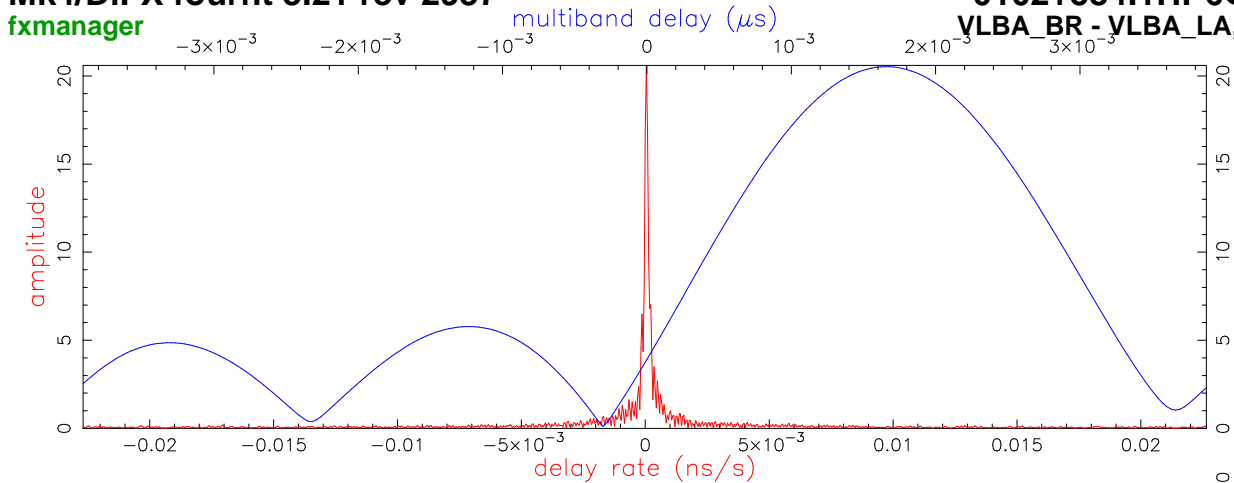


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

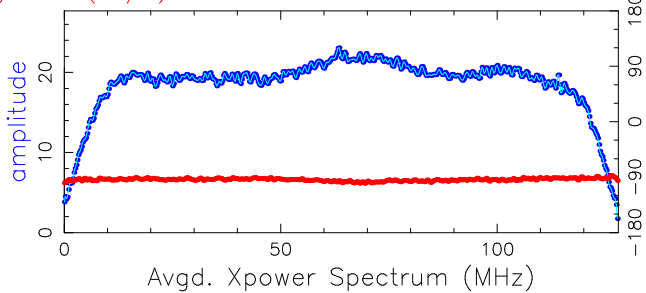
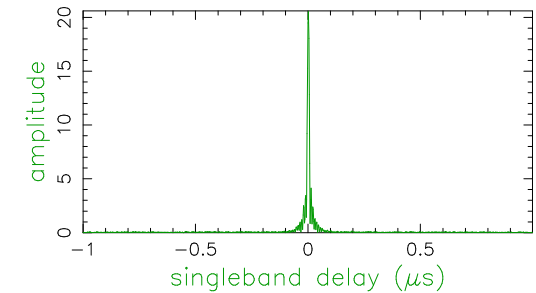
0102+584.1HP6Q8, No0090, bl

VLBA_BR - VLBA_LA, fgroup Q, pol RR



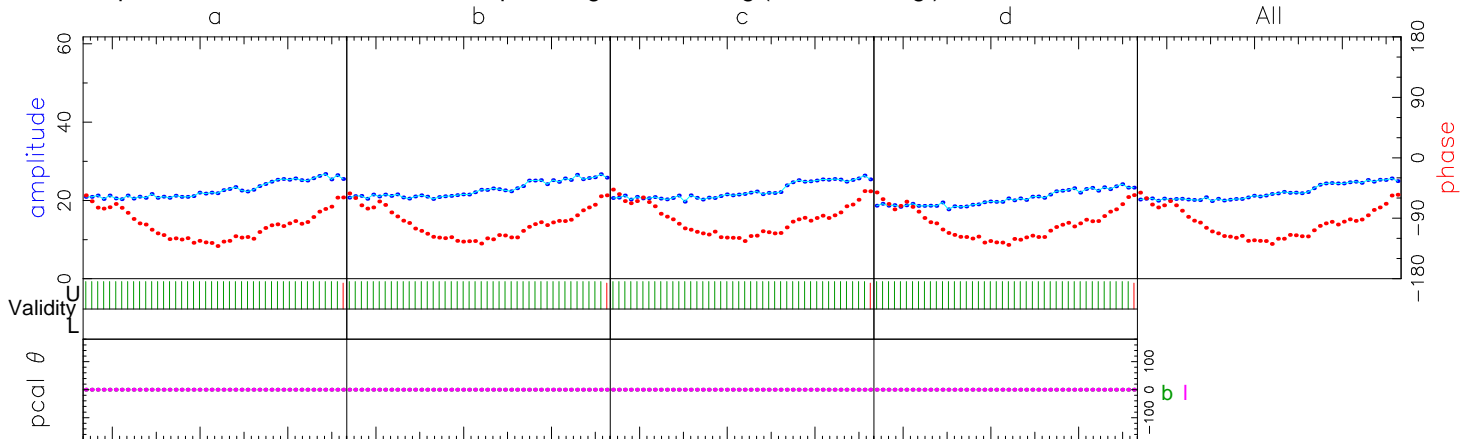
Fringe quality 8

SNR 755.8
 Int time 179.974
 Amp 20.602
 Phase -96.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001551
 MBD 0.001633
 Fringe rate (Hz)
 0.002392
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163102
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-99.0	-96.7	-90.6	-97.5	Phase	-96.0
21.2	21.2	20.8	19.0	Ampl.	20.6
514.0	513.9	513.8	513.6	Sbd box	513.8
U/L 352/0	352/0	352/0	352/0	APs used	
b 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
b:l 0:0	0:0	0:0	0:0	PC phase	
b:l 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
b Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	7.19309773894E+02	Apriori delay (usec)	7.19308140823E+02	Resid mbdelay (usec)	1.63307E-03	+/- 1.5E-06
Sband delay (usec)	7.19309691698E+02	Apriori clock (usec)	-1.3236904E+00	Resid sbdelay (usec)	1.55088E-03	+/- 5.7E-06
Phase delay (usec)	7.19308134630E+02	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-6.19300E-06	+/- 9.8E-09
Delay rate (us/s)	8.92884436411E-02	Apriori rate (us/s)	8.92883880656E-02	Resid rate (us/s)	5.55755E-08	+/- 9.4E-11
Total phase (deg)	41.2	Apriori accel (us/s/s)	1.15612805555E-05	Resid phase (deg)	-96.0	+/- 0.2

ph/seg (deg)	22.0	Theor.	0.5	Amplitude	20.602 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	12.0		0.9	Search (1024X16)	19.977	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	4.5		0.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	4.4		0.3	Inc. seg. avg.	22.100	Sample rate(MISamp/s): 256		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	20.558	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 47.6 el 70.3 pa -109.3 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) -482.304 1114.012 simultaneous interpolator

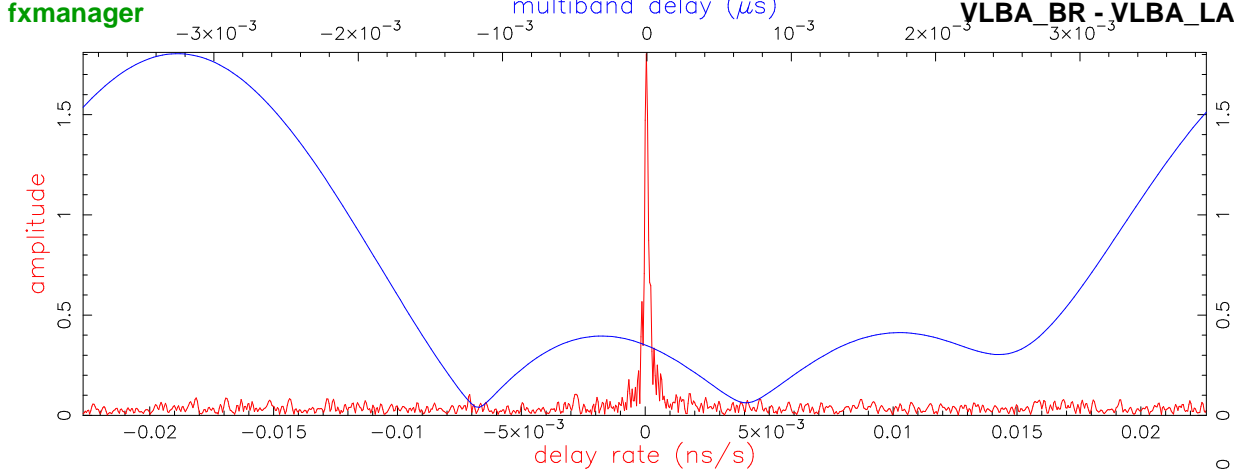
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.Q.27.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

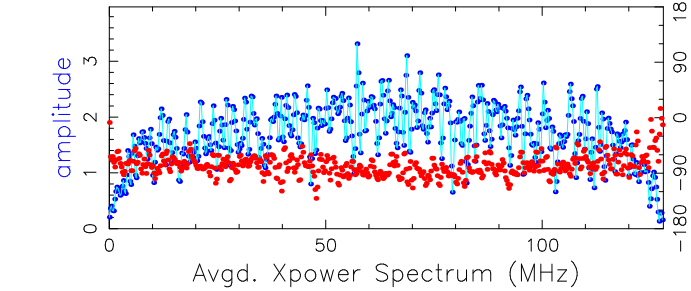
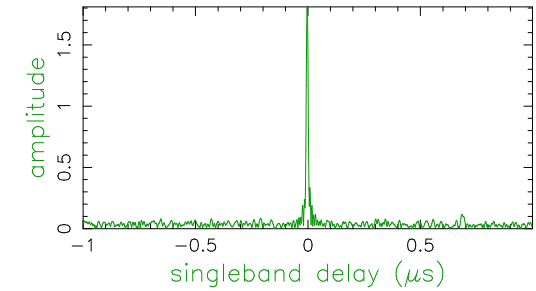
0102+584.1HP6Q8, No0090, bl

VLBA_BR - VLBA_LA, fgroup Q, pol LR



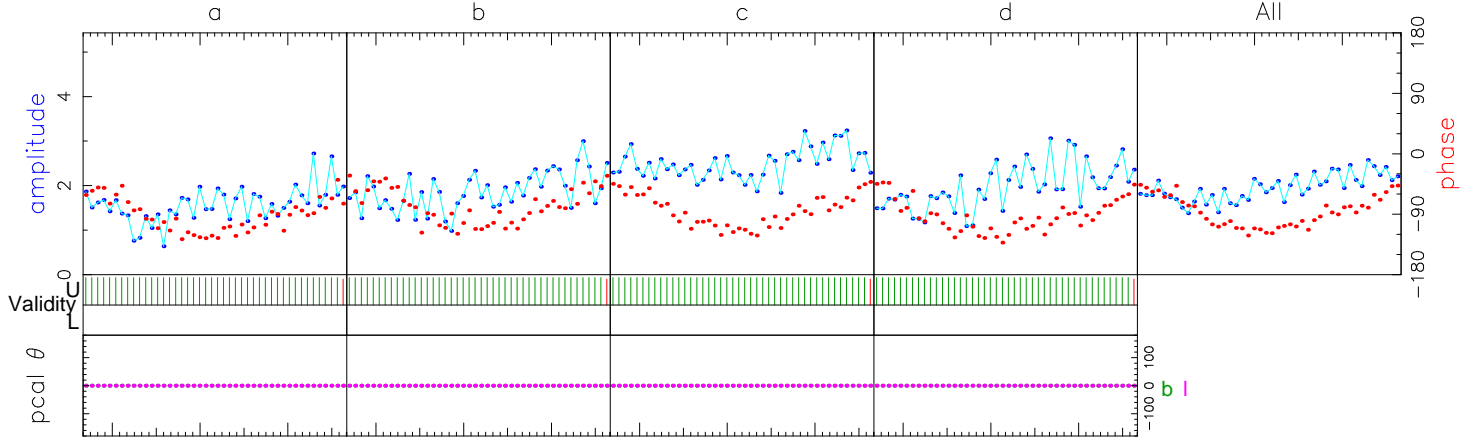
Fringe quality 8

SNR 66.4
 Int time 179.974
 Amp 1.810
 Phase -85.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003489
 MBD -0.003221
 Fringe rate (Hz)
 0.002390
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163104
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	43296.00	Freq (MHz)	All
-91.2	-77.0	-83.0	-92.7	-92.7	Phase	-85.7
1.4	1.7	2.3	1.8	1.8	Ampl.	1.8
512.1	511.5	511.0	510.5	510.5	Sbd box	511.2
U/L 352/0	352/0	352/0	352/0	352/0	APs used	
b 1000	1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	1000	PC freqs	
b:l 0:0	0:0	0:0	0:0	0:0	PC phase	
b:l 0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000	1000		
b Q00UL	Q01UL	Q02UL	Q03UL	Q03UL	Chan ids	
l Q00UR	Q01UR	Q02UR	Q03UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	7.19304919769E+02	Apriori delay (usec)	7.19308140823E+02	Resid mbdelay (usec)	-3.22105E-03	+/- 1.7E-05
Sband delay (usec)	7.19304651823E+02	Apriori clock (usec)	-1.3236904E+00	Resid sbdelay (usec)	-3.48900E-03	+/- 6.5E-05
Phase delay (usec)	7.19308135293E+02	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-5.52952E-06	+/- 1.1E-07
Delay rate (us/s)	8.92884436042E-02	Apriori rate (us/s)	8.92883880656E-02	Resid rate (us/s)	5.55386E-08	+/- 1.1E-09
Total phase (deg)	51.5	Apriori accel (us/s/s)	1.15612805555E-05	Resid phase (deg)	-85.7	+/- 1.7

ph/seg (deg)	22.8	Theor.	5.7	Amplitude	1.810 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	18.1		10.0	Search (1024X16)	1.763	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
ph/frq (deg)	9.0		1.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
amp/frq (%)	17.2		3.0	Inc. seg. avg.	1.943	Sample rate(MISamp/s): 256		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	1.813	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 47.6 el 70.3 pa -109.3 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) -482.304 1114.012 simultaneous interpolator

Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.Q.45.1HP6Q8

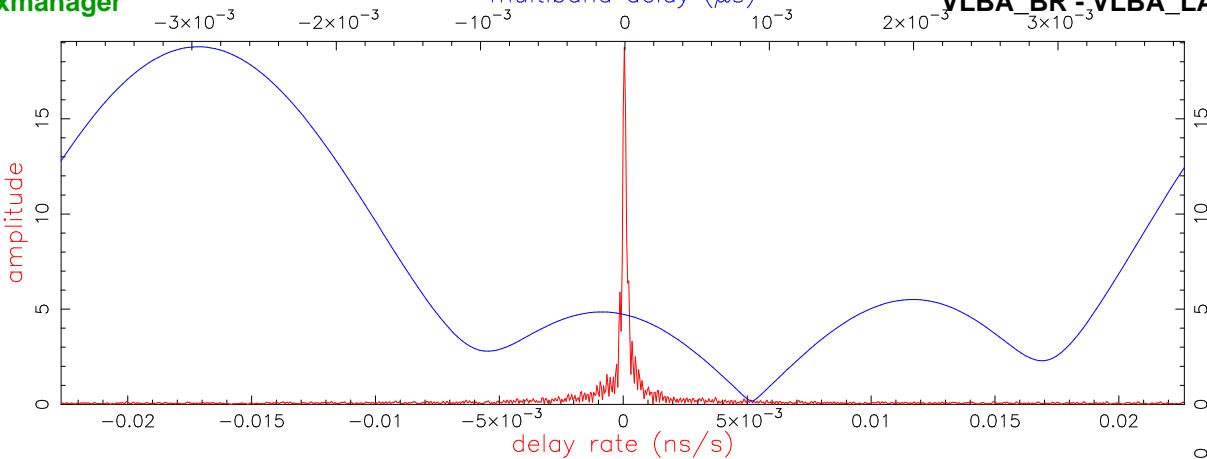
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, bl

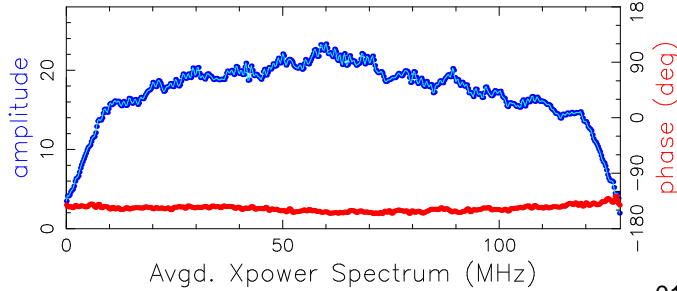
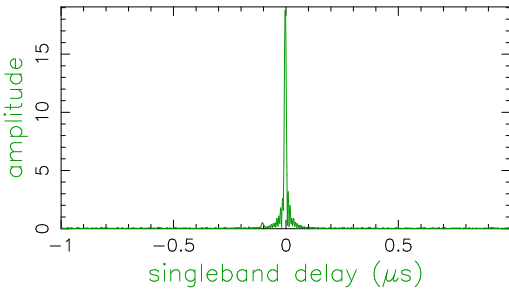
VLBA_BR - VLBA_LA, fgroup Q, pol LL

multiband delay (μ s)



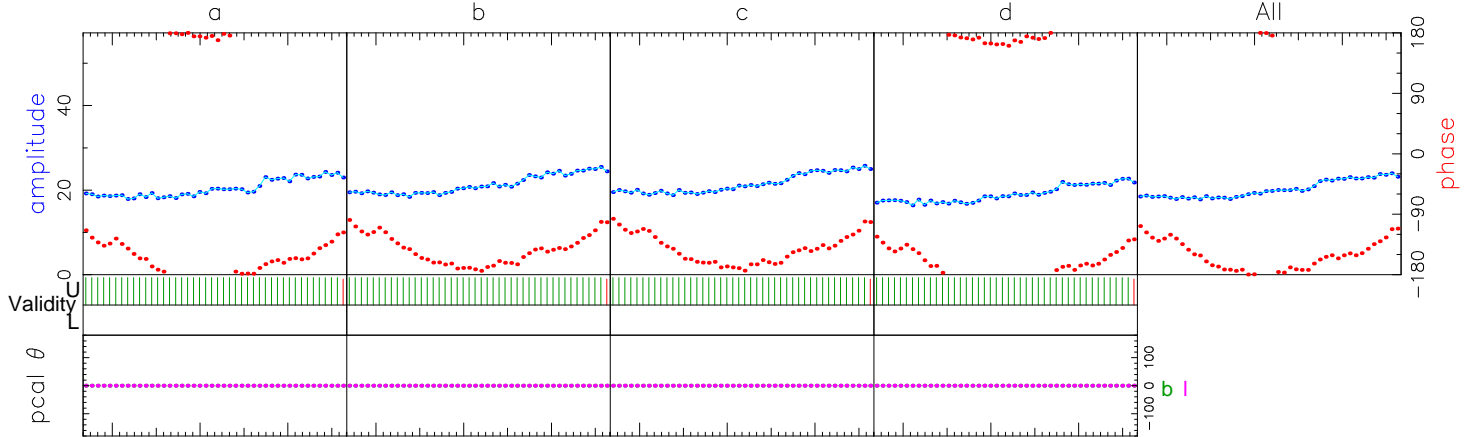
Fringe quality 7

SNR 699.5
 Int time 179.974
 Amp 19.068
 Phase -151.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.003048
 MBD -0.002906
 Fringe rate (Hz)
 0.002429
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163100
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-158.4	-142.3	-141.0	-167.7	Phase	-151.8
19.0	19.8	20.0	17.7	Ampl.	19.1
512.0	511.6	511.1	510.8	Sbd box	511.4
U/L 352/0	352/0	352/0	352/0	APs used	
b 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
b:l 0:0	0:0	0:0	0:0	PC phase	
b:l 0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
b Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	7.19305235113E+02	Apriori delay (usec)	7.19308140823E+02	Resid mbdelay (usec)	-2.90571E-03	+/- 1.6E-06
Sband delay (usec)	7.19305092823E+02	Apriori clock (usec)	-1.3236904E+00	Resid sbdelay (usec)	-3.04800E-03	+/- 6.2E-06
Phase delay (usec)	7.19308131026E+02	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-9.79693E-06	+/- 1.1E-08
Delay rate (us/s)	8.92884445033E-02	Apriori rate (us/s)	8.92883880656E-02	Resid rate (us/s)	5.64377E-08	+/- 1.0E-10
Total phase (deg)	-14.6	Apriori accel (us/s/s)	1.15612805555E-05	Resid phase (deg)	-151.8	+/- 0.2

ph/seg (deg)	22.0	0.5	Amplitude	19.068 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	12.2	0.9	Search (1024X16)	18.499	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	15.9	0.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.8	0.3	Inc. seg. avg.	20.207	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
			Inc. frq. avg.	19.123	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
b: az 47.6 el 70.3 pa -109.3	l: az 18.7 el 65.2 pa -150.7	u,v (fr/asec)	-482.304 1114.012			simultaneous interpolator

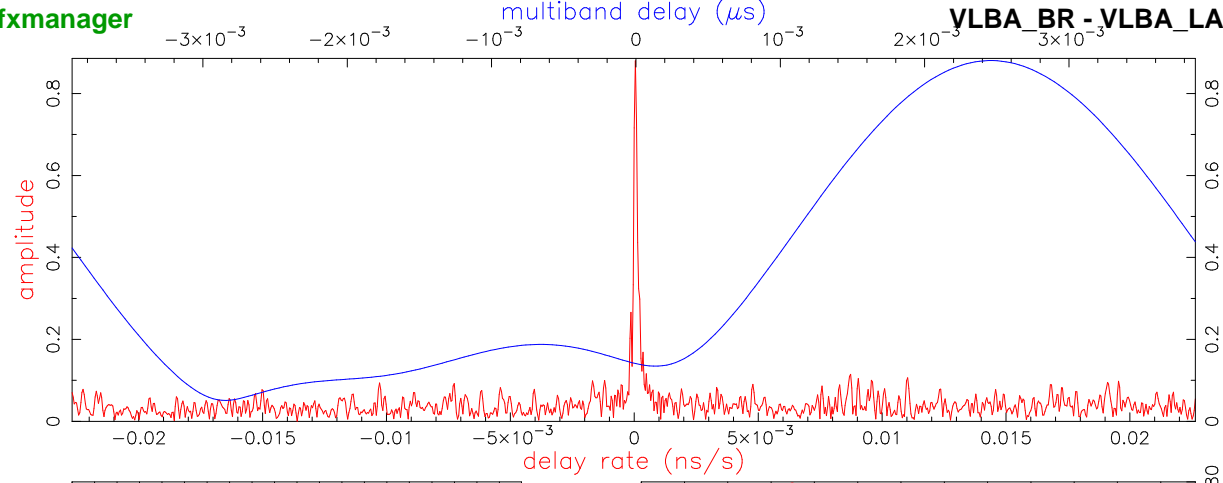
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.Q.5.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, bl

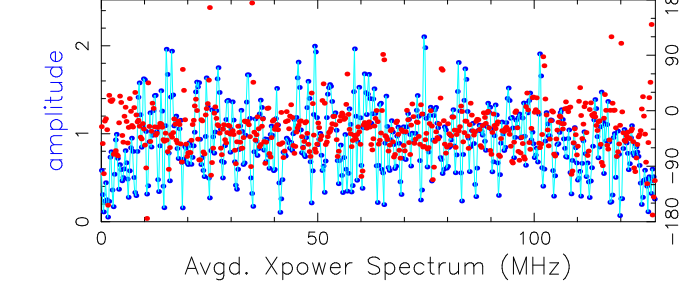
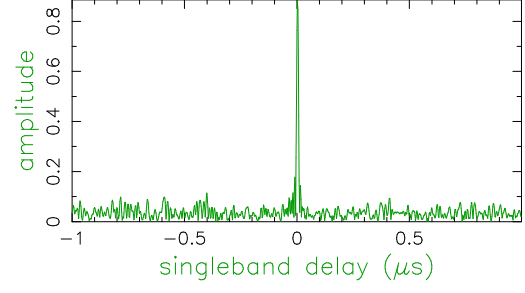
VLBA_BR - VLBA_LA, fgroup Q, pol RL



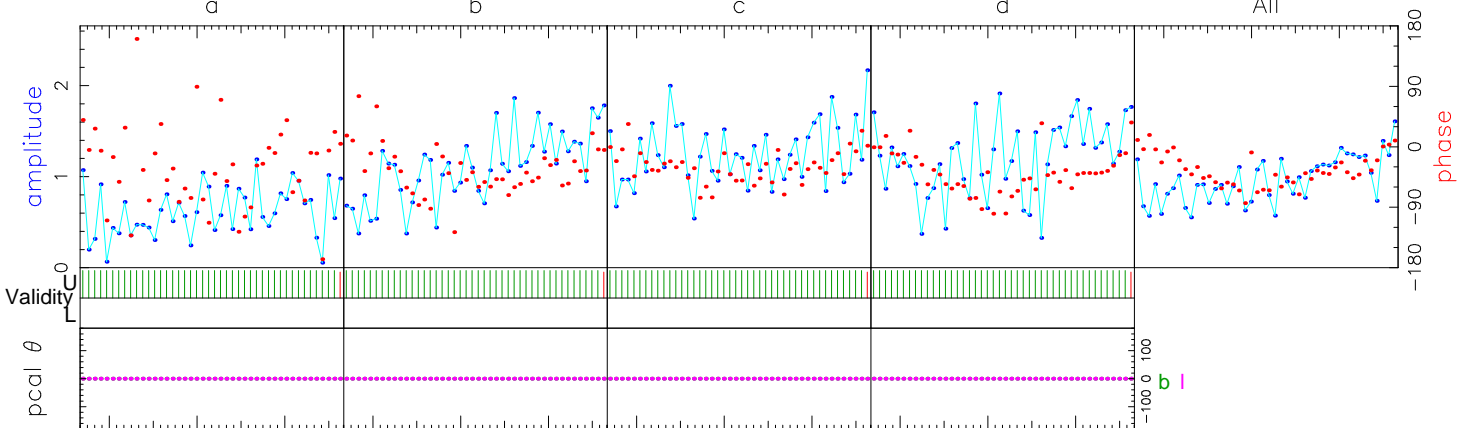
Fringe quality 8

SNR 32.5
 Int time 179.974
 Amp 0.886
 Phase -34.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.002490
 MBD 0.002502
 Fringe rate (Hz) 0.002431
 Ion TEC 0.000
 Ref freq (MHz) 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163106
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



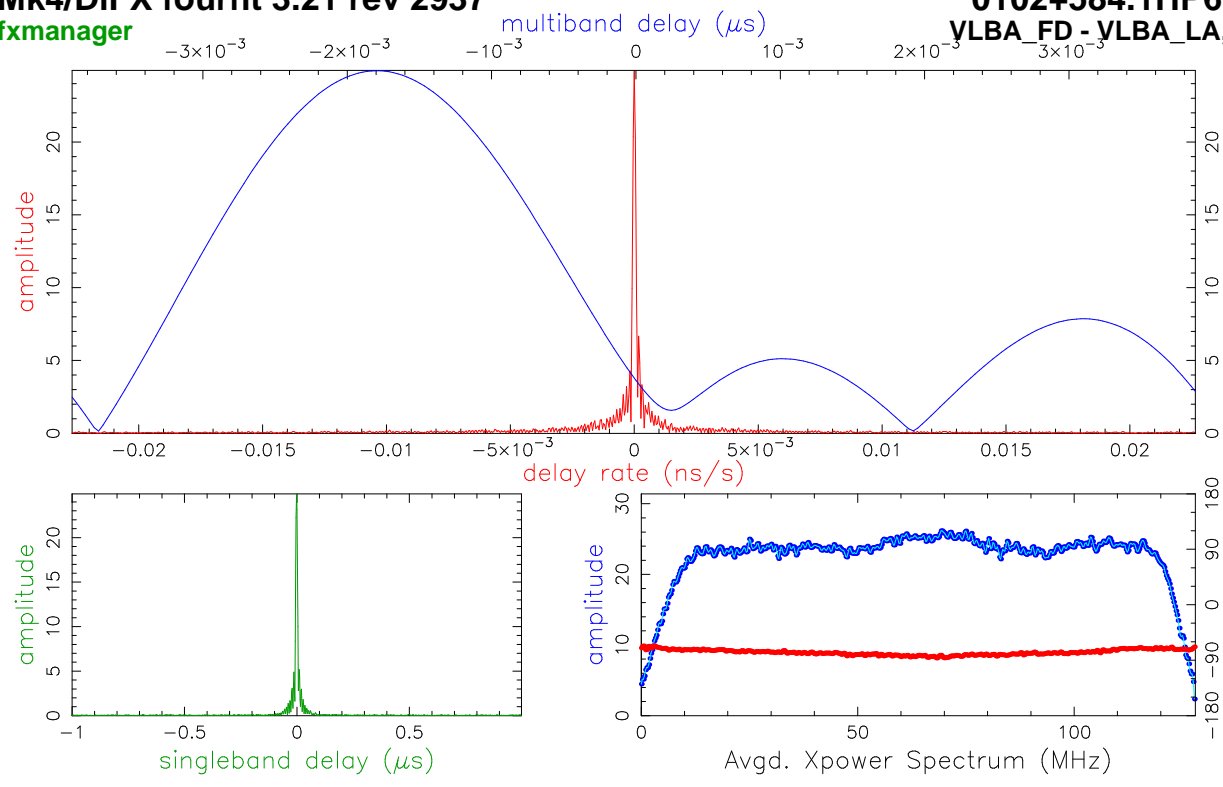
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	APs used	
l	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	Manl PC	
l	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

Group delay (usec)(sbd)	7.19310642956E+02	Apriori delay (usec)	7.19308140823E+02	Resid mbdelay (usec)	2.50213E-03	+/- 3.4E-05
Sband delay (usec)	7.19310630948E+02	Apriori clock (usec)	-1.3236904E+00	Resid sbdelay (usec)	2.49012E-03	+/- 1.3E-04
Phase delay (usec)	7.19308138625E+02	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-2.19818E-06	+/- 2.3E-07
Delay rate (us/s)	8.92884445572E-02	Apriori rate (us/s)	8.92883880656E-02	Resid rate (us/s)	5.64916E-08	+/- 2.2E-09
Total phase (deg)	103.1	Apriori accel (us/s/s)	1.15612805555E-05	Resid phase (deg)	-34.1	+/- 3.5

	RMS	Theor.	Amplitude	0.886 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	24.2	11.7	Search (1024X16)	0.867	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	29.2	20.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	6.9	3.5	Inc. seg. avg.	0.944	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	33.5	6.2	Inc. frq. avg.	0.882	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 47.6 el 70.3 pa -109.3 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) -482.304 1114.012 simultaneous interpolator

Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/bl.Q.59.1HP6Q8

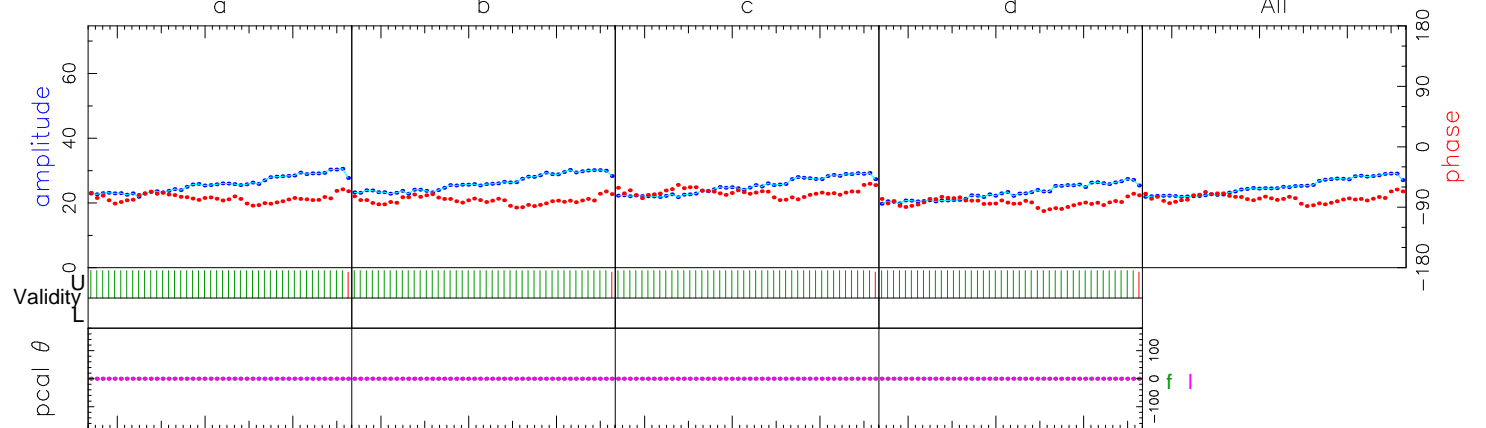


Fringe quality 9

SNR 914.0
Int time 179.974
Amp 24.914
Phase -76.7
PFD 0.0e+00
Delays (us)
SBD -0.001740
MBD -0.001780
Fringe rate (Hz) 0.000941
Ion TEC 0.000
Ref freq (MHz) 43040.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163102
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

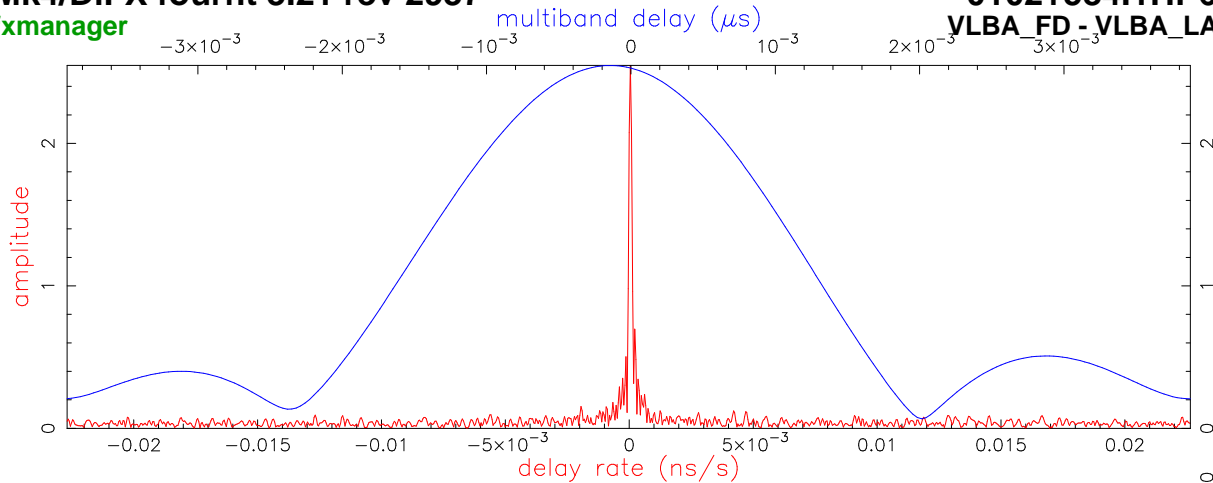
Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



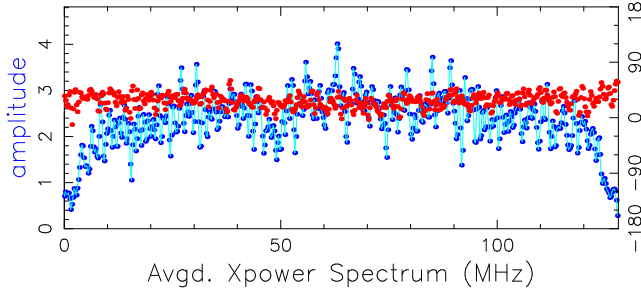
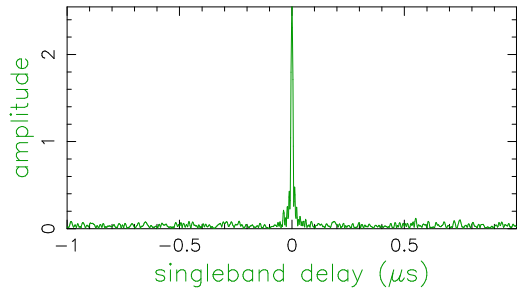
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000		
l	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000		
l	1000	1000	1000	1000		
f	Q00UR	Q01UR	Q02UR	Q03UR		
l	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-7.34693165711E+02	Apriori delay (usec)	-7.34691385649E+02	Resid mbdelay (usec)	-1.78006E-03	+/- 1.2E-06
Sband delay (usec)	-7.34693125899E+02	Apriori clock (usec)	8.2175455E+00	Resid sbdelay (usec)	-1.74025E-03	+/- 4.7E-06
Phase delay (usec)	-7.34691390596E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-4.94761E-06	+/- 8.1E-09
Delay rate (us/s)	-1.74245651084E-02	Apriori rate (us/s)	-1.74245869784E-02	Resid rate (us/s)	2.18700E-08	+/- 7.8E-11
Total phase (deg)	-162.5	Apriori accel (us/s/s)	-3.26700003080E-06	Resid phase (deg)	-76.7	+/- 0.1

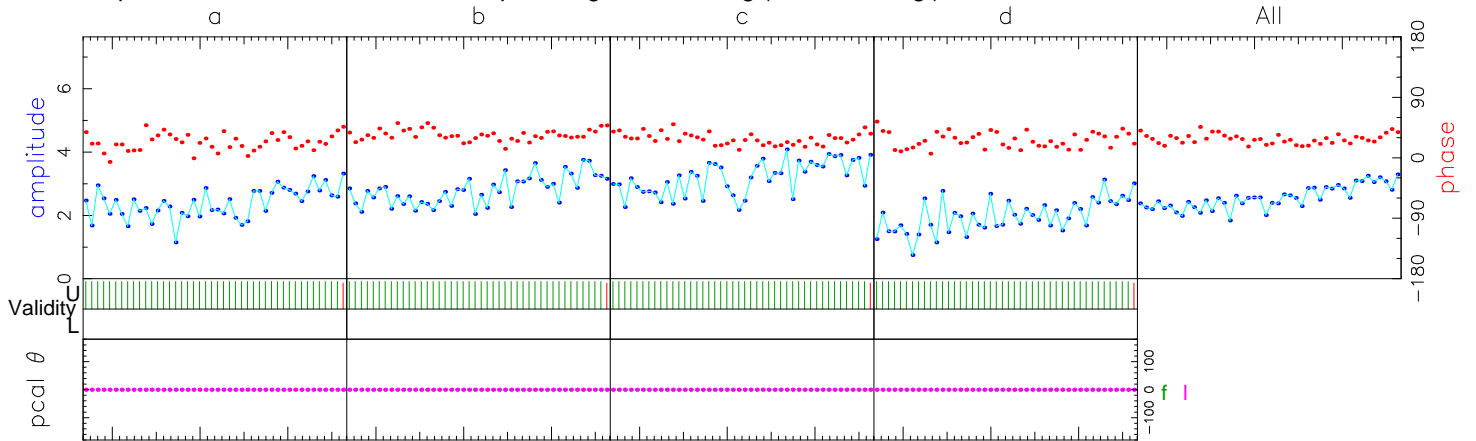
ph/seg (deg)	5.6	0.4	Amplitude	24.914 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	9.7	0.7	Search (1024X16)	23.497	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	7.9	0.1	Inc. seg. avg.	25.009	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.8	0.2	Inc. frq. avg.	25.004	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 512	t_cohere infinite



Fringe quality 9
SNR 93.5
Int time 179.974
Amp 2.548
Phase 28.3
PFD 0.0e+00
Delays (us)
SBD -0.000114
MBD -0.000152
Fringe rate (Hz) 0.001022
Ion TEC 0.000
Ref freq (MHz) 43040.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163104
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec

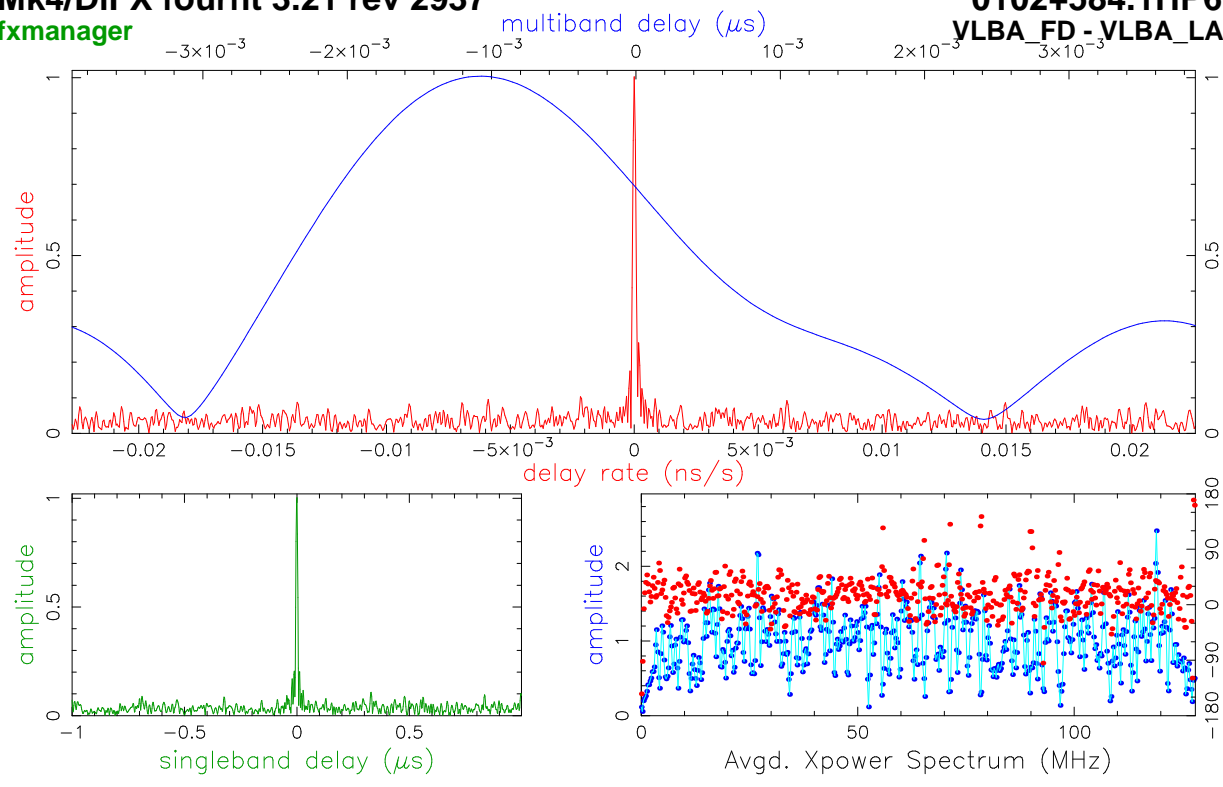


	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

Group delay (usec)(sbd)	-7.34691537953E+02	Apriori delay (usec)	-7.34691385649E+02	Resid mbdelay (usec)	-1.52304E-04	+/-	1.2E-05
Sband delay (usec)	-7.34691500149E+02	Apriori clock (usec)	8.2175455E+00	Resid sbdelay (usec)	-1.14500E-04	+/-	4.6E-05
Phase delay (usec)	-7.34691383819E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	1.82961E-06	+/-	7.9E-08
Delay rate (us/s)	-1.74245632393E-02	Apriori rate (us/s)	-1.74245869784E-02	Resid rate (us/s)	2.37390E-08	+/-	7.6E-10
Total phase (deg)	-57.4	Apriori accel (us/s/s)	-3.26700003080E-06	Resid phase (deg)	28.3	+/-	1.2

ph/seg (deg)	7.1	Theor.	4.1	Amplitude	2.548 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	14.2		7.1	Search (1024X16)	2.418	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	5.4		1.2	Inc. seg. avg.	2.560	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	17.9		2.1	Inc. frq. avg.	2.552	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
f: az 13.6 el 60.8 pa -157.8		l: az 18.7 el 65.2 pa -150.7		u, v (fr/asec)	93.606 -383.413	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite
Control file: cf_1234_gmva7mm		Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/fl..1HP6Q8		Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/fl.Q.44.1HP6Q8		ion window (TEC)	0.00 0.00

simultaneous interpolator

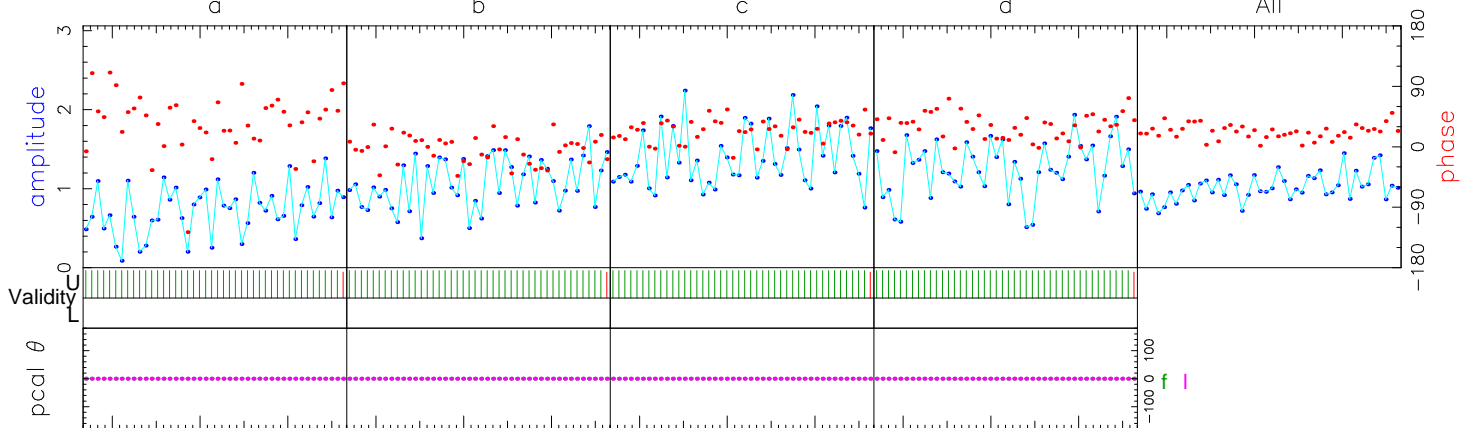


Fringe quality 6

SNR 37.4
Int time 179.974
Amp 1.020
Phase 22.4
PFD 0.0e+00
Delays (us)
SBD -0.000851
MBD -0.001145
Fringe rate (Hz) 0.000672
Ion TEC 0.000
Ref freq (MHz) 43040.0000
AP (sec) 0.512

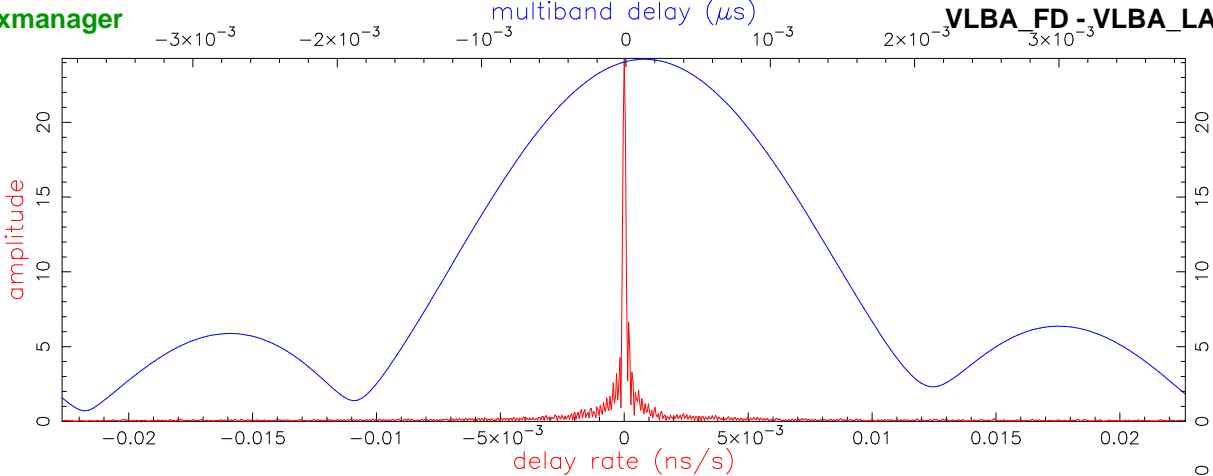
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163105
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec

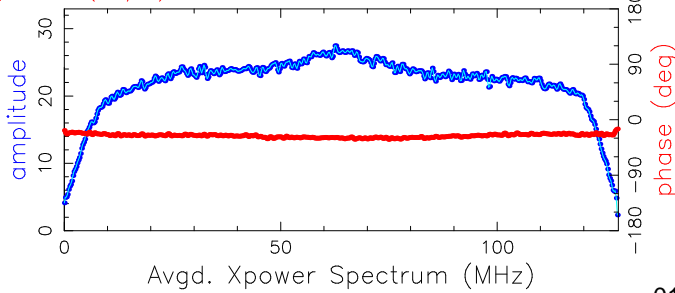
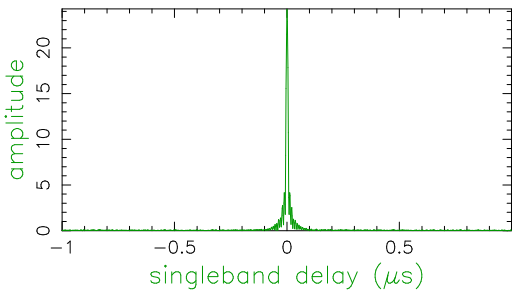


42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
41.2	-3.6	24.7	31.4	Phase	22.4
0.6	1.0	1.4	1.2	Ampl.	1.0
512.3	512.3	513.1	512.1	Sbd box	512.6
U/L 352/0	352/0	352/0	352/0	APs used	
f 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
f:l 0:0	0:0	0:0	0:0	PC phase	
f:l 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
f Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-7.34692530805E+02	Apriori delay (usec)	-7.34691385649E+02	Resid mbdelay (usec)	-1.14516E-03 +/- 3.0E-05
Sband delay (usec)	-7.34692236149E+02	Apriori clock (usec)	8.2175455E+00	Resid sbdelay (usec)	-8.50500E-04 +/- 1.2E-04
Phase delay (usec)	-7.34691384205E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	1.44356E-06 +/- 2.0E-07
Delay rate (us/s)	-1.74245713622E-02	Apriori rate (us/s)	-1.74245869784E-02	Resid rate (us/s)	1.56162E-08 +/- 1.9E-09
Total phase (deg)	-63.4	Apriori accel (us/s/s)	-3.26700003080E-06	Resid phase (deg)	22.4 +/- 3.1
RMS	Theor.	Amplitude	1.020 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
10.7	10.2	Search (1024X16)	0.976	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
16.8	17.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
23.6	3.1	Inc. seg. avg.	1.004	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
26.9	5.3	Inc. frq. avg.	1.039	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 13.6 el 60.8 pa -157.8	l: az 18.7 el 65.2 pa -150.7	u, v (fr/asec)	93.606 -383.413		simultaneous interpolator
Control file: cf_1234_gmva7mm	Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/fl..1HP6Q8	Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/fl.Q.58.1HP6Q8			

Fringe quality 9

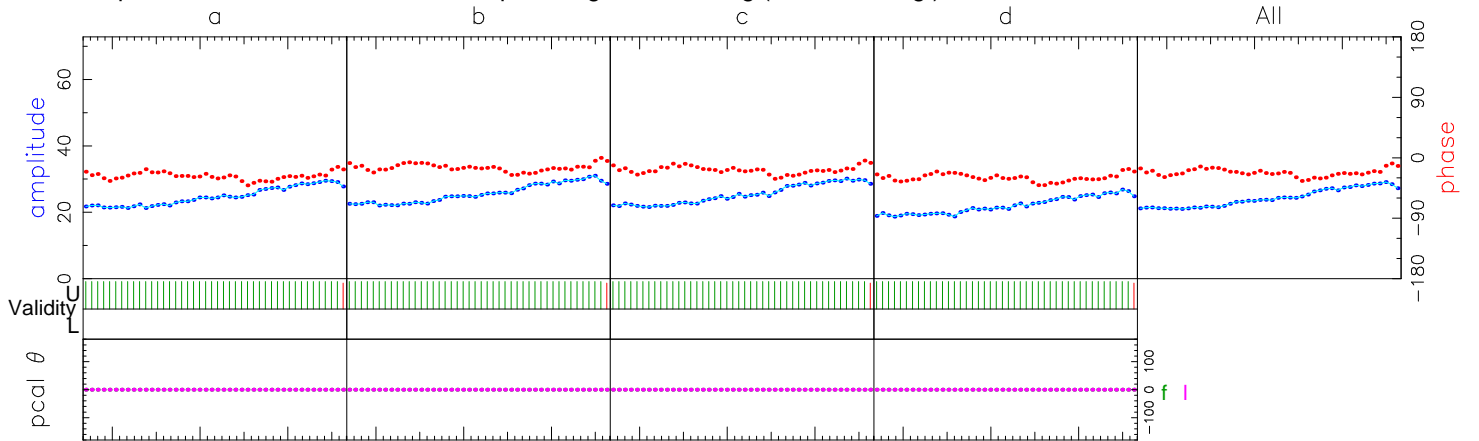


SNR 890.7
Int time 179.974
Amp 24.278
Phase -22.1
PFD 0.0e+00
Delays (us)
SBD 0.000333
MBD 0.000148
Fringe rate (Hz)
0.000947
Ion TEC 0.000
Ref freq (MHz)
43040.0000
AP (sec) 0.512



Exp. c202a
Yr:day 16383
Start 2020:283
Stop 2020:283
FRT 055640.00
055940.22
055810.00
Corr/FF/build
2021:005:135111
2021:010:163100
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	APs used	
l	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-7.34691238117E+02	Apriori delay (usec)	-7.34691385649E+02	Resid mbdelay (usec)	1.47531E-04	+/- 1.2E-06
Sband delay (usec)	-7.34691052399E+02	Apriori clock (usec)	8.2175455E+00	Resid sbdelay (usec)	3.33250E-04	+/- 4.8E-06
Phase delay (usec)	-7.34691387072E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-1.42360E-06	+/- 8.3E-09
Delay rate (us/s)	-1.74245649808E-02	Apriori rate (us/s)	-1.74245869784E-02	Resid rate (us/s)	2.19976E-08	+/- 8.0E-11
Total phase (deg)	-107.9	Apriori accel (us/s/s)	-3.26700003080E-06	Resid phase (deg)	-22.1	+/- 0.1

ph/seg (deg)	5.5	RMS	5.5	Theor.	0.4	Amplitude	24.278 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	11.1		0.7			Search (1024X16)	22.934	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	8.8		0.1			Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	5.9		0.2			Inc. seg. avg.	24.333	Sample rate (MSamp/s):	256	dr window (ns/s)	-0.023 0.023		
						Inc. frq. avg.	24.357	Data rate (Mb/s):	2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00

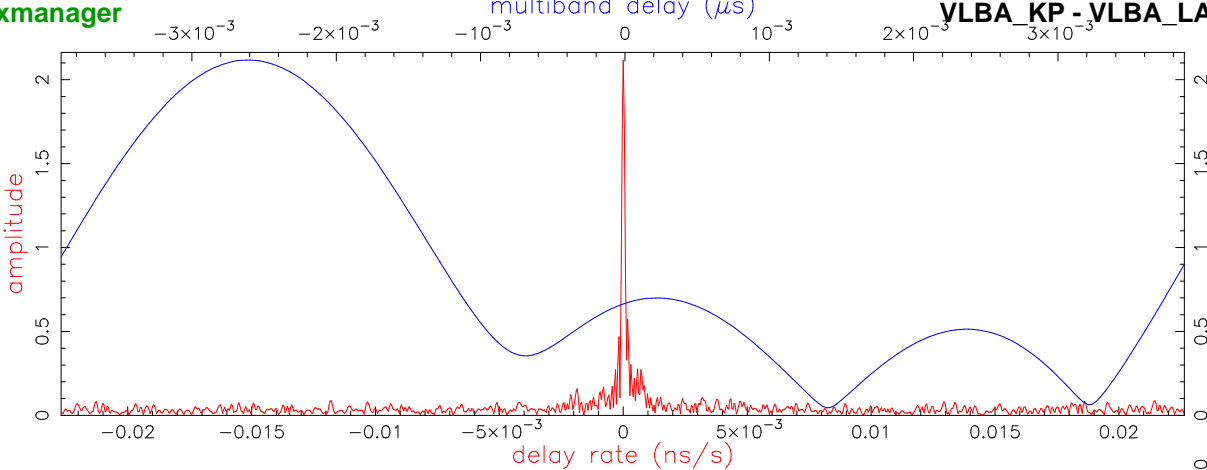
f: az 13.6 el 60.8 pa -157.8 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) 93.606 -383.413 simultaneous interpolator
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/fl..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/fl.Q.6.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

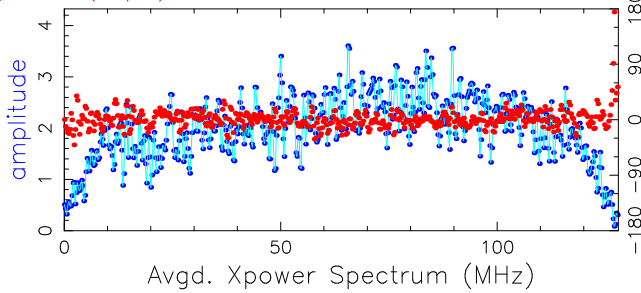
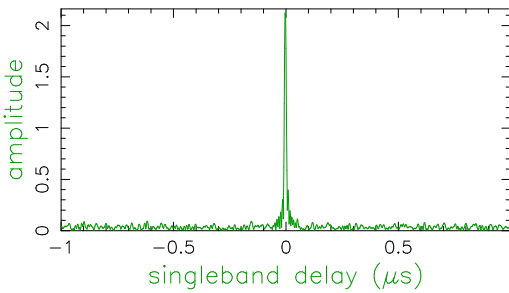
0102+584.1HP6Q8, No0090, kl

VLBA_KP - VLBA_LA, fgroup Q, pol LR



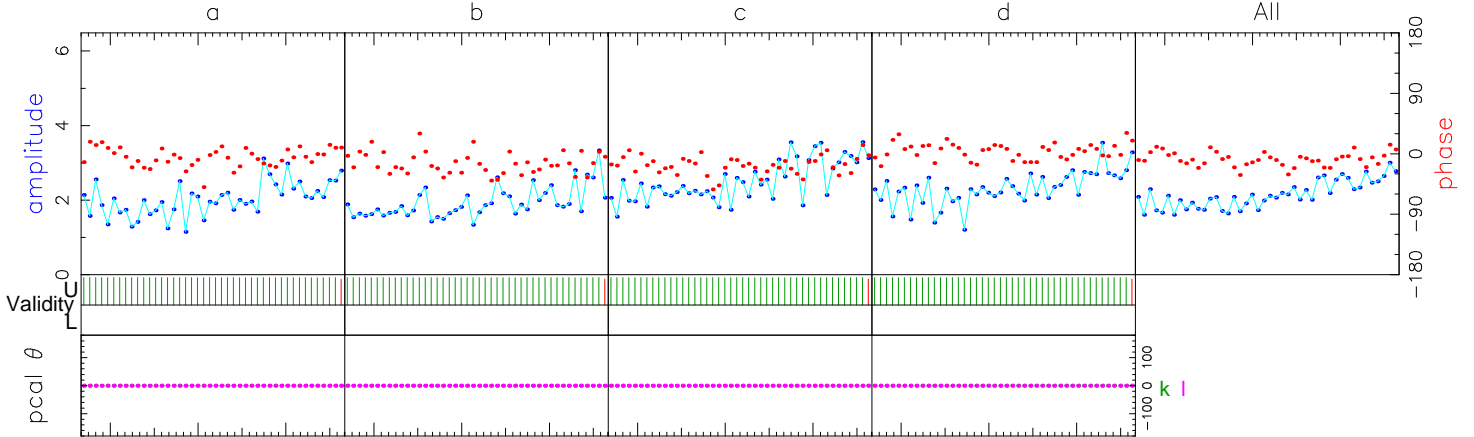
Fringe quality 8

SNR 79.3
 Int time 179.800
 Amp 2.163
 Phase -7.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002967
 MBD -0.002662
 Fringe rate (Hz)
 -0.000102
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163111
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	APs used	
l	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
l	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

	-8.61389583451E+02	Apriori delay (usec)	-8.61386921295E+02	Resid mbdelay (usec)	-2.66216E-03	+/- 1.4E-05
Group delay (usec)(sbd)	-8.61389583451E+02	Apriori clock (usec)	7.1361828E-01	Resid sbdelay (usec)	-2.96687E-03	+/- 5.4E-05
Sband delay (usec)	-8.61389888170E+02	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-5.00916E-07	+/- 9.3E-08
Phase delay (usec)	-8.61386921796E+02	Apriori rate (us/s)	6.90660761735E-02	Resid rate (us/s)	-2.36540E-09	+/- 9.0E-10
Delay rate (us/s)	6.90660738081E-02	Apriori accel (us/s/s)	-7.36966882147E-07	Resid phase (deg)	-7.8	+/- 1.4
Total phase (deg)	-41.1					

	RMS	Theor.	Amplitude	2.163 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	10.4	4.8	Search (1024X16)	2.092	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	16.7	8.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	11.7	1.4	Inc. seg. avg.	2.144	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	10.7	2.5	Inc. frq. avg.	2.138	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
k: az 21.3 el 60.1 pa -144.4			l: az 18.7 el 65.2 pa -150.7			u,v (fr/asec) -378.683 -172.474

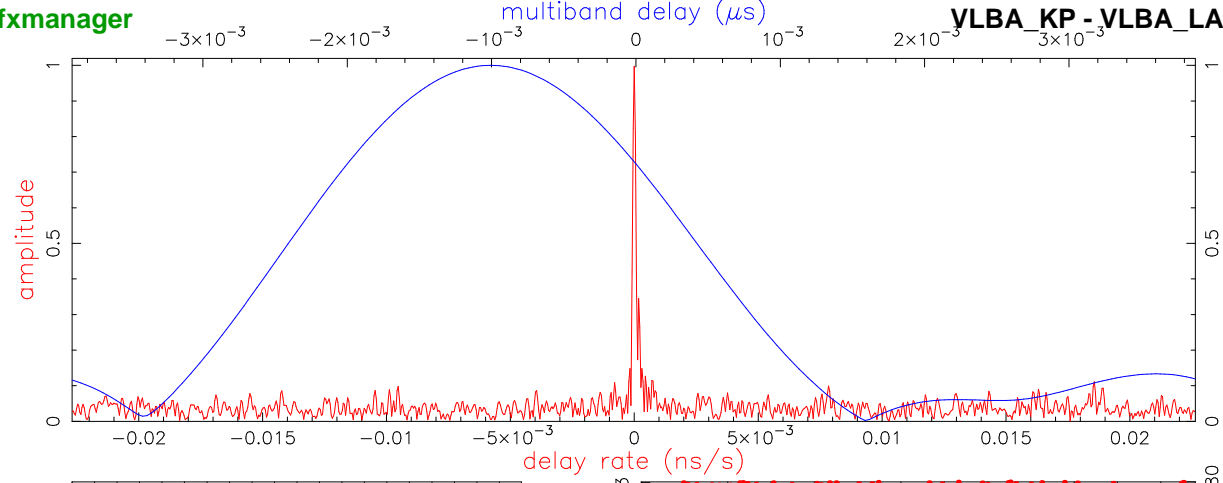
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl.Q.100.1HP6Q8 simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

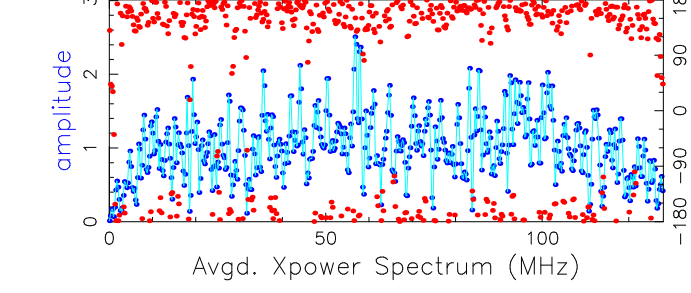
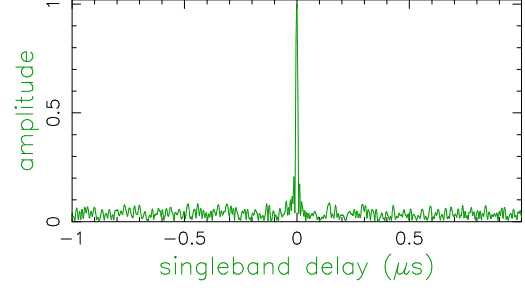
0102+584.1HP6Q8, No0090, kl

VLBA_KP - VLBA_LA, fgroup Q, pol RL



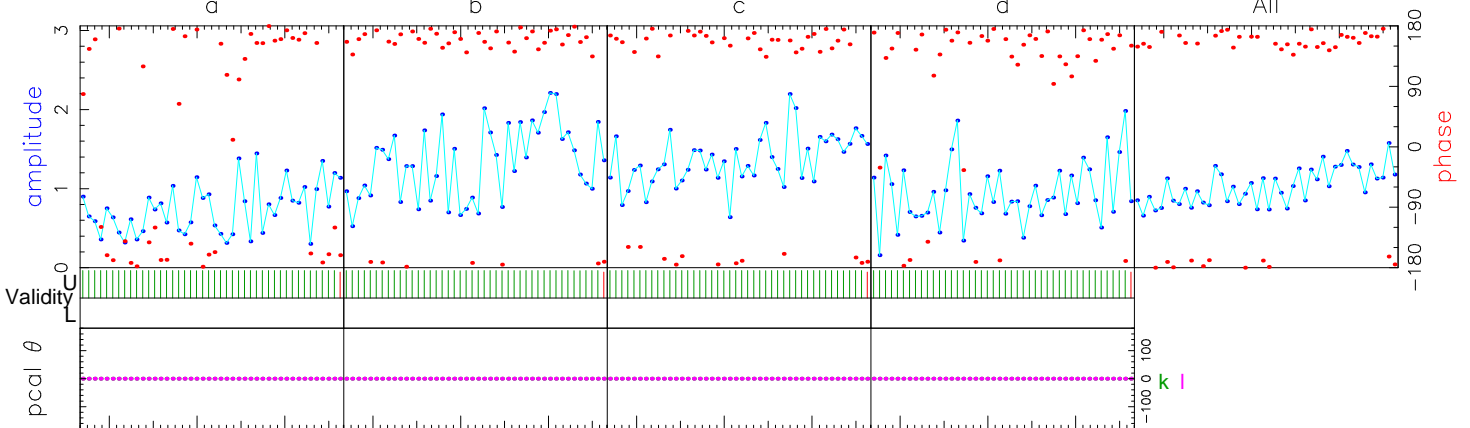
Fringe quality 8

SNR 37.4
 Int time 179.800
 Amp 1.020
 Phase 165.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.000965
 MBD -0.000914
 Fringe rate (Hz)
 -0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163113
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
174.0	164.5	166.6	157.5	Phase	165.1
0.6	1.3	1.3	0.8	Ampl.	1.0
512.9	512.4	512.7	512.2	Sbd box	512.5
U/L 352/0	352/0	352/0	352/0	APs used	
k 1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	PC freqs	
k:l 0:0	0:0	0:0	0:0	PC phase	
k:l 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
k Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
l Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	-8.61387835451E+02	Apriori delay (usec)	-8.61386921295E+02	Resid mbdelay (usec)	-9.14156E-04	+/-	3.0E-05
Sband delay (usec)	-8.61387886545E+02	Apriori clock (usec)	7.1361828E-01	Resid sbdelay (usec)	-9.65250E-04	+/-	1.2E-04
Phase delay (usec)	-8.61386910638E+02	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	1.06571E-05	+/-	2.0E-07
Delay rate (us/s)	6.90660760941E-02	Apriori rate (us/s)	6.90660761735E-02	Resid rate (us/s)	-7.94138E-11	+/-	1.9E-09
Total phase (deg)	131.8	Apriori accel (us/s/s)	-7.36966882147E-07	Resid phase (deg)	165.1	+/-	3.1

ph/seg (deg)	RMS	Theor.	Amplitude	1.020 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	15.0	10.2	Search (1024X16)	1.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	22.3	17.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
amp/frq (%)	8.4	3.1	Inc. seg. avg.	1.017	Sample rate(MSamp/s): 256	dr window (ns/s) -0.023 0.023
	30.0	5.3	Inc. frq. avg.	1.000	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 21.3 el 60.1 pa -144.4 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) -378.683 -172.474 simultaneous interpolator

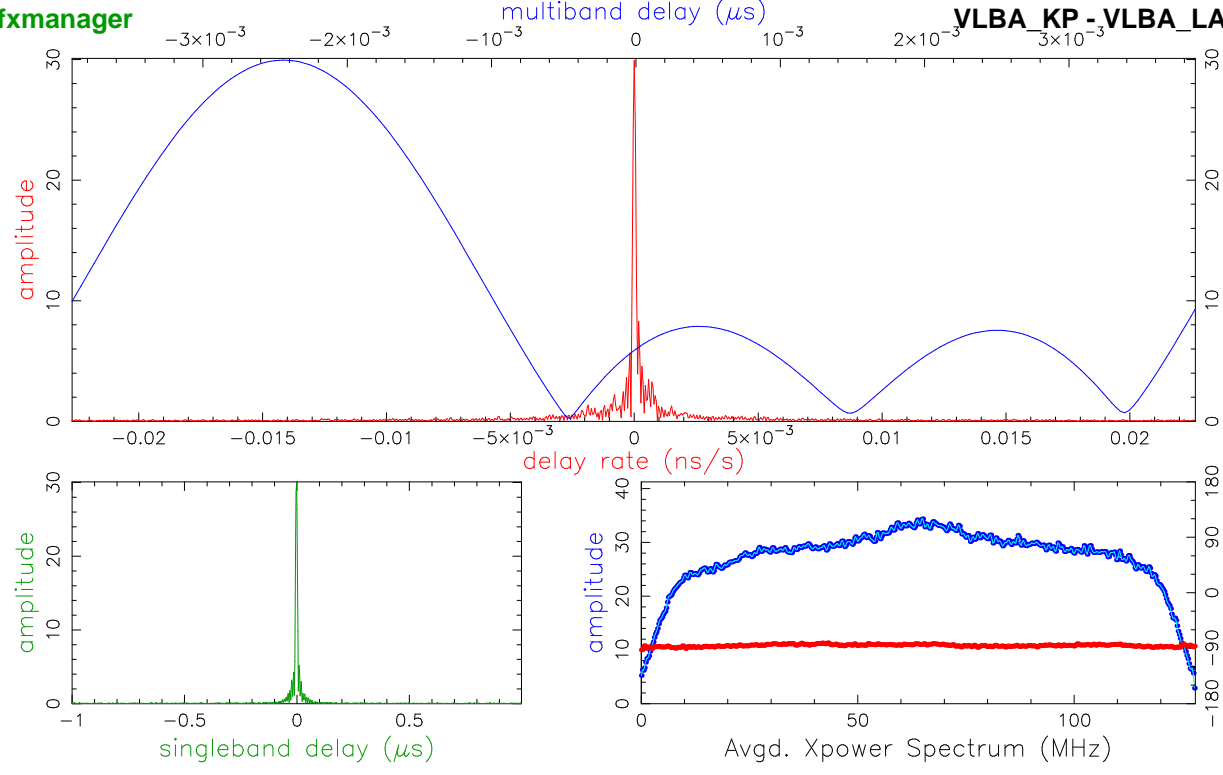
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl.Q.118.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, kl

VLBA_KP - VLBA_LA, fgroup Q, pol LL

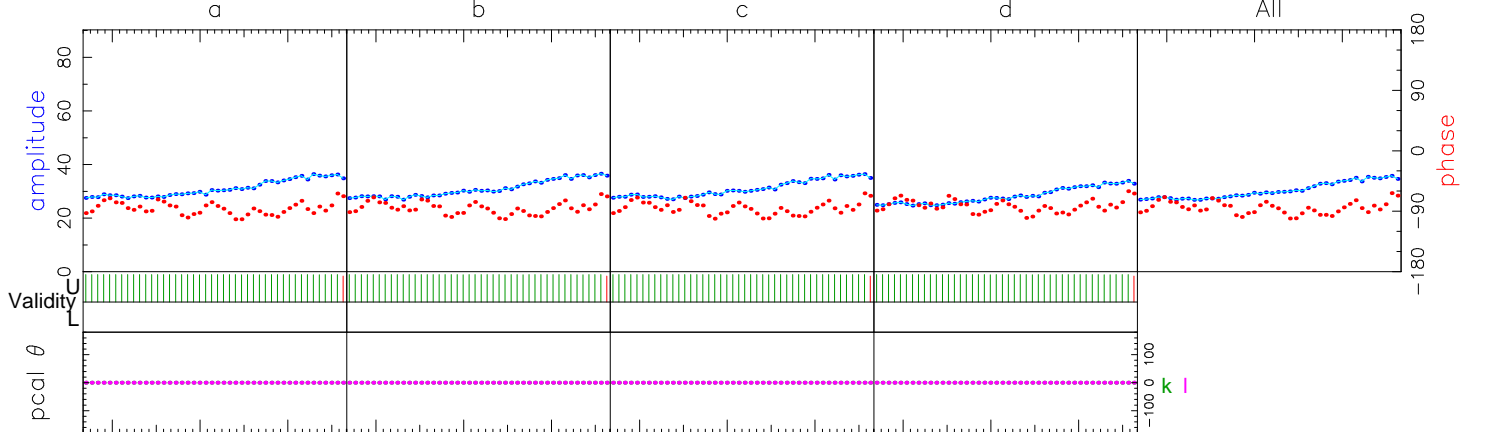


Fringe quality 9

SNR 1103.4
 Int time 179.800
 Amp 30.092
 Phase -84.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.002431
 MBD -0.002464
 Fringe rate (Hz)
 -0.000071
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163107
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	Phase	-84.7
l	1000	1000	1000	1000	Ampl.	29.9
k:l	0:0	0:0	0:0	0:0	Sbd box	511.8
k:l	0:0	0:0	0:0	0:0	APs used	
k	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	PC freqs	
k	Q00UL	Q01UL	Q02UL	Q03UL	PC phase	
l	Q00UL	Q01UL	Q02UL	Q03UL	ManI PC	
					PC amp	
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-8.61389385514E+02	Apriori delay (usec)	-8.61386921295E+02	Resid mbdelay (usec)	-2.46422E-03	+/-	1.0E-06
Sband delay (usec)	-8.61389352545E+02	Apriori clock (usec)	7.1361828E-01	Resid sbdelay (usec)	-2.43125E-03	+/-	3.9E-06
Phase delay (usec)	-8.61386926758E+02	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-5.46341E-06	+/-	6.7E-09
Delay rate (us/s)	6.90660745171E-02	Apriori rate (us/s)	6.90660761735E-02	Resid rate (us/s)	-1.65634E-09	+/-	6.4E-11
Total phase (deg)	-118.0	Apriori accel (us/s/s)	-7.36966882147E-07	Resid phase (deg)	-84.7	+/-	0.1

	RMS	Theor.	Amplitude	30.092 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	9.0	0.3	Search (1024X16)	29.937	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
amp/seg (%)	10.0	0.6	Interp.	0.000	Sample rate(MISamp/s): 256	nlags: 512	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	2.0	0.1	Inc. seg. avg.	30.321	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	3.9	0.2	Inc. frq. avg.	29.948					

k: az 21.3 el 60.1 pa -144.4 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) -378.683 -172.474 simultaneous interpolator

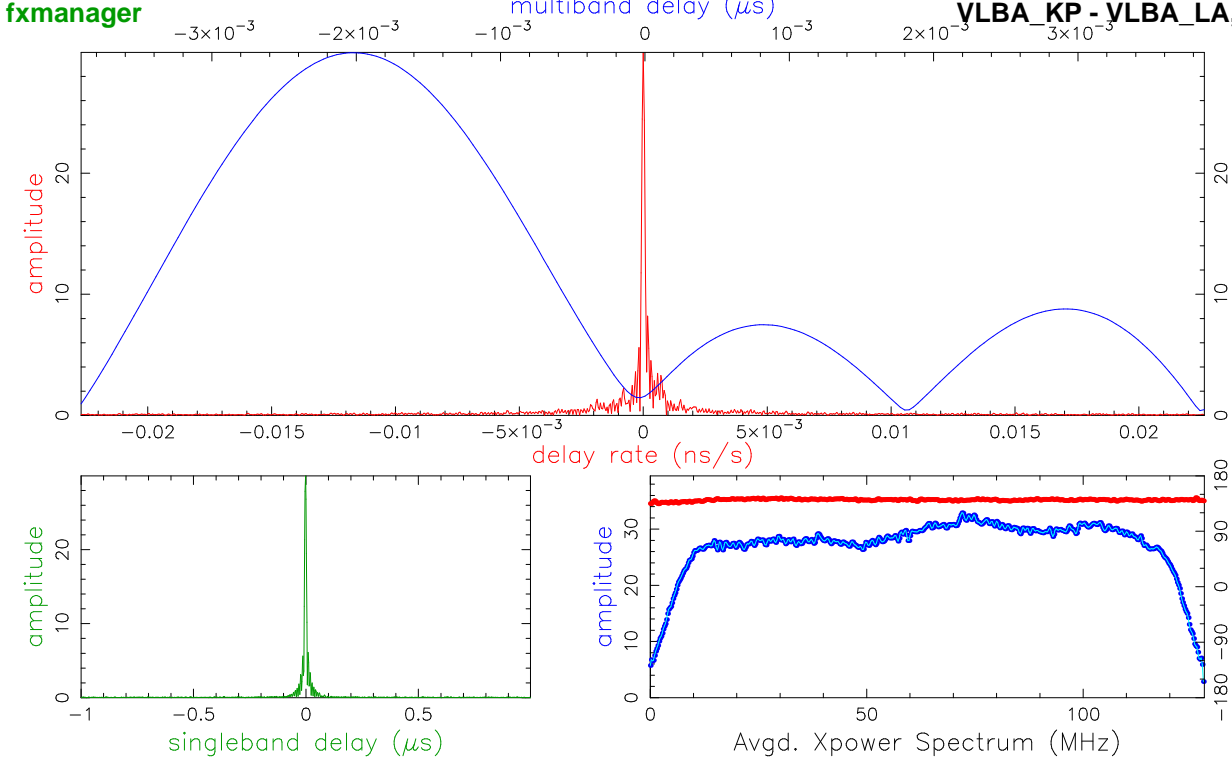
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl.Q.77.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, kl

VLBA_KP - VLBA_LA, fgroup Q, pol RR

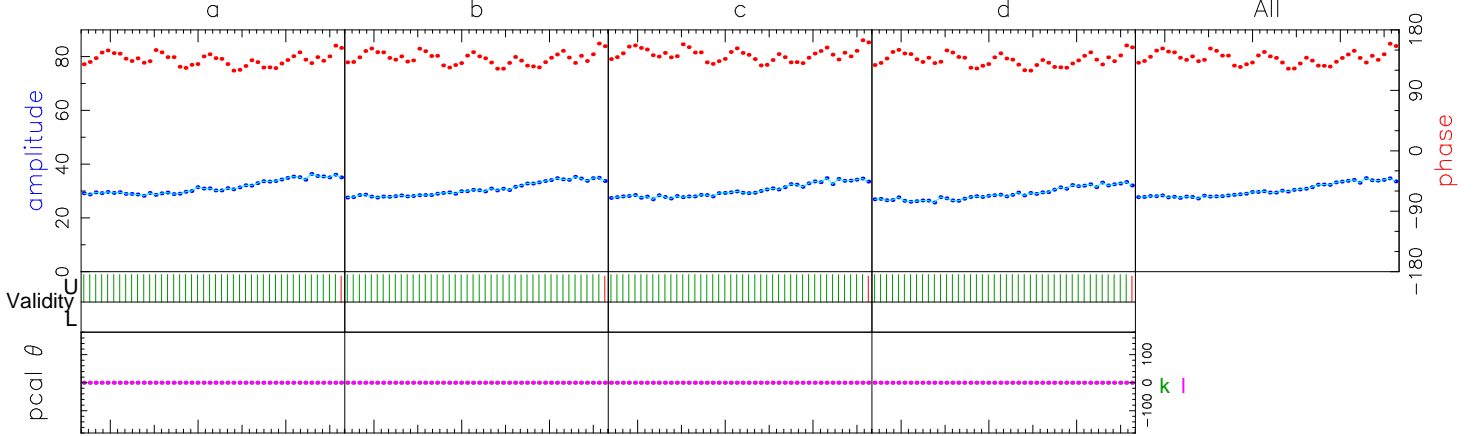


Fringe quality 9

SNR 1099.5
 Int time 179.800
 Amp 29.984
 Phase 137.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002161
 MBD -0.002029
 Fringe rate (Hz)
 -0.000093
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163109
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000		
l	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000		
l	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR		
l	Q00UR	Q01UR	Q02UR	Q03UR		

	-8.61388950014E+02	Apriori delay (usec)	-8.61386921295E+02	Resid mbdelay (usec)	-2.02872E-03	+/- 1.0E-06
Sband delay (usec)	-8.61389082420E+02	Apriori clock (usec)	7.1361828E-01	Resid sbdelay (usec)	-2.16112E-03	+/- 3.9E-06
Phase delay (usec)	-8.61386912392E+02	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	8.90318E-06	+/- 6.7E-09
Delay rate (us/s)	6.90660740180E-02	Apriori rate (us/s)	6.90660761735E-02	Resid rate (us/s)	-2.15552E-09	+/- 6.5E-11
Total phase (deg)	104.6	Apriori accel (us/s/s)	-7.36966882147E-07	Resid phase (deg)	137.9	+/- 0.1

	RMS	Theor.	Amplitude	29.984 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	9.0	0.3	Search (1024X16)	29.891	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	8.2	0.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	4.4	0.1	Inc. seg. avg.	30.330	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	3.0	0.2	Inc. frq. avg.	29.998	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 21.3 el 60.1 pa -144.4 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) -378.683 -172.474 simultaneous interpolator

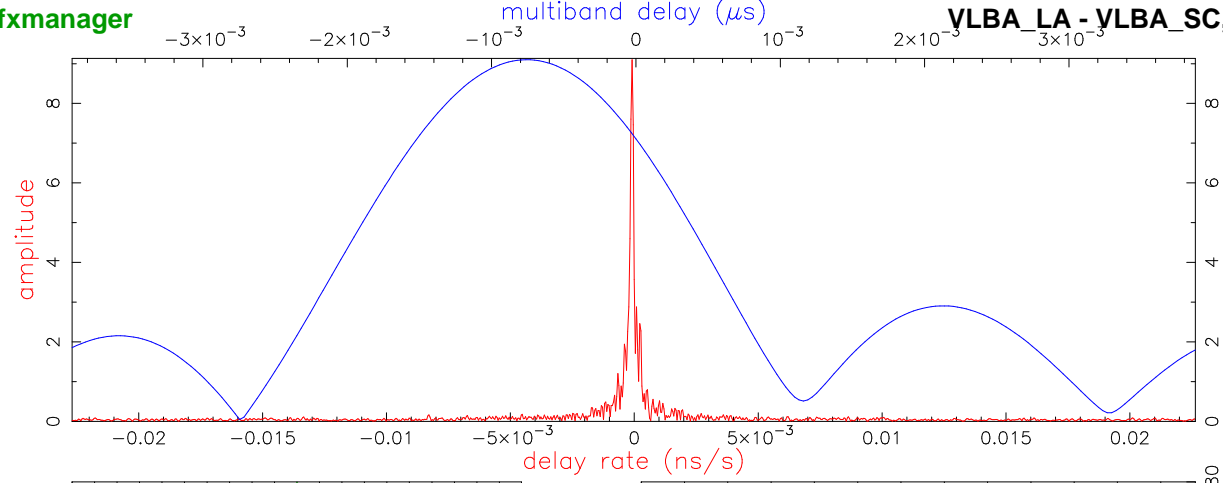
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/kl.Q.82.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, lc

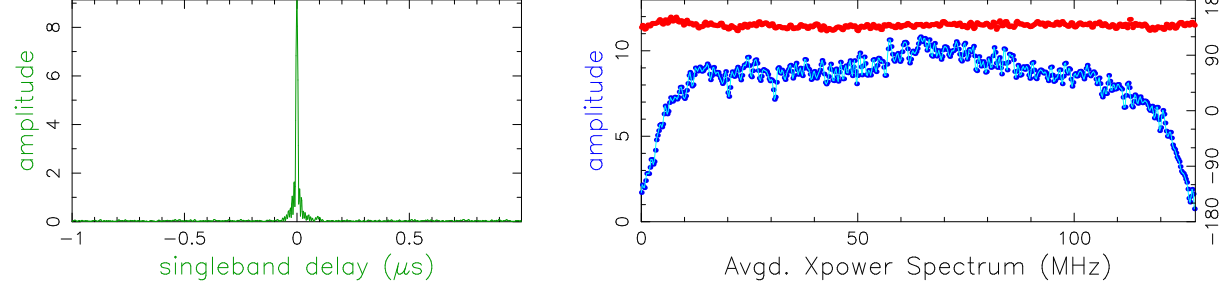
VLBA_LA - VLBA_SC, fgroup Q, pol RR



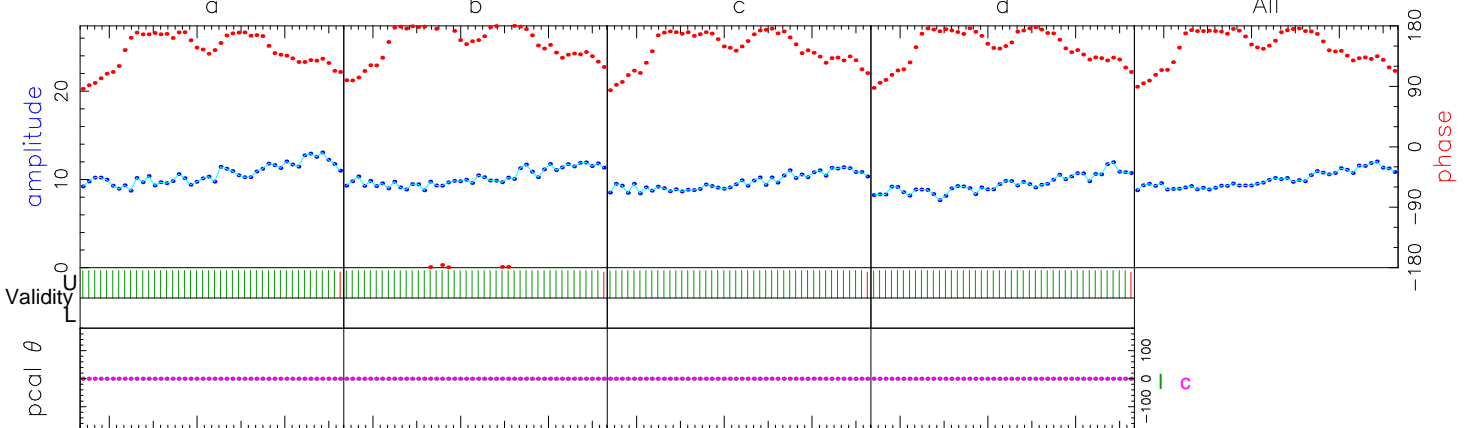
Fringe quality 7

SNR 335.1
 Int time 179.971
 Amp 9.133
 Phase 147.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.000406
 MBD -0.000770
 Fringe rate (Hz)
 -0.004263
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163112
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
c	1000	1000	1000	1000		
l:c	0:0	0:0	0:0	0:0		
l:c	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
c	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
c	Q00UR	Q01UR	Q02UR	Q03UR		

Group delay (usec)(sbd)	4.37866610447E+03	Apriori delay (usec)	4.37866687476E+03	Resid mbdelay (usec)	-7.70298E-04	+/-	3.3E-06
Sband delay (usec)	4.37866646901E+03	Apriori clock (usec)	-8.8328543E+00	Resid sbdelay (usec)	-4.05750E-04	+/-	1.3E-05
Phase delay (usec)	4.37866688427E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	9.50227E-06	+/-	2.2E-08
Delay rate (us/s)	5.17313333427E-01	Apriori rate (us/s)	5.17313432473E-01	Resid rate (us/s)	-9.90460E-08	+/-	2.1E-10
Total phase (deg)	251.6	Apriori accel (us/s/s)	3.53865583823E-06	Resid phase (deg)	147.2	+/-	0.3

ph/seg (deg)	25.0	1.1	Search (1024X16)	8.808	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	13.8	2.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	5.9	0.3	Inc. seg. avg.	9.984	Bits/sample: 2x2	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023	0.023
amp/frq (%)	4.5	0.6	Inc. frq. avg.	9.124	Data rate(Mb/s): 2048	nlags: 512	ion window (TEC)	0.00	0.00

l: az 18.7 el 65.2 pa -150.7 c: az 340.7 el 44.8 pa 142.6 u,v (fr/asec) -2832.567 891.996 simultaneous interpolator

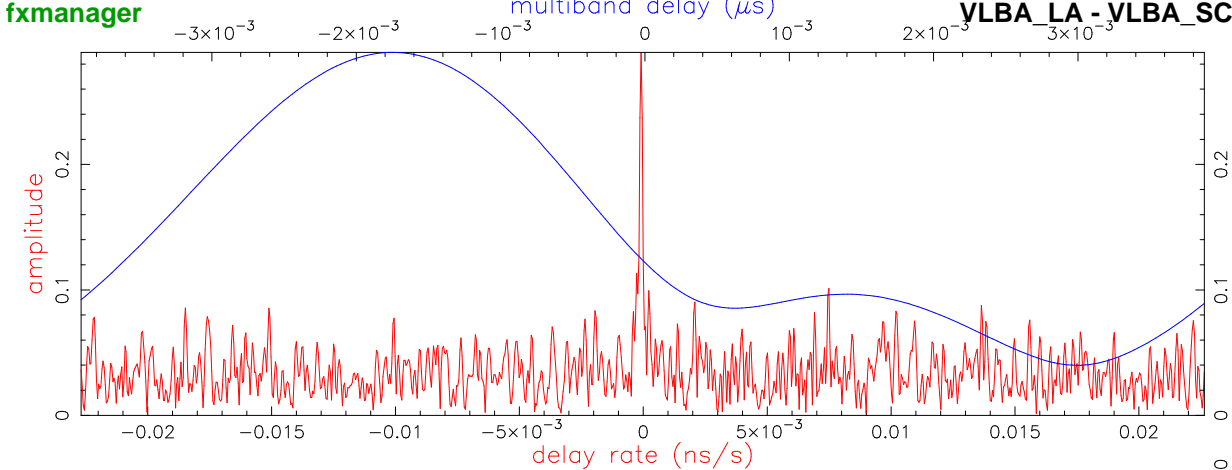
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lc..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lc.Q.109.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

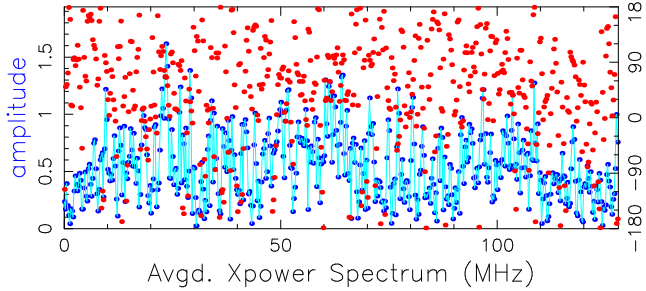
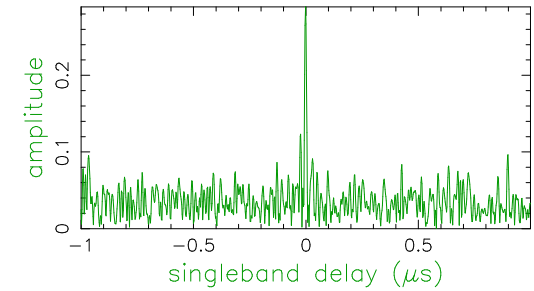
0102+584.1HP6Q8, No0090, lc

VLBA_LA - VLBA_SC, fgroup Q, pol LR



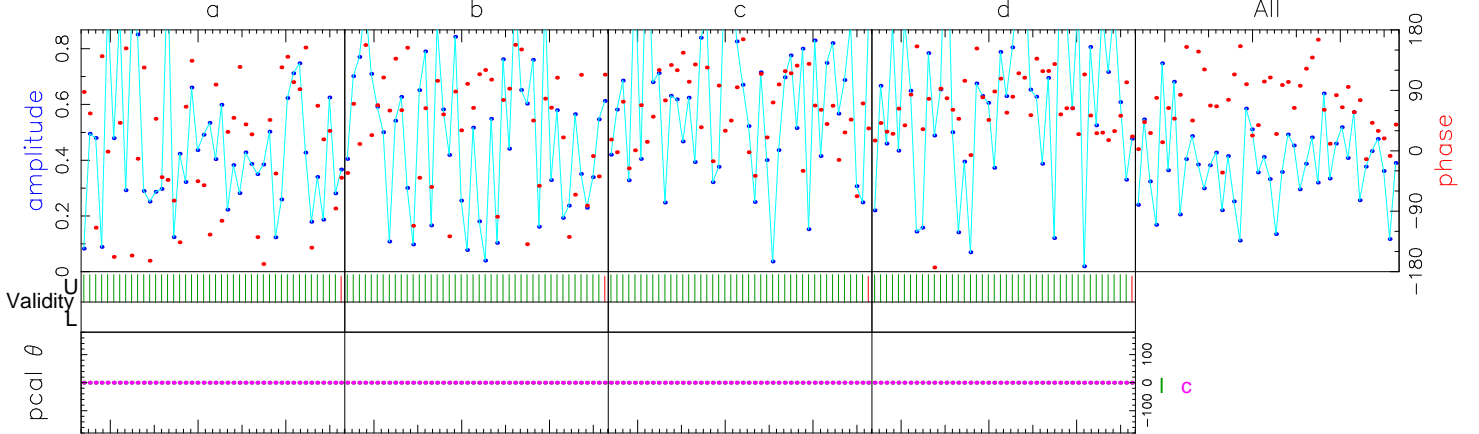
Fringe quality 8

SNR 10.6
 Int time 179.971
 Amp 0.289
 Phase 66.5
 PFD 5.8e-18
 Delays (us)
 SBD -0.001920
 MBD -0.001747
 Fringe rate (Hz)
 -0.003452
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163114
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	APs used	
c	1000	1000	1000	1000	PC freqs	
l:c	0:0	0:0	0:0	0:0	PC phase	
l:c	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
c	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	4.37866512784E+03	Apriori delay (usec)	4.37866687476E+03	Resid mbdelay (usec)	-1.74692E-03	+/-	1.0E-04
Sband delay (usec)	4.37866495501E+03	Apriori clock (usec)	-8.8328543E+00	Resid sbdelay (usec)	-1.91975E-03	+/-	4.1E-04
Phase delay (usec)	4.37866687906E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	4.29430E-06	+/-	7.0E-07
Delay rate (us/s)	5.17313352280E-01	Apriori rate (us/s)	5.17313432473E-01	Resid rate (us/s)	-8.01937E-08	+/-	6.7E-09
Total phase (deg)	170.9	Apriori accel (us/s/s)	3.53865583823E-06	Resid phase (deg)	66.5	+/-	10.8

ph/seg (deg)	47.4	Theor.	35.8	Amplitude	0.289 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	59.8	Search (1024X16)	0.284	Search	0.284	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	19.2	Inc. seg. avg.	0.326	Inc. seg. avg.	0.326	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	56.3	Inc. frq. avg.	0.288	Inc. frq. avg.	0.288	Sample rate(MISamp/s): 256	nlags: 512	t_cohere infinite	dr window (ns/s)	-0.023 0.023
						Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00		

l: az 18.7 el 65.2 pa -150.7 c: az 340.7 el 44.8 pa 142.6 u,v (fr/asec) -2832.567 891.996 simultaneous interpolator

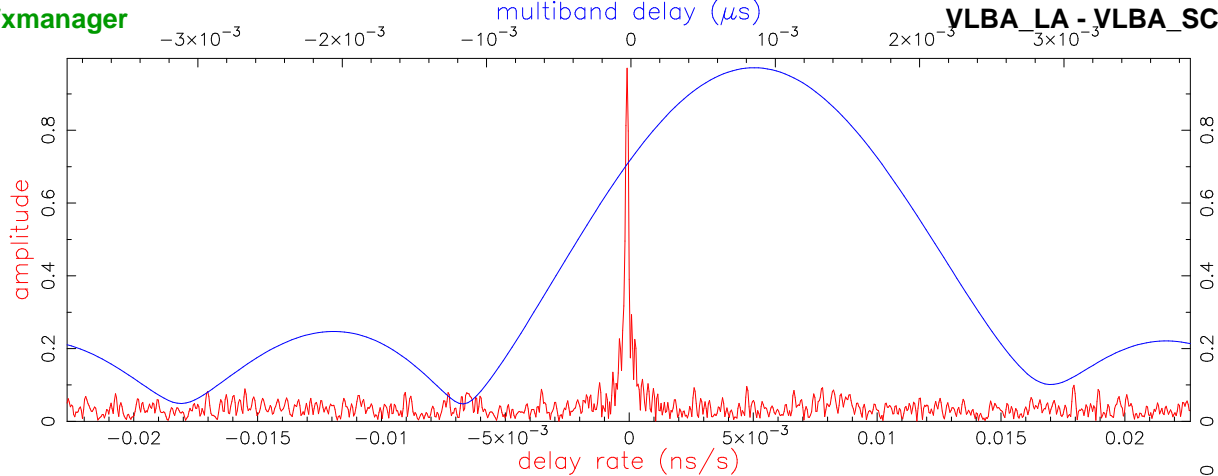
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lc..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lc.Q.126.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

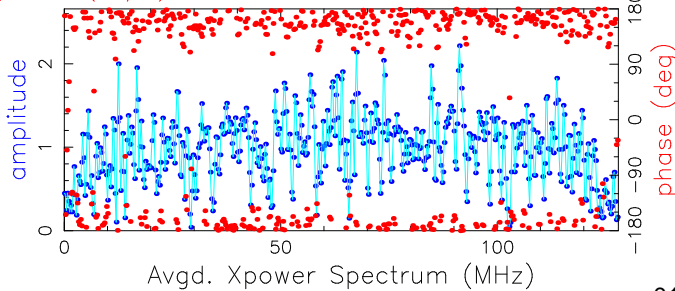
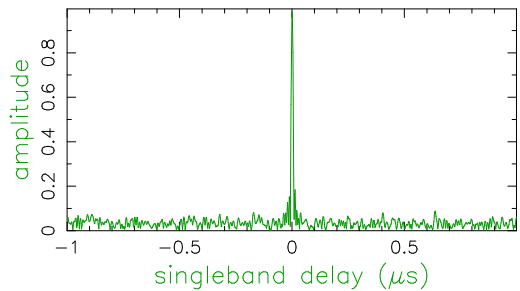
0102+584.1HP6Q8, No0090, lc

VLBA_LA - VLBA_SC, fgroup Q, pol RL



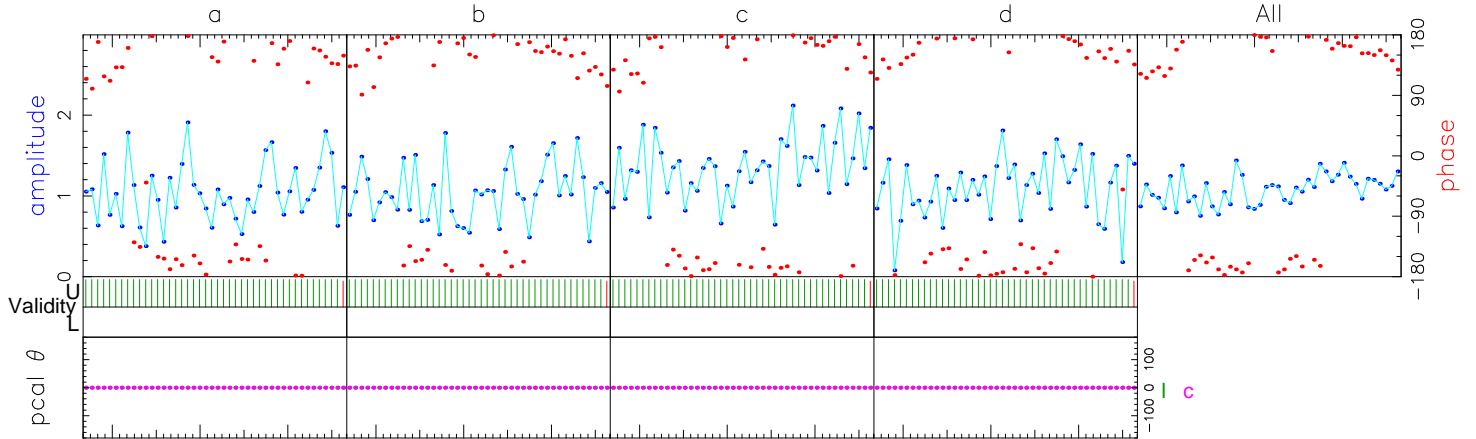
Fringe quality 8

SNR 36.6
 Int time 179.972
 Amp 0.998
 Phase 170.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000844
 MBD 0.000790
 Fringe rate (Hz)
 -0.004355
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163117
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



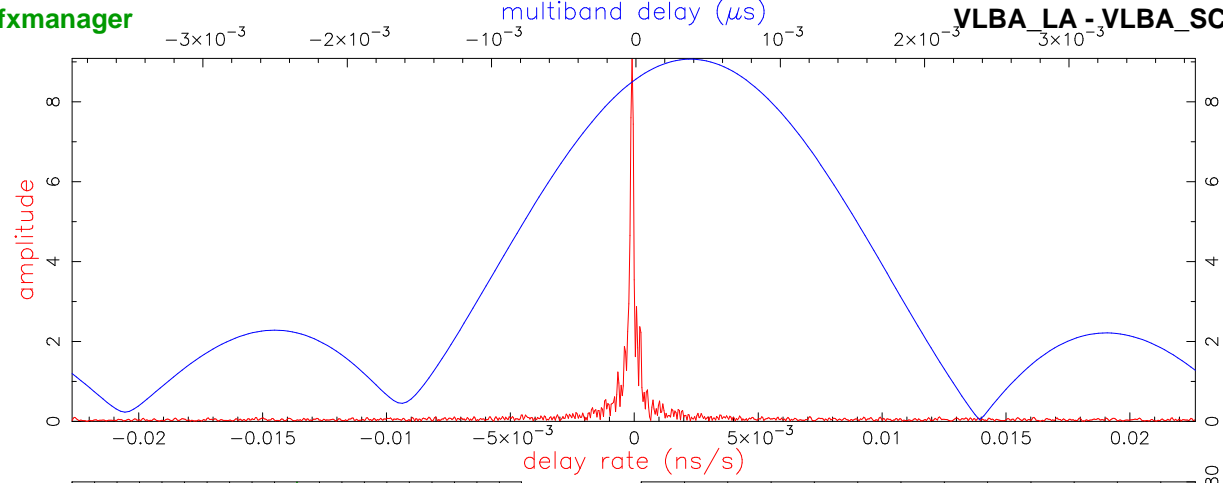
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
c	1000	1000	1000	1000		
l:c	0:0	0:0	0:0	0:0		
l:c	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
c	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
c	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	4.37866766472E+03	Apriori delay (usec)	4.37866687476E+03	Resid mbdelay (usec)	7.89952E-04	+/-	3.0E-05
Sband delay (usec)	4.37866771851E+03	Apriori clock (usec)	-8.8328543E+00	Resid sbdelay (usec)	8.43750E-04	+/-	1.2E-04
Phase delay (usec)	4.37866688579E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	1.10246E-05	+/-	2.0E-07
Delay rate (us/s)	5.17313331289E-01	Apriori rate (us/s)	5.17313432473E-01	Resid rate (us/s)	-1.01184E-07	+/-	1.9E-09
Total phase (deg)	275.2	Apriori accel (us/s/s)	3.53865583823E-06	Resid phase (deg)	170.8	+/-	3.1

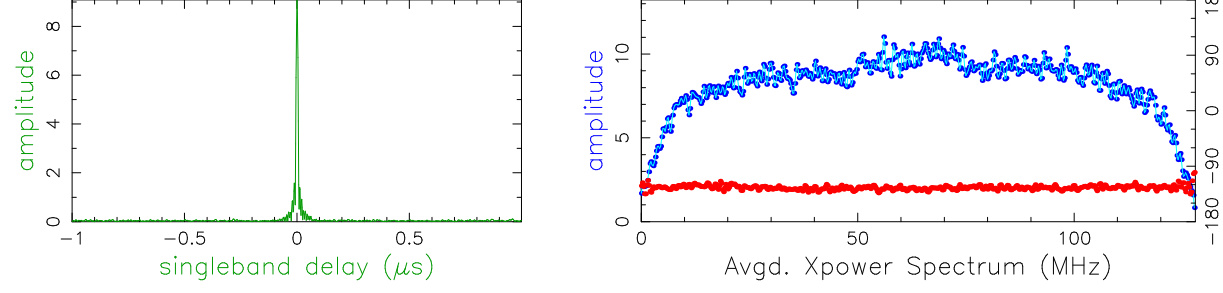
ph/seg (deg)	27.3	Theor.	10.4	Amplitude	0.998 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	20.0	Search (1024X16)	0.952	Search	0.952	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	6.3	Inc. seg. avg.	1.065	Inc. seg. avg.	1.065	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004 0.004	
amp/frq (%)	13.2	Inc. frq. avg.	0.972	Inc. frq. avg.	0.972	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023 0.023		
						Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 18.7 el 65.2 pa -150.7 c: az 340.7 el 44.8 pa 142.6 u,v (fr/asec) -2832.567 891.996 simultaneous interpolator

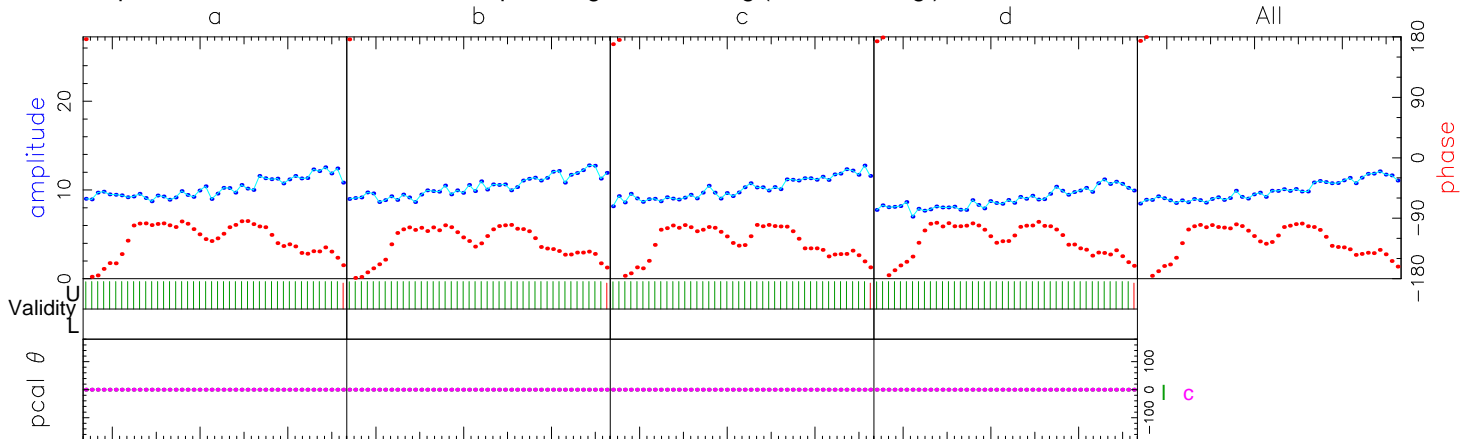
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lc..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lc.Q.156.1HP6Q8



Fringe quality 7
SNR 333.4
Int time 179.972
Amp 9.087
Phase -126.6
PFD 0.0e+00
Delays (us)
SBD 0.000324
MBD 0.000394
Fringe rate (Hz)
-0.004309
Ion TEC 0.000
Ref freq (MHz)
43040.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163111
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



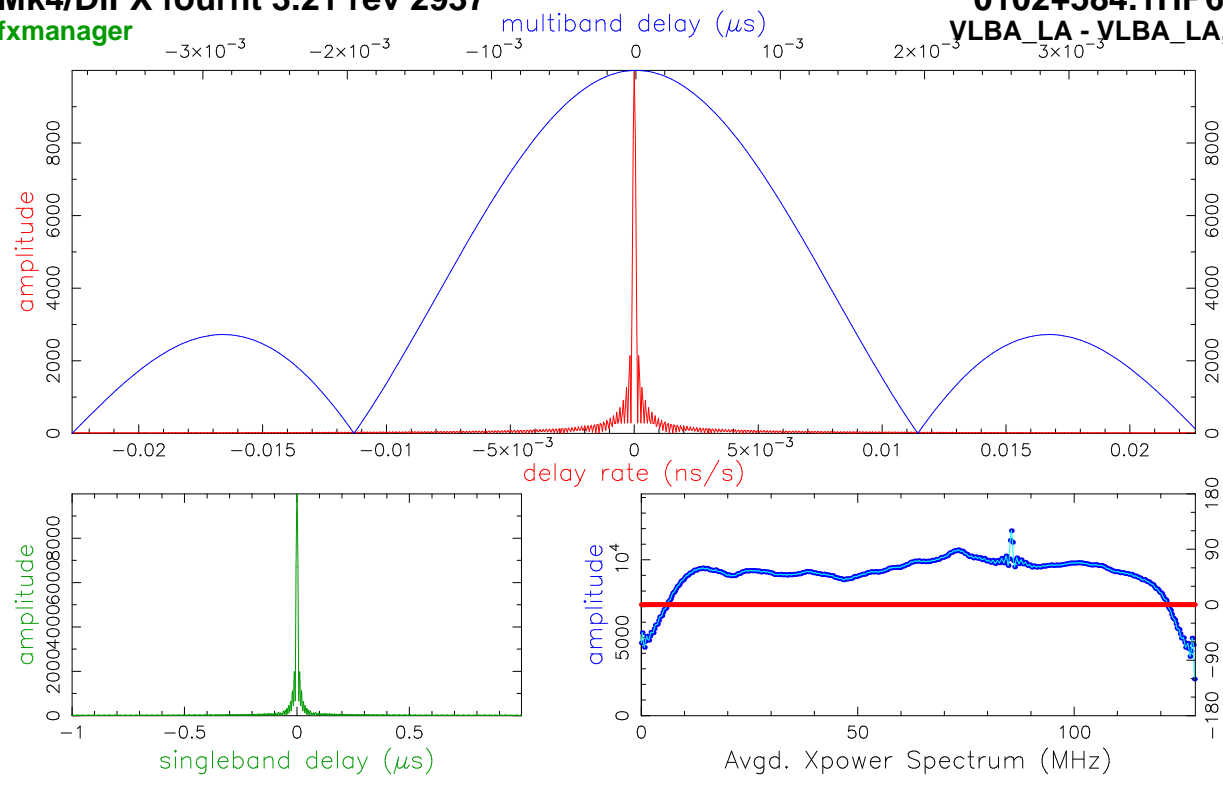
Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-123.6	-128.4	-128.3	-125.9	Phase	-126.6
9.3	9.5	9.3	8.1	Ampl.	9.1
512.8	513.3	513.3	513.1	Sbd box	513.2
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
c 1000	1000	1000	1000	PC freqs	
l:c 0:0	0:0	0:0	0:0	PC phase	
l:c 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
c 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
c Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	4.37866726872E+03	Apriori delay (usec)	4.37866687476E+03	Resid mbdelay (usec)	3.93952E-04	+/- 3.3E-06
Sband delay (usec)	4.37866719864E+03	Apriori clock (usec)	-8.8328543E+00	Resid sbdelay (usec)	3.23875E-04	+/- 1.3E-05
Phase delay (usec)	4.37866686659E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	-8.17024E-06	+/- 2.2E-08
Delay rate (us/s)	5.17313332367E-01	Apriori rate (us/s)	5.17313432473E-01	Resid rate (us/s)	-1.00107E-07	+/- 2.1E-10
Total phase (deg)	-22.2	Apriori accel (us/s/s)	3.53865583823E-06	Resid phase (deg)	-126.6	+/- 0.3

ph/seg (deg)	25.1	1.1	Amplitude	9.087 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	15.1	2.0	Search (1024X16)	8.906	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	2.8	0.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.0	0.6	Inc. seg. avg.	9.937	Sample rate(MISamp/s): 256	mb window (us) -0.004 0.004
			Inc. frq. avg.	9.071	Data rate(Mb/s): 2048	dr window (ns/s) -0.023 0.023
					nlags: 512	t_cohere infinite
l: az 18.7 el 65.2 pa -150.7	c: az 340.7 el 44.8 pa 142.6	u, v (fr/asec)	-2832.567 891.996		ion window (TEC)	0.00 0.00

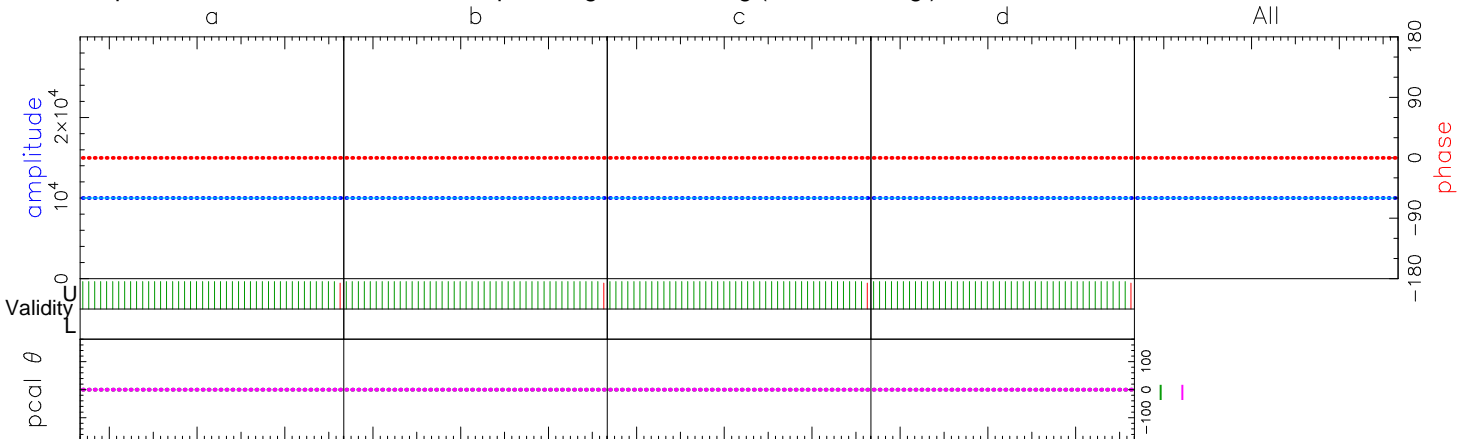


Fringe quality 9

SNR 366862.1
Int time 179.974
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) 43040.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163112
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
I	1000	1000	1000	1000		
I:I	0:0	0:0	0:0	0:0		
I:I	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000		
I	1000	1000	1000	1000		
I	Q00UR	Q01UR	Q02UR	Q03UR		
I	Q00UR	Q01UR	Q02UR	Q03UR		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.2E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	2.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	1.9E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

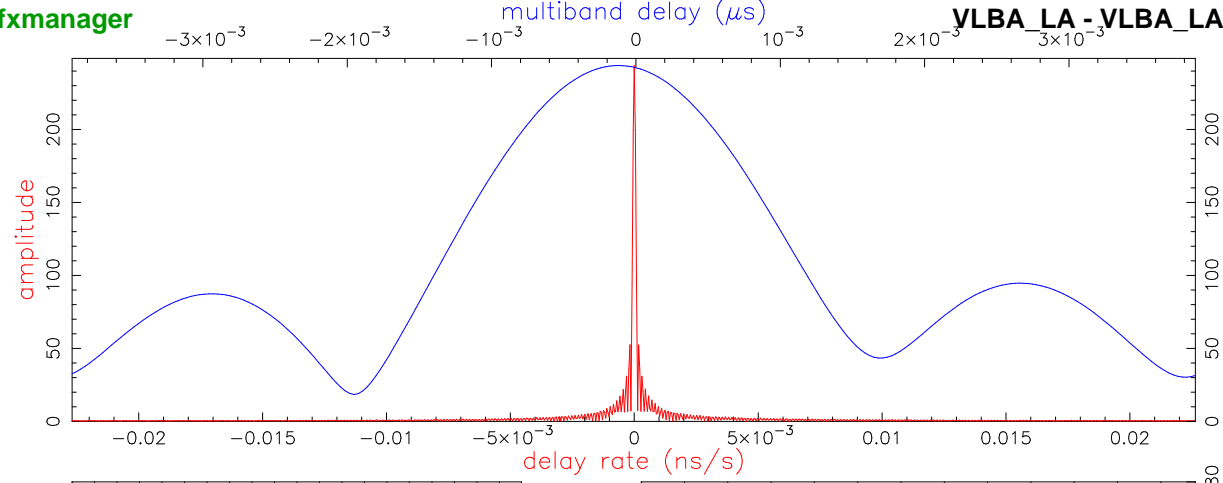
ph/seg (deg)	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (1024X16)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.004 0.004
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023 0.023
				Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, II

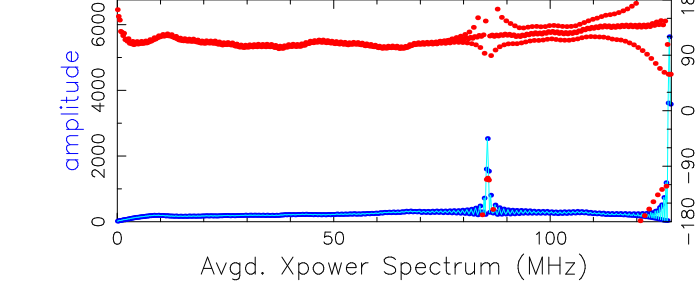
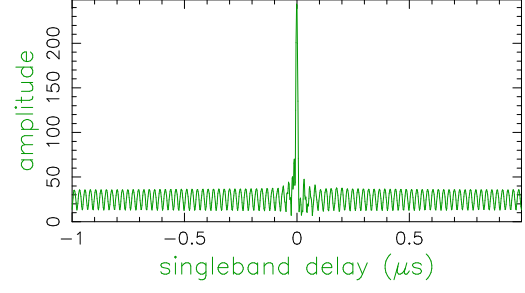
VLBA_LA - VLBA_LA, fgroup Q, pol LR



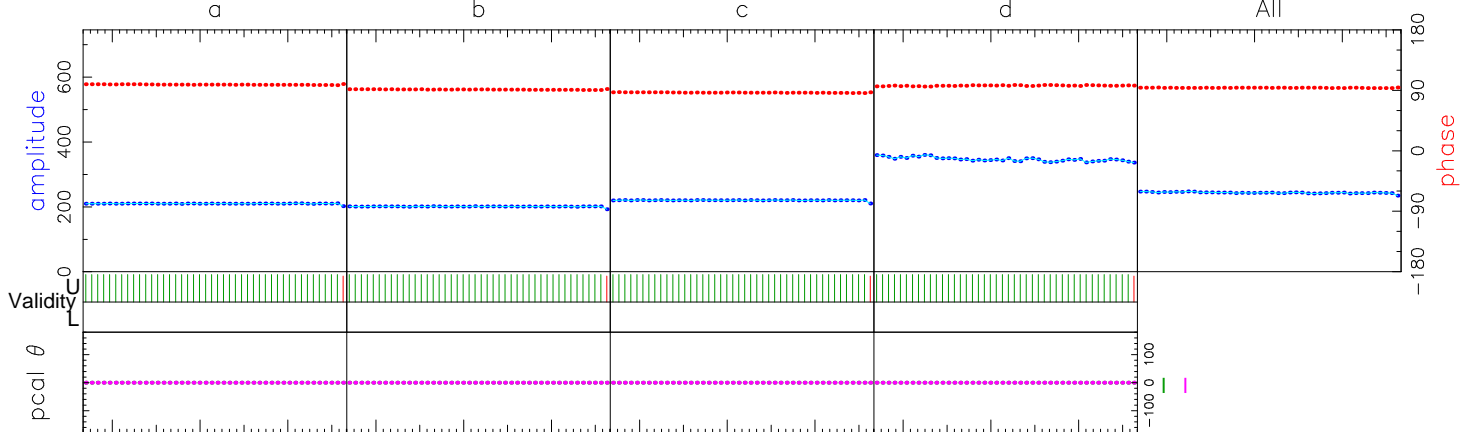
Fringe quality 8

SNR 9121.3
 Int time 179.974
 Amp 248.631
 Phase 93.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.001060
 MBD -0.000114
 Fringe rate (Hz)
 0.000022
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163114
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
	1000	1000	1000	1000	APs used	
	1000	1000	1000	1000	PC freqs	
:	0:0	0:0	0:0	0:0	PC freqs	
:	0:0	0:0	0:0	0:0	PC phase	
	1000	1000	1000	1000	Manl PC	
	1000	1000	1000	1000	PC amp	
	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-1.1450000000E-04	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	-1.14500E-04	+/-	1.2E-07
Sband delay (usec)	-1.0600000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.06000E-03	+/-	4.7E-07
Phase delay (usec)	6.04685733660E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	6.04686E-06	+/-	8.1E-10
Delay rate (us/s)	5.07680875921E-10	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	5.07681E-10	+/-	7.8E-12
Total phase (deg)	93.7	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	93.7	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.0	Amplitude	248.631 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	2.1		0.1	Search (1024X16)	242.229	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	6.7		0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	24.0		0.0	Inc. seg. avg.	243.762	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
				Inc. frq. avg.	244.552	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 18.7 el 65.2 pa -150.7 i: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

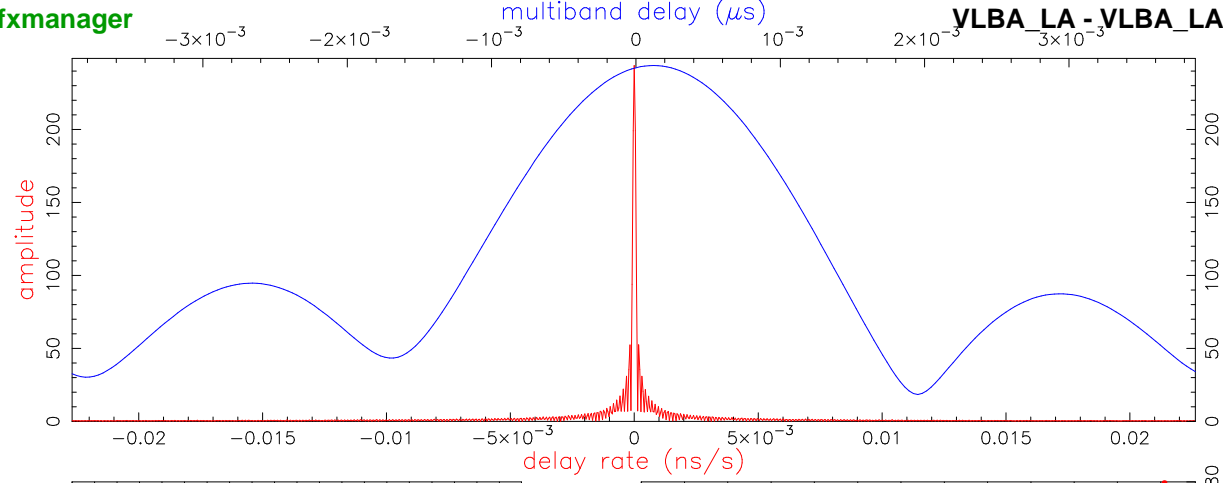
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/II..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/II.Q.122.1HP6Q8

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fxmanager

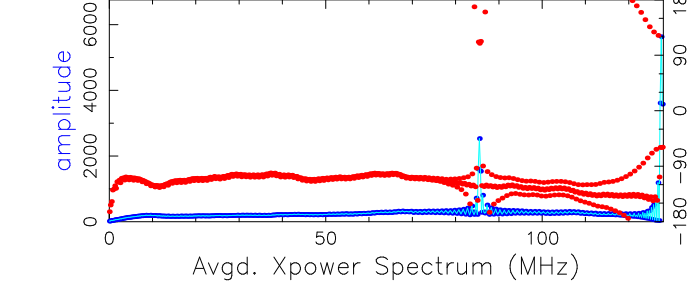
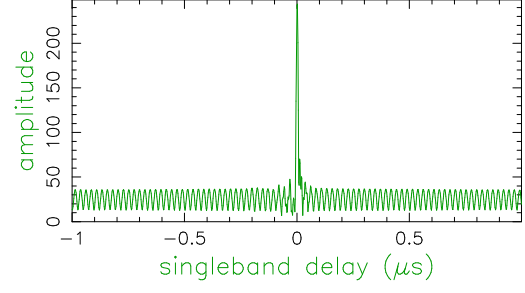
0102+584.1HP6Q8, No0090, II

VLBA_LA - VLBA_LA, fgroup Q, pol RL



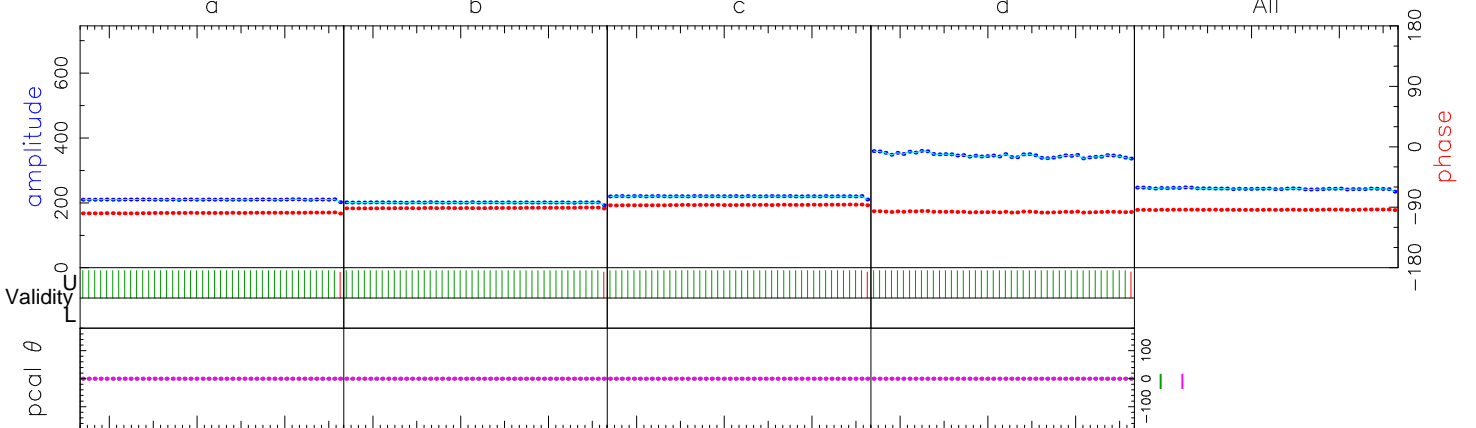
Fringe quality 8

SNR 9121.3
 Int time 179.974
 Amp 248.631
 Phase -93.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.001060
 MBD 0.000114
 Fringe rate (Hz)
 -0.000022
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr-day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163115
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-98.4	-91.1	-86.5	-96.9	Phase	-93.7
	209.9	201.0	220.3	347.0	Ampl.	244.6
	512.6	513.0	512.7	514.5	Sbd box	513.5
U/L	352/0	352/0	352/0	352/0	APs used	
	1000	1000	1000	1000	PC freqs	
	1000	1000	1000	1000	PC freqs	
:	0:0	0:0	0:0	0:0	PC phase	
:	0:0	0:0	0:0	0:0	Manl PC	
	1000	1000	1000	1000	PC amp	
	1000	1000	1000	1000		
	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	1.1450000000E-04	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	1.14500E-04	+/-	1.2E-07
Sband delay (usec)	1.0600000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.06000E-03	+/-	4.7E-07
Phase delay (usec)	-6.04685733649E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-6.04686E-06	+/-	8.1E-10
Delay rate (us/s)	-5.07680875921E-10	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	-5.07681E-10	+/-	7.8E-12
Total phase (deg)	-93.7	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-93.7	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.0	Amplitude	248.631 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	2.1		0.0	Search (1024X16)	242.229	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	6.7		0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	24.0		0.0	Inc. seg. avg.	243.762	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
				Inc. frq. avg.	244.552	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 512	t_cohere infinite

l: az 18.7 el 65.2 pa -150.7 l: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

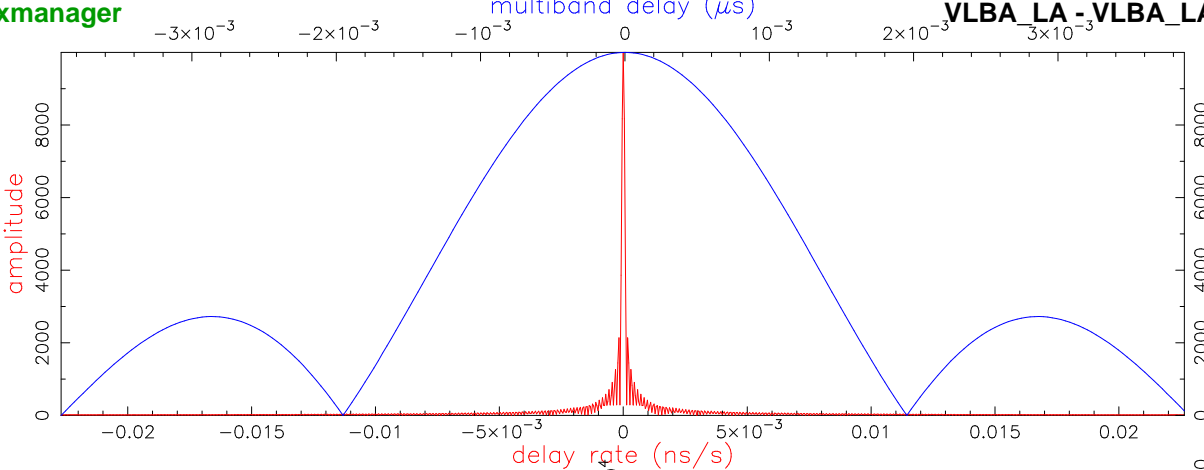
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/II..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/II.Q.136.1HP6Q8

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fxmanager

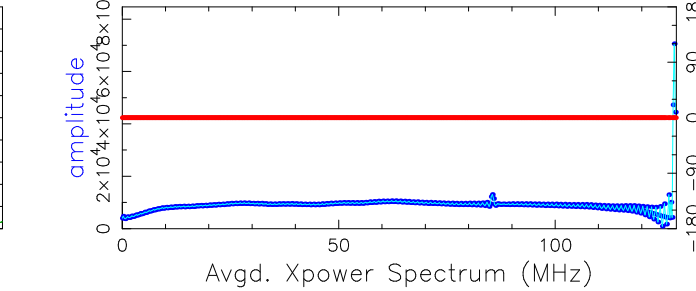
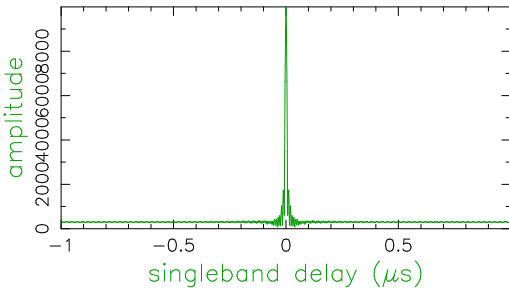
0102+584.1HP6Q8, No0090, II

VLBA_LA - VLBA_LA, fgroup Q, pol LL



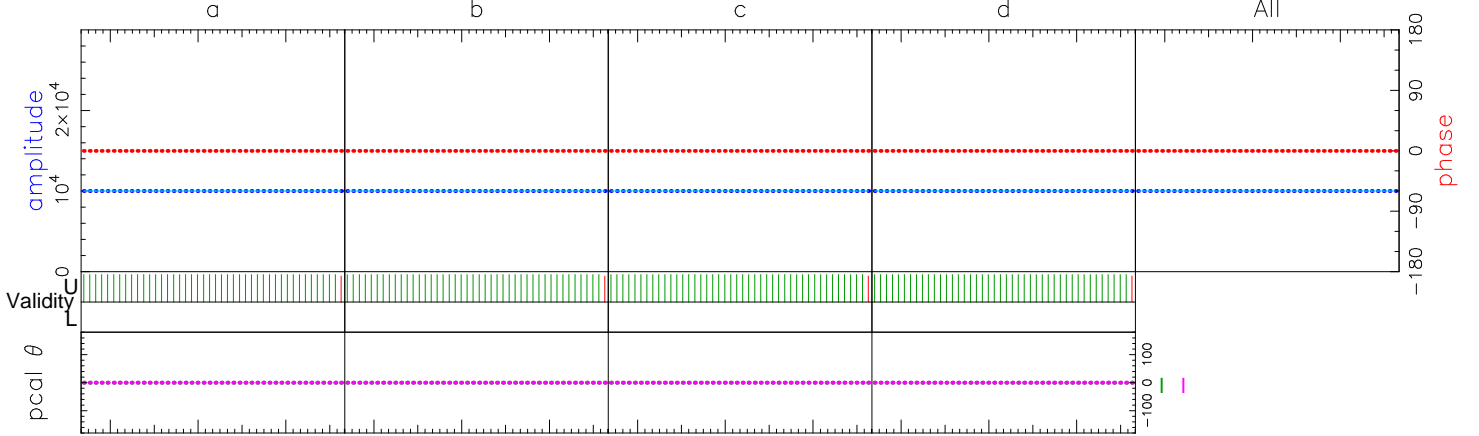
Fringe quality 9

SNR 366862.1
 Int time 179.974
 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)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163110
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
I	1000	1000	1000	1000	APs used	
I:I	0:0	0:0	0:0	0:0	PC freqs	
I:I	0:0	0:0	0:0	0:0	PC phase	
I	1000	1000	1000	1000	ManI PC	
I	1000	1000	1000	1000	PC amp	
I	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
I	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.2E-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	Theor.	0.0	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (1024X16)	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	mb window (us)	-0.004 0.004
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023 0.023
				Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00

l: az 18.7 el 65.2 pa -150.7 i: az 18.7 el 65.2 pa -150.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

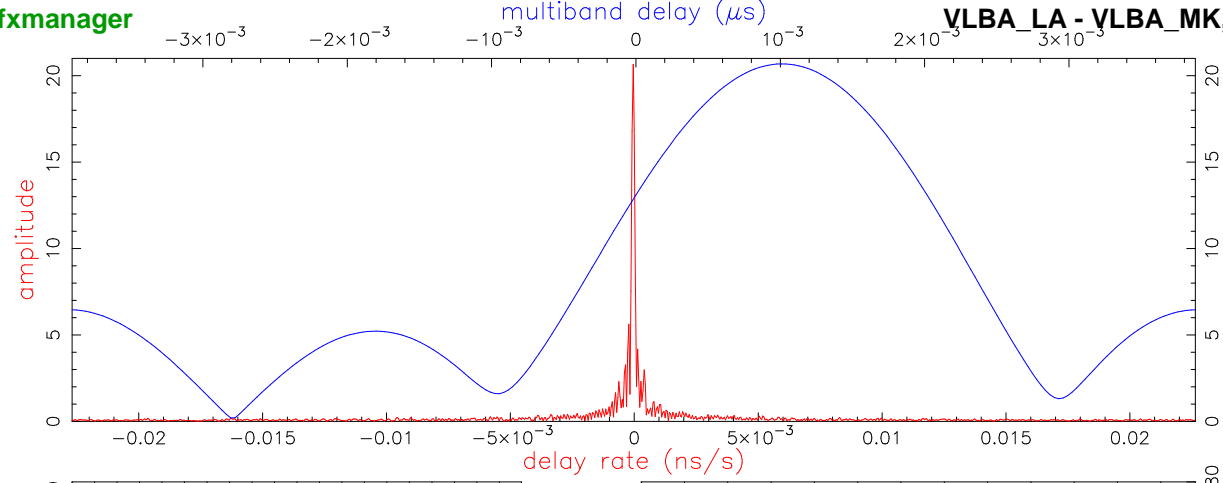
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/II..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/II.Q.87.1HP6Q8

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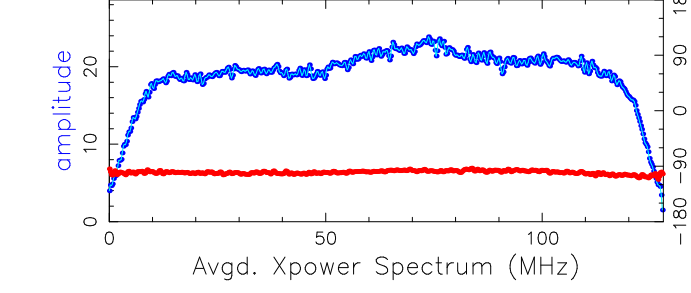
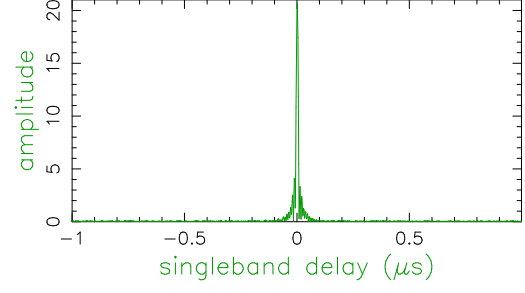
fxmanager

0102+584.1HP6Q8, No0090, Im

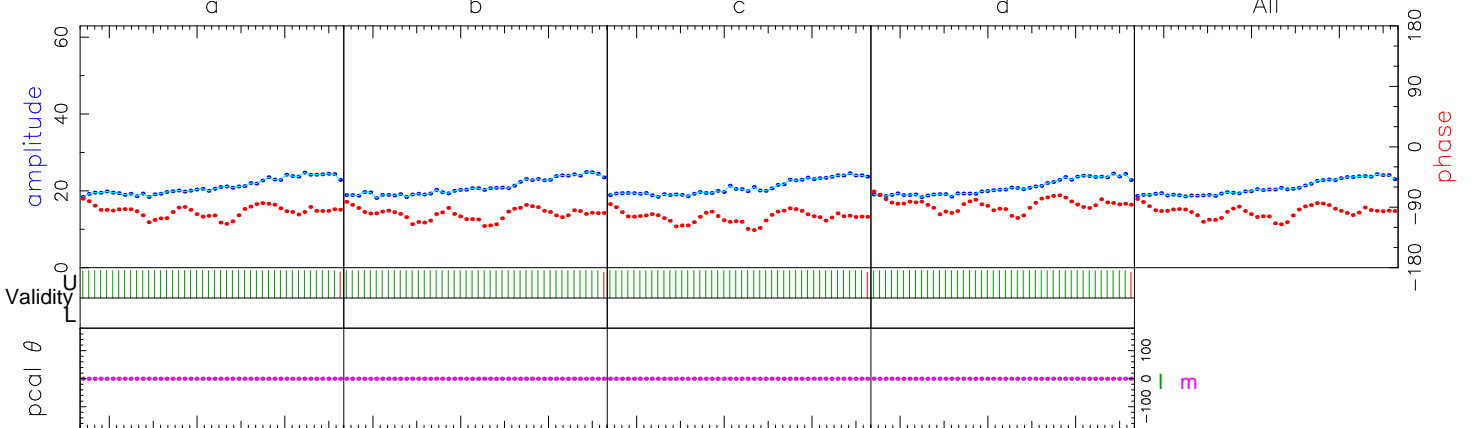
VLBA_LA - VLBA_MK, fgroup Q, pol RR



Fringe quality 9
 SNR 770.3
 Int time 179.974
 Amp 20.997
 Phase -96.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001104
 MBD 0.000956
 Fringe rate (Hz) -0.001608
 Ion TEC 0.000
 Ref freq (MHz) 43040.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163113
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	APs used	1000
m	1000	1000	1000	1000	PC freqs	1000
l:m	0:0	0:0	0:0	0:0	PC phase	0:0
l:m	0:0	0:0	0:0	0:0	Manl PC	0:0
m	1000	1000	1000	1000	PC amp	1000
l	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
m	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	8.51953276406E+03	Apriori delay (usec)	8.51953180757E+03	Resid mbdelay (usec)	9.56492E-04	+/- 1.4E-06
Sband delay (usec)	8.51953291169E+03	Apriori clock (usec)	-1.3743619E+01	Resid sbdelay (usec)	1.10413E-03	+/- 5.6E-06
Phase delay (usec)	8.51953180134E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	-6.22579E-06	+/- 9.6E-09
Delay rate (us/s)	-5.19858475389E-01	Apriori rate (us/s)	-5.19858438036E-01	Resid rate (us/s)	-3.73528E-08	+/- 9.2E-11
Total phase (deg)	262.7	Apriori accel (us/s/s)	-2.17667602271E-05	Resid phase (deg)	-96.5	+/- 0.1

	RMS	Theor.	Amplitude	20.997 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	8.5	0.5	Search (1024X16)	20.553	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	9.3	0.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	9.8	0.1	Inc. seg. avg.	20.873	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	1.0	0.3	Inc. frq. avg.	20.805	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 18.7 el 65.2 pa -150.7 m: az 32.9 el 30.2 pa -101.9 u,v (fr/asec) 2833.600 -846.908 simultaneous interpolator

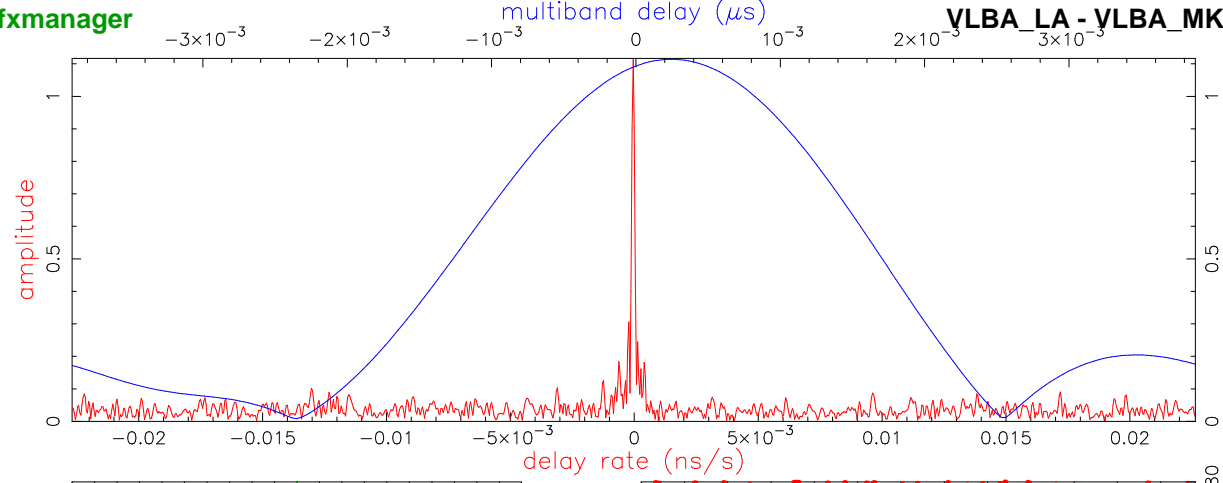
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm.Q.112.1HP6Q8

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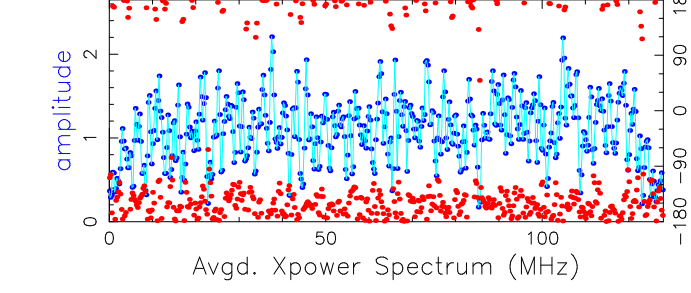
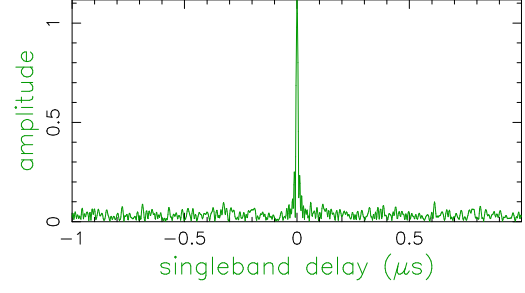
fxmanager

0102+584.1HP6Q8, No0090, Im

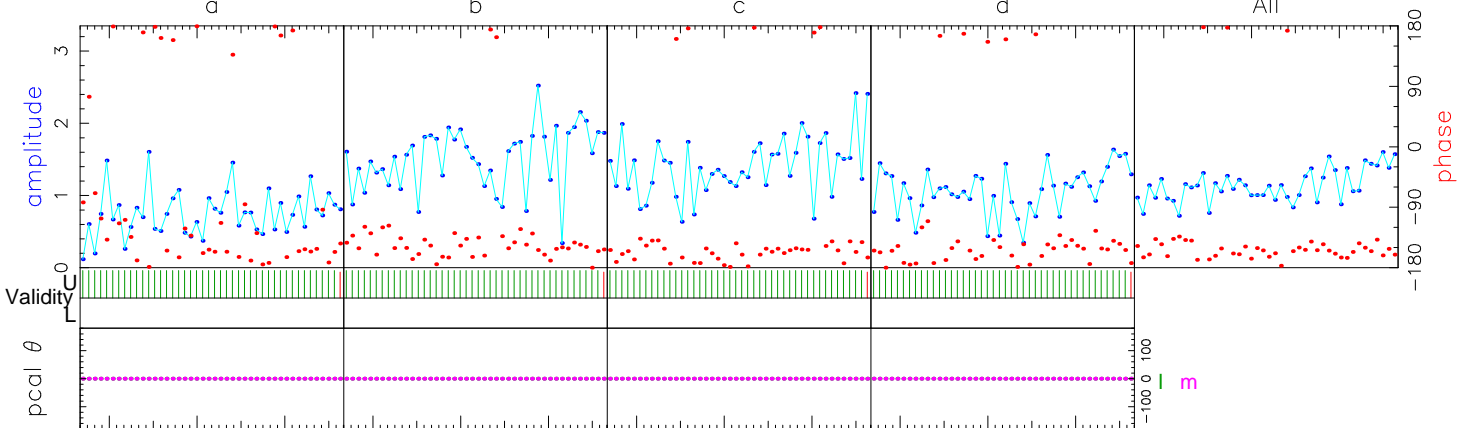
VLBA_LA - VLBA_MK, fgroup Q, pol LR



Fringe quality 8
 SNR 41.0
 Int time 179.974
 Amp 1.117
 Phase -156.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000337
 MBD 0.000279
 Fringe rate (Hz)
 -0.001571
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163114
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-160.1	-149.2	-160.1	-157.9	Phase	-156.0
0.6	1.5	1.4	1.0	Ampl.	1.1
513.5	513.4	512.7	513.5	Sbd box	513.2
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
m 1000	1000	1000	1000	PC freqs	
l:m 0:0	0:0	0:0	0:0	PC phase	
l:m 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	8.51953208625E+03	Apriori delay (usec)	8.51953180757E+03	Resid mbdelay (usec)	2.78679E-04	+/- 2.7E-05
Sband delay (usec)	8.51953214469E+03	Apriori clock (usec)	-1.3743619E+01	Resid sbdelay (usec)	3.37125E-04	+/- 1.1E-04
Phase delay (usec)	8.51953179750E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	-1.00712E-05	+/- 1.8E-07
Delay rate (us/s)	-5.19858474530E-01	Apriori rate (us/s)	-5.19858438036E-01	Resid rate (us/s)	-3.64935E-08	+/- 1.7E-09
Total phase (deg)	203.2	Apriori accel (us/s/s)	-2.17667602271E-05	Resid phase (deg)	-156.0	+/- 2.8

ph/seg (deg)	12.3	Theor.	9.3	Amplitude	1.117 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	19.8	Search (1024X16)	1.086	Search	1.086	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	6.5	Interp.	0.000	Inc. seg. avg.	1.124	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	29.3	Inc. frq. avg.	1.116	Inc. frq. avg.	1.116	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 512	t_cohere infinite

l: az 18.7 el 65.2 pa -150.7 m: az 32.9 el 30.2 pa -101.9 u,v (fr/asec) 2833.600 -846.908 simultaneous interpolator

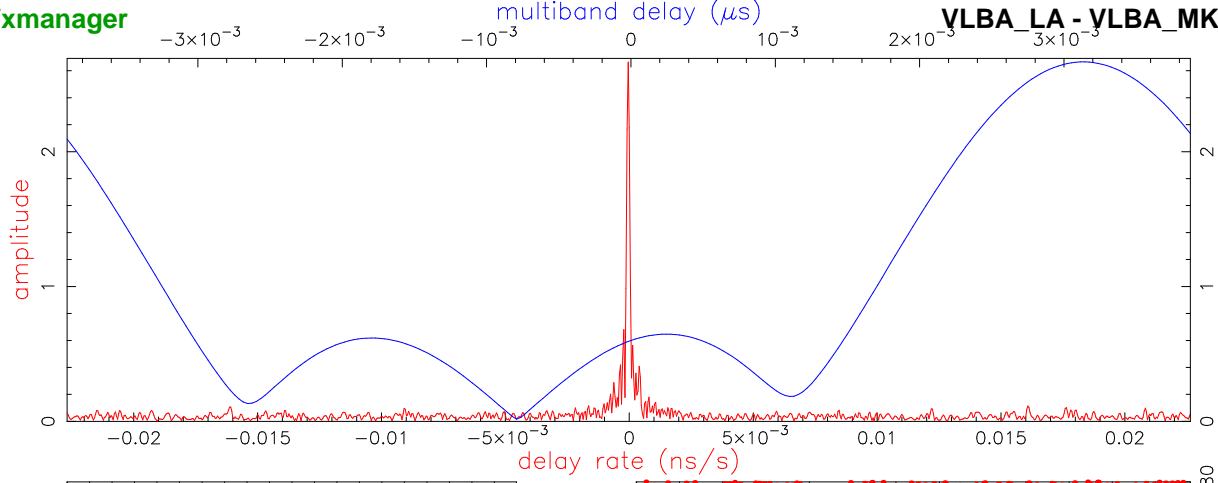
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm.Q.130.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

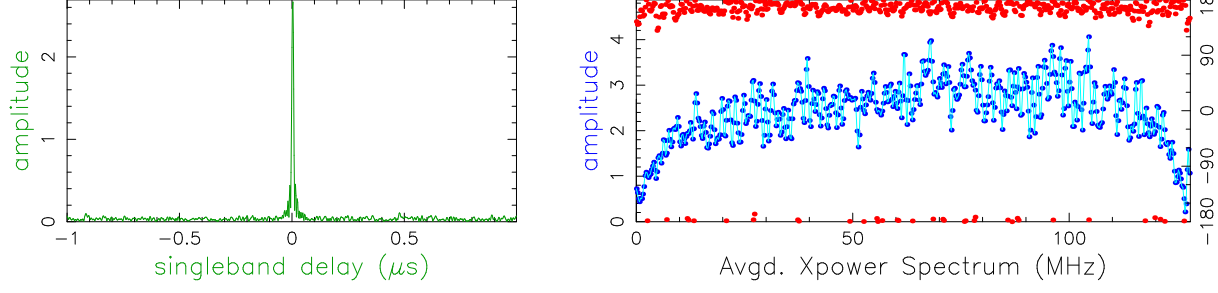
fxmanager

0102+584.1HP6Q8, No0090, Im

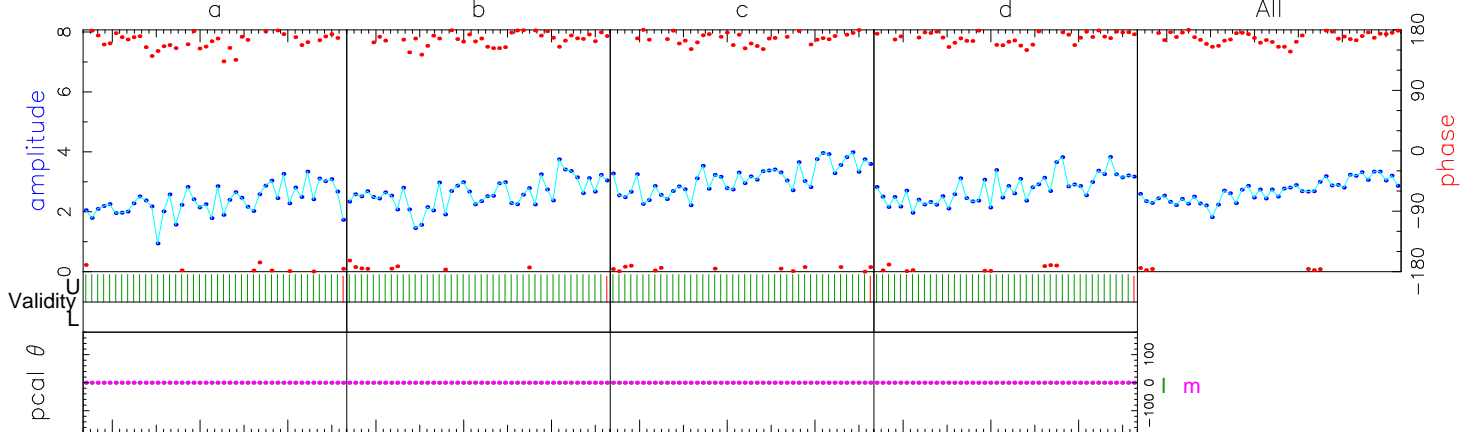
VLBA_LA - VLBA_MK, fgroup Q, pol RL



Fringe quality 9
 SNR 98.7
 Int time 179.974
 Amp 2.692
 Phase 170.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.003228
 MBD 0.003097
 Fringe rate (Hz)
 -0.001635
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163117
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
m	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
m	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
m	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	8.51953490491E+03	Apriori delay (usec)	8.51953180757E+03	Resid mbdelay (usec)	3.09734E-03	+/-	1.1E-05
Sband delay (usec)	8.51953503544E+03	Apriori clock (usec)	-1.3743619E+01	Resid sbdelay (usec)	3.22788E-03	+/-	4.4E-05
Phase delay (usec)	8.51953181856E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	1.09933E-05	+/-	7.5E-08
Delay rate (us/s)	-5.19858476030E-01	Apriori rate (us/s)	-5.19858438036E-01	Resid rate (us/s)	-3.79938E-08	+/-	7.2E-10
Total phase (deg)	169.5	Apriori accel (us/s/s)	-2.17667602271E-05	Resid phase (deg)	170.3	+/-	1.2

ph/seg (deg)	9.1	Theor.	3.8	Amplitude	2.692 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	13.2		6.7	Search (1024X16)	2.610	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	2.9		1.2	Inc. seg. avg.	2.691	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	10.2		2.0	Inc. frq. avg.	2.666	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 512	t_cohere infinite

l: az 18.7 el 65.2 pa -150.7 m: az 32.9 el 30.2 pa -101.9 u,v (fr/asec) 2833.600 -846.908 simultaneous interpolator

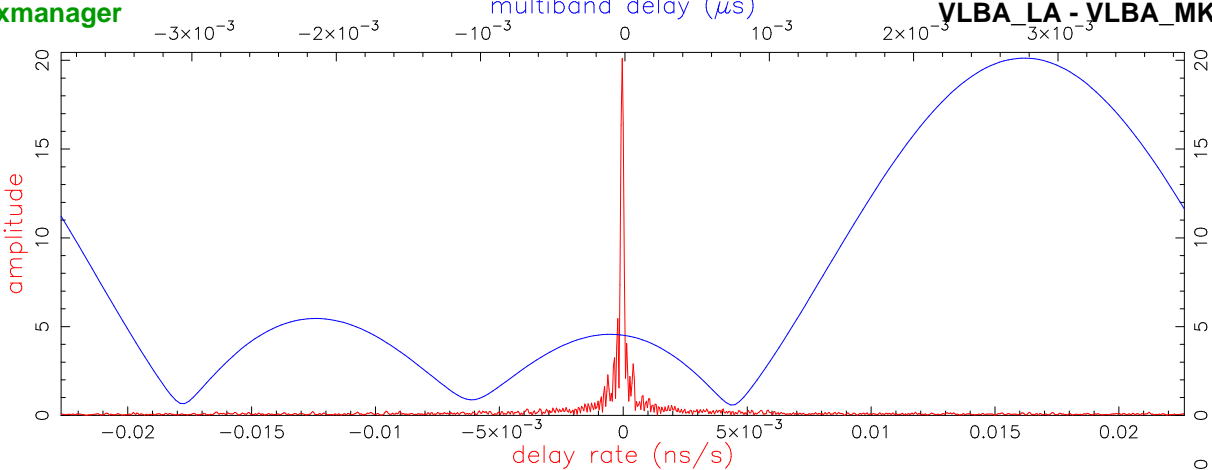
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm.Q.151.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

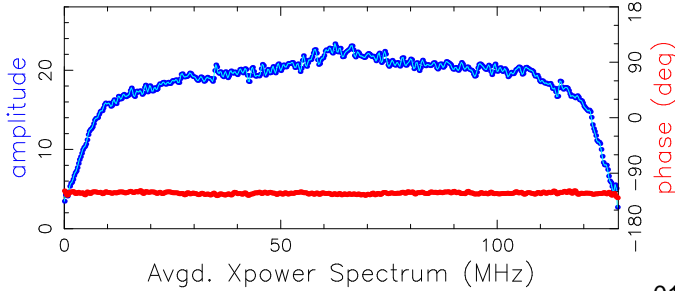
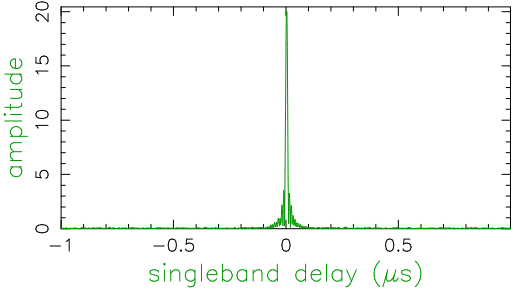
0102+584.1HP6Q8, No0090, Im

VLBA_LA - VLBA_MK, fgroup Q, pol LL



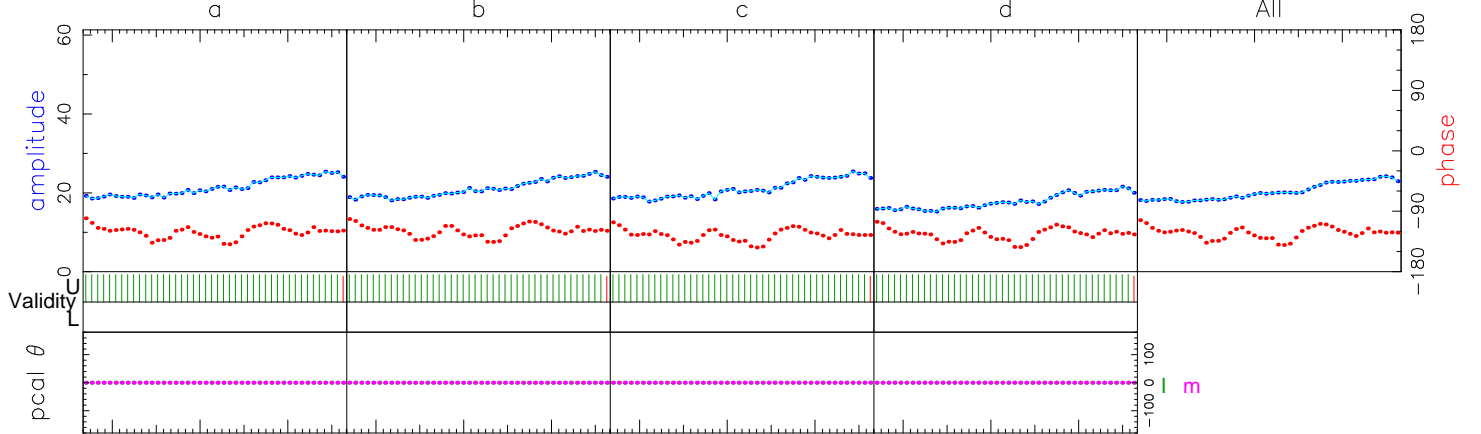
Fringe quality 9

SNR 750.2
 Int time 179.974
 Amp 20.448
 Phase -122.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.002810
 MBD 0.002804
 Fringe rate (Hz)
 -0.001637
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163110
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec

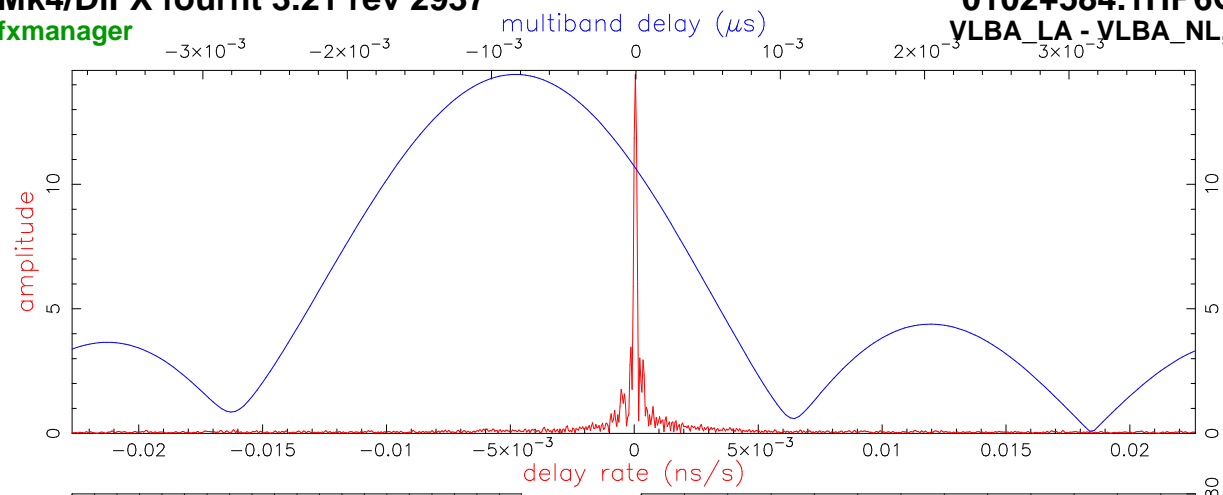


	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-120.5	-118.8	-125.3	-123.9	Phase	-122.0
	21.2	20.9	20.8	17.6	Ampl.	20.1
	514.3	514.6	514.4	514.5	Sbd box	514.4
U/L	352/0	352/0	352/0	352/0	APs used	
l	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
m	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

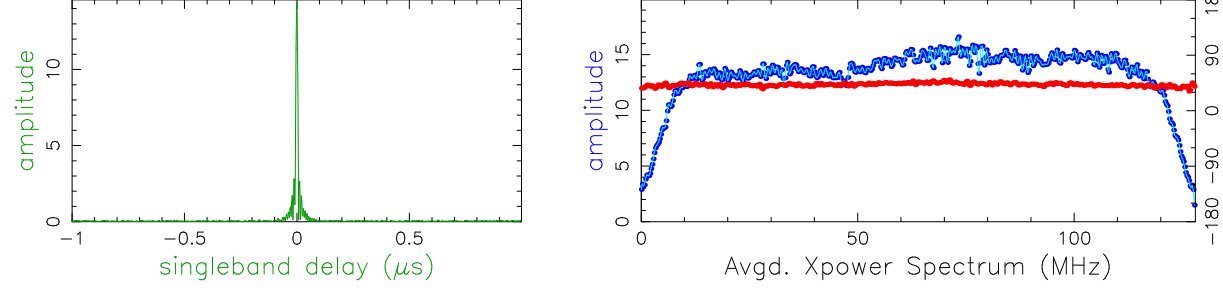
	8.51953461159E+03	Apriori delay (usec)	8.51953180757E+03	Resid mbdelay (usec)	2.80402E-03	+/- 1.5E-06
Group delay (usec)(sbd)	8.51953461159E+03	Apriori clock (usec)	-1.3743619E+01	Resid sbdelay (usec)	2.80950E-03	+/- 5.7E-06
Sband delay (usec)	8.51953461707E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	-7.87659E-06	+/- 9.9E-09
Phase delay (usec)	8.51953179969E+03	Apriori rate (us/s)	-5.19858438036E-01	Resid rate (us/s)	-3.80335E-08	+/- 9.5E-11
Delay rate (us/s)	-5.19858476070E-01	Apriori accel (us/s/s)	-2.17667602271E-05	Resid phase (deg)	-122.0	+/- 0.2
Total phase (deg)	237.2					

	RMS	Theor.	Amplitude	20.448 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	8.5	0.5	Search (1024X16)	19.838	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	10.4	0.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.7	0.2	Inc. seg. avg.	20.332	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	7.2	0.3	Inc. frq. avg.	20.137	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

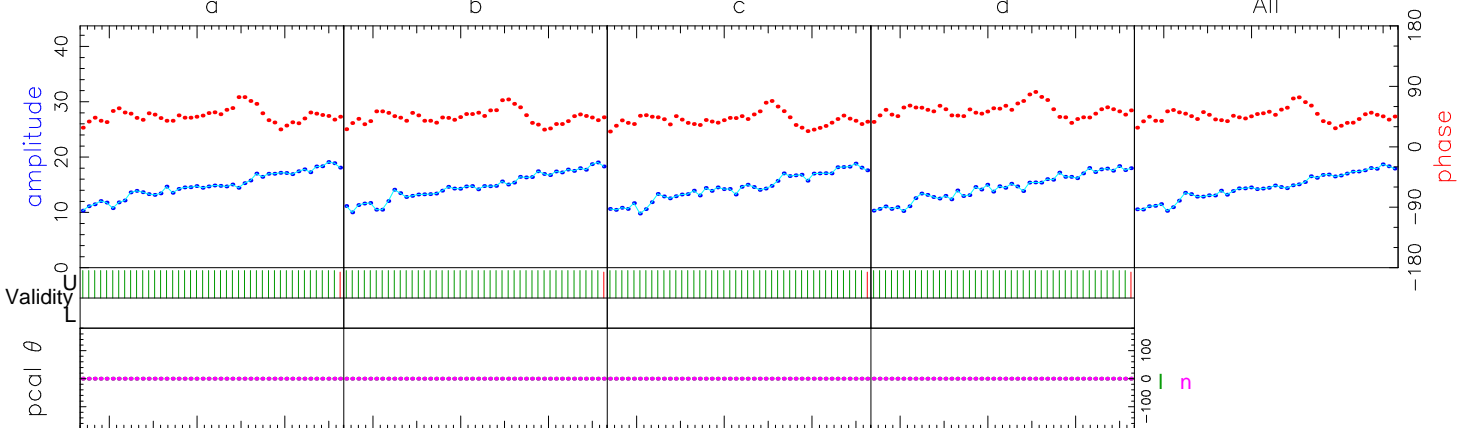
l: az 18.7 el 65.2 pa -150.7 m: az 32.9 el 30.2 pa -101.9 u, v (fr/asec) 2833.600 -846.908 simultaneous interpolator
 Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lm.Q.86.1HP6Q8



Fringe quality 9
SNR 534.7
Int time 179.973
Amp 14.575
Phase 46.2
PFD 0.0e+00
Delays (us)
SBD -0.000717
MBD -0.000878
Fringe rate (Hz) 0.002416
Ion TEC 0.000
Ref freq (MHz) 43040.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163113
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
n	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
n	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
n	Q00UR	Q01UR	Q02UR	Q03UR		

Group delay (usec)(sbd)	-1.02841780760E+03	Apriori delay (usec)	-1.02841692980E+03	Resid mbdelay (usec)	-8.77804E-04	+/- 2.1E-06
Sband delay (usec)	-1.02841764668E+03	Apriori clock (usec)	-5.1185513E-01	Resid sbdelay (usec)	-7.16875E-04	+/- 8.1E-06
Phase delay (usec)	-1.02841692682E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	2.98175E-06	+/- 1.4E-08
Delay rate (us/s)	1.66594715077E-01	Apriori rate (us/s)	1.66594658934E-01	Resid rate (us/s)	5.61427E-08	+/- 1.3E-10
Total phase (deg)	-190.9	Apriori accel (us/s/s)	-2.36513478215E-06	Resid phase (deg)	46.2	+/- 0.2

	RMS	Theor.	Amplitude	14.575 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	9.8	0.7	Search (1024X16)	14.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	16.1	1.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	7.3	0.2	Inc. seg. avg.	14.618	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	1.3	0.4	Inc. frq. avg.	14.461	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 18.7 el 65.2 pa -150.7 n: az 360.5 el 73.3 pa -179.4 u,v (fr/asec) -913.941 -333.409 simultaneous interpolator

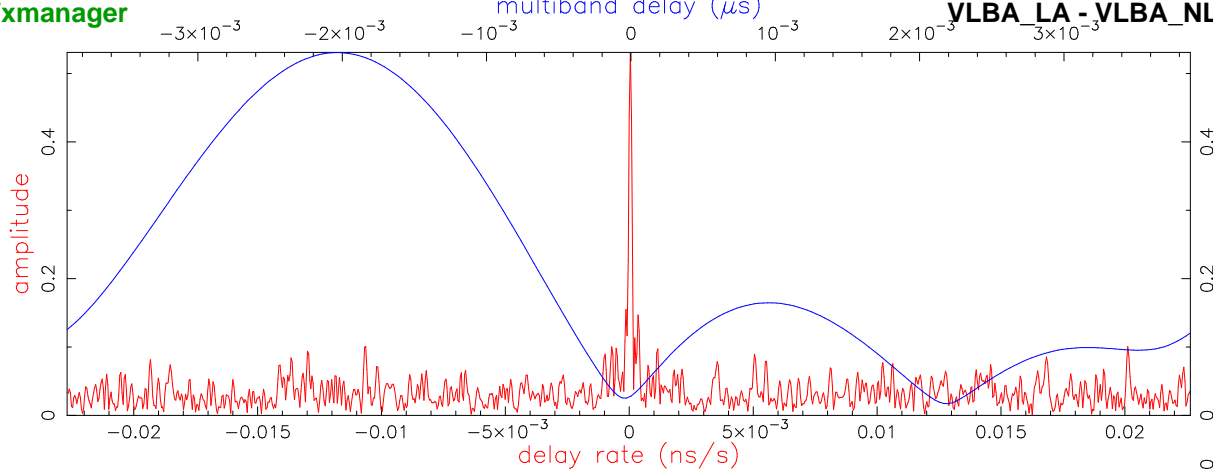
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/In..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/In.Q.114.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

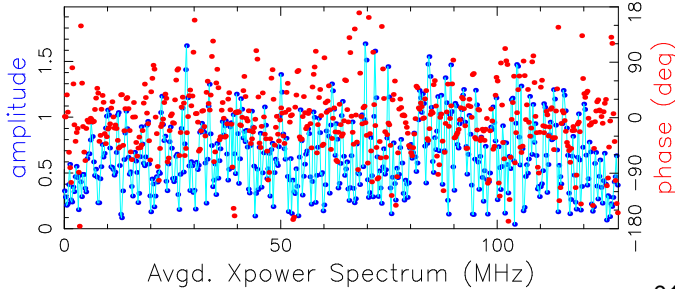
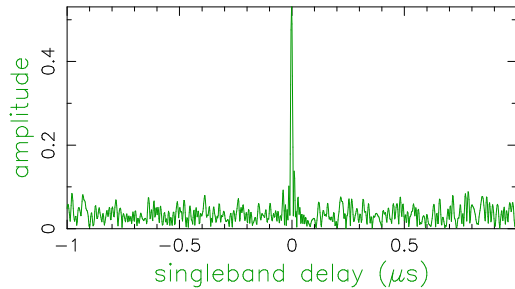
0102+584.1HP6Q8, No0090, In

VLBA_LA - VLBA_NL, fgroup Q, pol LR



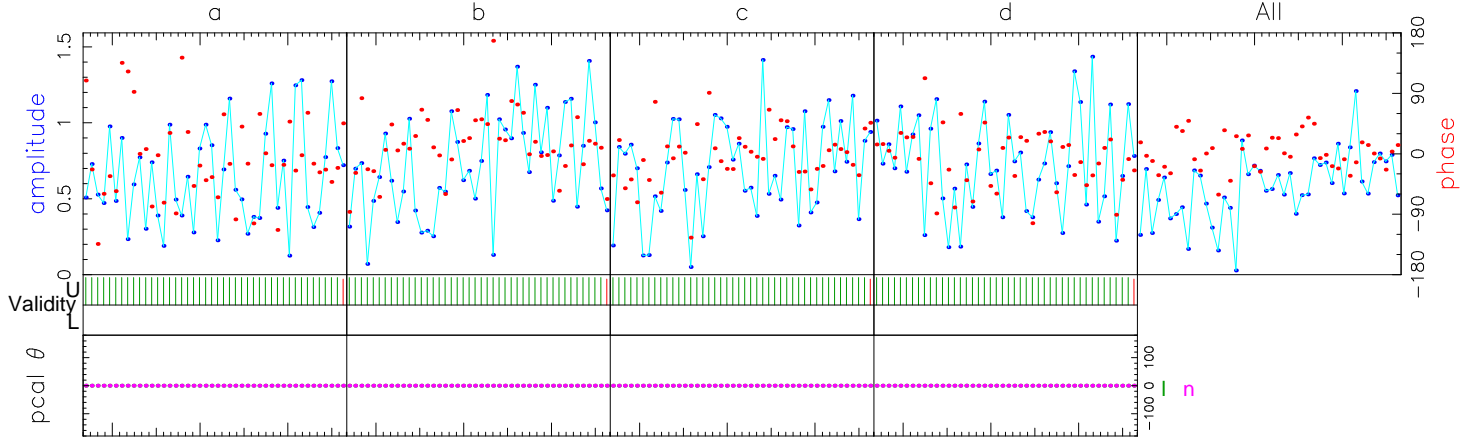
Fringe quality 9

SNR 19.5
 Int time 179.973
 Amp 0.531
 Phase 0.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.001801
 MBD -0.002023
 Fringe rate (Hz)
 0.002633
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163115
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-14.9	16.2	1.8	-6.8	Phase	0.2
0.4	0.6	0.6	0.6	Ampl.	0.5
513.1	511.8	511.7	512.2	Sbd box	512.1
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
l:n 0:0	0:0	0:0	0:0	PC phase	
l:n 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
n Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	-1.02841895292E+03	Apriori delay (usec)	-1.02841692980E+03	Resid mbdelay (usec)	-2.02312E-03	+/- 5.7E-05
Sband delay (usec)	-1.02841873105E+03	Apriori clock (usec)	-5.1185513E-01	Resid sbdelay (usec)	-1.80125E-03	+/- 2.2E-04
Phase delay (usec)	-1.02841692979E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	1.34761E-08	+/- 3.8E-07
Delay rate (us/s)	1.66594720114E-01	Apriori rate (us/s)	1.66594658934E-01	Resid rate (us/s)	6.11798E-08	+/- 3.6E-09
Total phase (deg)	-236.9	Apriori accel (us/s/s)	-2.36513478215E-06	Resid phase (deg)	0.2	+/- 5.9

ph/seg (deg)	RMS 25.9	Theor. 19.5	Amplitude Search (1024X16)	0.531 +/- 0.027	0.514	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	41.6	34.1	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	16.3	5.9	Inc. seg. avg.	0.546	0.546	Bits/sample: 2x2	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	15.2	10.3	Inc. frq. avg.	0.538	0.538	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00
l: az 18.7 el 65.2 pa -150.7	n: az 360.5 el 73.3 pa -179.4	u,v (fr/asec)	-913.941	-333.409						simultaneous interpolator	

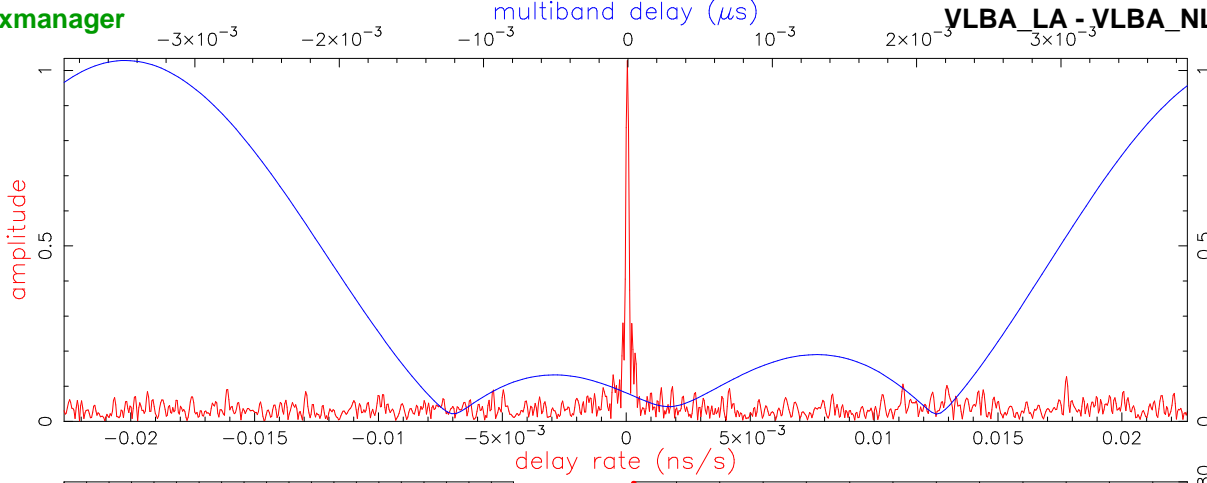
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/In..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/In.Q.132.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, In

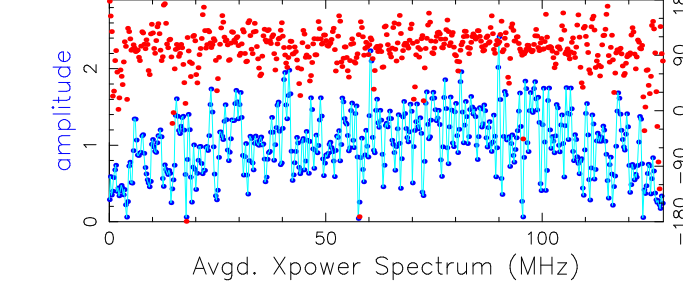
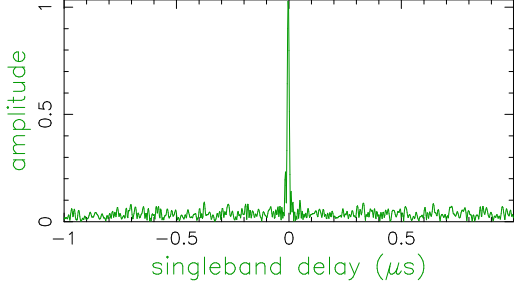
VLBA_LA - VLBA_NL, fgroup Q, pol RL



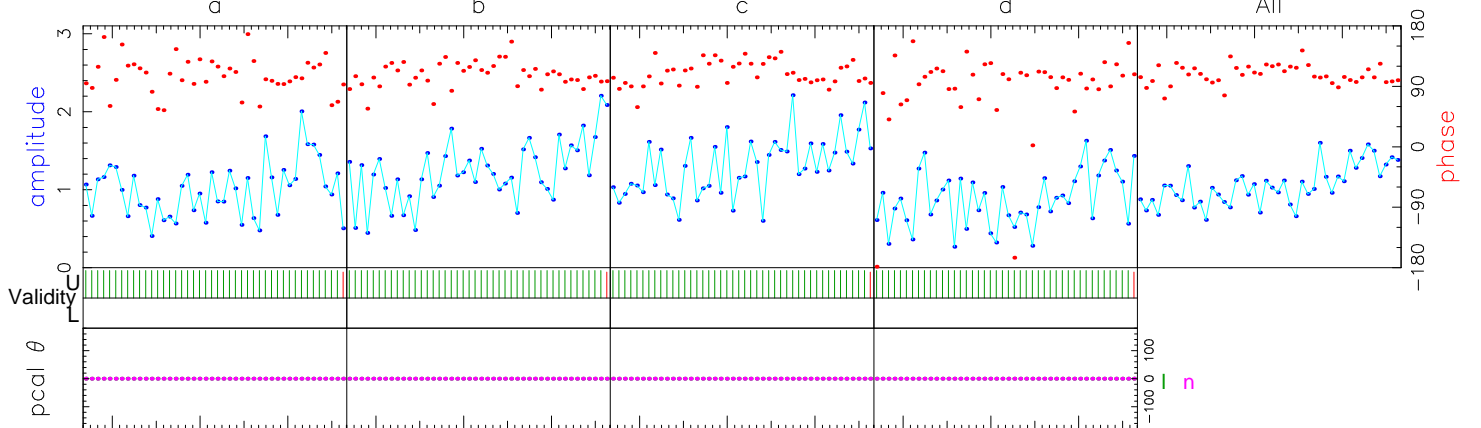
Fringe quality 9

SNR 37.9
Int time 179.973
Amp 1.034
Phase 106.9
PFD 0.0e+00
Delays (us)
SBD -0.003379
MBD -0.003454
Fringe rate (Hz) 0.002597
Ion TEC 0.000
Ref freq (MHz) 43040.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163116
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
n	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
n	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
n	Q00UL	Q01UL	Q02UL	Q03UL		
Group delay (usec)(sbd)	-1.02842038414E+03					
Sband delay (usec)	-1.02842030868E+03					
Phase delay (usec)	-1.02841692290E+03					
Delay rate (us/s)	1.66594719283E-01					
Total phase (deg)		-130.2				
Apriori delay (usec)			-1.02841692980E+03			
Apriori clock (usec)			-5.1185513E-01			
Apriori clockrate (us/s)			-6.0000003E-07			
Apriori rate (us/s)			1.66594658934E-01			
Apriori accel (us/s/s)			-2.36513478215E-06			
Resid mbdelay (usec)				-3.45434E-03		+/- 2.9E-05
Resid sbdelay (usec)				-3.37888E-03		+/- 1.1E-04
Resid phdelay (usec)				6.90006E-06		+/- 1.9E-07
Resid rate (us/s)				6.03488E-08		+/- 1.9E-09
Resid phase (deg)				106.9		+/- 3.0
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)	-0.004 0.004
Sample rate(MSamp/s):	256		dr window (ns/s)		-0.023	0.023
Data rate(Mb/s):	2048		nlags: 512		t_cohere infinite	ion window (TEC) 0.00 0.00
l: az 18.7 el 65.2 pa -150.7	n: az 360.5 el 73.3 pa -179.4		u, v (fr/asec) -913.941 -333.409		simultaneous interpolator	

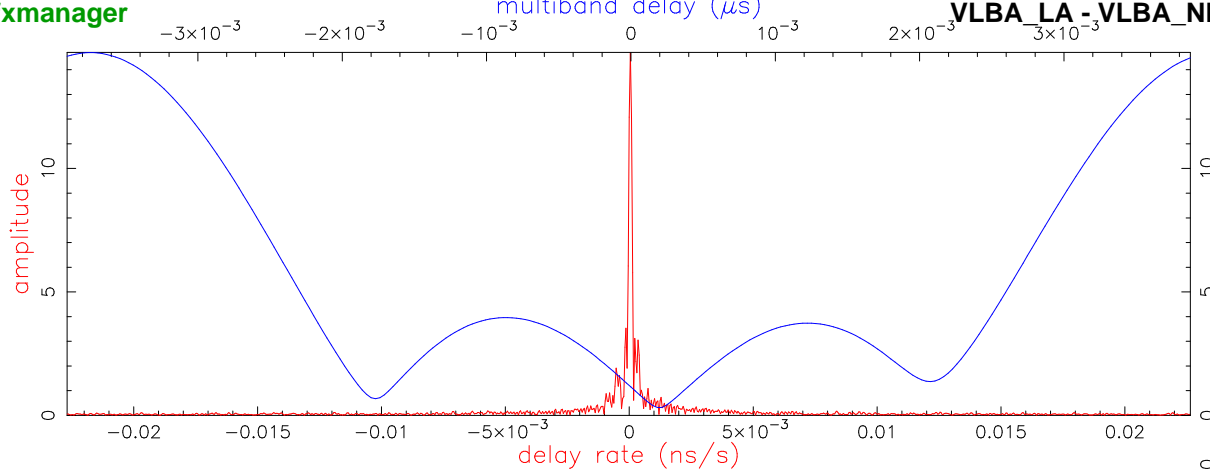
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/In..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/In.Q.147.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

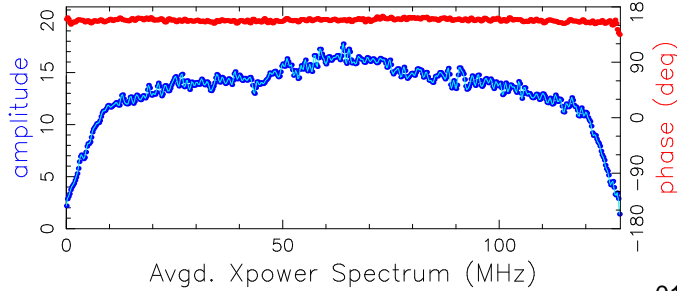
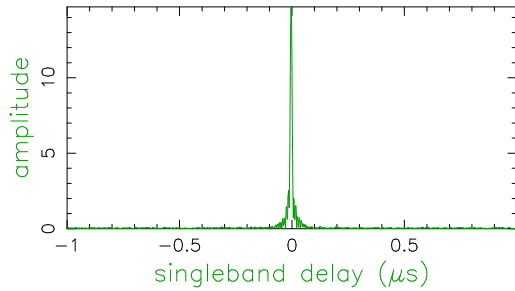
0102+584.1HP6Q8, No0090, In

VLBA_LA - VLBA_NL, fgroup Q, pol LL



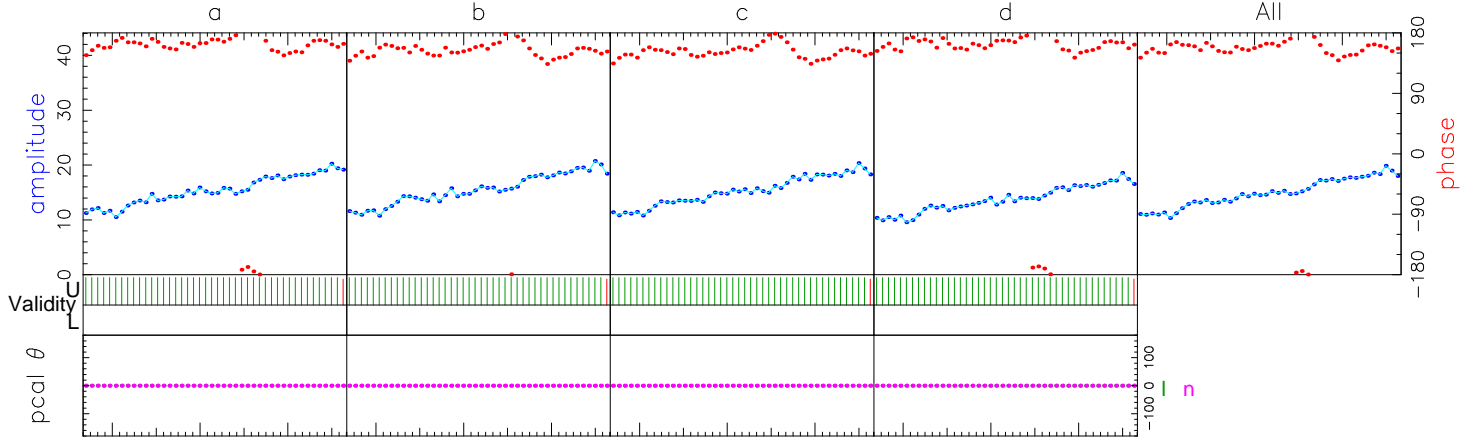
Fringe quality 9

SNR 539.4
 Int time 179.973
 Amp 14.703
 Phase 158.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.003735
 MBD -0.003737
 Fringe rate (Hz)
 0.002432
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163111
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



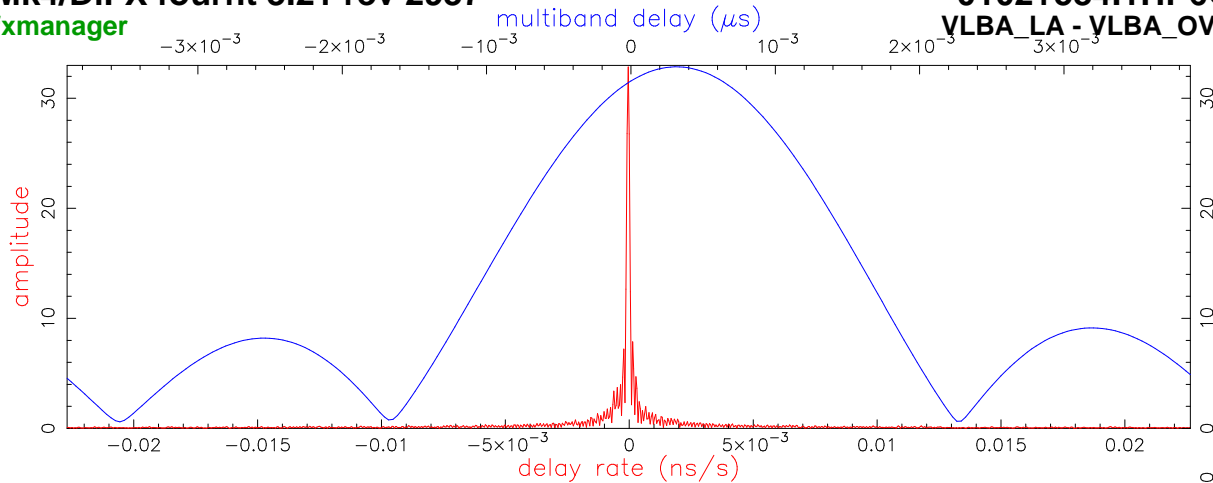
	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	PC freqs	
l:n	0:0	0:0	0:0	0:0	PC phase	
l	1000	1000	1000	1000	Manl PC	
n	1000	1000	1000	1000	PC amp	
l	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
n	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-1.02842066698E+03	Apriori delay (usec)	-1.02841692980E+03	Resid mbdelay (usec)	-3.73718E-03	+/- 2.1E-06
Sband delay (usec)	-1.02842066443E+03	Apriori clock (usec)	-5.1185513E-01	Resid sbdelay (usec)	-3.73462E-03	+/- 8.0E-06
Phase delay (usec)	-1.02841691957E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	1.02265E-05	+/- 1.4E-08
Delay rate (us/s)	1.66594715429E-01	Apriori rate (us/s)	1.66594658934E-01	Resid rate (us/s)	5.64944E-08	+/- 1.3E-10
Total phase (deg)	-78.6	Apriori accel (us/s/s)	-2.36513478215E-06	Resid phase (deg)	158.5	+/- 0.2

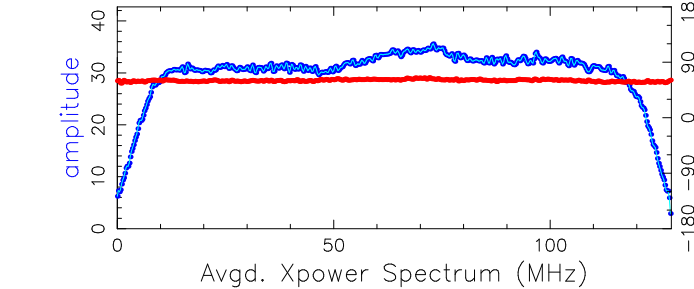
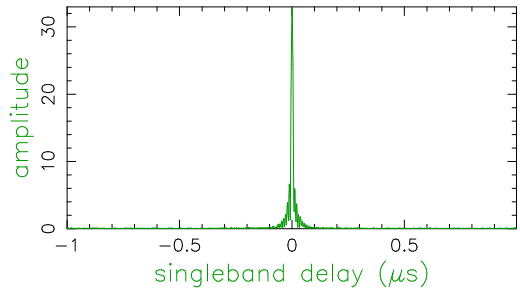
ph/seg (deg)	9.9	Theor.	0.7	Amplitude	14.703 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	17.3	Search (1024X16)	14.335	Search	14.335	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	8.0	Inc. seg. avg.	14.917	Inc. seg. avg.	14.917	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.9	Inc. frq. avg.	14.765	Inc. frq. avg.	14.765	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 512	t_cohere infinite

l: az 18.7 el 65.2 pa -150.7 n: az 360.5 el 73.3 pa -179.4 u,v (fr/asec) -913.941 -333.409 simultaneous interpolator

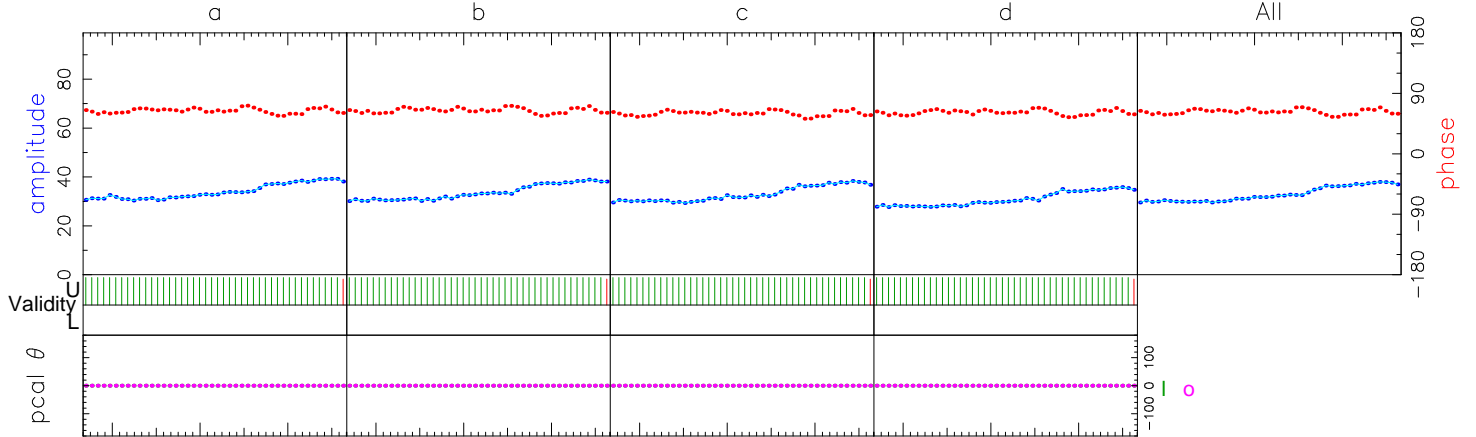
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/In..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/In.Q.97.1HP6Q8



Fringe quality 9
SNR 1210.4
Int time 179.974
Amp 32.992
Phase 62.6
PFD 0.0e+00
Delays (us)
SBD 0.000424
MBD 0.000340
Fringe rate (Hz)
-0.001863
Ion TEC 0.000
Ref freq (MHz)
43040.0000
AP (sec) 0.512
Exp. c202a
Yr:day 16383
Start 2020:283
Stop 2020:283
FRT 055640.00
055940.22
055810.00
Corr/FF/build
2021:005:135111
2021:010:163112
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
64.0	64.5	60.2	61.6	Phase	62.6
34.0	33.6	32.9	30.9	Ampl.	32.9
513.0	513.2	513.1	513.6	Sbd box	513.2
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
l:o 0:0	0:0	0:0	0:0	PC phase	
l:o 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
l Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	4.21029061570E+02	Apriori delay (usec)	4.21028721360E+02	Resid mbdelay (usec)	3.40210E-04	+/-	9.2E-07
Sband delay (usec)	4.21029145110E+02	Apriori clock (usec)	-2.1792999E+01	Resid sbdelay (usec)	4.23750E-04	+/-	3.6E-06
Phase delay (usec)	4.21028725400E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	4.04010E-06	+/-	6.1E-09
Delay rate (us/s)	-1.23850580269E-01	Apriori rate (us/s)	-1.23850536986E-01	Resid rate (us/s)	-4.32833E-08	+/-	5.9E-11
Total phase (deg)	122.8	Apriori accel (us/s/s)	-4.31334689010E-06	Resid phase (deg)	62.6	+/-	0.1

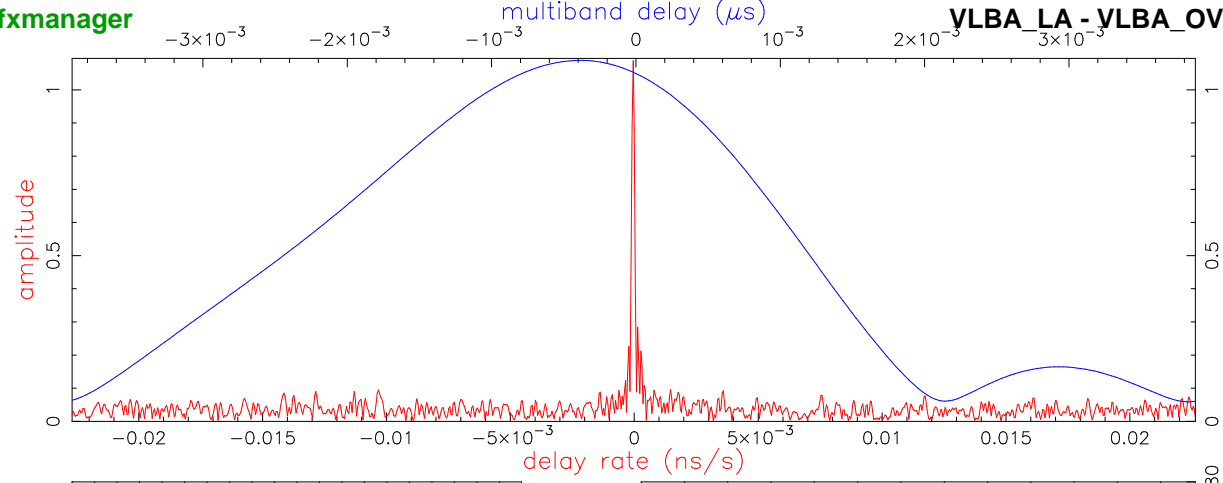
	RMS	Theor.	Amplitude	32.992 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	3.6	0.3	Search (1024X16)	32.465	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	9.0	0.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	2.5	0.1	Inc. seg. avg.	32.921	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	3.6	0.2	Inc. frq. avg.	32.870	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, lo

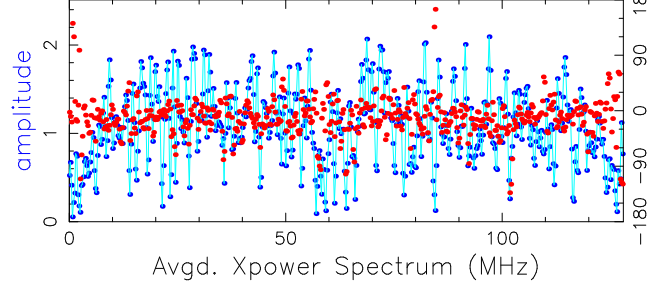
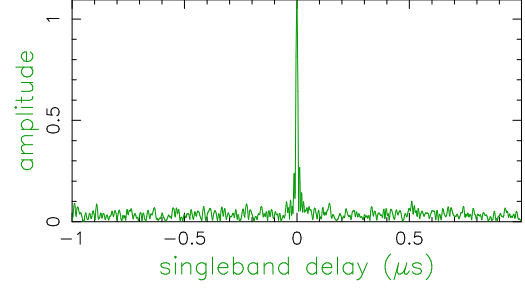
VLBA_LA - VLBA_OV, fgroup Q, pol LR



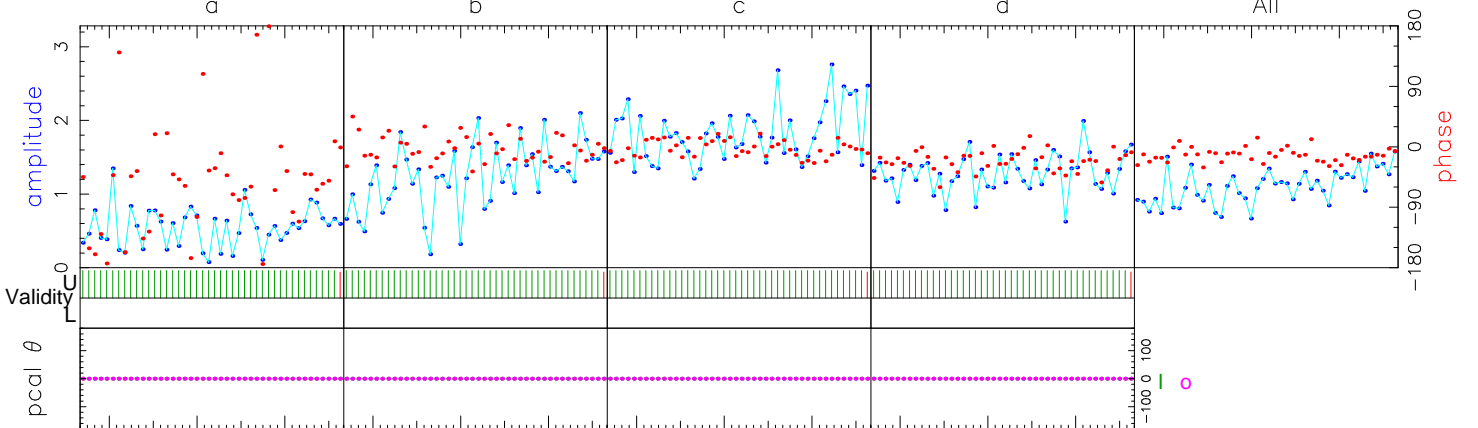
Fringe quality 5

SNR 40.2
 Int time 179.974
 Amp 1.095
 Phase -12.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.000519
 MBD -0.000452
 Fringe rate (Hz)
 -0.001676
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163114
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



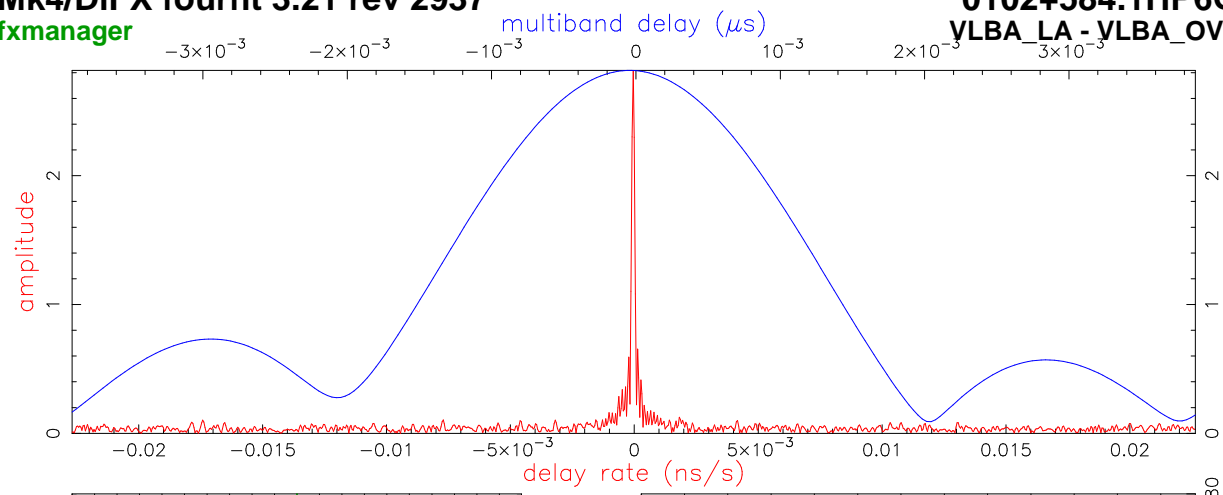
42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-67.5	-3.6	-2.9	-21.5	Phase	-12.3
0.3	1.2	1.8	1.2	Ampl.	1.1
514.2	513.0	512.5	512.3	Sbd box	512.7
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
l:o 0:0	0:0	0:0	0:0	PC phase	
l:o 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	4.21028269289E+02	Apriori delay (usec)	4.21028721360E+02	Resid mbdelay (usec)	-4.52071E-04	+/- 2.8E-05
Sband delay (usec)	4.21028202485E+02	Apriori clock (usec)	-2.1792999E+01	Resid sbdelay (usec)	-5.18875E-04	+/- 1.1E-04
Phase delay (usec)	4.21028720569E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-7.91353E-07	+/- 1.8E-07
Delay rate (us/s)	-1.23850575927E-01	Apriori rate (us/s)	-1.23850536986E-01	Resid rate (us/s)	-3.89411E-08	+/- 1.8E-09
Total phase (deg)	48.0	Apriori accel (us/s/s)	-4.31334689010E-06	Resid phase (deg)	-12.3	+/- 2.9

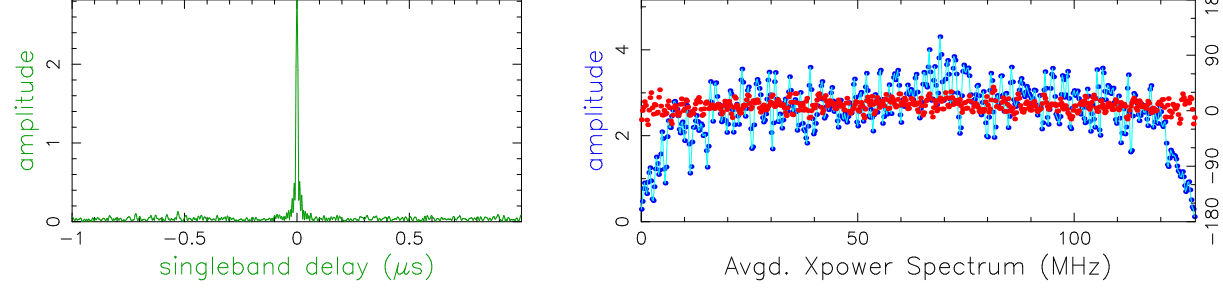
	RMS	Theor.	Amplitude	1.095 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	10.2	9.5	Search (1024X16)	1.083	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	21.4	16.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	40.6	2.9	Inc. seg. avg.	1.089	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	47.8	5.0	Inc. frq. avg.	1.135	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 18.7 el 65.2 pa -150.7 o: az 30.8 el 62.4 pa -129.3 u,v (fr/asec) 675.837 -328.108 simultaneous interpolator

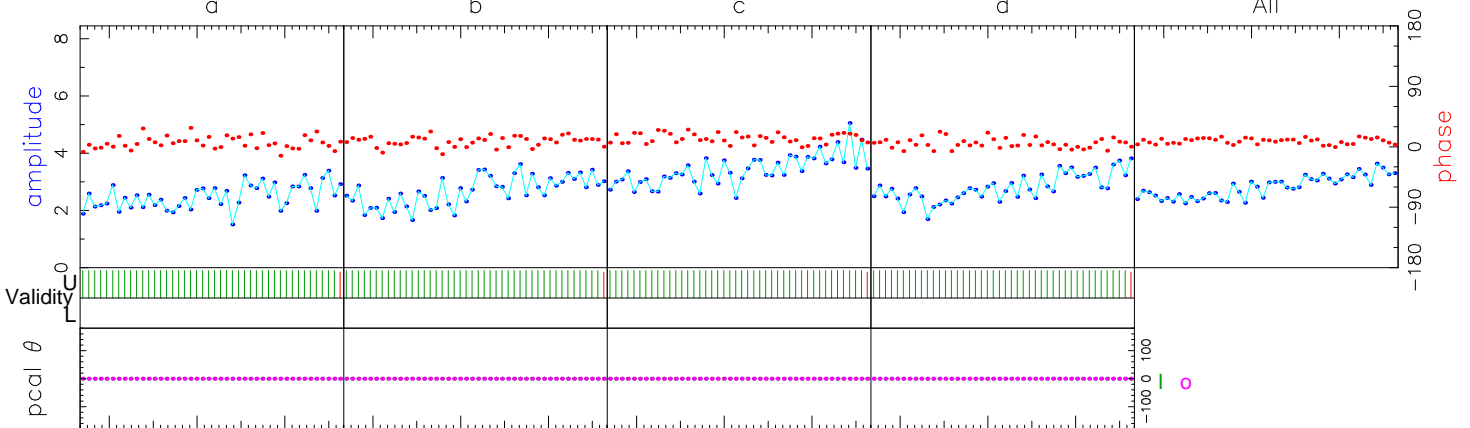
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lo..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lo.Q.129.1HP6Q8



Fringe quality 9
SNR 103.4
Int time 179.974
Amp 2.818
Phase 8.5
PFD 0.0e+00
Delays (us)
SBD -0.000046
MBD -0.000046
Fringe rate (Hz)
-0.001835
Ion TEC 0.000
Ref freq (MHz)
43040.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 055640.00
Stop 055940.22
FRT 055810.00
Corr/FF/build
2021:005:135111
2021:010:163116
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	PC freqs	
l:o	0:0	0:0	0:0	0:0	PC phase	
l	1000	1000	1000	1000	Manl PC	
o	1000	1000	1000	1000	PC amp	
l	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	4.21028675414E+02	Apriori delay (usec)	4.21028721360E+02	Resid mbdelay (usec)	-4.59458E-05	+/-	1.1E-05
Sband delay (usec)	4.21028674985E+02	Apriori clock (usec)	-2.1792999E+01	Resid sbdelay (usec)	-4.63750E-05	+/-	4.2E-05
Phase delay (usec)	4.21028721906E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.46022E-07	+/-	7.2E-08
Delay rate (us/s)	-1.23850579617E-01	Apriori rate (us/s)	-1.23850536986E-01	Resid rate (us/s)	-4.26310E-08	+/-	6.9E-10
Total phase (deg)	68.7	Apriori accel (us/s/s)	-4.31334689010E-06	Resid phase (deg)	8.5	+/-	1.1

ph/seg (deg)	4.1	3.7	Search (1024X16)	2.813	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	13.3	6.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	4.1	1.1	Inc. seg. avg.	2.819	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
amp/frq (%)	12.4	1.9	Inc. frq. avg.	2.821	Sample rate(MISamp/s): 256		dr window (ns/s)	-0.023	0.023	
					Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

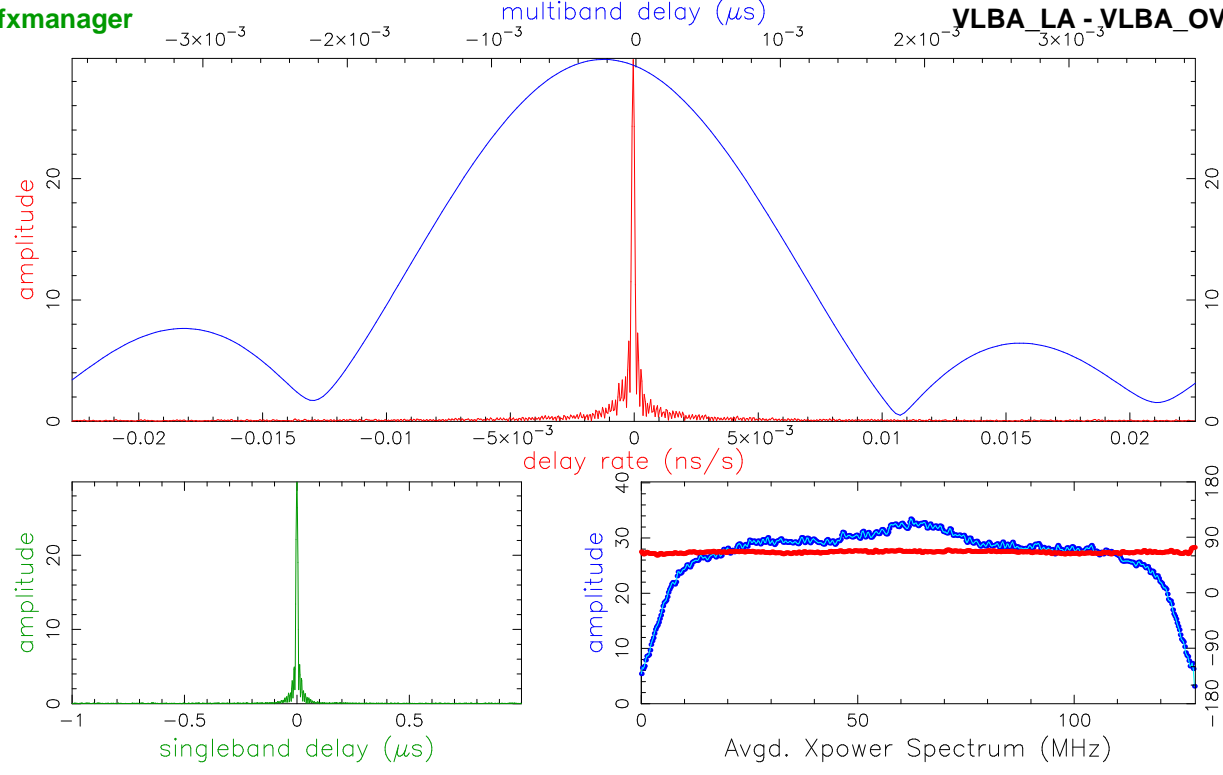
l: az 18.7 el 65.2 pa -150.7 o: az 30.8 el 62.4 pa -129.3 u,v (fr/asec) 675.837 -328.108 simultaneous interpolator
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lo..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lo.Q.143.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, lo

VLBA_LA - VLBA_OV, fgroup Q, pol LL

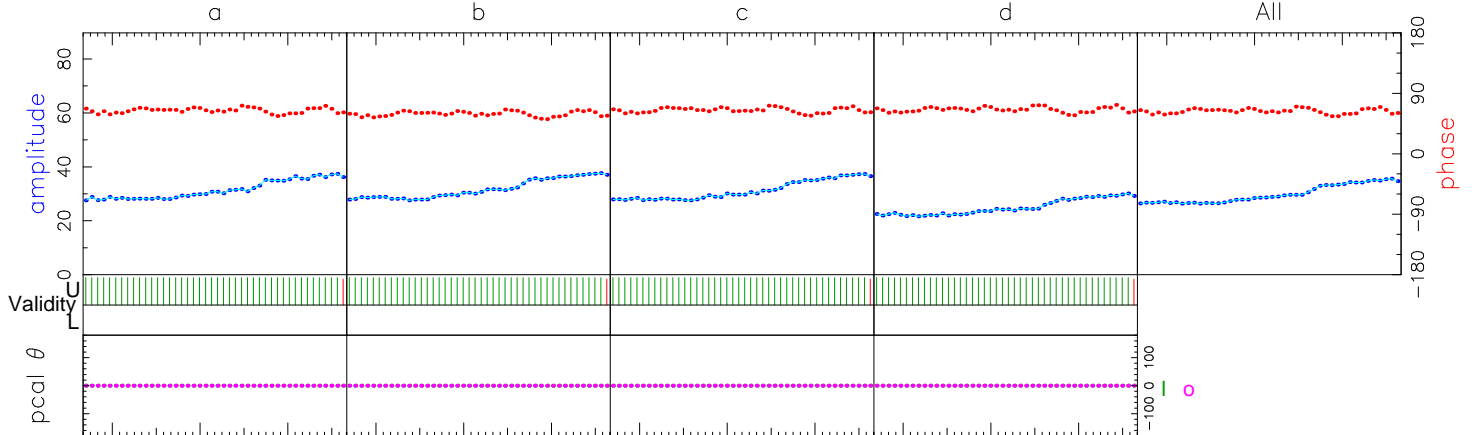


Fringe quality 9

SNR 1096.8
 Int time 179.974
 Amp 29.896
 Phase 63.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.000361
 MBD -0.000242
 Fringe rate (Hz)
 -0.001895
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Yr:day 16383
 Start 2021:005:135111
 Stop 2021:010:163110
 FRT 2020:247:085004
 Corr/FF/build
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
64.3	59.3	64.7	65.6	Phase	63.4
31.4	31.7	31.2	24.9	Ampl.	29.8
512.6	512.9	512.9	512.8	Sbd box	512.8
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	PC freqs	
l:o 0:0	0:0	0:0	0:0	PC phase	
l:o 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	4.21028479539E+02	Apriori delay (usec)	4.21028721360E+02	Resid mbdelay (usec)	-2.41821E-04	+/- 1.0E-06
Sband delay (usec)	4.21028359860E+02	Apriori clock (usec)	-2.1792999E+01	Resid sbdelay (usec)	-3.61500E-04	+/- 3.9E-06
Phase delay (usec)	4.21028725451E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	4.09100E-06	+/- 6.7E-09
Delay rate (us/s)	-1.23850581004E-01	Apriori rate (us/s)	-1.23850536986E-01	Resid rate (us/s)	-4.40179E-08	+/- 6.5E-11
Total phase (deg)	123.6	Apriori accel (us/s/s)	-4.31334689010E-06	Resid phase (deg)	63.4	+/- 0.1

ph/seg (deg)	RMS 3.6	Theor. 0.3	Amplitude 29.896 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	10.9	0.6	Search (1024X16) 29.249	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	3.5	0.1	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	9.5	0.2	Inc. seg. avg. 29.870	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
			Inc. frq. avg. 29.836	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 18.7 el 65.2 pa -150.7 o: az 30.8 el 62.4 pa -129.3 u,v (fr/asec) 675.837 -328.108 simultaneous interpolator

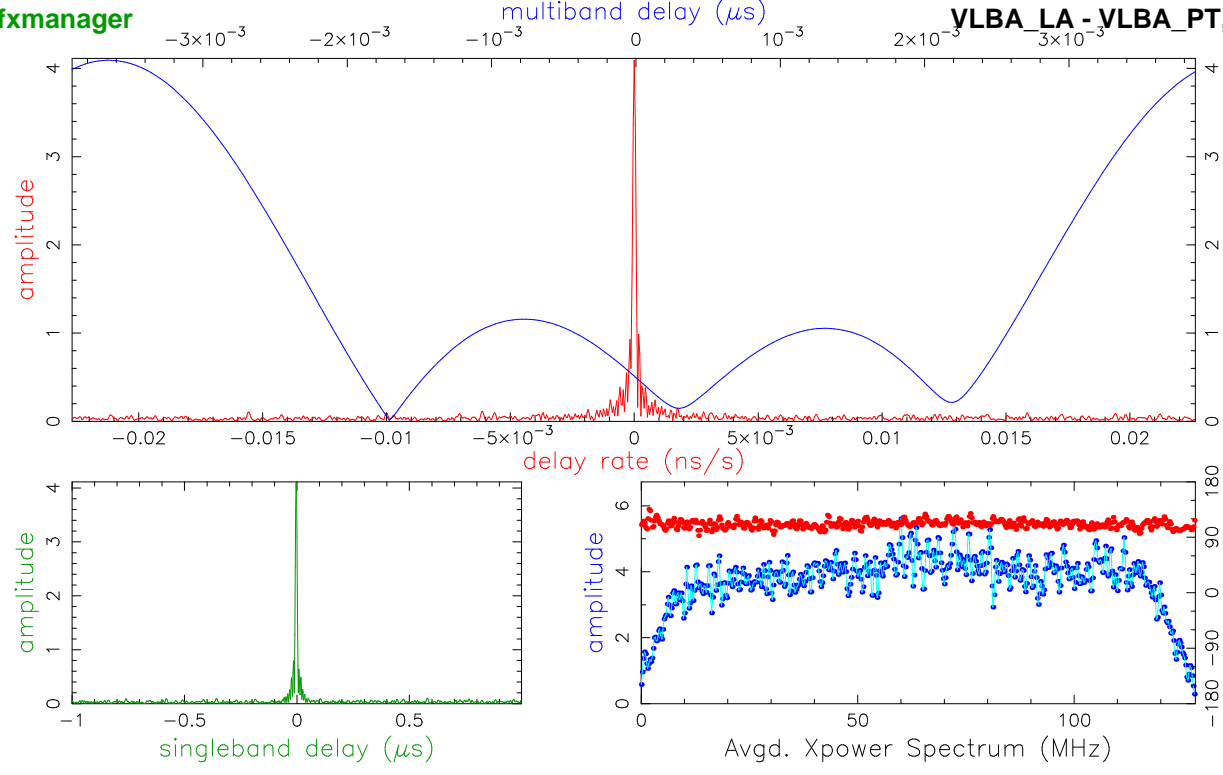
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lo..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lo.Q.88.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HP6Q8, No0090, lp

VLBA_LA - VLBA_PT, fgroup Q, pol RR

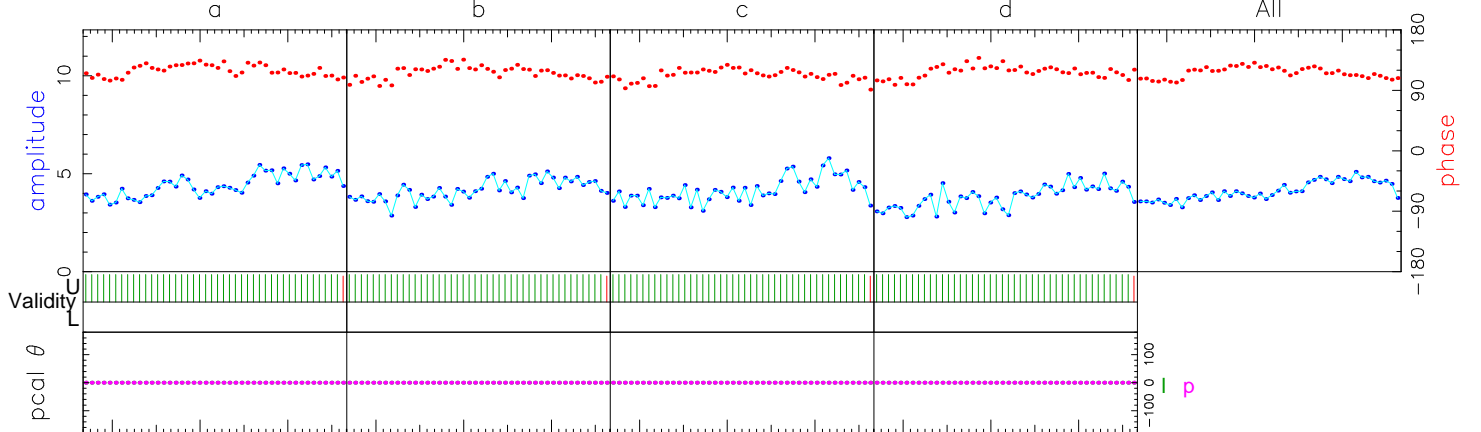


Fringe quality 9

SNR 150.9
 Int time 179.974
 Amp 4.114
 Phase 116.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.003426
 MBD -0.003629
 Fringe rate (Hz)
 -0.000693
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163115
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	Phase	116.3
p	1000	1000	1000	1000	Ampl.	4.1
l:p	0:0	0:0	0:0	0:0	Sbd box	511.2
lp	0:0	0:0	0:0	0:0	APs used	
l	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
l	Q00UR	Q01UR	Q02UR	Q03UR	PC phase	
p	Q00UR	Q01UR	Q02UR	Q03UR	Manl PC	
					PC amp	
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

	3.00386999499E+02	Apriori delay (usec)	3.00390628280E+02	Resid mbdelay (usec)	-3.62878E-03	+/- 7.4E-06
Group delay (usec)(sbd)	3.00386999499E+02	Apriori clock (usec)	3.00390628280E+02	Resid sbdelay (usec)	-3.42600E-03	+/- 2.9E-05
Sband delay (usec)	3.00387202280E+02	Apriori clockrate (us/s)	-4.2854500E-01	Resid phdelay (usec)	7.50317E-06	+/- 4.9E-08
Phase delay (usec)	3.00390635784E+02	Apriori rate (us/s)	-5.0000000E-07	Resid rate (us/s)	-1.61068E-08	+/- 4.7E-10
Delay rate (us/s)	-2.41169183887E-02	Apriori accel (us/s/s)	4.22889358194E-07	Resid phase (deg)	116.3	+/- 0.8
Total phase (deg)	347.1					

	RMS	Theor.	Amplitude	4.114 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	8.0	2.5	Search (1024X16)	3.902	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	11.4	4.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.7	0.8	Inc. seg. avg.	4.126	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	5.3	1.3	Inc. frq. avg.	4.097	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 512	t_cohere infinite

l: az 18.7 el 65.2 pa -150.7 p: az 19.7 el 63.3 pa -148.5 u,v (fr/asec) 132.328 74.783 simultaneous interpolator

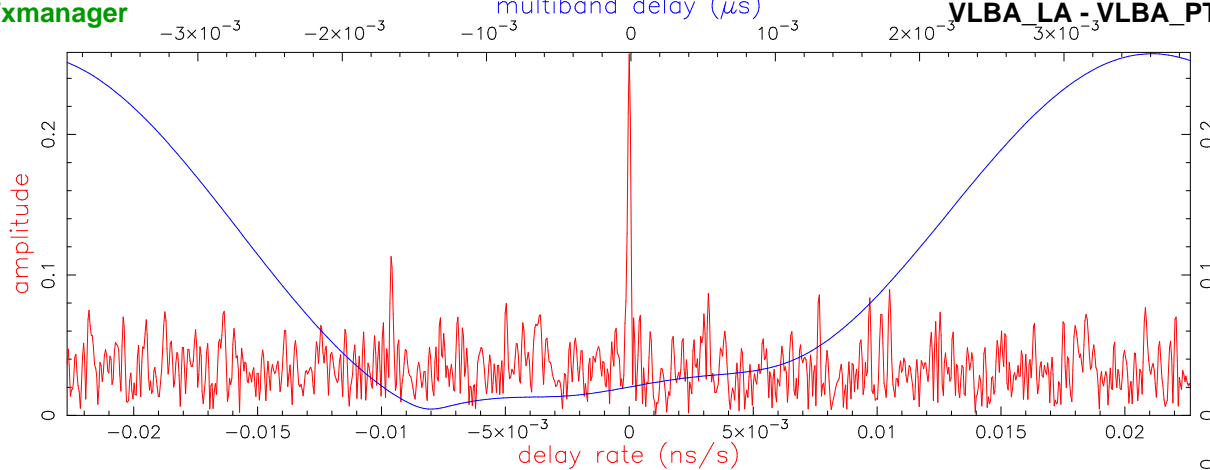
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp.Q.135.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

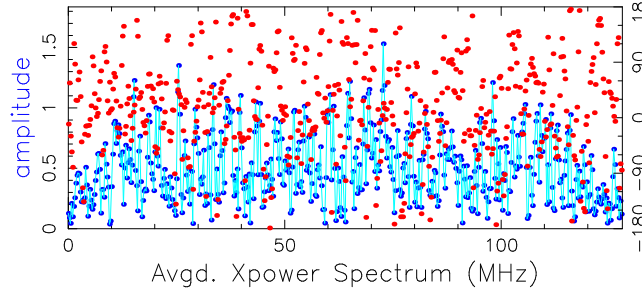
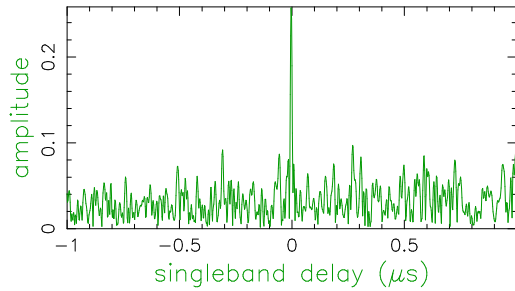
0102+584.1HP6Q8, No0090, lp

VLBA_LA - VLBA_PT, fgroup Q, pol LR



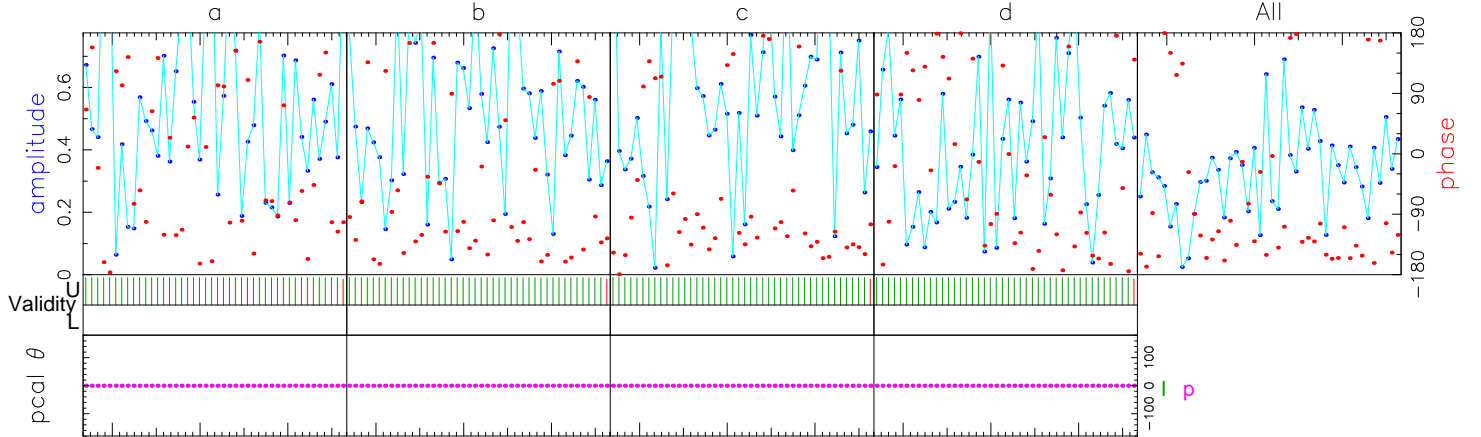
Fringe quality 9

SNR 9.5
 Int time 179.974
 Amp 0.258
 Phase -136.2
 PFD 5.1e-13
 Delays (us)
 SBD -0.003479
 MBD 0.003658
 Fringe rate (Hz)
 -0.000249
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163116
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l	Q00UL	Q01UL	Q02UL	Q03UL		
p	Q00UR	Q01UR	Q02UR	Q03UR		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	3.00386473530E+02	Apriori delay (usec)	3.00390628280E+02	Resid mbdelay (usec)	3.65775E-03	+/- 1.2E-04
Sband delay (usec)	3.00387148905E+02	Apriori clock (usec)	-4.2854500E-01	Resid sbdelay (usec)	-3.47938E-03	+/- 4.5E-04
Phase delay (usec)	3.00390619488E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-8.79201E-06	+/- 7.8E-07
Delay rate (us/s)	-2.41169080621E-02	Apriori rate (us/s)	-2.4116902819E-02	Resid rate (us/s)	-5.78019E-09	+/- 7.5E-09
Total phase (deg)	94.6	Apriori accel (us/s/s)	4.22889358194E-07	Resid phase (deg)	-136.2	+/- 12.1

	RMS	Theor.	Amplitude	0.258 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	50.8	40.1	Search (1024X16)	0.255	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	59.4	70.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	8.2	12.1	Inc. seg. avg.	0.263	Sample rate(MISamp/s): 256		ion window (TEC)	0.00	0.00
amp/frq (%)	41.3	21.1	Inc. frq. avg.	0.253	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

l: az 18.7 el 65.2 pa -150.7 p: az 19.7 el 63.3 pa -148.5 u,v (fr/asec) 132.328 74.783 simultaneous interpolator

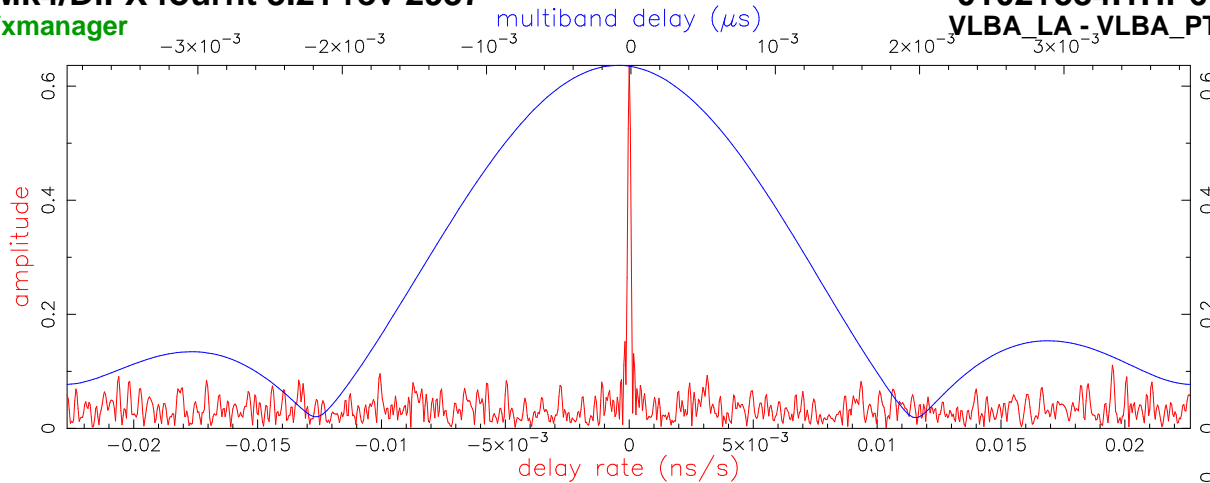
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp.Q.149.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

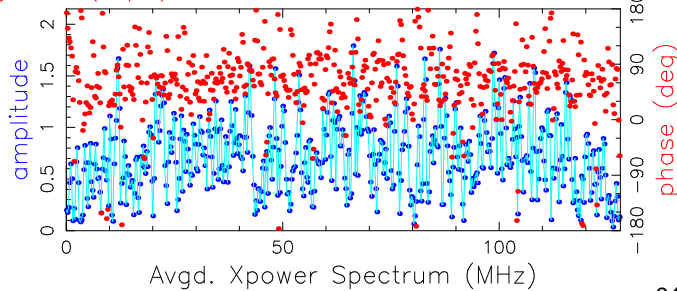
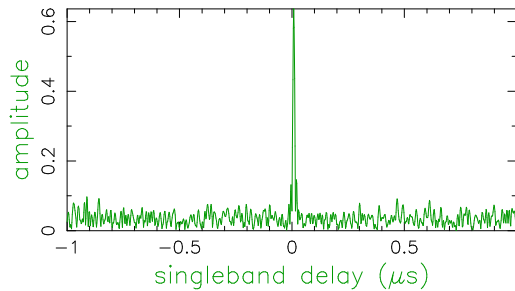
0102+584.1HP6Q8, No0090, lp

VLBA_LA - VLBA_PT, fgroup Q, pol RL



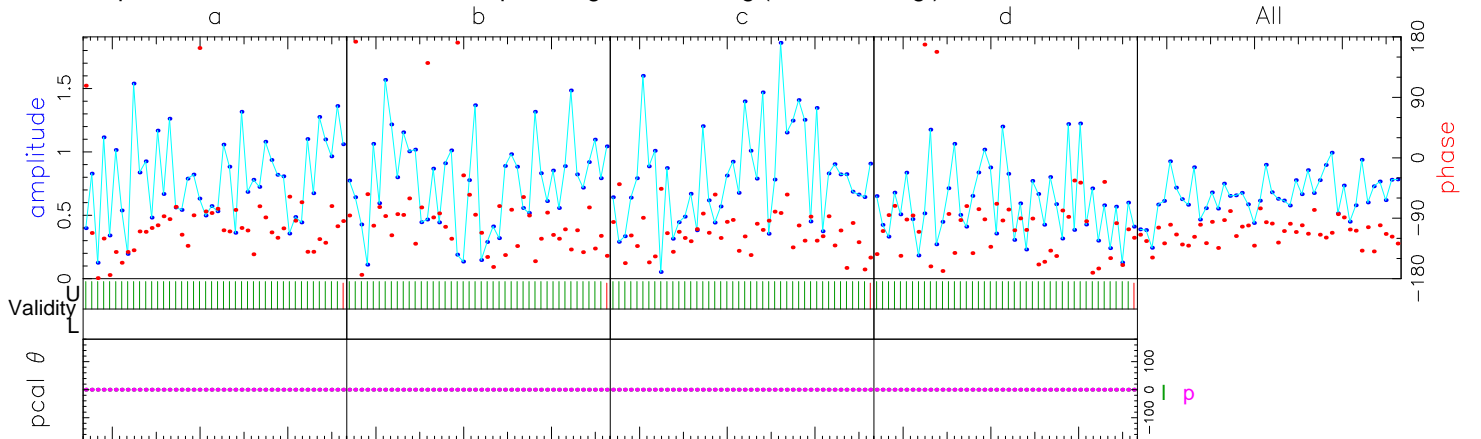
Fringe quality 9

SNR 23.3
 Int time 179.974
 Amp 0.636
 Phase -110.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.007839
 MBD -0.000087
 Fringe rate (Hz)
 -0.000619
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163118
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000		
p	1000	1000	1000	1000		
l	Q00UR	Q01UR	Q02UR	Q03UR		
p	Q00UL	Q01UL	Q02UL	Q03UL		
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	3.0039835350E+02	Apriori delay (usec)	3.00390628280E+02	Resid mbdelay (usec)	-8.72500E-05	+/-	4.8E-05
Sband delay (usec)	3.00398467530E+02	Apriori clock (usec)	-4.2854500E-01	Resid sbdelay (usec)	7.83925E-03	+/-	1.8E-04
Phase delay (usec)	3.00390621184E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-7.09623E-06	+/-	3.2E-07
Delay rate (us/s)	-2.41169166530E-02	Apriori rate (us/s)	-2.41169022819E-02	Resid rate (us/s)	-1.43711E-08	+/-	3.0E-09
Total phase (deg)	120.9	Apriori accel (us/s/s)	4.22889358194E-07	Resid phase (deg)	-110.0	+/-	4.9

	RMS	Theor.	Amplitude	0.636 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	16.9	16.3	Search (1024X16)	0.623	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	25.1	28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	1.7	4.9	Inc. seg. avg.	0.637	Sample rate(MISamp/s): 256		ion window (TEC)	0.00	0.00
amp/frq (%)	15.8	8.6	Inc. frq. avg.	0.634	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

l: az 18.7 el 65.2 pa -150.7 p: az 19.7 el 63.3 pa -148.5 u,v (fr/asec) 132.328 74.783 simultaneous interpolator

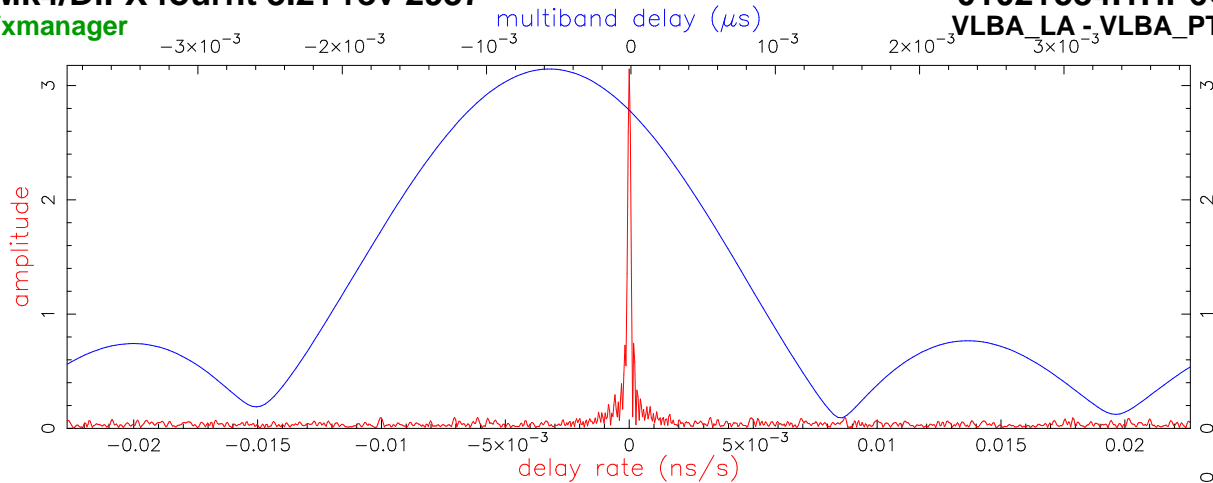
Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp.Q.162.1HP6Q8

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

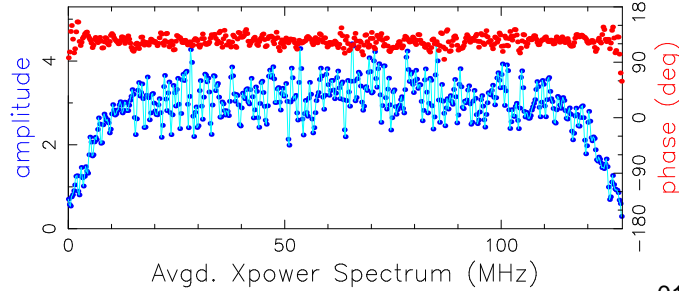
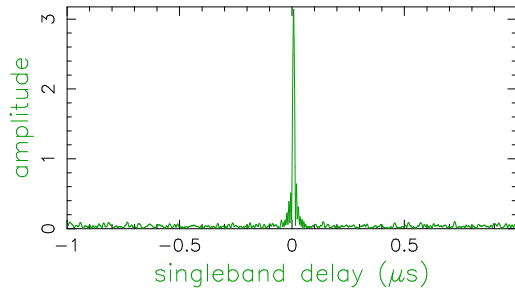
0102+584.1HP6Q8, No0090, lp

VLBA_LA - VLBA_PT, fgroup Q, pol LL



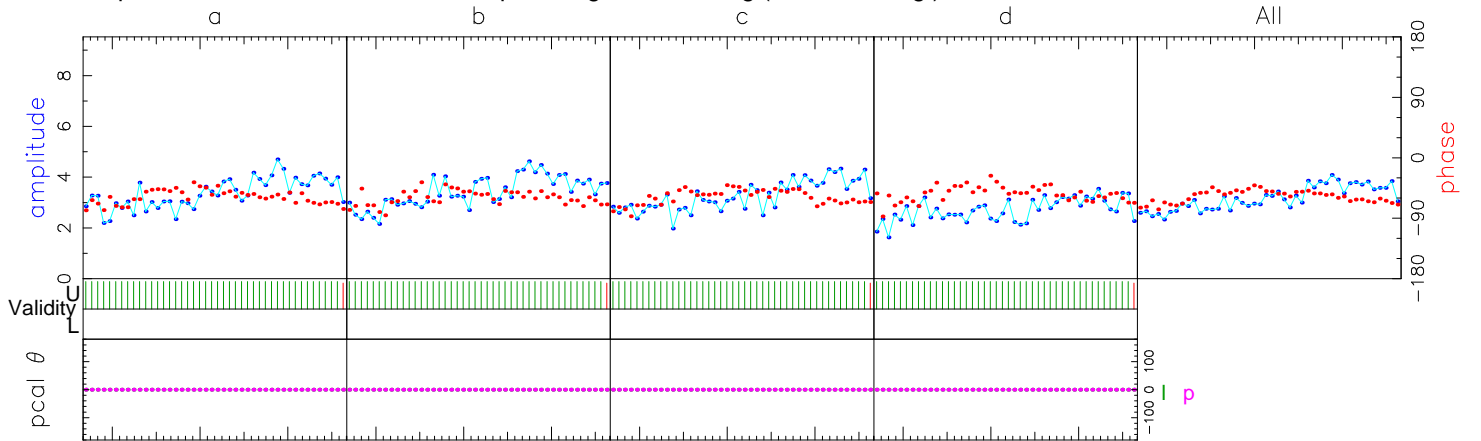
Fringe quality 9

SNR 116.5
 Int time 179.974
 Amp 3.176
 Phase -57.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.007138
 MBD -0.000595
 Fringe rate (Hz)
 -0.000750
 Ion TEC 0.000
 Ref freq (MHz)
 43040.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 055640.00
 Stop 055940.22
 FRT 055810.00
 Corr/FF/build
 2021:005:135111
 2021:010:163111
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 44 segs, 8 APs / seg (4.10 sec / seg.), time ticks 5 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-58.5	-58.9	-58.4	-53.8	Phase	-57.6
3.3	3.4	3.2	2.7	Ampl.	3.1
516.5	516.8	516.7	516.6	Sbd box	516.7
U/L 352/0	352/0	352/0	352/0	APs used	
l 1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	PC freqs	
l:p 0:0	0:0	0:0	0:0	PC phase	
lp 0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
l Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	3.00397845780E+02	Apriori delay (usec)	3.00390628280E+02	Resid mbdelay (usec)	-5.95000E-04	+/- 9.5E-06
Sband delay (usec)	3.00397766155E+02	Apriori clock (usec)	-4.2854500E-01	Resid sbdelay (usec)	7.13788E-03	+/- 3.7E-05
Phase delay (usec)	3.00390624564E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-3.71673E-06	+/- 6.3E-08
Delay rate (us/s)	-2.41169197047E-02	Apriori rate (us/s)	-2.41169022819E-02	Resid rate (us/s)	-1.74228E-08	+/- 6.1E-10
Total phase (deg)	173.2	Apriori accel (us/s/s)	4.22889358194E-07	Resid phase (deg)	-57.6	+/- 1.0

ph/seg (deg)	8.8	Theor.	3.3	Amplitude	3.176 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	14.8		5.7	Search (1024X16)	3.047	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	3.0		1.0	Inc. seg. avg.	3.173	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	9.1		1.7	Inc. frq. avg.	3.144	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 512	t_cohere infinite

l: az 18.7 el 65.2 pa -150.7 p: az 19.7 el 63.3 pa -148.5 u,v (fr/asec) 132.328 74.783 simultaneous interpolator

Control file: cf_1234_gmva7mm Input file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp..1HP6Q8 Output file: /Exps/c202a/v1/v1_7mm/1234/No0090/lp.Q.95.1HP6Q8