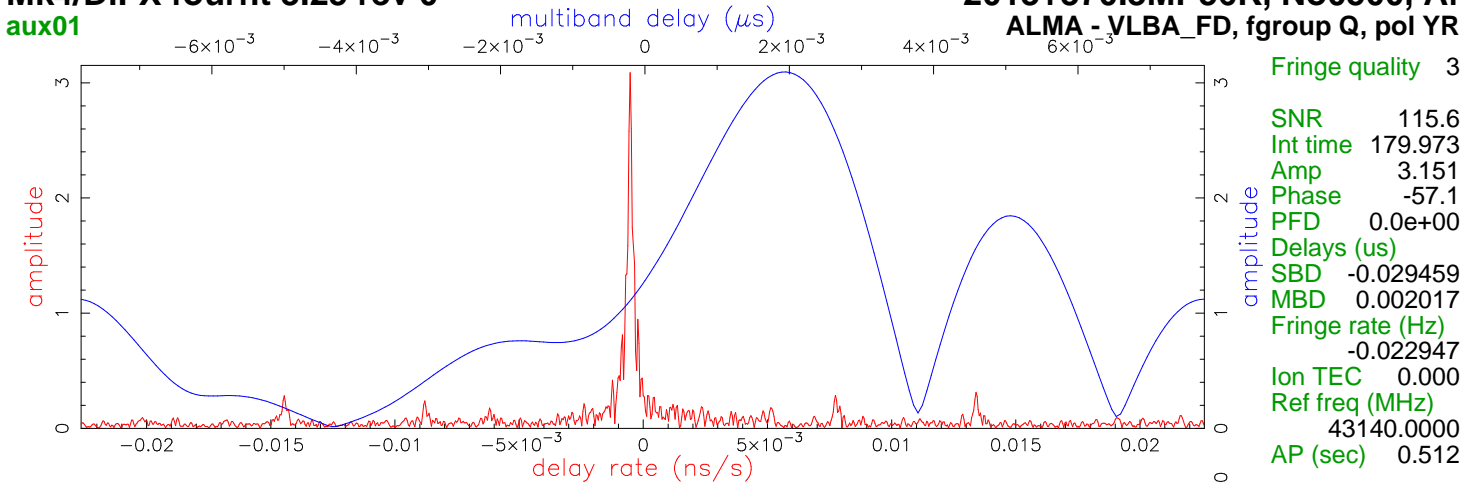


Mk4/DiFX fourfit 3.25 rev 0

aux01

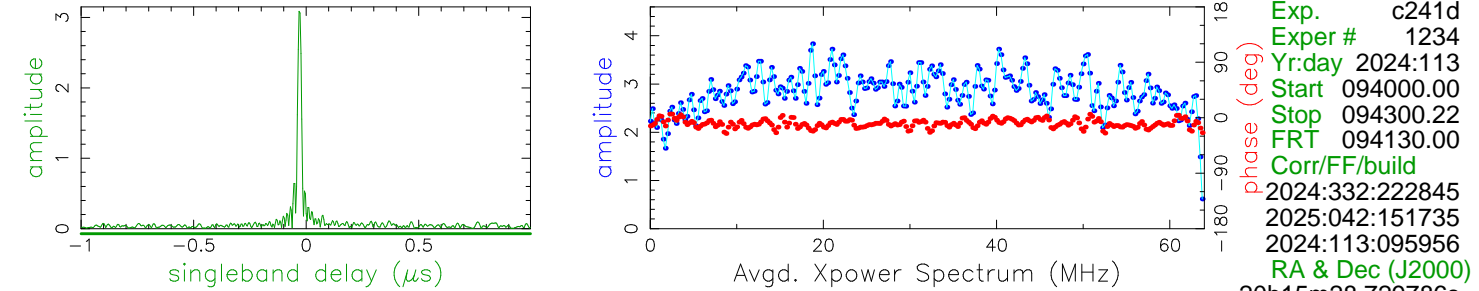
2013+370.3MP56K, No0500, Af

ALMA - VLBA_FD, fgroup Q, pol YR



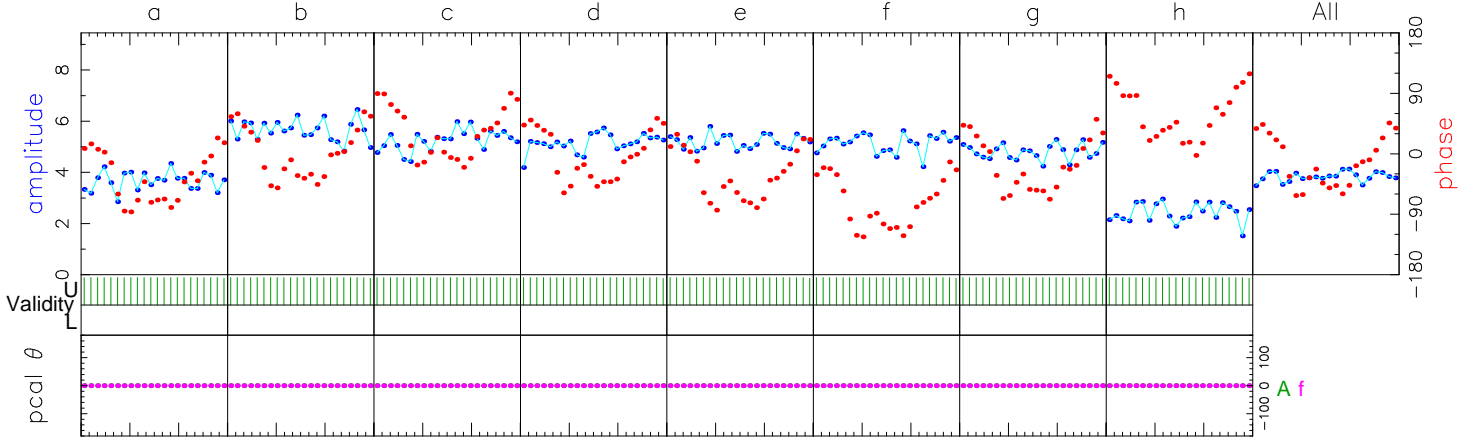
Fringe quality 3

SNR 115.6
 Int time 179.973
 Amp 3.151
 Phase -57.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.029459
 MBD 0.002017
 Fringe rate (Hz)
 -0.022947
 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
 2025:042:151735
 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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -7.64503297369E+03 Apriori delay (usec) -7.64500374042E+03 Resid mbdelay (usec) 2.01673E-03 +/- 9.4E-06
 Sband delay (usec) -7.64503319967E+03 Apriori clock (usec) -2.1074802E+03 Resid sbdelay (usec) -2.94592E-02 +/- 7.5E-05
 Phase delay (usec) -7.64500374120E+03 Apriori clockrate (us/s) -6.1051858E-08 Resid phdelay (usec) -7.79126E-07 +/- 6.4E-08
 Delay rate (us/s) -5.30326997461E-01 Apriori rate (us/s) -5.30326465547E-01 Resid rate (us/s) -5.31914E-07 +/- 6.1E-10
 Total phase (deg) -187.3 Apriori accel (us/s/s) -3.18996968766E-05 Resid phase (deg) -57.1 +/- 1.0

RMS Theor. Amplitude 3.151 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 36.7 2.3 Search (1024X32) 3.077 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 22.5 4.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.9 1.4 Inc. seg. avg. 3.833 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 31.4 2.4 Inc. frq. avg. 3.738 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 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 1890.264 -4138.998 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Af..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Af.Q.10.3MP56K

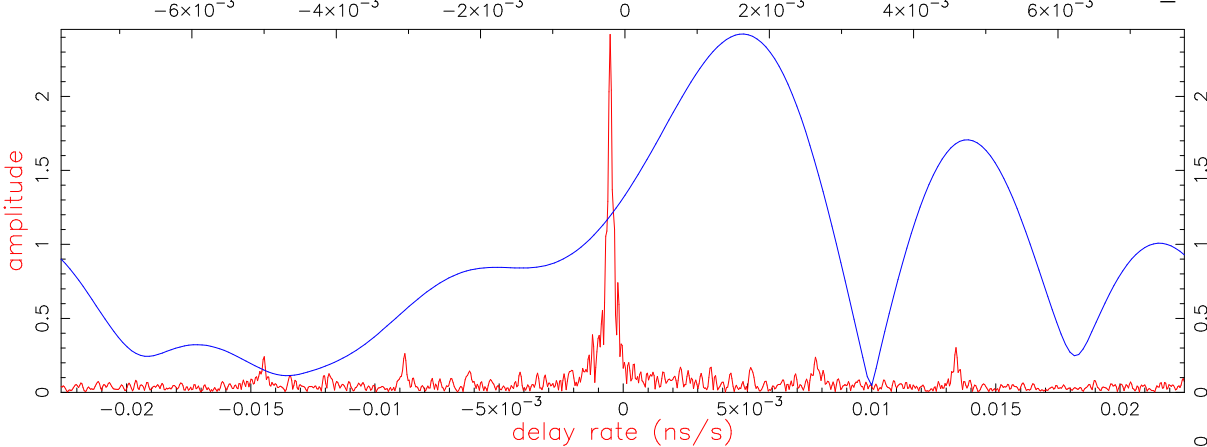
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Af

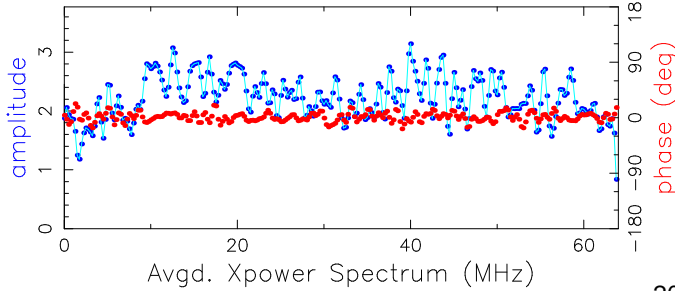
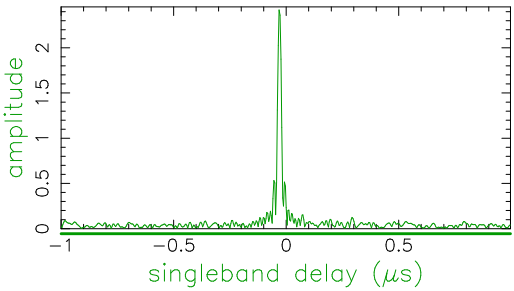
ALMA - VLBA_FD, fgroup Q, pol XR

multiband delay (μ s)



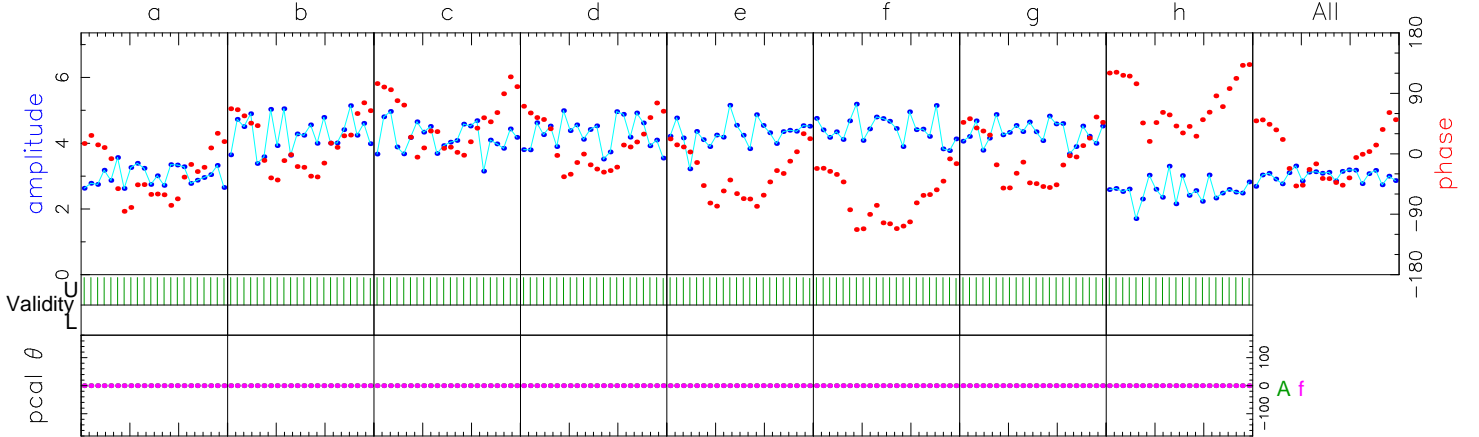
Fringe quality 3

SNR 90.0
 Int time 179.973
 Amp 2.453
 Phase -46.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.029770
 MBD 0.001693
 Fringe rate (Hz)
 -0.022944
 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
	-29.5	14.9	48.2	13.8	-29.8	-67.9	-5.3	75.6	Phase	-1.5
	2.4	3.4	3.3	3.5	3.5	3.7	3.4	2.1	Ampl.	3.2
	250.7	249.2	249.6	249.4	249.3	249.2	249.8	251.5	Sbd box	249.4
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-7.64503329722E+03	Apriori delay (usec)	-7.64500374042E+03	Resid mbdelay (usec)	1.69320E-03	+/-	1.2E-05
Sband delay (usec)	-7.64503351092E+03	Apriori clock (usec)	-2.1074802E+03	Resid sbdelay (usec)	-2.97705E-02	+/-	9.6E-05
Phase delay (usec)	-7.64500374052E+03	Apriori clockrate (us/s)	-6.1051858E-08	Resid phdelay (usec)	-9.95603E-08	+/-	8.2E-08
Delay rate (us/s)	-5.30326997391E-01	Apriori rate (us/s)	-5.30326465547E-01	Resid rate (us/s)	-5.31843E-07	+/-	7.9E-10
Total phase (deg)	-176.8	Apriori accel (us/s/s)	-3.18996968766E-05	Resid phase (deg)	-46.5	+/-	1.3

ph/seg (deg)	37.1	Theor.	3.0	Search (1024X32)	2.376	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	23.7		5.2	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)	49.9		1.8	Inc. seg. avg.	3.006	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 (%)	36.4		3.1	Inc. frq. avg.	3.157	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

A: az 14.3 el 27.9 pa -163.6 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 1890.264 -4138.998 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Af..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Af.Q.16.3MP56K

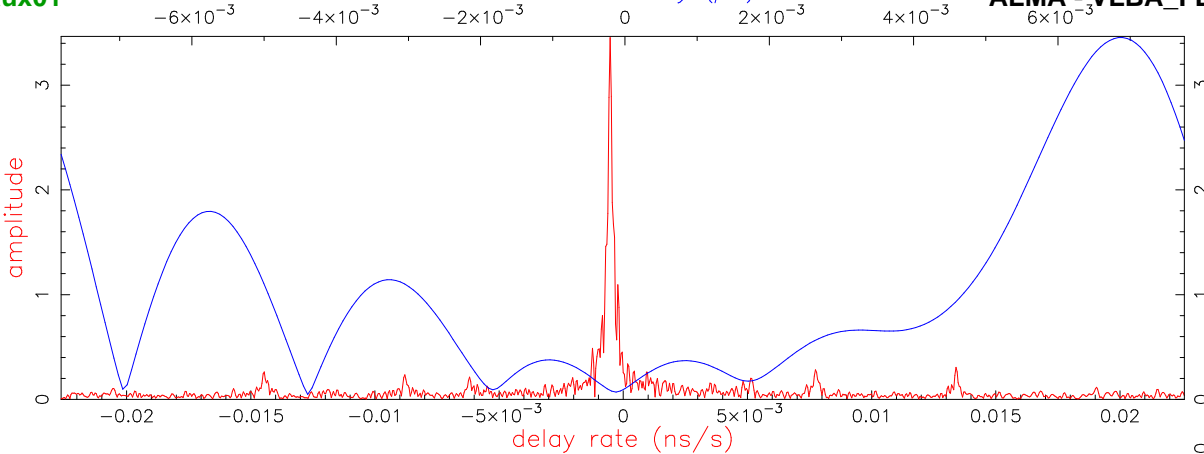
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Af

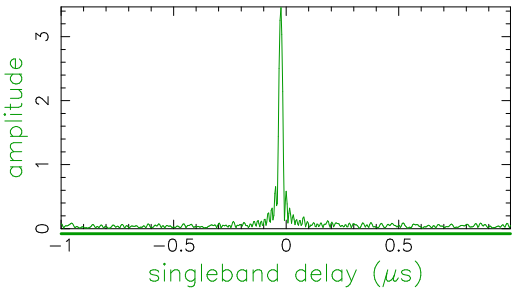
ALMA - VLBA_FD, fgroup Q, pol YL

multiband delay (μ s)

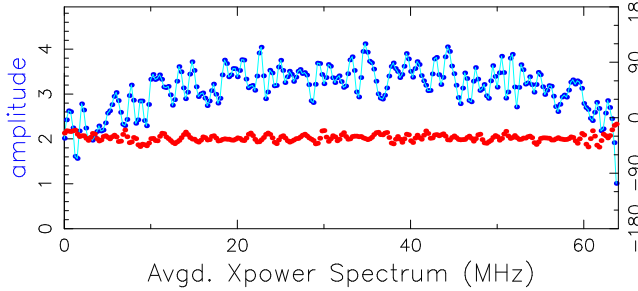


Fringe quality 3

SNR 127.1
Int time 179.973
Amp 3.466
Phase -75.0
PFD 0.0e+00
Delays (us)
SBD -0.024156
MBD 0.006836
Fringe rate (Hz)
-0.022942
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512

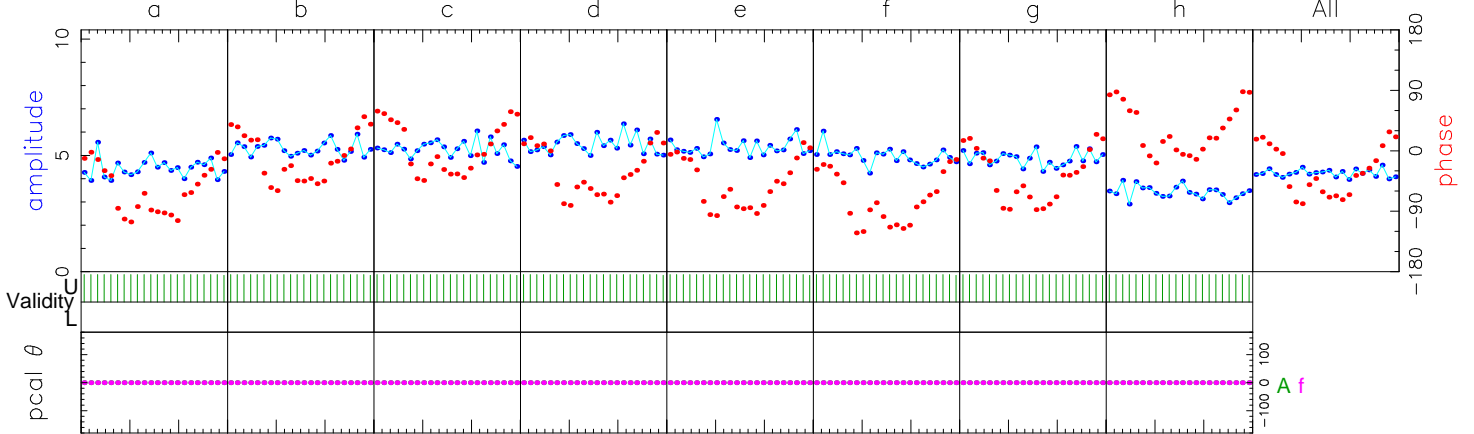


singleband delay (μ s)



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-58.0	-10.3	4.2	-31.7	-49.1	-70.3	-36.8	31.4	Phase	-30.0
	3.7	4.4	4.2	4.5	4.4	4.0	3.8	2.8	Ampl.	4.0
	252.4	250.3	250.5	250.6	250.7	250.7	250.7	252.5	Sbd box	250.8
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-7.64502815413E+03	Apriori delay (usec)	-7.64500374042E+03	Resid mbdelay (usec)	6.83629E-03	+/-	8.5E-06
Sband delay (usec)	-7.64502789642E+03	Apriori clock (usec)	-2.1074802E+03	Resid sbdelay (usec)	-2.41560E-02	+/-	6.8E-05
Phase delay (usec)	-7.64500374235E+03	Apriori clockrate (us/s)	-6.1051858E-08	Resid phdelay (usec)	-1.93120E-06	+/-	5.8E-08
Delay rate (us/s)	-5.30326997340E-01	Apriori rate (us/s)	-5.30326465547E-01	Resid rate (us/s)	-5.31792E-07	+/-	5.6E-10
Total phase (deg)	-205.2	Apriori accel (us/s/s)	-3.18996968766E-05	Resid phase (deg)	-75.0	+/-	0.9

ph/seg (deg)	35.8	RMS	2.1	Theor.	2.1	Amplitude	3.466 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	22.8	Search (1024X32)	3.430	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)	36.8	Inc. seg. avg.	4.238	Inc. frq. avg.	3.964	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	20.8	Inc. frq. avg.	3.964			Data rate (Mb/s):	2048							

A: az 14.3 el 27.9 pa -163.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 1890.264 -4138.998 simultaneous interpolator

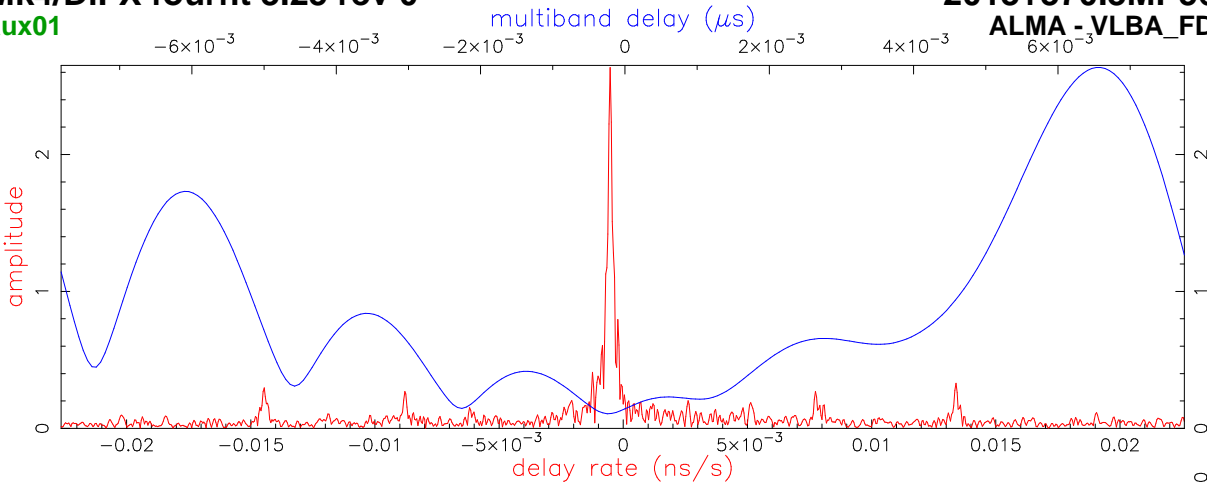
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Af..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Af.Q.26.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

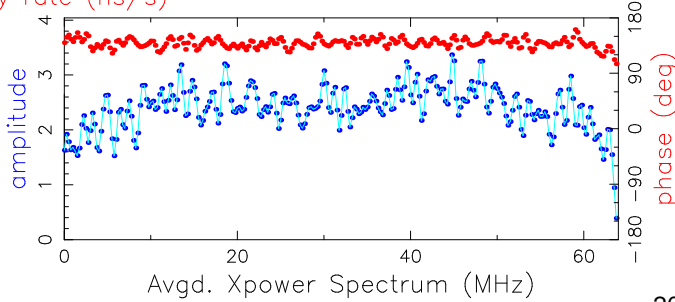
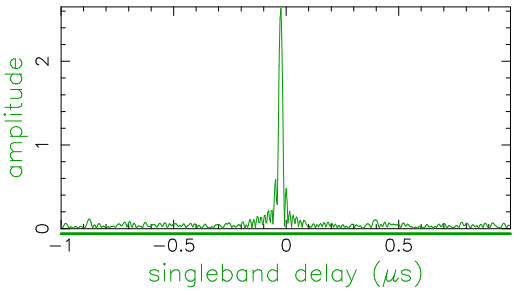
2013+370.3MP56K, No0500, Af

ALMA - VLBA_FD, fgroup Q, pol XL



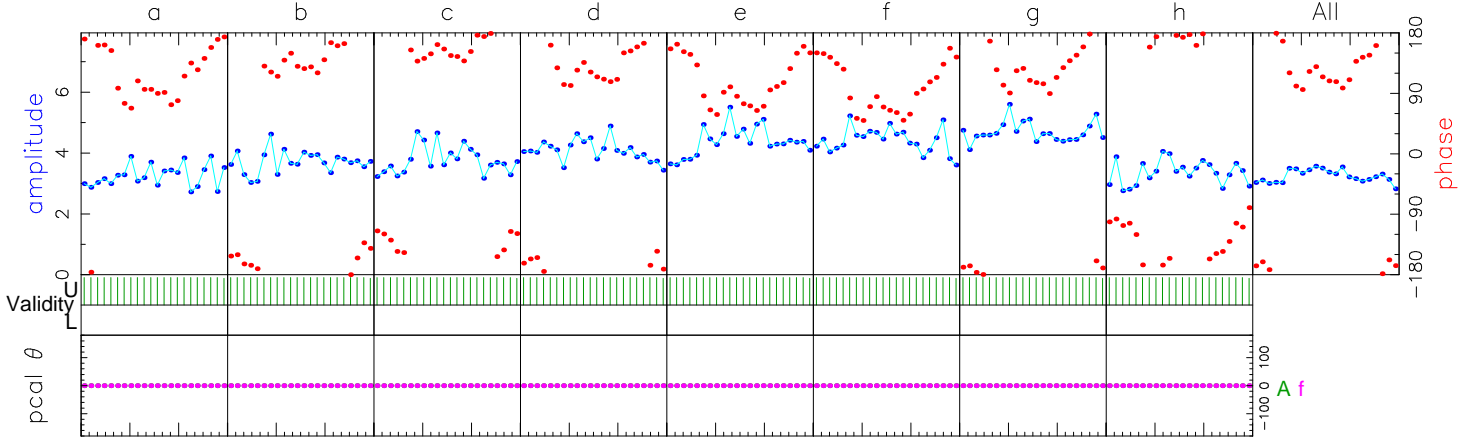
Fringe quality 3

SNR 97.2
 Int time 179.973
 Amp 2.651
 Phase -262.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.024416
 MBD 0.006519
 Fringe rate (Hz)
 -0.022895
 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
 2025:042:151733
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
A:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
A:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-7.64502847172E+03	Apriori delay (usec)	-7.64500374042E+03	Resid mbdelay (usec)	6.51870E-03	+/-	1.1E-05
Sband delay (usec)	-7.64502815592E+03	Apriori clock (usec)	-2.1074802E+03	Resid sbdelay (usec)	-2.44155E-02	+/-	8.9E-05
Phase delay (usec)	-7.64500373122E+03	Apriori clockrate (us/s)	-6.1051858E-08	Resid phdelay (usec)	9.20524E-06	+/-	7.6E-08
Delay rate (us/s)	-5.30326996262E-01	Apriori rate (us/s)	-5.30326465547E-01	Resid rate (us/s)	-5.30714E-07	+/-	7.3E-10
Total phase (deg)	-32.3	Apriori accel (us/s/s)	-3.18996968766E-05	Resid phase (deg)	-262.0	+/-	1.2

ph/seg (deg)	36.3	2.8	Search (1024X32)	2.570	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	23.7	4.8	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)	41.8	1.7	Inc. seg. avg.	3.242	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	25.9	2.9	Inc. frq. avg.	3.200	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 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 1890.264 -4138.998 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500//Af..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500//Af.Q.4.3MP56K

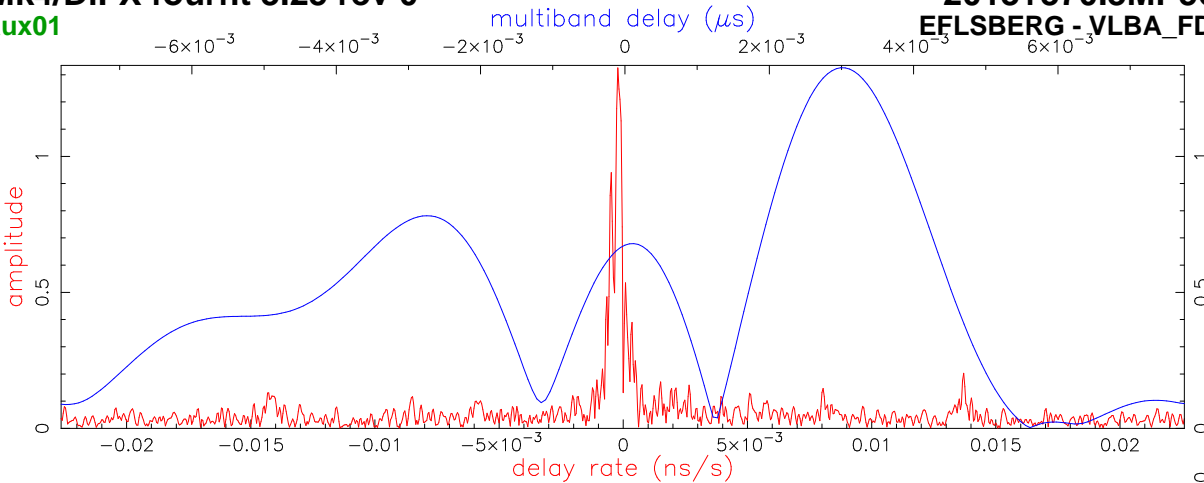
Mk4/DiFX fourfit 3.25 rev 0

aux01

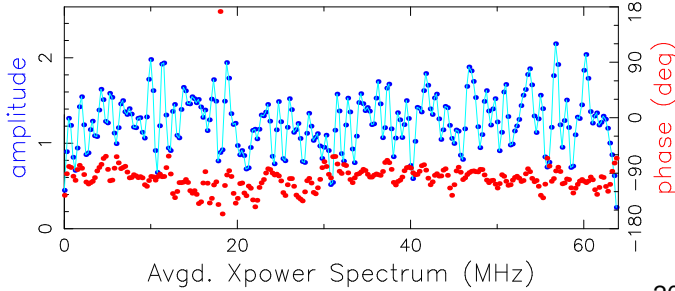
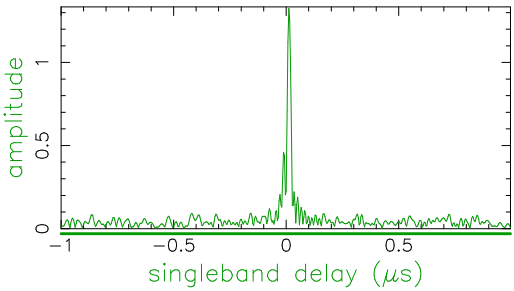
2013+370.3MP56K, No0500, Bf

EFLSBERG - VLBA_FD, fgroup Q, pol LR

Fringe quality 2

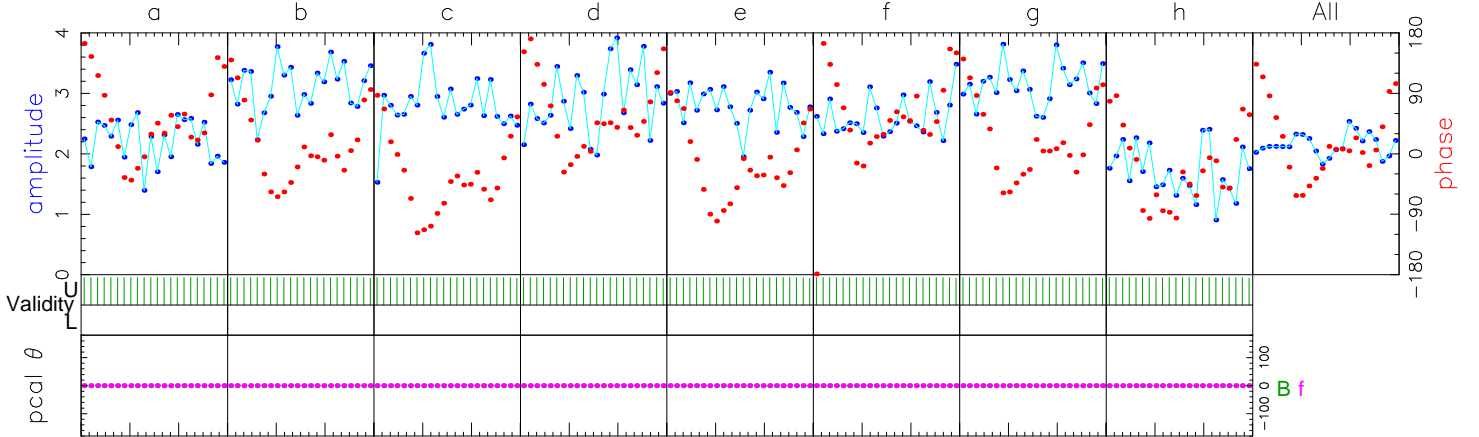


SNR 48.9
 Int time 179.952
 Amp 1.334
 Phase 215.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.012746
 MBD 0.003058
 Fringe rate (Hz)
 -0.010040
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151756
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) -1.64011536109E+02 Apriori delay (usec) -1.64030218707E+02 Resid mbdelay (usec) 3.05760E-03 +/- 2.2E-05
 Sband delay (usec) -1.64017472707E+02 Apriori clock (usec) -3.5451027E+01 Resid sbdelay (usec) 1.27460E-02 +/- 1.8E-04
 Phase delay (usec) -1.64030217861E+02 Apriori clockrate (us/s) -2.3975895E-07 Resid phdelay (usec) 8.46548E-07 +/- 1.5E-07
 Delay rate (us/s) -1.51013547377E+00 Apriori rate (us/s) -1.51013524104E+00 Resid rate (us/s) -2.32723E-07 +/- 1.4E-09
 Total phase (deg) -13.0 Apriori accel (us/s/s) 1.85971935214E-05 Resid phase (deg) 215.6 +/- 2.3

RMS Theor. Amplitude 1.334 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 55.7 5.5 Search (1024X32) 1.307 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 62.6 9.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 42.1 3.3 Inc. seg. avg. 2.141 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 32.2 5.8 Inc. frq. avg. 1.629 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 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 5450.594 1447.563 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Bf.Q.115.3MP56K

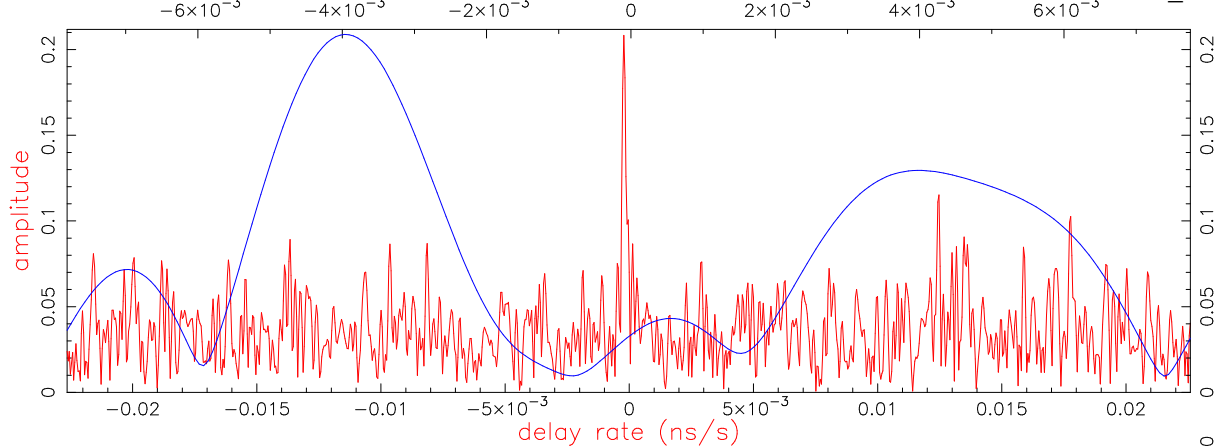
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Bf

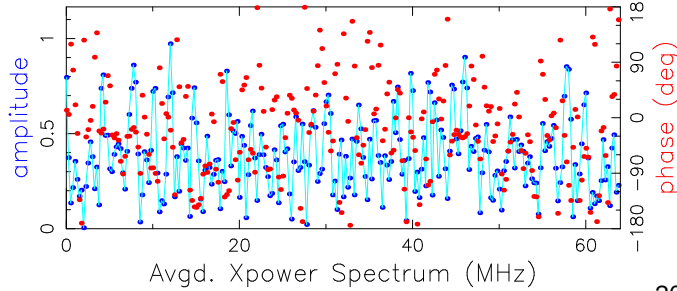
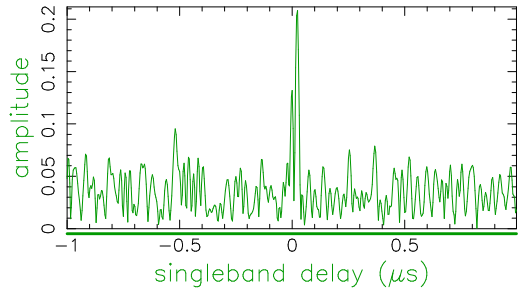
EFLSBERG - VLBA_FD, fgroup Q, pol RL

multiband delay (μ s)



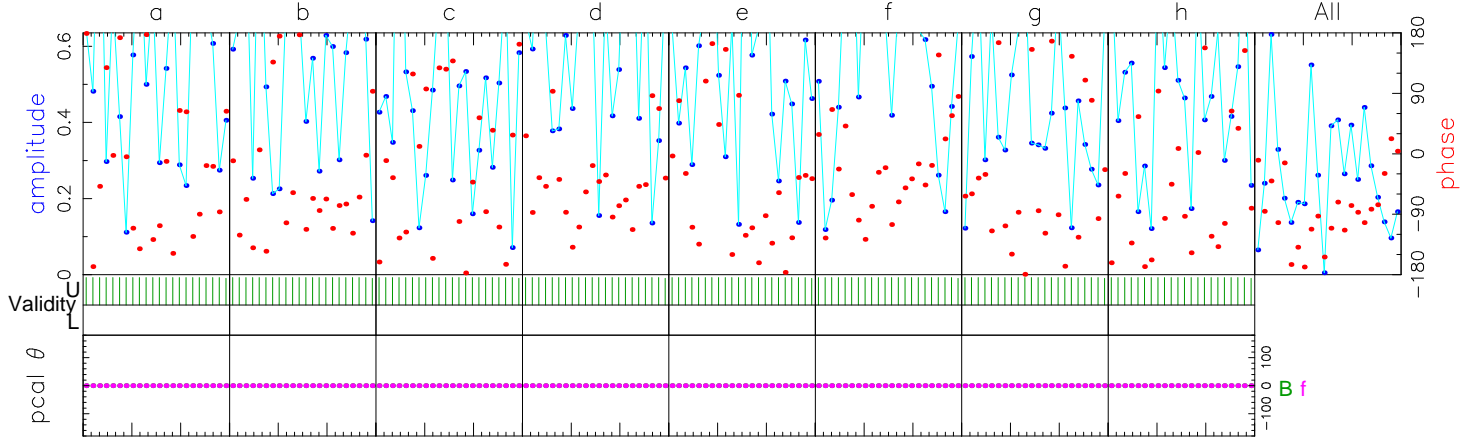
Fringe quality 9

SNR 7.8
 Int time 179.952
 Amp 0.212
 Phase 319.4
 PFD 1.3e-06
 Delays (us)
 SBD 0.021898
 MBD -0.004043
 Fringe rate (Hz)
 -0.010140
 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
	-102.4	-81.0	-160.6	-56.4	-122.2	-37.9	-112.4	-106.6	Phase	-85.6
	0.2	0.3	0.2	0.4	0.2	0.3	0.2	0.1	Ampl.	0.2
	245.7	262.2	86.2	263.2	124.3	263.0	263.0	251.6	Sbd box	262.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.64003011734E+02		Apriori delay (usec)		-1.64030218707E+02		Resid mbdelay (usec)		-0.404303E-03	+/- 1.4E-04
Sband delay (usec)	-1.64008321207E+02		Apriori clock (usec)		-3.5451027E+01		Resid sbdelay (usec)		2.18975E-02	+/- 1.1E-03
Phase delay (usec)	-1.64030224217E+02		Apriori clockrate (us/s)		-2.3975895E-07		Resid phdelay (usec)		-5.50945E-06	+/- 9.5E-07
Delay rate (us/s)	-1.51013547609E+00		Apriori rate (us/s)		-1.51013524104E+00		Resid rate (us/s)		-2.35049E-07	+/- 9.1E-09
Total phase (deg)	90.8		Apriori accel (us/s/s)		1.85971935214E-05		Resid phase (deg)		319.4	+/- 14.7

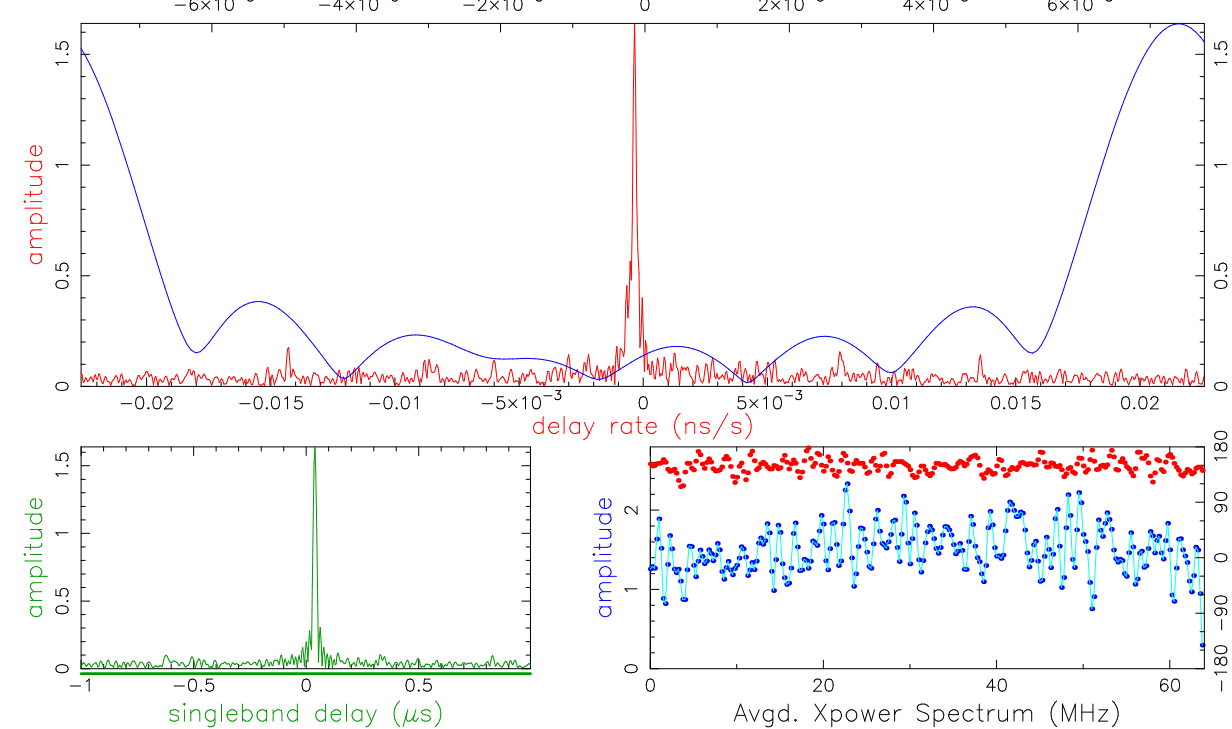
ph/seg (deg) 51.9 34.6 Search (1024X32) 0.207 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.7 60.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.9 20.9 Inc. seg. avg. 0.224 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.7 36.4 Inc. frq. avg. 0.241 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 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 5450.594 1447.563 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Bf.Q.144.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bf

VLBA_BR - VLBA_FD, fgroup Q, pol LL

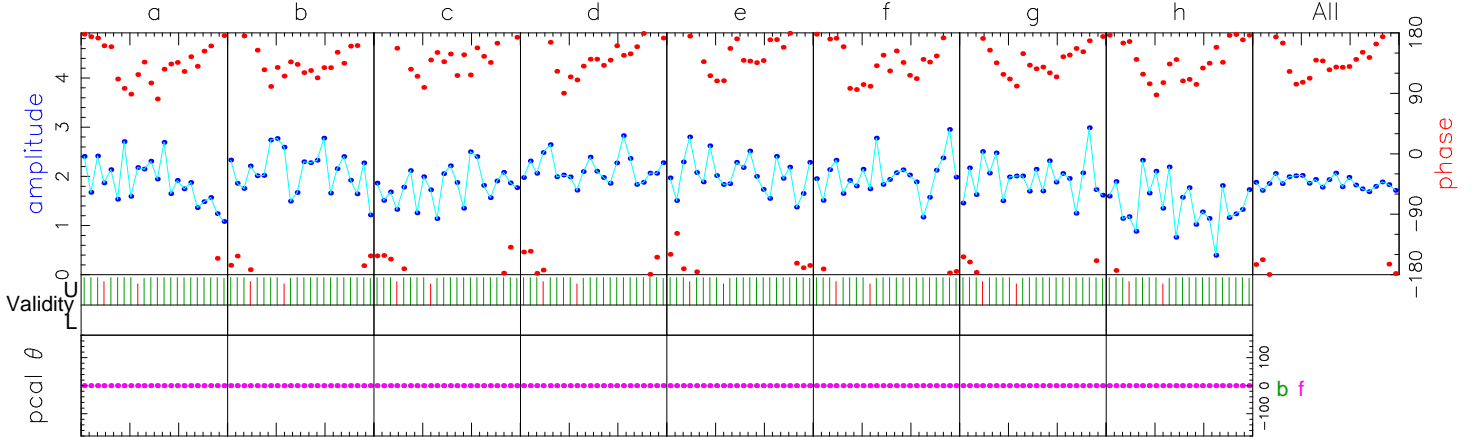


Fringe quality 7

SNR 59.6
 Int time 176.648
 Amp 1.640
 Phase 194.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.038633
 MBD 0.007383
 Fringe rate (Hz) -0.014684
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	137.4	145.2	155.2	157.1	162.7	144.4	149.1	138.7	Phase	149.1	
	1.6	1.8	1.5	1.8	1.7	1.7	1.7	1.2	Ampl.	1.7	
	266.7	267.1	266.8	266.8	266.8	266.9	267.0	266.4	Sbd box	266.9	
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
f	1000	1000	1000	1000	1000	1000	1000	1000			
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.67296619387E+03		Apriori delay (usec)		-1.67300482647E+03		Resid mbdelay (usec)		7.38260E-03	+/- 1.8E-05	
Sband delay (usec)	-1.67296619372E+03		Apriori clock (usec)		4.5648041E+00		Resid sbdelay (usec)		3.86328E-02	+/- 1.4E-04	
Phase delay (usec)	-1.67300481686E+03		Apriori clockrate (us/s)		5.2622099E-07		Resid phdelay (usec)		9.60309E-06	+/- 1.2E-07	
Delay rate (us/s)	-7.23540051308E-02		Apriori rate (us/s)		-7.23536647600E-02		Resid rate (us/s)		-3.40371E-07	+/- 1.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.49700276007E-05		Resid phase (deg)		194.1	+/- 1.9	
ph/seg (deg)	RMS 29.3	Theor. 4.5	Amplitude Search (1024X32)	1.640 +/- 0.028	1.599	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	15.8	7.8	Interp.	0.000	1.868	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	9.7	2.7	Inc. seg. avg.	1.868	1.654	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	11.2	4.7	Inc. frq. avg.	1.654		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023		
b: az 76.2 el 40.6 pa -54.6	f: az 66.6 el 46.8 pa -82.9		u, v (fr/asec) 272.619 1575.192				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/bf..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.35.3MP56K						simultaneous interpolator		

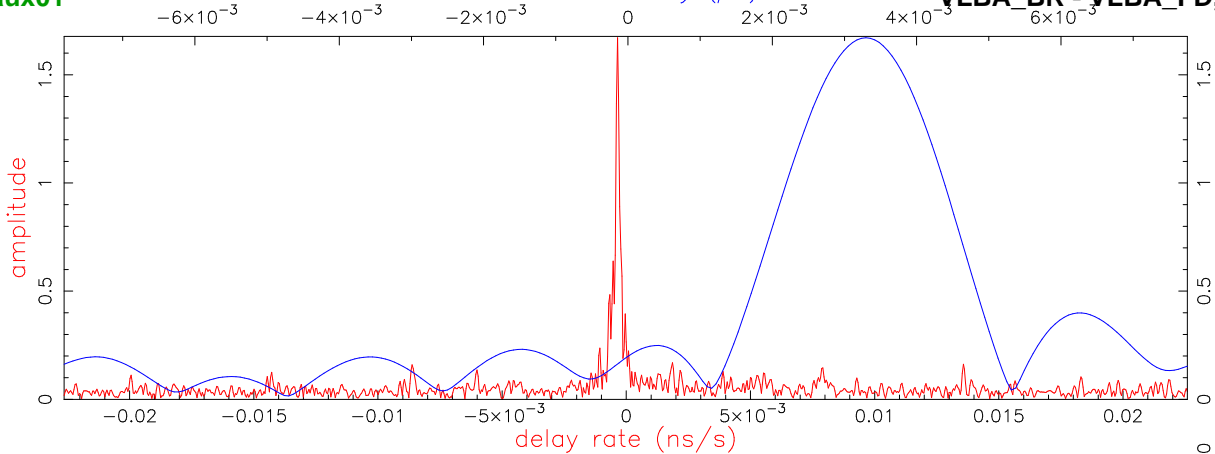
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, bf

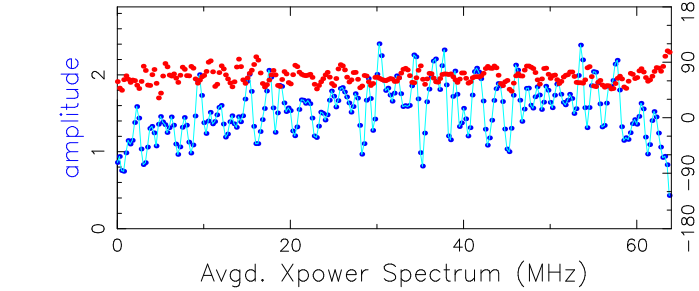
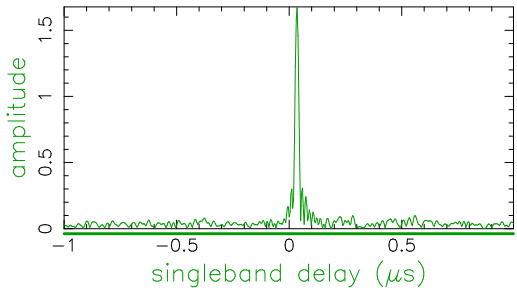
VLBA_BR - VLBA_FD, fgroup Q, pol RR

multiband delay (μ s)



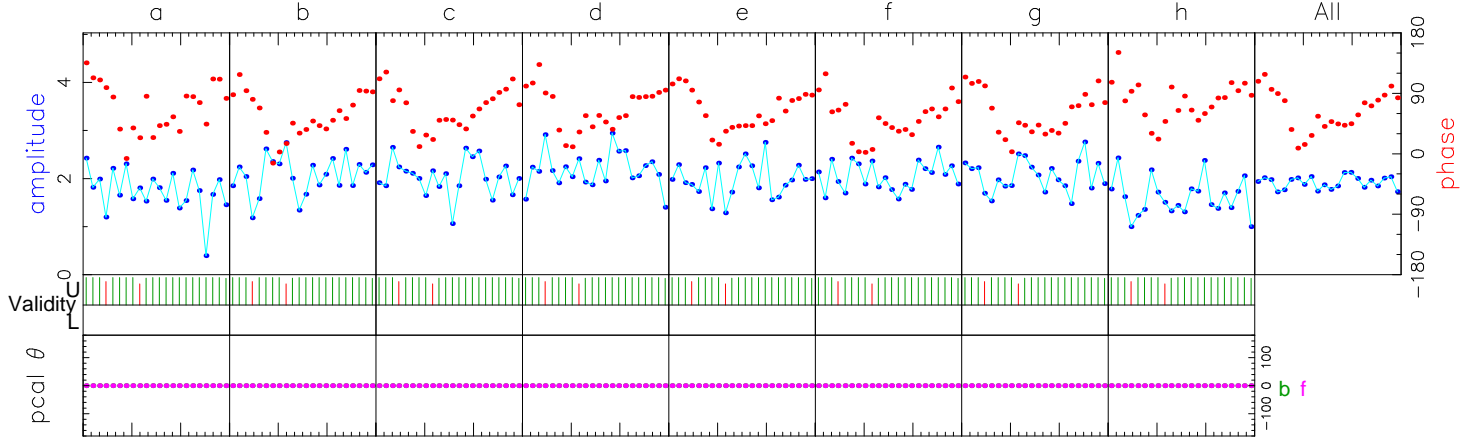
Fringe quality 7

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



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

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



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

Group delay (usec) (SBD) -1.67297029455E+03 Apriori delay (usec) -1.67300482647E+03 Resid mbdelay (usec) 3.28191E-03 +/- 1.8E-05
 Sband delay (usec) -1.67297046147E+03 Apriori clock (usec) 4.5648041E+00 Resid sbdelay (usec) 3.43650E-02 +/- 1.4E-04
 Phase delay (usec) -1.67300482234E+03 Apriori clockrate (us/s) 5.2622099E-07 Resid phdelay (usec) 4.12729E-06 +/- 1.2E-07
 Delay rate (us/s) -7.23540063447E-02 Apriori rate (us/s) -7.23536647600E-02 Resid rate (us/s) -3.41585E-07 +/- 1.2E-09
 Total phase (deg) 32.1 Apriori accel (us/s/s) 2.49700276007E-05 Resid phase (deg) 109.1 +/- 1.9

RMS Theor. Amplitude 1.677 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.6 4.4 Search (1024X32) 1.637 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 16.3 7.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 9.1 2.7 Inc. seg. avg. 1.915 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 10.3 4.6 Inc. frq. avg. 1.684 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 76.2 el 40.6 pa -54.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 272.619 1575.192 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.56.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

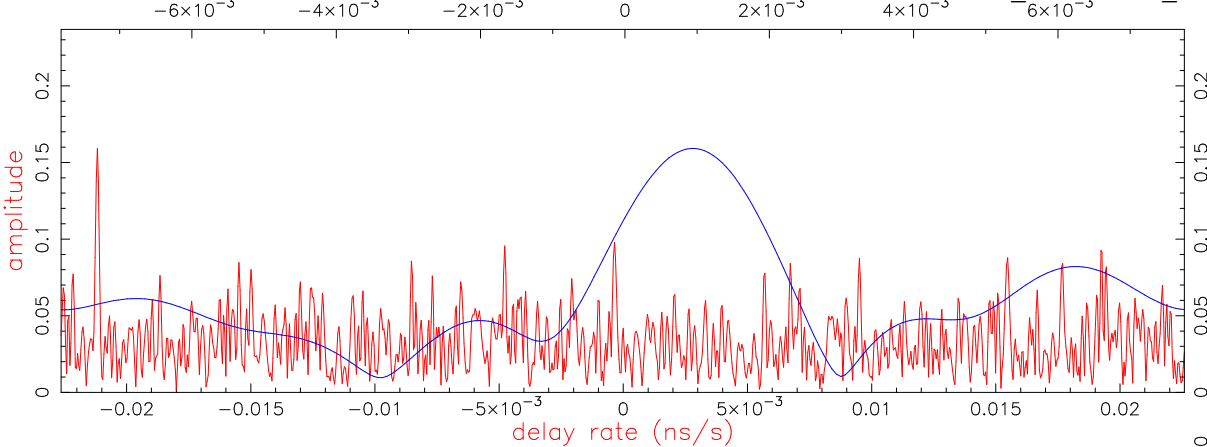
aux01

2013+370.3MP56K, No0500, bf

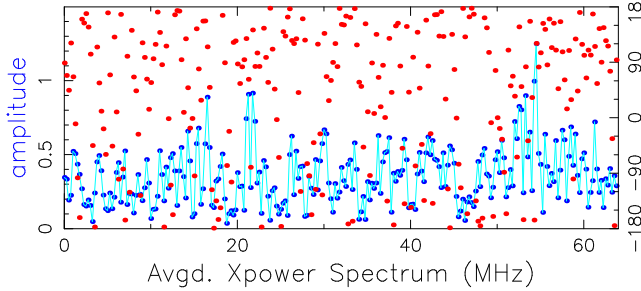
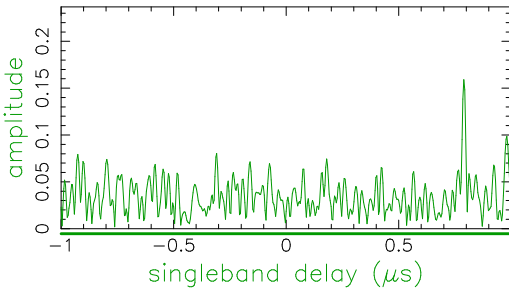
VLBA_BR - VLBA_FD, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

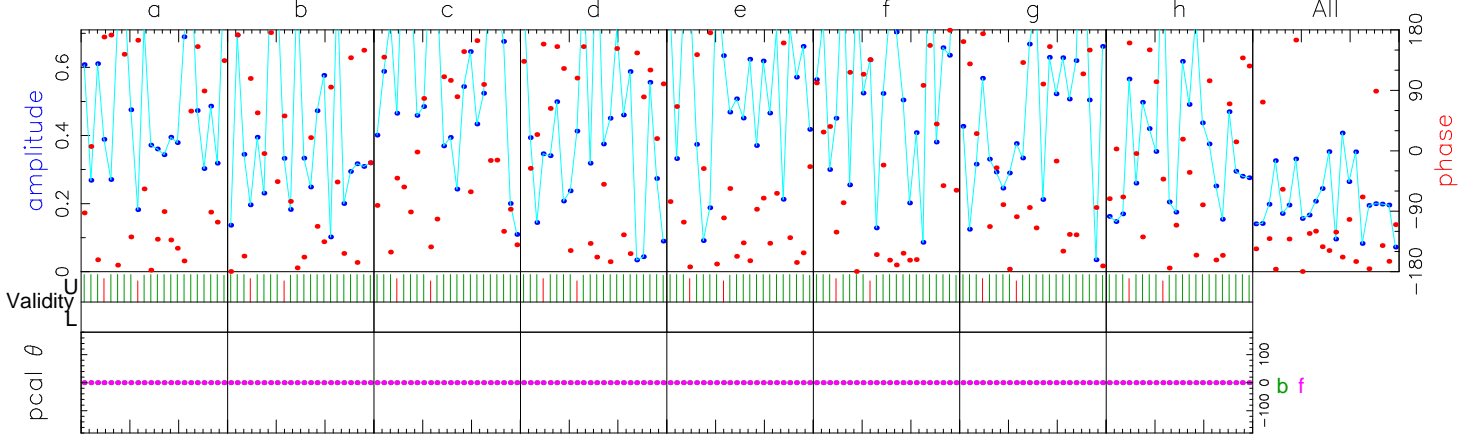


SNR 5.8
 Int time 176.648
 Amp 0.237
 Phase 253.8
 PFD 5.6e-01
 Delays (us)
 SBD 0.789721
 MBD 0.000944
 Fringe rate (Hz)
 -0.918498
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



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

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

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

b: az 76.2 el 40.6 pa -54.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 272.619 1575.192 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.66.3MP56K

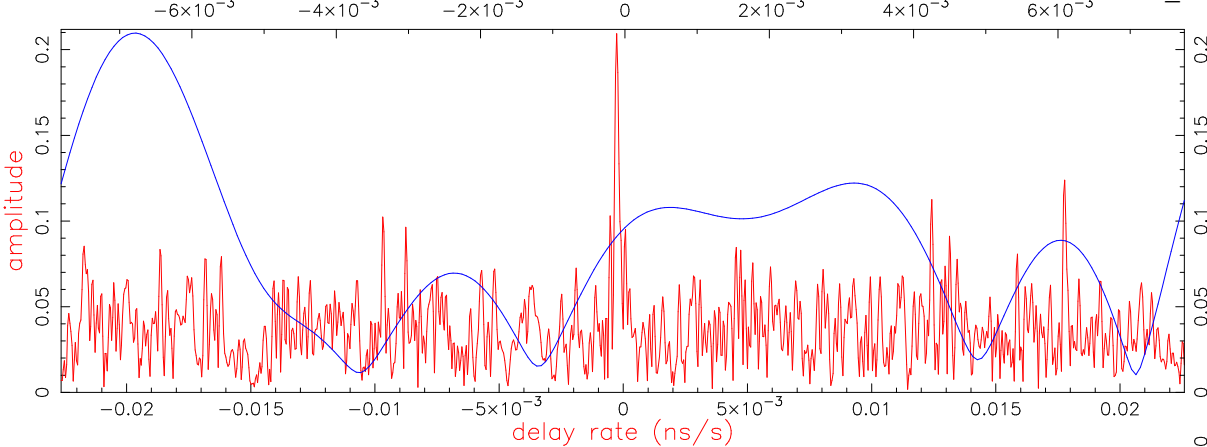
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, Bf

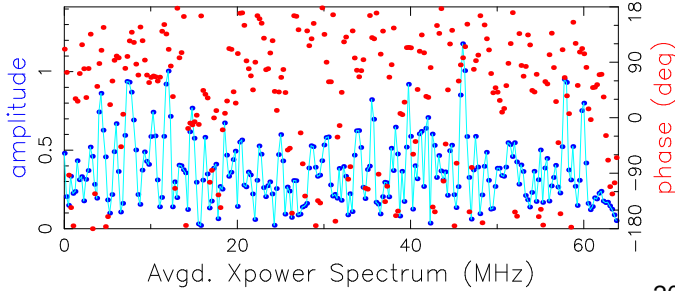
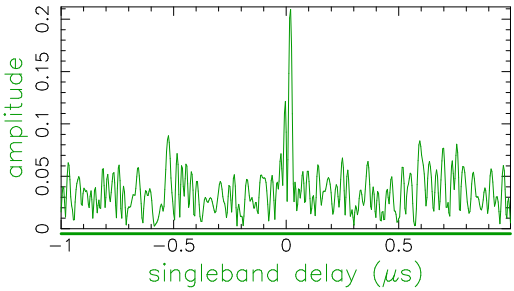
EFLSBERG - VLBA_FD, fgroup Q, pol LL

multiband delay (μ s)



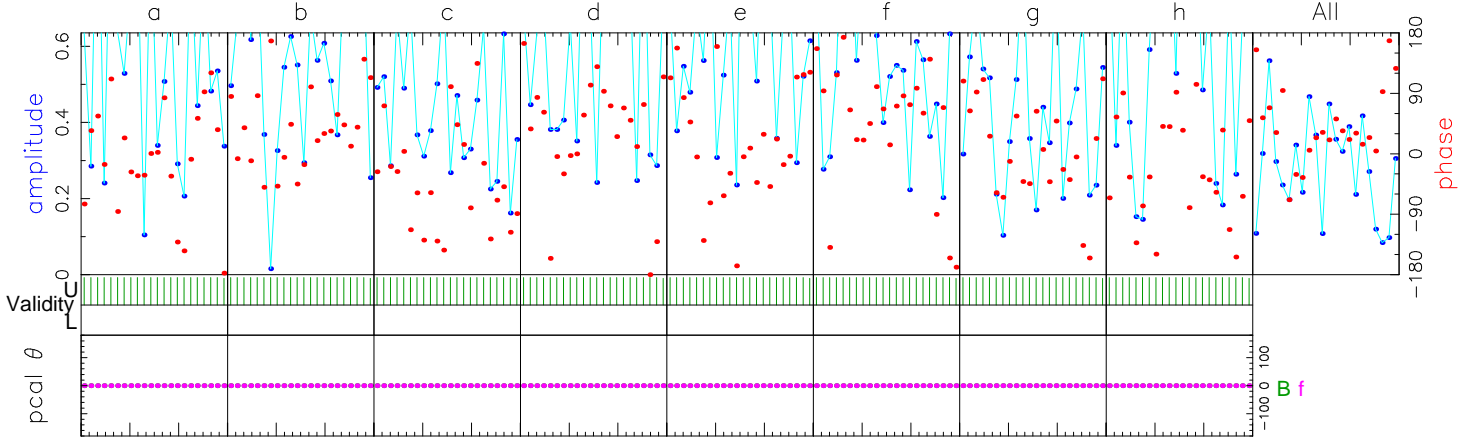
Fringe quality 9

SNR 7.8
 Int time 179.952
 Amp 0.212
 Phase 76.7
 PFD 1.3e-06
 Delays (us)
 SBD 0.018251
 MBD -0.006850
 Fringe rate (Hz)
 -0.010615
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	17.0	35.1	-56.1	68.4	2.9	92.4	26.3	-0.8	Ampl.	31.7
B	0.3	0.4	0.2	0.4	0.3	0.3	0.2	0.2	Ampl.	0.3
f	245.4	261.3	340.7	262.5	123.6	263.1	208.6	246.8	Sbd box	261.7
B	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.64005818514E+02	Apriori delay (usec)	-1.64030218707E+02	Resid mbdelay (usec)	-6.84981E-03	+/-	1.4E-04
Sband delay (usec)	-1.64011968207E+02	Apriori clock (usec)	-3.5451027E+01	Resid sbdelay (usec)	1.82505E-02	+/-	1.1E-03
Phase delay (usec)	-1.64030216666E+02	Apriori clockrate (us/s)	-2.3975895E-07	Resid phdelay (usec)	2.04090E-06	+/-	9.5E-07
Delay rate (us/s)	-1.51013548709E+00	Apriori rate (us/s)	-1.51013524104E+00	Resid rate (us/s)	-2.46048E-07	+/-	9.1E-09
Total phase (deg)	208.1	Apriori accel (us/s/s)	1.85971935214E-05	Resid phase (deg)	76.7	+/-	14.7

ph/seg (deg)	57.6	Theor.	34.6	Amplitude	0.212 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	70.0	Search (1024X32)	0.204	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	49.8	Inc. seg. avg.	0.240	Inc. frq. avg.	0.251	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	45.1	Inc. frq. avg.	0.251			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 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 5450.594 1447.563 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Bf.Q.78.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

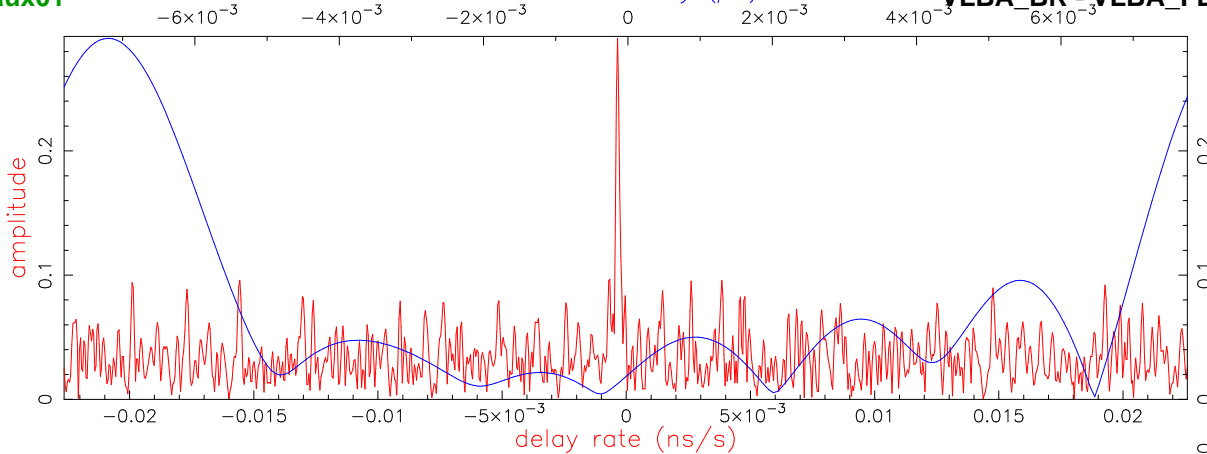
aux01

2013+370.3MP56K, No0500, bf

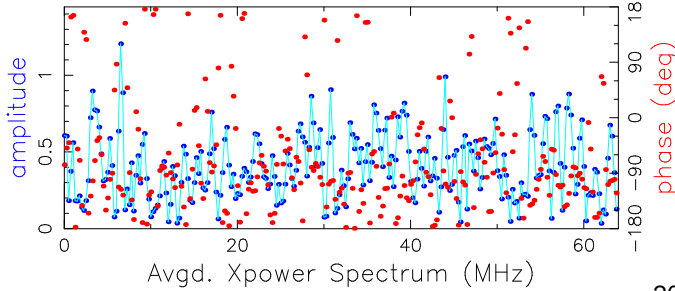
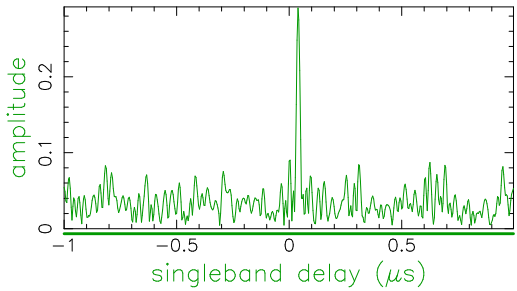
VLBA_BR - VLBA_FD, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 9

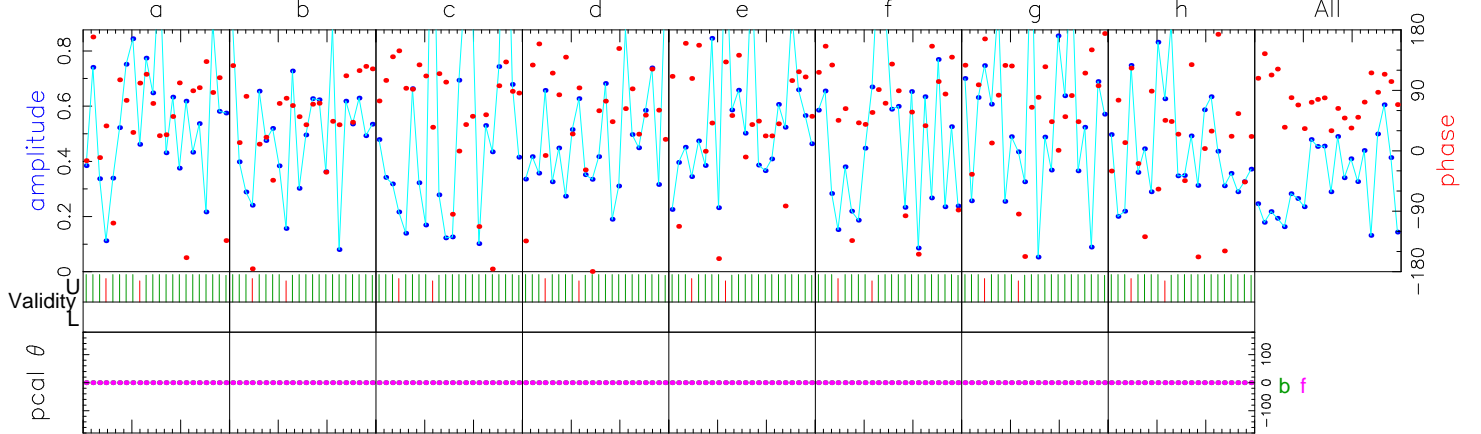


SNR 10.6
 Int time 176.648
 Amp 0.292
 Phase 324.1
 PFD 5.5e-18
 Delays (us)
 SBD 0.039977
 MBD -0.007166
 Fringe rate (Hz)
 -0.014815
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	348/0	348/0	348/0	348/0	348/0	348/0	348/0	348/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Group delay (usec) (SBD)	-1.67296511755E+03									
Sband delay (usec)	-1.67296484947E+03									
Phase delay (usec)	-1.67300482154E+03									
Delay rate (us/s)	-7.23540081811E-02									
Total phase (deg)			247.1							
Apriori delay (usec)										
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										

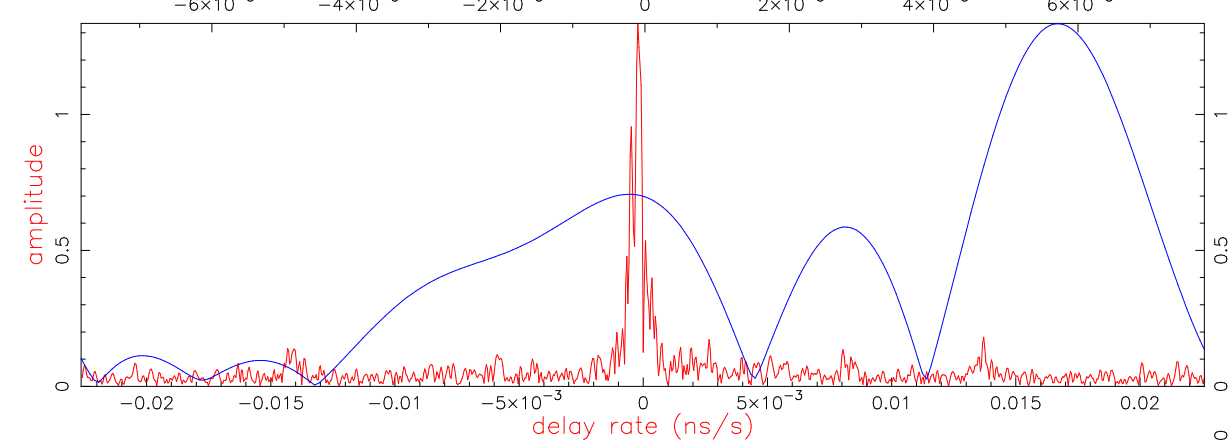
b: az 76.2 el 40.6 pa -54.6 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 272.619 1575.192
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/bf.Q.82.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

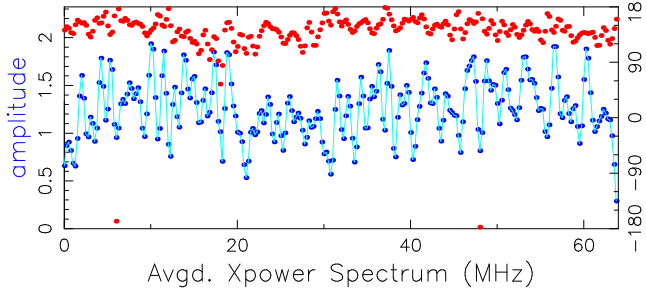
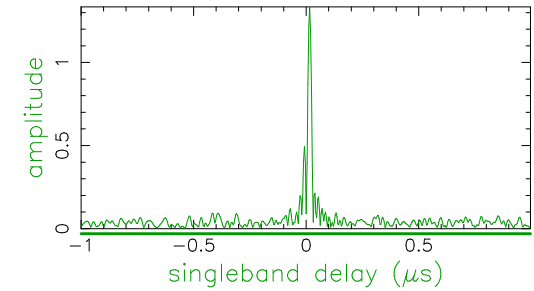
2013+370.3MP56K, No0500, Bf

EFLSBERG - VLBA_FD, fgroup Q, pol RR



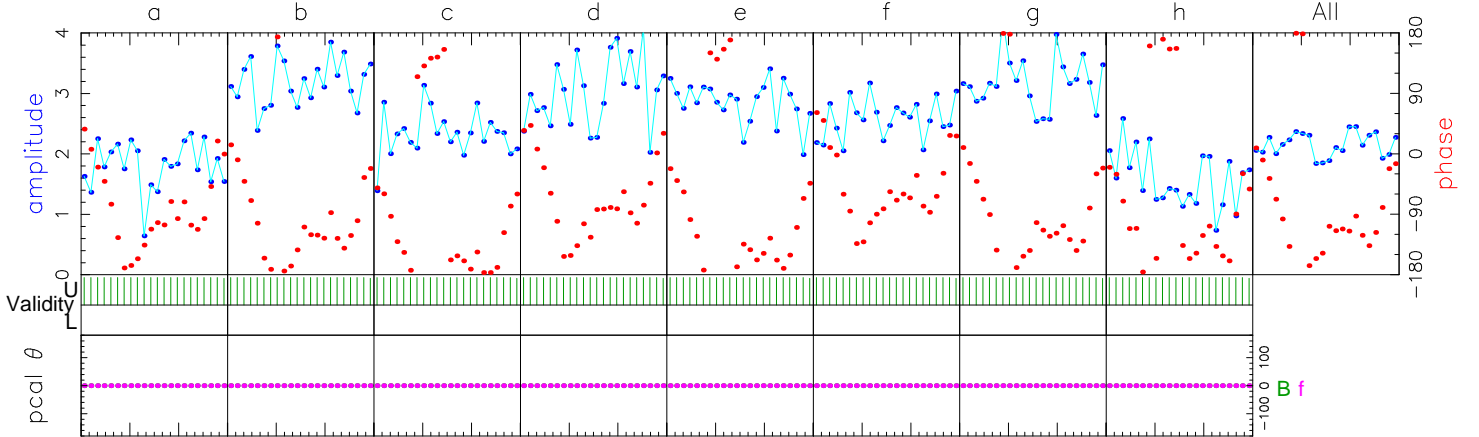
Fringe quality 2

SNR 49.0
 Int time 179.952
 Amp 1.335
 Phase 95.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.015218
 MBD 0.005704
 Fringe rate (Hz)
 -0.010061
 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	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.64008889922E+02	Apriori delay (usec)	-1.64030218707E+02	Resid mbdelay (usec)	5.70379E-03	+/-	2.2E-05
Sband delay (usec)	-1.64015000457E+02	Apriori clock (usec)	-3.5451027E+01	Resid sbdelay (usec)	1.52183E-02	+/-	1.8E-04
Phase delay (usec)	-1.64030225577E+02	Apriori clockrate (us/s)	-2.3975895E-07	Resid phdelay (usec)	-6.86987E-06	+/-	1.5E-07
Delay rate (us/s)	-1.51013547427E+00	Apriori rate (us/s)	-1.51013524104E+00	Resid rate (us/s)	-2.33227E-07	+/-	1.4E-09
Total phase (deg)	-132.8	Apriori accel (us/s/s)	1.85971935214E-05	Resid phase (deg)	95.8	+/-	2.3

ph/seg (deg)	55.1	Theor.	5.5	Amplitude	1.335 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.1		9.6	Search (1024X32)	1.314	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.5		3.3	Inc. seg. avg.	2.145	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.0		5.8	Inc. frq. avg.	1.570	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	

B: az 275.5 el 46.9 pa 52.6 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 5450.594 1447.563 simultaneous interpolator

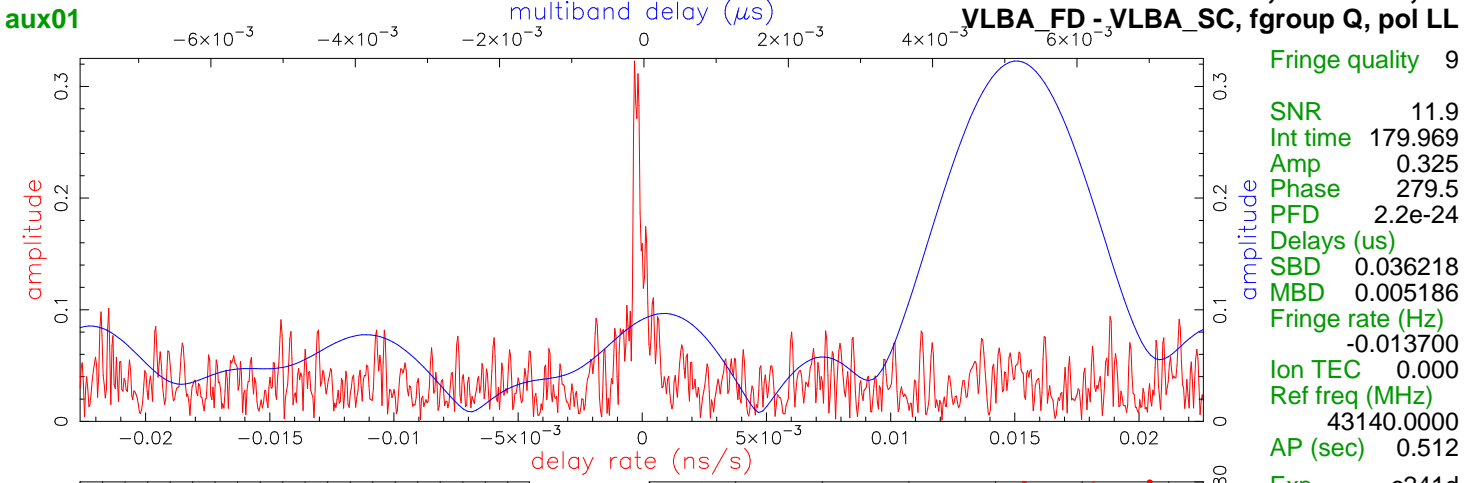
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/Bf..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/Bf.Q.89.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fc

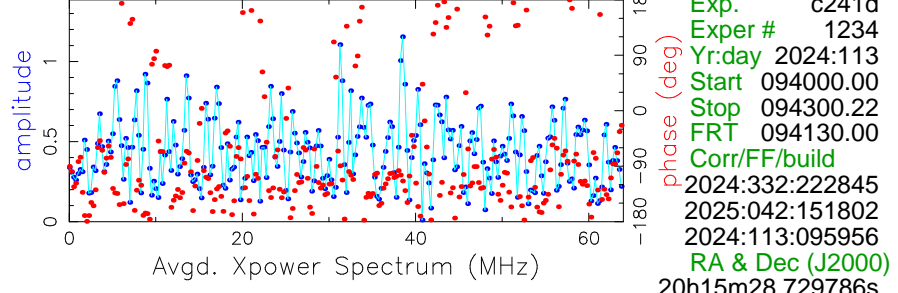
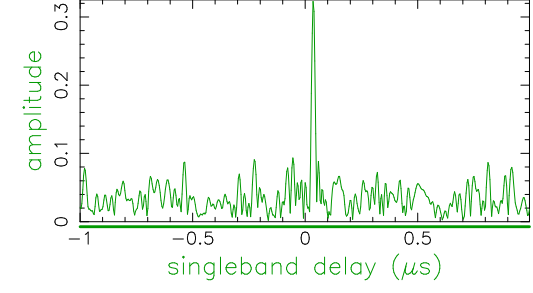
VLBA_FD - VLBA_SC, fgroup Q, pol LL



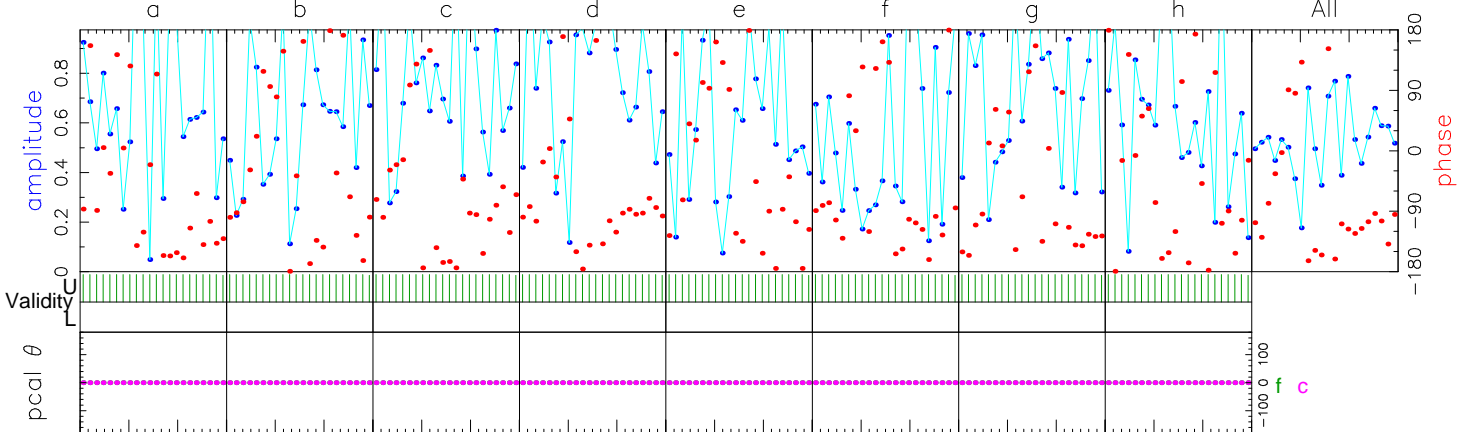
Fringe quality 9

SNR 11.9
 Int time 179.969
 Amp 0.325
 Phase 279.5
 PFD 2.2e-24
 Delays (us)
 SBD 0.036218
 MBD 0.005186
 Fringe rate (Hz)
 -0.013700
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512

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



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



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

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

ph/seg (deg) 65.3 22.5 Search (1024X32) 0.316 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.2 39.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.7 13.6 Inc. seg. avg. 0.494 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.9 23.7 Inc. frq. avg. 0.321 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 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2085.364 1804.109 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.154.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

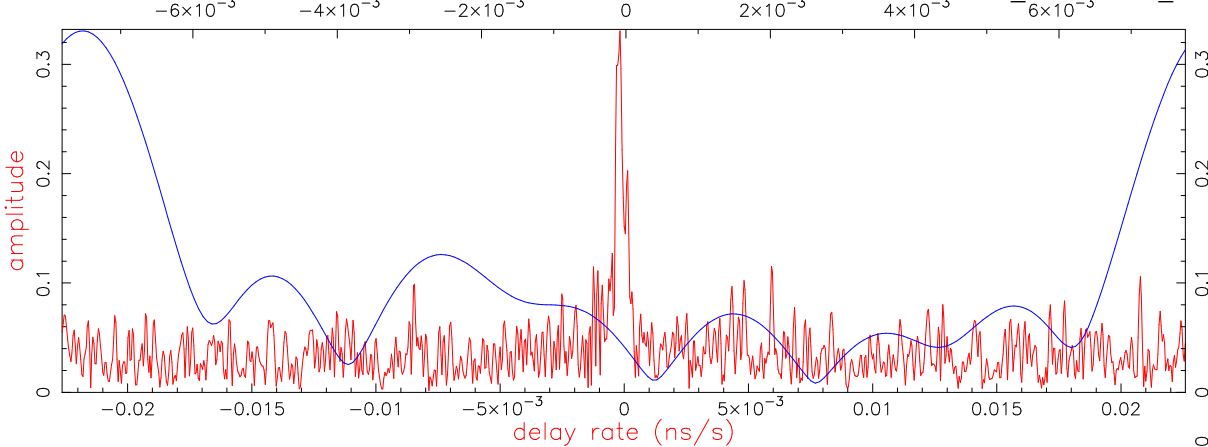
aux01

2013+370.3MP56K, No0500, fc

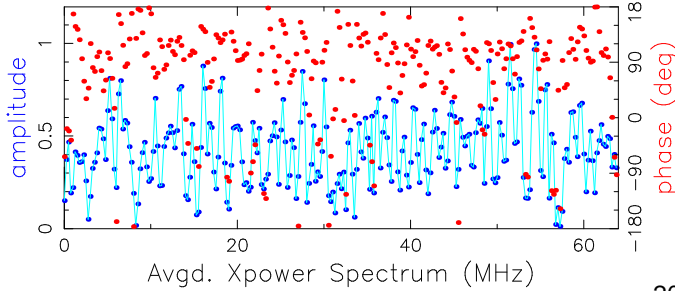
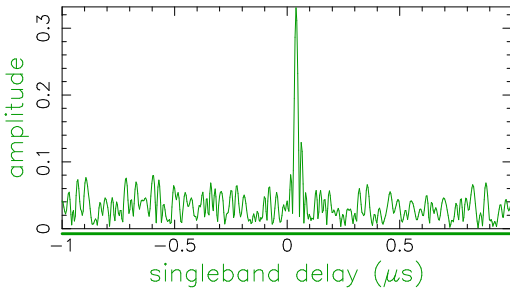
VLBA_FD - VLBA_SC, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 9

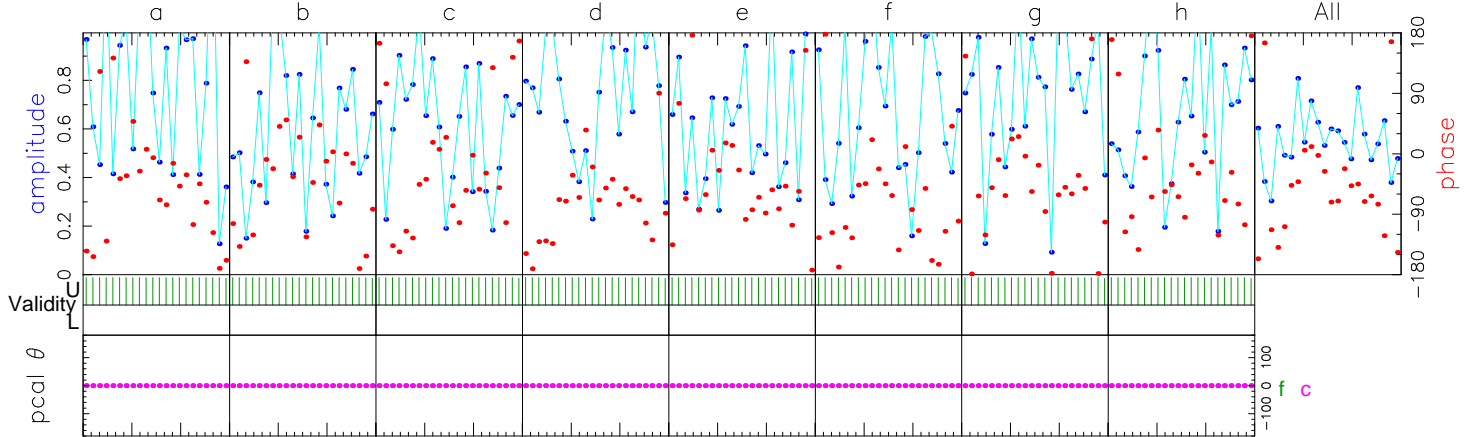


SNR 12.2
 Int time 179.969
 Amp 0.332
 Phase 180.5
 PFD 1.1e-25
 Delays (us)
 SBD 0.039860
 MBD -0.007508
 Fringe rate (Hz)
 -0.007691
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151814
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-66.2	-21.3	-83.2	-85.4	-75.3	-84.9	-54.1	-56.1	Phase	-67.0
	0.4	0.3	0.3	0.5	0.2	0.4	0.4	0.4	Ampl.	0.3
	267.6	267.2	268.3	266.9	26.7	267.1	267.2	267.2	Sbd box	267.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

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

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

f: az 66.6 el 46.8 pa -82.9 c: az 27.3 el 67.5 pa -147.2 u,v (fr/asec) -2085.364 1804.109 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.208.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

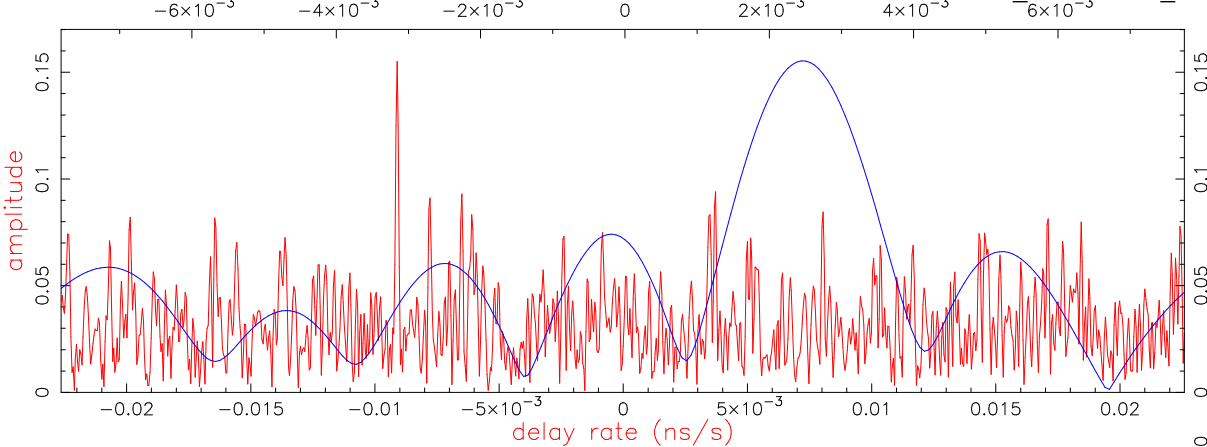
aux01

2013+370.3MP56K, No0500, fc

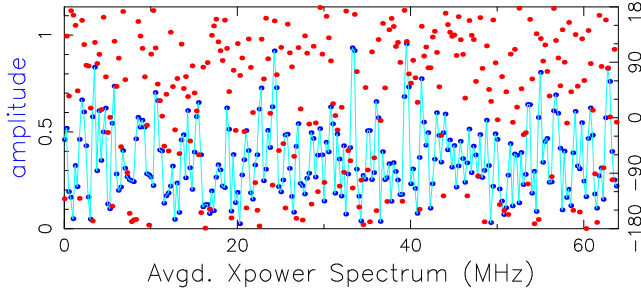
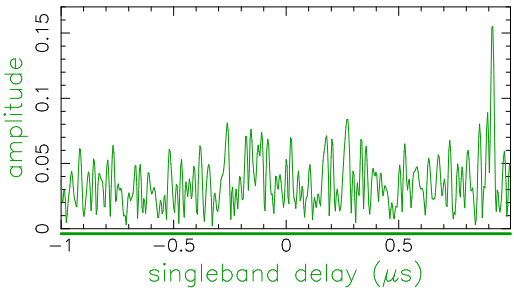
VLBA_FD - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

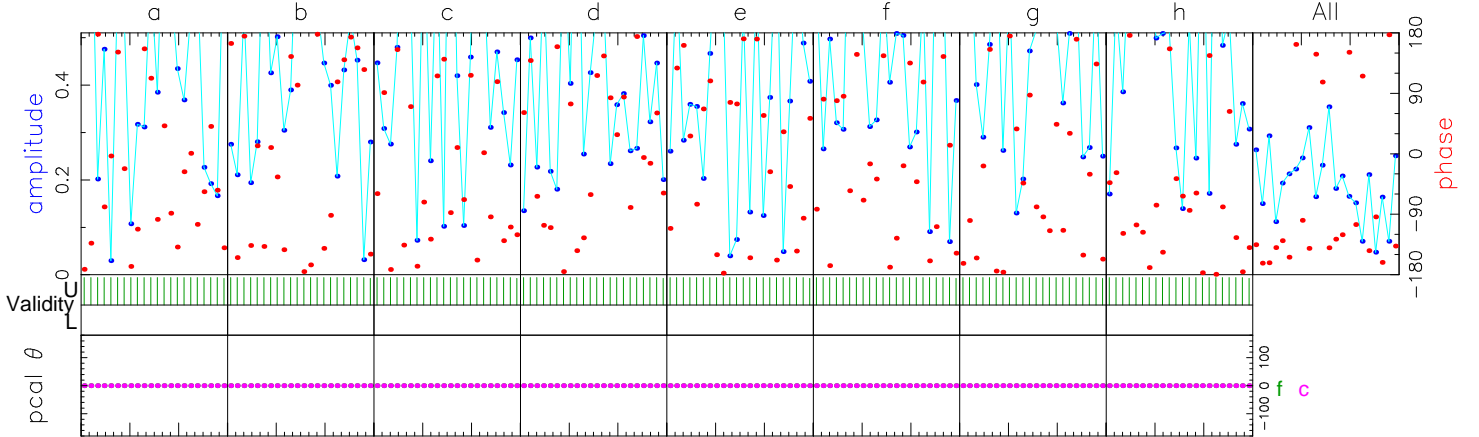


SNR 5.8
 Int time 179.969
 Amp 0.170
 Phase 73.8
 PFD 5.1e-01
 Delays (us)
 SBD 0.916128
 MBD 0.002406
 Fringe rate (Hz)
 -0.395239
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151816
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-121.0	-175.9	-133.0	174.8	-171.2	-146.4	-148.1	-136.8	Phase	-151.2
	0.2	0.3	0.1	0.1	0.2	0.1	0.2	0.3	Ampl.	0.2
	329.0	493.0	212.0	158.5	201.3	302.3	137.9	489.9	Sbd box	491.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

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

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

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

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.222.3MP56K

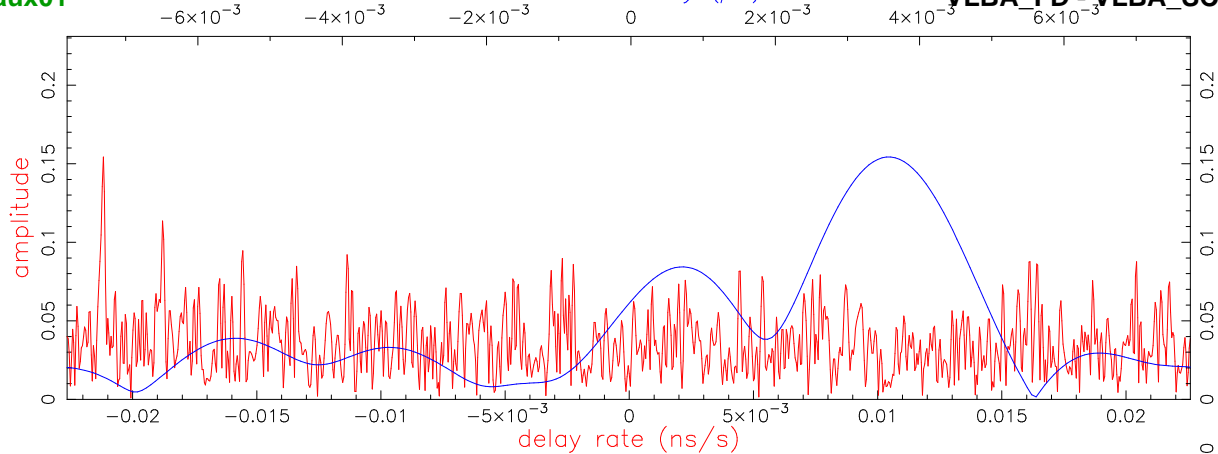
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fc

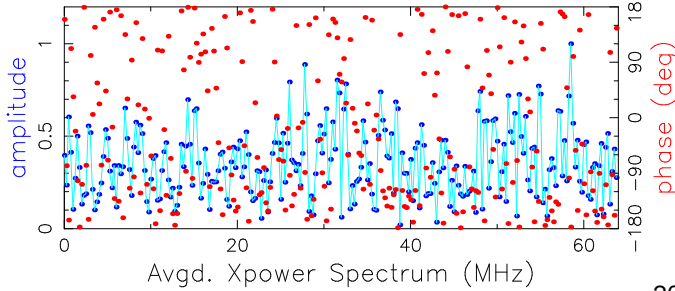
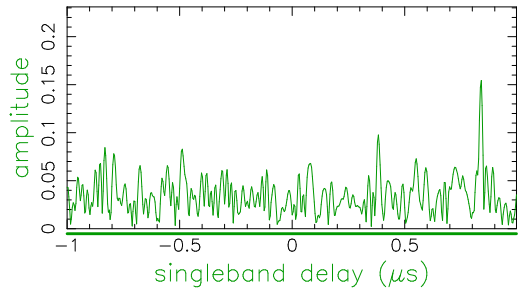
VLBA_FD - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)



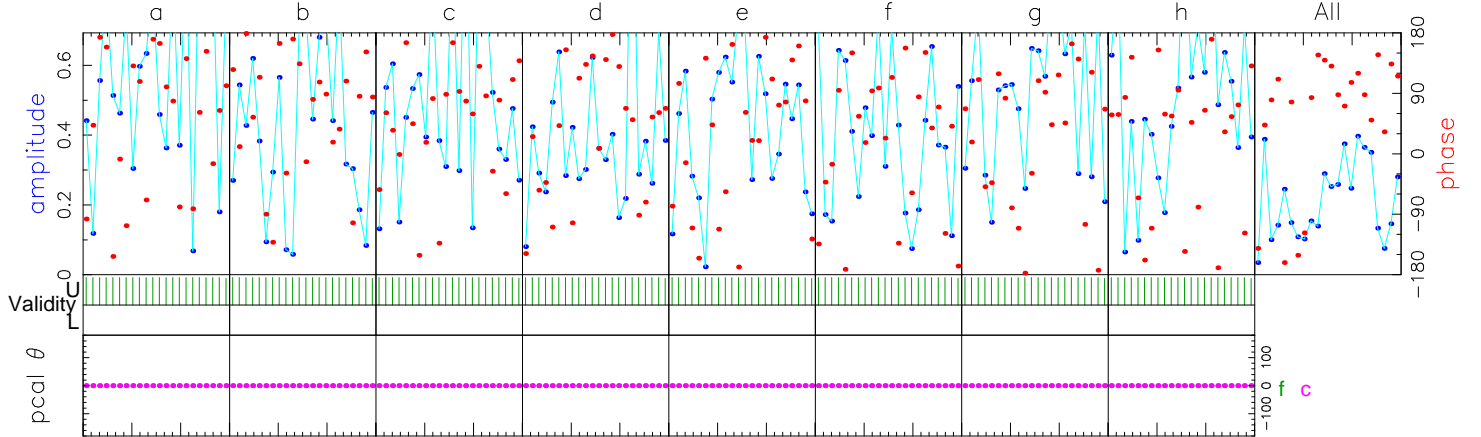
Fringe quality 0

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



Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 094000.00
Stop 094300.22
FRT 094130.00
Corr/FF/build
2024:332:222845
2025:042:151818
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

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

ph/seg (deg)	58.4	Theor.	47.1	Amplitude	0.231 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.2	Search (1024X32)	0.152	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.9	Inc. seg. avg.	0.239	Inc. frq. avg.	0.217	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.8	Inc. frq. avg.	0.217			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

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

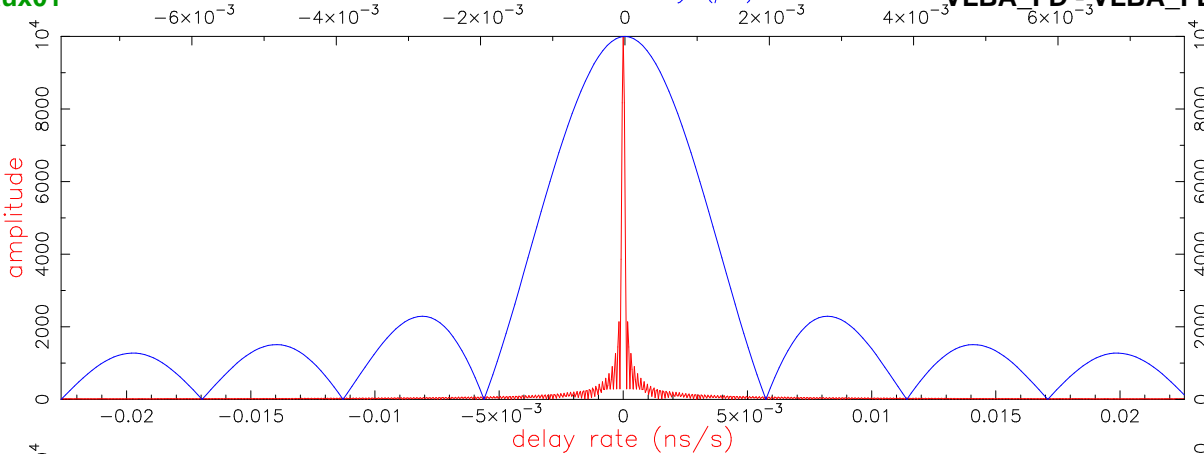
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fc..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fc.Q.236.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

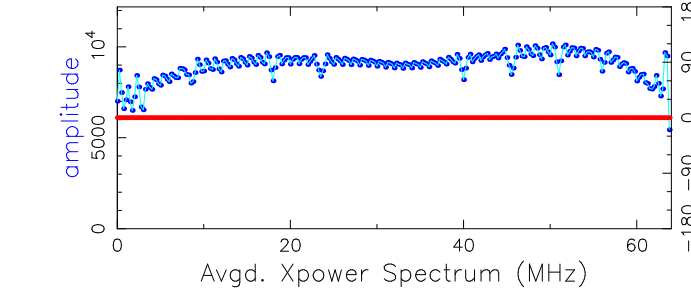
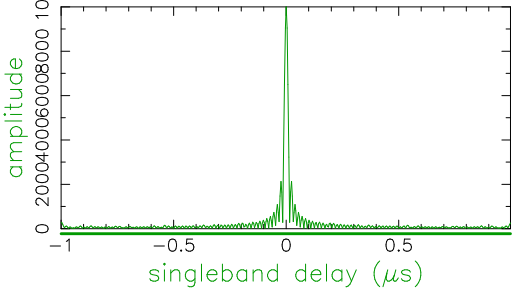
aux01

2013+370.3MP56K, No0500, ff

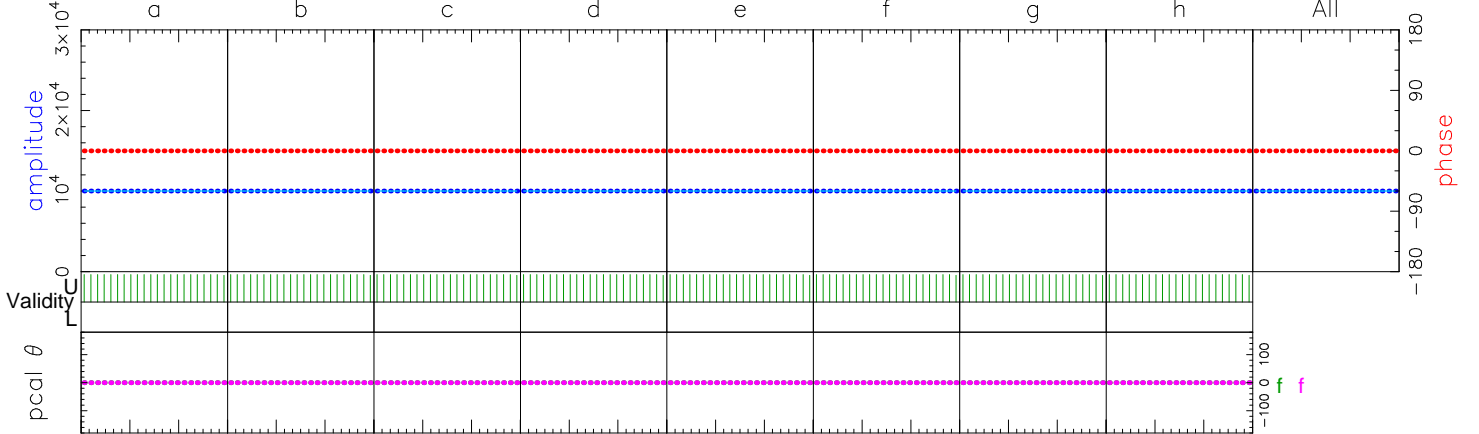
VLBA_FD - VLBA_FD, fgroup Q, pol LL



Fringe quality 9
 SNR 366859.4
 Int time 179.972
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151754
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



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



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

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-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

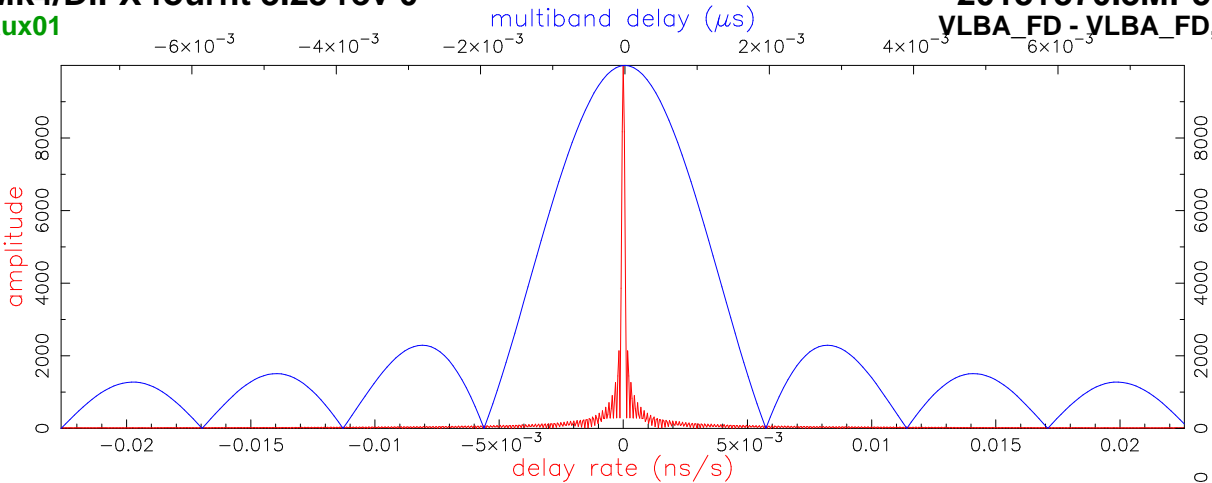
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 f: az 66.6 el 46.8 pa -82.9 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/ff..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/ff.Q.103.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, ff

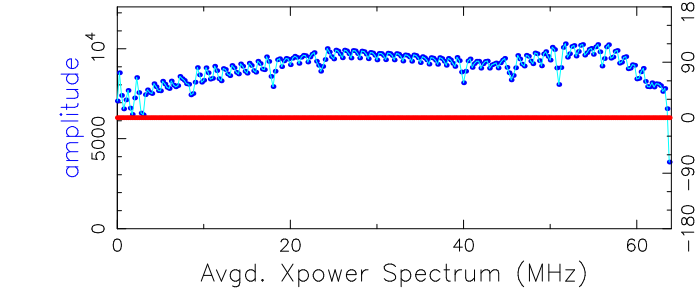
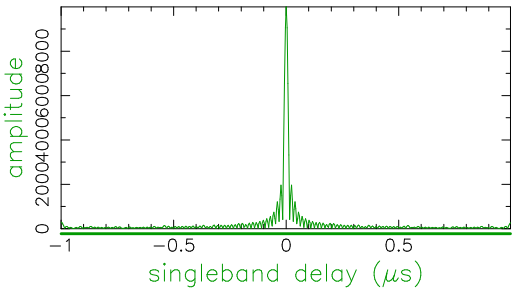
VLBA_FD - VLBA_FD, fgroup Q, pol RR



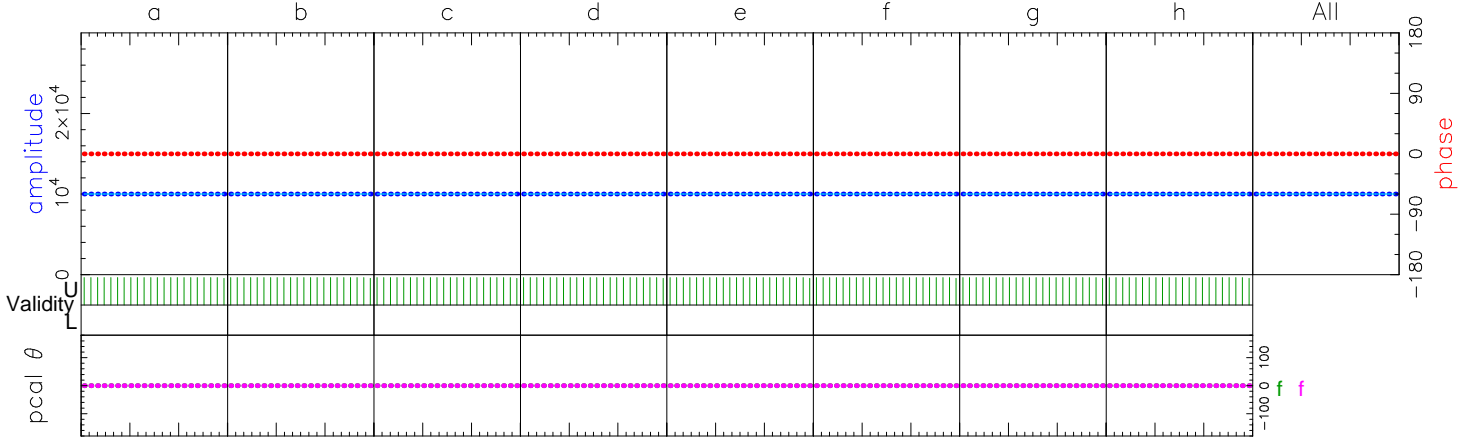
Fringe quality 9

SNR 366859.3
 Int time 179.972
 Amp 9999.998
 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
 2025:042:151756
 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		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

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 9999.998 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.998 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
 f: az 66.6 el 46.8 pa -82.9 f: az 66.6 el 46.8 pa -82.9 u,v (fr/asec) 0.000 0.000 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/ff..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/ff.Q.113.3MP56K simultaneous interpolator

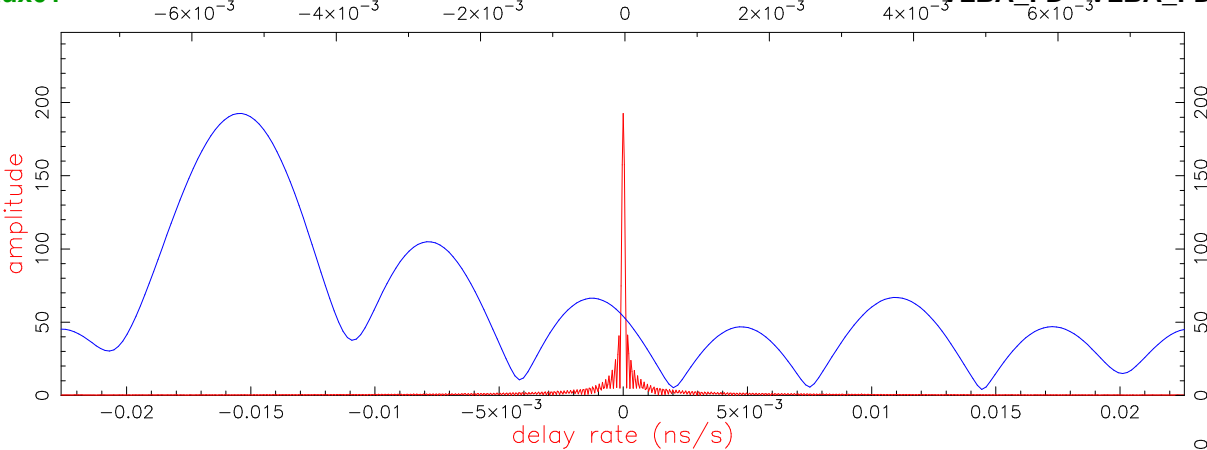
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, ff

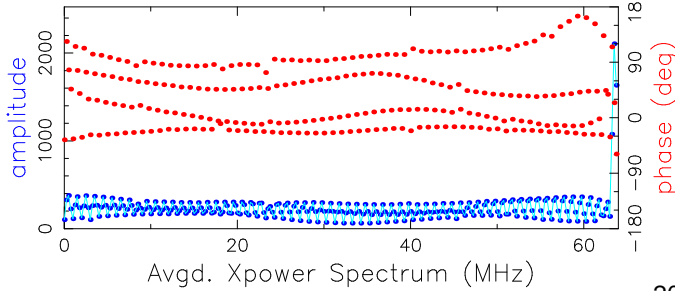
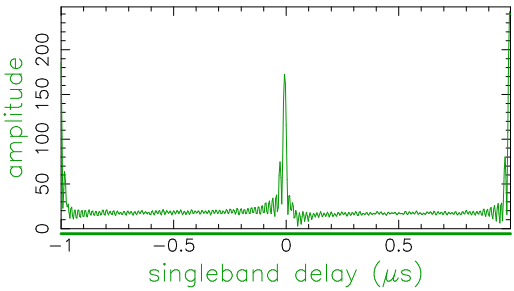
VLBA_FD - VLBA_FD, fgroup Q, pol LR

multiband delay (μ s)



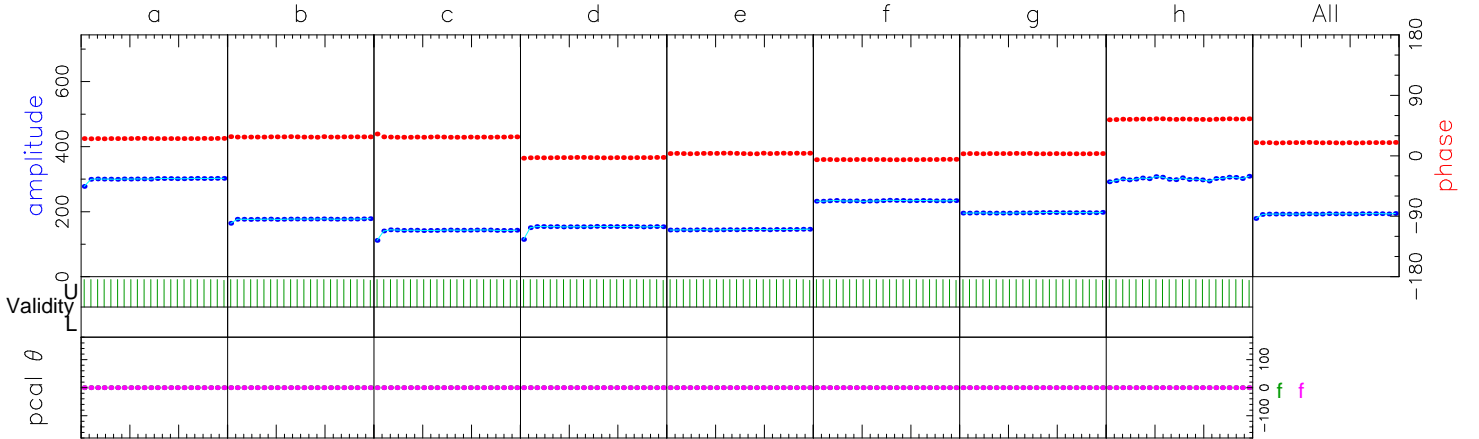
Fringe quality 6

SNR 9095.6
 Int time 179.968
 Amp 247.934
 Phase 19.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.993945
 MBD -0.005368
 Fringe rate (Hz)
 -0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151800
 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
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		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	9.946323125000E-01	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	-5.36769E-03	+/-	1.2E-07
Sband delay (usec)	9.939452500000E-01	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	9.93945E-01	+/-	9.5E-07
Phase delay (usec)	1.25513595053E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	1.25514E-06	+/-	8.1E-10
Delay rate (us/s)	-7.35704212854E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	-7.35704E-11	+/-	7.8E-12
Total phase (deg)	19.5	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	19.5	+/-	0.0

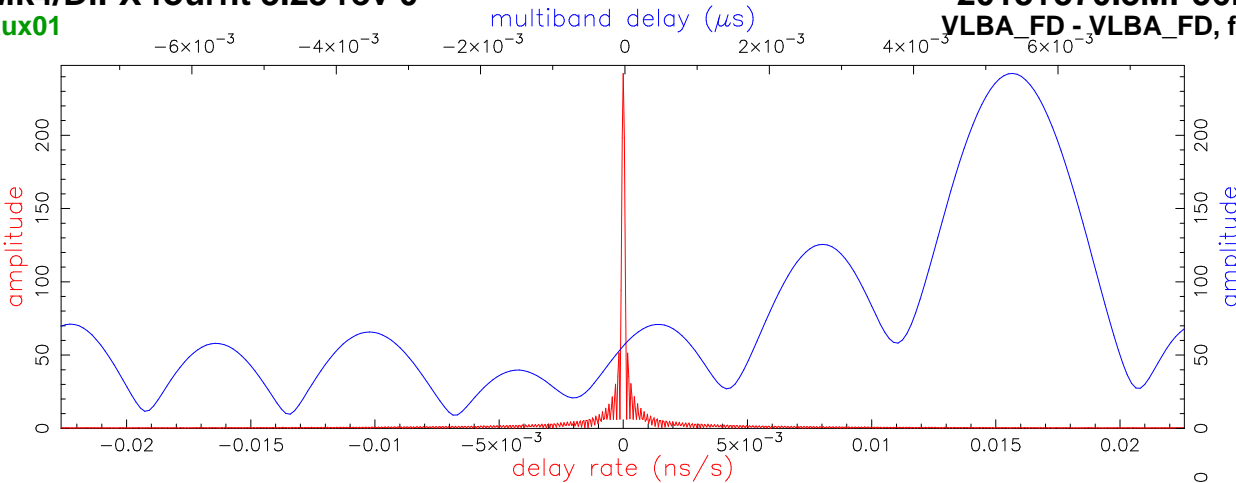
ph/seg (deg)	0.2	Theor.	Amplitude	247.934 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	22.4	0.0	Search (1024X32)	242.210	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.6	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.1	0.0	Inc. seg. avg.	192.504	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		f: az 66.6 el 46.8 pa -82.9	Inc. frq. avg.	205.819	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/ff..3MP56K	u, v (fr/asec)	0.000 0.000			simultaneous interpolator	
					Output file: /Exps/c241d/v1/7mm/1234/No0500/ff.Q.142.3MP56K			

Mk4/DiFX fourfit 3.25 rev 0

aux01

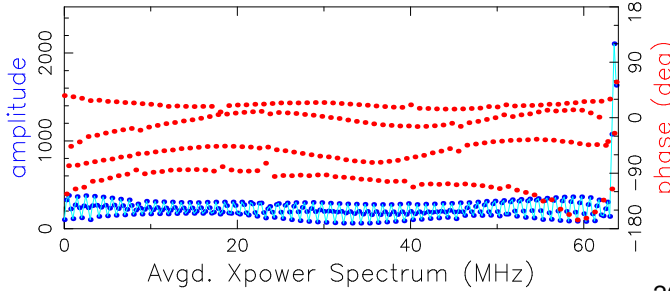
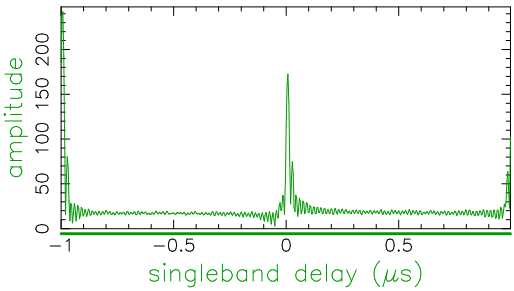
2013+370.3MP56K, No0500, ff

VLBA_FD - VLBA_FD, fgroup Q, pol RL



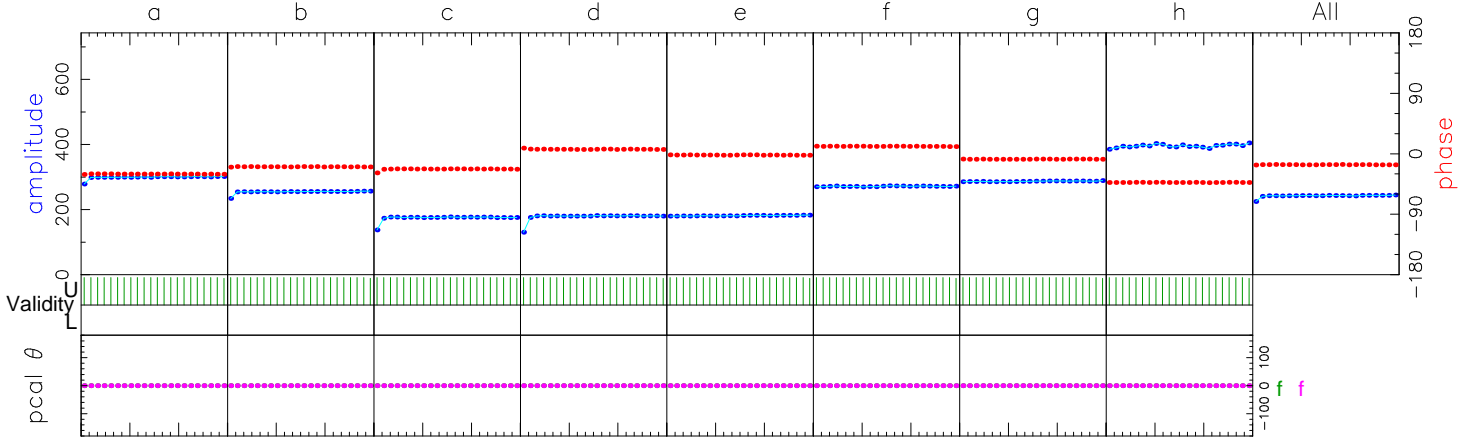
Fringe quality 7

SNR 9086.1
 Int time 179.968
 Amp 247.675
 Phase -16.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.993918
 MBD 0.005368
 Fringe rate (Hz) 0.000003
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151802
 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
	-30.1	-19.3	-22.8	6.8	-1.8	11.1	-8.0	-42.6	Phase	-16.3
	299.3	254.5	174.6	178.1	181.6	271.5	287.1	395.7	Ampl.	255.3
	258.8	258.1	258.1	2.7	2.3	2.6	1.9	2.7	Sbd box	2.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-9.94632406250E-01		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		5.36759E-03	+/- 1.2E-07
Sband delay (usec)	-9.93917750000E-01		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-9.93918E-01	+/- 9.5E-07
Phase delay (usec)	-1.04713984290E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.04714E-06	+/- 8.1E-10
Delay rate (us/s)	7.35704212854E-11		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		7.35704E-11	+/- 7.8E-12
Total phase (deg)			Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		-16.3	+/- 0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 247.675 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.7 0.1 Search (1024X32) 242.210 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.0 0.0 Inc. seg. avg. 242.217 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 f: az 66.6 el 46.8 pa -82.9 u, v (fr/asec) 0.000 0.000 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/ff..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/ff.Q.155.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

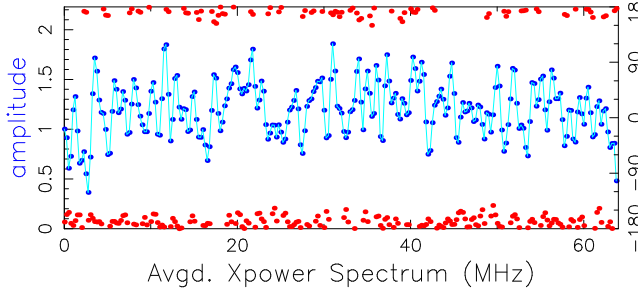
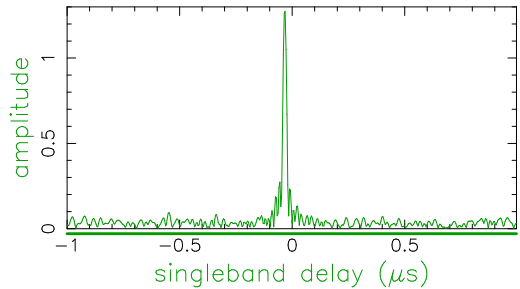
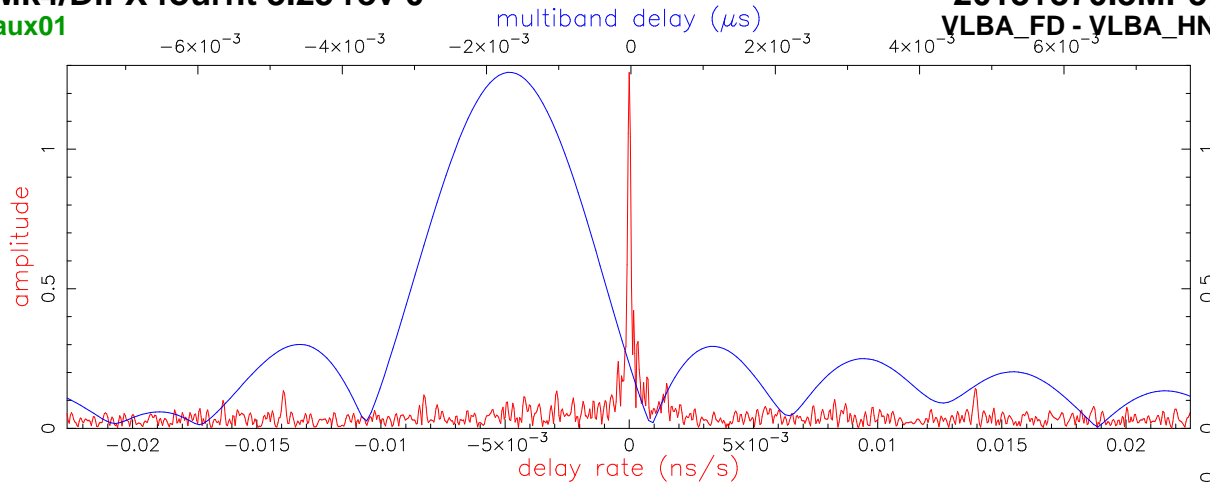
aux01

2013+370.3MP56K, No0500, fh

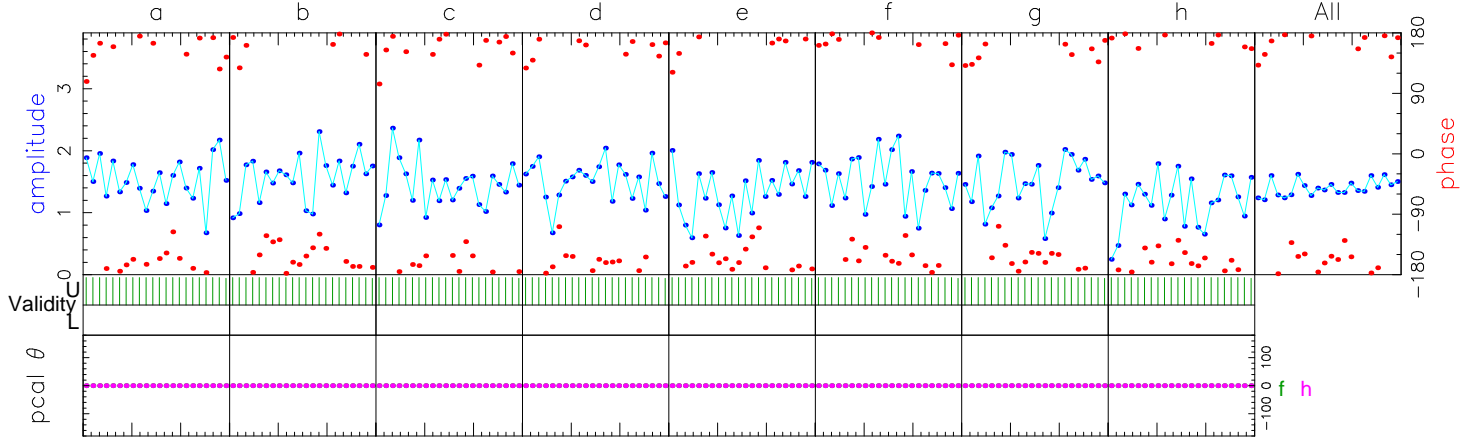
VLBA_FD - VLBA_HN, fgroup Q, pol RR

Fringe quality 7

SNR 47.7
 Int time 179.968
 Amp 1.300
 Phase -220.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.033020
 MBD -0.001726
 Fringe rate (Hz)
 -0.000272
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151754
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



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



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

Group delay (usec) (SBD)	-4.86429531884E+03	Apriori delay (usec)	-4.86426234281E+03	Resid mbdelay (usec)	-1.72603E-03	+/-	2.3E-05
Sband delay (usec)	-4.86429536256E+03	Apriori clock (usec)	-1.2364769E+01	Resid sbdelay (usec)	-3.30198E-02	+/-	1.8E-04
Phase delay (usec)	-4.86426235410E+03	Apriori clockrate (us/s)	-2.8717046E-08	Resid phdelay (usec)	-1.12926E-05	+/-	1.5E-07
Delay rate (us/s)	5.28835514668E-01	Apriori rate (us/s)	5.28835520975E-01	Resid rate (us/s)	-6.30725E-09	+/-	1.5E-09
Total phase (deg)	-29.2	Apriori accel (us/s/s)	1.40932944247E-05	Resid phase (deg)	-220.4	+/-	2.4

ph/seg (deg) 25.4 5.6 Search (1024X32) 1.245 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 12.4 9.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.3 3.4 Inc. seg. avg. 1.395 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.2 5.9 Inc. frq. avg. 1.283 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 h: az 103.5 el 73.6 pa -63.0 u,v (fr/asec) -1901.299 -171.607 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/fh..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fh.Q.105.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

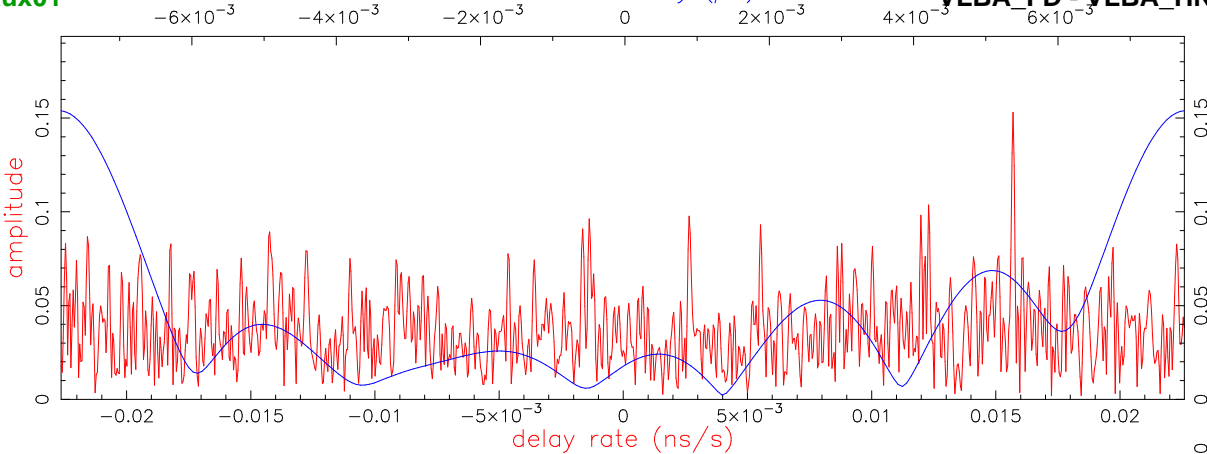
aux01

2013+370.3MP56K, No0500, fh

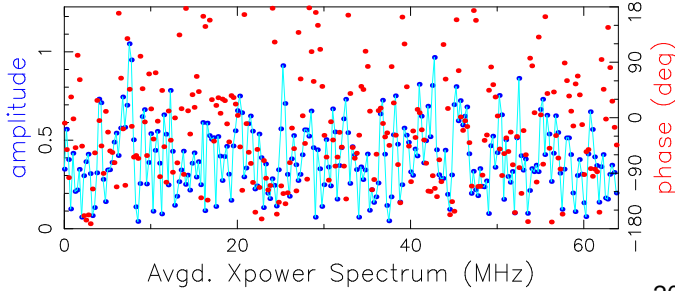
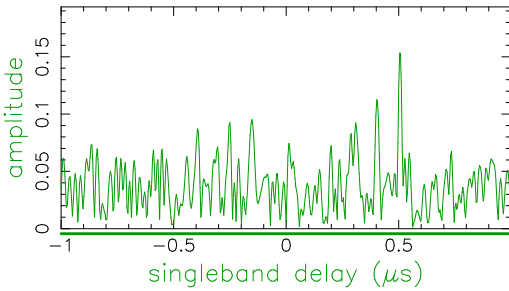
VLBA_FD - VLBA_HN, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

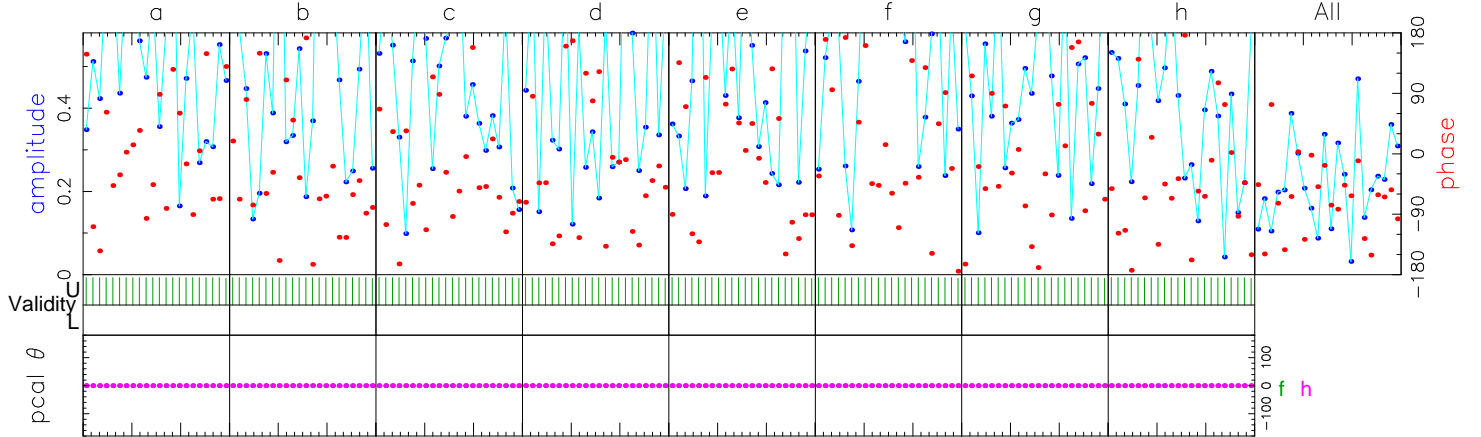


SNR 5.8
 Int time 179.968
 Amp 0.194
 Phase 297.8
 PFD 6.4e-01
 Delays (us)
 SBD 0.505853
 MBD 0.007888
 Fringe rate (Hz) 0.680991
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151756
 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		
h	1000	1000	1000	1000	1000	1000	1000	1000		
f:h	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:h	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		
h	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-4.86375445460E+03	Apriori delay (usec)	-4.86426234281E+03	Resid mbdelay (usec)	7.88821E-03	+/-	1.9E-04
Sband delay (usec)	-4.86375648956E+03	Apriori clock (usec)	-1.2364769E+01	Resid sbdelay (usec)	5.05853E-01	+/-	1.5E-03
Phase delay (usec)	-4.86426234682E+03	Apriori clockrate (us/s)	-2.8717046E-08	Resid phdelay (usec)	-4.00743E-06	+/-	1.3E-06
Delay rate (us/s)	5.28851306584E-01	Apriori rate (us/s)	5.28835520975E-01	Resid rate (us/s)	1.57856E-05	+/-	1.2E-08
Total phase (deg)	129.0	Apriori accel (us/s/s)	1.40932944247E-05	Resid phase (deg)	297.8	+/-	19.9

ph/seg (deg)	53.9	Theor.	46.6	Amplitude	0.194 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.0	Search (1024X32)	0.152	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.9	Inc. seg. avg.	0.207	Inc. frq. avg.	0.174	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.9	Inc. frq. avg.	0.174			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.6 el 46.8 pa -82.9 h: az 103.5 el 73.6 pa -63.0 u,v (fr/asec) -1901.299 -171.607 simultaneous interpolator

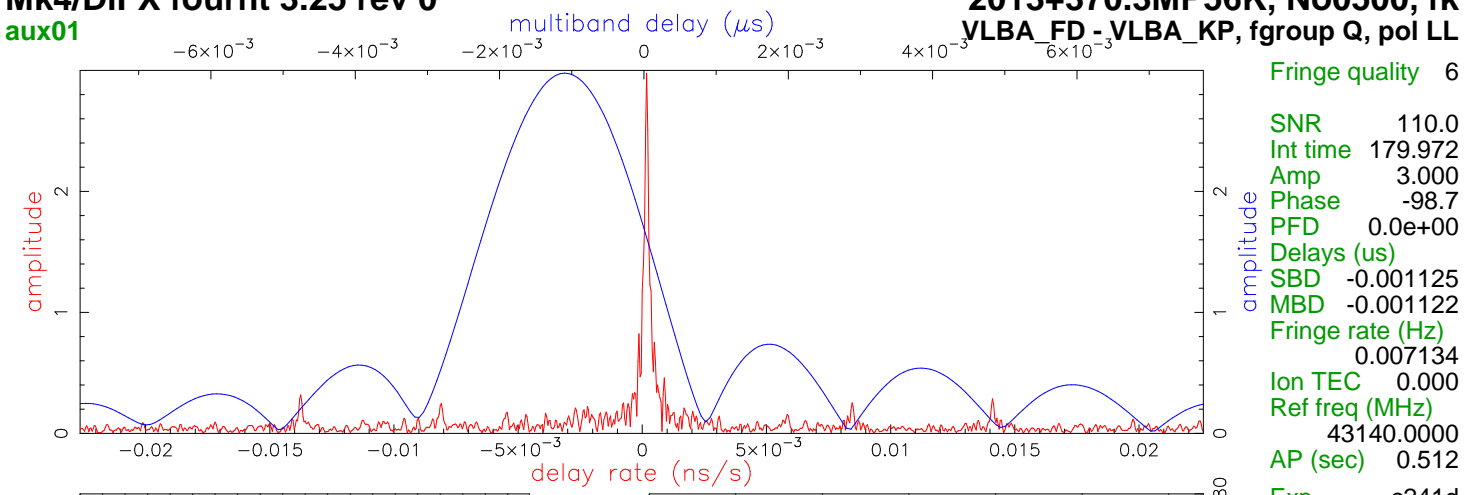
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fh..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fh.Q.116.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fk

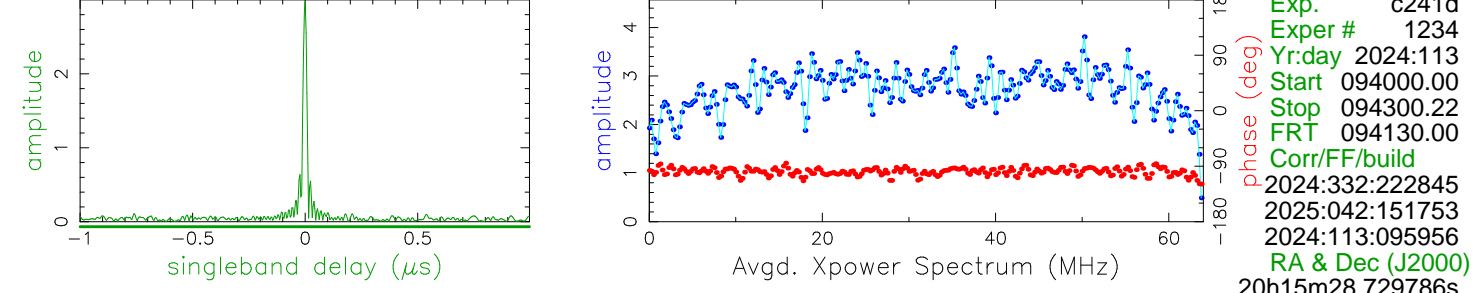
VLBA_FD - VLBA_KP, fgroup Q, pol LL



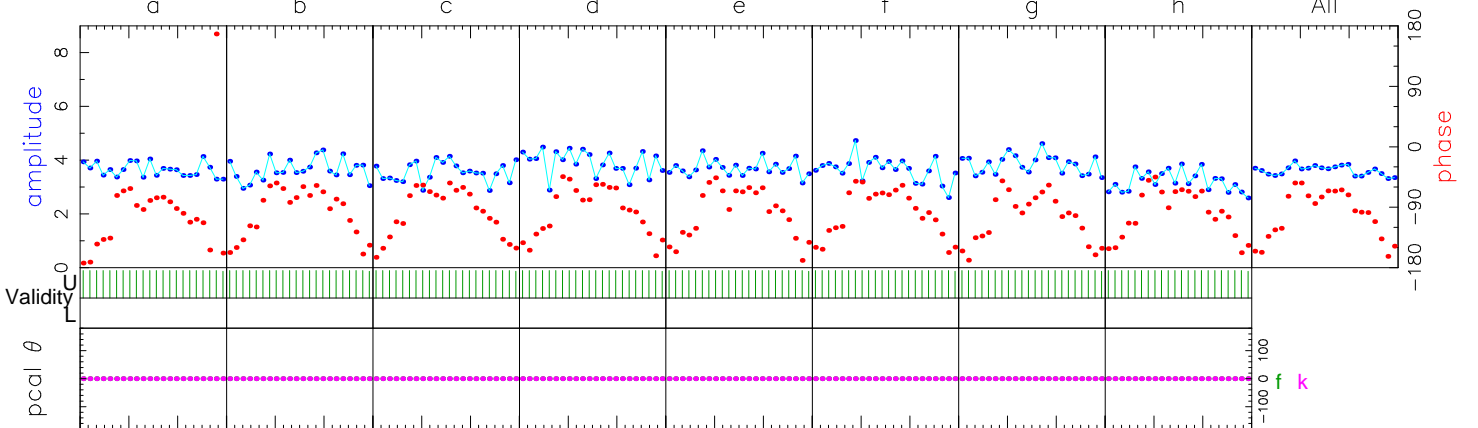
Fringe quality 6

SNR 110.0
 Int time 179.972
 Amp 3.000
 Phase -98.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.001125
 MBD -0.001122
 Fringe rate (Hz) 0.007134
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	3.0
k	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	256.7
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.45805637261E+03	Apriori delay (usec)	1.45805749477E+03	Resid mbdelay (usec)	-1.12216E-03	+/-	9.9E-06
Sband delay (usec)	1.45805637002E+03	Apriori clock (usec)	-9.2527390E-02	Resid sbdelay (usec)	-1.12475E-03	+/-	7.8E-05
Phase delay (usec)	1.45805748841E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-6.35698E-06	+/-	6.7E-08
Delay rate (us/s)	-6.78142883800E-02	Apriori rate (us/s)	-6.78144537380E-02	Resid rate (us/s)	1.65358E-07	+/-	6.4E-10
Total phase (deg)	18.0	Apriori accel (us/s/s)	-9.09965702144E-06	Resid phase (deg)	-98.7	+/-	1.0

ph/seg (deg)	35.2	RMS	2.4	Theor.	2.4	Amplitude	3.000 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	21.5	Search (1024X32)	2.916	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	6.4	Inc. seg. avg.	3.617	Inc. frq. avg.	2.990	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	4.9	Inc. frq. avg.	2.990	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 k: az 66.3 el 41.3 pa -77.6 u,v (fr/asec) 240.562 -343.354 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fk..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fk.Q.100.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

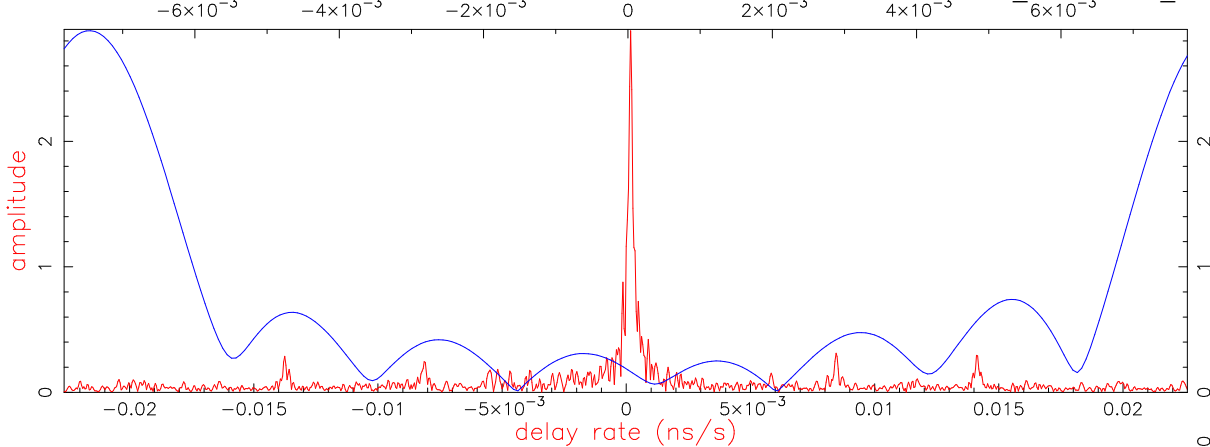
aux01

2013+370.3MP56K, No0500, fk

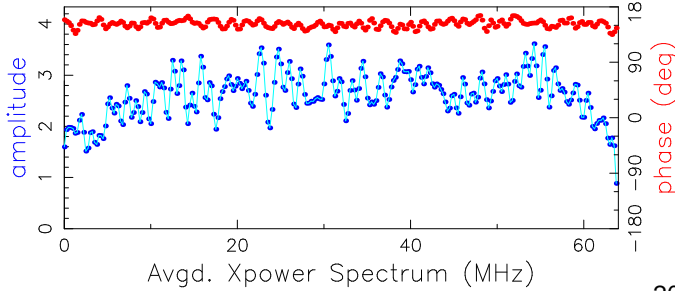
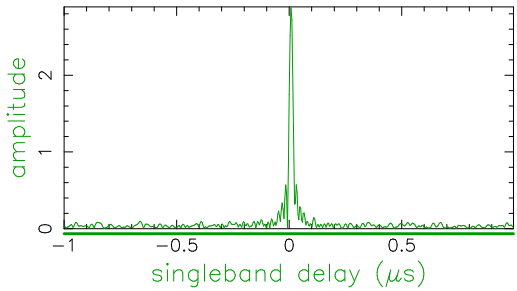
VLBA_FD - VLBA_KP, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 6

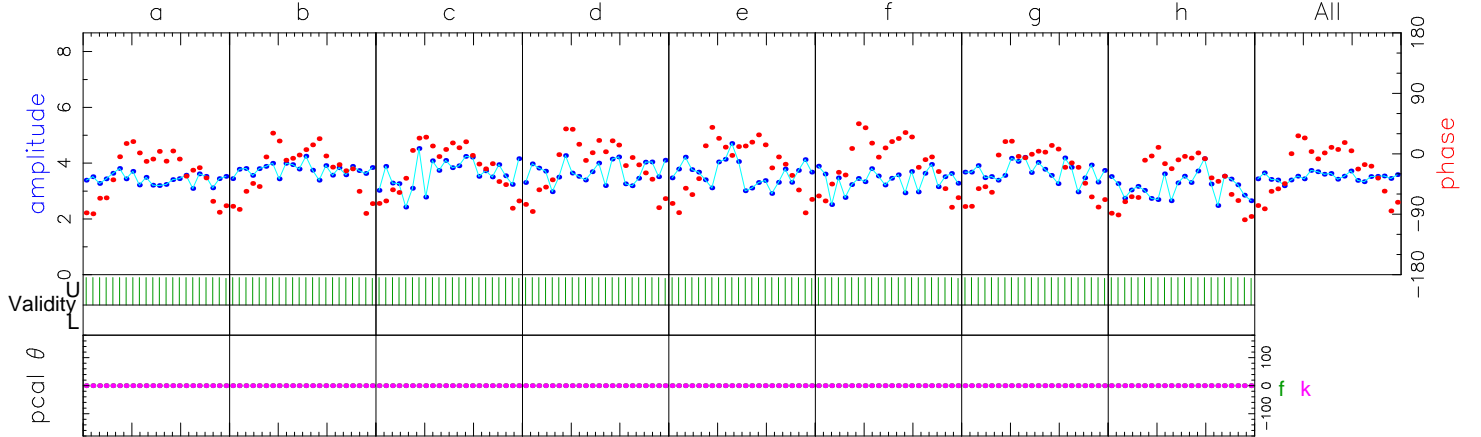


SNR 106.1
Int time 179.973
Amp 2.891
Phase 179.5
PFD 0.0e+00
Delays (us)
SBD 0.008582
MBD -0.007445
Fringe rate (Hz) 0.007084
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-30.6	-23.5	-19.1	-17.8	-19.6	-12.0	-24.8	-38.0	Phase	-23.0
	2.8	3.1	3.0	3.0	2.9	2.7	3.1	2.6	Ampl.	2.9
	259.6	259.3	258.9	259.1	259.2	259.3	259.2	258.9	Sbd box	259.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	1.45806567508E+03	Apriori delay (usec)	1.45805749477E+03	Resid mbdelay (usec)	-7.44469E-03	+/-	1.0E-05
Sband delay (usec)	1.45806607727E+03	Apriori clock (usec)	-9.2527390E-02	Resid sbdelay (usec)	8.58250E-03	+/-	8.1E-05
Phase delay (usec)	1.45805749328E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-1.48372E-06	+/-	7.0E-08
Delay rate (us/s)	-6.78142895288E-02	Apriori rate (us/s)	-6.78144537380E-02	Resid rate (us/s)	1.64209E-07	+/-	6.7E-10
Total phase (deg)	296.2	Apriori accel (us/s/s)	-9.09965702144E-06	Resid phase (deg)	179.5	+/-	1.1

ph/seg (deg)	35.2	Theor.	2.5	Amplitude	2.891 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	21.8	Search (1024X32)	2.807	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	8.7	Inc. seg. avg.	3.504	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	5.7	Inc. frq. avg.	2.903	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
				Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.6 el 46.8 pa -82.9 k: az 66.3 el 41.3 pa -77.6 u,v (fr/asec) 240.562 -343.354 simultaneous interpolator

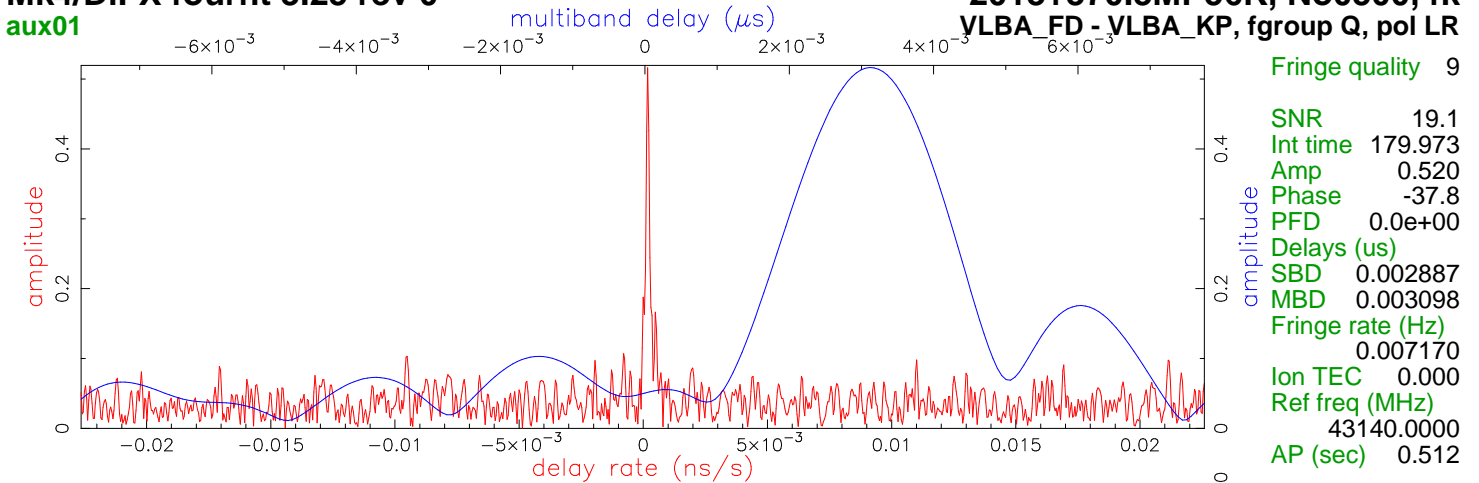
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fk..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fk.Q.111.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fk

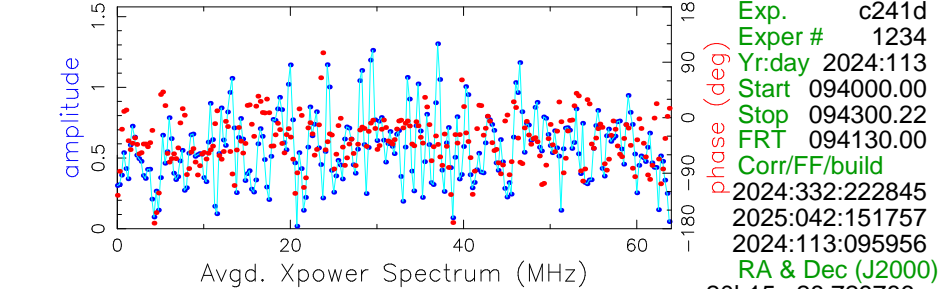
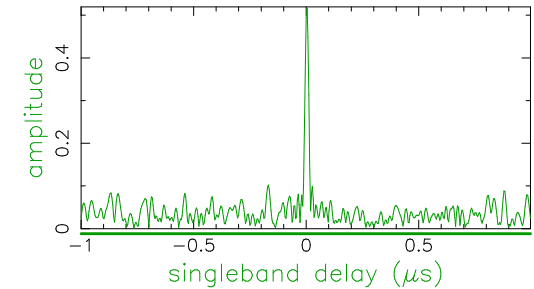
VLBA_FD - VLBA_KP, fgroup Q, pol LR



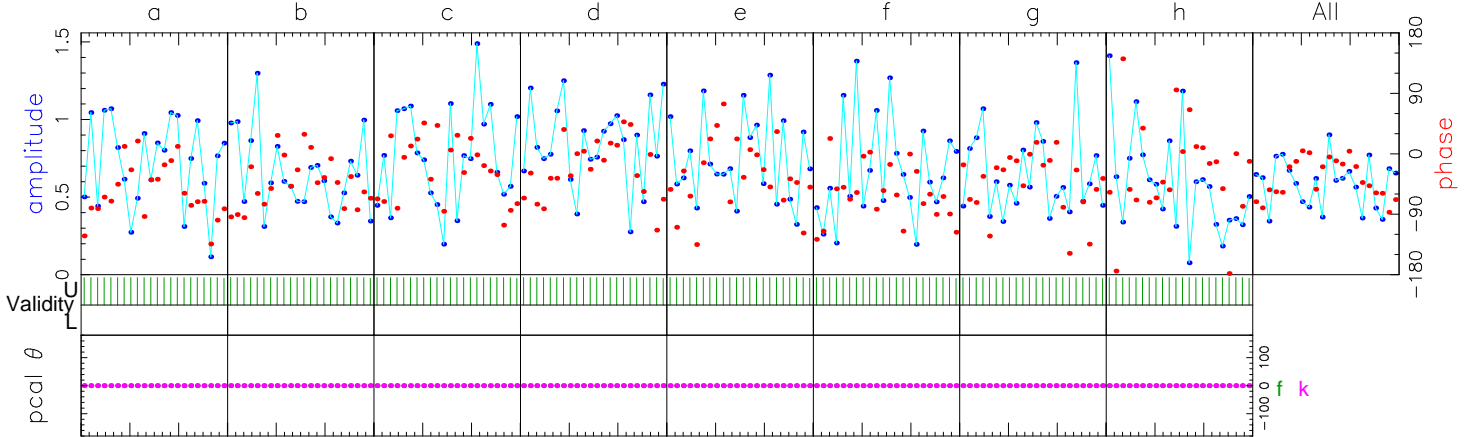
Fringe quality 9

SNR 19.1
 Int time 179.973
 Amp 0.520
 Phase -37.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.002887
 MBD 0.003098
 Fringe rate (Hz) 0.007170
 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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	1.45806059314E+03	Apriori delay (usec)	1.45805749477E+03	Resid mbdelay (usec)	3.09837E-03	+/-	5.7E-05
Sband delay (usec)	1.45806038227E+03	Apriori clock (usec)	-9.2527390E-02	Resid sbdelay (usec)	2.88750E-03	+/-	4.5E-04
Phase delay (usec)	1.45805749234E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-2.43271E-06	+/-	3.9E-07
Delay rate (us/s)	-6.78142875452E-02	Apriori rate (us/s)	-6.78144537380E-02	Resid rate (us/s)	1.66193E-07	+/-	3.7E-09
Total phase (deg)	79.0	Apriori accel (us/s/s)	-9.09965702144E-06	Resid phase (deg)	-37.8	+/-	6.0

ph/seg (deg)	28.3	RMS	14.1	Theor.	14.1	Amplitude	0.520 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	32.0	Search (1024X32)	0.503	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	15.8	Inc. seg. avg.	0.571	Inc. frq. avg.	0.527	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	15.3	Inc. frq. avg.	0.527	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 k: az 66.3 el 41.3 pa -77.6 u,v (fr/asec) 240.562 -343.354 simultaneous interpolator

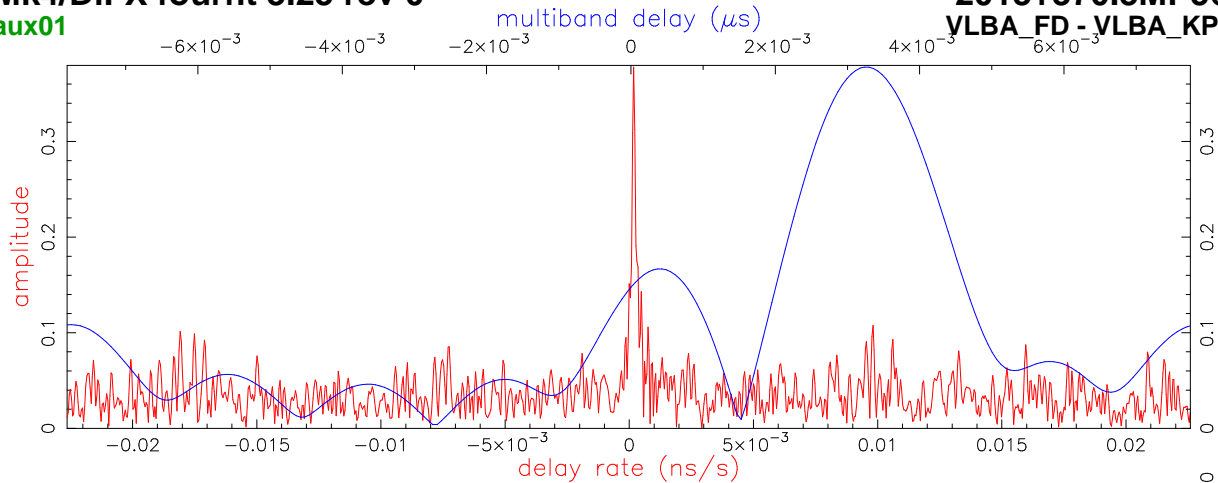
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fk..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fk.Q.125.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

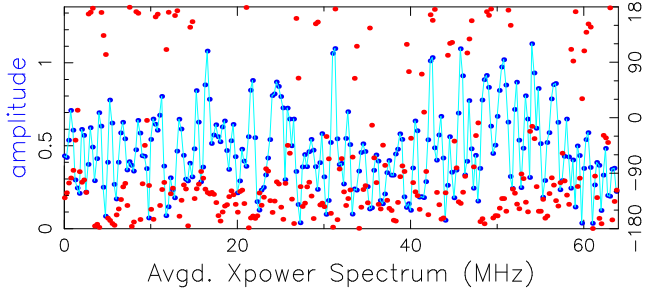
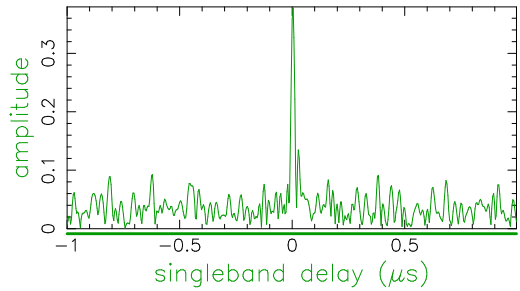
2013+370.3MP56K, No0500, fk

VLBA_FD - VLBA_KP, fgroup Q, pol RL



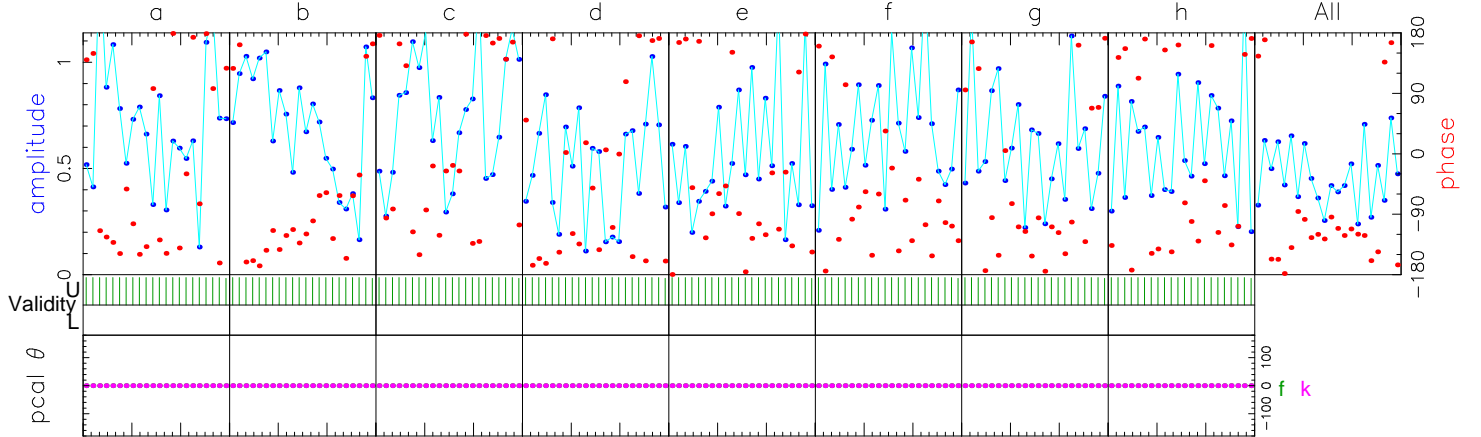
Fringe quality 9

SNR 13.9
 Int time 179.972
 Amp 0.380
 Phase -143.4
 PFD 1.3e-35
 Delays (us)
 SBD 0.003024
 MBD 0.003226
 Fringe rate (Hz) 0.007346
 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
	-153.6	-143.8	-145.2	-160.7	-131.7	-105.9	-143.6	-166.1	Phase	-143.4
	0.4	0.5	0.4	0.3	0.4	0.4	0.3	0.4	Ampl.	0.4
	258.7	257.8	257.2	51.6	257.8	258.1	256.9	256.3	Sbd box	257.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.45806072051E+03	Apriori delay (usec)	1.45805749477E+03	Resid mbdelay (usec)	3.22575E-03	+/-	7.8E-05
Sband delay (usec)	1.45806051852E+03	Apriori clock (usec)	-9.2527390E-02	Resid sbdelay (usec)	3.02375E-03	+/-	6.2E-04
Phase delay (usec)	1.45805748554E+03	Apriori clockrate (us/s)	-1.0198613E-07	Resid phdelay (usec)	-9.23098E-06	+/-	5.3E-07
Delay rate (us/s)	-6.78142834564E-02	Apriori rate (us/s)	-6.78144537380E-02	Resid rate (us/s)	1.70282E-07	+/-	5.1E-09
Total phase (deg)	-26.6	Apriori accel (us/s/s)	-9.09965702144E-06	Resid phase (deg)	-143.4	+/-	8.2

ph/seg (deg)	RMS 37.7	Theor. 19.3	Amplitude Search (1024X32)	0.380 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	44.1	33.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	20.3	11.6	Inc. seg. avg.	0.441	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	16.7	20.3	Inc. frq. avg.	0.388	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023
f: az 66.6 el 46.8 pa -82.9			k: az 66.3 el 41.3 pa -77.6		Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fk.3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fk.Q.147.3MP56K simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

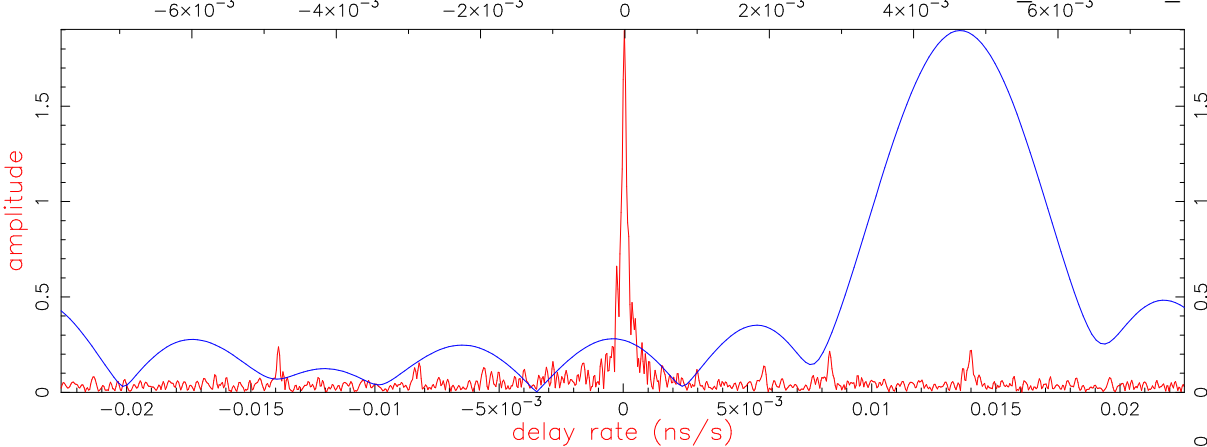
aux01

2013+370.3MP56K, No0500, fl

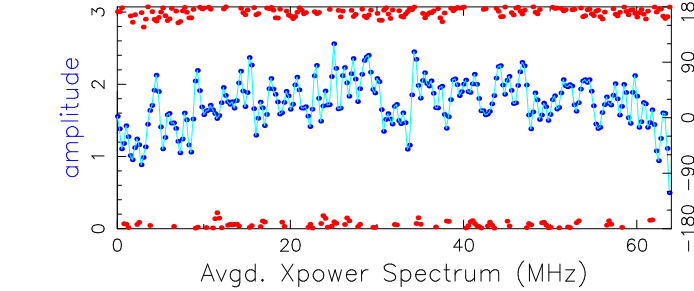
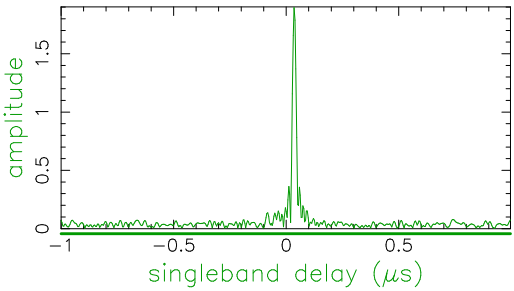
VLBA_FD - VLBA_LA, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 6

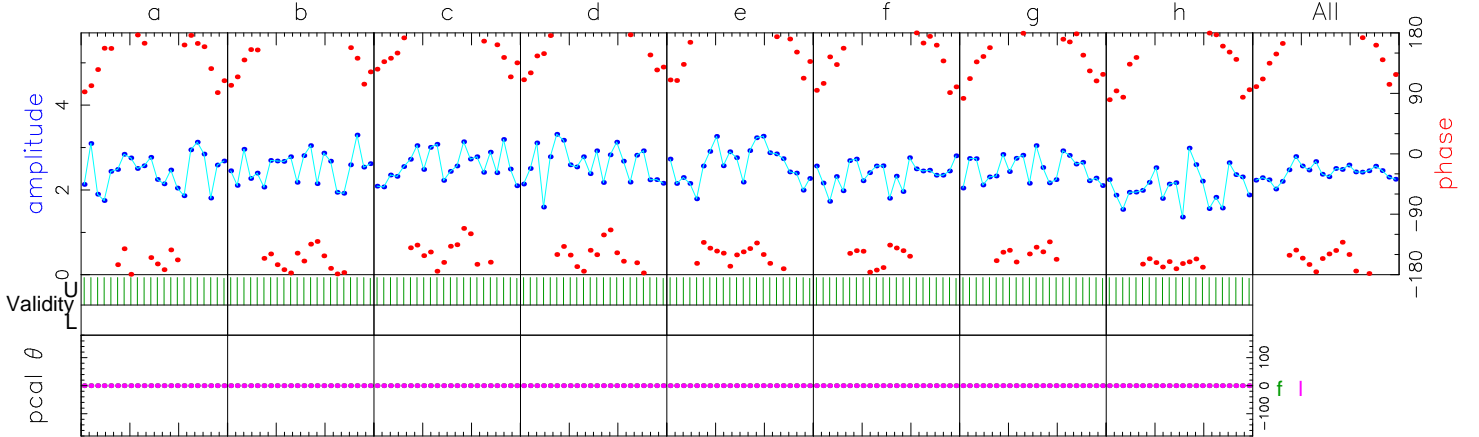


SNR 69.8
 Int time 179.973
 Amp 1.902
 Phase 221.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.035904
 MBD 0.004665
 Fringe rate (Hz)
 0.002553
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	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

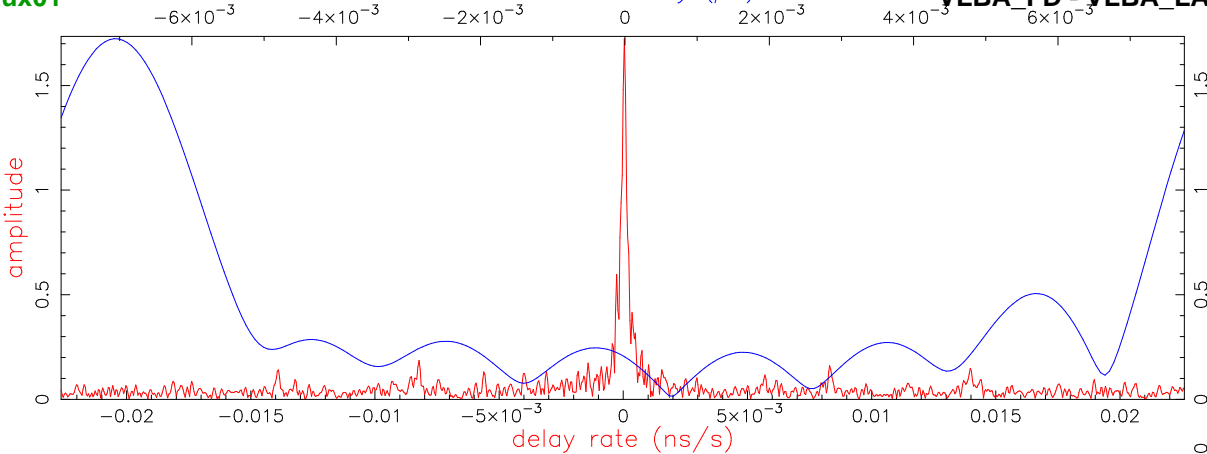
aux01

2013+370.3MP56K, No0500, fl

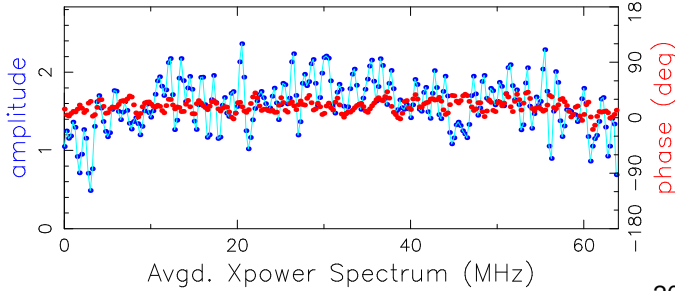
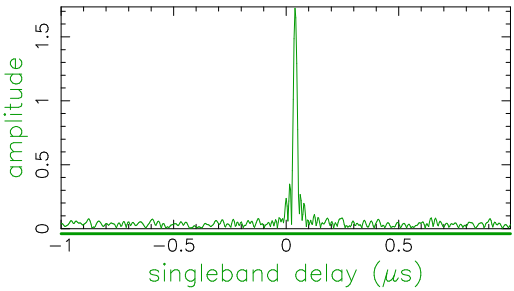
VLBA_FD - VLBA_LA, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 5

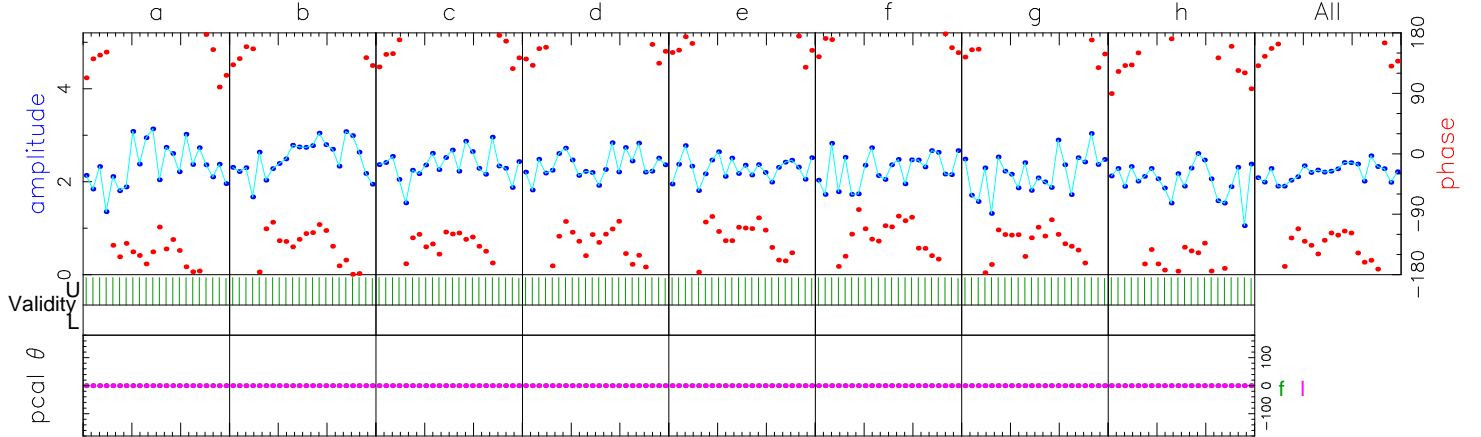


SNR 63.6
 Int time 179.973
 Amp 1.735
 Phase 89.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.040102
 MBD -0.007033
 Fringe rate (Hz) 0.002739
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



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	mb window (us) -0.008 0.008
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	ion window (TEC) 0.00 0.00

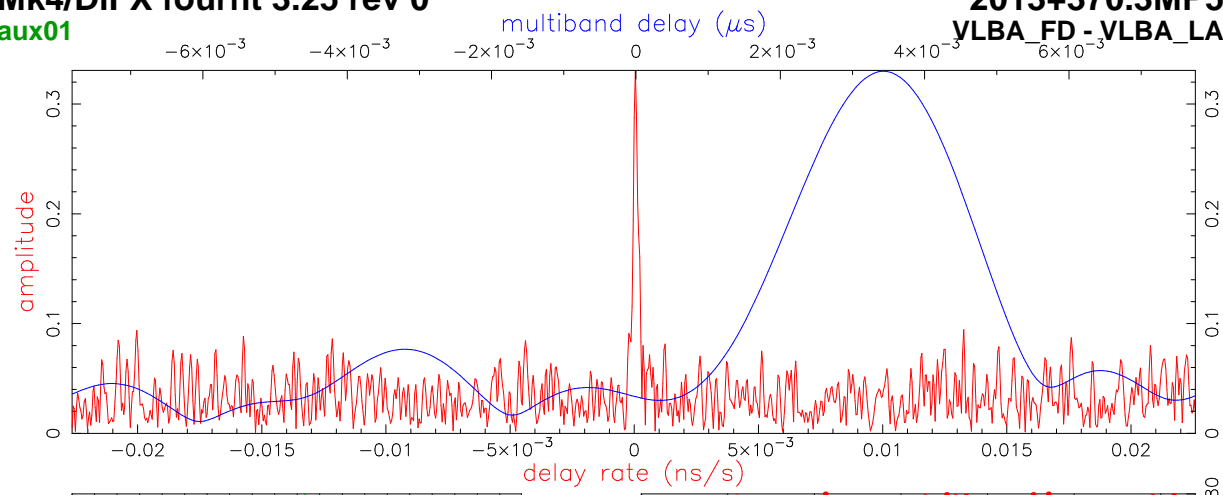
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fl..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fl.Q.123.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fl

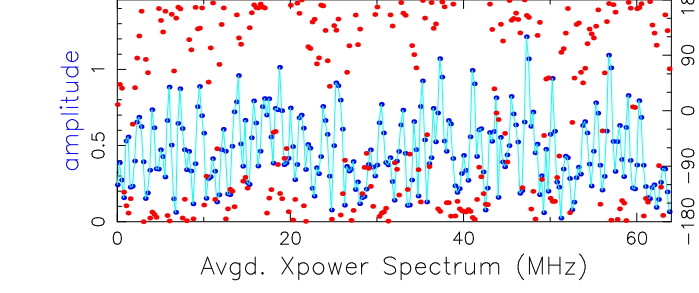
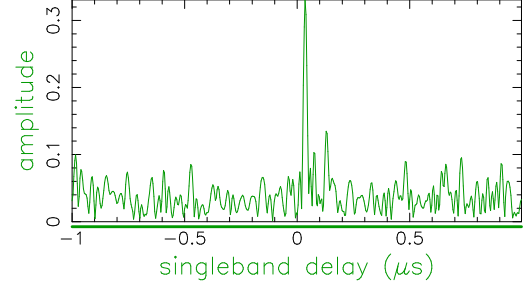
VLBA_FD - VLBA_LA, fgroup Q, pol LR



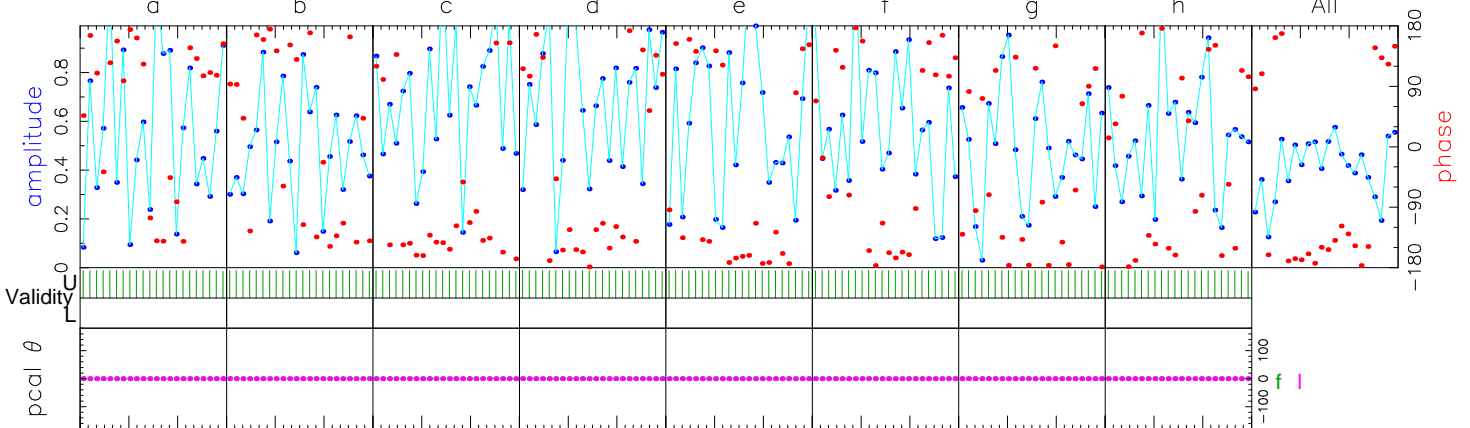
Fringe quality 9

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 22.2 Search (1024X32) 0.329 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.9 38.7 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 13.4 Inc. seg. avg. 0.381 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.0 23.3 Inc. frq. avg. 0.330 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 ion window (TEC) 0.00 0.00
 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 simultaneous interpolator

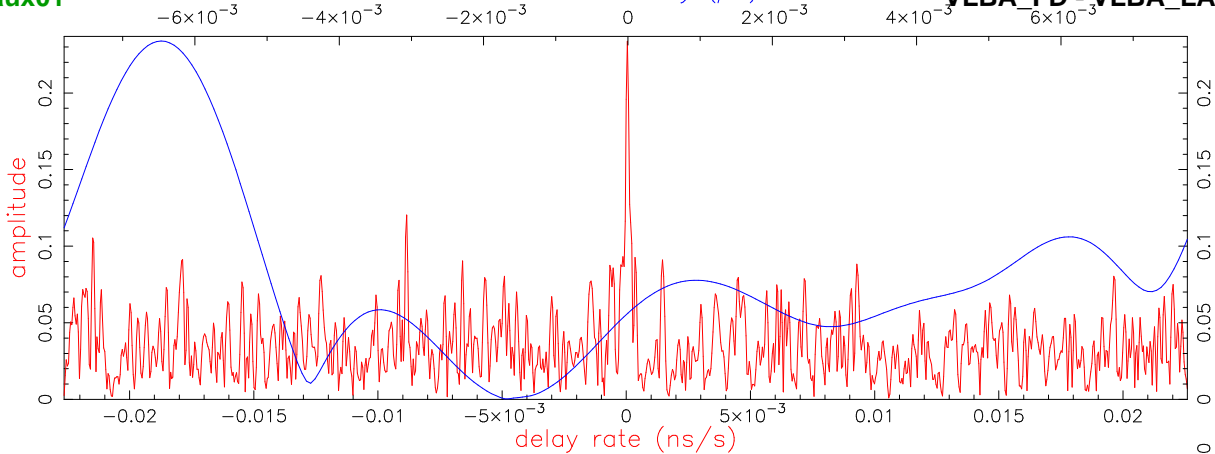
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fl

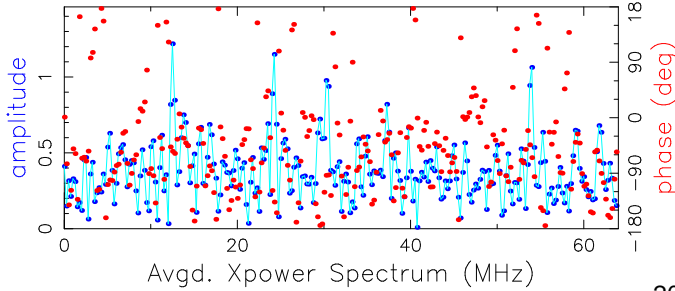
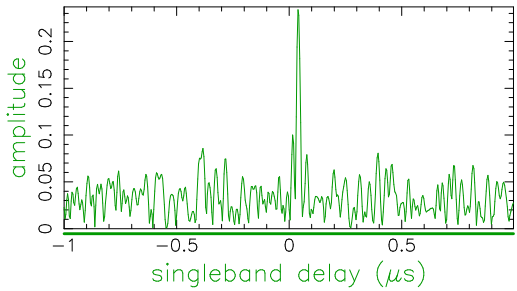
VLBA_FD - VLBA_LA, fgroup Q, pol RL

multiband delay (μ s)



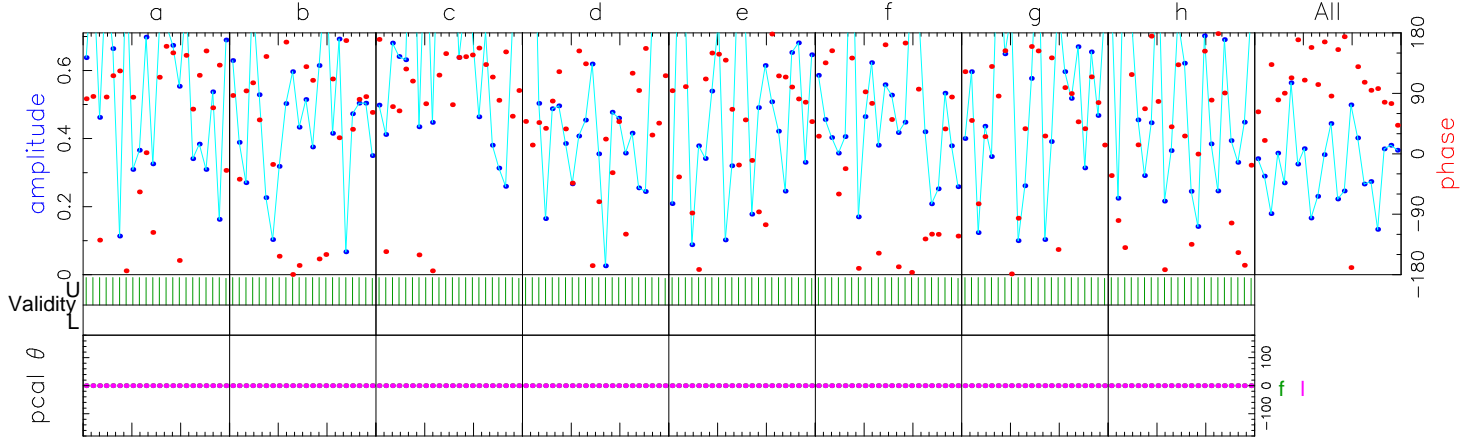
Fringe quality 9

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

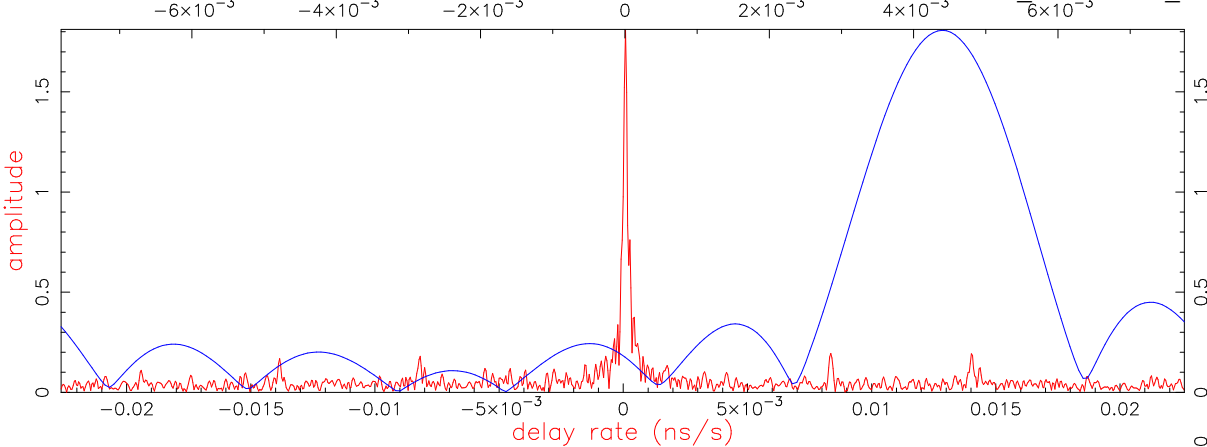
aux01

2013+370.3MP56K, No0500, fn

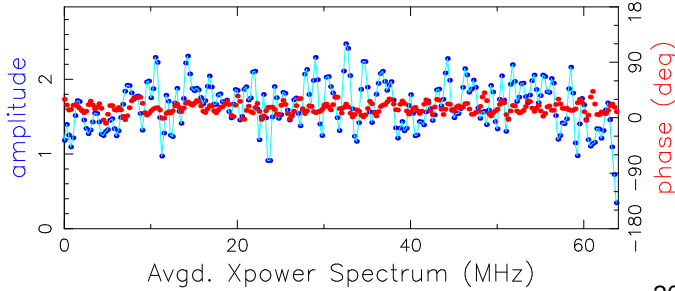
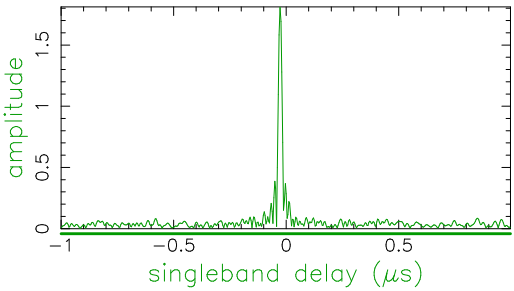
VLBA_FD - VLBA_NL, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 7

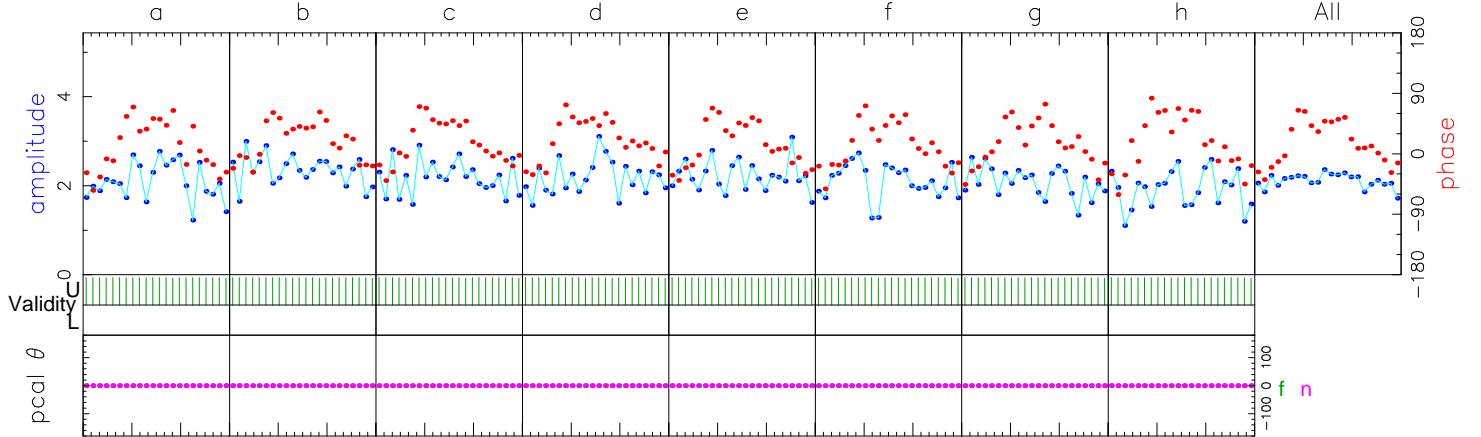


SNR 66.4
 Int time 179.663
 Amp 1.812
 Phase -28.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.026696
 MBD 0.004416
 Fringe rate (Hz) 0.003736
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151756
 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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-2.75319599695E+03	Apriori delay (usec)	-2.75316916279E+03	Resid mbdelay (usec)	4.41584E-03	+/-	1.6E-05
Sband delay (usec)	-2.75319585929E+03	Apriori clock (usec)	3.4478951E-01	Resid sbdelay (usec)	-2.66965E-02	+/-	1.3E-04
Phase delay (usec)	-2.75316916169E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	1.09628E-06	+/-	1.1E-07
Delay rate (us/s)	2.50178247293E-01	Apriori rate (us/s)	2.50178160689E-01	Resid rate (us/s)	8.66037E-08	+/-	1.1E-09
Total phase (deg)	-273.8	Apriori accel (us/s/s)	3.96002113081E-06	Resid phase (deg)	-28.0	+/-	1.7

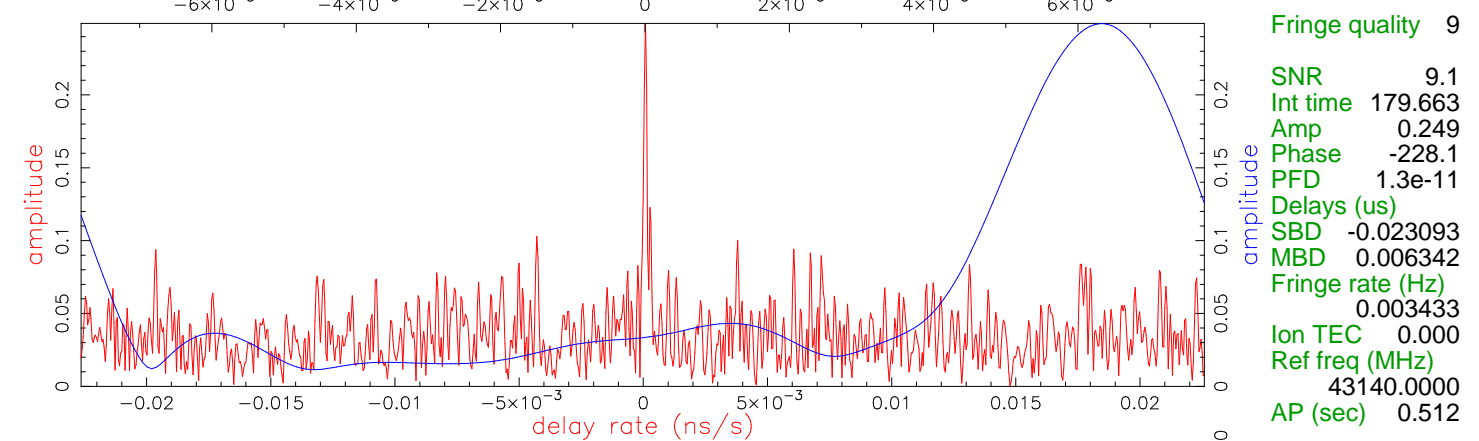
ph/seg (deg)	31.5	Theor.	4.0	Amplitude	1.812 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	18.6		7.1	Search (1024X32)	1.805	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	3.8		2.4	Inc. seg. avg.	2.108	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	8.6		4.3	Inc. frq. avg.	1.809	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		n: az 85.1 el 59.3 pa -68.9		u,v (fr/asec)	-901.185 -428.164	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/fn..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/fn.Q.119.3MP56K		simultaneous interpolator				

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fn

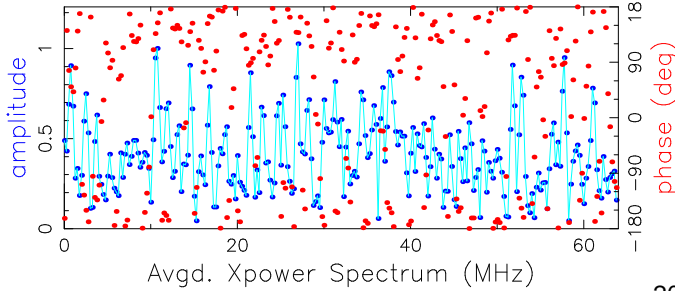
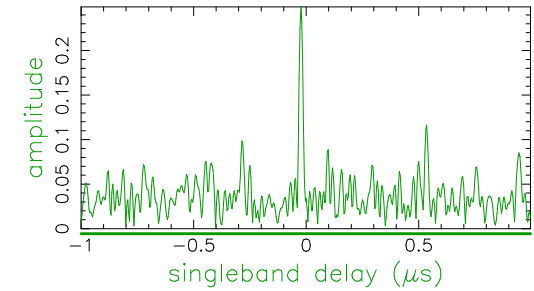
VLBA_FD - VLBA_NL, fgroup Q, pol LR



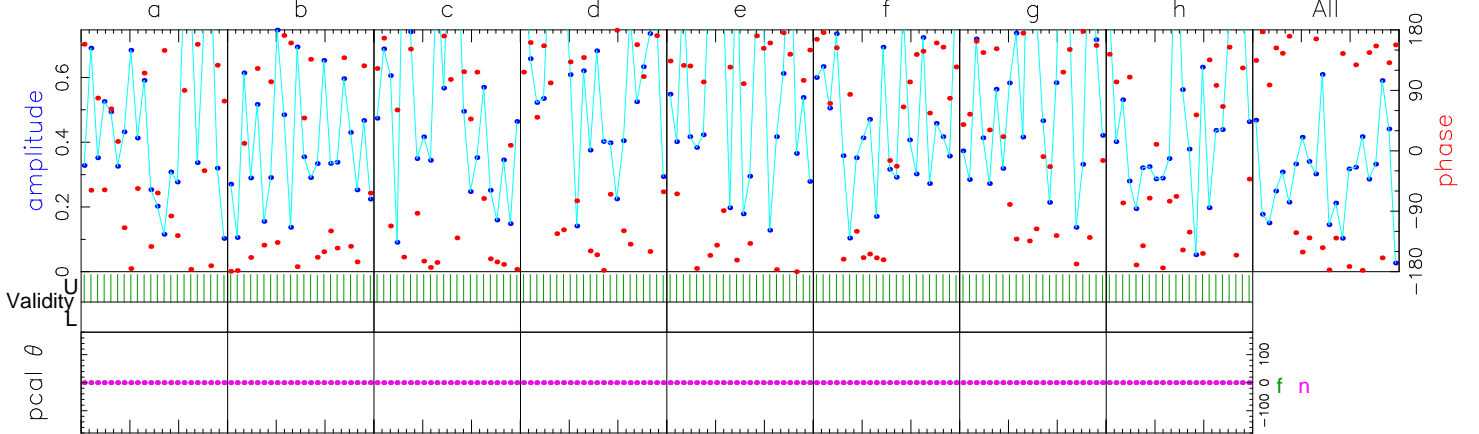
Fringe quality 9

SNR 9.1
 Int time 179.663
 Amp 0.249
 Phase -228.1
 PFD 1.3e-11
 Delays (us)
 SBD -0.023093
 MBD 0.006342
 Fringe rate (Hz) 0.003433
 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
	-170.3	-179.1	-178.3	175.9	172.2	147.4	-167.2	-167.3	Phase	176.9
	0.1	0.2	0.3	0.3	0.4	0.3	0.2	0.2	Ampl.	0.2
	405.6	311.4	24.6	250.0	250.7	249.9	475.9	392.7	Sbd box	251.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-2.75319407098E+03	Apriori delay (usec)	-2.75316916279E+03	Resid mbdelay (usec)	6.34181E-03	+/-	1.2E-04
Sband delay (usec)	-2.75319225554E+03	Apriori clock (usec)	3.4478951E-01	Resid sbdelay (usec)	-2.30928E-02	+/-	9.4E-04
Phase delay (usec)	-2.75316915140E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	1.13891E-05	+/-	8.1E-07
Delay rate (us/s)	2.50178240261E-01	Apriori rate (us/s)	2.50178160689E-01	Resid rate (us/s)	7.95721E-08	+/-	7.8E-09
Total phase (deg)	-113.9	Apriori accel (us/s/s)	3.96002113081E-06	Resid phase (deg)	-228.1	+/-	12.6

ph/seg (deg)	RMS 36.9	Theor. 29.4	Amplitude Search (1024X32)	0.247	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.0	51.4	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)	16.3	17.8	Inc. seg. avg.	0.272	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 (%)	38.6	31.0	Inc. frq. avg.	0.244	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	

f: az 66.6 el 46.8 pa -82.9 n: az 85.1 el 59.3 pa -68.9 u,v (fr/asec) -901.185 -428.164 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fn..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fn.Q.140.3MP56K

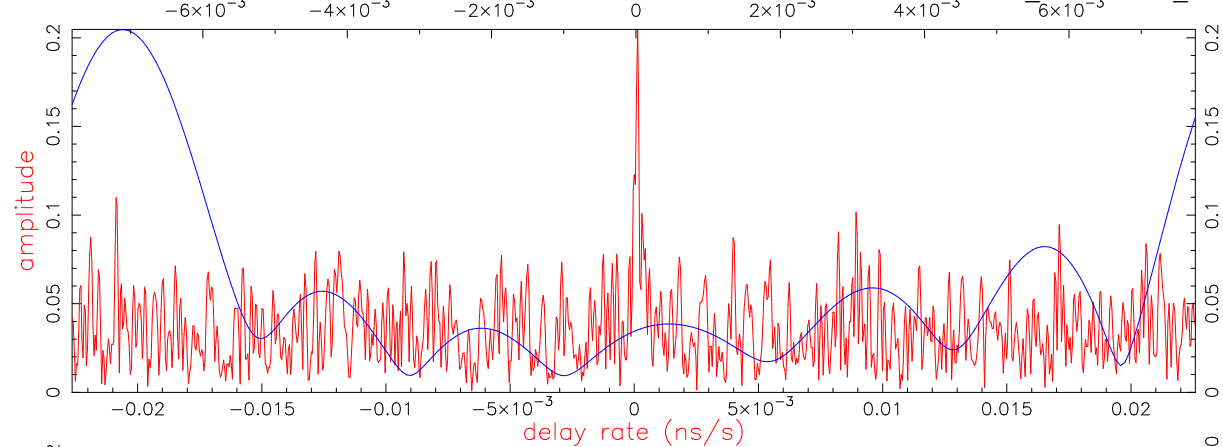
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fn

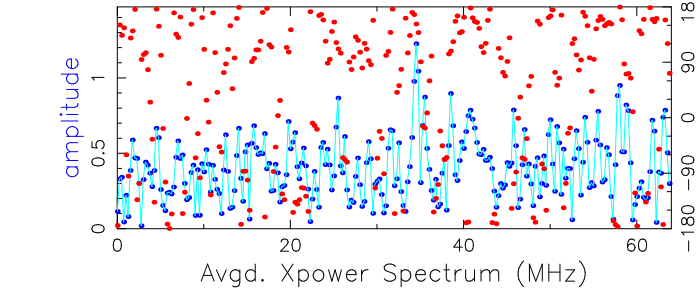
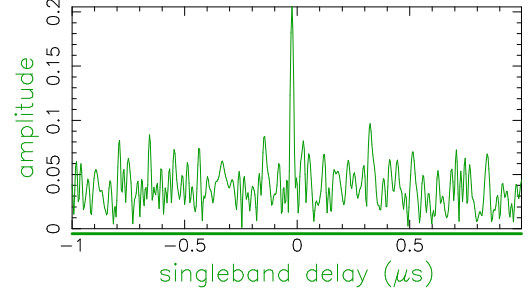
VLBA_FD - VLBA_NL, fgroup Q, pol RL

multiband delay (μ s)



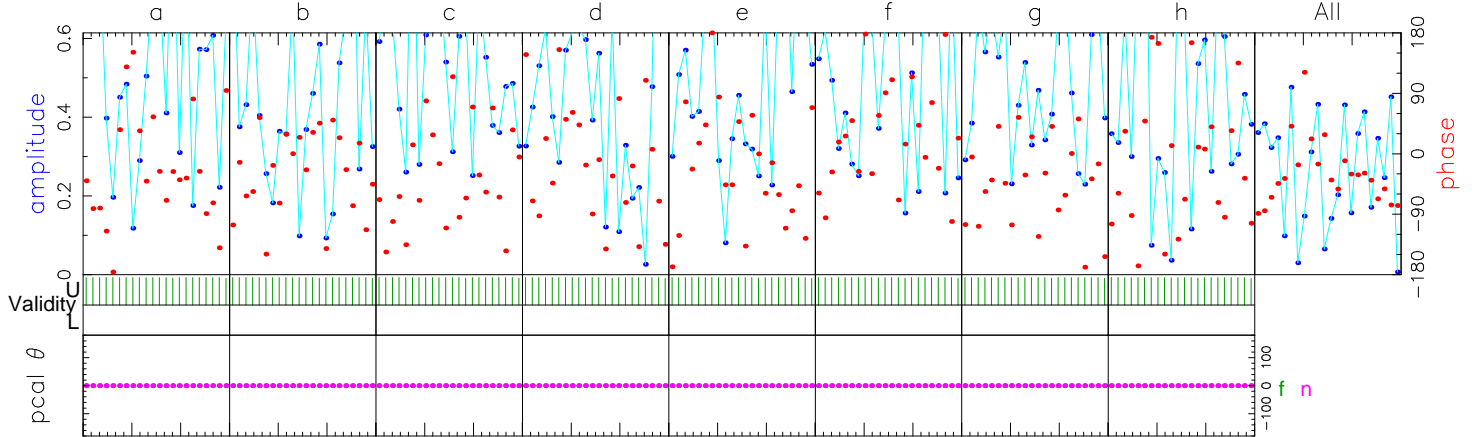
Fringe quality 9

SNR 7.5
 Int time 179.663
 Amp 0.205
 Phase -239.9
 PFD 9.9e-06
 Delays (us)
 SBD -0.023181
 MBD -0.007107
 Fringe rate (Hz)
 0.004906
 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
 2025:042:151804
 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	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-2.75319189473E+03	Apriori delay (usec)	-2.75316916279E+03	Resid mbdelay (usec)	-7.10694E-03	+/-	1.4E-04
Sband delay (usec)	-2.75319234354E+03	Apriori clock (usec)	3.4478951E-01	Resid sbdelay (usec)	-2.31807E-02	+/-	1.1E-03
Phase delay (usec)	-2.75316916520E+03	Apriori clockrate (us/s)	-2.4704002E-07	Resid phdelay (usec)	-2.40765E-06	+/-	9.8E-07
Delay rate (us/s)	2.50178274421E-01	Apriori rate (us/s)	2.50178160689E-01	Resid rate (us/s)	1.13731E-07	+/-	9.4E-09
Total phase (deg)	-125.7	Apriori accel (us/s/s)	3.96002113081E-06	Resid phase (deg)	-239.9	+/-	15.3

ph/seg (deg)	48.2	Theor.	35.8	Amplitude	0.205 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.4	Search (1024X32)	0.194	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.8	Inc. seg. avg.	0.225	Inc. frq. avg.	0.197	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.4	Inc. frq. avg.	0.197			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		n: az 85.1 el 59.3 pa -68.9		u,v (fr/asec)	-901.185 -428.164	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

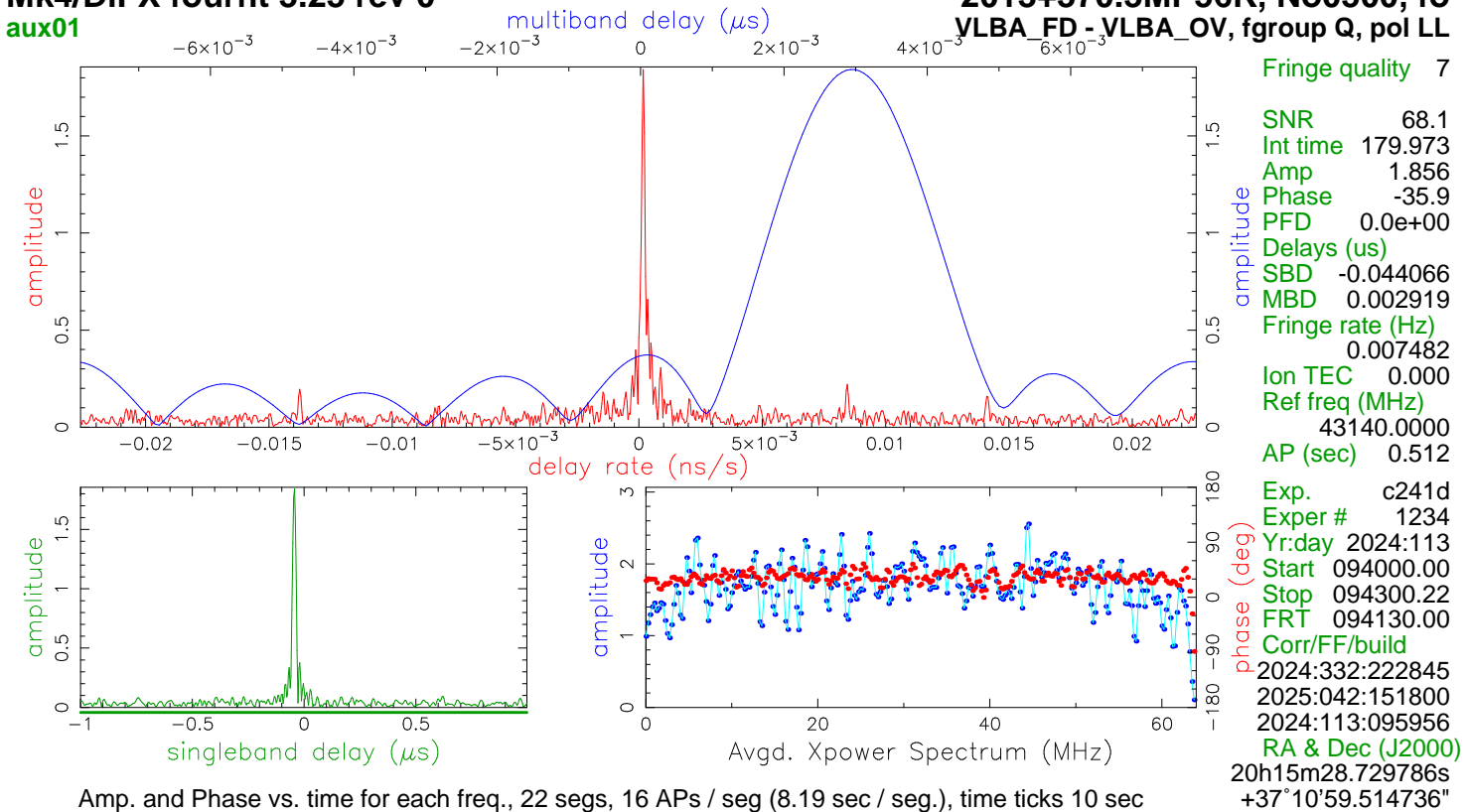
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fn..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fn.Q.159.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

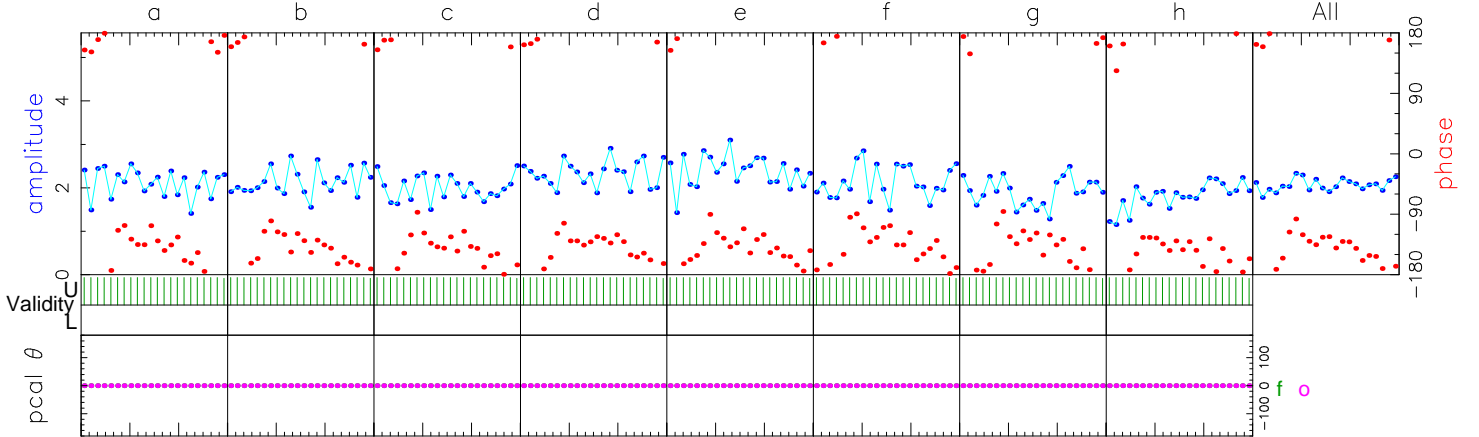
aux01

2013+370.3MP56K, No0500, fo

VLBA_FD - VLBA_OV, 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	
	-155.9	-149.7	-150.7	-147.1	-143.0	-139.7	-150.1	-153.1	Phase	-148.4	
	1.8	1.9	1.7	2.1	2.2	1.9	1.6	1.6	Ampl.	1.8	
	245.7	245.9	245.7	245.7	245.7	245.8	245.5	245.7	Sbd box	245.7	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
fo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
o	1000	1000	1000	1000	1000	1000	1000	1000			
f	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)	2.30643262397E+03			Apriori delay (usec)	2.30647657966E+03			Resid mbdelay (usec)	2.91931E-03	+/- 1.6E-05	
Sband delay (usec)	2.30643251416E+03			Apriori clock (usec)	-2.4995510E+01			Resid sbdelay (usec)	-4.40655E-02	+/- 1.3E-04	
Phase delay (usec)	2.30647657011E+03			Apriori clockrate (us/s)	-4.3105211E-07			Resid phdelay (usec)	-9.55404E-06	+/- 1.1E-07	
Delay rate (us/s)	-6.48184221479E-02			Apriori rate (us/s)	-6.48185955760E-02			Resid rate (us/s)	1.73428E-07	+/- 1.0E-09	
Total phase (deg)		-163.1		Apriori accel (us/s/s)	-1.89109025605E-05			Resid phase (deg)	-35.9	+/- 1.7	
RMS	27.4	3.9		Amplitude	1.856 +/- 0.027			Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	27.4	3.9		Search (1024X32)	1.837			Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	13.7	6.9		Interp.	0.000			Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	5.7	2.4		Inc. seg. avg.	2.064			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
amp/frq (%)	10.0	4.2		Inc. frq. avg.	1.847			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				o: az 68.4 el 38.3 pa -68.5				u,v (fr/asec) 225.225 -903.975		simultaneous interpolator	
Control file: cf_1234_gmva				Input file: /Exps/c241d/v1/7mm/1234/No0500/fo..3MP56K				Output file: /Exps/c241d/v1/7mm/1234/No0500/fo.Q.141.3MP56K			

Mk4/DiFX fourfit 3.25 rev 0

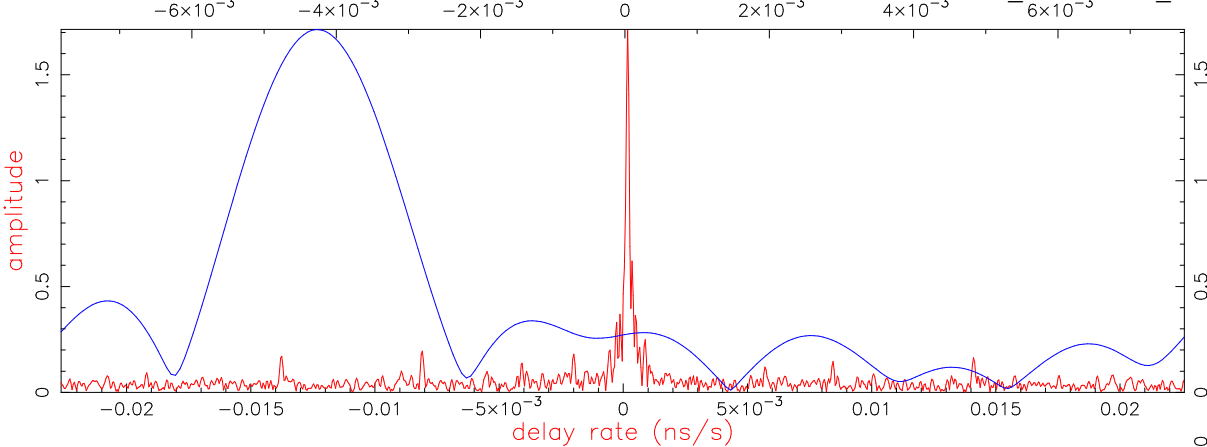
aux01

2013+370.3MP56K, No0500, fo

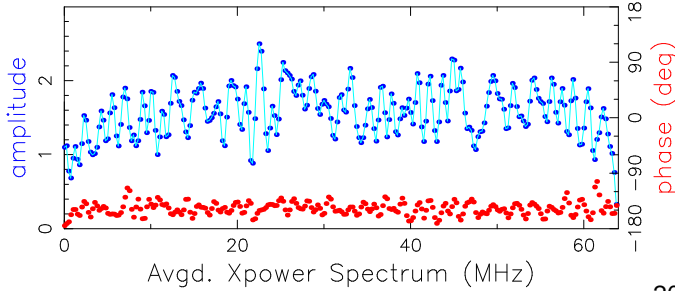
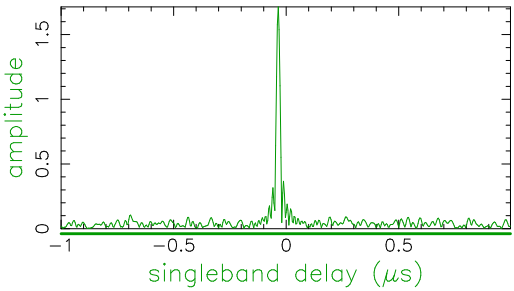
VLBA_FD - VLBA_OV, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 7

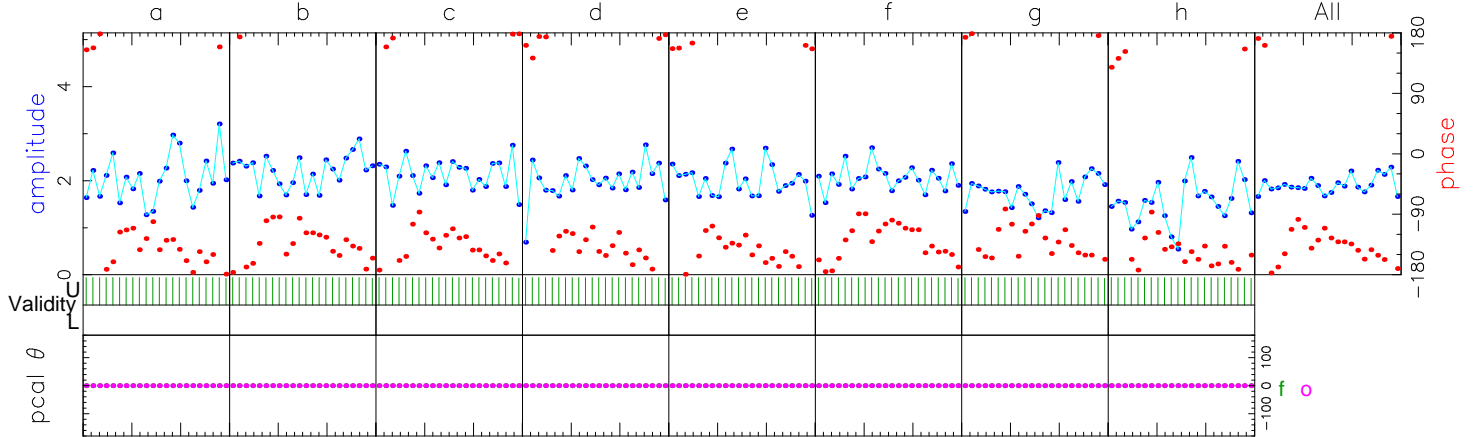


SNR 62.9
 Int time 179.973
 Amp 1.715
 Phase -191.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.035394
 MBD -0.004267
 Fringe rate (Hz) 0.007514
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



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

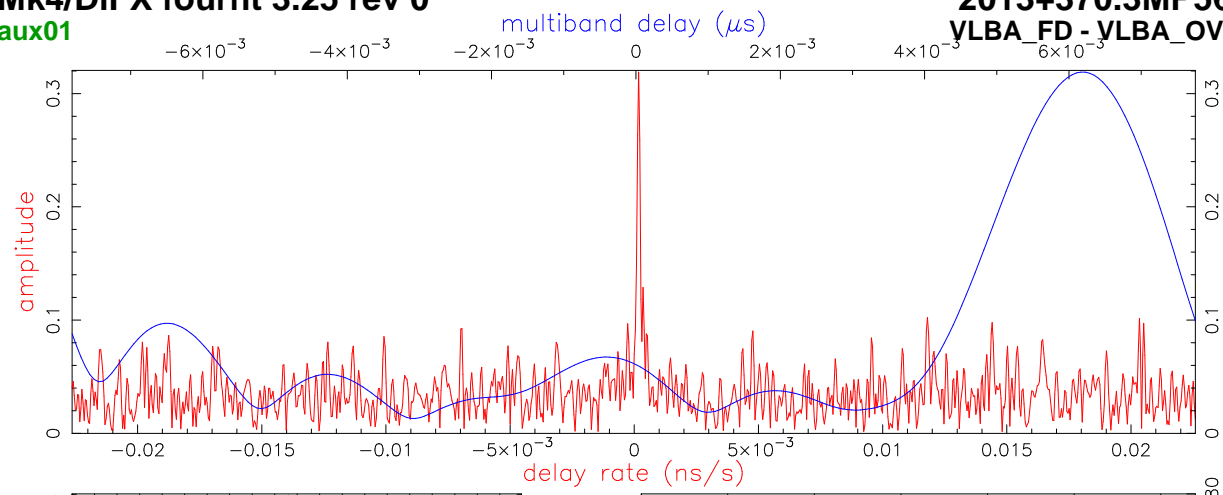


	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

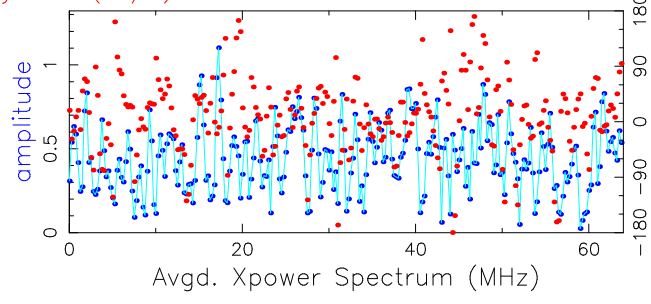
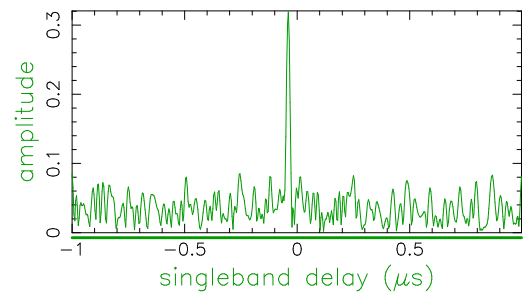
Group delay (usec) (SBD) 2.30644106269E+03 Apriori delay (usec) 2.30647657966E+03 Resid mbdelay (usec) -4.26697E-03 +/- 1.7E-05
 Sband delay (usec) 2.30644118541E+03 Apriori clock (usec) -2.4995510E+01 Resid sbdelay (usec) -3.53943E-02 +/- 1.4E-04
 Phase delay (usec) 2.30647657026E+03 Apriori clockrate (us/s) -4.3105211E-07 Resid phdelay (usec) -9.40307E-06 +/- 1.2E-07
 Delay rate (us/s) -6.48184213981E-02 Apriori rate (us/s) -6.48185955760E-02 Resid rate (us/s) 1.74178E-07 +/- 1.1E-09
 Total phase (deg) -318.2 Apriori accel (us/s/s) -1.89109025605E-05 Resid phase (deg) -191.0 +/- 1.8

RMS Theor. Amplitude 1.715 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 26.9 4.3 Search (1024X32) 1.700 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 15.3 7.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 11.4 2.6 Inc. seg. avg. 1.907 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 11.8 4.5 Inc. frq. avg. 1.737 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

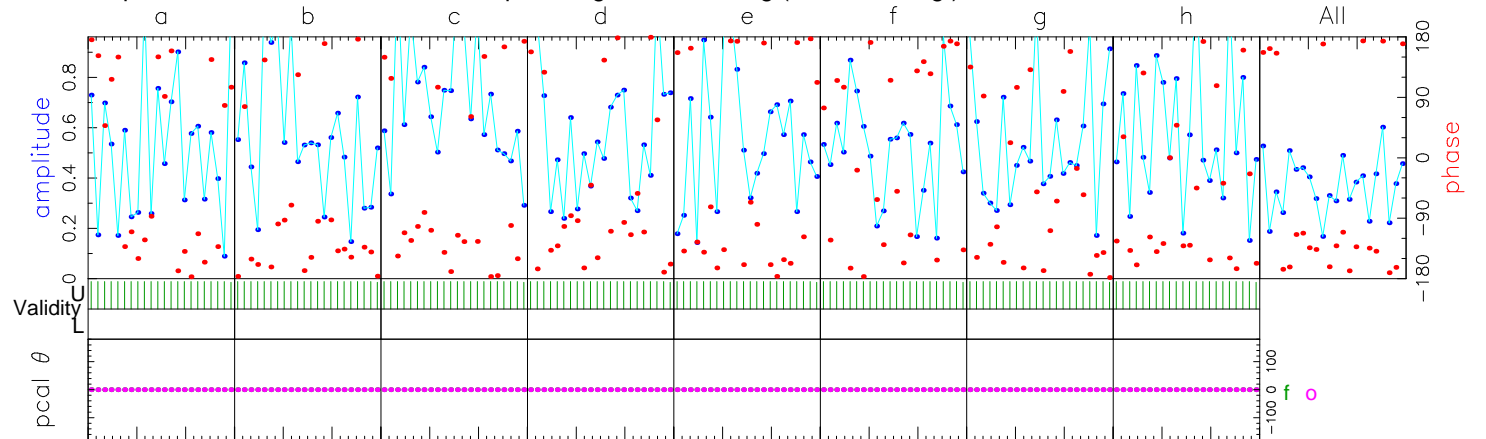
f: az 66.6 el 46.8 pa -82.9 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 225.225 -903.975 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fo.Q.153.3MP56K



Fringe quality 9
SNR 11.8
Int time 179.973
Amp 0.320
Phase -45.5
PFD 1.6e-23
Delays (us)
SBD -0.039928
MBD 0.006158
Fringe rate (Hz) 0.007546
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512
Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 094000.00
Stop 094300.22
FRT 094130.00
Corr/FF/build 2024:332:222845
2025:042:151807
2024:113:095956
RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



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



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

Group delay (usec) (SBD)	2.30643586291E+03	Apriori delay (usec)	2.30647657966E+03	Resid mbdelay (usec)	6.15825E-03	+/-	9.2E-05
Sband delay (usec)	2.30643665116E+03	Apriori clock (usec)	-2.4995510E+01	Resid sbdelay (usec)	-3.99285E-02	+/-	7.3E-04
Phase delay (usec)	2.30647656949E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	-1.01738E-05	+/-	6.3E-07
Delay rate (us/s)	-6.48184206482E-02	Apriori rate (us/s)	-6.48185955760E-02	Resid rate (us/s)	1.74928E-07	+/-	6.0E-09
Total phase (deg)	-172.7	Apriori accel (us/s/s)	-1.89109025605E-05	Resid phase (deg)	-45.5	+/-	9.7

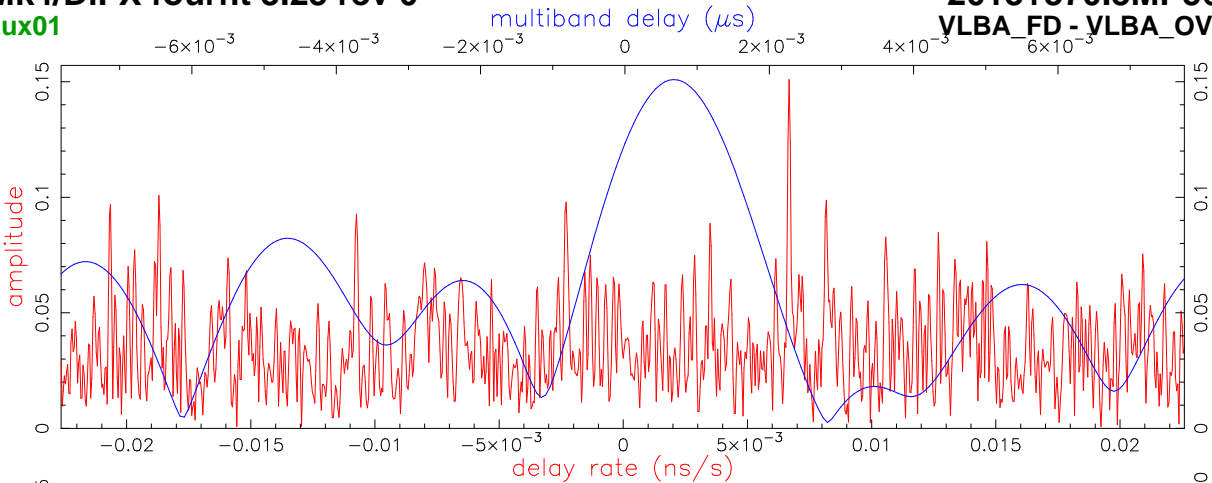
ph/seg (deg) 29.8 22.9 Search (1024X32) 0.315 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 38.1 39.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 17.6 13.8 Inc. seg. avg. 0.343 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 28.3 24.1 Inc. frq. avg. 0.320 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 66.6 el 46.8 pa -82.9 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 225.225 -903.975 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fo.Q.173.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

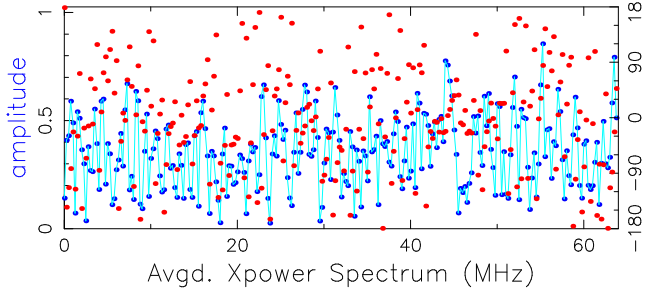
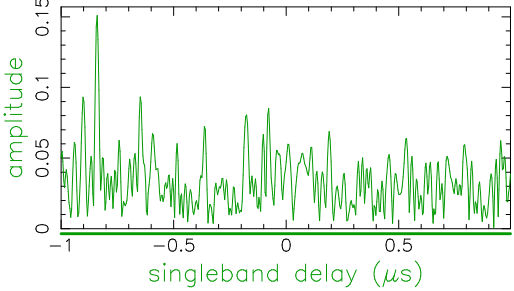
2013+370.3MP56K, No0500, fo

VLBA_FD - VLBA_OV, fgroup Q, pol RL



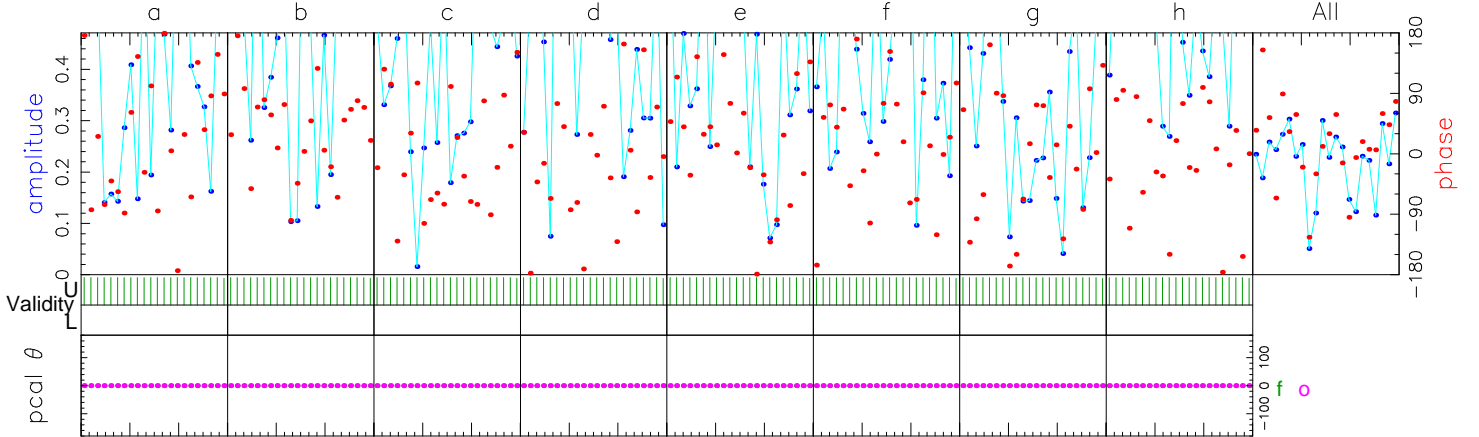
Fringe quality 0

SNR 5.6
 Int time 179.973
 Amp 0.157
 Phase -105.3
 PFD 9.6e-01
 Delays (us)
 SBD -0.840621
 MBD 0.000669
 Fringe rate (Hz)
 0.290032
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	2.30563349899E+03	Apriori delay (usec)	2.30647657966E+03	Resid mbdelay (usec)	6.69332E-04	+/-	2.0E-04
Sband delay (usec)	2.30563595916E+03	Apriori clock (usec)	-2.4995510E+01	Resid sbdelay (usec)	-8.40621E-01	+/-	1.6E-03
Phase delay (usec)	2.30647658158E+03	Apriori clockrate (us/s)	-4.3105211E-07	Resid phdelay (usec)	1.91376E-06	+/-	1.3E-06
Delay rate (us/s)	-6.48118725327E-02	Apriori rate (us/s)	-6.48185955760E-02	Resid rate (us/s)	6.72304E-06	+/-	1.3E-08
Total phase (deg)	-232.5	Apriori accel (us/s/s)	-1.89109025605E-05	Resid phase (deg)	-105.3	+/-	20.6

ph/seg (deg)	61.7	Theor.	48.4	Amplitude	0.157 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	64.5	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	31.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	61.9	Inc. seg. avg.	0.169	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	0.151	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.6 el 46.8 pa -82.9 o: az 68.4 el 38.3 pa -68.5 u,v (fr/asec) 225.225 -903.975 simultaneous interpolator

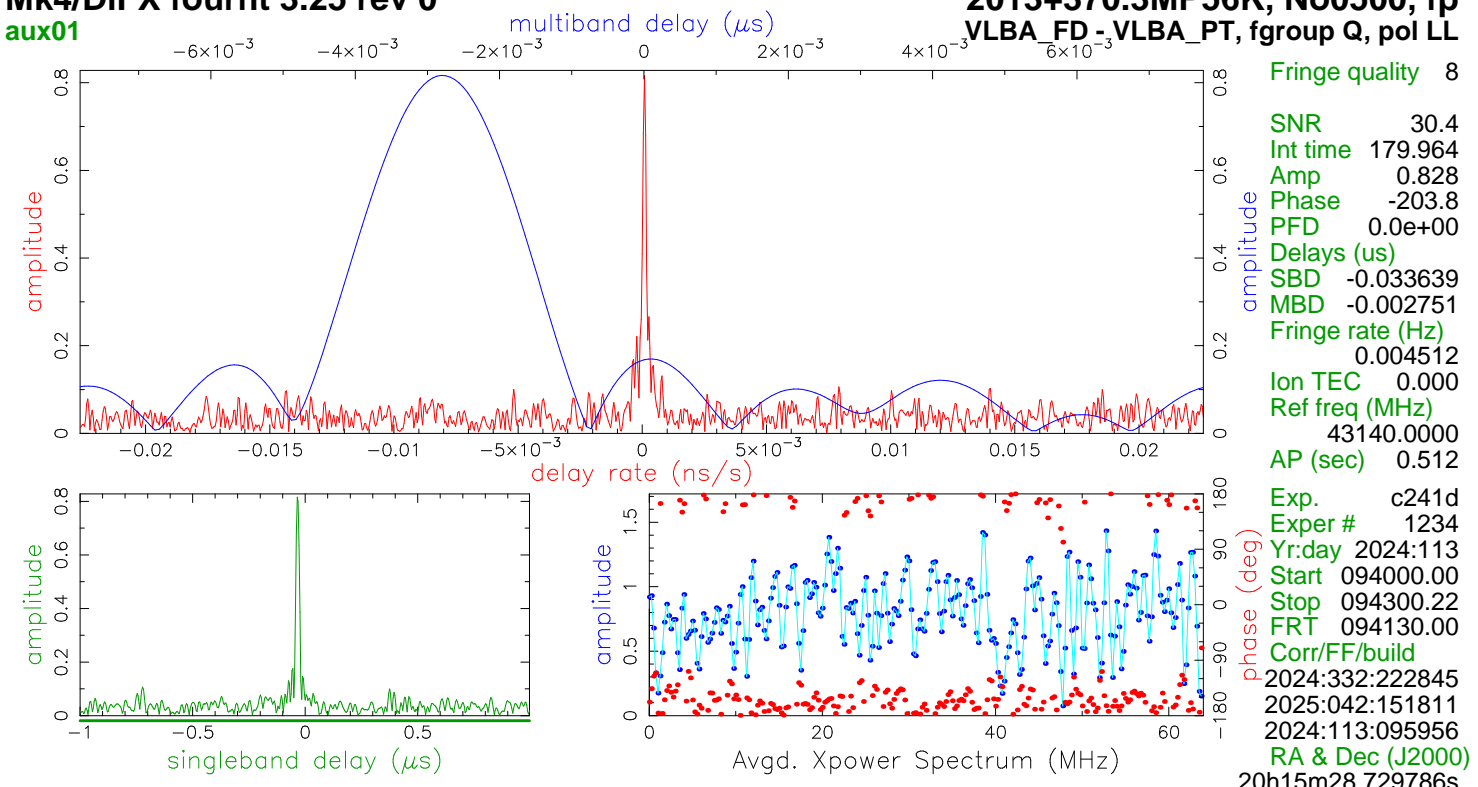
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fo..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fo.Q.201.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

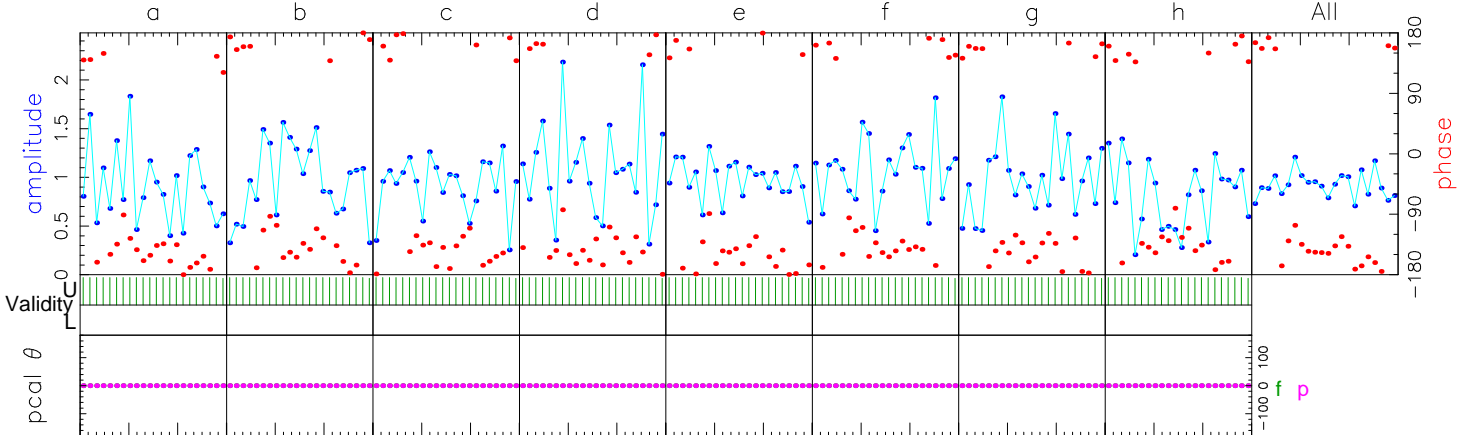
aux01

2013+370.3MP56K, No0500, fp

VLBA_FD - VLBA_PT, 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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	4.82396876918E+02	Apriori delay (usec)	4.82430877763E+02	Resid mbdelay (usec)	-2.75085E-03	+/-	3.6E-05
Sband delay (usec)	4.82397238763E+02	Apriori clock (usec)	-5.6430473E+00	Resid sbdelay (usec)	-3.36390E-02	+/-	2.8E-04
Phase delay (usec)	4.82430867537E+02	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	-1.02257E-05	+/-	2.4E-07
Delay rate (us/s)	-1.08612286592E-02	Apriori rate (us/s)	-1.08613332453E-02	Resid rate (us/s)	1.04586E-07	+/-	2.3E-09
Total phase (deg)	-179.8	Apriori accel (us/s/s)	-6.28280751795E-06	Resid phase (deg)	-203.8	+/-	3.8

ph/seg (deg) 28.0 8.8 Search (1024X32) 0.791 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.3 15.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.0 5.3 Inc. seg. avg. 0.913 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.9 9.3 Inc. frq. avg. 0.816 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 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 36.175 -378.872 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/fp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fp.Q.188.3MP56K simultaneous interpolator

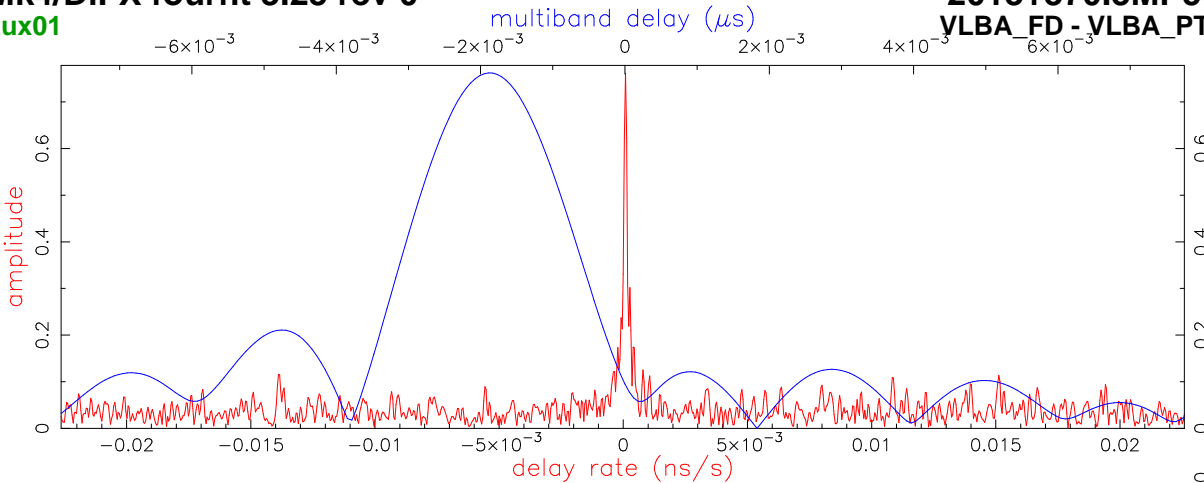
Mk4/DiFX fourfit 3.25 rev 0

aux01

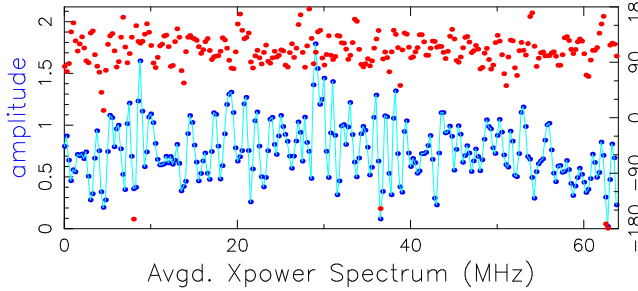
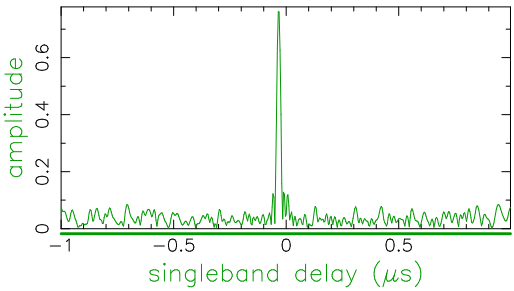
2013+370.3MP56K, No0500, fp

VLBA_FD - VLBA_PT, fgroup Q, pol RR

Fringe quality 8

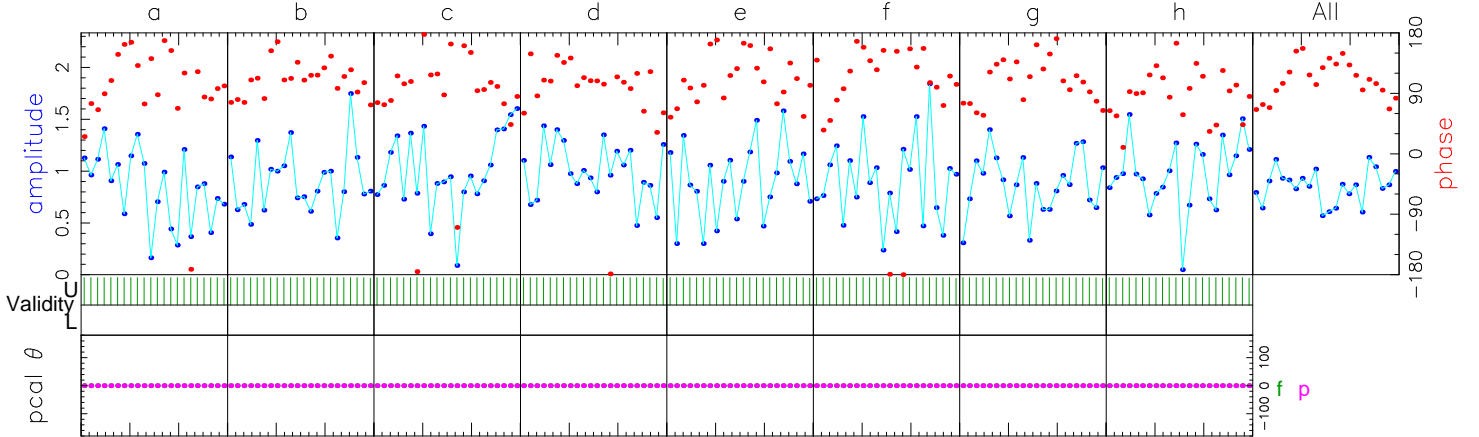


SNR 28.6
Int time 179.964
Amp 0.778
Phase -296.1
PFD 0.0e+00
Delays (us)
SBD -0.033240
MBD -0.001826
Fringe rate (Hz)
0.004324
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512



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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	4.82397801949E+02	Apriori delay (usec)		4.82430877763E+02	Resid mbdelay (usec)	-1.82581E-03	+/-	3.8E-05	
Sband delay (usec)	4.82397637763E+02	Apriori clock (usec)		-5.6430473E+00	Resid sbdelay (usec)	-3.32400E-02	+/-	3.0E-04	
Phase delay (usec)	4.82430884778E+02	Apriori clockrate (us/s)		-3.2847705E-07	Resid phdelay (usec)	7.01522E-06	+/-	2.6E-07	
Delay rate (us/s)	-1.08612330225E-02	Apriori rate (us/s)		-1.08613332453E-02	Resid rate (us/s)	1.00223E-07	+/-	2.5E-09	
Total phase (deg)		-272.0	Apriori accel (us/s/s)		-6.28280757195E-06	Resid phase (deg)	-296.1	+/-	4.0

ph/seg (deg)	27.5	9.4	Search (1024X32)	0.748	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	22.4	16.4	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	5.7	Inc. seg. avg.	0.841	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	7.9	9.9	Inc. frq. avg.	0.766	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023

f: az 66.6 el 46.8 pa -82.9 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 36.175 -378.872 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fp.Q.207.3MP56K

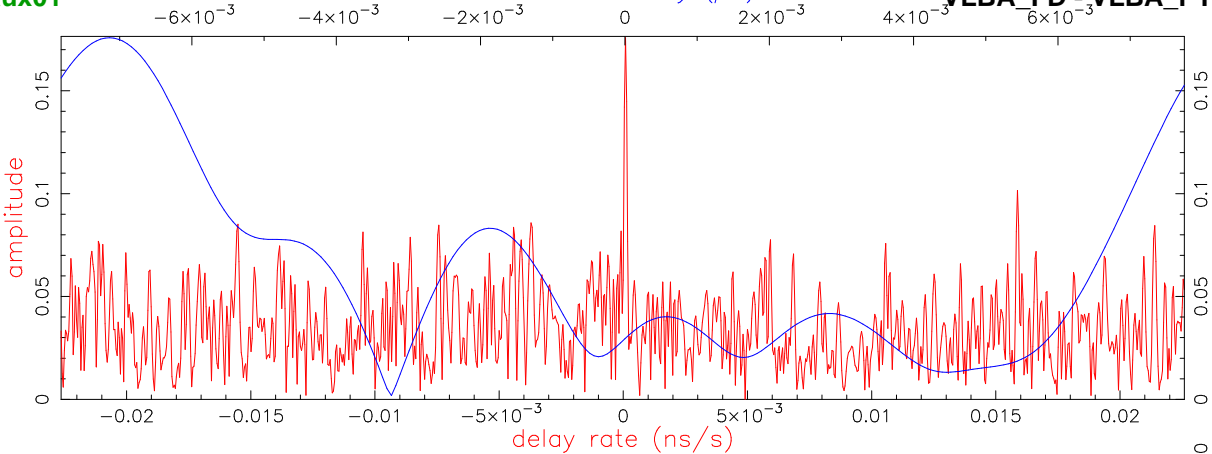
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fp

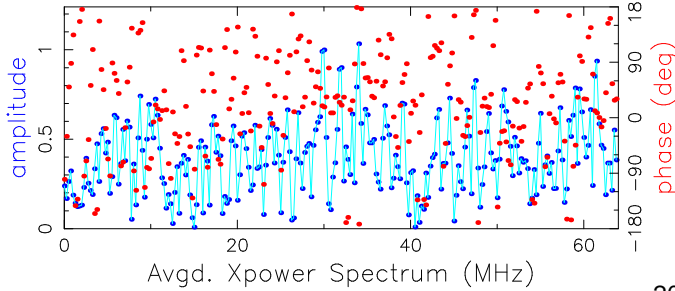
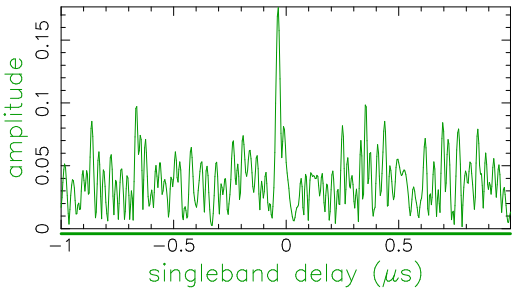
VLBA_FD - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



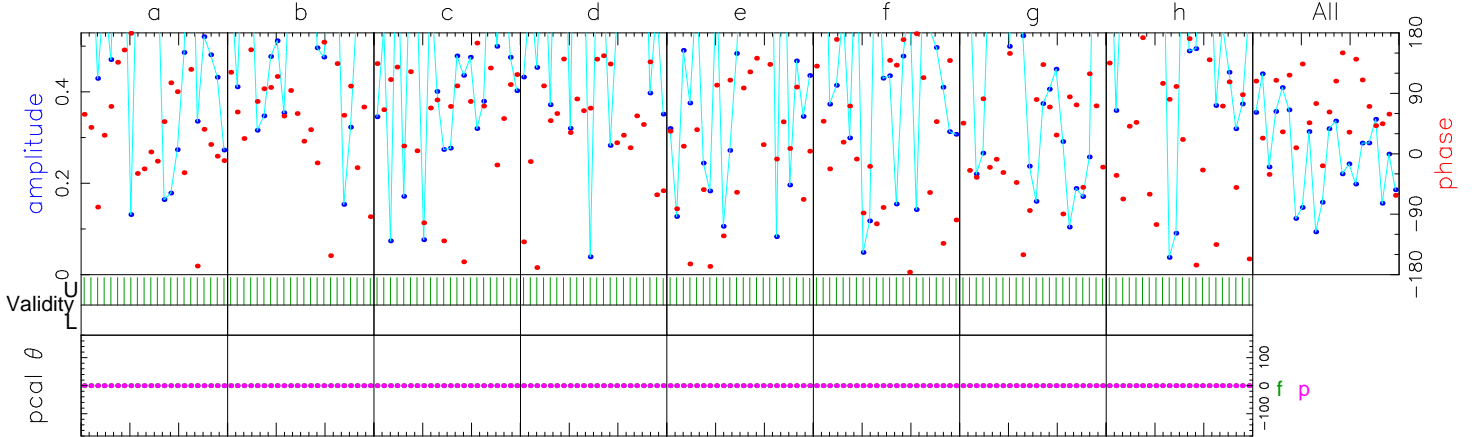
Fringe quality 0

SNR 6.5
 Int time 179.964
 Amp 0.176
 Phase -337.2
 PFD 1.3e-02
 Delays (us)
 SBD -0.036031
 MBD -0.007128
 Fringe rate (Hz)
 0.003900
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151816
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	4.82392499324E+02	Apriori delay (usec)	4.82430877763E+02	Resid mbdelay (usec)	-7.12844E-03	+/-	1.7E-04
Sband delay (usec)	4.82394846263E+02	Apriori clock (usec)	-5.6430473E+00	Resid sbdelay (usec)	-3.60315E-02	+/-	1.3E-03
Phase delay (usec)	4.82430882128E+02	Apriori clockrate (us/s)	-3.2847705E-07	Resid phdelay (usec)	4.36513E-06	+/-	1.1E-06
Delay rate (us/s)	-1.08612428357E-02	Apriori rate (us/s)	-1.08613332453E-02	Resid rate (us/s)	9.04096E-08	+/-	1.1E-08
Total phase (deg)	-313.2	Apriori accel (us/s/s)	-6.28280751795E-06	Resid phase (deg)	-337.2	+/-	17.7

ph/seg (deg)	56.0	Theor.	41.5	Amplitude	0.176 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.3		72.5	Search (1024X32)	0.174	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	42.3		25.0	Inc. seg. avg.	0.210	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.6		43.7	Inc. frq. avg.	0.185	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

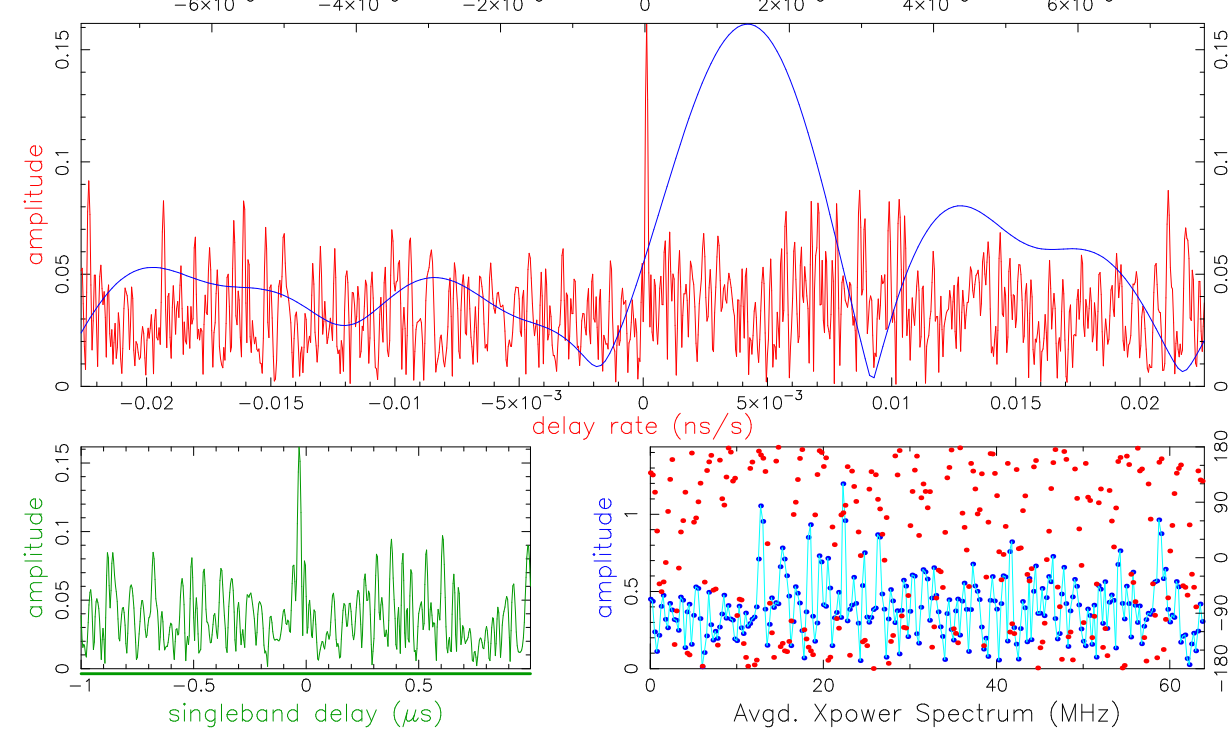
f: az 66.6 el 46.8 pa -82.9 p: az 69.2 el 44.9 pa -76.1 u,v (fr/asec) 36.175 -378.872 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fp..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fp.Q.221.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

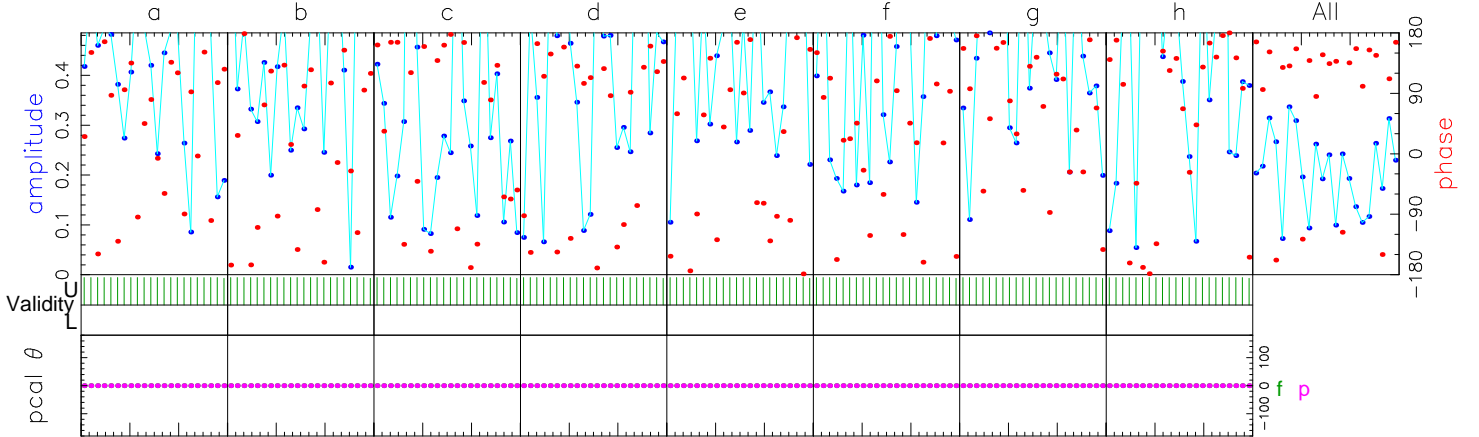
2013+370.3MP56K, No0500, fp

VLBA_FD - VLBA_PT, fgroup Q, pol RL



Fringe quality 0
 SNR 5.9
 Int time 179.964
 Amp 0.162
 Phase -255.4
 PFD 3.2e-01
 Delays (us)
 SBD -0.030639
 MBD 0.001444
 Fringe rate (Hz)
 0.004937
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151818
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	4.82401072135E+02				4.82430877763E+02				Resid mbdelay (usec)	1.44437E-03 +/- 1.8E-04
Sband delay (usec)	4.82400238263E+02				-5.6430473E+00				Resid sbdelay (usec)	-3.06395E-02 +/- 1.5E-03
Phase delay (usec)	4.82430887398E+02				-3.2847705E-07				Resid phdelay (usec)	9.63536E-06 +/- 1.2E-06
Delay rate (us/s)	-1.08612188121E-02				-1.08613332453E-02				Resid rate (us/s)	1.14433E-07 +/- 1.2E-08
Total phase (deg)			-231.3		-6.28280757195E-06				Resid phase (deg)	-255.4 +/- 19.3
	RMS	Theor.	Amplitude	0.162 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	40.0	45.3	Search (1024X32)	0.155					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	55.6	79.0	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	26.3	27.3	Inc. seg. avg.	0.159					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	51.2	47.7	Inc. frq. avg.	0.154					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			p: az 69.2 el 44.9 pa -76.1						u,v (fr/asec) 36.175 -378.872	simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0500/fp..3MP56K						Output file: /Exps/c241d/v1/7mm/1234/No0500/fp.Q.233.3MP56K	

Mk4/DiFX fourfit 3.25 rev 0

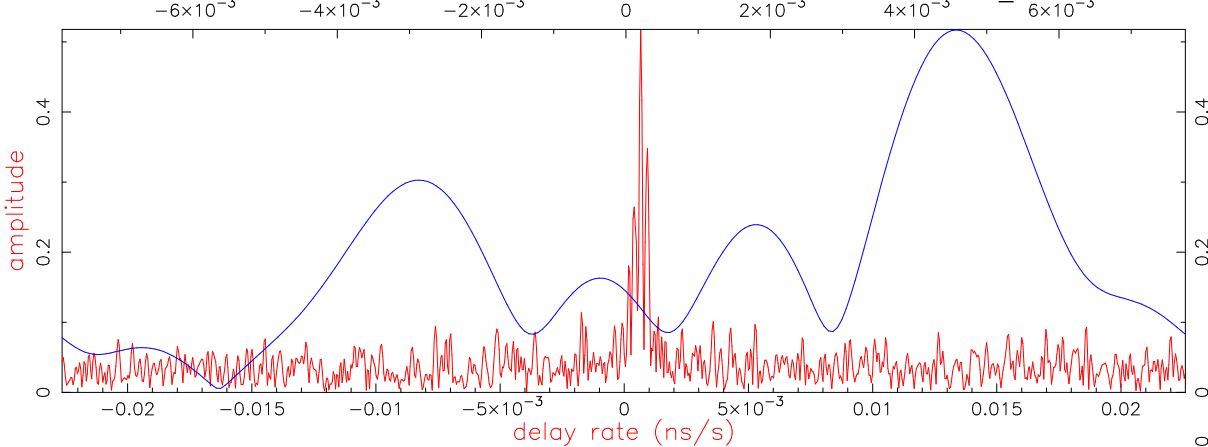
aux01

2013+370.3MP56K, No0500, fX

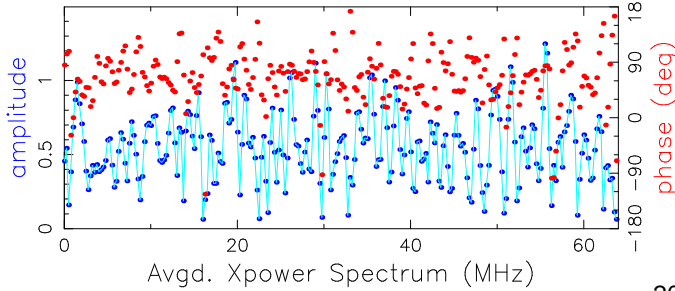
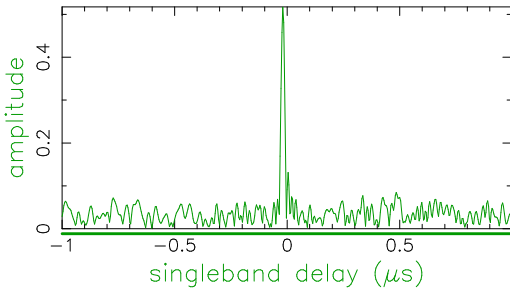
VLBA_FD - QNSALA60, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 8

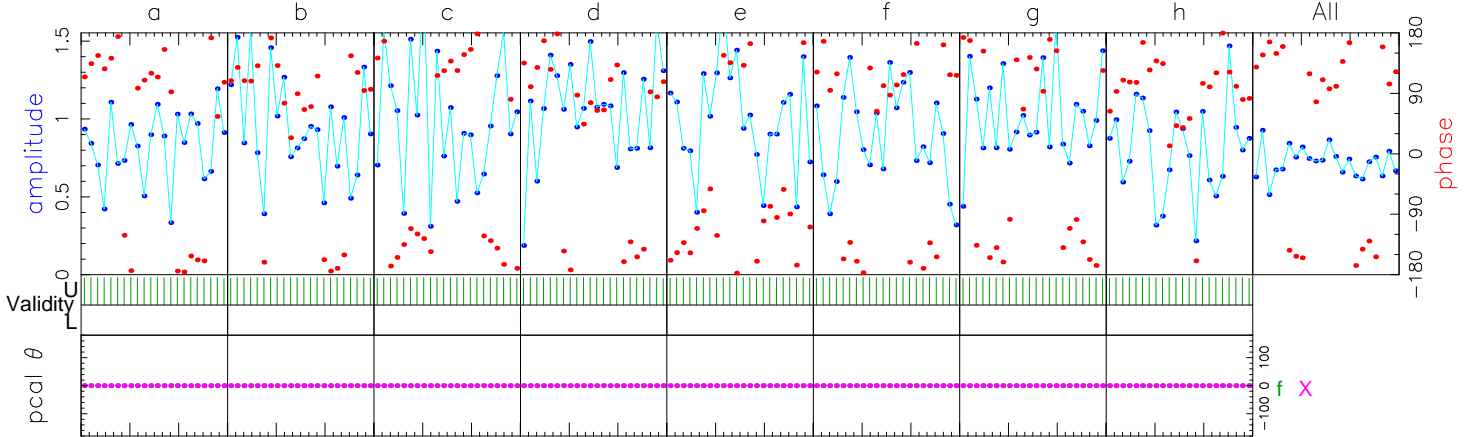


SNR 19.0
 Int time 179.824
 Amp 0.518
 Phase -250.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.019027
 MBD 0.004594
 Fringe rate (Hz)
 0.029287
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

Group delay (usec) (SBD)	6.59263320342E+02	Apriori delay (usec)	6.59289976605E+02	Resid mbdelay (usec)	4.59374E-03	+/-	5.7E-05
Sband delay (usec)	6.59270949105E+02	Apriori clock (usec)	-1.1286279E+02	Resid sbdelay (usec)	-1.90275E-02	+/-	4.5E-04
Phase delay (usec)	6.59289986548E+02	Apriori clockrate (us/s)	-1.1664031E-06	Resid phdelay (usec)	9.94274E-06	+/-	3.9E-07
Delay rate (us/s)	1.43529957677E+00	Apriori rate (us/s)	1.43529889788E+00	Resid rate (us/s)	6.78891E-07	+/-	3.7E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.68444574540E-05	Resid phase (deg)	-250.6	+/-	6.0

ph/seg (deg)	44.6	RMS	14.2	Theor.	44.6	Amplitude	0.518 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	43.5	Search (1024X32)	0.496	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	41.7	Inc. seg. avg.	0.702	Inc. frq. avg.	0.628	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	24.3	Inc. frq. avg.	0.628	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		X: az 272.4 el 44.4 pa 42.5		u, v (fr/asec)	-5184.846 -1945.508						simultaneous interpolator	

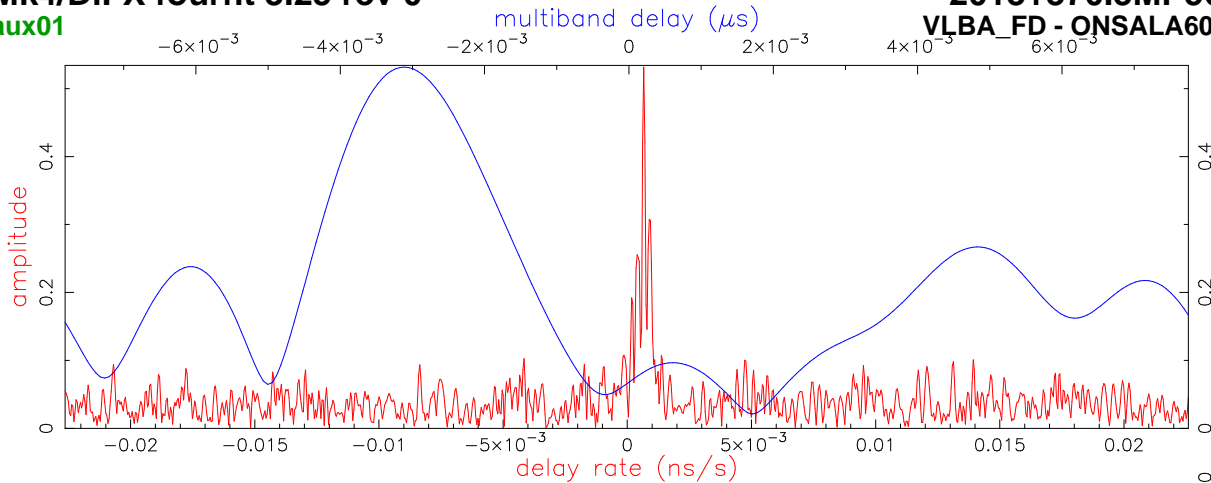
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fX.Q.143.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

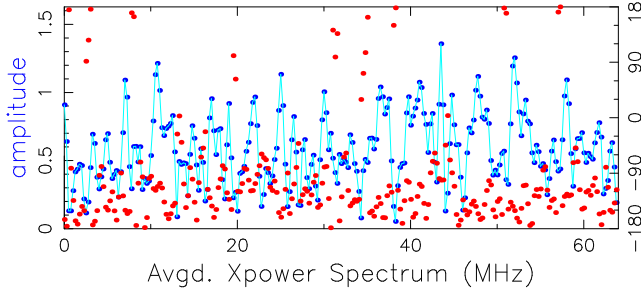
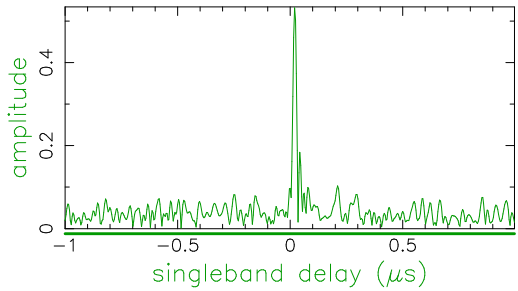
2013+370.3MP56K, No0500, fX

VLBA_FD - ONSALA60, fgroup Q, pol RR



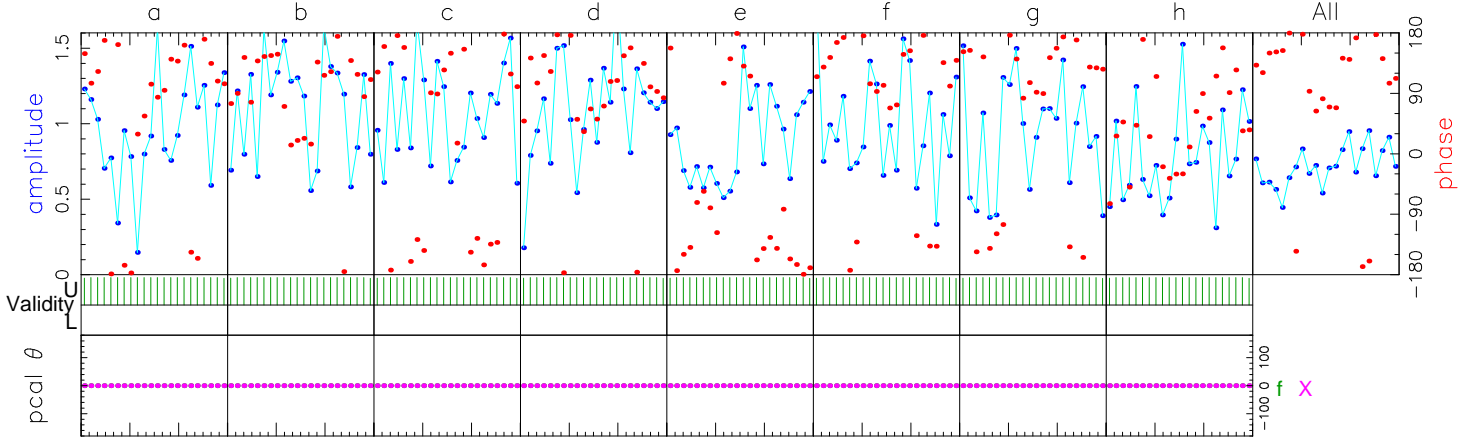
Fringe quality 8

SNR 19.6
 Int time 179.824
 Amp 0.534
 Phase 185.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.020367
 MBD -0.003096
 Fringe rate (Hz)
 0.029434
 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
 2025:042:151805
 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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	6.59318130967E+02	Apriori delay (usec)	6.59289976605E+02	Resid mbdelay (usec)	-3.09564E-03	+/-	5.5E-05
Sband delay (usec)	6.59310343605E+02	Apriori clock (usec)	-1.1286279E+02	Resid sbdelay (usec)	2.03670E-02	+/-	4.4E-04
Phase delay (usec)	6.59289985647E+02	Apriori clockrate (us/s)	-1.1664031E-06	Resid phdelay (usec)	9.04153E-06	+/-	3.8E-07
Delay rate (us/s)	1.43529958017E+00	Apriori rate (us/s)	1.43529889788E+00	Resid rate (us/s)	6.82292E-07	+/-	3.6E-09
Total phase (deg)	38.1	Apriori accel (us/s/s)	-2.68444574540E-05	Resid phase (deg)	185.4	+/-	5.9

ph/seg (deg)	43.6	Theor.	13.7	Amplitude	0.534 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	42.8		24.0	Search (1024X32)	0.499	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	52.2		8.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	32.2		14.4	Inc. seg. avg.	0.703	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
				Inc. frq. avg.	0.659	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
f: az 66.6 el 46.8 pa -82.9		X: az 272.4 el 44.4 pa 42.5		u, v (fr/asec)	-5184.846 -1945.508	ion window (TEC)	0.00 0.00

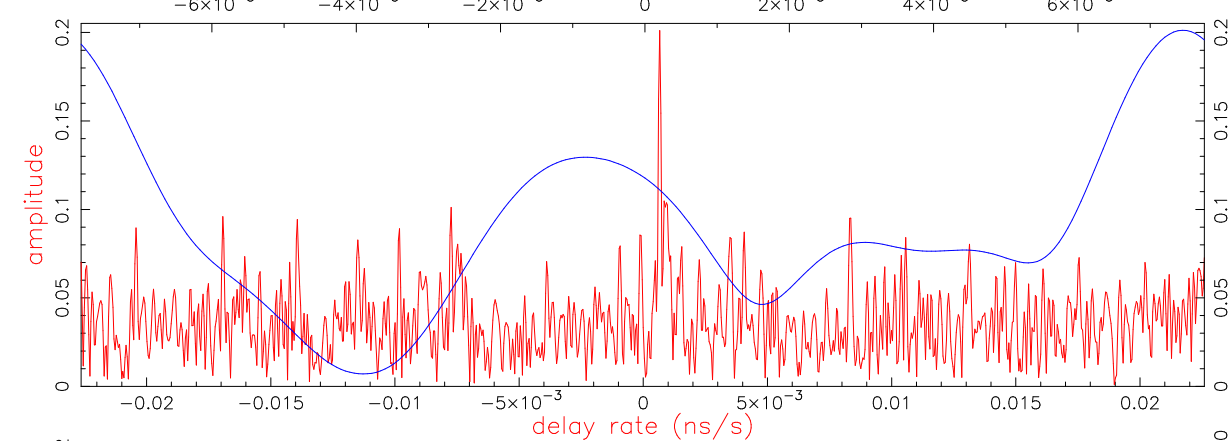
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Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fX

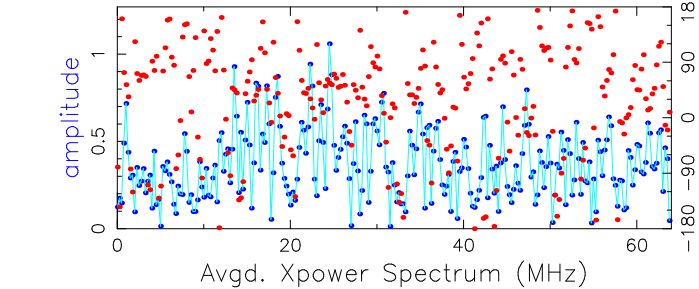
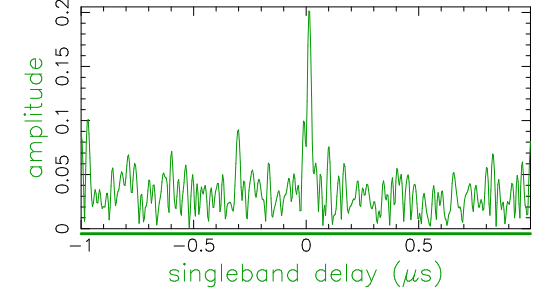
VLBA_FD - ONSALA60, fgroup Q, pol LR



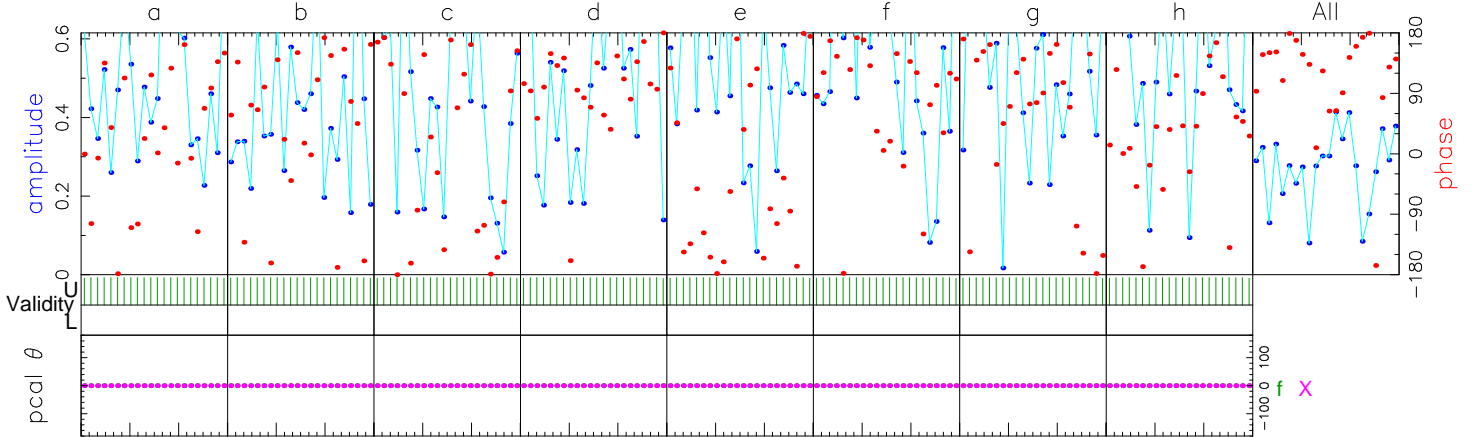
Fringe quality 9

SNR 7.5
 Int time 179.824
 Amp 0.205
 Phase 126.9
 PFD 8.8e-06
 Delays (us)
 SBD 0.013606
 MBD 0.007504
 Fringe rate (Hz) 0.029182
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build 2024:332:222845
 2025:042:151807
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"



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



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

Group delay (usec) (SBD)	6.59297480842E+02	Apriori delay (usec)	6.59289976605E+02	Resid mbdelay (usec)	7.50424E-03	+/-	1.4E-04
Sband delay (usec)	6.59303583105E+02	Apriori clock (usec)	-1.1286279E+02	Resid sbdelay (usec)	1.36065E-02	+/-	1.1E-03
Phase delay (usec)	6.59289984774E+02	Apriori clockrate (us/s)	-1.1664031E-06	Resid phdelay (usec)	8.16941E-06	+/-	9.8E-07
Delay rate (us/s)	1.43529957432E+00	Apriori rate (us/s)	1.43529889788E+00	Resid rate (us/s)	6.76443E-07	+/-	9.4E-09
Total phase (deg)	339.5	Apriori accel (us/s/s)	-2.68444574540E-05	Resid phase (deg)	126.9	+/-	15.2

ph/seg (deg) 44.8 35.7 Search (1024X32) 0.197 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.0 62.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.8 21.5 Inc. seg. avg. 0.229 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 55.8 37.6 Inc. frq. avg. 0.254 Data rate(Mb/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 X: az 272.4 el 44.4 pa 42.5 u,v (fr/asec) -5184.846 -1945.508 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fX...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fX.Q.171.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

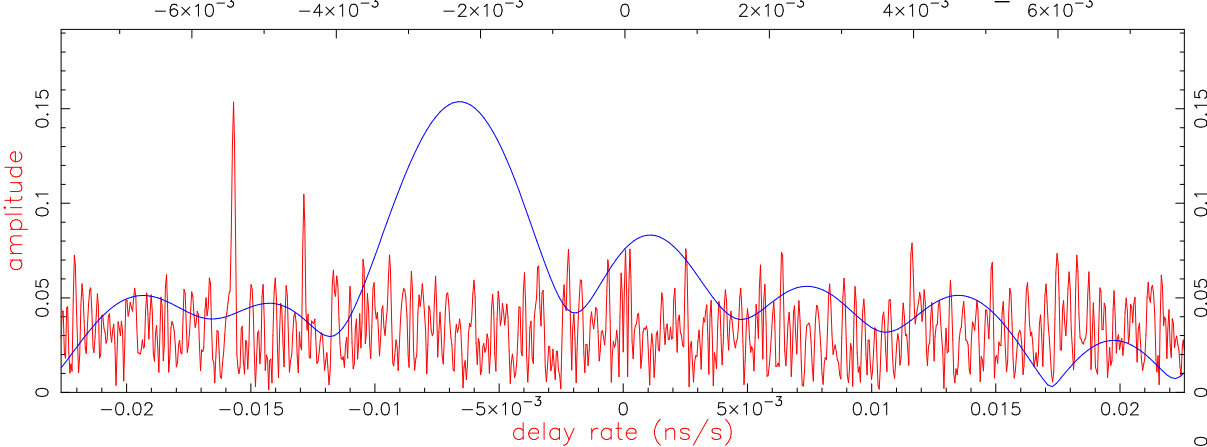
aux01

2013+370.3MP56K, No0500, fX

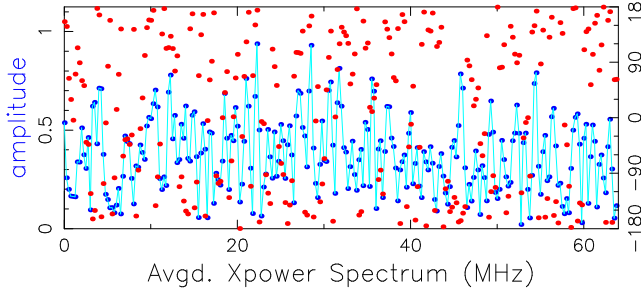
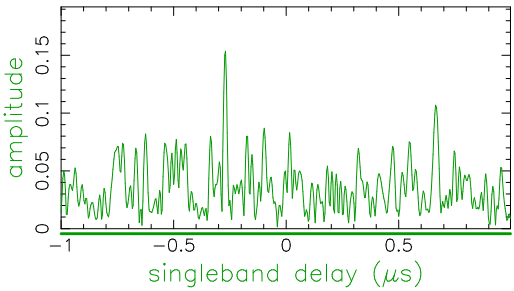
VLBA_FD - ONSALA60, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

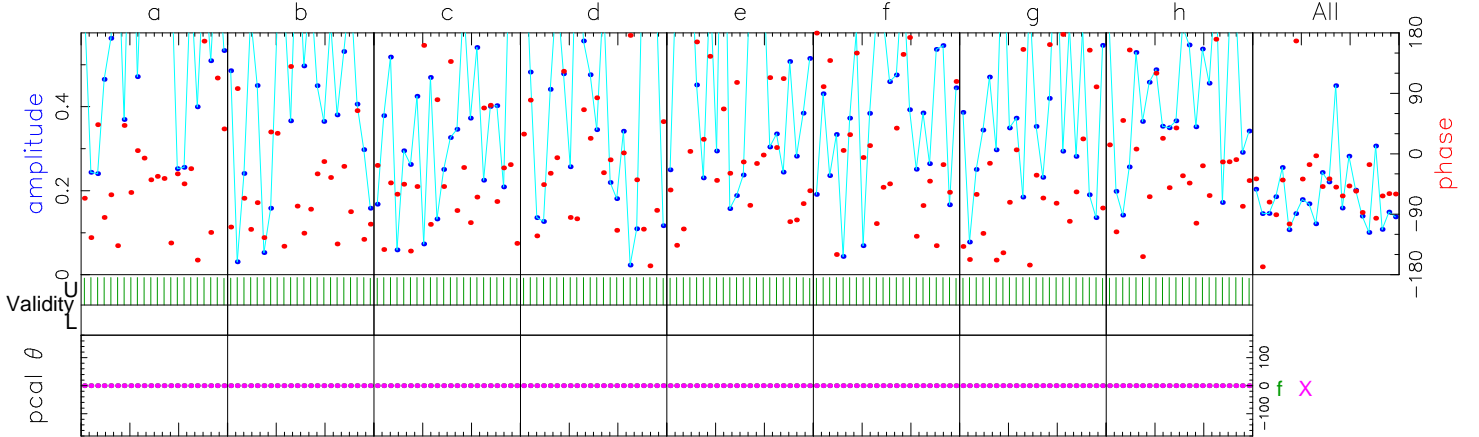


SNR 5.7
 Int time 179.824
 Amp 0.192
 Phase -260.6
 PFD 7.4e-01
 Delays (us)
 SBD -0.271037
 MBD -0.002348
 Fringe rate (Hz)
 -0.680984
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151810
 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
	-56.1	-76.3	-60.8	-26.9	-33.2	-107.0	-102.1	-28.2	Phase	-58.1
	0.3	0.3	0.2	0.2	0.2	0.0	0.2	0.2	Ampl.	0.2
	278.9	189.1	231.7	207.5	271.2	338.4	504.8	328.5	Sbd box	187.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	6.59022004082E+02		Apriori delay (usec)		6.59289976605E+02		Resid mbdelay (usec)		-2.34752E-03	+/- 1.9E-04
Sband delay (usec)	6.59018939855E+02		Apriori clock (usec)		-1.1286279E+02		Resid sbdelay (usec)		-2.71037E-01	+/- 1.5E-03
Phase delay (usec)	6.59289972866E+02		Apriori clockrate (us/s)		-1.1664031E-06		Resid phdelay (usec)		-3.73955E-06	+/- 1.3E-06
Delay rate (us/s)	1.43528311243E+00		Apriori rate (us/s)		1.43529889788E+00		Resid rate (us/s)		-1.57855E-05	+/- 1.2E-08
Total phase (deg)			Apriori accel (us/s/s)		-2.68444574540E-05		Resid phase (deg)		-260.6	+/- 20.1

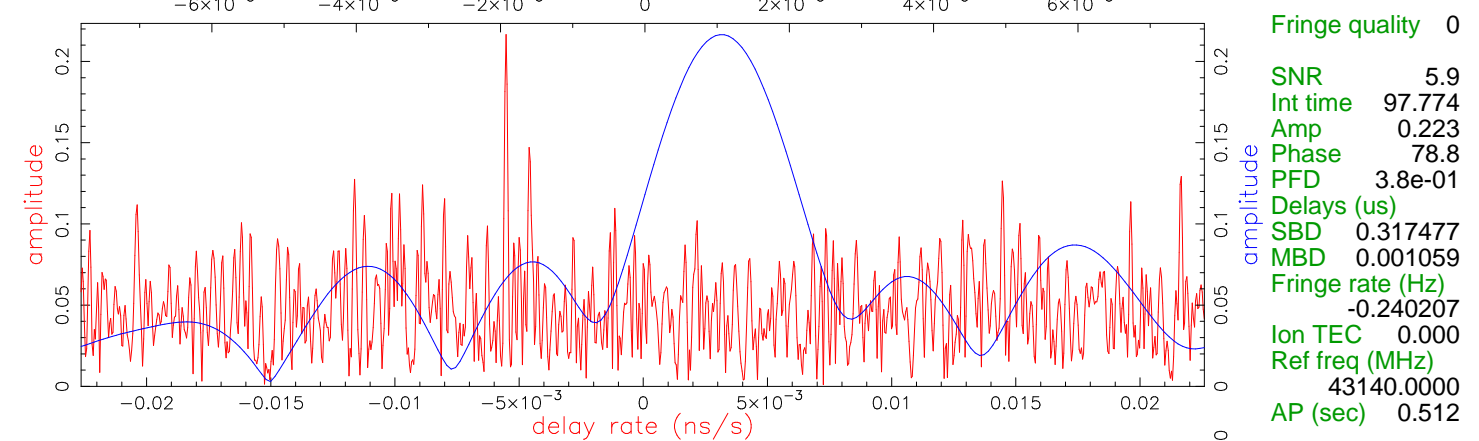
ph/seg (deg) 44.9 47.0 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.3 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.5 28.4 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.4 49.5 Inc. frq. avg. 0.187 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 X: az 272.4 el 44.4 pa 42.5 u,v (fr/asec) -5184.846 -1945.508 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fX..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fX.Q.183.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fY

VLBA_FD - YEBES40M, fgroup Q, pol LL



Fringe quality 0

SNR 5.9

Int time 97.774

Amplitude 0.223

Phase 78.8

PFD 3.8e-01

Delays (us)

SBD 0.317477

MBD 0.001059

Fringe rate (Hz)

-0.240207

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

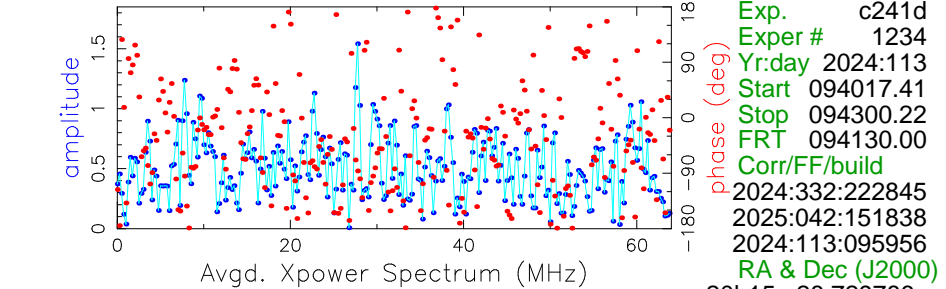
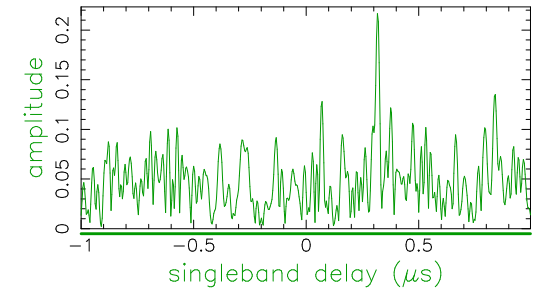
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2024:113:095956

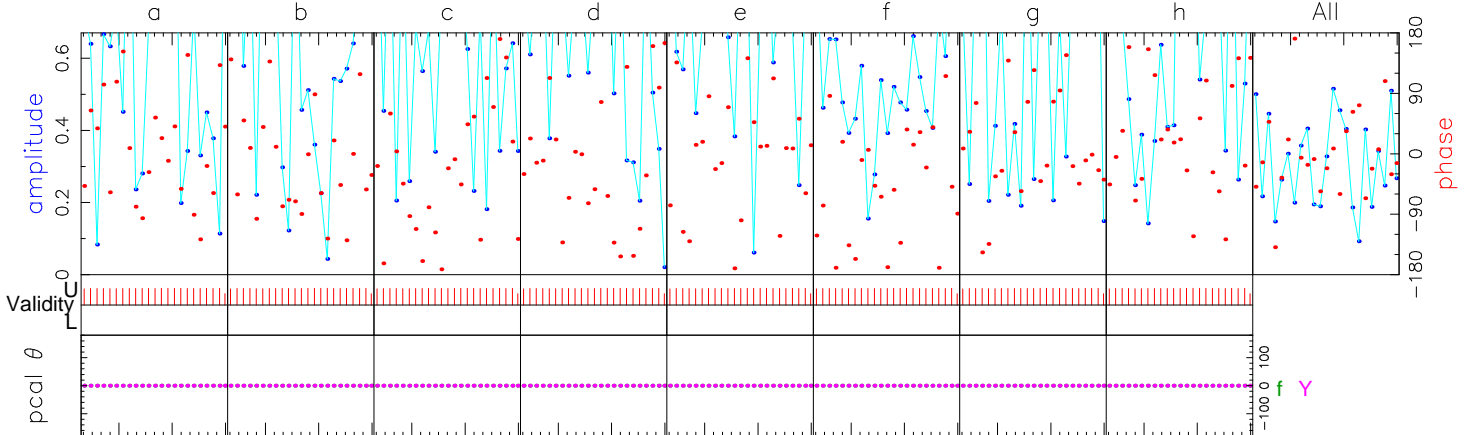
RA & Dec (J2000)

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		
	12.9	-14.4	-35.3	-30.9	-6.8	-63.2	-1.8	9.5	Phase	-11.2		
	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.2	Ampl.	0.2		
	16.6	256.7	334.8	288.5	274.8	361.8	338.0	278.2	Sbd box	338.3		
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
Y	0	0	0	0	0	0	0	0	PC freqs			
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
Y	1000	1000	1000	1000	1000	1000	1000	1000				
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids			
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks			
									Tracks			
Group delay (usec) (SBD)	-1.08657408599E+03		Apriori delay (usec)		-1.08688764539E+03		Resid mbdelay (usec)		1.05940E-03	+/- 1.8E-04		
Sband delay (usec)	-1.08657016864E+03		Apriori clock (usec)		1.1104487E+02		Resid sbdelay (usec)		3.17477E-01	+/- 1.5E-03		
Phase delay (usec)	-1.08688764611E+03		Apriori clockrate (us/s)		1.0589110E-06		Resid phdelay (usec)		-7.24375E-07	+/- 1.3E-06		
Delay rate (us/s)	1.54604893116E+00		Apriori rate (us/s)		1.54605449923E+00		Resid rate (us/s)		-5.56808E-06	+/- 1.3E-08		
Total phase (deg)	70.8		Apriori accel (us/s/s)		-3.19738848852E-06		Resid phase (deg)		78.8	+/- 19.4		
	RMS	Theor.	Amplitude	0.223 +/- 0.038		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	63.6	46.6	Search (1024X32)	0.215		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	71.8	81.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	28.3	27.5	Inc. seg. avg.	0.241		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023	0.023		
amp/frq (%)	27.5	48.0	Inc. frq. avg.	0.214		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	Y: az 281.3 el 52.4 pa 69.4		u,v (fr/asec) -5572.848 -554.498						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0500/fY..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/fY.Q.335.3MP56K									

Mk4/DiFX fourfit 3.25 rev 0

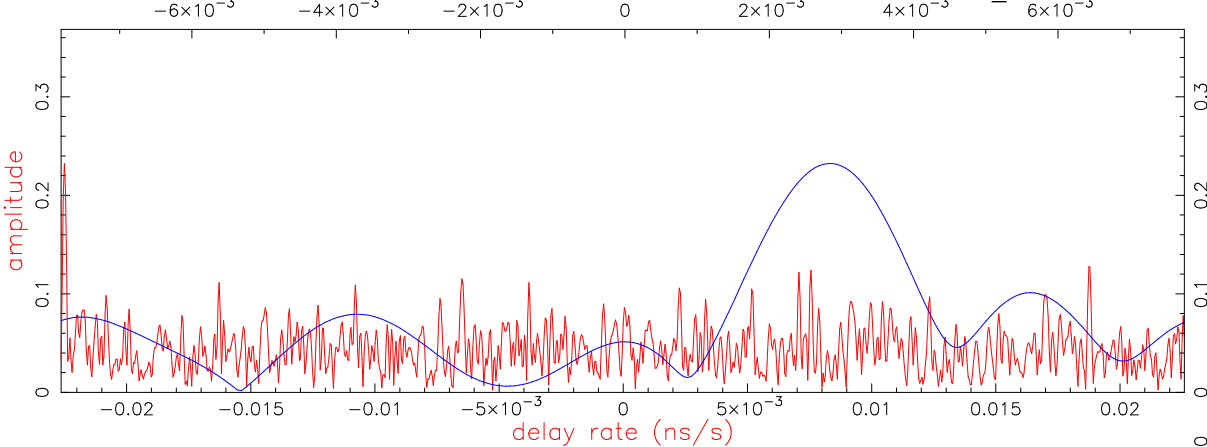
aux01

2013+370.3MP56K, No0500, fY

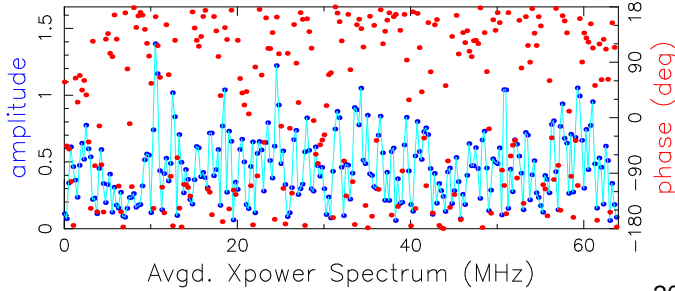
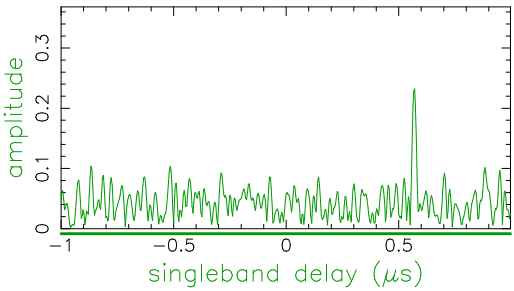
VLBA_FD - YEBES40M, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 0

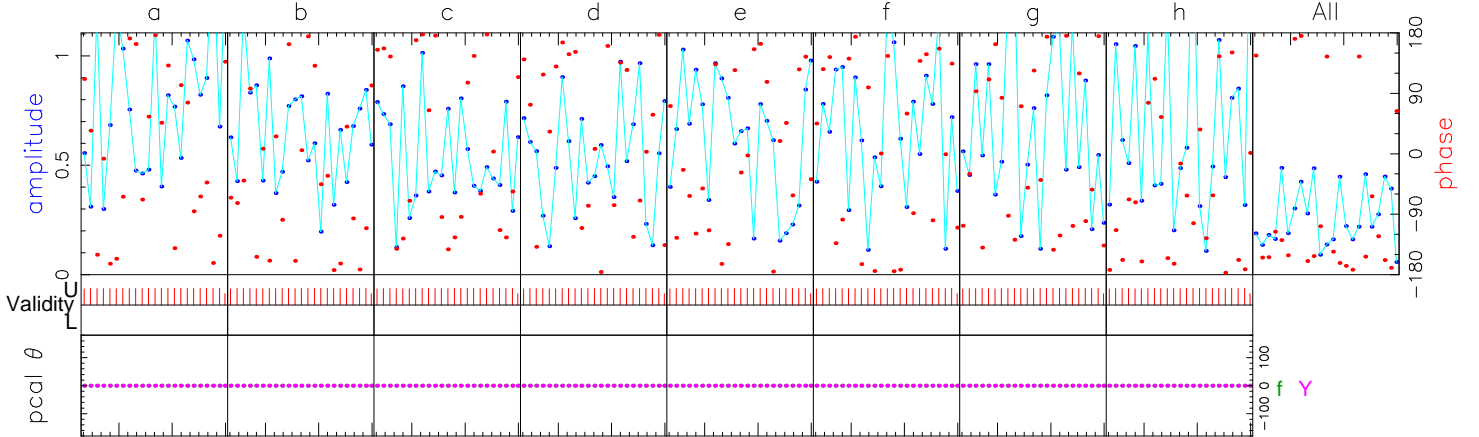


SNR 6.3
 Int time 97.774
 Amp 0.368
 Phase 291.4
 PFD 3.0e-02
 Delays (us)
 SBD 0.568857
 MBD 0.002803
 Fringe rate (Hz)
 -0.976067
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



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

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-161.3	-127.6	-162.2	178.1	-140.0	175.6	-145.5	-133.1	Phase	-158.6
	0.4	0.3	0.4	0.4	0.2	0.6	0.5	0.3	Ampl.	0.4
	324.3	193.7	494.4	496.8	460.2	45.9	472.4	409.6	Sbd box	402.6
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.08632234218E+03	Apriori delay (usec)	-1.08688764539E+03	Resid mbdelay (usec)	2.80321E-03	+/-	1.7E-04
Sband delay (usec)	-1.08631878814E+03	Apriori clock (usec)	1.1104487E+02	Resid sbdelay (usec)	5.68857E-01	+/-	1.4E-03
Phase delay (usec)	-1.08688765560E+03	Apriori clockrate (us/s)	1.0589110E-06	Resid phdelay (usec)	-1.02144E-05	+/-	1.2E-06
Delay rate (us/s)	1.54603187366E+00	Apriori rate (us/s)	1.54605449923E+00	Resid rate (us/s)	-2.26256E-05	+/-	1.2E-08
Total phase (deg)	283.4	Apriori accel (us/s/s)	-3.19738848852E-06	Resid phase (deg)	291.4	+/-	18.1

ph/seg (deg)	42.2	Theor.	43.3	Amplitude	0.368 +/- 0.058	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	58.2	Search (1024X32)	0.227	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	23.7	Inc. seg. avg.	0.330	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.1	Inc. frq. avg.	0.352	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
				Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.6 el 46.8 pa -82.9 Y: az 281.3 el 52.4 pa 69.4 u, v (fr/asec) -5572.848 -554.498 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fY.Q.346.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

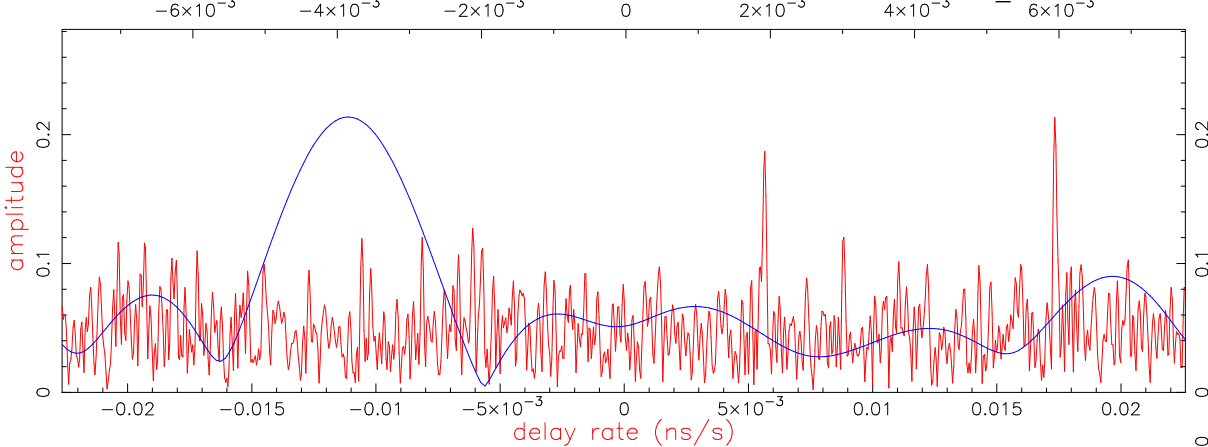
aux01

2013+370.3MP56K, No0500, fY

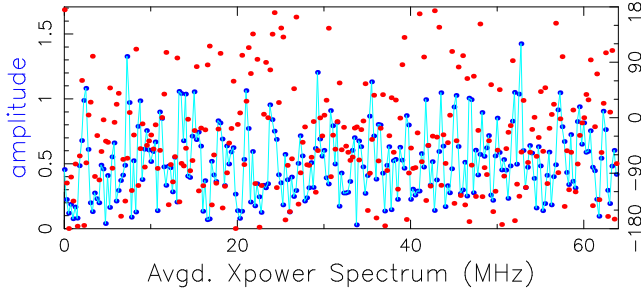
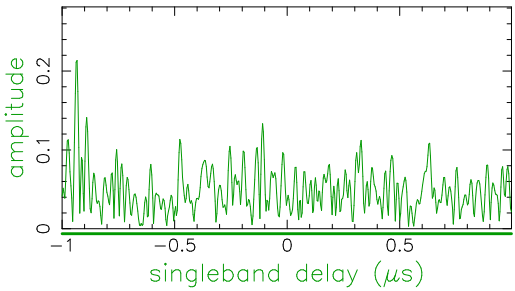
VLBA_FD - YEBES40M, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

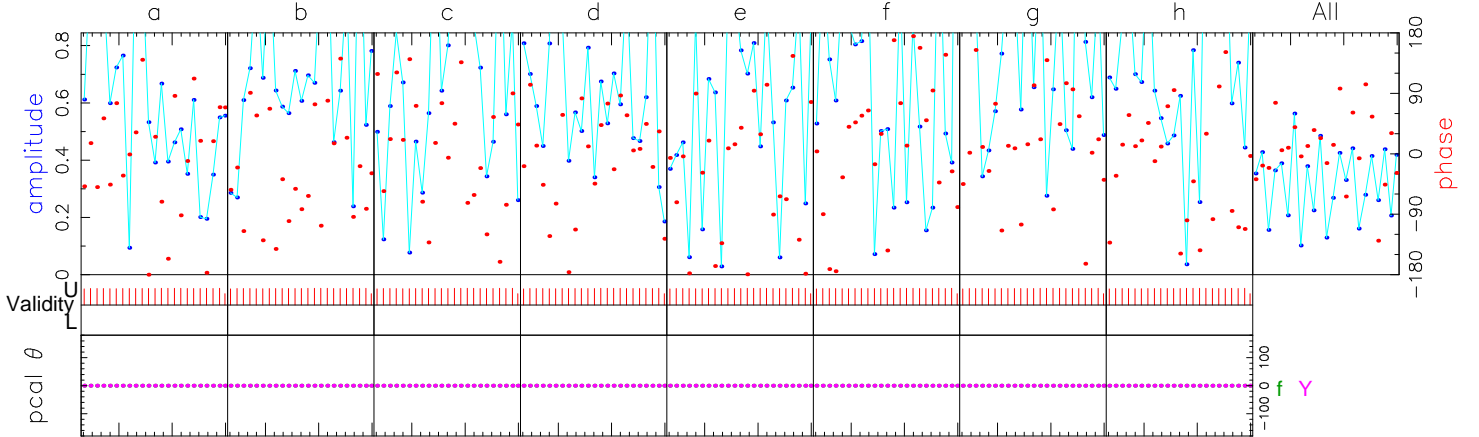


SNR 5.9
 Int time 97.774
 Amp 0.282
 Phase -253.6
 PFD 3.9e-01
 Delays (us)
 SBD -0.935347
 MBD -0.003894
 Fringe rate (Hz)
 0.752584
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094017.41
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151855
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.08782903951E+03	Apriori delay (usec)	-1.08688764539E+03	Resid mbdelay (usec)	-3.89412E-03	+/-	1.8E-04
Sband delay (usec)	-1.08782299214E+03	Apriori clock (usec)	1.1104487E+02	Resid sbdelay (usec)	-9.35347E-01	+/-	1.5E-03
Phase delay (usec)	-1.08688764433E+03	Apriori clockrate (us/s)	1.0589110E-02	Resid phdelay (usec)	1.05484E-06	+/-	1.3E-06
Delay rate (us/s)	1.54607194440E+00	Apriori rate (us/s)	1.54605449923E+00	Resid rate (us/s)	1.74452E-05	+/-	1.3E-08
Total phase (deg)	-261.6	Apriori accel (us/s/s)	-3.19738848852E-06	Resid phase (deg)	-253.6	+/-	19.5

ph/seg (deg)	52.6	Theor.	46.7	Amplitude	0.282 +/- 0.048	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	74.0	Search (1024X32)	0.206	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	21.8	Inc. seg. avg.	0.312	Inc. frq. avg.	0.258	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	42.5	Inc. frq. avg.	0.258			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 66.6 el 46.8 pa -82.9 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -5572.848 -554.498 simultaneous interpolator

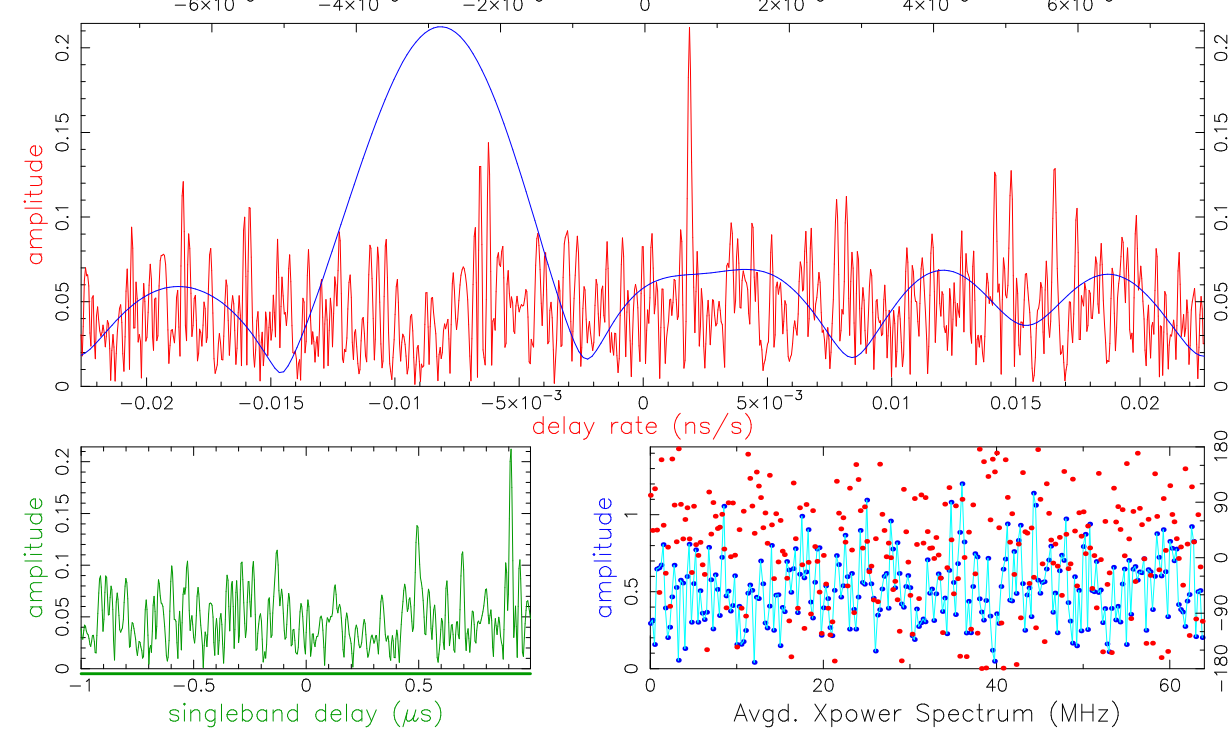
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fY.Q.372.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

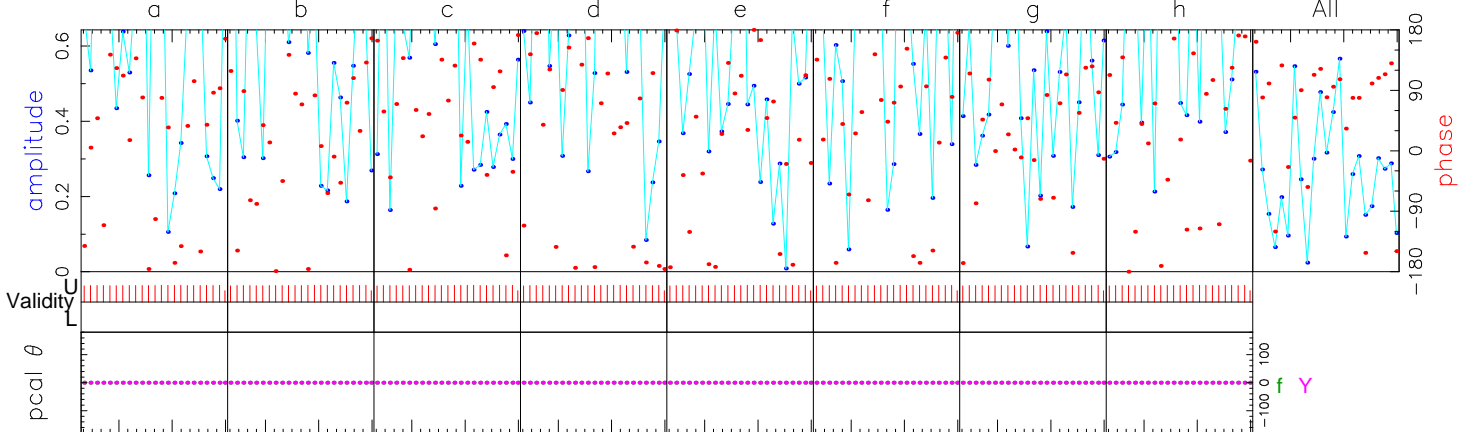
2013+370.3MP56K, No0500, fY

VLBA_FD - YEBES40M, fgroup Q, pol RL



Fringe quality 0
 SNR 5.8
 Int time 97.774
 Amp 0.214
 Phase 328.3
 PFD 6.0e-01
 Delays (us)
 SBD 0.909126
 MBD -0.002902
 Fringe rate (Hz) 0.079645
 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
 2025:042:151858
 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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) -1.08598429744E+03 Apriori delay (usec) -1.08688764539E+03 Resid mbdelay (usec) -2.90205E-03 +/- 1.9E-04
 Sband delay (usec) -1.08597851914E+03 Apriori clock (usec) 1.1104487E+02 Resid sbdelay (usec) 9.09126E-01 +/- 1.5E-03
 Phase delay (usec) -1.08688763874E+03 Apriori clockrate (us/s) 1.0589110E+02 Resid phdelay (usec) 6.65289E-06 +/- 1.3E-06
 Delay rate (us/s) 1.54605634543E+00 Apriori rate (us/s) 1.54605449923E+00 Resid rate (us/s) 1.84619E-06 +/- 1.4E-08
 Total phase (deg) 320.4 Apriori accel (us/s/s) -3.19738848852E-06 Resid phase (deg) 328.3 +/- 19.8

ph/seg (deg) 64.4 RMS 47.5 Theor. 47.5 Amplitude 0.214 +/- 0.037 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.2 82.9 Search (1024X32) 0.209 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.7 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.8 48.9 Inc. seg. avg. 0.202 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 Y: az 281.3 el 52.4 pa 69.4 u,v (fr/asec) -5572.848 -554.498 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/fY...3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fY.Q.385.3MP56K simultaneous interpolator

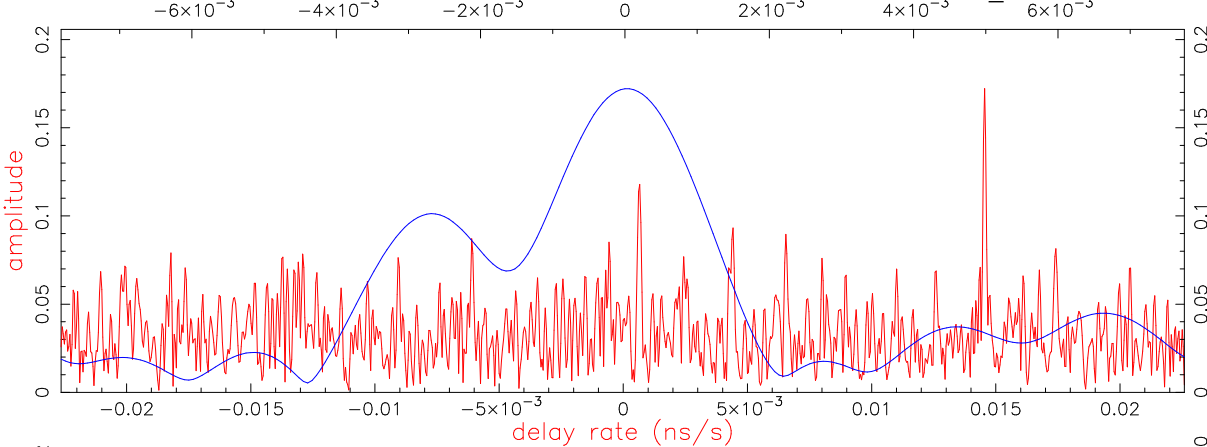
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fZ

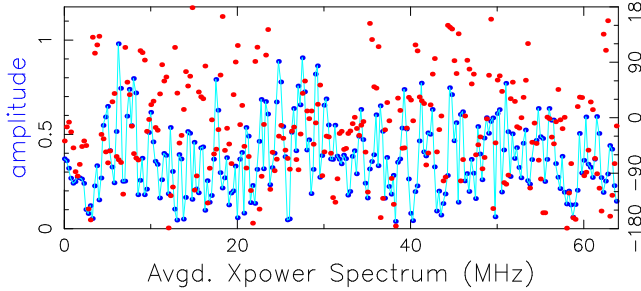
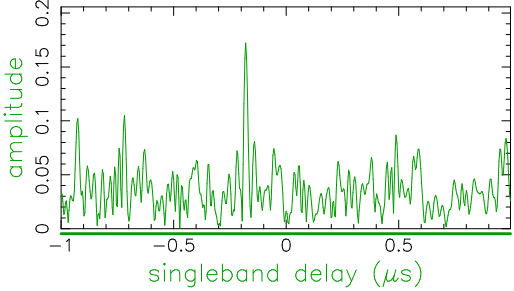
VLBA_FD - METSAHOV, fgroup Q, pol LL

multiband delay (μ s)



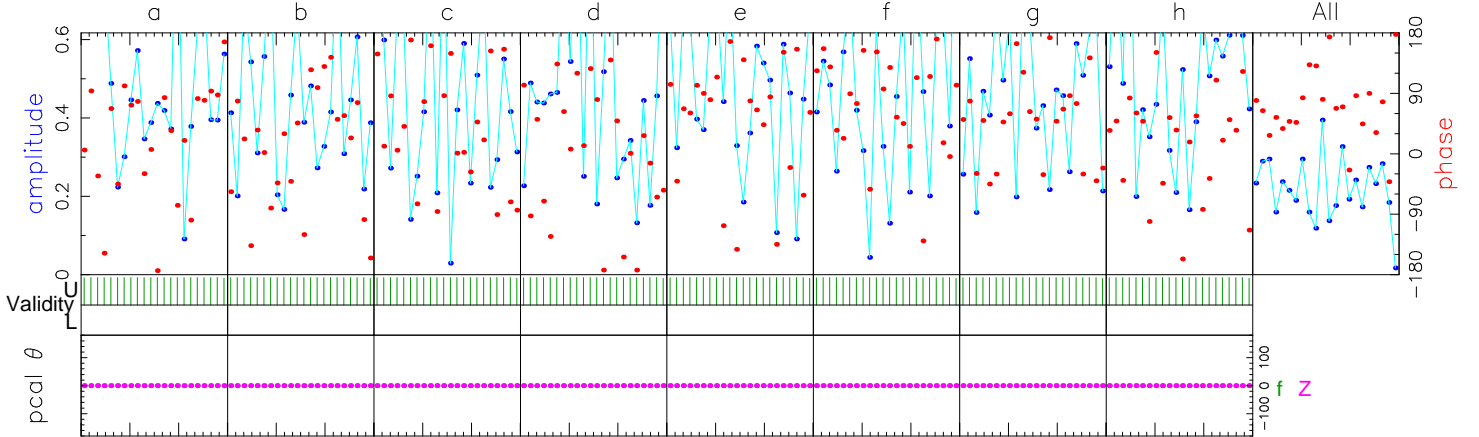
Fringe quality 0

SNR 6.3
 Int time 179.936
 Amp 0.206
 Phase -205.7
 PFD 3.6e-02
 Delays (us)
 SBD -0.179824
 MBD 0.000027
 Fringe rate (Hz)
 0.631130
 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		
Z	0	0	0	0	0	0	0	0		
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	2.47944054845E+03	Apriori delay (usec)	2.47962802115E+03	Resid mbdelay (usec)	2.72961E-05	+/-	1.7E-04
Sband delay (usec)	2.47944819765E+03	Apriori clock (usec)	-4.1042328E-02	Resid sbdelay (usec)	-1.79824E-01	+/-	1.4E-03
Phase delay (usec)	2.47962802530E+03	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	4.14255E-06	+/-	1.2E-06
Delay rate (us/s)	1.43330159891E+00	Apriori rate (us/s)	1.43328696911E+00	Resid rate (us/s)	1.46298E-05	+/-	1.1E-08
Total phase (deg)		Apriori accel (us/s/s)	-3.76721746617E-05	Resid phase (deg)	-205.7	+/-	18.1

ph/seg (deg)	51.8	Theor.	42.5	Amplitude	0.206 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	53.6	Search (1024X32)	0.168	Search	0.168	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.1	Inc. seg. avg.	0.206	Inc. seg. avg.	0.206	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.7	Inc. frq. avg.	0.205	Inc. frq. avg.	0.205	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		Z: az 280.0 el 38.3 pa 37.9		u, v (fr/asec)	-5182.099 -2359.807	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/fz..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fz.Q.120.3MP56K

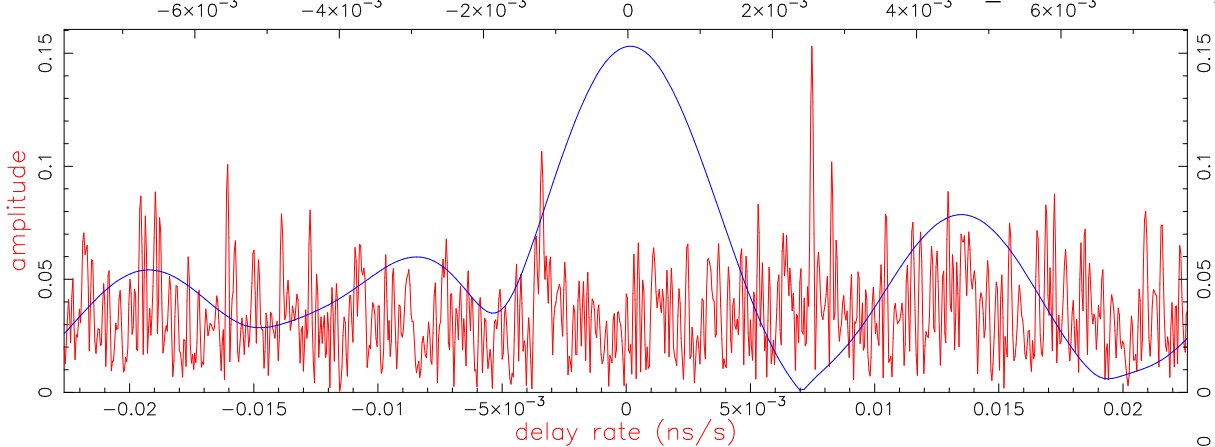
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fZ

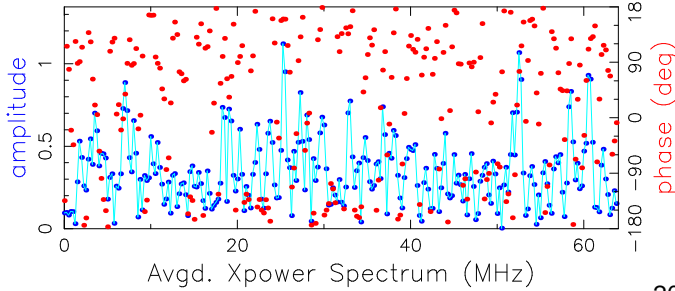
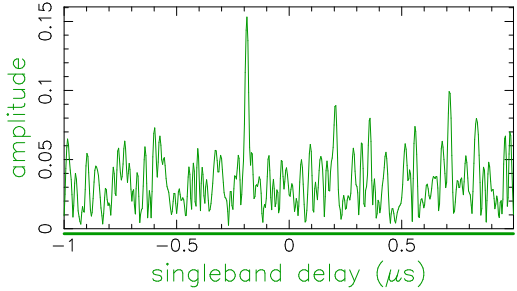
VLBA_FD - METSAHOV, fgroup Q, pol RR

multiband delay (μ s)



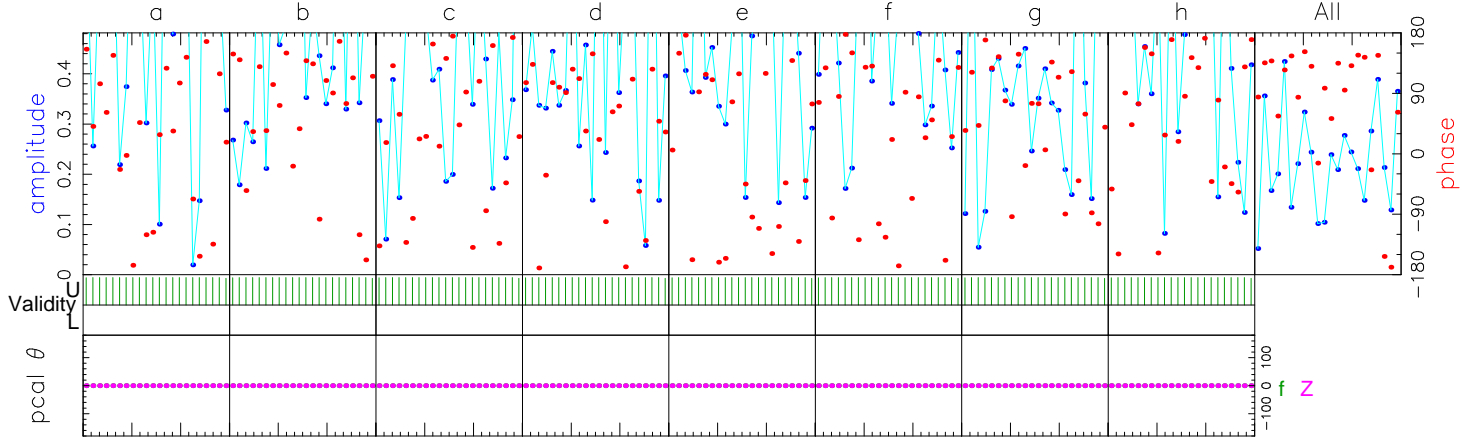
Fringe quality 0

SNR 5.6
 Int time 179.936
 Amp 0.161
 Phase -150.8
 PFD 8.9e-01
 Delays (us)
 SBD -0.188054
 MBD 0.000033
 Fringe rate (Hz) 0.324043
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151758
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
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		
Z	0	0	0	0	0	0	0	0		
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	2.47944055366E+03	Apriori delay (usec)	2.47962802115E+03	Resid mbdelay (usec)	3.25034E-05	+/-	1.9E-04
Sband delay (usec)	2.47943996740E+03	Apriori clock (usec)	-4.1042328E-02	Resid sbdelay (usec)	-1.88054E-01	+/-	1.5E-03
Phase delay (usec)	2.47962802883E+03	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	7.67382E-06	+/-	1.3E-06
Delay rate (us/s)	1.43329448054E+00	Apriori rate (us/s)	1.43328696911E+00	Resid rate (us/s)	7.51143E-06	+/-	1.3E-08
Total phase (deg)	-211.1	Apriori accel (us/s/s)	-3.76721746617E-05	Resid phase (deg)	-150.8	+/-	20.4

ph/seg (deg)	57.0	Theor.	47.8	Amplitude	0.161 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	80.3	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	35.2	Inc. seg. avg.	0.178	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.8	Inc. frq. avg.	0.156	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		Z: az 280.0 el 38.3 pa 37.9		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0500/fz..3MP56K		Output file: /Exps/c241d/v1/7mm/1234/No0500/fz.Q.130.3MP56K		simultaneous interpolator		

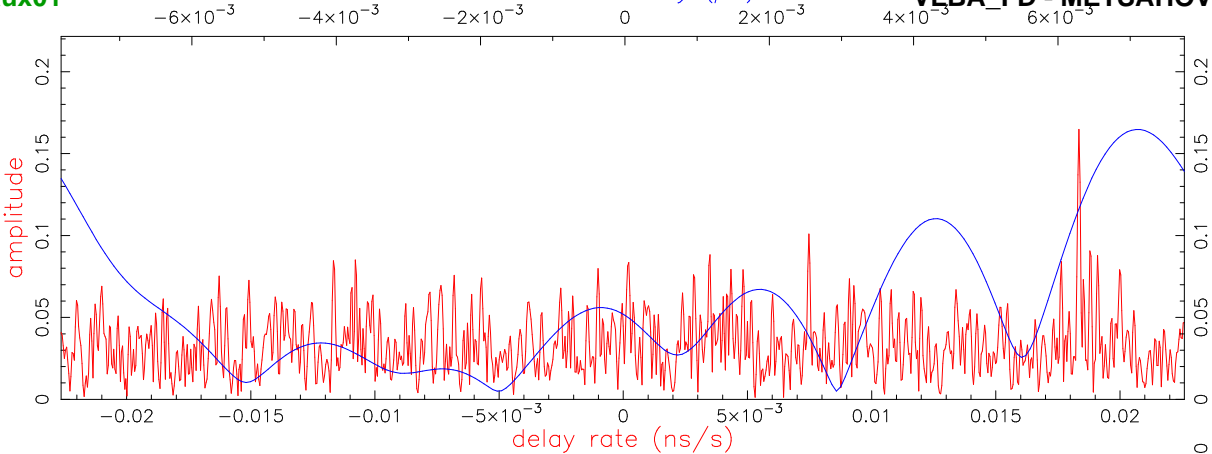
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP56K, No0500, fZ

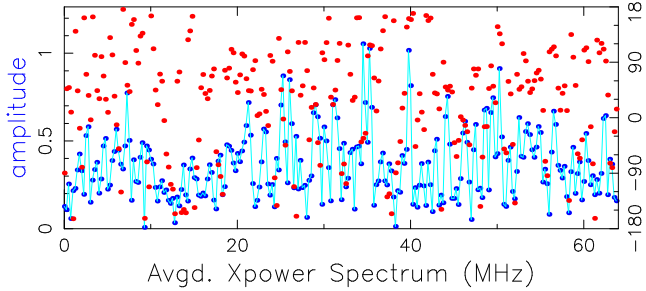
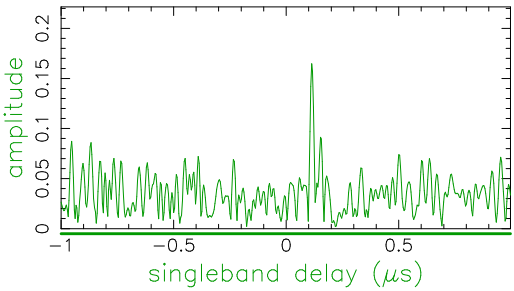
VLBA_FD - METSAHOV, fgroup Q, pol LR

multiband delay (μ s)



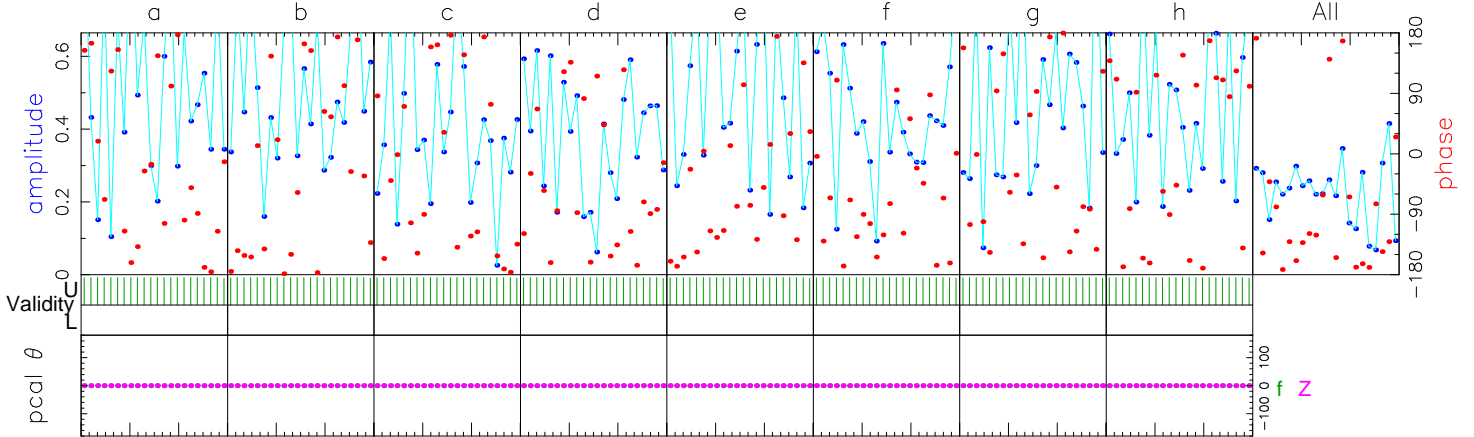
Fringe quality 0

SNR 6.1
 Int time 179.936
 Amp 0.222
 Phase 194.8
 PFD 1.4e-01
 Delays (us)
 SBD 0.114296
 MBD 0.007123
 Fringe rate (Hz) 0.795835
 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
 2025:042:151803
 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
	-138.4	-170.0	-155.1	-123.5	-115.0	-92.8	-125.5	154.1	Phase	-142.7
	0.3	0.3	0.2	0.1	0.3	0.2	0.3	0.3	Ampl.	0.2
	10.6	296.9	386.4	453.0	12.3	61.0	83.4	248.9	Sbd box	286.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	2.47974451903E+03	Apriori delay (usec)	2.47962802115E+03	Resid mbdelay (usec)	7.12288E-03	+/-	1.8E-04
Sband delay (usec)	2.47974231690E+03	Apriori clock (usec)	-4.1042328E-02	Resid sbdelay (usec)	1.14296E-01	+/-	1.4E-03
Phase delay (usec)	2.47962801196E+03	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	-9.19098E-06	+/-	1.2E-06
Delay rate (us/s)	1.43330541684E+00	Apriori rate (us/s)	1.43328696911E+00	Resid rate (us/s)	1.84477E-05	+/-	1.2E-08
Total phase (deg)	134.5	Apriori accel (us/s/s)	-3.76721746617E-05	Resid phase (deg)	194.8	+/-	18.8

ph/seg (deg)	58.0	Theor.	44.2	Amplitude	0.222 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	64.1	Search (1024X32)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	38.4	Inc. seg. avg.	0.235	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	31.7	Inc. frq. avg.	0.238	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023
				Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

f: az 66.6 el 46.8 pa -82.9 Z: az 280.0 el 38.3 pa 37.9 u,v (fr/asec) -5182.099 -2359.807 simultaneous interpolator

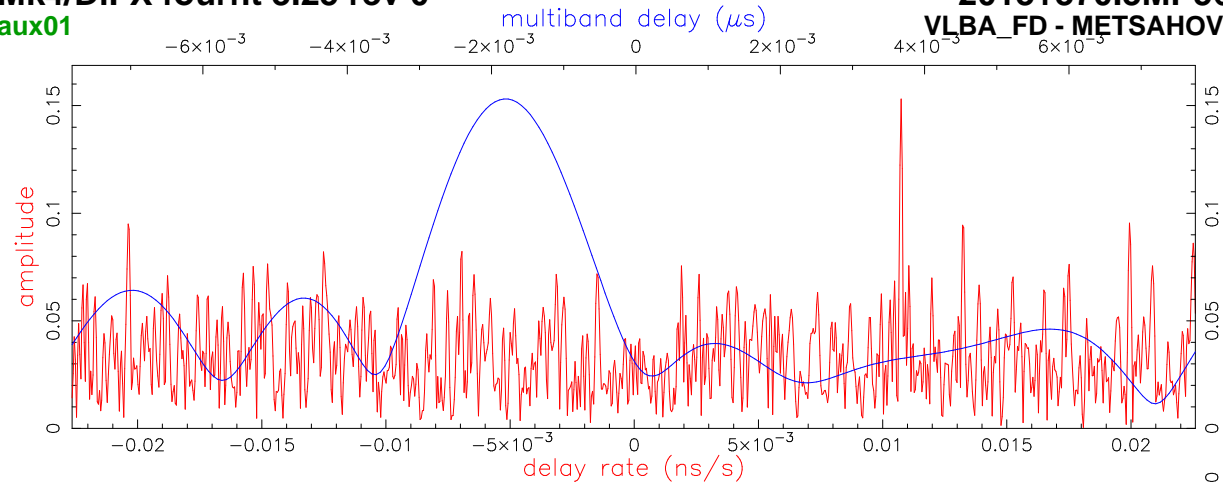
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fz..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fz.Q.158.3MP56K

Mk4/DiFX fourfit 3.25 rev 0

aux01

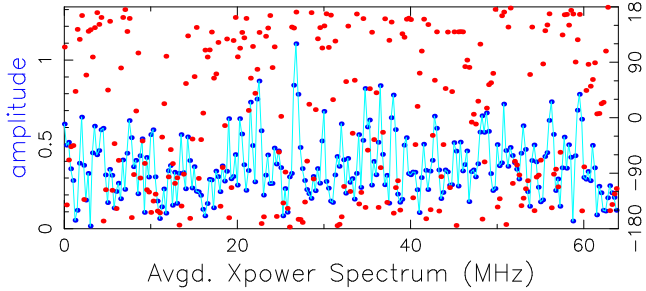
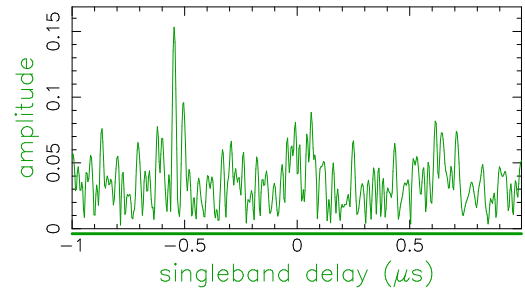
2013+370.3MP56K, No0500, fZ

VLBA_FD - METSAHOV, fgroup Q, pol RL



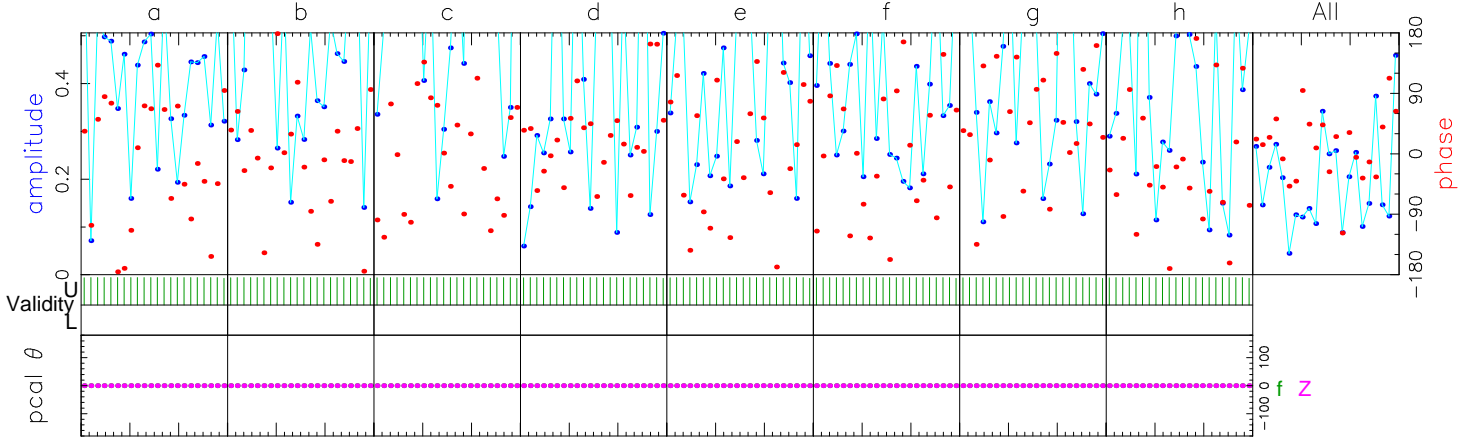
Fringe quality 0

SNR 5.6
 Int time 179.936
 Amp 0.169
 Phase -228.9
 PFD 9.0e-01
 Delays (us)
 SBD -0.546449
 MBD -0.001805
 Fringe rate (Hz)
 0.466688
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 094000.00
 Stop 094300.22
 FRT 094130.00
 Corr/FF/build
 2024:332:222845
 2025:042:151807
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	2.47907934128E+03	Apriori delay (usec)	2.47962802115E+03	Resid mbdelay (usec)	-1.80488E-03	+/-	1.9E-04
Sband delay (usec)	2.47908157215E+03	Apriori clock (usec)	-4.1042328E-02	Resid sbdelay (usec)	-5.46449E-01	+/-	1.5E-03
Phase delay (usec)	2.47962802235E+03	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	1.19987E-06	+/-	1.3E-06
Delay rate (us/s)	1.43329778710E+00	Apriori rate (us/s)	1.43328696911E+00	Resid rate (us/s)	1.08180E-05	+/-	1.3E-08
Total phase (deg)	-289.1	Apriori accel (us/s/s)	-3.76721746617E-05	Resid phase (deg)	-228.9	+/-	20.4

ph/seg (deg)	50.6	Theor.	47.8	Amplitude	0.169 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	72.1	Search (1024X32)	0.147	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	23.3	Inc. seg. avg.	0.163	Inc. frq. avg.	0.157	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	48.8	Inc. frq. avg.	0.157			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 66.6 el 46.8 pa -82.9 Z: az 280.0 el 38.3 pa 37.9 u,v (fr/asec) -5182.099 -2359.807 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0500/fZ..3MP56K Output file: /Exps/c241d/v1/7mm/1234/No0500/fZ.Q.172.3MP56K