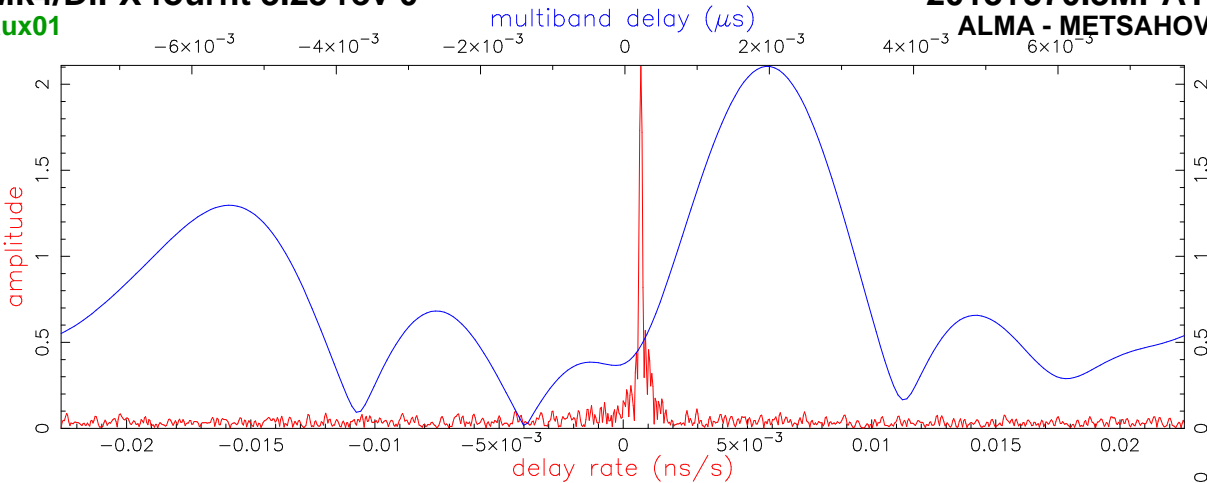


Mk4/DiFX fourfit 3.25 rev 0

aux01

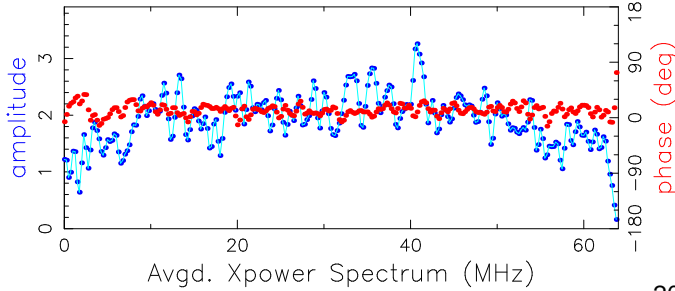
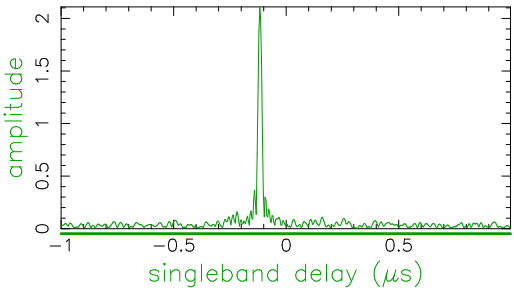
2013+370.3MPATB, No0544, AZ

ALMA - METSAHOV, fgroup Q, pol YR



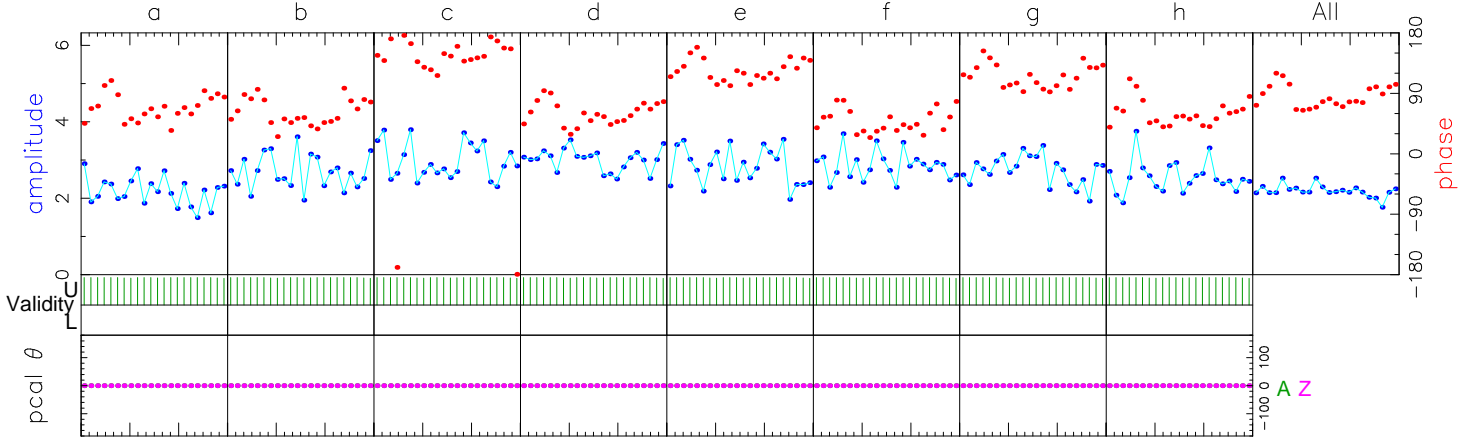
Fringe quality 5

SNR 77.3
 Int time 179.389
 Amp 2.110
 Phase -94.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.116580
 MBD 0.001987
 Fringe rate (Hz)
 0.030301
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153710
 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
	68.8	61.6	151.6	60.4	123.3	48.8	115.7	60.9	Phase	85.9
	2.1	2.5	2.8	2.9	2.7	2.7	2.6	2.4	Ampl.	2.6
	228.3	227.2	227.0	226.7	226.7	226.6	226.4	227.3	Sbd box	227.2
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	
Z	0	0	0	0	0	0	0	0	PC freqs	
A:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.12591375145E+03	Apriori delay (usec)	-1.12579073882E+03	Resid mbdelay (usec)	1.98737E-03	+/-	1.4E-05
Sband delay (usec)	-1.12590731857E+03	Apriori clock (usec)	-2.1075251E+03	Resid sbdelay (usec)	-1.16580E-01	+/-	1.1E-04
Phase delay (usec)	-1.12579073329E+03	Apriori clockrate (us/s)	-6.2069187E-07	Resid phdelay (usec)	5.52915E-06	+/-	9.6E-08
Delay rate (us/s)	4.08023195860E-01	Apriori rate (us/s)	4.08022493466E-01	Resid rate (us/s)	7.02394E-07	+/-	9.2E-10
Total phase (deg)	-264.4	Apriori accel (us/s/s)	-9.10524048523E-05	Resid phase (deg)	-94.1	+/-	1.5

ph/seg (deg)	16.2	Theor.	3.5	Amplitude	2.110 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	8.4	Search (1024X32)	2.084	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	41.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.1	Inc. seg. avg.	2.191	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	2.598	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 351.7 el 29.1 pa 170.1 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -1537.357 -7148.600 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/AZ...3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/AZ.Q.14.3MPATB

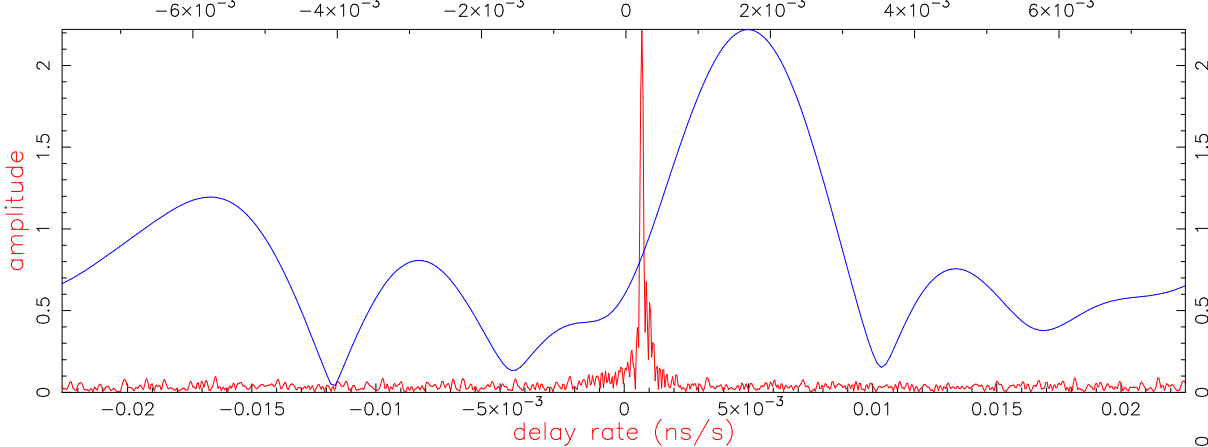
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, AZ

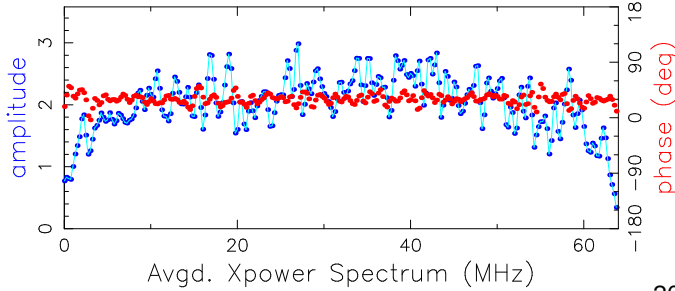
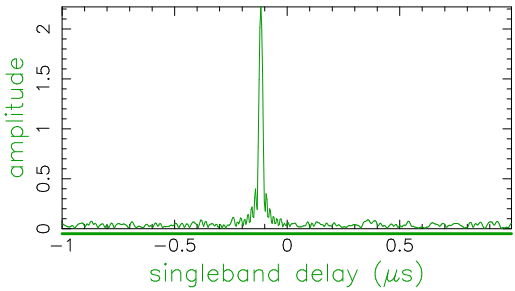
ALMA - METSAHOV, fgroup Q, pol XR

multiband delay (μ s)



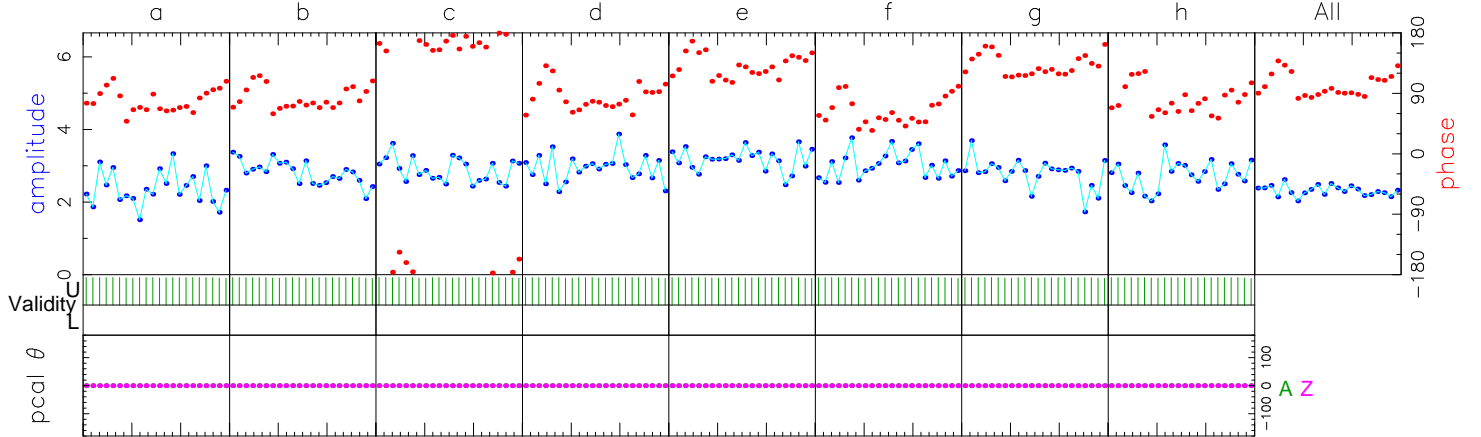
Fringe quality 5

SNR 81.3
 Int time 179.389
 Amp 2.221
 Phase -77.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.117024
 MBD 0.001694
 Fringe rate (Hz)
 0.030318
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153713
 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
	79.5	83.0	173.9	84.2	131.0	63.1	132.3	80.6	Phase	102.5
	2.3	2.7	2.8	2.8	3.0	2.8	2.7	2.6	Ampl.	2.7
	228.2	227.0	226.9	226.7	226.7	226.7	226.2	227.0	Sbd box	227.0
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	
Z	0	0	0	0	0	0	0	0	PC freqs	
A:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.12591404458E+03	Apriori delay (usec)	-1.12579073882E+03	Resid mbdelay (usec)	1.69424E-03	+/-	1.3E-05
Sband delay (usec)	-1.12590776257E+03	Apriori clock (usec)	-2.1075251E+03	Resid sbdelay (usec)	-1.17024E-01	+/-	1.1E-04
Phase delay (usec)	-1.12579073222E+03	Apriori clockrate (us/s)	-6.2069187E-07	Resid phdelay (usec)	6.59936E-06	+/-	9.1E-08
Delay rate (us/s)	4.08023196253E-01	Apriori rate (us/s)	4.08022493466E-01	Resid rate (us/s)	7.02787E-07	+/-	8.7E-10
Total phase (deg)	-247.7	Apriori accel (us/s/s)	-9.10524048523E-05	Resid phase (deg)	-77.5	+/-	1.4

ph/seg (deg)	17.0	3.3	Search (1024X32)	2.176	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	7.6	5.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	41.0	2.0	Inc. seg. avg.	2.317	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	24.0	3.5	Inc. frq. avg.	2.709	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023
					Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

A: az 351.7 el 29.1 pa 170.1 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -1537.357 -7148.600 simultaneous interpolator

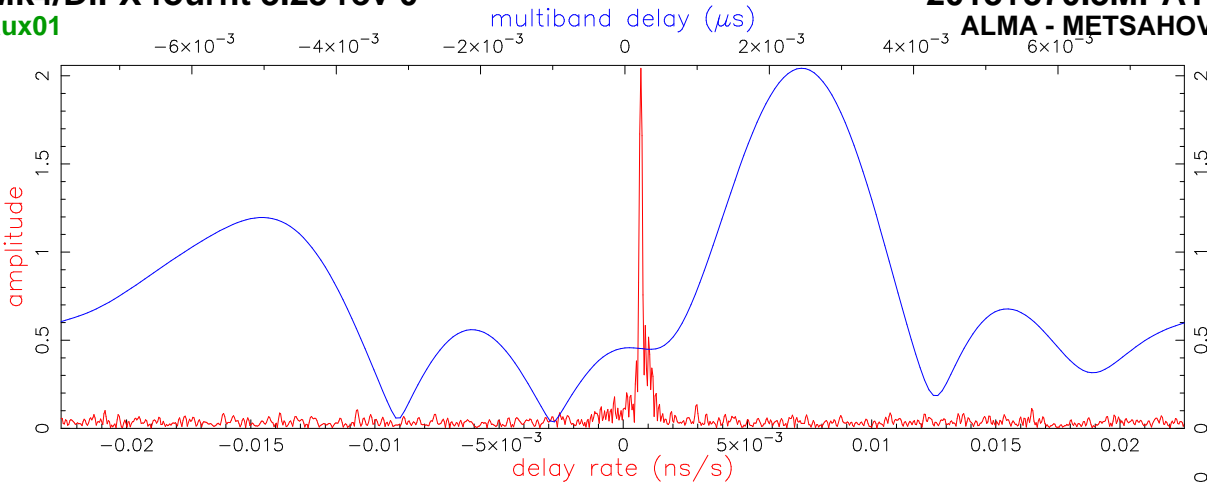
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/AZ...3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/AZ.Q.25.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

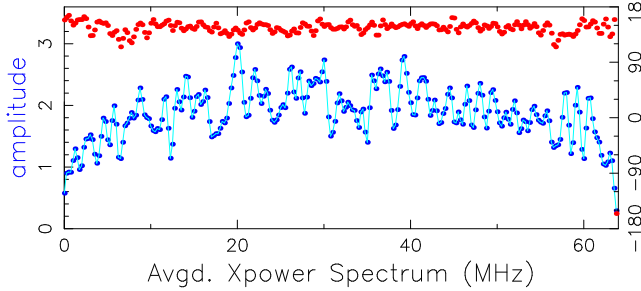
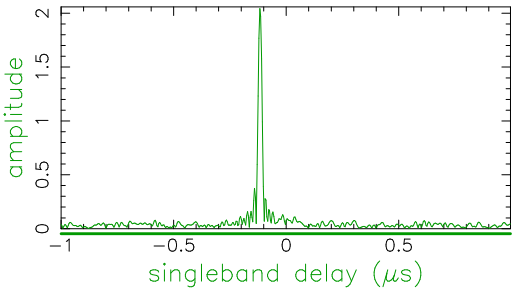
2013+370.3MPATB, No0544, AZ

ALMA - METSAHOV, fgroup Q, pol YL



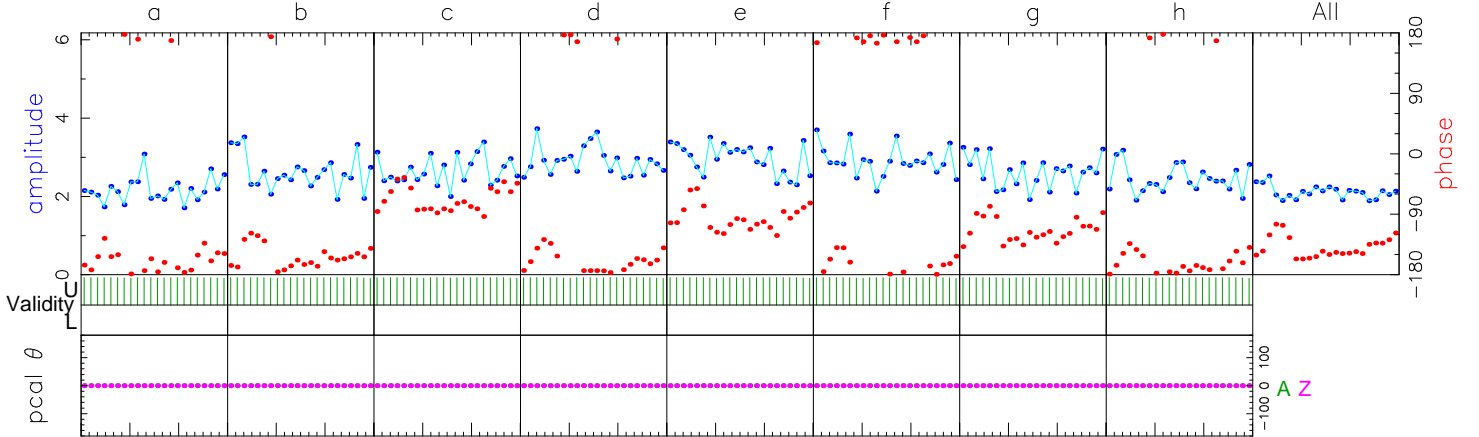
Fringe quality 5

SNR 75.4
 Int time 179.389
 Amp 2.059
 Phase -319.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.116043
 MBD 0.002470
 Fringe rate (Hz)
 0.030266
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153715
 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
	-163.5	-154.0	-68.5	-164.7	-95.7	-175.3	-113.3	-165.2	Phase	-139.0
	2.1	2.5	2.5	2.8	2.8	2.8	2.5	2.4	Ampl.	2.5
	229.0	227.3	226.9	226.8	226.7	226.8	226.3	227.6	Sbd box	227.3
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	
Z	0	0	0	0	0	0	0	0	PC freqs	
A:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -1.12591326849E+03 Apriori delay (usec) -1.12579073882E+03 Resid mbdelay (usec) 2.47034E-03 +/- 1.4E-05
 Sband delay (usec) -1.12590678182E+03 Apriori clock (usec) -2.1075251E+03 Resid sbdelay (usec) -1.16043E-01 +/- 1.1E-04
 Phase delay (usec) -1.12579074778E+03 Apriori clockrate (us/s) -6.2069187E-07 Resid phdelay (usec) -8.95271E-06 +/- 9.8E-08
 Delay rate (us/s) 4.08023195048E-01 Apriori rate (us/s) 4.08022493466E-01 Resid rate (us/s) 7.01582E-07 +/- 9.4E-10
 Total phase (deg) -129.3 Apriori accel (us/s/s) -9.10524048523E-05 Resid phase (deg) -319.0 +/- 1.5

RMS Theor. Amplitude 2.059 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 15.4 3.6 Search (1024X32) 2.020 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 8.3 6.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 42.8 2.1 Inc. seg. avg. 2.113 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 26.4 3.8 Inc. frq. avg. 2.547 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 351.7 el 29.1 pa 170.1 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -1537.357 -7148.600 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/AZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/AZ.Q.35.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

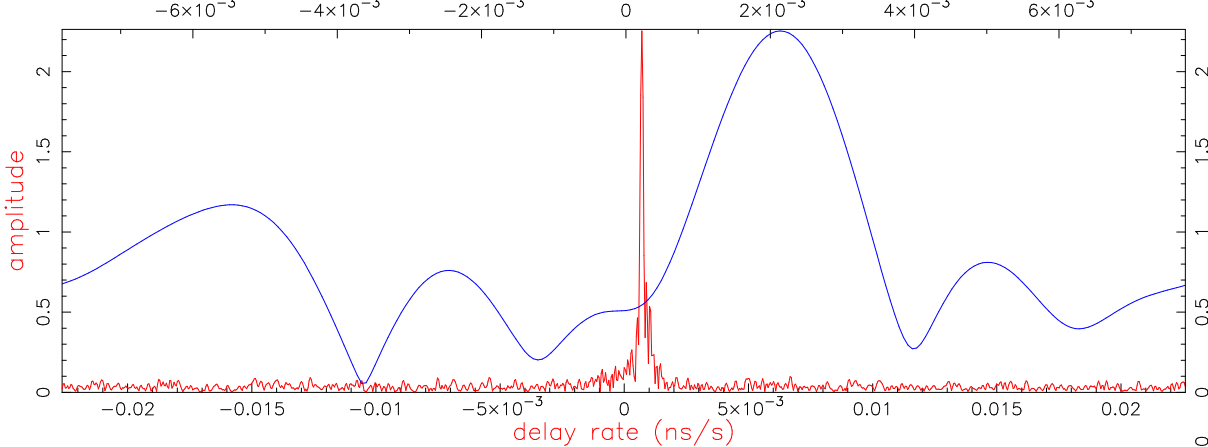
aux01

2013+370.3MPATB, No0544, AZ

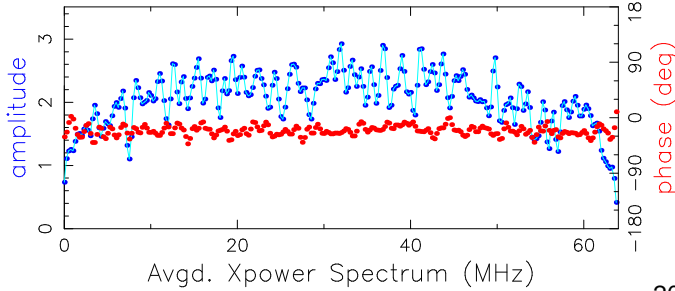
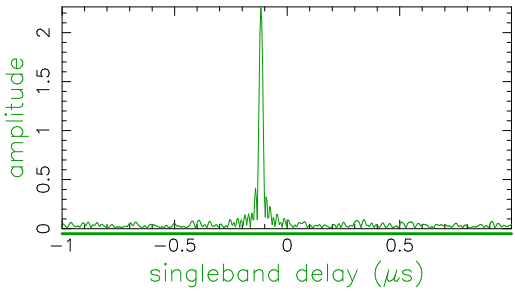
ALMA - METSAHOV, fgroup Q, pol XL

multiband delay (μ s)

Fringe quality 5

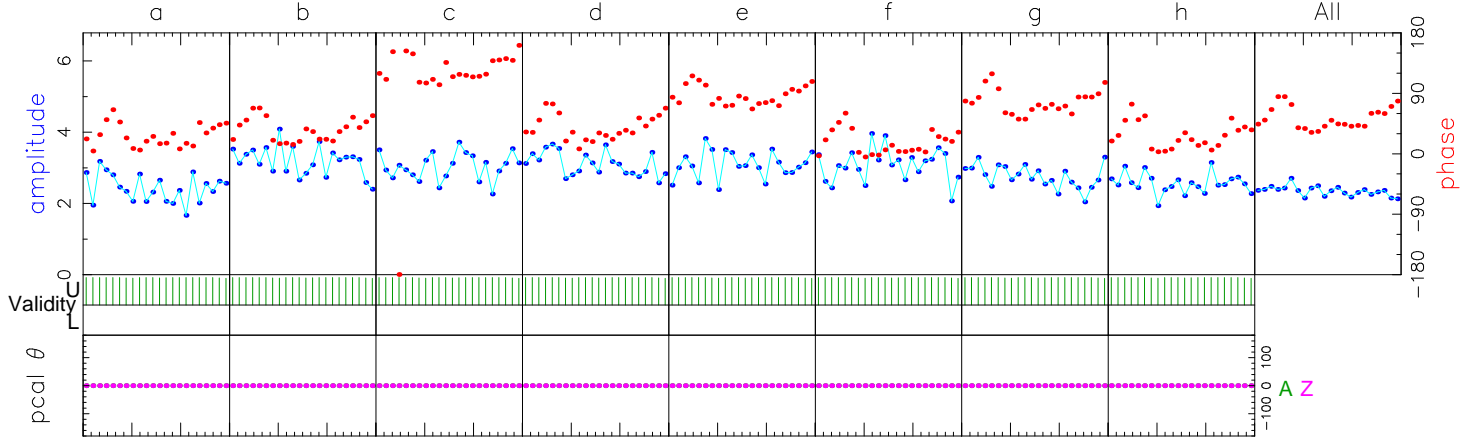


SNR 82.9
 Int time 179.389
 Amp 2.263
 Phase -126.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.116358
 MBD 0.002159
 Fringe rate (Hz)
 0.030307
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153708
 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
	27.9	35.7	128.7	39.9	86.8	16.1	77.6	28.0	Phase	53.5
	2.3	3.1	2.9	2.9	3.0	2.9	2.6	2.4	Ampl.	2.8
	228.8	227.2	227.1	226.8	226.8	226.7	226.3	227.2	Sbd box	227.2
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	
Z	0	0	0	0	0	0	0	0	PC freqs	
A:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -1.12591357980E+03 Apriori delay (usec) -1.12579073882E+03 Resid mbdelay (usec) 2.15903E-03 +/- 1.3E-05
 Sband delay (usec) -1.12590709707E+03 Apriori clock (usec) -2.1075251E+03 Resid sbdelay (usec) -1.16358E-01 +/- 1.0E-04
 Phase delay (usec) -1.12579073538E+03 Apriori clockrate (us/s) -6.2069187E-07 Resid phdelay (usec) 3.44777E-06 +/- 8.9E-08
 Delay rate (us/s) 4.08023195990E-01 Apriori rate (us/s) 4.08022493466E-01 Resid rate (us/s) 7.02524E-07 +/- 8.6E-10
 Total phase (deg) -296.7 Apriori accel (us/s/s) -9.10524048523E-05 Resid phase (deg) -126.5 +/- 1.4

RMS Theor. Amplitude 2.263 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 16.3 3.2 Search (1024X32) 2.220 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 7.0 5.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 41.9 2.0 Inc. seg. avg. 2.345 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 25.2 3.4 Inc. frq. avg. 2.771 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 351.7 el 29.1 pa 170.1 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -1537.357 -7148.600 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/AZ...3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/AZ.Q.5.3MPATB

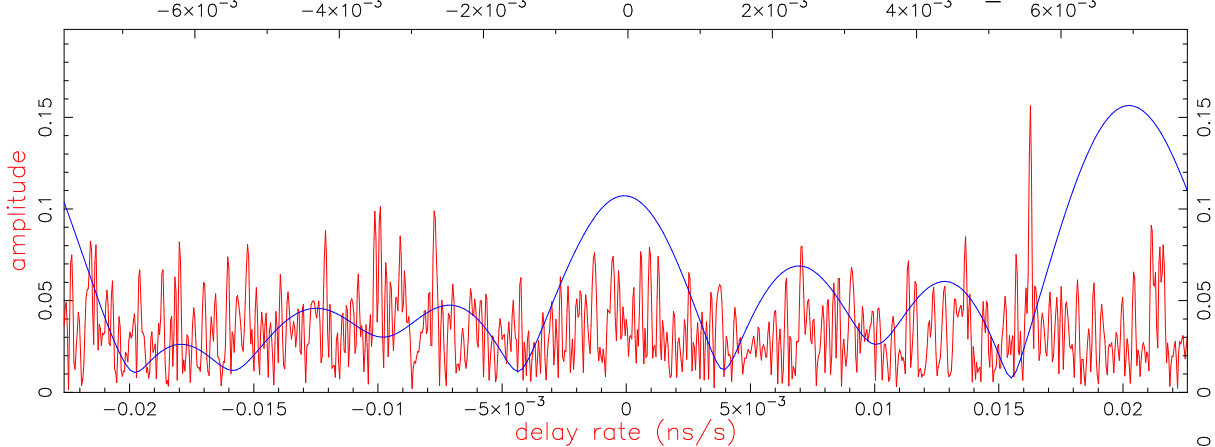
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, bZ

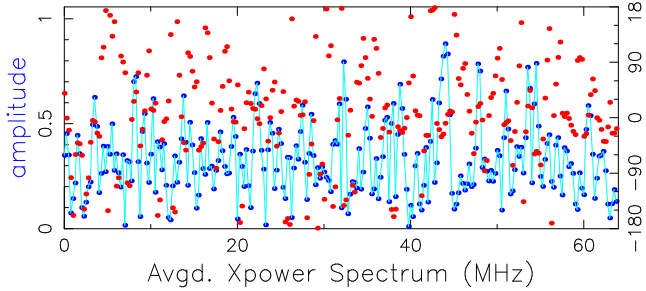
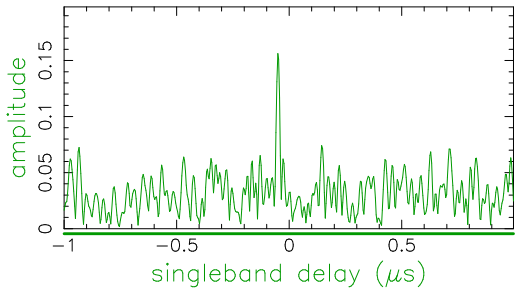
VLBA_BR - METSAHOV, fgroup Q, pol RL

multiband delay (μs)



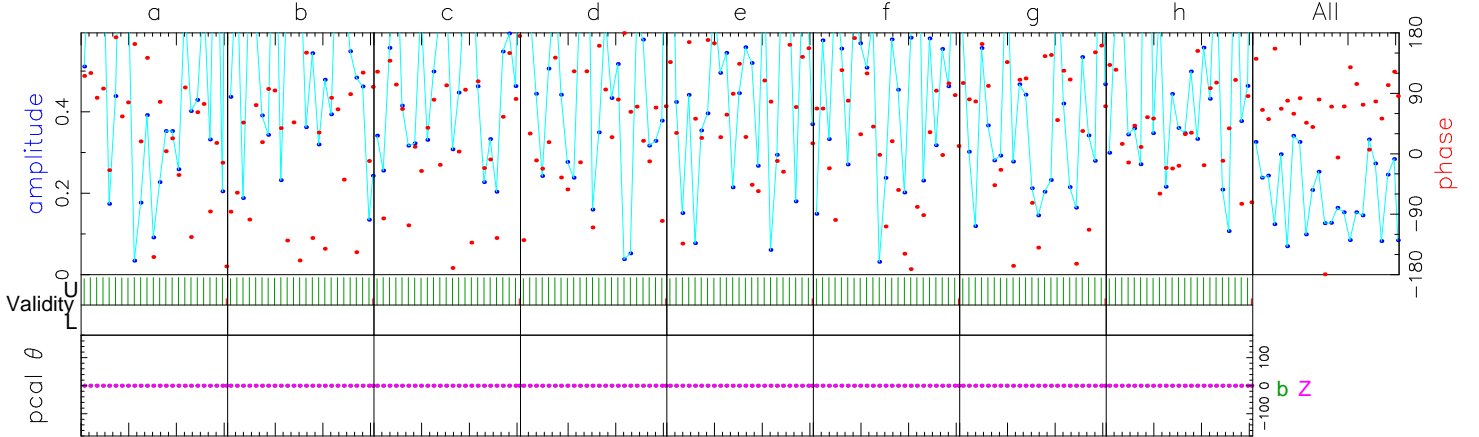
Fringe quality 0

SNR 5.8
 Int time 177.511
 Amp 0.198
 Phase -13.2
 PFD 6.5e-01
 Delays (us)
 SBD -0.049437
 MBD 0.006989
 Fringe rate (Hz) 0.705062
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112358.69
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153731
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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	75.9	87.9	83.5	52.6	106.3	45.9	123.2	44.0	Phase	76.8
b	0.4	0.1	0.2	0.2	0.2	0.1	0.3	0.3	Ampl.	0.2
Z	243.0	347.5	292.0	468.3	440.4	163.0	51.2	60.6	Sbd box	244.3
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	8.56086380899E+03	Apriori delay (usec)	8.56091932008E+03	Resid mbdelay (usec)	6.98892E-03	+/-	1.9E-04
Sband delay (usec)	8.56086988333E+03	Apriori clock (usec)	4.5235577E-08	Resid sbdelay (usec)	-4.94368E-02	+/-	1.5E-03
Phase delay (usec)	8.56091932502E+03	Apriori clockrate (us/s)	-3.3419014E-08	Resid phdelay (usec)	4.94539E-06	+/-	1.3E-06
Delay rate (us/s)	1.15561669628E+00	Apriori rate (us/s)	1.15560035269E+00	Resid rate (us/s)	1.63436E-05	+/-	1.2E-08
Total phase (deg)	-204.7	Apriori accel (us/s/s)	-5.39354082241E-05	Resid phase (deg)	-13.2	+/-	19.9

ph/seg (deg)	43.2	RMS	43.2	Theor.	48.7	Amplitude	0.198 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	62.4	Search (1024X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	31.1	Inc. seg. avg.	0.186	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	45.9	Inc. frq. avg.	0.197	Data rate(Mb/s): 2048								

b: az 93.3 el 57.2 pa -56.7 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4197.829 -2011.169 simultaneous interpolator

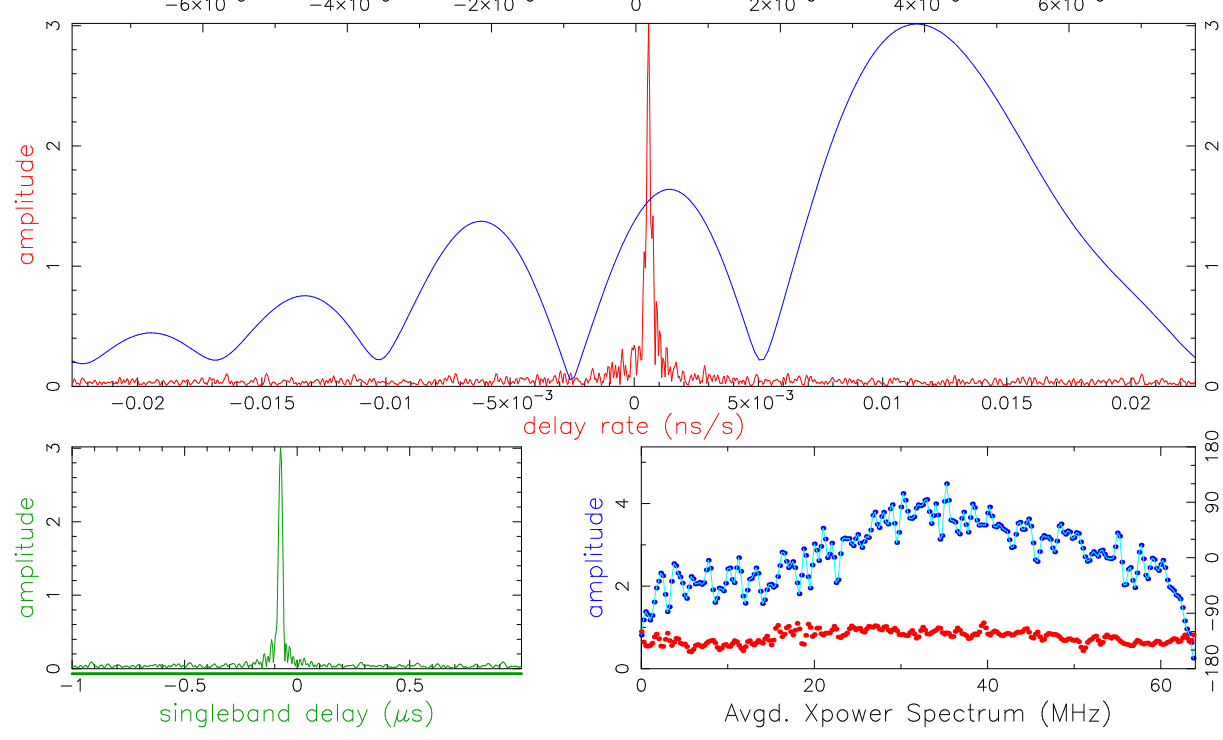
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Mk4/DiFX fourfit 3.25 rev 0

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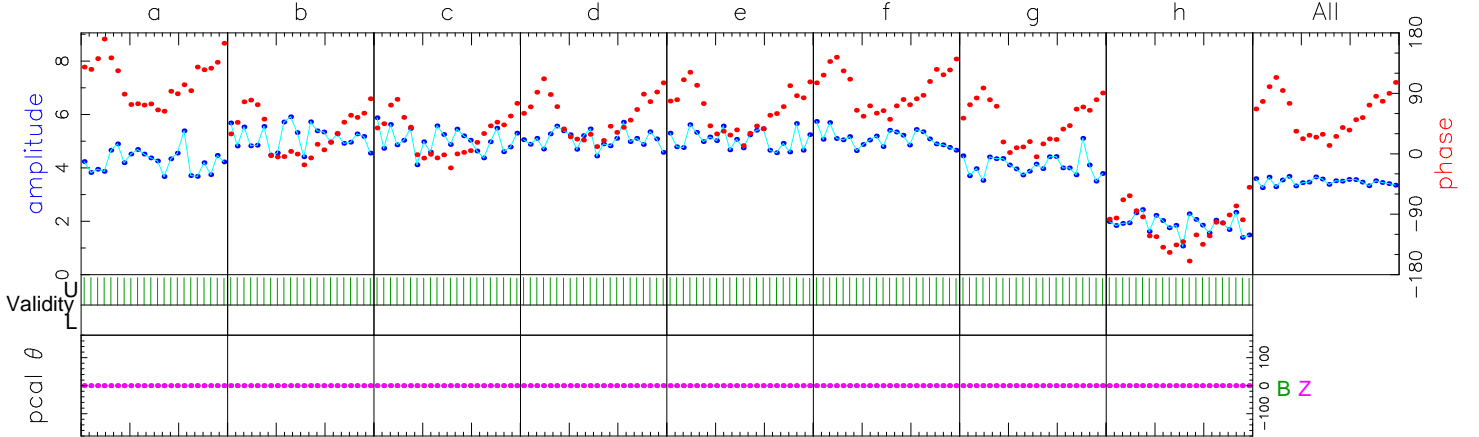
2013+370.3MPATB, No0544, BZ

EFLSBERG - METSAHOV, fgroup Q, pol LR



Fringe quality 3
 Error code G
 SNR 110.5
 Int time 179.389
 Amp 3.019
 Phase -233.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.073681
 MBD 0.003893
 Fringe rate (Hz)
 0.024223
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153742
 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	
	108.5	31.0	27.9	56.3	64.5	96.1	46.0	-107.1	Phase	59.3	
	3.7	4.4	4.4	4.4	4.3	4.5	3.5	1.7	Ampl.	3.9	
	235.9	237.6	238.5	238.2	238.4	238.1	236.4	232.7	Sbd box	238.1	
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		
Z	0	0	0	0	0	0	0	0	PC freqs		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Z	1000	1000	1000	1000	1000	1000	1000	1000			
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	1.51988135051E+03		Apriori delay (usec)		1.51995558209E+03		Resid mbdelay (usec)		3.89342E-03	+/- 9.8E-06	
Sband delay (usec)	1.51988190084E+03		Apriori clock (usec)		-3.5496914E+01		Resid sbdelay (usec)		-7.36813E-02	+/- 7.8E-05	
Phase delay (usec)	1.51995558591E+03		Apriori clockrate (us/s)		-7.9939896E-07		Resid phdelay (usec)		3.82133E-06	+/- 6.7E-08	
Delay rate (us/s)	-1.81364239451E-01		Apriori rate (us/s)		-1.81364800958E-01		Resid rate (us/s)		5.61506E-07	+/- 6.4E-10	
Total phase (deg)			Apriori accel (us/s/s)		-1.48442036198E-05		Resid phase (deg)		-233.2	+/- 1.0	
RMS	30.4	2.4	Amplitude		3.019 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	30.4	2.4	Search (1024X32)		2.943		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
amp/seg (%)	15.8	4.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	74.7	1.5	Inc. seg. avg.		3.479		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
amp/frq (%)	40.7	2.6	Inc. frq. avg.		3.858		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 291.9 el 31.5 pa 47.8	Z: az 299.2 el 26.6 pa 33.0		u, v (fr/asec) 643.389 -789.895						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0544/BZ..3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544/BZ.Q.155.3MPATB								

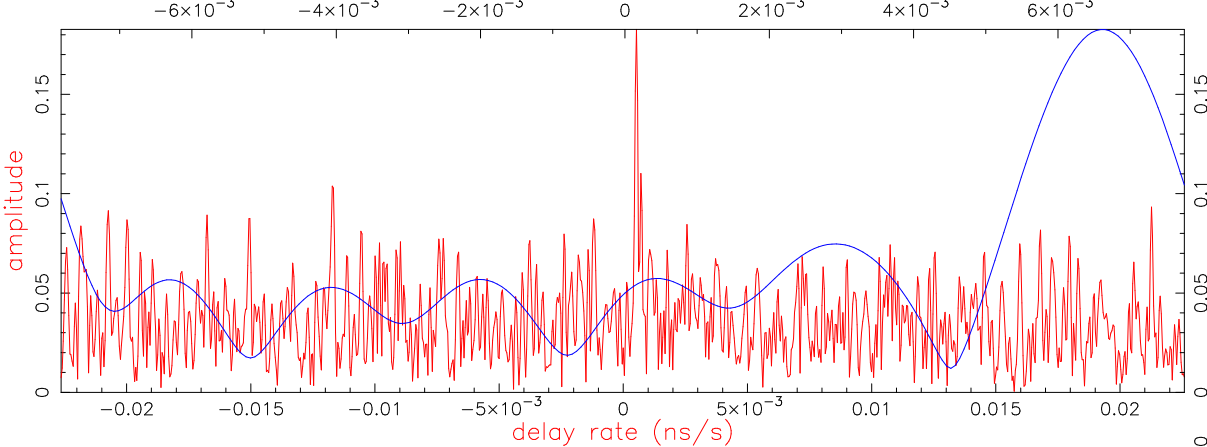
Mk4/DiFX fourfit 3.25 rev 0

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2013+370.3MPATB, No0544, BZ

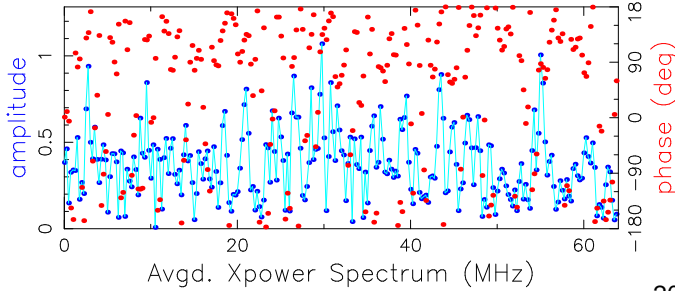
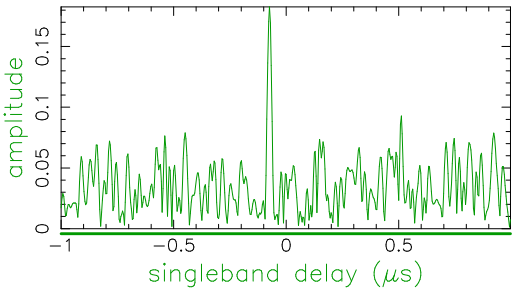
EFLSBERG - METSAHOV, fgroup Q, pol RL

multiband delay (μ s)



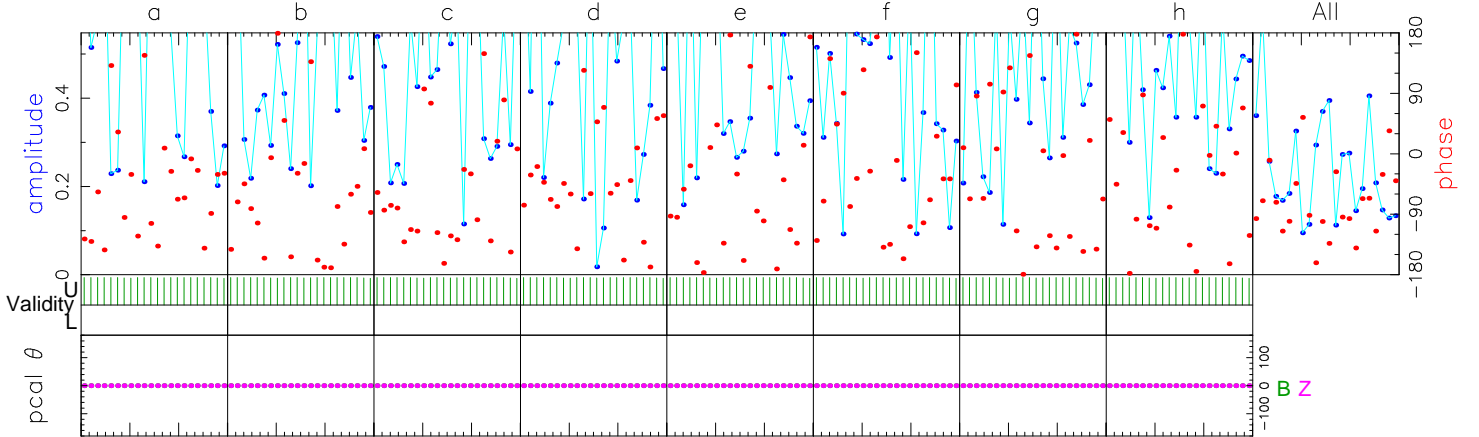
Fringe quality 0

SNR 6.7
 Int time 179.389
 Amp 0.183
 Phase -16.0
 PFD 3.2e-03
 Delays (us)
 SBD -0.074303
 MBD 0.006613
 Fringe rate (Hz)
 0.023510
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153744
 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
	-78.8	-101.1	-99.8	-52.3	-86.3	-91.5	-126.8	-37.0		-83.5
	0.4	0.2	0.2	0.3	0.1	0.2	0.2	0.1		0.2
	237.2	239.1	463.5	237.8	204.2	411.9	131.0	112.6		238.0
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		
Z	0	0	0	0	0	0	0	0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		Chan ids
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		Tracks

Group delay (usec) (SBD)	1.51988406989E+03	Apriori delay (usec)	1.51995558209E+03	Resid mbdelay (usec)	6.61280E-03	+/-	1.6E-04
Sband delay (usec)	1.51988127909E+03	Apriori clock (usec)	-3.5496914E+01	Resid sbdelay (usec)	-7.43030E-02	+/-	1.3E-03
Phase delay (usec)	1.51995557672E+03	Apriori clockrate (us/s)	-7.9939896E-07	Resid phdelay (usec)	-5.37529E-06	+/-	1.1E-06
Delay rate (us/s)	-1.81364255993E-01	Apriori rate (us/s)	-1.81364800958E-01	Resid rate (us/s)	5.44964E-07	+/-	1.1E-08
Total phase (deg)	-83.8	Apriori accel (us/s/s)	-1.48442036198E-05	Resid phase (deg)	-16.0	+/-	17.1

ph/seg (deg)	53.6	Theor.	40.2	Amplitude	0.183 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.0		70.1	Search (1024X32)	0.175	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.8		24.2	Inc. seg. avg.	0.196	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	44.9		42.3	Inc. frq. avg.	0.183	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 291.9 el 31.5 pa 47.8 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) 643.389 -789.895 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/BZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/BZ.Q.168.3MPATB

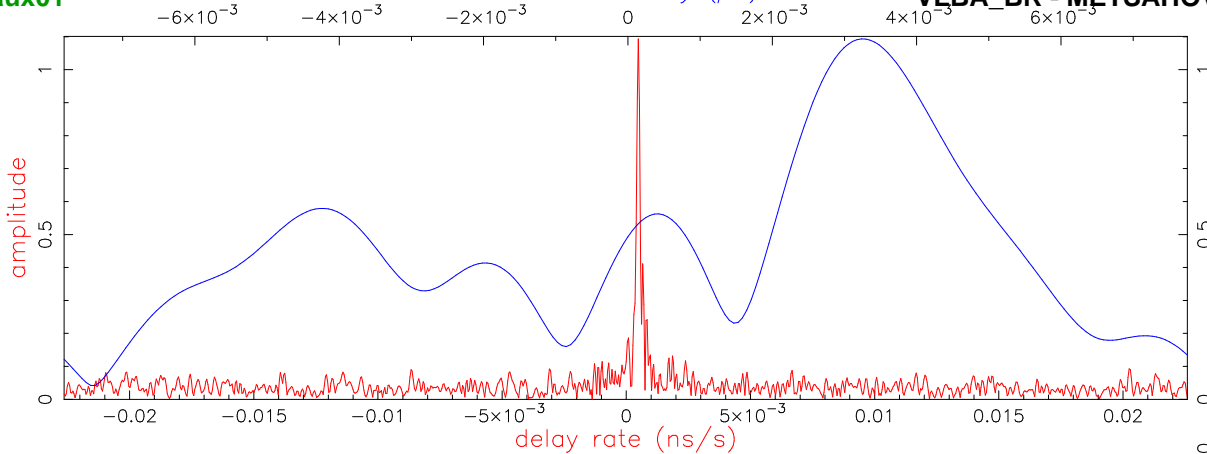
Mk4/DiFX fourfit 3.25 rev 0

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2013+370.3MPATB, No0544, bZ

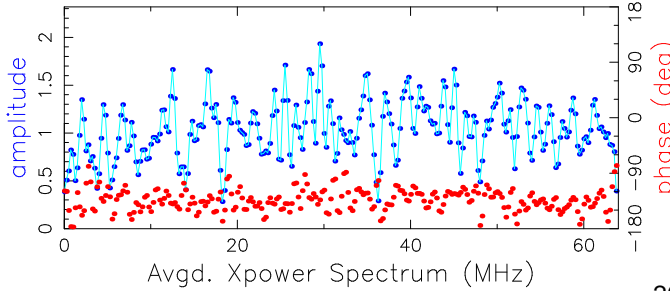
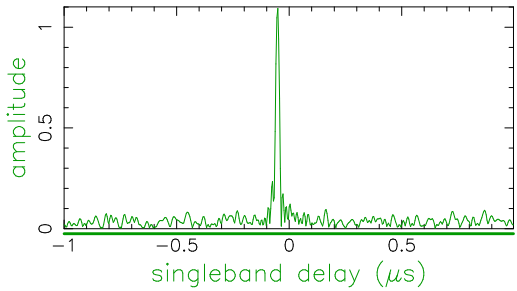
VLBA_BR - METSAHOV, fgroup Q, pol LL

multiband delay (μ s)



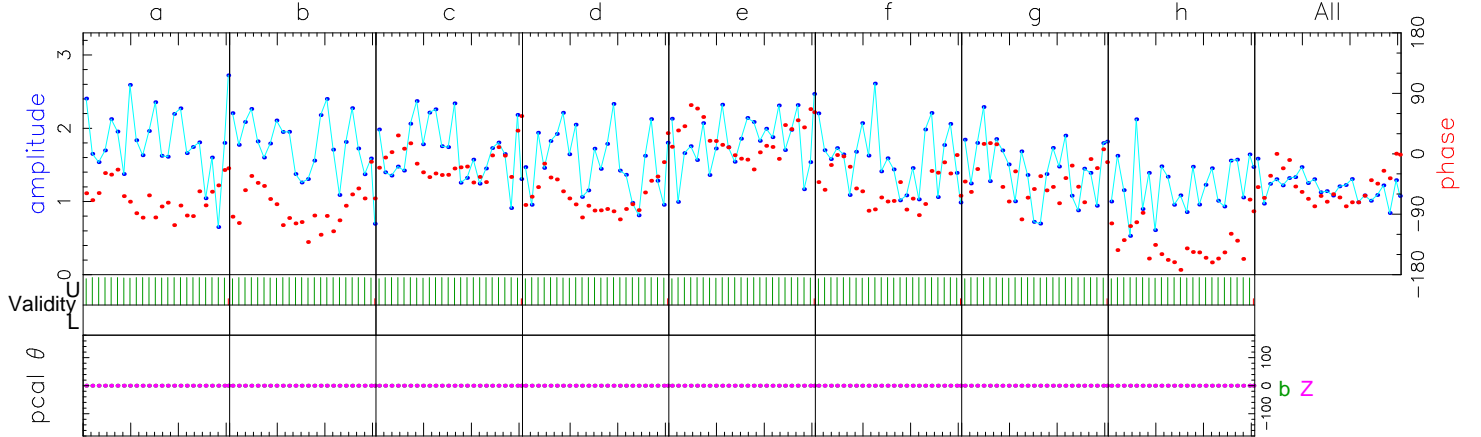
Fringe quality 5

SNR 40.1
 Int time 177.511
 Amp 1.101
 Phase -138.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.051840
 MBD 0.003232
 Fringe rate (Hz)
 0.022047
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112358.69
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153722
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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
	-66.5	-79.4	-13.2	-62.8	22.6	-46.9	-35.0	-135.6	Phase	-48.3
	1.6	1.6	1.6	1.4	1.4	1.2	1.2	1.1	Ampl.	1.4
	243.5	243.9	243.2	243.0	243.0	242.7	242.4	241.4	Sbd box	243.7
U/L	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) 8.56086005181E+03 Apriori delay (usec) 8.56091932008E+03 Resid mbdelay (usec) 3.23174E-03 +/- 2.7E-05
 Sband delay (usec) 8.56086748008E+03 Apriori clock (usec) 4.5235577E+08 Resid sbdelay (usec) -5.18400E-02 +/- 2.1E-04
 Phase delay (usec) 8.56091931697E+03 Apriori clockrate (us/s) -3.3419014E-08 Resid phdelay (usec) -3.11014E-06 +/- 1.8E-07
 Delay rate (us/s) 1.15560086374E+00 Apriori rate (us/s) 1.15560035269E+00 Resid rate (us/s) 5.11054E-07 +/- 1.8E-09
 Total phase (deg) -329.8 Apriori accel (us/s/s) -5.39354082241E-05 Resid phase (deg) -138.3 +/- 2.9

RMS Theor. Amplitude 1.101 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 24.0 7.0 Search (1024X32) 1.031 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 17.2 12.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 50.9 4.0 Inc. seg. avg. 1.190 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 35.4 7.1 Inc. frq. avg. 1.440 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 93.3 el 57.2 pa -56.7 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4197.829 -2011.169 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/bZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/bZ.Q.63.3MPATB

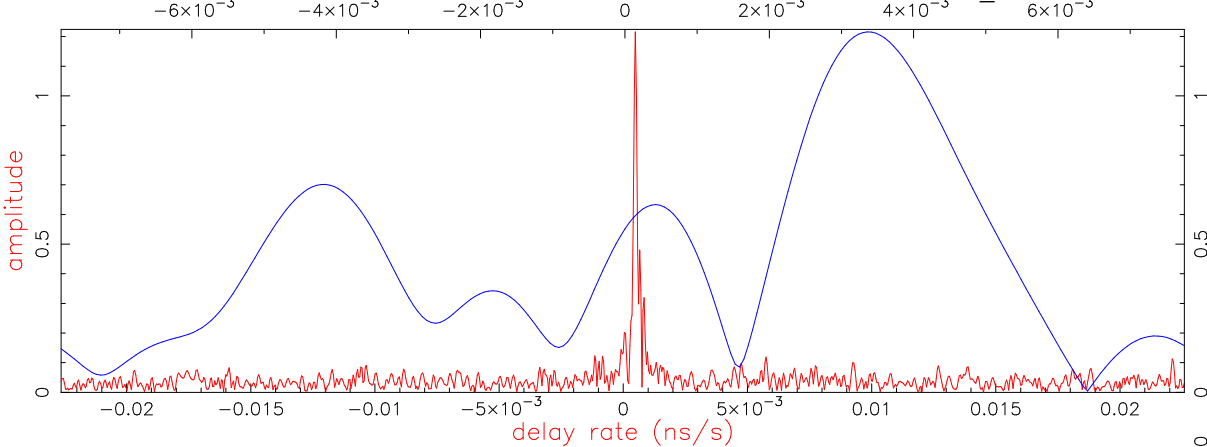
Mk4/DiFX fourfit 3.25 rev 0

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2013+370.3MPATB, No0544, bZ

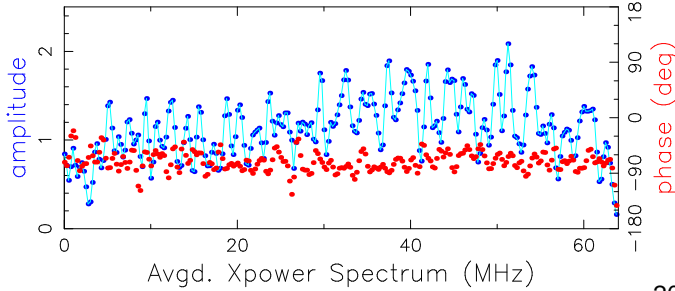
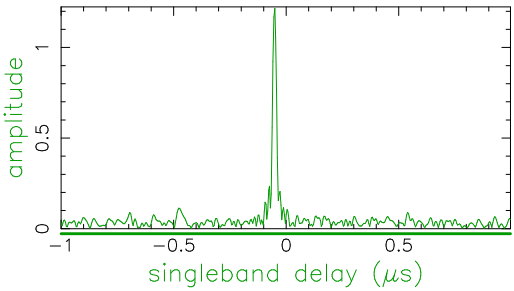
VLBA_BR - METSAHOV, fgroup Q, pol RR

multiband delay (μ s)



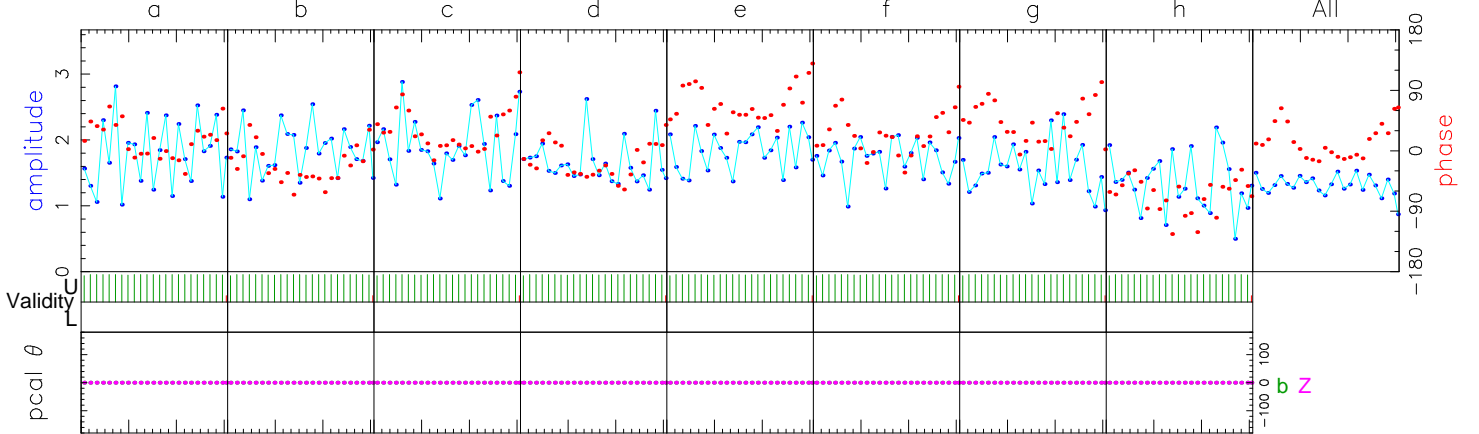
Fringe quality 5

SNR 44.6
 Int time 177.511
 Amp 1.224
 Phase -77.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.051871
 MBD 0.003343
 Fringe rate (Hz) 0.022034
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112358.69
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153724
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD) 8.56086016266E+03 Apriori delay (usec) 8.56091932008E+03 Resid mbdelay (usec) 3.34258E-03 +/- 2.4E-05
 Sband delay (usec) 8.56086744908E+03 Apriori clock (usec) 4.5235577E-08 Resid sbdelay (usec) -5.18710E-02 +/- 1.9E-04
 Phase delay (usec) 8.56091932086E+03 Apriori clockrate (us/s) -3.3419014E-08 Resid phdelay (usec) 7.78114E-07 +/- 1.7E-07
 Delay rate (us/s) 1.15560086344E+00 Apriori rate (us/s) 1.15560035269E+00 Resid rate (us/s) 5.10751E-07 +/- 1.6E-09
 Total phase (deg) -269.4 Apriori accel (us/s/s) -5.39354082241E-05 Resid phase (deg) -77.9 +/- 2.6

ph/seg (deg) 24.3 6.3 Search (1024X32) 1.163 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 13.3 11.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.9 3.6 Inc. seg. avg. 1.321 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.3 6.3 Inc. frq. avg. 1.532 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 93.3 el 57.2 pa -56.7 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4197.829 -2011.169 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/bZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/bZ.Q.70.3MPATB

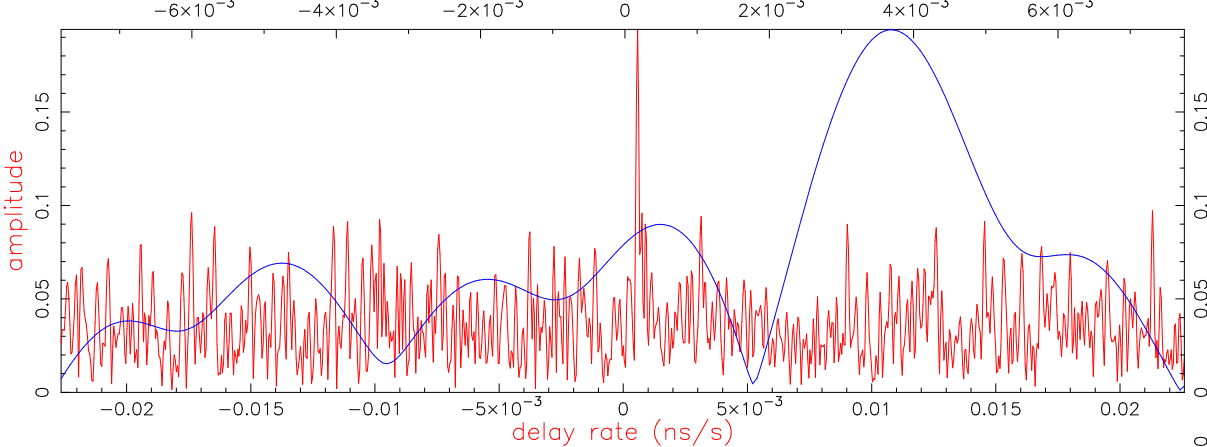
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, BZ

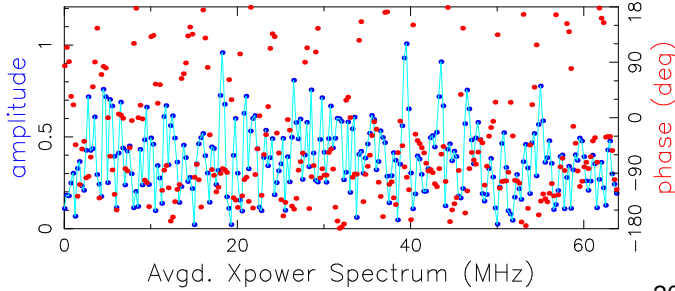
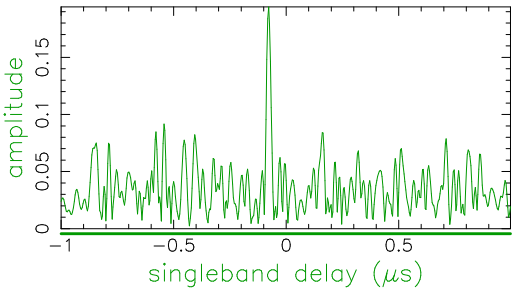
EFLSBERG - METSAHOV, fgroup Q, pol LL

multiband delay (μ s)



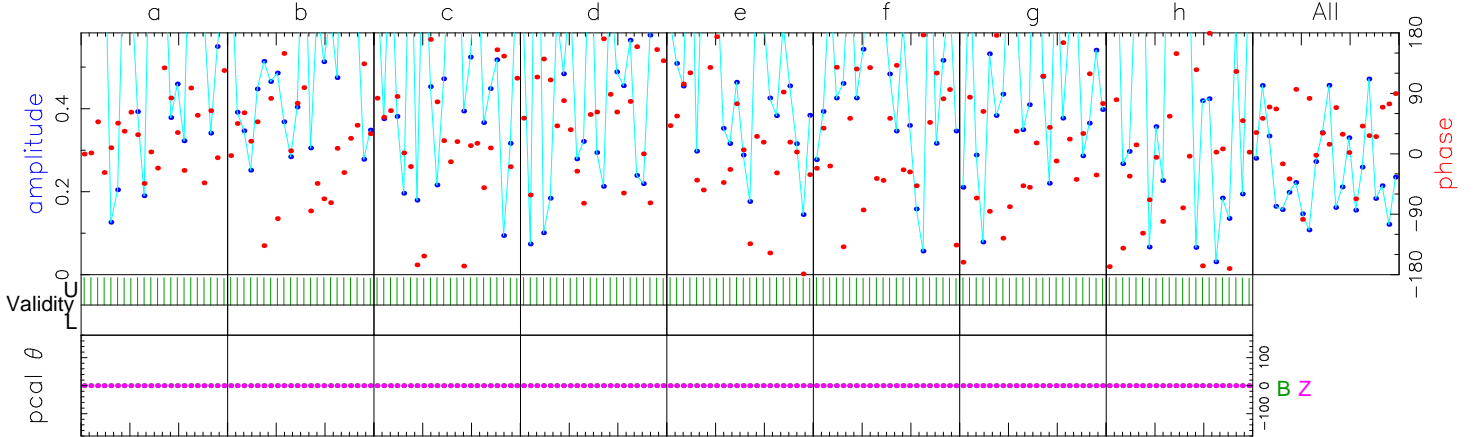
Fringe quality 0

SNR 7.1
 Int time 179.389
 Amp 0.194
 Phase -258.2
 PFD 1.7e-04
 Delays (us)
 SBD -0.078553
 MBD 0.003676
 Fringe rate (Hz) 0.024016
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build 2024:337:191905
 2025:042:153725
 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		
Z	0	0	0	0	0	0	0	0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Group delay (usec) (SBD)	30.4	10.3	36.7	78.8	42.6	39.7	-1.6	49.8		
Sband delay (usec)	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.0		
Phase delay (usec)	236.6	238.6	462.9	228.6	462.2	433.3	129.9	110.1		
Delay rate (us/s)										
Total phase (deg)			-326.0							
Apriori delay (usec)		1.51988113348E+03			1.51995558209E+03				3.67639E-03	+/- 1.5E-04
Apriori clock (usec)		1.51987702909E+03			-3.5496914E+01				-7.85530E-02	+/- 1.2E-03
Apriori clockrate (us/s)		1.51995558430E+03			-7.9939896E-07				2.21133E-06	+/- 1.0E-06
Apriori rate (us/s)		-1.81364244253E-01			-1.81364800958E-01				5.56705E-07	+/- 1.0E-08
Apriori accel (us/s/s)					-1.48442036198E-05				-258.2	+/- 16.1
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.023	0.023
ion window (TEC)									0.00	0.00
PC period (AP's) 5, 5										
simultaneous interpolator										

B: az 291.9 el 31.5 pa 47.8 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) 643.389 -789.895

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/BZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/BZ.Q.77.3MPATB

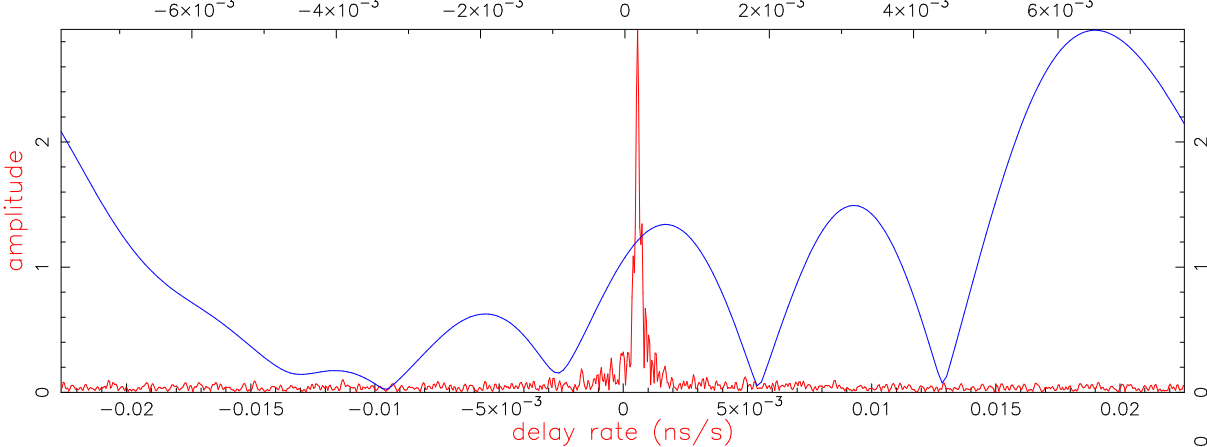
Mk4/DiFX fourfit 3.25 rev 0

aux01

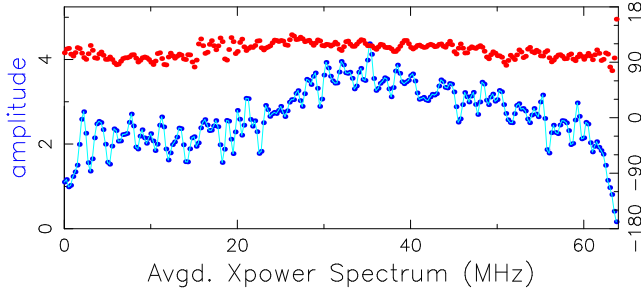
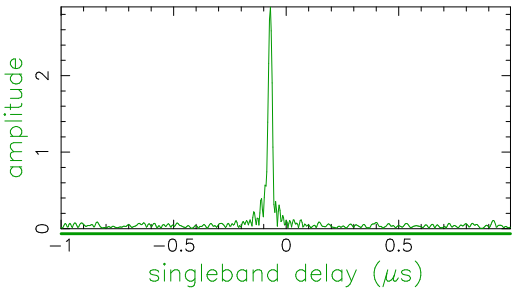
2013+370.3MPATB, No0544, BZ

EFLSBERG - METSAHOV, fgroup Q, pol RR

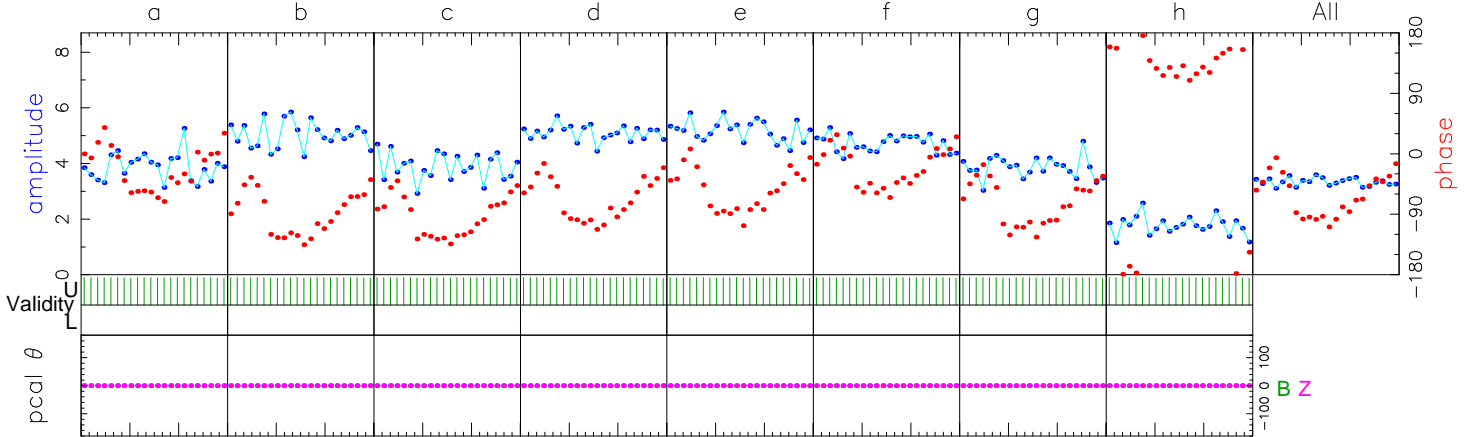
multiband delay (μ s)



Fringe quality 4
 Error code G
 SNR 106.2
 Int time 179.389
 Amp 2.899
 Phase -354.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.070920
 MBD 0.006503
 Fringe rate (Hz)
 0.024249
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153727
 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
	-22.5	-88.7	-92.7	-66.4	-53.4	-20.2	-73.7	148.6	Phase	-61.9
	3.3	4.3	3.4	4.4	4.4	4.2	3.3	1.6	Ampl.	3.6
	236.3	238.5	239.1	238.9	239.2	238.8	237.1	233.4	Sbd box	238.8
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	
Z	0	0	0	0	0	0	0	0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 1.51988396039E+03 Apriori delay (usec) 1.51995558209E+03 Resid mbdelay (usec) 6.50329E-03 +/- 1.0E-05
 Sband delay (usec) 1.51988466159E+03 Apriori clock (usec) -3.5496914E+01 Resid sbdelay (usec) -7.09205E-02 +/- 8.1E-05
 Phase delay (usec) 1.51995557811E+03 Apriori clockrate (us/s) -7.9939896E-07 Resid phdelay (usec) -3.98290E-06 +/- 7.0E-08
 Delay rate (us/s) -1.81364238869E-01 Apriori rate (us/s) -1.81364800958E-01 Resid rate (us/s) 5.62089E-07 +/- 6.7E-10
 Total phase (deg) -62.2 Apriori accel (us/s/s) -1.48442036198E-05 Resid phase (deg) -354.4 +/- 1.1

RMS Theor. Amplitude 2.899 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 30.5 2.5 Search (1024X32) 2.823 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 16.0 4.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 67.7 1.5 Inc. seg. avg. 3.339 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 39.9 2.7 Inc. frq. avg. 3.620 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

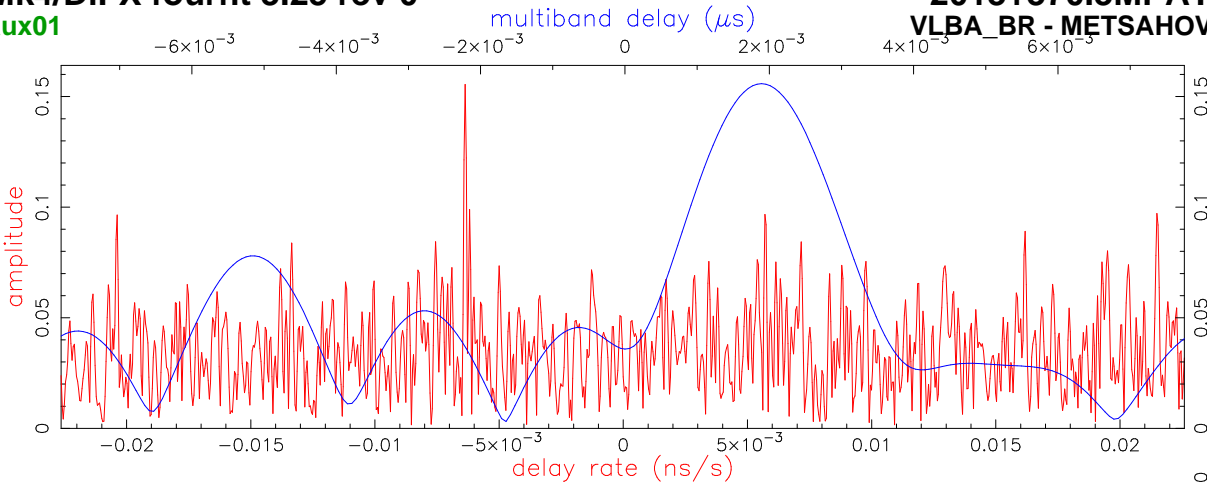
B: az 291.9 el 31.5 pa 47.8 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) 643.389 -789.895 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/BZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/BZ.Q.86.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

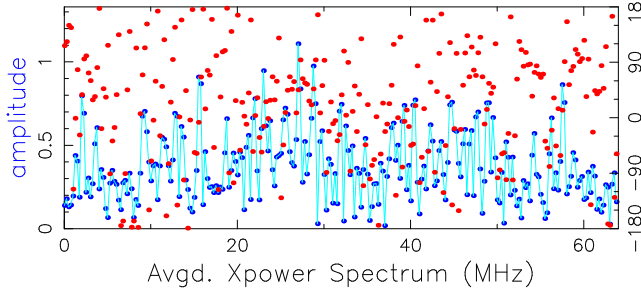
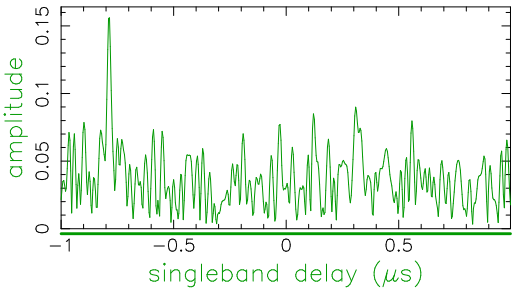
2013+370.3MPATB, No0544, bZ

VLBA_BR - METSAHOV, fgroup Q, pol LR



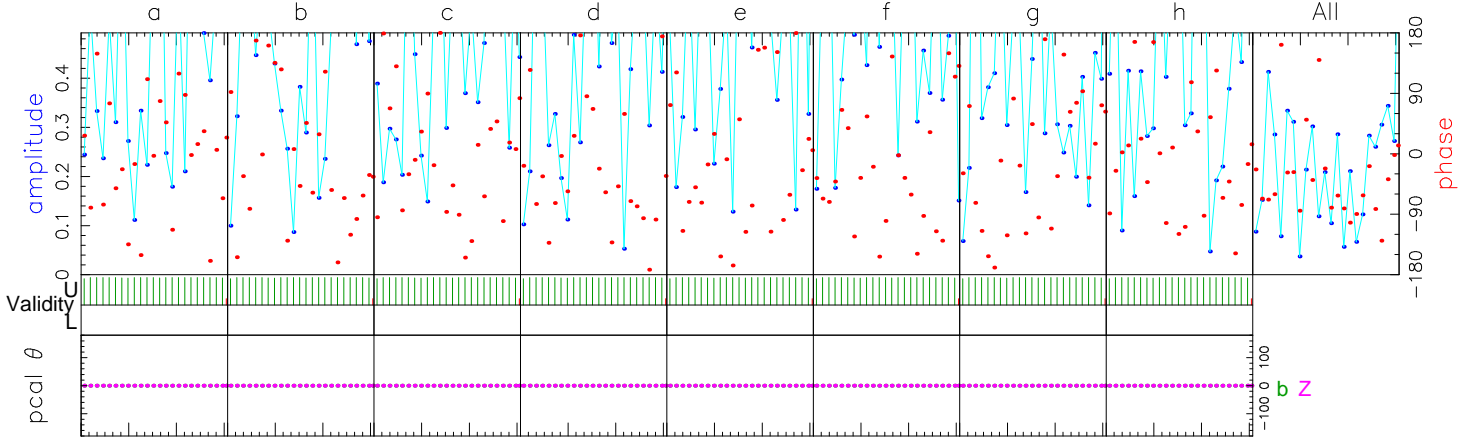
Fringe quality 0

SNR 5.8
 Int time 177.511
 Amp 0.164
 Phase -93.7
 PFD 6.0e-01
 Delays (us)
 SBD -0.787056
 MBD 0.001959
 Fringe rate (Hz)
 -0.276805
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112358.69
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153727
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 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	397.9	321.2	90.6	289.2	46.0	11.0	375.4	288.0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	8.56014002907E+03	Apriori delay (usec)	8.56091932008E+03	Resid mbdelay (usec)	1.95900E-03	+/-	1.9E-04
Sband delay (usec)	8.56013226433E+03	Apriori clock (usec)	4.5235577E+08	Resid sbdelay (usec)	-7.87056E-01	+/-	1.5E-03
Phase delay (usec)	8.56091931694E+03	Apriori clockrate (us/s)	-3.3419014E-08	Resid phdelay (usec)	-3.13458E-06	+/-	1.3E-06
Delay rate (us/s)	1.15559393625E+00	Apriori rate (us/s)	1.15560035269E+00	Resid rate (us/s)	-6.41643E-06	+/-	1.2E-08
Total phase (deg)	-285.2	Apriori accel (us/s/s)	-5.39354082241E-05	Resid phase (deg)	-93.7	+/-	19.8

ph/seg (deg)	60.5	RMS	Theor.	Amplitude	0.164 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.2	60.5	48.5	Search (1024X32)	0.154	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.2	81.2	84.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.5	31.2	28.0	Inc. seg. avg.	0.164	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		27.5	48.9	Inc. frq. avg.	0.161	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 93.3 el 57.2 pa -56.7 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4197.829 -2011.169 simultaneous interpolator

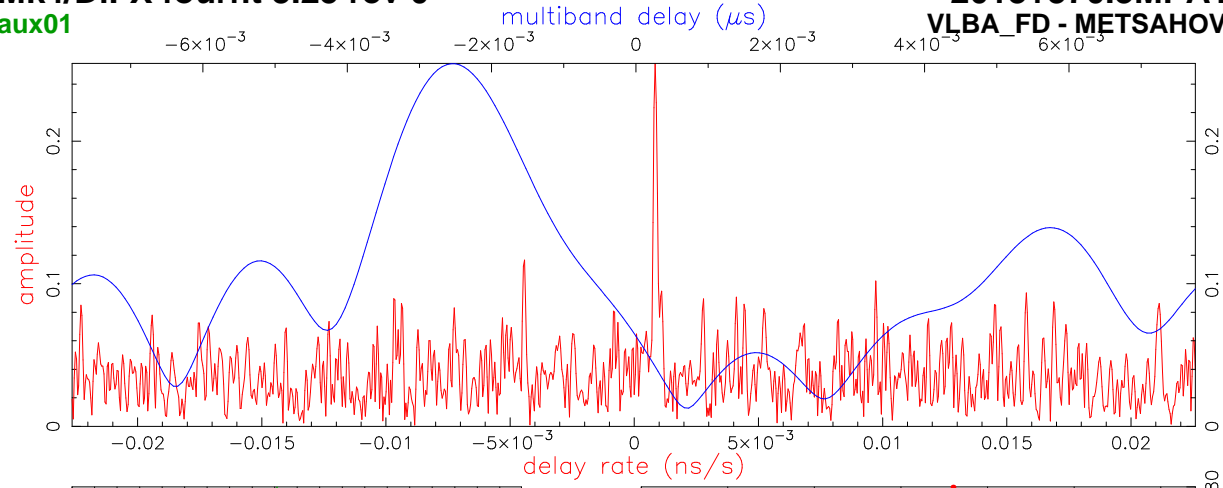
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/bZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/bZ.Q.88.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, fZ

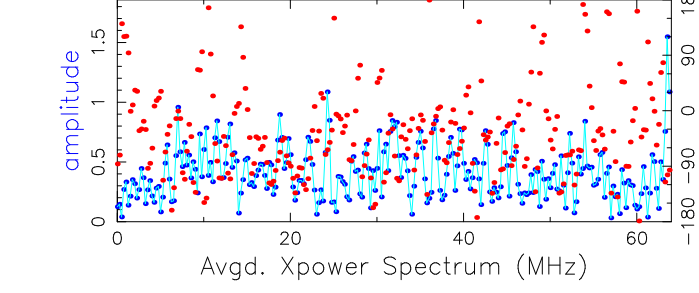
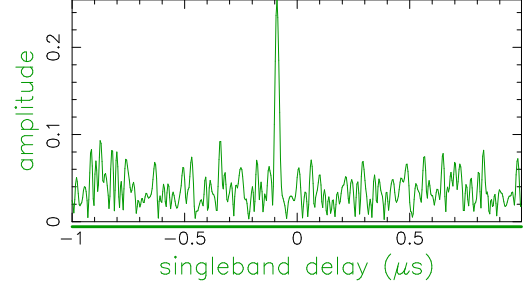
VLBA_FD - METSAHOV, fgroup Q, pol LL



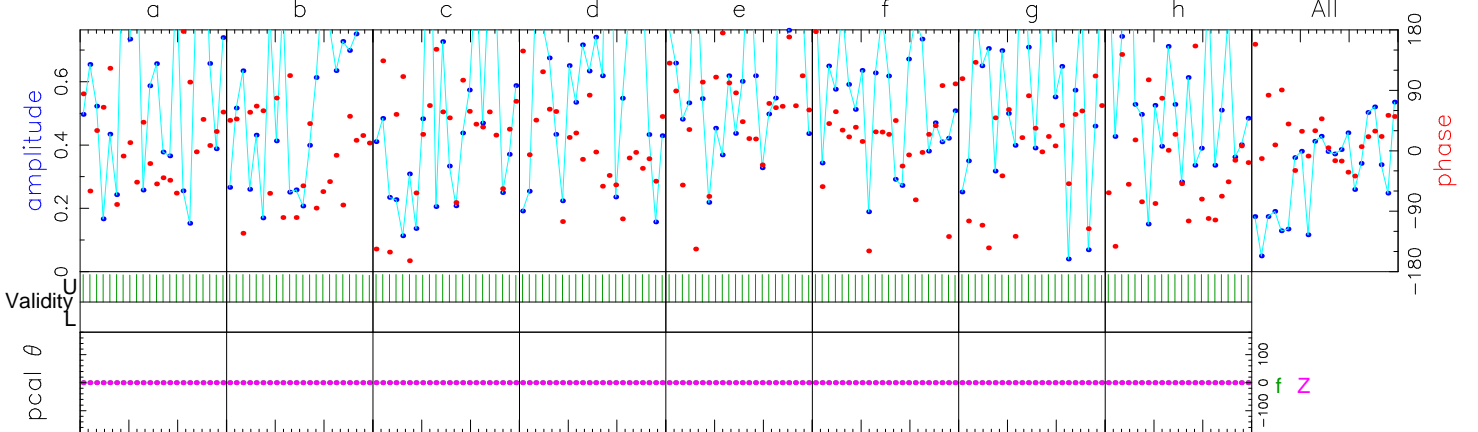
Fringe quality 9

SNR 9.3
 Int time 179.389
 Amp 0.255
 Phase -118.1
 PFD 2.3e-12
 Delays (us)
 SBD -0.090019
 MBD -0.002542
 Fringe rate (Hz) 0.036061
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153737
 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
	-1.3	-17.2	57.9	2.8	78.8	23.6	41.4	-53.6	Phase	16.9
	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	Ampl.	0.3
	234.3	441.4	233.8	233.0	234.5	233.8	233.1	233.7	Sbd box	234.0
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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.02069150661E+04	Apriori delay (usec)	1.02070113582E+04	Resid mbdelay (usec)	-2.54206E-03	+/-	1.2E-04
Sband delay (usec)	1.02069213394E+04	Apriori clock (usec)	-4.4433594E-02	Resid sbdelay (usec)	-9.00187E-02	+/-	9.2E-04
Phase delay (usec)	1.02070113593E+04	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	1.09063E-06	+/-	7.9E-07
Delay rate (us/s)	1.07451334129E+00	Apriori rate (us/s)	1.07451250538E+00	Resid rate (us/s)	8.35904E-07	+/-	7.6E-09
Total phase (deg)	-121.2	Apriori accel (us/s/s)	-7.87623901466E-05	Resid phase (deg)	-118.1	+/-	12.3

ph/seg (deg) 45.5 28.8 Search (1024X32) 0.249 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.0 50.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.2 17.4 Inc. seg. avg. 0.277 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.0 30.4 Inc. frq. avg. 0.312 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 f: az 66.2 el 66.7 pa -98.6 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -3923.108 -3586.404 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/No0544/fz..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/fz.Q.131.3MPATB simultaneous interpolator

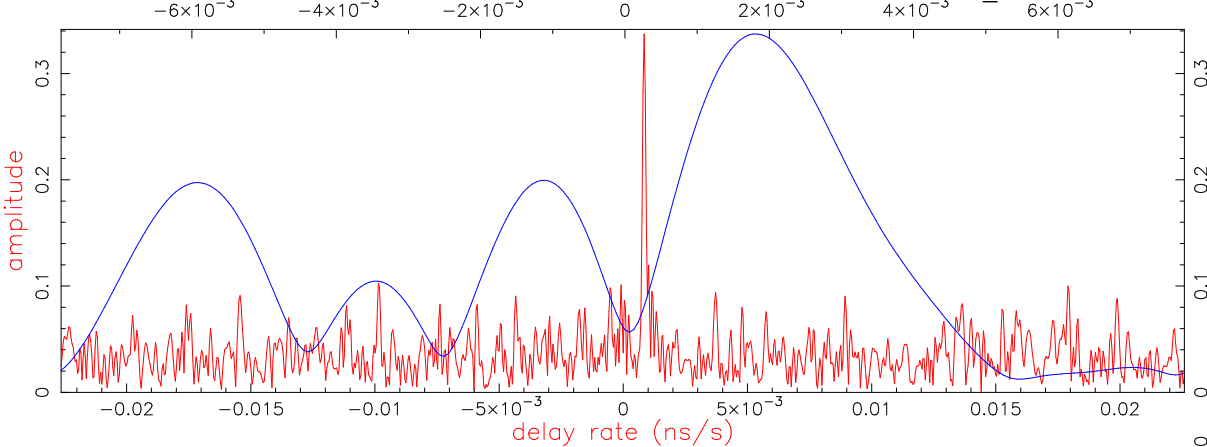
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, fZ

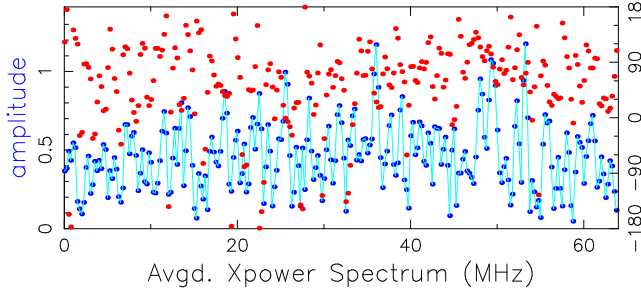
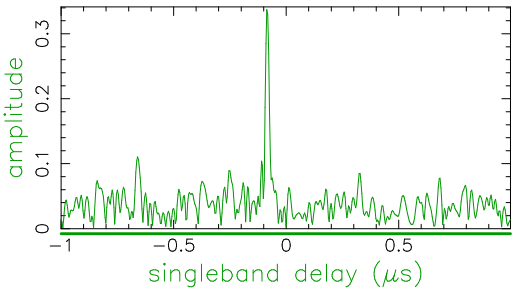
VLBA_FD - METSAHOV, fgroup Q, pol RR

multiband delay (μ s)

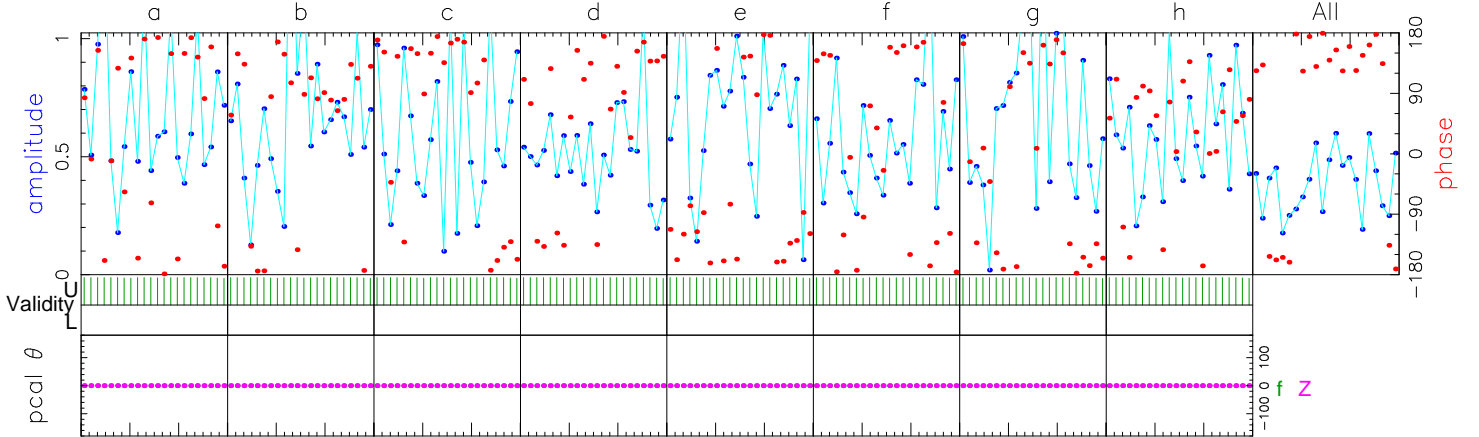


Fringe quality 9

SNR 12.5
 Int time 179.389
 Amp 0.342
 Phase -334.9
 PFD 1.9e-27
 Delays (us)
 SBD -0.084505
 MBD 0.001842
 Fringe rate (Hz)
 0.036001
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153739
 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)	1.02069194500E+04	Apriori delay (usec)	1.02070113582E+04	Resid mbdelay (usec)	1.84179E-03	+/-	8.7E-05
Sband delay (usec)	1.02069268532E+04	Apriori clock (usec)	-4.4433594E-02	Resid sbdelay (usec)	-8.45050E-02	+/-	6.9E-04
Phase delay (usec)	1.02070113685E+04	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	1.03118E-05	+/-	5.9E-07
Delay rate (us/s)	1.07451333991E+00	Apriori rate (us/s)	1.07451250538E+00	Resid rate (us/s)	8.34523E-07	+/-	5.7E-09
Total phase (deg)	-338.0	Apriori accel (us/s/s)	-7.87623901466E-05	Resid phase (deg)	-334.9	+/-	9.2

ph/seg (deg)	31.7	Theor.	21.5	Amplitude	0.342 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	39.5		37.5	Search (1024X32)	0.329	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.3		13.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	35.1		22.6	Inc. seg. avg.	0.363	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.416	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 66.2 el 66.7 pa -98.6 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -3923.108 -3586.404 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/fz..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/fz.Q.142.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

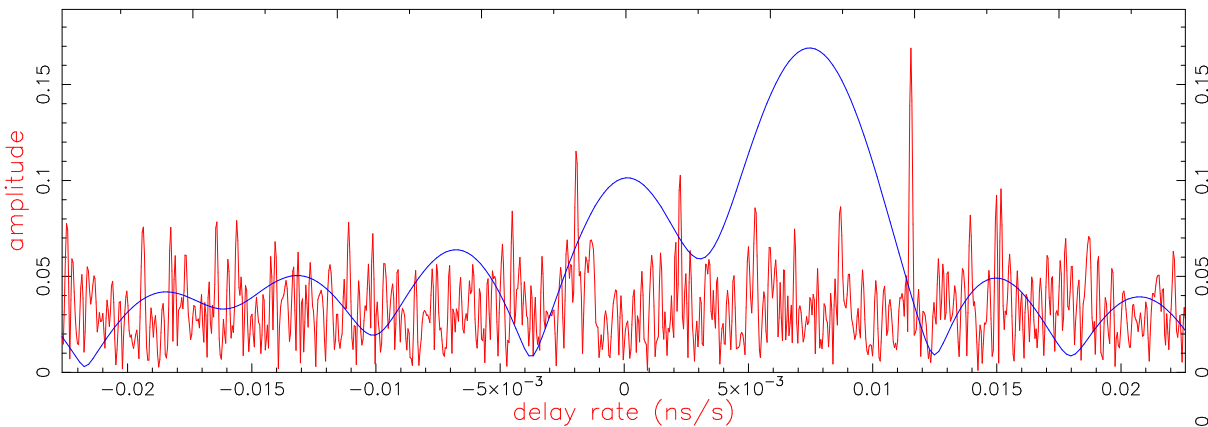
aux01

2013+370.3MPATB, No0544, fZ

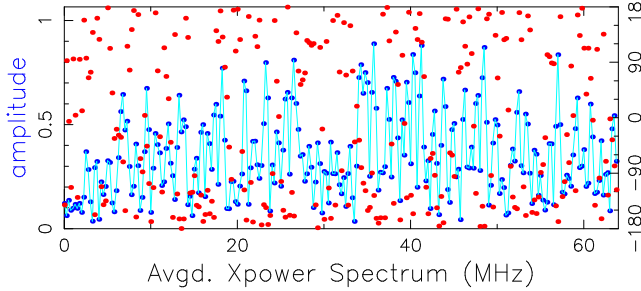
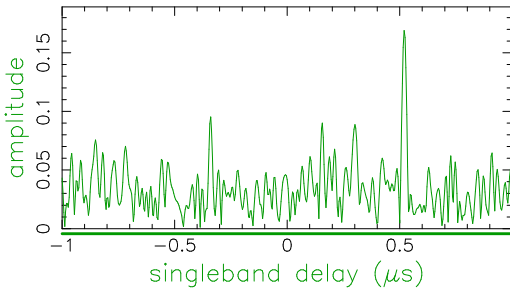
VLBA_FD - METSAHOV, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

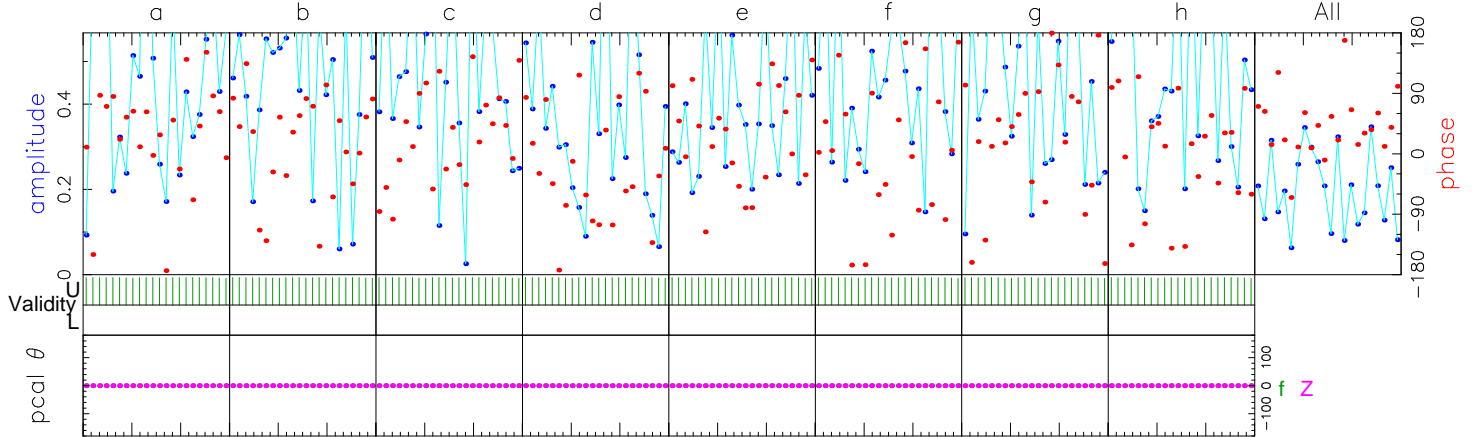


SNR 6.2
 Int time 179.389
 Amp 0.189
 Phase 239.1
 PFD 7.0e-02
 Delays (us)
 SBD 0.520366
 MBD 0.002584
 Fringe rate (Hz)
 0.499976
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153745
 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	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	1.02075295675E+04	Apriori delay (usec)	1.02070113582E+04	Resid mbdelay (usec)	2.58437E-03	+/-	1.7E-04
Sband delay (usec)	1.02075317239E+04	Apriori clock (usec)	-4.4433594E-02	Resid sbdelay (usec)	5.20366E-01	+/-	1.4E-03
Phase delay (usec)	1.02070113605E+04	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	2.35368E-06	+/-	1.2E-06
Delay rate (us/s)	1.07452409499E+00	Apriori rate (us/s)	1.07451250538E+00	Resid rate (us/s)	1.15896E-05	+/-	1.1E-08
Total phase (deg)	235.9	Apriori accel (us/s/s)	-7.87623901466E-05	Resid phase (deg)	239.1	+/-	18.5

ph/seg (deg)	RMS 47.3	Theor. 43.3	Amplitude Search (1024X32)	0.189 +/- 0.030	0.167	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	55.4	75.6	Interp.	0.000	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	27.4	26.1	Inc. seg. avg.	0.175	0.175	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.023	0.023
amp/frq (%)	42.6	45.6	Inc. frq. avg.	0.184	0.184	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 66.2 el 66.7 pa -98.6 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -3923.108 -3586.404 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/fz..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/fz.Q.178.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

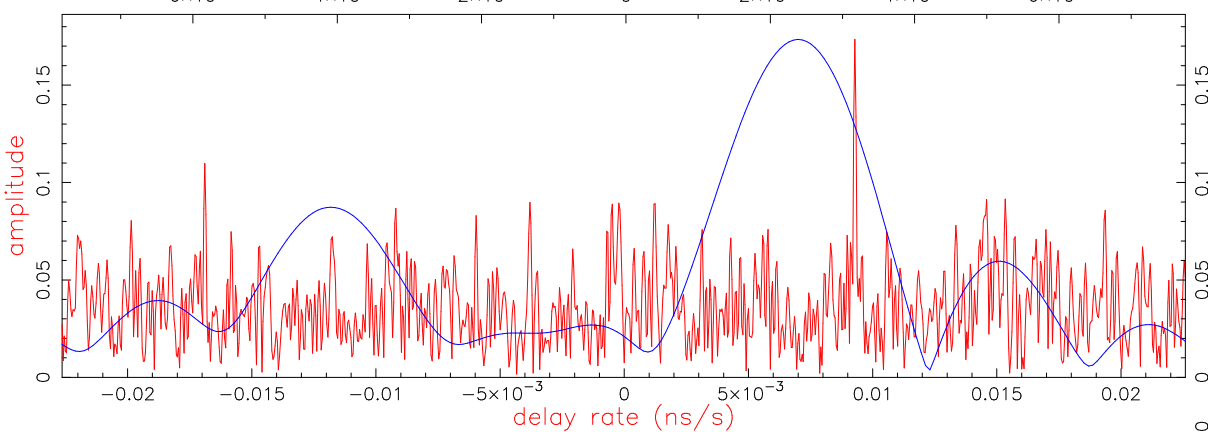
aux01

2013+370.3MPATB, No0544, fZ

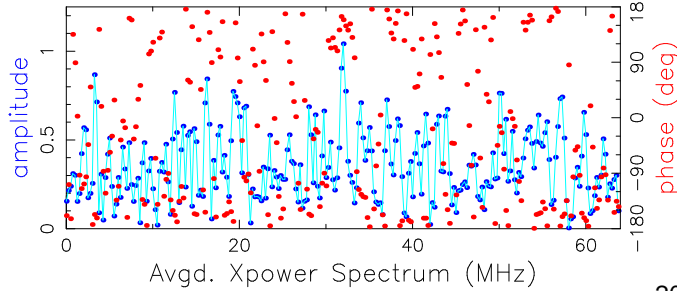
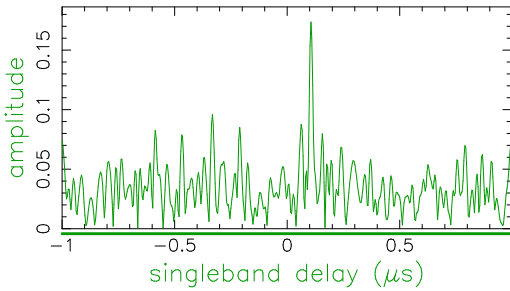
VLBA_FD - METSAHOV, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

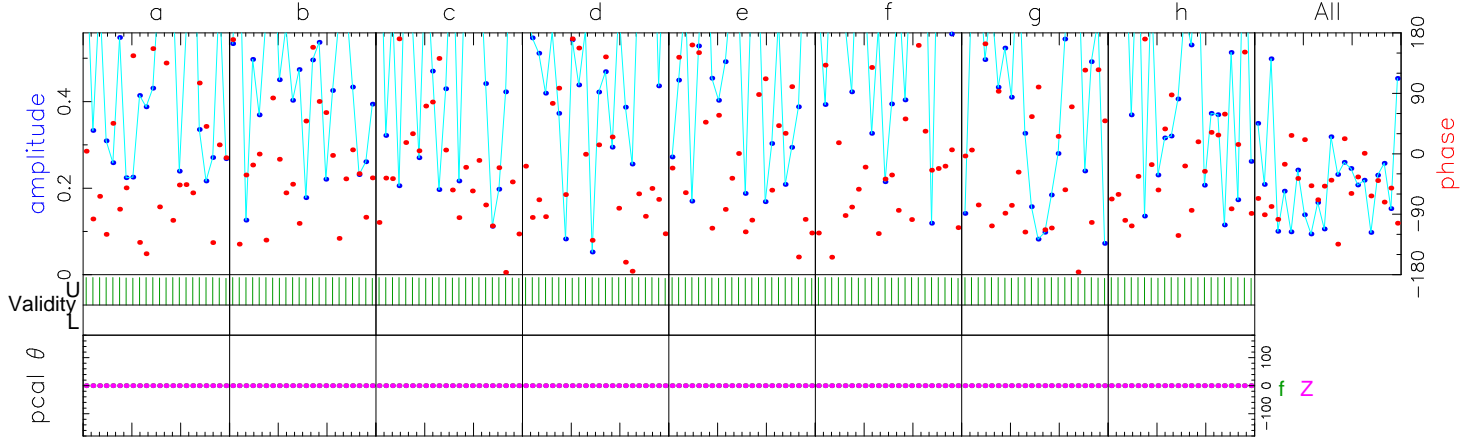


SNR 6.4
 Int time 179.389
 Amp 0.186
 Phase 281.9
 PFD 2.8e-02
 Delays (us)
 SBD 0.105786
 MBD 0.002389
 Fringe rate (Hz)
 0.402465
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153748
 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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	1.02071231227E+04	Apriori delay (usec)	1.02070113582E+04	Resid mbdelay (usec)	2.38950E-03	+/-	1.7E-04
Sband delay (usec)	1.02071171439E+04	Apriori clock (usec)	-4.4433594E-02	Resid sbdelay (usec)	1.05786E-01	+/-	1.4E-03
Phase delay (usec)	1.02070113546E+04	Apriori clockrate (us/s)	-5.5964001E-07	Resid phdelay (usec)	-3.58304E-06	+/-	1.2E-06
Delay rate (us/s)	1.07452183466E+00	Apriori rate (us/s)	1.07451250538E+00	Resid rate (us/s)	9.32928E-06	+/-	1.1E-08
Total phase (deg)	278.7	Apriori accel (us/s/s)	-7.87623901466E-05	Resid phase (deg)	281.9	+/-	18.0

ph/seg (deg)	41.4	Theor.	42.3	Amplitude	0.186 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	67.3	Search (1024X32)	0.172	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	17.7	Inc. seg. avg.	0.187	Inc. frq. avg.	0.176	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	40.0	Inc. frq. avg.	0.176			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

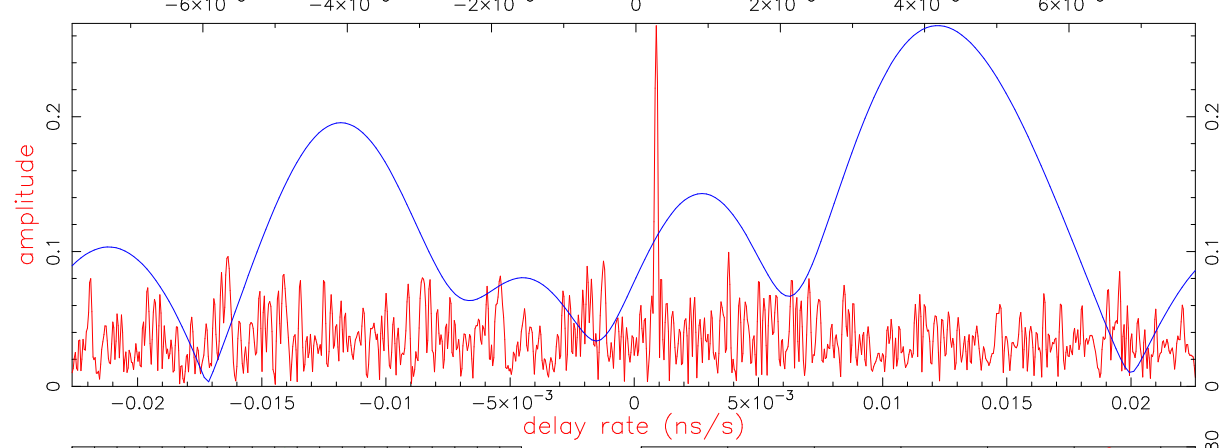
f: az 66.2 el 66.7 pa -98.6 Z: az 299.2 el 26.6 pa 33.0 u, v (fr/asec) -3923.108 -3586.404 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/fz..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/fz.Q.186.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

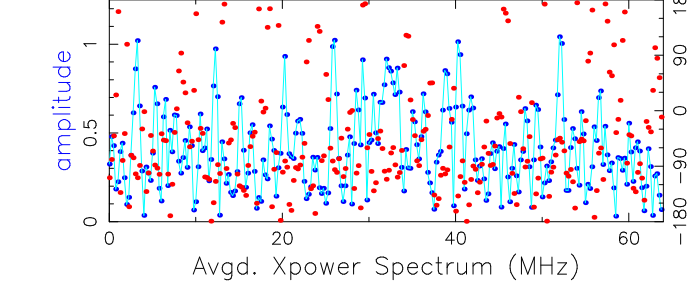
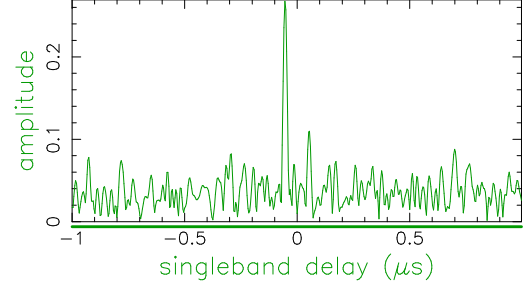
2013+370.3MPATB, No0544, hZ

VLBA_HN - METSAHOV, fgroup Q, pol RR



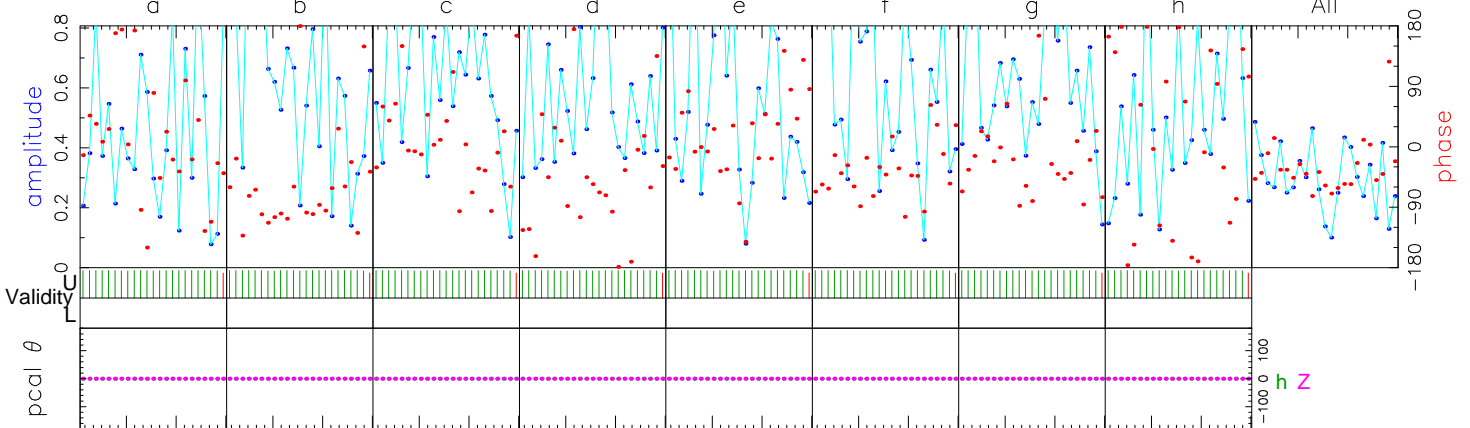
Fringe quality 9

SNR 9.7
 Int time 175.334
 Amp 0.269
 Phase -126.7
 PFD 4.1e-14
 Delays (us)
 SBD -0.053669
 MBD 0.004147
 Fringe rate (Hz)
 0.037786
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112104.10
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153824
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	344/0	344/0	344/0	344/0	344/0	344/0	344/0	344/0		
h	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
h:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		Chan ids
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		Tracks

Group delay (usec) (SBD) 1.17140450127E+04 Apriori delay (usec) 1.17141033656E+04 Resid mbdelay (usec) 4.14716E-03 +/- 1.1E-04
 Sband delay (usec) 1.17140496963E+04 Apriori clock (usec) 1.2320509E+01 Resid sbdelay (usec) -5.36693E-02 +/- 8.8E-04
 Phase delay (usec) 1.17141033632E+04 Apriori clockrate (us/s) -5.3092296E-07 Resid phdelay (usec) -2.36534E-06 +/- 7.6E-07
 Delay rate (us/s) 5.13832772317E-01 Apriori rate (us/s) 5.13831896428E-01 Resid rate (us/s) 8.75890E-07 +/- 7.4E-09
 Total phase (deg) -58.0 Apriori accel (us/s/s) -7.50039690181E-05 Resid phase (deg) -126.7 +/- 11.8

ph/seg (deg) 41.0 28.2 Amplitude 0.269 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.2 49.2 Search (1024X32) 0.262 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 66.6 16.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.0 29.0 Inc. seg. avg. 0.268 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Inc. frq. avg. 0.351 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

h: az 215.2 el 83.2 pa 32.9 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -1899.269 -2887.138 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/hZ...3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/hZ.Q.373.3MPATB

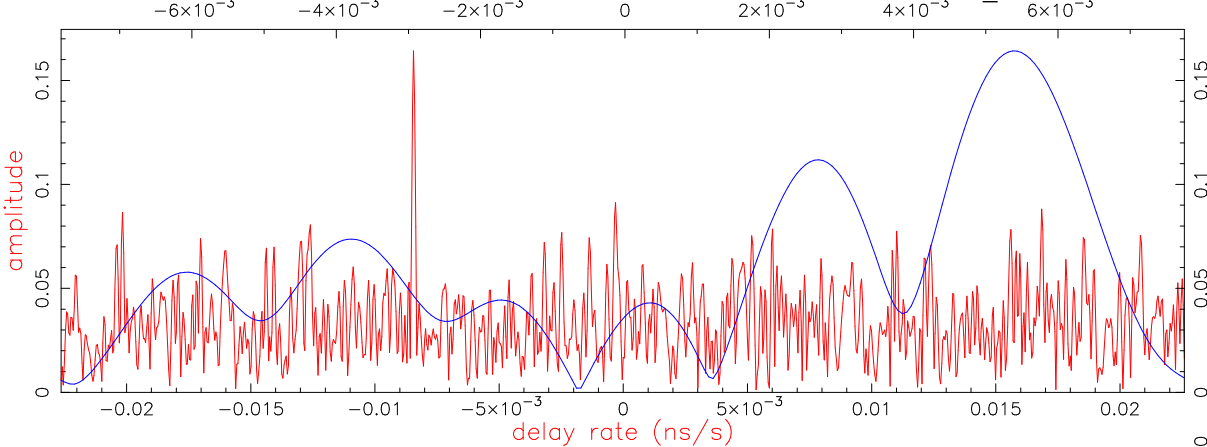
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, hZ

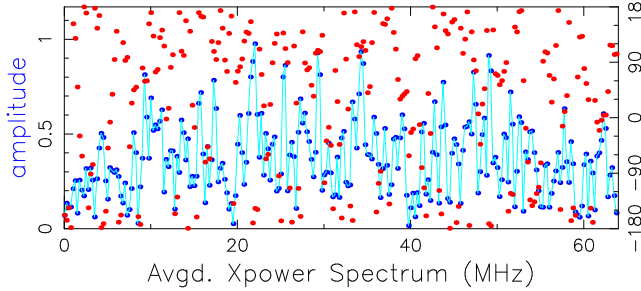
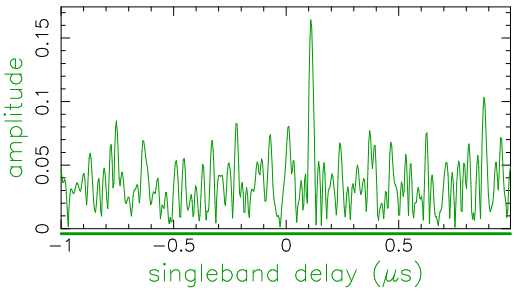
VLBA_HN - METSAHOV, fgroup Q, pol LR

multiband delay (μ s)



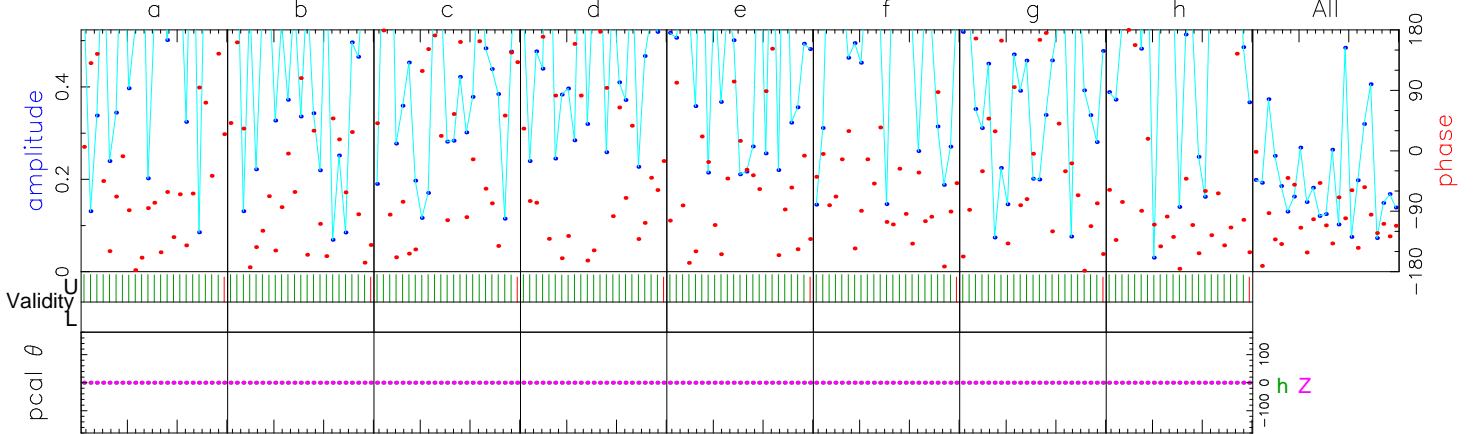
Fringe quality 0

SNR 6.0
 Int time 175.334
 Amp 0.175
 Phase 235.1
 PFD 2.8e-01
 Delays (us)
 SBD 0.110159
 MBD 0.005404
 Fringe rate (Hz)
 -0.366144
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112104.10
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153826
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	344/0	344/0	344/0	344/0	344/0	344/0	344/0	344/0		
h	1000	1000	1000	1000	1000	1000	1000	1000		
Z	0	0	0	0	0	0	0	0		
h:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
h	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	1.17142181448E+04	Apriori delay (usec)	1.17141033656E+04	Resid mbdelay (usec)	5.40425E-03	+/-	1.8E-04
Sband delay (usec)	1.17142135243E+04	Apriori clock (usec)	1.2320509E+01	Resid sbdelay (usec)	1.10159E-01	+/-	1.4E-03
Phase delay (usec)	1.17141033590E+04	Apriori clockrate (us/s)	-5.3092296E-07	Resid phdelay (usec)	-6.59454E-06	+/-	1.2E-06
Delay rate (us/s)	5.13823409089E-01	Apriori rate (us/s)	5.13831896428E-01	Resid rate (us/s)	-8.48734E-06	+/-	1.2E-08
Total phase (deg)	303.8	Apriori accel (us/s/s)	-7.50039690181E-05	Resid phase (deg)	235.1	+/-	19.2

ph/seg (deg)	41.2	Theor.	46.1	Amplitude	0.175 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.0		80.4	Search (1024X32)	0.160	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.3		27.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.1		47.4	Inc. seg. avg.	0.165	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.177	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

h: az 215.2 el 83.2 pa 32.9 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -1899.269 -2887.138 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/hZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/hZ.Q.387.3MPATB

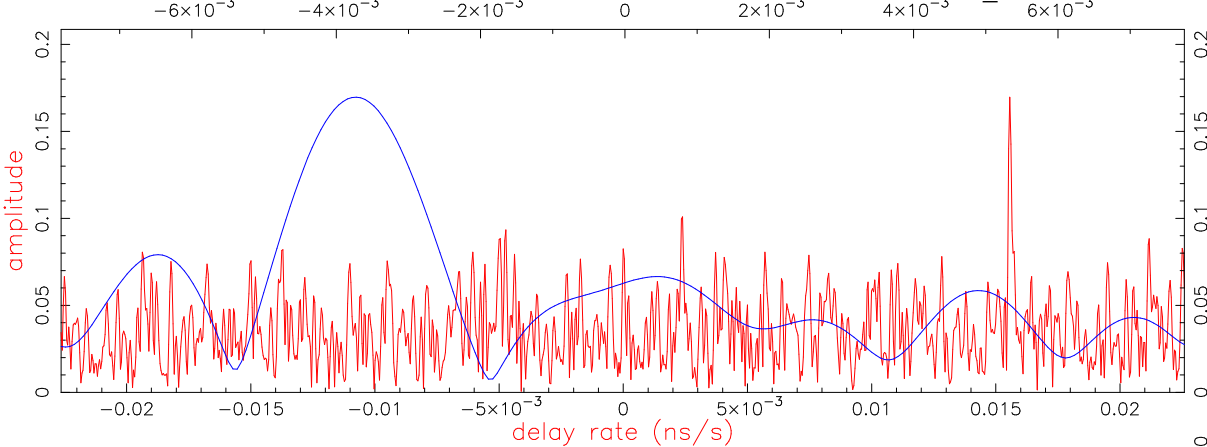
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, hZ

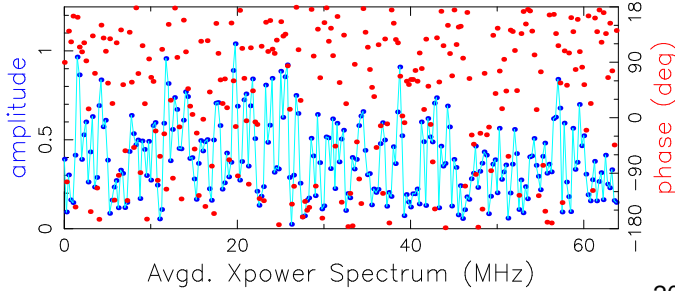
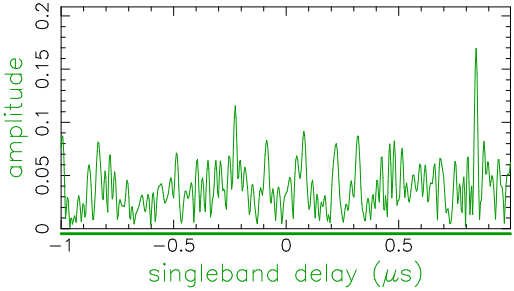
VLBA_HN - METSAHOV, fgroup Q, pol RL

multiband delay (μ s)



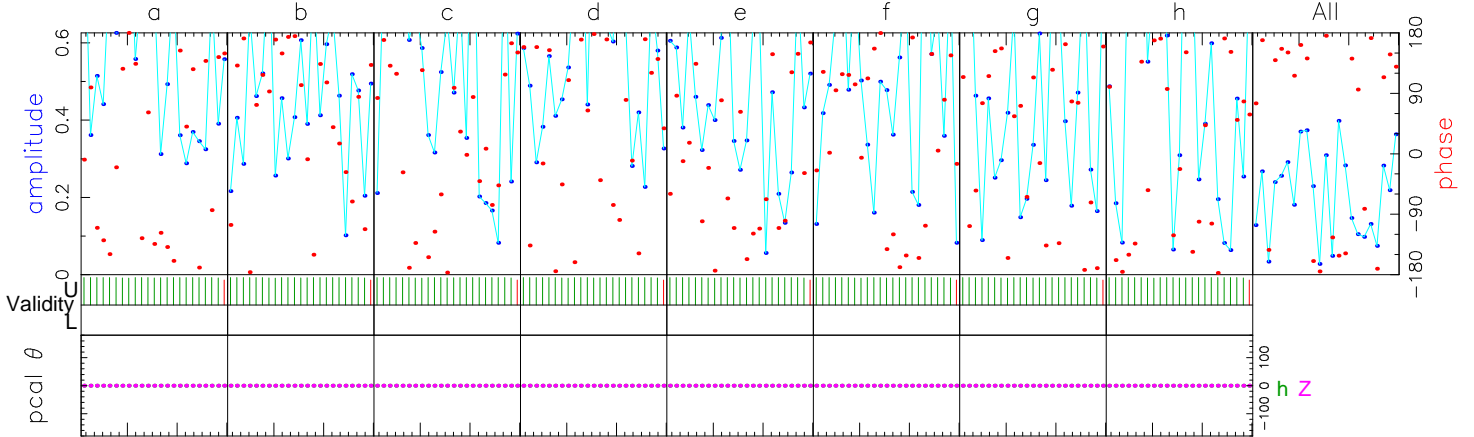
Fringe quality 0

SNR 6.2
 Int time 175.334
 Amp 0.209
 Phase 294.6
 PFD 9.7e-02
 Delays (us)
 SBD 0.843291
 MBD -0.003755
 Fringe rate (Hz) 0.675818
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112104.10
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build 2024:337:191905
 2025:042:153828
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



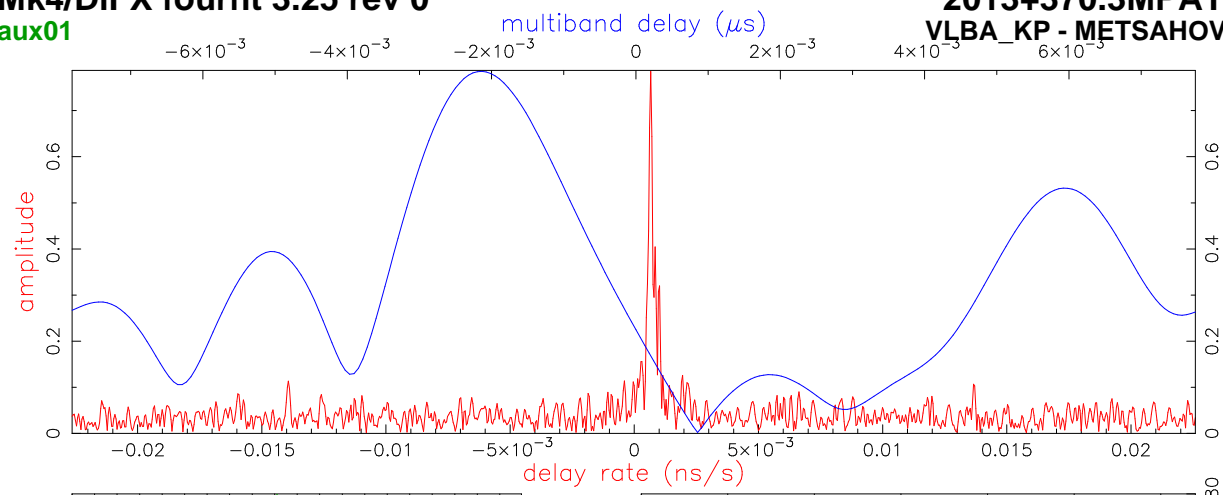
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-171.7	125.6	131.5	174.7	-122.1	149.7	157.3	165.8	Phase	159.6
	0.3	0.3	0.3	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2
	391.0	151.0	260.2	272.1	146.1	277.7	126.8	241.9	Sbd box	472.9
U/L	344/0	344/0	344/0	344/0	344/0	344/0	344/0	344/0	APs used	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
h:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	1.17149433606E+04		Apriori delay (usec)		1.17141033656E+04		Resid mbdelay (usec)		-3.75497E-03	+/- 1.8E-04
Sband delay (usec)	1.17149466563E+04		Apriori clock (usec)		1.2320509E+01		Resid sbdelay (usec)		8.43291E-01	+/- 1.4E-03
Phase delay (usec)	1.17141033759E+04		Apriori clockrate (us/s)		-5.3092296E-07		Resid phdelay (usec)		1.02753E-05	+/- 1.2E-06
Delay rate (us/s)	5.13847562117E-01		Apriori rate (us/s)		5.13831896428E-01		Resid rate (us/s)		1.56657E-05	+/- 1.2E-08
Total phase (deg)	3.3		Apriori accel (us/s/s)		-7.50039690181E-05		Resid phase (deg)		294.6	+/- 18.6
ph/seg (deg)	RMS 46.4	Theor. 44.7	Amplitude 0.209 +/- 0.034		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	70.7	78.0	Search (1024X32) 0.161		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	39.3	26.3	Inc. seg. avg. 0.198		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 (%)	32.1	46.0	Inc. frq. avg. 0.209		Data rate(Mb/s): 2048		ion window (TEC)		0.00 0.00	
h: az 215.2 el 83.2 pa 32.9	Z: az 299.2 el 26.6 pa 33.0		u, v (fr/asec) -1899.269 -2887.138		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0544/hZ...3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544/hZ.Q.400.3MPATB							

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, kZ

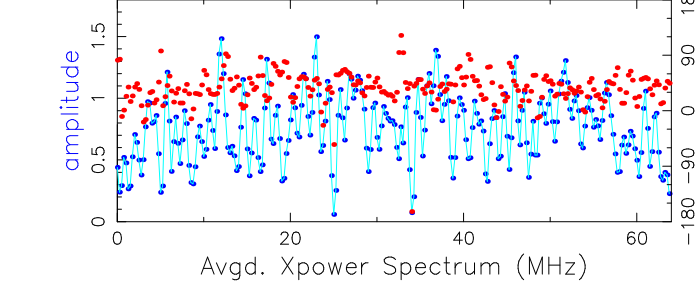
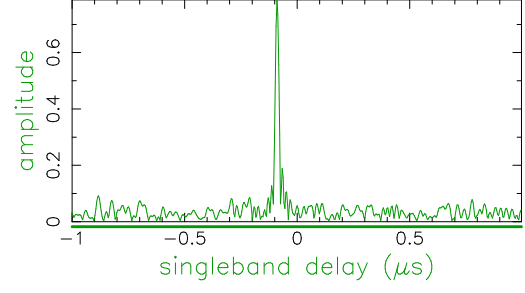
VLBA_KP - METSAHOV, fgroup Q, pol LL



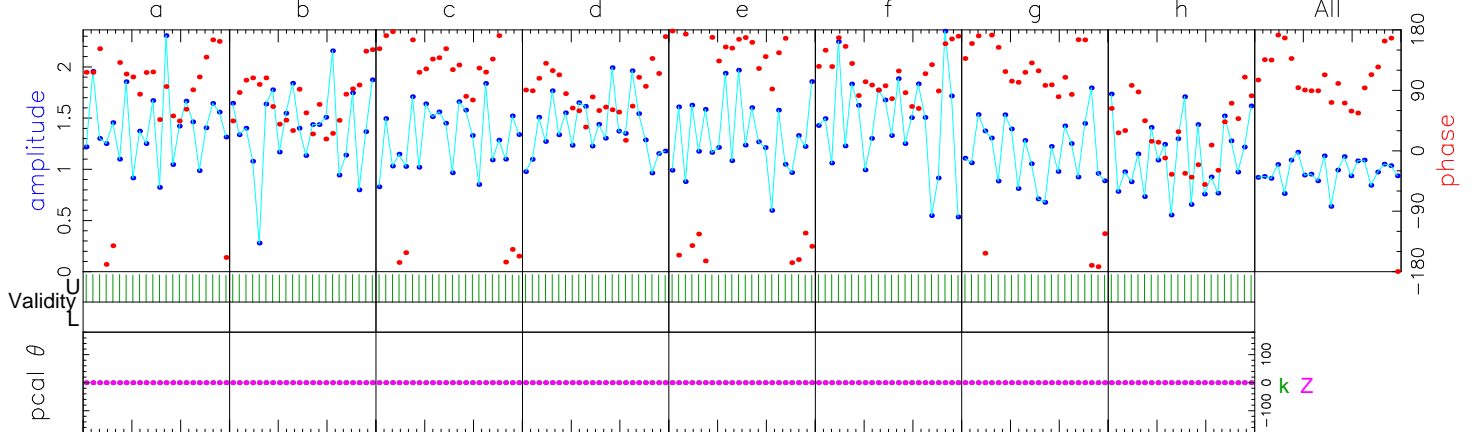
Fringe quality 5

SNR 28.8
 Int time 179.389
 Amp 0.787
 Phase -20.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.089226
 MBD -0.002126
 Fringe rate (Hz) 0.029160
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153745
 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	119.0	70.8	148.4	84.5	176.6	116.9	141.5	29.2	Phase	114.1
k	1.0	1.1	1.0	1.2	1.1	1.2	0.9	0.8	Ampl.	1.0
Z	233.7	234.3	233.9	233.5	233.8	233.5	233.1	232.4	Sbd box	234.2
k	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	9.31118291456E+03	Apriori delay (usec)	9.31127879068E+03	Resid mbdelay (usec)	-2.12612E-03	+/-	3.8E-05
Sband delay (usec)	9.31118956518E+03	Apriori clock (usec)	4.8711777E-02	Resid sbdelay (usec)	-8.92255E-02	+/-	3.0E-04
Phase delay (usec)	9.31127879803E+03	Apriori clockrate (us/s)	-4.5765388E-07	Resid phdelay (usec)	7.34955E-06	+/-	2.6E-07
Delay rate (us/s)	1.18919239146E+00	Apriori rate (us/s)	1.18919171552E+00	Resid rate (us/s)	6.75948E-07	+/-	2.5E-09
Total phase (deg)	-10.0	Apriori accel (us/s/s)	-7.26528419241E-05	Resid phase (deg)	-20.9	+/-	4.0

ph/seg (deg)	RMS 37.1	Theor. 9.3	Amplitude Search (1024X32)	0.787 +/- 0.027	0.754	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	28.6	16.3	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	51.4	5.6	Inc. seg. avg.	0.963	0.963	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	36.5	9.8	Inc. frq. avg.	1.039	1.039	Data rate(Mb/s): 2048	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00
						nlags: 256	t_cohere infinite			

k: az 69.7 el 61.1 pa -90.2 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4332.320 -3330.275 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/kZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/kZ.Q.173.3MPATB

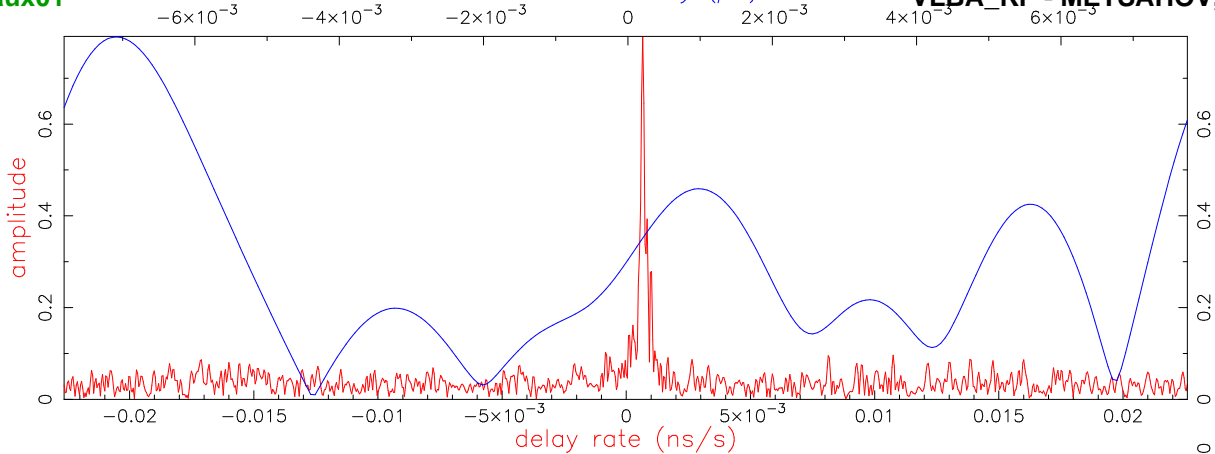
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, kZ

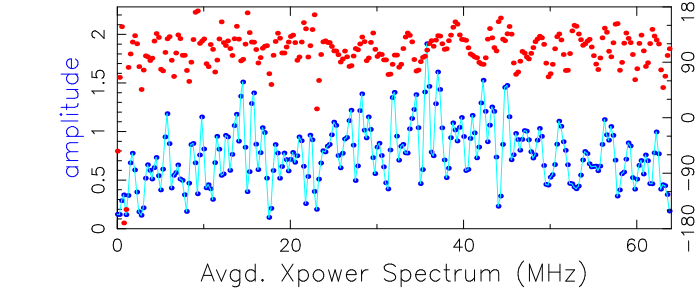
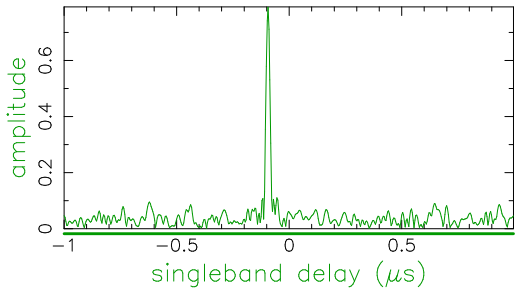
VLBA_KP - METSAHOV, fgroup Q, pol RR

multiband delay (μ s)



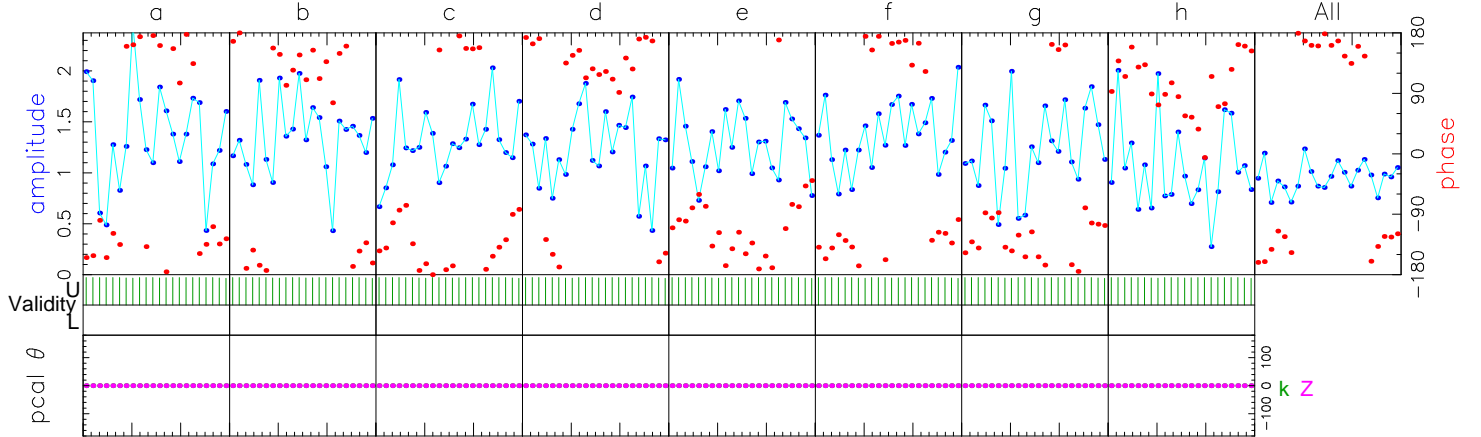
Fringe quality 5

SNR 29.0
 Int time 179.389
 Amp 0.791
 Phase -305.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.094221
 MBD -0.007102
 Fringe rate (Hz) 0.029520
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153748
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	9.31117793831E+03	Apriori delay (usec)	9.31127879068E+03	Resid mbdelay (usec)	-7.10237E-03	+/-	3.7E-05
Sband delay (usec)	9.31118456943E+03	Apriori clock (usec)	4.8711777E-02	Resid sbdelay (usec)	-9.42212E-02	+/-	3.0E-04
Phase delay (usec)	9.31127877969E+03	Apriori clockrate (us/s)	-4.5765388E-07	Resid phdelay (usec)	-1.09896E-05	+/-	2.5E-07
Delay rate (us/s)	1.18919239979E+00	Apriori rate (us/s)	1.18919171552E+00	Resid rate (us/s)	6.84278E-07	+/-	2.4E-09
Total phase (deg)	-294.8	Apriori accel (us/s/s)	-7.26528419241E-05	Resid phase (deg)	-305.7	+/-	4.0

ph/seg (deg)	34.7	RMS	34.7	Theor.	9.3	Amplitude	0.791 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	27.1		27.1		16.2	Search (1024X32)	0.746	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.5		48.5		5.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.6		29.6		9.8	Inc. seg. avg.	0.944	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	1.002	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 69.7 el 61.1 pa -90.2 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4332.320 -3330.275 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/kZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/kZ.Q.189.3MPATB

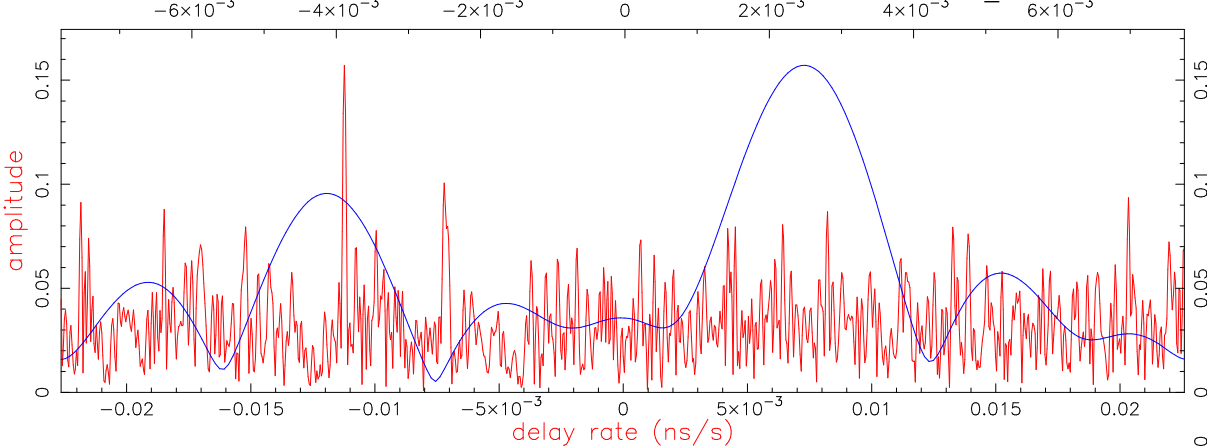
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, kZ

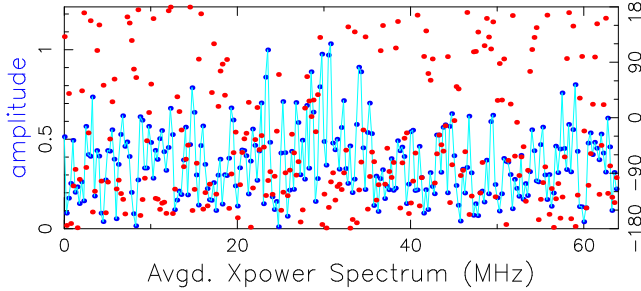
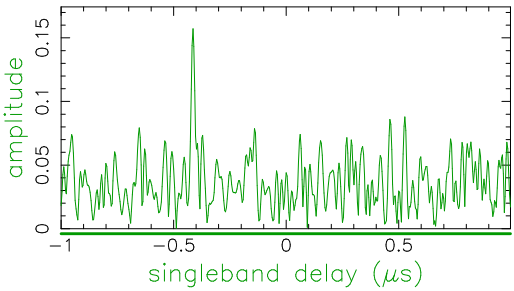
VLBA_KP - METSAHOV, fgroup Q, pol LR

multiband delay (μ s)



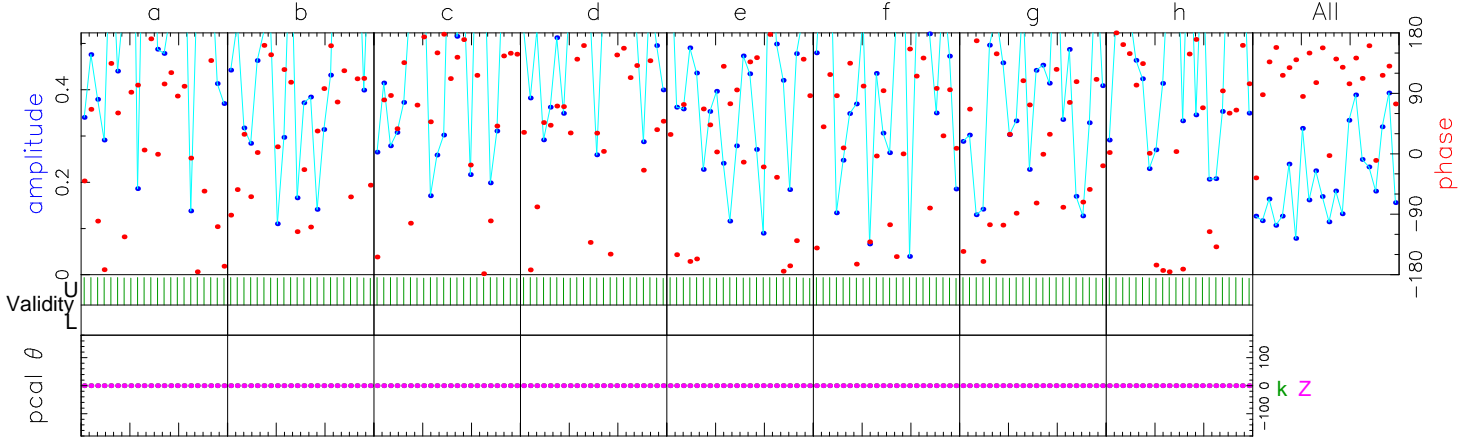
Fringe quality 0

SNR 5.8
 Int time 179.389
 Amp 0.174
 Phase -307.9
 PFD 6.6e-01
 Delays (us)
 SBD -0.414109
 MBD 0.002481
 Fringe rate (Hz)
 -0.486106
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153750
 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	120.4	89.3	139.9	102.9	124.9	90.4	90.4	132.0	Phase	119.6
k	0.2	0.1	0.3	0.2	0.1	0.1	0.0	0.3	Ampl.	0.2
Z	37.4	229.4	150.4	181.1	155.1	325.4	353.0	152.0	Sbd box	151.0
k	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	

Group delay (usec) (SBD)	9.31085939665E+03	Apriori delay (usec)	9.31127879068E+03	Resid mbdelay (usec)	2.48096E-03	+/-	1.9E-04
Sband delay (usec)	9.31086468218E+03	Apriori clock (usec)	4.8711777E-02	Resid sbdelay (usec)	-4.14109E-01	+/-	1.5E-03
Phase delay (usec)	9.31127879838E+03	Apriori clockrate (us/s)	-4.5765388E-07	Resid phdelay (usec)	7.69980E-06	+/-	1.3E-06
Delay rate (us/s)	1.18918044742E+00	Apriori rate (us/s)	1.18919171552E+00	Resid rate (us/s)	-1.12681E-05	+/-	1.2E-08
Total phase (deg)	-297.1	Apriori accel (us/s/s)	-7.26528419241E-05	Resid phase (deg)	-307.9	+/-	19.9

ph/seg (deg)	55.6	RMS	46.7	Theor.	55.6	Amplitude	0.174 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	65.6		81.5		65.6	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	24.2		28.2		24.2	Inc. seg. avg.	0.171	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 (%)	54.1		49.1		54.1	Inc. frq. avg.	0.164	Data rate(Mb/s): 2048					

k: az 69.7 el 61.1 pa -90.2 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4332.320 -3330.275 simultaneous interpolator

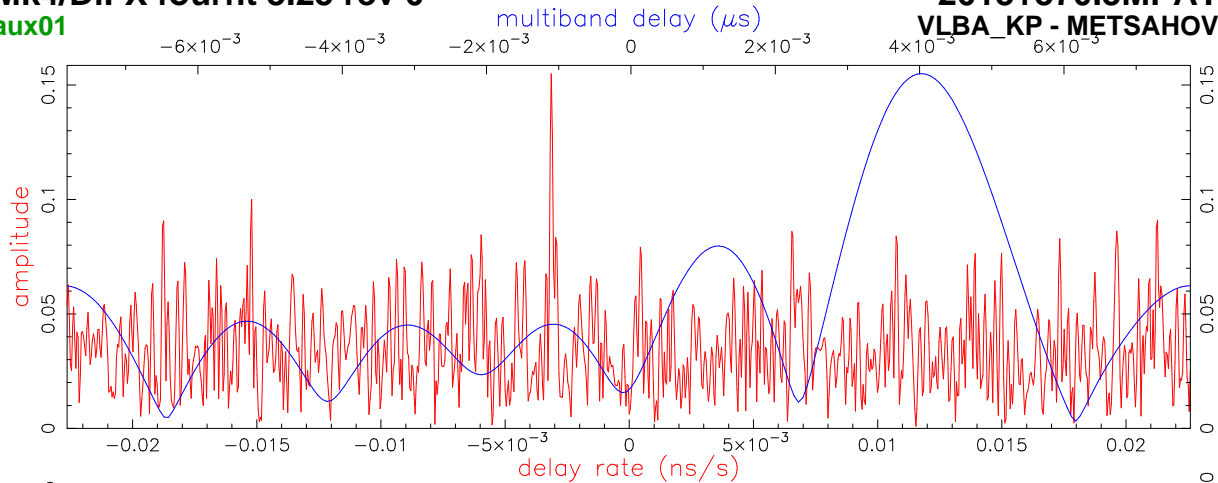
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/kZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/kZ.Q.199.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

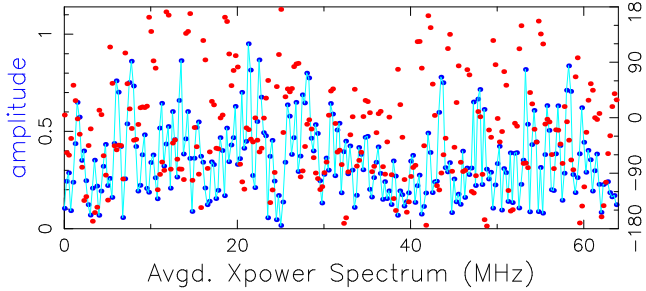
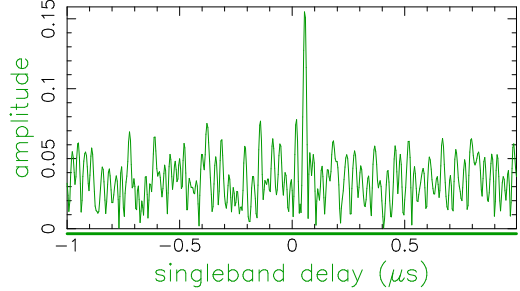
2013+370.3MPATB, No0544, kZ

VLBA_KP - METSAHOV, fgroup Q, pol RL



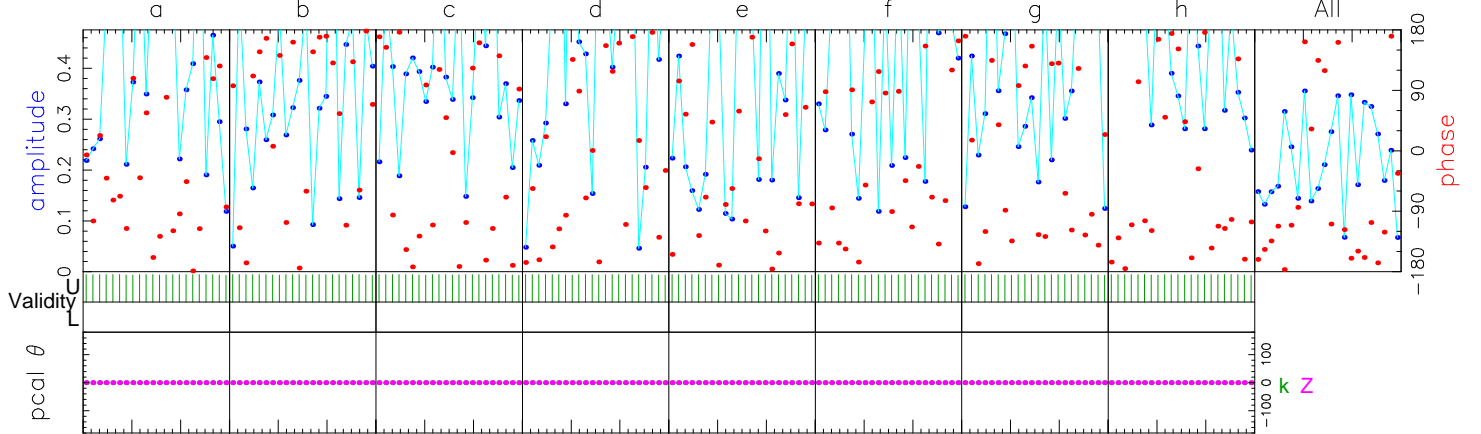
Fringe quality 0

SNR 5.8
 Int time 179.389
 Amp 0.159
 Phase 91.1
 PFD 6.5e-01
 Delays (us)
 SBD 0.056164
 MBD 0.003990
 Fringe rate (Hz)
 -0.136048
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153753
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	9.31132965600E+03	Apriori delay (usec)	9.31127879068E+03	Resid mbdelay (usec)	3.99032E-03	+/-	1.9E-04
Sband delay (usec)	9.31133495493E+03	Apriori clock (usec)	4.8711777E-02	Resid sbdelay (usec)	5.61642E-02	+/-	1.5E-03
Phase delay (usec)	9.31127878061E+03	Apriori clockrate (us/s)	-4.5765388E-07	Resid phdelay (usec)	-1.00692E-05	+/-	1.3E-06
Delay rate (us/s)	1.18918856188E+00	Apriori rate (us/s)	1.18919171552E+00	Resid rate (us/s)	-3.15364E-06	+/-	1.2E-08
Total phase (deg)	102.0	Apriori accel (us/s/s)	-7.26528419241E-05	Resid phase (deg)	91.1	+/-	19.9

ph/seg (deg)	59.7	Theor.	46.6	Amplitude	0.159 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.7	Search (1024X32)	0.151	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	32.7	Inc. seg. avg.	0.166	Inc. frq. avg.	0.155	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.4	Inc. frq. avg.	0.155			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 69.7 el 61.1 pa -90.2 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -4332.320 -3330.275 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/kZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/kZ.Q.213.3MPATB

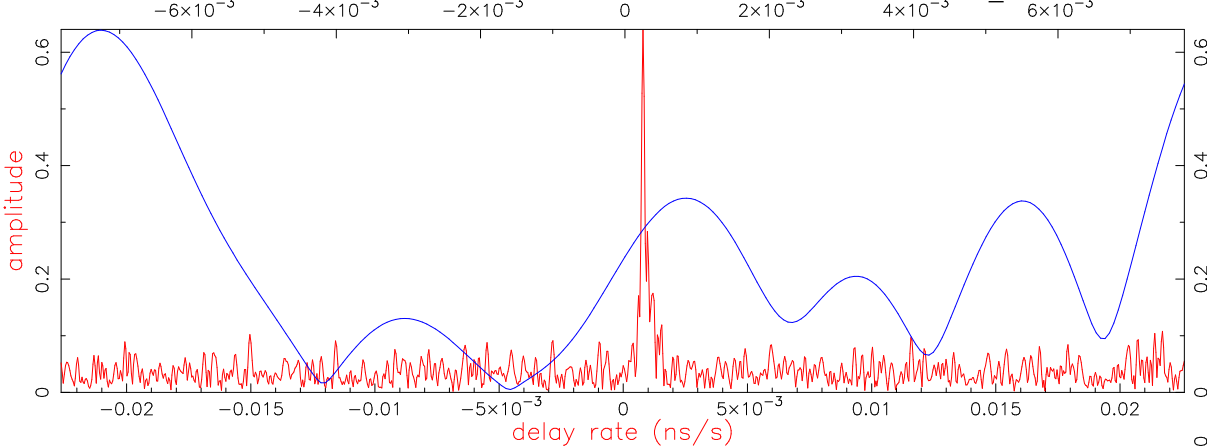
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, IZ

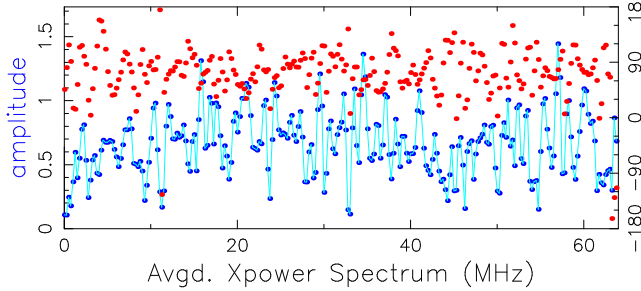
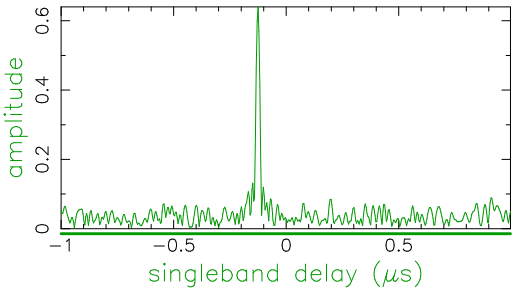
VLBA_LA - METSAHOV, fgroup Q, pol LL

multiband delay (μ s)



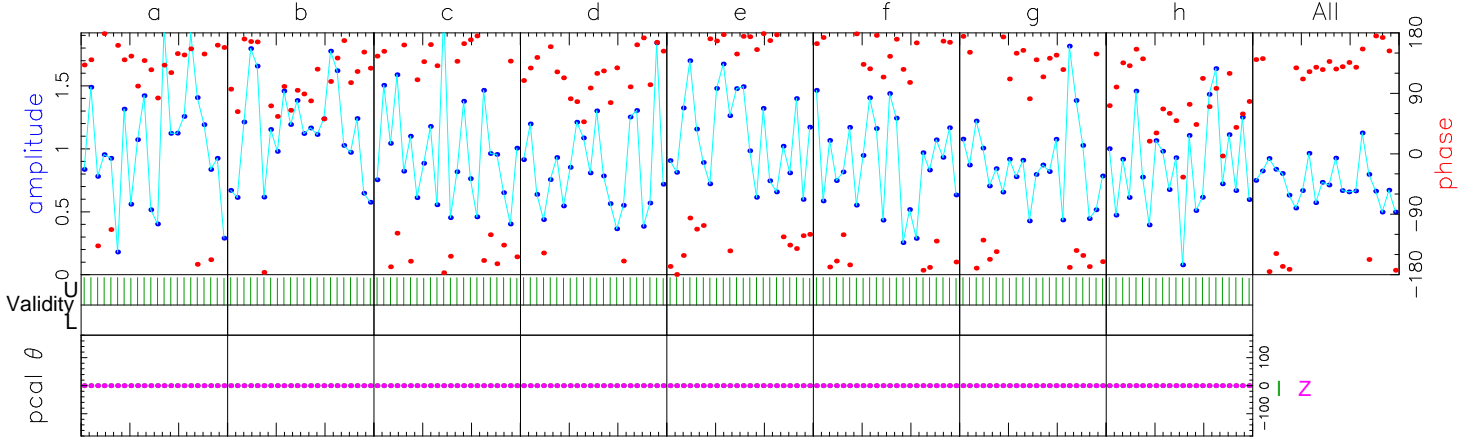
Fringe quality 8

SNR 23.4
 Int time 179.389
 Amp 0.640
 Phase -26.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.125568
 MBD -0.007279
 Fringe rate (Hz)
 0.033916
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153750
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD) 1.01647007949E+04 Apriori delay (usec) 1.01648330742E+04 Resid mbdelay (usec) -7.27933E-03 +/- 4.6E-05
 Sband delay (usec) 1.01647075057E+04 Apriori clock (usec) -8.4031811E+00 Resid sbdelay (usec) -1.25568E-01 +/- 3.7E-04
 Phase delay (usec) 1.01648330841E+04 Apriori clockrate (us/s) -8.4386101E-07 Resid phdelay (usec) 9.86043E-06 +/- 3.1E-07
 Delay rate (us/s) 1.08338986698E+00 Apriori rate (us/s) 1.0833898079E+00 Resid rate (us/s) 7.86191E-07 +/- 3.0E-09
 Total phase (deg) -90.8 Apriori accel (us/s/s) -7.34594576102E-05 Resid phase (deg) -26.9 +/- 4.9

ph/seg (deg) 29.4 11.5 Theor. Amplitude 0.640 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 28.2 20.0 Search (1024X32) 0.629 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.2 6.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.1 12.1 Inc. seg. avg. 0.719 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 I: az 77.6 el 66.5 pa -84.6 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -3951.151 -3162.563 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/No0544/IZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/IZ.Q.197.3MPATB

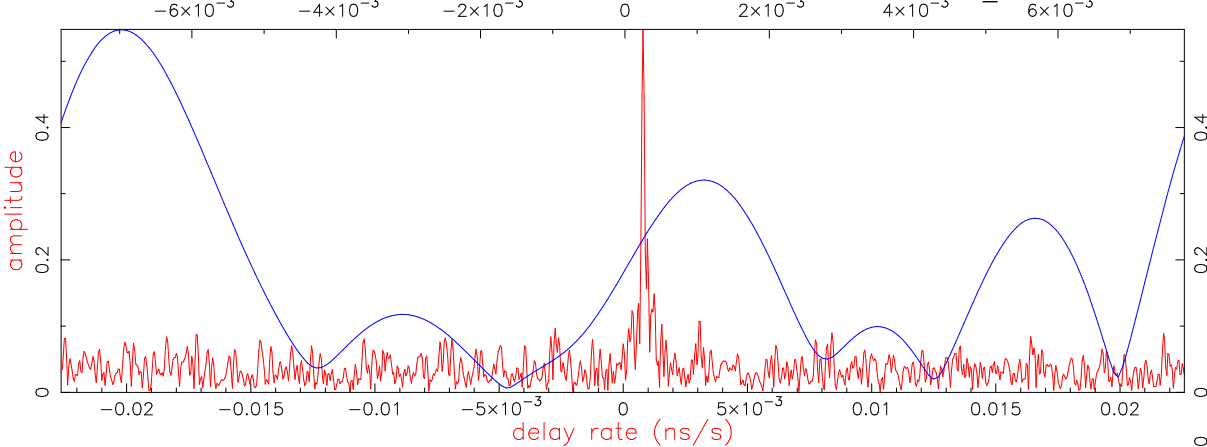
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, IZ

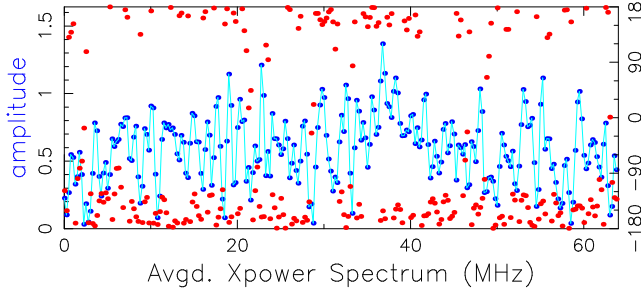
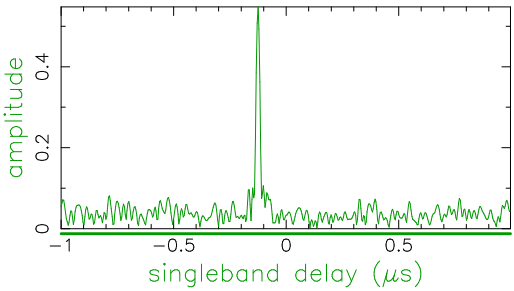
VLBA_LA - METSAHOV, fgroup Q, pol RR

multiband delay (μ s)



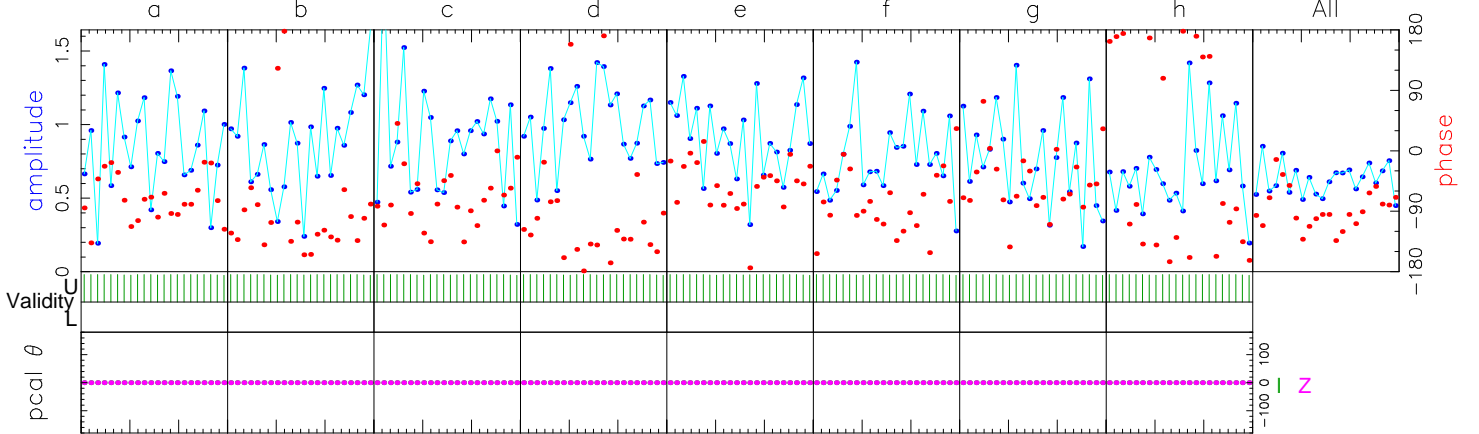
Fringe quality 8

SNR 20.1
 Int time 179.389
 Amp 0.548
 Phase -267.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.125303
 MBD -0.006986
 Fringe rate (Hz)
 0.034217
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153753
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	1.01647010879E+04	Apriori delay (usec)	1.01648330742E+04	Resid mbdelay (usec)	-6.98636E-03	+/-	5.4E-05
Sband delay (usec)	1.01647077710E+04	Apriori clock (usec)	-8.4031811E+00	Resid sbdelay (usec)	-1.25303E-01	+/-	4.3E-04
Phase delay (usec)	1.01648330686E+04	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	-5.61888E-06	+/-	3.7E-07
Delay rate (us/s)	1.08338987394E+00	Apriori rate (us/s)	1.08338980799E+00	Resid rate (us/s)	7.93151E-07	+/-	3.5E-09
Total phase (deg)	-331.2	Apriori accel (us/s/s)	-7.34594576102E-05	Resid phase (deg)	-267.3	+/-	5.7

ph/seg (deg)	29.7	RMS	13.4	Theor.	13.4	Amplitude	0.548 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	23.8	Search (1024X32)	0.534	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)	42.9	Inc. seg. avg.	0.611	Inc. frq. avg.	0.661	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 (%)	28.4	Inc. frq. avg.	0.661			Data rate (Mb/s):	2048							

I: az 77.6 el 66.5 pa -84.6 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -3951.151 -3162.563 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/IZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/IZ.Q.217.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

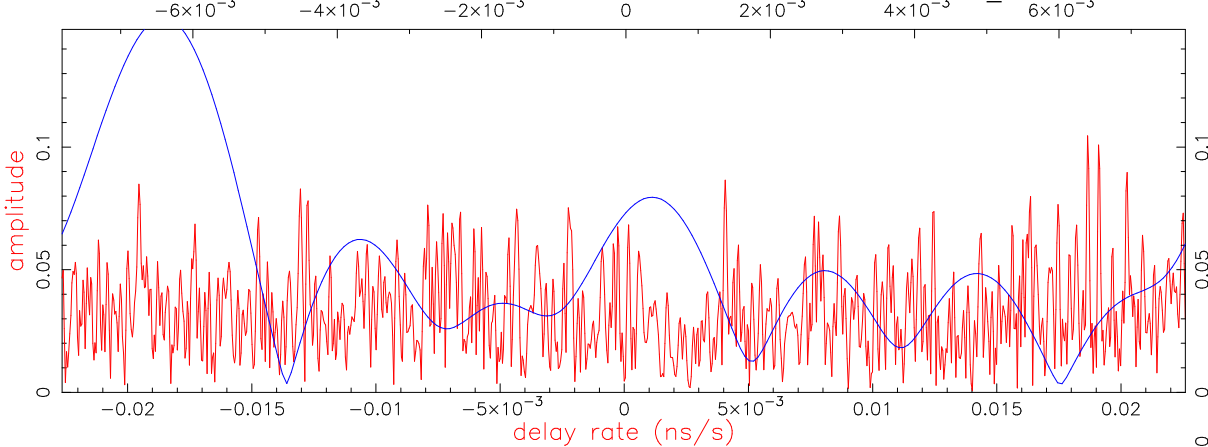
aux01

2013+370.3MPATB, No0544, IZ

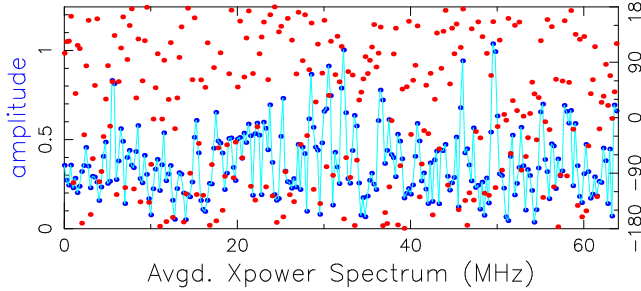
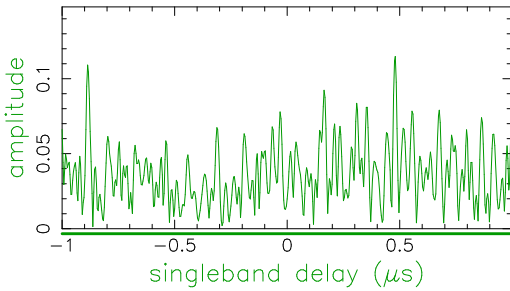
VLBA_LA - METSAHOV, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

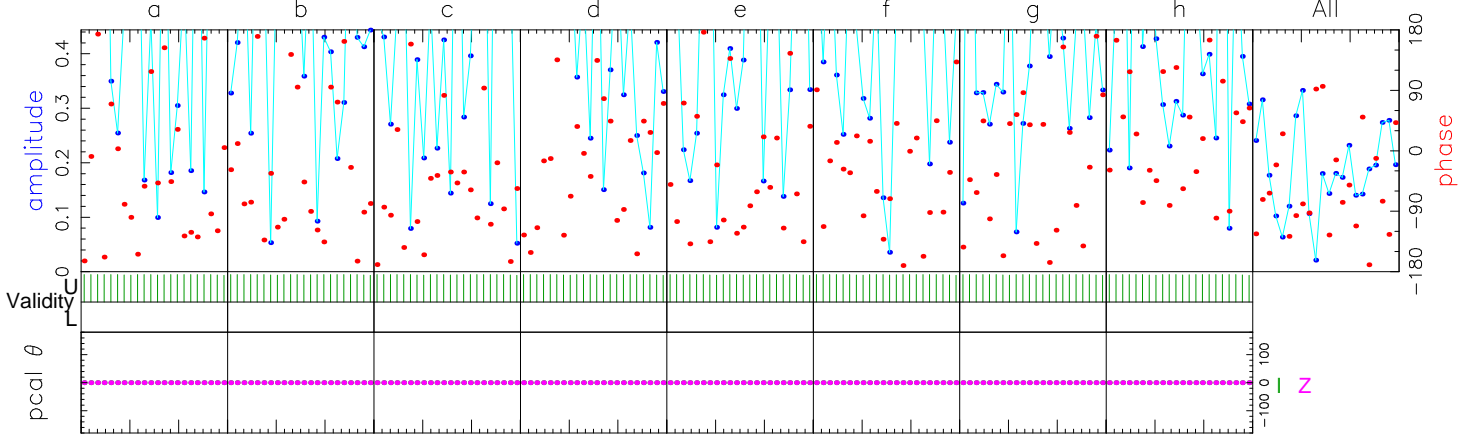


SNR 4.0
 Int time 179.389
 Amp 0.148
 Phase -99.7
 PFD 1.0e+00
 Delays (us)
 SBD -0.885821
 MBD 0.008301
 Fringe rate (Hz)
 0.809444
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153755
 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
	-126.3	-116.7	-71.2	-72.9	-92.4	-14.7	-66.8	43.4	Phase	-77.2
	0.3	0.2	0.2	0.2	0.3	0.2	0.1	0.3	Ampl.	0.2
	444.2	208.1	208.1	39.9	380.5	300.0	233.9	166.6	Sbd box	30.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	1.01639507500E+04	Apriori delay (usec)	1.01648330742E+04	Resid mbdelay (usec)	8.30078E-03	+/-	2.7E-04
Sband delay (usec)	1.01639472537E+04	Apriori clock (usec)	-8.4031811E+00	Resid sbdelay (usec)	-8.85821E-01	+/-	2.1E-03
Phase delay (usec)	1.01648330693E+04	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	-4.96909E-06	+/-	1.8E-06
Delay rate (us/s)	1.08340784397E+00	Apriori rate (us/s)	1.08338908079E+00	Resid rate (us/s)	1.87632E-05	+/-	1.8E-08
Total phase (deg)	-163.6	Apriori accel (us/s/s)	-7.34594576102E-05	Resid phase (deg)	-99.7	+/-	28.6

ph/seg (deg)	RMS 77.3	Theor. 67.0	Amplitude Search (1024X32)	0.158	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	99.8	116.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	61.6	40.4	Inc. seg. avg.	0.149	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	76.8	70.5	Inc. frq. avg.	0.184	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 77.6 el 66.5 pa -84.6 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) -3951.151 -3162.563 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/IZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/IZ.Q.231.3MPATB

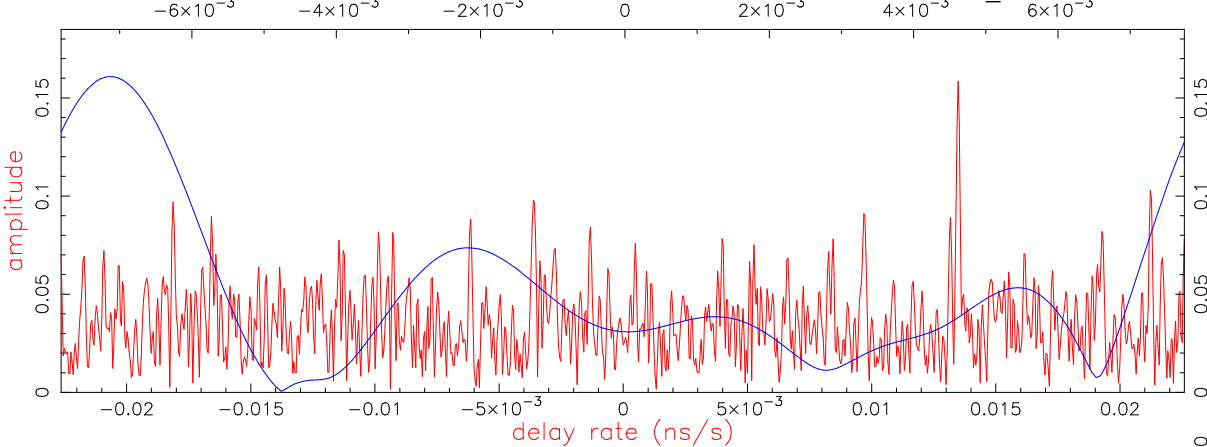
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, IZ

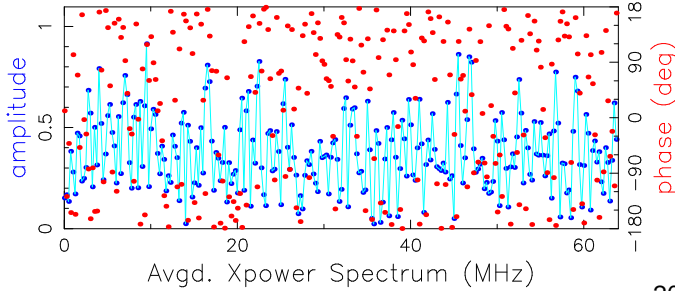
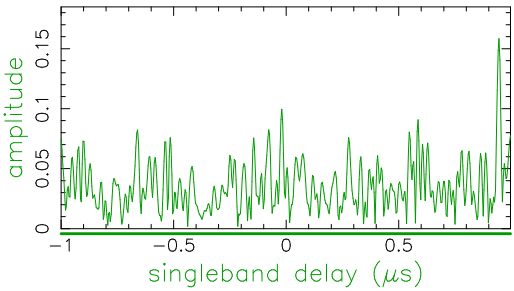
VLBA_LA - METSAHOV, fgroup Q, pol RL

multiband delay (μ s)



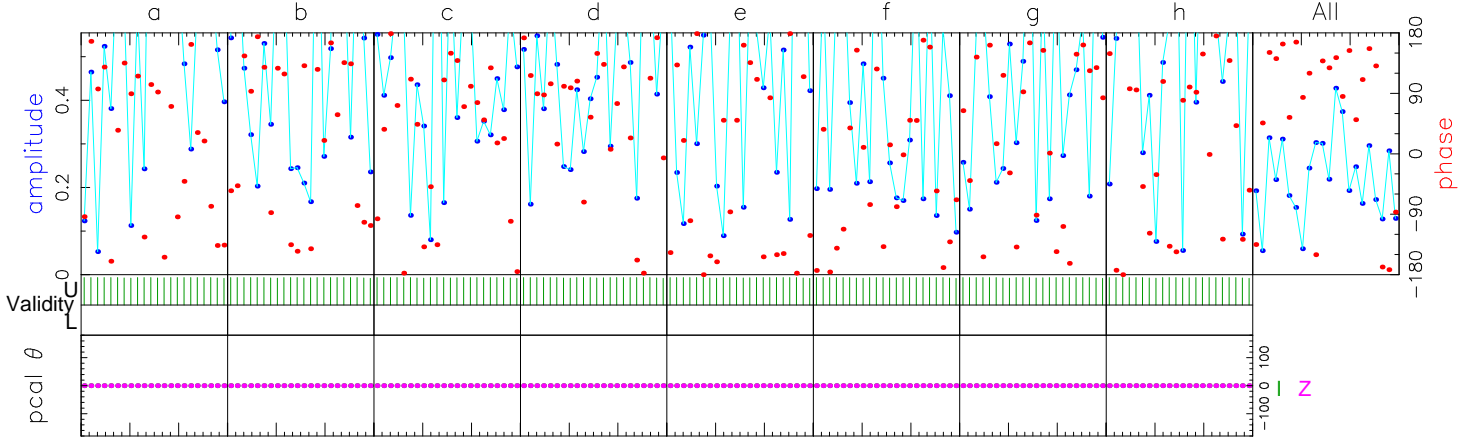
Fringe quality 0

SNR 5.8
 Int time 179.389
 Amp 0.185
 Phase 53.2
 PFD 5.3e-01
 Delays (us)
 SBD 0.944762
 MBD 0.008301
 Fringe rate (Hz)
 0.585185
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153759
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	1.01657788750E+04	Apriori delay (usec)	1.01648330742E+04	Resid mbdelay (usec)	8.30078E-03	+/-	1.9E-04
Sband delay (usec)	1.01657778362E+04	Apriori clock (usec)	-8.4031811E+00	Resid sbdelay (usec)	9.44762E-01	+/-	1.5E-03
Phase delay (usec)	1.01648330835E+04	Apriori clockrate (us/s)	-8.4386101E-07	Resid phdelay (usec)	9.22342E-06	+/-	1.3E-06
Delay rate (us/s)	1.08340264558E+00	Apriori rate (us/s)	1.08338908079E+00	Resid rate (us/s)	1.35648E-05	+/-	1.2E-08
Total phase (deg)	349.3	Apriori accel (us/s/s)	-7.34594576102E-05	Resid phase (deg)	53.2	+/-	19.7

ph/seg (deg)	55.7	RMS	46.2	Theor.	46.2	Amplitude	0.185 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.3	55.7	46.2	Search (1024X32)	0.158	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.3	72.3	80.7	Inc. seg. avg.	0.199	Inc. frq. avg.	0.179	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.7	24.3	27.9	Inc. frq. avg.	0.179	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023 0.023
		43.7	48.6							ion window (TEC)	0.00 0.00

I: az 77.6 el 66.5 pa -84.6 Z: az 299.2 el 26.6 pa 33.0 u, v (fr/asec) -3951.151 -3162.563 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/IZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/IZ.Q.246.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

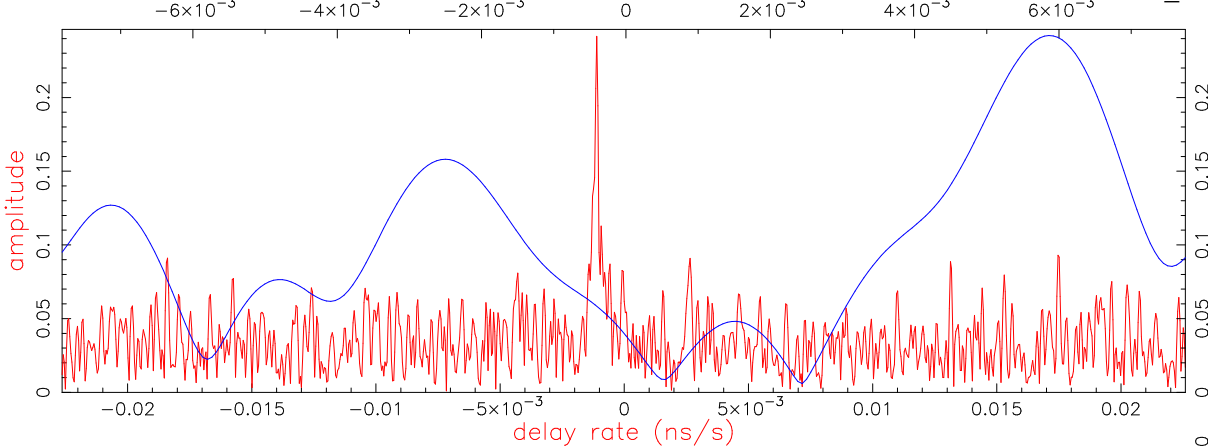
aux01

2013+370.3MPATB, No0544, Zc

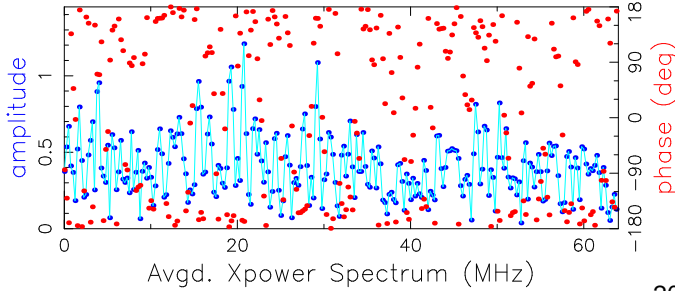
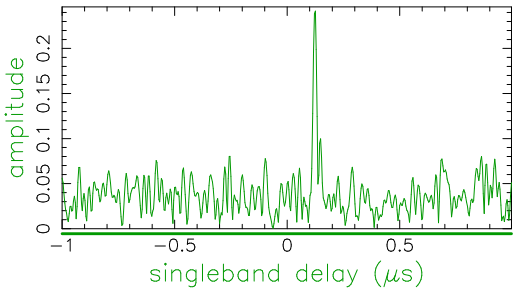
MEṬSAHOV - VLBA_SC, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 9

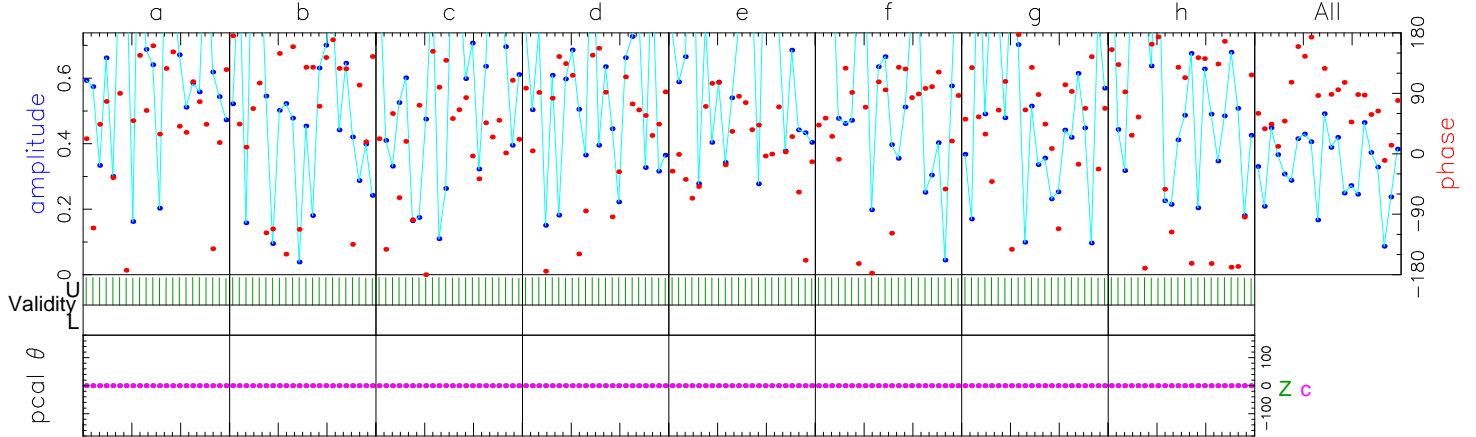


SNR 9.0
 Int time 179.389
 Amp 0.246
 Phase 263.9
 PFD 4.0e-11
 Delays (us)
 SBD 0.123300
 MBD 0.005791
 Fringe rate (Hz)
 -0.048677
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153800
 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
	98.8	124.3	43.7	95.4	18.7	84.1	59.7	155.2	Phase	83.9
	0.3	0.3	0.3	0.3	0.4	0.4	0.2	0.3	Ampl.	0.3
	289.0	288.9	288.9	288.2	288.6	289.8	426.5	291.4	Sbd box	288.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.02420287242E+04	Apriori delay (usec)	-1.02421595148E+04	Resid mbdelay (usec)	5.79060E-03	+/-	1.2E-04
Sband delay (usec)	-1.02420362145E+04	Apriori clock (usec)	-3.6237698E+00	Resid sbdelay (usec)	1.23300E-01	+/-	9.6E-04
Phase delay (usec)	-1.02421595094E+04	Apriori clockrate (us/s)	1.0031300E-06	Resid phdelay (usec)	5.40437E-06	+/-	8.2E-07
Delay rate (us/s)	-3.37657404732E-01	Apriori rate (us/s)	-3.37656276385E-01	Resid rate (us/s)	-1.12835E-06	+/-	7.9E-09
Total phase (deg)	95.4	Apriori accel (us/s/s)	9.28792001695E-05	Resid phase (deg)	263.9	+/-	12.7

ph/seg (deg)	46.5	RMS	29.8	Theor.	29.8	Amplitude	0.246 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.2	46.5	29.8	Search (1024X32)	0.231	Search	0.231	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.5	54.2	52.1	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.3	47.5	18.0	Inc. seg. avg.	0.293	Inc. seg. avg.	0.293	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		38.3	31.4	Inc. frq. avg.	0.307	Inc. frq. avg.	0.307	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 299.2 el 26.6 pa 33.0 c: az 333.4 el 67.7 pa 147.0 u,v (fr/asec) 1278.897 4754.406 simultaneous interpolator

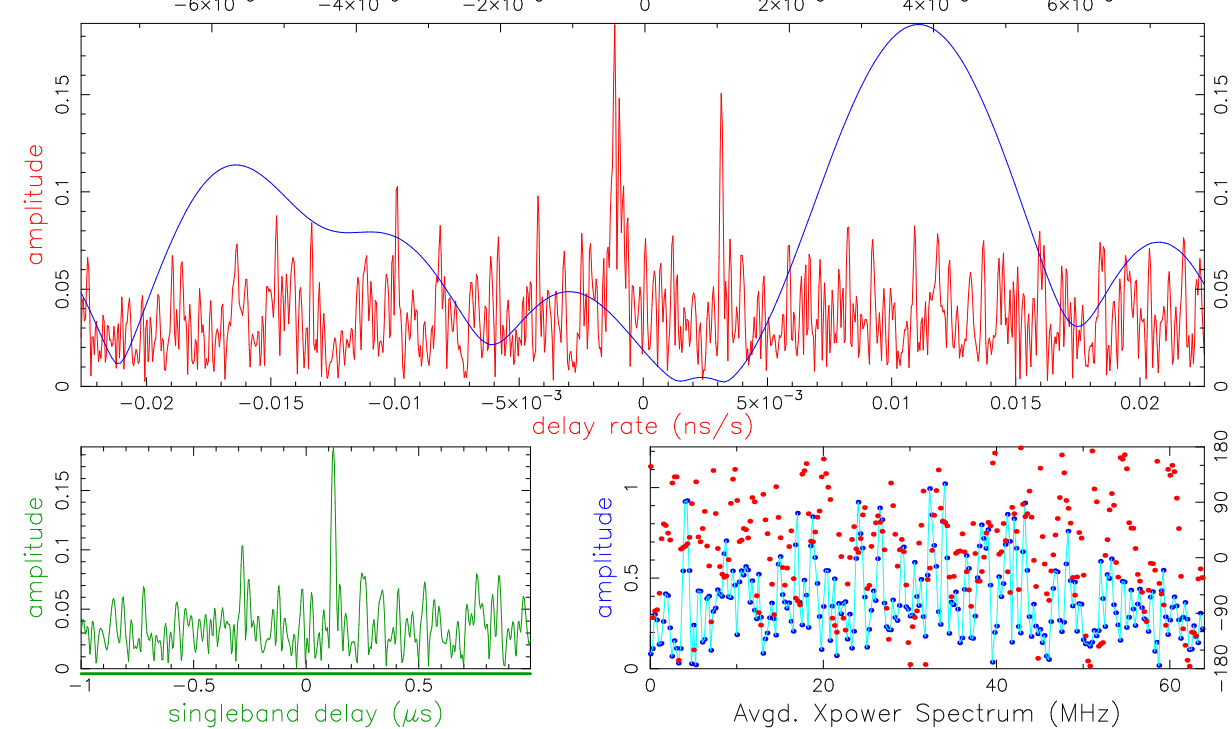
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zc..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zc.Q.253.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

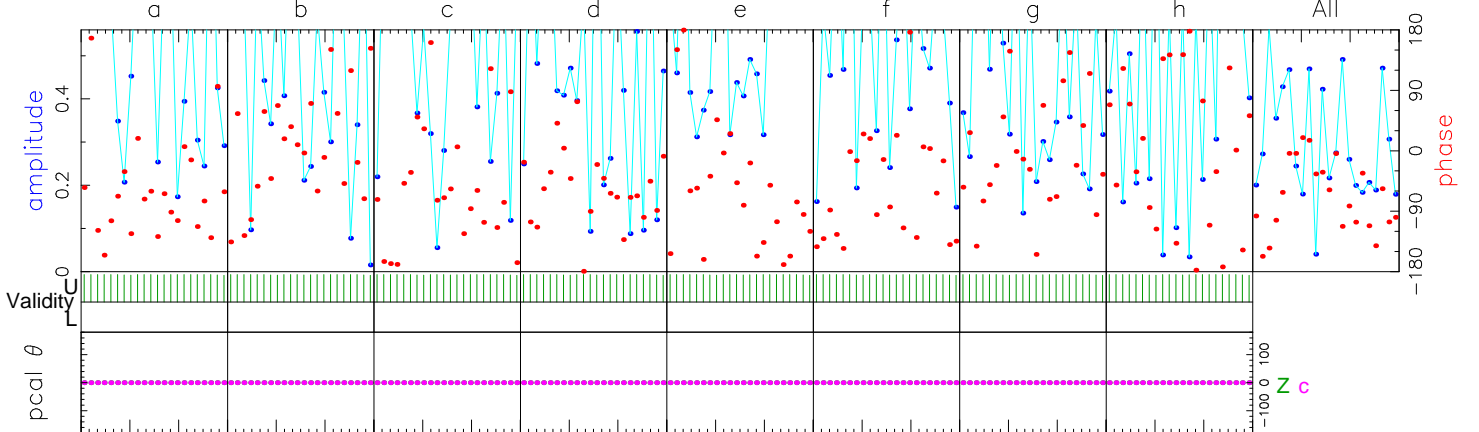
2013+370.3MPATB, No0544, Zc

MEṬSAHOV - VLBA_SC, fgroup Q, pol RR



Fringe quality 0
 SNR 6.8
 Int time 179.389
 Amp 0.187
 Phase 266.9
 PFD 1.2e-03
 Delays (us)
 SBD 0.120263
 MBD 0.003747
 Fringe rate (Hz)
 -0.049040
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153808
 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



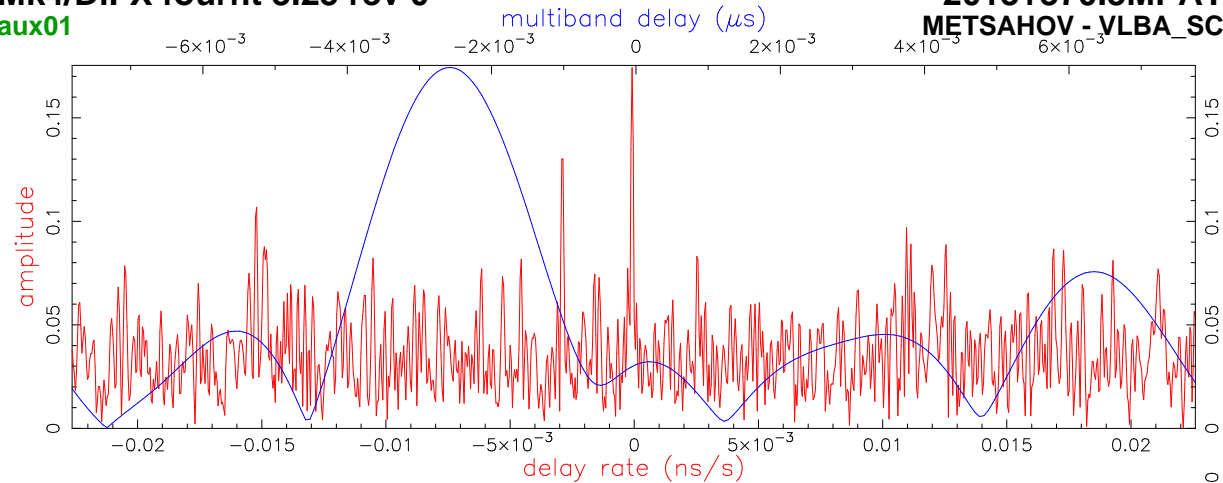
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	-89.5	-4.7	-104.3	-52.5	-104.7	-57.0	-34.0	177.2	Phase	-70.6	
	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1	Ampl.	0.2	
	286.2	39.9	320.8	289.4	289.4	289.3	290.1	292.0	Sbd box	287.8	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
Z	0	0	0	0	0	0	0	0	PC freqs		
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
c	1000	1000	1000	1000	1000	1000	1000	1000			
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.02420463930E+04		Apriori delay (usec)		-1.02421595148E+04		Resid mbdelay (usec)		3.74682E-03	+/- 1.6E-04	
Sband delay (usec)	-1.02420392523E+04		Apriori clock (usec)		-3.6237698E+00		Resid sbdelay (usec)		1.20263E-01	+/- 1.3E-03	
Phase delay (usec)	-1.02421595193E+04		Apriori clockrate (us/s)		1.0031300E-06		Resid phdelay (usec)		-4.54342E-06	+/- 1.1E-06	
Delay rate (us/s)	-3.37657413158E-01		Apriori rate (us/s)		-3.37656276385E-01		Resid rate (us/s)		-1.13677E-06	+/- 1.0E-08	
Total phase (deg)	98.4		Apriori accel (us/s/s)		9.28792001695E-05		Resid phase (deg)		266.9	+/- 16.8	
RMS	52.2	39.3	Amplitude		0.187 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	52.2	39.3	Search (1024X32)		0.182		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
amp/seg (%)	94.6	68.7	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	59.8	23.7	Inc. seg. avg.		0.244		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
amp/frq (%)	47.4	41.4	Inc. frq. avg.		0.216		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
Z: az 299.2 el 26.6 pa 33.0	c: az 333.4 el 67.7 pa 147.0		u,v (fr/asec)		1278.897 4754.406				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0544/Zc..3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544/Zc.Q.292.3MPATB								

Mk4/DiFX fourfit 3.25 rev 0

aux01

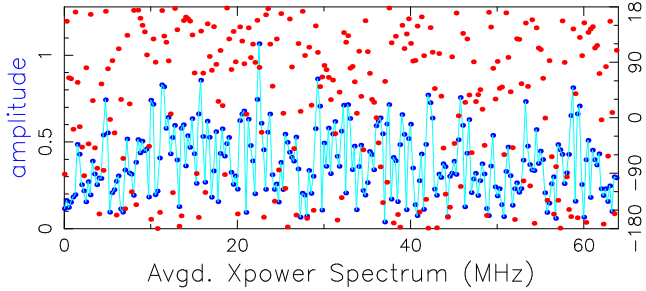
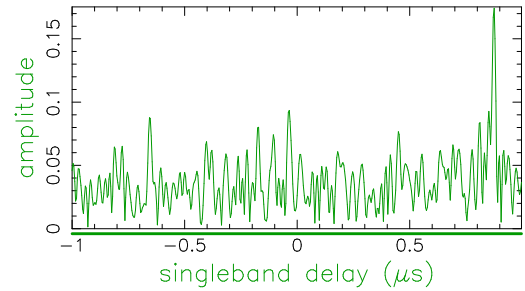
2013+370.3MPATB, No0544, Zc

MEṬSAHOV - VLBA_SC, fgroup Q, pol LR



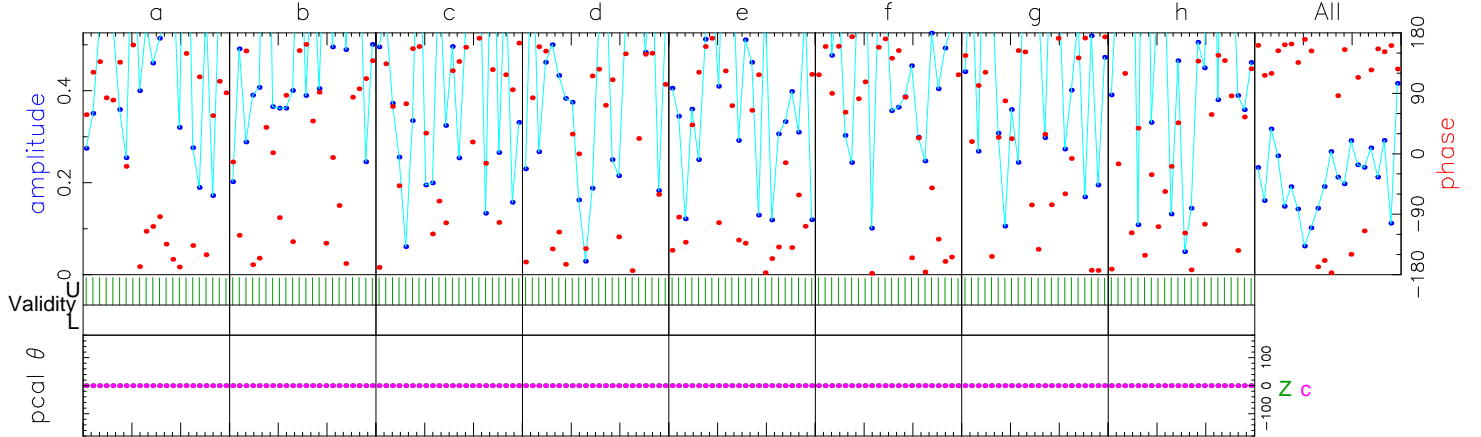
Fringe quality 0

SNR 6.4
 Int time 179.389
 Amp 0.175
 Phase 333.2
 PFD 1.9e-02
 Delays (us)
 SBD 0.873944
 MBD -0.002630
 Fringe rate (Hz)
 -0.004367
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153810
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	-1.02412871453E+04	Apriori delay (usec)	-1.02421595148E+04	Resid mbdelay (usec)	-2.63049E-03	+/-	1.7E-04
Sband delay (usec)	-1.02412855708E+04	Apriori clock (usec)	-3.6237698E+00	Resid sbdelay (usec)	8.73944E-01	+/-	1.3E-03
Phase delay (usec)	-1.02421595049E+04	Apriori clockrate (us/s)	1.0031300E-06	Resid phdelay (usec)	9.86547E-06	+/-	1.1E-06
Delay rate (us/s)	-3.37656377612E-01	Apriori rate (us/s)	-3.37656276385E-01	Resid rate (us/s)	-1.01227E-07	+/-	1.1E-08
Total phase (deg)	164.7	Apriori accel (us/s/s)	9.28792001695E-05	Resid phase (deg)	333.2	+/-	17.8

ph/seg (deg)	35.3	Theor.	41.9	Amplitude	0.175 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	50.0	Search (1024X32)	0.170	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	18.4	Inc. seg. avg.	0.169	Inc. frq. avg.	0.164	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.8	Inc. frq. avg.	0.164			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

Z: az 299.2 el 26.6 pa 33.0 c: az 333.4 el 67.7 pa 147.0 u,v (fr/asec) 1278.897 4754.406 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zc..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zc.Q.301.3MPATB

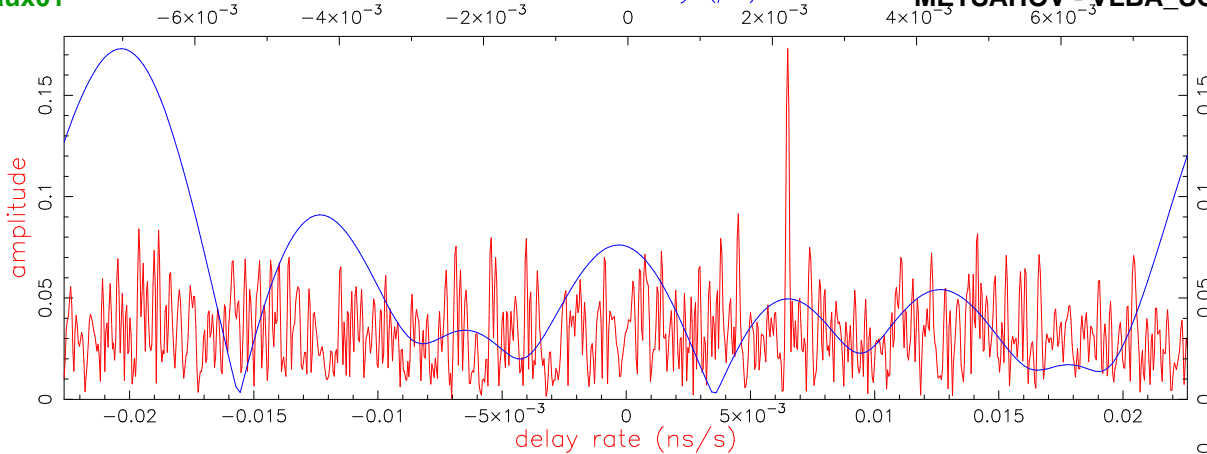
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, Zc

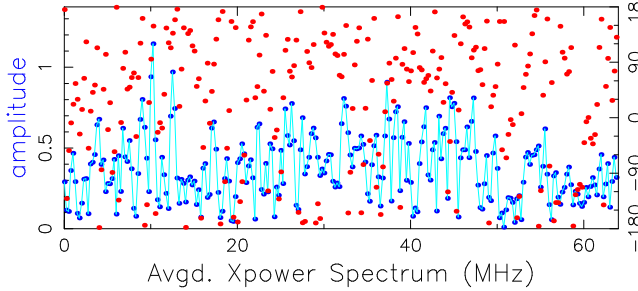
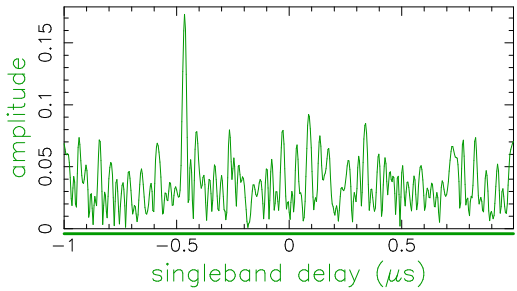
MEṬSAHOV - VLBA_SC, fgroup Q, pol RL

multiband delay (μ s)



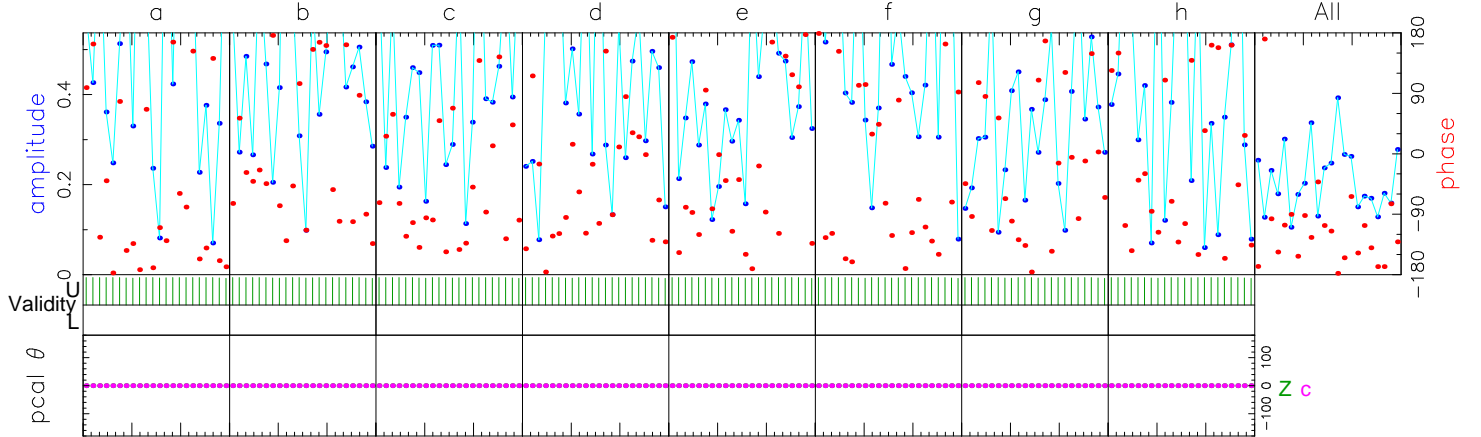
Fringe quality 0

SNR 6.3
 Int time 179.389
 Amp 0.179
 Phase -240.3
 PFD 3.2e-02
 Delays (us)
 SBD -0.464716
 MBD -0.007015
 Fringe rate (Hz)
 0.281540
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153813
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



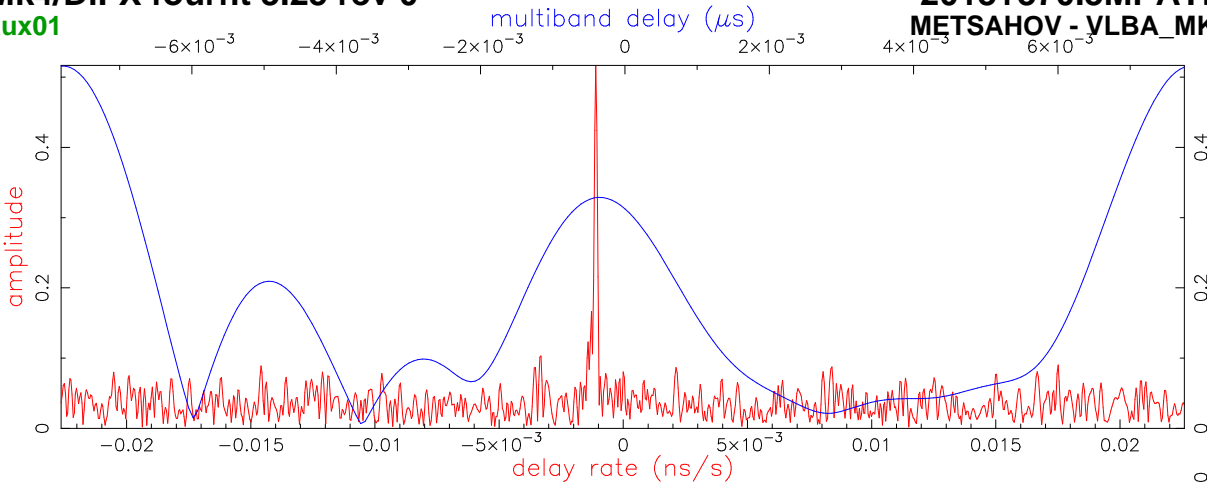
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
c	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Group delay (usec) (SBD)	-1.02426196551E+04	-1.02426242303E+04	-112.4	-89.3	-149.4	-151.3	-116.1	-122.4		
Sband delay (usec)	-1.02426242303E+04	-1.02421595230E+04	0.1	0.2	0.2	0.3	0.1	0.2		
Phase delay (usec)	-1.02421595230E+04	-3.37649750194E-01	0.0	0.0	0.0	0.0	0.0	0.0		
Delay rate (us/s)	-3.37649750194E-01									
Total phase (deg)			-48.8							
Apriori delay (usec)					-1.02421595148E+04					
Apriori clock (usec)					-3.6237698E+00					
Apriori clockrate (us/s)					1.0031300E-06					
Apriori rate (us/s)					-3.37656276385E-01					
Apriori accel (us/s/s)					9.28792001695E-05					
Resid mbdelay (usec)									-7.01526E-03	+/- 1.7E-04
Resid sbdelay (usec)									-4.64716E-01	+/- 1.4E-03
Resid phdelay (usec)									-8.22914E-06	+/- 1.2E-06
Resid rate (us/s)									6.52619E-06	+/- 1.1E-08
Resid phase (deg)									-240.3	+/- 18.1
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.023 0.023							
Data rate (Mb/s):	2048		nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00							
Z:	az 299.2 el 26.6 pa 33.0		c: az 333.4 el 67.7 pa 147.0		u,v (fr/asec) 1278.897 4754.406				simultaneous interpolator	
Control file:	cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0544/Zc..3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544/Zc.Q.322.3MPATB					

Mk4/DiFX fourfit 3.25 rev 0

aux01

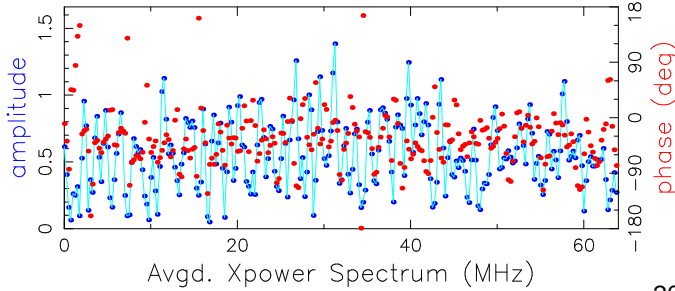
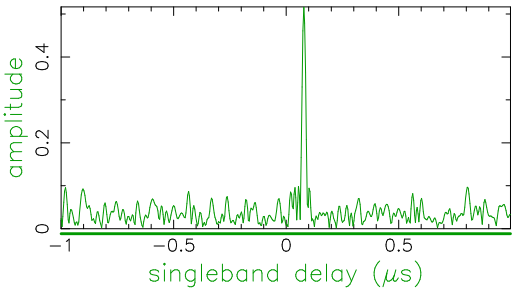
2013+370.3MPATB, No0544, Zm

MEṬSAHOV - VLBA_MK, fgroup Q, pol LL



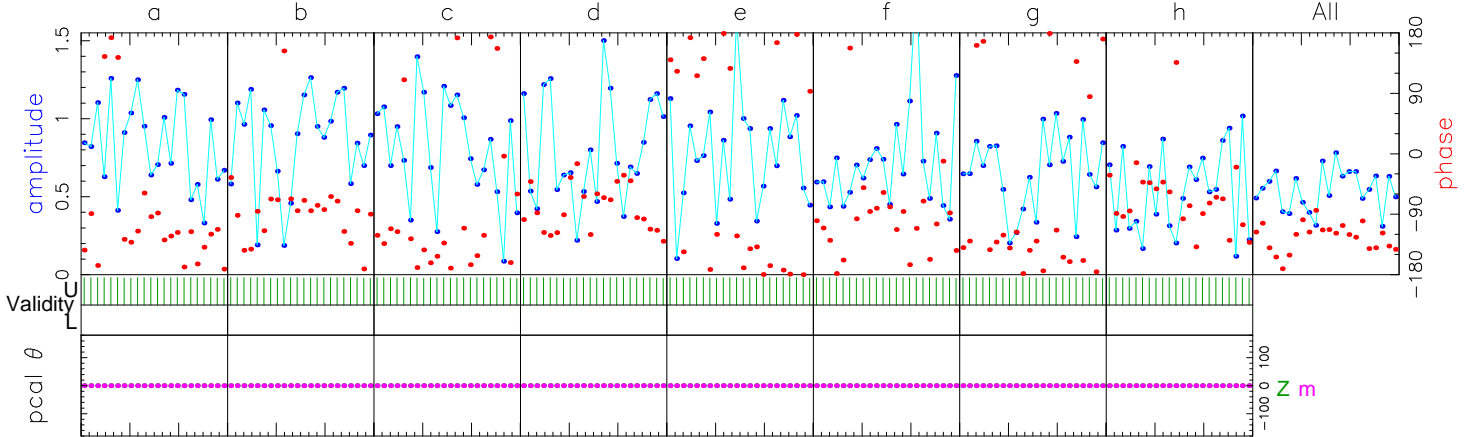
Fringe quality 8

SNR 18.9
 Int time 179.389
 Amp 0.517
 Phase 10.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.078513
 MBD -0.007775
 Fringe rate (Hz)
 -0.047626
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153754
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-133.8	-93.0	-149.8	-88.6	-178.6	-110.2	-159.6	-78.5	Phase	-124.3
	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.4	Ampl.	0.6
	276.7	276.9	277.9	277.8	277.8	278.0	278.0	279.0	Sbd box	277.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.70567953603E+03	Apriori delay (usec)	1.70559356131E+03	Resid mbdelay (usec)	-7.77528E-03	+/-	5.7E-05
Sband delay (usec)	1.70567207431E+03	Apriori clock (usec)	-4.4145584E-01	Resid sbdelay (usec)	7.85130E-02	+/-	4.6E-04
Phase delay (usec)	1.70559355330E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	-8.00359E-06	+/-	3.9E-07
Delay rate (us/s)	-1.73882797343E+00	Apriori rate (us/s)	-1.73882686944E+00	Resid rate (us/s)	-1.10398E-06	+/-	3.7E-09
Total phase (deg)	95.2	Apriori accel (us/s/s)	2.70502732295E-05	Resid phase (deg)	10.7	+/-	6.1

ph/seg (deg)	20.4	RMS	20.4	Theor.	14.2	Amplitude	0.517 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	25.1		25.1		24.8	Search (1024X32)	0.508	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.7		39.7		8.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.3		26.3		15.0	Inc. seg. avg.	0.529	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	0.613	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 299.2 el 26.6 pa 33.0 m: az 56.5 el 20.7 pa -80.5 u,v (fr/asec) 6285.982 2619.520 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zm..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zm.Q.222.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

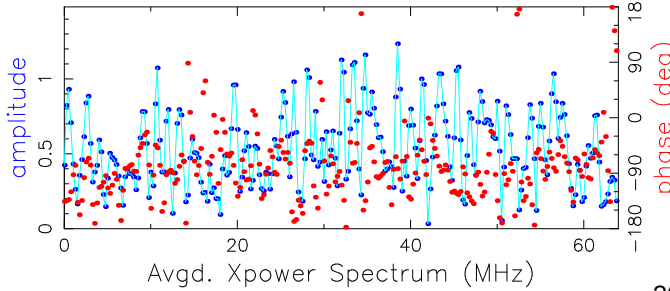
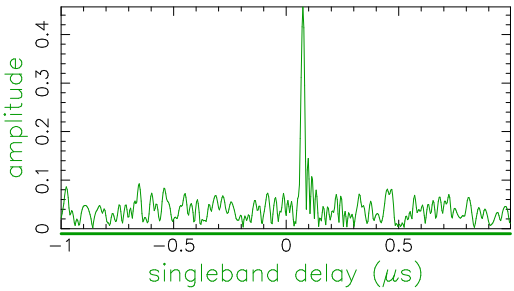
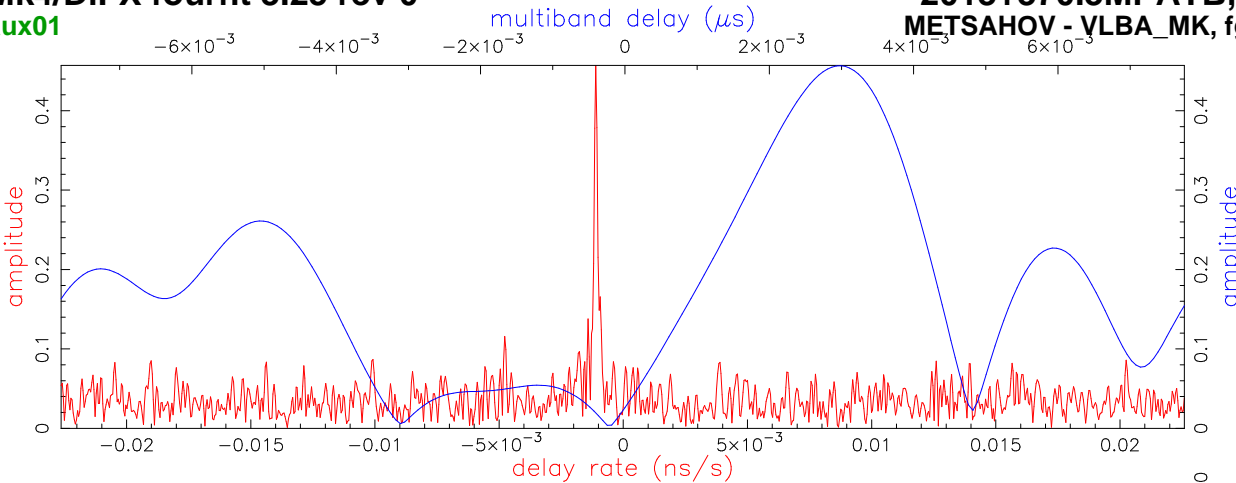
aux01

2013+370.3MPATB, No0544, Zm

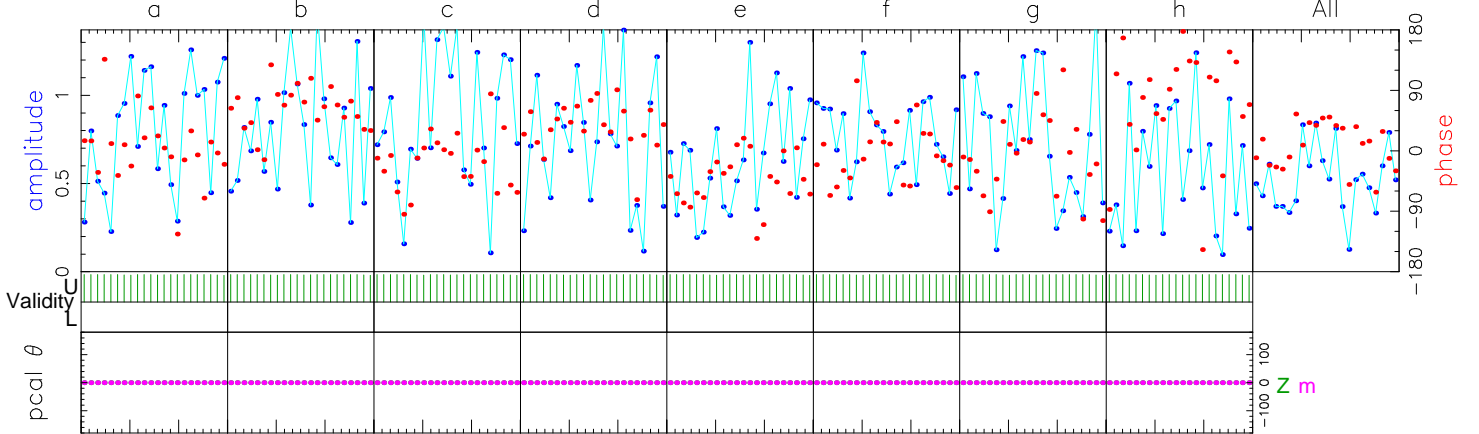
METSAHOV - VLBA_MK, fgroup Q, pol RR

Fringe quality 8

SNR 16.7
 Int time 179.389
 Amp 0.457
 Phase 306.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.074220
 MBD 0.002976
 Fringe rate (Hz)
 -0.047843
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153756
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



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



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

Group delay (usec) (SBD)	1.70567466281E+03	Apriori delay (usec)	1.70559356131E+03	Resid mbdelay (usec)	2.97650E-03	+/-	6.5E-05
Sband delay (usec)	1.70566778081E+03	Apriori clock (usec)	-4.4145584E-01	Resid sbdelay (usec)	7.42195E-02	+/-	5.2E-04
Phase delay (usec)	1.70559356220E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	8.90600E-07	+/-	4.4E-07
Delay rate (us/s)	-1.73882797846E+00	Apriori rate (us/s)	-1.73882686944E+00	Resid rate (us/s)	-1.10901E-06	+/-	4.2E-09
Total phase (deg)	30.9	Apriori accel (us/s/s)	2.70502732295E-05	Resid phase (deg)	306.3	+/-	6.9

ph/seg (deg)	33.8	16.1	Search (1024X32)	0.449	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	42.0	28.0	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)	50.6	9.7	Inc. seg. avg.	0.505	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	36.5	16.9	Inc. frq. avg.	0.579	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 299.2 el 26.6 pa 33.0 m: az 56.5 el 20.7 pa -80.5 u,v (fr/asec) 6285.982 2619.520 simultaneous interpolator

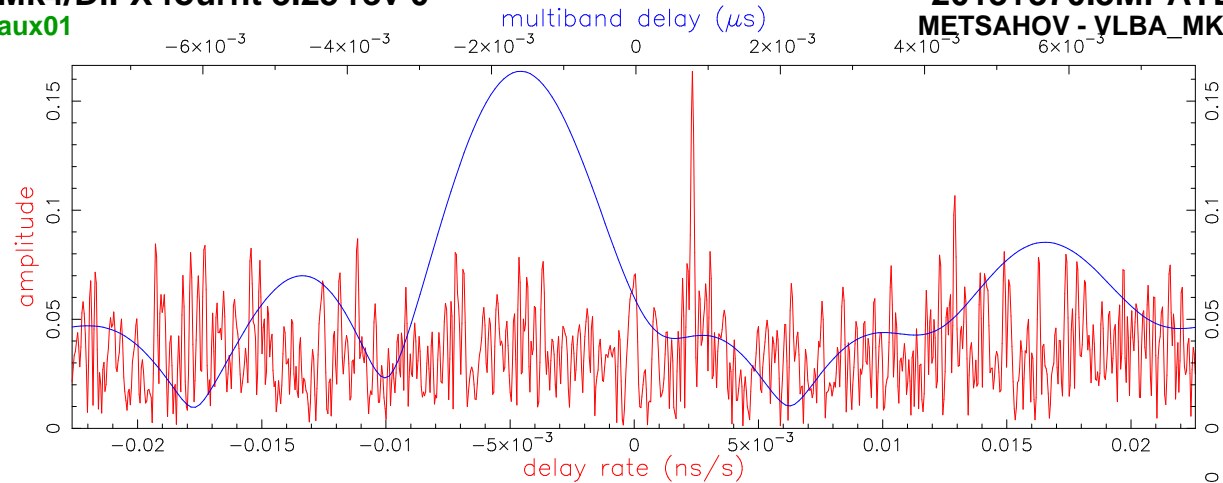
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zm..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zm.Q.235.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

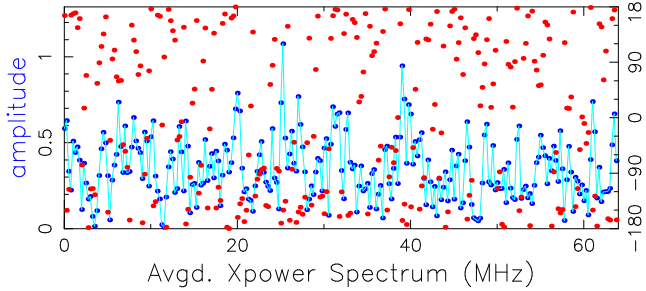
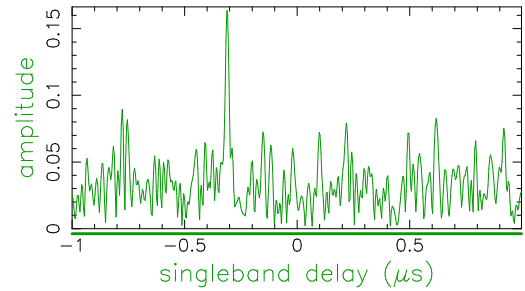
2013+370.3MPATB, No0544, Zm

ME TSAHOV - VLBA_MK, fgroup Q, pol LR



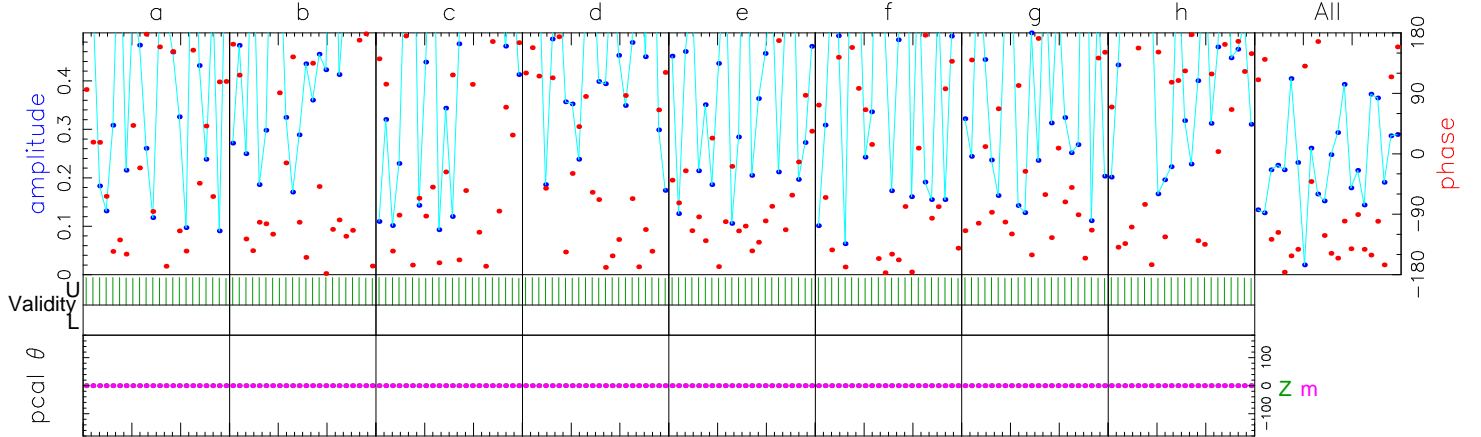
Fringe quality 0

SNR 6.1
Int time 179.389
Amp 0.166
Phase -235.2
PFD 1.6e-01
Delays (us)
SBD -0.311056
MBD -0.001613
Fringe rate (Hz)
0.100970
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512



Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 112100.00
Stop 112400.22
FRT 112232.00
Corr/FF/build
2024:337:191905
2025:042:153800
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	166.4	-147.1	-137.2	-172.8	-91.7	-160.2	-114.8	177.7	Phase	-145.2
Z	0.1	0.3	0.1	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
m	358.0	177.2	238.1	37.4	177.1	218.3	94.6	393.8	Sbd box	177.4
Z	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
Z:m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	1.70527944838E+03	Apriori delay (usec)	1.70559356131E+03	Resid mbdelay (usec)	-1.61292E-03	+/-	1.8E-04
Sband delay (usec)	1.70528250481E+03	Apriori clock (usec)	-4.4145584E-01	Resid sbdelay (usec)	-3.11056E-01	+/-	1.4E-03
Phase delay (usec)	1.70559355196E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	-9.34768E-06	+/-	1.2E-06
Delay rate (us/s)	-1.73882452891E+00	Apriori rate (us/s)	-1.73882686944E+00	Resid rate (us/s)	2.34053E-06	+/-	1.2E-08
Total phase (deg)	-150.6	Apriori accel (us/s/s)	2.70502732295E-05	Resid phase (deg)	-235.2	+/-	18.9

ph/seg (deg)	52.2	Theor.	44.3	Amplitude	0.166 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.8	Search (1024X32)	0.161	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.8	Inc. seg. avg.	0.181	Inc. frq. avg.	0.174	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.4	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

Z: az 299.2 el 26.6 pa 33.0 m: az 56.5 el 20.7 pa -80.5 u,v (fr/asec) 6285.982 2619.520 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zm..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zm.Q.255.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

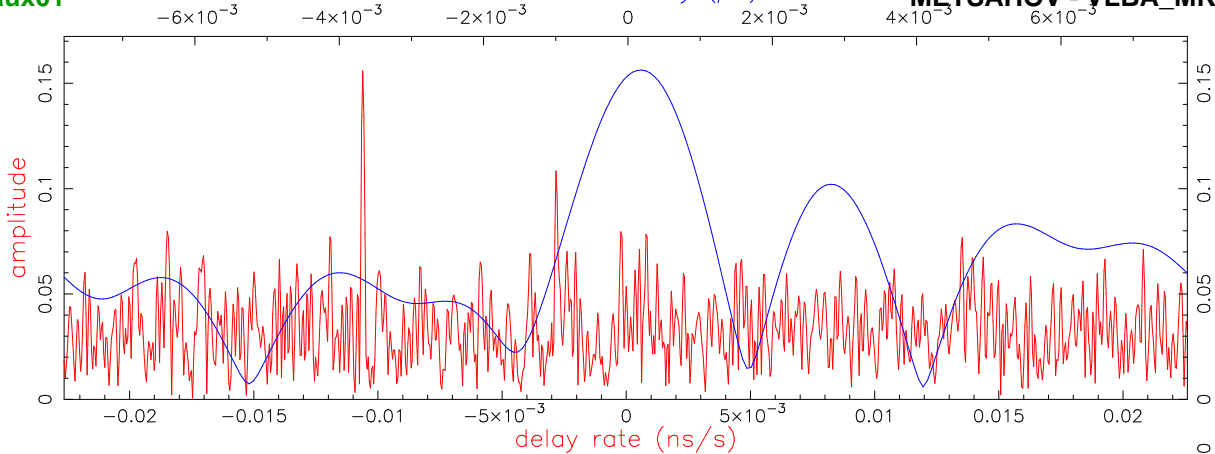
aux01

2013+370.3MPATB, No0544, Zm

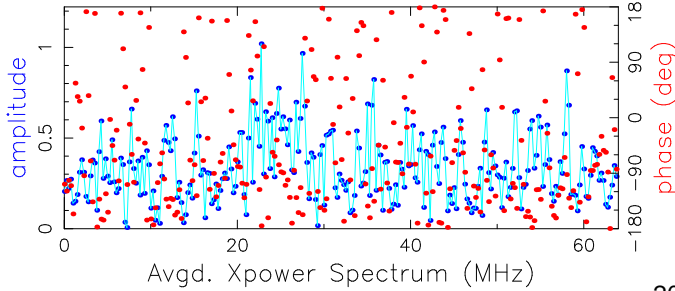
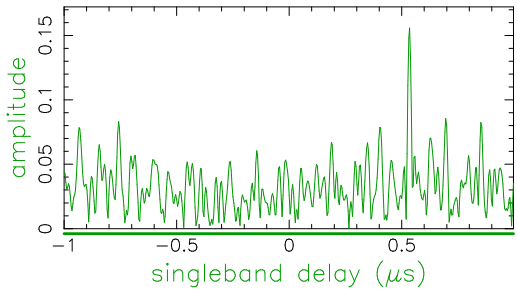
ME TSAHOV - VLBA_MK, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

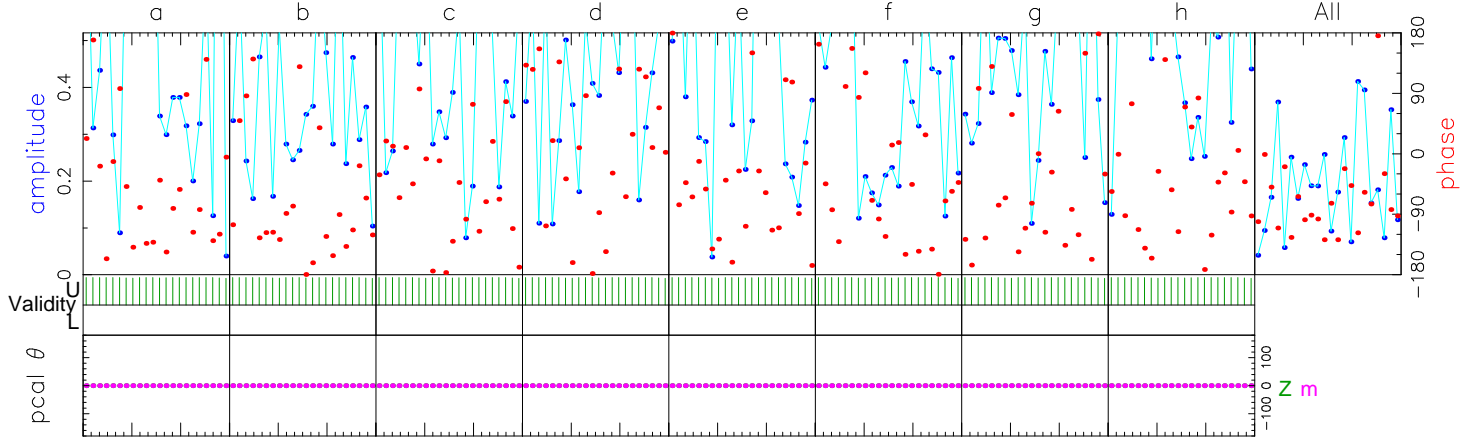


SNR 5.7
 Int time 179.389
 Amp 0.172
 Phase 315.9
 PFD 6.7e-01
 Delays (us)
 SBD 0.534136
 MBD 0.000103
 Fringe rate (Hz)
 -0.459586
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153805
 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
	-108.8	-113.3	-42.2	49.9	-76.0	-132.9	-124.1	-64.3	Phase	-89.1
	0.3	0.2	0.2	0.0	0.3	0.1	0.2	0.3	Ampl.	0.2
	395.1	485.3	245.2	270.7	392.5	289.0	392.8	390.3	Sbd box	393.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.70612491475E+03	Apriori delay (usec)	1.70559356131E+03	Resid mbdelay (usec)	1.03437E-04	+/-	1.9E-04
Sband delay (usec)	1.70612769706E+03	Apriori clock (usec)	-4.4145584E-01	Resid sbdelay (usec)	5.34136E-01	+/-	1.5E-03
Phase delay (usec)	1.70559355557E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	-5.73456E-06	+/-	1.3E-06
Delay rate (us/s)	-1.73883752279E+00	Apriori rate (us/s)	-1.73882686944E+00	Resid rate (us/s)	-1.06534E-05	+/-	1.2E-08
Total phase (deg)	40.5	Apriori accel (us/s/s)	2.70502732295E-05	Resid phase (deg)	315.9	+/-	19.9

ph/seg (deg)	43.3	Theor.	46.7	Amplitude	0.172 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.2		81.6	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	66.3		28.2	Inc. seg. avg.	0.162	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	55.3		49.2	Inc. frq. avg.	0.184	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
Z: az 299.2 el 26.6 pa 33.0		m: az 56.5 el 20.7 pa -80.5		u,v (fr/asec)	6285.982 2619.520	Data rate(Mb/s): 2048	t_cohere infinite			

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zm...3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zm.Q.279.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

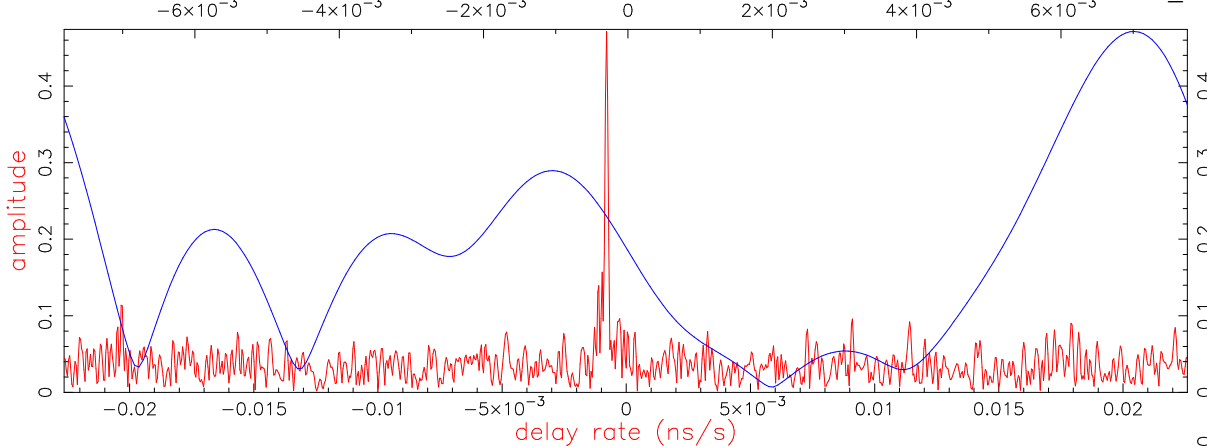
aux01

2013+370.3MPATB, No0544, Zn

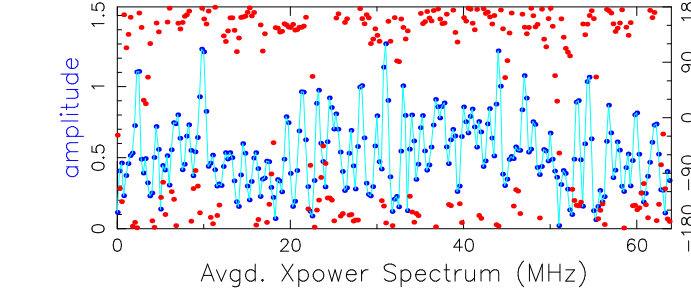
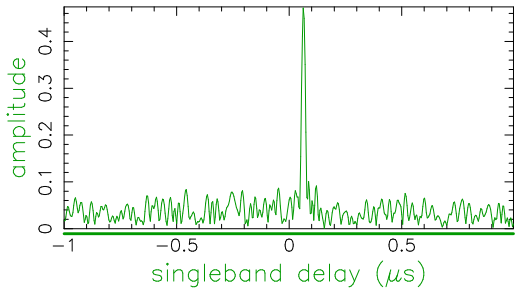
MEṬSAHOV - VLBA_NL, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 8

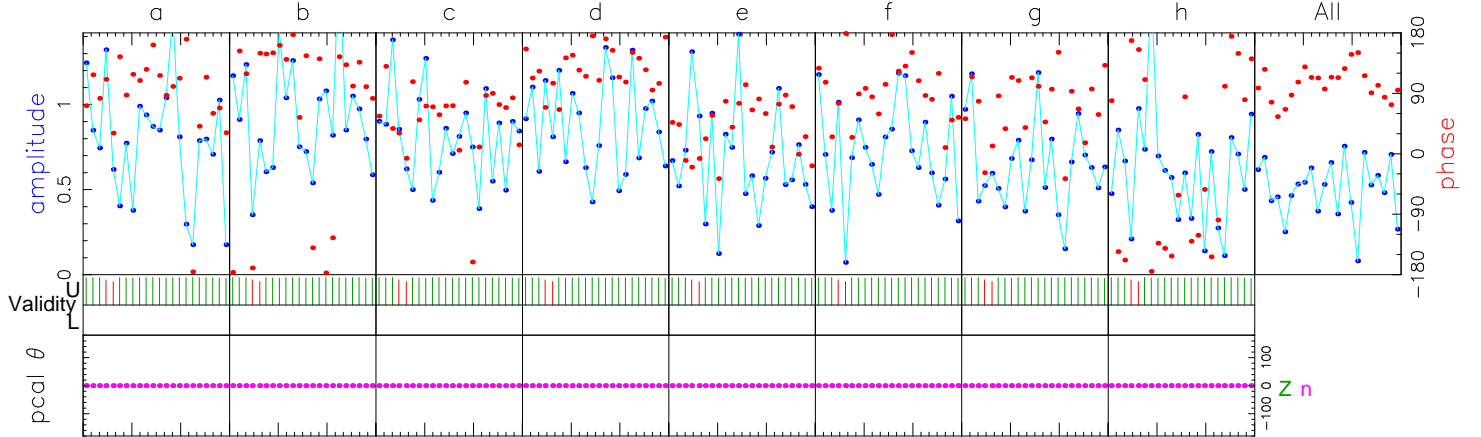


SNR 17.3
 Int time 177.414
 Amp 0.474
 Phase 194.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.063443
 MBD 0.007028
 Fringe rate (Hz)
 -0.033642
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153754
 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	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
Z	0	0	0	0	0	0	0	0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-1.14208577988E+04	Apriori delay (usec)	-1.14209273272E+04	Resid mbdelay (usec)	7.02836E-03	+/-	6.3E-05
Sband delay (usec)	-1.14208638837E+04	Apriori clock (usec)	3.8772774E-01	Resid sbdelay (usec)	6.34435E-02	+/-	5.0E-04
Phase delay (usec)	-1.14209273205E+04	Apriori clockrate (us/s)	3.1259999E-07	Resid phdelay (usec)	6.70192E-06	+/-	4.3E-07
Delay rate (us/s)	-8.25151249669E-01	Apriori rate (us/s)	-8.25150469825E-01	Resid rate (us/s)	-7.79844E-07	+/-	4.1E-09
Total phase (deg)	231.6	Apriori accel (us/s/s)	7.45374888903E-05	Resid phase (deg)	194.1	+/-	6.6

ph/seg (deg)	23.8	Theor.	15.5	Search (1024X32)	0.447	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	35.4	RMS	27.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	49.0	Inc. seg. avg.	0.488	Inc. frq. avg.	0.595	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	36.8	Inc. frq. avg.	0.595			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

Z: az 299.2 el 26.6 pa 33.0 n: az 107.0 el 77.8 pa -63.1 u,v (fr/asec) 3020.725 2915.880 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zn..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zn.Q.218.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

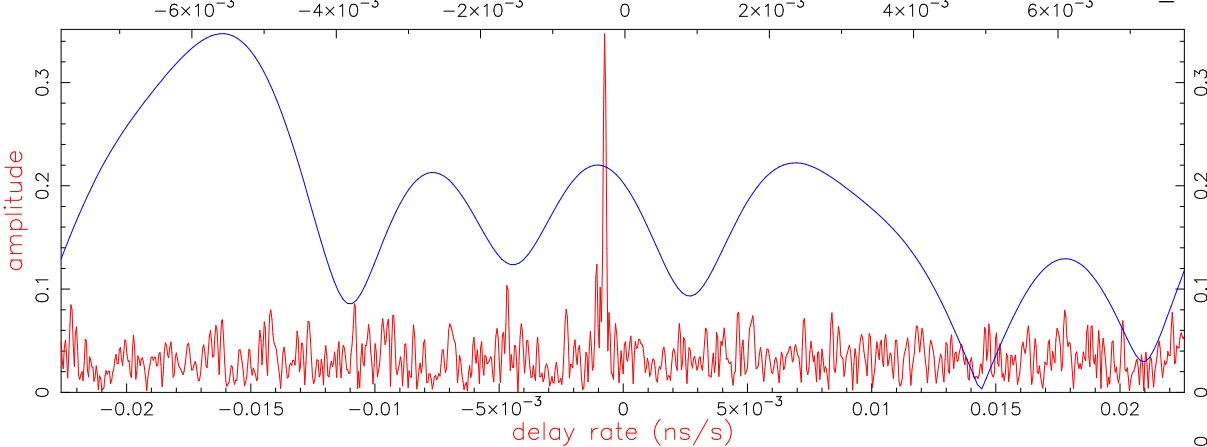
aux01

2013+370.3MPATB, No0544, Zn

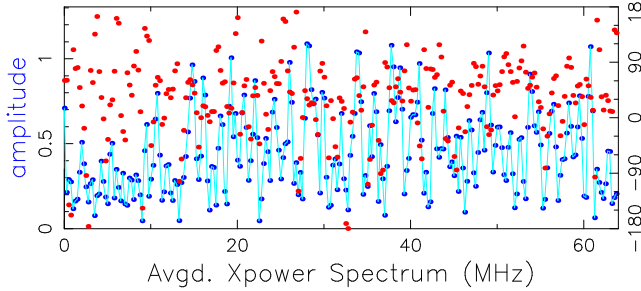
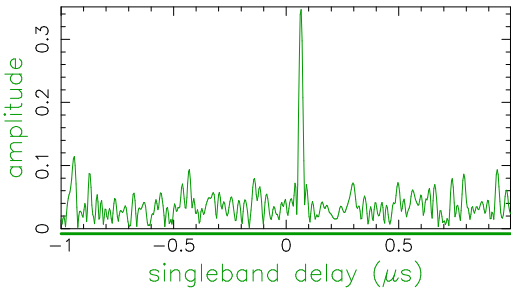
METSAHOV - VLBA_NL, fgroup Q, pol RR

multiband delay (μ s)

Fringe quality 9

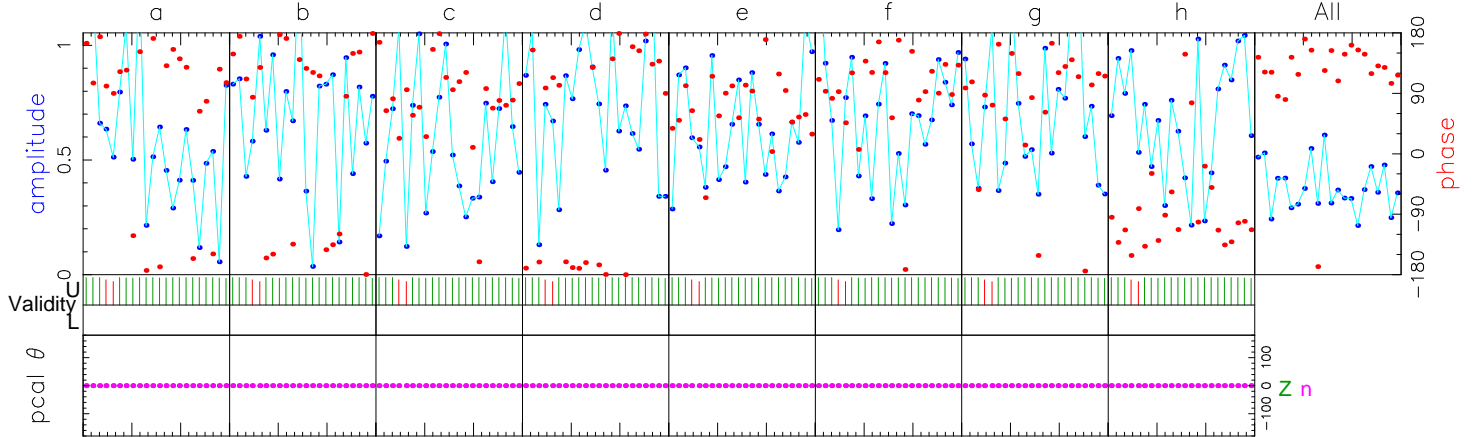


SNR 12.8
 Int time 177.414
 Amp 0.351
 Phase 65.1
 PFD 4.7e-29
 Delays (us)
 SBD 0.064952
 MBD -0.005628
 Fringe rate (Hz)
 -0.033542
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153756
 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	141.9	162.6	86.1	162.6	67.9	112.2	113.0	-110.7	Phase	132.6				
Z	0.5	0.5	0.4	0.6	0.5	0.6	0.5	0.6	Ampl.	0.5				
n	273.9	273.1	274.0	273.9	274.1	274.6	274.8	275.4	Sbd box	273.6				
Z:n	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0	APs used					
Z:n	0	0	0	0	0	0	0	0	PC freqs					
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC					
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000						
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids					
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks					
									Tracks					
Group delay (usec) (SBD)	-1.14208548304E+04								Apriori delay (usec)	-1.14209273272E+04	Resid mbdelay (usec)	-5.62820E-03	+/-	8.5E-05
Sband delay (usec)	-1.14208623757E+04								Apriori clock (usec)	3.8772774E-01	Resid sbdelay (usec)	6.49515E-02	+/-	6.7E-04
Phase delay (usec)	-1.14209273187E+04								Apriori clockrate (us/s)	3.1259999E-07	Resid phdelay (usec)	8.53523E-06	+/-	5.8E-07
Delay rate (us/s)	-8.25151247351E-01								Apriori rate (us/s)	-8.25150469825E-01	Resid rate (us/s)	-7.77526E-07	+/-	5.6E-09
Total phase (deg)		102.5							Apriori accel (us/s/s)	7.45374888903E-05	Resid phase (deg)	65.1	+/-	9.0
ph/seg (deg)	RMS 25.9	Theor. 20.9	Amplitude 1024X32	0.351 +/- 0.027	0.331	0.331	0.331	0.331	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	30.9	36.5	Interp.	0.000	0.000	0.000	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	61.5	12.7	Inc. seg. avg.	0.359	0.359	0.359	0.359	0.359	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	53.2	22.1	Inc. frq. avg.	0.517	0.517	0.517	0.517	0.517	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023		
Z: az 299.2 el 26.6 pa 33.0			n: az 107.0 el 77.8 pa -63.1						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/No0544/Zn..3MPATB						u,v (fr/asec) 3020.725 2915.880					simultaneous interpolator
									Output file: /Exps/c241d/v1/7mm/1234/No0544/Zn.Q.233.3MPATB					

Mk4/DiFX fourfit 3.25 rev 0

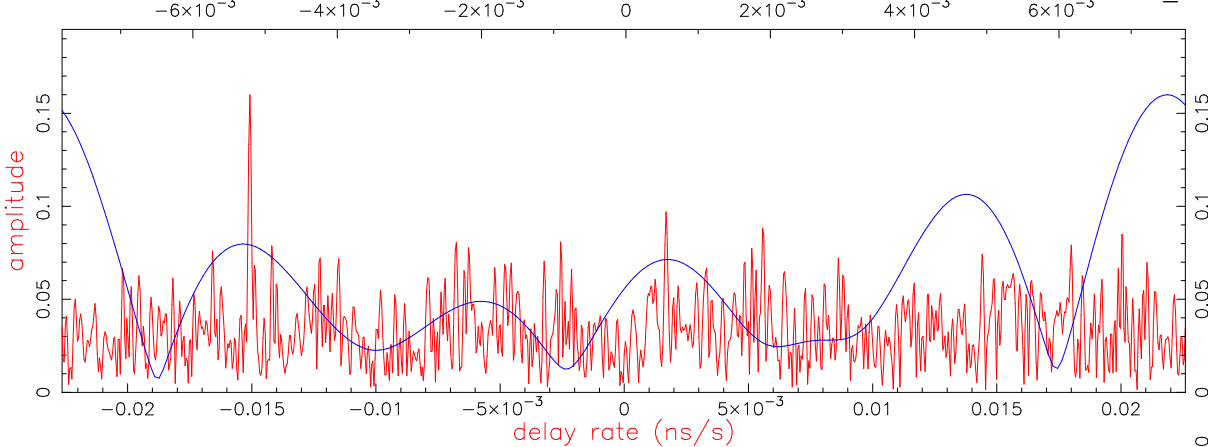
aux01

2013+370.3MPATB, No0544, Zn

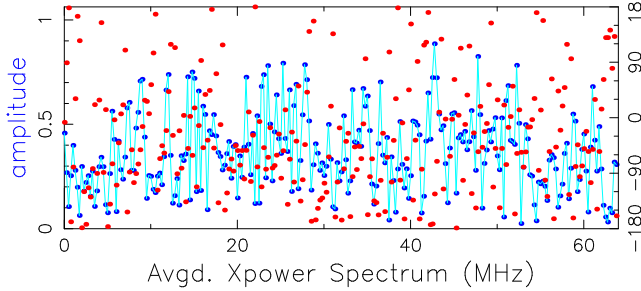
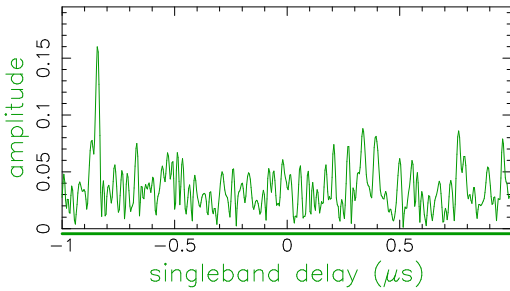
MEṬSAHOV - VLBA_NL, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

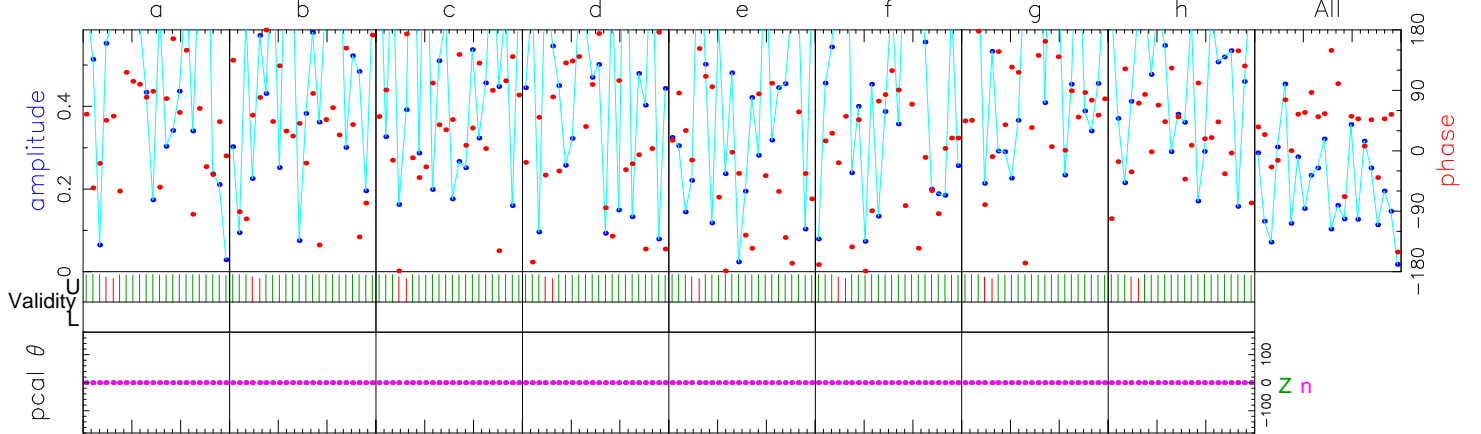


SNR 5.9
 Int time 177.414
 Amp 0.195
 Phase -248.7
 PFD 4.3e-01
 Delays (us)
 SBD -0.842522
 MBD -0.008108
 Fringe rate (Hz)
 -0.652939
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153802
 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	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
Z	0	0	0	0	0	0	0	0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.14217635604E+04	Apriori delay (usec)	-1.14209273272E+04	Resid mbdelay (usec)	-8.10816E-03	+/-	1.8E-04
Sband delay (usec)	-1.14217698490E+04	Apriori clock (usec)	3.8772774E-01	Resid sbdelay (usec)	-8.42522E-01	+/-	1.5E-03
Phase delay (usec)	-1.14209273244E+04	Apriori clockrate (us/s)	3.1259999E-07	Resid phdelay (usec)	2.81828E-06	+/-	1.3E-06
Delay rate (us/s)	-8.25165605168E-01	Apriori rate (us/s)	-8.25150469825E-01	Resid rate (us/s)	-1.51353E-05	+/-	1.2E-08
Total phase (deg)	-211.3	Apriori accel (us/s/s)	7.45374888903E-05	Resid phase (deg)	-248.7	+/-	19.5

ph/seg (deg)	58.8	Theor.	45.6	Amplitude	0.195 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	69.3		79.6	Search (1024X32)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	50.7		27.6	Inc. seg. avg.	0.186	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	55.1		48.2	Inc. frq. avg.	0.194	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 299.2 el 26.6 pa 33.0 n: az 107.0 el 77.8 pa -63.1 u,v (fr/asec) 3020.725 2915.880 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zn..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zn.Q.262.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

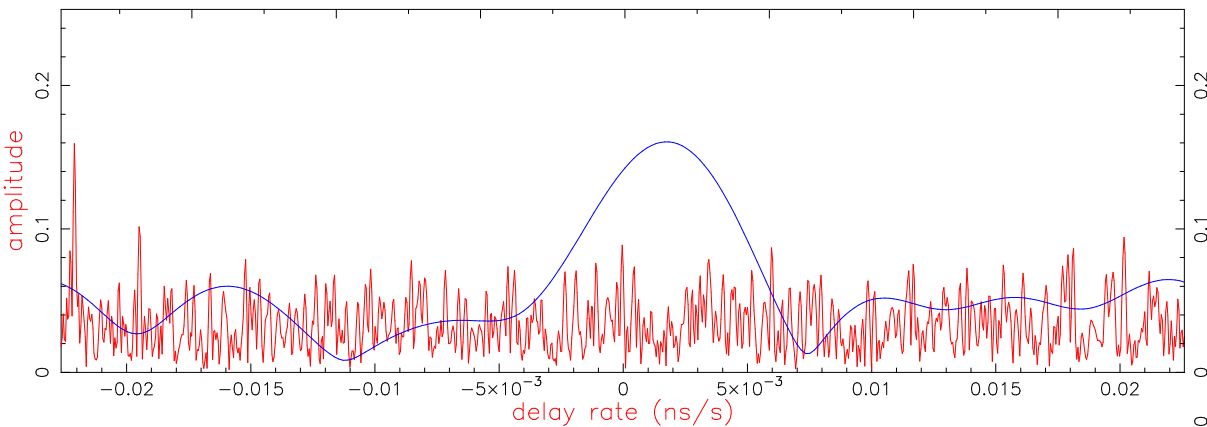
aux01

2013+370.3MPATB, No0544, Zn

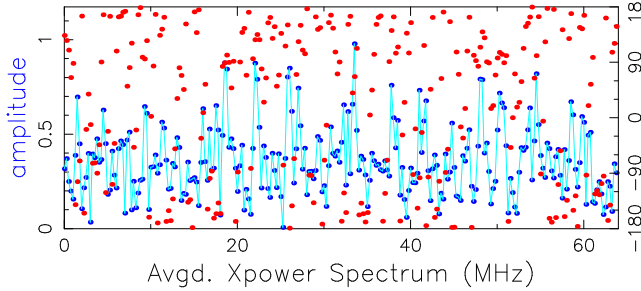
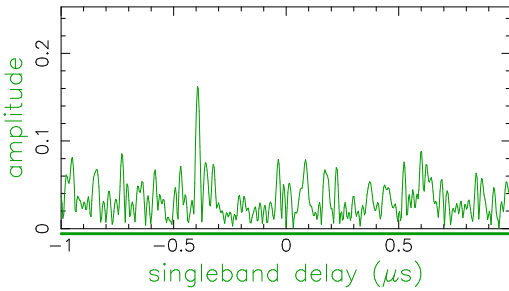
MEṬSAHOV - VLBA_NL, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

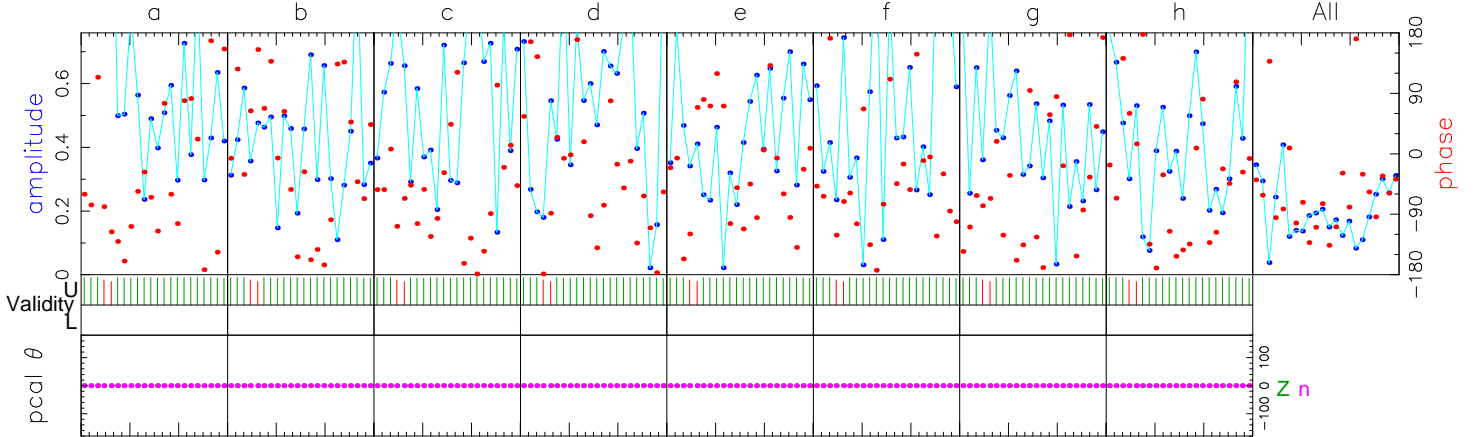


SNR 6.0
 Int time 177.414
 Amp 0.253
 Phase -93.9
 PFD 2.5e-01
 Delays (us)
 SBD -0.392972
 MBD 0.000436
 Fringe rate (Hz)
 -0.958262
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153804
 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	349/0	349/0	349/0	349/0	349/0	349/0	349/0	349/0		
Z	0	0	0	0	0	0	0	0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Group delay (usec) (SBD)	-1.14213175162E+04									
Sband delay (usec)	-1.14213202992E+04									
Phase delay (usec)	-1.14209273318E+04									
Delay rate (us/s)	-8.25172682660E-01									
Total phase (deg)			-56.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

ph/seg (deg) 54.1 44.8
 amp/seg (%) 57.9 78.1
 ph/frq (deg) 41.1 27.1
 amp/frq (%) 46.8 47.3

RMS Theor. Amplitude 0.253 +/- 0.042
 Search (1024X32) 0.155
 Interp. 0.000
 Inc. seg. avg. 0.235
 Inc. frq. avg. 0.247

Group delay (usec) (SBD) -1.14213175162E+04
 Sband delay (usec) -1.14213202992E+04
 Phase delay (usec) -1.14209273318E+04
 Delay rate (us/s) -8.25172682660E-01
 Total phase (deg) -56.4

Apriori delay (usec) -1.14209273272E+04
 Apriori clock (usec) 3.8772774E-01
 Apriori clockrate (us/s) 3.1259999E-07
 Apriori rate (us/s) -8.25150469825E-01
 Apriori accel (us/s/s) 7.45374888903E-05

Resid mbdelay (usec) 4.35999E-04 +/- 1.8E-04
 Resid sbdelay (usec) -3.92972E-01 +/- 1.4E-03
 Resid phdelay (usec) -4.59861E-06 +/- 1.2E-06
 Resid rate (us/s) -2.22128E-05 +/- 1.2E-08
 Resid phase (deg) -93.9 +/- 19.2

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

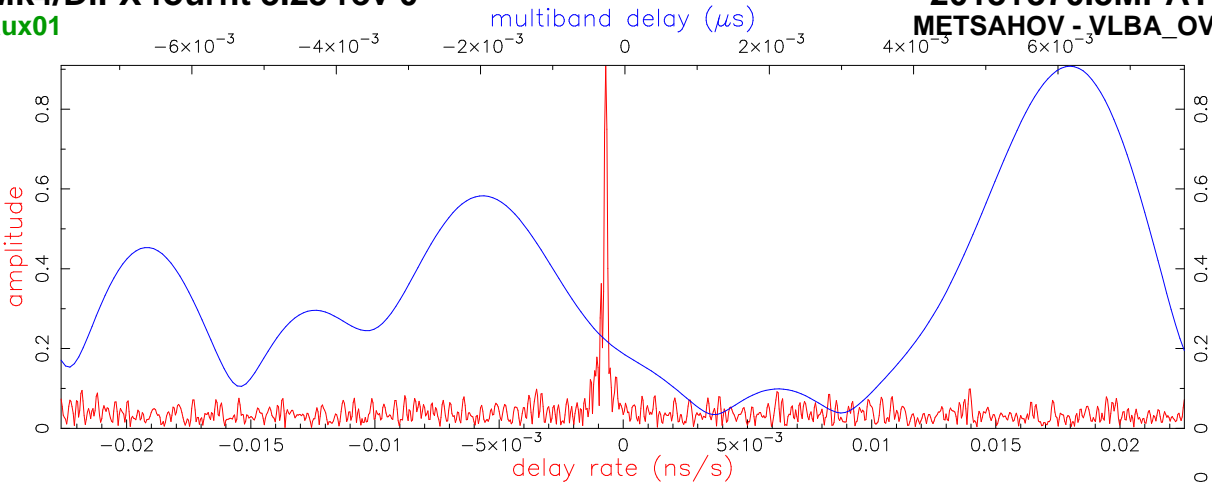
Z: az 299.2 el 26.6 pa 33.0 n: az 107.0 el 77.8 pa -63.1 u,v (fr/asec) 3020.725 2915.880 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zn..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zn.Q.273.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

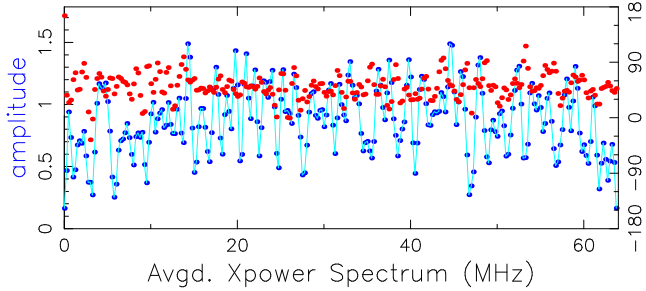
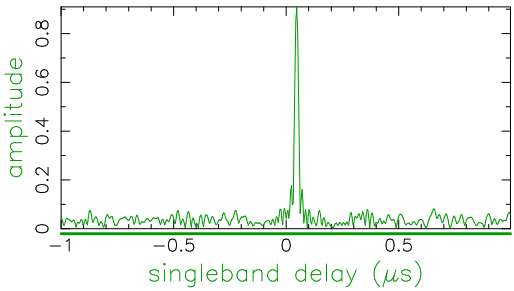
2013+370.3MPATB, No0544, Zo

MEṬSAHOV - VLBA_OV, fgroup Q, pol LL



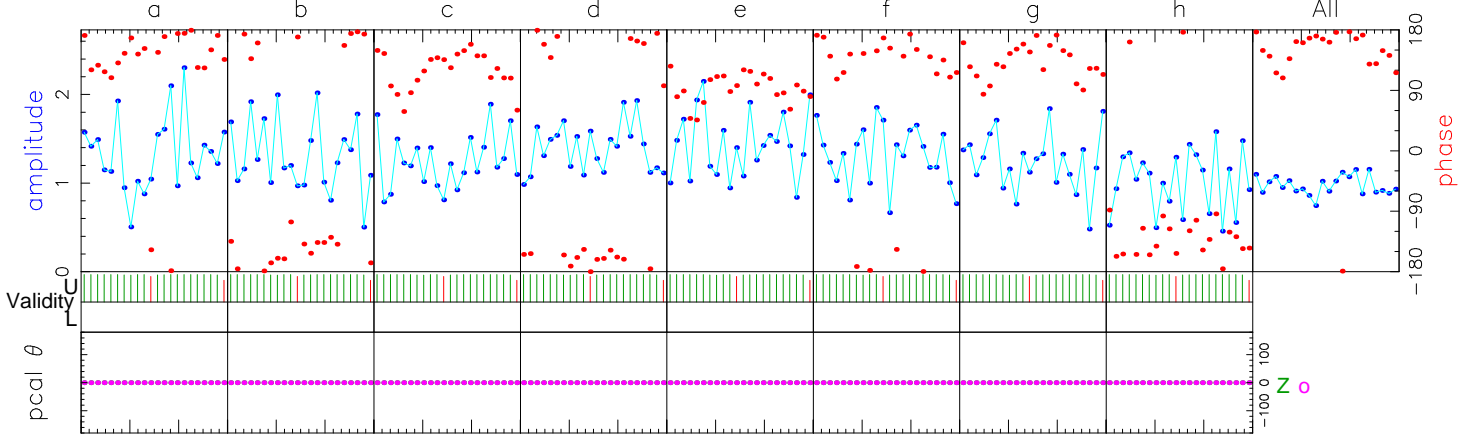
Fringe quality 6

SNR 33.1
 Int time 177.265
 Amp 0.910
 Phase 40.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.046316
 MBD 0.006153
 Fringe rate (Hz)
 -0.029883
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153755
 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	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0		
Z	0	0	0	0	0	0	0	0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) -8.62258638553E+03 Apriori delay (usec) -8.62263941367E+03 Resid mbdelay (usec) 6.15313E-03 +/- 3.3E-05
 Sband delay (usec) -8.62259309792E+03 Apriori clock (usec) -2.4953688E+01 Resid sbdelay (usec) 4.63157E-02 +/- 2.6E-04
 Phase delay (usec) -8.62263940380E+03 Apriori clockrate (us/s) 1.2858790E-07 Resid phdelay (usec) 9.86221E-06 +/- 2.2E-07
 Delay rate (us/s) -1.24404227558E+00 Apriori rate (us/s) -1.24404158288E+00 Resid rate (us/s) -6.92708E-07 +/- 2.2E-09
 Total phase (deg) 290.7 Apriori accel (us/s/s) 6.36911785073E-05 Resid phase (deg) 40.7 +/- 3.5

RMS Theor. Amplitude 0.910 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 21.6 8.1 Search (1024X32) 0.878 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 13.7 14.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 46.6 4.9 Inc. seg. avg. 0.968 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 30.7 8.5 Inc. frq. avg. 1.157 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

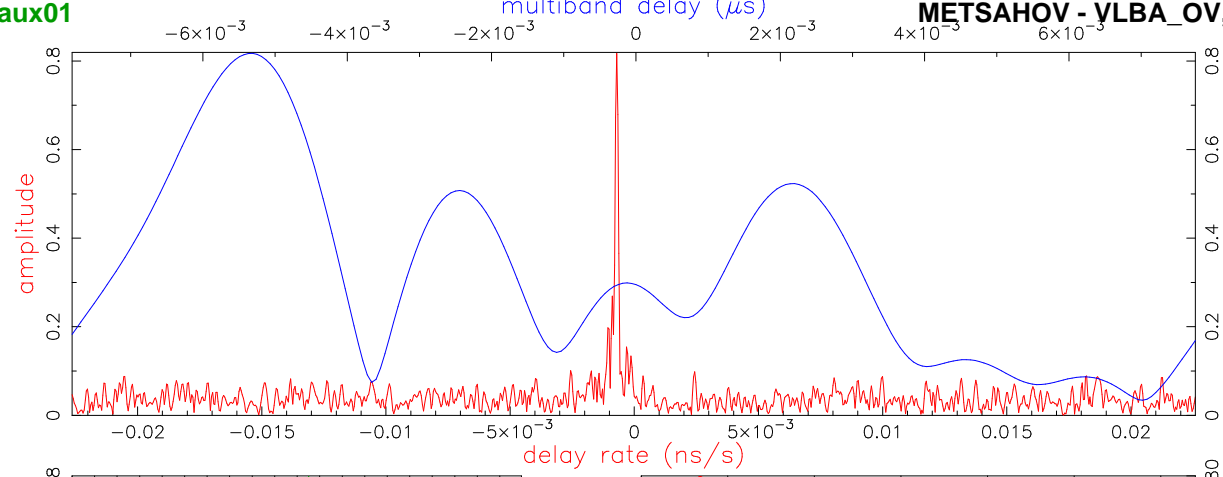
Z: az 299.2 el 26.6 pa 33.0 o: az 77.1 el 57.3 pa -77.2 u,v (fr/asec) 4523.723 2793.195 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544//Zo..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544//Zo.Q.228.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

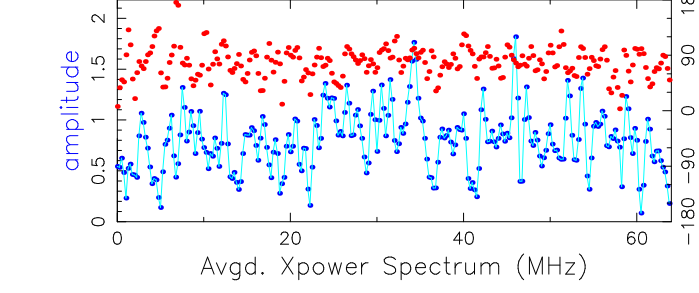
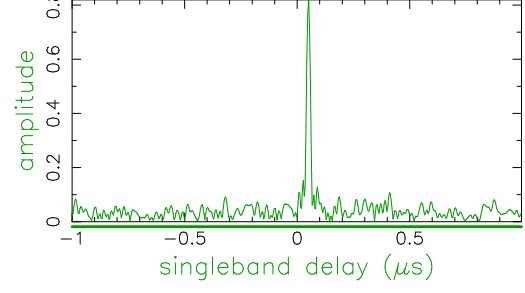
2013+370.3MPATB, No0544, Zo

ME TSAHOV - VLBA_OV, fgroup Q, pol RR



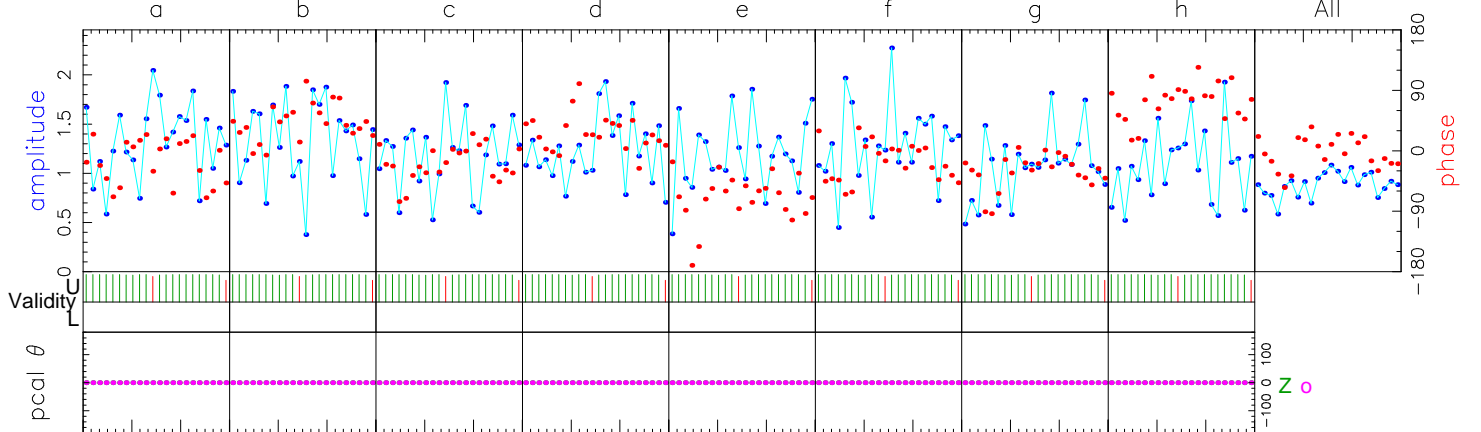
Fringe quality 5

SNR 29.8
 Int time 177.265
 Amp 0.819
 Phase 88.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.050150
 MBD -0.005352
 Fringe rate (Hz)
 -0.029921
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153805
 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



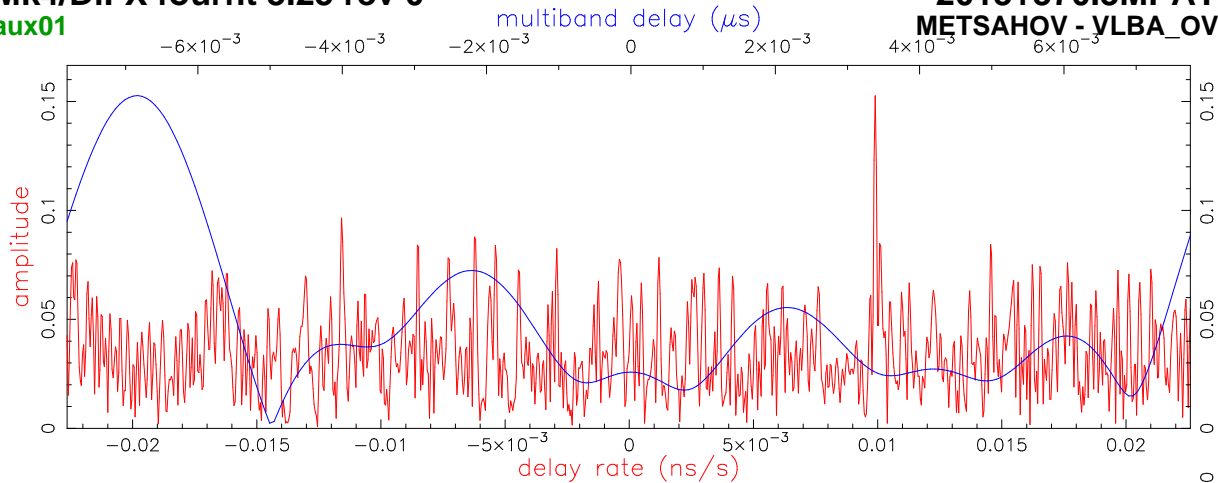
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	-14.4	41.8	-20.0	27.8	-70.3	-18.2	-30.5	72.8	Phase	-1.7	
	1.1	1.2	1.1	1.1	1.0	1.1	1.0	1.0	Ampl.	1.1	
	269.9	270.0	270.1	270.1	270.4	270.3	271.1	271.3	Sbd box	269.8	
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used		
Z	0	0	0	0	0	0	0	0	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
o	1000	1000	1000	1000	1000	1000	1000	1000			
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids		
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-8.62258226522E+03		Apriori delay (usec)		-8.62263941367E+03		Resid mbdelay (usec)		-5.35156E-03	+/- 3.6E-05	
Sband delay (usec)	-8.62258926367E+03		Apriori clock (usec)		-2.4953688E+01		Resid sbdelay (usec)		5.01500E-02	+/- 2.9E-04	
Phase delay (usec)	-8.62263941378E+03		Apriori clockrate (us/s)		1.2858790E-07		Resid phdelay (usec)		-1.12123E-07	+/- 2.5E-07	
Delay rate (us/s)	-1.24404227646E+00		Apriori rate (us/s)		-1.24404158288E+00		Resid rate (us/s)		-6.93579E-07	+/- 2.4E-09	
Total phase (deg)	338.3		Apriori accel (us/s/s)		6.36911785073E-05		Resid phase (deg)		88.3	+/- 3.8	
	RMS	Theor.	Amplitude	0.819 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	23.6	9.0	Search (1024X32)	0.793		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	17.0	15.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	49.4	5.4	Inc. seg. avg.	0.877		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023 0.023	
amp/frq (%)	33.1	9.5	Inc. frq. avg.	1.075		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
Z: az 299.2 el 26.6 pa 33.0	o: az 77.1 el 57.3 pa -77.2		u,v (fr/asec) 4523.723 2793.195						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0544/Zo..3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544/Zo.Q.283.3MPATB								

Mk4/DiFX fourfit 3.25 rev 0

aux01

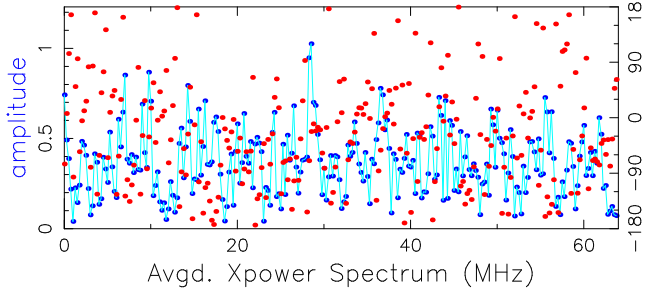
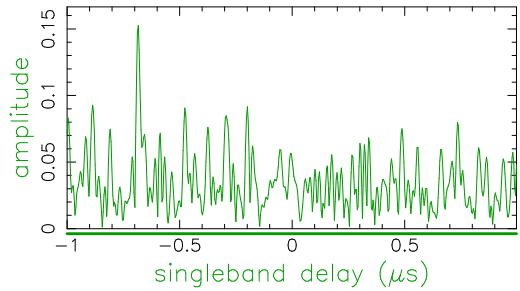
2013+370.3MPATB, No0544, Zo

MEṬSAHOV - VLBA_OV, fgroup Q, pol LR



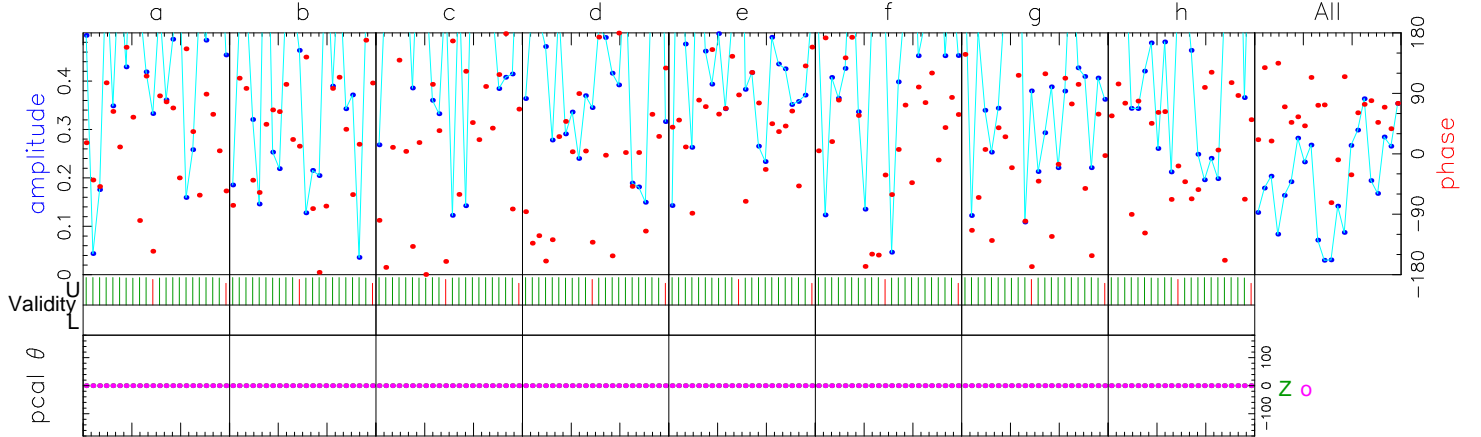
Fringe quality 0

SNR 5.6
 Int time 177.265
 Amp 0.167
 Phase -8.6
 PFD 9.3e-01
 Delays (us)
 SBD -0.684725
 MBD -0.006880
 Fringe rate (Hz)
 0.428912
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153808
 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	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0		
Z	0	0	0	0	0	0	0	0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-8.62331816888E+03	Apriori delay (usec)	-8.62263941367E+03	Resid mbdelay (usec)	-6.88021E-03	+/-	1.9E-04
Sband delay (usec)	-8.62332413867E+03	Apriori clock (usec)	-2.4953688E+01	Resid sbdelay (usec)	-6.84725E-01	+/-	1.5E-03
Phase delay (usec)	-8.62263940987E+03	Apriori clockrate (us/s)	1.2858790E-07	Resid phdelay (usec)	3.79466E-06	+/-	1.3E-06
Delay rate (us/s)	-1.24403164055E+00	Apriori rate (us/s)	-1.24404158288E+00	Resid rate (us/s)	9.94232E-06	+/-	1.3E-08
Total phase (deg)	-118.6	Apriori accel (us/s/s)	6.36911785073E-05	Resid phase (deg)	-8.6	+/-	20.5

ph/seg (deg)	49.0	Theor.	47.9	Amplitude	0.167 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.6	Search (1024X32)	0.150	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.0	Inc. seg. avg.	0.156	Inc. frq. avg.	0.154	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.6	Inc. frq. avg.	0.154			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

Z: az 299.2 el 26.6 pa 33.0 o: az 77.1 el 57.3 pa -77.2 u,v (fr/asec) 4523.723 2793.195 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zo..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zo.Q.291.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

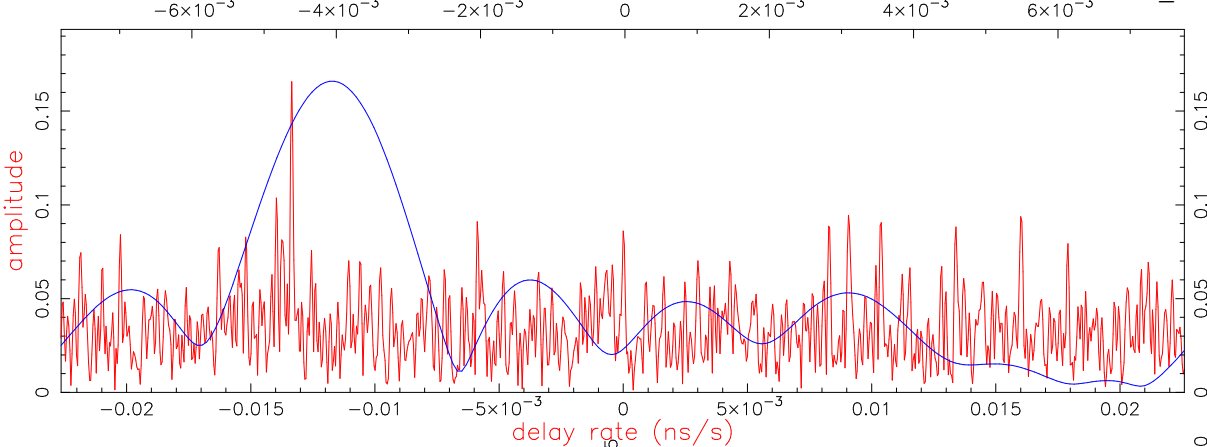
aux01

2013+370.3MPATB, No0544, Zo

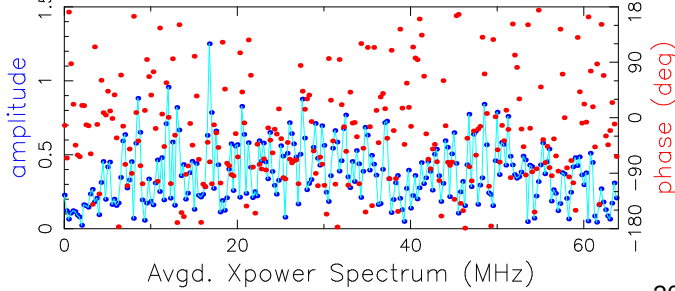
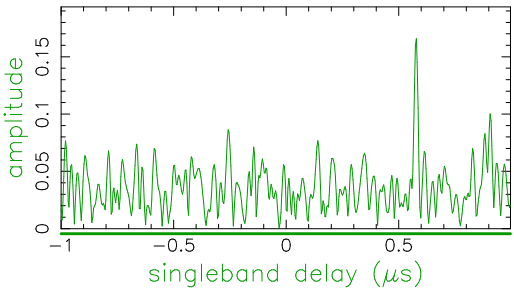
MEṬSAHOV - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

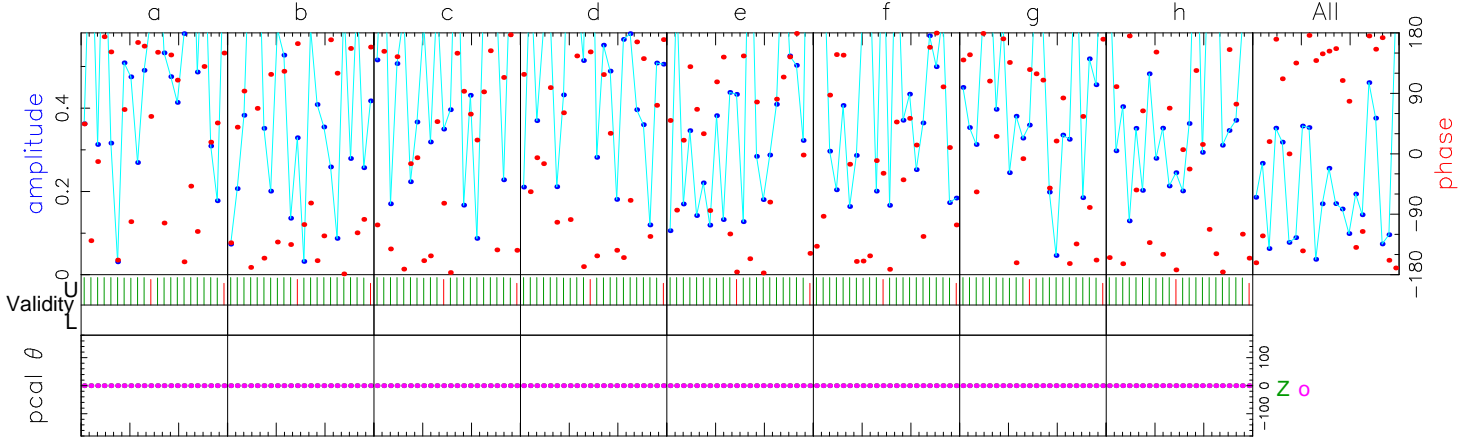


SNR 6.1
 Int time 177.265
 Amp 0.194
 Phase 107.1
 PFD 1.5e-01
 Delays (us)
 SBD 0.577005
 MBD -0.004119
 Fringe rate (Hz)
 -0.578889
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153809
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

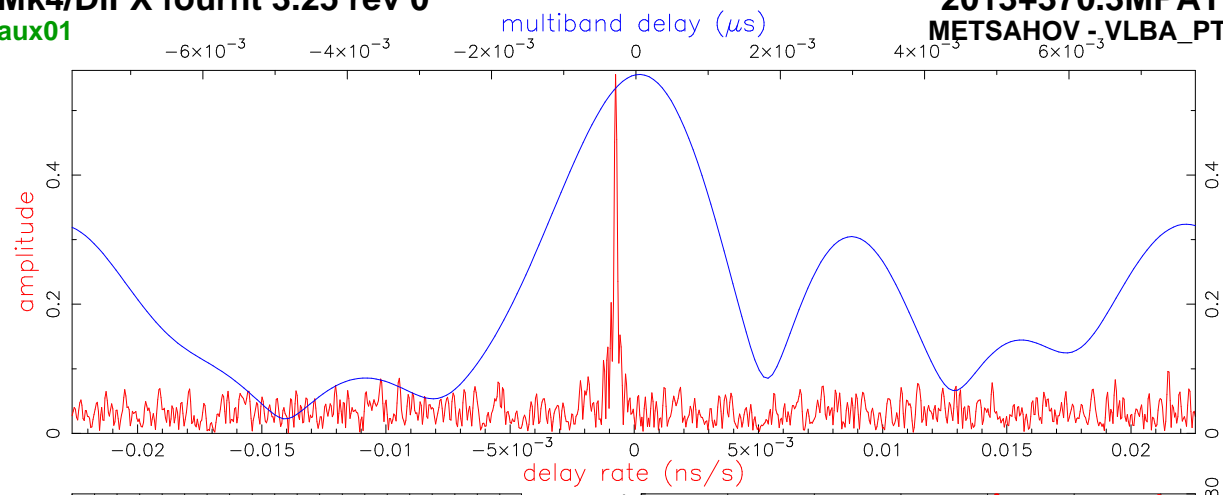
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	167.7	-175.3	167.4	167.4	171.8	-158.6	156.5	-162.9	Phase	174.6
	0.2	0.2	0.3	0.1	0.2	0.1	0.2	0.2	Ampl.	0.2
	87.1	218.1	406.3	229.1	313.4	487.8	402.4	274.5	Sbd box	404.7
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-8.62206540756E+03	Apriori delay (usec)	-8.62263941367E+03	Resid mbdelay (usec)	-4.11889E-03	+/-	1.8E-04
Sband delay (usec)	-8.62206240892E+03	Apriori clock (usec)	-2.4953688E+01	Resid sbdelay (usec)	5.77005E-01	+/-	1.4E-03
Phase delay (usec)	-8.62263940242E+03	Apriori clockrate (us/s)	1.2858790E-07	Resid phdelay (usec)	1.12446E-05	+/-	1.2E-06
Delay rate (us/s)	-1.24405500172E+00	Apriori rate (us/s)	-1.24404158288E+00	Resid rate (us/s)	-1.34188E-05	+/-	1.2E-08
Total phase (deg)	357.1	Apriori accel (us/s/s)	6.36911785073E-05	Resid phase (deg)	107.1	+/-	18.9

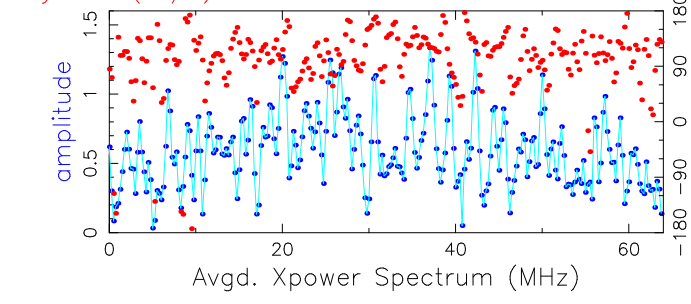
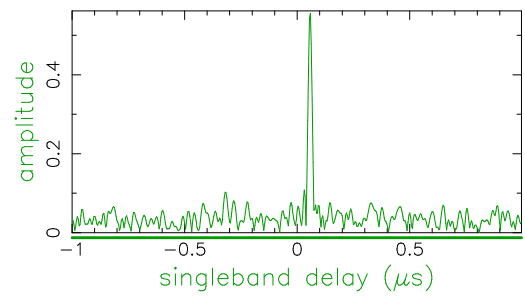
ph/seg (deg)	65.0	Theor.	44.1	Amplitude	0.194 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	91.0	Search (1024X32)	0.155	Search	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	17.4	Inc. seg. avg.	0.197	Inc. seg. avg.	0.179	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	32.1	Inc. frq. avg.	0.179	Inc. frq. avg.	0.179	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
Z: az 299.2 el 26.6 pa 33.0		o: az 77.1 el 57.3 pa -77.2		u,v (fr/asec)	4523.723 2793.195	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0544/Zo..3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544/Zo.Q.298.3MPATB		ion window (TEC) 0.00 0.00	simultaneous interpolator



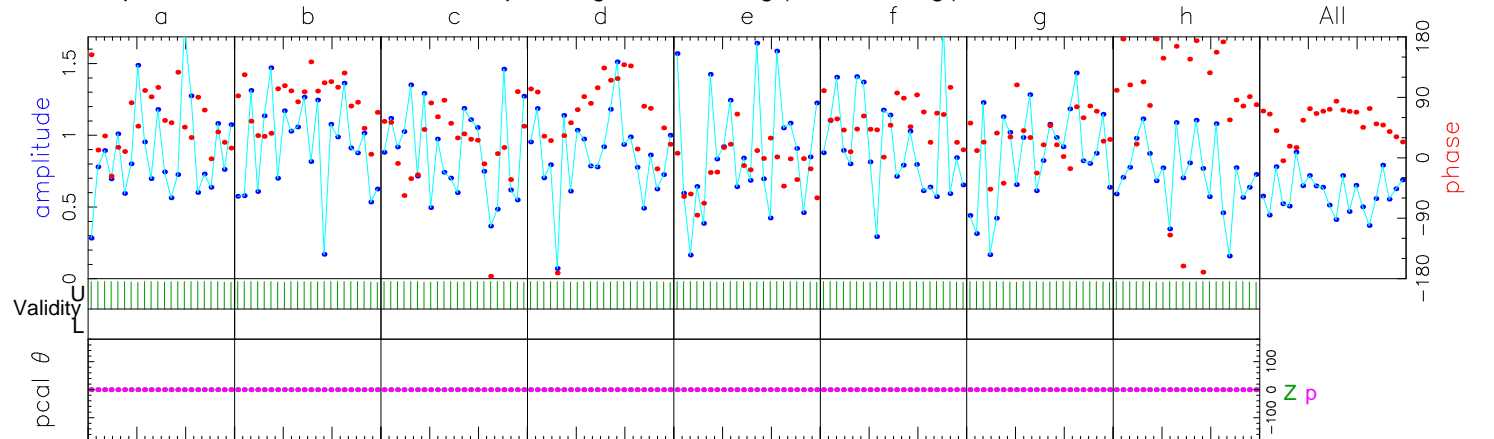
Fringe quality 8

SNR 20.6
Int time 179.389
Amp 0.562
Phase 141.1
PFD 0.0e+00
Delays (us)
SBD 0.057195
MBD 0.000033
Fringe rate (Hz)
-0.031729
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512

Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 112100.00
Stop 112400.22
FRT 112232.00
Corr/FF/build
2024:337:191905
2025:042:153755
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



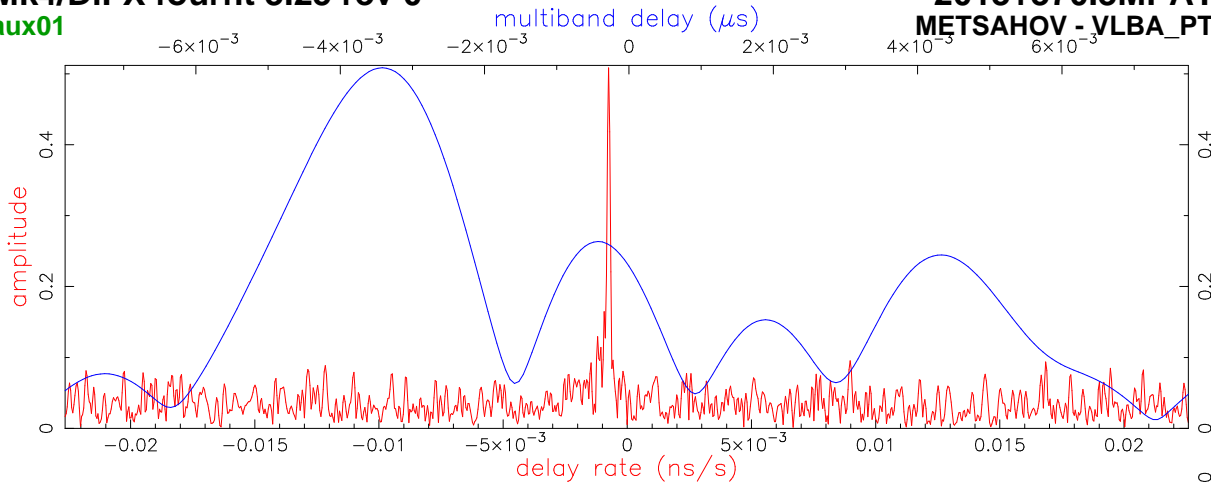
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	48.4	84.0	25.7	80.5	-11.4	53.3	30.9	133.6	Phase	51.1	
	0.7	0.8	0.7	0.6	0.8	0.7	0.8	0.5	Ampl.	0.7	
	272.0	271.8	271.1	272.1	271.9	272.1	272.4	273.5	Sbd box	271.6	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
Z	0	0	0	0	0	0	0	0	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000			
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids		
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-9.90180822630E+03		Apriori delay (usec)		-9.90187075891E+03		Resid mbdelay (usec)		3.26058E-05	+/- 5.3E-05	
Sband delay (usec)	-9.90181356341E+03		Apriori clock (usec)		-5.6006069E+00		Resid sbdelay (usec)		5.71955E-02	+/- 4.2E-04	
Phase delay (usec)	-9.90187075562E+03		Apriori clockrate (us/s)		2.3116296E-07		Resid phdelay (usec)		3.28945E-06	+/- 3.6E-07	
Delay rate (us/s)	-1.12118866944E+00		Apriori rate (us/s)		-1.12118793395E+00		Resid rate (us/s)		-7.35492E-07	+/- 3.4E-09	
Total phase (deg)	307.0		Apriori accel (us/s/s)		7.34223023310E-05		Resid phase (deg)		141.1	+/- 5.6	
	RMS	Theor.	Amplitude	0.562 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	22.9	13.1	Search (1024X32)	0.535	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	23.8	22.8	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	47.8	7.9	Inc. seg. avg.	0.586	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023	0.023	
amp/frq (%)	30.2	13.7	Inc. frq. avg.	0.696	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
Z: az 299.2 el 26.6 pa 33.0	p: az 74.2 el 64.6 pa -87.2		u, v (fr/asec) 4087.492 3234.445						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0544//Zp..3MPATB		Output file: /Exps/c241d/v1/7mm/1234/No0544//Zp.Q.226.3MPATB								

Mk4/DiFX fourfit 3.25 rev 0

aux01

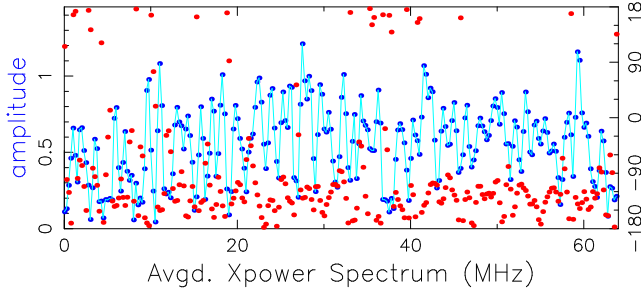
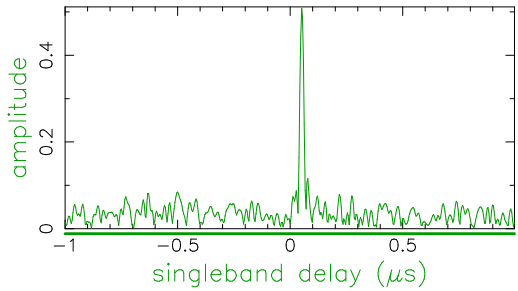
2013+370.3MPATB, No0544, Zp

MEṬSAHOV - VLBA_PT, fgroup Q, pol RR



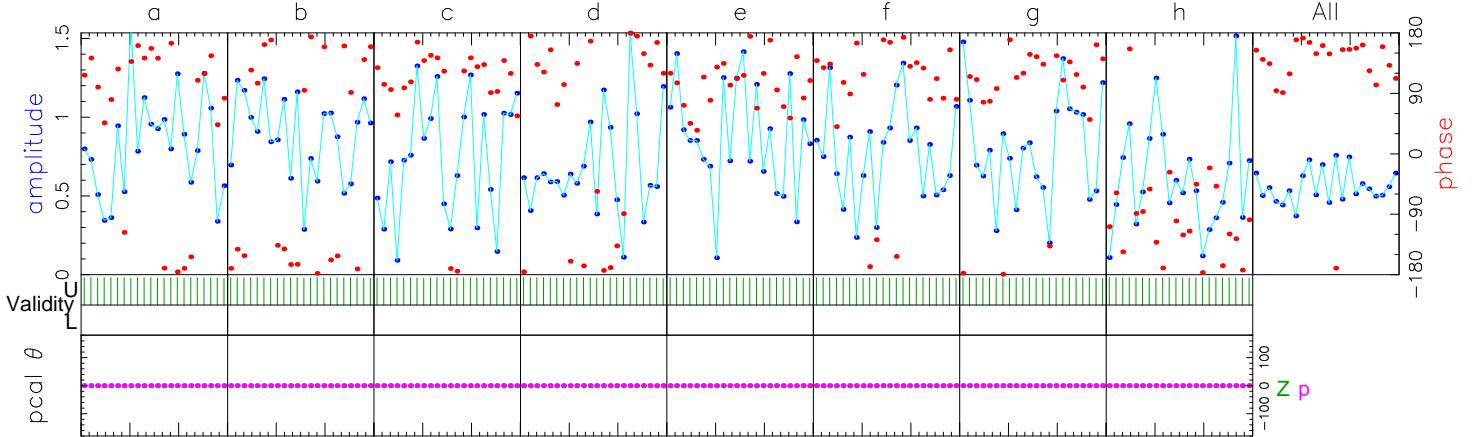
Fringe quality 8

SNR 18.7
 Int time 179.389
 Amp 0.512
 Phase 235.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.051832
 MBD -0.003403
 Fringe rate (Hz)
 -0.031970
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153800
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	-9.90181166208E+03	Apriori delay (usec)	-9.90187075891E+03	Resid mbdelay (usec)	-3.40318E-03	+/-	5.8E-05
Sband delay (usec)	-9.90181892716E+03	Apriori clock (usec)	-5.6006069E+00	Resid sbdelay (usec)	5.18317E-02	+/-	4.6E-04
Phase delay (usec)	-9.90187074954E+03	Apriori clockrate (us/s)	2.3116296E-07	Resid phdelay (usec)	9.36801E-06	+/-	3.9E-07
Delay rate (us/s)	-1.12118867502E+00	Apriori rate (us/s)	-1.12118793395E+00	Resid rate (us/s)	-7.41069E-07	+/-	3.8E-09
Total phase (deg)	41.4	Apriori accel (us/s/s)	7.34223023310E-05	Resid phase (deg)	235.5	+/-	6.1

ph/seg (deg)	26.0	Theor.	14.3	Amplitude	0.512 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	22.4	Search (1024X32)	0.499	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.0	Inc. seg. avg.	0.545	Inc. frq. avg.	0.615	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.4	Inc. frq. avg.	0.615			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

Z: az 299.2 el 26.6 pa 33.0 p: az 74.2 el 64.6 pa -87.2 u,v (fr/asec) 4087.492 3234.445 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zp..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zp.Q.252.3MPATB

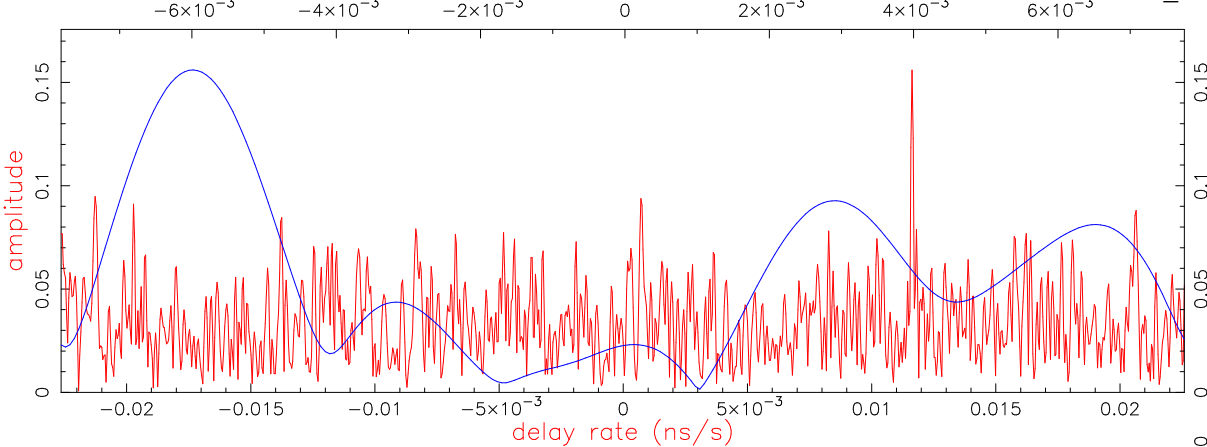
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, Zp

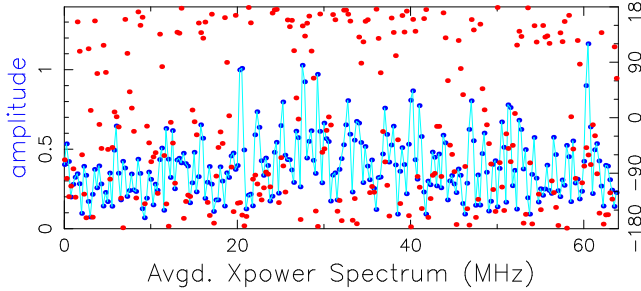
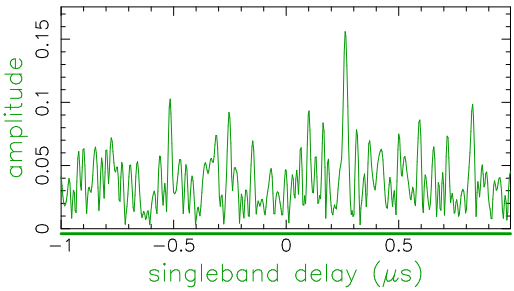
MEṬSAHOV - VLBA_PT, fgroup Q, pol LR

multiband delay (μ s)



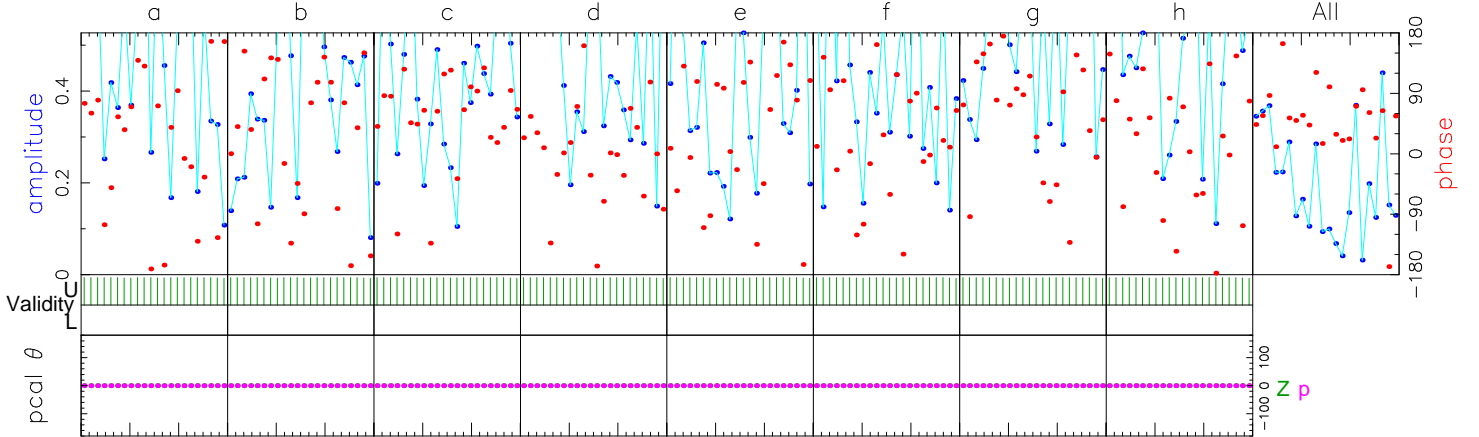
Fringe quality 0

SNR 5.8
 Int time 179.389
 Amp 0.176
 Phase 266.8
 PFD 6.7e-01
 Delays (us)
 SBD 0.262945
 MBD -0.005966
 Fringe rate (Hz)
 0.503442
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153803
 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
	66.6	109.1	72.0	-0.0	106.2	57.1	92.7	52.8	Phase	64.3
	0.2	0.1	0.4	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
	124.4	58.0	324.0	292.1	134.5	366.9	178.3	51.4	Sbd box	324.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-9.90161110033E+03		Apriori delay (usec)		-9.90187075891E+03		Resid mbdelay (usec)		-5.96642E-03	+/- 1.9E-04
Sband delay (usec)	-9.90160781366E+03		Apriori clock (usec)		-5.6006069E+00		Resid sbdelay (usec)		2.62945E-01	+/- 1.5E-03
Phase delay (usec)	-9.90187075477E+03		Apriori clockrate (us/s)		2.3116296E-07		Resid phdelay (usec)		4.13767E-06	+/- 1.3E-06
Delay rate (us/s)	-1.12117626398E+00		Apriori rate (us/s)		-1.12118793395E+00		Resid rate (us/s)		1.16700E-05	+/- 1.2E-08
Total phase (deg)	72.6		Apriori accel (us/s/s)		7.34223023310E-05		Resid phase (deg)		266.8	+/- 19.9

ph/seg (deg) 45.5 46.7 Amplitude 0.176 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.2 81.5 Search (1024X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.6 28.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.7 49.2 Inc. seg. avg. 0.167 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Z: az 299.2 el 26.6 pa 33.0 p: az 74.2 el 64.6 pa -87.2 u,v (fr/asec) 4087.492 3234.445 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544//Zp..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544//Zp.Q.267.3MPATB

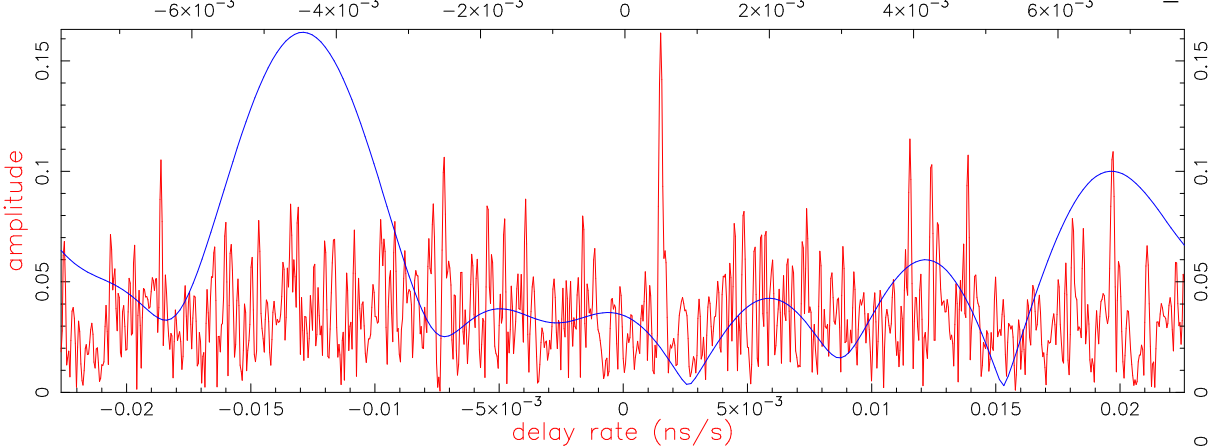
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, Zp

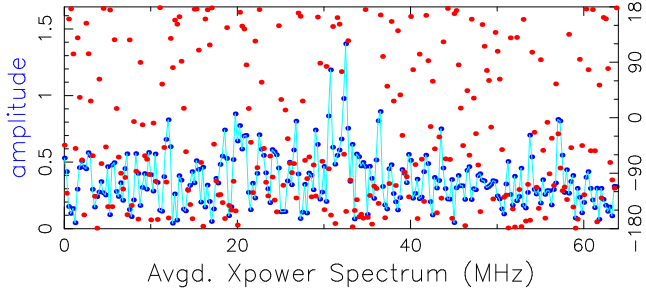
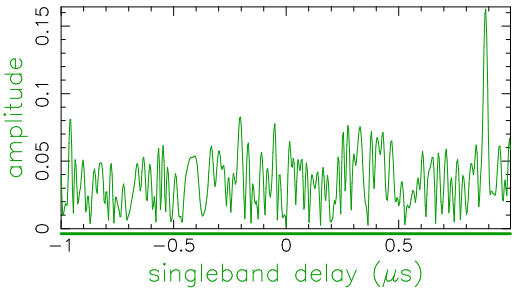
MEṬSAHOV - VLBA_PT, fgroup Q, pol RL

multiband delay (μ s)



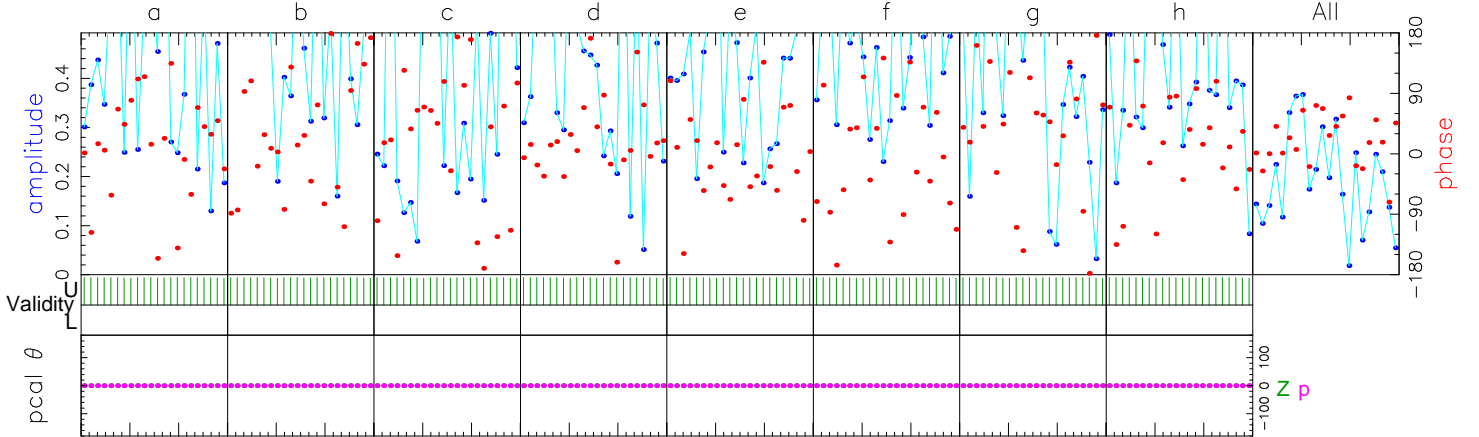
Fringe quality 0

SNR 6.0
 Int time 179.389
 Amp 0.164
 Phase 48.8
 PFD 2.2e-01
 Delays (us)
 SBD 0.885367
 MBD -0.004535
 Fringe rate (Hz)
 0.065286
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153807
 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
	24.6	33.5	55.7	11.5	-9.7	14.3	92.8	24.8	Phase	26.3
	0.2	0.1	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	146.2	15.6	21.6	483.8	322.2	341.8	269.2	152.6	Sbd box	483.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-9.90098466896E+03	Apriori delay (usec)	-9.90187075891E+03	Resid mbdelay (usec)	-4.53506E-03	+/-	1.8E-04
Sband delay (usec)	-9.90098539191E+03	Apriori clock (usec)	-5.6006069E+00	Resid sbdelay (usec)	8.85367E-01	+/-	1.4E-03
Phase delay (usec)	-9.90187075721E+03	Apriori clockrate (us/s)	2.3116296E-07	Resid phdelay (usec)	1.69357E-06	+/-	1.2E-06
Delay rate (us/s)	-1.12118642060E+00	Apriori rate (us/s)	-1.12118793395E+00	Resid rate (us/s)	1.51335E-06	+/-	1.2E-08
Total phase (deg)	214.7	Apriori accel (us/s/s)	7.34223023310E-05	Resid phase (deg)	48.8	+/-	19.1

ph/seg (deg)	38.1	Theor.	44.8	Amplitude	0.164 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	61.5	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	34.2	Inc. seg. avg.	0.149	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	43.0	Inc. frq. avg.	0.167	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

Z: az 299.2 el 26.6 pa 33.0 p: az 74.2 el 64.6 pa -87.2 u,v (fr/asec) 4087.492 3234.445 simultaneous interpolator

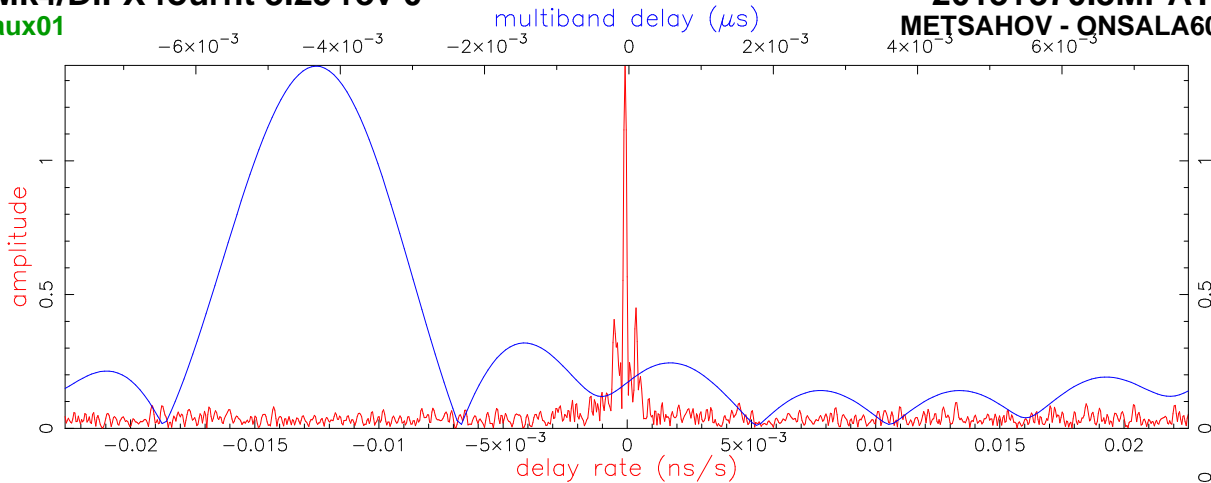
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/Zp..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/Zp.Q.285.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

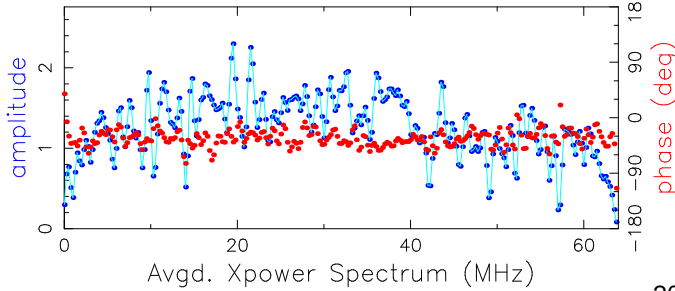
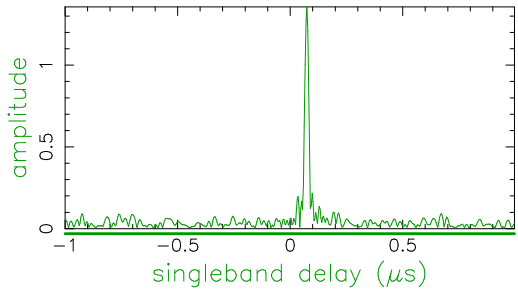
2013+370.3MPATB, No0544, ZX

METSALHOV - QNSALA60, fgroup Q, pol LL



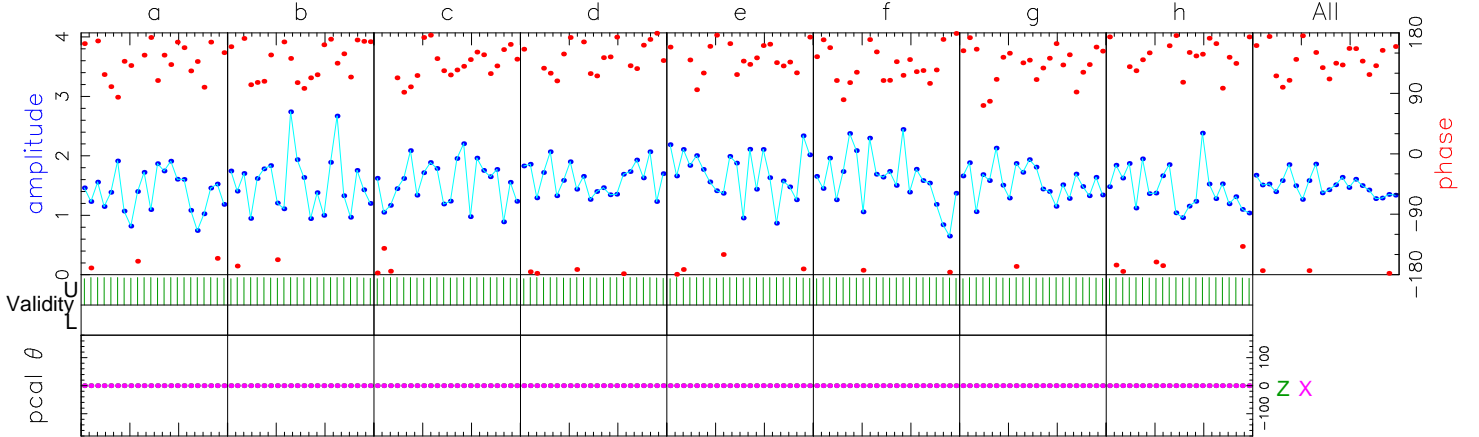
Fringe quality 7

SNR 49.6
 Int time 179.052
 Amp 1.357
 Phase 77.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.073603
 MBD -0.004343
 Fringe rate (Hz)
 -0.004318
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Yr:day 1234
 Start 2024:113
 Stop 2024:113
 FRT 112232.00
 Corr/FF/build
 2024:042:153755
 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
	145.7	143.4	140.3	151.9	152.5	133.2	135.1	158.4	Phase	145.0
	1.2	1.4	1.4	1.5	1.5	1.4	1.4	1.3	Ampl.	1.4
	276.2	275.4	276.0	275.8	276.0	275.6	276.3	275.7	Sbd box	275.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.61273242806E+03	Apriori delay (usec)	-1.61280621014E+03	Resid mbdelay (usec)	-4.34293E-03	+/-	2.2E-05
Sband delay (usec)	-1.61273260714E+03	Apriori clock (usec)	-1.1282542E+02	Resid sbdelay (usec)	7.36030E-02	+/-	1.7E-04
Phase delay (usec)	-1.61280620080E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	9.33878E-06	+/-	1.5E-07
Delay rate (us/s)	6.53390995302E-02	Apriori rate (us/s)	6.53391996228E-02	Resid rate (us/s)	-1.00093E-07	+/-	1.4E-09
Total phase (deg)	111.6	Apriori accel (us/s/s)	9.72414074925E-06	Resid phase (deg)	77.5	+/-	2.3

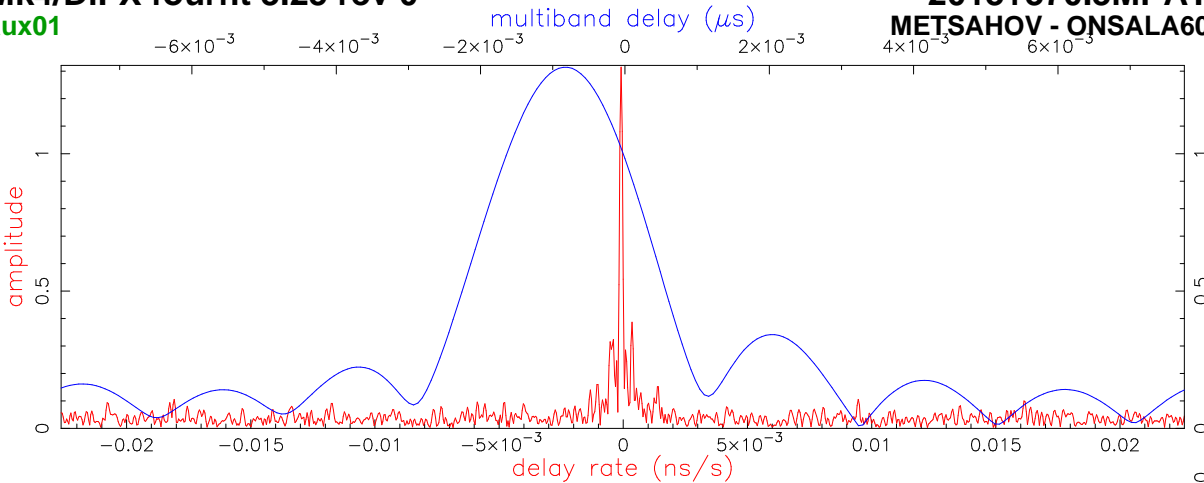
ph/seg (deg) 25.6 5.4 Search (1024X32) 1.331 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 15.8 9.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.5 3.3 Inc. seg. avg. 1.493 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.4 5.7 Inc. frq. avg. 1.366 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Z: az 299.2 el 26.6 pa 33.0 X: az 291.4 el 31.2 pa 39.0 u,v (fr/asec) -229.166 383.391 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZX..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZX.Q.230.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

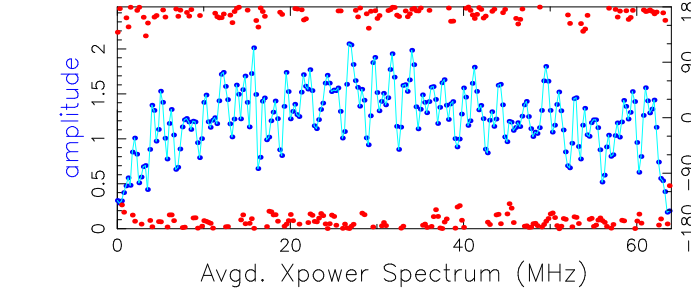
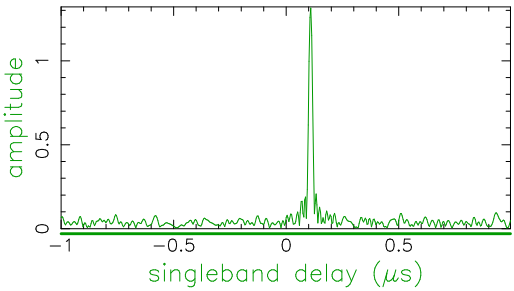
2013+370.3MPATB, No0544, ZX

METSAHOV - ONSALA60, fgroup Q, pol RR



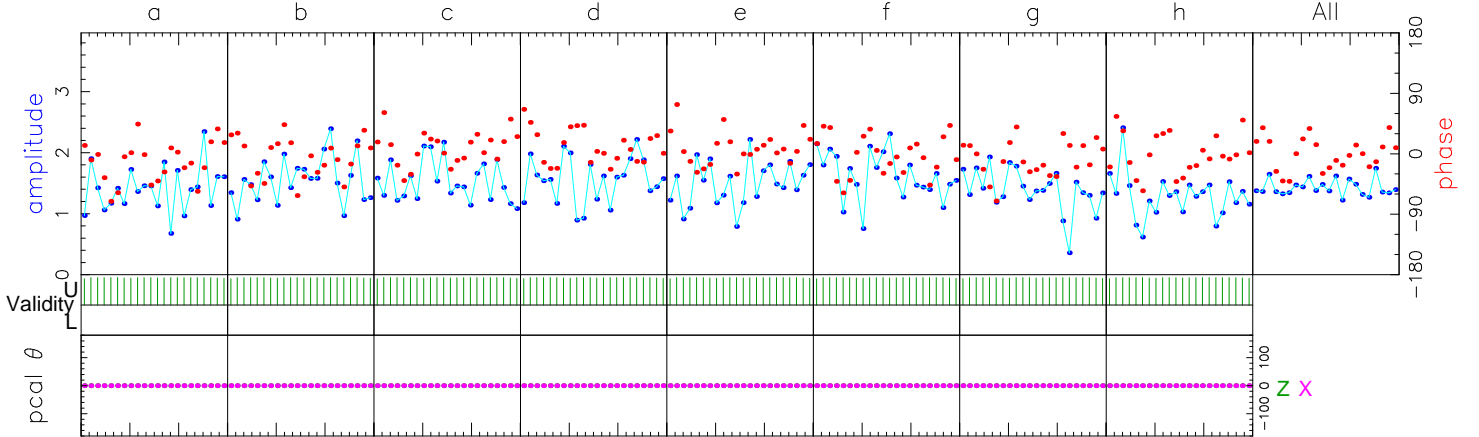
Fringe quality 7

SNR 48.3
 Int time 179.052
 Amp 1.321
 Phase 338.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.108430
 MBD -0.000852
 Fringe rate (Hz)
 -0.004245
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153759
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	0	0	0	0	0	0	0	0	Ampl.	1.3
X	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	284.8
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	PC amp	
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
									Tracks	
									Tracks	

Group delay (usec) (SBD)	-1.61269768700E+03	Apriori delay (usec)	-1.61280621014E+03	Resid mbdelay (usec)	-8.51863E-04	+/-	2.2E-05
Sband delay (usec)	-1.61269778039E+03	Apriori clock (usec)	-1.1282542E+02	Resid sbdelay (usec)	1.08430E-01	+/-	1.8E-04
Phase delay (usec)	-1.61280621010E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	3.10609E-08	+/-	1.5E-07
Delay rate (us/s)	6.53391012280E-02	Apriori rate (us/s)	6.53391996228E-02	Resid rate (us/s)	-9.83948E-08	+/-	1.5E-09
Total phase (deg)	12.1	Apriori accel (us/s/s)	9.72414074925E-06	Resid phase (deg)	338.0	+/-	2.4

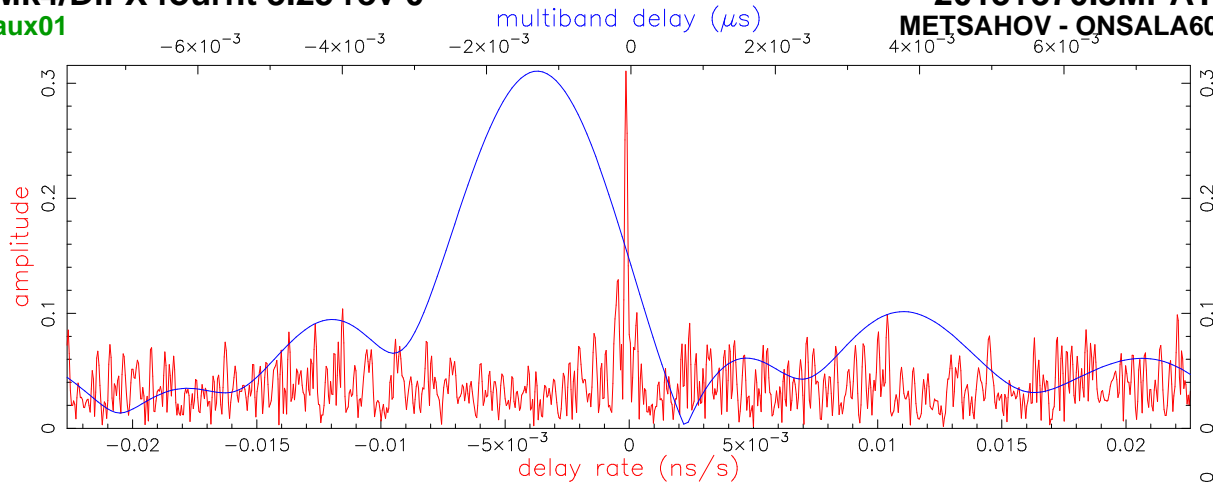
ph/seg (deg)	23.7	RMS	5.6	Theor.	Amplitude	1.321 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	12.9	Search (1024X32)	1.287	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	9.0	Inc. seg. avg.	1.425	Inc. frq. avg.	1.325	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	7.7	Inc. frq. avg.	1.325	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (ns/s)	-0.023	0.023
Z:	az 299.2 el 26.6 pa 33.0	X:	az 291.4 el 31.2 pa 39.0	u,v (fr/asec)	-229.166 383.391					ion window (TEC)	0.00	0.00
Control file:	cf_1234_gmva	Input file:	/Exps/c241d/v1/7mm/1234/No0544/ZX..3MPATB	Output file:	/Exps/c241d/v1/7mm/1234/No0544/ZX.Q.245.3MPATB					simultaneous interpolator		

Mk4/DiFX fourfit 3.25 rev 0

aux01

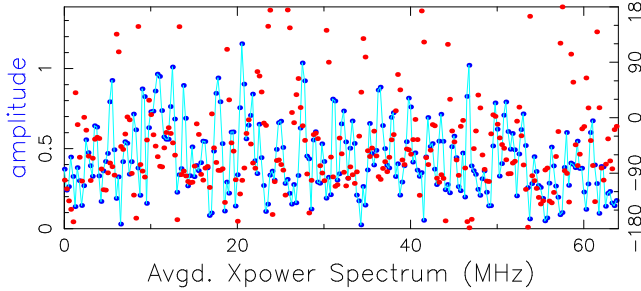
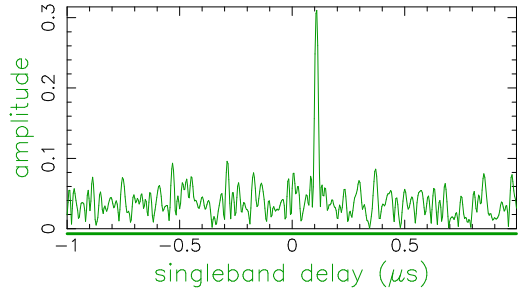
2013+370.3MPATB, No0544, ZX

METSALHOV - ONSALA60, fgroup Q, pol LR



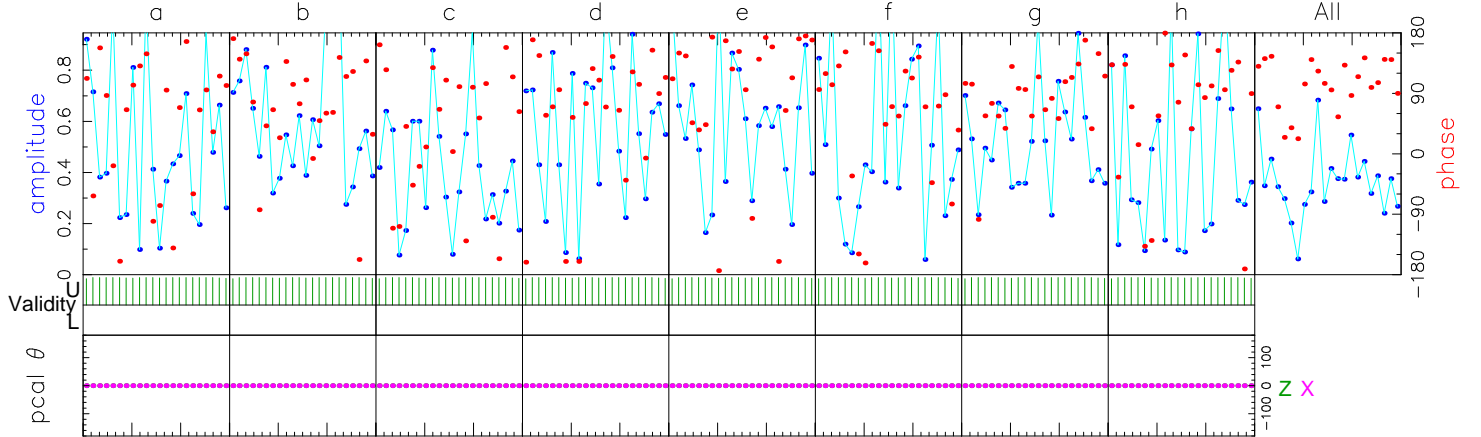
Fringe quality 9

SNR 11.5
 Int time 179.052
 Amp 0.315
 Phase 87.9
 PFD 2.0e-22
 Delays (us)
 SBD 0.107736
 MBD -0.001320
 Fringe rate (Hz)
 -0.004880
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153800
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	-1.61269815487E+03	Apriori delay (usec)	-1.61280621014E+03	Resid mbdelay (usec)	-1.31973E-03	+/-	9.4E-05
Sband delay (usec)	-1.61269847439E+03	Apriori clock (usec)	-1.1282542E+02	Resid sbdelay (usec)	1.07736E-01	+/-	7.5E-04
Phase delay (usec)	-1.61280620302E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	7.11170E-06	+/-	6.4E-07
Delay rate (us/s)	6.53390864970E-02	Apriori rate (us/s)	6.53391996228E-02	Resid rate (us/s)	-1.13126E-07	+/-	6.1E-09
Total phase (deg)	122.1	Apriori accel (us/s/s)	9.72414074925E-06	Resid phase (deg)	87.9	+/-	9.9

ph/seg (deg)	RMS 39.0	Theor. 23.3	Amplitude Search (1024X32)	0.315 +/- 0.027	0.294	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	45.4	40.6	Interp.	0.000	0.294	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	16.8	14.0	Inc. seg. avg.	0.338	0.294	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	30.8	24.5	Inc. frq. avg.	0.314	0.294	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 299.2 el 26.6 pa 33.0 X: az 291.4 el 31.2 pa 39.0 u,v (fr/asec) -229.166 383.391 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZX..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZX.Q.257.3MPATB

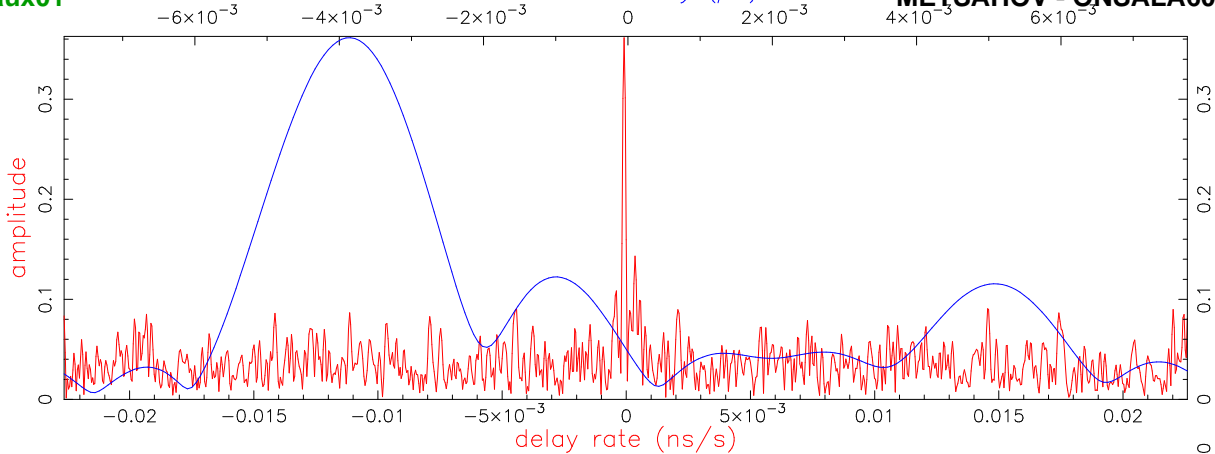
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, ZX

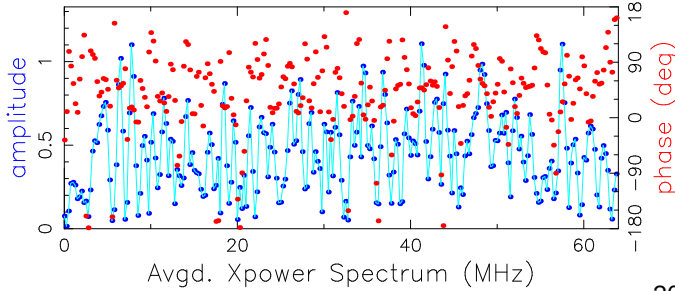
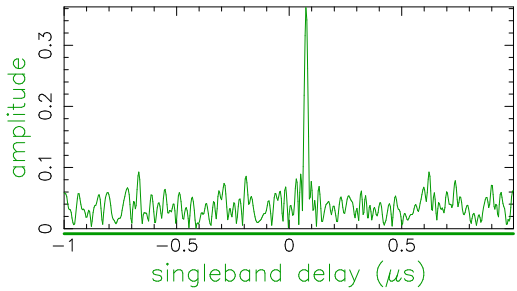
METSALHOV - ONSALA60, fgroup Q, pol RL

multiband delay (μ s)



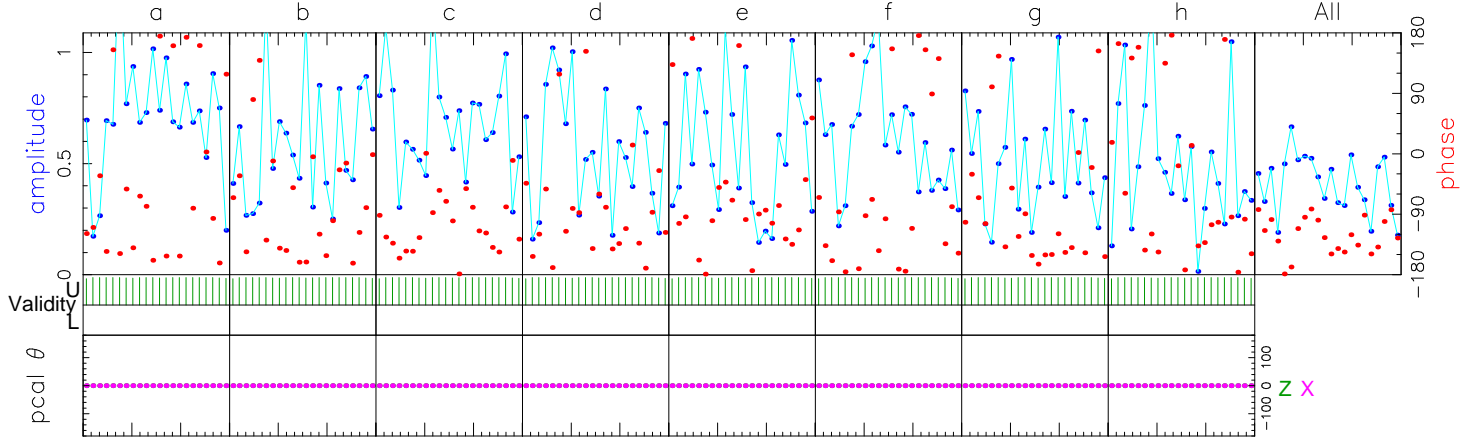
Fringe quality 9

SNR 13.3
 Int time 179.052
 Amp 0.363
 Phase 172.0
 PFD 9.2e-32
 Delays (us)
 SBD 0.074995
 MBD -0.003845
 Fringe rate (Hz)
 -0.003932
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153802
 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
	-141.2	-102.8	-107.6	-114.6	-109.3	-142.8	-115.8	-127.3	Phase	-120.5
	0.5	0.3	0.5	0.3	0.4	0.4	0.3	0.3	Ampl.	0.4
	275.7	275.3	276.2	276.9	276.8	275.7	276.7	275.9	Sbd box	276.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.61273193044E+03	Apriori delay (usec)	-1.61280621014E+03	Resid mbdelay (usec)	-3.84530E-03	+/-	8.2E-05
Sband delay (usec)	-1.61273121539E+03	Apriori clock (usec)	-1.1282542E+02	Resid sbdelay (usec)	7.49948E-02	+/-	6.5E-04
Phase delay (usec)	-1.61280621789E+03	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	-7.75623E-06	+/-	5.6E-07
Delay rate (us/s)	6.53391084691E-02	Apriori rate (us/s)	6.53391996228E-02	Resid rate (us/s)	-9.11538E-08	+/-	5.3E-09
Total phase (deg)	206.2	Apriori accel (us/s/s)	9.72414074925E-06	Resid phase (deg)	172.0	+/-	8.6

ph/seg (deg)	27.3	Theor.	20.2	Amplitude	0.363 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	37.4	Search (1024X32)	0.360	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	16.5	Inc. seg. avg.	0.388	Inc. seg. avg.	0.388	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	23.4	Inc. frq. avg.	0.366	Inc. frq. avg.	0.366	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

Z: az 299.2 el 26.6 pa 33.0 X: az 291.4 el 31.2 pa 39.0 u,v (fr/asec) -229.166 383.391 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZX..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZX.Q.264.3MPATB

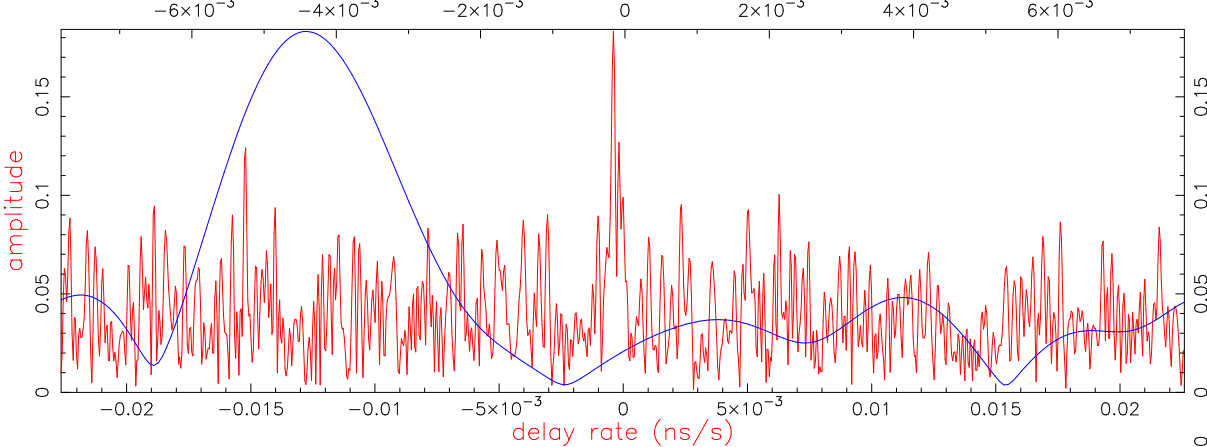
Mk4/DiFX fourfit 3.25 rev 0

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2013+370.3MPATB, No0544, ZY

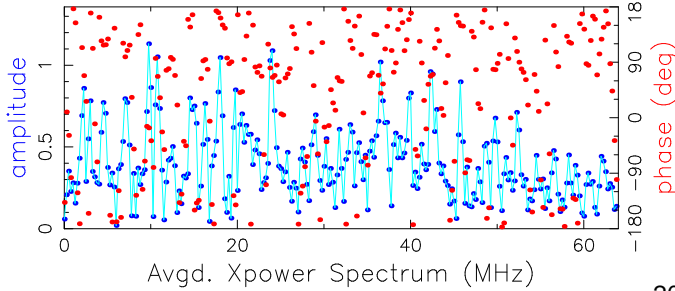
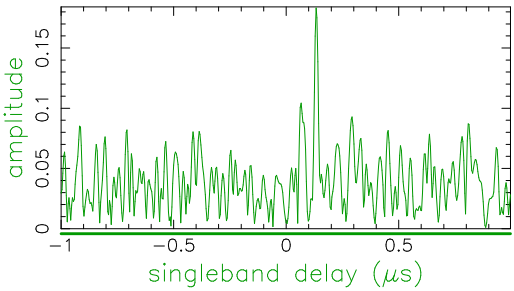
METSAROV - YEBES40M, fgroup Q, pol LL

multiband delay (μ s)



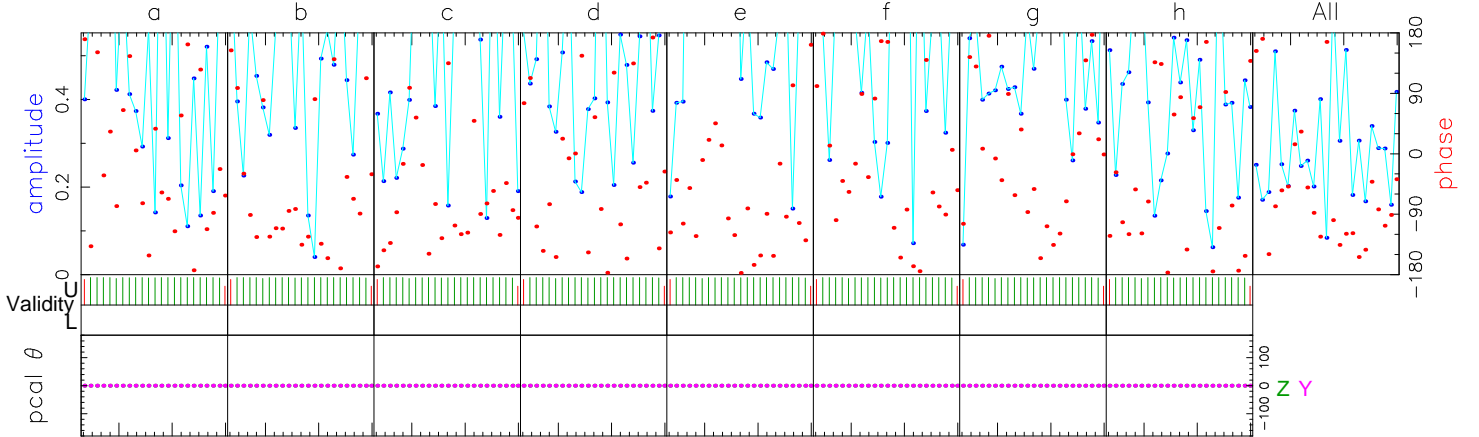
Fringe quality 0

SNR 6.4
 Int time 161.362
 Amp 0.184
 Phase 287.7
 PFD 2.2e-02
 Delays (us)
 SBD 0.133774
 MBD -0.004415
 Fringe rate (Hz)
 -0.017037
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112117.41
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153833
 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
	-76.5	-126.6	-88.4	-92.4	-79.3	-89.6	-89.4	-126.3	Phase	-94.8
	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	Ampl.	0.2
	38.6	472.7	291.6	372.6	291.8	151.4	385.9	372.9	Sbd box	291.2
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-2.28163977170E+03	Apriori delay (usec)	-2.28177598121E+03	Resid mbdelay (usec)	-4.41549E-03	+/-	1.7E-04
Sband delay (usec)	-2.28164220696E+03	Apriori clock (usec)	1.1109573E+02	Resid sbdelay (usec)	1.33774E-01	+/-	1.3E-03
Phase delay (usec)	-2.28177598732E+03	Apriori clockrate (us/s)	1.6185510E-06	Resid phdelay (usec)	-6.10392E-06	+/-	1.2E-06
Delay rate (us/s)	3.04173988319E-01	Apriori rate (us/s)	3.04174383248E-01	Resid rate (us/s)	-3.94929E-07	+/-	1.2E-08
Total phase (deg)	349.1	Apriori accel (us/s/s)	2.76432733967E-05	Resid phase (deg)	287.7	+/-	17.9

ph/seg (deg)	60.4	Theor.	43.0	Amplitude	0.184 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	92.0		75.0	Search (1024X32)	0.182	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	21.1		25.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	36.9		44.2	Inc. seg. avg.	0.228	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.175	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

Z: az 299.2 el 26.6 pa 33.0 Y: az 292.5 el 34.2 pa 61.9 u,v (fr/asec) -1076.854 1608.381 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZY..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZY.Q.414.3MPATB

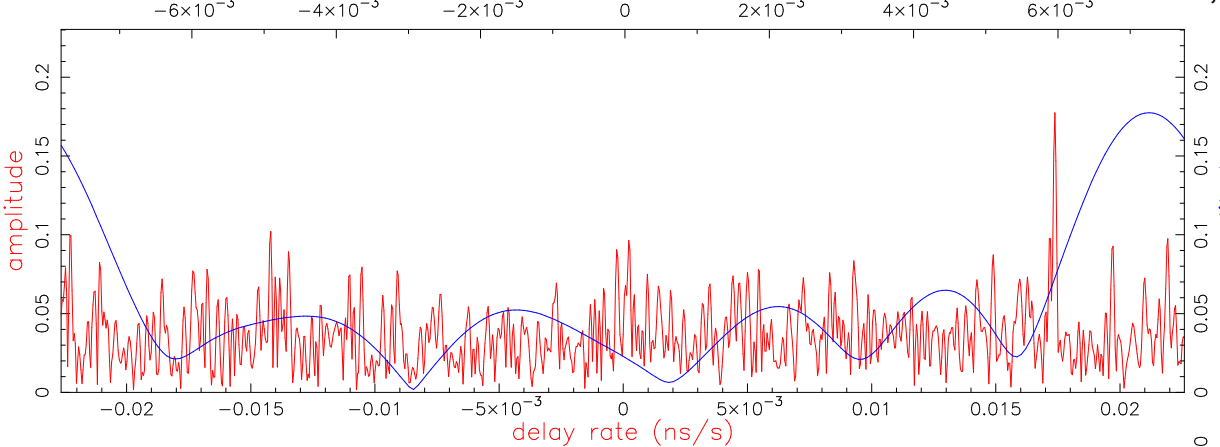
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, ZY

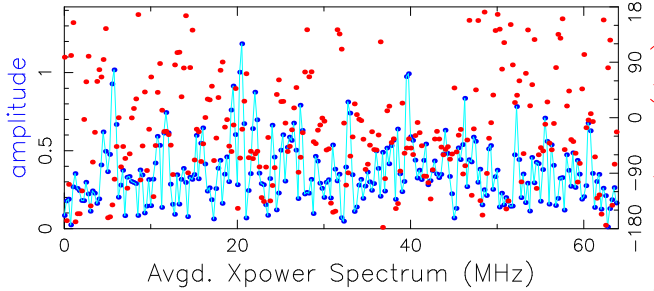
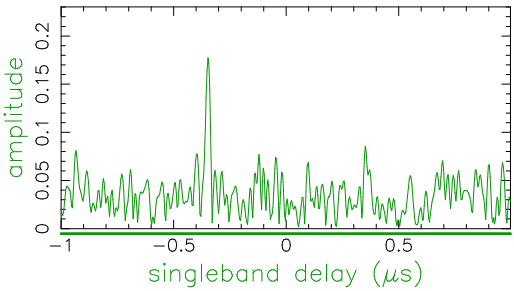
METSAHOV - YEBES40M, fgroup Q, pol RR

multiband delay (μs)



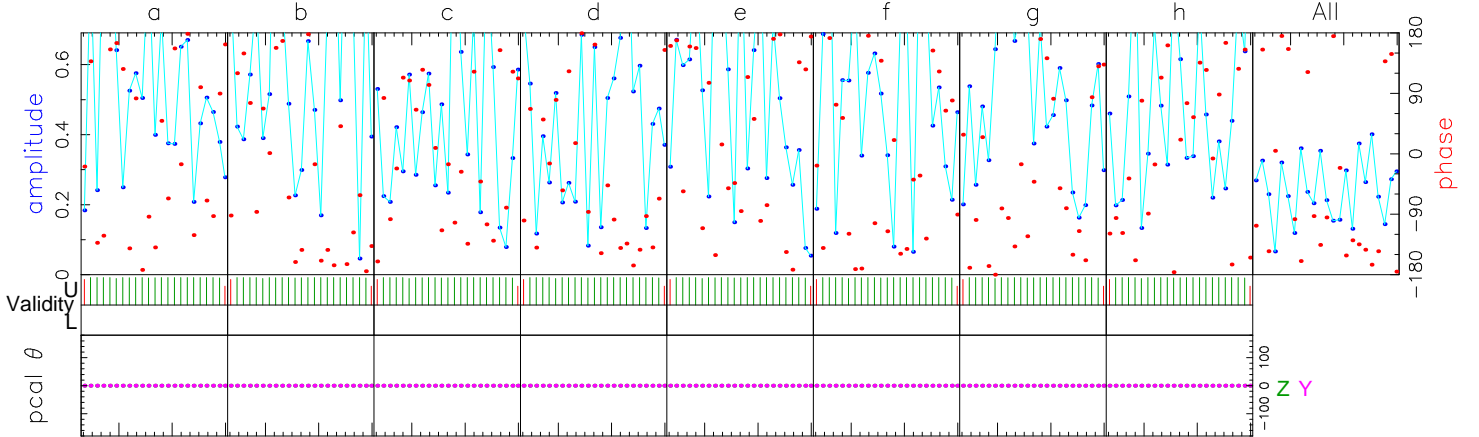
Fringe quality 0

SNR 6.2
 Int time 161.362
 Amp 0.230
 Phase -134.9
 PFD 8.1e-02
 Delays (us)
 SBD -0.346790
 MBD 0.007256
 Fringe rate (Hz)
 0.753309
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112117.41
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153842
 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
	-169.7	-162.4	-157.1	-137.5	-150.5	-156.4	-125.8	160.5	Phase	-157.4
	0.2	0.4	0.1	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	472.4	95.9	204.7	509.9	57.5	138.3	478.5	470.9	Sbd box	168.2
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-2.28212810015E+03	Apriori delay (usec)	-2.28177598121E+03	Resid mbdelay (usec)	7.25606E-03	+/-	1.8E-04
Sband delay (usec)	-2.28212277071E+03	Apriori clock (usec)	1.1109573E+02	Resid sbdelay (usec)	-3.46790E-01	+/-	1.4E-03
Phase delay (usec)	-2.28177599134E+03	Apriori clockrate (us/s)	1.6185510E-02	Resid phdelay (usec)	-1.01318E-05	+/-	1.2E-06
Delay rate (us/s)	3.04191845216E-01	Apriori rate (us/s)	3.04174383248E-01	Resid rate (us/s)	1.74620E-05	+/-	1.3E-08
Total phase (deg)	-73.5	Apriori accel (us/s/s)	2.76432733967E-05	Resid phase (deg)	-134.9	+/-	18.5

ph/seg (deg)	60.0	RMS	44.5	Theor.	Amplitude	0.230 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	62.1	60.0	44.5	Search (1024X32)	0.175	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.8	62.1	77.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.7	23.8	26.2	Inc. seg. avg.	0.243	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		33.7	45.8	Inc. frq. avg.	0.221	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 299.2 el 26.6 pa 33.0 Y: az 292.5 el 34.2 pa 61.9 u,v (fr/asec) -1076.854 1608.381 simultaneous interpolator

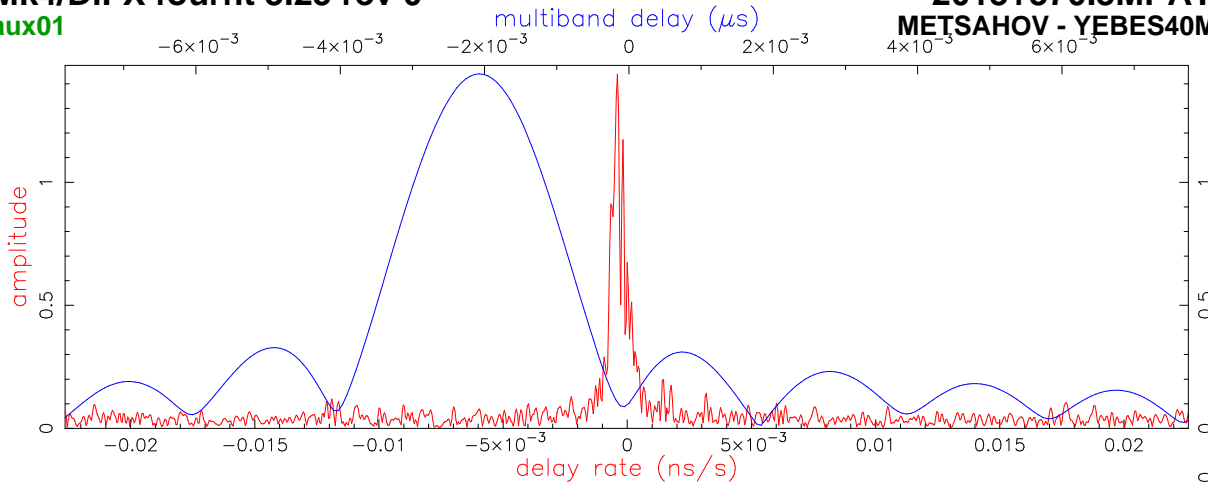
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZY..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZY.Q.435.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

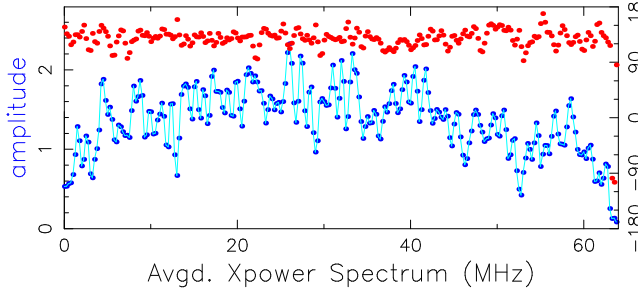
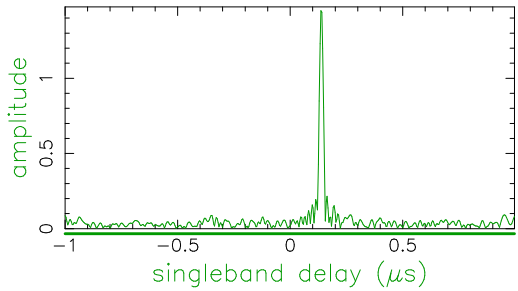
2013+370.3MPATB, No0544, ZY

METSALHOV - YEBES40M, fgroup Q, pol LR



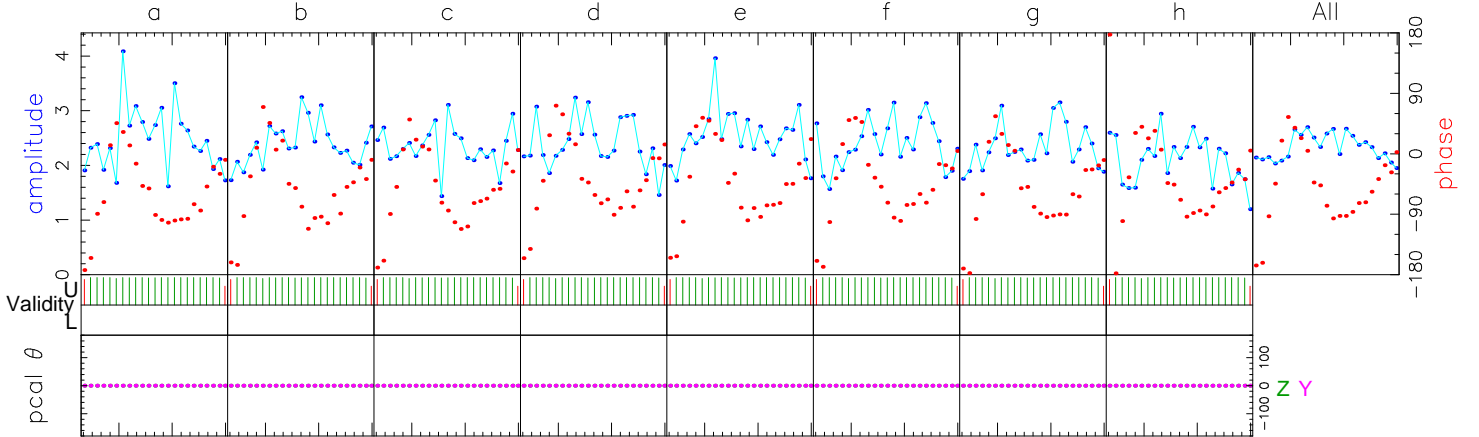
Fringe quality 5

SNR 51.2
 Int time 161.362
 Amp 1.475
 Phase 332.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.138502
 MBD -0.002129
 Fringe rate (Hz)
 -0.017624
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112117.41
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153846
 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
	-59.4	-53.2	-53.3	-43.2	-41.4	-46.8	-51.2	-49.5	Phase	-49.7
	1.6	1.4	1.4	1.5	1.5	1.5	1.4	1.2	Ampl.	1.4
	292.3	292.1	292.4	292.6	292.2	292.5	292.8	291.5	Sbd box	292.5
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -2.28163748501E+03 Apriori delay (usec) -2.28177598121E+03 Resid mbdelay (usec) -2.12880E-03 +/- 2.1E-05
 Sband delay (usec) -2.28163747871E+03 Apriori clock (usec) 1.1109573E+02 Resid sbdelay (usec) 1.38502E-01 +/- 1.7E-04
 Phase delay (usec) -2.28177598442E+03 Apriori clockrate (us/s) 1.6185510E-02 Resid phdelay (usec) -3.20339E-06 +/- 1.4E-07
 Delay rate (us/s) 3.04173974709E-01 Apriori rate (us/s) 3.04174383248E-01 Resid rate (us/s) -4.08539E-07 +/- 1.5E-09
 Total phase (deg) 34.1 Apriori accel (us/s/s) 2.76432733967E-05 Resid phase (deg) 332.8 +/- 2.2

RMS Theor. Amplitude 1.475 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.2 5.4 Search (1024X32) 1.420 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 60.5 9.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 6.3 3.2 Inc. seg. avg. 2.327 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 6.9 5.5 Inc. frq. avg. 1.444 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 299.2 el 26.6 pa 33.0 Y: az 292.5 el 34.2 pa 61.9 u,v (fr/asec) -1076.854 1608.381 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZY..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZY.Q.452.3MPATB

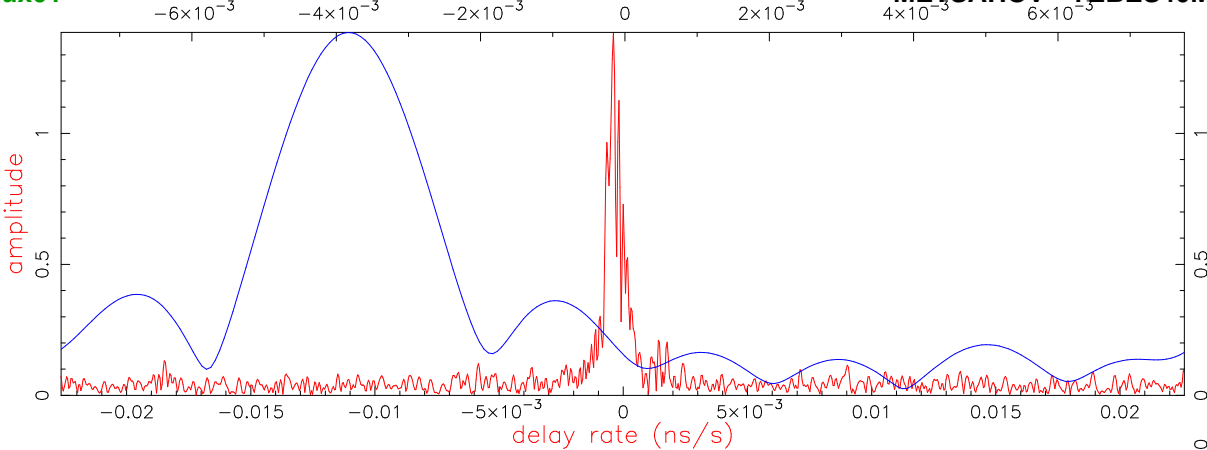
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MPATB, No0544, ZY

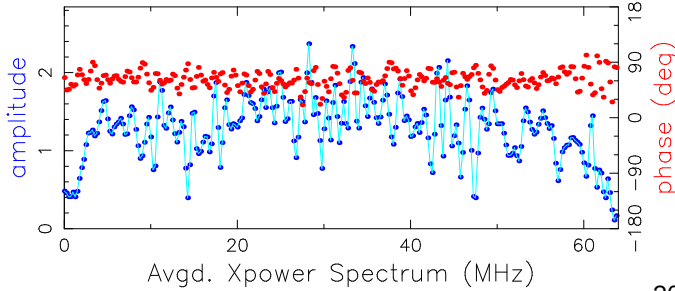
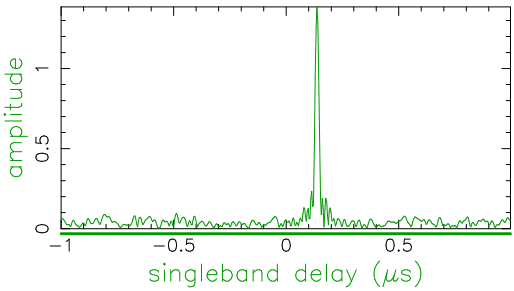
METSALHOV - YEBES40M, fgroup Q, pol RL

multiband delay (μ s)



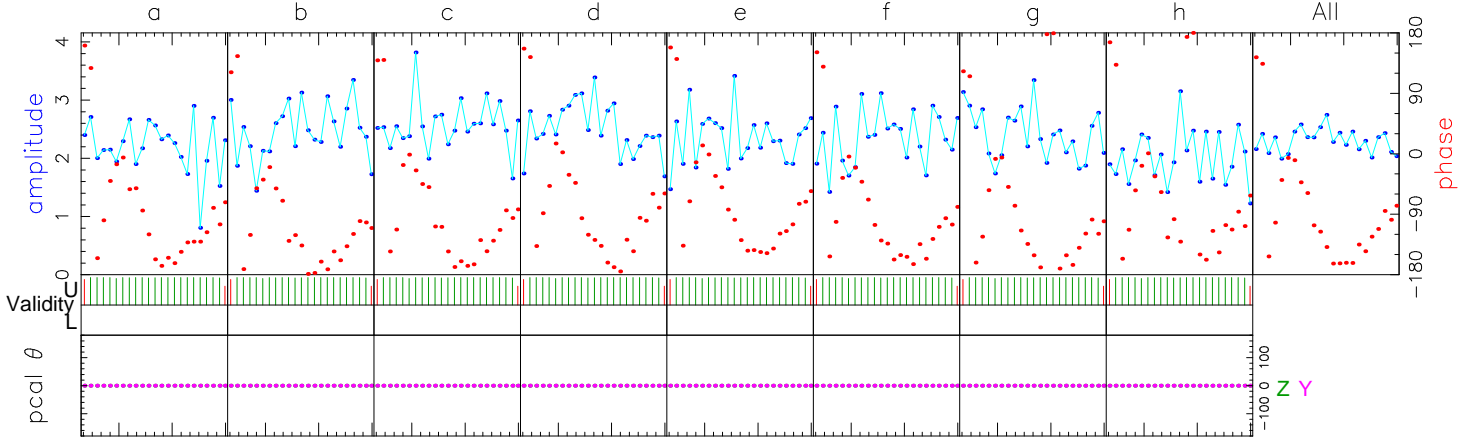
Fringe quality 4

SNR 48.1
 Int time 161.362
 Amp 1.385
 Phase 264.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.136903
 MBD -0.003823
 Fringe rate (Hz)
 -0.017232
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112117.41
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153849
 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
	-116.6	-131.6	-117.9	-104.8	-97.4	-118.1	-135.5	-117.7	Phase	-117.8
	1.3	1.6	1.5	1.4	1.4	1.5	1.4	1.2	Ampl.	1.4
	292.0	291.9	292.1	292.1	292.1	291.7	292.8	291.5	Sbd box	292.0
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -2.28163917929E+03 Apriori delay (usec) -2.28177598121E+03 Resid mbdelay (usec) -3.82308E-03 +/- 2.3E-05
 Sband delay (usec) -2.28163907771E+03 Apriori clock (usec) 1.1109573E+02 Resid sbdelay (usec) 1.36903E-01 +/- 1.8E-04
 Phase delay (usec) -2.28177598880E+03 Apriori clockrate (us/s) 1.6185510E-06 Resid phdelay (usec) -7.58470E-06 +/- 1.5E-07
 Delay rate (us/s) 3.04173983803E-01 Apriori rate (us/s) 3.04174383248E-01 Resid rate (us/s) -3.99445E-07 +/- 1.6E-09
 Total phase (deg) 326.1 Apriori accel (us/s/s) 2.76432733967E-05 Resid phase (deg) 264.7 +/- 2.4

RMS Theor. Amplitude 1.385 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.2 5.7 Search (1024X32) 1.372 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 68.0 10.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 13.5 3.4 Inc. seg. avg. 2.296 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 9.4 5.9 Inc. frq. avg. 1.412 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

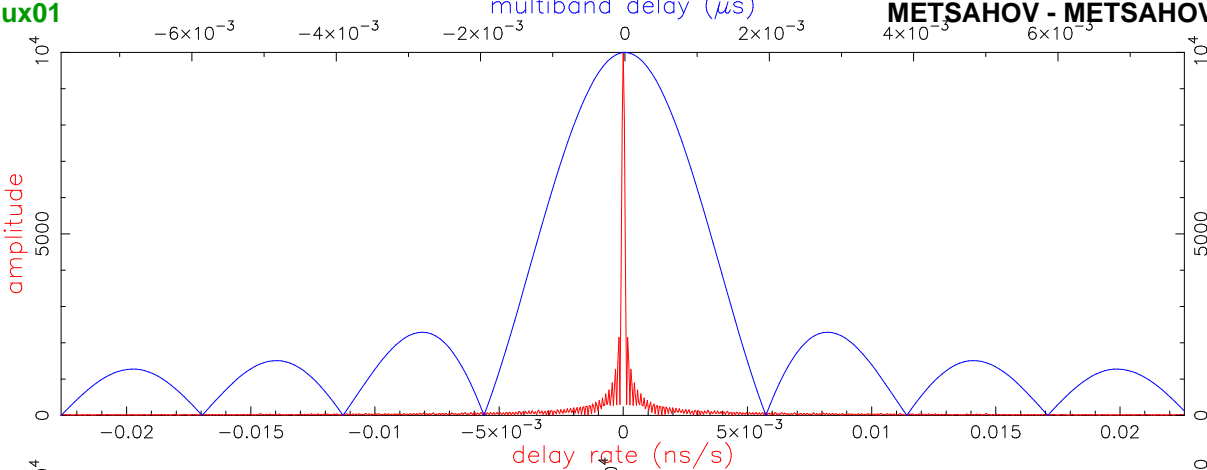
Z: az 299.2 el 26.6 pa 33.0 Y: az 292.5 el 34.2 pa 61.9 u,v (fr/asec) -1076.854 1608.381 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZY..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZY.Q.461.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

aux01

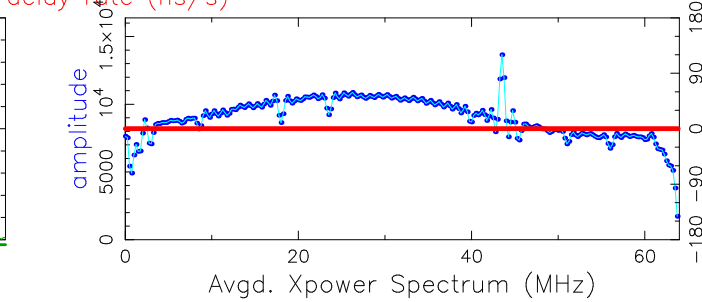
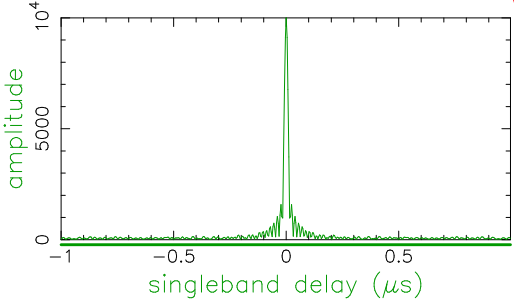
2013+370.3MPATB, No0544, ZZ

METSAHOV - METSAHOV, fgroup Q, pol LL



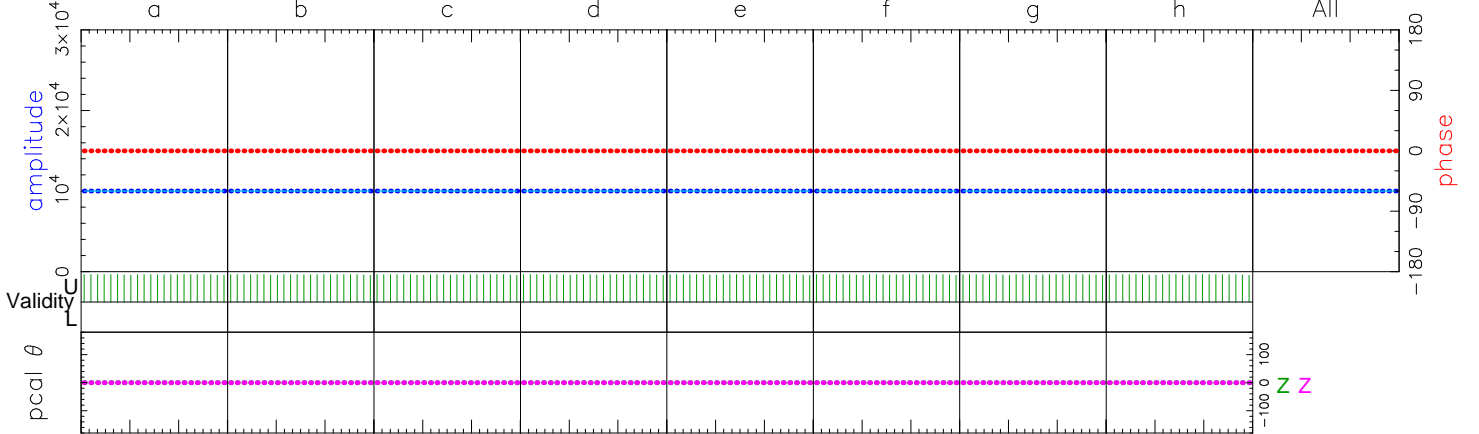
Fringe quality 9

SNR 366265.1
 Int time 179.389
 Amp 10000.002
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153751
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.4E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	2.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	1.9E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

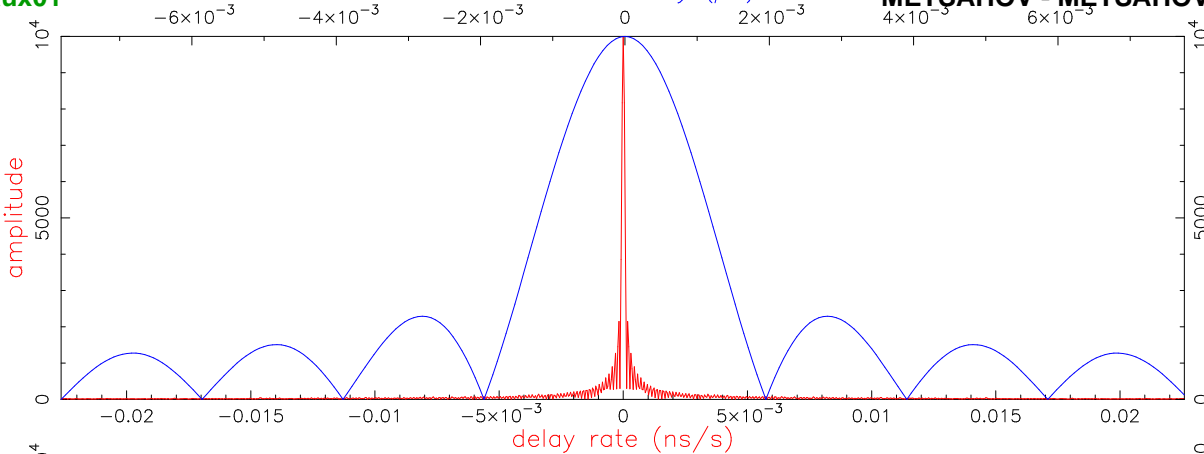
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.002 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb 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
 Z: az 299.2 el 26.6 pa 33.0 Z: az 299.2 el 26.6 pa 33.0 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/No0544//ZZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544//ZZ.Q.204.3MPATB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

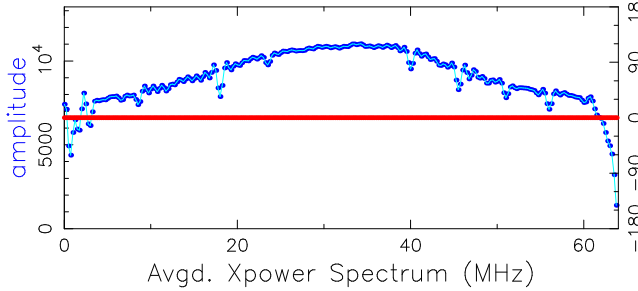
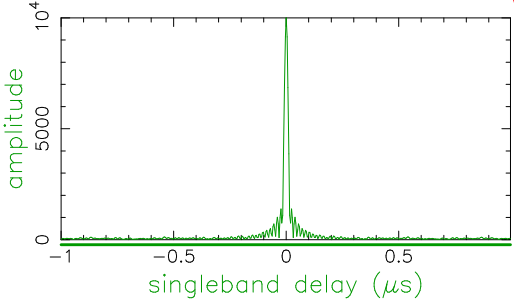
2013+370.3MPATB, No0544, ZZ

METSAHOV - METSAHOV, fgroup Q, pol RR



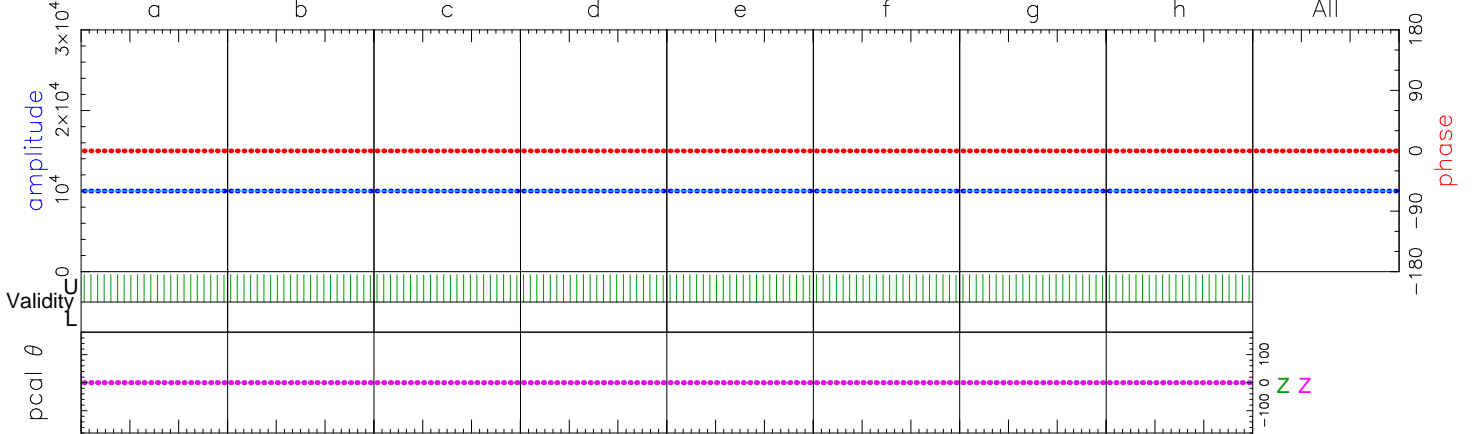
Fringe quality 9

SNR 366265.1
 Int time 179.389
 Amp 10000.002
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153801
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.4E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	2.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	1.9E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

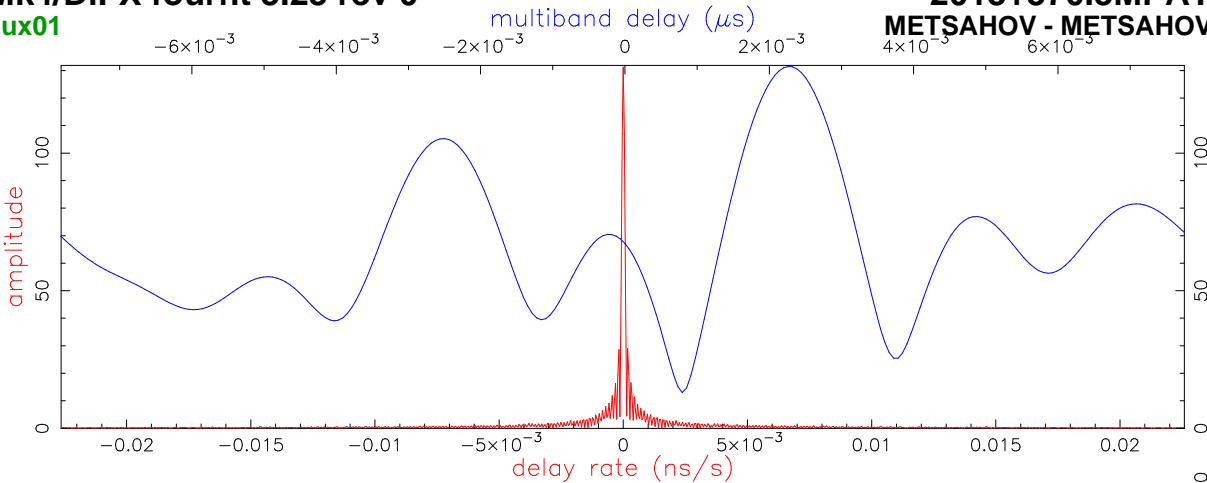
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.002 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb 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
 Z: az 299.2 el 26.6 pa 33.0 Z: az 299.2 el 26.6 pa 33.0 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/No0544/ZZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZZ.Q.261.3MPATB simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

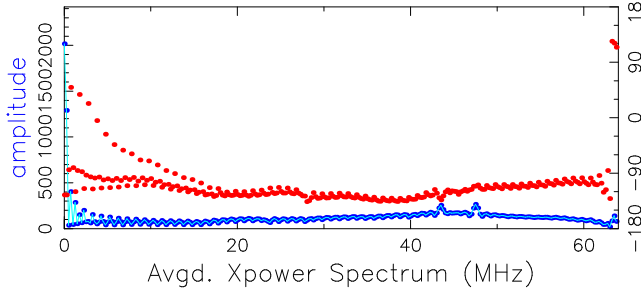
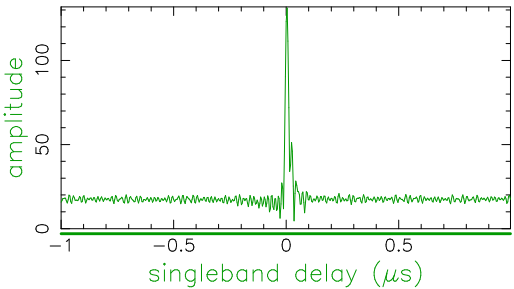
aux01

2013+370.3MPATB, No0544, ZZ

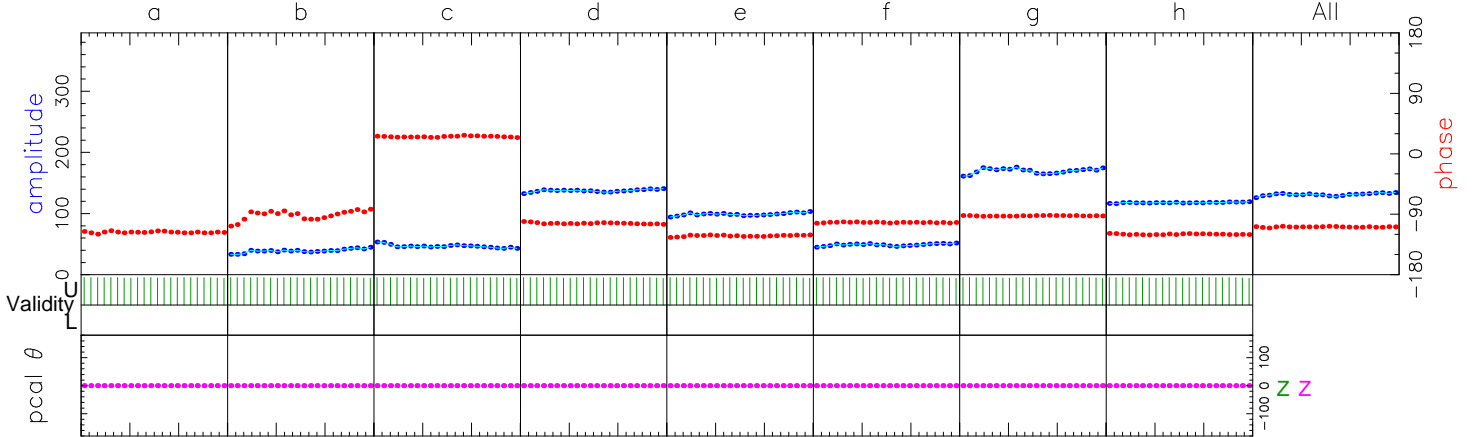
METSAHOV - METSAHOV, fgroup Q, pol LR



Fringe quality 5
 Error code G
 SNR 4829.4
 Int time 179.389
 Amp 131.857
 Phase -108.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.003074
 MBD 0.002218
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153803
 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
	-116.7	-90.8	25.6	-103.4	-122.0	-102.2	-92.3	-119.7	Phase	-108.8
	489.4	39.0	46.8	137.4	99.0	49.0	169.9	117.9	Ampl.	143.5
	258.3	270.3	256.4	256.7	257.7	257.0	258.8	257.0	Sbd box	257.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 2.21790625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.21791E-03 +/- 2.2E-07
 Sband delay (usec) 3.07400000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 3.07400E-03 +/- 1.8E-06
 Phase delay (usec) -7.0045665395E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -7.00456E-06 +/- 1.5E-09
 Delay rate (us/s) 2.82963158790E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 2.82963E-11 +/- 1.5E-11
 Total phase (deg) -108.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -108.8 +/- 0.0

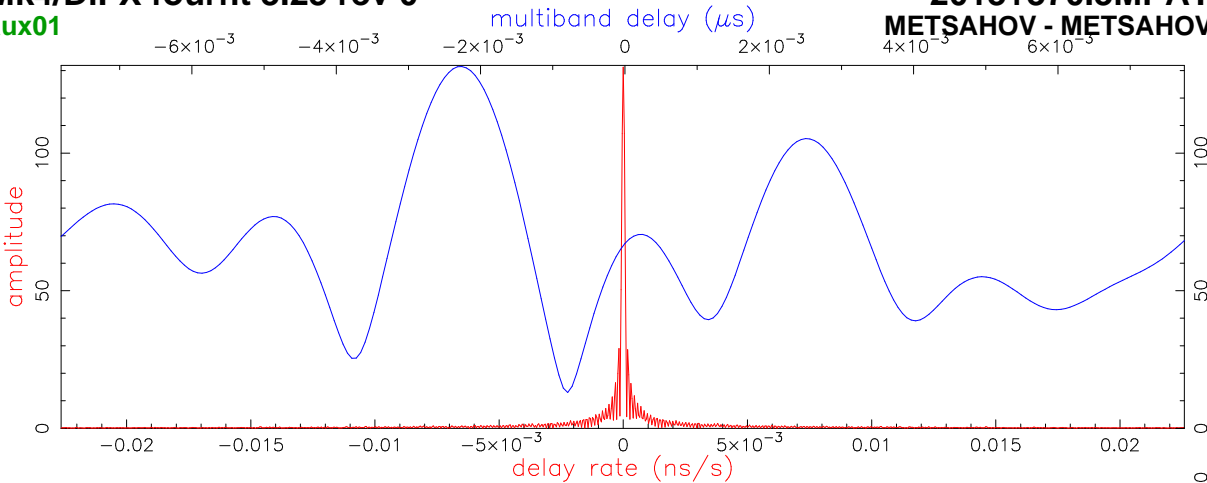
RMS Theor. Amplitude 131.857 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.1 Search (1024X32) 129.304 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.6 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 56.4 0.0 Inc. seg. avg. 131.204 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 105.0 0.1 Inc. frq. avg. 143.539 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 299.2 el 26.6 pa 33.0 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZZ.Q.268.3MPATB

Mk4/DiFX fourfit 3.25 rev 0

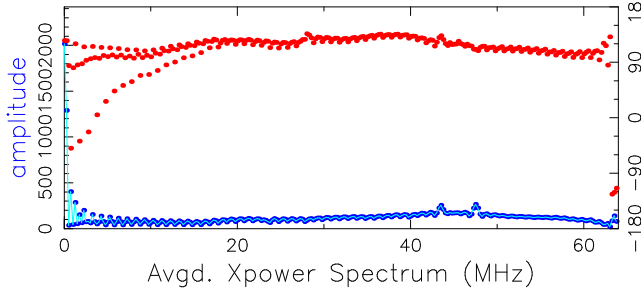
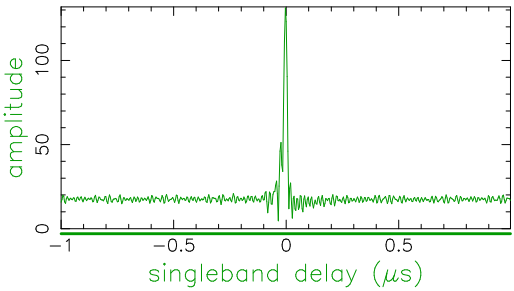
aux01

2013+370.3MPATB, No0544, ZZ

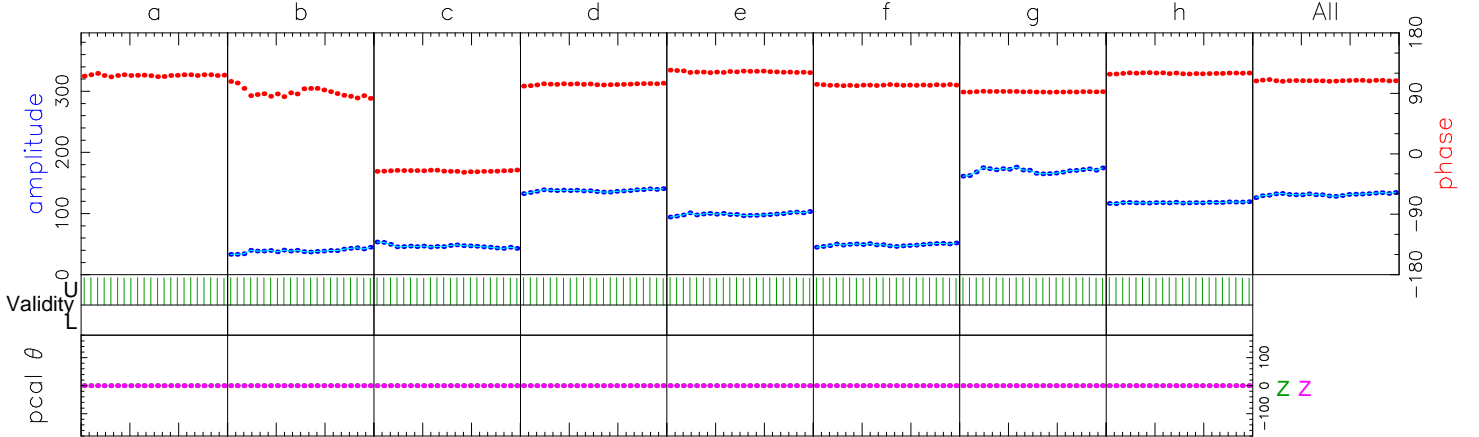
METŜAHOV - MET̂SAHOV, fgroup Q, pol RL



Fringe quality 5
 Error code G
 SNR 4829.4
 Int time 179.389
 Amp 131.857
 Phase 108.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.003074
 MBD -0.002218
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 112100.00
 Stop 112400.22
 FRT 112232.00
 Corr/FF/build
 2024:337:191905
 2025:042:153807
 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
	116.7	90.8	-25.6	103.4	122.0	102.2	92.3	119.7	Phase	108.8
	489.4	39.0	46.8	137.4	99.0	49.0	169.9	117.9	Ampl.	143.5
	255.7	243.7	257.6	257.3	256.3	257.0	255.2	257.0	Sbd box	256.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Z	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD) -2.21790625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -2.21791E-03 +/- 2.2E-07
 Sband delay (usec) -3.07400000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -3.07400E-03 +/- 1.8E-06
 Phase delay (usec) 7.00455665448E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 7.00456E-06 +/- 1.5E-09
 Delay rate (us/s) -2.82963158790E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -2.82963E-11 +/- 1.5E-11
 Total phase (deg) 108.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 108.8 +/- 0.0

RMS Theor. Amplitude 131.857 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.1 Search (1024X32) 129.304 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.6 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 56.4 0.0 Inc. seg. avg. 131.204 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 105.0 0.1 Inc. frq. avg. 143.539 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 299.2 el 26.6 pa 33.0 Z: az 299.2 el 26.6 pa 33.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0544/ZZ..3MPATB Output file: /Exps/c241d/v1/7mm/1234/No0544/ZZ.Q.284.3MPATB