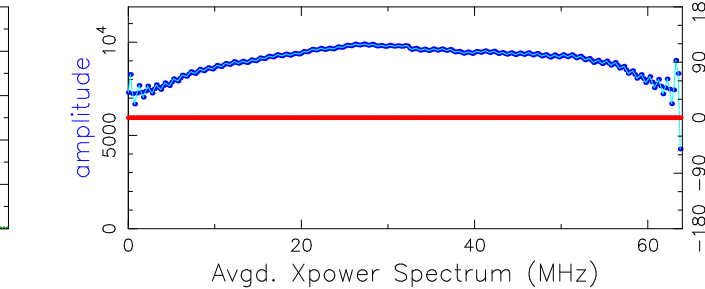
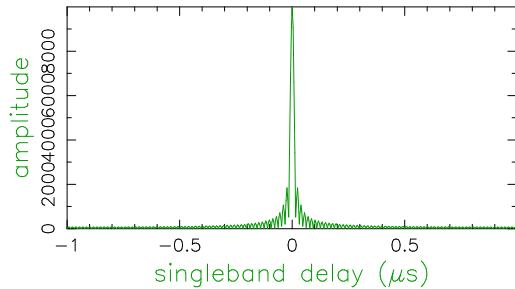
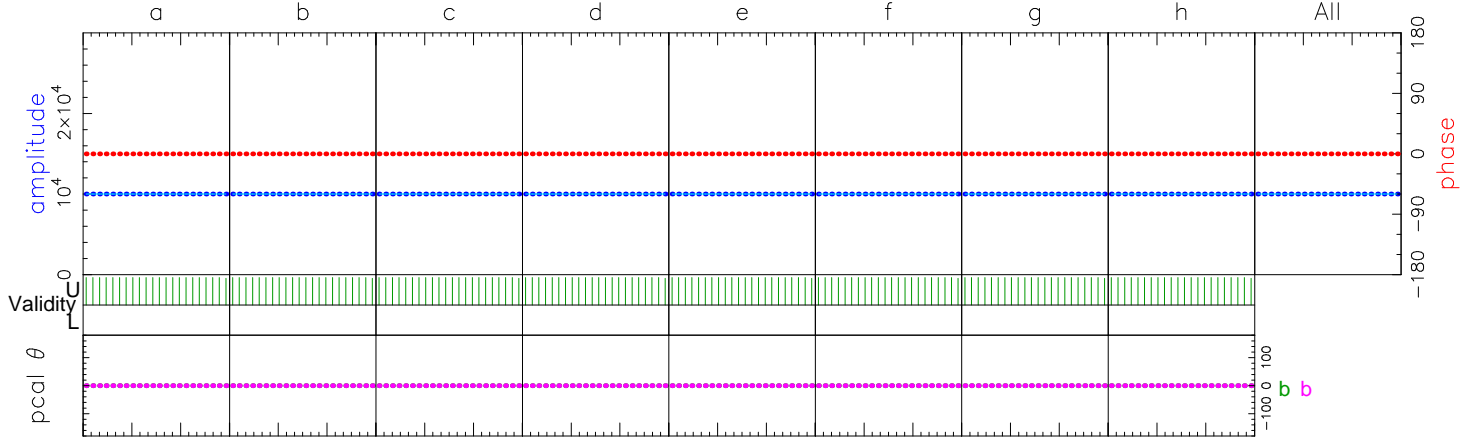


Fringe quality 9
SNR 366863.8
Int time 179.976
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Yr:day 16383
2021:007:125342
2021:010:141434
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



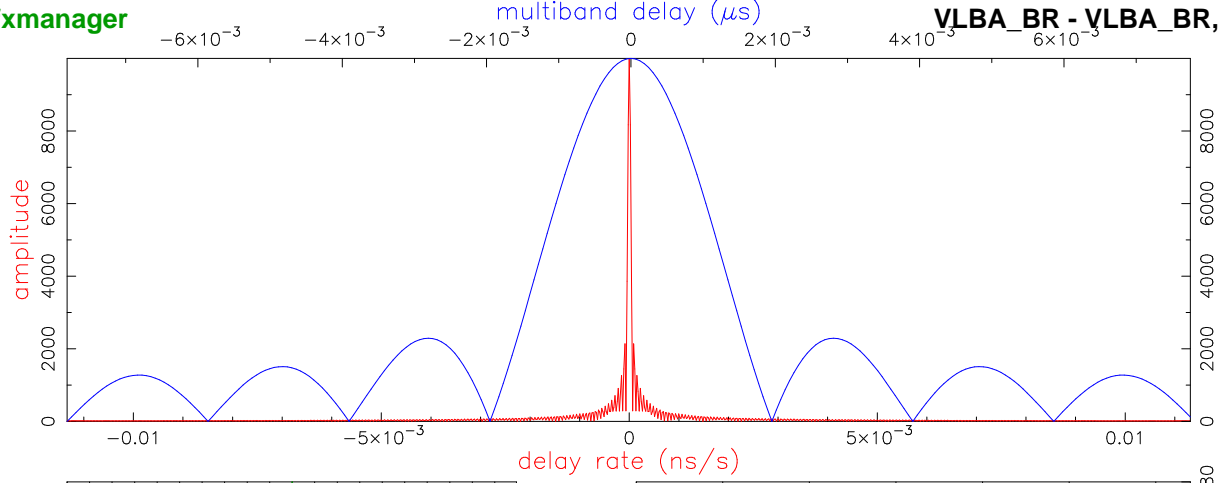
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



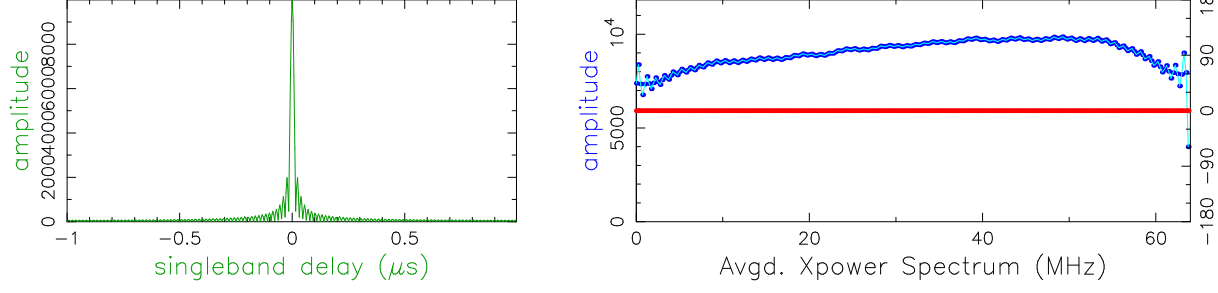
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

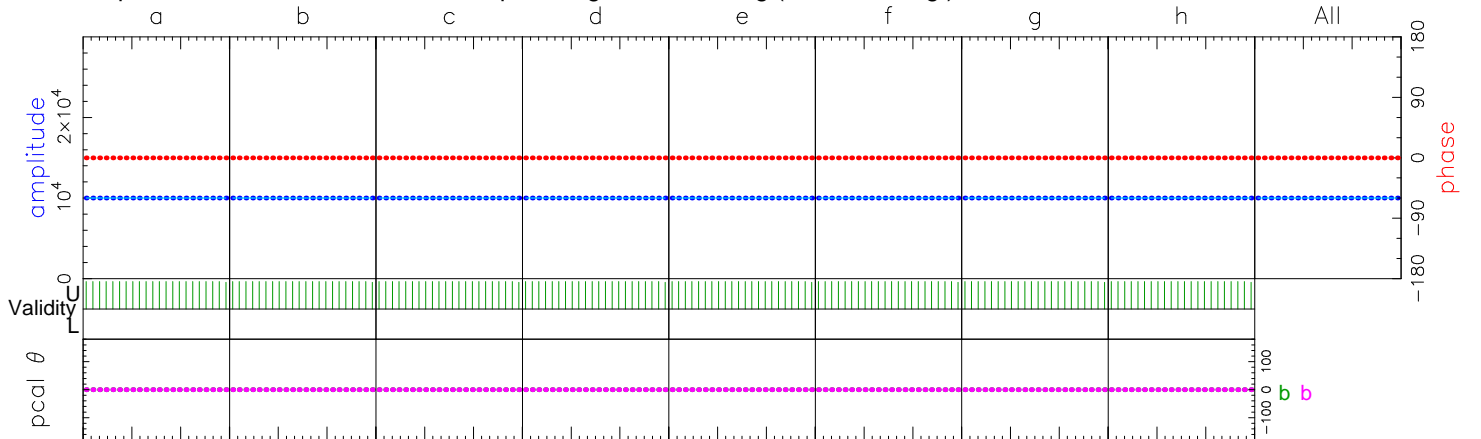
	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	0.0	0.0	Search (1024X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	0.0	0.0	Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		



Fringe quality 9
SNR 366863.8
Int time 179.976
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. c202a
Yr:day 16383
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141436
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0	257.0
b:b	0:0	0:0	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	10000.0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	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	+/- 3.0E-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	+/- 2.3E-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	+/- 1.0E-11
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	+/- 9.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
b: az 309.0 el 56.4 pa 83.2 b: az 309.0 el 56.4 pa 83.2 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/c202a/v1/v1_3mm/1234/No0128/bb..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bb.W.14.1HSTEG simultaneous interpolator

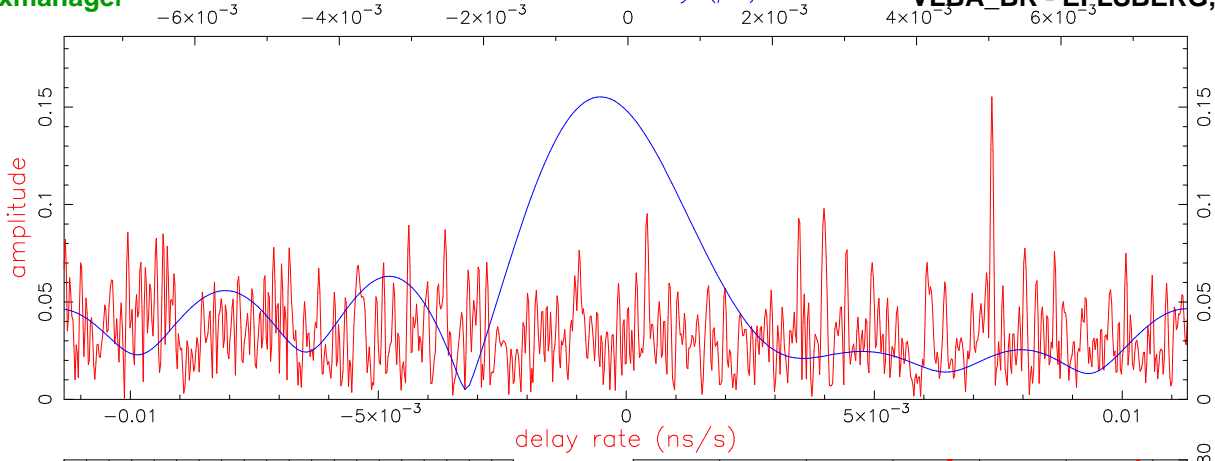
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bB

VLBA_BR - EFLSBERG, fgroup W, pol RR

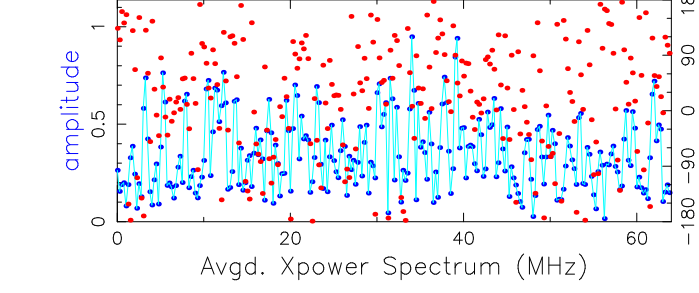
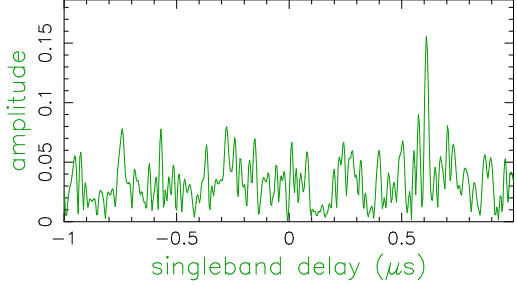
multiband delay (μ s)



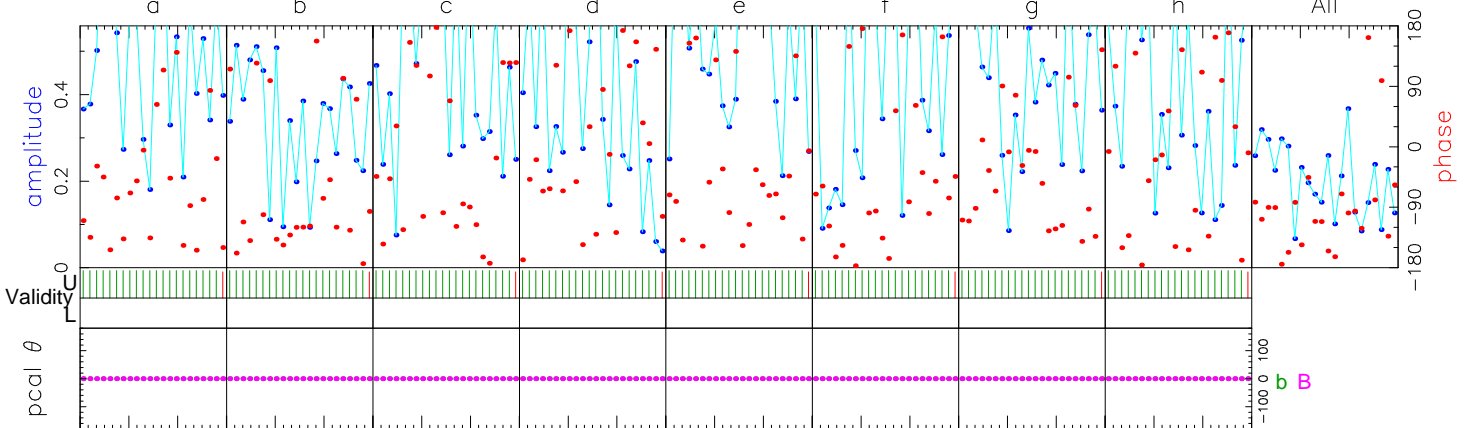
Fringe quality 0

SNR 5.7
 Int time 179.777
 Amp 0.186
 Phase -113.4
 PFD 7.7e-01
 Delays (us)
 SBD 0.609861
 MBD -0.000366
 Fringe rate (Hz) 0.635770
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build 2021:007:125342
 2021:010:141436
 2020:247:085004
 RA & Dec (J2000) 01h02m45.762375s +58°24'11.136621"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-84.7	-139.7	-135.2	-113.9	-106.6	-100.0	-80.1	-162.5	Phase	-113.4
	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	270.5	66.4	205.1	53.1	437.8	89.9	35.2	133.8	Sbd box	413.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.07530791577E+04		Apriori delay (usec)		1.07524701486E+04		Resid mbdelay (usec)		-3.65842E-04	+/- 1.9E-04
Sband delay (usec)	1.07530800101E+04		Apriori clock (usec)		-1.1830381E+01		Resid sbdelay (usec)		6.09861E-01	+/- 1.5E-03
Phase delay (usec)	1.07524701449E+04		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		-3.65743E-06	+/- 6.5E-07
Delay rate (us/s)	-4.68334190011E-01		Apriori rate (us/s)		-4.68341570673E-01		Resid rate (us/s)		7.38066E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.98652415296E-05		Resid phase (deg)		-113.4	+/- 20.1

ph/seg (deg) 49.9 47.1 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.2 82.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.9 28.4 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.8 49.6 Inc. frq. avg. 0.183 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 309.0 el 56.4 pa 83.2 B: az 1.1 el 19.0 pa -1.3 u,v (fr/asec) 5086.110 -7825.440 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB.W.16.1HSTEG

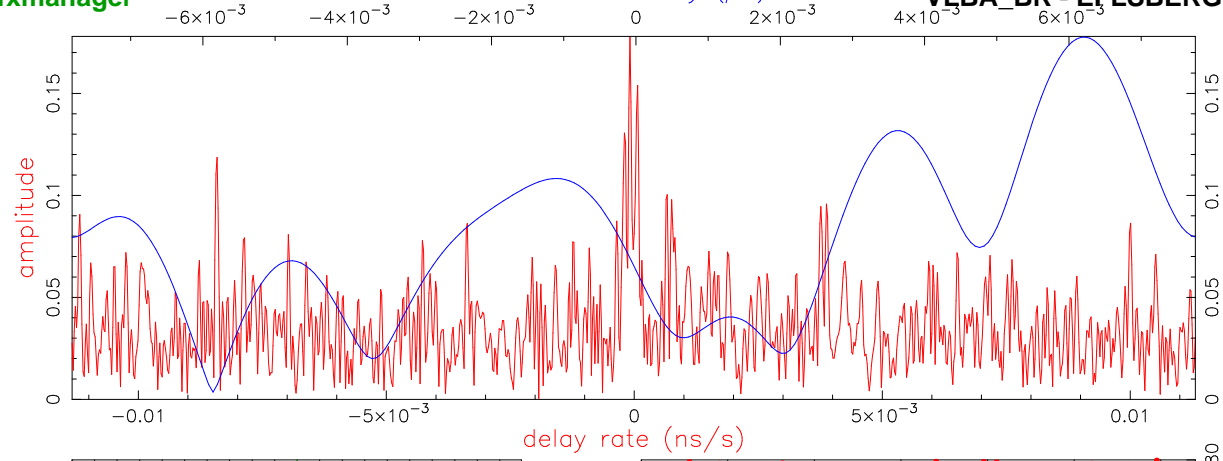
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bB

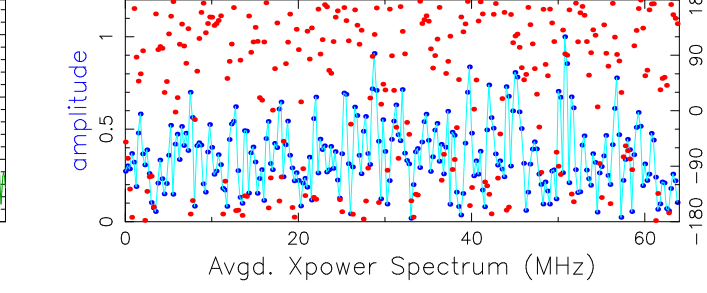
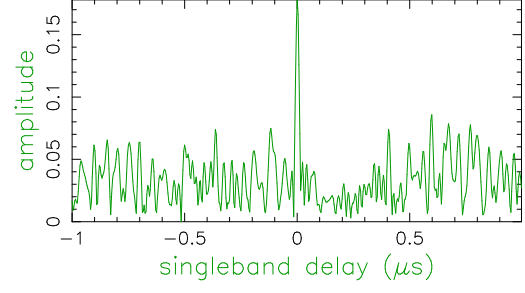
VLBA_BR - EFLSBERG, fgroup W, pol LL

multiband delay (μ s)



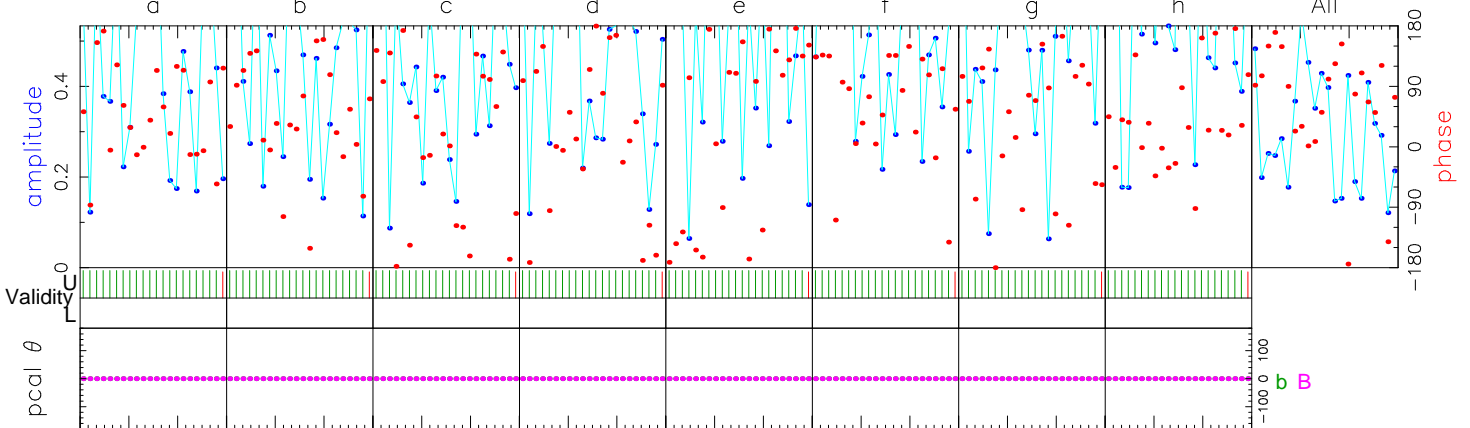
Fringe quality 0

SNR 6.5
 Int time 179.777
 Amp 0.178
 Phase 81.6
 PFD 9.6e-03
 Delays (us)
 SBD 0.000566
 MBD 0.006218
 Fringe rate (Hz)
 -0.007317
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141435
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.07524763670E+04	Apriori delay (usec)	1.07524701486E+04	Resid mbdelay (usec)	6.21840E-03	+/-	1.7E-04
Sband delay (usec)	1.07524707148E+04	Apriori clock (usec)	-1.1830381E+01	Resid sbdelay (usec)	5.66250E-04	+/-	1.3E-03
Phase delay (usec)	1.07524701512E+04	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	2.63212E-06	+/-	5.7E-07
Delay rate (us/s)	-4.68341655621E-01	Apriori rate (us/s)	-4.68341570673E-01	Resid rate (us/s)	-8.49476E-08	+/-	5.4E-09
Total phase (deg)	296.7	Apriori accel (us/s/s)	-5.98652415296E-05	Resid phase (deg)	81.6	+/-	17.6

ph/seg (deg)	59.2	Theor.	41.2	Amplitude	0.178 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	98.3		71.9	Search (1024X32)	0.175	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	48.1		24.8	Inc. seg. avg.	0.240	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	54.4		43.3	Inc. frq. avg.	0.223	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 309.0 el 56.4 pa 83.2 B: az 1.1 el 19.0 pa -1.3 u,v (fr/asec) 5086.110 -7825.440 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB.W.2.1HSTEG

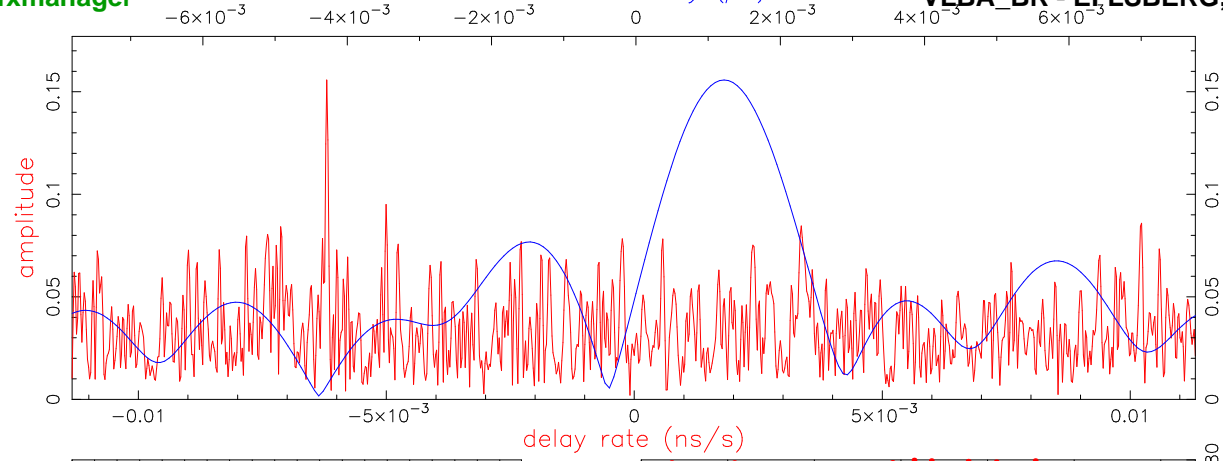
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bB

VLBA_BR - EFLSBERG, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0

SNR 5.7

Int time 179.777

Amp 0.177

Phase 152.4

PFD 7.4e-01

Delays (us)

SBD 0.433183

MBD 0.001207

Fringe rate (Hz)

-0.535702

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c202a

Exper # 16383

Yr:day 2020:283

Start 113000.00

Stop 113300.22

FRT 113130.00

Corr/FF/build

2021:007:125342

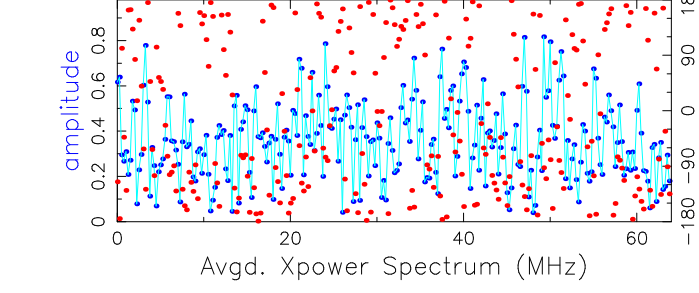
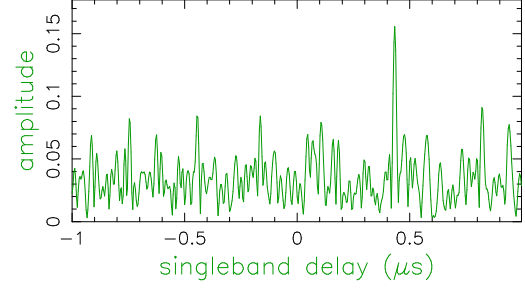
2021:010:141438

2020:247:085004

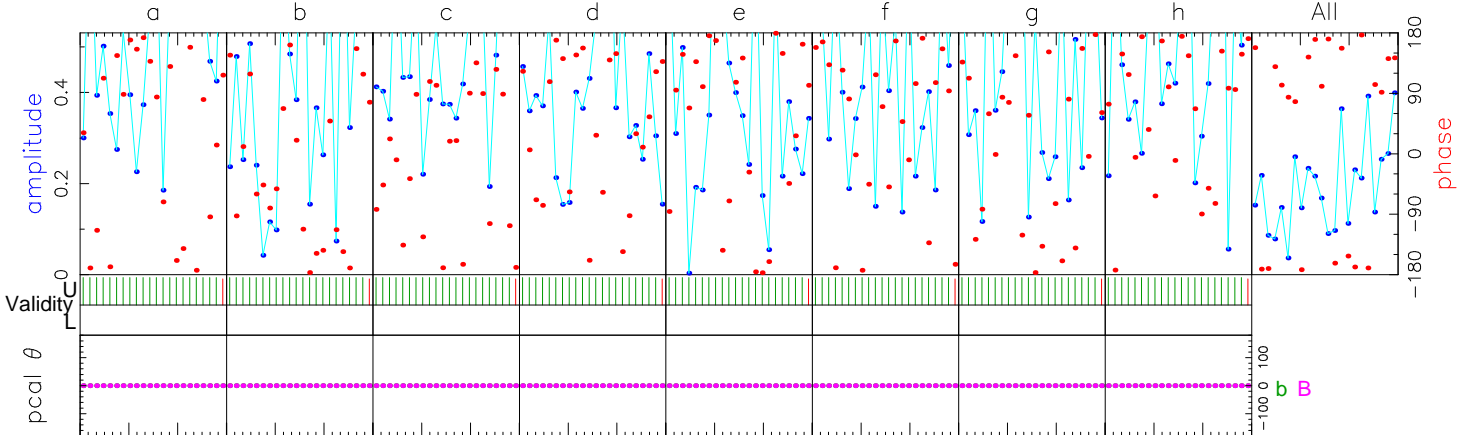
RA & Dec (J2000)

01h02m45.762375s

+58°24'11.136621"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	155.8	163.6	100.8	135.7	175.4	153.0	148.5	153.7	Phase	152.4
	0.4	0.1	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	367.3	467.7	188.6	33.8	101.5	469.2	375.8	445.6	Sbd box	367.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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)	1.07529088554E+04		Apriori delay (usec)		1.07524701486E+04		Resid mbdelay (usec)		1.20683E-03	+/- 1.9E-04
Sband delay (usec)	1.07529033313E+04		Apriori clock (usec)		-1.1830381E+01		Resid sbdelay (usec)		4.33183E-01	+/- 1.5E-03
Phase delay (usec)	1.07524701535E+04		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		4.91513E-06	+/- 6.5E-07
Delay rate (us/s)	-4.68347789645E-01		Apriori rate (us/s)		-4.68341570673E-01		Resid rate (us/s)		-6.21897E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.98652415296E-05		Resid phase (deg)		152.4	+/- 20.0

ph/seg (deg) 40.3 47.0 Search (1024X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 67.8 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 24.6 28.4 Inc. seg. avg. 0.166 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 42.8 49.5 Inc. frq. avg. 0.165 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 309.0 el 56.4 pa 83.2 B: az 1.1 el 19.0 pa -1.3 u,v (fr/asec) 5086.110 -7825.440 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB.W.31.1HSTEG

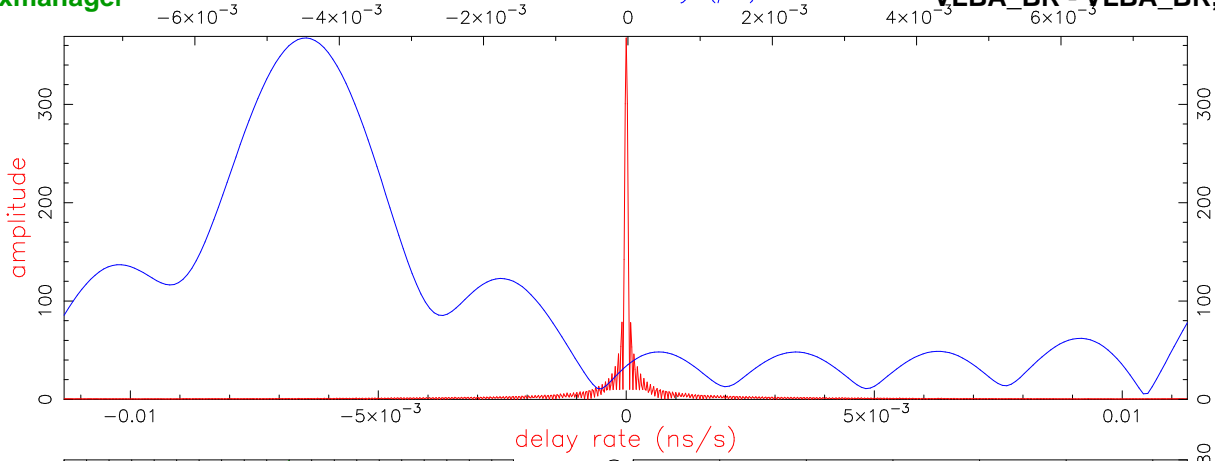
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bb

VLBA_BR - VLBA_BR, fgroup W, pol LR

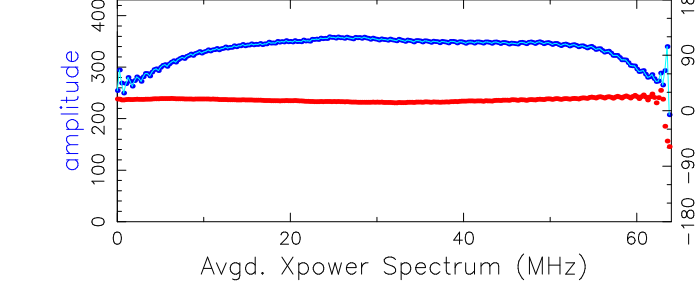
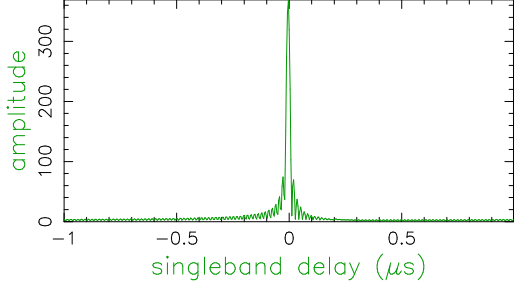
multiband delay (μ s)



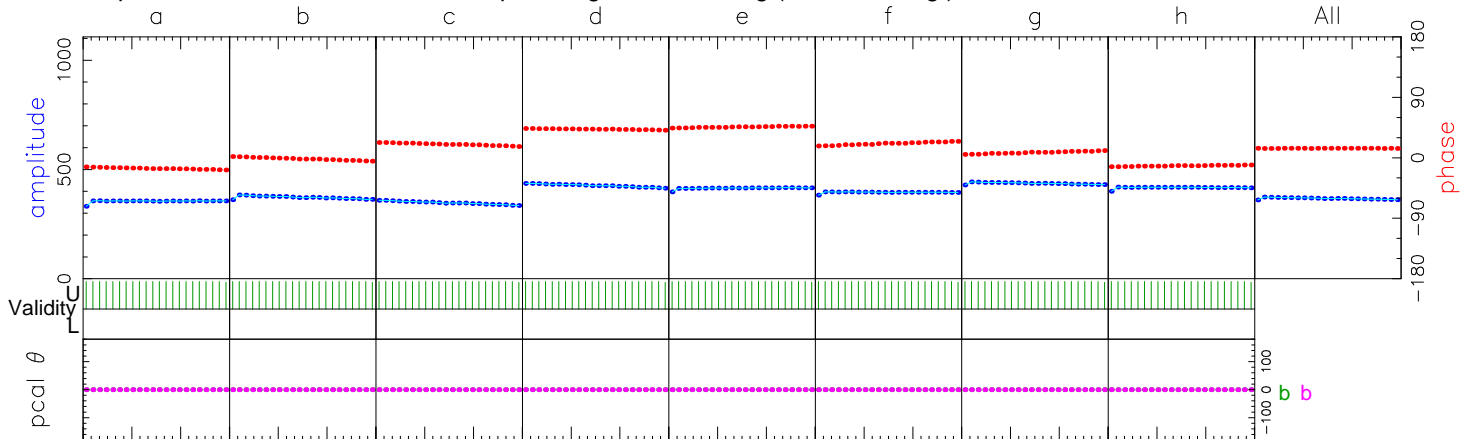
Fringe quality 7

SNR 13541.0
 Int time 179.976
 Amp 369.102
 Phase 14.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.004738
 MBD -0.004490
 Fringe rate (Hz) 0.000006
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141438
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-15.9	-1.5	20.2	42.5	45.8	21.2	7.9	-11.9	Phase	14.1
	354.9	372.1	347.4	426.6	414.4	395.4	436.4	417.3	Ampl.	395.6
	255.8	255.9	256.2	256.1	255.6	255.7	255.8	254.9	Sbd box	255.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	Manl 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)	-4.48990625000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-4.48991E-03	+/- 8.0E-08
Sband delay (usec)	-4.73800000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-4.73800E-03	+/- 6.4E-07
Phase delay (usec)	4.53787103116E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.53787E-07	+/- 2.7E-10
Delay rate (us/s)	7.36899924368E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		7.36900E-11	+/- 2.6E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		14.1	+/- 0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 369.102 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.1 0.0 Search (1024X32) 366.785 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.2 0.0 Inc. seg. avg. 367.513 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 395.564 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 309.0 el 56.4 pa 83.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bb..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bb.W.34.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

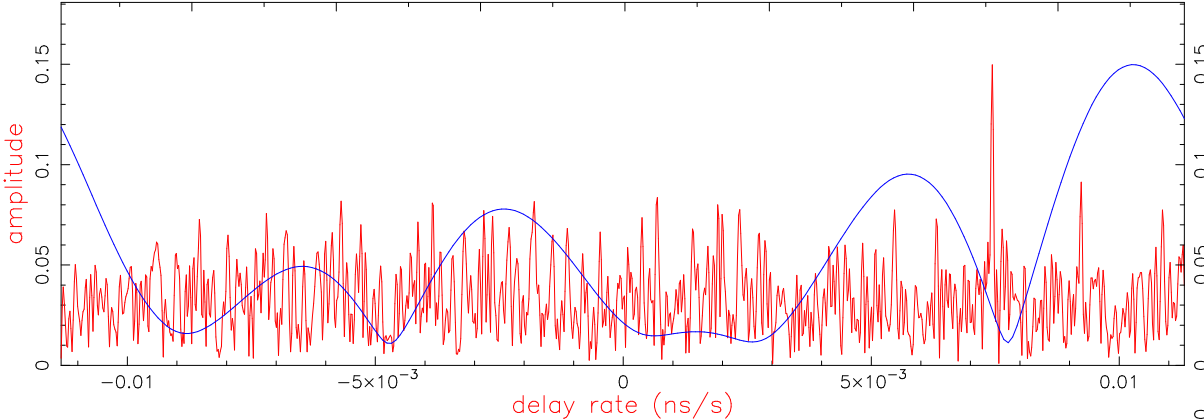
0102+584.1HSTEG, No0128, bB

VLBA_BR - EFLSBERG, fgroup W, pol RL

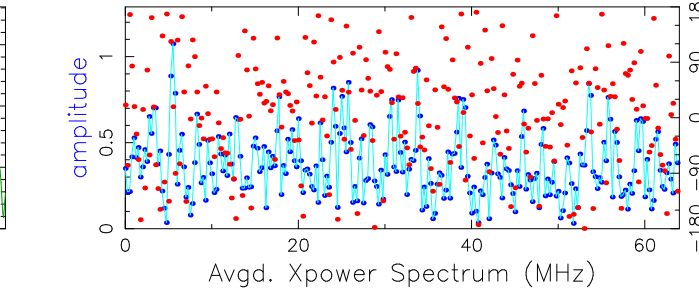
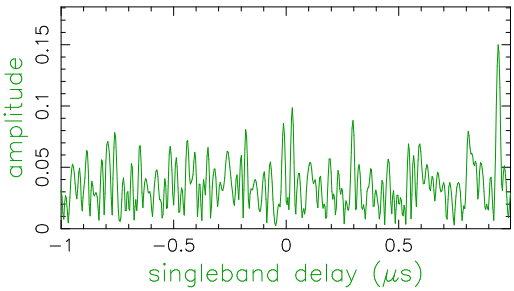
multiband delay (μ s)

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

Fringe quality 0

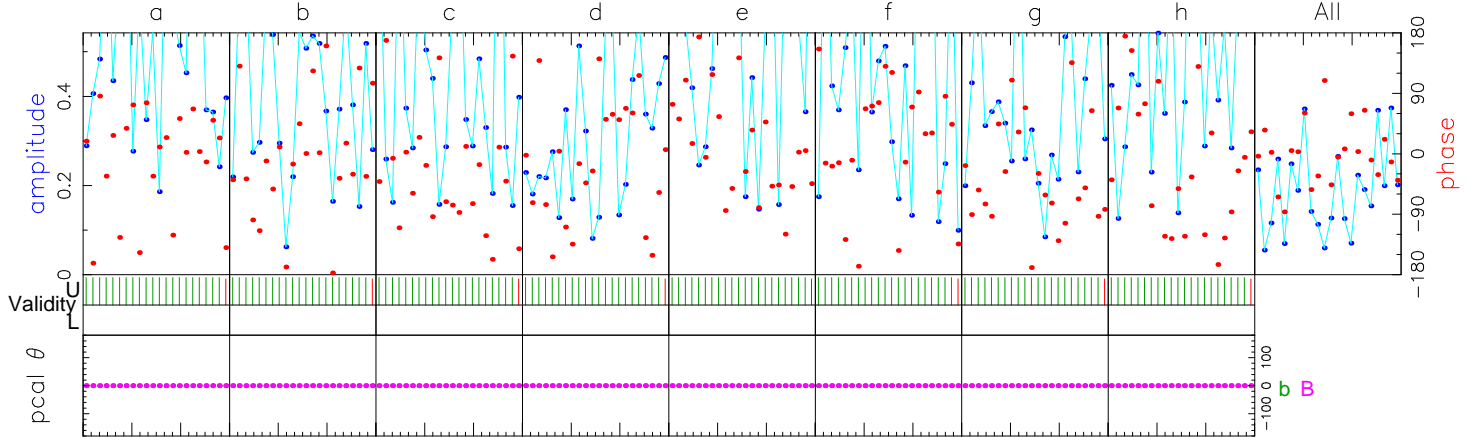


SNR 5.5
Int time 179.777
Amp 0.181
Phase -4.2
PFD 9.8e-01
Delays (us)
SBD 0.942324
MBD 0.007069
Fringe rate (Hz)
0.641129
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141439
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	1.07534147176E+04	Apriori delay (usec)	1.07524701486E+04	Resid mbdelay (usec)	7.06906E-03	+/-	2.0E-04
Sband delay (usec)	1.07534124721E+04	Apriori clock (usec)	-1.1830381E+01	Resid sbdelay (usec)	9.42324E-01	+/-	1.6E-03
Phase delay (usec)	1.07524701484E+04	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	-1.34137E-07	+/-	6.7E-07
Delay rate (us/s)	-4.68334127798E-01	Apriori rate (us/s)	-4.68341570673E-01	Resid rate (us/s)	7.44287E-06	+/-	6.4E-09
Total phase (deg)	211.0	Apriori accel (us/s/s)	-5.98652415296E-05	Resid phase (deg)	-4.2	+/-	20.8

ph/seg (deg)	45.6	Theor.	48.7	Amplitude	0.181 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.9		85.0	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	34.6		29.4	Inc. seg. avg.	0.167	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	48.7		51.3	Inc. frq. avg.	0.189	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 309.0 el 56.4 pa 83.2 B: az 1.1 el 19.0 pa -1.3 u,v (fr/asec) 5086.110 -7825.440 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bB.W.46.1HSTEG

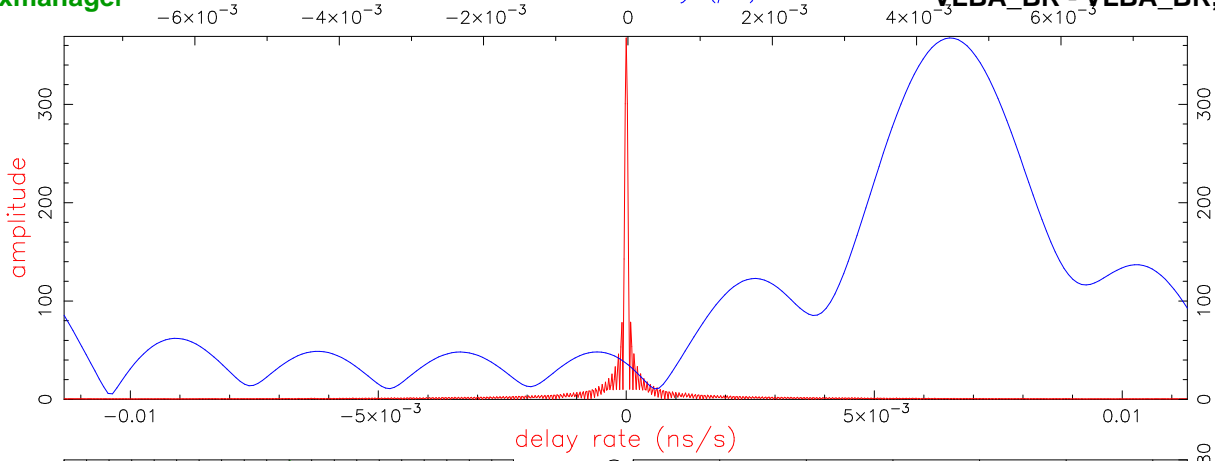
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bb

VLBA_BR - VLBA_BR, fgroup W, pol RL

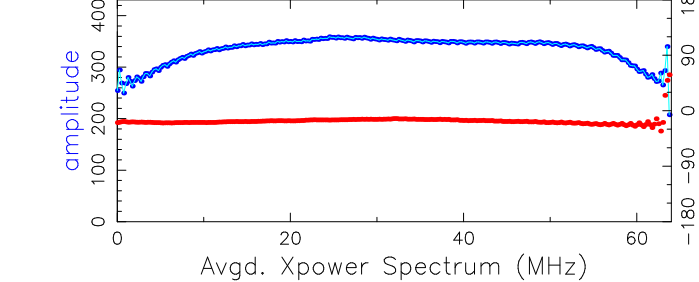
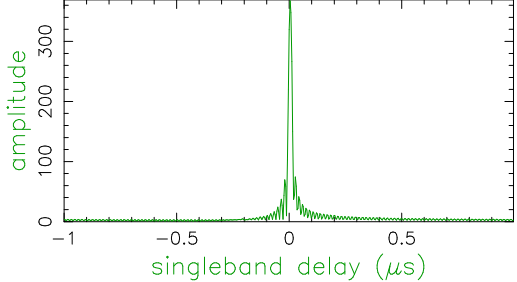
multiband delay (μ s)



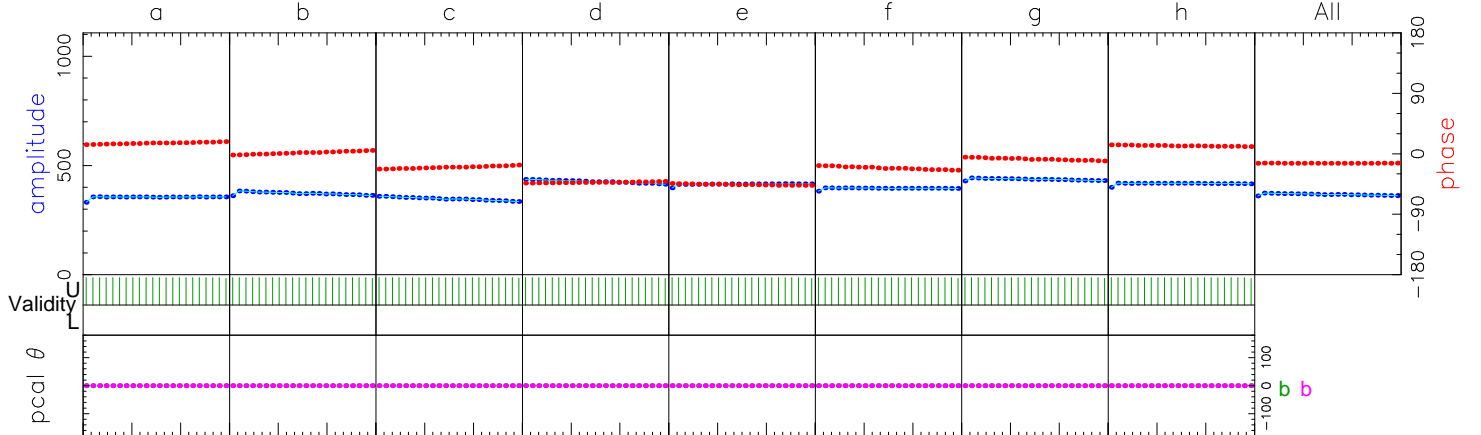
Fringe quality 7

SNR 13541.0
 Int time 179.976
 Amp 369.102
 Phase -14.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.004738
 MBD 0.004490
 Fringe rate (Hz) -0.000006
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141441
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



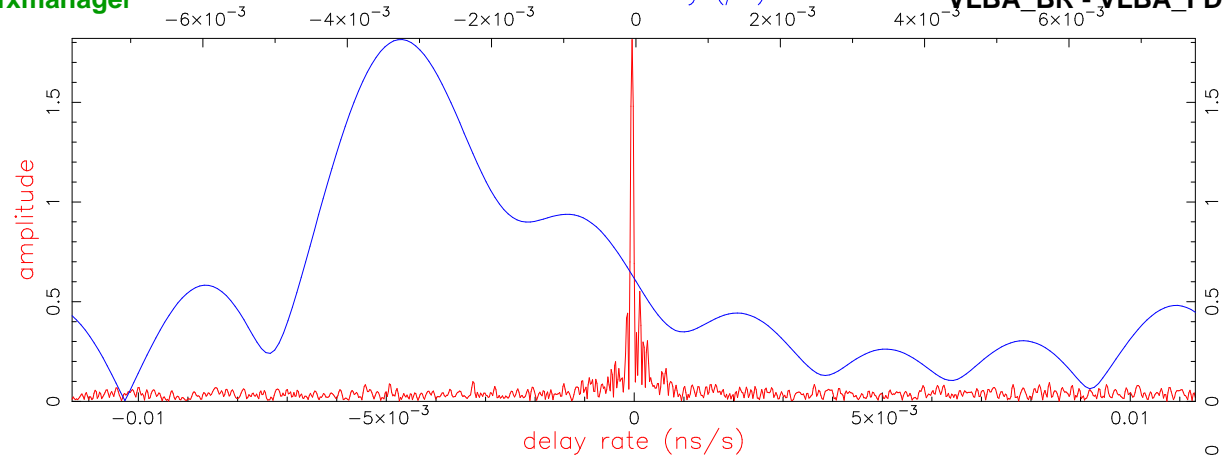
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	4.48990625000E-03								4.48991E-03	+/- 8.0E-08
Sband delay (usec)	4.73800000000E-03								4.73800E-03	+/- 6.4E-07
Phase delay (usec)	-4.53787103182E-07								-4.53787E-07	+/- 2.7E-10
Delay rate (us/s)	-7.36899924368E-11								-7.36900E-11	+/- 2.6E-12
Total phase (deg)			-14.1						-14.1	+/- 0.0
	RMS	Theor.	Amplitude	369.102 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.1	0.0	Search (1024X32)	366.785					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	1.1	0.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	25.0	0.0	Inc. seg. avg.	367.513					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	11.2	0.0	Inc. frq. avg.	395.564					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
b: az 309.0 el 56.4 pa 83.2			b: az 309.0 el 56.4 pa 83.2						u,v (fr/asec) 0.000 0.000	simultaneous interpolator

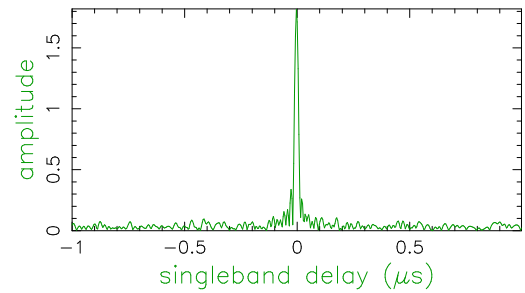
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bb_.1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bb.W.58.1HSTEG

multiband delay (μ s)

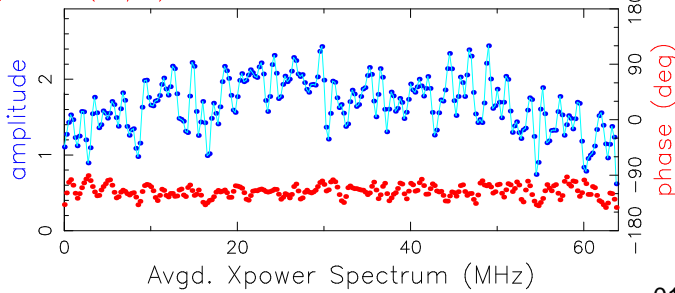


Fringe quality 5

SNR 66.8
Int time 179.976
Amp 1.820
Phase -115.6
PFD 0.0e+00
Delays (us)
SBD -0.003193
MBD -0.003244
Fringe rate (Hz)
-0.003743
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

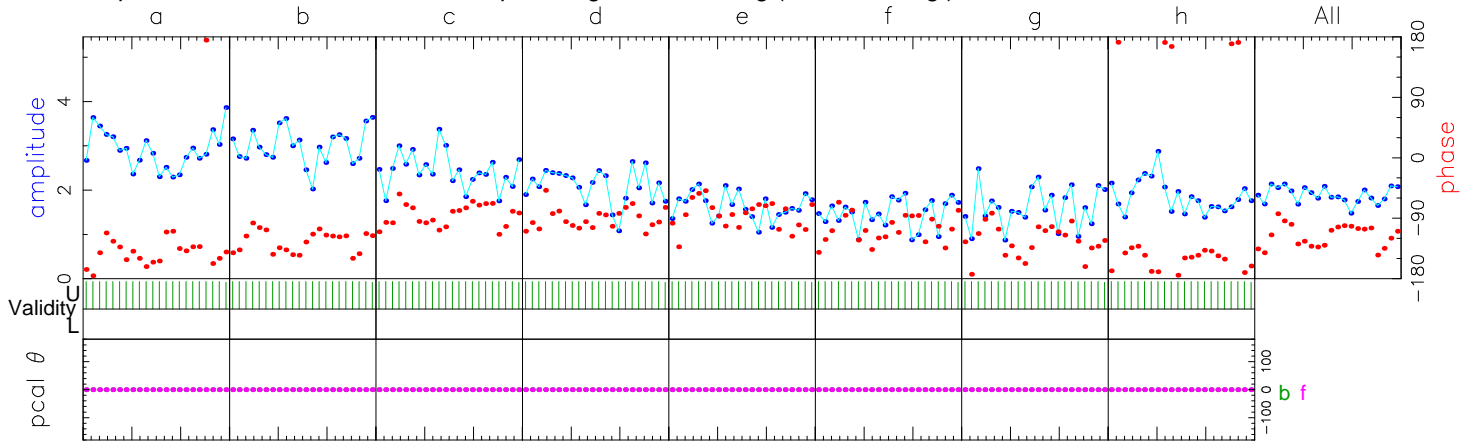


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141436
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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		

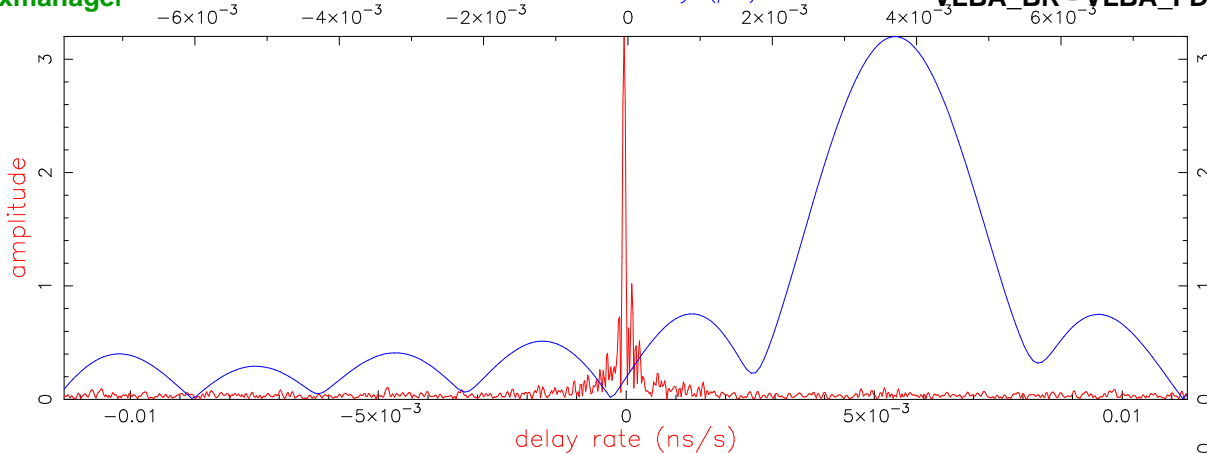
Group delay (usec)(sbd)	5.38405570537E+03	Apriori delay (usec)	5.38405894909E+03	Resid mbdelay (usec)	-3.24372E-03	+/-	1.6E-05
Sband delay (usec)	5.38405575634E+03	Apriori clock (usec)	-9.5492353E+00	Resid sbdelay (usec)	-3.19275E-03	+/-	1.3E-04
Phase delay (usec)	5.38405894536E+03	Apriori clockrate (us/s)	-3.9999997E-07	Resid phdelay (usec)	-3.72865E-06	+/-	5.5E-08
Delay rate (us/s)	2.14031163345E-01	Apriori rate (us/s)	2.14031206800E-01	Resid rate (us/s)	-4.34544E-08	+/-	5.3E-10
Total phase (deg)		Apriori accel (us/s/s)	-6.06974886396E-06	Resid phase (deg)	-115.6	+/-	1.7

ph/seg (deg)	16.6	Theor.	4.0	Amplitude	1.820 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	10.4		7.0	Search (1024X32)	1.793	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	30.5		2.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	31.9		4.2	Inc. seg. avg.	1.887	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	2.019	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

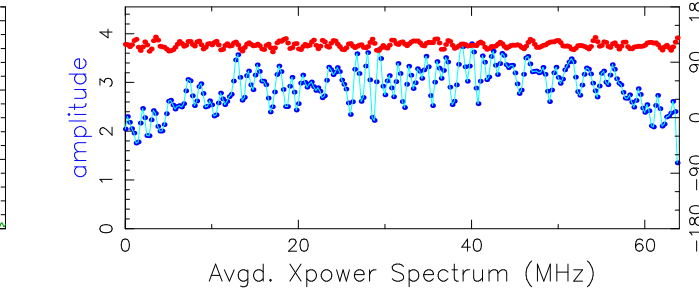
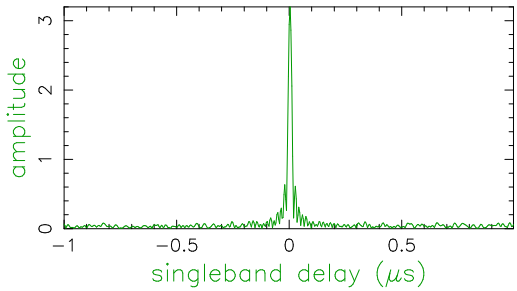
b: az 309.0 el 56.4 pa 83.2 f: az 322.7 el 35.5 pa 88.2 u,v (fr/asec) -2353.037 319.542 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bf..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bf.W.11.1HSTEG

multiband delay (μ s)

Fringe quality 8

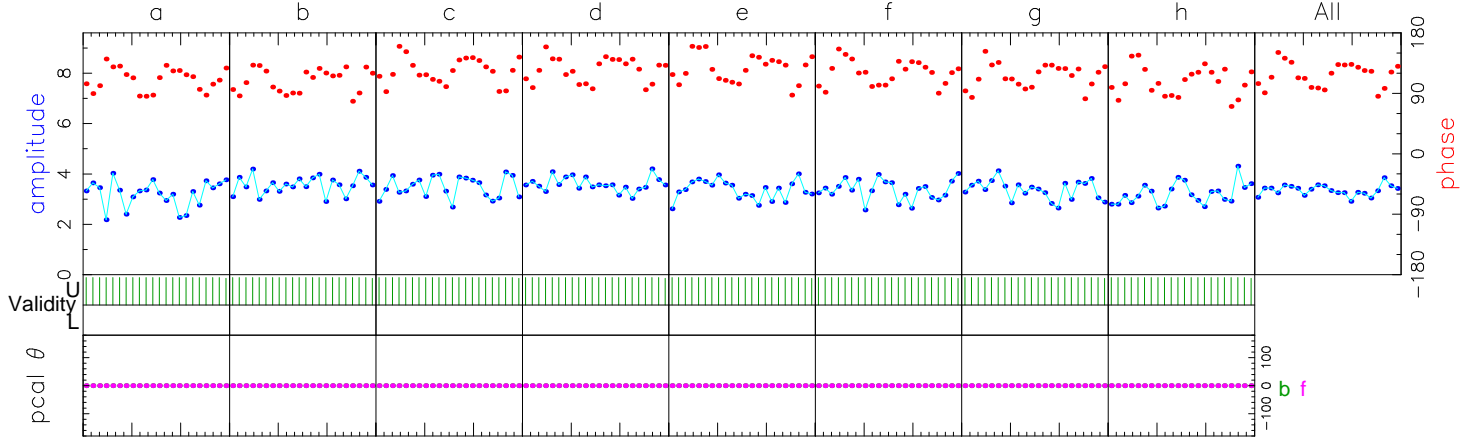


SNR 117.4
 Int time 179.976
 Amp 3.201
 Phase 117.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.003618
 MBD 0.003694
 Fringe rate (Hz)
 -0.003744
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



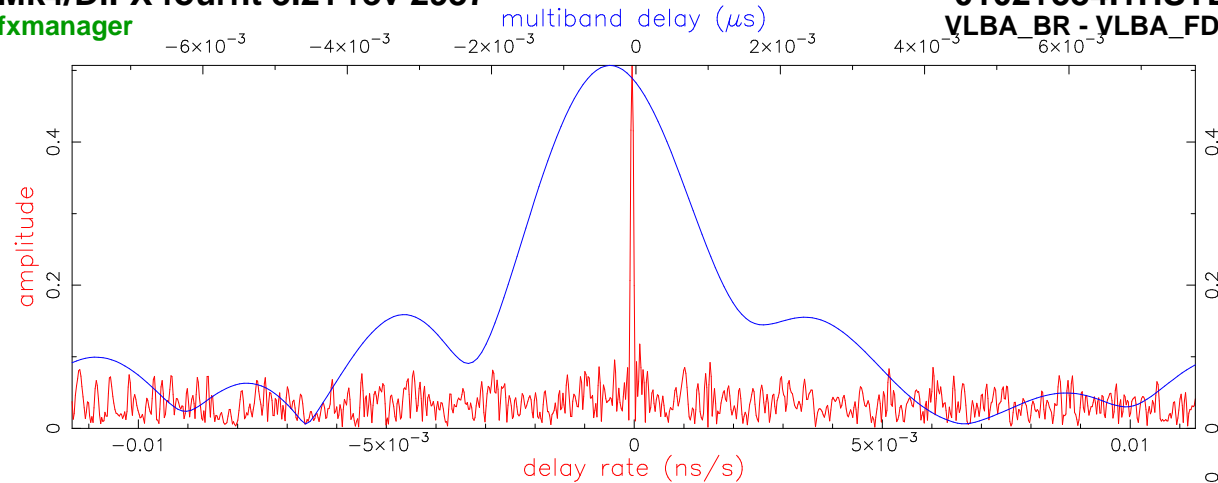
Exp. c202a
 Yr:day 16383
 Start 2020:283
 Stop 2020:283
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141437
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



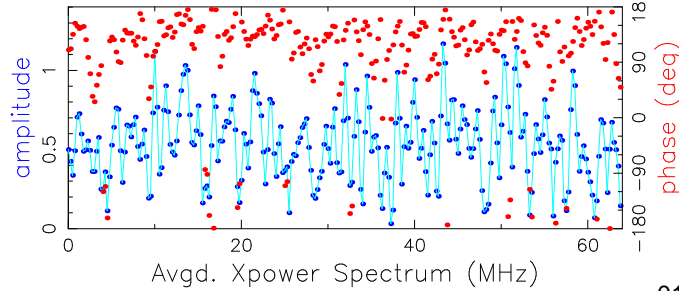
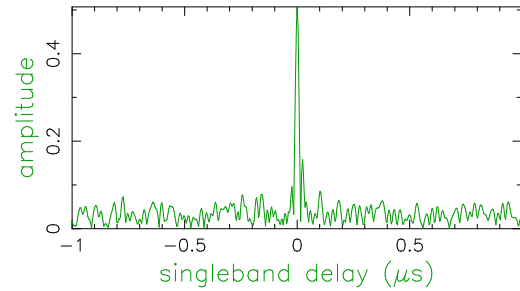
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)		5.38406264337E+03			5.38405894909E+03				3.69428E-03	+/- 9.2E-06
Sband delay (usec)		5.38406256759E+03			-9.5492353E+00				3.61850E-03	+/- 7.3E-05
Phase delay (usec)		5.38405895287E+03			-3.9999997E-07				3.77560E-06	+/- 3.1E-08
Delay rate (us/s)		2.14031163335E-01			2.14031206800E-01				-4.34643E-08	+/- 3.0E-10
Total phase (deg)			72.0		-6.06974886396E-06				117.1	+/- 1.0
	RMS	Theor.	Amplitude	3.201 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	17.5	2.3	Search (1024X32)	3.144	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	8.0	4.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	8.4	1.4	Inc. seg. avg.	3.353	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	4.4	2.4	Inc. frq. avg.	3.224	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 309.0 el 56.4 pa 83.2 f: az 322.7 el 35.5 pa 88.2 u,v (fr/asec) -2353.037 319.542 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bf..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bf.W.28.1HSTEG



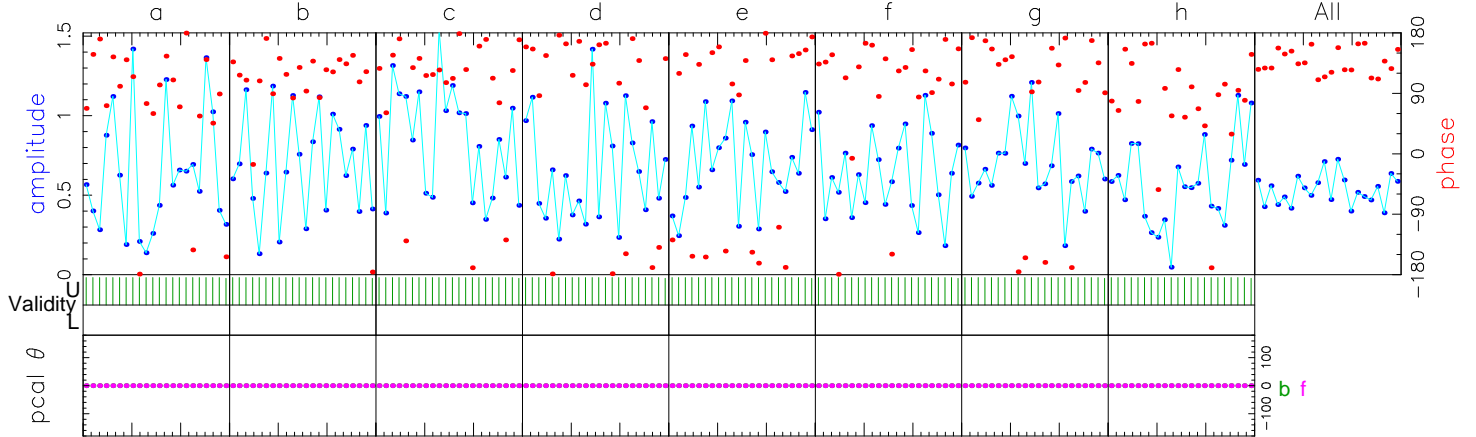
Fringe quality 8

SNR 18.6
Int time 179.976
Amp 0.507
Phase 135.7
PFD 0.0e+00
Delays (us)
SBD -0.000156
MBD -0.000365
Fringe rate (Hz)
-0.003644
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Yr:day 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141440
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



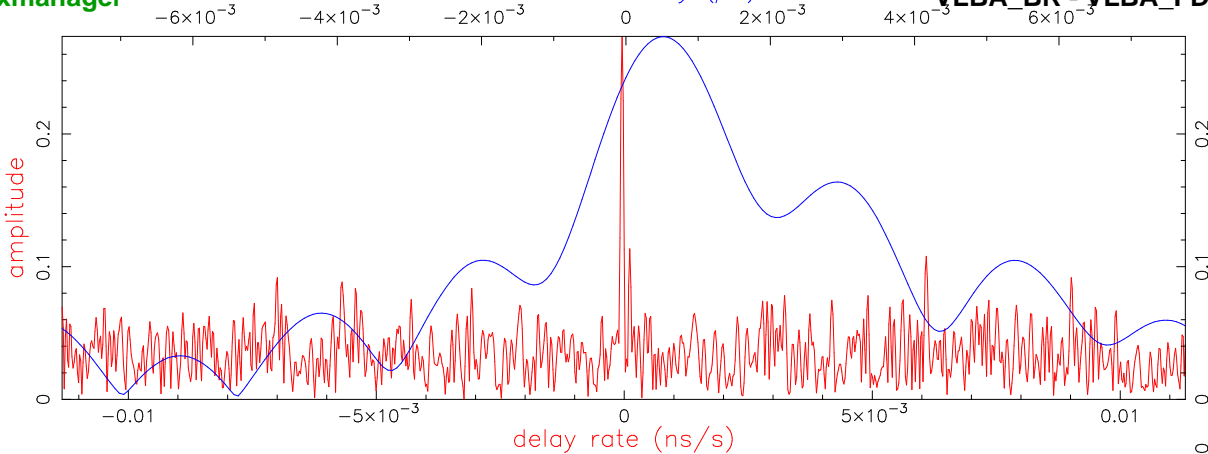
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.38405858365E+03			5.38405894909E+03				Resid mbdelay (usec)	-3.65443E-04 +/- 5.8E-05
Sband delay (usec)		5.38405879309E+03			-9.5492353E+00				Resid sbdelay (usec)	-1.56000E-04 +/- 4.6E-04
Phase delay (usec)		5.38405895347E+03			-3.9999997E-07				Resid phdelay (usec)	4.37488E-06 +/- 2.0E-07
Delay rate (us/s)		2.14031164493E-01			2.14031206800E-01				Resid rate (us/s)	-4.23066E-08 +/- 1.9E-09
Total phase (deg)			90.6		-6.06974886396E-06				Resid phase (deg)	135.7 +/- 6.2
ph/seg (deg)	18.0	14.4		0.507 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	18.8	25.2		0.502					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	25.7	8.7		0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	16.7	15.2		0.517					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
				0.537					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 309.0 el 56.4 pa 83.2 f: az 322.7 el 35.5 pa 88.2 u,v (fr/asec) -2353.037 319.542 simultaneous interpolator

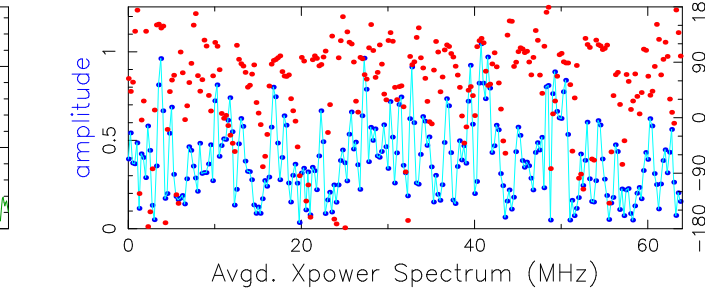
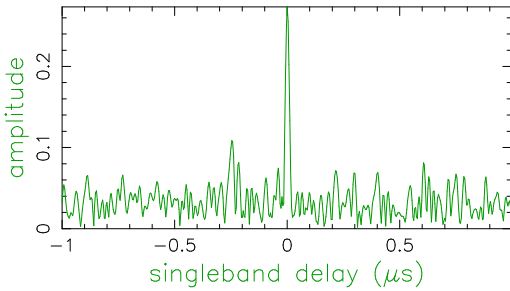
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bf..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bf.W.48.1HSTEG

multiband delay (μ s)

Fringe quality 9

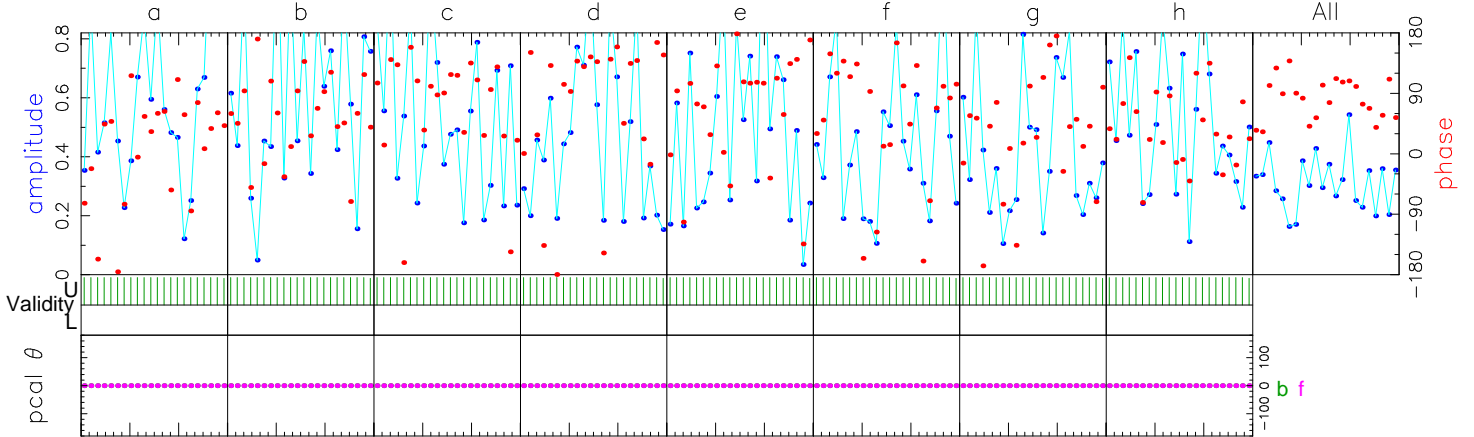


SNR 10.0
 Int time 179.976
 Amp 0.273
 Phase 80.4
 PFD 2.3e-15
 Delays (us)
 SBD 0.000324
 MBD 0.000521
 Fringe rate (Hz)
 -0.003997
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141441
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		5.38405947052E+03			5.38405894909E+03				5.21432E-04	+/- 1.1E-04
Sband delay (usec)		5.38405927309E+03			-9.5492353E+00				3.24000E-04	+/- 8.6E-04
Phase delay (usec)		5.38405895168E+03			-3.9999997E-07				2.59109E-06	+/- 3.7E-07
Delay rate (us/s)		2.14031160395E-01			2.14031206800E-01				-4.64049E-08	+/- 3.5E-09
Total phase (deg)			35.3		-6.06974886396E-06				80.4	+/- 11.4
	RMS	Theor.	Amplitude	0.273 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	30.3	26.8	Search (1024X32)	0.272	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	36.4	46.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	38.9	16.2	Inc. seg. avg.	0.281	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	30.8	28.2	Inc. frq. avg.	0.315	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

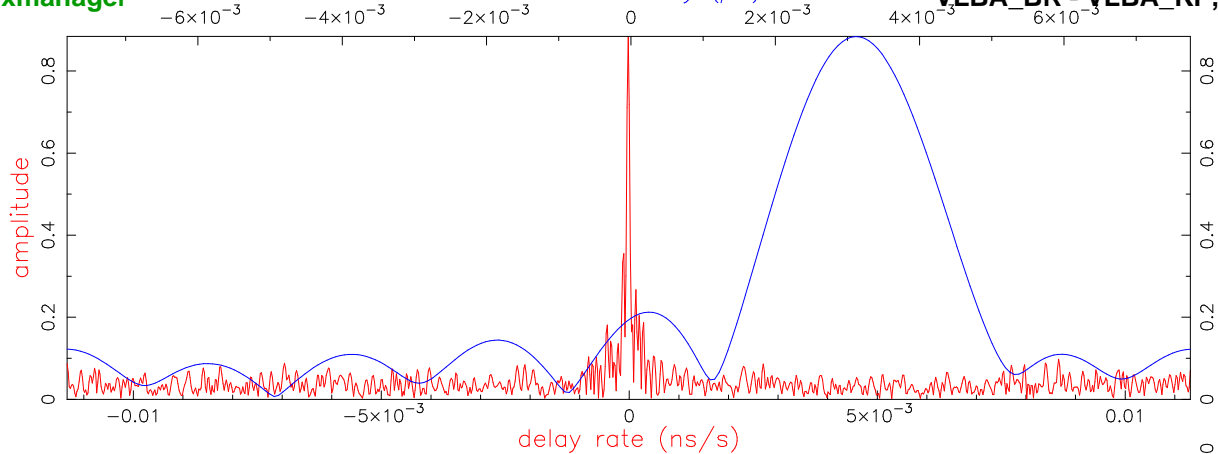
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bk

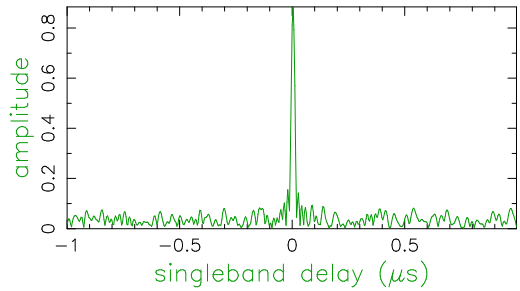
VLBA_BR - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

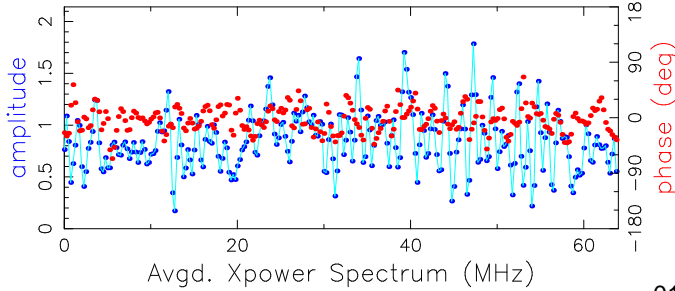


Fringe quality 8

SNR 32.4
 Int time 179.856
 Amp 0.884
 Phase 2.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.003671
 MBD 0.003115
 Fringe rate (Hz)
 -0.001722
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

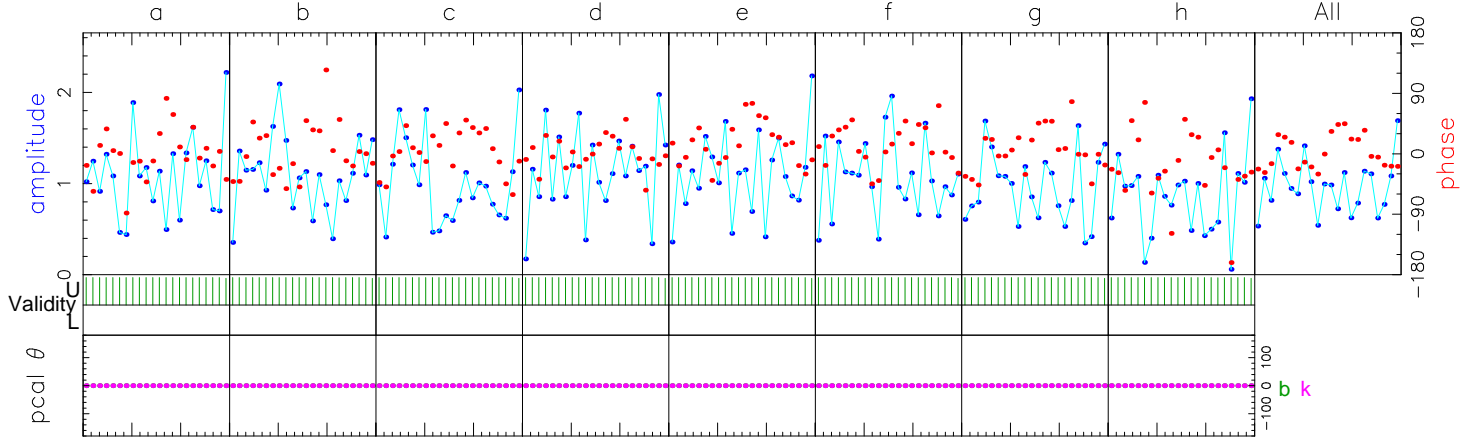


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141436
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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

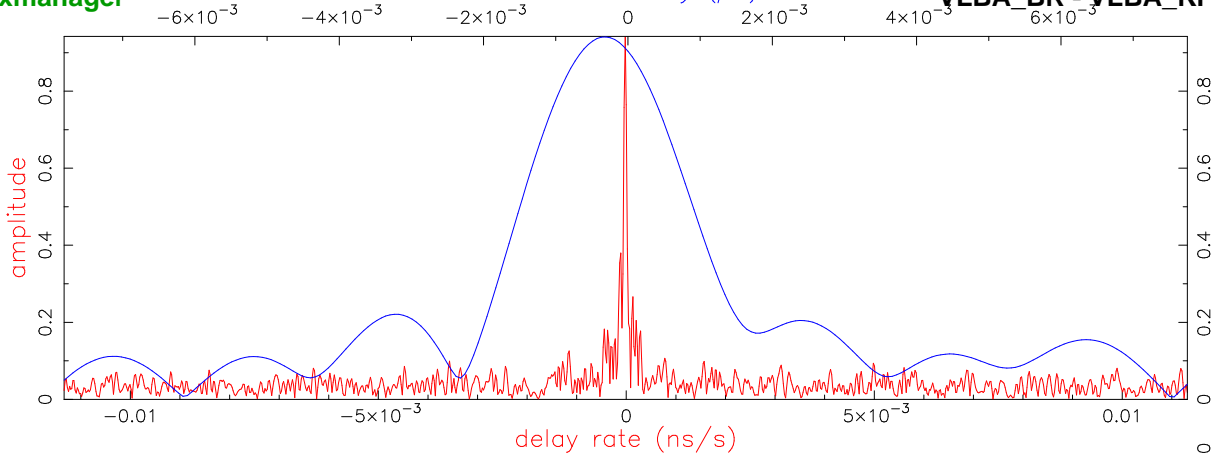


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-1.7	-2.0	4.7	1.8	11.2	13.3	6.5	-15.8		2.9
	0.9	0.9	0.9	1.0	1.0	1.0	0.8	0.7		0.9
	258.0	257.9	258.0	257.6	258.1	257.7	258.2	257.6		257.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	3.90971347598E+03		Apriori delay (usec)		3.90971036097E+03		Resid mbdelay (usec)		3.11501E-03	+/- 3.3E-05
Sband delay (usec)	3.90971403222E+03		Apriori clock (usec)		-2.0393085E+00		Resid sbdelay (usec)		3.67125E-03	+/- 2.7E-04
Phase delay (usec)	3.90971036106E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		9.40691E-08	+/- 1.1E-07
Delay rate (us/s)	1.69855821087E-01		Apriori rate (us/s)		1.69855841074E-01		Resid rate (us/s)		-1.99870E-08	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.62279424817E-08		Resid phase (deg)		2.9	+/- 3.5

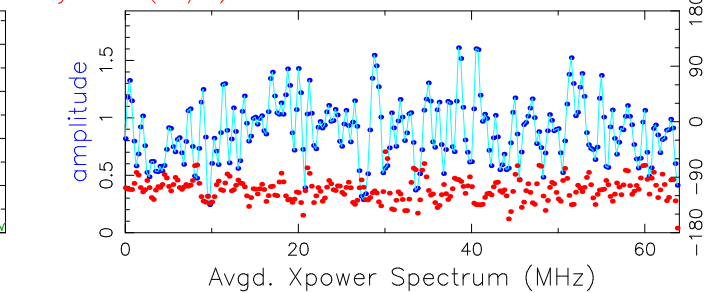
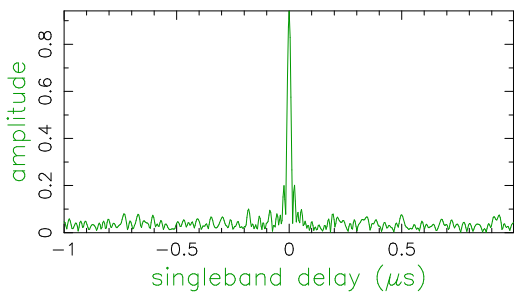
ph/seg (deg) 24.5 8.3 Search (1024X32) 0.869 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.4 14.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.9 5.0 Inc. seg. avg. 0.959 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.1 8.7 Inc. frq. avg. 0.890 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 309.0 el 56.4 pa 83.2 k: az 322.1 el 40.5 pa 93.4 u,v (fr/asec) -1863.642 993.458 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bk..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bk.W.19.1HSTEG

multiband delay (μ s)

Fringe quality 7

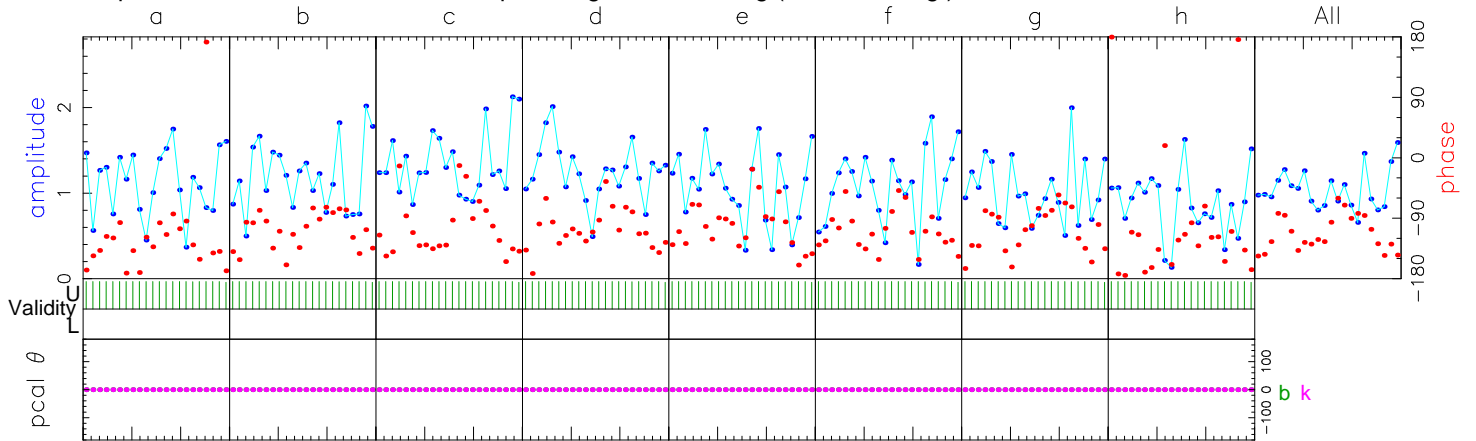


SNR 34.6
 Int time 179.855
 Amp 0.942
 Phase -112.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000499
 MBD -0.000335
 Fringe rate (Hz)
 -0.001721
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141435
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-132.1	-108.0	-112.4	-104.6	-98.0	-105.7	-108.5	-136.9	Phase	-112.6
	1.0	1.1	1.1	1.1	0.9	1.0	0.9	0.7	Ampl.	1.0
	256.9	256.7	257.5	256.9	256.9	256.9	256.5	256.1	Sbd box	256.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.90971002567E+03	Apriori delay (usec)	3.90971036097E+03	Resid mbdelay (usec)	-3.35300E-04	+/-	3.1E-05
Sband delay (usec)	3.90970986172E+03	Apriori clock (usec)	-2.0393085E+00	Resid sbdelay (usec)	-4.99250E-04	+/-	2.5E-04
Phase delay (usec)	3.90971035734E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-3.63032E-06	+/-	1.1E-07
Delay rate (us/s)	1.69855821099E-01	Apriori rate (us/s)	1.69855841074E-01	Resid rate (us/s)	-1.99742E-08	+/-	1.0E-09
Total phase (deg)		Apriori accel (us/s/s)	-8.62279424817E-08	Resid phase (deg)	-112.6	+/-	3.3

ph/seg (deg)	RMS 25.9	Theor. 7.8	Amplitude Search (1024X32)	0.942 +/- 0.027	0.928	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	26.5	13.6	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	14.9	4.7	Inc. seg. avg.	1.035	1.035	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	12.7	8.2	Inc. frq. avg.	0.959	0.959	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

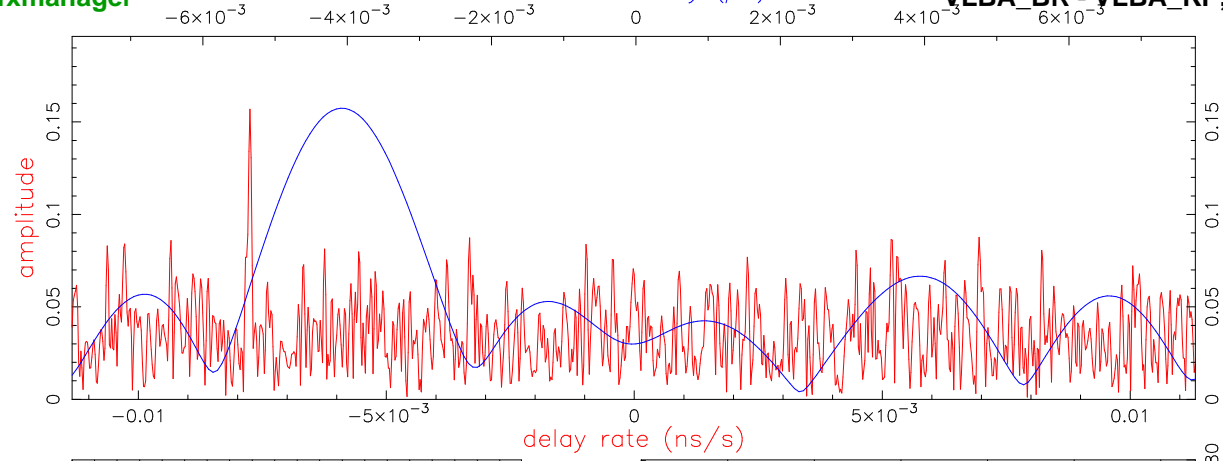
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bk

VLBA_BR - VLBA_KP, fgroup W, pol LR

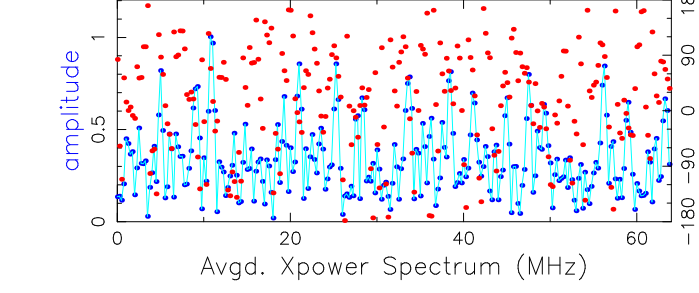
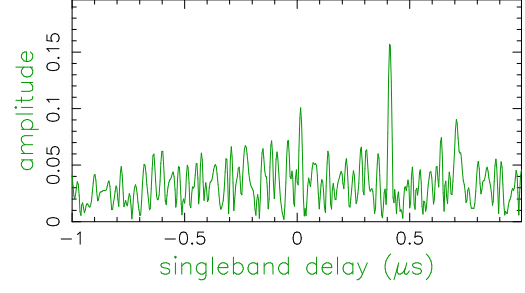
multiband delay (μ s)



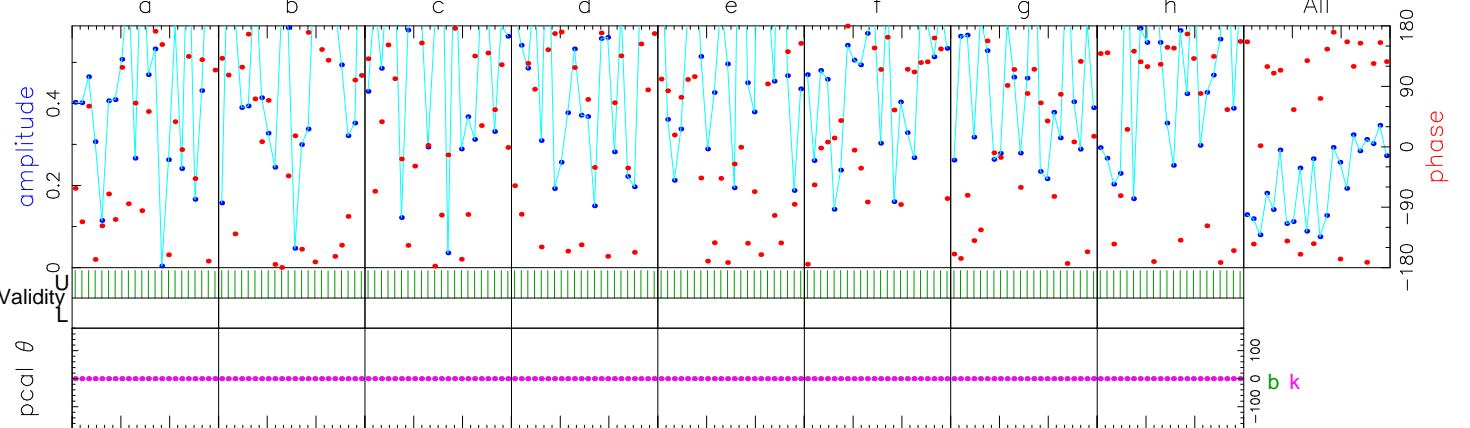
Fringe quality 0

SNR 5.9
 Int time 179.856
 Amp 0.196
 Phase 152.8
 PFD 4.0e-01
 Delays (us)
 SBD 0.411978
 MBD -0.003987
 Fringe rate (Hz)
 -0.669492
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-175.1	148.5	152.4	153.0	169.5	144.3	149.5	145.6	Phase	152.8
	0.1	0.3	0.1	0.3	0.1	0.1	0.1	0.3	Ampl.	0.2
	438.9	362.7	247.9	227.1	261.0	275.8	293.9	361.0	Sbd box	362.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.91012824857E+03		Apriori delay (usec)		3.90971036097E+03		Resid mbdelay (usec)		-3.98740E-03	+/- 1.8E-04
Sband delay (usec)	3.91012233897E+03		Apriori clock (usec)		-2.0393085E+00		Resid sbdelay (usec)		4.11978E-01	+/- 1.5E-03
Phase delay (usec)	3.90971036589E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		4.92679E-06	+/- 6.3E-07
Delay rate (us/s)	1.69848068932E-01		Apriori rate (us/s)		1.69855841074E-01		Resid rate (us/s)		-7.77214E-06	+/- 6.0E-09
Total phase (deg)	330.5		Apriori accel (us/s/s)		-8.62279424817E-08		Resid phase (deg)		152.8	+/- 19.5

ph/seg (deg) 54.2 45.7 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.6 79.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.6 27.5 Inc. seg. avg. 0.192 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.1 48.1 Inc. frq. avg. 0.175 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 309.0 el 56.4 pa 83.2 k: az 322.1 el 40.5 pa 93.4 u,v (fr/asec) -1863.642 993.458 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bk..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bk.W.41.1HSTEG

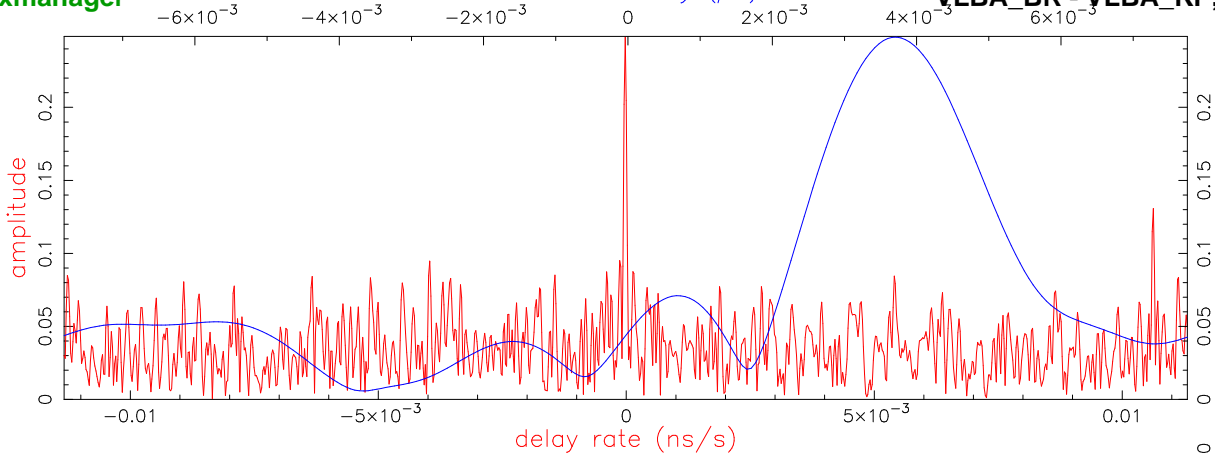
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bk

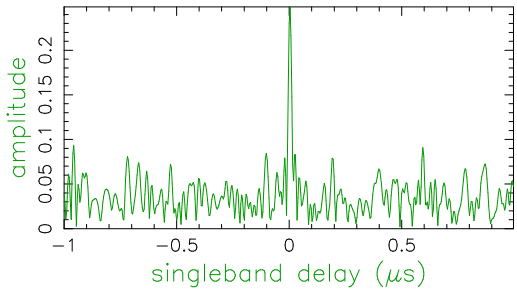
VLBA_BR - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

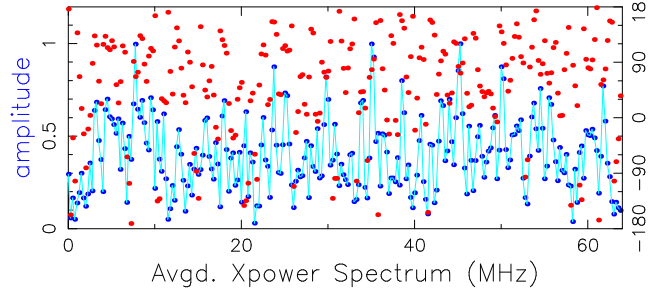


Fringe quality 9

SNR 9.1
 Int time 179.855
 Amp 0.249
 Phase 83.7
 PFD 1.5e-11
 Delays (us)
 SBD 0.003322
 MBD 0.003690
 Fringe rate (Hz) -0.001402
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

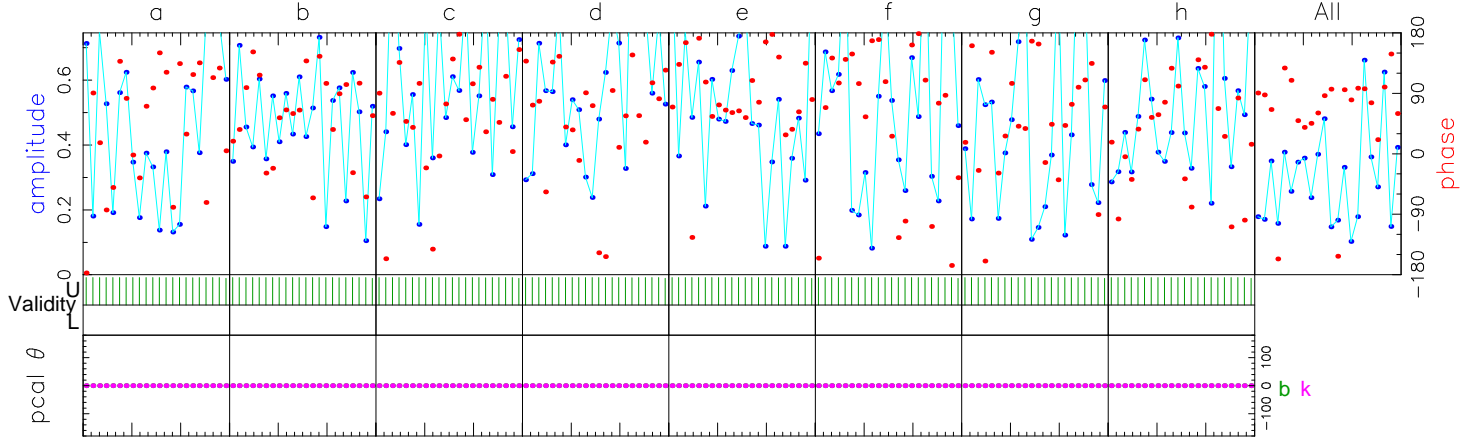


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141442
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	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	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	3.90971405051E+03		Apriori delay (usec)		3.90971036097E+03		Resid mbdelay (usec)		3.68954E-03	+/- 1.2E-04
Sband delay (usec)	3.90971368247E+03		Apriori clock (usec)		-2.0393085E+00		Resid sbdelay (usec)		3.32150E-03	+/- 9.4E-04
Phase delay (usec)	3.90971036367E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		2.69973E-06	+/- 4.1E-07
Delay rate (us/s)	1.69855824802E-01		Apriori rate (us/s)		1.69855841074E-01		Resid rate (us/s)		-1.62713E-08	+/- 3.9E-09
Total phase (deg)	261.4		Apriori accel (us/s/s)		-8.62279424817E-08		Resid phase (deg)		83.7	+/- 12.6

	RMS	Theor.	Amplitude	0.249 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.5	29.5	Search (1024X32)	0.241	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	63.2	51.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.3	17.8	Inc. seg. avg.	0.268	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	25.0	31.0	Inc. frq. avg.	0.254	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 309.0 el 56.4 pa 83.2 k: az 322.1 el 40.5 pa 93.4 u,v (fr/asec) -1863.642 993.458 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bk..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bk.W.67.1HSTEG

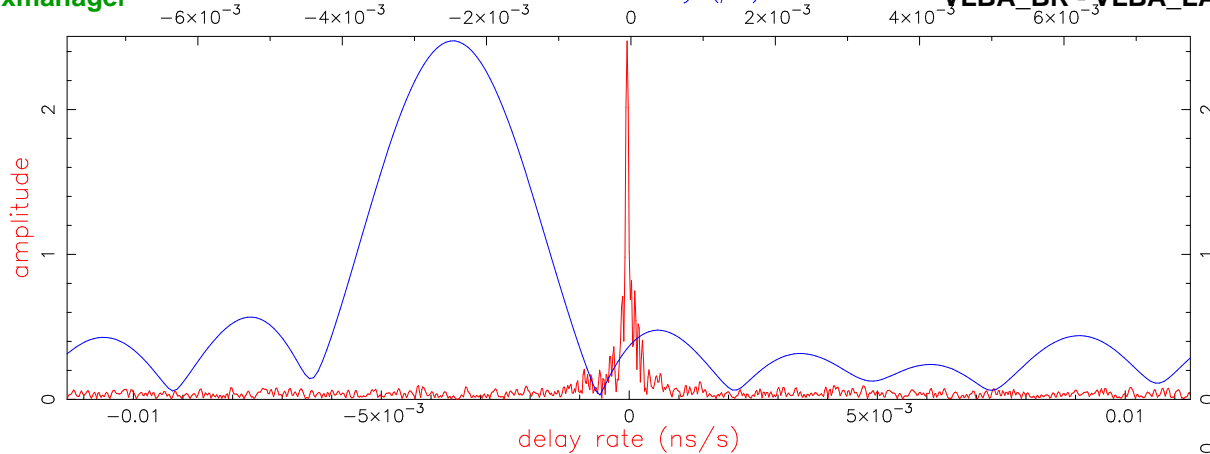
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bl

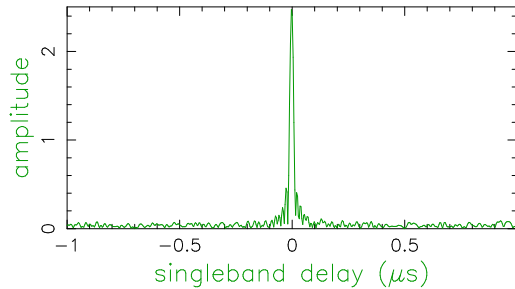
VLBA_BR - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

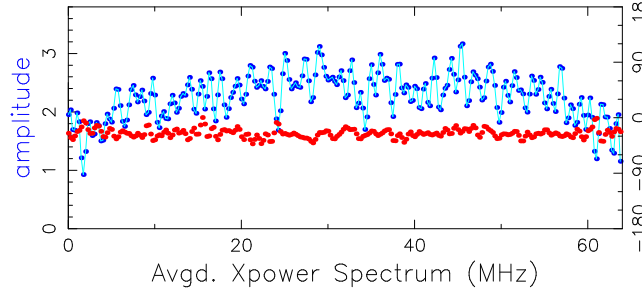


Fringe quality 7

SNR 91.9
 Int time 179.976
 Amp 2.504
 Phase -25.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002451
 MBD -0.002428
 Fringe rate (Hz)
 -0.003259
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

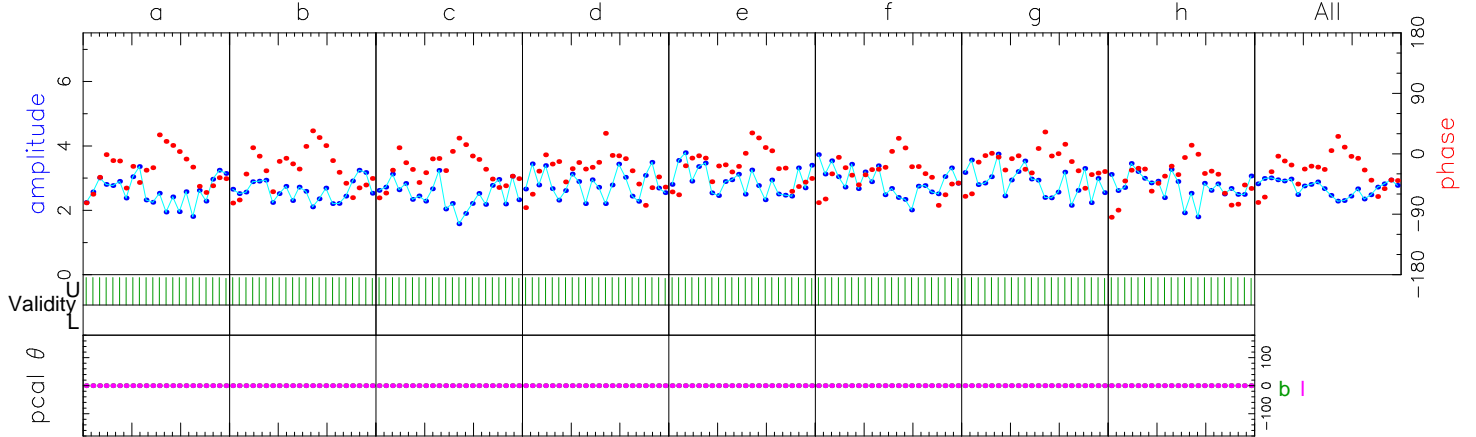


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141435
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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) 3.86643127194E+03 Apriori delay (usec) 3.86643370001E+03 Resid mbdelay (usec) -2.42807E-03 +/- 1.2E-05
 Sband delay (usec) 3.86643124901E+03 Apriori clock (usec) -1.3216906E+00 Resid sbdelay (usec) -2.45100E-03 +/- 9.4E-05
 Phase delay (usec) 3.86643369918E+03 Apriori clockrate (us/s) 9.9999998E-08 Resid phdelay (usec) -8.35091E-07 +/- 4.0E-08
 Delay rate (us/s) 1.67558243173E-01 Apriori rate (us/s) 1.67558281002E-01 Resid rate (us/s) -3.78285E-08 +/- 3.9E-10
 Total phase (deg) 304.9 Apriori accel (us/s/s) -5.17348097197E-06 Resid phase (deg) -25.9 +/- 1.2

RMS Theor. Amplitude 2.504 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 24.6 2.9 Search (1024X32) 2.431 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 12.2 5.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 7.6 1.8 Inc. seg. avg. 2.703 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 6.0 3.1 Inc. frq. avg. 2.488 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 309.0 el 56.4 pa 83.2 l: az 320.1 el 40.7 pa 86.3 u,v (fr/asec) -1842.331 85.090 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl.W.4.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

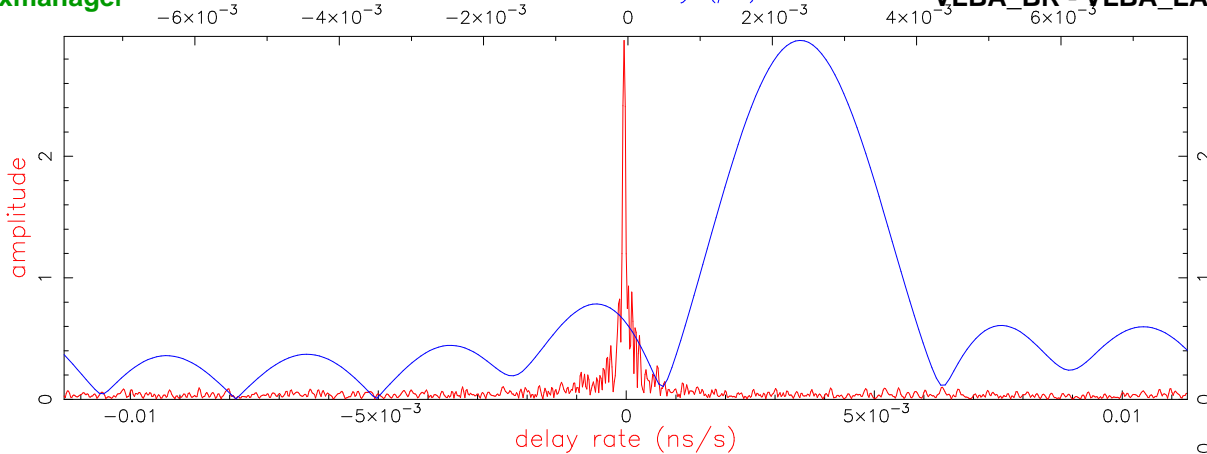
fxmanager

0102+584.1HSTEG, No0128, bl

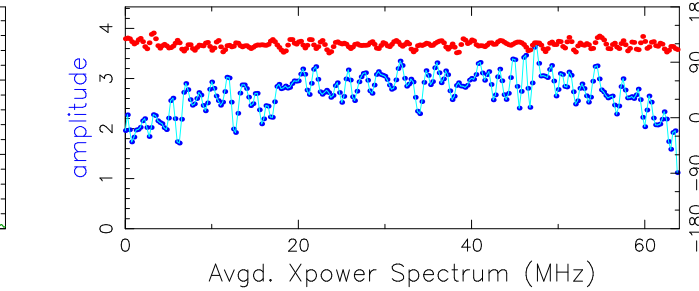
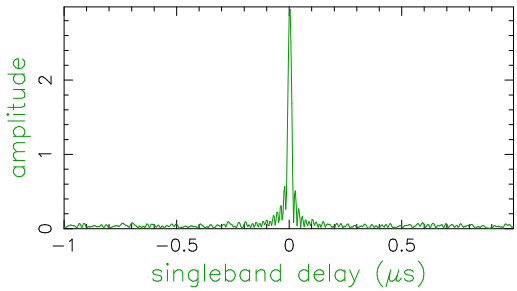
VLBA_BR - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 7

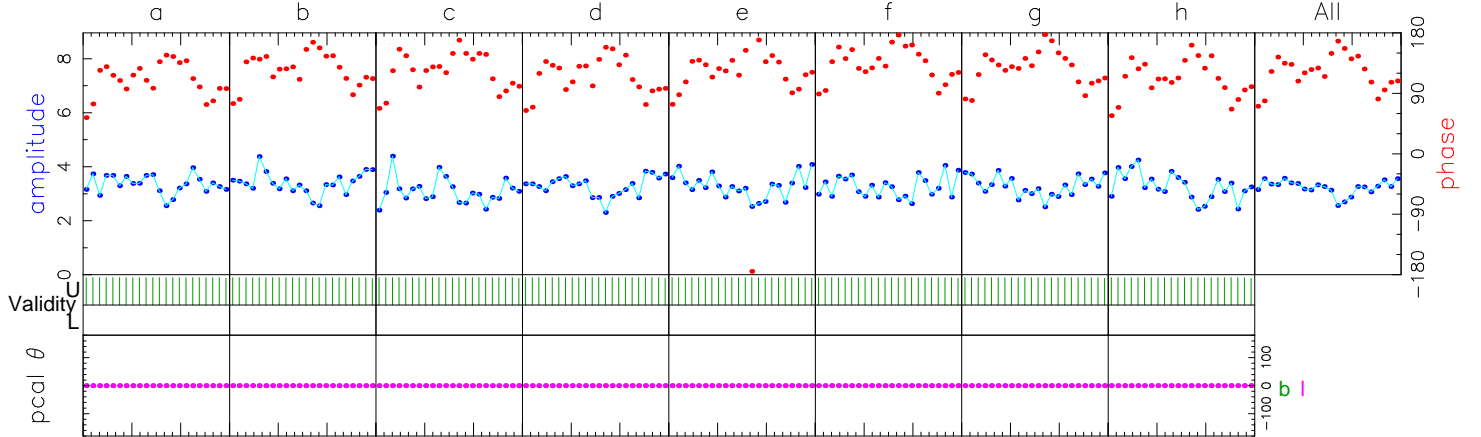


SNR 109.6
 Int time 179.976
 Amp 2.987
 Phase 120.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.002539
 MBD 0.002355
 Fringe rate (Hz)
 -0.003255
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



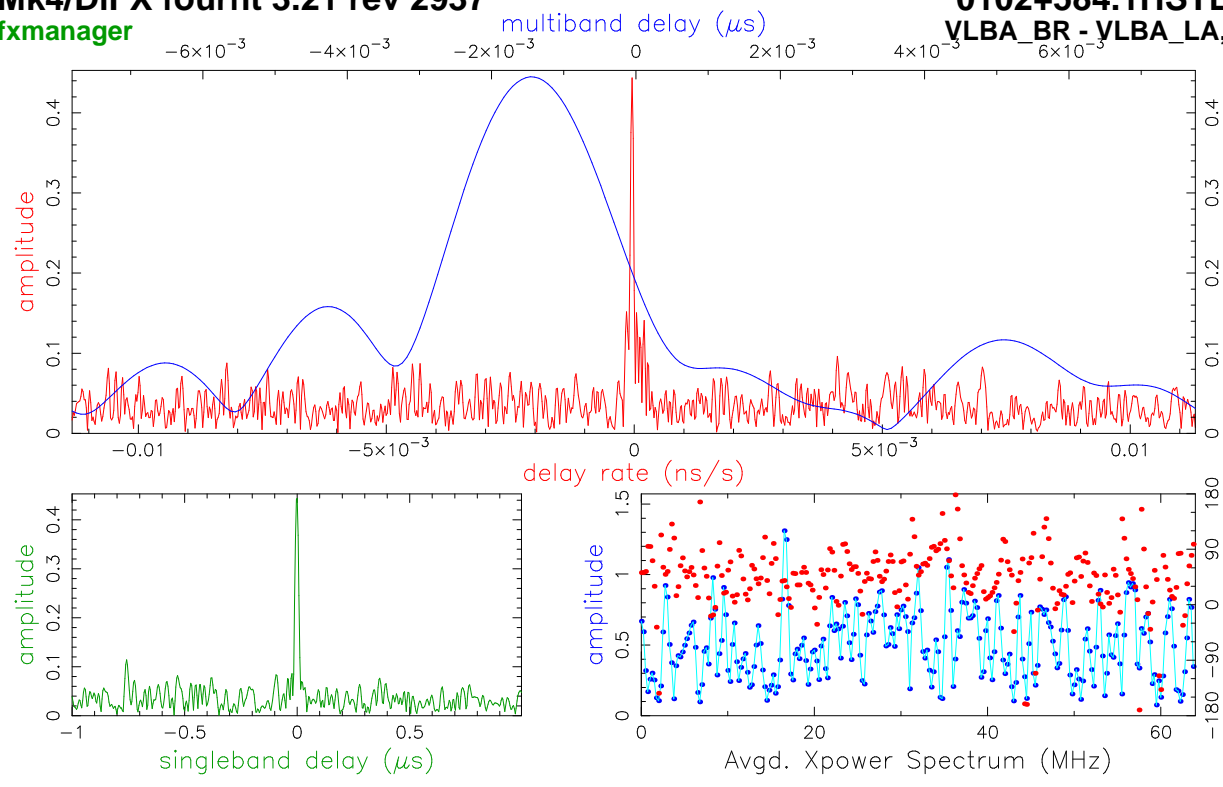
Exp. c202a
 Yr:day 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	3.86643605475E+03		Apriori delay (usec)		3.86643370001E+03		Resid mbdelay (usec)		2.35474E-03	+/- 9.9E-06
Sband delay (usec)	3.86643623901E+03		Apriori clock (usec)		-1.3216906E+00		Resid sbdelay (usec)		2.53900E-03	+/- 7.9E-05
Phase delay (usec)	3.86643370389E+03		Apriori clockrate (us/s)		9.999998E-08		Resid phdelay (usec)		3.87956E-06	+/- 3.4E-08
Delay rate (us/s)	1.67558243217E-01		Apriori rate (us/s)		1.67558281002E-01		Resid rate (us/s)		-3.77845E-08	+/- 3.2E-10
Total phase (deg)			Apriori accel (us/s/s)		-5.17348097197E-06		Resid phase (deg)		120.3	+/- 1.0

ph/seg (deg) 24.8 2.5 Search (1024X32) 2.899 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 11.9 4.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.8 1.5 Inc. seg. avg. 3.231 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 3.0 2.6 Inc. frq. avg. 2.978 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 309.0 el 56.4 pa 83.2 l: az 320.1 el 40.7 pa 86.3 u,v (fr/asec) -1842.331 85.090 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl.W.42.1HSTEG

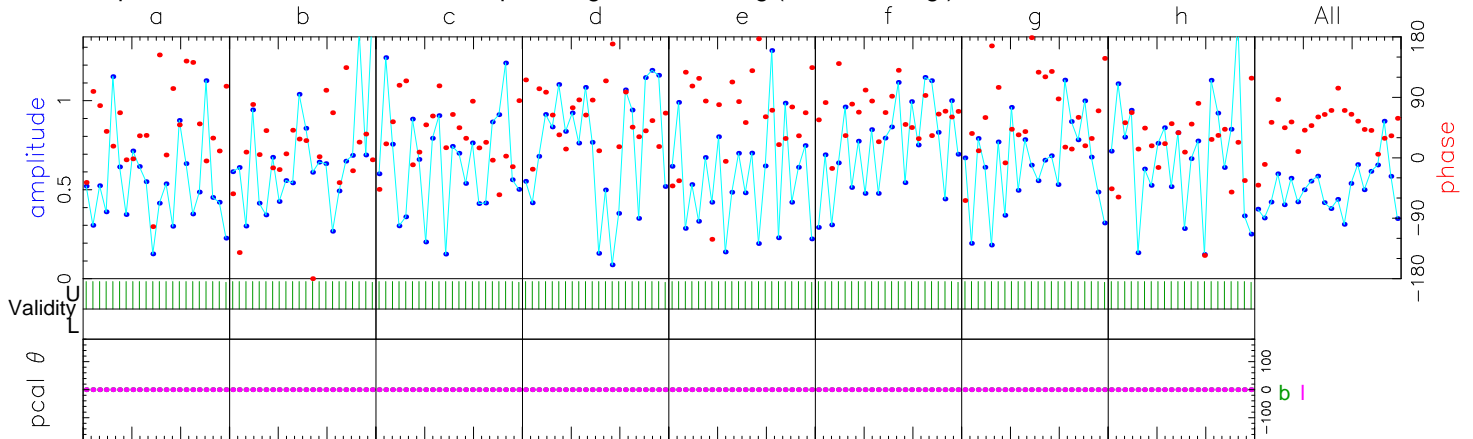


Fringe quality 9

SNR 16.6
Int time 179.976
Amp 0.453
Phase 45.6
PFD 0.0e+00
Delays (us)
SBD -0.001846
MBD -0.001532
Fringe rate (Hz)
-0.003492
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141440
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

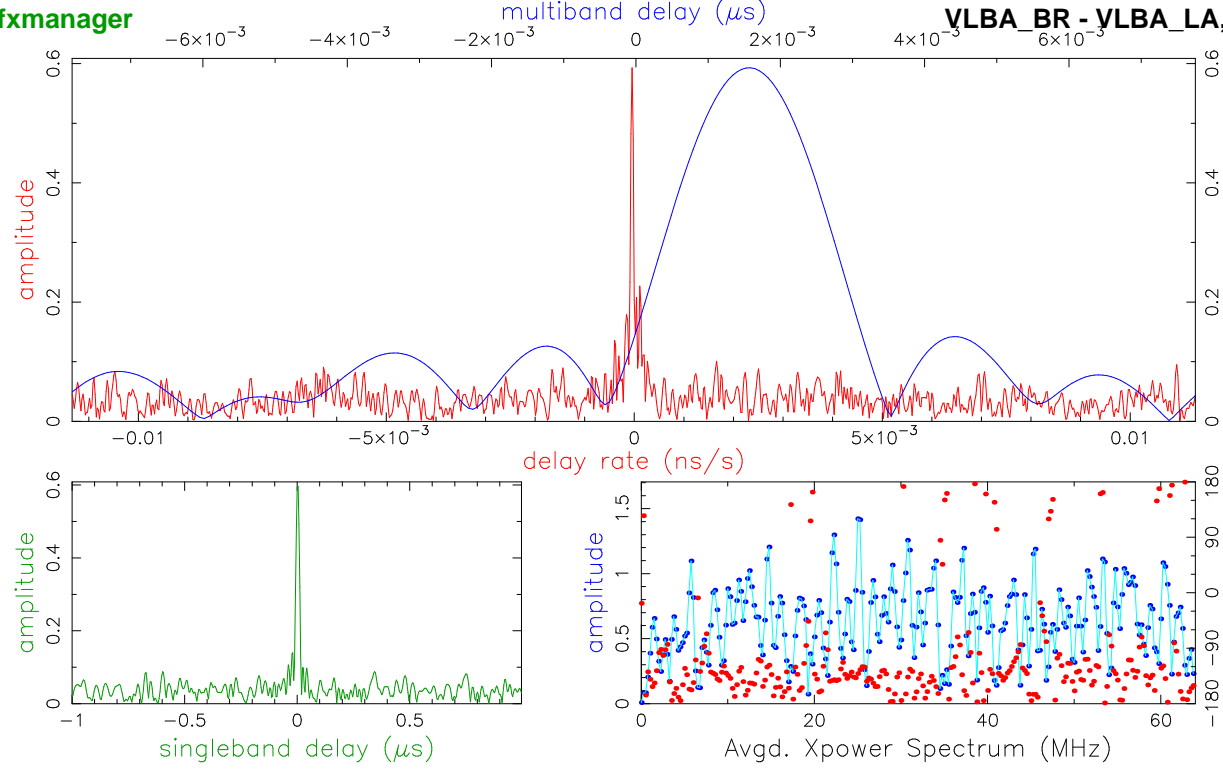
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	3.86643216779E+03		Apriori delay (usec)		3.86643370001E+03		Resid mbdelay (usec)		-1.53222E-03	+/- 6.5E-05
Sband delay (usec)	3.86643185426E+03		Apriori clock (usec)		-1.3216906E+00		Resid sbdelay (usec)		-1.84575E-03	+/- 5.2E-04
Phase delay (usec)	3.86643370148E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		1.47049E-06	+/- 2.2E-07
Delay rate (us/s)	1.67558240468E-01		Apriori rate (us/s)		1.67558281002E-01		Resid rate (us/s)		-4.05337E-08	+/- 2.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.17348097197E-06		Resid phase (deg)		45.6	+/- 6.9
ph/seg (deg)	RMS 31.3	Theor. 16.2	Amplitude 0.453 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	30.5	28.2	Search (1024X32) 0.443		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	21.7	9.8	Interp. 0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
amp/frq (%)	23.0	17.0	Inc. seg. avg. 0.485		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
			Inc. frq. avg. 0.463							

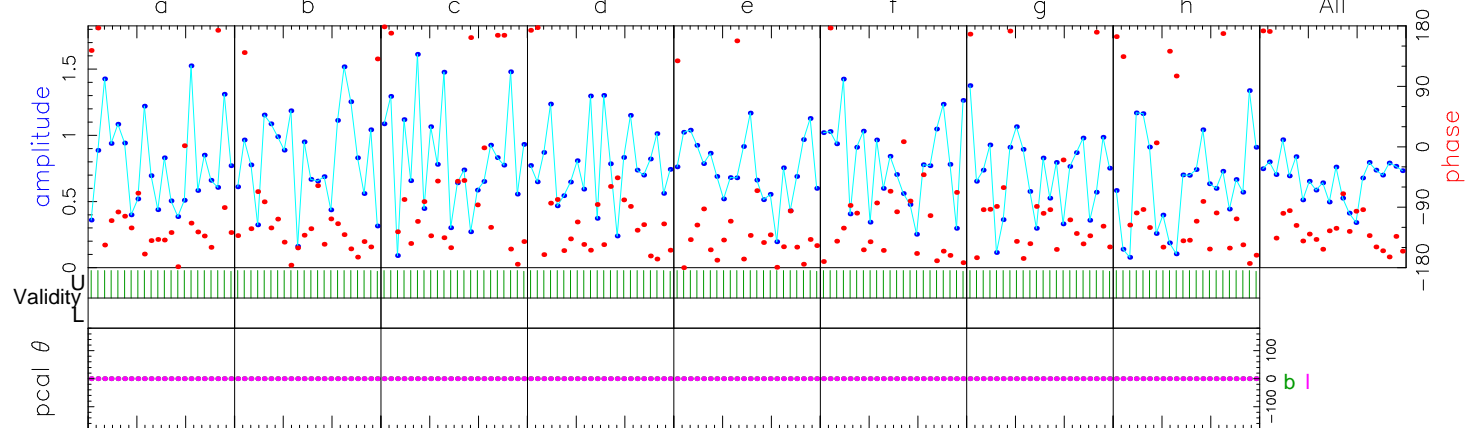
b: az 309.0 el 56.4 pa 83.2 l: az 320.1 el 40.7 pa 86.3 u,v (fr/asec) -1842.331 85.090 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl.W.57.1HSTEG



Fringe quality 9
SNR 22.3
Int time 179.976
Amp 0.609
Phase -133.6
PFD 0.0e+00
Delays (us)
SBD 0.002069
MBD 0.001597
Fringe rate (Hz) -0.003210
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141442
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-129.4	-133.8	-131.4	-128.8	-145.8	-129.9	-136.3	-133.3	Phase	-133.6
	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	Ampl.	0.6
	257.5	257.7	257.9	257.3	257.7	257.7	257.1	257.8	Sbd box	257.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	Mani 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)	3.86643529657E+03		Apriori delay (usec)		3.86643370001E+03		Resid mbdelay (usec)		1.59656E-03	+/- 4.9E-05
Sband delay (usec)	3.86643576901E+03		Apriori clock (usec)		-1.3216906E+00		Resid sbdelay (usec)		2.06900E-03	+/- 3.9E-04
Phase delay (usec)	3.86643369570E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-4.30909E-06	+/- 1.7E-07
Delay rate (us/s)	1.67558243737E-01		Apriori rate (us/s)		1.67558281002E-01		Resid rate (us/s)		-3.72645E-08	+/- 1.6E-09
Total phase (deg)	197.2		Apriori accel (us/s/s)		-5.17348097197E-06		Resid phase (deg)		-133.6	+/- 5.1

ph/seg (deg) 29.2 12.0 Amplitude 0.609 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 26.1 21.0 Search (1024X32) 0.578 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 6.0 7.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 9.5 12.7 Inc. seg. avg. 0.661 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 309.0 el 56.4 pa 83.2 l: az 320.1 el 40.7 pa 86.3 u,v (fr/asec) -1842.331 85.090 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bl.W.72.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

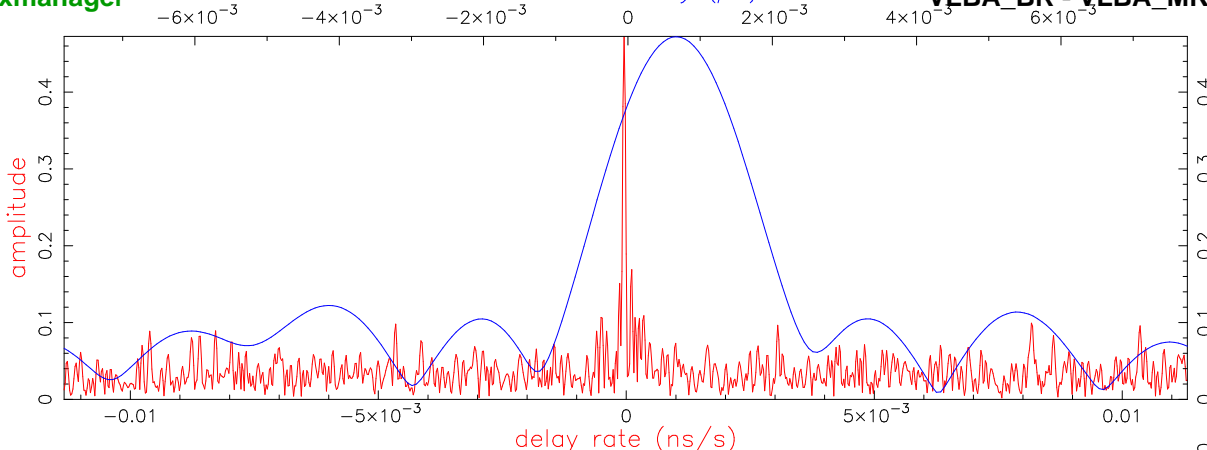
fxmanager

0102+584.1HSTEG, No0128, bm

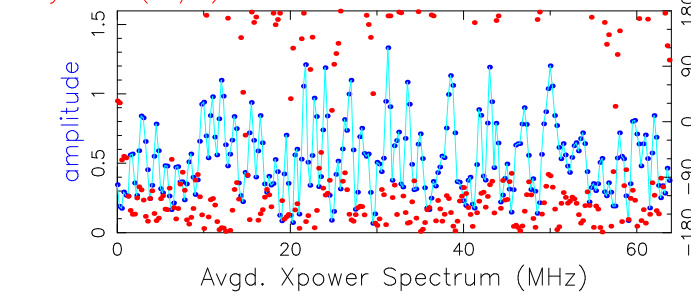
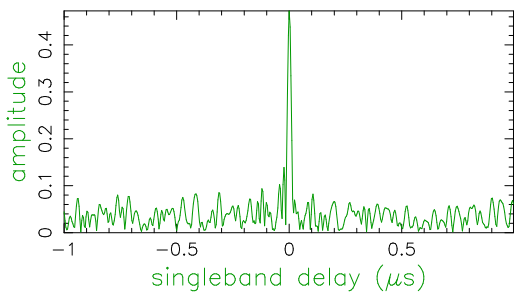
VLBA_BR - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

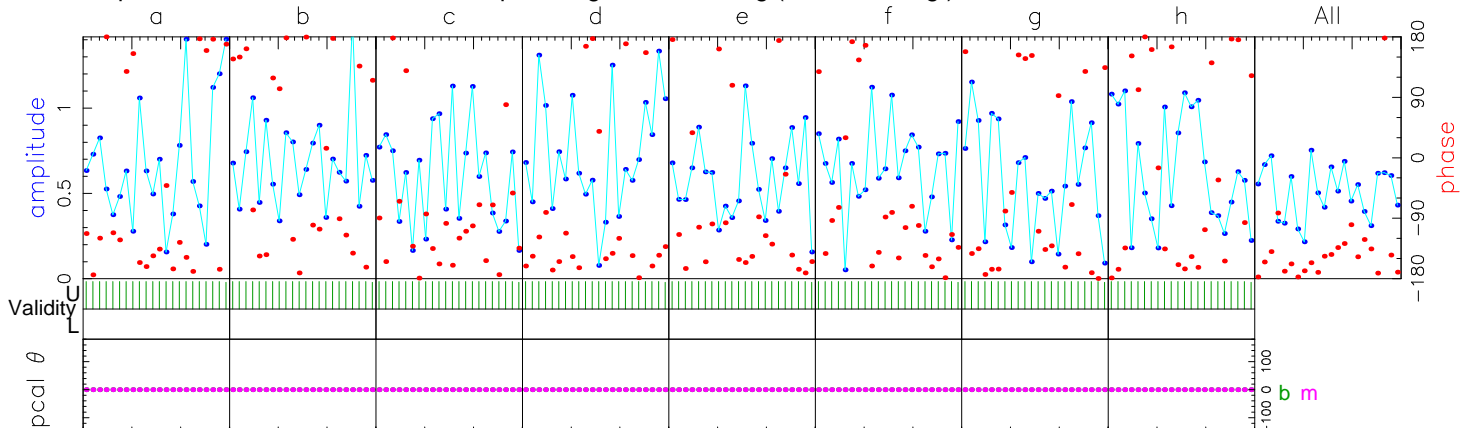


SNR 17.3
 Int time 179.976
 Amp 0.473
 Phase -150.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.000385
 MBD 0.000681
 Fringe rate (Hz) -0.003206
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141437
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-159.8	-155.5	-131.2	-149.8	-141.7	-134.6	-159.5	-162.7	Phase	-150.1
	0.6	0.4	0.4	0.6	0.4	0.5	0.4	0.5	Ampl.	0.5
	257.3	258.0	257.1	256.7	257.5	256.8	257.3	256.8	Sbd box	257.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 1.66746080917E+03 Apriori delay (usec) 1.66746012808E+03 Resid mbdelay (usec) 6.81088E-04 +/- 6.3E-05
 Sband delay (usec) 1.66746051358E+03 Apriori clock (usec) -1.5069308E+01 Resid sbdelay (usec) 3.85500E-04 +/- 5.0E-04
 Phase delay (usec) 1.66746012324E+03 Apriori clockrate (us/s) -9.9999991E-08 Resid phdelay (usec) -4.83924E-06 +/- 2.1E-07
 Delay rate (us/s) -1.87353917733E-01 Apriori rate (us/s) -1.87353880511E-01 Resid rate (us/s) -3.22219E-08 +/- 2.0E-09
 Total phase (deg) 5.7 Apriori accel (us/s/s) 3.00551797580E-05 Resid phase (deg) -150.1 +/- 6.6

ph/seg (deg) 25.0 15.5 Amplitude 0.473 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.8 27.1 Search (1024X32) 0.457 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.2 9.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 17.1 16.3 Inc. seg. avg. 0.493 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 309.0 el 56.4 pa 83.2 m: az 344.6 el 48.8 pa 151.9 u,v (fr/asec) 2076.779 5720.675 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm.W.24.1HSTEG

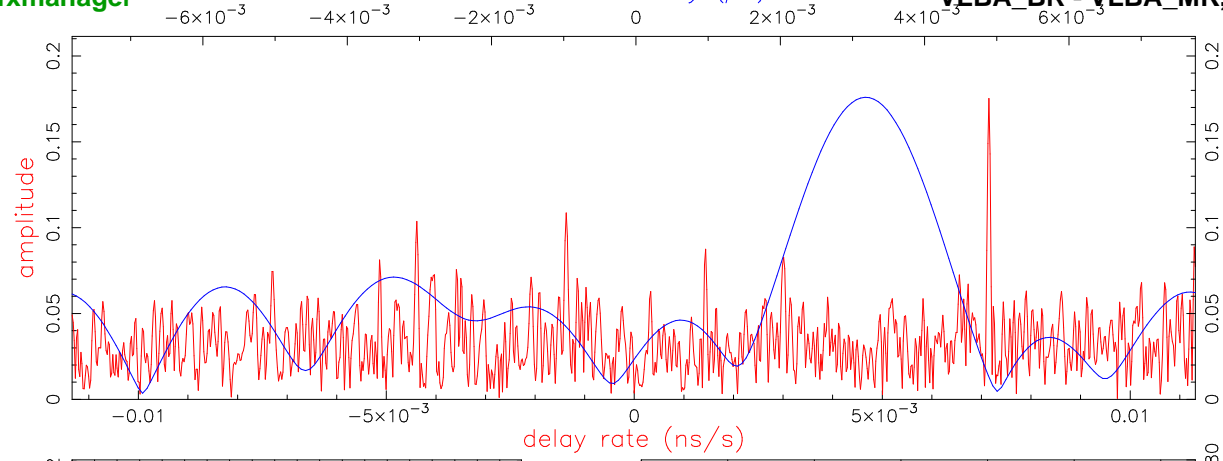
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

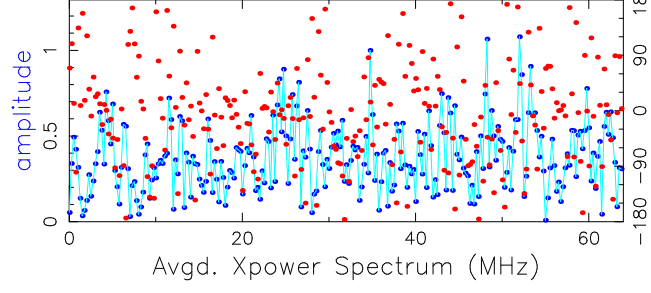
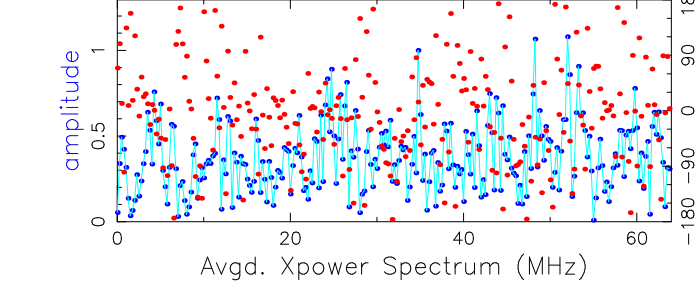
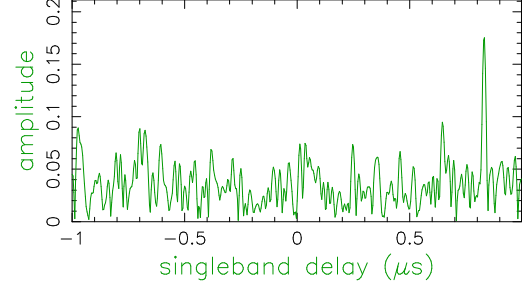
0102+584.1HSTEG, No0128, bm

VLBA_BR - VLBA_MK, fgroup W, pol LR

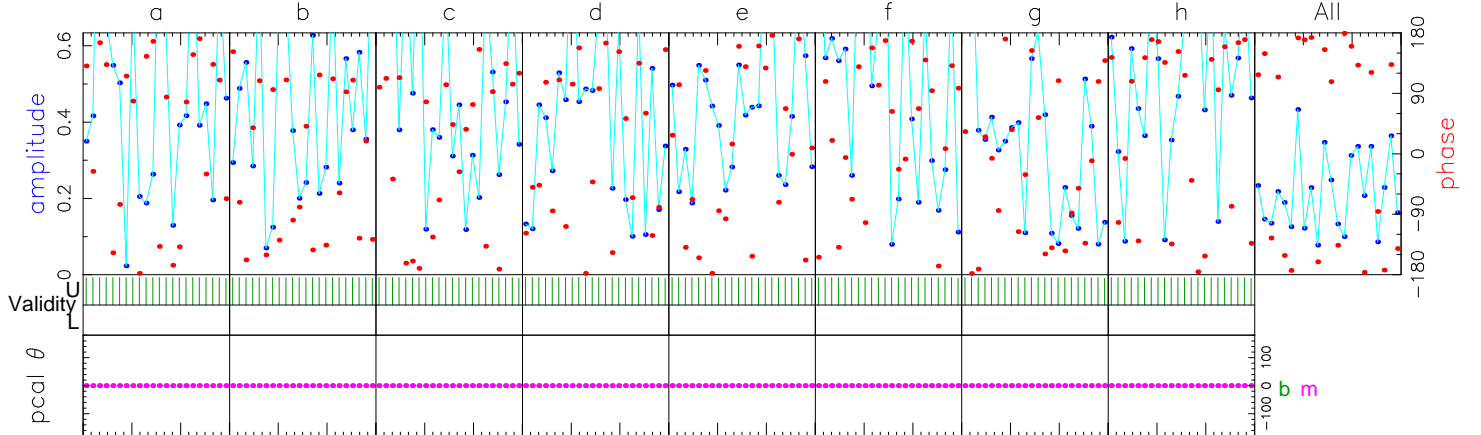
multiband delay (μ s)



Fringe quality 0
 SNR 6.5
 Int time 179.976
 Amp 0.211
 Phase 159.8
 PFD 8.5e-03
 Delays (us)
 SBD 0.830361
 MBD 0.003100
 Fringe rate (Hz) 0.617367
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	1.66829135276E+03									
Sband delay (usec)	1.66829048958E+03									
Phase delay (usec)	1.66746013323E+03									
Delay rate (us/s)	-1.87346713496E-01									
Total phase (deg)			315.6							
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)									159.8	+/- 17.5
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MSamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 44.1 41.1 Search (1024X32) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.5 71.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.0 24.8 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.8 43.2 Inc. frq. avg. 0.195 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 309.0 el 56.4 pa 83.2 m: az 344.6 el 48.8 pa 151.9 u,v (fr/asec) 2076.779 5720.675 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm.W.43.1HSTEG

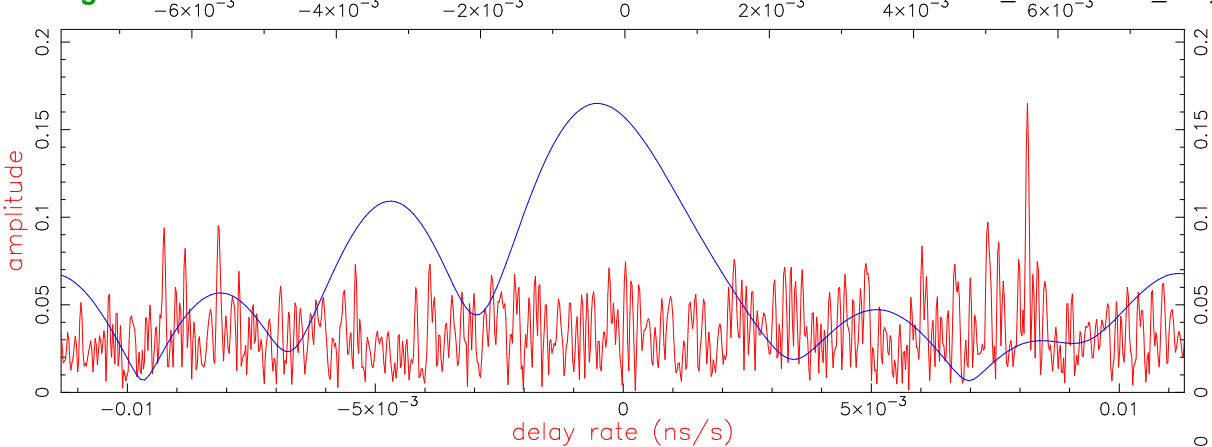
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bm

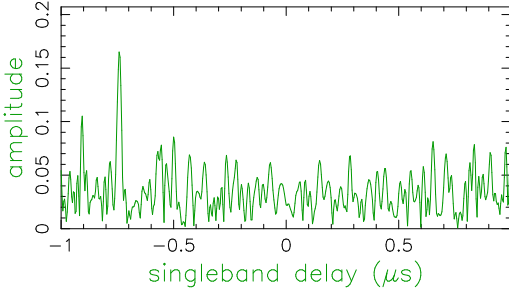
VLBA_BR - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

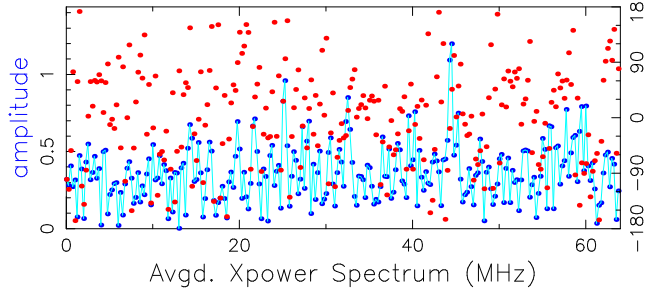


Fringe quality 0

SNR 6.1
 Int time 179.976
 Amp 0.207
 Phase 115.4
 PFD 1.4e-01
 Delays (us)
 SBD -0.741068
 MBD -0.000368
 Fringe rate (Hz)
 0.702457
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

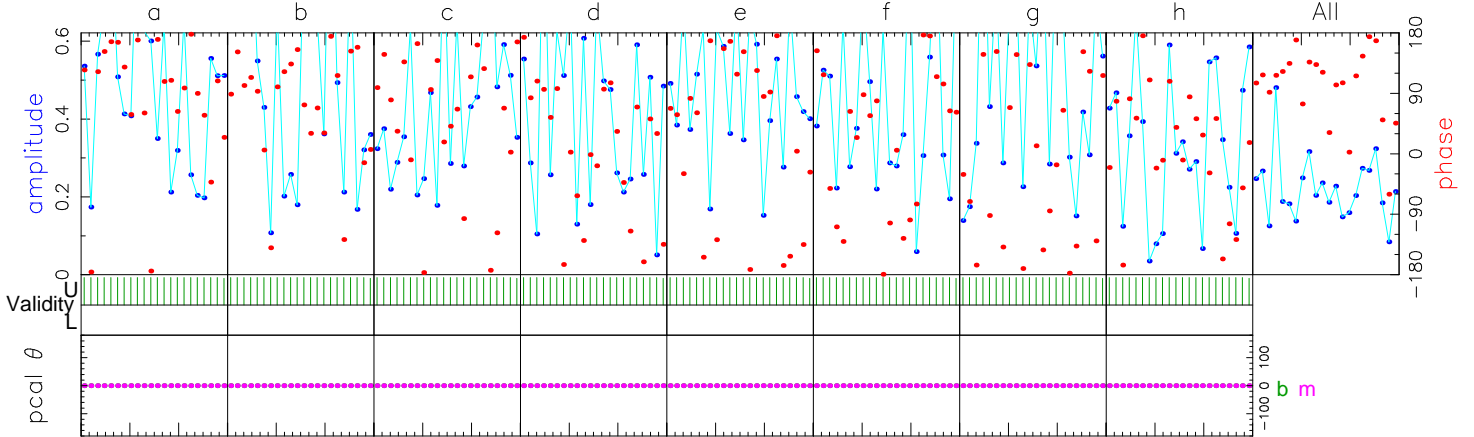


delay rate (ns/s)



Exp. c202a
 Yr:day 16383
 Start 2021:007:125342
 Stop 2021:010:141441
 FRT 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	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	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.66672538551E+03	Apriori delay (usec)	1.66746012808E+03	Resid mbdelay (usec)	-3.67573E-04	+/-	1.8E-04
Sband delay (usec)	1.66671905983E+03	Apriori clock (usec)	-1.5069308E+01	Resid sbdelay (usec)	-7.41068E-01	+/-	1.4E-03
Phase delay (usec)	1.66746013180E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	3.72179E-06	+/-	6.1E-07
Delay rate (us/s)	-1.87345725682E-01	Apriori rate (us/s)	-1.87353880511E-01	Resid rate (us/s)	8.15483E-06	+/-	5.8E-09
Total phase (deg)	271.2	Apriori accel (us/s/s)	3.00551797580E-05	Resid phase (deg)	115.4	+/-	18.8

ph/seg (deg)	57.8	Theor.	44.2	Amplitude	0.207 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	60.0	Search (1024X32)	0.161	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	42.1	Inc. seg. avg.	0.215	Inc. frq. avg.	0.219	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	51.0	Inc. frq. avg.	0.219			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 309.0 el 56.4 pa 83.2 m: az 344.6 el 48.8 pa 151.9 u,v (fr/asec) 2076.779 5720.675 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm.W.61.1HSTEG

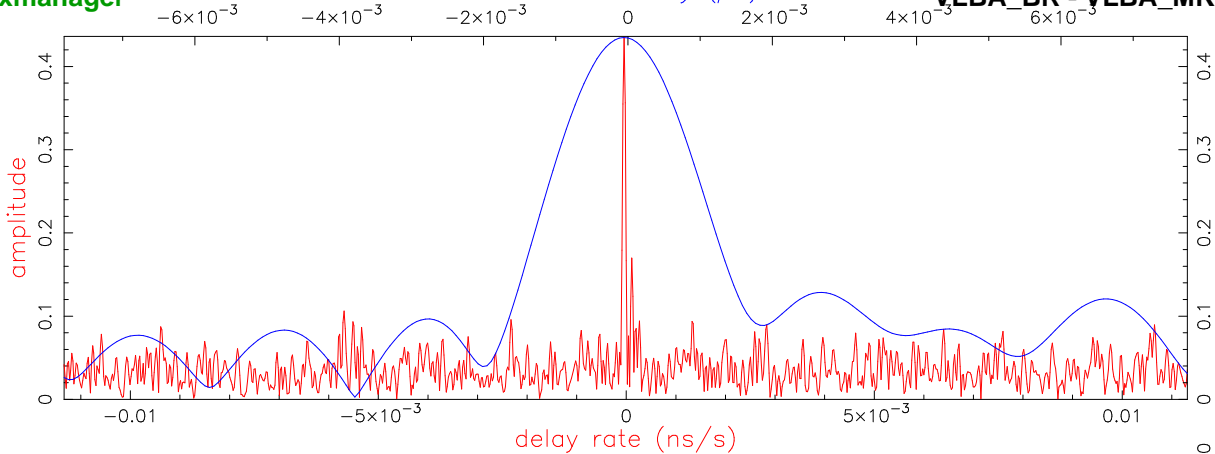
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bm

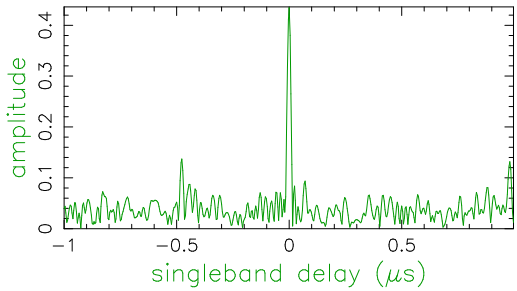
VLBA_BR - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

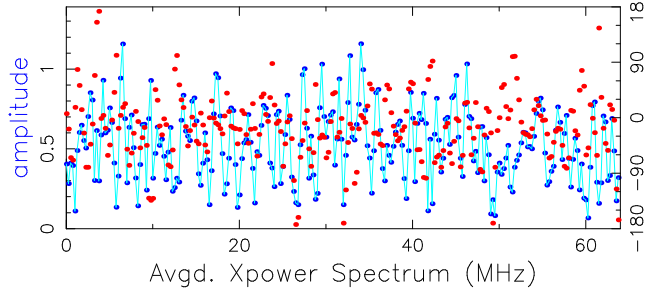


Fringe quality 9

SNR 16.0
 Int time 179.976
 Amp 0.436
 Phase -24.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.000771
 MBD -0.000090
 Fringe rate (Hz)
 -0.003396
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

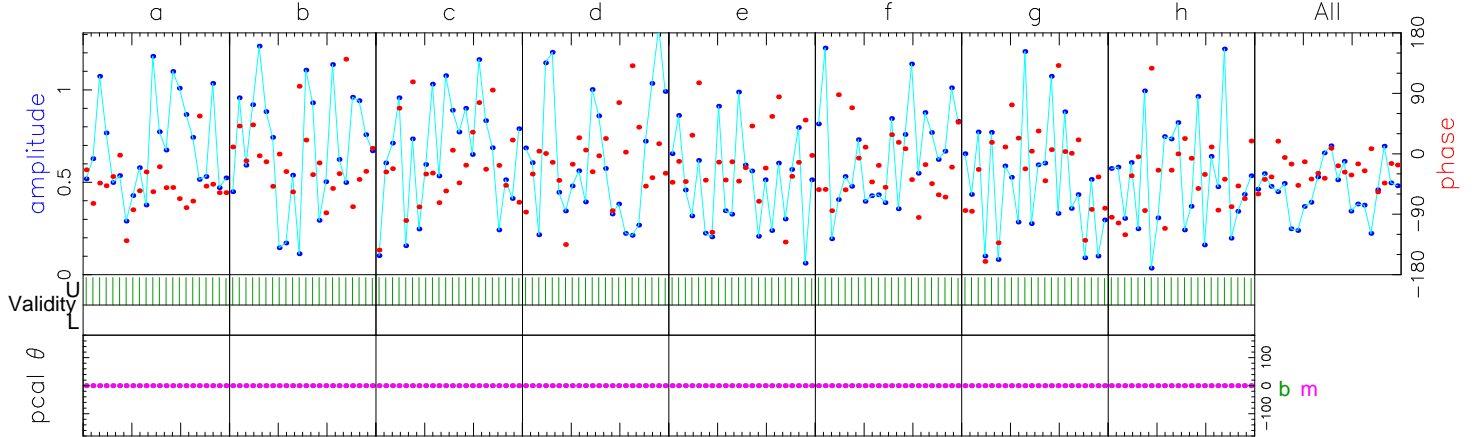


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141435
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-50.1	-16.9	-10.0	-14.5	-13.2	-24.0	-10.7	-47.3	Phase	-24.7
	0.6	0.5	0.4	0.5	0.3	0.5	0.3	0.4	Ampl.	0.4
	256.8	256.8	257.7	256.9	257.4	256.2	256.0	256.0	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.66746003761E+03	Apriori delay (usec)	1.66746012808E+03	Resid mbdelay (usec)	-9.04743E-05	+/-	6.8E-05
Sband delay (usec)	1.66745935733E+03	Apriori clock (usec)	-1.5069308E+01	Resid sbdelay (usec)	-7.70750E-04	+/-	5.4E-04
Phase delay (usec)	1.66746012728E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-7.96065E-07	+/-	2.3E-07
Delay rate (us/s)	-1.87353919930E-01	Apriori rate (us/s)	-1.87353880511E-01	Resid rate (us/s)	-3.94185E-08	+/-	2.2E-09
Total phase (deg)	131.1	Apriori accel (us/s/s)	3.00551797580E-05	Resid phase (deg)	-24.7	+/-	7.2

ph/seg (deg)	19.9	Theor.	16.8	Amplitude	0.436 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	30.8		29.3	Search (1024X32)	0.430	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	17.6		10.1	Inc. seg. avg.	0.442	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	20.9		17.7	Inc. frq. avg.	0.444	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 309.0 el 56.4 pa 83.2 m: az 344.6 el 48.8 pa 151.9 u,v (fr/asec) 2076.779 5720.675 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bm.W.9.1HSTEG

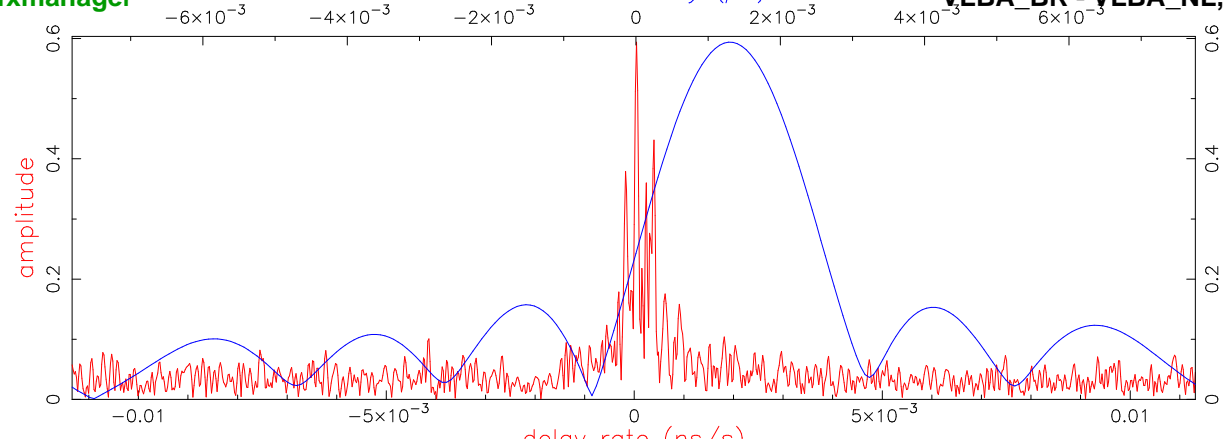
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bn

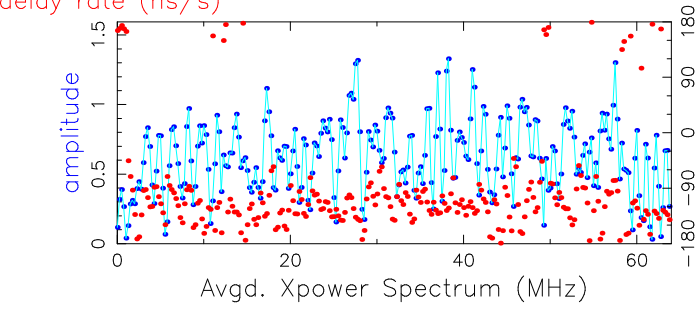
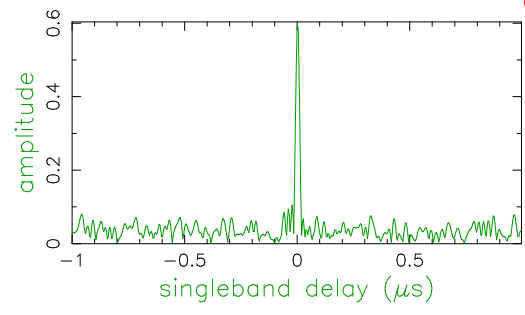
VLBA_BR - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)



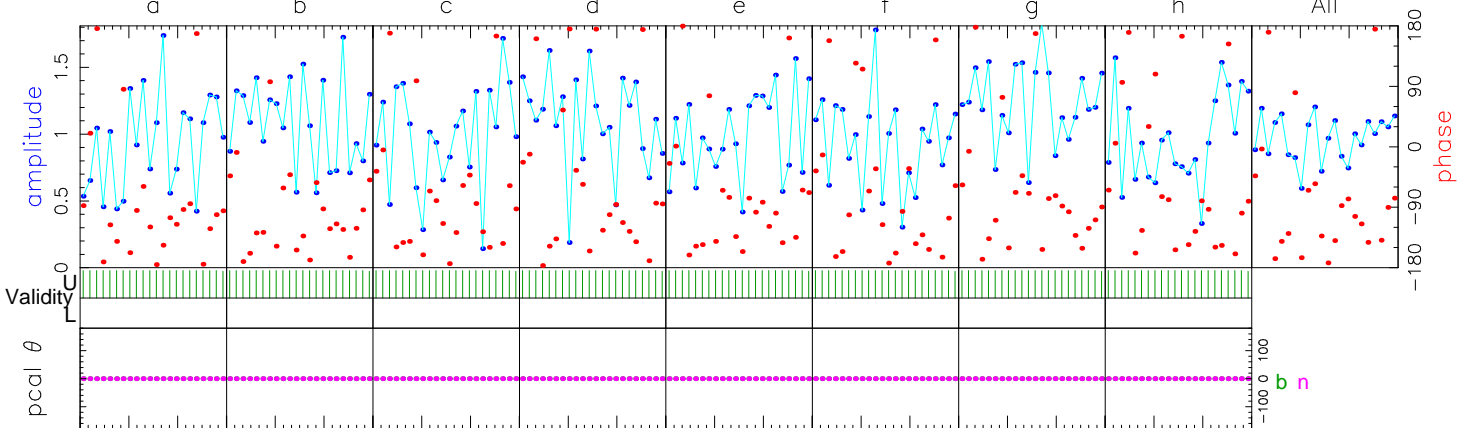
Fringe quality 9

SNR 22.1
 Int time 179.976
 Amp 0.604
 Phase -117.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001691
 MBD 0.001312
 Fringe rate (Hz) 0.003539
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c202a
 Yr:day 16383
 Start 2021:007:125342
 Stop 2021:010:141437
 FRT 2020:247:085004
 RA & Dec (J2000) 01h02m45.762375s +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	4.71328700906E+03	Apriori delay (usec)		4.71328569671E+03	Resid mbdelay (usec)		1.31235E-03	+/-	4.9E-05	
Sband delay (usec)	4.71328738746E+03	Apriori clock (usec)		-1.8455448E+00	Resid sbdelay (usec)		1.69075E-03	+/-	3.9E-04	
Phase delay (usec)	4.71328569294E+03	Apriori clockrate (us/s)		-5.0000000E-07	Resid phdelay (usec)		-3.77233E-06	+/-	1.7E-07	
Delay rate (us/s)	1.54009776433E-01	Apriori rate (us/s)		1.54009735354E-01	Resid rate (us/s)		4.10793E-08	+/-	1.6E-09	
Total phase (deg)		212.3	Apriori accel (us/s/s)		-1.75104136106E-05	Resid phase (deg)		-117.0	+/-	5.2

ph/seg (deg)	59.1	12.1	Search (1024X32)	0.583	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	66.6	21.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000			
ph/frq (deg)	8.2	7.3	Inc. seg. avg.	0.950	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	16.8	12.8	Inc. frq. avg.	0.594	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011			
b: az 309.0 el 56.4 pa 83.2				n: az 319.0 el 37.8 pa 69.7				ion window (TEC)		0.00 0.00	
Control file: cf_1234_gmva				Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn..1HSTEG				Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn.W.25.1HSTEG		simultaneous interpolator	

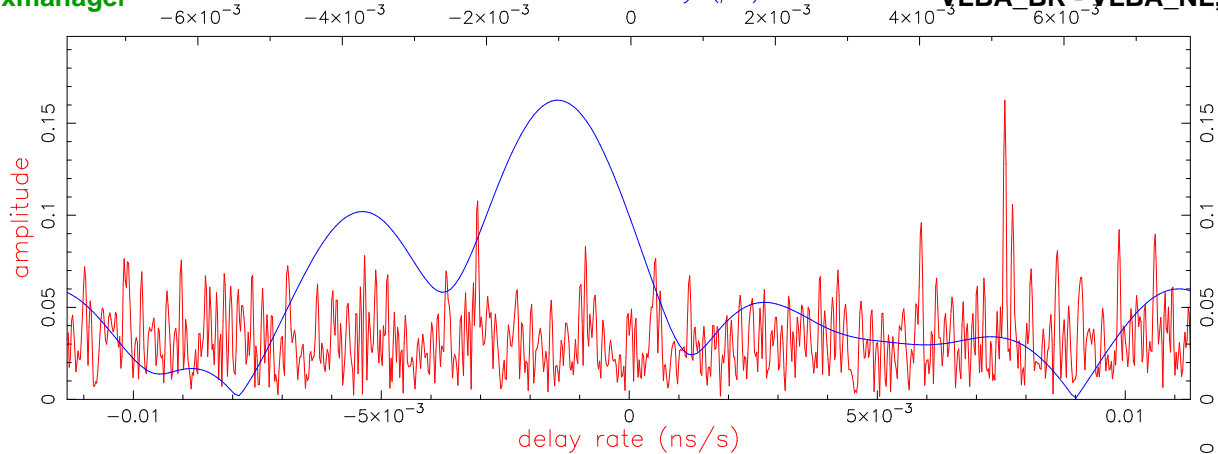
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bn

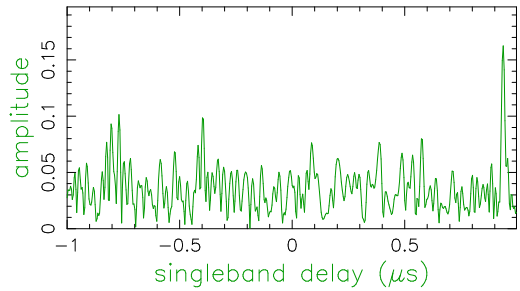
VLBA_BR - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

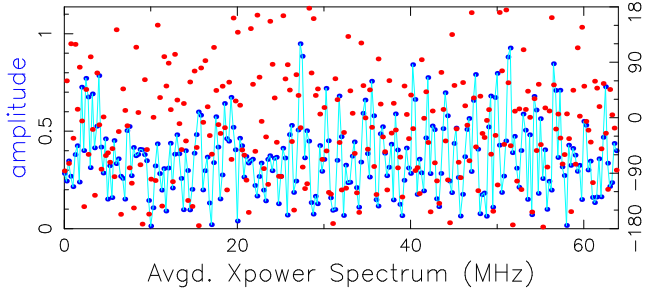


Fringe quality 0

SNR 6.0
 Int time 179.976
 Amp 0.197
 Phase -14.3
 PFD 2.6e-01
 Delays (us)
 SBD 0.937009
 MBD -0.001041
 Fringe rate (Hz)
 0.653715
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

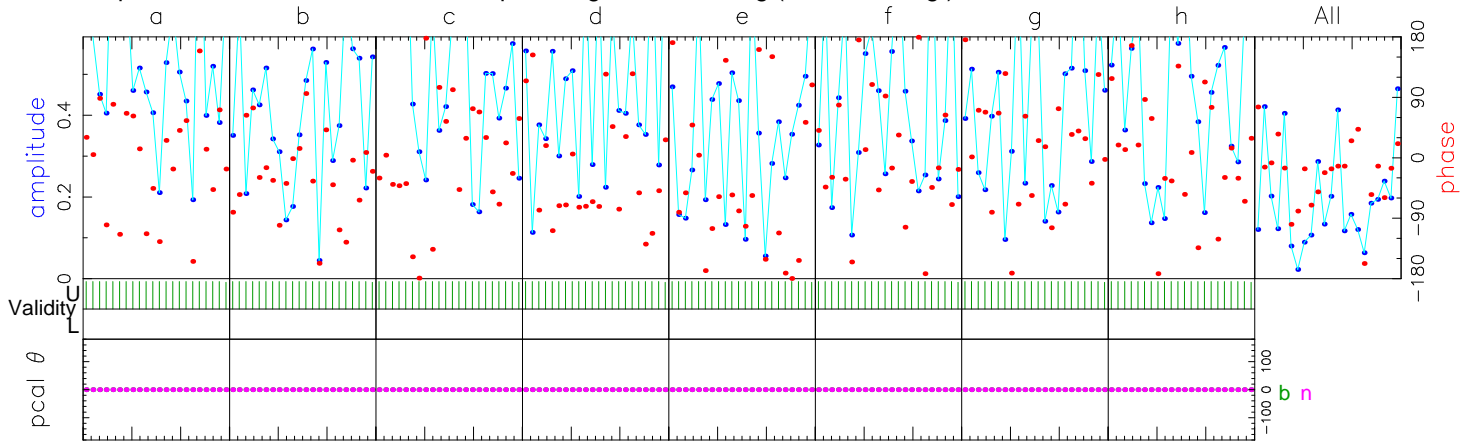


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All			
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0					
b	1000	1000	1000	1000	1000	1000	1000	1000					
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL					
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
Group delay (usec)(sbd)		4.71422215593E+03			4.71328569671E+03				Resid mbdelay (usec)	-1.04078E-03	+/- 1.8E-04		
Sband delay (usec)		4.71422270546E+03			-1.8455448E+00				Resid sbdelay (usec)	9.37009E-01	+/- 1.4E-03		
Phase delay (usec)		4.71328569625E+03			-5.0000000E-07				Resid phdelay (usec)	-4.61682E-07	+/- 6.2E-07		
Delay rate (us/s)		1.54017324333E-01			1.54009735354E-01				Resid rate (us/s)	7.58898E-06	+/- 5.9E-09		
Total phase (deg)			315.0		-1.75104136106E-05				Resid phase (deg)	-14.3	+/- 19.2		
	RMS	Theor.	Amplitude	0.197 +/- 0.033					Pcal mode: MANUAL, MANUAL				
ph/seg (deg)	50.8	45.0	Search (1024X32)	0.156					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)	78.2	78.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	46.6	27.1	Inc. seg. avg.	0.182					Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	34.7	47.3	Inc. frq. avg.	0.205					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
b: az 309.0 el 56.4 pa 83.2			n: az 319.0 el 37.8 pa 69.7										simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn..1HSTEG										Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn.W.39.1HSTEG

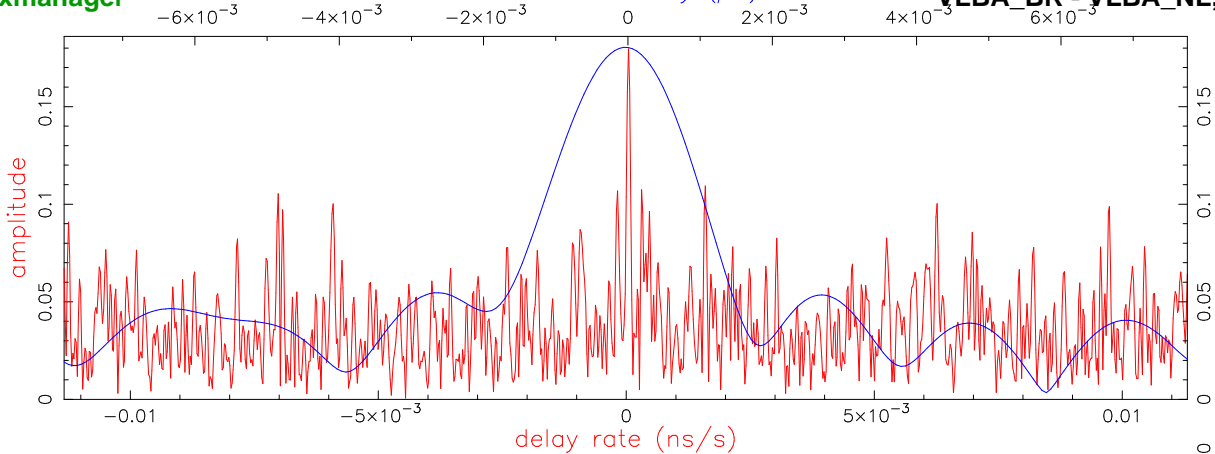
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bn

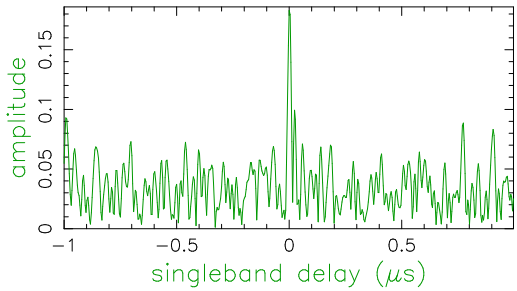
VLBA_BR - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

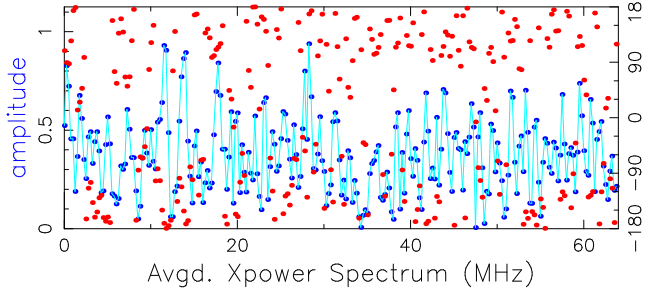


Fringe quality 0

SNR 6.8
 Int time 179.976
 Amp 0.186
 Phase -171.9
 PFD 1.3e-03
 Delays (us)
 SBD 0.001628
 MBD -0.000138
 Fringe rate (Hz)
 0.003021
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

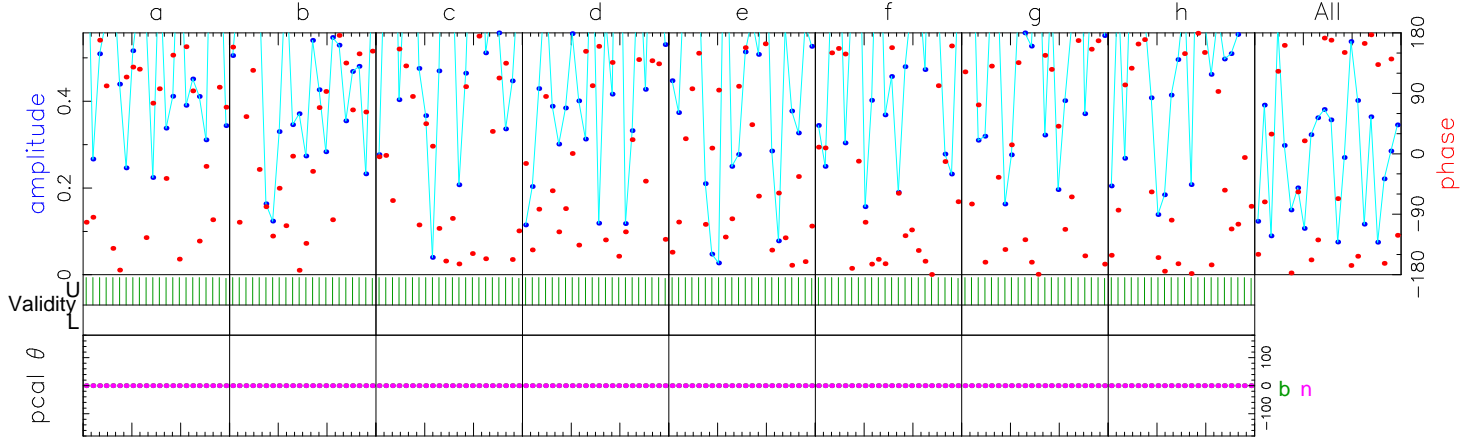


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141441
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		4.71328555825E+03			4.71328569671E+03				Resid mbdelay (usec)	-1.38463E-04 +/- 1.6E-04
Sband delay (usec)		4.71328732471E+03			-1.8455448E+00				Resid sbdelay (usec)	1.62800E-03 +/- 1.3E-03
Phase delay (usec)		4.71328569117E+03			-5.0000000E-07				Resid phdelay (usec)	-5.54319E-06 +/- 5.4E-07
Delay rate (us/s)		1.54009770426E-01			1.54009735354E-01				Resid rate (us/s)	3.50722E-08 +/- 5.2E-09
Total phase (deg)			157.4		-1.75104136106E-05				Resid phase (deg)	-171.9 +/- 16.8

ph/seg (deg) 69.7 39.4 Search (1024X32) 0.177 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 90.1 68.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.1 23.8 Inc. seg. avg. 0.222 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.8 41.5 Inc. frq. avg. 0.169 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 309.0 el 56.4 pa 83.2 n: az 319.0 el 37.8 pa 69.7 u,v (fr/asec) -1703.485 -1874.152 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn.W.59.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

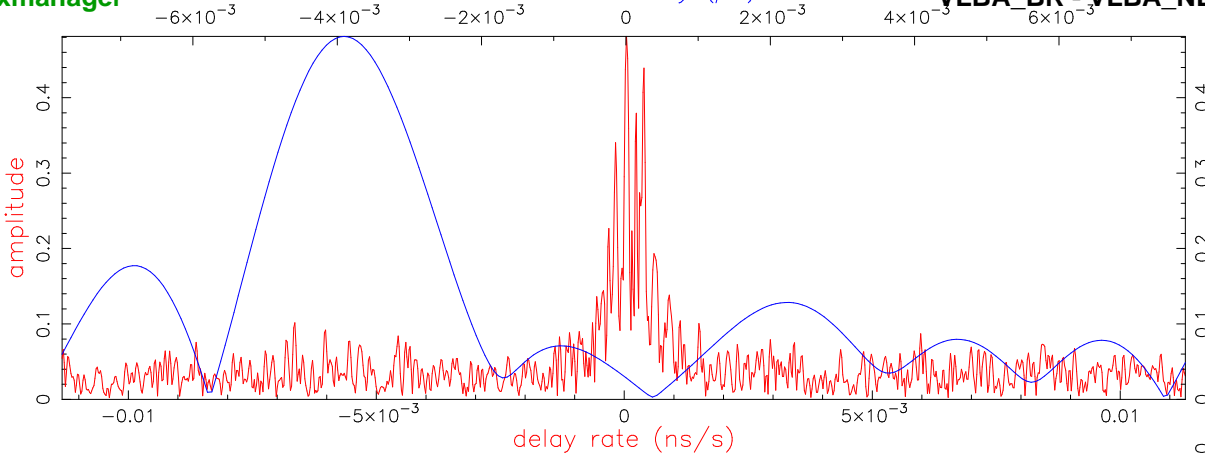
fxmanager

0102+584.1HSTEG, No0128, bn

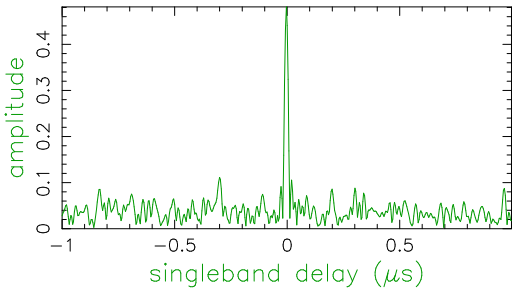
VLBA_BR - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

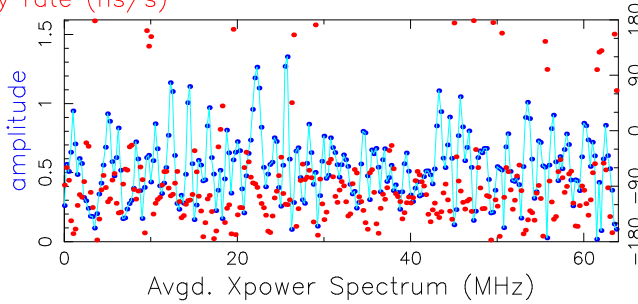
Fringe quality 9



SNR 17.7
 Int time 179.976
 Amp 0.481
 Phase -108.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.003704
 MBD -0.003900
 Fringe rate (Hz) 0.003590
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

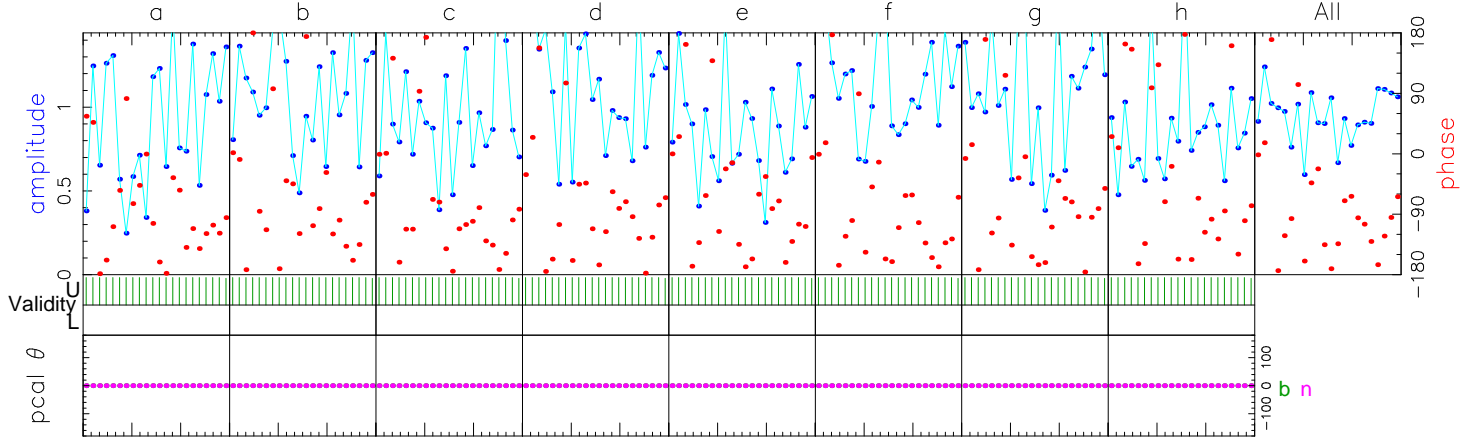


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141435
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-105.3	-109.1	-126.2	-102.4	-90.9	-110.6	-84.9	-145.2	Phase	-108.4
	0.5	0.5	0.6	0.5	0.4	0.6	0.6	0.4	Ampl.	0.5
	255.4	256.1	255.9	255.5	256.2	256.5	256.3	256.7	Sbd box	256.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.71328179659E+03		Apriori delay (usec)		4.71328569671E+03		Resid mbdelay (usec)		-3.90012E-03	+/- 6.1E-05
Sband delay (usec)	4.71328199271E+03		Apriori clock (usec)		-1.8455448E+00		Resid sbdelay (usec)		-3.70400E-03	+/- 4.9E-04
Phase delay (usec)	4.71328569322E+03		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-3.49553E-06	+/- 2.1E-07
Delay rate (us/s)	1.54009777028E-01		Apriori rate (us/s)		1.54009735354E-01		Resid rate (us/s)		4.16745E-08	+/- 2.0E-09
Total phase (deg)	220.9		Apriori accel (us/s/s)		-1.75104136106E-05		Resid phase (deg)		-108.4	+/- 6.5

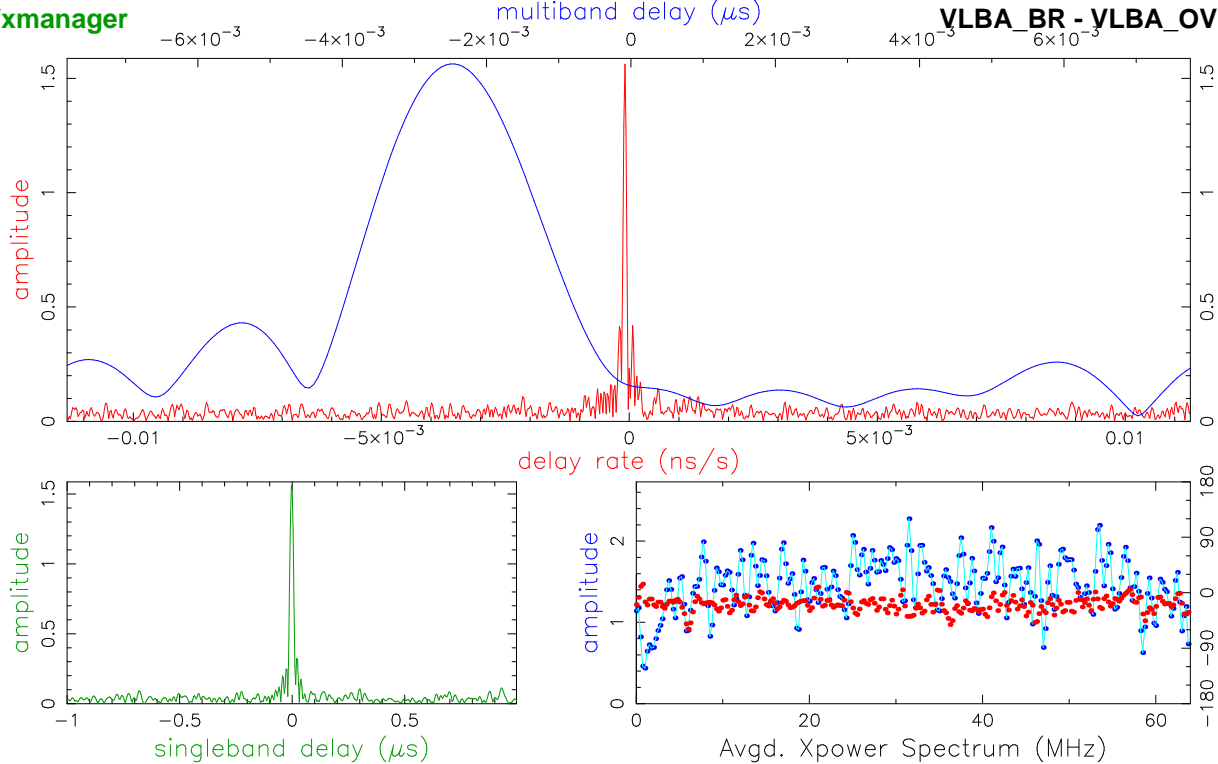
ph/seg (deg) 63.8 15.2 Search (1024X32) 0.480 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 102.4 26.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.7 9.2 Inc. seg. avg. 0.919 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 17.9 16.0 Inc. frq. avg. 0.495 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 309.0 el 56.4 pa 83.2 n: az 319.0 el 37.8 pa 69.7 u,v (fr/asec) -1703.485 -1874.152 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bn.W.8.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bo

VLBA_BR - VLBA_OV, fgroup W, pol LL

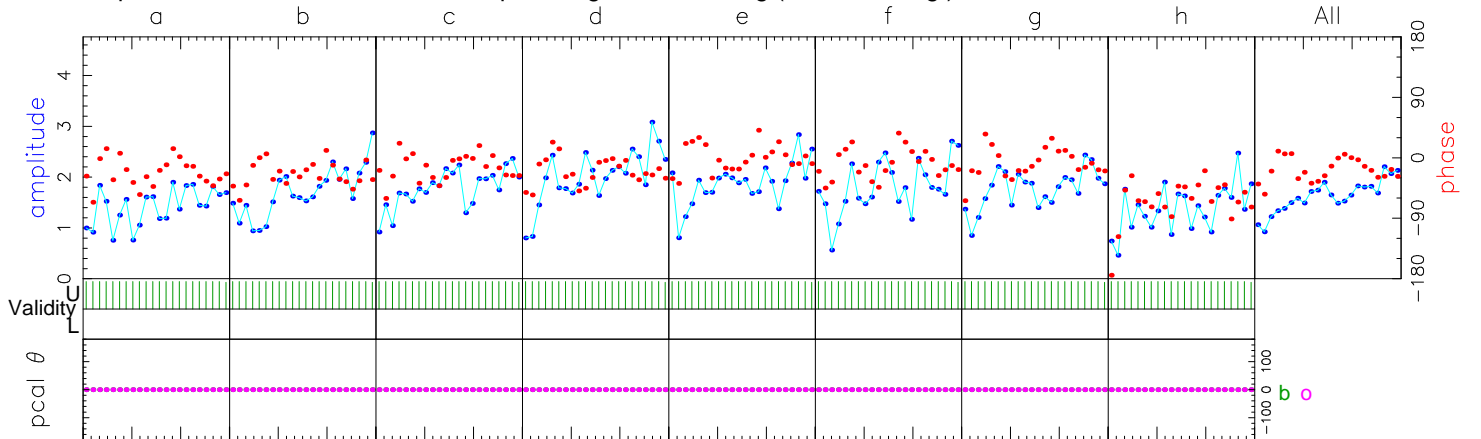


Fringe quality 7

SNR 58.2
 Int time 179.976
 Amp 1.587
 Phase -17.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.002294
 MBD -0.002431
 Fringe rate (Hz)
 -0.006733
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141438
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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

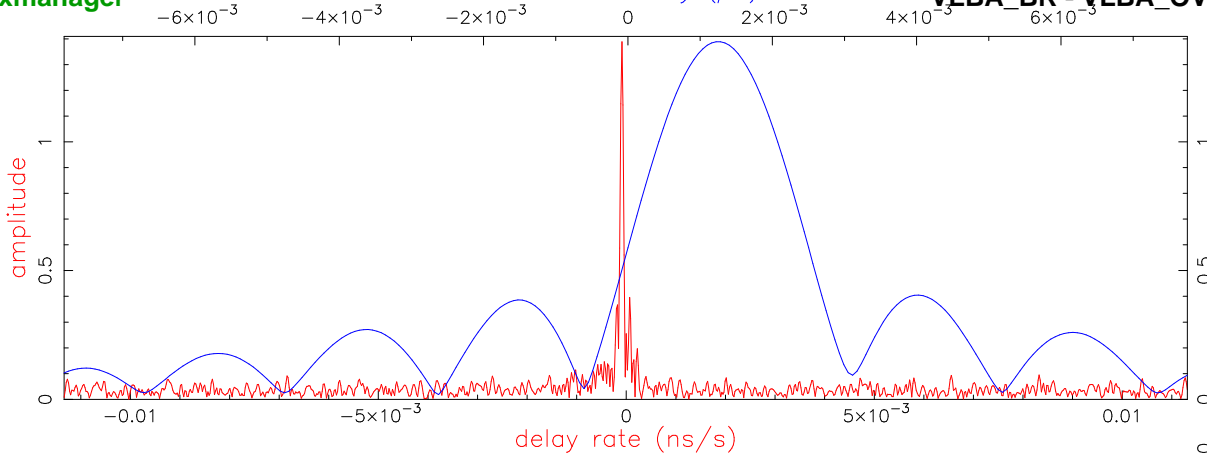


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.87955114185E+03	1.87955127824E+03	1.87955357192E+03	1.87955357249E+03	1.87955357249E+03	1.87955357249E+03	1.87955357249E+03	1.87955357249E+03		
Sband delay (usec)	1.87955127824E+03	1.87955127824E+03	1.87955357192E+03	1.87955357249E+03	1.87955357249E+03	1.87955357249E+03	1.87955357249E+03	1.87955357249E+03		
Phase delay (usec)	1.87955357192E+03	1.87955357192E+03	1.87955357192E+03	1.87955357192E+03	1.87955357192E+03	1.87955357192E+03	1.87955357192E+03	1.87955357192E+03		
Delay rate (us/s)	9.48919099555E-02	9.48919099555E-02	9.48919099555E-02	9.48919099555E-02	9.48919099555E-02	9.48919099555E-02	9.48919099555E-02	9.48919099555E-02		
Total phase (deg)			246.8							
			Apriori delay (usec)	1.87955357249E+03	Resid mbdelay (usec)	-2.43064E-03	+/-	1.9E-05		
			Apriori clock (usec)	-2.3114689E+01	Resid sbdelay (usec)	-2.29425E-03	+/-	1.5E-04		
			Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-5.62790E-07	+/-	6.3E-08		
			Apriori rate (us/s)	9.48919881236E-02	Resid rate (us/s)	-7.81681E-08	+/-	6.1E-10		
			Apriori accel (us/s/s)	3.31719894492E-06	Resid phase (deg)	-17.5	+/-	2.0		

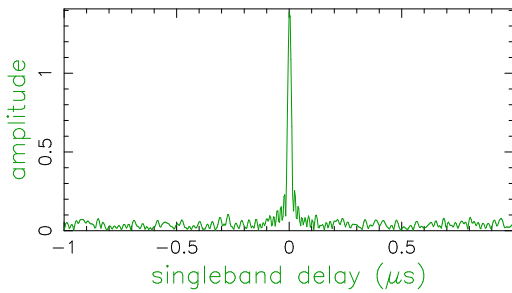
ph/seg (deg) 17.1 4.6 Search (1024X32) 1.499 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.9 8.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.2 2.8 Inc. seg. avg. 1.618 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 12.8 4.9 Inc. frq. avg. 1.616 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 309.0 el 56.4 pa 83.2 o: az 319.2 el 48.1 pa 95.0 u,v (fr/asec) -1038.482 1076.109 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo.W.29.1HSTEG

multiband delay (μ s)

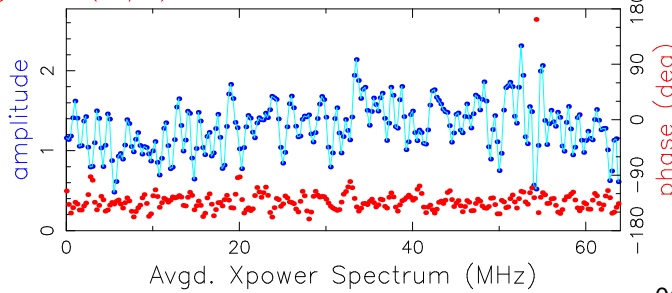
Fringe quality 7



SNR 51.7
Int time 179.976
Amp 1.409
Phase -130.0
PFD 0.0e+00
Delays (us)
SBD 0.001537
MBD 0.001283
Fringe rate (Hz)
-0.006875
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

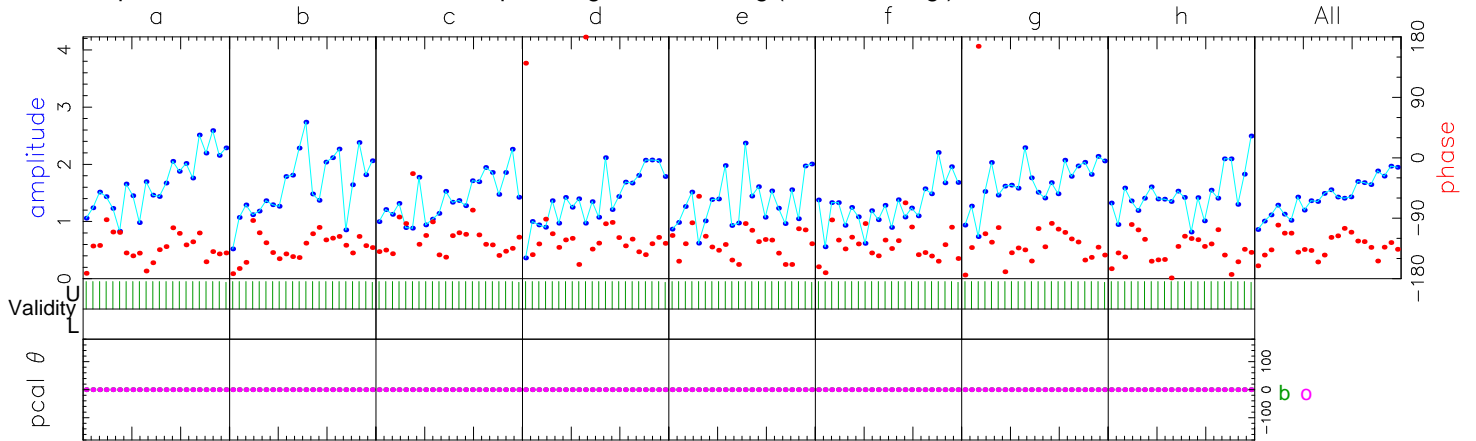


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141440
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-133.1	-130.5	-121.6	-127.4	-124.6	-129.7	-132.3	-139.0	Phase	-130.0
	1.6	1.6	1.3	1.3	1.3	1.2	1.6	1.4	Ampl.	1.4
	257.4	257.3	257.5	257.2	257.6	257.7	257.4	257.4	Sbd box	257.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.87955485576E+03	Apriori delay (usec)	1.87955357249E+03	Resid mbdelay (usec)	1.28327E-03	+/-	2.1E-05
Sband delay (usec)	1.87955510924E+03	Apriori clock (usec)	-2.3114689E+01	Resid sbdelay (usec)	1.53675E-03	+/-	1.7E-04
Phase delay (usec)	1.87955356829E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	-4.19334E-06	+/-	7.1E-08
Delay rate (us/s)	9.48919083088E-02	Apriori rate (us/s)	9.48919881236E-02	Resid rate (us/s)	-7.98148E-08	+/-	6.9E-10
Total phase (deg)	134.2	Apriori accel (us/s/s)	3.31719894492E-06	Resid phase (deg)	-130.0	+/-	2.2

ph/seg (deg)	16.2	Theor.	5.2	Amplitude	1.409 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	21.7		9.1	Search (1024X32)	1.320	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	5.8		3.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	10.5		5.5	Inc. seg. avg.	1.435	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	1.392	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 309.0 el 56.4 pa 83.2 o: az 319.2 el 48.1 pa 95.0 u,v (fr/asec) -1038.482 1076.109 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo.W.49.1HSTEG

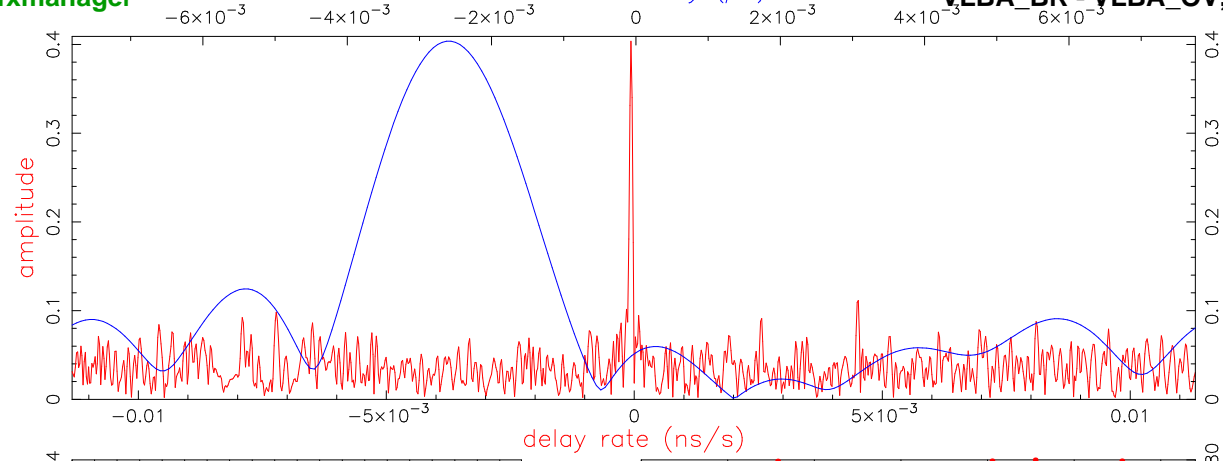
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bo

VLBA_BR - VLBA_OV, fgroup W, pol LR

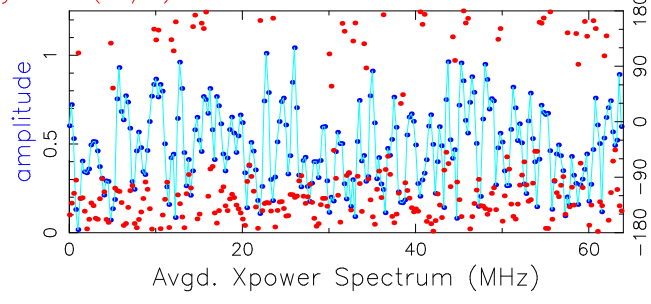
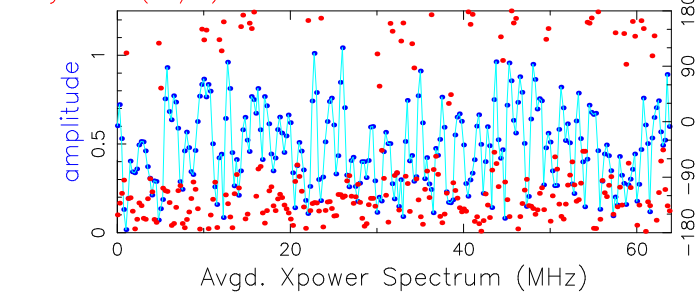
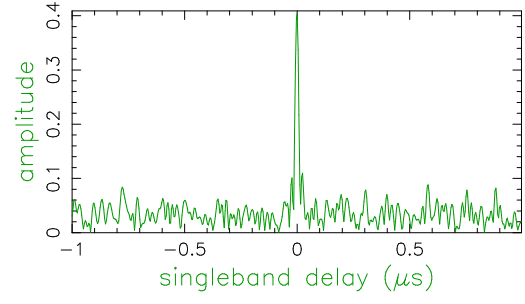
multiband delay (μ s)



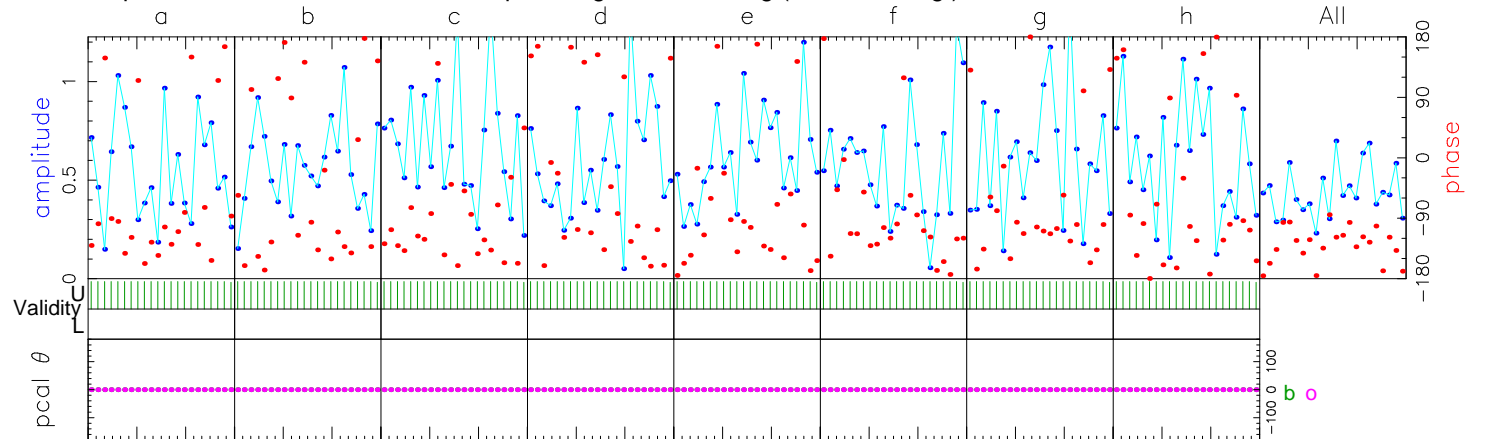
Fringe quality 9

SNR 15.0
 Int time 179.976
 Amp 0.409
 Phase -127.4
 PFD 2.2e-42
 Delays (us)
 SBD -0.001442
 MBD -0.002635
 Fringe rate (Hz)
 -0.006401
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141442
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



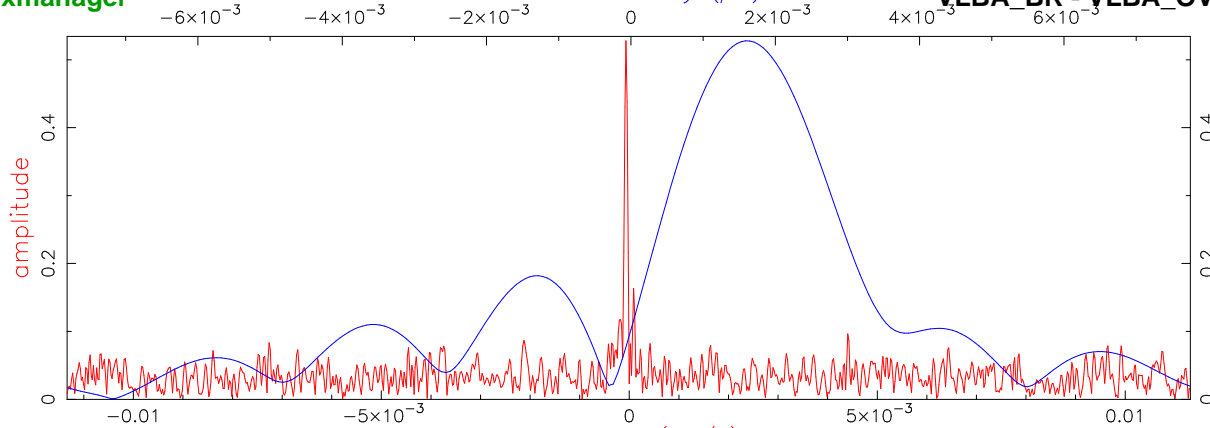
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.8	-156.2	-120.9	-134.0	-121.4	-111.7	-119.5	-142.8	Phase	-127.4
	0.4	0.3	0.5	0.4	0.4	0.4	0.5	0.4	Ampl.	0.4
	256.4	256.8	256.4	256.6	256.7	256.6	256.2	256.4	Sbd box	256.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.87955093718E+03		Apriori delay (usec)		1.87955357249E+03		Resid mbdelay (usec)		-2.63531E-03	+/- 7.2E-05
Sband delay (usec)	1.87955213074E+03		Apriori clock (usec)		-2.3114689E+01		Resid sbdelay (usec)		-1.44175E-03	+/- 5.7E-04
Phase delay (usec)	1.87955356838E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-4.10835E-06	+/- 2.5E-07
Delay rate (us/s)	9.48919138200E-02		Apriori rate (us/s)		9.48919881236E-02		Resid rate (us/s)		-7.43036E-08	+/- 2.4E-09
Total phase (deg)	136.8		Apriori accel (us/s/s)		3.31719894492E-06		Resid phase (deg)		-127.4	+/- 7.6

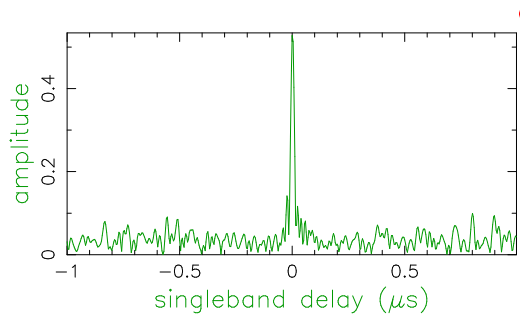
ph/seg (deg) 26.3 17.9 Search (1024X32) 0.392 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.3 31.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.8 10.8 Inc. seg. avg. 0.422 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 13.4 18.9 Inc. frq. avg. 0.407 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 309.0 el 56.4 pa 83.2 o: az 319.2 el 48.1 pa 95.0 u,v (fr/asec) -1038.482 1076.109 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo.W.70.1HSTEG

multiband delay (μ s)

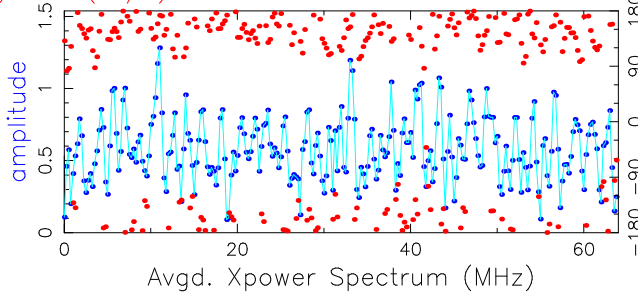


Fringe quality 9

SNR 19.6
Int time 179.976
Amp 0.534
Phase 159.0
PFD 0.0e+00
Delays (us)
SBD 0.001388
MBD 0.001635
Fringe rate (Hz)
-0.006389
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

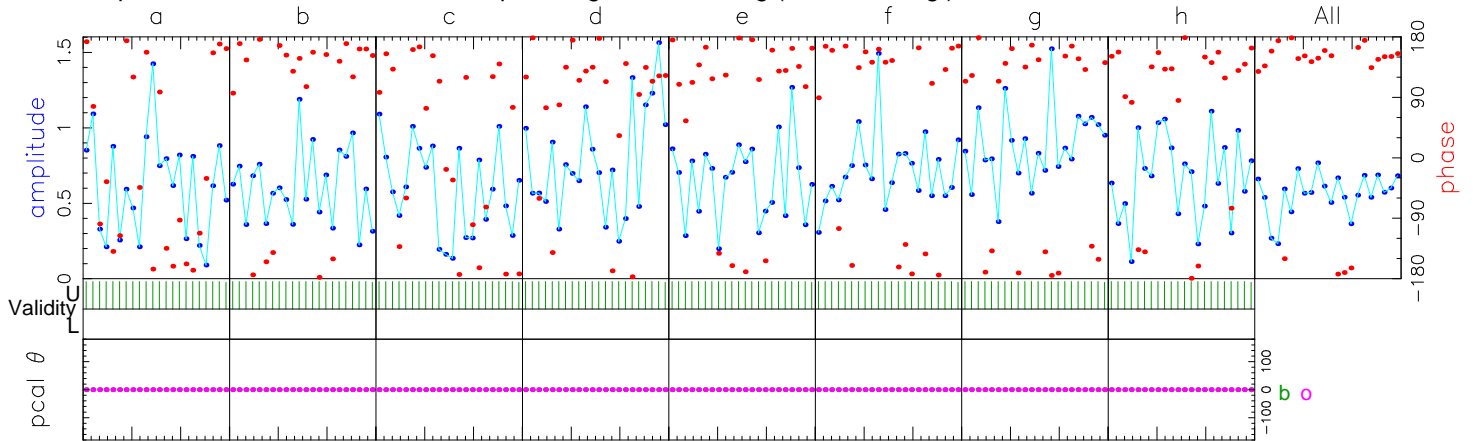


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141444
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



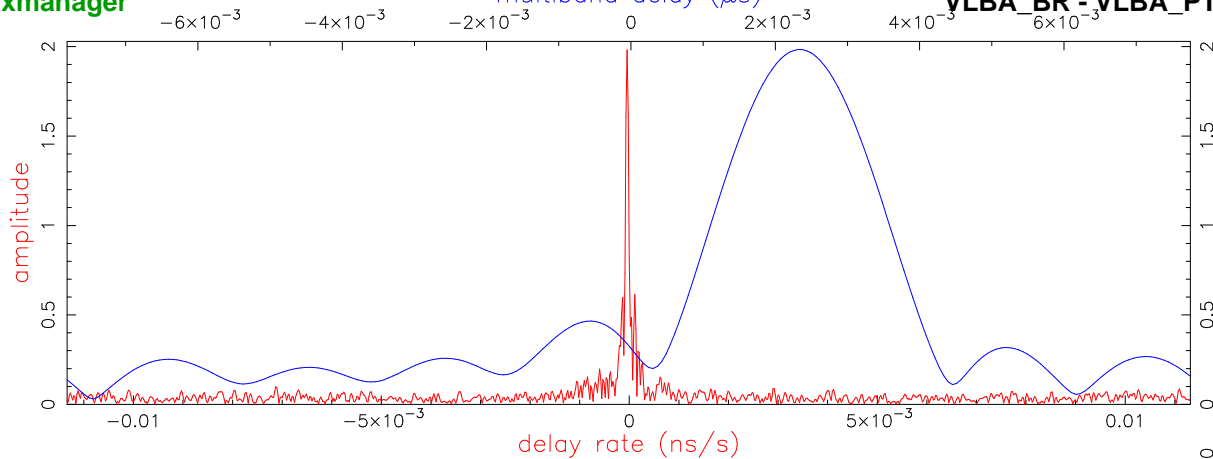
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.3	157.3	155.1	139.3	151.6	169.4	167.0	152.1	Phase	159.0
	0.4	0.5	0.4	0.6	0.6	0.6	0.7	0.5	Ampl.	0.5
	257.1	257.4	257.2	257.5	258.1	257.7	256.6	257.4	Sbd box	257.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.8795520771E+03	Apriori delay (usec)	1.87955357249E+03	Resid mbdelay (usec)	1.63523E-03	+/-	5.5E-05
Sband delay (usec)	1.87955496024E+03	Apriori clock (usec)	-2.3114689E+01	Resid sbdelay (usec)	1.38775E-03	+/-	4.4E-04
Phase delay (usec)	1.87955357761E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	5.12640E-06	+/-	1.9E-07
Delay rate (us/s)	9.48919139518E-02	Apriori rate (us/s)	9.48919881236E-02	Resid rate (us/s)	-7.41718E-08	+/-	1.8E-09
Total phase (deg)	63.2	Apriori accel (us/s/s)	3.31719894492E-06	Resid phase (deg)	159.0	+/-	5.8

ph/seg (deg)	20.8	Theor.	13.7	Amplitude	0.534 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	25.7	Search (1024X32)	0.512	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	14.7	Inc. seg. avg.	0.548	Inc. frq. avg.	0.534	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	21.6	Inc. frq. avg.	0.534			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

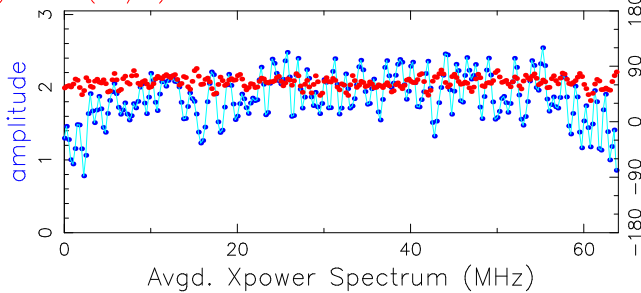
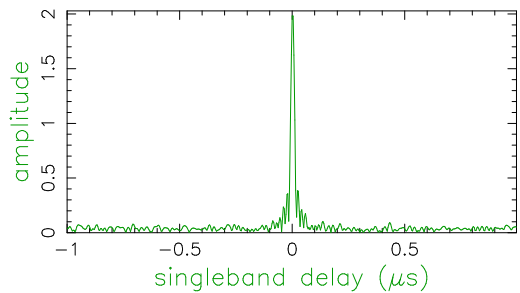
b: az 309.0 el 56.4 pa 83.2 o: az 319.2 el 48.1 pa 95.0 u,v (fr/asec) -1038.482 1076.109 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bo.W.81.1HSTEG

multiband delay (μ s)



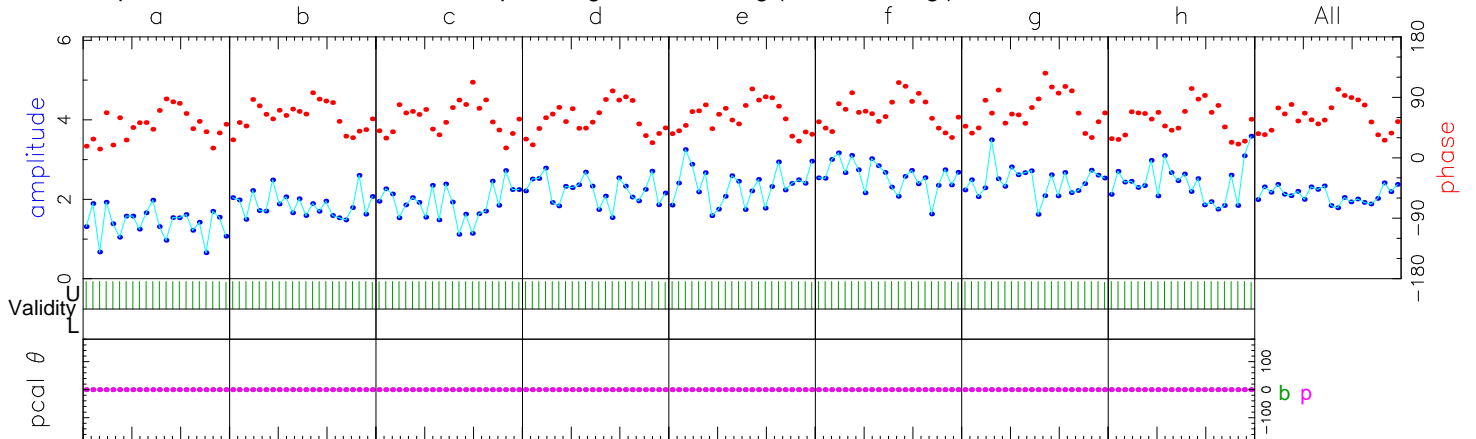
Fringe quality 8

SNR 74.5
Int time 179.976
Amp 2.029
Phase 59.9
PFD 0.0e+00
Delays (us)
SBD 0.001946
MBD 0.002281
Fringe rate (Hz)
-0.004731
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141436
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

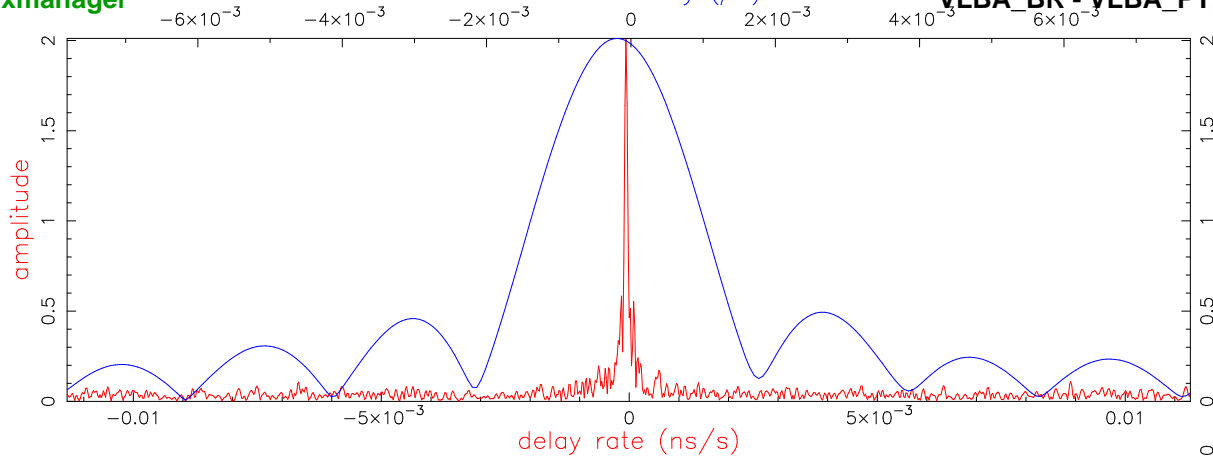
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
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)	3.90879333093E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		2.28084E-03	+/- 1.5E-05
Sband delay (usec)	3.90879299559E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		1.94550E-03	+/- 1.2E-04
Phase delay (usec)	3.90879105202E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		1.93210E-06	+/- 5.0E-08
Delay rate (us/s)	1.70616067578E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.49274E-08	+/- 4.8E-10
Total phase (deg)	79.6		Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		59.9	+/- 1.5

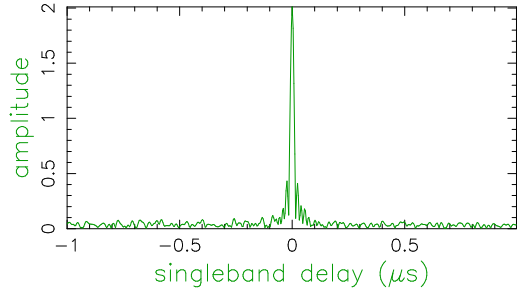
ph/seg (deg) 21.1 3.6 Search (1024X32) 1.888 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 10.1 6.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 8.0 2.2 Inc. seg. avg. 2.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 16.6 3.8 Inc. frq. avg. 1.994 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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.12.1HSTEG

multiband delay (μ s)

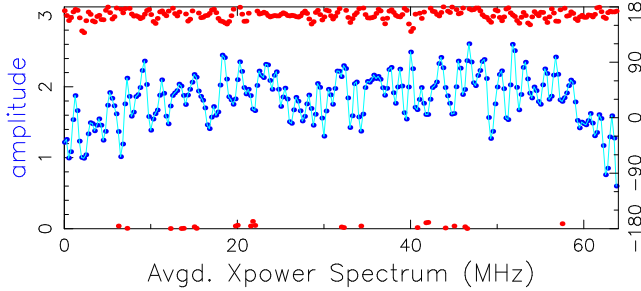


Fringe quality 8

SNR 73.8
Int time 179.976
Amp 2.012
Phase 169.4
PFD 0.0e+00
Delays (us)
SBD -0.000103
MBD -0.000193
Fringe rate (Hz)
-0.004778
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

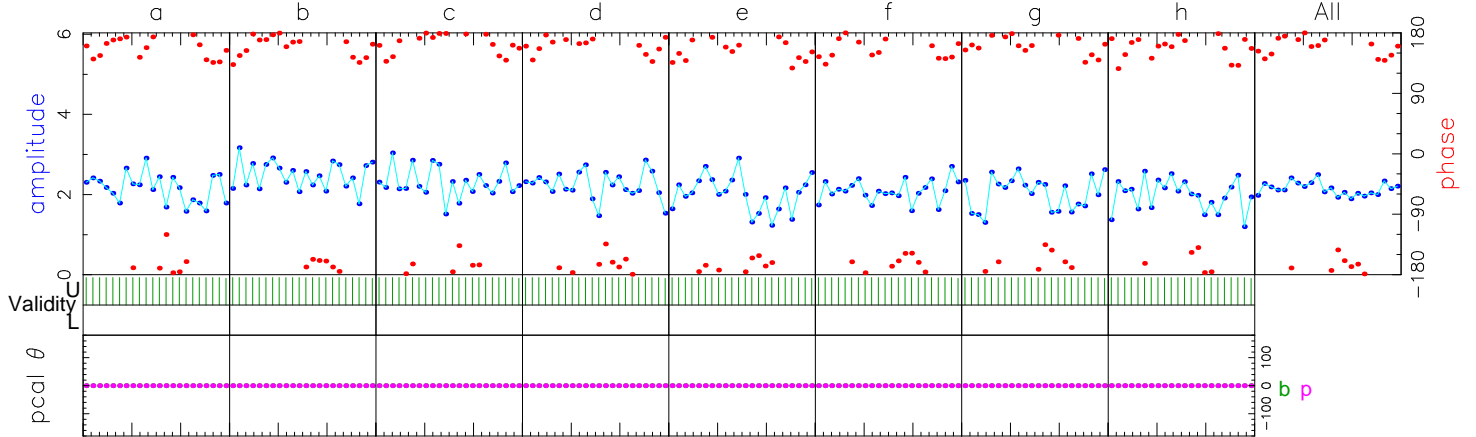


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141437
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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)	3.90879085688E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		-1.93211E-04	+/- 1.5E-05
Sband delay (usec)	3.90879094684E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		-1.03250E-04	+/- 1.2E-04
Phase delay (usec)	3.90879105555E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		5.46379E-06	+/- 5.0E-08
Delay rate (us/s)	1.70616067035E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.54701E-08	+/- 4.8E-10
Total phase (deg)	189.2		Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		169.4	+/- 1.6

ph/seg (deg) 20.9 3.6
amp/seg (%) 10.3 6.4
ph/frq (deg) 3.0 2.2
amp/frq (%) 8.1 3.8

RMS Theor. Amplitude 2.012 +/- 0.027
Search (1024X32) 1.889
Interp. 0.000
Inc. seg. avg. 2.142
Inc. frq. avg. 2.012

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator

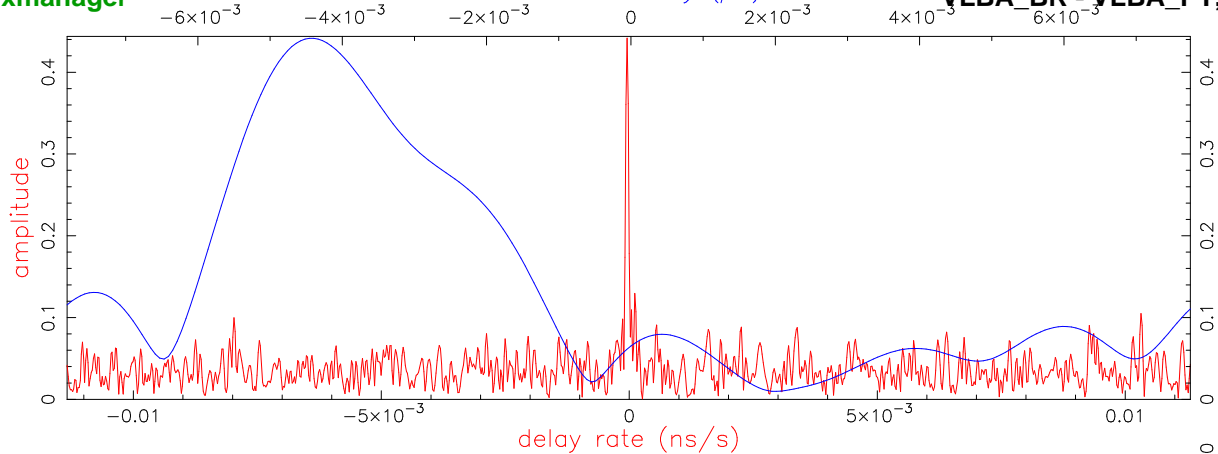
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bp

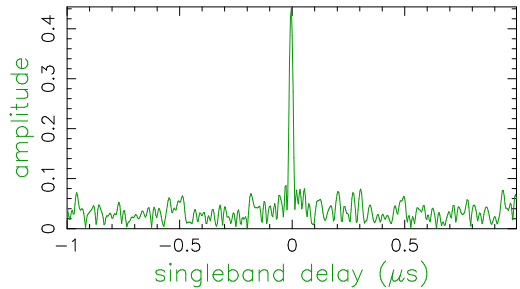
VLBA_BR - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

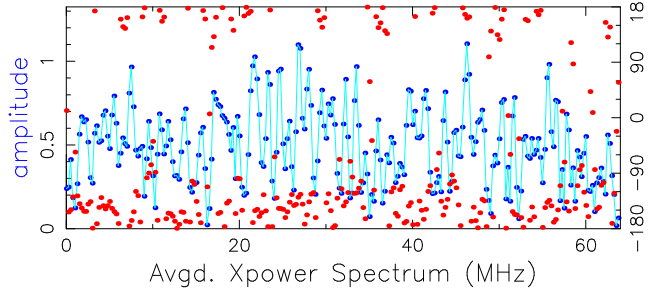


Fringe quality 7

SNR 16.3
 Int time 179.976
 Amp 0.444
 Phase -160.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.004835
 MBD -0.004432
 Fringe rate (Hz)
 -0.004711
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

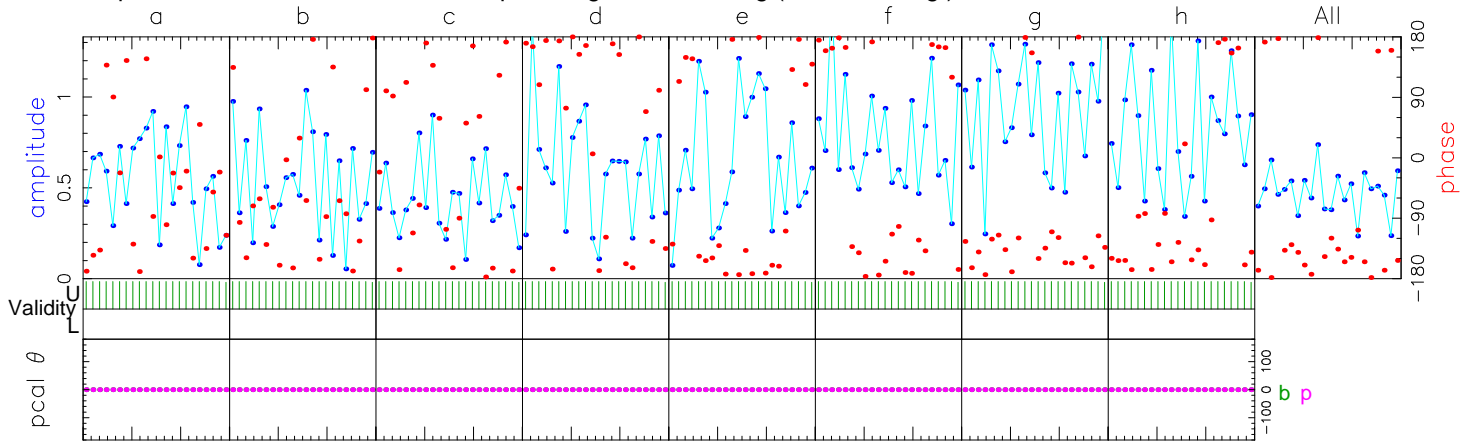


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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

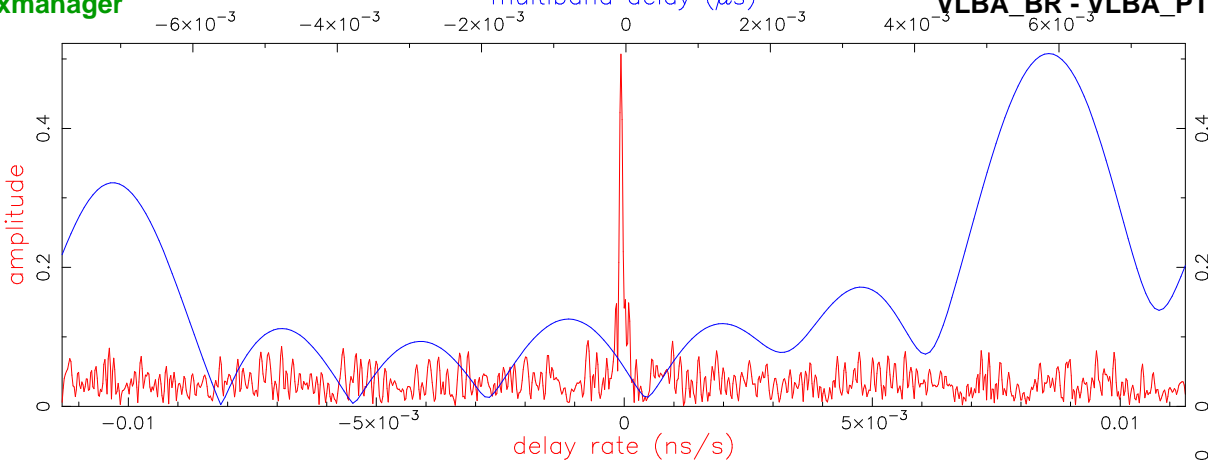


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.2	-125.9	168.9	165.2	-177.3	-173.5	-144.3	-151.3	Phase	-160.8
	0.2	0.2	0.2	0.5	0.6	0.7	0.9	0.7	Ampl.	0.5
	302.7	255.7	335.9	255.7	255.7	255.8	255.7	255.1	Sbd box	255.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.90878661796E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		-4.43213E-03	+/- 6.7E-05
Sband delay (usec)	3.90878621559E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		-4.83450E-03	+/- 5.3E-04
Phase delay (usec)	3.90879104491E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-5.18456E-06	+/- 2.3E-07
Delay rate (us/s)	1.70616067814E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.46907E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		-160.8	+/- 7.0

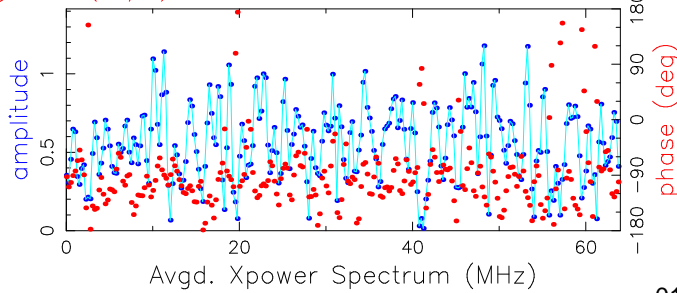
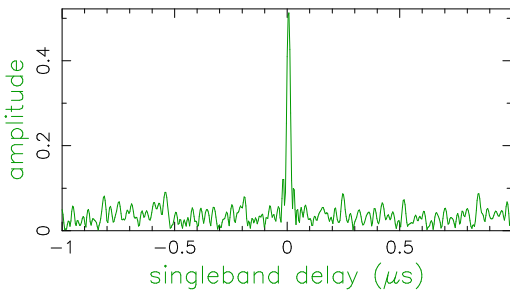
ph/seg (deg) 24.5 16.5 Search (1024X32) 0.422 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.6 28.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.8 10.0 Inc. seg. avg. 0.459 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.3 17.4 Inc. frq. avg. 0.472 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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.44.1HSTEG

multiband delay (μ s)

Fringe quality 7

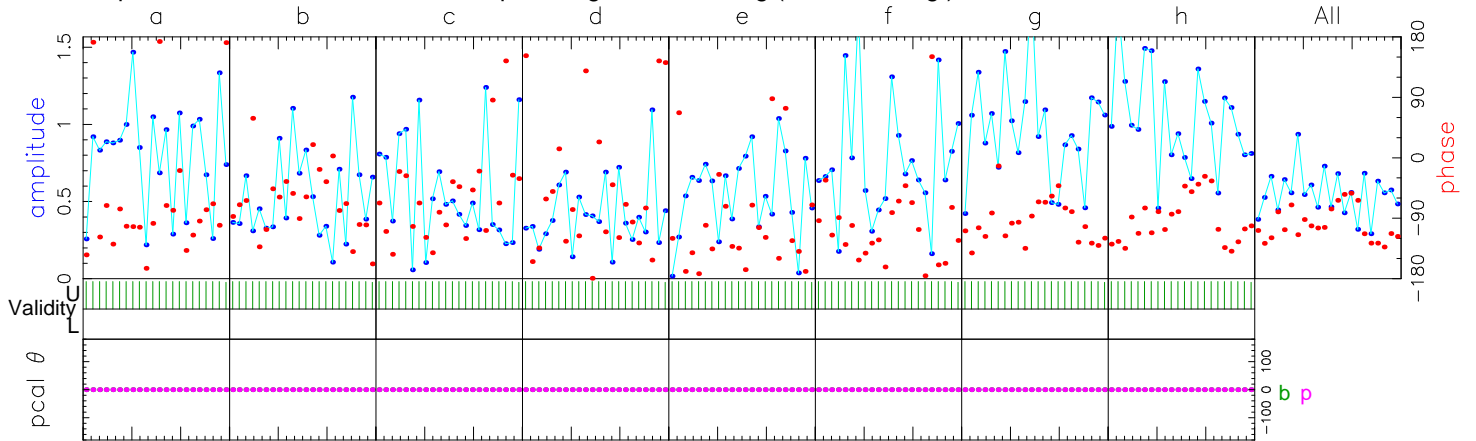


SNR 19.2
Int time 179.976
Amp 0.522
Phase -100.3
PFD 0.0e+00
Delays (us)
SBD 0.006098
MBD 0.005915
Fringe rate (Hz)
-0.004825
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141441
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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

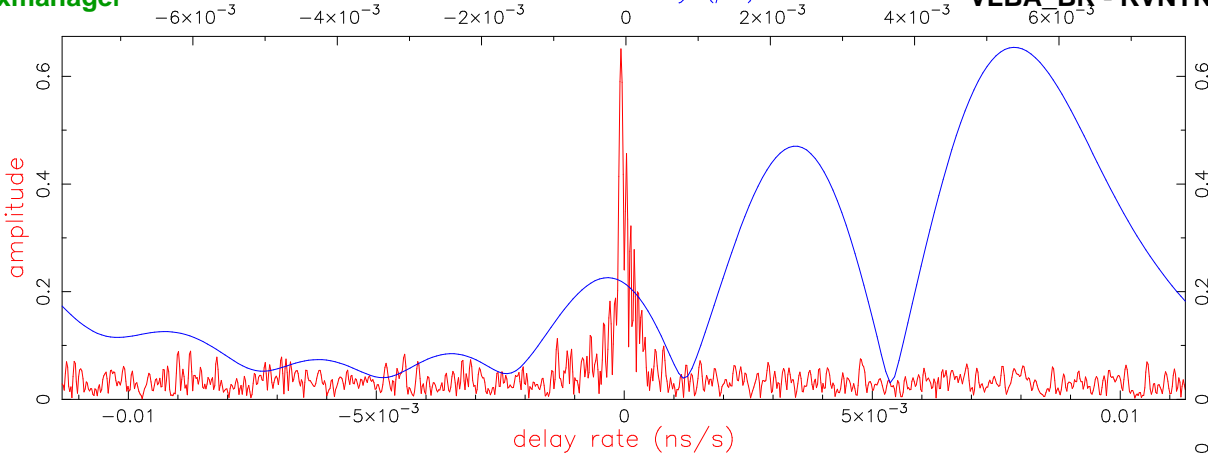


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-104.3	-76.1	-67.3	-124.8	-132.9	-114.6	-99.6	-95.8	Phase	-100.3
	0.6	0.4	0.4	0.2	0.3	0.6	0.8	0.9	Ampl.	0.5
	258.3	258.8	258.5	384.9	258.7	259.1	258.6	259.0	Sbd box	258.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.90879696507E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		5.91498E-03	+/- 5.7E-05
Sband delay (usec)	3.90879714809E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		6.09800E-03	+/- 4.5E-04
Phase delay (usec)	3.90879104686E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-3.23332E-06	+/- 1.9E-07
Delay rate (us/s)	1.70616066492E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.60129E-08	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		-100.3	+/- 6.0

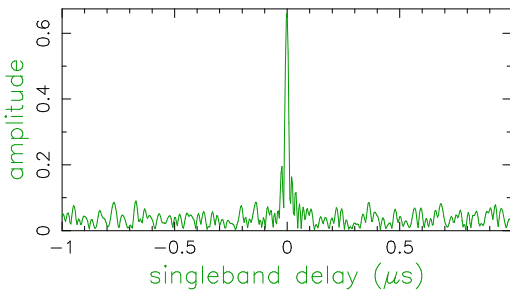
ph/seg (deg) 24.8 14.0 Search (1024X32) 0.490 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.8 24.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.4 8.5 Inc. seg. avg. 0.538 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.6 14.8 Inc. frq. avg. 0.525 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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.66.1HSTEG

multiband delay (μ s)

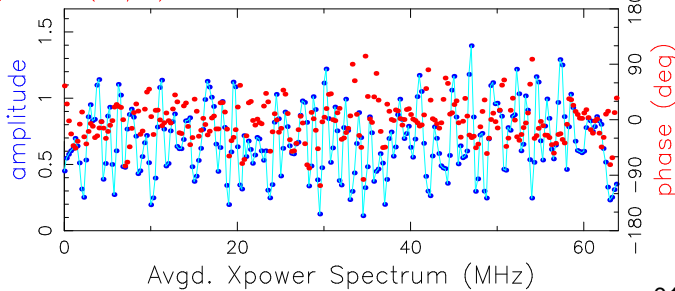
Fringe quality 6



SNR 24.7
Int time 179.976
Amp 0.674
Phase -85.7
PFD 0.0e+00
Delays (us)
SBD -0.001656
MBD 0.005490
Fringe rate (Hz)
-0.005452
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

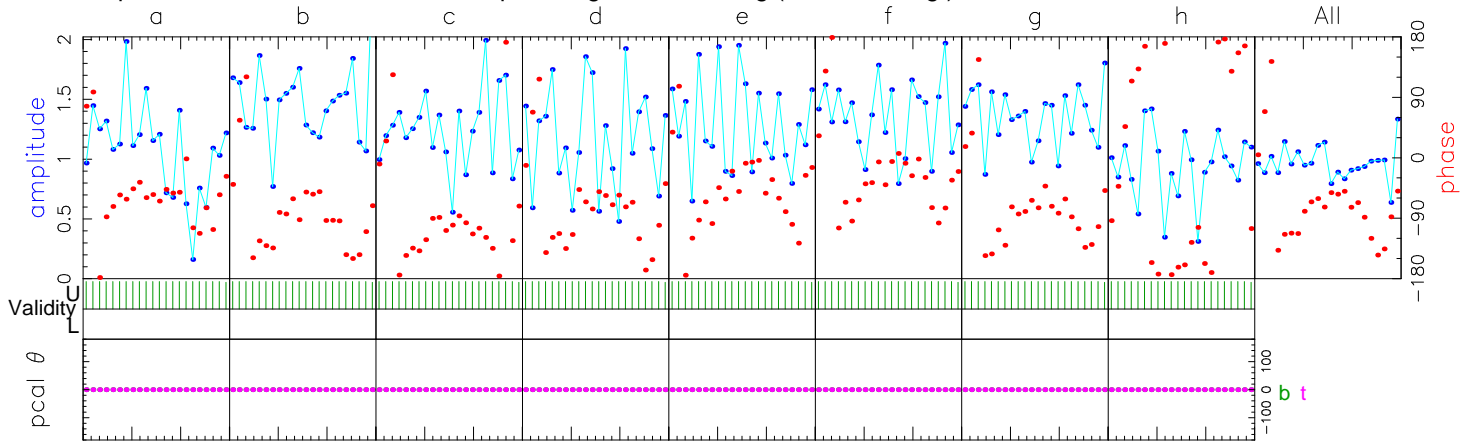


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141436
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-59.5	-95.9	-123.4	-89.6	-49.9	-41.5	-88.1	-172.8	Phase	-85.7
	0.7	1.0	0.8	0.7	0.8	0.9	0.9	0.6	Ampl.	0.8
	254.5	256.7	256.8	256.8	256.7	256.7	255.9	253.5	Sbd box	256.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:t	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	
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.81666311038E+03	Apriori delay (usec)	2.81665762019E+03	Resid mbdelay (usec)	5.49020E-03	+/-	4.4E-05
Sband delay (usec)	2.81665596394E+03	Apriori clock (usec)	-3.0843086E+00	Resid sbdelay (usec)	-1.65625E-03	+/-	3.5E-04
Phase delay (usec)	2.81665761743E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-2.76471E-06	+/-	1.5E-07
Delay rate (us/s)	-1.02360189825E+00	Apriori rate (us/s)	-1.02360183496E+00	Resid rate (us/s)	-6.32955E-08	+/-	1.4E-09
Total phase (deg)	59.4	Apriori accel (us/s/s)	3.84954551570E-06	Resid phase (deg)	-85.7	+/-	4.6

ph/seg (deg)	55.5	Theor.	Amplitude	0.674 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	48.2	10.9	Search (1024X32)	0.652	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.6	6.6	Inc. seg. avg.	0.952	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.4	11.4	Inc. frq. avg.	0.802	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 309.0 el 56.4 pa 83.2 t: az 38.3 el 44.1 pa -96.6 u,v (fr/asec) 11225.506 1350.248 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt.W.13.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

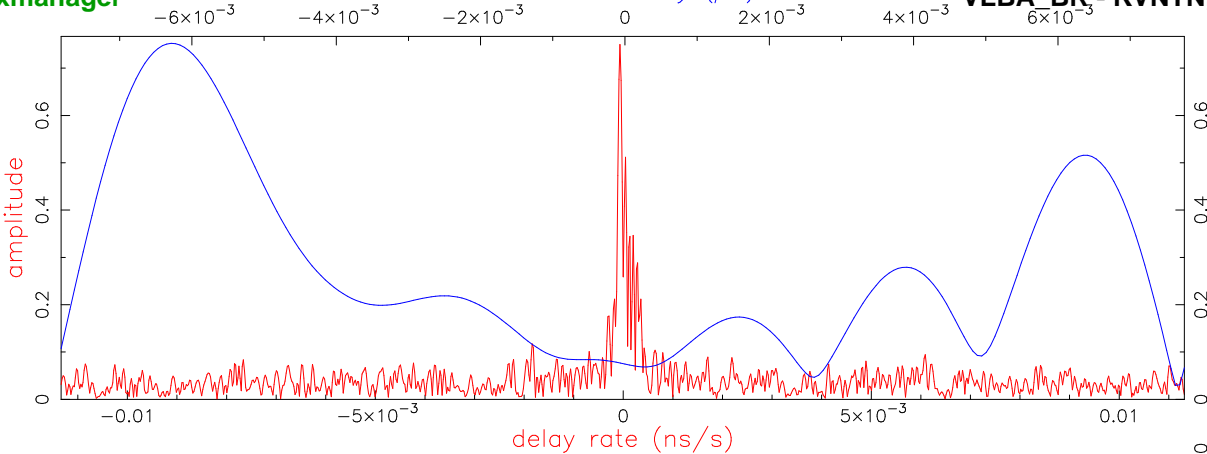
fxmanager

0102+584.1HSTEG, No0128, bt

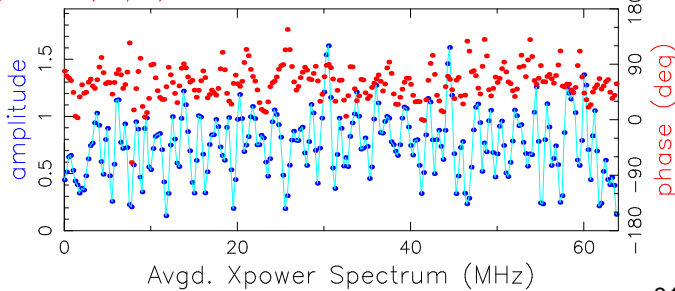
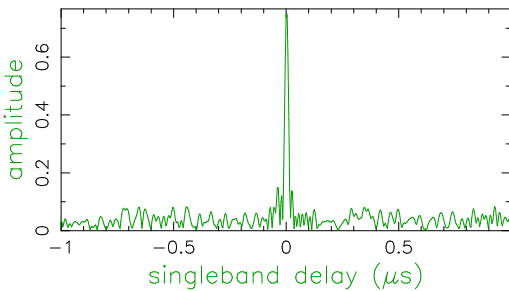
VLBA_BR - KVNTN, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 6

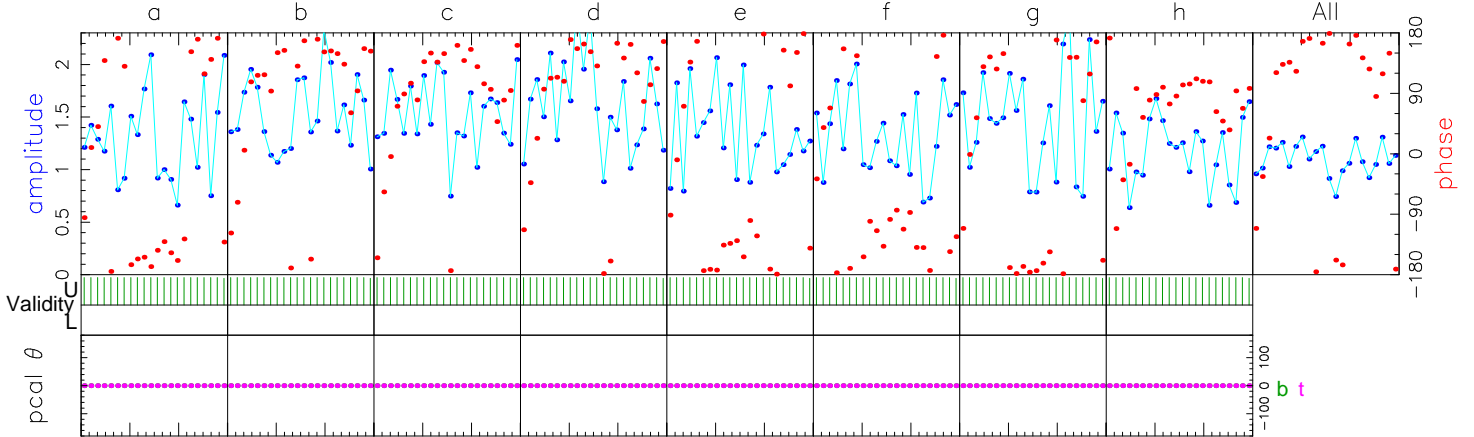


SNR 28.1
 Int time 179.976
 Amp 0.767
 Phase 153.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.001893
 MBD -0.006189
 Fringe rate (Hz)
 -0.005316
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141438
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:t	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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 2.81666705582E+03 Apriori delay (usec) 2.81665762019E+03 Resid mbdelay (usec) -6.18937E-03 +/- 3.9E-05
 Sband delay (usec) 2.81665951369E+03 Apriori clock (usec) -3.0843086E+00 Resid sbdelay (usec) 1.89350E-03 +/- 3.1E-04
 Phase delay (usec) 2.81665762515E+03 Apriori clockrate (us/s) -9.9999991E-08 Resid phdelay (usec) 4.96314E-06 +/- 1.3E-07
 Delay rate (us/s) -1.02360189667E+00 Apriori rate (us/s) -1.02360183496E+00 Resid rate (us/s) -6.17182E-08 +/- 1.3E-09
 Total phase (deg) 299.1 Apriori accel (us/s/s) 3.84954551570E-06 Resid phase (deg) 153.9 +/- 4.1

RMS Theor. Amplitude 0.767 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.7 9.5 Search (1024X32) 0.747 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 47.6 16.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 45.6 5.8 Inc. seg. avg. 1.088 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 26.3 10.0 Inc. frq. avg. 0.932 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 309.0 el 56.4 pa 83.2 t: az 38.3 el 44.1 pa -96.6 u,v (fr/asec) 11225.506 1350.248 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt.W.30.1HSTEG

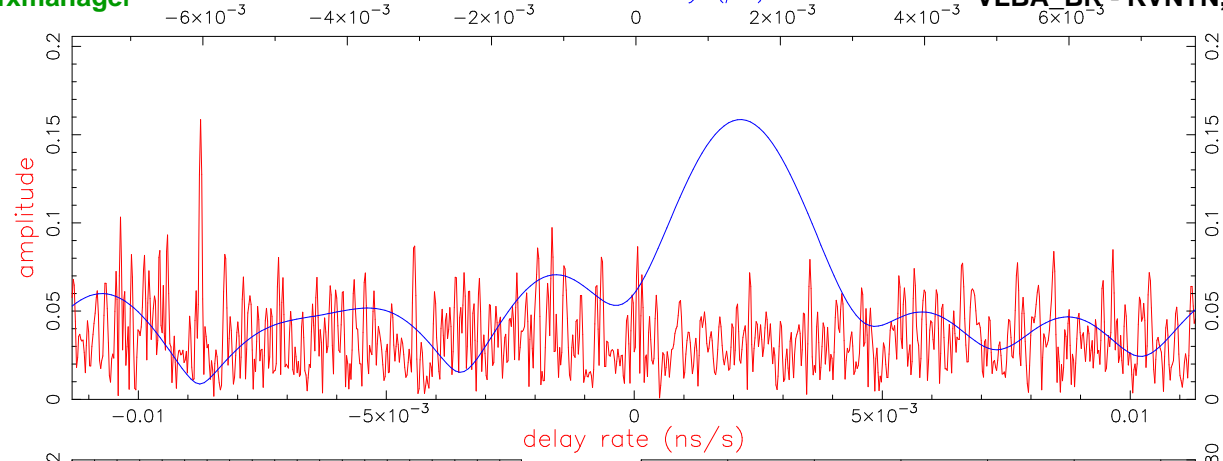
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bt

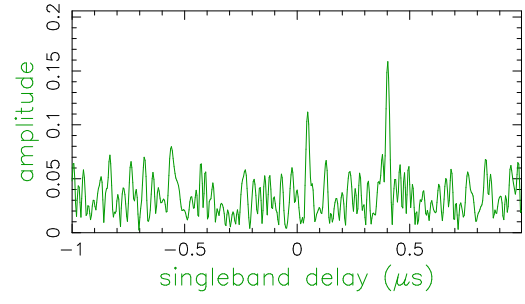
VLBA_BR - KVNTN, fgroup W, pol LR

multiband delay (μ s)

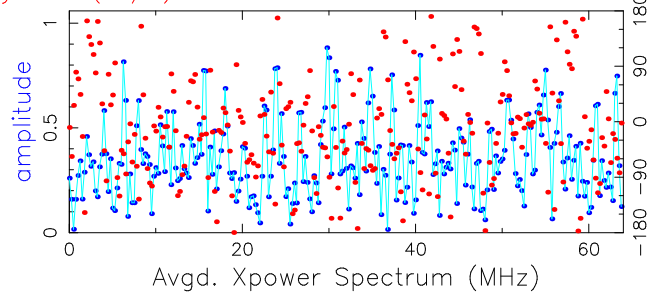


Fringe quality 0

SNR 5.8
 Int time 179.976
 Amp 0.206
 Phase -92.8
 PFD 5.2e-01
 Delays (us)
 SBD 0.401933
 MBD 0.001429
 Fringe rate (Hz)
 -0.755239
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

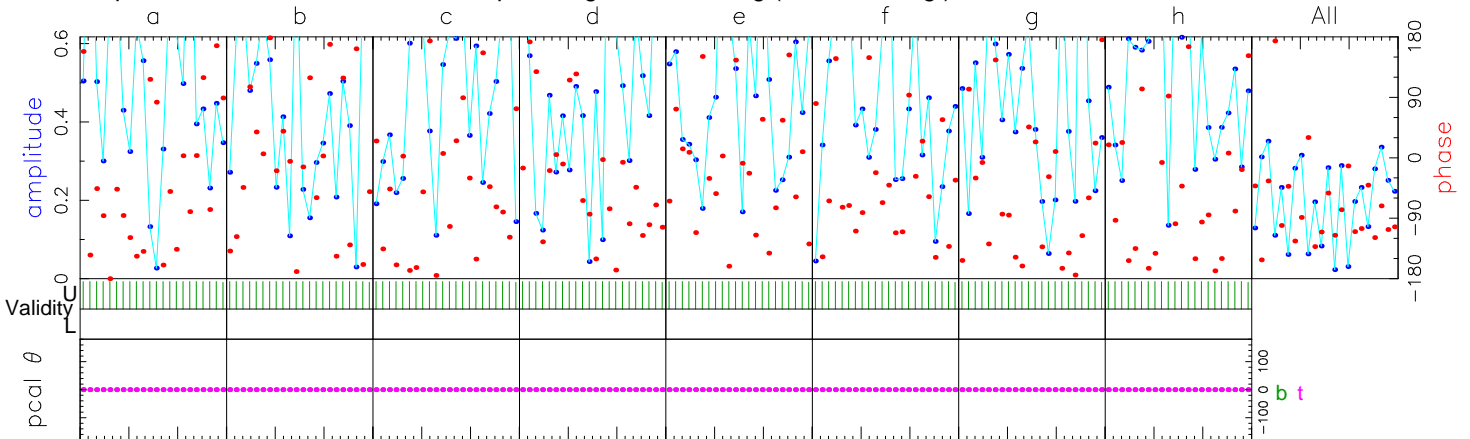


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



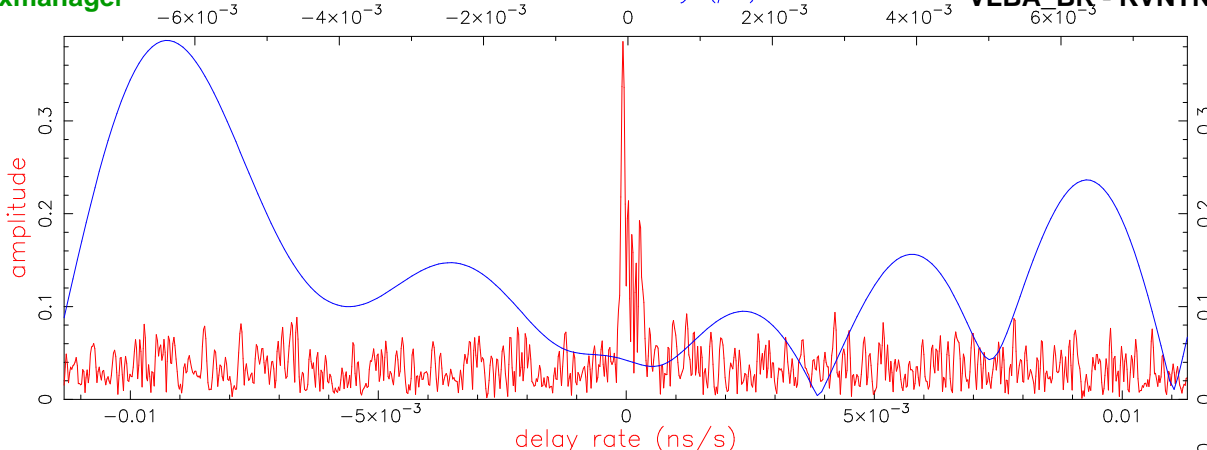
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-115.1	-107.4	-97.4	-76.6	-30.3	-67.6	-122.9	-116.1	Phase	-92.8
	0.3	0.1	0.2	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
	239.1	31.7	163.7	323.5	28.9	226.1	388.9	47.8	Sbd box	359.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:t	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	
t	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.81706529925E+03		Apriori delay (usec)		2.81665762019E+03		Resid mbdelay (usec)		1.42906E-03	+/- 1.9E-04
Sband delay (usec)	2.81705955344E+03		Apriori clock (usec)		-3.0843086E+00		Resid sbdelay (usec)		4.01933E-01	+/- 1.5E-03
Phase delay (usec)	2.81665761720E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-2.99282E-06	+/- 6.3E-07
Delay rate (us/s)	-1.02361060253E+00		Apriori rate (us/s)		-1.02360183496E+00		Resid rate (us/s)		-8.76757E-06	+/- 6.1E-09
Total phase (deg)			52.3		Apriori accel (us/s/s)		3.84954551570E-06		Resid phase (deg)	-92.8 +/- 19.7

	RMS	Theor.	Amplitude	0.206 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	48.7	46.2	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	69.5	80.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	34.1	27.8	Inc. seg. avg.	0.196	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.9	48.6	Inc. frq. avg.	0.207	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

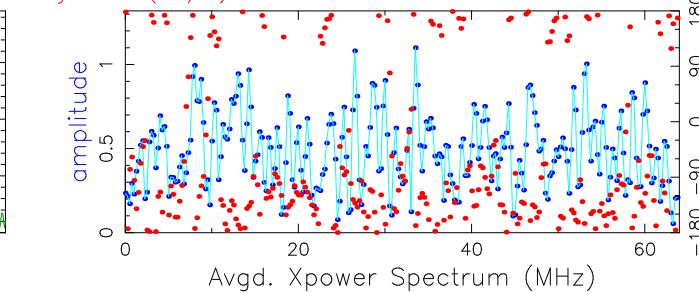
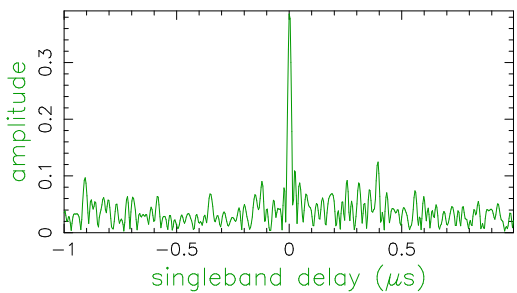
b: az 309.0 el 56.4 pa 83.2 t: az 38.3 el 44.1 pa -96.6 u,v (fr/asec) 11225.506 1350.248 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt.W.47.1HSTEG

multiband delay (μ s)

Fringe quality 8

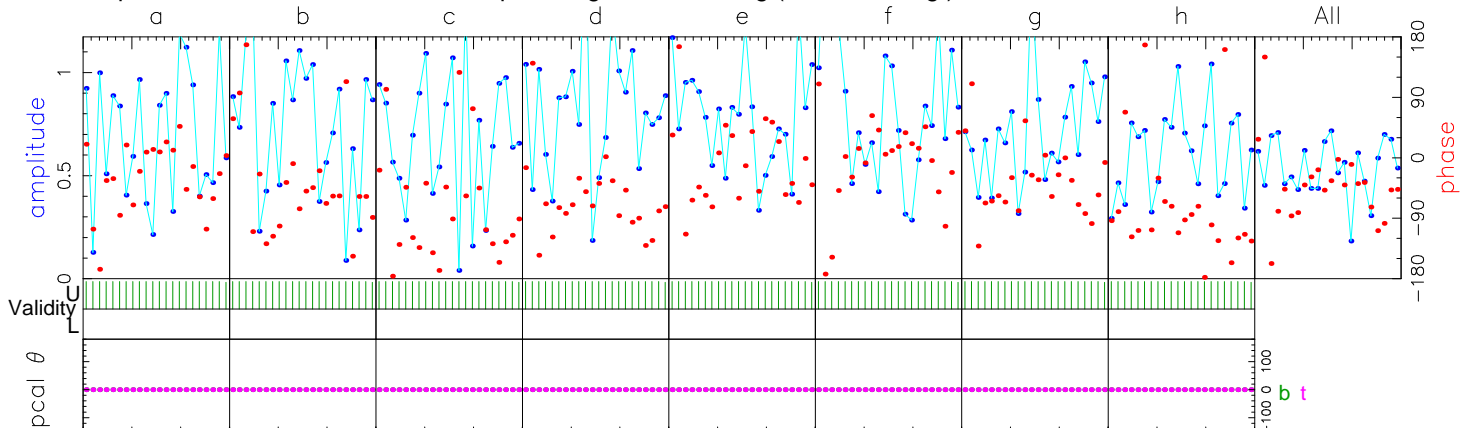


SNR 14.3
 Int time 179.976
 Amp 0.391
 Phase -54.1
 PFD 3.3e-38
 Delays (us)
 SBD 0.001508
 MBD -0.006297
 Fringe rate (Hz)
 -0.004933
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141441
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

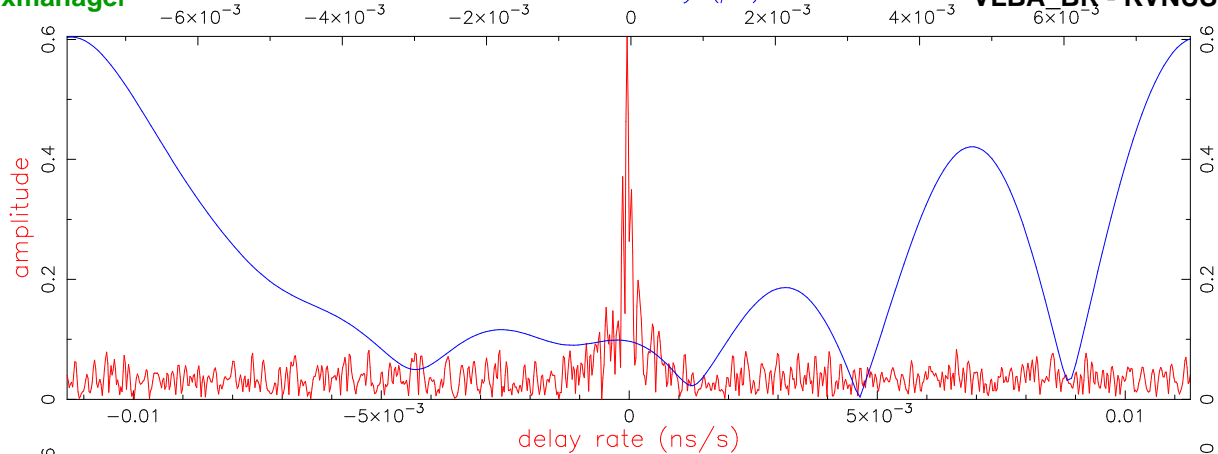
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
t	1000	1000	1000	1000	1000	1000	1000	1000			
b:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:t	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			
t	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)		2.81665132348E+03			2.81665762019E+03				Resid mbdelay (usec)	-6.29671E-03	+/- 7.6E-05
Sband delay (usec)		2.81665912844E+03			-3.0843086E+00				Resid sbdelay (usec)	1.50825E-03	+/- 6.0E-04
Phase delay (usec)		2.81665761845E+03			-9.9999991E-08				Resid phdelay (usec)	-1.74375E-06	+/- 2.6E-07
Delay rate (us/s)		-1.02360189222E+00			-1.02360183496E+00				Resid rate (us/s)	-5.72656E-08	+/- 2.5E-09
Total phase (deg)			91.1		3.84954551570E-06				Resid phase (deg)	-54.1	+/- 8.0
ph/seg (deg)	51.1	18.7			0.391 +/- 0.027				Pcal mode: MANUAL, MANUAL		
amp/seg (%)	51.5	32.7			0.378				Pcal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	42.5	11.3			0.000				sb window (us)	-1.000	1.000
amp/frq (%)	28.1	19.7			0.513				Bits/sample: 2x2		
					0.462				SampCntNorm: enabled		
									Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
									ion window (TEC)	0.00	0.00

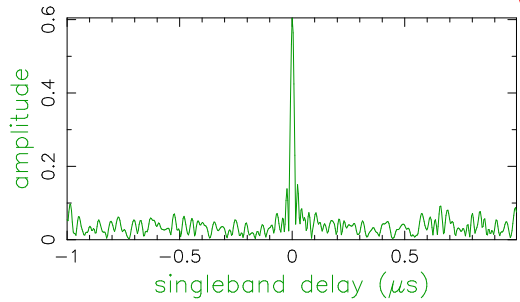
b: az 309.0 el 56.4 pa 83.2 t: az 38.3 el 44.1 pa -96.6 u,v (fr/asec) 11225.506 1350.248 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bt.W.62.1HSTEG

multiband delay (μ s)

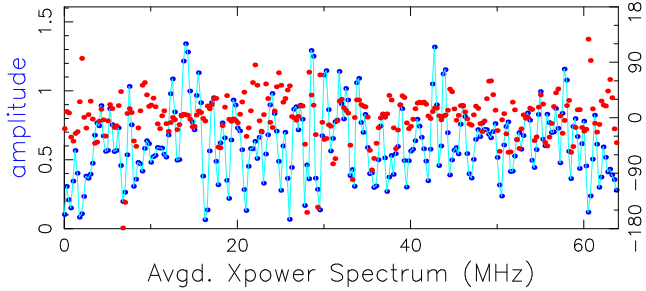


Fringe quality 8

SNR 22.2
 Int time 179.976
 Amp 0.605
 Phase 99.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.000560
 MBD -0.007732
 Fringe rate (Hz)
 -0.003890
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

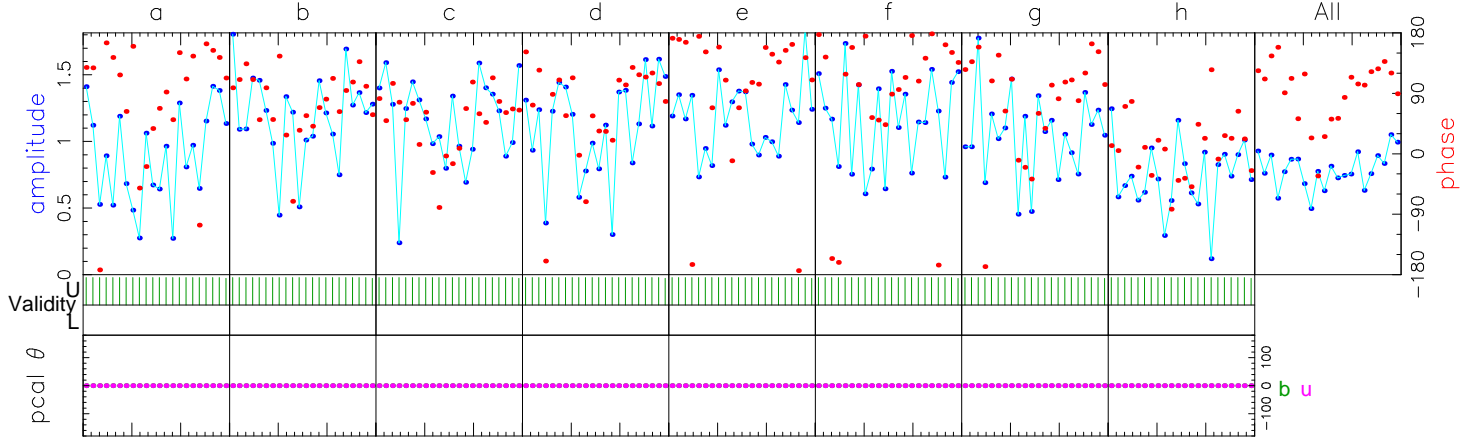


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141437
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:u	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		
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.99035707070E+03	Apriori delay (usec)	1.99034917748E+03	Resid mbdelay (usec)	-7.73178E-03	+/-	4.9E-05
Sband delay (usec)	1.99034973773E+03	Apriori clock (usec)	-4.2352357E+00	Resid sbdelay (usec)	5.60250E-04	+/-	3.9E-04
Phase delay (usec)	1.99034918069E+03	Apriori clockrate (us/s)	-3.9999997E-07	Resid phdelay (usec)	3.21346E-06	+/-	1.7E-07
Delay rate (us/s)	-9.90684813939E-01	Apriori rate (us/s)	-9.90684768785E-01	Resid rate (us/s)	-4.51535E-08	+/-	1.6E-09
Total phase (deg)	152.9	Apriori accel (us/s/s)	5.11623712219E-06	Resid phase (deg)	99.7	+/-	5.2

ph/seg (deg)	45.8	RMS	12.1	Theor.	12.1	Amplitude	0.605 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	37.7	Search (1024X32)	0.603	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	49.9	Inc. seg. avg.	0.773	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
amp/frq (%)	34.6	Inc. frq. avg.	0.768										

b: az 309.0 el 56.4 pa 83.2 u: az 39.5 el 47.3 pa -97.8 u,v (fr/asec) 10865.797 1364.162 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu...1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu.W.26.1HSTEG

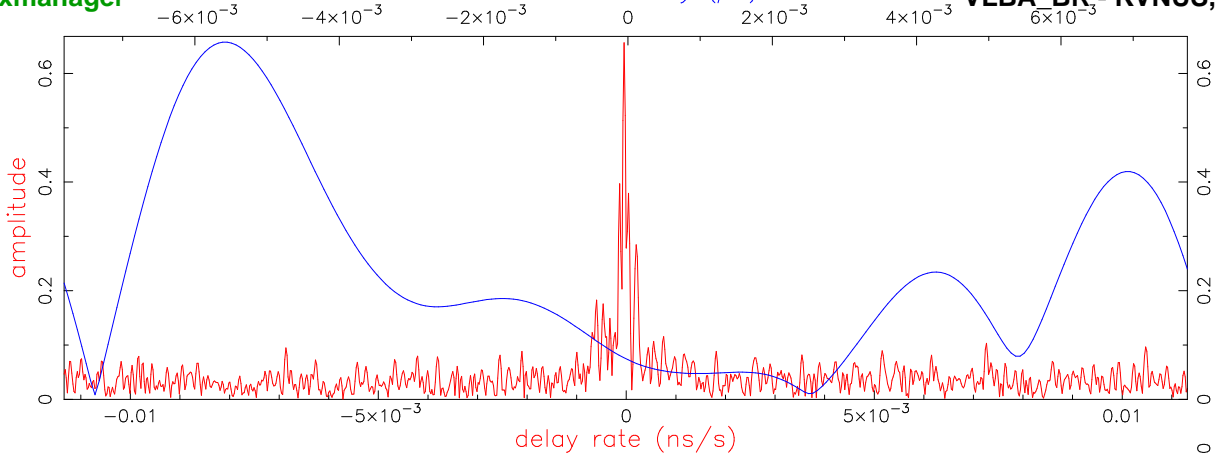
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bu

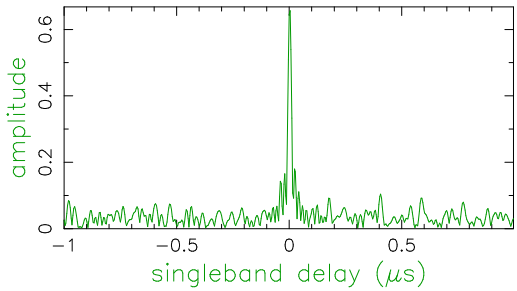
VLBA_BR- KVNUS, fgroup W, pol RR

multiband delay (μ s)

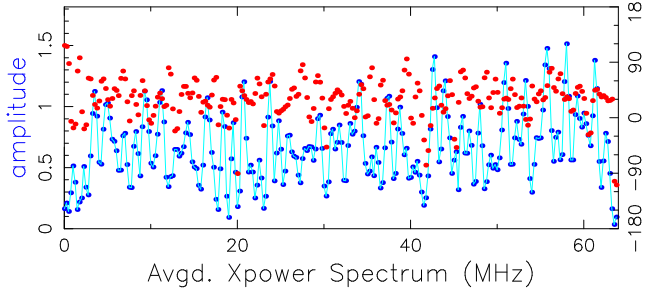


Fringe quality 7

SNR 24.5
 Int time 179.976
 Amp 0.668
 Phase 122.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002292
 MBD -0.005654
 Fringe rate (Hz)
 -0.004068
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

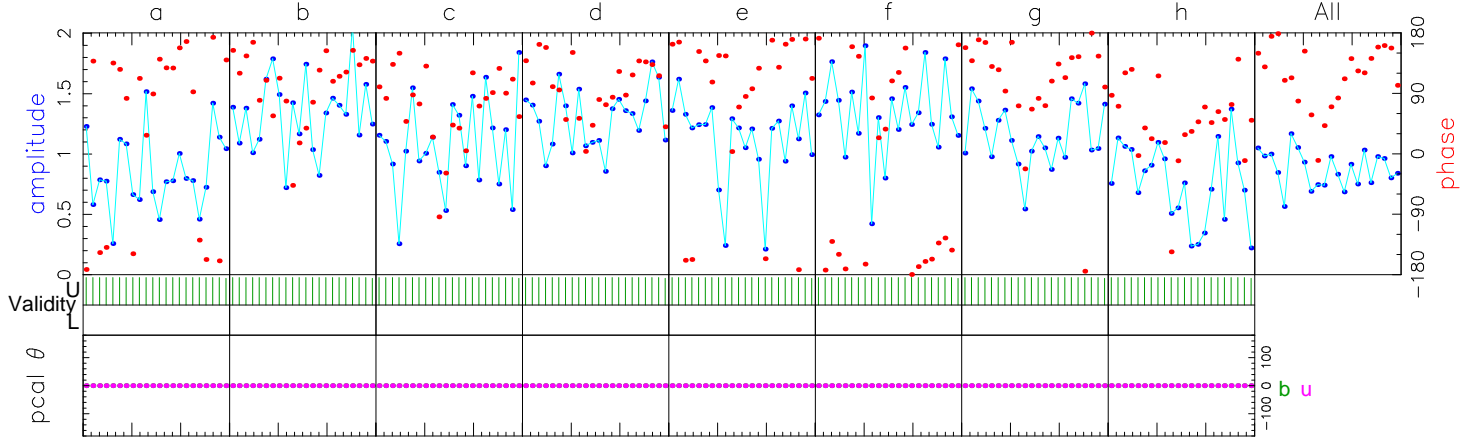


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:u	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		
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.99035914885E+03			1.99034917748E+03					
Sband delay (usec)		1.99035146948E+03			-4.2352357E+00					
Phase delay (usec)		1.99034918143E+03			-3.9999997E-07					
Delay rate (us/s)		-9.90684816005E-01			-9.90684768785E-01					
Total phase (deg)			175.9		5.11623712219E-06				122.6	4.7
ph/seg (deg)	46.6	11.0		0.647						
amp/seg (%)	38.4	19.1		0.000						
ph/frq (deg)	43.1	6.6		0.863						
amp/frq (%)	32.8	11.5		0.798						
b: az 309.0 el 56.4 pa 83.2										
u: az 39.5 el 47.3 pa -97.8										
u,v (fr/asec)					10865.797	1364.162				
Control file: cf_1234_gmva										
Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu..1HSTEG										
Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu.W.40.1HSTEG										

RMS Theor. Amplitude 0.668 +/- 0.027
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

simultaneous interpolator

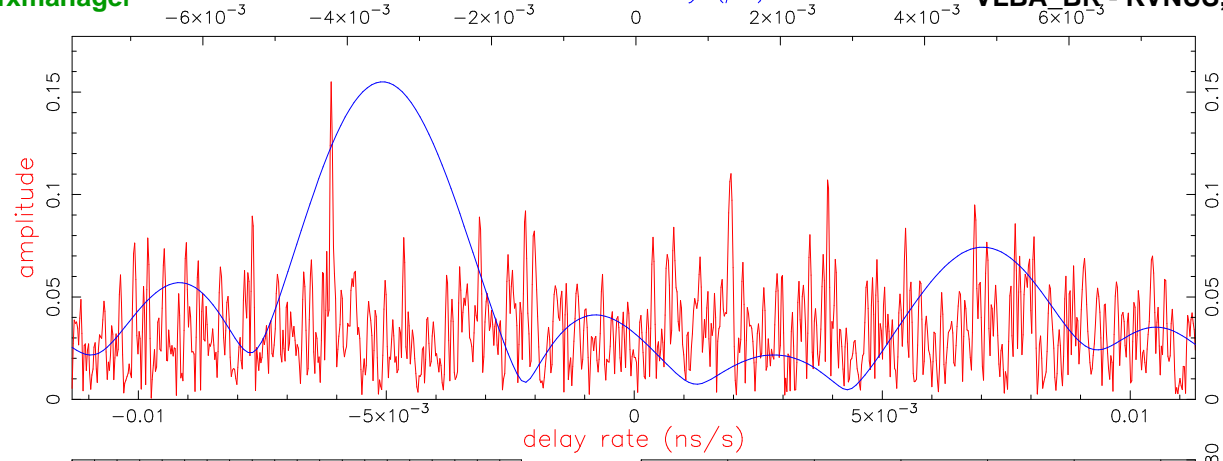
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bu

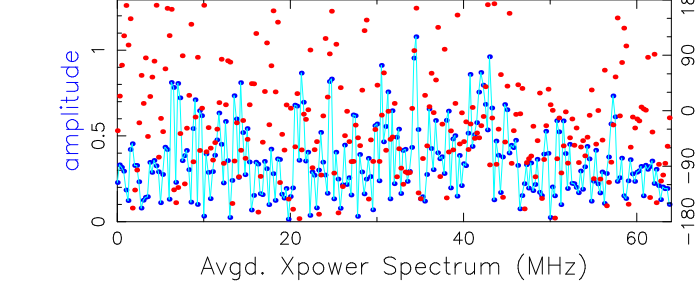
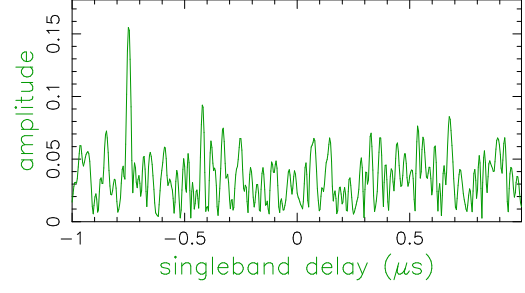
VLBA_BR - KVNUS, fgroup W, pol LR

multiband delay (μ s)



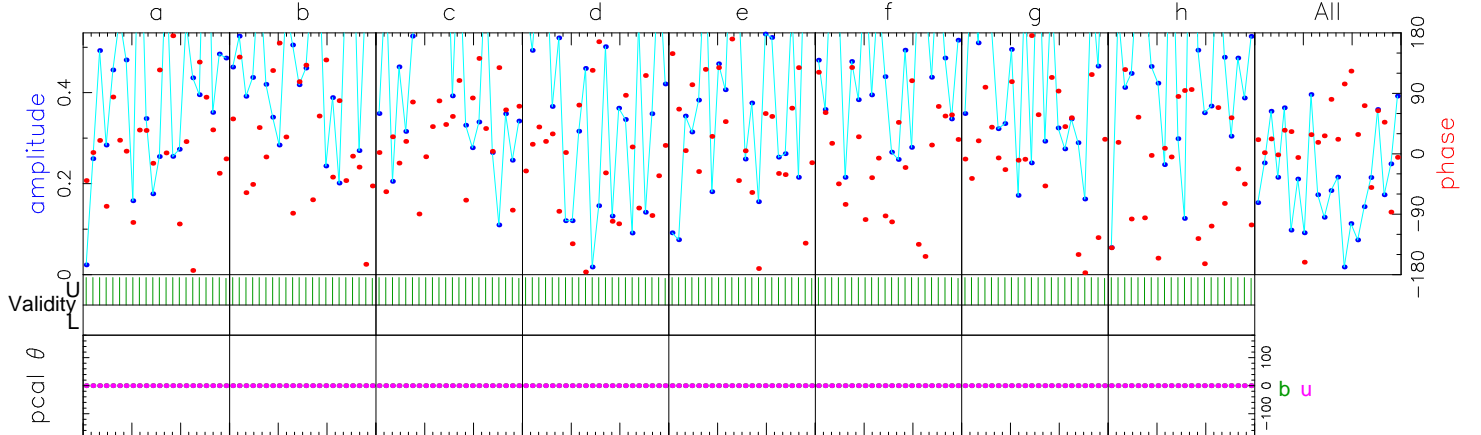
Fringe quality 0

SNR 5.8
Int time 179.976
Amp 0.177
Phase 21.8
PFD 6.7e-01
Delays (us)
SBD -0.748446
MBD -0.003521
Fringe rate (Hz)
-0.526760
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141440
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:u	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	
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	1.9895956530E+03		Apriori delay (usec)		1.99034917748E+03		Resid mbdelay (usec)		-3.52117E-03	+/- 1.9E-04
Sband delay (usec)	1.98960073148E+03		Apriori clock (usec)		-4.2352357E+00		Resid sbdelay (usec)		-7.48446E-01	+/- 1.5E-03
Phase delay (usec)	1.99034917818E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		7.04495E-07	+/- 6.4E-07
Delay rate (us/s)	-9.90690883952E-01		Apriori rate (us/s)		-9.90684768785E-01		Resid rate (us/s)		-6.11517E-06	+/- 6.2E-09
Total phase (deg)	75.1		Apriori accel (us/s/s)		5.11623712219E-06		Resid phase (deg)		21.8	+/- 19.9

ph/seg (deg) 59.0 46.7 Search (1024X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 75.2 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 26.4 28.2 Inc. seg. avg. 0.177 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 35.3 49.2 Inc. frq. avg. 0.169 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 309.0 el 56.4 pa 83.2 u: az 39.5 el 47.3 pa -97.8 u,v (fr/asec) 10865.797 1364.162 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu.W.55.1HSTEG

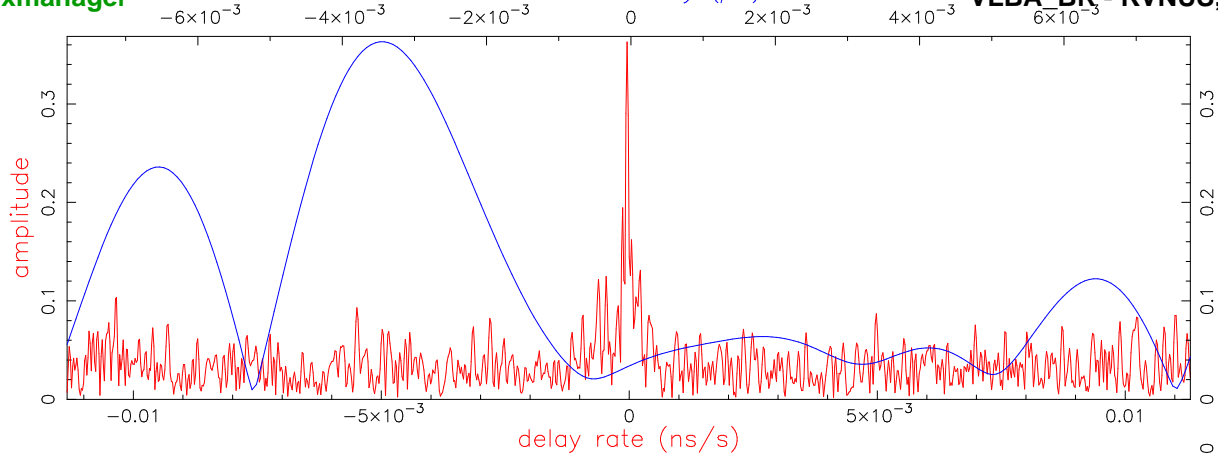
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bu

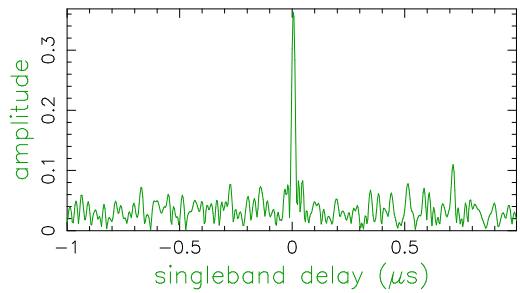
VLBA_BR - KVNUS, fgroup W, pol RL

multiband delay (μ s)

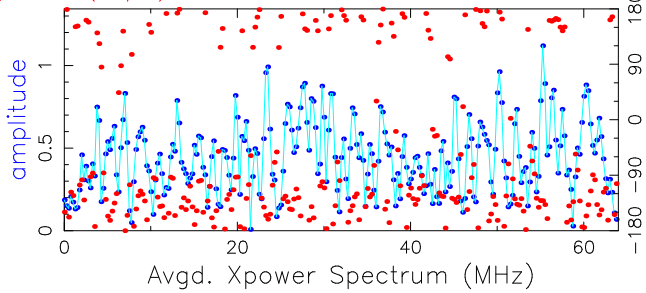


Fringe quality 9

SNR 13.5
 Int time 179.976
 Amp 0.369
 Phase -49.5
 PFD 3.3e-33
 Delays (us)
 SBD 0.005477
 MBD -0.003392
 Fringe rate (Hz)
 -0.004317
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

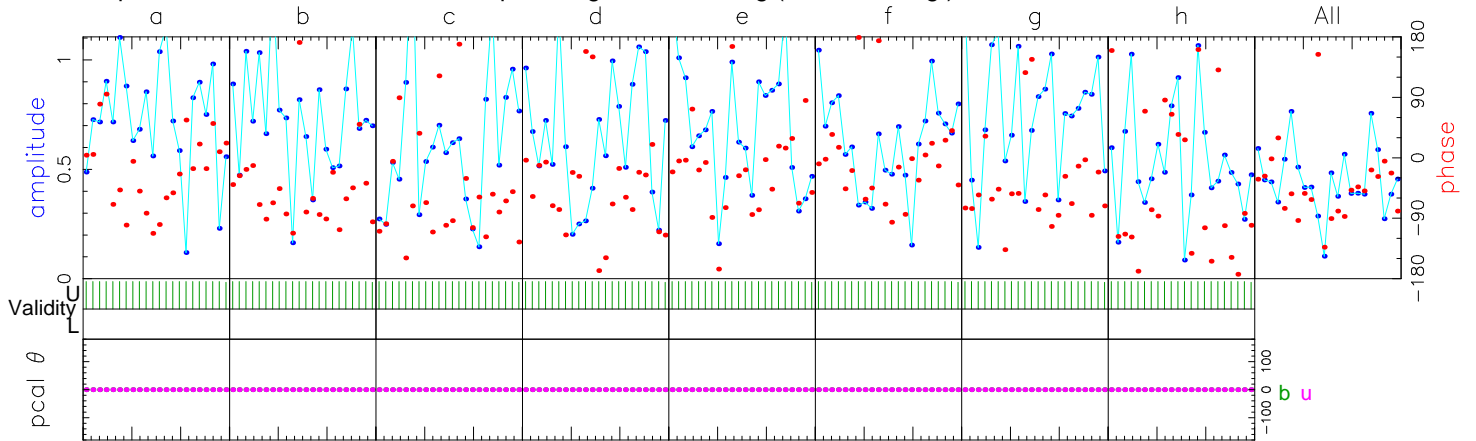


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141442
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.4	-59.5	-86.3	-56.7	-18.7	-12.2	-57.4	-144.5	Phase	-49.5
	0.4	0.6	0.4	0.4	0.4	0.4	0.5	0.2	Ampl.	0.4
	256.7	259.0	258.9	258.5	258.4	257.7	257.8	254.8	Sbd box	258.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:u	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	
u	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.99036141088E+03		Apriori delay (usec)		1.99034917748E+03		Resid mbdelay (usec)		-3.39160E-03	+/- 8.0E-05
Sband delay (usec)	1.99035465448E+03		Apriori clock (usec)		-4.2352357E+00		Resid sbdelay (usec)		5.47700E-03	+/- 6.4E-04
Phase delay (usec)	1.99034917588E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-1.59688E-06	+/- 2.7E-07
Delay rate (us/s)	-9.90684818900E-01		Apriori rate (us/s)		-9.90684768785E-01		Resid rate (us/s)		-5.01149E-08	+/- 2.6E-09
Total phase (deg)	3.7		Apriori accel (us/s/s)		5.11623712219E-06		Resid phase (deg)		-49.5	+/- 8.5

	RMS	Theor.	Amplitude	0.369 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	49.0	19.9	Search (1024X32)	0.356	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	45.8	34.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	47.2	12.0	Inc. seg. avg.	0.427	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	32.4	20.9	Inc. frq. avg.	0.414	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

b: az 309.0 el 56.4 pa 83.2 u: az 39.5 el 47.3 pa -97.8 u,v (fr/asec) 10865.797 1364.162 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bu.W.68.1HSTEG

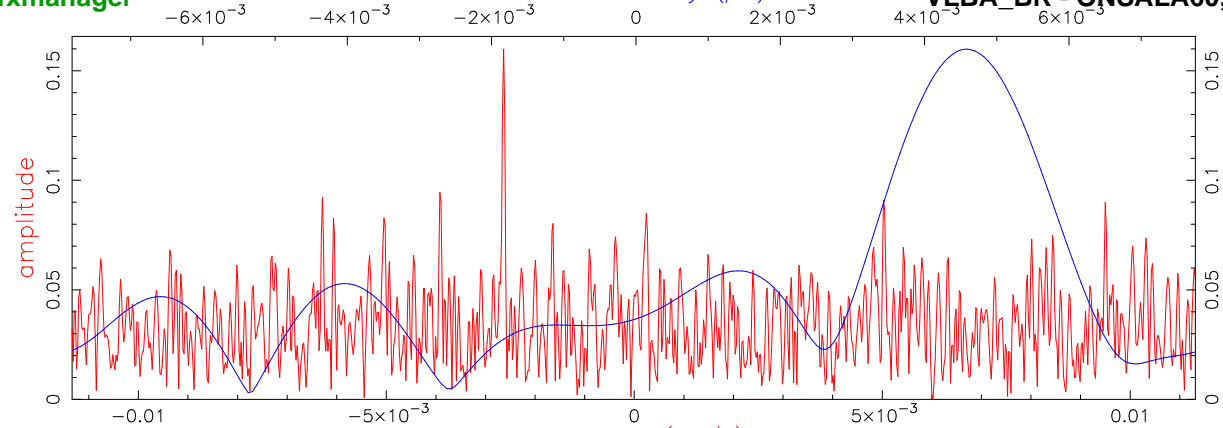
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

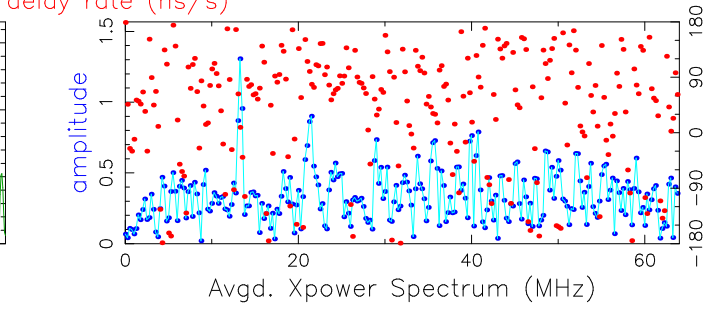
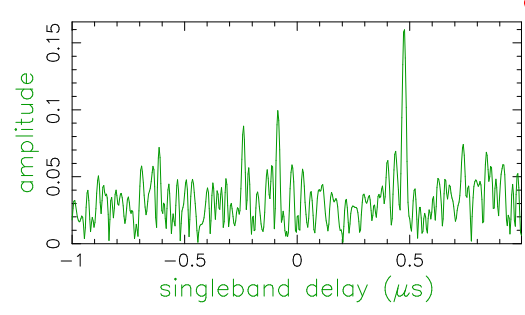
0102+584.1HSTEG, No0128, bX

VLBA_BR - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

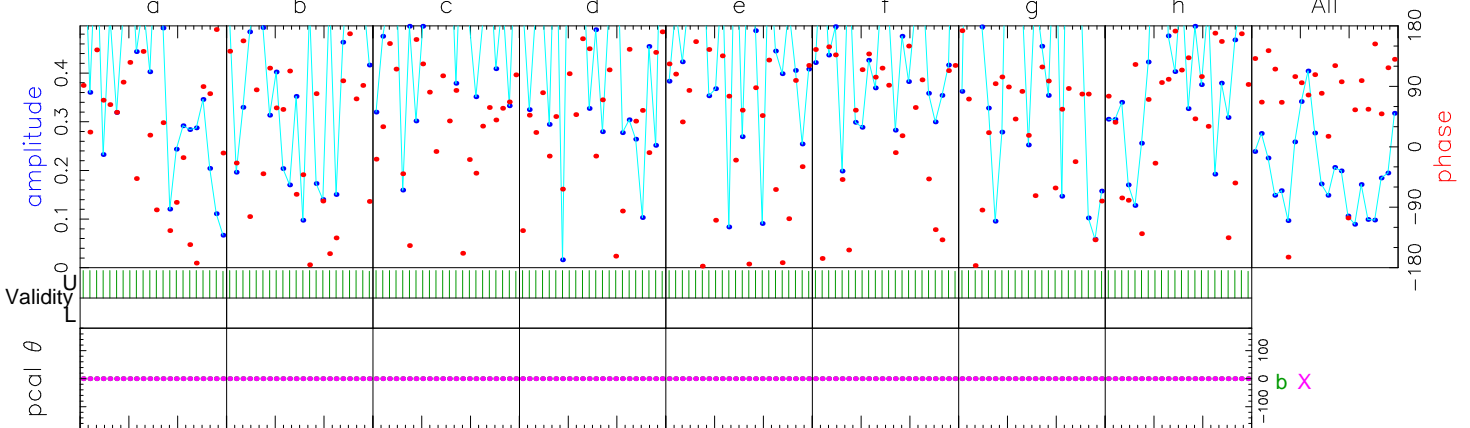


Fringe quality 0
 SNR 5.9
 Int time 179.966
 Amp 0.166
 Phase 99.2
 PFD 3.0e-01
 Delays (us)
 SBD 0.474892
 MBD 0.004558
 Fringe rate (Hz) -0.226770
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141447
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	87.1	130.0	74.7	93.2	132.7	126.3	66.5	94.9	Phase	99.2
	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	409.1	348.1	360.5	256.7	227.2	377.0	429.7	205.3	Sbd box	378.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	
									Tracks	
Group delay (usec)(sbd)	8.31588358026E+03		Apriori delay (usec)		8.31541027232E+03		Resid mbdelay (usec)		4.55794E-03	+/- 1.8E-04
Sband delay (usec)	8.31588516432E+03		Apriori clock (usec)		-5.0006104E+01		Resid sbdelay (usec)		4.74892E-01	+/- 1.4E-03
Phase delay (usec)	8.31541027552E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		3.20036E-06	+/- 6.2E-07
Delay rate (us/s)	-5.03579166636E-01		Apriori rate (us/s)		-5.03576534066E-01		Resid rate (us/s)		-2.63257E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.39066403108E-05		Resid phase (deg)		99.2	+/- 19.3

ph/seg (deg) 51.3 45.2 Search (1024X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.7 78.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.9 27.3 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.3 47.6 Inc. frq. avg. 0.161 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 309.0 el 56.4 pa 83.2 X: az 4.0 el 26.0 pa -4.3 u,v (fr/asec) 5477.723 -7390.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX.W.107.1HSTEG

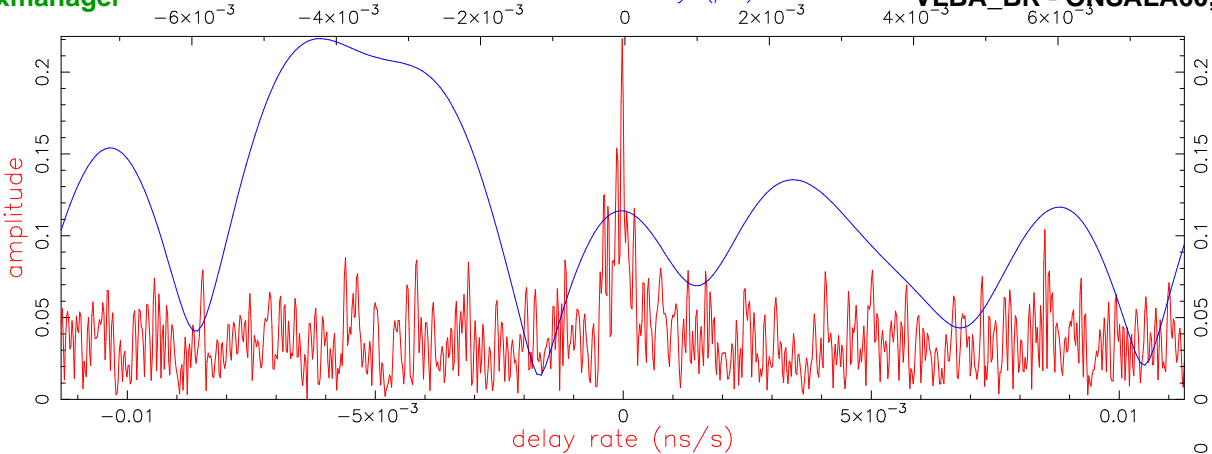
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bX

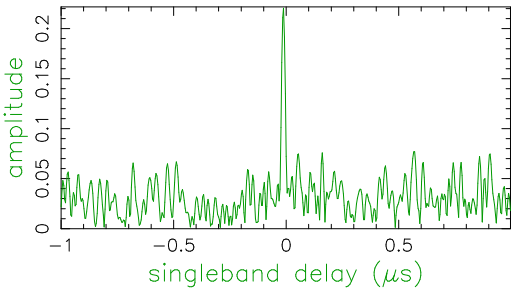
VLBA_BR - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

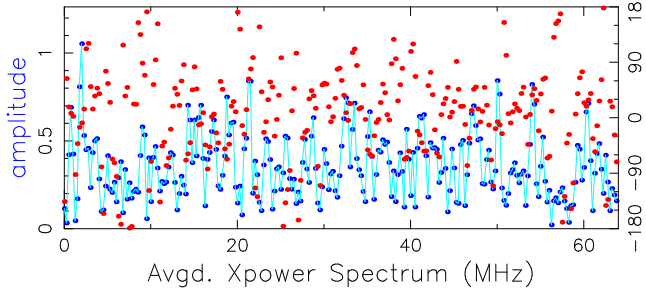


Fringe quality 9

SNR 8.1
 Int time 179.966
 Amp 0.222
 Phase -85.0
 PFD 7.0e-08
 Delays (us)
 SBD -0.012737
 MBD -0.004242
 Fringe rate (Hz)
 -0.002559
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

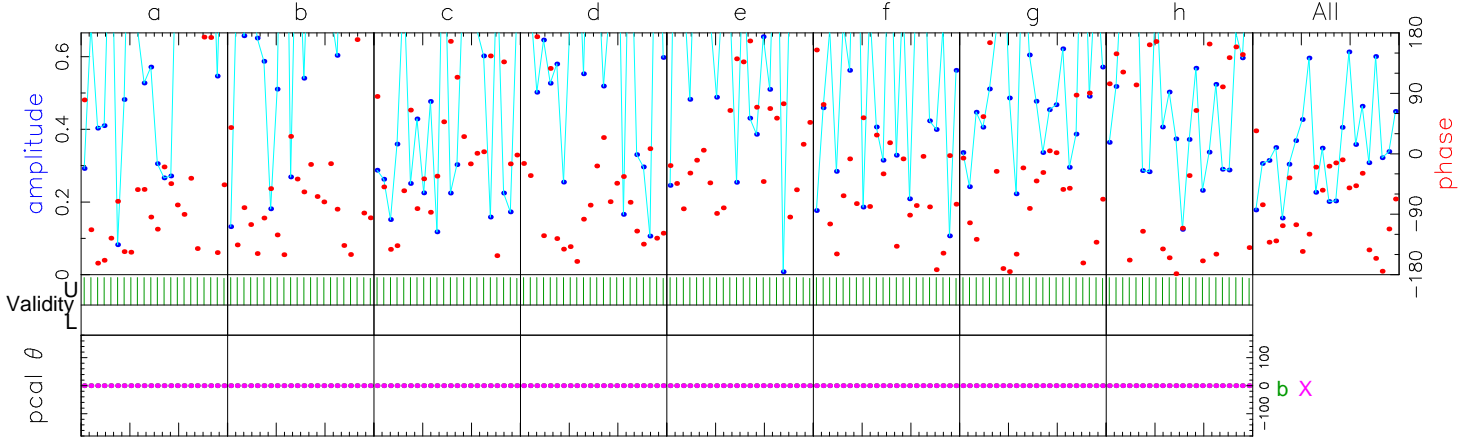


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141449
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.6	-98.3	-10.7	-89.8	-16.2	-54.4	-84.2	165.6	Phase	-85.0
	0.4	0.5	0.2	0.4	0.4	0.3	0.2	0.3	Ampl.	0.3
	253.4	253.7	404.5	253.0	254.1	253.0	440.1	251.4	Sbd box	253.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	8.31539040530E+03	Apriori delay (usec)	8.31541027232E+03	Resid mbdelay (usec)	-4.24202E-03	+/-	1.3E-04
Sband delay (usec)	8.31539753582E+03	Apriori clock (usec)	-5.0006104E+01	Resid sbdelay (usec)	-1.27365E-02	+/-	1.1E-03
Phase delay (usec)	8.31541026958E+03	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	-2.74250E-06	+/-	4.5E-07
Delay rate (us/s)	-5.03576563774E-01	Apriori rate (us/s)	-5.03576534066E-01	Resid rate (us/s)	-2.97084E-08	+/-	4.4E-09
Total phase (deg)	223.8	Apriori accel (us/s/s)	-5.39066403108E-05	Resid phase (deg)	-85.0	+/-	14.1

ph/seg (deg)	56.5	Theor.	33.0	Amplitude	0.222 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	83.5	Search (1024X32)	0.214	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	63.3	Inc. seg. avg.	0.306	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	71.7	Inc. frq. avg.	0.315	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 309.0 el 56.4 pa 83.2 X: az 4.0 el 26.0 pa -4.3 u,v (fr/asec) 5477.723 -7390.026 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX.W.127.1HSTEG

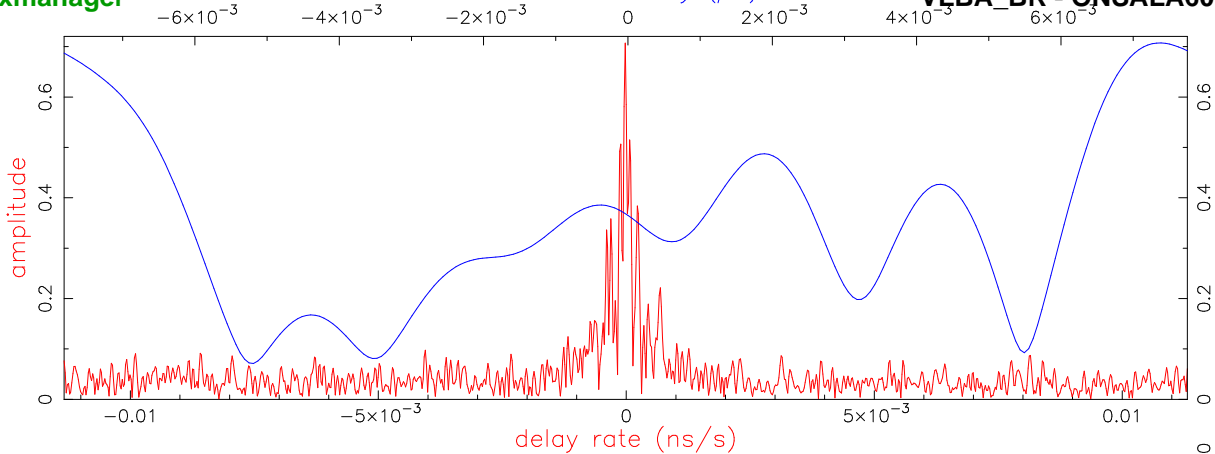
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bX

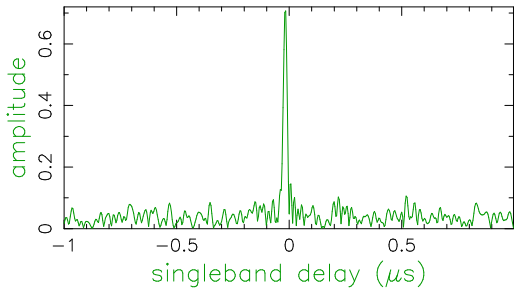
VLBA_BR - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

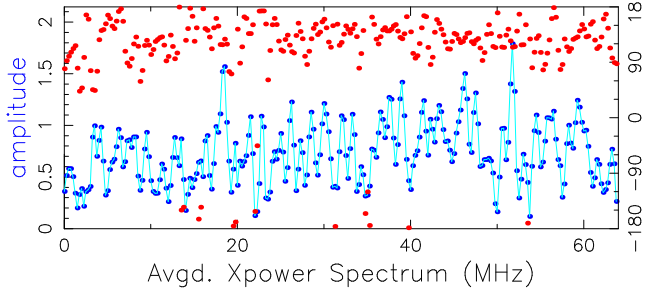


Fringe quality 5

SNR 26.4
 Int time 179.966
 Amp 0.720
 Phase -156.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.017402
 MBD 0.007418
 Fringe rate (Hz)
 -0.002359
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

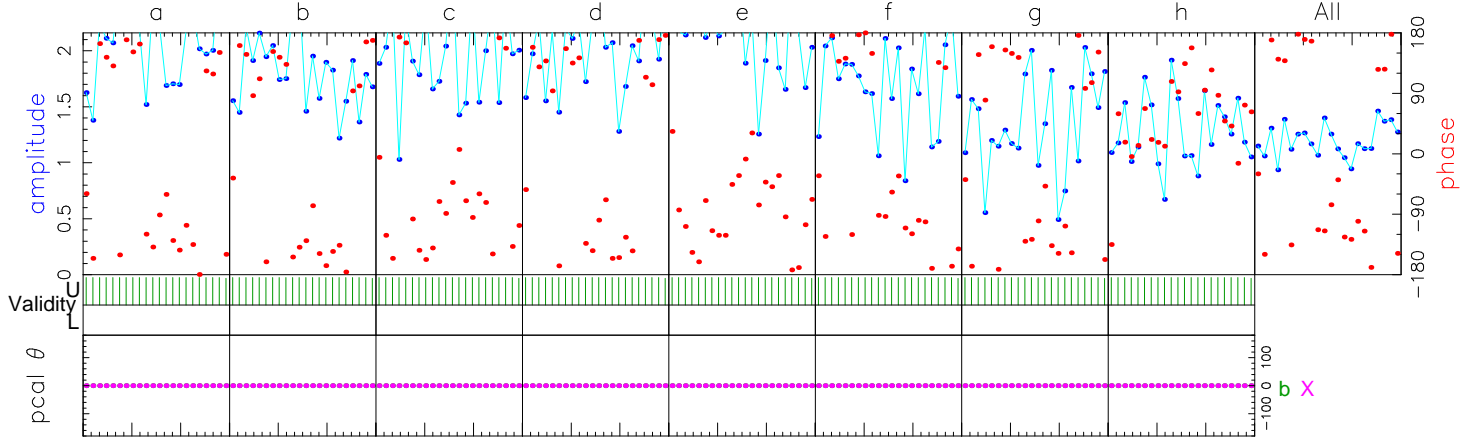


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141443
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-166.7	174.7	-117.8	175.2	-83.1	-145.6	-173.9	62.1		-156.8
	1.4	1.1	1.2	1.2	1.2	0.9	0.8	0.8		1.1
	252.6	252.3	252.5	252.2	252.1	251.8	251.0	249.6		252.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Tracks
Group delay (usec)(sbd)	8.31538644062E+03		Apriori delay (usec)		8.31541027232E+03		Resid mbdelay (usec)		7.41829E-03	+/- 4.1E-05
Sband delay (usec)	8.31539287007E+03		Apriori clock (usec)		-5.0006104E+01		Resid sbdelay (usec)		-1.74023E-02	+/- 3.3E-04
Phase delay (usec)	8.31541026727E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-5.05687E-06	+/- 1.4E-07
Delay rate (us/s)	-5.03576561456E-01		Apriori rate (us/s)		-5.03576534066E-01		Resid rate (us/s)		-2.73900E-08	+/- 1.3E-09
Total phase (deg)	152.0		Apriori accel (us/s/s)		-5.39066403108E-05		Resid phase (deg)		-156.8	+/- 4.3

ph/seg (deg) 57.5 10.2 Search (1024X32) 0.698 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.7 17.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 69.5 6.1 Inc. seg. avg. 1.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.9 10.7 Inc. frq. avg. 1.075 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 309.0 el 56.4 pa 83.2 X: az 4.0 el 26.0 pa -4.3 u,v (fr/asec) 5477.723 -7390.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX.W.76.1HSTEG

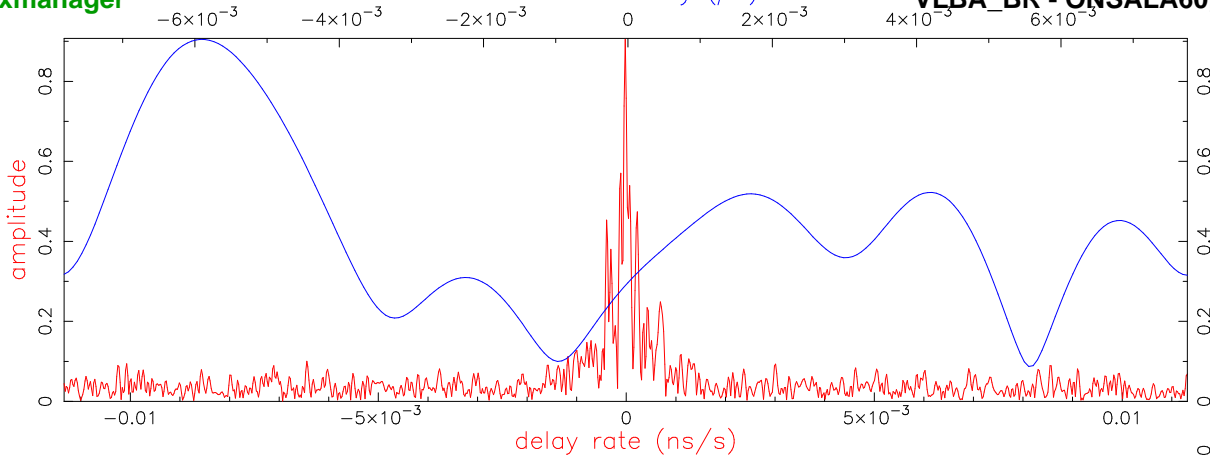
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bX

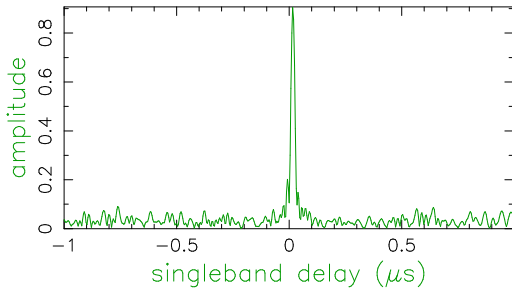
VLBA_BR - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

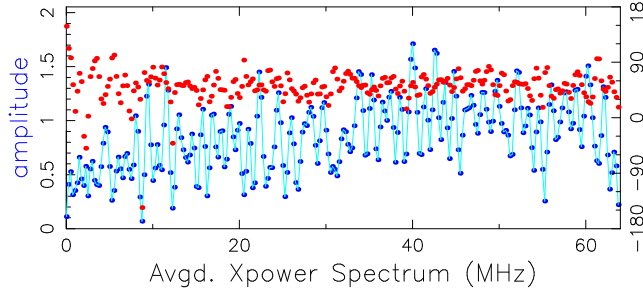


Fringe quality 3

SNR 33.3
 Int time 179.966
 Amp 0.907
 Phase -51.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.016319
 MBD -0.005888
 Fringe rate (Hz)
 -0.002207
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

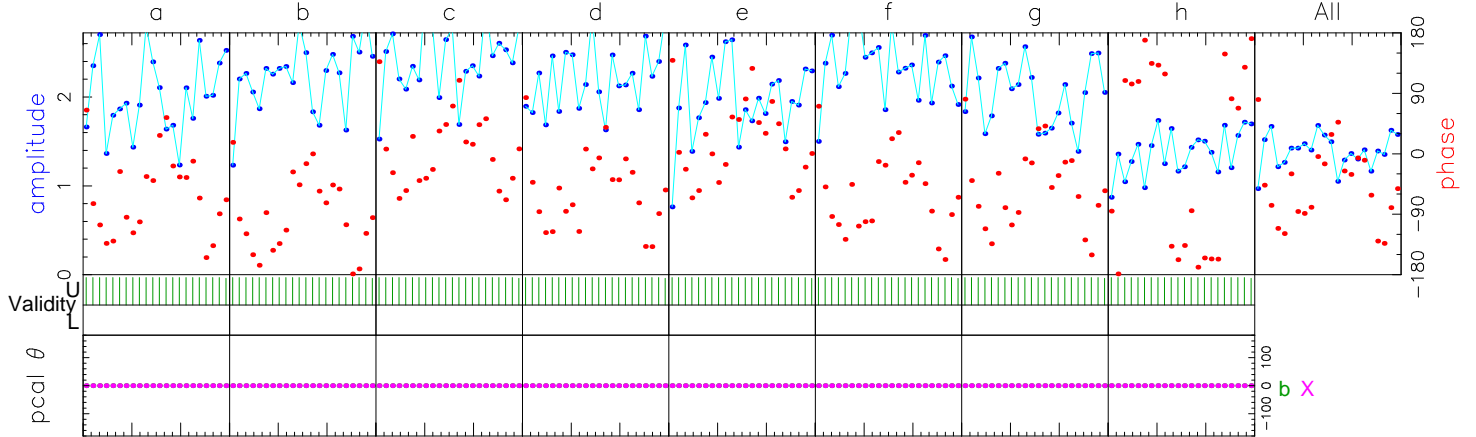


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141444
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

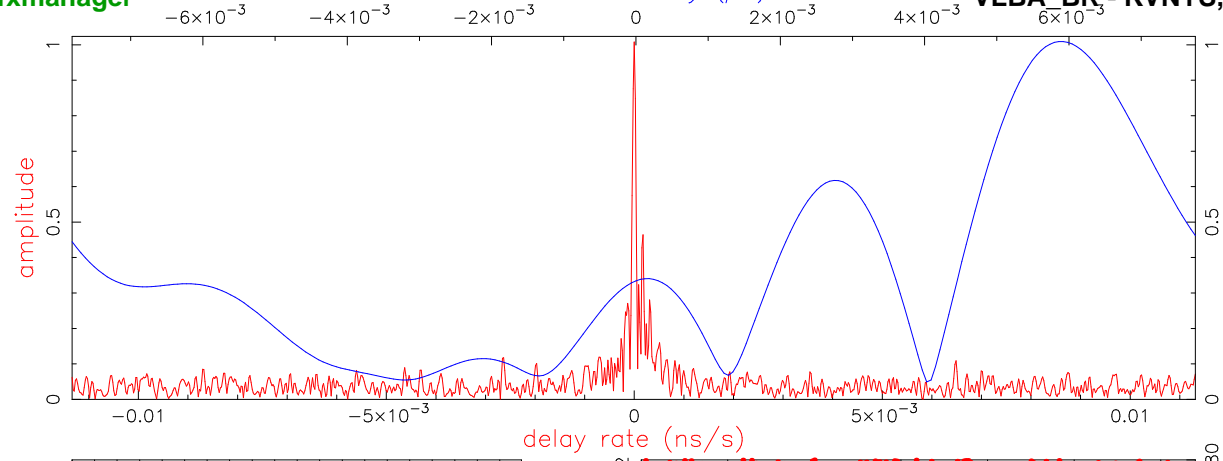
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



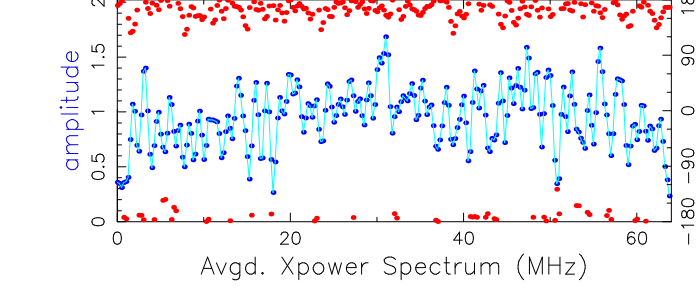
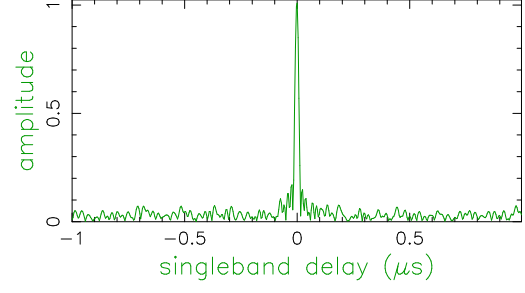
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.3	-94.6	-1.1	-60.5	8.8	-65.1	-55.6	162.2	Phase	-51.6
	1.2	1.4	1.6	1.4	1.3	1.5	1.2	0.8	Ampl.	1.3
	260.9	261.4	261.3	260.6	260.4	260.9	259.8	258.8	Sbd box	261.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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)	8.31542000980E+03		Apriori delay (usec)		8.31541027232E+03		Resid mbdelay (usec)		-5.88752E-03	+/- 3.3E-05
Sband delay (usec)	8.31542659132E+03		Apriori clock (usec)		-5.0006104E+01		Resid sbdelay (usec)		1.63190E-02	+/- 2.6E-04
Phase delay (usec)	8.31541027066E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-1.66238E-06	+/- 1.1E-07
Delay rate (us/s)	-5.03576559686E-01		Apriori rate (us/s)		-5.03576534066E-01		Resid rate (us/s)		-2.56200E-08	+/- 1.1E-09
Total phase (deg)	257.3		Apriori accel (us/s/s)		-5.39066403108E-05		Resid phase (deg)		-51.6	+/- 3.4

ph/seg (deg) 55.8 8.1 Search (1024X32) 0.901 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.1 14.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 70.6 4.9 Inc. seg. avg. 1.379 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.9 8.5 Inc. frq. avg. 1.309 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 309.0 el 56.4 pa 83.2 X: az 4.0 el 26.0 pa -4.3 u,v (fr/asec) 5477.723 -7390.026 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bX.W.84.1HSTEG

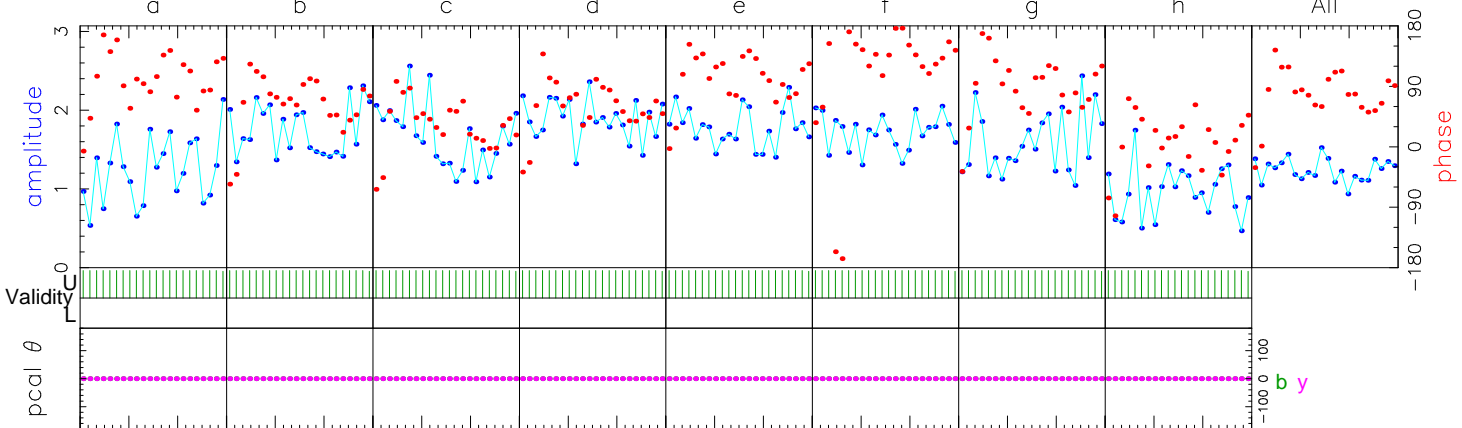
multiband delay (μ s)



Fringe quality 5
SNR 37.6
Int time 179.976
Amp 1.024
Phase 80.7
PFD 0.0e+00
Delays (us)
SBD -0.001618
MBD 0.005822
Fringe rate (Hz)
0.000726
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Yr:day 16383
Exp# 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141447
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

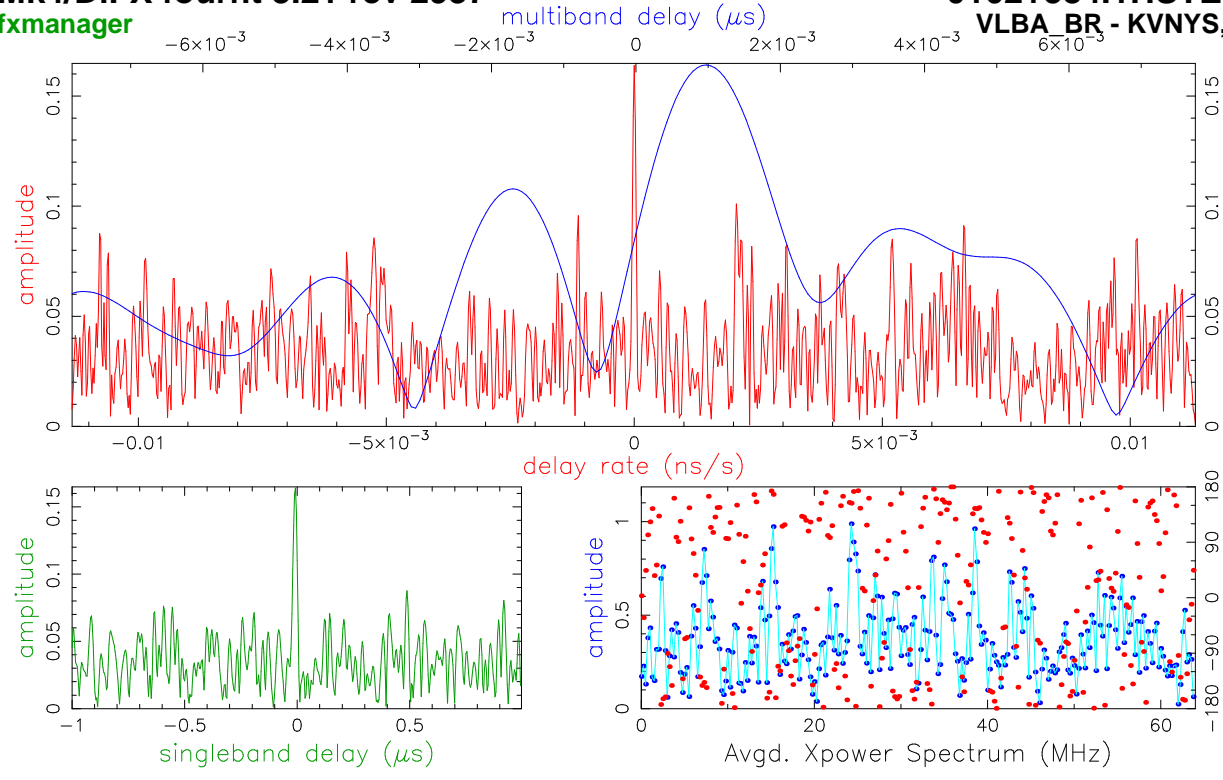


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



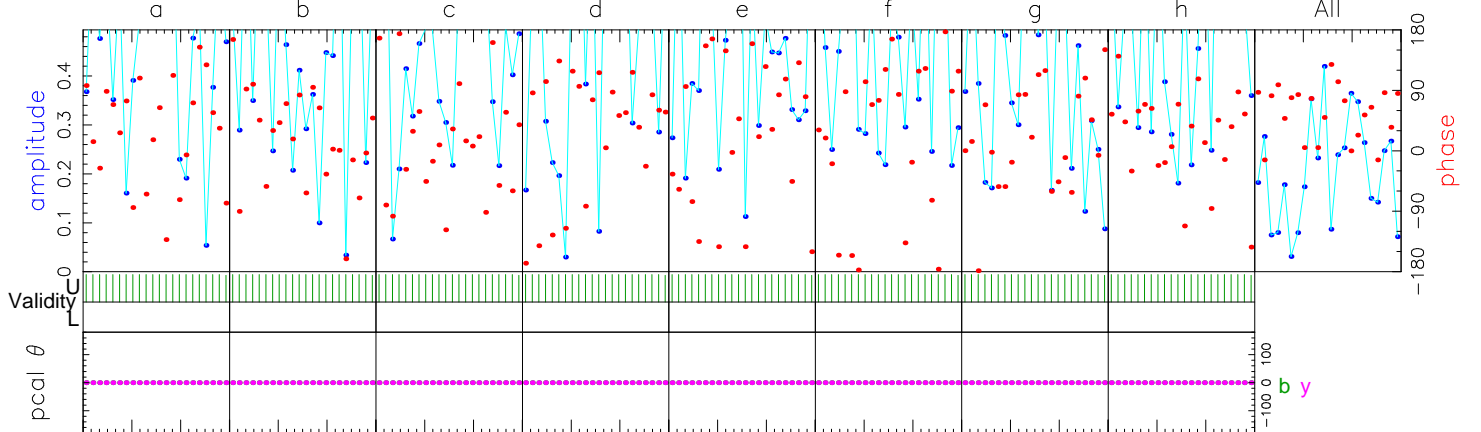
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	1.90821467653E+03				1.90820885428E+03				5.82225E-03	+/- 2.9E-05
Sband delay (usec)	1.90820723578E+03				-2.9503088E+00				-1.61850E-03	+/- 2.3E-04
Phase delay (usec)	1.90820885688E+03				-9.9999991E-08				2.60234E-06	+/- 9.8E-08
Delay rate (us/s)	-9.91034439625E-01				-9.91034448048E-01				8.42333E-09	+/- 9.5E-10
Total phase (deg)			335.4		2.83730167306E-06				80.7	+/- 3.1
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Pcal mode:	MANUAL	MANUAL			MANUAL				MANUAL	
Pcal rate:	0.000E+00	0.000E+00			0.000E+00				0.000E+00	
Search (1024X32)										
Inc. seg. avg.										
Inc. frq. avg.										
Sample rate (MSamp/s):	128				128				128	
Data rate (Mb/s):	2048				2048				2048	
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								
PC period (AP's)	5	5								
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										

b: az 309.0 el 56.4 pa 83.2 y: az 41.1 el 47.7 pa -93.8 u,v (fr/asec) 10867.914 940.977 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/by..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/by.W.104.1HSTEG



Fringe quality 0
 SNR 6.0
 Int time 179.976
 Amp 0.165
 Phase 48.0
 PFD 1.8e-01
 Delays (us)
 SBD -0.008943
 MBD 0.000921
 Fringe rate (Hz)
 0.000747
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141449
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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

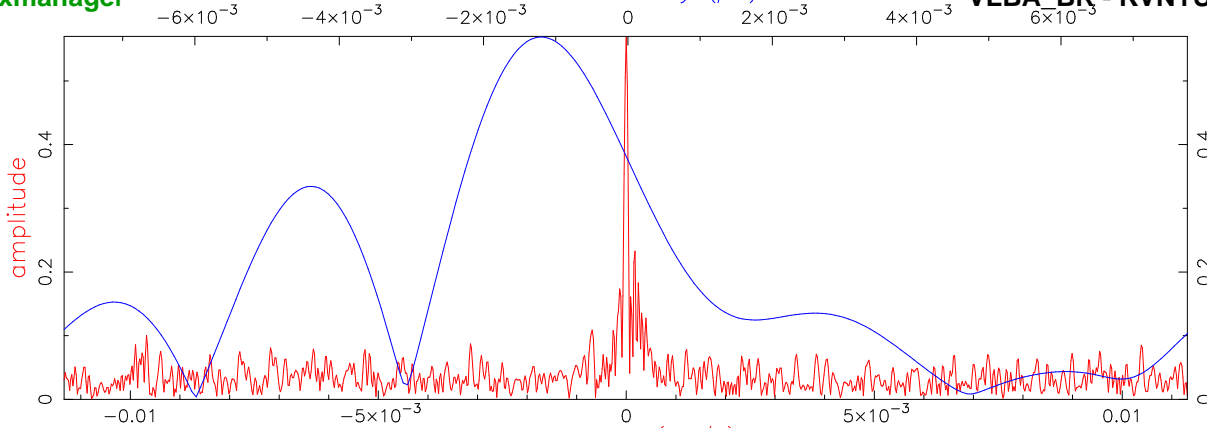


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
y	1000	1000	1000	1000	1000	1000	1000	1000			
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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)		1.90819415012E+03			1.90820885428E+03				9.20844E-04	+/- 1.8E-04	
Sband delay (usec)		1.90819991153E+03			-2.9503088E+00				-8.94275E-03	+/- 1.4E-03	
Phase delay (usec)		1.90820885583E+03			-9.9999991E-08				1.54889E-06	+/- 6.1E-07	
Delay rate (us/s)		-9.91034439377E-01			-9.91034448048E-01				8.67133E-09	+/- 5.9E-09	
Total phase (deg)			302.7		2.83730167306E-06				48.0	+/- 19.0	
pcal mode:					MANUAL, MANUAL				PC period (AP's)	5, 5	
pcal rate:					0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
Bits/sample:					2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
Sample rate (MSamp/s):					128				dr window (ns/s)	-0.011 0.011	
Data rate (Mb/s):					2048				ion window (TEC)	0.00 0.00	
									nlags: 256	t_cohere infinite	

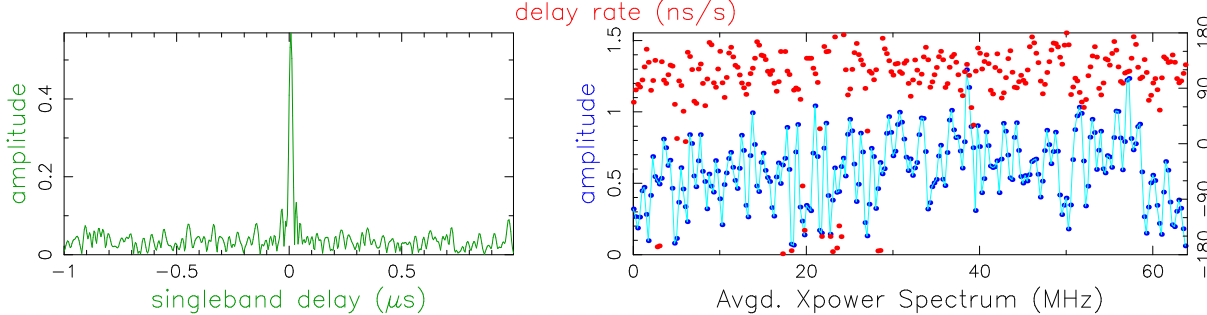
b: az 309.0 el 56.4 pa 83.2 y: az 41.1 el 47.7 pa -93.8 u,v (fr/asec) 10867.914 940.977 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/by..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/by.W.123.1HSTEG

multiband delay (μ s)

Fringe quality 8

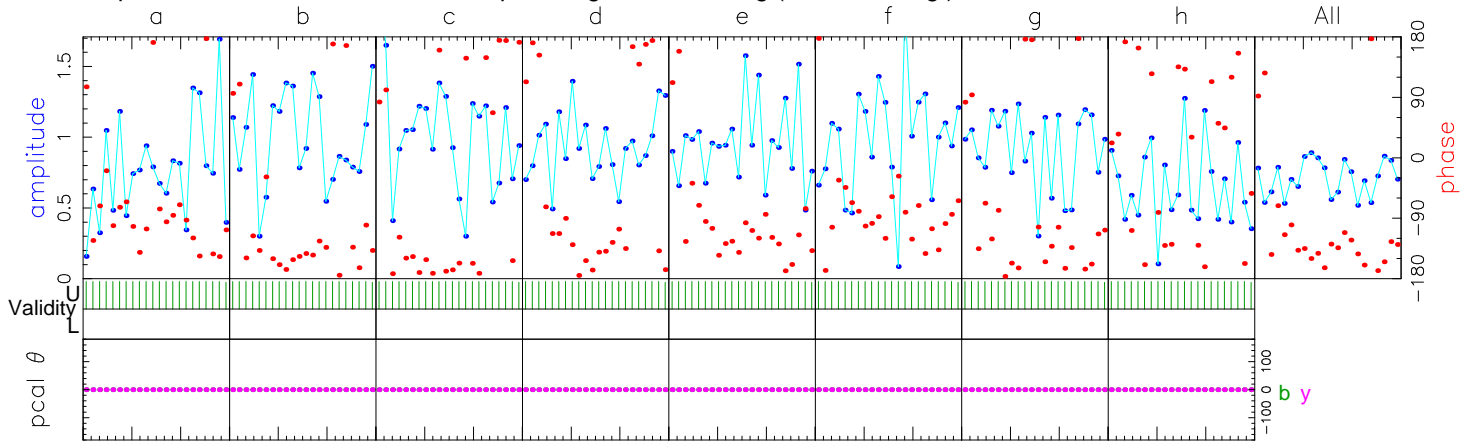


SNR 20.9
Int time 179.976
Amp 0.570
Phase -140.9
PFD 0.0e+00
Delays (us)
SBD 0.007269
MBD -0.001230
Fringe rate (Hz)
0.000776
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141451
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



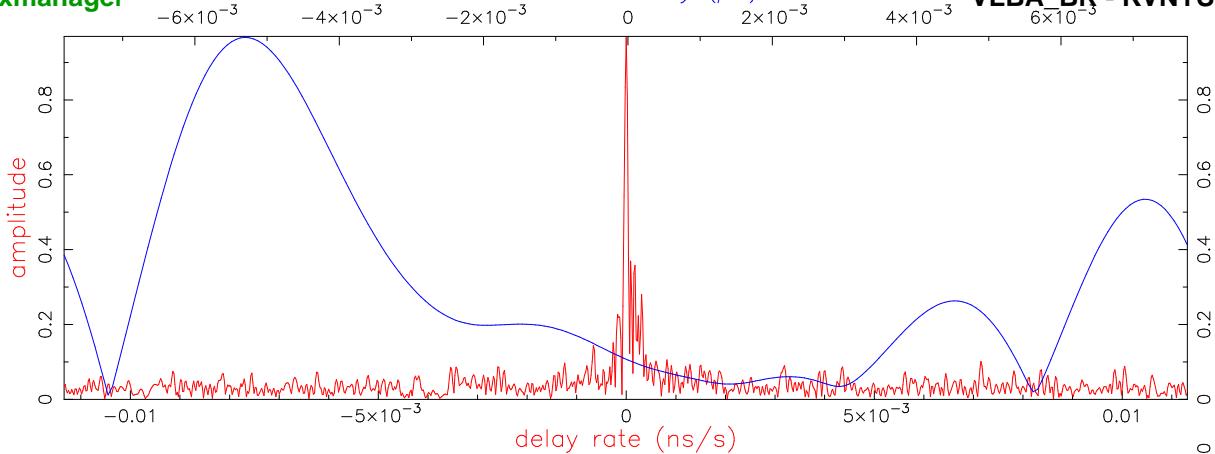
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.5	-150.7	175.5	-153.0	-120.4	-95.4	-149.5	153.1	Phase	-140.9
	0.6	0.8	0.8	0.7	0.8	0.8	0.6	0.3	Ampl.	0.7
	256.6	259.2	259.0	258.9	259.2	258.6	257.9	255.9	Sbd box	258.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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)	1.90822324884E+03	Apriori delay (usec)	1.90820885428E+03	Resid mbdelay (usec)	-1.23044E-03	+/-	5.2E-05
Sband delay (usec)	1.90821612278E+03	Apriori clock (usec)	-2.9503088E+00	Resid sbdelay (usec)	7.26850E-03	+/-	4.1E-04
Phase delay (usec)	1.90820884973E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-4.54325E-06	+/-	1.8E-07
Delay rate (us/s)	-9.91034439038E-01	Apriori rate (us/s)	-9.91034448048E-01	Resid rate (us/s)	9.01002E-09	+/-	1.7E-09
Total phase (deg)	113.8	Apriori accel (us/s/s)	2.83730167306E-06	Resid phase (deg)	-140.9	+/-	5.5

ph/seg (deg)	41.3	Theor.	12.9	Amplitude	0.570 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	32.8		22.4	Search (1024X32)	0.547	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.6		7.8	Inc. seg. avg.	0.694	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.4		13.5	Inc. frq. avg.	0.658	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	

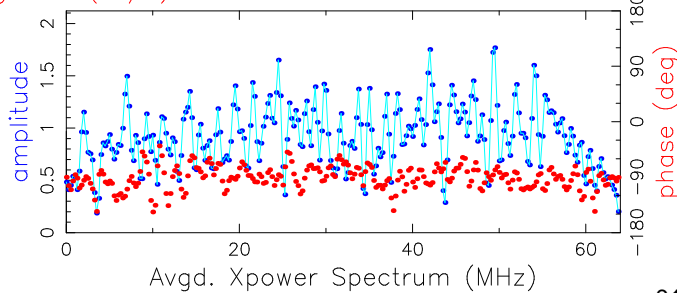
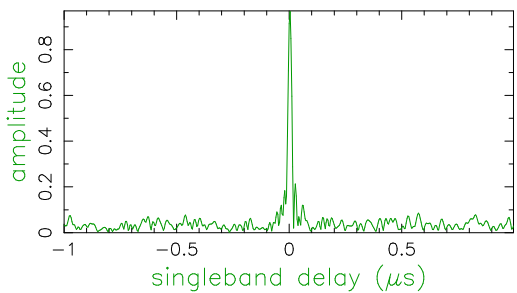
b: az 309.0 el 56.4 pa 83.2 y: az 41.1 el 47.7 pa -93.8 u,v (fr/asec) 10867.914 940.977 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/by..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/by.W.147.1HSTEG

multiband delay (μ s)



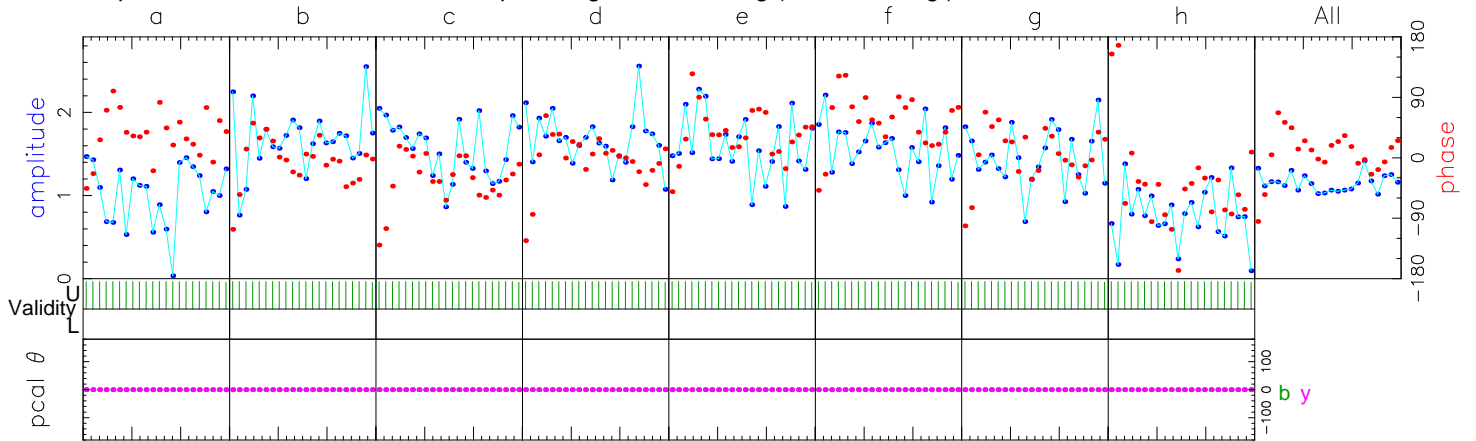
Fringe quality 5

SNR 35.6
Int time 179.976
Amp 0.970
Phase 7.9
PFD 0.0e+00
Delays (us)
SBD 0.003171
MBD -0.005335
Fringe rate (Hz)
0.000617
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141445
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	31.2	-3.4	-30.2	-0.3	35.7	54.9	7.3	-60.8		7.9
	0.8	1.4	1.3	1.3	1.3	1.2	1.1	0.6		1.1
	255.6	257.7	258.2	258.0	257.9	258.0	257.0	254.8		257.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		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		PC amp
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	1.90821914415E+03		Apriori delay (usec)		1.90820885428E+03		Resid mbdelay (usec)		-5.33513E-03	+/- 3.1E-05
Sband delay (usec)	1.90821202553E+03		Apriori clock (usec)		-2.9503088E+00		Resid sbdelay (usec)		3.17125E-03	+/- 2.4E-04
Phase delay (usec)	1.90820885453E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		2.53922E-07	+/- 1.0E-07
Delay rate (us/s)	-9.91034440889E-01		Apriori rate (us/s)		-9.91034448048E-01		Resid rate (us/s)		7.15927E-09	+/- 1.0E-09
Total phase (deg)	262.5		Apriori accel (us/s/s)		2.83730167306E-06		Resid phase (deg)		7.9	+/- 3.2

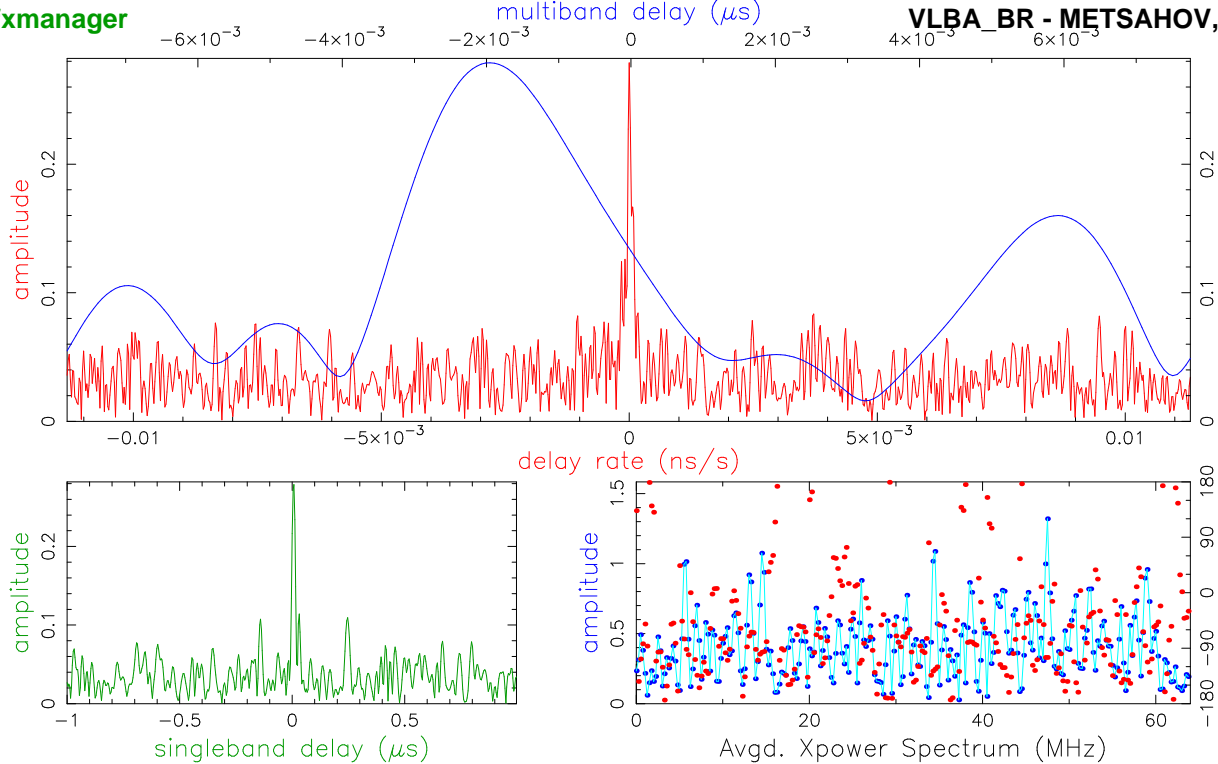
ph/seg (deg) 34.1 7.6 Search (1024X32) 0.950 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 21.8 13.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 40.6 4.6 Inc. seg. avg. 1.143 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 31.2 8.0 Inc. frq. avg. 1.123 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 309.0 el 56.4 pa 83.2 y: az 41.1 el 47.7 pa -93.8 u,v (fr/asec) 10867.914 940.977 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/by..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/by.W.87.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bZ

VLBA_BR - METSAHOV, fgroup W, pol RR

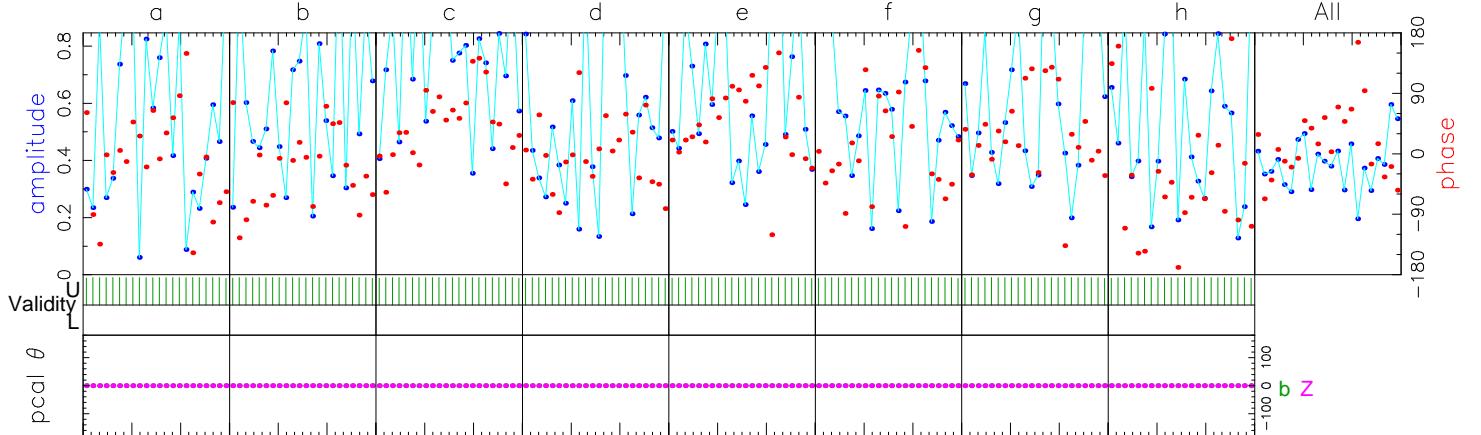


Fringe quality 9

SNR 10.3
 Int time 179.618
 Amp 0.282
 Phase 10.8
 PFD 9.8e-17
 Delays (us)
 SBD 0.006416
 MBD -0.001983
 Fringe rate (Hz)
 -0.000789
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141447
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-4.2	-26.1	39.8	-1.5	58.3	3.7	36.2	-82.8		10.8
	0.3	0.4	0.5	0.4	0.4	0.2	0.4	0.3		0.3
	78.1	258.8	258.8	257.6	258.9	256.5	257.3	256.9		258.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		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)	7.15404998709E+03		Apriori delay (usec)		7.15403634512E+03		Resid mbdelay (usec)		-1.98303E-03	+/- 1.0E-04
Sband delay (usec)	7.15404276137E+03		Apriori clock (usec)		-1.8569574E+08		Resid sbdelay (usec)		6.41625E-03	+/- 8.3E-04
Phase delay (usec)	7.15403634547E+03		Apriori clockrate (us/s)		-1.6000005E-08		Resid phdelay (usec)		3.46831E-07	+/- 3.6E-07
Delay rate (us/s)	-5.84395396747E-01		Apriori rate (us/s)		-5.84395387586E-01		Resid rate (us/s)		-9.16165E-09	+/- 3.4E-09
Total phase (deg)	287.6		Apriori accel (us/s/s)		-4.99375753760E-05		Resid phase (deg)		10.8	+/- 11.1

ph/seg (deg) 52.9 26.0 Search (1024X32) 0.268 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.9 45.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.8 15.7 Inc. seg. avg. 0.355 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.0 27.3 Inc. frq. avg. 0.340 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 309.0 el 56.4 pa 83.2 Z: az 11.5 el 29.7 pa -11.0 u,v (fr/asec) 6367.278 -7003.443 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ.W.101.1HSTEG

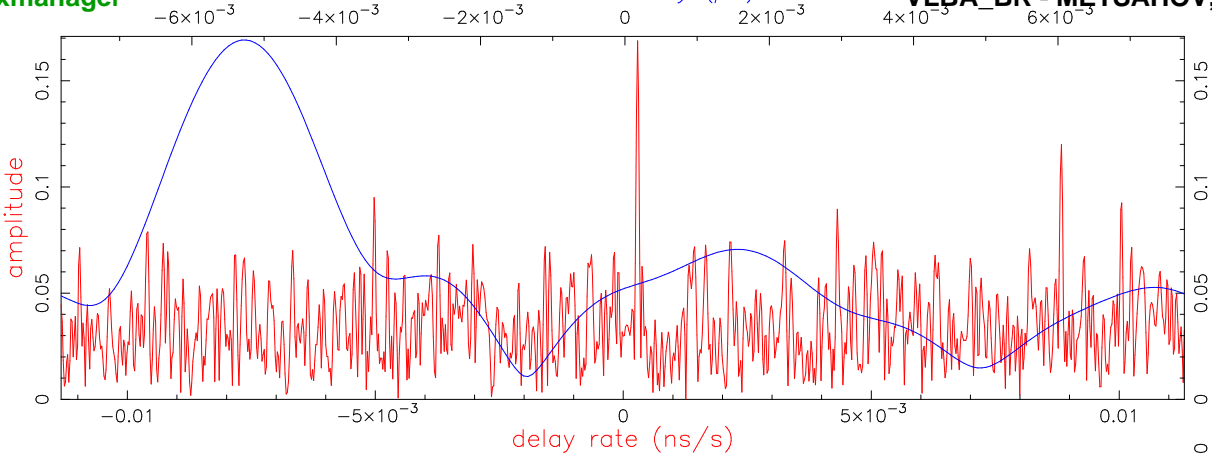
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bZ

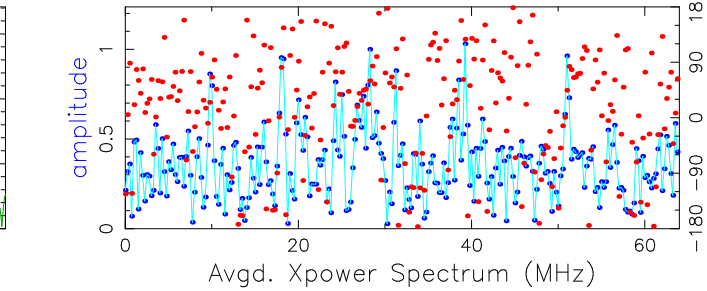
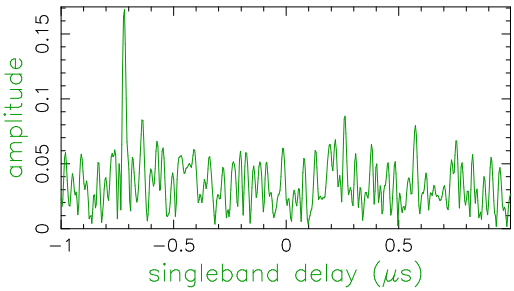
VLBA_BR - METSAHOV, fgroup W, pol LR

multiband delay (μ s)



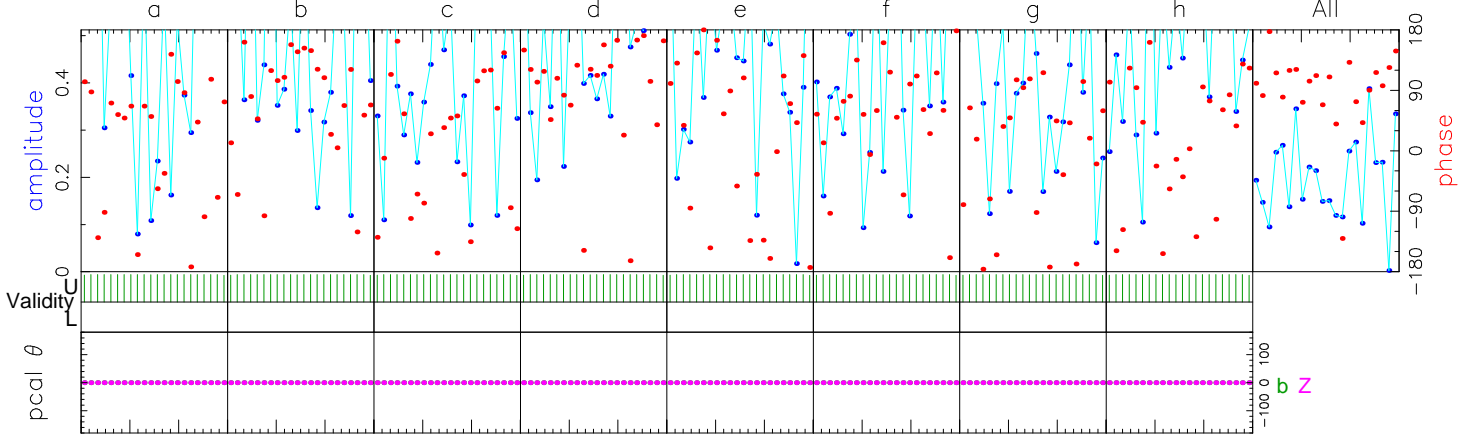
Fringe quality 0

SNR 6.3
 Int time 179.618
 Amp 0.171
 Phase 104.1
 PFD 5.0e-02
 Delays (us)
 SBD -0.720086
 MBD -0.005357
 Fringe rate (Hz)
 0.023899
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141449
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	69.4	97.8	117.0	124.3	151.4	87.8	73.6	99.7	Phase	104.1
	0.2	0.2	0.1	0.4	0.2	0.2	0.1	0.1	Ampl.	0.2
	70.9	45.2	196.6	73.9	313.6	211.8	429.9	148.6	Sbd box	72.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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)	7.15331223780E+03	Apriori delay (usec)		7.15403634512E+03	Resid mbdelay (usec)	-5.35732E-03	+/-	1.7E-04	
Sband delay (usec)	7.15331625937E+03	Apriori clock (usec)		-1.8569574E+00	Resid sbdelay (usec)	-7.20086E-01	+/-	1.4E-03	
Phase delay (usec)	7.15403634848E+03	Apriori clockrate (us/s)		-1.6000005E-08	Resid phdelay (usec)	3.35768E-06	+/-	5.9E-07	
Delay rate (us/s)	-5.84395110144E-01	Apriori rate (us/s)		-5.84395387586E-01	Resid rate (us/s)	2.77441E-07	+/-	5.7E-09	
Total phase (deg)	21.0		Apriori accel (us/s/s)		-4.99375753760E-05	Resid phase (deg)	104.1	+/-	18.3

ph/seg (deg)	41.4	Theor.	42.9	Amplitude	0.171 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	55.5	Search (1024X32)	0.163	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.7	Inc. seg. avg.	0.156	Inc. frq. avg.	0.169	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.7	Inc. frq. avg.	0.169			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 309.0 el 56.4 pa 83.2 Z: az 11.5 el 29.7 pa -11.0 u,v (fr/asec) 6367.278 -7003.443 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ.W.121.1HSTEG

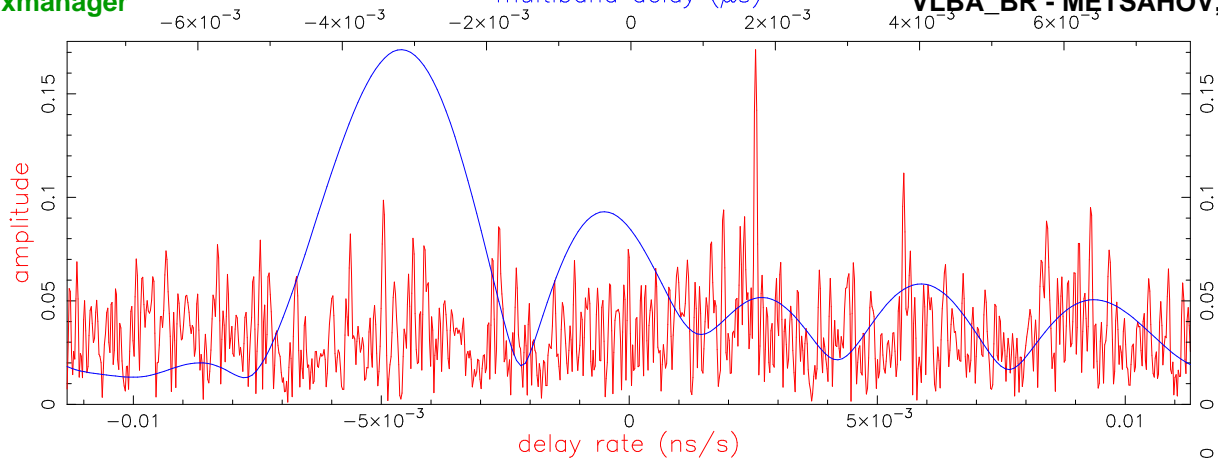
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bZ

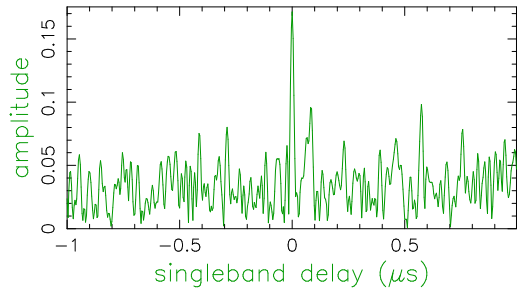
VLBA_BR - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

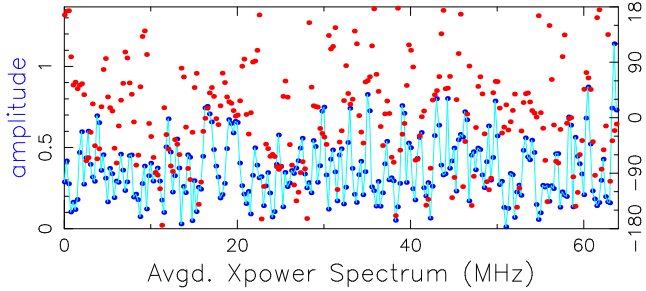


Fringe quality 0

SNR 6.3
Int time 179.618
Amp 0.175
Phase 31.5
PFD 4.1e-02
Delays (us)
SBD -0.000558
MBD -0.003193
Fringe rate (Hz) 0.219466
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

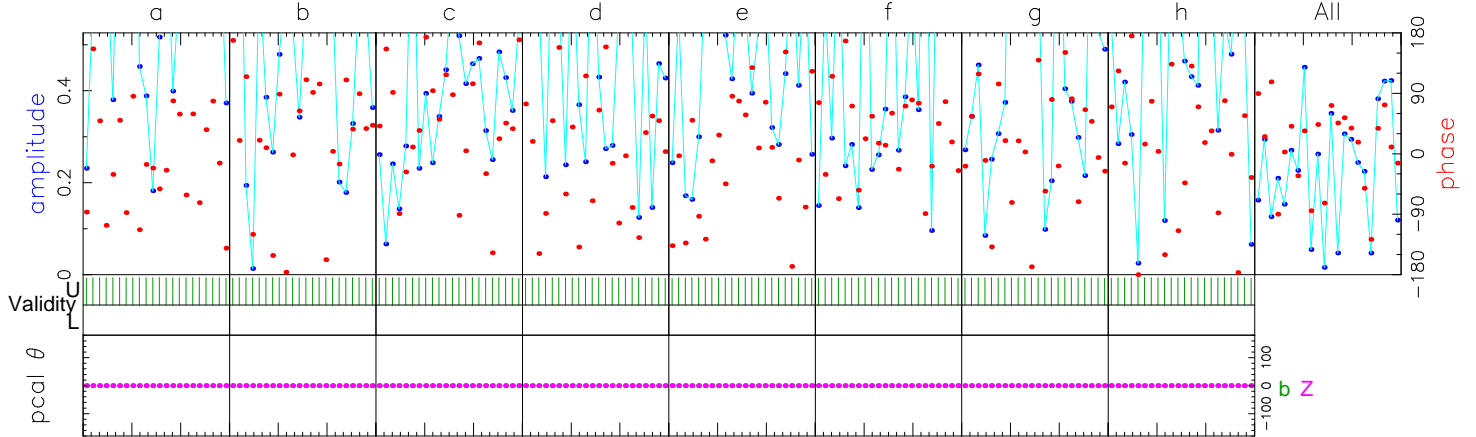


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141451
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	7.15403315215E+03	Apriori delay (usec)	7.15403634512E+03	Resid mbdelay (usec)	-3.19298E-03	+/-	1.7E-04
Sband delay (usec)	7.15403578687E+03	Apriori clock (usec)	-1.8569574E+00	Resid sbdelay (usec)	-5.58250E-04	+/-	1.4E-03
Phase delay (usec)	7.15403634614E+03	Apriori clockrate (us/s)	-1.6000005E-08	Resid phdelay (usec)	1.01439E-06	+/-	5.9E-07
Delay rate (us/s)	-5.84392839807E-01	Apriori rate (us/s)	-5.84395387586E-01	Resid rate (us/s)	2.54778E-06	+/-	5.6E-09
Total phase (deg)	308.3	Apriori accel (us/s/s)	-4.99375753760E-05	Resid phase (deg)	31.5	+/-	18.2

ph/seg (deg)	64.8	Theor.	42.7	Amplitude	0.175 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	81.7		74.5	Search (1024X32)	0.170	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	27.6		25.8	Inc. seg. avg.	0.185	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.0		44.9	Inc. frq. avg.	0.174	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 309.0 el 56.4 pa 83.2 Z: az 11.5 el 29.7 pa -11.0 u,v (fr/asec) 6367.278 -7003.443 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ.W.142.1HSTEG

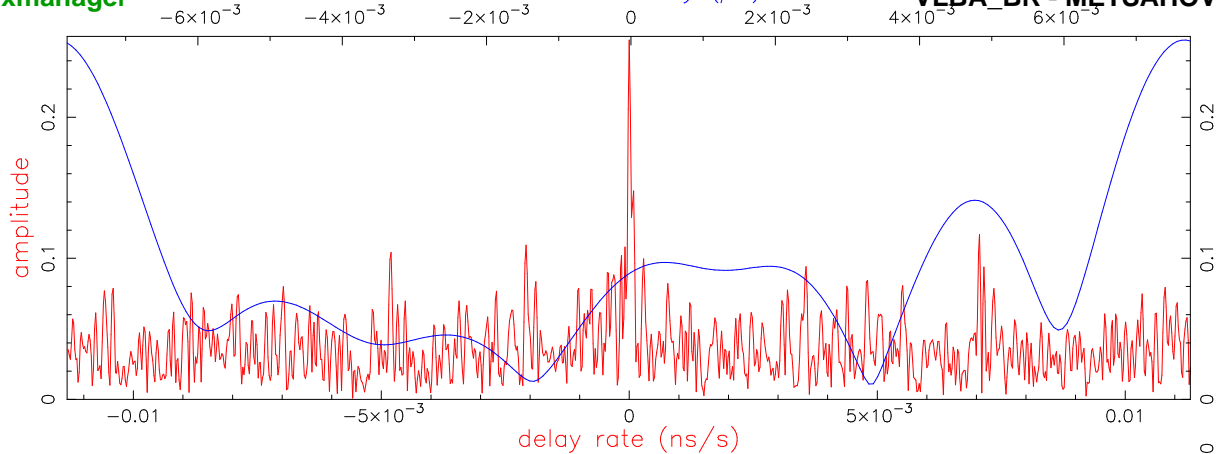
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bZ

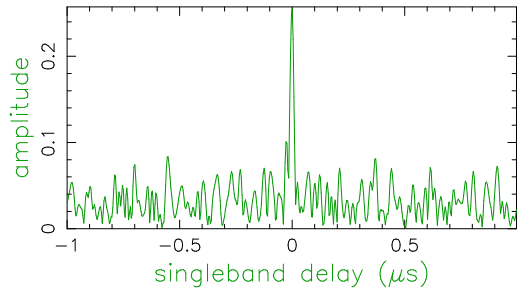
VLBA_BR - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

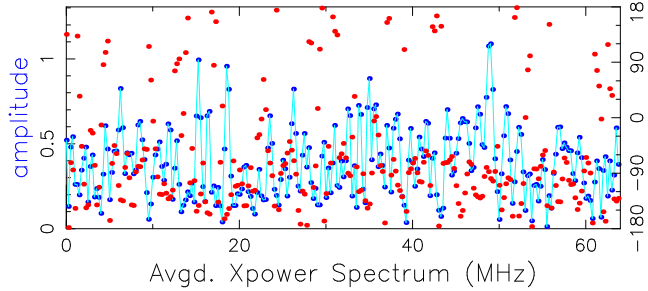


Fringe quality 9

SNR 9.4
 Int time 179.618
 Amp 0.257
 Phase -33.4
 PFD 8.0e-13
 Delays (us)
 SBD -0.001327
 MBD -0.007980
 Fringe rate (Hz)
 -0.000936
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

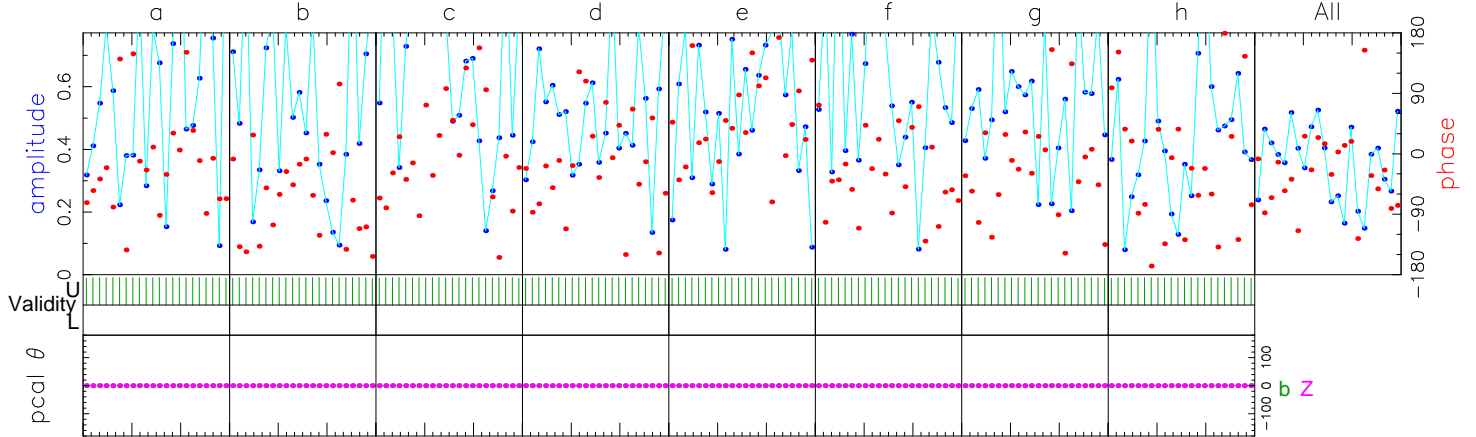


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141445
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-31.8	-80.1	-11.4	-27.6	34.3	-33.1	-35.3	-92.5	Phase	-33.4
	0.4	0.3	0.3	0.2	0.2	0.4	0.3	0.1	Ampl.	0.3
	256.4	256.9	256.1	255.4	255.7	255.9	255.9	414.1	Sbd box	256.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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)	7.15402836512E+03	Apriori delay (usec)	7.15403634512E+03	Resid mbdelay (usec)	-7.98000E-03	+/-	1.2E-04
Sband delay (usec)	7.15403501812E+03	Apriori clock (usec)	-1.8569574E+00	Resid sbdelay (usec)	-1.32700E-03	+/-	9.1E-04
Phase delay (usec)	7.15403634405E+03	Apriori clockrate (us/s)	-1.6000005E-08	Resid phdelay (usec)	-1.07839E-06	+/-	3.9E-07
Delay rate (us/s)	-5.84395398454E-01	Apriori rate (us/s)	-5.84395387586E-01	Resid rate (us/s)	-1.08679E-08	+/-	3.8E-09
Total phase (deg)	243.4	Apriori accel (us/s/s)	-4.99375753760E-05	Resid phase (deg)	-33.4	+/-	12.1

ph/seg (deg)	RMS 56.7	Theor. 28.5	Amplitude Search (1024X32)	0.257 +/- 0.027	0.241	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	59.2	49.7	Interp.	0.000	0.241	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	42.4	17.2	Inc. seg. avg.	0.319	0.241	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	36.7	30.0	Inc. frq. avg.	0.284	0.241	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 309.0 el 56.4 pa 83.2 Z: az 11.5 el 29.7 pa -11.0 u,v (fr/asec) 6367.278 -7003.443 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bZ.W.88.1HSTEG