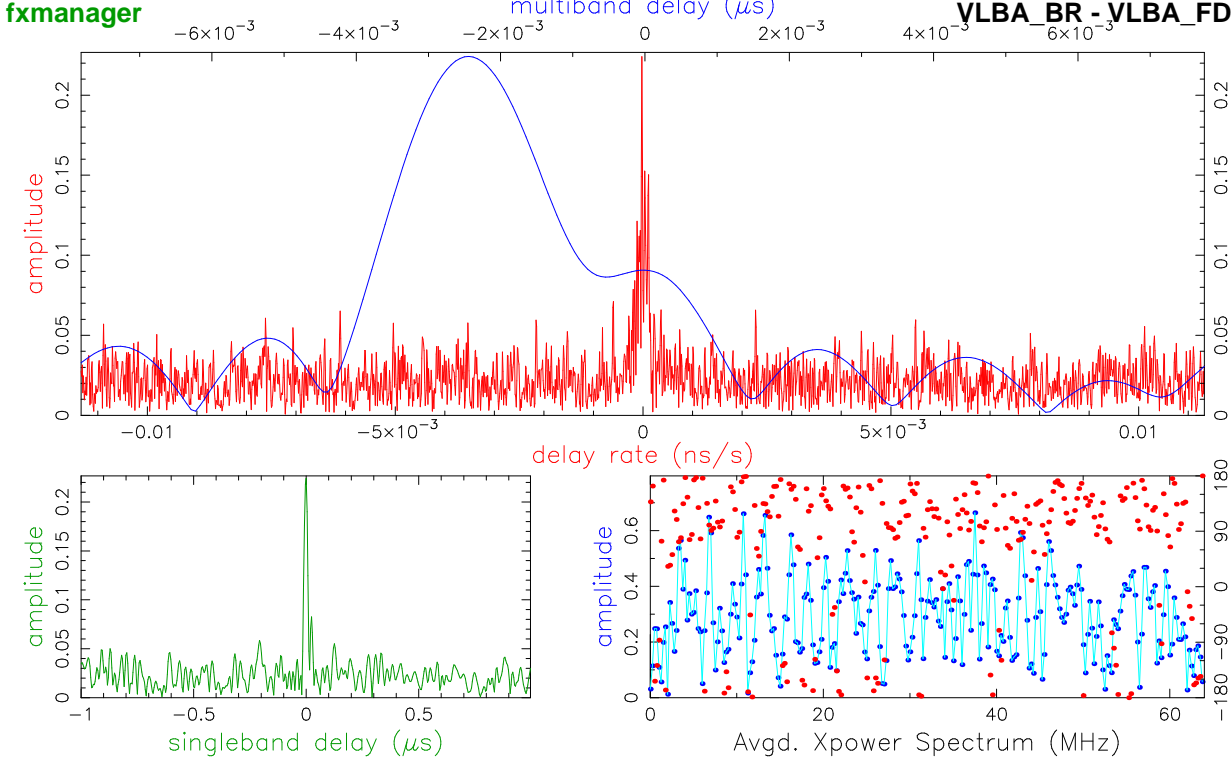


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

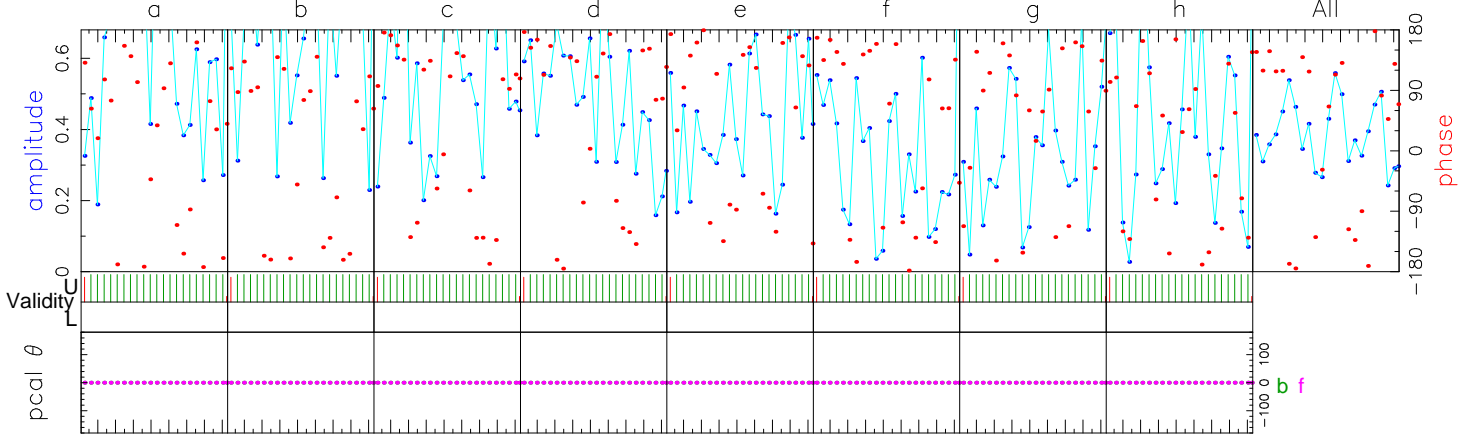
3C84.11M7QU, No0117, bf

VLBA_BR - VLBA_FD, fgroup W, pol LL



Fringe quality 9
 SNR 13.5
 Int time 475.241
 Amp 0.227
 Phase 145.5
 PFD 7.2e-33
 Delays (us)
 SBD -0.001386
 MBD -0.002478
 Fringe rate (Hz)
 -0.001590
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133003.56
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133329
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	4.74344281928E+03		Apriori delay (usec)		4.74344529687E+03		Resid mbdelay (usec)		-2.47760E-03	+/- 8.0E-05
Sband delay (usec)	4.74344391087E+03		Apriori clock (usec)		-9.5847359E+00		Resid sbdelay (usec)		-1.38600E-03	+/- 6.4E-04
Phase delay (usec)	4.74344530156E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		4.69179E-06	+/- 2.7E-07
Delay rate (us/s)	3.11578187415E-01		Apriori rate (us/s)		3.11578205873E-01		Resid rate (us/s)		-1.84586E-08	+/- 9.9E-10
Total phase (deg)	99.6		Apriori accel (us/s/s)		-7.67568894410E-06		Resid phase (deg)		145.5	+/- 8.5

	RMS	Theor.	Amplitude	0.227 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	67.8	20.3	Search (2048X32)	0.216	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	82.0	35.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	20.5	12.0	Inc. seg. avg.	0.367	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	24.6	20.9	Inc. frq. avg.	0.230	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

b: az 279.7 el 53.2 pa 61.5 f: az 301.7 el 35.5 pa 77.7 u,v (fr/asec) -2401.448 1045.330 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf.W.1.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

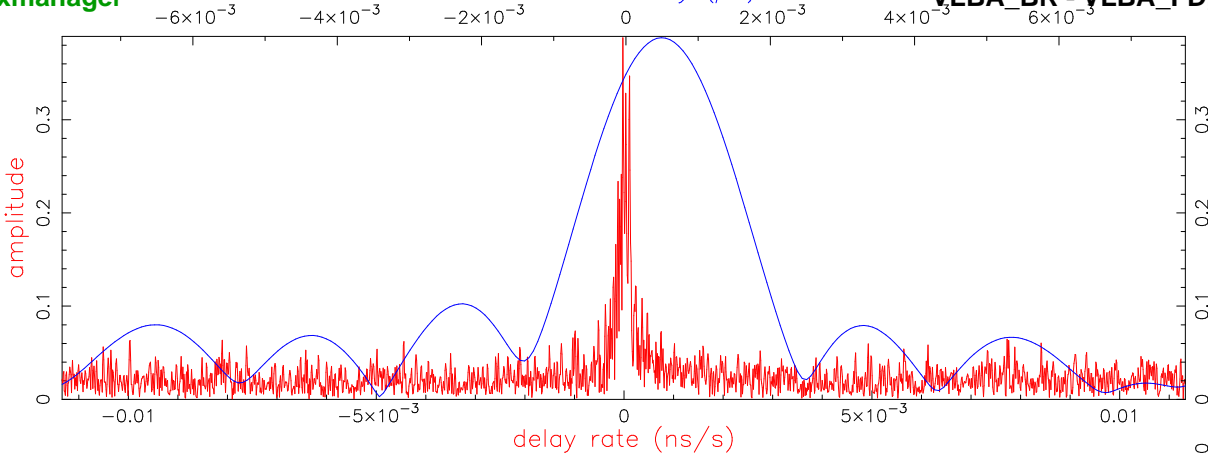
fxmanager

3C84.11M7QU, No0117, bf

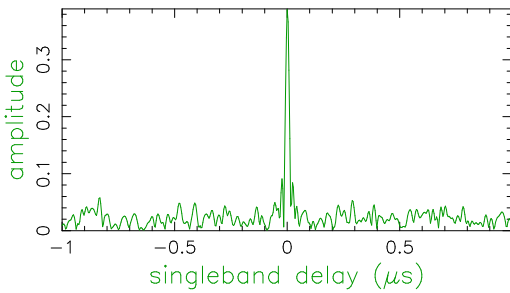
VLBA_BR - VLBA_FD, fgroup W, pol RR

multiband delay (μ s)

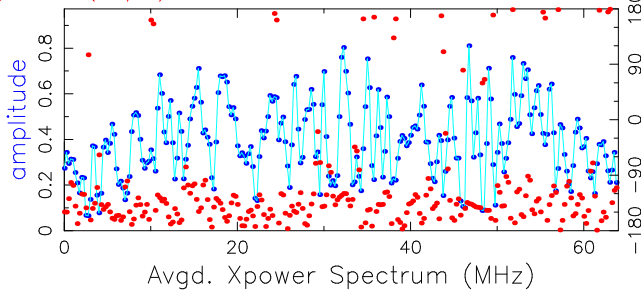
Fringe quality 9



SNR 23.2
 Int time 475.241
 Amp 0.389
 Phase -138.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000784
 MBD 0.000517
 Fringe rate (Hz)
 -0.001574
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

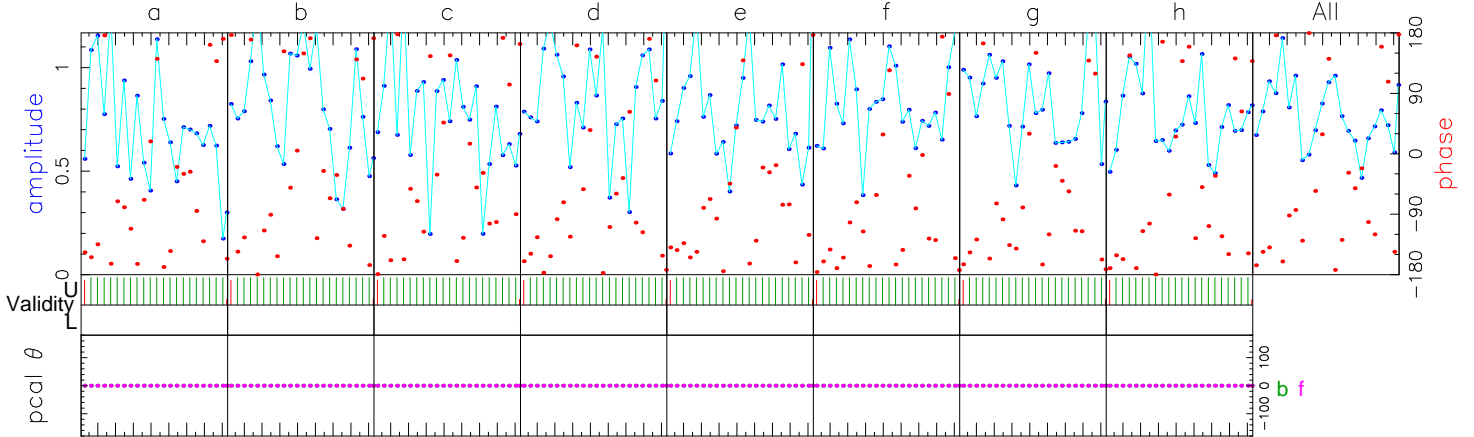


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133003.56
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133332
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-139.7	-150.3	-127.3	-140.9	-119.2	-140.1	-140.0	-150.8	Phase	-138.8
	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	Ampl.	0.4
	256.5	257.3	257.3	256.8	257.6	257.1	257.4	257.1	Sbd box	257.2
U/L	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.74344581365E+03		Apriori delay (usec)		4.74344529687E+03		Resid mbdelay (usec)		5.16779E-04	+/- 4.7E-05
Sband delay (usec)	4.74344608112E+03		Apriori clock (usec)		-9.5847359E+00		Resid sbdelay (usec)		7.84250E-04	+/- 3.7E-04
Phase delay (usec)	4.74344529240E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-4.47448E-06	+/- 1.6E-07
Delay rate (us/s)	3.11578187598E-01		Apriori rate (us/s)		3.11578205873E-01		Resid rate (us/s)		-1.82758E-08	+/- 5.8E-10
Total phase (deg)	175.4		Apriori accel (us/s/s)		-7.67568894410E-06		Resid phase (deg)		-138.8	+/- 4.9

	RMS	Theor.	Amplitude	0.389 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	69.1	11.8	Search (2048X32)	0.368	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	104.5	20.6	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	11.5	7.0	Inc. seg. avg.	0.749	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	6.8	12.2	Inc. frq. avg.	0.391				

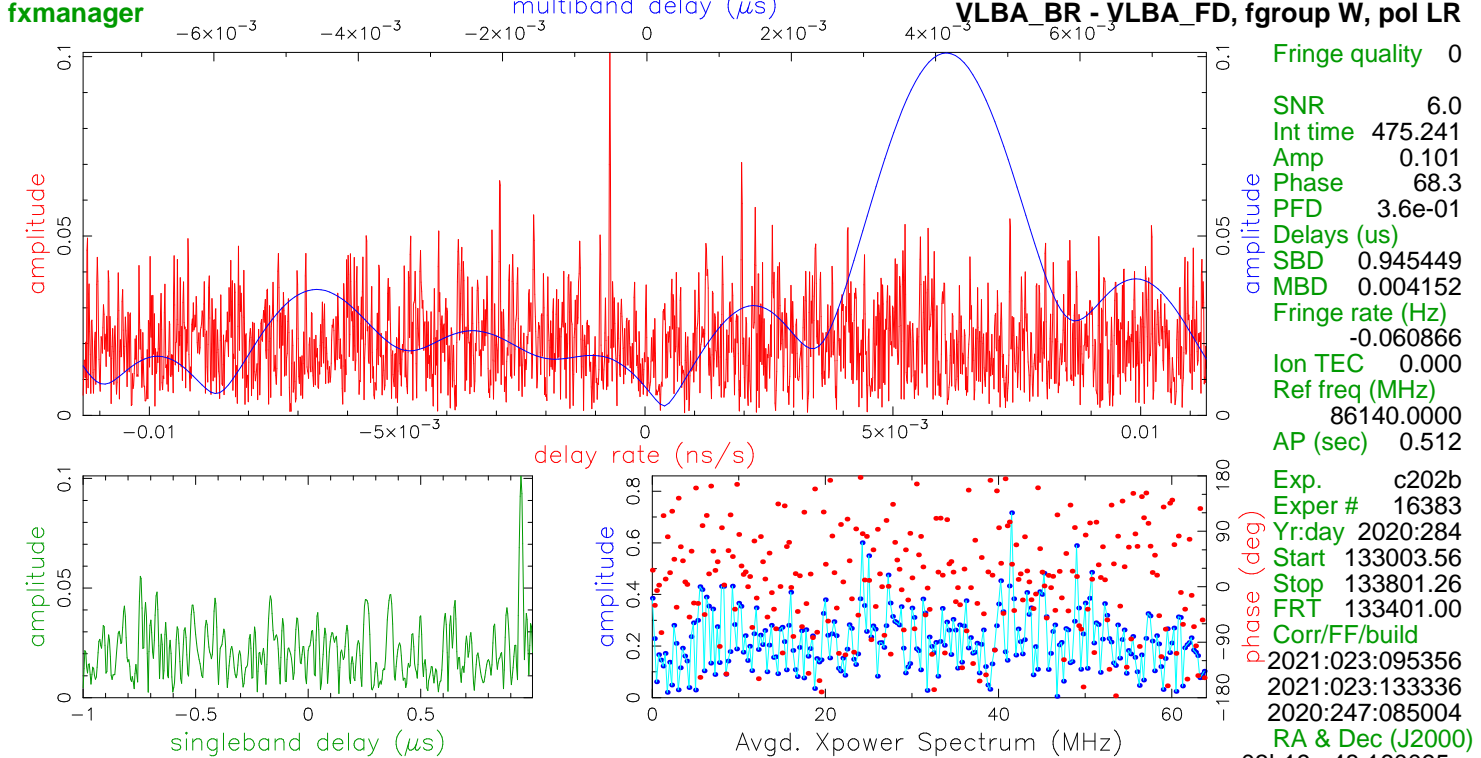
b: az 279.7 el 53.2 pa 61.5 f: az 301.7 el 35.5 pa 77.7 u,v (fr/asec) -2401.448 1045.330 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf.W.20.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

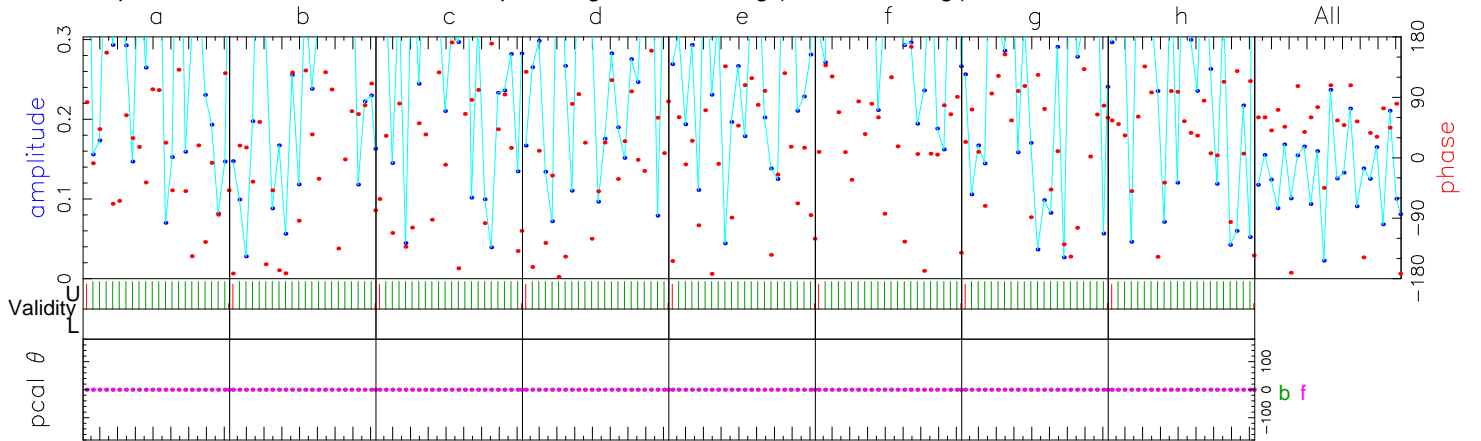
fxmanager

3C84.1M7QU, No0117, bf

VLBA_BR - VLBA_FD, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
62.2	88.6	58.2	68.9	54.0	66.5	79.1	67.6	Phase	68.3
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
124.3	351.6	348.8	482.6	353.3	499.1	496.0	498.5	Sbd box	499.0
U/L 931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	APs used	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000		
b W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	4.74438694872E+03		Apriori delay (usec)	4.74344529687E+03	Resid mbdelay (usec)	4.15185E-03	+/-	1.8E-04	
Sband delay (usec)	4.74439074637E+03		Apriori clock (usec)	-9.5847359E+00	Resid sbdelay (usec)	9.45449E-01	+/-	1.4E-03	
Phase delay (usec)	4.74344529907E+03		Apriori clockrate (us/s)	-3.9999997E-07	Resid phdelay (usec)	2.20213E-06	+/-	6.1E-07	
Delay rate (us/s)	3.11577499284E-01		Apriori rate (us/s)	3.11578205873E-01	Resid rate (us/s)	-7.06590E-07	+/-	2.2E-09	
Total phase (deg)		22.4	Apriori accel (us/s/s)	-7.67568894410E-06	Resid phase (deg)	68.3	+/-	19.0	

ph/seg (deg) 52.8 45.6 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 58.6 79.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 12.1 26.9 Inc. seg. avg. 0.102 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 43.8 47.0 Inc. frq. avg. 0.092 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

b: az 279.7 el 53.2 pa 61.5 f: az 301.7 el 35.5 pa 77.7 u,v (fr/asec) -2401.448 1045.330 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf.W.39.1IM7QU simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

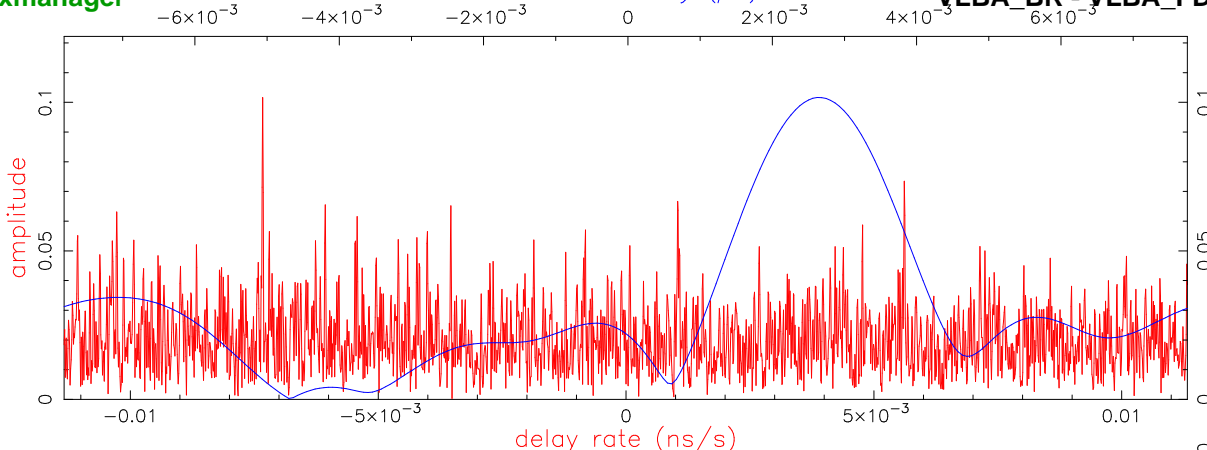
fxmanager

3C84.11M7QU, No0117, bf

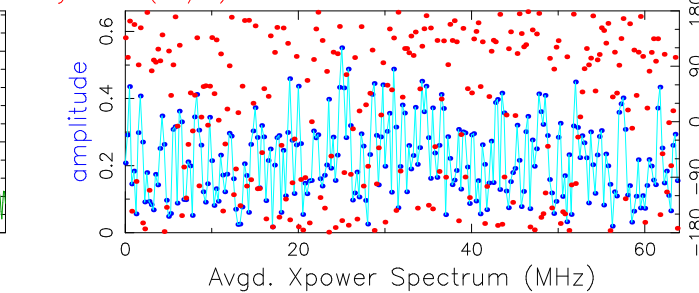
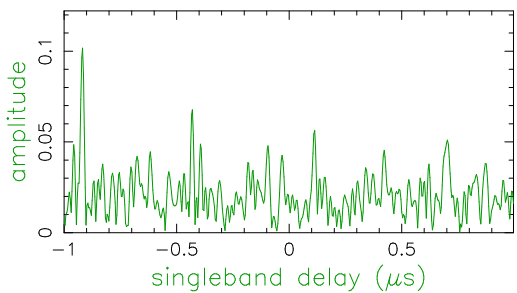
VLBA_BR - VLBA_FD, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 0

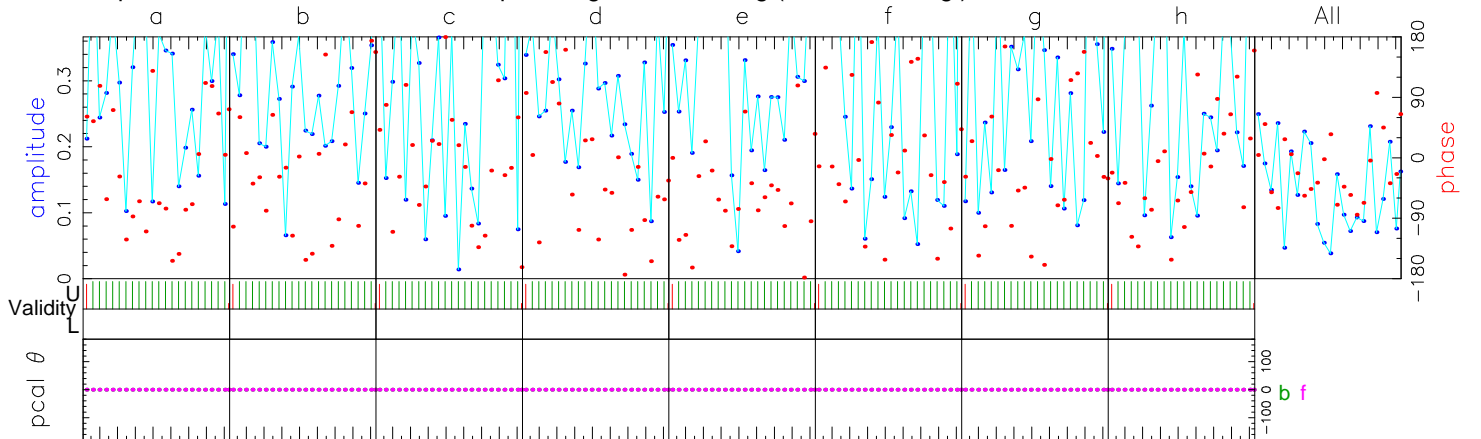


SNR 6.1
 Int time 475.241
 Amp 0.122
 Phase -26.3
 PFD 2.5e-01
 Delays (us)
 SBD -0.918897
 MBD 0.002627
 Fringe rate (Hz)
 -0.631910
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133003.56
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133340
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec

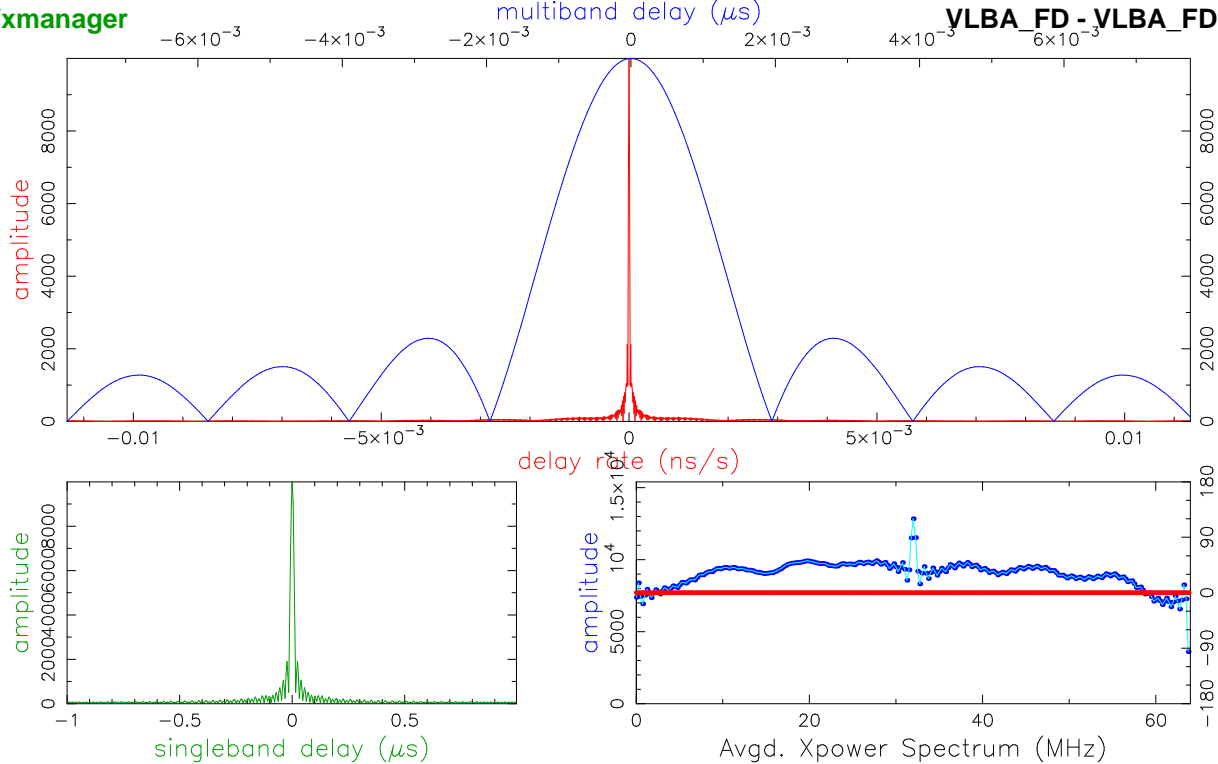


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.7	-29.5	-9.3	-36.6	-61.0	-3.6	-17.2	-24.2	Phase	-26.3
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	4.4	26.2	22.2	139.3	432.9	479.0	410.8	392.0	Sbd box	21.8
U/L	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.74252604917E+03		Apriori delay (usec)		4.74344529687E+03		Resid mbdelay (usec)		2.62730E-03	+/- 1.8E-04
Sband delay (usec)	4.74252639962E+03		Apriori clock (usec)		-9.5847359E+00		Resid sbdelay (usec)		-9.18897E-01	+/- 1.4E-03
Phase delay (usec)	4.74344529602E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-8.47315E-07	+/- 6.1E-07
Delay rate (us/s)	3.11570870021E-01		Apriori rate (us/s)		3.11578205873E-01		Resid rate (us/s)		-7.33585E-06	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.67568894410E-06		Resid phase (deg)		-26.3	+/- 18.8

	RMS	Theor.	Amplitude	0.122 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	47.5	45.0	Search (2048X32)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	72.8	78.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	19.2	26.6	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	34.3	46.4	Inc. frq. avg.	0.116	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

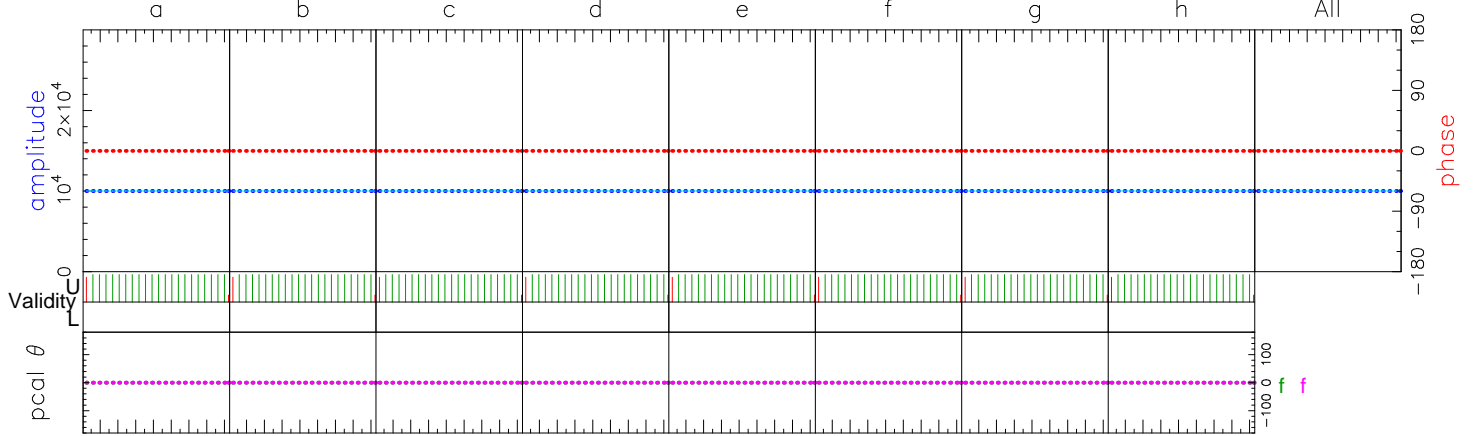
b: az 279.7 el 53.2 pa 61.5 f: az 301.7 el 35.5 pa 77.7 u,v (fr/asec) -2401.448 1045.330 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/bf.W.58.11M7QU



Fringe quality 9
SNR 596778.4
Int time 476.246
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Yr:day 16383
Start 2020:284
Stop 2020:284
FRT 133002.54
Start 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133329
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

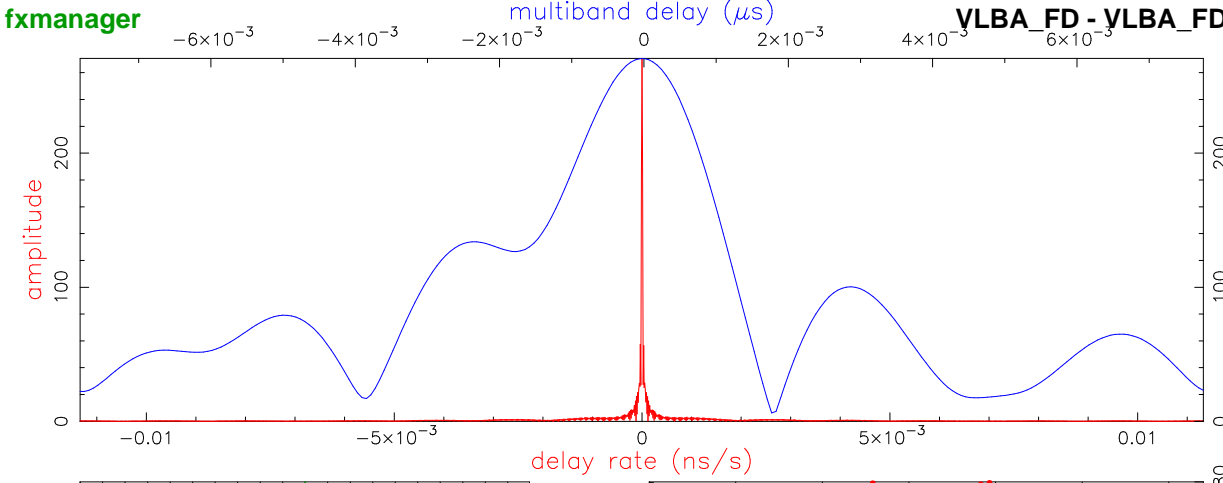
Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	1.8E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.4E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.2E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.2E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

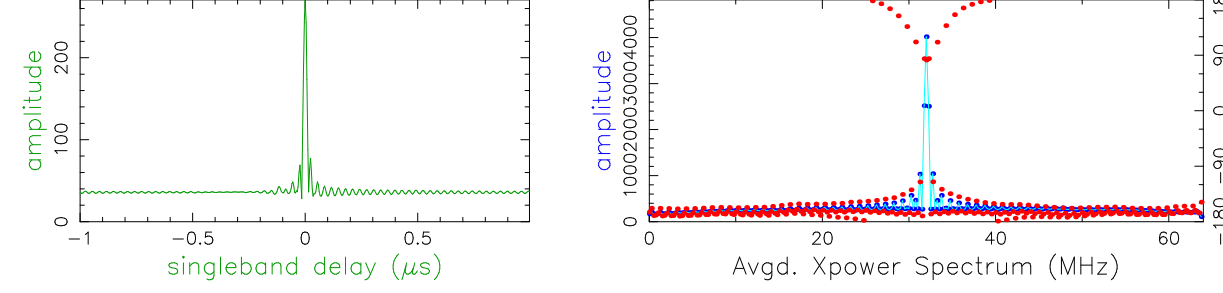
ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	Search (2048X32)	9999.999	Interp.	0.000	Search (2048X32)	9999.999	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Inc. seg. avg.	10000.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	Inc. frq. avg.	9999.999	Inc. frq. avg.	9999.999	Inc. frq. avg.	9999.999	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
f: az 301.7 el 35.5 pa 77.7		f: az 301.7 el 35.5 pa 77.7		u, v (fr/asec)	0.000 0.000	ion window (TEC)	0.00 0.00	Data rate (Mb/s):	2048	simultaneous interpolator			



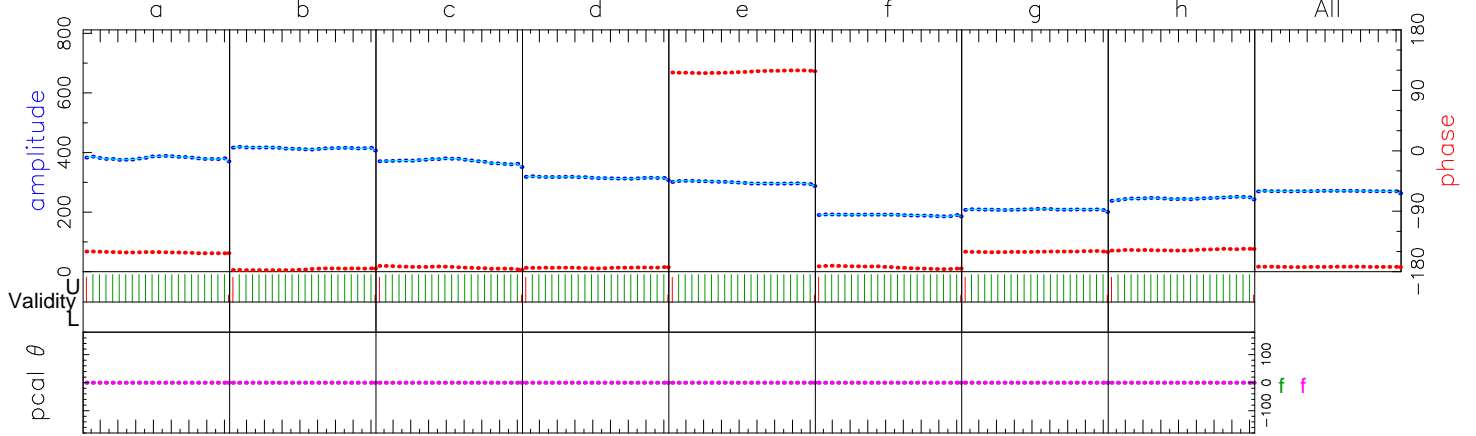
Fringe quality 6

SNR 16151.5
Int time 476.246
Amp 270.644
Phase -172.6
PFD 0.0e+00
Delays (us)
SBD -0.000209
MBD -0.000027
Fringe rate (Hz) 0.000005
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133337
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-151.3	-176.4	-173.5	-174.0	117.5	-173.4	-150.2	-147.4	Phase	-172.6
	381.6	414.7	371.5	315.8	299.1	190.1	208.7	246.1	Ampl.	303.4
	256.9	256.7	256.9	256.8	263.2	257.1	257.0	256.9	Sbd box	256.9
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.74062500000E-05					0.00000000000E+00			Resid mbdelay (usec)	-2.74062E-05 +/- 6.7E-08
Sband delay (usec)	-2.08500000000E-04					0.0000000E+00			Resid sbdelay (usec)	-2.08500E-04 +/- 5.3E-07
Phase delay (usec)	-5.56694777163E-06					0.0000000E+00			Resid phdelay (usec)	-5.56695E-06 +/- 2.3E-10
Delay rate (us/s)	6.02273976647E-11					0.00000000000E+00			Resid rate (us/s)	6.02274E-11 +/- 8.3E-13
Total phase (deg)			-172.6			0.00000000000E+00			Resid phase (deg)	-172.6 +/- 0.0

RMS Theor. Amplitude 270.644 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (2048X32) 270.503 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 32.9 0.0 Inc. seg. avg. 270.571 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.2 0.0 Inc. frq. avg. 303.446 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 301.7 el 35.5 pa 77.7 f: az 301.7 el 35.5 pa 77.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ff.11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ff.W.43.11M7QU

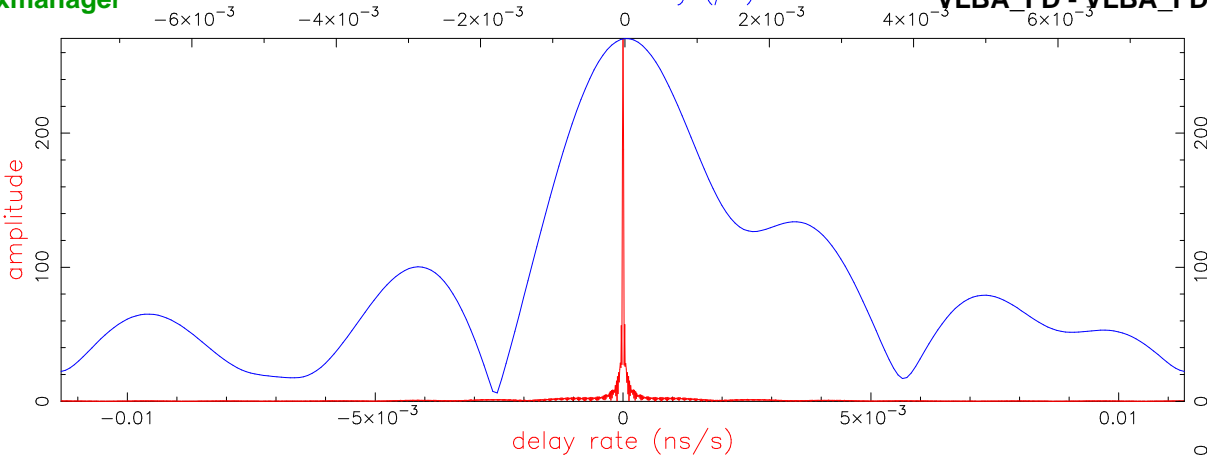
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ff

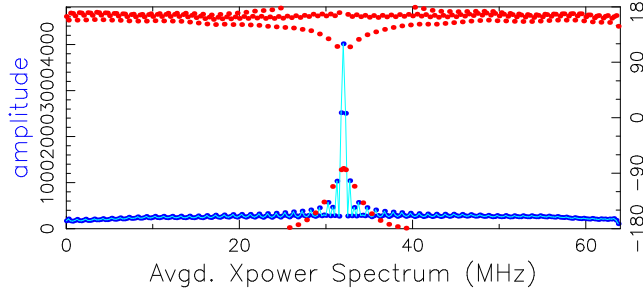
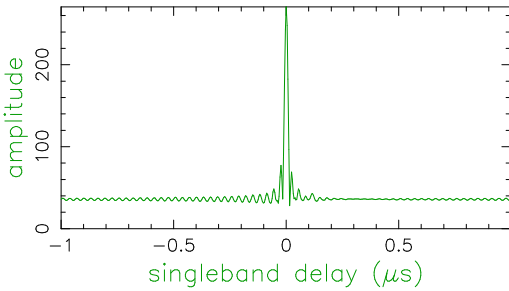
VLBA_FD - VLBA_FD, fgroup W, pol RL

multiband delay (μ s)



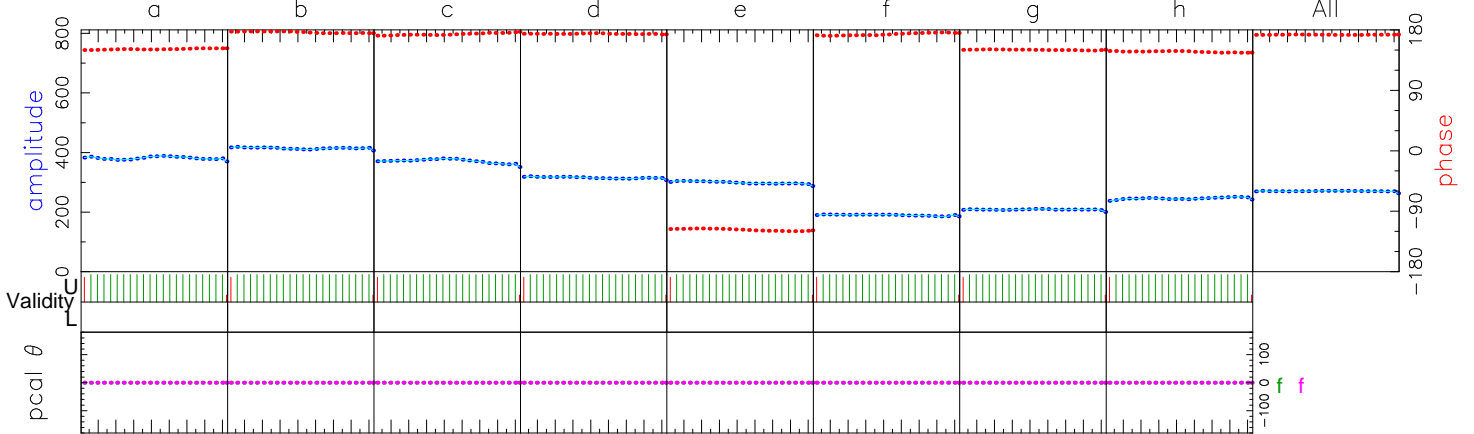
Fringe quality 6

SNR 16151.5
 Int time 476.246
 Amp 270.644
 Phase 172.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.000209
 MBD 0.000027
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133340
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.74062500000E-05				0.00000000000E+00				2.74062E-05	+/- 6.7E-08
Sband delay (usec)	2.08500000000E-04				0.0000000E+00				2.08500E-04	+/- 5.3E-07
Phase delay (usec)	5.56694777182E-06				0.0000000E+00				5.56695E-06	+/- 2.3E-10
Delay rate (us/s)	-6.02273976647E-11				0.00000000000E+00				-6.02274E-11	+/- 8.3E-13
Total phase (deg)			172.6		0.00000000000E+00				172.6	+/- 0.0
	RMS	Theor.	Amplitude	270.644 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.2	0.0	Search (2048X32)	270.503	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	0.4	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	32.9	0.0	Inc. seg. avg.	270.571	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	31.2	0.0	Inc. frq. avg.	303.446	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
f: az 301.7 el 35.5 pa 77.7			f: az 301.7 el 35.5 pa 77.7		u,v (fr/asec) 0.000	0.000				simultaneous interpolator

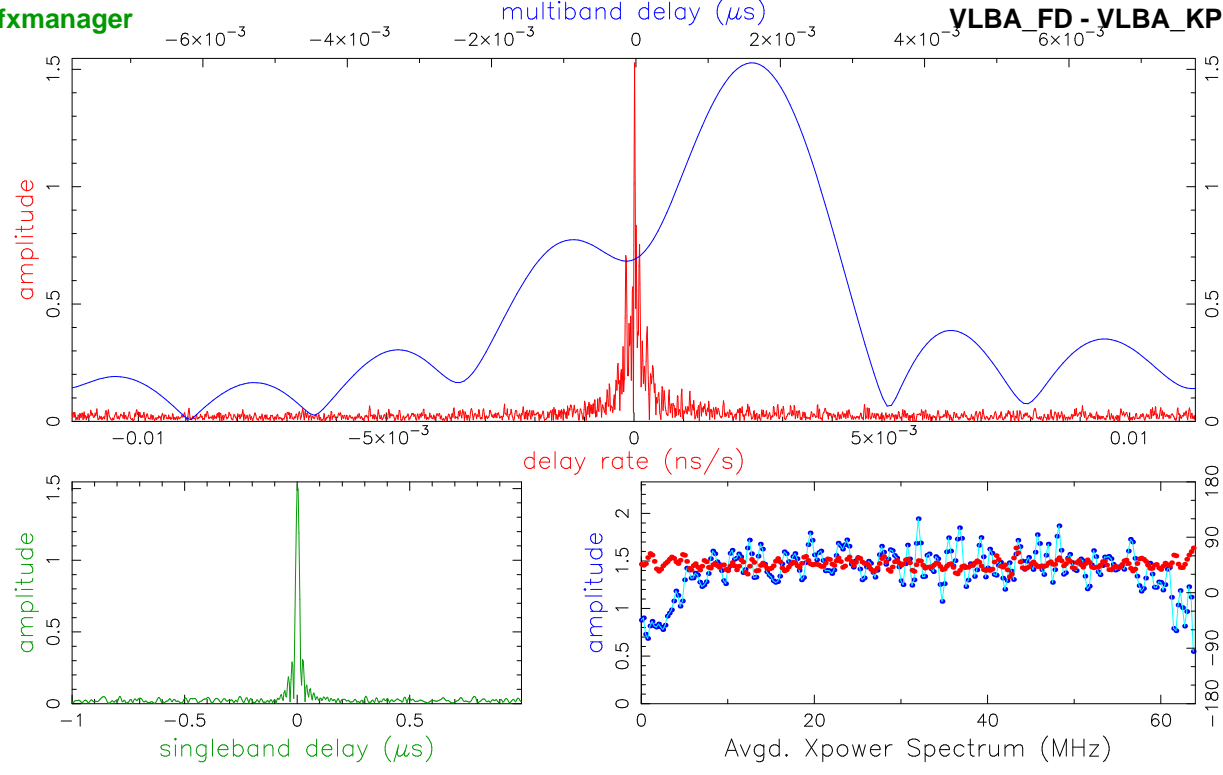
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ff.11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ff.W.60.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, fk

VLBA_FD - VLBA_KP, fgroup W, pol LL

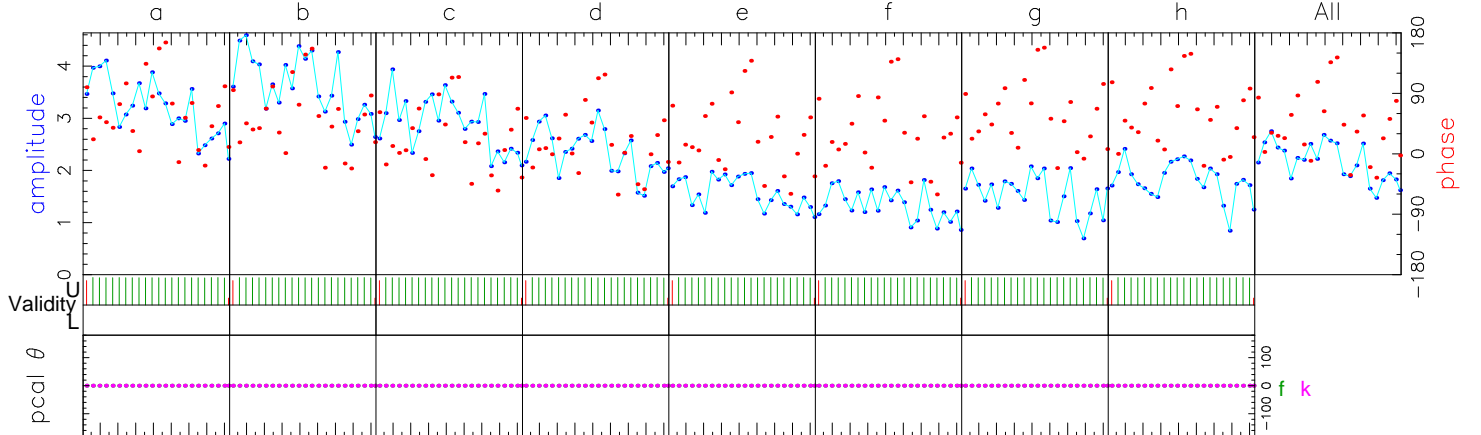


Fringe quality 3

SNR 91.9
 Int time 472.519
 Amp 1.547
 Phase 43.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.001429
 MBD 0.001624
 Fringe rate (Hz) 0.001329
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133331
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.84073412227E+03									
Sband delay (usec)	-1.84073431747E+03									
Phase delay (usec)	-1.84073574456E+03									
Delay rate (us/s)	-6.84984811517E-02									
Total phase (deg)			-13.2							
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)									43.7	+/- 1.2
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 48.0 3.0 Search (2048X32) 1.429 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.2 5.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 1.8 Inc. seg. avg. 2.183 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.8 3.1 Inc. frq. avg. 1.604 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 301.7 el 35.5 pa 77.7 k: az 299.4 el 41.8 pa 80.5 u,v (fr/asec) 538.775 446.391 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fk..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fk.W.17.1IM7QU

Mk4/DiFX fourfit 3.21 rev 2937

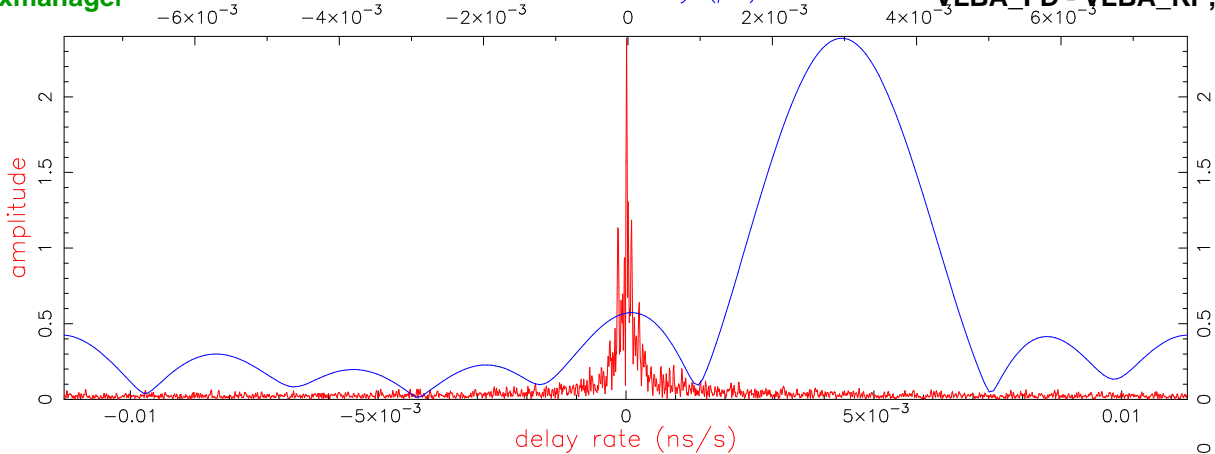
fxmanager

3C84.11M7QU, No0117, fk

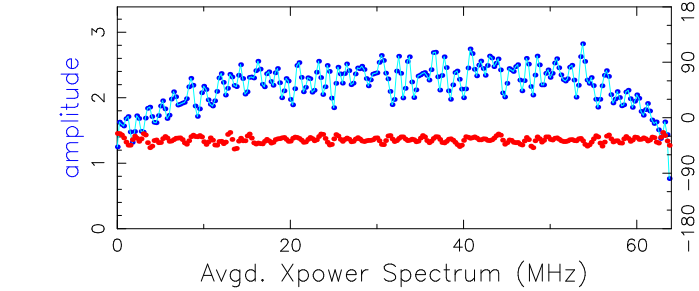
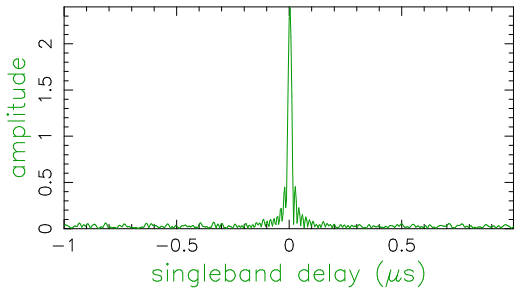
VLBA_FD - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 5

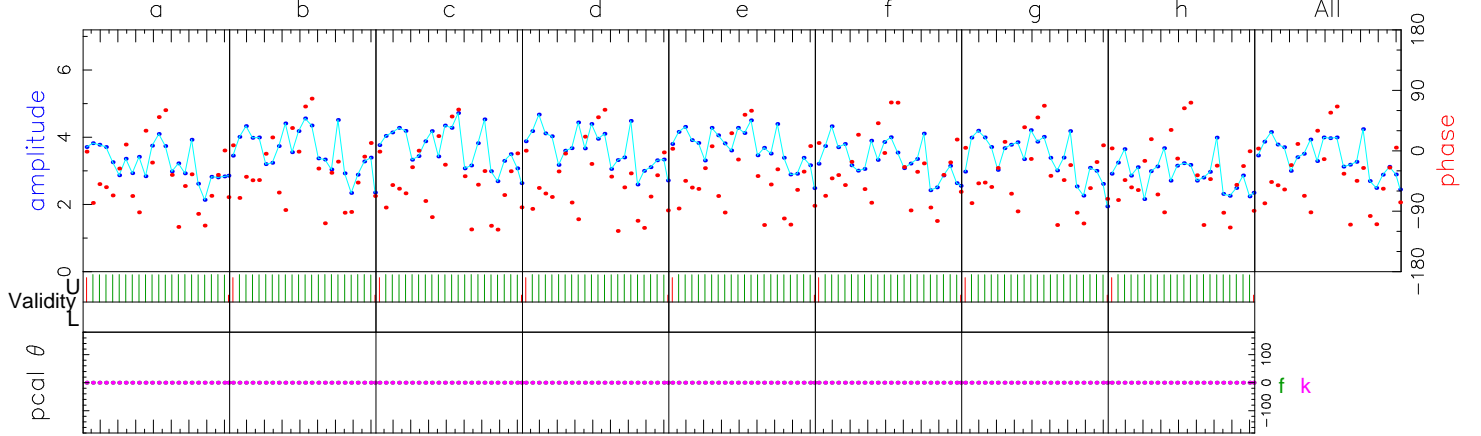


SNR 142.6
 Int time 472.518
 Amp 2.400
 Phase -35.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002987
 MBD 0.002941
 Fringe rate (Hz) 0.001318
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133335
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-39.0	-25.6	-41.7	-45.1	-37.5	-25.5	-33.7	-35.6	Phase	-35.6
	2.3	2.5	2.6	2.5	2.6	2.4	2.4	2.0	Ampl.	2.4
	258.0	257.6	257.7	257.7	258.0	257.5	258.0	257.6	Sbd box	257.8
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.84073280540E+03		Apriori delay (usec)		-1.84073574597E+03		Resid mbdelay (usec)		2.94057E-03 +/- 7.6E-06	
Sband delay (usec)	-1.84073275872E+03		Apriori clock (usec)		7.5360527E+00		Resid sbdelay (usec)		2.98725E-03 +/- 6.0E-05	
Phase delay (usec)	-1.84073574712E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-1.14673E-06 +/- 2.6E-08	
Delay rate (us/s)	-6.84984812778E-02		Apriori rate (us/s)		-6.84984965812E-02		Resid rate (us/s)		1.53034E-08 +/- 9.4E-11	
Total phase (deg)			Apriori accel (us/s/s)		8.35223918679E-06		Resid phase (deg)		-35.6 +/- 0.8	

	RMS	Theor.	Amplitude	2.400 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	48.2	1.9	Search (2048X32)	2.256	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	48.2	3.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	7.6	1.1	Inc. seg. avg.	3.442	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	7.5	2.0	Inc. frq. avg.	2.403	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

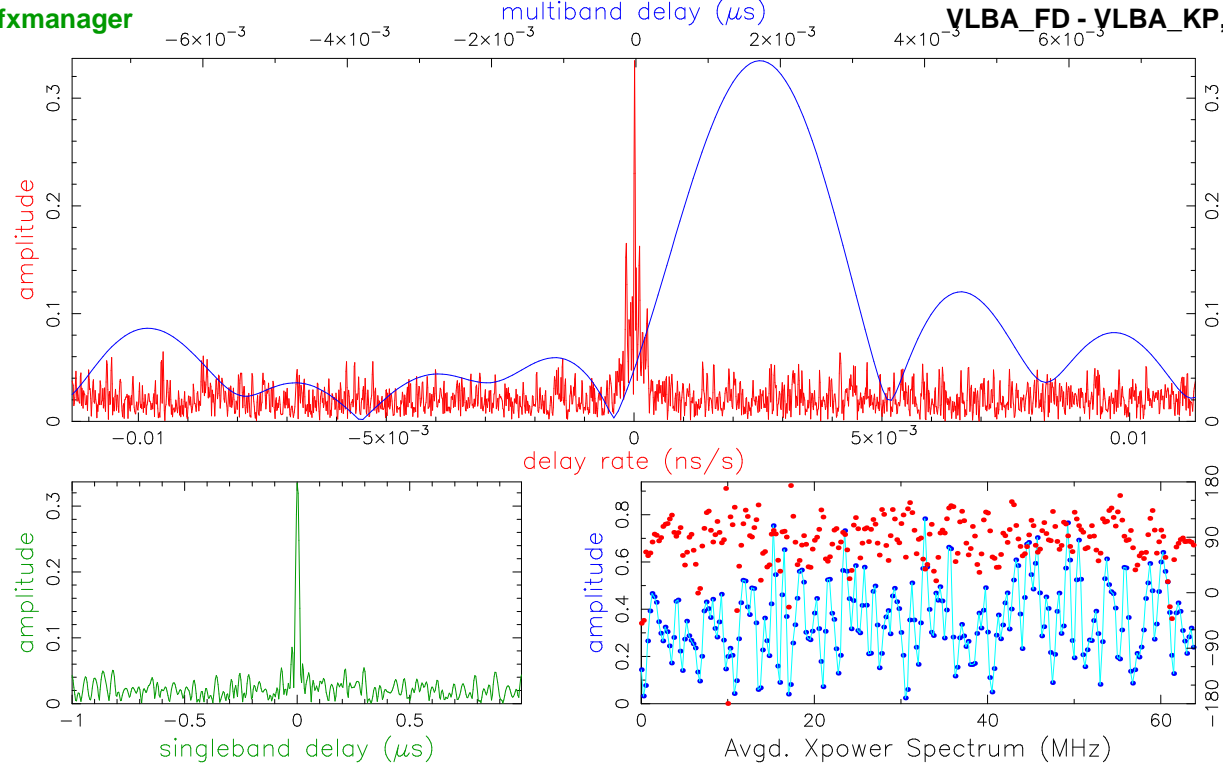
f: az 301.7 el 35.5 pa 77.7 k: az 299.4 el 41.8 pa 80.5 u,v (fr/asec) 538.775 446.391 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fk..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fk.W.33.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fk

VLBA_FD - VLBA_KP, fgroup W, pol RL

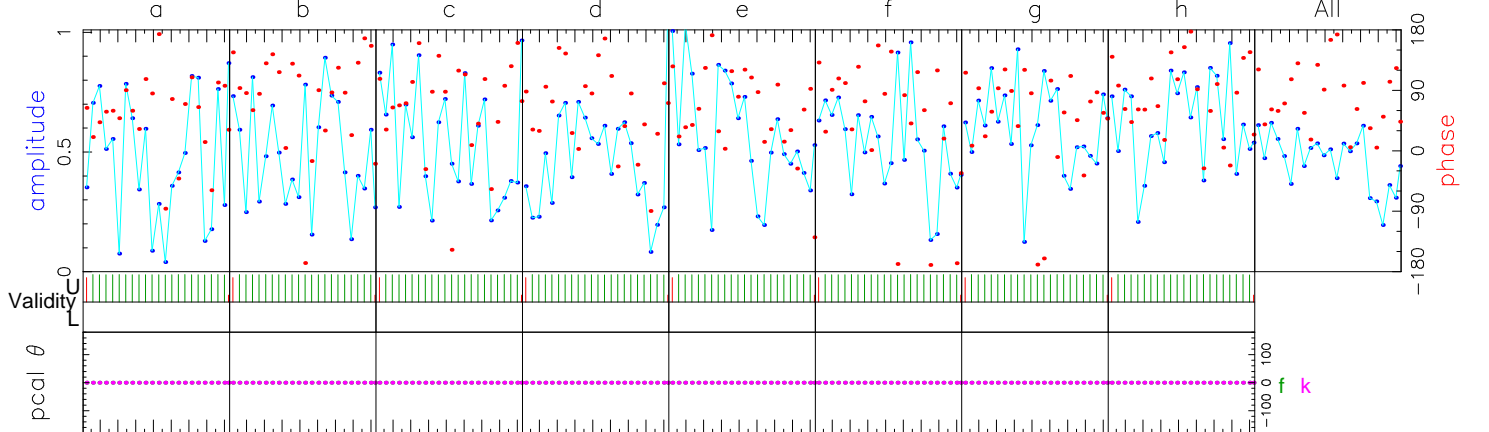


Fringe quality 9

SNR 20.0
 Int time 472.518
 Amp 0.337
 Phase 82.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.001035
 MBD 0.001740
 Fringe rate (Hz) 0.001273
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133342
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.84073400555E+03									
Sband delay (usec)	-1.84073471072E+03									
Phase delay (usec)	-1.84073574330E+03									
Delay rate (us/s)	-6.84984818014E-02									
Total phase (deg)			25.9							
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)										

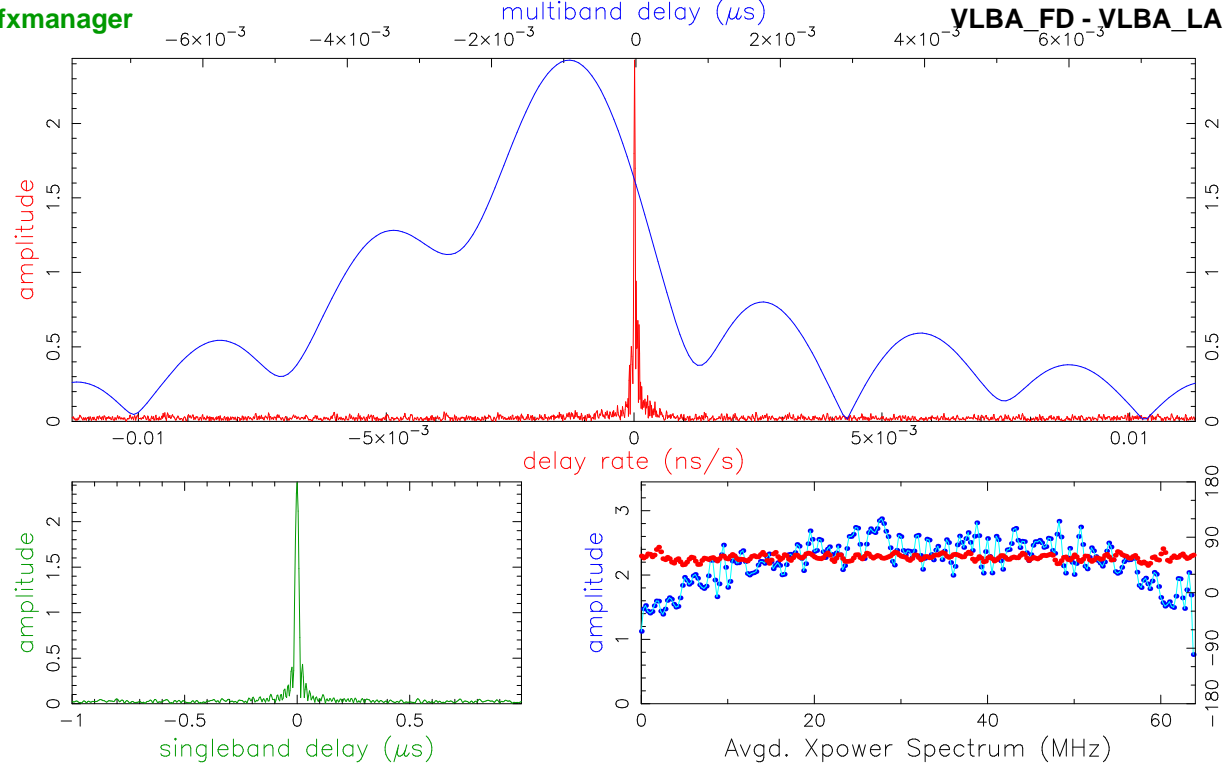
ph/seg (deg) 46.6 13.7 Search (2048X32) 0.314 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.0 23.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.5 8.1 Inc. seg. avg. 0.452 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.8 14.1 Inc. frq. avg. 0.342 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 301.7 el 35.5 pa 77.7 k: az 299.4 el 41.8 pa 80.5 u,v (fr/asec) 538.775 446.391 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fk..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fk.W.68.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

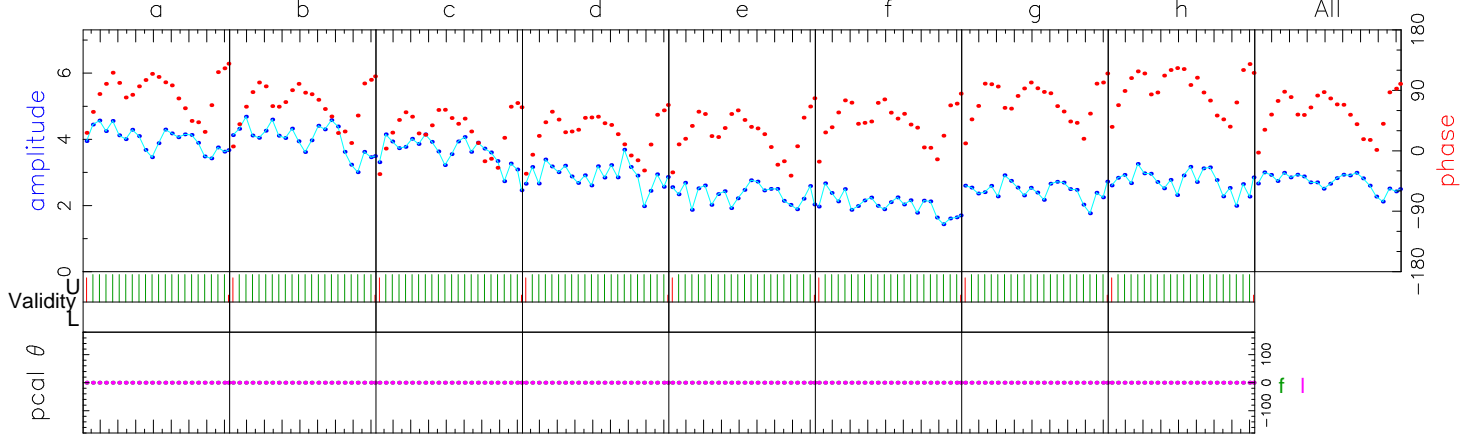
3C84.11M7QU, No0117, fl

VLBA_FD - VLBA_LA, fgroup W, pol LL



Fringe quality 4
 SNR 145.4
 Int time 475.890
 Amp 2.437
 Phase 57.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000908
 MBD -0.000938
 Fringe rate (Hz) 0.000923
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133331
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.24812481054E+03	Apriori delay (usec)	-1.24812387271E+03	Resid mbdelay (usec)	-9.37831E-04	+/-	7.5E-06
Sband delay (usec)	-1.24812478071E+03	Apriori clock (usec)	8.2774200E+00	Resid sbdelay (usec)	-9.08000E-04	+/-	5.9E-05
Phase delay (usec)	-1.24812387085E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	1.85607E-06	+/-	2.5E-08
Delay rate (us/s)	-6.72801953309E-02	Apriori rate (us/s)	-6.72802060407E-02	Resid rate (us/s)	1.07098E-08	+/-	9.2E-11
Total phase (deg)		Apriori accel (us/s/s)	1.06337205725E-06	Resid phase (deg)	57.6	+/-	0.8

ph/seg (deg)	28.1	RMS	28.1	Theor.	1.9	Amplitude	2.437 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	15.2		3.6		3.3	Search (2048X32)	2.420	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	29.5		1.1		1.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	28.0		1.9		1.9	Inc. seg. avg.	2.722	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	2.682	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

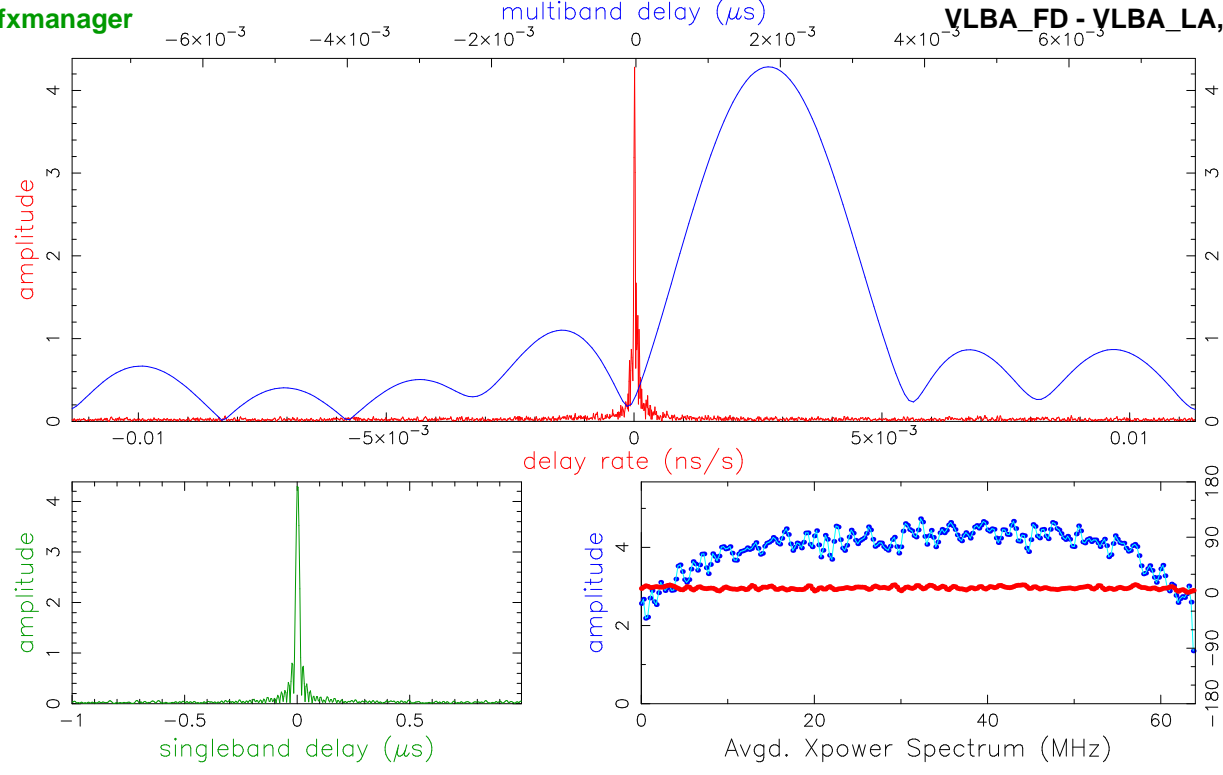
f: az 301.7 el 35.5 pa 77.7 l: az 297.7 el 39.7 pa 74.2 u,v (fr/asec) 517.888 -427.948 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.W.16.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

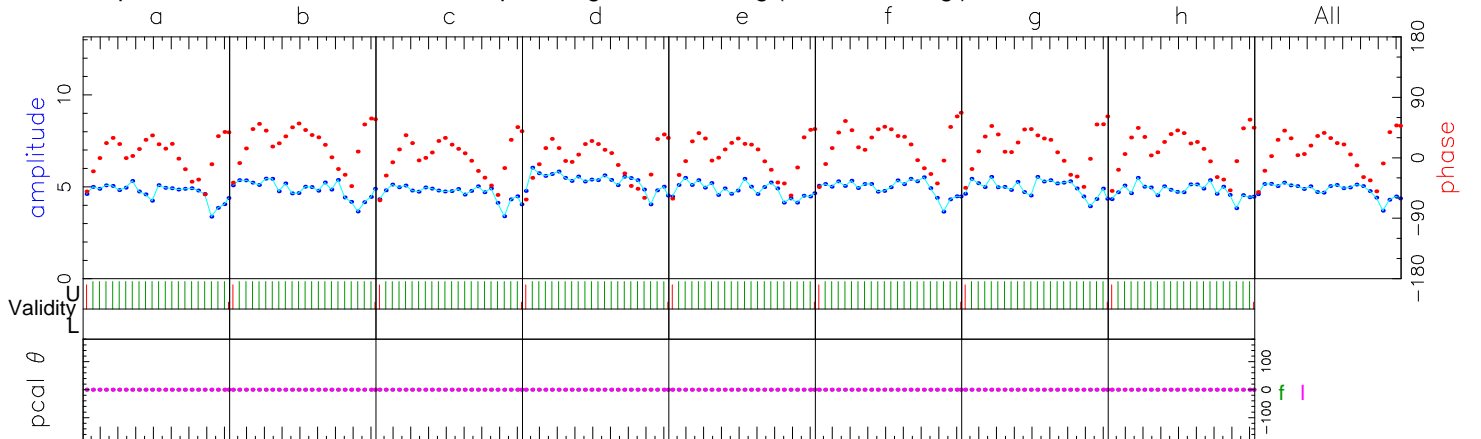
3C84.1M7QU, No0117, fl

VLBA_FD - VLBA_LA, fgroup W, pol RR



Fringe quality 7
 SNR 261.7
 Int time 475.890
 Amp 4.387
 Phase 8.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.001890
 MBD 0.001790
 Fringe rate (Hz) 0.000928
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133335
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.24812208310E+03					-1.24812387271E+03			Resid mbdelay (usec)	1.78961E-03 +/- 4.1E-06
Sband delay (usec)	-1.24812198221E+03					8.2774200E+00			Resid sbdelay (usec)	1.89050E-03 +/- 3.3E-05
Phase delay (usec)	-1.24812387242E+03					5.0000000E-07			Resid phdelay (usec)	2.85006E-07 +/- 1.4E-08
Delay rate (us/s)	-6.72801952657E-02					-6.72802060407E-02			Resid rate (us/s)	1.07750E-08 +/- 5.1E-11
Total phase (deg)		-133.4				1.06337205725E-06			Resid phase (deg)	8.8 +/- 0.4
	RMS	Theor.	Amplitude	4.387 +/- 0.017					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	28.6	1.0	Search (2048X32)	4.257					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	13.1	1.8	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	9.8	0.6	Inc. seg. avg.	4.835					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	4.0	1.1	Inc. frq. avg.	4.329					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

f: az 301.7 el 35.5 pa 77.7 l: az 297.7 el 39.7 pa 74.2 u,v (fr/asec) 517.888 -427.948 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.1.1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.W.35.1M7QU

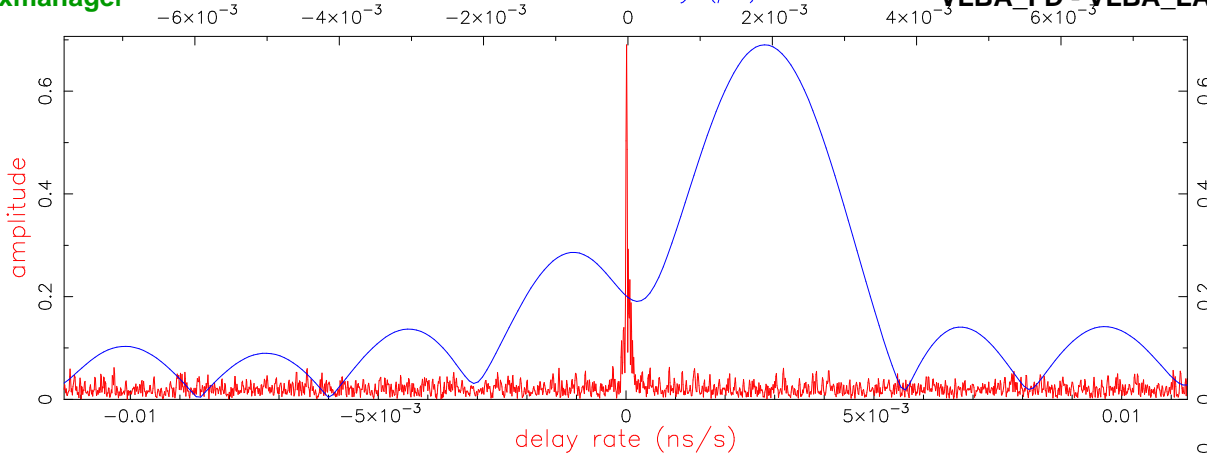
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, fl

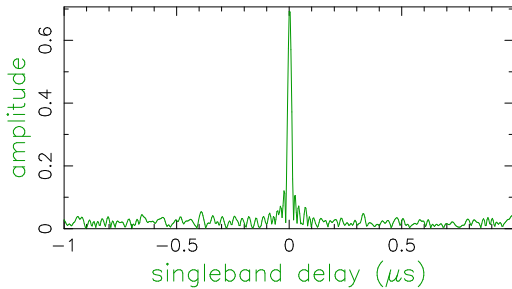
VLBA_FD - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

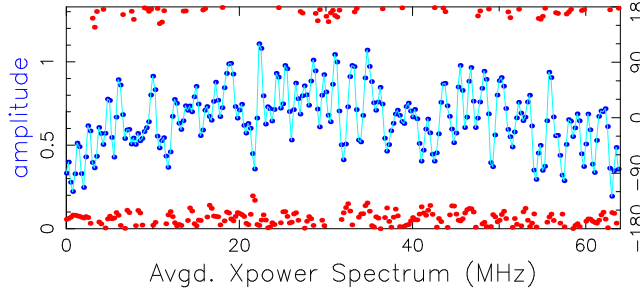


Fringe quality 6

SNR 42.2
 Int time 475.890
 Amp 0.707
 Phase -168.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001898
 MBD 0.001864
 Fringe rate (Hz) 0.000931
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

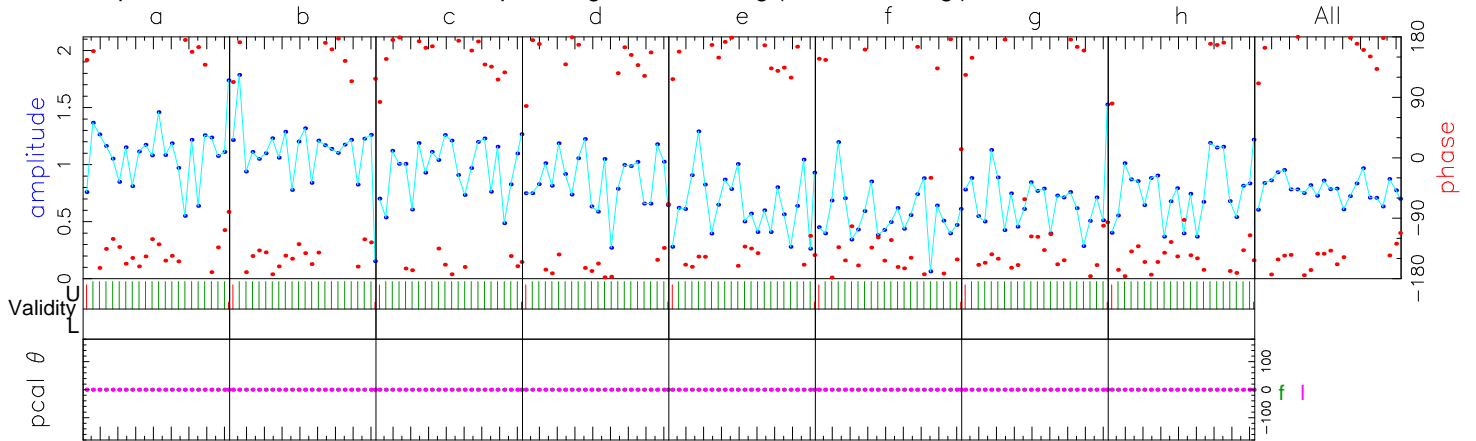


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133339
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.24812200870E+03	Apriori delay (usec)	-1.24812387271E+03	Resid mbdelay (usec)	1.86401E-03	+/-	2.6E-05
Sband delay (usec)	-1.24812197471E+03	Apriori clock (usec)	8.2774200E+00	Resid sbdelay (usec)	1.89800E-03	+/-	2.0E-04
Phase delay (usec)	-1.24812387814E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-5.43427E-06	+/-	8.8E-08
Delay rate (us/s)	-6.72801952309E-02	Apriori rate (us/s)	-6.72802060407E-02	Resid rate (us/s)	1.08098E-08	+/-	3.2E-10
Total phase (deg)	-310.8	Apriori accel (us/s/s)	1.06337205725E-06	Resid phase (deg)	-168.5	+/-	2.7

ph/seg (deg)	30.7	Theor.	6.5	Amplitude	0.707 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	18.0		11.4	Search (2048X32)	0.689	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	13.7		3.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	23.7		6.7	Inc. seg. avg.	0.783	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.704	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

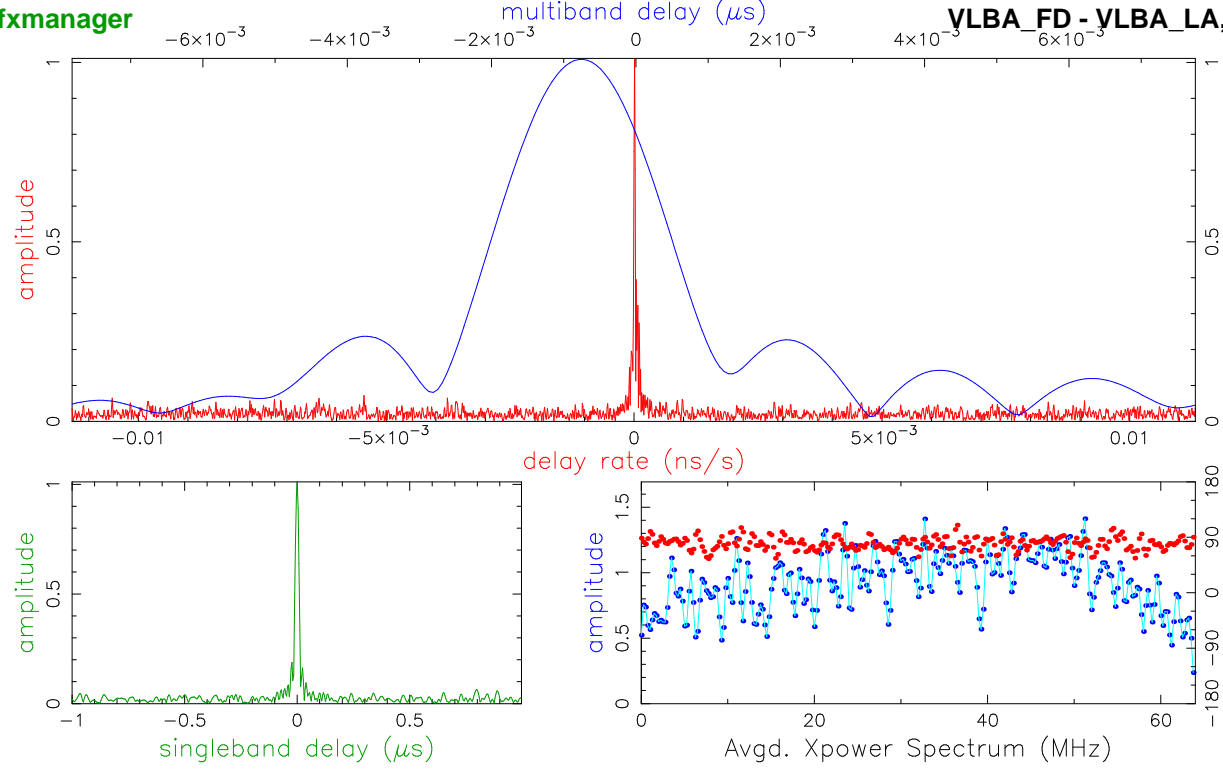
f: az 301.7 el 35.5 pa 77.7 l: az 297.7 el 39.7 pa 74.2 u,v (fr/asec) 517.888 -427.948 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.W.53.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, fl

VLBA_FD - VLBA_LA, fgroup W, pol RL

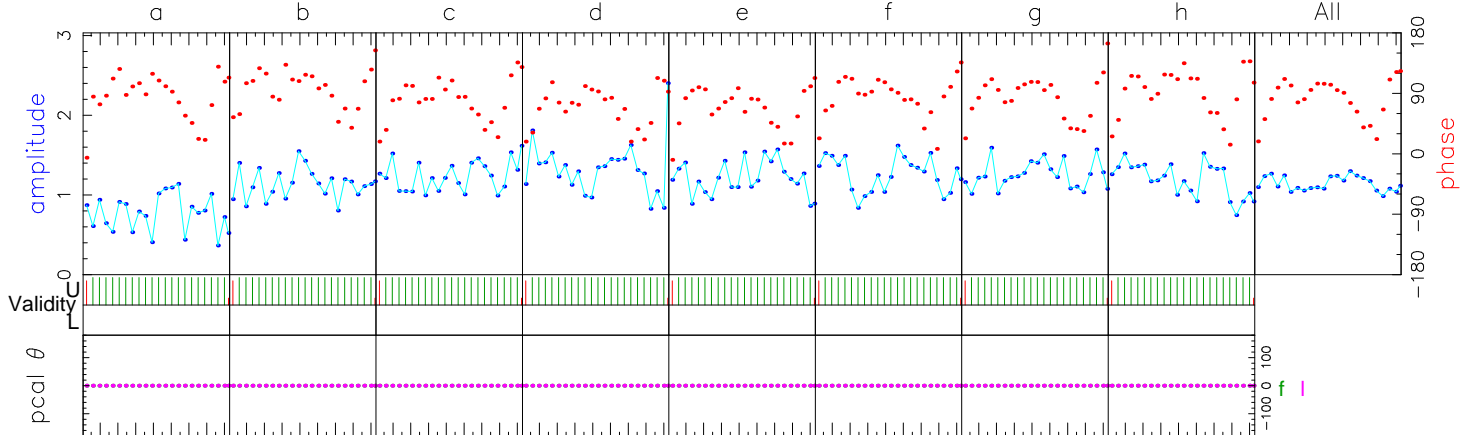


Fringe quality 7

SNR 60.3
 Int time 475.890
 Amp 1.011
 Phase 81.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.000646
 MBD -0.000771
 Fringe rate (Hz) 0.000893
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133343
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.24812464342E+03									
Sband delay (usec)	-1.24812451821E+03									
Phase delay (usec)	-1.24812387009E+03									
Delay rate (us/s)	-6.72801956695E-02									
Total phase (deg)			-61.2							
Apriori delay (usec)					-1.24812387271E+03					
Apriori clock (usec)					8.2774200E+07					
Apriori clockrate (us/s)					5.0000000E-07					
Apriori rate (us/s)					-6.72802060407E-02					
Apriori accel (us/s/s)					1.06337205725E-06					
Resid mbdelay (usec)									-7.70707E-04	+/- 1.8E-05
Resid sbdelay (usec)									-6.45500E-04	+/- 1.4E-04
Resid phdelay (usec)									2.61456E-06	+/- 6.1E-08
Resid rate (us/s)									1.03712E-08	+/- 2.2E-10
Resid phase (deg)									81.1	+/- 1.9
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							

f: az 301.7 el 35.5 pa 77.7 l: az 297.7 el 39.7 pa 74.2 u,v (fr/asec) 517.888 -427.948 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fl.W.74.11M7QU

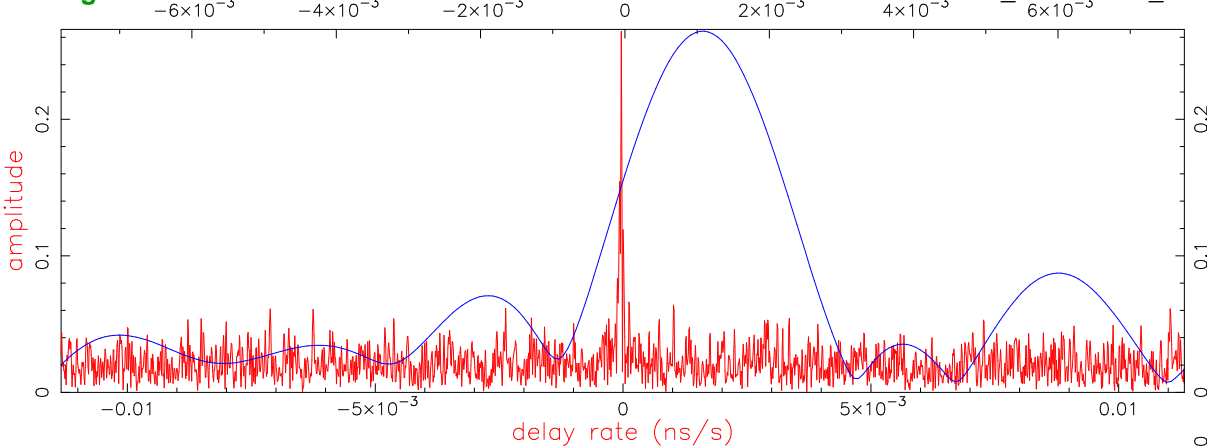
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, fm

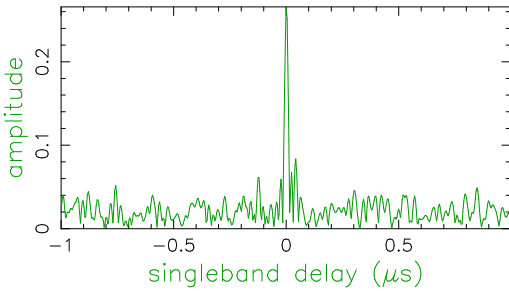
VLBA_FD - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

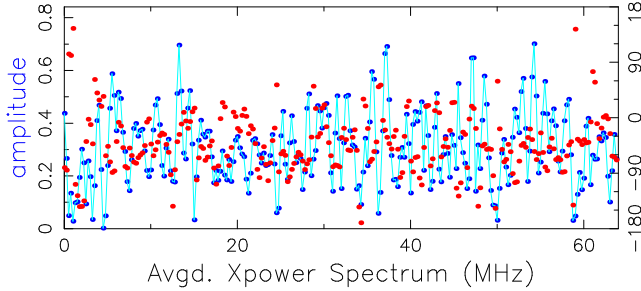


Fringe quality 9

SNR 15.9
 Int time 476.246
 Amp 0.266
 Phase -46.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000917
 MBD 0.001114
 Fringe rate (Hz)
 -0.002389
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

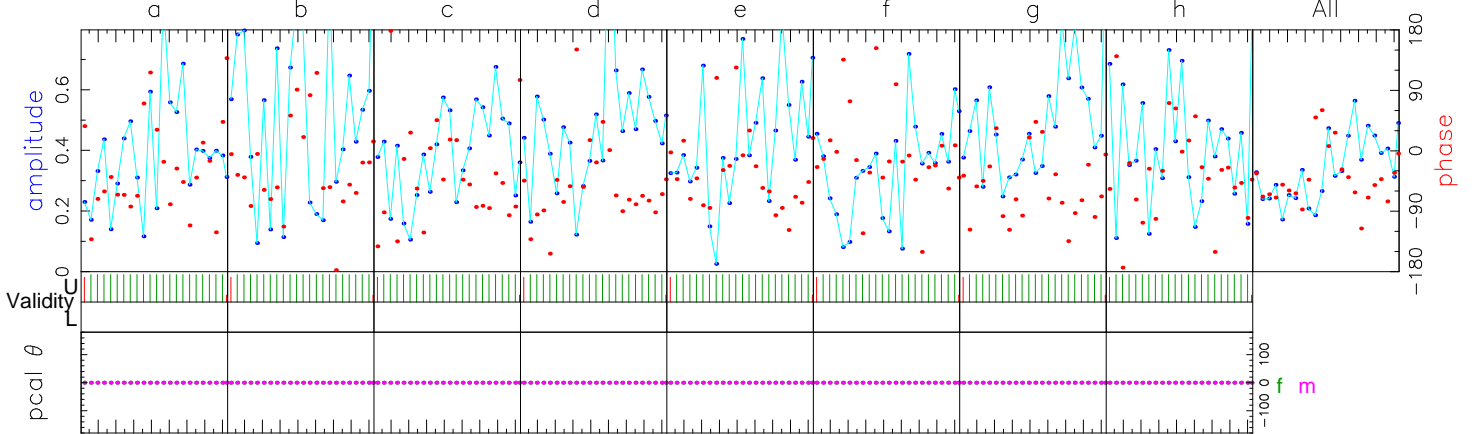


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133334
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-43.3	-26.8	-60.7	-59.5	-51.0	-16.6	-59.7	-38.8	Phase	-46.4
	0.2	0.3	0.2	0.4	0.3	0.2	0.3	0.2	Ampl.	0.3
	258.5	257.2	257.3	257.1	256.7	257.8	256.8	258.3	Sbd box	257.2
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	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)	-6.97007140132E+03	Apriori delay (usec)	-6.97007251491E+03	Resid mbdelay (usec)	1.11359E-03	+/-	6.8E-05
Sband delay (usec)	-6.97007159766E+03	Apriori clock (usec)	-5.4939480E+00	Resid sbdelay (usec)	9.17250E-04	+/-	5.4E-04
Phase delay (usec)	-6.97007251640E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-1.49708E-06	+/-	2.3E-07
Delay rate (us/s)	-6.06232506803E-01	Apriori rate (us/s)	-6.06232479068E-01	Resid rate (us/s)	-2.77351E-08	+/-	8.4E-10
Total phase (deg)	-202.7	Apriori accel (us/s/s)	4.97916434078E-05	Resid phase (deg)	-46.4	+/-	7.2

ph/seg (deg)	RMS 42.5	Theor. 17.3	Amplitude Search (2048X32)	0.266 +/- 0.017	0.240	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	46.8	30.2	Interp.	0.000	0.240	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	17.9	10.2	Inc. seg. avg.	0.319	0.319	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	21.9	17.8	Inc. frq. avg.	0.269	0.269	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 301.7 el 35.5 pa 77.7

m: az 331.1 el 64.2 pa 141.7

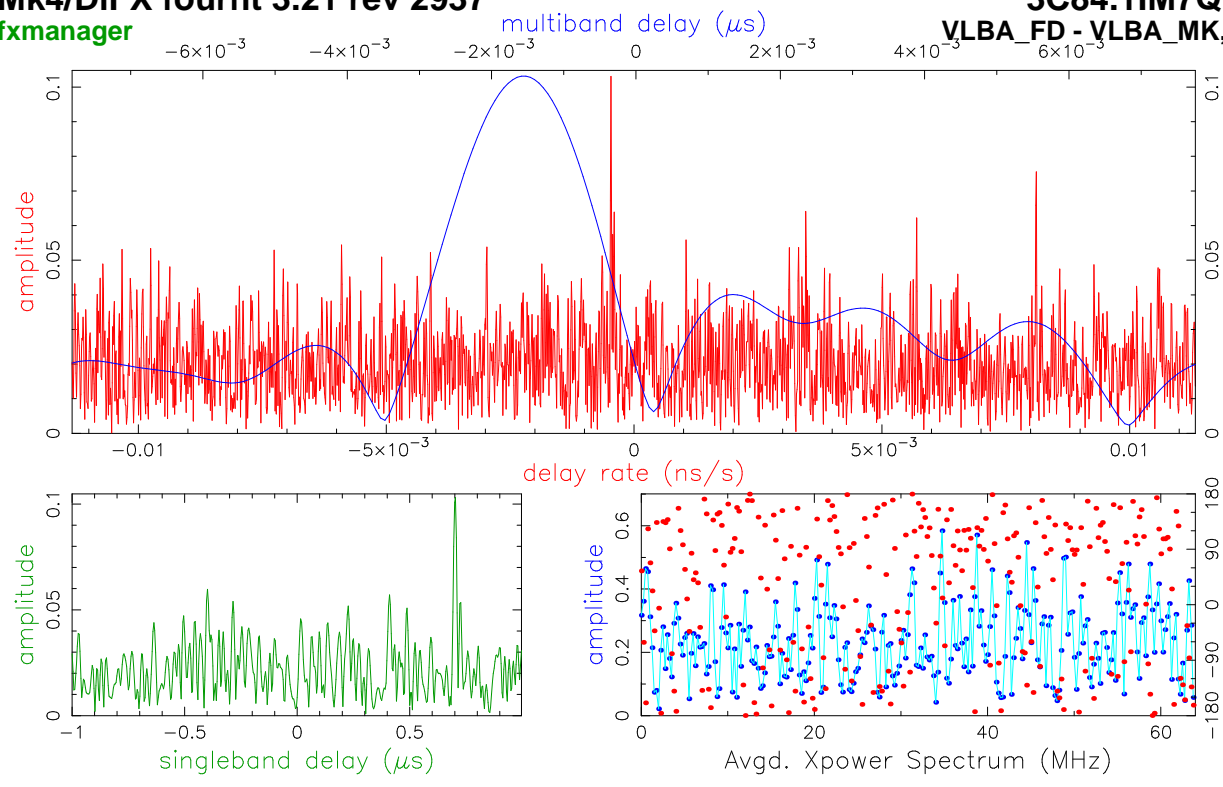
u,v (fr/asec) 4722.698 4554.282

simultaneous interpolator

Control file: cf_1234_gmva

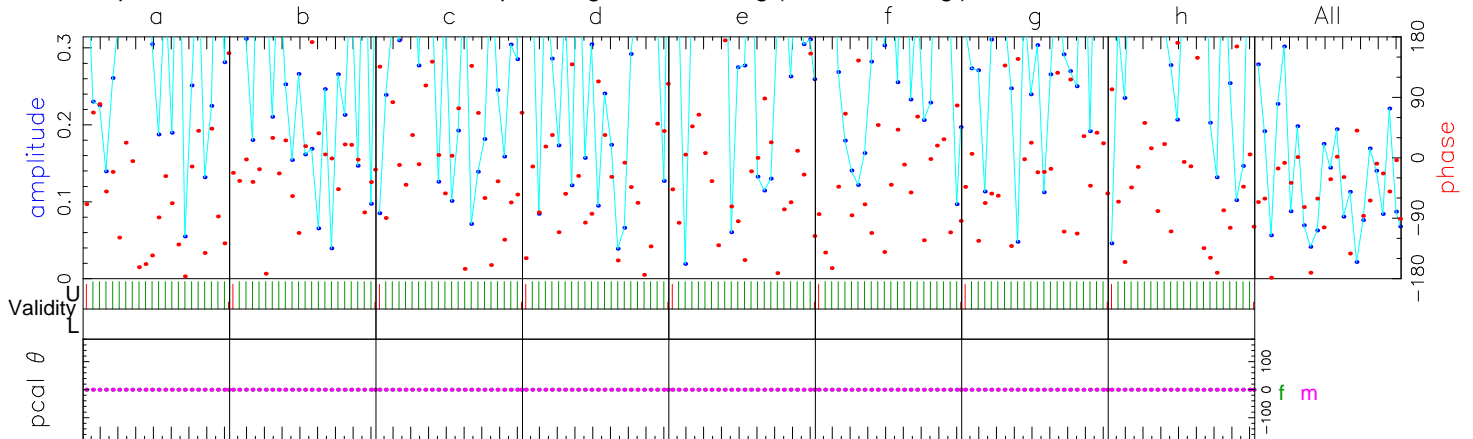
Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fm..1M7QU

Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fm.W.27.1M7QU



Fringe quality 0
SNR 6.3
Int time 476.246
Amp 0.105
Phase -40.6
PFD 1.0e-01
Delays (us)
SBD 0.701607
MBD -0.001604
Fringe rate (Hz)
-0.039636
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133338
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-6.96937099395E+03	Apriori delay (usec)	-6.97007251491E+03	Resid mbdelay (usec)	-1.60405E-03	+/-	1.7E-04
Sband delay (usec)	-6.96937090841E+03	Apriori clock (usec)	-5.4939480E+00	Resid sbdelay (usec)	7.01607E-01	+/-	1.4E-03
Phase delay (usec)	-6.97007251622E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-1.30945E-06	+/-	5.9E-07
Delay rate (us/s)	-6.06232939208E-01	Apriori rate (us/s)	-6.06232479068E-01	Resid rate (us/s)	-4.60140E-07	+/-	2.1E-09
Total phase (deg)	-196.9	Apriori accel (us/s/s)	4.97916434078E-05	Resid phase (deg)	-40.6	+/-	18.3

ph/seg (deg)	56.5	Theor.	43.9	Amplitude	0.105 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.5		76.6	Search (2048X32)	0.094	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.0		25.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.8		45.3	Inc. seg. avg.	0.105	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.100	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 301.7 el 35.5 pa 77.7 m: az 331.1 el 64.2 pa 141.7 u,v (fr/asec) 4722.698 4554.282 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fm..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fm.W.49.1M7QU

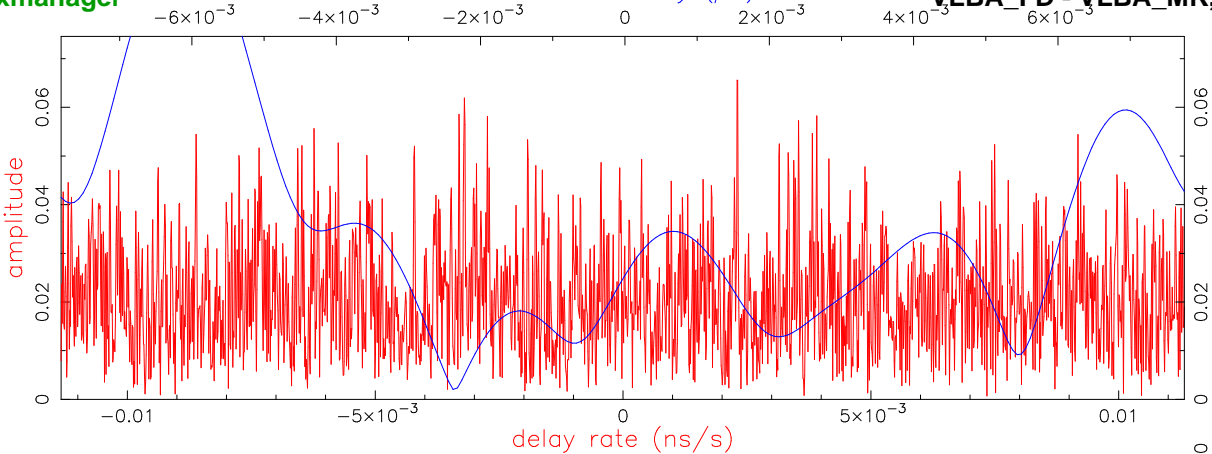
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, fm

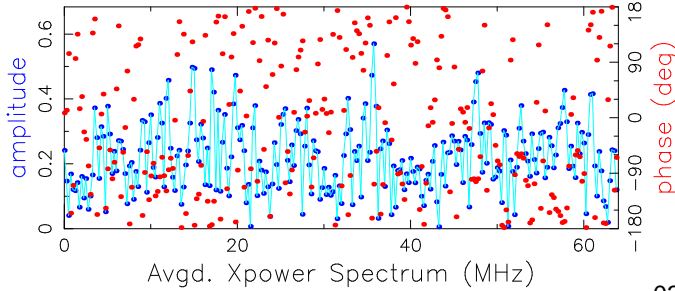
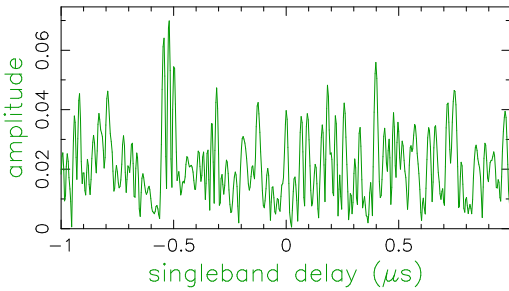
VLBA_FD - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)



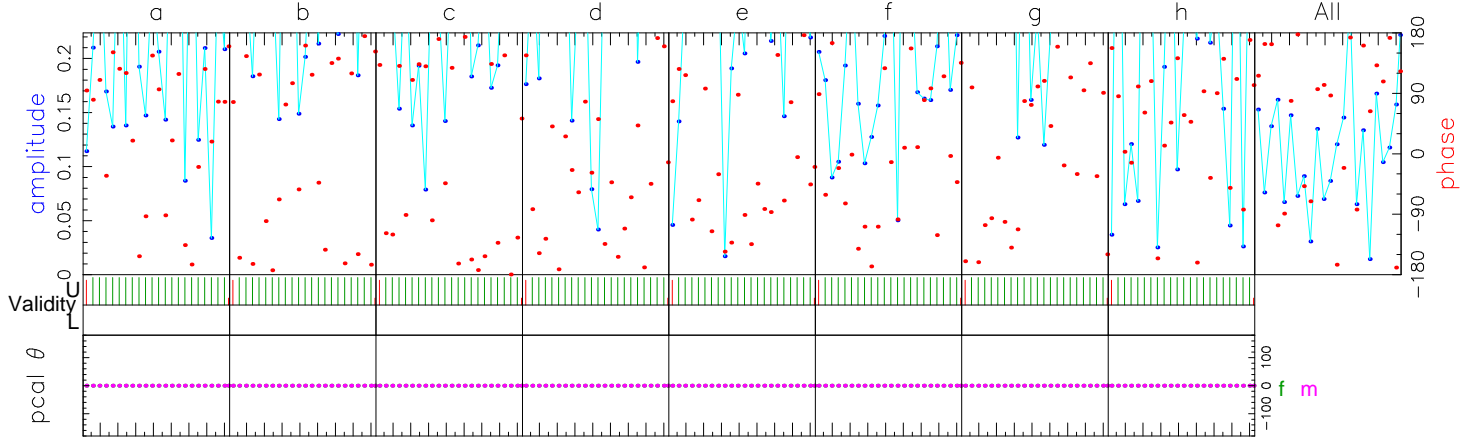
Fringe quality 0

SNR 3.3
 Int time 476.246
 Amp 0.075
 Phase 155.6
 PFD 1.0e+00
 Delays (us)
 SBD -0.498221
 MBD 0.007324
 Fringe rate (Hz)
 0.792086
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133342
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.97056519069E+03	Apriori delay (usec)	-6.97007251491E+03	Resid mbdelay (usec)	7.32422E-03	+/-	3.2E-04
Sband delay (usec)	-6.97057073566E+03	Apriori clock (usec)	-5.4939480E+00	Resid sbdelay (usec)	-4.98221E-01	+/-	2.6E-03
Phase delay (usec)	-6.97007250989E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	5.01667E-06	+/-	1.1E-06
Delay rate (us/s)	-6.06223283736E-01	Apriori rate (us/s)	-6.06232479068E-01	Resid rate (us/s)	9.19533E-06	+/-	4.0E-09
Total phase (deg)	-0.7	Apriori accel (us/s/s)	4.97916434078E-05	Resid phase (deg)	155.6	+/-	34.3

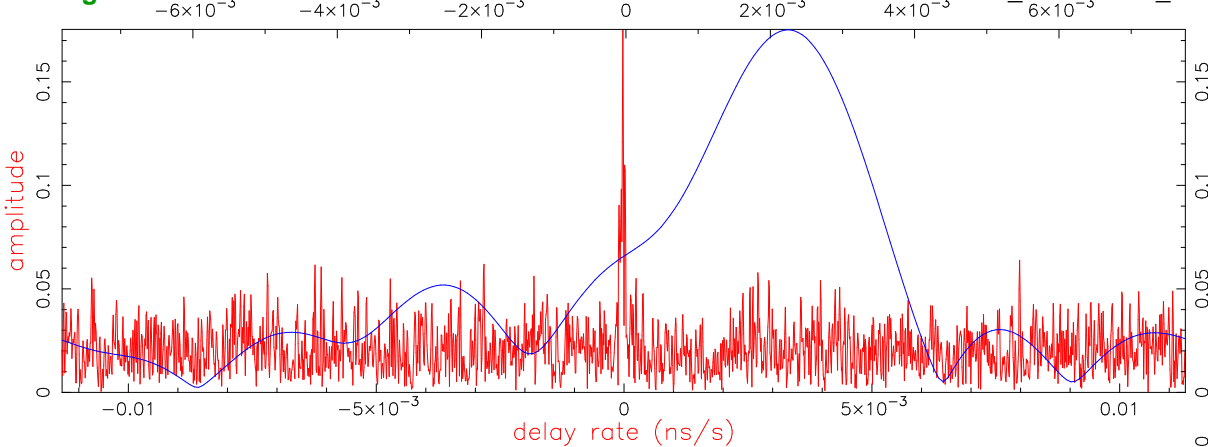
ph/seg (deg)	80.9	Theor.	82.2	Amplitude	0.075 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	142.0	Search (2048X32)	0.099	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	93.9	Inc. seg. avg.	0.076	Inc. frq. avg.	0.106	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	135.9	Inc. frq. avg.	0.106			Sample rate (MSamp/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

f: az 301.7 el 35.5 pa 77.7 m: az 331.1 el 64.2 pa 141.7 u,v (fr/asec) 4722.698 4554.282 simultaneous interpolator

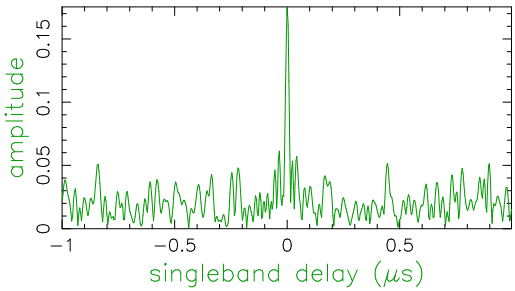
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fm..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fm.W.67.1M7QU

multiband delay (μ s)

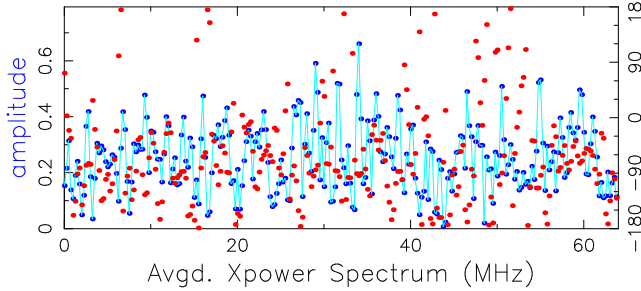
Fringe quality 9



SNR 10.5
Int time 476.246
Amp 0.175
Phase -105.5
PFD 5.6e-17
Delays (us)
SBD 0.000450
MBD 0.002258
Fringe rate (Hz)
-0.002331
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

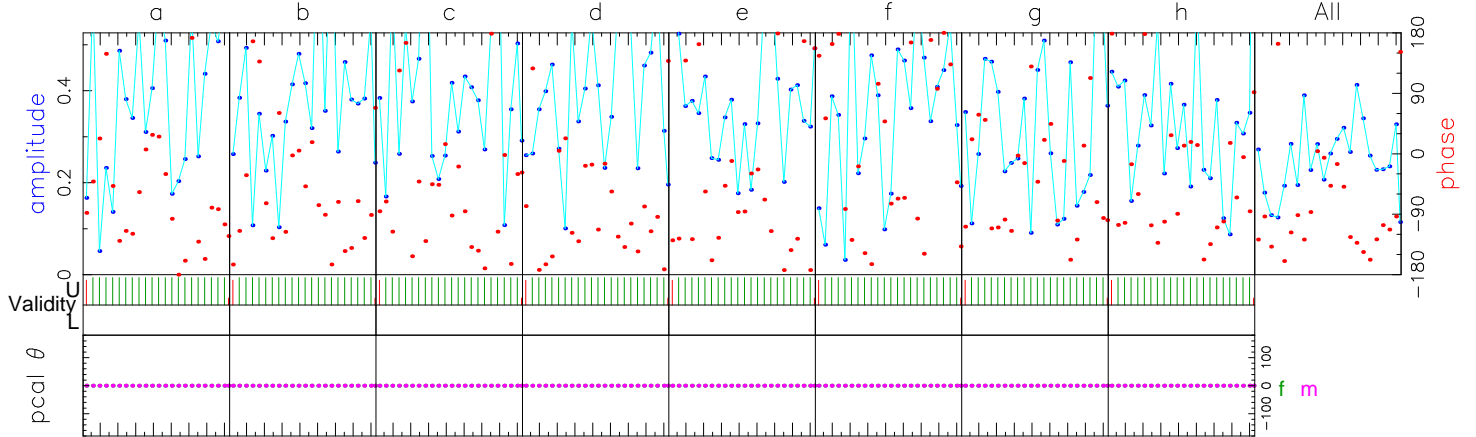


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133330
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.97007025706E+03	Apriori delay (usec)	-6.97007251491E+03	Resid mbdelay (usec)	2.25785E-03	+/-	1.0E-04
Sband delay (usec)	-6.97007206491E+03	Apriori clock (usec)	-5.4939480E+00	Resid sbdelay (usec)	4.50000E-04	+/-	8.2E-04
Phase delay (usec)	-6.97007251831E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-3.40363E-06	+/-	3.5E-07
Delay rate (us/s)	-6.06232506124E-01	Apriori rate (us/s)	-6.06232479068E-01	Resid rate (us/s)	-2.70563E-08	+/-	1.3E-09
Total phase (deg)	-261.8	Apriori accel (us/s/s)	4.97916434078E-05	Resid phase (deg)	-105.5	+/-	11.0

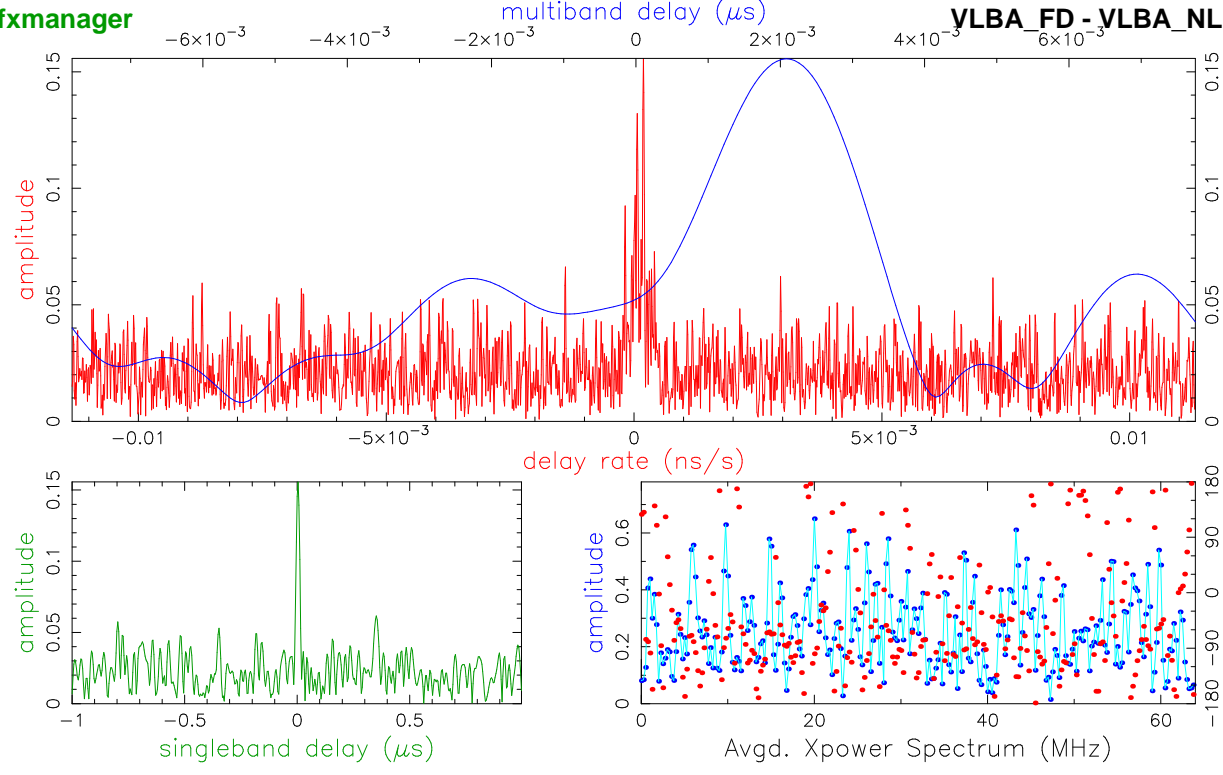
ph/seg (deg)	51.8	Theor.	26.2	Amplitude	0.175 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	62.1		45.8	Search (2048X32)	0.162	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.0		15.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.6		27.0	Inc. seg. avg.	0.231	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.184	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

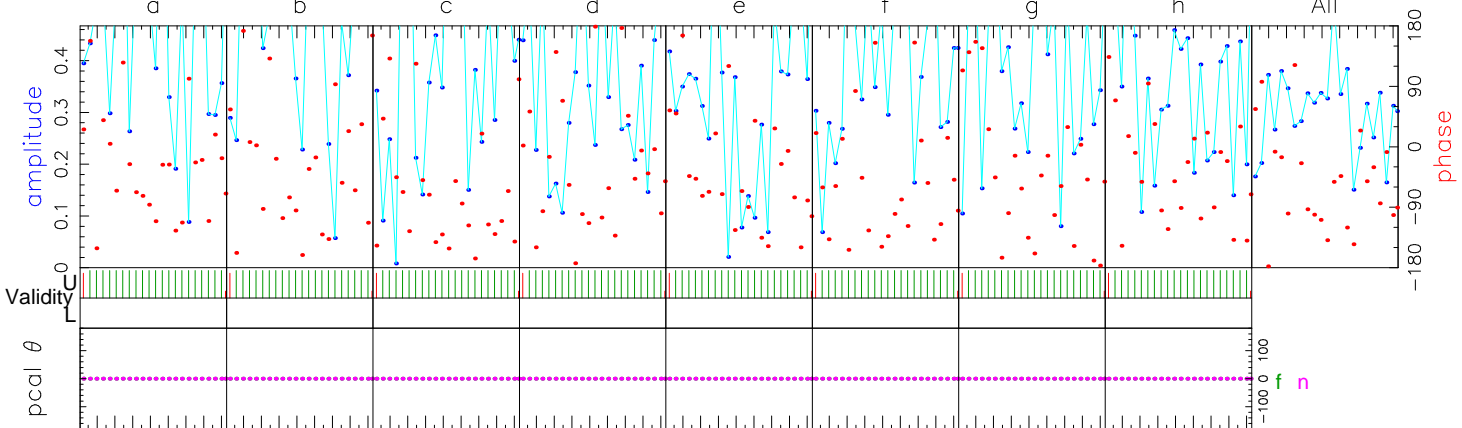
3C84.11M7QU, No0117, fn

VLBA_FD - VLBA_NL, fgroup W, pol LL



Fringe quality 9
 SNR 9.3
 Int time 476.246
 Amp 0.156
 Phase -73.9
 PFD 5.9e-12
 Delays (us)
 SBD 0.003452
 MBD 0.002080
 Fringe rate (Hz) 0.016236
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133330
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-49.3	-58.4	-109.5	-82.6	-49.0	-104.5	-83.2	-24.0	Phase	-73.9
	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	Ampl.	0.2
	257.0	257.1	257.8	133.6	259.7	259.0	209.5	408.0	Sbd box	257.9
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

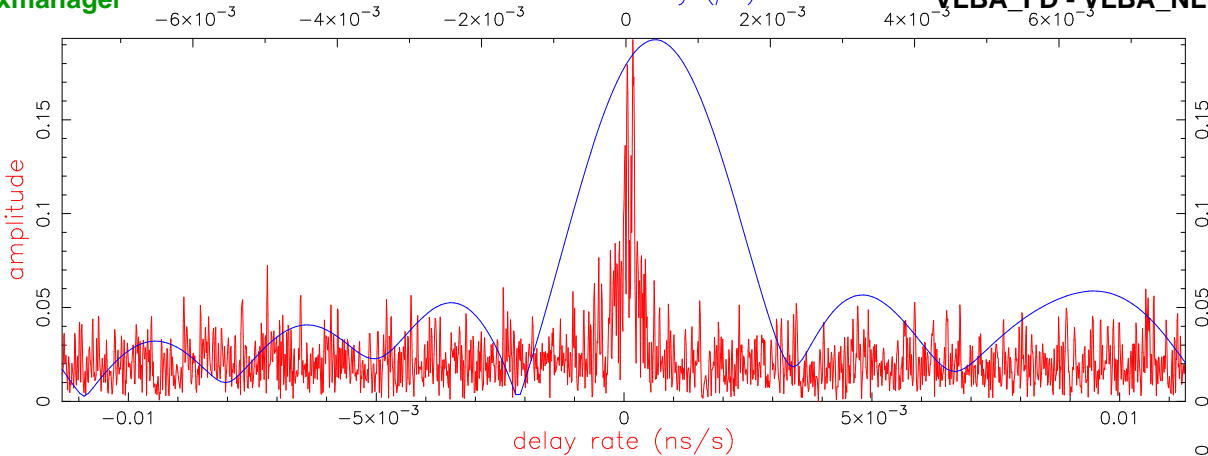
Group delay (usec)(sbd) 9.36262886088E+02 Apriori delay (usec) 9.36260806193E+02 Resid mbdelay (usec) 2.07990E-03 +/- 1.2E-04
 Sband delay (usec) 9.36264258193E+02 Apriori clock (usec) 7.6993160E+00 Resid sbdelay (usec) 3.45200E-03 +/- 9.3E-04
 Phase delay (usec) 9.36260803809E+02 Apriori clockrate (us/s) -1.0000003E-07 Resid phdelay (usec) -2.38370E-06 +/- 4.0E-07
 Delay rate (us/s) -7.57370343917E-02 Apriori rate (us/s) -7.57372228793E-02 Resid rate (us/s) 1.88488E-07 +/- 1.4E-09
 Total phase (deg) 230.4 Apriori accel (us/s/s) -1.66501473680E-05 Resid phase (deg) -73.9 +/- 12.3

RMS Theor. Amplitude 0.156 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 75.3 29.5 Search (2048X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 107.8 51.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 32.5 17.4 Inc. seg. avg. 0.267 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 36.4 30.4 Inc. frq. avg. 0.169 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

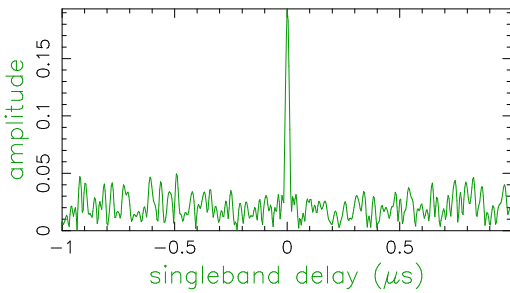
f: az 301.7 el 35.5 pa 77.7 n: az 299.1 el 32.5 pa 60.7 u,v (fr/asec) 553.791 -2202.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fn..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fn.W.14.11M7QU

multiband delay (μ s)

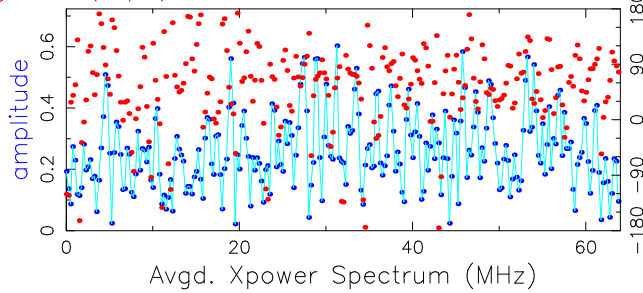
Fringe quality 9



SNR 11.5
Int time 476.246
Amp 0.193
Phase 69.4
PFD 4.1e-22
Delays (us)
SBD 0.000750
MBD 0.000410
Fringe rate (Hz) 0.015563
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

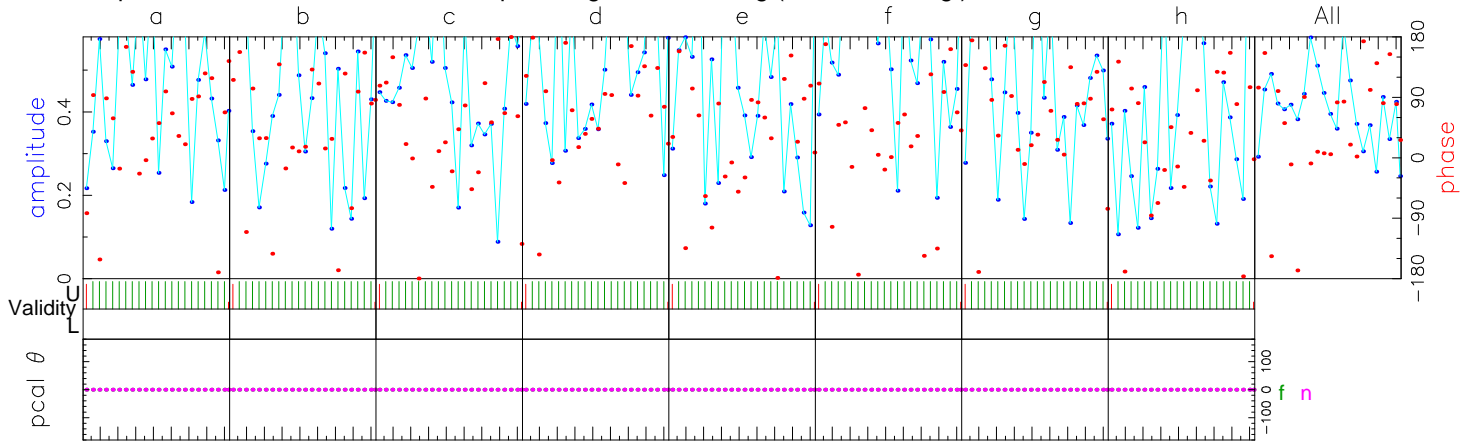


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133335
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		9.36261216451E+02				9.36260806193E+02			4.10259E-04	+/- 9.4E-05
Sband delay (usec)		9.36261556443E+02				7.6993160E+00			7.50250E-04	+/- 7.5E-04
Phase delay (usec)		9.36260808430E+02				-1.0000003E-07			2.23726E-06	+/- 3.2E-07
Delay rate (us/s)		-7.57370422063E-02				-7.57372228793E-02			1.80673E-07	+/- 1.2E-09
Total phase (deg)			13.7			-1.66501473680E-05			69.4	+/- 9.9
	RMS	Theor.	Amplitude	0.193 +/- 0.017		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5	
ph/seg (deg)	68.0	23.8	Search (2048X32)	0.184		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	123.5	41.5	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	17.6	14.0	Inc. seg. avg.	0.383		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011
amp/frq (%)	24.5	24.5	Inc. frq. avg.	0.194		Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite
f: az 301.7 el 35.5 pa 77.7		n: az 299.1 el 32.5 pa 60.7		u,v (fr/asec) 553.791 -2202.301					ion window (TEC)	0.00 0.00

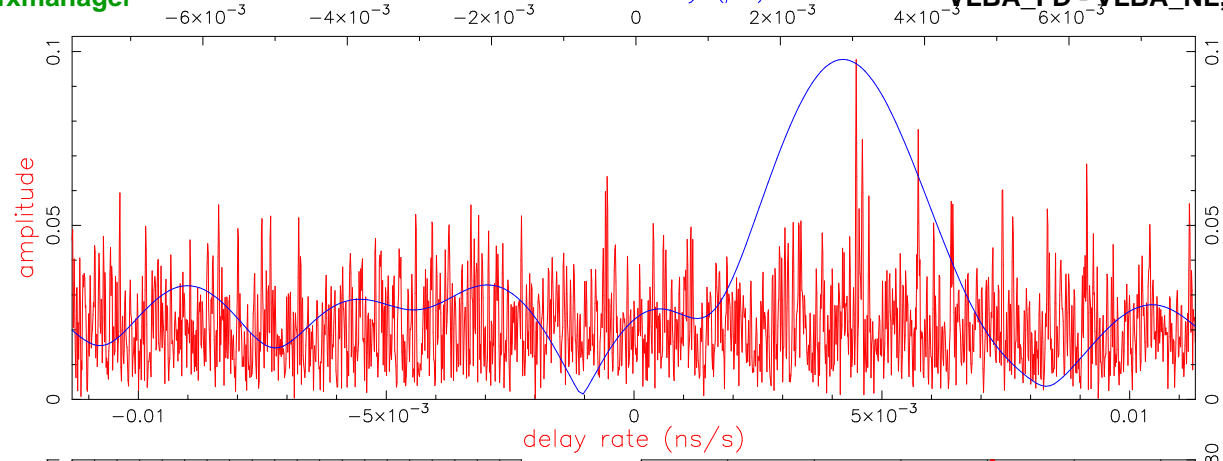
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fn

VLBA_FD - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0

SNR 5.8

Int time 476.246

Amp 0.104

Phase -17.9

PFD 7.5e-01

Delays (us)

SBD -0.210808

MBD 0.002871

Fringe rate (Hz)

0.387247

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c202b

Exper # 16383

Yr:day 2020:284

Start 133002.54

Stop 133801.26

FRT 133401.00

Corr/FF/build

2021:023:095356

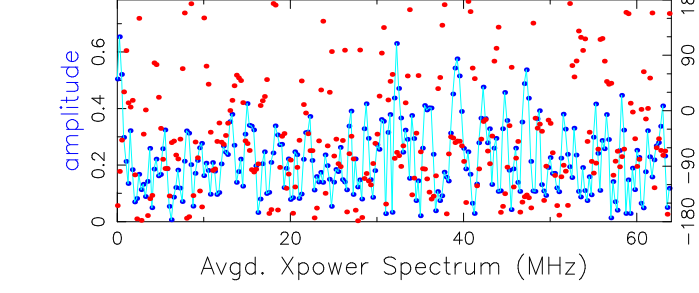
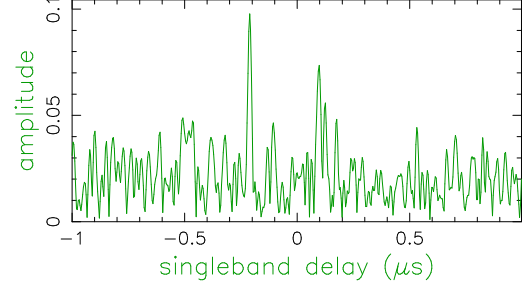
2021:023:133339

2020:247:085004

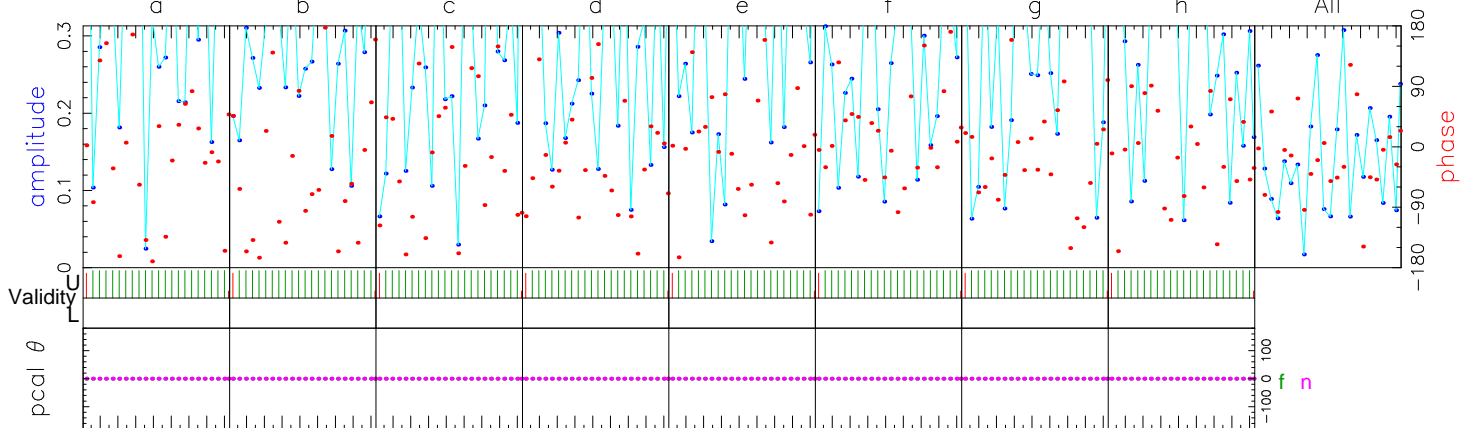
RA & Dec (J2000)

03h19m48.160095s

+41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)		9.36044926729E+02		Apriori delay (usec)	9.36260806193E+02		Resid mbdelay (usec)	2.87054E-03		+/- 1.9E-04
Sband delay (usec)		9.36049998443E+02		Apriori clock (usec)	7.6993160E+00		Resid sbdelay (usec)	-2.10808E-01		+/- 1.5E-03
Phase delay (usec)		9.36260805616E+02		Apriori clockrate (us/s)	-1.0000003E-07		Resid phdelay (usec)	-5.76379E-07		+/- 6.3E-07
Delay rate (us/s)		-7.57327273313E-02		Apriori rate (us/s)	-7.57372228793E-02		Resid rate (us/s)	4.49555E-06		+/- 2.3E-09
Total phase (deg)			286.5	Apriori accel (us/s/s)	-1.66501473680E-05		Resid phase (deg)	-17.9		+/- 19.6

ph/seg (deg) 60.3 47.1 Search (2048X32) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 88.3 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 39.8 27.8 Inc. seg. avg. 0.113 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 28.0 48.5 Inc. frq. avg. 0.105 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 301.7 el 35.5 pa 77.7 n: az 299.1 el 32.5 pa 60.7 u,v (fr/asec) 553.791 -2202.301 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fn..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fn.W.57.11M7QU

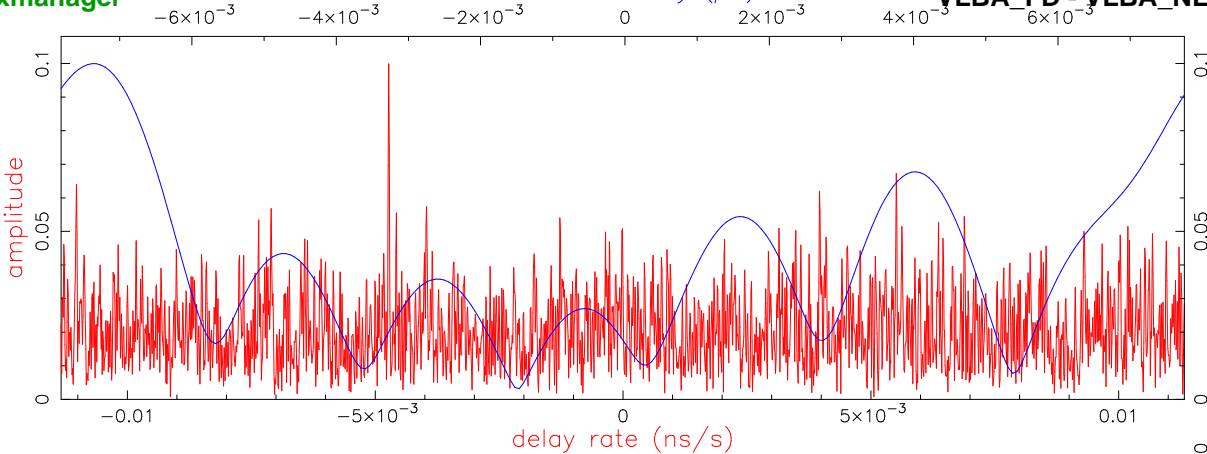
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fn

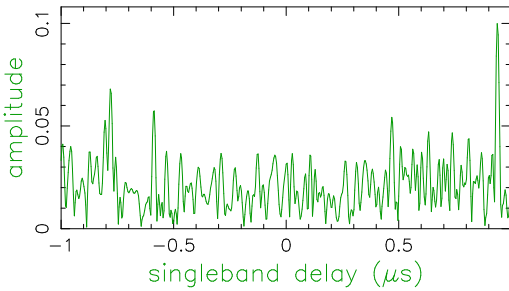
VLBA_FD - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

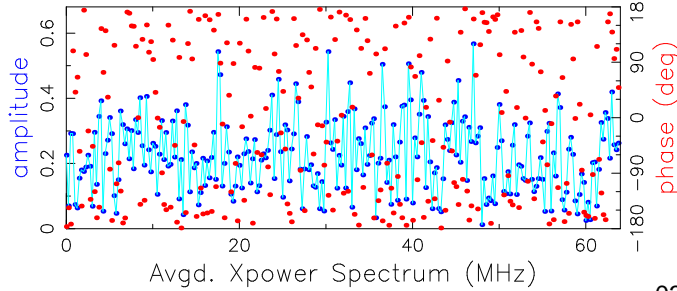


Fringe quality 0

SNR 6.0
 Int time 476.246
 Amp 0.108
 Phase -86.1
 PFD 4.0e-01
 Delays (us)
 SBD 0.938433
 MBD -0.007314
 Fringe rate (Hz)
 -0.407433
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

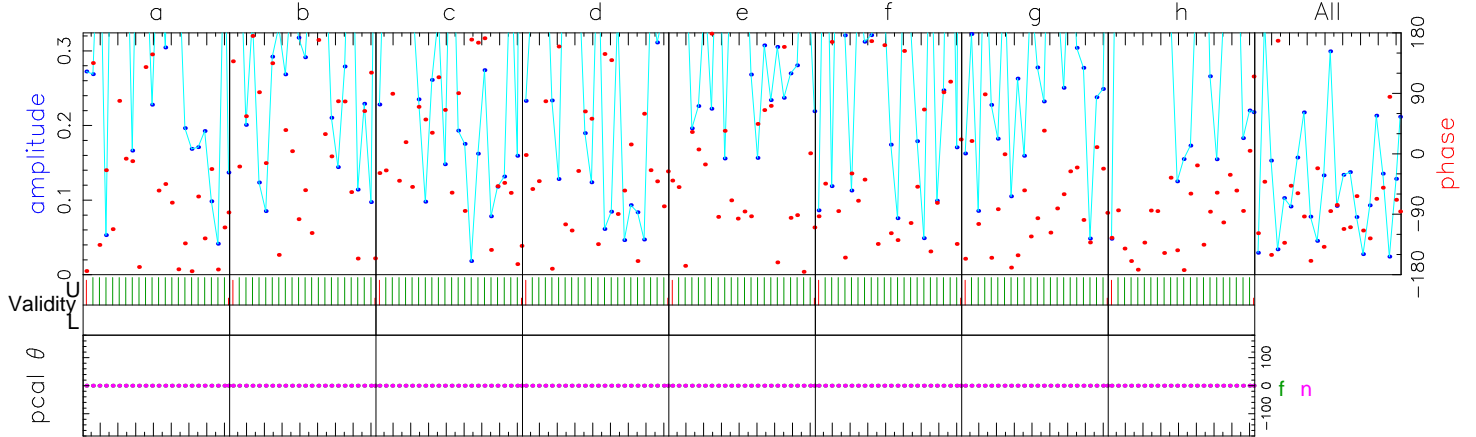


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133343
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-122.8	49.2	-18.1	-63.9	-78.3	-126.7	-66.9	-98.8	Phase	-86.1
	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3	Ampl.	0.1
	155.1	412.4	387.2	58.3	495.5	41.1	161.9	497.5	Sbd box	497.2
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

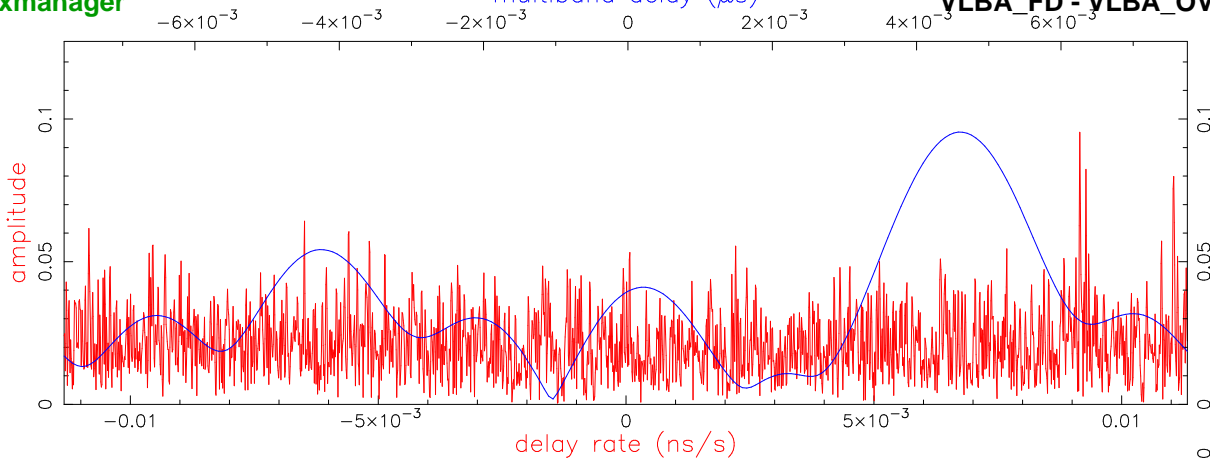
Group delay (usec)(sbd)	9.37206617305E+02	Apriori delay (usec)	9.36260806193E+02	Resid mbdelay (usec)	-7.31389E-03	+/-	1.8E-04
Sband delay (usec)	9.37199238693E+02	Apriori clock (usec)	7.6993160E+00	Resid sbdelay (usec)	9.38433E-01	+/-	1.4E-03
Phase delay (usec)	9.36260803416E+02	Apriori clockrate (us/s)	-1.0000003E-07	Resid phdelay (usec)	-2.77628E-06	+/-	6.2E-07
Delay rate (us/s)	-7.57419527763E-02	Apriori rate (us/s)	-7.57372228793E-02	Resid rate (us/s)	-4.72990E-06	+/-	2.2E-09
Total phase (deg)	218.3	Apriori accel (us/s/s)	-1.66501473680E-05	Resid phase (deg)	-86.1	+/-	19.1

ph/seg (deg)	56.3	Theor.	45.8	Amplitude	0.108 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	85.4	Search (2048X32)	0.096	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	67.1	Inc. seg. avg.	0.103	Inc. frq. avg.	0.116	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	62.6	Inc. frq. avg.	0.116			Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00	

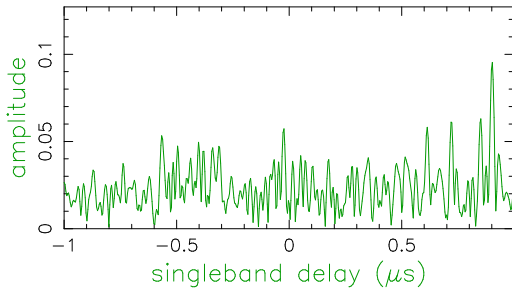
f: az 301.7 el 35.5 pa 77.7 n: az 299.1 el 32.5 pa 60.7 u,v (fr/asec) 553.791 -2202.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fn..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fn.W.76.11M7QU

multiband delay (μs)

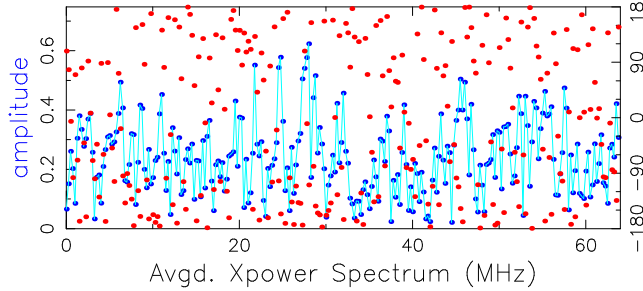
Fringe quality 0



SNR 5.7
Int time 474.719
Amp 0.127
Phase 74.0
PFD 9.5e-01
Delays (us)
SBD 0.901585
MBD 0.004575
Fringe rate (Hz)
0.789537
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

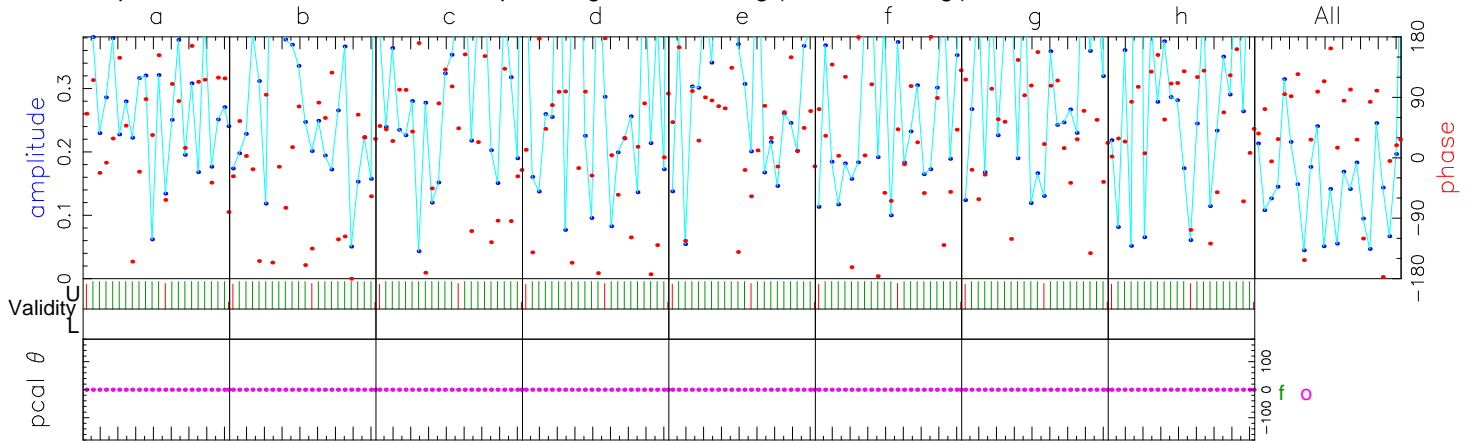


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133330
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec

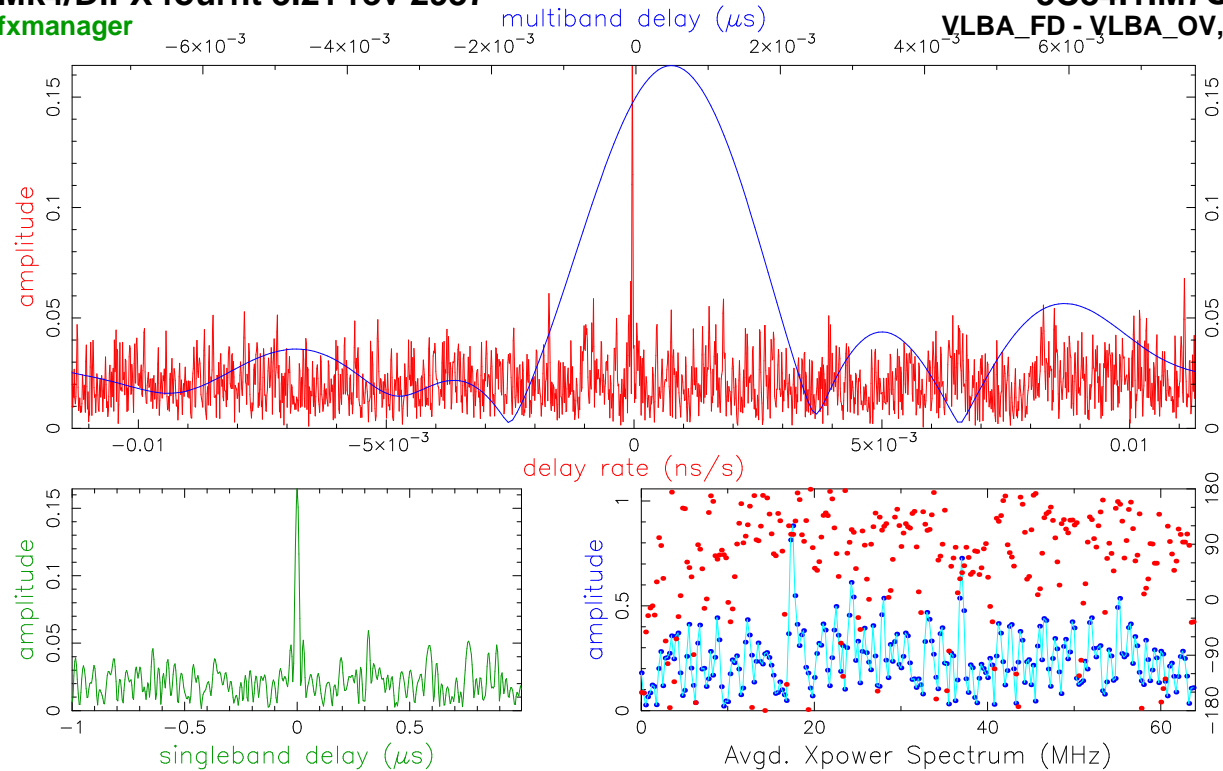


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.77574121386E+03	Apriori delay (usec)	-3.77663641375E+03	Resid mbdelay (usec)	4.57489E-03	+/-	1.9E-04
Sband delay (usec)	-3.77573482900E+03	Apriori clock (usec)	-1.3523580E+01	Resid sbdelay (usec)	9.01585E-01	+/-	1.5E-03
Phase delay (usec)	-3.77663641136E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	2.38680E-06	+/-	6.5E-07
Delay rate (us/s)	-1.78750160415E-01	Apriori rate (us/s)	-1.78759326160E-01	Resid rate (us/s)	9.16574E-06	+/-	2.4E-09
Total phase (deg)	-171.0	Apriori accel (us/s/s)	1.28683027387E-05	Resid phase (deg)	74.0	+/-	20.1

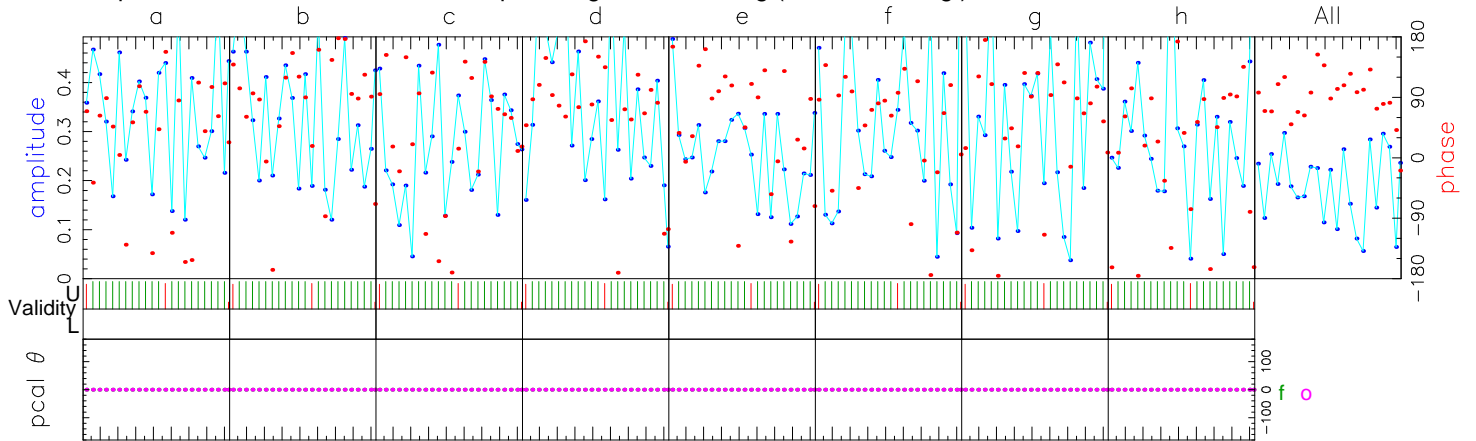
ph/seg (deg)	67.1	Theor.	48.1	Amplitude	0.127 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	100.7		84.0	Search (2048X32)	0.094	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	45.0		28.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	53.2		49.6	Inc. seg. avg.	0.150	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.125	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 301.7 el 35.5 pa 77.7 o: az 293.3 el 49.1 pa 77.3 u,v (fr/asec) 1391.537 251.590 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo.W.10.11M7QU



Fringe quality 9
SNR 9.8
Int time 474.719
Amp 0.164
Phase 95.0
PFD 5.0e-14
Delays (us)
SBD -0.000242
MBD 0.000487
Fringe rate (Hz)
-0.002687
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133333
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
75.2	113.4	100.6	94.9	93.6	94.7	89.1	103.1	103.1	Phase	95.0
0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.1	0.1	Ampl.	0.2
256.6	255.8	25.2	256.9	73.5	258.4	256.7	334.2	334.2	Sbd box	256.9
U/L 931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	APs used	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fo 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.77663592698E+03		Apriori delay (usec)		-3.77663641375E+03		Resid mbdelay (usec)		4.86776E-04	+/- 1.1E-04
Sband delay (usec)	-3.77663665600E+03		Apriori clock (usec)		-1.3523580E+01		Resid sbdelay (usec)		-2.42250E-04	+/- 8.8E-04
Phase delay (usec)	-3.77663641069E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		3.06268E-06	+/- 3.8E-07
Delay rate (us/s)	-1.78759357350E-01		Apriori rate (us/s)		-1.78759326160E-01		Resid rate (us/s)		-3.11900E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.28683027387E-05		Resid phase (deg)		95.0	+/- 11.7

ph/seg (deg) 30.6 28.0 Search (2048X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 47.2 48.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.0 16.5 Inc. seg. avg. 0.168 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 38.2 28.9 Inc. frq. avg. 0.160 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 301.7 el 35.5 pa 77.7 o: az 293.3 el 49.1 pa 77.3 u,v (fr/asec) 1391.537 251.590 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo.W.26.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

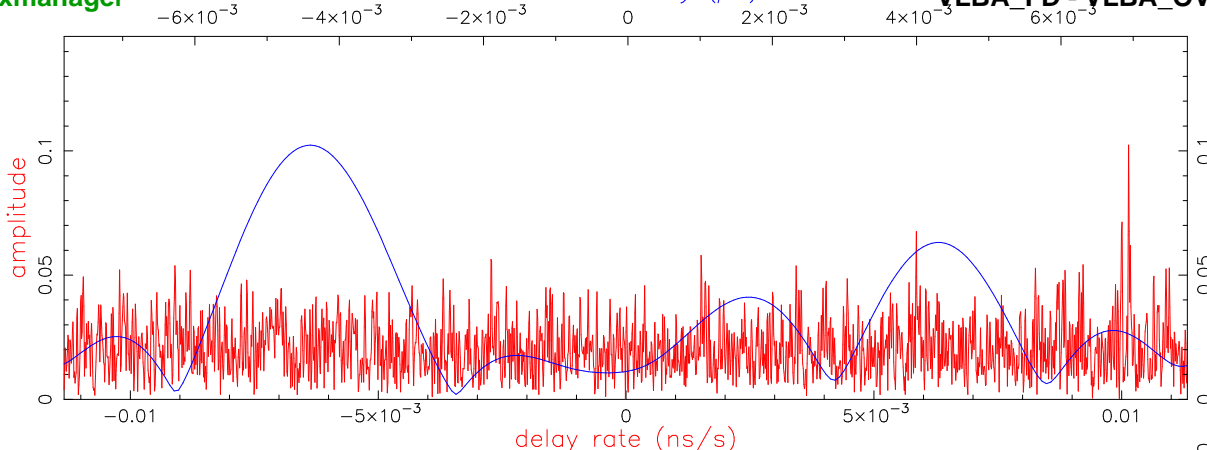
fxmanager

3C84.11M7QU, No0117, fo

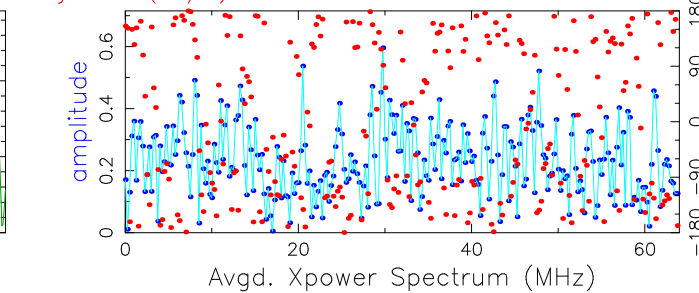
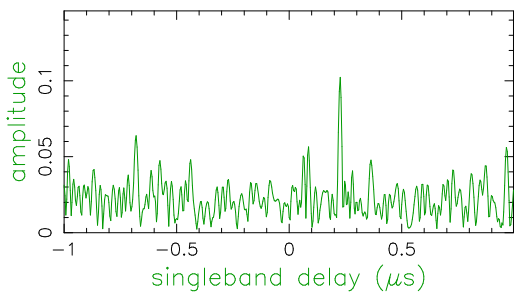
VLBA_FD - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

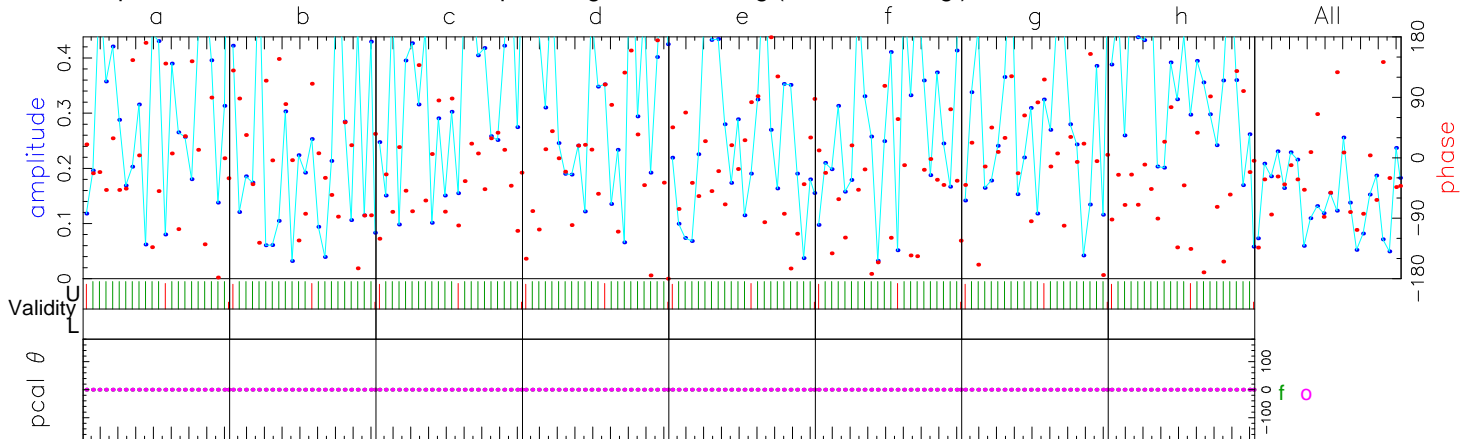


SNR 6.1
 Int time 474.719
 Amp 0.146
 Phase -36.3
 PFD 2.4e-01
 Delays (us)
 SBD 0.226247
 MBD -0.004412
 Fringe rate (Hz)
 0.875231
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

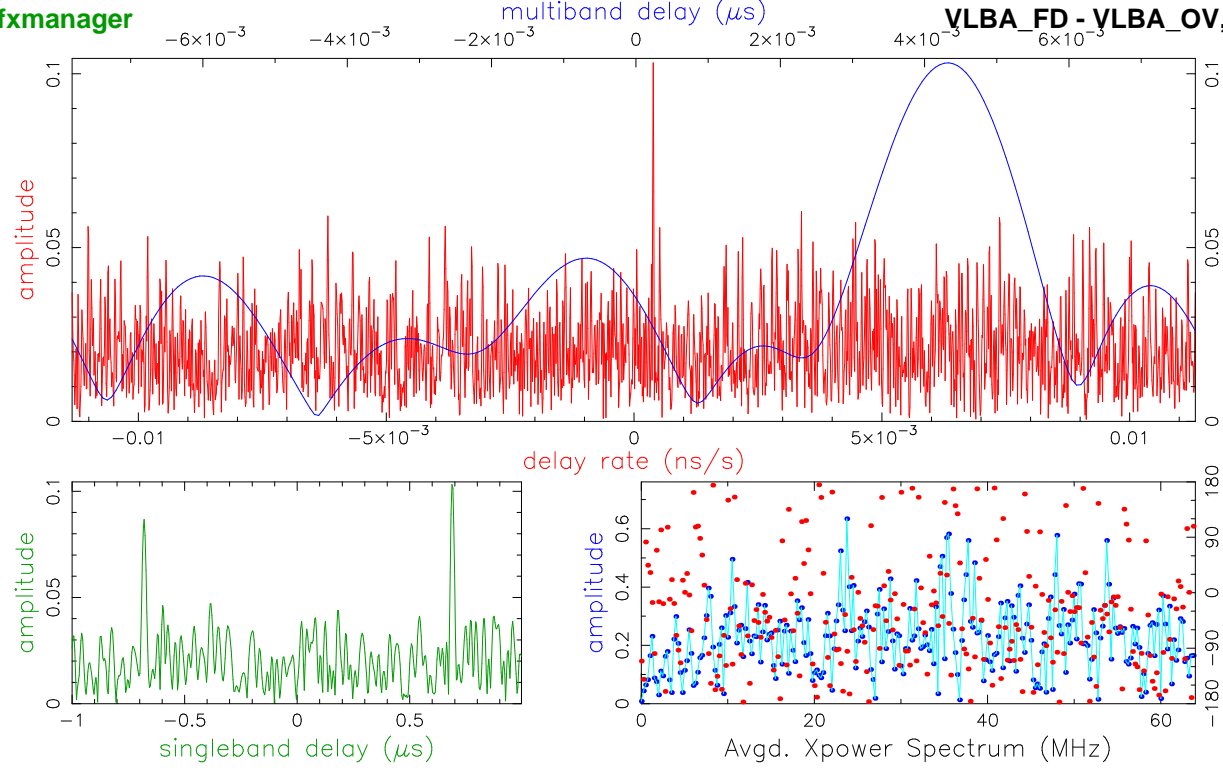


Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133337
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec

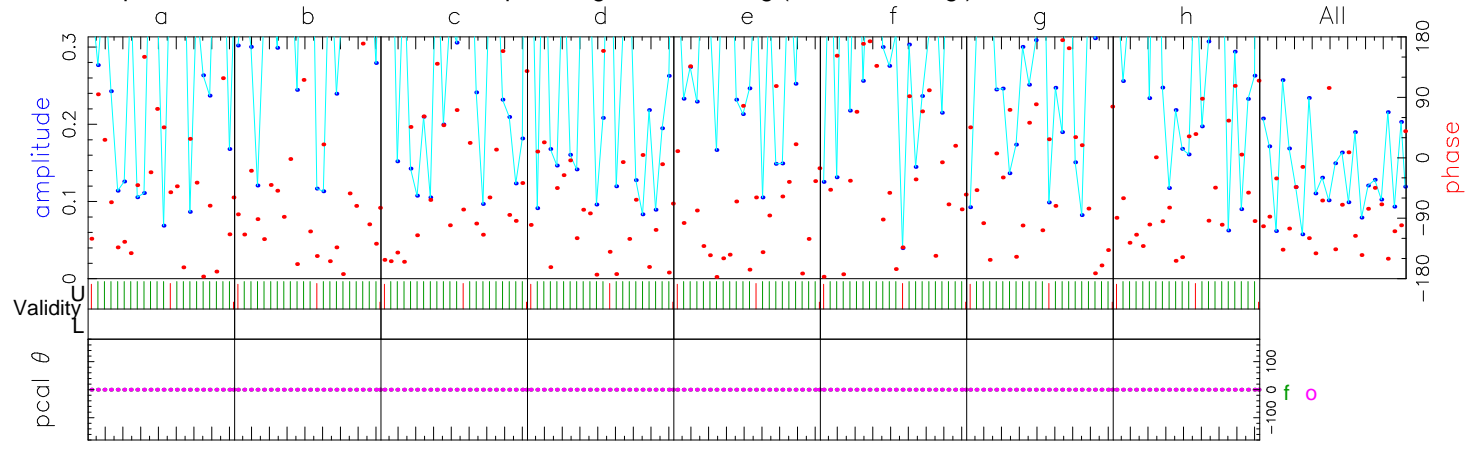


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-23.8	-105.5	-29.5	-43.2	-34.2	-56.6	16.8	-47.5	Phase	-36.3		
	0.2	0.1	0.3	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1		
	442.9	115.9	315.0	279.0	66.4	305.5	227.0	474.6	Sbd box	314.9		
U/L	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	APs used			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
o	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	-3.77640645075E+03		Apriori delay (usec)		-3.77663641375E+03		Resid mbdelay (usec)		-4.41200E-03	+/- 1.8E-04		
Sband delay (usec)	-3.77641016700E+03		Apriori clock (usec)		-1.3523580E+01		Resid sbdelay (usec)		2.26247E-01	+/- 1.4E-03		
Phase delay (usec)	-3.77663641492E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		-1.17015E-06	+/- 6.1E-07		
Delay rate (us/s)	-1.78749165601E-01		Apriori rate (us/s)		-1.78759326160E-01		Resid rate (us/s)		1.01606E-05	+/- 2.2E-09		
Total phase (deg)			Apriori accel (us/s/s)		1.28683027387E-05		Resid phase (deg)		-36.3	+/- 18.8		
	RMS	Theor.	Amplitude	0.146 +/- 0.024		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	66.4	44.9	Search (2048X32)	0.099		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	76.4	78.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	37.4	26.6	Inc. seg. avg.	0.161		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	41.5	46.4	Inc. frq. avg.	0.146		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
f: az 301.7 el 35.5 pa 77.7	o: az 293.3 el 49.1 pa 77.3		u,v (fr/asec) 1391.537 251.590						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo..11M7QU		Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo.W.44.11M7QU									



Fringe quality 0
SNR 6.2
Int time 474.718
Amp 0.104
Phase -100.5
PFD 1.3e-01
Delays (us)
SBD 0.689022
MBD 0.004328
Fringe rate (Hz) 0.033357
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133341
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



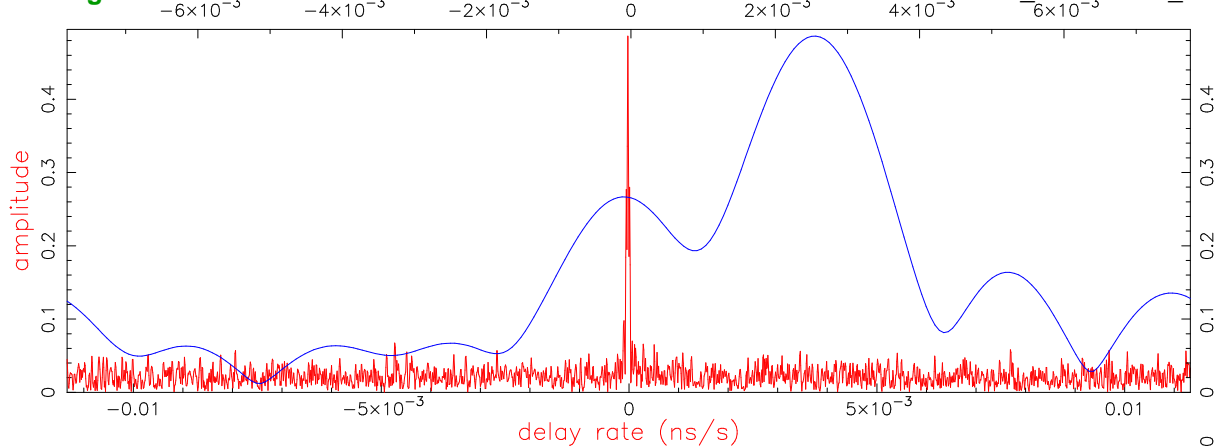
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-94.8	-100.0	-110.6	-84.5	-106.8	-148.1	-119.7	-83.3	Phase	-100.5		
	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	Ampl.	0.1		
	13.2	432.7	262.0	75.1	315.0	132.1	131.3	481.8	Sbd box	433.4		
U/L	931/0	931/0	931/0	931/0	931/0	931/0	931/0	931/0	APs used			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
o	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	-3.77594458526E+03		Apriori delay (usec)		-3.77663641375E+03		Resid mbdelay (usec)		4.32849E-03	+/- 1.7E-04		
Sband delay (usec)	-3.77594739200E+03		Apriori clock (usec)		-1.3523580E+01		Resid sbdelay (usec)		6.89022E-01	+/- 1.4E-03		
Phase delay (usec)	-3.77663641699E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		-3.24192E-06	+/- 5.9E-07		
Delay rate (us/s)	-1.78758938920E-01		Apriori rate (us/s)		-1.78759326160E-01		Resid rate (us/s)		3.87240E-07	+/- 2.2E-09		
Total phase (deg)			Apriori accel (us/s/s)		1.28683027387E-05		Resid phase (deg)		-100.5	+/- 18.4		
	RMS	Theor.	Amplitude	0.104 +/- 0.017		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	57.5	44.1	Search (2048X32)	0.101		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	64.4	76.9	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	23.7	26.1	Inc. seg. avg.	0.110		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	52.6	45.5	Inc. frq. avg.	0.097		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
f: az 301.7 el 35.5 pa 77.7	o: az 293.3 el 49.1 pa 77.3		u,v (fr/asec) 1391.537 251.590						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo..11M7QU		Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fo.W.63.11M7QU									

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

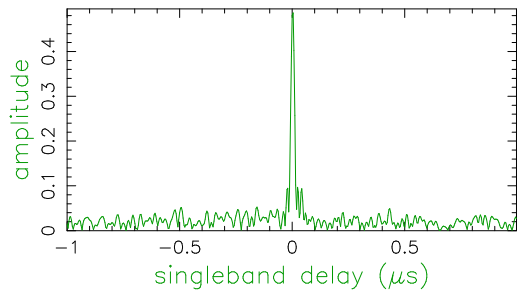
3C84.11M7QU, No0117, fp
VLBA_FD - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

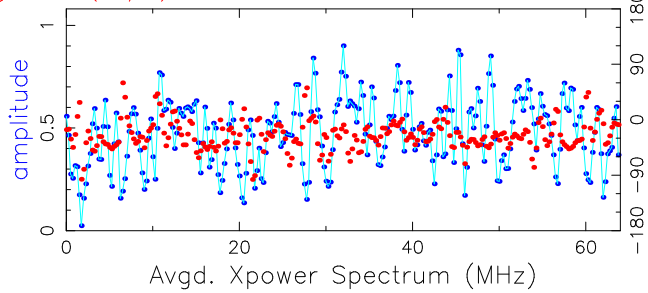


Fringe quality 5

SNR 29.6
Int time 476.246
Amp 0.495
Phase -30.8
PFD 0.0e+00
Delays (us)
SBD 0.002187
MBD 0.002528
Fringe rate (Hz)
-0.001804
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

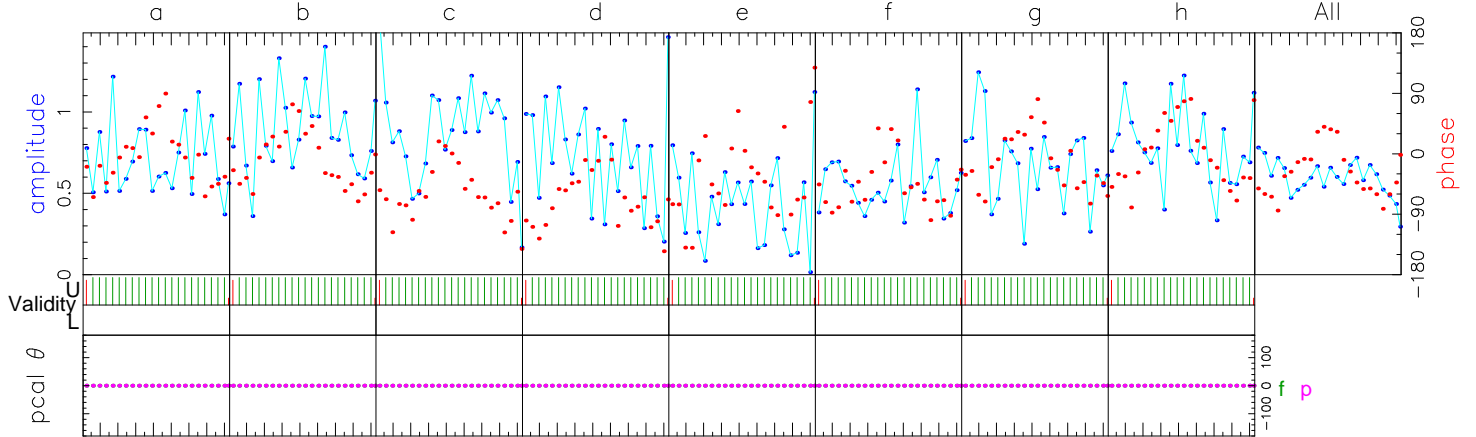


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133330
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.43820201358E+03	-1.43820235449E+03	-1.43820454273E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03		
Sband delay (usec)	-1.43820235449E+03	-1.43820235449E+03	-1.43820454273E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03		
Phase delay (usec)	-1.43820454273E+03	-1.43820454273E+03	-1.43820454273E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03	-1.43820454174E+03		
Delay rate (us/s)	-6.44949519648E-02	-6.44949519648E-02	-6.44949519648E-02	-6.44949519648E-02	-6.44949519648E-02	-6.44949519648E-02	-6.44949519648E-02	-6.44949519648E-02		
Total phase (deg)			-111.9							
Apriori delay (usec)				0.481	0.481	0.481	0.481	0.481		
Apriori clock (usec)				0.481	0.481	0.481	0.481	0.481		
Apriori clockrate (us/s)				0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00		
Apriori rate (us/s)				0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00	0.000000E+00		
Apriori accel (us/s/s)				3.64567660807E-06	3.64567660807E-06	3.64567660807E-06	3.64567660807E-06	3.64567660807E-06		
Resid mbdelay (usec)				2.52816E-03	2.52816E-03	2.52816E-03	2.52816E-03	2.52816E-03		+/- 3.7E-05
Resid sbdelay (usec)				2.18725E-03	2.18725E-03	2.18725E-03	2.18725E-03	2.18725E-03		+/- 2.9E-04
Resid phdelay (usec)				-9.92743E-07	-9.92743E-07	-9.92743E-07	-9.92743E-07	-9.92743E-07		+/- 1.3E-07
Resid rate (us/s)				-2.09386E-08	-2.09386E-08	-2.09386E-08	-2.09386E-08	-2.09386E-08		+/- 4.5E-10
Resid phase (deg)				-30.8	-30.8	-30.8	-30.8	-30.8		+/- 3.9
Pcal mode:	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL		
Pcal rate:	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
PC period (AP's)	5	5	5	5	5	5	5	5		
sb window (us)	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000		
mb window (us)	-0.008	0.008	-0.008	0.008	-0.008	0.008	-0.008	0.008		
dr window (ns/s)	-0.011	0.011	-0.011	0.011	-0.011	0.011	-0.011	0.011		
ion window (TEC)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
ph/seg (deg)	37.1	9.3	Search (2048X32)	0.481	0.481	0.481	0.481	0.481		
amp/seg (%)	29.2	16.2	Interp.	0.000	0.000	0.000	0.000	0.000		
ph/frq (deg)	29.1	5.5	Inc. seg. avg.	0.596	0.596	0.596	0.596	0.596		
amp/frq (%)	30.0	9.6	Inc. frq. avg.	0.535	0.535	0.535	0.535	0.535		
f: az 301.7 el 35.5 pa 77.7										
p: az 298.3 el 40.4 pa 75.9										
u,v (fr/asec)	500.638	-108.493								
Control file:	cf_1234_gmva									
Input file:	/Exps/c202b/v1/v1_3mm/1234/No0117/fp..11M7QU									
Output file:	/Exps/c202b/v1/v1_3mm/1234/No0117/fp.W.12.11M7QU									

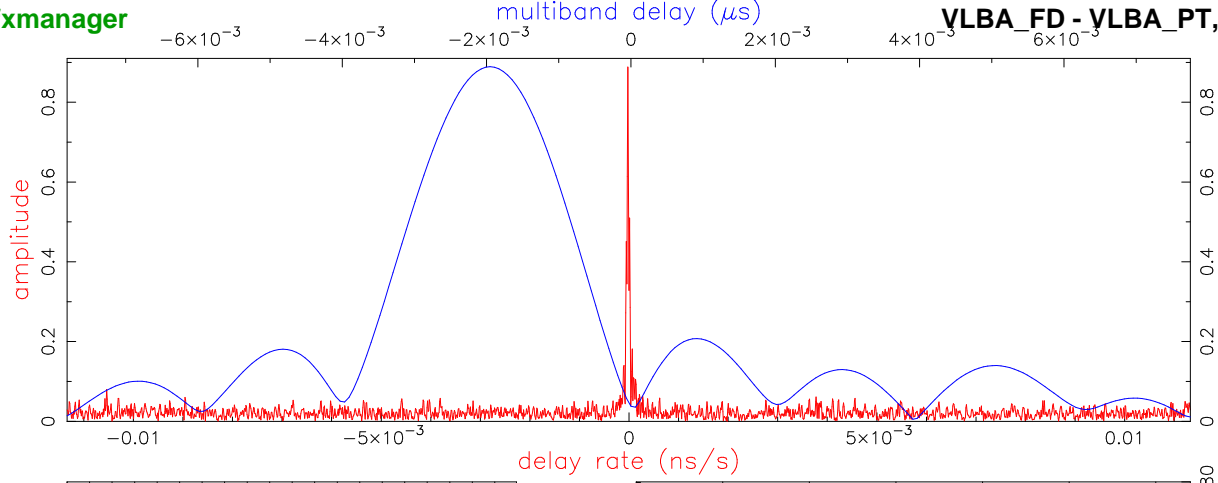
simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, fp

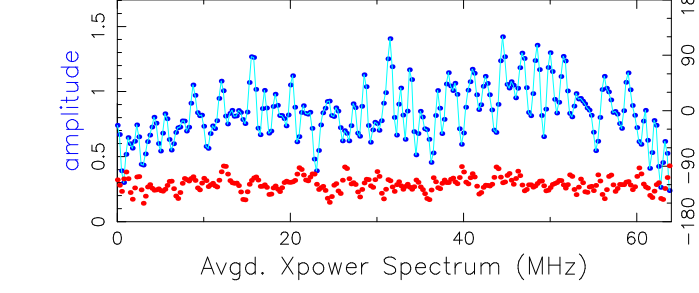
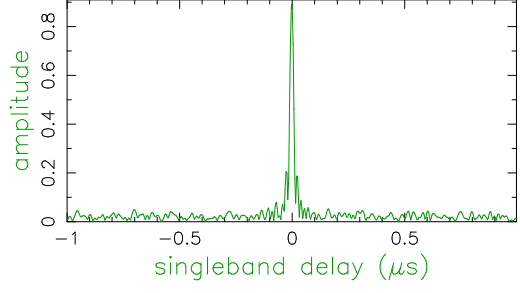
VLBA_FD - VLBA_PT, fgroup W, pol RR



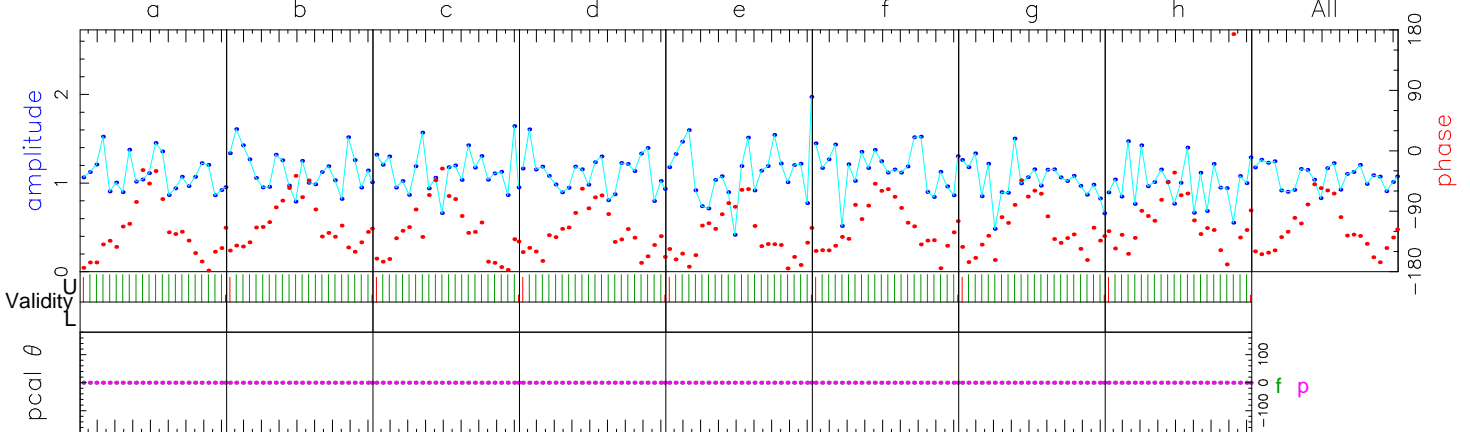
Fringe quality 6

SNR 54.3
 Int time 476.246
 Amp 0.910
 Phase -119.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.001973
 MBD -0.001998
 Fringe rate (Hz)
 -0.001816
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133334
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-124.8	-113.3	-122.2	-123.1	-131.9	-113.3	-117.8	-110.2	Phase	-119.5
	0.8	1.0	0.9	1.0	0.9	1.0	0.9	0.8	Ampl.	0.9
	256.5	256.1	256.5	256.5	256.6	256.8	256.3	256.8	Sbd box	256.5
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.43820653986E+03		Apriori delay (usec)		-1.43820454174E+03		Resid mbdelay (usec)		-1.99812E-03	+/- 2.0E-05
Sband delay (usec)	-1.43820651449E+03		Apriori clock (usec)		7.7890005E+00		Resid sbdelay (usec)		-1.97275E-03	+/- 1.6E-04
Phase delay (usec)	-1.43820454559E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.85488E-06	+/- 6.8E-08
Delay rate (us/s)	-6.44949521065E-02		Apriori rate (us/s)		-6.44949310262E-02		Resid rate (us/s)		-2.10803E-08	+/- 2.5E-10
Total phase (deg)			Apriori accel (us/s/s)		3.64567660807E-06		Resid phase (deg)		-119.5	+/- 2.1

ph/seg (deg) 35.0 5.1 Search (2048X32) 0.885 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 23.0 8.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.8 3.0 Inc. seg. avg. 1.071 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.9 5.2 Inc. frq. avg. 0.893 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 301.7 el 35.5 pa 77.7 p: az 298.3 el 40.4 pa 75.9 u,v (fr/asec) 500.638 -108.493 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fp..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fp.W.29.1IM7QU

Mk4/DiFX fourfit 3.21 rev 2937

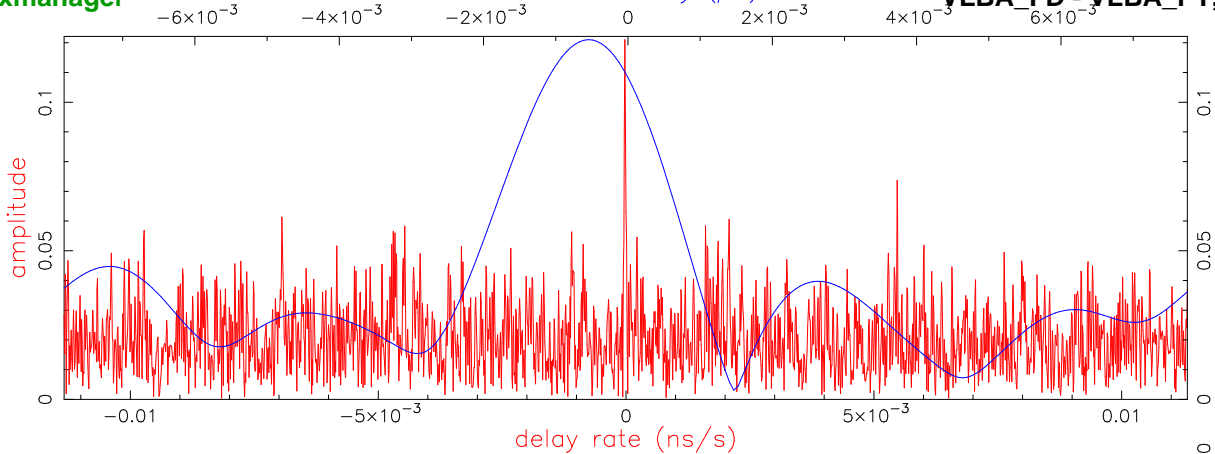
fxmanager

3C84.11M7QU, No0117, fp

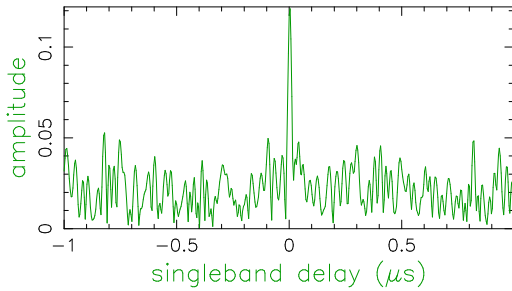
VLBA_FD - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

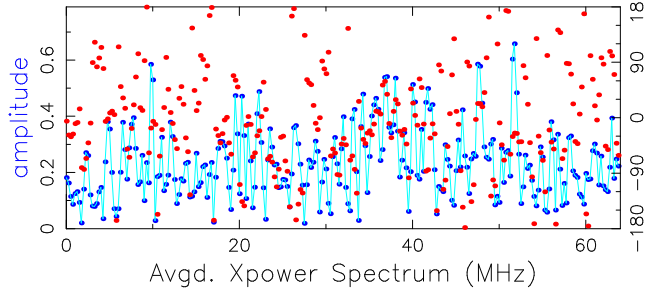
Fringe quality 9



SNR 7.3
Int time 476.246
Amp 0.122
Phase 27.5
PFD 9.7e-05
Delays (us)
SBD 0.002639
MBD -0.000561
Fringe rate (Hz)
-0.001732
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

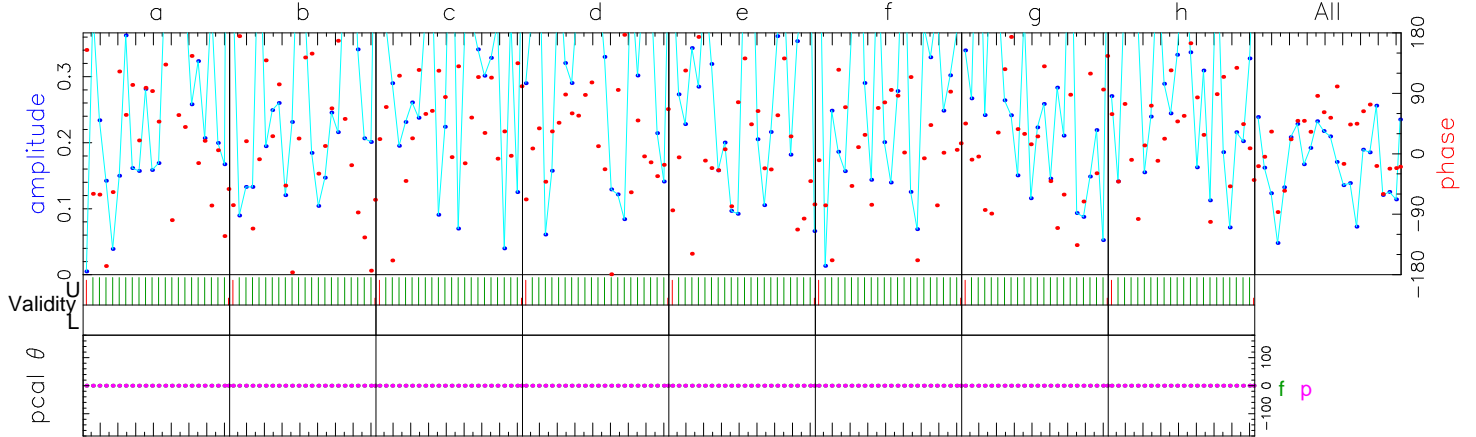


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133338
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	19.7	7.6	46.5	30.5	-13.4	19.4	16.7	42.6	Phase	27.5
	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.1
	172.2	271.3	257.3	257.6	71.2	257.9	227.6	25.4	Sbd box	257.7
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.43820510261E+03	Apriori delay (usec)	-1.43820454174E+03	Resid mbdelay (usec)	-5.60868E-04	+/-	1.5E-04
Sband delay (usec)	-1.43820190299E+03	Apriori clock (usec)	7.7890005E+00	Resid sbdelay (usec)	2.63875E-03	+/-	1.2E-03
Phase delay (usec)	-1.43820454085E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	8.85891E-07	+/-	5.1E-07
Delay rate (us/s)	-6.44949511273E-02	Apriori rate (us/s)	-6.44949310262E-02	Resid rate (us/s)	-2.01011E-08	+/-	1.8E-09
Total phase (deg)	-53.7	Apriori accel (us/s/s)	3.64567660807E-06	Resid phase (deg)	27.5	+/-	15.7

ph/seg (deg)	49.9	RMS	47.9	Theor.	37.7	Amplitude	0.122 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	57.4		57.4		65.7	Search (2048X32)	0.120	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	22.0		22.0		22.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	47.9		47.9		38.8	Inc. seg. avg.	0.138	Sample rate (MSamp/s):	128			ion window (TEC)	0.00	0.00
						Inc. frq. avg.	0.117	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	

f: az 301.7 el 35.5 pa 77.7

p: az 298.3 el 40.4 pa 75.9

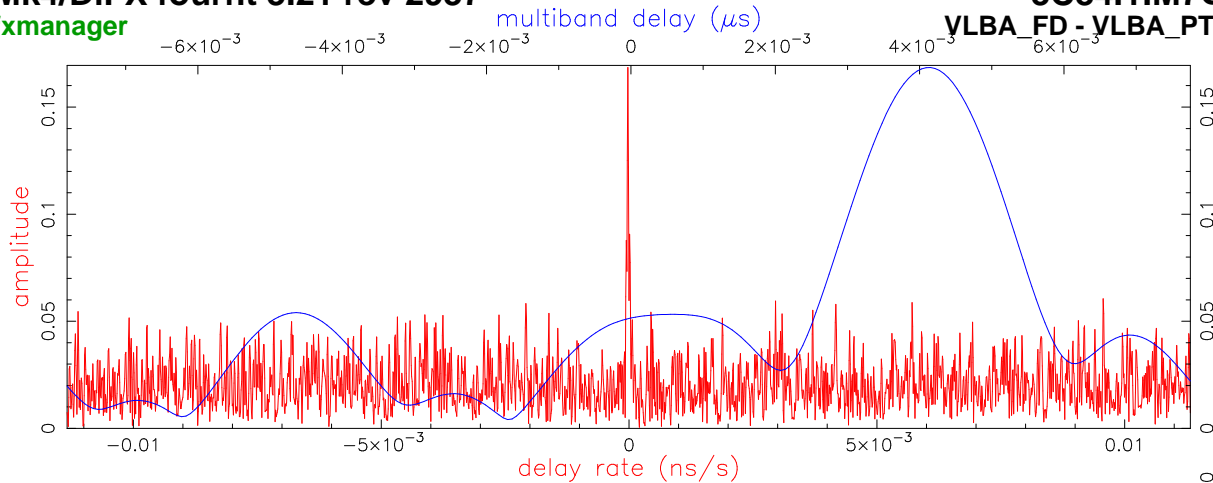
u,v (fr/asec) 500.638 -108.493

simultaneous interpolator

Control file: cf_1234_gmva

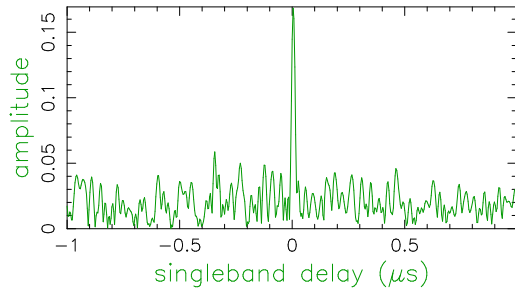
Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fp..11M7QU

Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fp.W.48.11M7QU

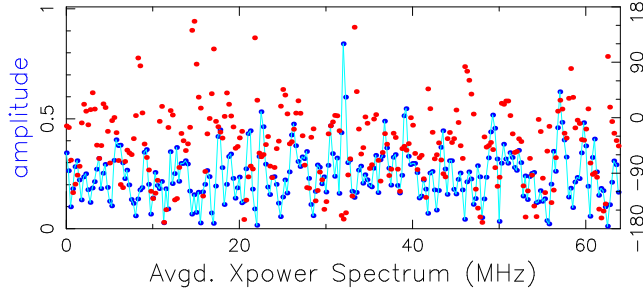


Fringe quality 9

SNR 10.1
Int time 476.246
Amp 0.169
Phase -37.1
PFD 2.1e-15
Delays (us)
SBD 0.004879
MBD 0.004161
Fringe rate (Hz)
-0.001891
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

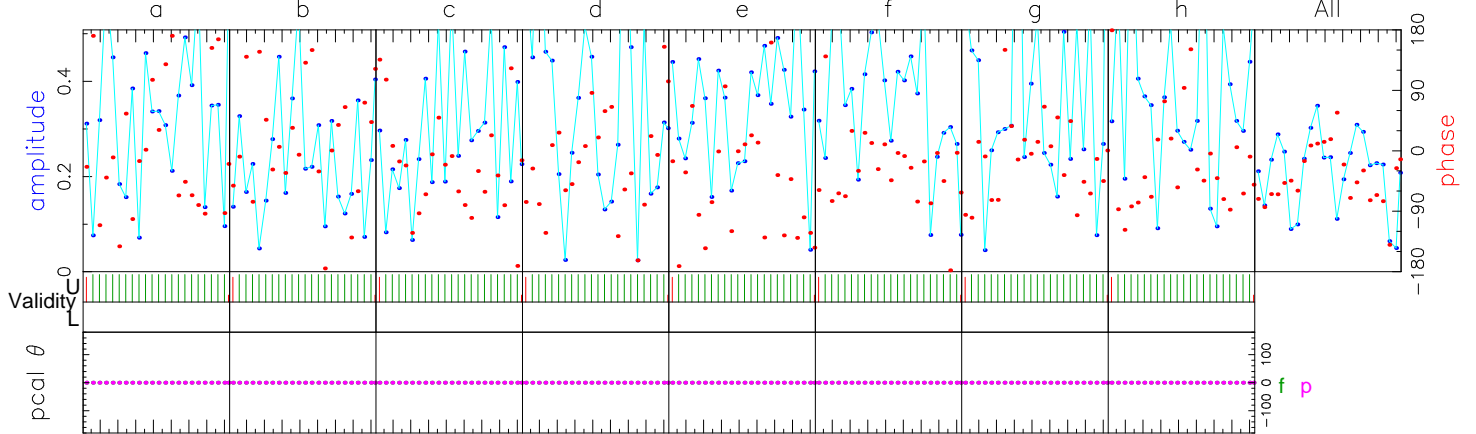


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133343
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-57.1	1.0	-35.7	-40.8	-70.7	-26.0	-26.7	-51.5	Phase	-37.1
	0.1	0.1	0.1	0.2	0.1	0.3	0.2	0.2	Ampl.	0.2
	297.8	492.5	258.1	257.7	339.4	258.4	258.0	258.1	Sbd box	258.2
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.43820038048E+03	Apriori delay (usec)	-1.43820454174E+03	Resid mbdelay (usec)	4.16126E-03	+/-	1.1E-04
Sband delay (usec)	-1.43819966249E+03	Apriori clock (usec)	7.7890005E+00	Resid sbdelay (usec)	4.87925E-03	+/-	8.5E-04
Phase delay (usec)	-1.43820454294E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.19694E-06	+/-	3.7E-07
Delay rate (us/s)	-6.44949529837E-02	Apriori rate (us/s)	-6.44949310262E-02	Resid rate (us/s)	-2.19575E-08	+/-	1.3E-09
Total phase (deg)	-118.3	Apriori accel (us/s/s)	3.64567660807E-06	Resid phase (deg)	-37.1	+/-	11.3

ph/seg (deg)	42.7	Theor.	27.1	Amplitude	0.169 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	53.8	Search (2048X32)	0.165	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.9	Inc. seg. avg.	0.189	Inc. frq. avg.	0.170	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.2	Inc. frq. avg.	0.170			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 301.7 el 35.5 pa 77.7

p: az 298.3 el 40.4 pa 75.9

u,v (fr/asec) 500.638 -108.493

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fp..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fp.W.70.1IM7QU

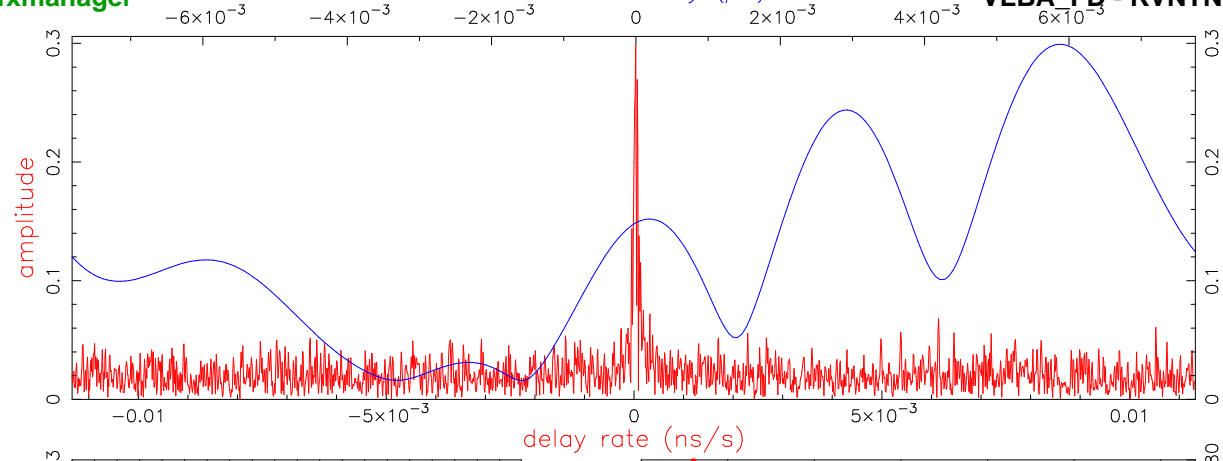
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ft

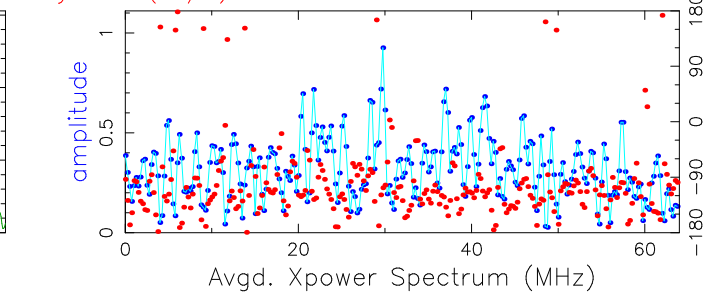
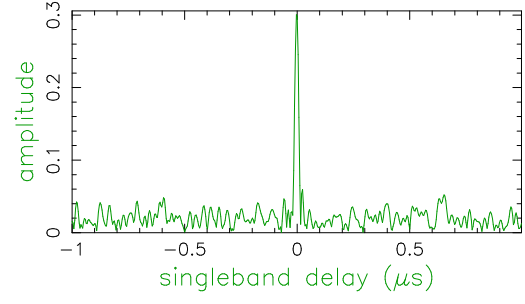
VLBA_FD - KVNTN, fgroup W, pol LL

multiband delay (μ s)



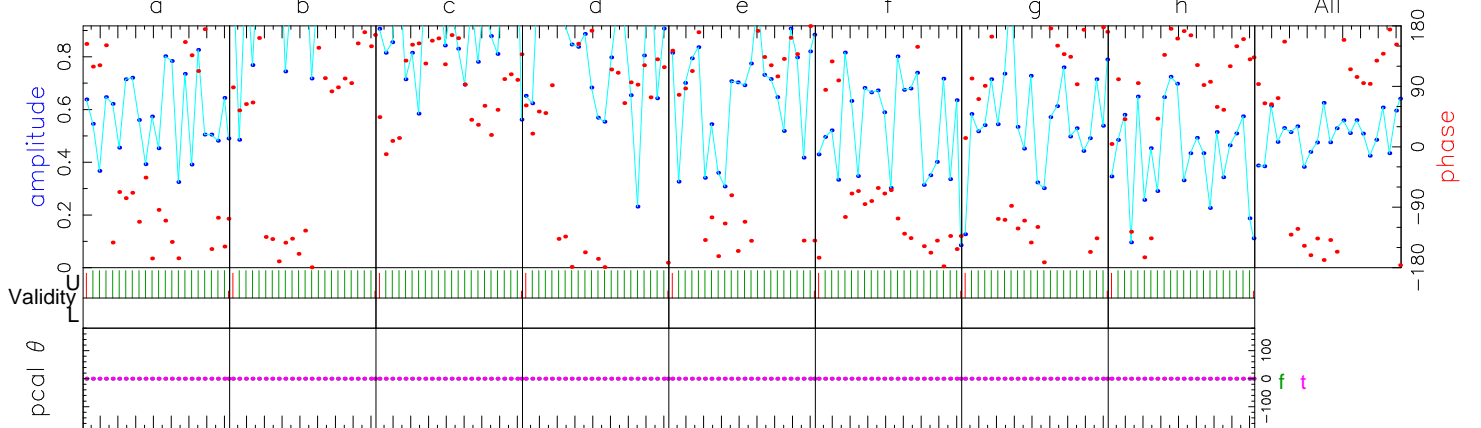
Fringe quality 7

SNR 18.3
 Int time 476.246
 Amp 0.306
 Phase 153.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.002137
 MBD 0.005766
 Fringe rate (Hz) 0.002832
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133331
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ft	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

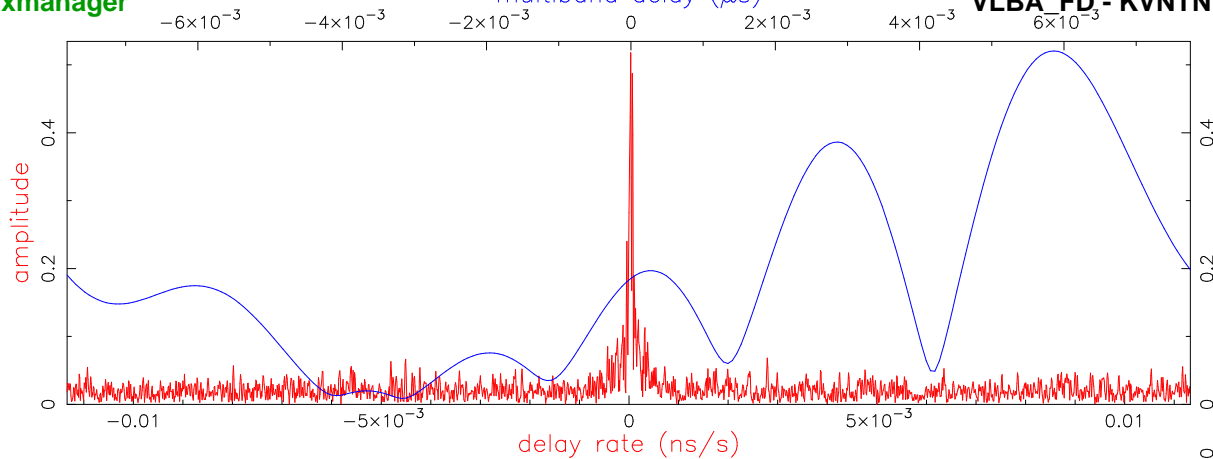
Group delay (usec)(sbd)	-2.11762093282E+03	Apriori delay (usec)	-2.11761107380E+03	Resid mbdelay (usec)	5.76597E-03	+/-	5.9E-05
Sband delay (usec)	-2.11761321055E+03	Apriori clock (usec)	6.4970522E+00	Resid sbdelay (usec)	-2.13675E-03	+/-	4.7E-04
Phase delay (usec)	-2.11761106885E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	4.94132E-06	+/-	2.0E-07
Delay rate (us/s)	-1.77939777657E+00	Apriori rate (us/s)	-1.77939780945E+00	Resid rate (us/s)	3.28799E-08	+/-	7.3E-10
Total phase (deg)	-169.6	Apriori accel (us/s/s)	8.36264441693E-06	Resid phase (deg)	153.2	+/-	6.3

ph/seg (deg)	56.4	RMS	15.0	Theor.	15.0	Amplitude	0.306 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	69.3	Search (2048X32)	0.298	Search	0.298	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	52.7	Inc. seg. avg.	0.488	Inc. seg. avg.	0.488	Inc. frq. avg.	0.399	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.6	Inc. frq. avg.	0.399	Inc. frq. avg.	0.399	Sample rate (MSamp/s): 128		Sample rate (MSamp/s): 128		dr window (ns/s)	-0.011 0.011
						Data rate (Mb/s): 2048		Data rate (Mb/s): 2048		ion window (TEC)	0.00 0.00

f: az 301.7 el 35.5 pa 77.7 t: az 61.3 el 41.3 pa -78.2 u,v (fr/asec) 13636.334 192.953 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft.W.18.11M7QU

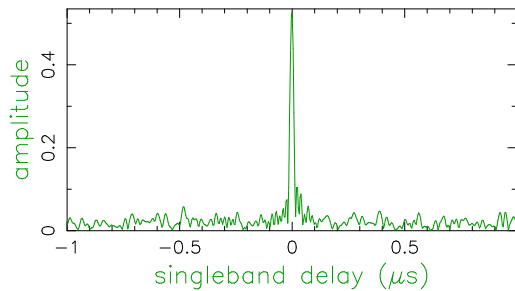
multiband delay (μ s)



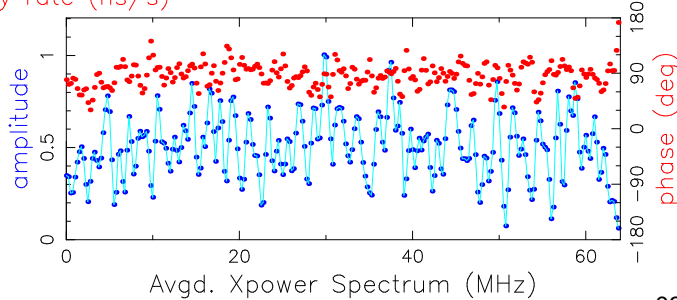
Fringe quality 4

SNR 31.9
Int time 476.246
Amp 0.535
Phase -2.9
PFD 0.0e+00
Delays (us)
SBD -0.001630
MBD 0.005975
Fringe rate (Hz)
0.002804
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

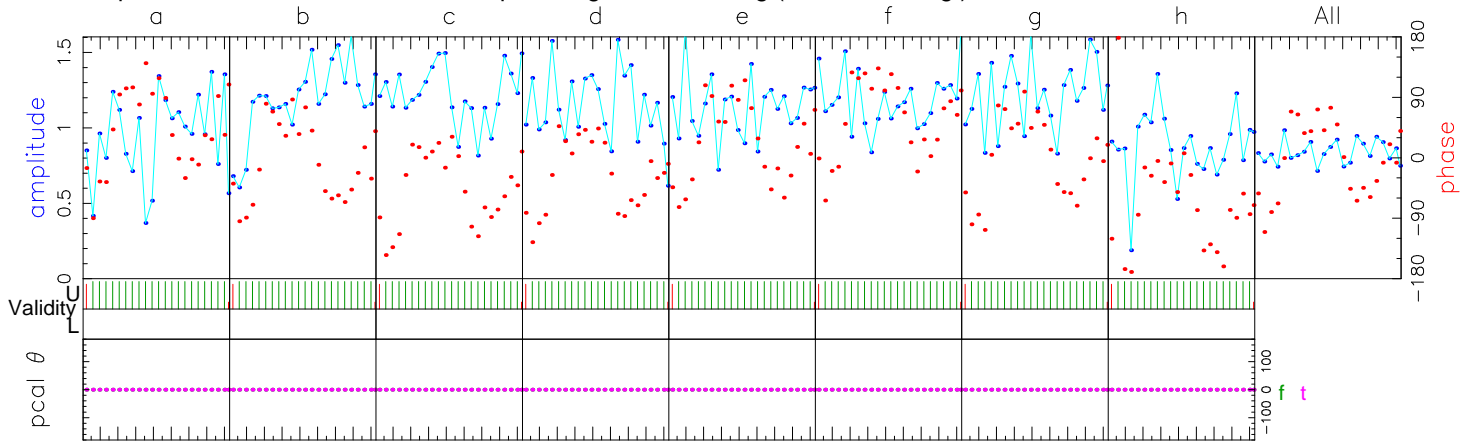
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133335
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ft	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-2.11760509929E+03				-2.11761107380E+03			5.97451E-03	+/- 3.4E-05
Sband delay (usec)		-2.11761270430E+03				6.4970522E+00			-1.63050E-03	+/- 2.7E-04
Phase delay (usec)		-2.11761107389E+03				2.9999999E-07			-9.41258E-08	+/- 1.2E-07
Delay rate (us/s)		-1.7793977689E+00				-1.77939780945E+00			3.25554E-08	+/- 4.2E-10
Total phase (deg)			-325.7			8.36264441693E-06			-2.9	+/- 3.6
		RMS	Theor.	Amplitude	0.535 +/- 0.017					
ph/seg (deg)		54.5	8.6	Search (2048X32)	0.519					
amp/seg (%)		59.0	15.0	Interp.	0.000					
ph/frq (deg)		46.9	5.1	Inc. seg. avg.	0.833					
amp/frq (%)		27.9	8.9	Inc. frq. avg.	0.660					
f: az 301.7 el 35.5 pa 77.7				t: az 61.3 el 41.3 pa -78.2						
Control file: cf_1234_gmva				Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft..11M7QU						
				Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft.W.36.11M7QU						

Group delay (usec)(sbd) -2.11760509929E+03 Apriori delay (usec) -2.11761107380E+03 Resid mbdelay (usec) 5.97451E-03 +/- 3.4E-05
 Sband delay (usec) -2.11761270430E+03 Apriori clock (usec) 6.4970522E+00 Resid sbdelay (usec) -1.63050E-03 +/- 2.7E-04
 Phase delay (usec) -2.11761107389E+03 Apriori clockrate (us/s) 2.9999999E-07 Resid phdelay (usec) -9.41258E-08 +/- 1.2E-07
 Delay rate (us/s) -1.7793977689E+00 Apriori rate (us/s) -1.77939780945E+00 Resid rate (us/s) 3.25554E-08 +/- 4.2E-10
 Total phase (deg) -325.7 Apriori accel (us/s/s) 8.36264441693E-06 Resid phase (deg) -2.9 +/- 3.6
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 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
 simultaneous interpolator

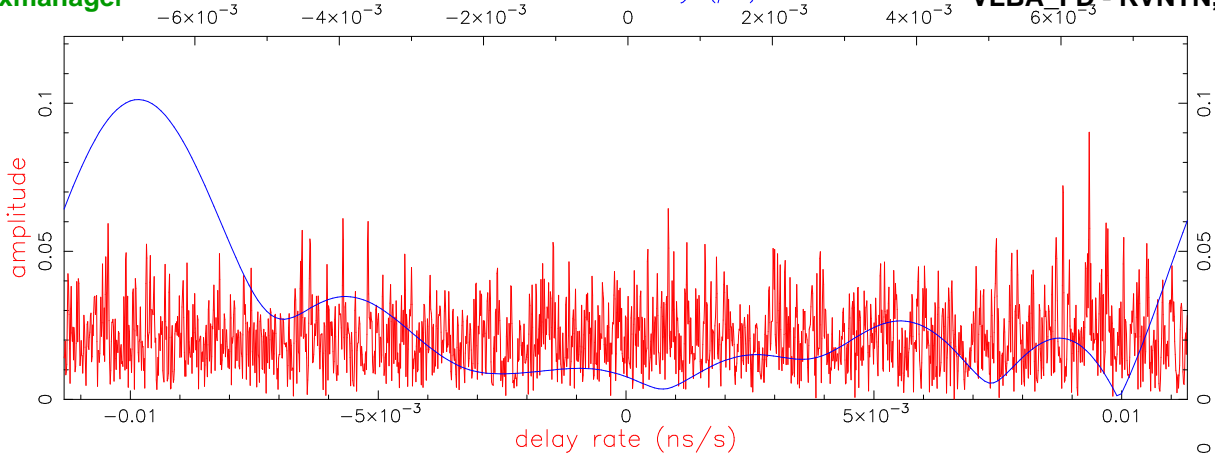
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ft

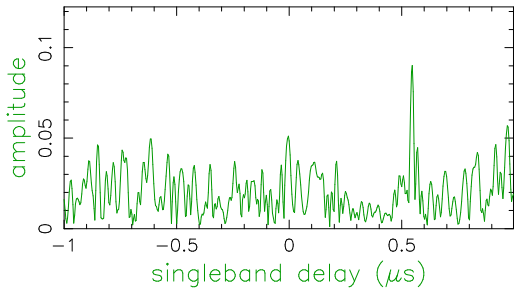
VLBA_FD - KVNTN, fgroup W, pol LR

multiband delay (μ s)

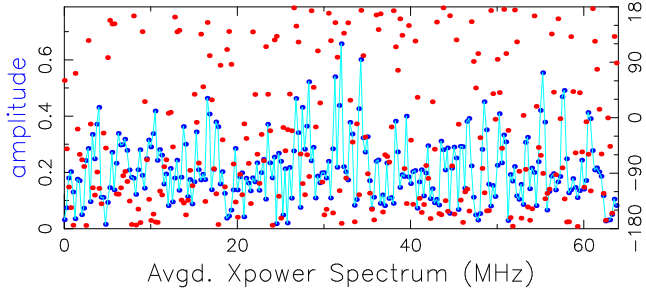


Fringe quality 0

SNR 5.4
Int time 476.246
Amp 0.123
Phase -67.0
PFD 1.0e+00
Delays (us)
SBD 0.545709
MBD 0.008301
Fringe rate (Hz)
0.805879
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

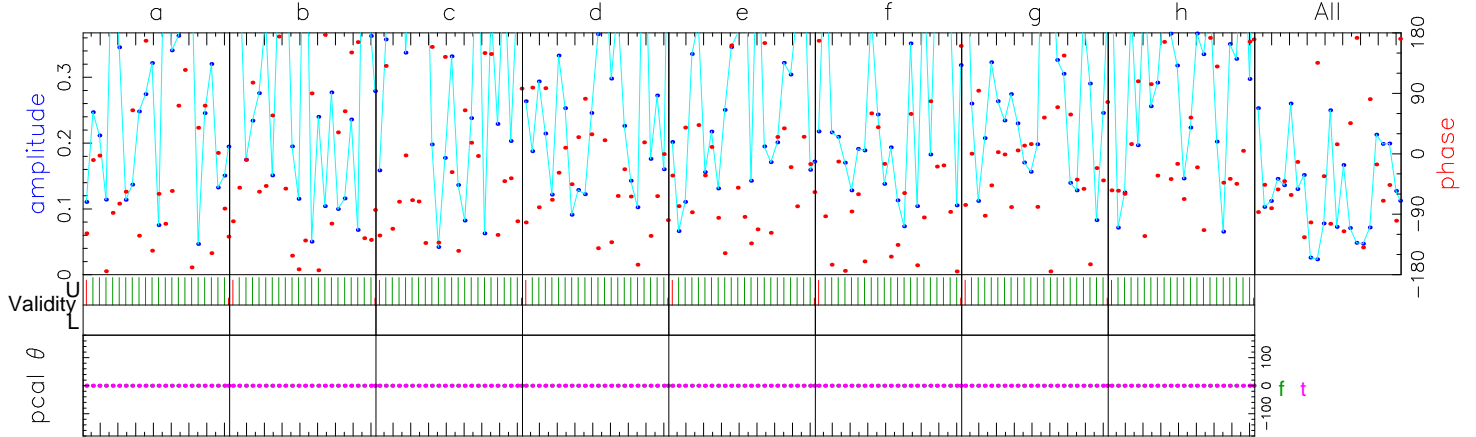


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133339
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-112.5	-111.9	-80.3	-33.8	-54.8	-61.0	-19.5	-42.6	Phase	-67.0
	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	241.6	396.1	417.1	120.5	23.9	177.4	48.4	402.7	Sbd box	396.7
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ft	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	
t	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.11707152301E+03		Apriori delay (usec)		-2.11761107380E+03		Resid mbdelay (usec)		8.30078E-03	+/- 2.0E-04
Sband delay (usec)	-2.11706536505E+03		Apriori clock (usec)		6.4970522E+00		Resid sbdelay (usec)		5.45709E-01	+/- 1.6E-03
Phase delay (usec)	-2.11761107596E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-2.16175E-06	+/- 6.8E-07
Delay rate (us/s)	-1.77938845398E+00		Apriori rate (us/s)		-1.77939780945E+00		Resid rate (us/s)		9.35546E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		8.36264441693E-06		Resid phase (deg)		-67.0	+/- 21.1

	RMS	Theor.	Amplitude	0.123 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	69.8	50.5	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	89.7	88.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	37.4	29.8	Inc. seg. avg.	0.126	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.5	52.1	Inc. frq. avg.	0.126	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 301.7 el 35.5 pa 77.7 t: az 61.3 el 41.3 pa -78.2 u,v (fr/asec) 13636.334 192.953 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft.W.54.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

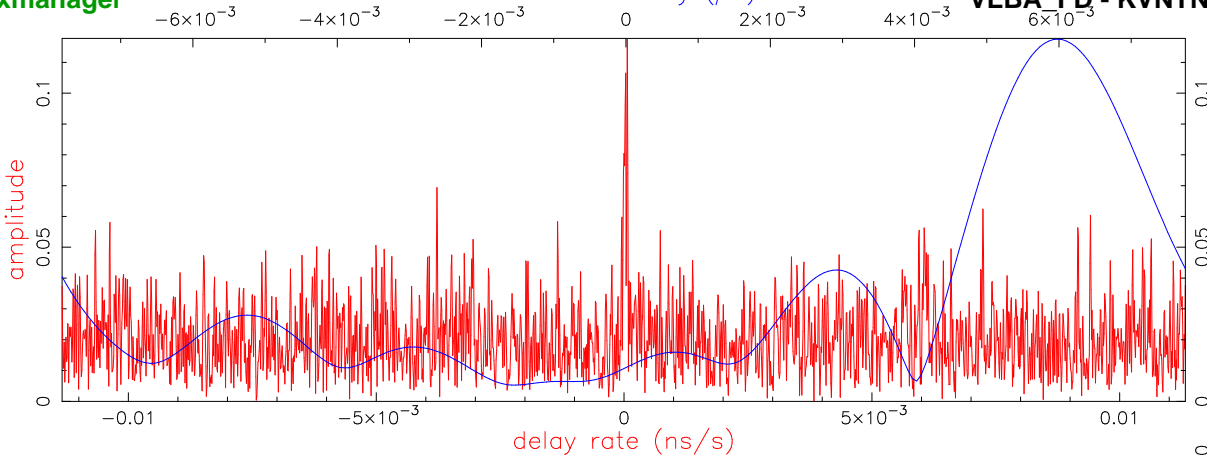
fxmanager

3C84.11M7QU, No0117, ft

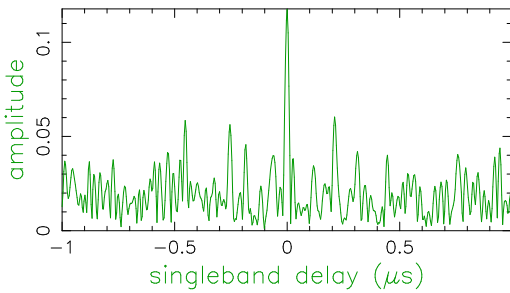
VLBA_FD - KVNTN, fgroup W, pol RL

multiband delay (μ s)

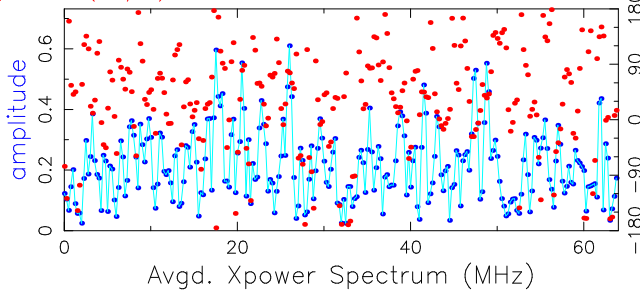
Fringe quality 0



SNR 7.0
 Int time 476.246
 Amp 0.118
 Phase -23.8
 PFD 6.3e-04
 Delays (us)
 SBD -0.000699
 MBD 0.005940
 Fringe rate (Hz)
 0.005991
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

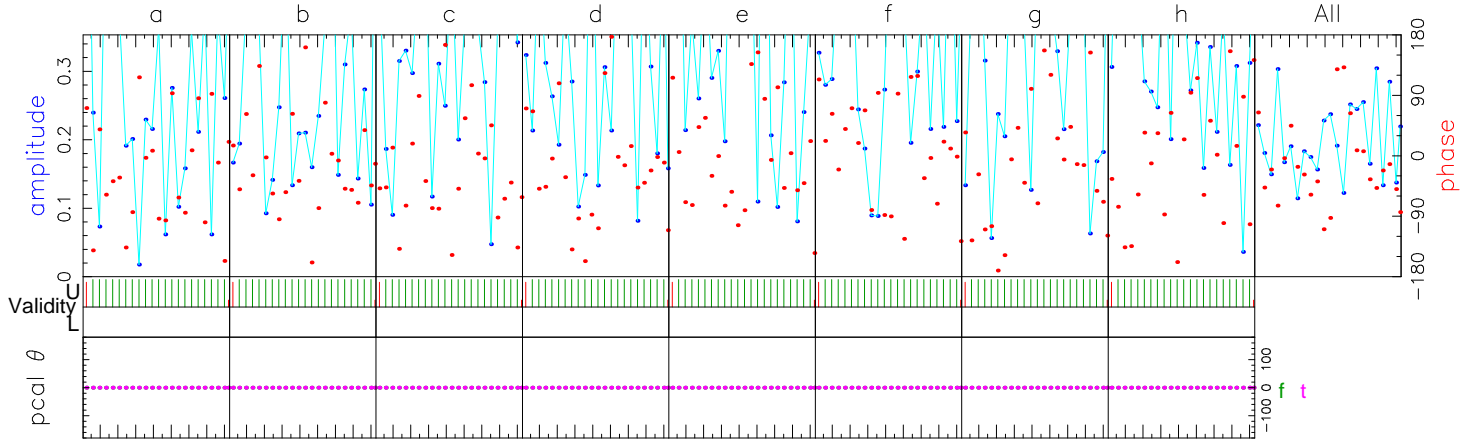


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133343
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-32.7	-18.7	-49.8	-27.5	-2.8	14.2	-25.0	-64.8	Phase	-23.8
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	5.7	338.0	198.4	258.0	321.3	259.3	140.6	469.2	Sbd box	256.8
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ft	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	
t	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

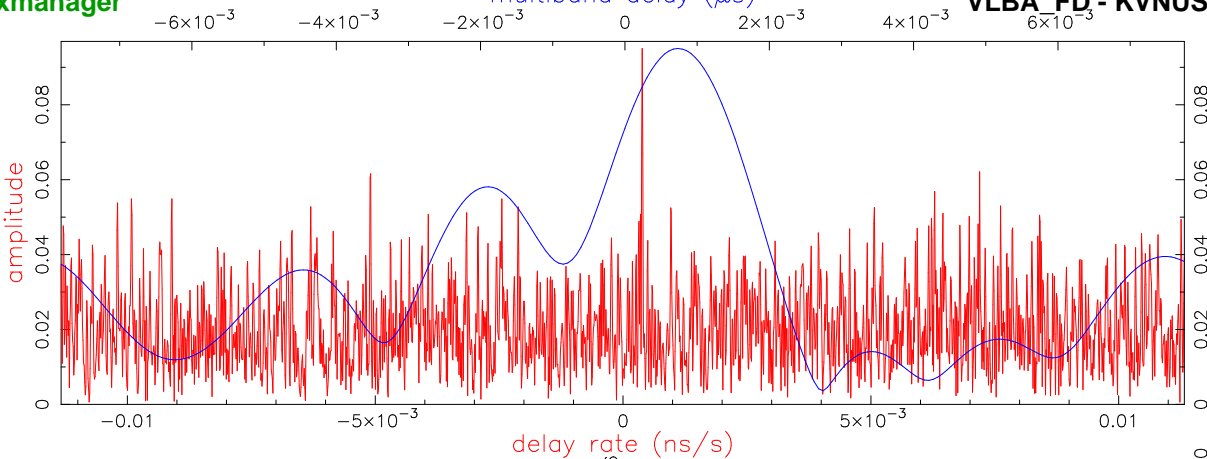
Group delay (usec)(sbd)	-2.11760513403E+03	Apriori delay (usec)	-2.11761107380E+03	Resid mbdelay (usec)	5.93976E-03	+/-	1.5E-04
Sband delay (usec)	-2.11761177280E+03	Apriori clock (usec)	6.4970522E+00	Resid sbdelay (usec)	-6.99000E-04	+/-	1.2E-03
Phase delay (usec)	-2.11761107456E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-7.67412E-07	+/-	5.3E-07
Delay rate (us/s)	-1.77939773990E+00	Apriori rate (us/s)	-1.77939780945E+00	Resid rate (us/s)	6.95499E-08	+/-	1.9E-09
Total phase (deg)	-346.6	Apriori accel (us/s/s)	8.36264441693E-06	Resid phase (deg)	-23.8	+/-	16.3

ph/seg (deg)	63.0	Theor.	39.1	Amplitude	0.118 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	84.4	Search (2048X32)	0.113	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	27.0	Inc. seg. avg.	0.162	Inc. frq. avg.	0.117	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	21.4	Inc. frq. avg.	0.117			Sample rate (MSamp/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

f: az 301.7 el 35.5 pa 77.7 t: az 61.3 el 41.3 pa -78.2 u,v (fr/asec) 13636.334 192.953 simultaneous interpolator

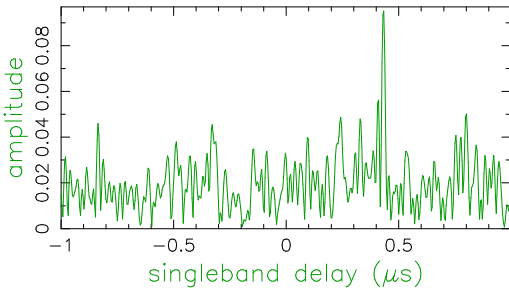
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ft.W.72.11M7QU

multiband delay (μs)

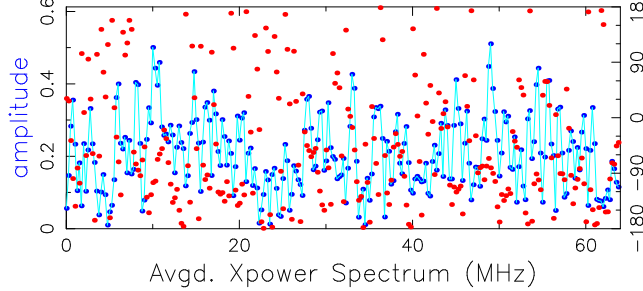


Fringe quality 0

SNR 5.8
Int time 476.246
Amp 0.097
Phase -168.0
PFD 8.4e-01
Delays (us)
SBD 0.431925
MBD 0.000730
Fringe rate (Hz)
0.033533
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

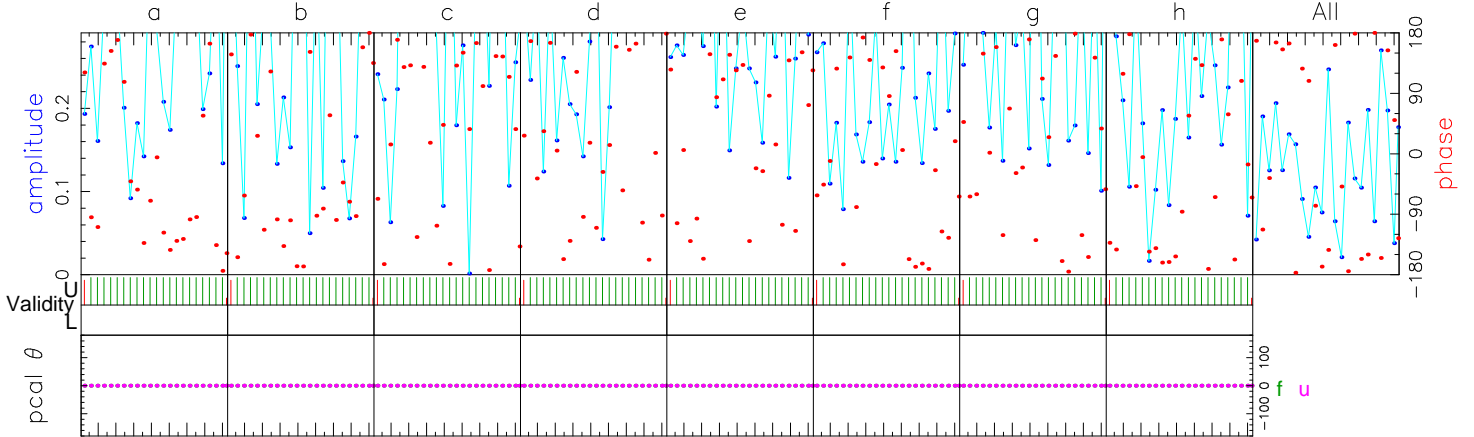


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133354
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



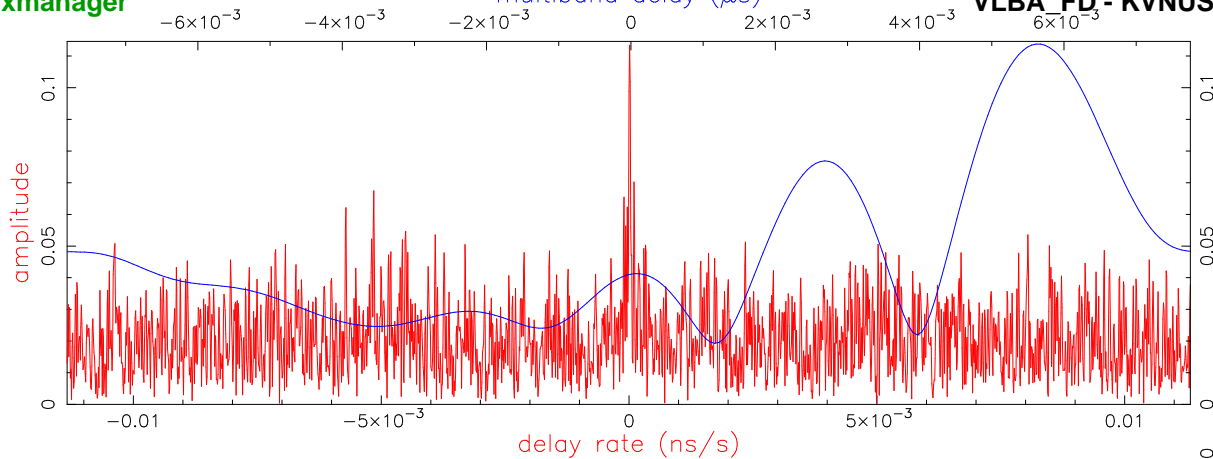
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-139.6	-160.6	151.4	-143.2	157.5	-136.1	-150.7	-161.4	Phase	-168.0
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	118.7	366.7	367.7	314.2	461.4	108.1	342.1	456.3	Sbd box	367.6
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.94513995665E+03	Apriori delay (usec)	-2.94557818664E+03	Resid mbdelay (usec)	7.29991E-04	+/-	1.9E-04
Sband delay (usec)	-2.94514626139E+03	Apriori clock (usec)	5.3119998E+00	Resid sbdelay (usec)	4.31925E-01	+/-	1.5E-03
Phase delay (usec)	-2.94557819206E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.41781E-06	+/-	6.4E-07
Delay rate (us/s)	-1.73342646625E+00	Apriori rate (us/s)	-1.73342685554E+00	Resid rate (us/s)	3.89285E-07	+/-	2.3E-09
Total phase (deg)	-167.1	Apriori accel (us/s/s)	1.03298366427E-05	Resid phase (deg)	-168.0	+/-	19.8

ph/seg (deg)	60.9	Theor.	47.5	Amplitude	0.097 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.2		82.8	Search (2048X32)	0.092	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.7		28.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.9		48.9	Inc. seg. avg.	0.097	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.096	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

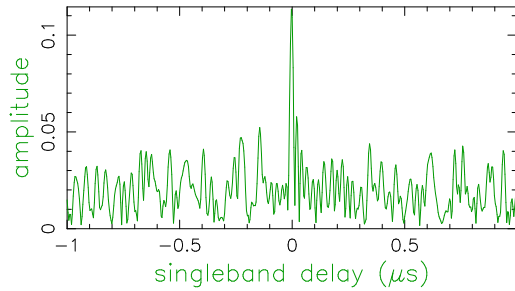
f: az 301.7 el 35.5 pa 77.7 u: az 63.8 el 44.4 pa -77.9 u,v (fr/asec) 13288.194 118.428 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu.W.114.11M7QU

multiband delay (μ s)

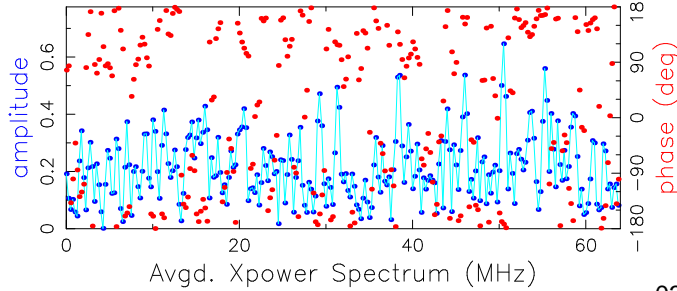


Fringe quality 0

SNR 6.8
Int time 476.246
Amp 0.115
Phase 70.1
PFD 2.3e-03
Delays (us)
SBD -0.002624
MBD 0.005737
Fringe rate (Hz)
0.001047
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

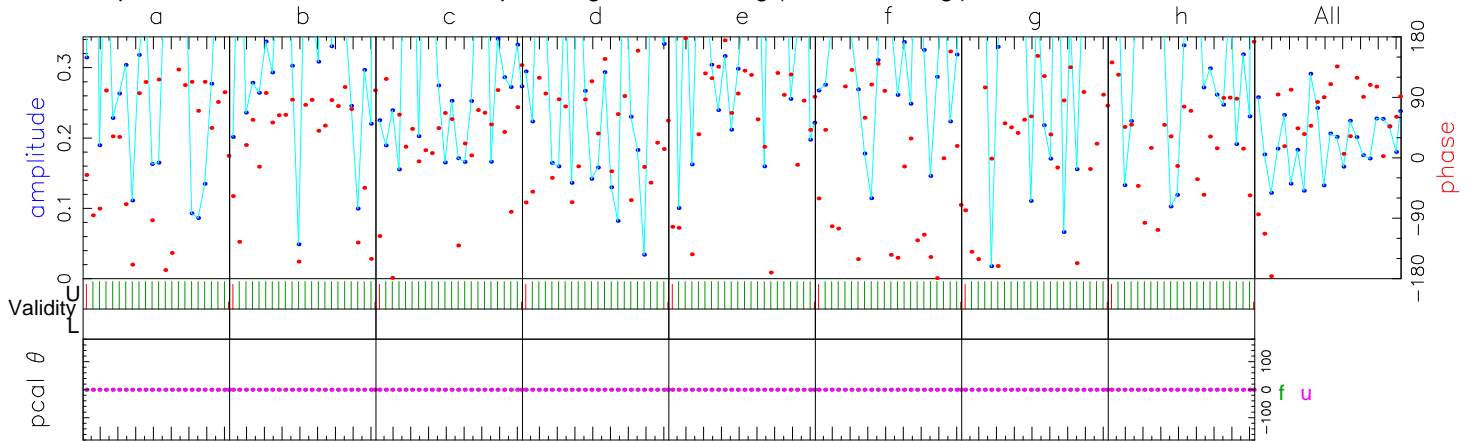


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133358
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



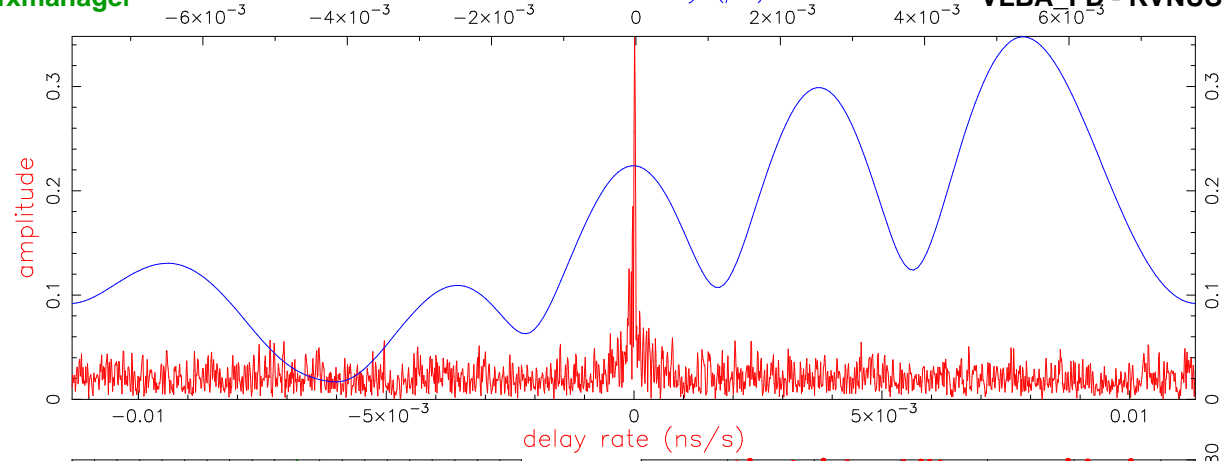
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.94558807466E+03	Apriori delay (usec)	-2.94557818664E+03	Resid mbdelay (usec)	5.73698E-03	+/-	1.6E-04
Sband delay (usec)	-2.94558081064E+03	Apriori clock (usec)	5.3119998E+00	Resid sbdelay (usec)	-2.62400E-03	+/-	1.3E-03
Phase delay (usec)	-2.94557818438E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.25921E-06	+/-	5.4E-07
Delay rate (us/s)	-1.73342684338E+00	Apriori rate (us/s)	-1.7334268554E+00	Resid rate (us/s)	1.21560E-08	+/-	2.0E-09
Total phase (deg)	-289.0	Apriori accel (us/s/s)	1.03298366427E-05	Resid phase (deg)	70.1	+/-	16.7

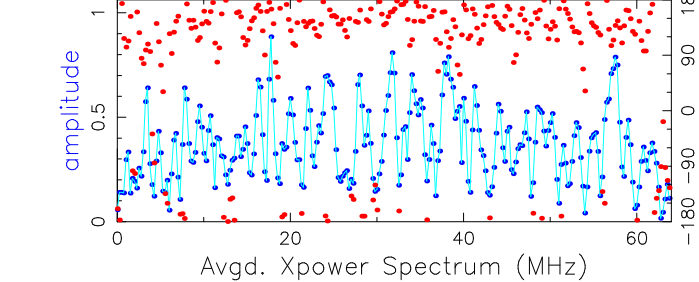
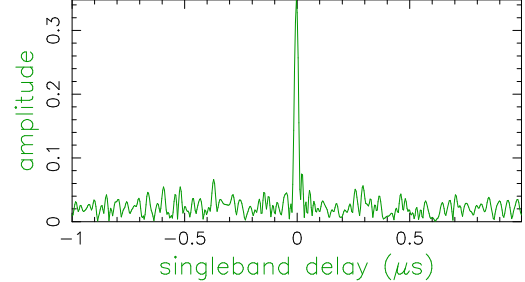
ph/seg (deg)	65.6	Theor.	40.1	Amplitude	0.115 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.3		70.0	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	59.6		23.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	55.4		41.3	Inc. seg. avg.	0.156	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.129	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 301.7 el 35.5 pa 77.7 u: az 63.8 el 44.4 pa -77.9 u,v (fr/asec) 13288.194 118.428 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu.W.136.11M7QU

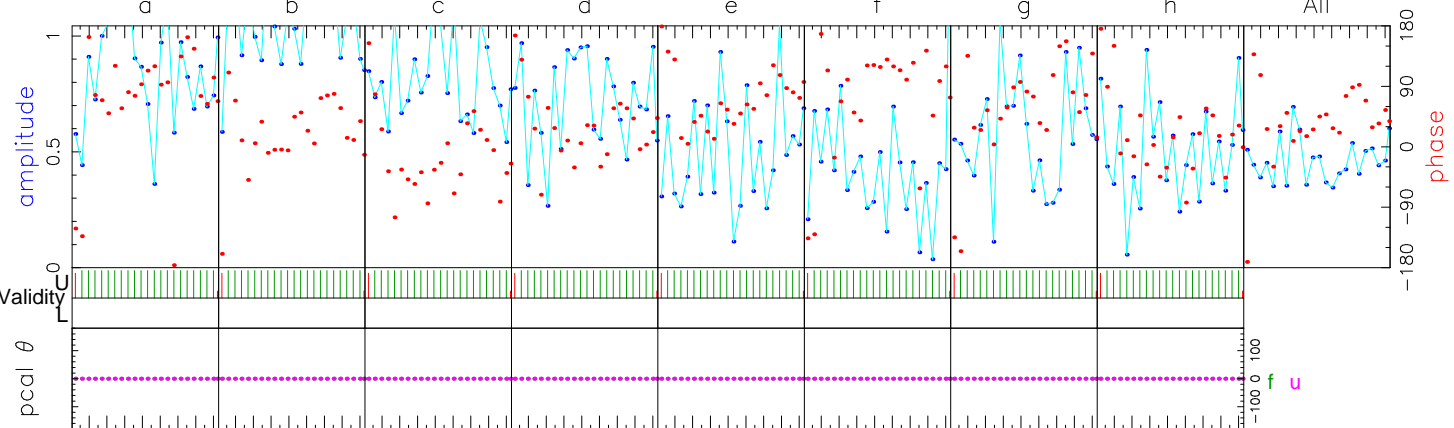
multiband delay (μ s)



Fringe quality 7
SNR 20.8
Int time 476.246
Amp 0.348
Phase 46.3
PFD 0.0e+00
Delays (us)
SBD -0.003347
MBD 0.005391
Fringe rate (Hz) 0.000564
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Yr:day # 16383
2021:023:095356
2021:023:133345
2020:247:085004
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



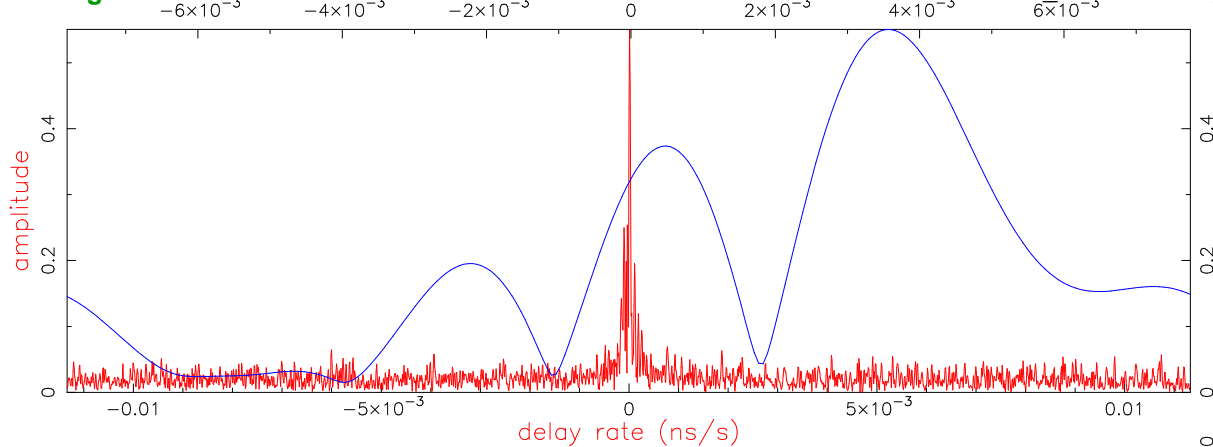
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.94558842041E+03	Apriori delay (usec)	-2.94557818664E+03	Resid mbdelay (usec)	5.39123E-03	+/-	5.2E-05
Sband delay (usec)	-2.94558153389E+03	Apriori clock (usec)	5.3119998E+00	Resid sbdelay (usec)	-3.34725E-03	+/-	4.1E-04
Phase delay (usec)	-2.94557818515E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.49375E-06	+/-	1.8E-07
Delay rate (us/s)	-1.73342684899E+00	Apriori rate (us/s)	-1.73342685554E+00	Resid rate (us/s)	6.54849E-09	+/-	6.5E-10
Total phase (deg)	-312.7	Apriori accel (us/s/s)	1.03298366427E-05	Resid phase (deg)	46.3	+/-	5.5

ph/seg (deg)	45.9	Theor.	13.2	Amplitude	0.348 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	41.3		23.1	Search (2048X32)	0.336	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	52.2		7.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	60.1		13.6	Inc. seg. avg.	0.449	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.472	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

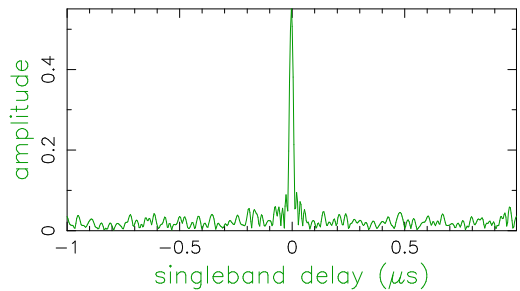
f: az 301.7 el 35.5 pa 77.7 u: az 63.8 el 44.4 pa -77.9 u,v (fr/asec) 13288.194 118.428 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu.W.78.11M7QU

multiband delay (μ s)

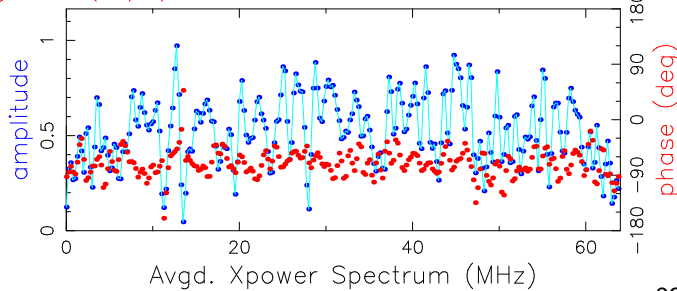


Fringe quality 4

SNR 32.9
Int time 476.246
Amp 0.551
Phase -153.7
PFD 0.0e+00
Delays (us)
SBD -0.003696
MBD 0.003576
Fringe rate (Hz)
0.000698
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

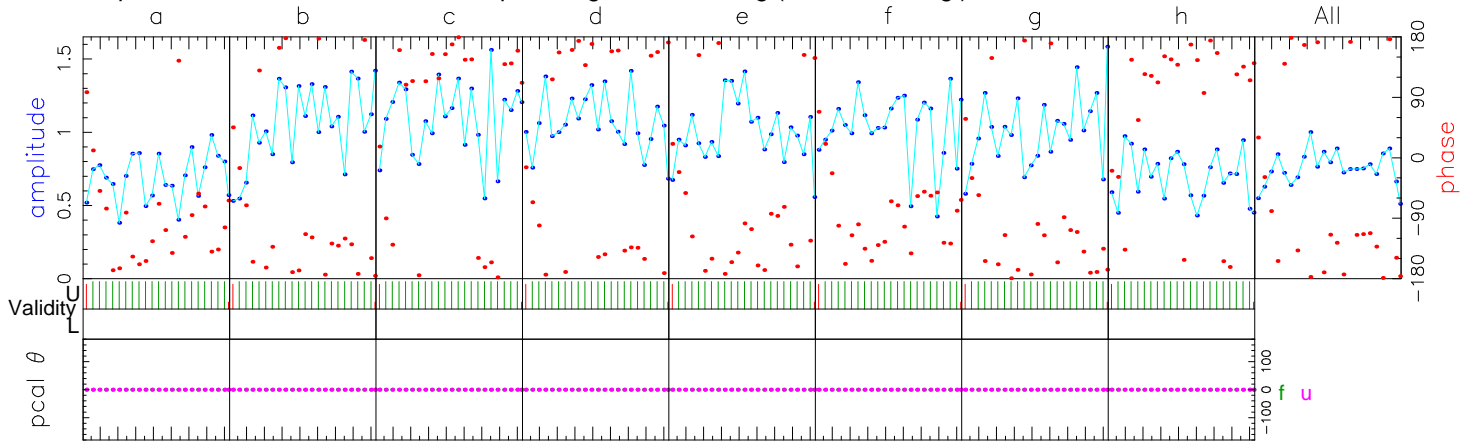


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133350
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-111.4	-155.6	160.2	-173.4	-133.5	-94.4	-143.1	148.7	Phase	-153.7
	0.5	0.8	0.8	0.8	0.7	0.7	0.7	0.5	Ampl.	0.7
	254.3	255.7	256.1	256.4	256.2	256.1	255.4	254.0	Sbd box	256.1
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:u	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	
u	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.94557461107E+03	Apriori delay (usec)	-2.94557818664E+03	Resid mbdelay (usec)	3.57557E-03	+/-	3.3E-05
Sband delay (usec)	-2.94558188239E+03	Apriori clock (usec)	5.3119998E+00	Resid sbdelay (usec)	-3.69575E-03	+/-	2.6E-04
Phase delay (usec)	-2.94557819160E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.95597E-06	+/-	1.1E-07
Delay rate (us/s)	-1.73342684743E+00	Apriori rate (us/s)	-1.73342685554E+00	Resid rate (us/s)	8.10661E-09	+/-	4.1E-10
Total phase (deg)	-152.7	Apriori accel (us/s/s)	1.03298366427E-05	Resid phase (deg)	-153.7	+/-	3.5

ph/seg (deg)	55.7	RMS	8.4	Theor.	8.4	Amplitude	0.551 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	43.0	Search (2048X32)	0.539	Inc. seg. avg.	0.756	Inc. frq. avg.	0.678	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.1	Interp.	0.000	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.4	Inc. seg. avg.	0.756	nlags:	256	t_cohere	infinite	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.678	ion window (TEC)	0.00	0.00	0.00	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 301.7 el 35.5 pa 77.7 u: az 63.8 el 44.4 pa -77.9 u,v (fr/asec) 13288.194 118.428 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fu.W.94.11M7QU

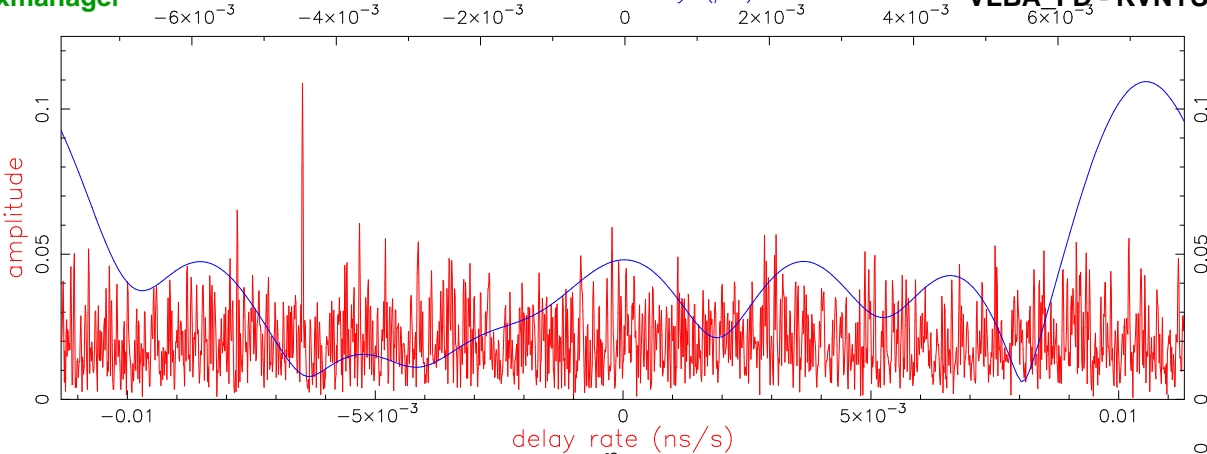
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

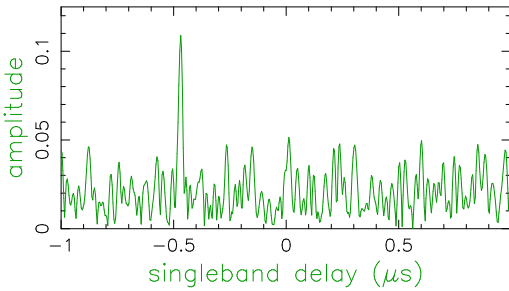
VLBA_FD - KVNYS, fgroup W, pol LR

multiband delay (μ s)

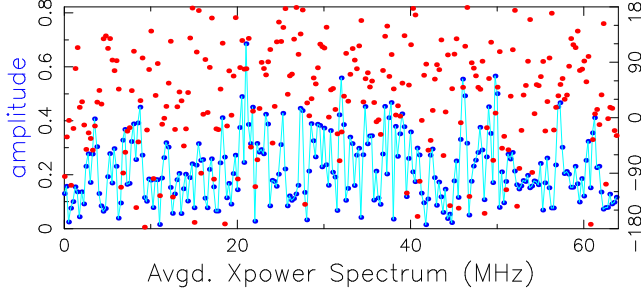


Fringe quality 0

SNR 6.5
Int time 476.246
Amp 0.125
Phase 159.1
PFD 2.2e-02
Delays (us)
SBD -0.468529
MBD -0.008301
Fringe rate (Hz)
-0.557617
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

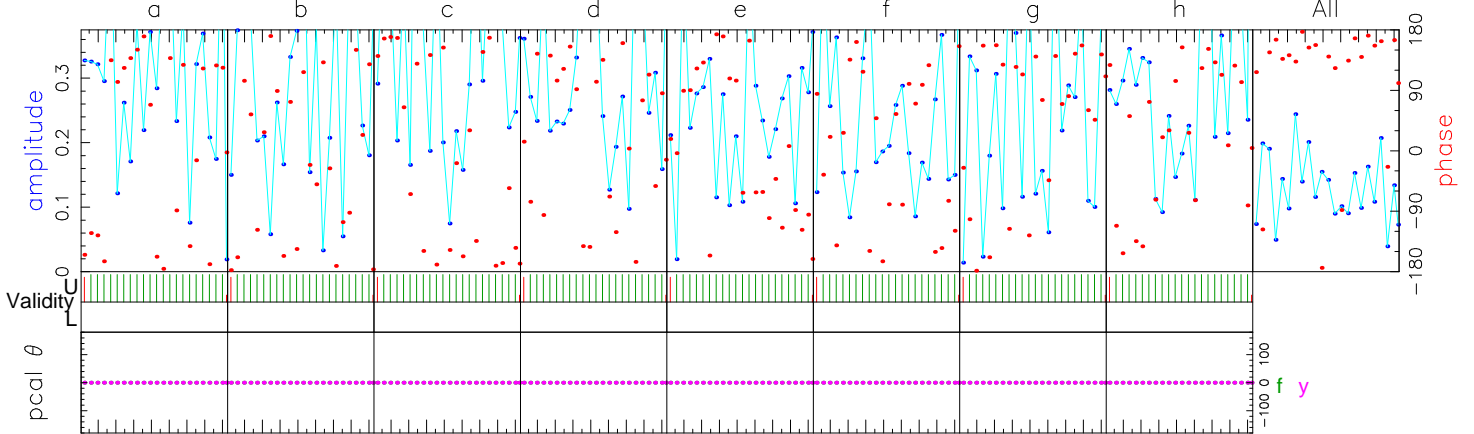


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133354
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-2.72977199803E+03	Apriori delay (usec)	-2.72931057224E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.7E-04
Sband delay (usec)	-2.72977910174E+03	Apriori clock (usec)	6.6330519E+00	Resid sbdelay (usec)	-4.68529E-01	+/-	1.3E-03
Phase delay (usec)	-2.72931056711E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	5.13213E-06	+/-	5.7E-07
Delay rate (us/s)	-1.73191551016E+00	Apriori rate (us/s)	-1.73190903678E+00	Resid rate (us/s)	-6.47338E-06	+/-	2.1E-09
Total phase (deg)	-90.4	Apriori accel (us/s/s)	7.06785044833E-06	Resid phase (deg)	159.1	+/-	17.6

ph/seg (deg)	51.7	Theor.	42.2	Amplitude	0.125 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	52.7		73.7	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	27.5		24.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	59.2		43.5	Inc. seg. avg.	0.120	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.121	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.115.11M7QU

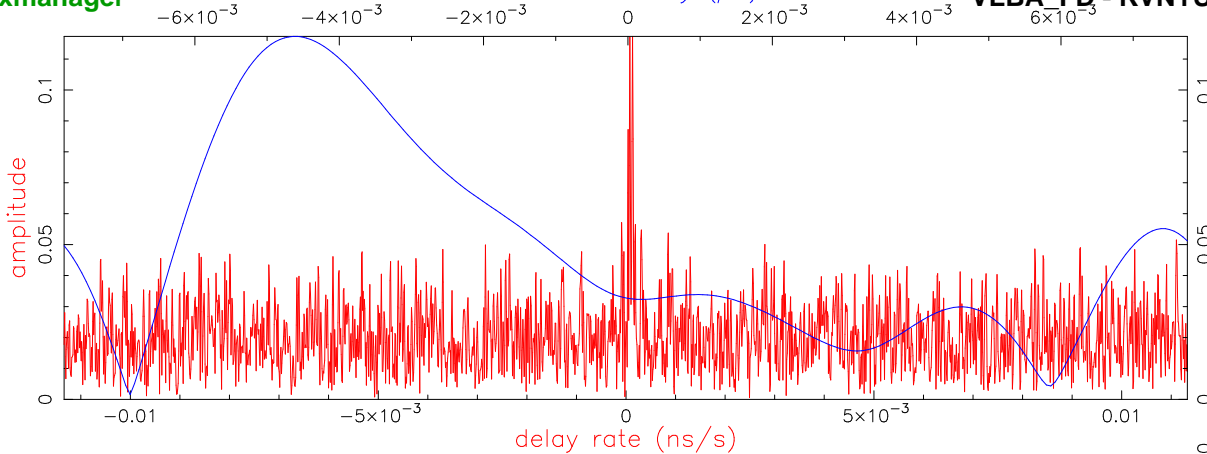
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

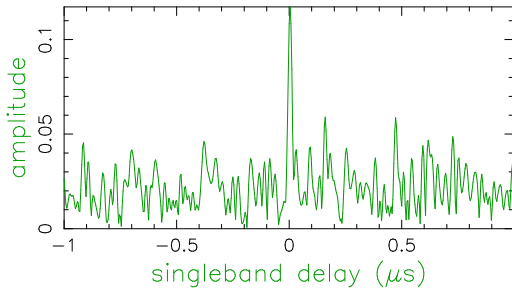
VLBA_FD - KVNYS, fgroup W, pol RL

multiband delay (μ s)

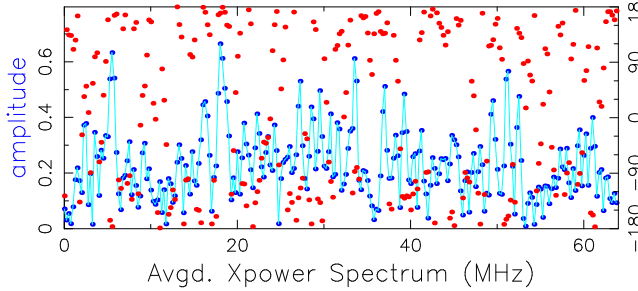


Fringe quality 0

SNR 7.0
 Int time 476.246
 Amp 0.117
 Phase -81.7
 PFD 7.6e-04
 Delays (us)
 SBD 0.003976
 MBD -0.004611
 Fringe rate (Hz)
 0.011007
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

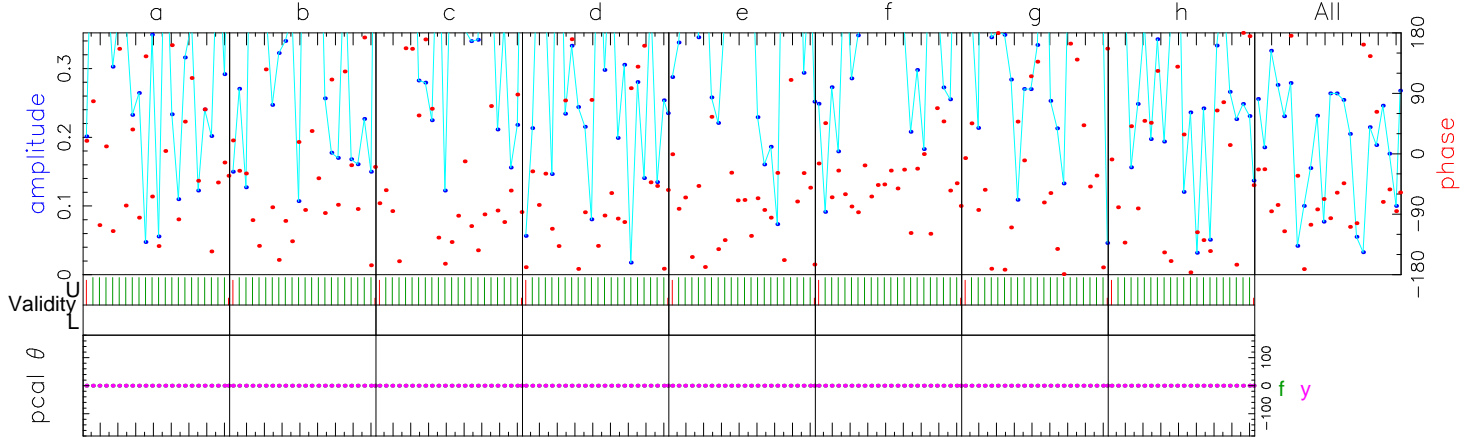


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133358
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-15.8	-86.5	-112.1	-104.8	-90.4	-45.2	-91.2	155.9	Phase	-81.7
	0.1	0.1	0.2	0.1	0.2	0.3	0.1	0.0	Ampl.	0.1
	453.9	266.1	258.8	192.6	257.2	258.5	319.5	376.4	Sbd box	258.0
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.72929955779E+03		Apriori delay (usec)		-2.72931057224E+03		Resid mbdelay (usec)		-4.61054E-03	+/- 1.6E-04
Sband delay (usec)	-2.72930659599E+03		Apriori clock (usec)		6.6330519E+00		Resid sbdelay (usec)		3.97625E-03	+/- 1.2E-03
Phase delay (usec)	-2.72931057488E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-2.63490E-06	+/- 5.3E-07
Delay rate (us/s)	-1.73190890900E+00		Apriori rate (us/s)		-1.73190903678E+00		Resid rate (us/s)		1.27783E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		7.06785044833E-06		Resid phase (deg)		-81.7	+/- 16.4

ph/seg (deg) 62.2 39.2 Search (2048X32) 0.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 94.5 68.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.0 23.1 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 69.6 40.4 Inc. frq. avg. 0.133 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 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.131.11M7QU

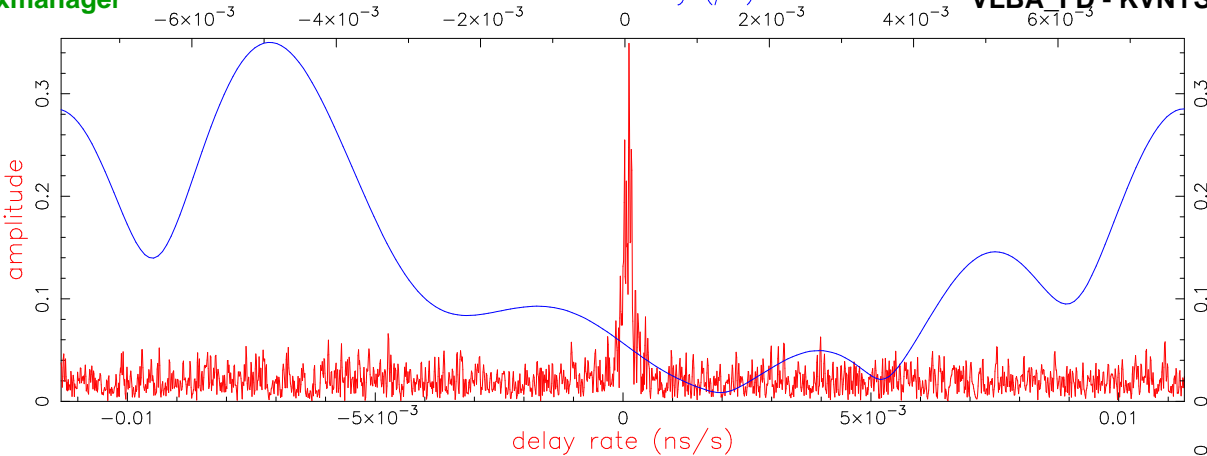
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

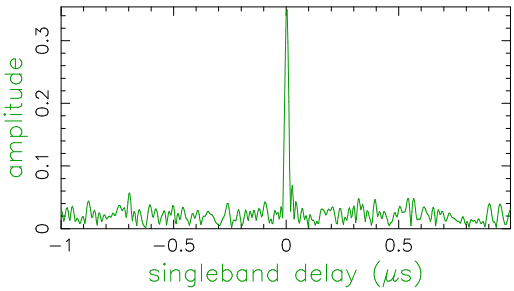
VLBA_FD - KVNYS, fgroup W, pol LL

multiband delay (μ s)

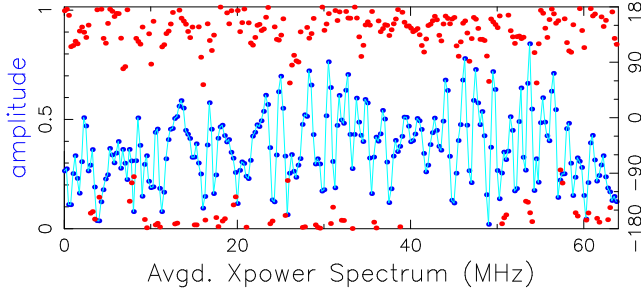


Fringe quality 7

SNR 21.1
 Int time 476.246
 Amp 0.354
 Phase -119.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.002353
 MBD -0.005011
 Fringe rate (Hz)
 0.010802
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

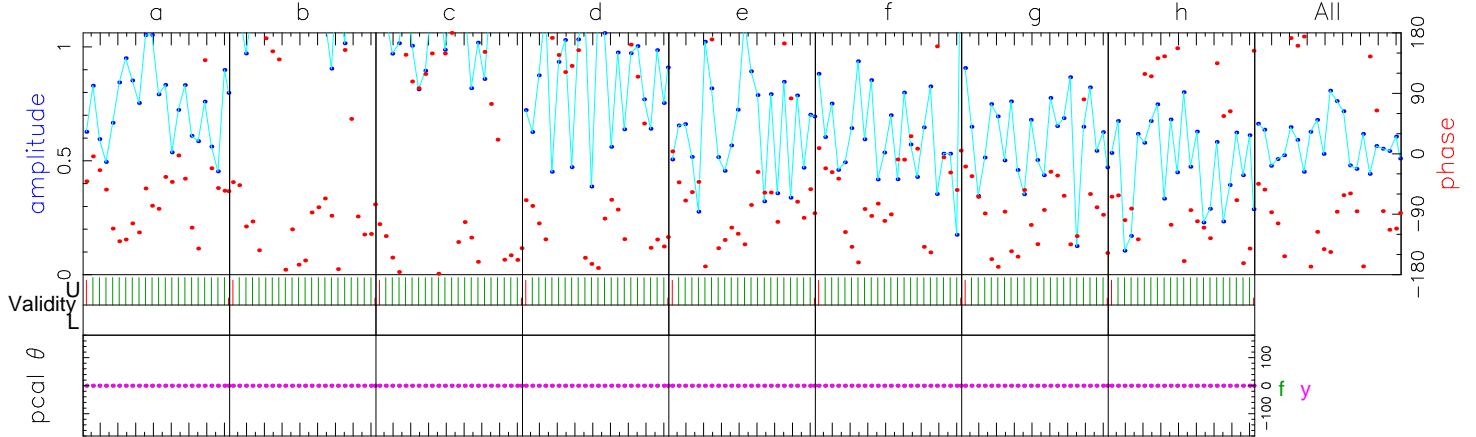


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133345
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

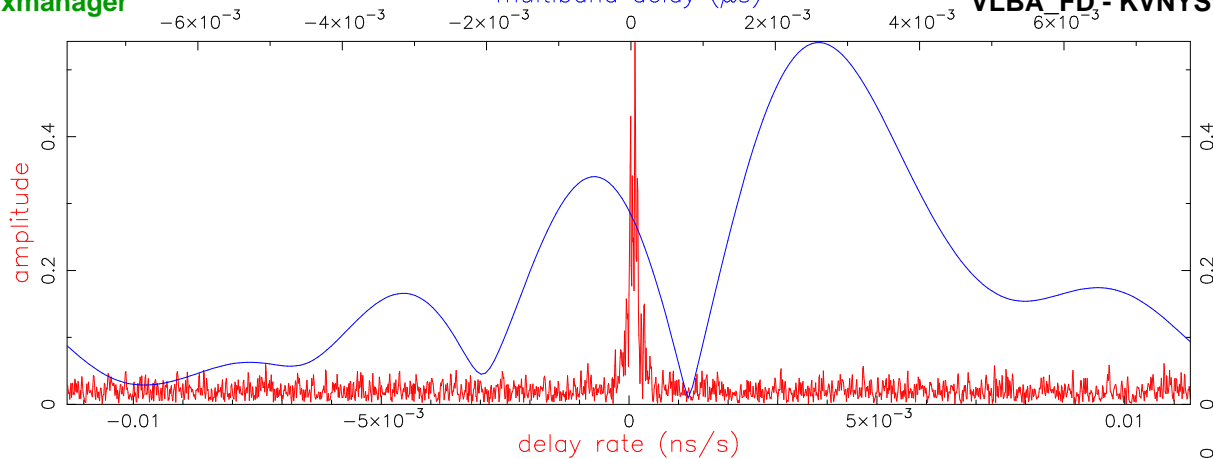
Group delay (usec)(sbd)	-2.72931558298E+03	Apriori delay (usec)	-2.72931057224E+03	Resid mbdelay (usec)	-5.01074E-03	+/-	5.1E-05
Sband delay (usec)	-2.72930821974E+03	Apriori clock (usec)	6.6330519E+00	Resid sbdelay (usec)	2.35250E-03	+/-	4.1E-04
Phase delay (usec)	-2.72931057611E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-3.86225E-06	+/-	1.7E-07
Delay rate (us/s)	-1.73190891138E+00	Apriori rate (us/s)	-1.73190903678E+00	Resid rate (us/s)	1.25398E-07	+/-	6.3E-10
Total phase (deg)	-9.3	Apriori accel (us/s/s)	7.06785044833E-06	Resid phase (deg)	-119.8	+/-	5.4

ph/seg (deg)	61.5	Theor.	13.0	Search (2048X32)	0.338	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.0		22.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	45.0		7.7	Inc. seg. avg.	0.571	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	53.1		13.4	Inc. frq. avg.	0.443	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator

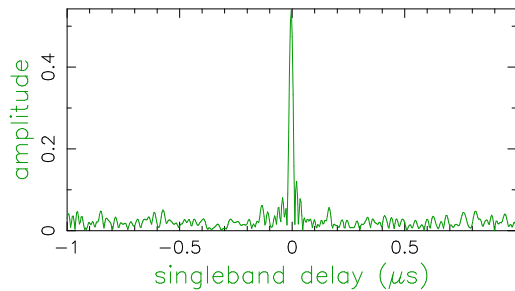
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.77.11M7QU

multiband delay (μ s)

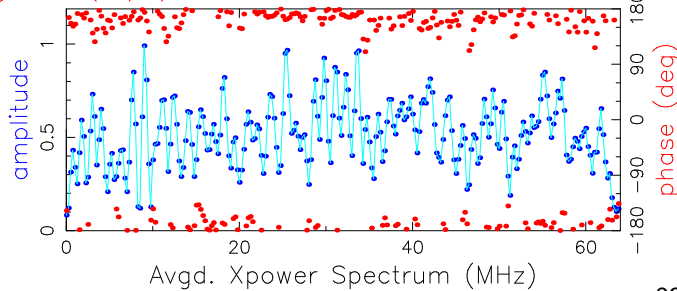


Fringe quality 4

SNR 32.4
Int time 476.246
Amp 0.542
Phase 88.3
PFD 0.0e+00
Delays (us)
SBD -0.004648
MBD 0.002564
Fringe rate (Hz)
0.010875
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

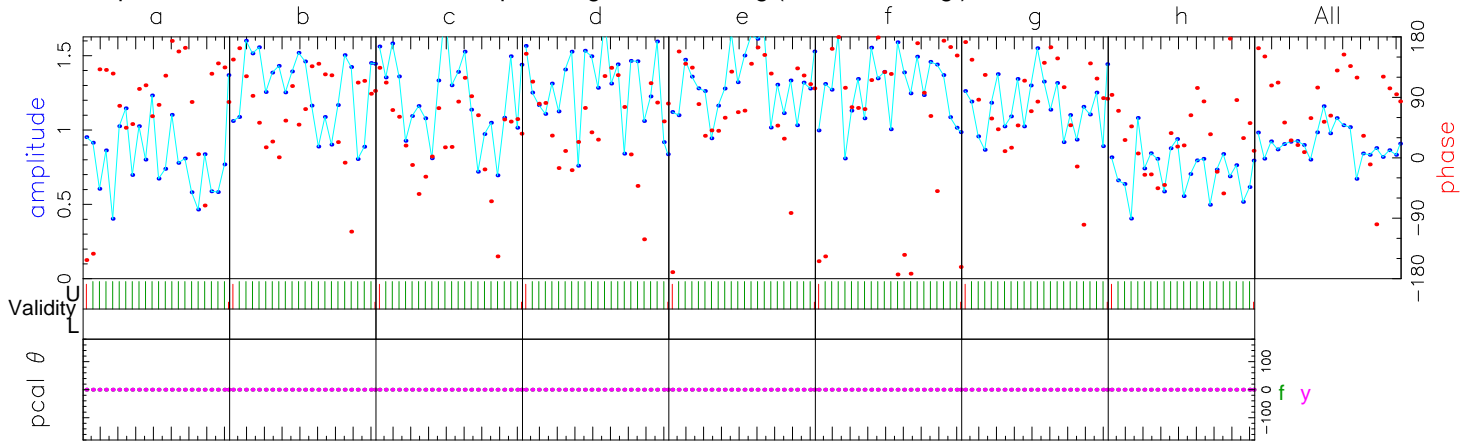


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133350
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.72930800777E+03				-2.72931057224E+03				2.56448E-03	+/- 3.4E-05
Sband delay (usec)	-2.72931522024E+03				6.6330519E+00				-4.64800E-03	+/- 2.7E-04
Phase delay (usec)	-2.72931056940E+03				2.9999999E-07				2.84701E-06	+/- 1.1E-07
Delay rate (us/s)	-1.73190891053E+00				-1.73190903678E+00				1.26249E-07	+/- 4.1E-10
Total phase (deg)			-161.2		7.06785044833E-06				88.3	+/- 3.5
	RMS	Theor.	Amplitude	0.542 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	60.9	8.5	Search (2048X32)	0.506	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	70.6	14.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	43.0	5.0	Inc. seg. avg.	0.901	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	32.4	8.7	Inc. frq. avg.	0.661	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00