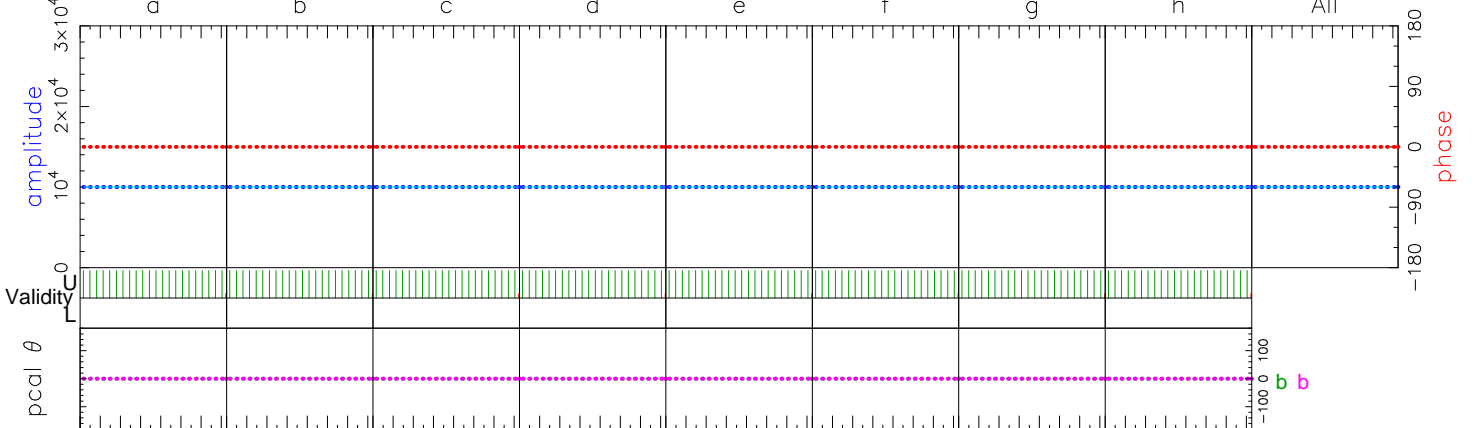


Fringe quality 9
SNR 560310.7
Int time 419.819
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084500.00
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130857
2020:247:085004
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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

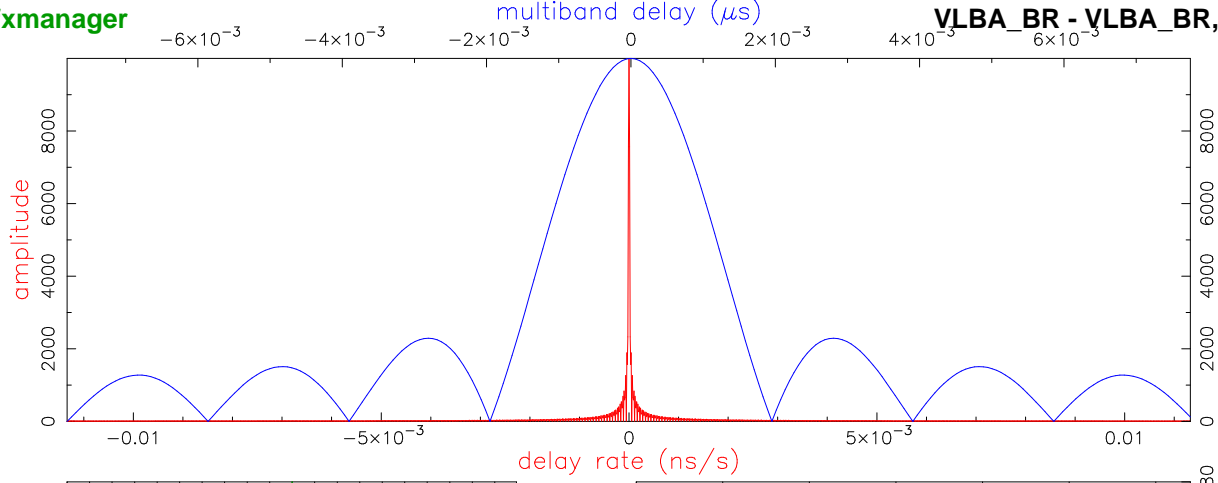


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

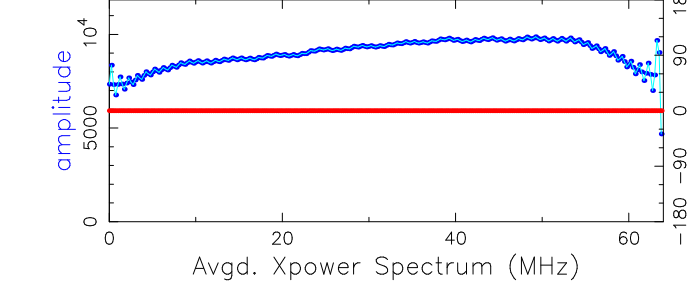
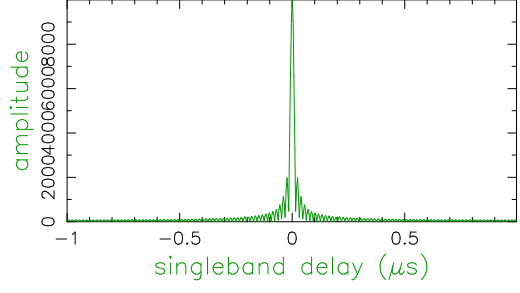
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s)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

RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

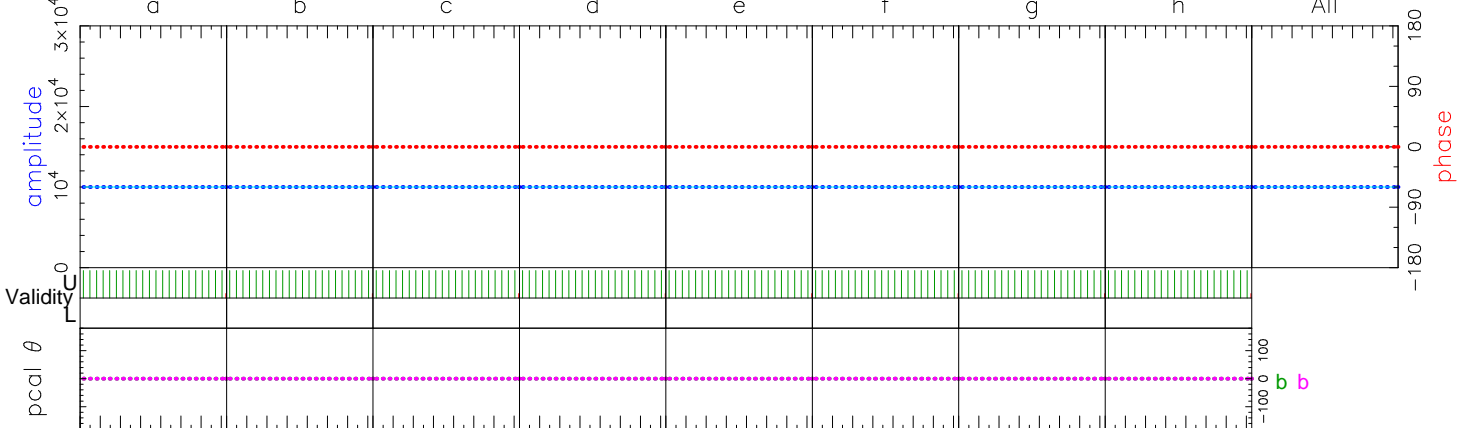
b: az 108.1 el 74.7 pa -57.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb.W.2.1ILPVT



Fringe quality 9
SNR 560310.7
Int time 419.819
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
Yr:day 2020:284
Start 084500.00
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130900
2020:247:085004
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.5E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 b: az 108.1 el 74.7 pa -57.7 u,v (fr/asec) 0.000 0.000 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/No0079/bb..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb.W.22.1ILPVT simultaneous interpolator

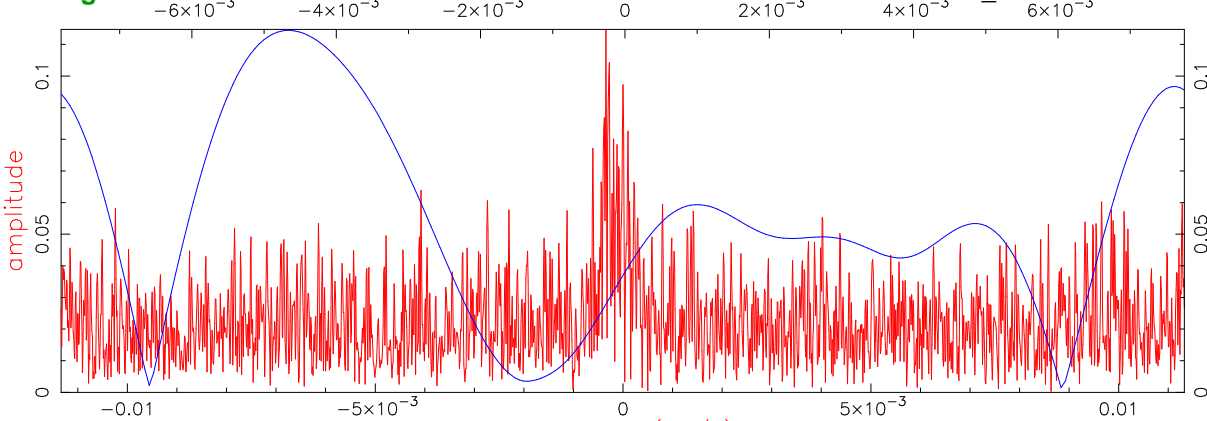
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bB

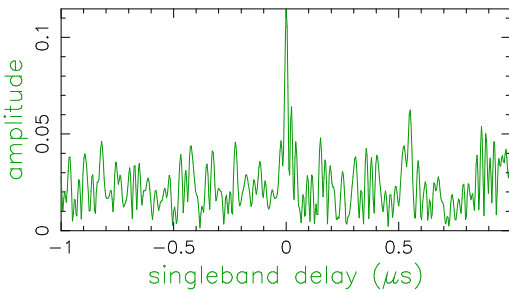
VLBA_BR - EFLSBERG, fgroup W, pol RR

multiband delay (μ s)

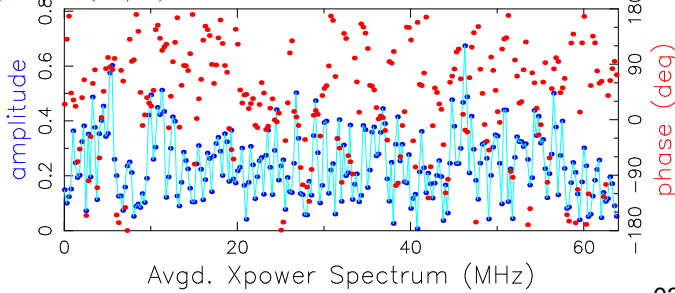


Fringe quality 0

SNR 6.4
 Int time 419.819
 Amp 0.115
 Phase 117.5
 PFD 3.5e-02
 Delays (us)
 SBD 0.000549
 MBD -0.004643
 Fringe rate (Hz)
 -0.029344
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

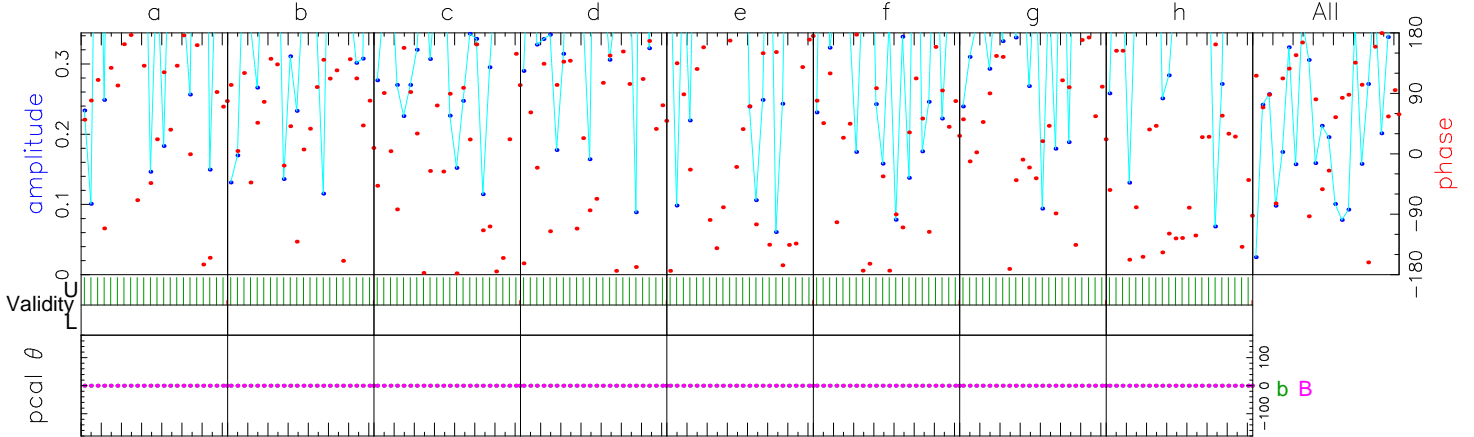


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130902
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.28532768615E+04				1.28532815049E+04			Resid mbdelay (usec)	-4.64336E-03 +/- 1.7E-04
Sband delay (usec)		1.28532820542E+04				-1.1815058E+01			Resid sbdelay (usec)	5.49250E-04 +/- 1.3E-03
Phase delay (usec)		1.28532815087E+04				2.0000000E-07			Resid phdelay (usec)	3.78934E-06 +/- 5.7E-07
Delay rate (us/s)		9.47964261820E-01				9.47964602473E-01			Resid rate (us/s)	-3.40653E-07 +/- 2.4E-09
Total phase (deg)			57.3			-7.04536517085E-05			Resid phase (deg)	117.5 +/- 17.8
ph/seg (deg)	RMS 77.1	Theor. 42.8	Amplitude 0.115 +/- 0.018	Search (2048X32) 0.110	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us) -1.000	1.000		
amp/seg (%)	153.3	74.6	Interp. 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008	0.008		
ph/frq (deg)	77.4	25.2	Inc. seg. avg. 0.183	Sample rate(MISamp/s): 128	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00	0.00	
amp/frq (%)	72.1	44.0	Inc. frq. avg. 0.148							

b: az 108.1 el 74.7 pa -57.7 B: az 309.6 el 21.9 pa 40.6 u,v (fr/asec) -7391.036 -5010.586 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB.W.30.1ILPVT

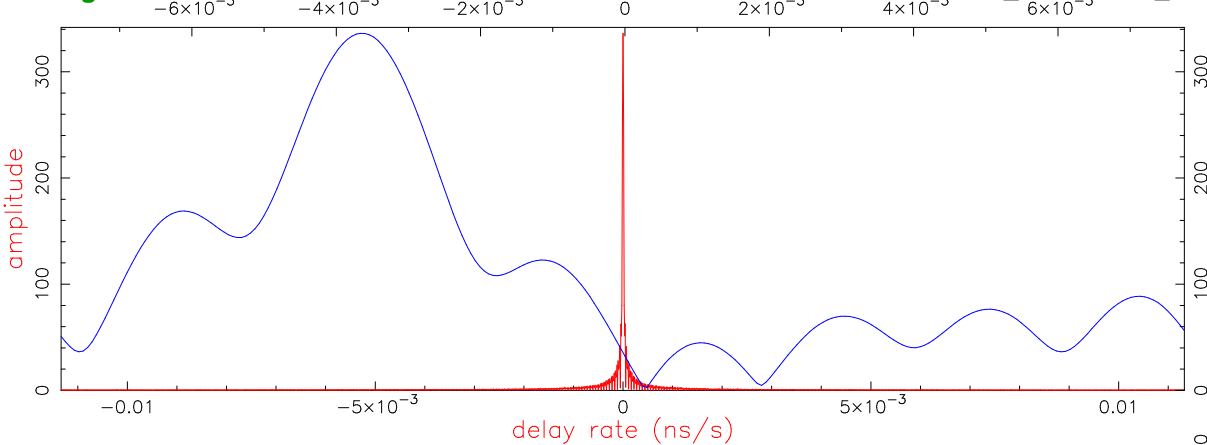
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bb

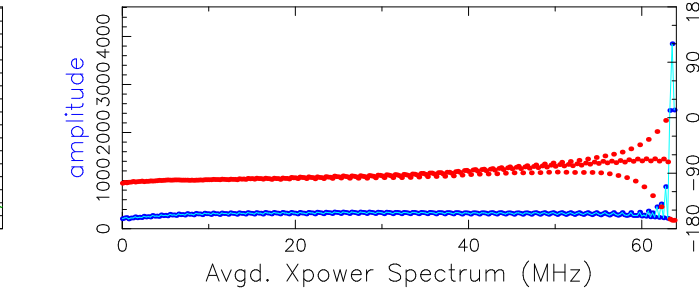
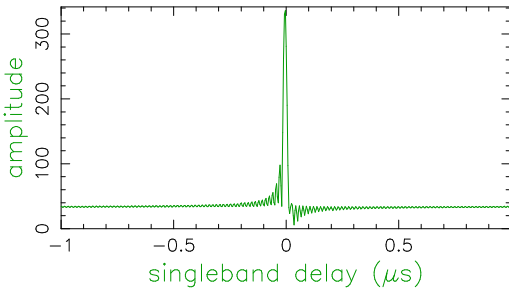
VLBA_BR - VLBA_BR, fgroup W, pol LR

multiband delay (μ s)



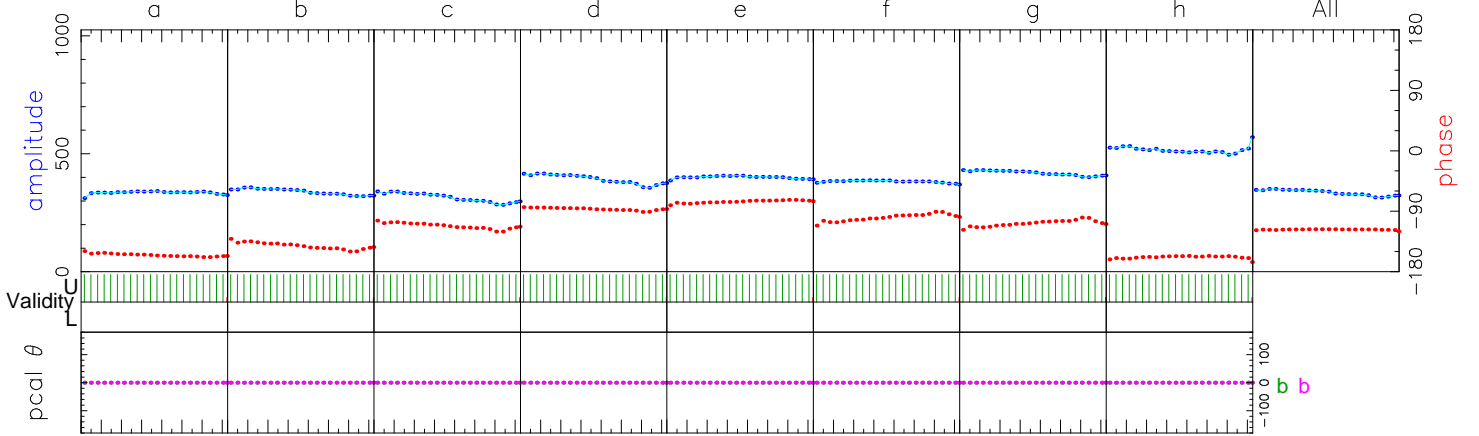
Fringe quality 6

SNR 19154.9
 Int time 419.819
 Amp 341.862
 Phase -117.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.005537
 MBD -0.003680
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130904
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-155.1	-141.1	-111.4	-86.6	-75.7	-99.5	-108.0	-158.2	Phase	-117.2
	335.4	338.6	314.4	392.8	400.5	381.3	417.8	514.6	Ampl.	386.9
	256.0	256.1	256.4	256.4	255.9	255.9	256.0	254.8	Sbd box	255.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:b	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	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.680000000000E-03		Apriori delay (usec)		0.000000000000E+00		Resid mbdelay (usec)		-3.68000E-03	+/- 5.7E-08
Sband delay (usec)	-5.537250000000E-03		Apriori clock (usec)		0.000000000000E+00		Resid sbdelay (usec)		-5.53725E-03	+/- 4.5E-07
Phase delay (usec)	-3.77946758617E-06		Apriori clockrate (us/s)		0.000000000000E+00		Resid phdelay (usec)		-3.77947E-06	+/- 1.9E-10
Delay rate (us/s)	-1.27540371525E-11		Apriori rate (us/s)		0.000000000000E+00		Resid rate (us/s)		-1.27540E-11	+/- 8.0E-13
Total phase (deg)			Apriori accel (us/s/s)		0.000000000000E+00		Resid phase (deg)		-117.2	+/- 0.0

	RMS	Theor.	Amplitude	341.862 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	0.5	0.0	Search (2048X32)	329.237	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	3.8	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	33.6	0.0	Inc. seg. avg.	336.168	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	21.7	0.0	Inc. frq. avg.	386.941	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 108.1 el 74.7 pa -57.7 b: az 108.1 el 74.7 pa -57.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb.W.41.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

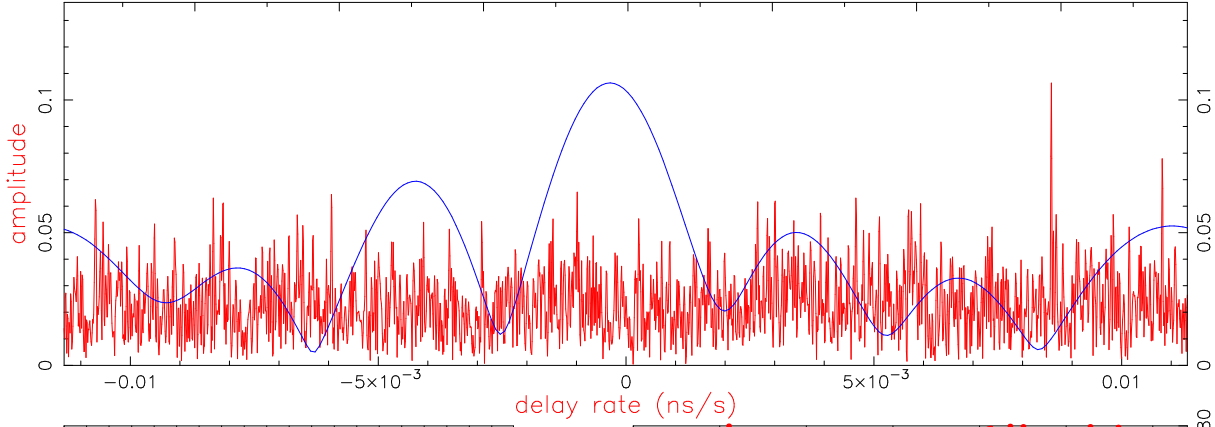
3C84.1ILPVT, No0079, bB

VLBA_BR - EFLSBERG, fgroup W, pol LR

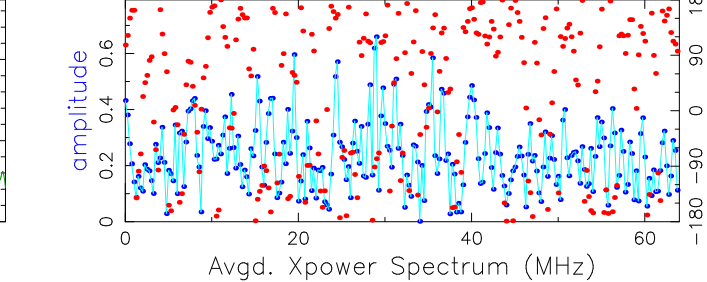
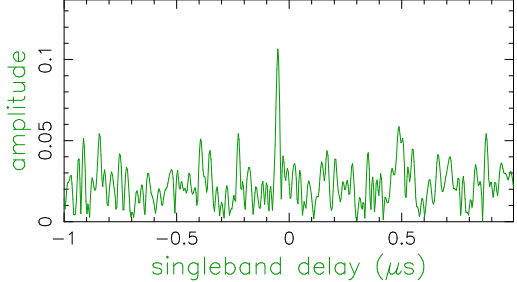
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

Fringe quality 0

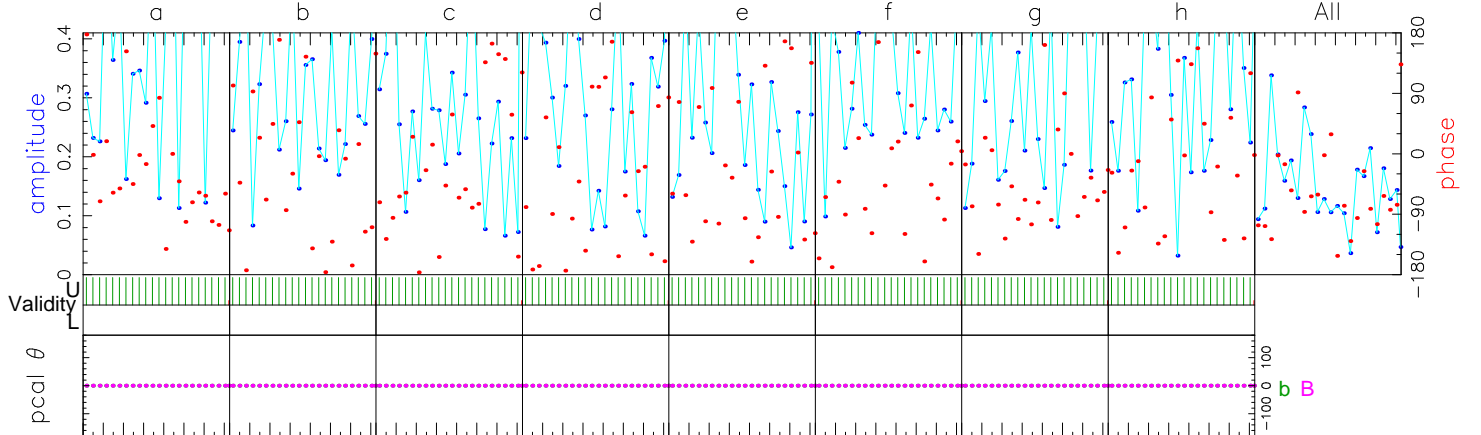


SNR 6.0
 Int time 419.819
 Amp 0.137
 Phase -70.9
 PFD 4.4e-01
 Delays (us)
 SBD -0.050079
 MBD -0.000223
 Fringe rate (Hz)
 0.739978
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130906
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-51.9	-97.1	-75.0	-148.2	-70.2	-53.7	-65.5	-69.9	Phase	-70.9
	0.3	0.1	0.1	0.1	0.1	0.1	0.3	0.1	Ampl.	0.1
	244.0	90.1	21.3	41.6	484.5	485.5	244.5	454.1	Sbd box	244.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	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	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.28532344073E+04		Apriori delay (usec)		1.28532815049E+04		Resid mbdelay (usec)		-2.22628E-04	+/- 1.8E-04
Sband delay (usec)	1.28532314254E+04		Apriori clock (usec)		-1.1815058E+01		Resid sbdelay (usec)		-5.00795E-02	+/- 1.4E-03
Phase delay (usec)	1.28532815026E+04		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		-2.28644E-06	+/- 6.2E-07
Delay rate (us/s)	9.47973192880E-01		Apriori rate (us/s)		9.47964602473E-01		Resid rate (us/s)		8.59041E-06	+/- 2.5E-09
Total phase (deg)	228.9		Apriori accel (us/s/s)		-7.04536517085E-05		Resid phase (deg)		-70.9	+/- 19.2

ph/seg (deg) 57.5 46.0 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.1 80.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.0 27.1 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 59.8 47.3 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 B: az 309.6 el 21.9 pa 40.6 u,v (fr/asec) -7391.036 -5010.586 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB.W.51.1ILPVT

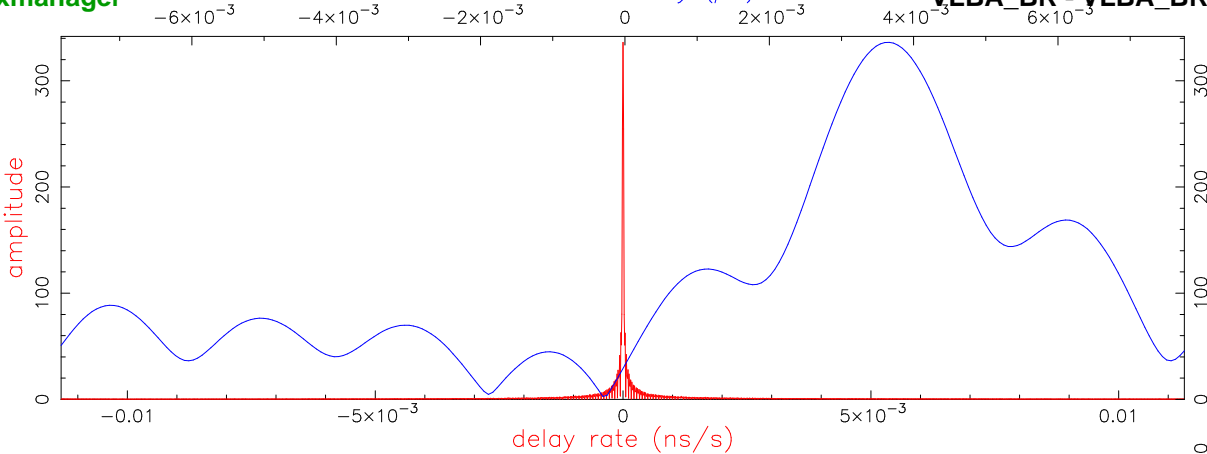
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bb

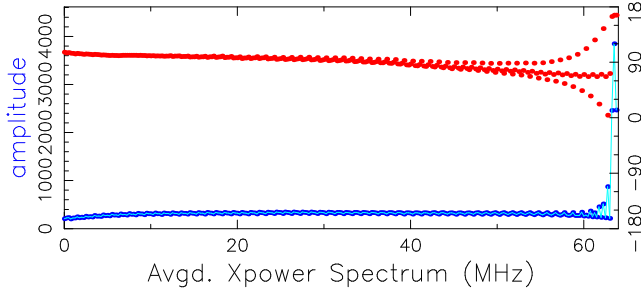
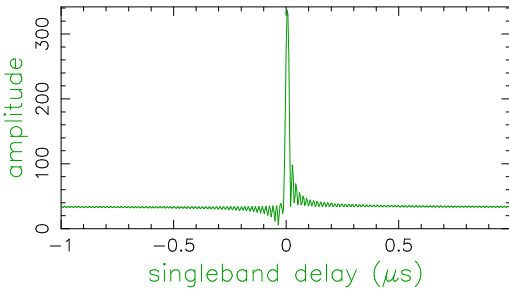
VLBA_BR - VLBA_BR, fgroup W, pol RL

multiband delay (μ s)



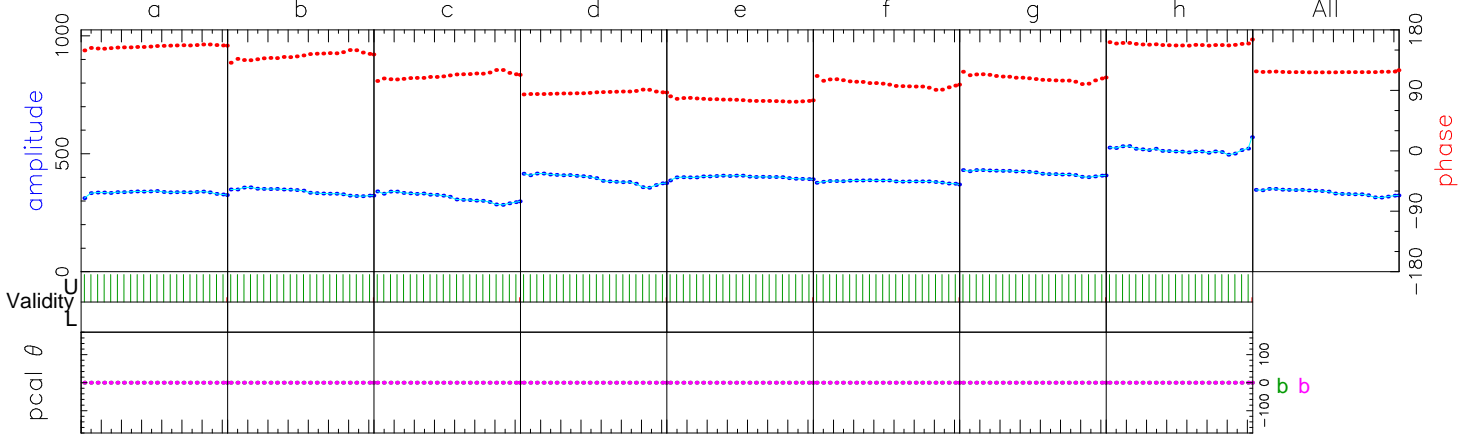
Fringe quality 6

SNR 19154.9
 Int time 419.819
 Amp 341.862
 Phase 117.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.005537
 MBD 0.003680
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130907
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.680000000000E-03	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	3.68000E-03	+/-	5.7E-08
Sband delay (usec)	5.537250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	5.53725E-03	+/-	4.5E-07
Phase delay (usec)	3.77946758622E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	3.77947E-06	+/-	1.9E-10
Delay rate (us/s)	1.27540371525E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	1.27540E-11	+/-	8.0E-13
Total phase (deg)	117.2	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	117.2	+/-	0.0

ph/seg (deg)	0.5	0.0	Amplitude	341.862 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	3.8	0.0	Search (2048X32)	329.237	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	33.6	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	21.7	0.0	Inc. seg. avg.	336.168	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
			Inc. frq. avg.	386.941	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 108.1 el 74.7 pa -57.7 b: az 108.1 el 74.7 pa -57.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bb.W.54.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

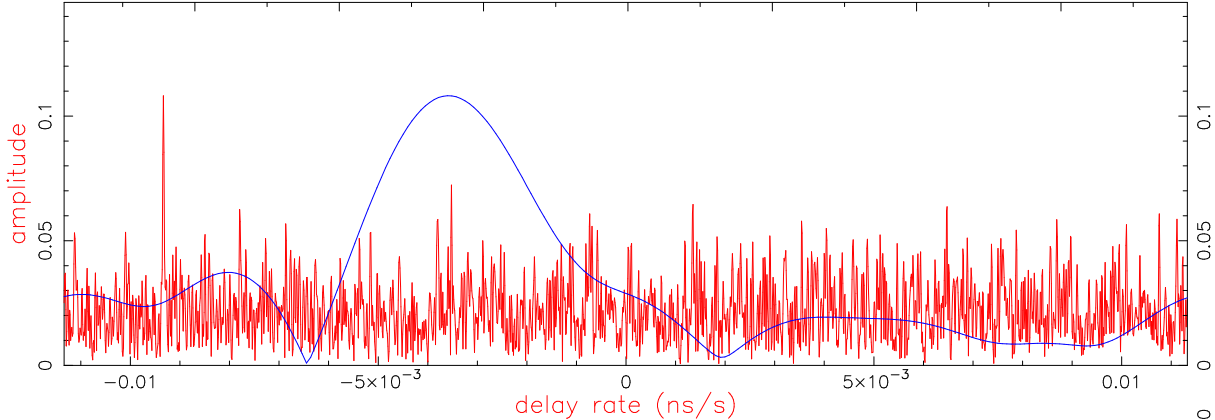
3C84.1ILPVT, No0079, bB

VLBA_BR - EFLSBERG, fgroup W, pol RL

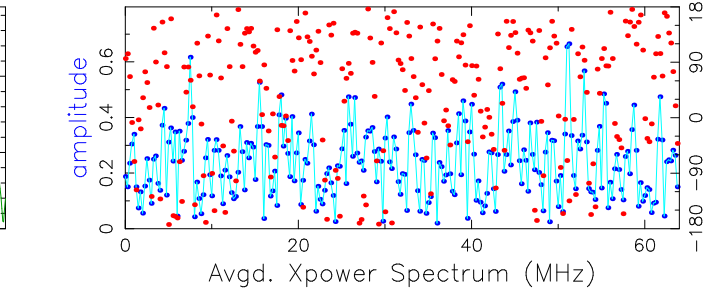
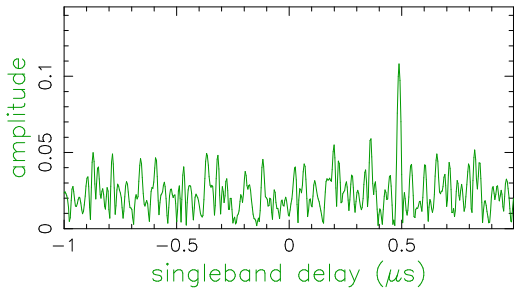
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

Fringe quality 0

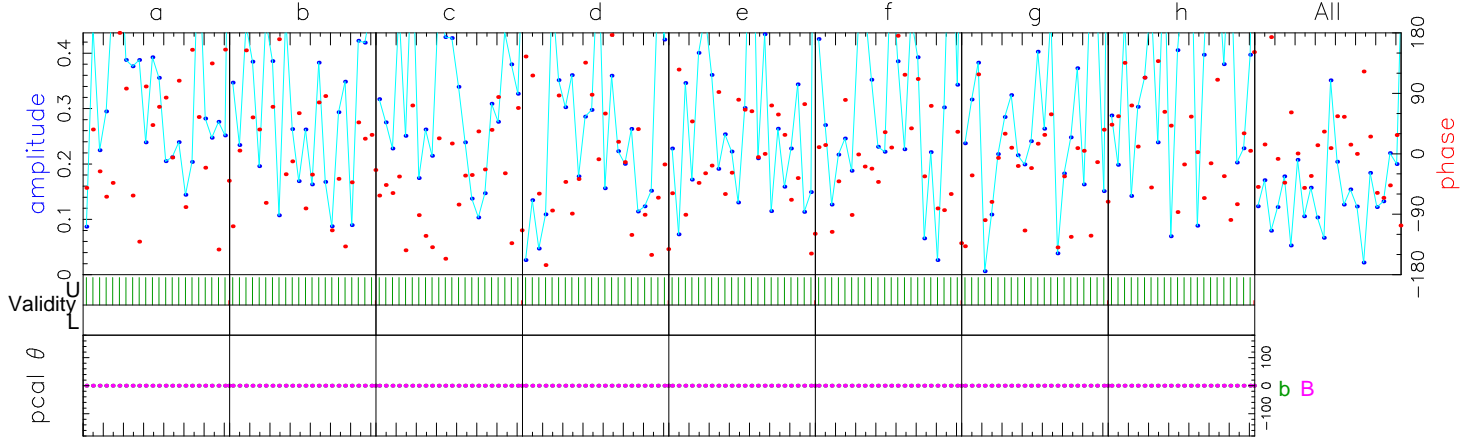


SNR 6.1
Int time 419.819
Amp 0.146
Phase -3.5
PFD 3.0e-01
Delays (us)
SBD 0.488026
MBD -0.002498
Fringe rate (Hz)
-0.804782
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084500.00
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130909
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.28537633822E+04	Apriori delay (usec)	1.28532815049E+04	Resid mbdelay (usec)	-2.49771E-03	+/-	1.8E-04
Sband delay (usec)	1.28537695314E+04	Apriori clock (usec)	-1.1815058E+01	Resid sbdelay (usec)	4.88026E-01	+/-	1.4E-03
Phase delay (usec)	1.28532815048E+04	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	-1.11951E-07	+/-	6.1E-07
Delay rate (us/s)	9.47955259755E-01	Apriori rate (us/s)	9.47964602473E-01	Resid rate (us/s)	-9.34272E-06	+/-	2.5E-09
Total phase (deg)	296.4	Apriori accel (us/s/s)	-7.04536517085E-05	Resid phase (deg)	-3.5	+/-	18.9

ph/seg (deg)	60.0	RMS	45.3	Theor.	45.3	Amplitude	0.146 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.7	Search (2048X32)	0.107	Search	0.107	Search	0.107	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.3	Inc. seg. avg.	0.152	Inc. seg. avg.	0.152	Inc. seg. avg.	0.152	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	31.6	Inc. frq. avg.	0.141	Inc. frq. avg.	0.141	Inc. frq. avg.	0.141	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	

b: az 108.1 el 74.7 pa -57.7 B: az 309.6 el 21.9 pa 40.6 u,v (fr/asec) -7391.036 -5010.586 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB.W.69.1ILPVT

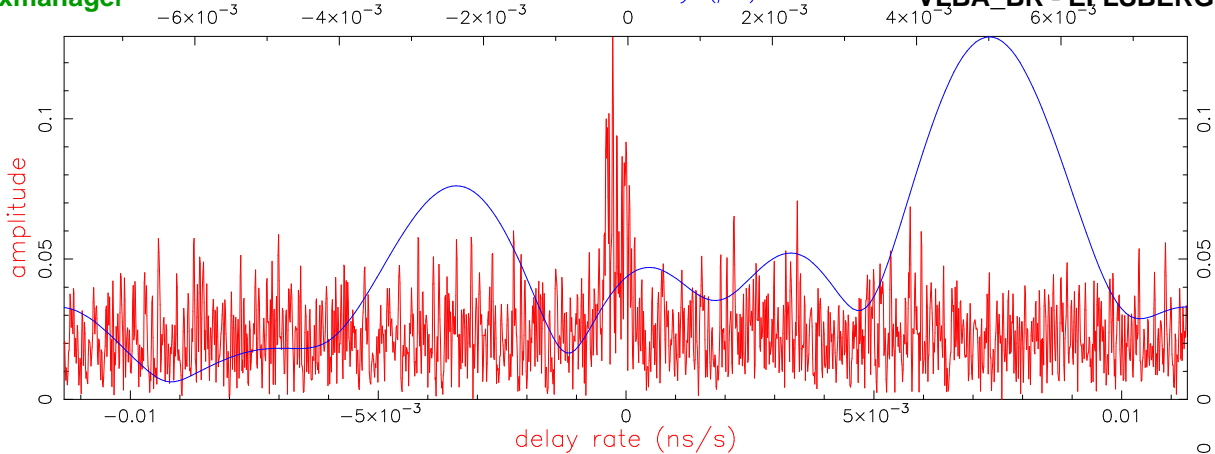
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bB

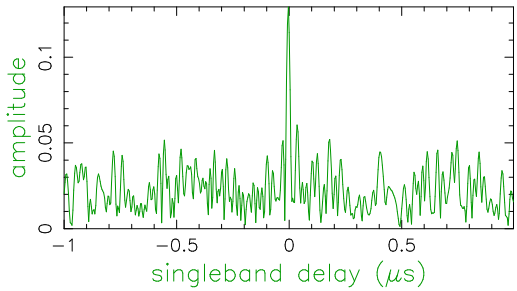
VLBA_BR - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)

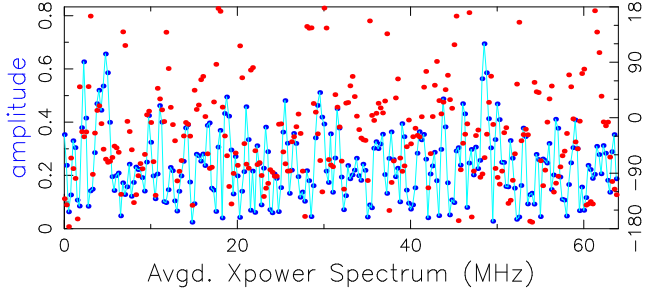


Fringe quality 0

SNR 7.2
 Int time 419.819
 Amp 0.129
 Phase -148.8
 PFD 1.3e-04
 Delays (us)
 SBD -0.004318
 MBD 0.004998
 Fringe rate (Hz)
 -0.023064
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

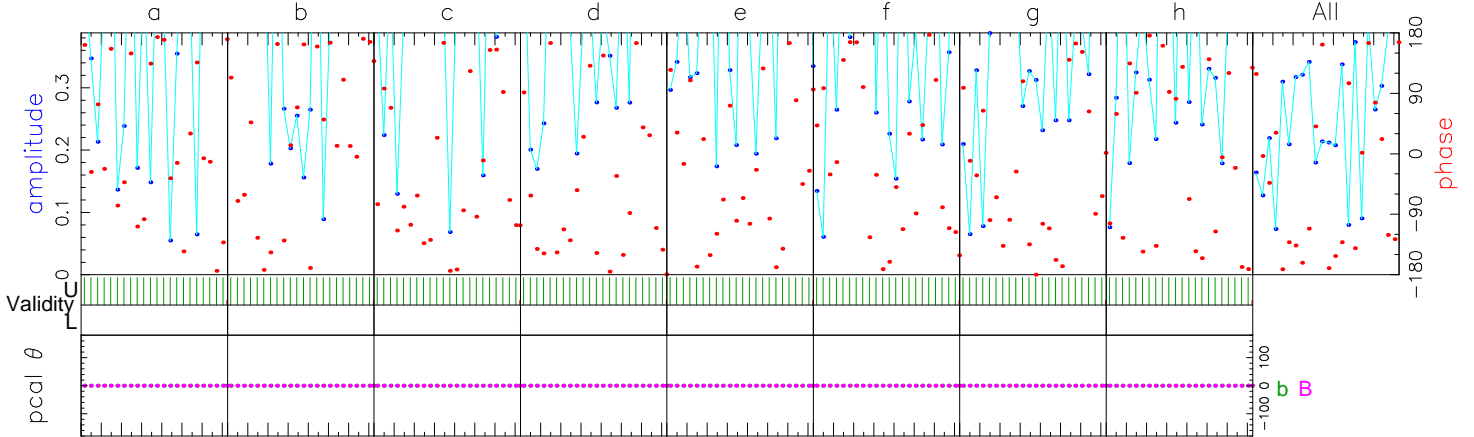


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130858
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-149.8	161.2	-123.2	-161.8	-80.7	-144.5	-116.8	172.2	Phase	-148.8
	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	61.5	193.6	256.2	256.1	458.4	254.6	254.8	255.3	Sbd box	255.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	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	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.28532708778E+04	Apriori delay (usec)	1.28532815049E+04	Resid mbdelay (usec)	4.99793E-03	+/-	1.5E-04
Sband delay (usec)	1.28532771872E+04	Apriori clock (usec)	-1.1815058E+01	Resid sbdelay (usec)	-4.31775E-03	+/-	1.2E-03
Phase delay (usec)	1.28532815001E+04	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	-4.79879E-06	+/-	5.1E-07
Delay rate (us/s)	9.47964334721E-01	Apriori rate (us/s)	9.47964602473E-01	Resid rate (us/s)	-2.67752E-07	+/-	2.1E-09
Total phase (deg)	151.0	Apriori accel (us/s/s)	-7.04536517085E-05	Resid phase (deg)	-148.8	+/-	15.8

ph/seg (deg)	93.4	Theor.	Amplitude	0.129 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	142.9	37.9	Search (2048X32)	0.126	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	41.9	22.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.5	39.0	Inc. seg. avg.	0.217	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 108.1 el 74.7 pa -57.7 B: az 309.6 el 21.9 pa 40.6 u,v (fr/asec) -7391.036 -5010.586 simultaneous interpolator

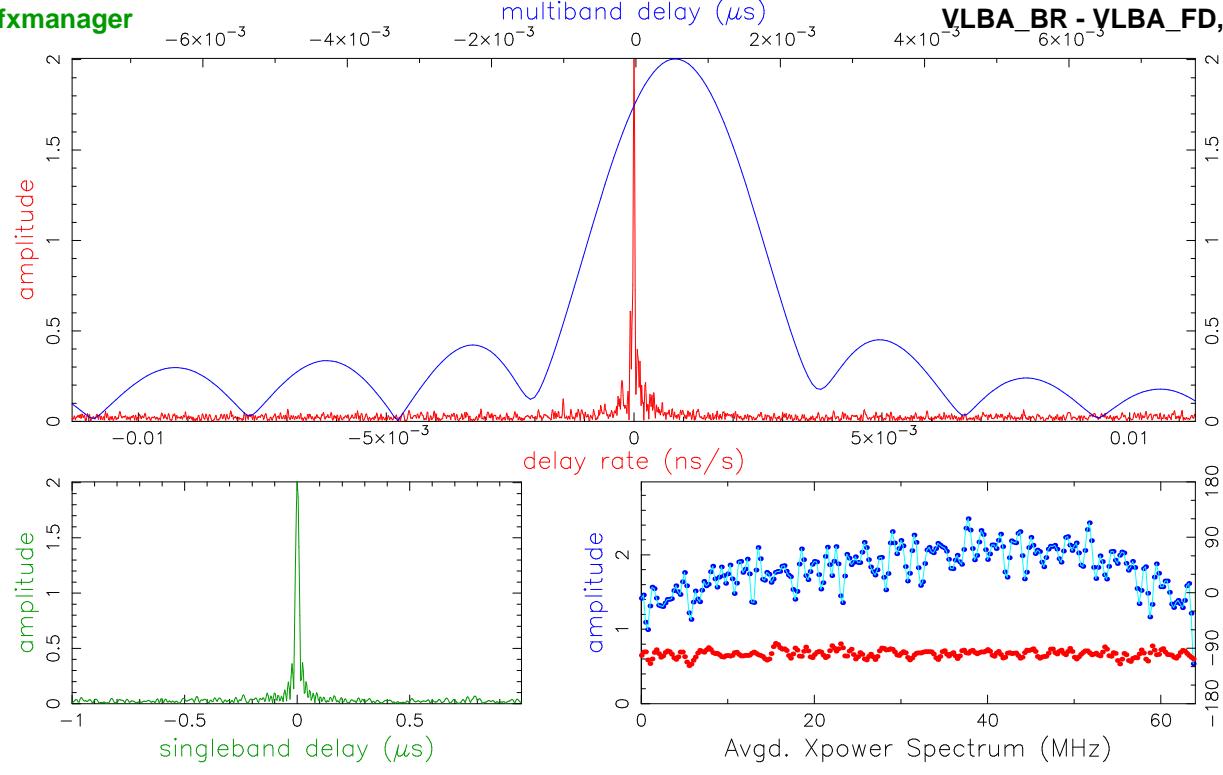
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bB.W.8.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

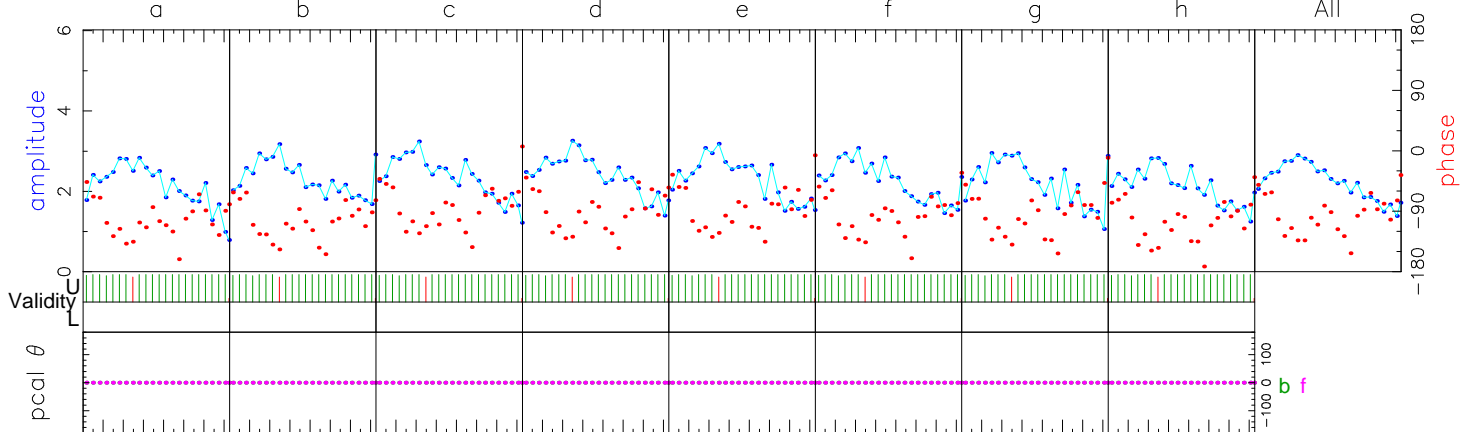
3C84.1ILPVT, No0079, bf

VLBA_BR - VLBA_FD, fgroup W, pol RR



Fringe quality 6
 SNR 112.0
 Int time 416.274
 Amp 2.007
 Phase -99.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.000499
 MBD 0.000558
 Fringe rate (Hz) -0.000367
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.51
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130901
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.97564529410E+02				-2.97565086973E+02				5.57563E-04	+/- 9.7E-06
Sband delay (usec)	-2.97564588473E+02				-9.5778837E+00				4.98500E-04	+/- 7.7E-05
Phase delay (usec)	-2.97565090187E+02				-3.9999997E-07				-3.21420E-06	+/- 3.3E-08
Delay rate (us/s)	1.98345074993E-01				1.98345079249E-01				-4.25631E-09	+/- 1.4E-10
Total phase (deg)			-312.7		1.91296621883E-05				-99.7	+/- 1.0
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 26.8 2.4
 amp/seg (%) 24.3 4.3
 ph/frq (deg) 7.9 1.4
 amp/frq (%) 4.4 2.5

RMS Theor. Amplitude 2.007 +/- 0.018
 Search (2048X32) 1.935
 Interp. 0.000
 Inc. seg. avg. 2.234
 Inc. frq. avg. 2.018

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 SampCntNorm: enabled
 nlags: 256 t_cohere infinite

b: az 108.1 el 74.7 pa -57.7 f: az 14.7 el 78.6 pa -161.7 u,v (fr/asec) -1484.975 2907.027 simultaneous interpolator

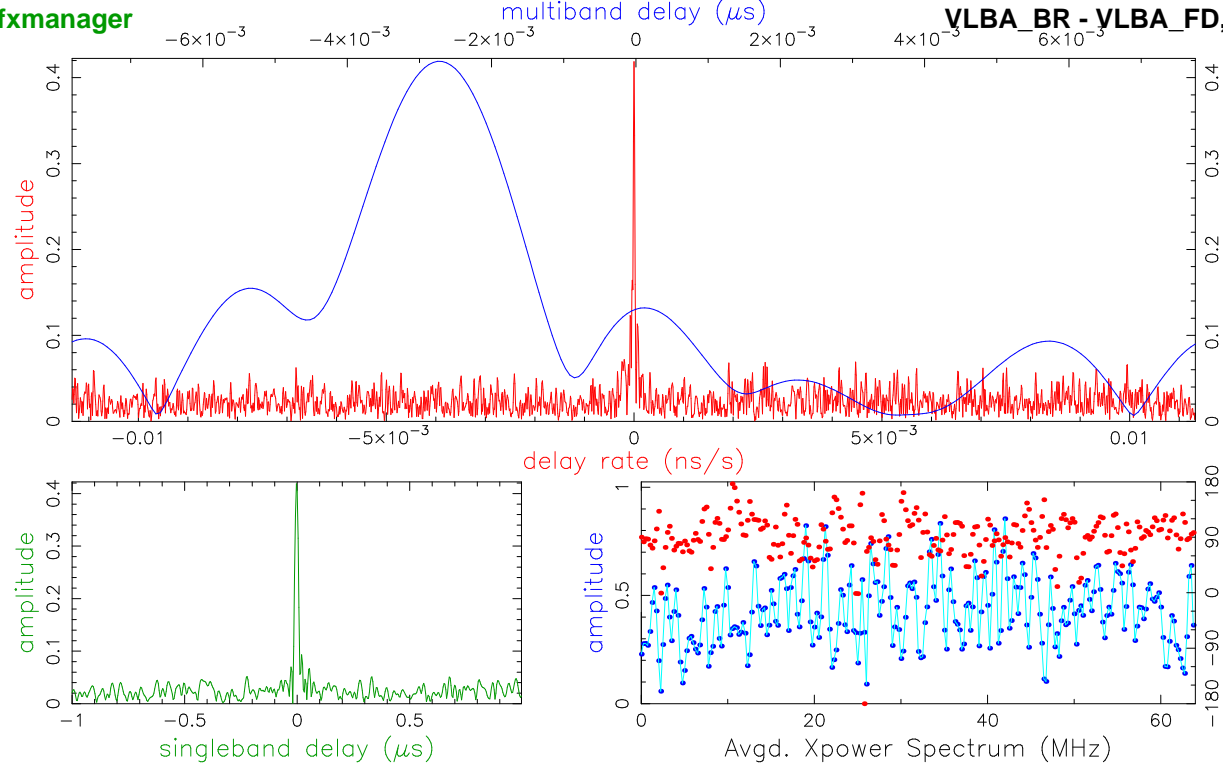
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf.W.26.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bf

VLBA_BR - VLBA_FD, fgroup W, pol LR

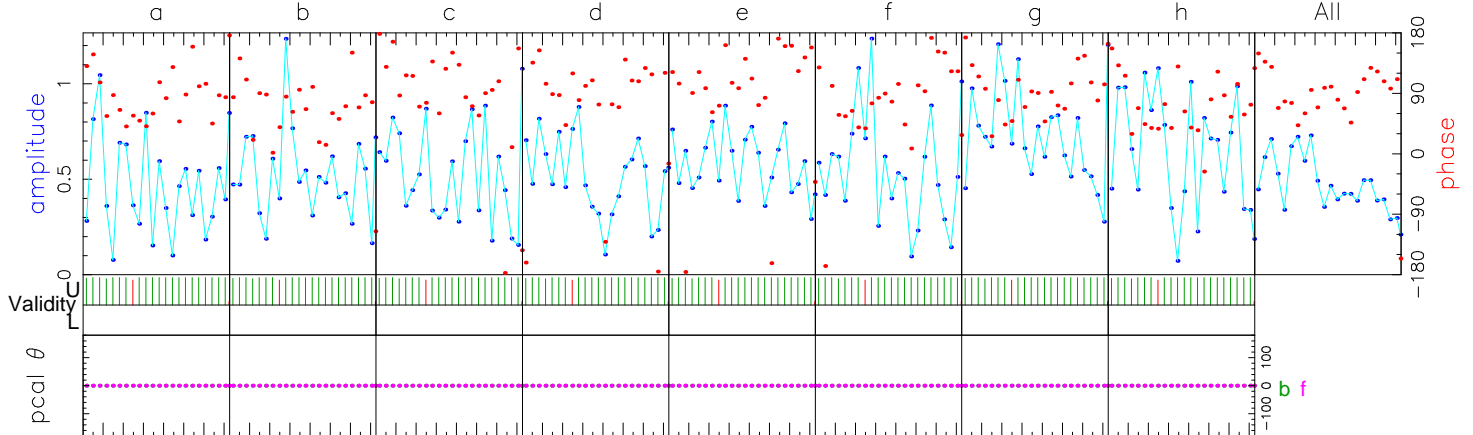


Fringe quality 9

SNR 23.6
 Int time 416.274
 Amp 0.422
 Phase 93.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.002714
 MBD -0.002680
 Fringe rate (Hz)
 -0.000317
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.51
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130905
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
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	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	
Group delay (usec)(sbd)	-2.97567766754E+02								Resid mbdelay (usec)	-2.67978E-03 +/- 4.6E-05
Sband delay (usec)	-2.97567800473E+02								Resid sbdelay (usec)	-2.71350E-03 +/- 3.7E-04
Phase delay (usec)	-2.97565083963E+02								Resid phdelay (usec)	3.00962E-06 +/- 1.6E-07
Delay rate (us/s)	1.98345075566E-01								Resid rate (us/s)	-3.68308E-09 +/- 6.5E-10
Total phase (deg)			-119.7						Resid phase (deg)	93.3 +/- 4.9
ph/seg (deg)	29.6	11.6							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	34.9	20.3							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	22.2	6.9							Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	16.8	12.0							SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
									Sample rate(MISamp/s): 128	ion window (TEC) 0.00 0.00
									Data rate(Mb/s): 2048	
									nlags: 256	
									t_cohere infinite	

b: az 108.1 el 74.7 pa -57.7 f: az 14.7 el 78.6 pa -161.7 u,v (fr/asec) -1484.975 2907.027 simultaneous interpolator

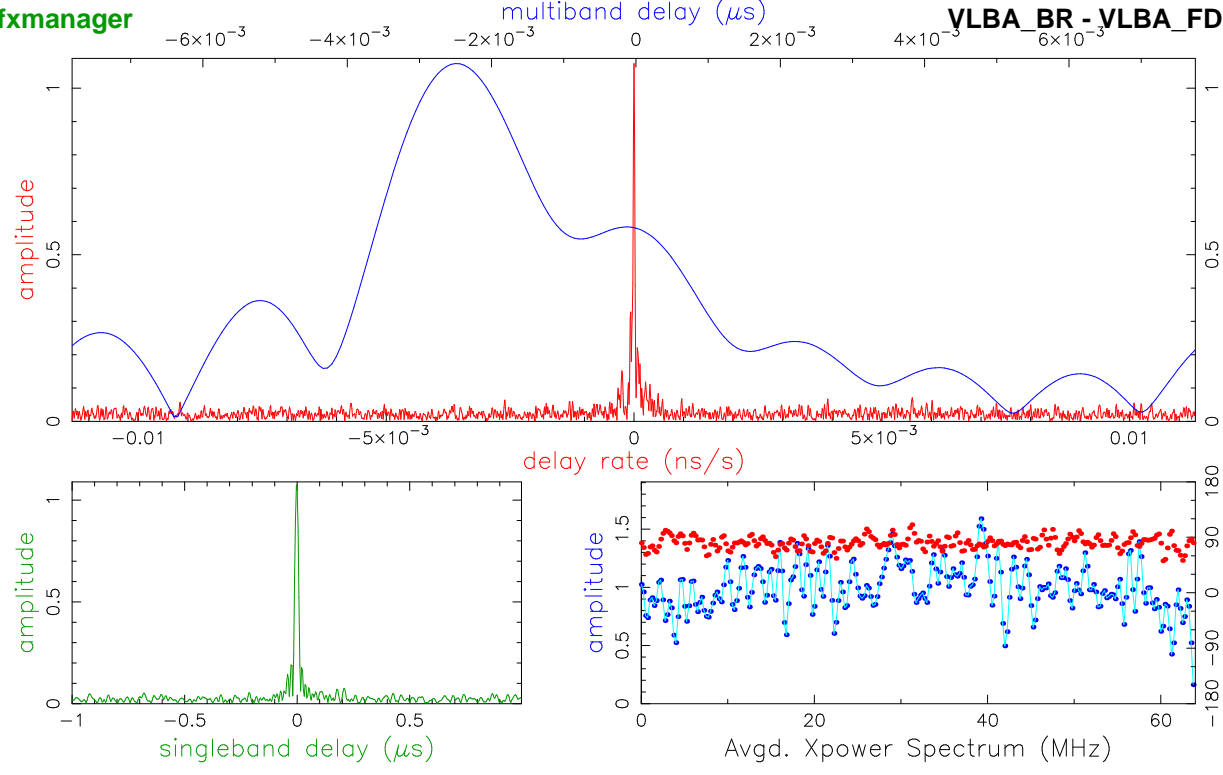
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf.W.47.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

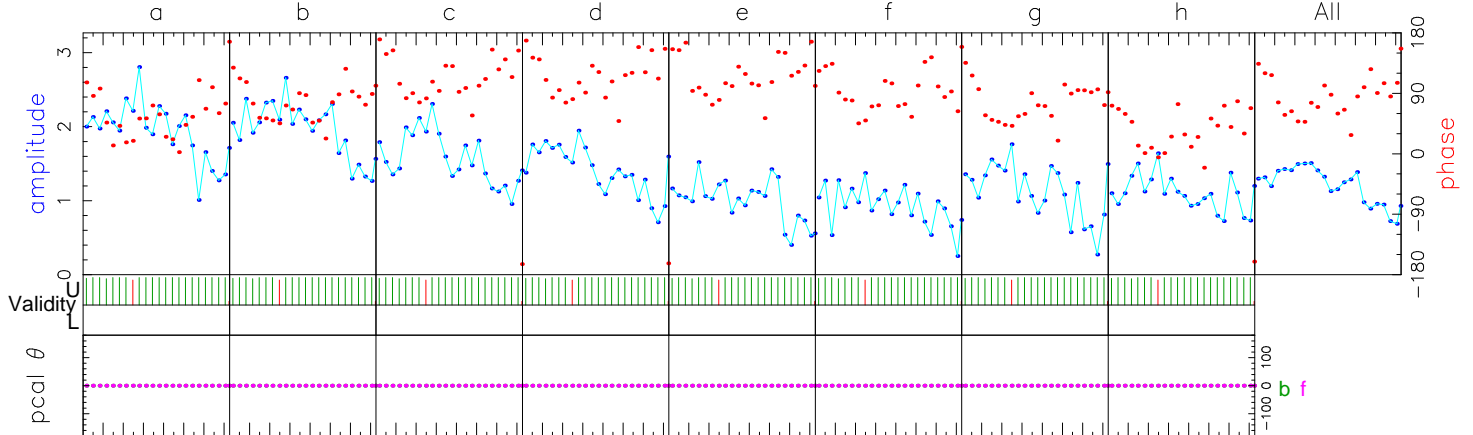
3C84.11LPVT, No0079, bf

VLBA_BR - VLBA_FD, fgroup W, pol LL



Fringe quality 3
 SNR 60.8
 Int time 416.274
 Amp 1.089
 Phase 81.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002369
 MBD -0.002457
 Fringe rate (Hz)
 -0.000305
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.51
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130857
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.97567544004E+02				-2.97565086973E+02				-2.45703E-03	+/- 1.8E-05
Sband delay (usec)	-2.97567456223E+02				-9.5778837E+00				-2.36925E-03	+/- 1.4E-04
Phase delay (usec)	-2.97565084335E+02				-3.9999997E-07				2.63798E-06	+/- 6.1E-08
Delay rate (us/s)	1.98345075712E-01				1.98345079249E-01				-3.53712E-09	+/- 2.5E-10
Total phase (deg)			-131.3		1.91296621883E-05				81.8	+/- 1.9
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

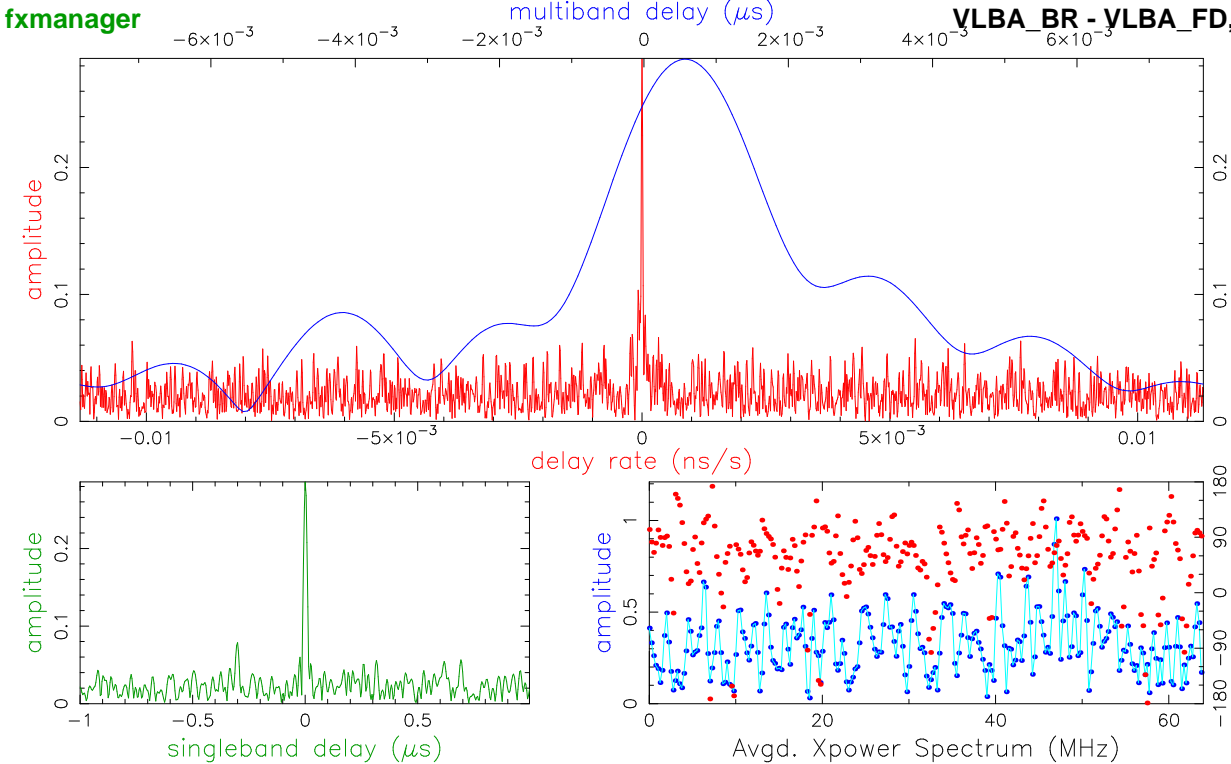
b: az 108.1 el 74.7 pa -57.7 f: az 14.7 el 78.6 pa -161.7 u,v (fr/asec) -1484.975 2907.027 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf.W.5.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

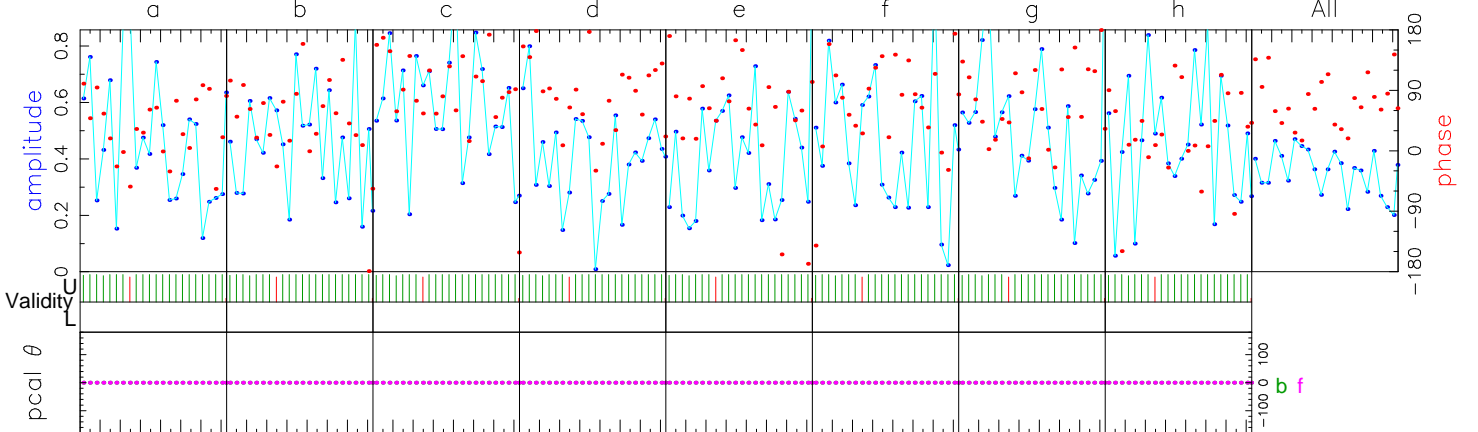
3C84.1ILPVT, No0079, bf

VLBA_BR - VLBA_FD, fgroup W, pol RL



Fringe quality 8
 SNR 16.0
 Int time 416.274
 Amp 0.286
 Phase 71.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.000597
 MBD 0.000578
 Fringe rate (Hz) -0.000333
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.51
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130908
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	257.2
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-2.97564509379E+02		Apriori delay (usec)		-2.97565086973E+02		Resid mbdelay (usec)		5.77594E-04	+/- 6.8E-05
Sband delay (usec)	-2.97564490223E+02		Apriori clock (usec)		-9.5778837E+00		Resid sbdelay (usec)		5.96750E-04	+/- 5.4E-04
Phase delay (usec)	-2.97565084672E+02		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		2.30075E-06	+/- 2.3E-07
Delay rate (us/s)	1.98345075389E-01		Apriori rate (us/s)		1.98345079249E-01		Resid rate (us/s)		-3.86022E-09	+/- 9.6E-10
Total phase (deg)			Apriori accel (us/s/s)		1.91296621883E-05		Resid phase (deg)		71.3	+/- 7.2

ph/seg (deg) 37.7 17.2 Search (2048X32) 0.276 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.8 30.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.8 10.2 Inc. seg. avg. 0.336 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 22.7 17.7 Inc. frq. avg. 0.316 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 f: az 14.7 el 78.6 pa -161.7 u,v (fr/asec) -1484.975 2907.027 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bf.W.66.1ILPVT

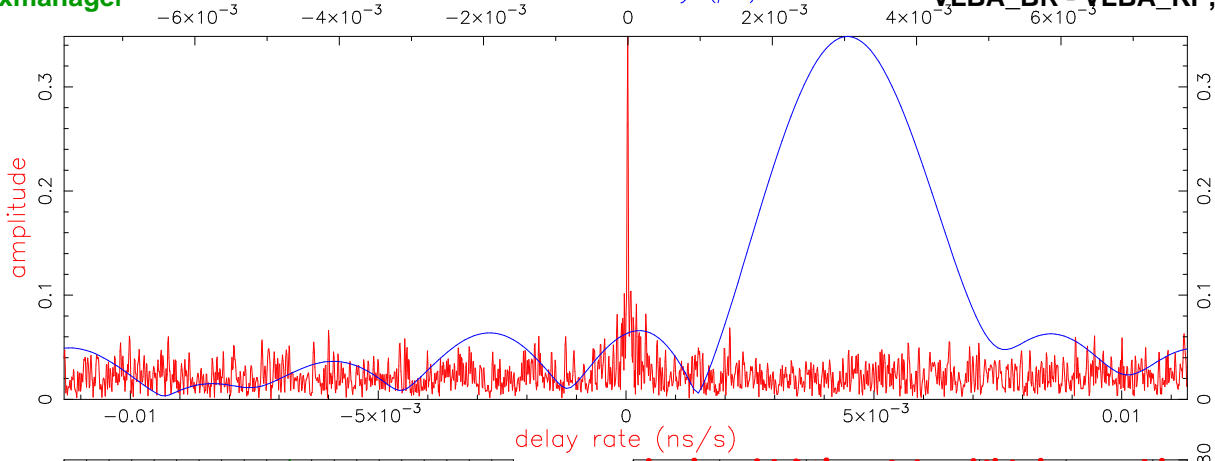
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bk

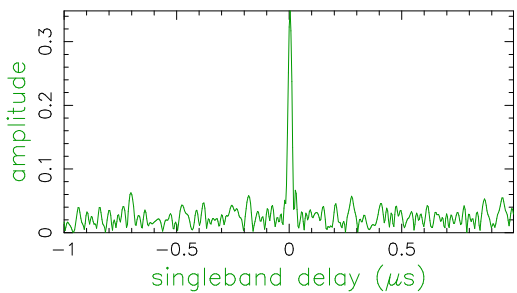
VLBA_BR - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

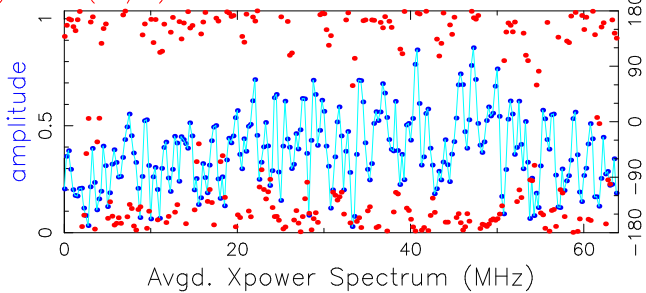


Fringe quality 9

SNR 19.5
 Int time 417.476
 Amp 0.348
 Phase -164.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.003708
 MBD 0.003039
 Fringe rate (Hz) 0.002403
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

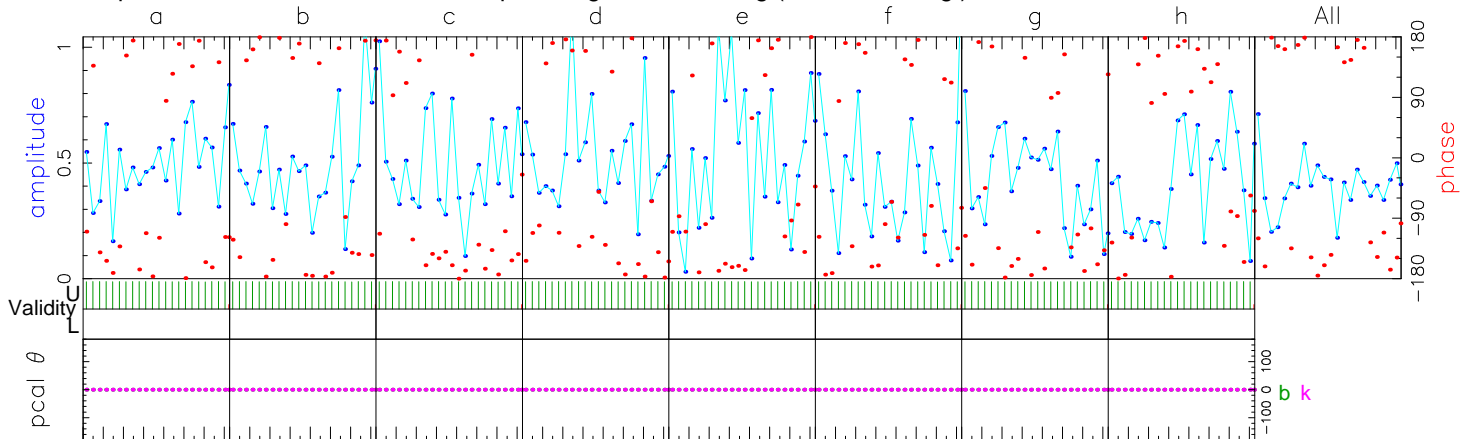


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130900
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	-1.72845800467E+02	Apriori delay (usec)	-1.72848839027E+02	Resid mbdelay (usec)	3.03856E-03	+/-	5.6E-05
Sband delay (usec)	-1.72845131277E+02	Apriori clock (usec)	-2.0469704E+00	Resid sbdelay (usec)	3.70775E-03	+/-	4.4E-04
Phase delay (usec)	-1.72848844346E+02	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-5.31829E-06	+/-	1.9E-07
Delay rate (us/s)	6.80285524197E-02	Apriori rate (us/s)	6.80285245281E-02	Resid rate (us/s)	2.78917E-08	+/-	7.8E-10
Total phase (deg)	-162.7	Apriori accel (us/s/s)	1.70306849008E-05	Resid phase (deg)	-164.9	+/-	5.9

ph/seg (deg)	30.3	Theor.	14.1	Amplitude	0.348 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	36.3		24.6	Search (2048X32)	0.325	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.2		8.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	18.5		14.5	Inc. seg. avg.	0.390	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.347	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 108.1 el 74.7 pa -57.7 k: az 40.4 el 76.7 pa -134.9 u,v (fr/asec) -491.153 2619.211 simultaneous interpolator

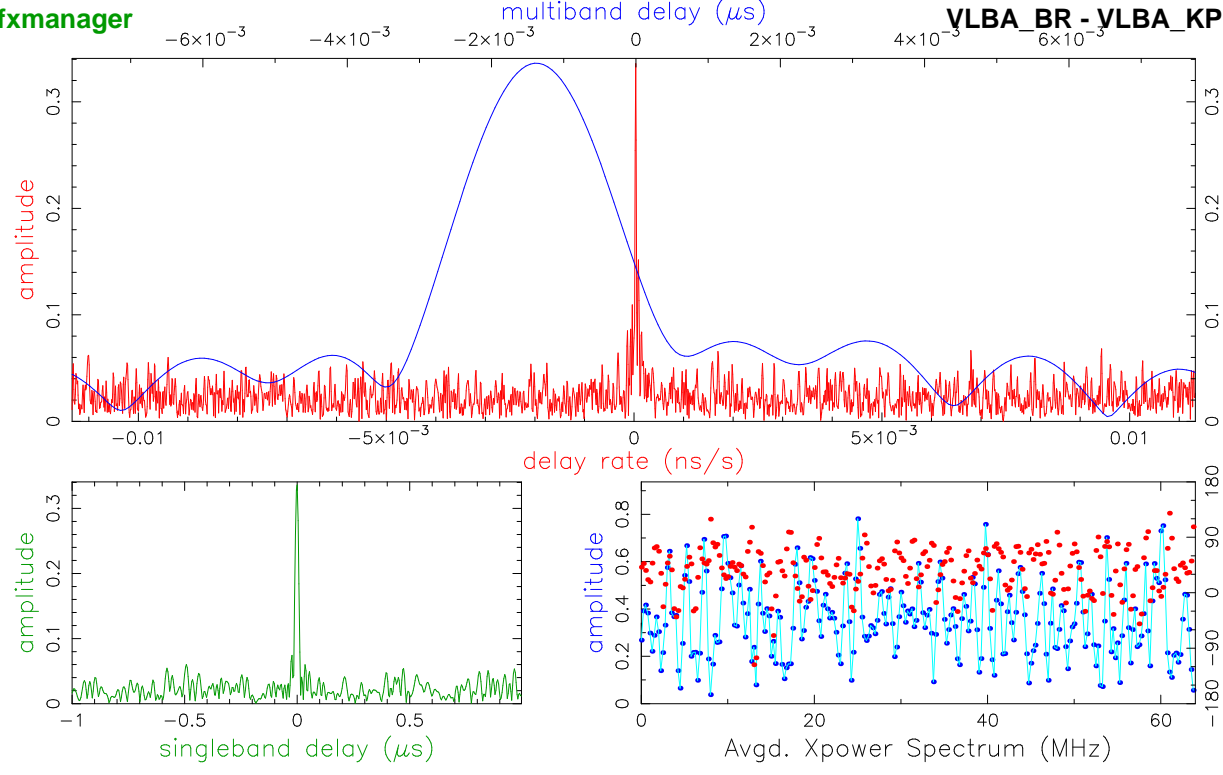
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bk..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bk.W.21.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11LPVT, No0079, bk

VLBA_BR - VLBA_KP, fgroup W, pol LL

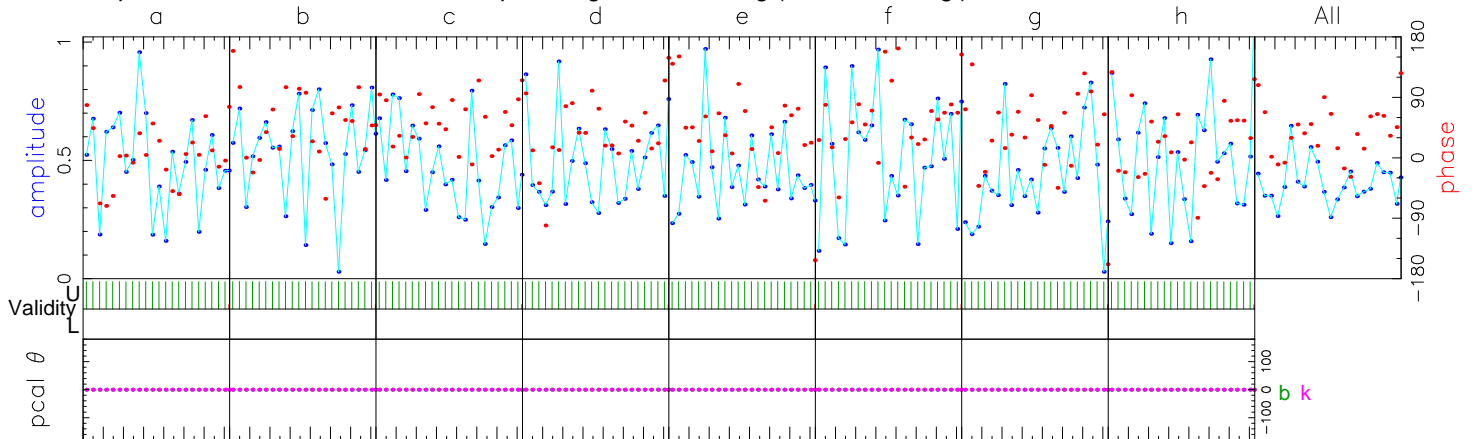


Fringe quality 9

SNR 19.0
 Int time 417.476
 Amp 0.341
 Phase 36.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.001506
 MBD -0.001434
 Fringe rate (Hz) 0.002656
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130857
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.72850272842E+02								Resid mbdelay (usec)	-1.43381E-03 +/- 5.7E-05
Sband delay (usec)	-1.72850345027E+02								Resid sbdelay (usec)	-1.50600E-03 +/- 4.5E-04
Phase delay (usec)	-1.72848837841E+02								Resid phdelay (usec)	1.18647E-06 +/- 1.9E-07
Delay rate (us/s)	6.8028553673E-02								Resid rate (us/s)	3.08393E-08 +/- 8.0E-10
Total phase (deg)			-321.0						Resid phase (deg)	36.8 +/- 6.0
	RMS	Theor.	Amplitude	0.341 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	35.1	14.4	Search (2048X32)	0.332					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	31.9	25.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	18.9	8.5	Inc. seg. avg.	0.392					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	11.1	14.9	Inc. frq. avg.	0.347					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

b: az 108.1 el 74.7 pa -57.7 k: az 40.4 el 76.7 pa -134.9 u,v (fr/asec) -491.153 2619.211 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bk..11LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bk.W.3.11LPVT

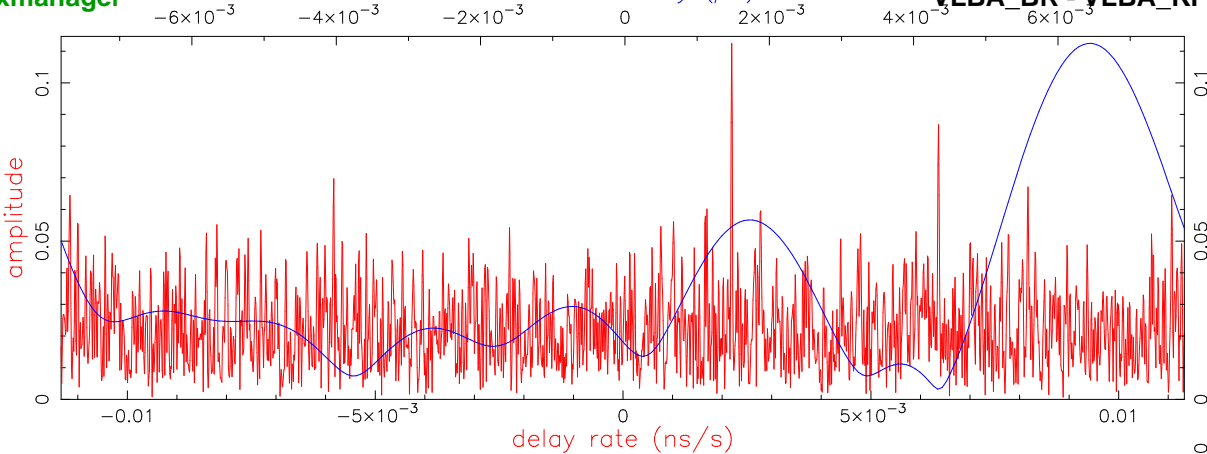
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bk

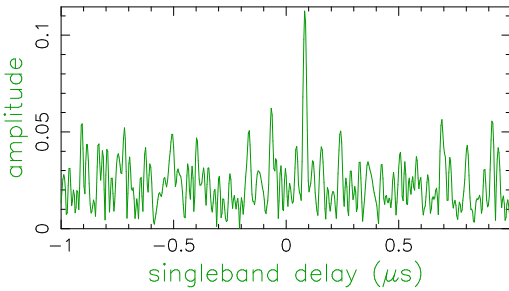
VLBA_BR - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

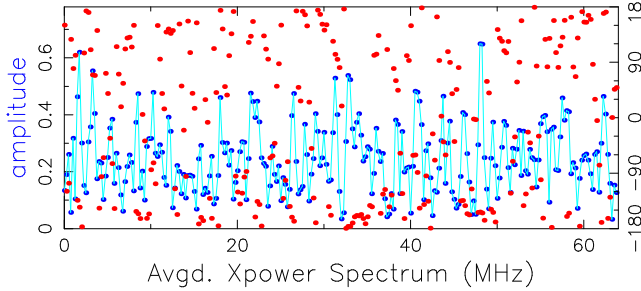


Fringe quality 0

SNR 6.3
 Int time 417.476
 Amp 0.115
 Phase -24.2
 PFD 7.4e-02
 Delays (us)
 SBD 0.082867
 MBD 0.006481
 Fringe rate (Hz)
 0.189383
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

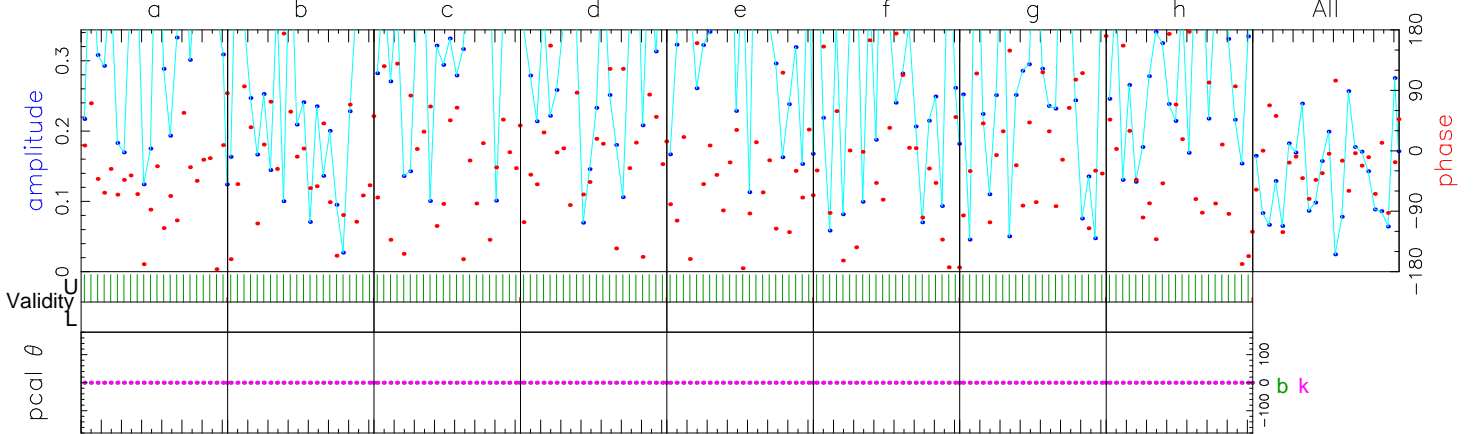


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130907
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-33.3	-24.2	-6.2	2.2	-42.4	-38.5	6.7	-59.4	Phase	-24.2
	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.1	Ampl.	0.1
	276.9	432.3	244.7	501.9	181.7	190.9	51.8	240.0	Sbd box	278.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.72764233269E+02		Apriori delay (usec)		-1.72848839027E+02		Resid mbdelay (usec)		6.48076E-03	+/- 1.7E-04
Sband delay (usec)	-1.72765971777E+02		Apriori clock (usec)		-2.0469704E+00		Resid sbdelay (usec)		8.28672E-02	+/- 1.4E-03
Phase delay (usec)	-1.72848839807E+02		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-7.80081E-07	+/- 5.9E-07
Delay rate (us/s)	6.80307230761E-02		Apriori rate (us/s)		6.80285245281E-02		Resid rate (us/s)		2.19855E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.70306849008E-05		Resid phase (deg)		-24.2	+/- 18.2

	RMS	Theor.	Amplitude	0.115 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.2	43.6	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	62.7	76.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	25.3	25.7	Inc. seg. avg.	0.108	Sample rate(MSamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.8	44.8	Inc. frq. avg.	0.111	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 108.1 el 74.7 pa -57.7 k: az 40.4 el 76.7 pa -134.9 u,v (fr/asec) -491.153 2619.211 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bk..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bk.W.56.1ILPVT

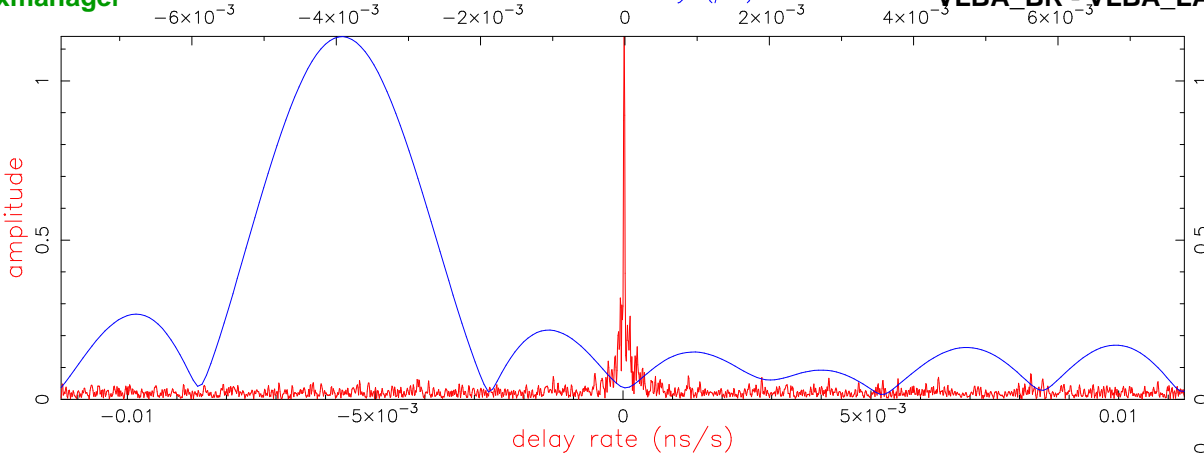
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11LPVT, No0079, bl

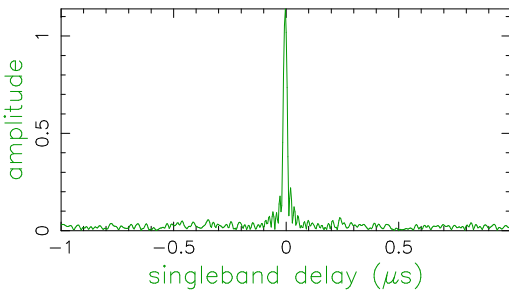
VLBA_BR - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

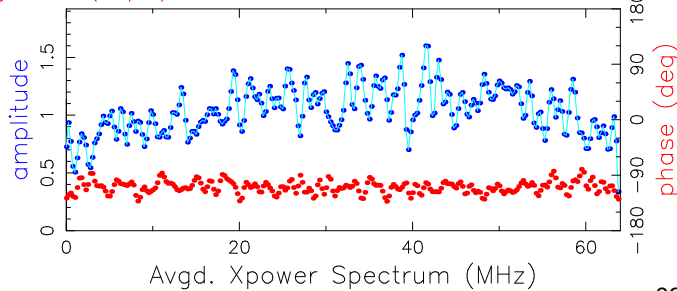


Fringe quality 7

SNR 63.7
 Int time 417.819
 Amp 1.140
 Phase -113.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.004256
 MBD -0.003930
 Fringe rate (Hz)
 0.002165
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

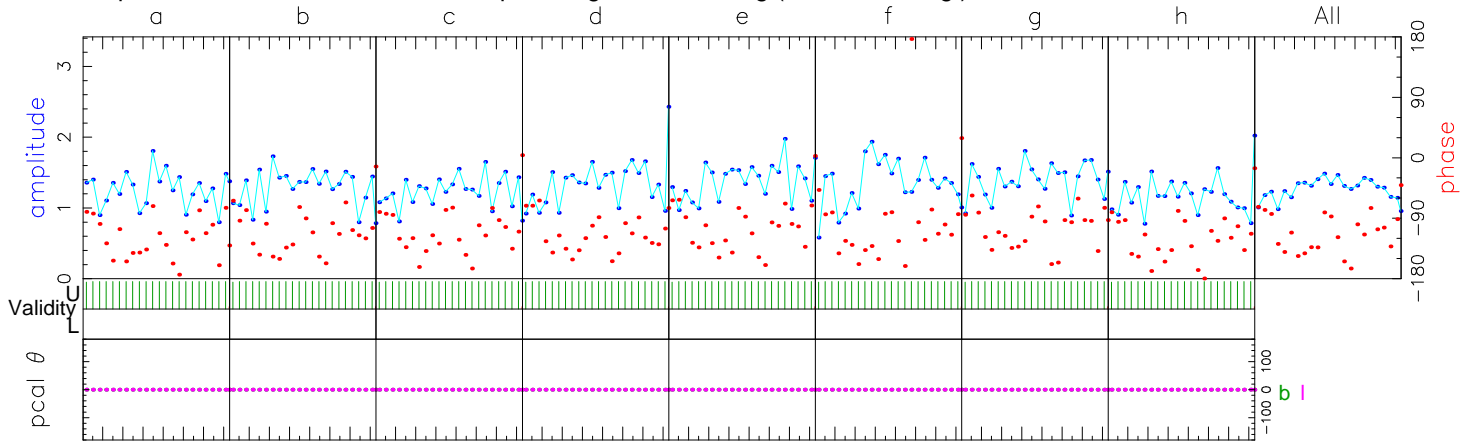


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130858
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.33575929621E+02	Apriori delay (usec)	-5.33571999262E+02	Resid mbdelay (usec)	-3.93036E-03	+/-	1.7E-05
Sband delay (usec)	-5.33576254762E+02	Apriori clock (usec)	-1.3090286E+00	Resid sbdelay (usec)	-4.25550E-03	+/-	1.4E-04
Phase delay (usec)	-5.33572002922E+02	Apriori clockrate (us/s)	9.999998E-08	Resid phdelay (usec)	-3.65957E-06	+/-	5.8E-08
Delay rate (us/s)	1.63244831362E-01	Apriori rate (us/s)	1.63244806224E-01	Resid rate (us/s)	2.51382E-08	+/-	2.4E-10
Total phase (deg)	-119.4	Apriori accel (us/s/s)	1.48111140385E-05	Resid phase (deg)	-113.5	+/-	1.8

ph/seg (deg)	27.3	RMS	4.3	Theor.	4.3	Amplitude	1.140 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	16.7	Search (2048X32)	1.117	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	6.5	Inc. seg. avg.	1.274	Inc. frq. avg.	1.143	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	5.9	Inc. frq. avg.	1.143	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 108.1 el 74.7 pa -57.7 l: az 37.6 el 82.5 pa -141.7 u,v (fr/asec) -1223.503 2106.035 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl..11LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl.W.11.11LPVT

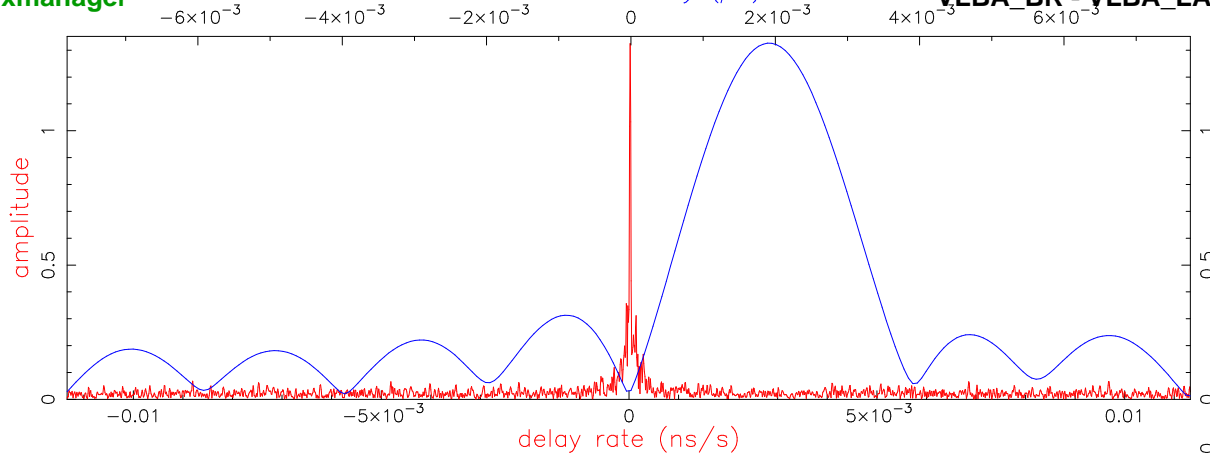
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11LPVT, No0079, bl

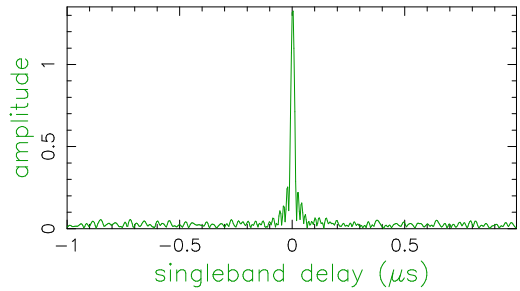
VLBA_BR - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

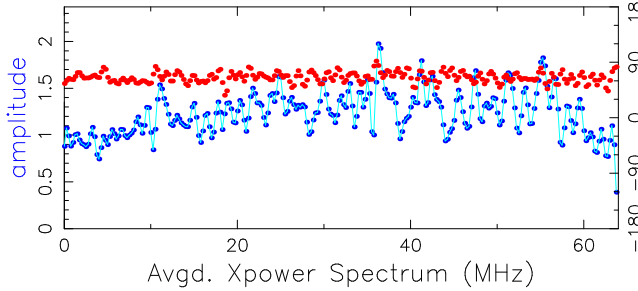


Fringe quality 7

SNR 75.5
Int time 417.819
Amp 1.351
Phase 68.1
PFD 0.0e+00
Delays (us)
SBD 0.002119
MBD 0.001871
Fringe rate (Hz) 0.002044
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

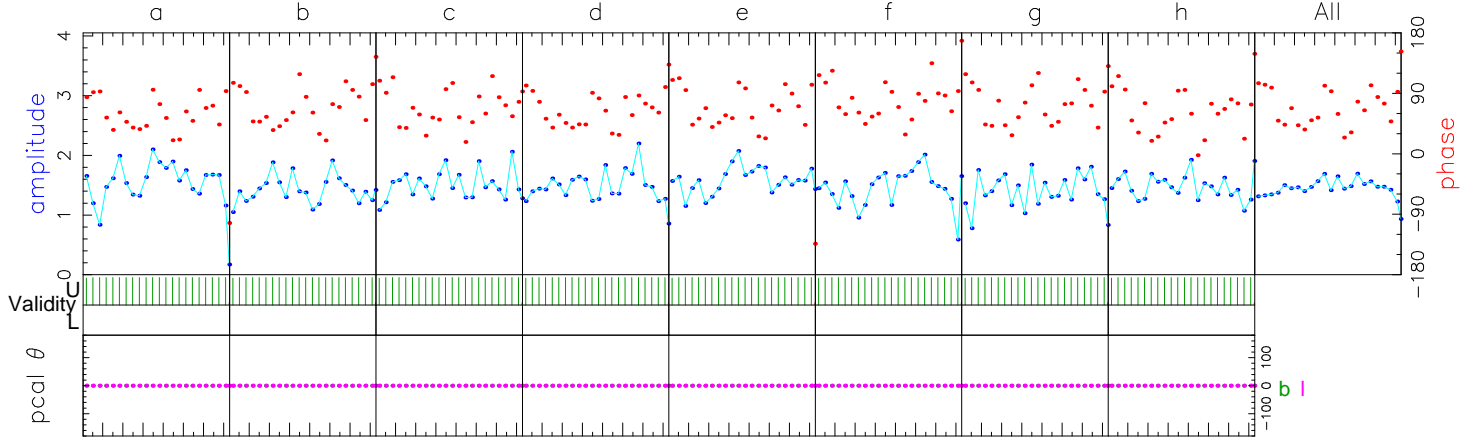


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084501.54
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130902
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.33570128402E+02									
Sband delay (usec)	-5.33569879762E+02									
Phase delay (usec)	-5.33571997065E+02									
Delay rate (us/s)	1.63244829958E-01									
Total phase (deg)			62.2							
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)									68.1	+/- 1.5
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)										

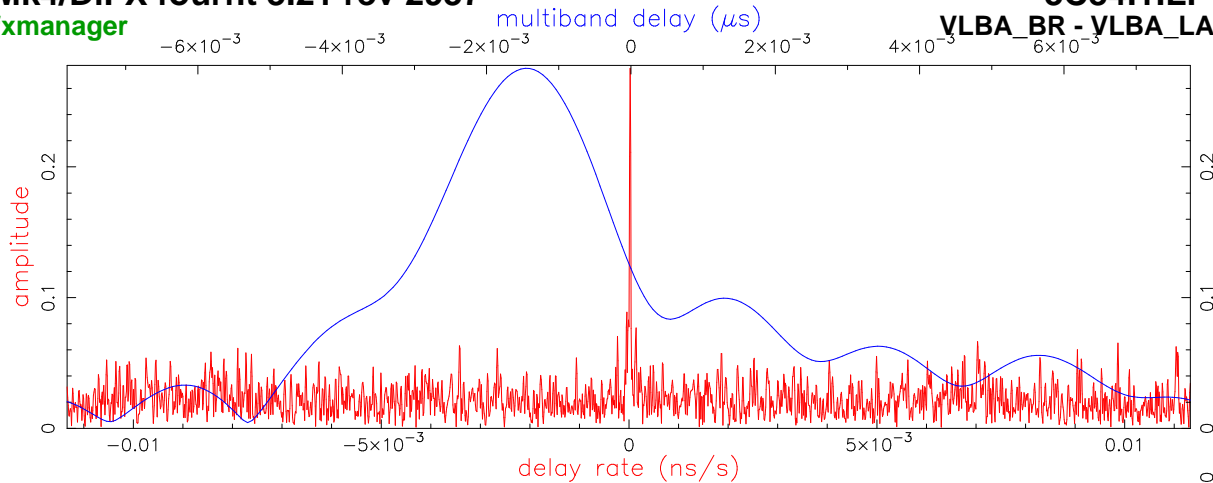
b: az 108.1 el 74.7 pa -57.7 l: az 37.6 el 82.5 pa -141.7 u,v (fr/asec) -1223.503 2106.035 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl.W.29.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

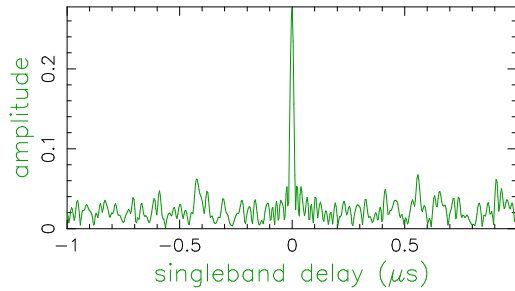
3C84.11LPVT, No0079, bl

VLBA_BR - VLBA_LA, fgroup W, pol LR

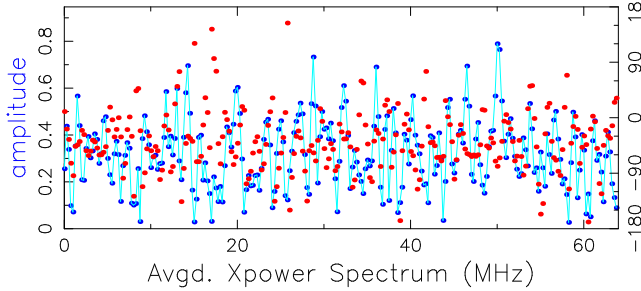


Fringe quality 8

SNR 15.5
 Int time 417.819
 Amp 0.278
 Phase -37.0
 PFD 1.4e-45
 Delays (us)
 SBD -0.001133
 MBD -0.001469
 Fringe rate (Hz) 0.001822
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

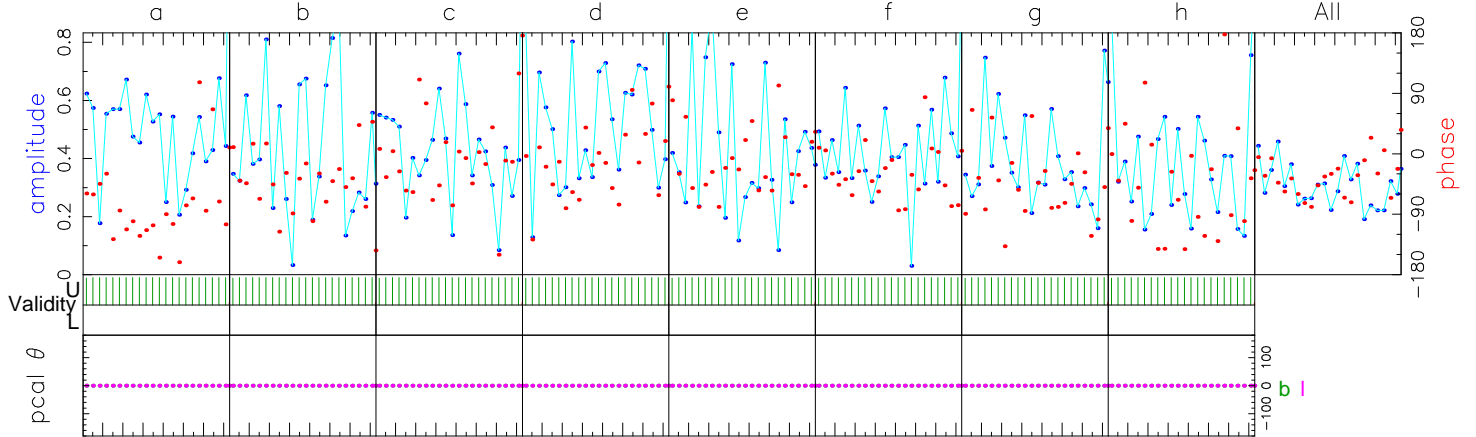


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130905
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-5.33573467808E+02	Apriori delay (usec)	-5.33571999262E+02	Resid mbdelay (usec)	-1.46855E-03	+/-	7.0E-05
Sband delay (usec)	-5.33573132512E+02	Apriori clock (usec)	-1.3090286E+00	Resid sbdelay (usec)	-1.13325E-03	+/-	5.6E-04
Phase delay (usec)	-5.33572000456E+02	Apriori clockrate (us/s)	9.999998E-08	Resid phdelay (usec)	-1.19404E-06	+/-	2.4E-07
Delay rate (us/s)	1.63244827376E-01	Apriori rate (us/s)	1.63244806224E-01	Resid rate (us/s)	2.11526E-08	+/-	9.9E-10
Total phase (deg)	-42.9	Apriori accel (us/s/s)	1.48111140385E-05	Resid phase (deg)	-37.0	+/-	7.4

ph/seg (deg)	27.0	Theor.	17.7	Amplitude	0.278 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	28.0		30.9	Search (2048X32)	0.275	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	32.3		10.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	22.4		18.2	Inc. seg. avg.	0.292	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.305	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

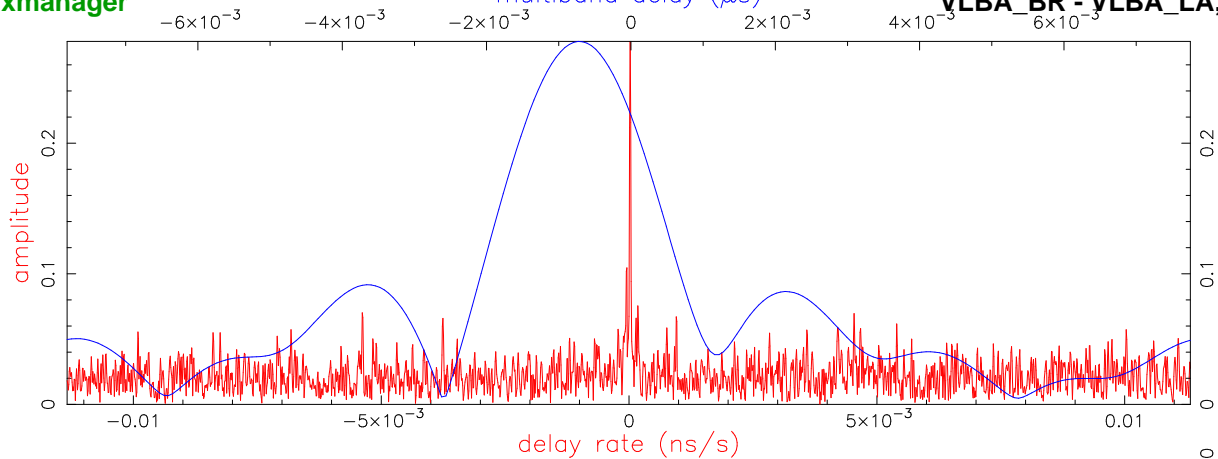
b: az 108.1 el 74.7 pa -57.7 l: az 37.6 el 82.5 pa -141.7 u,v (fr/asec) -1223.503 2106.035 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl.W.50.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

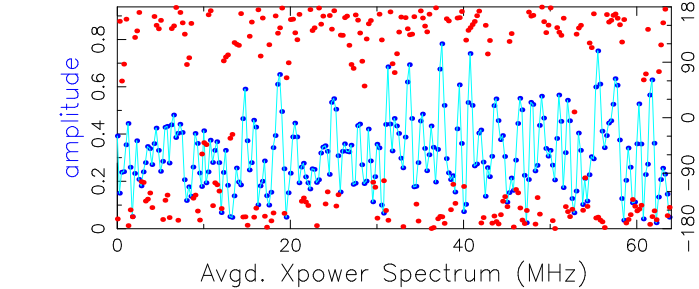
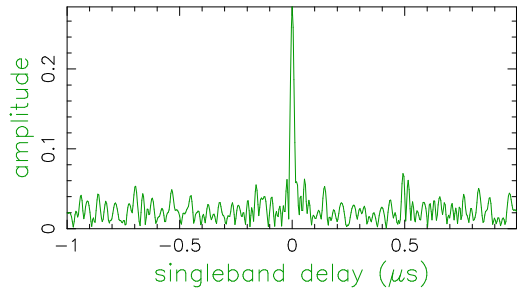
3C84.11LPVT, No0079, bl

VLBA_BR - VLBA_LA, fgroup W, pol RL



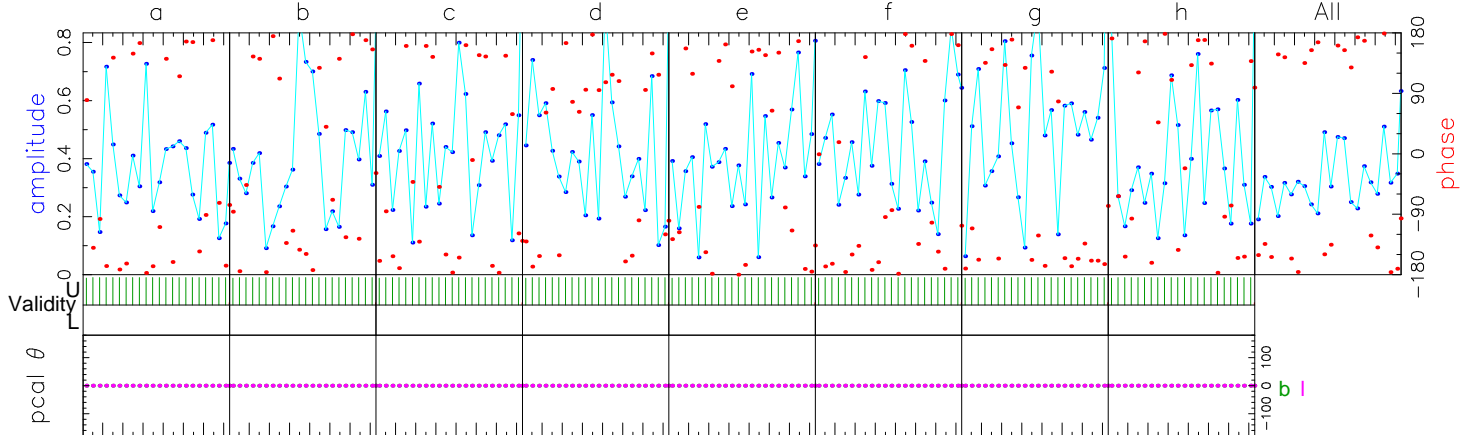
Fringe quality 9

SNR 15.5
 Int time 417.819
 Amp 0.278
 Phase -177.1
 PFD 1.4e-45
 Delays (us)
 SBD -0.000022
 MBD -0.000716
 Fringe rate (Hz)
 0.002090
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130909
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.2	-163.8	-168.3	145.0	175.3	-169.1	-167.4	176.9	Phase	-177.1
	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	Ampl.	0.3
	257.1	257.0	257.6	256.8	256.5	256.9	256.8	256.9	Sbd box	257.0
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.33572714933E+02		Apriori delay (usec)		-5.33571999262E+02		Resid mbdelay (usec)		-7.15671E-04	+/- 7.0E-05
Sband delay (usec)	-5.33572020762E+02		Apriori clock (usec)		-1.3090286E+00		Resid sbdelay (usec)		-2.15000E-05	+/- 5.5E-04
Phase delay (usec)	-5.33572004973E+02		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-5.71139E-06	+/- 2.4E-07
Delay rate (us/s)	1.63244830486E-01		Apriori rate (us/s)		1.63244806224E-01		Resid rate (us/s)		2.42624E-08	+/- 9.9E-10
Total phase (deg)			Apriori accel (us/s/s)		1.48111140385E-05		Resid phase (deg)		-177.1	+/- 7.4

	RMS	Theor.	Amplitude	0.278 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	31.5	17.7	Search (2048X32)	0.269	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	37.1	30.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	18.0	10.4	Inc. seg. avg.	0.308	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	16.1	18.2	Inc. frq. avg.	0.282	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

b: az 108.1 el 74.7 pa -57.7 l: az 37.6 el 82.5 pa -141.7 u,v (fr/asec) -1223.503 2106.035 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl..1LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bl.W.70.1LPVT

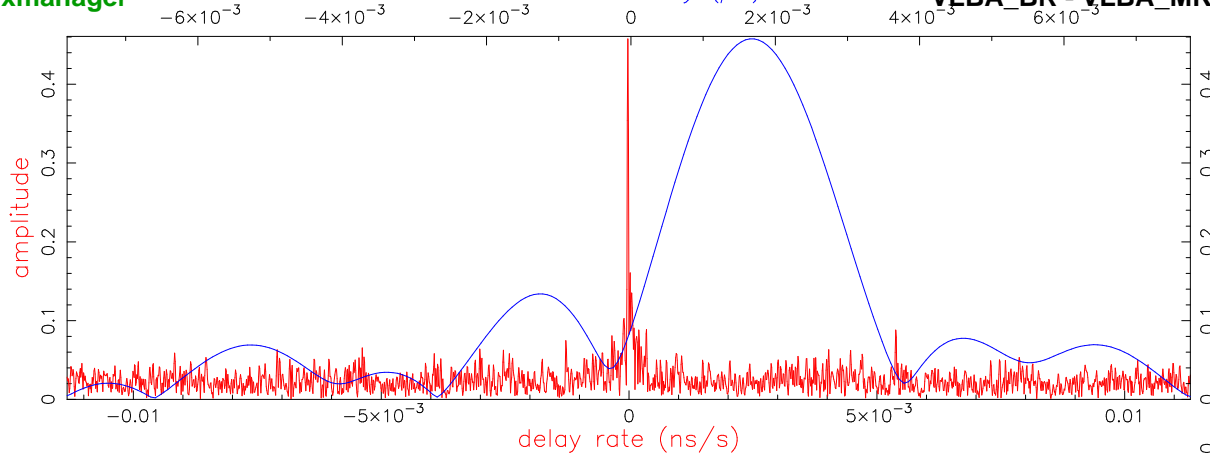
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bm

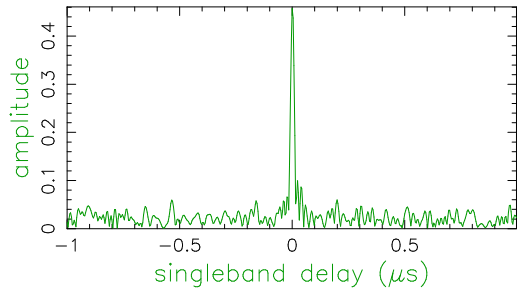
VLBA_BR - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

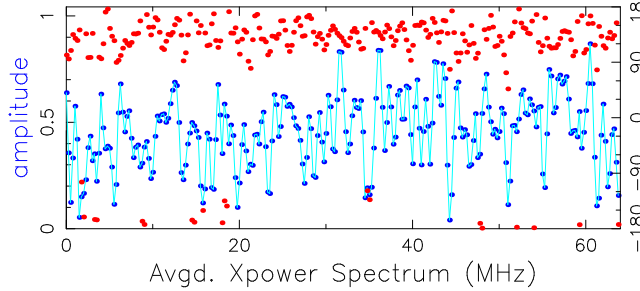


Fringe quality 8

SNR 25.8
Int time 417.827
Amp 0.461
Phase 129.5
PFD 0.0e+00
Delays (us)
SBD 0.001060
MBD 0.001706
Fringe rate (Hz)
-0.001835
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

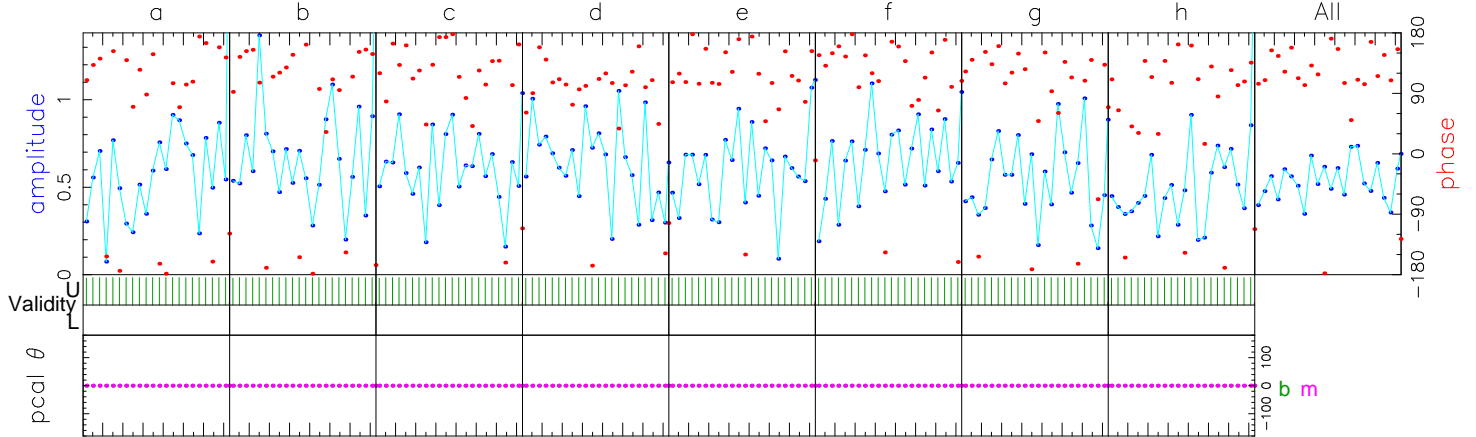


delay rate (ns/s)



Exp. c202b
Yr:day 16383
Start 2020:284
Stop 2020:284
FRT 084501.54
085159.84
084830.00
Corr/FF/build
2021:023:032807
2021:023:130901
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	7.02385722993E+03		Apriori delay (usec)		7.02385552345E+03		Resid mbdelay (usec)		1.70648E-03	+/- 4.2E-05
Sband delay (usec)	7.02385658345E+03		Apriori clock (usec)		-1.5076971E+01		Resid sbdelay (usec)		1.06000E-03	+/- 3.3E-04
Phase delay (usec)	7.02385552762E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		4.17554E-06	+/- 1.4E-07
Delay rate (us/s)	-6.41078373867E-01		Apriori rate (us/s)		-6.41078352568E-01		Resid rate (us/s)		-2.12985E-08	+/- 5.9E-10
Total phase (deg)	53.8		Apriori accel (us/s/s)		-7.07333855262E-06		Resid phase (deg)		129.5	+/- 4.4

ph/seg (deg) 30.8 10.7 Search (2048X32) 0.448 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 28.6 18.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 11.5 6.3 Inc. seg. avg. 0.527 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 12.3 11.0 Inc. frq. avg. 0.462 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 108.1 el 74.7 pa -57.7 m: az 52.0 el 38.7 pa -97.2 u,v (fr/asec) 4888.227 2139.673 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm.W.24.1ILPVT

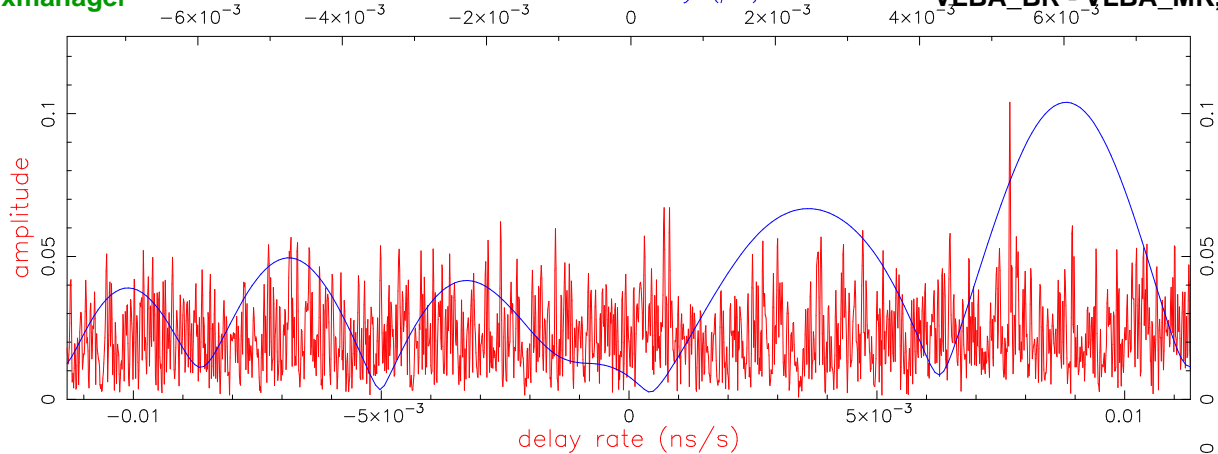
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bm

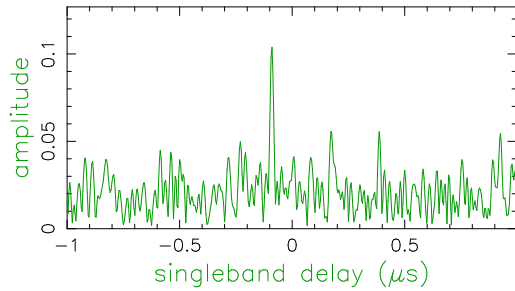
VLBA_BR - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

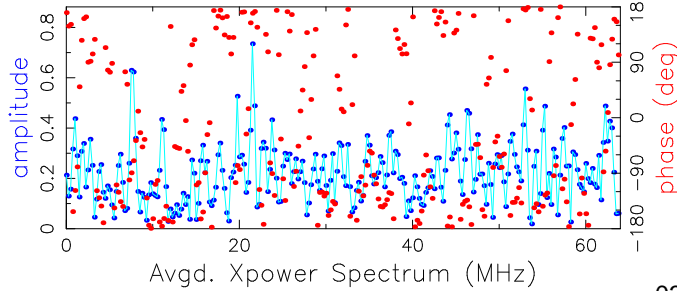


Fringe quality 0

SNR 5.8
 Int time 417.827
 Amp 0.127
 Phase 171.1
 PFD 7.5e-01
 Delays (us)
 SBD -0.090600
 MBD 0.006010
 Fringe rate (Hz)
 0.662708
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

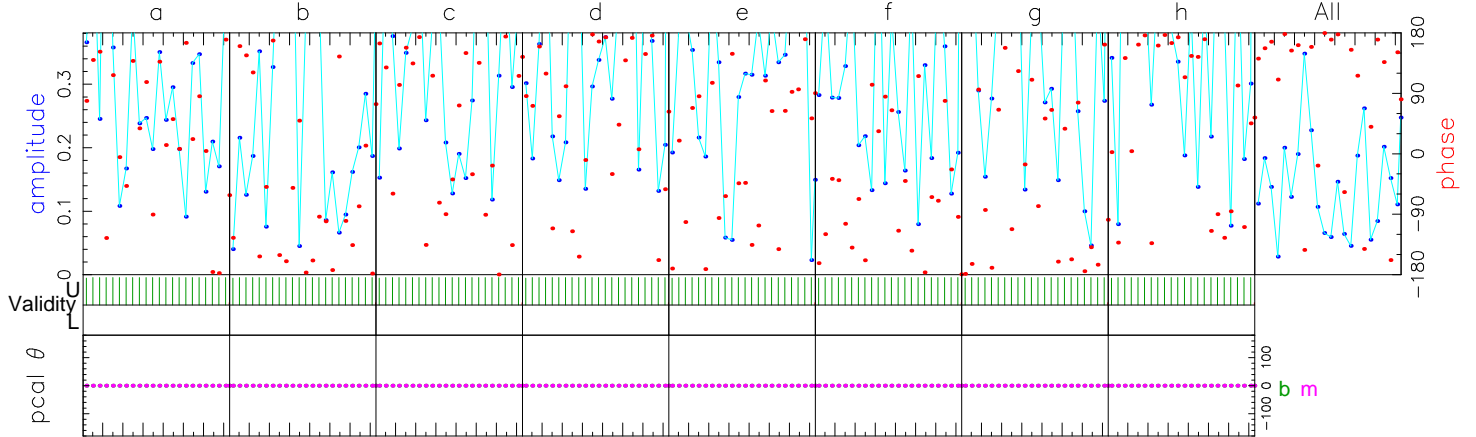


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130904
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



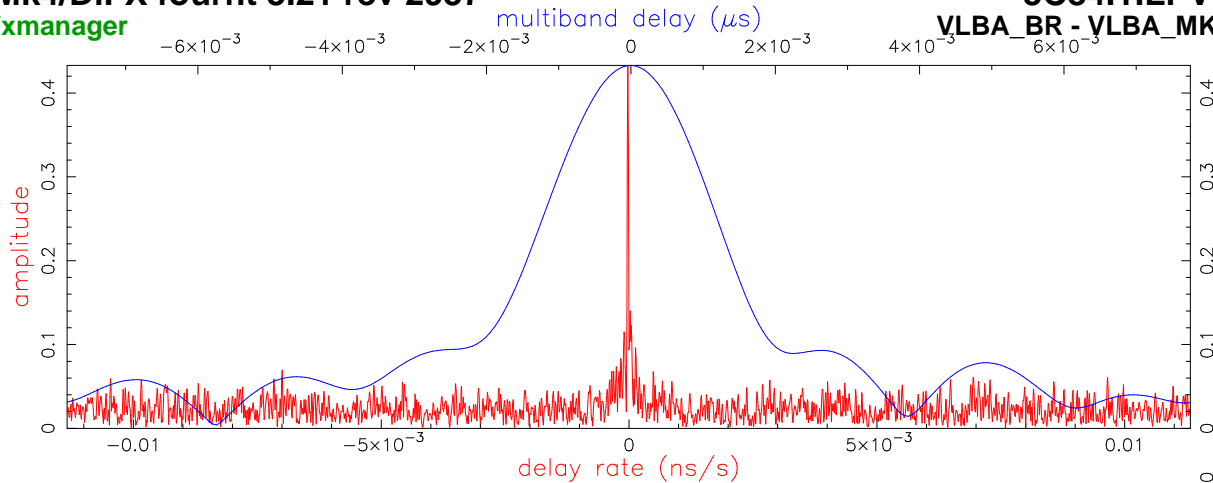
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	126.2	-145.8	169.9	158.6	119.7	-99.7	164.2	167.0	Phase	171.1
	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	116.5	234.4	32.2	233.0	357.2	508.6	449.3	233.7	Sbd box	233.8
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	7.02376778300E+03	Apriori delay (usec)	7.02385552345E+03	Resid mbdelay (usec)	6.00955E-03	+/-	1.9E-04
Sband delay (usec)	7.02376492345E+03	Apriori clock (usec)	-1.5076971E+01	Resid sbdelay (usec)	-9.06000E-02	+/-	1.5E-03
Phase delay (usec)	7.02385552896E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	5.51877E-06	+/-	6.3E-07
Delay rate (us/s)	-6.41070659184E-01	Apriori rate (us/s)	-6.41078352568E-01	Resid rate (us/s)	7.69338E-06	+/-	2.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-7.07333855262E-06	Resid phase (deg)	171.1	+/-	19.7

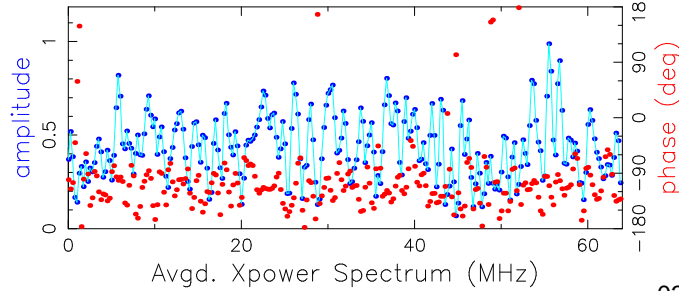
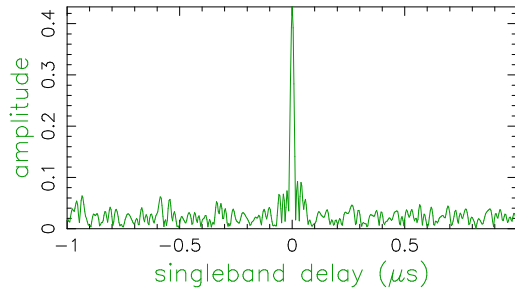
ph/seg (deg)	RMS 60.3	Theor. 47.1	Amplitude Search (2048X32)	0.127 +/- 0.022	0.103	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	82.5	82.3	Interp.	0.000	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	49.5	27.8	Inc. seg. avg.	0.128	0.128	Bits/sample: 2x2	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	43.0	48.5	Inc. frq. avg.	0.138	0.138	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 108.1 el 74.7 pa -57.7 m: az 52.0 el 38.7 pa -97.2 u,v (fr/asec) 4888.227 2139.673 simultaneous interpolator

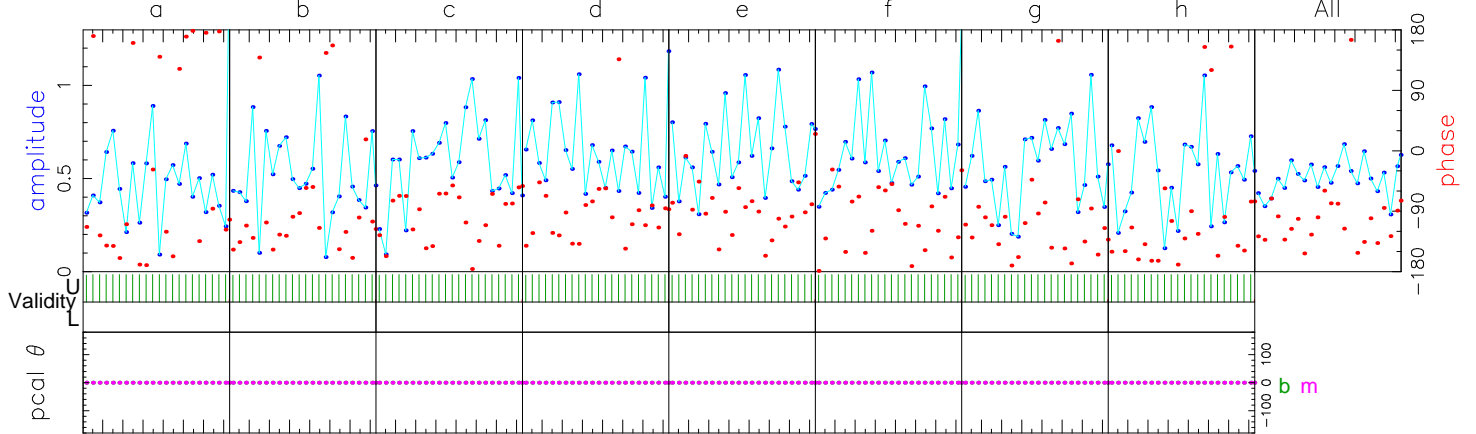
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm.W.44.1ILPVT



Fringe quality 7
SNR 24.2
Int time 417.827
Amp 0.433
Phase -112.5
PFD 0.0e+00
Delays (us)
SBD 0.000001
MBD -0.000005
Fringe rate (Hz)
-0.001753
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084501.54
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130857
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-151.6	-117.5	-97.0	-107.1	-90.1	-102.2	-115.5	-144.5	Phase	-112.5
	0.3	0.4	0.5	0.5	0.6	0.5	0.5	0.4	Ampl.	0.5
	257.0	257.5	257.7	257.0	256.9	256.7	256.1	256.2	Sbd box	257.0
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.02385551840E+03		Apriori delay (usec)		7.02385552345E+03		Resid mbdelay (usec)		-5.04773E-06	+/- 4.5E-05
Sband delay (usec)	7.02385552420E+03		Apriori clock (usec)		-1.5076971E+01		Resid sbdelay (usec)		7.50000E-07	+/- 3.6E-04
Phase delay (usec)	7.02385551982E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-3.62894E-06	+/- 1.5E-07
Delay rate (us/s)	-6.41078372913E-01		Apriori rate (us/s)		-6.41078352568E-01		Resid rate (us/s)		-2.03448E-08	+/- 6.3E-10
Total phase (deg)	171.7		Apriori accel (us/s/s)		-7.07333855262E-06		Resid phase (deg)		-112.5	+/- 4.7

ph/seg (deg) 31.2 11.4 Amplitude 0.433 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 26.2 19.8 Search (2048X32) 0.430 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 24.0 6.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 17.3 11.7 Inc. seg. avg. 0.493 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

b: az 108.1 el 74.7 pa -57.7 m: az 52.0 el 38.7 pa -97.2 u,v (fr/asec) 4888.227 2139.673 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm.W.6.1ILPVT

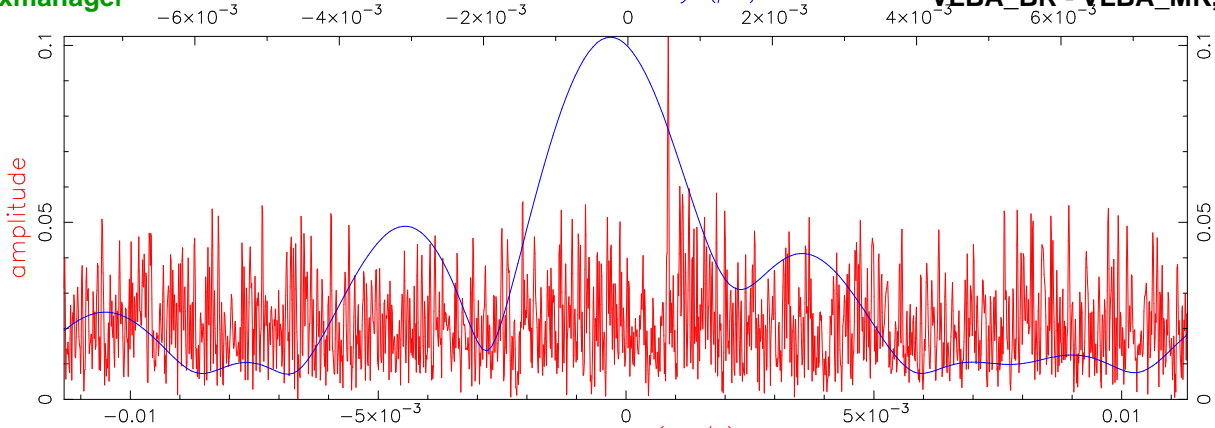
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

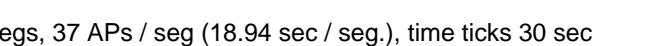
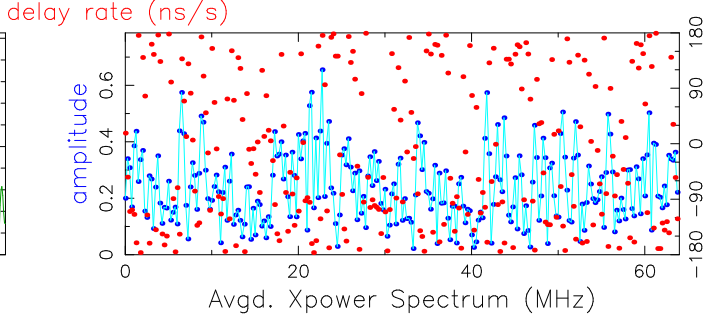
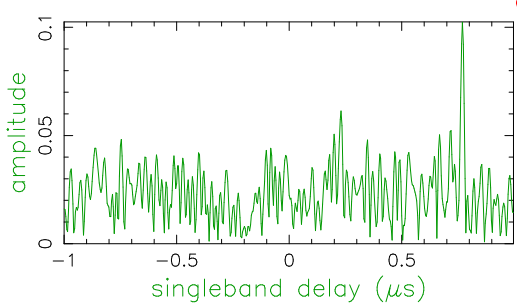
3C84.1ILPVT, No0079, bm

VLBA_BR - VLBA_MK, fgroup W, pol RL

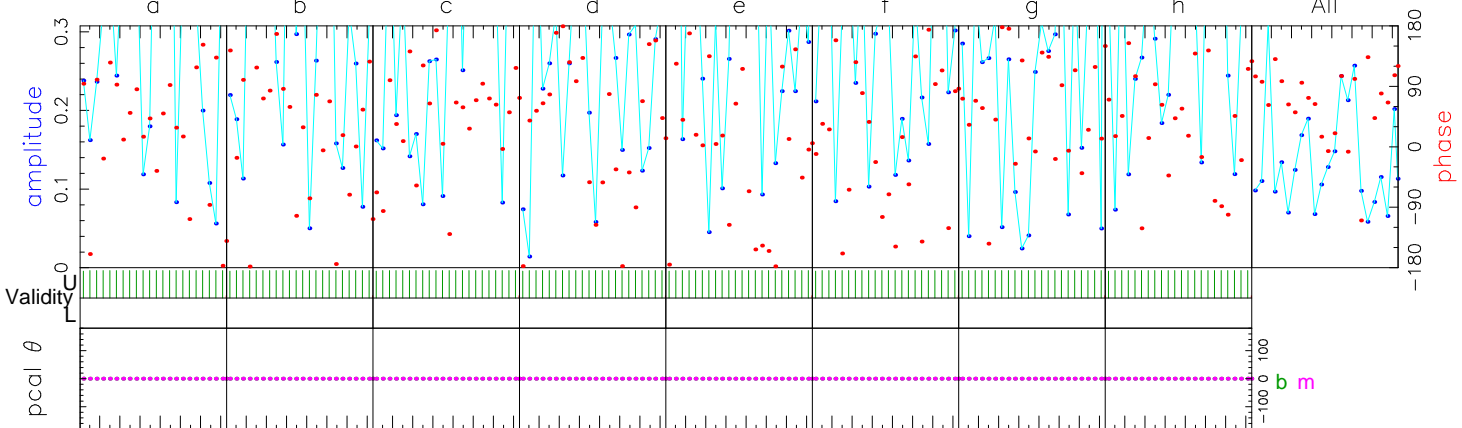
multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 417.827
 Amp 0.103
 Phase 73.3
 PFD 9.3e-01
 Delays (us)
 SBD 0.769541
 MBD -0.000242
 Fringe rate (Hz)
 0.073158
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130908
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 7.02462090622E+03 Apriori delay (usec) 7.02385552345E+03 Resid mbdelay (usec) -2.42225E-04 +/- 1.9E-04
 Sband delay (usec) 7.02462506445E+03 Apriori clock (usec) -1.5076971E+01 Resid sbdelay (usec) 7.69541E-01 +/- 1.5E-03
 Phase delay (usec) 7.02385552581E+03 Apriori clockrate (us/s) -9.9999991E-08 Resid phdelay (usec) 2.36218E-06 +/- 6.5E-07
 Delay rate (us/s) -6.41077503280E-01 Apriori rate (us/s) -6.41078352568E-01 Resid rate (us/s) 8.49288E-07 +/- 2.7E-09
 Total phase (deg) 357.5 Apriori accel (us/s/s) -7.07333855262E-06 Resid phase (deg) 73.3 +/- 20.0

ph/seg (deg) 54.2 48.0 Amplitude 0.103 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.8 83.9 Search (2048X32) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 28.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.2 49.5 Inc. seg. avg. 0.104 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

b: az 108.1 el 74.7 pa -57.7 m: az 52.0 el 38.7 pa -97.2 u,v (fr/asec) 4888.227 2139.673 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bm.W.65.1ILPVT

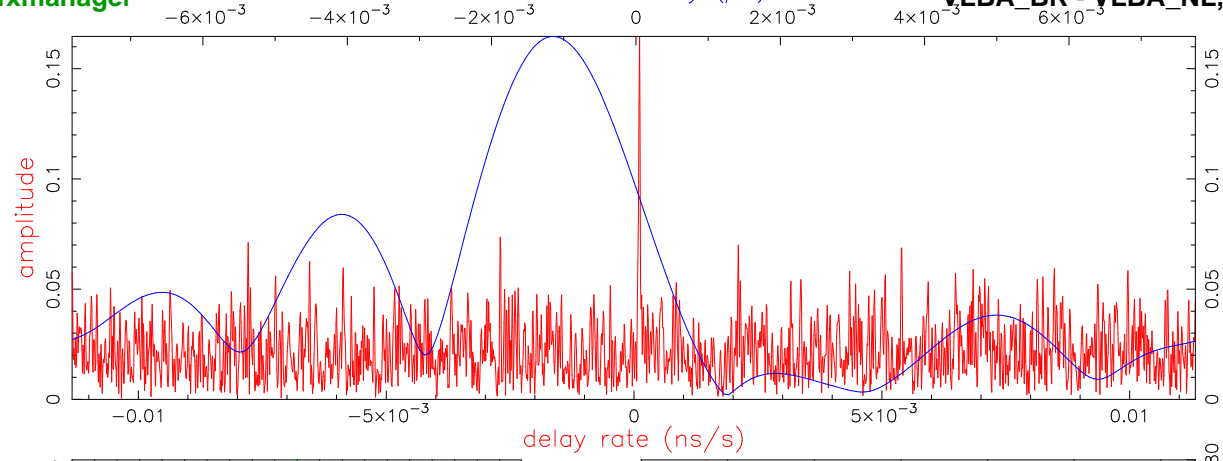
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bn

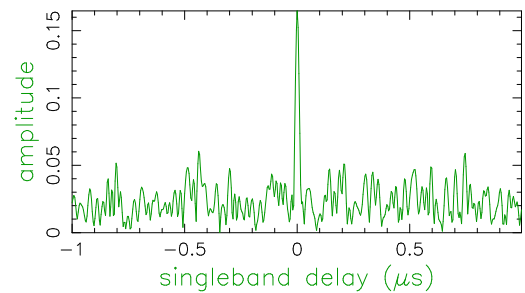
VLBA_BR - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

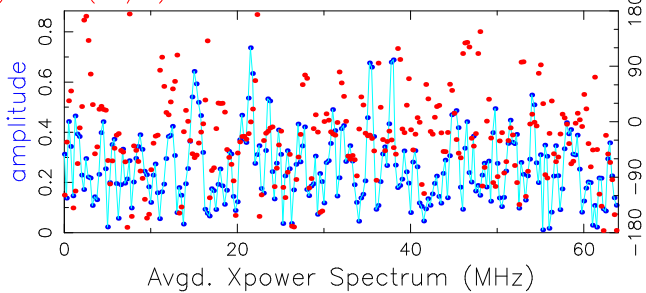


Fringe quality 9
 SNR 9.2
 Int time 419.819
 Amp 0.165
 Phase -11.6
 PFD 1.1e-11
 Delays (us)
 SBD 0.000125
 MBD -0.001143
 Fringe rate (Hz) 0.009423
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130901
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

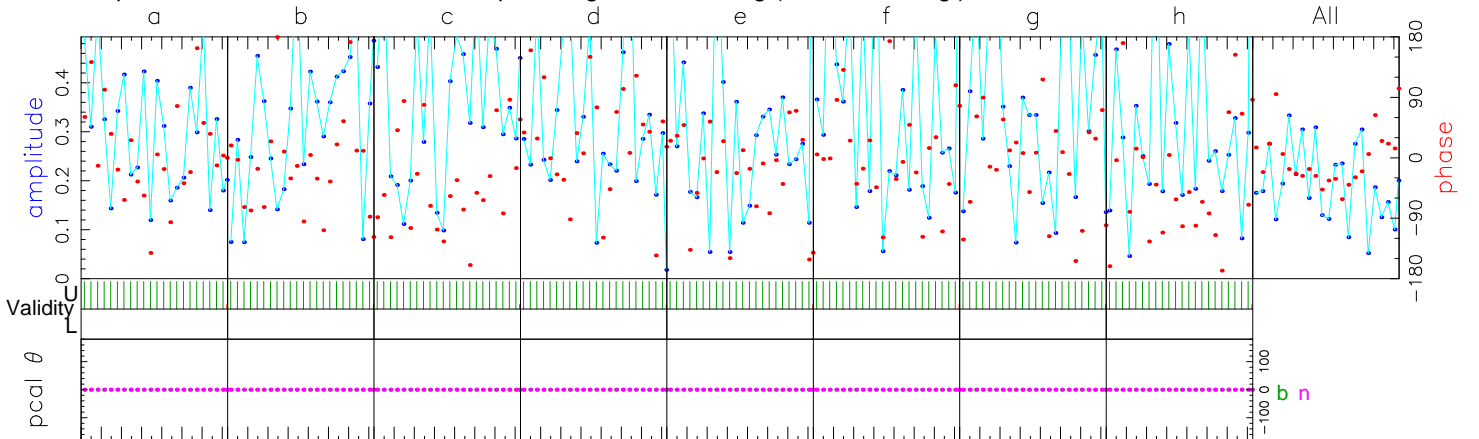
delay rate (ns/s)



singleband delay (μ s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-5.17452054701E+02				-5.17450911329E+02				
Sband delay (usec)		-5.17450786079E+02				-1.8768549E+00				
Phase delay (usec)		-5.17450911702E+02				-5.0000000E-07				
Delay rate (us/s)		3.91031799814E-01				3.91031690420E-01				
Total phase (deg)			-192.3			8.62750222713E-06				
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:										
Pcal rate:										
Bits/sample:										
Sample rate (MSamp/s):										
Data rate (Mb/s):										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 37.5 29.8 Amplitude 0.165 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.1 52.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.1 17.6 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.5 30.7 Inc. frq. avg. 0.173 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 n: az 271.2 el 83.6 pa 84.9 u,v (fr/asec) -2977.901 1154.886 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bn..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bn.W.25.1ILPVT

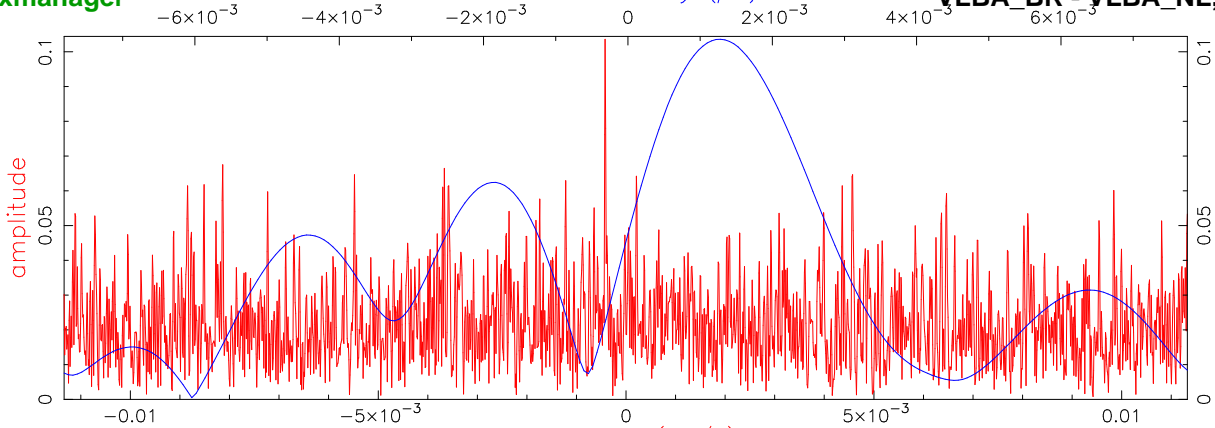
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bn

VLBA_BR - VLBA_NL, fgroup W, pol LR

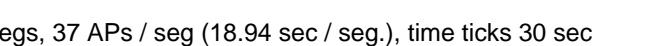
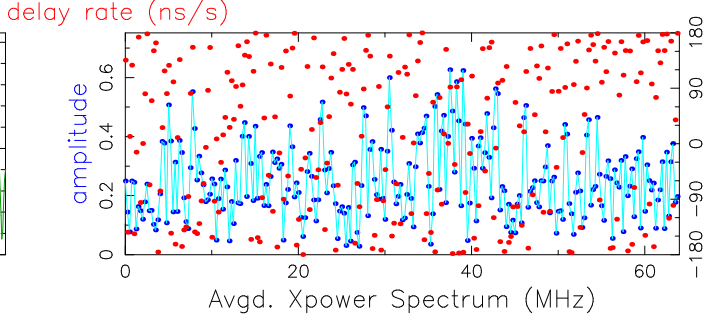
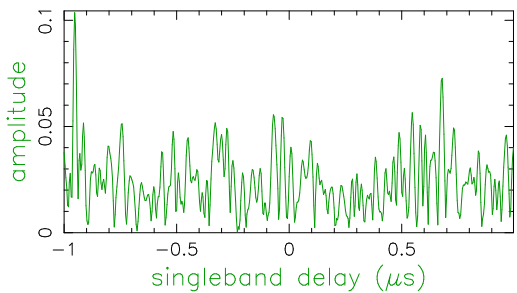
multiband delay (μ s)



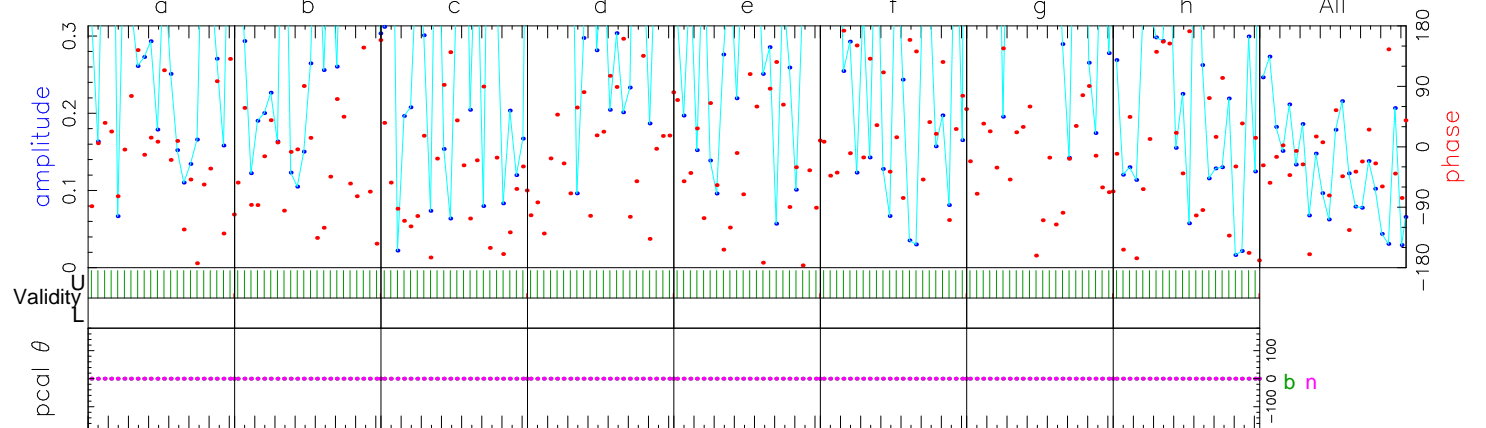
Fringe quality 0

SNR 5.8
Int time 419.819
Amp 0.104
Phase -25.4
PFD 7.2e-01
Delays (us)
SBD -0.952153
MBD 0.001277
Fringe rate (Hz)
-0.036485
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c202b
Yr:day 16383
2021:023:032807
2021:023:130904
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-5.18402758944E+02								1.27738E-03	+/- 1.9E-04
Sband delay (usec)	-5.18403064079E+02								-9.52153E-01	+/- 1.5E-03
Phase delay (usec)	-5.17450912149E+02								-8.20237E-07	+/- 6.3E-07
Delay rate (us/s)	3.91031266871E-01								-4.23550E-07	+/- 2.6E-09
Total phase (deg)			-206.1						-25.4	+/- 19.6
Apriori delay (usec)					-5.17450911329E+02				Resid mbdelay (usec)	
Apriori clock (usec)					0.101				Resid sbdelay (usec)	
Apriori clockrate (us/s)					0.000				Resid phdelay (usec)	
Apriori rate (us/s)					3.91031690420E-01				Resid rate (us/s)	
Apriori accel (us/s/s)					8.62750222713E-06				Resid phase (deg)	
RMS	59.4	47.0			0.104 +/- 0.018				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
Theor.	47.0								PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
Amplitude									Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
Search (2048X32)									Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
Interp.									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
Inc. seg. avg.									nlags: 256	t_cohere infinite
Inc. frq. avg.										

b: az 108.1 el 74.7 pa -57.7 n: az 271.2 el 83.6 pa 84.9 u,v (fr/asec) -2977.901 1154.886 simultaneous interpolator

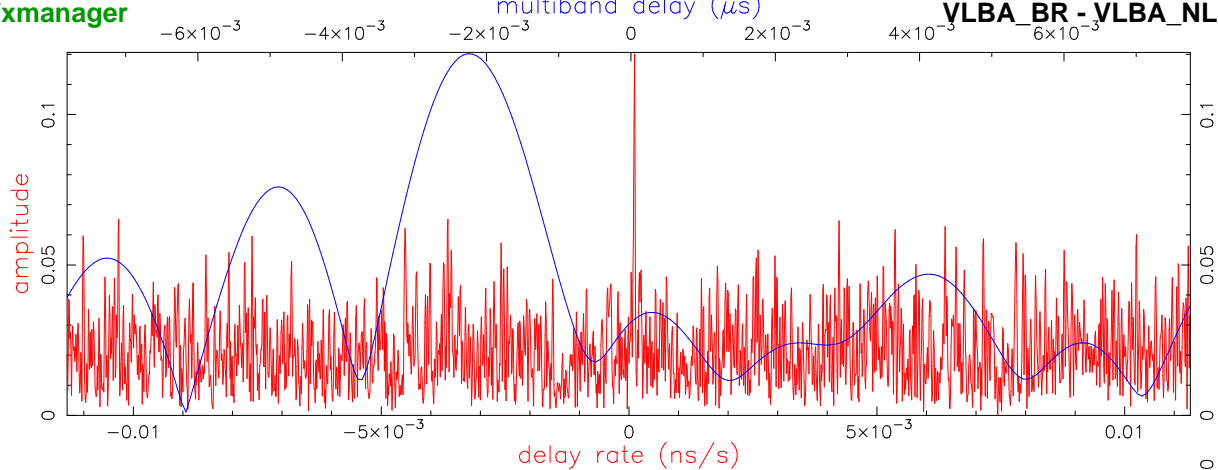
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bn..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bn.W.43.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

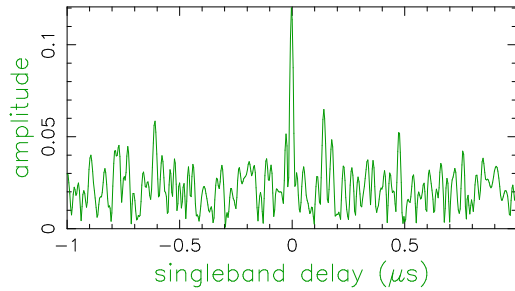
3C84.1ILPVT, No0079, bn

VLBA_BR - VLBA_NL, fgroup W, pol LL

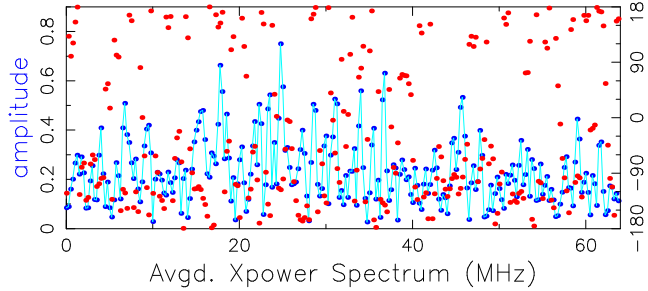


Fringe quality 0

SNR 6.8
 Int time 419.819
 Amp 0.121
 Phase -145.9
 PFD 4.0e-03
 Delays (us)
 SBD -0.003059
 MBD -0.002198
 Fringe rate (Hz)
 0.009448
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

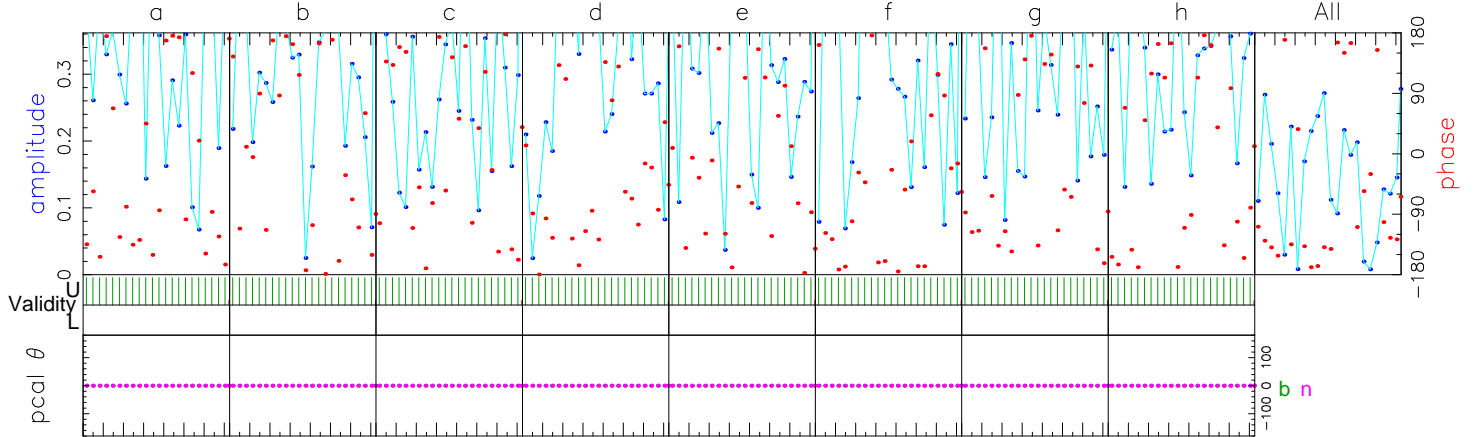


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130858
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.4	-176.7	-171.5	-109.0	-119.8	-121.3	-140.1	-177.2	Phase	-145.9
	0.2	0.1	0.1	0.1	0.0	0.1	0.2	0.2	Ampl.	0.1
	256.4	48.8	330.7	316.9	427.0	153.8	256.8	254.3	Sbd box	256.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.17453109420E+02		Apriori delay (usec)		-5.17450911329E+02		Resid mbdelay (usec)		-2.19809E-03	+/- 1.6E-04
Sband delay (usec)	-5.17453970329E+02		Apriori clock (usec)		-1.8768549E+00		Resid sbdelay (usec)		-3.05900E-03	+/- 1.3E-03
Phase delay (usec)	-5.17450916034E+02		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-4.70540E-06	+/- 5.5E-07
Delay rate (us/s)	3.91031800103E-01		Apriori rate (us/s)		3.91031690420E-01		Resid rate (us/s)		1.09683E-07	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		8.62750222713E-06		Resid phase (deg)		-145.9	+/- 17.0

	RMS	Theor.	Amplitude	0.121 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	58.4	40.6	Search (2048X32)	0.117	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.2	70.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.8	24.0	Inc. seg. avg.	0.114	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	41.5	41.8	Inc. frq. avg.	0.121	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 108.1 el 74.7 pa -57.7 n: az 271.2 el 83.6 pa 84.9 u,v (fr/asec) -2977.901 1154.886 simultaneous interpolator

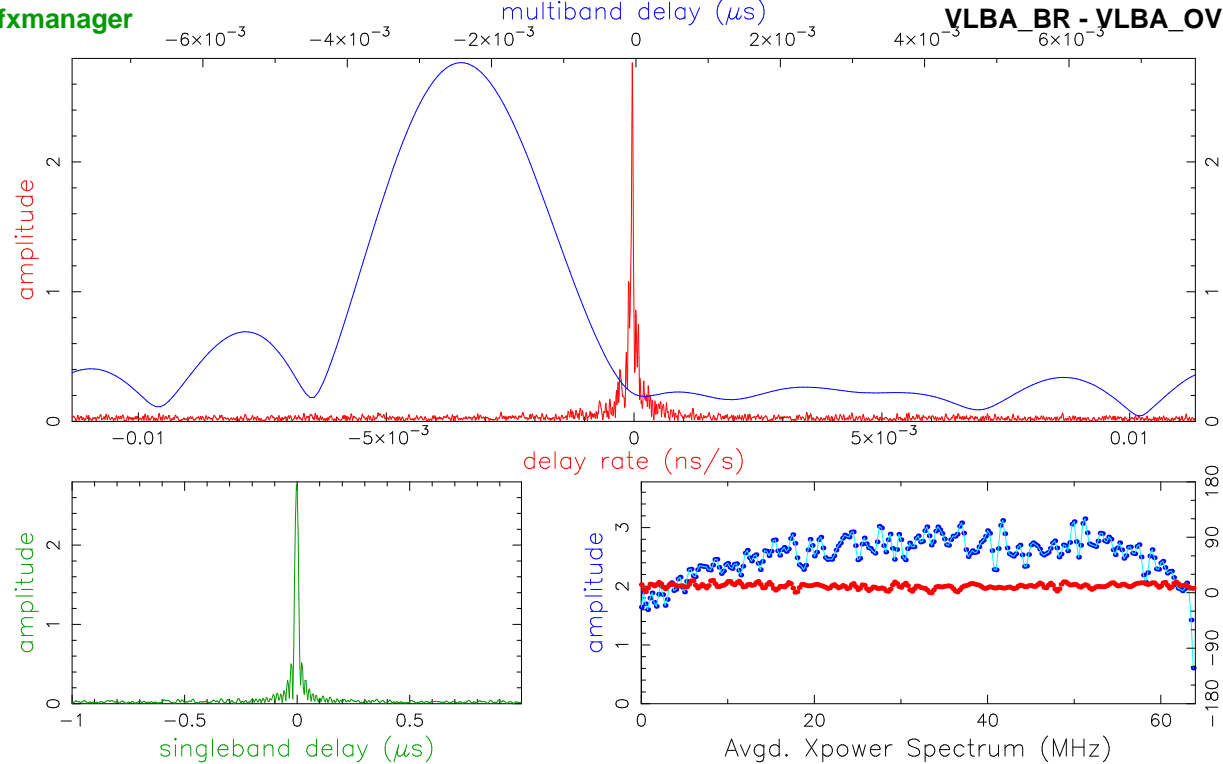
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bn..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bn.W.7.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bo

VLBA_BR - VLBA_OV, fgroup W, pol LL

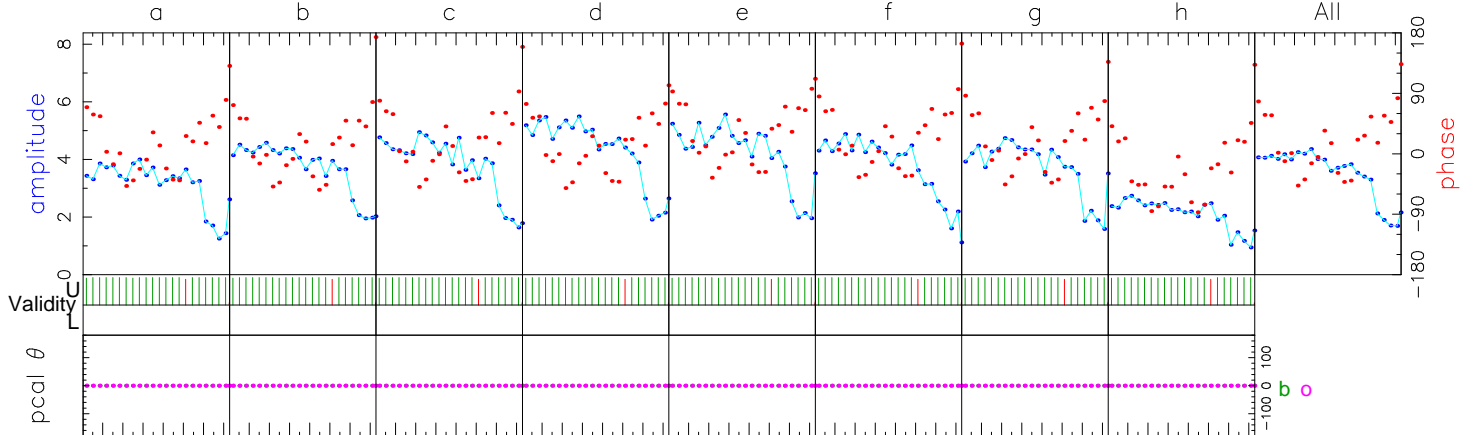


Fringe quality 4

SNR 156.1
 Int time 416.155
 Amp 2.799
 Phase 9.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.002487
 MBD -0.002381
 Fringe rate (Hz)
 -0.002404
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

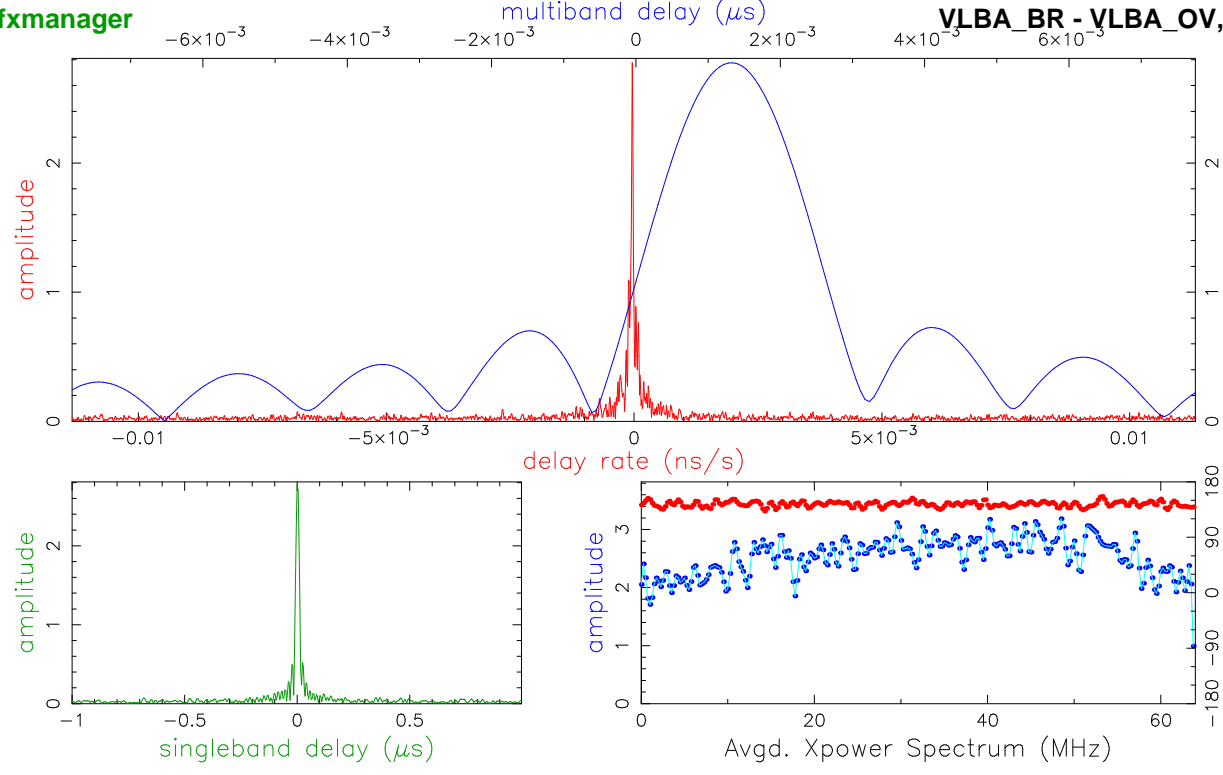
Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130859
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-9.33598426164E+01		Apriori delay (usec)		-9.33574620761E+01		Resid mbdelay (usec)		-2.38054E-03	+/- 7.0E-06
Sband delay (usec)	-9.33599490761E+01		Apriori clock (usec)		-2.3110029E+01		Resid sbdelay (usec)		-2.48700E-03	+/- 5.5E-05
Phase delay (usec)	-9.33574617605E+01		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		3.15602E-07	+/- 2.4E-08
Delay rate (us/s)	-2.55775528901E-02		Apriori rate (us/s)		-2.55775249765E-02		Resid rate (us/s)		-2.79136E-08	+/- 9.8E-11
Total phase (deg)			Apriori accel (us/s/s)		1.08299789765E-05		Resid phase (deg)		9.8	+/- 0.7

ph/seg (deg) 40.4 1.8 Search (2048X32) 2.643 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.0 3.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.5 1.0 Inc. seg. avg. 3.534 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.5 1.8 Inc. frq. avg. 2.827 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 o: az 67.1 el 75.3 pa -100.5 u,v (fr/asec) 214.580 1677.851 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo.W.16.1ILPVT

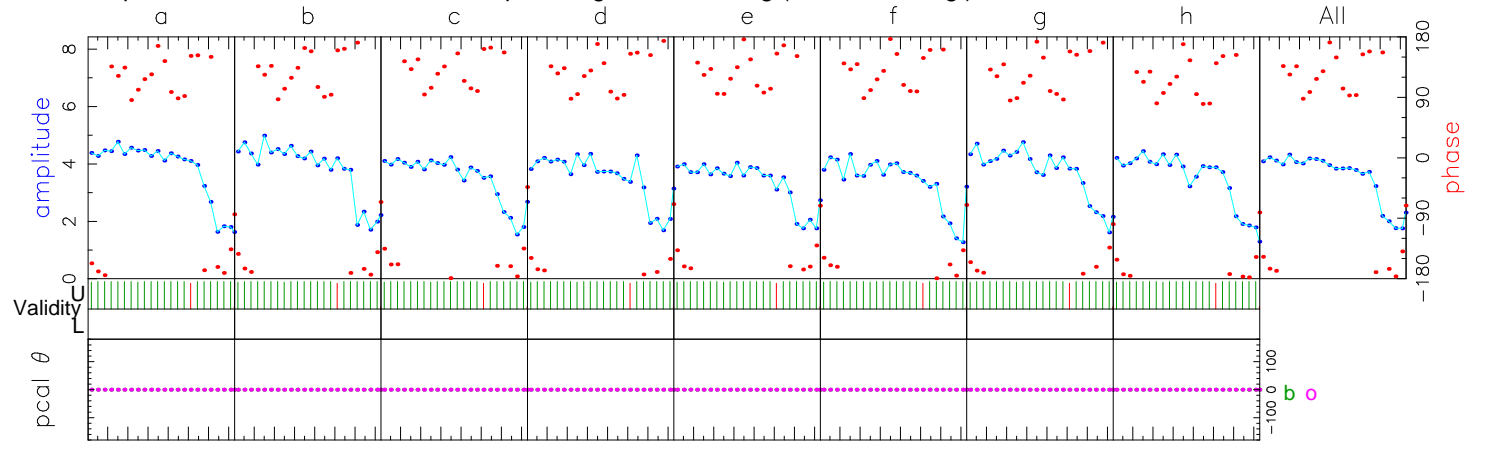


Fringe quality 5

SNR 156.8
Int time 416.155
Amp 2.810
Phase 144.7
PFD 0.0e+00
Delays (us)
SBD 0.001412
MBD 0.001352
Fringe rate (Hz)
-0.002425
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

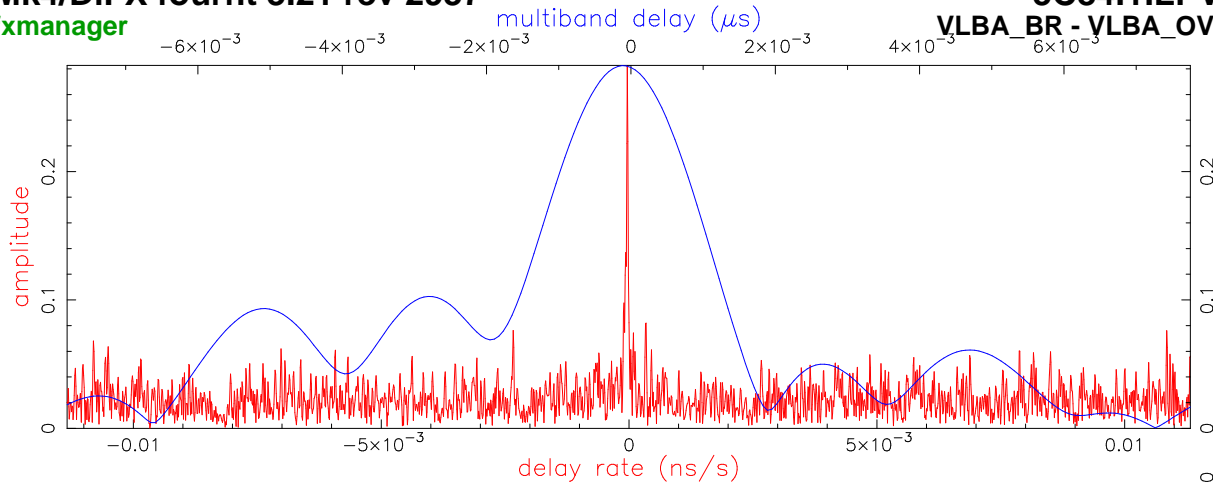
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084501.54
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130902
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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

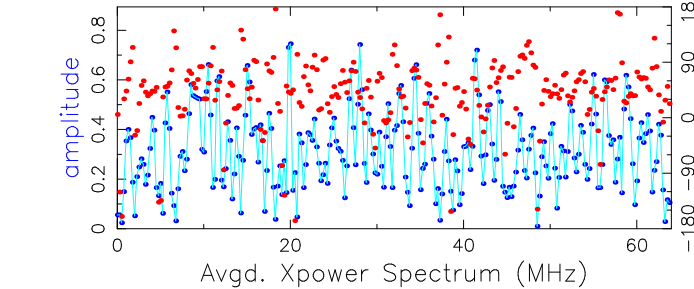
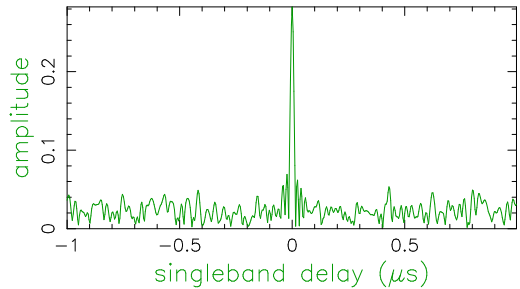


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	140.8	147.0	152.6	143.7	148.2	147.6	141.7	137.0	Phase	144.7
b	3.0	3.0	2.7	2.8	2.5	2.7	2.9	2.7	Ampl.	2.8
o	257.5	257.4	257.4	257.3	257.6	257.2	257.3	257.4	Sbd box	257.4
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	-9.33561101789E+01		Apriori delay (usec)		-9.33574620761E+01		Resid mbdelay (usec)		1.35190E-03	+/- 6.9E-06
Sband delay (usec)	-9.33560500761E+01		Apriori clock (usec)		-2.3110029E+01		Resid sbdelay (usec)		1.41200E-03	+/- 5.5E-05
Phase delay (usec)	-9.33574574093E+01		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		4.66675E-06	+/- 2.4E-08
Delay rate (us/s)	-2.55775531239E-02		Apriori rate (us/s)		-2.55775249765E-02		Resid rate (us/s)		-2.81475E-08	+/- 9.8E-11
Total phase (deg)			Apriori accel (us/s/s)		1.08299789765E-05		Resid phase (deg)		144.7	+/- 0.7

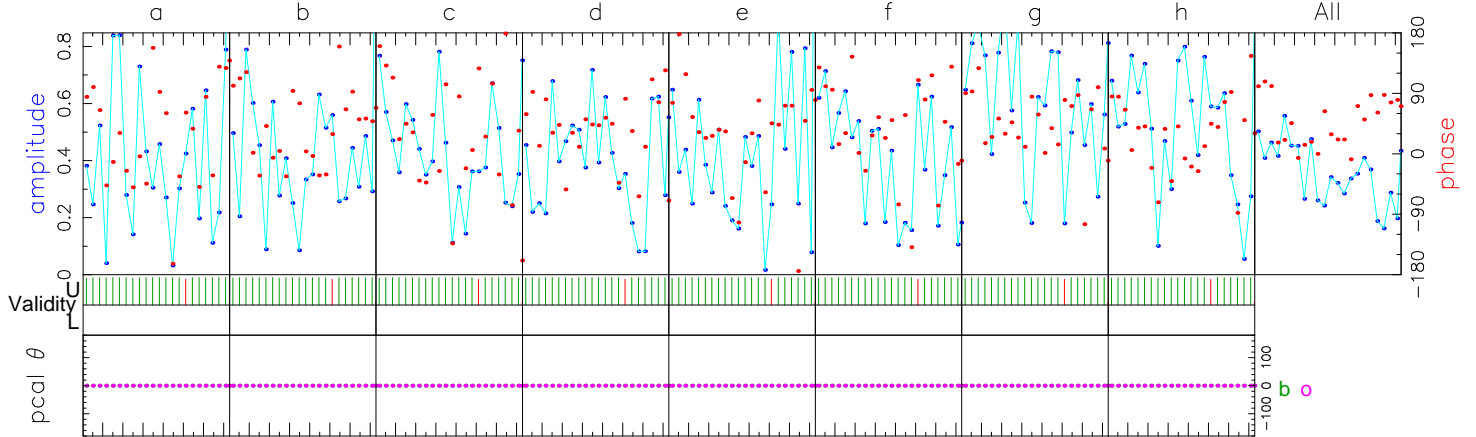
ph/seg (deg) 41.6 1.8 Search (2048X32) 2.644 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 40.1 3.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 5.4 1.0 Inc. seg. avg. 3.580 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 5.6 1.8 Inc. frq. avg. 2.784 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 108.1 el 74.7 pa -57.7 o: az 67.1 el 75.3 pa -100.5 u,v (fr/asec) 214.580 1677.851 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo..11LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo.W.33.11LPVT



Fringe quality 9
SNR 15.8
Int time 416.155
Amp 0.283
Phase 46.7
PFD 0.0e+00
Delays (us)
SBD -0.000325
MBD -0.000117
Fringe rate (Hz)
-0.002432
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084501.54
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130906
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
44.2	30.9	51.9	46.4	53.1	72.3	49.2	31.0		Phase	46.7
0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.4		Ampl.	0.3
256.6	256.9	11.7	257.3	256.5	256.7	257.3	256.0		Sbd box	256.9
U/L 816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0		APs used	
b 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
b:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:o 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	
o 1000	1000	1000	1000	1000	1000	1000	1000			
b W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
o W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.33575788351E+01		Apriori delay (usec)	-9.33574620761E+01		Resid mbdelay (usec)	-1.16759E-04		+/-	6.9E-05
Sband delay (usec)	-9.33577868261E+01		Apriori clock (usec)	-2.3110029E+01		Resid sbdelay (usec)	-3.24750E-04		+/-	5.5E-04
Phase delay (usec)	-9.33574605704E+01		Apriori clockrate (us/s)	9.9999998E-08		Resid phdelay (usec)	1.50561E-06		+/-	2.3E-07
Delay rate (us/s)	-2.55775532040E-02		Apriori rate (us/s)	-2.55775249765E-02		Resid rate (us/s)	-2.82275E-08		+/-	9.7E-10
Total phase (deg)		-235.3	Apriori accel (us/s/s)	1.08299789765E-05		Resid phase (deg)	46.7		+/-	7.3

ph/seg (deg) RMS Theor. Amplitude 0.283 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 36.3 17.4 Search (2048X32) 0.267 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 45.0 30.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 14.3 10.3 Inc. seg. avg. 0.337 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 31.1 17.9 Inc. frq. avg. 0.284 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 108.1 el 74.7 pa -57.7 o: az 67.1 el 75.3 pa -100.5 u,v (fr/asec) 214.580 1677.851 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo.W.52.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

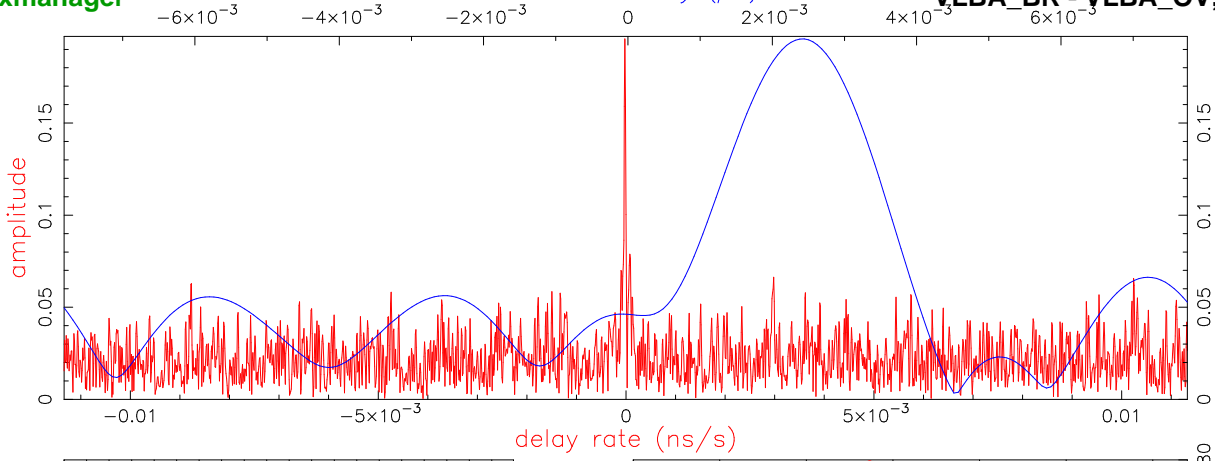
fxmanager

3C84.1ILPVT, No0079, bo

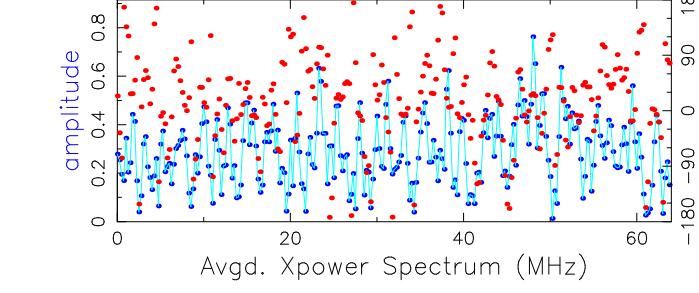
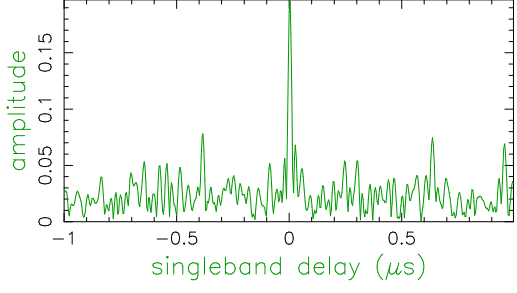
VLBA_BR - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 9

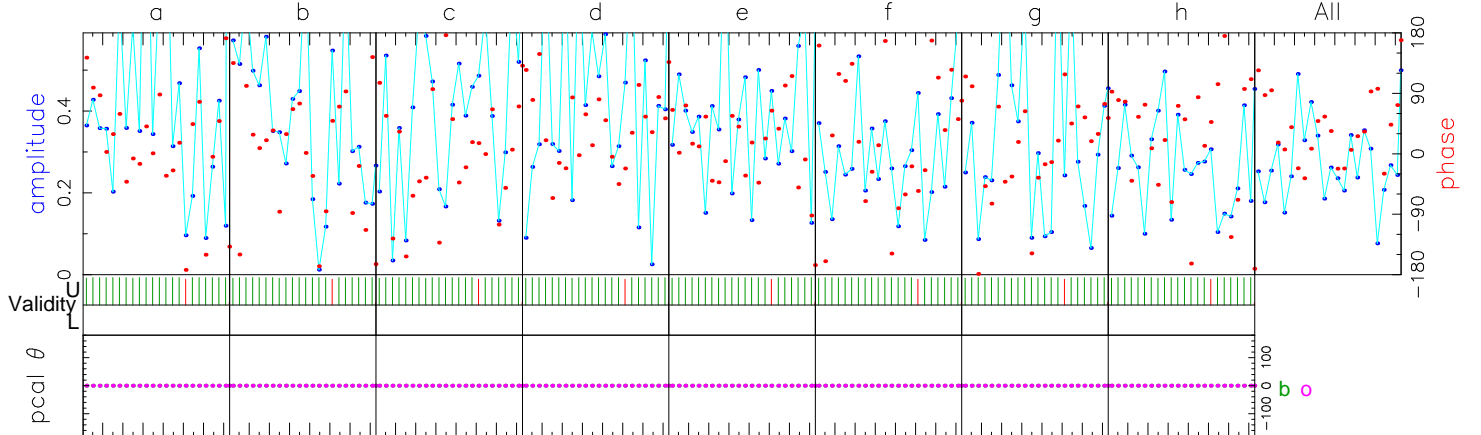


SNR 11.0
 Int time 416.155
 Amp 0.197
 Phase 27.7
 PFD 1.9e-19
 Delays (us)
 SBD 0.002854
 MBD 0.002384
 Fringe rate (Hz)
 -0.002351
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084501.54
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130910
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

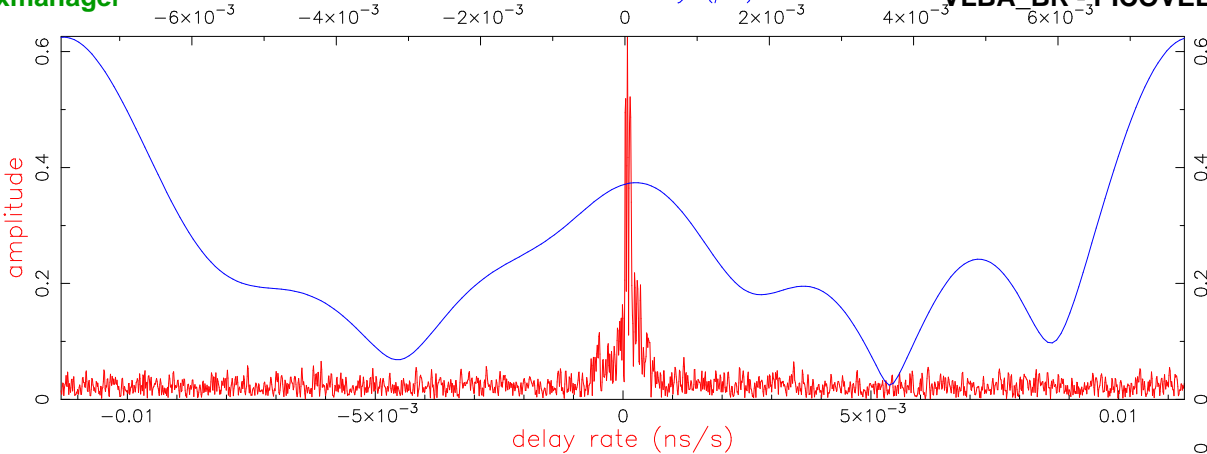
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	816/0	816/0	816/0	816/0	816/0	816/0	816/0	816/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	-9.33550782800E+01		Apriori delay (usec)		-9.33574620761E+01		Resid mbdelay (usec)		2.38380E-03	+/- 9.9E-05	
Sband delay (usec)	-9.33546078261E+01		Apriori clock (usec)		-2.3110029E+01		Resid sbdelay (usec)		2.85425E-03	+/- 7.8E-04	
Phase delay (usec)	-9.33574611818E+01		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		8.94240E-07	+/- 3.4E-07	
Delay rate (us/s)	-2.55775522715E-02		Apriori rate (us/s)		-2.55775249765E-02		Resid rate (us/s)		-2.72951E-08	+/- 1.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		1.08299789765E-05		Resid phase (deg)		27.7	+/- 10.4	
	RMS	Theor.	Amplitude	0.197 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	46.4	25.0	Search (2048X32)	0.187		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	58.7	43.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	24.4	14.7	Inc. seg. avg.	0.246		Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	37.7	25.7	Inc. frq. avg.	0.197		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00

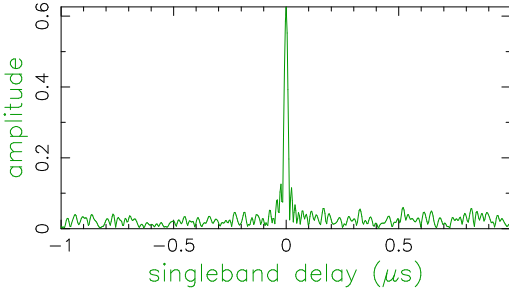
b: az 108.1 el 74.7 pa -57.7 o: az 67.1 el 75.3 pa -100.5 u,v (fr/asec) 214.580 1677.851 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bo.W.71.1ILPVT

multiband delay (μ s)

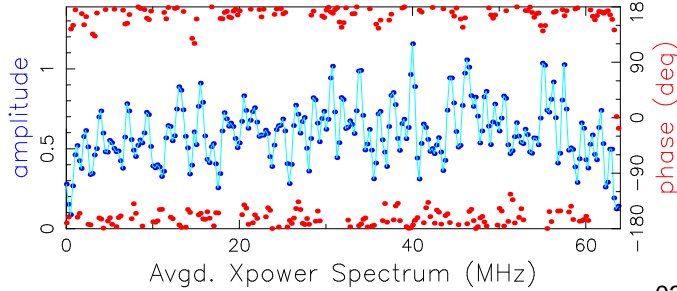


Fringe quality 3

SNR 35.1
 Int time 419.388
 Amp 0.626
 Phase -94.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000614
 MBD -0.007796
 Fringe rate (Hz)
 0.007183
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

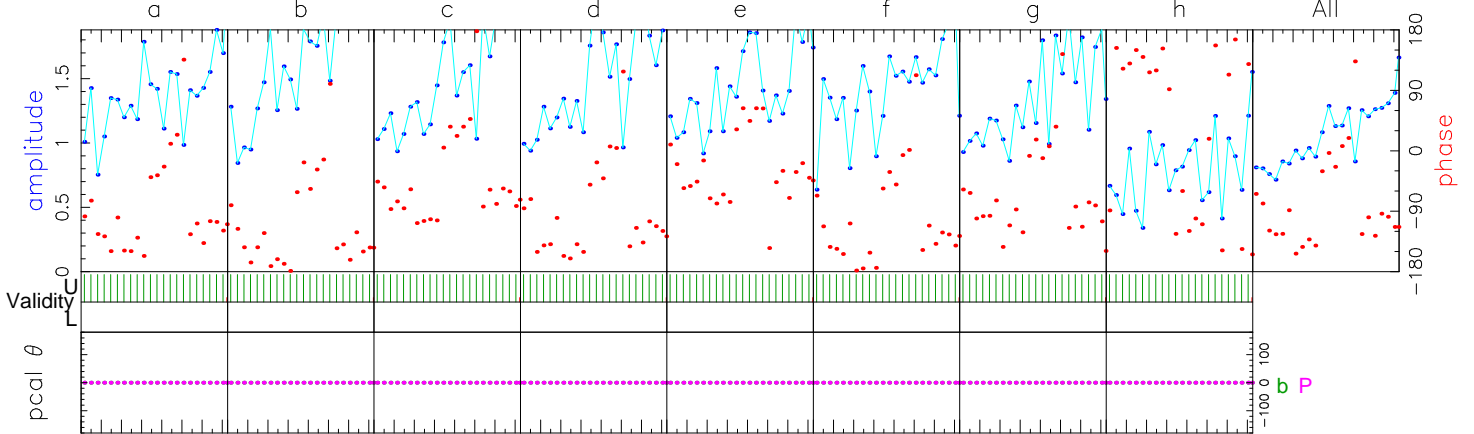


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130859
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-106.4	-129.0	-58.7	-105.5	-25.0	-123.4	-79.6	164.3	Phase	-94.8
	0.8	0.9	1.0	0.9	0.9	0.8	0.8	0.4	Ampl.	0.8
	256.2	256.4	256.6	256.1	256.3	256.3	256.0	253.9	Sbd box	256.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 1.38279155810E+04 Apriori delay (usec) 1.38279233774E+04 Resid mbdelay (usec) -7.79639E-03 +/- 3.1E-05
 Sband delay (usec) 1.38279227639E+04 Apriori clock (usec) -1.5037956E+00 Resid sbdelay (usec) -6.13500E-04 +/- 2.5E-04
 Phase delay (usec) 1.38279233743E+04 Apriori clockrate (us/s) 3.9999999E-07 Resid phdelay (usec) -3.05573E-06 +/- 1.1E-07
 Delay rate (us/s) 1.16421040804E+00 Apriori rate (us/s) 1.16421032465E+00 Resid rate (us/s) 8.33894E-08 +/- 4.3E-10
 Total phase (deg) 167.4 Apriori accel (us/s/s) -6.29206495230E-05 Resid phase (deg) -94.8 +/- 3.3

RMS Theor. Amplitude 0.626 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.5 7.8 Search (2048X32) 0.574 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 75.4 13.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 56.0 4.6 Inc. seg. avg. 1.037 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 41.6 8.1 Inc. frq. avg. 0.819 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 108.1 el 74.7 pa -57.7 P: az 308.1 el 19.3 pa 58.6 u,v (fr/asec) -9034.309 -3347.127 simultaneous interpolator

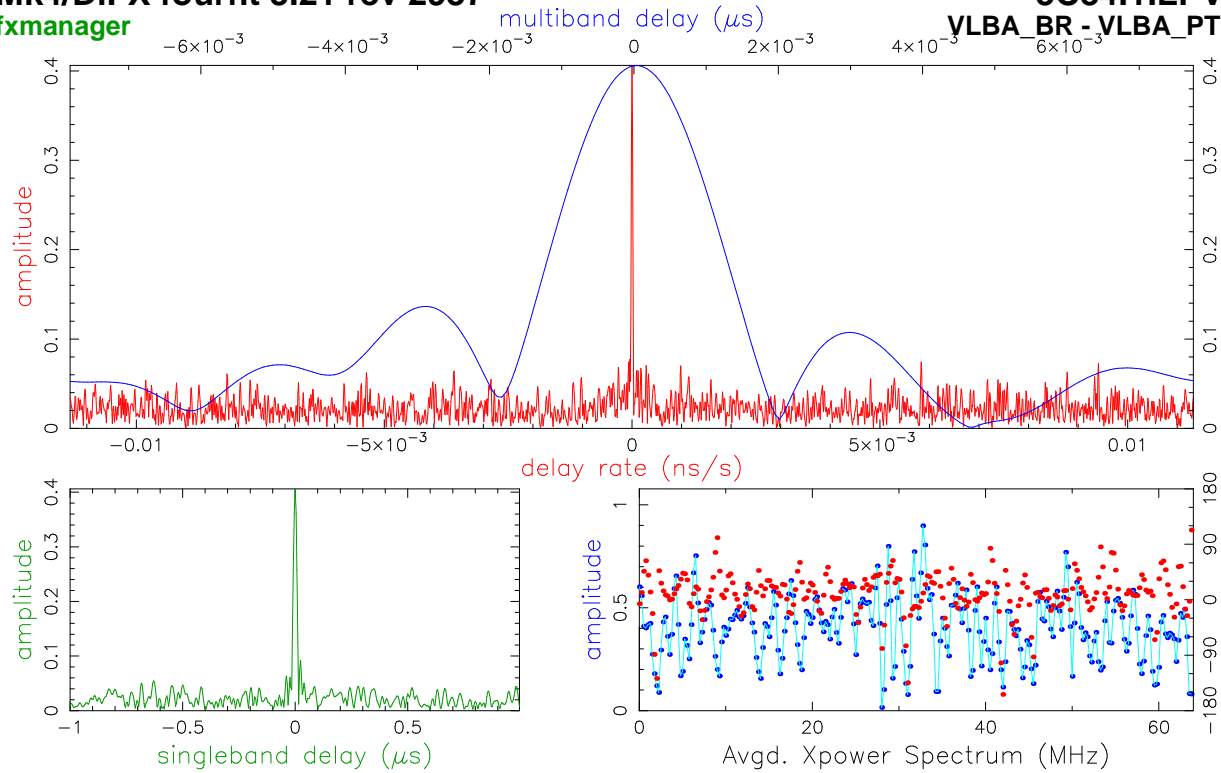
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP.W.17.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11LPVT, No0079, bp

VLBA_BR - VLBA_PT, fgroup W, pol LL

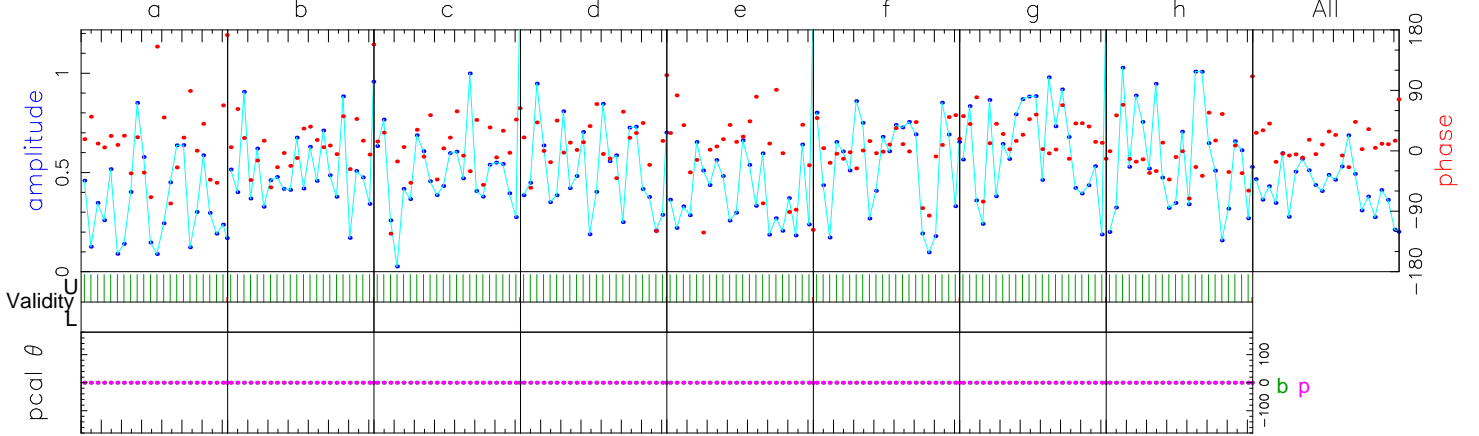


Fringe quality 9

SNR 22.8
 Int time 419.819
 Amp 0.406
 Phase 8.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.000294
 MBD 0.000031
 Fringe rate (Hz) -0.000101
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130859
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.27755484648E+02				-4.27755515679E+02				3.10312E-05	+/- 4.8E-05
Sband delay (usec)	-4.27755809679E+02				-1.7888832E+00				-2.94000E-04	+/- 3.8E-04
Phase delay (usec)	-4.27755515393E+02				-3.9999997E-07				2.85749E-07	+/- 1.6E-07
Delay rate (us/s)	1.30527942326E-01				1.30527943496E-01				-1.16983E-09	+/- 6.7E-10
Total phase (deg)			-34.6		1.58200609804E-05				8.9	+/- 5.0
Apriori delay (usec)				0.405						
Apriori clock (usec)				0.405						
Apriori clockrate (us/s)				0.000						
Apriori rate (us/s)				0.422						
Apriori accel (us/s/s)				0.408						
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										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
SampCntNorm: enabled									-0.008	0.008
mb window (us)									-0.011	0.011
dr window (ns/s)									0.00	0.00
ion window (TEC)									0.00	0.00

b: az 108.1 el 74.7 pa -57.7 p: az 38.5 el 80.4 pa -139.1 u,v (fr/asec) -971.424 2312.896 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp..11LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp.W.19.11LPVT

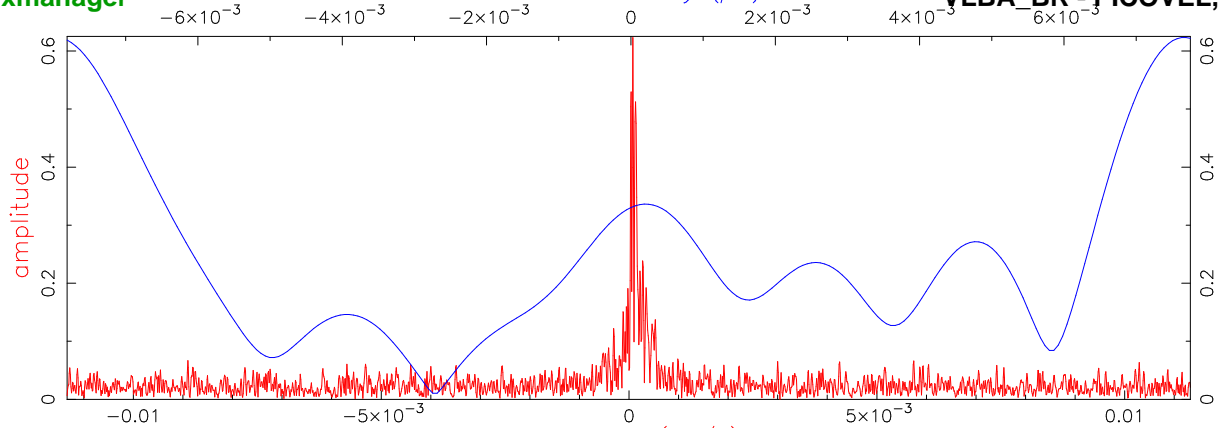
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bP

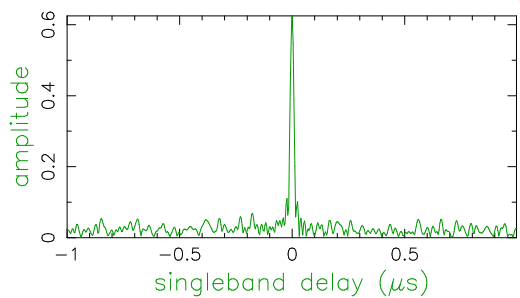
VLBA_BR - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

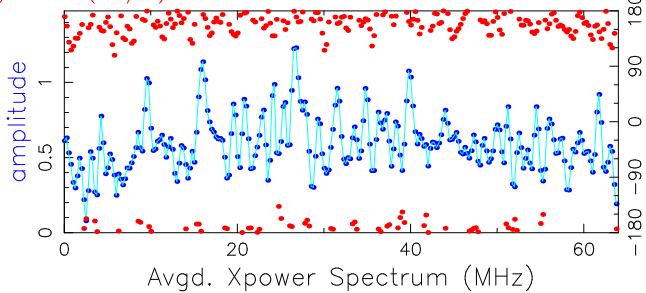


Fringe quality 4

SNR 35.0
 Int time 419.388
 Amp 0.625
 Phase -111.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.000700
 MBD -0.007975
 Fringe rate (Hz)
 0.007123
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

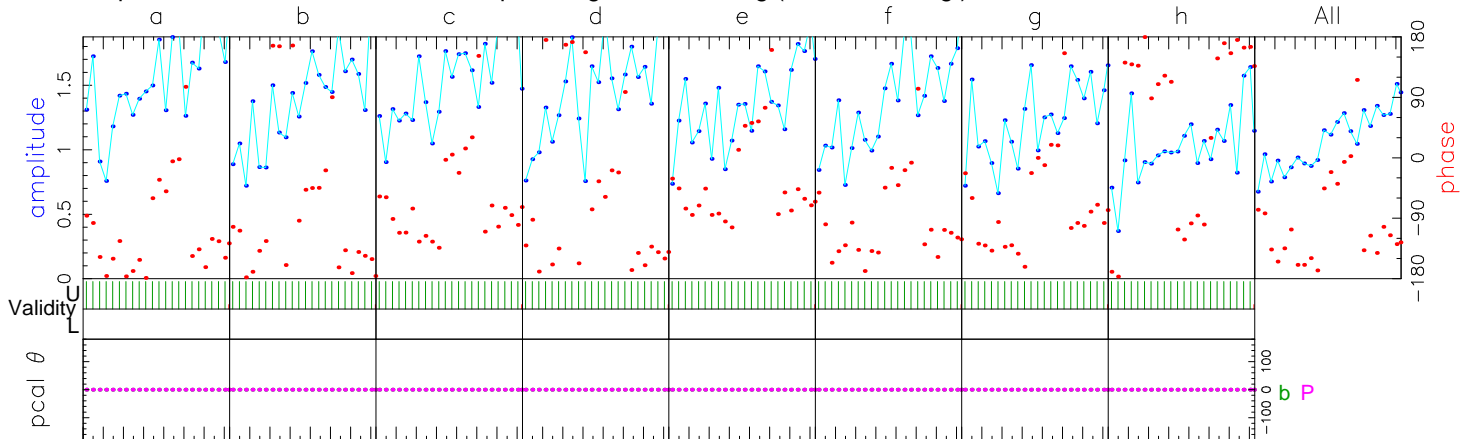


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130902
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.38279154022E+04	Apriori delay (usec)	1.38279233774E+04	Resid mbdelay (usec)	-7.97518E-03	+/-	3.1E-05
Sband delay (usec)	1.38279226774E+04	Apriori clock (usec)	-1.5037956E+00	Resid sbdelay (usec)	-7.00000E-04	+/-	2.5E-04
Phase delay (usec)	1.38279233738E+04	Apriori clockrate (us/s)	3.9999999E-07	Resid phdelay (usec)	-3.57814E-06	+/-	1.1E-07
Delay rate (us/s)	1.16421040734E+00	Apriori rate (us/s)	1.16421032465E+00	Resid rate (us/s)	8.26922E-08	+/-	4.4E-10
Total phase (deg)	151.2	Apriori accel (us/s/s)	-6.29206495230E-05	Resid phase (deg)	-111.0	+/-	3.3

ph/seg (deg)	58.4	RMS	7.8	Theor.	7.8	Amplitude	0.625 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	78.9	Search (2048X32)	0.565	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	47.9	Inc. seg. avg.	1.058	Inc. frq. avg.	0.788	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	30.9	Inc. frq. avg.	0.788	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
								ion window (TEC)	0.00	0.00	

b: az 108.1 el 74.7 pa -57.7 P: az 308.1 el 19.3 pa 58.6 u,v (fr/asec) -9034.309 -3347.127 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP.W.34.1ILPVT

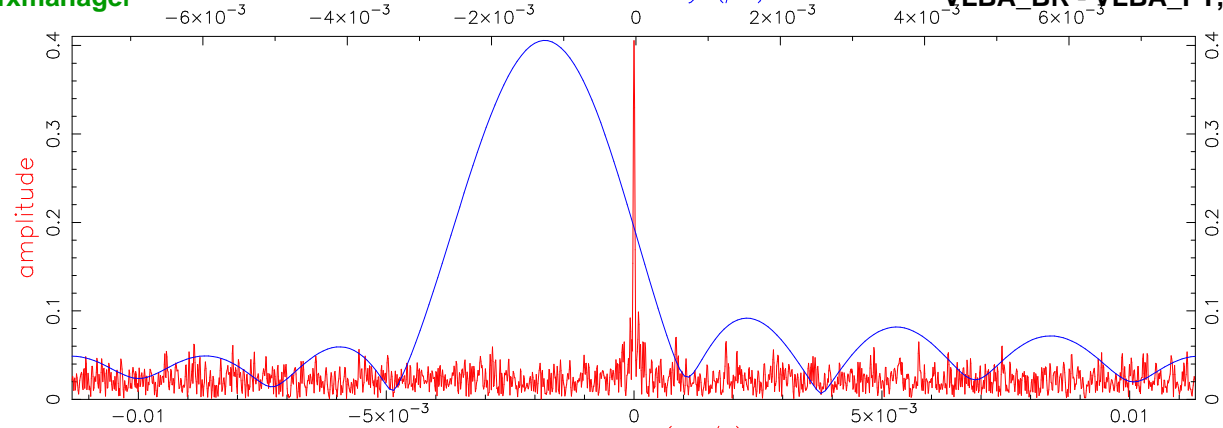
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bp

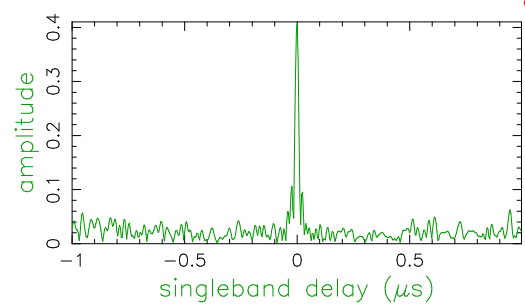
VLBA_BR - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

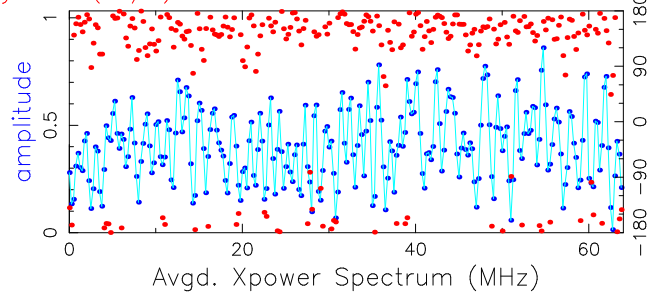


Fringe quality 9

SNR 23.0
 Int time 419.819
 Amp 0.410
 Phase 155.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001336
 MBD -0.001293
 Fringe rate (Hz)
 -0.000128
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

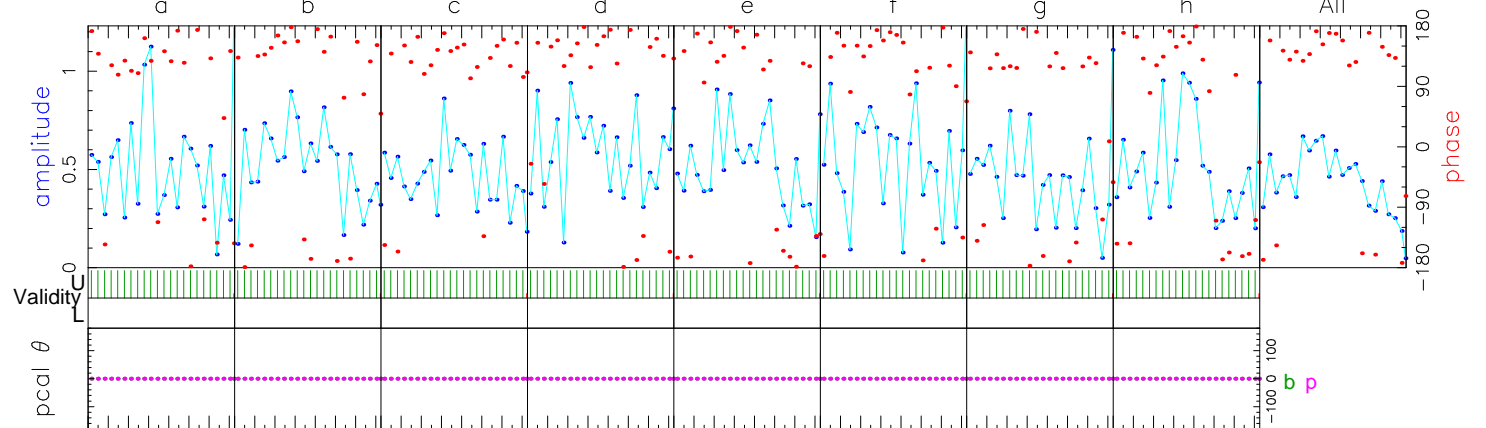


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130903
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
b	1000	1000	1000	1000	1000	1000	1000	1000				
p	1000	1000	1000	1000	1000	1000	1000	1000				
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
b	1000	1000	1000	1000	1000	1000	1000	1000				
p	1000	1000	1000	1000	1000	1000	1000	1000				
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)	-4.27756808335E+02				-4.27755515679E+02							
Sband delay (usec)	-4.27756851429E+02				-1.7888832E+00							
Phase delay (usec)	-4.27755510670E+02				-3.9999997E-07							
Delay rate (us/s)	1.30527942008E-01				1.30527943496E-01							
Total phase (deg)			111.9		1.58200609804E-05							
			Apriori delay (usec)						Resid mbdelay (usec)	-1.29266E-03	+/- 4.7E-05	
			Apriori clock (usec)						Resid sbdelay (usec)	-1.33575E-03	+/- 3.7E-04	
			Apriori clockrate (us/s)						Resid phdelay (usec)	5.00915E-06	+/- 1.6E-07	
			Apriori rate (us/s)						Resid rate (us/s)	-1.48797E-09	+/- 6.6E-10	
			Apriori accel (us/s/s)						Resid phase (deg)	155.3	+/- 5.0	
ph/seg (deg)	28.9	12.0	Search (2048X32)	0.397	PCal mode: MANUAL, MANUAL				PC period (AP's)	5, 5		
amp/seg (%)	35.7	20.9	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000	1.000	
ph/frq (deg)	8.0	7.0	Inc. seg. avg.	0.438	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	12.0	12.3	Inc. frq. avg.	0.406	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	
					nlags: 256				t_cohere infinite			

b: az 108.1 el 74.7 pa -57.7 p: az 38.5 el 80.4 pa -139.1 u,v (fr/asec) -971.424 2312.896 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp.W.39.1ILPVT

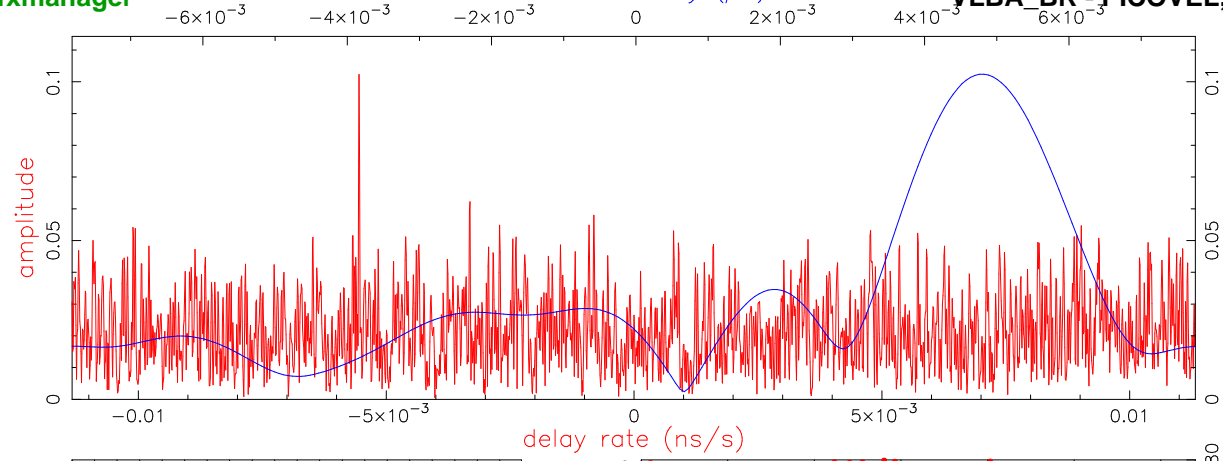
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11LPVT, No0079, bP

VLBA_BR - PICOVEL, fgroup W, pol LR

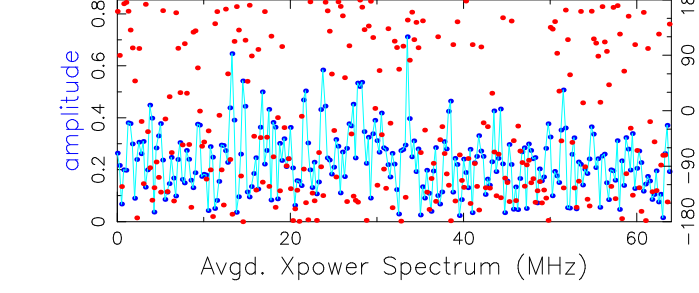
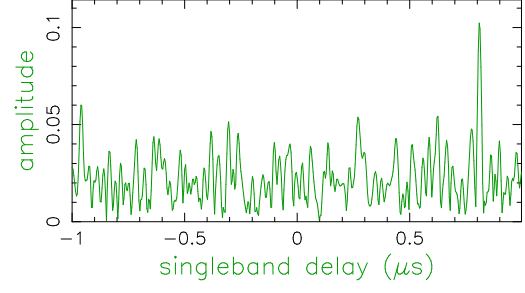
multiband delay (μ s)



Fringe quality 0

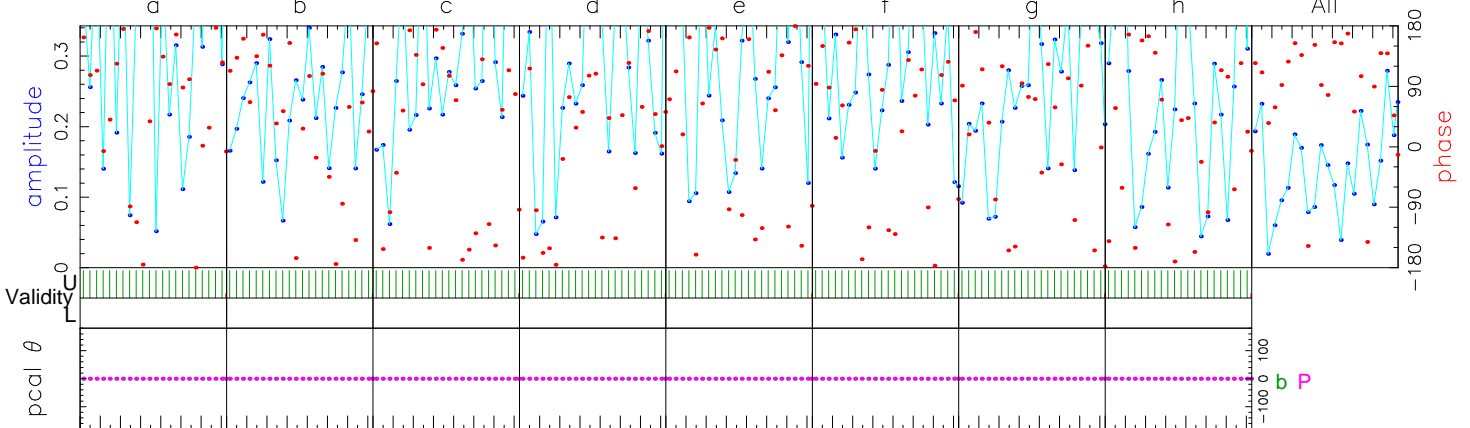
SNR 5.8
Int time 419.388
Amp 0.114
Phase 121.9
PFD 8.3e-01
Delays (us)
SBD 0.809895
MBD 0.004842
Fringe rate (Hz)
-0.478531
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084500.00
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130907
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	1.38287407190E+04		Apriori delay (usec)		1.38279233774E+04		Resid mbdelay (usec)		4.84161E-03	+/- 1.9E-04
Sband delay (usec)	1.38287332726E+04		Apriori clock (usec)		-1.5037956E+00		Resid sbdelay (usec)		8.09895E-01	+/- 1.5E-03
Phase delay (usec)	1.38279233813E+04		Apriori clockrate (us/s)		3.9999999E-07		Resid phdelay (usec)		3.93132E-06	+/- 6.4E-07
Delay rate (us/s)	1.16420476938E+00		Apriori rate (us/s)		1.16421032465E+00		Resid rate (us/s)		-5.55527E-06	+/- 2.6E-09
Total phase (deg)	24.1		Apriori accel (us/s/s)		-6.29206495230E-05		Resid phase (deg)		121.9	+/- 19.8

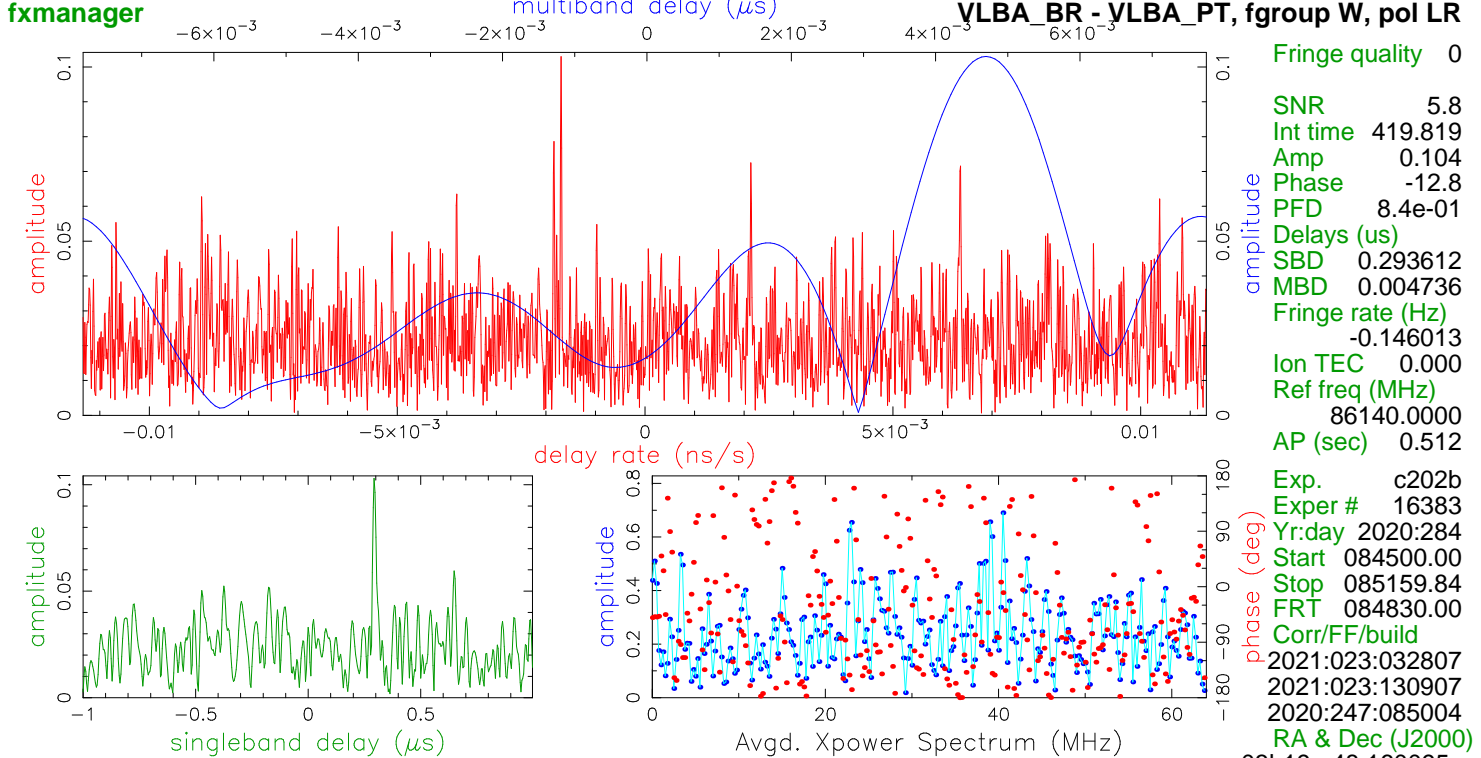
ph/seg (deg) 49.7 47.5 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.8 82.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.4 28.0 Inc. seg. avg. 0.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.6 48.9 Inc. frq. avg. 0.109 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 P: az 308.1 el 19.3 pa 58.6 u,v (fr/asec) -9034.309 -3347.127 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP..11LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP.W.55.11LPVT

Mk4/DiFX fourfit 3.21 rev 2937

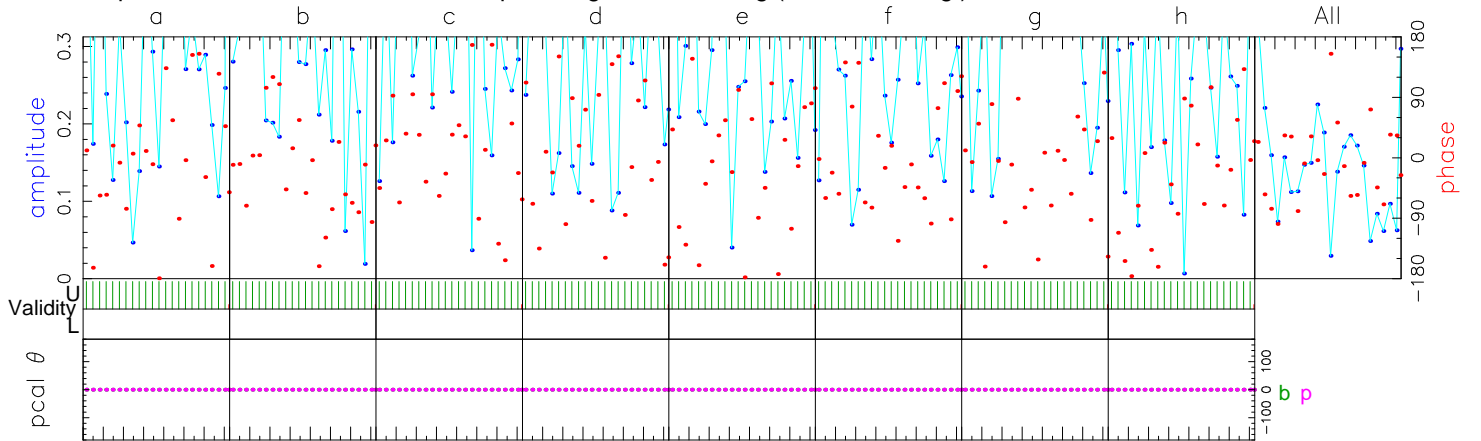
fxmanager

3C84.1ILPVT, No0079, bp

VLBA_BR - VLBA_PT, fgroup W, pol LR



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-13.2	-22.1	1.2	-52.1	62.8	-36.7	-15.6	-19.1	Phase	-12.8
	0.1	0.2	0.2	0.0	0.1	0.1	0.1	0.1	Ampl.	0.1
	421.3	332.0	334.6	166.1	185.7	409.2	221.4	211.4	Sbd box	332.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.27469529963E+02		Apriori delay (usec)	-4.27755515679E+02		Resid mbdelay (usec)	4.73572E-03		+/-	1.9E-04
Sband delay (usec)	-4.27461903929E+02		Apriori clock (usec)	-1.7888832E+00		Resid sbdelay (usec)	2.93612E-01		+/-	1.5E-03
Phase delay (usec)	-4.27755516091E+02		Apriori clockrate (us/s)	-3.9999997E-07		Resid phdelay (usec)	-4.12188E-07		+/-	6.4E-07
Delay rate (us/s)	1.30526248425E-01		Apriori rate (us/s)	1.30527943496E-01		Resid rate (us/s)	-1.69507E-06		+/-	2.6E-09
Total phase (deg)		-56.2	Apriori accel (us/s/s)	1.58200609804E-05		Resid phase (deg)	-12.8		+/-	19.8

	RMS	Theor.	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	58.9	47.5	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	76.8	82.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.9	28.0	Inc. seg. avg.	0.106	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	45.5	48.9	Inc. frq. avg.	0.103	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 108.1 el 74.7 pa -57.7 p: az 38.5 el 80.4 pa -139.1 u,v (fr/asec) -971.424 2312.896 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp.W.59.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

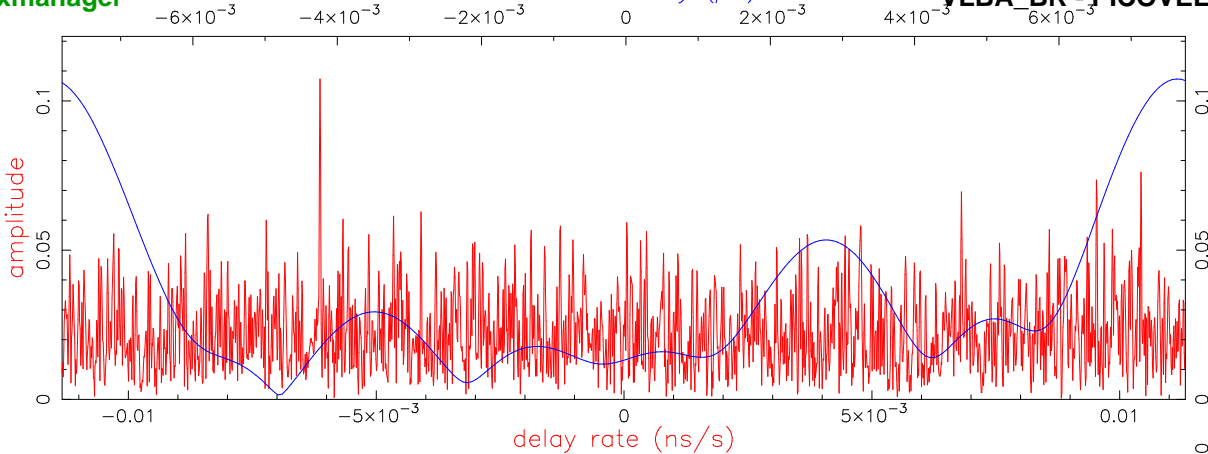
fxmanager

3C84.11LPVT, No0079, bP

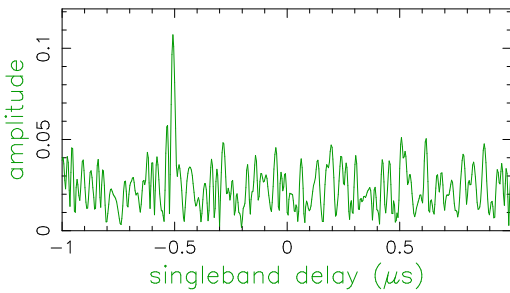
VLBA_BR - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

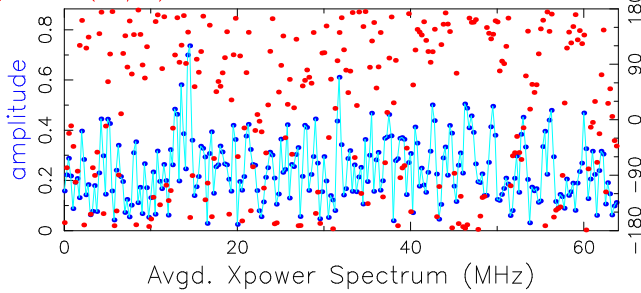
Fringe quality 0



SNR 6.0
 Int time 419.388
 Amp 0.122
 Phase 151.6
 PFD 3.7e-01
 Delays (us)
 SBD -0.507403
 MBD -0.007981
 Fringe rate (Hz)
 -0.529201
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

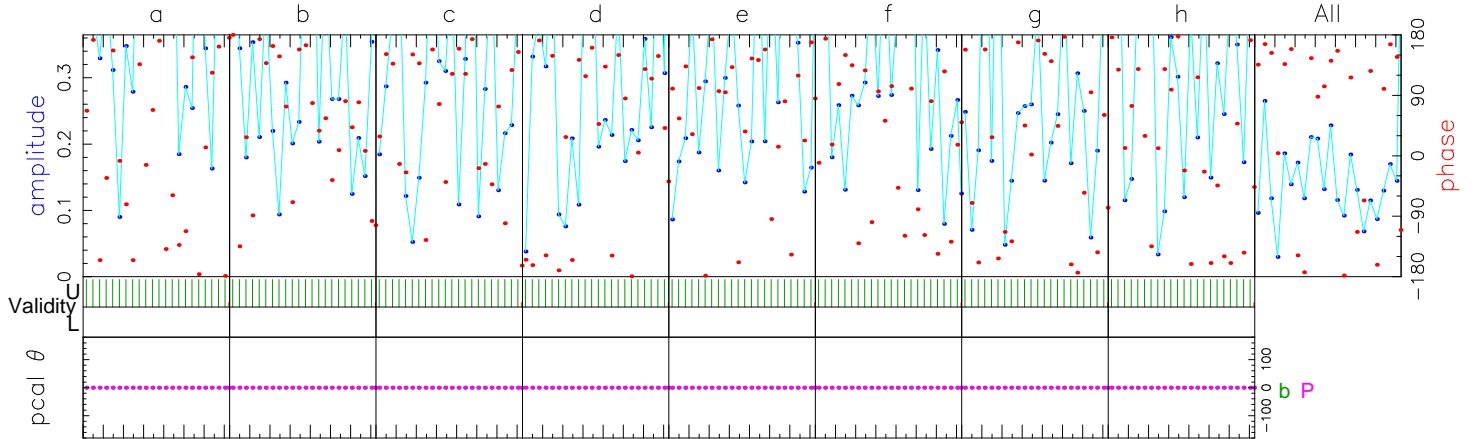


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130910
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-178.2	118.8	144.8	148.2	127.6	146.4	169.7	161.6	Phase	151.6
	0.2	0.1	0.1	0.2	0.2	0.0	0.1	0.1	Ampl.	0.1
	205.2	184.2	458.7	126.1	372.0	246.7	167.9	121.0	Sbd box	127.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.38274153960E+04	Apriori delay (usec)	1.38279233774E+04	Resid mbdelay (usec)	-7.98137E-03	+/-	1.8E-04
Sband delay (usec)	1.38274159739E+04	Apriori clock (usec)	-1.5037956E+00	Resid sbdelay (usec)	-5.07403E-01	+/-	1.4E-03
Phase delay (usec)	1.38279233823E+04	Apriori clockrate (us/s)	3.9999999E-07	Resid phdelay (usec)	4.88882E-06	+/-	6.1E-07
Delay rate (us/s)	1.16420418115E+00	Apriori rate (us/s)	1.16421032465E+00	Resid rate (us/s)	-6.14349E-06	+/-	2.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-6.29206495230E-05	Resid phase (deg)	151.6	+/-	19.0

ph/seg (deg)	57.2	Theor.	45.7	Amplitude	0.122 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.3		79.7	Search (2048X32)	0.105	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.6		26.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	40.6		47.0	Inc. seg. avg.	0.125	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.116	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 108.1 el 74.7 pa -57.7 P: az 308.1 el 19.3 pa 58.6 u,v (fr/asec) -9034.309 -3347.127 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP..11LPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bP.W.72.11LPVT

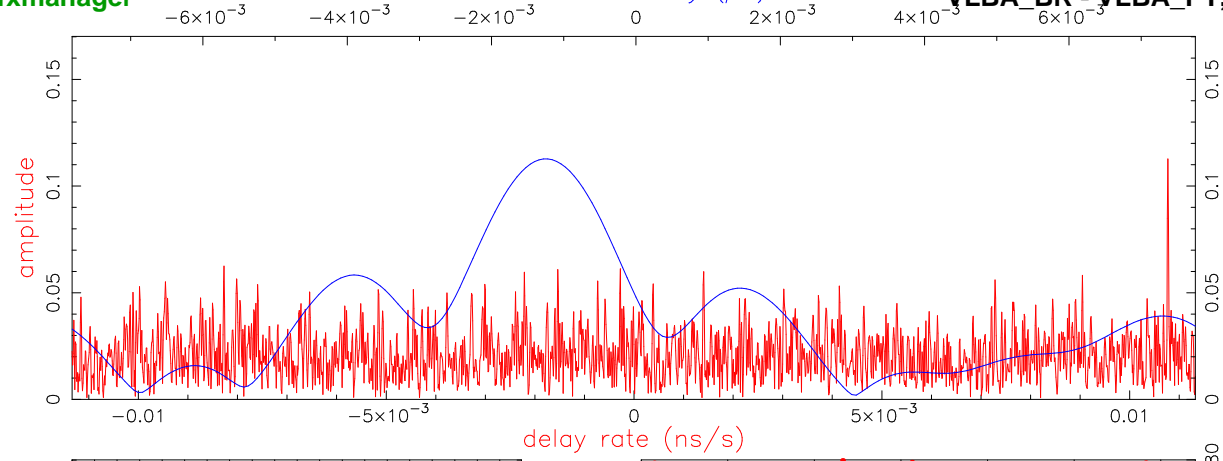
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

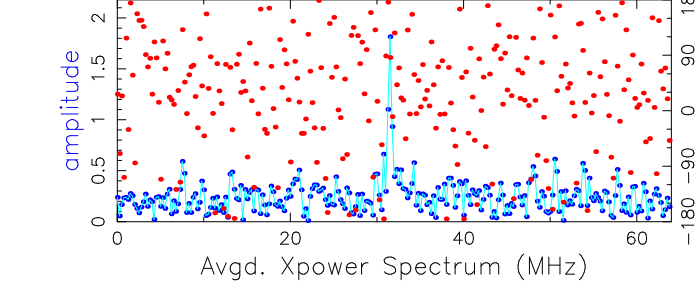
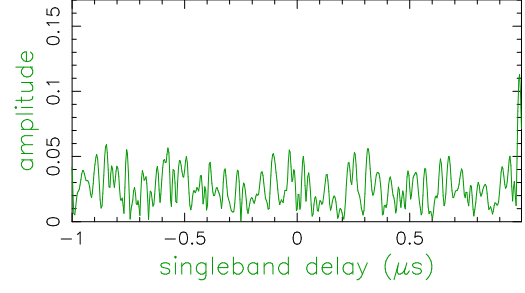
3C84.1ILPVT, No0079, bp

VLBA_BR - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

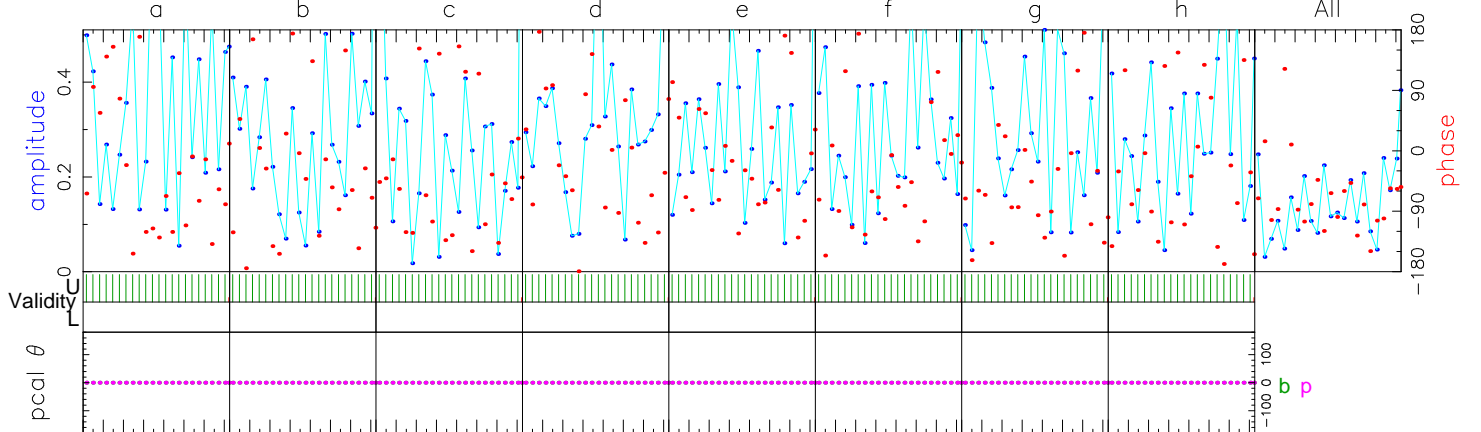


Fringe quality 0
 SNR 6.4
 Int time 419.819
 Amp 0.170
 Phase -78.9
 PFD 5.3e-02
 Delays (us)
 SBD 0.987182
 MBD -0.001271
 Fringe rate (Hz)
 0.929122
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130911
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-106.0	-81.0	-77.2	-10.7	-41.5	-75.6	-85.1	-111.0	Phase	-78.9
	0.3	0.1	0.2	0.1	0.2	0.2	0.3	0.2	Ampl.	0.2
	509.7	63.5	335.8	459.1	463.2	129.4	110.7	17.2	Sbd box	509.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.26772411496E+02		Apriori delay (usec)		-4.27755515679E+02		Resid mbdelay (usec)		-1.27082E-03	+/- 1.7E-04
Sband delay (usec)	-4.26768333429E+02		Apriori clock (usec)		-1.7888832E+00		Resid sbdelay (usec)		9.87182E-01	+/- 1.4E-03
Phase delay (usec)	-4.27755518223E+02		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-2.54365E-06	+/- 5.8E-07
Delay rate (us/s)	1.30538729682E-01		Apriori rate (us/s)		1.30527943496E-01		Resid rate (us/s)		1.07862E-05	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.58200609804E-05		Resid phase (deg)		-78.9	+/- 18.0

ph/seg (deg) 50.9 43.2 Search (2048X32) 0.170 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.4 75.4 Interp. 0.109 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.2 25.5 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.0 44.5 Inc. frq. avg. 0.173 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 p: az 38.5 el 80.4 pa -139.1 u,v (fr/asec) -971.424 2312.896 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bp.W.75.1ILPVT

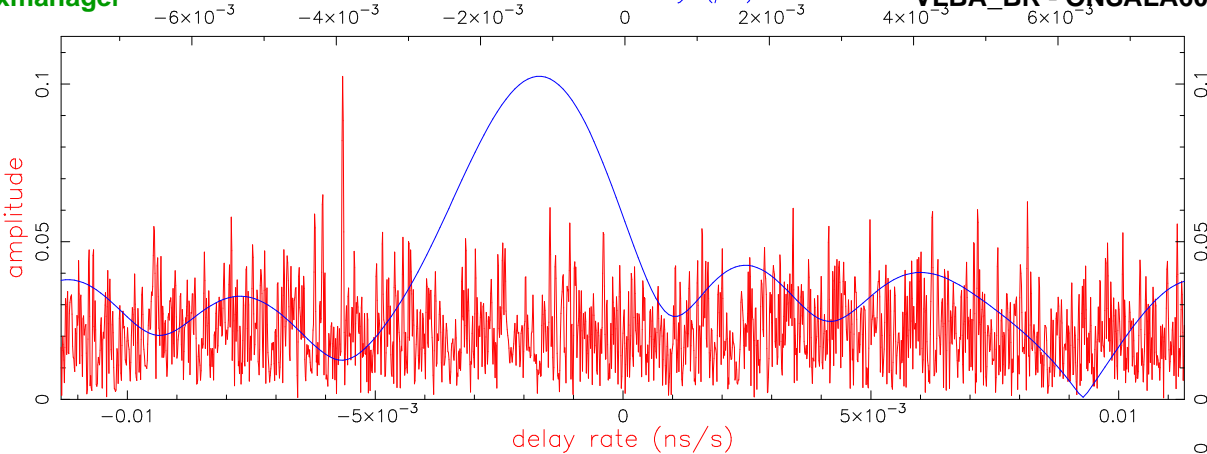
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bX

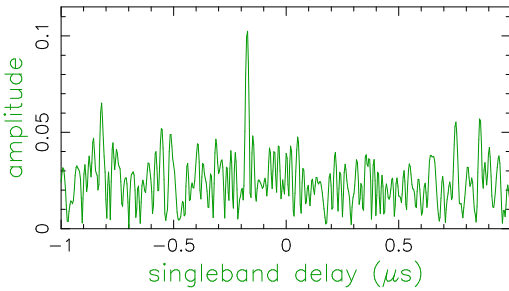
VLBA_BR - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

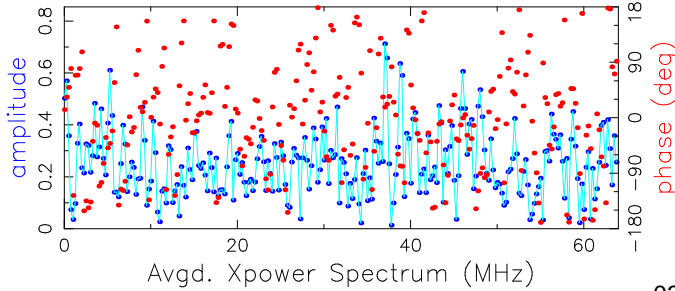


Fringe quality 0

SNR 5.8
Int time 419.804
Amp 0.115
Phase 173.6
PFD 8.0e-01
Delays (us)
SBD -0.173252
MBD -0.001217
Fringe rate (Hz)
-0.488335
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

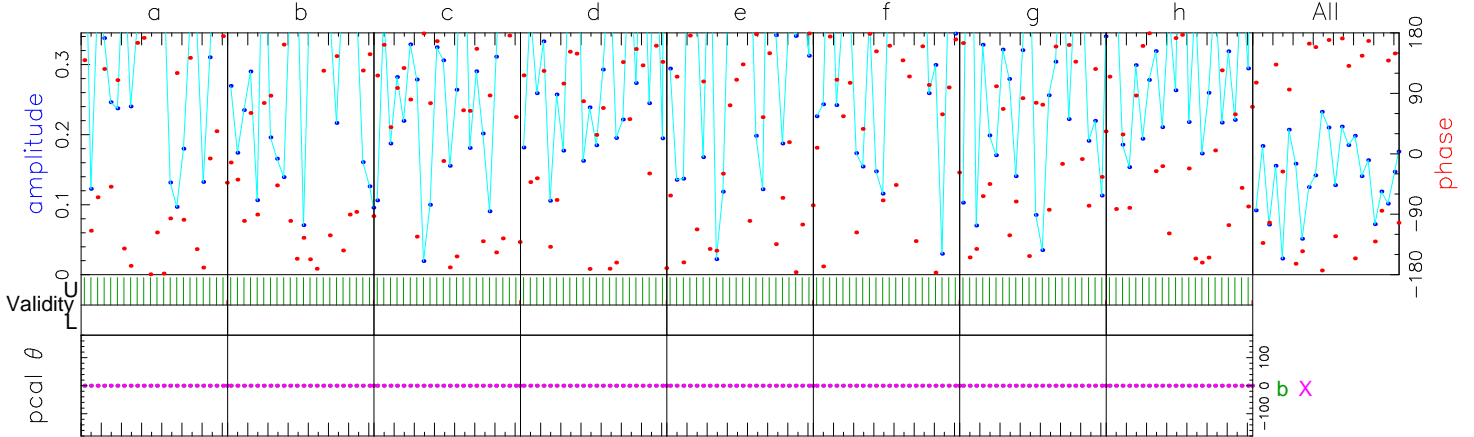


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 084500.00
Stop 085159.84
FRT 084830.00
Corr/FF/build
2021:023:032807
2021:023:130920
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.3	-149.7	136.4	140.8	-171.8	151.3	-146.1	-129.3	Phase	173.6
	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	212.0	397.0	44.2	160.7	87.1	212.7	389.7	232.7	Sbd box	212.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

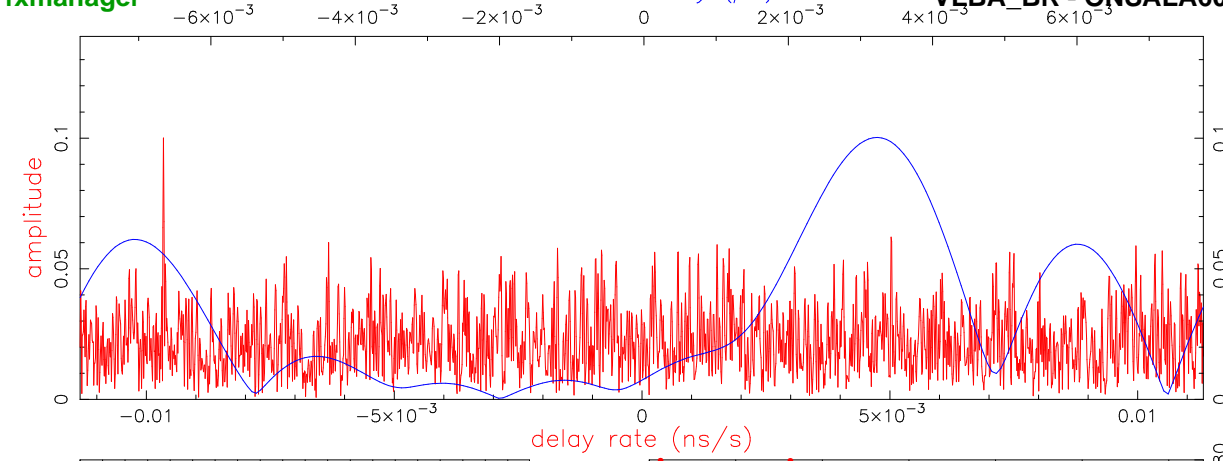
Group delay (usec)(sbd)	1.20475726904E+04	Apriori delay (usec)	1.20477457819E+04	Resid mbdelay (usec)	-1.21652E-03	+/-	1.9E-04
Sband delay (usec)	1.20475725294E+04	Apriori clock (usec)	-5.0047554E+01	Resid sbdelay (usec)	-1.73252E-01	+/-	1.5E-03
Phase delay (usec)	1.20477457875E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	5.59868E-06	+/-	6.4E-07
Delay rate (us/s)	8.21607958482E-01	Apriori rate (us/s)	8.21613627570E-01	Resid rate (us/s)	-5.66909E-06	+/-	2.6E-09
Total phase (deg)	48.8	Apriori accel (us/s/s)	-7.16643039584E-05	Resid phase (deg)	173.6	+/-	19.7

ph/seg (deg)	58.0	Theor.	47.3	Amplitude	0.115 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	64.7	Search (2048X32)	0.101	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	Inc. seg. avg.	0.118	Inc. frq. avg.	0.117	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.0	Inc. frq. avg.	0.117			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	

b: az 108.1 el 74.7 pa -57.7 X: az 310.6 el 24.1 pa 32.9 u,v (fr/asec) -6425.173 -5573.748 simultaneous interpolator

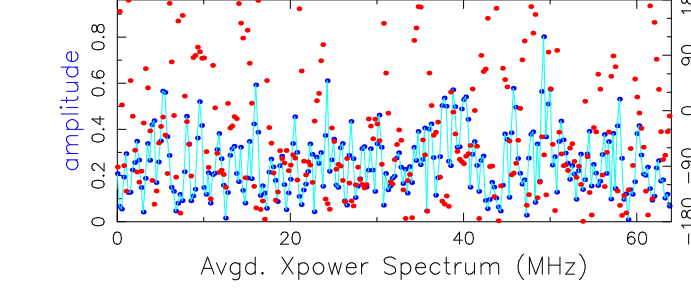
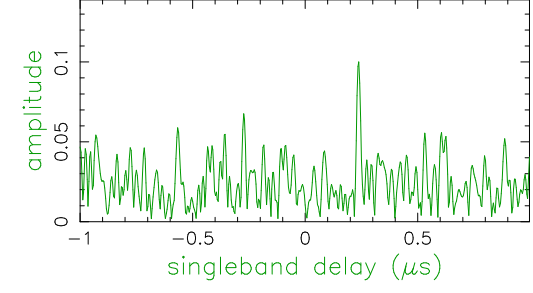
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX.W.111.1ILPVT

multiband delay (μ s)



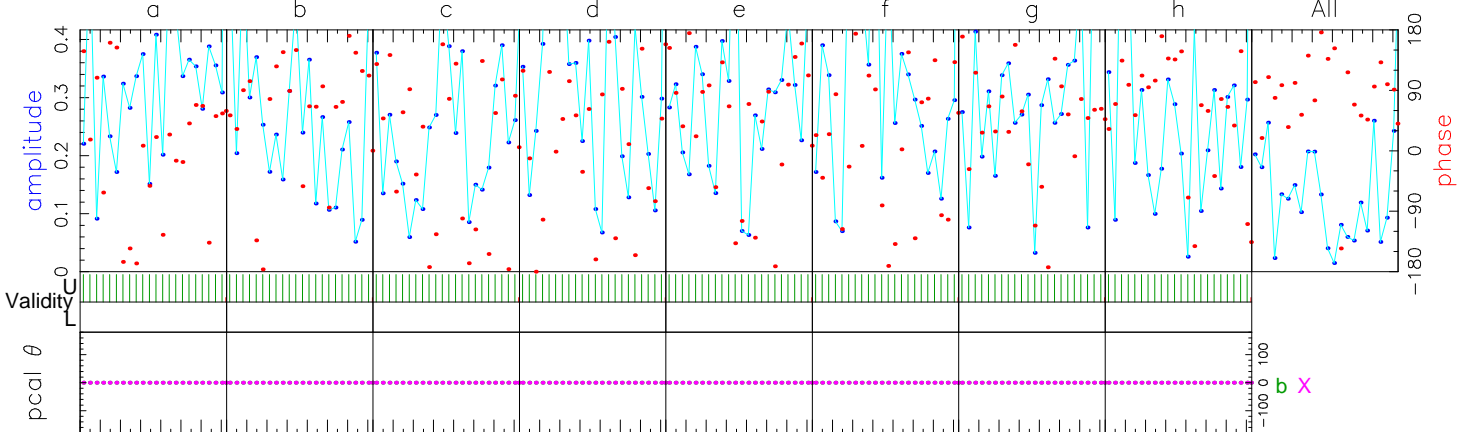
Fringe quality 0

SNR 5.7
 Int time 419.804
 Amp 0.139
 Phase 92.4
 PFD 9.8e-01
 Delays (us)
 SBD 0.236970
 MBD 0.003157
 Fringe rate (Hz)
 -0.832774
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130924
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.20479833140E+04	Apriori delay (usec)	1.20477457819E+04	Resid mbdelay (usec)	3.15707E-03	+/-	1.9E-04
Sband delay (usec)	1.20479827524E+04	Apriori clock (usec)	-5.0047554E+01	Resid sbdelay (usec)	2.36970E-01	+/-	1.5E-03
Phase delay (usec)	1.20477457849E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	2.97865E-06	+/-	6.5E-07
Delay rate (us/s)	8.21603959893E-01	Apriori rate (us/s)	8.21613627570E-01	Resid rate (us/s)	-9.66768E-06	+/-	2.7E-09
Total phase (deg)	327.6	Apriori accel (us/s/s)	-7.16643039584E-05	Resid phase (deg)	92.4	+/-	20.3

ph/seg (deg)	46.5	Theor.	48.6	Amplitude	0.139 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	85.0		84.8	Search (2048X32)	0.097	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	34.9		28.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	38.6		50.0	Inc. seg. avg.	0.132	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.140	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 108.1 el 74.7 pa -57.7 X: az 310.6 el 24.1 pa 32.9 u,v (fr/asec) -6425.173 -5573.748 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX.W.131.1ILPVT

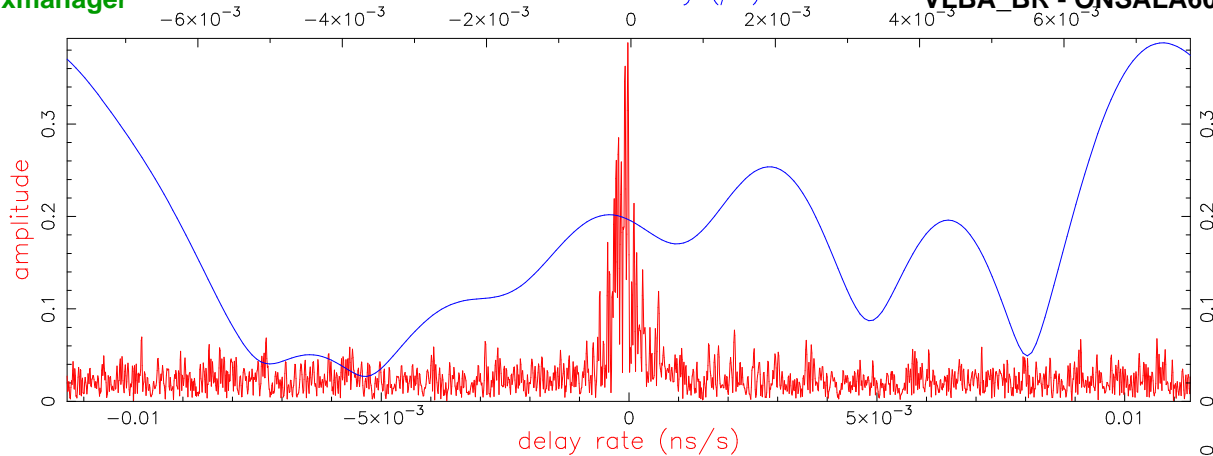
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bX

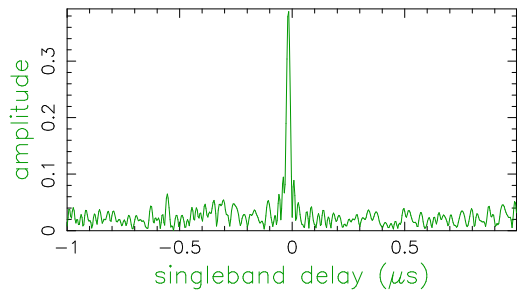
VLBA_BR - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

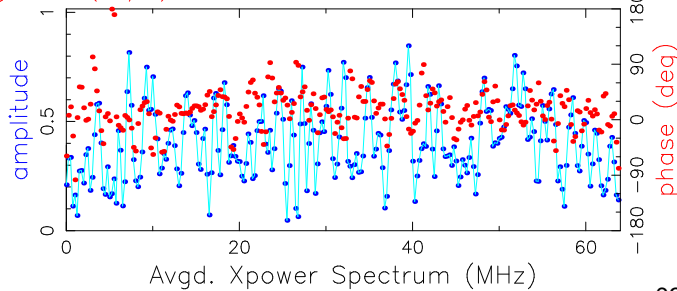


Fringe quality 7

SNR 22.0
 Int time 419.804
 Amp 0.393
 Phase 92.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.017063
 MBD 0.007351
 Fringe rate (Hz)
 -0.002014
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

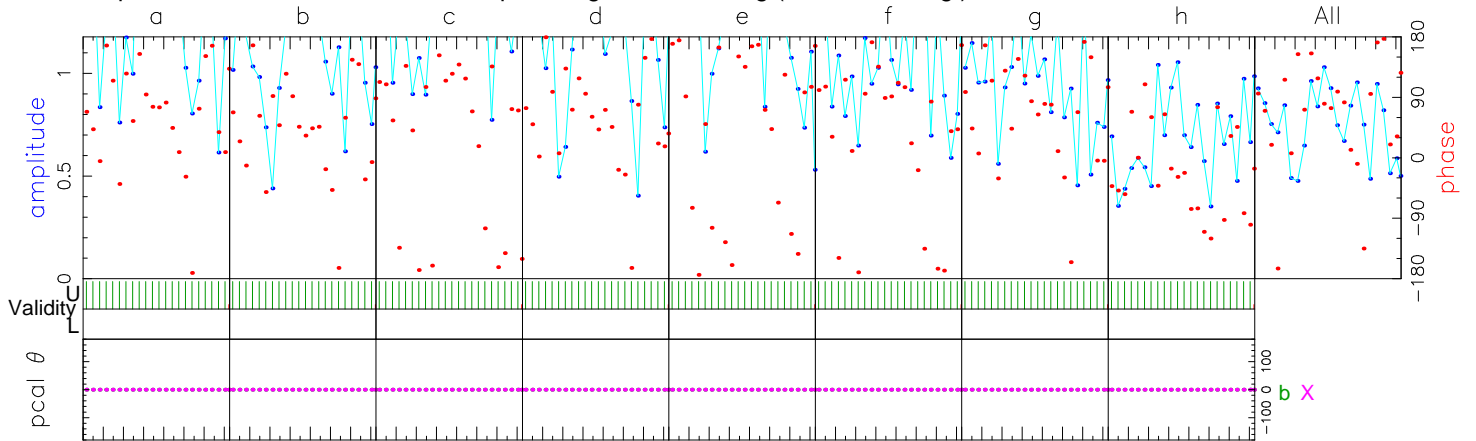


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130913
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



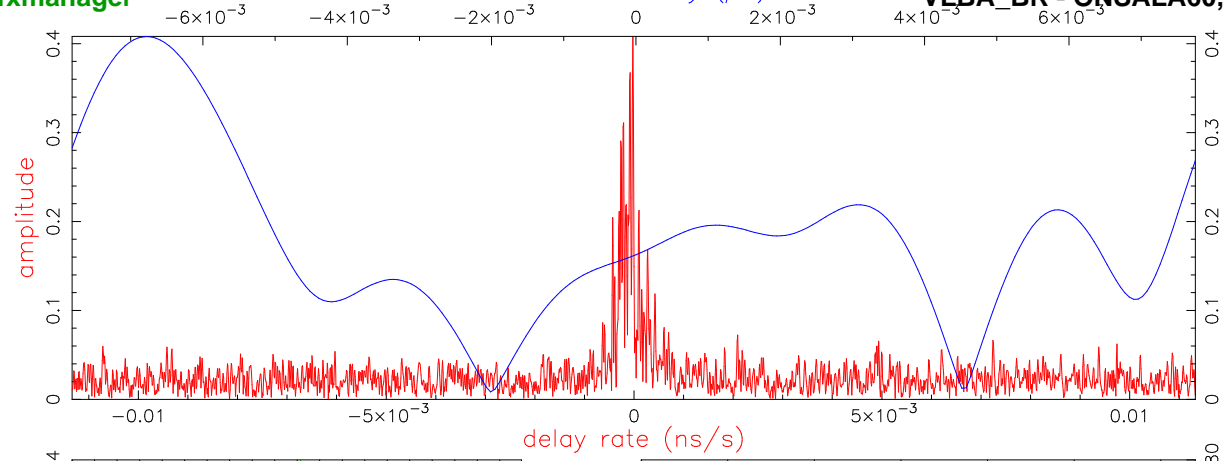
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	1.20477218830E+04	Apriori delay (usec)	1.20477457819E+04	Resid mbdelay (usec)	7.35114E-03	+/-	4.9E-05
Sband delay (usec)	1.20477287189E+04	Apriori clock (usec)	-5.0047554E+01	Resid sbdelay (usec)	-1.70630E-02	+/-	3.9E-04
Phase delay (usec)	1.20477457849E+04	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	2.98175E-06	+/-	1.7E-07
Delay rate (us/s)	8.21613604190E-01	Apriori rate (us/s)	8.21613627570E-01	Resid rate (us/s)	-2.33803E-08	+/-	6.9E-10
Total phase (deg)	327.7	Apriori accel (us/s/s)	-7.16643039584E-05	Resid phase (deg)	92.5	+/-	5.2

ph/seg (deg)	64.0	RMS	12.5	Theor.	12.5	Amplitude	0.393 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	103.2	Search (2048X32)	0.386	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	63.5	Inc. seg. avg.	0.744	Inc. frq. avg.	0.543	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	48.4	Inc. frq. avg.	0.543	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite

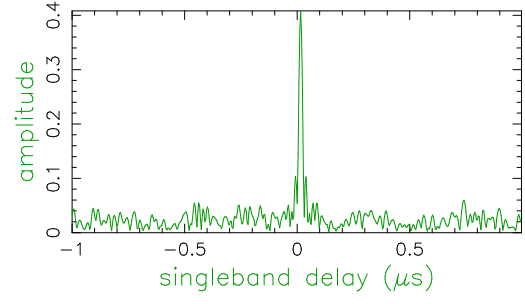
b: az 108.1 el 74.7 pa -57.7 X: az 310.6 el 24.1 pa 32.9 u,v (fr/asec) -6425.173 -5573.748 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX.W.77.1ILPVT

multiband delay (μ s)

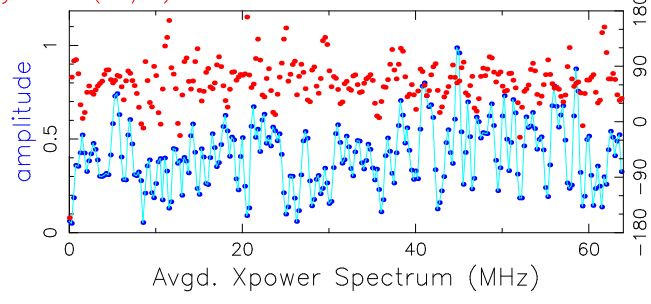


Fringe quality 7

SNR 22.9
 Int time 419.804
 Amp 0.408
 Phase -41.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.015333
 MBD -0.006789
 Fringe rate (Hz)
 -0.002004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

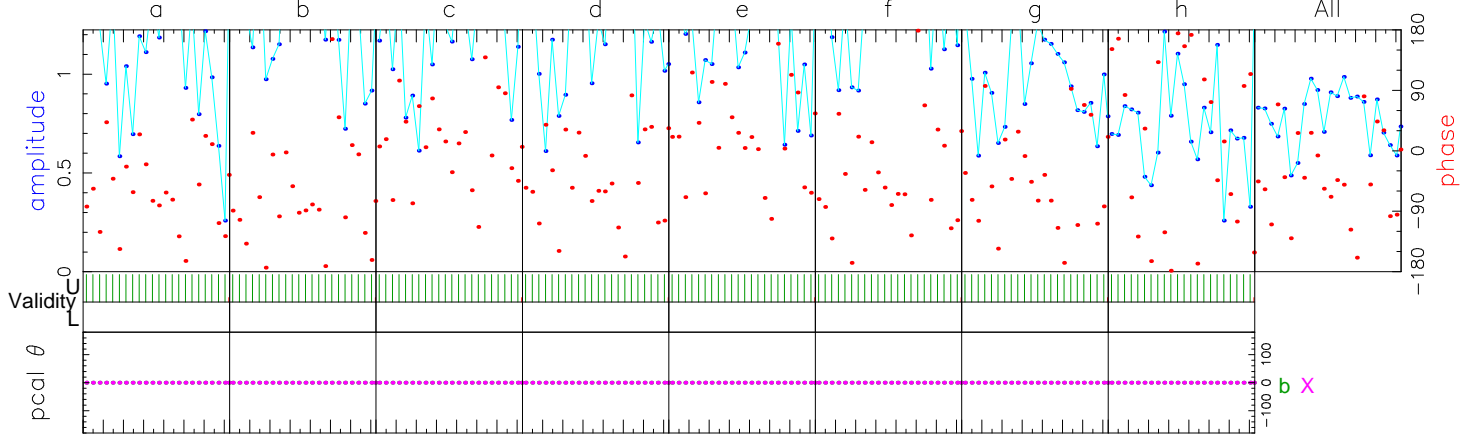


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130917
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.7	-78.8	16.4	-46.5	19.6	-55.7	-49.5	177.8		-41.5
	0.7	0.7	0.6	0.6	0.5	0.7	0.4	0.3		0.6
	261.0	261.2	261.0	260.5	260.0	260.2	259.6	257.8		260.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
b:X	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
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	1.20477546179E+04		Apriori delay (usec)		1.20477457819E+04		Resid mbdelay (usec)		-6.78905E-03	+/- 4.7E-05
Sband delay (usec)	1.20477611144E+04		Apriori clock (usec)		-5.0047554E+01		Resid sbdelay (usec)		1.53325E-02	+/- 3.8E-04
Phase delay (usec)	1.20477457806E+04		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-1.33873E-06	+/- 1.6E-07
Delay rate (us/s)	8.21613604301E-01		Apriori rate (us/s)		8.21613627570E-01		Resid rate (us/s)		-2.32683E-08	+/- 6.7E-10
Total phase (deg)	193.7		Apriori accel (us/s/s)		-7.16643039584E-05		Resid phase (deg)		-41.5	+/- 5.0

	RMS	Theor.	Amplitude	0.408 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	63.7	12.0	Search (2048X32)	0.406	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	97.7	21.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	69.2	7.1	Inc. seg. avg.	0.765	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	49.7	12.4	Inc. frq. avg.	0.553	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

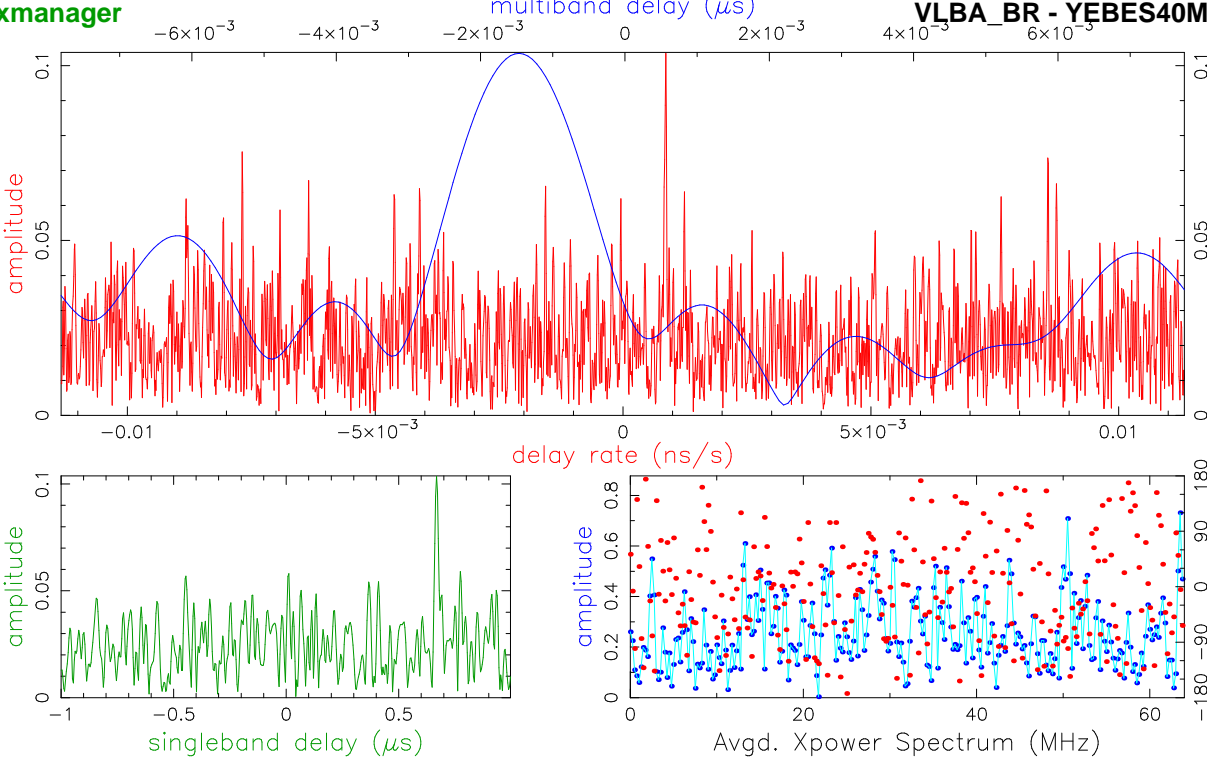
b: az 108.1 el 74.7 pa -57.7 X: az 310.6 el 24.1 pa 32.9 u,v (fr/asec) -6425.173 -5573.748 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bX.W.92.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

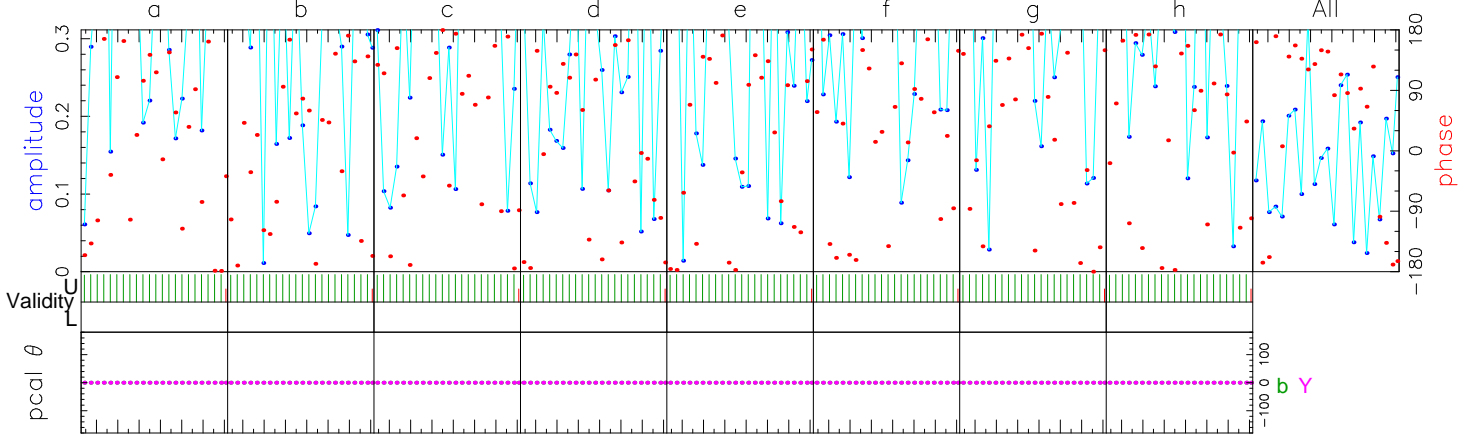
3C84.1ILPVT, No0079, bY

VLBA_BR - YEYES40M, fgroup W, pol LR



Fringe quality 0
 SNR 5.7
 Int time 402.380
 Amp 0.104
 Phase 142.3
 PFD 9.6e-01
 Delays (us)
 SBD 0.668187
 MBD -0.001466
 Fringe rate (Hz)
 0.074309
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084516.90
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130920
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 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	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.31362642034E+04				1.31355937944E+04			Resid mbdelay (usec)	-1.46600E-03 +/- 1.9E-04
Sband delay (usec)		1.31362619812E+04				-1.5397541E+01			Resid sbdelay (usec)	6.68187E-01 +/- 1.5E-03
Phase delay (usec)		1.31355937990E+04				-1.2000000E-07			Resid phdelay (usec)	4.59006E-06 +/- 6.5E-07
Delay rate (us/s)		1.11992111630E+00				1.11992025365E+00			Resid rate (us/s)	8.62653E-07 +/- 2.8E-09
Total phase (deg)			305.6			-6.28222608846E-05			Resid phase (deg)	142.3 +/- 20.2

	RMS	Theor.	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	59.4	48.4	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	84.7	84.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	31.4	28.5	Inc. seg. avg.	0.108	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.2	49.8	Inc. frq. avg.	0.100	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

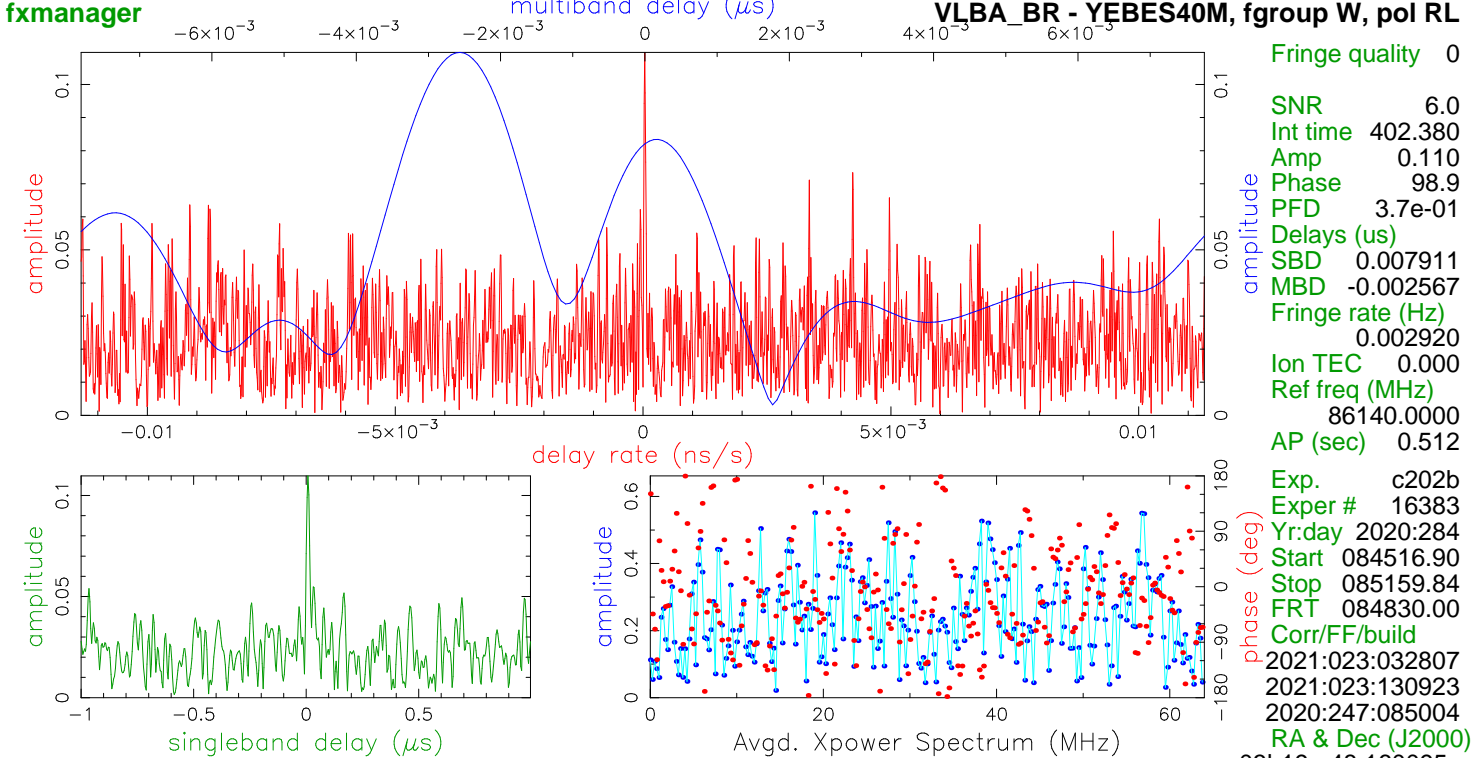
b: az 108.1 el 74.7 pa -57.7 Y: az 307.2 el 21.2 pa 53.6 u,v (fr/asec) -8694.436 -3654.529 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY.W.110.1ILPVT

Mk4/DiFX fourfit 3.21 rev 2937

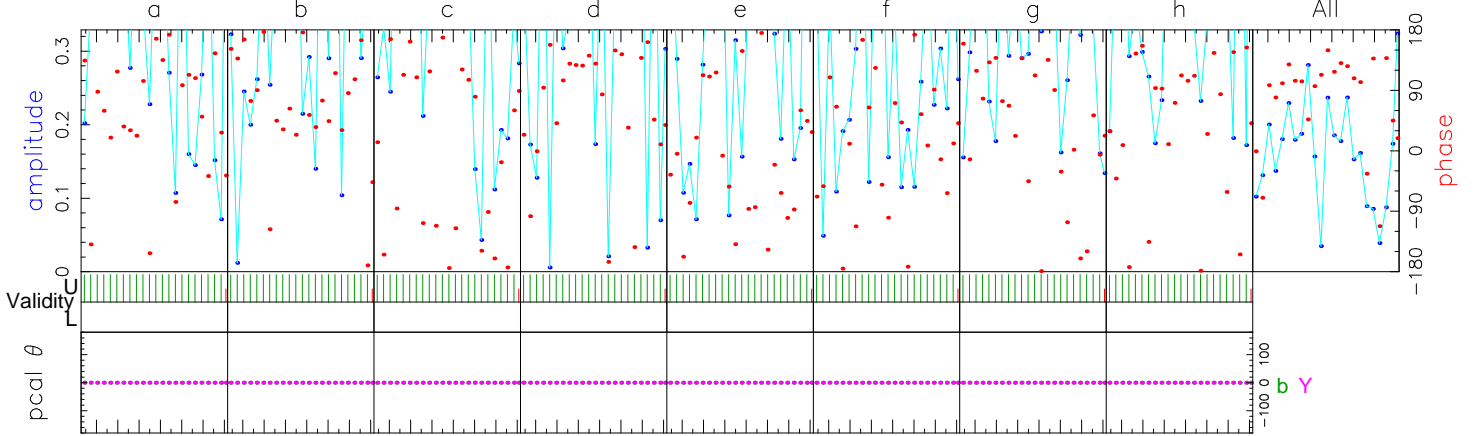
fxmanager

3C84.1ILPVT, No0079, bY

VLBA_BR - YEYES40M, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 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
82.3	87.7	162.9	105.5	-42.6	34.0	101.4	101.9	101.9	Phase	98.9
0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
52.9	259.3	398.2	258.7	194.7	295.9	256.1	462.9	462.9	Sbd box	259.0
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.31356068527E+04	Apriori delay (usec)	1.31355937944E+04	Resid mbdelay (usec)	-2.56675E-03	+/-	1.8E-04
Sband delay (usec)	1.31356017059E+04	Apriori clock (usec)	-1.5397541E+01	Resid sbdelay (usec)	7.91150E-03	+/-	1.4E-03
Phase delay (usec)	1.31355937976E+04	Apriori clockrate (us/s)	-1.2000000E-07	Resid phdelay (usec)	3.18811E-06	+/-	6.1E-07
Delay rate (us/s)	1.11992028755E+00	Apriori rate (us/s)	1.11992025365E+00	Resid rate (us/s)	3.38981E-08	+/-	2.6E-09
Total phase (deg)	262.2	Apriori accel (us/s/s)	-6.28222608846E-05	Resid phase (deg)	98.9	+/-	19.0

ph/seg (deg)	65.4	RMS	45.7	Theor.	45.7	Amplitude	0.110 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	76.2	65.4	45.7	45.7	45.7	Search (2048X32)	0.109	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	69.3	76.2	79.7	79.7	79.7	Interp.	0.000	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	57.5	69.3	26.9	26.9	26.9	Inc. seg. avg.	0.122	Data rate (Mb/s):	2048	nlags:	256	ion window (TEC)	0.00	0.00
		57.5	47.0	47.0	47.0	Inc. frq. avg.	0.124			t_cohere:	infinite			

b: az 108.1 el 74.7 pa -57.7 Y: az 307.2 el 21.2 pa 53.6 u,v (fr/asec) -8694.436 -3654.529 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY.W.129.1ILPVT

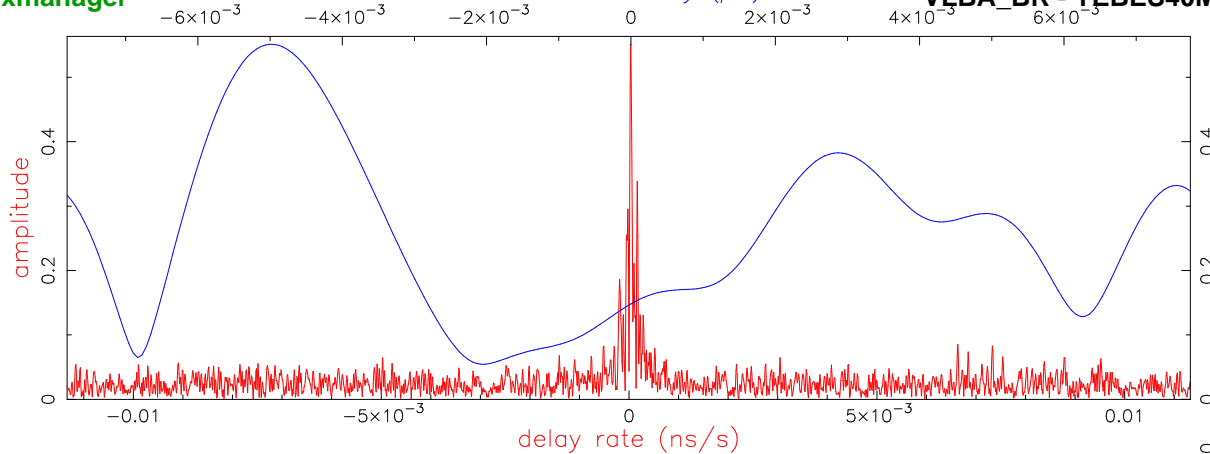
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bY

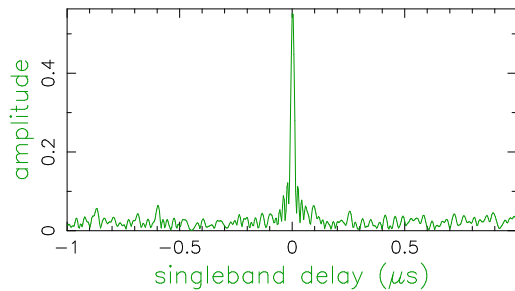
VLBA_BR - YEBES40M, fgroup W, pol LL

multiband delay (μ s)

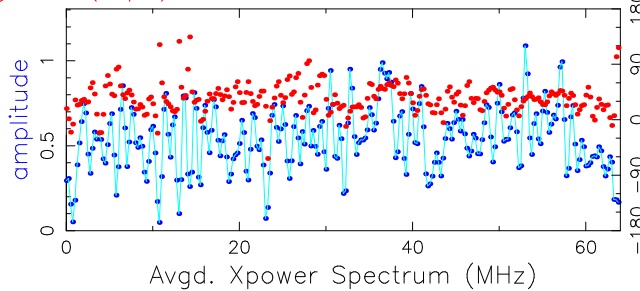


Fringe quality 3

SNR 30.9
 Int time 402.380
 Amp 0.563
 Phase 114.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.001882
 MBD -0.004956
 Fringe rate (Hz)
 0.002846
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

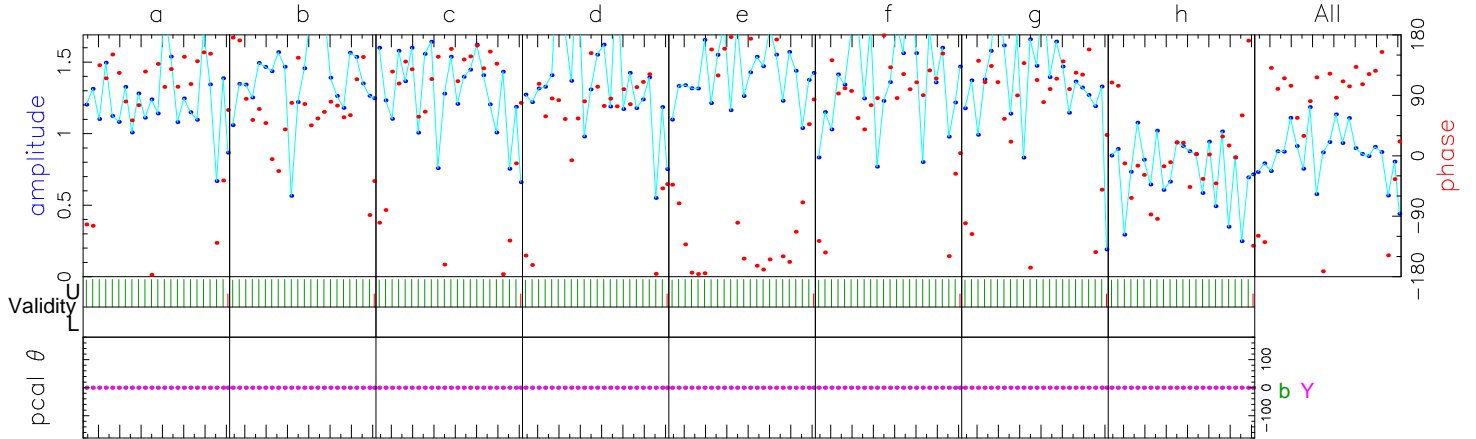


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084516.90
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130913
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 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	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.31355888387E+04	Apriori delay (usec)	1.31355937944E+04	Resid mbdelay (usec)	-4.95572E-03	+/-	3.5E-05
Sband delay (usec)	1.31355956759E+04	Apriori clock (usec)	-1.5397541E+01	Resid sbdelay (usec)	1.88150E-03	+/-	2.8E-04
Phase delay (usec)	1.31355937981E+04	Apriori clockrate (us/s)	-1.2000000E-07	Resid phdelay (usec)	3.69490E-06	+/-	1.2E-07
Delay rate (us/s)	1.11992028669E+00	Apriori rate (us/s)	1.11992025365E+00	Resid rate (us/s)	3.30372E-08	+/-	5.1E-10
Total phase (deg)	277.9	Apriori accel (us/s/s)	-6.28222608846E-05	Resid phase (deg)	114.6	+/-	3.7

ph/seg (deg)	61.9	RMS	Theor.	Amplitude	0.563 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.6	61.9	8.9	Search (2048X32)	0.549	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	66.3	61.6	15.5	Interp.	0.000	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	49.2	66.3	5.2	Inc. seg. avg.	0.857	Data rate (Mb/s):	2048	nlags:	256	ion window (TEC)	0.00	0.00
		49.2	9.2	Inc. frq. avg.	0.792							

b: az 108.1 el 74.7 pa -57.7 Y: az 307.2 el 21.2 pa 53.6 u,v (fr/asec) -8694.436 -3654.529 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY.W.78.1ILPVT

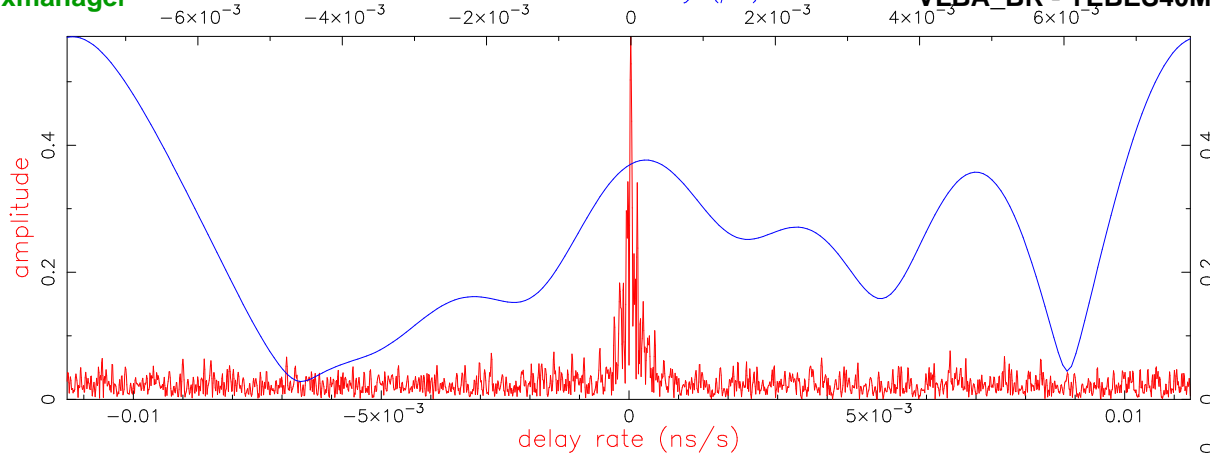
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bY

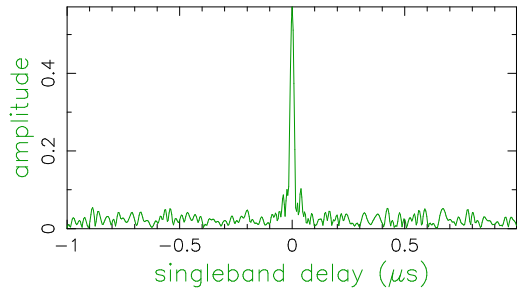
VLBA_BR - YEBES40M, fgroup W, pol RR

multiband delay (μ s)

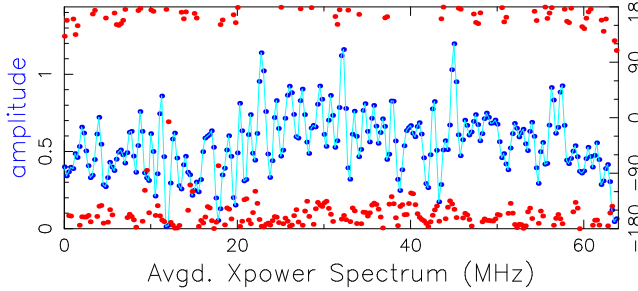


Fringe quality 3

SNR 31.3
 Int time 402.380
 Amp 0.571
 Phase -82.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.000418
 MBD -0.007739
 Fringe rate (Hz)
 0.002839
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

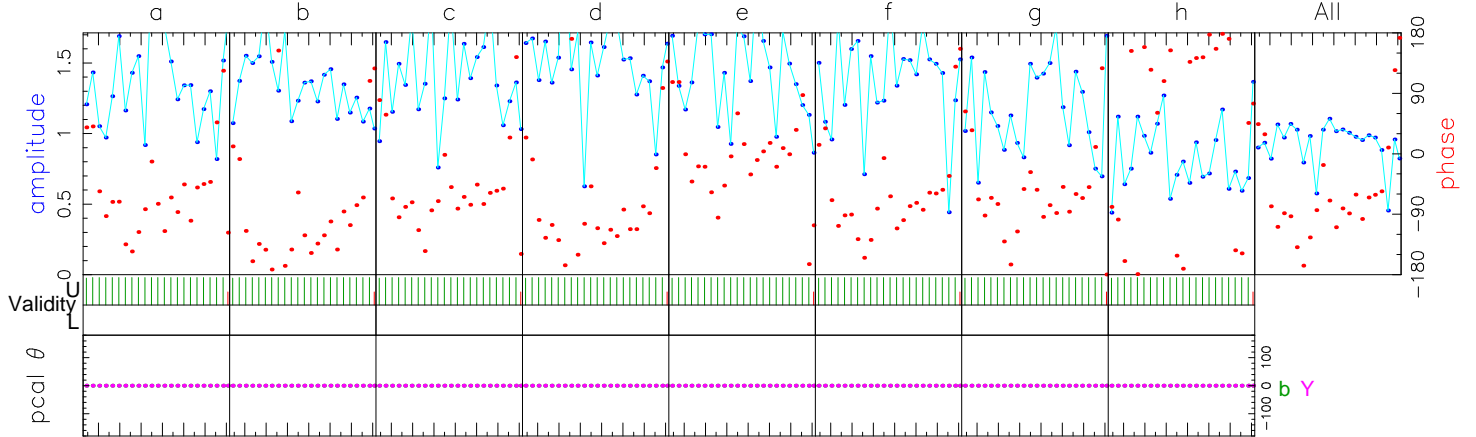


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084516.90
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130917
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 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
	-70.9	-127.3	-65.8	-111.6	-0.4	-80.8	-69.5	160.9	Phase	-82.5
	0.8	0.8	0.9	0.9	0.9	0.9	0.7	0.5	Ampl.	0.8
	256.7	256.3	256.6	256.4	256.5	256.1	255.5	254.5	Sbd box	256.9
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.31355860555E+04		Apriori delay (usec)		1.31355937944E+04		Resid mbdelay (usec)		-7.73897E-03	+/- 3.5E-05
Sband delay (usec)	1.31355933762E+04		Apriori clock (usec)		-1.5397541E+01		Resid sbdelay (usec)		-4.18250E-04	+/- 2.7E-04
Phase delay (usec)	1.31355937918E+04		Apriori clockrate (us/s)		-1.2000000E-07		Resid phdelay (usec)		-2.66091E-06	+/- 1.2E-07
Delay rate (us/s)	1.11992028661E+00		Apriori rate (us/s)		1.11992025365E+00		Resid rate (us/s)		3.29628E-08	+/- 5.1E-10
Total phase (deg)	80.8		Apriori accel (us/s/s)		-6.28222608846E-05		Resid phase (deg)		-82.5	+/- 3.7

ph/seg (deg) 61.7 8.8 Search (2048X32) 0.569 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.2 15.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.0 5.2 Inc. seg. avg. 0.920 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.3 9.0 Inc. frq. avg. 0.815 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 Y: az 307.2 el 21.2 pa 53.6 u,v (fr/asec) -8694.436 -3654.529 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bY.W.91.1ILPVT

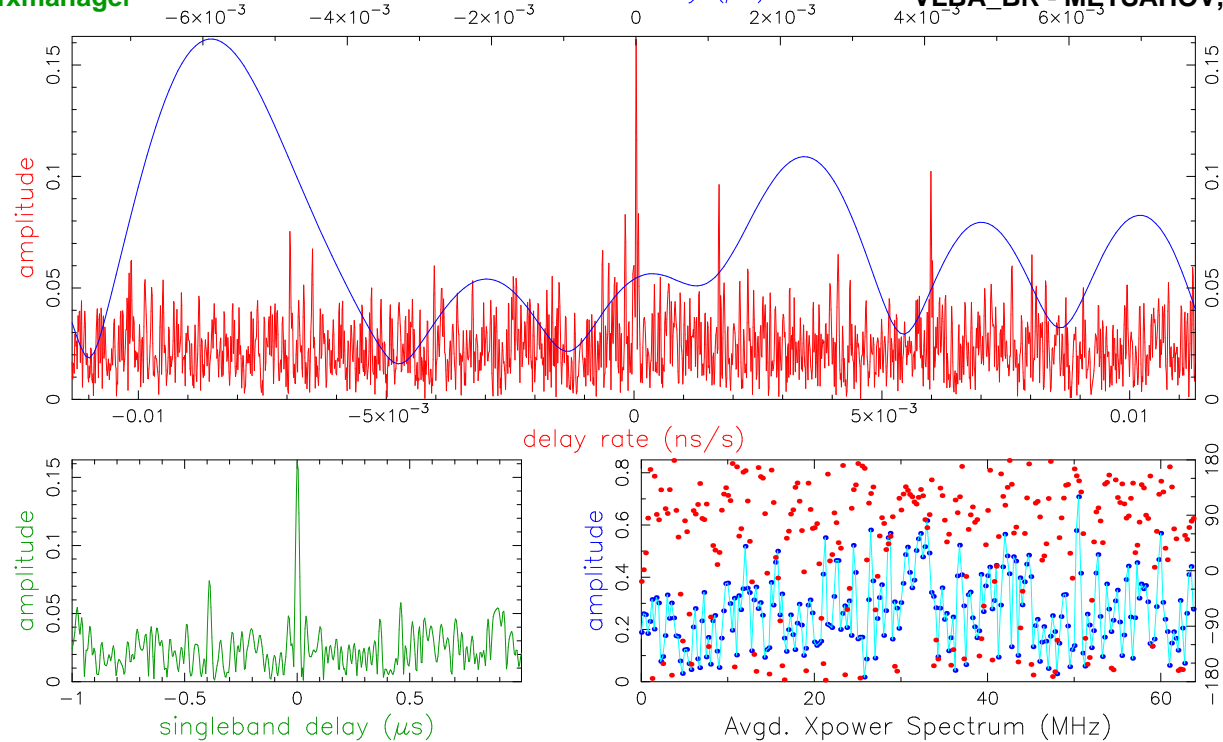
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bZ

VLBA_BR - METSAHOV, fgroup W, pol RR

multiband delay (μ s)

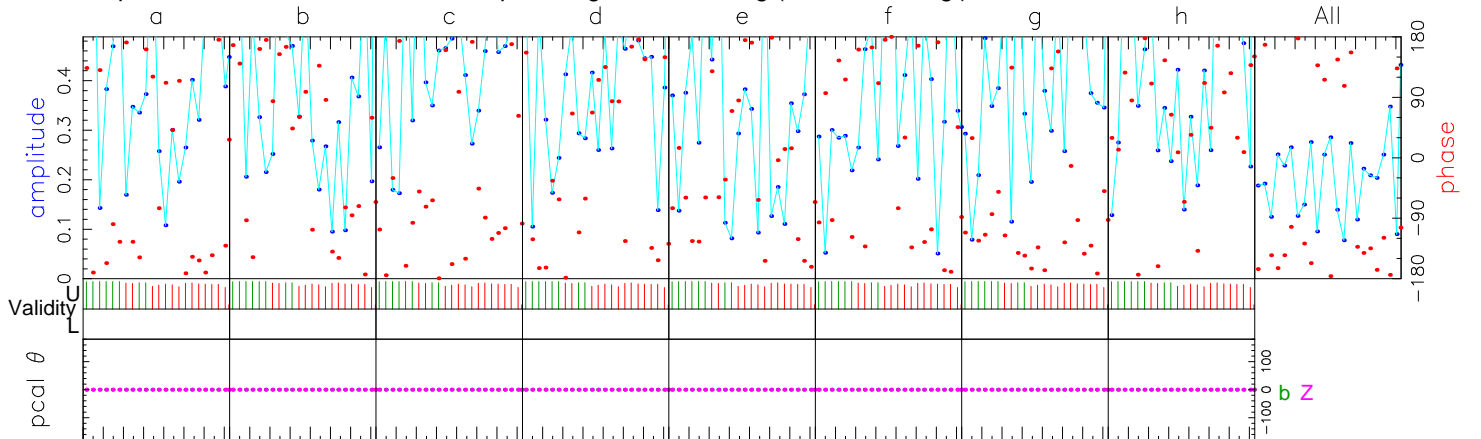


Fringe quality 9

SNR 8.8
 Int time 388.236
 Amp 0.163
 Phase -163.8
 PFD 6.4×10^{-10}
 Delays (us)
 SBD 0.001191
 MBD -0.005830
 Fringe rate (Hz) 0.003671
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130918
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.2	165.4	-130.1	169.2	-107.8	-163.0	-124.2	108.4	Phase	-163.8
	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2
	257.8	258.2	256.9	256.0	137.8	256.7	256.3	256.1	Sbd box	257.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.29706405581E+04		Apriori delay (usec)		1.29706463883E+04		Resid mbdelay (usec)		-5.83021E-03	+/- 1.2E-04
Sband delay (usec)	1.29706475791E+04		Apriori clock (usec)		-1.8541842E+00		Resid sbdelay (usec)		1.19075E-03	+/- 9.8E-04
Phase delay (usec)	1.29706463831E+04		Apriori clockrate (us/s)		-1.6000005E-08		Resid phdelay (usec)		-5.28150E-06	+/- 4.2E-07
Delay rate (us/s)	7.15032659910E-01		Apriori rate (us/s)		7.15032617291E-01		Resid rate (us/s)		4.26190E-08	+/- 1.7E-09
Total phase (deg)	157.0		Apriori accel (us/s/s)		-7.82322730491E-05		Resid phase (deg)		-163.8	+/- 13.1

ph/seg (deg) 40.6 31.3 Search (2048X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.9 54.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.4 18.5 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.9 32.2 Inc. frq. avg. 0.203 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 108.1 el 74.7 pa -57.7 Z: az 318.5 el 21.4 pa 28.3 u,v (fr/asec) -5621.514 -6209.979 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ.W.105.1ILPVT

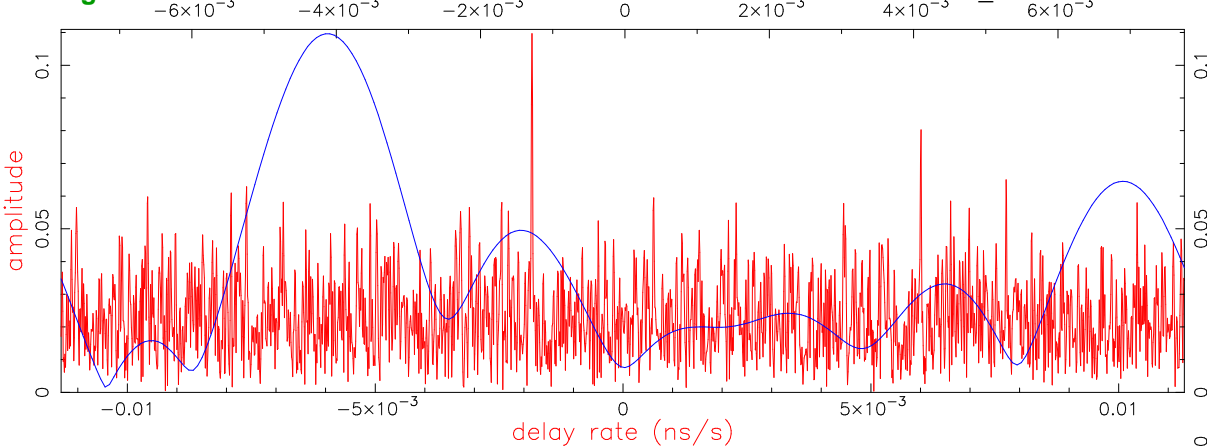
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bZ

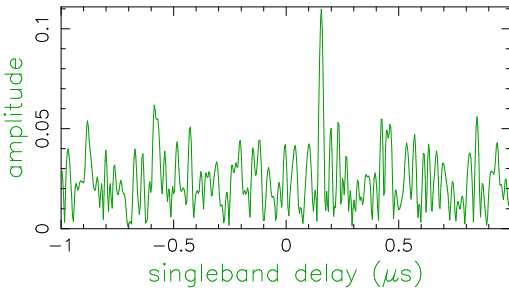
VLBA_BR - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

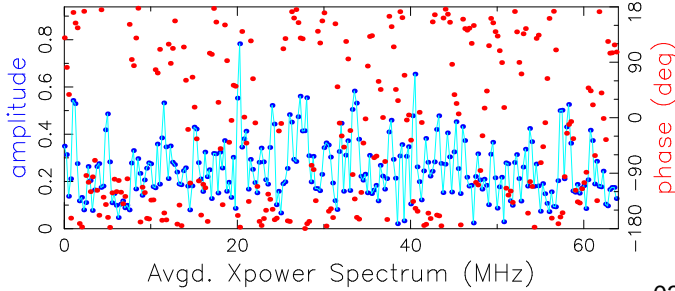


Fringe quality 0

SNR 5.9
 Int time 388.236
 Amp 0.111
 Phase -134.0
 PFD 5.7e-01
 Delays (us)
 SBD 0.155768
 MBD -0.004129
 Fringe rate (Hz)
 -0.158620
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

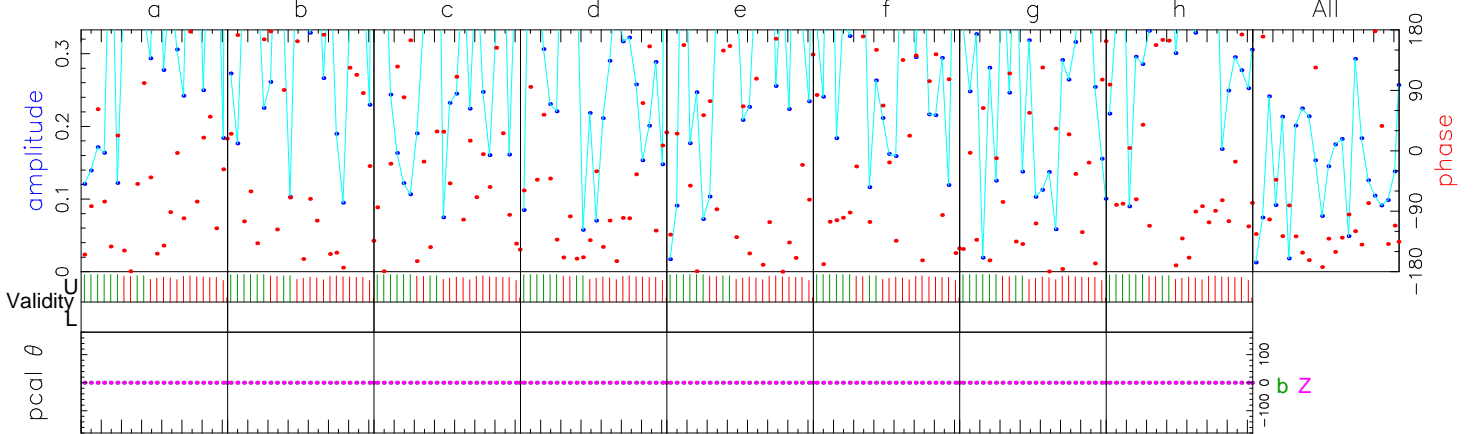


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130922
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.8	-154.8	-71.2	-117.5	-167.9	-156.1	-117.7	-119.1	Phase	-134.0
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	373.9	171.3	316.9	257.9	470.3	113.2	106.8	285.4	Sbd box	296.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 1.29707985090E+04 Apriori delay (usec) 1.29706463883E+04 Resid mbdelay (usec) -4.12938E-03 +/- 1.8E-04
 Sband delay (usec) 1.29708021563E+04 Apriori clock (usec) -1.8541842E+00 Resid sbdelay (usec) 1.55768E-01 +/- 1.5E-03
 Phase delay (usec) 1.29706463840E+04 Apriori clockrate (us/s) -1.6000005E-08 Resid phdelay (usec) -4.32123E-06 +/- 6.2E-07
 Delay rate (us/s) 7.15030775873E-01 Apriori rate (us/s) 7.15032617291E-01 Resid rate (us/s) -1.84142E-06 +/- 2.6E-09
 Total phase (deg) 186.7 Apriori accel (us/s/s) -7.82322730491E-05 Resid phase (deg) -134.0 +/- 19.4

RMS Theor. Amplitude 0.111 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.6 46.5 Search (2048X32) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 73.7 81.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 34.2 27.4 Inc. seg. avg. 0.109 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 37.5 47.8 Inc. frq. avg. 0.110 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 108.1 el 74.7 pa -57.7 Z: az 318.5 el 21.4 pa 28.3 u,v (fr/asec) -5621.514 -6209.979 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ.W.125.1ILPVT

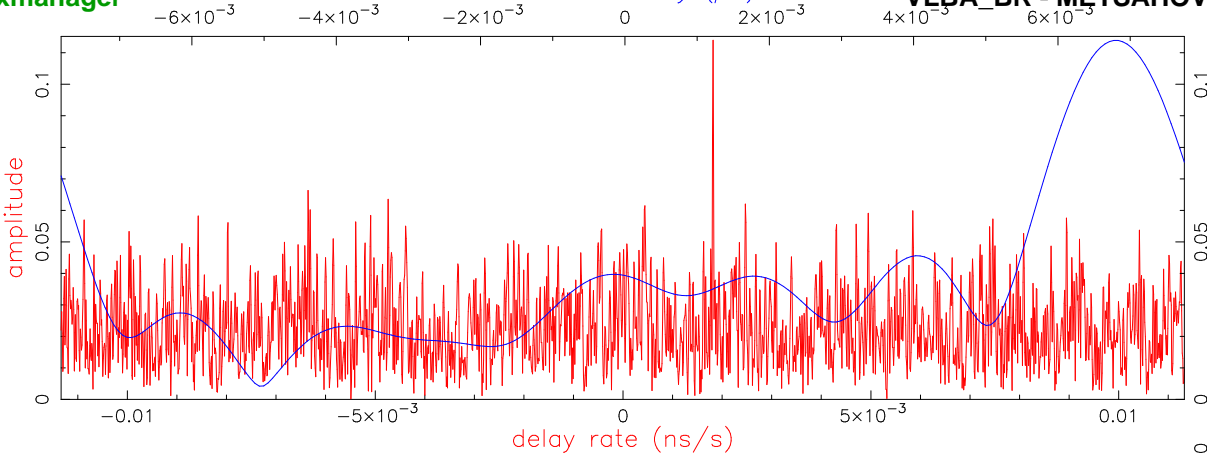
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1ILPVT, No0079, bZ

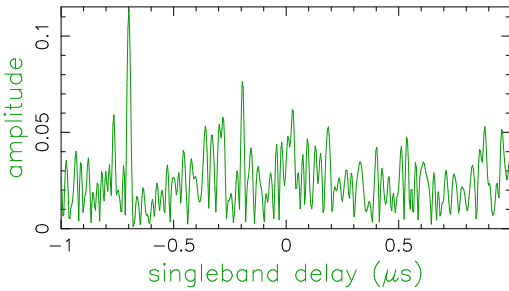
VLBA_BR - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

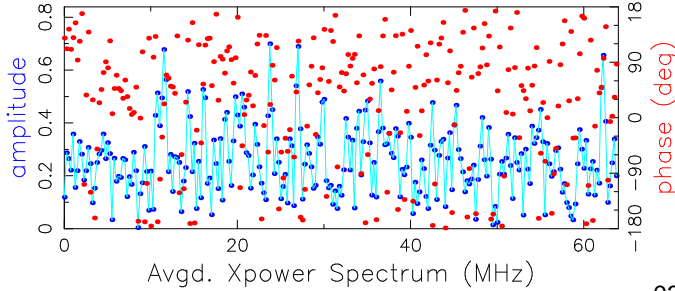


Fringe quality 0

SNR 6.1
 Int time 388.236
 Amp 0.115
 Phase -127.8
 PFD 1.9e-01
 Delays (us)
 SBD -0.699449
 MBD 0.006801
 Fringe rate (Hz)
 0.156413
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

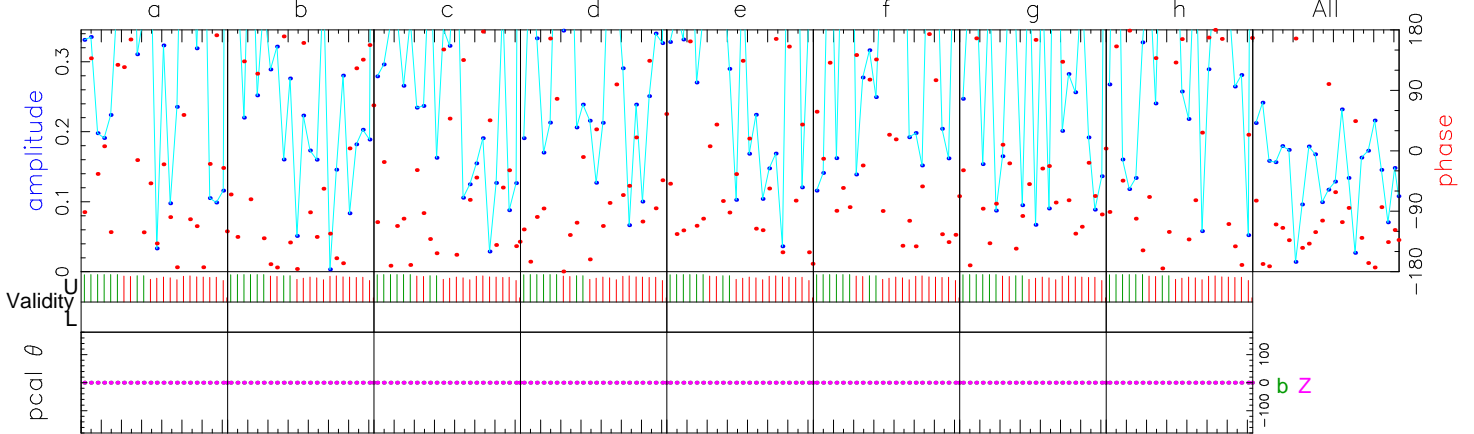


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130926
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.29699500646E+04	Apriori delay (usec)	1.29706463883E+04	Resid mbdelay (usec)	6.80130E-03	+/-	1.8E-04
Sband delay (usec)	1.29699469393E+04	Apriori clock (usec)	-1.8541842E+00	Resid sbdelay (usec)	-6.99449E-01	+/-	1.4E-03
Phase delay (usec)	1.29706463842E+04	Apriori clockrate (us/s)	-1.6000005E-08	Resid phdelay (usec)	-4.12106E-06	+/-	6.0E-07
Delay rate (us/s)	7.15034433090E-01	Apriori rate (us/s)	7.15032617291E-01	Resid rate (us/s)	1.81580E-06	+/-	2.5E-09
Total phase (deg)	192.9	Apriori accel (us/s/s)	-7.82322730491E-05	Resid phase (deg)	-127.8	+/-	18.7

ph/seg (deg)	56.7	Theor.	44.7	Amplitude	0.115 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	58.9		78.1	Search (2048X32)	0.113	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	24.6		26.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	35.7		46.0	Inc. seg. avg.	0.114	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.114	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 108.1 el 74.7 pa -57.7 Z: az 318.5 el 21.4 pa 28.3 u,v (fr/asec) -5621.514 -6209.979 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ.W.145.1ILPVT

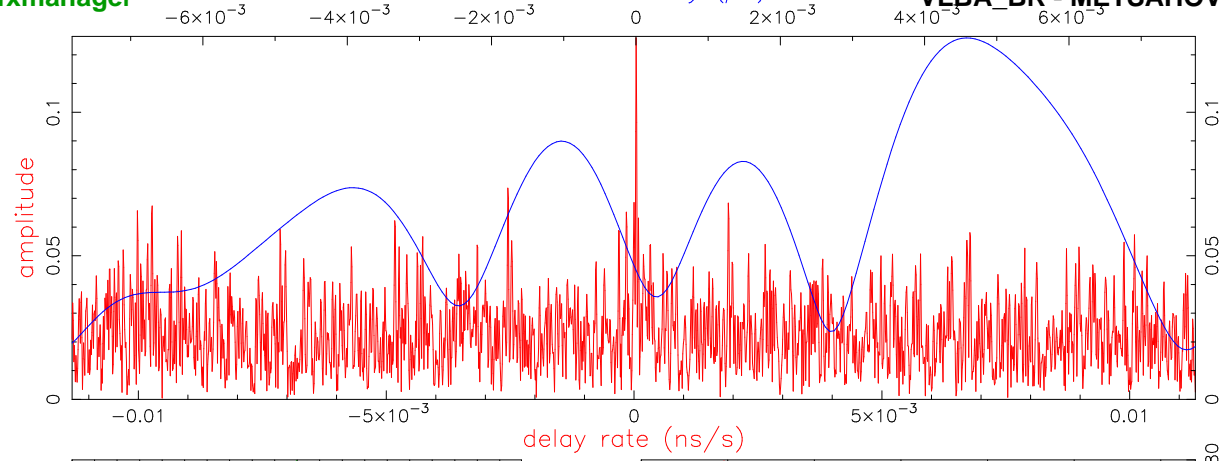
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

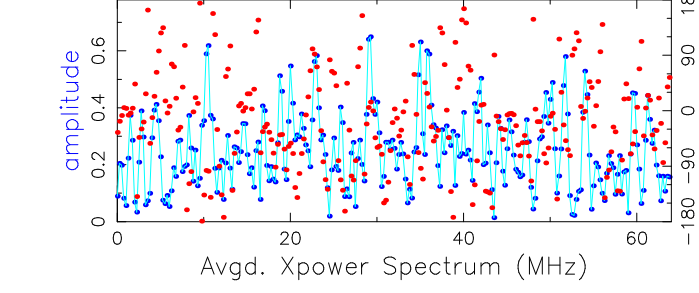
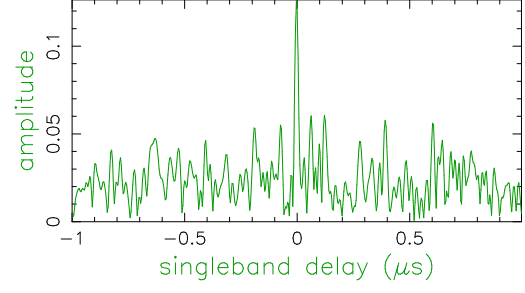
3C84.1ILPVT, No0079, bZ

VLBA_BR - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

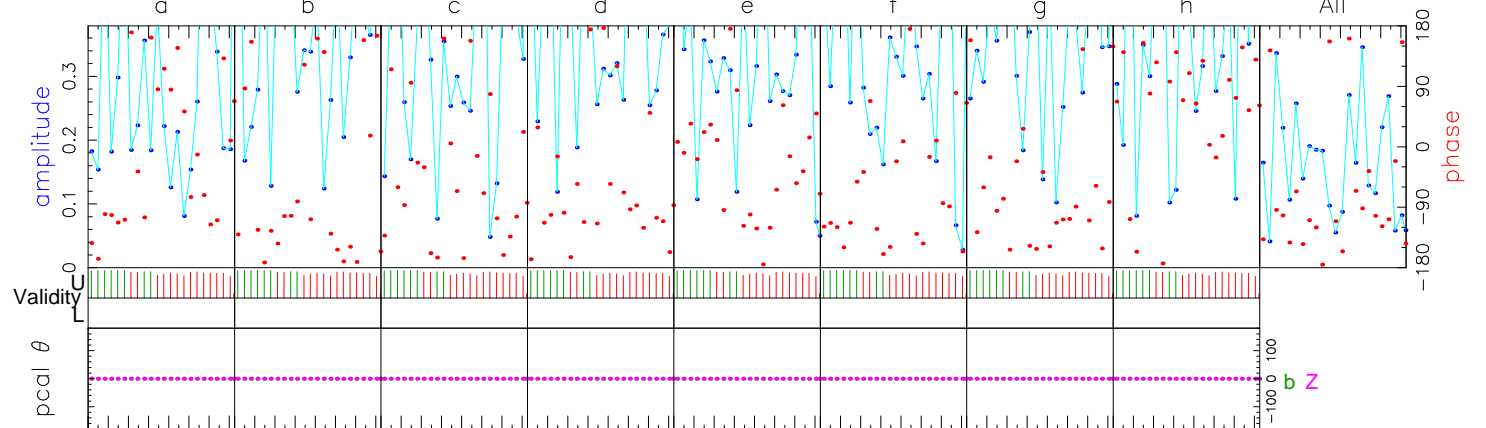


Fringe quality 0
 SNR 6.8
 Int time 388.236
 Amp 0.126
 Phase -114.9
 PFD 2.8e-03
 Delays (us)
 SBD -0.003086
 MBD 0.004580
 Fringe rate (Hz) 0.004038
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 084500.00
 Stop 085159.84
 FRT 084830.00
 Corr/FF/build
 2021:023:032807
 2021:023:130913
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-108.4	-150.9	-88.2	-115.6	-22.9	-102.0	-107.4	110.7	Phase	-114.9
	0.1	0.3	0.1	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
	406.2	256.9	412.7	256.1	425.2	256.1	254.9	411.1	Sbd box	256.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.29706509687E+04	Apriori delay (usec)	1.29706463883E+04	Resid mbdelay (usec)	4.58035E-03	+/-	1.6E-04
Sband delay (usec)	1.29706433021E+04	Apriori clock (usec)	-1.8541842E+00	Resid sbdelay (usec)	-3.08625E-03	+/-	1.3E-03
Phase delay (usec)	1.29706463846E+04	Apriori clockrate (us/s)	-1.6000005E-08	Resid phdelay (usec)	-3.70586E-06	+/-	5.4E-07
Delay rate (us/s)	7.15032664172E-01	Apriori rate (us/s)	7.15032617291E-01	Resid rate (us/s)	4.68803E-08	+/-	2.2E-09
Total phase (deg)	205.8	Apriori accel (us/s/s)	-7.82322730491E-05	Resid phase (deg)	-114.9	+/-	16.8

ph/seg (deg)	52.2	Theor.	40.3	Amplitude	0.126 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	76.7	Search (2048X32)	0.123	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	69.3	Inc. seg. avg.	0.136	Inc. frq. avg.	0.176	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	65.8	Inc. frq. avg.	0.176			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

b: az 108.1 el 74.7 pa -57.7 Z: az 318.5 el 21.4 pa 28.3 u,v (fr/asec) -5621.514 -6209.979 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ..1ILPVT Output file: /Exps/c202b/v1/v1_3mm/1234/No0079/bZ.W.80.1ILPVT