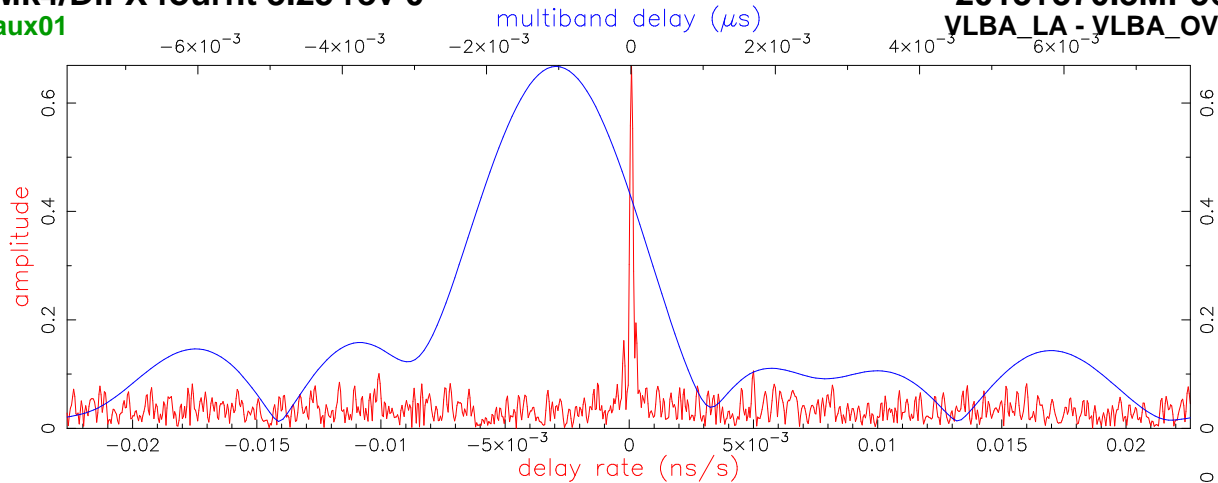
l: az 71.2 el 46.9 pa -74.8 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 311.064 -487.919 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lo.Q.268.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

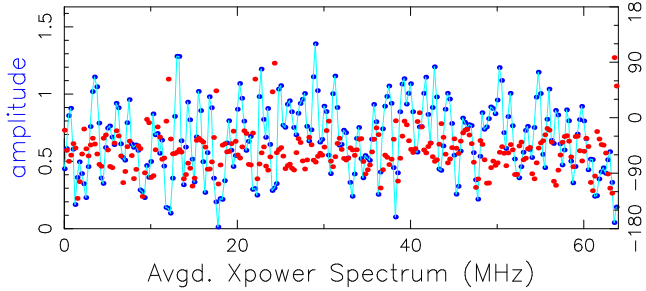
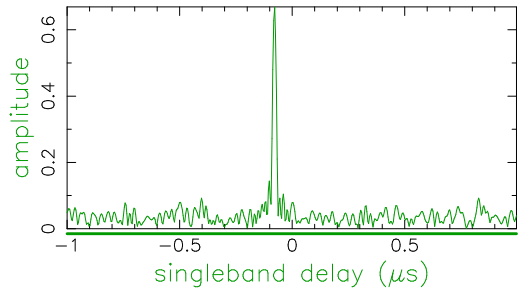
2013+370.3MP56K, No0500, lo

VLBA_LA - VLBA_OV, fgroup Q, pol RL



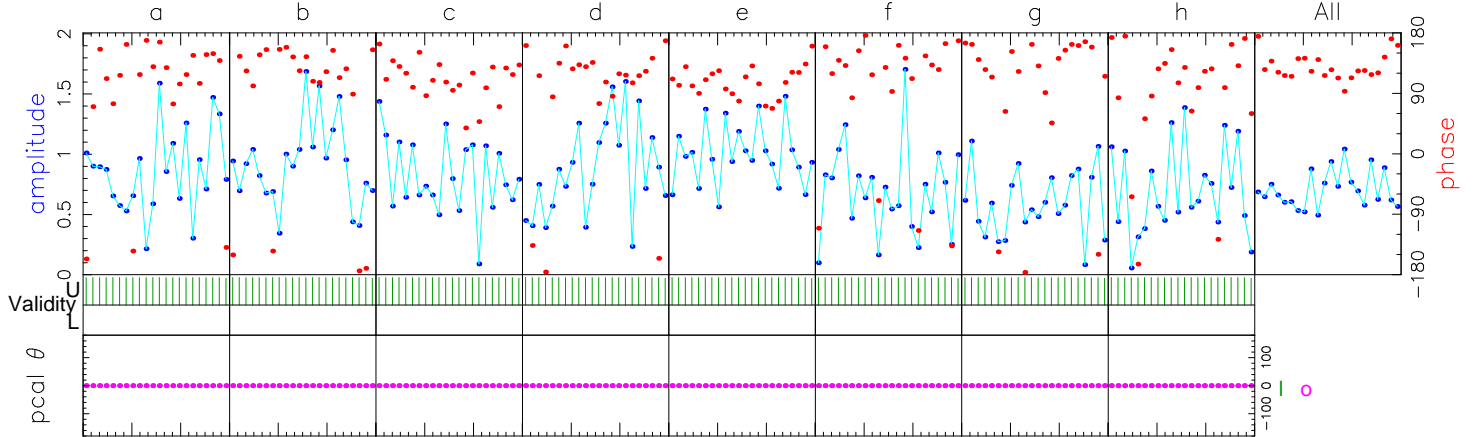
Fringe quality 9

SNR 24.6
 Int time 179.984
 Amp 0.669
 Phase -164.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.078815
 MBD -0.001051
 Fringe rate (Hz) 0.004689
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:0	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	2.30800413852E+03	Apriori delay (usec)	2.30808331417E+03	Resid mbdelay (usec)	-1.05066E-03	+/-	4.4E-05
Sband delay (usec)	2.30800449892E+03	Apriori clock (usec)	-3.3352531E+01	Resid sbdelay (usec)	-7.88153E-02	+/-	3.5E-04
Phase delay (usec)	2.30808332241E+03	Apriori clockrate (us/s)	-7.1527311E-07	Resid phdelay (usec)	8.23481E-06	+/-	3.0E-07
Delay rate (us/s)	-8.79048051392E-02	Apriori rate (us/s)	-8.79049138338E-02	Resid rate (us/s)	1.08695E-07	+/-	2.9E-09
Total phase (deg)	-102.2	Apriori accel (us/s/s)	-1.38407842591E-05	Resid phase (deg)	-164.6	+/-	4.7

ph/seg (deg)	19.6	Theor.	10.9	Amplitude	0.669 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	22.9	Search (1024X32)	0.642	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	15.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	20.3	Inc. seg. avg.	0.695	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	0.683	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 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 311.064 -487.919 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lo.Q.284.3MP56K

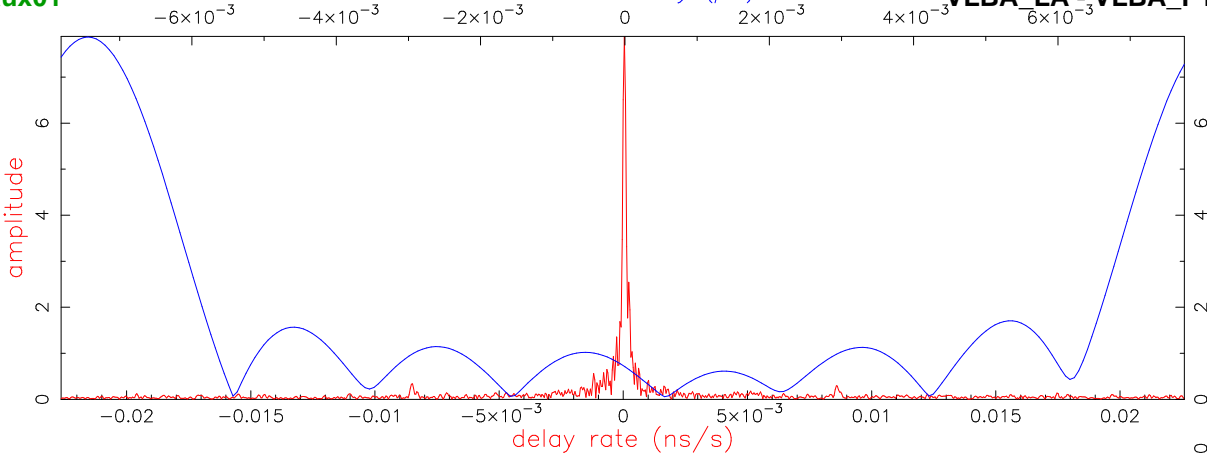
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, lp

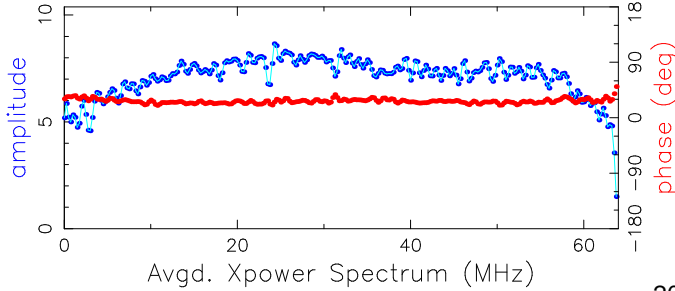
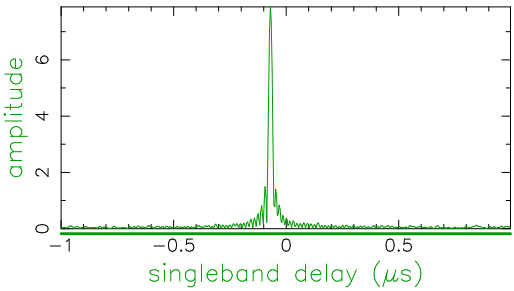
VLBA_LA - VLBA_PT, fgroup Q, pol LL

multiband delay (μ s)



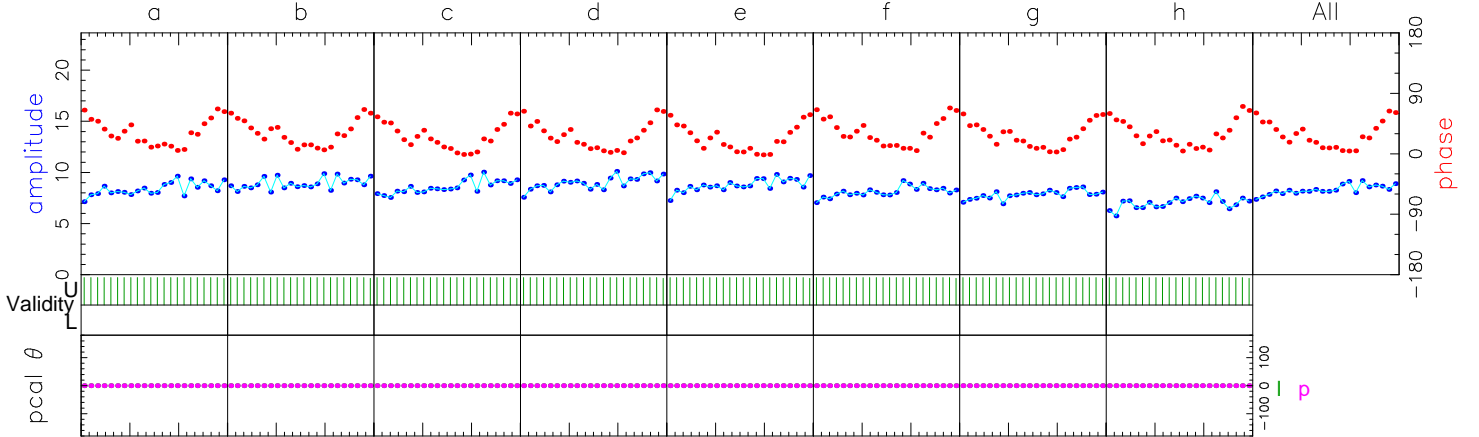
Fringe quality 8

SNR 289.2
 Int time 179.975
 Amp 7.884
 Phase -61.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.069763
 MBD -0.007426
 Fringe rate (Hz)
 0.001734
 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
 2025:042:151821
 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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 4.83967686493E+02 Apriori delay (usec) 4.84037612276E+02 Resid mbdelay (usec) -7.42578E-03 +/- 3.8E-06
 Sband delay (usec) 4.83967849526E+02 Apriori clock (usec) -1.4000071E+01 Resid sbdelay (usec) -6.97628E-02 +/- 3.0E-05
 Phase delay (usec) 4.84037614117E+02 Apriori clockrate (us/s) -6.1269804E-07 Resid phdelay (usec) 1.84103E-06 +/- 2.6E-08
 Delay rate (us/s) -3.39476113053E-02 Apriori rate (us/s) -3.39476515031E-02 Resid rate (us/s) 4.01977E-08 +/- 2.5E-10
 Total phase (deg) -207.7 Apriori accel (us/s/s) -1.21268927052E-06 Resid phase (deg) -61.4 +/- 0.4

RMS Theor. Amplitude 7.884 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 18.9 0.9 Search (1024X32) 7.809 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 8.0 1.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 3.7 0.6 Inc. seg. avg. 8.314 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 7.4 1.0 Inc. frq. avg. 7.882 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

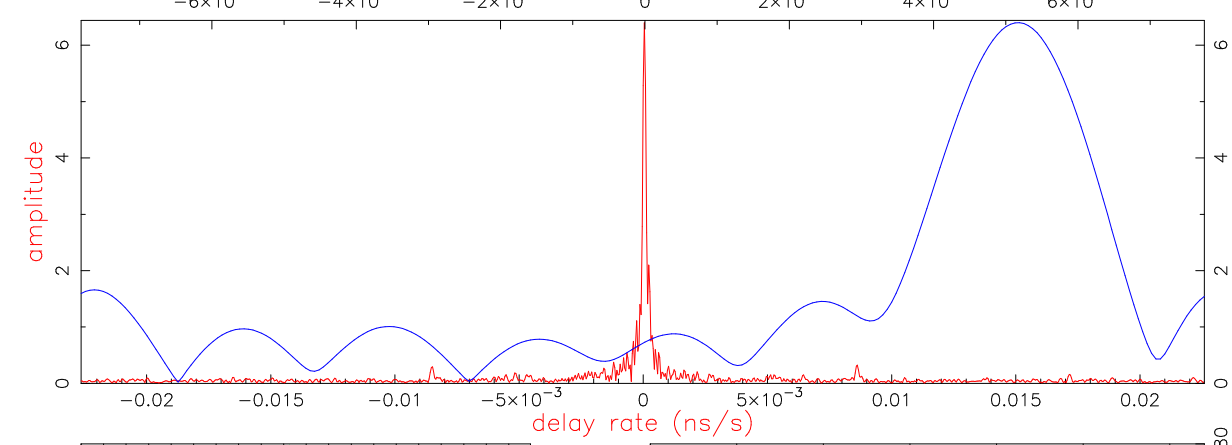
l: az 71.2 el 46.9 pa -74.8 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 122.014 37.185 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lp.Q.244.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

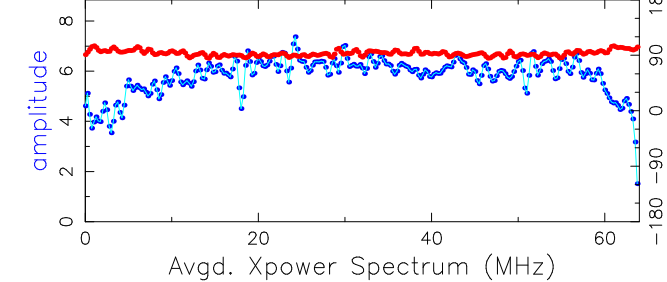
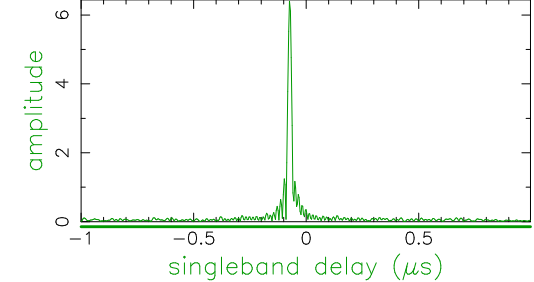
2013+370.3MP56K, No0500, lp

VLBA_LA - VLBA_PT, fgroup Q, pol RR



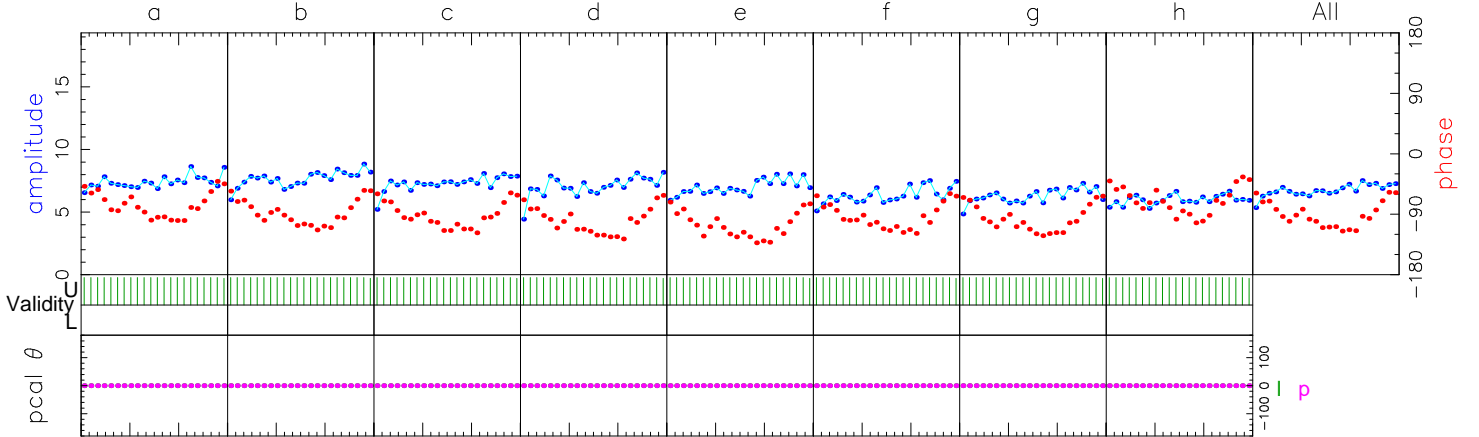
Fringe quality 7

SNR 236.3
 Int time 179.975
 Amp 6.441
 Phase -22.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.073208
 MBD 0.005194
 Fringe rate (Hz)
 0.001765
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	4.83964681056E+02	Apriori delay (usec)		4.84037612276E+02	Resid mbdelay (usec)		5.19378E-03	+/-	4.6E-06	
Sband delay (usec)	4.83964404276E+02	Apriori clock (usec)		-1.4000071E+01	Resid sbdelay (usec)		-7.32080E-02	+/-	3.6E-05	
Phase delay (usec)	4.84037606468E+02	Apriori clockrate (us/s)		-6.1269804E-07	Resid phdelay (usec)		-5.80718E-06	+/-	3.1E-08	
Delay rate (us/s)	-3.39476105979E-02	Apriori rate (us/s)		-3.39476515031E-02	Resid rate (us/s)		4.09052E-08	+/-	3.0E-10	
Total phase (deg)		-169.0	Apriori accel (us/s/s)		-1.21268927052E-06	Resid phase (deg)		-22.7	+/-	0.5

ph/seg (deg)	18.5	1.1	Search (1024X32)		6.282	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
amp/seg (%)	8.5	2.0	Interp.		0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
ph/frq (deg)	13.2	0.7	Inc. seg. avg.		6.742	Bits/sample: 2x2		SampCntNorm: enabled	
amp/frq (%)	8.6	1.2	Inc. frq. avg.		6.525	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	

l: az 71.2 el 46.9 pa -74.8 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 122.014 37.185 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lp.Q.283.3MP56K

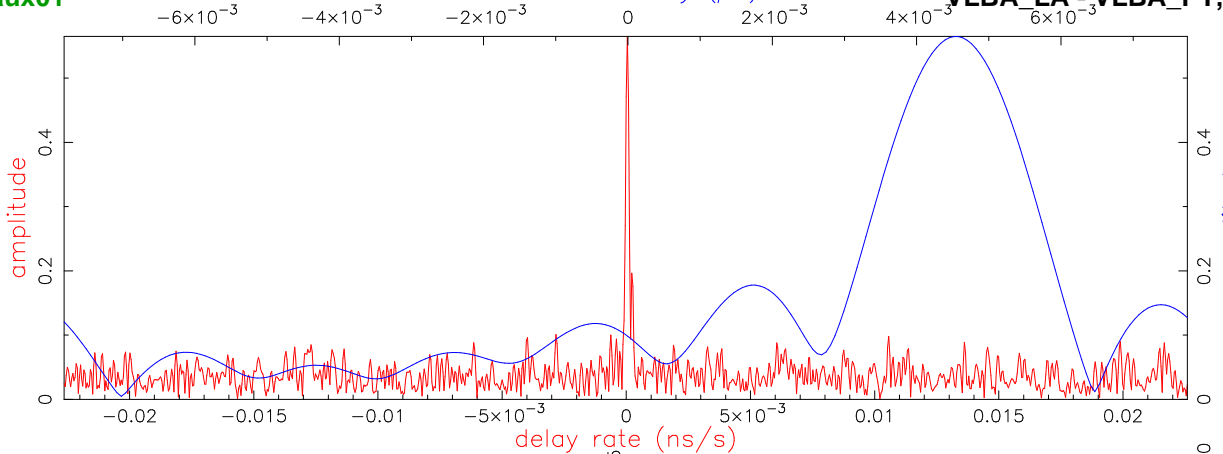
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, lp

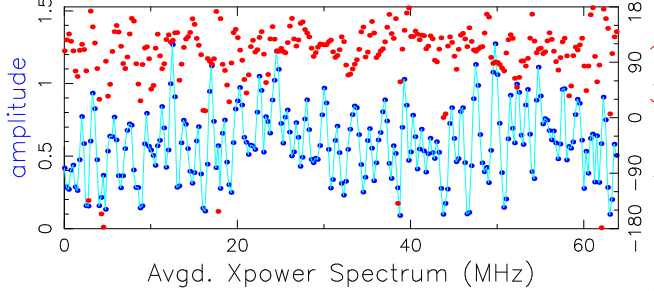
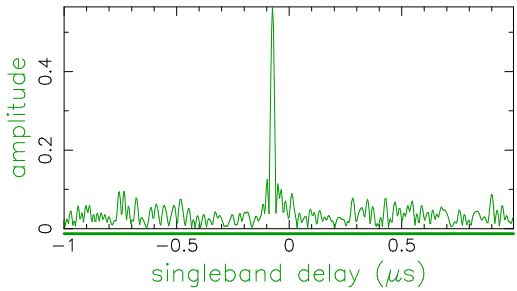
VLBA_LA - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



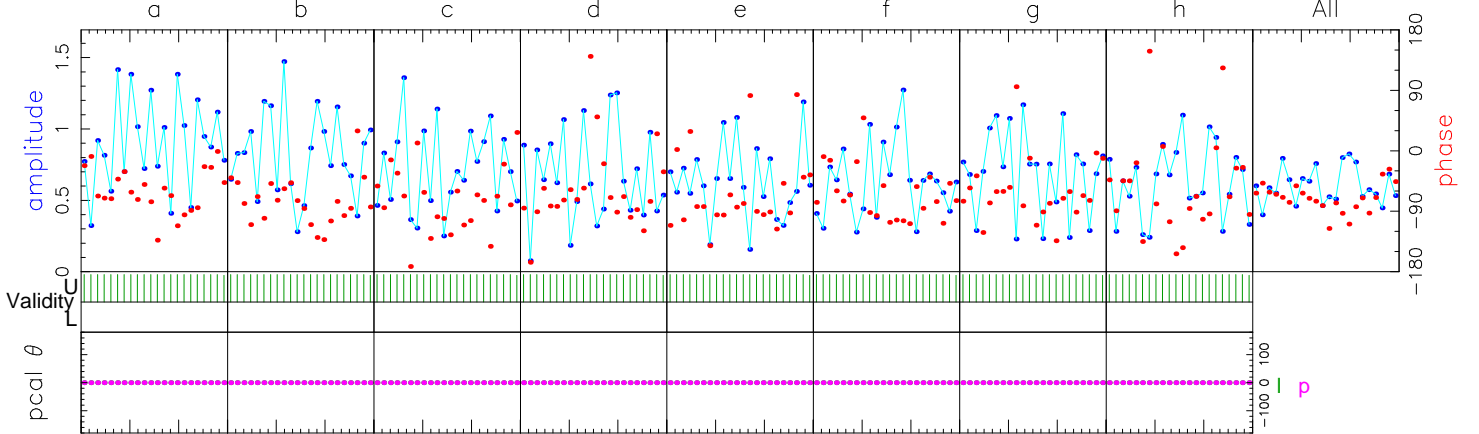
Fringe quality 9

SNR 20.7
 Int time 179.975
 Amp 0.565
 Phase -4.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.074101
 MBD 0.004546
 Fringe rate (Hz)
 0.001698
 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
	-60.8	-80.2	-76.2	-73.5	-76.5	-74.2	-67.5	-67.3	Phase	-71.8
	0.8	0.7	0.5	0.5	0.5	0.5	0.6	0.4	Ampl.	0.6
	238.0	237.8	238.5	237.7	237.8	237.8	238.1	238.4	Sbd box	238.0
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	4.83964033243E+02	Apriori delay (usec)	4.84037612276E+02	Resid mbdelay (usec)	4.54597E-03	+/-	5.2E-05
Sband delay (usec)	4.83963511026E+02	Apriori clock (usec)	-1.4000071E+01	Resid sbdelay (usec)	-7.41012E-02	+/-	4.2E-04
Phase delay (usec)	4.84037607652E+02	Apriori clockrate (us/s)	-6.1269804E-07	Resid phdelay (usec)	-4.62400E-06	+/-	3.6E-07
Delay rate (us/s)	-3.39476121401E-02	Apriori rate (us/s)	-3.39476515031E-02	Resid rate (us/s)	3.93630E-08	+/-	3.4E-09
Total phase (deg)	-150.6	Apriori accel (us/s/s)	-1.21268927052E-06	Resid phase (deg)	-4.3	+/-	5.5

ph/seg (deg) 21.1 13.0 Search (1024X32) 0.558 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 22.7 22.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.8 7.8 Inc. seg. avg. 0.589 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.2 13.6 Inc. frq. avg. 0.563 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 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 122.014 37.185 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lp.Q.301.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

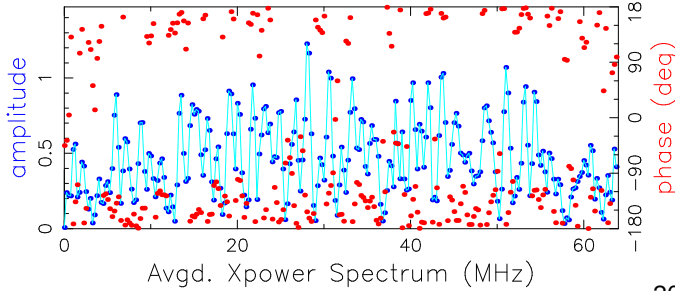
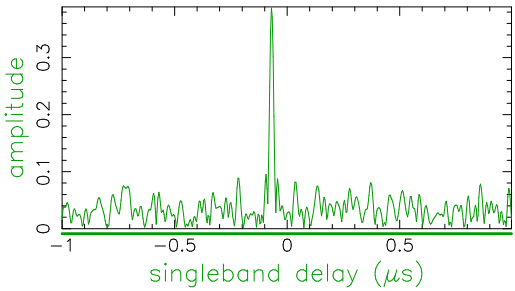
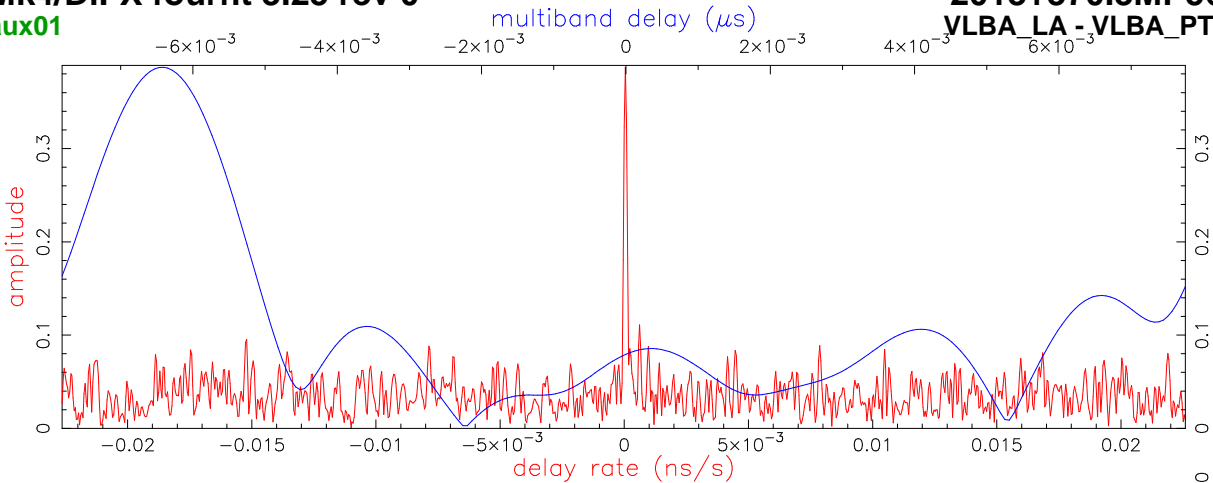
2013+370.3MP56K, No0500, lp

VLBA_LA - VLBA_PT, fgroup Q, pol RL

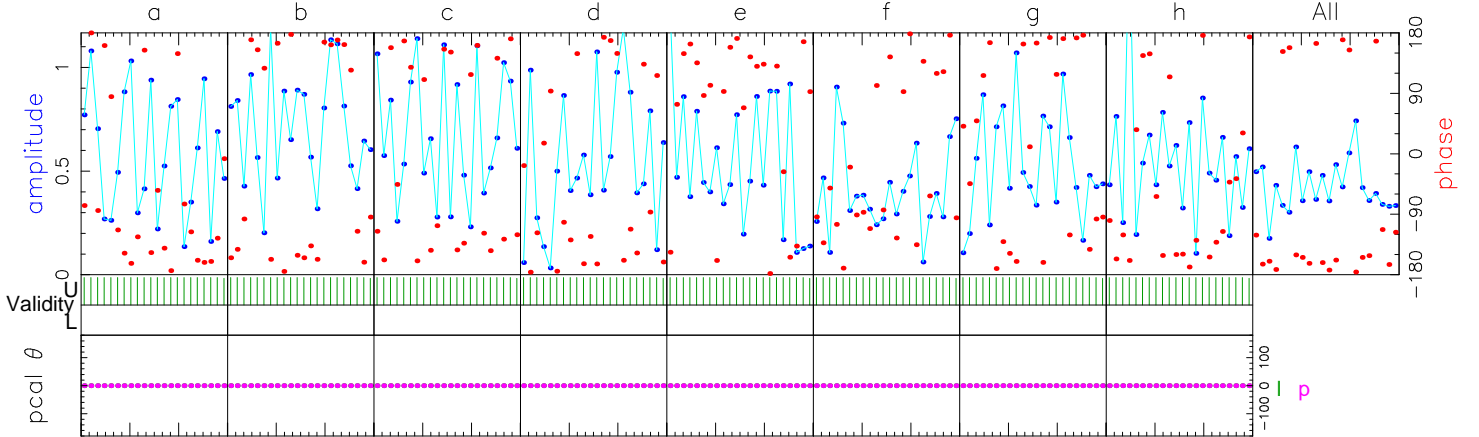
Fringe quality 9

SNR 14.3
 Int time 179.975
 Amp 0.389
 Phase -256.4
 PFD 9.2e-38
 Delays (us)
 SBD -0.069317
 MBD -0.006407
 Fringe rate (Hz)
 0.001480
 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
 2025:042:151835
 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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
lp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Group delay (usec) (SBD)	4.83968705650E+02	4.83968295026E+02	4.84037601559E+02	4.84037612276E+02	4.84037615031E-02	4.84037612276E+02	4.84037615031E-02	4.84037612276E+02	4.84037615031E-02	4.84037612276E+02
Sband delay (usec)										
Phase delay (usec)										
Delay rate (us/s)										
Total phase (deg)										
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

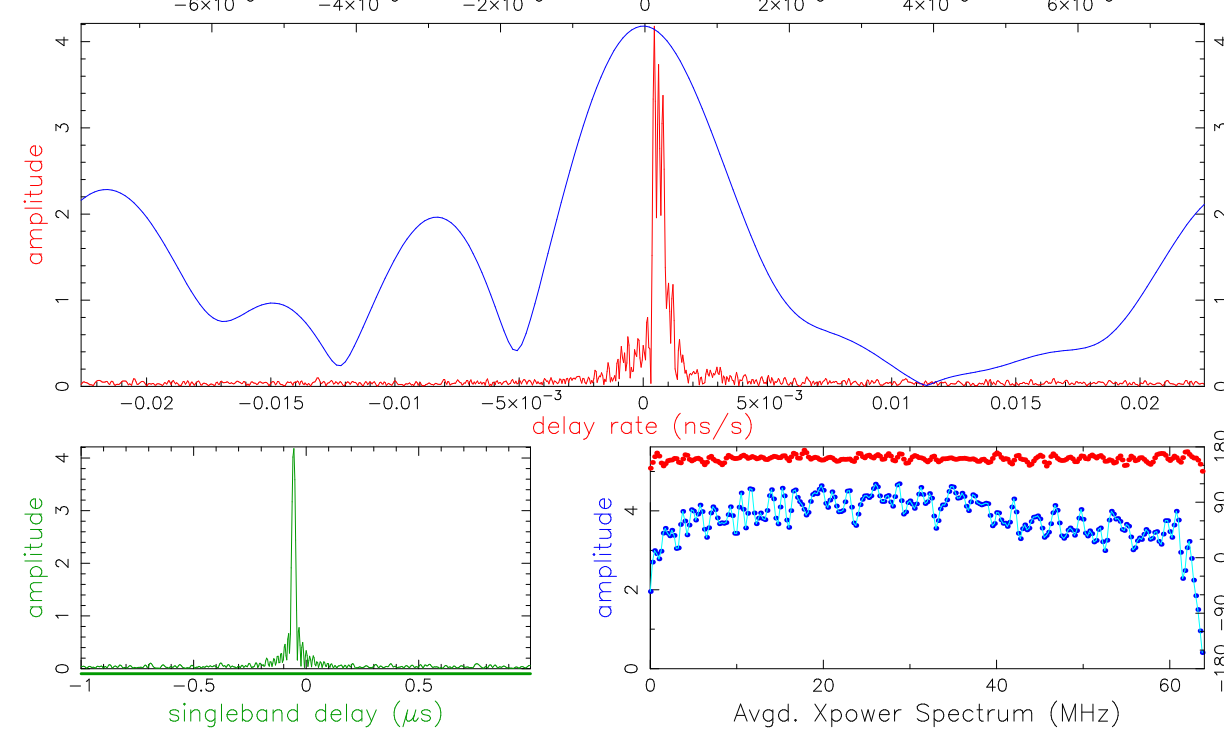
l: az 71.2 el 46.9 pa -74.8 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 122.014 37.185
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/lp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/lp.Q.318.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

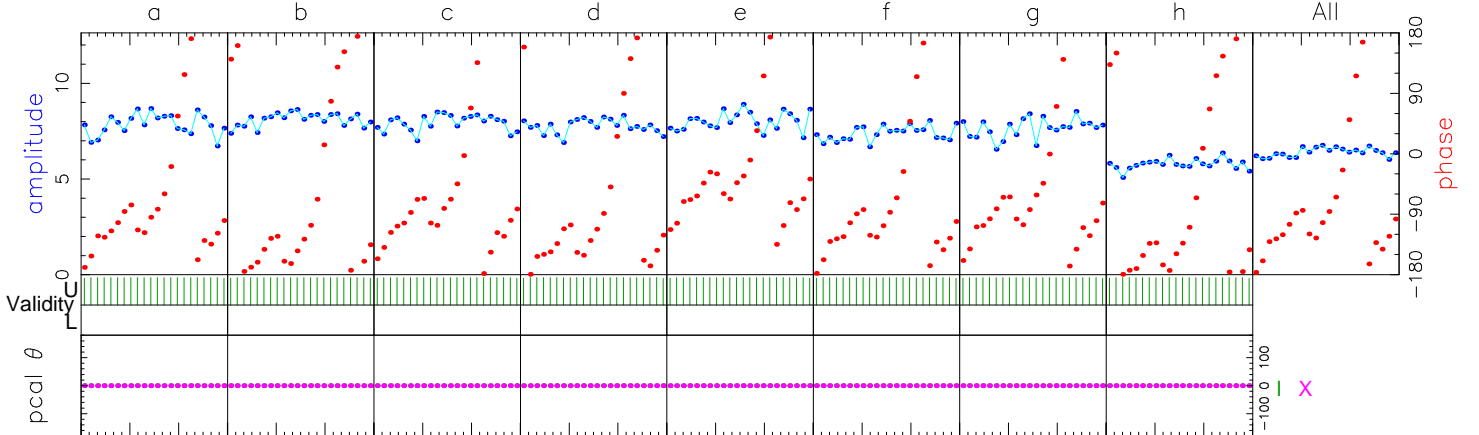
2013+370.3MP56K, No0500, IX

VLBA_LA - QNSALA60, fgroup Q, pol LL



Fringe quality 2
 SNR 154.5
 Int time 179.835
 Amp 4.213
 Phase -211.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.055824
 MBD -0.000057
 Fringe rate (Hz) 0.019240
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	6.60834154077E+02	Apriori delay (usec)	6.60896711117E+02	Resid mbdelay (usec)	-5.70402E-05	+/-	7.0E-06
Sband delay (usec)	6.60840886867E+02	Apriori clock (usec)	-1.2121981E+02	Resid sbdelay (usec)	-5.58242E-02	+/-	5.6E-05
Phase delay (usec)	6.60896703328E+02	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	-7.78940E-06	+/-	4.8E-08
Delay rate (us/s)	1.41221302560E+00	Apriori rate (us/s)	1.41221257962E+00	Resid rate (us/s)	4.45981E-07	+/-	4.6E-10
Total phase (deg)	-168.6	Apriori accel (us/s/s)	-2.17743391525E-05	Resid phase (deg)	-211.0	+/-	0.7

ph/seg (deg)	58.2	1.7	Search (1024X32)	4.150	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	52.2	3.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	38.2	1.0	Inc. seg. avg.	6.398	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	21.2	1.8	Inc. frq. avg.	4.944	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
I: az 71.2 el 46.9 pa -74.8	X: az 272.4 el 44.4 pa 42.5	u, v (fr/asec)	-5099.007 -1529.451	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/IX..3MP56K	Output file: /Exps/c241d/v1/7mm/1234/No0500/IX.Q.265.3MP56K				simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

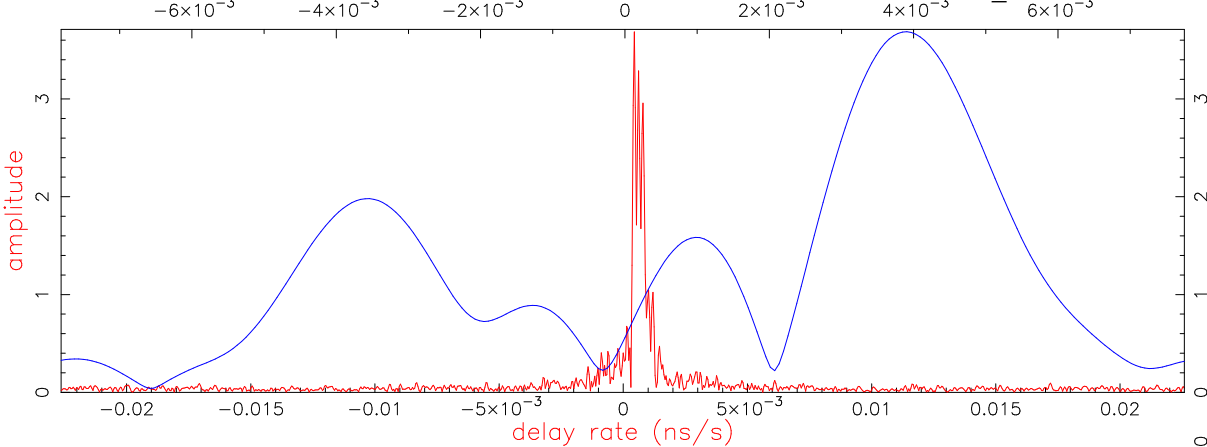
aux01

2013+370.3MP56K, No0500, IX

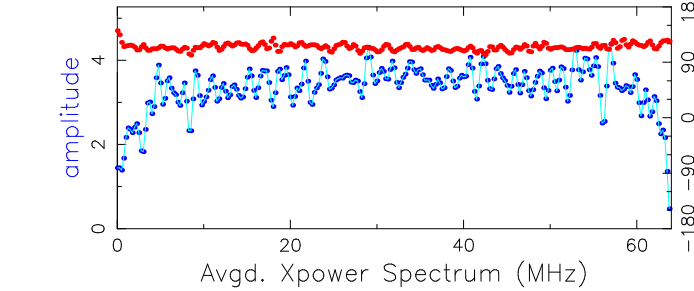
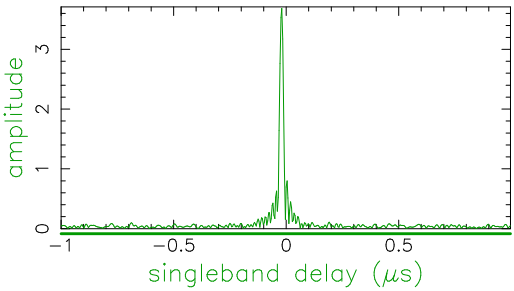
VLBA_LA - ONSALA60, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 2

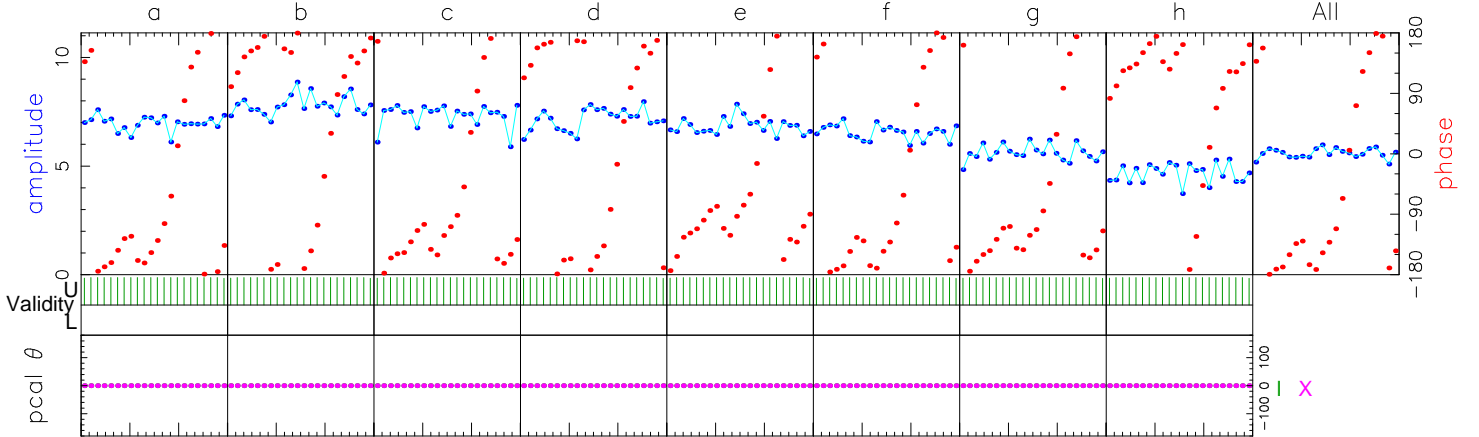


SNR 136.1
 Int time 179.835
 Amp 3.711
 Phase -212.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.020592
 MBD 0.003854
 Fringe rate (Hz)
 0.019220
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	6.60869315608E+02	Apriori delay (usec)	6.60896711117E+02	Resid mbdelay (usec)	3.85449E-03	+/-	8.0E-06
Sband delay (usec)	6.60876119117E+02	Apriori clock (usec)	-1.2121981E+02	Resid sbdelay (usec)	-2.05920E-02	+/-	6.3E-05
Phase delay (usec)	6.60896700342E+02	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	-1.07750E-05	+/-	5.4E-08
Delay rate (us/s)	1.41221302514E+00	Apriori rate (us/s)	1.41221257962E+00	Resid rate (us/s)	4.45523E-07	+/-	5.2E-10
Total phase (deg)	-170.0	Apriori accel (us/s/s)	-2.17743391525E-05	Resid phase (deg)	-212.3	+/-	0.8

ph/seg (deg)	58.2	RMS	2.0	Theor.	3.711 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	51.0	Search (1024X32)	3.662	Amplitude	3.711 +/- 0.027	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.6	Interp.	0.000	Search	3.662	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	24.2	Inc. seg. avg.	5.587	Inc. seg. avg.	5.587	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	4.374	Inc. frq. avg.	4.374	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

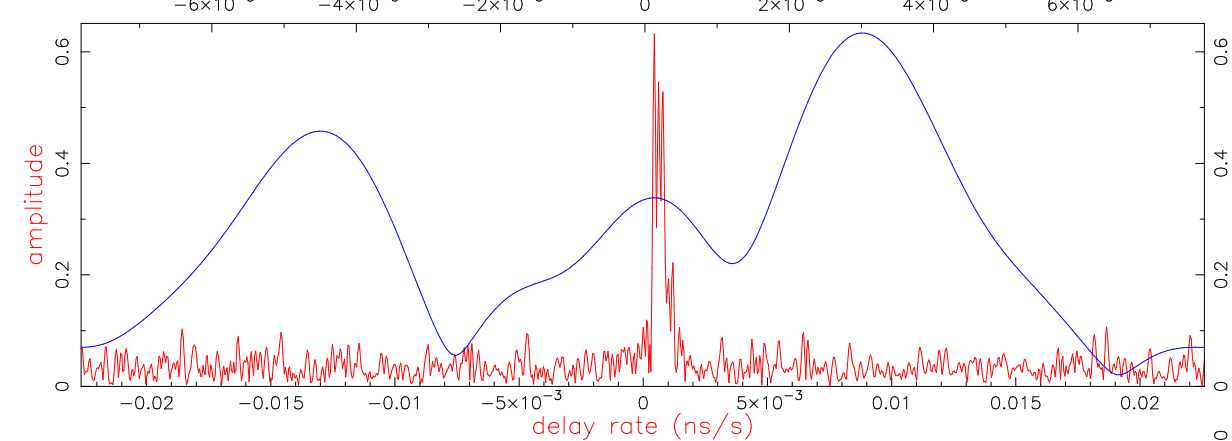
I: az 71.2 el 46.9 pa -74.8 X: az 272.4 el 44.4 pa 42.5 u,v (fr/asec) -5099.007 -1529.451 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IX.Q.286.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

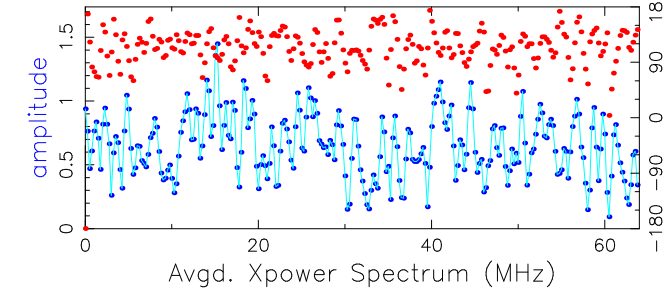
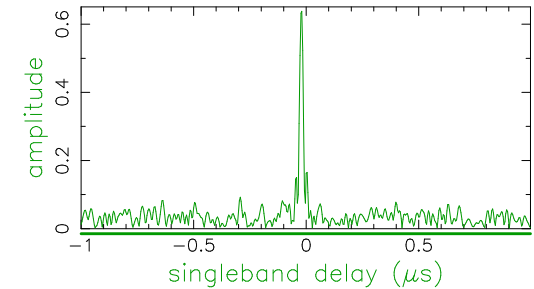
2013+370.3MP56K, No0500, IX

VLBA_LA - ONSALA60, fgroup Q, pol LR



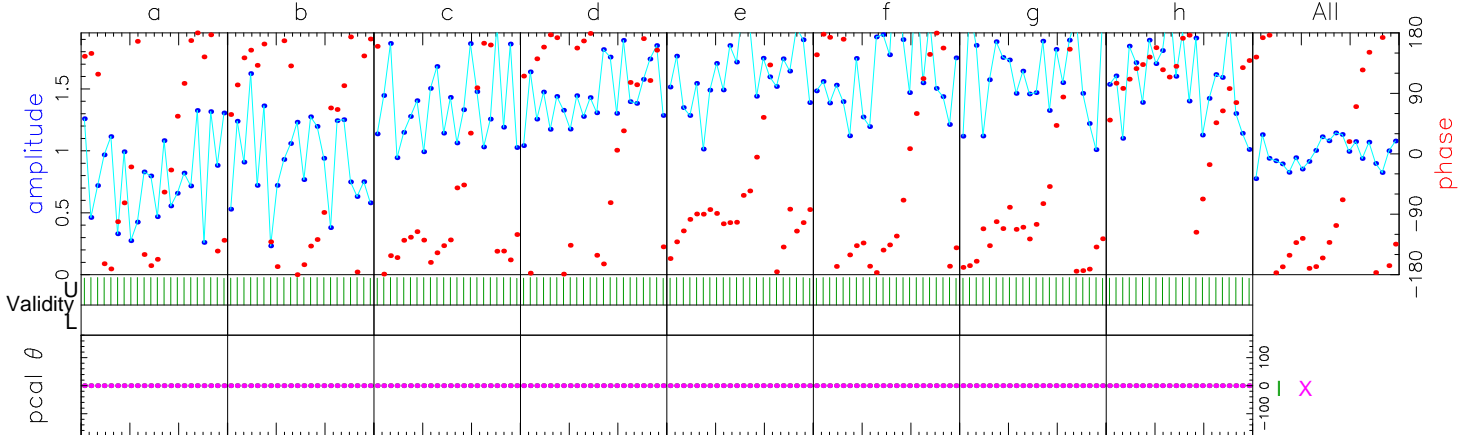
Fringe quality 5

SNR 23.9
 Int time 179.835
 Amp 0.651
 Phase -210.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.021298
 MBD 0.003102
 Fringe rate (Hz) 0.019331
 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
	-168.9	158.4	-147.5	163.6	-100.1	-168.0	-132.8	118.3	Phase	-165.4
	0.4	0.6	0.9	0.9	1.1	1.0	1.0	1.0	Ampl.	0.9
	251.6	251.2	251.2	251.3	250.8	251.3	250.7	249.6	Sbd box	251.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	6.608868563390E+02	Apriori delay (usec)	6.60896711117E+02	Resid mbdelay (usec)	3.10227E-03	+/-	4.5E-05
Sband delay (usec)	6.60875413367E+02	Apriori clock (usec)	-1.2121981E+02	Resid sbdelay (usec)	-2.12977E-02	+/-	3.6E-04
Phase delay (usec)	6.60896700464E+02	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	-1.06530E-05	+/-	3.1E-07
Delay rate (us/s)	1.41221302771E+00	Apriori rate (us/s)	1.41221257962E+00	Resid rate (us/s)	4.48092E-07	+/-	3.0E-09
Total phase (deg)	-168.1	Apriori accel (us/s/s)	-2.17743391525E-05	Resid phase (deg)	-210.4	+/-	4.8

ph/seg (deg) 58.6 11.3 Theor. Amplitude 0.651 +/- 0.027
 amp/seg (%) 53.3 19.6 Search (1024X32) 0.628
 ph/frq (deg) 47.9 6.8 Inc. seg. avg. 0.962
 amp/frq (%) 46.5 11.8 Inc. frq. avg. 0.857
 I: az 71.2 el 46.9 pa -74.8 X: az 272.4 el 44.4 pa 42.5 u,v (fr/asec) -5099.007 -1529.451
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IX.Q.311.3MP56K

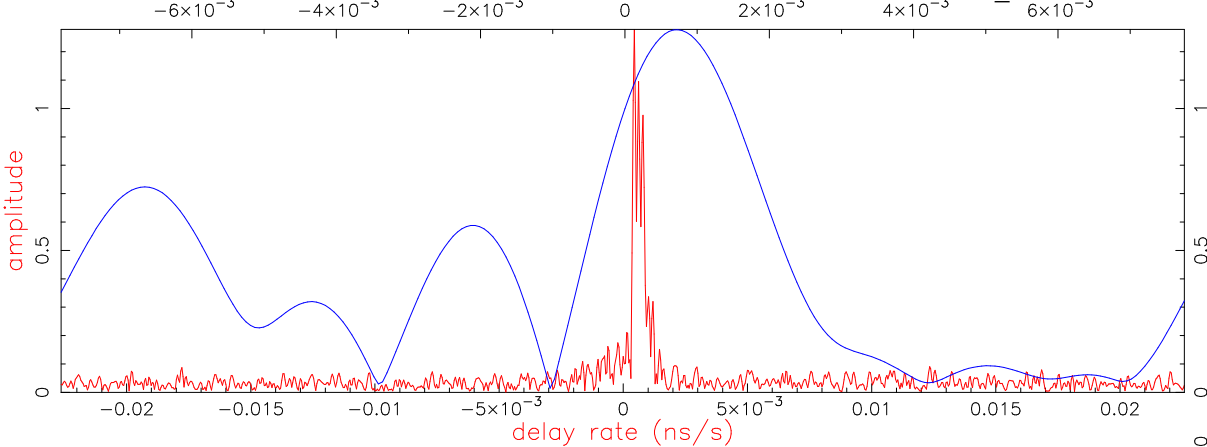
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, IX

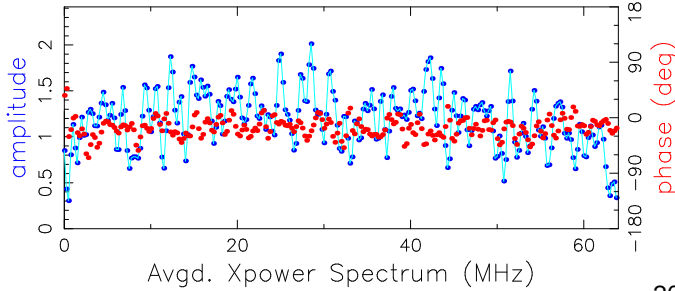
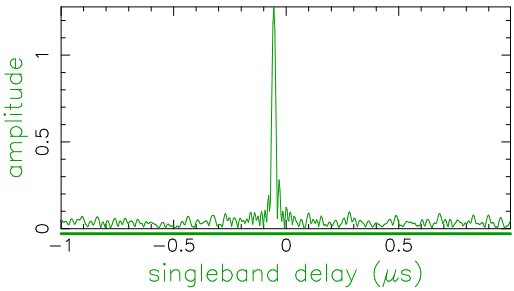
VLBA_LA - ONSALA60, fgroup Q, pol RL

multiband delay (μ s)



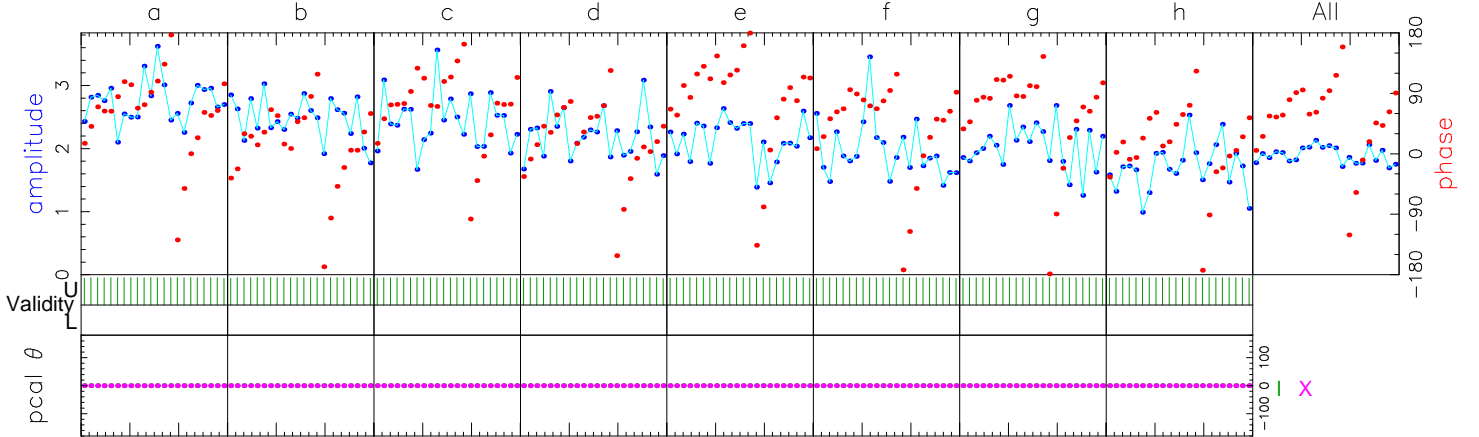
Fringe quality 4

SNR 46.9
 Int time 179.835
 Amp 1.279
 Phase -29.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.055041
 MBD 0.000708
 Fringe rate (Hz)
 0.019201
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	6.60834919577E+02	Apriori delay (usec)	6.60896711117E+02	Resid mbdelay (usec)	7.08460E-04	+/-	2.3E-05
Sband delay (usec)	6.60841669867E+02	Apriori clock (usec)	-1.2121981E+02	Resid sbdelay (usec)	-5.50412E-02	+/-	1.8E-04
Phase delay (usec)	6.60896715044E+02	Apriori clockrate (us/s)	-1.4506241E-02	Resid phdelay (usec)	3.92667E-06	+/-	1.6E-07
Delay rate (us/s)	1.41221302470E+00	Apriori rate (us/s)	1.41221257962E+00	Resid rate (us/s)	4.45081E-07	+/-	1.5E-09
Total phase (deg)	-346.7	Apriori accel (us/s/s)	-2.17743391525E-05	Resid phase (deg)	-29.0	+/-	2.4

ph/seg (deg)	58.5	Theor.	5.7	Search (1024X32)	1.251	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	49.3		10.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	36.2		3.5	Inc. seg. avg.	1.887	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	22.6		6.0	Inc. frq. avg.	1.481	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 71.2 el 46.9 pa -74.8 X: az 272.4 el 44.4 pa 42.5 u,v (fr/asec) -5099.007 -1529.451 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IX.Q.321.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

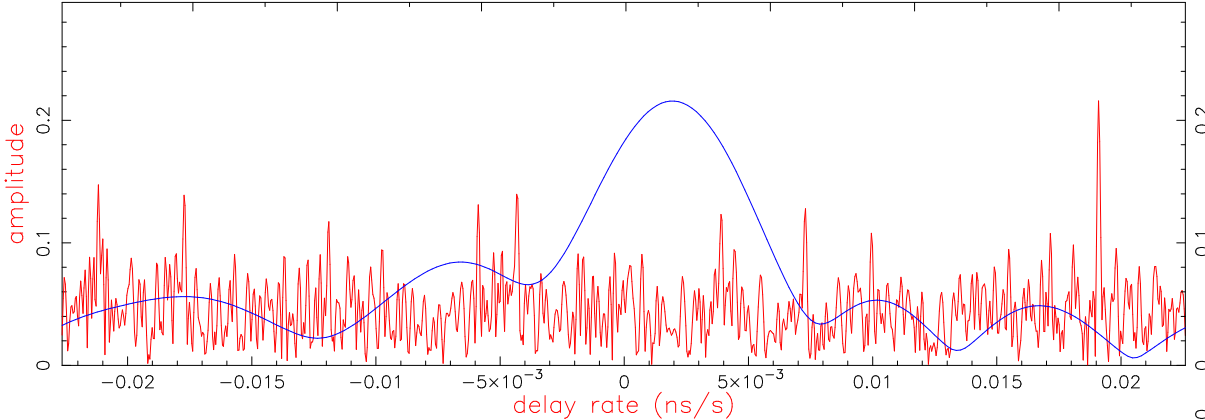
aux01

2013+370.3MP56K, No0500, IY

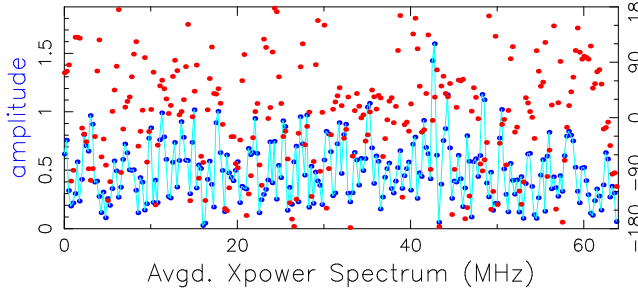
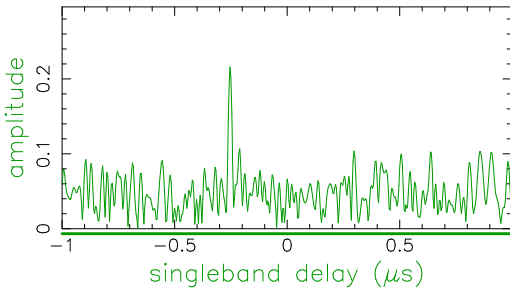
VLBA_LA - YEBES40M, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 0

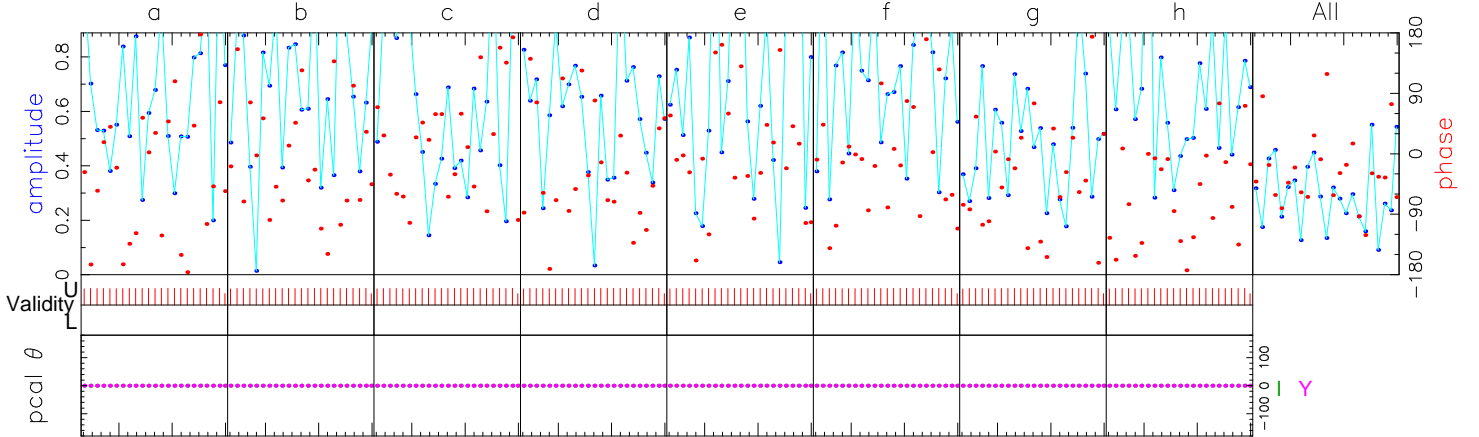


SNR 5.8
 Int time 97.781
 Amp 0.296
 Phase -32.3
 PFD 4.8e-01
 Delays (us)
 SBD -0.253410
 MBD 0.000660
 Fringe rate (Hz)
 0.828239
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094017.41
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151845
 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
	-70.0	-40.8	-28.6	-45.2	13.4	-21.6	-45.3	-54.1	Phase	-32.3
	0.1	0.3	0.3	0.2	0.4	0.5	0.3	0.4	Ampl.	0.3
	400.0	480.2	221.0	490.2	302.9	229.5	327.1	74.0	Sbd box	192.1
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.08553025089E+03	Apriori delay (usec)	-1.08528091088E+03	Resid mbdelay (usec)	6.59984E-04	+/-	1.9E-04
Sband delay (usec)	-1.08553432038E+03	Apriori clock (usec)	1.0268784E+02	Resid sbdelay (usec)	-2.53410E-01	+/-	1.5E-03
Phase delay (usec)	-1.08528091295E+03	Apriori clockrate (us/s)	7.7468999E-07	Resid phdelay (usec)	-2.07859E-06	+/-	1.3E-06
Delay rate (us/s)	1.52298737984E+00	Apriori rate (us/s)	1.52296818098E+00	Resid rate (us/s)	1.91989E-05	+/-	1.3E-08
Total phase (deg)	-210.6	Apriori accel (us/s/s)	1.87272981291E-06	Resid phase (deg)	-32.3	+/-	19.6

ph/seg (deg)	56.8	Theor.	47.0	Amplitude	0.296 +/- 0.051	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.2		82.1	Search (1024X32)	0.208	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	27.5		27.7	Inc. seg. avg.	0.301	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	35.2		48.4	Inc. frq. avg.	0.287	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 71.2 el 46.9 pa -74.8 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -5487.009 -138.441 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IY.Q.354.3MP56K

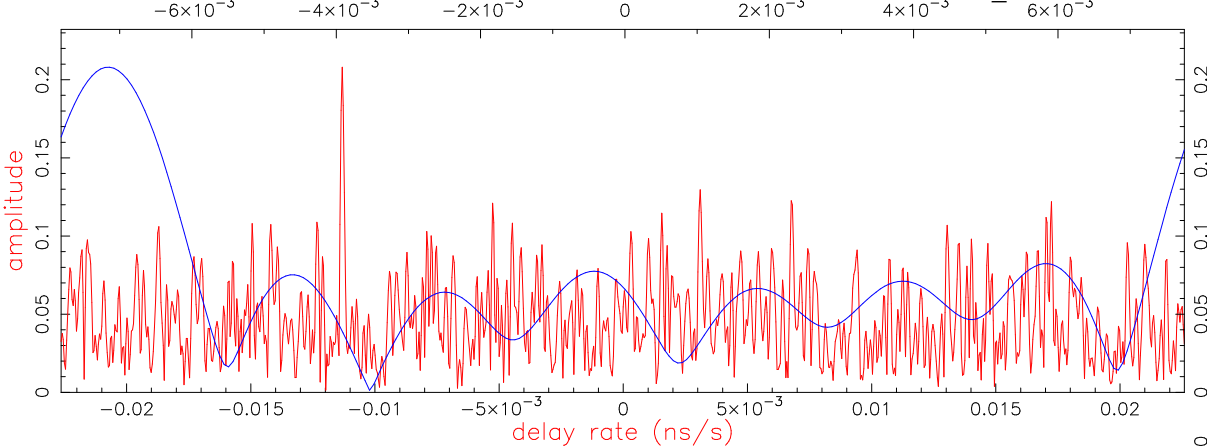
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, IY

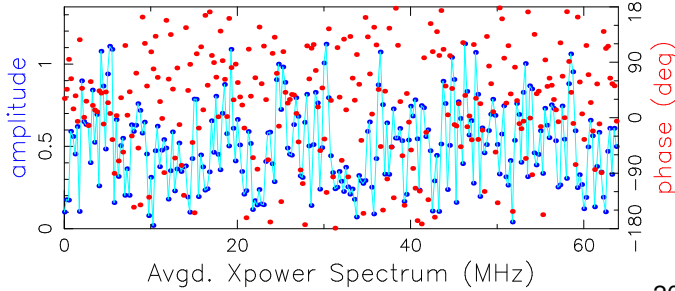
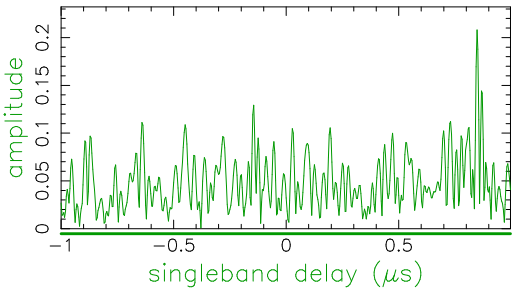
VLBA_LA - YEBES40M, fgroup Q, pol RR

multiband delay (μ s)



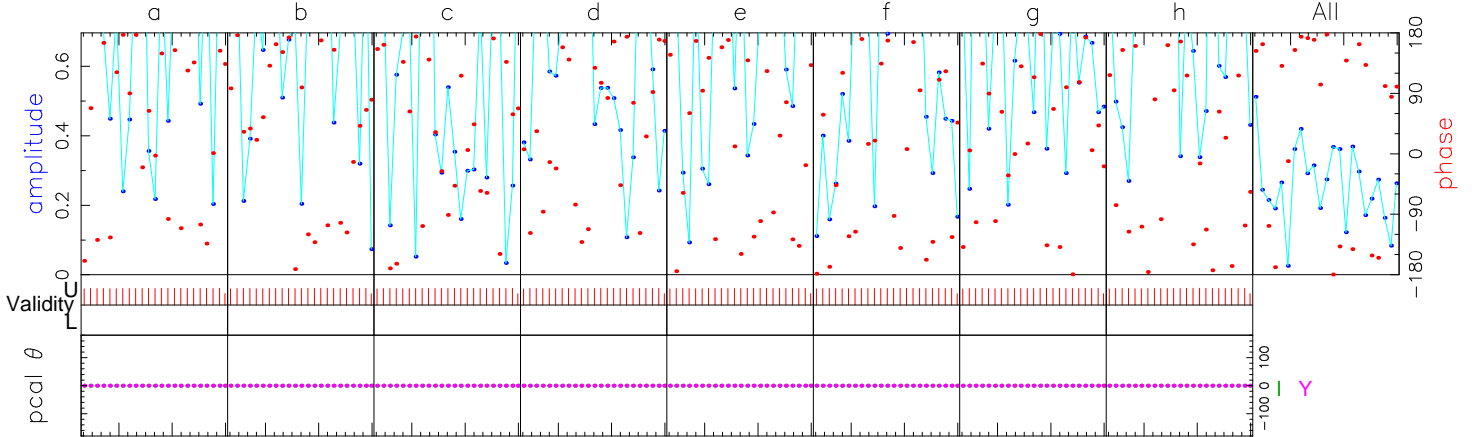
Fringe quality 0

SNR 5.6
 Int time 97.781
 Amp 0.232
 Phase 148.2
 PFD 8.6e-01
 Delays (us)
 SBD 0.848328
 MBD -0.007131
 Fringe rate (Hz)
 -0.490516
 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	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.08442866650E+03	Apriori delay (usec)	-1.08528091088E+03	Resid mbdelay (usec)	-7.13062E-03	+/-	1.9E-04
Sband delay (usec)	-1.08443258238E+03	Apriori clock (usec)	1.0268784E+02	Resid sbdelay (usec)	8.48328E-01	+/-	1.5E-03
Phase delay (usec)	-1.08528089989E+03	Apriori clockrate (us/s)	7.7468999E-07	Resid phdelay (usec)	1.09893E-05	+/-	1.3E-06
Delay rate (us/s)	1.52295681064E+00	Apriori rate (us/s)	1.52296818098E+00	Resid rate (us/s)	-1.13703E-05	+/-	1.4E-08
Total phase (deg)	329.9	Apriori accel (us/s/s)	1.87272981291E-06	Resid phase (deg)	148.2	+/-	20.3

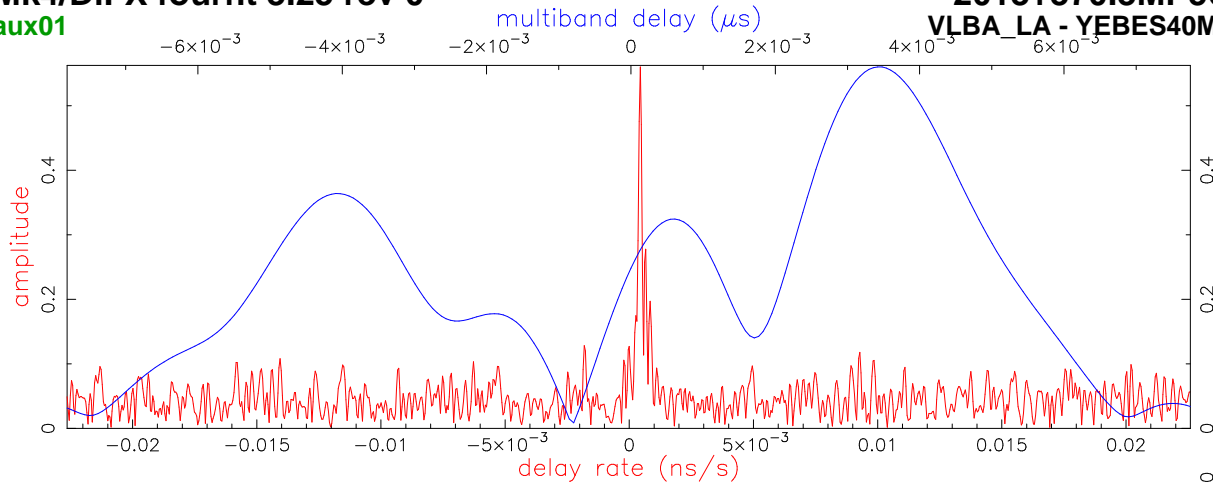
ph/seg (deg)	56.2	Theor.	48.7	Amplitude	0.232 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	58.1	Search (1024X32)	0.206	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	31.8	Inc. seg. avg.	0.213	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.3	Inc. frq. avg.	0.215	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
I: az 71.2 el 46.9 pa -74.8		Y: az 281.3 el 52.4 pa 69.4		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/IY...3MP56K		u,v (fr/asec) -5487.009 -138.441		simultaneous interpolator		
				Output file: /Exps/c241d/v1/7mm/1234/No0500/IY.Q.383.3MP56K				

Mk4/DiFX fourfit 3.25 rev 0

aux01

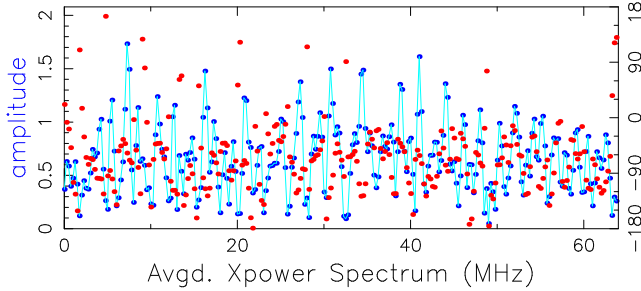
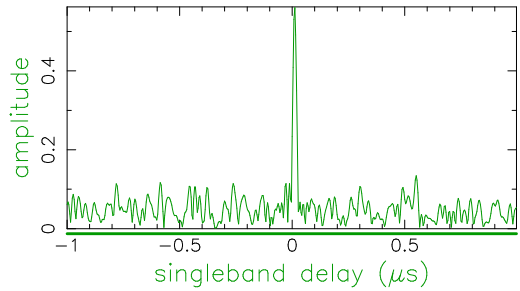
2013+370.3MP56K, No0500, IY

VLBA_LA - YEBES40M, fgroup Q, pol LR



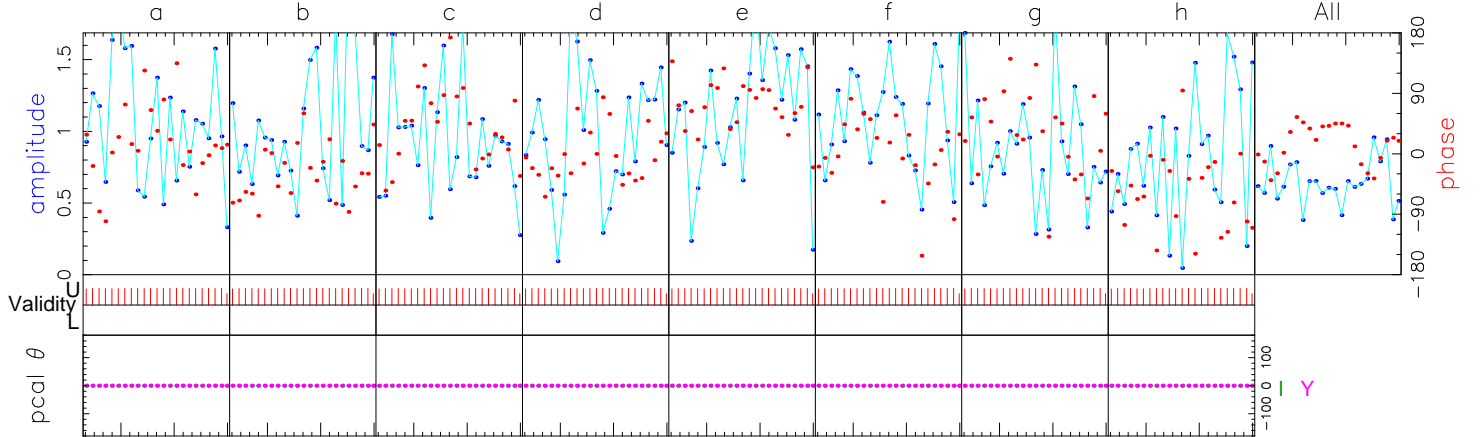
Fringe quality 7

SNR 15.2
 Int time 97.781
 Amp 0.562
 Phase 11.4
 PFD 1.0e-43
 Delays (us)
 SBD 0.010916
 MBD 0.003418
 Fringe rate (Hz)
 0.019850
 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
U/L	11.9	-38.5	43.0	-4.2	76.8	10.9	30.1	-63.9	Phase	11.4
I	0.8	0.8	0.6	0.8	1.0	0.8	0.6	0.6	Ampl.	0.7
Y	259.2	259.4	259.6	259.2	259.1	259.1	258.9	258.0	Sbd box	259.8
I	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
Y	0	0	0	0	0	0	0	0	PC freqs	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.08527749239E+03	Apriori delay (usec)	-1.08528091088E+03	Resid mbdelay (usec)	3.41848E-03	+/-	7.1E-05
Sband delay (usec)	-1.08526999488E+03	Apriori clock (usec)	1.0268784E+02	Resid sbdelay (usec)	1.09160E-02	+/-	5.7E-04
Phase delay (usec)	-1.08528091014E+03	Apriori clockrate (us/s)	7.7468999E-07	Resid phdelay (usec)	7.34363E-07	+/-	4.9E-07
Delay rate (us/s)	1.52296864111E+00	Apriori rate (us/s)	1.52296818098E+00	Resid rate (us/s)	4.60132E-07	+/-	5.2E-09
Total phase (deg)	-166.9	Apriori accel (us/s/s)	1.87272981291E-06	Resid phase (deg)	11.4	+/-	7.5

ph/seg (deg)	29.4	RMS	29.4	Theor.	18.1	Amplitude	0.562 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5				
amp/seg (%)	31.3	Search (1024X32)	0.542	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008		
ph/frq (deg)	48.4	Inc. seg. avg.	0.616	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	40.4	Inc. frq. avg.	0.727	u, v (fr/asec)	-5487.009 -138.441	simultaneous interpolator									

I: az 71.2 el 46.9 pa -74.8 Y: az 281.3 el 52.4 pa 69.4 u, v (fr/asec) -5487.009 -138.441 simultaneous interpolator

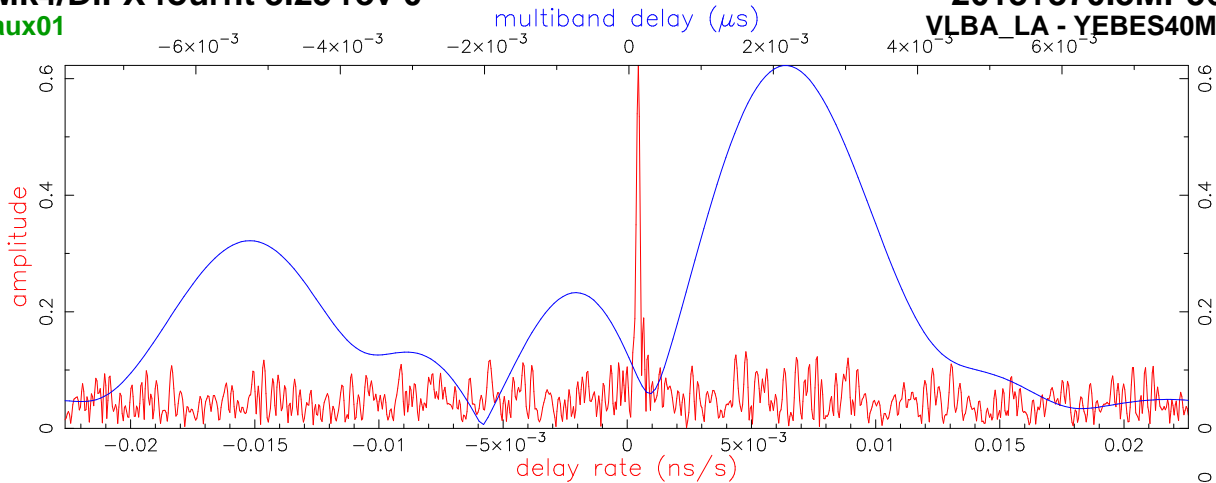
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IY.Q.397.3MP56K

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aux01

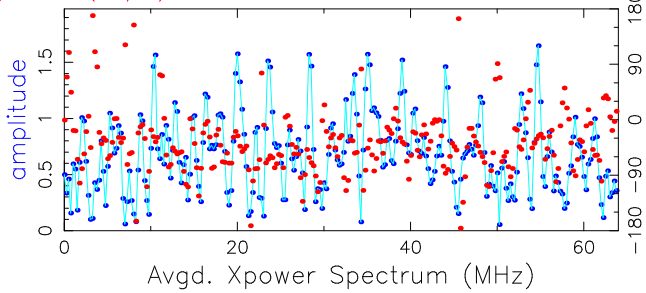
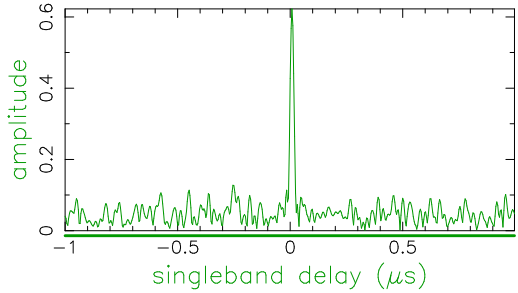
2013+370.3MP56K, No0500, IY

VLBA_LA - YEBES40M, fgroup Q, pol RL



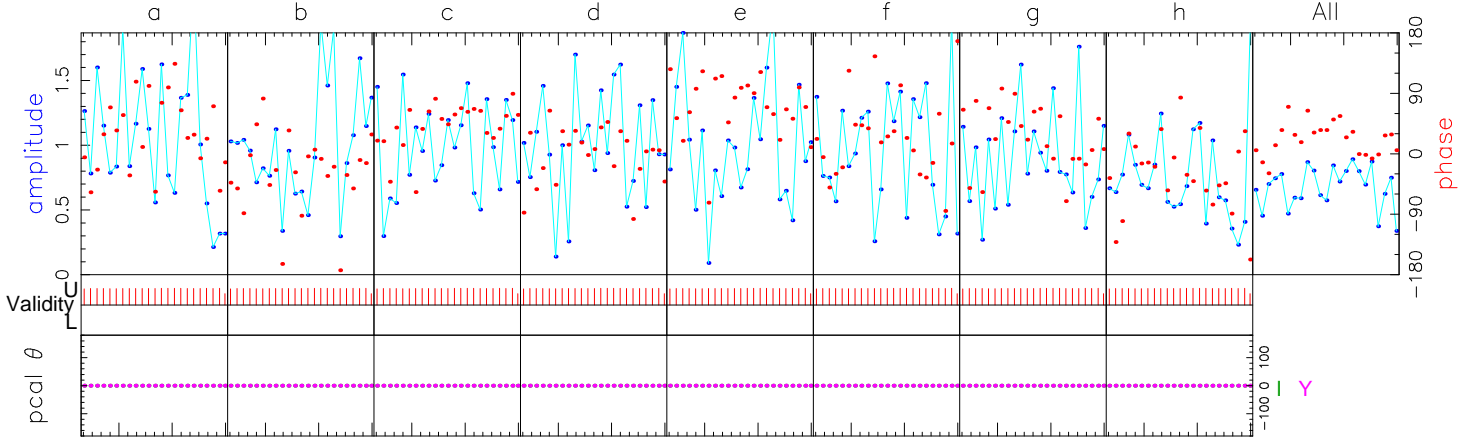
Fringe quality 8

SNR 16.8
 Int time 97.781
 Amp 0.623
 Phase 23.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.007947
 MBD 0.002178
 Fringe rate (Hz)
 0.019547
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.08527873327E+03	Apriori delay (usec)	-1.08528091088E+03	Resid mbdelay (usec)	2.17761E-03	+/-	6.4E-05
Sband delay (usec)	-1.08527296338E+03	Apriori clock (usec)	1.0268784E+02	Resid sbdelay (usec)	7.94750E-03	+/-	5.1E-04
Phase delay (usec)	-1.08528090937E+03	Apriori clockrate (us/s)	7.7468999E-07	Resid phdelay (usec)	1.51077E-06	+/-	4.4E-07
Delay rate (us/s)	1.52296863407E+00	Apriori rate (us/s)	1.52296818098E+00	Resid rate (us/s)	4.53098E-07	+/-	4.7E-09
Total phase (deg)	-154.8	Apriori accel (us/s/s)	1.87272981291E-06	Resid phase (deg)	23.5	+/-	6.8

ph/seg (deg)	RMS 24.6	Theor. 16.3	Amplitude Search (1024X32)	0.623 +/- 0.037	0.607	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	26.0	28.5	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	36.0	9.6	Inc. seg. avg.	0.655	0.655	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023
amp/frq (%)	25.4	16.8	Inc. frq. avg.	0.710	0.710	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	0.00

I: az 71.2 el 46.9 pa -74.8 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -5487.009 -138.441 simultaneous interpolator

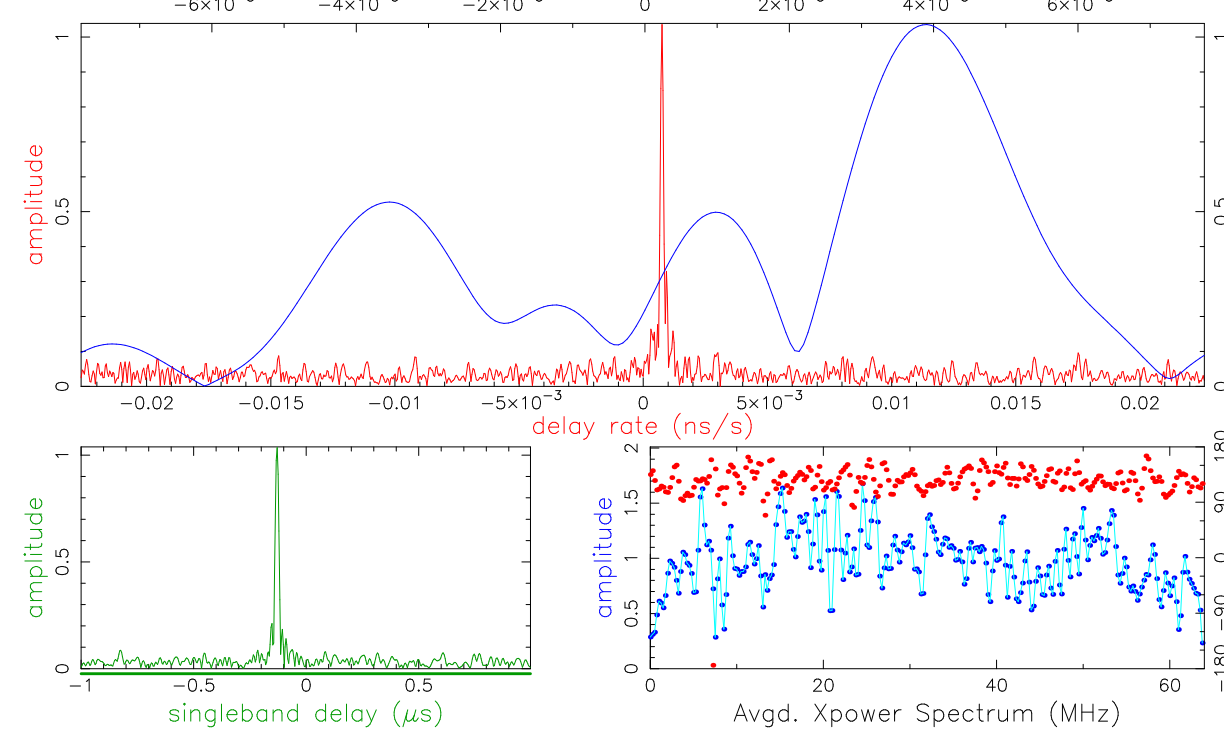
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IY.Q.406.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, IZ

VLBA_LA - METSAHOV, fgroup Q, pol LL

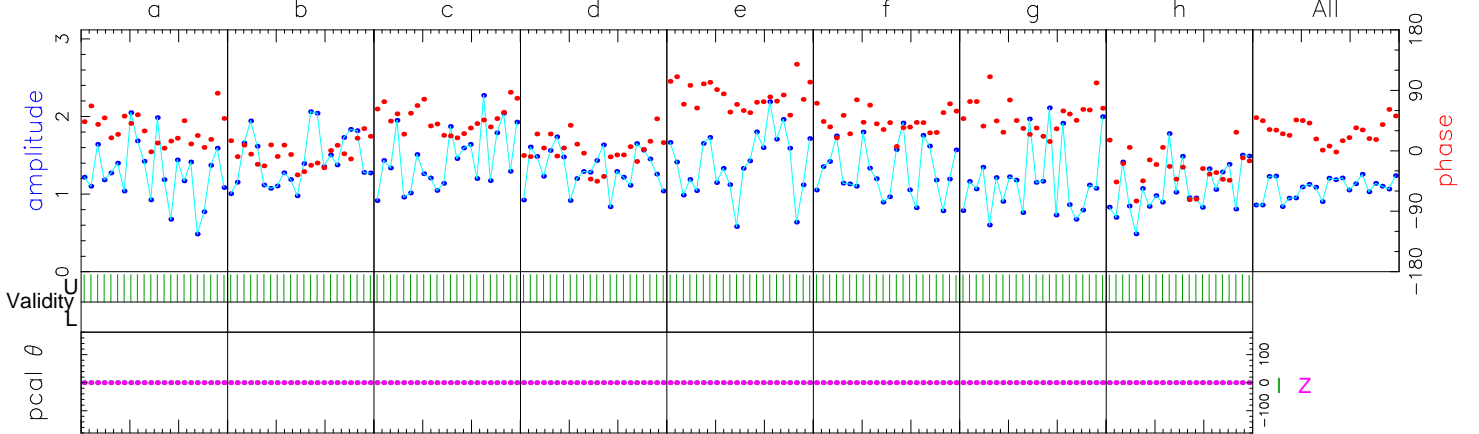


Fringe quality 6

SNR 38.1
 Int time 179.947
 Amp 1.039
 Phase -353.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.129605
 MBD 0.003877
 Fringe rate (Hz)
 0.032223
 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
 2025:042:151812
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	2.48109800731E+03	Apriori delay (usec)	2.48123475567E+03	Resid mbdelay (usec)	3.87664E-03	+/-	2.8E-05
Sband delay (usec)	2.48110515067E+03	Apriori clock (usec)	-8.3980656E-07	Resid sbdelay (usec)	-1.29605E-01	+/-	2.3E-04
Phase delay (usec)	2.48123475754E+03	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	1.87744E-06	+/-	1.9E-07
Delay rate (us/s)	1.41020139780E+00	Apriori rate (us/s)	1.41020065085E+00	Resid rate (us/s)	7.46946E-07	+/-	1.9E-09
Total phase (deg)	-223.9	Apriori accel (us/s/s)	-3.26020563603E-05	Resid phase (deg)	-353.3	+/-	3.0

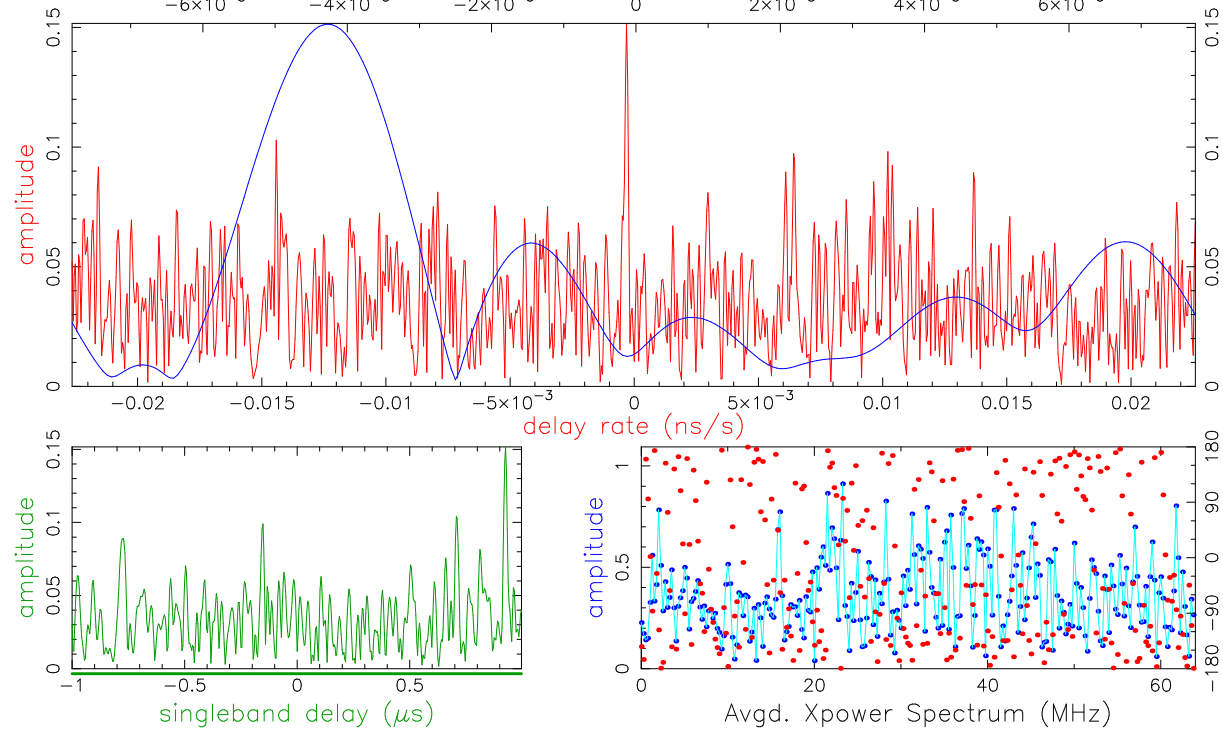
ph/seg (deg) 16.5 7.1 Search (1024X32) 1.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 13.2 12.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.6 4.3 Inc. seg. avg. 1.072 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 22.1 7.4 Inc. frq. avg. 1.226 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 I: az 71.2 el 46.9 pa -74.8 Z: az 280.0 el 38.3 pa 37.9 u,v (fr/asec) -5096.260 -1943.750 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/IZ..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IZ.Q.196.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, IZ

VLBA_LA - METSAHOV, fgroup Q, pol LR

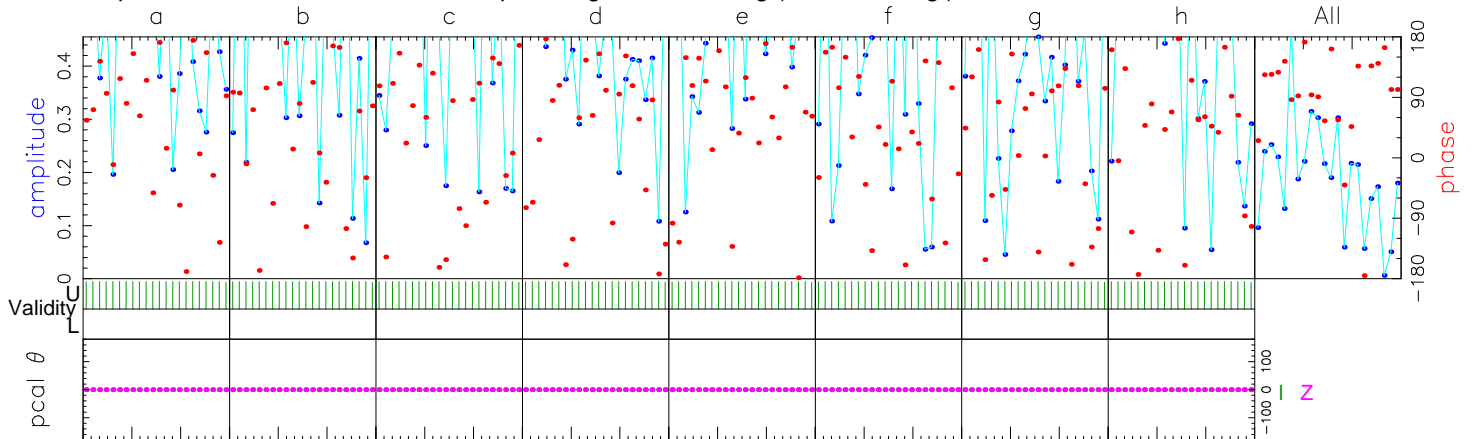


Fringe quality 0

SNR 5.6
 Int time 179.947
 Amp 0.152
 Phase 172.4
 PFD 9.6e-01
 Delays (us)
 SBD 0.925173
 MBD -0.004289
 Fringe rate (Hz)
 -0.013021
 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



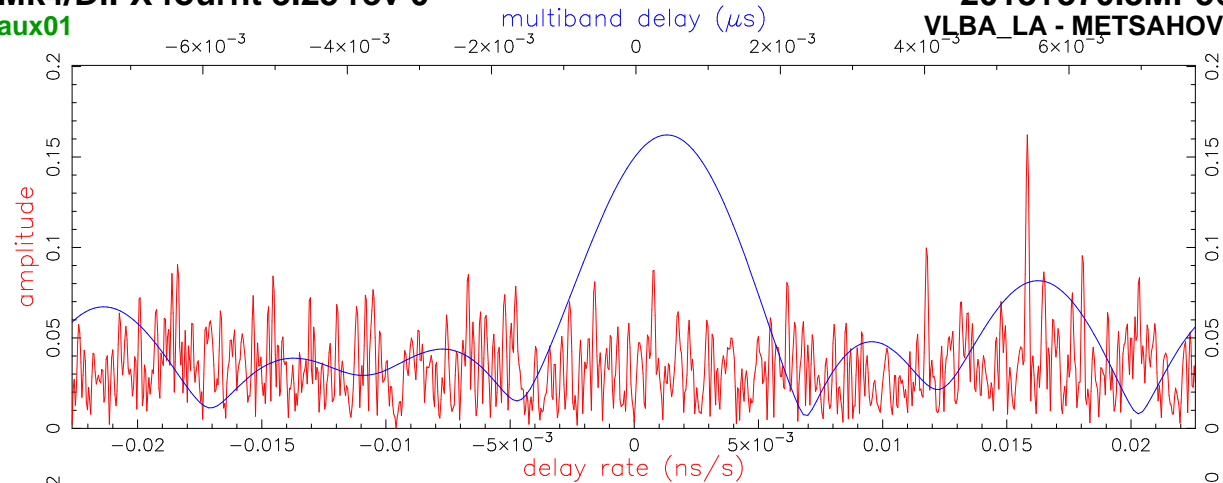
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0				
I	1000	1000	1000	1000	1000	1000	1000	1000				
Z	0	0	0	0	0	0	0	0				
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
I	1000	1000	1000	1000	1000	1000	1000	1000				
Z	1000	1000	1000	1000	1000	1000	1000	1000				
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL				
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR				
Group delay (usec) (SBD)	2.48215234199E+03					2.48123475567E+03			Resid mbdelay (usec)	-4.28868E-03	+/- 2.0E-04	
Sband delay (usec)	2.48215992867E+03					-8.3980656E+00			Resid sbdelay (usec)	9.25173E-01	+/- 1.5E-03	
Phase delay (usec)	2.48123476242E+03					-8.4386101E-07			Resid phdelay (usec)	6.75427E-06	+/- 1.3E-06	
Delay rate (us/s)	1.41020034902E+00					1.41020065085E+00			Resid rate (us/s)	-3.01834E-07	+/- 1.3E-08	
Total phase (deg)		301.8				-3.26020563603E-05			Resid phase (deg)	172.4	+/- 20.6	
ph/seg (deg)	52.3	48.3	Search (1024X32)	0.148					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	74.1	84.3	Interp.	0.000					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.0	29.1	Inc. seg. avg.	0.143					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	22.1	50.8	Inc. frq. avg.	0.143					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
I: az 71.2 el 46.9 pa -74.8		Z: az 280.0 el 38.3 pa 37.9				u, v (fr/asec) -5096.260 -1943.750					simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0500/IZ_3MP56K				Output file: /Exps/c241d/v1/7mm/1234/No0500/IZ.Q.281.3MP56K						

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, IZ

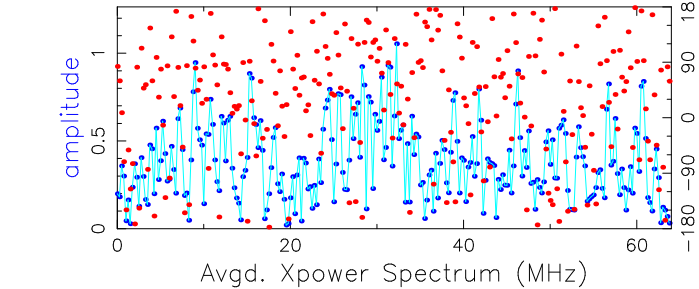
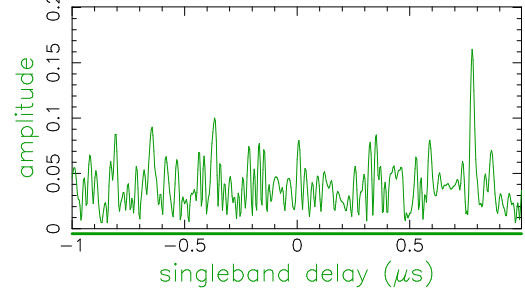
VLBA_LA - METSAHOV, fgroup Q, pol RL



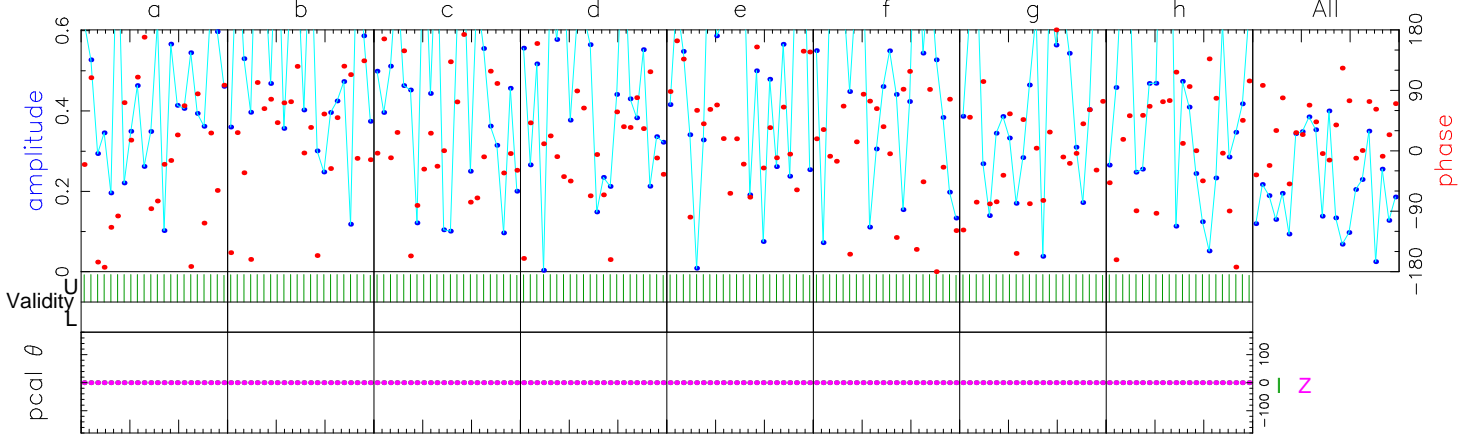
Fringe quality 0

SNR 6.0
 Int time 179.947
 Amp 0.201
 Phase 75.2
 PFD 2.9e-01
 Delays (us)
 SBD 0.777662
 MBD 0.000437
 Fringe rate (Hz) 0.686353
 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	2.48201644266E+03	Apriori delay (usec)	2.48123475567E+03	Resid mbdelay (usec)	4.36989E-04	+/-	1.8E-04
Sband delay (usec)	2.48201241767E+03	Apriori clock (usec)	-8.3980656E-07	Resid sbdelay (usec)	7.77662E-01	+/-	1.4E-03
Phase delay (usec)	2.48123475761E+03	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	1.94442E-06	+/-	1.2E-06
Delay rate (us/s)	1.41021656074E+00	Apriori rate (us/s)	1.41020065085E+00	Resid rate (us/s)	1.59099E-05	+/-	1.2E-08
Total phase (deg)	204.6	Apriori accel (us/s/s)	-3.26020563603E-05	Resid phase (deg)	75.2	+/-	19.2

ph/seg (deg)	44.8	RMS	44.8	Theor.	45.1	Amplitude	0.201 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	72.9	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	32.9	Inc. seg. avg.	0.197	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	42.1	Inc. frq. avg.	0.200									

I: az 71.2 el 46.9 pa -74.8 Z: az 280.0 el 38.3 pa 37.9 u,v (fr/asec) -5096.260 -1943.750 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/IZ..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/IZ.Q.293.3MP56K