

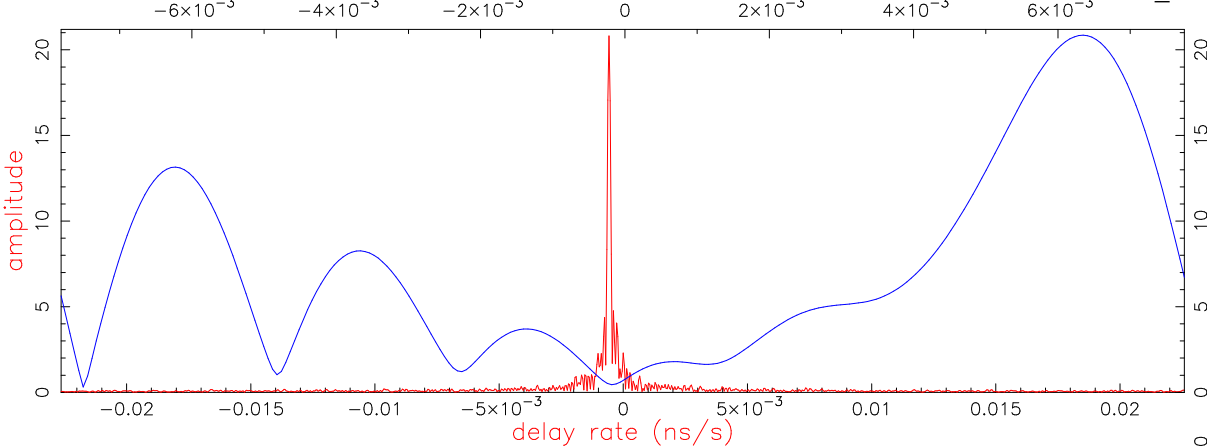
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, Am

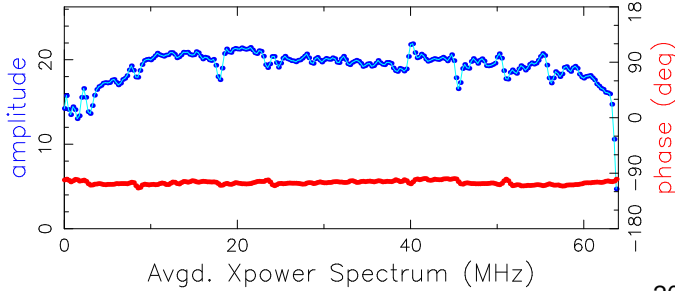
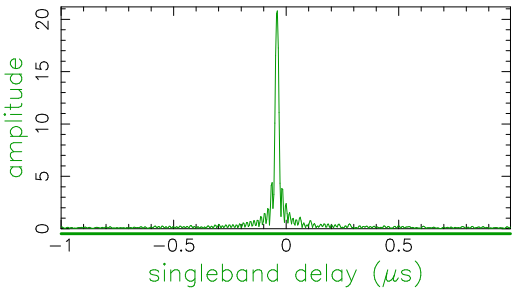
ALMA - VLBA_MK, fgroup Q, pol YR

multiband delay (μ s)



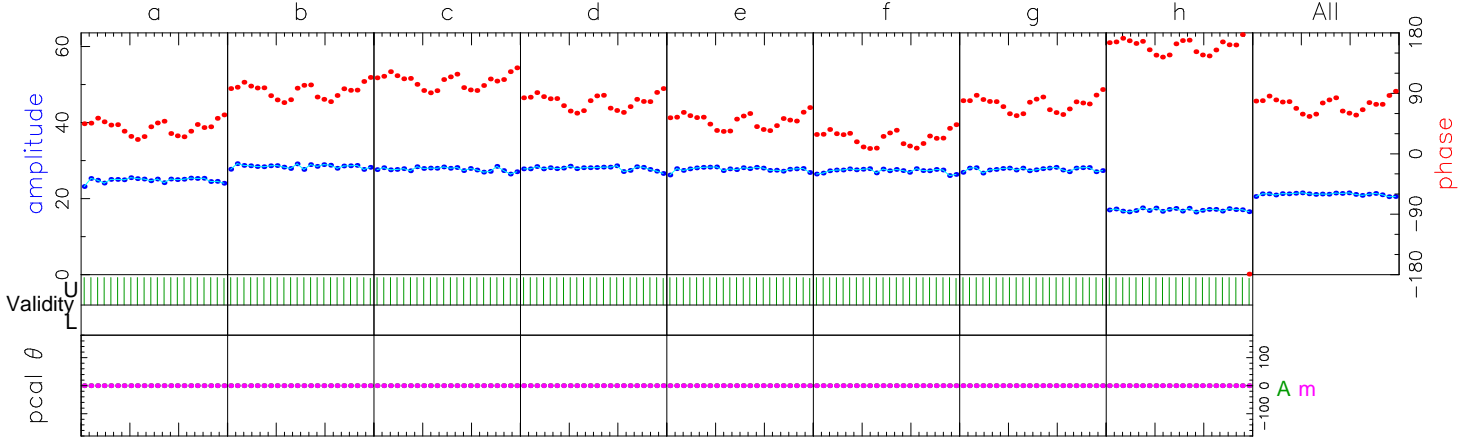
Fringe quality 6

SNR 777.3
 Int time 179.991
 Amp 21.194
 Phase -174.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.040750
 MBD 0.006263
 Fringe rate (Hz)
 -0.025086
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152901
 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
	39.2	93.6	108.3	77.6	49.2	23.7	74.1	161.1	Phase	73.0
	24.5	28.0	27.3	27.5	27.3	26.9	27.2	16.8	Ampl.	25.7
	247.9	246.4	246.6	246.6	246.5	246.4	246.8	249.0	Sbd box	246.6
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	3.64517897660E+03	Apriori delay (usec)	3.64521958869E+03	Resid mbdelay (usec)	6.26292E-03	+/-	1.4E-06
Sband delay (usec)	3.64517883919E+03	Apriori clock (usec)	-2.1079666E+03	Resid sbdelay (usec)	-4.07495E-02	+/-	1.1E-05
Phase delay (usec)	3.64521959339E+03	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	4.70206E-06	+/-	9.5E-09
Delay rate (us/s)	-1.15268893574E+00	Apriori rate (us/s)	-1.15268835423E+00	Resid rate (us/s)	-5.81512E-07	+/-	9.1E-11
Total phase (deg)	-154.3	Apriori accel (us/s/s)	-8.03007099772E-05	Resid phase (deg)	-174.5	+/-	0.1

ph/seg (deg)	RMS 10.3	Theor. 0.3	Amplitude Search (1024X32)	21.194 +/- 0.027	20.636	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	1.4	0.6	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)	47.6	0.2	Inc. seg. avg.	21.156	21.156	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 (%)	26.9	0.4	Inc. frq. avg.	25.681	25.681	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

A: az 0.8 el 29.7 pa -179.3 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 4114.946 -4999.461 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Am...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Am.Q.18.3MP8EV

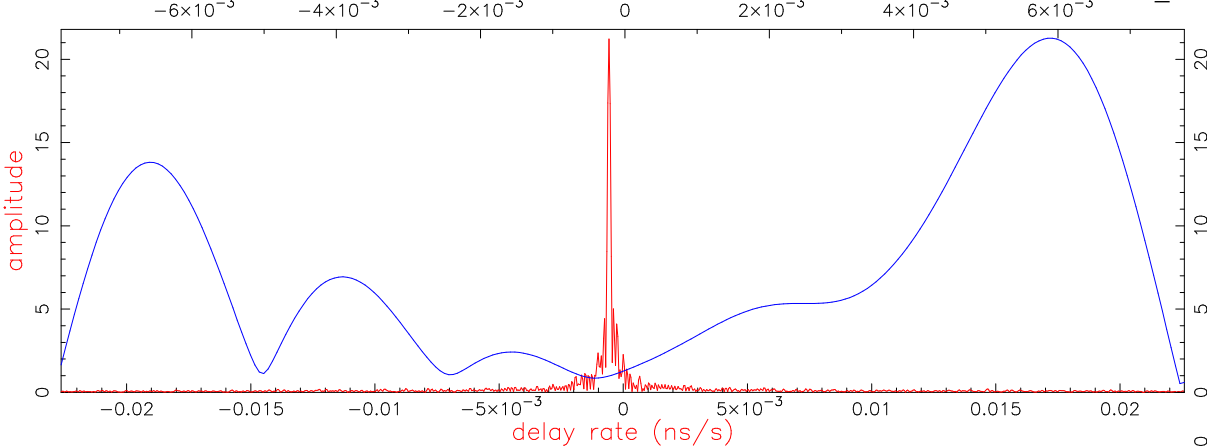
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, Am

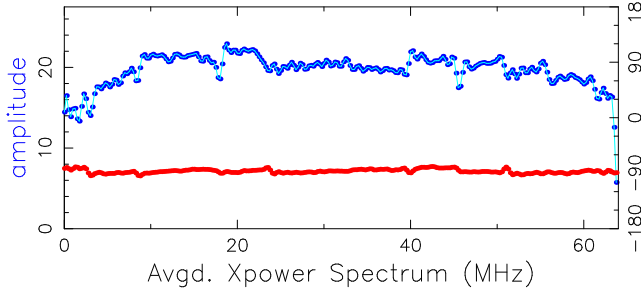
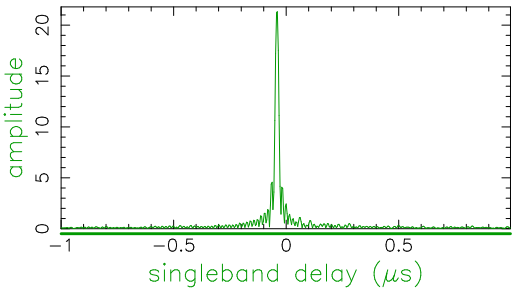
ALMA - VLBA_MK, fgroup Q, pol XR

multiband delay (μ s)



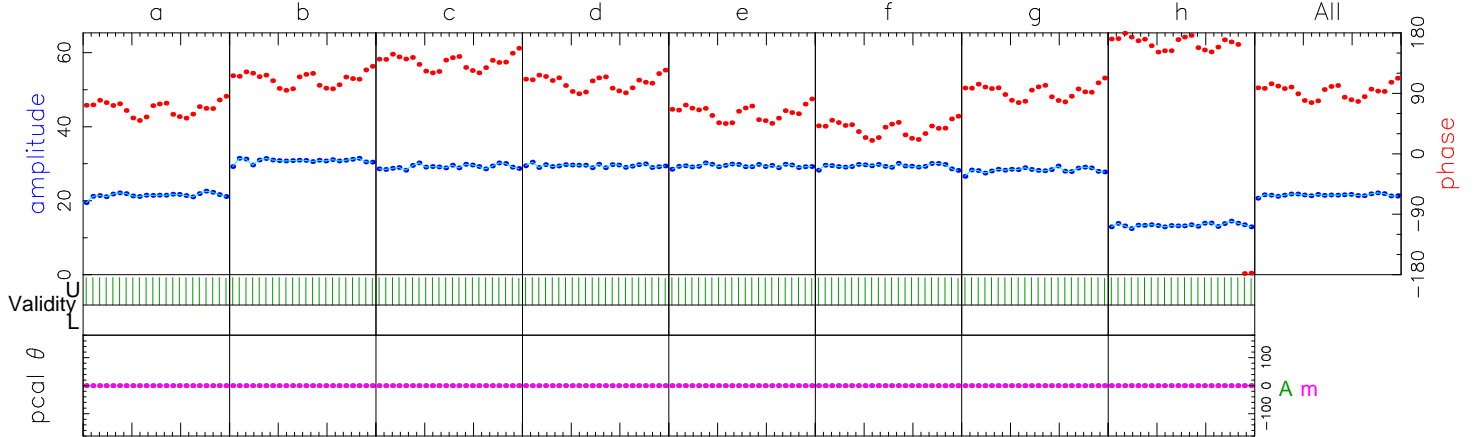
Fringe quality 6

SNR 799.4
 Int time 179.989
 Amp 21.796
 Phase -154.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.040912
 MBD 0.005981
 Fringe rate (Hz)
 -0.025038
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152903
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	67.6	111.1	136.4	106.0	60.9	37.4	92.5	166.2	Phase	92.9
	21.2	30.4	28.8	29.1	29.0	28.9	27.9	13.2	Ampl.	26.0
	247.8	246.4	246.5	246.6	246.4	246.4	246.8	248.8	Sbd box	246.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	3.64517869445E+03	Apriori delay (usec)	3.64521958869E+03	Resid mbdelay (usec)	5.98076E-03	+/-	1.4E-06
Sband delay (usec)	3.64517867669E+03	Apriori clock (usec)	-2.1079666E+03	Resid sbdelay (usec)	-4.09120E-02	+/-	1.1E-05
Phase delay (usec)	3.64521959467E+03	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	5.98348E-06	+/-	9.2E-09
Delay rate (us/s)	-1.15268893463E+00	Apriori rate (us/s)	-1.15268835423E+00	Resid rate (us/s)	-5.80400E-07	+/-	8.9E-11
Total phase (deg)	-134.4	Apriori accel (us/s/s)	-8.03007099772E-05	Resid phase (deg)	-154.6	+/-	0.1

ph/seg (deg)	10.0	RMS	Theor.	Amplitude	21.796 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	1.8	10.0	0.3	Search (1024X32)	21.041	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.7	1.8	0.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	31.9	45.7	0.2	Inc. seg. avg.	21.544	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
		31.9	0.4	Inc. frq. avg.	26.045	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 0.8 el 29.7 pa -179.3 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 4114.946 -4999.461 simultaneous interpolator

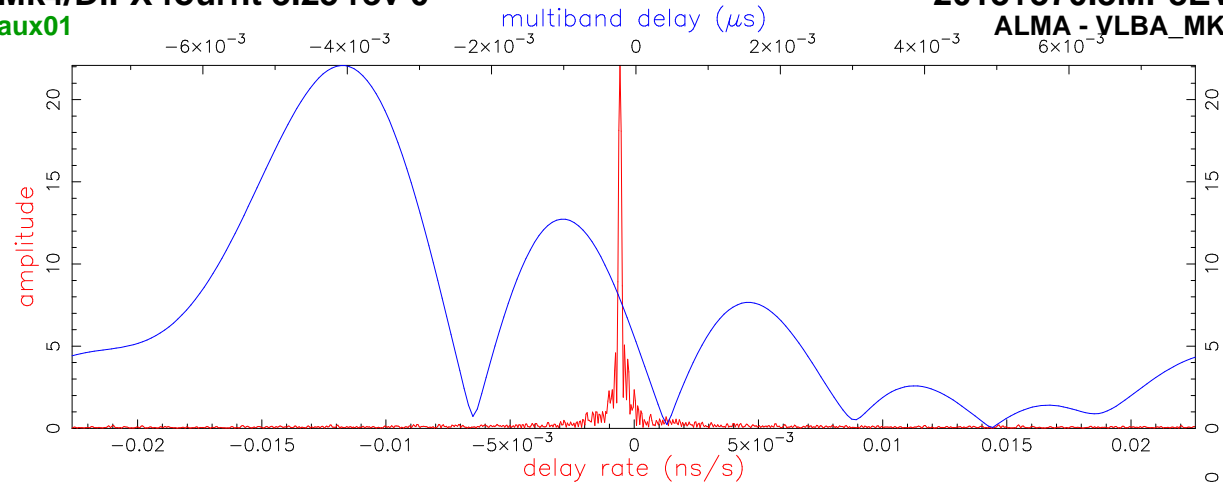
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Am...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Am.Q.28.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

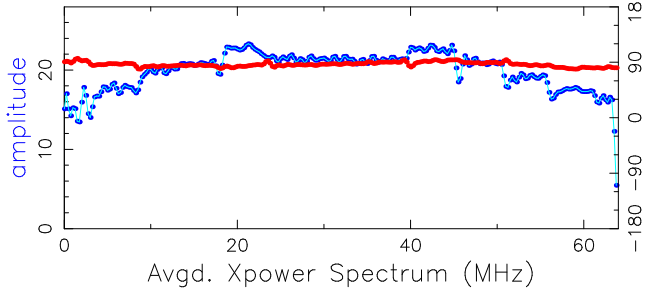
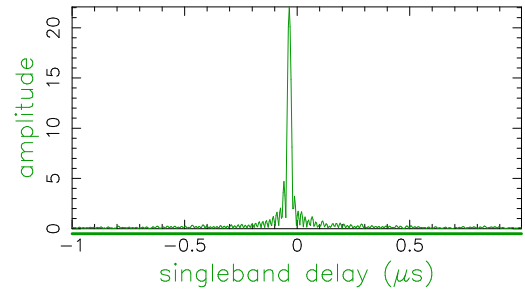
2013+370.3MP8EV, No0527, Am

ALMA - VLBA_MK, fgroup Q, pol YL



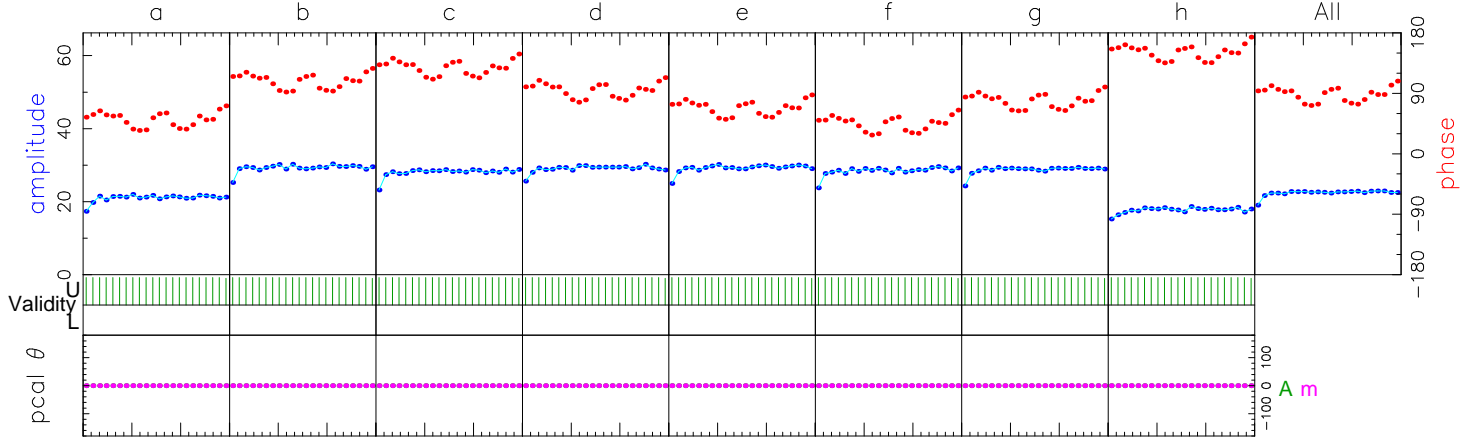
Fringe quality 6

SNR 810.0
 Int time 179.991
 Amp 22.083
 Phase -316.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.035166
 MBD -0.004066
 Fringe rate (Hz)
 -0.025090
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152905
 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
	51.4	108.2	128.3	94.7	68.3	45.0	79.2	150.9	Phase	88.4
	20.7	28.8	27.6	28.6	28.8	28.0	28.3	17.4	Ampl.	26.0
	249.7	247.8	247.8	248.0	247.9	247.8	248.0	250.2	Sbd box	248.0
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UY	Q01UY	Q02UY	Q03UY	Q04UY	Q05UY	Q06UY	Q07UY	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	3.64518427220E+03	Apriori delay (usec)	3.64521958869E+03	Resid mbdelay (usec)	-4.06649E-03	+/-	1.3E-06
Sband delay (usec)	3.64518442219E+03	Apriori clock (usec)	-2.1079666E+03	Resid sbdelay (usec)	-3.51665E-02	+/-	1.1E-05
Phase delay (usec)	3.64521959438E+03	Apriori clockrate (us/s)	3.6680728E-09	Resid phdelay (usec)	5.69137E-06	+/-	9.1E-09
Delay rate (us/s)	-1.15268893582E+00	Apriori rate (us/s)	-1.15268835423E+00	Resid rate (us/s)	-5.81588E-07	+/-	8.8E-11
Total phase (deg)	-296.5	Apriori accel (us/s/s)	-8.03007099772E-05	Resid phase (deg)	-316.6	+/-	0.1

	RMS	Theor.	Amplitude	22.083 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	10.2	0.3	Search (1024X32)	21.763	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	3.9	0.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	40.2	0.2	Inc. seg. avg.	22.439	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
amp/frq (%)	25.9	0.3	Inc. frq. avg.	26.039	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

A: az 0.8 el 29.7 pa -179.3 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 4114.946 -4999.461 simultaneous interpolator

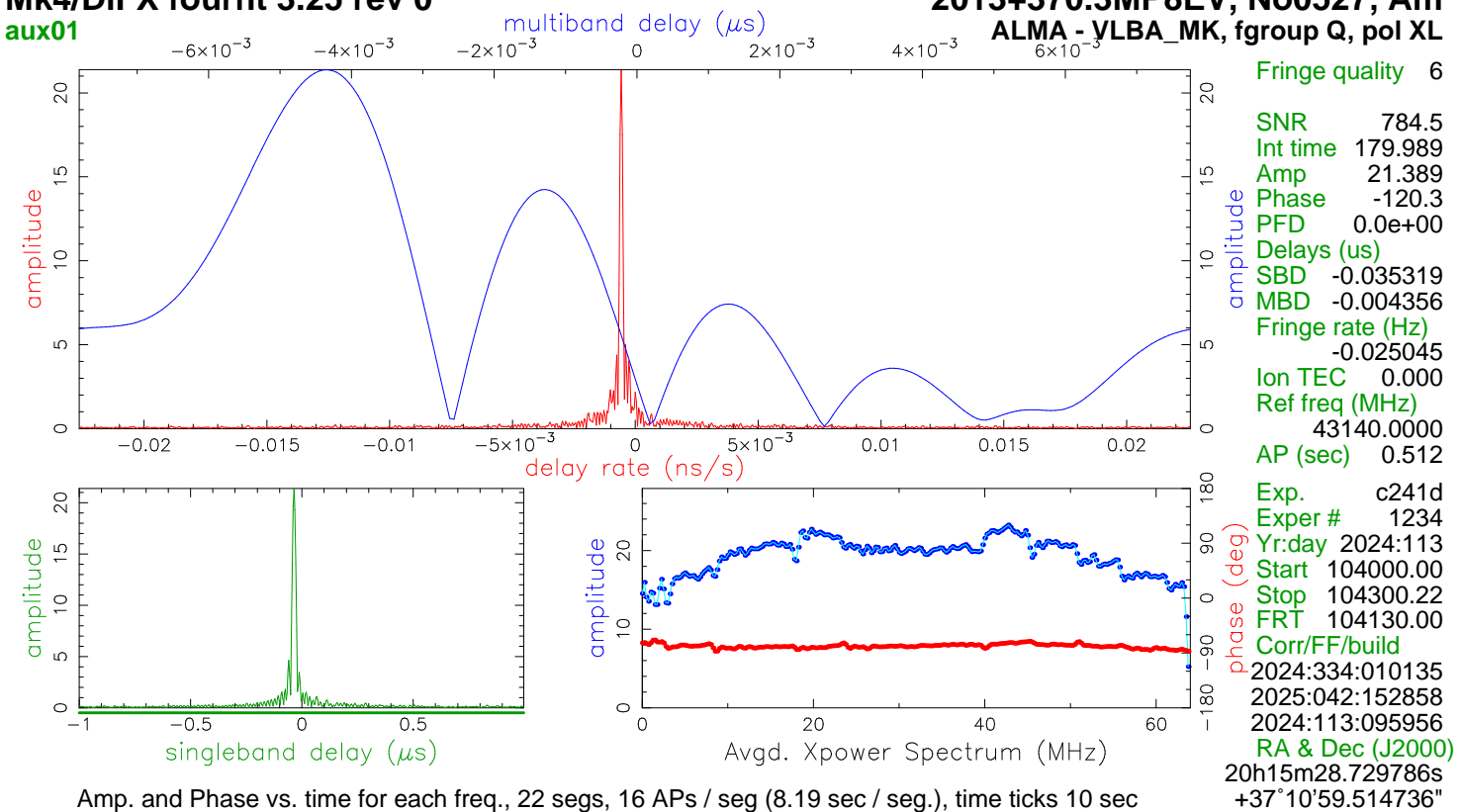
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Am...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Am.Q.39.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

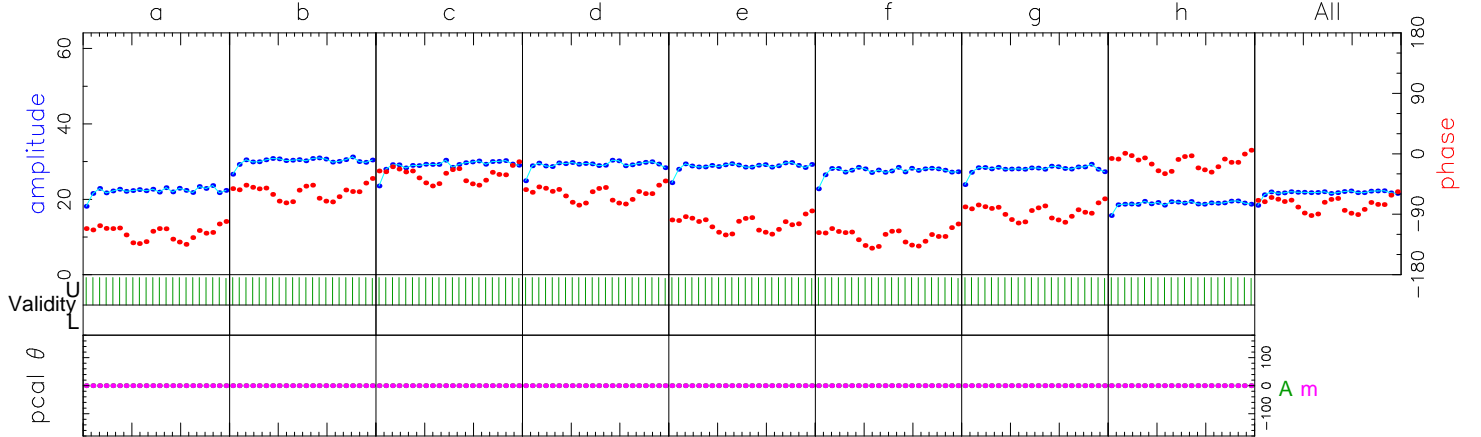
aux01

2013+370.3MP8EV, No0527, Am

ALMA - VLBA_MK, fgroup Q, pol XL



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



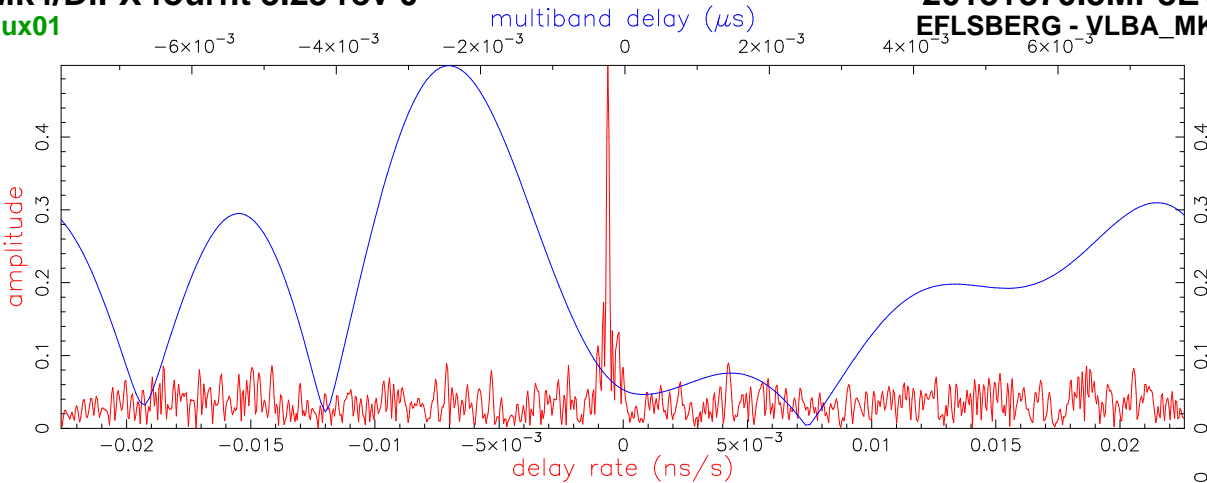
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-117.9	-56.8	-31.2	-59.7	-104.2	-122.9	-86.4	-12.1	Phase	-75.3
	21.9	29.7	28.7	28.7	28.3	27.1	27.6	18.6	Ampl.	26.3
	249.6	247.8	247.8	247.9	247.9	247.8	247.9	249.9	Sbd box	248.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
A	0	0	0	0	0	0	0	0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
A:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
A	Q00UX	Q01UX	Q02UX	Q03UX	Q04UX	Q05UX	Q06UX	Q07UX	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	3.64518398223E+03					3.64521958869E+03			Resid mbdelay (usec)	-4.35646E-03 +/- 1.4E-06
Sband delay (usec)	3.64518426919E+03					-2.1079666E+03			Resid sbdelay (usec)	-3.53195E-02 +/- 1.1E-05
Phase delay (usec)	3.64521958384E+03					3.6680728E-09			Resid phdelay (usec)	-4.85147E-06 +/- 9.4E-09
Delay rate (us/s)	-1.15268893478E+00					-1.15268835423E+00			Resid rate (us/s)	-5.80550E-07 +/- 9.0E-11
Total phase (deg)			-100.2			-8.03007099772E-05			Resid phase (deg)	-120.3 +/- 0.1
RMS	9.9	0.3							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	9.9	0.3	Search (1024X32)	21.124					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	3.9	0.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	43.9	0.2	Inc. seg. avg.	21.710					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	28.8	0.4	Inc. frq. avg.	26.331					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
A: az 0.8 el 29.7 pa -179.3		m: az 54.7 el 12.9 pa -75.0				u,v (fr/asec) 4114.946 -4999.461				simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0527//Am...3MP8EV				Output file: /Exps/c241d/v1/7mm/1234/No0527//Am.Q.8.3MP8EV				

Mk4/DiFX fourfit 3.25 rev 0

aux01

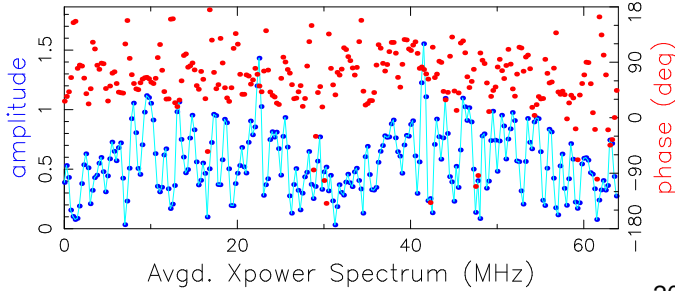
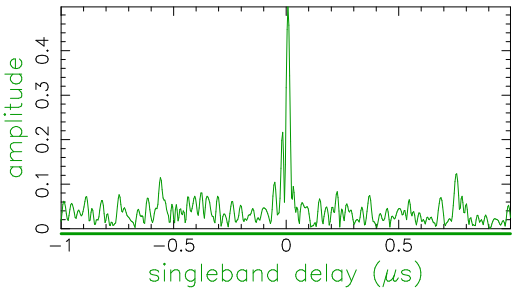
2013+370.3MP8EV, No0527, Bm

EFLSBERG - VLBA_MK, fgroup Q, pol LL



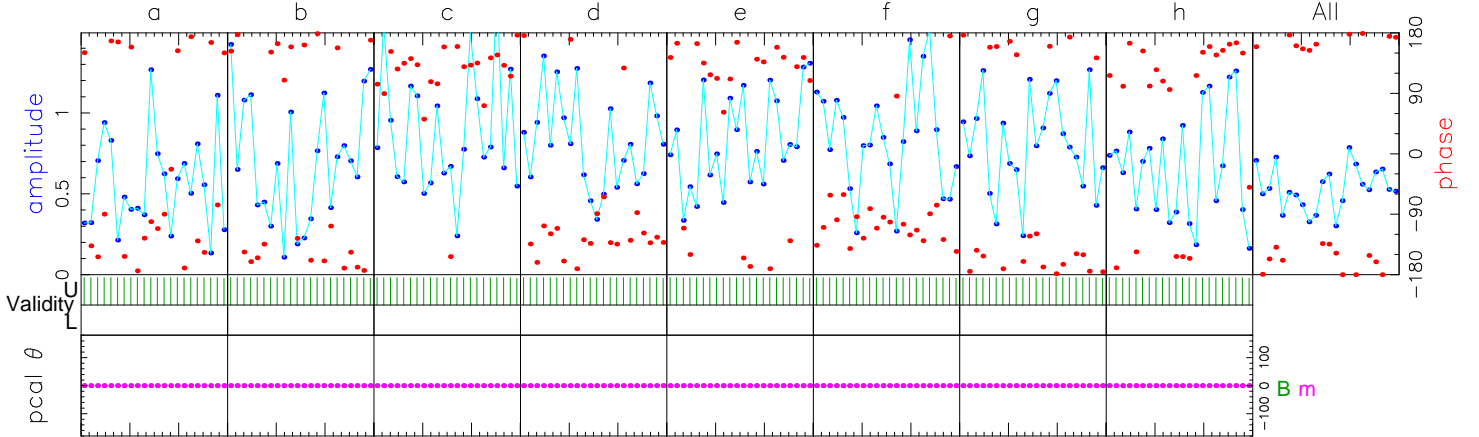
Fringe quality 8

SNR 18.3
 Int time 179.966
 Amp 0.498
 Phase 29.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.007996
 MBD -0.002431
 Fringe rate (Hz)
 -0.025913
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152919
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-138.9	-174.9	128.4	-136.6	152.1	-107.8	-169.8	153.7	Phase	-173.2
	0.4	0.6	0.8	0.7	0.7	0.7	0.6	0.6	Ampl.	0.6
	256.1	258.3	259.4	259.9	259.7	259.5	258.2	258.5	Sbd box	259.0
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	7.96461425234E+03	Apriori delay (usec)	7.96460105833E+03	Resid mbdelay (usec)	-2.43099E-03	+/-	5.9E-05
Sband delay (usec)	7.96460905408E+03	Apriori clock (usec)	-3.5937939E+01	Resid sbdelay (usec)	7.99575E-03	+/-	4.7E-04
Phase delay (usec)	7.96460104718E+03	Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	-1.11507E-05	+/-	4.0E-07
Delay rate (us/s)	-1.91922155058E+00	Apriori rate (us/s)	-1.91922094991E+00	Resid rate (us/s)	-6.00669E-07	+/-	3.9E-09
Total phase (deg)	265.6	Apriori accel (us/s/s)	-1.29920664423E-05	Resid phase (deg)	29.3	+/-	6.3

ph/seg (deg)	22.2	Theor.	14.7	Amplitude	0.498 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	26.8	Search (1024X32)	0.476	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.7	Inc. seg. avg.	0.520	Inc. frq. avg.	0.644	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.4	Inc. frq. avg.	0.644			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 285.6 el 37.5 pa 50.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 6913.497 1094.890 simultaneous interpolator

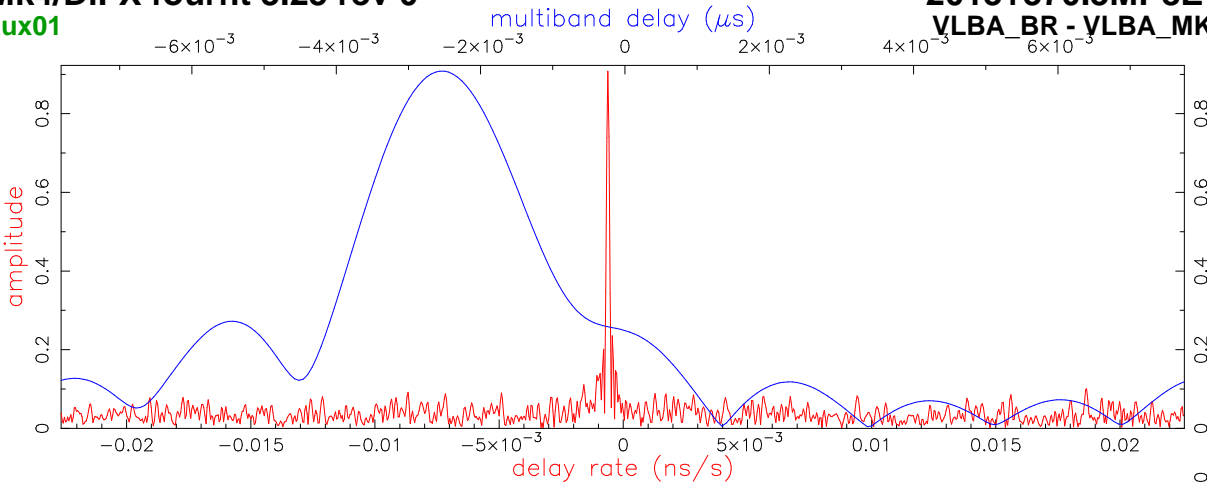
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Bm...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Bm.Q.103.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

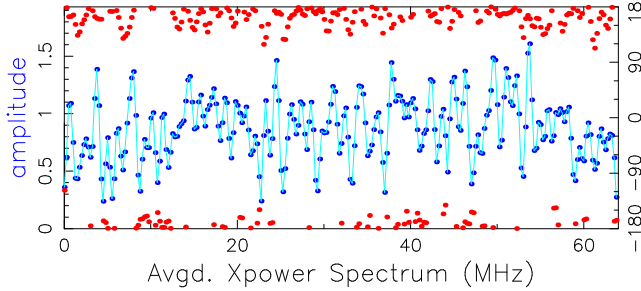
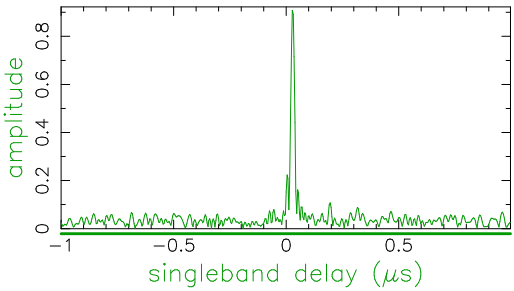
2013+370.3MP8EV, No0527, bm

VLBA_BR - VLBA_MK, fgroup Q, pol RL



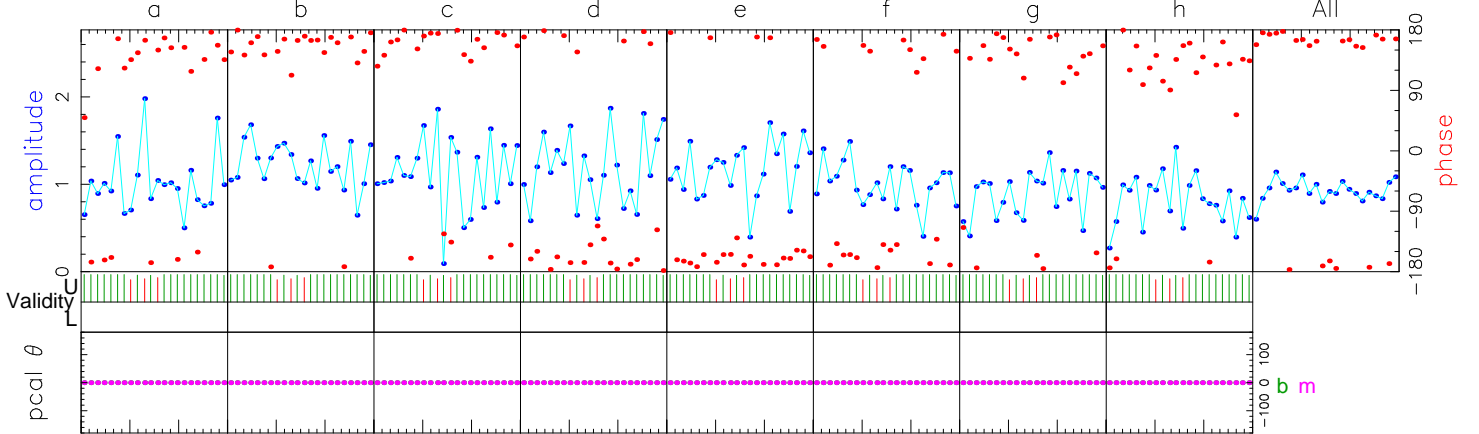
Fringe quality 8

SNR 33.4
 Int time 175.830
 Amp 0.923
 Phase 217.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.028918
 MBD -0.002510
 Fringe rate (Hz)
 -0.027388
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152920
 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	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.16134824236E+04	Apriori delay (usec)	1.16134536837E+04	Resid mbdelay (usec)	-2.51011E-03	+/-	3.2E-05
Sband delay (usec)	1.16134826019E+04	Apriori clock (usec)	4.0806484E+00	Resid sbdelay (usec)	2.89182E-02	+/-	2.6E-04
Phase delay (usec)	1.16134536948E+04	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	1.10859E-05	+/-	2.2E-07
Delay rate (us/s)	-5.08018474202E-01	Apriori rate (us/s)	-5.08017839332E-01	Resid rate (us/s)	-6.34870E-07	+/-	2.2E-09
Total phase (deg)	186.4	Apriori accel (us/s/s)	-3.40458225805E-05	Resid phase (deg)	217.2	+/-	3.4

ph/seg (deg)	12.1	RMS	8.0	Theor.	12.1	Amplitude	0.923 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	12.6	Search (1024X32)	0.881	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	0.881	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	21.2	Inc. seg. avg.	0.919	Inc. frq. avg.	0.950	Bits/sample: 2x2	5.9094092E-07	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023		
amp/frq (%)	17.9	Inc. frq. avg.	0.950			Data rate(Mb/s): 2048	-5.08017839332E-01	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00		

b: az 85.9 el 50.5 pa -56.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1820.441 401.583 simultaneous interpolator

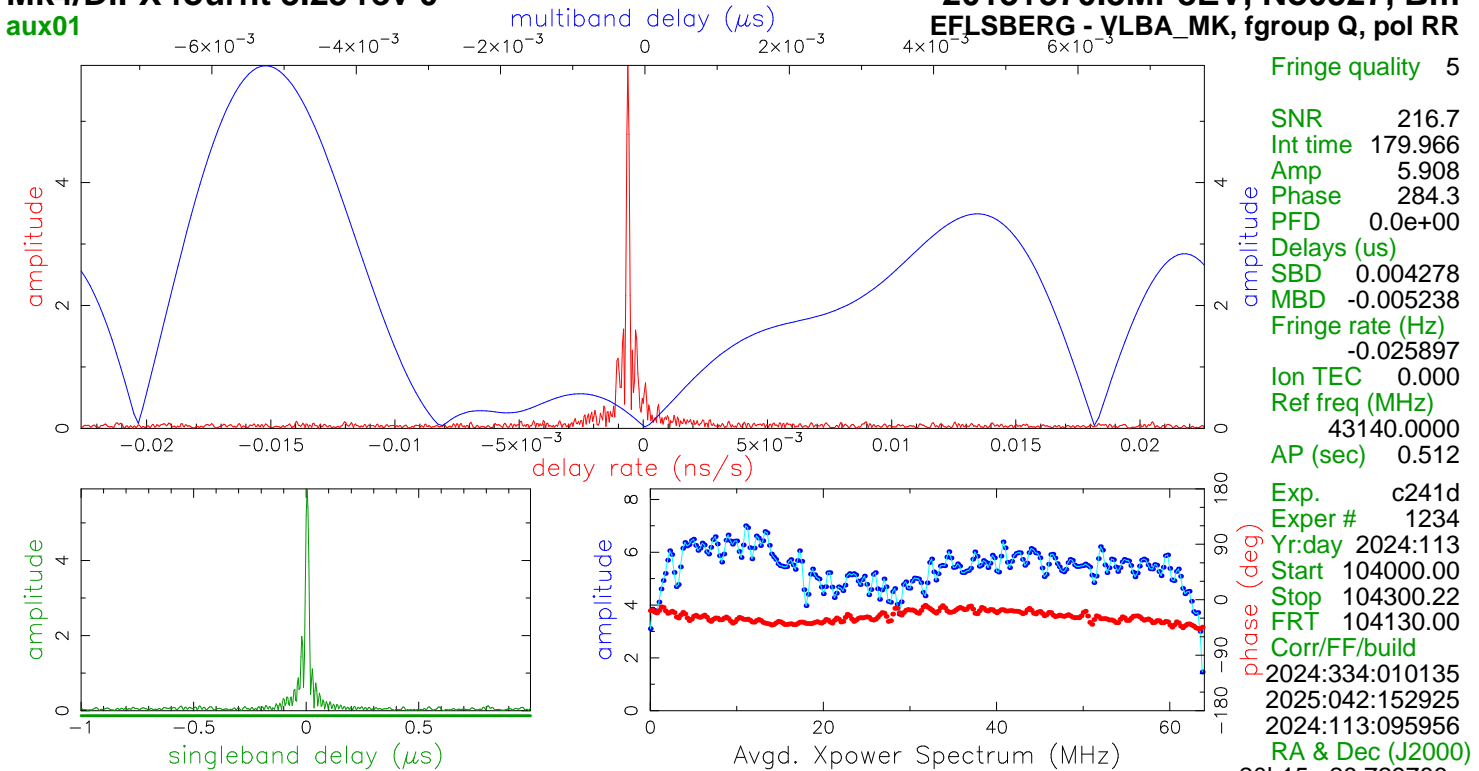
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//bm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//bm.Q.107.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

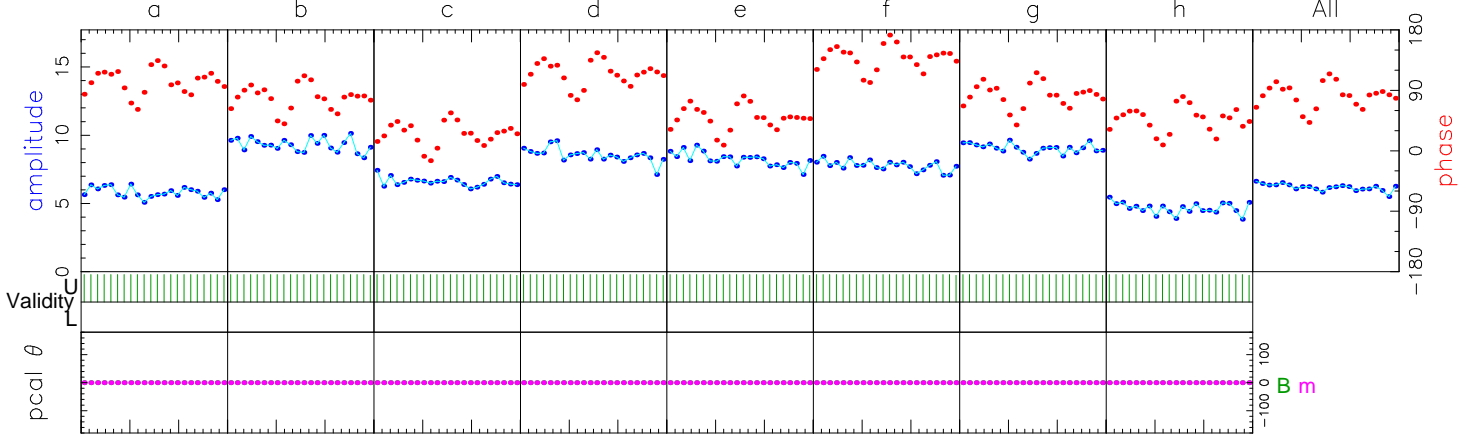
aux01

2013+370.3MP8EV, No0527, Bm

EFLSBERG - VLBA_MK, fgroup Q, pol RR



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
102.5	78.8	24.6	114.8	48.8	138.1	82.2	46.3	81.8	Phase	81.8
5.5	8.9	6.3	8.1	7.9	7.4	8.6	4.4	7.1	Ampl.	7.1
255.0	257.8	258.8	258.7	259.0	258.6	257.7	254.3	258.1	Sbd box	258.1
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	7.96461144581E+03		Apriori delay (usec)	7.96460105833E+03	Resid mbdelay (usec)	-5.23752E-03	+/-	5.0E-06		
Sband delay (usec)	7.96460533658E+03		Apriori clock (usec)	-3.5937939E+01	Resid sbdelay (usec)	4.27825E-03	+/-	4.0E-05		
Phase delay (usec)	7.96460106360E+03		Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	5.26841E-06	+/-	3.4E-08		
Delay rate (us/s)	-1.91922155021E+00		Apriori rate (us/s)	-1.91922094991E+00	Resid rate (us/s)	-6.00298E-07	+/-	3.3E-10		
Total phase (deg)		160.6	Apriori accel (us/s/s)	-1.29920664423E-05	Resid phase (deg)	284.3	+/-	0.5		
RMS	17.7	1.2	Amplitude	5.908 +/- 0.027	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	17.7	1.2	Search (1024X32)	5.591	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	6.3	2.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	41.4	0.7	Inc. seg. avg.	6.190	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023		
amp/frq (%)	32.6	1.3	Inc. frq. avg.	7.148	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
B: az 285.6 el 37.5 pa 50.2			m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec) 6913.497 1094.890				simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//Bm...3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//Bm.Q.133.3MP8EV					

Mk4/DiFX fourfit 3.25 rev 0

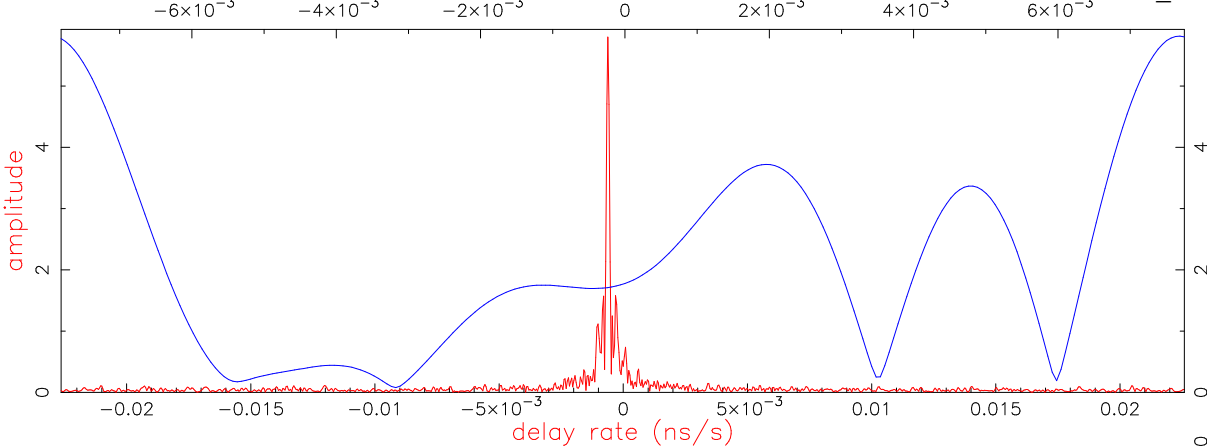
aux01

2013+370.3MP8EV, No0527, Bm

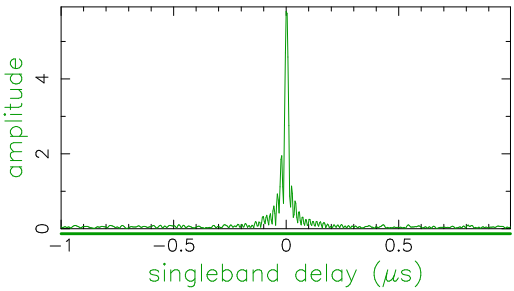
EFLSBERG - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)

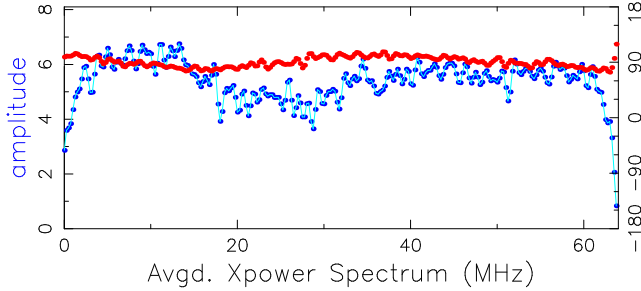
Fringe quality 5



SNR 217.4
 Int time 179.966
 Amp 5.927
 Phase 43.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.001769
 MBD -0.007861
 Fringe rate (Hz)
 -0.025912
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



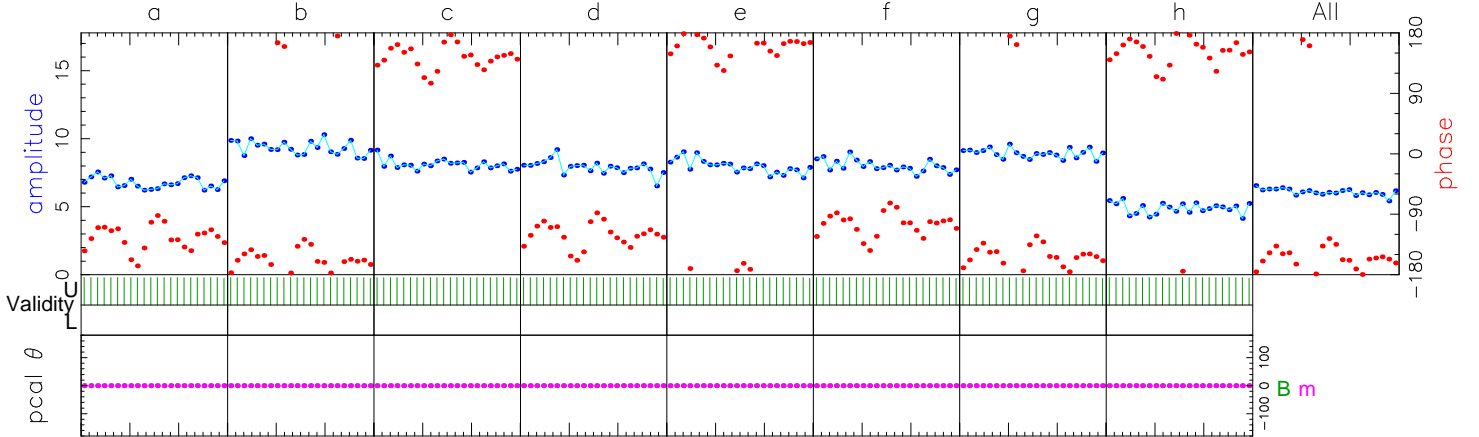
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152928
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-125.0	-161.4	143.3	-120.8	164.4	-104.9	-155.4	152.4	Phase	-158.9
	6.4	8.9	7.7	7.5	7.6	7.7	8.5	4.6	Ampl.	7.4
	254.7	256.9	258.1	258.1	258.2	257.9	256.9	253.9	Sbd box	257.5
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	7.96460882186E+03	Apriori delay (usec)	7.96460105833E+03	Resid mbdelay (usec)	-7.86147E-03	+/-	5.0E-06
Sband delay (usec)	7.96460282758E+03	Apriori clock (usec)	-3.5937939E+01	Resid sbdelay (usec)	1.76925E-03	+/-	4.0E-05
Phase delay (usec)	7.96460104810E+03	Apriori clockrate (us/s)	-1.7503902E-07	Resid phdelay (usec)	-1.02311E-05	+/-	3.4E-08
Delay rate (us/s)	-1.91922155056E+00	Apriori rate (us/s)	-1.91922094991E+00	Resid rate (us/s)	-6.00652E-07	+/-	3.3E-10
Total phase (deg)	279.9	Apriori accel (us/s/s)	-1.29920664423E-05	Resid phase (deg)	43.6	+/-	0.5

ph/seg (deg)	17.7	Theor.	1.2	Amplitude	5.927 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	4.8		2.2	Search (1024X32)	5.572	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	45.8		0.7	Inc. seg. avg.	6.087	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.2		1.3	Inc. frq. avg.	7.374	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 285.6 el 37.5 pa 50.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 6913.497 1094.890 simultaneous interpolator

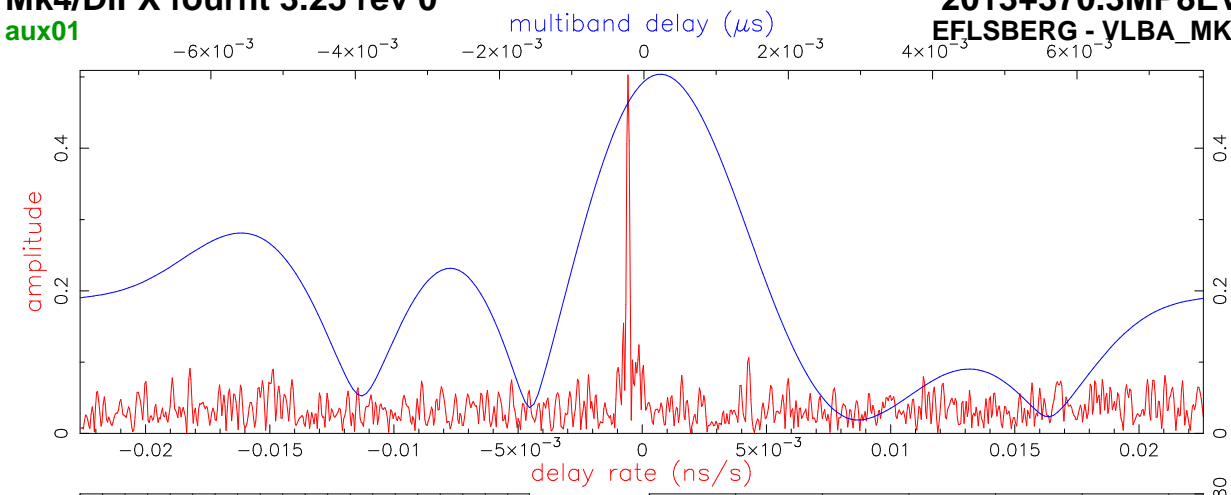
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Bm...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Bm.Q.148.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

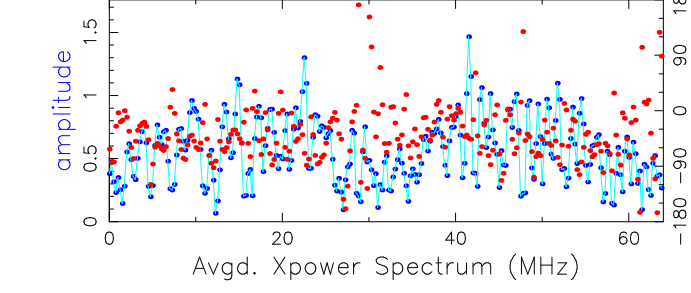
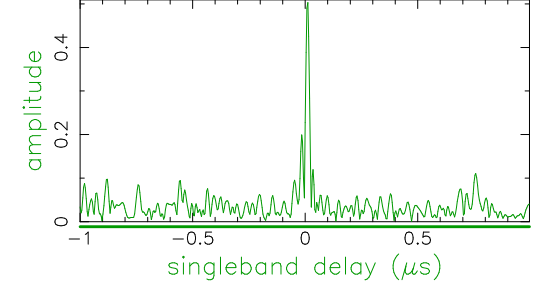
2013+370.3MP8EV, No0527, Bm

EFLSBERG - VLBA_MK, fgroup Q, pol RL



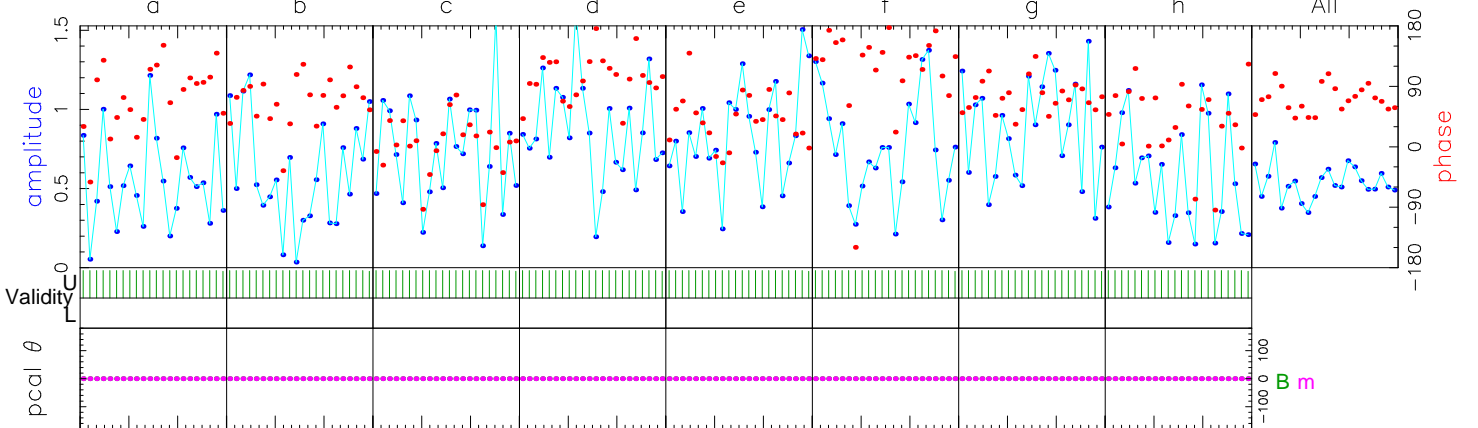
Fringe quality 8

SNR 18.7
 Int time 179.966
 Amp 0.509
 Phase 275.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.010289
 MBD 0.000152
 Fringe rate (Hz)
 -0.025881
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152931
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) 7.96461683500E+03 Apriori delay (usec) 7.96460105833E+03 Resid mbdelay (usec) 1.51669E-04 +/- 5.8E-05
 Sband delay (usec) 7.96461134783E+03 Apriori clock (usec) -3.5937939E+01 Resid sbdelay (usec) 1.02895E-02 +/- 4.6E-04
 Phase delay (usec) 7.96460106300E+03 Apriori clockrate (us/s) -1.7503902E-07 Resid phdelay (usec) 4.66706E-06 +/- 4.0E-07
 Delay rate (us/s) -1.91922154983E+00 Apriori rate (us/s) -1.91922094991E+00 Resid rate (us/s) -5.99922E-07 +/- 3.8E-09
 Total phase (deg) 151.3 Apriori accel (us/s/s) -1.29920664423E-05 Resid phase (deg) 275.0 +/- 6.1

ph/seg (deg) 20.0 14.4 Search (1024X32) 0.474 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 20.5 25.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.4 8.7 Inc. seg. avg. 0.520 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.3 15.1 Inc. frq. avg. 0.613 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 285.6 el 37.5 pa 50.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 6913.497 1094.890 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Bm...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Bm.Q.167.3MP8EV

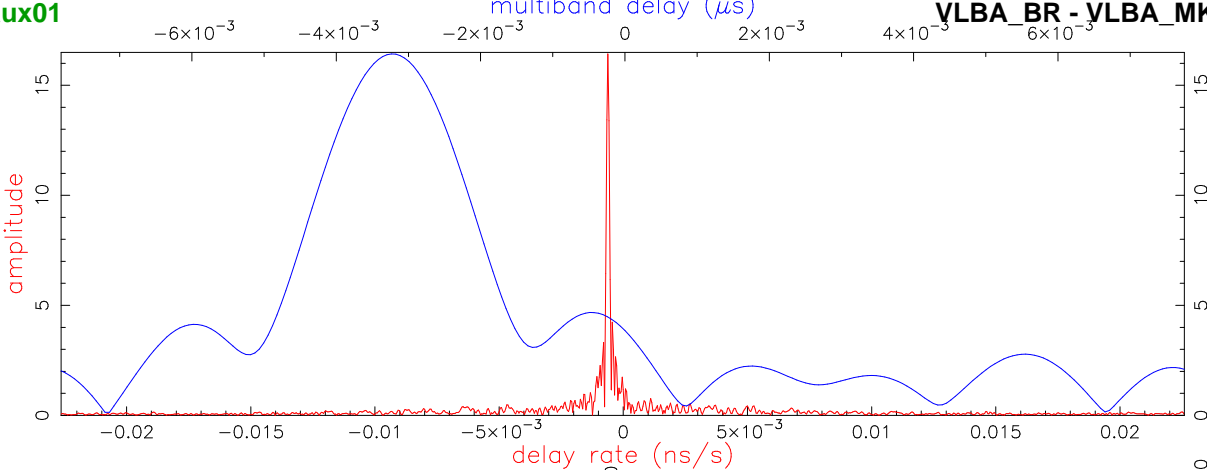
Mk4/DiFX fourfit 3.25 rev 0

aux01

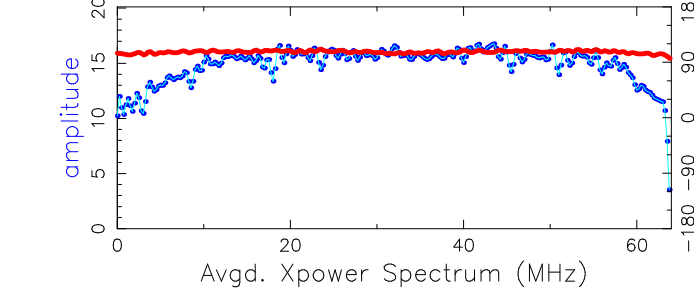
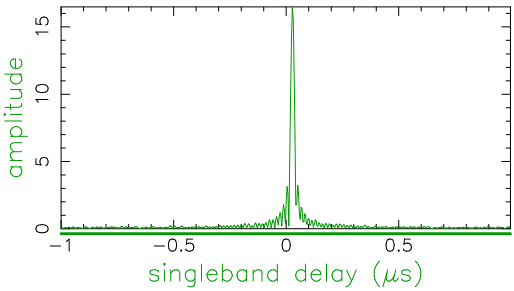
2013+370.3MP8EV, No0527, bm

VLBA_BR - VLBA_MK, fgroup Q, pol LL

Fringe quality 8

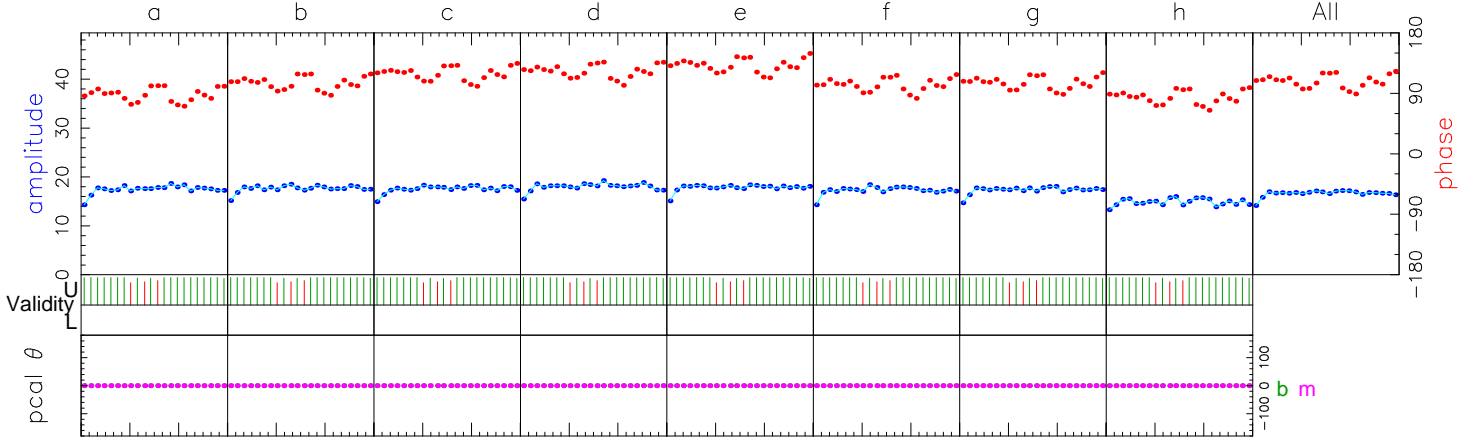


SNR 598.0
 Int time 175.830
 Amp 16.496
 Phase 153.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.028149
 MBD -0.003199
 Fringe rate (Hz)
 -0.027443
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152912
 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
	87.9	105.2	119.1	122.8	131.7	102.8	105.6	84.1	Phase	108.0
	17.2	17.4	17.3	17.8	17.6	17.1	17.2	14.7	Ampl.	17.0
	264.3	264.6	264.1	264.3	264.0	264.0	264.1	263.6	Sbd box	264.2
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.16134817343E+04	Apriori delay (usec)	1.16134536837E+04	Resid mbdelay (usec)	-3.19936E-03	+/-	1.8E-06
Sband delay (usec)	1.16134818329E+04	Apriori clock (usec)	4.0806484E+00	Resid sbdelay (usec)	2.81493E-02	+/-	1.4E-05
Phase delay (usec)	1.16134536906E+04	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	6.95301E-06	+/-	1.2E-08
Delay rate (us/s)	-5.08018475459E-01	Apriori rate (us/s)	-5.08017839332E-01	Resid rate (us/s)	-6.36127E-07	+/-	1.2E-10
Total phase (deg)	122.2	Apriori accel (us/s/s)	-3.40458225805E-05	Resid phase (deg)	153.0	+/-	0.2

ph/seg (deg)	9.3	RMS	0.4	Theor.	16.496 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	3.9		0.8	Search (1024X32)	15.499	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.9		0.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	6.4		0.5	Inc. seg. avg.	16.653	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	17.033	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 85.9 el 50.5 pa -56.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1820.441 401.583 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/bm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/bm.Q.61.3MP8EV

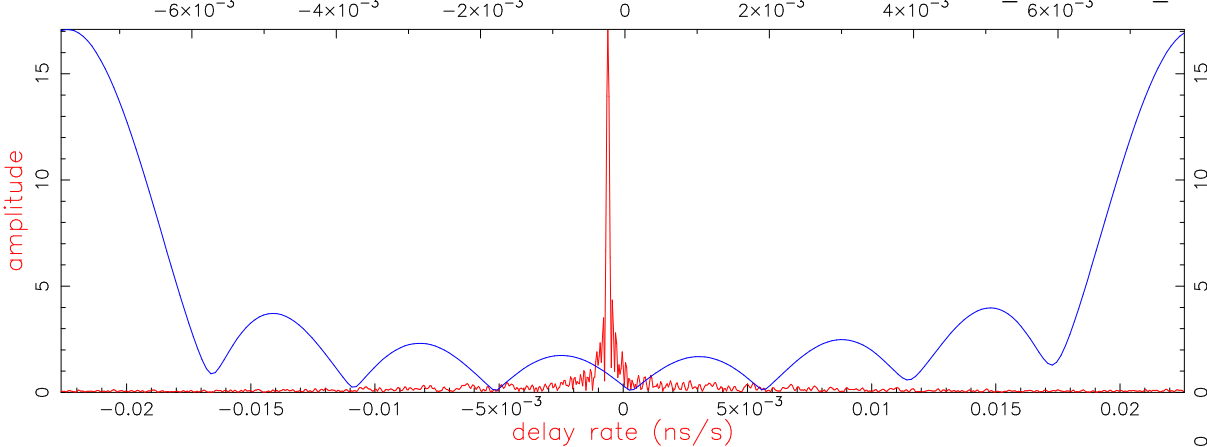
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, bm

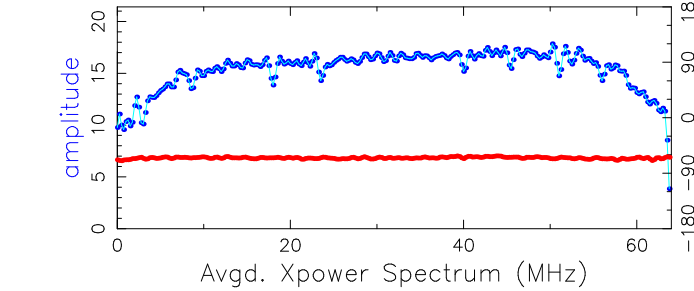
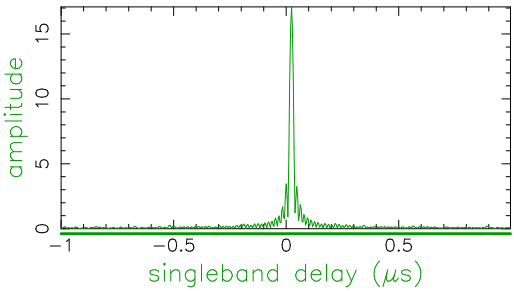
VLBA_BR - VLBA_MK, fgroup Q, pol RR

multiband delay (μ s)



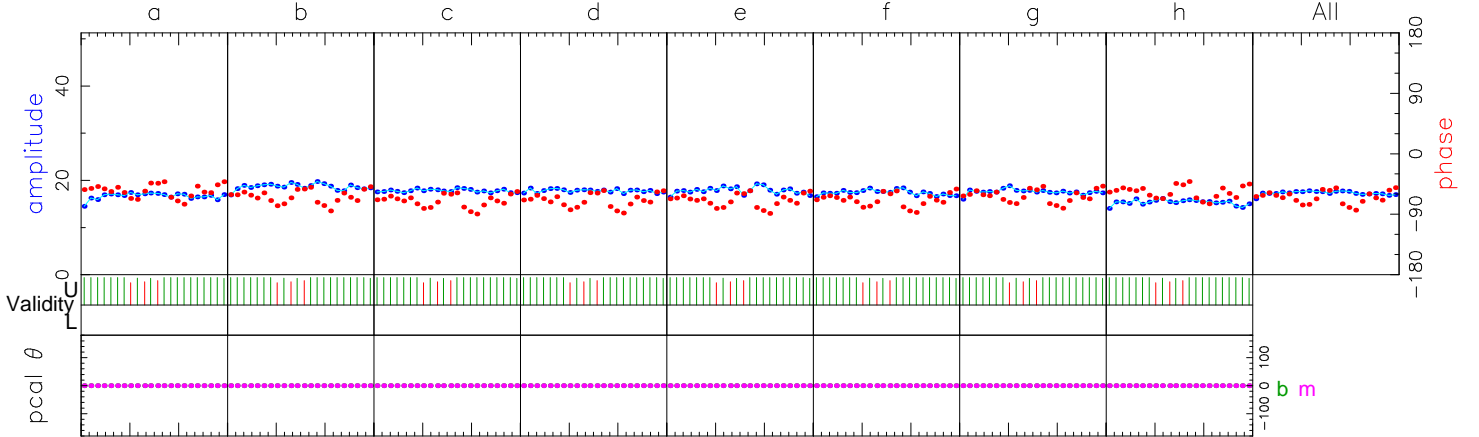
Fringe quality 9

SNR 619.6
 Int time 175.830
 Amp 17.094
 Phase 340.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.023566
 MBD -0.007719
 Fringe rate (Hz)
 -0.027448
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152916
 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
	-55.1	-63.8	-70.2	-69.3	-69.5	-68.4	-62.8	-56.8	Phase	-64.7
	16.5	18.4	17.6	17.6	17.6	17.2	17.4	15.2	Ampl.	17.2
	262.5	262.9	263.0	263.2	262.9	263.2	263.0	263.3	Sbd box	263.0
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	1.16134772143E+04	Apriori delay (usec)	1.16134536837E+04	Resid mbdelay (usec)	-7.71944E-03	+/-	1.8E-06
Sband delay (usec)	1.16134772499E+04	Apriori clock (usec)	4.0806484E+00	Resid sbdelay (usec)	2.35662E-02	+/-	1.4E-05
Phase delay (usec)	1.16134536795E+04	Apriori clockrate (us/s)	5.9094092E-07	Resid phdelay (usec)	-4.16624E-06	+/-	1.2E-08
Delay rate (us/s)	-5.08018475597E-01	Apriori rate (us/s)	-5.08017839332E-01	Resid rate (us/s)	-6.36265E-07	+/-	1.2E-10
Total phase (deg)	309.5	Apriori accel (us/s/s)	-3.40458225805E-05	Resid phase (deg)	340.3	+/-	0.2

ph/seg (deg)	9.2	RMS	0.4	Theor.	17.094 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	2.6	Search (1024X32)	16.334	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	6.4	Inc. seg. avg.	17.316	Inc. frq. avg.	17.169	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	5.4	Inc. frq. avg.	17.169	Inc. frq. avg.	17.169	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 85.9 el 50.5 pa -56.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1820.441 401.583 simultaneous interpolator

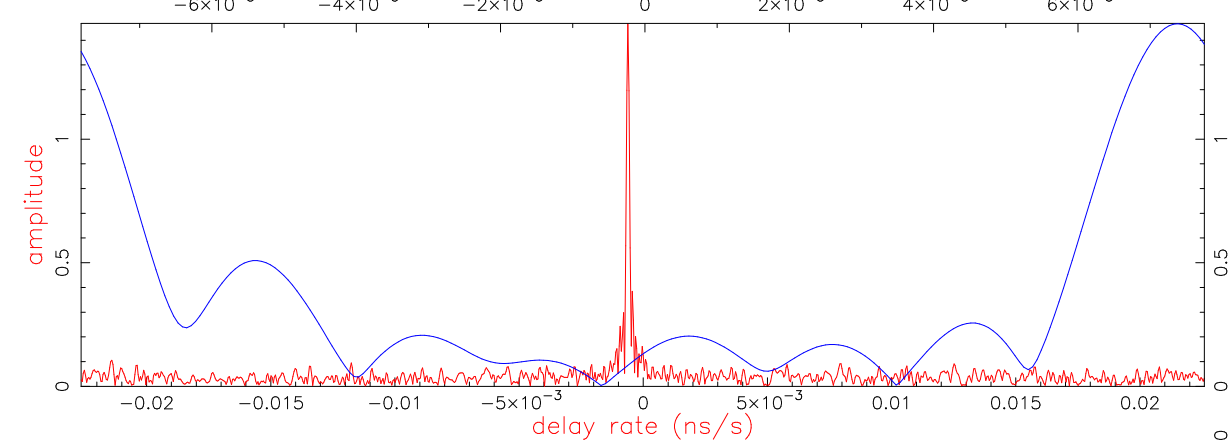
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/bm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/bm.Q.85.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

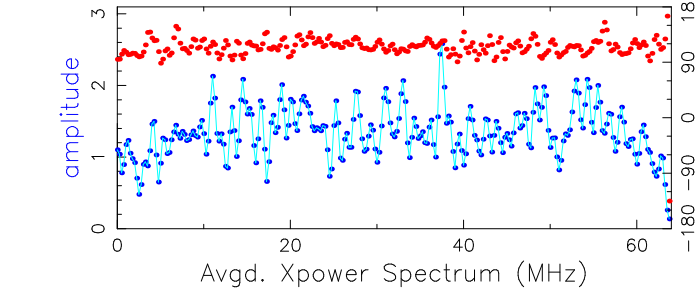
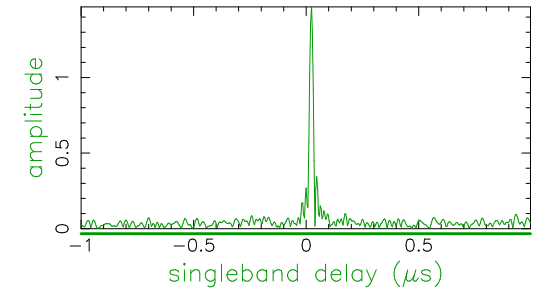
2013+370.3MP8EV, No0527, bm

VLBA_BR - VLBA_MK, fgroup Q, pol LR



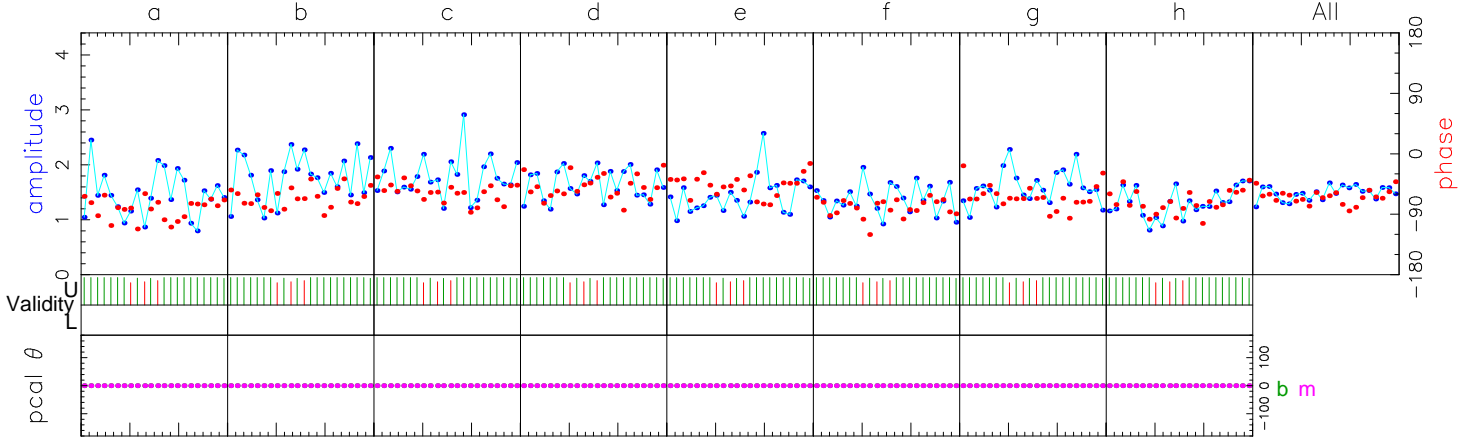
Fringe quality 8

SNR 53.2
 Int time 175.830
 Amp 1.468
 Phase 138.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.023046
 MBD 0.007367
 Fringe rate (Hz)
 -0.027382
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152918
 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
	-83.0	-64.8	-56.5	-49.8	-48.2	-80.4	-65.4	-69.3	Phase	-64.1
	1.4	1.7	1.8	1.6	1.4	1.3	1.5	1.3	Ampl.	1.5
	262.5	263.2	263.0	263.1	262.6	262.8	262.9	262.6	Sbd box	262.9
U/L	347/0	347/0	347/0	347/0	347/0	347/0	347/0	347/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 1.16134766759E+04 Apriori delay (usec) 1.16134536837E+04 Resid mbdelay (usec) 7.36720E-03 +/- 2.0E-05
 Sband delay (usec) 1.16134767292E+04 Apriori clock (usec) 4.0806484E+00 Resid sbdelay (usec) 2.30455E-02 +/- 1.6E-04
 Phase delay (usec) 1.16134536796E+04 Apriori clockrate (us/s) 5.9094092E-07 Resid phdelay (usec) -4.12754E-06 +/- 1.4E-07
 Delay rate (us/s) -5.08018474049E-01 Apriori rate (us/s) -5.08017839332E-01 Resid rate (us/s) -6.34717E-07 +/- 1.4E-09
 Total phase (deg) 107.6 Apriori accel (us/s/s) -3.40458225805E-05 Resid phase (deg) 138.4 +/- 2.2

RMS Theor. Amplitude 1.468 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 10.3 5.0 Search (1024X32) 1.415 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 8.4 8.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 14.0 3.0 Inc. seg. avg. 1.484 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 11.7 5.3 Inc. frq. avg. 1.496 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

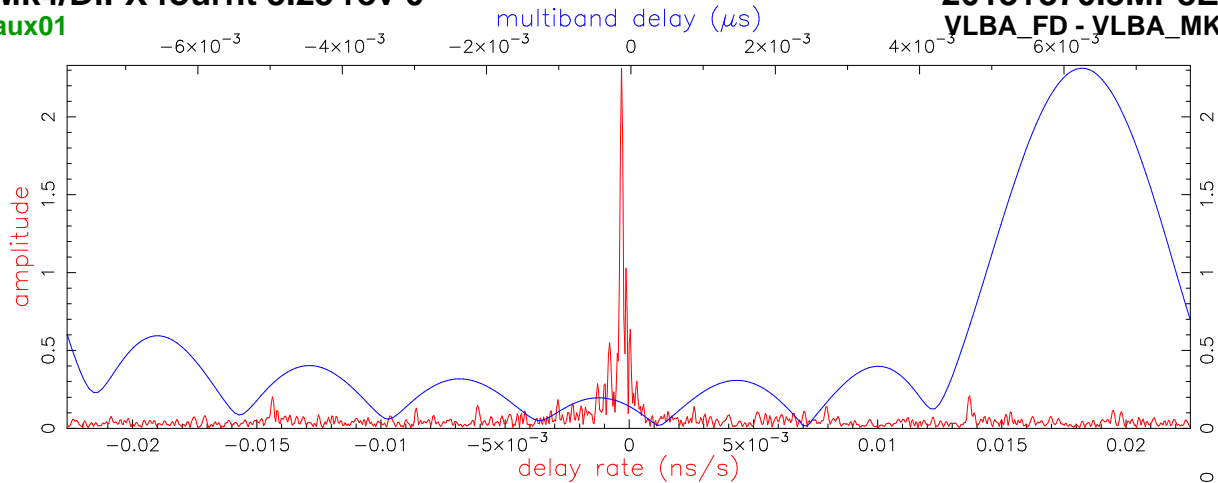
b: az 85.9 el 50.5 pa -56.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1820.441 401.583 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/bm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/bm.Q.94.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

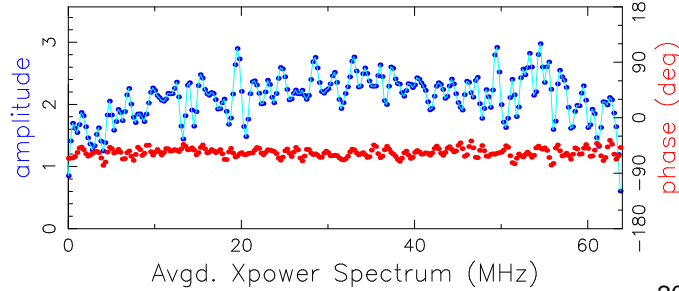
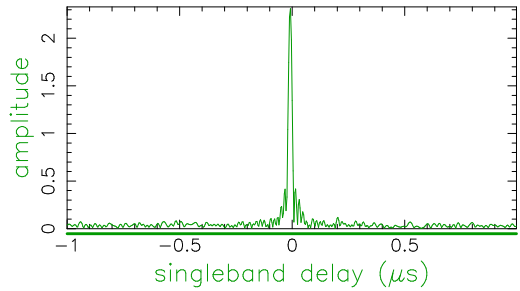
2013+370.3MP8EV, No0527, fm

VLBA_FD - VLBA_MK, fgroup Q, pol LL



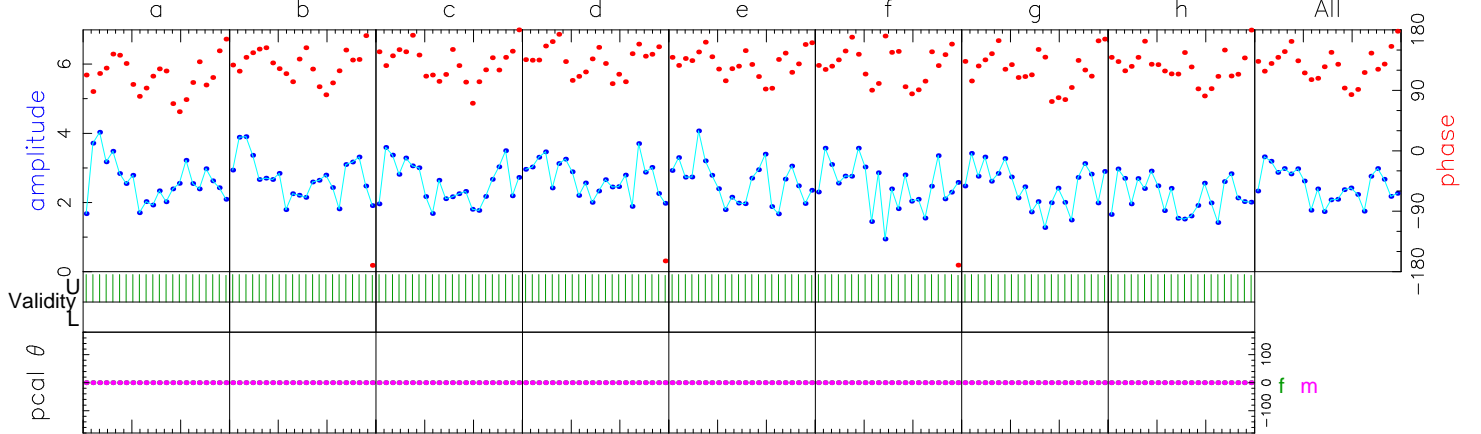
Fringe quality 7

SNR 85.5
Int time 179.982
Amp 2.330
Phase -74.2
PFD 0.0e+00
Delays (us)
SBD -0.008948
MBD 0.006222
Fringe rate (Hz)
-0.014144
Ion TEC 0.000
Ref freq (MHz)
43140.0000
AP (sec) 0.512



Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 104000.00
Stop 104300.22
FRT 104130.00
Corr/FF/build
2024:334:010135
2025:042:152924
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	1000	1000
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
f:m	0:0	0:0	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	1000	1000
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	1.33830621153E+04	Apriori delay (usec)	1.33830715187E+04	Resid mbdelay (usec)	6.22163E-03	+/-	1.3E-05
Sband delay (usec)	1.33830625704E+04	Apriori clock (usec)	-4.8604774E-01	Resid sbdelay (usec)	-8.94825E-03	+/-	1.0E-04
Phase delay (usec)	1.33830715269E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	8.25980E-06	+/-	8.6E-08
Delay rate (us/s)	-5.27006556143E-01	Apriori rate (us/s)	-5.27006228277E-01	Resid rate (us/s)	-3.27867E-07	+/-	8.3E-10
Total phase (deg)	39.4	Apriori accel (us/s/s)	-5.95296218810E-05	Resid phase (deg)	-74.2	+/-	1.3

ph/seg (deg)	22.8	RMS	22.8	Theor.	3.1	Amplitude	2.330 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	20.6		20.6		5.5	Search (1024X32)	2.220	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.9		8.9		1.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	6.6		6.6		3.3	Inc. seg. avg.	2.491	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
						Inc. frq. avg.	2.332	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 67.7 el 58.8 pa -91.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1876.721 -1191.098 simultaneous interpolator

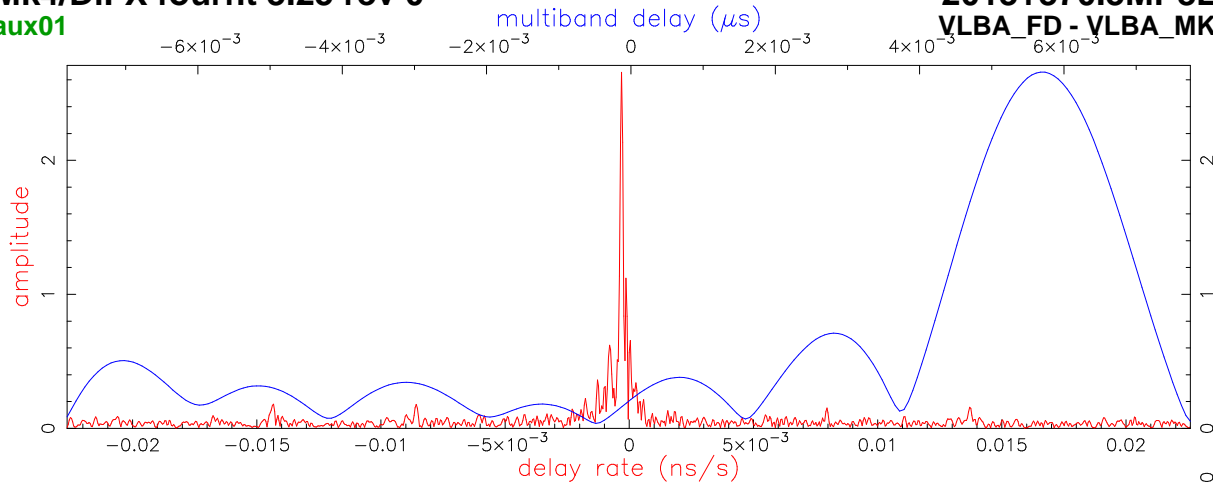
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/fm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/fm.Q.128.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

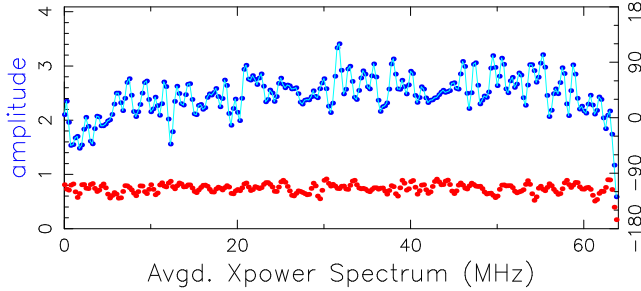
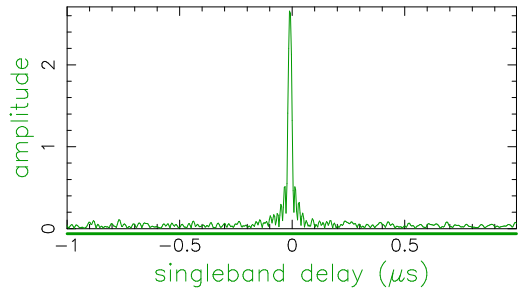
2013+370.3MP8EV, No0527, fm

VLBA_FD - VLBA_MK, fgroup Q, pol RR



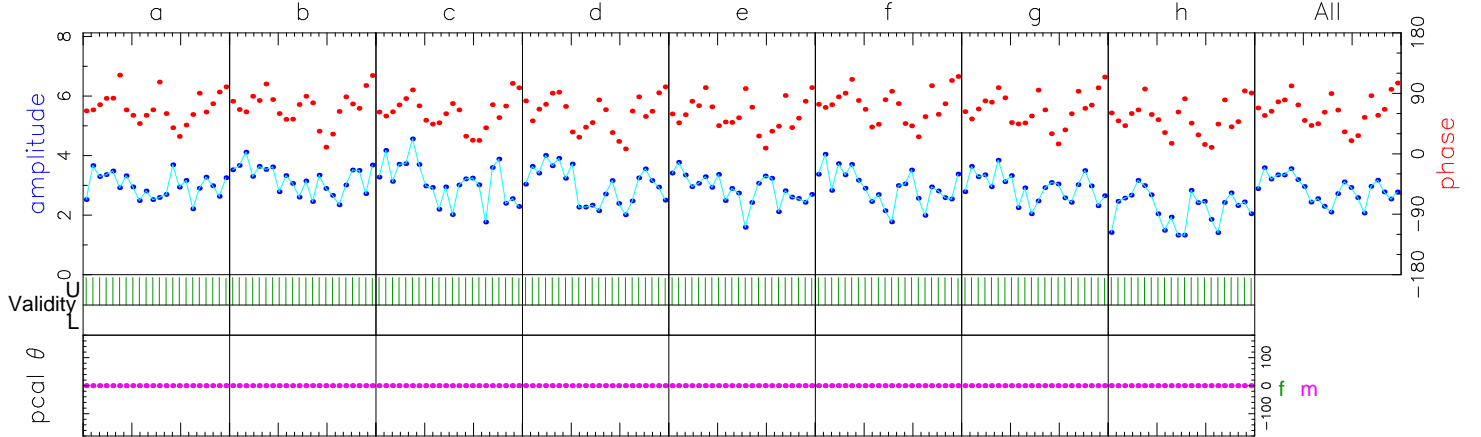
Fringe quality 8

SNR 99.3
 Int time 179.982
 Amp 2.708
 Phase -137.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.009970
 MBD 0.005744
 Fringe rate (Hz)
 -0.014148
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152926
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	2.7
m	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	254.4
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	PC amp	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	1.33830616377E+04	Apriori delay (usec)	1.33830715187E+04	Resid mbdelay (usec)	5.74404E-03	+/-	1.1E-05
Sband delay (usec)	1.33830615484E+04	Apriori clock (usec)	-4.8604774E-01	Resid sbdelay (usec)	-9.97025E-03	+/-	8.7E-05
Phase delay (usec)	1.33830715229E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	4.17575E-06	+/-	7.4E-08
Delay rate (us/s)	-5.27006556228E-01	Apriori rate (us/s)	-5.27006228277E-01	Resid rate (us/s)	-3.27951E-07	+/-	7.1E-10
Total phase (deg)	-24.0	Apriori accel (us/s/s)	-5.95296218810E-05	Resid phase (deg)	-137.6	+/-	1.2

ph/seg (deg)	22.7	Theor.	2.7	Amplitude	2.708 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	16.8		4.7	Search (1024X32)	2.540	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	7.4		1.6	Inc. seg. avg.	2.871	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.7		2.8	Inc. frq. avg.	2.671	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
f: az 67.7 el 58.8 pa -91.2		m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec)	1876.721 -1191.098	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

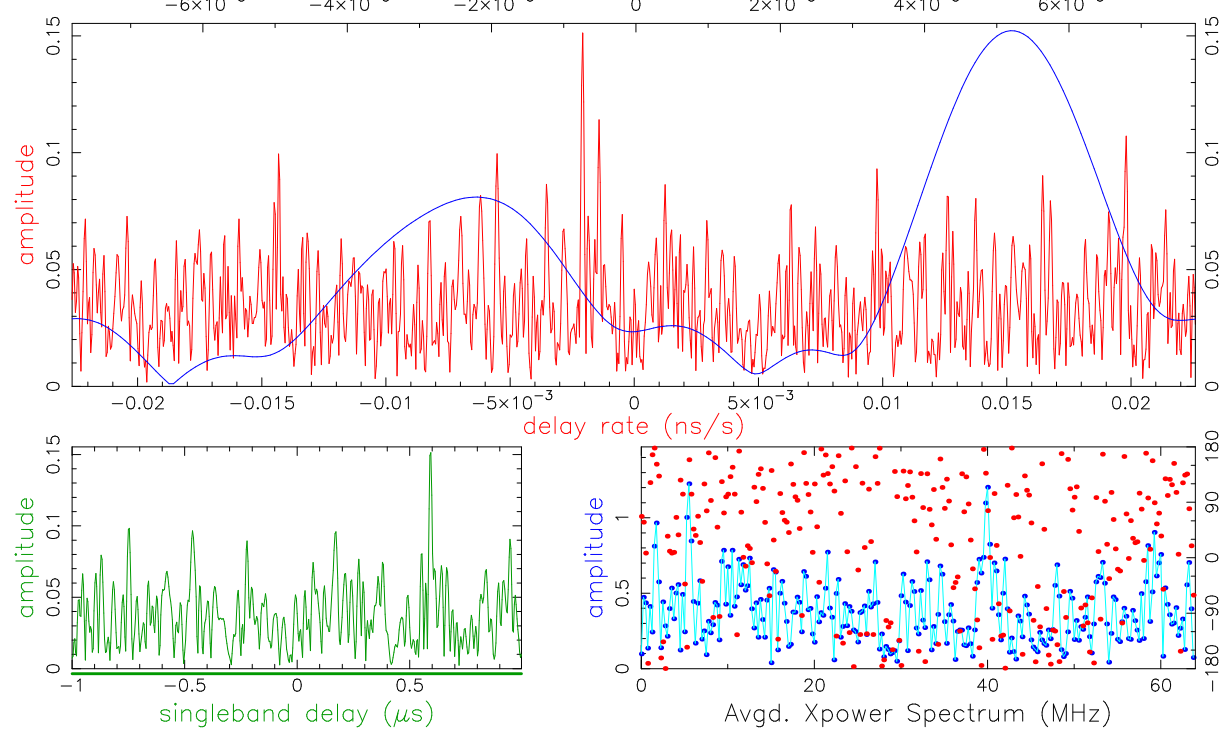
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//fm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//fm.Q.142.3MP8EV simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

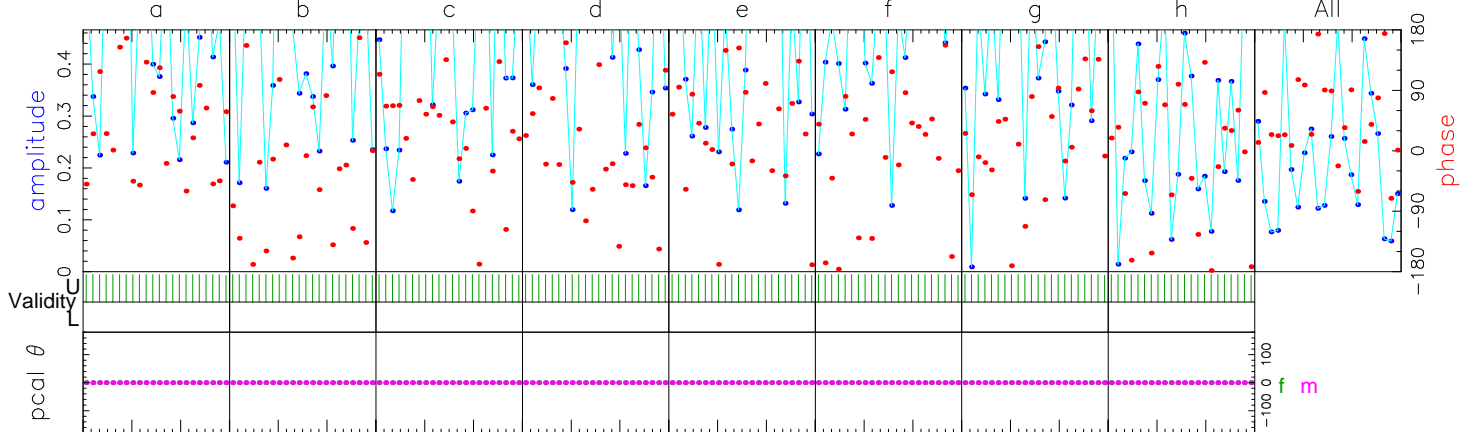
2013+370.3MP8EV, No0527, fm

VLBA_FD - VLBA_MK, fgroup Q, pol LR



Fringe quality 0
 SNR 5.7
 Int time 179.982
 Amp 0.155
 Phase 170.3
 PFD 8.1e-01
 Delays (us)
 SBD 0.592004
 MBD 0.005072
 Fringe rate (Hz) -0.089803
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build 2024:334:010135
 2025:042:152928
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Group delay (usec) (SBD)	1.33836703407E+04		Apriori delay (usec)		1.33830715187E+04		Resid mbdelay (usec)		5.07201E-03	+/- 1.9E-04
Sband delay (usec)	1.33836635222E+04		Apriori clock (usec)		-4.8604774E-01		Resid sbdelay (usec)		5.92004E-01	+/- 1.5E-03
Phase delay (usec)	1.33830715210E+04		Apriori clockrate (us/s)		6.4719931E-08		Resid phdelay (usec)		2.27574E-06	+/- 1.3E-06
Delay rate (us/s)	-5.27008309943E-01		Apriori rate (us/s)		-5.27006228277E-01		Resid rate (us/s)		-2.08167E-06	+/- 1.2E-08
Total phase (deg)	284.0		Apriori accel (us/s/s)		-5.95296218810E-05		Resid phase (deg)		170.3	+/- 20.2
ph/seg (deg)	RMS 63.3	Theor. 47.3	Amplitude Search (1024X32)	0.155 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	91.8	82.6	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)	45.2	28.5	Inc. seg. avg.	0.163	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		Data rate(Mb/s): 2048		dr window (ns/s)	-0.023 0.023
amp/frq (%)	42.3	49.8	Inc. frq. avg.	0.153	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
f: az 67.7 el 58.8 pa -91.2		m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec) 1876.721 -1191.098		simultaneous interpolator				
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0527//fm..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//fm.Q.150.3MP8EV						

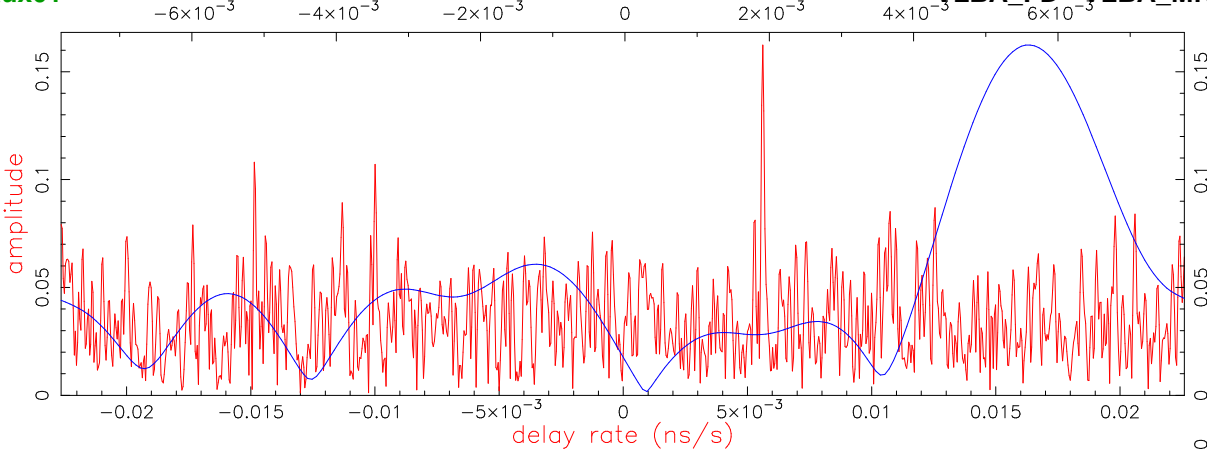
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, fm

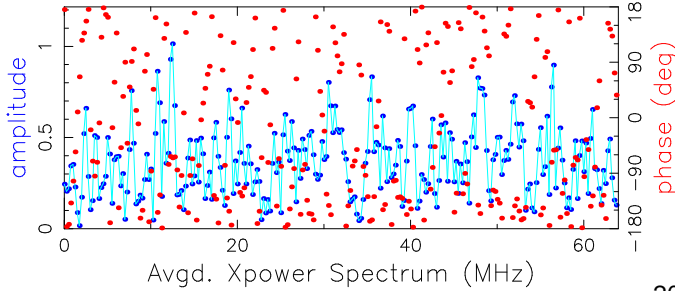
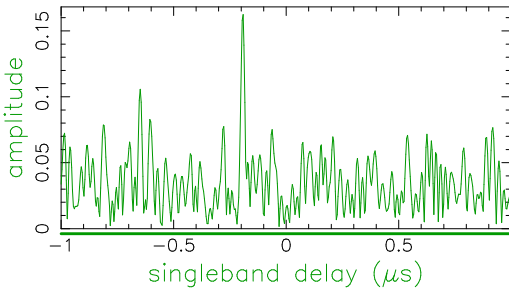
VLBA_FD - VLBA_MK, fgroup Q, pol RL

multiband delay (μ s)



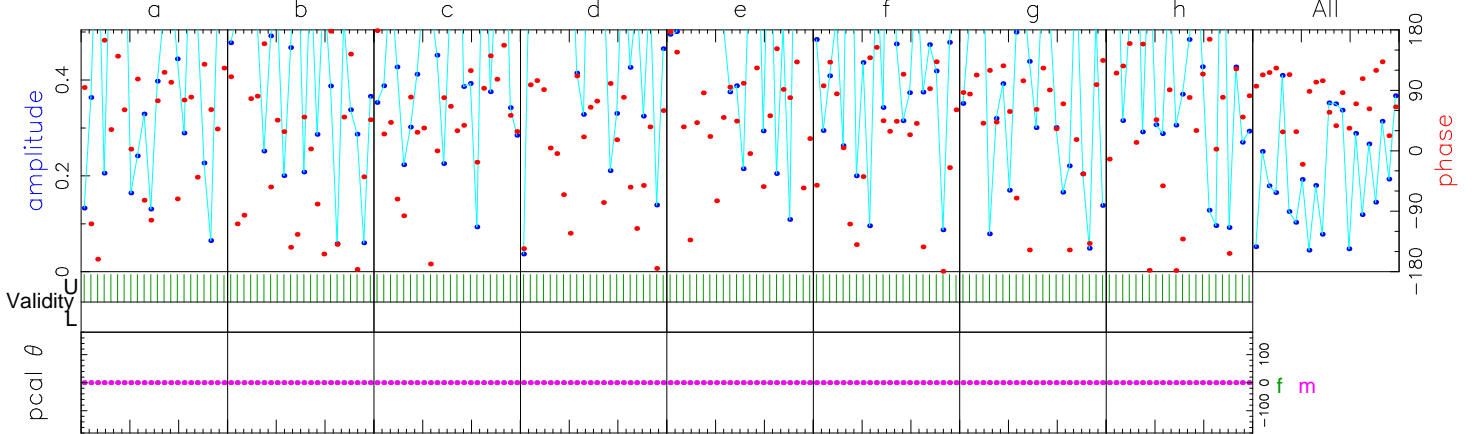
Fringe quality 0

SNR 6.0
 Int time 179.982
 Amp 0.168
 Phase -39.0
 PFD 2.1e-01
 Delays (us)
 SBD -0.192738
 MBD 0.005554
 Fringe rate (Hz)
 0.242839
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152930
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	1.33828739479E+04	Apriori delay (usec)	1.33830715187E+04	Resid mbdelay (usec)	5.55420E-03	+/-	1.8E-04
Sband delay (usec)	1.33828787809E+04	Apriori clock (usec)	-4.8604774E-01	Resid sbdelay (usec)	-1.92738E-01	+/-	1.4E-03
Phase delay (usec)	1.33830715234E+04	Apriori clockrate (us/s)	6.4719931E-08	Resid phdelay (usec)	4.73079E-06	+/-	1.2E-06
Delay rate (us/s)	-5.27000599194E-01	Apriori rate (us/s)	-5.27006228277E-01	Resid rate (us/s)	5.62908E-06	+/-	1.2E-08
Total phase (deg)	-285.4	Apriori accel (us/s/s)	-5.95296218810E-05	Resid phase (deg)	-39.0	+/-	19.0

ph/seg (deg)	40.3	Theor.	44.7	Amplitude	0.168 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.9	Search (1024X32)	0.157	Search	0.157	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	57.6	Inc. seg. avg.	0.163	Inc. seg. avg.	0.163	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.8	Inc. frq. avg.	0.160	Inc. frq. avg.	0.160	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
f: az 67.7 el 58.8 pa -91.2		m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec)	1876.721 -1191.098	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

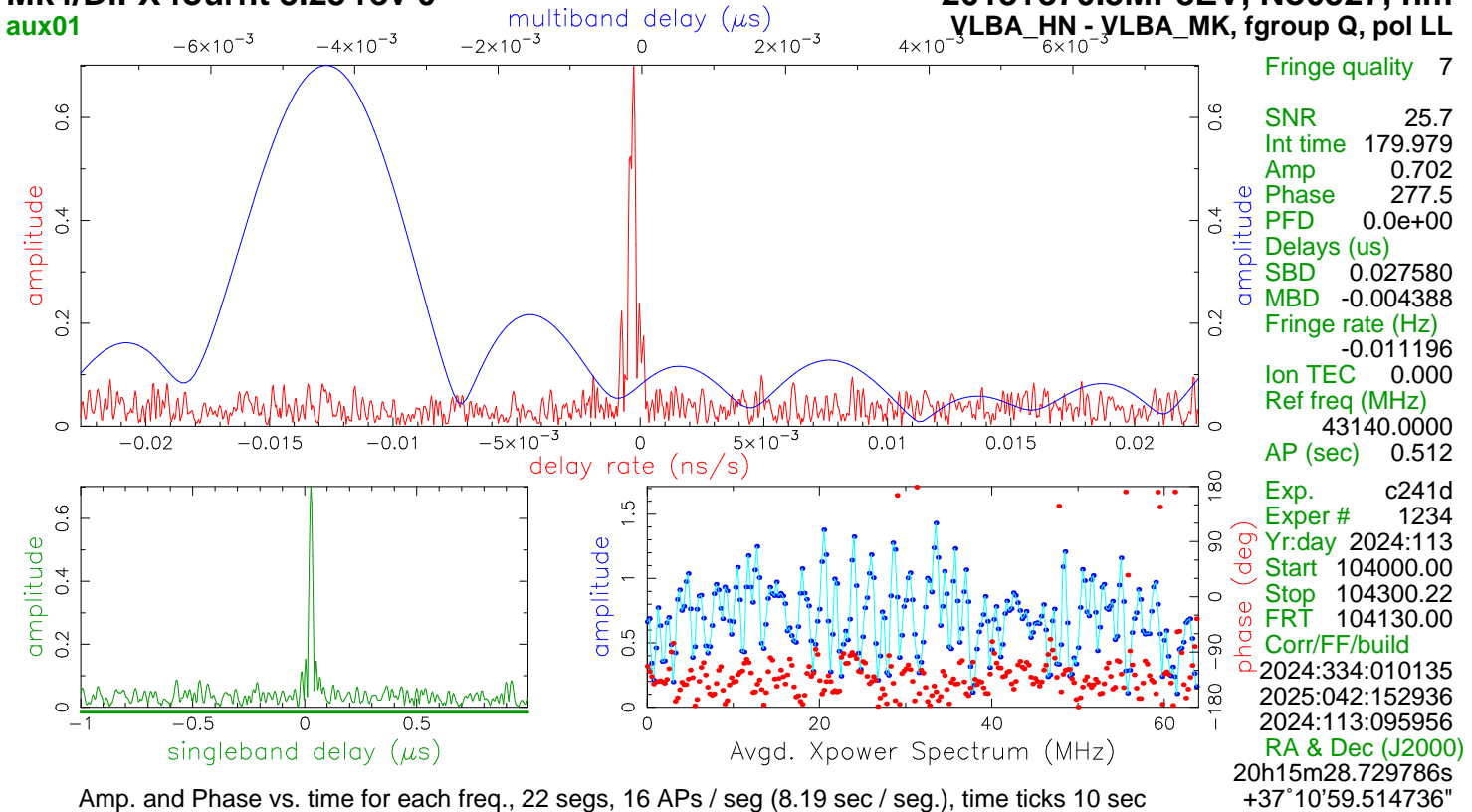
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/fm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/fm.Q.161.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

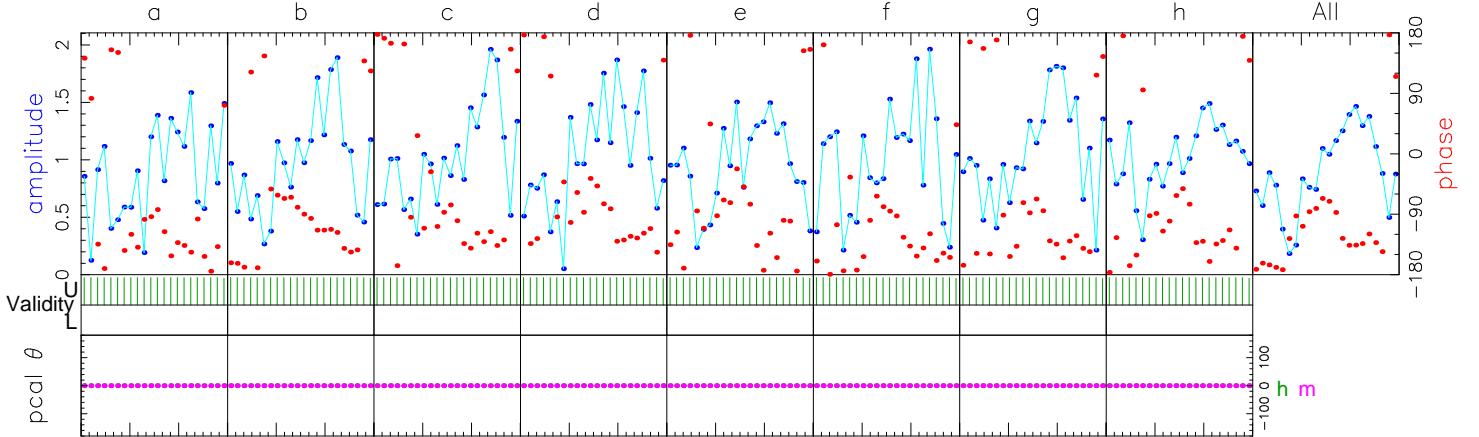
aux01

2013+370.3MP8EV, No0527, hm

VLBA_HN - VLBA_MK, fgroup Q, pol LL



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-143.9	-121.2	-132.0	-108.6	-118.0	-128.9	-134.8	-132.1	Phase	-127.5
	0.6	0.7	0.7	0.8	0.6	0.7	0.8	0.8	Ampl.	0.7
	263.9	264.1	264.5	263.9	264.1	263.4	264.0	264.3	Sbd box	264.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
h	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.62745429639E+04	Apriori delay (usec)	1.62745161023E+04	Resid mbdelay (usec)	-4.38840E-03	+/-	4.2E-05
Sband delay (usec)	1.62745436823E+04	Apriori clock (usec)	1.1878824E+01	Resid sbdelay (usec)	2.75800E-02	+/-	3.3E-04
Phase delay (usec)	1.62745160941E+04	Apriori clockrate (us/s)	9.3436977E-08	Resid phdelay (usec)	-8.20700E-06	+/-	2.9E-07
Delay rate (us/s)	-1.08787931053E+00	Apriori rate (us/s)	-1.08787905100E+00	Resid rate (us/s)	-2.59534E-07	+/-	2.8E-09
Total phase (deg)	152.6	Apriori accel (us/s/s)	-6.31324326345E-05	Resid phase (deg)	277.5	+/-	4.5

ph/seg (deg)	42.4	Theor.	10.4	Amplitude	0.702 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	57.5	Search (1024X32)	0.697	Search	0.697	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	11.9	Inc. seg. avg.	0.879	Inc. seg. avg.	0.879	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	10.3	Inc. frq. avg.	0.709	Inc. frq. avg.	0.709	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

h: az 143.9 el 83.1 pa -31.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 3897.596 -706.473 simultaneous interpolator

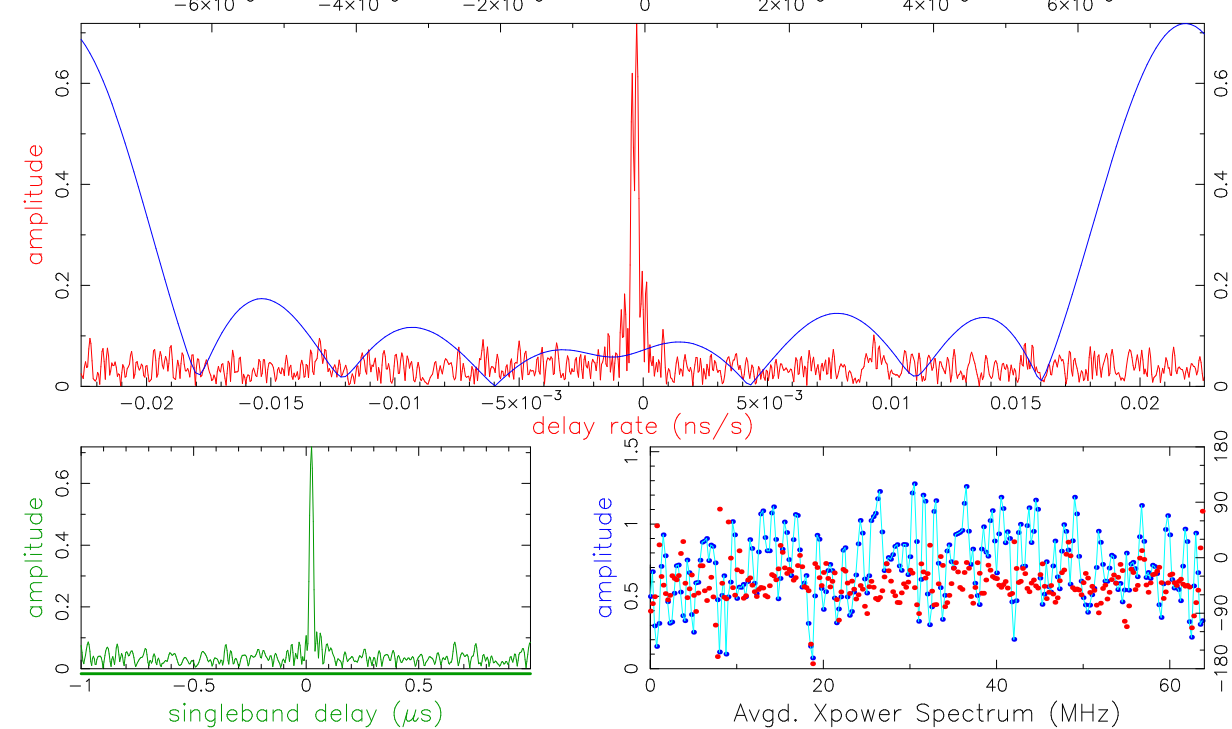
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/hm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/hm.Q.193.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, hm

VLBA_HN - VLBA_MK, fgroup Q, pol RR

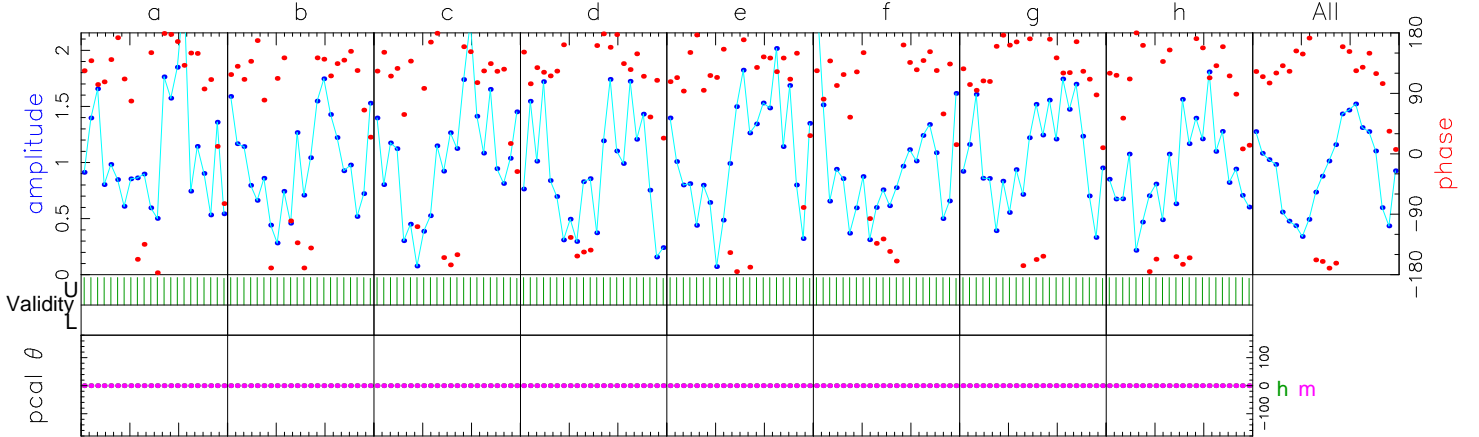


Fringe quality 7

SNR 26.4
 Int time 179.979
 Amp 0.719
 Phase 342.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.023265
 MBD 0.007483
 Fringe rate (Hz) -0.010826
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152942
 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
143.4	136.4	141.8	142.0	138.2	130.3	142.7	145.9	140.2	Phase	140.2
0.8	0.7	0.7	0.7	0.8	0.6	0.8	0.6	0.7	Ampl.	0.7
262.7	263.1	263.0	262.9	263.2	262.6	262.6	263.7	263.0	Sbd box	263.0
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
h 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
h:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
h:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
h 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000	1000	1000	1000	1000	1000		
h	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	1.62745392106E+04	Apriori delay (usec)	1.62745161023E+04	Resid mbdelay (usec)	7.48335E-03	+/-	4.1E-05
Sband delay (usec)	1.62745393675E+04	Apriori clock (usec)	1.1878824E+01	Resid sbdelay (usec)	2.32653E-02	+/-	3.3E-04
Phase delay (usec)	1.62745161113E+04	Apriori clockrate (us/s)	9.3436977E-08	Resid phdelay (usec)	9.02895E-06	+/-	2.8E-07
Delay rate (us/s)	-1.08787930195E+00	Apriori rate (us/s)	-1.08787905100E+00	Resid rate (us/s)	-2.50954E-07	+/-	2.7E-09
Total phase (deg)	217.7	Apriori accel (us/s/s)	-6.31324326345E-05	Resid phase (deg)	342.7	+/-	4.3

ph/seg (deg)	47.1	10.2	Search (1024X32)	0.692	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	58.9	17.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	5.4	6.1	Inc. seg. avg.	0.919	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023
amp/frq (%)	9.9	10.7	Inc. frq. avg.	0.716	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

h: az 143.9 el 83.1 pa -31.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 3897.596 -706.473 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/hm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/hm.Q.218.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

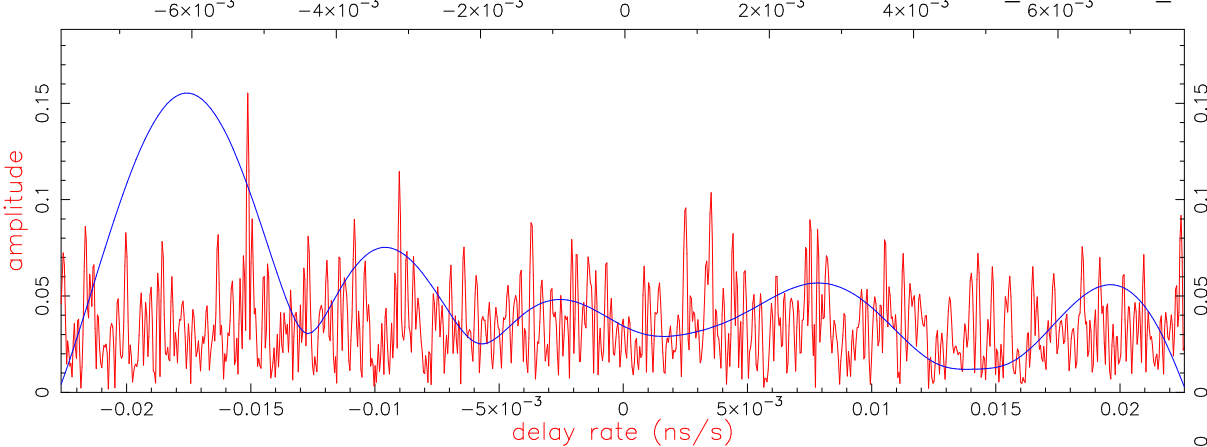
aux01

2013+370.3MP8EV, No0527, hm

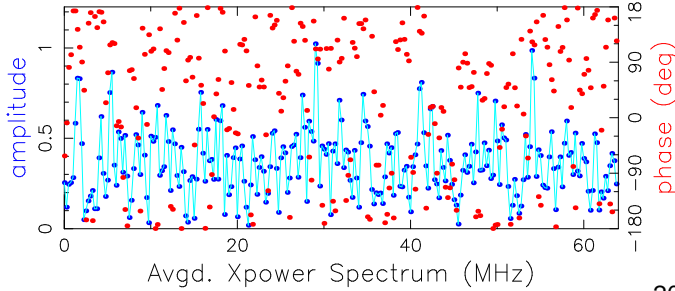
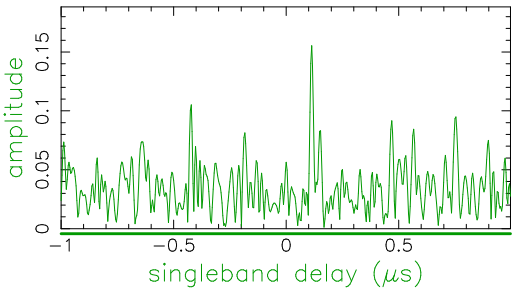
VLBA_HN - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

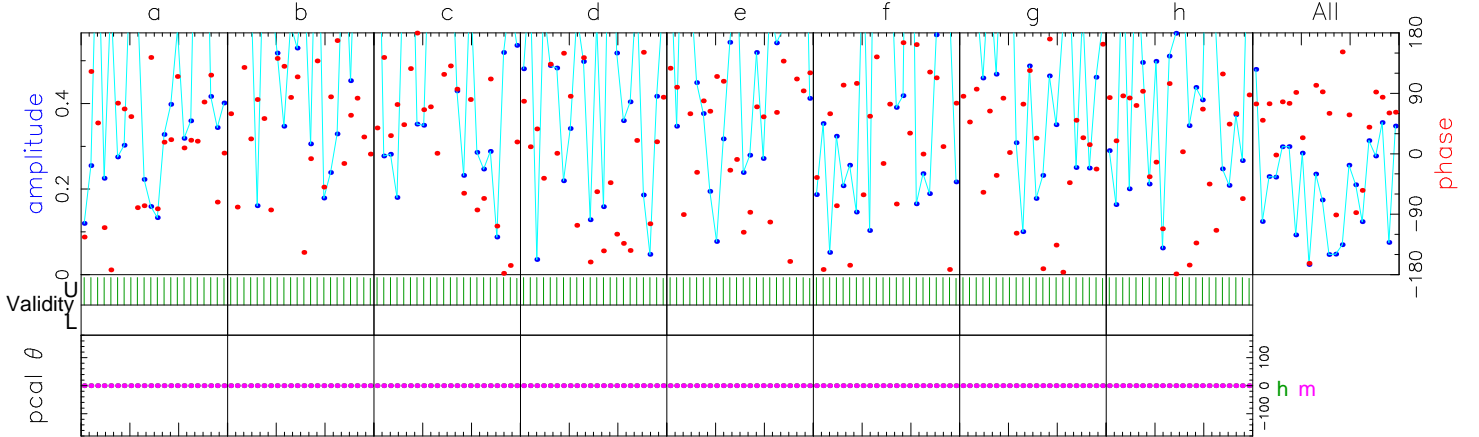


SNR 5.7
 Int time 179.979
 Amp 0.188
 Phase 244.6
 PFD 7.8e-01
 Delays (us)
 SBD 0.113139
 MBD -0.006075
 Fringe rate (Hz)
 -0.655775
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152944
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	1.62746350277E+04	Apriori delay (usec)	1.62745161023E+04	Resid mbdelay (usec)	-6.07460E-03	+/-	1.9E-04
Sband delay (usec)	1.62746292415E+04	Apriori clock (usec)	1.1878824E+01	Resid sbdelay (usec)	1.13139E-01	+/-	1.5E-03
Phase delay (usec)	1.62745161064E+04	Apriori clockrate (us/s)	9.3436977E-08	Resid phdelay (usec)	4.15893E-06	+/-	1.3E-06
Delay rate (us/s)	-1.08789425209E+00	Apriori rate (us/s)	-1.08787905100E+00	Resid rate (us/s)	-1.52011E-05	+/-	1.2E-08
Total phase (deg)	119.6	Apriori accel (us/s/s)	-6.31324326345E-05	Resid phase (deg)	244.6	+/-	20.1

ph/seg (deg)	66.8	Theor.	Amplitude	0.188 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.4	47.2	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	37.1	28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	36.9	49.6	Inc. seg. avg.	0.189	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
			Inc. frq. avg.	0.184	Data rate(Mb/s): 2048				

h: az 143.9 el 83.1 pa -31.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 3897.596 -706.473 simultaneous interpolator

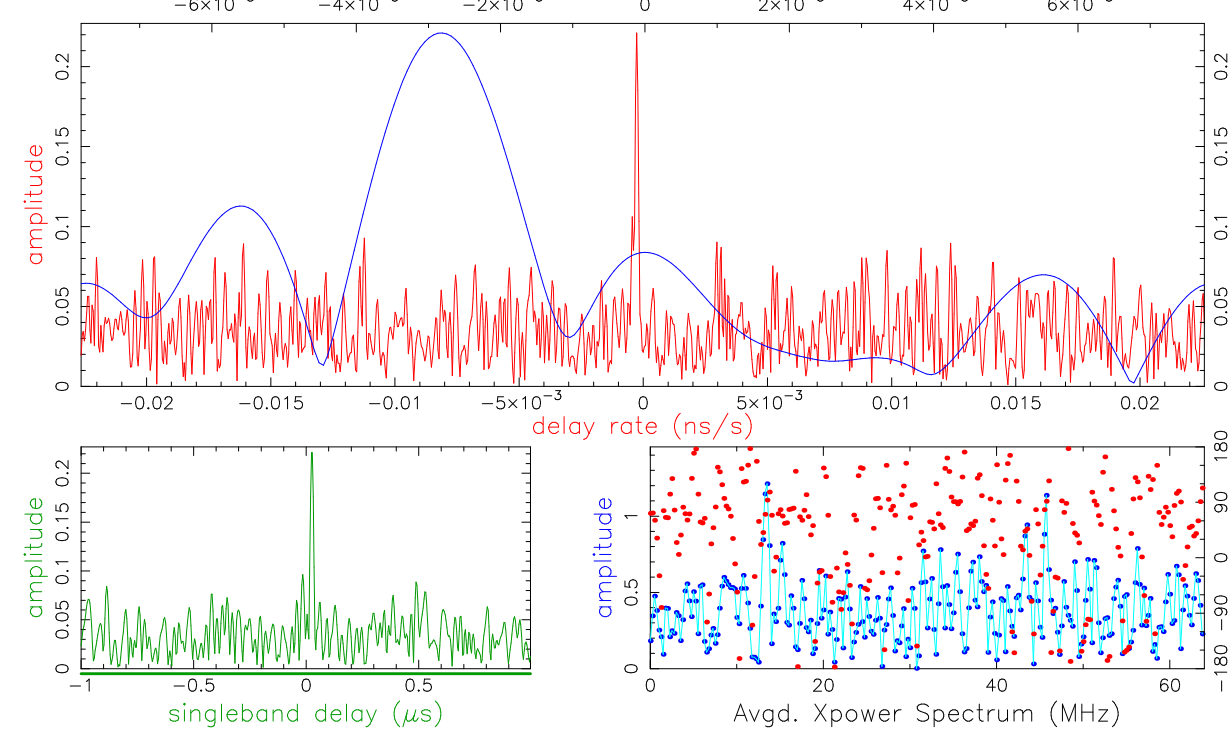
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/hm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/hm.Q.232.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

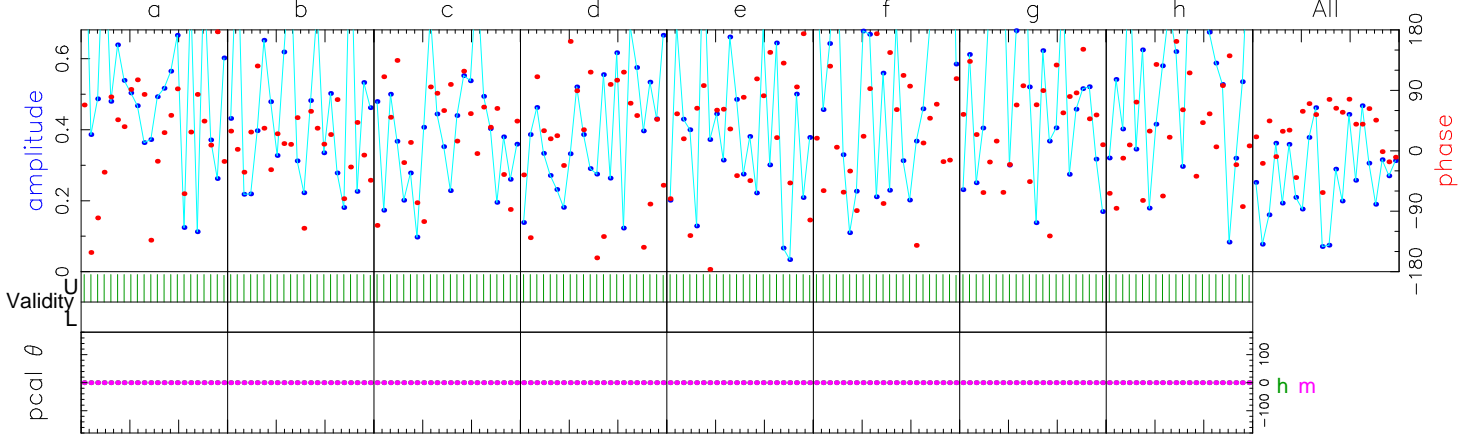
2013+370.3MP8EV, No0527, hm

VLBA_HN - VLBA_MK, fgroup Q, pol RL



Fringe quality 9
 SNR 8.3
 Int time 179.979
 Amp 0.227
 Phase 79.4
 PFD 1.4e-08
 Delays (us)
 SBD 0.025369
 MBD -0.002809
 Fringe rate (Hz)
 -0.011632
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152947
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	1.62745445431E+04	Apriori delay (usec)	1.62745161023E+04	Resid mbdelay (usec)	-2.80915E-03	+/-	1.3E-04
Sband delay (usec)	1.62745414715E+04	Apriori clock (usec)	1.1878824E+01	Resid sbdelay (usec)	2.53692E-02	+/-	1.0E-03
Phase delay (usec)	1.62745161045E+04	Apriori clockrate (us/s)	9.3436977E-08	Resid phdelay (usec)	2.21559E-06	+/-	8.9E-07
Delay rate (us/s)	-1.08787932063E+00	Apriori rate (us/s)	-1.08787905100E+00	Resid rate (us/s)	-2.69638E-07	+/-	8.5E-09
Total phase (deg)	314.4	Apriori accel (us/s/s)	-6.31324326345E-05	Resid phase (deg)	79.4	+/-	13.8

	RMS	Theor.	Amplitude	0.227 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	39.1	32.3	Search (1024X32)	0.218	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	53.7	56.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	24.6	19.5	Inc. seg. avg.	0.228	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
amp/frq (%)	34.4	34.0	Inc. frq. avg.	0.222	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

h: az 143.9 el 83.1 pa -31.2 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 3897.596 -706.473 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/hm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/hm.Q.244.3MP8EV

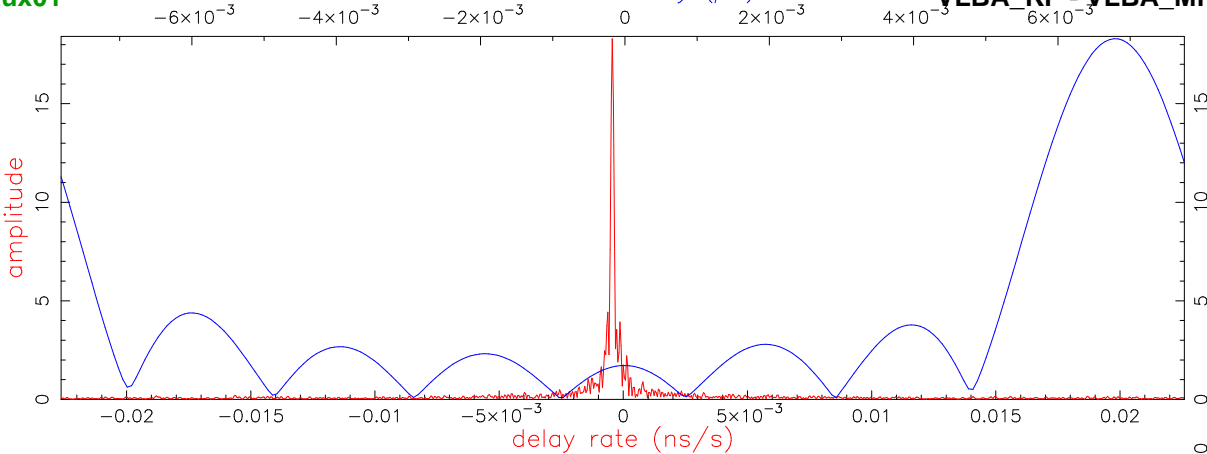
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, km

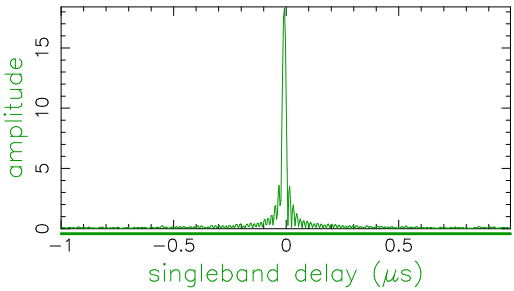
VLBA_KP - VLBA_MK, fgroup Q, pol LL

multiband delay (μ s)

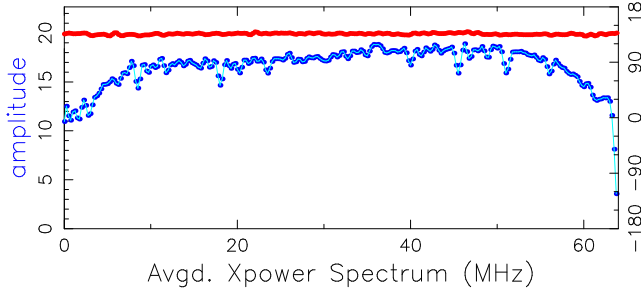


Fringe quality 8

SNR 675.5
 Int time 179.983
 Amp 18.415
 Phase -246.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.008831
 MBD 0.006769
 Fringe rate (Hz)
 -0.018969
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



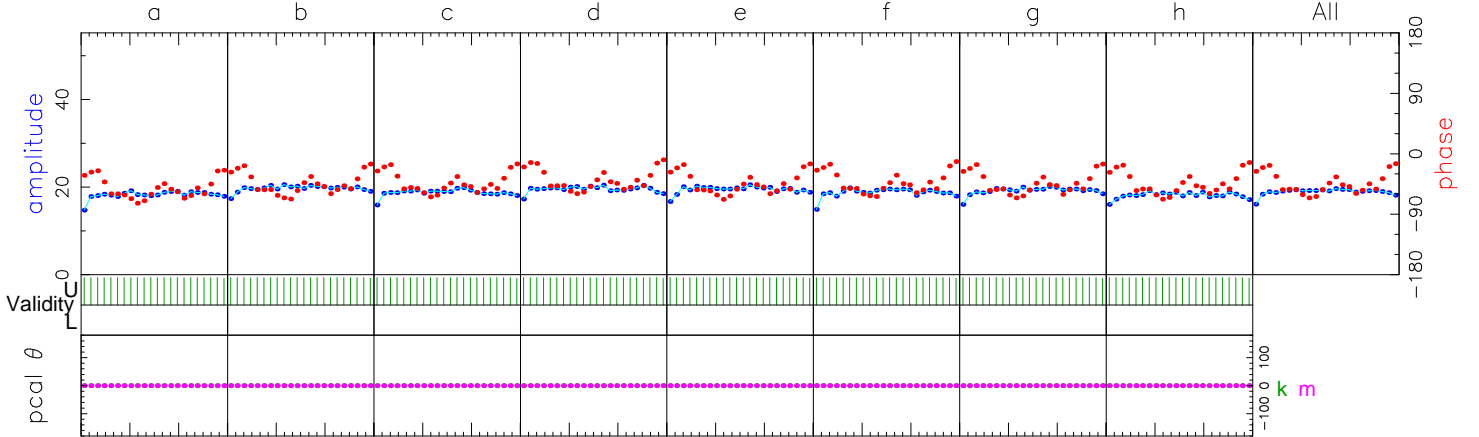
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152946
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	1.22249708007E+04	Apriori delay (usec)	1.22249796571E+04	Resid mbdelay (usec)	6.76860E-03	+/-	1.6E-06
Sband delay (usec)	1.22249708259E+04	Apriori clock (usec)	-3.9315414E-01	Resid sbdelay (usec)	-8.83125E-03	+/-	1.3E-05
Phase delay (usec)	1.22249796543E+04	Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	-2.81956E-06	+/-	1.1E-08
Delay rate (us/s)	-4.29131667547E-01	Apriori rate (us/s)	-4.29131227834E-01	Resid rate (us/s)	-4.39713E-07	+/-	1.0E-10
Total phase (deg)	-98.9	Apriori accel (us/s/s)	-5.20249959447E-05	Resid phase (deg)	-246.3	+/-	0.2

ph/seg (deg)	15.3	RMS	15.3	Theor.	0.4	Amplitude	18.415 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	4.8		4.8		0.7	Search (1024X32)	18.202	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	3.8		3.8		0.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	3.0		3.0		0.4	Inc. seg. avg.	18.959	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	nlags:	256	ion window (TEC)	0.00	0.00
						Inc. frq. avg.	18.327	Data rate (Mb/s):	2048	t_cohere	infinite			

k: az 69.1 el 53.2 pa -84.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1527.222 -894.753 simultaneous interpolator

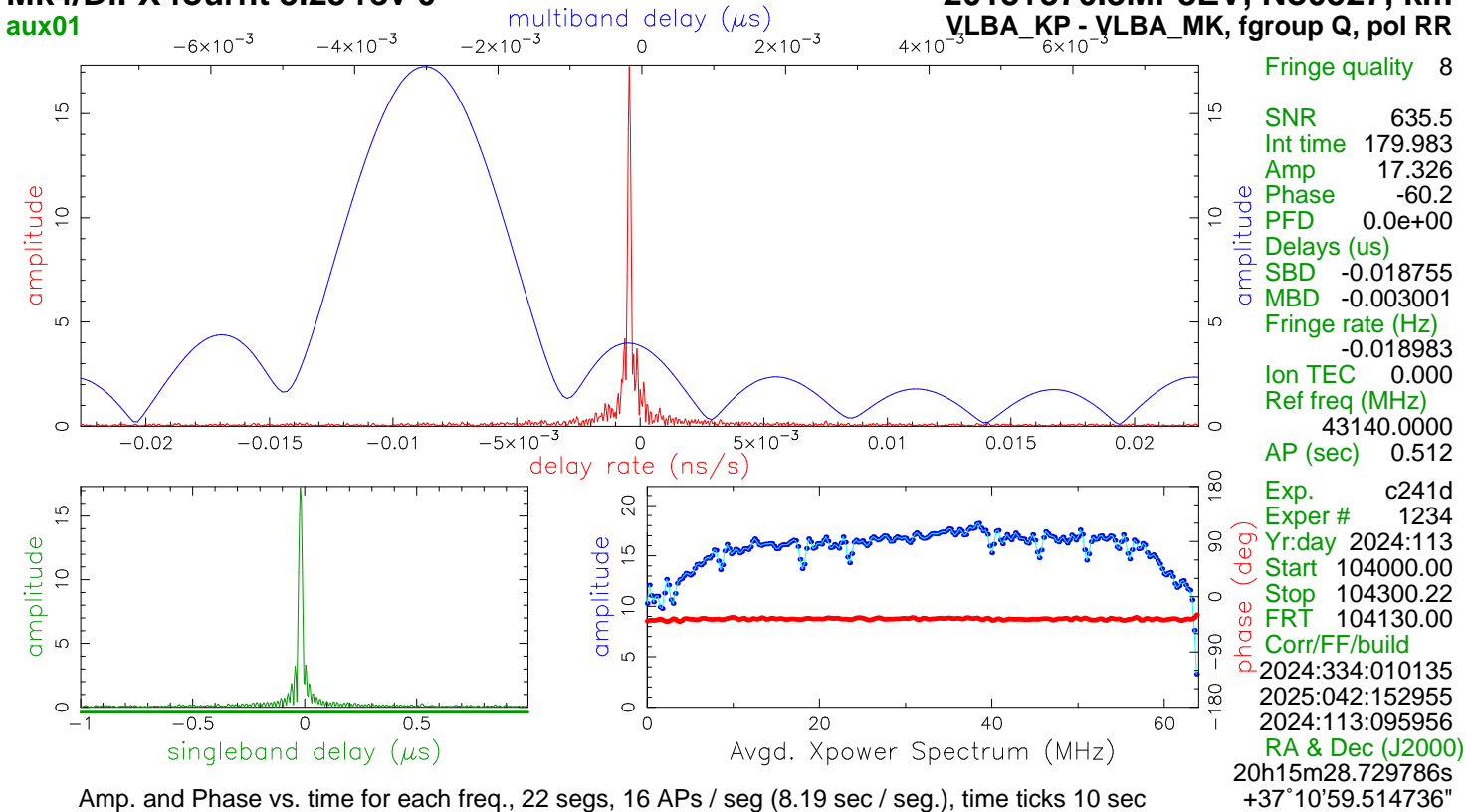
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//km..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//km.Q.243.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

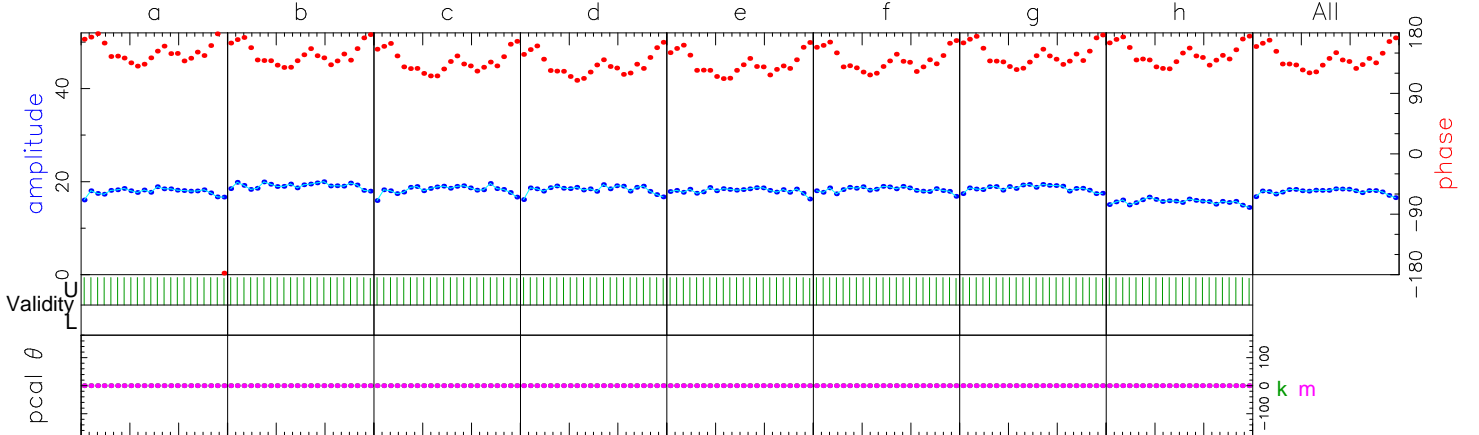
aux01

2013+370.3MP8EV, No0527, km

VLBA_KP - VLBA_MK, fgroup Q, pol RR



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



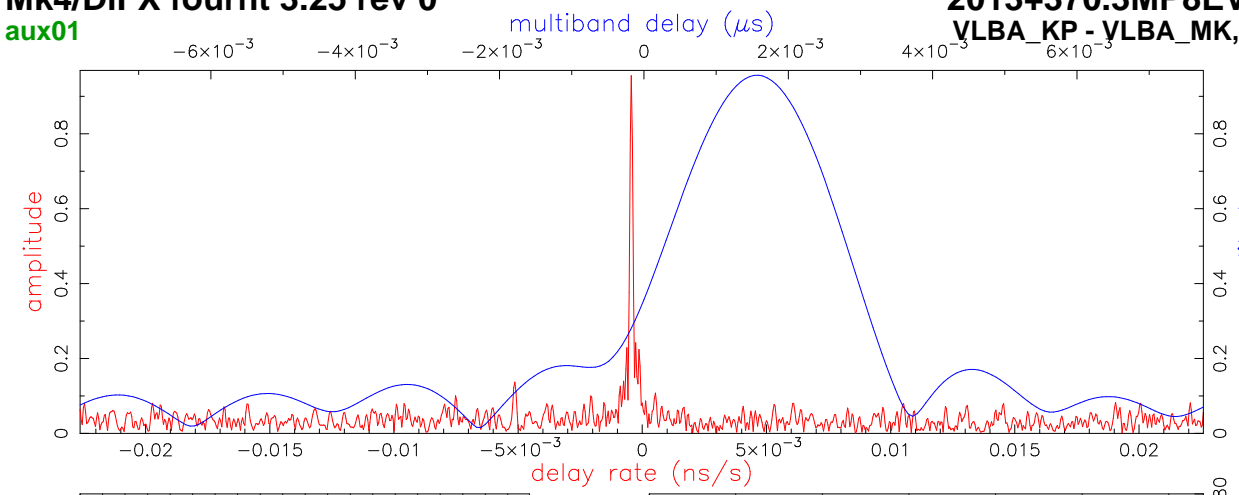
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
152.8	148.2	137.0	132.5	133.7	139.5	147.1	148.0	148.0	Phase	142.3
17.2	18.5	17.6	17.6	17.4	17.6	17.9	15.2	15.2	Ampl.	17.4
251.7	252.1	252.2	252.3	252.3	252.2	252.1	252.6	252.6	Sbd box	252.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	1.22249610316E+04		Apriori delay (usec)	1.22249796571E+04	Resid mbdelay (usec)	-3.00058E-03	+/-	1.7E-06		
Sband delay (usec)	1.22249609019E+04		Apriori clock (usec)	-3.9315414E-01	Resid sbdelay (usec)	-1.87552E-02	+/-	1.4E-05		
Phase delay (usec)	1.22249796663E+04		Apriori clockrate (us/s)	1.6670606E-07	Resid phdelay (usec)	9.16264E-06	+/-	1.2E-08		
Delay rate (us/s)	-4.29131667870E-01		Apriori rate (us/s)	-4.29131227834E-01	Resid rate (us/s)	-4.40036E-07	+/-	1.1E-10		
Total phase (deg)		87.1	Apriori accel (us/s/s)	-5.20249959447E-05	Resid phase (deg)	-60.2	+/-	0.2		
RMS	15.4	0.4	Amplitude	17.326 +/- 0.027	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
ph/seg (deg)	15.4	0.4	Search (1024X32)	17.156	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)	4.4	0.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	8.2	0.3	Inc. seg. avg.	17.888	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023		
amp/frq (%)	5.3	0.4	Inc. frq. avg.	17.396	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00	
k: az 69.1 el 53.2 pa -84.7			m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec)	1527.222 -894.753		simultaneous interpolator		
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//km..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//km.Q.285.3MP8EV					

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, km

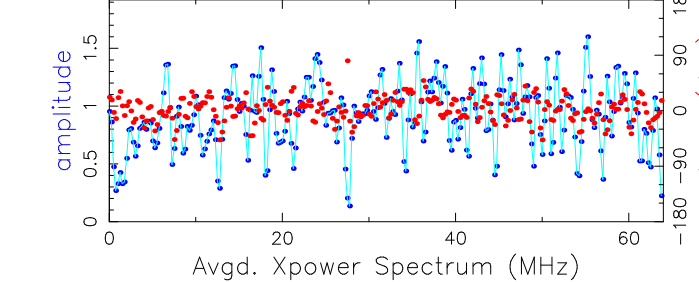
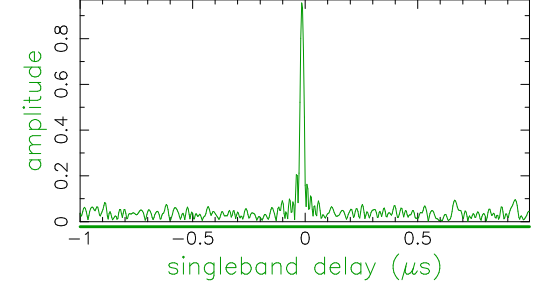
VLBA_KP - VLBA_MK, fgroup Q, pol LR



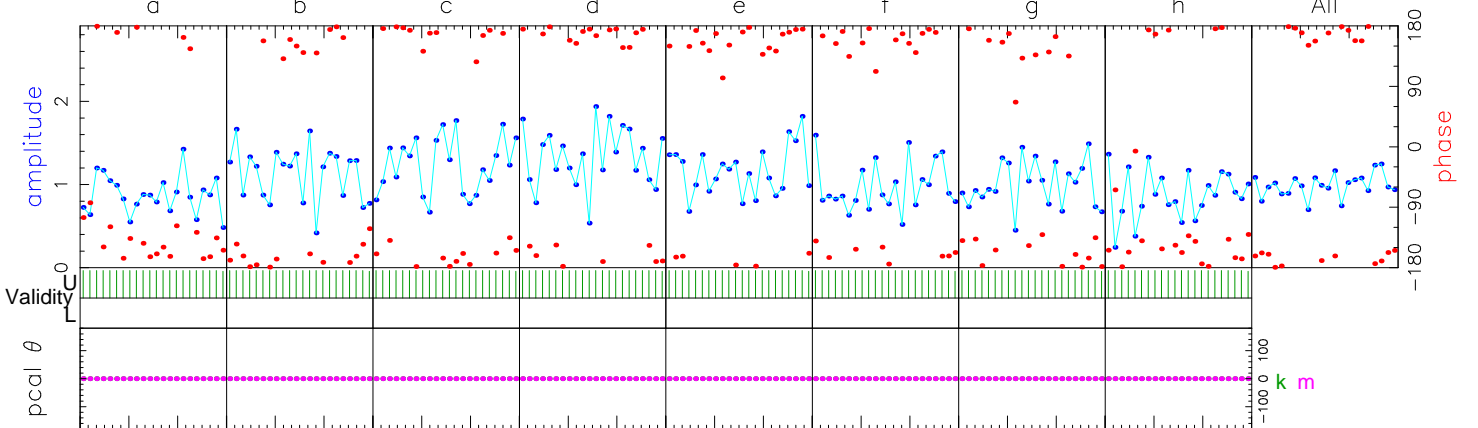
Fringe quality 8

SNR 35.6
 Int time 179.983
 Amp 0.969
 Phase -21.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.014124
 MBD 0.001616
 Fringe rate (Hz) -0.019028
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152959
 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
	-156.2	-178.2	-176.0	176.1	165.2	174.1	177.2	-160.6	Phase	-178.6
	0.8	1.0	1.2	1.3	1.1	0.9	0.8	0.8	Ampl.	1.0
	252.8	253.4	253.4	253.5	253.6	253.1	253.6	253.8	Sbd box	253.4
U/L	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) 1.22249656486E+04 Apriori delay (usec) 1.22249796571E+04 Resid mbdelay (usec) 1.61642E-03 +/- 3.1E-05
 Sband delay (usec) 1.22249655326E+04 Apriori clock (usec) -3.9315414E-01 Resid sbdelay (usec) -1.41245E-02 +/- 2.4E-04
 Phase delay (usec) 1.22249796456E+04 Apriori clockrate (us/s) 1.6670606E-07 Resid phdelay (usec) -1.14993E-05 +/- 2.1E-07
 Delay rate (us/s) -4.29131668906E-01 Apriori rate (us/s) -4.29131227834E-01 Resid rate (us/s) -4.41072E-07 +/- 2.0E-09
 Total phase (deg) -233.7 Apriori accel (us/s/s) -5.20249959447E-05 Resid phase (deg) -21.1 +/- 3.2

ph/seg (deg) 15.9 7.6 Search (1024X32) 0.945 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.2 13.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.1 4.6 Inc. seg. avg. 0.984 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 17.9 8.0 Inc. frq. avg. 0.972 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

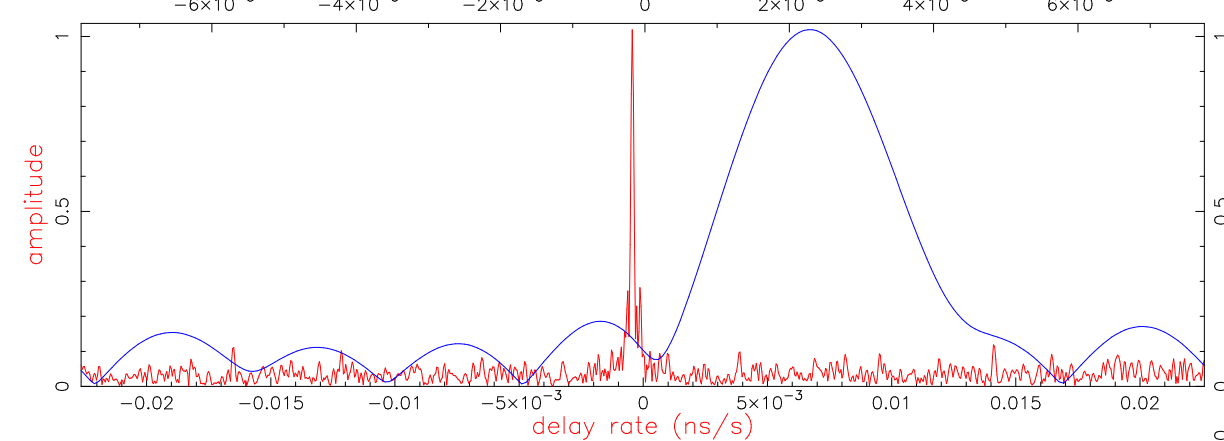
k: az 69.1 el 53.2 pa -84.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1527.222 -894.753 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//km..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//km.Q.305.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

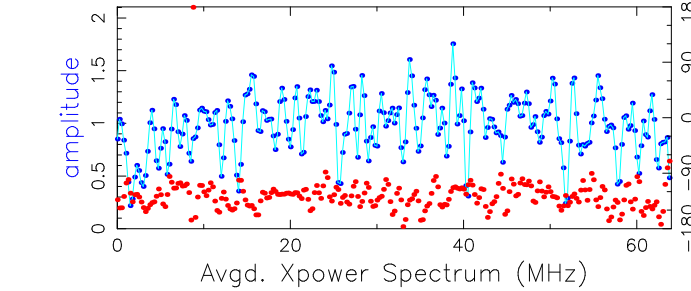
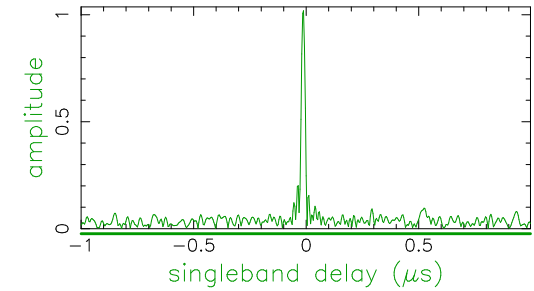
2013+370.3MP8EV, No0527, km

VLBA_KP - VLBA_MK, fgroup Q, pol RL



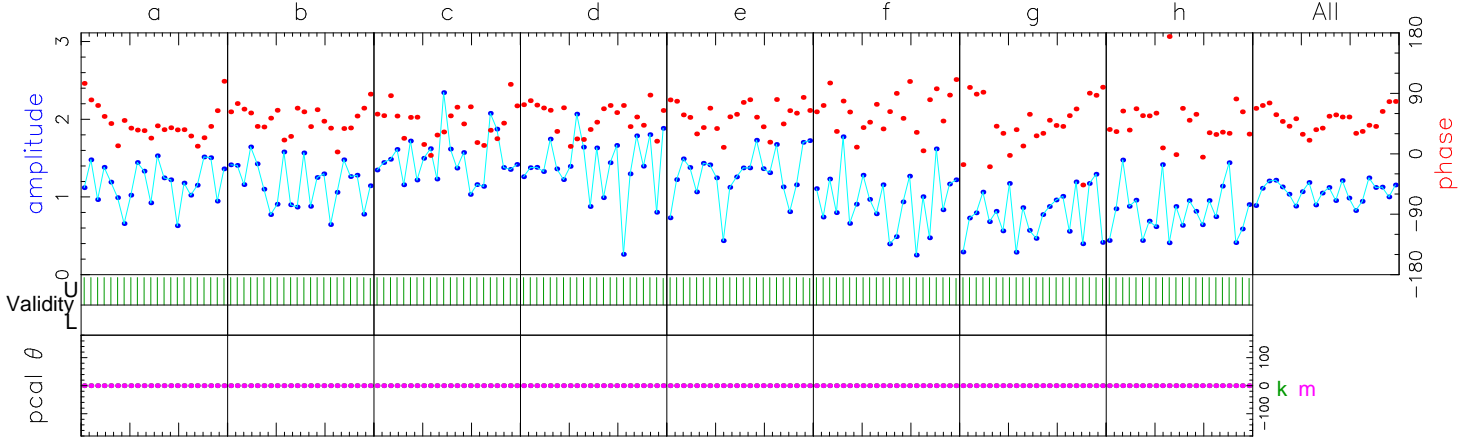
Fringe quality 8

SNR 38.0
 Int time 179.983
 Amp 1.037
 Phase -151.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.013419
 MBD 0.002250
 Fringe rate (Hz)
 -0.018767
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153001
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD) 1.22249662819E+04 Apriori delay (usec) 1.22249796571E+04 Resid mbdelay (usec) 2.24979E-03 +/- 2.9E-05
 Sband delay (usec) 1.22249662386E+04 Apriori clock (usec) -3.9315414E-01 Resid sbdelay (usec) -1.34185E-02 +/- 2.3E-04
 Phase delay (usec) 1.22249796605E+04 Apriori clockrate (us/s) 1.6670606E-07 Resid phdelay (usec) 3.31399E-06 +/- 1.9E-07
 Delay rate (us/s) -4.29131662853E-01 Apriori rate (us/s) -4.29131227834E-01 Resid rate (us/s) -4.35019E-07 +/- 1.9E-09
 Total phase (deg) -3.7 Apriori accel (us/s/s) -5.20249959447E-05 Resid phase (deg) -151.0 +/- 3.0

ph/seg (deg) 16.4 7.1 Search (1024X32) 1.005 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 12.0 12.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.0 4.3 Inc. seg. avg. 1.054 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.2 7.4 Inc. frq. avg. 1.025 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 69.1 el 53.2 pa -84.7 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1527.222 -894.753 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//km..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//km.Q.316.3MP8EV

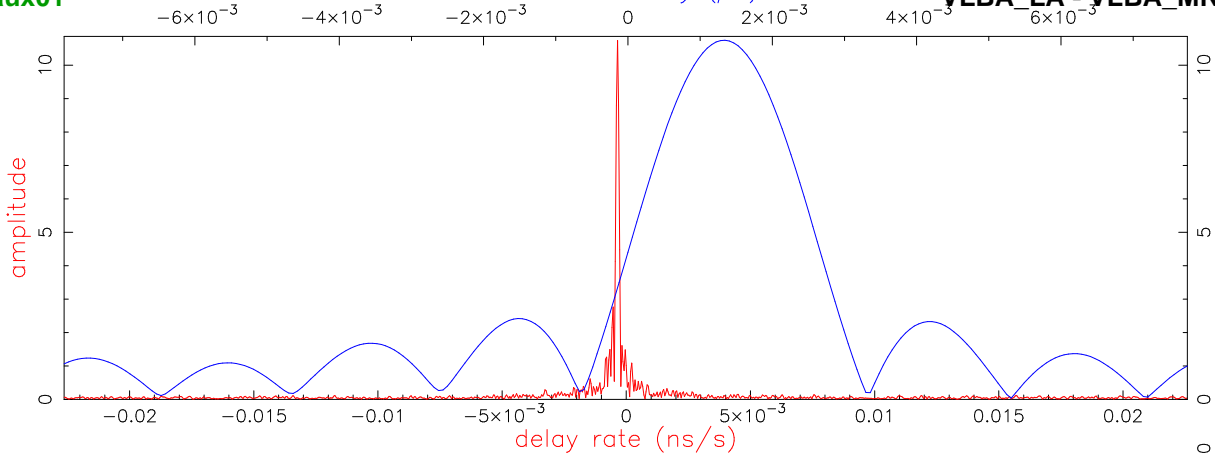
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, Im

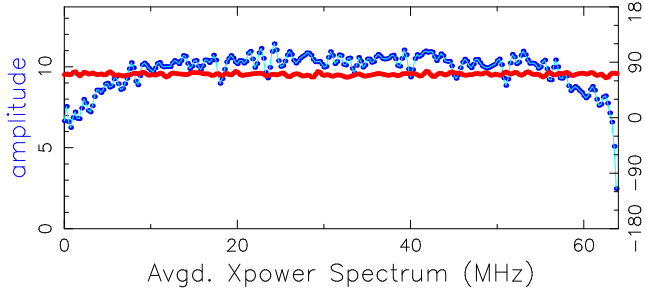
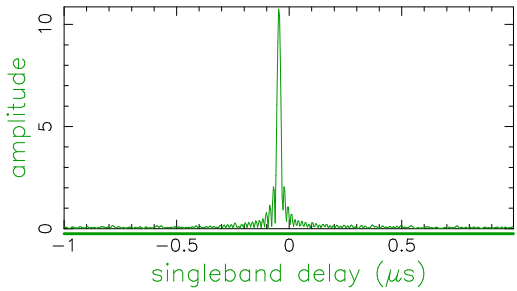
VLBA_LA - VLBA_MK, fgroup Q, pol LL

multiband delay (μ s)



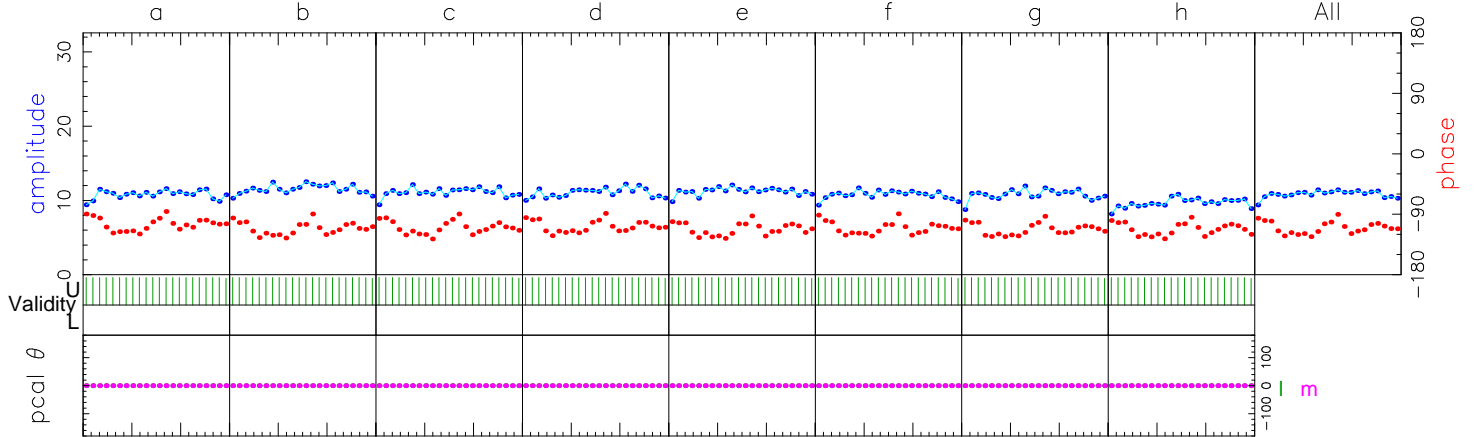
Fringe quality 9

SNR 398.4
 Int time 179.982
 Amp 10.861
 Phase -357.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.045547
 MBD 0.001363
 Fringe rate (Hz)
 -0.015309
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152943
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	1.33351394014E+04	Apriori delay (usec)		1.33351849130E+04	Resid mbdelay (usec)		1.36338E-03	+/-	2.7E-06
Sband delay (usec)	1.33351393663E+04	Apriori clock (usec)		-8.8440952E+00	Resid sbdelay (usec)		-4.55468E-02	+/-	2.2E-05
Phase delay (usec)	1.33351849059E+04	Apriori clockrate (us/s)		-2.1950107E-07	Resid phdelay (usec)		-7.07979E-06	+/-	1.9E-08
Delay rate (us/s)	-5.31258480016E-01	Apriori rate (us/s)		-5.31258125158E-01	Resid rate (us/s)		-3.54858E-07	+/-	1.8E-10
Total phase (deg)	-304.6	Apriori accel (us/s/s)		-5.41963316231E-05	Resid phase (deg)		-357.5	+/-	0.3

ph/seg (deg)	8.8	Theor.	Amplitude	10.861 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	4.2	0.7	Search (1024X32)	10.657	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	2.8	0.4	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	4.7	0.7	Inc. seg. avg.	10.870	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
			Inc. frq. avg.	10.753	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 75.4 el 58.6 pa -80.6 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1894.804 -766.732 simultaneous interpolator

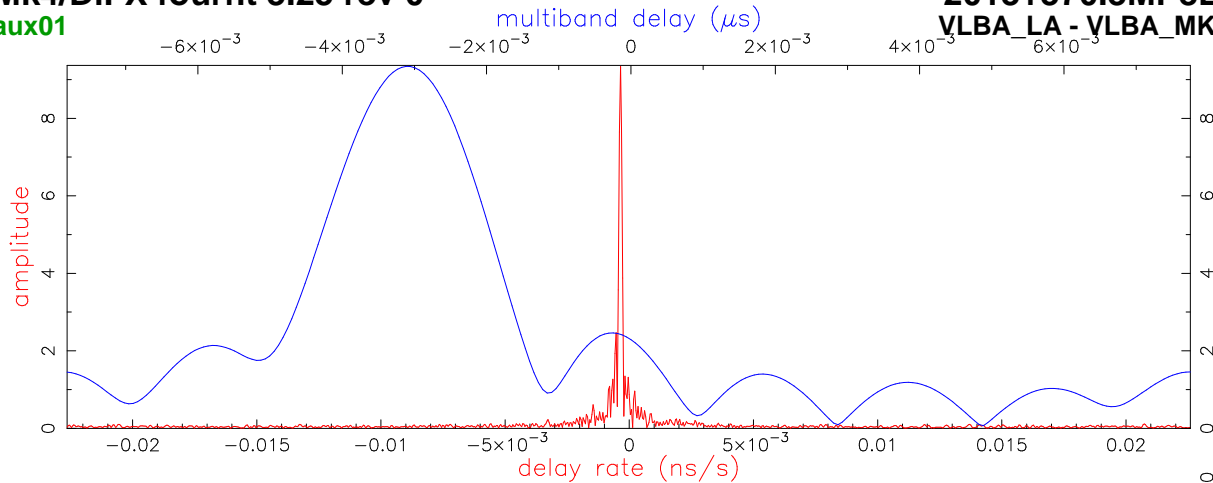
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Im..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Im.Q.226.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

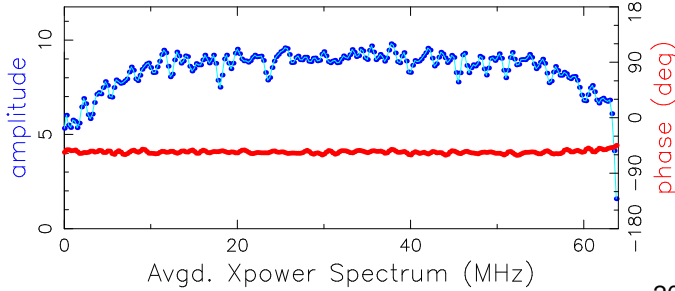
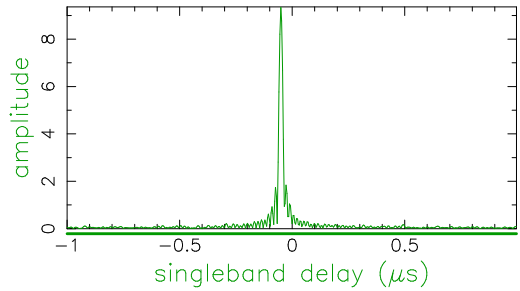
2013+370.3MP8EV, No0527, Im

VLBA_LA - VLBA_MK, fgroup Q, pol RR



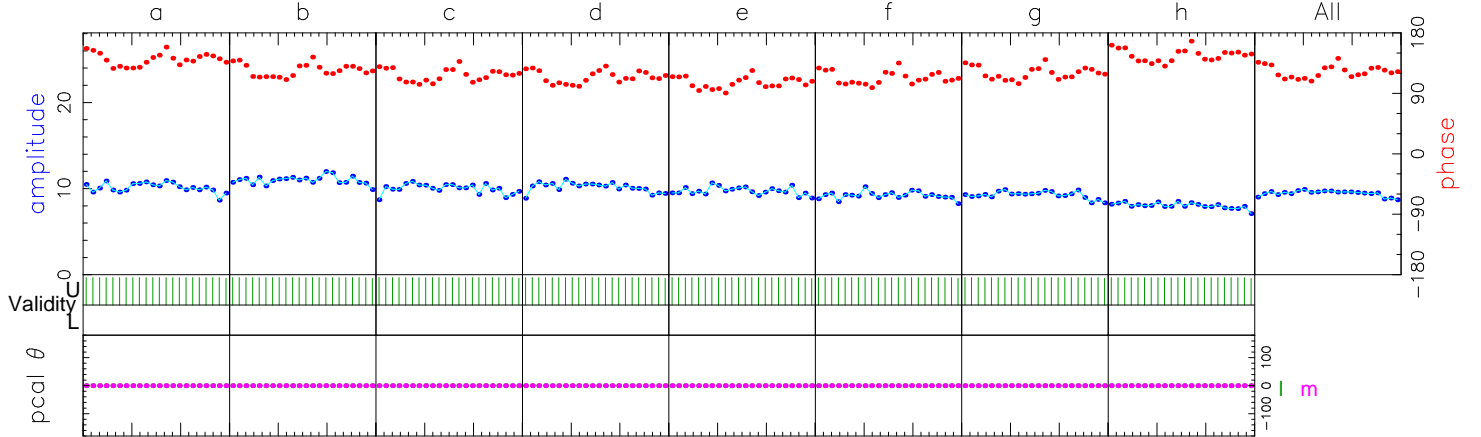
Fringe quality 8

SNR 343.6
 Int time 179.982
 Amp 9.366
 Phase -125.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.050122
 MBD -0.003075
 Fringe rate (Hz)
 -0.015309
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152945
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



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

Group delay (usec) (SBD)	1.33351349633E+04	Apriori delay (usec)	1.33351849130E+04	Resid mbdelay (usec)	-3.07474E-03	+/-	3.2E-06
Sband delay (usec)	1.33351347908E+04	Apriori clock (usec)	-8.8440952E+00	Resid sbdelay (usec)	-5.01222E-02	+/-	2.5E-05
Phase delay (usec)	1.33351849209E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	7.87168E-06	+/-	2.1E-08
Delay rate (us/s)	-5.31258480022E-01	Apriori rate (us/s)	-5.31258125158E-01	Resid rate (us/s)	-3.54864E-07	+/-	2.1E-10
Total phase (deg)	-72.4	Apriori accel (us/s/s)	-5.41963316231E-05	Resid phase (deg)	-125.2	+/-	0.3

ph/seg (deg)	8.9	0.8	Amplitude	9.366 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	3.5	1.4	Search (1024X32)	9.239	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	15.3	0.5	Inc. seg. avg.	9.456	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	8.9	0.8	Inc. frq. avg.	9.580	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

l: az 75.4 el 58.6 pa -80.6 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1894.804 -766.732 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Im..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Im.Q.237.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

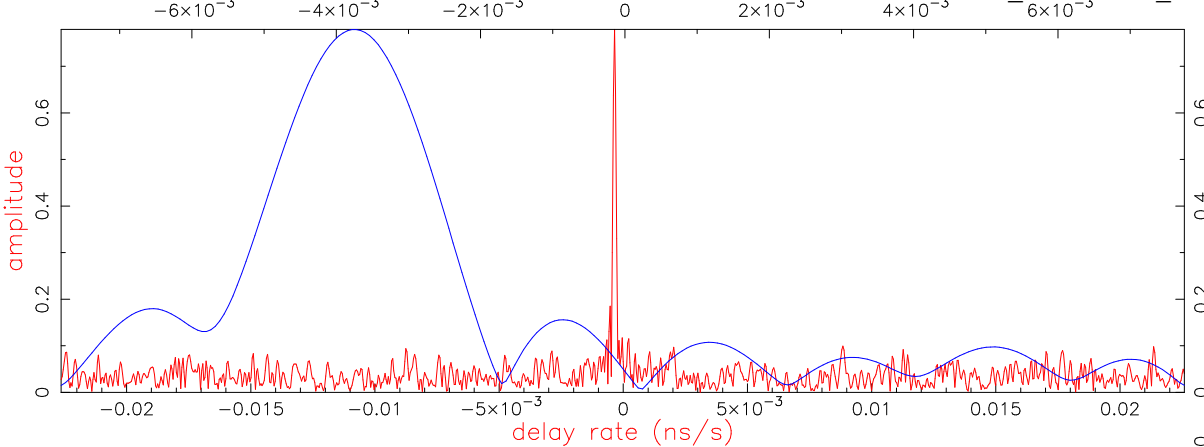
aux01

2013+370.3MP8EV, No0527, Im

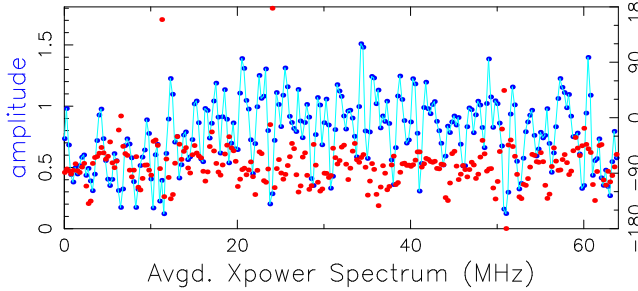
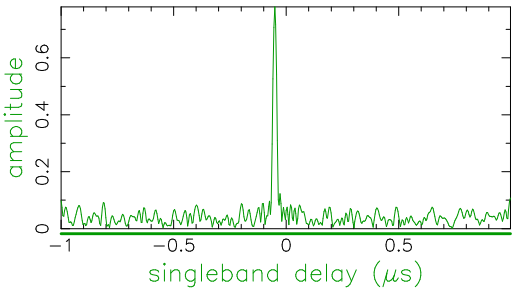
VLBA_LA - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 9

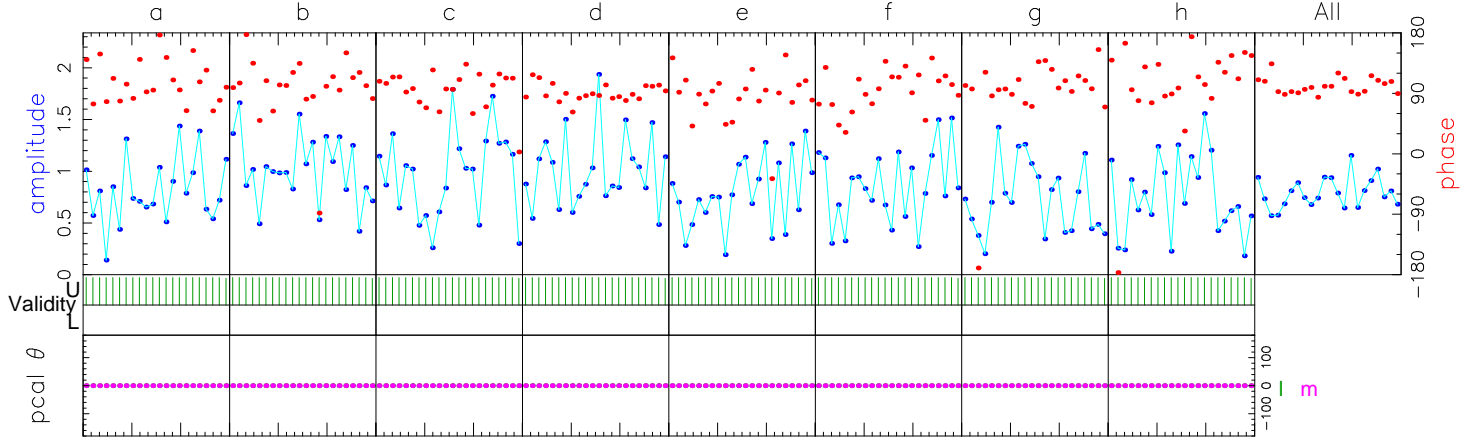


SNR 28.6
 Int time 179.982
 Amp 0.779
 Phase -146.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.050609
 MBD -0.003744
 Fringe rate (Hz)
 -0.015166
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152952
 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	110.0	107.1	99.8	90.6	91.1	98.5	103.2	113.6	Phase	101.2
l	0.7	0.9	0.9	1.0	0.7	0.8	0.7	0.6	Ampl.	0.8
m	243.6	244.1	243.8	244.3	244.2	243.6	244.4	244.4	Sbd box	244.0
l	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	1.33351342938E+04	Apriori delay (usec)	1.33351849130E+04	Resid mbdelay (usec)	-3.74418E-03	+/-	3.8E-05
Sband delay (usec)	1.33351343045E+04	Apriori clock (usec)	-8.8440952E+00	Resid sbdelay (usec)	-5.06085E-02	+/-	3.0E-04
Phase delay (usec)	1.33351849195E+04	Apriori clockrate (us/s)	-2.1950107E-07	Resid phdelay (usec)	6.51578E-06	+/-	2.6E-07
Delay rate (us/s)	-5.31258476720E-01	Apriori rate (us/s)	-5.31258125158E-01	Resid rate (us/s)	-3.51562E-07	+/-	2.5E-09
Total phase (deg)	-93.4	Apriori accel (us/s/s)	-5.41963316231E-05	Resid phase (deg)	-146.3	+/-	4.0

ph/seg (deg)	12.1	RMS	9.4	Theor.	12.1	Amplitude	0.779 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	18.6	Search (1024X32)	0.765	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	9.1	Inc. seg. avg.	0.784	Inc. frq. avg.	0.783	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	15.3	Inc. frq. avg.	0.783	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 75.4 el 58.6 pa -80.6 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 1894.804 -766.732 simultaneous interpolator

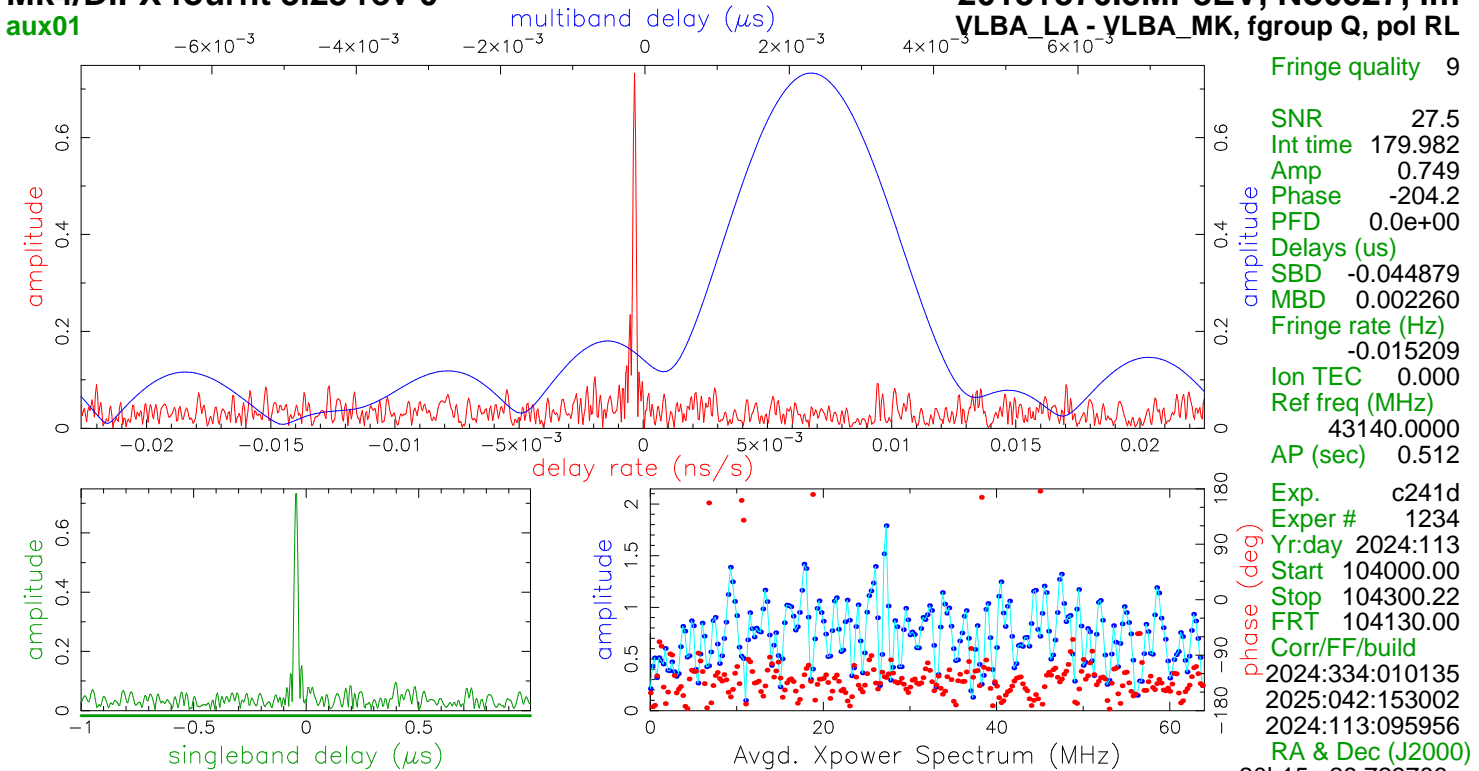
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/Im..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/Im.Q.272.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

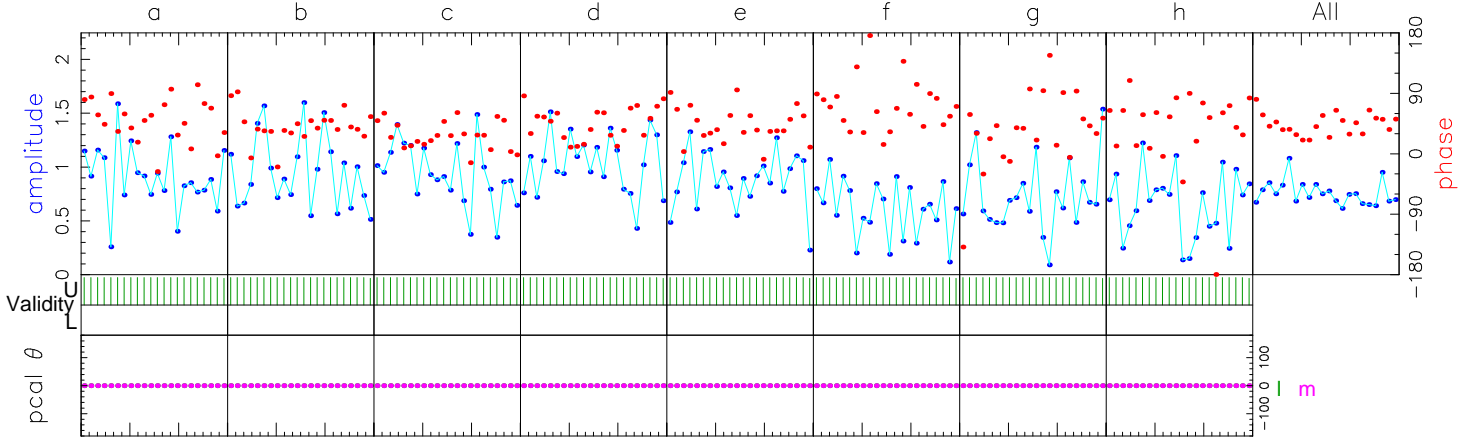
aux01

2013+370.3MP8EV, No0527, Im

VLBA_LA - VLBA_MK, fgroup Q, pol RL



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



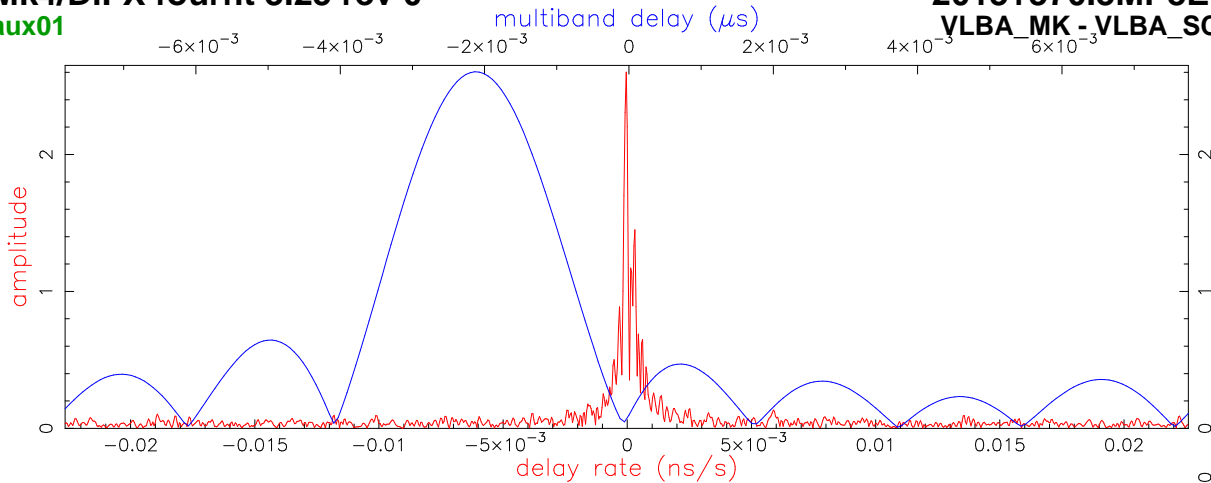
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
Group delay (usec) (SBD)	1.33351402976E+04								2.25960E-03	+/- 4.0E-05
Sband delay (usec)	1.33351400345E+04								-4.48785E-02	+/- 3.1E-04
Phase delay (usec)	1.33351849158E+04								2.78979E-06	+/- 2.7E-07
Delay rate (us/s)	-5.31258477716E-01								-3.52558E-07	+/- 2.6E-09
Total phase (deg)			-151.3						-204.2	+/- 4.2
ph/seg (deg)	15.4	9.8								
amp/seg (%)	14.4	17.1								
ph/frq (deg)	12.3	5.9								
amp/frq (%)	21.6	10.3								
l: az 75.4 el 58.6 pa -80.6		m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec) 1894.804 -766.732						simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0527//Im..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//Im.Q.322.3MP8EV						

Mk4/DiFX fourfit 3.25 rev 0

aux01

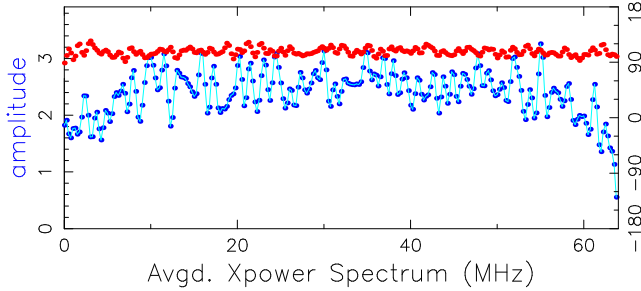
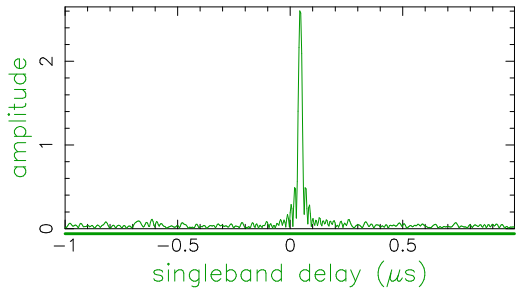
2013+370.3MP8EV, No0527, mc

VLBA_MK - VLBA_SC, fgroup Q, pol LL



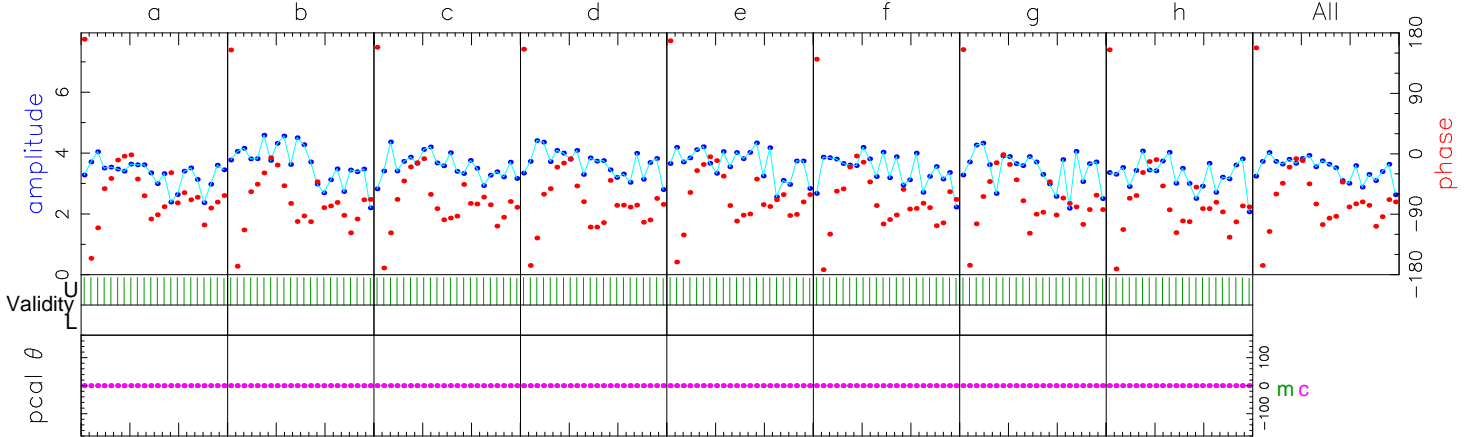
Fringe quality 6

SNR 97.3
 Int time 179.980
 Amp 2.651
 Phase 173.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.044709
 MBD -0.002081
 Fringe rate (Hz)
 -0.001657
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153000
 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
	-66.1	-75.8	-74.8	-76.4	-69.7	-74.6	-73.0	-81.2	Phase	-73.9
	2.5	2.7	2.7	2.7	2.7	2.5	2.6	2.4	Ampl.	2.6
	268.3	268.4	268.4	268.6	268.3	268.6	268.5	268.4	Sbd box	268.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.51799159087E+04	Apriori delay (usec)	-1.51799607025E+04	Resid mbdelay (usec)	-2.08122E-03	+/-	1.1E-05
Sband delay (usec)	-1.51799159938E+04	Apriori clock (usec)	-3.1832485E+00	Resid sbdelay (usec)	4.47088E-02	+/-	8.9E-05
Phase delay (usec)	-1.51799607073E+04	Apriori clockrate (us/s)	3.7877004E-07	Resid phdelay (usec)	-4.76122E-06	+/-	7.6E-08
Delay rate (us/s)	1.21745015789E+00	Apriori rate (us/s)	1.21745019631E+00	Resid rate (us/s)	-3.84151E-08	+/-	7.3E-10
Total phase (deg)	279.1	Apriori accel (us/s/s)	8.30143813798E-05	Resid phase (deg)	173.6	+/-	1.2

ph/seg (deg) 45.0 2.8 Amplitude 2.651 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 34.1 4.8 Search (1024X32) 2.568 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.9 1.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 4.5 2.9 Inc. seg. avg. 3.481 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 Inc. frq. avg. 2.608 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 m: az 54.7 el 12.9 pa -75.0 c: az 354.5 el 70.4 pa 172.7 u,v (fr/asec) -4353.284 2630.973 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mc..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mc.Q.314.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

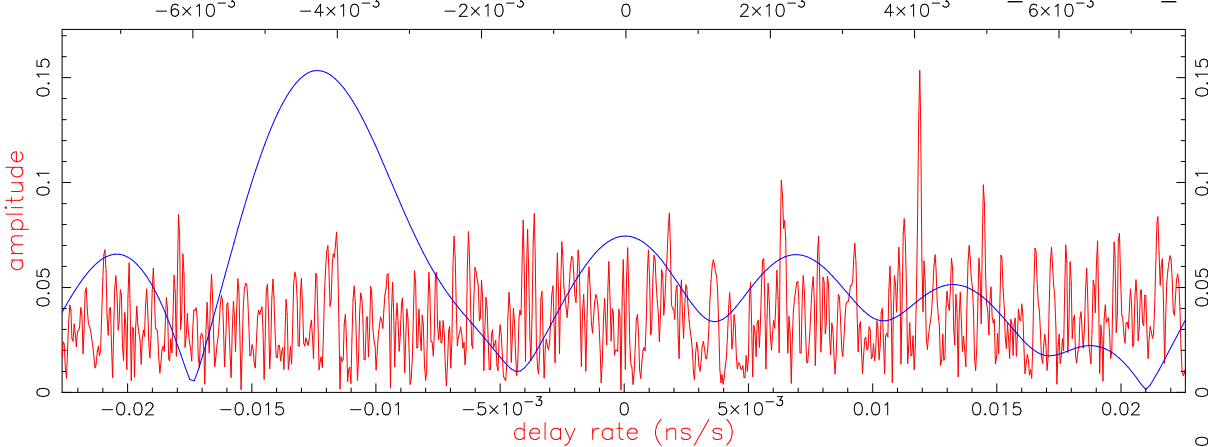
aux01

2013+370.3MP8EV, No0527, mc

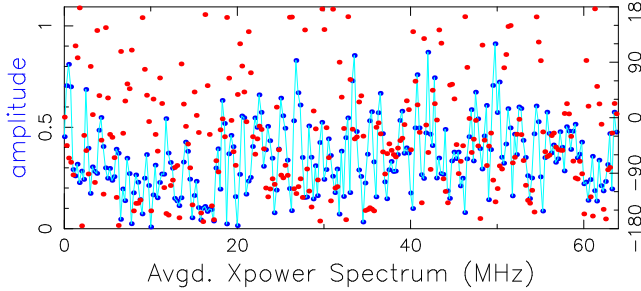
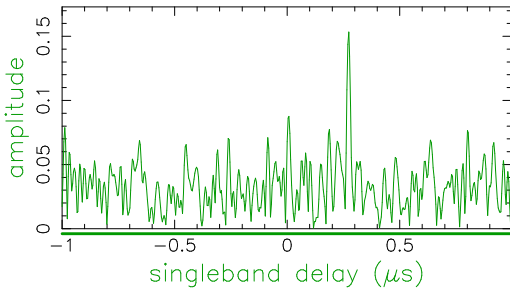
VLBA_MK - VLBA_SC, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

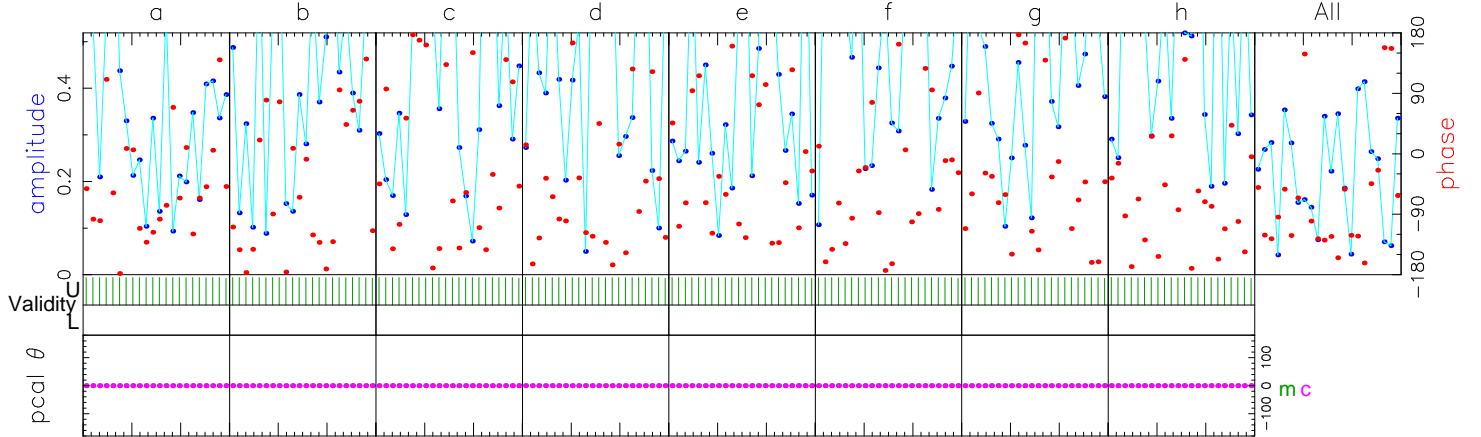


SNR 5.6
 Int time 179.980
 Amp 0.173
 Phase 298.4
 PFD 8.7e-01
 Delays (us)
 SBD 0.272749
 MBD -0.004300
 Fringe rate (Hz)
 0.515658
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153013
 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



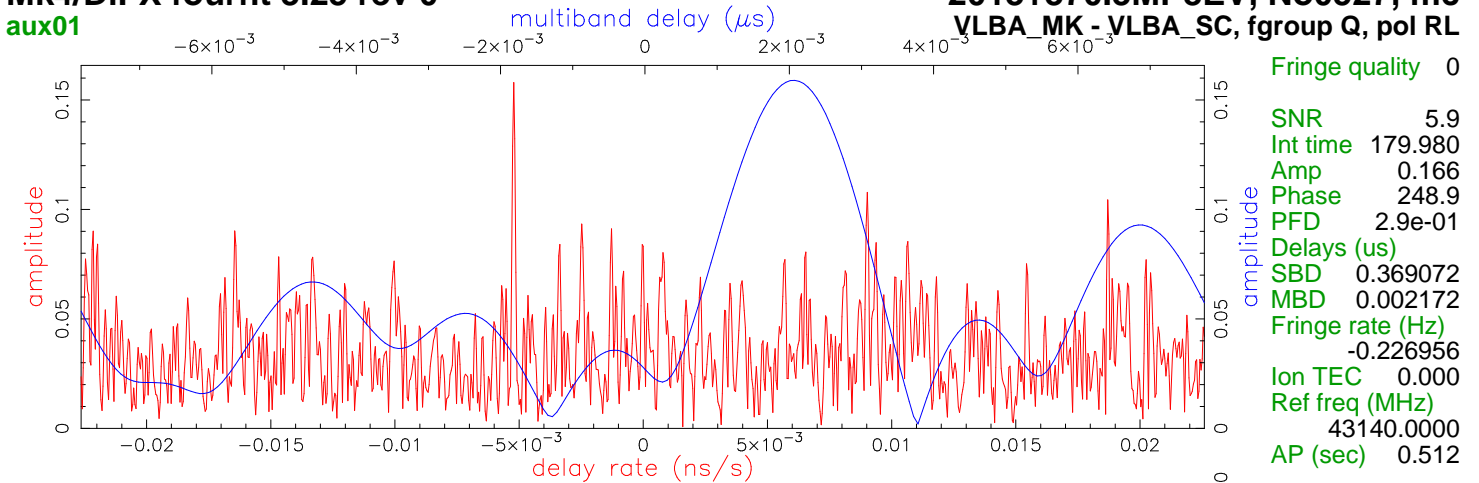
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	-68.7	-147.8	-152.3	-104.4	-119.1	-94.2	-118.8	-93.9	Phase	-106.6	
	0.2	0.1	0.2	0.3	0.0	0.2	0.3	0.3	Ampl.	0.2	
	444.9	140.9	6.6	324.9	103.4	462.2	235.5	216.4	Sbd box	326.8	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
m:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
m:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
c	1000	1000	1000	1000	1000	1000	1000	1000			
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids		
c	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.51796837521E+04		Apriori delay (usec)		-1.51799607025E+04		Resid mbdelay (usec)		-4.29962E-03	+/- 1.9E-04	
Sband delay (usec)	-1.51796879535E+04		Apriori clock (usec)		-3.1832485E+00		Resid sbdelay (usec)		2.72749E-01	+/- 1.5E-03	
Phase delay (usec)	-1.51799607094E+04		Apriori clockrate (us/s)		3.7877004E-07		Resid phdelay (usec)		-6.86385E-06	+/- 1.3E-06	
Delay rate (us/s)	1.21746214944E+00		Apriori rate (us/s)		1.21745019631E+00		Resid rate (us/s)		1.19531E-05	+/- 1.3E-08	
Total phase (deg)			Apriori accel (us/s/s)		8.30143813798E-05		Resid phase (deg)		298.4	+/- 20.3	
	RMS	Theor.	Amplitude	0.173 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	52.6	47.6	Search (1024X32)	0.149		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	87.3	83.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	31.2	28.7	Inc. seg. avg.	0.187		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023 0.023	
amp/frq (%)	49.6	50.1	Inc. frq. avg.	0.169		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
m: az 54.7 el 12.9 pa -75.0	c: az 354.5 el 70.4 pa 172.7		u,v (fr/asec)		-4353.284 2630.973				simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0527//mc..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//mc.Q.372.3MP8EV								

Mk4/DiFX fourfit 3.25 rev 0

aux01

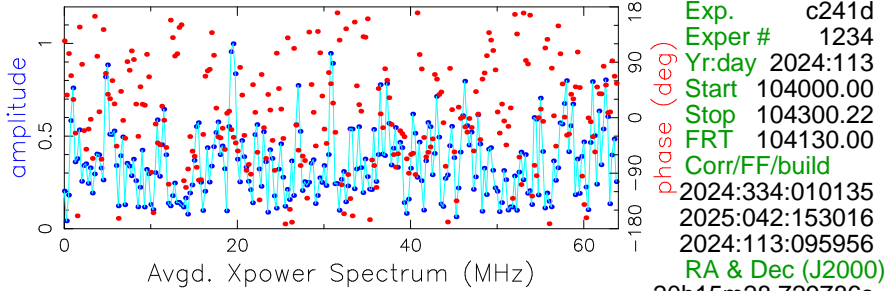
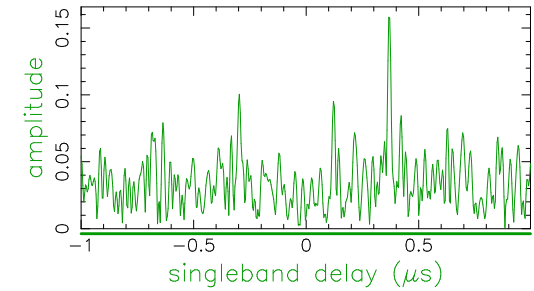
2013+370.3MP8EV, No0527, mc

VLBA_MK - VLBA_SC, fgroup Q, pol RL



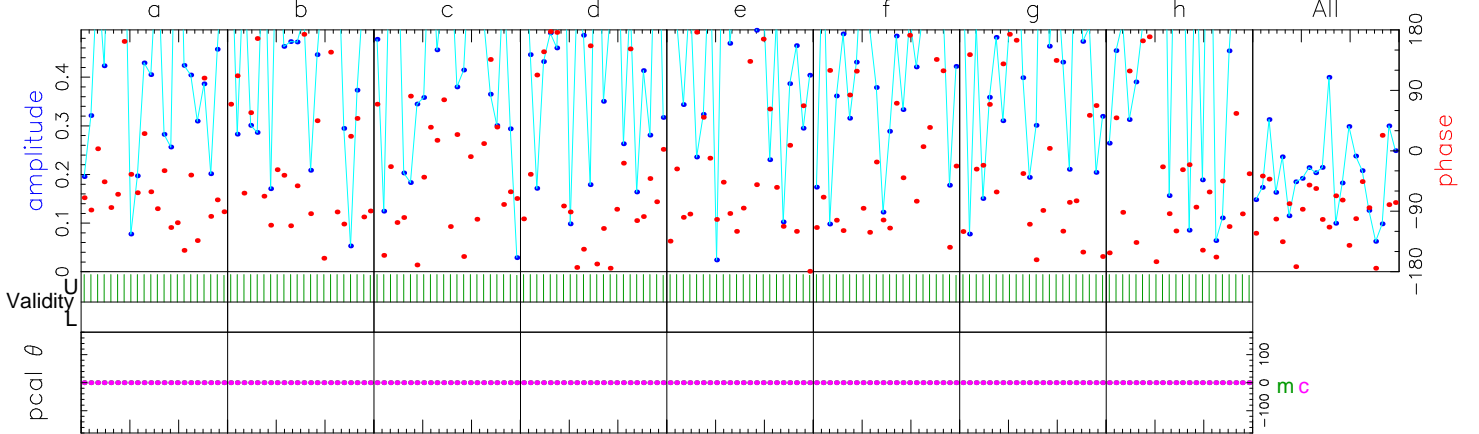
Fringe quality 0

SNR 5.9
 Int time 179.980
 Amp 0.166
 Phase 248.9
 PFD 2.9e-01
 Delays (us)
 SBD 0.369072
 MBD 0.002172
 Fringe rate (Hz)
 -0.226956
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153016
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-80.8	-82.9	-27.9	-126.2	-82.0	-82.5	-115.0	-85.5	Phase	-88.6
	0.3	0.1	0.1	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	352.3	227.2	366.1	350.8	229.8	82.8	292.3	429.0	Sbd box	351.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:c	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
c	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.51795991556E+04	Apriori delay (usec)	-1.51799607025E+04	Resid mbdelay (usec)	2.17189E-03	+/-	1.8E-04
Sband delay (usec)	-1.51795916300E+04	Apriori clock (usec)	-3.1832485E+00	Resid sbdelay (usec)	3.69072E-01	+/-	1.4E-03
Phase delay (usec)	-1.51799607082E+04	Apriori clockrate (us/s)	3.7877004E-07	Resid phdelay (usec)	-5.70250E-06	+/-	1.2E-06
Delay rate (us/s)	1.21744493538E+00	Apriori rate (us/s)	1.21745019631E+00	Resid rate (us/s)	-5.26092E-06	+/-	1.2E-08
Total phase (deg)	354.5	Apriori accel (us/s/s)	8.30143813798E-05	Resid phase (deg)	248.9	+/-	19.3

ph/seg (deg)	44.8	Theor.	45.2	Amplitude	0.166 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	54.0		78.8	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.6		27.2	Inc. seg. avg.	0.157	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.6		47.5	Inc. frq. avg.	0.161	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

m: az 54.7 el 12.9 pa -75.0 c: az 354.5 el 70.4 pa 172.7 u,v (fr/asec) -4353.284 2630.973 simultaneous interpolator

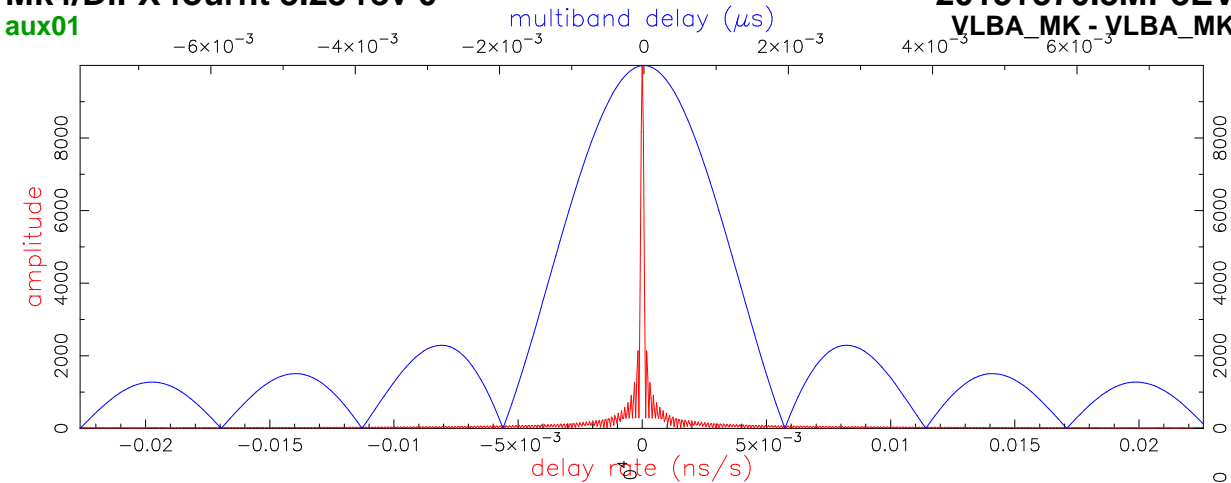
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/mc..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/mc.Q.394.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

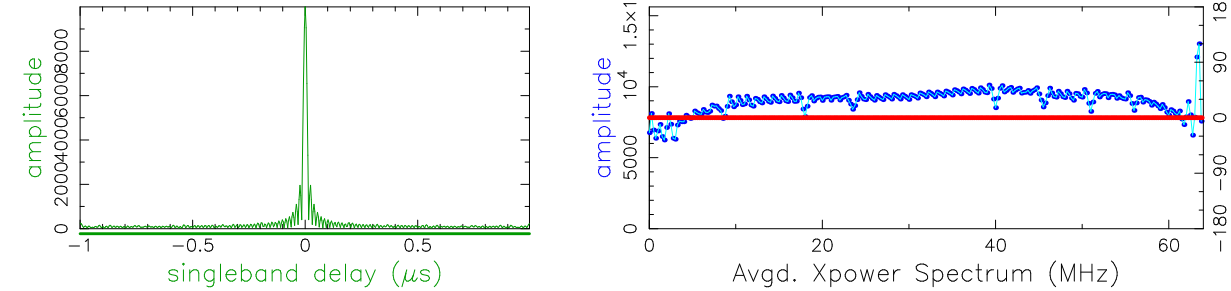
2013+370.3MP8EV, No0527, mm

VLBA_MK - VLBA_MK, fgroup Q, pol LL



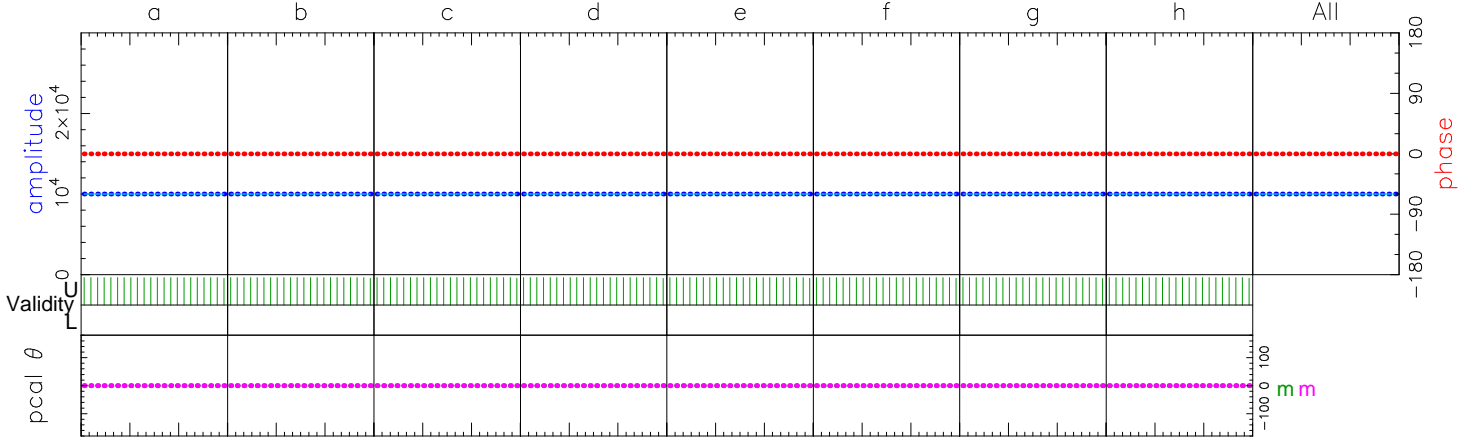
Fringe quality 9

SNR 366883.4
 Int time 179.995
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152958
 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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
m	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
m	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
m	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

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

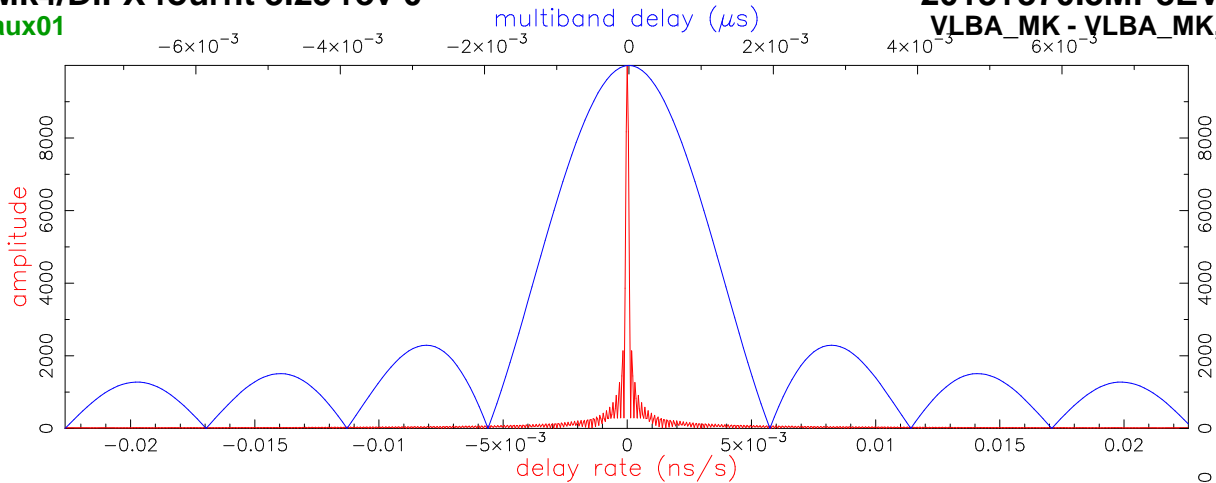
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	0.0	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
m: az 54.7 el 12.9 pa -75.0		m: az 54.7 el 12.9 pa -75.0		Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0527/mm...3MP8EV		u,v (fr/asec) 0.000 0.000			ion window (TEC) 0.00 0.00
							simultaneous interpolator
							Output file: /Exps/c241d/v1/7mm/1234/No0527/mm.Q.299.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

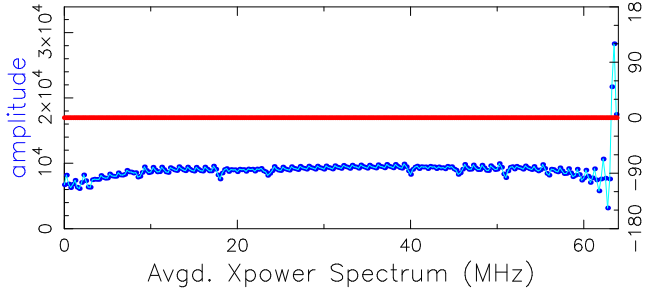
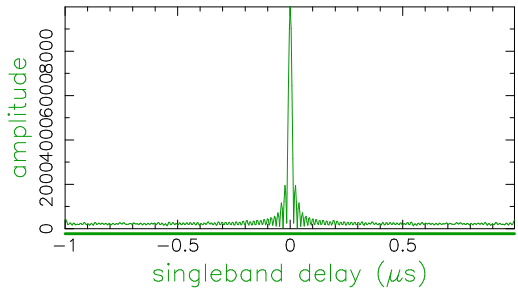
2013+370.3MP8EV, No0527, mm

VLBA_MK - VLBA_MK, fgroup Q, pol RR



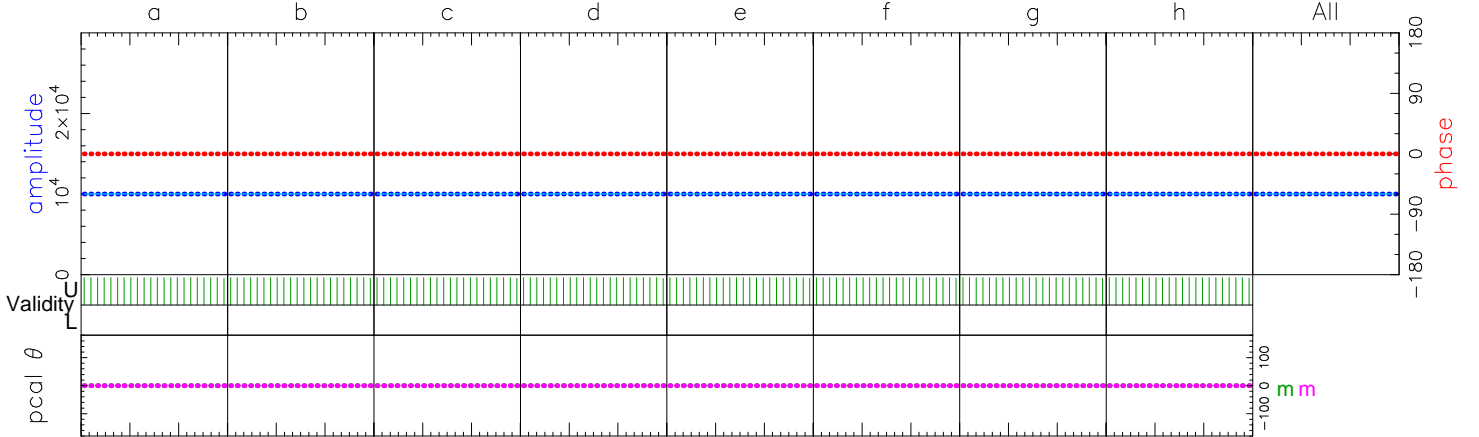
Fringe quality 9

SNR 366883.4
 Int time 179.995
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153003
 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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
m	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
m	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
m	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

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

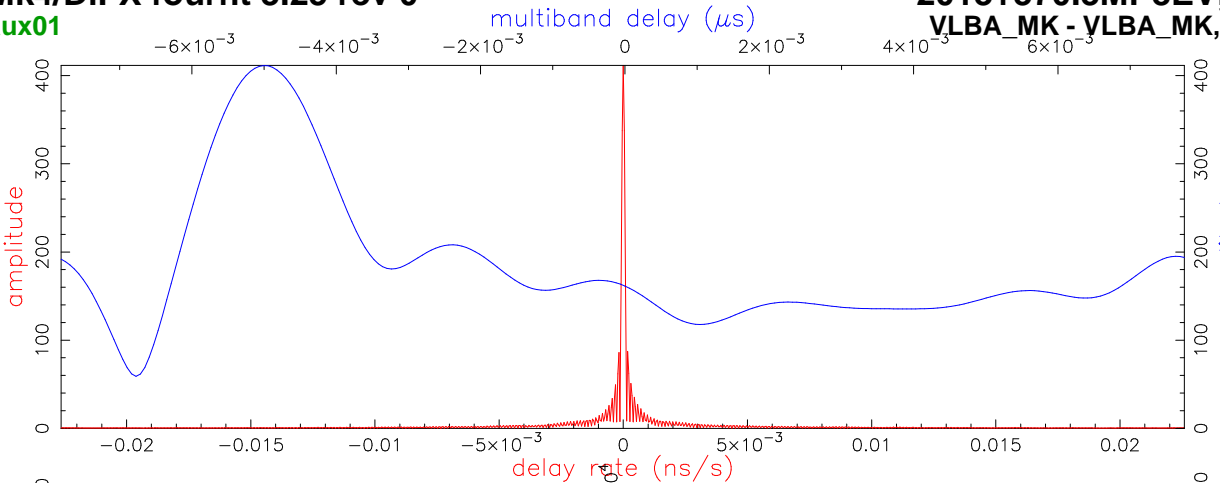
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 m: az 54.7 el 12.9 pa -75.0 m: az 54.7 el 12.9 pa -75.0 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/No0527//mm...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mm.Q.327.3MP8EV simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

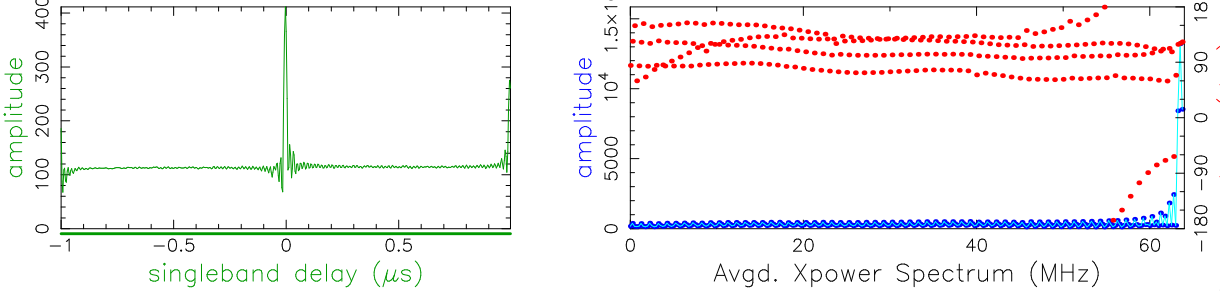
aux01

2013+370.3MP8EV, No0527, mm

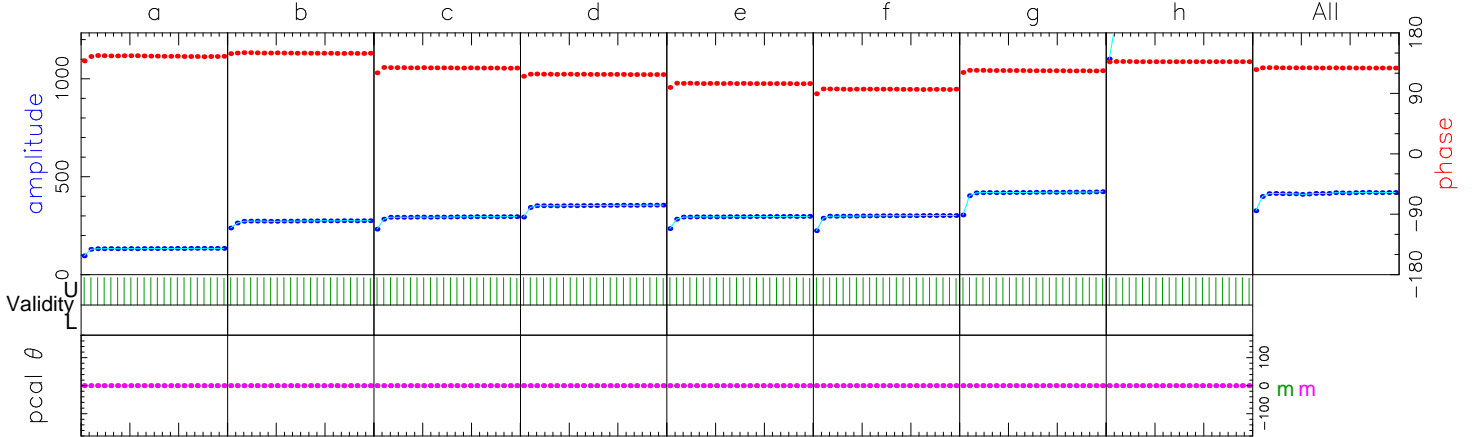
VLBA_MK - VLBA_MK, fgroup Q, pol LR



Fringe quality 6
 Error code G
 SNR 15101.8
 Int time 179.995
 Amp 411.624
 Phase 127.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003720
 MBD -0.005000
 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 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153005
 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



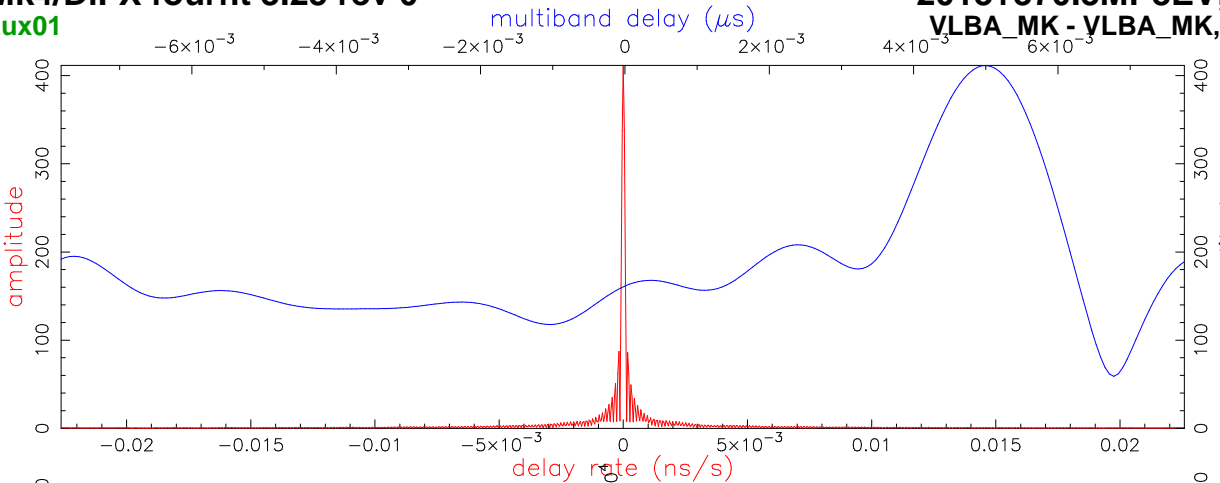
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-4.99956250000E-03								Resid mbdelay (usec)	-4.99956E-03 +/- 7.2E-08
Sband delay (usec)	-3.71950000000E-03								Resid sbdelay (usec)	-3.71950E-03 +/- 5.7E-07
Phase delay (usec)	8.22200616805E-06								Resid phdelay (usec)	8.22201E-06 +/- 4.9E-10
Delay rate (us/s)	3.39555790548E-11								Resid rate (us/s)	3.39556E-11 +/- 4.7E-12
Total phase (deg)			127.7						Resid phase (deg)	127.7 +/- 0.0
	RMS	Theor.	Amplitude	411.624 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.5	0.0	Search (1024X32)	409.406					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	4.6	0.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	20.6	0.0	Inc. seg. avg.	411.518					SampCntNorm: enabled	dr window (ns/s) -0.023 0.023
amp/frq (%)	87.7	0.0	Inc. frq. avg.	426.334					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	ion window (TEC) 0.00 0.00
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
m: az 54.7 el 12.9 pa -75.0			m: az 54.7 el 12.9 pa -75.0							simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//mm...3MP8EV							Output file: /Exps/c241d/v1/7mm/1234/No0527//mm.Q.335.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

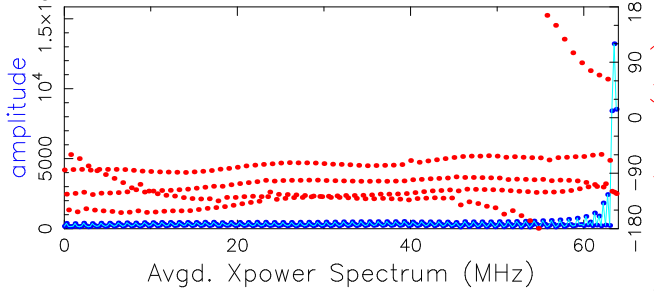
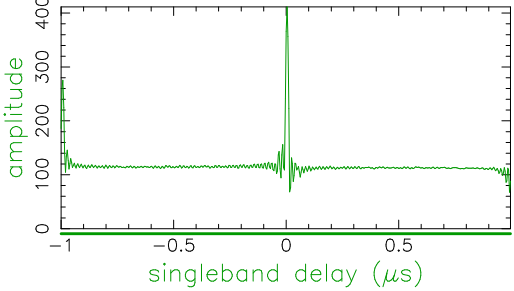
aux01

2013+370.3MP8EV, No0527, mm

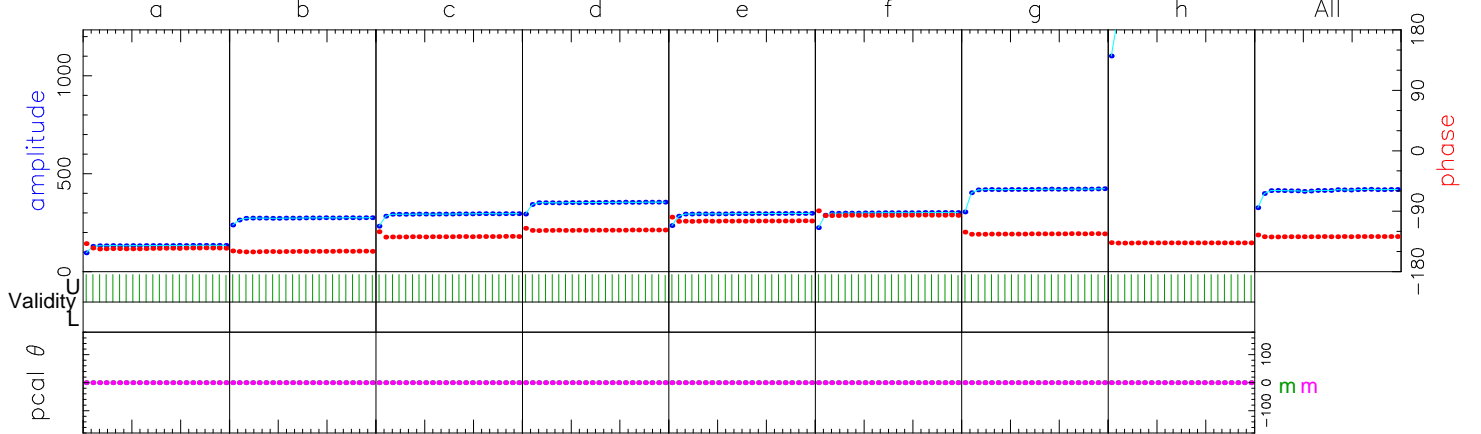
VLBA_MK - VLBA_MK, fgroup Q, pol RL



Fringe quality 6
 Error code G
 SNR 15101.8
 Int time 179.995
 Amp 411.624
 Phase -127.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.003720
 MBD 0.005000
 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 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153008
 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



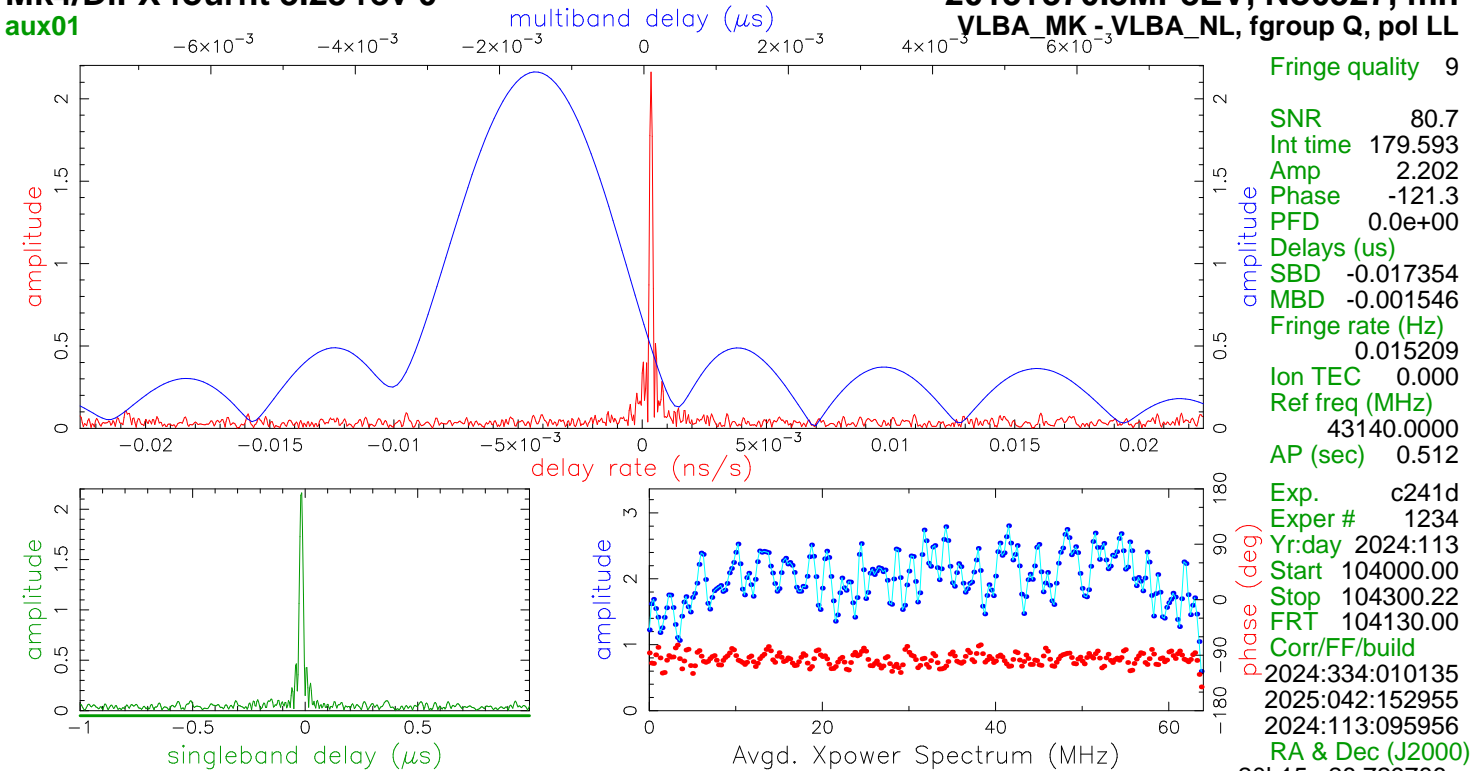
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-145.0	-149.7	-127.5	-118.0	-104.4	-95.8	-123.6	-137.0	Phase	-127.7
	131.9	272.4	291.7	350.4	293.0	296.9	414.8	1359.7	Ampl.	426.3
	3.1	258.0	258.4	258.1	258.6	258.2	258.2	258.0	Sbd box	258.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	4.99956250000E-03					0.00000000000E+00			Resid mbdelay (usec)	4.99956E-03 +/- 7.2E-08
Sband delay (usec)	3.71950000000E-03					0.0000000E+00			Resid sbdelay (usec)	3.71950E-03 +/- 5.7E-07
Phase delay (usec)	-8.22200616826E-06					0.0000000E+00			Resid phdelay (usec)	-8.22201E-06 +/- 4.9E-10
Delay rate (us/s)	-3.39555790548E-11					0.00000000000E+00			Resid rate (us/s)	-3.39556E-11 +/- 4.7E-12
Total phase (deg)			-127.7			0.00000000000E+00			Resid phase (deg)	-127.7 +/- 0.0
	RMS	Theor.	Amplitude	411.624 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.5	0.0	Search (1024X32)	409.406					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	4.6	0.0	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	20.6	0.0	Inc. seg. avg.	411.518					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	87.7	0.0	Inc. frq. avg.	426.334					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
m: az 54.7 el 12.9 pa -75.0			m: az 54.7 el 12.9 pa -75.0						u,v (fr/asec) 0.000 0.000	ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//mm...3MP8EV						Output file: /Exps/c241d/v1/7mm/1234/No0527//mm.Q.350.3MP8EV	simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

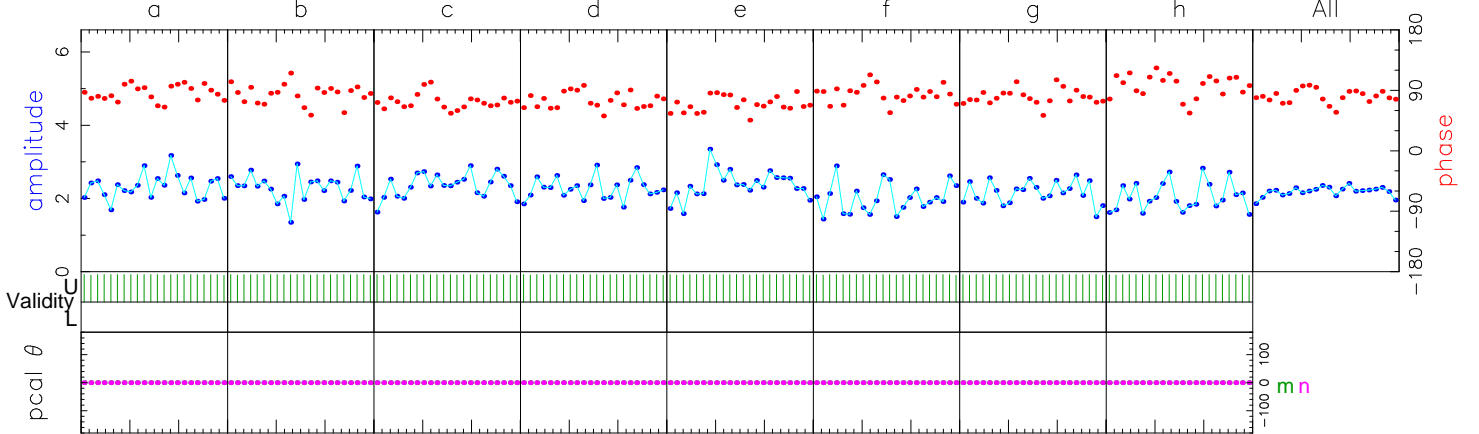
aux01

2013+370.3MP8EV, No0527, mn

VLBA_MK - VLBA_NL, fgroup Q, pol LL



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
86.4	84.0	73.5	74.8	70.6	83.9	80.6	98.7	98.7	Phase	81.2
2.3	2.2	2.3	2.2	2.3	2.0	2.1	2.0	2.0	Ampl.	2.2
252.7	252.4	252.6	252.4	252.8	252.5	252.5	252.7	252.7	Sbd box	252.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.52204114460E+04	Apriori delay (usec)	-1.52203942755E+04	Resid mbdelay (usec)	-1.54557E-03	+/-	1.3E-05
Sband delay (usec)	-1.52204116297E+04	Apriori clock (usec)	8.2995033E-01	Resid sbdelay (usec)	-1.73542E-02	+/-	1.1E-04
Phase delay (usec)	-1.52203942703E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	5.22774E-06	+/-	9.1E-08
Delay rate (us/s)	7.82706637880E-01	Apriori rate (us/s)	7.82706285339E-01	Resid rate (us/s)	3.52541E-07	+/-	8.8E-10
Total phase (deg)	-137.2	Apriori accel (us/s/s)	5.86196774742E-05	Resid phase (deg)	-121.3	+/-	1.4

ph/seg (deg)	9.8	Theor.	3.3	Amplitude	2.202 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	5.7	Search (1024X32)	2.150	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	9.7	Inc. seg. avg.	2.189	Inc. frq. avg.	2.183	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	6.1	Inc. frq. avg.	2.183			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

m: az 54.7 el 12.9 pa -75.0 n: az 95.2 el 70.5 pa -68.7 u,v (fr/asec) -2799.726 617.404 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/mn..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/mn.Q.290.3MP8EV

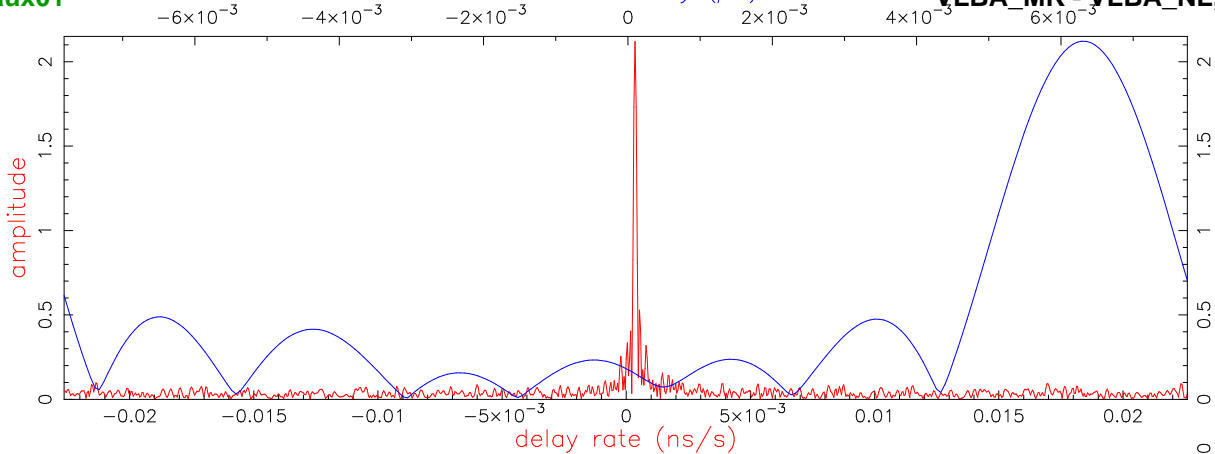
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, mn

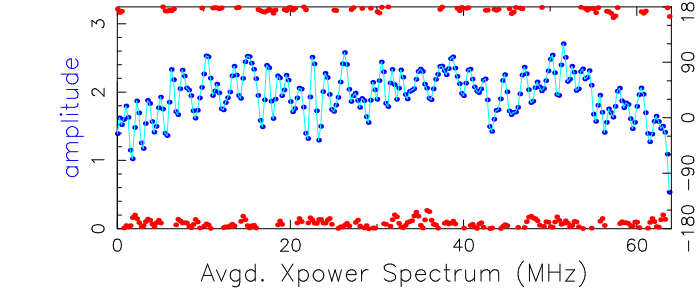
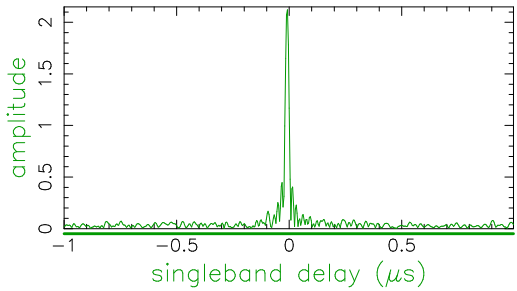
VLBA_MK - VLBA_NL, fgroup Q, pol RR

multiband delay (μ s)



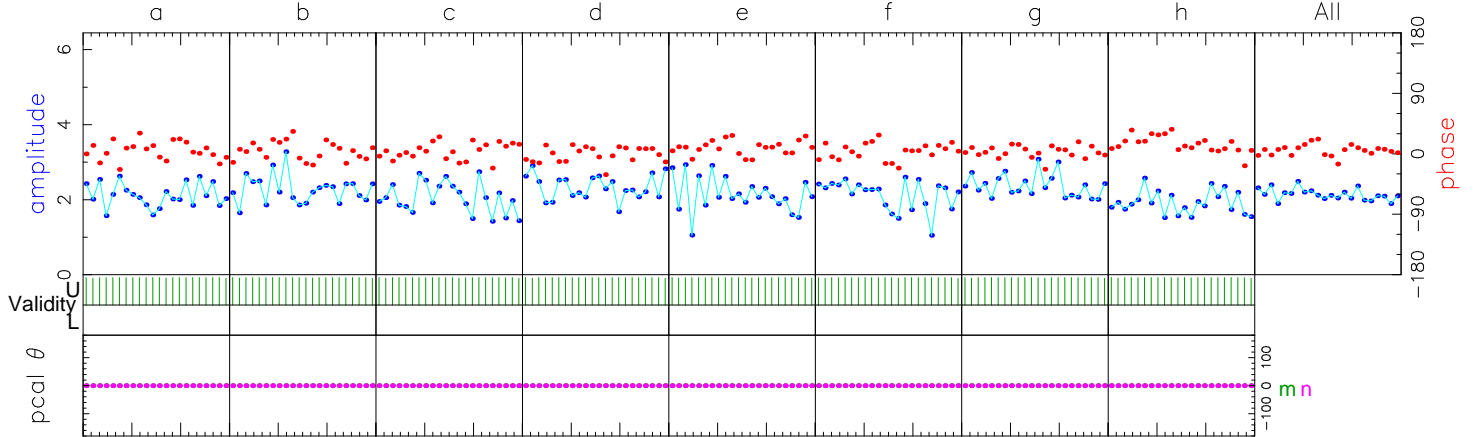
Fringe quality 9

SNR 78.8
 Int time 179.593
 Amp 2.150
 Phase -197.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.009290
 MBD 0.006276
 Fringe rate (Hz)
 0.015155
 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 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153005
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -1.52204036242E+04 Apriori delay (usec) -1.52203942755E+04 Resid mbdelay (usec) 6.27624E-03 +/- 1.4E-05
 Sband delay (usec) -1.52204035657E+04 Apriori clock (usec) 8.2995033E-01 Resid sbdelay (usec) -9.29025E-03 +/- 1.1E-04
 Phase delay (usec) -1.52203942751E+04 Apriori clockrate (us/s) -3.1175995E-07 Resid phdelay (usec) 3.41171E-07 +/- 9.4E-08
 Delay rate (us/s) 7.82706636644E-01 Apriori rate (us/s) 7.82706285339E-01 Resid rate (us/s) 3.51304E-07 +/- 9.0E-10
 Total phase (deg) -213.1 Apriori accel (us/s/s) 5.86196774742E-05 Resid phase (deg) -197.2 +/- 1.5

ph/seg (deg) 8.1 3.4 Search (1024X32) 2.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 7.0 6.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.4 2.1 Inc. seg. avg. 2.138 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.7 3.6 Inc. frq. avg. 2.126 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

m: az 54.7 el 12.9 pa -75.0 n: az 95.2 el 70.5 pa -68.7 u,v (fr/asec) -2799.726 617.404 simultaneous interpolator

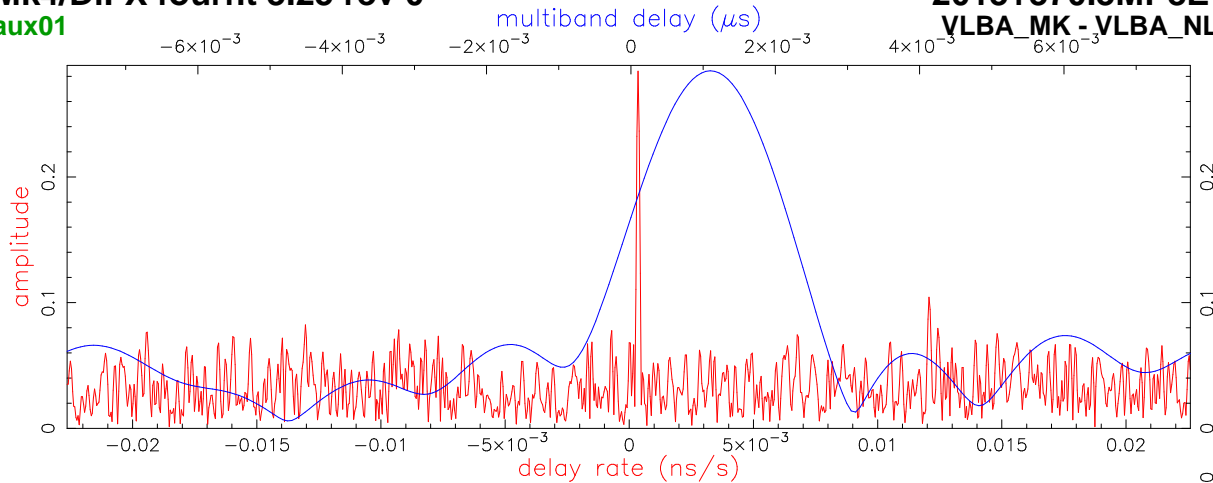
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mn..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mn.Q.333.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

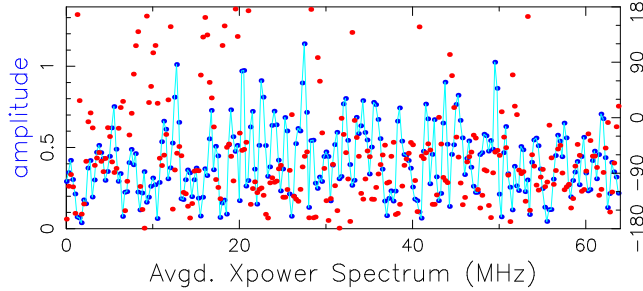
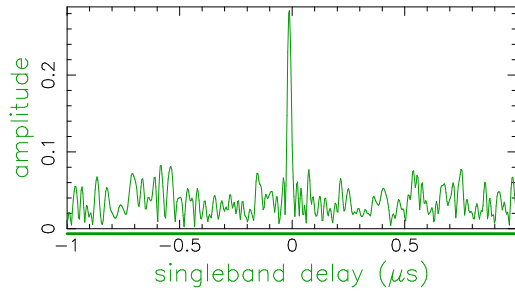
2013+370.3MP8EV, No0527, mn

VLBA_MK - VLBA_NL, fgroup Q, pol LR



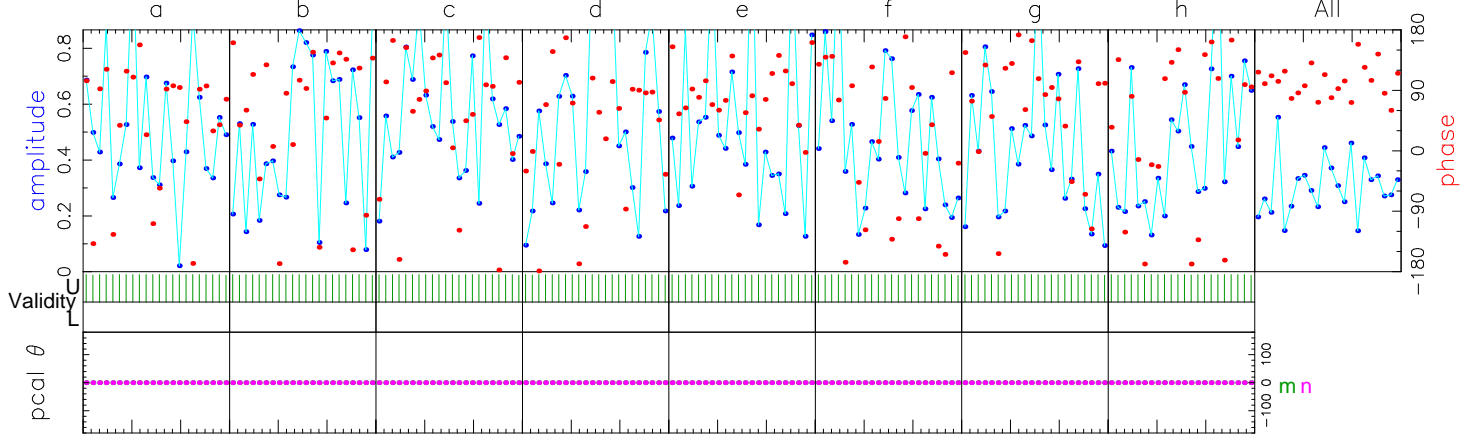
Fringe quality 9

SNR 10.6
 Int time 179.593
 Amp 0.289
 Phase -101.1
 PFD 8.3e-18
 Delays (us)
 SBD -0.013408
 MBD 0.001051
 Fringe rate (Hz) 0.014910
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build 2024:334:010135
 2025:042:153007
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
n	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.52204088499E+04	Apriori delay (usec)	-1.52203942755E+04	Resid mbdelay (usec)	1.05059E-03	+/-	1.0E-04
Sband delay (usec)	-1.52204076832E+04	Apriori clock (usec)	8.2995033E-01	Resid sbdelay (usec)	-1.34078E-02	+/-	8.1E-04
Phase delay (usec)	-1.52203942689E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	6.53175E-06	+/-	7.0E-07
Delay rate (us/s)	7.82706630962E-01	Apriori rate (us/s)	7.82706285339E-01	Resid rate (us/s)	3.45623E-07	+/-	6.7E-09
Total phase (deg)	-117.0	Apriori accel (us/s/s)	5.86196774742E-05	Resid phase (deg)	-101.1	+/-	10.8

ph/seg (deg)	23.9	Theor.	25.4	Amplitude	0.289 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	34.7	Search (1024X32)	0.281	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	15.9	Inc. seg. avg.	0.279	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	23.6	Inc. frq. avg.	0.282	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

m: az 54.7 el 12.9 pa -75.0 n: az 95.2 el 70.5 pa -68.7 u,v (fr/asec) -2799.726 617.404 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/mn..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/mn.Q.345.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

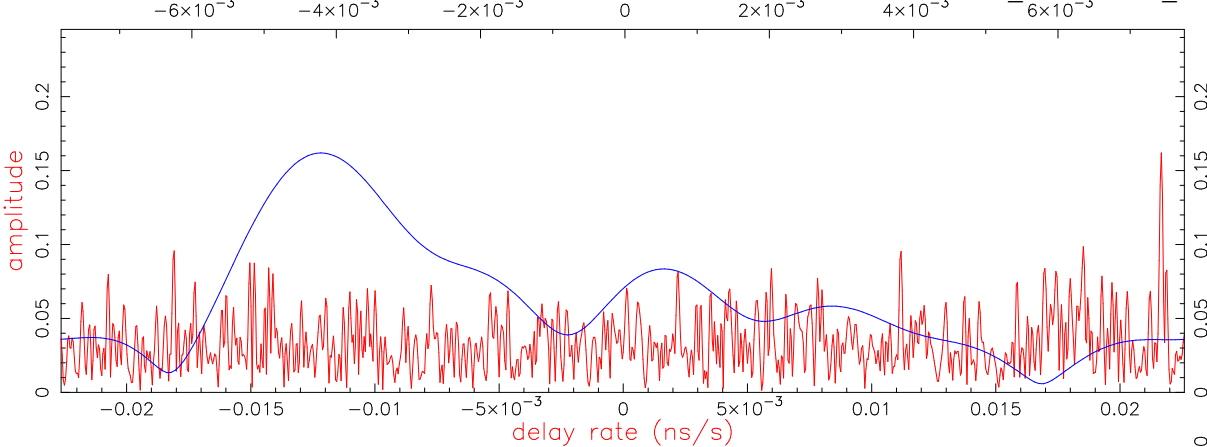
aux01

2013+370.3MP8EV, No0527, mn

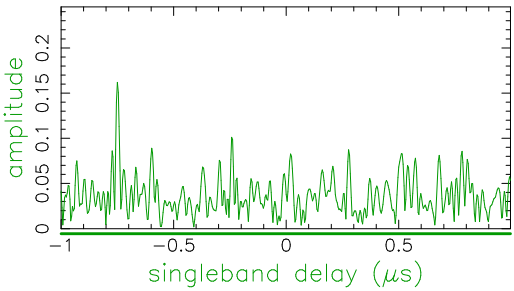
VLBA_MK - VLBA_NL, fgroup Q, pol RL

multiband delay (μ s)

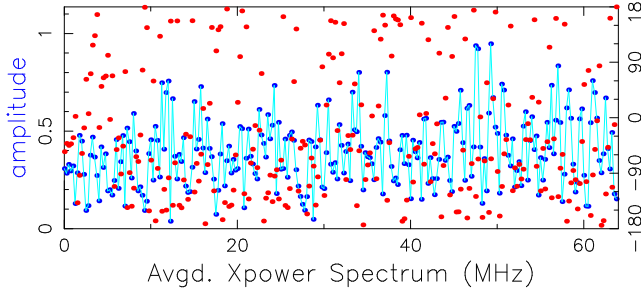
Fringe quality 0



SNR 5.9
Int time 179.593
Amp 0.245
Phase -49.0
PFD 3.0e-01
Delays (us)
SBD -0.749412
MBD -0.004198
Fringe rate (Hz) 0.938610
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512



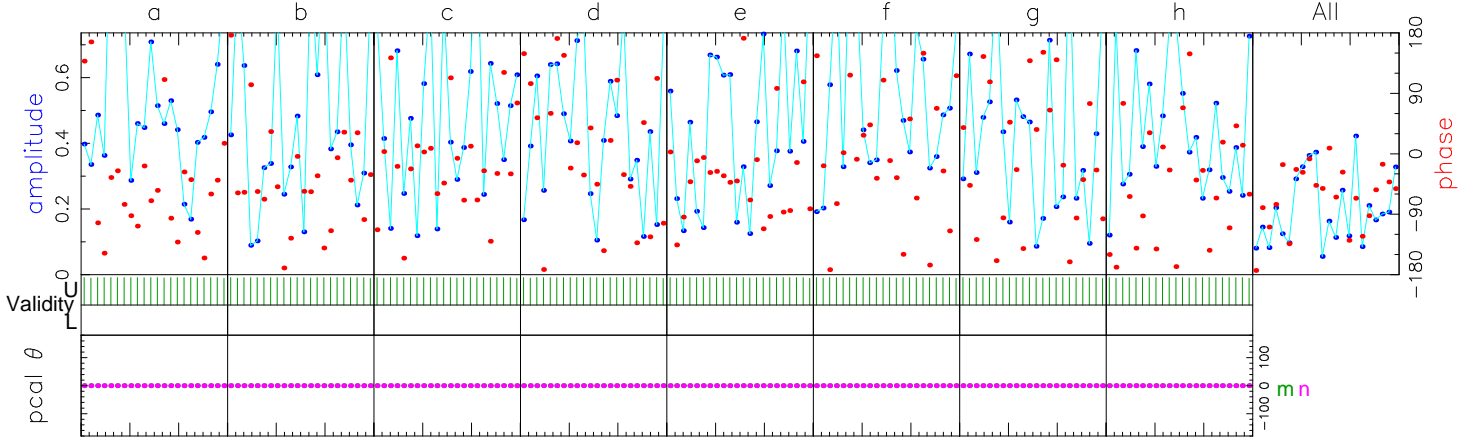
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 104000.00
Stop 104300.22
FRT 104130.00
Corr/FF/build 2024:334:010135
2025:042:153009
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
	-66.8	-51.3	-28.9	8.5	-49.9	5.6	-130.3	-66.3	Phase	-49.0
	0.4	0.4	0.4	0.1	0.4	0.1	0.1	0.2	Ampl.	0.3
	65.6	59.4	88.2	410.5	65.1	75.7	370.2	443.8	Sbd box	65.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-1.52211484738E+04	Apriori delay (usec)	-1.52203942755E+04	Resid mbdelay (usec)	-4.19829E-03	+/-	1.8E-04
Sband delay (usec)	-1.52211436872E+04	Apriori clock (usec)	8.2995033E-01	Resid sbdelay (usec)	-7.49412E-01	+/-	1.4E-03
Phase delay (usec)	-1.52203942786E+04	Apriori clockrate (us/s)	-3.1175995E-07	Resid phdelay (usec)	-3.15303E-06	+/-	1.2E-06
Delay rate (us/s)	7.82728042640E-01	Apriori rate (us/s)	7.82706285339E-01	Resid rate (us/s)	2.17573E-05	+/-	1.2E-08
Total phase (deg)	-64.9	Apriori accel (us/s/s)	5.86196774742E-05	Resid phase (deg)	-49.0	+/-	19.3

ph/seg (deg)	48.2	Theor.	45.2	Amplitude	0.245 +/- 0.041	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.4		78.9	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.2		27.3	Inc. seg. avg.	0.230	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	61.6		47.6	Inc. frq. avg.	0.250	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

m: az 54.7 el 12.9 pa -75.0 n: az 95.2 el 70.5 pa -68.7 u,v (fr/asec) -2799.726 617.404 simultaneous interpolator

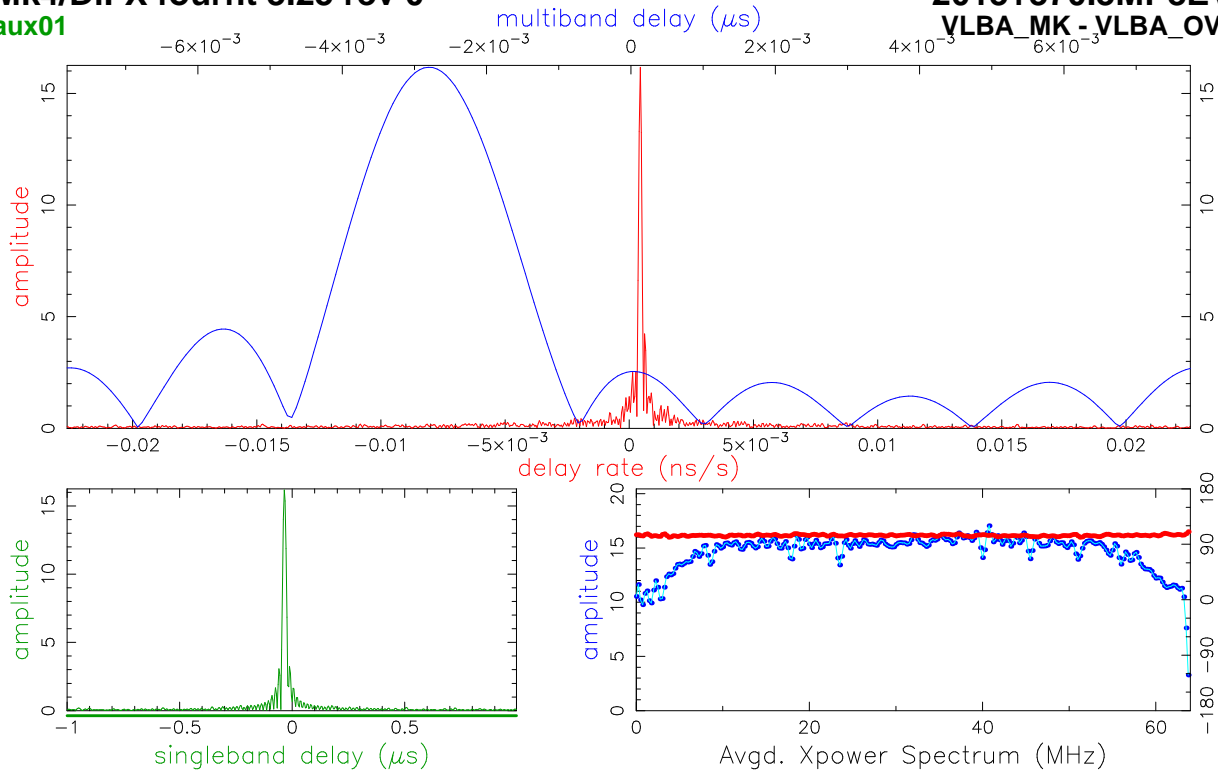
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527/mn..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527/mn.Q.359.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, mo

VLBA_MK - VLBA_OV, fgroup Q, pol LL

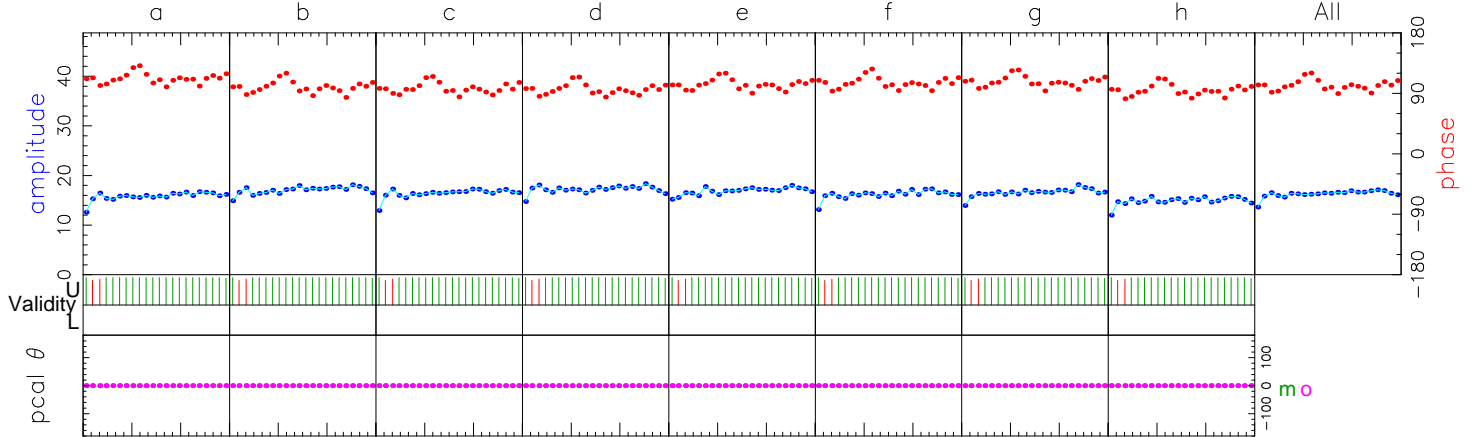


Fringe quality 9

SNR 593.9
 Int time 178.611
 Amp 16.253
 Phase -303.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.034248
 MBD -0.002775
 Fringe rate (Hz) 0.018888
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153005
 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



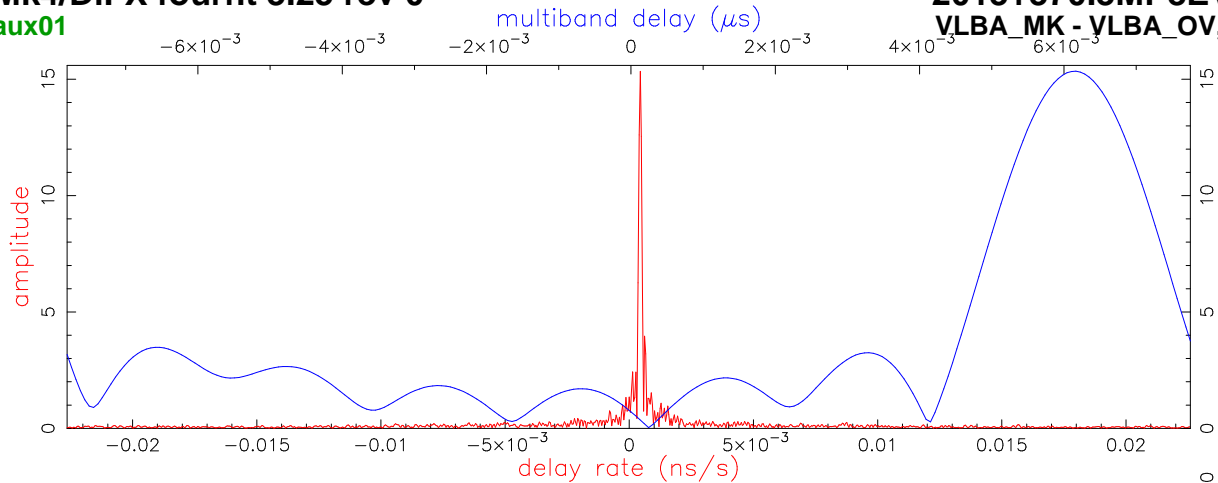
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	112.0	99.0	97.3	95.9	103.0	105.6	107.2	94.5	Phase	101.8
m	15.7	16.9	16.3	17.1	16.8	16.0	16.5	14.8	Ampl.	16.3
o	248.2	248.2	248.3	248.3	248.3	248.3	248.2	247.9	Sbd box	248.2
m	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.14291456129E+04					-1.14291115879E+04			Resid mbdelay (usec)	-2.77498E-03 +/- 1.8E-06
Sband delay (usec)	-1.14291458359E+04					-2.4511011E+01			Resid sbdelay (usec)	-3.42480E-02 +/- 1.5E-05
Phase delay (usec)	-1.14291115814E+04					-4.9577204E-07			Resid phdelay (usec)	6.55635E-06 +/- 1.2E-08
Delay rate (us/s)	3.97108638821E-01					3.97108200986E-01			Resid rate (us/s)	4.37835E-07 +/- 1.2E-10
Total phase (deg)		-268.5				4.24931621842E-05			Resid phase (deg)	-303.2 +/- 0.2
	RMS	Theor.	Amplitude	16.253 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	7.7	0.5	Search (1024X32)	16.005					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	4.3	0.8	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	6.7	0.3	Inc. seg. avg.	16.318					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.023 0.023
amp/frq (%)	4.3	0.5	Inc. frq. avg.	16.250					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
m: az 54.7 el 12.9 pa -75.0			o: az 73.7 el 49.6 pa -73.8							ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//mo..3MP8EV							simultaneous interpolator
			Output file: /Exps/c241d/v1/7mm/1234/No0527//mo.Q.334.3MP8EV							

Mk4/DiFX fourfit 3.25 rev 0

aux01

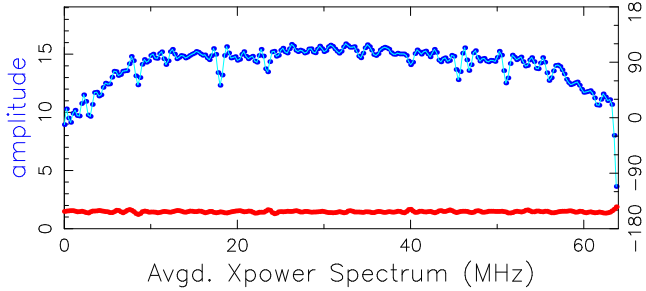
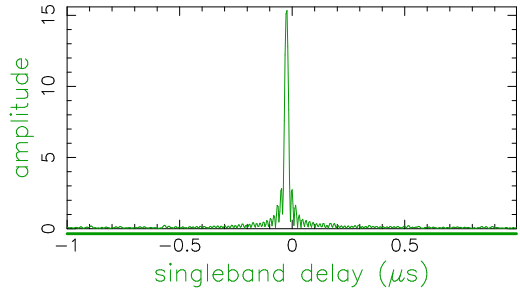
2013+370.3MP8EV, No0527, mo

VLBA_MK - VLBA_OV, fgroup Q, pol RR



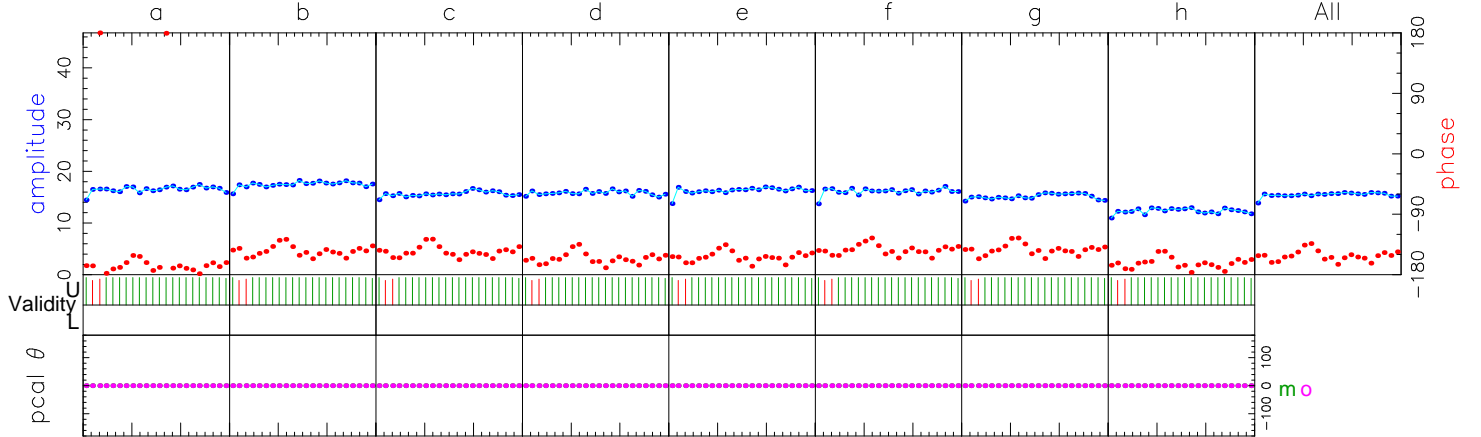
Fringe quality 9

SNR 570.0
 Int time 178.611
 Amp 15.597
 Phase -196.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.025086
 MBD 0.006107
 Fringe rate (Hz)
 0.018875
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153007
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

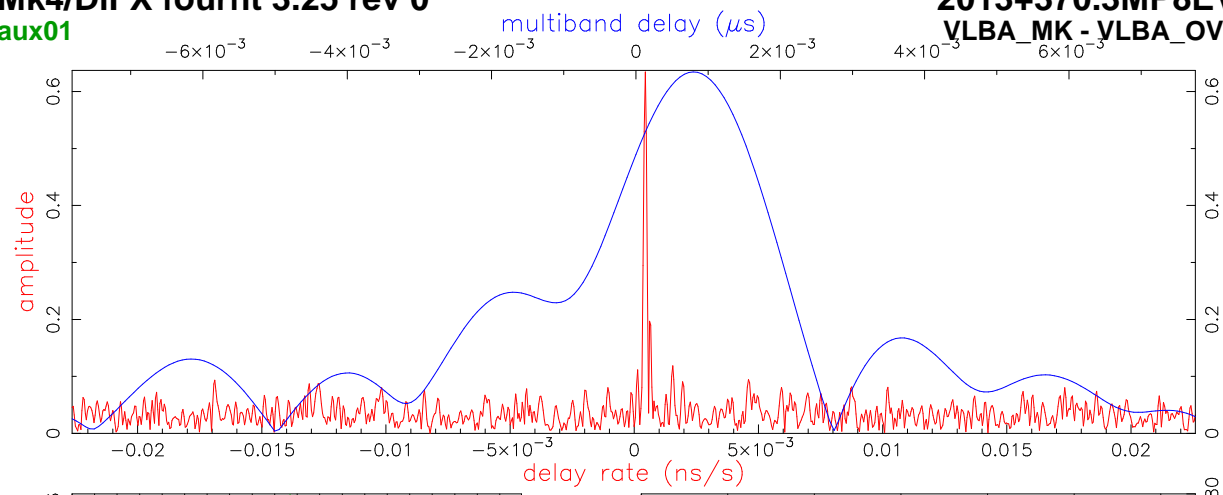
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	15.5
o	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	250.6
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	PC amp	
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD) -1.14291367312E+04 Apriori delay (usec) -1.14291115879E+04 Resid mbdelay (usec) 6.10677E-03 +/- 1.9E-06
 Sband delay (usec) -1.14291366742E+04 Apriori clock (usec) -2.4511011E+01 Resid sbdelay (usec) -2.50863E-02 +/- 1.5E-05
 Phase delay (usec) -1.14291115977E+04 Apriori clockrate (us/s) -4.9577204E-07 Resid phdelay (usec) -9.77084E-06 +/- 1.3E-08
 Delay rate (us/s) 3.97108200986E-01 Apriori rate (us/s) 3.97108200986E-01 Resid rate (us/s) 4.37535E-07 +/- 1.2E-10
 Total phase (deg) -162.1 Apriori accel (us/s/s) 4.24931621842E-05 Resid phase (deg) -196.7 +/- 0.2

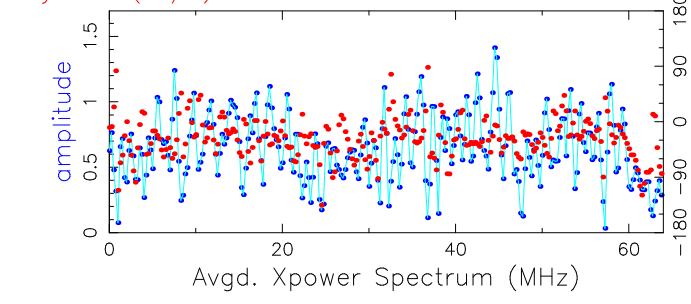
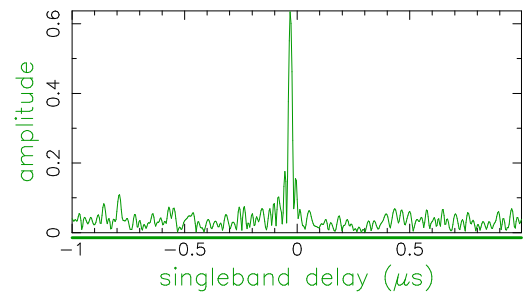
RMS Theor. Amplitude 15.597 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 7.5 0.5 Search (1024X32) 14.890 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.8 0.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 10.5 0.3 Inc. seg. avg. 15.473 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 amp/frq (%) 9.1 0.5 Inc. frq. avg. 15.532 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 m: az 54.7 el 12.9 pa -75.0 o: az 73.7 el 49.6 pa -73.8 u,v (fr/asec) -1416.276 341.675 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mo..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mo.Q.344.3MP8EV



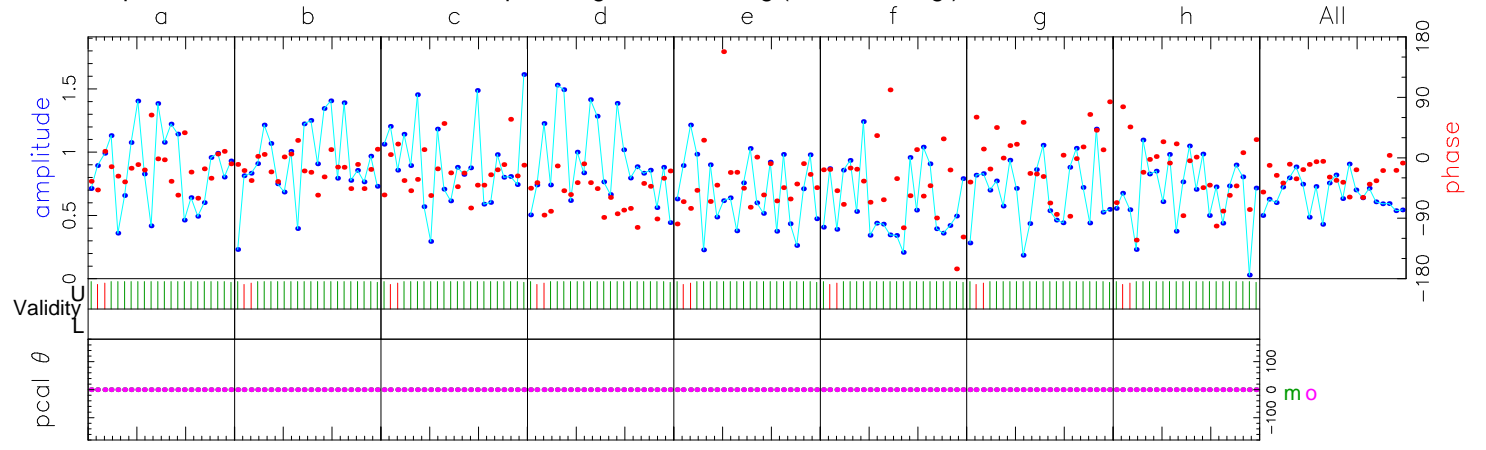
Fringe quality 9

SNR 23.3
Int time 178.611
Amp 0.637
Phase -71.3
PFD 0.0e+00
Delays (us)
SBD -0.030420
MBD 0.000824
Fringe rate (Hz) 0.018715
Ion TEC 0.000
Ref freq (MHz) 43140.0000
AP (sec) 0.512

Exp. c241d
Exper # 1234
Yr:day 2024:113
Start 104000.00
Stop 104300.22
FRT 104130.00
Corr/FF/build 2024:334:010135
2025:042:153012
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	
	-15.8	-15.1	-21.9	-53.7	-46.7	-41.6	4.3	-19.5		-26.3	
	0.8	0.9	0.8	0.8	0.6	0.4	0.5	0.5		0.7	
	249.3	249.6	248.8	248.9	248.8	249.5	249.6	248.8		249.2	
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0			
m	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
m	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL			
o	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR			
Group delay (usec) (SBD)	-1.14291420144E+04		Apriori delay (usec)		-1.14291115879E+04		Resid mbdelay (usec)		8.23585E-04	+/- 4.7E-05	
Sband delay (usec)	-1.14291420077E+04		Apriori clock (usec)		-2.4511011E+01		Resid sbdelay (usec)		-3.04198E-02	+/- 3.7E-04	
Phase delay (usec)	-1.14291115896E+04		Apriori clockrate (us/s)		-4.9577204E-07		Resid phdelay (usec)		-1.69354E-06	+/- 3.2E-07	
Delay rate (us/s)	3.97108634803E-01		Apriori rate (us/s)		3.97108200986E-01		Resid rate (us/s)		4.33816E-07	+/- 3.1E-09	
Total phase (deg)			Apriori accel (us/s/s)		4.24931621842E-05		Resid phase (deg)		-71.3	+/- 4.9	
RMS	17.1	11.5	Amplitude		0.637 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	21.0	7.0	Search (1024X32)		0.616		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
amp/seg (%)	26.4	12.1	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	21.0	7.0	Inc. seg. avg.		0.650		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
amp/frq (%)	26.4	12.1	Inc. frq. avg.		0.661		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
m: az 54.7 el 12.9 pa -75.0		o: az 73.7 el 49.6 pa -73.8		u,v (fr/asec)		-1416.276 341.675		simultaneous interpolator			
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0527//mo..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//mo.Q.369.3MP8EV							

Mk4/DiFX fourfit 3.25 rev 0

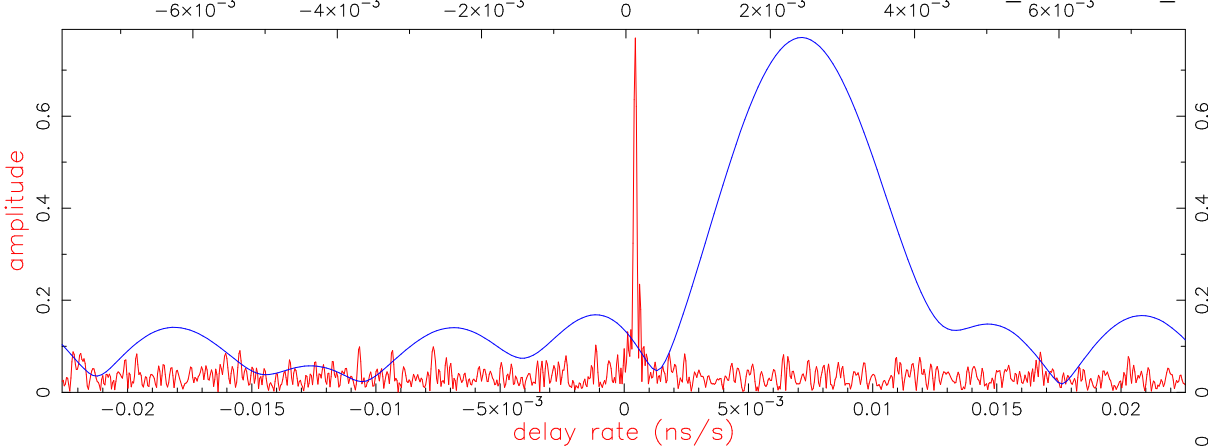
aux01

2013+370.3MP8EV, No0527, mo

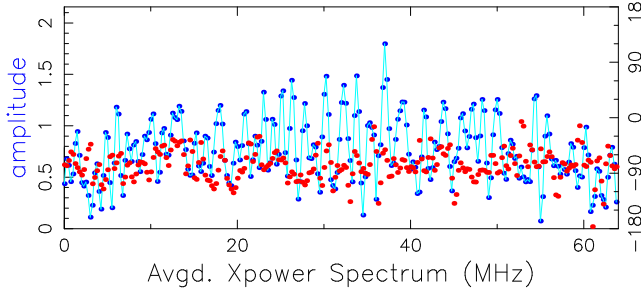
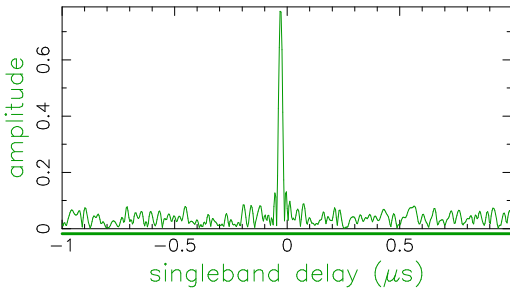
VLBA_MK - VLBA_OV, fgroup Q, pol RL

multiband delay (μ s)

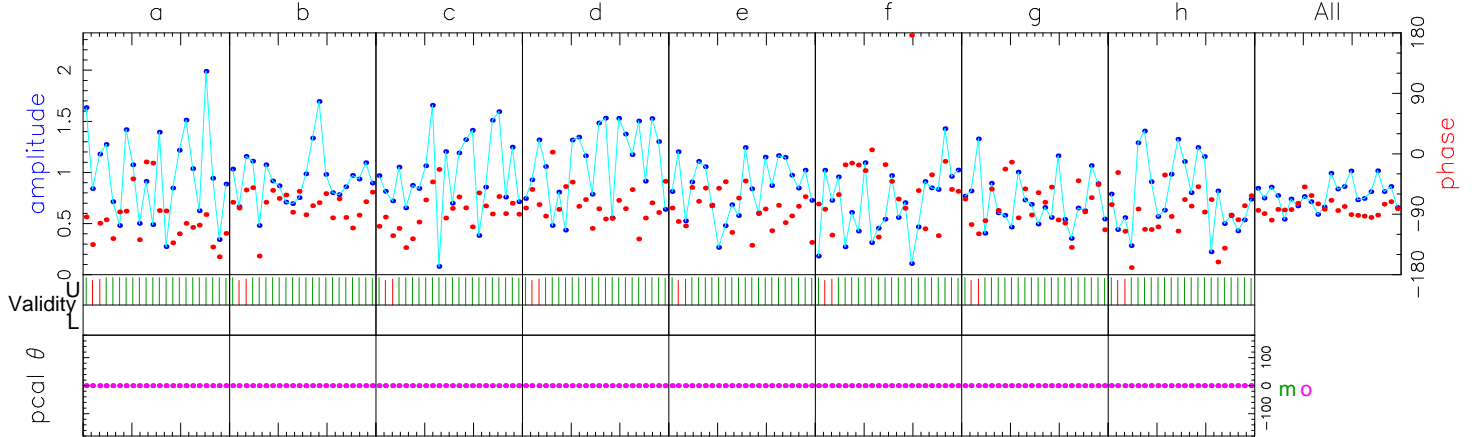
Fringe quality 8



SNR 28.8
 Int time 178.611
 Amp 0.789
 Phase -126.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.029375
 MBD 0.002368
 Fringe rate (Hz) 0.018693
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512
 Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build 2024:334:010135
 2025:042:153014
 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



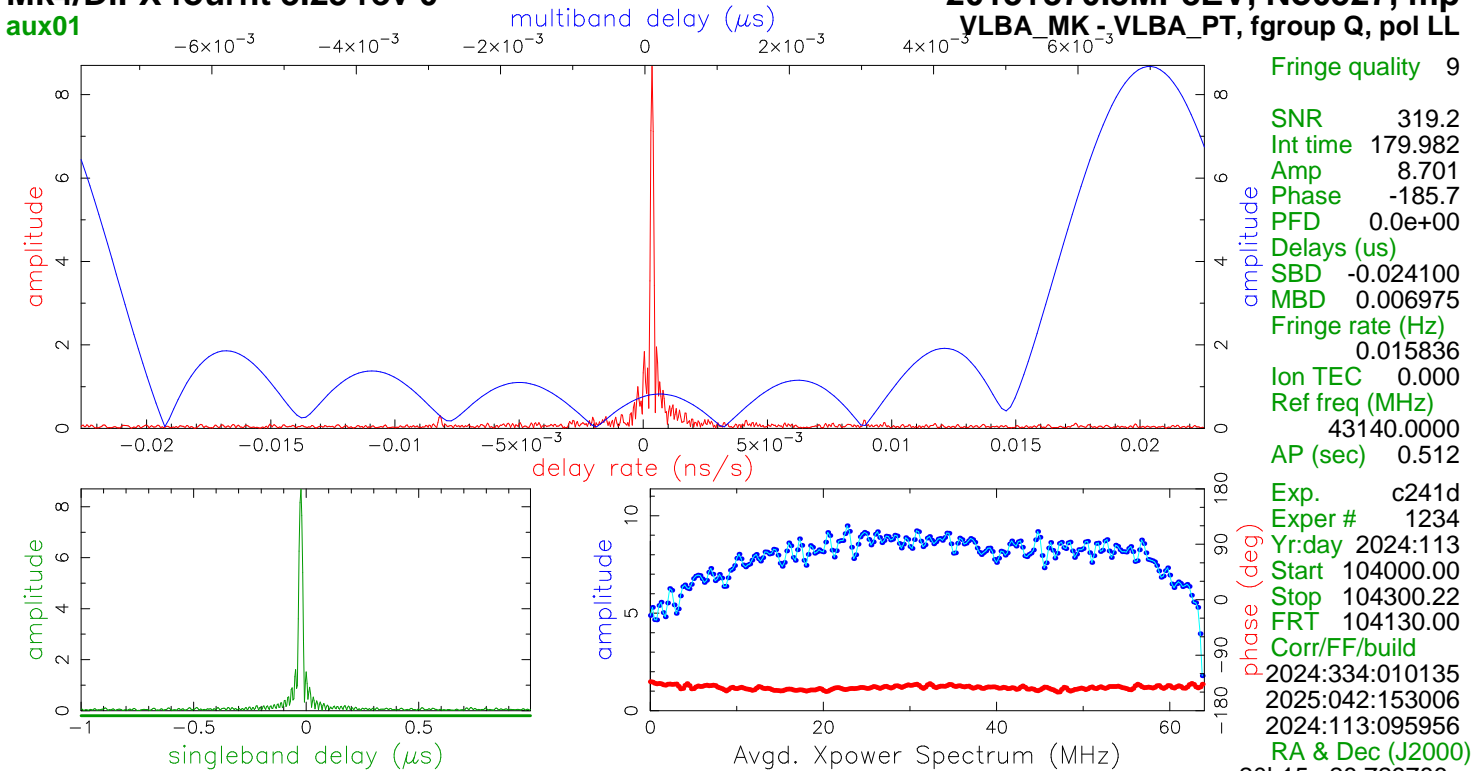
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
	-98.6	-74.4	-86.6	-77.9	-82.2	-55.4	-77.2	-90.7	Phase	-81.4
	0.8	0.9	0.9	1.0	0.8	0.6	0.7	0.7	Ampl.	0.8
	250.0	249.5	249.8	249.4	249.8	249.5	248.7	249.2	Sbd box	249.5
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	
									Tracks	
Group delay (usec) (SBD)	-1.14291404697E+04			Apriori delay (usec)	-1.14291115879E+04			Resid mbdelay (usec)	2.36824E-03	+/- 3.8E-05
Sband delay (usec)	-1.14291409629E+04			Apriori clock (usec)	-2.4511011E+01			Resid sbdelay (usec)	-2.93750E-02	+/- 3.0E-04
Phase delay (usec)	-1.14291115932E+04			Apriori clockrate (us/s)	-4.9577204E-07			Resid phdelay (usec)	-5.23826E-06	+/- 2.6E-07
Delay rate (us/s)	3.97108634299E-01			Apriori rate (us/s)	3.97108200986E-01			Resid rate (us/s)	4.33313E-07	+/- 2.5E-09
Total phase (deg)			-91.7	Apriori accel (us/s/s)	4.24931621842E-05			Resid phase (deg)	-126.4	+/- 4.0
	RMS	Theor.	Amplitude	0.789 +/- 0.027				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	11.3	9.3	Search (1024X32)	0.760			PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	15.5	16.3	Interp.	0.000			Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	13.9	5.6	Inc. seg. avg.	0.775			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
amp/frq (%)	18.3	9.8	Inc. frq. avg.	0.781			Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
m: az 54.7 el 12.9 pa -75.0			o: az 73.7 el 49.6 pa -73.8				u,v (fr/asec) -1416.276 341.675		simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//mo..3MP8EV				Output file: /Exps/c241d/v1/7mm/1234/No0527//mo.Q.381.3MP8EV			

Mk4/DiFX fourfit 3.25 rev 0

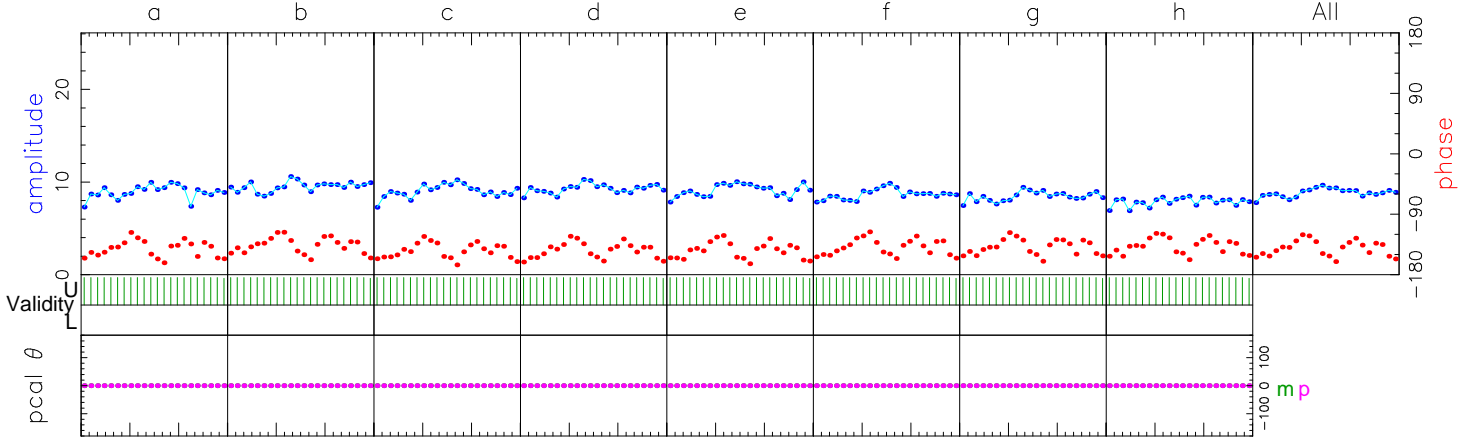
aux01

2013+370.3MP8EV, No0527, mp

VLBA_MK - VLBA_PT, fgroup Q, pol LL



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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All		
	-141.7	-136.3	-144.5	-143.6	-143.8	-139.1	-138.9	-137.5	Phase	-140.7		
	8.7	9.3	8.9	9.1	8.9	8.5	8.3	7.7	Ampl.	8.7		
	251.2	251.0	250.7	250.8	250.8	250.8	250.7	250.8	Sbd box	250.8		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
p	1000	1000	1000	1000	1000	1000	1000	1000				
m	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)	-1.29797975020E+04			Apriori delay (usec)	-1.29797732271E+04				Resid mbdelay (usec)	6.97512E-03	+/- 3.4E-06	
Sband delay (usec)	-1.29797973271E+04			Apriori clock (usec)	-5.1581821E+00				Resid sbdelay (usec)	-2.41000E-02	+/- 2.7E-05	
Phase delay (usec)	-1.29797732362E+04			Apriori clockrate (us/s)	-3.9319698E-07				Resid phdelay (usec)	-9.06170E-06	+/- 2.3E-08	
Delay rate (us/s)	4.94158136201E-01			Apriori rate (us/s)	4.94157769107E-01				Resid rate (us/s)	3.67094E-07	+/- 2.2E-10	
Total phase (deg)		-191.8		Apriori accel (us/s/s)	5.36675894550E-05				Resid phase (deg)	-185.7	+/- 0.4	
	RMS	Theor.	Amplitude	8.701 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	11.3	0.8	Search (1024X32)	8.442					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	5.4	1.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	3.4	0.5	Inc. seg. avg.	8.850					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
amp/frq (%)	5.4	0.9	Inc. frq. avg.	8.690					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
m: az 54.7 el 12.9 pa -75.0			p: az 72.8 el 56.7 pa -82.5						u,v (fr/asec) -1761.161 824.301		simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241d/v1/7mm/1234/No0527//mp..3MP8EV						Output file: /Exps/c241d/v1/7mm/1234/No0527//mp.Q.342.3MP8EV			

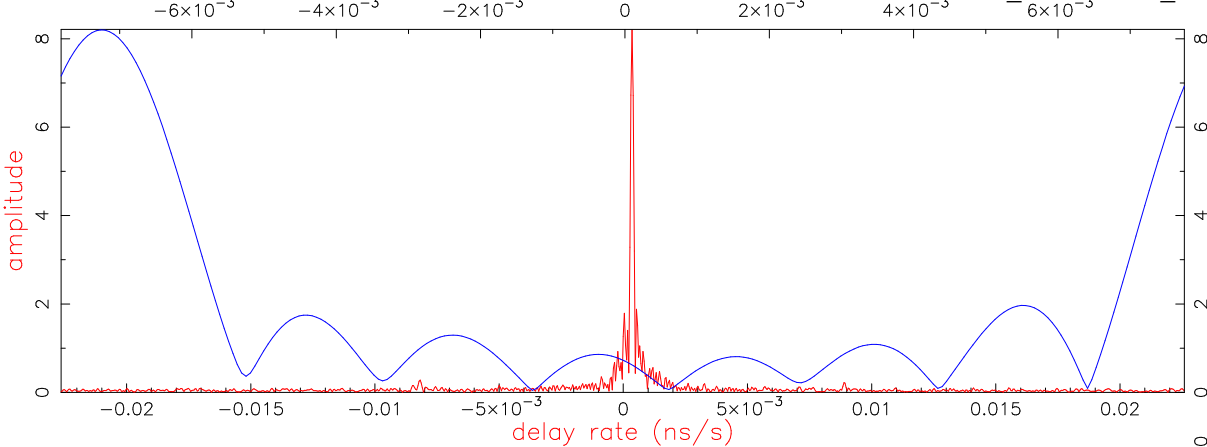
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, mp

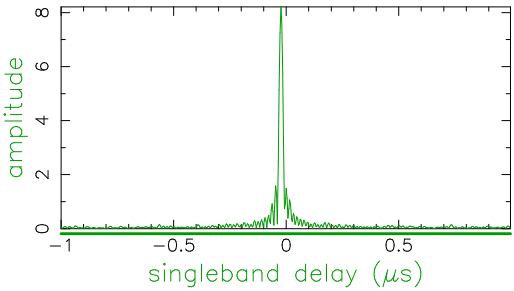
VLBA_MK - VLBA_PT, fgroup Q, pol RR

multiband delay (μ s)

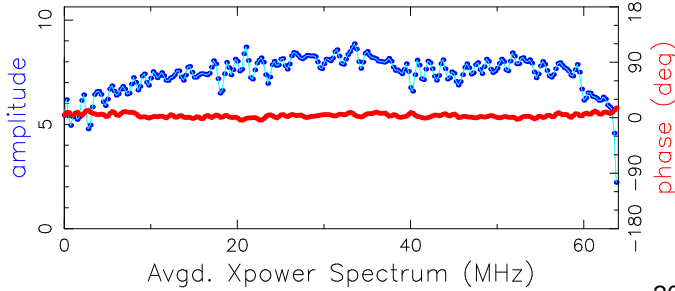


Fringe quality 9

SNR 301.3
 Int time 179.982
 Amp 8.213
 Phase -20.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.022956
 MBD -0.007237
 Fringe rate (Hz)
 0.015837
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



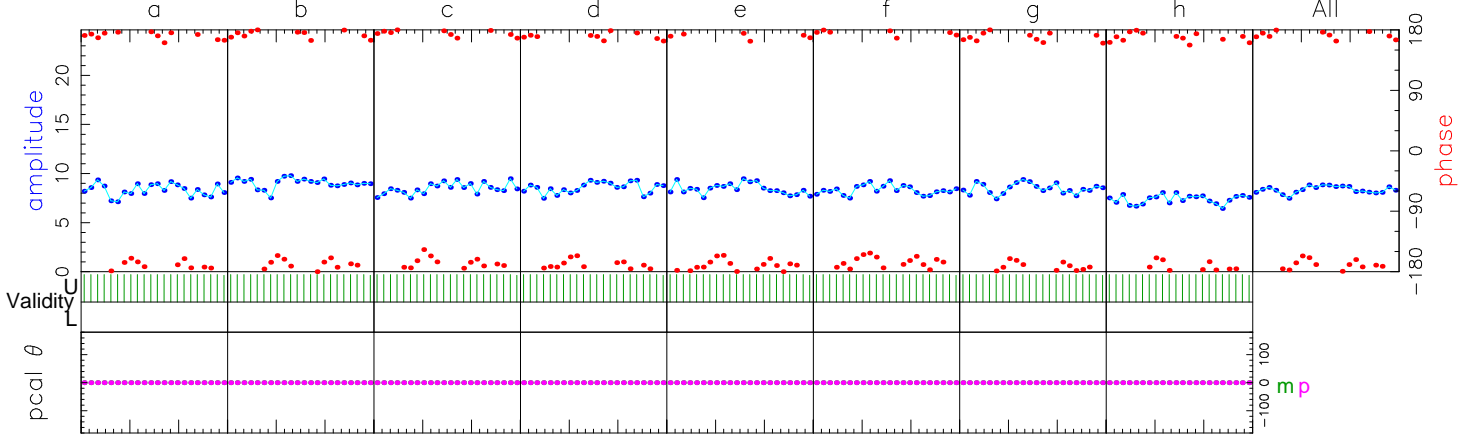
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153008
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	-1.29797960886E+04	Apriori delay (usec)	-1.29797732271E+04	Resid mbdelay (usec)	-7.23651E-03	+/-	3.6E-06
Sband delay (usec)	-1.29797961831E+04	Apriori clock (usec)	-5.1581821E+00	Resid sbdelay (usec)	-2.29560E-02	+/-	2.9E-05
Phase delay (usec)	-1.29797732385E+04	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	-1.14463E-05	+/-	2.4E-08
Delay rate (us/s)	4.94158136204E-01	Apriori rate (us/s)	4.94157769107E-01	Resid rate (us/s)	3.67097E-07	+/-	2.4E-10
Total phase (deg)	-26.3	Apriori accel (us/s/s)	5.36675894550E-05	Resid phase (deg)	-20.3	+/-	0.4

ph/seg (deg) 11.2 0.9
 amp/seg (%) 4.6 1.6
 ph/frq (deg) 4.2 0.5
 amp/frq (%) 5.2 0.9

RMS Theor. Amplitude 8.213 +/- 0.027
 Search (1024X32) 8.019
 Interp. 0.000
 Inc. seg. avg. 8.361
 Inc. frq. avg. 8.217

m: az 54.7 el 12.9 pa -75.0 p: az 72.8 el 56.7 pa -82.5 u,v (fr/asec) -1761.161 824.301

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mp..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mp.Q.351.3MP8EV

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

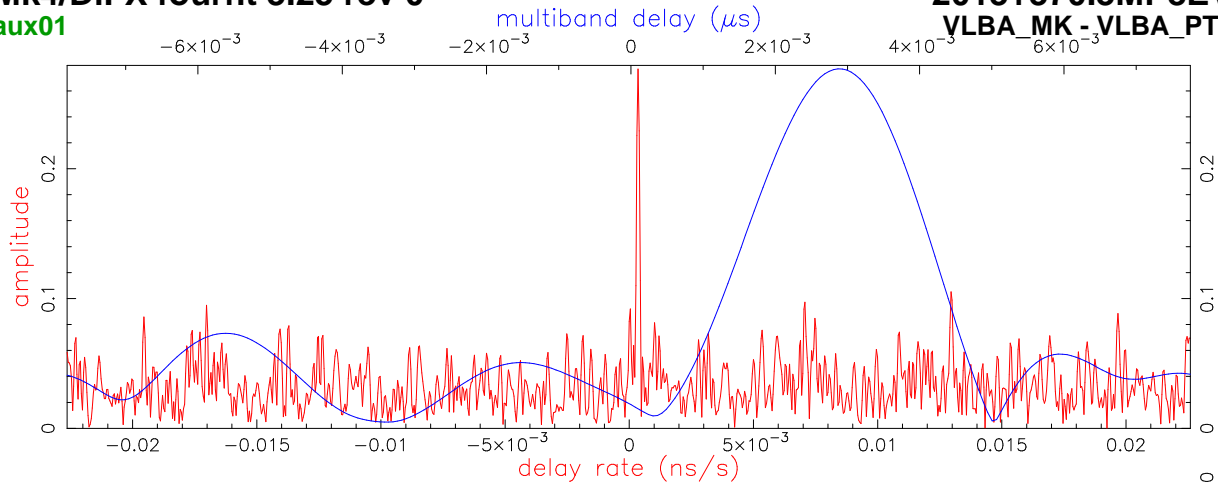
simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

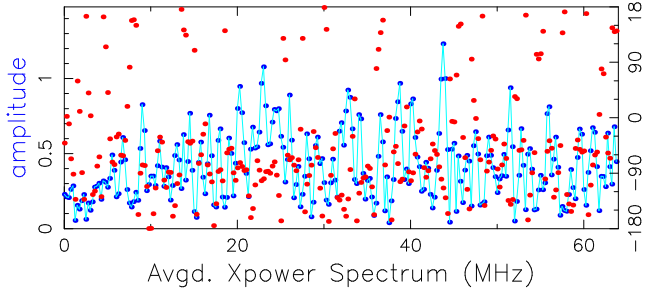
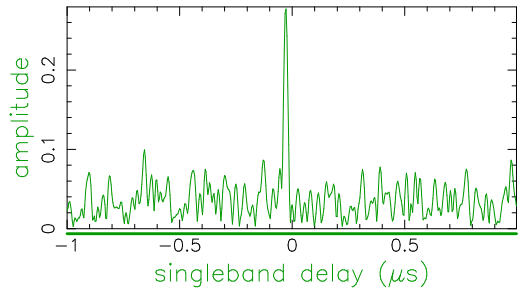
2013+370.3MP8EV, No0527, mp

VLBA_MK - VLBA_PT, fgroup Q, pol LR



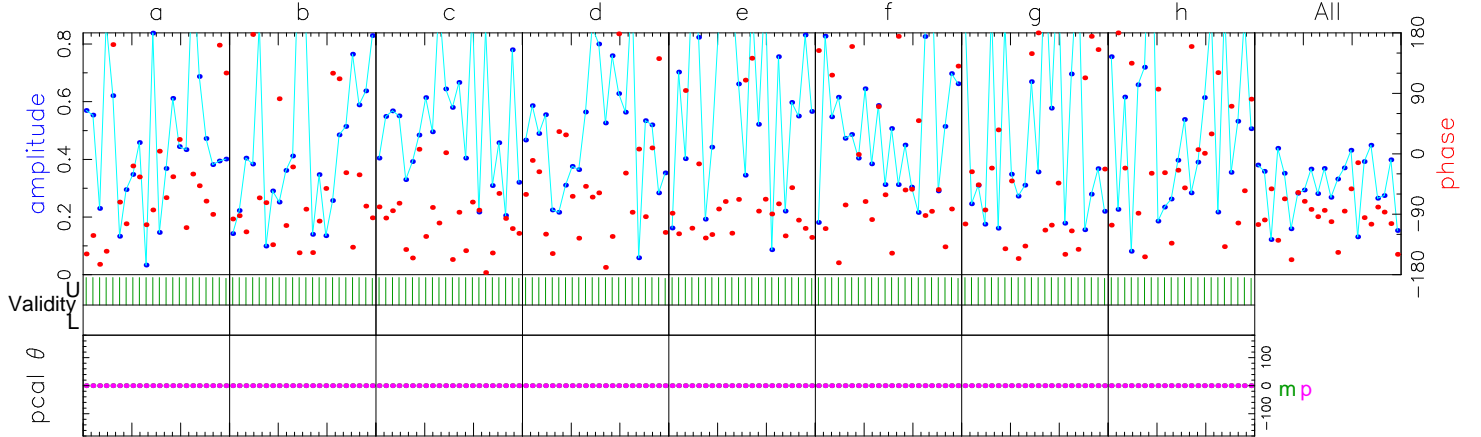
Fringe quality 9

SNR 10.3
 Int time 179.982
 Amp 0.280
 Phase -137.4
 PFD 2.4e-16
 Delays (us)
 SBD -0.028753
 MBD 0.002850
 Fringe rate (Hz)
 0.015892
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153010
 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
	-84.3	-98.9	-100.7	-76.2	-94.6	-106.0	-110.9	-52.4	Phase	-92.4
	0.2	0.3	0.4	0.3	0.4	0.2	0.3	0.2	Ampl.	0.3
	200.3	248.7	249.2	249.8	249.8	236.4	250.9	40.8	Sbd box	249.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-1.29798016269E+04	Apriori delay (usec)	-1.29797732271E+04	Resid mbdelay (usec)	2.85021E-03	+/-	1.1E-04
Sband delay (usec)	-1.29798019796E+04	Apriori clock (usec)	-5.1581821E+00	Resid sbdelay (usec)	-2.87525E-02	+/-	8.4E-04
Phase delay (usec)	-1.29797732330E+04	Apriori clockrate (us/s)	-3.9319698E-07	Resid phdelay (usec)	-5.95280E-06	+/-	7.2E-07
Delay rate (us/s)	4.94158137483E-01	Apriori rate (us/s)	4.94157769107E-01	Resid rate (us/s)	3.68376E-07	+/-	6.9E-09
Total phase (deg)	-143.5	Apriori accel (us/s/s)	5.36675894550E-05	Resid phase (deg)	-137.4	+/-	11.2

ph/seg (deg)	33.4	Theor.	26.2	Amplitude	0.280 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	36.5		45.7	Search (1024X32)	0.269	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.7		15.8	Inc. seg. avg.	0.283	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.5		27.6	Inc. frq. avg.	0.277	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

m: az 54.7 el 12.9 pa -75.0 p: az 72.8 el 56.7 pa -82.5 u,v (fr/asec) -1761.161 824.301 simultaneous interpolator

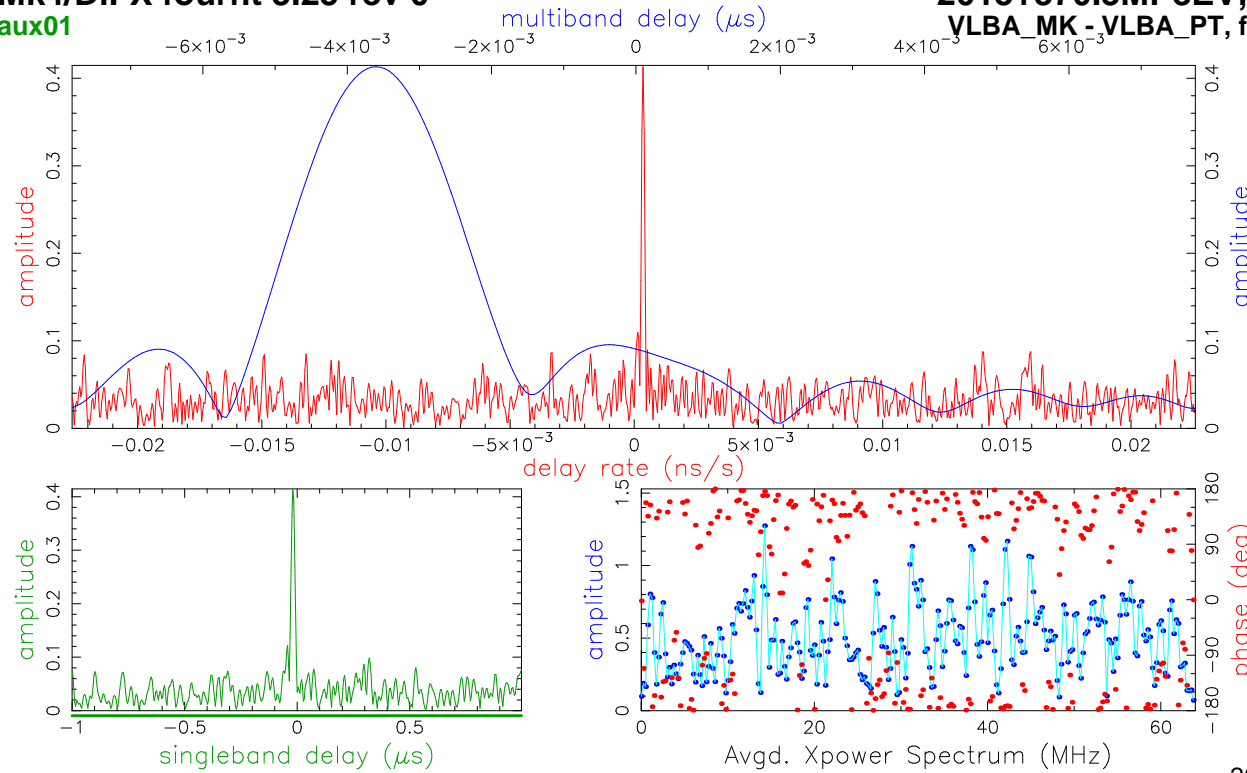
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mp..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mp.Q.364.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, mp

VLBA_MK - VLBA_PT, fgroup Q, pol RL

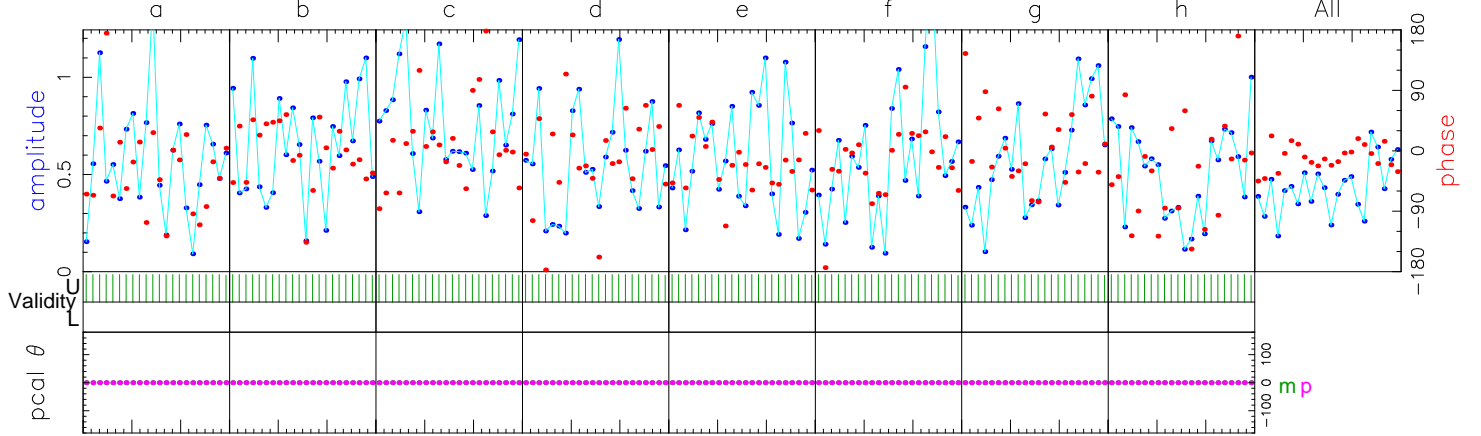


Fringe quality 9

SNR 15.2
 Int time 179.982
 Amp 0.415
 Phase -211.9
 PFD 9.2e-44
 Delays (us)
 SBD -0.018702
 MBD -0.003578
 Fringe rate (Hz) 0.015585
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512

Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build 2024:334:010135
 2025:042:153012
 2024:113:095956
 RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

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



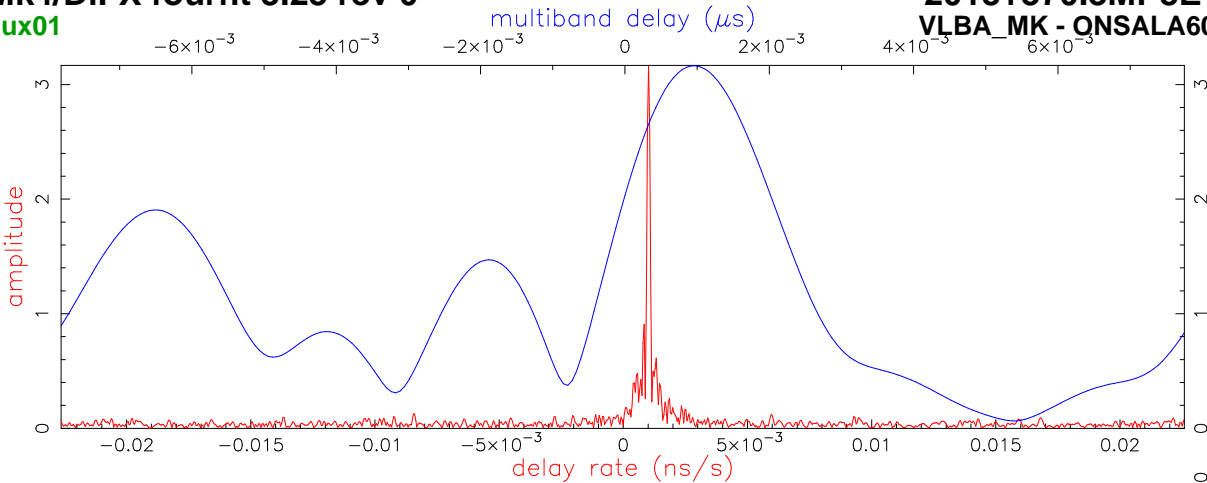
	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All	
	-25.6	-1.4	-5.4	-0.7	-15.9	-2.0	0.1	-40.0	Phase	-9.4	
	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.3	Ampl.	0.4	
	253.8	253.0	251.5	251.3	252.1	252.4	252.1	250.9	Sbd box	252.2	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids		
p	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-1.29797924300E+04		Apriori delay (usec)		-1.29797732271E+04		Resid mbdelay (usec)		-3.57788E-03	+/- 7.1E-05	
Sband delay (usec)	-1.29797919293E+04		Apriori clock (usec)		-5.1581821E+00		Resid sbdelay (usec)		-1.87022E-02	+/- 5.7E-04	
Phase delay (usec)	-1.29797732277E+04		Apriori clockrate (us/s)		-3.9319698E-07		Resid phdelay (usec)		-6.03144E-07	+/- 4.8E-07	
Delay rate (us/s)	4.94158130372E-01		Apriori rate (us/s)		4.94157769107E-01		Resid rate (us/s)		3.61265E-07	+/- 4.7E-09	
Total phase (deg)			Apriori accel (us/s/s)		5.36675894550E-05		Resid phase (deg)		-211.9	+/- 7.5	
	RMS	Theor.	Amplitude	0.415 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	18.8	17.7	Search (1024X32)	0.403		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	31.8	30.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	16.0	10.7	Inc. seg. avg.	0.414		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023 0.023	
amp/frq (%)	19.3	18.6	Inc. frq. avg.	0.415		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
m: az 54.7 el 12.9 pa -75.0		p: az 72.8 el 56.7 pa -82.5		u, v (fr/asec) -1761.161 824.301						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241d/v1/7mm/1234/No0527//mp..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//mp.Q.371.3MP8EV							

Mk4/DiFX fourfit 3.25 rev 0

aux01

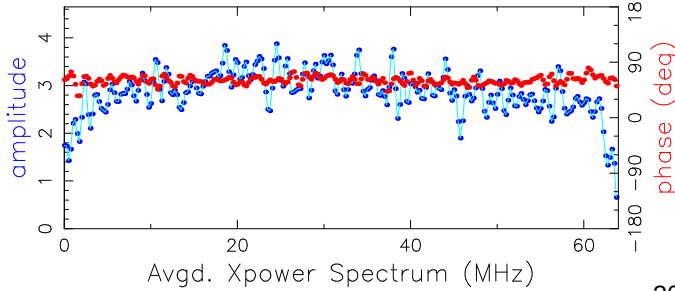
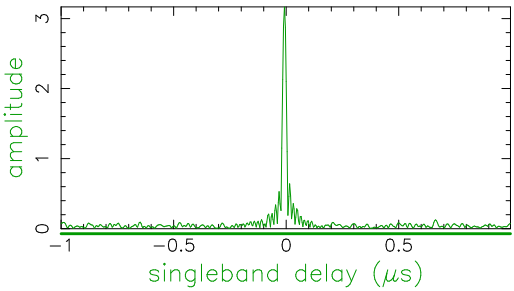
2013+370.3MP8EV, No0527, mX

VLBA_MK - QNSALA60, fgroup Q, pol LL



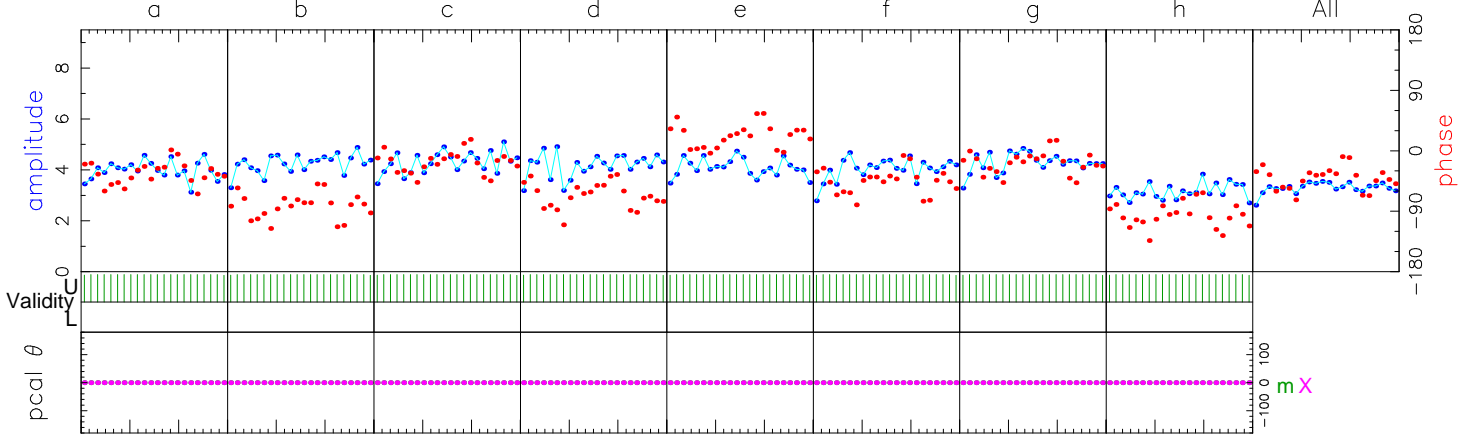
Fringe quality 5

SNR 116.0
 Int time 179.810
 Amp 3.167
 Phase -243.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.007841
 MBD 0.000956
 Fringe rate (Hz)
 0.044365
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153001
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks	

Group delay (usec) (SBD)	-7.78881919092E+03	Apriori delay (usec)	-7.78880452155E+03	Resid mbdelay (usec)	9.55636E-04	+/-	9.4E-06
Sband delay (usec)	-7.78881236280E+03	Apriori clock (usec)	-1.1238093E+02	Resid sbdelay (usec)	-7.84125E-03	+/-	7.4E-05
Phase delay (usec)	-7.78880452418E+03	Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	-2.62247E-06	+/-	6.4E-08
Delay rate (us/s)	1.81759915117E+00	Apriori rate (us/s)	1.81759812276E+00	Resid rate (us/s)	1.02840E-06	+/-	6.1E-10
Total phase (deg)	-264.8	Apriori accel (us/s/s)	6.44350946840E-06	Resid phase (deg)	-243.2	+/-	1.0

ph/seg (deg)	RMS 16.7	Theor. 2.3	Amplitude 3.167 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	7.7	4.0	Search (1024X32) 3.081	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	41.7	1.4	Inc. seg. avg. 3.301	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	24.2	2.4	Inc. frq. avg. 3.853	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

m: az 54.7 el 12.9 pa -75.0 X: az 284.1 el 36.4 pa 41.0 u,v (fr/asec) -6550.568 -1542.649 simultaneous interpolator

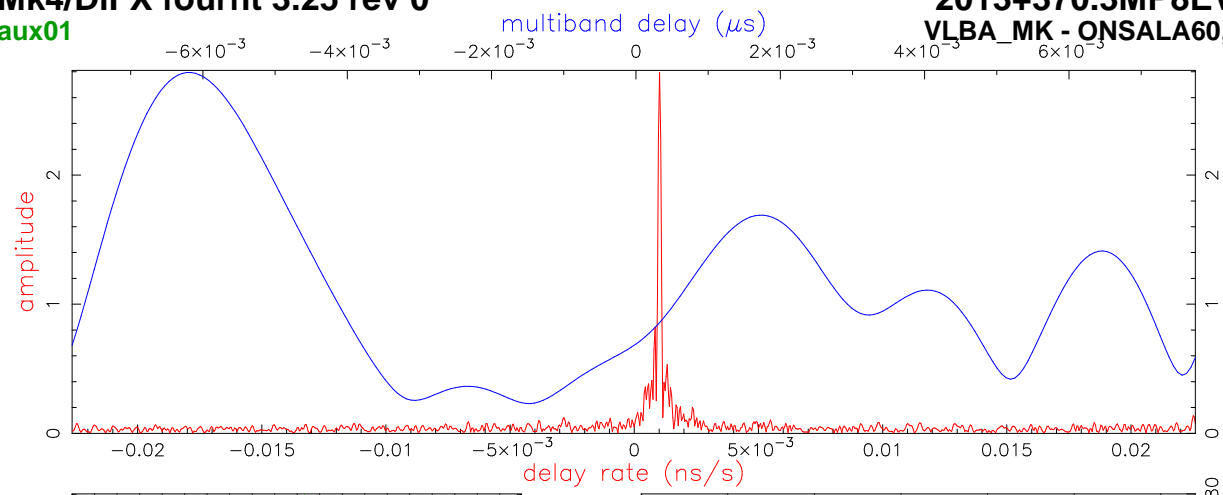
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mX...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mX.Q.321.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

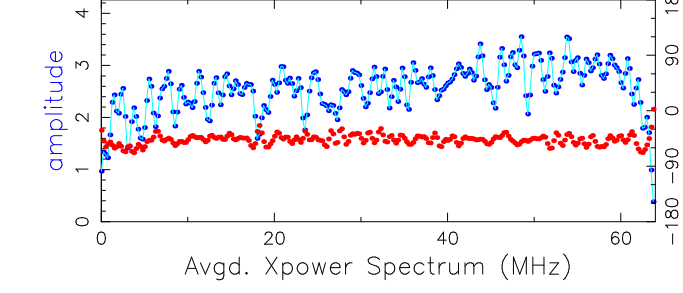
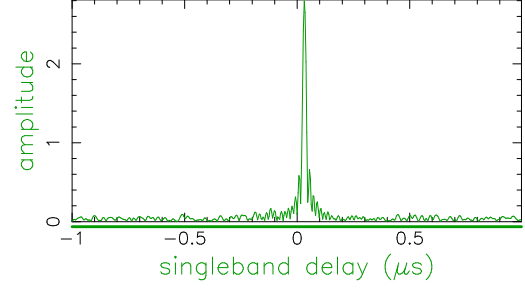
2013+370.3MP8EV, No0527, mX

VLBA_MK - ONSALA60, fgroup Q, pol RR



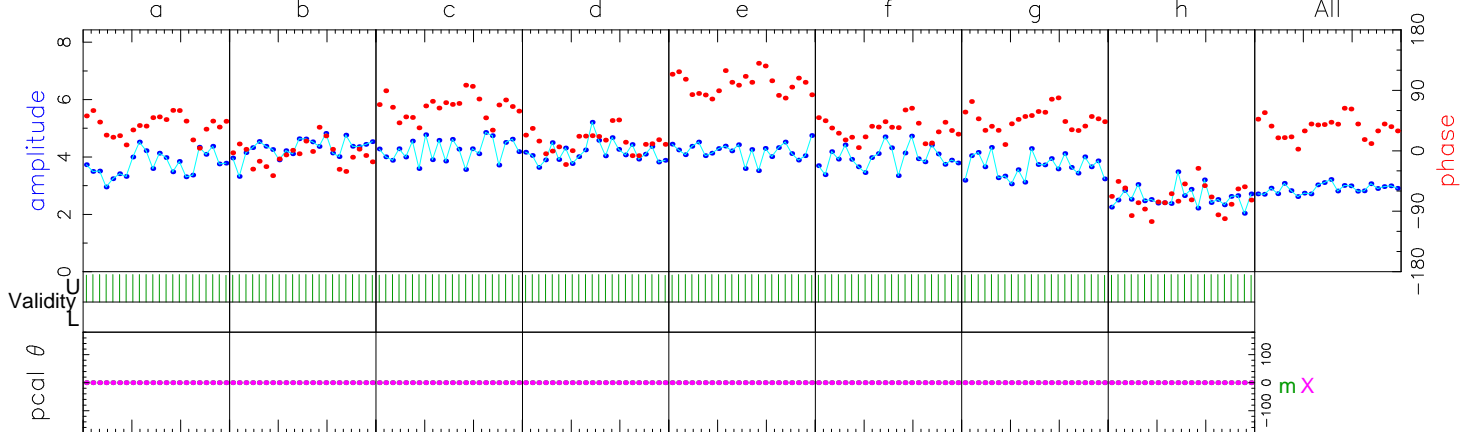
Fringe quality 5

SNR 103.0
 Int time 179.810
 Amp 2.811
 Phase 79.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.032141
 MBD -0.006166
 Fringe rate (Hz)
 0.044386
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153005
 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
	37.6	-6.1	64.7	13.5	99.4	32.6	47.2	-70.8	Phase	34.7
	3.6	4.1	4.1	4.0	4.1	3.9	3.5	2.5	Ampl.	3.7
	265.1	264.9	264.7	264.7	264.5	264.8	264.2	262.9	Sbd box	265.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD) -7.78877943714E+03 Apriori delay (usec) -7.78880452155E+03 Resid mbdelay (usec) -6.16558E-03 +/- 1.1E-05
 Sband delay (usec) -7.78877238105E+03 Apriori clock (usec) -1.1238093E+02 Resid sbdelay (usec) 3.21405E-02 +/- 8.4E-05
 Phase delay (usec) -7.78880451932E+03 Apriori clockrate (us/s) -1.2311231E-02 Resid phdelay (usec) 2.23161E-06 +/- 7.2E-08
 Delay rate (us/s) 1.81759915164E+00 Apriori rate (us/s) 1.81759812276E+00 Resid rate (us/s) 1.02887E-06 +/- 6.9E-10
 Total phase (deg) 58.1 Apriori accel (us/s/s) 6.44350946840E-06 Resid phase (deg) 79.7 +/- 1.1

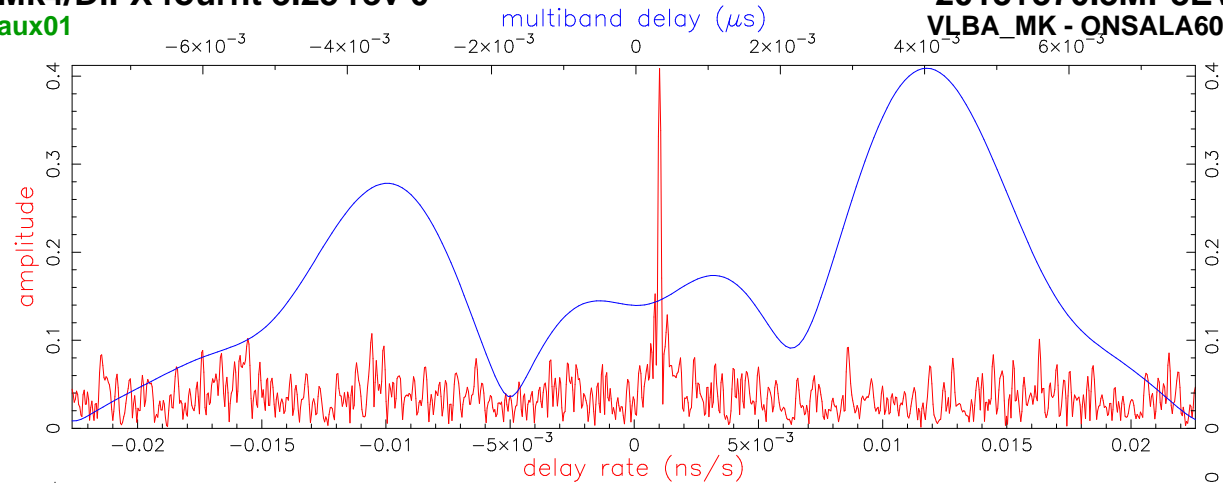
ph/seg (deg) 15.2 2.6 Theor. Amplitude 2.811 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 6.3 4.6 Search (1024X32) 2.729 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.5 1.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.0 2.7 Inc. seg. avg. 2.893 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.023 0.023
 m: az 54.7 el 12.9 pa -75.0 X: az 284.1 el 36.4 pa 41.0 u,v (fr/asec) -6550.568 -1542.649 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mX...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mX.Q.332.3MP8EV simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

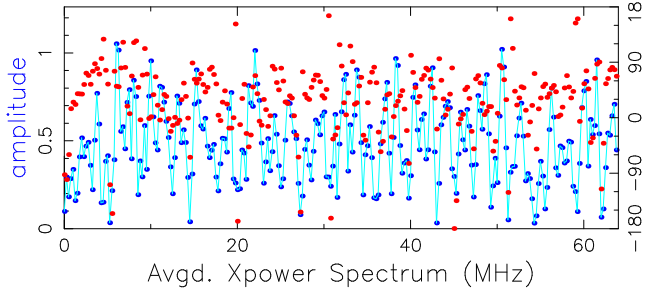
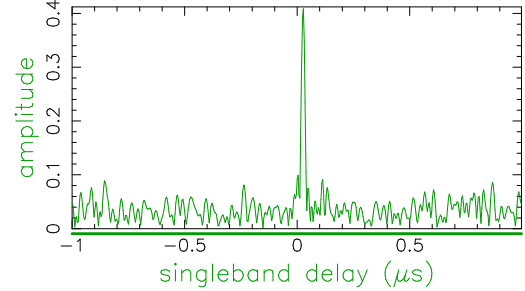
2013+370.3MP8EV, No0527, mX

VLBA_MK - ONSALA60, fgroup Q, pol LR



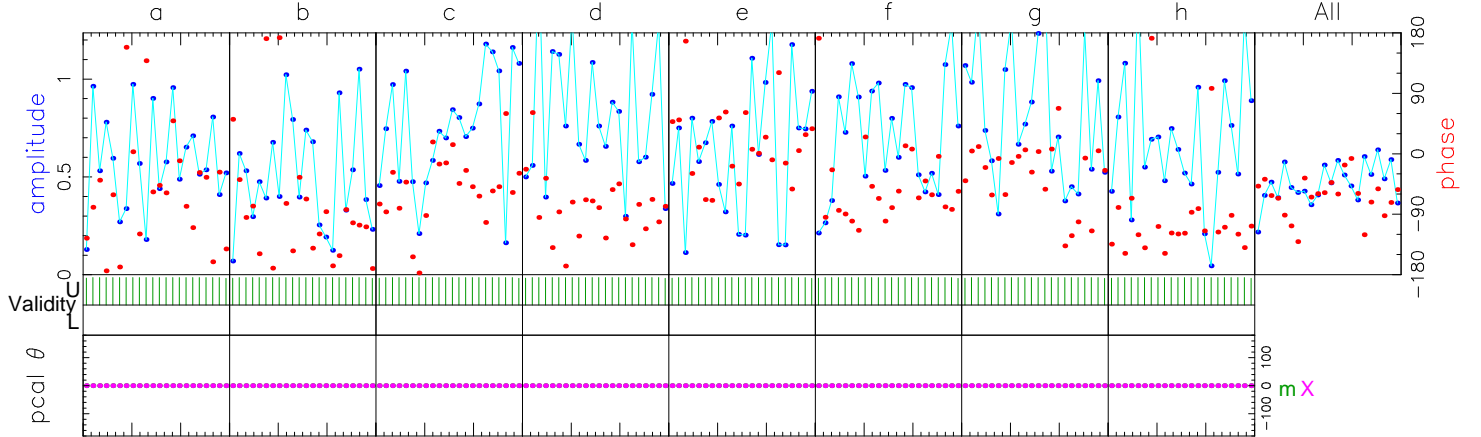
Fringe quality 7

SNR 15.1
 Int time 179.810
 Amp 0.412
 Phase 137.7
 PFD 5.0e-43
 Delays (us)
 SBD 0.026226
 MBD 0.003978
 Fringe rate (Hz)
 0.044339
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153008
 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
	-69.2	-114.5	-48.3	-89.9	1.1	-63.8	-20.5	-118.2	Phase	-64.8
	0.3	0.4	0.6	0.7	0.5	0.6	0.6	0.6	Ampl.	0.5
	265.6	262.8	263.5	263.3	262.7	262.9	263.0	261.4	Sbd box	263.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
X	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-7.78878491848E+03	Apriori delay (usec)	-7.78880452155E+03	Resid mbdelay (usec)	3.97807E-03	+/-	7.2E-05
Sband delay (usec)	-7.78877829530E+03	Apriori clock (usec)	-1.1238093E+02	Resid sbdelay (usec)	2.62263E-02	+/-	5.7E-04
Phase delay (usec)	-7.78880452573E+03	Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	-4.17145E-06	+/-	4.9E-07
Delay rate (us/s)	1.81759915057E+00	Apriori rate (us/s)	1.81759812276E+00	Resid rate (us/s)	1.02780E-06	+/-	4.7E-09
Total phase (deg)	116.2	Apriori accel (us/s/s)	6.44350946840E-06	Resid phase (deg)	137.7	+/-	7.6

ph/seg (deg)	RMS 29.6	Theor. 17.8	Amplitude Search (1024X32)	0.412 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	27.3	31.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	45.7	10.7	Inc. seg. avg.	0.447	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	41.5	18.7	Inc. frq. avg.	0.517	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.023	0.023

m: az 54.7 el 12.9 pa -75.0 X: az 284.1 el 36.4 pa 41.0 u,v (fr/asec) -6550.568 -1542.649 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mX...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mX.Q.352.3MP8EV

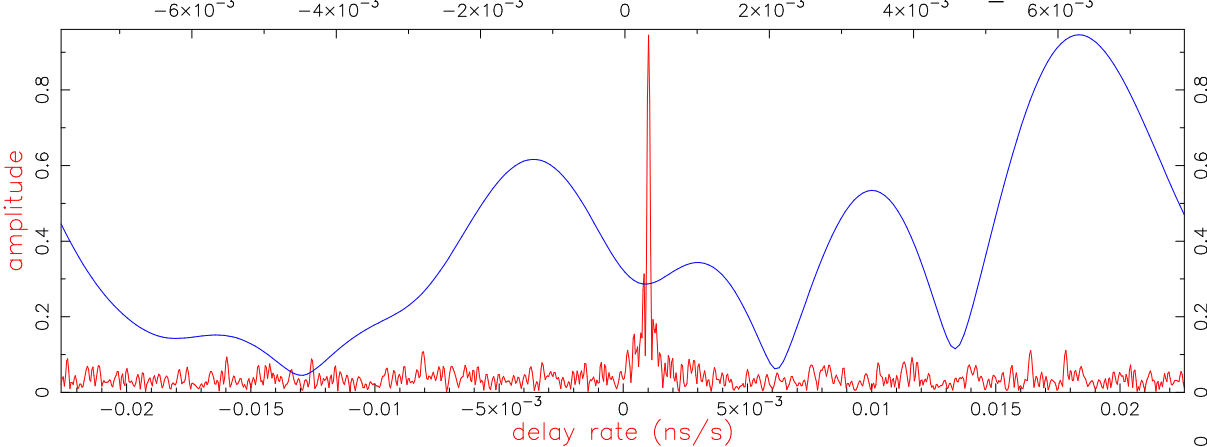
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, mX

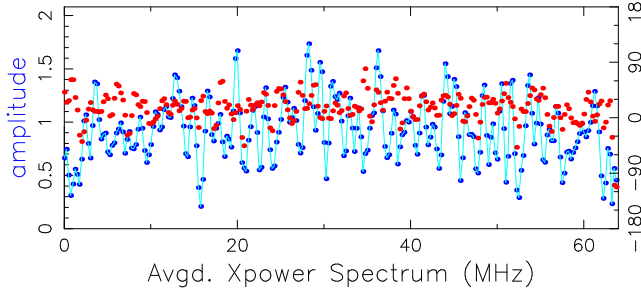
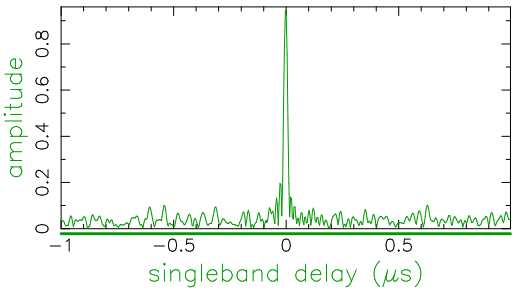
VLBA_MK - ONSALA60, fgroup Q, pol RL

multiband delay (μ s)



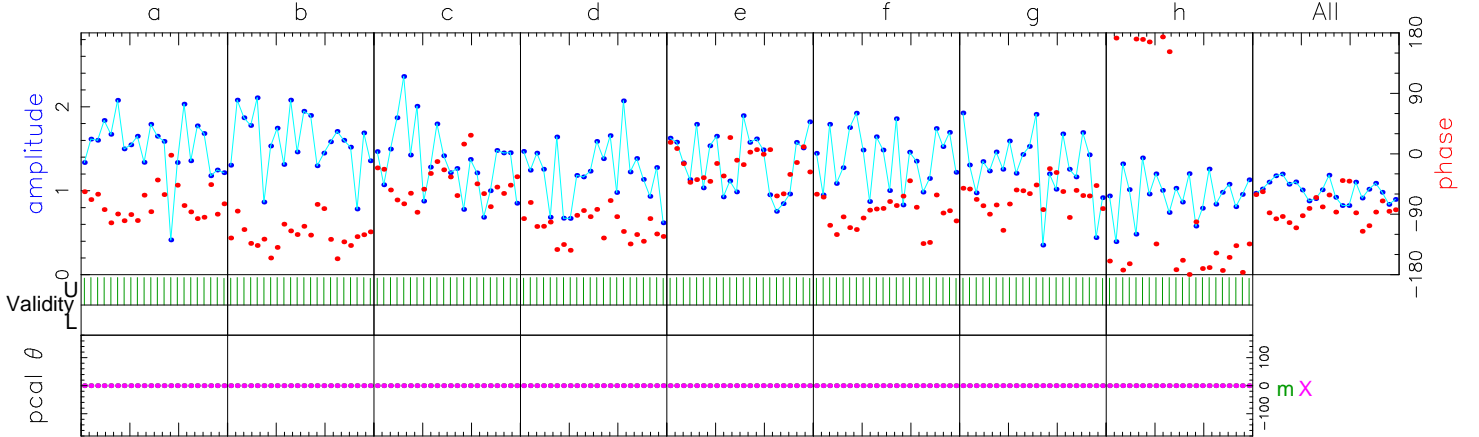
Fringe quality 6

SNR 35.2
 Int time 179.810
 Amp 0.960
 Phase -284.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002331
 MBD 0.006337
 Fringe rate (Hz)
 0.044386
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153010
 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	
	-77.2	-120.8	-45.7	-107.1	-14.2	-88.1	-63.3	-166.9	Phase	-82.4	
	1.4	1.5	1.2	1.1	1.3	1.3	1.2	0.9	Ampl.	1.2	
	256.4	255.9	256.0	256.0	255.8	255.5	255.8	254.5	Sbd box	256.4	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids		
X	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-7.78881380982E+03		Apriori delay (usec)		-7.78880452155E+03		Resid mbdelay (usec)		6.33673E-03	+/- 3.1E-05	
Sband delay (usec)	-7.78880685280E+03		Apriori clock (usec)		-1.1238093E+02		Resid sbdelay (usec)		-2.33125E-03	+/- 2.4E-04	
Phase delay (usec)	-7.78880452686E+03		Apriori clockrate (us/s)		-1.2311231E-06		Resid phdelay (usec)		-5.30883E-06	+/- 2.1E-07	
Delay rate (us/s)	1.81759915164E+00		Apriori rate (us/s)		1.81759812276E+00		Resid rate (us/s)		1.02888E-06	+/- 2.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		6.44350946840E-06		Resid phase (deg)		-284.9	+/- 3.3	
	RMS	Theor.	Amplitude	0.960 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	20.2	7.6	Search (1024X32)	0.919	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	12.8	13.3	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	51.1	4.6	Inc. seg. avg.	0.995	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.023	0.023	
amp/frq (%)	34.0	8.0	Inc. frq. avg.	1.234	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
m: az 54.7 el 12.9 pa -75.0	X: az 284.1 el 36.4 pa 41.0		u,v (fr/asec) -6550.568 -1542.649						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0527//mX...3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//mX.Q.366.3MP8EV								

Mk4/DiFX fourfit 3.25 rev 0

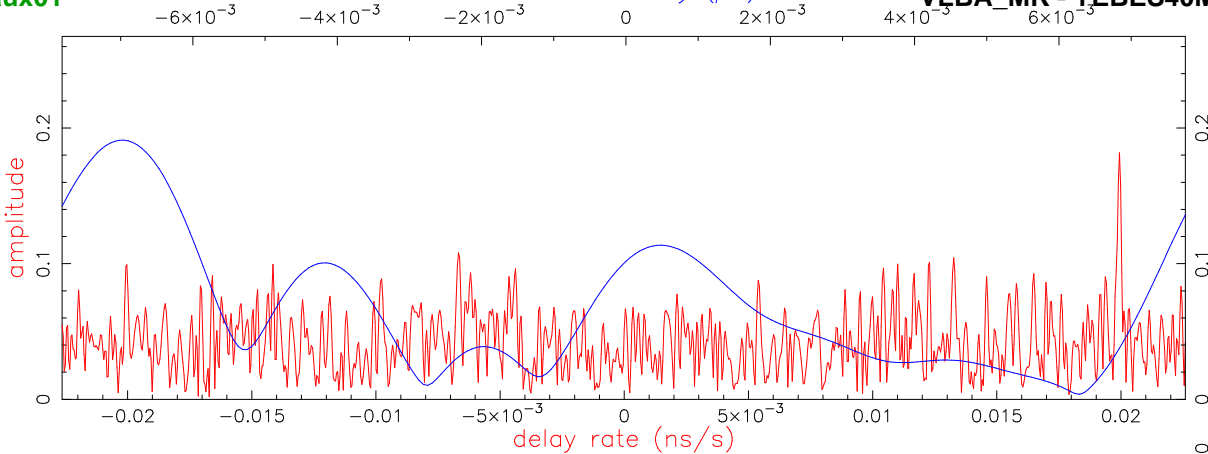
aux01

2013+370.3MP8EV, No0527, mY

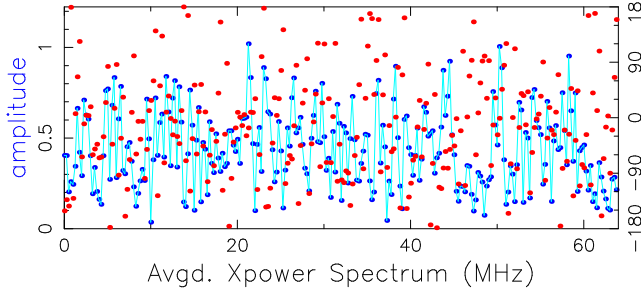
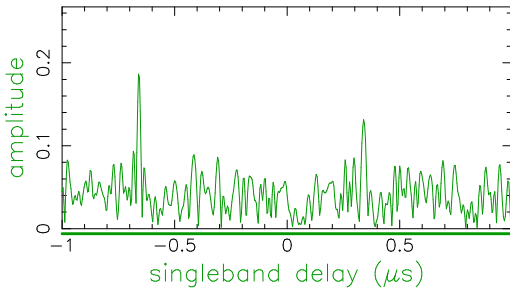
VLBA_MK - YEBES40M, fgroup Q, pol LL

multiband delay (μ s)

Fringe quality 0

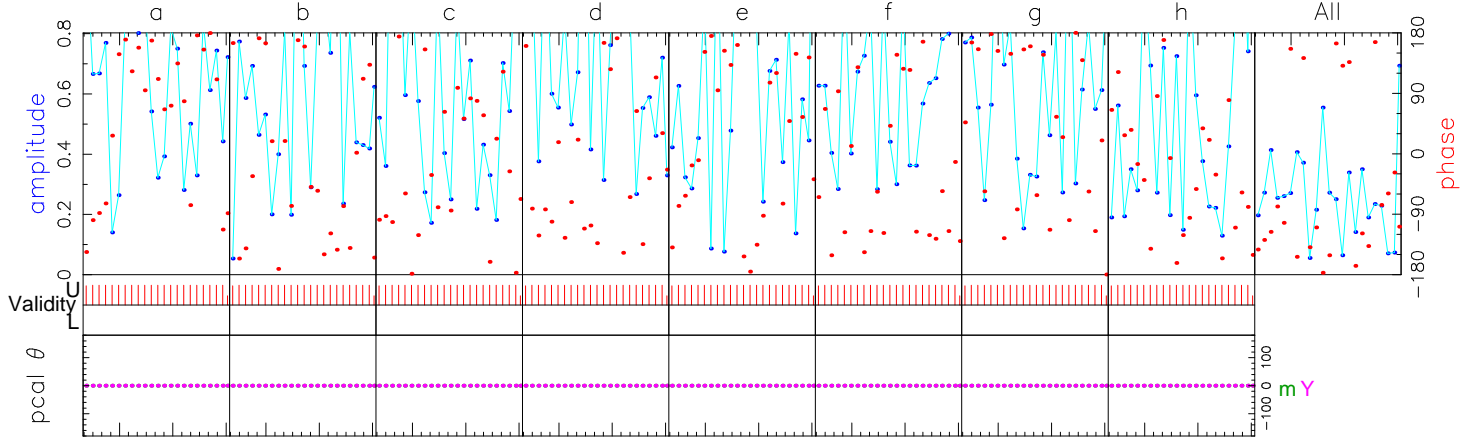


SNR 5.6
 Int time 115.350
 Amp 0.268
 Phase -215.8
 PFD 9.6e-01
 Delays (us)
 SBD -0.658678
 MBD 0.008301
 Fringe rate (Hz)
 0.864842
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104018.95
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153023
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	315/0	315/0	315/0	315/0	315/0	315/0	315/0	315/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-8.98913426678E+03	Apriori delay (usec)	-8.98847069256E+03	Resid mbdelay (usec)	8.30078E-03	+/-	2.0E-04
Sband delay (usec)	-8.98912937081E+03	Apriori clock (usec)	1.1153473E+02	Resid sbdelay (usec)	-6.58678E-01	+/-	1.6E-03
Phase delay (usec)	-8.98847070211E+03	Apriori clockrate (us/s)	9.9419106E-07	Resid phdelay (usec)	-9.54733E-06	+/-	1.3E-06
Delay rate (us/s)	2.00873442687E+00	Apriori rate (us/s)	2.00871437953E+00	Resid rate (us/s)	2.00473E-05	+/-	1.4E-08
Total phase (deg)	-99.6	Apriori accel (us/s/s)	2.71845645278E-05	Resid phase (deg)	-215.8	+/-	20.6

ph/seg (deg)	53.8	Theor.	49.4	Amplitude	0.268 +/- 0.048	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.4		86.3	Search (1024X32)	0.189	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.5		29.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.5		50.9	Inc. seg. avg.	0.267	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
				Inc. frq. avg.	0.284	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 54.7 el 12.9 pa -75.0 Y: az 288.0 el 41.3 pa 65.2 u,v (fr/asec) -7229.255 -236.690 simultaneous interpolator

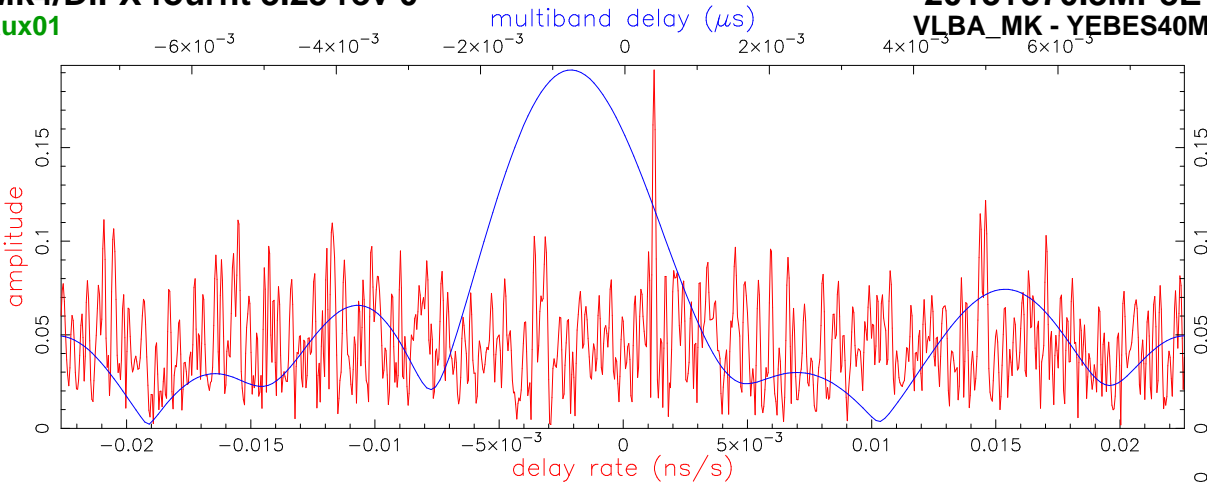
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mY...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mY.Q.416.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

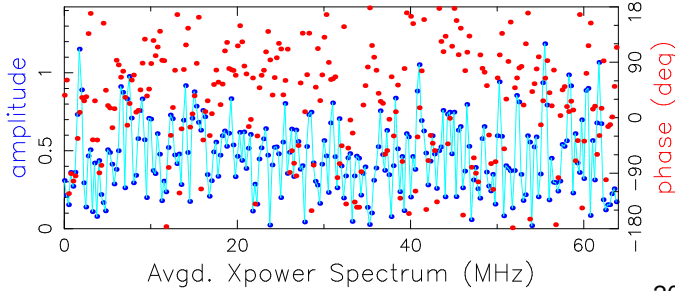
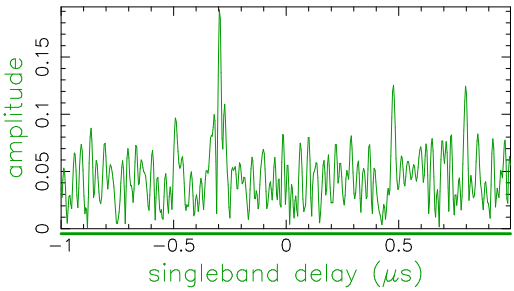
2013+370.3MP8EV, No0527, mY

VLBA_MK - YEBES40M, fgroup Q, pol RR



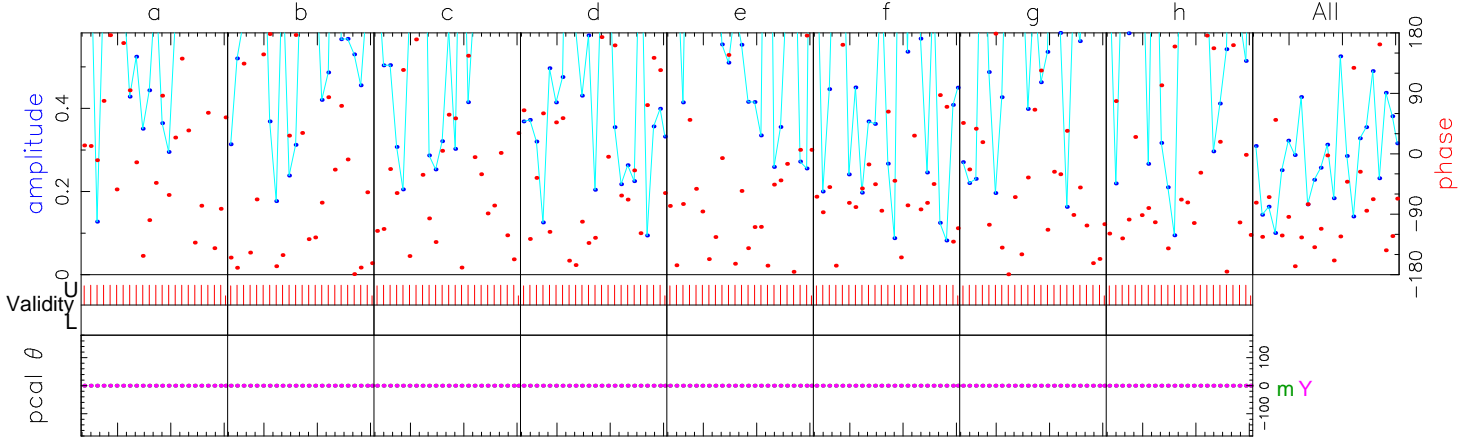
Fringe quality 0

SNR 5.7
 Int time 115.350
 Amp 0.194
 Phase -350.7
 PFD 7.9e-01
 Delays (us)
 SBD -0.295646
 MBD -0.000719
 Fringe rate (Hz)
 0.053878
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104018.95
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153033
 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
	-47.0	-138.7	-85.9	-138.6	-108.2	-86.1	-102.8	-106.7	Phase	-103.2
	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	Ampl.	0.2
	170.5	107.3	71.3	379.5	274.3	509.8	102.7	281.7	Sbd box	181.3
U/L	315/0	315/0	315/0	315/0	315/0	315/0	315/0	315/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-8.98876828623E+03	Apriori delay (usec)	-8.98847069256E+03	Resid mbdelay (usec)	-7.18665E-04	+/-	1.9E-04
Sband delay (usec)	-8.98876633856E+03	Apriori clock (usec)	1.1153473E+02	Resid sbdelay (usec)	-2.95646E-01	+/-	1.5E-03
Phase delay (usec)	-8.98847069921E+03	Apriori clockrate (us/s)	9.9419106E-07	Resid phdelay (usec)	-6.64207E-06	+/-	1.3E-06
Delay rate (us/s)	2.00871562844E+00	Apriori rate (us/s)	2.00871437953E+00	Resid rate (us/s)	1.24891E-06	+/-	1.4E-08
Total phase (deg)	-234.5	Apriori accel (us/s/s)	2.71845645278E-05	Resid phase (deg)	-350.7	+/-	20.1

ph/seg (deg)	RMS 62.1	Theor. 48.3	Amplitude Search (1024X32)	0.194 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.9	84.3	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)	32.4	28.5	Inc. seg. avg.	0.213	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.023	0.023
amp/frq (%)	32.1	49.7	Inc. frq. avg.	0.184	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 54.7 el 12.9 pa -75.0 Y: az 288.0 el 41.3 pa 65.2 u,v (fr/asec) -7229.255 -236.690 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mY...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mY.Q.434.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

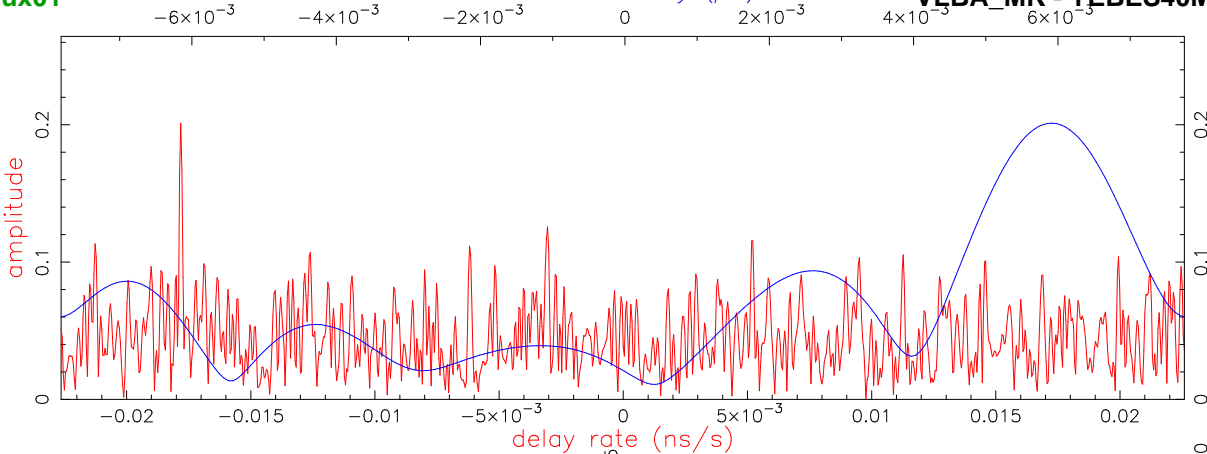
aux01

2013+370.3MP8EV, No0527, mY

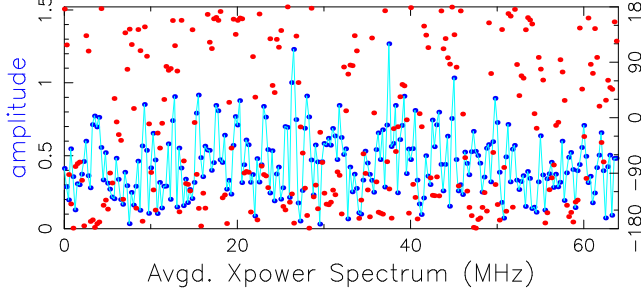
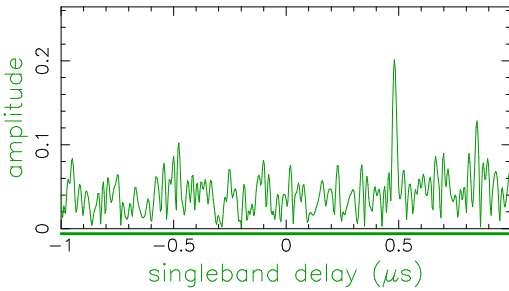
VLBA_MK - YEBES40M, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

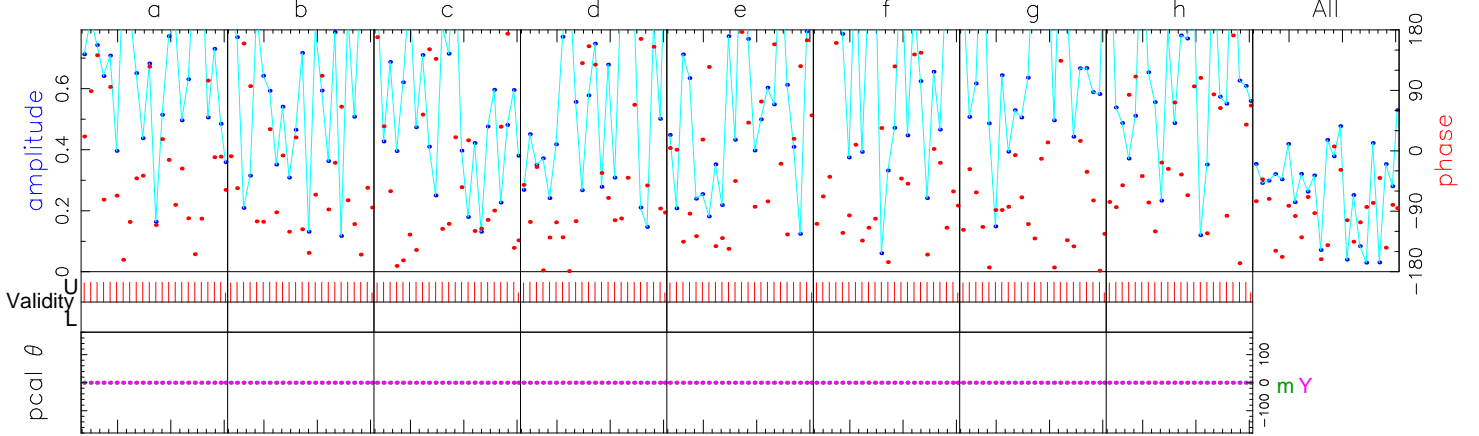


SNR 5.9
 Int time 115.350
 Amp 0.264
 Phase 222.9
 PFD 3.5e-01
 Delays (us)
 SBD 0.480738
 MBD 0.005919
 Fringe rate (Hz) -0.773423
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104018.95
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build 2024:334:010135
 2025:042:153037
 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
	-68.0	-70.0	-126.6	-122.7	-115.8	-91.8	-95.1	-39.0	Phase	-92.1
	0.2	0.4	0.3	0.3	0.1	0.4	0.2	0.2	Ampl.	0.3
	333.5	380.2	201.4	233.0	288.7	378.8	379.7	13.1	Sbd box	380.1
U/L	315/0	315/0	315/0	315/0	315/0	315/0	315/0	315/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL	Chan ids	
Y	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR	Tracks	

Group delay (usec) (SBD)	-8.98799602389E+03	Apriori delay (usec)	-8.98847069256E+03	Resid mbdelay (usec)	5.91867E-03	+/-	1.8E-04
Sband delay (usec)	-8.98798995431E+03	Apriori clock (usec)	1.1153473E+02	Resid sbdelay (usec)	4.80738E-01	+/-	1.5E-03
Phase delay (usec)	-8.98847069849E+03	Apriori clockrate (us/s)	9.9419106E-07	Resid phdelay (usec)	-5.93064E-06	+/-	1.2E-06
Delay rate (us/s)	2.00869645132E+00	Apriori rate (us/s)	2.00871437953E+00	Resid rate (us/s)	-1.79282E-05	+/-	1.3E-08
Total phase (deg)	339.1	Apriori accel (us/s/s)	2.71845645278E-05	Resid phase (deg)	222.9	+/-	19.4

ph/seg (deg)	43.1	Theor.	46.5	Amplitude	0.264 +/- 0.045	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.9		81.1	Search (1024X32)	0.194	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	33.1		27.4	Inc. seg. avg.	0.273	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	45.0		47.9	Inc. frq. avg.	0.261	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 54.7 el 12.9 pa -75.0 Y: az 288.0 el 41.3 pa 65.2 u,v (fr/asec) -7229.255 -236.690 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mY...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mY.Q.442.3MP8EV

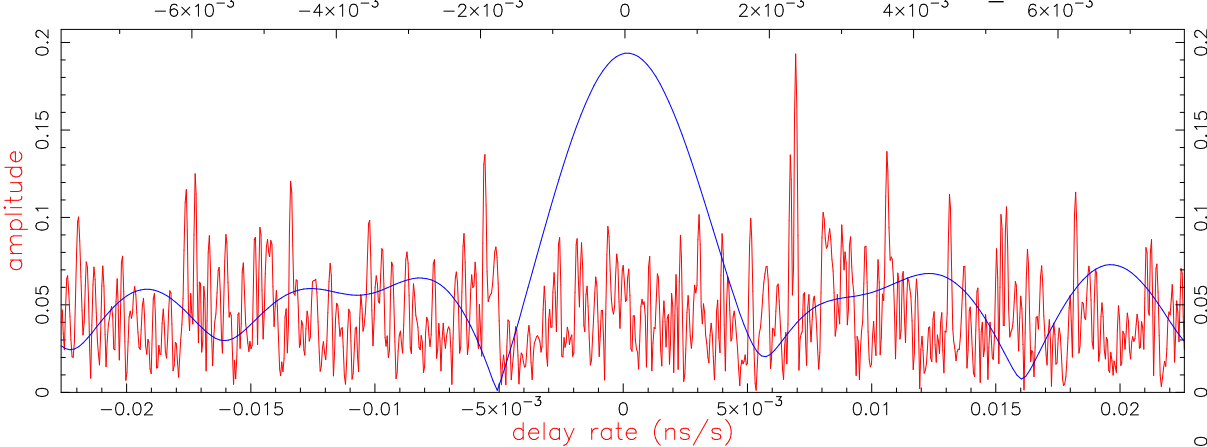
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP8EV, No0527, mY

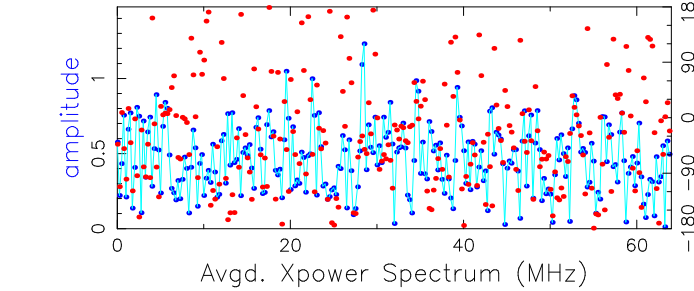
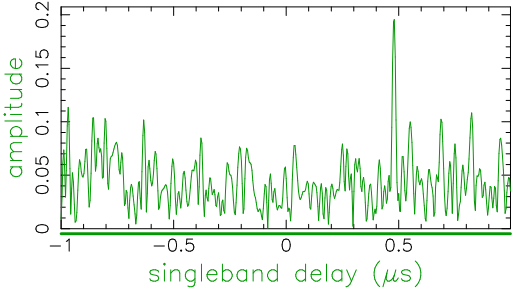
VLBA_MK - YEBES40M, fgroup Q, pol RL

multiband delay (μ s)



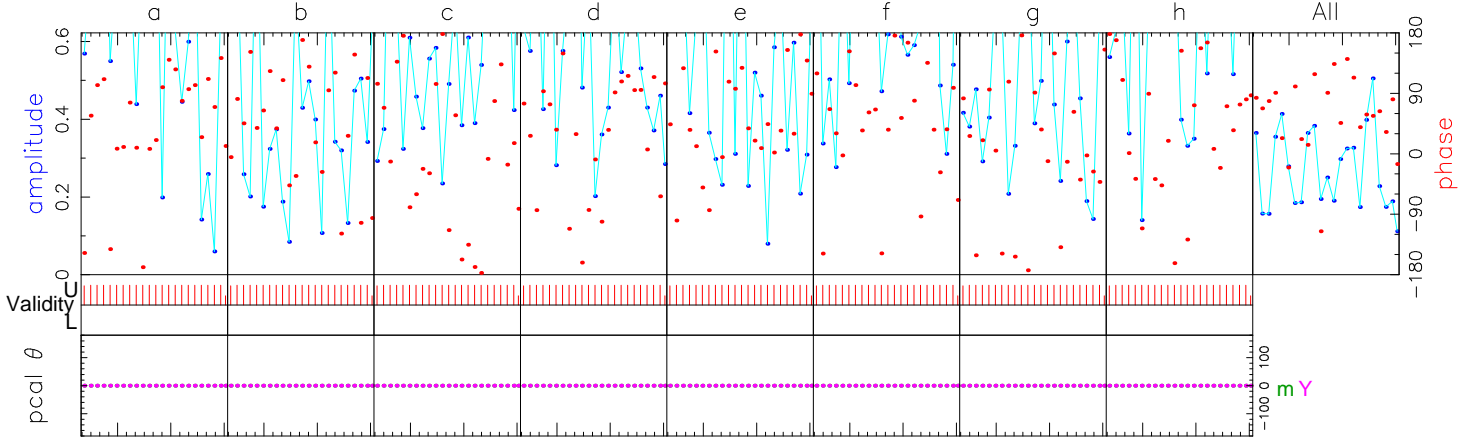
Fringe quality 0

SNR 5.9
 Int time 115.350
 Amp 0.207
 Phase 225.2
 PFD 4.4e-01
 Delays (us)
 SBD 0.478736
 MBD 0.000109
 Fringe rate (Hz) 0.300446
 Ion TEC 0.000
 Ref freq (MHz) 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104018.95
 Stop 104300.22
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153039
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	42912.00	42976.00	43040.00	43104.00	43168.00	43232.00	43296.00	43360.00	Freq (MHz)	All
U/L	315/0	315/0	315/0	315/0	315/0	315/0	315/0	315/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Y	0	0	0	0	0	0	0	0		
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		
Y	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		

Group delay (usec) (SBD)	-8.98798620876E+03	Apriori delay (usec)	-8.98847069256E+03	Resid mbdelay (usec)	1.08803E-04	+/-	1.9E-04
Sband delay (usec)	-8.98799195606E+03	Apriori clock (usec)	1.1153473E+02	Resid sbdelay (usec)	4.78736E-01	+/-	1.5E-03
Phase delay (usec)	-8.98847068820E+03	Apriori clockrate (us/s)	9.9419106E-07	Resid phdelay (usec)	4.36119E-06	+/-	1.3E-06
Delay rate (us/s)	2.00872134398E+00	Apriori rate (us/s)	2.00871437953E+00	Resid rate (us/s)	6.96445E-06	+/-	1.4E-08
Total phase (deg)		Apriori accel (us/s/s)	2.71845645278E-05	Resid phase (deg)	225.2	+/-	19.6

ph/seg (deg)	55.4	Theor.	46.9	Amplitude	0.207 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	62.7	Search (1024X32)	0.187	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	23.0	Inc. seg. avg.	0.213	Inc. frq. avg.	0.186	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	48.3	Inc. frq. avg.	0.186			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

m: az 54.7 el 12.9 pa -75.0 Y: az 288.0 el 41.3 pa 65.2 u, v (fr/asec) -7229.255 -236.690 simultaneous interpolator

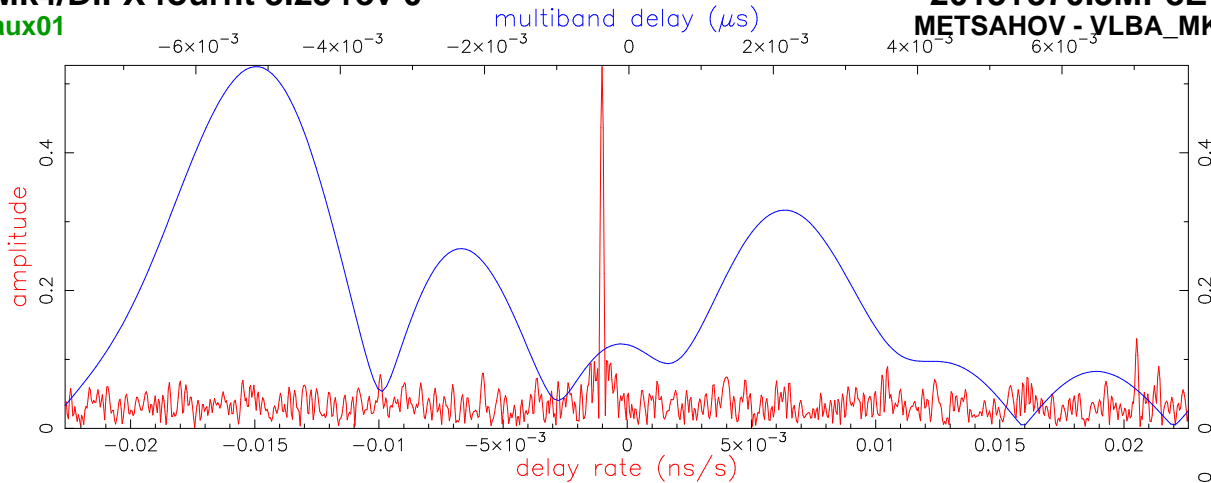
Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//mY...3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//mY.Q.451.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

aux01

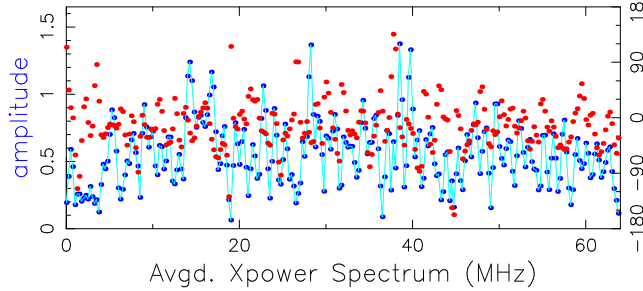
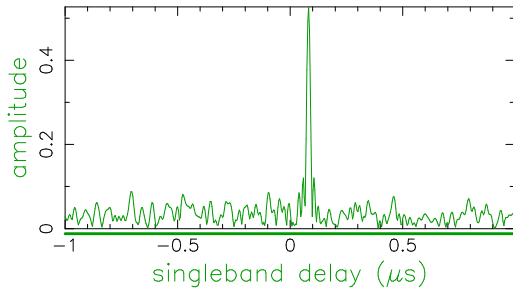
2013+370.3MP8EV, No0527, Zm

MEṬSAHOV - VLBA_MK, fgroup Q, pol LL



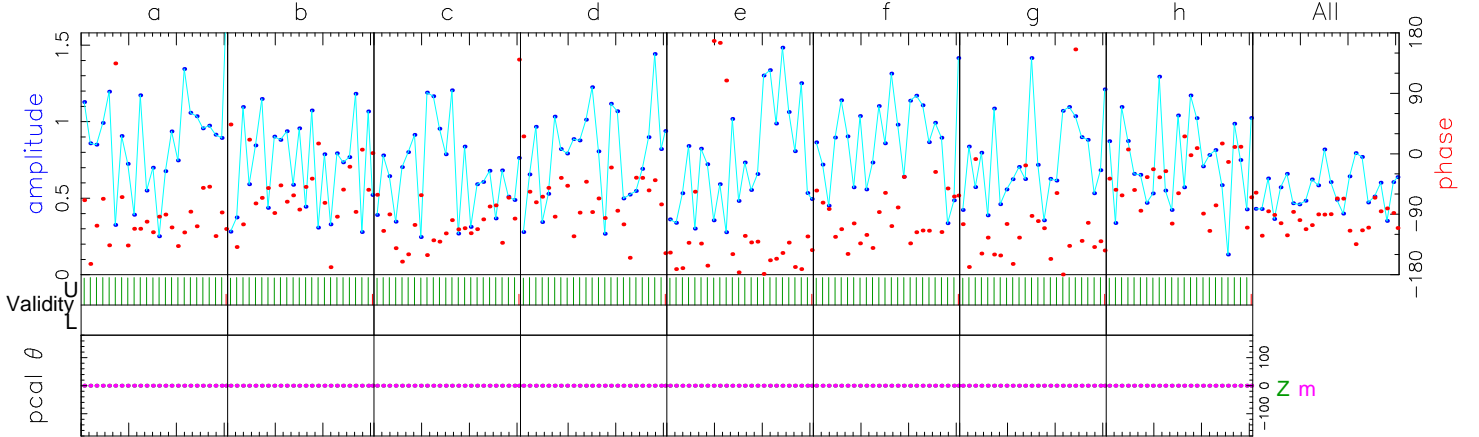
Fringe quality 8

SNR 19.3
 Int time 179.279
 Amp 0.527
 Phase 37.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.081387
 MBD -0.005182
 Fringe rate (Hz)
 -0.044851
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104259.71
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152953
 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
	-102.4	-63.5	-115.7	-66.1	-153.9	-99.3	-130.8	-36.3	Phase	-97.2
	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.6	Ampl.	0.6
	277.9	278.3	278.3	278.1	278.7	278.3	278.6	280.1	Sbd box	277.8
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	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)	6.04547664263E+03	Apriori delay (usec)	6.04538807414E+03	Resid mbdelay (usec)	-5.18151E-03	+/-	5.6E-05
Sband delay (usec)	6.04546946089E+03	Apriori clock (usec)	-4.4299316E-01	Resid sbdelay (usec)	8.13868E-02	+/-	4.5E-04
Phase delay (usec)	6.04538806789E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	-6.25611E-06	+/-	3.8E-07
Delay rate (us/s)	-1.77712258047E+00	Apriori rate (us/s)	-1.77712154080E+00	Resid rate (us/s)	-1.03966E-06	+/-	3.7E-09
Total phase (deg)	224.5	Apriori accel (us/s/s)	3.97516189241E-06	Resid phase (deg)	37.8	+/-	5.9

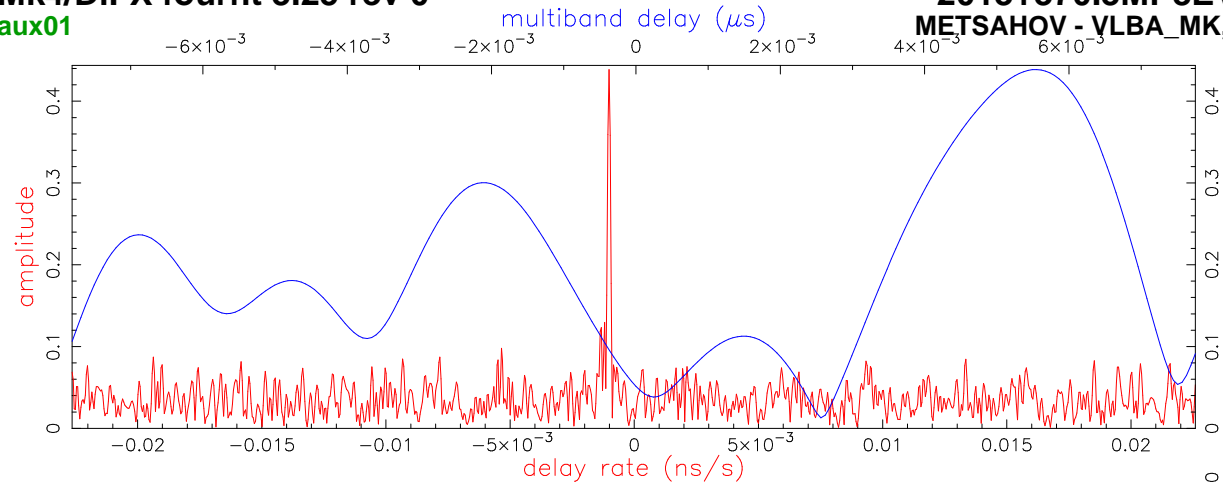
ph/seg (deg)	19.7	Theor.	14.6	Amplitude	0.527 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	24.9	Search (1024X32)	0.492	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.9	Inc. seg. avg.	0.540	Inc. seg. avg.	0.540	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.2	Inc. frq. avg.	0.634	Inc. frq. avg.	0.634	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023 0.023	
Z: az 291.7 el 31.1 pa 35.4		m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec)	6409.072 1945.609	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/No0527//Zm..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//Zm.Q.277.3MP8EV					simultaneous interpolator	

Mk4/DiFX fourfit 3.25 rev 0

aux01

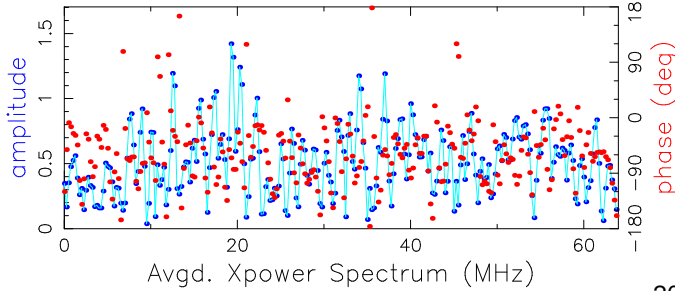
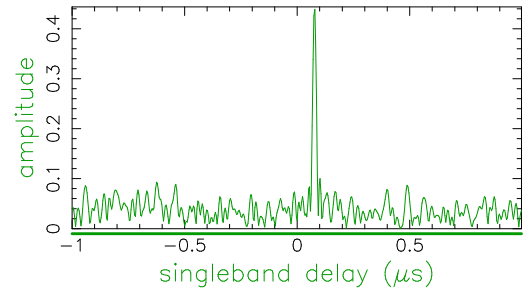
2013+370.3MP8EV, No0527, Zm

METSAHOV - VLBA_MK, fgroup Q, pol RR



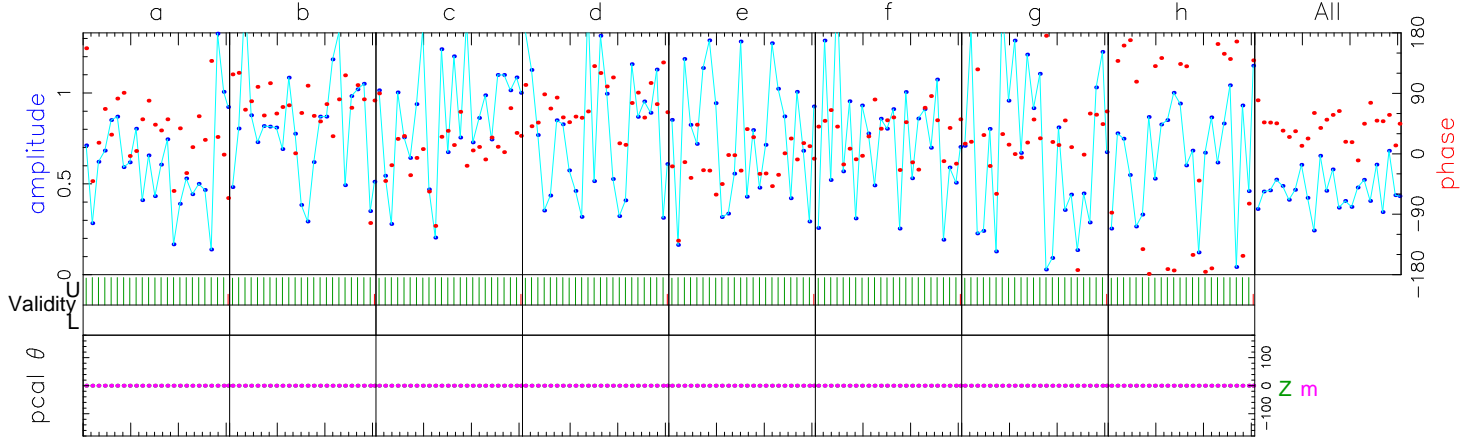
Fringe quality 7

SNR 16.2
 Int time 179.279
 Amp 0.444
 Phase 332.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.076792
 MBD 0.005510
 Fringe rate (Hz)
 -0.044686
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104259.71
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:152959
 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	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
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)	6.04547170872E+03	Apriori delay (usec)	6.04538807414E+03	Resid mbdelay (usec)	5.50958E-03	+/-	6.7E-05
Sband delay (usec)	6.04546486639E+03	Apriori clock (usec)	-4.4299316E-01	Resid sbdelay (usec)	7.67922E-02	+/-	5.3E-04
Phase delay (usec)	6.04538807673E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	2.58730E-06	+/-	4.5E-07
Delay rate (us/s)	-1.77712257663E+00	Apriori rate (us/s)	-1.77712154080E+00	Resid rate (us/s)	-1.03583E-06	+/-	4.4E-09
Total phase (deg)	159.3	Apriori accel (us/s/s)	3.97516189241E-06	Resid phase (deg)	332.7	+/-	7.1

ph/seg (deg)	21.1	Theor.	17.3	Amplitude	0.444 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	23.8	Search (1024X32)	0.416	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	62.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.9	Inc. seg. avg.	0.448	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023 0.023	
		Inc. frq. avg.	0.621	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 291.7 el 31.1 pa 35.4 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 6409.072 1945.609 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Zm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Zm.Q.306.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

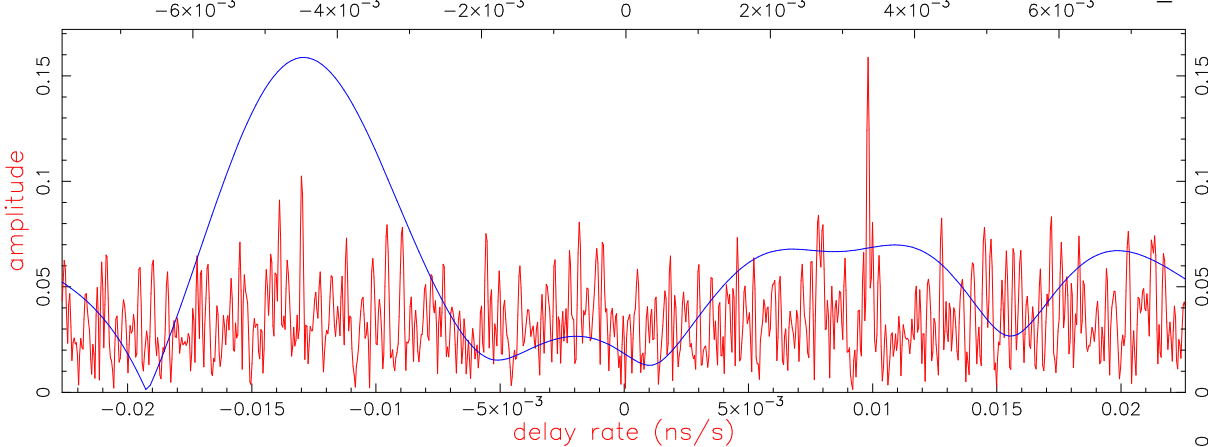
aux01

2013+370.3MP8EV, No0527, Zm

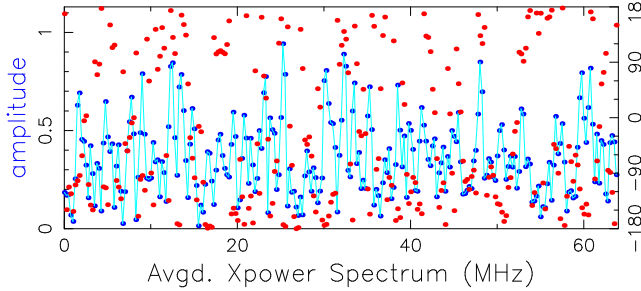
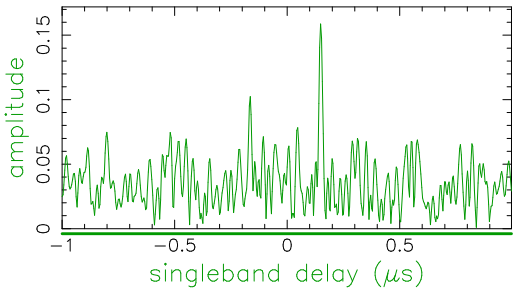
ME TSAHOV - VLBA_MK, fgroup Q, pol LR

multiband delay (μ s)

Fringe quality 0

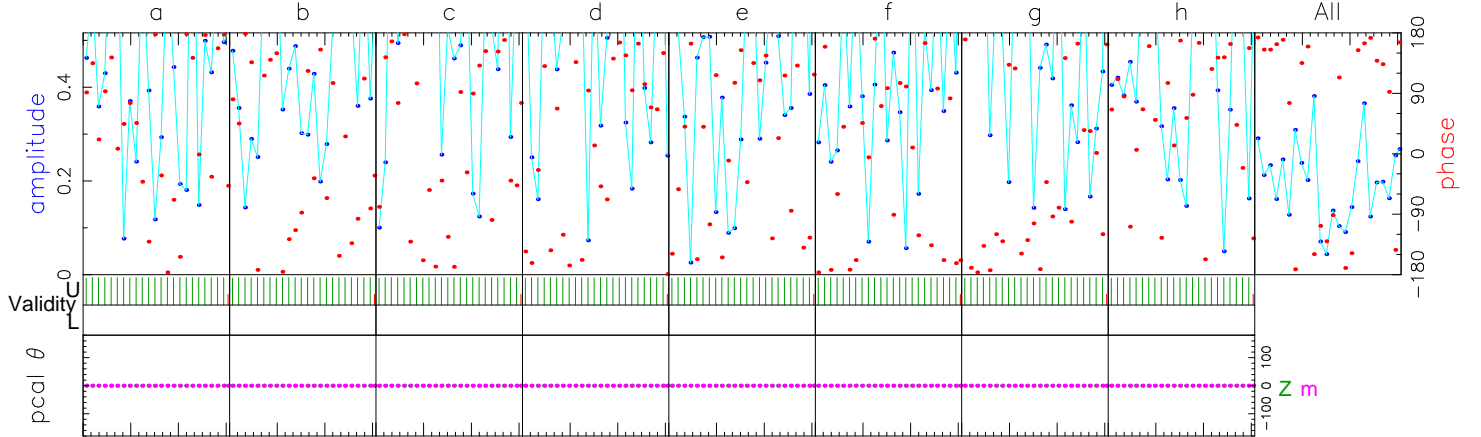


SNR 5.8
 Int time 179.279
 Amp 0.172
 Phase 33.6
 PFD 5.3e-01
 Delays (us)
 SBD 0.148862
 MBD -0.004469
 Fringe rate (Hz)
 0.424926
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104259.71
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153001
 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	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
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	Q00UL	Q01UL	Q02UL	Q03UL	Q04UL	Q05UL	Q06UL	Q07UL		
m	Q00UR	Q01UR	Q02UR	Q03UR	Q04UR	Q05UR	Q06UR	Q07UR		

Group delay (usec) (SBD)	6.04553985510E+03	Apriori delay (usec)	6.04538807414E+03	Resid mbdelay (usec)	-4.46904E-03	+/-	1.9E-04
Sband delay (usec)	6.04553693614E+03	Apriori clock (usec)	-4.4299316E-01	Resid sbdelay (usec)	1.48862E-01	+/-	1.5E-03
Phase delay (usec)	6.04538808500E+03	Apriori clockrate (us/s)	6.2435994E-07	Resid phdelay (usec)	1.08561E-05	+/-	1.3E-06
Delay rate (us/s)	-1.77711169088E+00	Apriori rate (us/s)	-1.77712154080E+00	Resid rate (us/s)	9.84993E-06	+/-	1.2E-08
Total phase (deg)	220.2	Apriori accel (us/s/s)	3.97516189241E-06	Resid phase (deg)	33.6	+/-	19.7

ph/seg (deg)	45.9	RMS	48.2	Theor.	48.2	Amplitude	0.172 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.8	Search (1024X32)	0.156	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)	38.2	Inc. seg. avg.	0.159	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.023	0.023	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00
amp/frq (%)	45.4	Inc. frq. avg.	0.183	nlags: 256 t_cohere infinite	simultaneous interpolator						

Z: az 291.7 el 31.1 pa 35.4 m: az 54.7 el 12.9 pa -75.0 u,v (fr/asec) 6409.072 1945.609

Control file: cf_1234_gmva Input file: /Exps/c241d/v1/7mm/1234/No0527//Zm..3MP8EV Output file: /Exps/c241d/v1/7mm/1234/No0527//Zm.Q.320.3MP8EV

Mk4/DiFX fourfit 3.25 rev 0

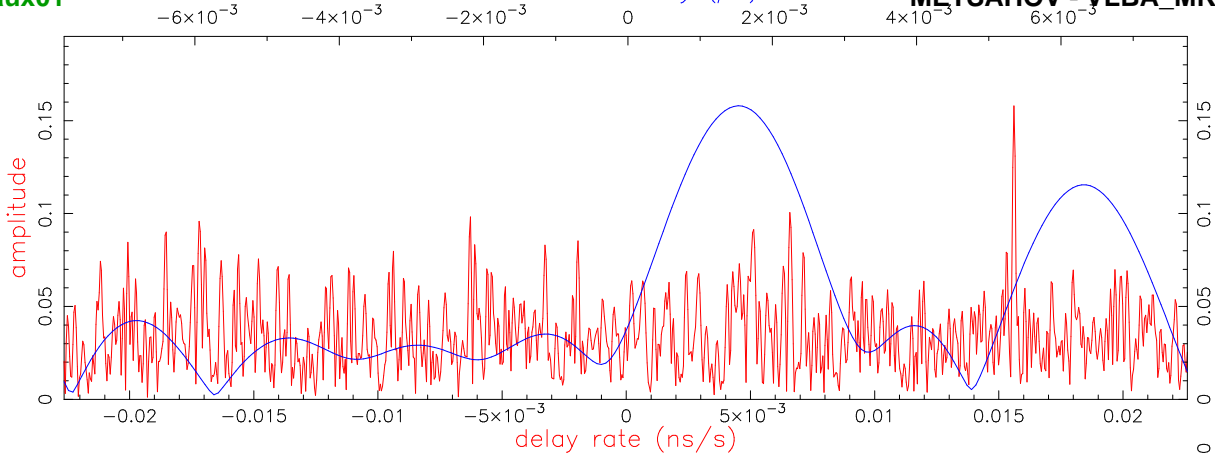
aux01

2013+370.3MP8EV, No0527, Zm

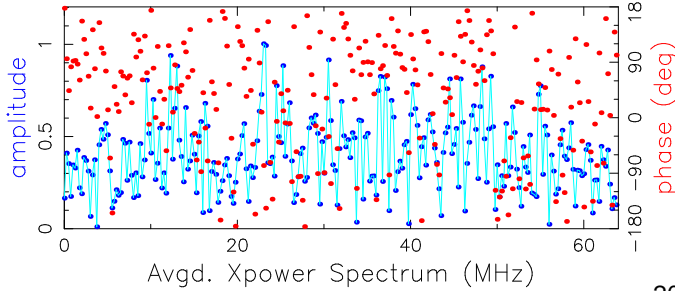
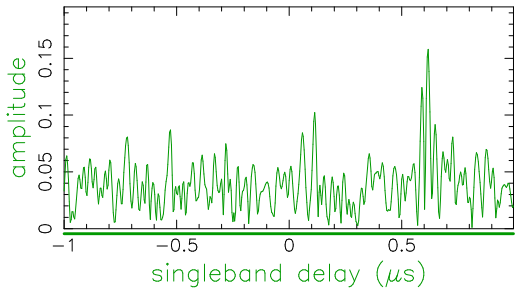
ME TSAHOV - VLBA_MK, fgroup Q, pol RL

multiband delay (μ s)

Fringe quality 0

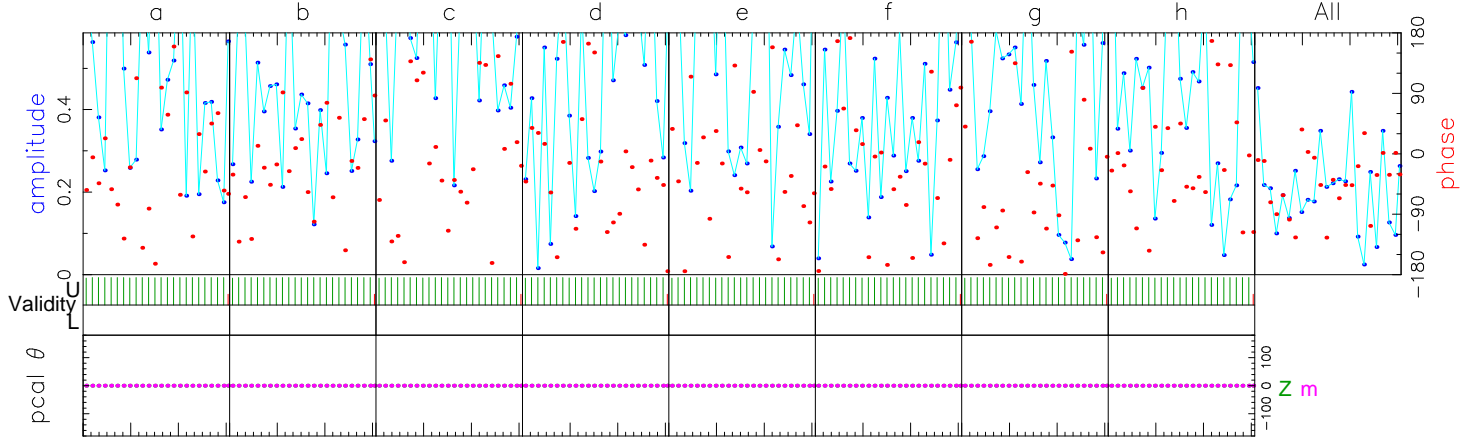


SNR 5.8
 Int time 179.279
 Amp 0.195
 Phase 294.7
 PFD 5.2e-01
 Delays (us)
 SBD 0.616139
 MBD 0.001508
 Fringe rate (Hz)
 0.677059
 Ion TEC 0.000
 Ref freq (MHz)
 43140.0000
 AP (sec) 0.512



Exp. c241d
 Exper # 1234
 Yr:day 2024:113
 Start 104000.00
 Stop 104259.71
 FRT 104130.00
 Corr/FF/build
 2024:334:010135
 2025:042:153003
 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		
	-69.3	-18.7	-67.7	-50.9	-17.0	-21.6	-97.3	-38.8	Phase	-42.8		
	0.3	0.3	0.1	0.2	0.3	0.1	0.2	0.3	Ampl.	0.2		
	68.1	408.9	48.2	258.4	82.2	285.8	30.0	404.1	Sbd box	414.7		
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	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			
									Tracks			
Group delay (usec) (SBD)	6.04599895717E+03		Apriori delay (usec)		6.04538807414E+03		Resid mbdelay (usec)		1.50802E-03	+/- 1.9E-04		
Sband delay (usec)	6.04600421364E+03		Apriori clock (usec)		-4.4299316E-01		Resid sbdelay (usec)		6.16139E-01	+/- 1.5E-03		
Phase delay (usec)	6.04538807138E+03		Apriori clockrate (us/s)		6.2435994E-07		Resid phdelay (usec)		-2.75741E-06	+/- 1.3E-06		
Delay rate (us/s)	-1.77710584635E+00		Apriori rate (us/s)		-1.77712154080E+00		Resid rate (us/s)		1.56944E-05	+/- 1.2E-08		
Total phase (deg)	121.3		Apriori accel (us/s/s)		3.97516189241E-06		Resid phase (deg)		294.7	+/- 19.7		
	RMS	Theor.	Amplitude	0.195 +/- 0.034		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	44.6	48.2	Search (1024X32)	0.156		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	73.9	84.2	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	31.8	27.8	Inc. seg. avg.	0.189		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.023	0.023		
amp/frq (%)	44.8	48.6	Inc. frq. avg.	0.193		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 291.7 el 31.1 pa 35.4	m: az 54.7 el 12.9 pa -75.0		u,v (fr/asec) 6409.072 1945.609						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241d/v1/7mm/1234/No0527//Zm..3MP8EV		Output file: /Exps/c241d/v1/7mm/1234/No0527//Zm.Q.326.3MP8EV									