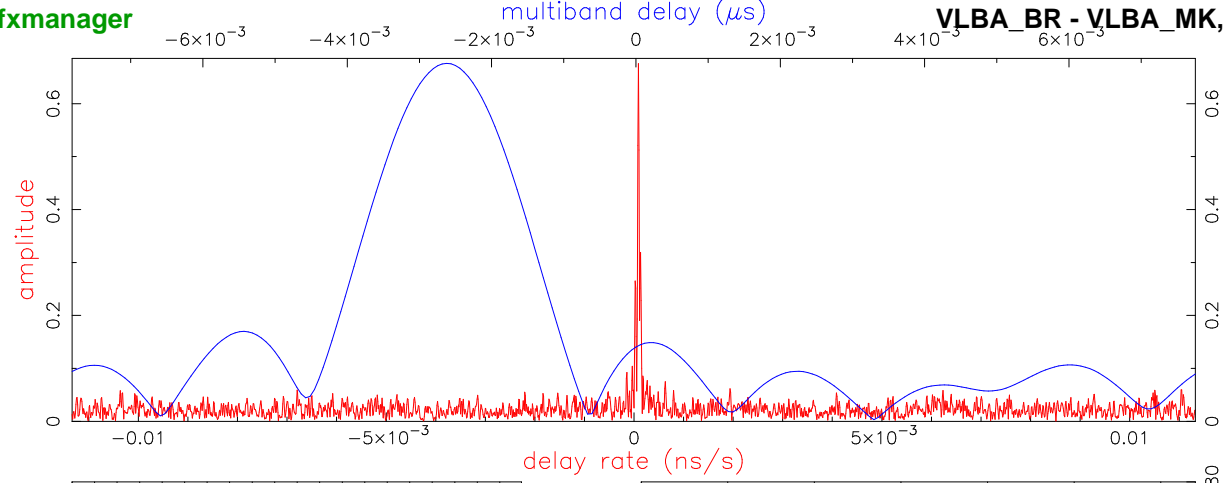


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, bm

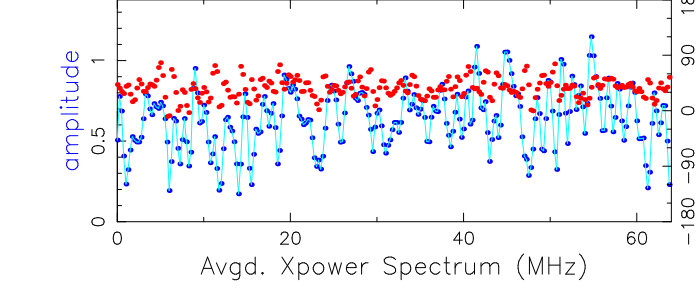
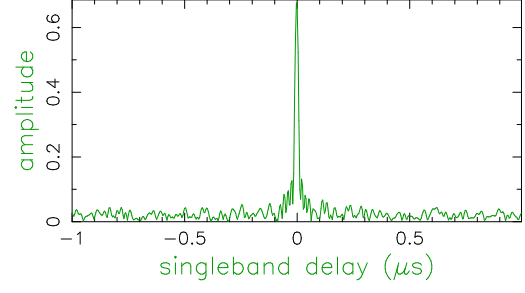
VLBA_BR - VLBA_MK, fgroup W, pol RR



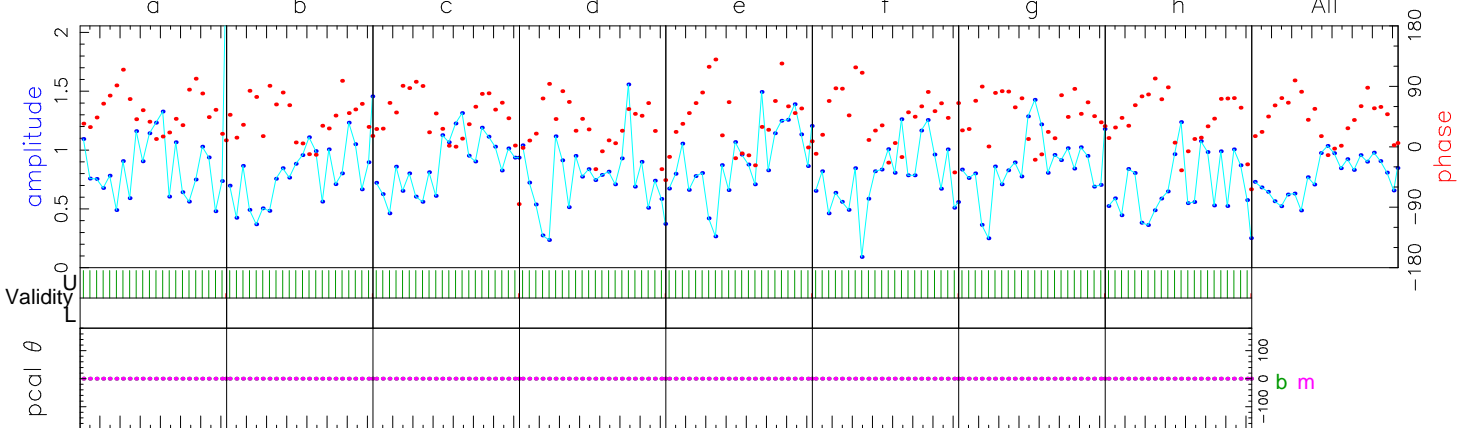
Fringe quality 8

SNR 38.4
 Int time 419.823
 Amp 0.685
 Phase 40.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.002413
 MBD -0.002585
 Fringe rate (Hz) 0.007888
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120155
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.54718980268E+03									
Sband delay (usec)	-4.54718963126E+03									
Phase delay (usec)	-4.54718721672E+03									
Delay rate (us/s)	-8.15473492424E-01									
Total phase (deg)			-305.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 30.4 7.2 Amplitude 0.685 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.1 12.5 Search (2048X32) 0.651 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.1 4.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.5 7.4 Inc. seg. avg. 0.774 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.677 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 191.0 el 37.5 pa 7.3 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 4712.302 3468.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/bm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/bm.W.31.1X06HR

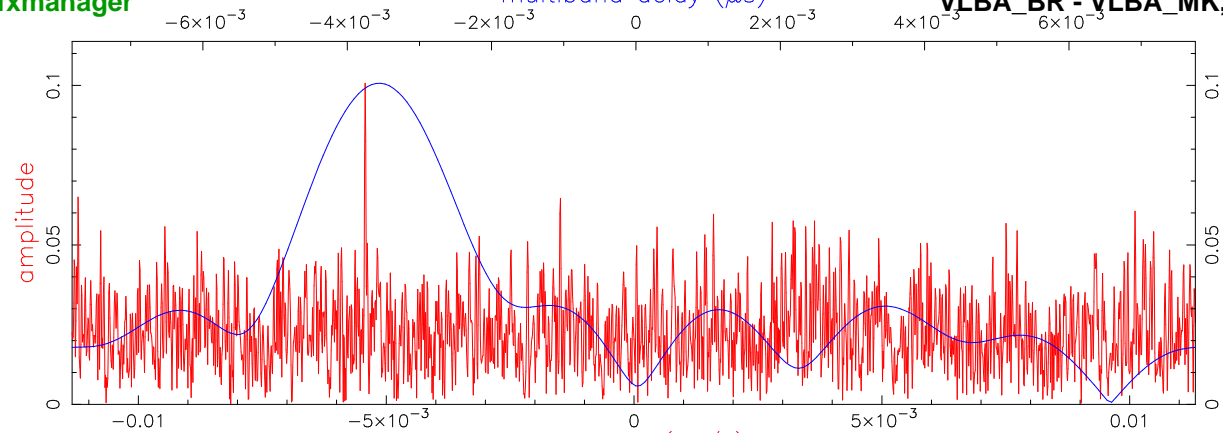
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, bm

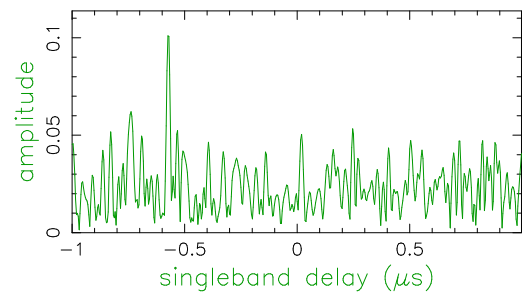
VLBA_BR - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

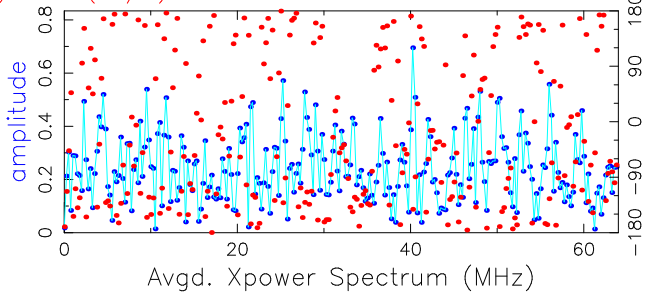


Fringe quality 0

SNR 5.8
 Int time 419.823
 Amp 0.114
 Phase 144.8
 PFD 8.3e-01
 Delays (us)
 SBD -0.572300
 MBD -0.003555
 Fringe rate (Hz)
 -0.468441
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

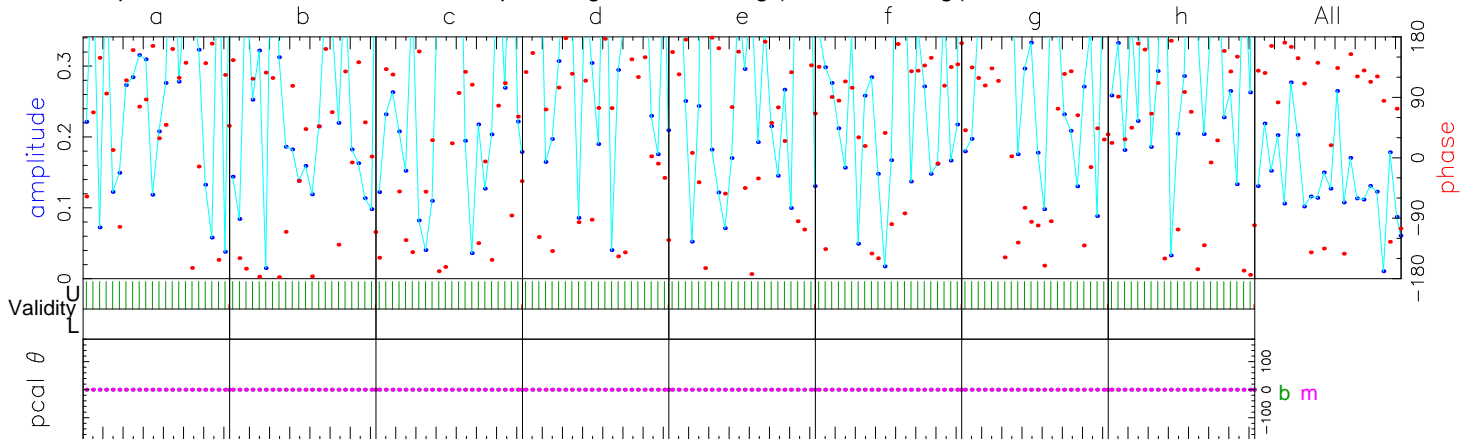


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120159
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	121.6	141.1	149.3	162.0	-178.7	143.9	100.4	127.8	Phase	144.8
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	67.0	443.3	310.0	69.8	59.8	162.9	343.0	487.3	Sbd box	110.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -4.54775327317E+03 Apriori delay (usec) -4.54718721801E+03 Resid mbdelay (usec) -3.55516E-03 +/- 1.9E-04
 Sband delay (usec) -4.54775951826E+03 Apriori clock (usec) 0.100 Resid sbdelay (usec) -5.72300E-01 +/- 1.5E-03
 Phase delay (usec) -4.54718721334E+03 Apriori clockrate (us/s) -4.1800000E-07 Resid phdelay (usec) 4.67011E-06 +/- 6.4E-07
 Delay rate (us/s) -8.15479022127E-01 Apriori rate (us/s) -8.15473583995E-01 Resid rate (us/s) -5.43813E-06 +/- 2.6E-09
 Total phase (deg) -200.6 Apriori accel (us/s/s) 2.10131670039E-05 Resid phase (deg) 144.8 +/- 19.8

RMS Theor. Amplitude 0.114 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.8 47.5 Search (2048X32) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 70.1 82.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 27.3 28.0 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.9 48.8 Inc. frq. avg. 0.107 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 191.0 el 37.5 pa 7.3 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 4712.302 3468.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/bm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/bm.W.49.1X06HR

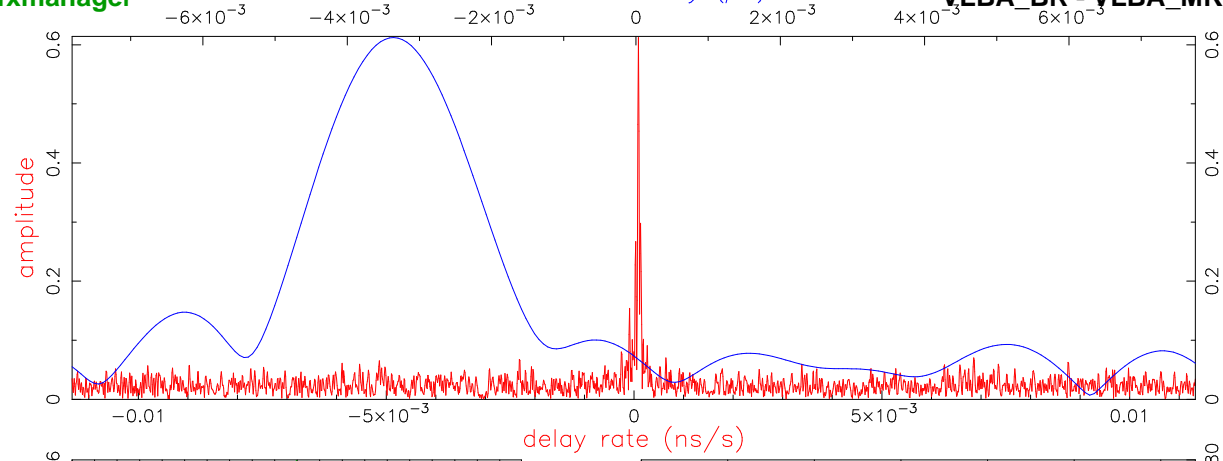
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, bm

VLBA_BR - VLBA_MK, fgroup W, pol LL

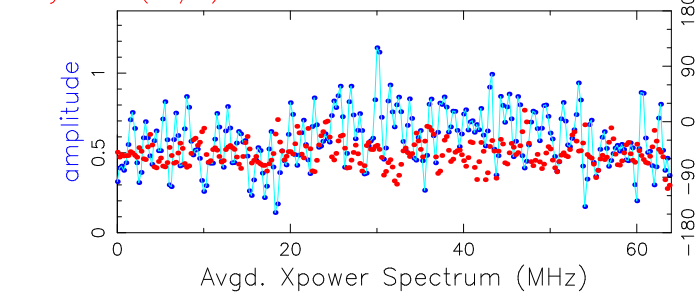
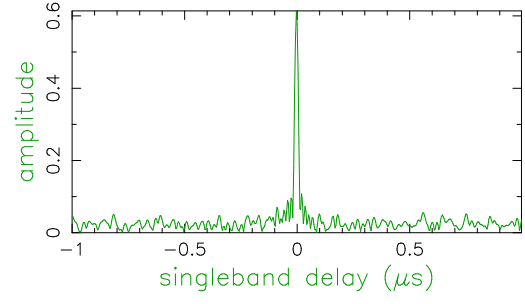
multiband delay (μ s)



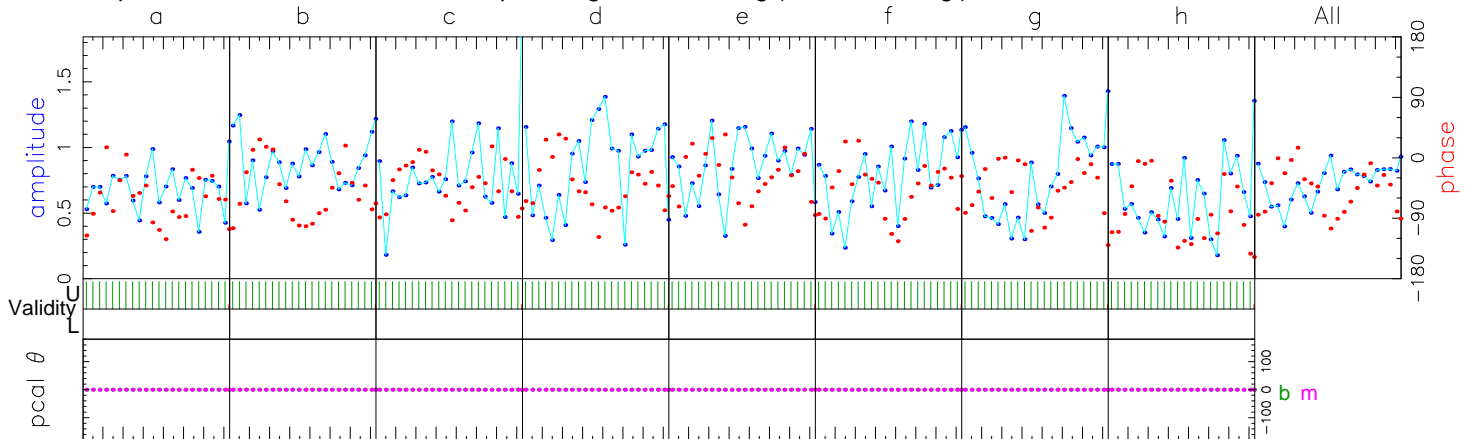
Fringe quality 7

SNR 34.4
 Int time 419.823
 Amp 0.614
 Phase -49.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.003187
 MBD -0.003340
 Fringe rate (Hz) 0.007835
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120151
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-62.5	-54.7	-40.5	-49.8	-29.2	-47.3	-47.8	-81.4	Phase	-49.9
	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.5	Ampl.	0.6
	256.0	256.3	256.3	256.0	256.1	256.0	256.1	255.5	Sbd box	256.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.54719055787E+03		Apriori delay (usec)		-4.54718721801E+03		Resid mbdelay (usec)		-3.33986E-03	+/- 3.2E-05
Sband delay (usec)	-4.54719040526E+03		Apriori clock (usec)		-1.8685951E+01		Resid sbdelay (usec)		-3.18725E-03	+/- 2.5E-04
Phase delay (usec)	-4.54718721962E+03		Apriori clockrate (us/s)		-4.1800000E-07		Resid phdelay (usec)		-1.61017E-06	+/- 1.1E-07
Delay rate (us/s)	-8.15473493035E-01		Apriori rate (us/s)		-8.15473583995E-01		Resid rate (us/s)		9.09597E-08	+/- 4.4E-10
Total phase (deg)			Apriori accel (us/s/s)		2.10131670039E-05		Resid phase (deg)		-49.9	+/- 3.3

ph/seg (deg) 32.8 8.0 Search (2048X32) 0.602 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 28.5 13.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.8 4.7 Inc. seg. avg. 0.720 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.7 8.2 Inc. frq. avg. 0.627 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 191.0 el 37.5 pa 7.3 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 4712.302 3468.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/bm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/bm.W.6.1X06HR

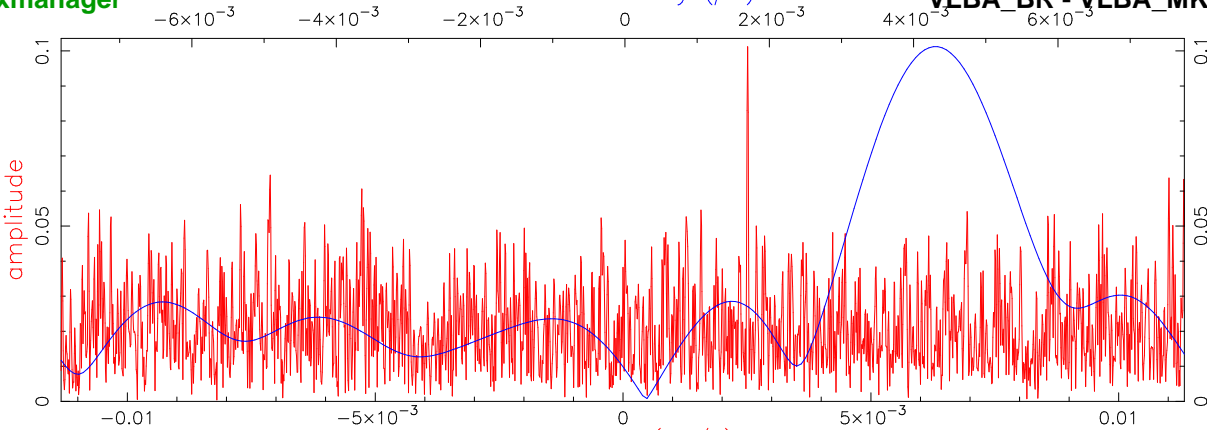
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, bm

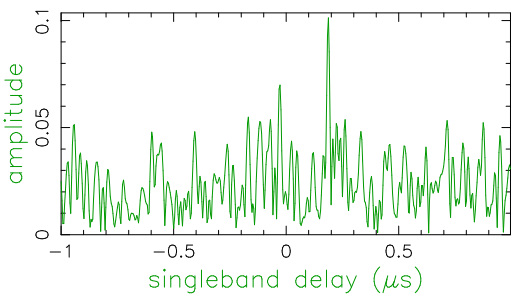
VLBA_BR - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

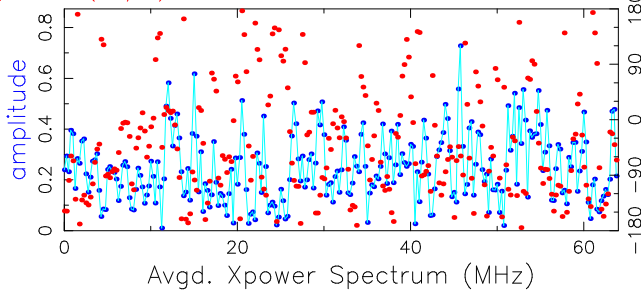


Fringe quality 0

SNR 5.7
 Int time 419.823
 Amp 0.104
 Phase -128.6
 PFD 9.6e-01
 Delays (us)
 SBD 0.186948
 MBD 0.004280
 Fringe rate (Hz)
 0.216646
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

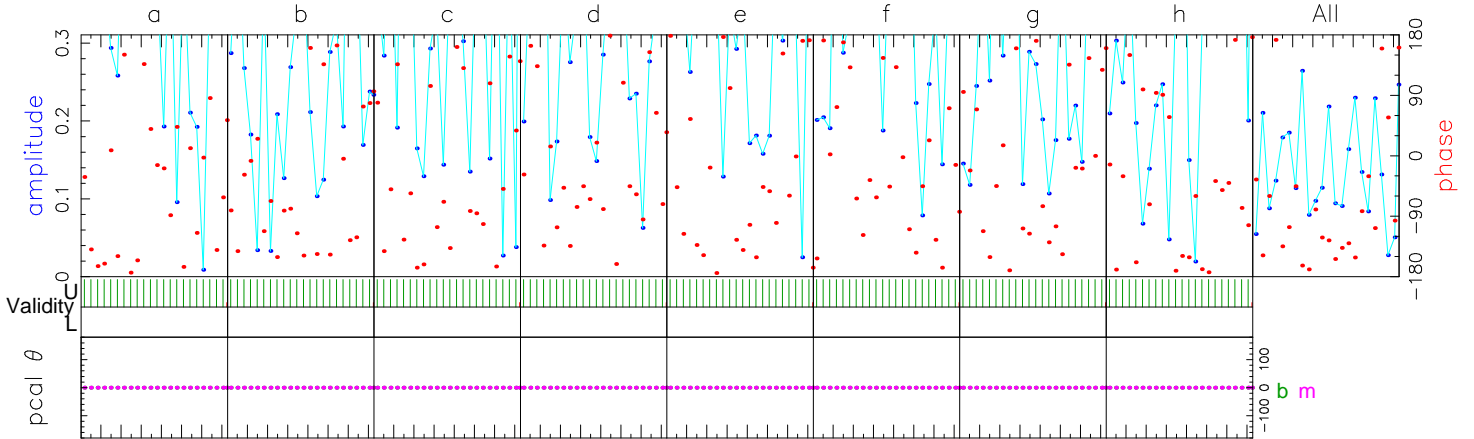


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120203
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



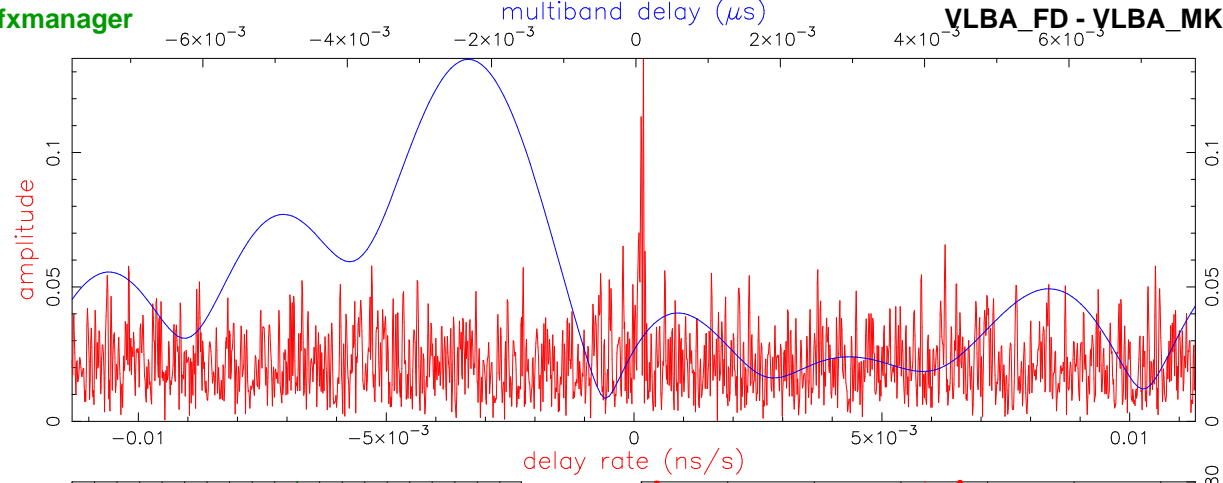
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-139.2	-126.0	-141.2	-109.3	-128.2	-73.3	-147.3	-133.6	Phase	-128.6
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	190.9	487.1	42.4	422.3	438.4	261.0	385.2	315.2	Sbd box	304.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.54699543786E+03	Apriori delay (usec)	-4.54718721801E+03	Resid mbdelay (usec)	4.28015E-03	+/-	1.9E-04
Sband delay (usec)	-4.54700027001E+03	Apriori clock (usec)	-1.8685951E+01	Resid sbdelay (usec)	1.86948E-01	+/-	1.5E-03
Phase delay (usec)	-4.54718722216E+03	Apriori clockrate (us/s)	-4.1800000E-07	Resid phdelay (usec)	-4.14593E-06	+/-	6.5E-07
Delay rate (us/s)	-8.15471068949E-01	Apriori rate (us/s)	-8.15473583995E-01	Resid rate (us/s)	2.51505E-06	+/-	2.7E-09
Total phase (deg)	-114.0	Apriori accel (us/s/s)	2.10131670039E-05	Resid phase (deg)	-128.6	+/-	20.2

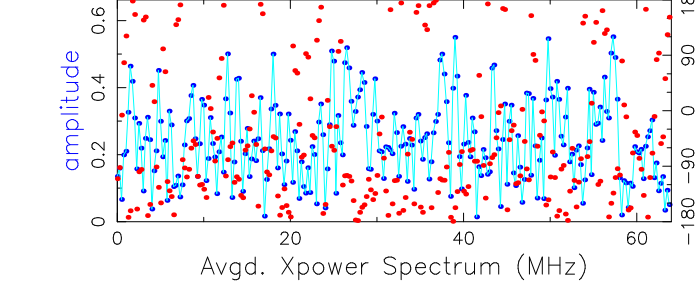
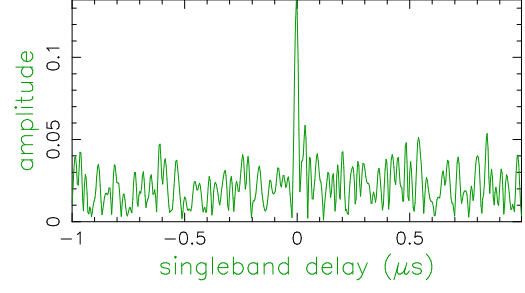
ph/seg (deg)	RMS 60.4	Theor. 48.3	Amplitude Search (2048X32)	0.104 +/- 0.018	0.099	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.3	84.3	Interp.	0.000	0.009	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	26.1	28.5	Inc. seg. avg.	0.102	0.096	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.7	49.7	Inc. frq. avg.	0.096	0.096	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

b: az 191.0 el 37.5 pa 7.3 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 4712.302 3468.026 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/bm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/bm.W.67.1X06HR

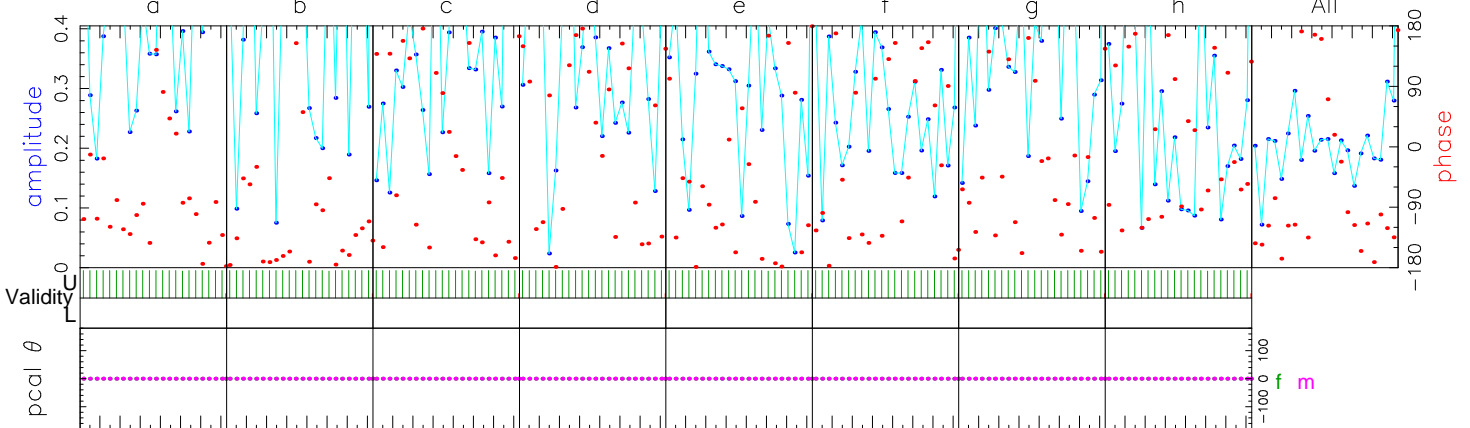


Fringe quality 9
SNR 7.6
Int time 419.317
Amp 0.135
Phase -133.0
PFD 1.3e-05
Delays (us)
SBD -0.003248
MBD -0.002316
Fringe rate (Hz) 0.016106
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 120001.00
Stop 120700.84
FRT 120331.00
Corr/FF/build
2021:303:024342
2021:303:120152
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
-3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.6	-135.8	-159.0	176.0	-123.9	-174.3	-87.8	-132.9	Phase	-133.0
	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	256.4	256.9	331.9	326.0	59.3	55.7	470.7	134.0	Sbd box	256.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.67213183428E+03	Apriori delay (usec)	-1.67212951838E+03	Resid mbdelay (usec)	-2.31590E-03	+/-	1.4E-04
Sband delay (usec)	-1.67213276613E+03	Apriori clock (usec)	-5.4427147E+00	Resid sbdelay (usec)	-3.24775E-03	+/-	1.1E-03
Phase delay (usec)	-1.67212952267E+03	Apriori clockrate (us/s)	-2.5800000E-07	Resid phdelay (usec)	-4.28933E-06	+/-	4.9E-07
Delay rate (us/s)	-1.21358201579E+00	Apriori rate (us/s)	-1.21358220277E+00	Resid rate (us/s)	1.86973E-07	+/-	2.0E-09
Total phase (deg)	-29.7	Apriori accel (us/s/s)	7.57334587156E-06	Resid phase (deg)	-133.0	+/-	15.2

ph/seg (deg)	60.7	Theor.	36.3	Amplitude	0.135 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.3		63.4	Search (2048X32)	0.133	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	36.5		21.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.4		37.4	Inc. seg. avg.	0.174	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.146	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 218.5 el 48.3 pa 33.1 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 6976.660 1459.100 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/fm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/fm.W.12.1X06HR

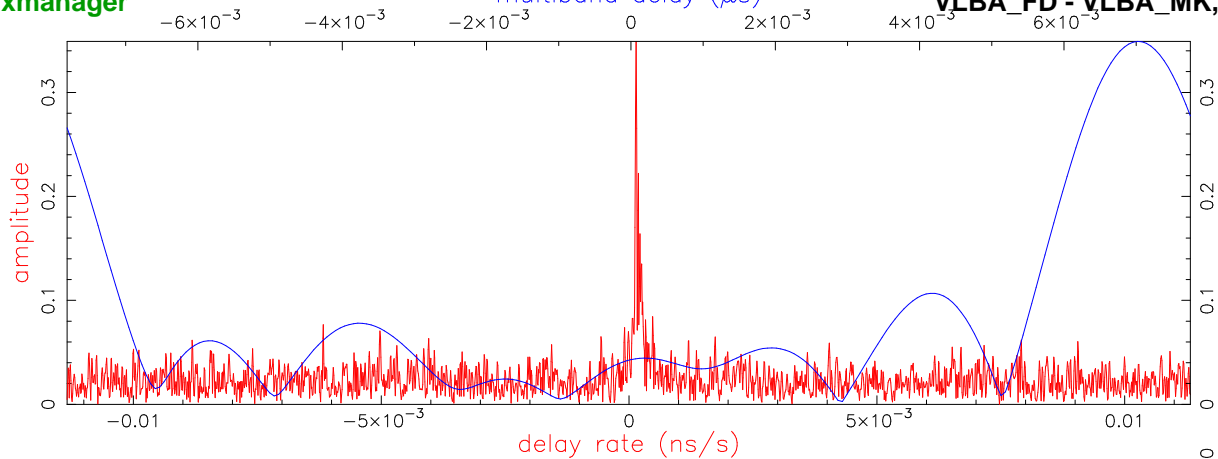
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, fm

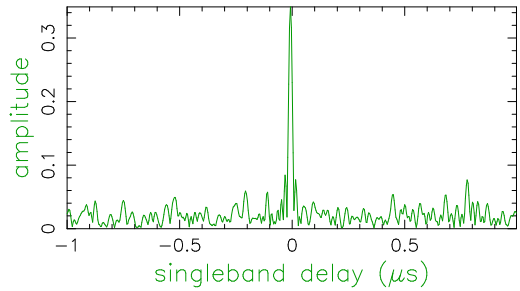
VLBA_FD - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

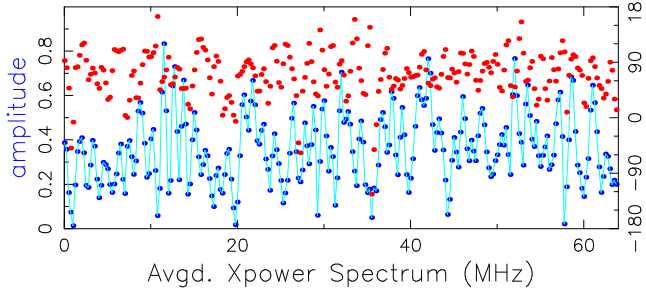


Fringe quality 9

SNR 19.5
 Int time 419.317
 Amp 0.349
 Phase -97.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.007815
 MBD 0.007029
 Fringe rate (Hz)
 0.012497
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

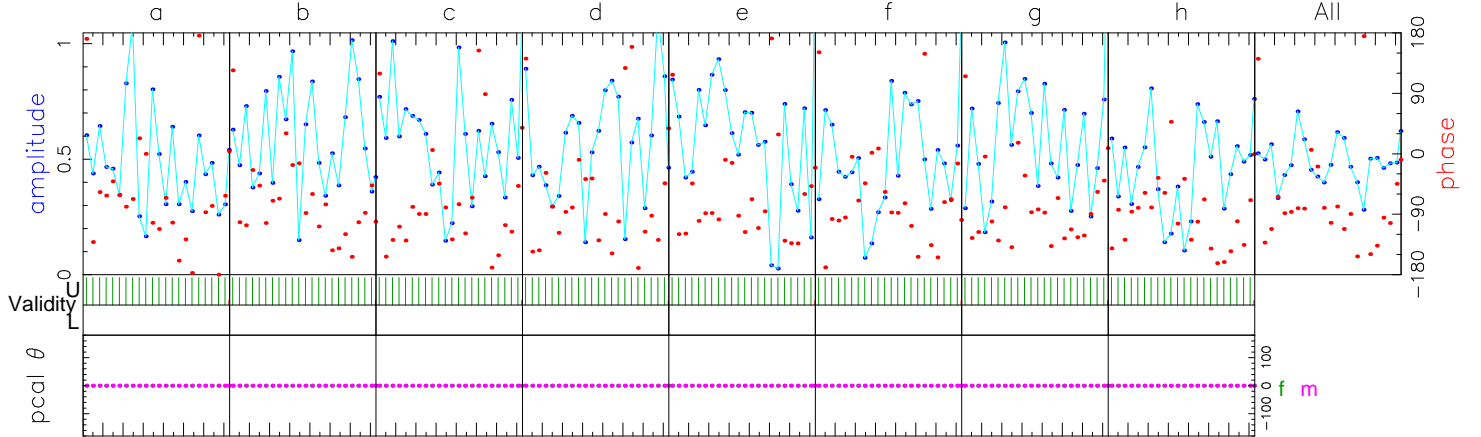


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120156
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.1	-87.1	-113.4	-109.6	-89.7	-97.3	-89.9	-101.7	Phase	-97.3
	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	Ampl.	0.3
	255.4	254.9	254.7	254.6	255.0	255.7	254.8	255.3	Sbd box	255.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.67213811472E+03	Apriori delay (usec)	-1.67212951838E+03	Resid mbdelay (usec)	7.02866E-03	+/-	5.6E-05
Sband delay (usec)	-1.67213733338E+03	Apriori clock (usec)	-5.4427147E+00	Resid sbdelay (usec)	-7.81500E-03	+/-	4.4E-04
Phase delay (usec)	-1.67212952152E+03	Apriori clockrate (us/s)	-2.5800000E-07	Resid phdelay (usec)	-3.13859E-06	+/-	1.9E-07
Delay rate (us/s)	-1.21358205769E+00	Apriori rate (us/s)	-1.21358220277E+00	Resid rate (us/s)	1.45081E-07	+/-	7.8E-10
Total phase (deg)	-354.0	Apriori accel (us/s/s)	7.57334587156E-06	Resid phase (deg)	-97.3	+/-	5.9

ph/seg (deg)	49.7	RMS	14.1	Theor.	14.1	Amplitude	0.349 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	47.4	Search (2048X32)	0.343	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	10.5	Inc. seg. avg.	0.472	Inc. frq. avg.	0.350	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	9.5	Inc. frq. avg.	0.350	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	dr window (ns/s)	-0.011	0.011
f: az 218.5 el 48.3 pa 33.1		m: az 128.8 el 54.4 pa -47.2		u, v (fr/asec)	6976.660 1459.100			ion window (TEC)	0.00	0.00	

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/fm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/fm.W.37.1X06HR simultaneous interpolator

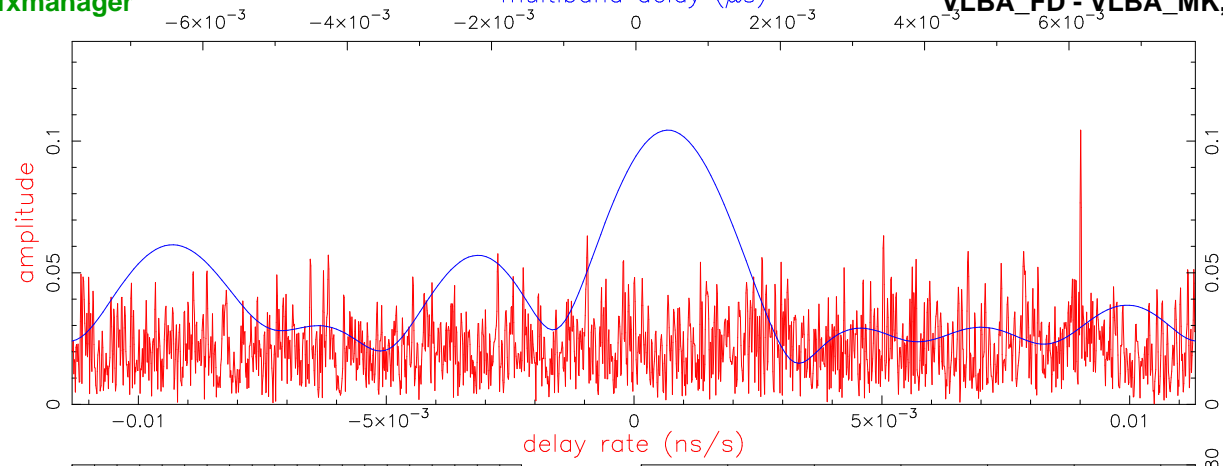
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, fm

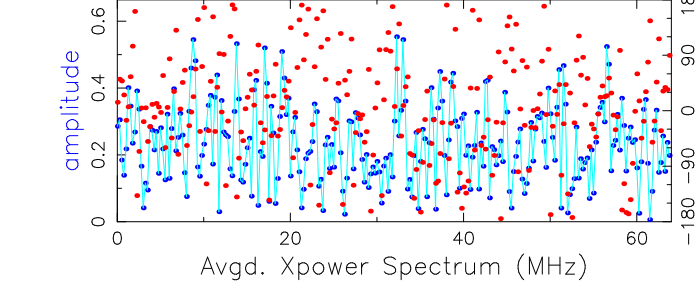
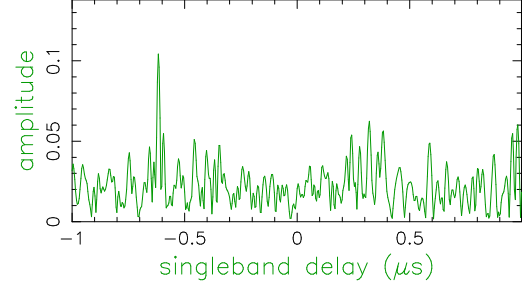
VLBA_FD - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)



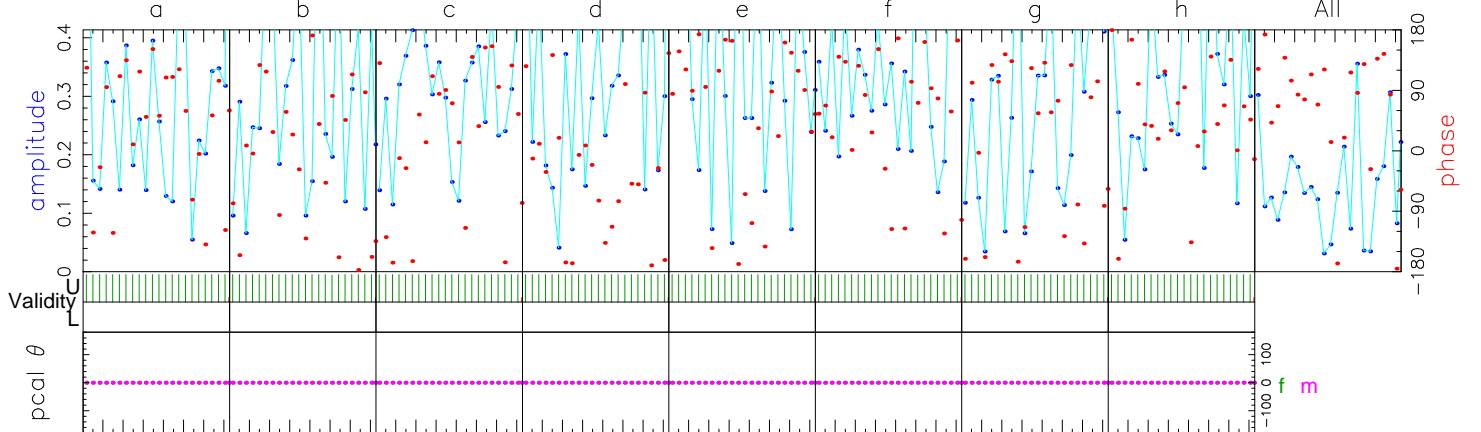
Fringe quality 0

SNR 5.9
 Int time 419.317
 Amp 0.138
 Phase 101.2
 PFD 6.9e-01
 Delays (us)
 SBD -0.616431
 MBD 0.000472
 Fringe rate (Hz) 0.777529
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build 2021:303:024342
 2021:303:120200
 2021:252:122852
 RA & Dec (J2000) 17h43m58.856136s
 --3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



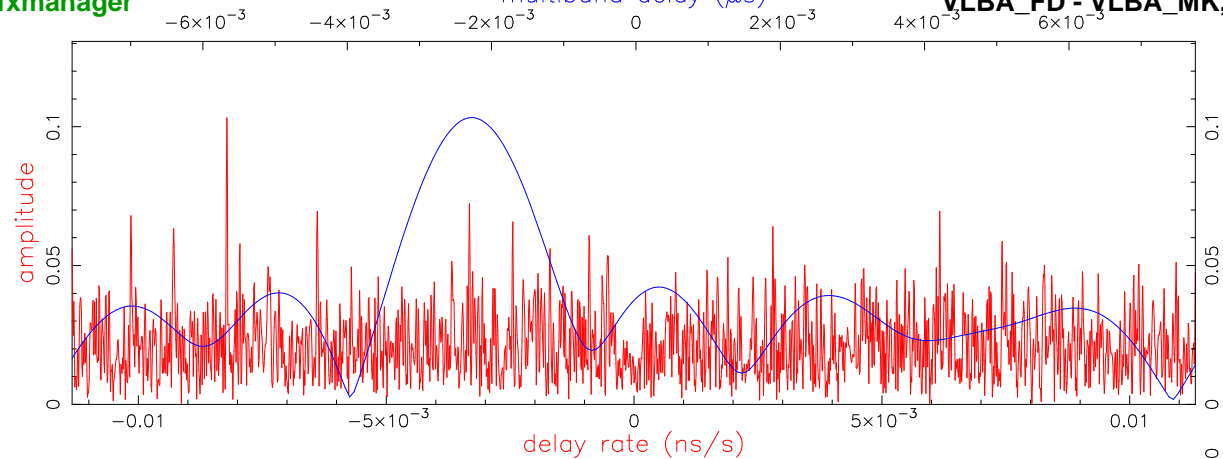
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.67273842179E+03	Apriori delay (usec)	-1.67212951838E+03	Resid mbdelay (usec)	4.71591E-04	+/-	1.9E-04
Sband delay (usec)	-1.67274594888E+03	Apriori clock (usec)	-5.4427147E+00	Resid sbdelay (usec)	-6.16431E-01	+/-	1.5E-03
Phase delay (usec)	-1.67212951511E+03	Apriori clockrate (us/s)	-2.5800000E-07	Resid phdelay (usec)	3.26273E-06	+/-	6.3E-07
Delay rate (us/s)	-1.21357317643E+00	Apriori rate (us/s)	-1.21358220277E+00	Resid rate (us/s)	9.02634E-06	+/-	2.6E-09
Total phase (deg)	-155.5	Apriori accel (us/s/s)	7.57334587156E-06	Resid phase (deg)	101.2	+/-	19.6

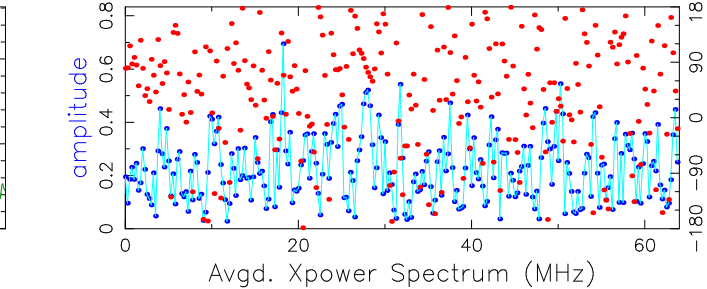
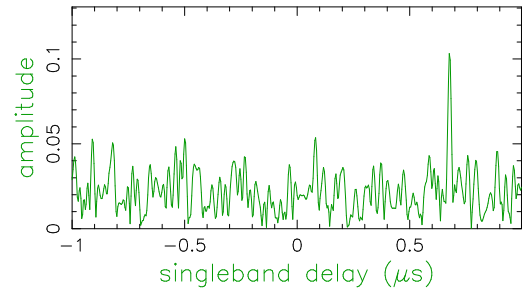
ph/seg (deg)	55.9	Theor.	46.9	Amplitude	0.138 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	91.6		81.8	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	71.6		27.7	Inc. seg. avg.	0.144	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	48.5		48.3	Inc. frq. avg.	0.146	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 218.5 el 48.3 pa 33.1 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 6976.660 1459.100 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/fm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/fm.W.55.1X06HR

multiband delay (μ s)

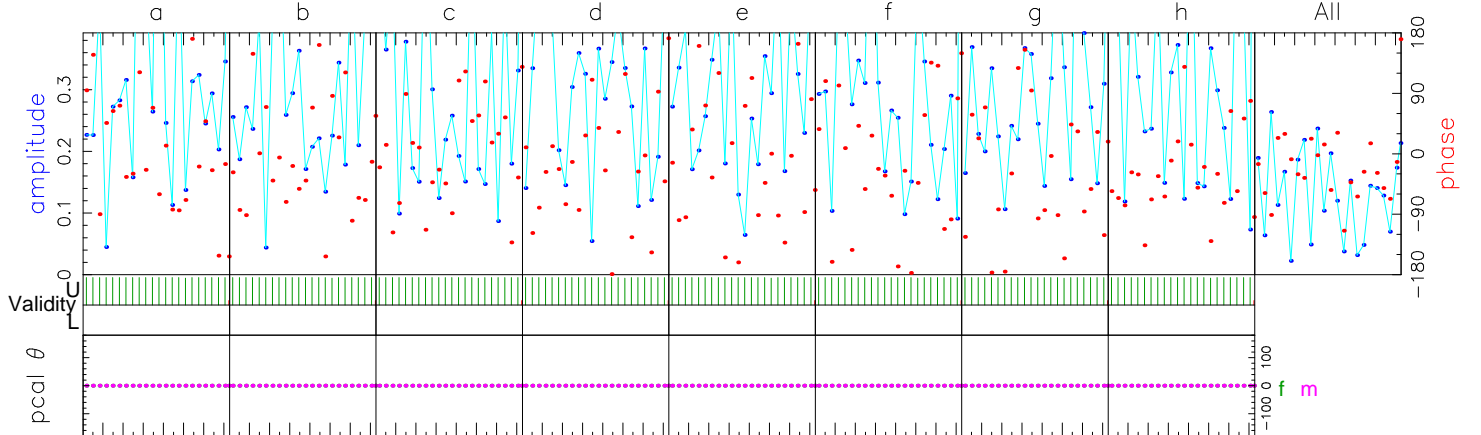


Fringe quality 0
SNR 5.8
Int time 419.317
Amp 0.131
Phase -24.3
PFD 7.4e-01
Delays (us)
SBD 0.677022
MBD -0.002223
Fringe rate (Hz) -0.708408
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 120001.00
Stop 120700.84
FRT 120331.00
Corr/FF/build
2021:303:024342
2021:303:120204
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.9	-32.9	-1.7	-24.7	-32.2	16.3	-41.7	-35.8	Phase	-24.3
	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.3	Ampl.	0.1
	21.4	264.2	378.0	94.6	42.7	2.4	190.8	430.7	Sbd box	430.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.67145986634E+03		Apriori delay (usec)		-1.67212951838E+03		Resid mbdelay (usec)		-2.22296E-03	+/- 1.9E-04
Sband delay (usec)	-1.67145249663E+03		Apriori clock (usec)		-5.4427147E+00		Resid sbdelay (usec)		6.77022E-01	+/- 1.5E-03
Phase delay (usec)	-1.67212951916E+03		Apriori clockrate (us/s)		-2.5800000E-07		Resid phdelay (usec)		-7.82109E-07	+/- 6.3E-07
Delay rate (us/s)	-1.21359042668E+00		Apriori rate (us/s)		-1.21358220277E+00		Resid rate (us/s)		-8.22392E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		7.57334587156E-06		Resid phase (deg)		-24.3	+/- 19.6

ph/seg (deg) 41.5 47.1 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 70.9 82.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 21.3 27.8 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 49.4 48.5 Inc. frq. avg. 0.121 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 218.5 el 48.3 pa 33.1 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 6976.660 1459.100 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/fm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/fm.W.74.1X06HR

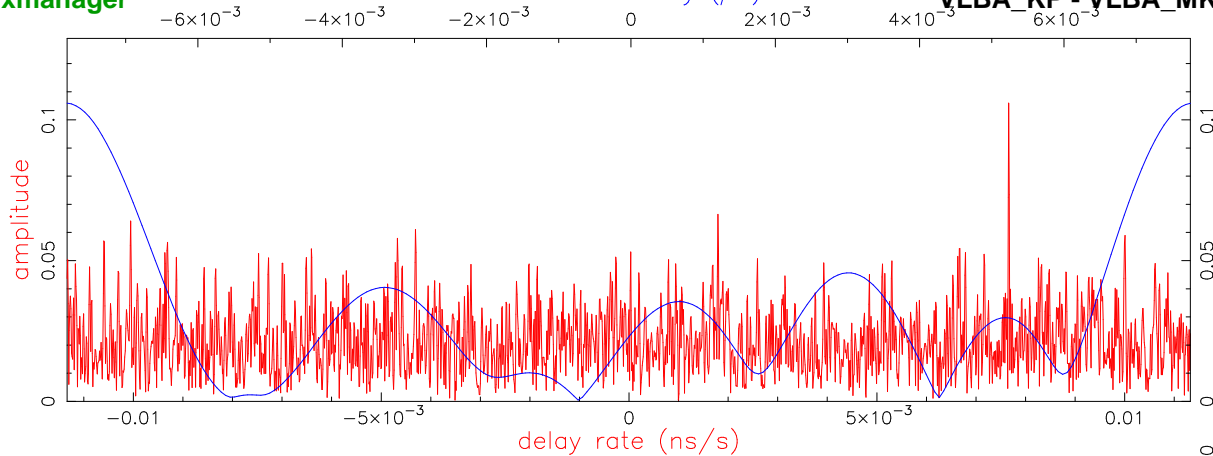
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, km

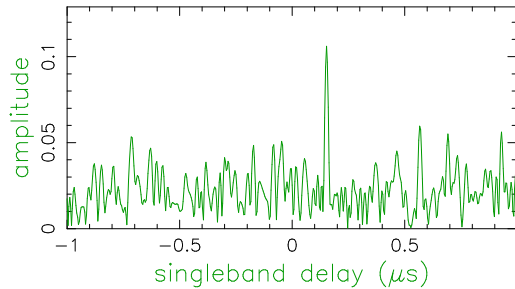
VLBA_KP - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

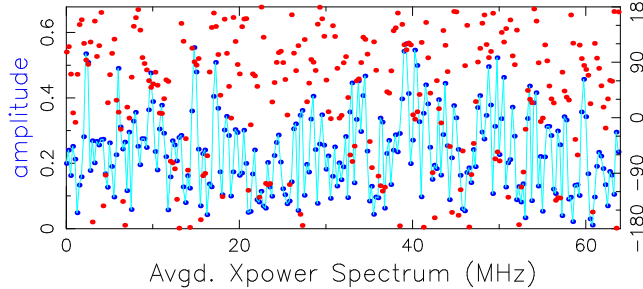


Fringe quality 0

SNR 5.9
 Int time 419.823
 Amp 0.129
 Phase -29.8
 PFD 5.2e-01
 Delays (us)
 SBD 0.152578
 MBD 0.007802
 Fringe rate (Hz)
 0.660721
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

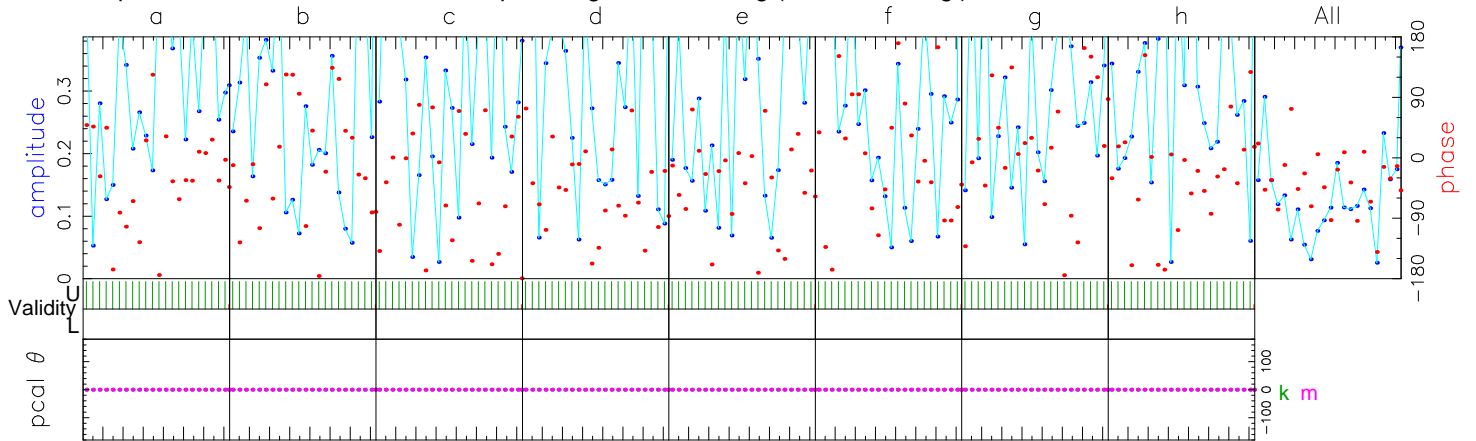


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120152
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-19.6	-36.5	-46.5	-42.8	-18.3	-42.5	6.1	-46.3	Phase	-29.8
	0.2	0.1	0.1	0.2	0.2	0.0	0.1	0.2	Ampl.	0.1
	297.5	329.2	291.8	201.7	296.4	303.8	4.2	90.0	Sbd box	296.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.05300993933E+03		Apriori delay (usec)		-1.05315836626E+03		Resid mbdelay (usec)		7.80194E-03	+/- 1.8E-04
Sband delay (usec)	-1.05300578876E+03		Apriori clock (usec)		-1.5381931E+01		Resid sbdelay (usec)		1.52578E-01	+/- 1.5E-03
Phase delay (usec)	-1.05315836722E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		-9.59574E-07	+/- 6.2E-07
Delay rate (us/s)	-1.04211657146E+00		Apriori rate (us/s)		-1.04212424177E+00		Resid rate (us/s)		7.67031E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.08008578788E-06		Resid phase (deg)		-29.8	+/- 19.3

	RMS	Theor.	Amplitude	0.129 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	45.0	46.3	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	63.7	80.7	Interp.	0.000	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	20.2	27.3	Inc. seg. avg.	0.117	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
amp/frq (%)	38.5	47.6	Inc. frq. avg.	0.121					

k: az 207.2 el 50.8 pa 23.8 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 5988.870 1652.752 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/km..1X06HR Output file: /Exps/c211c/v1/1234/No0062/km.W.19.1X06HR

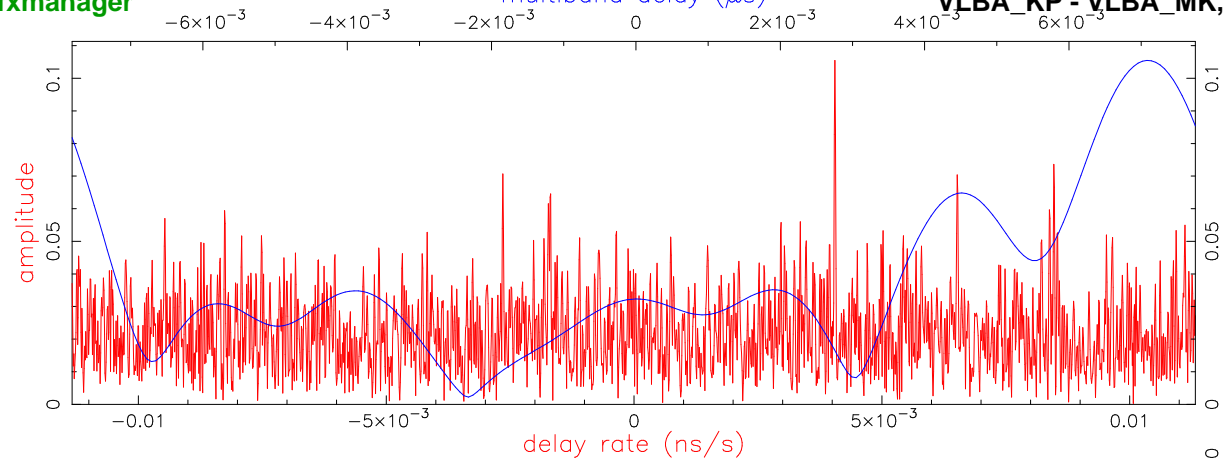
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, km

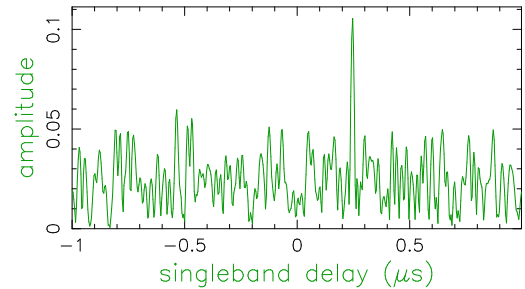
VLBA_KP - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

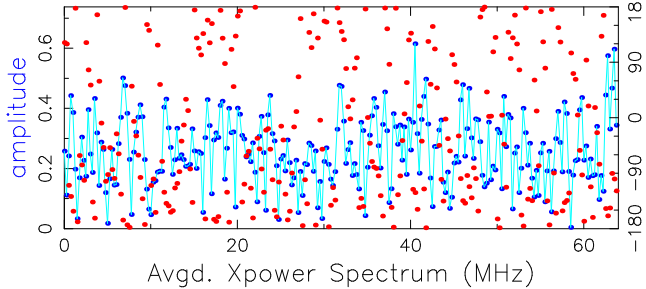


Fringe quality 0

SNR 5.9
 Int time 419.823
 Amp 0.111
 Phase 86.6
 PFD 5.7e-01
 Delays (us)
 SBD 0.245843
 MBD 0.007085
 Fringe rate (Hz)
 0.349272
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

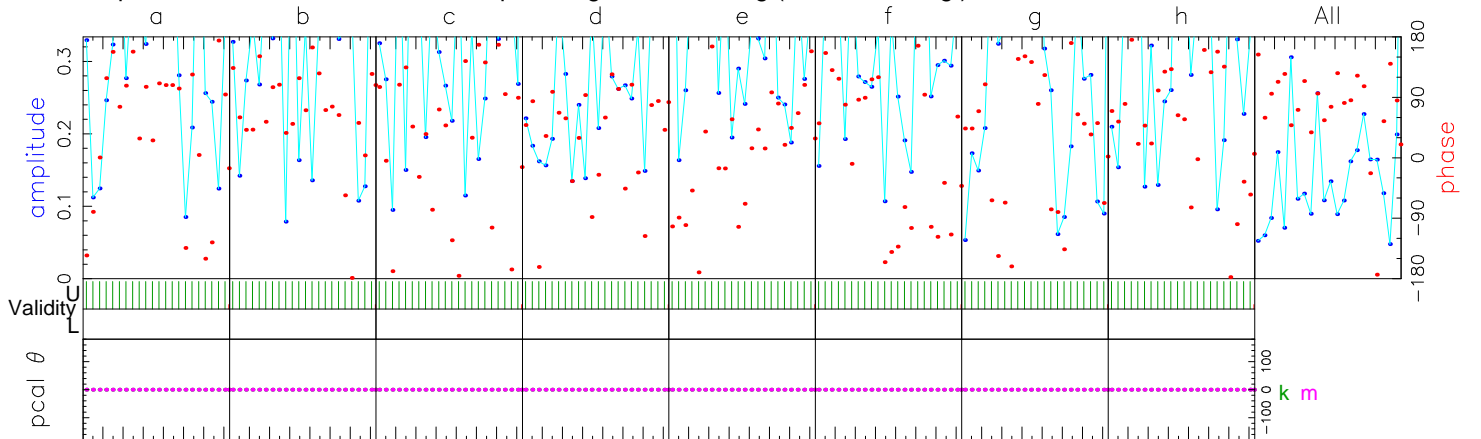


delay rate (ns/s)



Exp. c211c
 Yr:day 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120157
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.05291690662E+03									
Sband delay (usec)	-1.05291252301E+03									
Phase delay (usec)	-1.05315836347E+03									
Delay rate (us/s)	-1.04212018707E+00									
Total phase (deg)		-154.7								
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
k m										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.111 +/- 0.019										
0.103										
0.000										
0.112										
0.111										
7.08465E-03										
2.45843E-01										
2.79108E-06										
4.05470E-06										
86.6										
+/- 1.8E-04										
+/- 1.5E-03										
+/- 6.2E-07										
+/- 2.6E-09										
+/- 19.4										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
simultaneous interpolator										

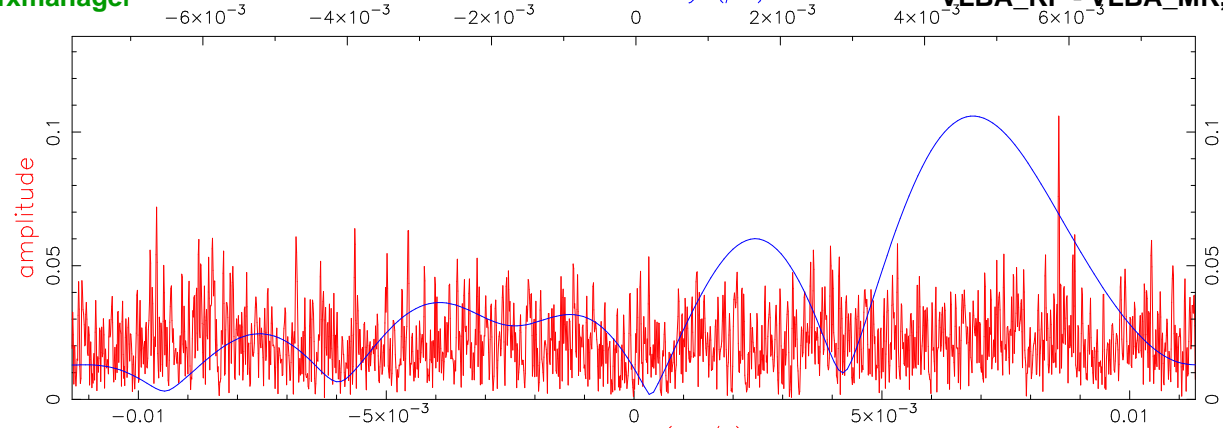
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

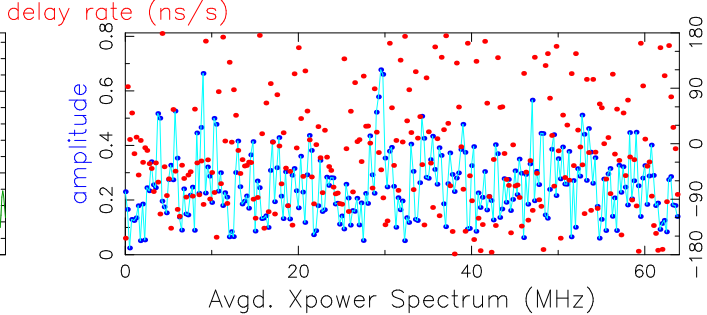
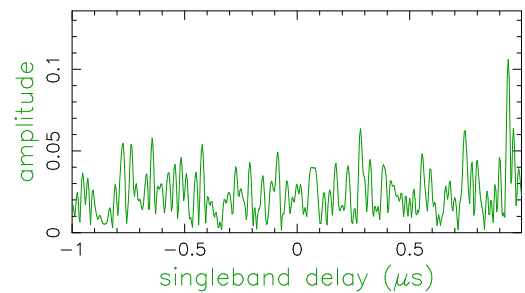
1741-038.1X06HR, No0062, km

VLBA_KP - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

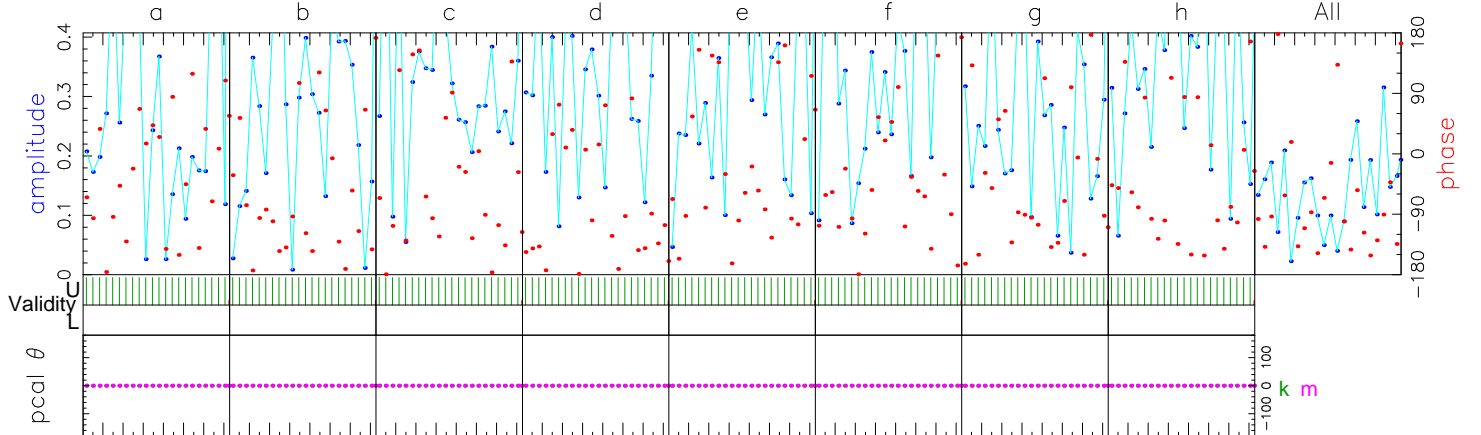


Fringe quality 0
 SNR 5.9
 Int time 419.823
 Amp 0.136
 Phase -103.7
 PFD 5.3e-01
 Delays (us)
 SBD 0.937507
 MBD 0.004671
 Fringe rate (Hz) 0.739107
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build 2021:303:024342
 2021:303:120201
 2021:252:122852
 RA & Dec (J2000) 17h43m58.856136s --3°50'04.616734"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-25.8	-130.6	-141.1	-117.2	-104.8	-73.2	-95.2	-124.2	Phase	-103.7
	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	235.5	276.3	121.4	459.1	229.2	497.4	435.8	55.4	Sbd box	497.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.05221619522E+03		Apriori delay (usec)		-1.05315836626E+03		Resid mbdelay (usec)		4.67105E-03	+/- 1.8E-04
Sband delay (usec)	-1.05222085951E+03		Apriori clock (usec)		-1.5381931E+01		Resid sbdelay (usec)		9.37507E-01	+/- 1.5E-03
Phase delay (usec)	-1.05315836961E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		-3.34264E-06	+/- 6.2E-07
Delay rate (us/s)	-1.04211566147E+00		Apriori rate (us/s)		-1.04212424177E+00		Resid rate (us/s)		8.58030E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.08008578788E-06		Resid phase (deg)		-103.7	+/- 19.3

ph/seg (deg) 54.4 46.3 Amplitude 0.136 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.8 80.8 Search (2048X32) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.4 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.3 47.6 Inc. seg. avg. 0.135 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 k: az 207.2 el 50.8 pa 23.8 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 5988.870 1652.752 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/km..1X06HR Output file: /Exps/c211c/v1/1234/No0062/km.W.59.1X06HR simultaneous interpolator

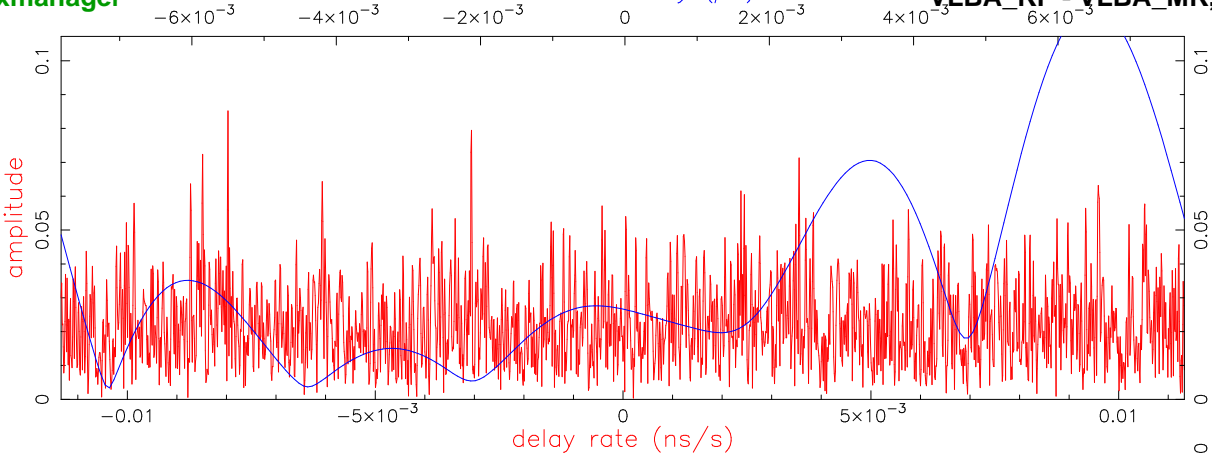
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, km

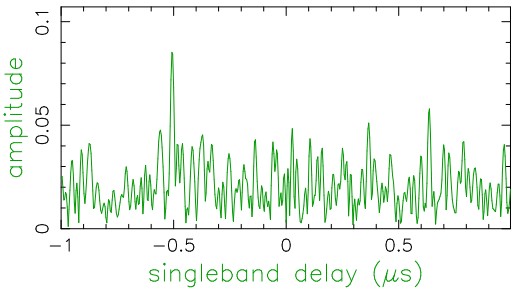
VLBA_KP - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

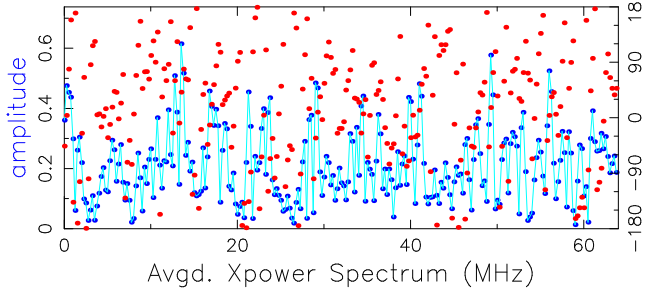


Fringe quality 0

SNR 4.9
 Int time 419.823
 Amp 0.107
 Phase 63.7
 PFD 1.0e+00
 Delays (us)
 SBD -0.506113
 MBD -0.008301
 Fringe rate (Hz)
 -0.687392
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

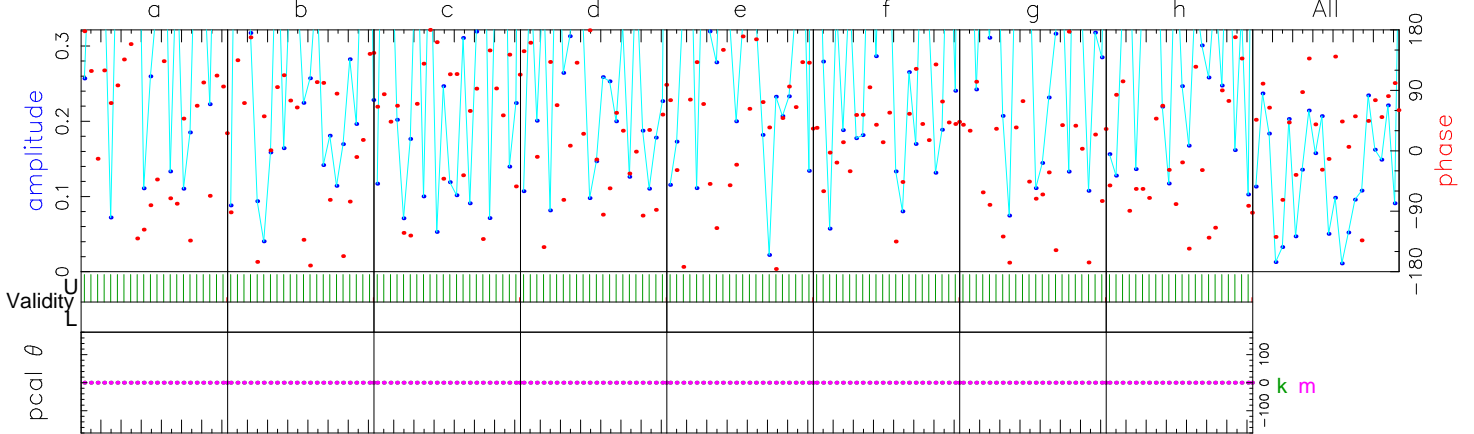


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120205
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 --3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	127.8	106.3	84.3	20.1	99.5	34.4	9.1	-45.7	Phase	63.7
	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.1	Ampl.	0.1
	218.7	158.2	421.9	419.7	128.8	126.6	125.5	75.2	Sbd box	127.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.05366666705E+03		Apriori delay (usec)		-1.05315836626E+03		Resid mbdelay (usec)		-8.30078E-03	+/- 2.2E-04
Sband delay (usec)	-1.05366447951E+03		Apriori clock (usec)		-1.5381931E+01		Resid sbdelay (usec)		-5.06113E-01	+/- 1.8E-03
Phase delay (usec)	-1.05315836421E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		2.05497E-06	+/- 7.6E-07
Delay rate (us/s)	-1.04213222170E+00		Apriori rate (us/s)		-1.04212424177E+00		Resid rate (us/s)		-7.97993E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		4.08008578788E-06		Resid phase (deg)		63.7	+/- 23.6

	RMS	Theor.	Amplitude	0.107 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	73.1	56.6	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	101.3	98.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	65.0	33.4	Inc. seg. avg.	0.108	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	74.9	58.3	Inc. frq. avg.	0.133	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 207.2 el 50.8 pa 23.8 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 5988.870 1652.752 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/km..1X06HR Output file: /Exps/c211c/v1/1234/No0062/km.W.80.1X06HR

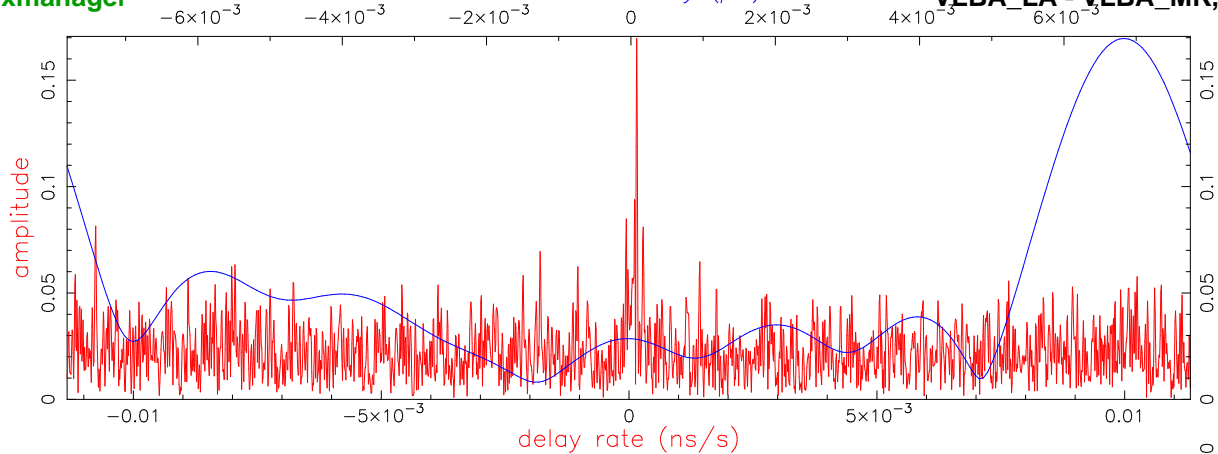
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, Im

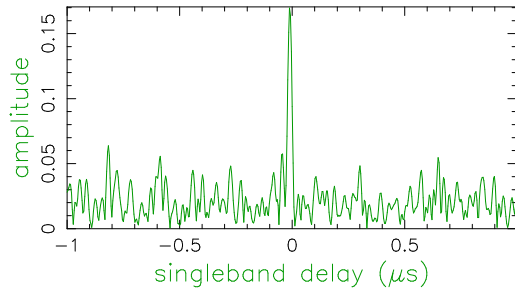
VLBA_LA - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

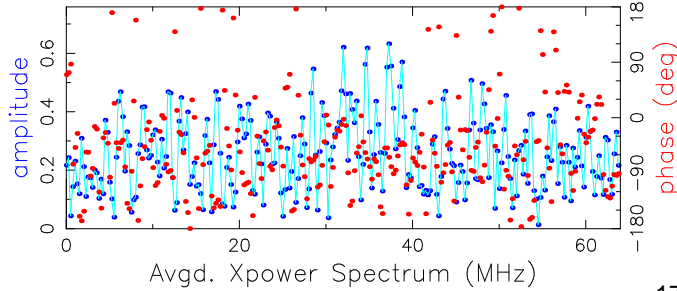


Fringe quality 9

SNR 9.6
 Int time 419.823
 Amp 0.171
 Phase 90.1
 PFD 4.8e-13
 Delays (us)
 SBD -0.010645
 MBD 0.006834
 Fringe rate (Hz)
 0.013545
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

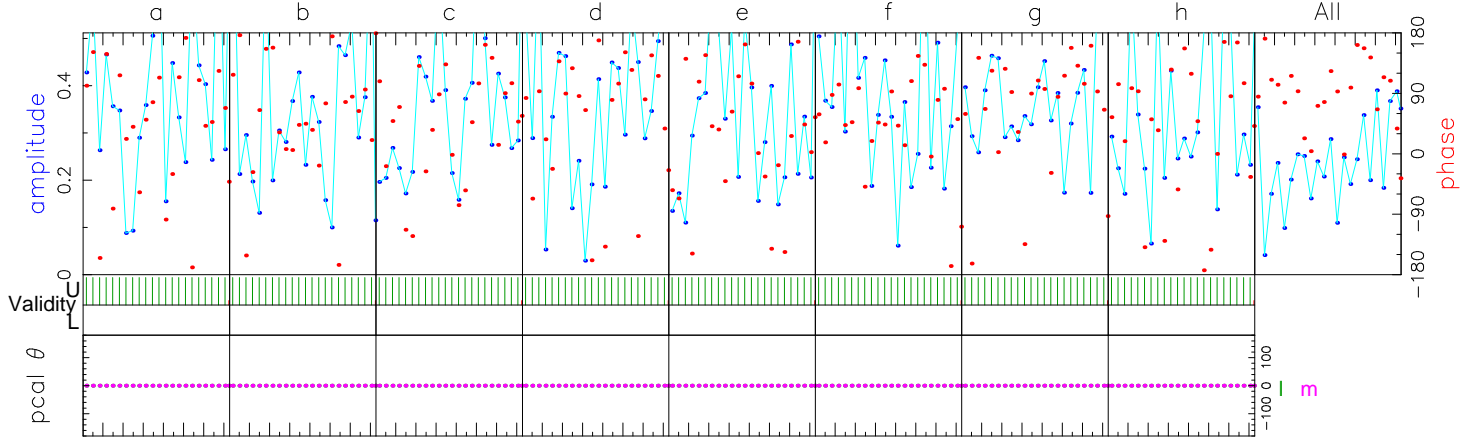


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120210
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	113.5	75.7	77.1	106.4	66.3	68.3	97.6	114.3	Phase	90.1
	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.1	Ampl.	0.2
	57.0	18.3	255.7	252.5	387.1	254.3	254.4	192.1	Sbd box	254.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.44559309599E+03				-2.44558430450E+03				Resid mbdelay (usec)	6.83351E-03 +/- 1.1E-04
Sband delay (usec)	-2.44559494950E+03				-1.8324209E+01				Resid sbdelay (usec)	-1.06450E-02 +/- 9.0E-04
Phase delay (usec)	-2.44558430159E+03				-6.0400003E-07				Resid phdelay (usec)	2.90699E-06 +/- 3.9E-07
Delay rate (us/s)	-1.13509836061E+00				-1.13509851786E+00				Resid rate (us/s)	1.57248E-07 +/- 1.6E-09
Total phase (deg)		-266.0			1.10501940968E-05				Resid phase (deg)	90.1 +/- 12.0
	RMS	Theor.	Amplitude	0.171 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	47.2	28.7	Search (2048X32)	0.166					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	65.7	50.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.9	17.0	Inc. seg. avg.	0.209					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	27.5	29.6	Inc. frq. avg.	0.171					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

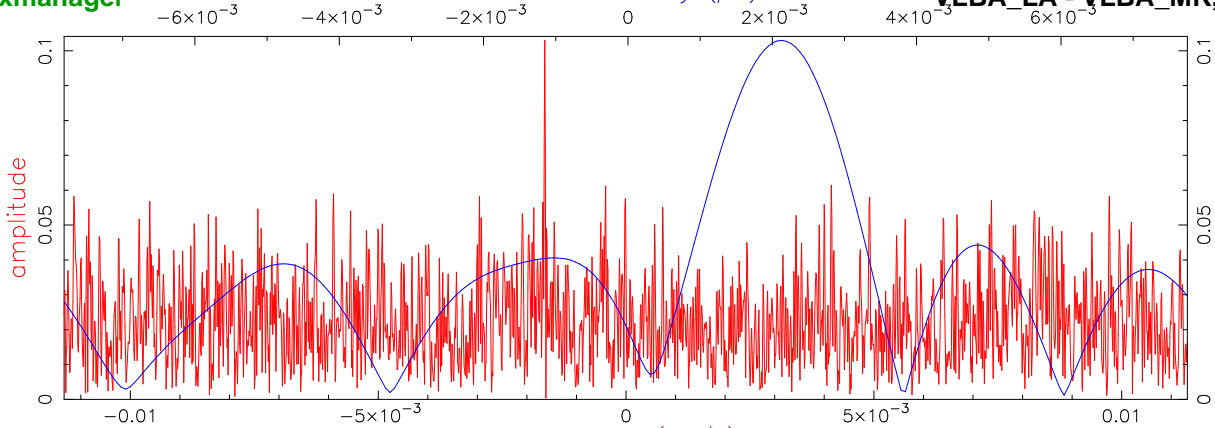
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

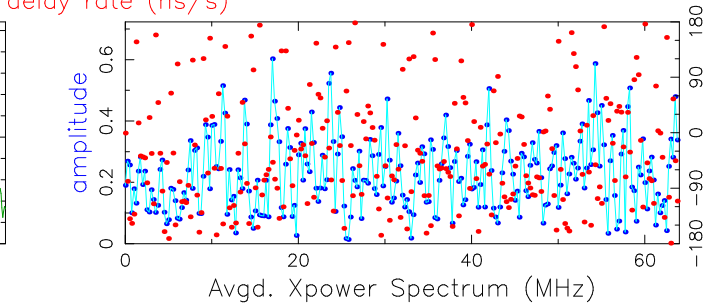
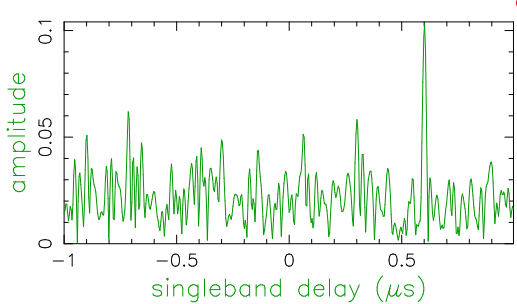
1741-038.1X06HR, No0062, Im

VLBA_LA - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

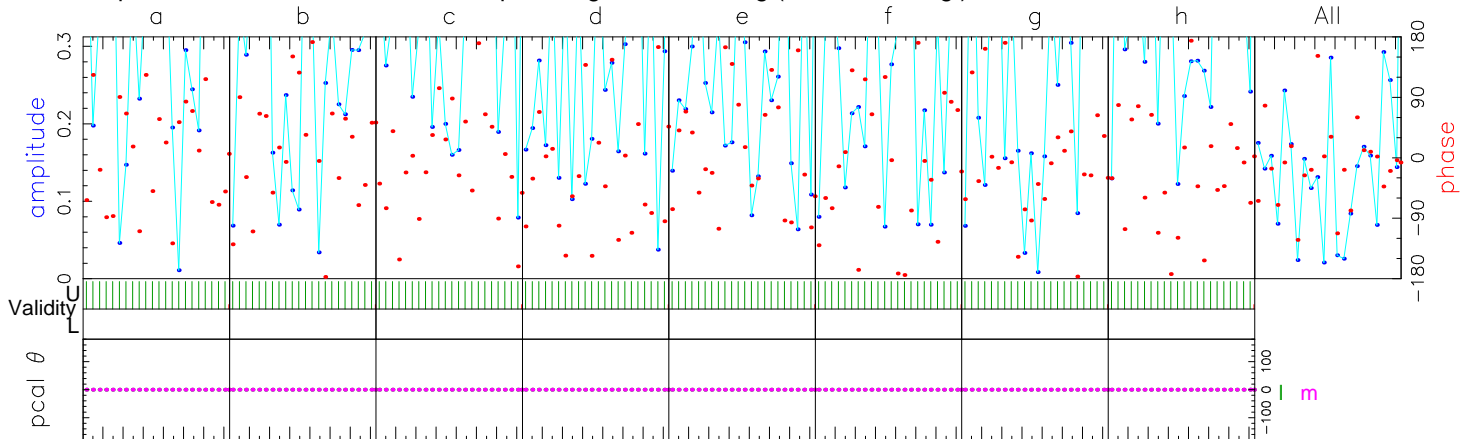


Fringe quality 0
 SNR 5.8
 Int time 419.823
 Amp 0.104
 Phase -6.4
 PFD 8.4e-01
 Delays (us)
 SBD 0.600888
 MBD 0.002119
 Fringe rate (Hz)
 -0.141380
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120214
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
l	0	0	0	0	0	0	0	0			
m	0	0	0	0	0	0	0	0			
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l	1000	1000	1000	1000	1000	1000	1000	1000			
m	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-2.44498843589E+03				-2.44558430450E+03				2.11861E-03	+/- 1.9E-04	
Sband delay (usec)	-2.44498341675E+03				-1.8324209E+01				6.00888E-01	+/- 1.5E-03	
Phase delay (usec)	-2.44558430470E+03				-6.0400003E-07				-2.07588E-07	+/- 6.4E-07	
Delay rate (us/s)	-1.13510015915E+00				-1.13509851786E+00				-1.64129E-06	+/- 2.6E-09	
Total phase (deg)			-2.6		1.10501940968E-05				-6.4	+/- 19.8	
	RMS	Theor.	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	59.6	47.5	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	93.1	82.9	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	27.7	28.0	Inc. seg. avg.	0.107	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	42.1	48.9	Inc. frq. avg.	0.100	Data rate(Mb/s): 2048				nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 212.4 el 45.3 pa 26.7 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 6531.766 2104.365 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/lm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/lm.W.121.1X06HR

Mk4/DiFX fourfit 3.21 rev 2937

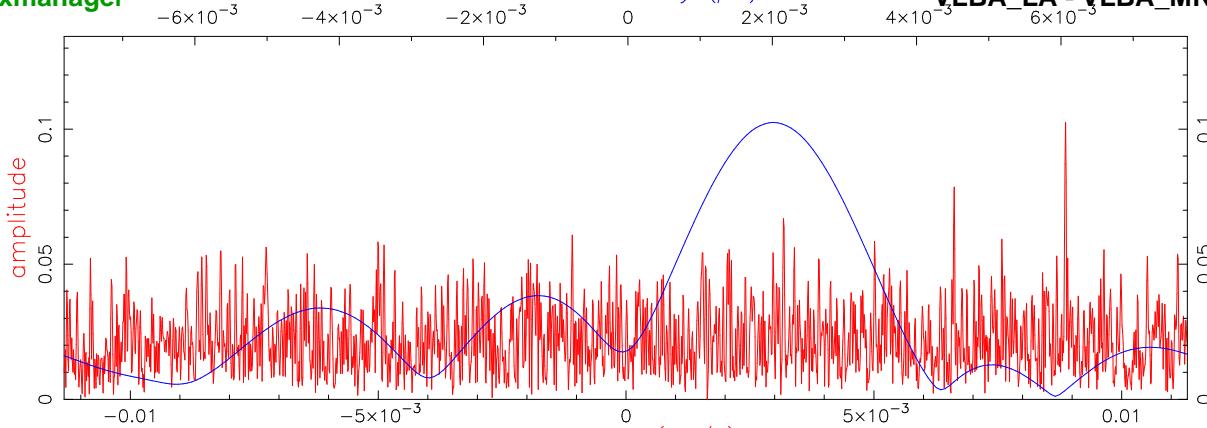
fxmanager

1741-038.1X06HR, No0062, Im

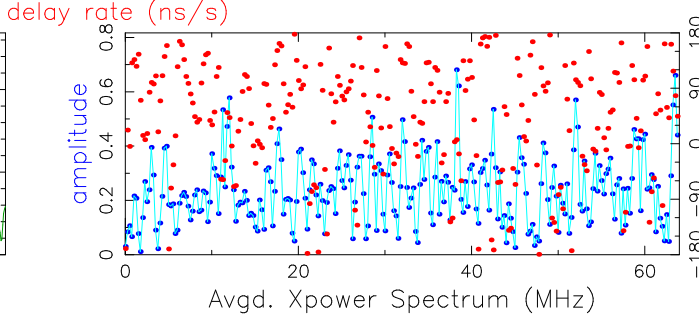
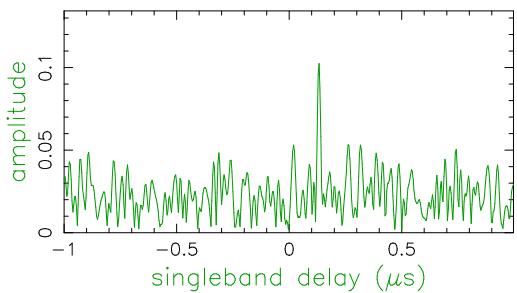
VLBA_LA - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 0

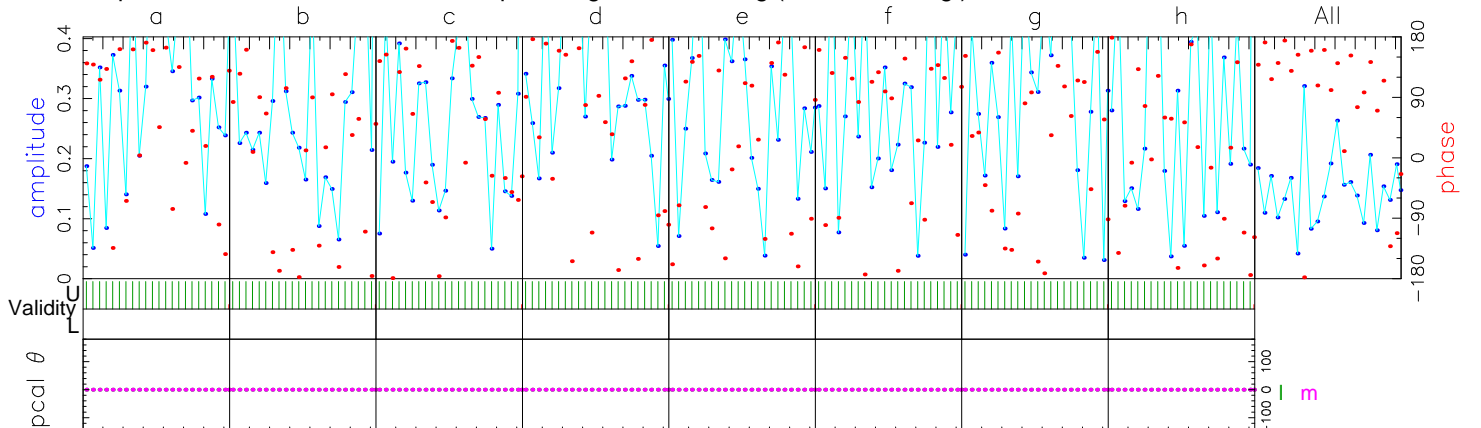


SNR 5.8
 Int time 419.823
 Amp 0.134
 Phase 141.5
 PFD 8.7e-01
 Delays (us)
 SBD 0.132047
 MBD 0.001988
 Fringe rate (Hz)
 0.765492
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120218
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.44545731677E+03				-2.44558430450E+03				1.98773E-03	+/- 1.9E-04
Sband delay (usec)	-2.44545225800E+03				-1.8324209E+01				1.32047E-01	+/- 1.5E-03
Phase delay (usec)	-2.44558429993E+03				-6.0400003E-07				4.56431E-06	+/- 6.4E-07
Delay rate (us/s)	-1.13508963126E+00				-1.13509851786E+00				8.88660E-06	+/- 2.6E-09
Total phase (deg)			-214.6						141.5	+/- 19.9
	RMS	Theor.	Amplitude	0.134 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	52.5	47.7	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	75.4	83.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	22.2	28.1	Inc. seg. avg.	0.146	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	44.6	49.1	Inc. frq. avg.	0.124	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 212.4 el 45.3 pa 26.7 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 6531.766 2104.365 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/lm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/lm.W.139.1X06HR

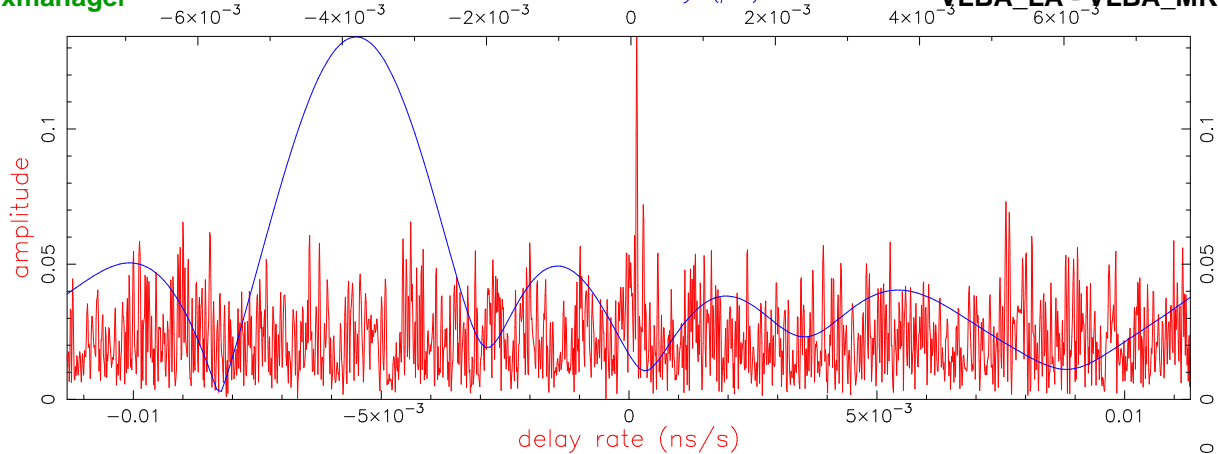
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, Im

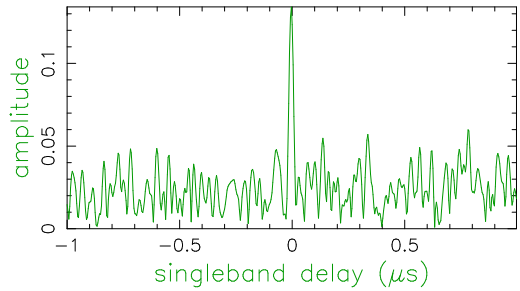
VLBA_LA - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

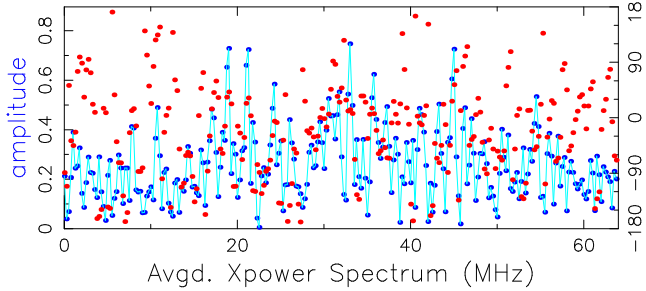


Fringe quality 9

SNR 7.5
 Int time 419.823
 Amp 0.134
 Phase -21.3
 PFD 1.7e-05
 Delays (us)
 SBD -0.004438
 MBD -0.003807
 Fringe rate (Hz)
 0.013566
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

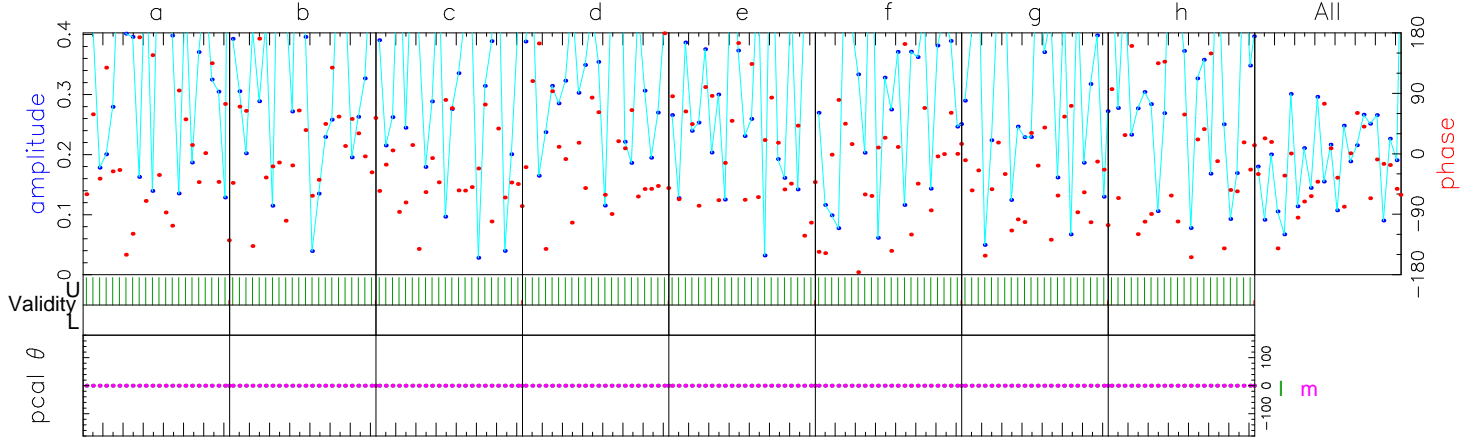


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120207
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-46.5	11.5	-38.6	-11.5	2.4	-7.3	-34.9	-21.3	Phase	-21.3
	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	379.8	135.4	255.8	501.6	296.9	411.4	255.8	321.6	Sbd box	255.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -2.4455881142E+03 Apriori delay (usec) -2.44558430450E+03 Resid mbdelay (usec) -3.80693E-03 +/- 1.4E-04
 Sband delay (usec) -2.44558874225E+03 Apriori clock (usec) -1.8324209E+01 Resid sbdelay (usec) -4.43775E-03 +/- 1.1E-03
 Phase delay (usec) -2.44558430518E+03 Apriori clockrate (us/s) -6.0400003E-07 Resid phdelay (usec) -6.85797E-07 +/- 4.9E-07
 Delay rate (us/s) -1.13509836037E+00 Apriori rate (us/s) -1.13509851786E+00 Resid rate (us/s) 1.57490E-07 +/- 2.0E-09
 Total phase (deg) -17.4 Apriori accel (us/s/s) 1.10501940968E-05 Resid phase (deg) -21.3 +/- 15.2

RMS Theor. Amplitude 0.134 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 50.5 36.5 Search (2048X32) 0.131 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 69.1 63.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 22.5 21.5 Inc. seg. avg. 0.158 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 36.5 37.6 Inc. frq. avg. 0.133 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

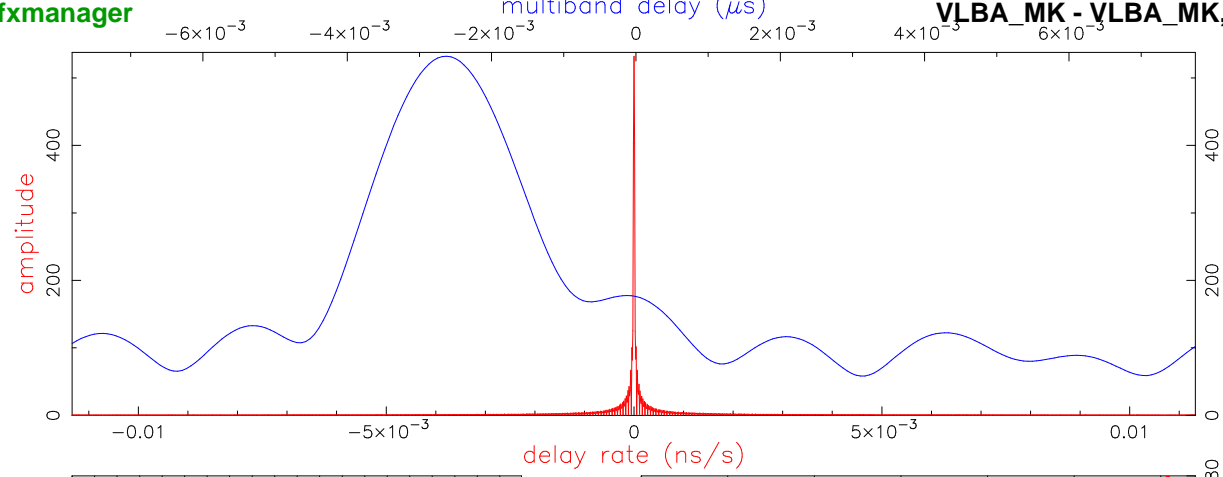
l: az 212.4 el 45.3 pa 26.7 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 6531.766 2104.365 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/Im..1X06HR Output file: /Exps/c211c/v1/1234/No0062/Im.W.86.1X06HR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

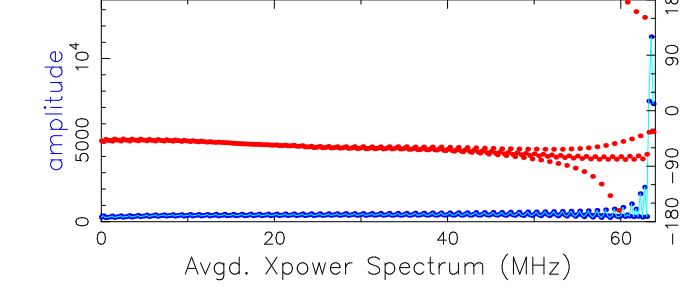
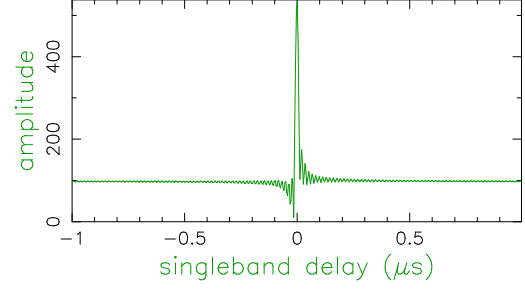
1741-038.1X06HR, No0062, mm

VLBA_MK - VLBA_MK, fgroup W, pol LR



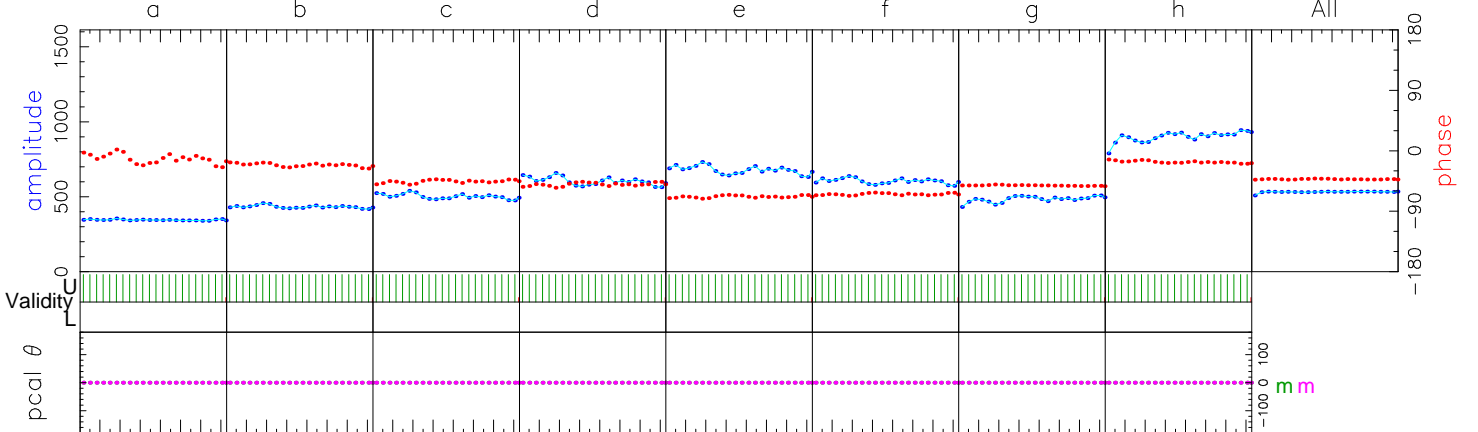
Fringe quality 6

SNR 30136.5
 Int time 419.823
 Amp 537.851
 Phase -42.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001179
 MBD -0.002603
 Fringe rate (Hz)
 0.000009
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



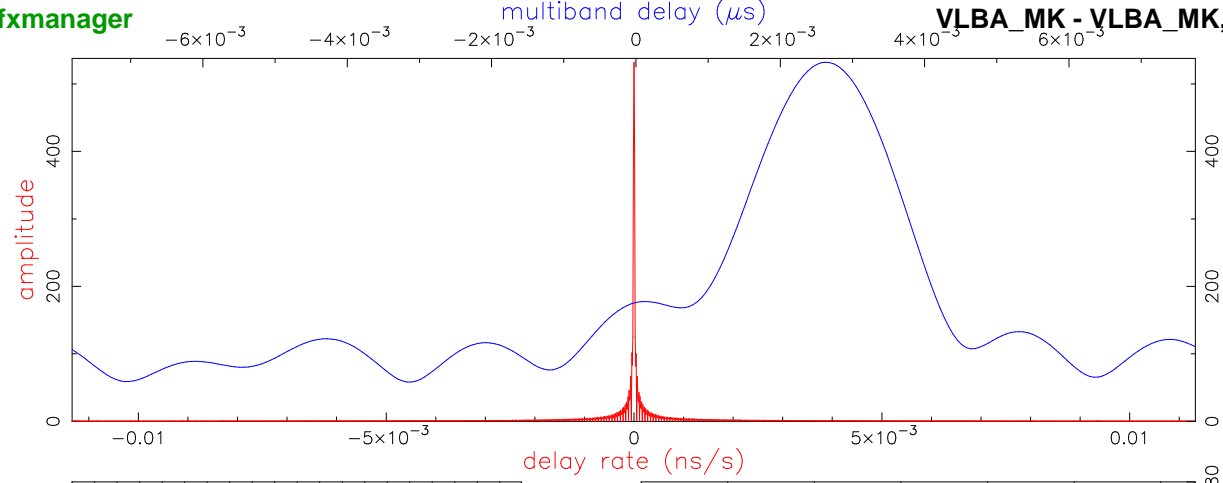
Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120213
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-11.7	-21.1	-45.8	-50.1	-68.3	-64.6	-51.5	-16.6	Phase	-42.3
	343.3	433.2	502.6	604.6	678.8	604.4	484.0	899.1	Ampl.	568.7
	256.2	255.9	256.0	256.4	256.0	256.4	256.8	256.1	Sbd box	256.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.60290625000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.60291E-03	+/- 3.6E-08
Sband delay (usec)	-1.17875000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.17875E-03	+/- 2.9E-07
Phase delay (usec)	-1.36276746470E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.36277E-06	+/- 1.2E-10
Delay rate (us/s)	1.09117873416E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.09118E-10	+/- 5.1E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-42.3	+/- 0.0

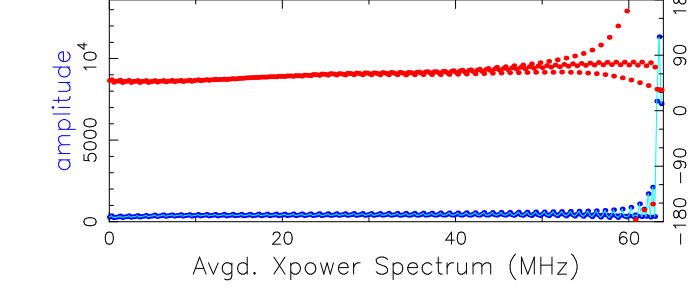
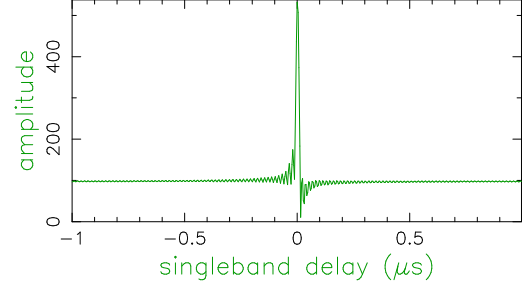
ph/seg (deg) 0.4 0.0 Amplitude 537.851 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.4 0.0 Search (2048X32) 524.709 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.3 0.0 Inc. seg. avg. 532.105 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 m: az 128.8 el 54.4 pa -47.2 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mm.W.114.1X06HR simultaneous interpolator



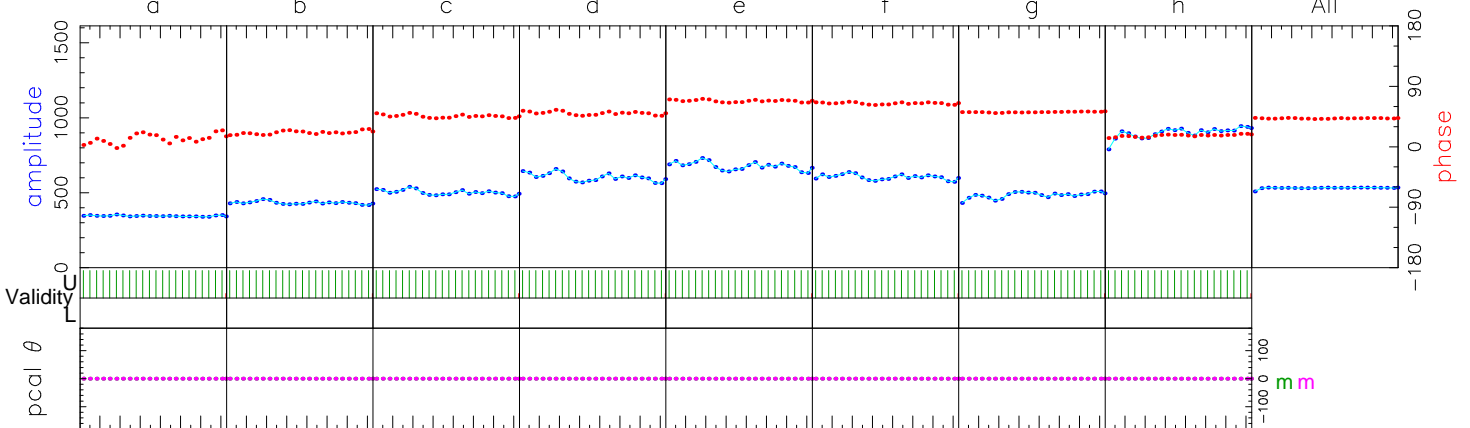
Fringe quality 6

SNR 30136.5
Int time 419.823
Amp 537.851
Phase 42.3
PFD 0.0e+00
Delays (us)
SBD 0.001179
MBD 0.002603
Fringe rate (Hz)
-0.000009
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 120001.00
Stop 120700.84
FRT 120331.00
Corr/FF/build
2021:303:024342
2021:303:120216
2021:252:122852
RA & Dec (J2000)
17h43m58.856136s
--3°50'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	11.7	21.1	45.8	50.1	68.3	64.6	51.5	16.6	Phase	42.3
	343.3	433.2	502.6	604.6	678.8	604.4	484.0	899.1	Ampl.	568.7
	257.8	258.1	258.0	257.6	258.0	257.6	257.2	257.9	Sbd box	257.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.60290625000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.60291E-03	+/- 3.6E-08
Sband delay (usec)	1.17875000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.17875E-03	+/- 2.9E-07
Phase delay (usec)	1.36276746469E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		1.36277E-06	+/- 1.2E-10
Delay rate (us/s)	-1.09117873416E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.09118E-10	+/- 5.1E-13
Total phase (deg)	42.3		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		42.3	+/- 0.0

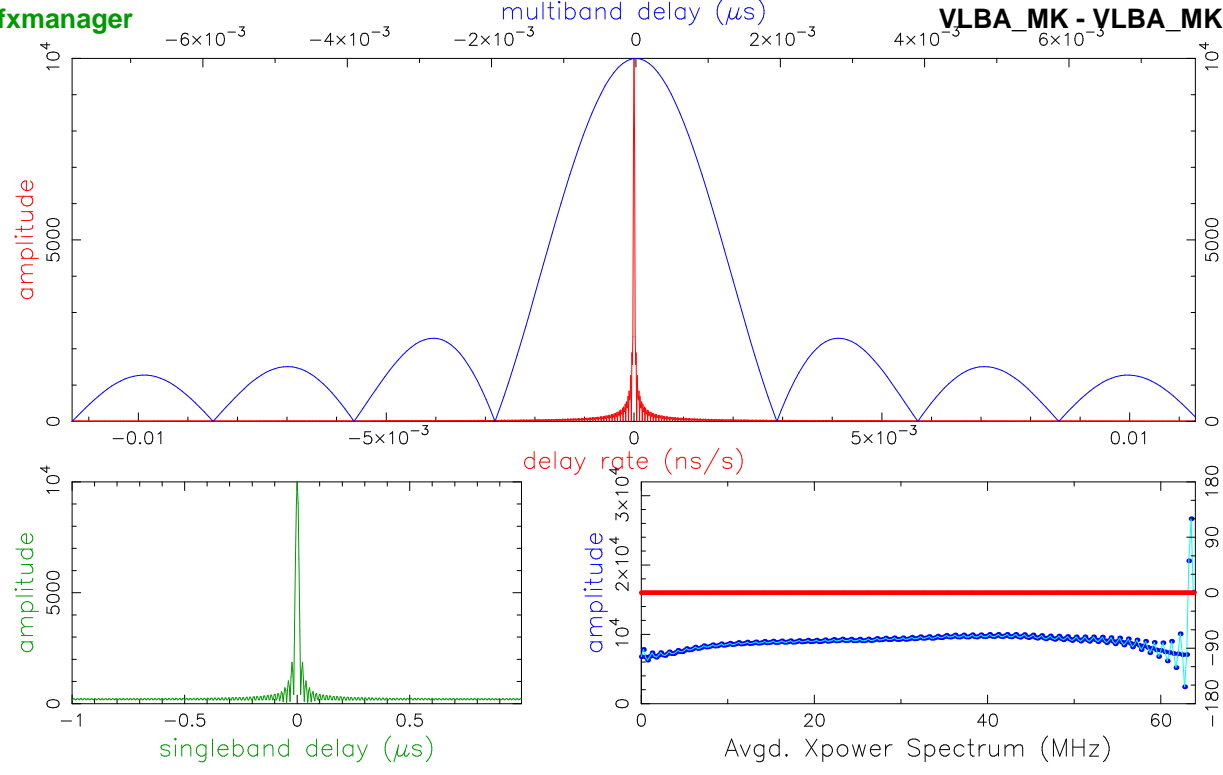
ph/seg (deg) 0.4 0.0 Search (2048X32) 524.709 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 1.4 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 23.7 0.0 Inc. seg. avg. 532.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 30.3 0.0 Inc. frq. avg. 568.725 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 128.8 el 54.4 pa -47.2 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mm.W.130.1X06HR simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mm

VLBA_MK - VLBA_MK, fgroup W, pol LL

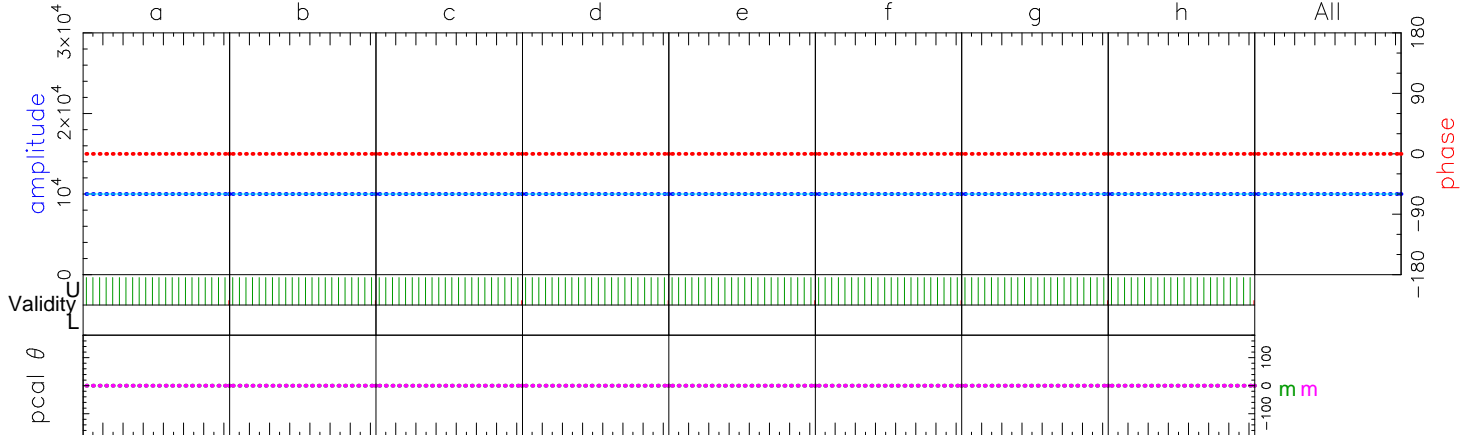


Fringe quality 9

SNR 560312.8
 Int time 419.823
 Amp 10000.001
 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)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120207
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

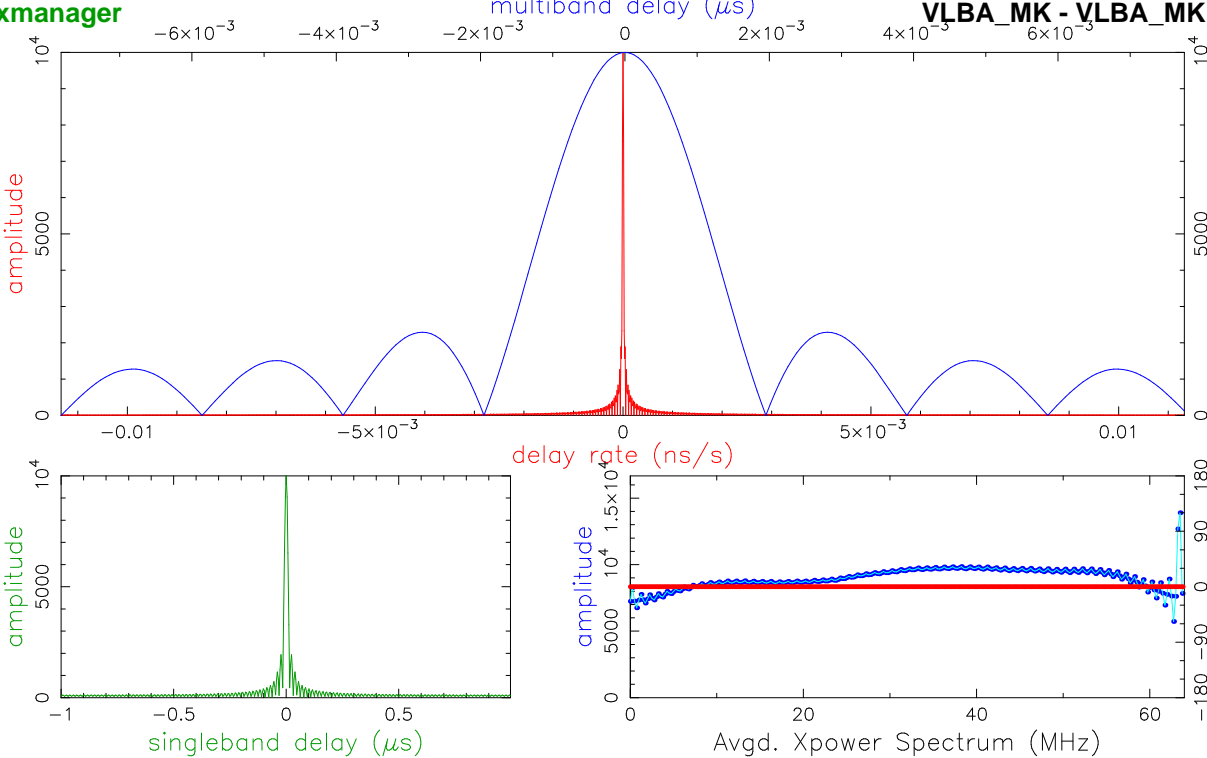
m: az 128.8 el 54.4 pa -47.2 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mm..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mm.W.84.1X06HR

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mm

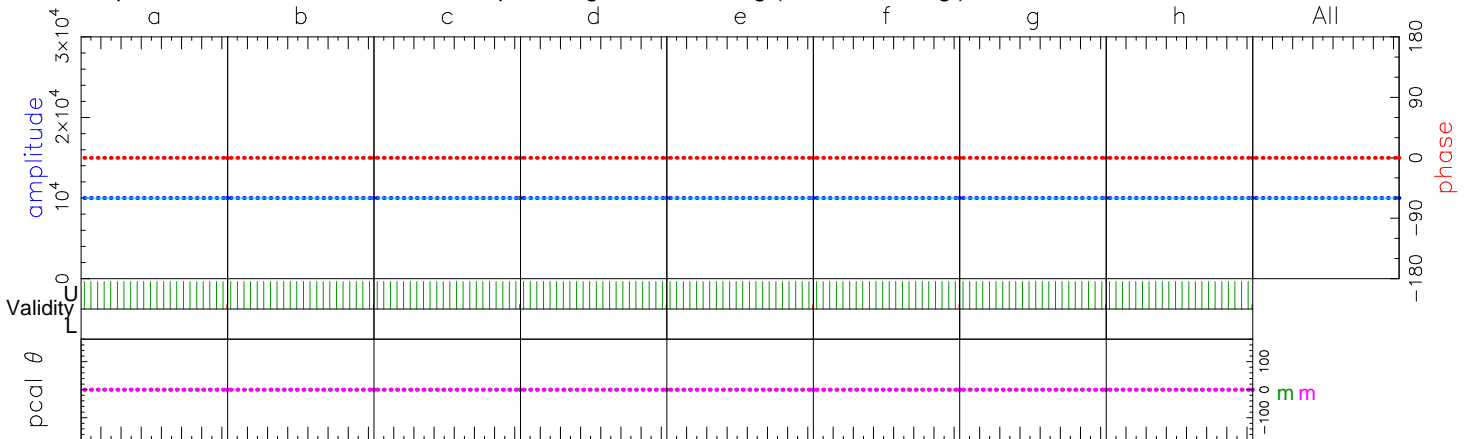
VLBA_MK - VLBA_MK, fgroup W, pol RR



Fringe quality 9

SNR 560312.8
 Int time 419.823
 Amp 10000.001
 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) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120210
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Total phase (deg)			0.0							
			Apriori delay (usec)						Resid mbdelay (usec)	0.00000E+00 +/- 1.9E-09
			Apriori clock (usec)						Resid sbdelay (usec)	0.00000E+00 +/- 1.5E-08
			Apriori clockrate (us/s)						Resid phdelay (usec)	0.00000E+00 +/- 6.6E-12
			Apriori rate (us/s)						Resid rate (us/s)	0.00000E+00 +/- 2.7E-14
			Apriori accel (us/s/s)						Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 m: az 128.8 el 54.4 pa -47.2 m: az 128.8 el 54.4 pa -47.2 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

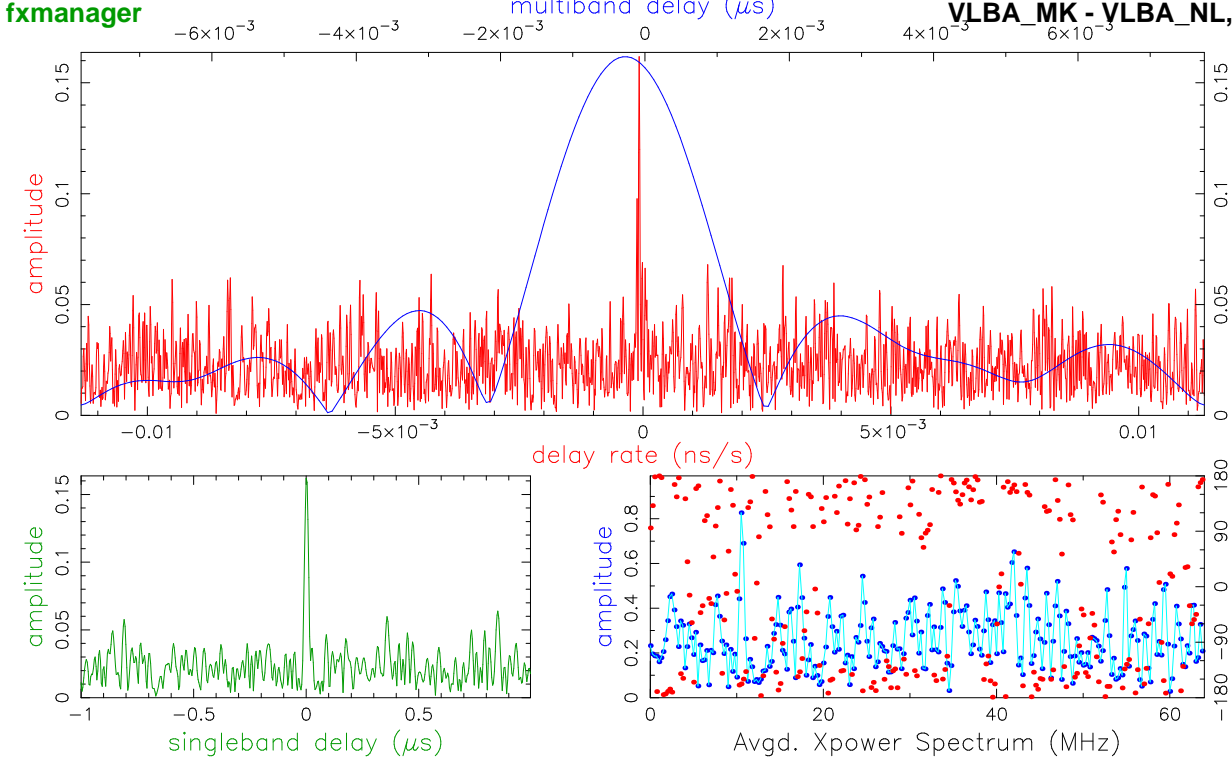
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Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

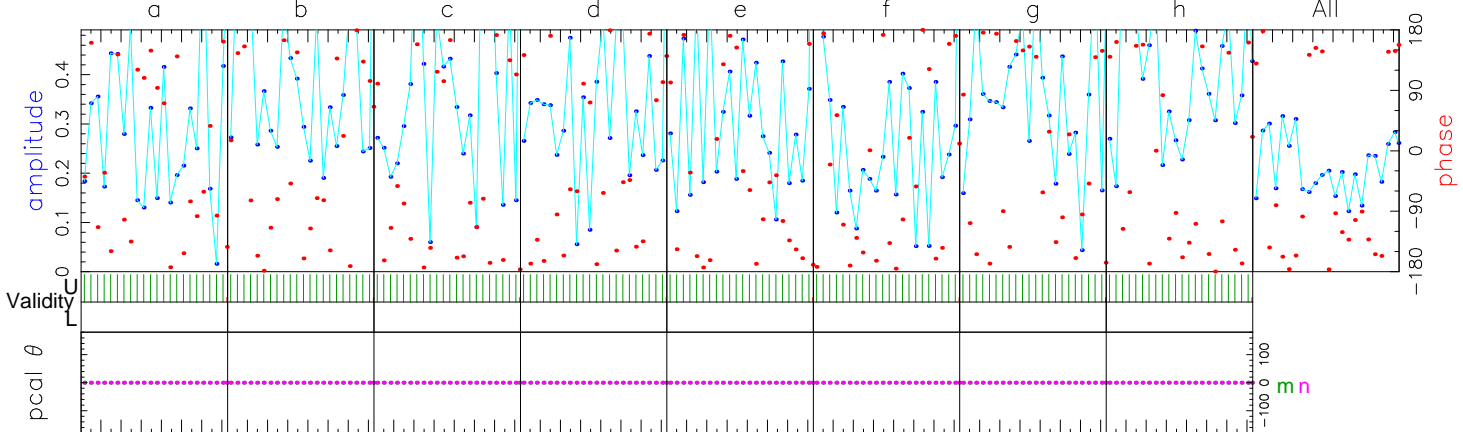
1741-038.1X06HR, No0062, mn

VLBA_MK - VLBA_NL, fgroup W, pol RR



Fringe quality 9
 SNR 9.2
 Int time 419.823
 Amp 0.164
 Phase -160.9
 PFD 1.8e-11
 Delays (us)
 SBD 0.001517
 MBD -0.000276
 Fringe rate (Hz) -0.006783
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120211
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-151.7	-167.0	-172.3	-148.5	-153.9	-156.9	-170.2	-158.8	Phase	-160.9
	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2	Ampl.	0.2
	259.5	366.1	257.9	281.9	258.5	19.5	257.9	257.0	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.88261021248E+03		Apriori delay (usec)		5.88261048808E+03		Resid mbdelay (usec)		-2.75599E-04	+/- 1.2E-04
Sband delay (usec)	5.88261200508E+03		Apriori clock (usec)		1.0230867E+01		Resid sbdelay (usec)		1.51700E-03	+/- 9.4E-04
Phase delay (usec)	5.88261048289E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		-5.18980E-06	+/- 4.0E-07
Delay rate (us/s)	1.35000030212E+00		Apriori rate (us/s)		1.35000038086E+00		Resid rate (us/s)		-7.87484E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.87536343155E-05		Resid phase (deg)		-160.9	+/- 12.5

	RMS	Theor.	Amplitude	0.164 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	45.6	30.0	Search (2048X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.0	52.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	9.7	17.7	Inc. seg. avg.	0.189	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	21.7	30.8	Inc. frq. avg.	0.156	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

m: az 128.8 el 54.4 pa -47.2 n: az 225.8 el 33.4 pa 32.7 u,v (fr/asec) -7787.696 -2729.257 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mn..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mn.W.107.1X06HR

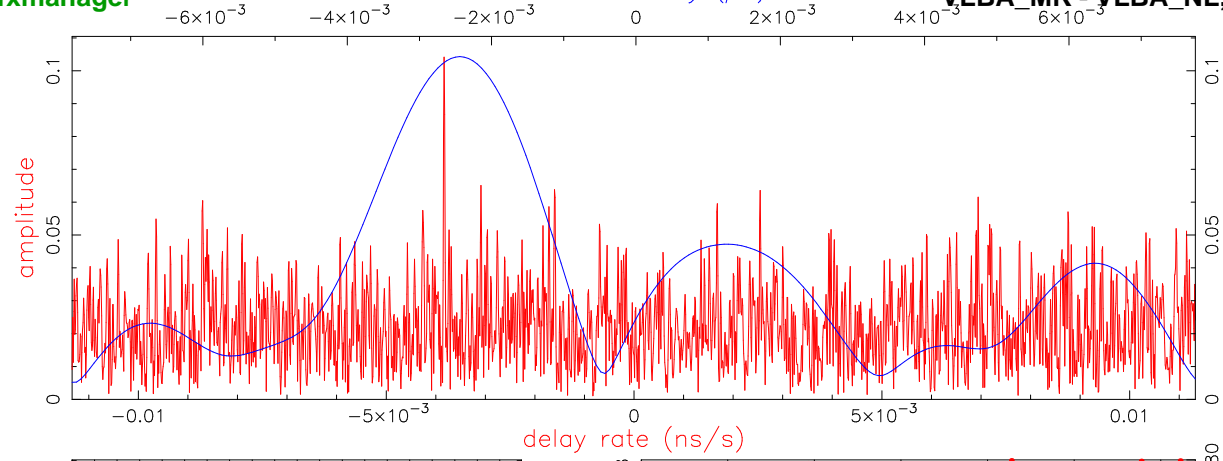
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

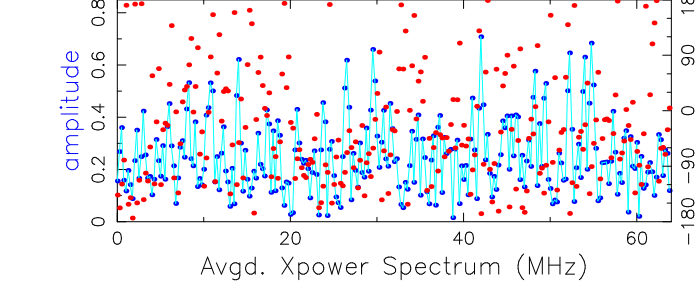
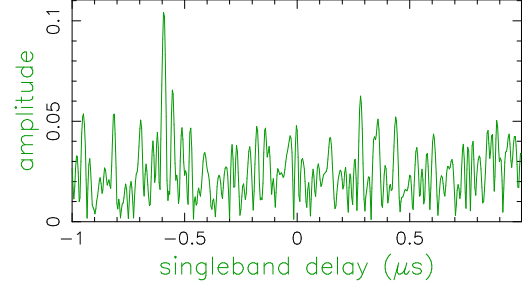
1741-038.1X06HR, No0062, mn

VLBA_MK - VLBA_NL, fgroup W, pol LR

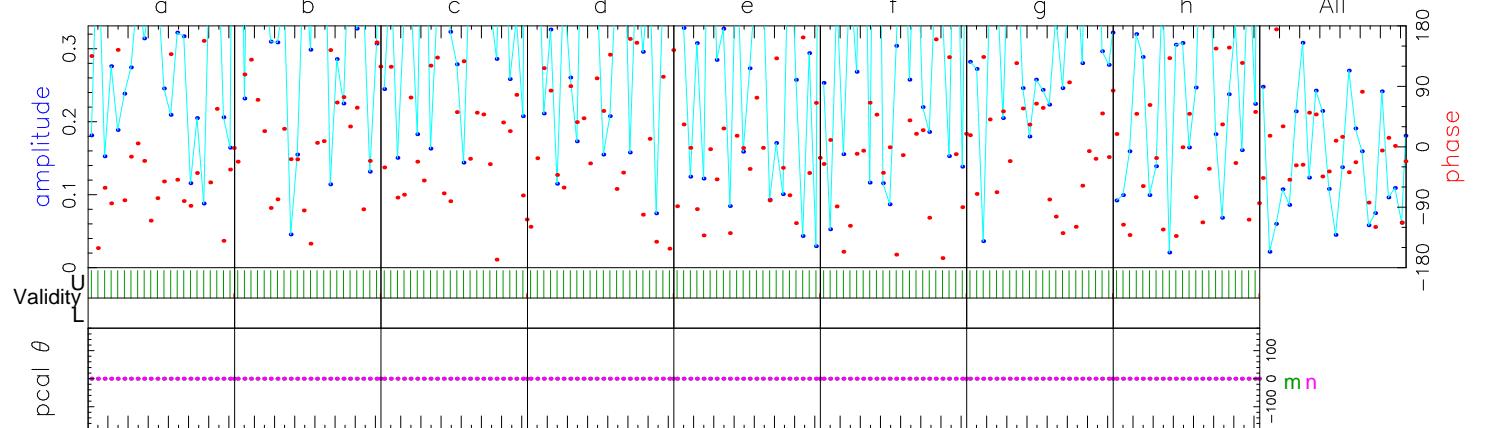
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.823
 Amp 0.110
 Phase -14.7
 PFD 6.0e-01
 Delays (us)
 SBD -0.592262
 MBD -0.002375
 Fringe rate (Hz)
 -0.330313
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120214
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°5'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-61.4	21.2	6.7	10.6	-28.7	-6.0	-3.5	-68.2	Phase	-14.7
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	67.5	103.3	107.1	376.0	176.1	220.0	336.4	221.1	Sbd box	105.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.88201436269E+03		Apriori delay (usec)		5.88261048808E+03		Resid mbdelay (usec)		-2.37539E-03	+/- 1.8E-04
Sband delay (usec)	5.88201822583E+03		Apriori clock (usec)		1.0230867E+01		Resid sbdelay (usec)		-5.92262E-01	+/- 1.5E-03
Phase delay (usec)	5.88261048761E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		-4.73063E-07	+/- 6.3E-07
Delay rate (us/s)	1.34999654626E+00		Apriori rate (us/s)		1.35000038086E+00		Resid rate (us/s)		-3.83460E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.87536343155E-05		Resid phase (deg)		-14.7	+/- 19.4

ph/seg (deg) 60.8 46.6 Amplitude 0.110 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 85.7 81.3 Search (2048X32) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.1 27.5 Inc. seg. avg. 0.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.7 47.9 Inc. frq. avg. 0.112 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 128.8 el 54.4 pa -47.2 n: az 225.8 el 33.4 pa 32.7 u,v (fr/asec) -7787.696 -2729.257 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mn..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mn.W.123.1X06HR

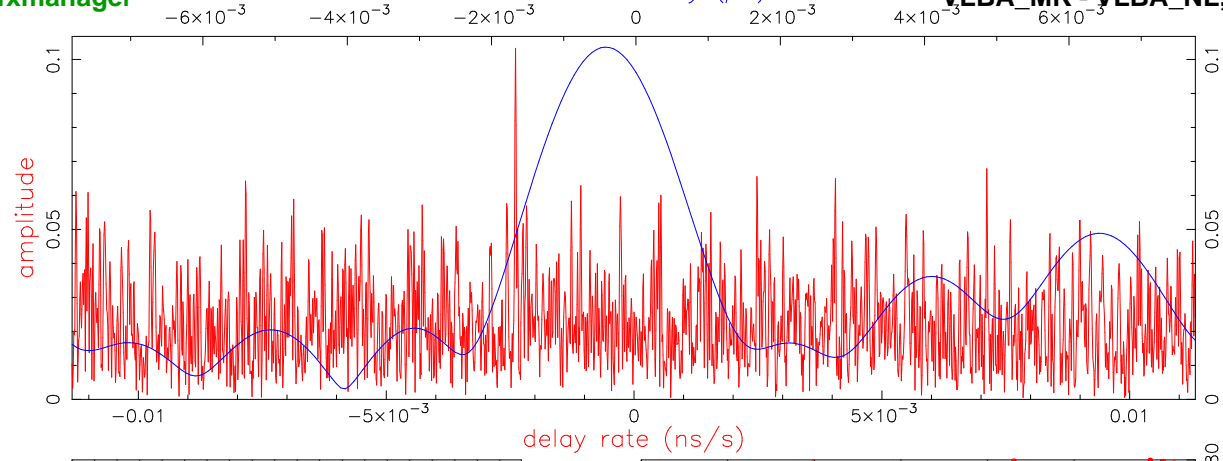
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

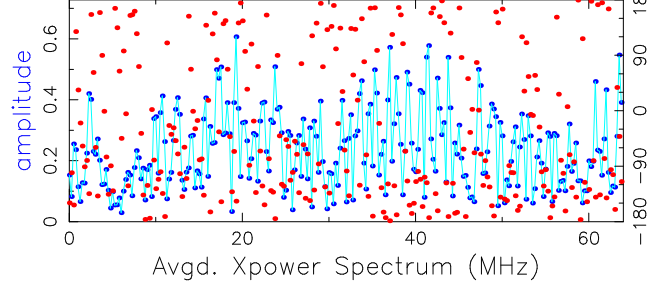
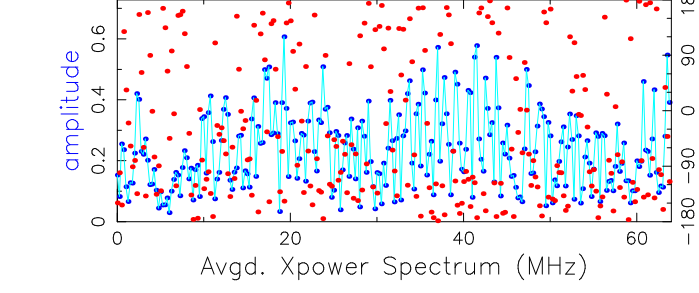
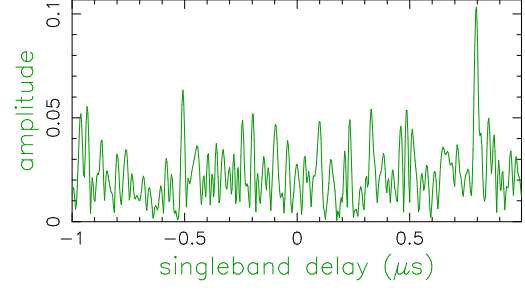
1741-038.1X06HR, No0062, mn

VLBA_MK - VLBA_NL, fgroup W, pol RL

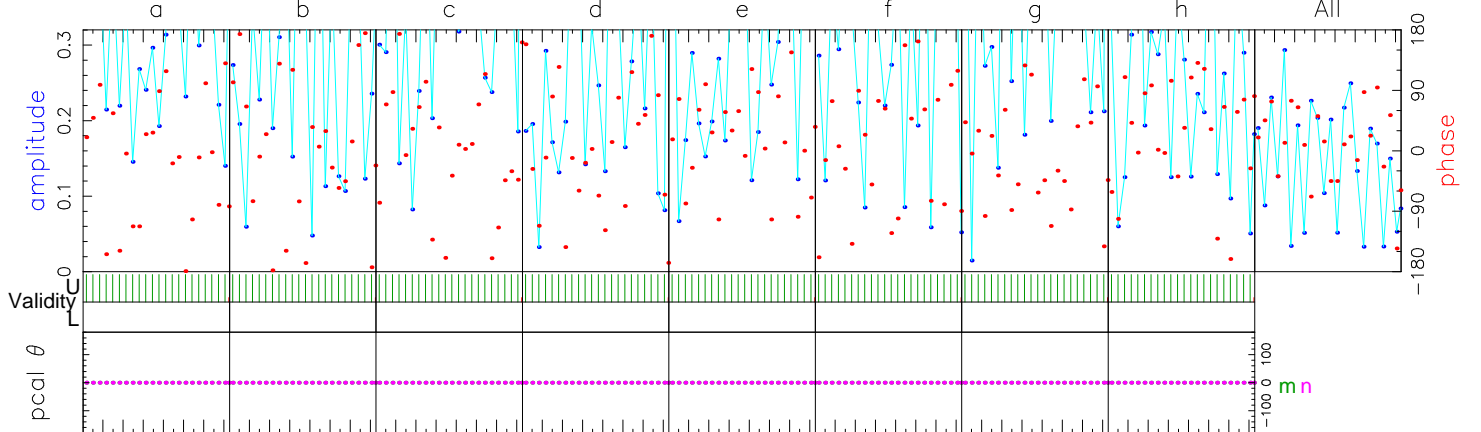
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.823
 Amp 0.107
 Phase 19.8
 PFD 6.6e-01
 Delays (us)
 SBD 0.795240
 MBD -0.000511
 Fringe rate (Hz)
 -0.206717
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120218
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	21.3	-33.9	17.2	10.4	18.7	54.0	-0.1	38.0	Phase	19.8
	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	198.1	164.9	221.0	274.2	462.2	244.6	263.3	440.2	Sbd box	460.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.88340685246E+03		Apriori delay (usec)		5.88261048808E+03		Resid mbdelay (usec)		-5.10619E-04	+/- 1.8E-04
Sband delay (usec)	5.88340572808E+03		Apriori clock (usec)		1.0230867E+01		Resid sbdelay (usec)		7.95240E-01	+/- 1.5E-03
Phase delay (usec)	5.88261048872E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		6.38431E-07	+/- 6.3E-07
Delay rate (us/s)	1.34999798109E+00		Apriori rate (us/s)		1.35000038086E+00		Resid rate (us/s)		-2.39978E-06	+/- 2.6E-09
Total phase (deg)	179.4		Apriori accel (us/s/s)		-2.87536343155E-05		Resid phase (deg)		19.8	+/- 19.5

ph/seg (deg) 56.9 46.8 Amplitude 0.107 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.3 81.7 Search (2048X32) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.5 27.6 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.6 48.2 Inc. frq. avg. 0.099 Data rate (Mbit/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 128.8 el 54.4 pa -47.2 n: az 225.8 el 33.4 pa 32.7 u,v (fr/asec) -7787.696 -2729.257 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mn..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mn.W.141.1X06HR

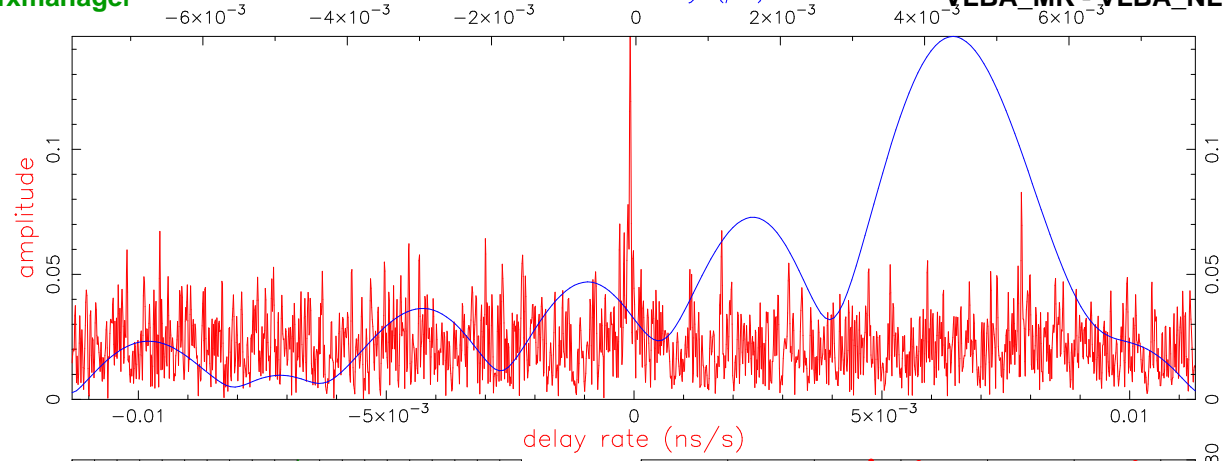
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mn

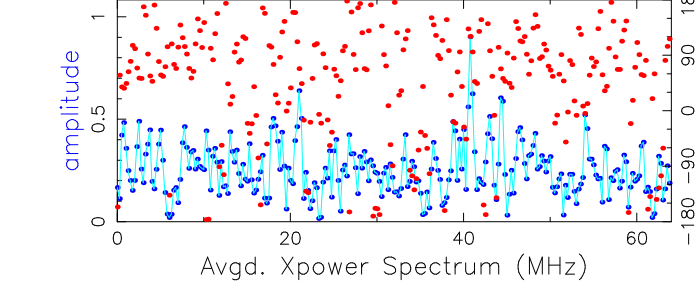
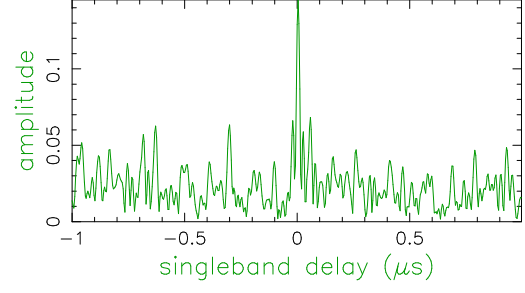
VLBA_MK - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)



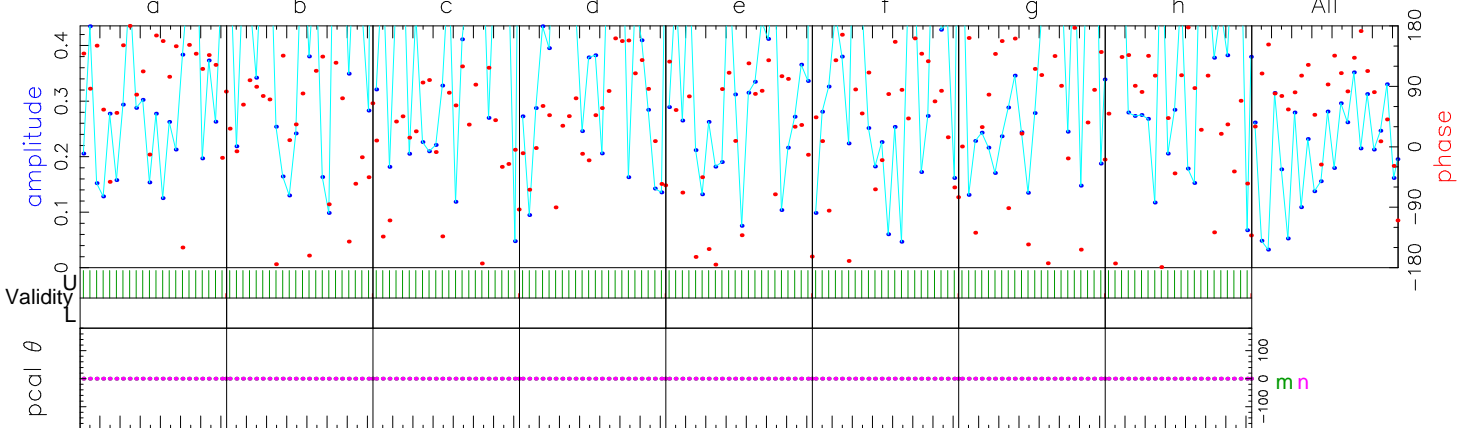
Fringe quality 9

SNR 8.1
 Int time 419.823
 Amp 0.145
 Phase 84.3
 PFD 1.4e-07
 Delays (us)
 SBD 0.003960
 MBD 0.004393
 Fringe rate (Hz)
 -0.006569
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120207
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.88261488070E+03		Apriori delay (usec)		5.88261048808E+03		Resid mbdelay (usec)		4.39262E-03	+/- 1.3E-04
Sband delay (usec)	5.88261444833E+03		Apriori clock (usec)		1.0230867E+01		Resid sbdelay (usec)		3.96025E-03	+/- 1.1E-03
Phase delay (usec)	5.88261049080E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		2.71924E-06	+/- 4.5E-07
Delay rate (us/s)	1.35000030460E+00		Apriori rate (us/s)		1.35000038086E+00		Resid rate (us/s)		-7.62599E-08	+/- 1.9E-09
Total phase (deg)	243.9		Apriori accel (us/s/s)		-2.87536343155E-05		Resid phase (deg)		84.3	+/- 14.1

	RMS	Theor.	Amplitude	0.145 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.6	33.8	Search (2048X32)	0.144	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	77.7	59.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.7	19.9	Inc. seg. avg.	0.180	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	19.6	34.8	Inc. frq. avg.	0.151	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 128.8 el 54.4 pa -47.2 n: az 225.8 el 33.4 pa 32.7 u,v (fr/asec) -7787.696 -2729.257 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mn..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mn.W.89.1X06HR

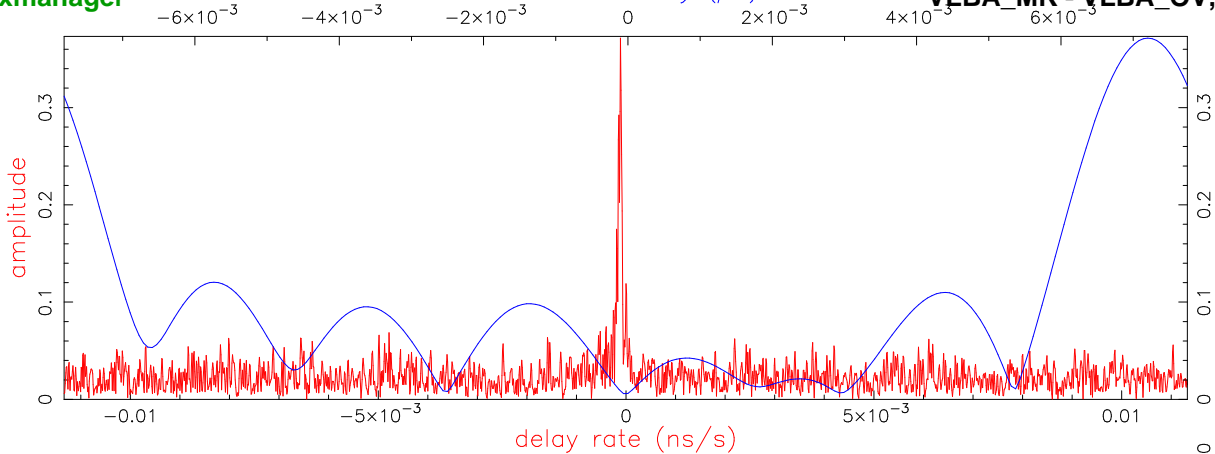
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mo

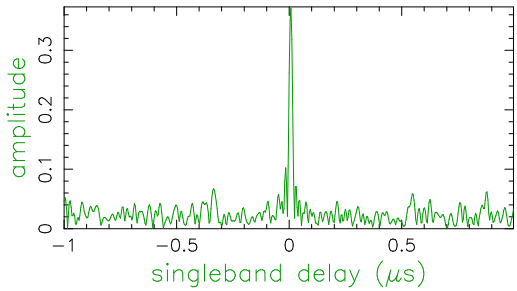
VLBA_MK - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

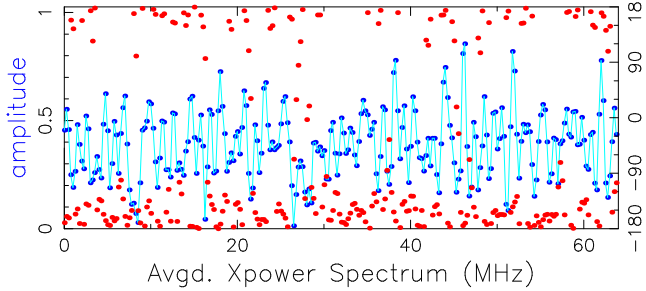


Fringe quality 9

SNR 20.9
 Int time 419.772
 Amp 0.373
 Phase -168.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.006928
 MBD 0.007181
 Fringe rate (Hz) -0.009878
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

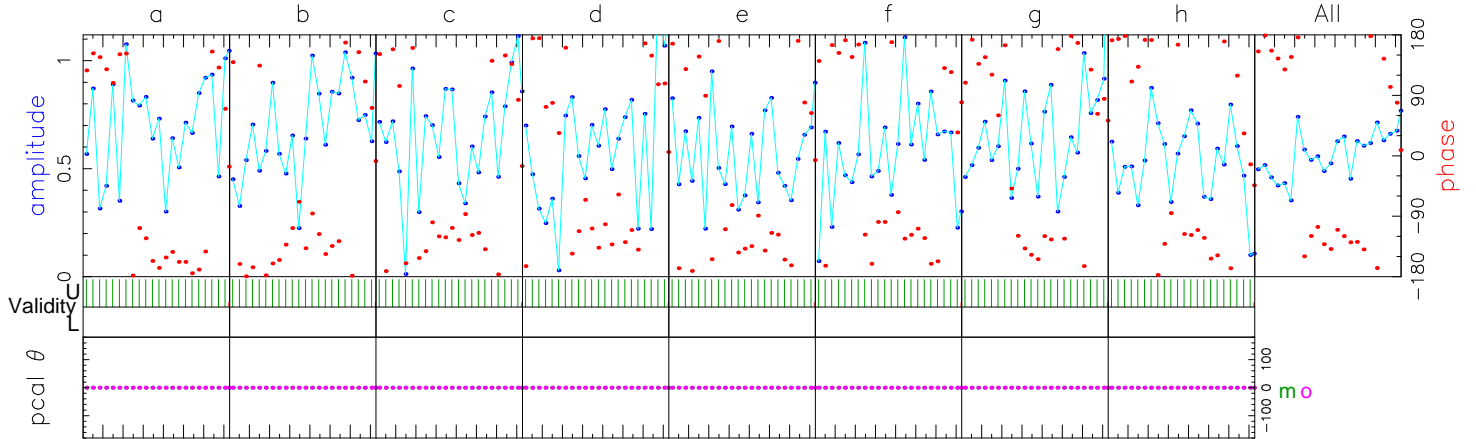


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120211
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	175.5	-159.9	-169.7	-158.3	-162.9	-151.7	169.5	-168.0	Phase	-168.6
	0.5	0.5	0.4	0.3	0.3	0.4	0.3	0.4	Ampl.	0.4
	258.6	258.8	258.7	259.2	259.0	259.1	259.1	258.3	Sbd box	258.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.72435653610E+03		Apriori delay (usec)		1.72434935542E+03		Resid mbdelay (usec)		7.18069E-03	+/- 5.2E-05
Sband delay (usec)	1.72435628367E+03		Apriori clock (usec)		1.1962654E+01		Resid sbdelay (usec)		6.92825E-03	+/- 4.1E-04
Phase delay (usec)	1.72434934998E+03		Apriori clockrate (us/s)		-4.2000013E-08		Resid phdelay (usec)		-5.43573E-06	+/- 1.8E-07
Delay rate (us/s)	8.78575137534E-01		Apriori rate (us/s)		8.78575252207E-01		Resid rate (us/s)		-1.14673E-07	+/- 7.3E-10
Total phase (deg)	2.7		Apriori accel (us/s/s)		-7.09492743157E-06		Resid phase (deg)		-168.6	+/- 5.5

	RMS	Theor.	Amplitude	0.373 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.2	13.1	Search (2048X32)	0.361	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	58.0	22.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	14.3	7.8	Inc. seg. avg.	0.550	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	16.9	13.5	Inc. frq. avg.	0.377	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

m: az 128.8 el 54.4 pa -47.2 o: az 195.2 el 47.9 pa 12.8 u,v (fr/asec) -5055.265 -2306.684 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mo..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mo.W.109.1X06HR

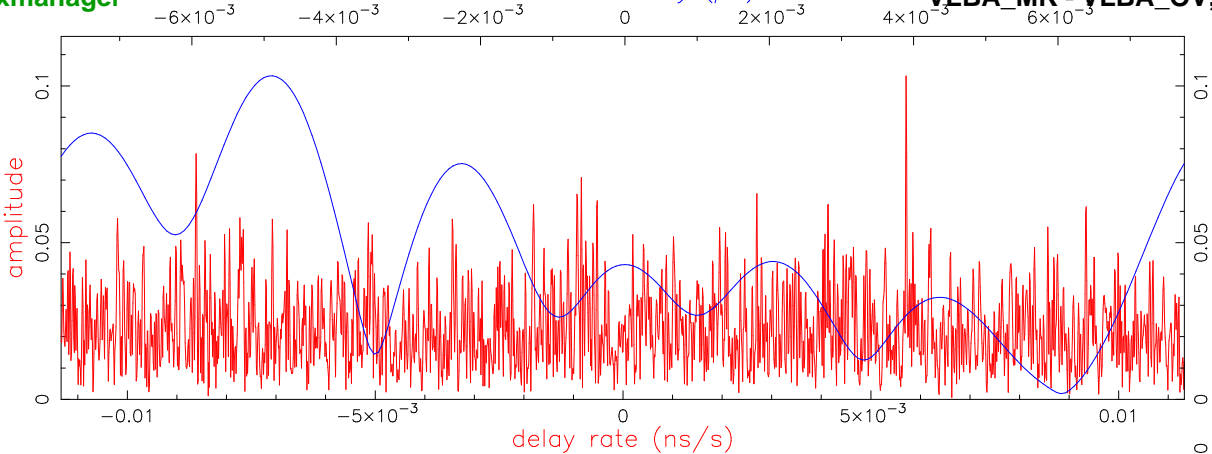
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mo

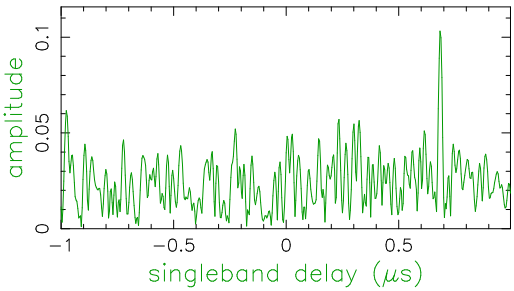
VLBA_MK - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

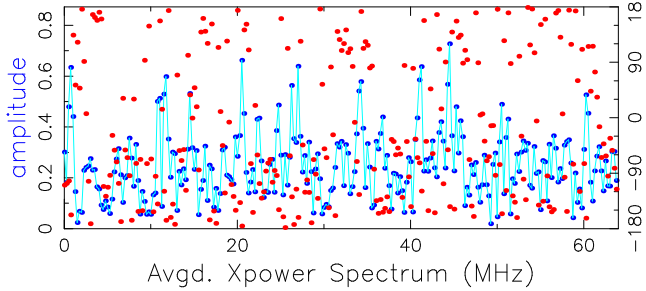


Fringe quality 0

SNR 5.8
 Int time 419.772
 Amp 0.116
 Phase -119.4
 PFD 7.5e-01
 Delays (us)
 SBD 0.684797
 MBD -0.004858
 Fringe rate (Hz)
 0.493068
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

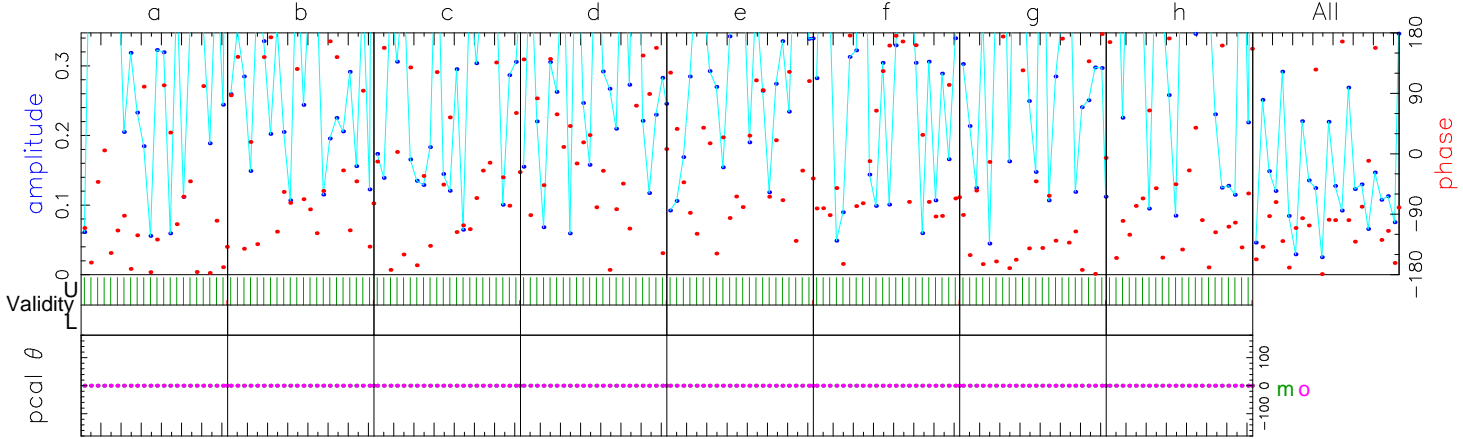


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120215
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-129.1	-143.1	-101.2	-9.7	-46.2	-101.0	-159.3	-115.7	Phase	-119.4
	0.2	0.1	0.0	0.1	0.1	0.2	0.3	0.2	Ampl.	0.1
	431.4	8.2	496.6	71.1	484.1	433.6	432.4	431.9	Sbd box	432.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.72503199695E+03	Apriori delay (usec)	1.72434935542E+03	Resid mbdelay (usec)	-4.85846E-03	+/-	1.9E-04
Sband delay (usec)	1.72503415267E+03	Apriori clock (usec)	1.1962654E+01	Resid sbdelay (usec)	6.84797E-01	+/-	1.5E-03
Phase delay (usec)	1.72434935157E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	-3.84912E-06	+/-	6.3E-07
Delay rate (us/s)	8.78580976241E-01	Apriori rate (us/s)	8.78575252207E-01	Resid rate (us/s)	5.72403E-06	+/-	2.6E-09
Total phase (deg)	51.9	Apriori accel (us/s/s)	-7.09492743157E-06	Resid phase (deg)	-119.4	+/-	19.7

ph/seg (deg)	49.6	Theor.	47.1	Amplitude	0.116 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.9		82.3	Search (2048X32)	0.099	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	58.2		27.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	70.7		48.5	Inc. seg. avg.	0.113	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.131	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

m: az 128.8 el 54.4 pa -47.2 o: az 195.2 el 47.9 pa 12.8 u,v (fr/asec) -5055.265 -2306.684 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mo..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mo.W.126.1X06HR

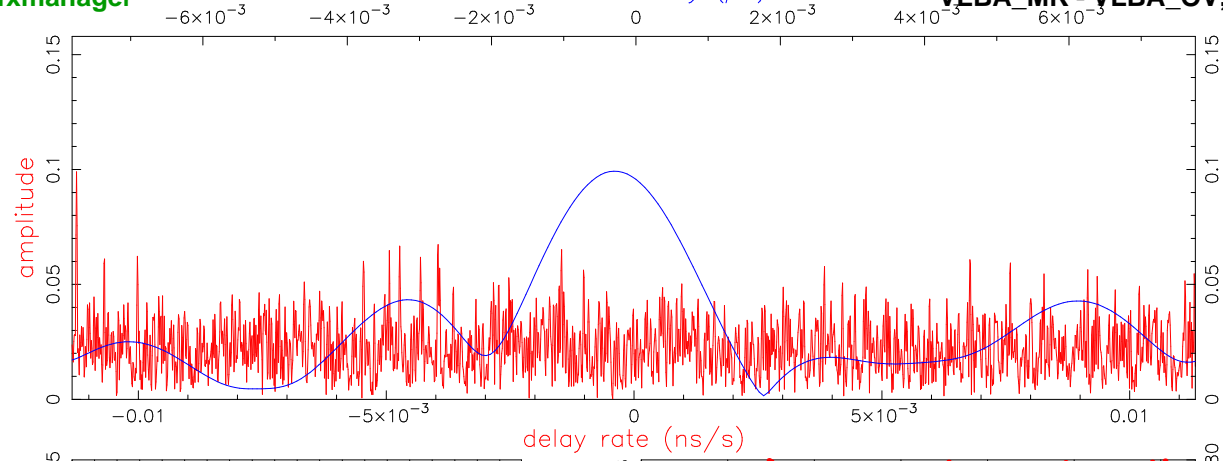
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mo

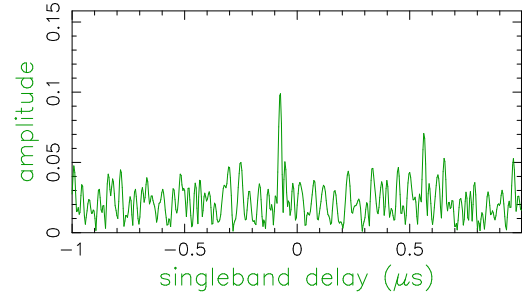
VLBA_MK - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

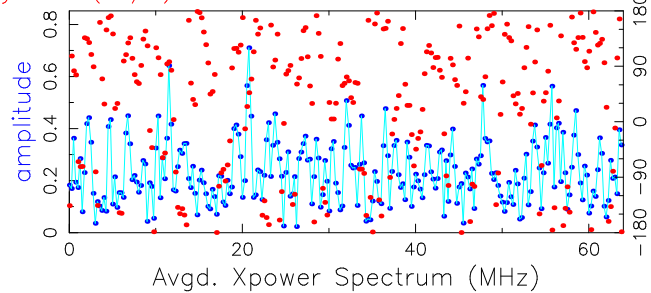


Fringe quality 0

SNR 5.7
 Int time 419.772
 Amp 0.158
 Phase -33.9
 PFD 9.7e-01
 Delays (us)
 SBD -0.075894
 MBD -0.000378
 Fringe rate (Hz)
 -0.970210
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

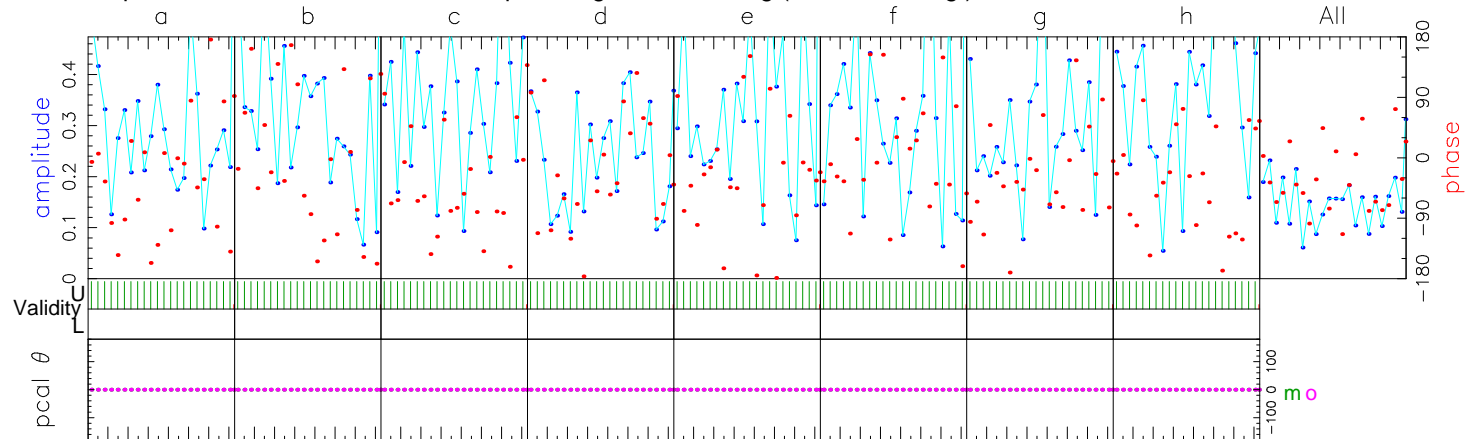


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120218
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°5'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-40.2	-27.1	-62.1	8.6	-26.8	-22.7	-21.3	-47.7	Phase	-33.9
	0.1	0.1	0.3	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
	386.9	459.4	240.0	46.9	192.0	124.5	317.6	116.9	Sbd box	237.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.72427085201E+03	Apriori delay (usec)	1.72434935542E+03	Resid mbdelay (usec)	-3.78409E-04	+/-	1.9E-04
Sband delay (usec)	1.72427346117E+03	Apriori clock (usec)	1.1962654E+01	Resid sbdelay (usec)	-7.58943E-02	+/-	1.5E-03
Phase delay (usec)	1.72434935433E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	-1.09252E-06	+/-	6.5E-07
Delay rate (us/s)	8.78563989028E-01	Apriori rate (us/s)	8.78575252207E-01	Resid rate (us/s)	-1.12632E-05	+/-	2.7E-09
Total phase (deg)	137.4	Apriori accel (us/s/s)	-7.09492743157E-06	Resid phase (deg)	-33.9	+/-	20.2

ph/seg (deg)	49.8	Theor.	48.5	Search (2048X32)	0.096	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.2		84.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	23.1		28.6	Inc. seg. avg.	0.170	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	41.7		49.9	Inc. frq. avg.	0.146	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 128.8 el 54.4 pa -47.2 o: az 195.2 el 47.9 pa 12.8 u,v (fr/asec) -5055.265 -2306.684 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mo..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mo.W.142.1X06HR

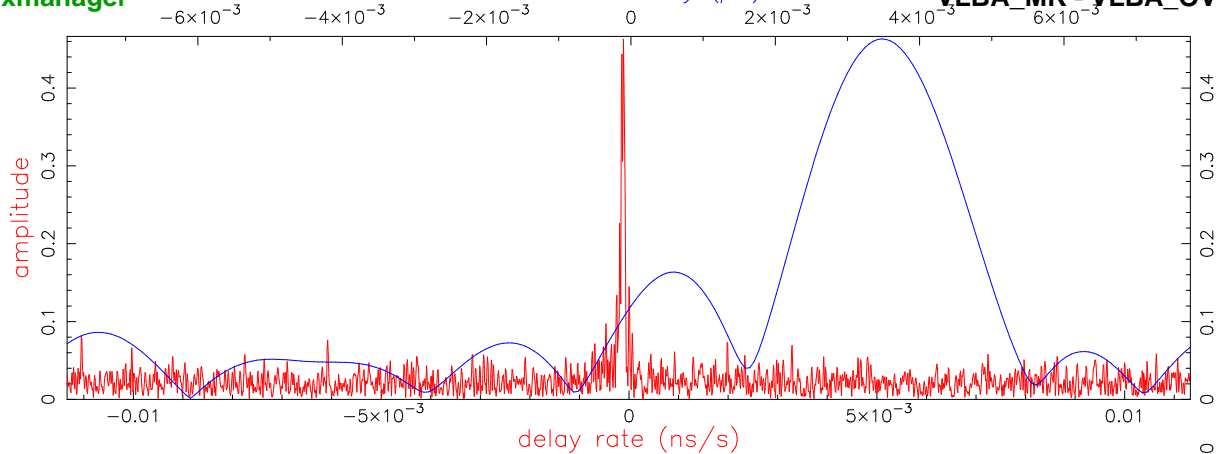
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mo

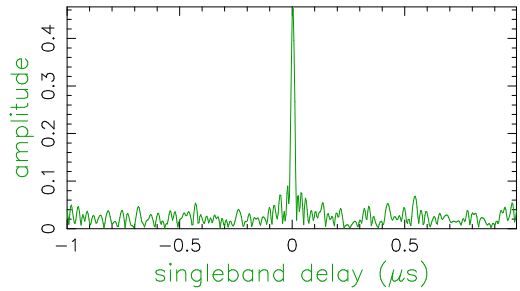
VLBA_MK - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

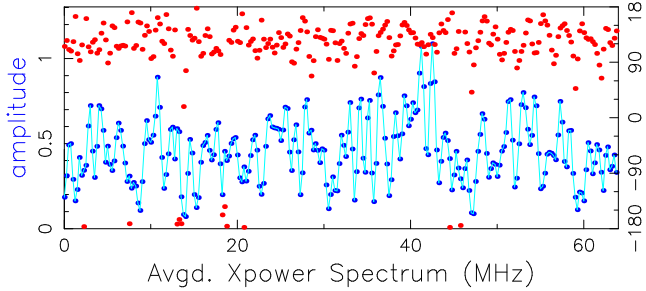


Fringe quality 7

SNR 26.1
 Int time 419.772
 Amp 0.466
 Phase 120.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.002761
 MBD 0.003440
 Fringe rate (Hz)
 -0.009850
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

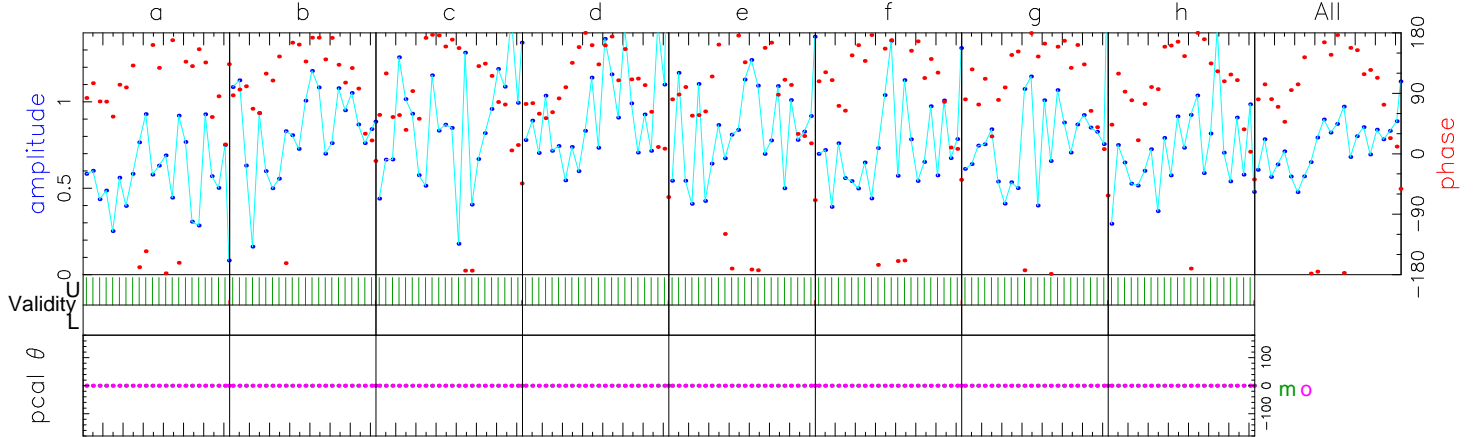


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120208
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	131.3	123.8	102.7	106.9	118.3	136.8	129.2	121.3	Phase	120.9
	0.4	0.6	0.4	0.6	0.4	0.5	0.5	0.5	Ampl.	0.5
	257.3	257.5	257.8	257.8	257.4	258.3	257.8	257.8	Sbd box	257.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.72435279560E+03	Apriori delay (usec)	1.72434935542E+03	Resid mbdelay (usec)	3.44018E-03	+/-	4.2E-05
Sband delay (usec)	1.72435211667E+03	Apriori clock (usec)	1.1962654E+01	Resid sbdelay (usec)	2.76125E-03	+/-	3.3E-04
Phase delay (usec)	1.72434935932E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	3.89903E-06	+/-	1.4E-07
Delay rate (us/s)	8.78575137862E-01	Apriori rate (us/s)	8.78575252207E-01	Resid rate (us/s)	-1.14345E-07	+/-	5.8E-10
Total phase (deg)	292.2	Apriori accel (us/s/s)	-7.09492743157E-06	Resid phase (deg)	120.9	+/-	4.4

ph/seg (deg)	52.8	Theor.	10.5	Amplitude	0.466 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.0		18.4	Search (2048X32)	0.453	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	12.7		6.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	14.3		10.8	Inc. seg. avg.	0.732	Sample rate(MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.468	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

m: az 128.8 el 54.4 pa -47.2 o: az 195.2 el 47.9 pa 12.8 u,v (fr/asec) -5055.265 -2306.684 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mo..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mo.W.93.1X06HR

Mk4/DiFX fourfit 3.21 rev 2937

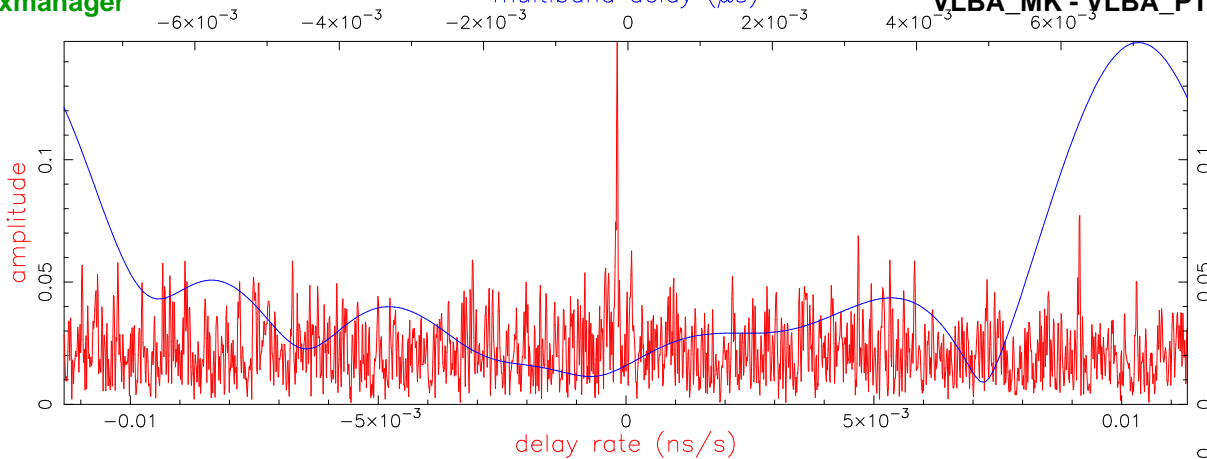
fxmanager

1741-038.1X06HR, No0062, mp

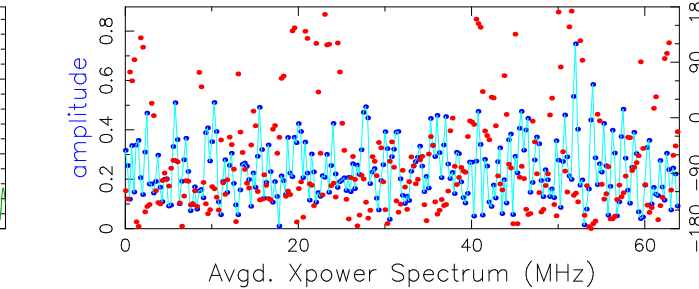
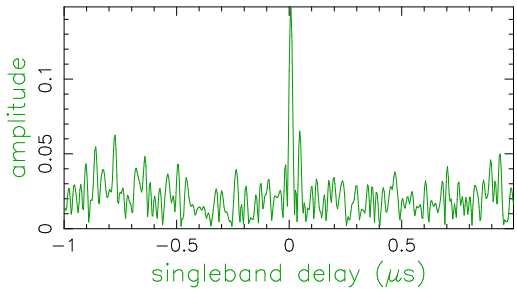
VLBA_MK - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

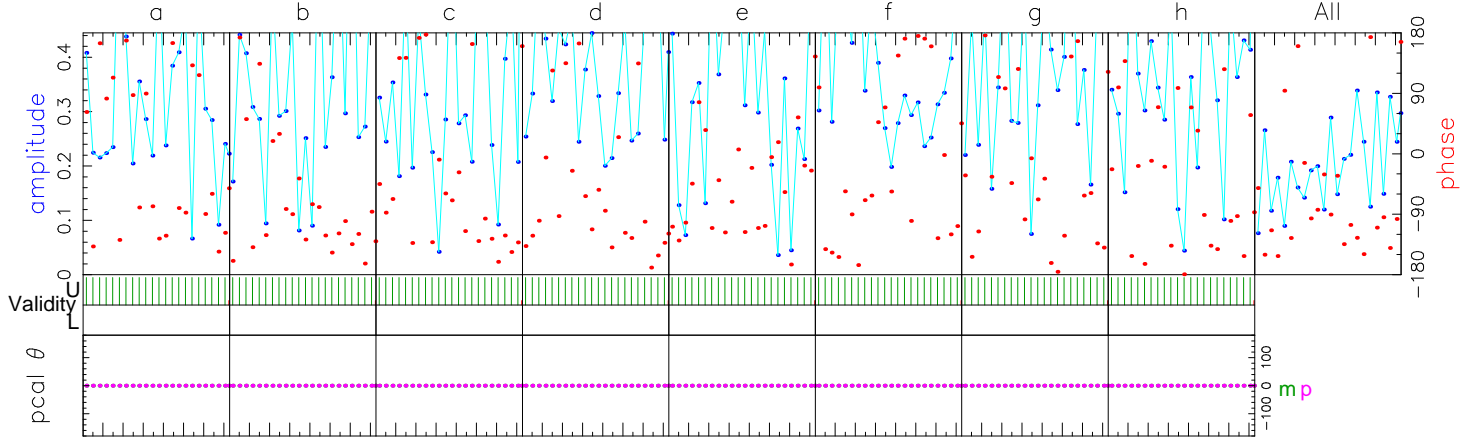


SNR 8.3
 Int time 419.823
 Amp 0.148
 Phase -117.1
 PFD 3.4e-08
 Delays (us)
 SBD 0.007116
 MBD 0.007050
 Fringe rate (Hz)
 -0.015719
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120212
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.9	-113.7	-124.3	-114.9	-60.0	-128.1	-148.6	-109.7	Phase	-117.1
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	412.2	124.4	259.4	259.0	259.3	350.3	257.6	462.0	Sbd box	258.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.90261351317E+03	Apriori delay (usec)	1.90260646273E+03	Resid mbdelay (usec)	7.05044E-03	+/-	1.3E-04
Sband delay (usec)	1.90261357823E+03	Apriori clock (usec)	1.0164356E+01	Resid sbdelay (usec)	7.11550E-03	+/-	1.0E-03
Phase delay (usec)	1.90260645896E+03	Apriori clockrate (us/s)	4.3800001E-07	Resid phdelay (usec)	-3.77563E-06	+/-	4.4E-07
Delay rate (us/s)	1.10527188098E+00	Apriori rate (us/s)	1.10527206346E+00	Resid rate (us/s)	-1.82483E-07	+/-	1.8E-09
Total phase (deg)	134.8	Apriori accel (us/s/s)	-8.36535773355E-06	Resid phase (deg)	-117.1	+/-	13.8

ph/seg (deg)	57.1	Theor.	33.1	Amplitude	0.148 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	62.2		57.7	Search (2048X32)	0.137	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	29.2		19.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	29.4		34.0	Inc. seg. avg.	0.172	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.155	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 128.8 el 54.4 pa -47.2 p: az 210.7 el 47.3 pa 25.9 u,v (fr/asec) -6357.008 -1932.870 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mp..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mp.W.112.1X06HR

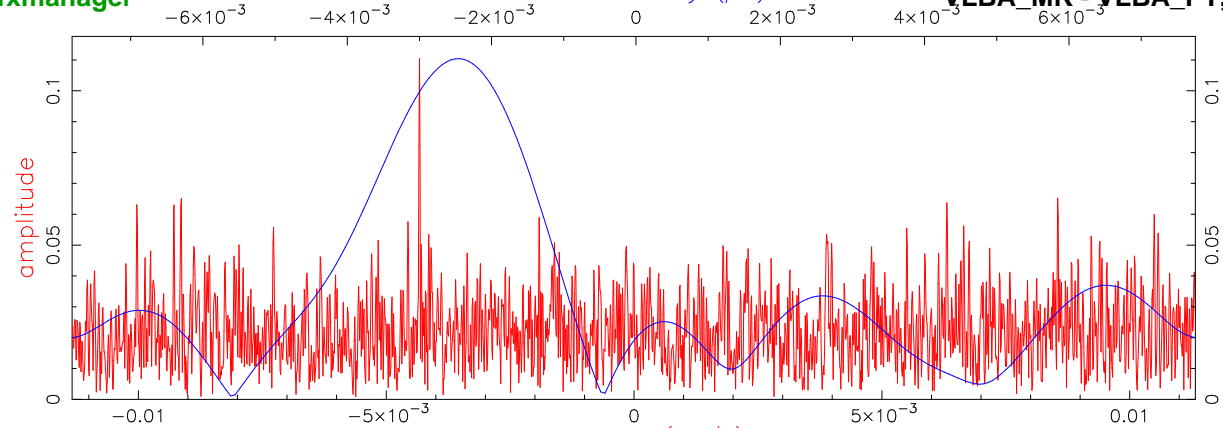
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mp

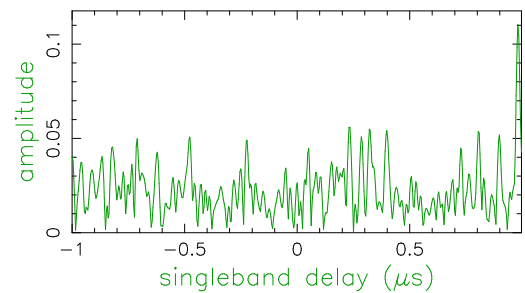
VLBA_MK - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

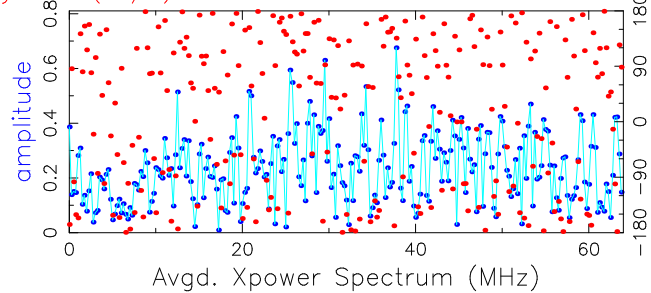


Fringe quality 0

SNR 6.2
 Int time 419.823
 Amp 0.118
 Phase -37.3
 PFD 1.4e-01
 Delays (us)
 SBD 0.981121
 MBD -0.002455
 Fringe rate (Hz)
 -0.373682
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

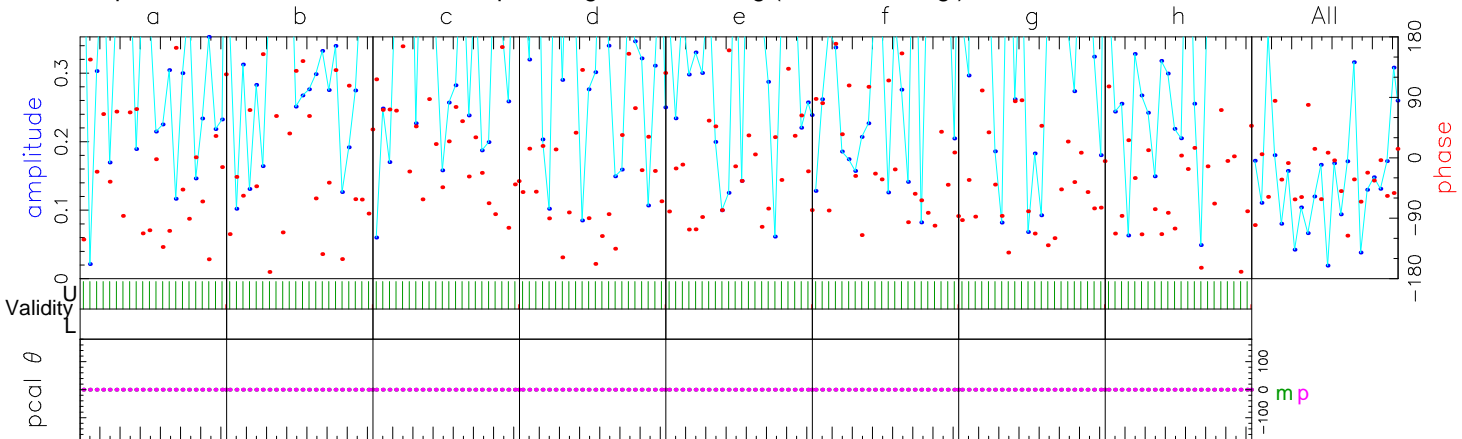


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120215
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.7	-64.9	6.0	-51.3	-16.9	-38.8	-53.4	-38.9	Phase	-37.3
	0.1	0.0	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	400.1	358.1	114.8	507.0	496.6	229.2	76.0	359.3	Sbd box	508.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.90358838255E+03	Apriori delay (usec)	1.90260646273E+03	Resid mbdelay (usec)	-2.45518E-03	+/-	1.7E-04
Sband delay (usec)	1.90358758398E+03	Apriori clock (usec)	1.0164356E+01	Resid sbdelay (usec)	9.81121E-01	+/-	1.4E-03
Phase delay (usec)	1.90260646153E+03	Apriori clockrate (us/s)	4.3800001E-07	Resid phdelay (usec)	-1.20245E-06	+/-	6.0E-07
Delay rate (us/s)	1.10526772539E+00	Apriori rate (us/s)	1.10527206346E+00	Resid rate (us/s)	-4.33808E-06	+/-	2.5E-09
Total phase (deg)	214.6	Apriori accel (us/s/s)	-8.36535773355E-06	Resid phase (deg)	-37.3	+/-	18.5

ph/seg (deg)	48.6	Theor.	44.3	Amplitude	0.118 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	84.8		77.3	Search (2048X32)	0.108	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	27.0		26.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	33.0		45.6	Inc. seg. avg.	0.122	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.115	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 128.8 el 54.4 pa -47.2 p: az 210.7 el 47.3 pa 25.9 u,v (fr/asec) -6357.008 -1932.870 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mp..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mp.W.128.1X06HR

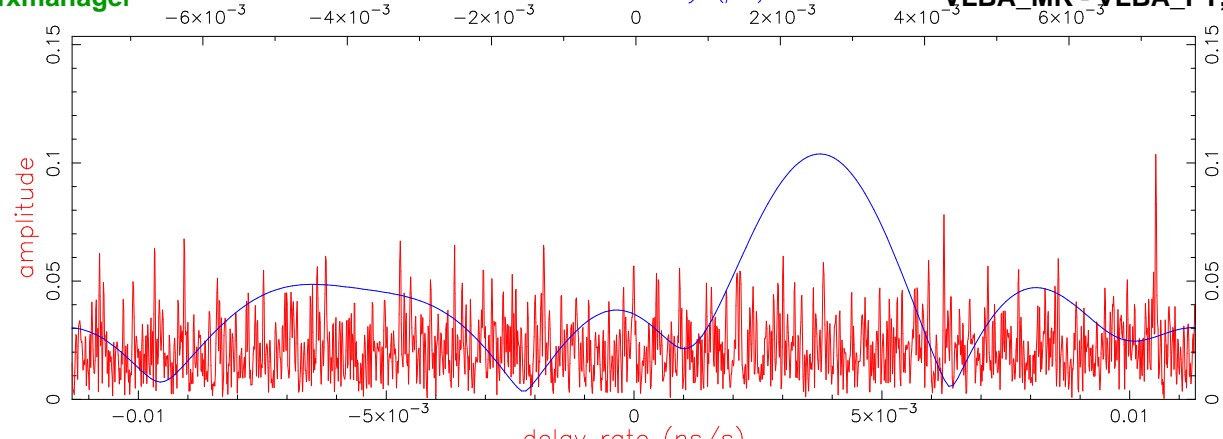
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

1741-038.1X06HR, No0062, mp

VLBA_MK - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.9

Int time 419.823

Amp 0.153

Phase 44.9

PFD 7.1e-01

Delays (us)

SBD -0.661219

MBD 0.002475

Fringe rate (Hz) 0.908188

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c211c

Exper # 16383

Yr:day 2021:116

Start 120001.00

Stop 120700.84

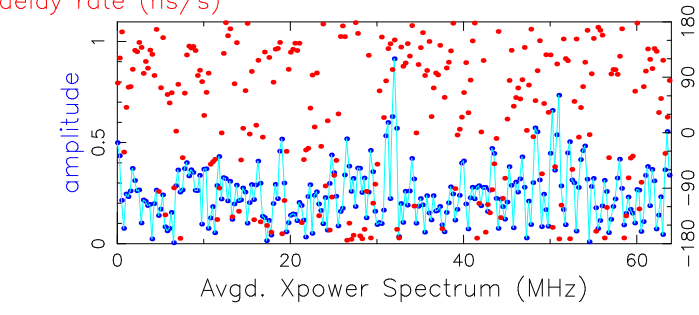
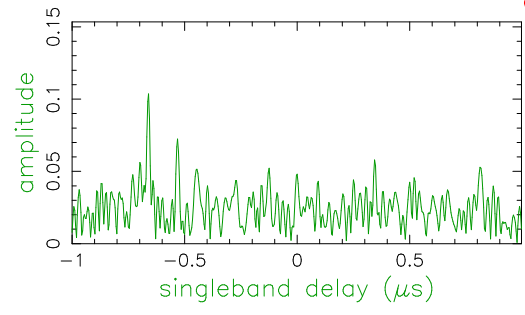
FRT 120331.00

Corr/FF/build 2021:303:024342

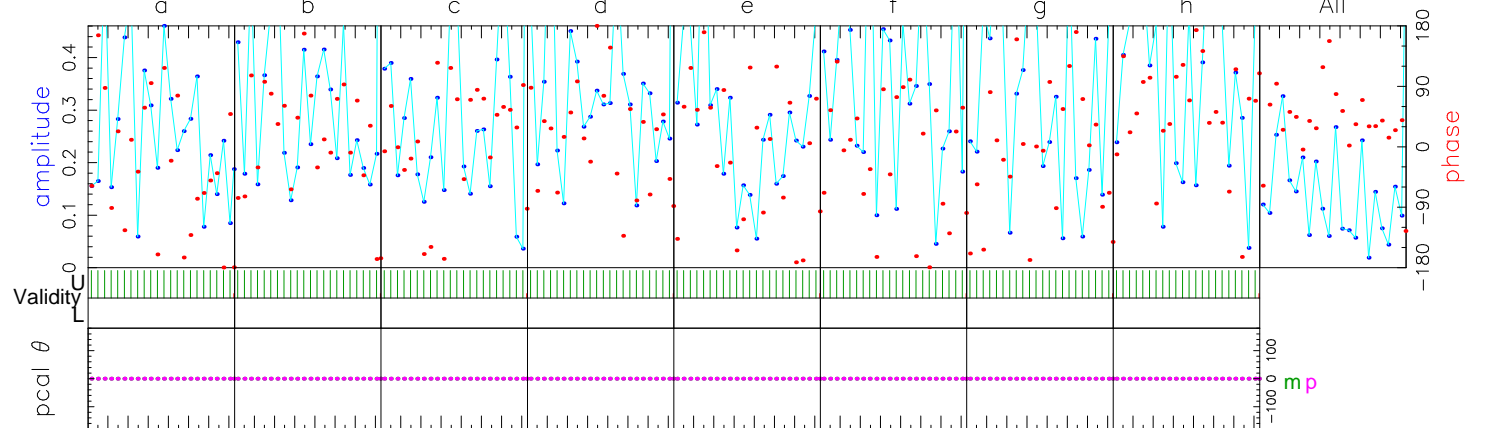
2021:303:120218

2021:252:122852

RA & Dec (J2000) 17h43m58.856136s --3°5'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	42.7	49.5	50.6	22.6	84.7	12.9	1.3	67.3	Phase	44.9
	0.0	0.2	0.2	0.2	0.1	0.2	0.1	0.3	Ampl.	0.1
	270.1	387.5	465.2	308.5	427.2	135.9	32.7	88.0	Sbd box	87.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.90195268736E+03		Apriori delay (usec)		1.90260646273E+03		Resid mbdelay (usec)		2.47463E-03	+/- 1.9E-04
Sband delay (usec)	1.90194524373E+03		Apriori clock (usec)		1.0164356E+01		Resid sbdelay (usec)		-6.61219E-01	+/- 1.5E-03
Phase delay (usec)	1.90260646418E+03		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		1.44930E-06	+/- 6.3E-07
Delay rate (us/s)	1.10528260662E+00		Apriori rate (us/s)		1.10527206346E+00		Resid rate (us/s)		1.05432E-05	+/- 2.6E-09
Total phase (deg)	296.8		Apriori accel (us/s/s)		-8.36535773355E-06		Resid phase (deg)		44.9	+/- 19.6

ph/seg (deg) 45.0 47.0 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 94.2 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 30.5 27.7 Inc. seg. avg. 0.155 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 60.2 48.3 Inc. frq. avg. 0.149 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

m: az 128.8 el 54.4 pa -47.2 p: az 210.7 el 47.3 pa 25.9 u,v (fr/asec) -6357.008 -1932.870 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mp..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mp.W.144.1X06HR

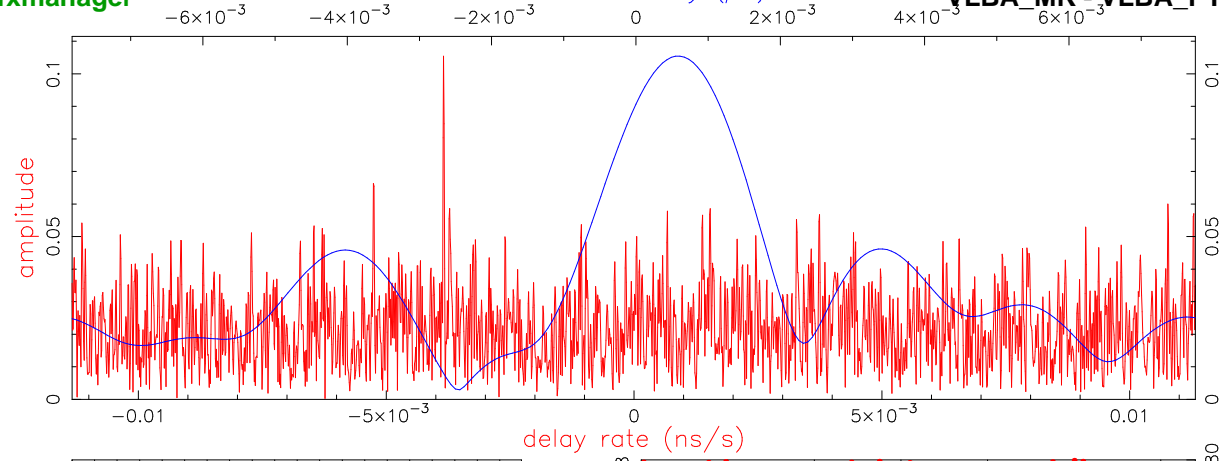
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

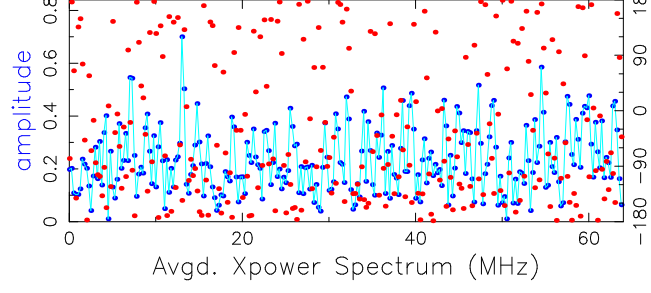
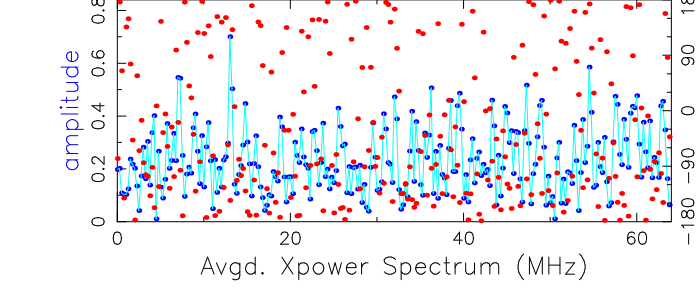
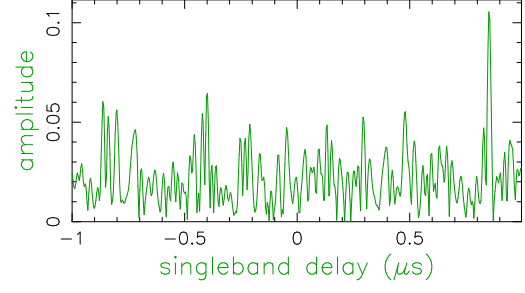
1741-038.1X06HR, No0062, mp

VLBA_MK - VLBA_PT, fgroup W, pol LL

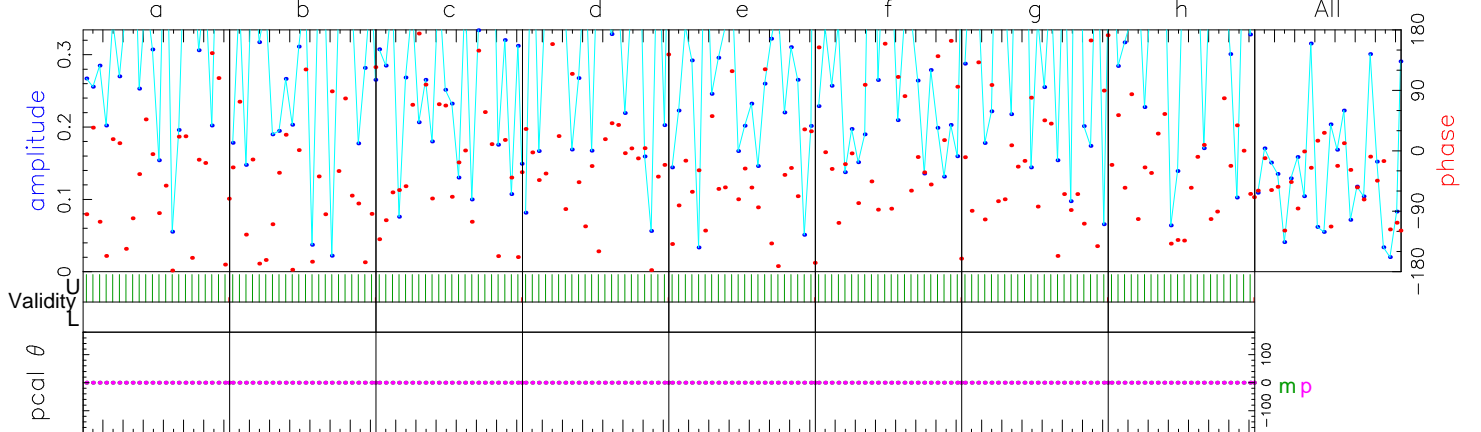
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 419.823
 Amp 0.111
 Phase -39.5
 PFD 4.9e-01
 Delays (us)
 SBD 0.852688
 MBD 0.000615
 Fringe rate (Hz)
 -0.331332
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 120001.00
 Stop 120700.84
 FRT 120331.00
 Corr/FF/build
 2021:303:024342
 2021:303:120208
 2021:252:122852
 RA & Dec (J2000)
 17h43m58.856136s
 -3°50'04.616734"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.3	-61.2	2.6	-16.3	-69.7	-46.5	-56.5	-28.4	Phase	-39.5
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	37.6	379.8	170.8	18.8	68.7	112.9	476.3	332.3	Sbd box	475.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.90346645261E+03		Apriori delay (usec)		1.90260646273E+03		Resid mbdelay (usec)		6.14880E-04	+/- 1.8E-04
Sband delay (usec)	1.90345915123E+03		Apriori clock (usec)		1.0164356E+01		Resid sbdelay (usec)		8.52688E-01	+/- 1.4E-03
Phase delay (usec)	1.90260646146E+03		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		-1.27267E-06	+/- 6.2E-07
Delay rate (us/s)	1.10526821702E+00		Apriori rate (us/s)		1.10527206346E+00		Resid rate (us/s)		-3.84644E-06	+/- 2.6E-09
Total phase (deg)	212.4		Apriori accel (us/s/s)		-8.36535773355E-06		Resid phase (deg)		-39.5	+/- 19.2

	RMS	Theor.	Amplitude	0.111 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	43.6	46.1	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	77.4	80.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	26.3	27.2	Inc. seg. avg.	0.106	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	42.4	47.5	Inc. frq. avg.	0.106	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

m: az 128.8 el 54.4 pa -47.2 p: az 210.7 el 47.3 pa 25.9 u,v (fr/asec) -6357.008 -1932.870 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0062/mp..1X06HR Output file: /Exps/c211c/v1/1234/No0062/mp.W.95.1X06HR