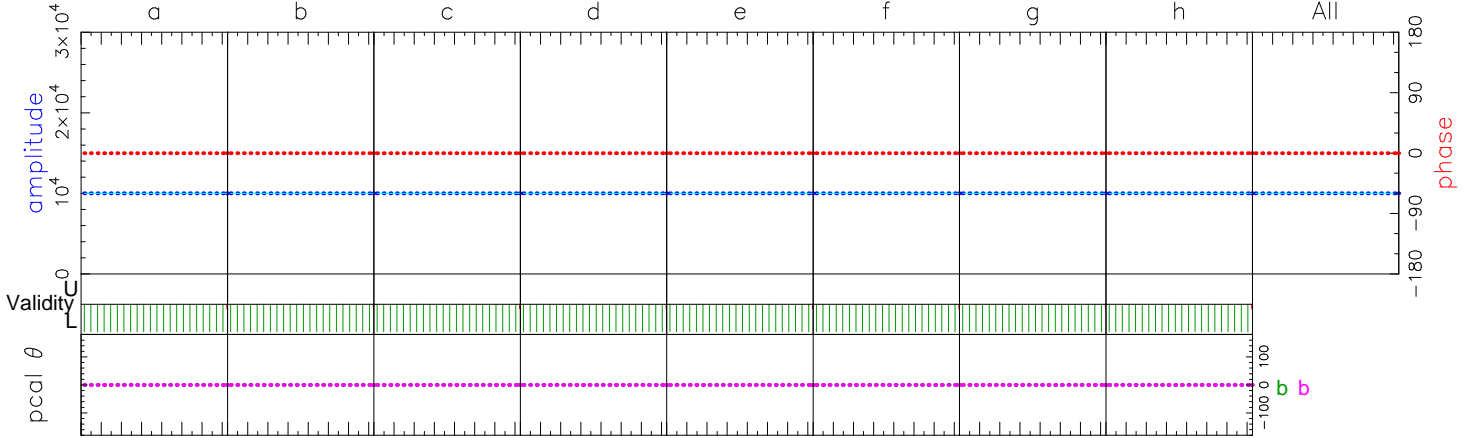


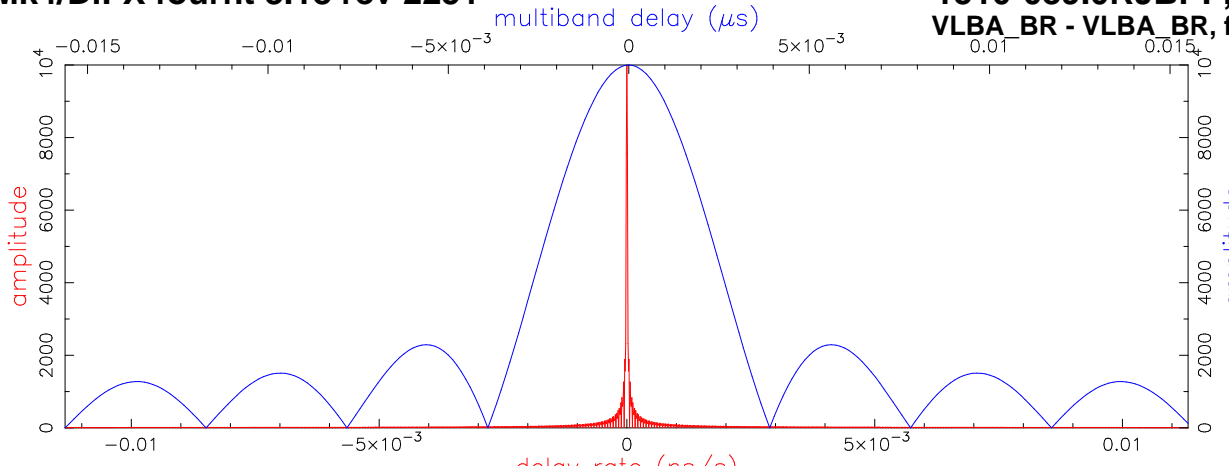
Fringe quality 9
 SNR 396205.2
 Int time 419.832
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110820
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820			
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	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL			
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL			
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 5.5E-09	
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 4.3E-08	
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 9.3E-12	
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 3.8E-14	
Total phase (deg)			0.0								+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 137.7 el 23.2 pa -27.1 b: az 137.7 el 23.2 pa -27.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bb..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bb.W.11.0RJBPf



Fringe quality 9

SNR 396205.2

Int time 419.832

Amp 10000.000

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. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

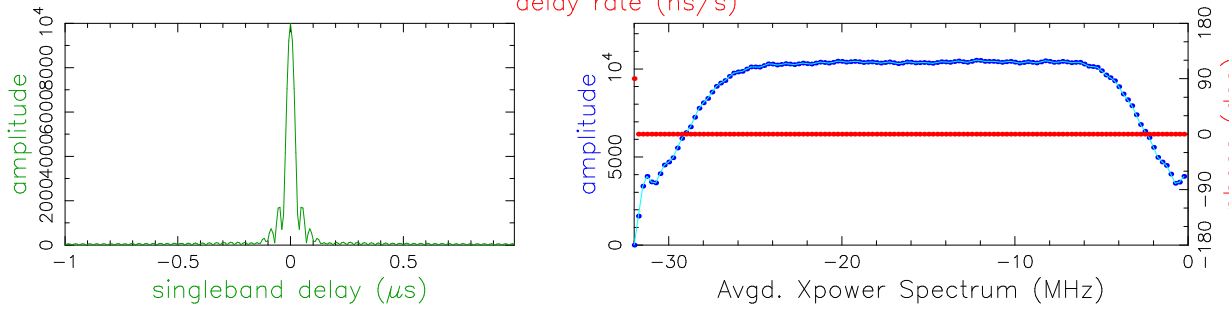
2019:228:110823

2018:249:082454

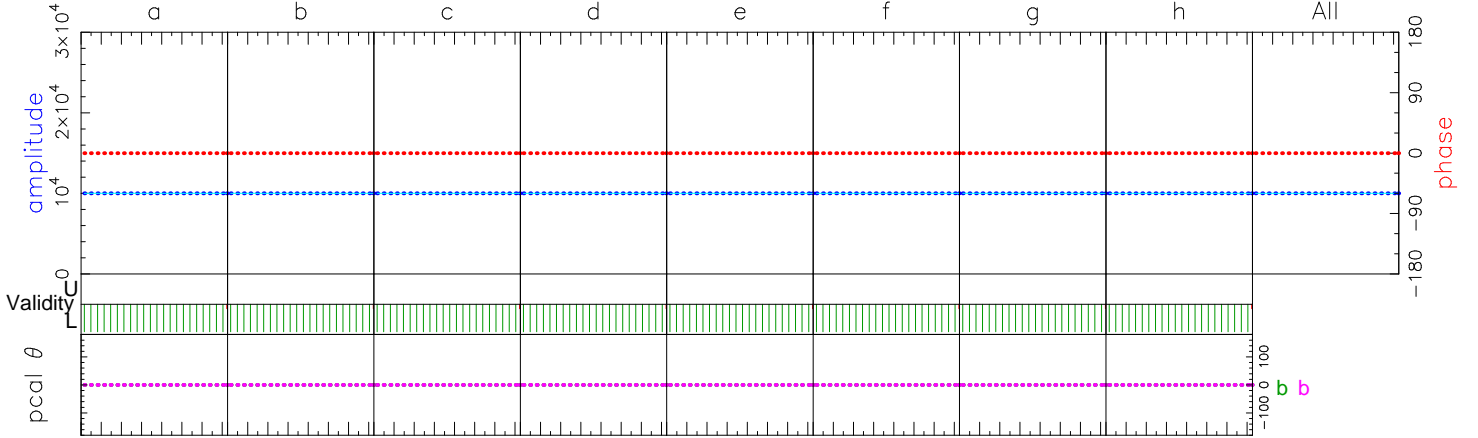
RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"



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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
b:b 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b:b 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
b 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
b 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

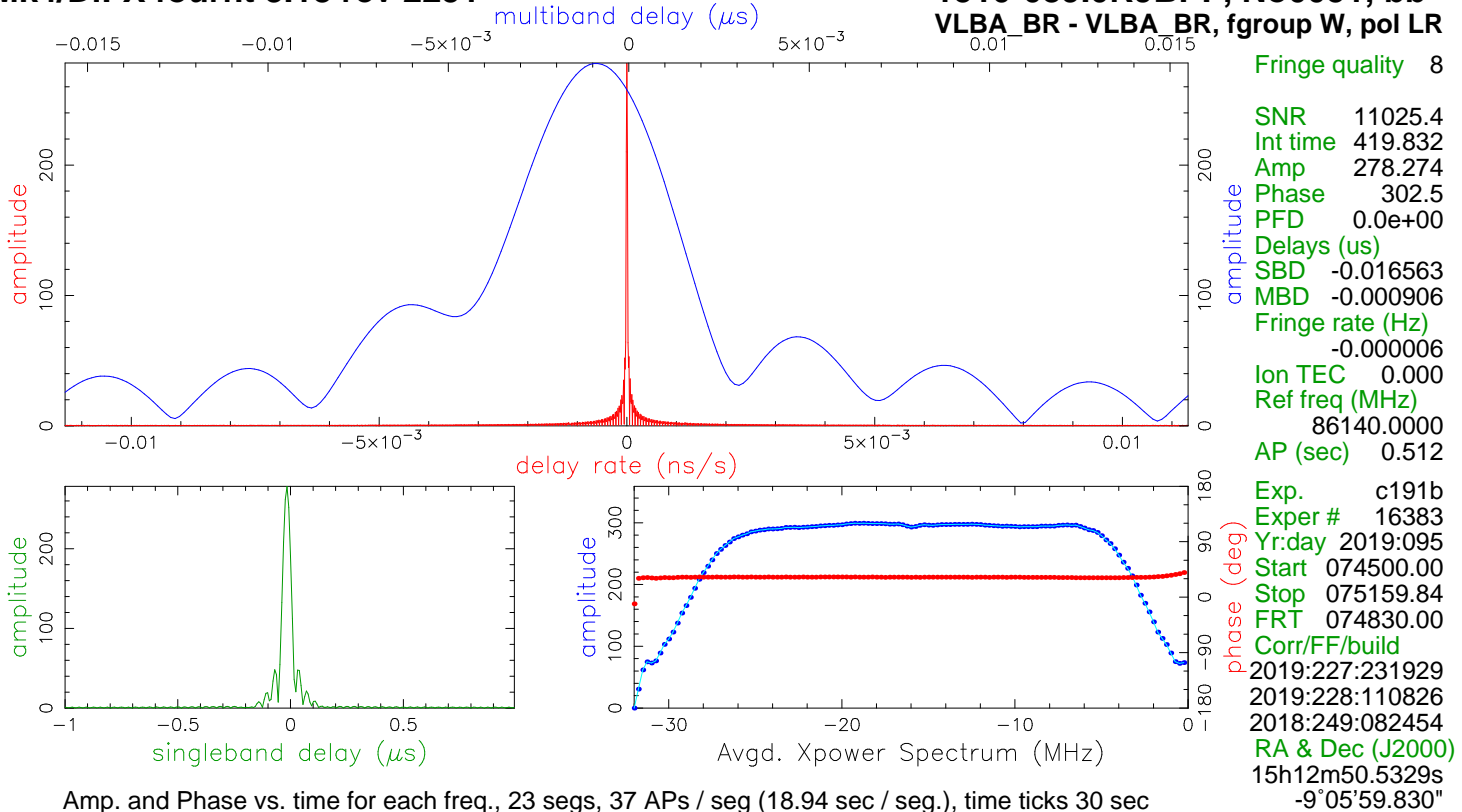
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

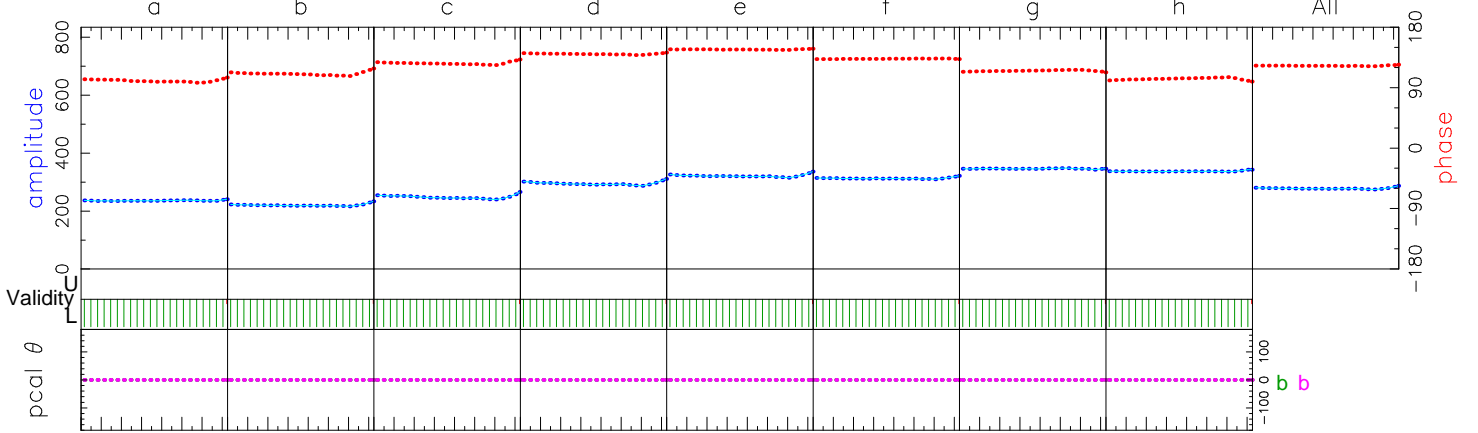
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

b: az 137.7 el 23.2 pa -27.1 b: az 137.7 el 23.2 pa -27.1 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00



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

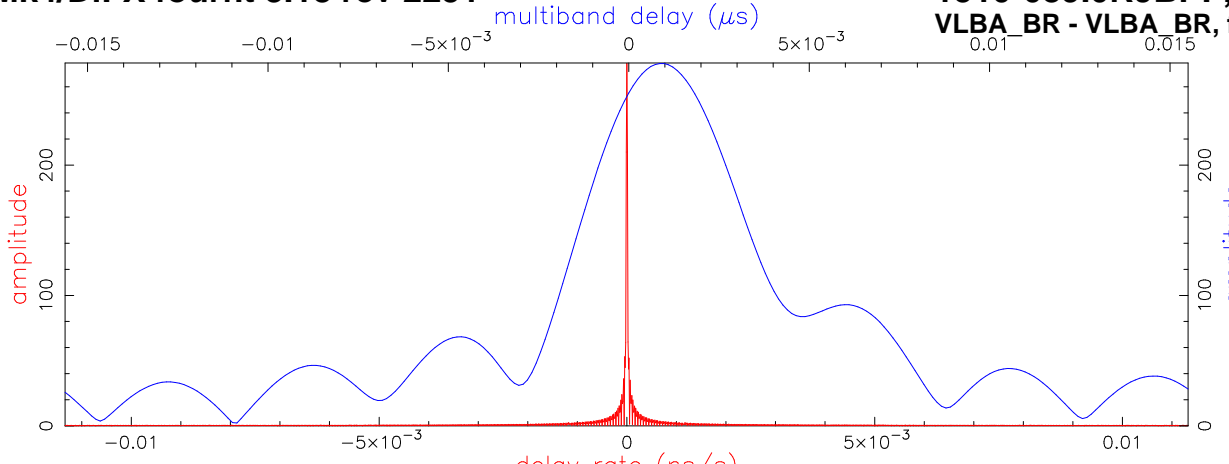


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	100.1	110.5	126.1	140.0	146.8	132.9	115.1	103.1	Phase	122.5
	236.1	219.9	247.8	294.6	321.2	312.8	346.2	337.3	Ampl.	289.5
	126.8	127.0	127.1	127.0	127.0	126.7	126.8	126.7	Sbd box	126.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		-3.215587500000E-02		Apriori delay (usec)		0.000000000000E+00		Resid mbdelay (usec)	-9.05875E-04	+/- 2.0E-07
Sband delay (usec)		-1.656350000000E-02		Apriori clock (usec)		0.000000000000E+00		Resid sbdelay (usec)	-1.65635E-02	+/- 1.6E-06
Phase delay (usec)		3.95070510807E-06		Apriori clockrate (us/s)		0.000000000000E+00		Resid phdelay (usec)	3.95071E-06	+/- 3.4E-10
Delay rate (us/s)		-7.08557619584E-11		Apriori rate (us/s)		0.000000000000E+00		Resid rate (us/s)	-7.08558E-11	+/- 1.4E-12
Total phase (deg)			302.5	Apriori accel (us/s/s)		0.000000000000E+00		Resid phase (deg)	302.5	+/- 0.0

ph/seg (deg) 0.4 0.0 Theor. Amplitude 278.274 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 0.0 Search (2048X32) 277.804 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.8 0.0 Inc. seg. avg. 277.969 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 289.491 ion window (TEC) 0.00 0.00

b: az 137.7 el 23.2 pa -27.1 b: az 137.7 el 23.2 pa -27.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

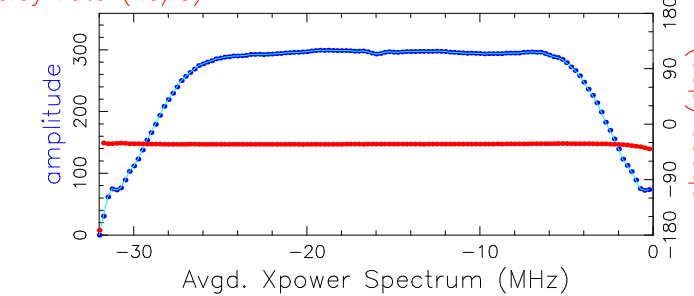
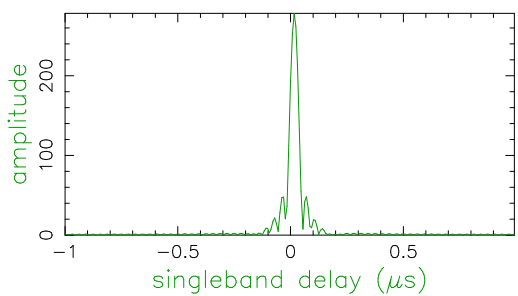
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bb..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bb.W.57.0RJBPf



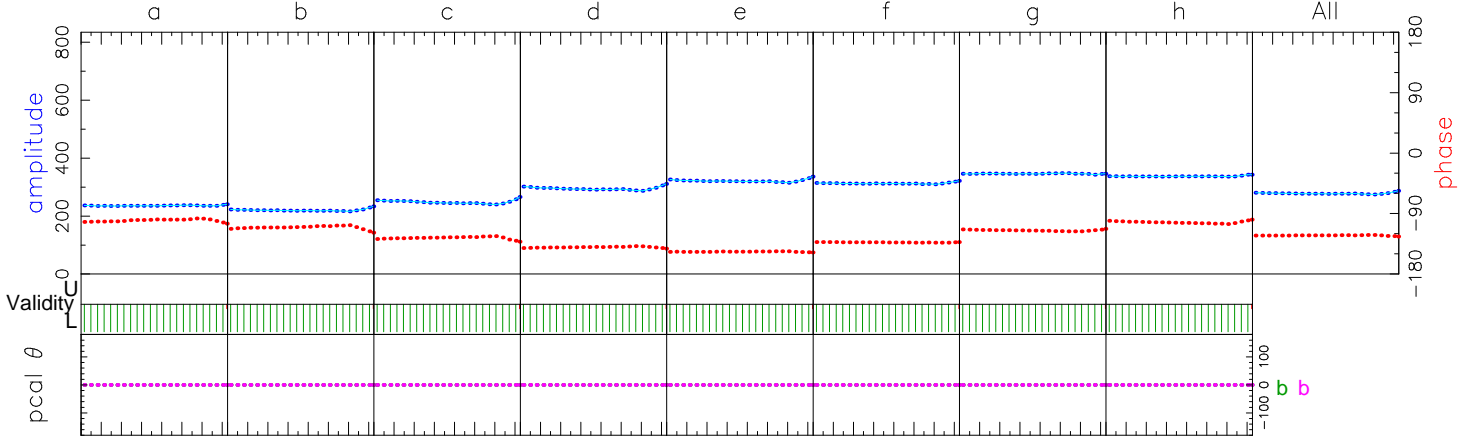
Fringe quality 8

SNR 11025.4
Int time 419.832
Amp 278.274
Phase -302.5
PFD 0.0e+00
Delays (us)
SBD 0.016563
MBD 0.000906
Fringe rate (Hz) 0.000006
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110828
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

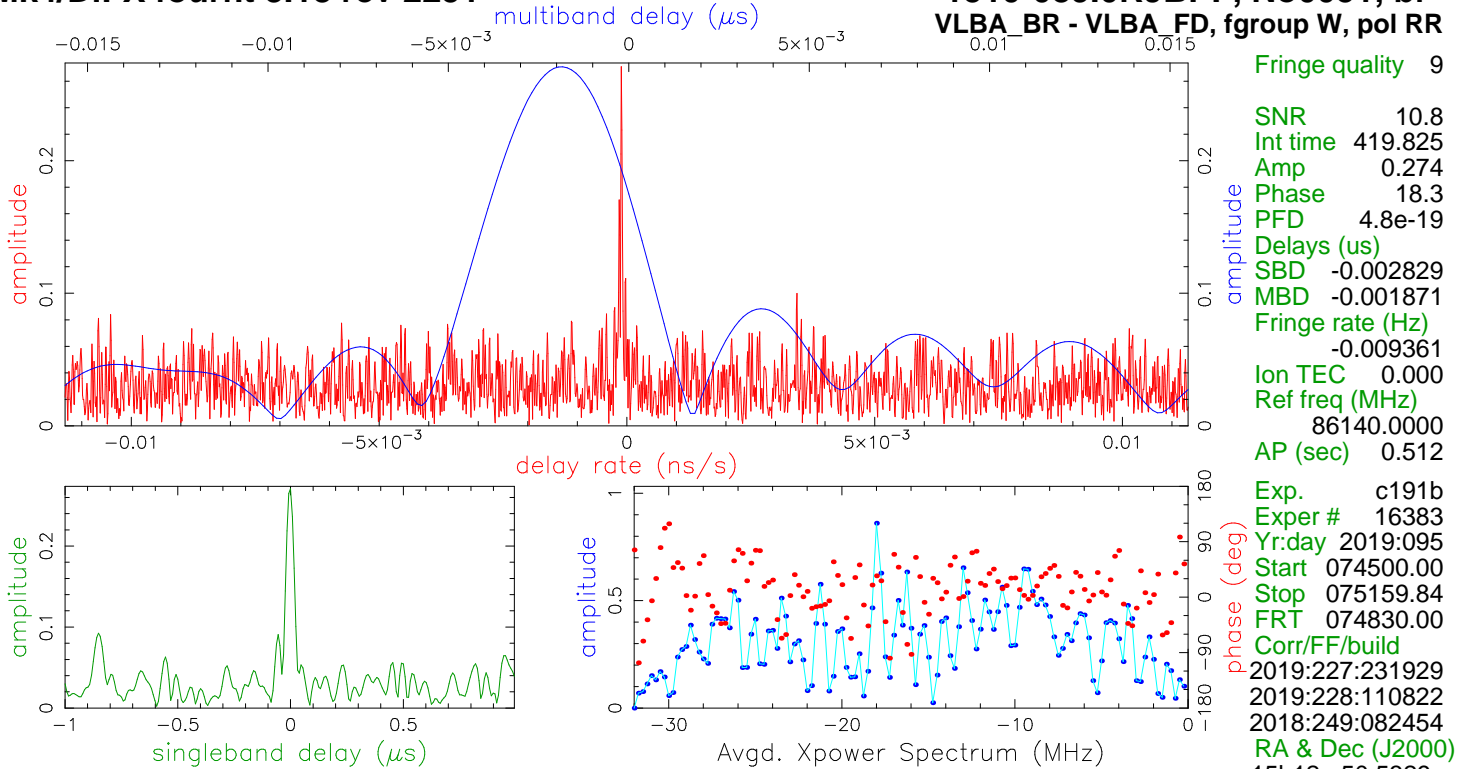


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-100.1	-110.5	-126.1	-140.0	-146.8	-132.9	-115.1	-103.1	Phase	-122.5
236.1	219.9	247.8	294.6	321.2	312.8	346.2	337.3	Ampl.	289.5
131.2	131.0	130.9	131.0	131.0	131.3	131.2	131.3	Sbd box	131.1
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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 W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
b W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.21558750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	9.05875E-04	+/-	2.0E-07		
Sband delay (usec)	1.65635000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.65635E-02	+/-	1.6E-06		
Phase delay (usec)	-3.95070510806E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.95071E-06	+/-	3.4E-10		
Delay rate (us/s)	7.08557619584E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.08558E-11	+/-	1.4E-12		
Total phase (deg)		-302.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)		-302.5	+/-	0.0

ph/seg (deg) 0.4 0.0 Theor. Amplitude 278.274 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 0.0 Search (2048X32) 277.804 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.8 0.0 Inc. seg. avg. 277.969 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 137.7 el 23.2 pa -27.1 b: az 137.7 el 23.2 pa -27.1 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bb..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bb.W.73.0RJBPf simultaneous interpolator



Fringe quality 9

SNR 10.8

Int time 419.825

Amp 0.274

Phase 18.3

PFD 4.8e-19

Delays (us)

SBD -0.002829

MBD -0.001871

Fringe rate (Hz)

-0.009361

Ion TEC 0.000

Ref freq (MHz)

86140.000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110822

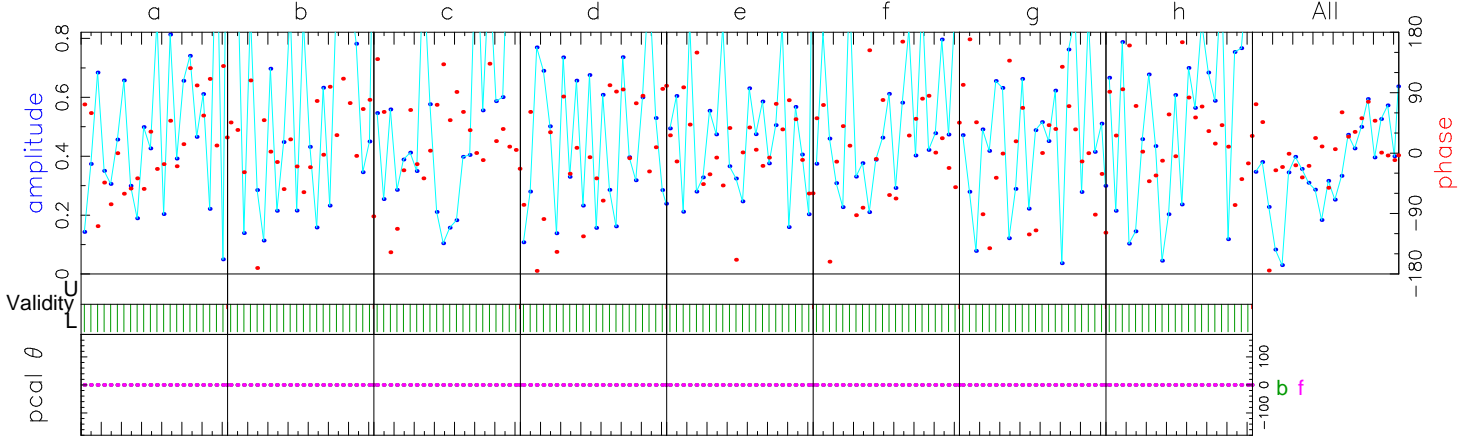
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
5.3	32.9	17.8	21.3	10.1	20.4	8.9	24.2	Phase	18.3
0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	Ampl.	0.3
24.1	129.7	129.7	109.2	127.7	128.1	128.8	127.6	Sbd box	128.6
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
Group delay (usec)(sbd)	-6.46819791528E+03		Apriori delay (usec)	-6.46819604419E+03		Resid mbdelay (usec)	-1.87110E-03	+/-	2.0E-04
Sband delay (usec)	-6.46819887319E+03		Apriori clock (usec)	-6.7136803E+00		Resid sbdelay (usec)	-2.82900E-03	+/-	1.6E-03
Phase delay (usec)	-6.46819604360E+03		Apriori clockrate (us/s)	-5.2999990E-08		Resid phdelay (usec)	5.89254E-07	+/-	3.4E-07
Delay rate (us/s)	1.32896424564E-01		Apriori rate (us/s)	1.32896533239E-01		Resid rate (us/s)	-1.08675E-07	+/-	1.4E-09
Total phase (deg)		-70.4	Apriori accel (us/s/s)	3.01325853851E-05		Resid phase (deg)	18.3	+/-	10.6

ph/seg (deg) 50.0 25.3 Theor. Amplitude 0.274 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

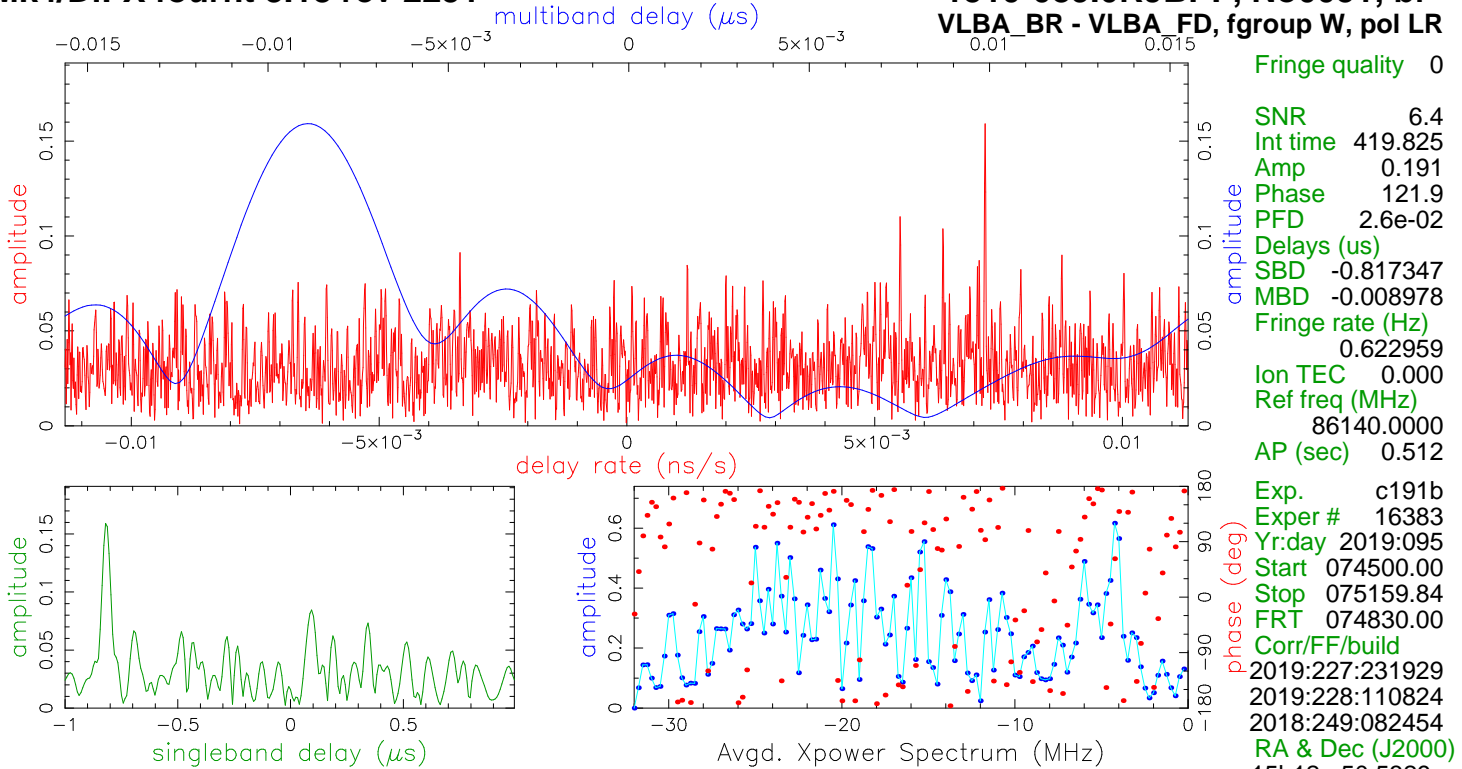
amp/seg (%) 59.1 44.2 Search (2048X32) 0.267 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 9.9 14.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 23.0 26.1 Inc. seg. avg. 0.322 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

b: az 137.7 el 23.2 pa -27.1 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) -721.322 1672.390 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bf.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bf.W.23.0RJBPf simultaneous interpolator



Fringe quality 0

SNR 6.4

Int time 419.825

Amp 0.191

Phase 121.9

PFD 2.6e-02

Delays (us)

SBD -0.817347

MBD -0.008978

Fringe rate (Hz) 0.622959

Ion TEC 0.000

Ref freq (MHz) 86140.000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110824

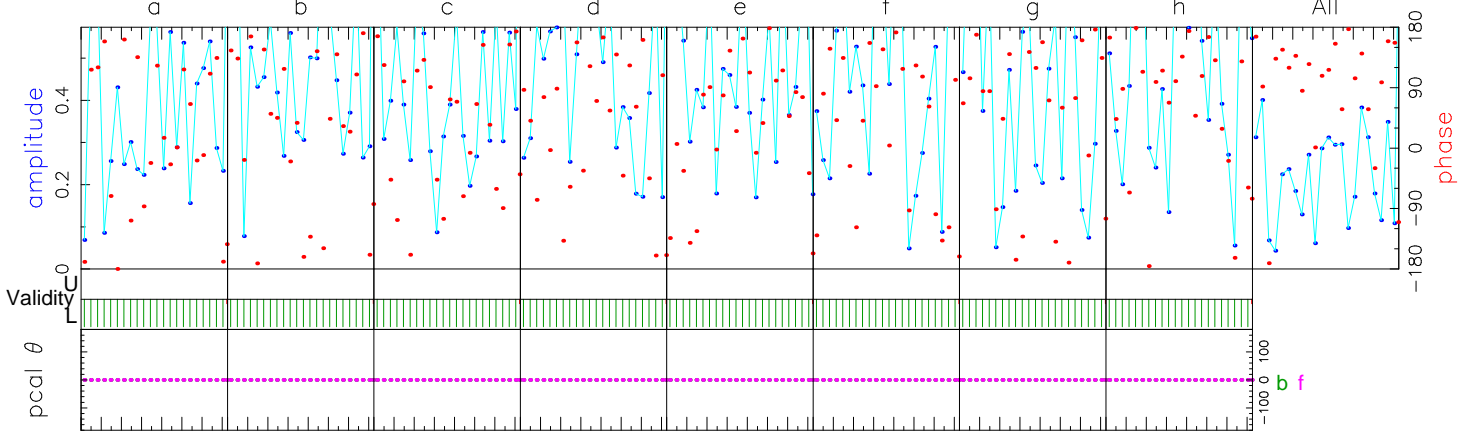
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
102.0	132.8	141.9	97.4	88.4	130.5	135.5	121.1	Phase	121.9
0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	Ampl.	0.2
180.0	80.5	152.8	232.4	172.9	201.2	24.7	24.3	Sbd box	24.4
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
								Tracks	
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
Group delay (usec)(sbd)	-6.46901752259E+03		Apriori delay (usec)	-6.46819604419E+03		Resid mbdelay (usec)	-8.97841E-03	+/-	3.4E-04
Sband delay (usec)	-6.46901339069E+03		Apriori clock (usec)	-6.7136803E+00		Resid sbdelay (usec)	-8.17347E-01	+/-	2.7E-03
Phase delay (usec)	-6.46819604025E+03		Apriori clockrate (us/s)	-5.2999990E-08		Resid phdelay (usec)	3.93202E-06	+/-	5.8E-07
Delay rate (us/s)	1.32903765175E-01		Apriori rate (us/s)	1.32896533239E-01		Resid rate (us/s)	7.23194E-06	+/-	2.4E-09
Total phase (deg)		33.3	Apriori accel (us/s/s)	3.01325853851E-05		Resid phase (deg)	121.9	+/-	18.0

ph/seg (deg) 54.7 43.1 Search (2048X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

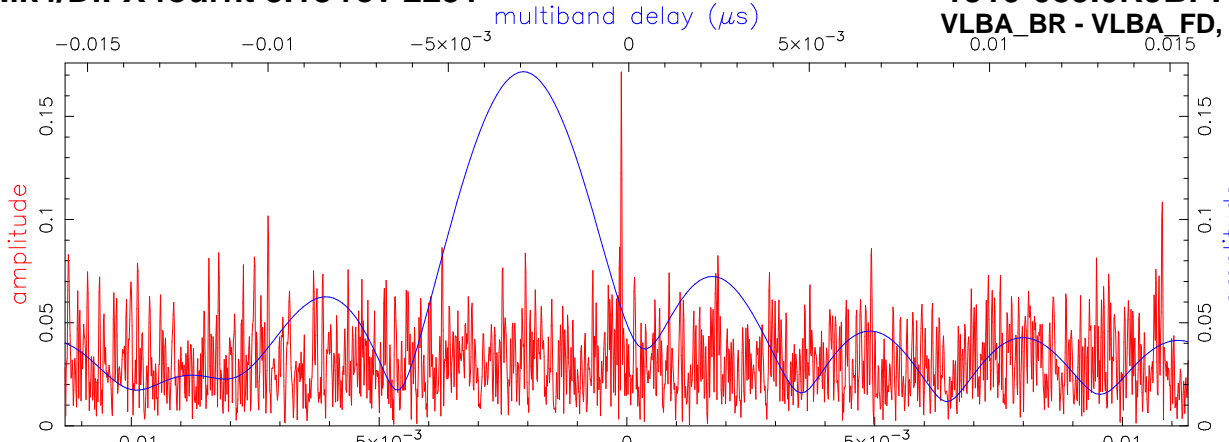
amp/seg (%) 81.7 75.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 22.0 25.4 Inc. seg. avg. 0.207 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

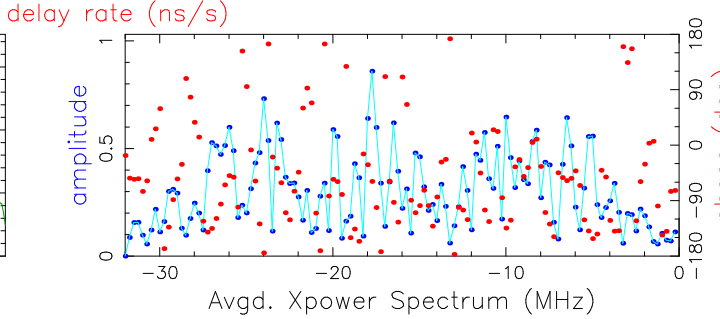
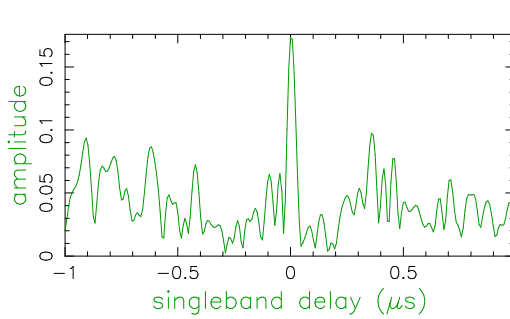
amp/frq (%) 41.9 44.4 Inc. frq. avg. 0.180 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

b: az 137.7 el 23.2 pa -27.1 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) -721.322 1672.390 ion window (TEC) 0.00 0.00

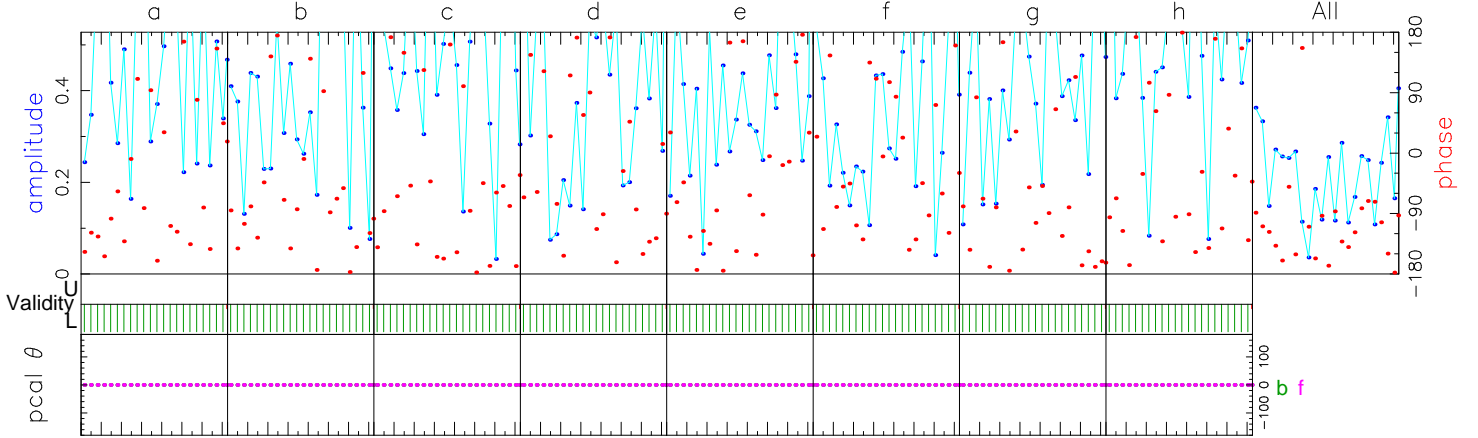
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bf..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bf.W.38.0RJBPf simultaneous interpolator



Fringe quality 0
SNR 7.0
Int time 419.825
Amp 0.176
Phase -120.7
PFD 4.8e-04
Delays (us)
SBD 0.003329
MBD -0.002845
Fringe rate (Hz)
-0.009141
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110820
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



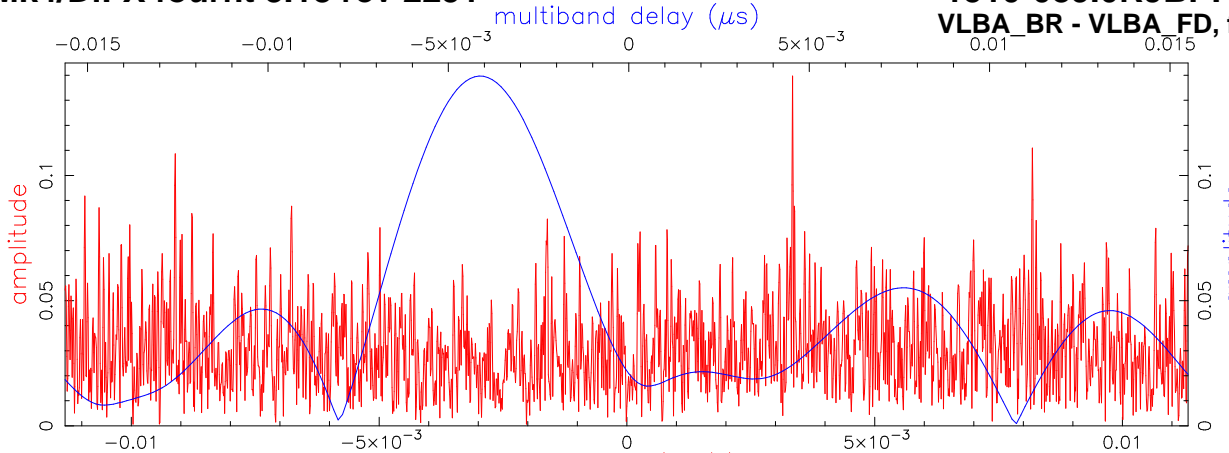
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-127.0	-113.8	-114.5	-129.3	-98.5	-95.9	-143.9	-123.8	Phase	-120.7
	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	Ampl.	0.2
	123.6	219.3	129.2	53.9	10.3	173.5	139.8	14.6	Sbd box	129.4
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.46819888928E+03		Apriori delay (usec)		-6.46819604419E+03		Resid mbdelay (usec)		-2.84510E-03 +/- 3.1E-04	
Sband delay (usec)	-6.46819271519E+03		Apriori clock (usec)		-6.7136803E+00		Resid sbdelay (usec)		3.32900E-03 +/- 2.5E-03	
Phase delay (usec)	-6.46819604808E+03		Apriori clockrate (us/s)		-5.2999990E-08		Resid phdelay (usec)		-3.89329E-06 +/- 5.3E-07	
Delay rate (us/s)	1.32896427126E-01		Apriori rate (us/s)		1.32896533239E-01		Resid rate (us/s)		-1.06112E-07 +/- 2.2E-09	
Total phase (deg)	-209.4		Apriori accel (us/s/s)		3.01325853851E-05		Resid phase (deg)		-120.7 +/- 16.4	

RMS 38.3 Theor. 39.4 Amplitude 0.176 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.1 68.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 17.6 23.3 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 34.5 40.6 Inc. frq. avg. 0.163 Data rate (Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 34.5 40.6 Data rate (Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

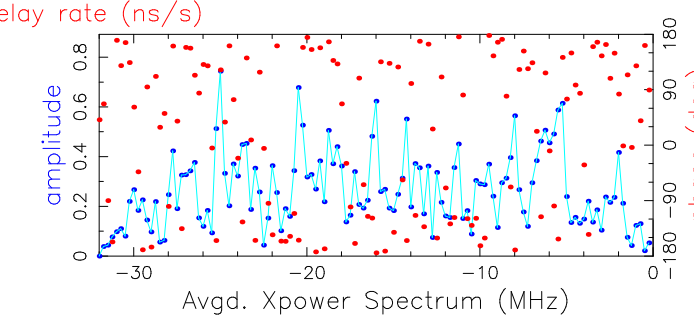
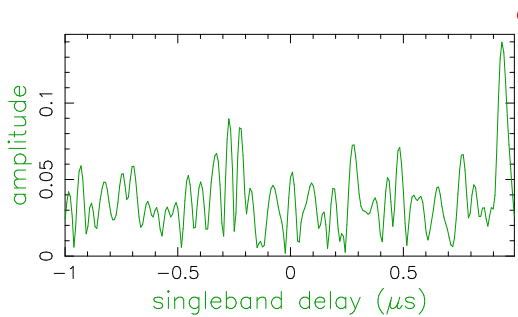
b: az 137.7 el 23.2 pa -27.1 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) -721.322 1672.390 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bf.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bf.W.6.0RJBPf



Fringe quality 0

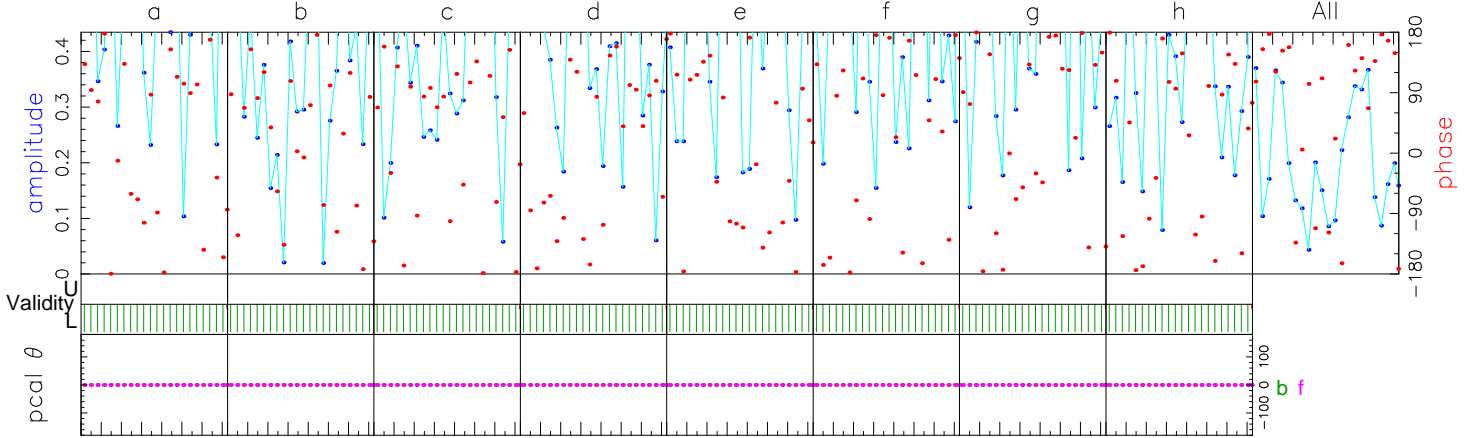
SNR 5.5
Int time 419.825
Amp 0.145
Phase -218.3
PFD 9.7e-01
Delays (us)
SBD 0.938295
MBD -0.004139
Fringe rate (Hz)
0.288096
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110827
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Avgd. Xpower Spectrum (MHz)

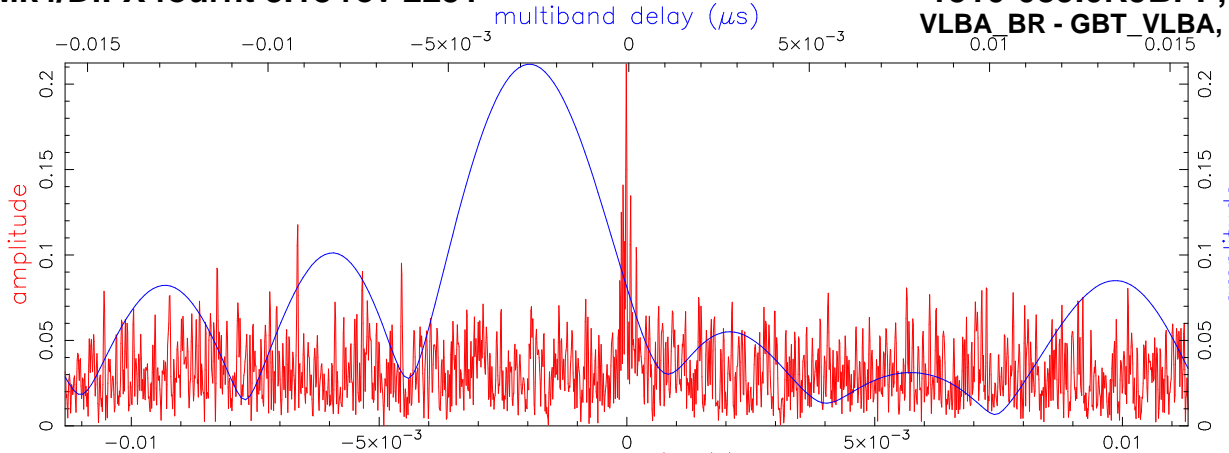
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



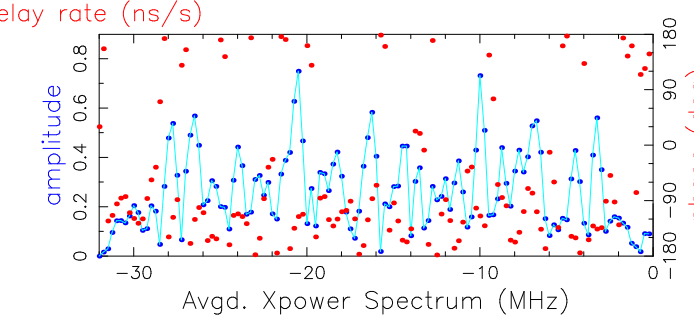
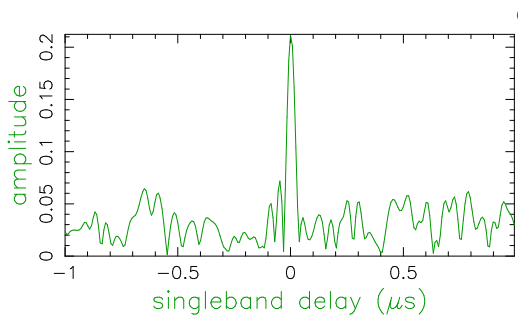
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
165.0	101.6	132.8	148.3	139.9	140.9	167.6	127.7	Phase	141.7
0.2	0.1	0.2	0.1	0.1	0.3	0.1	0.1	Ampl.	0.1
246.4	121.4	250.6	39.3	210.8	248.4	94.1	185.3	Sbd box	249.1
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Tracks	
Group delay (usec)(sbd)	-6.46726268328E+03		Apriori delay (usec)	-6.46819604419E+03	Resid mbdelay (usec)	-4.13909E-03	+/-	3.9E-04	
Sband delay (usec)	-6.46725774919E+03		Apriori clock (usec)	-6.7136803E+00	Resid sbdelay (usec)	9.38295E-01	+/-	3.1E-03	
Phase delay (usec)	-6.46819603962E+03		Apriori clockrate (us/s)	-5.2999990E-08	Resid phdelay (usec)	4.56870E-06	+/-	6.7E-07	
Delay rate (us/s)	1.32899877743E-01		Apriori rate (us/s)	1.32896533239E-01	Resid rate (us/s)	3.34450E-06	+/-	2.8E-09	
Total phase (deg)	-306.9		Apriori accel (us/s/s)	3.01325853851E-05	Resid phase (deg)	-218.3	+/-	20.7	

ph/seg (deg) 59.7 49.6 Search (2048X32) 0.137 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 87.5 86.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.9 29.3 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.9 51.1 Inc. frq. avg. 0.135 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

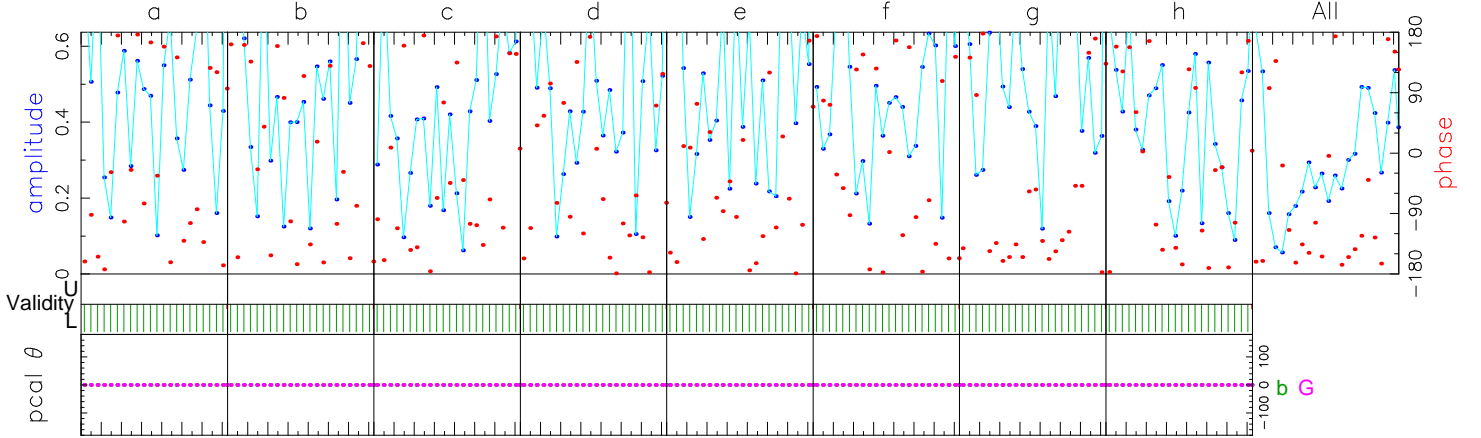
b: az 137.7 el 23.2 pa -27.1 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) -721.322 1672.390 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bf.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bf.W.66.0RJBPf



Fringe quality 9
SNR 8.4
Int time 419.801
Amp 0.212
Phase -152.7
PFD 7.1e-09
Delays (us)
SBD 0.001524
MBD -0.002739
Fringe rate (Hz)
-0.000878
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110819
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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

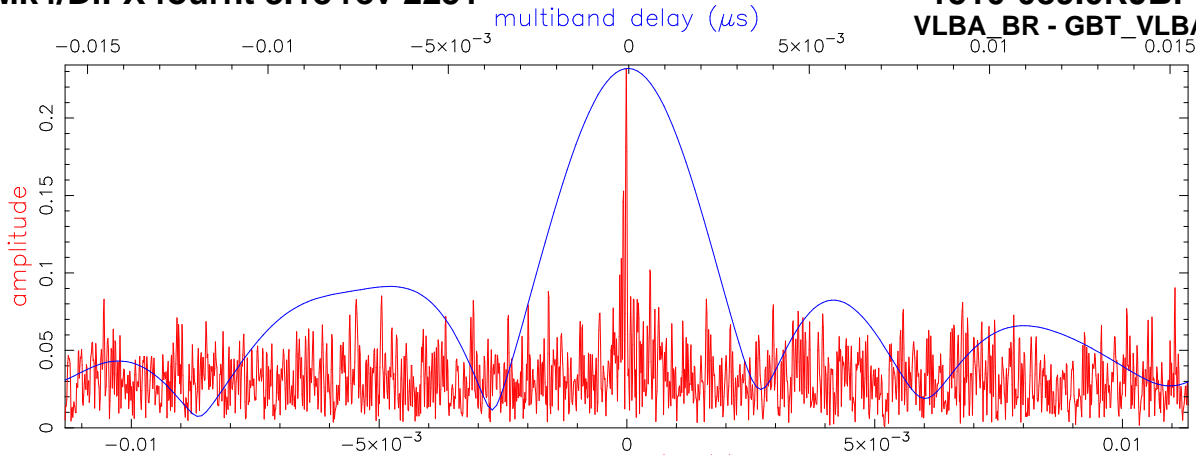


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-150.2	169.7	-136.4	-152.9	-115.5	-150.6	-143.0	164.1	Phase	-152.7
	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2	Ampl.	0.2
	129.3	130.1	130.0	83.8	229.9	187.6	128.9	127.2	Sbd box	129.2
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:G	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	
G	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

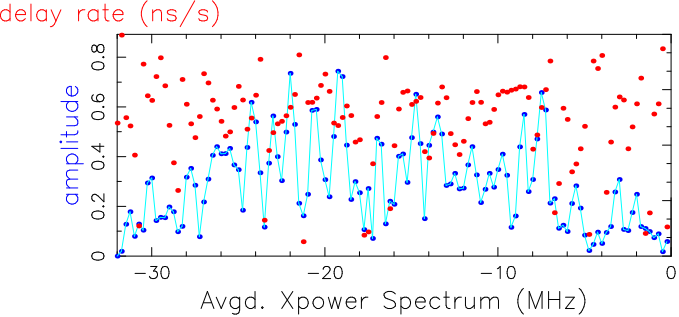
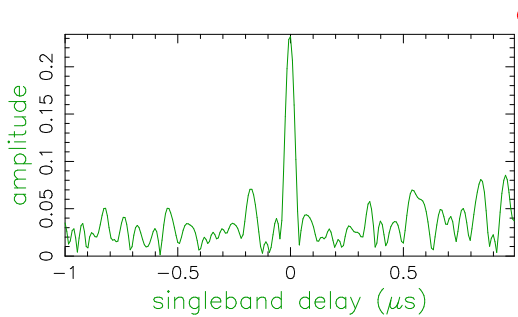
Group delay (usec)(sbd)	-5.75402996055E+03	Apriori delay (usec)	-5.75402722179E+03	Resid mbdelay (usec)	-2.73876E-03	+/-	2.6E-04
Sband delay (usec)	-5.75402569729E+03	Apriori clock (usec)	1.4419319E+01	Resid sbdelay (usec)	1.52450E-03	+/-	2.0E-03
Phase delay (usec)	-5.75402722671E+03	Apriori clockrate (us/s)	-1.1599998E-07	Resid phdelay (usec)	-4.92447E-06	+/-	4.4E-07
Delay rate (us/s)	6.71228336062E-01	Apriori rate (us/s)	6.71228346255E-01	Resid rate (us/s)	-1.01933E-08	+/-	1.8E-09
Total phase (deg)	-111.2	Apriori accel (us/s/s)	2.84597363774E-05	Resid phase (deg)	-152.7	+/-	13.6

ph/seg (deg)	61.3	Theor.	32.7	Amplitude	0.212 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	84.9	Search (2048X32)	0.210	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	29.0	Interp.	0.000	Inc. seg. avg.	0.263	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	32.7	Inc. frq. avg.	0.218	Inc. frq. avg.	0.218	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

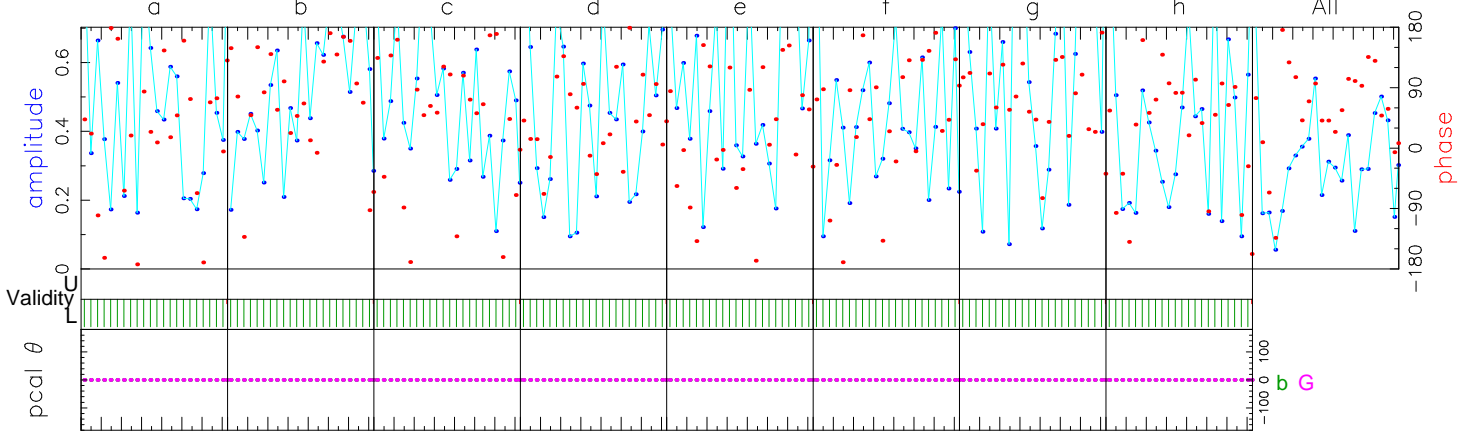
b: az 137.7 el 23.2 pa -27.1 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3847.463 709.419 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bG.W.1.0RJBPf



Fringe quality 9
 SNR 9.3
 Int time 419.801
 Amp 0.234
 Phase 76.1
 PFD 3.3e-12
 Delays (us)
 SBD -0.003046
 MBD -0.000014
 Fringe rate (Hz)
 -0.000875
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110821
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

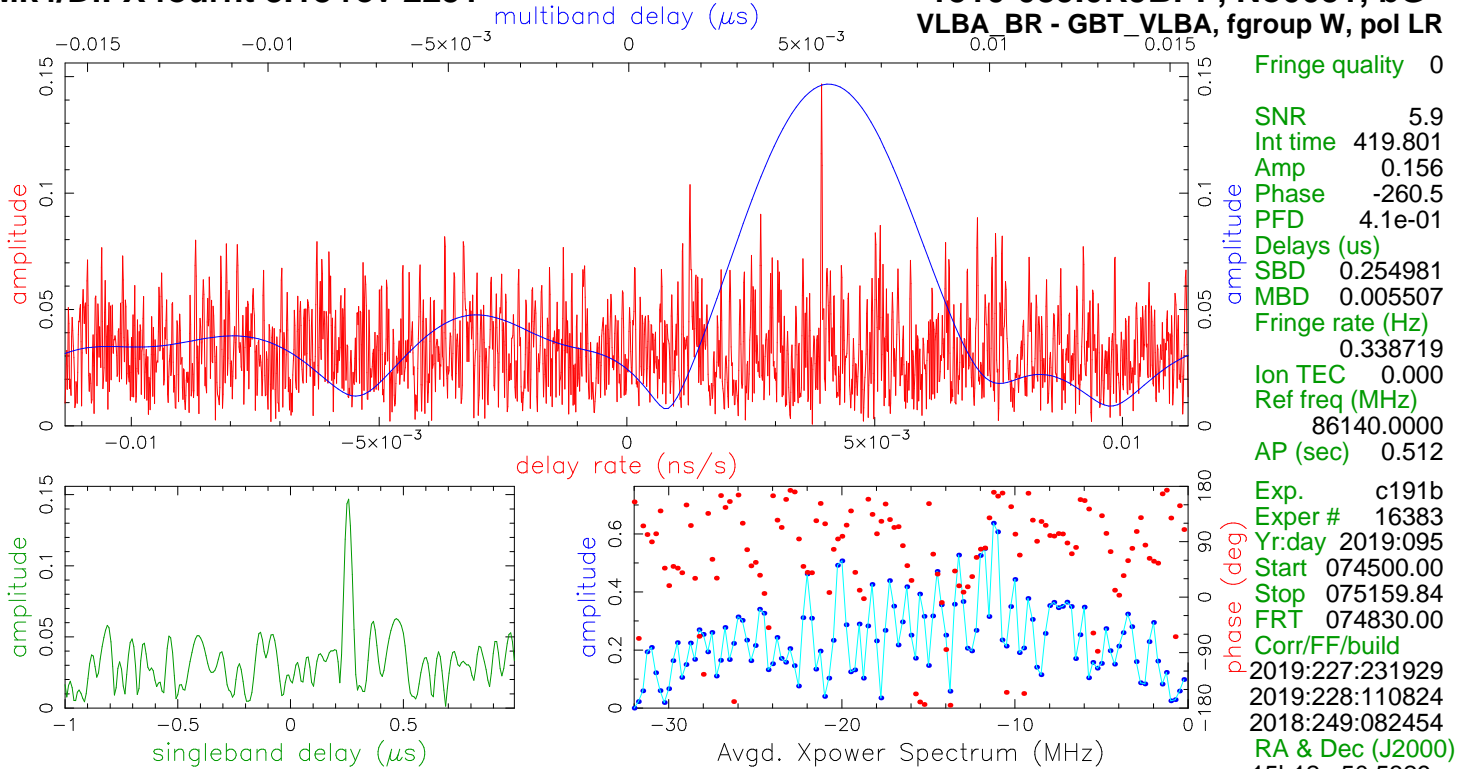


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

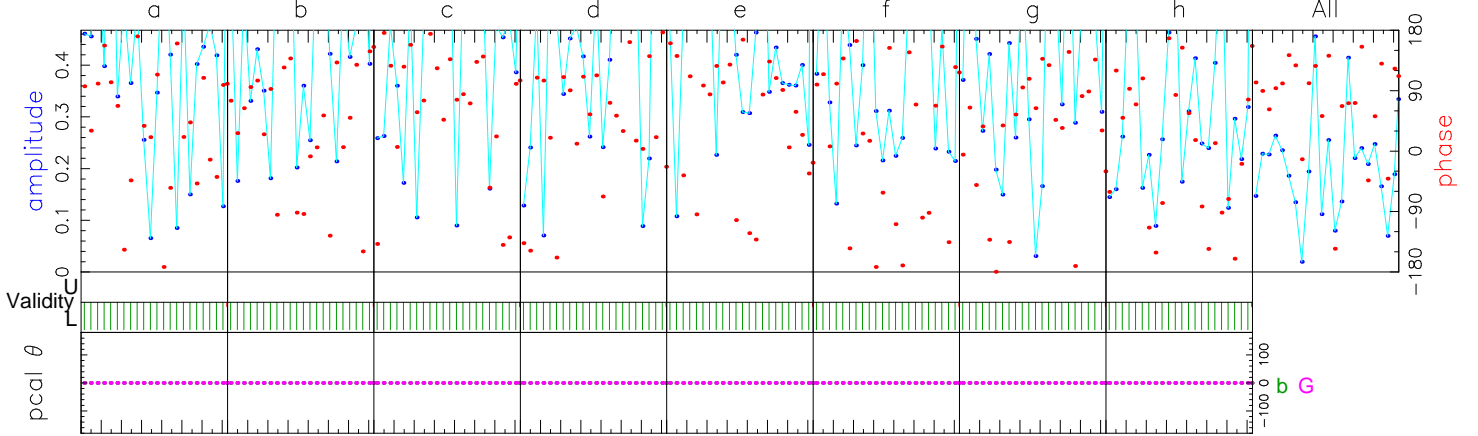


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
b:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
G	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)	-5.75402723573E+03				-5.75402722179E+03				-1.39471E-05	+/- 2.3E-04
Sband delay (usec)	-5.75403026729E+03				1.4419319E+01				-3.04550E-03	+/- 1.9E-03
Phase delay (usec)	-5.75402721933E+03				-1.1599998E-07				2.45345E-06	+/- 4.0E-07
Delay rate (us/s)	6.71228336093E-01				6.71228346255E-01				-1.01621E-08	+/- 1.6E-09
Total phase (deg)			-242.4		2.84597363774E-05				76.1	+/- 12.3
	RMS	Theor.	Amplitude	0.234 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	61.8	29.6	Search (2048X32)	0.232	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	74.4	51.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016	
ph/frq (deg)	22.7	17.5	Inc. seg. avg.	0.277	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	36.5	30.5	Inc. frq. avg.	0.236	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00	

b: az 137.7 el 23.2 pa -27.1 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3847.463 709.419 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bG.W.17.0RJBPf



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

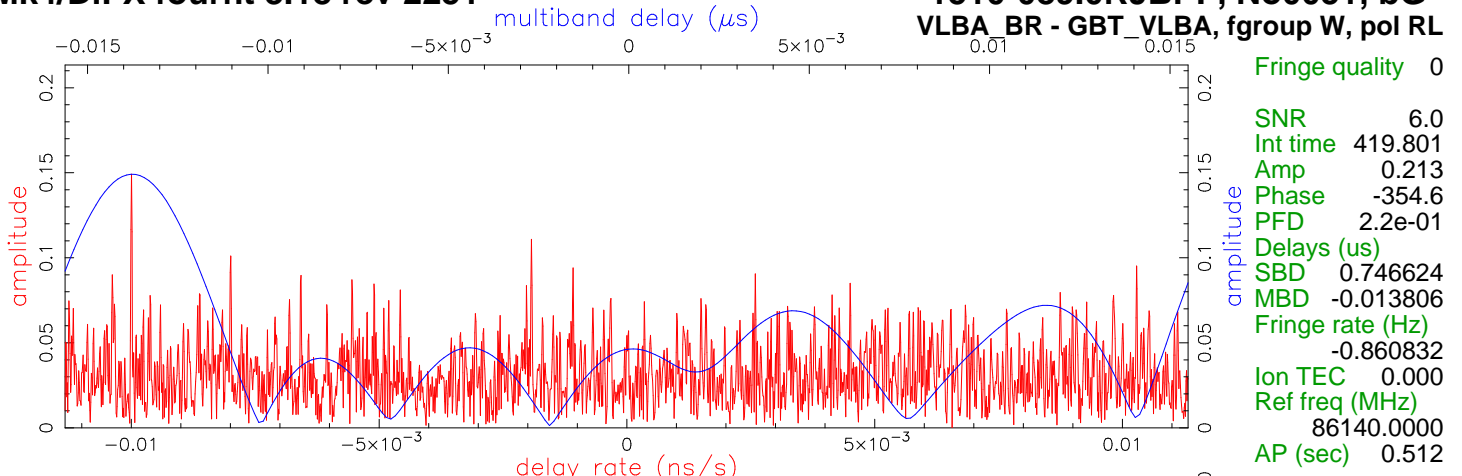


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
86.1	89.7	123.0	74.6	103.6	140.6	92.4	80.7	80.7	Phase	99.5
0.1	0.1	0.3	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
241.8	139.1	160.6	93.0	79.4	108.6	244.0	93.0	93.0	Sbd box	161.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:G	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	
G	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.75377171462E+03		Apriori delay (usec)	-5.75402722179E+03		Resid mbdelay (usec)	5.50717E-03	+/-	3.7E-04	
Sband delay (usec)	-5.75377224079E+03		Apriori clock (usec)	1.4419319E+01		Resid sbdelay (usec)	2.54981E-01	+/-	2.9E-03	
Phase delay (usec)	-5.75402721858E+03		Apriori clockrate (us/s)	-1.1599998E-07		Resid phdelay (usec)	3.20853E-06	+/-	6.3E-07	
Delay rate (us/s)	6.71232278445E-01		Apriori rate (us/s)	6.71228346255E-01		Resid rate (us/s)	3.93219E-06	+/-	2.6E-09	
Total phase (deg)		-219.0	Apriori accel (us/s/s)	2.84597363774E-05		Resid phase (deg)	-260.5	+/-	19.5	

	RMS	Theor.	Amplitude	0.156 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	61.7	46.8	Search (2048X32)	0.144	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	75.4	81.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.3	27.6	Inc. seg. avg.	0.160	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	39.5	48.1	Inc. frq. avg.	0.147	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

b: az 137.7 el 23.2 pa -27.1 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3847.463 709.419 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bG.W.44.0RJBPf



Fringe quality 0

SNR 6.0

Int time 419.801

Amp 0.213

Phase -354.6

PFD 2.2e-01

Delays (us)

SBD 0.746624

MBD -0.013806

Fringe rate (Hz)

-0.860832

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

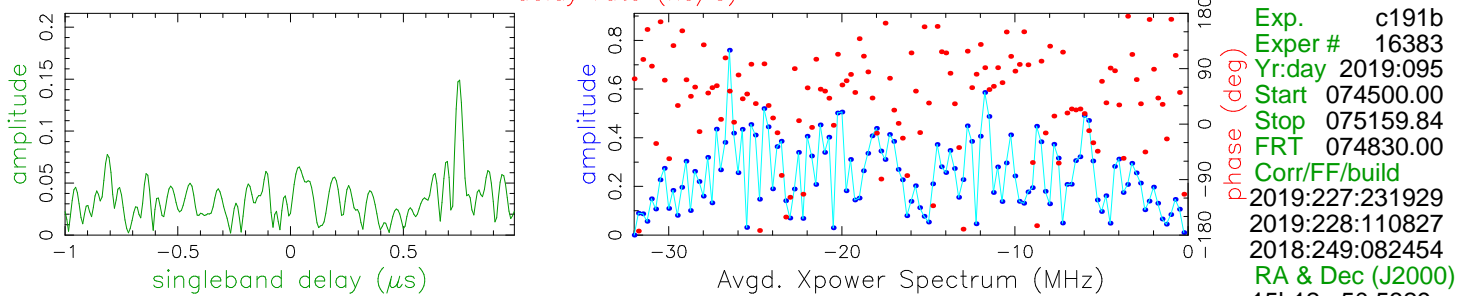
2019:228:110827

2018:249:082454

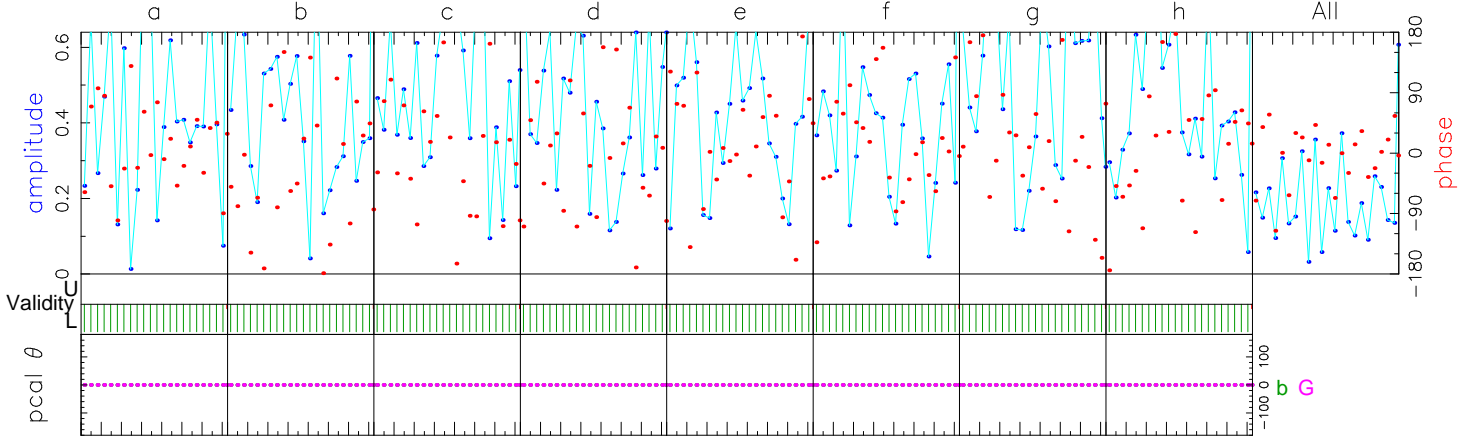
RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"



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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	15.5	-28.8	4.8	-33.7	41.4	9.4	-24.2	29.7	Phase	5.4
	0.4	0.2	0.2	0.1	0.2	0.3	0.2	0.2	Ampl.	0.2
	224.2	48.3	81.9	153.2	42.9	91.9	24.9	17.2	Sbd box	224.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:G	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	
G	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.75329102791E+03		Apriori delay (usec)		-5.75402722179E+03		Resid mbdelay (usec)		-1.38061E-02	+/- 3.6E-04
Sband delay (usec)	-5.75328059779E+03		Apriori clock (usec)		1.4419319E+01		Resid sbdelay (usec)		7.46624E-01	+/- 2.9E-03
Phase delay (usec)	-5.75402722161E+03		Apriori clockrate (us/s)		-1.1599998E-07		Resid phdelay (usec)		1.72756E-07	+/- 6.2E-07
Delay rate (us/s)	6.71218352854E-01		Apriori rate (us/s)		6.71228346255E-01		Resid rate (us/s)		-9.99340E-06	+/- 2.5E-09
Total phase (deg)	-313.1		Apriori accel (us/s/s)		2.84597363774E-05		Resid phase (deg)		-354.6	+/- 19.1

ph/seg (deg) 44.7 45.8 Search (2048X32) 0.143 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 69.8 79.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

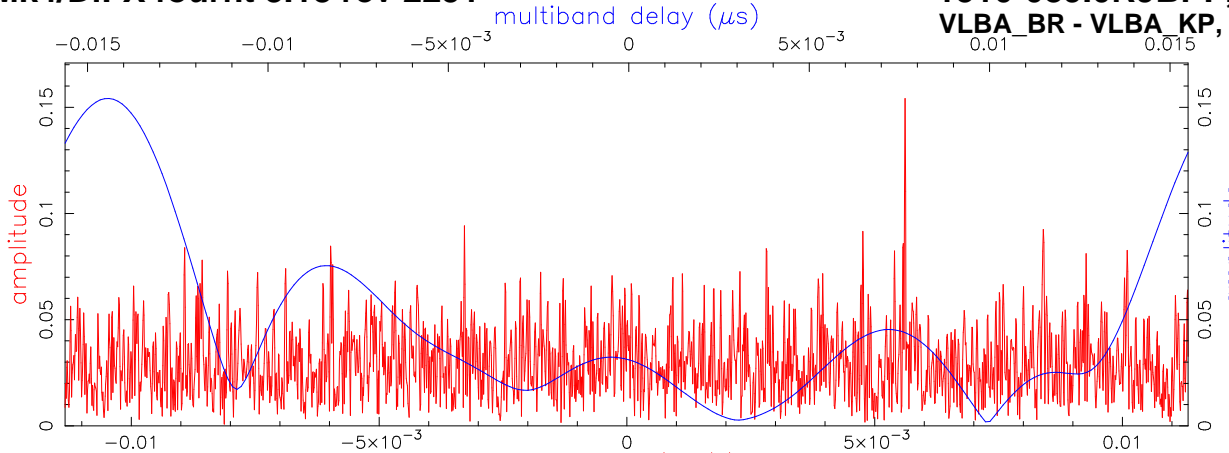
ph/frq (deg) 30.5 27.0 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 39.5 47.1 Inc. frq. avg. 0.207 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

b: az 137.7 el 23.2 pa -27.1 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3847.463 709.419 simultaneous interpolator

ion window (TEC) 0.00 0.00

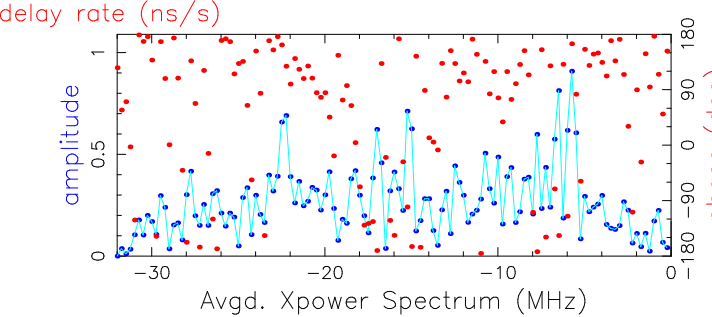
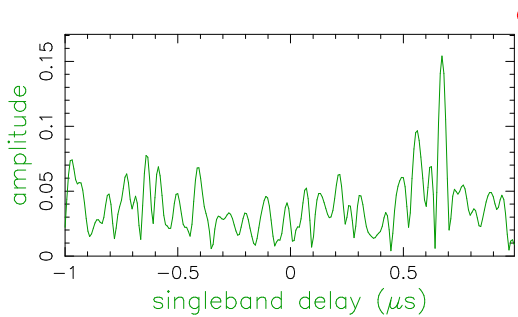
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bG.W.64.0RJBPf



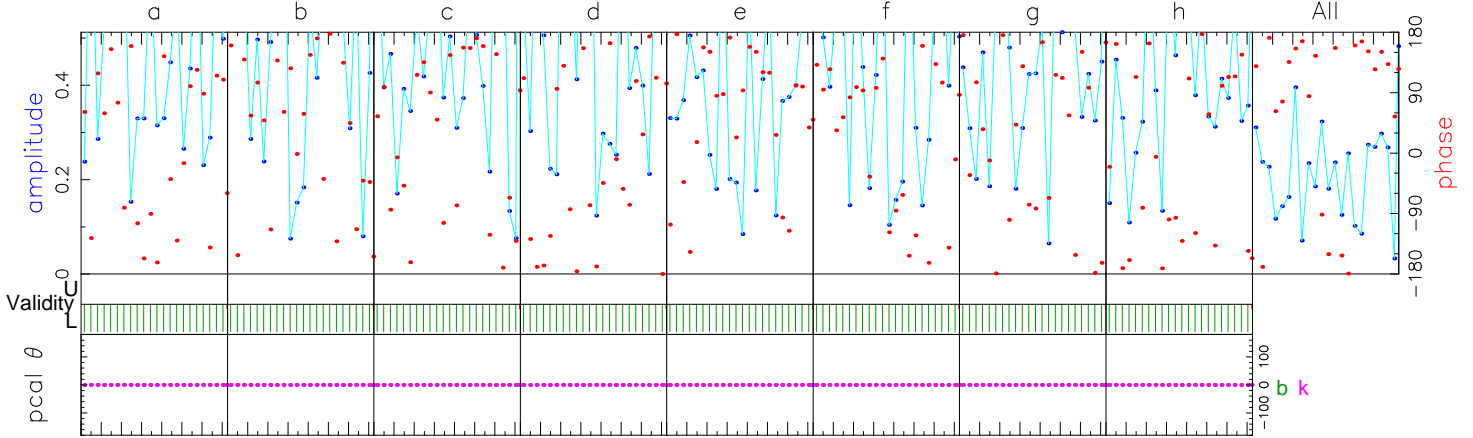
Fringe quality 0

SNR 6.1
Int time 419.827
Amp 0.171
Phase -207.4
PFD 1.2e-01
Delays (us)
SBD 0.671806
MBD -0.014443
Fringe rate (Hz)
0.483535
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110820
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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

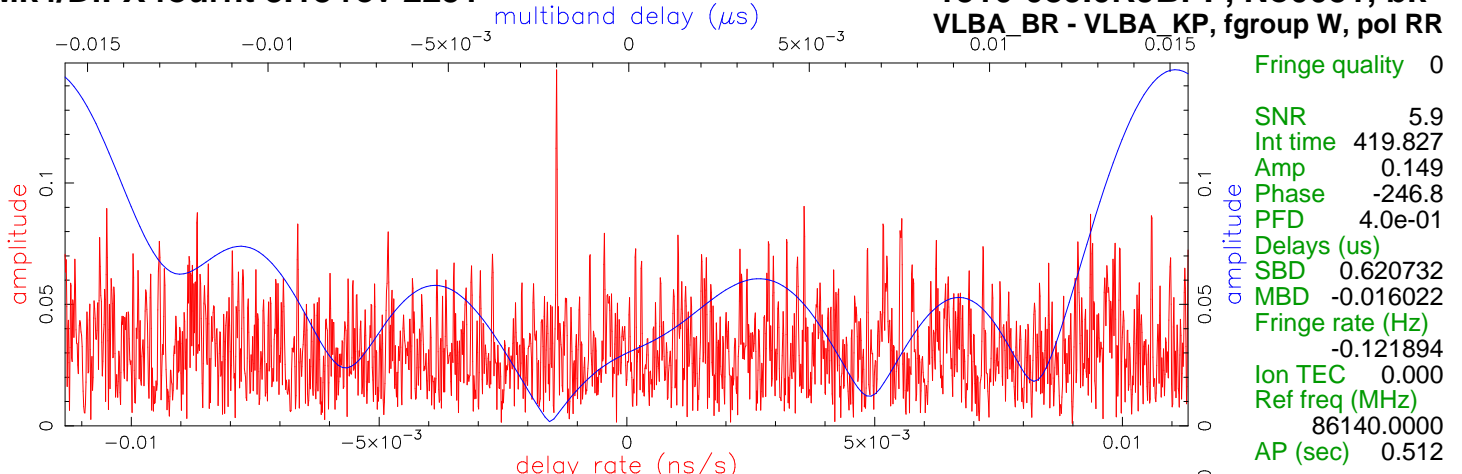


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	164.7	155.9	143.3	-170.0	117.1	115.6	157.2	-178.1	Phase	152.6
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	242.9	74.3	76.2	77.9	80.4	12.3	216.9	5.8	Sbd box	215.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd) -5.12371851439E+03 Apriori delay (usec) -5.12439157121E+03 Resid mbdelay (usec) -1.44432E-02 +/- 3.6E-04
 Sband delay (usec) -5.12371976571E+03 Apriori clock (usec) 4.3166161E-01 Resid sbdelay (usec) 6.71806E-01 +/- 2.8E-03
 Phase delay (usec) -5.12439156629E+03 Apriori clockrate (us/s) 1.4700001E-07 Resid phdelay (usec) 4.92006E-06 +/- 6.1E-07
 Delay rate (us/s) -1.69320977564E-02 Apriori rate (us/s) -1.69377111214E-02 Resid rate (us/s) 5.61336E-06 +/- 2.5E-09
 Total phase (deg) -187.2 Apriori accel (us/s/s) 2.33793288839E-05 Resid phase (deg) -207.4 +/- 18.8

RMS Theor. Amplitude 0.171 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.9 45.0 Search (2048X32) 0.152 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 70.1 78.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 29.3 26.5 Inc. seg. avg. 0.177 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 19.8 46.3 Inc. frq. avg. 0.171 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 137.7 el 23.2 pa -27.1 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 137.004 1587.088 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bk.W.10.0RJBPf



Fringe quality 0

SNR 5.9

Int time 419.827

Amp 0.149

Phase -246.8

PFD 4.0e-01

Delays (us)

SBD 0.620732

MBD -0.016022

Fringe rate (Hz)

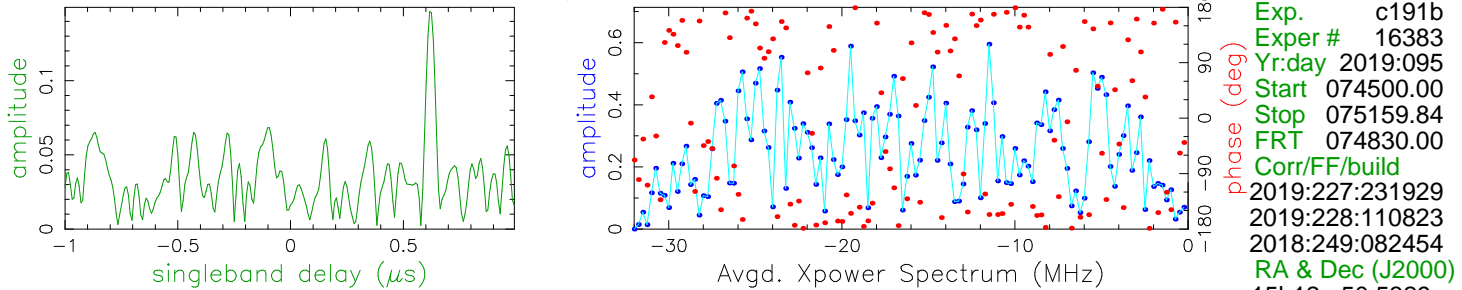
-0.121894

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512



Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110823

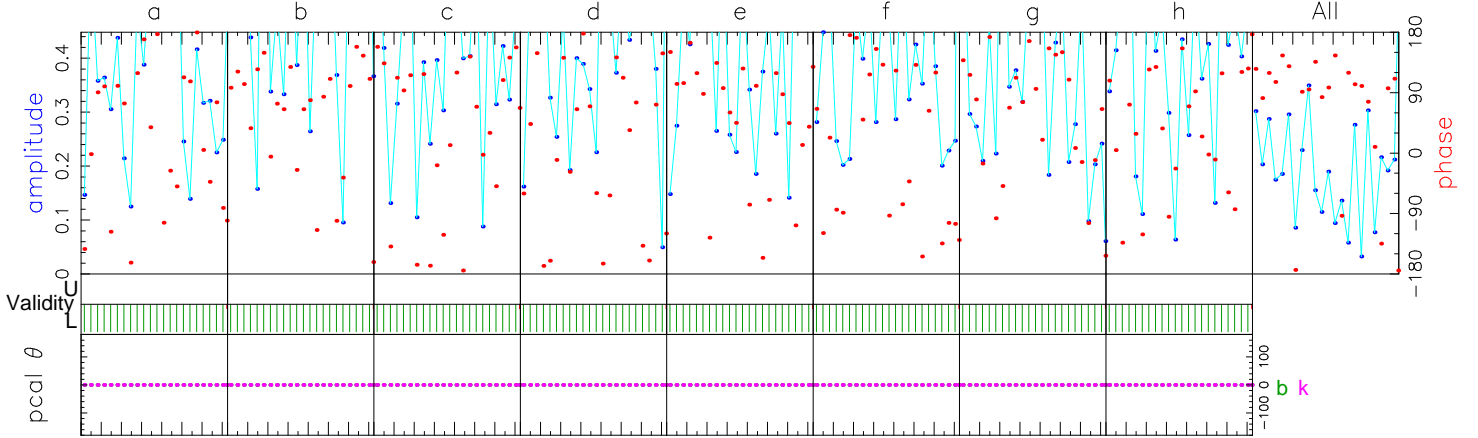
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	63.8	110.1	113.8	149.4	107.1	173.2	95.6	93.0	Phase	113.2
	0.0	0.4	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	70.1	207.9	209.0	171.7	131.0	155.4	252.6	165.2	Sbd box	208.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.12378259277E+03		Apriori delay (usec)		-5.12439157121E+03		Resid mbdelay (usec)		-1.60216E-02	+/- 3.7E-04
Sband delay (usec)	-5.12377083871E+03		Apriori clock (usec)		4.3166161E-01		Resid sbdelay (usec)		6.20732E-01	+/- 2.9E-03
Phase delay (usec)	-5.12439156756E+03		Apriori clockrate (us/s)		1.4700001E-07		Resid phdelay (usec)		3.65006E-06	+/- 6.3E-07
Delay rate (us/s)	-1.69391261846E-02		Apriori rate (us/s)		-1.69377111214E-02		Resid rate (us/s)		-1.41506E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.33793288839E-05		Resid phase (deg)		-246.8	+/- 19.5

ph/seg (deg) 52.5 46.7 Search (2048X32) 0.144 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 67.8 81.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

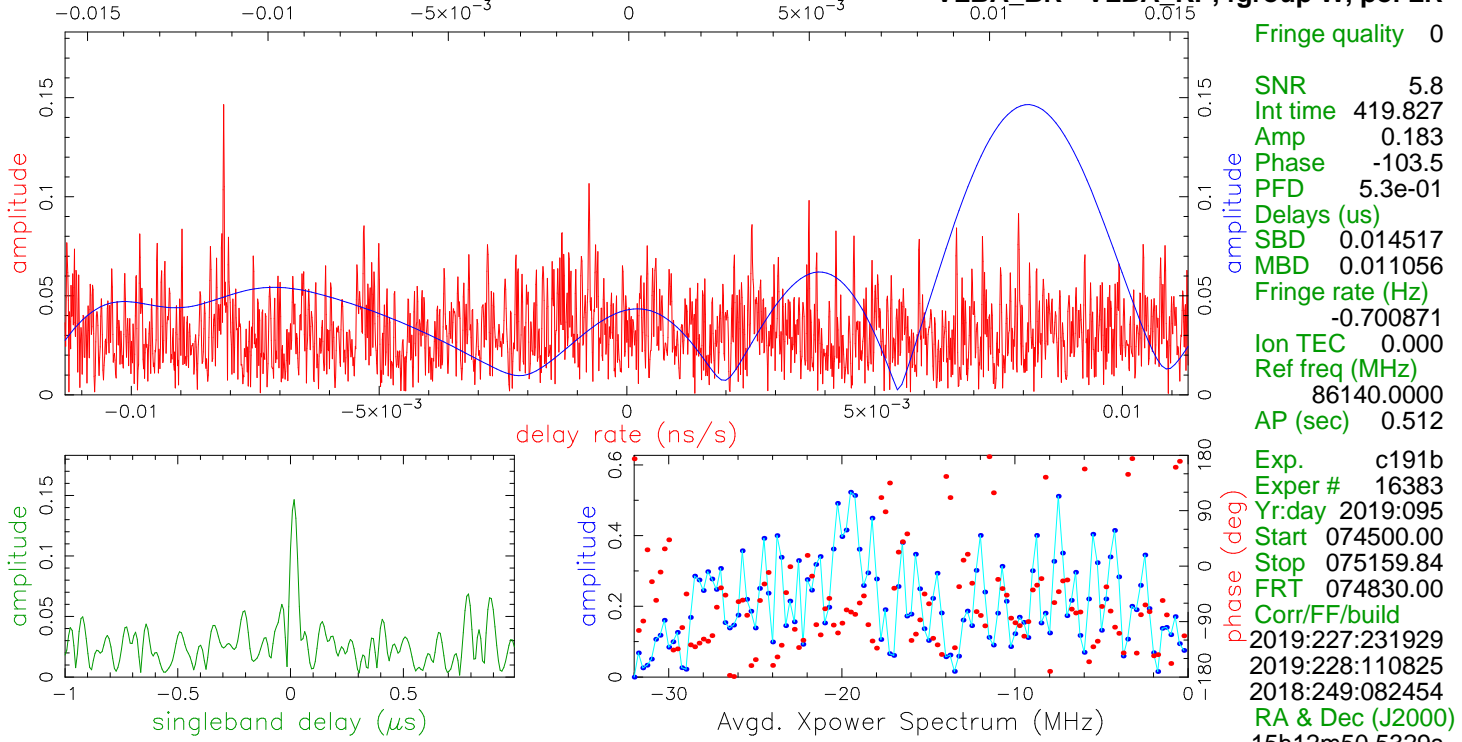
ph/frq (deg) 36.8 27.5 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 64.4 48.1 Inc. frq. avg. 0.143 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

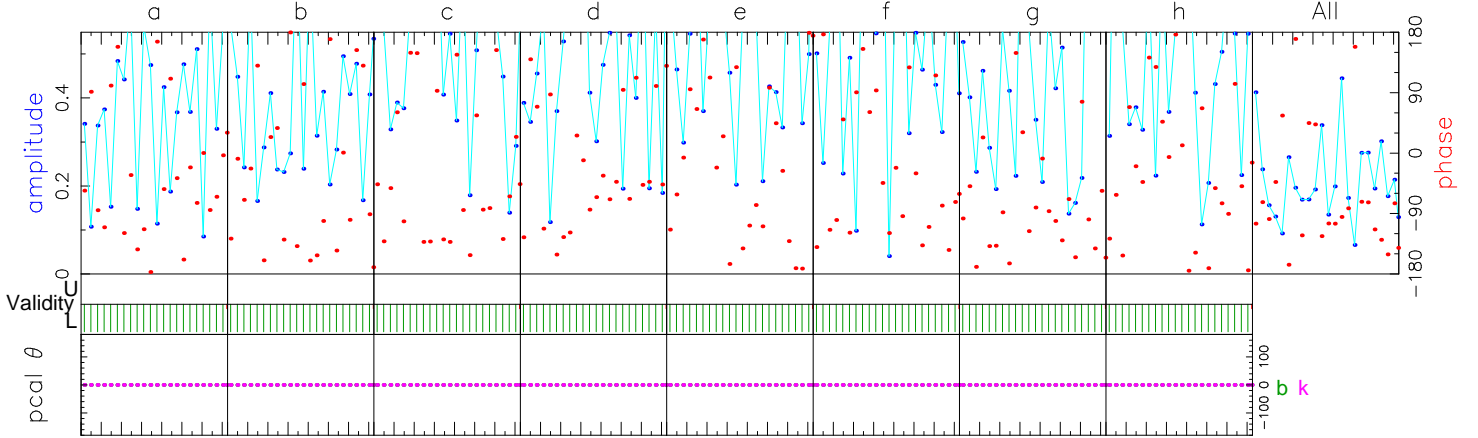
b: az 137.7 el 23.2 pa -27.1 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 137.004 1587.088 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bk.W.35.0RJBPf

multiband delay (μ s)



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



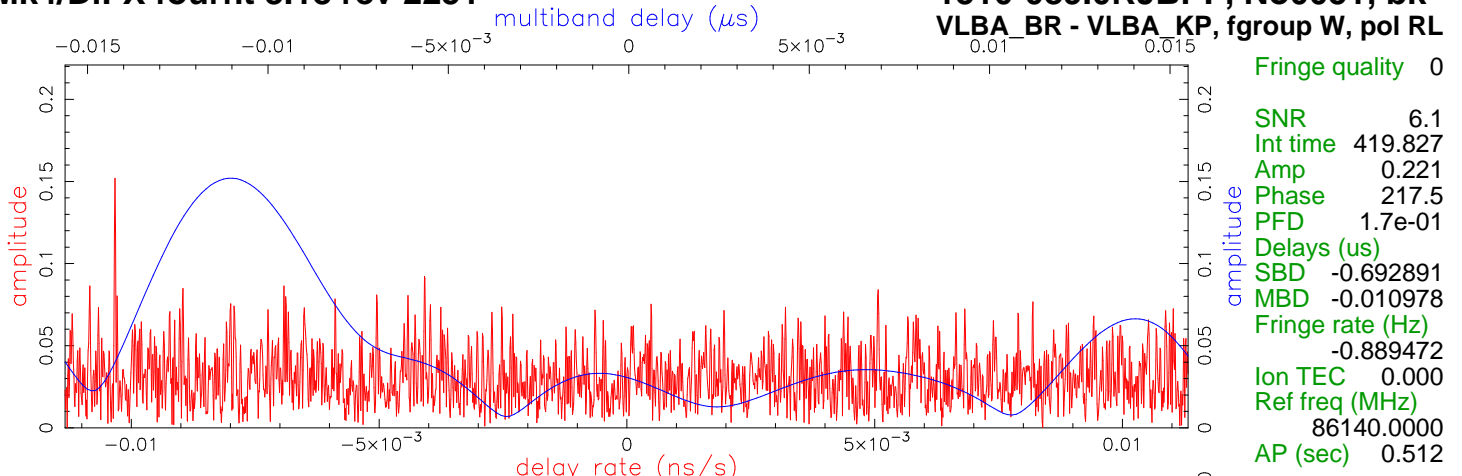
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-83.3	-124.7	-130.0	-60.4	-153.6	-102.6	-96.3	-106.4	Phase	-103.5
0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.1	Ampl.	0.2
150.7	4.2	35.0	165.2	42.1	130.9	130.8	10.1	Sbd box	130.9
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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		
b W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
								Tracks	
k W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	

Group delay (usec)(sbd)	-5.12438051472E+03	Apriori delay (usec)	-5.12439157121E+03	Resid mbdelay (usec)	1.10565E-02	+/-	3.7E-04
Sband delay (usec)	-5.12437705421E+03	Apriori clock (usec)	4.3166161E-01	Resid sbdelay (usec)	1.45170E-02	+/-	3.0E-03
Phase delay (usec)	-5.12439157455E+03	Apriori clockrate (us/s)	1.4700001E-07	Resid phdelay (usec)	-3.33903E-06	+/-	6.4E-07
Delay rate (us/s)	-1.69458475424E-02	Apriori rate (us/s)	-1.69377111214E-02	Resid rate (us/s)	-8.13642E-06	+/-	2.6E-09
Total phase (deg)	-83.3	Apriori accel (us/s/s)	2.33793288839E-05	Resid phase (deg)	-103.5	+/-	19.7

ph/seg (deg)	67.7	Theor.	47.3	Amplitude	0.183 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	79.6	Search (2048X32)	0.145	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	31.6	Interp.	0.000	Inc. seg. avg.	0.203	Bits/sample:	2x2	mb window (us)	-0.016 0.016
amp/frq (%)	36.3	Inc. frq. avg.	0.180	Inc. frq. avg.	0.180	Sample rate(MSamp/s):	64	dr window (ns/s)	-0.011 0.011
						Data rate(Mb/s):	1024	ion window (TEC)	0.00 0.00
						nlags:	128	t_cohere	infinite

b: az 137.7 el 23.2 pa -27.1 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 137.004 1587.088 simultaneous interpolator

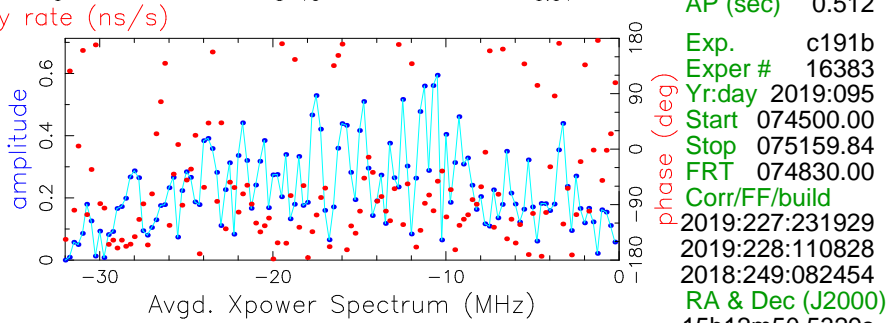
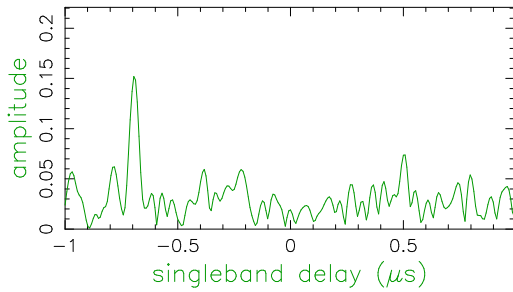
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bk.W.52.0RJBPf



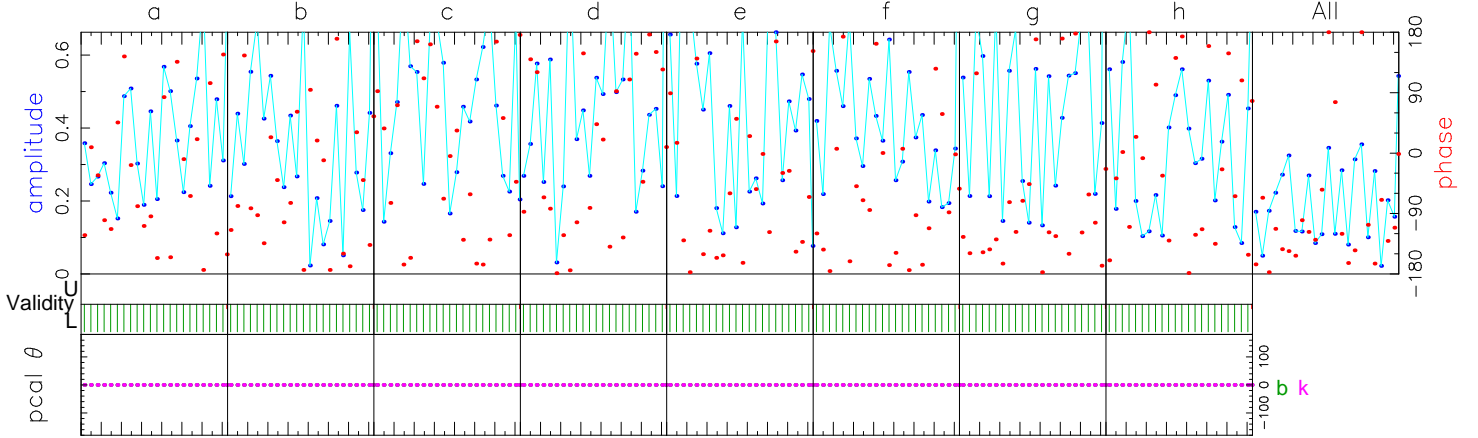
Fringe quality 0

SNR 6.1
Int time 419.827
Amp 0.221
Phase 217.5
PFD 1.7e-01
Delays (us)
SBD -0.692891
MBD -0.010978
Fringe rate (Hz)
-0.889472
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110828
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



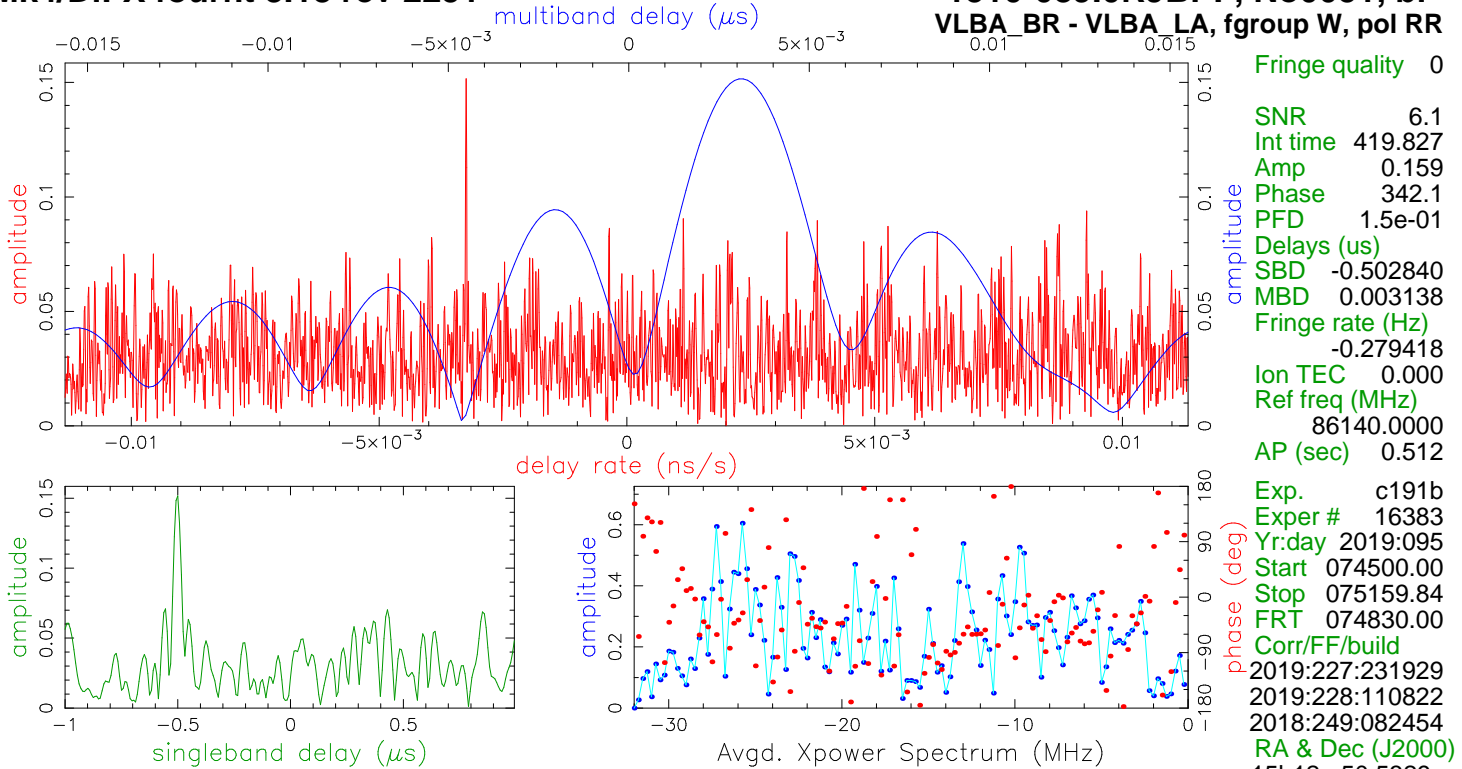
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



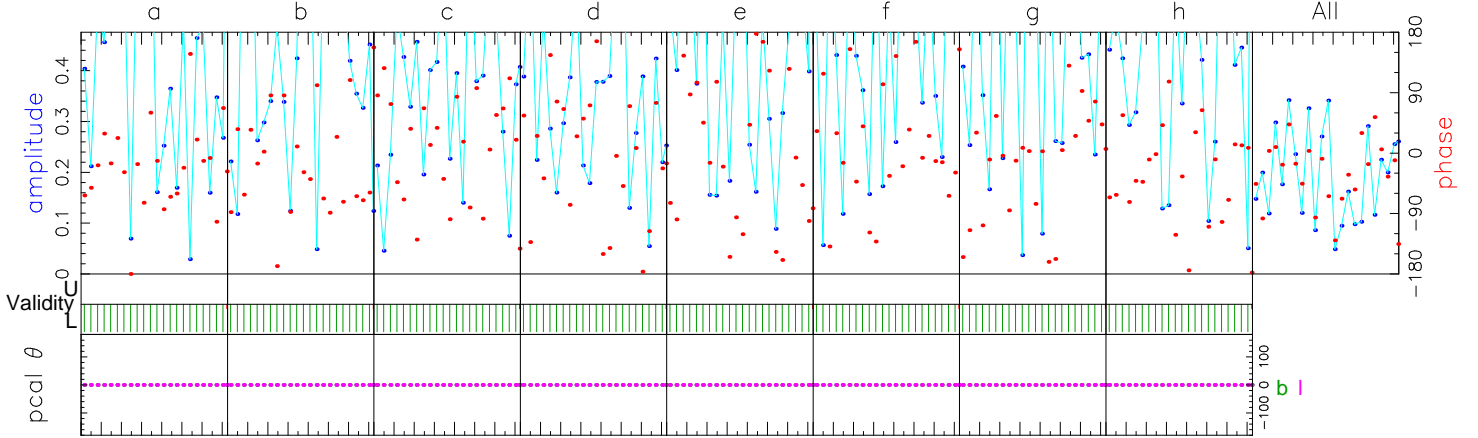
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-126.4	-113.1	-169.1	175.8	-135.3	-134.4	-134.3	-155.9	Phase	-142.5
0.1	0.2	0.2	0.2	0.3	0.2	0.4	0.2	Ampl.	0.2
97.3	102.4	165.0	100.9	134.9	87.9	39.5	91.5	Sbd box	40.3
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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		
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Tracks	
Group delay (usec)(sbd)	-5.12509004900E+03	Apriori delay (usec)	-5.12439157121E+03	Resid mbdelay (usec)	-1.09778E-02	+/-	3.6E-04		
Sband delay (usec)	-5.12508446271E+03	Apriori clock (usec)	4.3166161E-01	Resid sbdelay (usec)	-6.92891E-01	+/-	2.8E-03		
Phase delay (usec)	-5.12439157580E+03	Apriori clockrate (us/s)	1.4700001E-07	Resid phdelay (usec)	-4.59628E-06	+/-	6.1E-07		
Delay rate (us/s)	-1.69480370081E-02	Apriori rate (us/s)	-1.69377111214E-02	Resid rate (us/s)	-1.03259E-05	+/-	2.5E-09		
Total phase (deg)	237.7	Apriori accel (us/s/s)	2.33793288839E-05	Resid phase (deg)	217.5	+/-	18.9		

ph/seg (deg) 49.5 45.4 Search (2048X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 72.8 79.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 25.6 26.8 Inc. seg. avg. 0.211 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 42.7 46.7 Inc. frq. avg. 0.211 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

b: az 137.7 el 23.2 pa -27.1 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 137.004 1587.088 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bk.W.77.0RJBPf

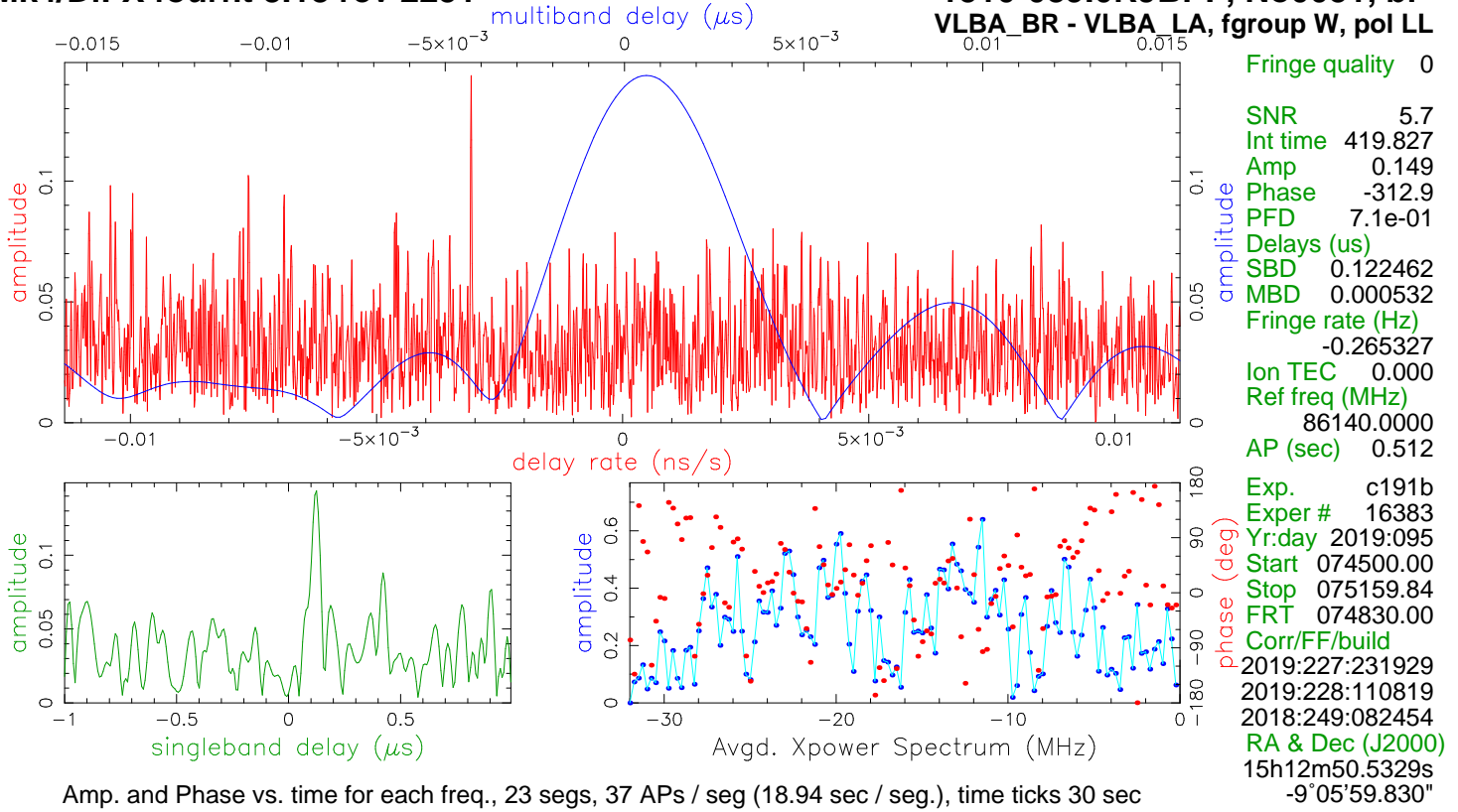


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-15.3	-31.1	1.1	-6.2	-132.5	-17.8	13.9	-36.8	Phase	-17.9
	0.3	0.3	0.2	0.1	0.0	0.1	0.2	0.2	Ampl.	0.2
	65.6	64.9	131.1	86.2	24.1	31.7	129.7	64.4	Sbd box	64.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.98402583274E+03		Apriori delay (usec)		-4.98352897073E+03		Resid mbdelay (usec)		3.13799E-03	+/- 3.6E-04
Sband delay (usec)	-4.98403181023E+03		Apriori clock (usec)		2.7854404E+00		Resid sbdelay (usec)		-5.02840E-01	+/- 2.8E-03
Phase delay (usec)	-4.98352897131E+03		Apriori clockrate (us/s)		1.4000000E-07		Resid phdelay (usec)		-5.77030E-07	+/- 6.1E-07
Delay rate (us/s)	1.14947638385E-01		Apriori rate (us/s)		1.14950882148E-01		Resid rate (us/s)		-3.24376E-06	+/- 2.5E-09
Total phase (deg)	148.1		Apriori accel (us/s/s)		2.36373552497E-05		Resid phase (deg)		342.1	+/- 18.9

	RMS	Theor.	Amplitude	0.159 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	46.8	45.3	Search (2048X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	63.7	79.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	50.3	26.7	Inc. seg. avg.	0.153	Sample rate(MSamp/s): 64	Data rate(Mb/s): 1024	dr window (ns/s)	-0.011	0.011
amp/frq (%)	54.4	46.6	Inc. frq. avg.	0.153	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00



Fringe quality 0

SNR 5.7

Int time 419.827

Amp 0.149

Phase -312.9

PFD 7.1e-01

Delays (us)

SBD 0.122462

MBD 0.000532

Fringe rate (Hz)

-0.265327

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110819

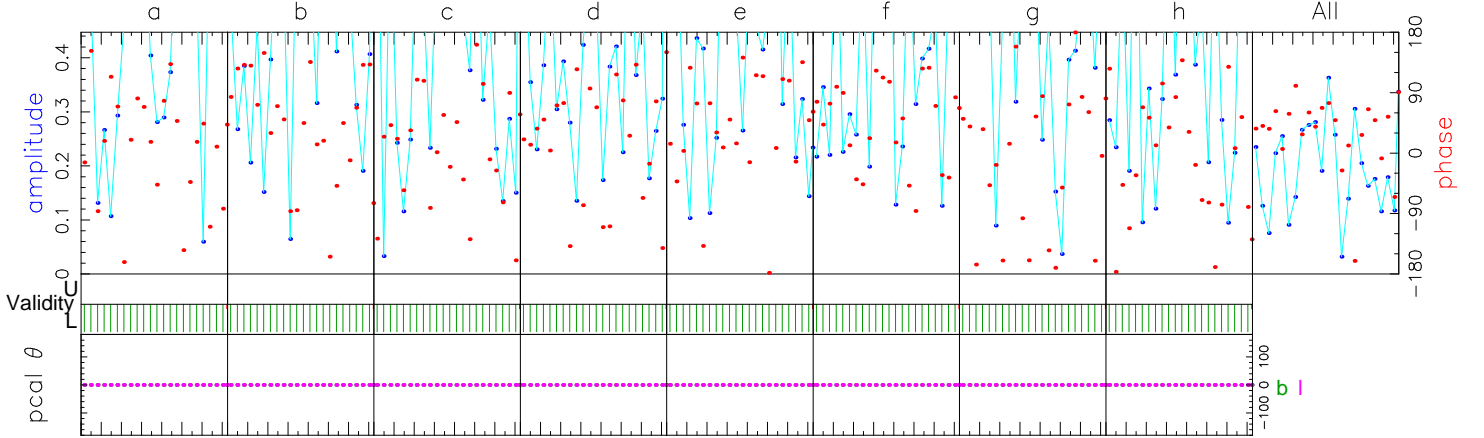
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	Ampl.	0.1
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	144.7
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.98340343841E+03		Apriori delay (usec)		-4.98352897073E+03		Resid mbdelay (usec)		5.32326E-04	+/- 3.8E-04
Sband delay (usec)	-4.98340650873E+03		Apriori clock (usec)		2.7854404E+00		Resid sbdelay (usec)		1.22462E-01	+/- 3.0E-03
Phase delay (usec)	-4.98352896921E+03		Apriori clockrate (us/s)		1.4000000E-07		Resid phdelay (usec)		1.51922E-06	+/- 6.4E-07
Delay rate (us/s)	1.14947801959E-01		Apriori rate (us/s)		1.14950882148E-01		Resid rate (us/s)		-3.08019E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.36373552497E-05		Resid phase (deg)		-312.9	+/- 20.0

ph/seg (deg) 49.1 47.9 Search (2048X32) 0.141 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

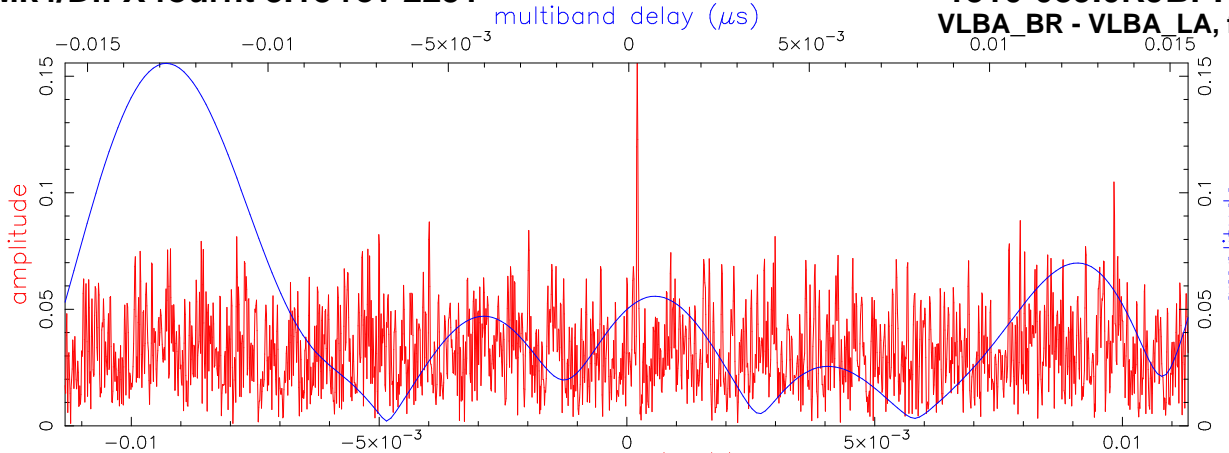
amp/seg (%) 65.7 83.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 22.4 28.3 Inc. seg. avg. 0.147 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

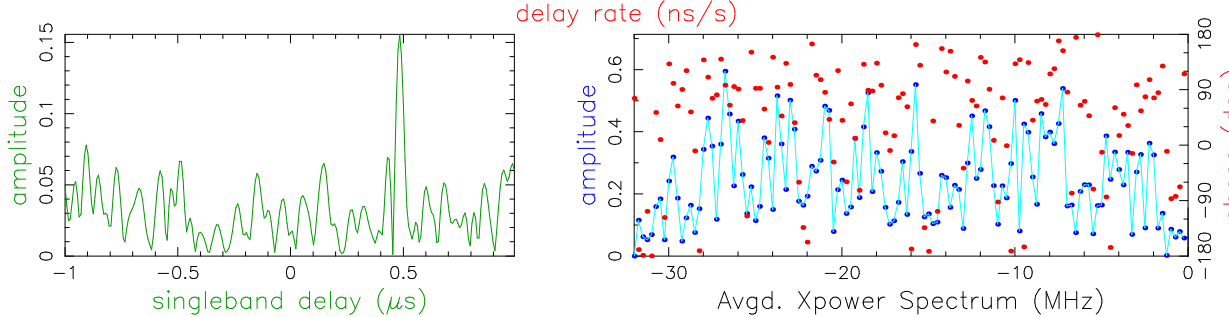
amp/frq (%) 30.2 49.4 Inc. frq. avg. 0.139 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

b: az 137.7 el 23.2 pa -27.1 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) -628.198 1098.726 ion window (TEC) 0.00 0.00

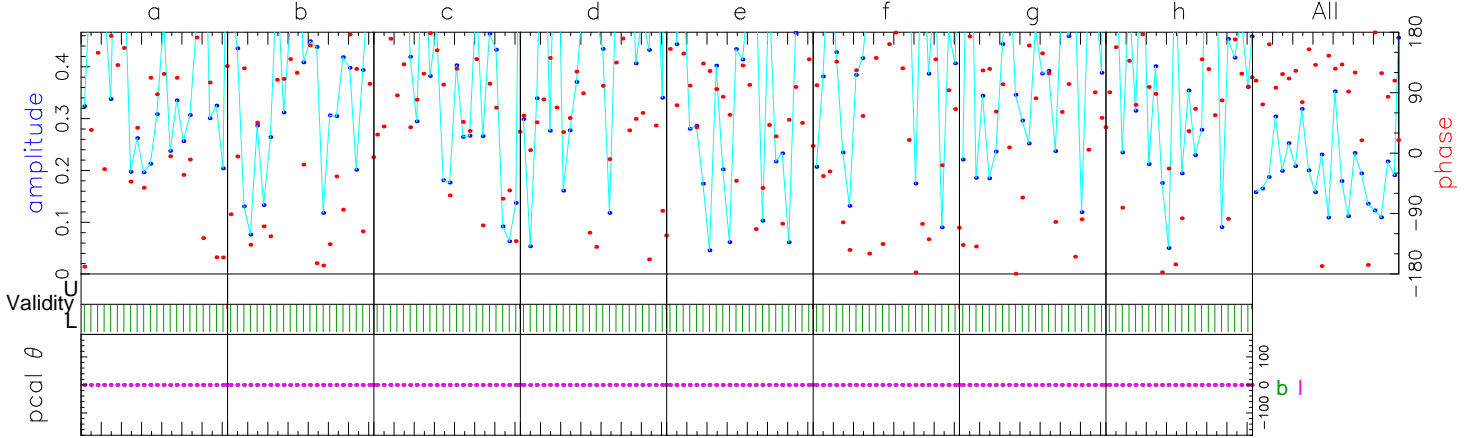
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bl..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bl.W.4.0RJBPf simultaneous interpolator



Fringe quality 0
SNR 6.2
Int time 419.827
Amp 0.156
Phase -242.9
PFD 8.9e-02
Delays (us)
SBD 0.483658
MBD -0.012820
Fringe rate (Hz) 0.018187
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110824
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



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

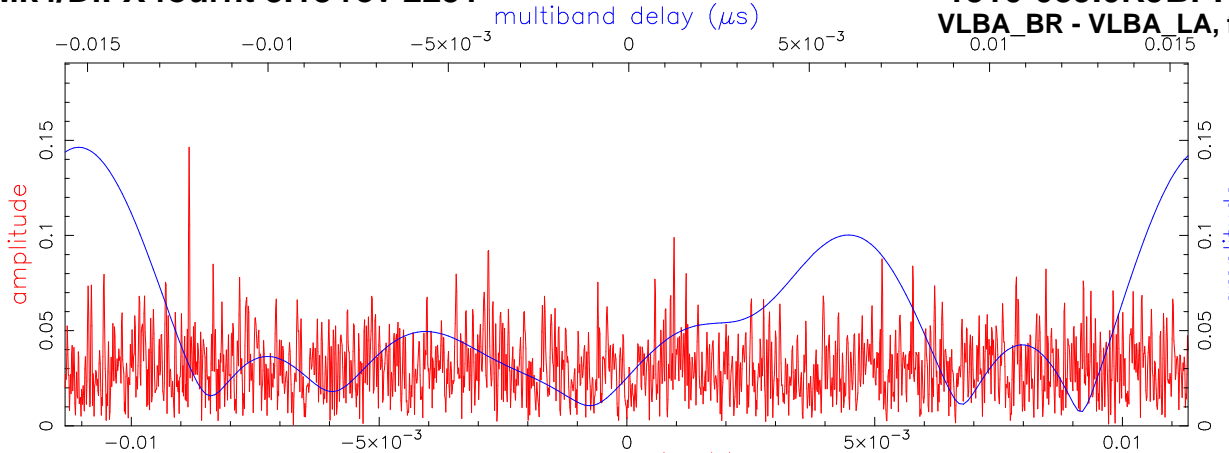


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	117.1	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	0.2	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	190.9	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

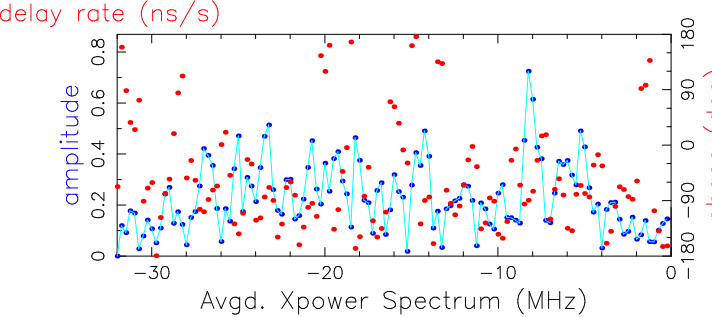
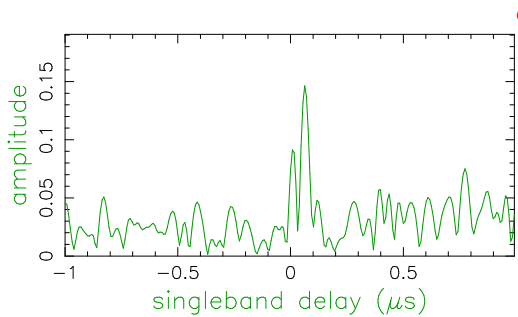
Group delay (usec)(sbd) -4.98304179061E+03 Apriori delay (usec) -4.98352897073E+03 Resid mbdelay (usec) -1.28199E-02 +/- 3.5E-04
Sband delay (usec) -4.98304531223E+03 Apriori clock (usec) 2.7854404E+00 Resid sbdelay (usec) 4.83658E-01 +/- 2.8E-03
Phase delay (usec) -4.98352896696E+03 Apriori clockrate (us/s) 1.4000000E-07 Resid phdelay (usec) 3.77466E-06 +/- 6.0E-07
Delay rate (us/s) 1.14951093279E-01 Apriori rate (us/s) 1.14950882148E-01 Resid rate (us/s) 2.11131E-07 +/- 2.5E-09
Total phase (deg) -76.9 Apriori accel (us/s/s) 2.36373552497E-05 Resid phase (deg) -242.9 +/- 18.6

RMS Theor. Amplitude 0.156 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 41.0 44.6 Search (2048X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 52.1 77.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 30.5 26.3 Inc. seg. avg. 0.153 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
amp/frq (%) 32.4 45.9 Inc. frq. avg. 0.154 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 137.7 el 23.2 pa -27.1 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) -628.198 1098.726 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bl..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bl.W.41.0RJBPf

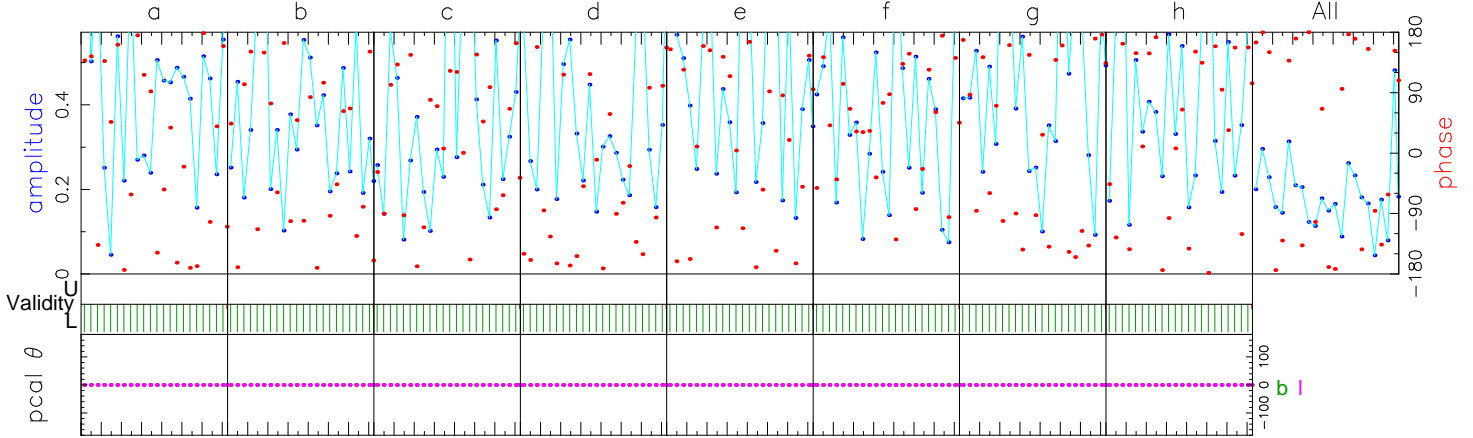


Fringe quality 0
SNR 5.8
Int time 419.827
Amp 0.191
Phase -4.9
PFD 5.6e-01
Delays (us)
SBD 0.063319
MBD -0.015250
Fringe rate (Hz)
-0.760963
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110826
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

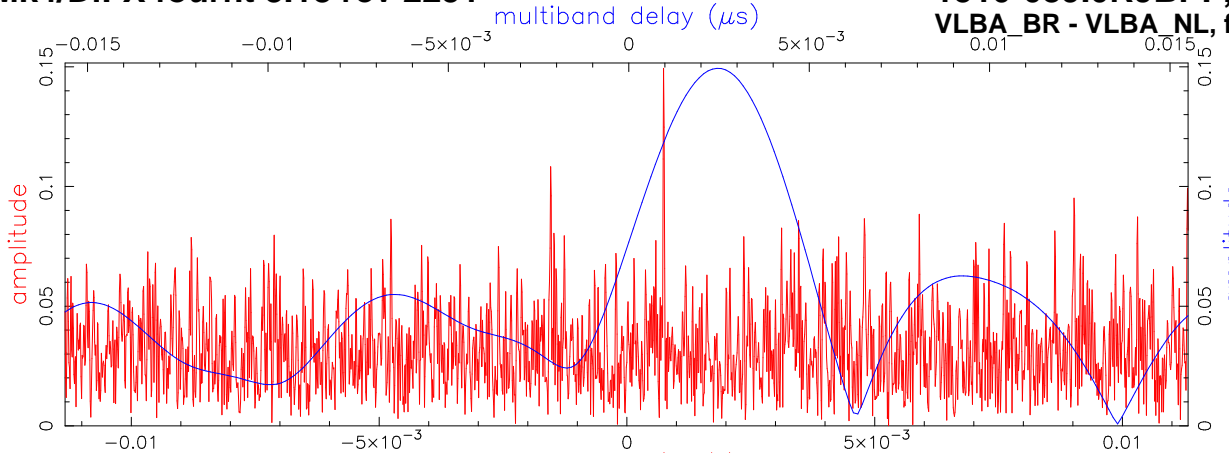


Avgd. Xpower Spectrum (MHz)

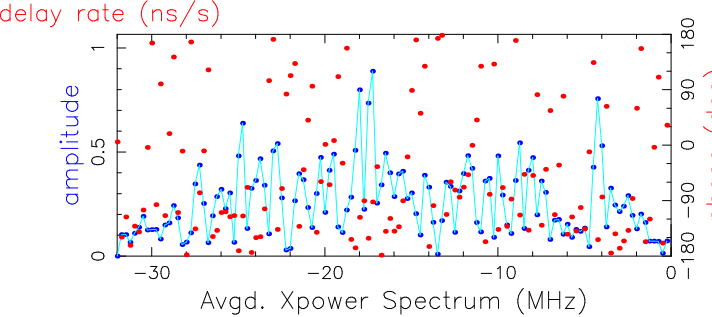
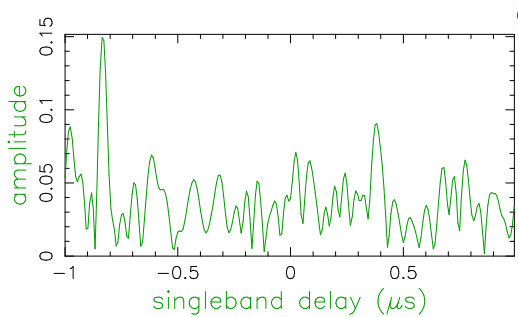
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
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	Man'l PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.98345047028E+03		Apriori delay (usec)		-4.98352897073E+03		Resid mbdelay (usec)		-1.52496E-02	+/- 3.7E-04
Sband delay (usec)	-4.98346565173E+03		Apriori clock (usec)		2.7854404E+00		Resid sbdelay (usec)		6.33190E-02	+/- 3.0E-03
Phase delay (usec)	-4.98352896508E+03		Apriori clockrate (us/s)		1.4000000E-07		Resid phdelay (usec)		5.64800E-06	+/- 6.4E-07
Delay rate (us/s)	1.14942048121E-01		Apriori rate (us/s)		1.14950882148E-01		Resid rate (us/s)		-8.83403E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.36373552497E-05		Resid phase (deg)		-4.9	+/- 19.7
	RMS	Theor.	Amplitude	0.191 +/- 0.033	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	53.7	47.3	Search (2048X32)	0.143	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000
amp/seg (%)	68.8	82.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016
ph/frq (deg)	45.6	27.9	Inc. seg. avg.	0.185	Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011	0.011
amp/frq (%)	43.4	48.7	Inc. frq. avg.	0.199	Data rate(Mb/s): 1024		ion window (TEC)		0.00	0.00
					nlags: 128 t_cohere infinite					

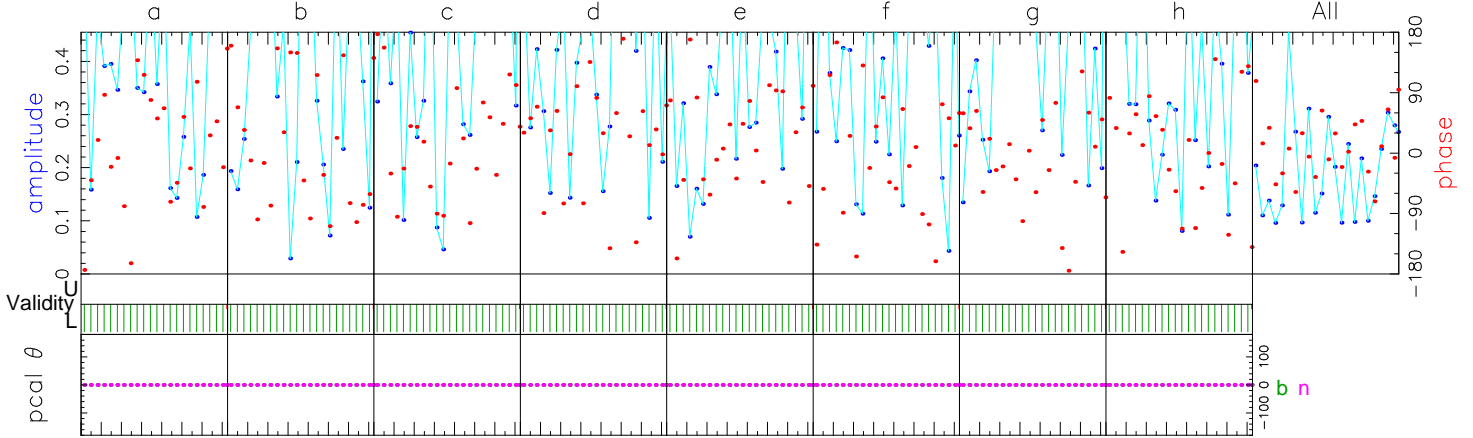


Fringe quality 0
SNR 6.0
Int time 419.827
Amp 0.152
Phase 188.3
PFD 2.3e-01
Delays (us)
SBD -0.832721
MBD 0.002509
Fringe rate (Hz) 0.063777
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512



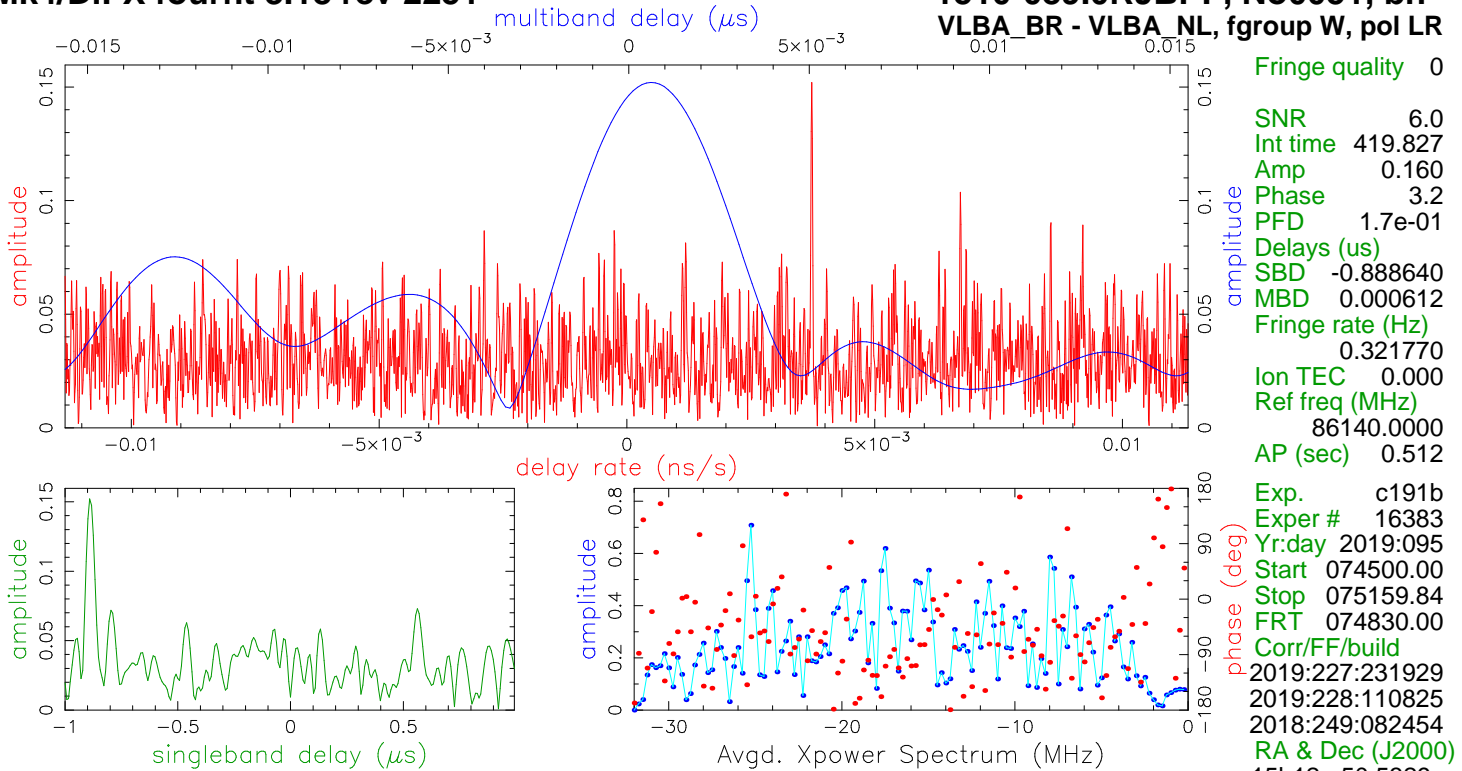
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110823
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

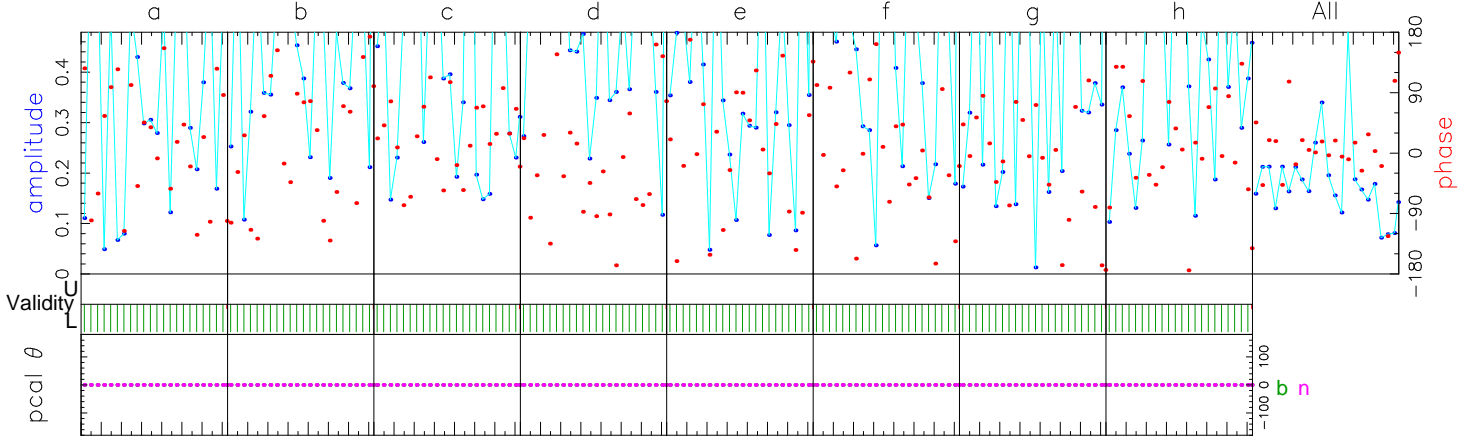


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	30.4	-49.2	23.8	51.1	11.6	-30.2	-6.6	33.3	Phase	8.3
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	85.9	65.7	86.1	216.8	59.9	52.1	12.0	82.9	Sbd box	22.4
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.64472273499E+03		Apriori delay (usec)		-4.64388149363E+03		Resid mbdelay (usec)		2.50864E-03	+/- 3.6E-04
Sband delay (usec)	-4.64471421513E+03		Apriori clock (usec)		-2.1520510E+01		Resid sbdelay (usec)		-8.32721E-01	+/- 2.9E-03
Phase delay (usec)	-4.64388149336E+03		Apriori clockrate (us/s)		-3.6299997E-07		Resid phdelay (usec)		2.68311E-07	+/- 6.2E-07
Delay rate (us/s)	4.35690552469E-01		Apriori rate (us/s)		4.35689812086E-01		Resid rate (us/s)		7.40383E-07	+/- 2.5E-09
Total phase (deg)	238.2		Apriori accel (us/s/s)		2.31657415810E-05		Resid phase (deg)		188.3	+/- 19.1

ph/seg (deg) 43.5 45.8 Search (2048X32) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 68.7 80.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.0 27.0 Inc. seg. avg. 0.149 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 22.5 47.2 Inc. frq. avg. 0.157 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 137.7 el 23.2 pa -27.1 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -2490.132 389.542 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bn.W.29.0RJBPf simultaneous interpolator



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



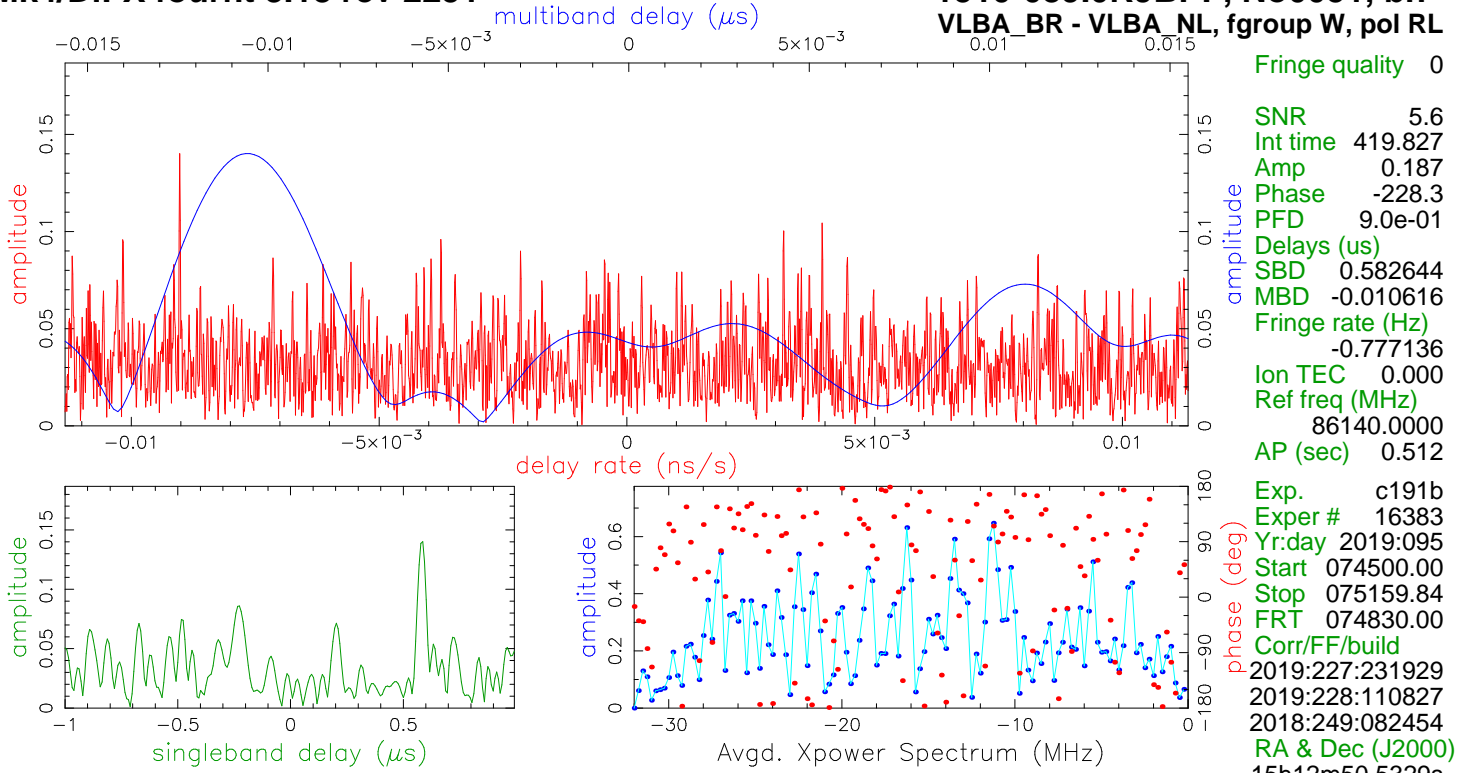
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
11.2	0.0	23.2	-47.7	23.0	-0.2	1.7	12.5	Phase	3.2
0.1	0.1	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
67.6	18.9	15.2	3.4	219.4	194.8	6.0	14.4	Sbd box	15.3
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-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 W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	

Group delay (usec)(sbd)	-4.64475588208E+03	Apriori delay (usec)	-4.64388149363E+03	Resid mbdelay (usec)	6.11555E-04	+/-	3.6E-04
Sband delay (usec)	-4.64477013313E+03	Apriori clock (usec)	-2.1520510E+01	Resid sbdelay (usec)	-8.88640E-01	+/-	2.8E-03
Phase delay (usec)	-4.64388149353E+03	Apriori clockrate (us/s)	-3.6299997E-07	Resid phdelay (usec)	1.03667E-07	+/-	6.1E-07
Delay rate (us/s)	4.35693547517E-01	Apriori rate (us/s)	4.35689812086E-01	Resid rate (us/s)	3.73543E-06	+/-	2.5E-09
Total phase (deg)	53.1	Apriori accel (us/s/s)	2.31657415810E-05	Resid phase (deg)	3.2	+/-	18.9

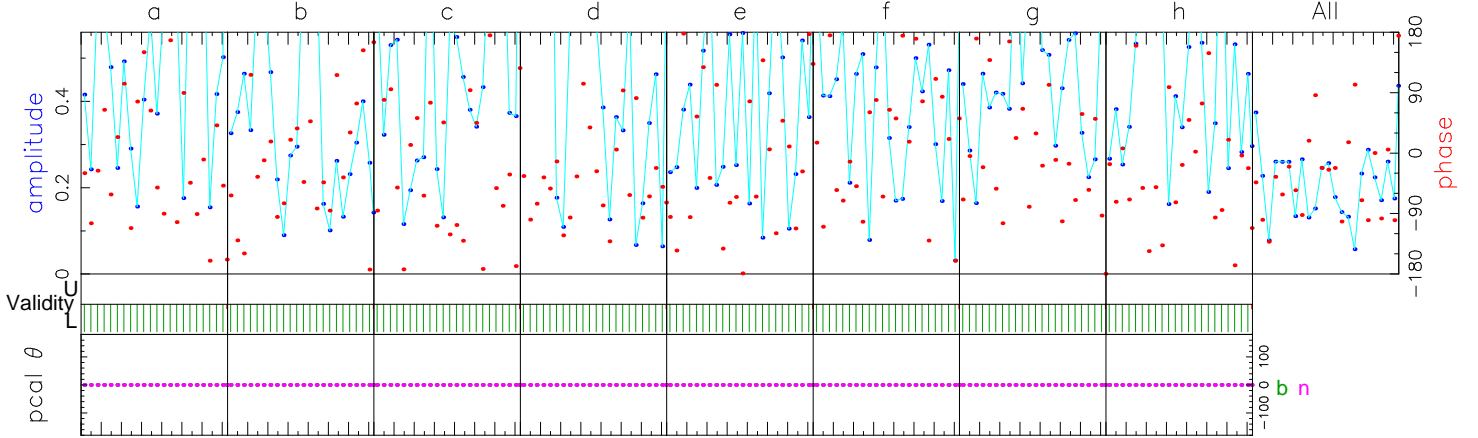
ph/seg (deg)	48.4	Theor.	45.4	Amplitude	0.160 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	61.3	Search (2048X32)	0.147	Apriori clock (usec)	0.147	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	24.3	Interp.	0.000	Apriori clockrate (us/s)	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	49.9	Inc. seg. avg.	0.149	Apriori rate (us/s)	4.35689812086E-01	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
		Inc. frq. avg.	0.156	Apriori accel (us/s/s)	2.31657415810E-05	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

b: az 137.7 el 23.2 pa -27.1 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -2490.132 389.542 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bn.W.50.0RJBPf



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

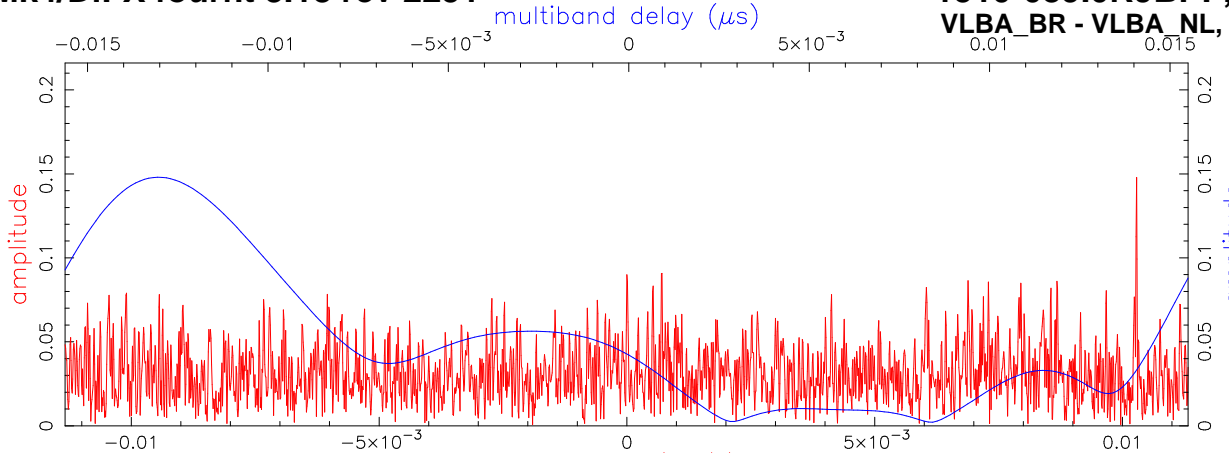


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-46.5	-27.7	-100.3	-45.0	-91.7	-28.4	-22.6	-57.9	Phase	-48.3
0.2	0.2	0.1	0.4	0.1	0.1	0.2	0.3	Ampl.	0.2
108.7	31.6	102.3	86.9	227.4	12.3	210.9	226.5	Sbd box	203.6
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
								Tracks	
Group delay (usec)(sbd)	-4.64329835991E+03		Apriori delay (usec)	-4.64388149363E+03		Resid mbdelay (usec)	-1.06163E-02	+/-	3.9E-04
Sband delay (usec)	-4.64329884963E+03		Apriori clock (usec)	-2.1520510E+01		Resid sbdelay (usec)	5.82644E-01	+/-	3.1E-03
Phase delay (usec)	-4.64388149519E+03		Apriori clockrate (us/s)	-3.6299997E-07		Resid phdelay (usec)	-1.55637E-06	+/-	6.6E-07
Delay rate (us/s)	4.35680790308E-01		Apriori rate (us/s)	4.35689812086E-01		Resid rate (us/s)	-9.02178E-06	+/-	2.7E-09
Total phase (deg)		-178.3	Apriori accel (us/s/s)	2.31657415810E-05		Resid phase (deg)	-228.3	+/-	20.4

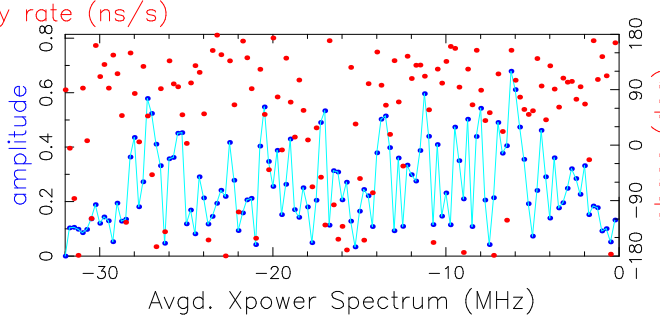
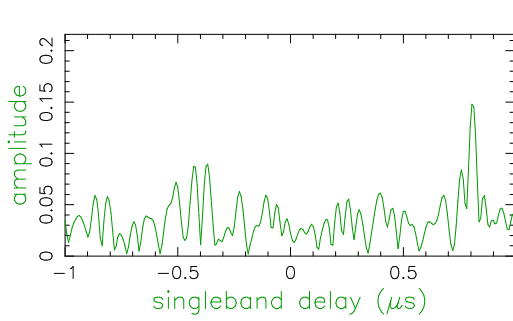
ph/seg (deg)	61.3	Theor. 48.9	Amplitude Search (2048X32)	0.187 +/- 0.033	0.138	48.9	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	70.6	85.4	Interp.	0.000	0.199	49.4	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	32.1	28.8	Inc. seg. avg.	0.178	0.178	49.4	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	49.4	50.3	Inc. frq. avg.			49.4	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011
						49.4	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 137.7 el 23.2 pa -27.1 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -2490.132 389.542 simultaneous interpolator

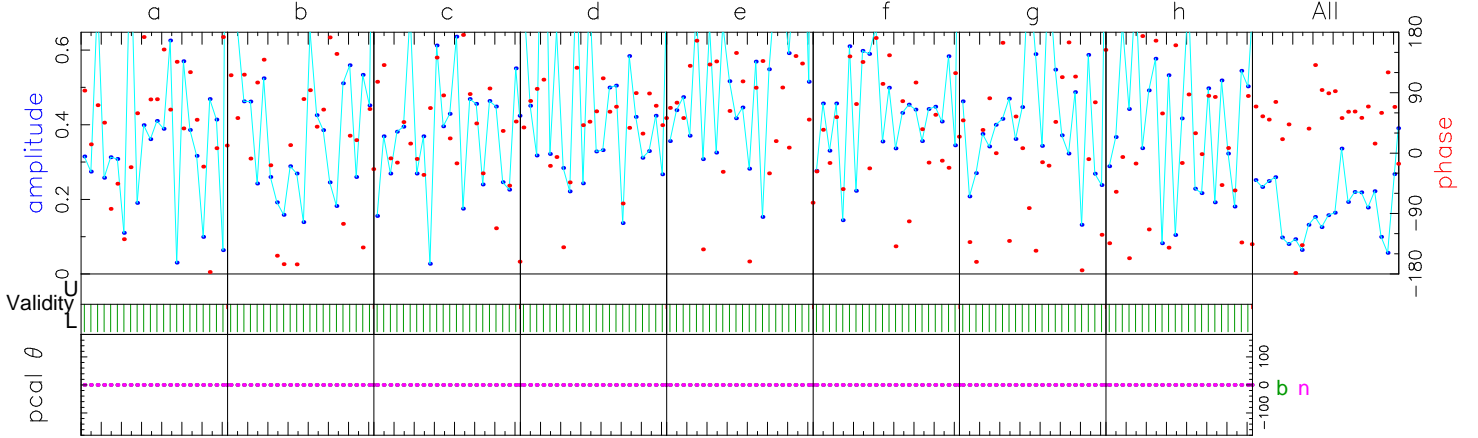
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bn.W.68.0RJBPf



Fringe quality 0
 SNR 5.9
 Int time 419.827
 Amp 0.216
 Phase -296.1
 PFD 3.0e-01
 Delays (us)
 SBD 0.807750
 MBD -0.012918
 Fringe rate (Hz)
 0.886065
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110820
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
54.6	81.4	35.9	66.3	97.4	61.1	22.6	-35.9	Phase	63.9
0.2	0.2	0.3	0.5	0.4	0.2	0.1	0.1	Ampl.	0.2
101.5	183.3	115.2	231.8	231.5	127.7	24.4	179.0	Sbd box	232.4
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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 W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-4.64308191157E+03		Apriori delay (usec)	-4.64388149363E+03		Resid mbdelay (usec)	-1.29179E-02	+/-	3.7E-04
Sband delay (usec)	-4.64307374413E+03		Apriori clock (usec)	-2.1520510E+01		Resid sbdelay (usec)	8.07750E-01	+/-	2.9E-03
Phase delay (usec)	-4.64388149157E+03		Apriori clockrate (us/s)	-3.6299997E-07		Resid phdelay (usec)	2.06048E-06	+/-	6.2E-07
Delay rate (us/s)	4.35700098425E-01		Apriori rate (us/s)	4.35689812086E-01		Resid rate (us/s)	1.02863E-05	+/-	2.6E-09
Total phase (deg)		-246.2	Apriori accel (us/s/s)	2.31657415810E-05		Resid phase (deg)	-296.1	+/-	19.3

ph/seg (deg) 50.5 46.2 47.6
 amp/seg (%) 53.9 80.7 47.6
 ph/frq (deg) 48.3 27.3
 amp/frq (%) 60.2 47.6

RMS Theor. Amplitude 0.216 +/- 0.036
 Search (2048X32) 0.145
 Interp. 0.000
 Inc. seg. avg. 0.192
 Inc. frq. avg. 0.213

Group delay (usec)(sbd) -4.64308191157E+03
 Sband delay (usec) -4.64307374413E+03
 Phase delay (usec) -4.64388149157E+03
 Delay rate (us/s) 4.35700098425E-01
 Total phase (deg) -246.2

Apriori delay (usec) -4.64388149363E+03
 Apriori clock (usec) -2.1520510E+01
 Apriori clockrate (us/s) -3.6299997E-07
 Apriori rate (us/s) 4.35689812086E-01
 Apriori accel (us/s/s) 2.31657415810E-05

Resid mbdelay (usec) -1.29179E-02
 Resid sbdelay (usec) 8.07750E-01
 Resid phdelay (usec) 2.06048E-06
 Resid rate (us/s) 1.02863E-05
 Resid phase (deg) -296.1

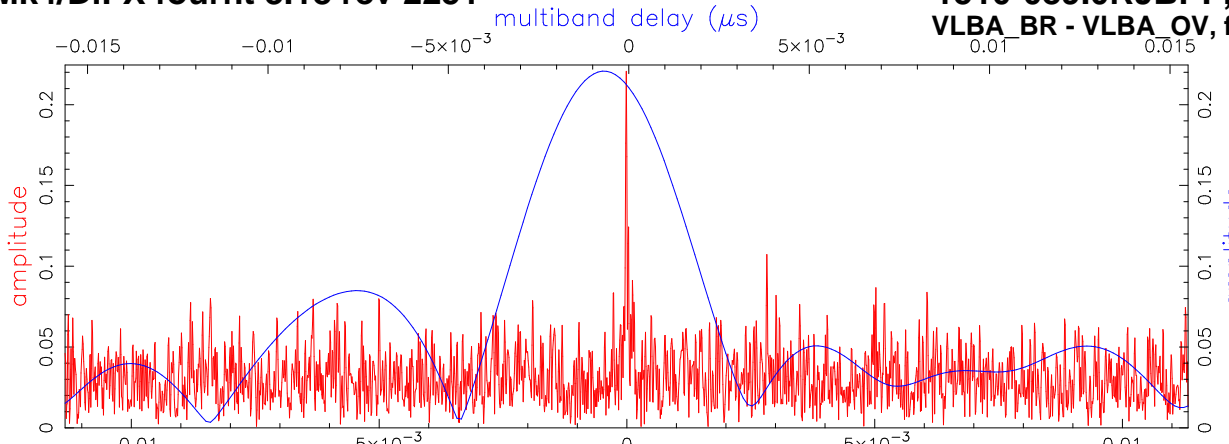
PCal mode: MANUAL, MANUAL
 PCal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2
 Sample rate(MSamp/s): 64
 Data rate(Mb/s): 1024

PC period (AP's) 5, 5
 SampCntNorm: enabled
 nlags: 128 t_cohere infinite

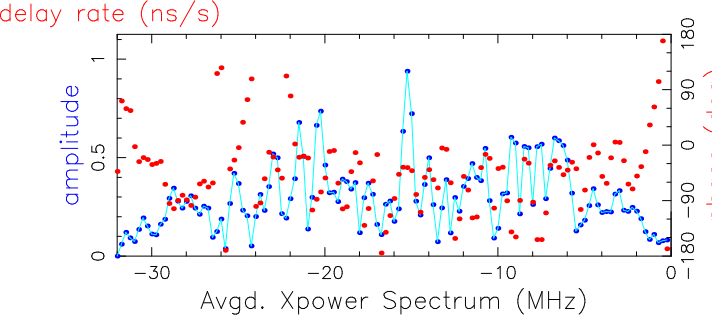
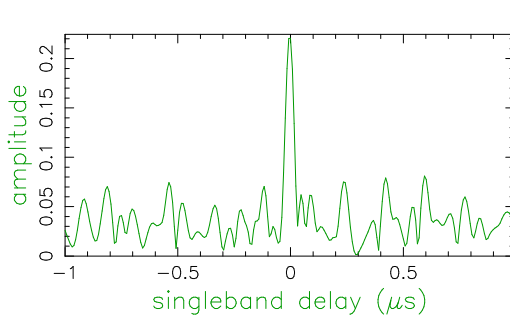
sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

b: az 137.7 el 23.2 pa -27.1 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -2490.132 389.542
 simultaneous interpolator

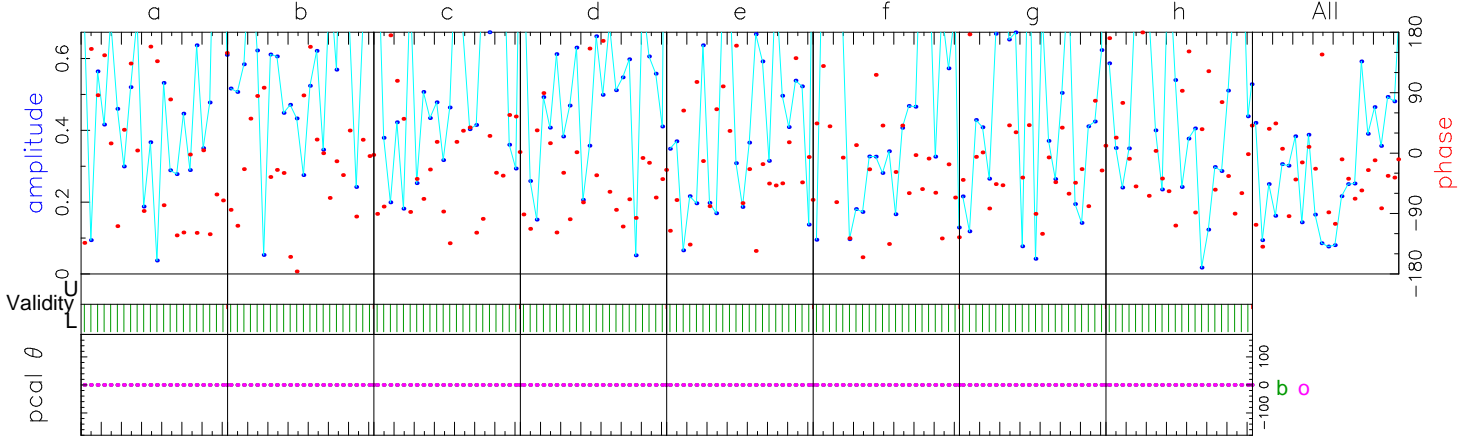
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bn.W.9.0RJBPf



Fringe quality 9
 SNR 8.9
 Int time 419.829
 Amp 0.225
 Phase -37.2
 PFD 1.1e-10
 Delays (us)
 SBD -0.003806
 MBD -0.000768
 Fringe rate (Hz)
 -0.001286
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110822
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



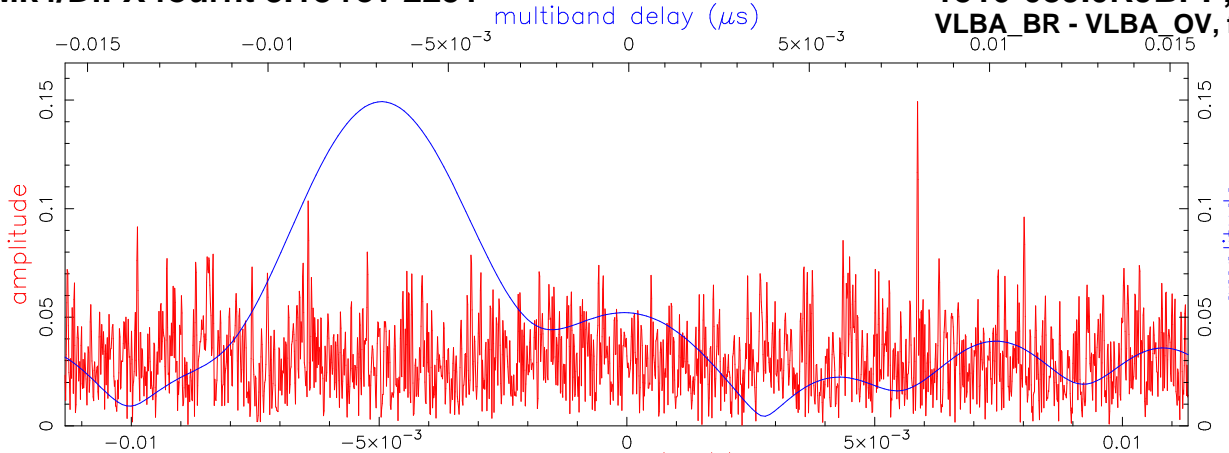
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



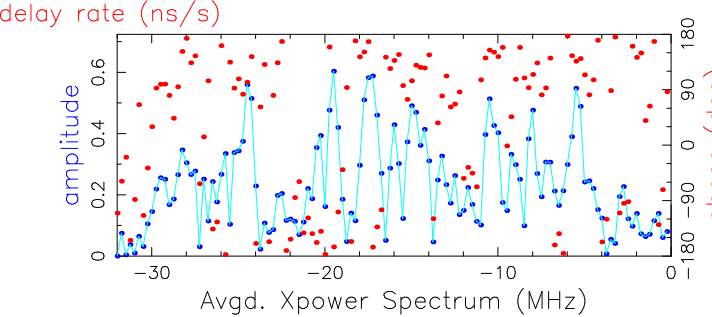
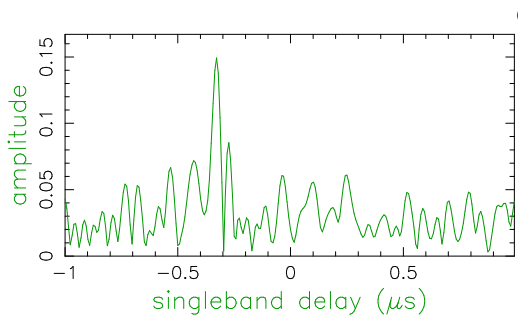
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-77.5	-13.3	-33.5	-57.3	-28.1	-29.6	-17.2	-58.7	Phase	-37.2
	0.2	0.3	0.3	0.3	0.1	0.2	0.3	0.2	Ampl.	0.2
	233.9	128.3	128.0	128.7	126.5	221.5	129.4	205.9	Sbd box	128.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.8704418884E+03		Apriori delay (usec)		-2.87044112034E+03		Resid mbdelay (usec)		-7.68072E-04	+/- 2.4E-04
Sband delay (usec)	-2.87044492684E+03		Apriori clock (usec)		-1.3372881E+01		Resid sbdelay (usec)		-3.80650E-03	+/- 1.9E-03
Phase delay (usec)	-2.87044112154E+03		Apriori clockrate (us/s)		-2.1700000E-07		Resid phdelay (usec)		-1.19815E-06	+/- 4.2E-07
Delay rate (us/s)	-9.65394851136E-02		Apriori rate (us/s)		-9.65394701786E-02		Resid rate (us/s)		-1.49350E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.26812708027E-05		Resid phase (deg)		-37.2	+/- 12.9

ph/seg (deg) 59.6 30.9 Theor. Amplitude 0.225 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.8 53.9 Search (2048X32) 0.212 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 18.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 24.2 31.8 Inc. seg. avg. 0.255 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.224 ion window (TEC) 0.00 0.00

b: az 137.7 el 23.2 pa -27.1 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 581.213 1061.635 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bo.W.27.0RJBPf

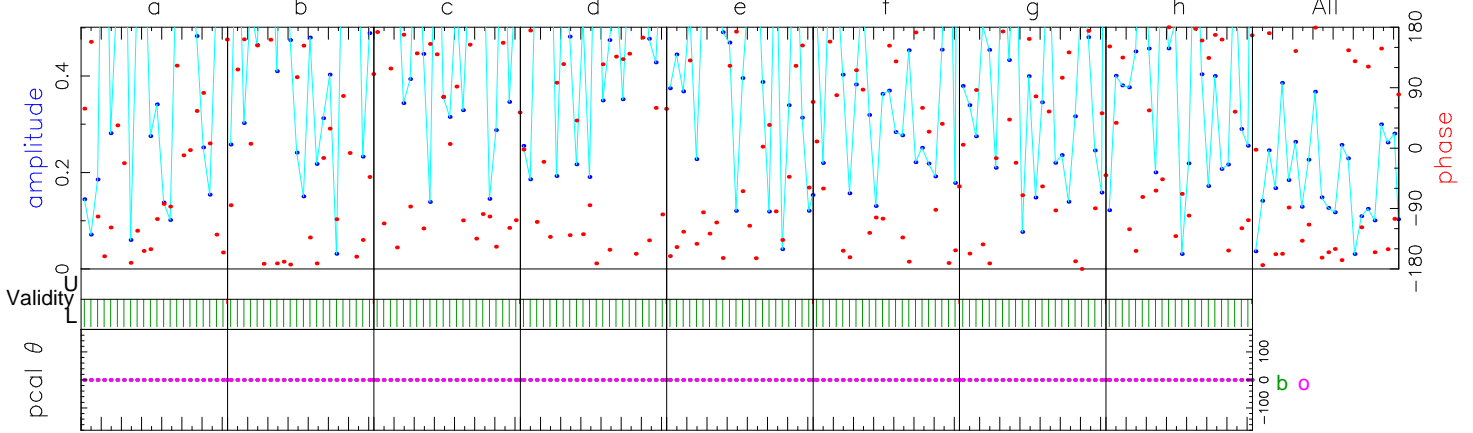


Fringe quality 0
 SNR 5.9
 Int time 419.829
 Amp 0.167
 Phase 194.5
 PFD 3.5e-01
 Delays (us)
 SBD -0.328276
 MBD -0.006849
 Fringe rate (Hz)
 0.505073
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



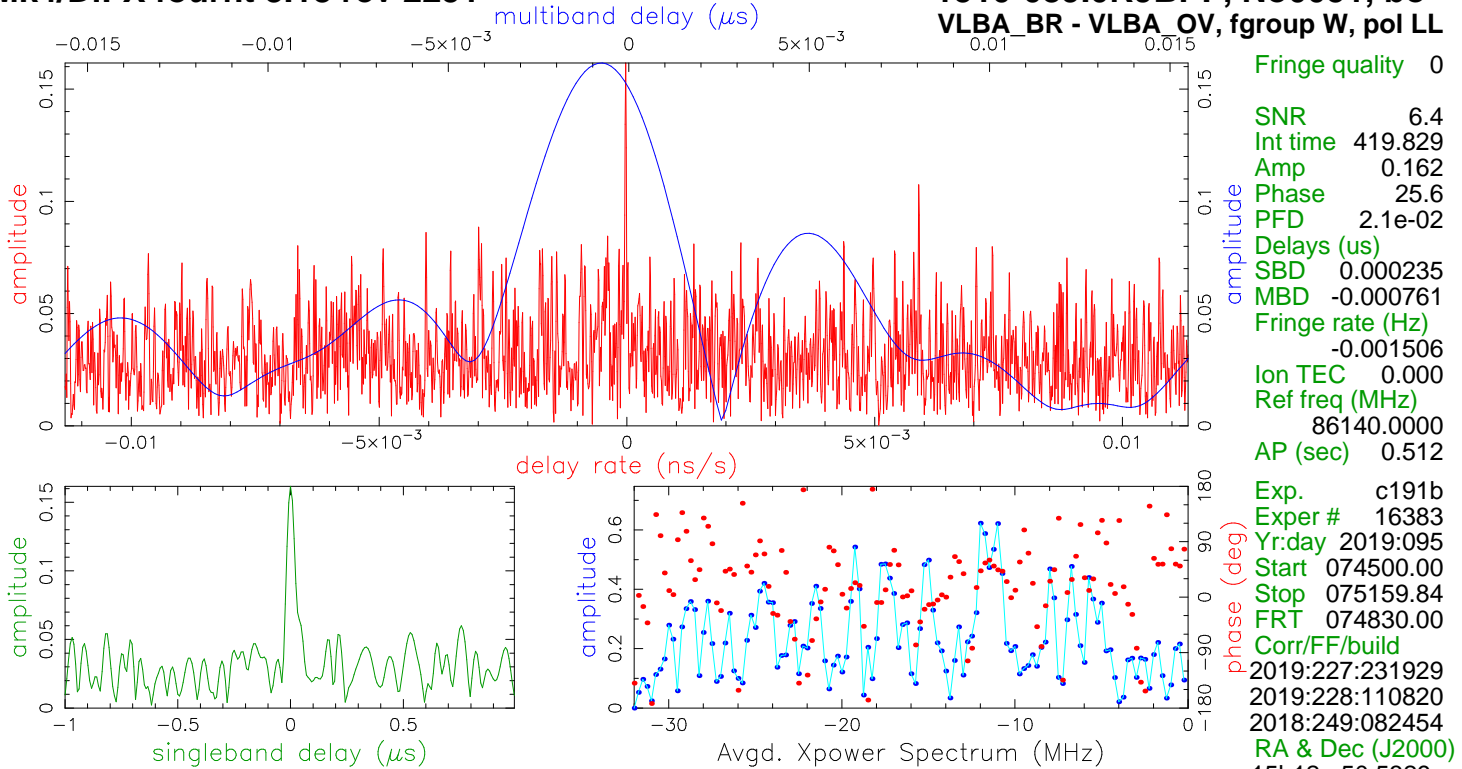
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110825
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-119.0	168.9	-171.1	-165.9	-140.7	161.7	174.5	-153.2	Phase	-165.5
	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	Ampl.	0.2
	26.1	194.7	86.1	87.9	158.5	126.3	184.8	77.0	Sbd box	87.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.87076046930E+03		Apriori delay (usec)		-2.87044112034E+03		Resid mbdelay (usec)		-6.84896E-03	+/- 3.7E-04
Sband delay (usec)	-2.87076939634E+03		Apriori clock (usec)		-1.3372881E+01		Resid sbdelay (usec)		-3.28276E-01	+/- 2.9E-03
Phase delay (usec)	-2.87044112568E+03		Apriori clockrate (us/s)		-2.1700000E-07		Resid phdelay (usec)		-5.33572E-06	+/- 6.2E-07
Delay rate (us/s)	-9.65336067864E-02		Apriori rate (us/s)		-9.65394701786E-02		Resid rate (us/s)		5.86339E-06	+/- 2.6E-09
Total phase (deg)	156.3		Apriori accel (us/s/s)		1.26812708027E-05		Resid phase (deg)		194.5	+/- 19.4

ph/seg (deg) 53.0 46.5 Theor. Amplitude 0.167 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.4 81.1 Search (2048X32) 0.141 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.1 27.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.2 47.8 Inc. seg. avg. 0.162 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 137.7 el 23.2 pa -27.1 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 581.213 1061.635 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bo.W.47.0RJBPf simultaneous interpolator



Fringe quality 0

SNR 6.4

Int time 419.829

Amp 0.162

Phase 25.6

PFD 2.1e-02

Delays (us)

SBD 0.000235

MBD -0.000761

Fringe rate (Hz)

-0.001506

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110820

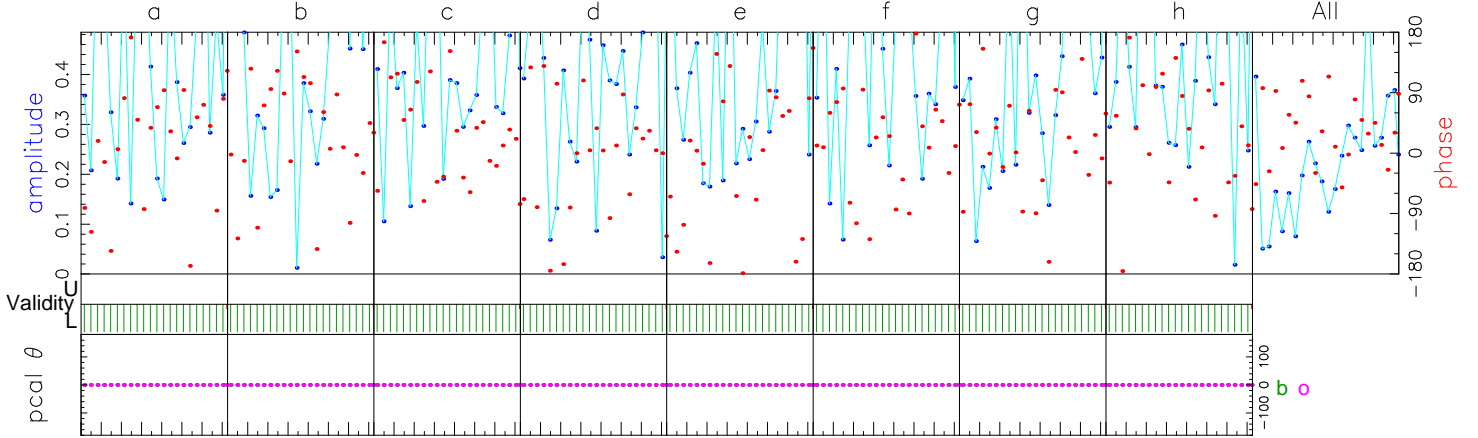
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
34.7	23.7	27.7	16.0	91.7	0.0	15.1	54.6	Phase	25.6
0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.2	Ampl.	0.2
51.3	129.9	130.3	157.1	248.2	127.8	130.9	175.6	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.87044188161E+03		Apriori delay (usec)	-2.87044112034E+03		Resid mbdelay (usec)	-7.61269E-04	+/-	3.4E-04
Sband delay (usec)	-2.87044088534E+03		Apriori clock (usec)	-1.3372881E+01		Resid sbdelay (usec)	2.35000E-04	+/-	2.7E-03
Phase delay (usec)	-2.87044111951E+03		Apriori clockrate (us/s)	-2.1700000E-07		Resid phdelay (usec)	8.26729E-07	+/-	5.8E-07
Delay rate (us/s)	-9.65394876566E-02		Apriori rate (us/s)	-9.65394701786E-02		Resid rate (us/s)	-1.74780E-08	+/-	2.4E-09
Total phase (deg)		-12.6	Apriori accel (us/s/s)	1.26812708027E-05		Resid phase (deg)	25.6	+/-	17.9

ph/seg (deg) 49.5 42.9 Search (2048X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

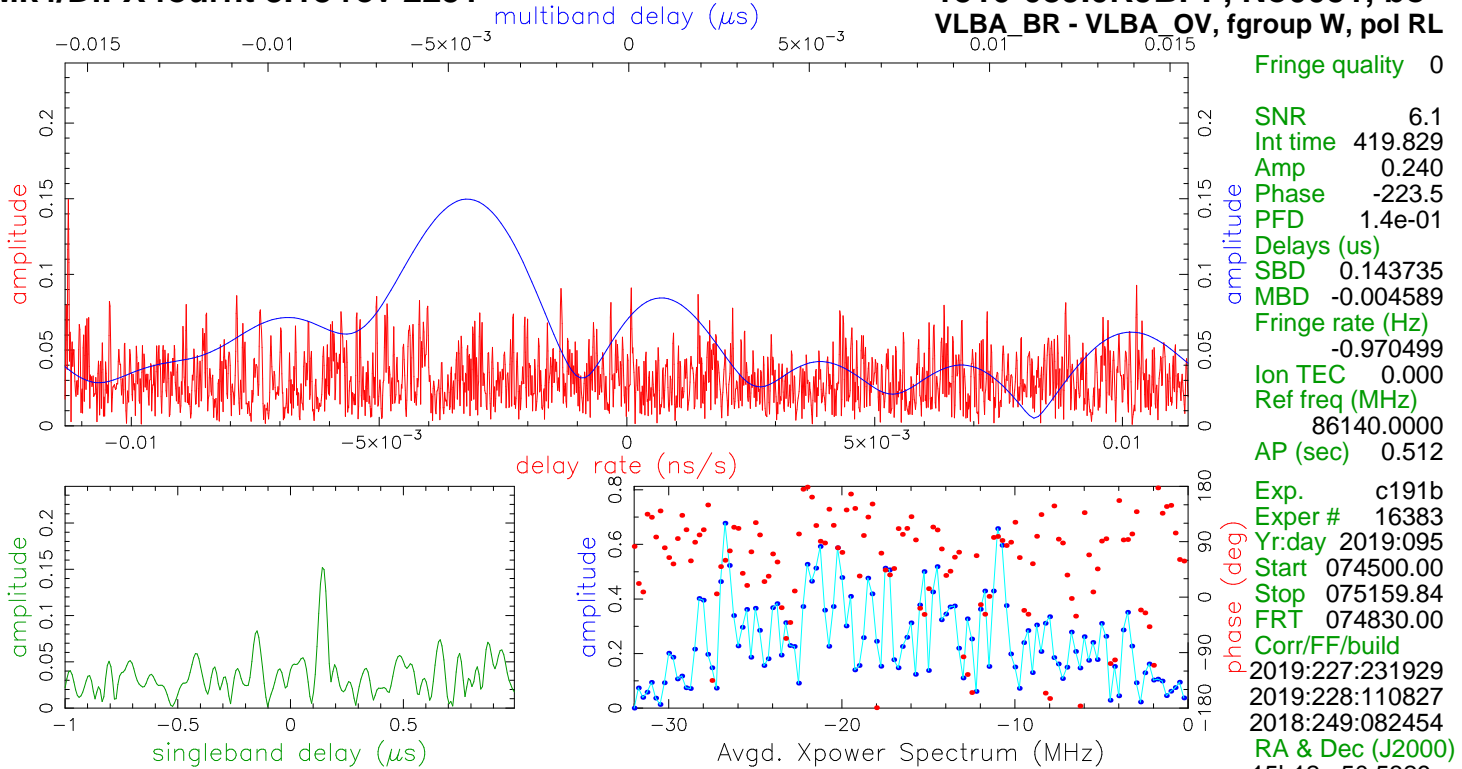
amp/seg (%) 86.8 74.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 32.0 25.3 Inc. seg. avg. 0.180 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 37.7 44.2 Inc. frq. avg. 0.156 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

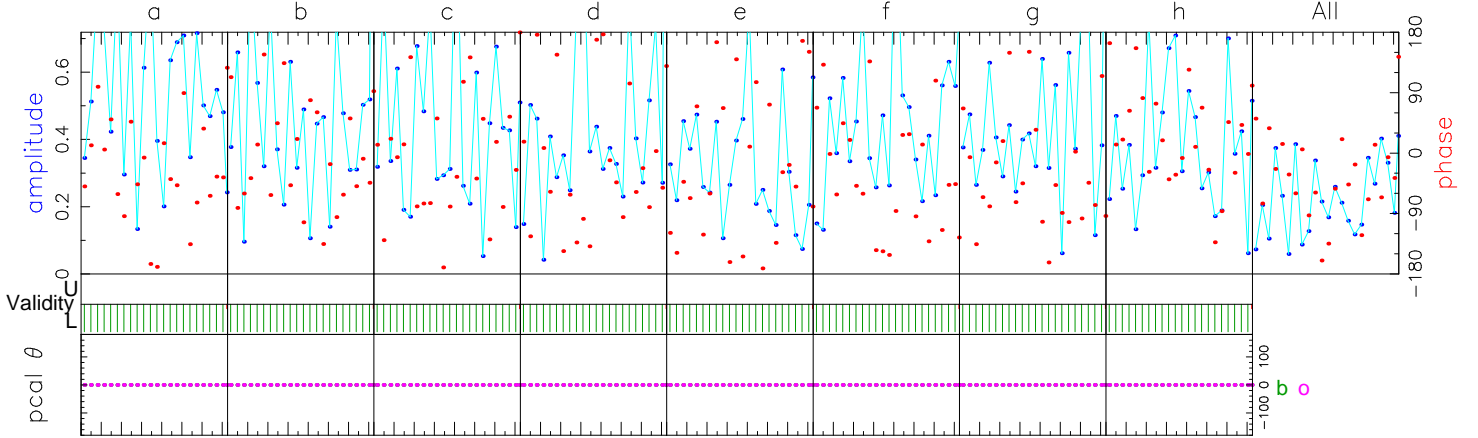
b: az 137.7 el 23.2 pa -27.1 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 581.213 1061.635 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bo.W.5.0RJBPf



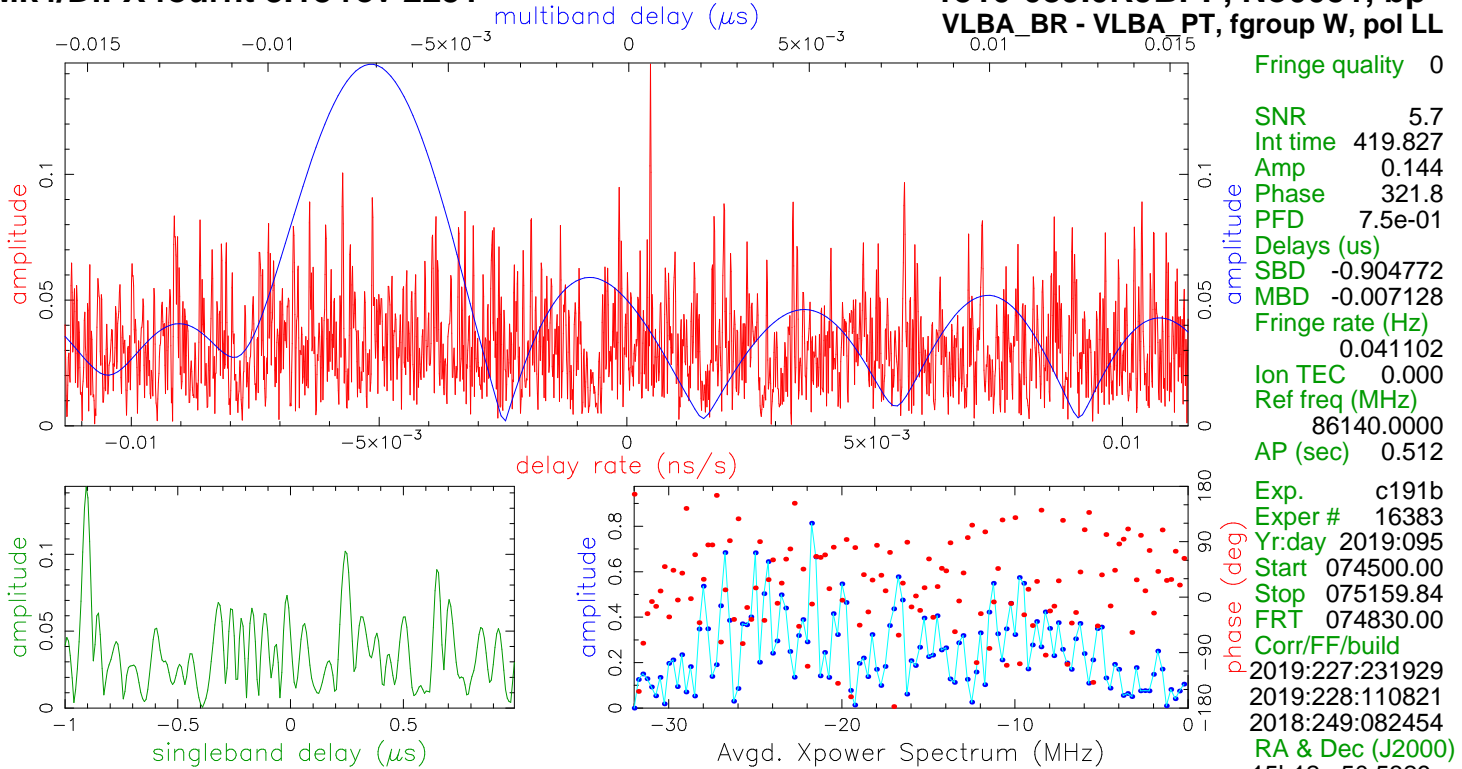
Fringe quality 0
SNR 6.1
Int time 419.829
Amp 0.240
Phase -223.5
PFD 1.4e-01
Delays (us)
SBD 0.143735
MBD -0.004589
Fringe rate (Hz)
-0.970499
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110827
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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



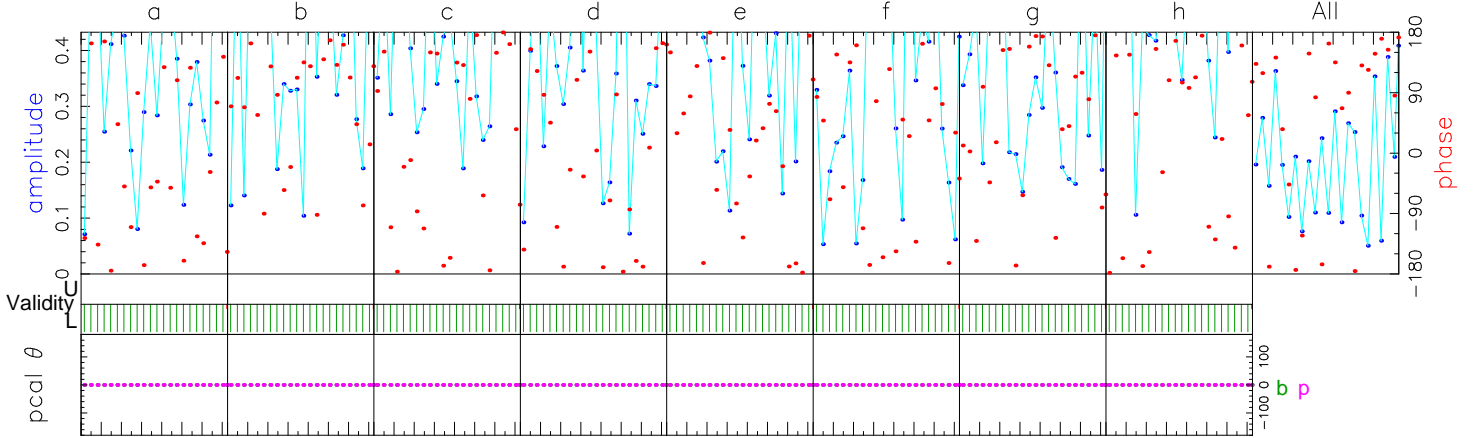
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-20.5	-39.5	-47.1	-103.9	-88.4	-55.5	-65.8	14.3	Phase	-43.5
	0.3	0.3	0.3	0.2	0.1	0.3	0.3	0.3	Ampl.	0.3
	146.2	147.9	147.7	249.9	127.9	1.8	146.5	147.4	Sbd box	147.4
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	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		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.87028945982E+03		Apriori delay (usec)		-2.87044112034E+03		Resid mbdelay (usec)		-4.58948E-03	+/- 3.6E-04
Sband delay (usec)	-2.87029738484E+03		Apriori clock (usec)		-1.3372881E+01		Resid sbdelay (usec)		1.43735E-01	+/- 2.8E-03
Phase delay (usec)	-2.87044112174E+03		Apriori clockrate (us/s)		-2.1700000E-07		Resid phdelay (usec)		-1.40268E-06	+/- 6.1E-07
Delay rate (us/s)	-9.65507367054E-02		Apriori rate (us/s)		-9.65394701786E-02		Resid rate (us/s)		-1.12665E-05	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.26812708027E-05		Resid phase (deg)		-223.5	+/- 18.8

ph/seg (deg) 55.8 45.2 Search (2048X32) 0.144 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 81.1 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) 41.2 26.6 Inc. seg. avg. 0.261 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 39.6 46.5 Inc. frq. avg. 0.251 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 137.7 el 23.2 pa -27.1 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 581.213 1061.635 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bo.W.67.0RJBPf simultaneous interpolator



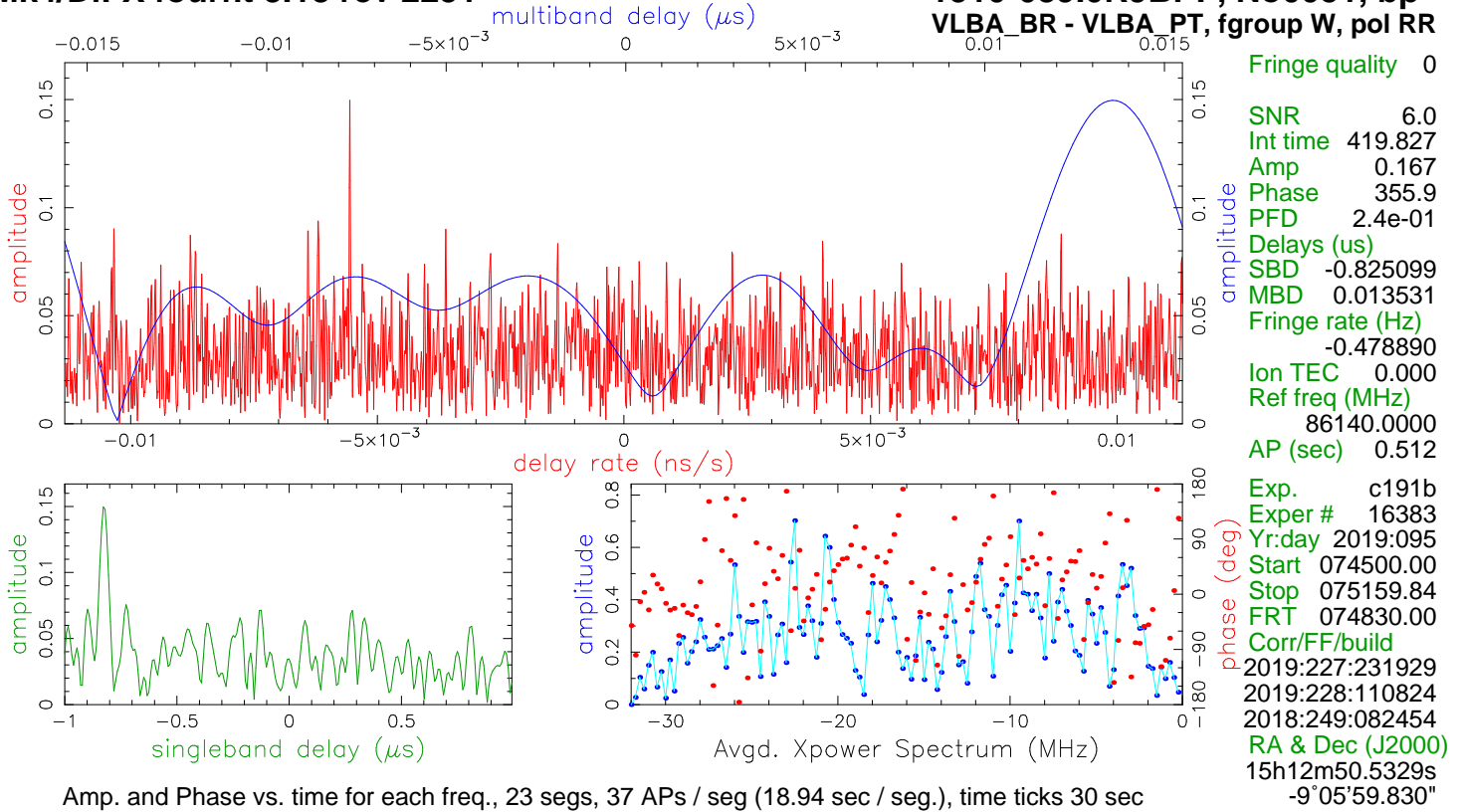
Fringe quality 0
 SNR 5.7
 Int time 419.827
 Amp 0.144
 Phase 321.8
 PFD 7.5e-01
 Delays (us)
 SBD -0.904772
 MBD -0.007128
 Fringe rate (Hz) 0.041102
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110821
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

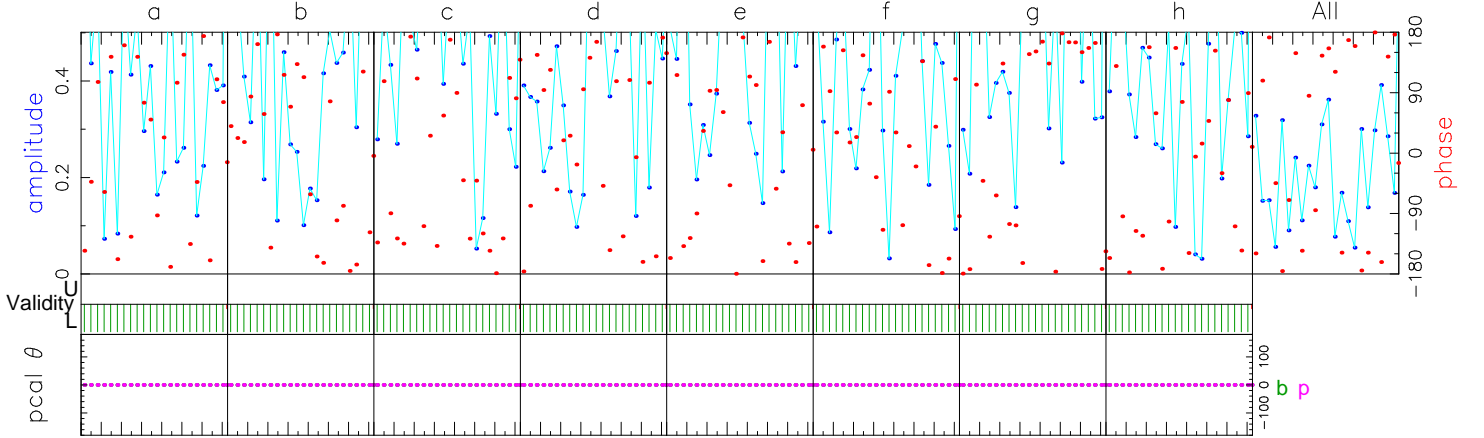


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	178.1	117.6	161.7	144.3	118.6	120.7	129.8	155.0	Phase	141.8
	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	213.2	12.7	14.7	1.4	235.1	122.2	112.9	13.8	Sbd box	13.2
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs 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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.10671125582E+03		Apriori delay (usec)		-5.10579787799E+03		Resid mbdelay (usec)		-7.12784E-03	+/- 3.8E-04
Sband delay (usec)	-5.10670264949E+03		Apriori clock (usec)		-7.3589420E+00		Resid sbdelay (usec)		-9.04772E-01	+/- 3.0E-03
Phase delay (usec)	-5.10579787342E+03		Apriori clockrate (us/s)		-2.8199998E-07		Resid phdelay (usec)		4.57192E-06	+/- 6.5E-07
Delay rate (us/s)	6.81631433108E-02		Apriori rate (us/s)		6.81626661624E-02		Resid rate (us/s)		4.77148E-07	+/- 2.7E-09
Total phase (deg)	246.2		Apriori accel (us/s/s)		2.38555558543E-05		Resid phase (deg)		321.8	+/- 20.1

ph/seg (deg) 58.7 48.1 Theor. Amplitude 0.144 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.9 84.0 Search (2048X32) 0.139 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 28.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.5 49.5 Inc. seg. avg. 0.146 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 137.7 el 23.2 pa -27.1 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -356.245 1280.302 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bp.W.13.0RJBPf simultaneous interpolator

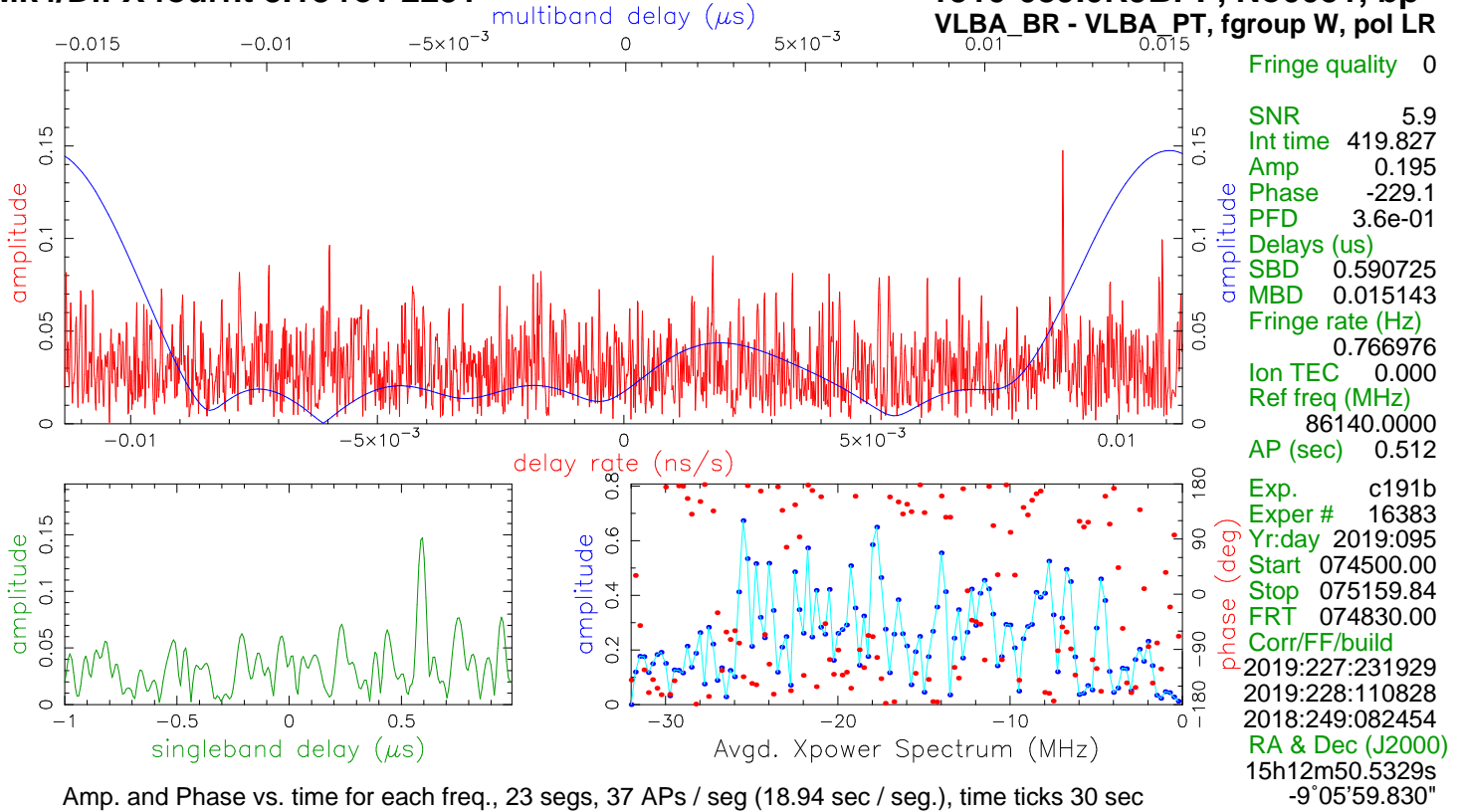


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

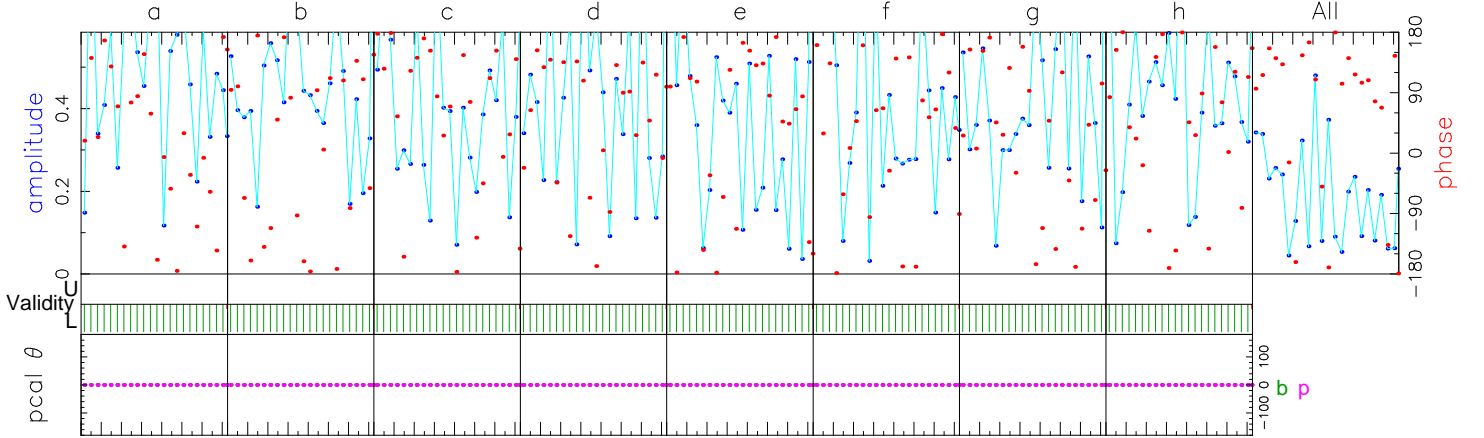


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
167.7	149.8	-160.0	174.5	-173.8	3.8	168.9	-175.3	Phase	175.9
0.2	0.1	0.2	0.2	0.2	0.1	0.4	0.2	Ampl.	0.2
177.1	211.8	115.2	52.0	97.2	59.7	22.8	90.9	Sbd box	23.4
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
Group delay (usec)(sbd)	-5.10662809675E+03	Apriori delay (usec)	-5.10579787799E+03	Resid mbdelay (usec)	1.35312E-02	+/-	3.6E-04		
Sband delay (usec)	-5.10662297649E+03	Apriori clock (usec)	-7.3589420E+00	Resid sbdelay (usec)	-8.25099E-01	+/-	2.9E-03		
Phase delay (usec)	-5.10579787232E+03	Apriori clockrate (us/s)	-2.8199998E-07	Resid phdelay (usec)	5.67186E-06	+/-	6.2E-07		
Delay rate (us/s)	6.81571067194E-02	Apriori rate (us/s)	6.81626661624E-02	Resid rate (us/s)	-5.55944E-06	+/-	2.5E-09		
Total phase (deg)	280.3	Apriori accel (us/s/s)	2.38555558543E-05	Resid phase (deg)	355.9	+/-	19.1		

ph/seg (deg) 57.1 45.9 Search (2048X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.4 80.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.1 27.1 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.5 47.3 Inc. frq. avg. 0.168 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 137.7 el 23.2 pa -27.1 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -356.245 1280.302 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bp.W.43.0RJBPf simultaneous interpolator



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



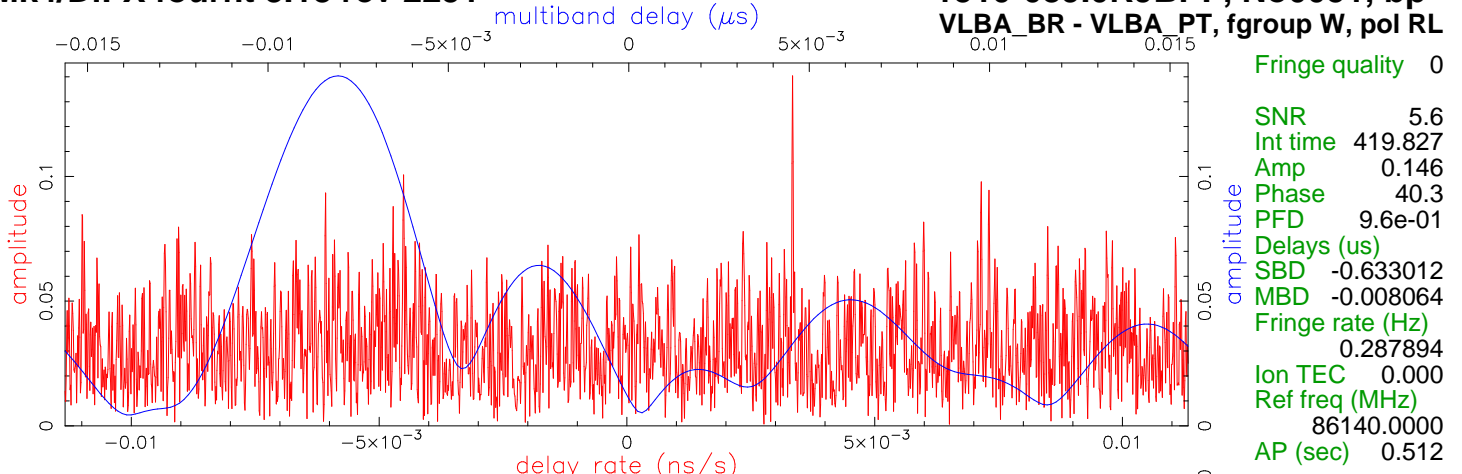
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
127.6	155.2	123.5	117.2	142.3	109.0	151.8	141.1	Phase	130.9
0.1	0.2	0.3	0.2	0.2	0.3	0.1	0.2	Ampl.	0.2
213.6	122.3	181.9	233.2	76.5	122.1	62.9	235.1	Sbd box	204.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-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	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
								Tracks	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
								Tracks	

Group delay (usec)(sbd)	-5.10522023456E+03	Apriori delay (usec)	-5.10579787799E+03	Resid mbdelay (usec)	1.51434E-02	+/-	3.7E-04
Sband delay (usec)	-5.10520715349E+03	Apriori clock (usec)	-7.3589420E+00	Resid sbdelay (usec)	5.90725E-01	+/-	2.9E-03
Phase delay (usec)	-5.10579787377E+03	Apriori clockrate (us/s)	-2.8199998E-07	Resid phdelay (usec)	4.22118E-06	+/-	6.3E-07
Delay rate (us/s)	6.81715699903E-02	Apriori rate (us/s)	6.81626661624E-02	Resid rate (us/s)	8.90383E-06	+/-	2.6E-09
Total phase (deg)	-304.6	Apriori accel (us/s/s)	2.38555558543E-05	Resid phase (deg)	-229.1	+/-	19.4

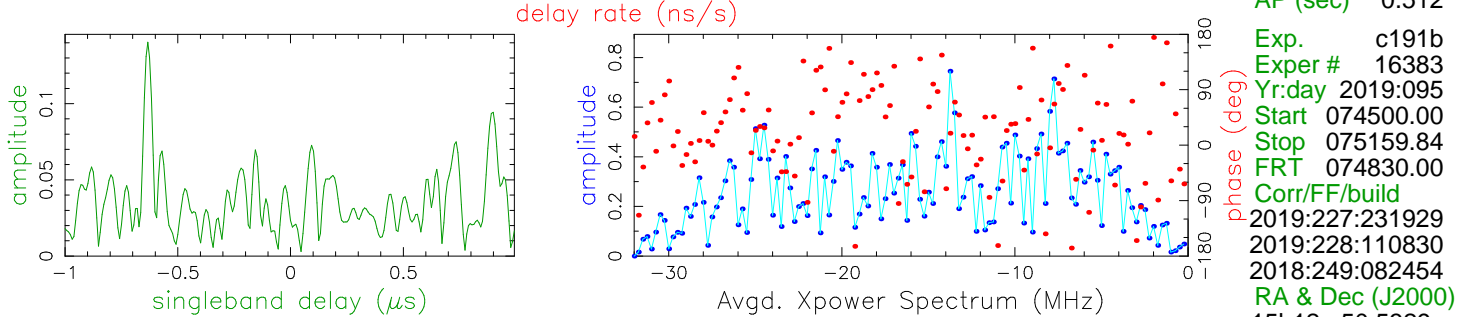
ph/seg (deg)	62.2	Theor.	46.5	Amplitude	0.195 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	86.0	Search (2048X32)	0.144	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	18.2	Interp.	0.000	Inc. seg. avg.	0.187	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	28.8	Inc. frq. avg.	0.180	Inc. frq. avg.	0.180	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

b: az 137.7 el 23.2 pa -27.1 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -356.245 1280.302 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bp.W.74.0RJBPf

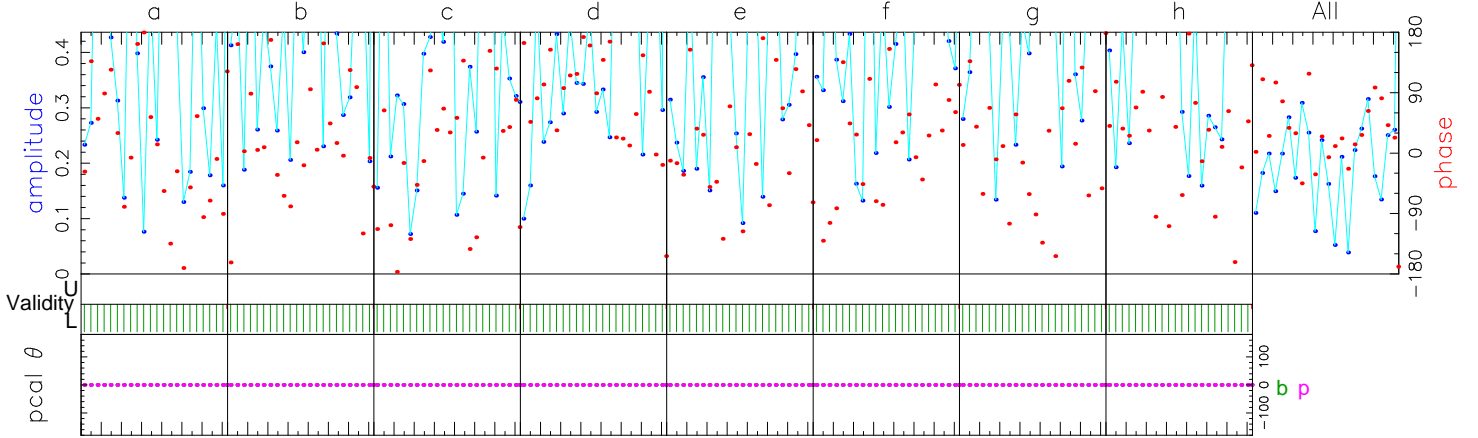


Fringe quality 0
 SNR 5.6
 Int time 419.827
 Amp 0.146
 Phase 40.3
 PFD 9.6e-01
 Delays (us)
 SBD -0.633012
 MBD -0.008064
 Fringe rate (Hz)
 0.287894
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512



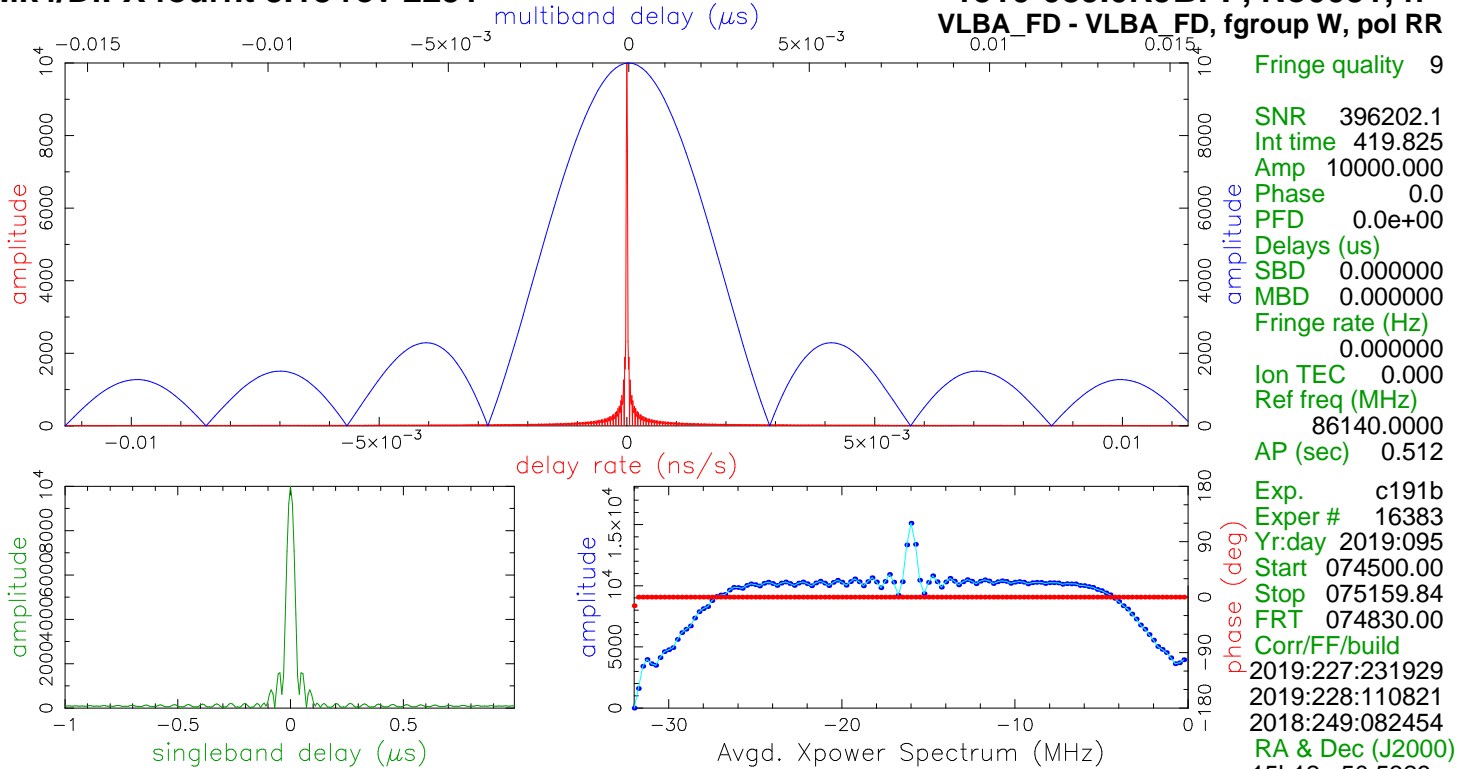
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110830
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



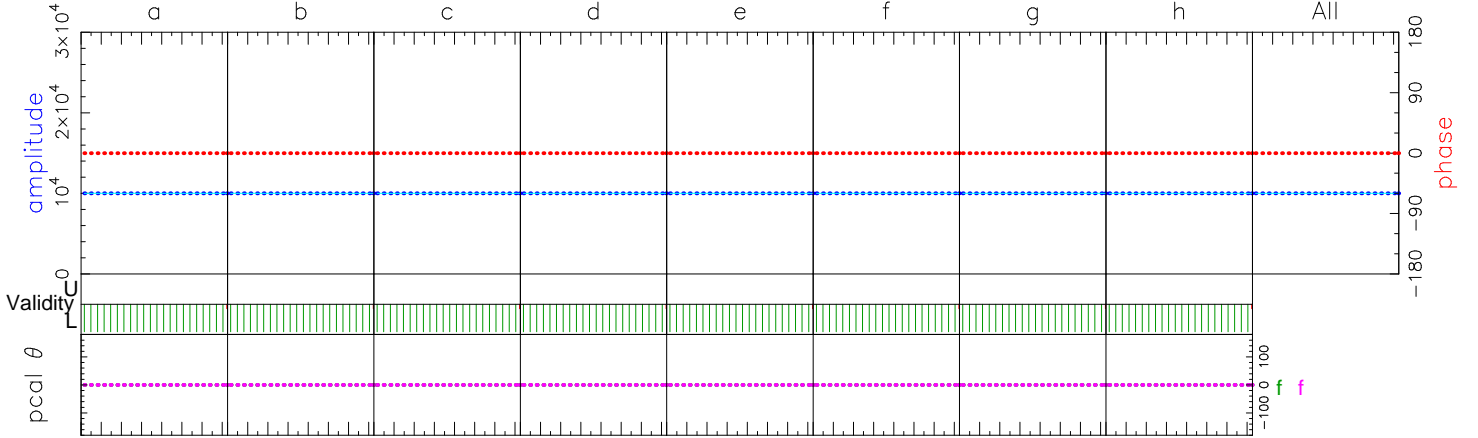
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
14.8	35.5	55.1	75.4	26.2	29.7	0.9	45.9	Phase	40.3
0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
98.6	83.5	246.3	46.8	27.7	239.3	57.3	218.5	Sbd box	48.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
b:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
b 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
b W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	-5.10643094208E+03	Apriori delay (usec)	-5.10579787799E+03	Resid mbdelay (usec)	-8.06409E-03	+/-	3.9E-04		
Sband delay (usec)	-5.10643089049E+03	Apriori clock (usec)	-7.3589420E+00	Resid sbdelay (usec)	-6.33012E-01	+/-	3.1E-03		
Phase delay (usec)	-5.10579787669E+03	Apriori clockrate (us/s)	-2.8199998E-07	Resid phdelay (usec)	1.30059E-06	+/-	6.6E-07		
Delay rate (us/s)	6.81660083316E-02	Apriori rate (us/s)	6.81626661624E-02	Resid rate (us/s)	3.34217E-06	+/-	2.7E-09		
Total phase (deg)	324.8	Apriori accel (us/s/s)	2.38555558543E-05	Resid phase (deg)	40.3	+/-	20.6		

ph/seg (deg) 46.9 49.4 Search (2048X32) 0.138 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.6 86.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.9 29.1 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 29.6 50.9 Inc. frq. avg. 0.138 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 137.7 el 23.2 pa -27.1 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -356.245 1280.302 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/bp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/bp.W.87.0RJBPf simultaneous interpolator



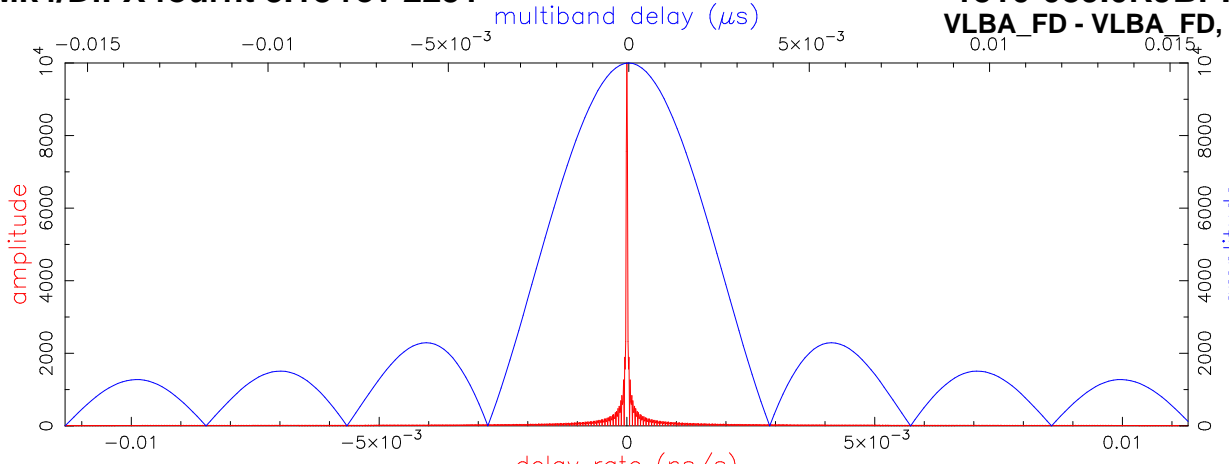
Fringe quality 9
 SNR 396202.1
 Int time 419.825
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110821
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

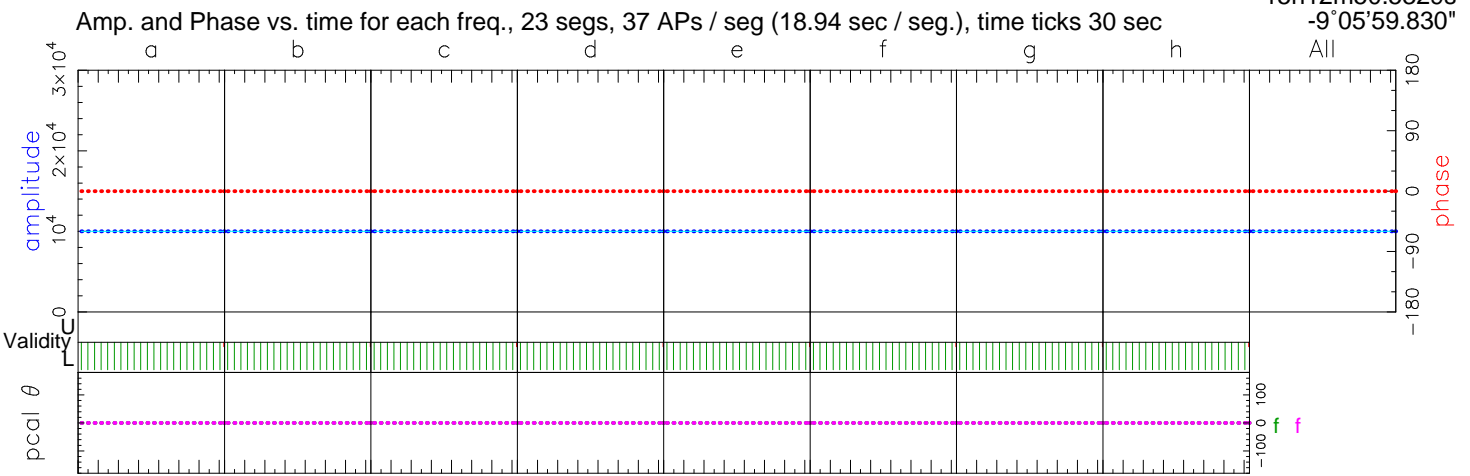
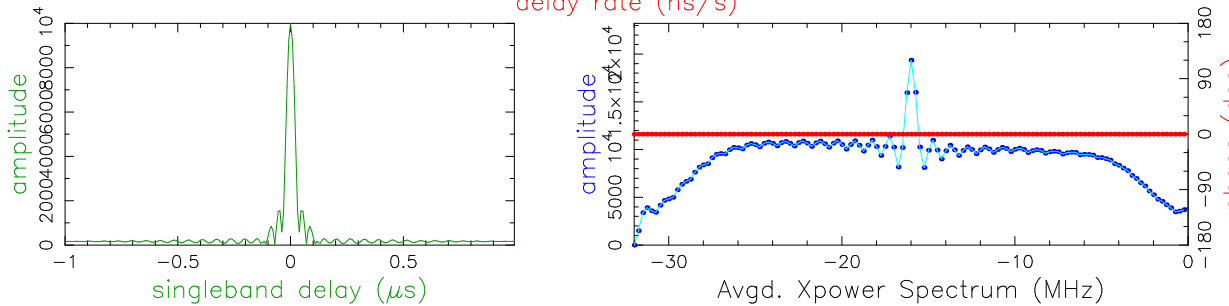


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820			
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000			
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
f	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR			
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR			
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 5.5E-09	
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 4.3E-08	
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 9.3E-12	
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		+/- 3.8E-14	
Total phase (deg)			0.0							0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/ff..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/ff.W.18.0RJBPf simultaneous interpolator

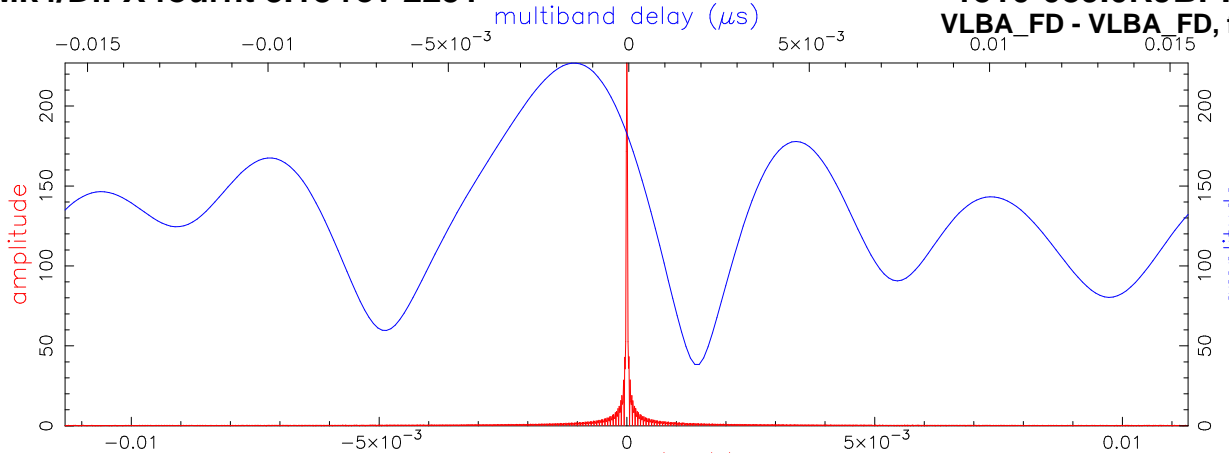


Fringe quality 9
 SNR 396202.1
 Int time 419.825
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110819
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

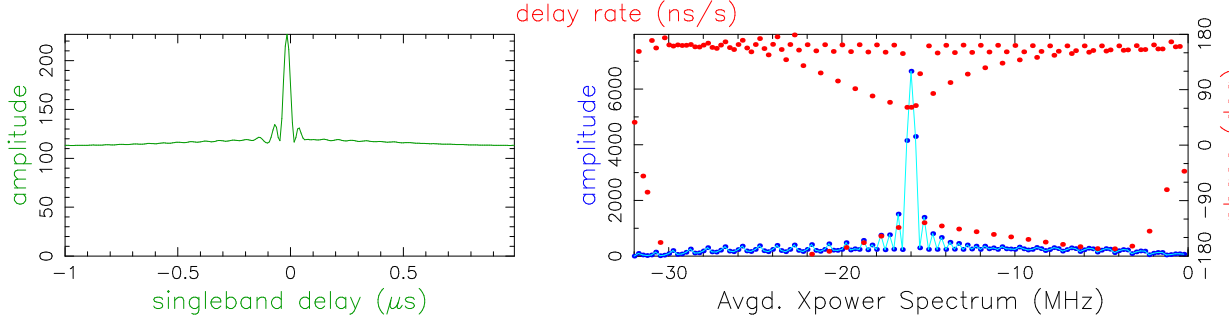


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00	+/- 5.5E-09
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00	+/- 4.3E-08
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00	+/- 9.3E-12
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00	+/- 3.8E-14
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		0.0	+/- 0.0

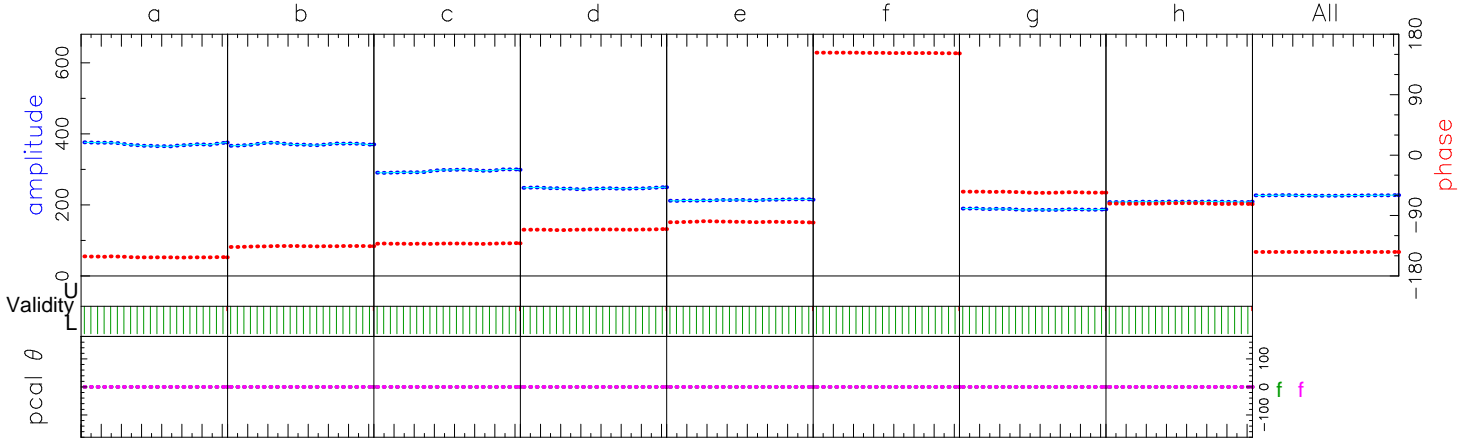
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/ff..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/ff.W.2.0RJBPf simultaneous interpolator



Fringe quality 5
 SNR 8990.3
 Int time 419.825
 Amp 226.913
 Phase -144.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.016114
 MBD -0.001511
 Fringe rate (Hz) 0.000005
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110824
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

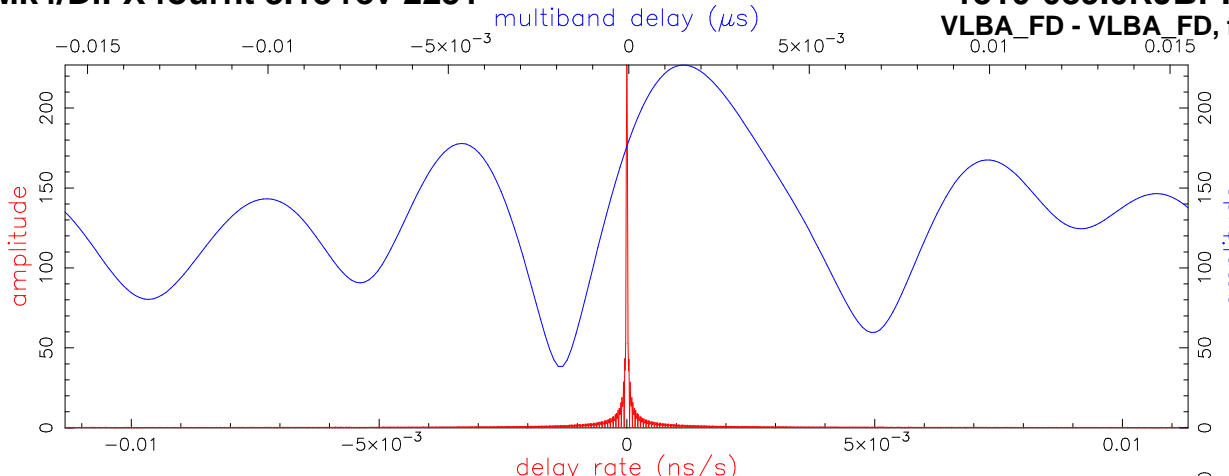


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

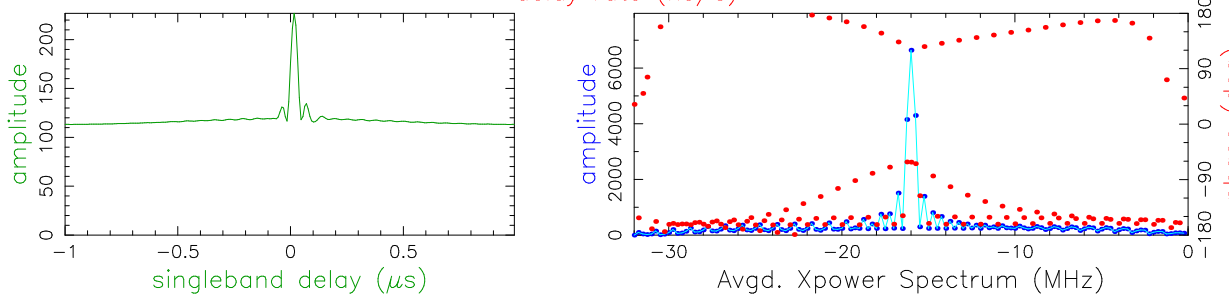


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-151.8	-135.7	-131.7	-110.9	-99.4	152.0	-55.3	-72.2	Phase	-144.2
	370.6	370.9	295.8	246.9	213.8	827.2	187.7	209.0	Ampl.	340.2
	127.0	126.9	126.9	127.0	126.9	120.3	126.6	127.0	Sbd box	126.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		-1.51125000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)	-1.51125E-03	+/- 2.4E-07
Sband delay (usec)		-1.61145000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)	-1.61145E-02	+/- 1.9E-06
Phase delay (usec)		-4.64958192093E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)	-4.64958E-06	+/- 4.1E-10
Delay rate (us/s)		5.95188400451E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)	5.95188E-11	+/- 1.7E-12
Total phase (deg)			-144.2	Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)	-144.2	+/- 0.0

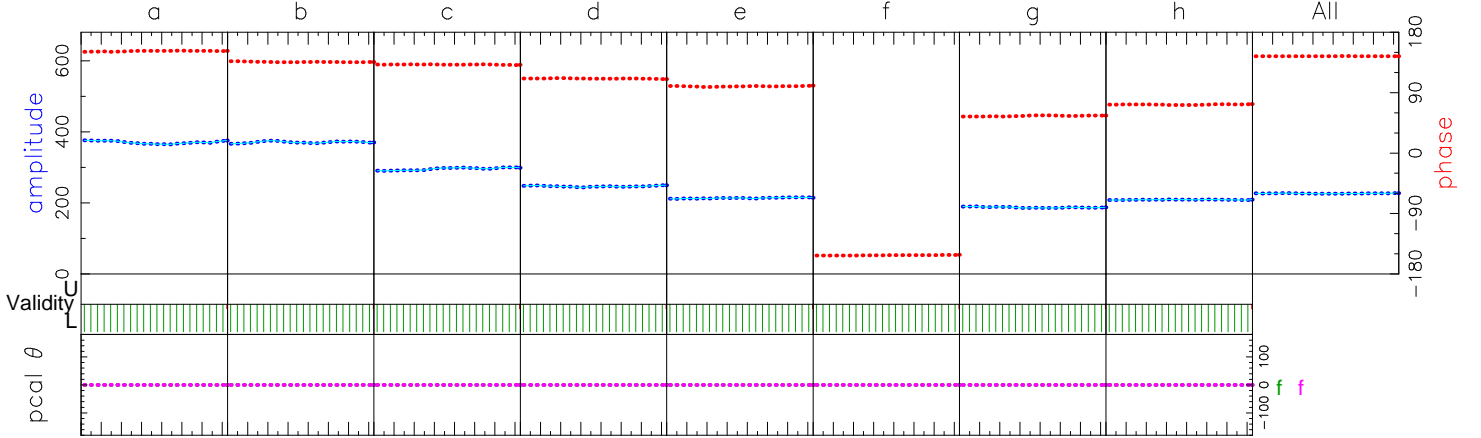
ph/seg (deg) 0.1 0.0 Theor. Amplitude 226.913 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.1 Search (2048X32) 223.571 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 99.6 0.0 Inc. seg. avg. 226.860 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 simultaneous interpolator



Fringe quality 5
 SNR 8990.3
 Int time 419.825
 Amp 226.913
 Phase 144.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.016114
 MBD 0.001511
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110826
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

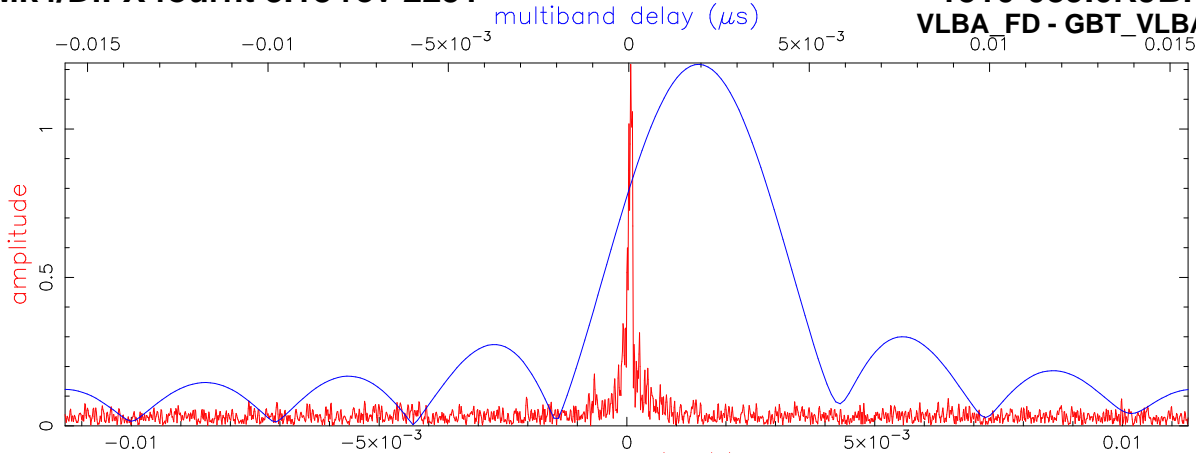


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

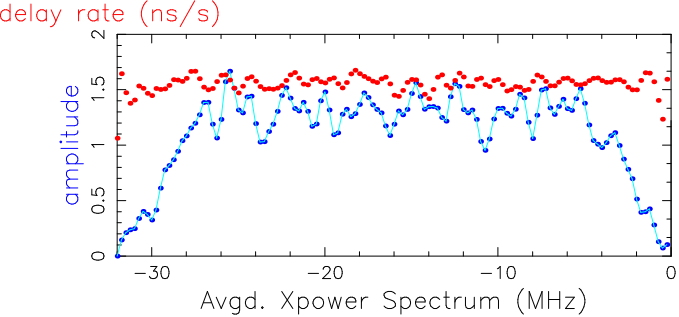
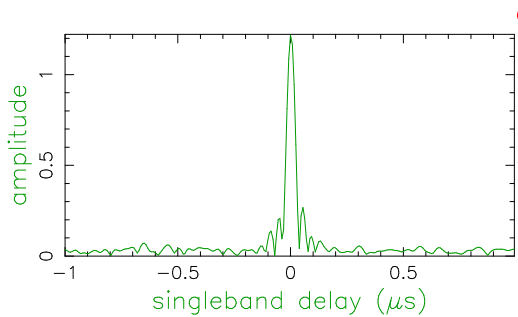


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	151.8	135.7	131.7	110.9	99.4	-152.0	55.3	72.2	Phase	144.2
	370.6	370.9	295.8	246.9	213.8	827.2	187.7	209.0	Ampl.	340.2
	131.0	131.1	131.1	131.0	131.1	137.7	131.4	131.0	Sbd box	131.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.51125000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		1.51125E-03	+/- 2.4E-07
Sband delay (usec)	1.61145000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.61145E-02	+/- 1.9E-06
Phase delay (usec)	4.64958192151E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.64958E-06	+/- 4.1E-10
Delay rate (us/s)	-5.95188400451E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.95188E-11	+/- 1.7E-12
Total phase (deg)	144.2		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		144.2	+/- 0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 226.913 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.1 Search (2048X32) 223.571 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 99.6 0.0 Inc. seg. avg. 226.860 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 f: az 147.2 el 44.4 pa -27.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/ff..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/ff.W.61.0RJBPf simultaneous interpolator

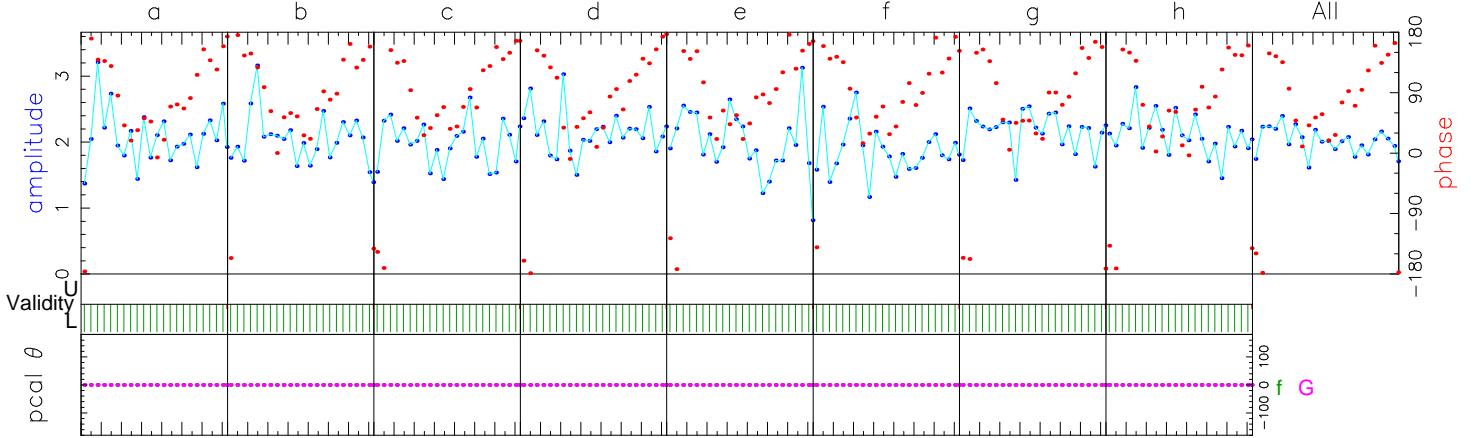


Fringe quality 5
SNR 48.4
Int time 419.800
Amp 1.222
Phase 102.8
PFD 0.0e+00
Delays (us)
SBD 0.001739
MBD 0.001940
Fringe rate (Hz) 0.006649
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110821
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



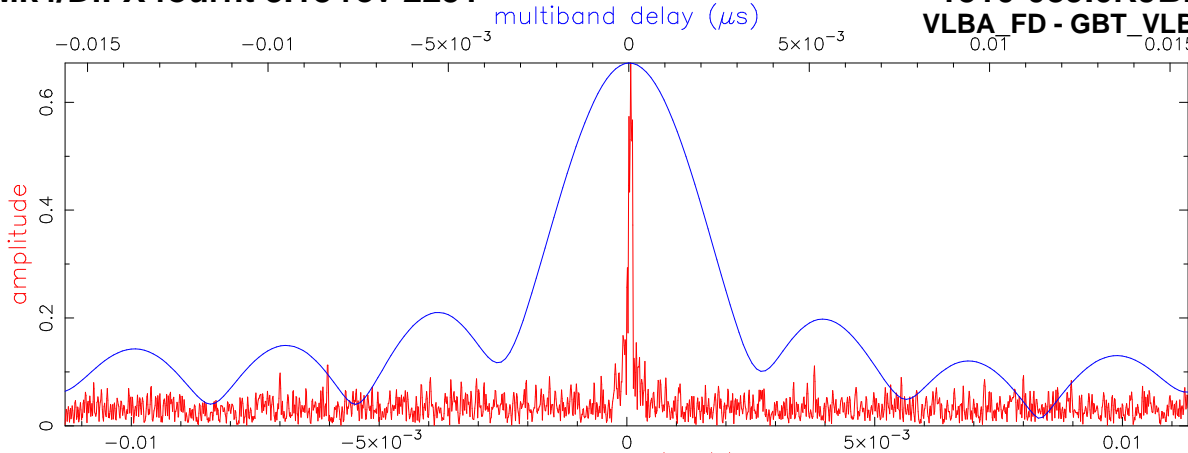
Avgd. Xpower Spectrum (MHz)

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	98.2	102.8
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	1.2	1.2
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	1.1	1.1
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1.2	1.2
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1.1	1.1
f	1000	1000	1000	1000	1000	1000	1000	1000	1.2	1.2
G	1000	1000	1000	1000	1000	1000	1000	1000	1.1	1.1
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	129.3	129.2
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	129.4	129.3
Group delay (usec)(sbd)		7.14170761967E+02		Apriori delay (usec)	7.14168822400E+02		Resid mbdelay (usec)	1.93957E-03		+/- 4.5E-05
Sband delay (usec)		7.14170561400E+02		Apriori clock (usec)	2.1132999E+01		Resid sbdelay (usec)	1.73900E-03		+/- 3.6E-04
Phase delay (usec)		7.14168825714E+02		Apriori clockrate (us/s)	-6.2999993E-08		Resid phdelay (usec)	3.31396E-06		+/- 7.6E-08
Delay rate (us/s)		5.38331890203E-01		Apriori rate (us/s)	5.38331813017E-01		Resid rate (us/s)	7.71867E-08		+/- 3.1E-10
Total phase (deg)		232.9		Apriori accel (us/s/s)	-1.67284900767E-06		Resid phase (deg)	102.8		+/- 2.4

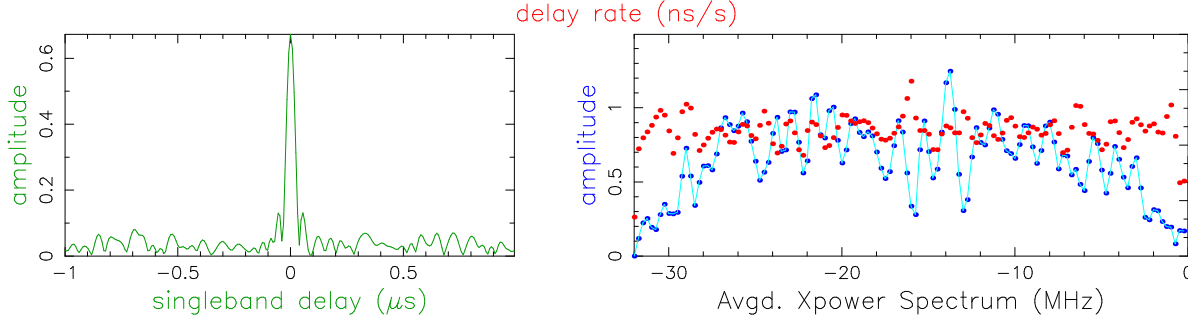
ph/seg (deg) 55.7 5.7 Theor. Amplitude 1.222 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.7 9.9 Search (2048X32) 1.214 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.1 3.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 5.9 5.8 Inc. seg. avg. 2.018 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3126.142 -962.971 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fG.W.20.0RJBPf simultaneous interpolator



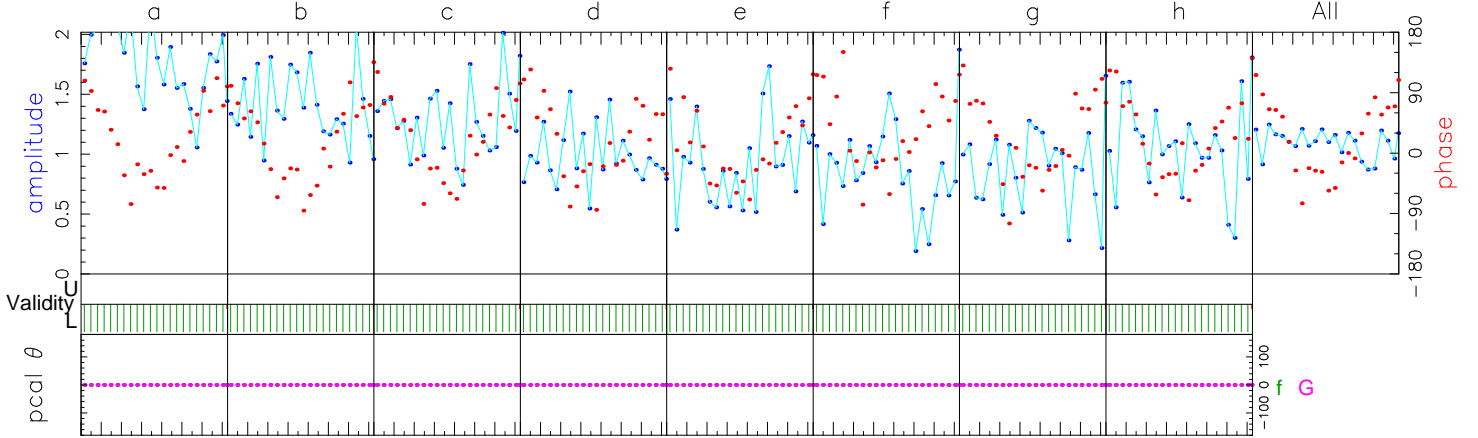
Fringe quality 7

SNR 26.7
Int time 419.800
Amp 0.673
Phase 20.9
PFD 0.0e+00
Delays (us)
SBD 0.000441
MBD 0.000017
Fringe rate (Hz) 0.006520
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110819
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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

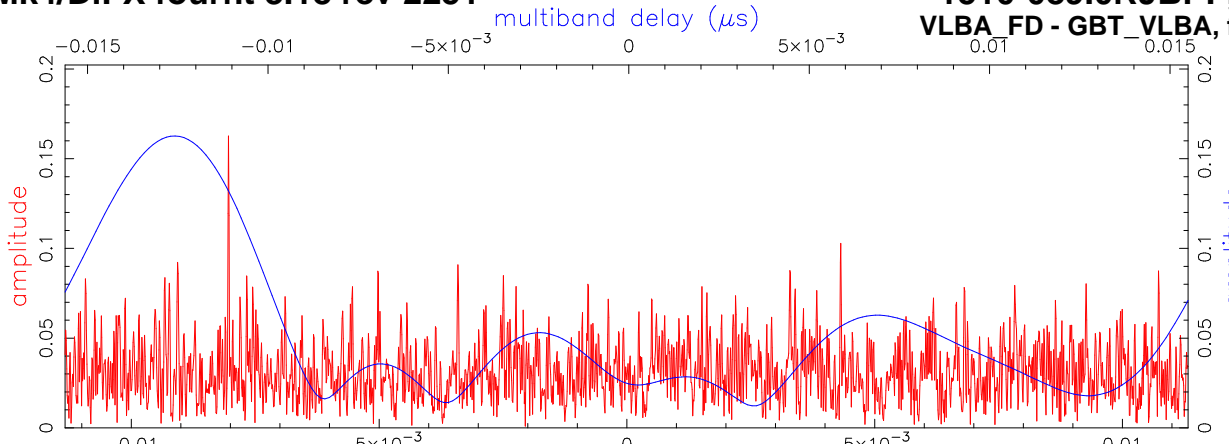


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	24.1	14.8	26.0	16.3	16.8	25.2	22.1	20.8	Phase	20.9
	1.1	0.8	0.8	0.5	0.6	0.5	0.5	0.6	Ampl.	0.7
	129.0	129.0	129.0	129.1	129.1	129.4	129.0	128.9	Sbd box	129.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

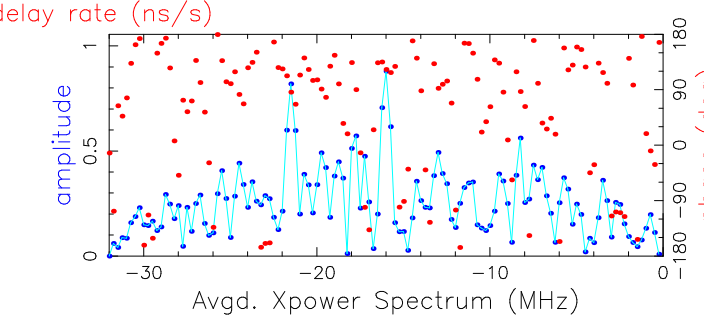
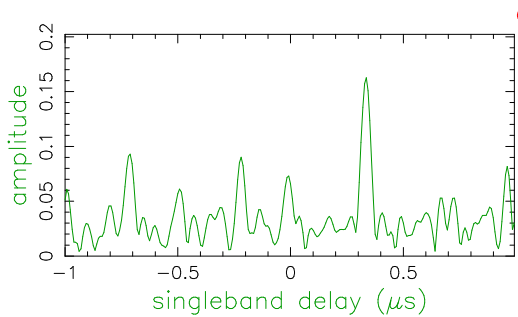
Group delay (usec)(sbd) 7.14168839779E+02 Apriori delay (usec) 7.14168822400E+02 Resid mbdelay (usec) 1.73798E-05 +/- 8.1E-05
 Sband delay (usec) 7.14169263900E+02 Apriori clock (usec) 2.1132999E+01 Resid sbdelay (usec) 4.41500E-04 +/- 6.5E-04
 Phase delay (usec) 7.14168823074E+02 Apriori clockrate (us/s) -6.2999993E-08 Resid phdelay (usec) 6.74055E-07 +/- 1.4E-07
 Delay rate (us/s) 5.38331888702E-01 Apriori rate (us/s) 5.38331813017E-01 Resid rate (us/s) 7.56853E-08 +/- 5.7E-10
 Total phase (deg) 151.0 Apriori accel (us/s/s) -1.67284900767E-06 Resid phase (deg) 20.9 +/- 4.3

RMS Theor. Amplitude 0.673 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 53.1 10.3 Search (2048X32) 0.667 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 64.3 18.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 4.7 6.1 Inc. seg. avg. 1.074 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 28.8 10.6 Inc. frq. avg. 0.671 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 147.2 el 44.4 pa -27.5 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3126.142 -962.971 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fG.W.3.0RJBPf

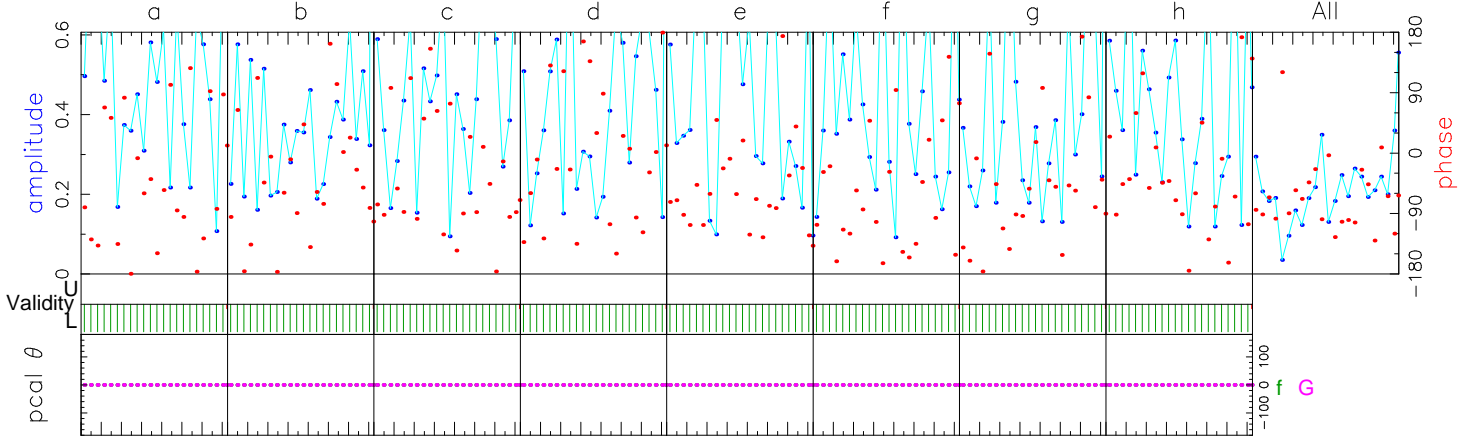


Fringe quality 0
SNR 6.5
Int time 419.800
Amp 0.202
Phase -257.7
PFD 1.5e-02
Delays (us)
SBD 0.334499
MBD -0.012609
Fringe rate (Hz)
-0.692138
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110823
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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



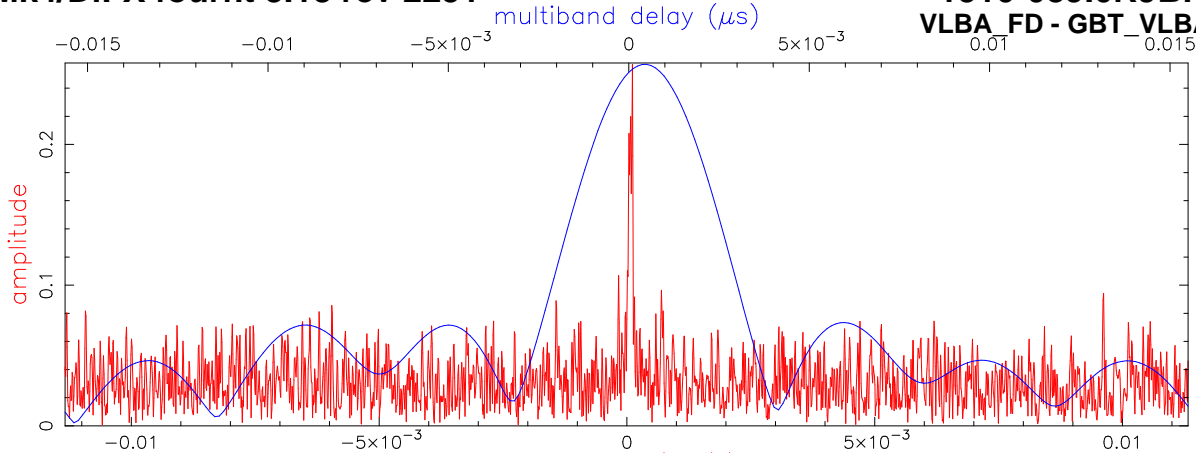
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-113.6	-50.2	-77.9	-65.6	-67.9	-106.0	-101.3	-61.4	Phase	-77.7
	0.1	0.1	0.2	0.1	0.4	0.2	0.2	0.3	Ampl.	0.2
	39.0	192.2	117.2	1.4	171.9	253.1	102.7	171.1	Sbd box	171.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	7.14499963103E+02	Apriori delay (usec)	7.14168822400E+02	Resid mbdelay (usec)	-1.26093E-02	+/-	3.4E-04
Sband delay (usec)	7.14503321400E+02	Apriori clock (usec)	2.1132999E+01	Resid sbdelay (usec)	3.34499E-01	+/-	2.7E-03
Phase delay (usec)	7.14168819894E+02	Apriori clockrate (us/s)	-6.2999993E-08	Resid phdelay (usec)	-2.50515E-06	+/-	5.7E-07
Delay rate (us/s)	5.38323777985E-01	Apriori rate (us/s)	5.38331813017E-01	Resid rate (us/s)	-8.03503E-06	+/-	2.4E-09
Total phase (deg)	-127.5	Apriori accel (us/s/s)	-1.67284900767E-06	Resid phase (deg)	-257.7	+/-	17.7

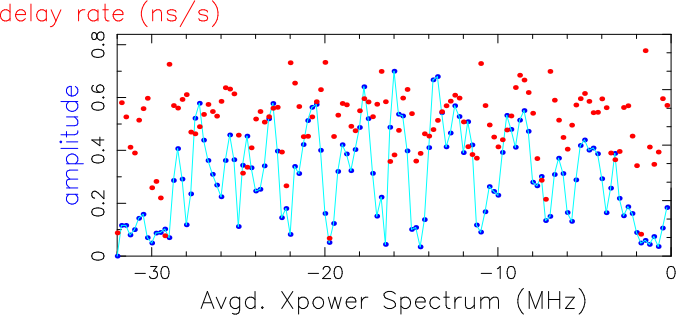
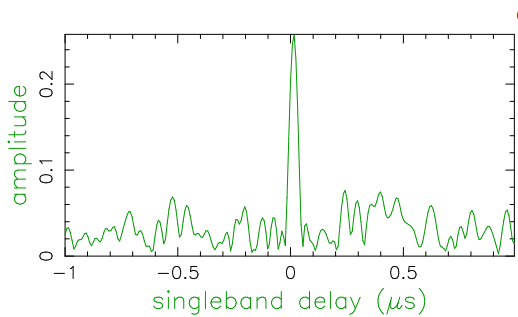
ph/seg (deg)	RMS 51.0	Theor. 42.6	Amplitude Search (2048X32)	0.202 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	55.7	74.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	25.5	25.1	Inc. seg. avg.	0.202	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.9	43.8	Inc. frq. avg.	0.196	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00

f: az 147.2 el 44.4 pa -27.5 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3126.142 -962.971 simultaneous interpolator

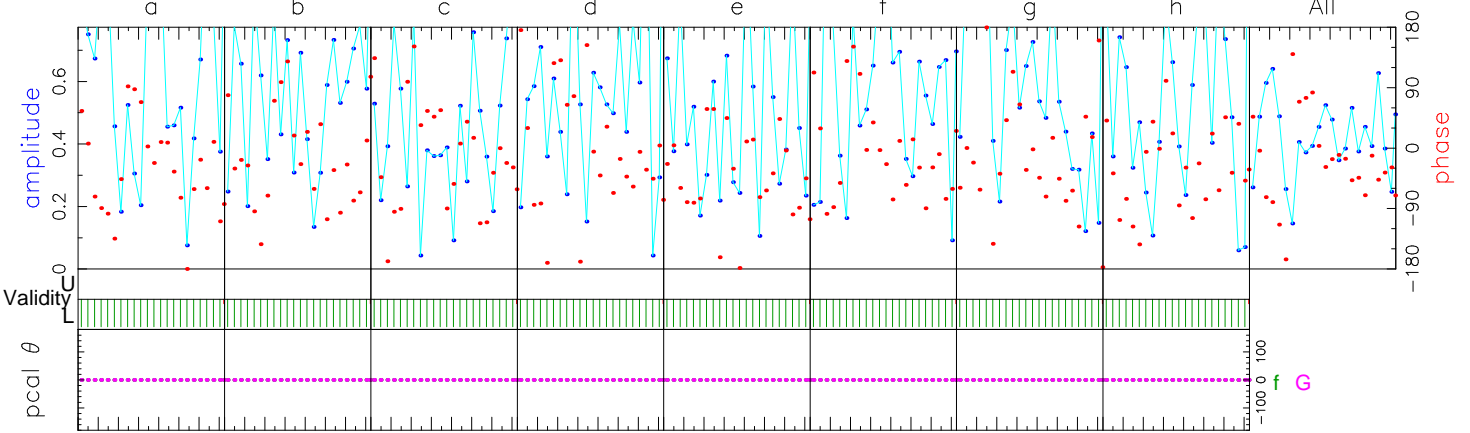
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fG.W.37.0RJBPf



Fringe quality 9
SNR 10.2
Int time 419.800
Amp 0.258
Phase -30.4
PFD 3.6e-16
Delays (us)
SBD 0.013859
MBD 0.000458
Fringe rate (Hz) 0.009486
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110825
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

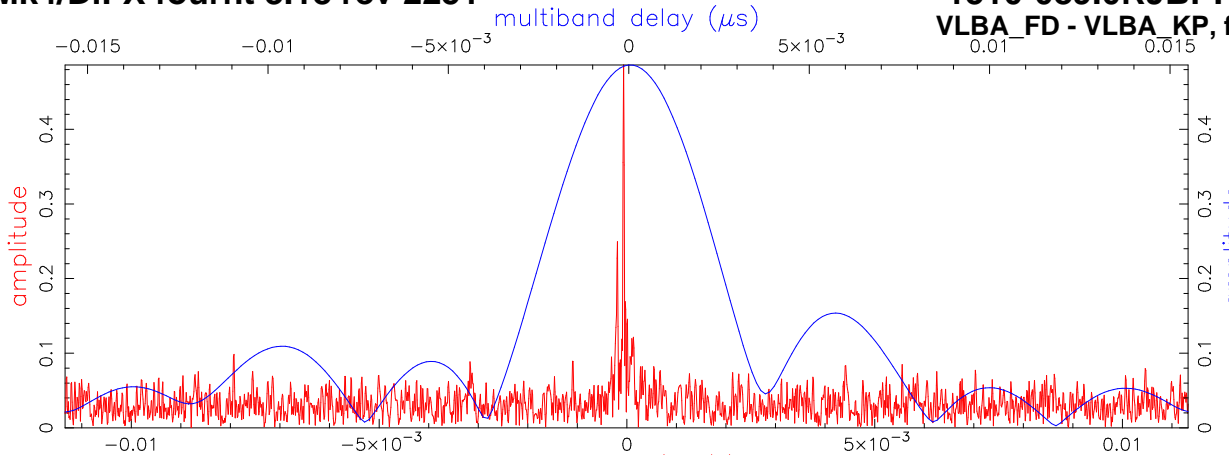


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

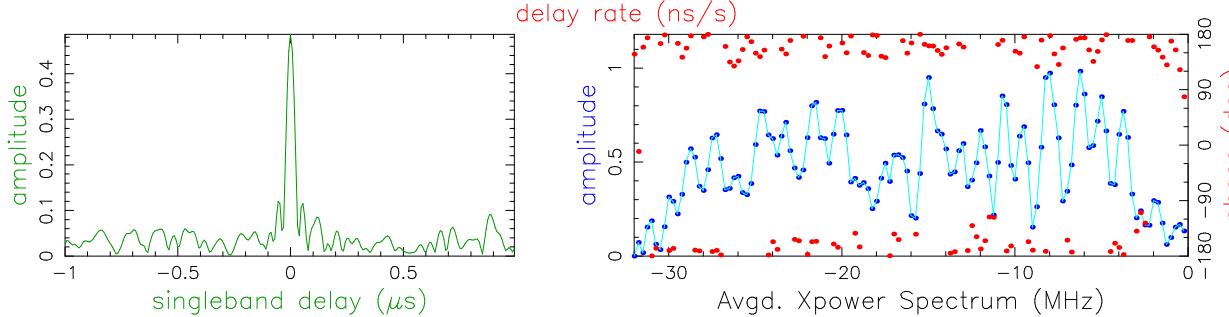


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-29.6	-34.9	-28.1	-21.3	-32.7	-34.8	-24.2	-34.4	Phase	-30.4
	0.4	0.2	0.1	0.2	0.3	0.3	0.2	0.3	Ampl.	0.2
	130.7	130.4	158.1	131.6	130.1	130.5	132.2	21.1	Sbd box	130.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.14169279996E+02		Apriori delay (usec)		7.14168822400E+02		Resid mbdelay (usec)		4.57596E-04	+/- 2.1E-04
Sband delay (usec)	7.14182681400E+02		Apriori clock (usec)		2.1132999E+01		Resid sbdelay (usec)		1.38590E-02	+/- 1.7E-03
Phase delay (usec)	7.14168821418E+02		Apriori clockrate (us/s)		-6.2999993E-08		Resid phdelay (usec)		-9.81114E-07	+/- 3.6E-07
Delay rate (us/s)	5.38331923136E-01		Apriori rate (us/s)		5.38331813017E-01		Resid rate (us/s)		1.10120E-07	+/- 1.5E-09
Total phase (deg)	99.7		Apriori accel (us/s/s)		-1.67284900767E-06		Resid phase (deg)		-30.4	+/- 11.2

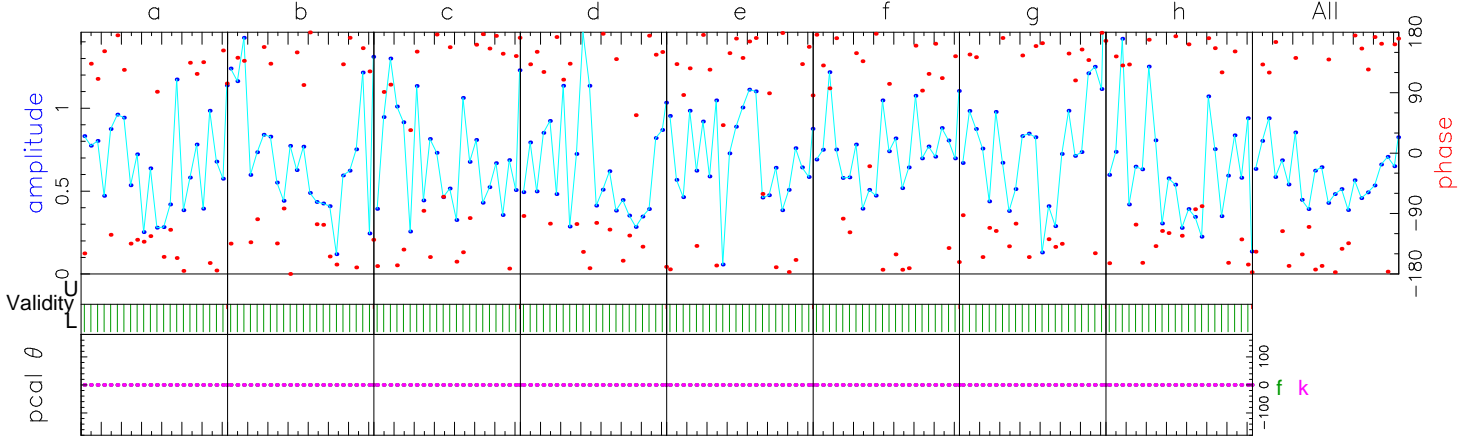
ph/seg (deg) 68.5 26.9 Theor. Amplitude 0.258 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.7 46.9 Search (2048X32) 0.250 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.6 15.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 23.7 27.7 Inc. seg. avg. 0.379 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) -3126.142 -962.971 ion window (TEC) 0.00 0.00



Fringe quality 9
 SNR 19.3
 Int time 419.825
 Amp 0.486
 Phase 174.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000127
 MBD 0.000040
 Fringe rate (Hz)
 -0.005554
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110823
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



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

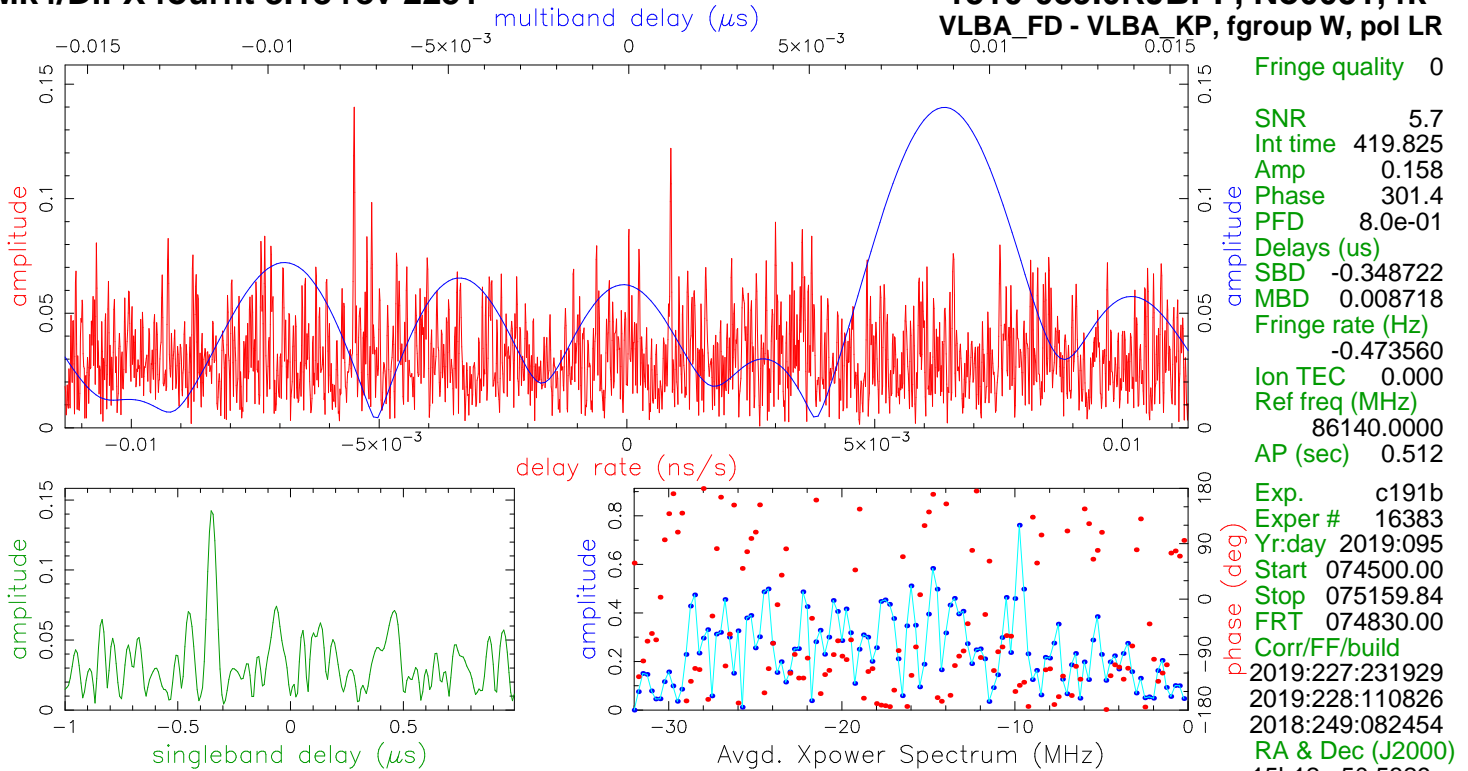


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	178.2	176.3	175.9	-177.5	163.3	158.3	-177.0	-177.3	Phase	174.8
	0.5	0.5	0.5	0.4	0.6	0.5	0.6	0.5	Ampl.	0.5
	128.8	129.2	129.0	129.5	129.0	129.2	128.8	128.6	Sbd box	129.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	1.34380451273E+03	Apriori delay (usec)	1.34380447298E+03	Resid mbdelay (usec)	3.97548E-05	+/-	1.1E-04
Sband delay (usec)	1.34380434648E+03	Apriori clock (usec)	7.1453419E+00	Resid sbdelay (usec)	-1.26500E-04	+/-	8.9E-04
Phase delay (usec)	1.34380447861E+03	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	5.63656E-06	+/-	1.9E-07
Delay rate (us/s)	-1.49834308837E-01	Apriori rate (us/s)	-1.49834244360E-01	Resid rate (us/s)	-6.44773E-08	+/-	7.9E-10
Total phase (deg)	283.6	Apriori accel (us/s/s)	-6.75325650112E-06	Resid phase (deg)	174.8	+/-	5.9

ph/seg (deg)	36.1	Theor.	14.3	Amplitude	0.486 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	37.0	Search (2048X32)	0.480	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	10.1	Interp.	0.000	Inc. seg. avg.	0.576	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	9.9	Inc. frq. avg.	0.487	Inc. frq. avg.	0.487	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016

f: az 147.2 el 44.4 pa -27.5 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 858.326 -85.302 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fk.W.30.0RJBPf



Fringe quality 0

SNR 5.7

Int time 419.825

Amp 0.158

Phase 301.4

PFD 8.0e-01

Delays (us)

SBD -0.348722

MBD 0.008718

Fringe rate (Hz)

-0.473560

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110826

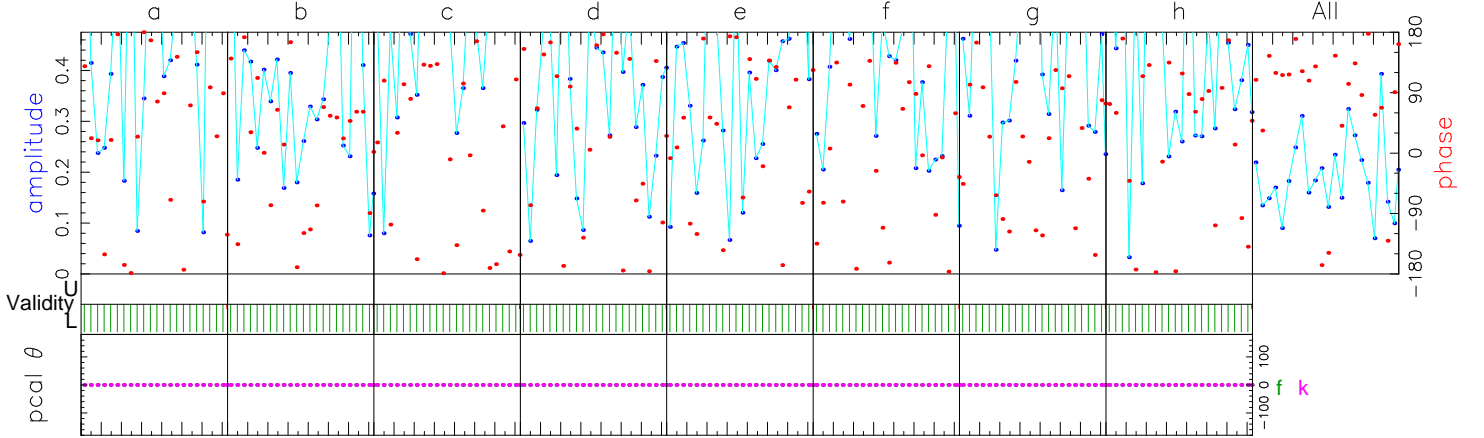
2018:249:082454

RA & Dec (J2000)

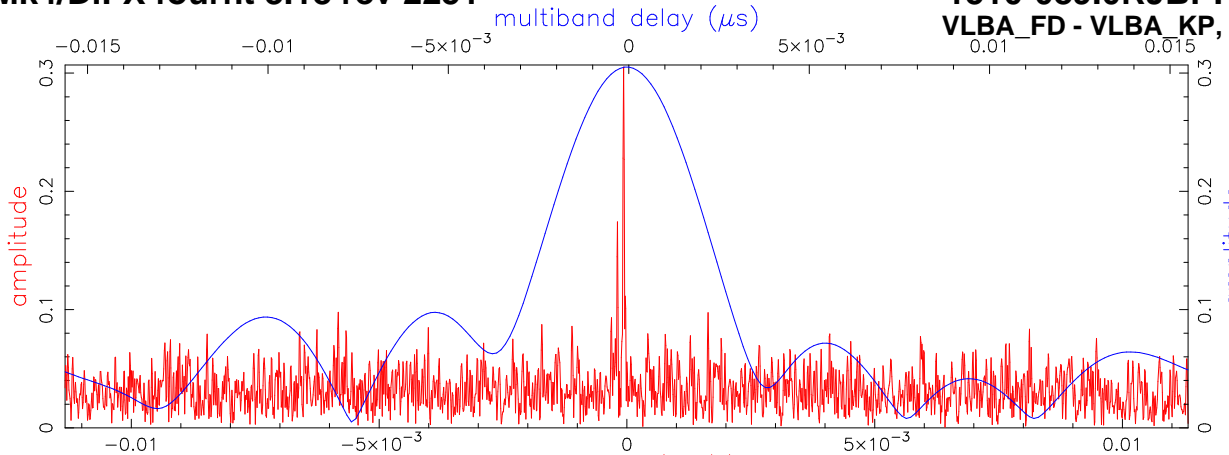
15h12m50.5329s

-9°05'59.830"

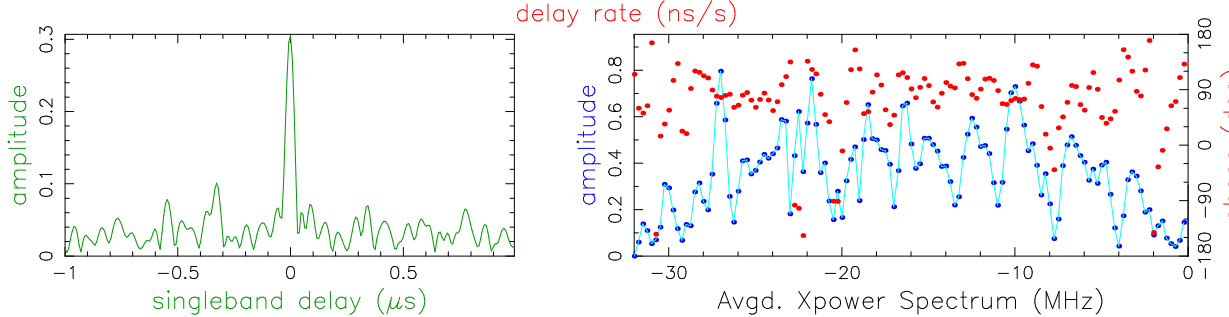
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



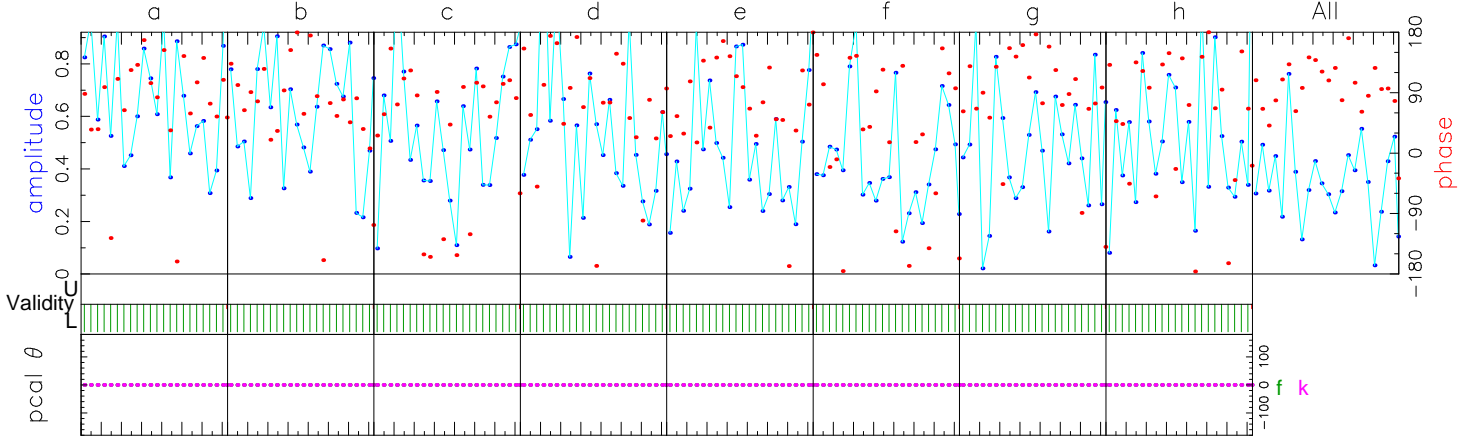
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	124.2	70.1	140.4	156.6	105.6	120.5	62.6	123.8	Phase	121.4	
	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2	
	84.9	44.6	85.9	82.6	98.1	72.9	200.5	84.9	Sbd box	84.4	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
k	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	1.34346944076E+03		Apriori delay (usec)		1.34380447298E+03		Resid mbdelay (usec)		8.71778E-03	+/- 3.8E-04	
Sband delay (usec)	1.34345575148E+03		Apriori clock (usec)		7.1453419E+00		Resid sbdelay (usec)		-3.48722E-01	+/- 3.0E-03	
Phase delay (usec)	1.34380447689E+03		Apriori clockrate (us/s)		2.0000000E-07		Resid phdelay (usec)		3.91523E-06	+/- 6.5E-07	
Delay rate (us/s)	-1.49839741918E-01		Apriori rate (us/s)		-1.49834244360E-01		Resid rate (us/s)		-5.49756E-06	+/- 2.7E-09	
Total phase (deg)	50.3		Apriori accel (us/s/s)		-6.75325650112E-06		Resid phase (deg)		301.4	+/- 20.2	
RMS	50.4	48.3	Amplitude	0.158 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	64.8	84.4	Search (2048X32)	0.136		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	36.4	28.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	44.0	49.8	Inc. seg. avg.	0.158		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)			Inc. frq. avg.	0.152		Data rate(Mb/s): 1024		ion window (TEC)	0.00	0.00	
f: az 147.2 el 44.4 pa -27.5	k: az 139.2 el 39.5 pa -33.6		u,v (fr/asec) 858.326 -85.302				nlags: 128 t_cohere infinite		simultaneous interpolator		



Fringe quality 9
SNR 12.2
Int time 419.825
Amp 0.307
Phase 99.6
PFD 1.3e-25
Delays (us)
SBD -0.002238
MBD -0.000113
Fringe rate (Hz) -0.005515
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110820
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

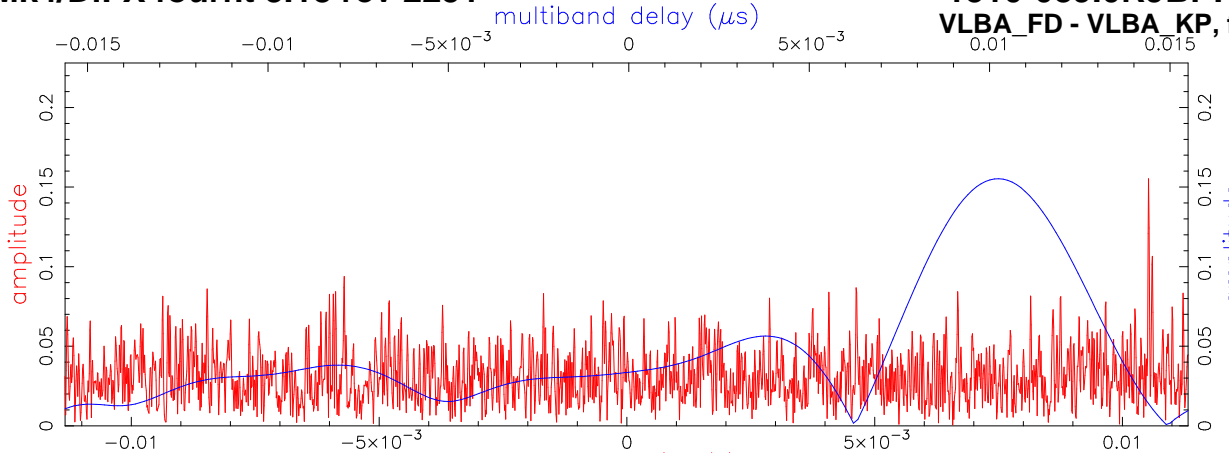


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
107.6	86.8	100.2	100.1	83.5	125.0	105.1	102.6	Phase	99.6
0.4	0.4	0.4	0.3	0.3	0.1	0.3	0.2	Ampl.	0.3
128.2	128.4	130.2	128.7	128.5	3.4	129.2	127.7	Sbd box	128.7
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.34380435967E+03		Apriori delay (usec)	1.34380447298E+03		Resid mbdelay (usec)	-1.13308E-04	+/-	1.8E-04
Sband delay (usec)	1.34380223498E+03		Apriori clock (usec)	7.1453419E+00		Resid sbdelay (usec)	-2.23800E-03	+/-	1.4E-03
Phase delay (usec)	1.34380447619E+03		Apriori clockrate (us/s)	2.0000000E-07		Resid phdelay (usec)	3.21170E-06	+/-	3.0E-07
Delay rate (us/s)	-1.49834308382E-01		Apriori rate (us/s)	-1.49834244360E-01		Resid rate (us/s)	-6.40224E-08	+/-	1.3E-09
Total phase (deg)		208.4	Apriori accel (us/s/s)	-6.75325650112E-06		Resid phase (deg)	99.6	+/-	9.4

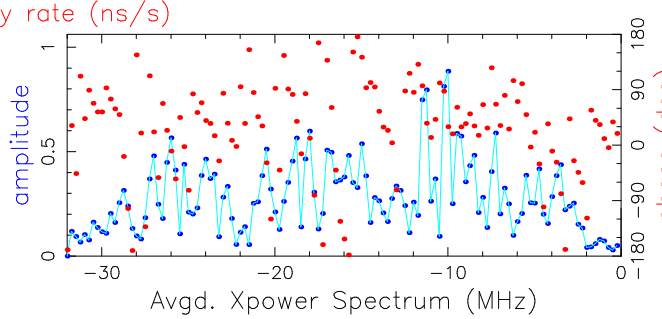
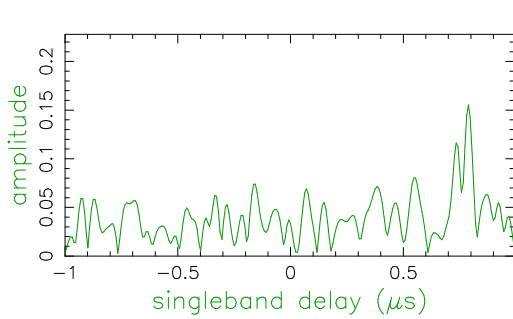
RMS Theor. Amplitude 0.307 +/- 0.025
ph/seg (deg) 32.8 22.6 Search (2048X32) 0.301 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 52.1 39.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 14.0 13.3 Inc. seg. avg. 0.335 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 28.8 23.3 Inc. frq. avg. 0.302 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 147.2 el 44.4 pa -27.5 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 858.326 -85.302 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fk.W.7.0RJBPf simultaneous interpolator



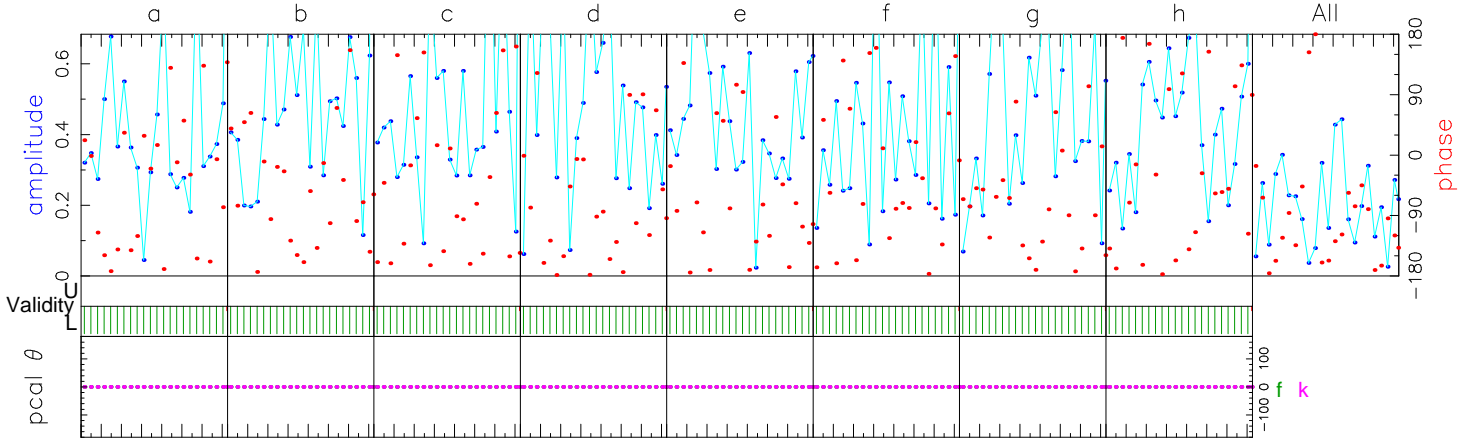
Fringe quality 0

SNR 6.2
Int time 419.825
Amp 0.228
Phase -297.1
PFD 9.6e-02
Delays (us)
SBD 0.788496
MBD 0.010218
Fringe rate (Hz) 0.906813
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110828
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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



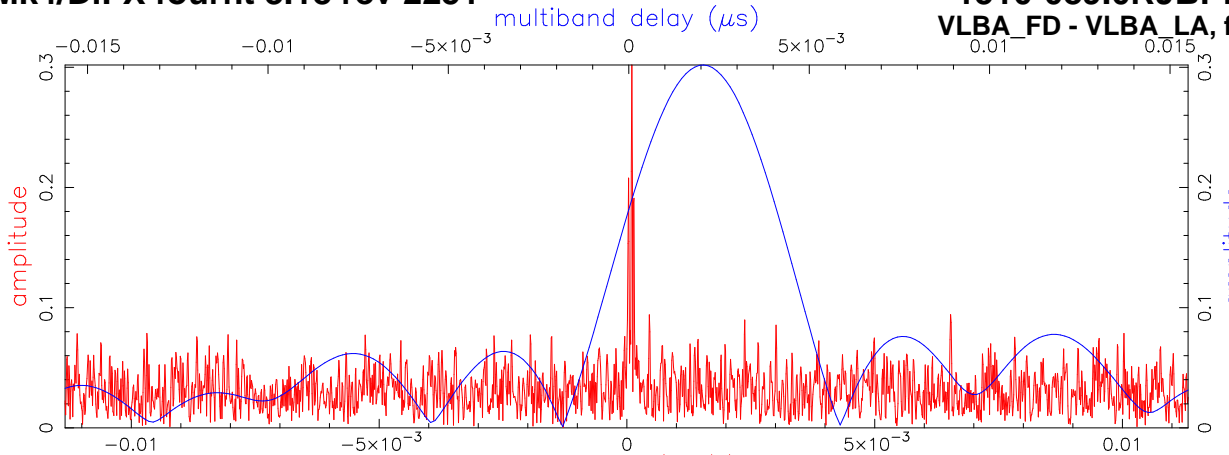
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-138.5	-98.7	-123.4	-133.4	-111.2	-103.3	-93.0	-151.0	Phase	-117.1
	0.1	0.3	0.2	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2
	200.9	224.1	136.8	234.7	87.9	9.5	231.4	92.0	Sbd box	229.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	1.34459594075E+03	Apriori delay (usec)	1.34380447298E+03	Resid mbdelay (usec)	1.02178E-02	+/-	3.5E-04
Sband delay (usec)	1.34459296948E+03	Apriori clock (usec)	7.1453419E+00	Resid sbdelay (usec)	7.88496E-01	+/-	2.8E-03
Phase delay (usec)	1.34380446920E+03	Apriori clockrate (us/s)	2.0000000E-07	Resid phdelay (usec)	-3.77555E-06	+/-	6.0E-07
Delay rate (us/s)	-1.49823717155E-01	Apriori rate (us/s)	-1.49834244360E-01	Resid rate (us/s)	1.05272E-05	+/-	2.5E-09
Total phase (deg)	-188.2	Apriori accel (us/s/s)	-6.75325650112E-06	Resid phase (deg)	-297.1	+/-	18.6

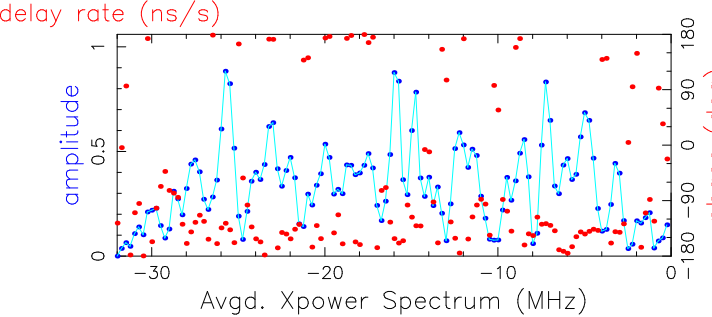
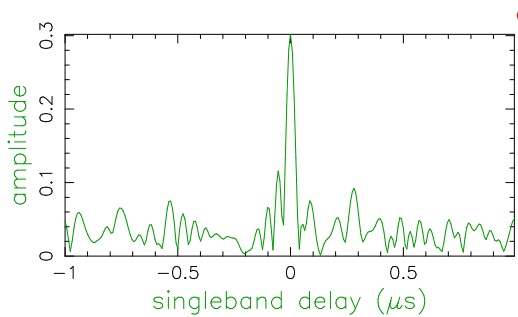
ph/seg (deg)	51.0	Theor.	44.7	Search (2048X32)	0.152	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.8		77.9	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	22.6		26.3	Inc. seg. avg.	0.229	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.2		46.0	Inc. frq. avg.	0.219	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 1024	nlags: 128	t_cohere infinite		

f: az 147.2 el 44.4 pa -27.5 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 858.326 -85.302 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fk.W.71.0RJBPf

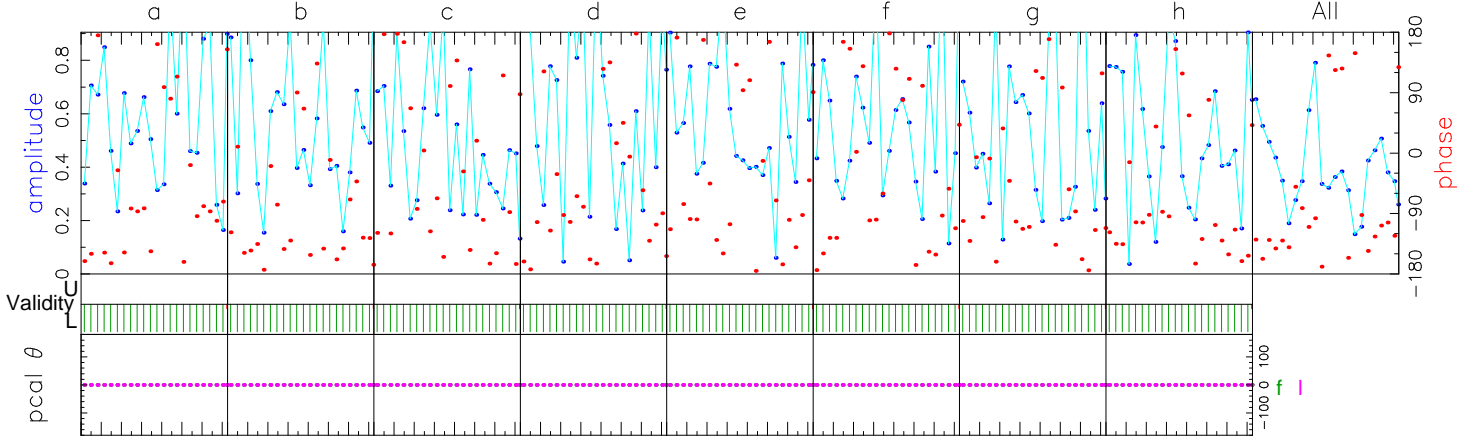


Fringe quality 9
SNR 12.0
Int time 419.825
Amp 0.302
Phase -132.7
PFD 1.5e-24
Delays (us)
SBD -0.000384
MBD 0.002057
Fringe rate (Hz) 0.008859
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



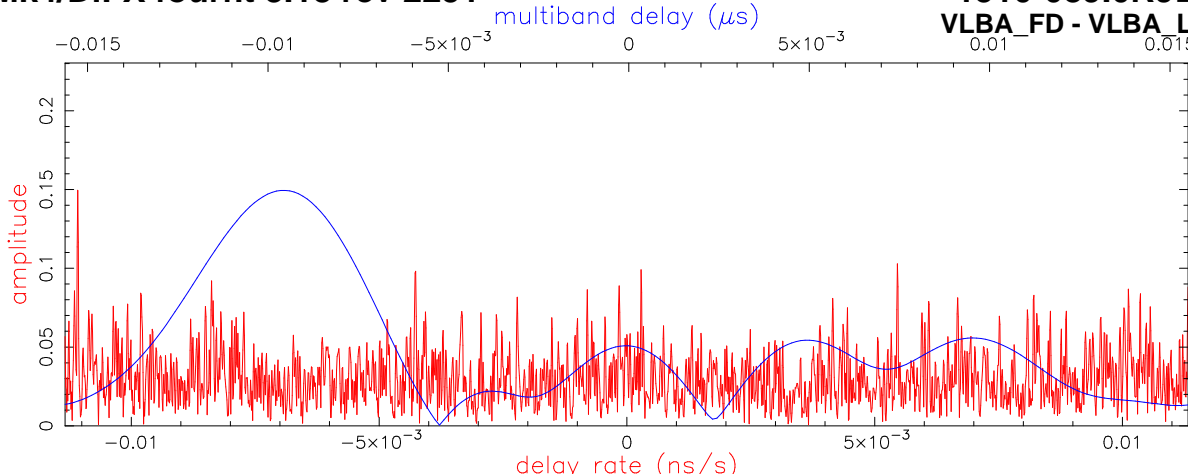
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110822
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

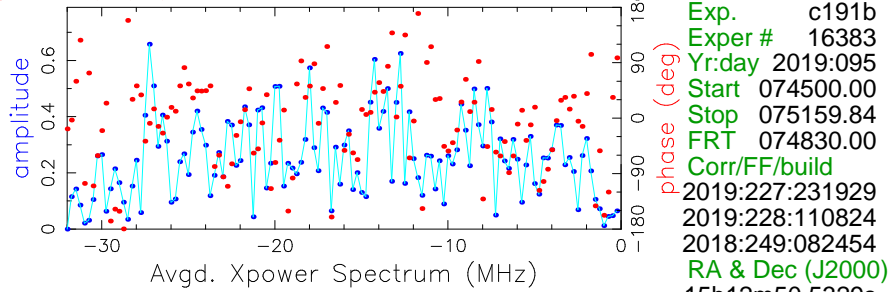
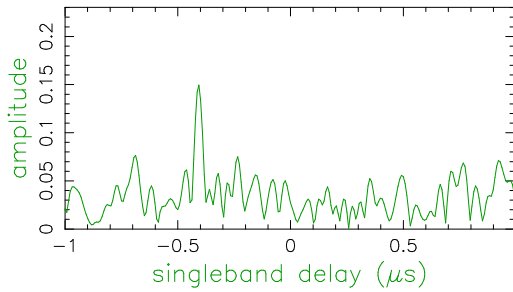


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All		
	-134.8	-126.9	-144.5	-126.4	-124.4	-147.7	-135.0	-128.8	Phase	-132.7		
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Ampl.	0.3		
	129.0	128.3	127.7	128.3	130.1	129.3	129.9	129.0	Sbd box	129.0		
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used			
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs			
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs			
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Man'l PC			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
l	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids			
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	1.48466913042E+03		Apriori delay (usec)		1.48466707345E+03		Resid mbdelay (usec)		2.05696E-03	+/- 1.8E-04		
Sband delay (usec)	1.48466668995E+03		Apriori clock (usec)		9.4991207E+00		Resid sbdelay (usec)		-3.83500E-04	+/- 1.4E-03		
Phase delay (usec)	1.48466706917E+03		Apriori clockrate (us/s)		1.9299999E-07		Resid phdelay (usec)		-4.27947E-06	+/- 3.1E-07		
Delay rate (us/s)	-1.79455482493E-02		Apriori rate (us/s)		-1.79456510907E-02		Resid rate (us/s)		1.02841E-07	+/- 1.3E-09		
Total phase (deg)	121.9		Apriori accel (us/s/s)		-6.49523013531E-06		Resid phase (deg)		-132.7	+/- 9.6		
	RMS	Theor.	Amplitude	0.302 +/- 0.025		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	48.8	23.0	Search (2048X32)	0.292		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	60.5	40.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016	
ph/frq (deg)	9.4	13.6	Inc. seg. avg.	0.373		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	11.6	23.7	Inc. frq. avg.	0.296		Data rate(Mb/s): 1024		nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00

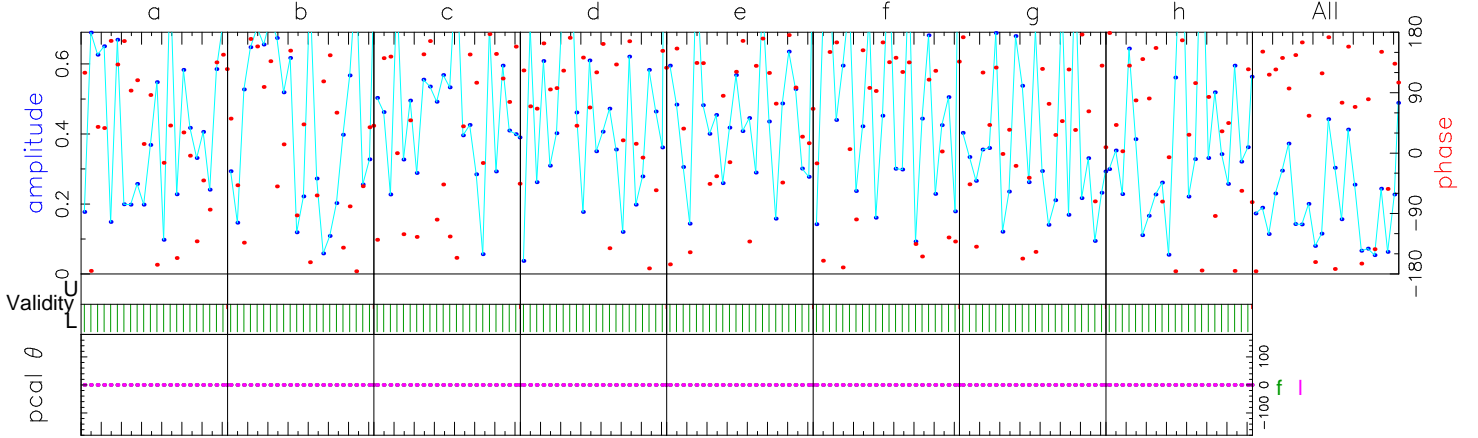
f: az 147.2 el 44.4 pa -27.5 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 93.123 -573.664 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fl.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fl.W.25.0RJBPf



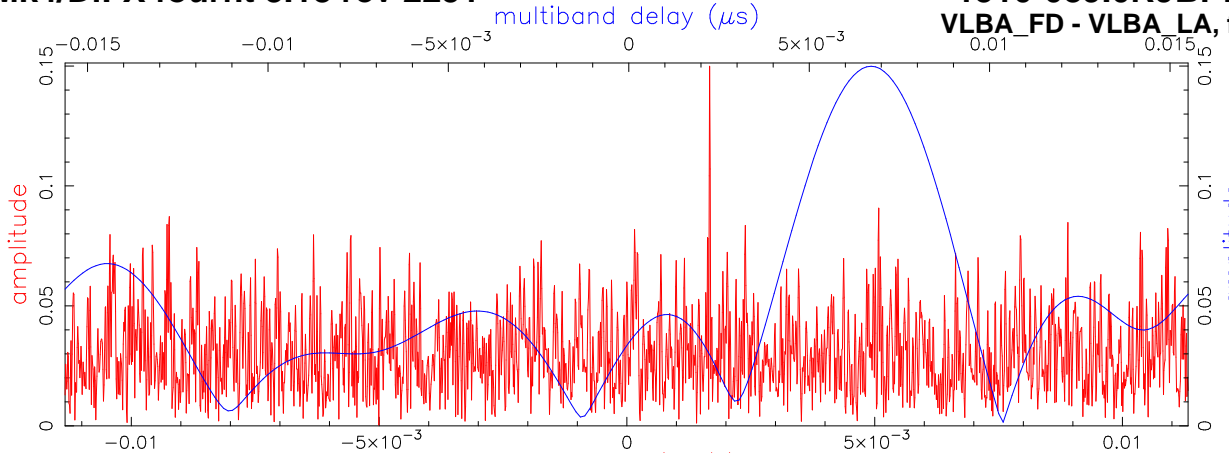
Fringe quality 0
 SNR 5.9
 Int time 419.825
 Amp 0.230
 Phase 319.0
 PFD 3.1e-01
 Delays (us)
 SBD -0.407802
 MBD -0.009562
 Fringe rate (Hz)
 -0.954407
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110824
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



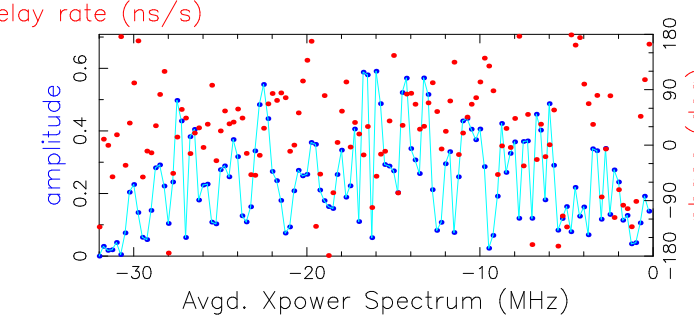
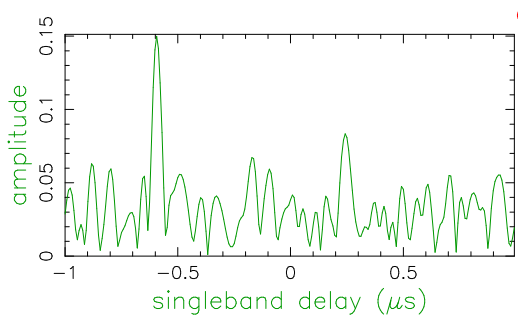
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820			
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used		
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Man'l PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
l	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
Group delay (usec)(sbd)	1.48425126176E+03		Apriori delay (usec)		1.48466707345E+03		Resid mbdelay (usec)		-9.56169E-03	+/- 3.7E-04	
Sband delay (usec)	1.48425927095E+03		Apriori clock (usec)		9.4991207E+00		Resid sbdelay (usec)		-4.07802E-01	+/- 2.9E-03	
Phase delay (usec)	1.48466707794E+03		Apriori clockrate (us/s)		1.9299999E-07		Resid phdelay (usec)		4.48201E-06	+/- 6.2E-07	
Delay rate (us/s)	-1.79567308062E-02		Apriori rate (us/s)		-1.79456510907E-02		Resid rate (us/s)		-1.10797E-05	+/- 2.6E-09	
Total phase (deg)	213.6		Apriori accel (us/s/s)		-6.49523013531E-06		Resid phase (deg)		319.0	+/- 19.3	
ph/seg (deg)	RMS 56.4	Theor. 46.3	Amplitude 56.4	0.230 +/- 0.039		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	82.8	80.7	Search (2048X32)	0.144		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	36.7	27.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	38.5	47.6	Inc. seg. avg.	0.232		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
			Inc. frq. avg.	0.230		Data rate(Mb/s): 1024		ion window (TEC)	0.00	0.00	
f: az 147.2 el 44.4 pa -27.5	l: az 147.0 el 39.1 pa -25.9		u,v (fr/asec) 93.123 -573.664						simultaneous interpolator		

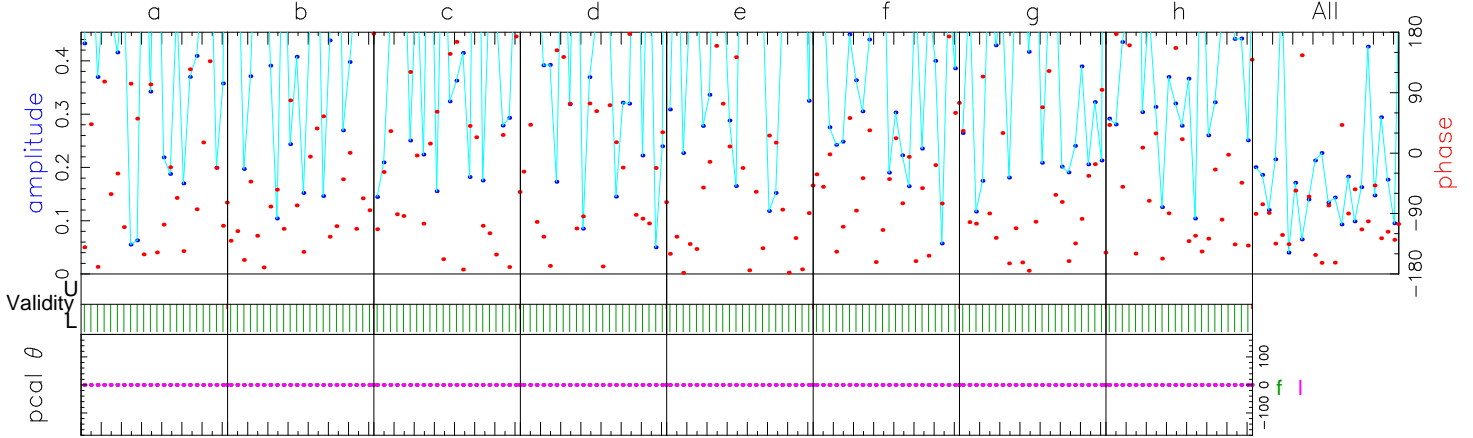


Fringe quality 0
SNR 5.9
Int time 419.825
Amp 0.151
Phase 70.7
PFD 3.1e-01
Delays (us)
SBD -0.593558
MBD 0.006718
Fringe rate (Hz)
0.143963
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



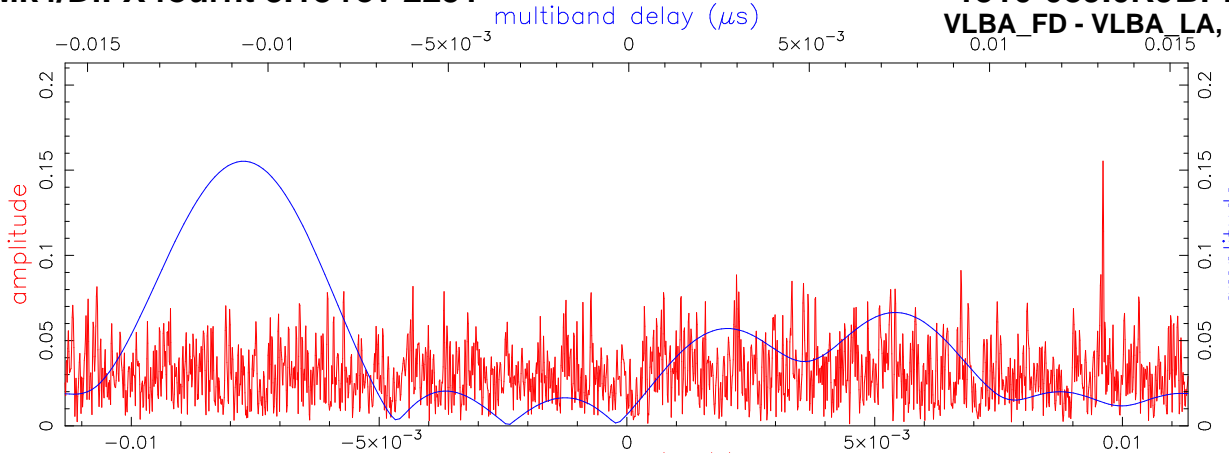
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110826
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

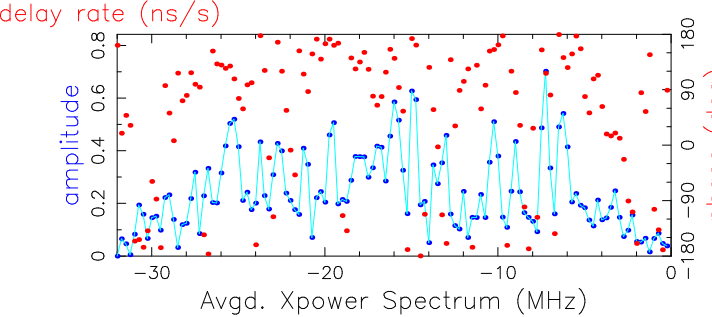
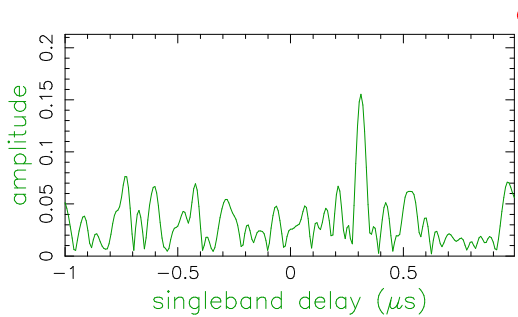


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-125.1	-100.0	-93.9	-115.7	-132.8	-73.3	-111.7	-109.0		-109.3
	0.1	0.3	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	236.3	53.6	113.8	191.1	54.3	164.1	54.8	193.9	Sbd box	53.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.48408004116E+03		Apriori delay (usec)		1.48466707345E+03		Resid mbdelay (usec)		6.71770E-03	+/- 3.7E-04
Sband delay (usec)	1.48407351545E+03		Apriori clock (usec)		9.4991207E+00		Resid sbdelay (usec)		-5.93558E-01	+/- 2.9E-03
Phase delay (usec)	1.48466706993E+03		Apriori clockrate (us/s)		1.9299999E-07		Resid phdelay (usec)		-3.52452E-06	+/- 6.2E-07
Delay rate (us/s)	-1.79439798180E-02		Apriori rate (us/s)		-1.79456510907E-02		Resid rate (us/s)		1.67127E-06	+/- 2.6E-09
Total phase (deg)	325.3		Apriori accel (us/s/s)		-6.49523013531E-06		Resid phase (deg)		70.7	+/- 19.3

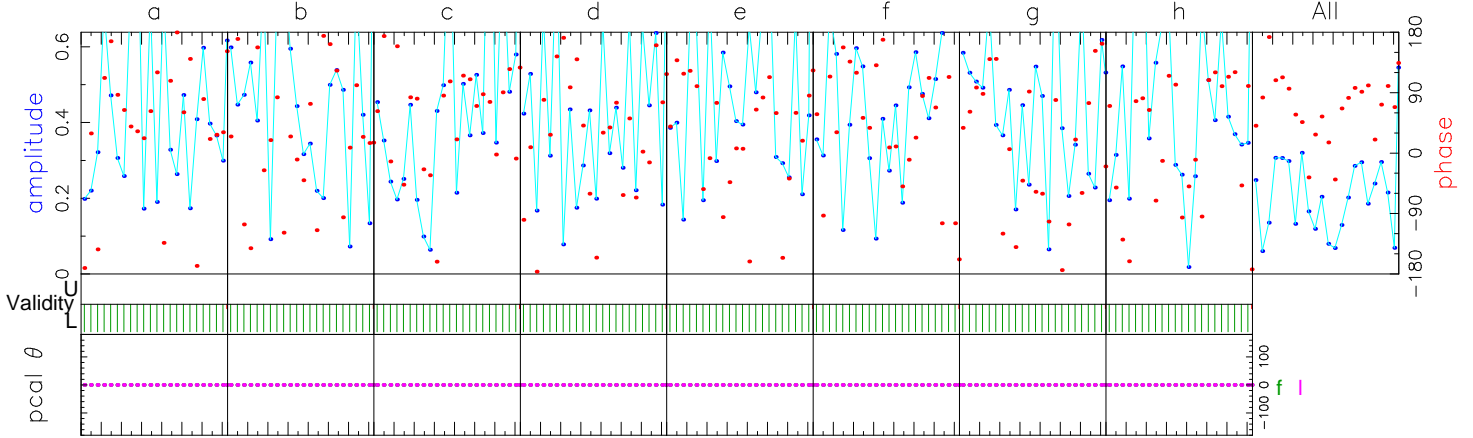
ph/seg (deg) 51.5 46.3 Theor. Amplitude 0.151 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.3 80.7 Search (2048X32) 0.144 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.3 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.7 47.6 Inc. seg. avg. 0.143 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 147.2 el 44.4 pa -27.5 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 93.123 -573.664 ion window (TEC) 0.00 0.00



Fringe quality 0
SNR 6.2
Int time 419.825
Amp 0.213
Phase -284.2
PFD 9.4e-02
Delays (us)
SBD 0.311784
MBD -0.010699
Fringe rate (Hz) 0.827566
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110820
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

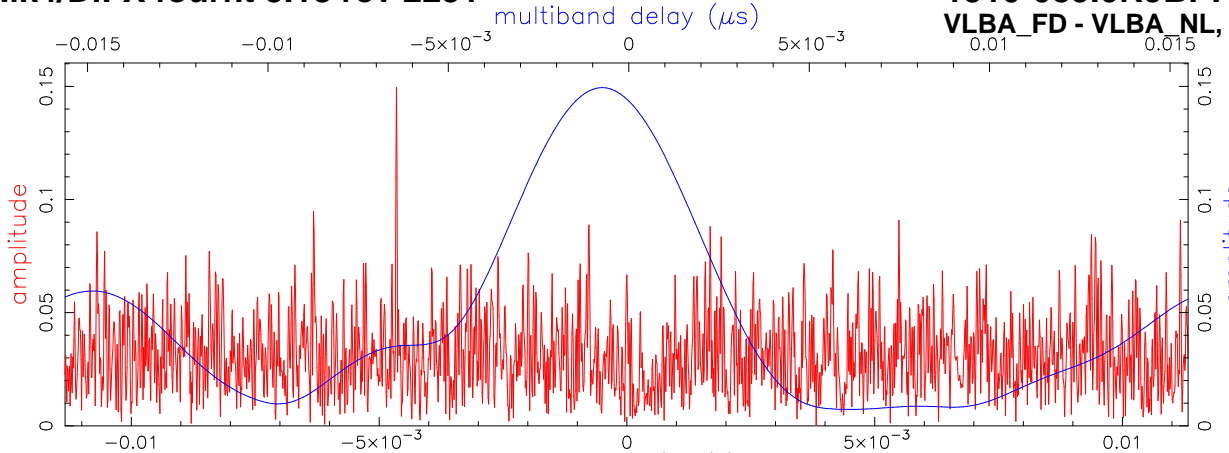


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

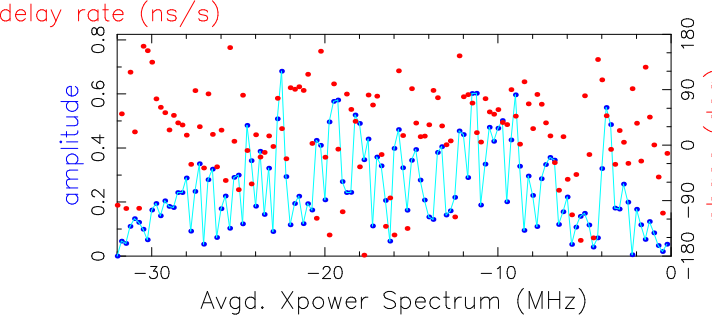
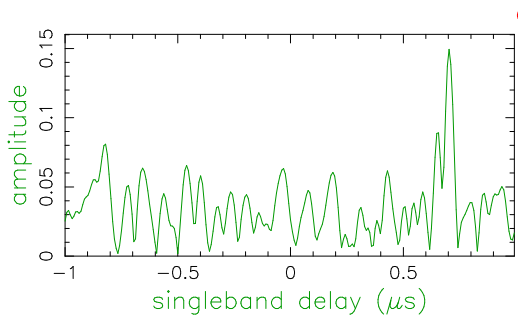


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	80.1	53.6	85.3	53.6	71.2	75.0	70.8	88.8	Phase	75.8
	0.3	0.0	0.4	0.2	0.3	0.2	0.1	0.2	Ampl.	0.2
	94.8	31.5	169.2	215.5	219.5	67.1	198.1	249.0	Sbd box	168.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Man'l PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.48496887430E+03		Apriori delay (usec)		1.48466707345E+03		Resid mbdelay (usec)		-1.06991E-02	+/- 3.5E-04
Sband delay (usec)	1.48497885745E+03		Apriori clock (usec)		9.4991207E+00		Resid sbdelay (usec)		3.11784E-01	+/- 2.8E-03
Phase delay (usec)	1.48466707590E+03		Apriori clockrate (us/s)		1.9299999E-07		Resid phdelay (usec)		2.44509E-06	+/- 6.0E-07
Delay rate (us/s)	-1.79360438657E-02		Apriori rate (us/s)		-1.79456510907E-02		Resid rate (us/s)		9.60723E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.49523013531E-06		Resid phase (deg)		-284.2	+/- 18.6

ph/seg (deg) 48.8 44.6 Search (2048X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 65.8 77.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 14.8 26.3 Inc. seg. avg. 0.211 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 46.5 45.9 Inc. frq. avg. 0.196 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 147.2 el 44.4 pa -27.5 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 93.123 -573.664 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fl.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fl.W.8.0RJBPf simultaneous interpolator

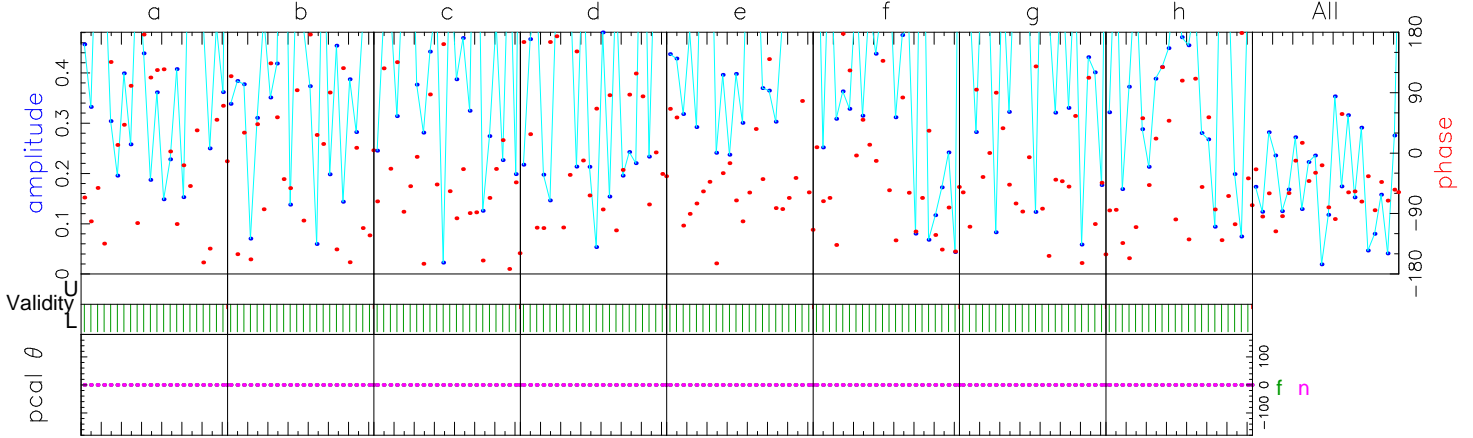


Fringe quality 0
 SNR 5.9
 Int time 419.825
 Amp 0.160
 Phase -236.4
 PFD 3.3e-01
 Delays (us)
 SBD 0.703291
 MBD -0.000740
 Fringe rate (Hz)
 -0.400748
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110820
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

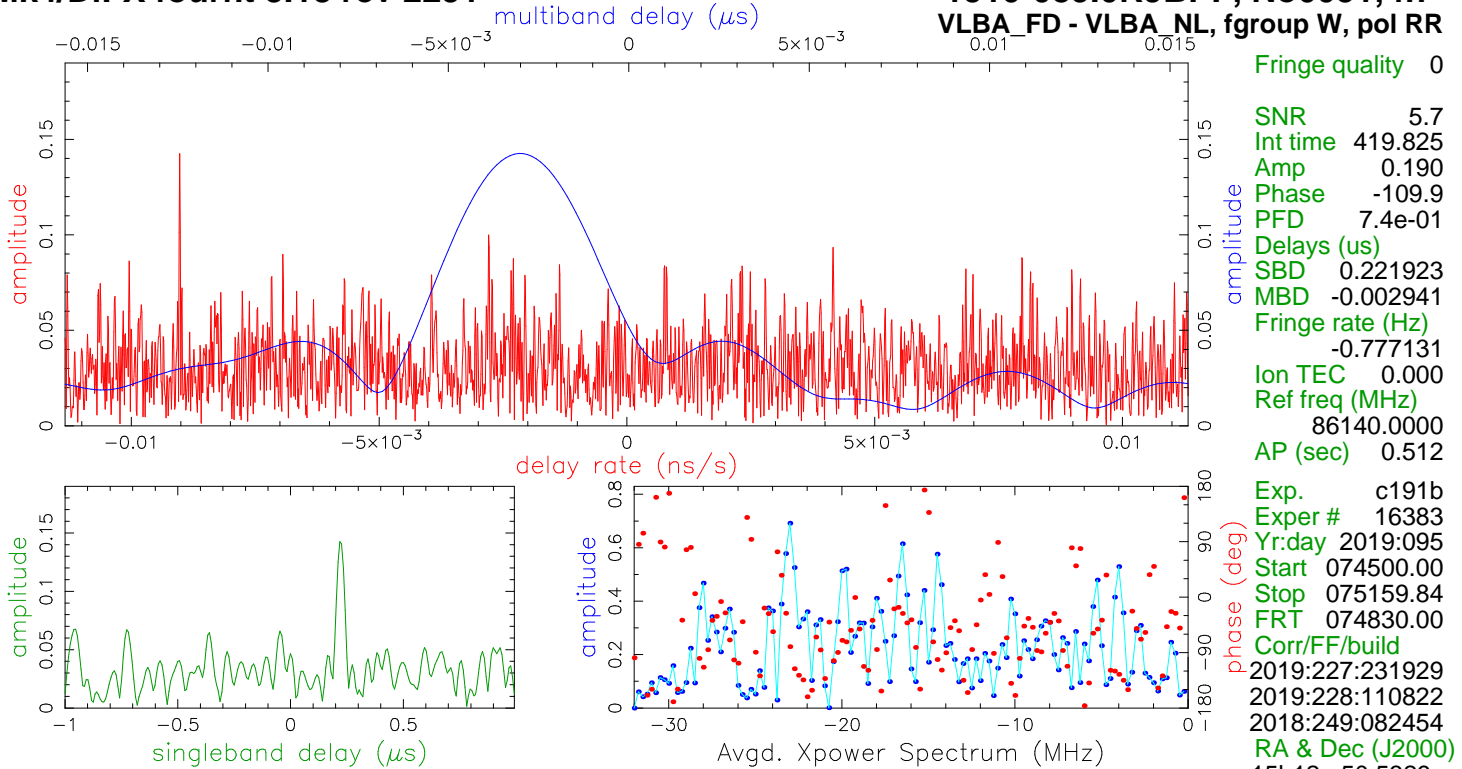


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-68.3	-66.0	-67.0	-43.1	-47.6	-41.9	-48.9	-91.6	Phase	-56.4
	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.1	Ampl.	0.1
	176.6	69.9	182.3	175.9	218.2	102.1	219.7	9.1	Sbd box	219.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

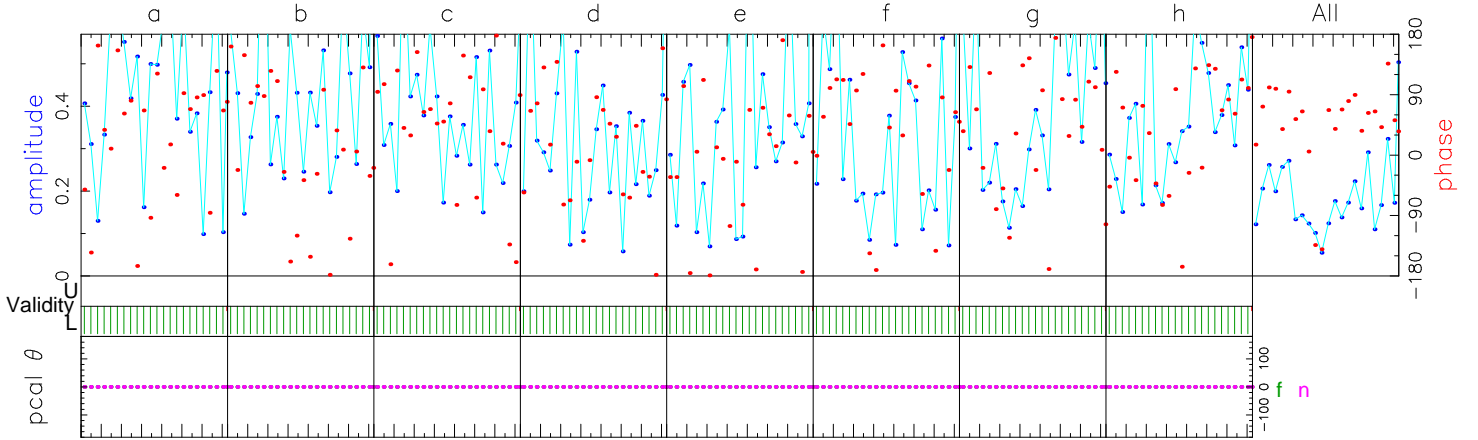
Group delay (usec)(sbd)	1.82503256095E+03	Apriori delay (usec)	1.82431455056E+03	Resid mbdelay (usec)	-7.39603E-04	+/-	3.7E-04
Sband delay (usec)	1.82501784156E+03	Apriori clock (usec)	-1.4806830E+01	Resid sbdelay (usec)	7.03291E-01	+/-	2.9E-03
Phase delay (usec)	1.82431454874E+03	Apriori clockrate (us/s)	-3.0999996E-07	Resid phdelay (usec)	-1.81995E-06	+/-	6.2E-07
Delay rate (us/s)	3.02788626560E-01	Apriori rate (us/s)	3.02793278847E-01	Resid rate (us/s)	-4.65229E-06	+/-	2.6E-09
Total phase (deg)	-97.9	Apriori accel (us/s/s)	-6.96684380407E-06	Resid phase (deg)	-236.4	+/-	19.4

ph/seg (deg)	RMS 39.5	Theor. 46.4	Amplitude Search (2048X32)	0.160 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.0	81.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	18.7	27.4	Inc. seg. avg.	0.149	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.3	47.8	Inc. frq. avg.	0.149	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00

f: az 147.2 el 44.4 pa -27.5 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -1768.811 -1282.848 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fn.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fn.W.12.0RJBPf



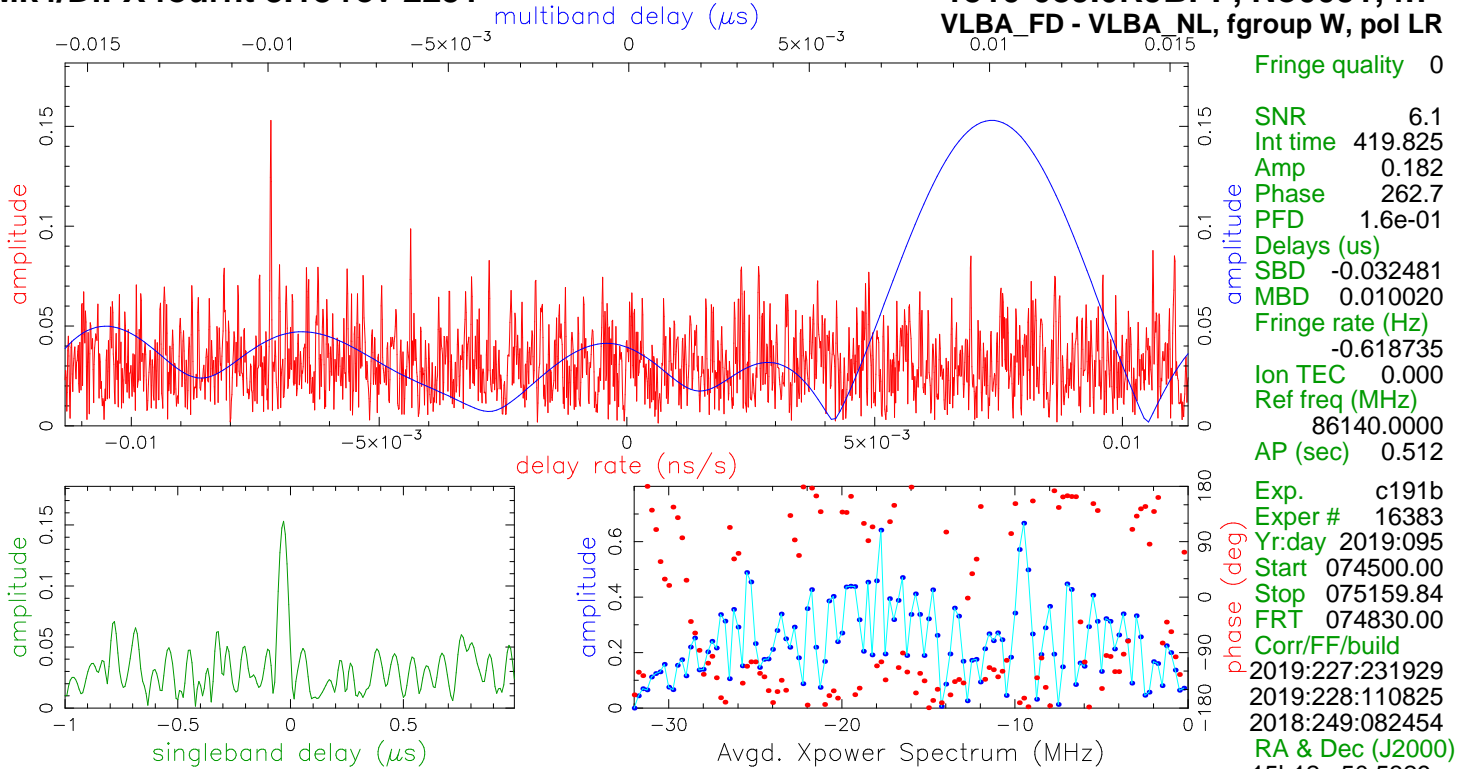
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
68.5	94.0	81.7	37.4	50.2	84.6	71.2	63.6	63.6	Phase	70.1
0.2	0.1	0.2	0.1	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
99.7	254.6	94.1	35.9	64.9	191.1	156.2	26.3	26.3	Sbd box	157.4
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

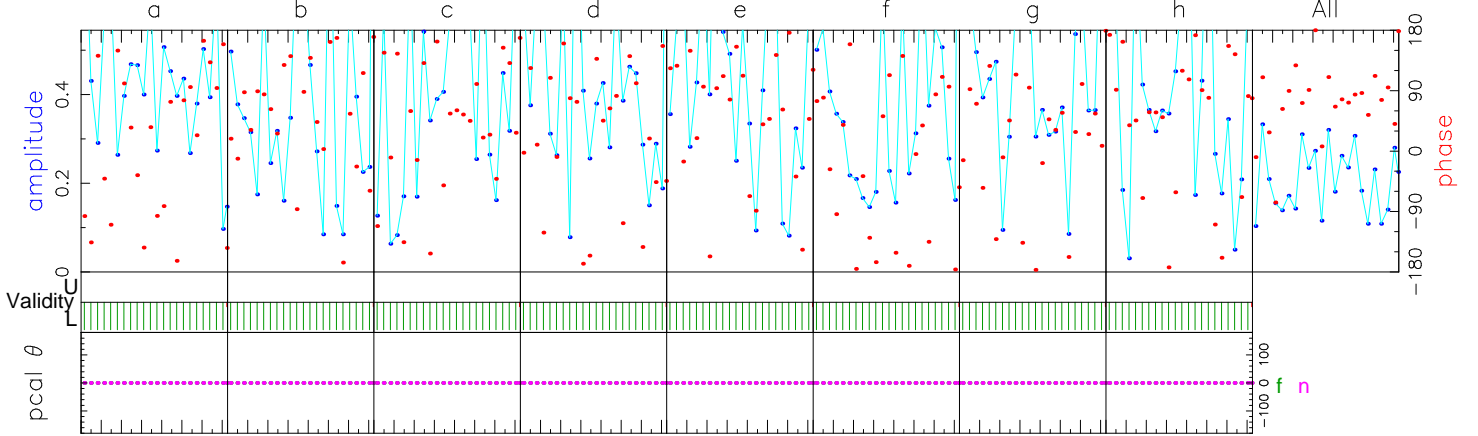
Group delay (usec)(sbd)	1.82453035934E+03	Apriori delay (usec)	1.82431455056E+03	Resid mbdelay (usec)	-2.94122E-03	+/-	3.8E-04
Sband delay (usec)	1.82453647356E+03	Apriori clock (usec)	-1.4806830E+01	Resid sbdelay (usec)	2.21923E-01	+/-	3.0E-03
Phase delay (usec)	1.82431455282E+03	Apriori clockrate (us/s)	-3.0999996E-07	Resid phdelay (usec)	2.26122E-06	+/-	6.5E-07
Delay rate (us/s)	3.02784257125E-01	Apriori rate (us/s)	3.02793278847E-01	Resid rate (us/s)	-9.02172E-06	+/-	2.7E-09
Total phase (deg)	-331.3	Apriori accel (us/s/s)	-6.96684380407E-06	Resid phase (deg)	-109.9	+/-	20.1

ph/seg (deg)	54.6	Theor.	48.1	Amplitude	0.190 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	56.3	Search (2048X32)	0.140	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	20.1	Inc. seg. avg.	0.177	Inc. frq. avg.	0.174	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	31.8	Inc. frq. avg.	0.174	u,v (fr/asec)	-1768.811 -1282.848	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

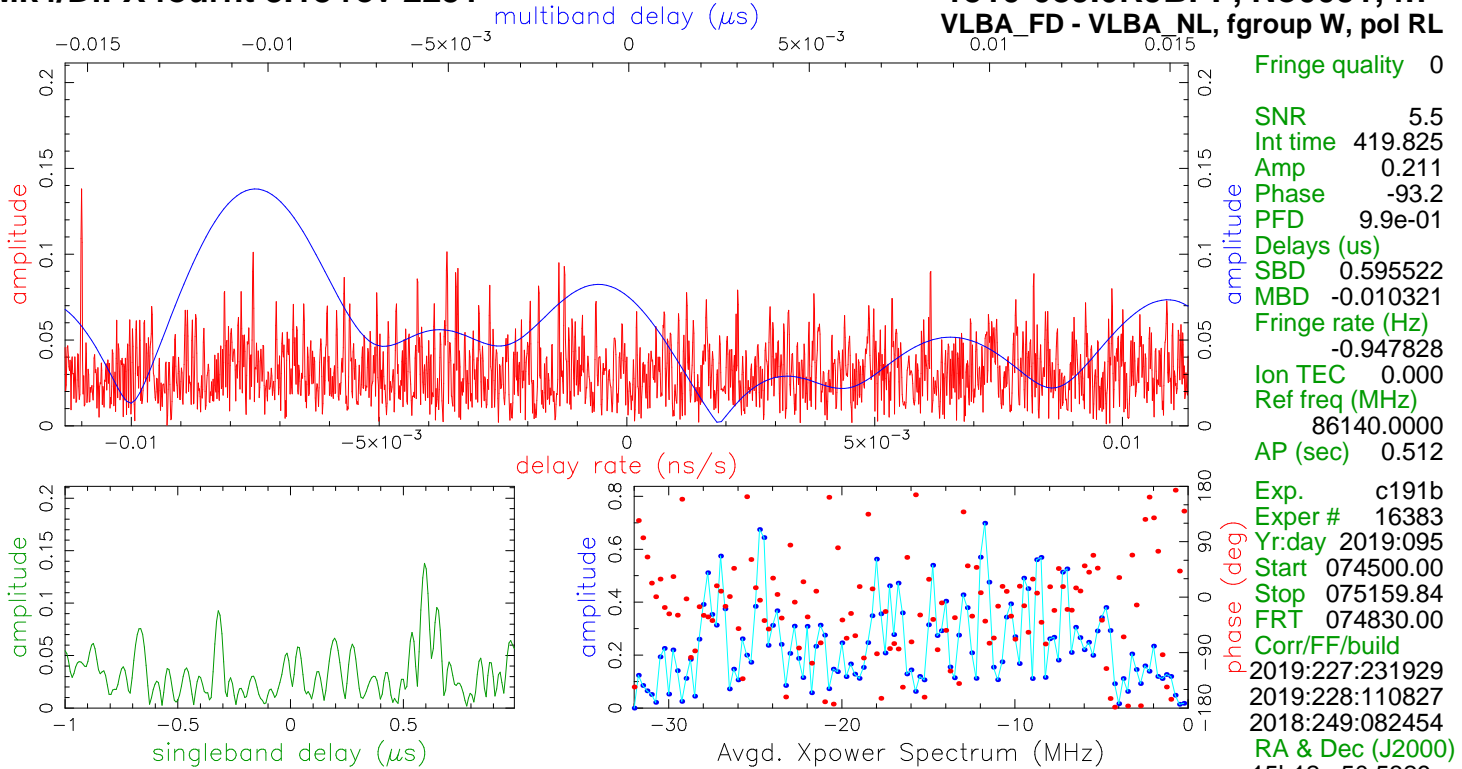


Fringe quality 0
 SNR 6.1
 Int time 419.825
 Amp 0.182
 Phase 262.7
 PFD 1.6e-01
 Delays (us)
 SBD -0.032481
 MBD 0.010020
 Fringe rate (Hz)
 -0.618735
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110825
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

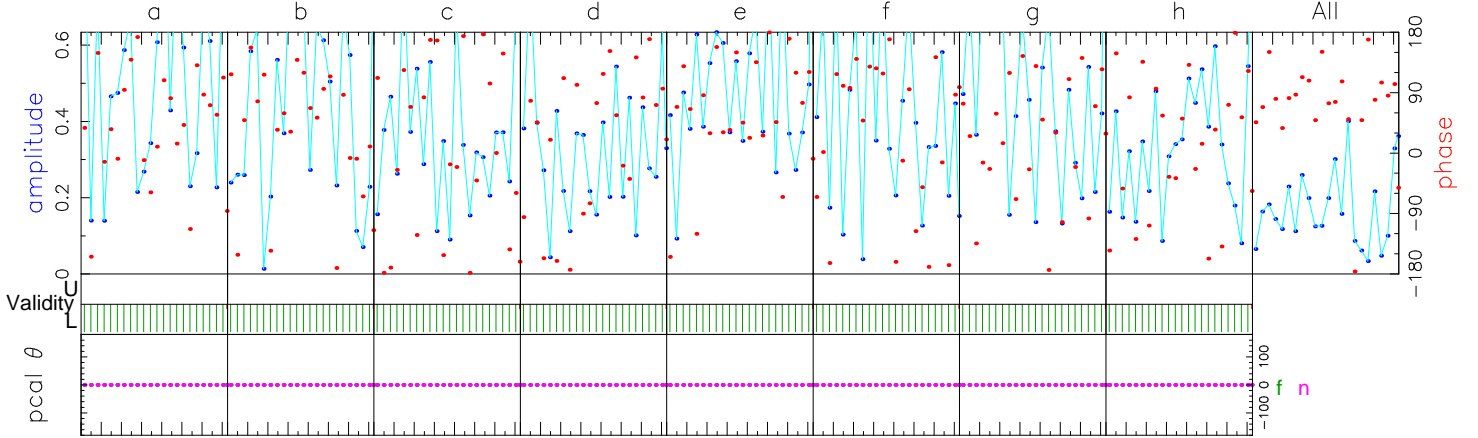
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
160.7	78.6	68.3	96.7	90.1	85.1	59.5	97.5	Phase	82.7
0.0	0.2	0.3	0.1	0.3	0.1	0.2	0.3	Ampl.	0.2
205.5	20.6	126.2	40.7	73.5	110.7	102.2	69.5	Sbd box	124.8
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.82429332012E+03		Apriori delay (usec)	1.82431455056E+03		Resid mbdelay (usec)	1.00196E-02	+/-	3.6E-04
Sband delay (usec)	1.82428207006E+03		Apriori clock (usec)	-1.4806830E+01		Resid sbdelay (usec)	-3.24805E-02	+/-	2.8E-03
Phase delay (usec)	1.82431455322E+03		Apriori clockrate (us/s)	-3.0999996E-07		Resid phdelay (usec)	2.66765E-06	+/-	6.1E-07
Delay rate (us/s)	3.02786095949E-01		Apriori rate (us/s)	3.02793278847E-01		Resid rate (us/s)	-7.18290E-06	+/-	2.5E-09
Total phase (deg)		41.3	Apriori accel (us/s/s)	-6.96684380407E-06		Resid phase (deg)	262.7	+/-	18.9
RMS	Theor.	Amplitude	0.182 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
ph/seg (deg)	52.8	45.3	Search (2048X32)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	mb window (us)	-0.016	0.016	
amp/seg (%)	59.7	79.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.9	26.7	Inc. seg. avg.	0.187	Sample rate(MSamp/s): 64	Data rate(Mb/s): 1024	ion window (TEC)	0.00	0.00
amp/frq (%)	43.4	46.6	Inc. frq. avg.	0.171	nlags: 128	t_cohere infinite			
f: az 147.2 el 44.4 pa -27.5	n: az 166.5 el 38.1 pa -9.4	u,v (fr/asec)	-1768.811 -1282.848						simultaneous interpolator



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

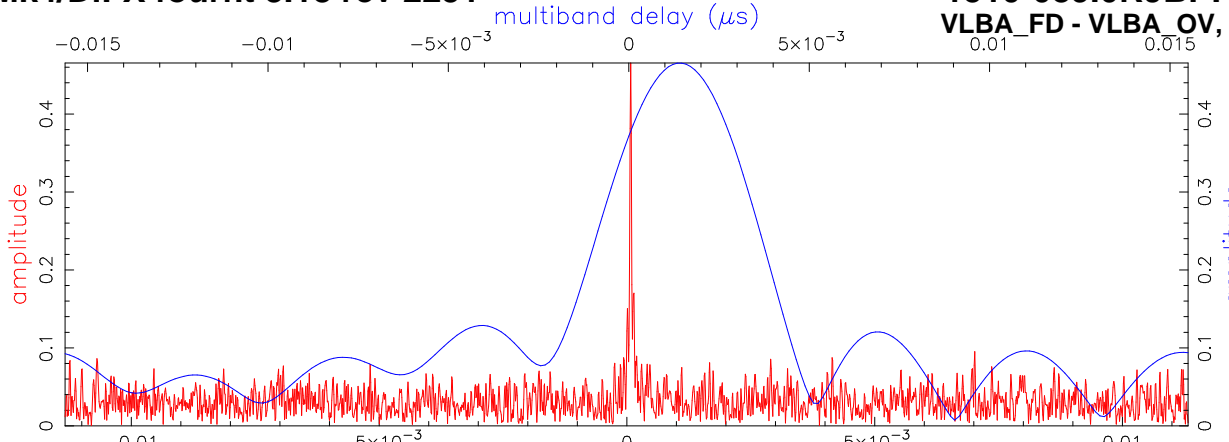


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
71.6	84.2	-177.8	92.6	101.3	116.6	27.9	83.5	Phase	86.8
0.4	0.4	0.1	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
204.9	204.2	132.4	3.8	125.5	88.9	197.6	169.5	Sbd box	205.2
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Tracks	
Group delay (usec)(sbd)	1.82489797999E+03		Apriori delay (usec)	1.82431455056E+03		Resid mbdelay (usec)	-1.03206E-02	+/-	4.0E-04
Sband delay (usec)	1.82491007206E+03		Apriori clock (usec)	-1.4806830E+01		Resid sbdelay (usec)	5.95522E-01	+/-	3.1E-03
Phase delay (usec)	1.82431455336E+03		Apriori clockrate (us/s)	-3.0999996E-07		Resid phdelay (usec)	2.80061E-06	+/-	6.7E-07
Delay rate (us/s)	3.02782275506E-01		Apriori rate (us/s)	3.02793278847E-01		Resid rate (us/s)	-1.10033E-05	+/-	2.8E-09
Total phase (deg)		-314.6	Apriori accel (us/s/s)	-6.96684380407E-06		Resid phase (deg)	-93.2	+/-	20.9

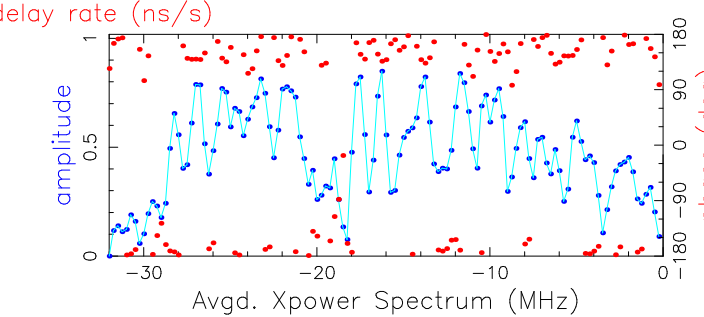
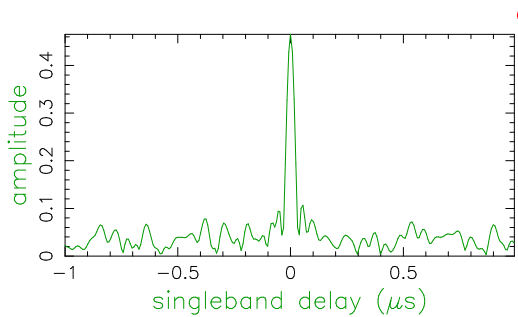
ph/seg (deg)	41.7	50.1	Search (2048X32)	0.135	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.1	87.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	48.2	29.5	Inc. seg. avg.	0.185	Bits/sample: 2x2	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011	0.011
amp/frq (%)	54.5	51.5	Inc. frq. avg.	0.222	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 147.2 el 44.4 pa -27.5 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -1768.811 -1282.848 simultaneous interpolator

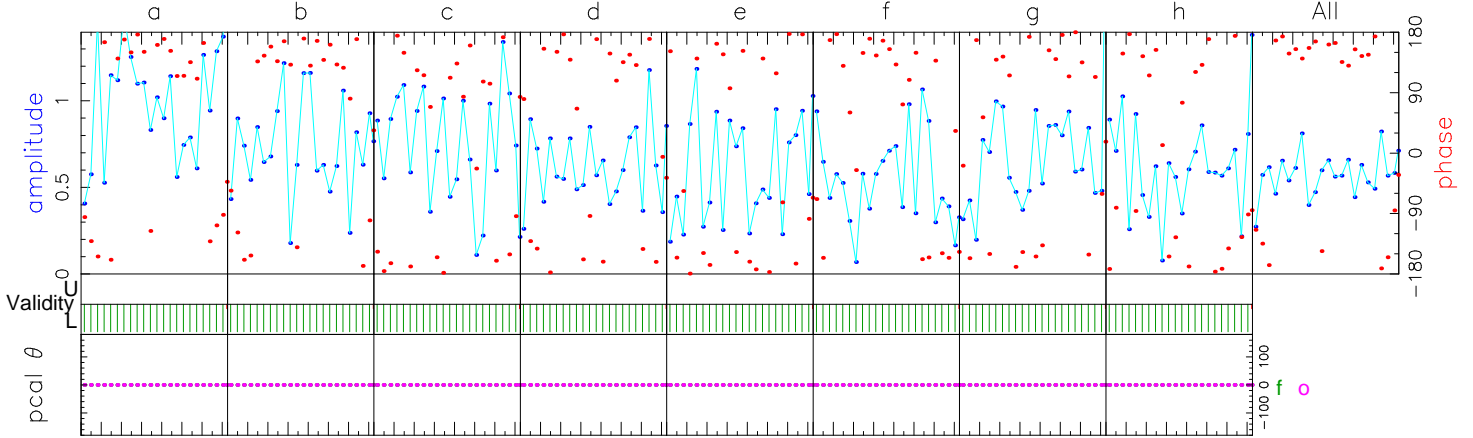
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fn.W.62.0RJBPf



Fringe quality 9
 SNR 18.4
 Int time 419.825
 Amp 0.465
 Phase 171.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000061
 MBD 0.001414
 Fringe rate (Hz) 0.006695
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110821
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



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

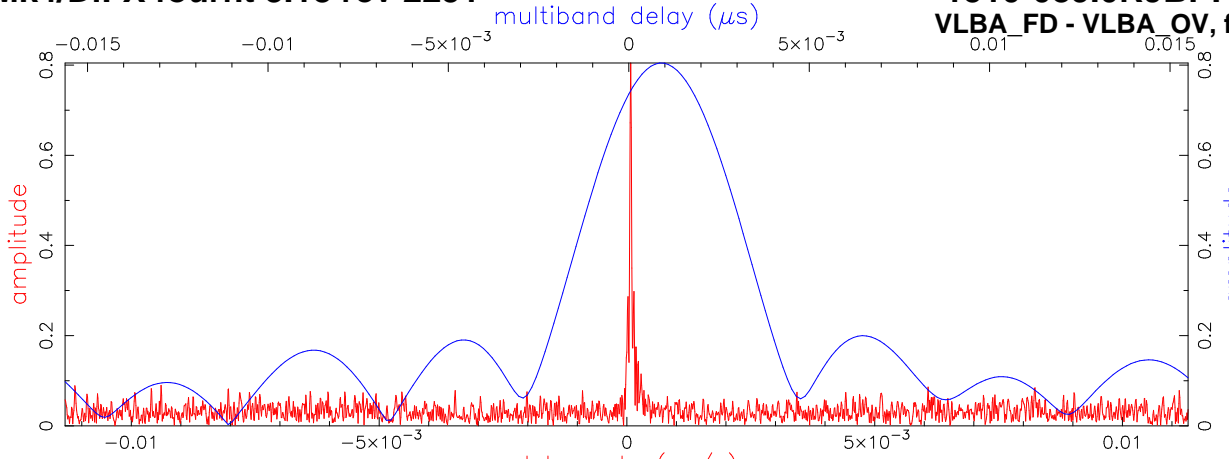


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Phase	171.4
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	0.5
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	129.0
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC amp	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

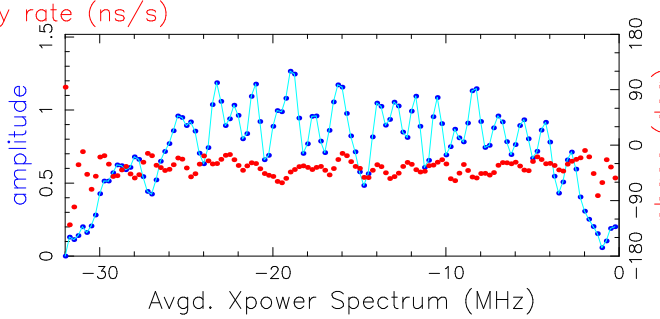
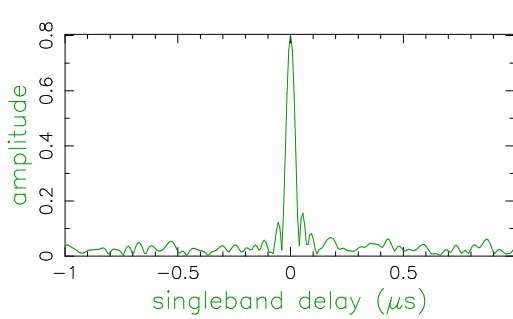
Group delay (usec)(sbd) 3.59775633816E+03 Apriori delay (usec) 3.59775492385E+03 Resid mbdelay (usec) 1.41432E-03 +/- 1.2E-04
 Sband delay (usec) 3.59775498485E+03 Apriori clock (usec) -6.6592007E+00 Resid sbdelay (usec) 6.10000E-05 +/- 9.3E-04
 Phase delay (usec) 3.59775492937E+03 Apriori clockrate (us/s) -1.6400001E-07 Resid phdelay (usec) 5.52699E-06 +/- 2.0E-07
 Delay rate (us/s) -2.29435925700E-01 Apriori rate (us/s) -2.29436003417E-01 Resid rate (us/s) 7.77174E-08 +/- 8.3E-10
 Total phase (deg) 221.8 Apriori accel (us/s/s) -1.74513145823E-05 Resid phase (deg) 171.4 +/- 6.2

RMS Theor. Amplitude 0.465 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.0 14.9 Search (2048X32) 0.455 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 34.3 26.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 9.6 8.8 Inc. seg. avg. 0.552 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 22.5 15.3 Inc. frq. avg. 0.465 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

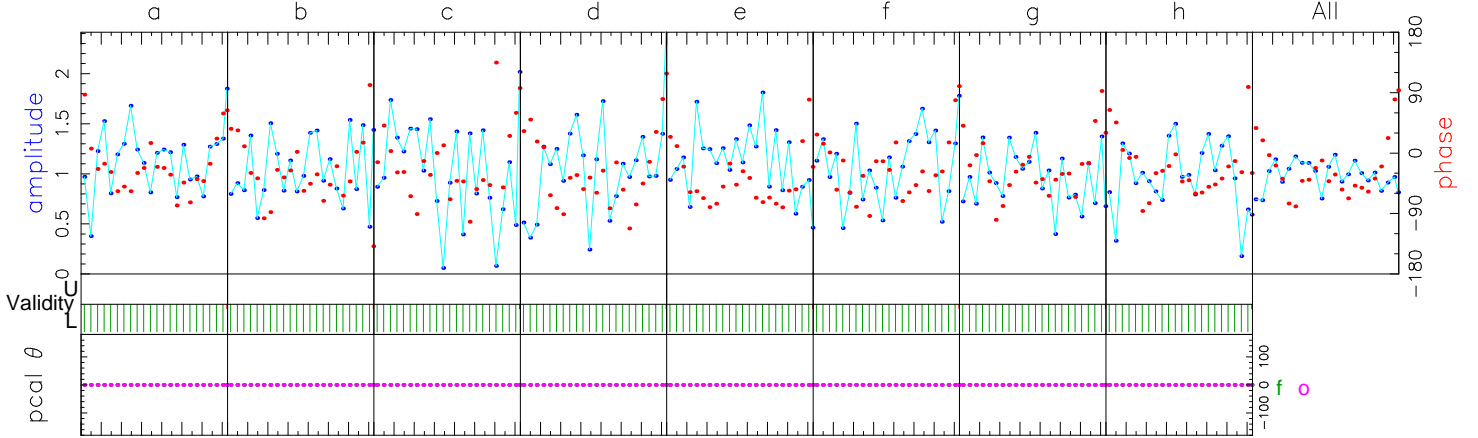
f: az 147.2 el 44.4 pa -27.5 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1302.535 -610.754 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fo.W.15.0RJBPf



Fringe quality 8
SNR 31.9
Int time 419.825
Amp 0.805
Phase -31.5
PFD 0.0e+00
Delays (us)
SBD 0.000072
MBD 0.000903
Fringe rate (Hz) 0.006643
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110823
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



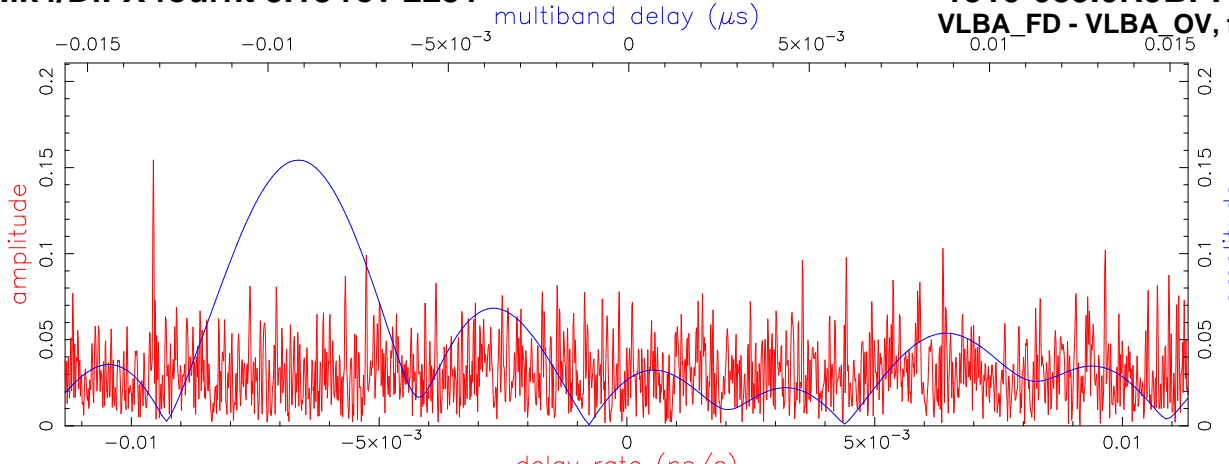
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



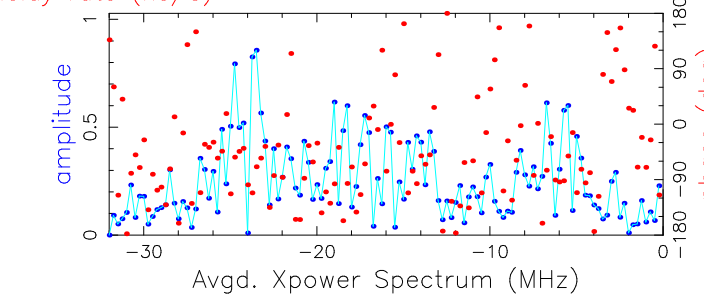
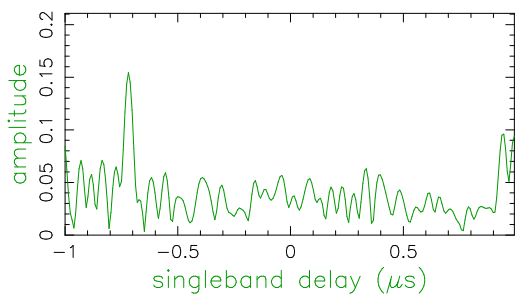
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-24.0	-30.6	-32.9	-36.3	-46.9	-28.9	-24.2	-26.9	Phase	-31.5
	0.9	0.8	0.8	0.7	0.8	0.8	0.7	0.8	Ampl.	0.8
	129.1	128.9	128.8	129.0	129.0	128.8	129.3	129.0	Sbd box	129.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.59775582710E+03		Apriori delay (usec)		3.59775492385E+03		Resid mbdelay (usec)		9.03255E-04	+/- 6.8E-05
Sband delay (usec)	3.59775499585E+03		Apriori clock (usec)		-6.6592007E+00		Resid sbdelay (usec)		7.20000E-05	+/- 5.4E-04
Phase delay (usec)	3.59775492283E+03		Apriori clockrate (us/s)		-1.6400001E-07		Resid phdelay (usec)		-1.01678E-06	+/- 1.2E-07
Delay rate (us/s)	-2.29435926299E-01		Apriori rate (us/s)		-2.29436003417E-01		Resid rate (us/s)		7.71180E-08	+/- 4.8E-10
Total phase (deg)	18.9		Apriori accel (us/s/s)		-1.74513145823E-05		Resid phase (deg)		-31.5	+/- 3.6

RMS Theor. Amplitude 0.805 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.4 8.6 Search (2048X32) 0.802 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 28.2 15.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 8.2 5.1 Inc. seg. avg. 0.978 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 9.1 8.9 Inc. frq. avg. 0.808 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 147.2 el 44.4 pa -27.5 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1302.535 -610.754 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fo.W.31.0RJBPf

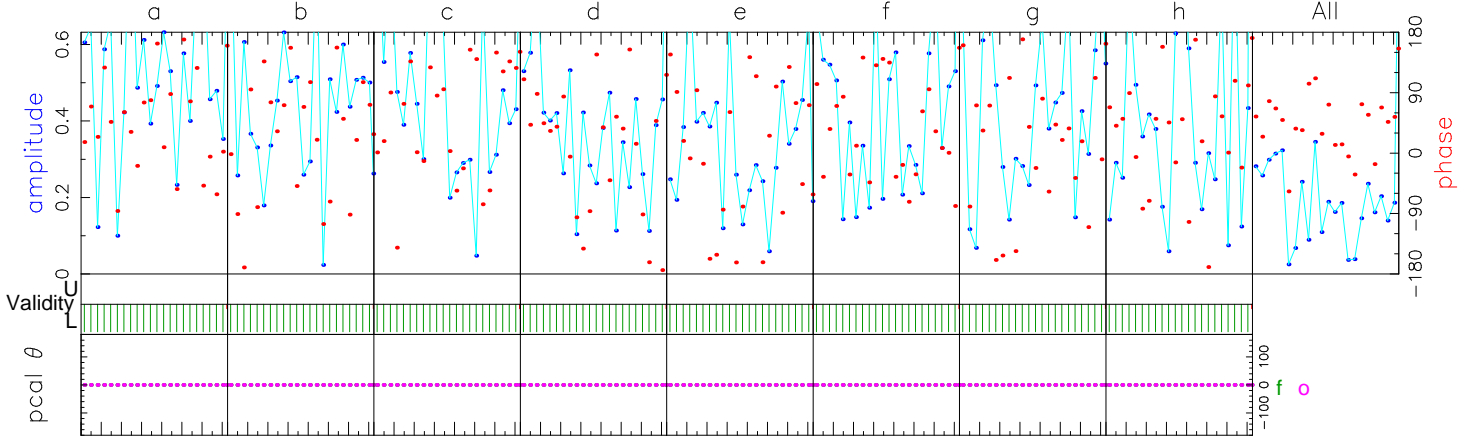


Fringe quality 0
 SNR 6.1
 Int time 419.825
 Amp 0.211
 Phase 234.8
 PFD 1.2e-01
 Delays (us)
 SBD -0.718490
 MBD -0.009152
 Fringe rate (Hz)
 -0.822975
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110826
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

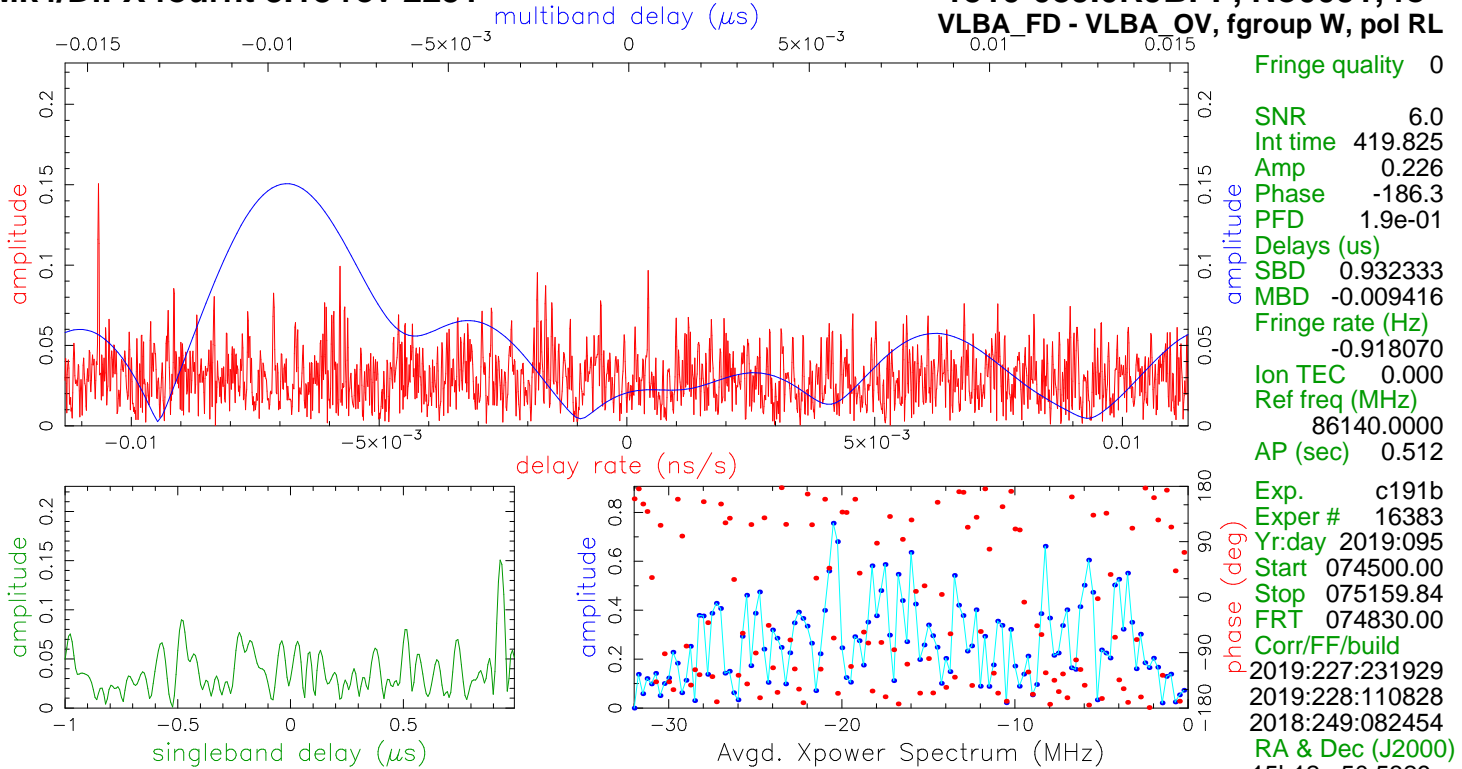


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

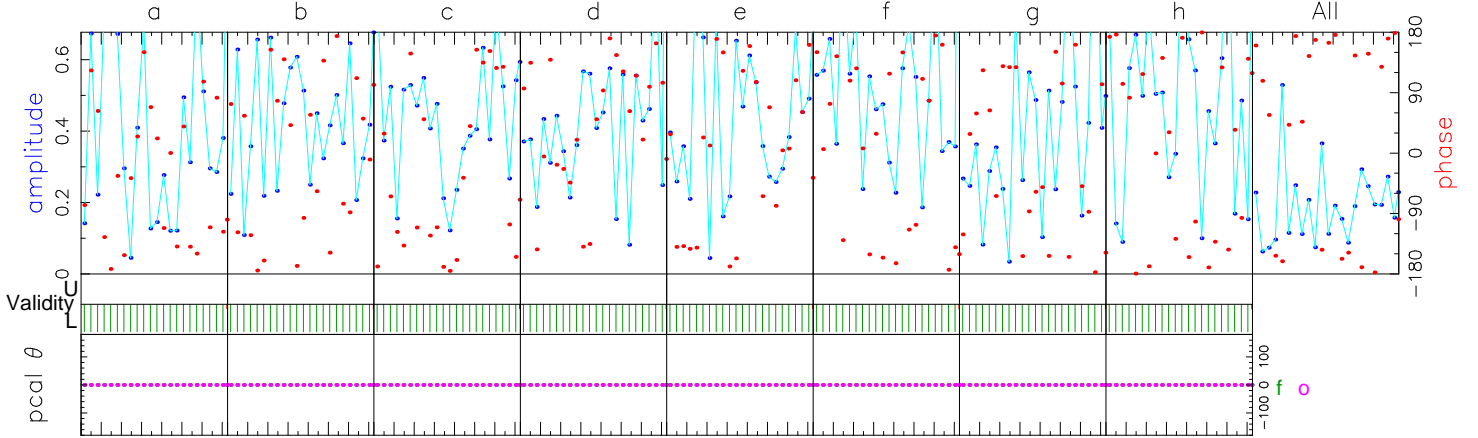
Group delay (usec)(sbd) 3.59702702211E+03 Apriori delay (usec) 3.59775492385E+03 Resid mbdelay (usec) -9.15174E-03 +/- 3.5E-04
 Sband delay (usec) 3.59703643435E+03 Apriori clock (usec) -6.6592007E+00 Resid sbdelay (usec) -7.18490E-01 +/- 2.8E-03
 Phase delay (usec) 3.59775492561E+03 Apriori clockrate (us/s) -1.6400001E-07 Resid phdelay (usec) 1.76849E-06 +/- 6.0E-07
 Delay rate (us/s) -2.29445557343E-01 Apriori rate (us/s) -2.29436003417E-01 Resid rate (us/s) -9.55393E-06 +/- 2.5E-09
 Total phase (deg) 285.3 Apriori accel (us/s/s) -1.74513145823E-05 Resid phase (deg) 234.8 +/- 18.7

RMS Theor. Amplitude 0.211 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 44.2 44.9 Search (2048X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 74.9 78.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 15.2 26.5 Inc. seg. avg. 0.197 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 28.2 46.2 Inc. frq. avg. 0.195 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 147.2 el 44.4 pa -27.5 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1302.535 -610.754 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fo.W.53.0RJBPf



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

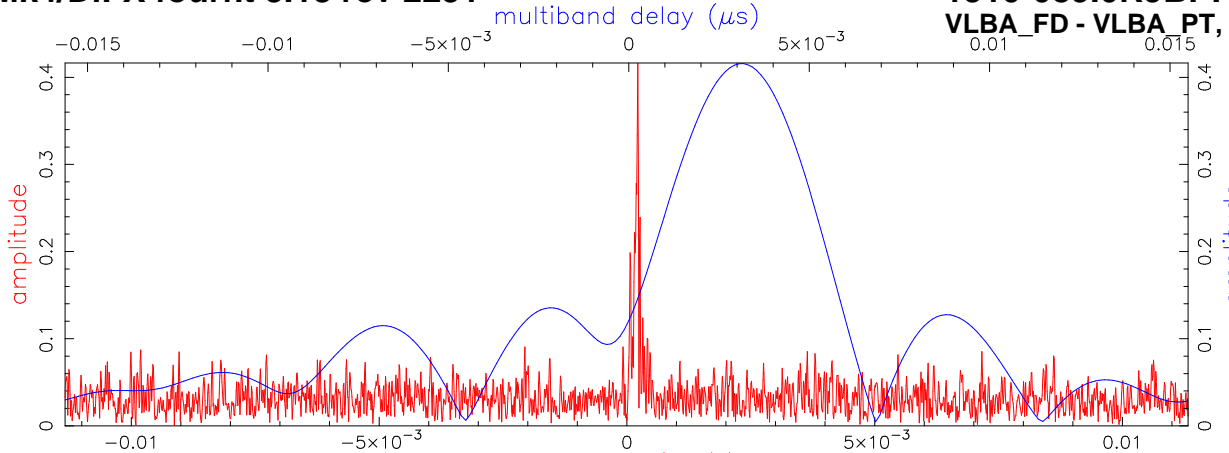


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-165.8	-162.8	-175.3	113.1	151.5	166.9	-174.5	-178.4	Phase	173.7
0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.4	Ampl.	0.2
171.5	226.9	41.0	121.2	222.0	131.8	11.7	249.1	Sbd box	248.3
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.59868300739E+03	Apriori delay (usec)	3.59775492385E+03	Resid mbdelay (usec)	-9.41645E-03	+/-	3.6E-04		
Sband delay (usec)	3.59868725685E+03	Apriori clock (usec)	-6.6592007E+00	Resid sbdelay (usec)	9.32333E-01	+/-	2.9E-03		
Phase delay (usec)	3.59775492945E+03	Apriori clockrate (us/s)	-1.6400001E-07	Resid phdelay (usec)	5.60000E-06	+/-	6.1E-07		
Delay rate (us/s)	-2.29446661299E-01	Apriori rate (us/s)	-2.29436003417E-01	Resid rate (us/s)	-1.06579E-05	+/-	2.5E-09		
Total phase (deg)		Apriori accel (us/s/s)	-1.74513145823E-05	Resid phase (deg)	-186.3	+/-	19.0		

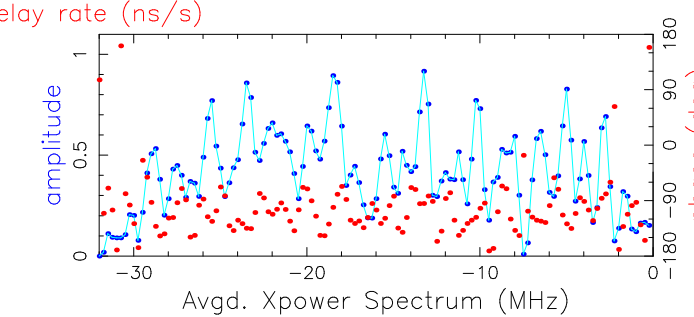
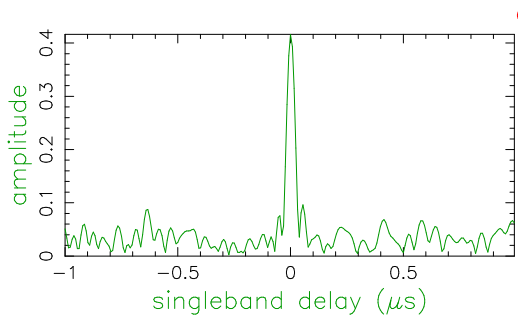
ph/seg (deg)	53.6	Theor.	45.6	Amplitude	0.226 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.0		79.5	Search (2048X32)	0.143	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.016	0.016
ph/frq (deg)	30.3		26.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.9		46.9	Inc. seg. avg.	0.216	Sample rate(MSamp/s):	64	Data rate(Mb/s):	1024	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.219	nlags:	128	t_cohere	infinite			

f: az 147.2 el 44.4 pa -27.5 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1302.535 -610.754 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fo.W.72.0RJBPf

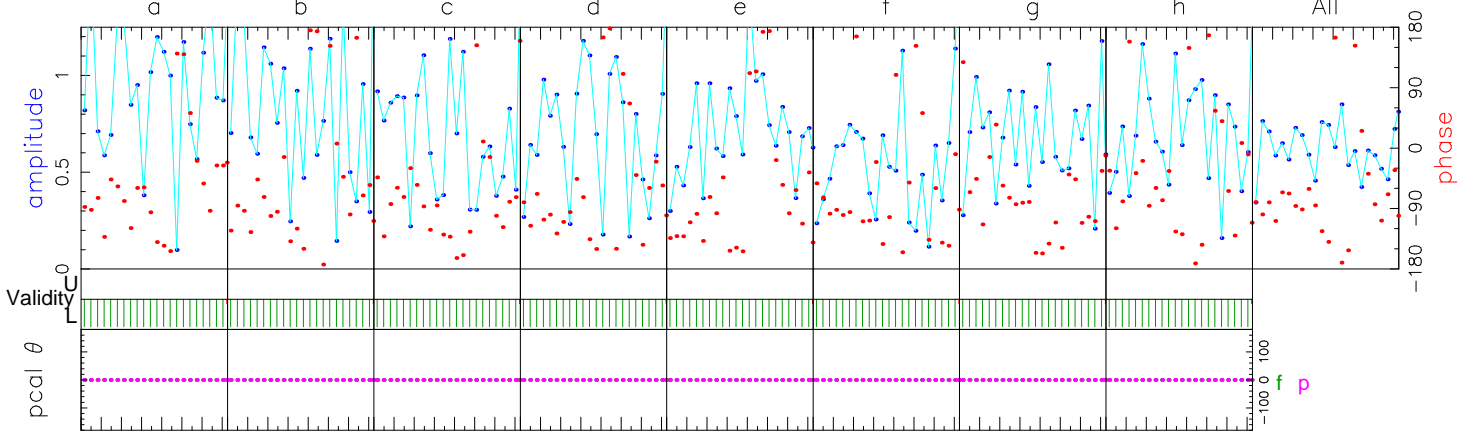


Fringe quality 9
SNR 16.5
Int time 419.825
Amp 0.416
Phase -97.6
PFD 0.0e+00
Delays (us)
SBD 0.001106
MBD 0.003133
Fringe rate (Hz) 0.018799
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110822
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

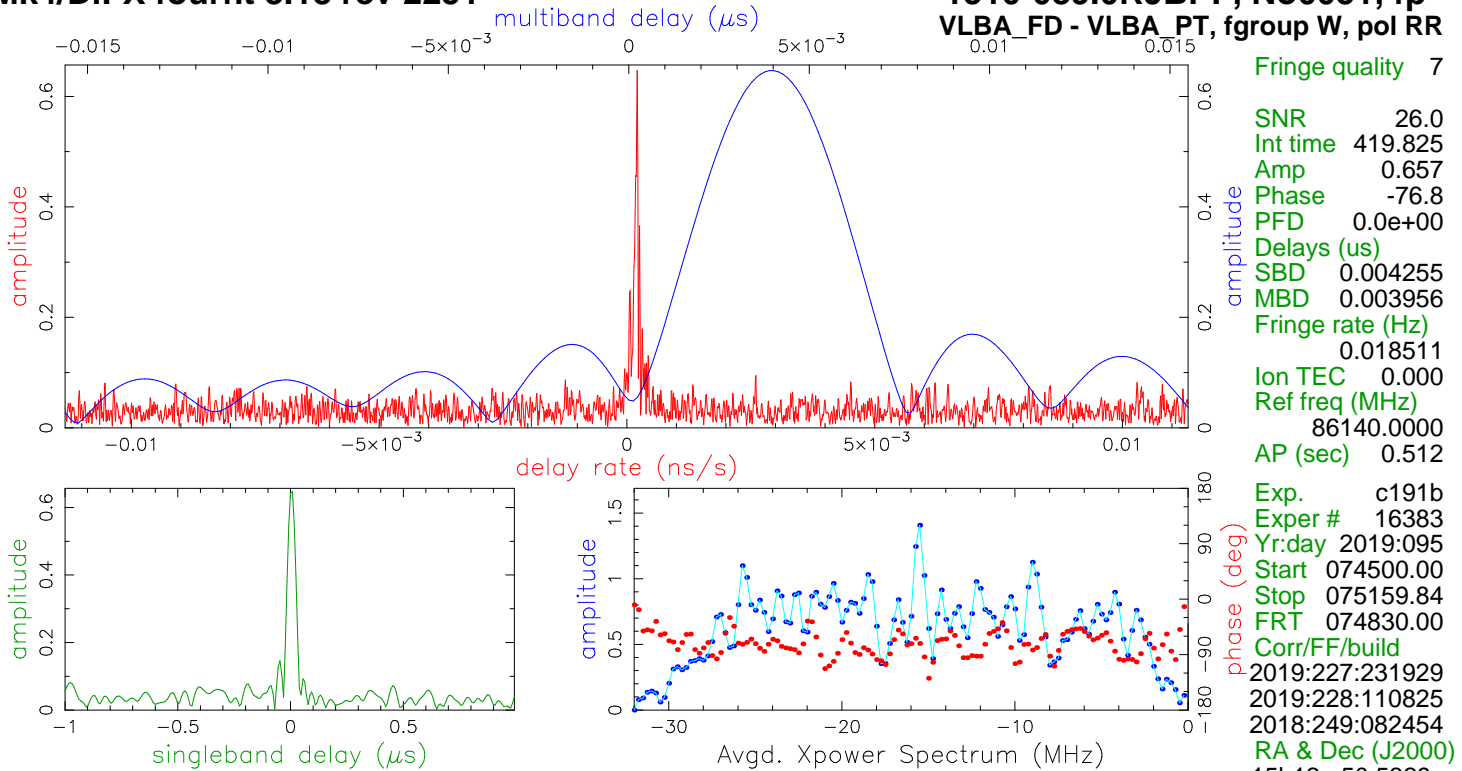


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	1.36240129958E+03	Apriori delay (usec)	1.36239816620E+03	Resid mbdelay (usec)	3.13338E-03	+/-	1.3E-04
Sband delay (usec)	1.36239927170E+03	Apriori clock (usec)	-6.4526176E-01	Resid sbdelay (usec)	1.10550E-03	+/-	1.0E-03
Phase delay (usec)	1.36239816305E+03	Apriori clockrate (us/s)	-2.2899998E-07	Resid phdelay (usec)	-3.14589E-06	+/-	2.2E-07
Delay rate (us/s)	-6.47336488404E-02	Apriori rate (us/s)	-6.47338670762E-02	Resid rate (us/s)	2.18236E-07	+/-	9.2E-10
Total phase (deg)	-84.5	Apriori accel (us/s/s)	-6.27702953078E-06	Resid phase (deg)	-97.6	+/-	6.9

ph/seg (deg)	52.4	RMS	16.7	Theor.	17.1	Amplitude	0.416 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	56.7		29.1	Search (2048X32)		Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.016	0.016		
ph/frq (deg)	14.4		9.8	Inc. seg. avg.		Inc. seg. avg.	0.592	Bits/sample:	2x2	ion window (TEC)		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	23.9		17.1	Inc. frq. avg.		Inc. frq. avg.	0.419	Sample rate (MSamp/s):	64	nlags:	128	t_cohere	infinite	ion window (TEC)	0.00	0.00

f: az 147.2 el 44.4 pa -27.5 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 365.077 -392.087 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fp.W.21.0RJBPf



Fringe quality 7

SNR 26.0

Int time 419.825

Amp 0.657

Phase -76.8

PFD 0.0e+00

Delays (us)

SBD 0.004255

MBD 0.003956

Fringe rate (Hz)

0.018511

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110825

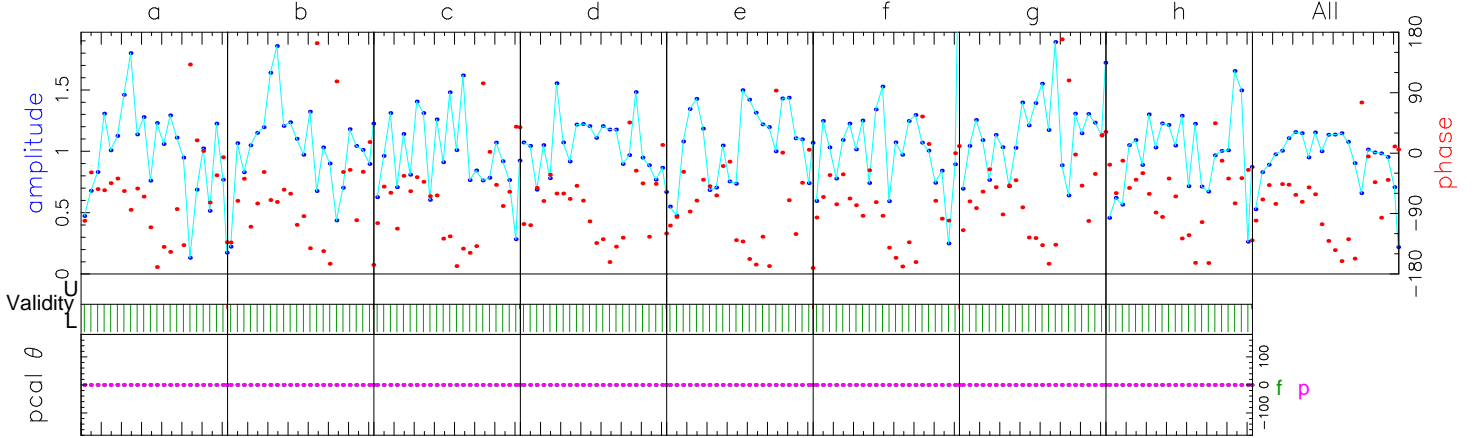
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-69.8	-77.1	-79.2	-79.6	-83.4	-78.8	-83.9	-63.8	Phase	-76.8
0.7	0.7	0.6	0.7	0.6	0.7	0.7	0.7	Ampl.	0.6
129.9	129.4	129.3	129.8	129.4	129.0	129.6	129.8	Sbd box	129.5
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.36240212244E+03	Apriori delay (usec)	1.36239816620E+03	Resid mbdelay (usec)	3.95625E-03	+/-	8.3E-05		
Sband delay (usec)	1.36240242120E+03	Apriori clock (usec)	-6.4526176E-01	Resid sbdelay (usec)	4.25500E-03	+/-	6.6E-04		
Phase delay (usec)	1.36239816372E+03	Apriori clockrate (us/s)	-2.2899998E-07	Resid phdelay (usec)	-2.47587E-06	+/-	1.4E-07		
Delay rate (us/s)	-6.47336521792E-02	Apriori rate (us/s)	-6.47338670762E-02	Resid rate (us/s)	2.14897E-07	+/-	5.9E-10		
Total phase (deg)	-63.7	Apriori accel (us/s/s)	-6.27702953078E-06	Resid phase (deg)	-76.8	+/-	4.4		

RMS Theor. Amplitude 0.657 +/- 0.025

ph/seg (deg) 55.6 10.6 Search (2048X32) 0.624

amp/seg (%) 54.8 18.4 Interp. 0.000

ph/frq (deg) 7.4 6.2 Inc. seg. avg. 0.954

amp/frq (%) 7.8 10.9 Inc. frq. avg. 0.647

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(MSamp/s): 64

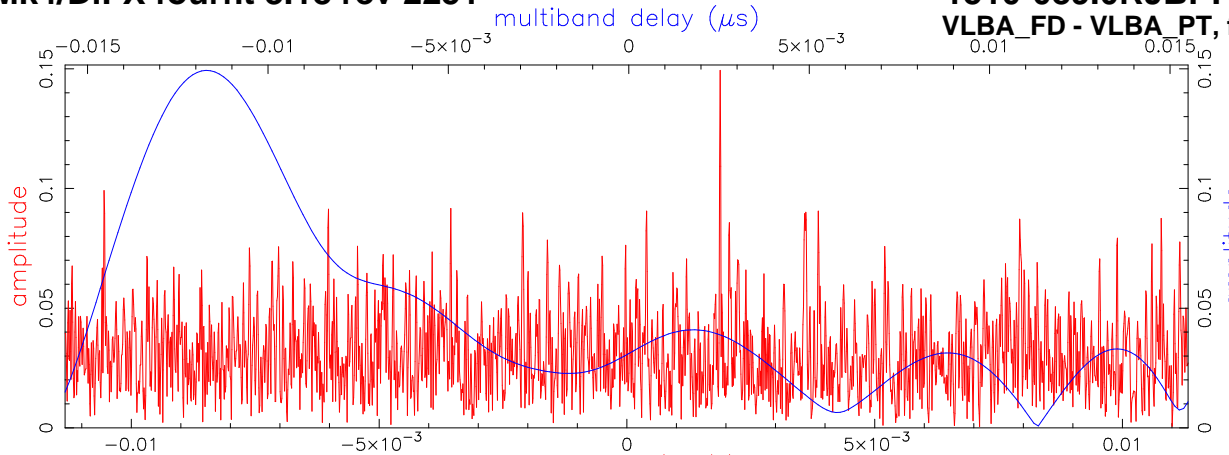
Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000

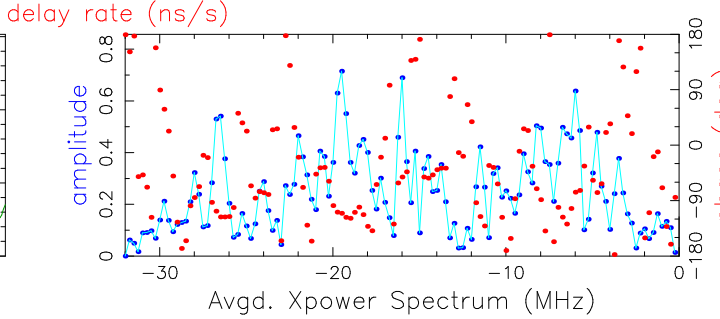
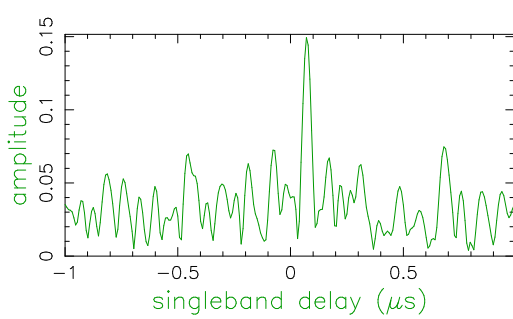
mb window (us) -0.016 0.016

dr window (ns/s) -0.011 0.011

ion window (TEC) 0.00 0.00

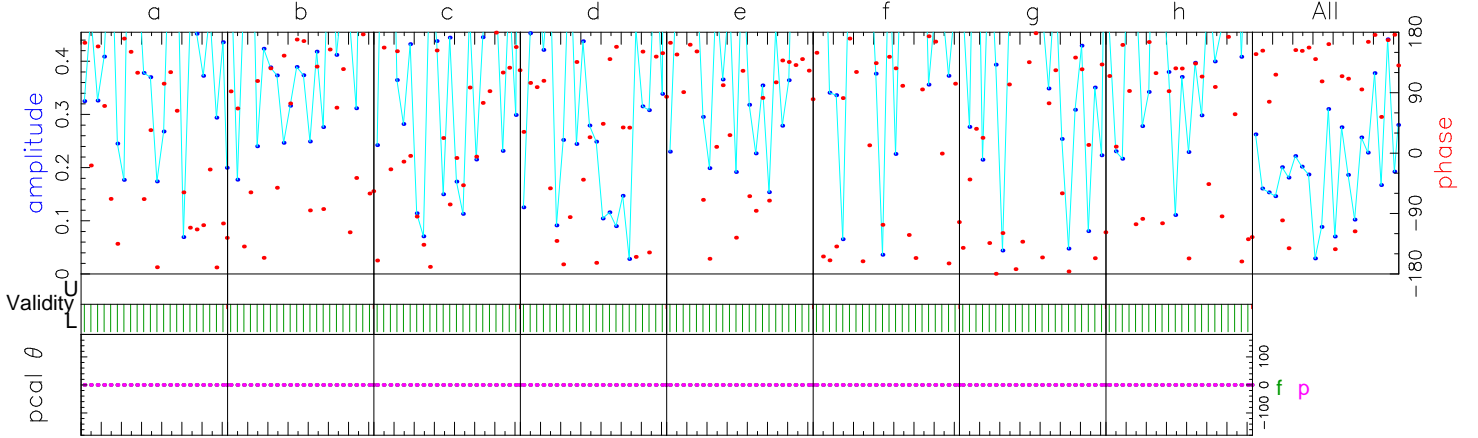


Fringe quality 0
SNR 5.9
Int time 419.825
Amp 0.152
Phase -28.1
PFD 3.1e-01
Delays (us)
SBD 0.072167
MBD -0.011674
Fringe rate (Hz)
0.162047
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110828
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

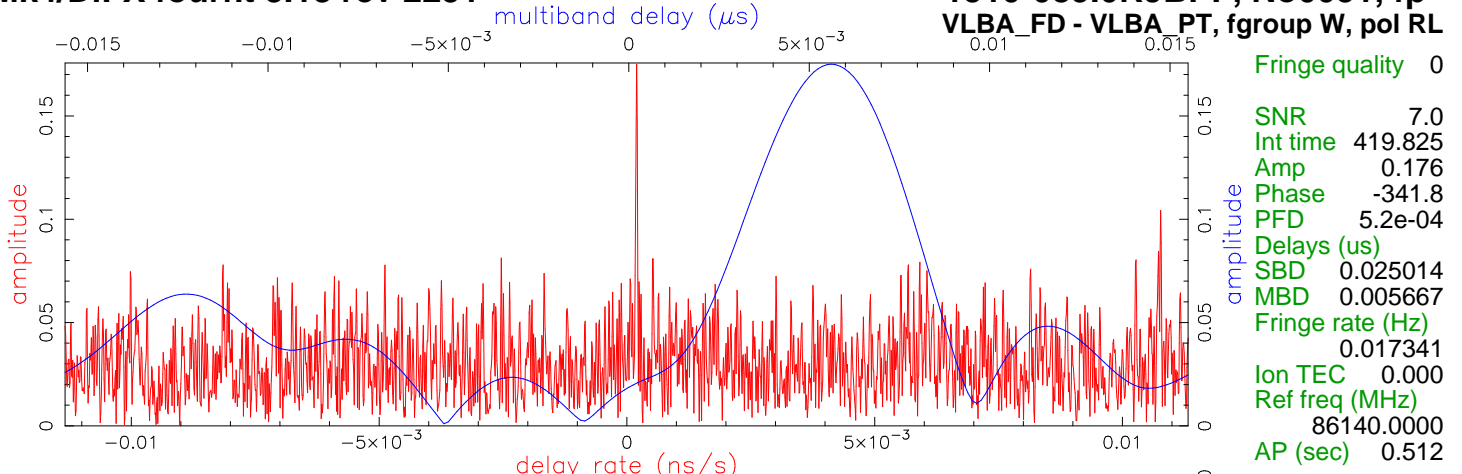


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

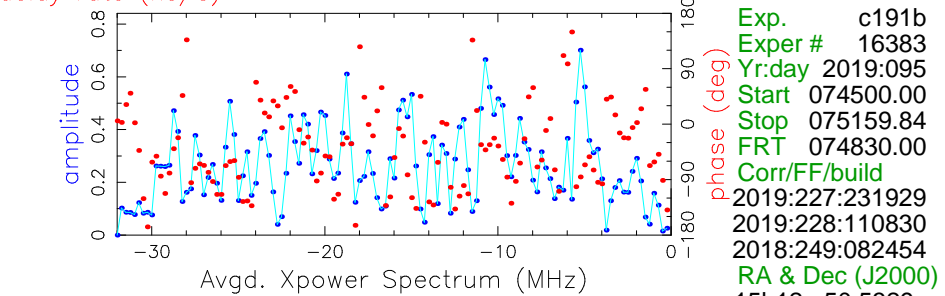
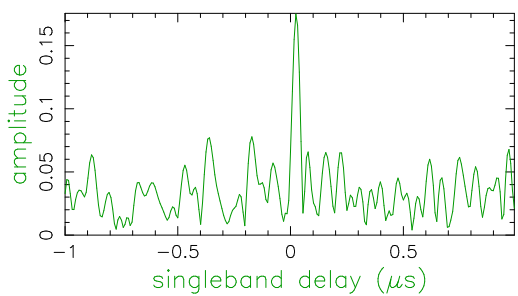
Group delay (usec)(sbd)	1.36248024265E+03	Apriori delay (usec)	1.36239816620E+03	Resid mbdelay (usec)	-1.16736E-02	+/-	3.7E-04
Sband delay (usec)	1.36247033270E+03	Apriori clock (usec)	-6.4526176E-01	Resid sbdelay (usec)	7.21665E-02	+/-	2.9E-03
Phase delay (usec)	1.36239817110E+03	Apriori clockrate (us/s)	-2.2899998E-07	Resid phdelay (usec)	4.89870E-06	+/-	6.2E-07
Delay rate (us/s)	-6.47319858770E-02	Apriori rate (us/s)	-6.47338670762E-02	Resid rate (us/s)	1.88120E-06	+/-	2.6E-09
Total phase (deg)	-15.0	Apriori accel (us/s/s)	-6.27702953078E-06	Resid phase (deg)	-28.1	+/-	19.3

ph/seg (deg)	50.1	Theor.	46.3	Amplitude	0.152 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	71.5	Search (2048X32)	0.145	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	23.5	Interp.	0.000	Inc. seg. avg.	0.155	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	47.4	Inc. frq. avg.	0.144	Inc. frq. avg.	0.144	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

f: az 147.2 el 44.4 pa -27.5 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 365.077 -392.087 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fp.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fp.W.69.0RJBPf

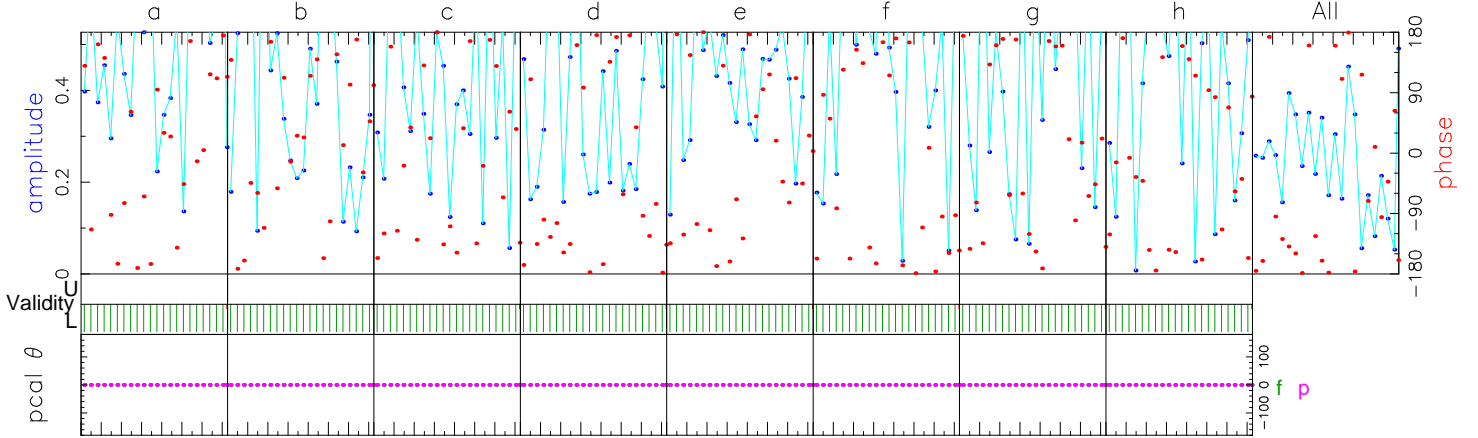


Fringe quality 0
SNR 7.0
Int time 419.825
Amp 0.176
Phase -341.8
PFD 5.2e-04
Delays (us)
SBD 0.025014
MBD 0.005667
Fringe rate (Hz) 0.017341
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512



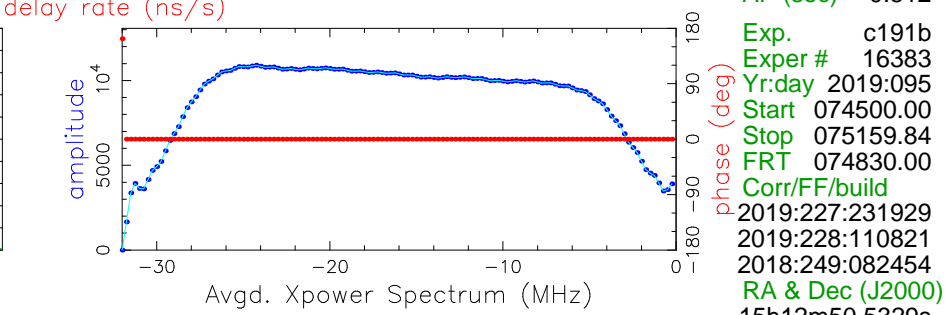
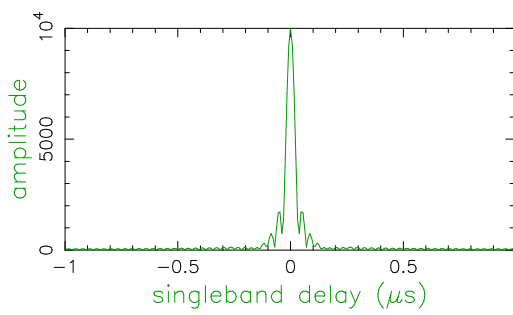
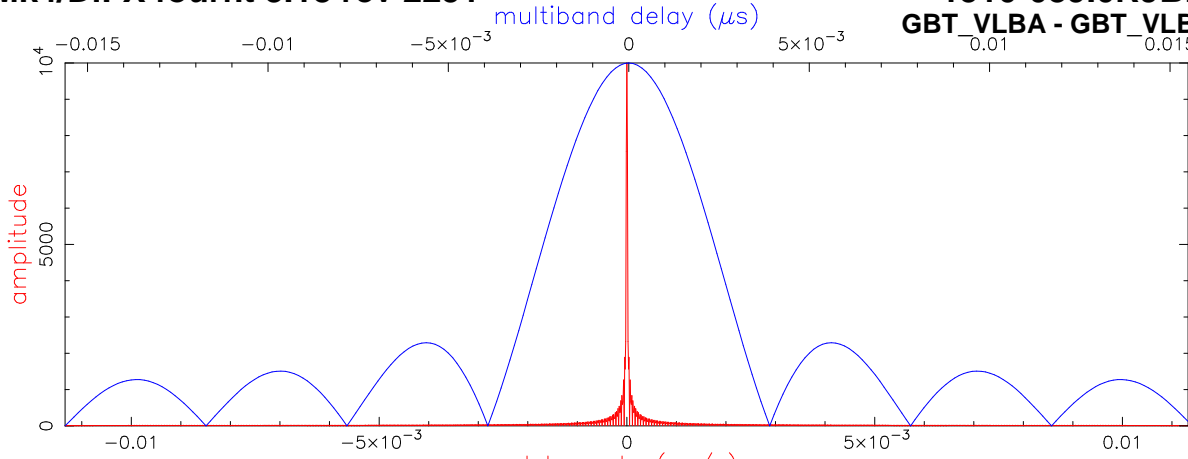
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110830
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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



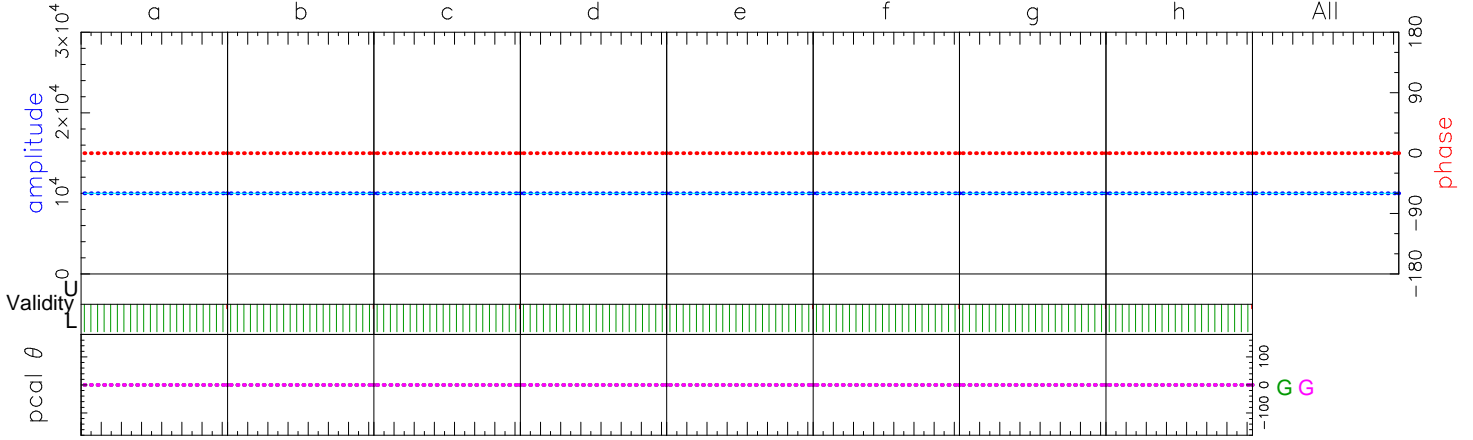
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
178.3	-149.3	-156.0	-146.6	-153.5	-178.1	-146.2	-170.0	Phase	-161.8
0.1	0.1	0.2	0.3	0.1	0.3	0.2	0.2	Ampl.	0.2
220.8	250.9	134.2	233.7	224.8	132.1	57.3	42.2	Sbd box	132.2
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.36243508306E+03	Apriori delay (usec)	1.36239816620E+03	Resid mbdelay (usec)	5.66686E-03	+/-	3.1E-04		
Sband delay (usec)	1.36242318070E+03	Apriori clock (usec)	-6.4526176E-01	Resid sbdelay (usec)	2.50145E-02	+/-	2.5E-03		
Phase delay (usec)	1.36239816098E+03	Apriori clockrate (us/s)	-2.2899998E-07	Resid phdelay (usec)	-5.21676E-06	+/-	5.3E-07		
Delay rate (us/s)	-6.47336657657E-02	Apriori rate (us/s)	-6.47338670762E-02	Resid rate (us/s)	2.01310E-07	+/-	2.2E-09		
Total phase (deg)	-328.7	Apriori accel (us/s/s)	-6.27702953078E-06	Resid phase (deg)	-341.8	+/-	16.5		

ph/seg (deg) 67.6 39.5 Search (2048X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 72.1 68.9 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 23.3 Inc. seg. avg. 0.194 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 41.5 40.7 Inc. frq. avg. 0.167 Data rate (Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 147.2 el 44.4 pa -27.5 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 365.077 -392.087 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/fp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/fp.W.82.0RJBPf simultaneous interpolator



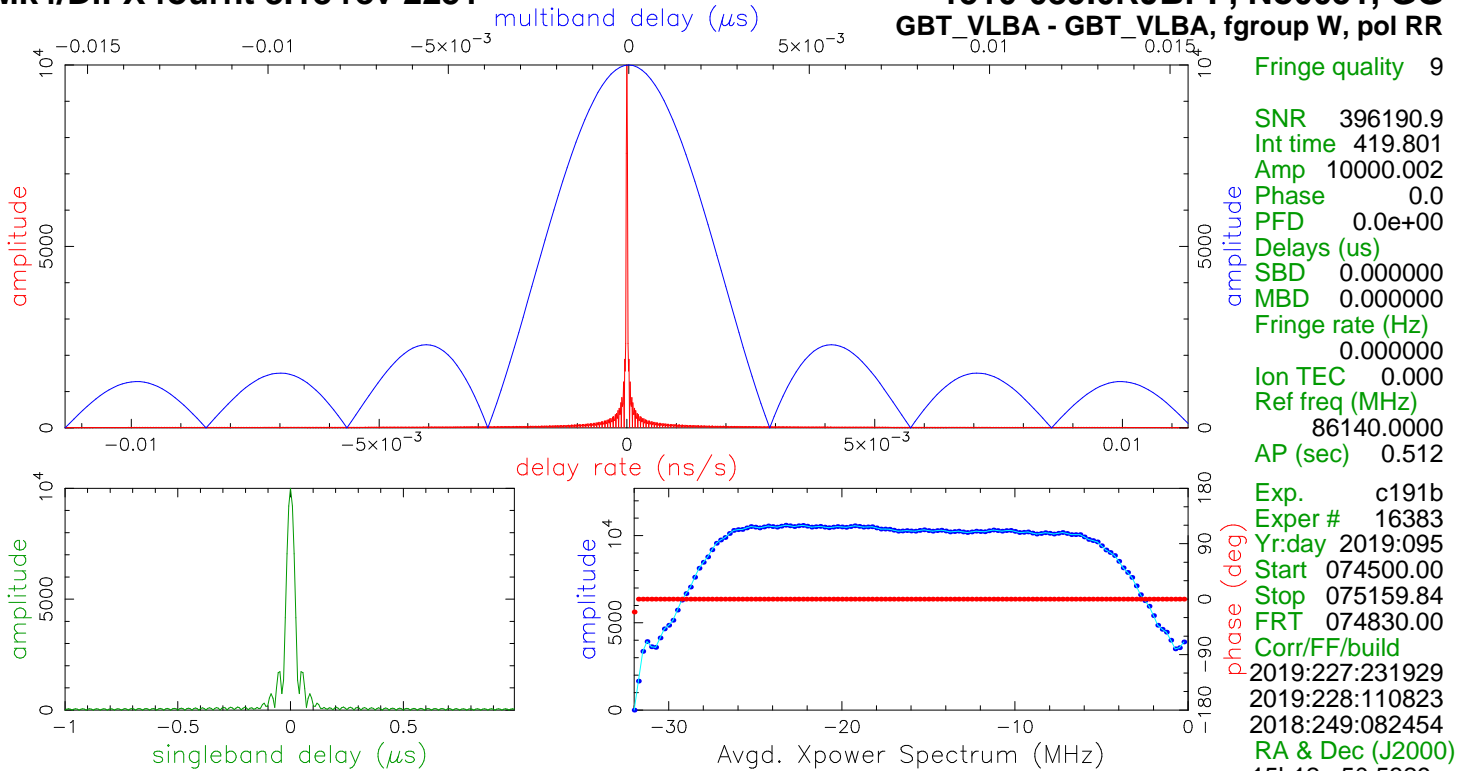
Fringe quality 9
SNR 396190.9
Int time 419.801
Amp 10000.002
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110821
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

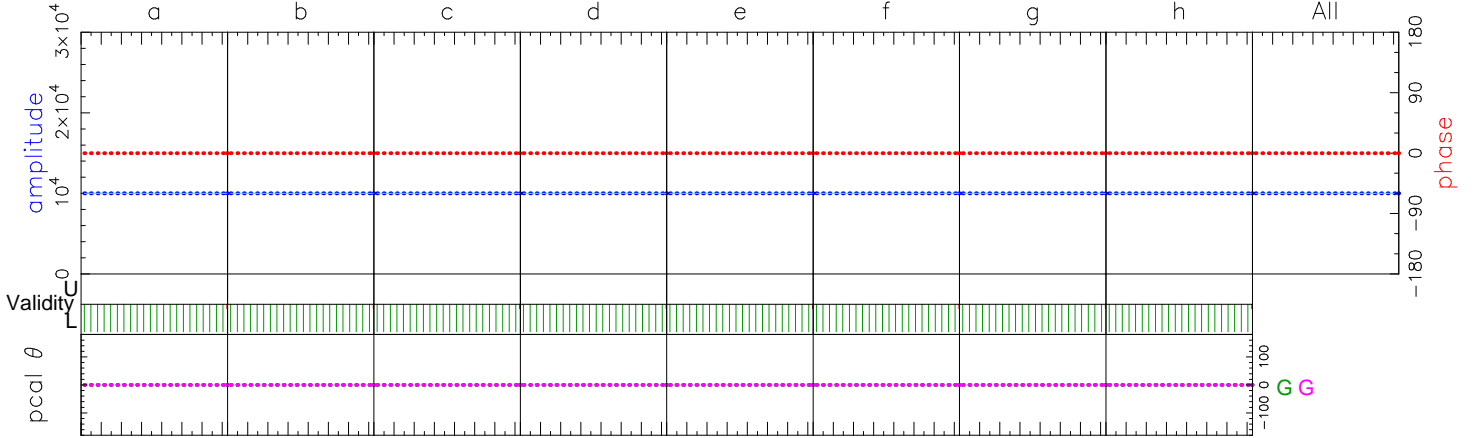


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	Ampl.	10000.0
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.0
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00	+/- 5.5E-09
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00	+/- 4.3E-08
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00	+/- 9.3E-12
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00	+/- 3.8E-14
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		0.0	+/- 0.0

RMS Theor. Amplitude 10000.002 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.002 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
G: az 181.4 el 42.4 pa 1.9 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/GG..0RJBPF Output file: /Exps/c191b/v1/1234/No0051/GG.W.14.0RJBPF

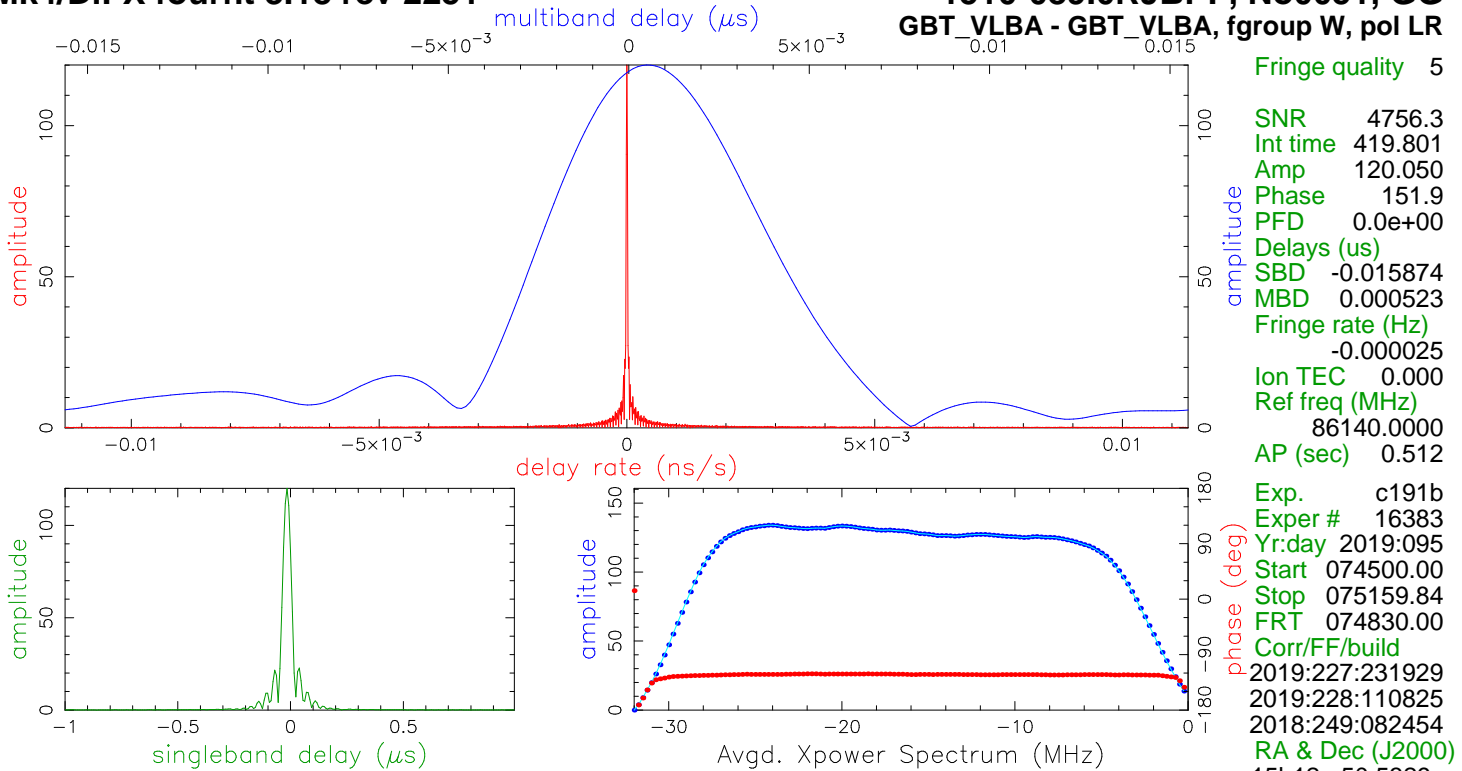


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00 +/- 5.5E-09	
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00 +/- 4.3E-08	
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00 +/- 9.3E-12	
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00 +/- 3.8E-14	
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		0.0 +/- 0.0	

	RMS	Theor.	Amplitude	10000.002 +/- 0.025	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 (2048X32)	10000.002	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
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(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	0.0	0.0	Inc. frq. avg.	10000.002	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			



Fringe quality 5

SNR 4756.3

Int time 419.801

Amp 120.050

Phase 151.9

PFD 0.0e+00

Delays (us)

SBD -0.015874

MBD 0.000523

Fringe rate (Hz)

-0.000025

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110825

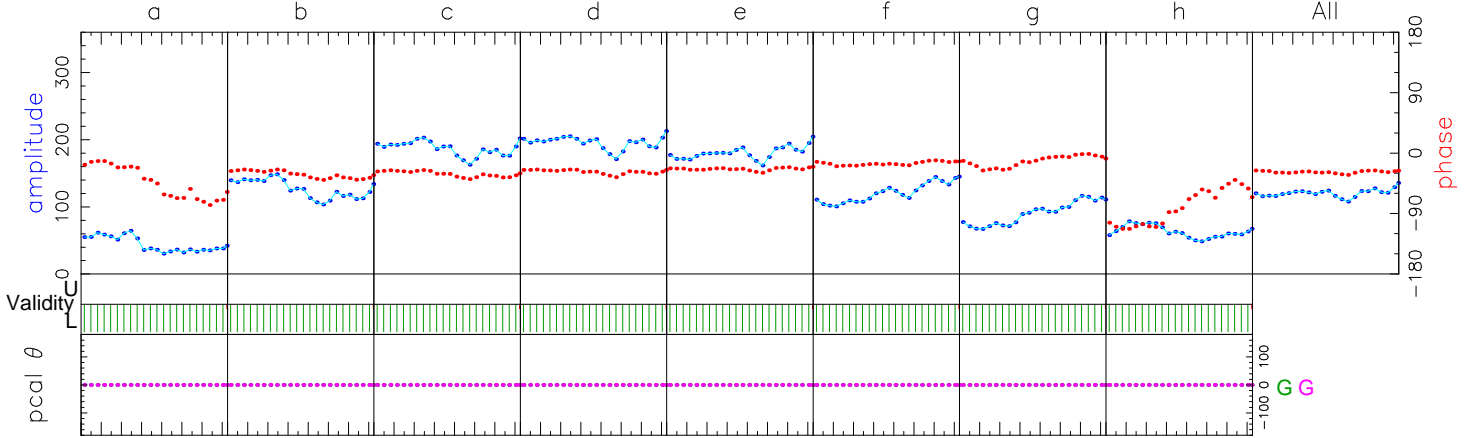
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

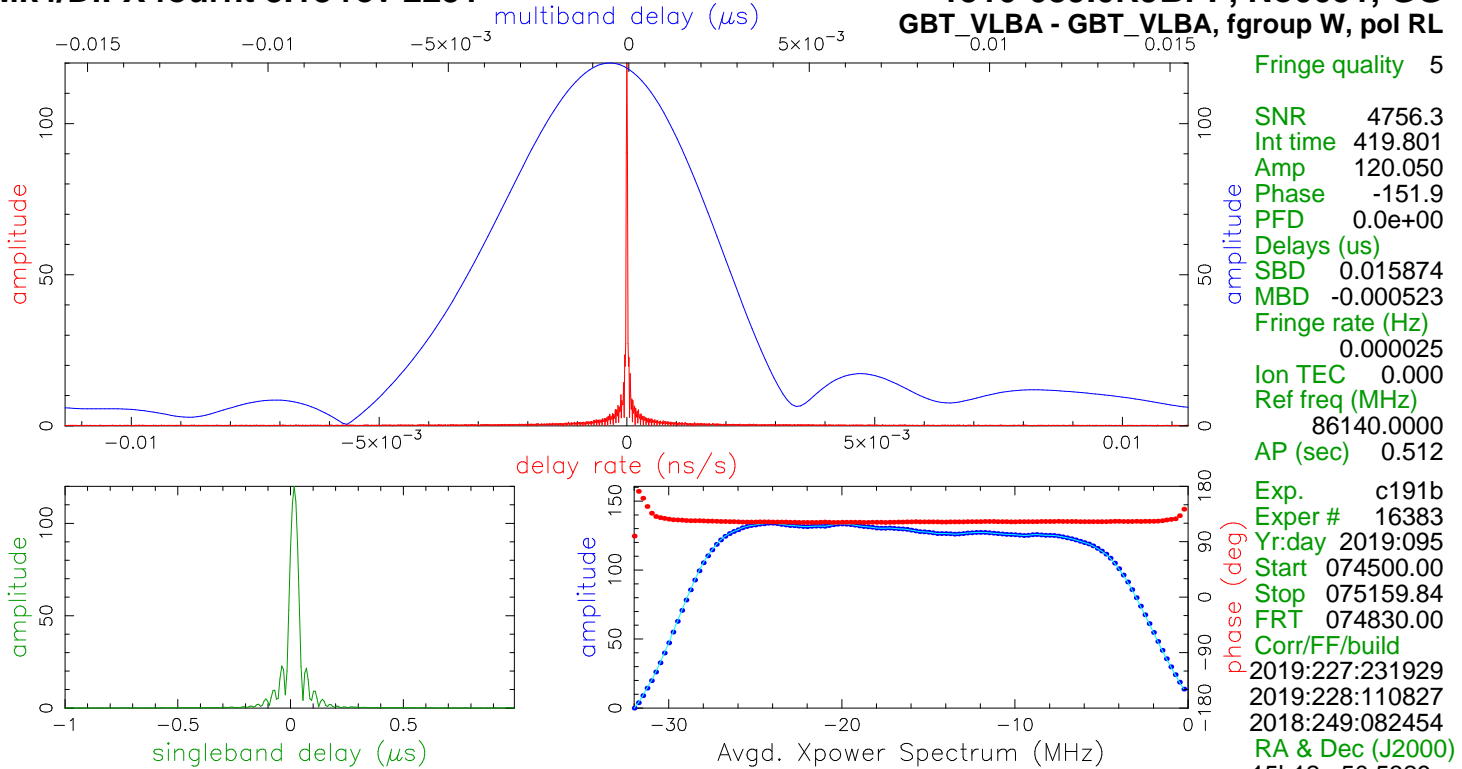
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-37.6	-31.2	-30.8	-27.7	-23.7	-15.2	-10.7	-83.7	Phase	-28.1
40.7	126.1	186.0	195.1	179.8	120.1	89.1	56.7	Ampl.	124.2
127.6	126.9	127.1	127.2	127.0	126.9	127.2	125.5	Sbd box	127.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:G 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:G 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
G W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	-3.07269375000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	5.23062E-04	+/-	4.6E-07
Sband delay (usec)	-1.58740000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.58740E-02	+/-	3.6E-06
Phase delay (usec)	-9.07590090935E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-9.07590E-07	+/-	7.8E-10
Delay rate (us/s)	-2.88382951171E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-2.88383E-10	+/-	3.2E-12
Total phase (deg)	151.9	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	151.9	+/-	0.0

ph/seg (deg)	1.8	Theor.	0.1	Amplitude	120.050 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	4.2		0.1	Search (2048X32)	118.522	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	24.8		0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.4		0.1	Inc. seg. avg.	120.095	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	124.190	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			



Fringe quality 5

SNR 4756.3

Int time 419.801

Amp 120.050

Phase -151.9

PFD 0.0e+00

Delays (us)

SBD 0.015874

MBD -0.000523

Fringe rate (Hz)

0.000025

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110827

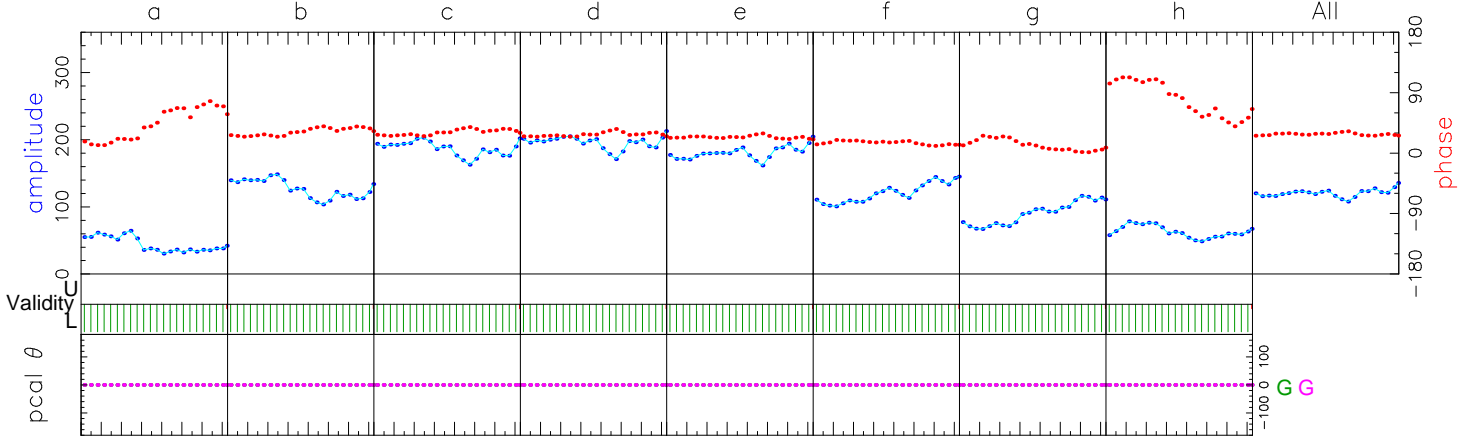
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	37.6	31.2	30.8	27.7	23.7	15.2	10.7	83.7	Phase	28.1
	40.7	126.1	186.0	195.1	179.8	120.1	89.1	56.7	Ampl.	124.2
	130.4	131.1	130.9	130.8	131.0	131.1	130.8	132.5	Sbd box	131.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.07269375000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-5.23062E-04	+/- 4.6E-07
Sband delay (usec)	1.58740000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.58740E-02	+/- 3.6E-06
Phase delay (usec)	9.07590090895E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		9.07590E-07	+/- 7.8E-10
Delay rate (us/s)	2.88382951171E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		2.88383E-10	+/- 3.2E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-151.9	+/- 0.0

ph/seg (deg) 1.8 0.1 Theor. Amplitude 120.050 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

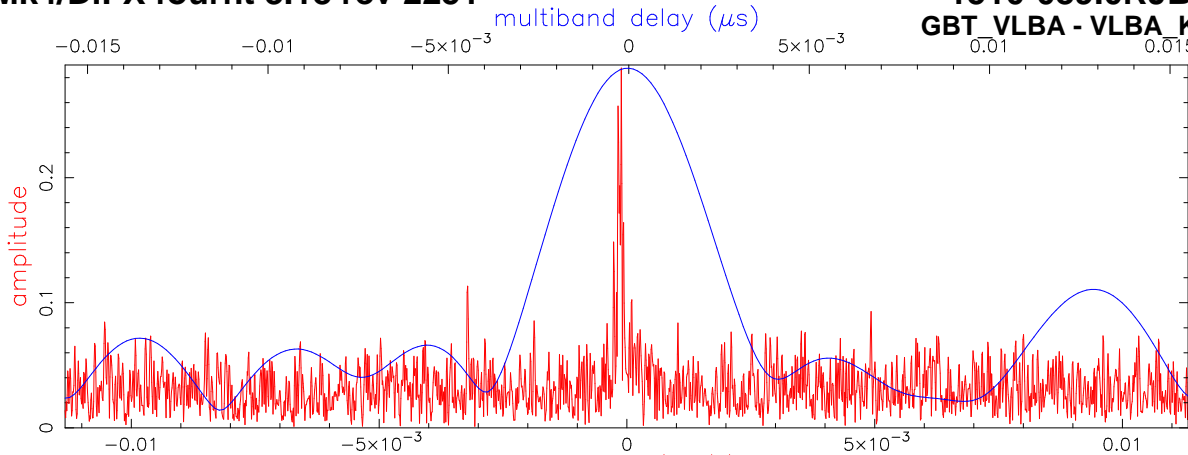
amp/seg (%) 4.2 0.1 Search (2048X32) 118.522 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 24.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

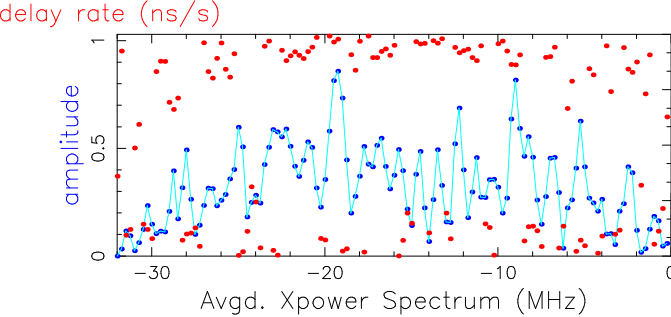
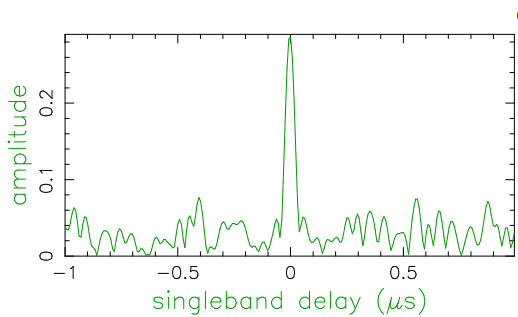
amp/frq (%) 46.4 0.1 Inc. seg. avg. 120.095 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

G: az 181.4 el 42.4 pa 1.9 G: az 181.4 el 42.4 pa 1.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/GG..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/GG.W.65.0RJBPf

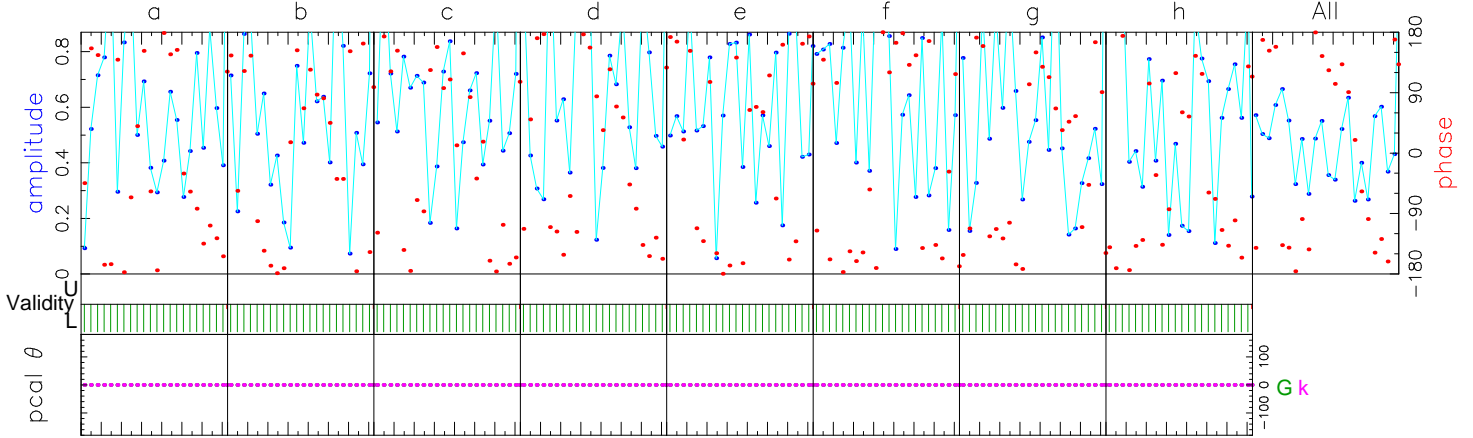


Fringe quality 9
 SNR 11.5
 Int time 419.801
 Amp 0.290
 Phase -175.4
 PFD 3.5e-22
 Delays (us)
 SBD -0.002929
 MBD -0.000012
 Fringe rate (Hz)
 -0.009319
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110822
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-155.7	147.5	177.4	-149.4	167.3	-174.5	179.0	-169.9	Phase	-175.4
	0.3	0.2	0.3	0.3	0.3	0.5	0.2	0.3	Ampl.	0.3
	129.5	127.5	128.3	215.4	128.3	128.9	128.2	128.8	Sbd box	128.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.29635638483E+02		Apriori delay (usec)		6.29635650579E+02		Resid mbdelay (usec)		-1.20962E-05	+/- 1.9E-04
Sband delay (usec)	6.29632722079E+02		Apriori clock (usec)		-1.3987658E+01		Resid sbdelay (usec)		-2.92850E-03	+/- 1.5E-03
Phase delay (usec)	6.29635644923E+02		Apriori clockrate (us/s)		2.6299999E-07		Resid phdelay (usec)		-5.65543E-06	+/- 3.2E-07
Delay rate (us/s)	-6.88166165566E-01		Apriori rate (us/s)		-6.88166057377E-01		Resid rate (us/s)		-1.08189E-07	+/- 1.3E-09
Total phase (deg)	163.3		Apriori accel (us/s/s)		-5.08040749345E-06		Resid phase (deg)		-175.4	+/- 10.0

ph/seg (deg) 62.8 23.9
 amp/seg (%) 77.2 41.7
 ph/frq (deg) 21.8 14.1
 amp/frq (%) 28.4 24.6

RMS Theor. Amplitude 0.290 +/- 0.025
 Search (2048X32) 0.282
 Interp. 0.000
 Inc. seg. avg. 0.434
 Inc. frq. avg. 0.292

Group delay (usec)(sbd) 6.29635638483E+02
 Sband delay (usec) 6.29632722079E+02
 Phase delay (usec) 6.29635644923E+02
 Delay rate (us/s) -6.88166165566E-01
 Total phase (deg) 163.3

Apriori delay (usec) 6.29635650579E+02
 Apriori clock (usec) -1.3987658E+01
 Apriori clockrate (us/s) 2.6299999E-07
 Apriori rate (us/s) -6.88166057377E-01
 Apriori accel (us/s/s) -5.08040749345E-06

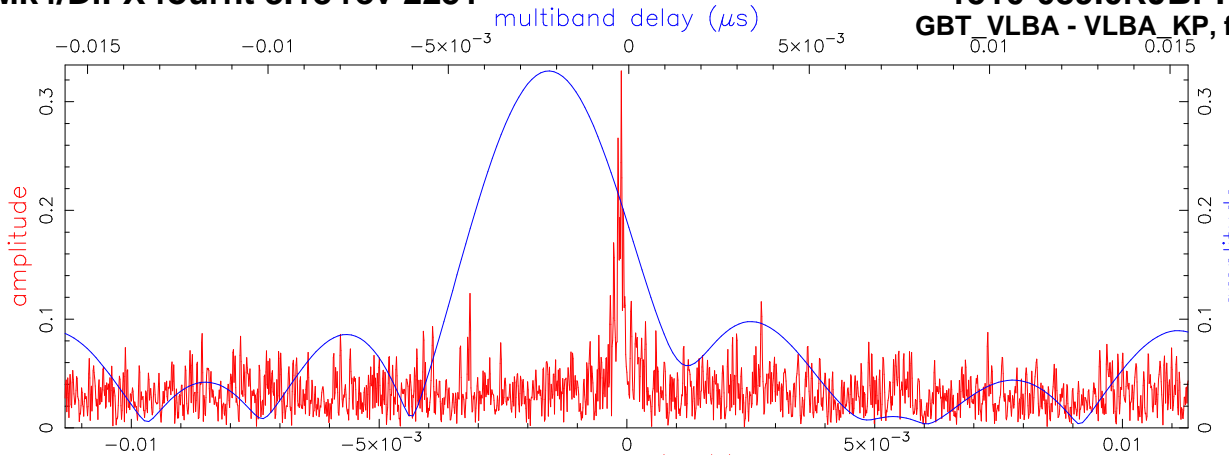
Resid mbdelay (usec) -1.20962E-05 +/- 1.9E-04
 Resid sbdelay (usec) -2.92850E-03 +/- 1.5E-03
 Resid phdelay (usec) -5.65543E-06 +/- 3.2E-07
 Resid rate (us/s) -1.08189E-07 +/- 1.3E-09
 Resid phase (deg) -175.4 +/- 10.0

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(MSamp/s): 64
 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite

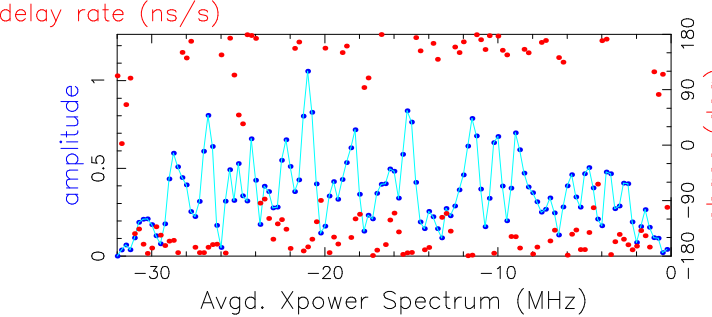
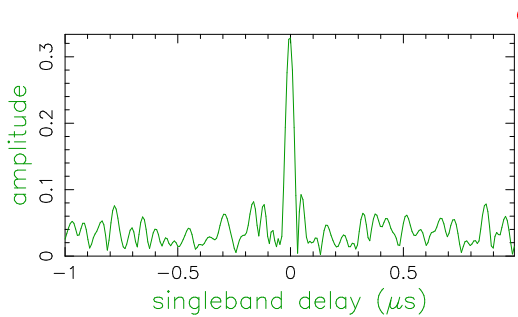
sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

G: az 181.4 el 42.4 pa 1.9 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 3984.467 877.669 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gk.W.26.0RJBPf

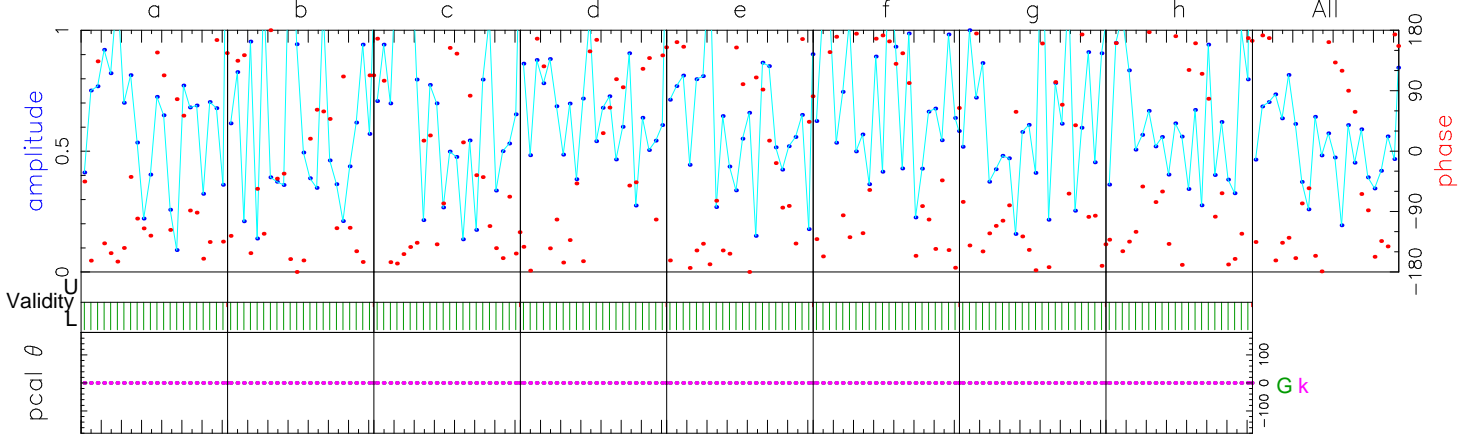


Fringe quality 9
SNR 13.2
Int time 419.801
Amp 0.334
Phase -161.1
PFD 1.8e-31
Delays (us)
SBD -0.003584
MBD -0.002257
Fringe rate (Hz)
-0.009291
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



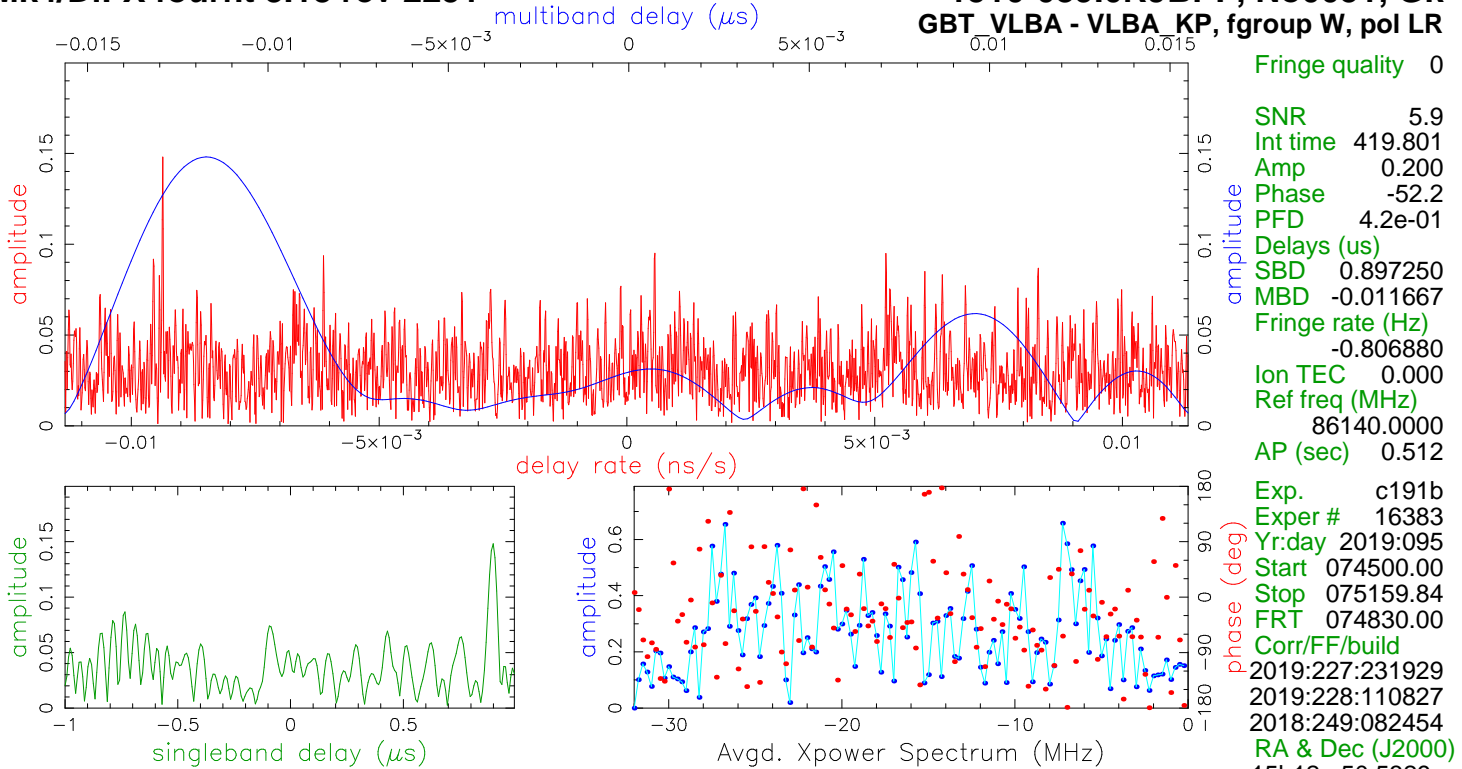
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110825
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-149.6	-169.2	-152.0	174.6	-172.7	-166.1	-144.9	-155.4	Phase	-161.1
	0.3	0.3	0.4	0.3	0.3	0.5	0.3	0.4	Ampl.	0.3
	128.7	128.5	127.9	128.4	128.0	129.3	129.0	128.5	Sbd box	128.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.29633393670E+02		Apriori delay (usec)		6.29635650579E+02		Resid mbdelay (usec)		-2.25691E-03	+/- 1.6E-04
Sband delay (usec)	6.29632066579E+02		Apriori clock (usec)		-1.3987658E+01		Resid sbdelay (usec)		-3.58400E-03	+/- 1.3E-03
Phase delay (usec)	6.29635645383E+02		Apriori clockrate (us/s)		2.6299999E-07		Resid phdelay (usec)		-5.19579E-06	+/- 2.8E-07
Delay rate (us/s)	-6.88166165239E-01		Apriori rate (us/s)		-6.88166057377E-01		Resid rate (us/s)		-1.07862E-07	+/- 1.2E-09
Total phase (deg)	177.6		Apriori accel (us/s/s)		-5.08040749345E-06		Resid phase (deg)		-161.1	+/- 8.7

ph/seg (deg) 61.2 20.8 Theor. Amplitude 0.334 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.7 36.3 Search (2048X32) 0.320 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.9 12.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.1 21.4 Inc. seg. avg. 0.492 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 G: az 181.4 el 42.4 pa 1.9 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 3984.467 877.669 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gk.W.45.0RJBPf simultaneous interpolator



Fringe quality 0

SNR 5.9

Int time 419.801

Amp 0.200

Phase -52.2

PFD 4.2e-01

Delays (us)

SBD 0.897250

MBD -0.011667

Fringe rate (Hz)

-0.806880

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110827

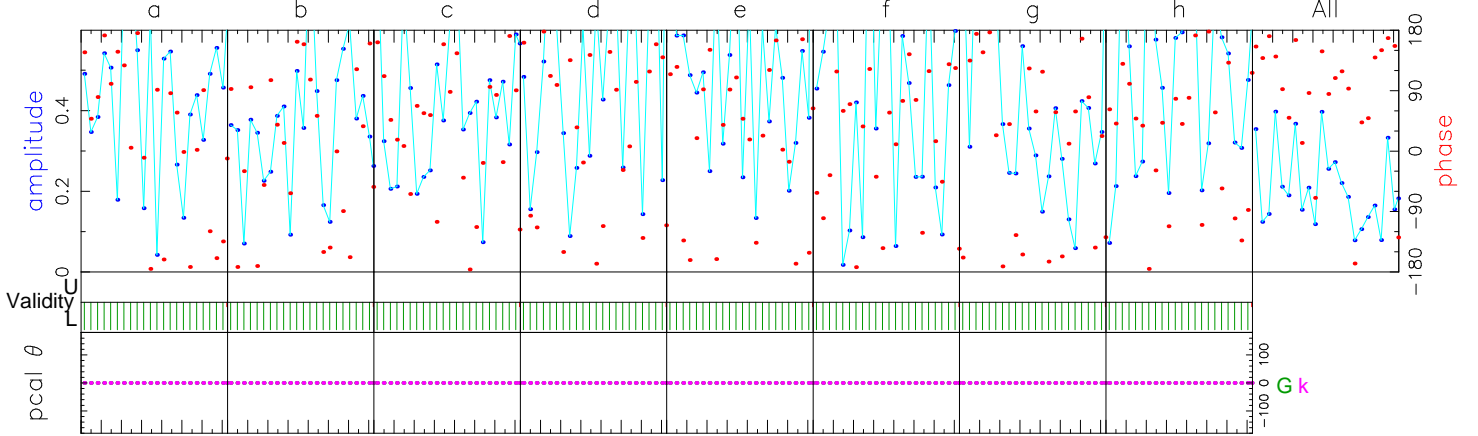
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	141.7	117.9	102.9	138.5	117.9	123.0	156.5	103.2	Phase	127.8
	0.2	0.1	0.1	0.3	0.3	0.2	0.3	0.2	Ampl.	0.2
	135.5	231.6	137.1	142.0	51.7	73.8	94.8	224.2	Sbd box	243.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) 6.30530233440E+02 Apriori delay (usec) 6.29635650579E+02 Resid mbdelay (usec) -1.16671E-02 +/- 3.7E-04

Sband delay (usec) 6.30532901079E+02 Apriori clock (usec) -1.3987658E+01 Resid sbdelay (usec) 8.97250E-01 +/- 2.9E-03

Phase delay (usec) 6.29635654699E+02 Apriori clockrate (us/s) 2.6299999E-07 Resid phdelay (usec) 4.11996E-06 +/- 6.3E-07

Delay rate (us/s) -6.88175424454E-01 Apriori rate (us/s) -6.88166057377E-01 Resid rate (us/s) -9.36708E-06 +/- 2.6E-09

Total phase (deg) -73.5 Apriori accel (us/s/s) -5.08040749345E-06 Resid phase (deg) -52.2 +/- 19.5

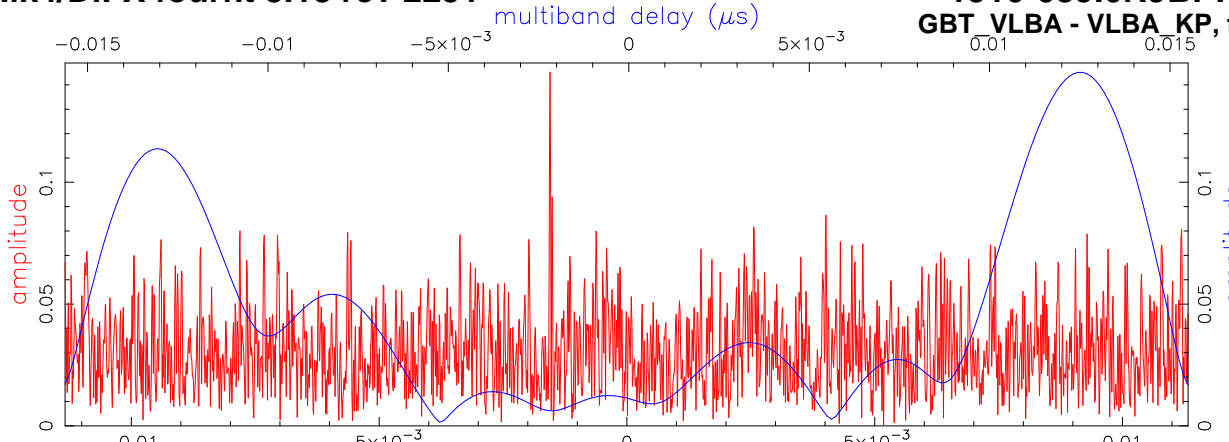
ph/seg (deg) 59.9 Theor. 46.8 Amplitude 0.200 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 79.1 81.7 Search (2048X32) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

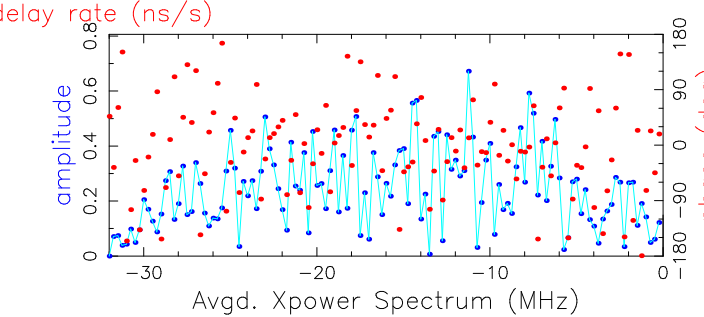
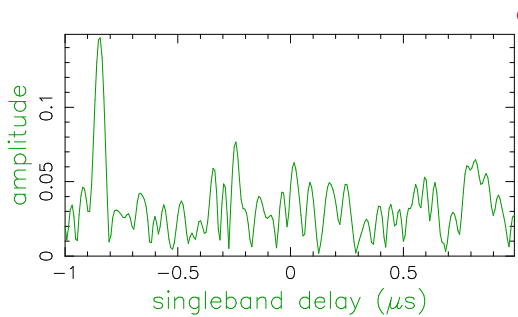
ph/frq (deg) 20.7 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 25.4 48.2 Inc. seg. avg. 0.214 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

G: az 181.4 el 42.4 pa 1.9 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 3984.467 877.669 ion window (TEC) 0.00 0.00

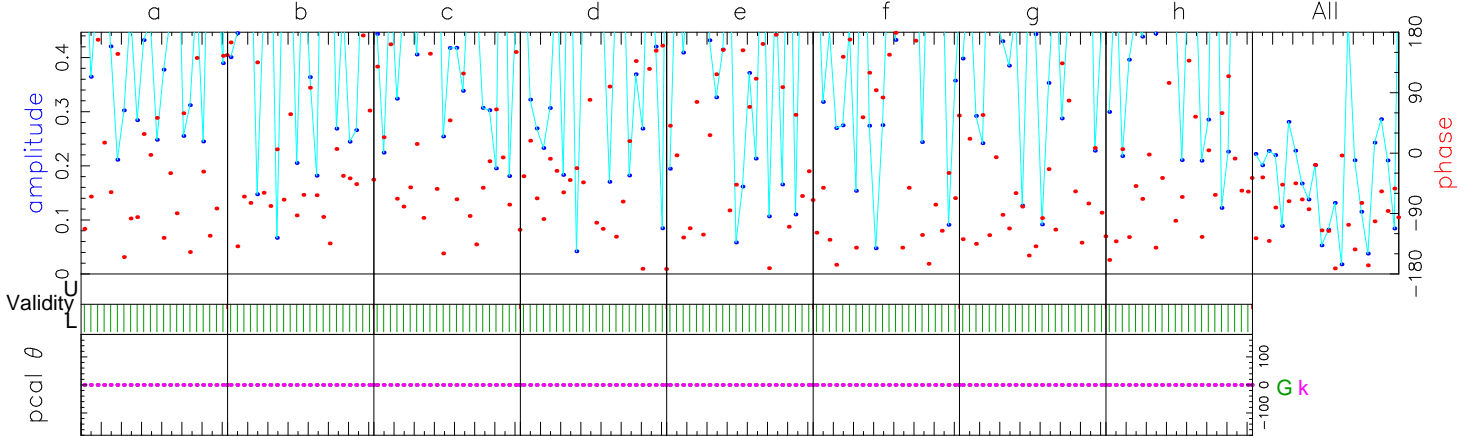


Fringe quality 0
 SNR 5.9
 Int time 419.801
 Amp 0.149
 Phase 273.2
 PFD 4.5e-01
 Delays (us)
 SBD -0.846892
 MBD 0.012521
 Fringe rate (Hz)
 -0.133289
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110829
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

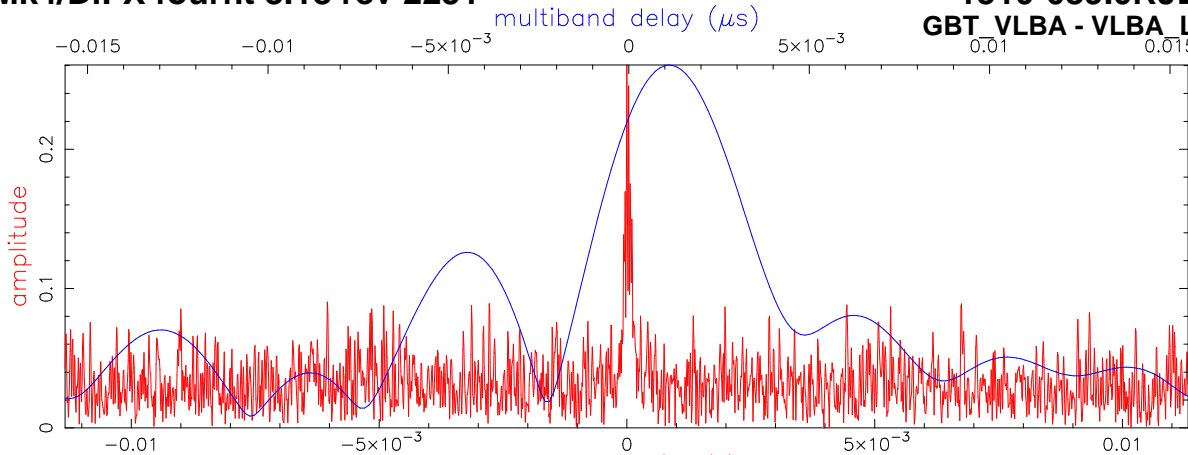
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-95.5	-75.9	-68.0	-63.7	-118.1	-146.4	-93.6	-52.5	Phase	-86.8
0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
112.6	53.2	153.9	153.0	52.0	233.1	20.3	238.7	Sbd box	20.6
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd) 6.28773171544E+02 Apriori delay (usec) 6.29635650579E+02 Resid mbdelay (usec) 1.25210E-02 +/- 3.7E-04
 Sband delay (usec) 6.28788759079E+02 Apriori clock (usec) -1.3987658E+01 Resid sbdelay (usec) -8.46892E-01 +/- 2.9E-03
 Phase delay (usec) 6.29635647779E+02 Apriori clockrate (us/s) 2.6299999E-07 Resid phdelay (usec) -2.79979E-06 +/- 6.3E-07
 Delay rate (us/s) -6.88167604735E-01 Apriori rate (us/s) -6.88166057377E-01 Resid rate (us/s) -1.54736E-06 +/- 2.6E-09
 Total phase (deg) 251.9 Apriori accel (us/s/s) -5.08040749345E-06 Resid phase (deg) 273.2 +/- 19.6

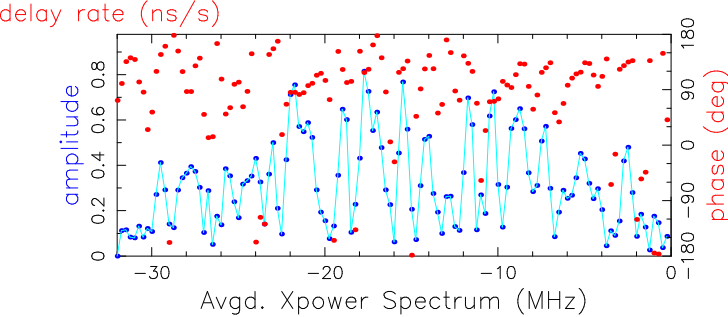
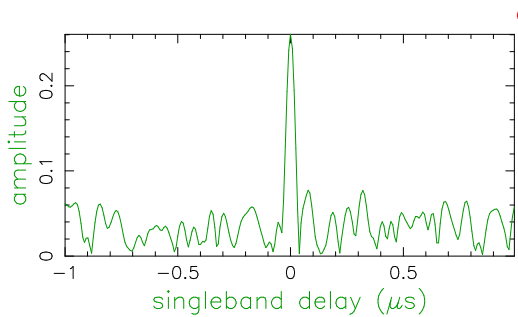
RMS Theor. Amplitude 0.149 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 44.0 46.9 Search (2048X32) 0.142 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 74.0 81.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 33.8 27.7 Inc. seg. avg. 0.136 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 38.6 48.3 Inc. frq. avg. 0.150 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



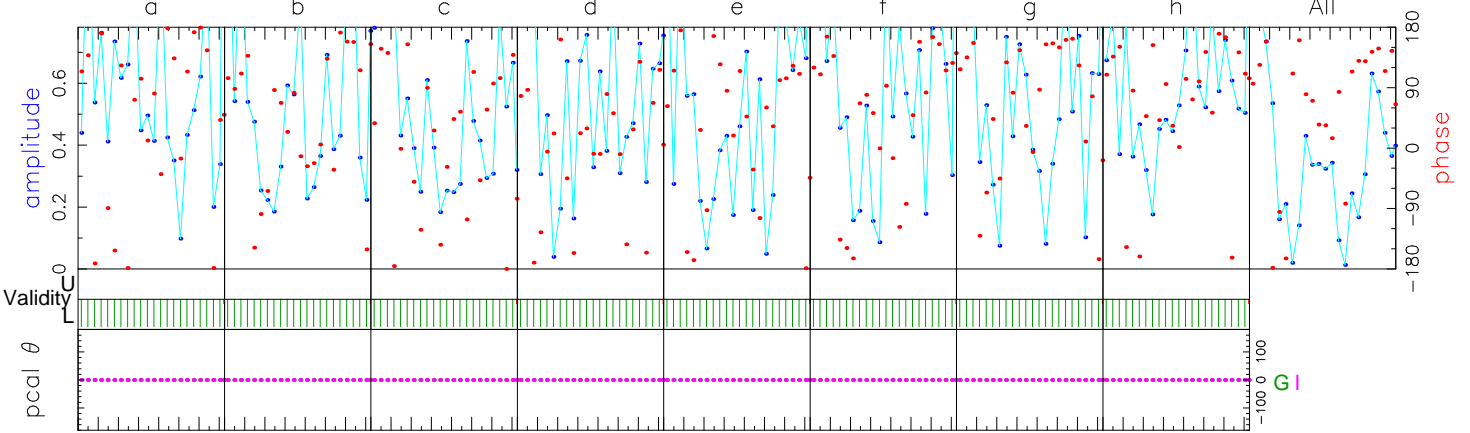
Fringe quality 9

SNR 10.3
Int time 419.801
Amp 0.260
Phase 120.4
PFD 1.3e-16
Delays (us)
SBD 0.000224
MBD 0.001120
Fringe rate (Hz)
-0.000315
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110821
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



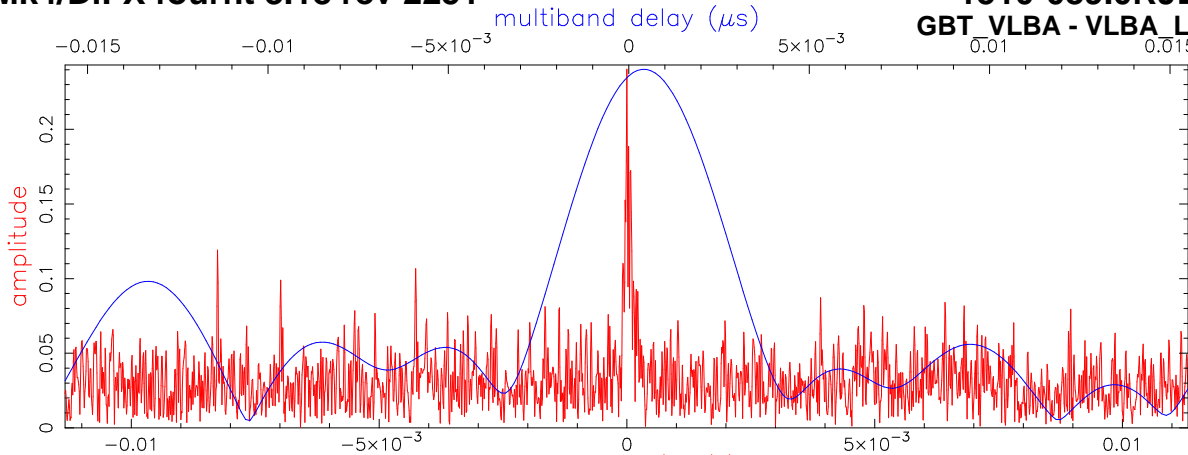
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



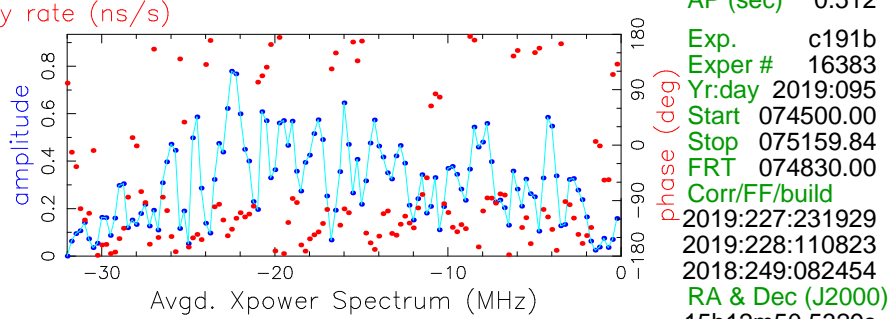
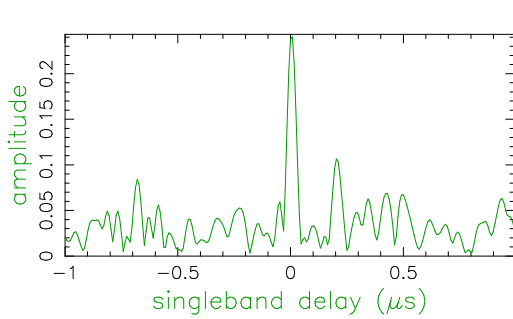
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
I	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	7.70499371492E+02	Apriori delay (usec)	7.70498251055E+02	Resid mbdelay (usec)	1.12044E-03	+/-	2.1E-04
Sband delay (usec)	7.70498475055E+02	Apriori clock (usec)	-1.1633879E+01	Resid sbdelay (usec)	2.24000E-04	+/-	1.7E-03
Phase delay (usec)	7.70498254936E+02	Apriori clockrate (us/s)	2.5600000E-07	Resid phdelay (usec)	3.88123E-06	+/-	3.6E-07
Delay rate (us/s)	-5.56277467761E-01	Apriori rate (us/s)	-5.56277464107E-01	Resid rate (us/s)	-3.65332E-09	+/-	1.5E-09
Total phase (deg)	244.9	Apriori accel (us/s/s)	-4.82238112764E-06	Resid phase (deg)	120.4	+/-	11.1

ph/seg (deg)	64.7	RMS	26.6	Theor.	27.4	Amplitude	0.260 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	104.8	Search (2048X32)	0.000	Interp.	0.337	Inc. seg. avg.	0.269	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	27.5	Inc. frq. avg.	0.337	Inc. seg. avg.	0.269	Inc. frq. avg.	0.269	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	22.7	u,v (fr/asec)	3219.265 389.307	Data rate (Mb/s):	1024	nlags:	128	t_cohere	infinite	ion window (TEC)	0.00 0.00

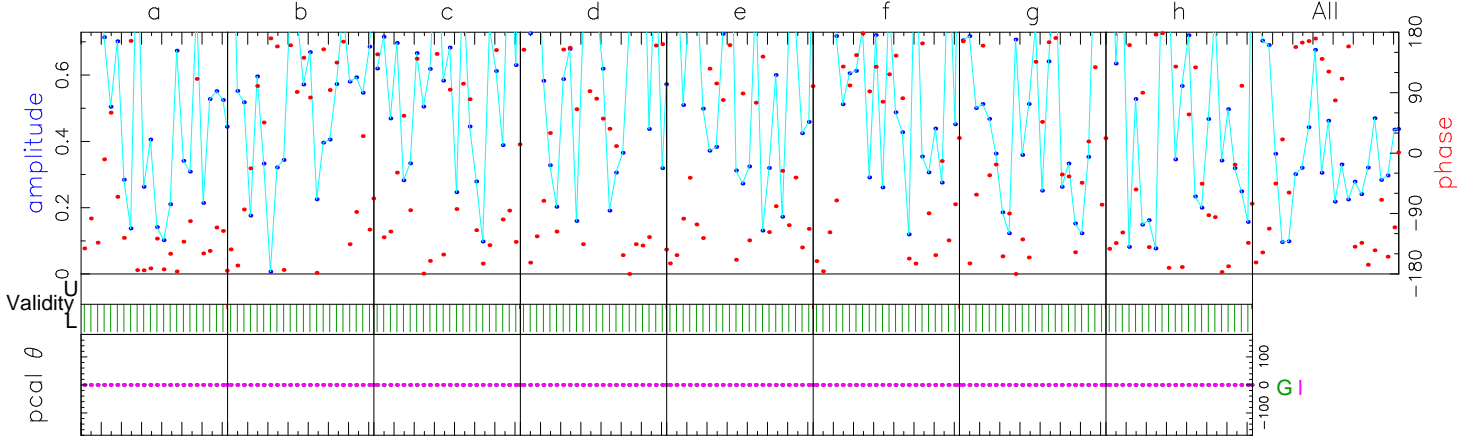


Fringe quality 9
SNR 9.6
Int time 419.801
Amp 0.243
Phase -163.7
PFD 1.2e-13
Delays (us)
SBD 0.004614
MBD 0.000406
Fringe rate (Hz)
-0.000403
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512



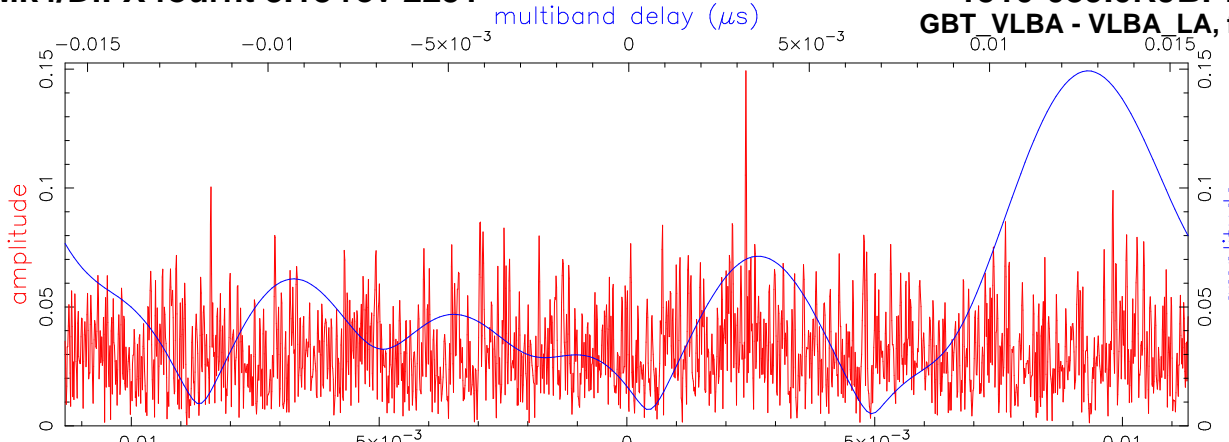
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110823
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

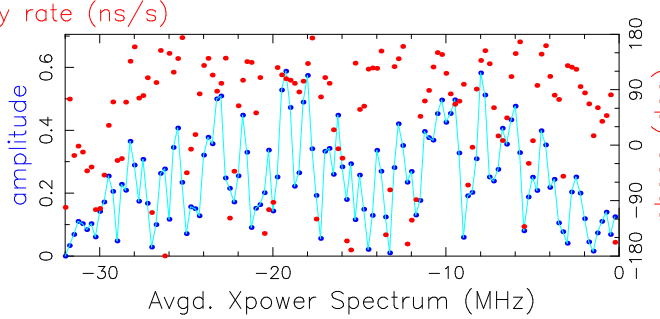
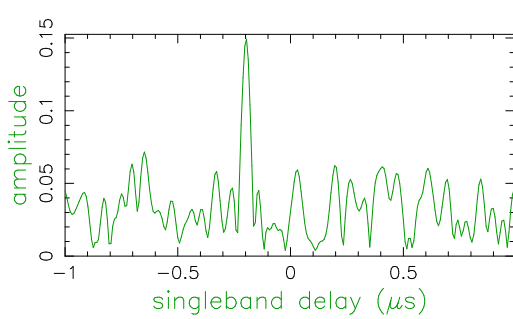


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	Ampl.	0.2
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.6
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
I	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.70498657430E+02		Apriori delay (usec)		7.70498251055E+02		Resid mbdelay (usec)		4.06375E-04	+/- 2.3E-04
Sband delay (usec)	7.70502864555E+02		Apriori clock (usec)		-1.1633879E+01		Resid sbdelay (usec)		4.61350E-03	+/- 1.8E-03
Phase delay (usec)	7.70498245774E+02		Apriori clockrate (us/s)		2.5600000E-07		Resid phdelay (usec)		-5.28034E-06	+/- 3.8E-07
Delay rate (us/s)	-5.56277468785E-01		Apriori rate (us/s)		-5.56277464107E-01		Resid rate (us/s)		-4.67790E-09	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.82238112764E-06		Resid phase (deg)		-163.7	+/- 11.9

RMS Theor. Amplitude 0.243 +/- 0.025
 ph/seg (deg) 71.2 28.5 Search (2048X32) 0.223 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 101.2 49.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.4 16.8 Inc. seg. avg. 0.344 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.6 29.4 Inc. frq. avg. 0.243 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 G: az 181.4 el 42.4 pa 1.9 I: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 3219.265 389.307 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/GI.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/GI.W.34.0RJBPf

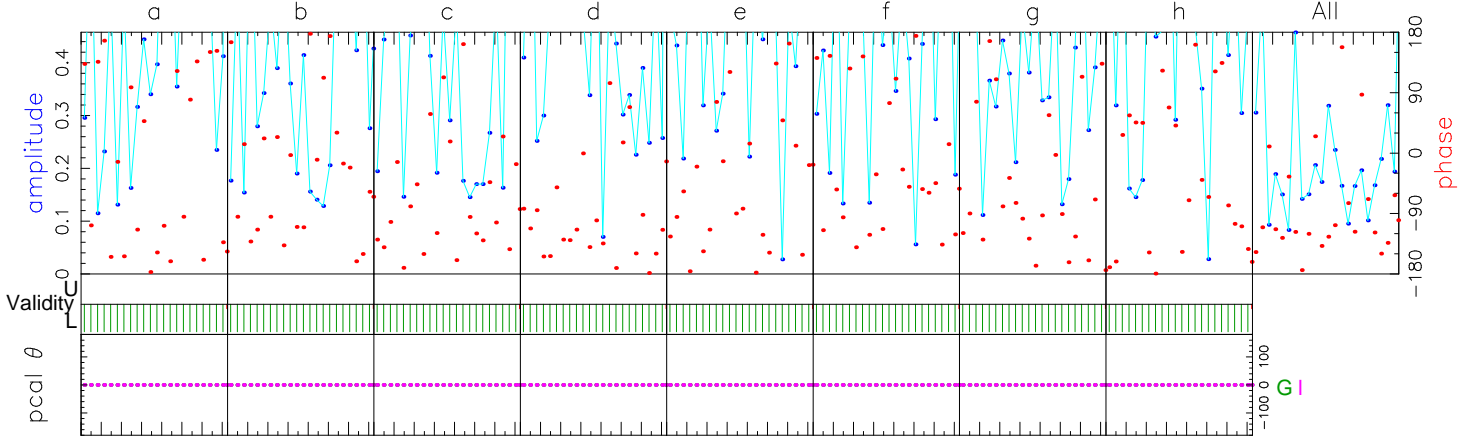


Fringe quality 0
SNR 5.9
Int time 419.801
Amp 0.153
Phase 60.4
PFD 3.1e-01
Delays (us)
SBD -0.197144
MBD 0.012739
Fringe rate (Hz)
0.206707
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110826
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

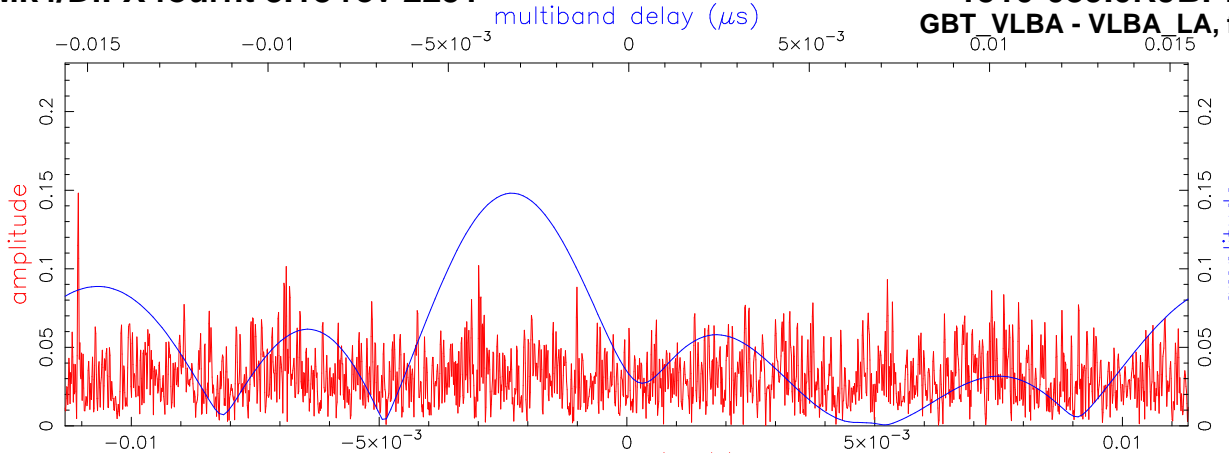


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
G	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
I	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

Group delay (usec)(sbd)	7.70292240142E+02	Apriori delay (usec)	7.70498251055E+02	Resid mbdelay (usec)	1.27391E-02	+/-	3.7E-04
Sband delay (usec)	7.70301107055E+02	Apriori clock (usec)	-1.1633879E+01	Resid sbdelay (usec)	-1.97144E-01	+/-	2.9E-03
Phase delay (usec)	7.70498247198E+02	Apriori clockrate (us/s)	2.5600000E-07	Resid phdelay (usec)	-3.85608E-06	+/-	6.2E-07
Delay rate (us/s)	-5.56275064446E-01	Apriori rate (us/s)	-5.56277464107E-01	Resid rate (us/s)	2.39966E-06	+/-	2.6E-09
Total phase (deg)	184.9	Apriori accel (us/s/s)	-4.82238112764E-06	Resid phase (deg)	60.4	+/-	19.3

ph/seg (deg)	63.3	Theor.	46.3	Amplitude	0.153 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	87.2	Search (2048X32)	0.142	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	38.1	Interp.	0.000	Inc. seg. avg.	0.164	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	38.7	Inc. frq. avg.	0.161	Inc. frq. avg.	0.161	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

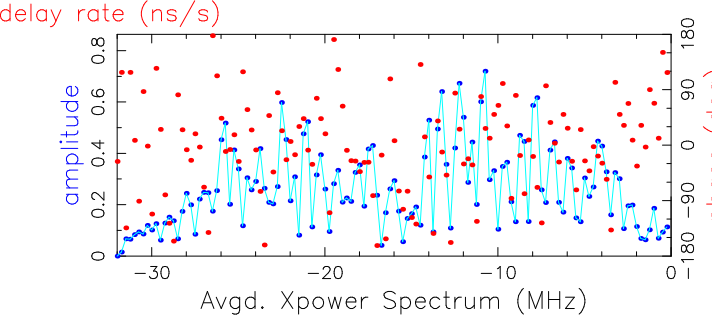
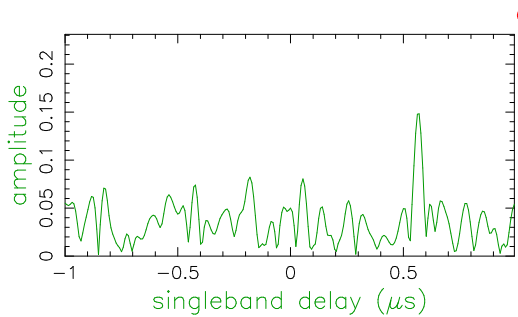
G: az 181.4 el 42.4 pa 1.9 I: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 3219.265 389.307 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/GI.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/GI.W.54.0RJBPf



Fringe quality 0

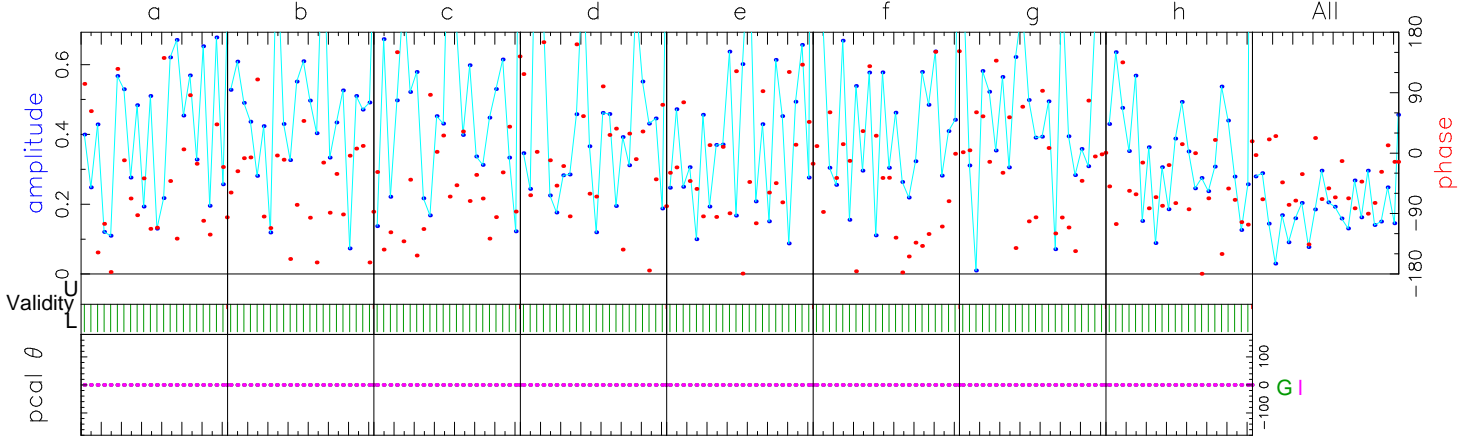
SNR 6.0
Int time 419.801
Amp 0.231
Phase -44.7
PFD 2.7e-01
Delays (us)
SBD 0.566567
MBD -0.003261
Fringe rate (Hz)
-0.953443
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110828
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Avgd. Xpower Spectrum (MHz)

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



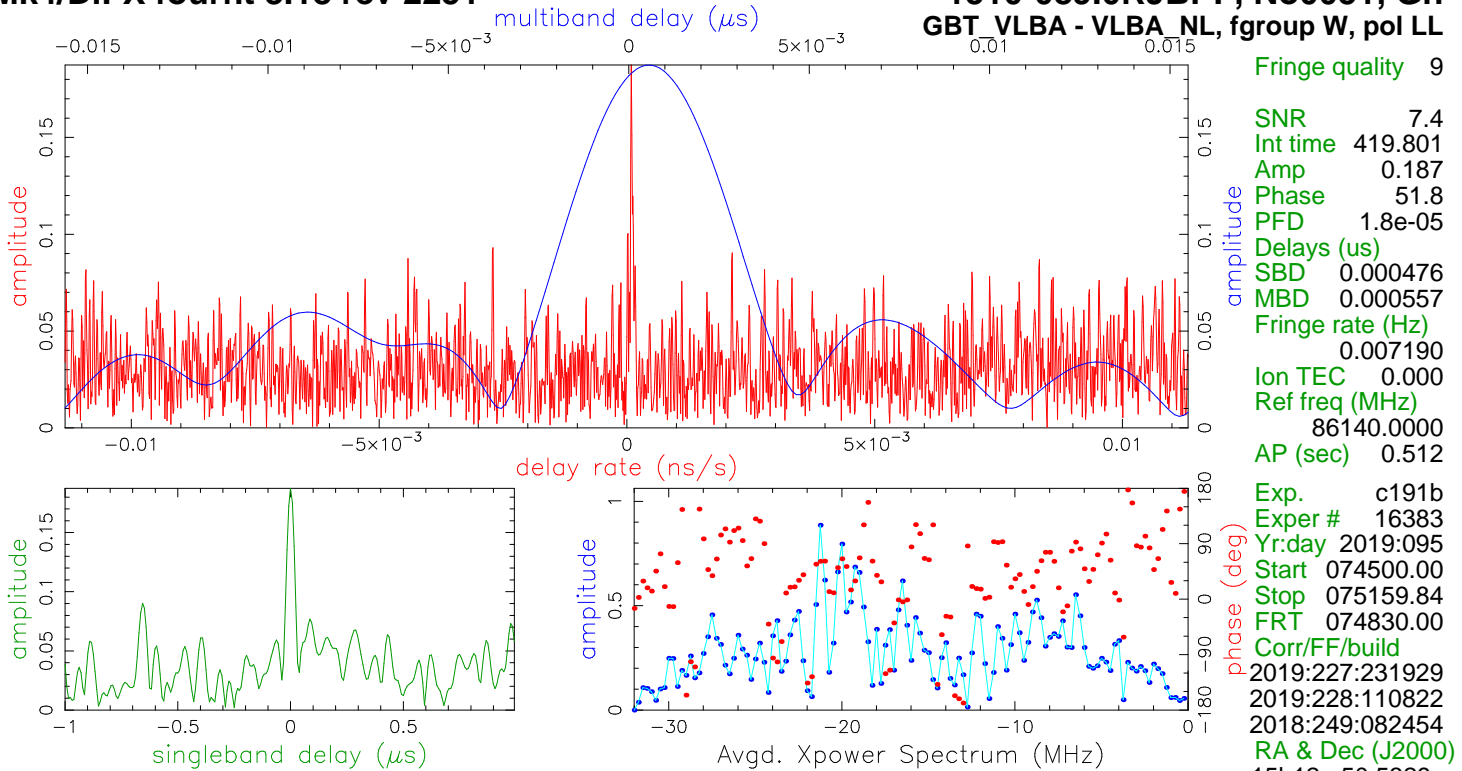
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-61.4	-37.2	-74.3	14.6	-40.1	-85.0	-12.8	-65.5	Phase	-44.7
	0.1	0.4	0.3	0.2	0.2	0.1	0.3	0.3	Ampl.	0.2
	64.1	202.8	201.8	74.3	147.7	244.9	218.0	60.3	Sbd box	201.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
I	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	7.71057490247E+02	Apriori delay (usec)	7.70498251055E+02	Resid mbdelay (usec)	-3.26081E-03	+/-	3.6E-04
Sband delay (usec)	7.71064818055E+02	Apriori clock (usec)	-1.1633879E+01	Resid sbdelay (usec)	5.66567E-01	+/-	2.9E-03
Phase delay (usec)	7.70498249613E+02	Apriori clockrate (us/s)	2.5600000E-07	Resid phdelay (usec)	-1.44123E-06	+/-	6.2E-07
Delay rate (us/s)	-5.56288532631E-01	Apriori rate (us/s)	-5.56277464107E-01	Resid rate (us/s)	-1.10685E-05	+/-	2.6E-09
Total phase (deg)	-280.2	Apriori accel (us/s/s)	-4.82238112764E-06	Resid phase (deg)	-44.7	+/-	19.2

ph/seg (deg)	41.3	Theor.	46.1	Amplitude	0.231 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	54.7	Search (2048X32)	0.145	Apriori clock (usec)	0.145	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	36.1	Interp.	0.000	Apriori clockrate (us/s)	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	40.9	Inc. seg. avg.	0.214	Apriori rate (us/s)	0.233	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
		Inc. frq. avg.	0.233	Apriori accel (us/s/s)	-4.82238112764E-06	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

G: az 181.4 el 42.4 pa 1.9 I: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 3219.265 389.307 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/GI.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/GI.W.70.0RJBPf



Fringe quality 9

SNR 7.4

Int time 419.801

Amp 0.187

Phase 51.8

PFD 1.8e-05

Delays (us)

SBD 0.000476

MBD 0.000557

Fringe rate (Hz) 0.007190

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

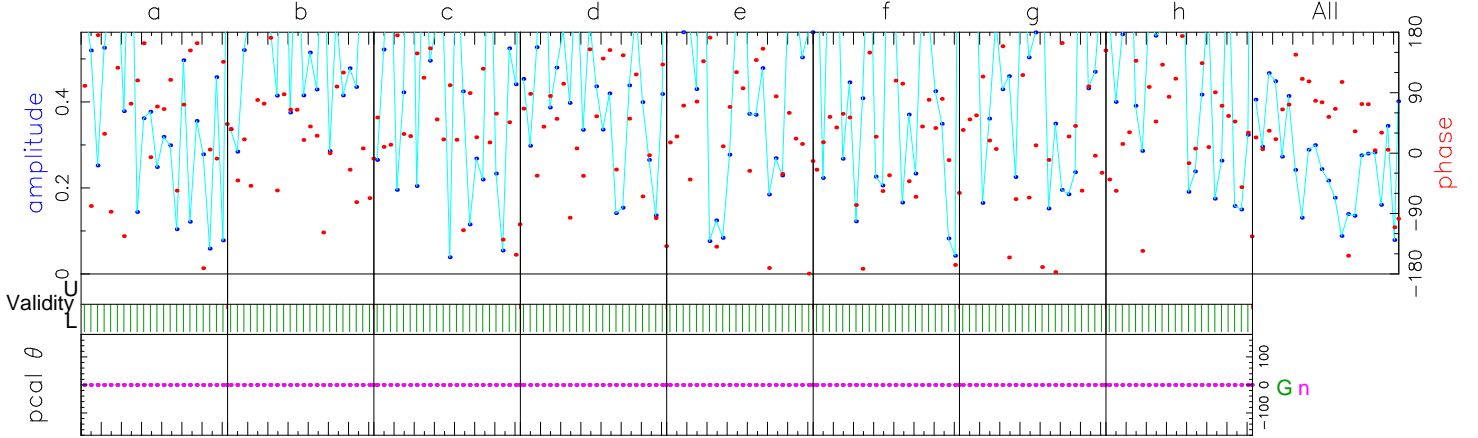
2019:227:231929

2019:228:110822

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
89.7	34.3	39.7	65.2	73.7	36.6	25.5	65.6	Phase	51.8
0.1	0.3	0.3	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2
106.3	174.7	128.6	78.7	237.7	188.7	233.9	129.9	Sbd box	129.1
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.11014628517E+03		Apriori delay (usec)	1.11014572816E+03		Resid mbdelay (usec)	5.57014E-04		+/- 2.9E-04
Sband delay (usec)	1.11014620416E+03		Apriori clock (usec)	-3.5939831E+01		Resid sbdelay (usec)	4.76000E-04		+/- 2.3E-03
Phase delay (usec)	1.11014572983E+03		Apriori clockrate (us/s)	-2.4699998E-07		Resid phdelay (usec)	1.66999E-06		+/- 5.0E-07
Delay rate (us/s)	-2.35538450704E-01		Apriori rate (us/s)	-2.35538534169E-01		Resid rate (us/s)	8.34653E-08		+/- 2.1E-09
Total phase (deg)		60.2	Apriori accel (us/s/s)	-5.29399479640E-06		Resid phase (deg)	51.8		+/- 15.4

ph/seg (deg) 61.9 RMS 61.9 Theor. 37.0 Amplitude 0.187 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

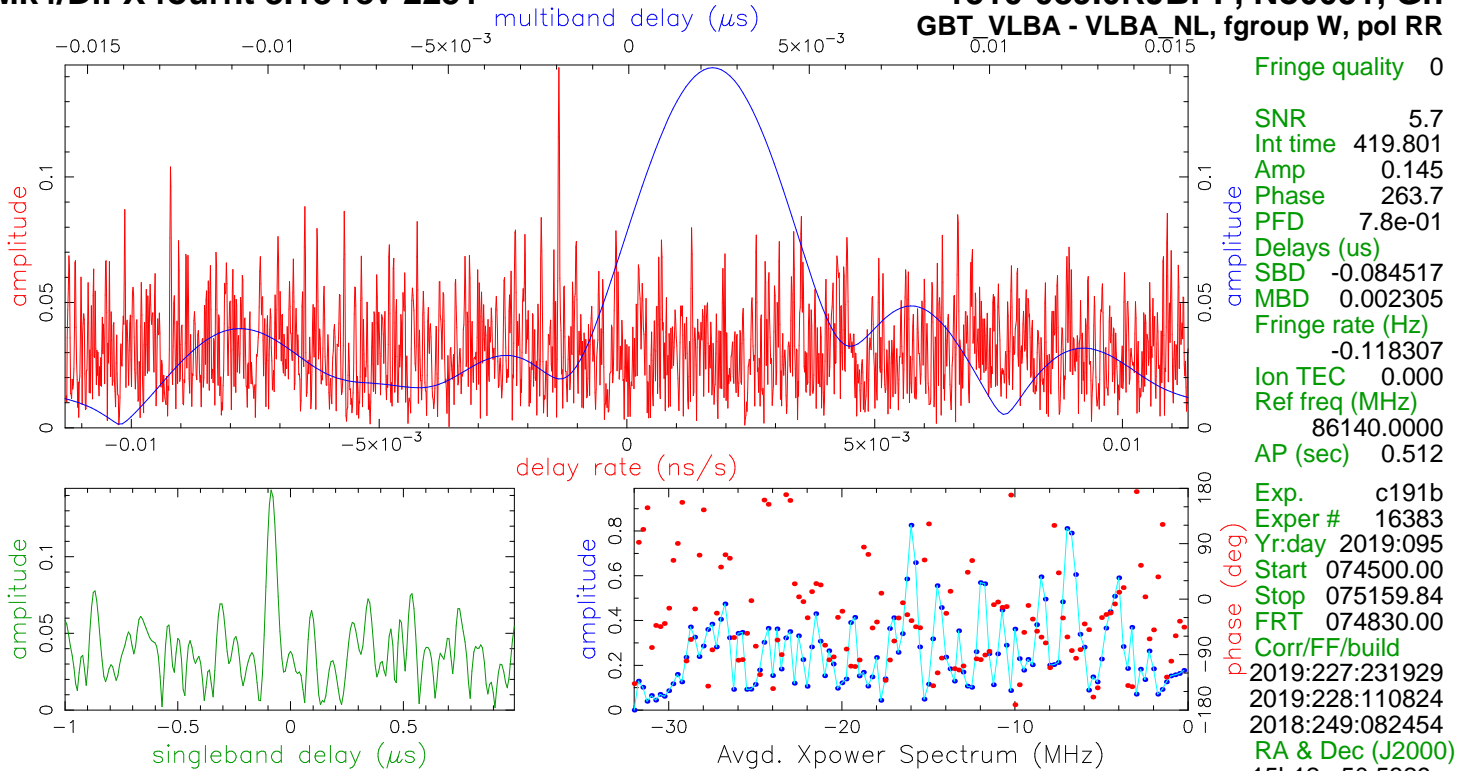
amp/seg (%) 70.1 64.6 Search (2048X32) 0.175 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 24.7 21.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

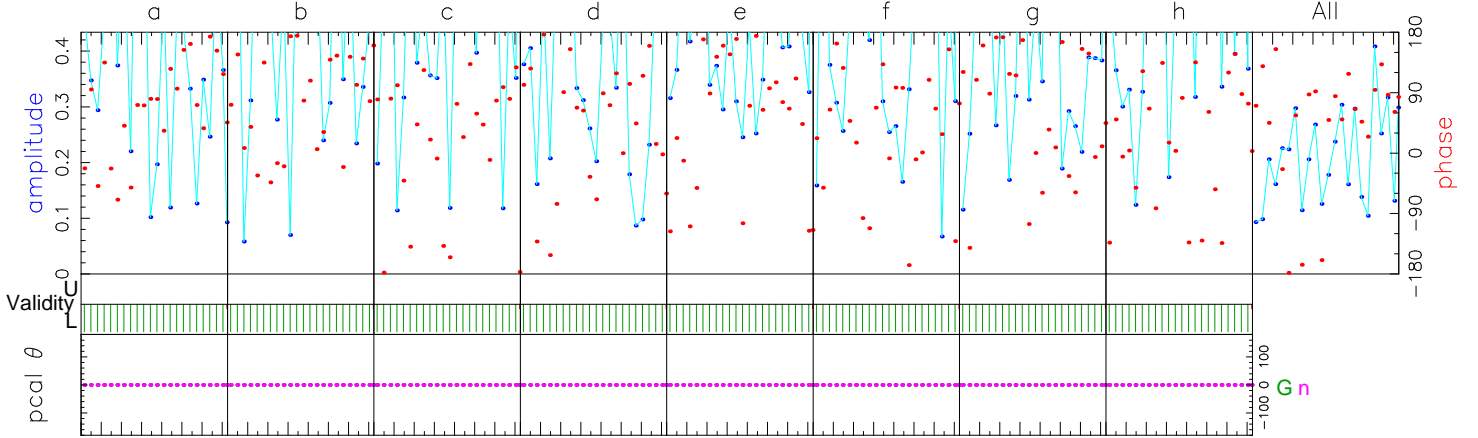
amp/frq (%) 27.7 38.1 Inc. seg. avg. 0.215 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

G: az 181.4 el 42.4 pa 1.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 1357.331 -319.877 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gn.W.24.0RJBPf



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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
70.2	94.7	84.1	77.0	112.1	52.5	84.7	89.0	Phase	83.7
0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
197.9	120.1	156.7	18.7	115.5	71.5	127.7	44.0	Sbd box	118.2
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.11005428321E+03	Apriori delay (usec)	1.11014572816E+03	Resid mbdelay (usec)	2.30506E-03	+/-	3.8E-04		
Sband delay (usec)	1.11006121166E+03	Apriori clock (usec)	-3.5939831E+01	Resid sbdelay (usec)	-8.45165E-02	+/-	3.0E-03		
Phase delay (usec)	1.11014573086E+03	Apriori clockrate (us/s)	-2.4699998E-07	Resid phdelay (usec)	2.70029E-06	+/-	6.5E-07		
Delay rate (us/s)	-2.35539907594E-01	Apriori rate (us/s)	-2.35538534169E-01	Resid rate (us/s)	-1.37342E-06	+/-	2.7E-09		
Total phase (deg)	272.1	Apriori accel (us/s/s)	-5.29399479640E-06	Resid phase (deg)	263.7	+/-	20.1		

ph/seg (deg) 55.5 48.2 Search (2048X32) 0.140 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

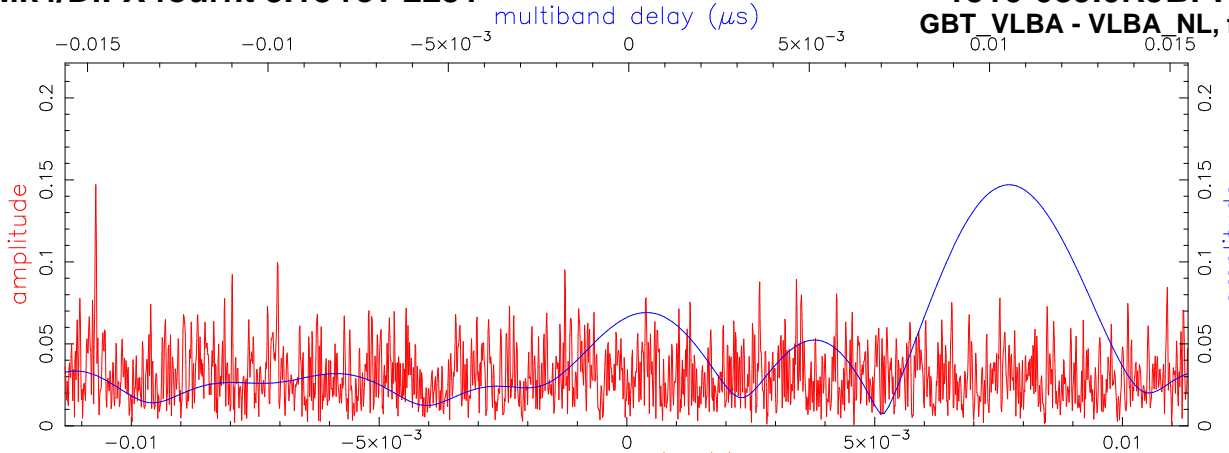
amp/seg (%) 72.8 84.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 18.9 28.4 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

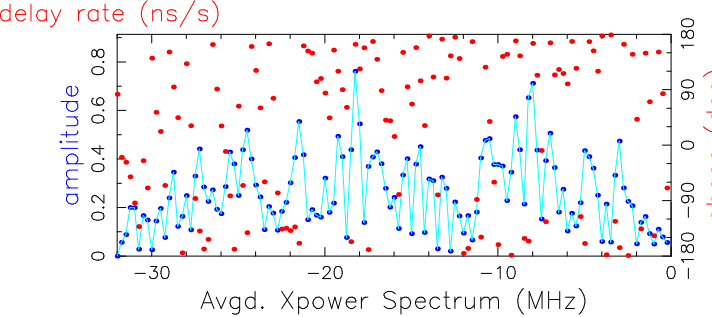
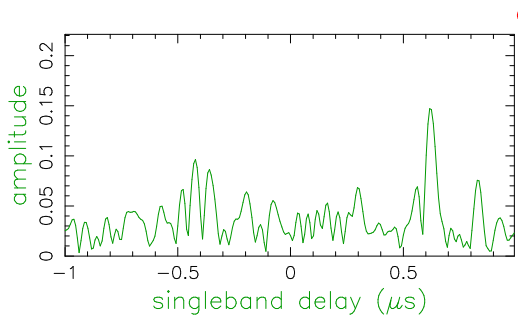
amp/frq (%) 29.7 49.7 Inc. frq. avg. 0.134 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

G: az 181.4 el 42.4 pa 1.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 1357.331 -319.877 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gn.W.40.0RJBPf

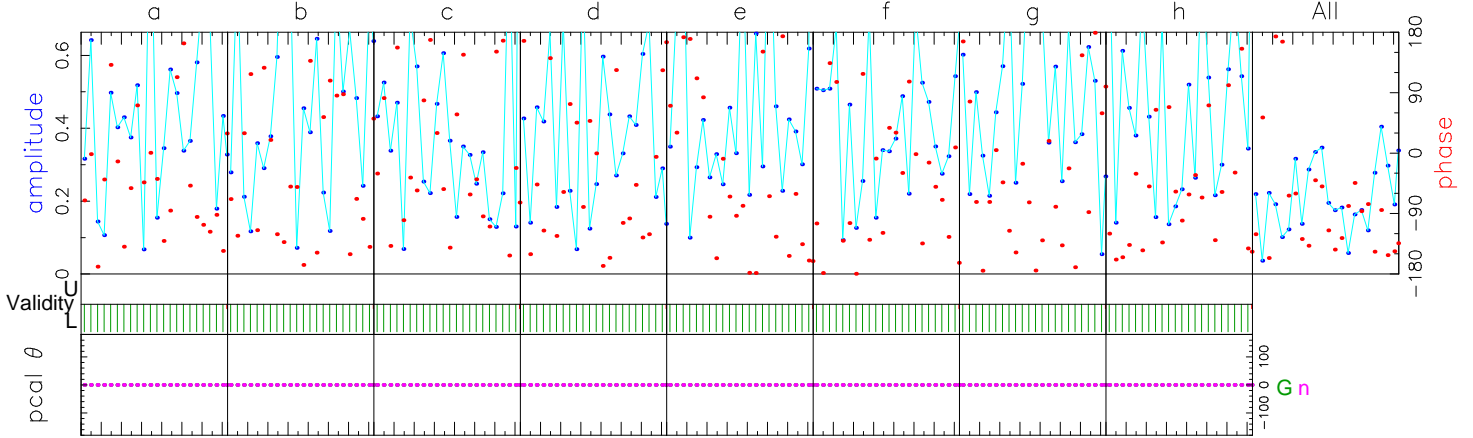


Fringe quality 0
 SNR 5.9
 Int time 419.801
 Amp 0.221
 Phase -108.0
 PFD 4.0e-01
 Delays (us)
 SBD 0.620588
 MBD 0.010537
 Fringe rate (Hz)
 -0.922906
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110826
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

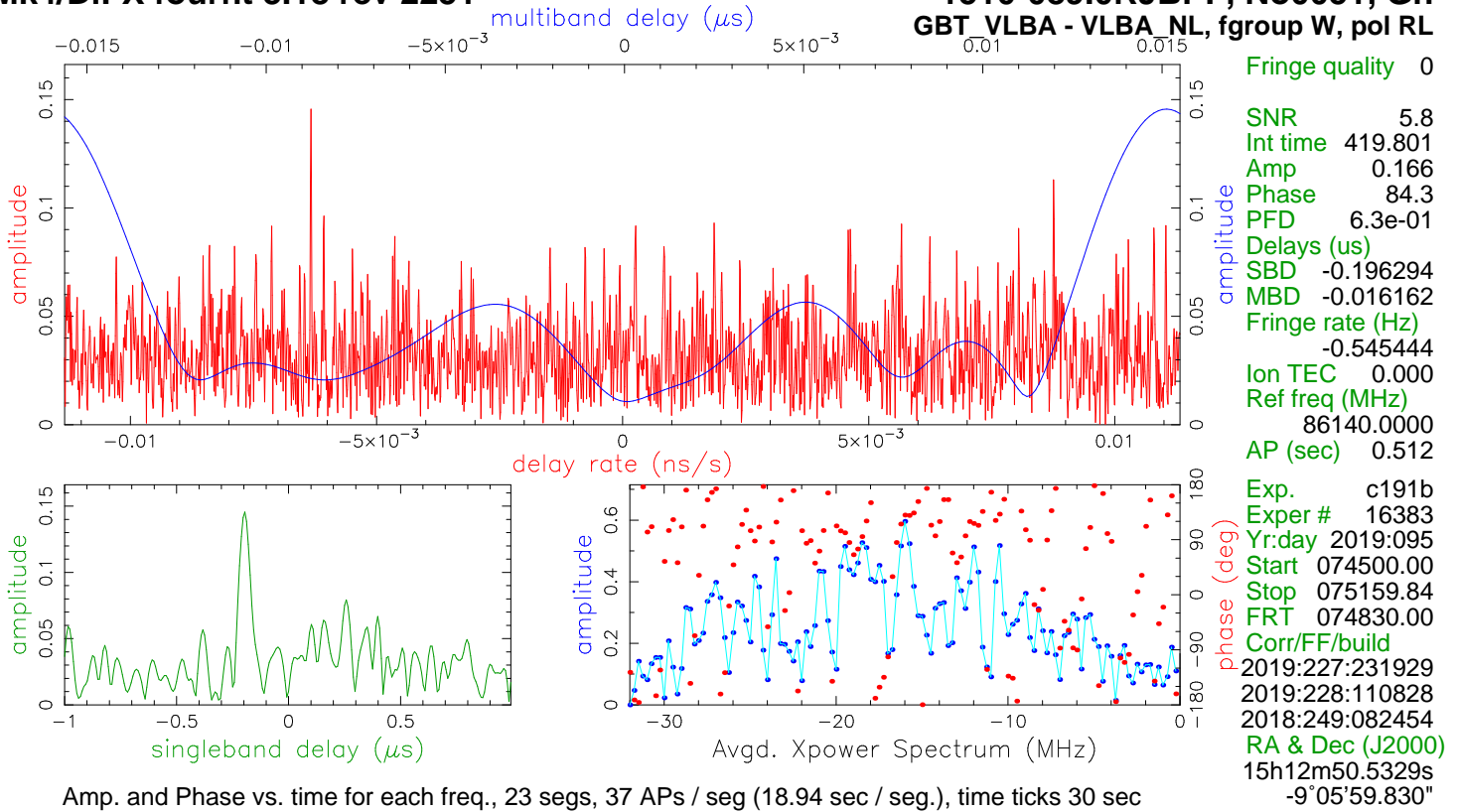


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-77.0	-134.3	-88.7	-116.6	-131.5	-79.8	-103.2	-104.5	Phase	-108.0
	0.2	0.3	0.1	0.3	0.2	0.3	0.3	0.3	Ampl.	0.2
	78.0	75.6	150.4	81.8	75.5	11.9	63.5	206.2	Sbd box	208.4
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

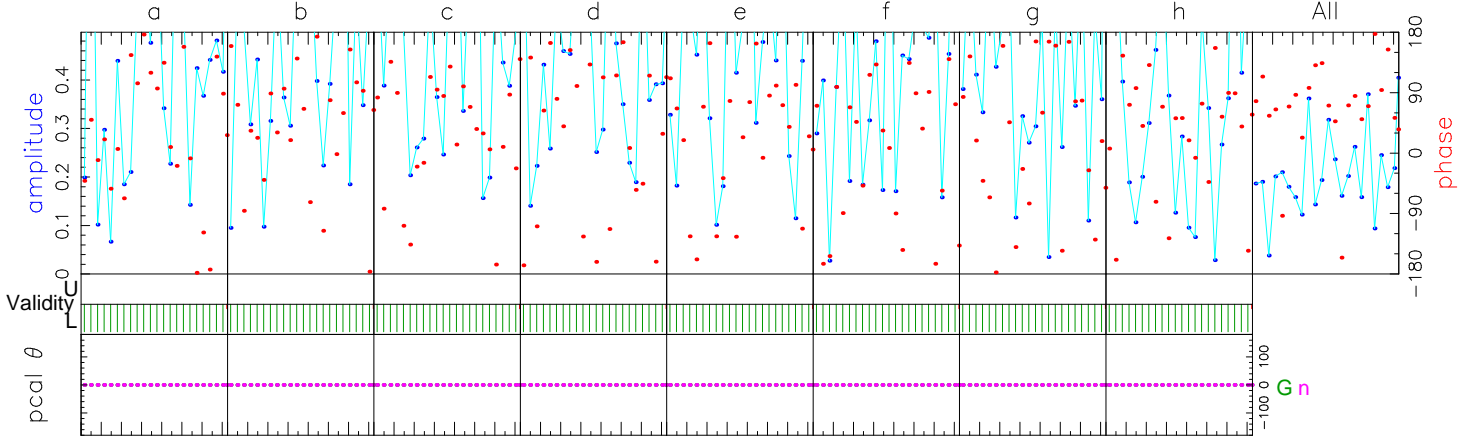
Group delay (usec)(sbd)	1.11078126534E+03	Apriori delay (usec)	1.11014572816E+03	Resid mbdelay (usec)	1.05372E-02	+/-	3.7E-04
Sband delay (usec)	1.11076631566E+03	Apriori clock (usec)	-3.5939831E+01	Resid sbdelay (usec)	6.20588E-01	+/-	2.9E-03
Phase delay (usec)	1.11014572467E+03	Apriori clockrate (us/s)	-2.4699998E-07	Resid phdelay (usec)	-3.48165E-06	+/-	6.3E-07
Delay rate (us/s)	-2.35549248196E-01	Apriori rate (us/s)	-2.35538534169E-01	Resid rate (us/s)	-1.07140E-05	+/-	2.6E-09
Total phase (deg)	-99.6	Apriori accel (us/s/s)	-5.29399479640E-06	Resid phase (deg)	-108.0	+/-	19.5

ph/seg (deg)	55.9	Theor.	46.7	Amplitude	0.221 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.1		81.5	Search (2048X32)	0.143	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.016	0.016
ph/frq (deg)	24.1		27.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.0		48.1	Inc. seg. avg.	0.233	Sample rate(MSamp/s):	64			ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.208	Data rate(Mb/s):	1024	nlags:	128	t_cohere	infinite	

G: az 181.4 el 42.4 pa 1.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 1357.331 -319.877 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gn.W.60.0RJBPf



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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
96.4	69.4	70.8	144.4	66.5	93.3	116.9	71.9	Phase	84.3
0.2	0.2	0.3	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
200.3	102.7	119.0	178.1	210.2	215.8	70.2	162.3	Sbd box	103.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.10994206634E+03		Apriori delay (usec)	1.11014572816E+03		Resid mbdelay (usec)	-1.61618E-02	+/-	3.8E-04
Sband delay (usec)	1.10994943466E+03		Apriori clock (usec)	-3.5939831E+01		Resid sbdelay (usec)	-1.96294E-01	+/-	3.0E-03
Phase delay (usec)	1.11014573087E+03		Apriori clockrate (us/s)	-2.4699998E-07		Resid phdelay (usec)	2.71790E-06	+/-	6.4E-07
Delay rate (us/s)	-2.35544866232E-01		Apriori rate (us/s)	-2.35538534169E-01		Resid rate (us/s)	-6.33206E-06	+/-	2.6E-09
Total phase (deg)		92.7	Apriori accel (us/s/s)	-5.29399479640E-06		Resid phase (deg)	84.3	+/-	19.9

ph/seg (deg) 58.1 Theor. 47.6 Amplitude 0.166 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

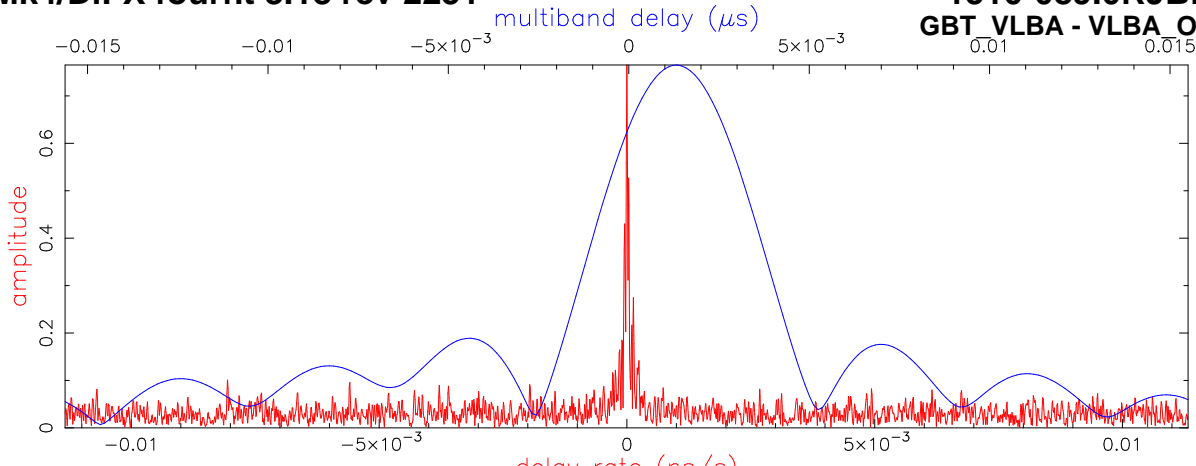
amp/seg (%) 66.6 83.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 31.0 28.1 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 34.1 49.0 Inc. frq. avg. 0.162 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

G: az 181.4 el 42.4 pa 1.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 1357.331 -319.877 ion window (TEC) 0.00 0.00 simultaneous interpolator

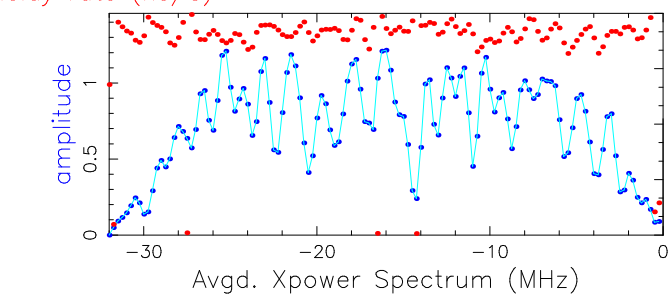
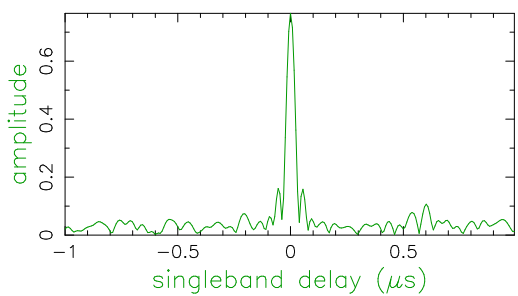
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gn.W.76.0RJBPf



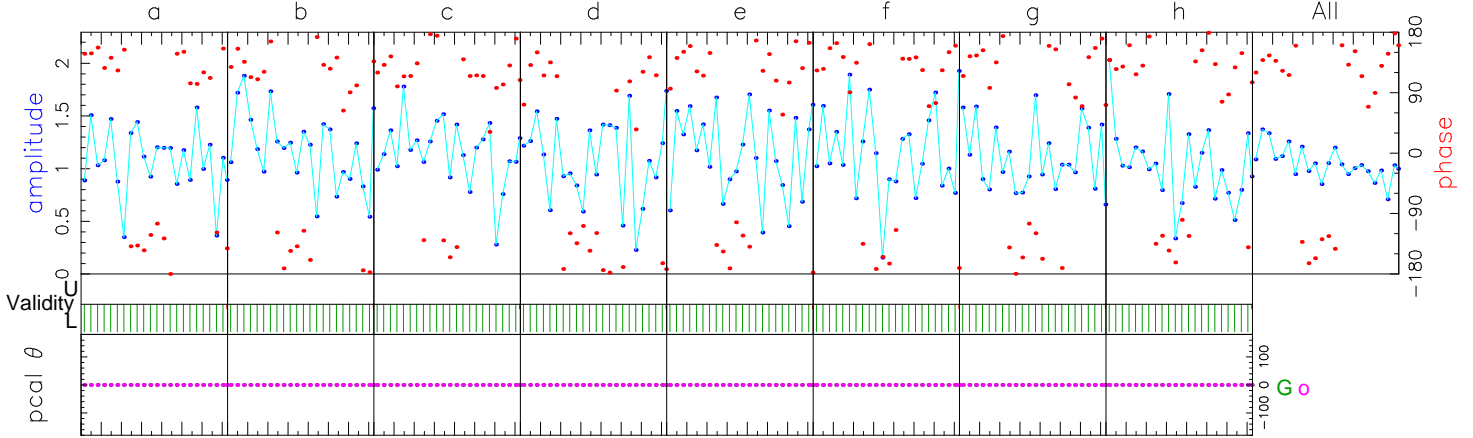
Fringe quality 7

SNR 30.3
Int time 419.801
Amp 0.765
Phase 154.2
PFD 0.0e+00
Delays (us)
SBD 0.000477
MBD 0.001320
Fringe rate (Hz)
0.000194
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110821
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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



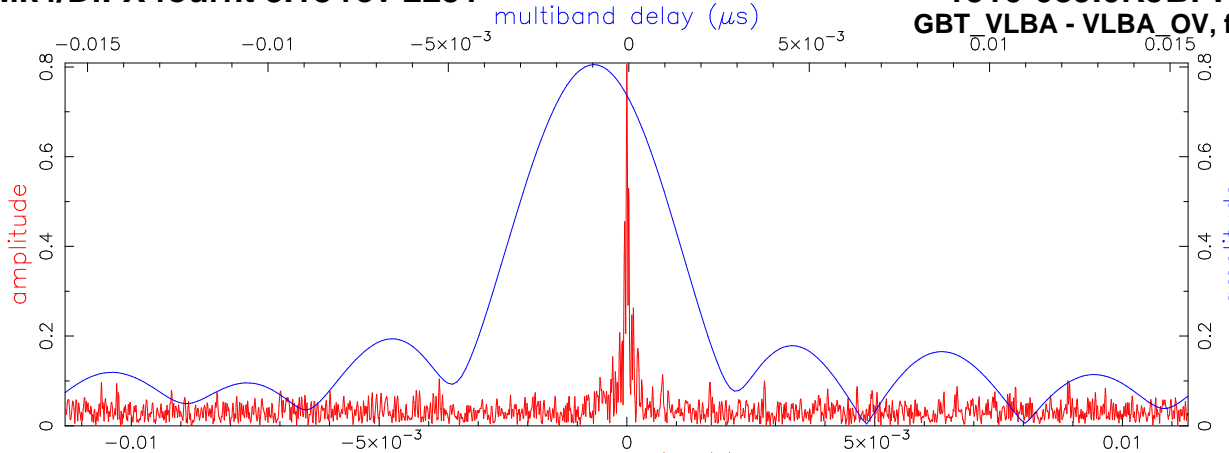
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	164.5	154.2
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	0.7	0.8
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	0.8	0.8
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	128.9	129.1
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	128.9	129.1
G	1000	1000	1000	1000	1000	1000	1000	1000	0.8	0.8
o	1000	1000	1000	1000	1000	1000	1000	1000	0.7	0.7
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	129.9	129.9
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	129.0	129.0

Group delay (usec)(sbd)	2.88358742138E+03	Apriori delay (usec)	2.88358610145E+03	Resid mbdelay (usec)	1.31994E-03	+/-	7.2E-05
Sband delay (usec)	2.88358657845E+03	Apriori clock (usec)	-2.7792200E+01	Resid sbdelay (usec)	4.77000E-04	+/-	5.7E-04
Phase delay (usec)	2.88358610642E+03	Apriori clockrate (us/s)	-1.0100002E-07	Resid phdelay (usec)	4.97356E-06	+/-	1.2E-07
Delay rate (us/s)	-7.67767814177E-01	Apriori rate (us/s)	-7.67767816434E-01	Resid rate (us/s)	2.25676E-09	+/-	5.0E-10
Total phase (deg)	74.5	Apriori accel (us/s/s)	-1.57784655747E-05	Resid phase (deg)	154.2	+/-	3.8

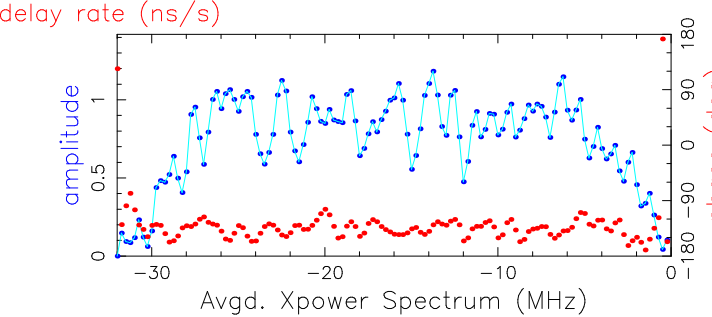
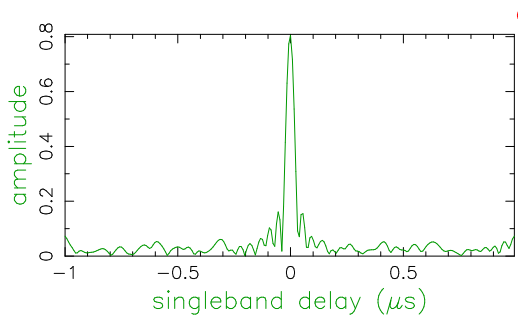
ph/seg (deg)	45.3	Theor.	9.1	Amplitude	0.765 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	42.4	Search (2048X32)	0.000	Search	0.746	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	9.4	Interp.	5.3	Inc. seg. avg.	1.039	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	6.8	Inc. frq. avg.	9.3	Inc. frq. avg.	0.770	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

G: az 181.4 el 42.4 pa 1.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 4428.677 352.217 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Go..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Go.W.19.0RJBPf

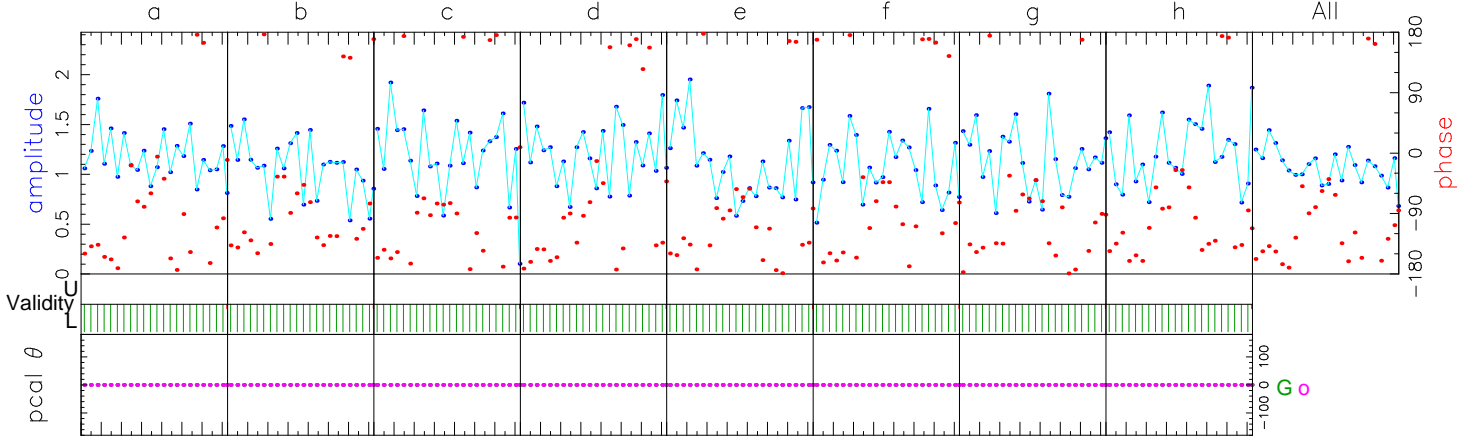


Fringe quality 8
 SNR 32.0
 Int time 419.801
 Amp 0.809
 Phase -130.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.001884
 MBD -0.000983
 Fringe rate (Hz)
 0.000167
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



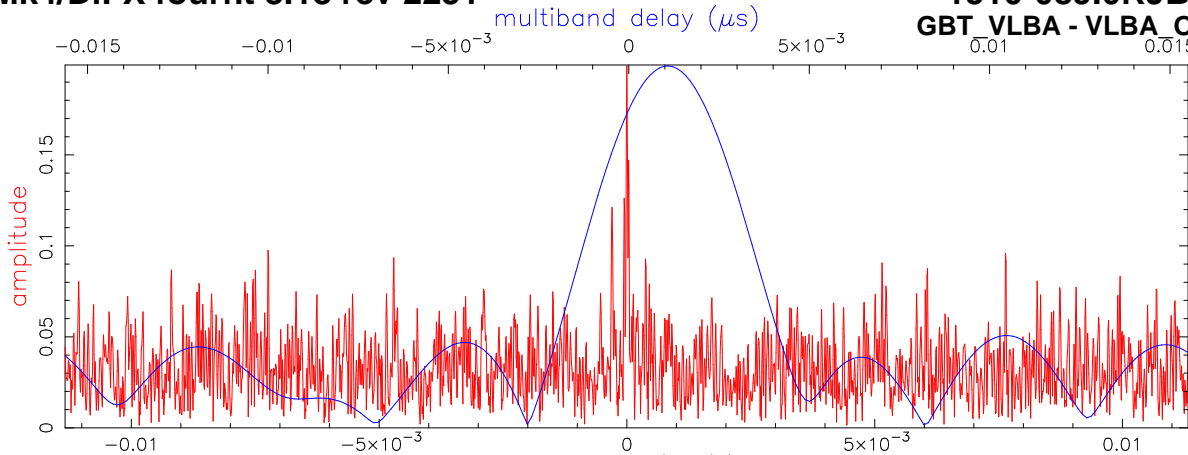
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110823
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

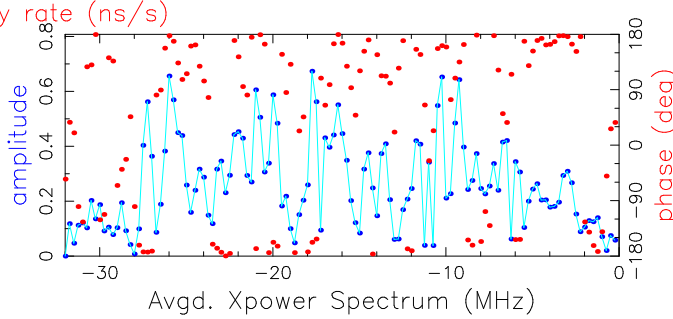
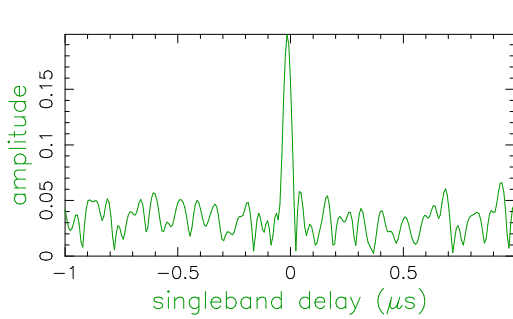


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-125.3	-115.2	-136.8	-145.4	-136.6	-136.7	-125.8	-119.3	Phase	-130.4
	0.8	0.8	0.9	0.8	0.9	0.7	0.8	0.9	Ampl.	0.8
	128.4	128.7	128.9	129.0	128.5	128.9	128.7	128.7	Sbd box	128.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.88358511882E+03		Apriori delay (usec)		2.88358610145E+03		Resid mbdelay (usec)		-9.82625E-04	+/- 6.8E-05
Sband delay (usec)	2.88358421745E+03		Apriori clock (usec)		-2.7792200E+01		Resid sbdelay (usec)		-1.88400E-03	+/- 5.4E-04
Phase delay (usec)	2.88358609724E+03		Apriori clockrate (us/s)		-1.0100002E-07		Resid phdelay (usec)		-4.20417E-06	+/- 1.2E-07
Delay rate (us/s)	-7.67767814499E-01		Apriori rate (us/s)		-7.67767816434E-01		Resid rate (us/s)		1.93507E-09	+/- 4.8E-10
Total phase (deg)	149.9		Apriori accel (us/s/s)		-1.57784655747E-05		Resid phase (deg)		-130.4	+/- 3.6

ph/seg (deg) 45.0 8.6 Search (2048X32) 0.797 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.5 15.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.1 5.1 Inc. seg. avg. 1.079 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 8.6 8.8 Inc. frq. avg. 0.814 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 G: az 181.4 el 42.4 pa 1.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 4428.677 352.217 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Go..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Go.W.36.0RJBPf

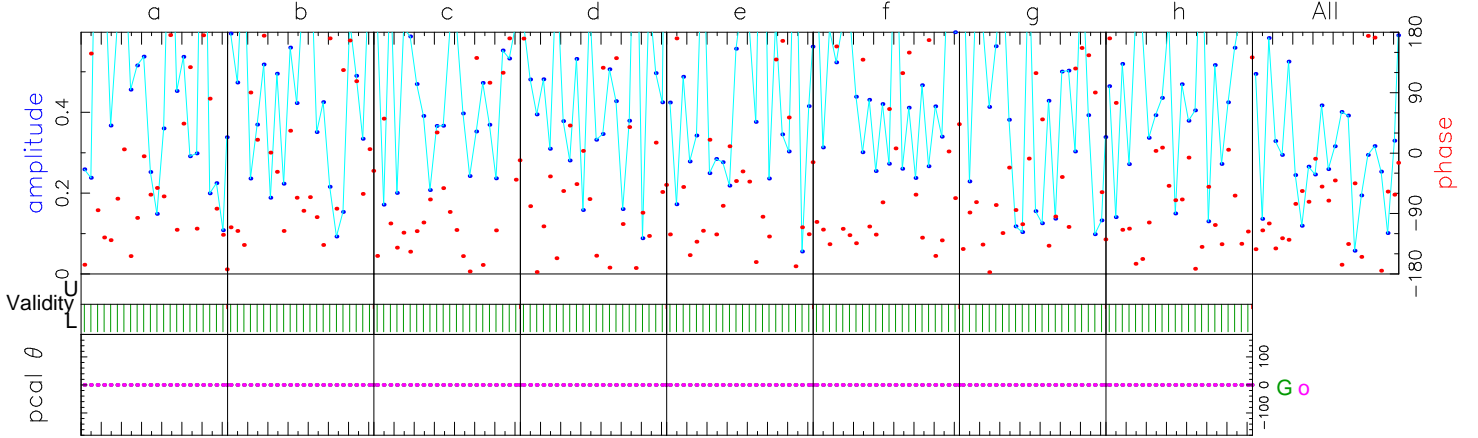


Fringe quality 9
 SNR 7.9
 Int time 419.801
 Amp 0.199
 Phase -112.4
 PFD 4.7e-07
 Delays (us)
 SBD -0.014089
 MBD 0.001072
 Fringe rate (Hz)
 0.000313
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110826
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

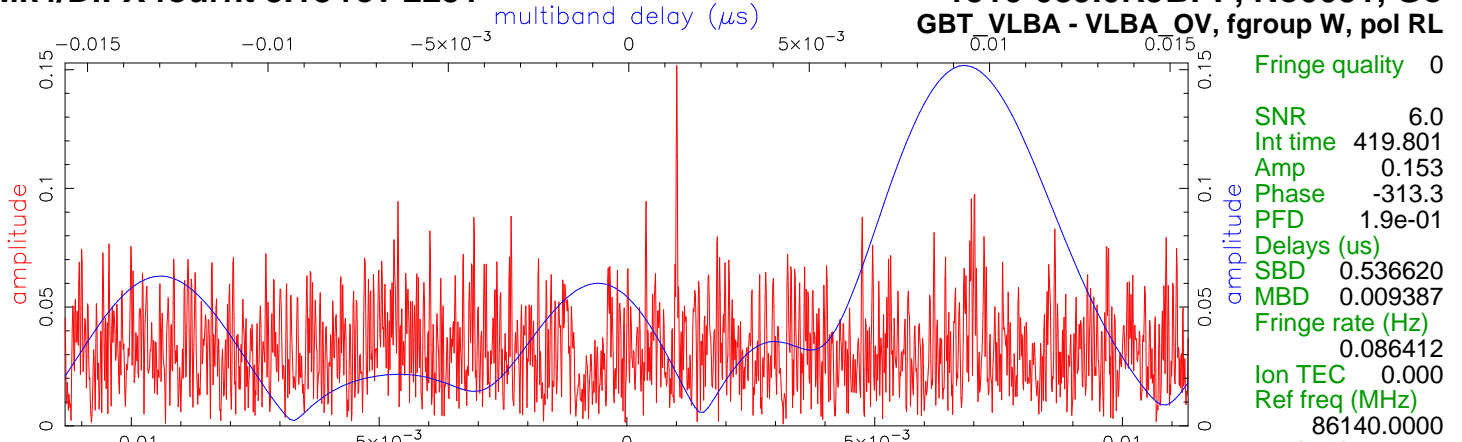


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-115.9	-85.9	-127.2	-121.5	-106.4	-113.2	-114.8	-109.0	Phase	-112.4
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	124.4	89.8	127.4	128.4	236.2	129.4	39.7	243.9	Sbd box	127.2
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	

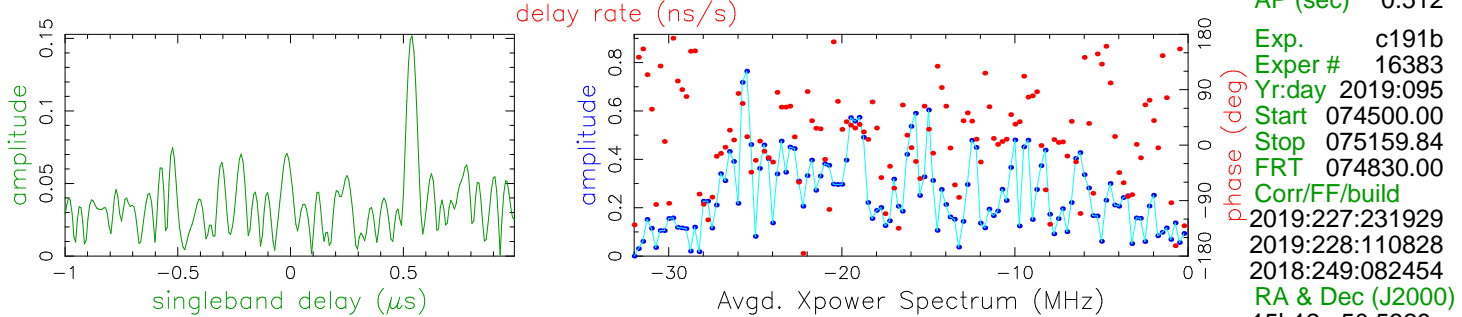
Group delay (usec)(sbd)	2.88358717295E+03	Apriori delay (usec)	2.88358610145E+03	Resid mbdelay (usec)	1.07150E-03	+/-	2.7E-04
Sband delay (usec)	2.88357201245E+03	Apriori clock (usec)	-2.7792200E+01	Resid sbdelay (usec)	-1.40890E-02	+/-	2.2E-03
Phase delay (usec)	2.88358609782E+03	Apriori clockrate (us/s)	-1.0100002E-07	Resid phdelay (usec)	-3.62492E-06	+/-	4.7E-07
Delay rate (us/s)	-7.67767812797E-01	Apriori rate (us/s)	-7.67767816434E-01	Resid rate (us/s)	3.63703E-09	+/-	1.9E-09
Total phase (deg)	167.9	Apriori accel (us/s/s)	-1.57784655747E-05	Resid phase (deg)	-112.4	+/-	14.5

ph/seg (deg)	52.8	Theor.	34.8	Amplitude	0.199 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	84.2		60.7	Search (2048X32)	0.193	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.016	0.016
ph/frq (deg)	13.4		20.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	13.4		35.8	Inc. seg. avg.	0.254	Sample rate(MSamp/s):	64	Data rate(Mb/s):	1024	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.190	nlags:	128	t_cohere:	infinite			

G: az 181.4 el 42.4 pa 1.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 4428.677 352.217 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Go..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Go.W.56.0RJBPf

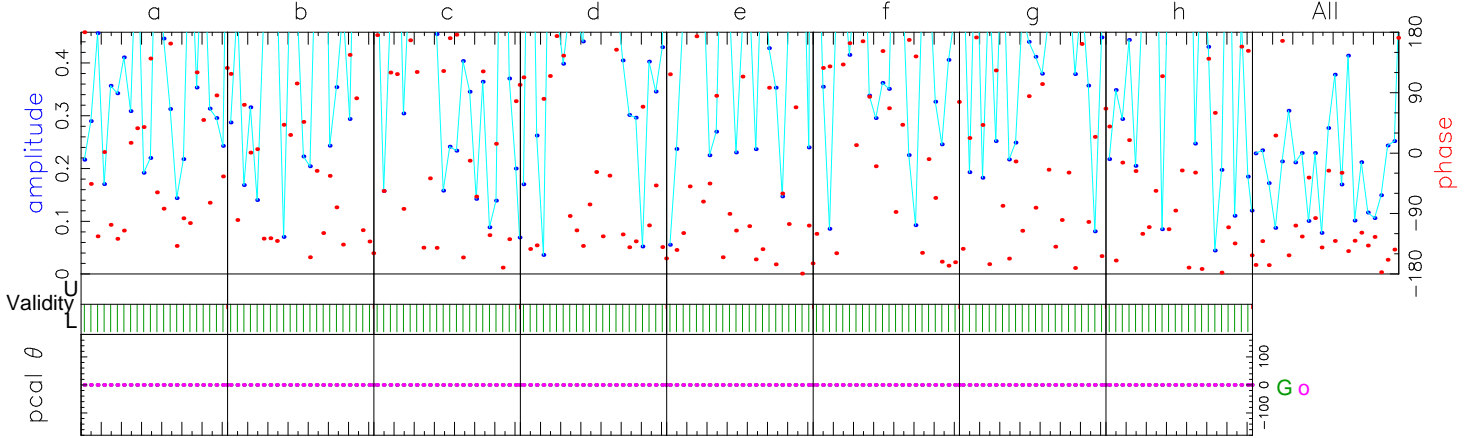


Fringe quality 0
 SNR 6.0
 Int time 419.801
 Amp 0.153
 Phase -313.3
 PFD 1.9e-01
 Delays (us)
 SBD 0.536620
 MBD 0.009387
 Fringe rate (Hz)
 0.086412
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



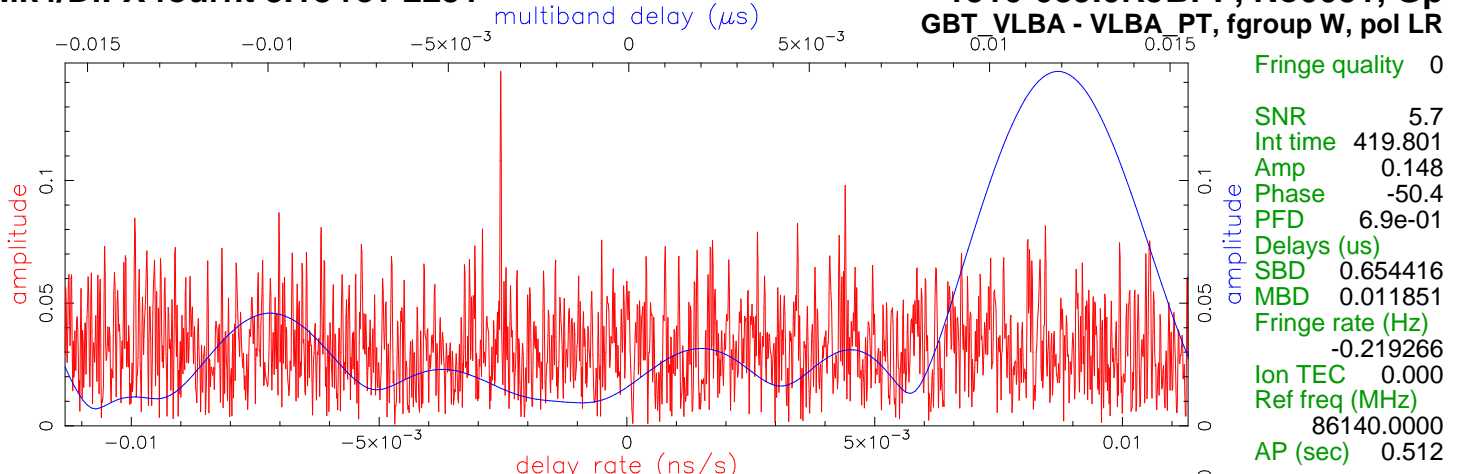
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110828
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

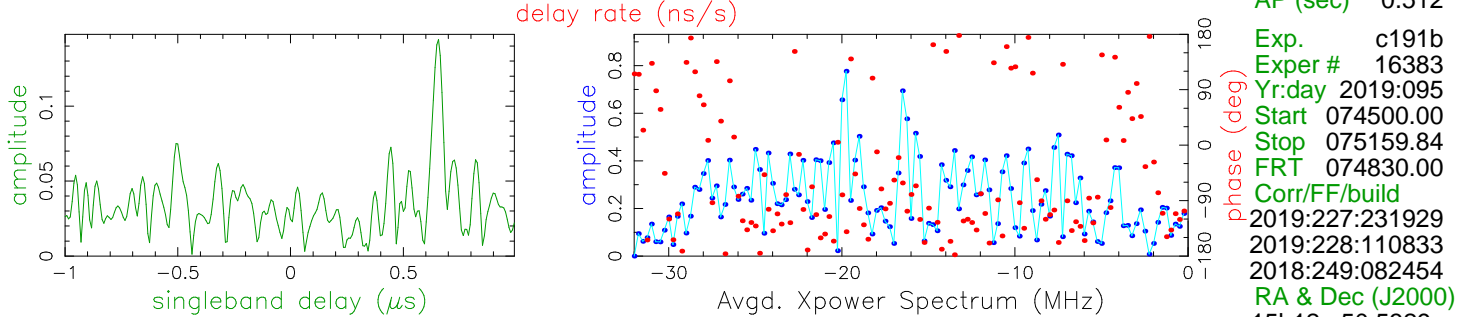


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86380.00	Freq (MHz)	All
-74.0	-116.8	-179.4	-126.5	-140.0	-175.3	-133.4	-111.3	-111.3	Phase	-133.3
0.1	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
201.2	206.4	49.6	197.2	163.7	70.7	91.3	47.2	47.2	Sbd box	197.7
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000		
G W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	W07LR	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.88412673795E+03	Apriori delay (usec)		2.88358610145E+03	Resid mbdelay (usec)		9.38650E-03	+/-	3.6E-04	
Sband delay (usec)	2.88412272145E+03	Apriori clock (usec)		-2.7792200E+01	Resid sbdelay (usec)		5.36620E-01	+/-	2.9E-03	
Phase delay (usec)	2.88358609715E+03	Apriori clockrate (us/s)		-1.0100002E-07	Resid phdelay (usec)		-4.30006E-06	+/-	6.1E-07	
Delay rate (us/s)	-7.67766813271E-01	Apriori rate (us/s)		-7.67767816434E-01	Resid rate (us/s)		1.00316E-06	+/-	2.5E-09	
Total phase (deg)		-33.1	Apriori accel (us/s/s)		-1.57784655747E-05	Resid phase (deg)		-313.3	+/-	19.0

ph/seg (deg) 55.8 45.5 Theor. Amplitude 0.153 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.6 79.5 Search (2048X32) 0.143 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.1 26.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 34.1 46.9 Inc. seg. avg. 0.158 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 G: az 181.4 el 42.4 pa 1.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 4428.677 352.217 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Go..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Go.W.75.0RJBPf simultaneous interpolator

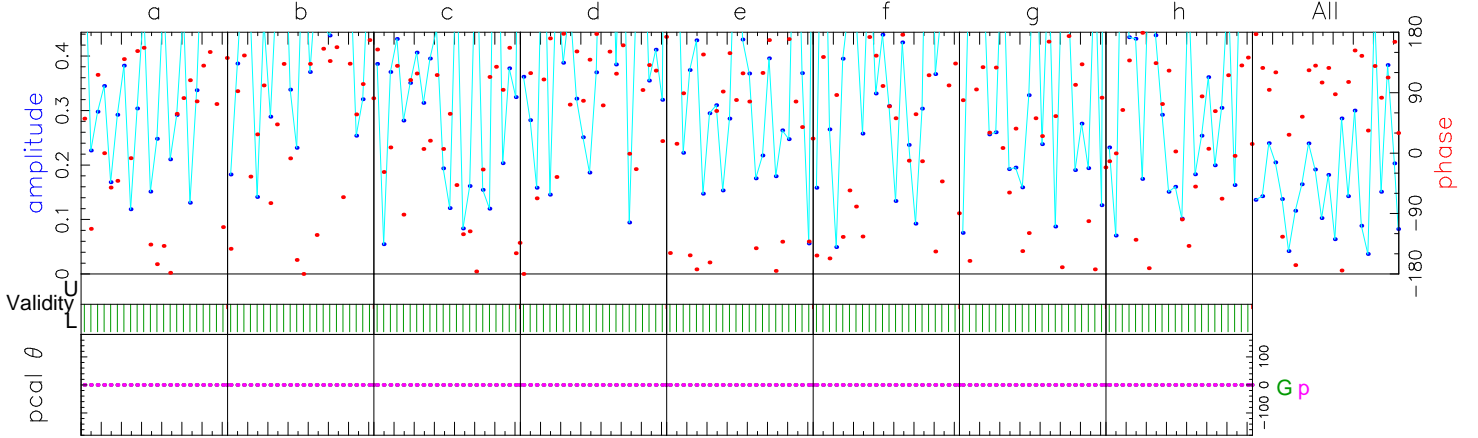


Fringe quality 0
 SNR 5.7
 Int time 419.801
 Amp 0.148
 Phase -50.4
 PFD 6.9e-01
 Delays (us)
 SBD 0.654416
 MBD 0.011851
 Fringe rate (Hz)
 -0.219266
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

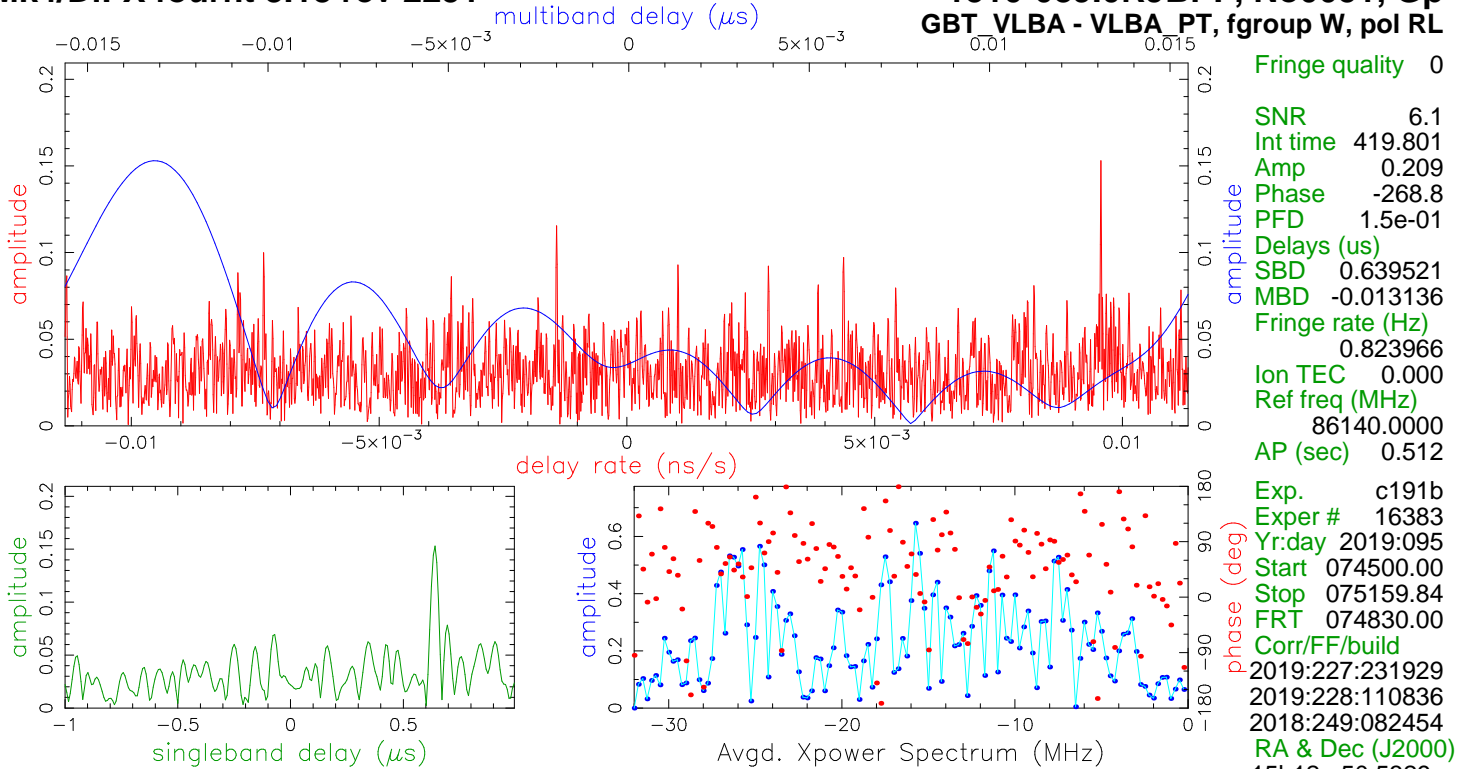


Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110833
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

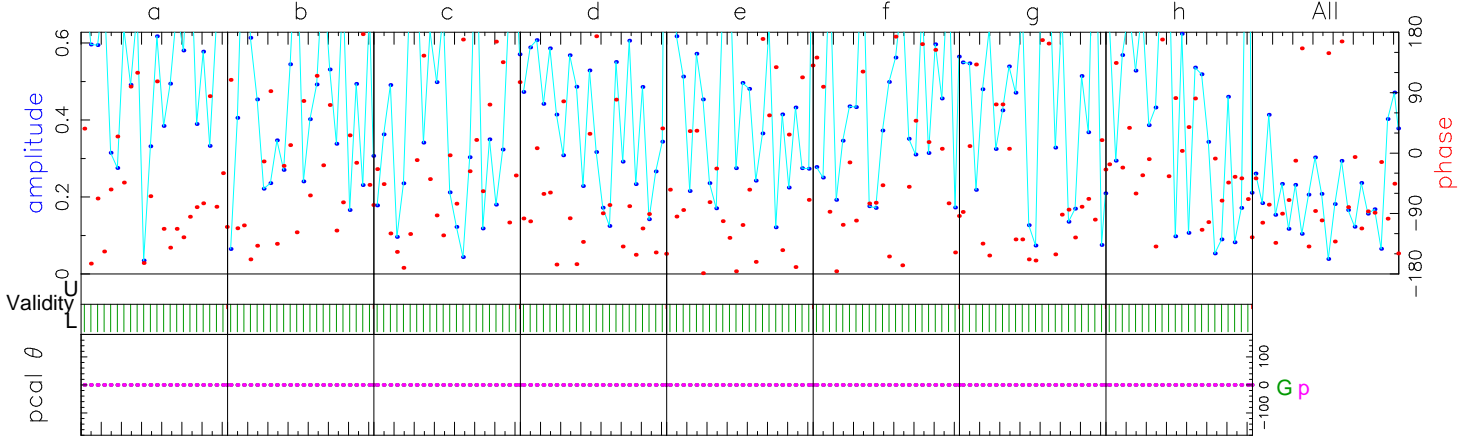
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	120.6	141.0	127.6	119.2	125.4	157.9	133.2	120.3	Phase	129.6	
	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1	
	177.1	103.4	191.2	218.0	147.3	67.8	44.2	253.6	Sbd box	212.8	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000			
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
									Tracks		
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
									Tracks		
Group delay (usec)(sbd)	6.48897444899E+02		Apriori delay (usec)		6.48229343799E+02		Resid mbdelay (usec)		1.18511E-02	+/- 3.8E-04	
Sband delay (usec)	6.48883759799E+02		Apriori clock (usec)		-2.1778261E+01		Resid sbdelay (usec)		6.54416E-01	+/- 3.0E-03	
Phase delay (usec)	6.48229347979E+02		Apriori clockrate (us/s)		-1.6600000E-07		Resid phdelay (usec)		4.18006E-06	+/- 6.4E-07	
Delay rate (us/s)	-6.0306822552E-01		Apriori rate (us/s)		-6.03065680093E-01		Resid rate (us/s)		-2.54546E-06	+/- 2.7E-09	
Total phase (deg)			Apriori accel (us/s/s)		-4.60418052311E-06		Resid phase (deg)		-50.4	+/- 20.0	
RMS	Theor.	Amplitude	0.148 +/- 0.026		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	50.5	47.9	Search (2048X32)		0.141		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
amp/seg (%)	78.0	83.6	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016 0.016
ph/frq (deg)	14.4	28.2	Inc. seg. avg.		0.139		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	29.1	49.3	Inc. frq. avg.		0.134		Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite	ion window (TEC)	0.00 0.00
G: az 181.4 el 42.4 pa 1.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 3491.218 570.884 simultaneous interpolator											
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gp.W.107.0RJBPf											



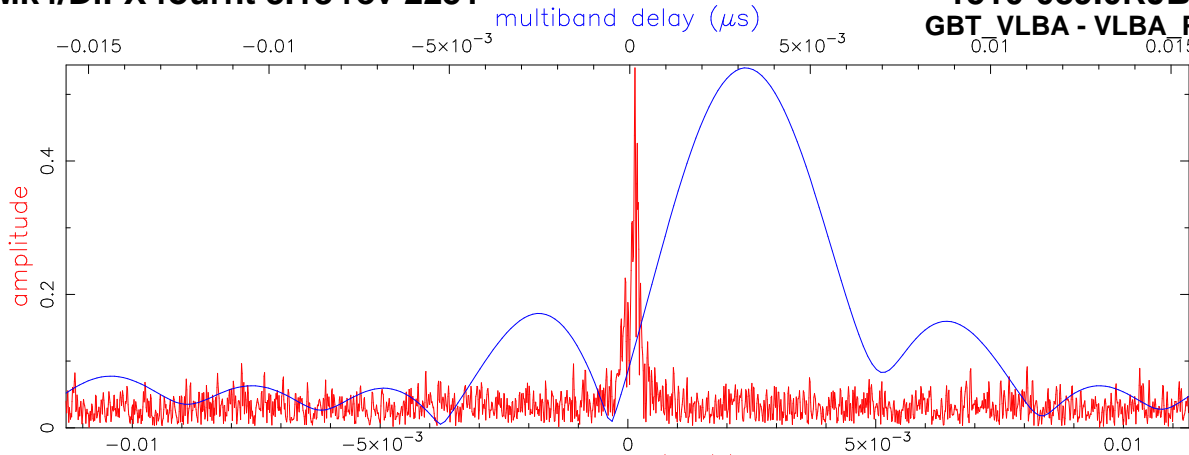
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-90.3	-76.9	-63.8	-98.4	-103.4	-136.7	-123.9	-39.0	Phase	-88.8
	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
	126.6	237.0	223.9	84.6	148.6	157.7	164.8	109.1	Sbd box	210.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd)	6.48872457674E+02	Apriori delay (usec)	6.48229343799E+02	Resid mbdelay (usec)	-1.31361E-02	+/-	3.6E-04
Sband delay (usec)	6.48868864299E+02	Apriori clock (usec)	-2.1778261E+01	Resid sbdelay (usec)	6.39521E-01	+/-	2.8E-03
Phase delay (usec)	6.48229340936E+02	Apriori clockrate (us/s)	-1.6600000E-07	Resid phdelay (usec)	-2.86266E-06	+/-	6.1E-07
Delay rate (us/s)	-6.03056114666E-01	Apriori rate (us/s)	-6.03065680093E-01	Resid rate (us/s)	9.56543E-06	+/-	2.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-4.60418052311E-06	Resid phase (deg)	-268.8	+/-	18.9

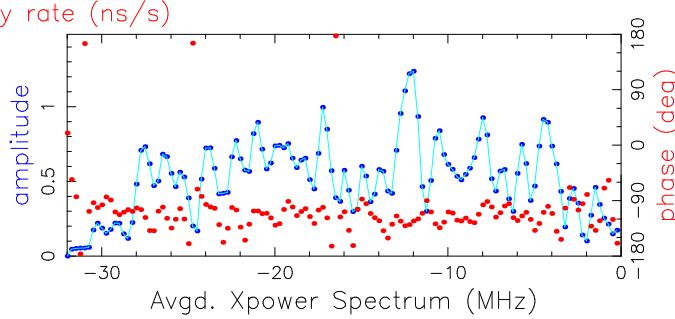
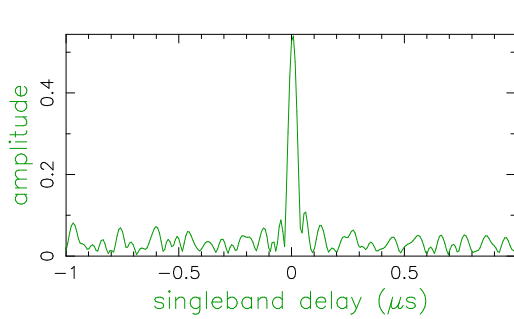
ph/seg (deg)	56.6	Theor.	45.2	Amplitude	0.209 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	81.6		79.0	Search (2048X32)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	34.3		26.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	24.8		46.6	Inc. seg. avg.	0.225	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
				Inc. frq. avg.	0.217	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00



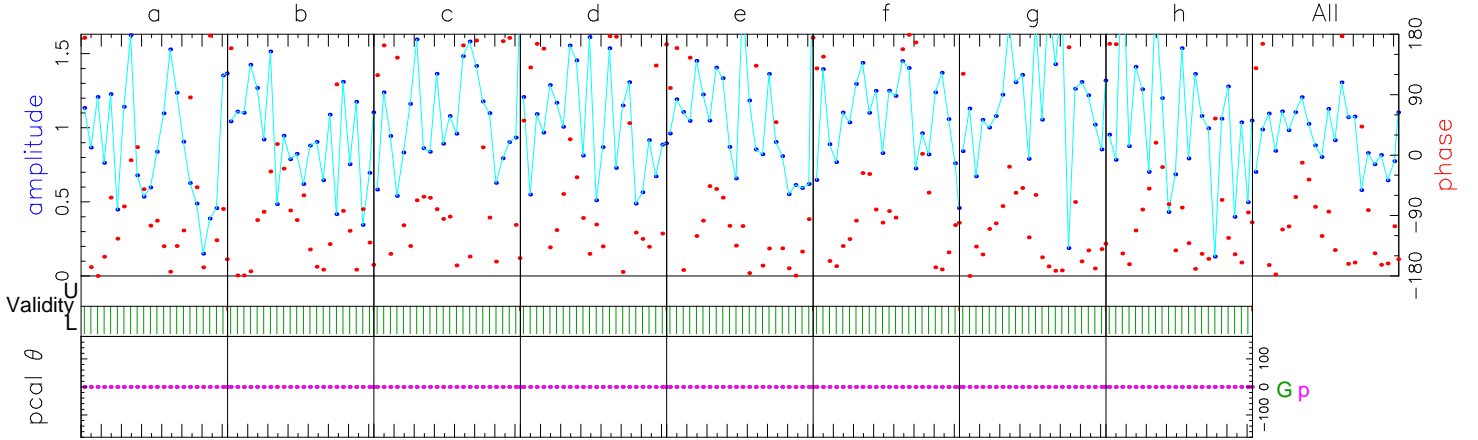
Fringe quality 9

SNR 21.6
Int time 419.801
Amp 0.544
Phase -128.5
PFD 0.0e+00
Delays (us)
SBD 0.005236
MBD 0.003192
Fringe rate (Hz) 0.011940
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110829
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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



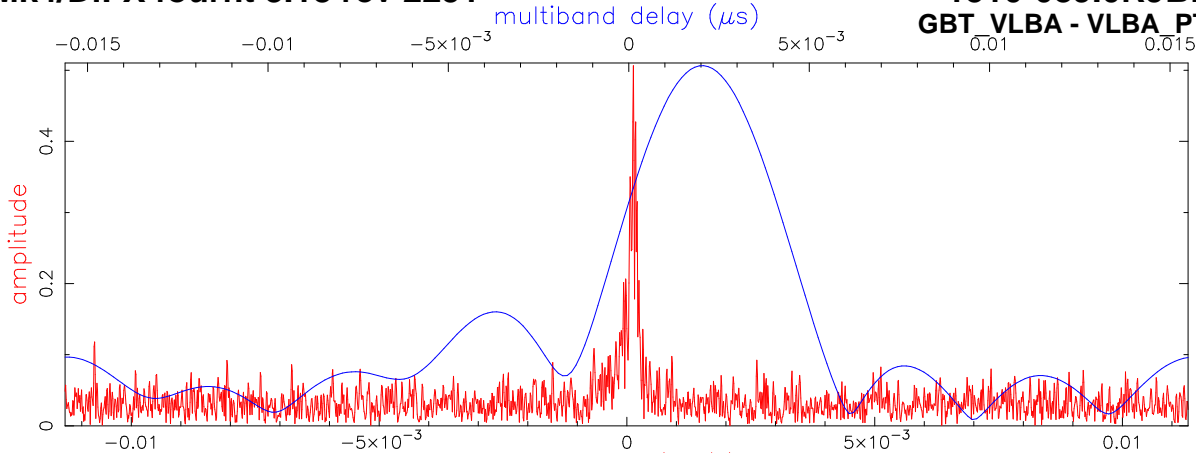
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-118.0	-124.7	-133.4	-145.1	-136.4	-129.4	-125.3	-120.4	Phase	-128.5
	0.5	0.5	0.6	0.4	0.5	0.6	0.7	0.6	Ampl.	0.5
	130.0	129.4	129.6	129.6	129.2	129.9	129.8	129.8	Sbd box	129.7
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd)	6.48232535424E+02	Apriori delay (usec)	6.48229343799E+02	Resid mbdelay (usec)	3.19163E-03	+/-	1.0E-04
Sband delay (usec)	6.48234579799E+02	Apriori clock (usec)	-2.1778261E+01	Resid sbdelay (usec)	5.23600E-03	+/-	8.0E-04
Phase delay (usec)	6.48229339656E+02	Apriori clockrate (us/s)	-1.6600000E-07	Resid phdelay (usec)	-4.14253E-06	+/-	1.7E-07
Delay rate (us/s)	-6.03065541483E-01	Apriori rate (us/s)	-6.03065680093E-01	Resid rate (us/s)	1.38610E-07	+/-	7.1E-10
Total phase (deg)	114.5	Apriori accel (us/s/s)	-4.60418052311E-06	Resid phase (deg)	-128.5	+/-	5.3

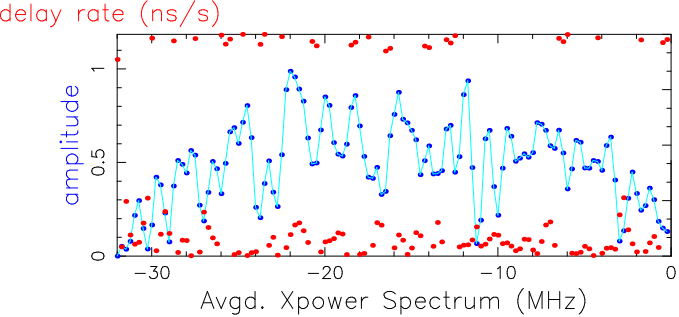
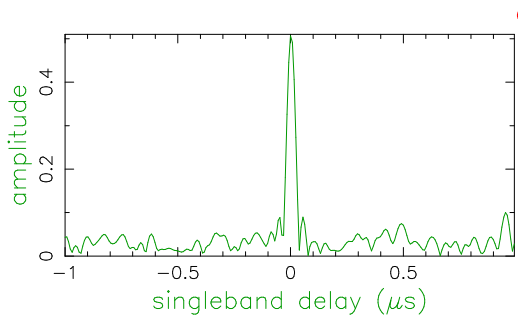
ph/seg (deg)	63.8	RMS	12.8	Theor.	12.8	Amplitude	0.544 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	80.4		22.3		22.3	Search (2048X32)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	9.7		7.5		7.5	Interp.	0.917	Bits/sample:	2x2	ion window (TEC)	0.00	0.00		
amp/frq (%)	17.7		13.1		13.1	Inc. seg. avg.	0.540	Sample rate(MSamp/s):	64					
						Inc. frq. avg.	0.540	Data rate(Mb/s):	1024	nlags:	128	t_cohere	infinite	

G: az 181.4 el 42.4 pa 1.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 3491.218 570.884 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gp.W.80.0RJBPf

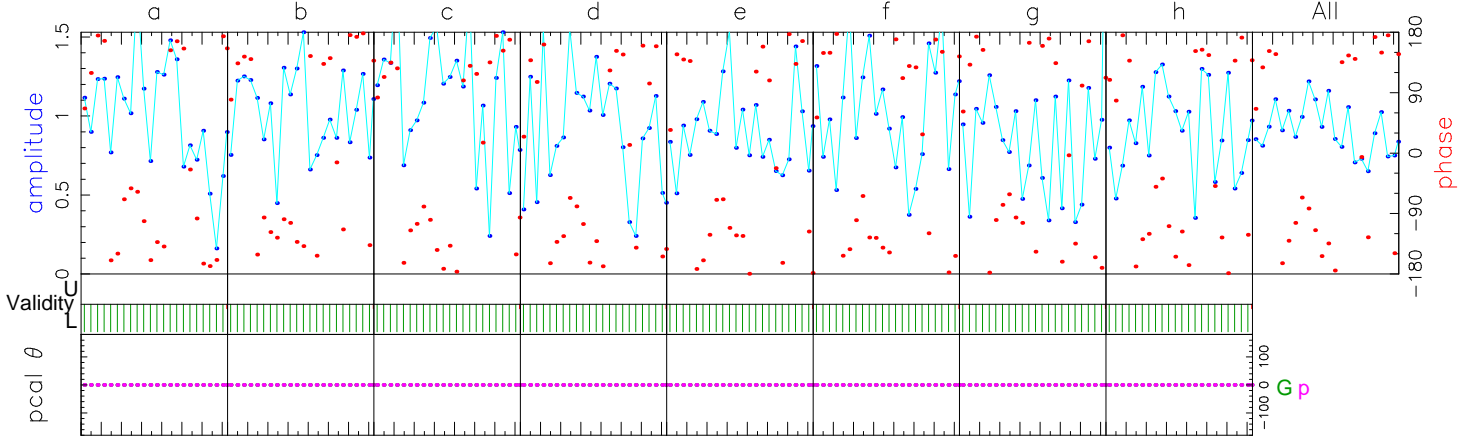


Fringe quality 9
 SNR 20.2
 Int time 419.801
 Amp 0.510
 Phase -167.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.002397
 MBD 0.002029
 Fringe rate (Hz) 0.011891
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



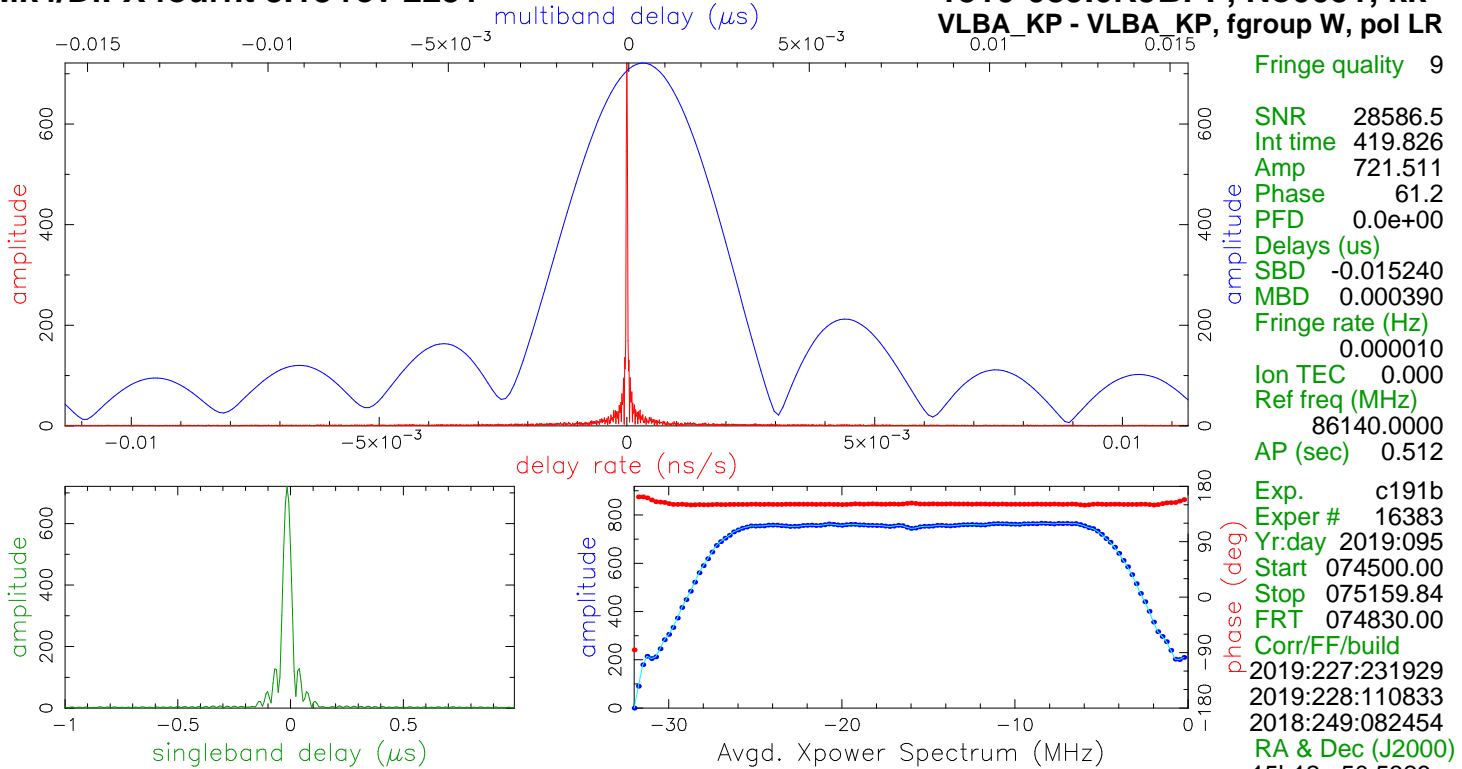
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110831
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-151.6	-162.2	170.4	-172.2	-167.8	-165.0	-169.3	-157.7	Phase	-167.3
	0.5	0.6	0.6	0.5	0.4	0.6	0.4	0.5	Ampl.	0.5
	128.8	129.8	129.5	129.5	129.3	129.2	128.6	129.3	Sbd box	129.3
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.48231372352E+02		Apriori delay (usec)		6.48229343799E+02		Resid mbdelay (usec)		2.02855E-03	+/- 1.1E-04
Sband delay (usec)	6.48231740799E+02		Apriori clock (usec)		-2.1778261E+01		Resid sbdelay (usec)		2.39700E-03	+/- 8.5E-04
Phase delay (usec)	6.48229338405E+02		Apriori clockrate (us/s)		-1.6600000E-07		Resid phdelay (usec)		-5.39392E-06	+/- 1.8E-07
Delay rate (us/s)	-6.03065542047E-01		Apriori rate (us/s)		-6.03065680093E-01		Resid rate (us/s)		1.38045E-07	+/- 7.5E-10
Total phase (deg)	75.7		Apriori accel (us/s/s)		-4.60418052311E-06		Resid phase (deg)		-167.3	+/- 5.7

ph/seg (deg) 63.8 13.6 Theor. Amplitude 0.510 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.7 23.7 Search (2048X32) 0.484 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.2 8.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 15.1 14.0 Inc. seg. avg. 0.890 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 G: az 181.4 el 42.4 pa 1.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 3491.218 570.884 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/Gp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/Gp.W.92.0RJBPf



Fringe quality 9

SNR 28586.5

Int time 419.826

Amp 721.511

Phase 61.2

PFD 0.0e+00

Delays (us)

SBD -0.015240

MBD 0.000390

Fringe rate (Hz) 0.000010

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

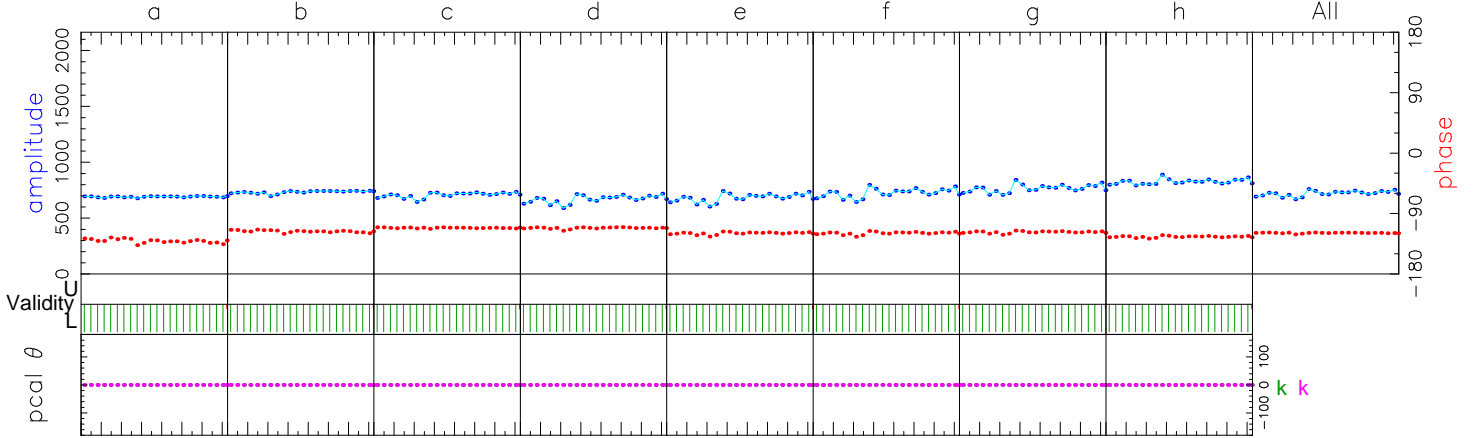
2019:227:231929

2019:228:110833

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-130.7	-116.4	-111.3	-111.4	-119.1	-119.0	-117.5	-124.4	Phase	-118.8
	690.5	733.1	707.2	670.6	683.1	725.0	766.0	826.6	Ampl.	725.3
	127.2	127.1	127.2	126.9	127.1	127.0	127.1	126.9	Sbd box	127.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.08601875000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.89813E-04	+/- 7.6E-08
Sband delay (usec)	-1.52395000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.52395E-02	+/- 6.0E-07
Phase delay (usec)	-3.83238398953E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.83238E-06	+/- 1.3E-10
Delay rate (us/s)	1.19037680090E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.19038E-10	+/- 5.3E-13
Total phase (deg)	61.2		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		61.2	+/- 0.0

RMS Theor. Amplitude 721.511 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 0.6 0.0 Search (2048X32) 709.525 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

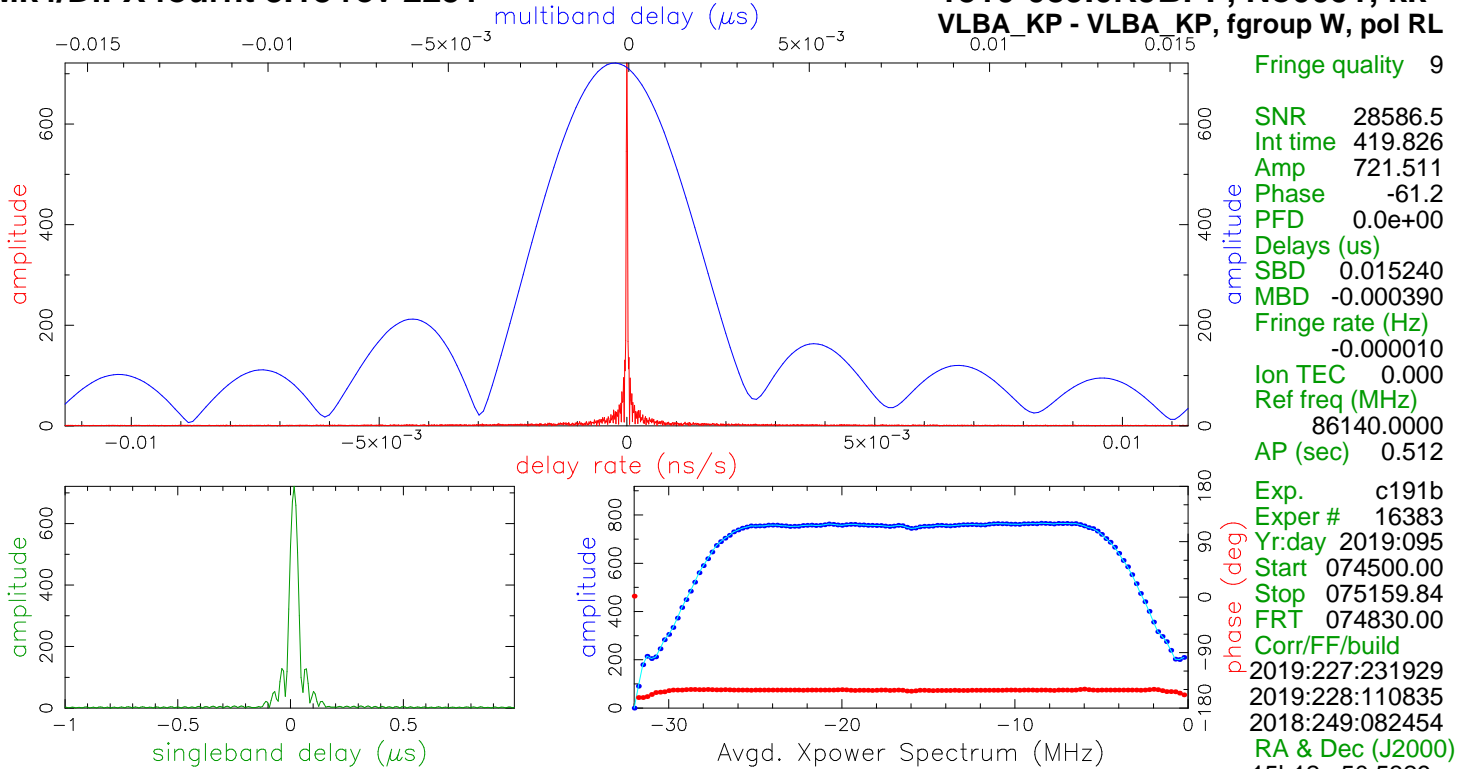
amp/seg (%) 3.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 7.0 0.0 Inc. seg. avg. 721.413 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 6.6 0.0 Inc. frq. avg. 725.282 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 139.2 el 39.5 pa -33.6 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kk.W.103.0RJBPf

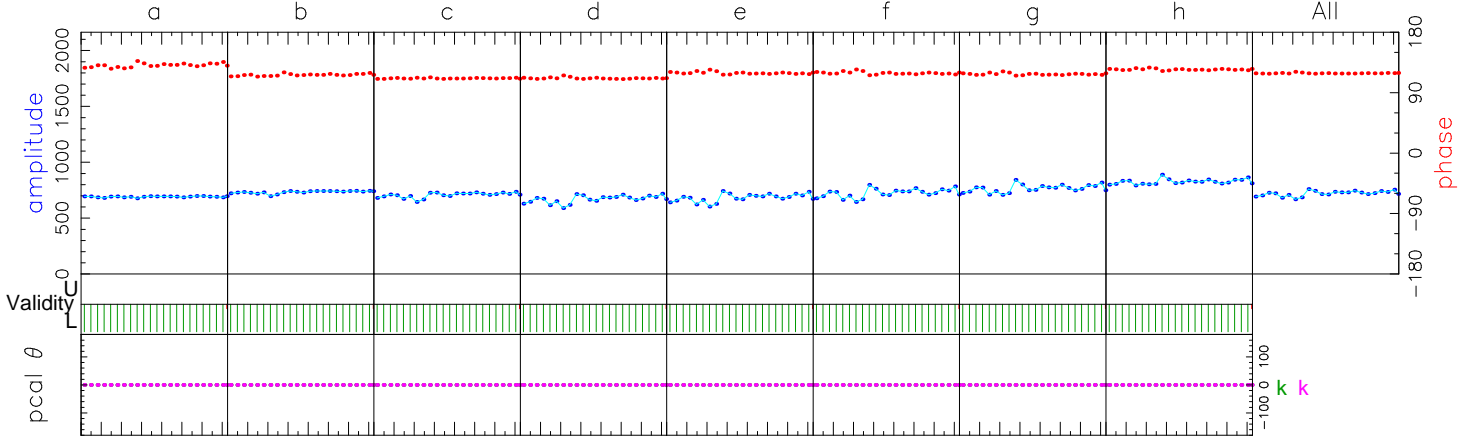


Fringe quality 9

SNR 28586.5
Int time 419.826
Amp 721.511
Phase -61.2
PFD 0.0e+00
Delays (us)
SBD 0.015240
MBD -0.000390
Fringe rate (Hz)
-0.000010
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110835
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

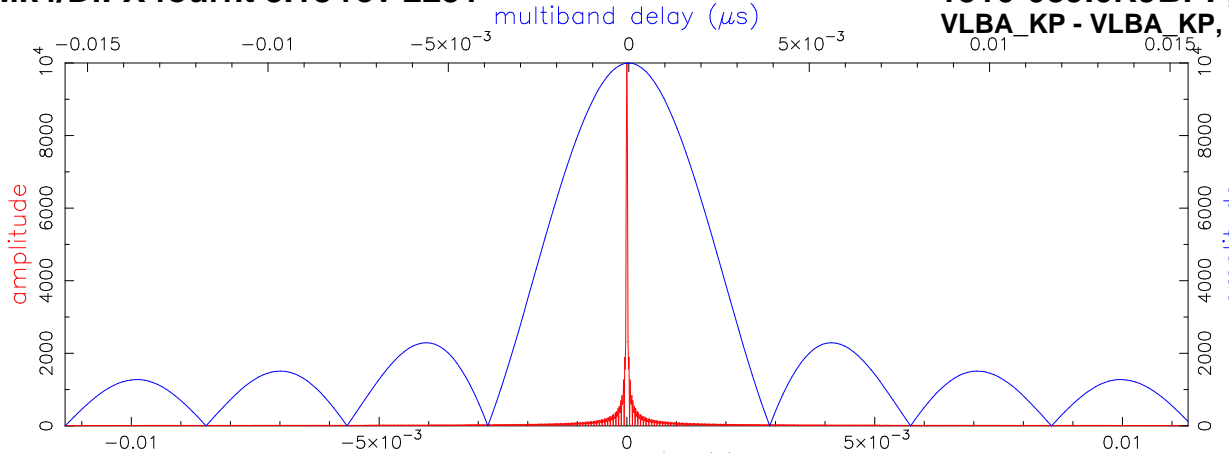
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



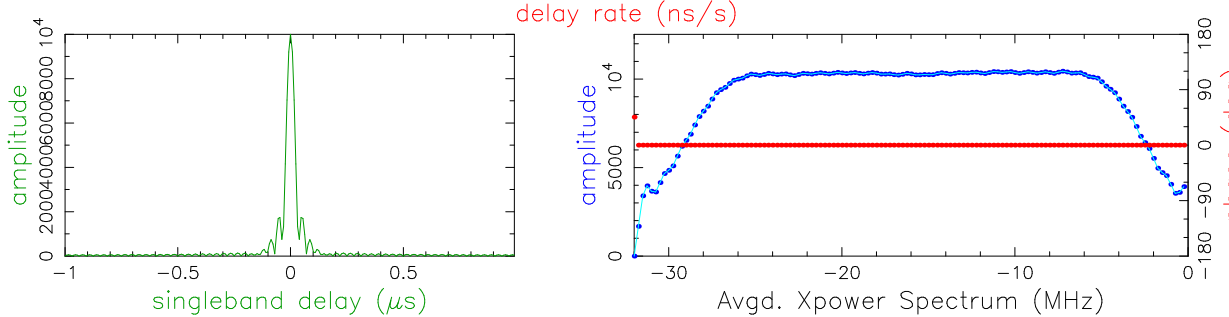
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	130.7	116.4	111.3	111.4	119.1	119.0	117.5	124.4	Phase	118.8
	690.5	733.1	707.2	670.6	683.1	725.0	766.0	826.6	Ampl.	725.3
	130.8	130.9	130.8	131.1	130.9	131.0	130.9	131.1	Sbd box	131.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		3.08601875000E-02		Apriori delay (usec)	0.00000000000E+00		Resid mbdelay (usec)	-3.89813E-04	+/-	7.6E-08
Sband delay (usec)		1.52395000000E-02		Apriori clock (usec)	0.0000000E+00		Resid sbdelay (usec)	1.52395E-02	+/-	6.0E-07
Phase delay (usec)		3.83238398952E-06		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	3.83238E-06	+/-	1.3E-10
Delay rate (us/s)		-1.19037680090E-10		Apriori rate (us/s)	0.00000000000E+00		Resid rate (us/s)	-1.19038E-10	+/-	5.3E-13
Total phase (deg)			-61.2	Apriori accel (us/s/s)	0.00000000000E+00		Resid phase (deg)	-61.2	+/-	0.0

RMS Theor. Amplitude 721.511 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.0 Search (2048X32) 709.525 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 3.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 7.0 0.0 Inc. seg. avg. 721.413 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 6.6 0.0 Inc. frq. avg. 725.282 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 139.2 el 39.5 pa -33.6 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kk.W.119.0RJBPf

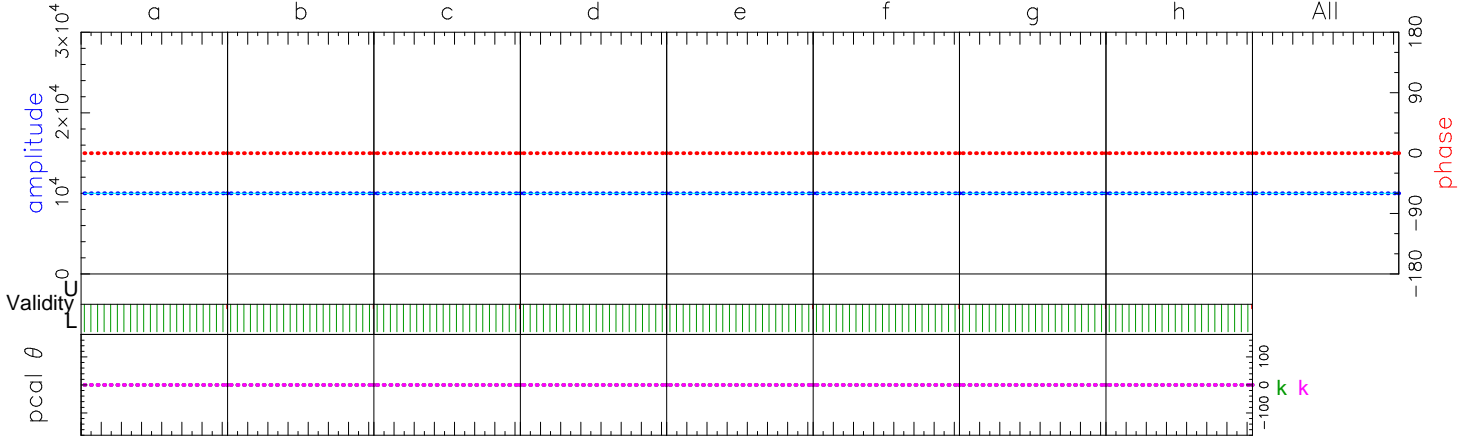


Fringe quality 9
SNR 396202.8
Int time 419.826
Amp 10000.000
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



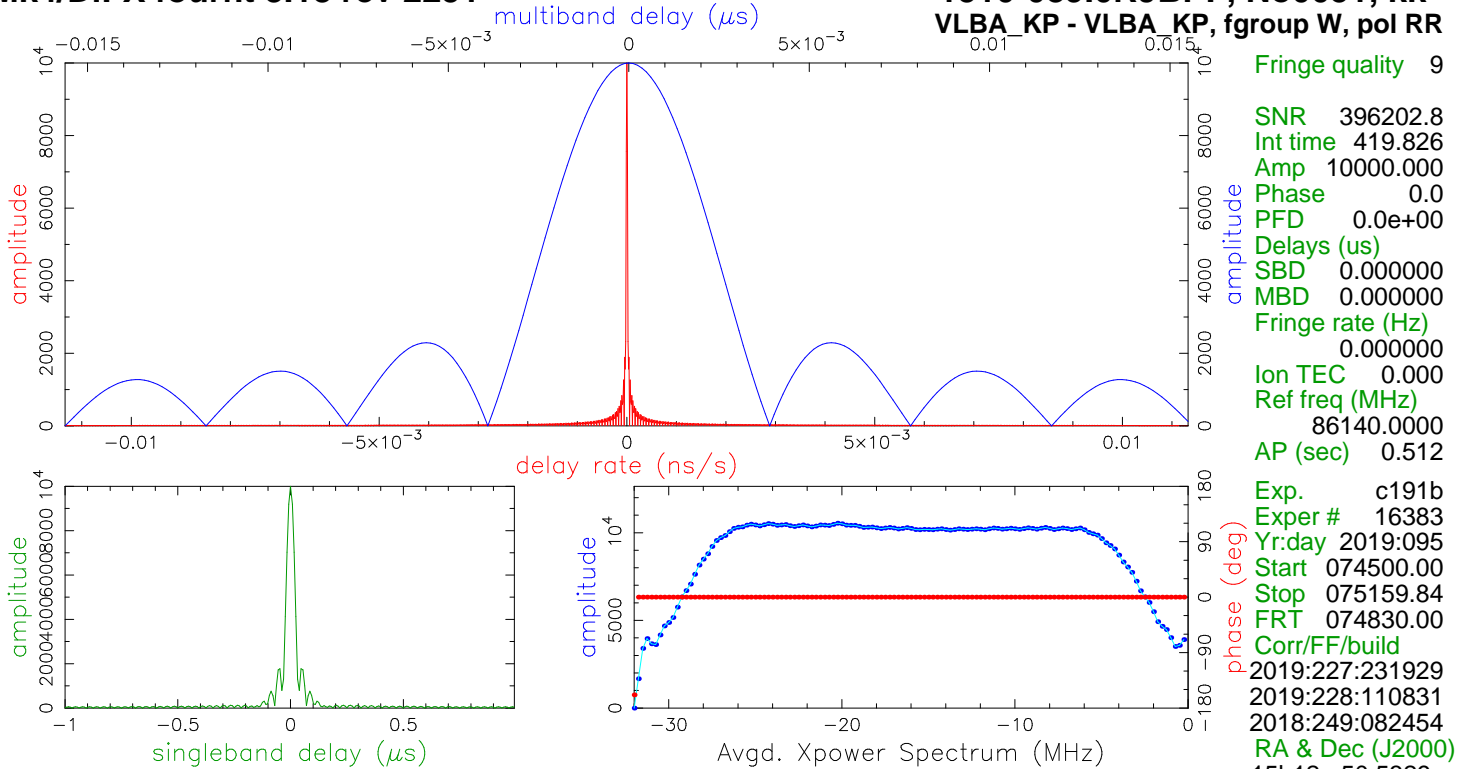
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110829
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	10000.0	10000.0
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	129.0	129.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	129.0	129.0
k	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
k	1000	1000	1000	1000	1000	1000	1000	1000	129.0	129.0
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	10000.0	10000.0
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	129.0	129.0
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 5.5E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 4.3E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 9.3E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 3.8E-14
Total phase (deg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 k: az 139.2 el 39.5 pa -33.6 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kk.W.79.0RJBPf simultaneous interpolator



Fringe quality 9

SNR 396202.8

Int time 419.826

Amp 10000.000

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. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110831

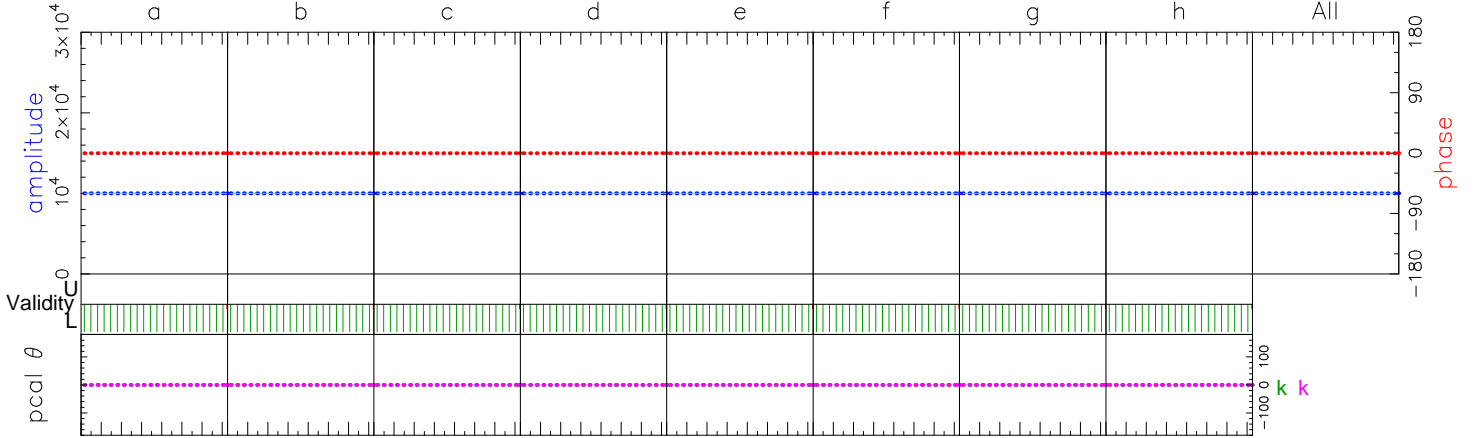
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
k:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
k 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
k W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
k W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

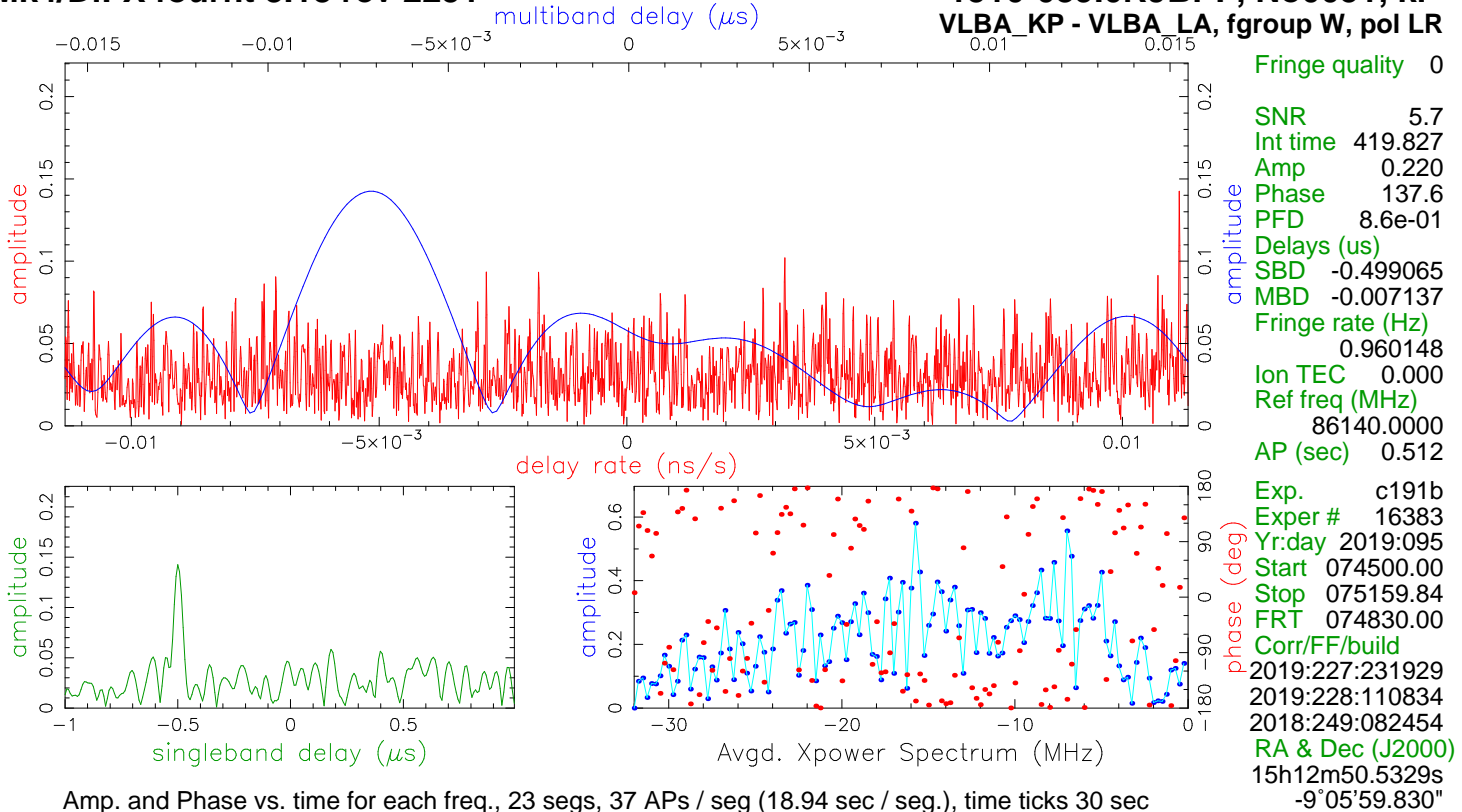
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

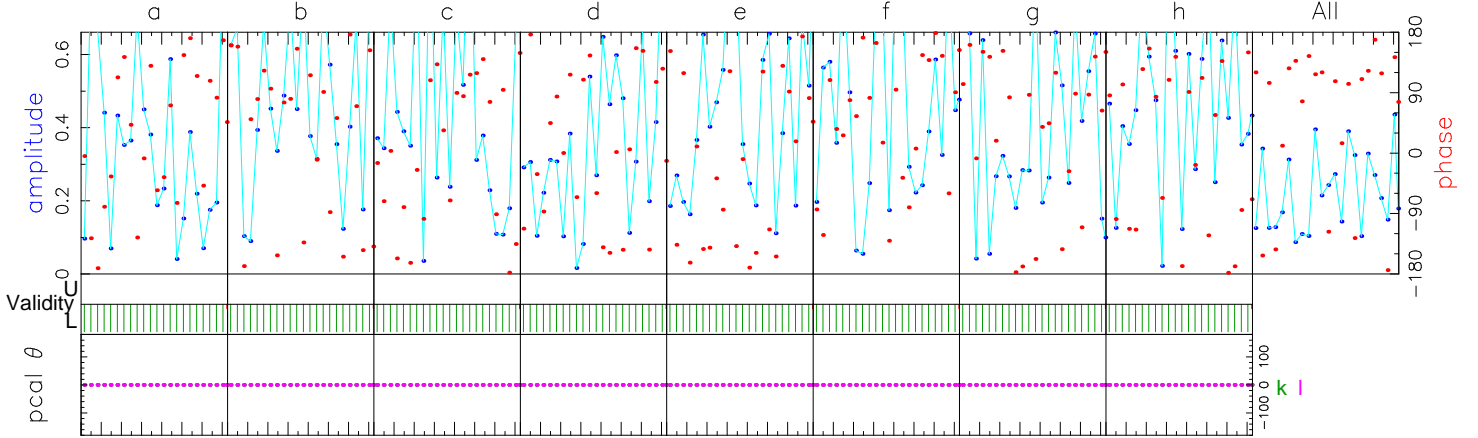
k: az 139.2 el 39.5 pa -33.6 k: az 139.2 el 39.5 pa -33.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kk..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kk.W.91.0RJBPf



Fringe quality 0
 SNR 5.7
 Int time 419.827
 Amp 0.220
 Phase 137.6
 PFD 8.6e-01
 Delays (us)
 SBD -0.499065
 MBD -0.007137
 Fringe rate (Hz) 0.960148
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110834
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

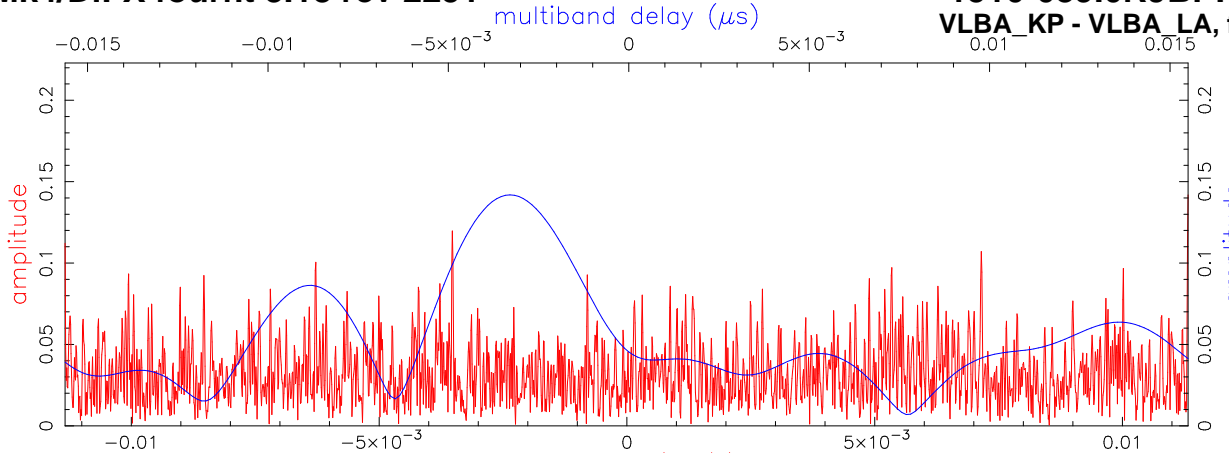


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Chan ids
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Tracks

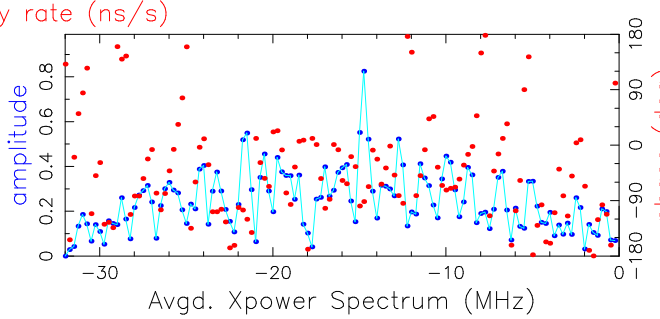
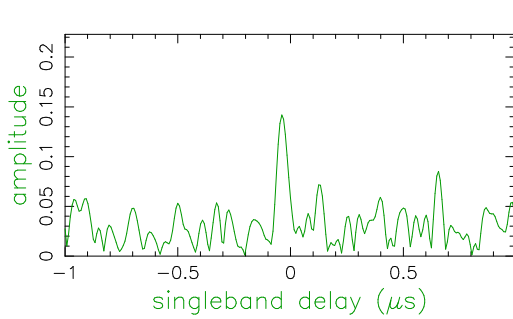
Group delay (usec)(sbd) 1.40355463664E+02 Apriori delay (usec) 1.40862600476E+02 Resid mbdelay (usec) -7.13681E-03 +/- 3.8E-04
 Sband delay (usec) 1.40363534976E+02 Apriori clock (usec) 2.3537788E+00 Resid sbdelay (usec) -4.99065E-01 +/- 3.0E-03
 Phase delay (usec) 1.40862604912E+02 Apriori clockrate (us/s) -7.000001E-09 Resid phdelay (usec) 4.43643E-06 +/- 6.5E-07
 Delay rate (us/s) 1.31899739637E-01 Apriori rate (us/s) 1.31888593269E-01 Resid rate (us/s) 1.11464E-05 +/- 2.7E-09
 Total phase (deg) 283.4 Apriori accel (us/s/s) 2.58026365813E-07 Resid phase (deg) 137.6 +/- 20.3

ph/seg (deg) 58.5 Theor. 48.6 Amplitude 0.220 +/- 0.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 95.3 84.6 Search (2048X32) 0.136 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.2 28.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.1 50.0 Inc. seg. avg. 0.257 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 139.2 el 39.5 pa -33.6 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) -765.202 -488.362 ion window (TEC) 0.00 0.00

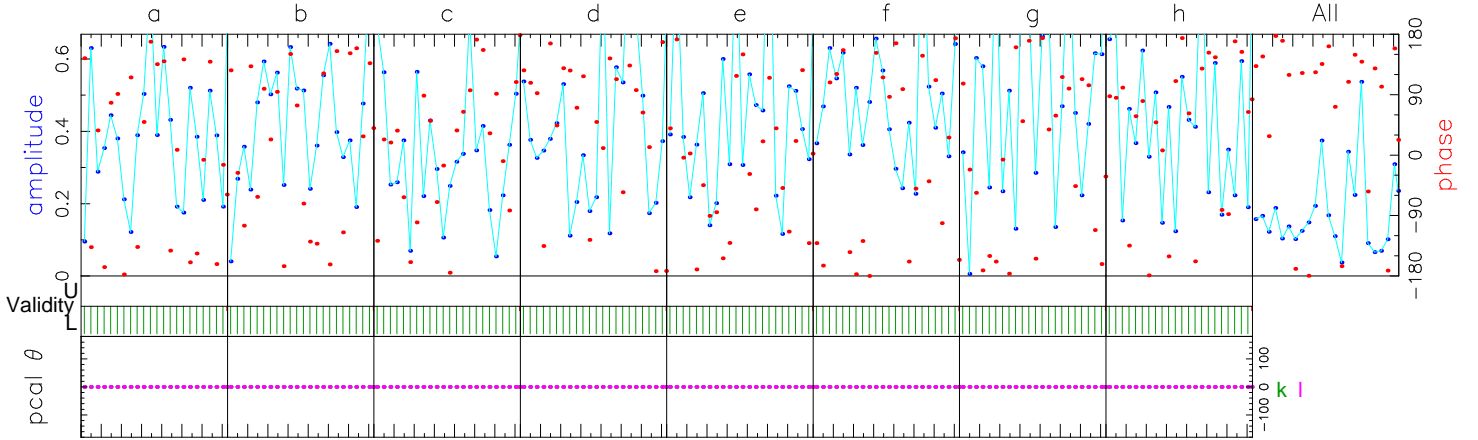
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kl..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kl.W.108.0RJBPf simultaneous interpolator



Fringe quality 0
SNR 5.6
Int time 419.827
Amp 0.223
Phase 320.1
PFD 8.9e-01
Delays (us)
SBD -0.037896
MBD -0.003266
Fringe rate (Hz) 0.975863
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110835
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

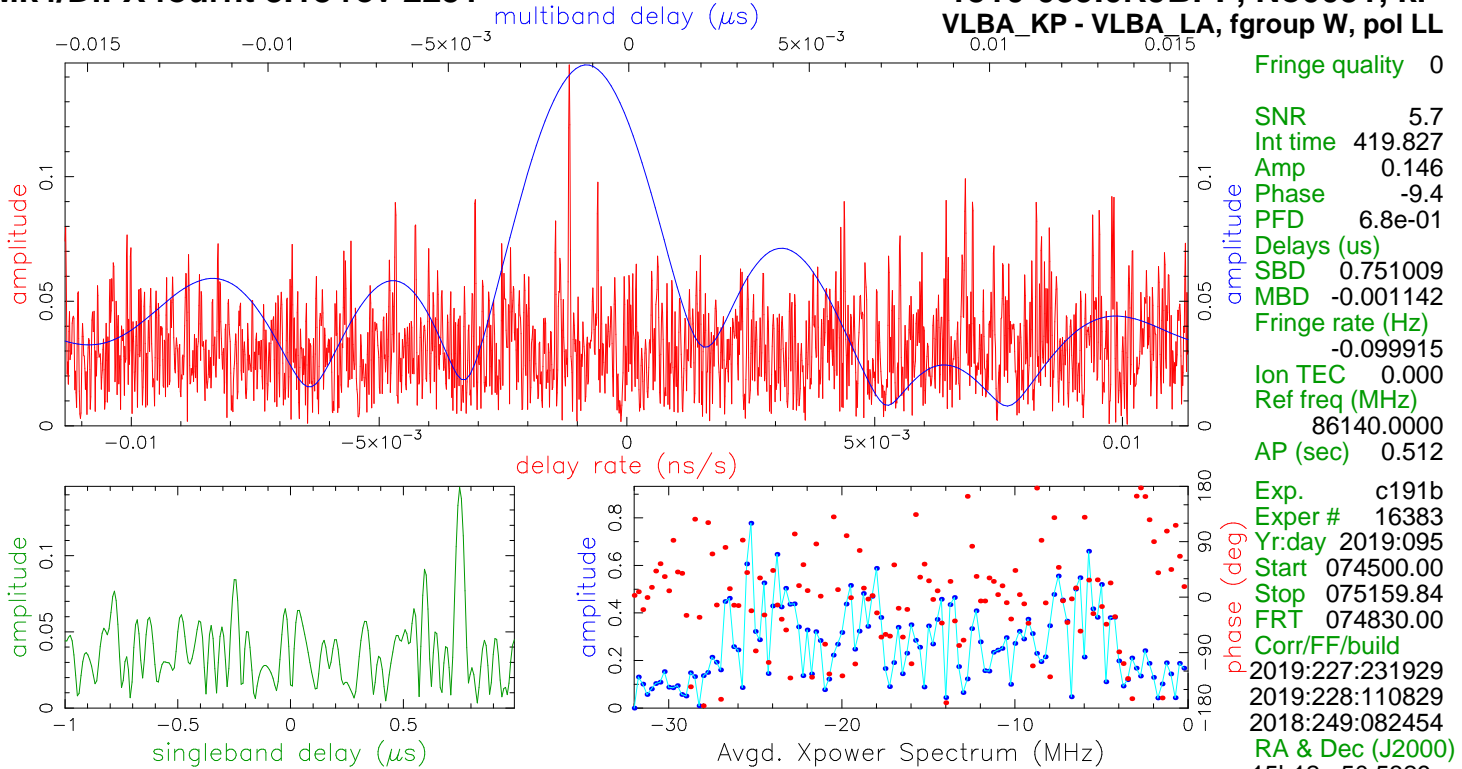


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

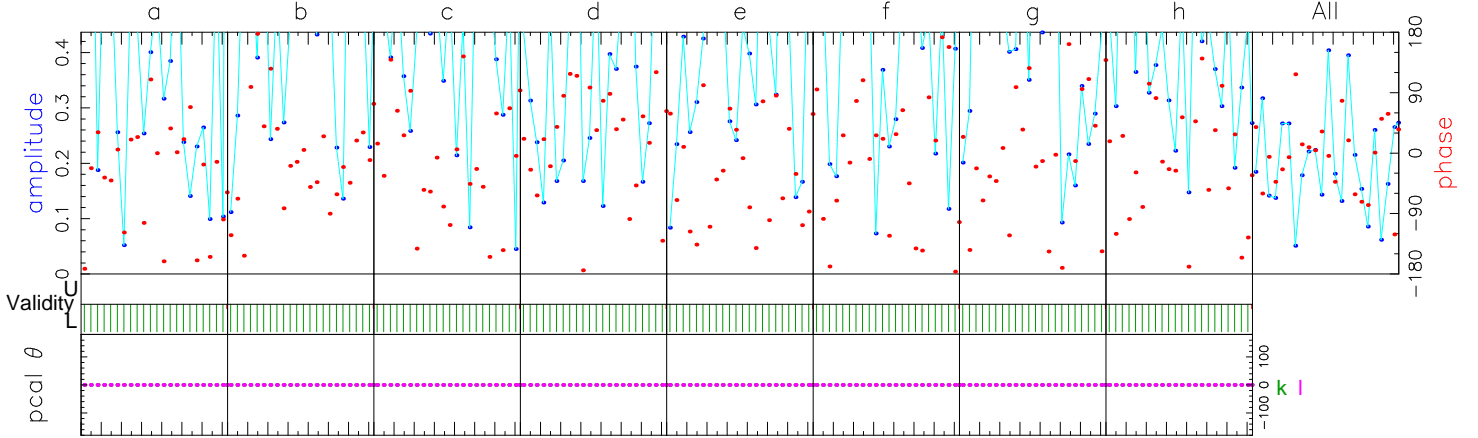


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	Ampl.	140.1	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Phase	0.2	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	124.1	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC phase		
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	ManI PC		
									PC amp		
Group delay (usec)(sbd)	1.40828084068E+02								Chan ids		
Sband delay (usec)	1.40824703976E+02								Tracks		
Phase delay (usec)	1.40862604993E+02								Chan ids		
Delay rate (us/s)	1.31899922067E-01								Tracks		
Total phase (deg)		105.9									
			Apriori delay (usec)	1.40862600476E+02					Resid mbdelay (usec)	-3.26641E-03	+/- 3.9E-04
			Apriori clock (usec)	2.3537788E+00					Resid sbdelay (usec)	-3.78965E-02	+/- 3.1E-03
			Apriori clockrate (us/s)	-7.0000001E-09					Resid phdelay (usec)	4.51718E-06	+/- 6.6E-07
			Apriori rate (us/s)	1.31888593269E-01					Resid rate (us/s)	1.13288E-05	+/- 2.7E-09
			Apriori accel (us/s/s)	2.58026365813E-07					Resid phase (deg)	320.1	+/- 20.4
ph/seg (deg)	53.4	48.8	Search (2048X32)	0.139					PCal mode: MANUAL, MANUAL		
amp/seg (%)	85.1	85.2	Interp.	0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)	5, 5	
ph/frq (deg)	39.2	28.8	Inc. seg. avg.	0.203					SampCntNorm: enabled		
amp/frq (%)	55.8	50.3	Inc. frq. avg.	0.219					mb window (us)	-1.000	1.000
									dr window (ns/s)	-0.016	0.016
									ion window (TEC)	0.00	0.00

k: az 139.2 el 39.5 pa -33.6 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) -765.202 -488.362 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kl..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kl.W.122.0RJBPf



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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-11.6	-9.3	-24.1	51.5	-40.0	30.6	-16.7	-12.3	Phase	-9.4
	0.2	0.3	0.1	0.1	0.2	0.0	0.2	0.1	Ampl.	0.1
	22.5	224.1	35.2	126.5	137.7	180.8	68.0	104.0	Sbd box	225.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		1.41611458466E+02		Apriori delay (usec)	1.40862600476E+02		Resid mbdelay (usec)	-1.14201E-03	+/-	3.8E-04
Sband delay (usec)		1.41613608976E+02		Apriori clock (usec)	2.3537788E+00		Resid sbdelay (usec)	7.51009E-01	+/-	3.0E-03
Phase delay (usec)		1.40862600174E+02		Apriori clockrate (us/s)	-7.0000001E-09		Resid phdelay (usec)	-3.01801E-07	+/-	6.4E-07
Delay rate (us/s)		1.31887433351E-01		Apriori rate (us/s)	1.31888593269E-01		Resid rate (us/s)	-1.15992E-06	+/-	2.7E-09
Total phase (deg)		-223.6		Apriori accel (us/s/s)	2.58026365813E-07		Resid phase (deg)	-9.4	+/-	20.0

ph/seg (deg) 55.0 75.1 33.0 40.9
 amp/seg (%) 75.1 83.5 28.2 49.2
 ph/frq (deg) 33.0 28.2 28.2 49.2
 amp/frq (%) 40.9 49.2 28.2 49.2

RMS Theor. Amplitude 0.146 +/- 0.025
 Search (2048X32) 0.143
 Interp. 0.000
 Inc. seg. avg. 0.151
 Inc. frq. avg. 0.142

Group delay (usec)(sbd) 1.41611458466E+02
 Sband delay (usec) 1.41613608976E+02
 Phase delay (usec) 1.40862600174E+02
 Delay rate (us/s) 1.31887433351E-01
 Total phase (deg) -223.6

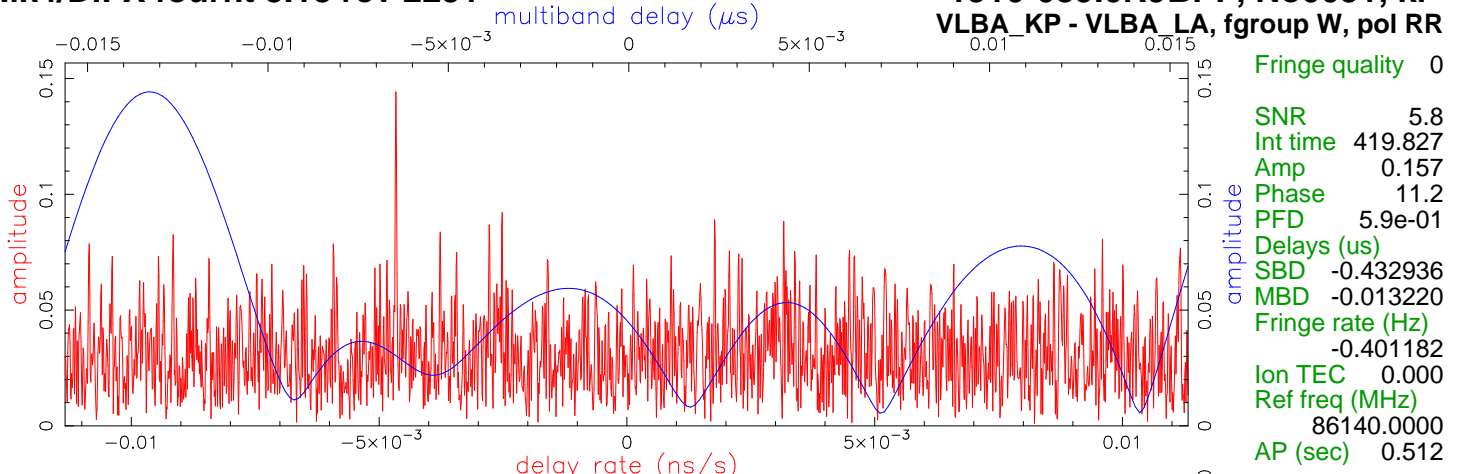
Apriori delay (usec) 1.40862600476E+02
 Apriori clock (usec) 2.3537788E+00
 Apriori clockrate (us/s) -7.0000001E-09
 Apriori rate (us/s) 1.31888593269E-01
 Apriori accel (us/s/s) 2.58026365813E-07

Resid mbdelay (usec) -1.14201E-03
 Resid sbdelay (usec) 7.51009E-01
 Resid phdelay (usec) -3.01801E-07
 Resid rate (us/s) -1.15992E-06
 Resid phase (deg) -9.4

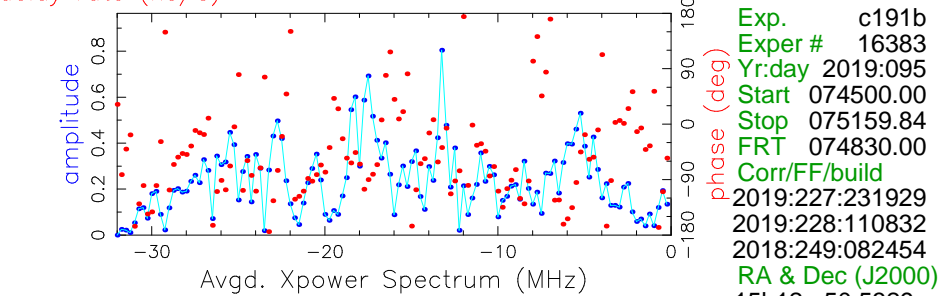
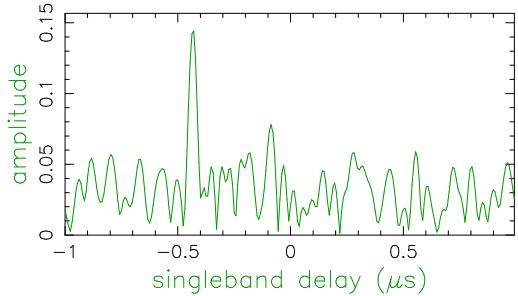
PCal mode: MANUAL, MANUAL
 PCal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2
 Sample rate(MSamp/s): 64
 Data rate(Mb/s): 1024
 nlags: 128 t_cohere infinite

PC period (AP's) 5, 5
 sb window (us) -1.000 1.000
 SampCntNorm: enabled
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

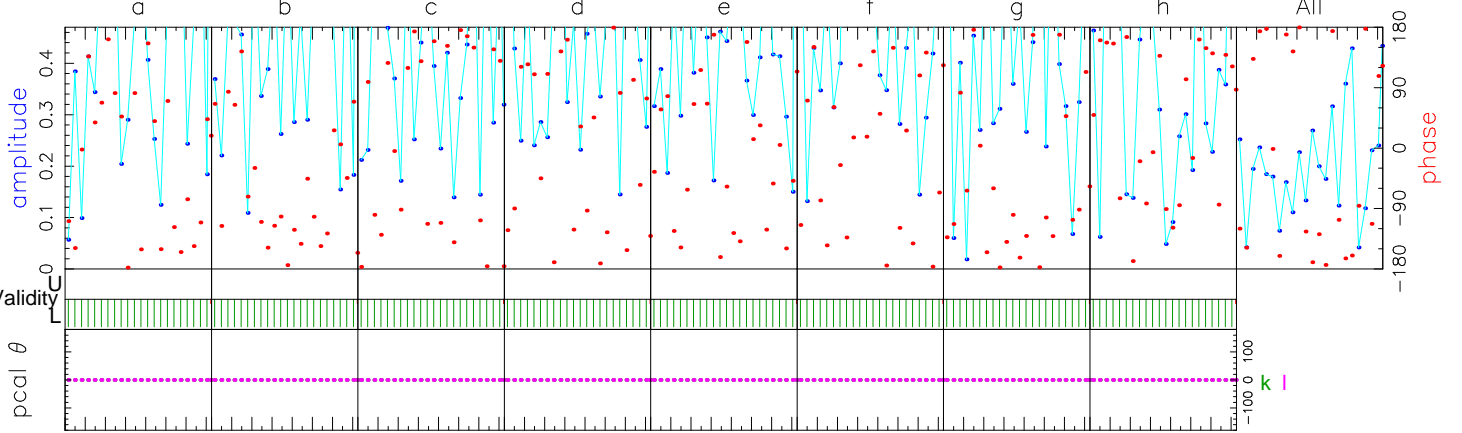
k: az 139.2 el 39.5 pa -33.6
 l: az 147.0 el 39.1 pa -25.9
 u,v (fr/asec) -765.202 -488.362



Fringe quality 0
 SNR 5.8
 Int time 419.827
 Amp 0.157
 Phase 11.2
 PFD 5.9e-01
 Delays (us)
 SBD -0.432936
 MBD -0.013220
 Fringe rate (Hz)
 -0.401182
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110832
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



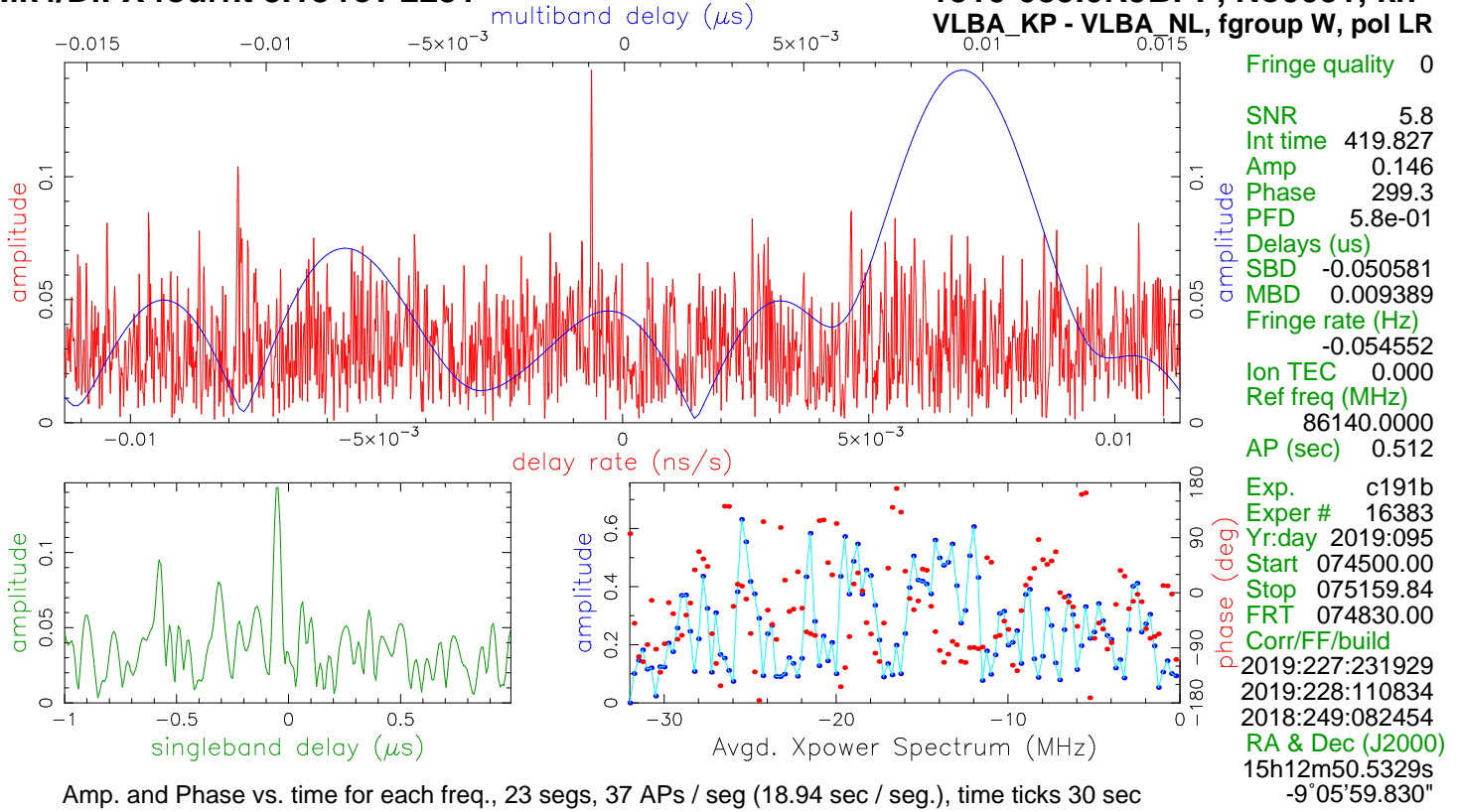
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)		1.40443130176E+02		Apriori delay (usec)	1.40862600476E+02		Resid mbdelay (usec)	-1.32203E-02		+/- 3.8E-04
Sband delay (usec)		1.40429664476E+02		Apriori clock (usec)	2.3537788E+00		Resid sbdelay (usec)	-4.32936E-01		+/- 3.0E-03
Phase delay (usec)		1.40862595034E+02		Apriori clockrate (us/s)	-7.0000001E-09		Resid phdelay (usec)	-5.44232E-06		+/- 6.4E-07
Delay rate (us/s)		1.31883935941E-01		Apriori rate (us/s)	1.31888593269E-01		Resid rate (us/s)	-4.65733E-06		+/- 2.6E-09
Total phase (deg)		157.0		Apriori accel (us/s/s)	2.58026365813E-07		Resid phase (deg)	11.2		+/- 19.8

ph/seg (deg) 53.6 74.7 38.3 48.5
 amp/seg (%) 53.6 74.7 38.3 48.5
 ph/frq (deg) 53.6 74.7 38.3 48.5
 amp/frq (%) 53.6 74.7 38.3 48.5

k: az 139.2 el 39.5 pa -33.6 l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) -765.202 -488.362
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kl..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kl.W.93.0RJBPf



Fringe quality 0

SNR 5.8

Int time 419.827

Amp 0.146

Phase 299.3

PFD 5.8e-01

Delays (us)

SBD -0.050581

MBD 0.009389

Fringe rate (Hz)

-0.054552

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110834

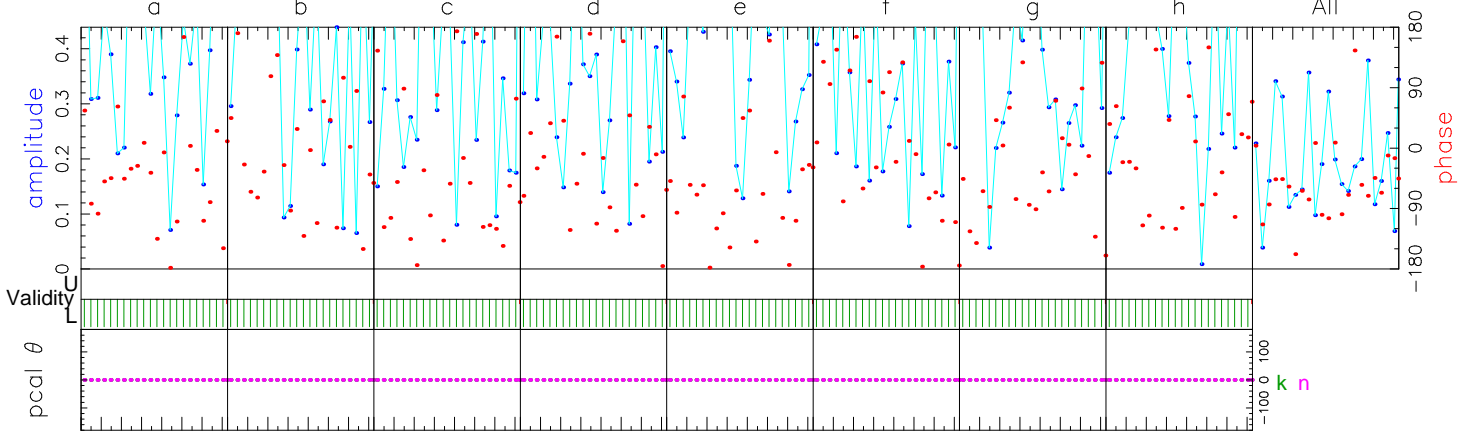
2018:249:082454

RA & Dec (J2000)

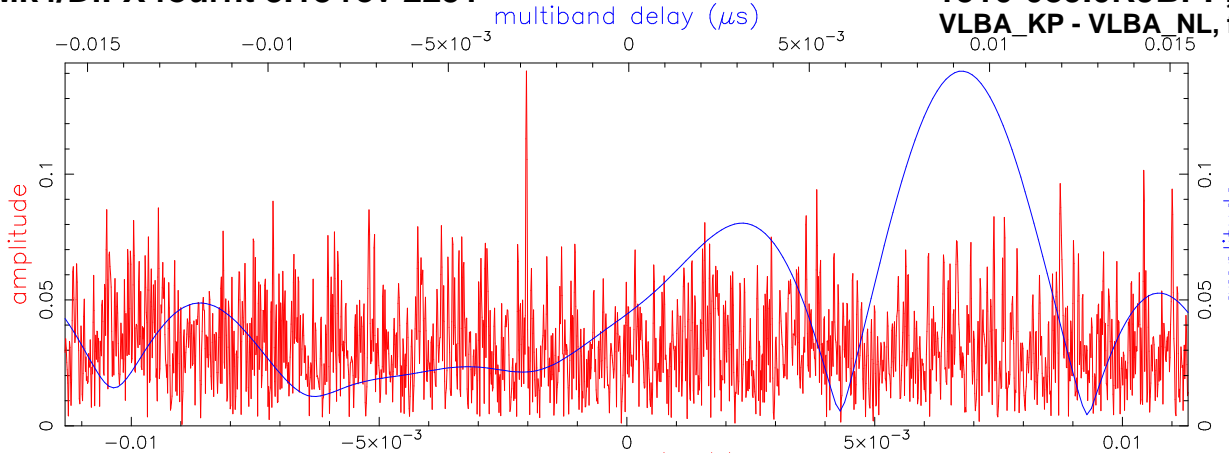
15h12m50.5329s

-9°05'59.830"

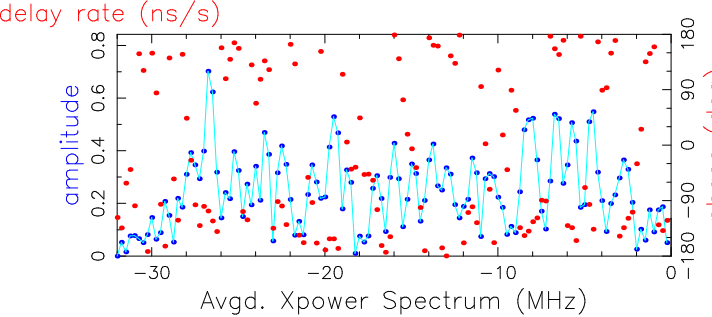
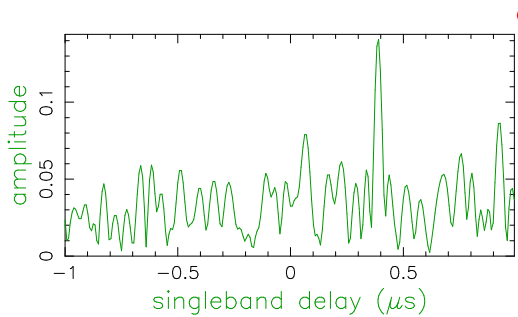
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-32.7	-57.8	-93.7	-51.1	-89.8	-23.8	-69.0	-30.7	Phase	-60.7
0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
116.1	109.6	111.2	222.6	122.2	16.6	129.5	167.2	Sbd box	122.5
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	4.80456966216E+02	Apriori delay (usec)	4.80510077577E+02	Resid mbdelay (usec)	9.38864E-03	+/-	3.7E-04		
Sband delay (usec)	4.80459497077E+02	Apriori clock (usec)	-2.1952171E+01	Resid sbdelay (usec)	-5.05805E-02	+/-	3.0E-03		
Phase delay (usec)	4.80510075620E+02	Apriori clockrate (us/s)	-5.0999997E-07	Resid phdelay (usec)	-1.95660E-06	+/-	6.4E-07		
Delay rate (us/s)	4.52626889908E-01	Apriori rate (us/s)	4.52627523207E-01	Resid rate (us/s)	-6.33299E-07	+/-	2.6E-09		
Total phase (deg)	329.0	Apriori accel (us/s/s)	-2.13587302947E-07	Resid phase (deg)	299.3	+/-	19.8		
RMS	Theor.	Amplitude	0.146 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
ph/seg (deg)	52.3	47.4	Search (2048X32)	0.139	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000
amp/seg (%)	72.6	82.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	
ph/frq (deg)	29.3	28.0	Inc. seg. avg.	0.146	Sample rate(MSamp/s):	64	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.0	48.8	Inc. frq. avg.	0.142	Data rate(Mb/s):	1024	ion window (TEC)	0.00	0.00
k: az 139.2 el 39.5 pa -33.6	n: az 166.5 el 38.1 pa -9.4	u,v (fr/asec)	-2627.136 -1197.546	simultaneous interpolator					
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kn.W.110.0RJBPf									

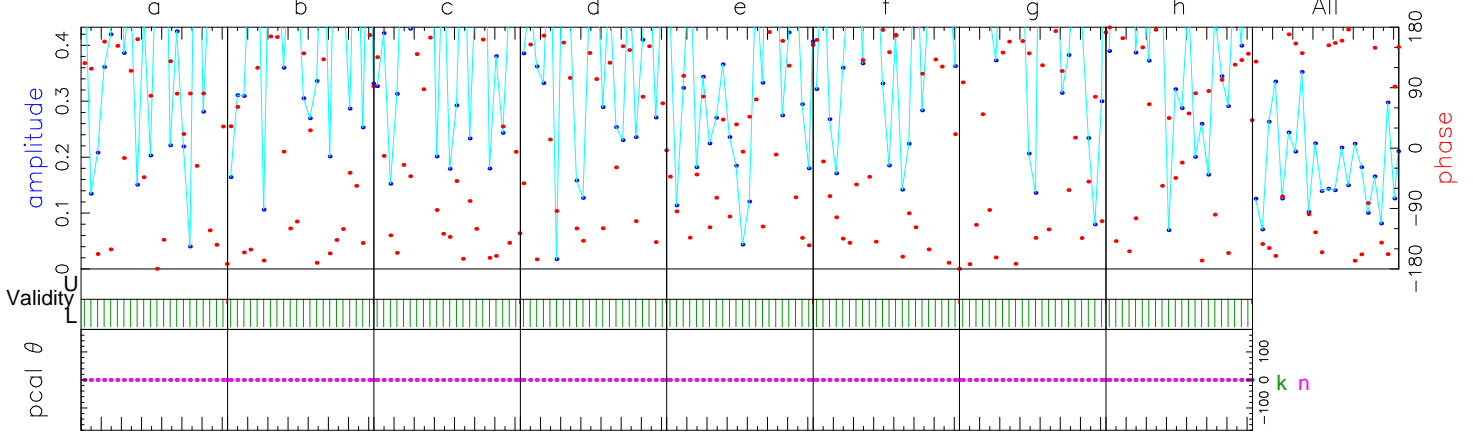


Fringe quality 0
 SNR 5.6
 Int time 419.827
 Amp 0.144
 Phase -175.4
 PFD 8.8e-01
 Delays (us)
 SBD 0.388092
 MBD 0.009249
 Fringe rate (Hz)
 -0.174255
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



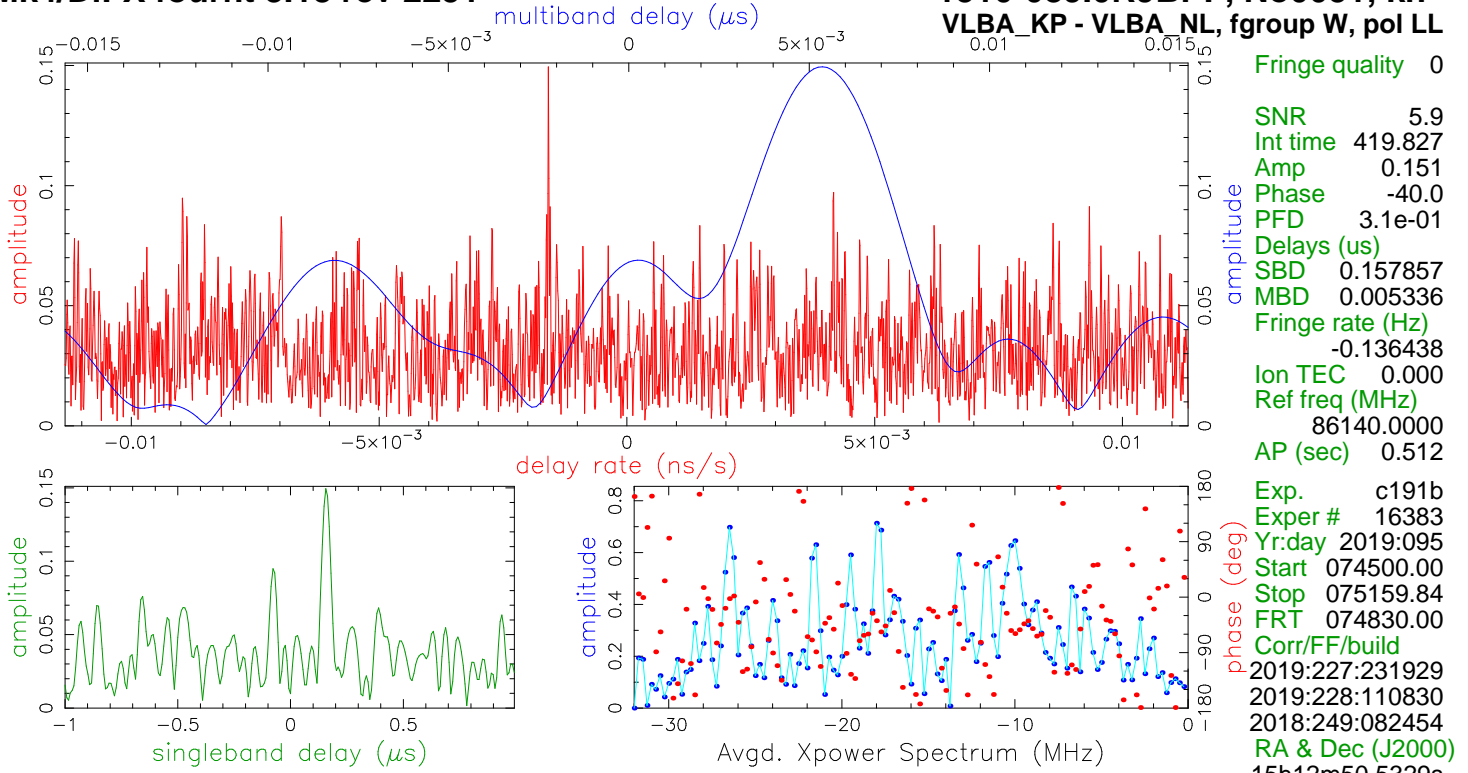
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110836
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

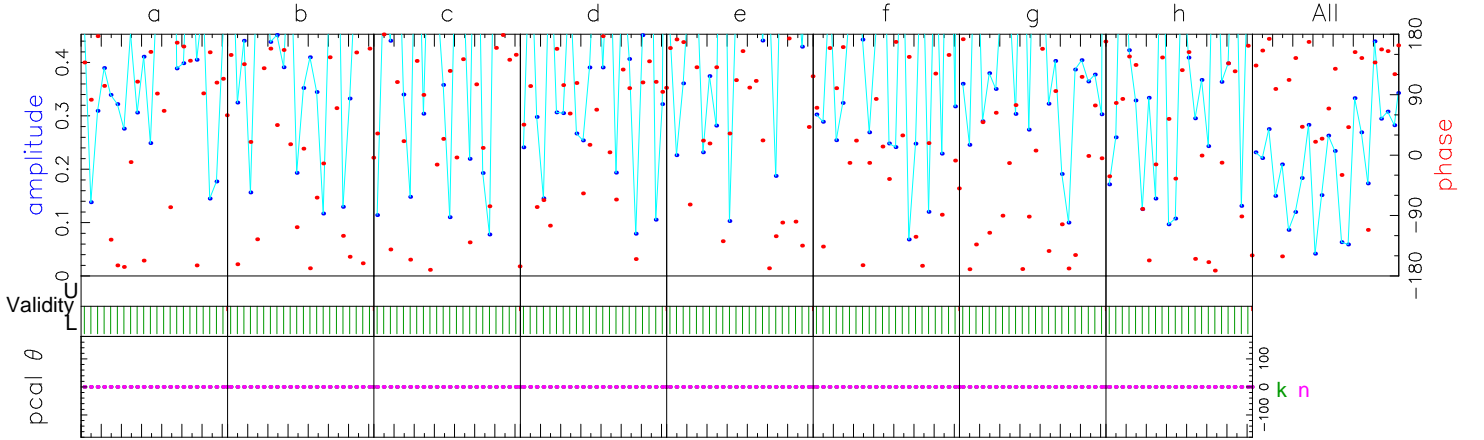


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	166.5	-164.0	-152.6	138.3	-120.3	-142.8	179.5	172.3	Phase	-175.4
	0.1	0.2	0.2	0.2	0.0	0.2	0.2	0.2	Ampl.	0.1
	130.5	180.3	154.6	185.2	139.5	177.1	166.2	31.1	Sbd box	178.7
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.80894327066E+02		Apriori delay (usec)		4.80510077577E+02		Resid mbdelay (usec)		9.24949E-03 +/- 3.9E-04	
Sband delay (usec)	4.80898169077E+02		Apriori clock (usec)		-2.1952171E+01		Resid sbdelay (usec)		3.88092E-01 +/- 3.1E-03	
Phase delay (usec)	4.80510071921E+02		Apriori clockrate (us/s)		-5.0999997E-07		Resid phdelay (usec)		-5.65588E-06 +/- 6.6E-07	
Delay rate (us/s)	4.52625500276E-01		Apriori rate (us/s)		4.52627523207E-01		Resid rate (us/s)		-2.02293E-06 +/- 2.7E-09	
Total phase (deg)			Apriori accel (us/s/s)		-2.13587302947E-07		Resid phase (deg)		-175.4 +/- 20.3	
RMS	47.9	48.8	Amplitude		0.144 +/- 0.026		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	61.6	85.1	Search (2048X32)		0.138		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
amp/seg (%)	35.1	28.8	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
ph/frq (deg)	38.1	50.2	Inc. seg. avg.		0.136		Sample rate(MSamp/s): 64		mb window (us) -0.016 0.016	
amp/frq (%)			Inc. frq. avg.		0.141		Data rate(Mb/s): 1024		dr window (ns/s) -0.011 0.011	
							nlags: 128 t_cohere infinite		ion window (TEC) 0.00 0.00	

k: az 139.2 el 39.5 pa -33.6 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -2627.136 -1197.546 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kn.W.124.0RJBPf



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



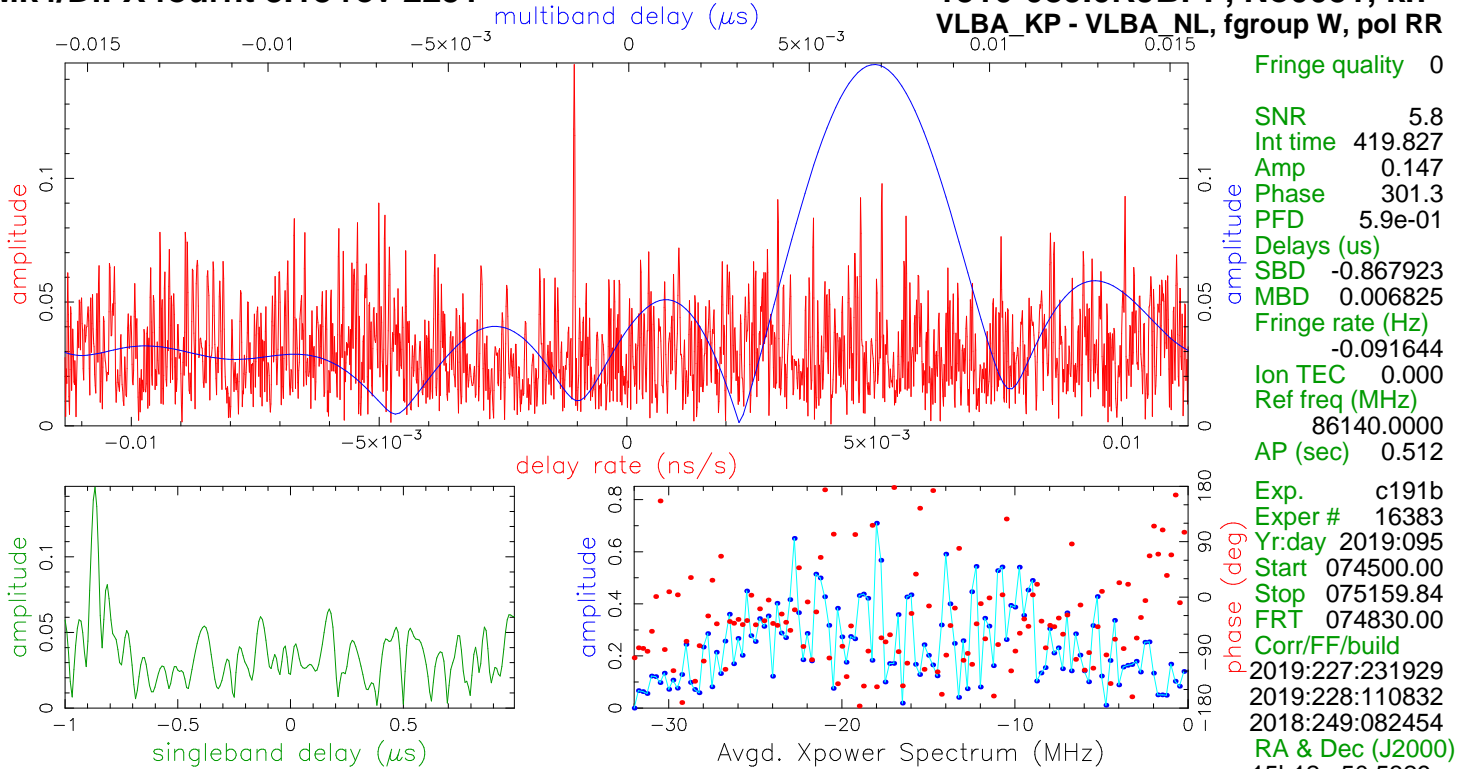
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
146.5	148.4	140.1	99.1	164.6	90.6	-167.8	143.8	Phase	140.0
0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	Ampl.	0.1
119.7	104.3	179.6	146.4	82.0	119.2	66.2	56.2	Sbd box	149.2
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kn 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	4.80671663826E+02	Apriori delay (usec)	4.80510077577E+02	Resid mbdelay (usec)	5.33625E-03	+/-	3.7E-04
Sband delay (usec)	4.80667934577E+02	Apriori clock (usec)	-2.1952171E+01	Resid sbdelay (usec)	1.57857E-01	+/-	2.9E-03
Phase delay (usec)	4.80510082091E+02	Apriori clockrate (us/s)	-5.0999997E-07	Resid phdelay (usec)	4.51413E-06	+/-	6.2E-07
Delay rate (us/s)	4.52625939296E-01	Apriori rate (us/s)	4.52627523207E-01	Resid rate (us/s)	-1.58391E-06	+/-	2.6E-09
Total phase (deg)	-10.3	Apriori accel (us/s/s)	-2.13587302947E-07	Resid phase (deg)	-40.0	+/-	19.3

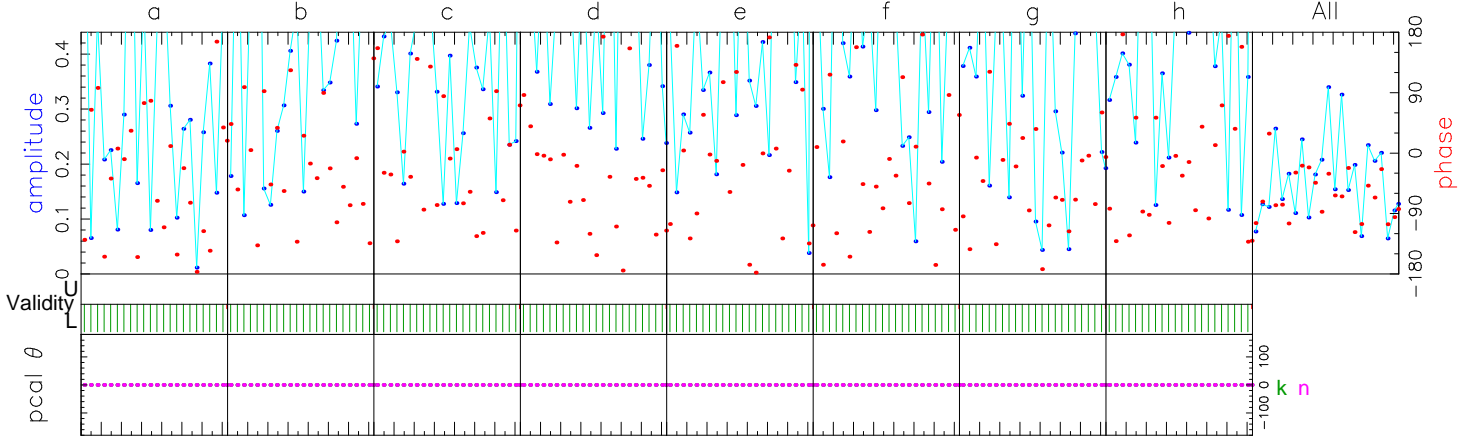
ph/seg (deg)	68.3	Theor.	46.3	Amplitude	0.151 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	78.2	Search (2048X32)	0.146	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	35.5	Interp.	0.000	Inc. seg. avg.	0.162	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	40.5	Inc. frq. avg.	0.148	Inc. frq. avg.	0.148	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

k: az 139.2 el 39.5 pa -33.6 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -2627.136 -1197.546 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kn.W.83.0RJBPf



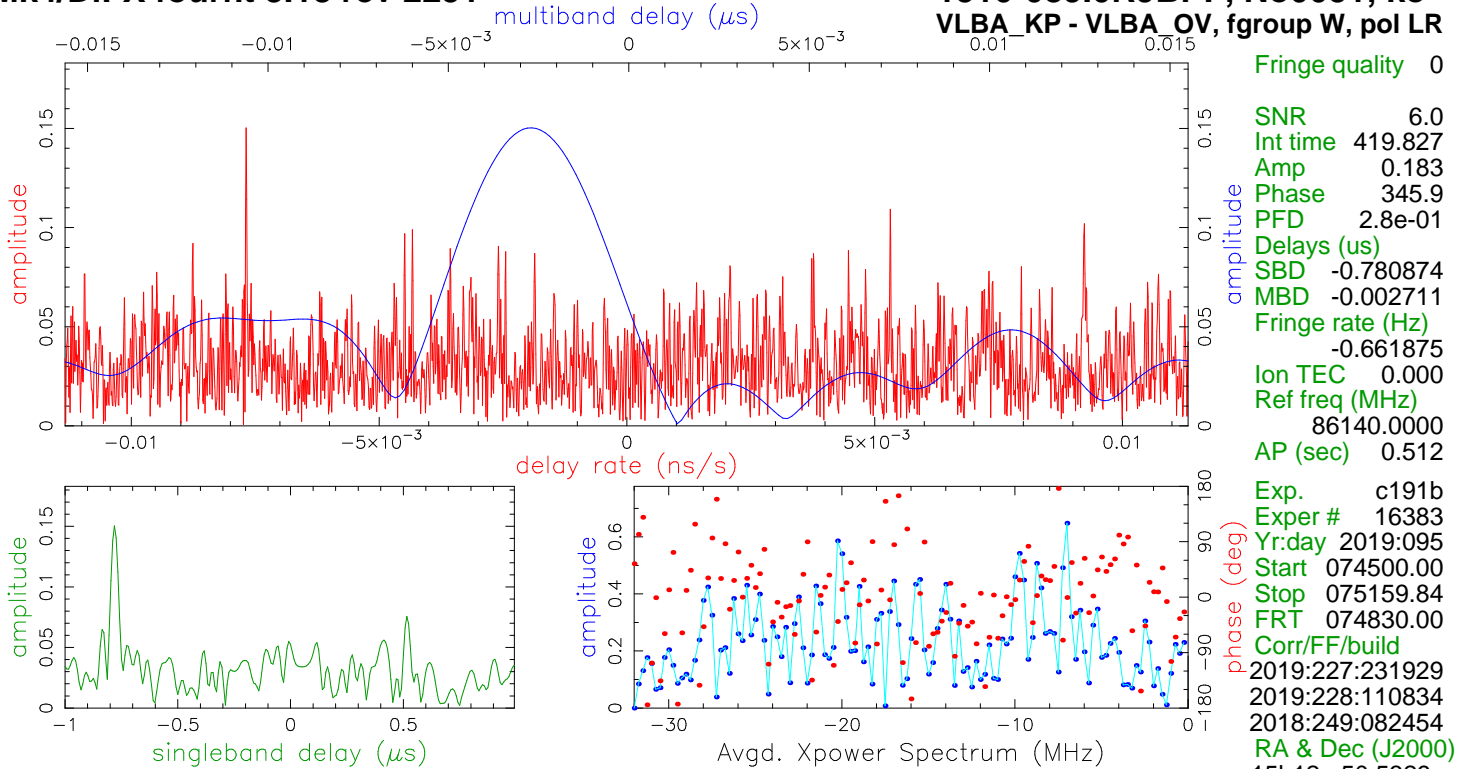
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



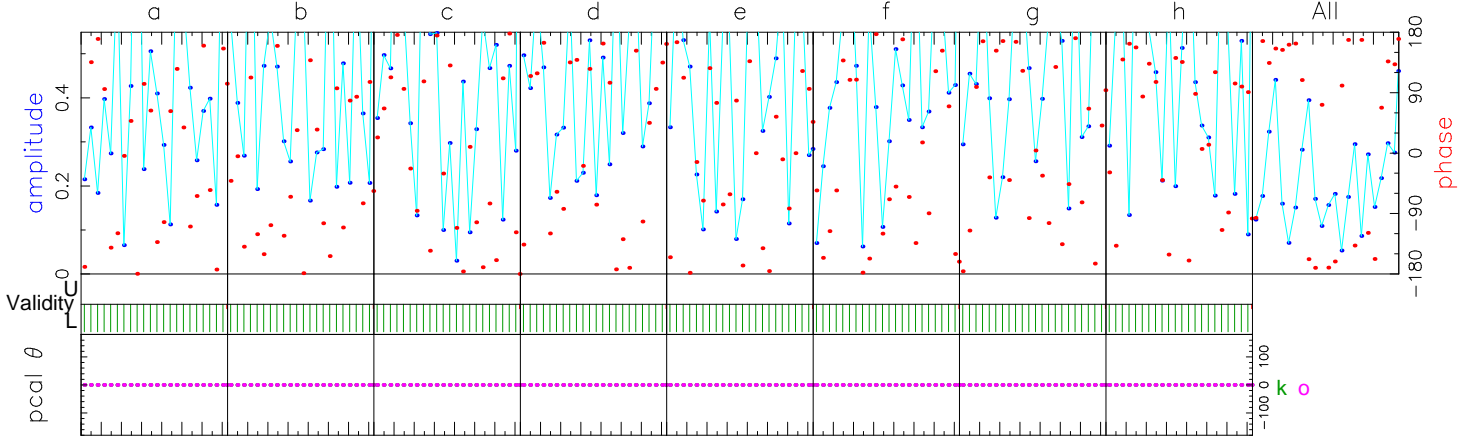
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-34.0	-62.2	-59.8	-61.0	-42.6	-99.3	-49.1	-55.5	Phase	-58.7
0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.2	Ampl.	0.1
233.9	16.7	132.9	135.9	24.8	146.7	18.3	247.9	Sbd box	17.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kn	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	
								Chan ids	
								Tracks	

Group delay (usec)(sbd)	4.79641902591E+02	Apriori delay (usec)	4.80510077577E+02	Resid mbdelay (usec)	6.82501E-03	+/-	3.8E-04
Sband delay (usec)	4.79642154077E+02	Apriori clock (usec)	-2.1952171E+01	Resid sbdelay (usec)	-8.67923E-01	+/-	3.0E-03
Phase delay (usec)	4.80510075685E+02	Apriori clockrate (us/s)	-5.0999997E-07	Resid phdelay (usec)	-1.89213E-06	+/-	6.4E-07
Delay rate (us/s)	4.52626459307E-01	Apriori rate (us/s)	4.52627523207E-01	Resid rate (us/s)	-1.06390E-06	+/-	2.6E-09
Total phase (deg)	331.0	Apriori accel (us/s/s)	-2.13587302947E-07	Resid phase (deg)	301.3	+/-	19.8

ph/seg (deg)	37.1	Theor.	47.5	Amplitude	0.147 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	54.9	Search (2048X32)	0.143	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	20.9	Inc. seg. avg.	0.130	Inc. frq. avg.	0.136	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	39.6	Inc. frq. avg.	0.136	u,v (fr/asec)	-2627.136 -1197.546	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00



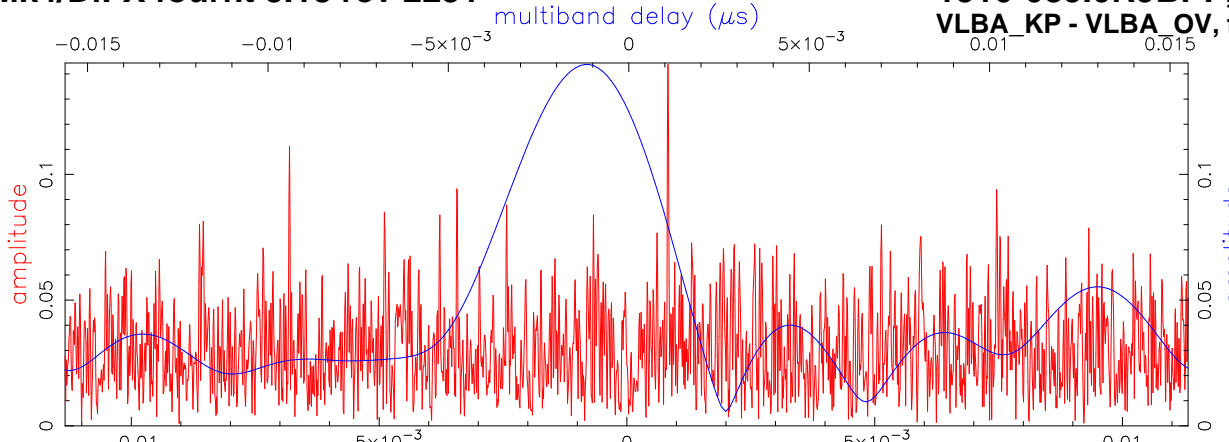
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



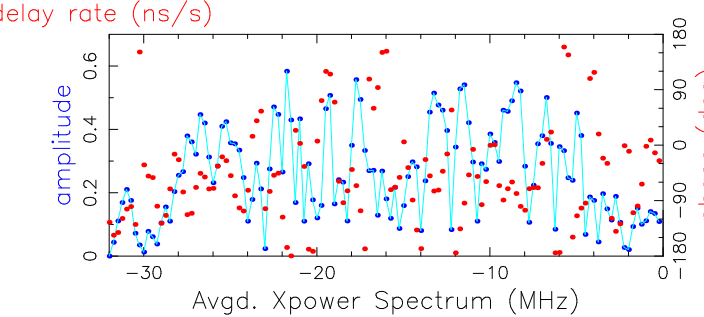
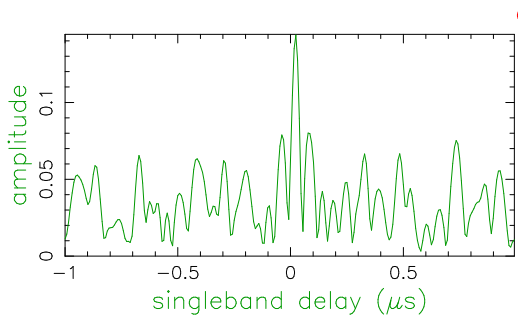
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
162.1	-164.2	166.2	154.7	120.8	-174.5	-179.1	156.8	Phase	165.9
0.2	0.1	0.2	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
30.8	198.9	95.4	64.9	47.3	168.1	43.4	6.3	Sbd box	29.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ko	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000		
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
								Tracks	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
								Tracks	

Group delay (usec)(sbd)	2.25316649032E+03	Apriori delay (usec)	2.25395045087E+03	Resid mbdelay (usec)	-2.71055E-03	+/-	3.6E-04
Sband delay (usec)	2.25316957637E+03	Apriori clock (usec)	-1.3804543E+01	Resid sbdelay (usec)	-7.80874E-01	+/-	2.9E-03
Phase delay (usec)	2.25395045622E+03	Apriori clockrate (us/s)	-3.6400001E-07	Resid phdelay (usec)	5.34892E-06	+/-	6.2E-07
Delay rate (us/s)	-7.96094427730E-02	Apriori rate (us/s)	-7.96017590573E-02	Resid rate (us/s)	-7.68372E-06	+/-	2.6E-09
Total phase (deg)	287.4	Apriori accel (us/s/s)	-1.06980580812E-05	Resid phase (deg)	345.9	+/-	19.2

ph/seg (deg)	48.7	Theor.	46.1	Amplitude	0.183 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	78.6	Search (2048X32)	0.148	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	25.0	Inc. seg. avg.	0.193	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016 0.016
amp/frq (%)	37.5	Inc. frq. avg.	0.172	Sample rate(MSamp/s):	64	nlags:	128	dr window (ns/s)	-0.011 0.011
				Data rate(Mb/s):	1024	t_cohere	infinite	ion window (TEC)	0.00 0.00

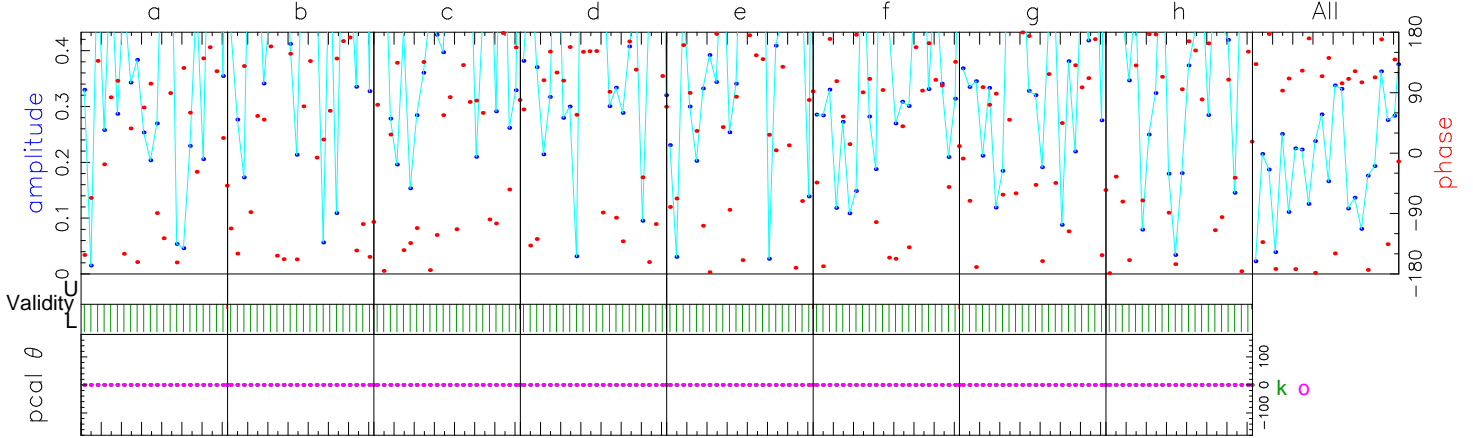


Fringe quality 0
 SNR 5.7
 Int time 419.827
 Amp 0.144
 Phase -26.3
 PFD 7.6e-01
 Delays (us)
 SBD 0.022307
 MBD -0.001170
 Fringe rate (Hz)
 0.071663
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



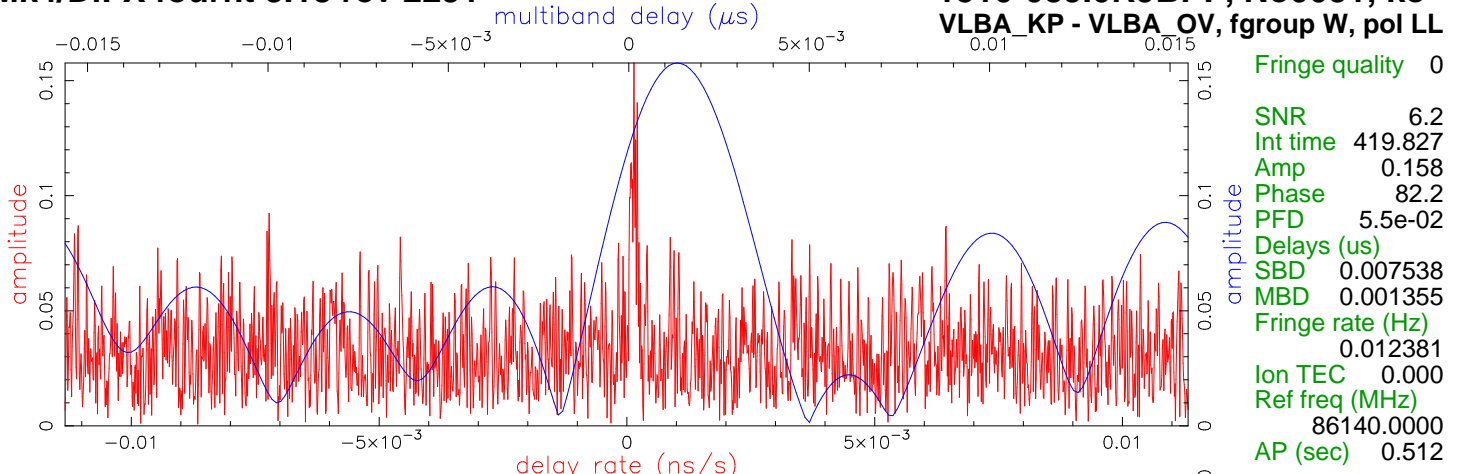
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110836
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
128.2	-173.2	150.3	159.4	150.7	122.7	158.0	169.7	Phase	153.7
0.1	0.2	0.2	0.2	0.1	0.2	0.0	0.2	Ampl.	0.1
145.7	19.6	169.7	131.5	177.8	9.4	124.9	152.0	Sbd box	131.9
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
k W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.25398053115E+03	Apriori delay (usec)	2.25395045087E+03	Resid mbdelay (usec)	-1.16972E-03	+/-	3.8E-04		
Sband delay (usec)	2.25397275737E+03	Apriori clock (usec)	-1.3804543E+01	Resid sbdelay (usec)	2.23065E-02	+/-	3.0E-03		
Phase delay (usec)	2.25395045583E+03	Apriori clockrate (us/s)	-3.6400001E-07	Resid phdelay (usec)	4.95781E-06	+/-	6.5E-07		
Delay rate (us/s)	-7.96009271207E-02	Apriori rate (us/s)	-7.96017590573E-02	Resid rate (us/s)	8.31937E-07	+/-	2.7E-09		
Total phase (deg)	-84.7	Apriori accel (us/s/s)	-1.06980580812E-05	Resid phase (deg)	-26.3	+/-	20.1		

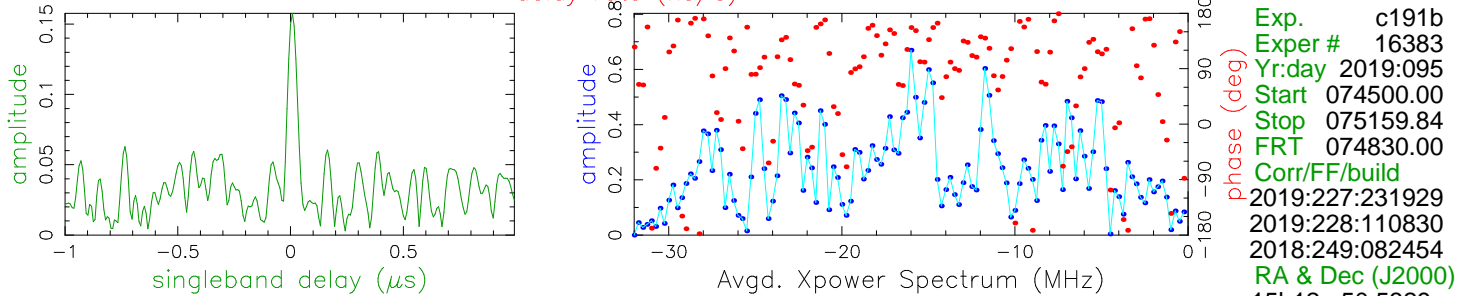
ph/seg (deg) 43.3 48.2 Search (2048X32) 0.140 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.4 84.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.5 28.4 Inc. seg. avg. 0.149 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.5 49.6 Inc. frq. avg. 0.137 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 139.2 el 39.5 pa -33.6 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 444.209 -525.453 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/ko..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/ko.W.128.0RJBPf simultaneous interpolator



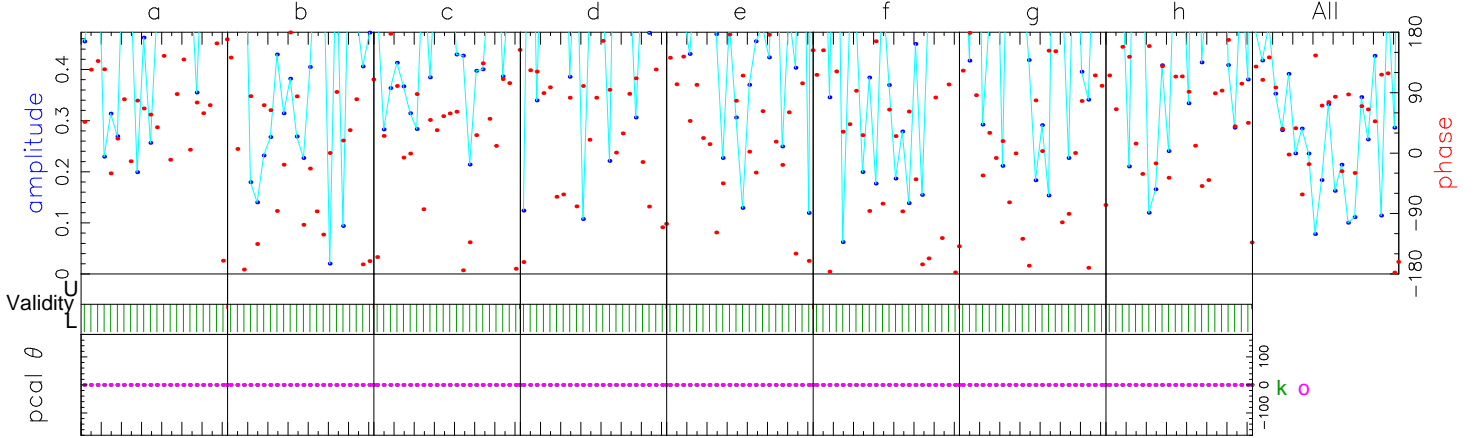
Fringe quality 0

SNR 6.2
Int time 419.827
Amp 0.158
Phase 82.2
PFD 5.5e-02
Delays (us)
SBD 0.007538
MBD 0.001355
Fringe rate (Hz) 0.012381
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110830
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



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

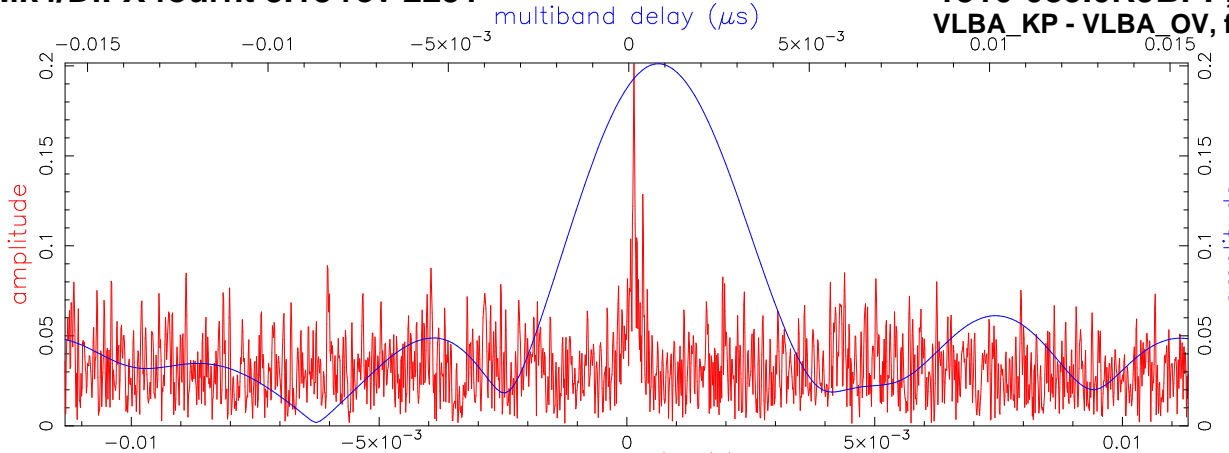


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	81.7	146.5	69.7	61.1	80.2	135.5	67.4	74.6	Phase	82.2
	0.3	0.0	0.2	0.1	0.2	0.2	0.1	0.3	Ampl.	0.2
	130.1	22.8	131.4	115.7	19.4	142.2	160.0	129.7	Sbd box	130.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ko	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd) 2.25395180562E+03 Apriori delay (usec) 2.25395045087E+03 Resid mbdelay (usec) 1.35475E-03 +/- 3.5E-04
 Sband delay (usec) 2.25395798937E+03 Apriori clock (usec) -1.3804543E+01 Resid sbdelay (usec) 7.53850E-03 +/- 2.8E-03
 Phase delay (usec) 2.25395045352E+03 Apriori clockrate (us/s) -3.6400001E-07 Resid phdelay (usec) 2.64963E-06 +/- 5.9E-07
 Delay rate (us/s) -7.96016153257E-02 Apriori rate (us/s) -7.96017590573E-02 Resid rate (us/s) 1.43732E-07 +/- 2.4E-09
 Total phase (deg) 23.7 Apriori accel (us/s/s) -1.06980580812E-05 Resid phase (deg) 82.2 +/- 18.3

RMS Theor. Amplitude 0.158 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 64.9 44.0 Search (2048X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 122.5 76.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 36.2 25.9 Inc. seg. avg. 0.226 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.8 45.3 Inc. frq. avg. 0.155 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

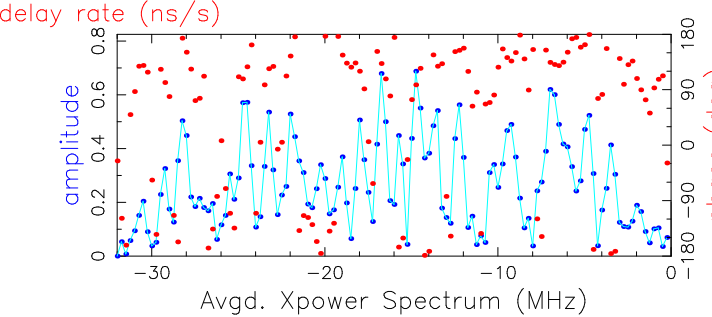
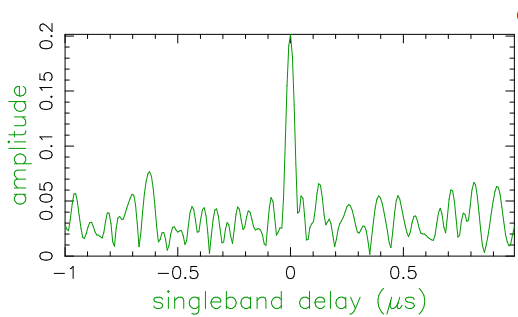
k: az 139.2 el 39.5 pa -33.6 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 444.209 -525.453 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/ko..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/ko.W.85.0RJBPf



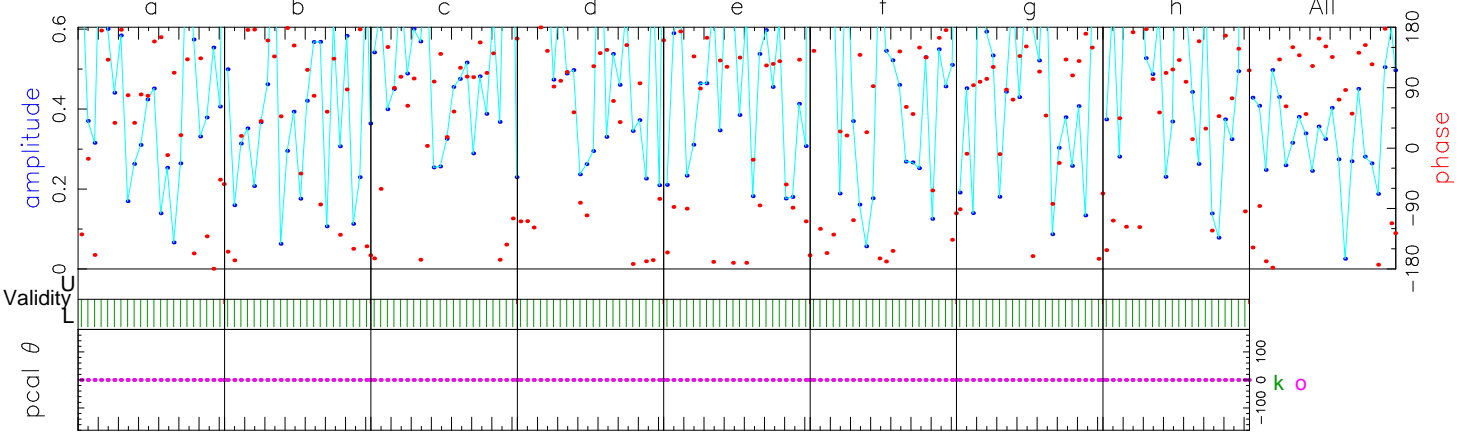
Fringe quality 9

SNR 8.0
 Int time 419.827
 Amp 0.202
 Phase 156.7
 PFD 2.3e-07
 Delays (us)
 SBD -0.001287
 MBD 0.000835
 Fringe rate (Hz)
 0.012441
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110832
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

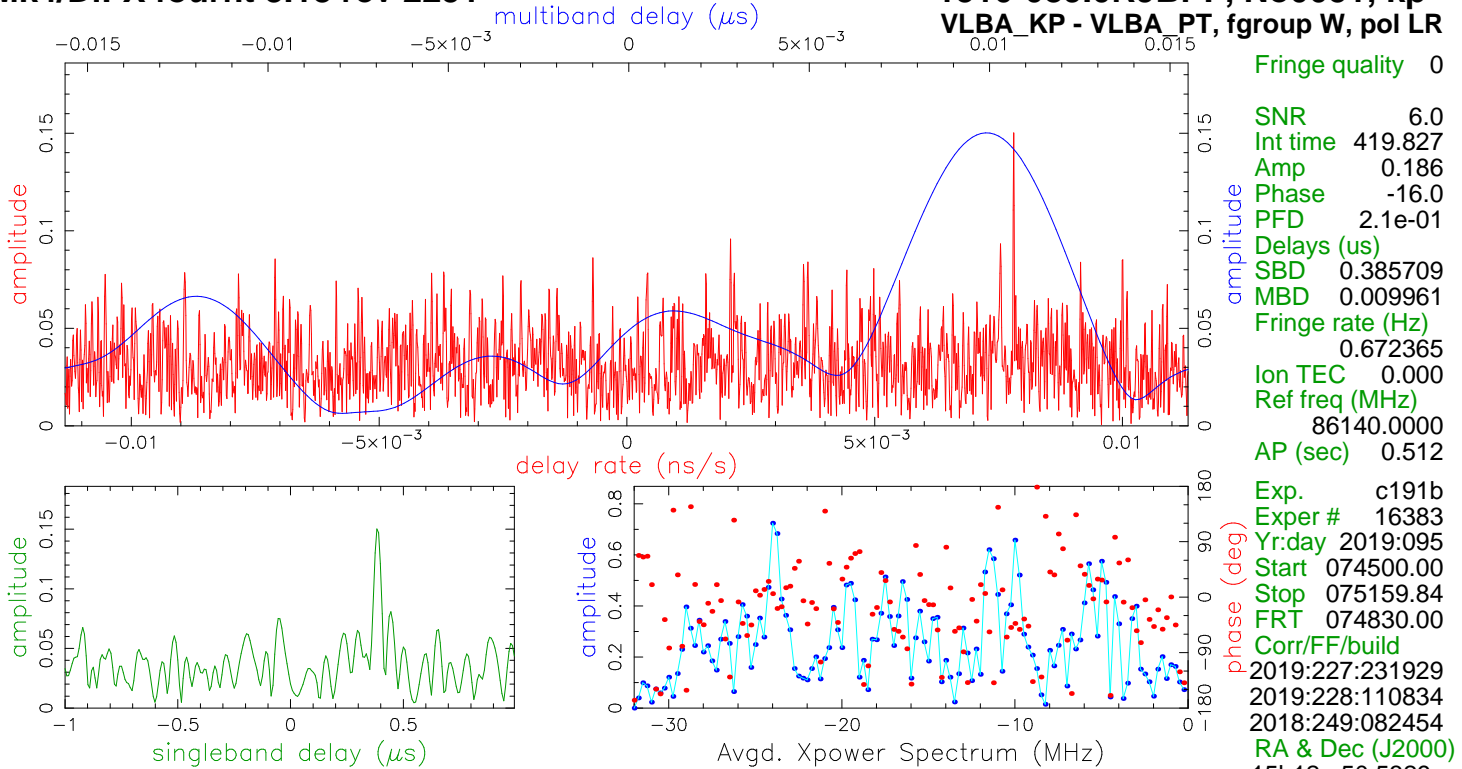


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

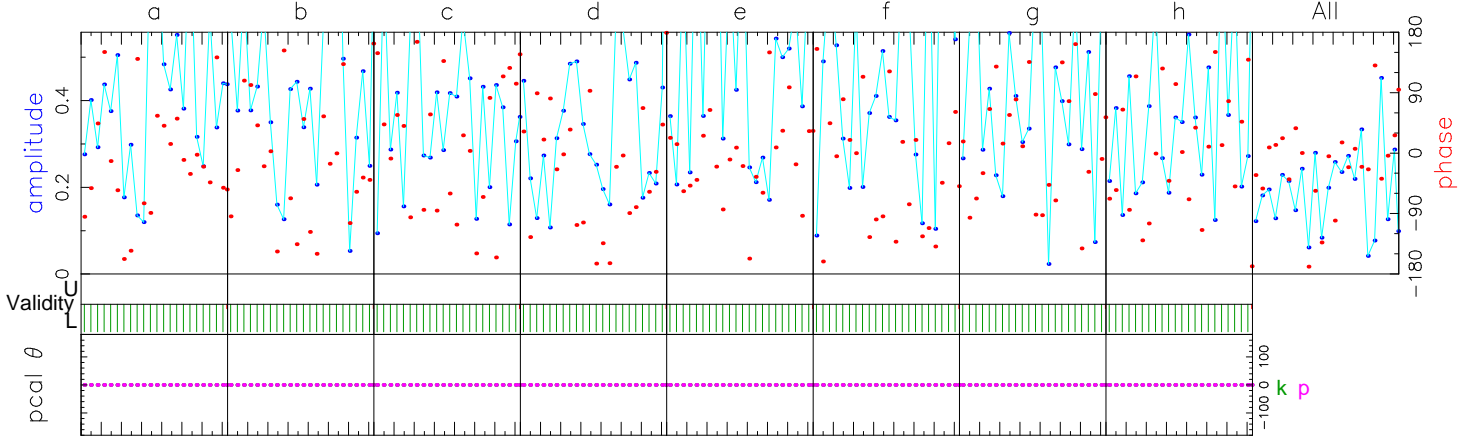


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	156.7	156.7
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	0.2	0.2
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	0.1	0.1
k:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	128.8	128.8
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)	2.25395128555E+03		Apriori delay (usec)		2.25395045087E+03		Resid mbdelay (usec)		8.34688E-04	+/- 2.7E-04
Sband delay (usec)	2.25394916387E+03		Apriori clock (usec)		-1.3804543E+01		Resid sbdelay (usec)		-1.28700E-03	+/- 2.2E-03
Phase delay (usec)	2.25395045592E+03		Apriori clockrate (us/s)		-3.6400001E-07		Resid phdelay (usec)		5.05341E-06	+/- 4.6E-07
Delay rate (us/s)	-7.96016146277E-02		Apriori rate (us/s)		-7.96017590573E-02		Resid rate (us/s)		1.44430E-07	+/- 1.9E-09
Total phase (deg)	98.3		Apriori accel (us/s/s)		-1.06980580812E-05		Resid phase (deg)		156.7	+/- 14.3

ph/seg (deg) 58.8 34.4 Theor. Amplitude 0.202 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 92.3 60.0 Search (2048X32) 0.200 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.5 20.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 23.6 35.4 Inc. seg. avg. 0.290 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 139.2 el 39.5 pa -33.6 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 444.209 -525.453 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/ko..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/ko.W.97.0RJBPf simultaneous interpolator



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

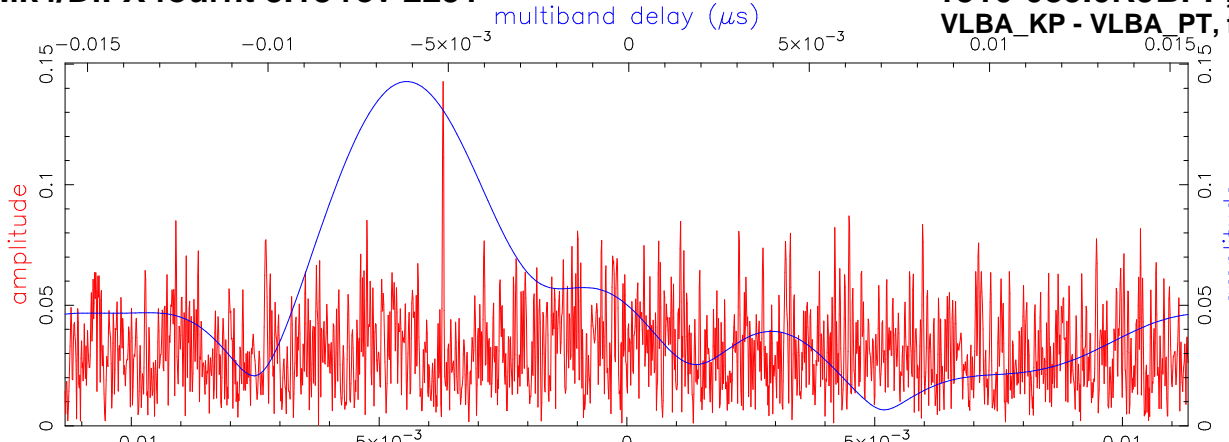


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-19.2	-12.7	13.7	-26.7	-5.4	-31.6	-22.5	-16.5	Phase	-16.0
0.2	0.2	0.0	0.2	0.4	0.2	0.1	0.2	Ampl.	0.2
42.6	120.8	187.2	180.7	177.3	48.9	54.6	80.1	Sbd box	178.4
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
								Tracks	
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.89786542527E+01	Apriori delay (usec)	1.85936932202E+01	Resid mbdelay (usec)	9.96103E-03	+/-	3.6E-04		
Sband delay (usec)	1.89794027202E+01	Apriori clock (usec)	-7.7906036E+00	Resid sbdelay (usec)	3.85709E-01	+/-	2.9E-03		
Phase delay (usec)	1.85936927049E+01	Apriori clockrate (us/s)	-4.2899999E-07	Resid phdelay (usec)	-5.15325E-07	+/-	6.1E-07		
Delay rate (us/s)	8.51081827708E-02	Apriori rate (us/s)	8.51003772838E-02	Resid rate (us/s)	7.80549E-06	+/-	2.5E-09		
Total phase (deg)		Apriori accel (us/s/s)	4.76226970344E-07	Resid phase (deg)	-16.0	+/-	19.1		

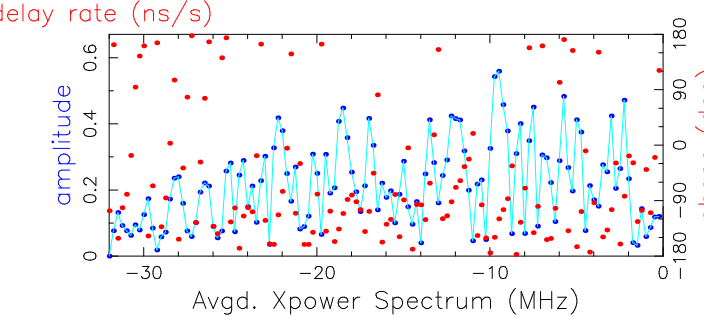
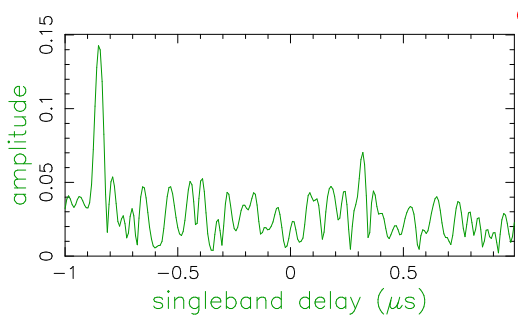
ph/seg (deg)	60.7	Theor.	45.7	Amplitude	0.186 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	70.2	Search (2048X32)	0.145	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	15.4	Inc. seg. avg.	0.185	Inc. frq. avg.	0.168	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016	0.016
amp/frq (%)	57.3	Inc. frq. avg.	0.168			Sample rate (MSamp/s):	64	dr window (ns/s)	-0.011	0.011		
						Data rate (Mb/s):	1024	ion window (TEC)	0.00	0.00		
						nlags:	128	t_cohere	infinite			

k: az 139.2 el 39.5 pa -33.6 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -493.249 -306.786 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kp.W.112.0RJBPf

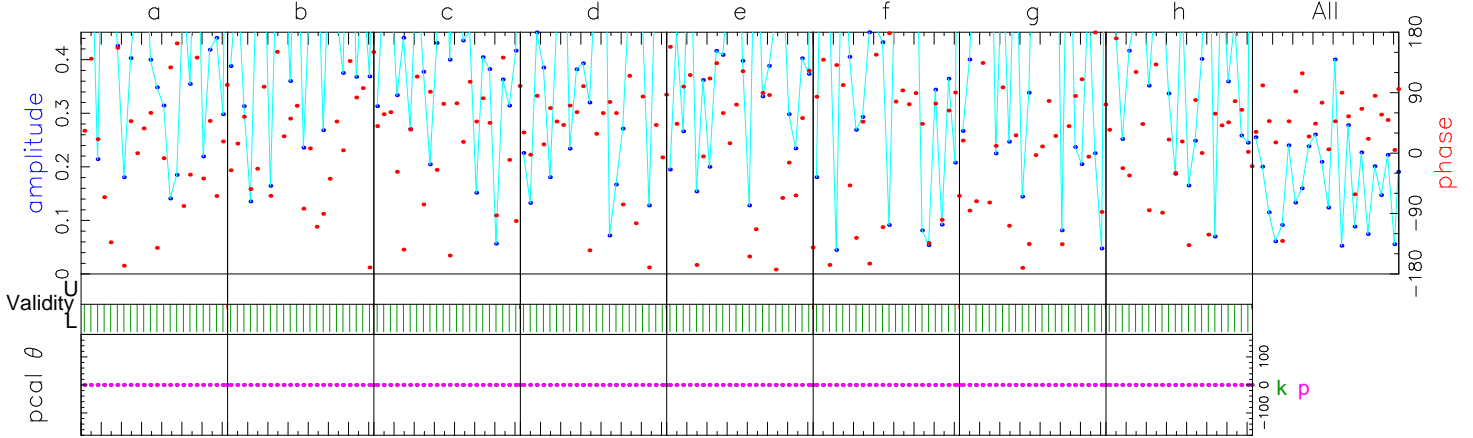


Fringe quality 0
SNR 5.7
Int time 419.827
Amp 0.150
Phase 234.2
PFD 7.7e-01
Delays (us)
SBD -0.848814
MBD -0.006155
Fringe rate (Hz)
-0.319704
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



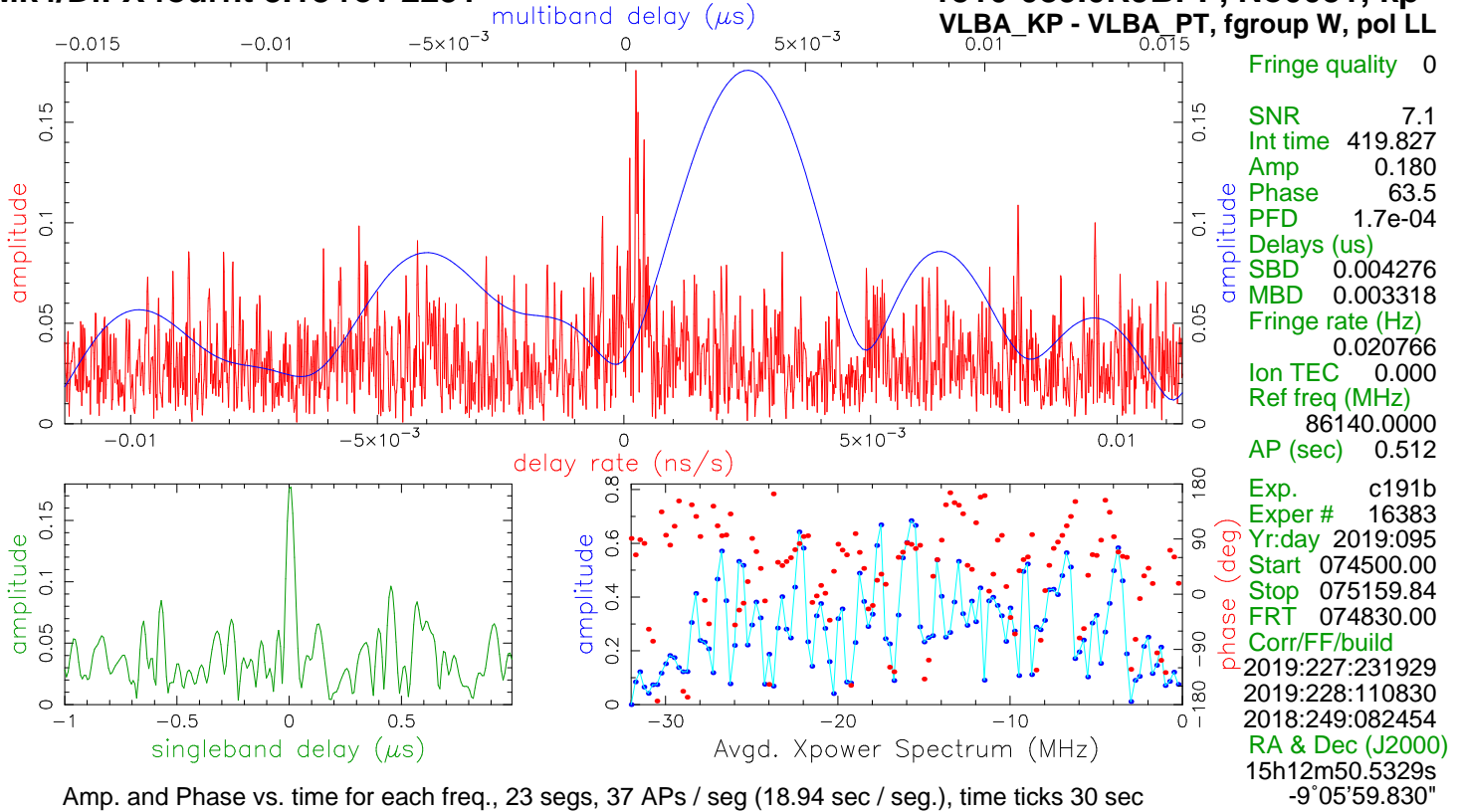
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110836
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

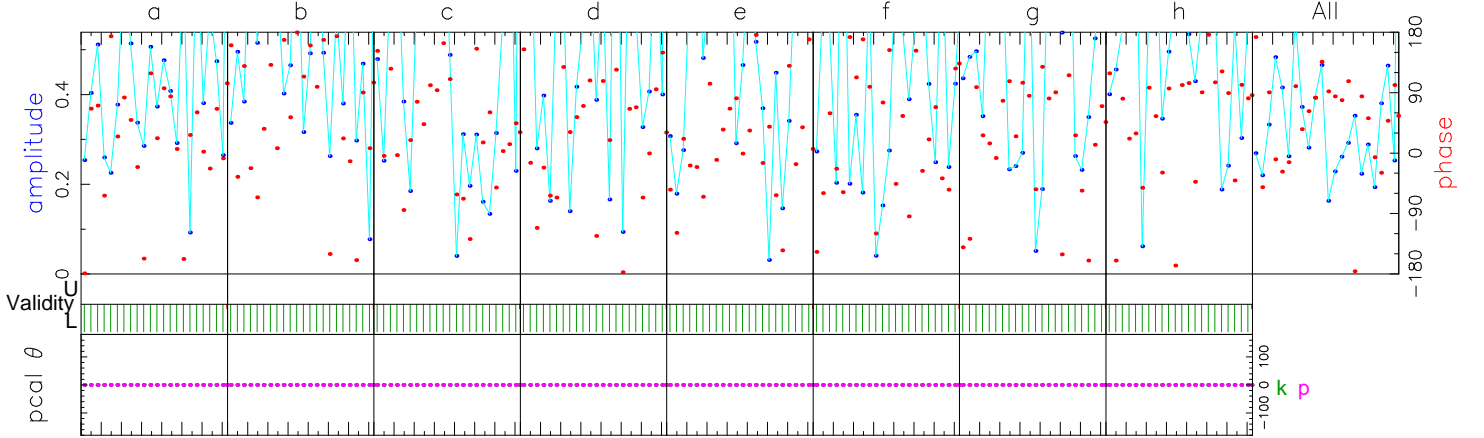


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.77437886224E+01		Apriori delay (usec)		1.85936932202E+01		Resid mbdelay (usec)		-6.15460E-03	+/- 3.8E-04
Sband delay (usec)	1.77448787202E+01		Apriori clock (usec)		-7.7906036E+00		Resid sbdelay (usec)		-8.48814E-01	+/- 3.0E-03
Phase delay (usec)	1.85936949676E+01		Apriori clockrate (us/s)		-4.2899999E-07		Resid phdelay (usec)		1.74737E-06	+/- 6.5E-07
Delay rate (us/s)	8.50966658370E-02		Apriori rate (us/s)		8.51003772838E-02		Resid rate (us/s)		-3.71145E-06	+/- 2.7E-09
Total phase (deg)	138.4		Apriori accel (us/s/s)		4.76226970344E-07		Resid phase (deg)		234.2	+/- 20.1

ph/seg (deg) 53.7 48.2 Search (2048X32) 0.138 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.8 84.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.2 28.4 Inc. seg. avg. 0.135 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 37.0 49.6 Inc. frq. avg. 0.153 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 139.2 el 39.5 pa -33.6 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -493.249 -306.786 ion window (TEC) 0.00 0.00



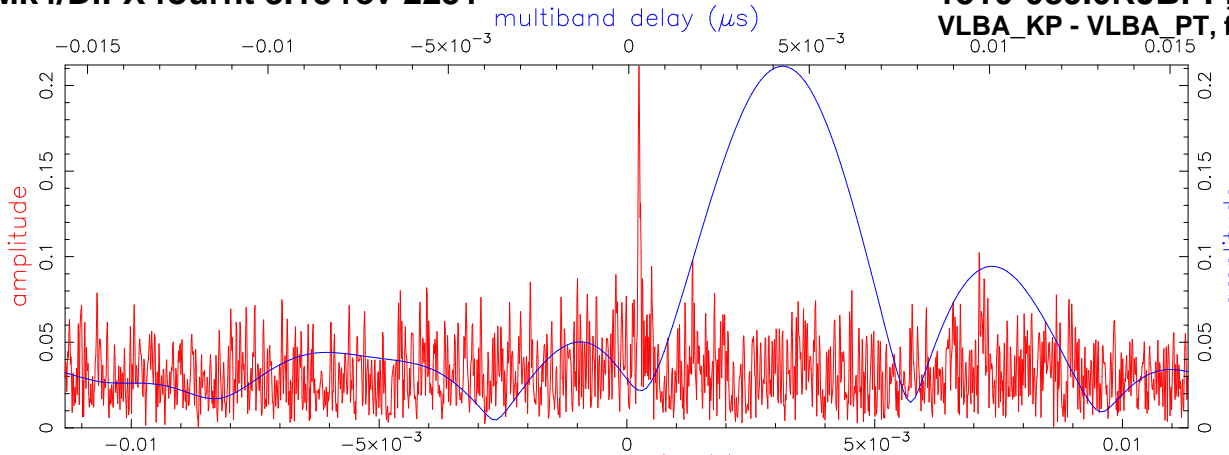
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
59.5	97.2	63.4	81.0	16.4	-7.8	77.2	84.8	Phase	63.5
0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.3	Ampl.	0.2
46.6	7.8	113.1	54.4	129.8	21.0	1.9	129.3	Sbd box	129.5
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.85970108069E+01	Apriori delay (usec)	1.85936932202E+01	Resid mbdelay (usec)	3.31759E-03	+/-	3.0E-04		
Sband delay (usec)	1.85979692202E+01	Apriori clock (usec)	-7.7906036E+00	Resid sbdelay (usec)	4.27600E-03	+/-	2.4E-03		
Phase delay (usec)	1.85936952690E+01	Apriori clockrate (us/s)	-4.2899999E-07	Resid phdelay (usec)	2.04880E-06	+/-	5.2E-07		
Delay rate (us/s)	8.51006183599E-02	Apriori rate (us/s)	8.51003772838E-02	Resid rate (us/s)	2.41076E-07	+/-	2.1E-09		
Total phase (deg)	327.8	Apriori accel (us/s/s)	4.76226970344E-07	Resid phase (deg)	63.5	+/-	16.1		

RMS Theor. Amplitude 0.180 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.5 38.6 Search (2048X32) 0.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 107.8 67.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 39.6 22.8 Inc. seg. avg. 0.270 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 36.6 39.7 Inc. frq. avg. 0.186 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 139.2 el 39.5 pa -33.6 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -493.249 -306.786 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kp.W.84.0RJBPf



Fringe quality 9

SNR 8.4

Int time 419.827

Amp 0.212

Phase 12.0

PFD 8.1e-09

Delays (us)

SBD 0.005948

MBD 0.004257

Fringe rate (Hz) 0.021313

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

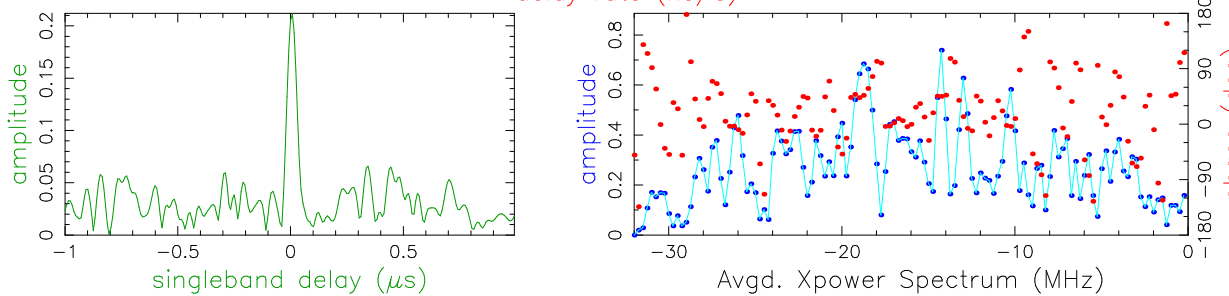
Corr/FF/build

2019:227:231929

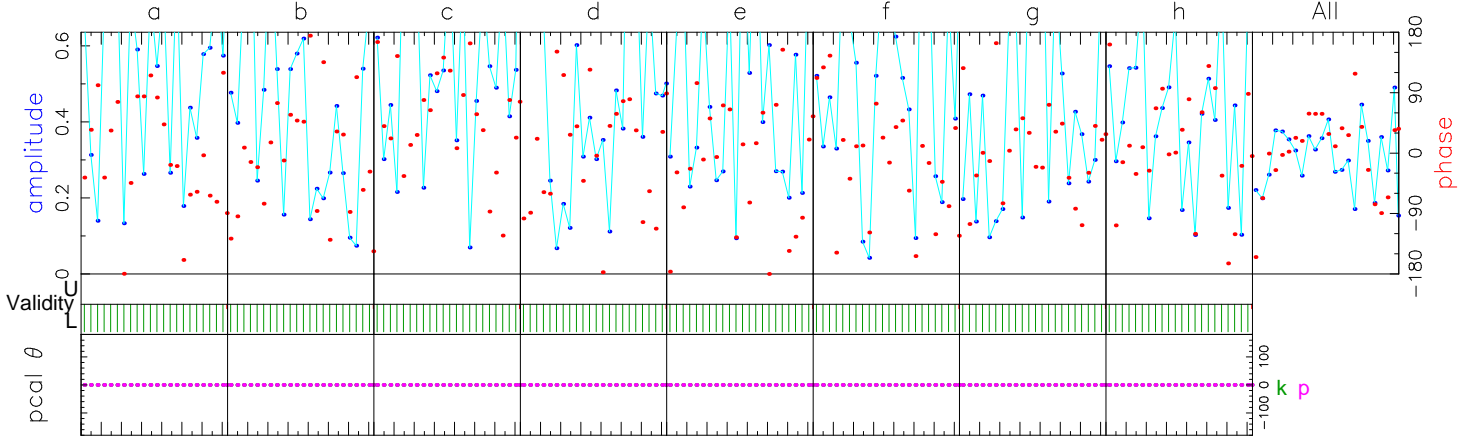
2019:228:110832

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	7.6	-2.4	51.3	1.8	6.7	8.3	2.5	27.4	Phase	12.0
	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	Ampl.	0.2
	129.8	104.6	204.8	13.6	36.4	128.8	130.1	17.4	Sbd box	129.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.85979506819E+01		Apriori delay (usec)		1.85936932202E+01		Resid mbdelay (usec)		4.25746E-03	+/- 2.6E-04
Sband delay (usec)	1.85996412202E+01		Apriori clock (usec)		-7.7906036E+00		Resid sbdelay (usec)		5.94800E-03	+/- 2.1E-03
Phase delay (usec)	1.85936936078E+01		Apriori clockrate (us/s)		-4.2899999E-07		Resid phdelay (usec)		3.87575E-07	+/- 4.4E-07
Delay rate (us/s)	8.51006247114E-02		Apriori rate (us/s)		8.51003772838E-02		Resid rate (us/s)		2.47428E-07	+/- 1.8E-09
Total phase (deg)	276.3		Apriori accel (us/s/s)		4.76226970344E-07		Resid phase (deg)		12.0	+/- 13.6

ph/seg (deg) 60.7 32.7 Amplitude 0.212 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

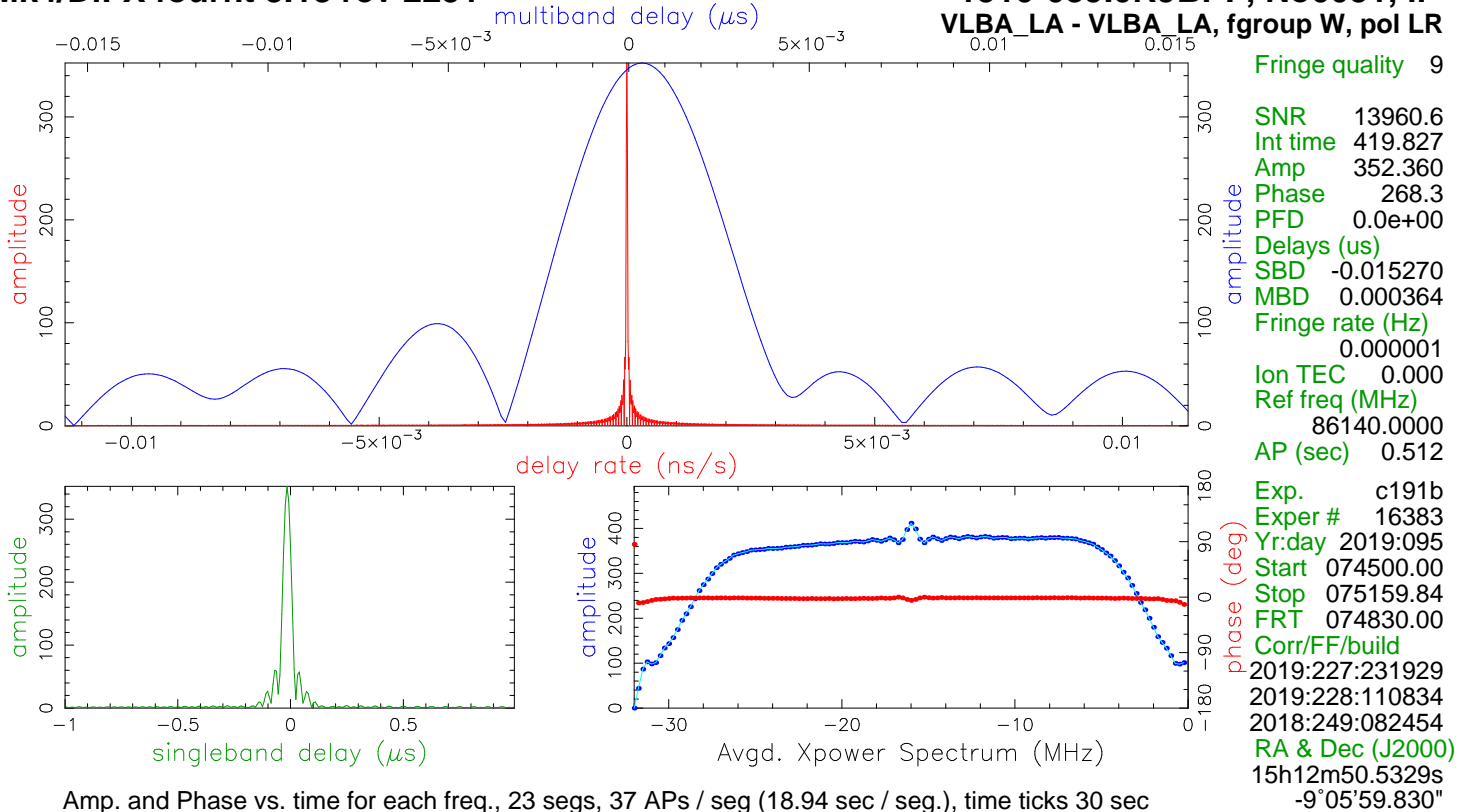
amp/seg (%) 61.9 57.1 Search (2048X32) 0.202 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 19.3 19.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

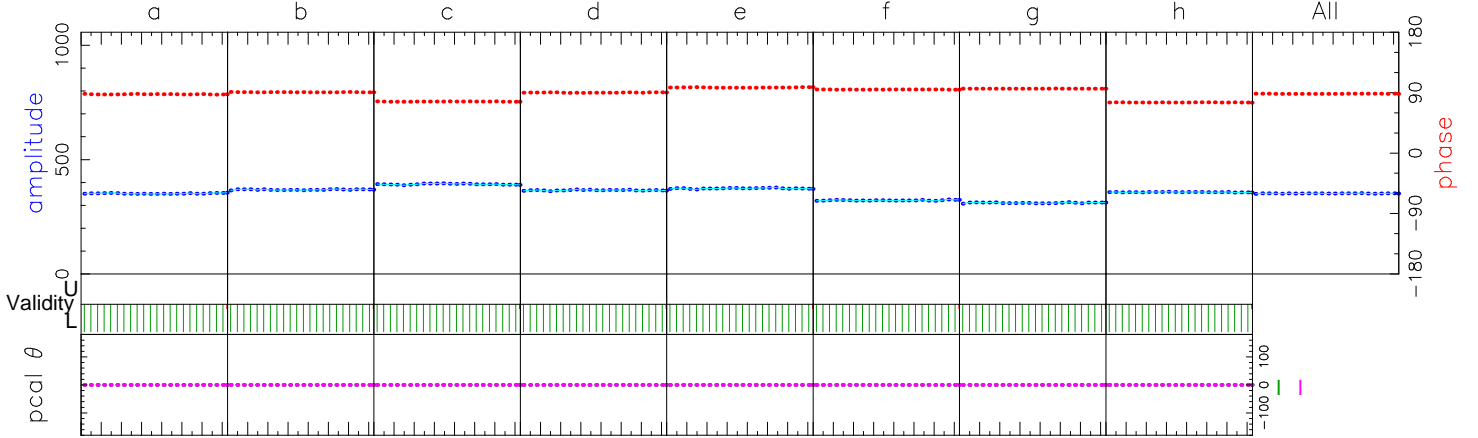
amp/frq (%) 22.5 33.7 Inc. seg. avg. 0.270 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

k: az 139.2 el 39.5 pa -33.6 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -493.249 -306.786 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/kp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/kp.W.96.0RJBPf simultaneous interpolator

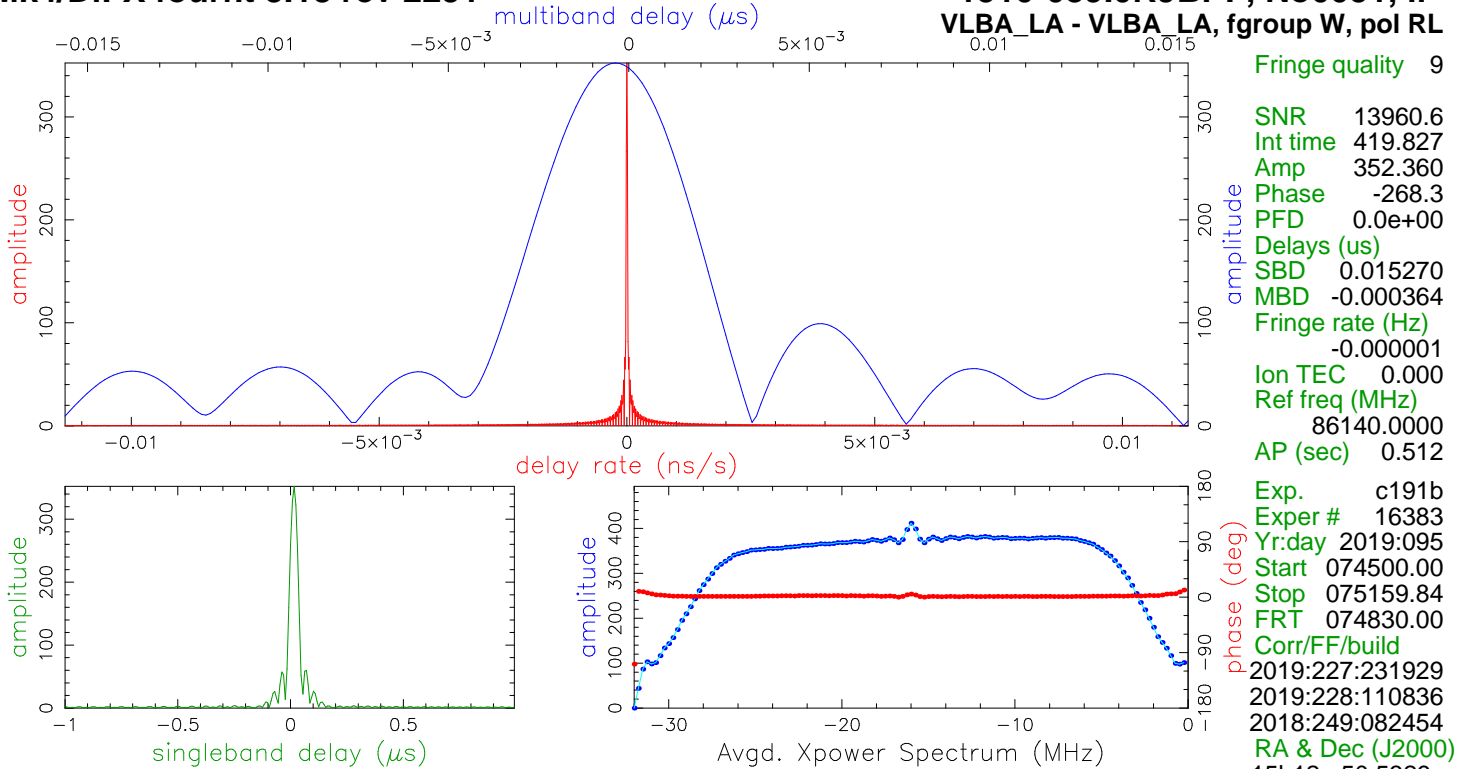


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
87.6	90.6	76.7	90.0	97.6	94.6	95.9	75.4		Phase	88.3
352.0	368.8	392.8	366.3	374.4	322.2	311.1	358.1		Ampl.	355.7
127.2	127.0	127.0	127.1	127.1	126.9	127.0	127.0		Sbd box	127.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820		APs used	
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000		PC freqs	
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000		PC freqs	
I:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
I:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
I	1000	1000	1000	1000	1000	1000	1000		PC amp	
I	1000	1000	1000	1000	1000	1000	1000			
I	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
I	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.08863125000E-02		Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	3.63687E-04	+/-	1.6E-07		
Sband delay (usec)	-1.52695000000E-02		Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.52695E-02	+/-	1.2E-06		
Phase delay (usec)	2.84745483450E-06		Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.84745E-06	+/-	2.6E-10		
Delay rate (us/s)	7.08557619584E-12		Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.08558E-12	+/-	1.1E-12		
Total phase (deg)		268.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	268.3	+/-	0.0		

ph/seg (deg) 0.1 0.0 Theor. Amplitude 352.360 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.0 Search (2048X32) 347.452 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 7.3 0.0 Inc. seg. avg. 352.304 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 355.700 ion window (TEC) 0.00 0.00
 I: az 147.0 el 39.1 pa -25.9 I: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/II.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/II.W.111.0RJBPf



Fringe quality 9

SNR 13960.6

Int time 419.827

Amp 352.360

Phase -268.3

PFD 0.0e+00

Delays (us)

SBD 0.015270

MBD -0.000364

Fringe rate (Hz)

-0.000001

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110836

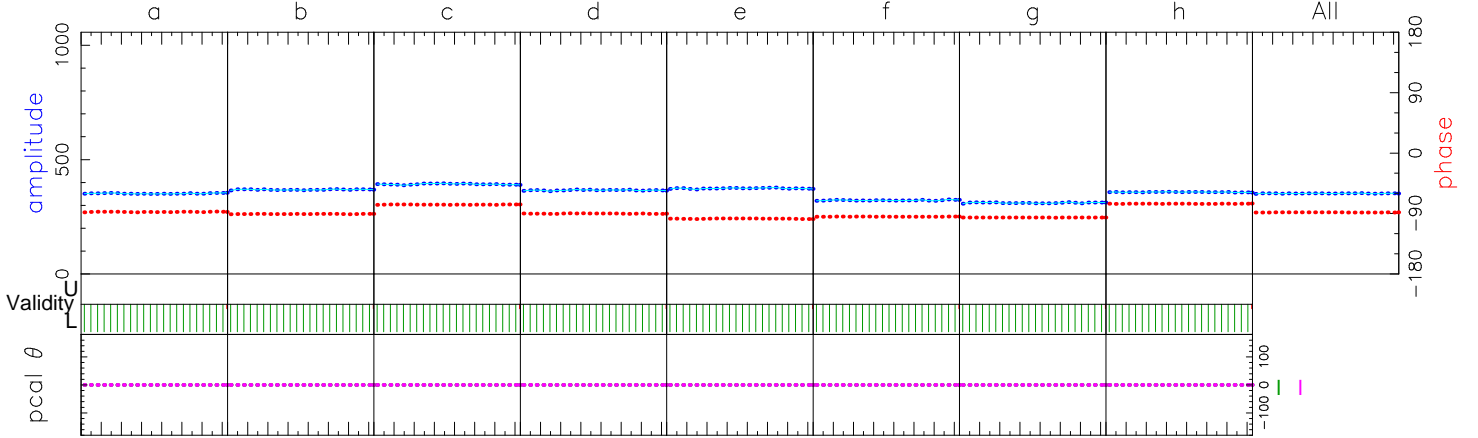
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-87.6	-90.6	-76.7	-90.0	-97.6	-94.6	-95.9	-75.4	Phase	-88.3
352.0	368.8	392.8	366.3	374.4	322.2	311.1	358.1	Ampl.	355.7
130.8	131.0	131.0	130.9	130.9	131.1	131.0	131.0	Sbd box	131.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
I -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I:I 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:I 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I 1000	1000	1000	1000	1000	1000	1000	1000		
I W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
I W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.08863125000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.63687E-04	+/-	1.6E-07		
Sband delay (usec)	1.52695000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.52695E-02	+/-	1.2E-06		
Phase delay (usec)	-2.84745483450E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.84745E-06	+/-	2.6E-10		
Delay rate (us/s)	-7.08557619584E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-7.08558E-12	+/-	1.1E-12		
Total phase (deg)		-268.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-268.3	+/-	0.0	

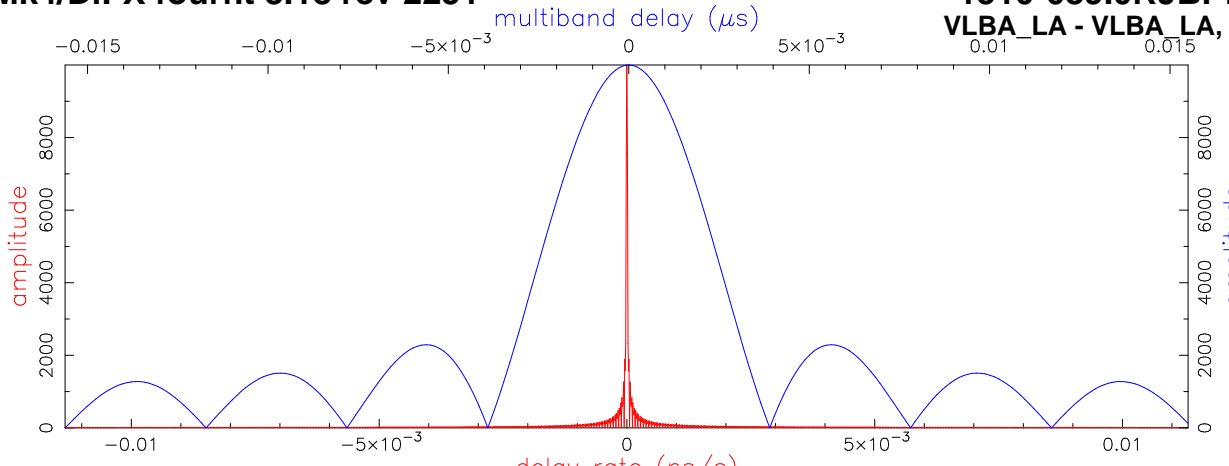
ph/seg (deg) 0.1 0.0 Search (2048X32) 347.452 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.2 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

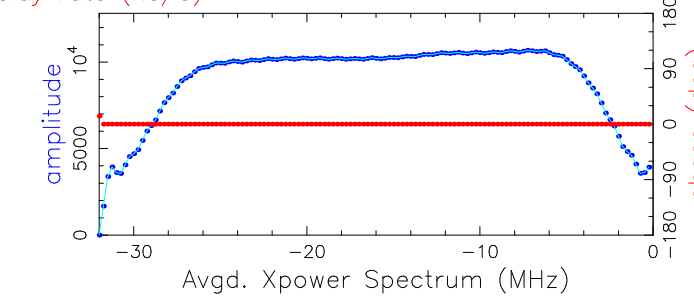
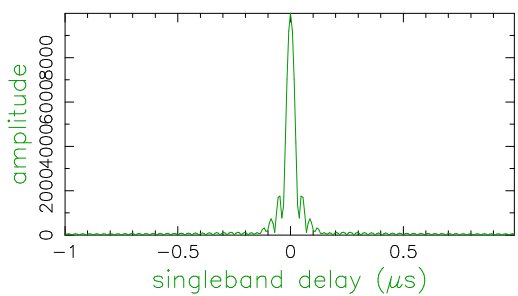
ph/frq (deg) 9.1 0.0 Inc. seg. avg. 352.304 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 7.3 0.0 Inc. frq. avg. 355.700 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

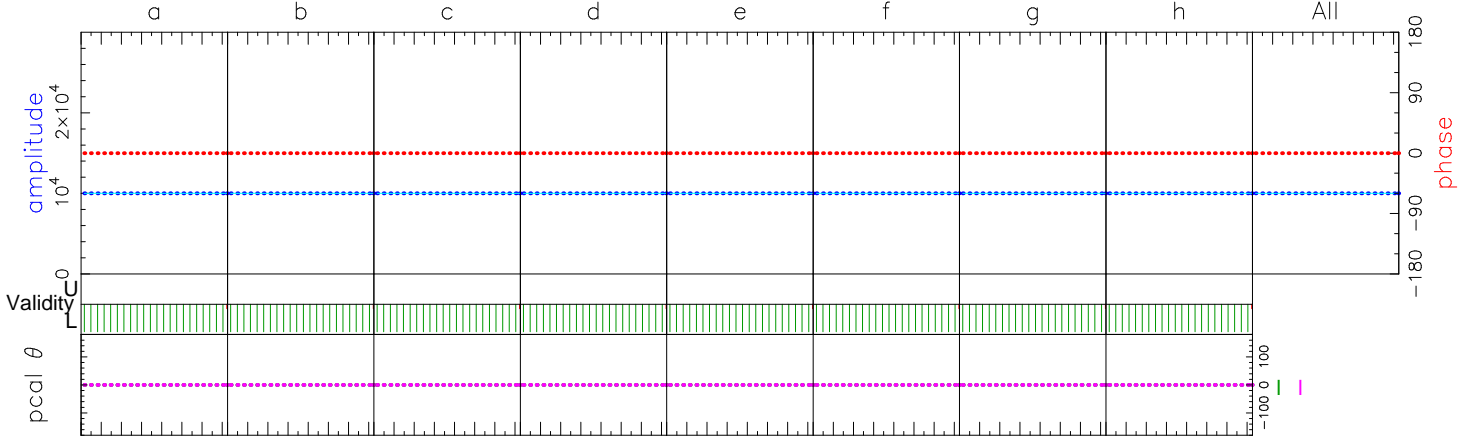
I: az 147.0 el 39.1 pa -25.9 I: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00



Fringe quality 9
 SNR 396202.8
 Int time 419.827
 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. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110830
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

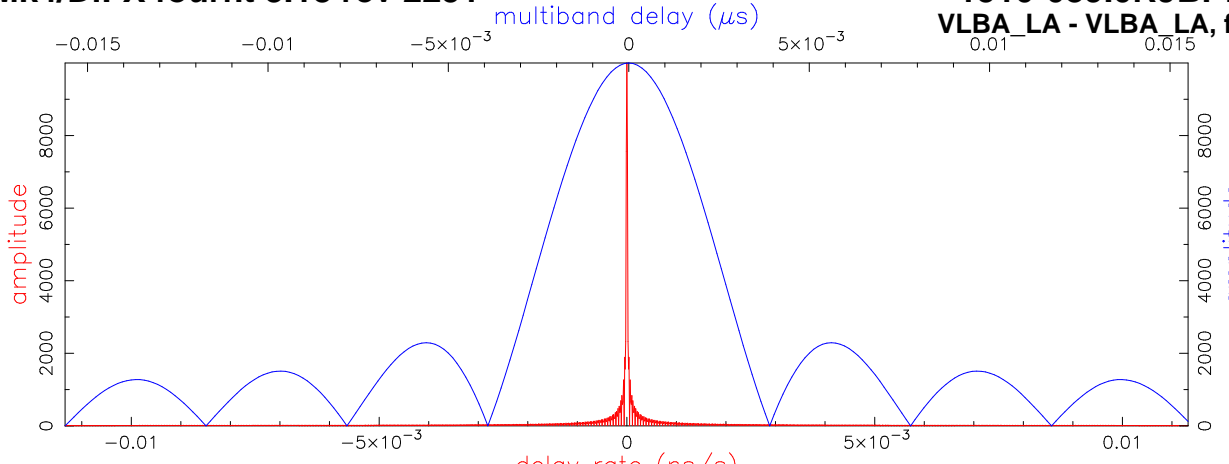


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

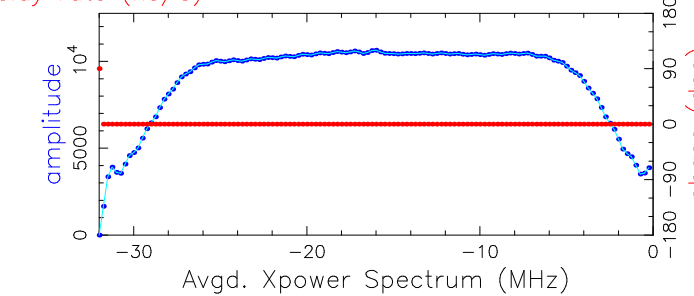
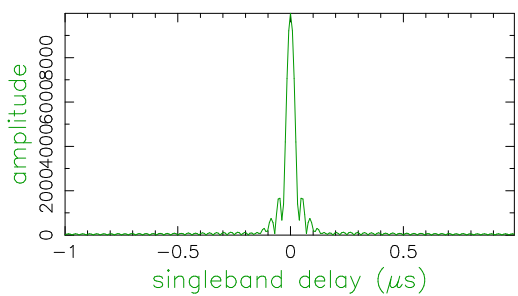


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
	1000	1000	1000	1000	1000	1000	1000	Chan ids	
	1000	1000	1000	1000	1000	1000	1000	Tracks	
	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00 +/- 5.5E-09
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00 +/- 4.3E-08
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00 +/- 9.3E-12
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00 +/- 3.8E-14
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		0.0 +/- 0.0

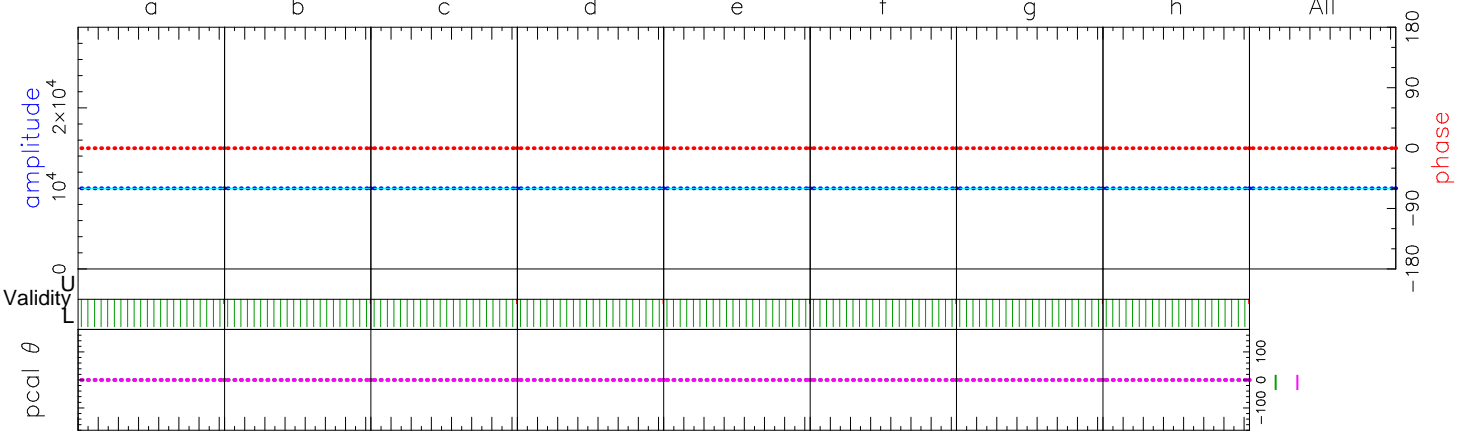
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 9999.999 ion window (TEC) 0.00 0.00



Fringe quality 9
 SNR 396202.8
 Int time 419.827
 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. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110832
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



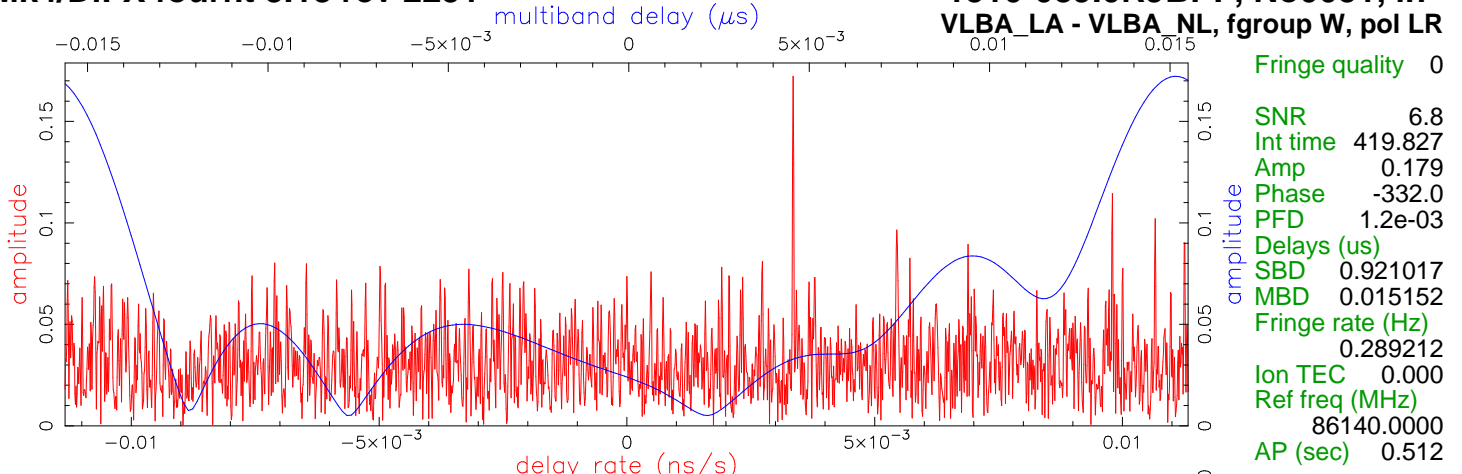
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
	1000	1000	1000	1000	1000	1000	1000	PC amp	
	1000	1000	1000	1000	1000	1000	1000		
	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	
	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

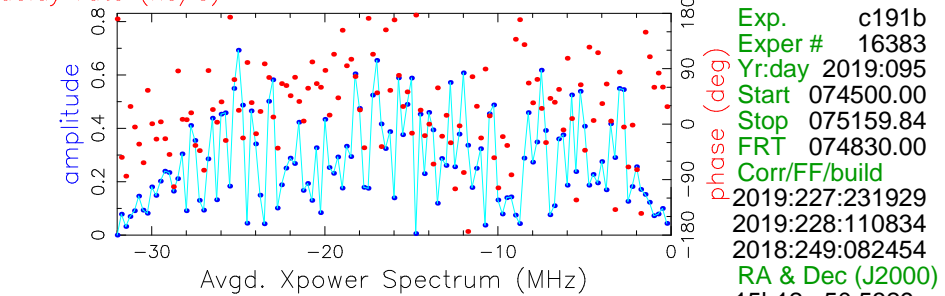
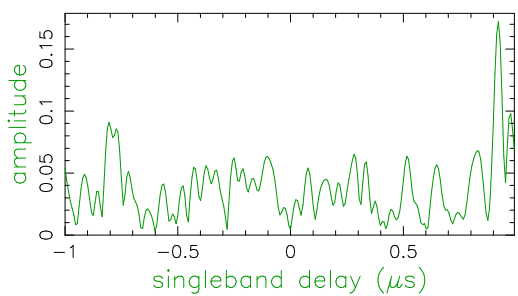
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 9999.999 ion window (TEC) 0.00 0.00

l: az 147.0 el 39.1 pa -25.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/II.0RJBPf Output file: /Exps/c191b/v1/1234/No0051/II.W.95.0RJBPf



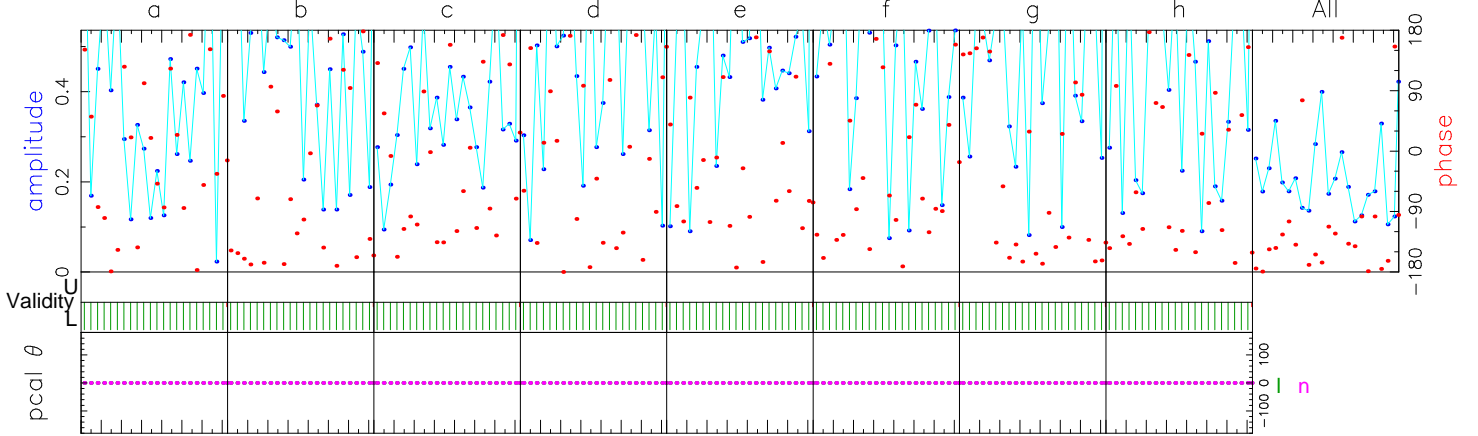
Fringe quality 0

SNR 6.8
 Int time 419.827
 Amp 0.179
 Phase -332.0
 PFD 1.2e-03
 Delays (us)
 SBD 0.921017
 MBD 0.015152
 Fringe rate (Hz) 0.289212
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512



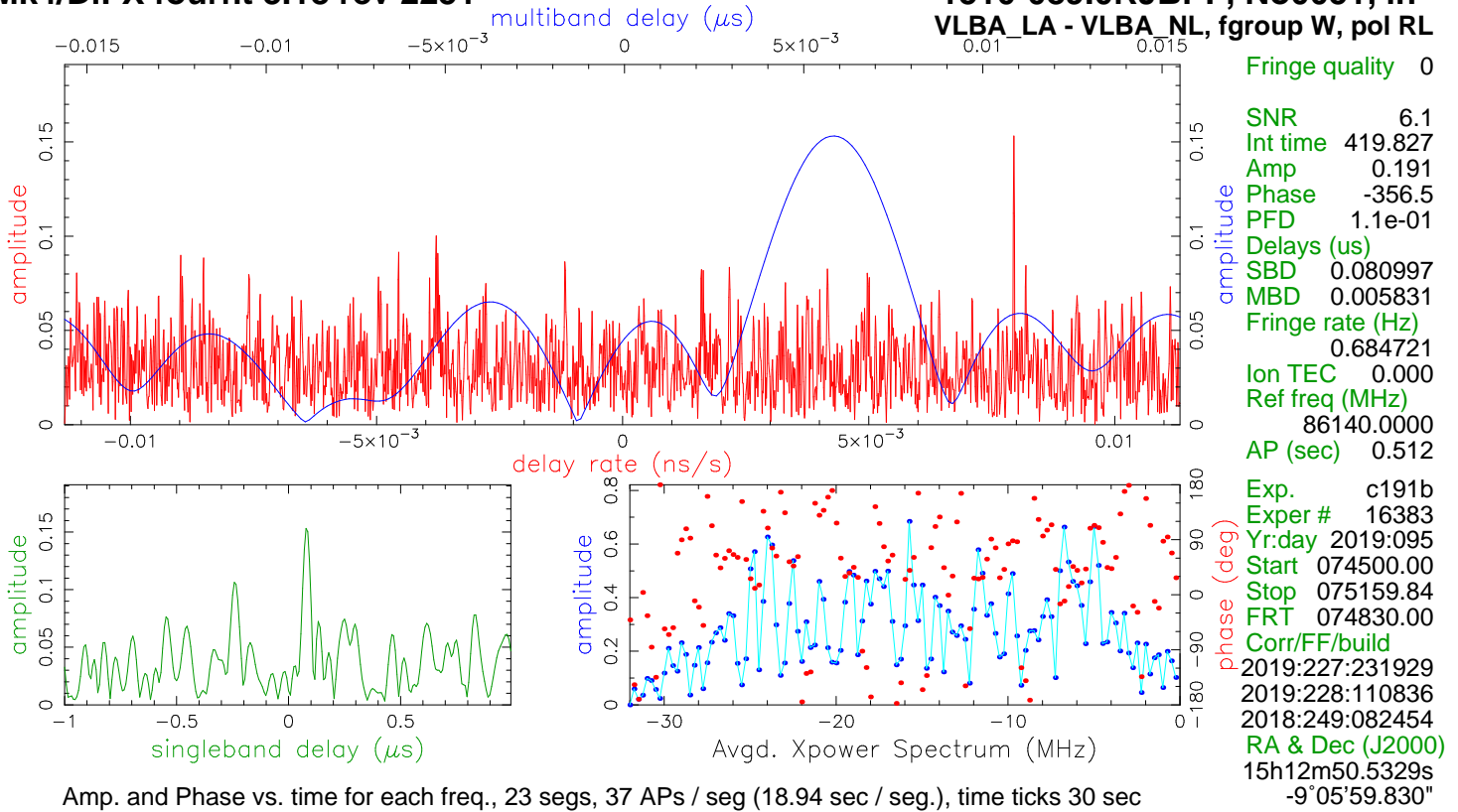
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110834
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

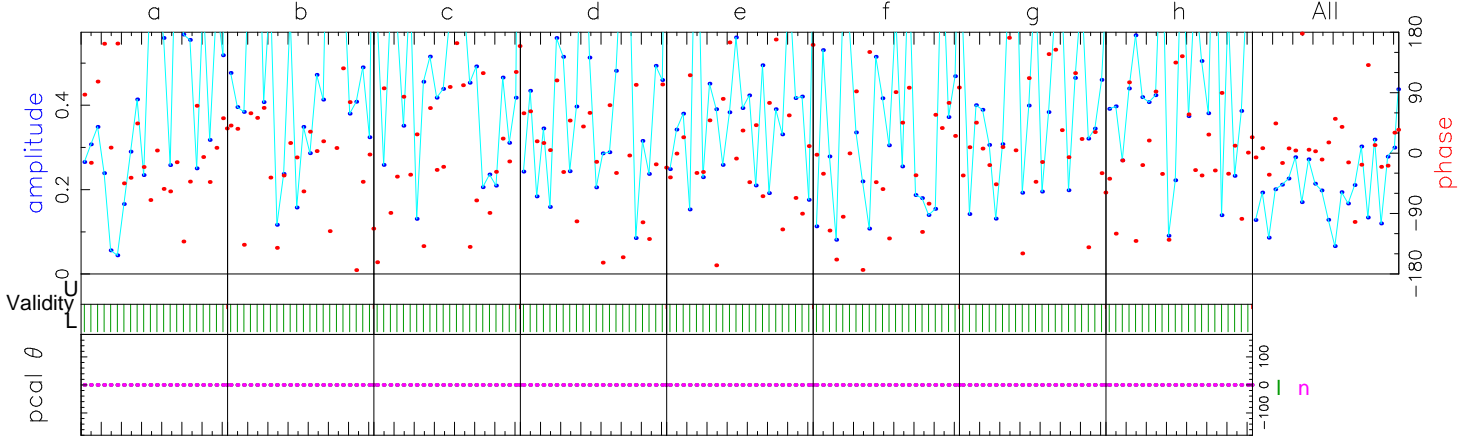


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
177.8	-160.6	-123.4	-168.5	-105.7	-141.1	-157.9	175.9	Phase	-152.0
0.1	0.2	0.1	0.2	0.2	0.2	0.4	0.1	Ampl.	0.2
42.8	14.1	156.7	92.4	10.2	86.5	246.8	176.2	Sbd box	246.9
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
l W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.40568879391E+02	Apriori delay (usec)	3.39647477101E+02	Resid mbdelay (usec)	1.51523E-02	+/-	3.2E-04		
Sband delay (usec)	3.40568493601E+02	Apriori clock (usec)	-2.4305950E+01	Resid sbdelay (usec)	9.21017E-01	+/-	2.5E-03		
Phase delay (usec)	3.39647472200E+02	Apriori clockrate (us/s)	-5.0299999E-07	Resid phdelay (usec)	-4.90116E-06	+/-	5.4E-07		
Delay rate (us/s)	3.20742287406E-01	Apriori rate (us/s)	3.20738929938E-01	Resid rate (us/s)	3.35747E-06	+/-	2.2E-09		
Total phase (deg)	-88.1	Apriori accel (us/s/s)	-4.71613668760E-07	Resid phase (deg)	-332.0	+/-	16.8		

ph/seg (deg) 41.2 40.2 Search (2048X32) 0.168 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.6 70.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.0 23.7 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 41.0 41.4 Inc. frq. avg. 0.180 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 147.0 el 39.1 pa -25.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -1861.934 -709.184 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/In..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/In.W.114.0RJBPf simultaneous interpolator



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

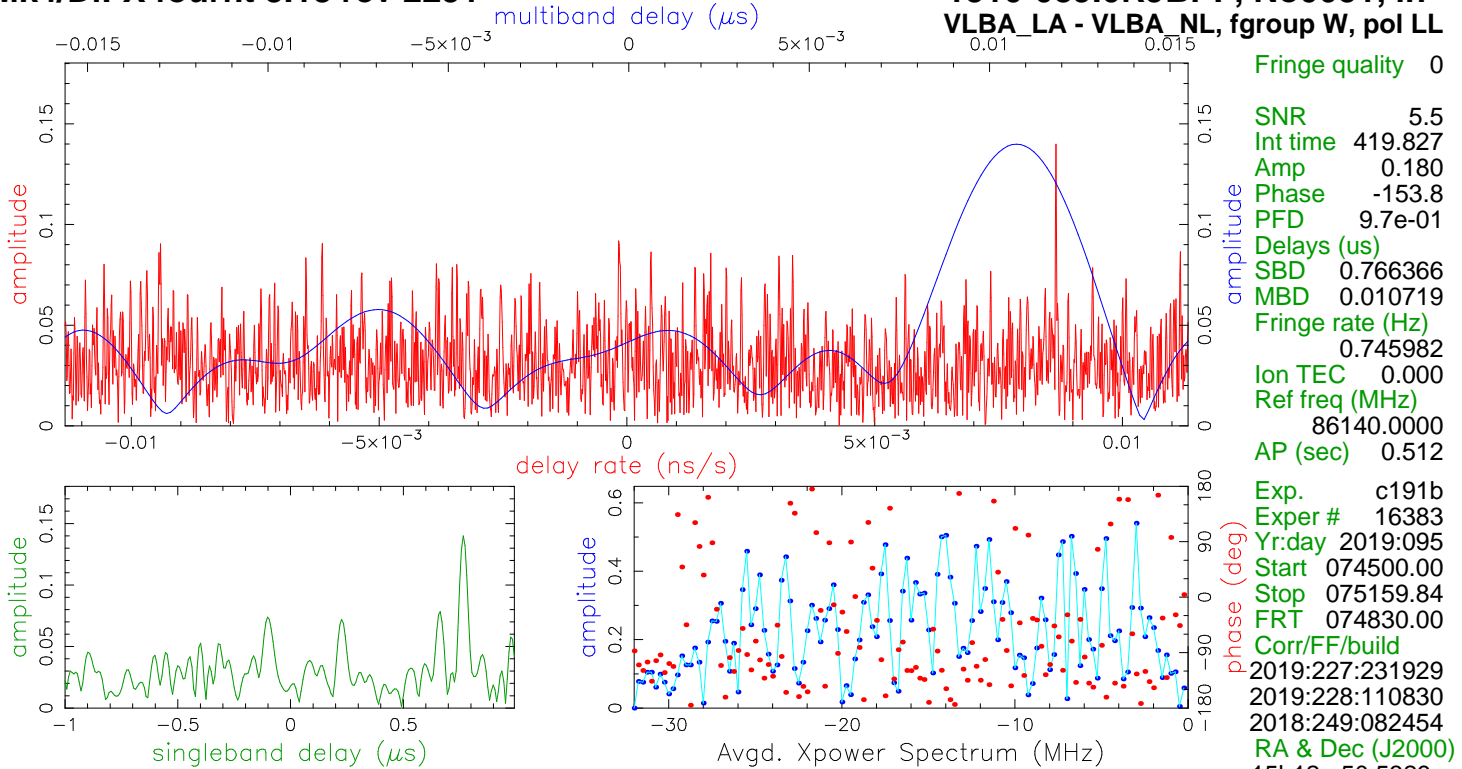


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-12.0	16.0	8.4	21.8	-9.2	16.4	16.0	-10.6	Phase	3.5
	0.3	0.2	0.0	0.2	0.2	0.1	0.2	0.3	Ampl.	0.2
	140.6	28.5	247.7	6.8	163.1	45.7	41.1	139.6	Sbd box	139.4
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Man'l PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		3.39715808384E+02		Apriori delay (usec)		3.39647477101E+02		Resid mbdelay (usec)	5.83128E-03	+/- 3.5E-04
Sband delay (usec)		3.39728474601E+02		Apriori clock (usec)		-2.4305950E+01		Resid sbdelay (usec)	8.09975E-02	+/- 2.8E-03
Phase delay (usec)		3.39647477214E+02		Apriori clockrate (us/s)		-5.0299999E-07		Resid phdelay (usec)	1.12467E-07	+/- 6.0E-07
Delay rate (us/s)		3.20746878875E-01		Apriori rate (us/s)		3.20738929938E-01		Resid rate (us/s)	7.94894E-06	+/- 2.5E-09
Total phase (deg)			-112.6	Apriori accel (us/s/s)		-4.71613668760E-07		Resid phase (deg)	-356.5	+/- 18.7

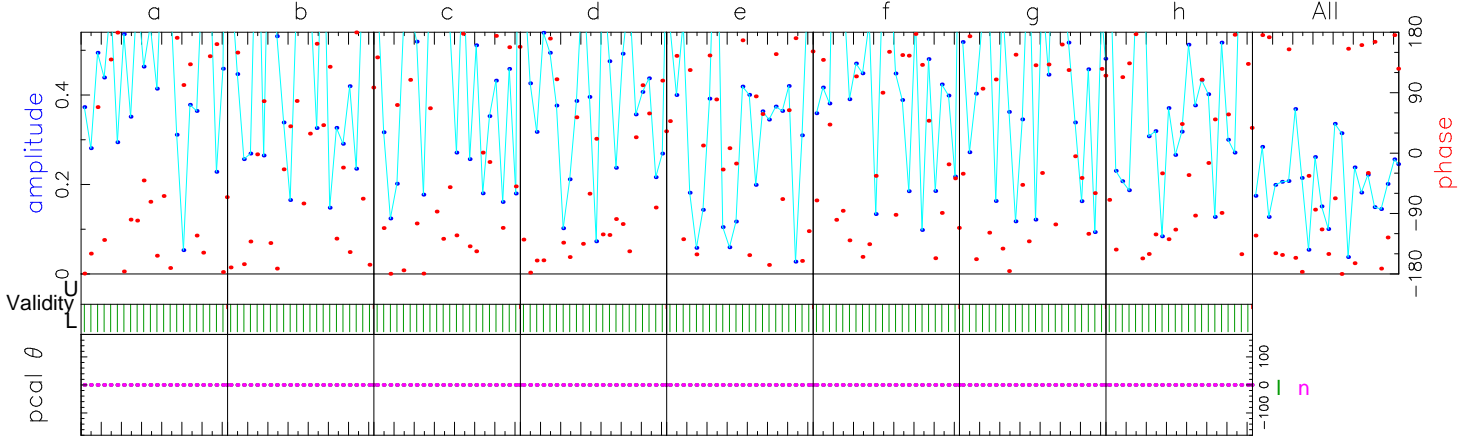
	RMS	Theor.	Amplitude	0.191 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.3	44.8	Search (2048X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	55.7	78.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	15.5	26.4	Inc. seg. avg.	0.191	Sample rate(MSamp/s): 64	mb window (us) -0.016 0.016
amp/frq (%)	41.6	46.1	Inc. frq. avg.	0.176	Data rate(Mb/s): 1024	dr window (ns/s) -0.011 0.011
					nlags: 128 t_cohere infinite	ion window (TEC) 0.00 0.00

l: az 147.0 el 39.1 pa -25.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -1861.934 -709.184 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/In..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/In.W.131.0RJBPf

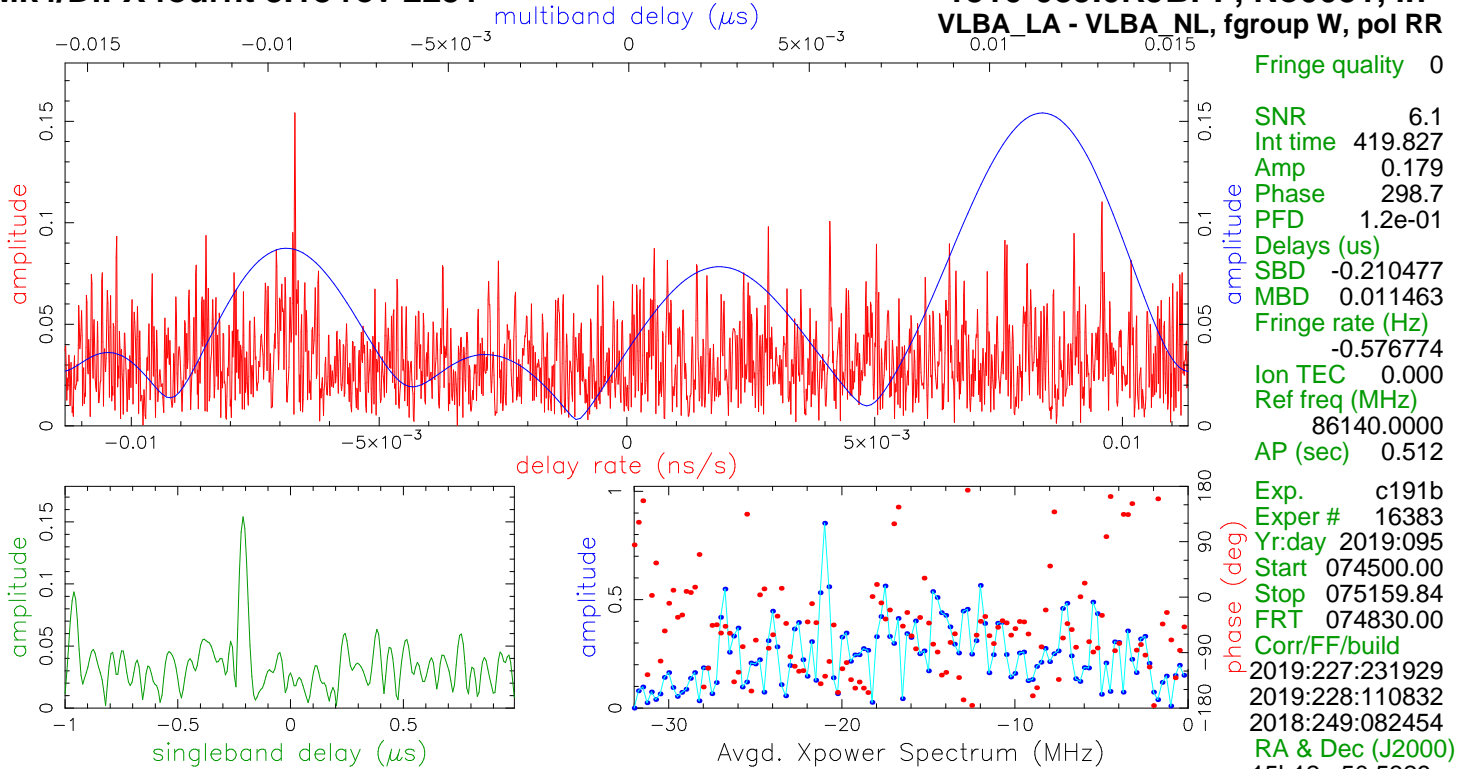


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-152.0	-141.7	-155.2	-147.6	144.3	-143.7	-152.1	-141.0	Phase	-153.8
0.3	0.1	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
132.6	212.5	116.4	214.8	102.2	125.0	112.0	177.0	Sbd box	227.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000		
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.40408196062E+02	Apriori delay (usec)	3.39647477101E+02	Resid mbdelay (usec)	1.07190E-02	+/-	3.9E-04		
Sband delay (usec)	3.40413843601E+02	Apriori clock (usec)	-2.4305950E+01	Resid sbdelay (usec)	7.66366E-01	+/-	3.1E-03		
Phase delay (usec)	3.39647472140E+02	Apriori clockrate (us/s)	-5.0299999E-07	Resid phdelay (usec)	-4.96119E-06	+/-	6.7E-07		
Delay rate (us/s)	3.20747590053E-01	Apriori rate (us/s)	3.20738929938E-01	Resid rate (us/s)	8.66011E-06	+/-	2.7E-09		
Total phase (deg)	-270.0	Apriori accel (us/s/s)	-4.71613668760E-07	Resid phase (deg)	-153.8	+/-	20.7		

ph/seg (deg)	52.1	Theor.	49.5	Amplitude	0.180 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	73.2	Search (2048X32)	0.136	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	26.7	Inc. seg. avg.	0.189	Bits/sample:	2x2	Sample rate(MSamp/s):	64	ion window (TEC)	0.00	0.00		
amp/frq (%)	36.2	Inc. frq. avg.	0.169	Data rate(Mb/s):	1024	nlags:	128	t_cohere	infinite			



Fringe quality 0

SNR 6.1

Int time 419.827

Amp 0.179

Phase 298.7

PFD 1.2e-01

Delays (us)

SBD -0.210477

MBD 0.011463

Fringe rate (Hz) -0.576774

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

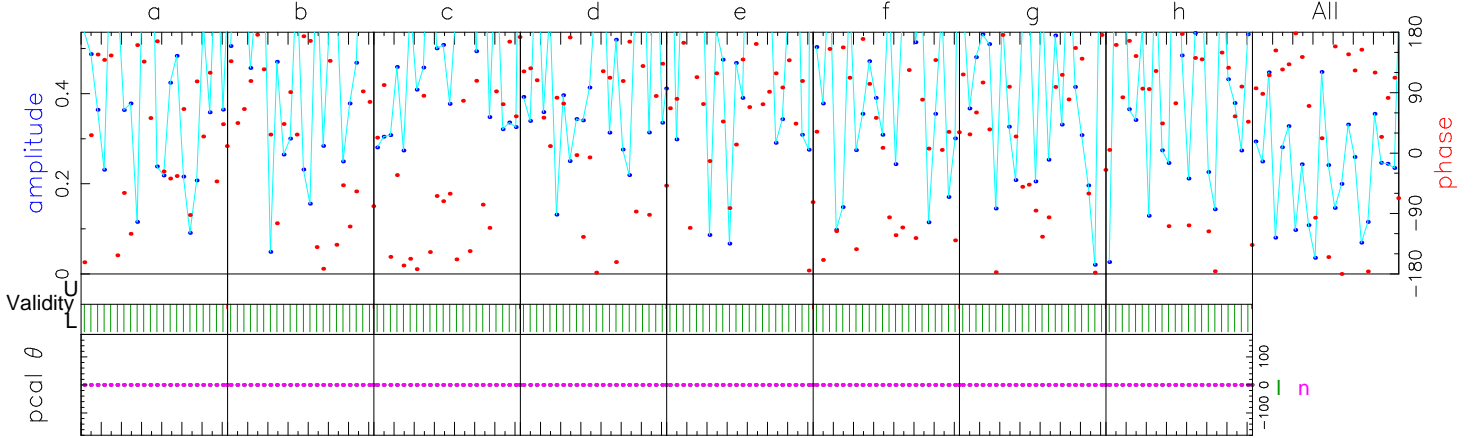
2019:227:231929

2019:228:110832

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
80.4	116.5	-157.8	118.0	97.0	136.4	115.5	121.9	Phase	118.7
0.1	0.2	0.1	0.2	0.4	0.1	0.1	0.3	Ampl.	0.2
178.2	64.7	240.3	101.5	101.8	11.5	41.1	103.3	Sbd box	102.1
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
l W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.39440190281E+02	Apriori delay (usec)	3.39647477101E+02	Resid mbdelay (usec)	1.14632E-02	+/-	3.6E-04		
Sband delay (usec)	3.39437000101E+02	Apriori clock (usec)	-2.4305950E+01	Resid sbdelay (usec)	-2.10477E-01	+/-	2.8E-03		
Phase delay (usec)	3.39647480927E+02	Apriori clockrate (us/s)	-5.0299999E-07	Resid phdelay (usec)	3.82621E-06	+/-	6.0E-07		
Delay rate (us/s)	3.20732234162E-01	Apriori rate (us/s)	3.20738929938E-01	Resid rate (us/s)	-6.69578E-06	+/-	2.5E-09		
Total phase (deg)	182.5	Apriori accel (us/s/s)	-4.71613668760E-07	Resid phase (deg)	298.7	+/-	18.8		

ph/seg (deg) 57.8 Theor. 45.0 Amplitude 0.179 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

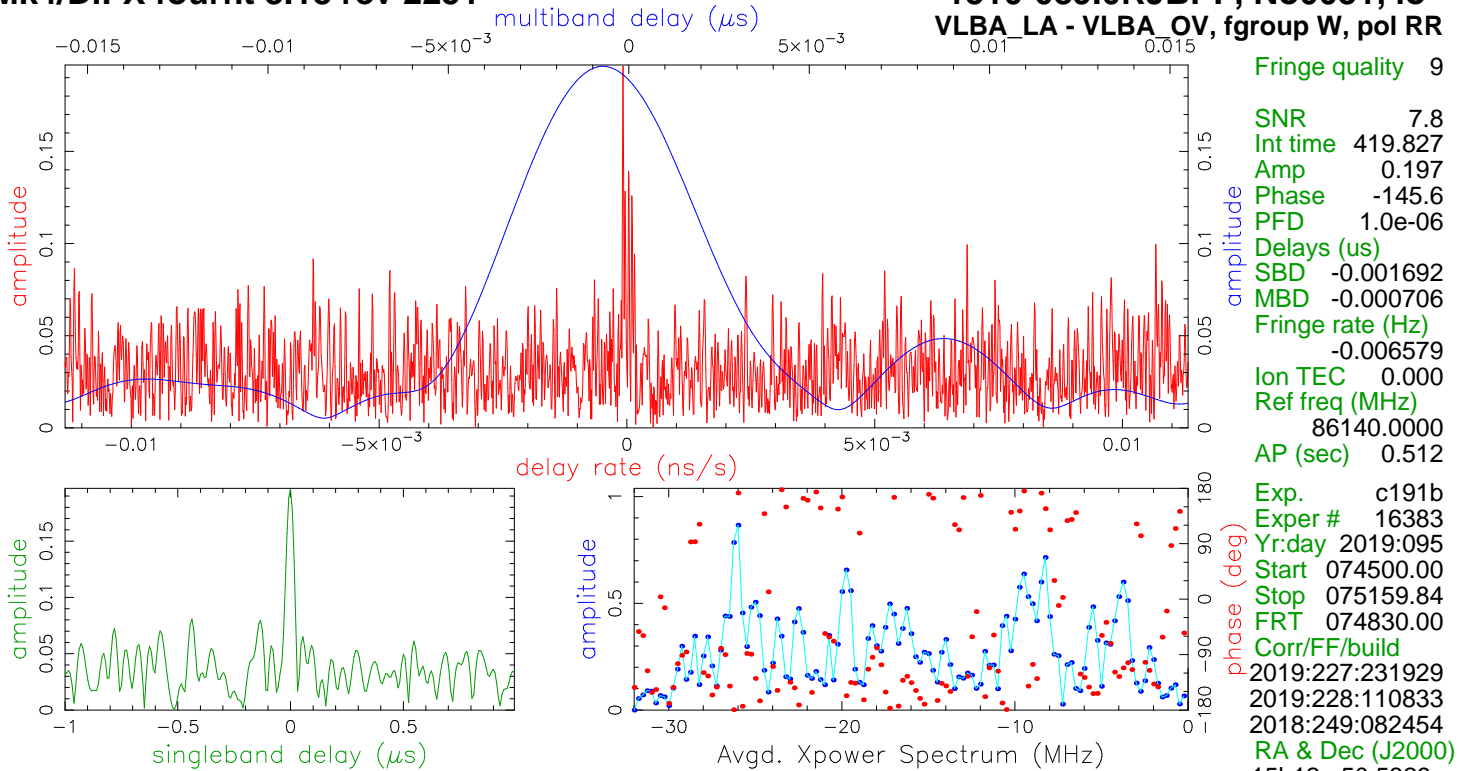
amp/seg (%) 90.3 78.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 39.3 26.5 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 59.1 46.3 Inc. frq. avg. 0.181 Data rate (Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

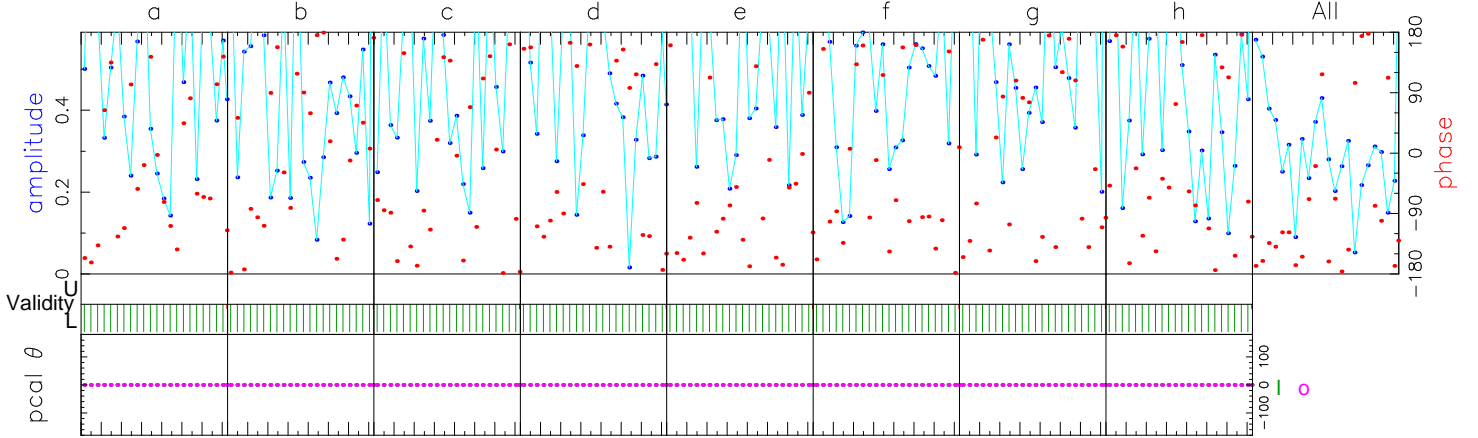
l: az 147.0 el 39.1 pa -25.9 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) -1861.934 -709.184 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/In..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/In.W.98.0RJBPf



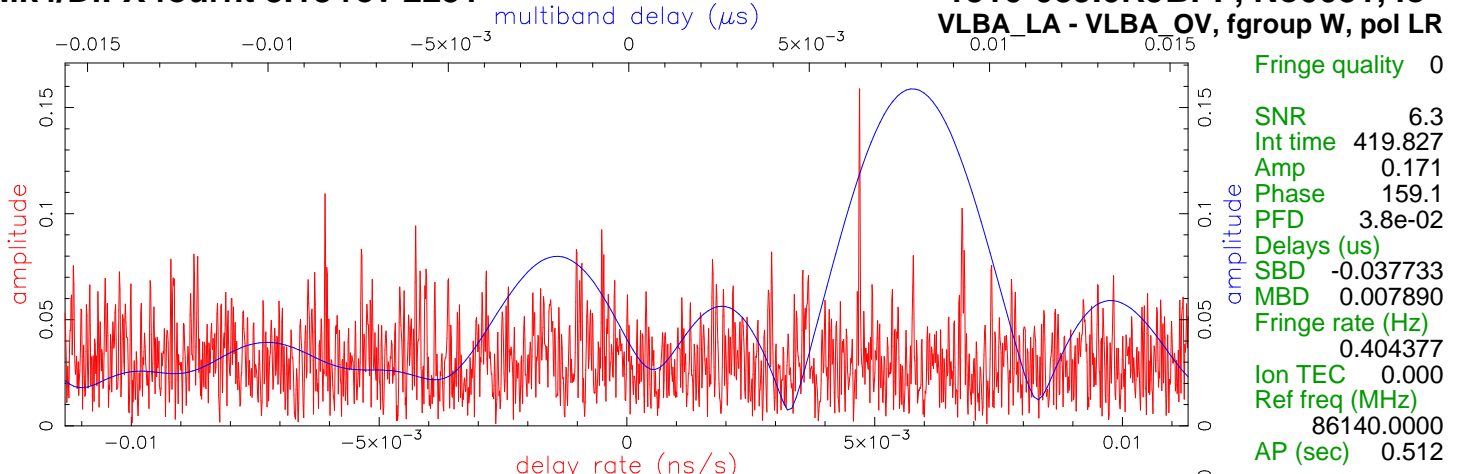
Fringe quality 9
SNR 7.8
Int time 419.827
Amp 0.197
Phase -145.6
PFD 1.0e-06
Delays (us)
SBD -0.001692
MBD -0.000706
Fringe rate (Hz)
-0.006579
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110833
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-130.4	-159.3	-144.2	-154.4	-138.5	-148.7	-154.4	-127.5	Phase	-145.6	
	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.2	Ampl.	0.2	
	99.4	87.6	23.1	129.2	129.1	129.8	128.6	180.3	Sbd box	128.8	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used		
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
o	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	2.11308714395E+03		Apriori delay (usec)		2.11308785039E+03		Resid mbdelay (usec)		-7.06442E-04	+/- 2.8E-04	
Sband delay (usec)	2.11308615839E+03		Apriori clock (usec)		-1.6158321E+01		Resid sbdelay (usec)		-1.69200E-03	+/- 2.2E-03	
Phase delay (usec)	2.11308784570E+03		Apriori clockrate (us/s)		-3.5700002E-07		Resid phdelay (usec)		-4.69506E-06	+/- 4.7E-07	
Delay rate (us/s)	-2.11490428705E-01		Apriori rate (us/s)		-2.11490352327E-01		Resid rate (us/s)		-7.63783E-08	+/- 2.0E-09	
Total phase (deg)	10.2		Apriori accel (us/s/s)		-1.09560844470E-05		Resid phase (deg)		-145.6	+/- 14.7	
	RMS	Theor.	Amplitude	0.197 +/- 0.025		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	57.9	35.2	Search (2048X32)	0.193		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	82.5	61.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	12.7	20.8	Inc. seg. avg.	0.251		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	42.2	36.3	Inc. frq. avg.	0.187		Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

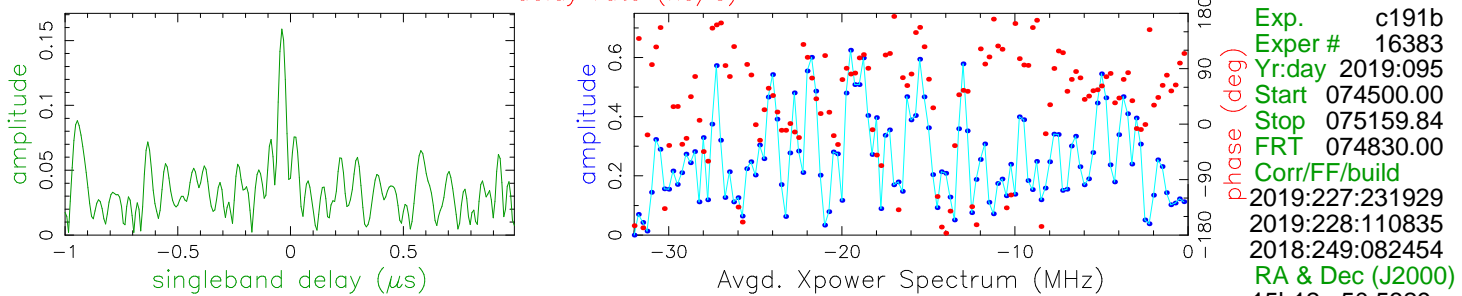
l: az 147.0 el 39.1 pa -25.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1209.411 -37.090 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lo.W.100.0RJBPf



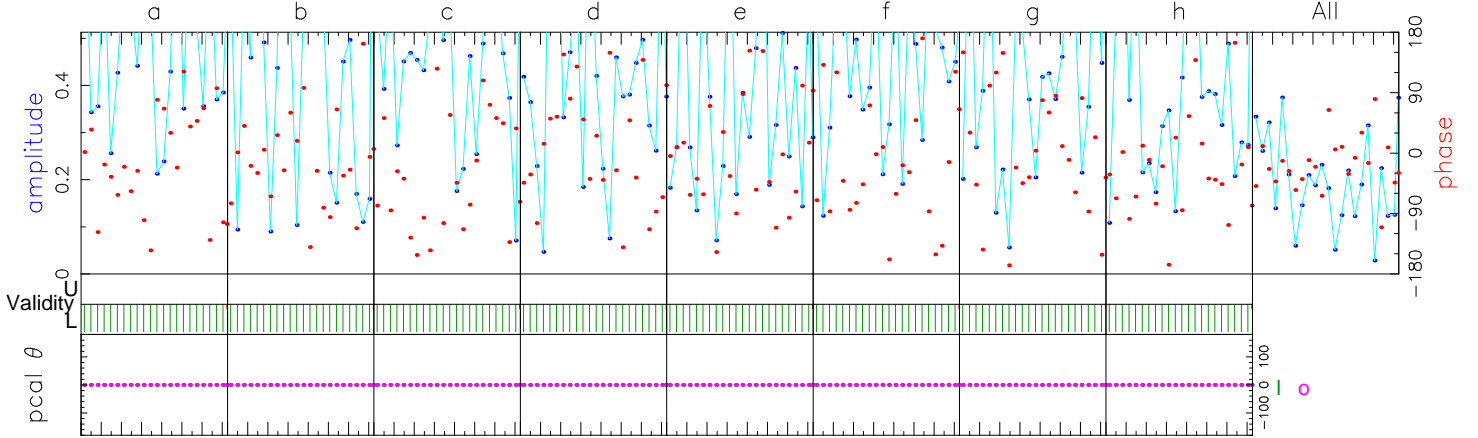
Fringe quality 0

SNR 6.3
Int time 419.827
Amp 0.171
Phase 159.1
PFD 3.8e-02
Delays (us)
SBD -0.037733
MBD 0.007890
Fringe rate (Hz) 0.404377
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110835
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



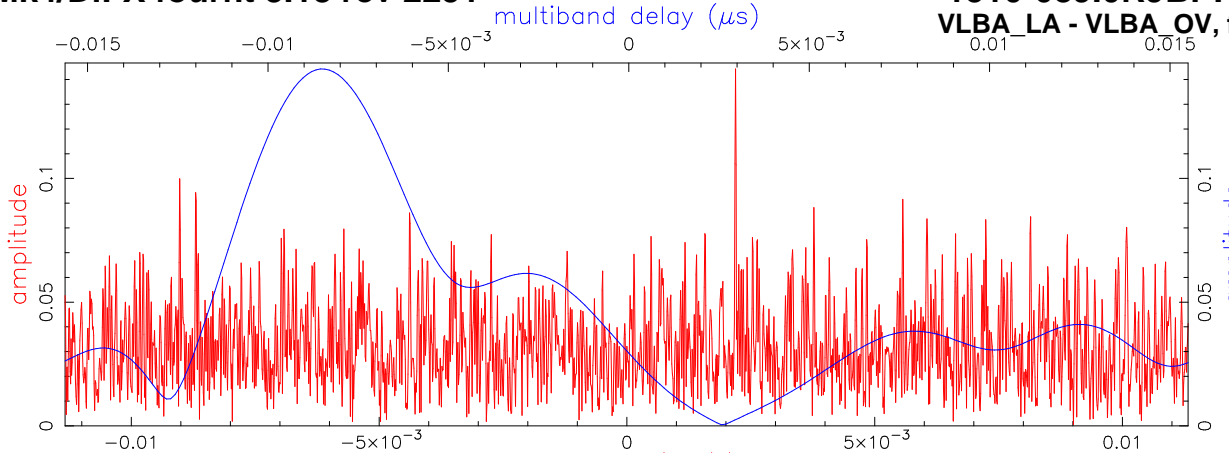
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All		
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820				
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000				
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000				
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
l	1000	1000	1000	1000	1000	1000	1000	1000				
o	1000	1000	1000	1000	1000	1000	1000	1000				
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL				
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR				
Group delay (usec)(sbd)	2.11306449047E+03		Apriori delay (usec)		2.11308785039E+03		Resid mbdelay (usec)		7.89008E-03	+/- 3.4E-04		
Sband delay (usec)	2.11305011689E+03		Apriori clock (usec)		-1.6158321E+01		Resid sbdelay (usec)		-3.77335E-02	+/- 2.7E-03		
Phase delay (usec)	2.11308784972E+03		Apriori clockrate (us/s)		-3.5700002E-07		Resid phdelay (usec)		-6.73845E-07	+/- 5.9E-07		
Delay rate (us/s)	-2.11485657908E-01		Apriori rate (us/s)		-2.11490352327E-01		Resid rate (us/s)		4.69442E-06	+/- 2.4E-09		
Total phase (deg)	314.9		Apriori accel (us/s/s)		-1.09560844470E-05		Resid phase (deg)		159.1	+/- 18.2		
RMS	41.0	43.6	Search (2048X32)		0.000		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	61.1	76.0	Interp.		0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	27.4	25.7	Inc. seg. avg.		0.160		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016 0.016	
ph/frq (deg)	36.1	44.8	Inc. frq. avg.		0.166		Sample rate(MSamp/s): 64		ion window (ns/s)	-0.011 0.011		
amp/frq (%)							Data rate(Mb/s): 1024		nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 147.0 el 39.1 pa -25.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1209.411 -37.090 simultaneous interpolator

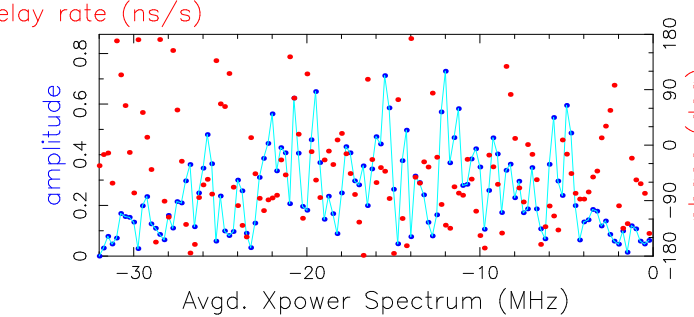
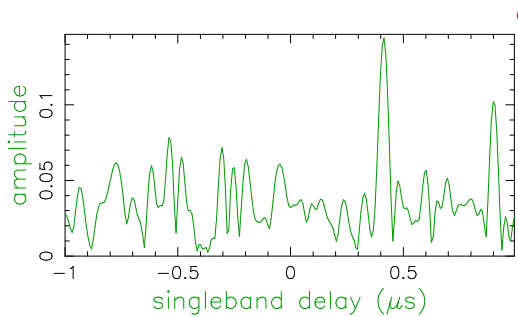
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lo.W.116.0RJBPf



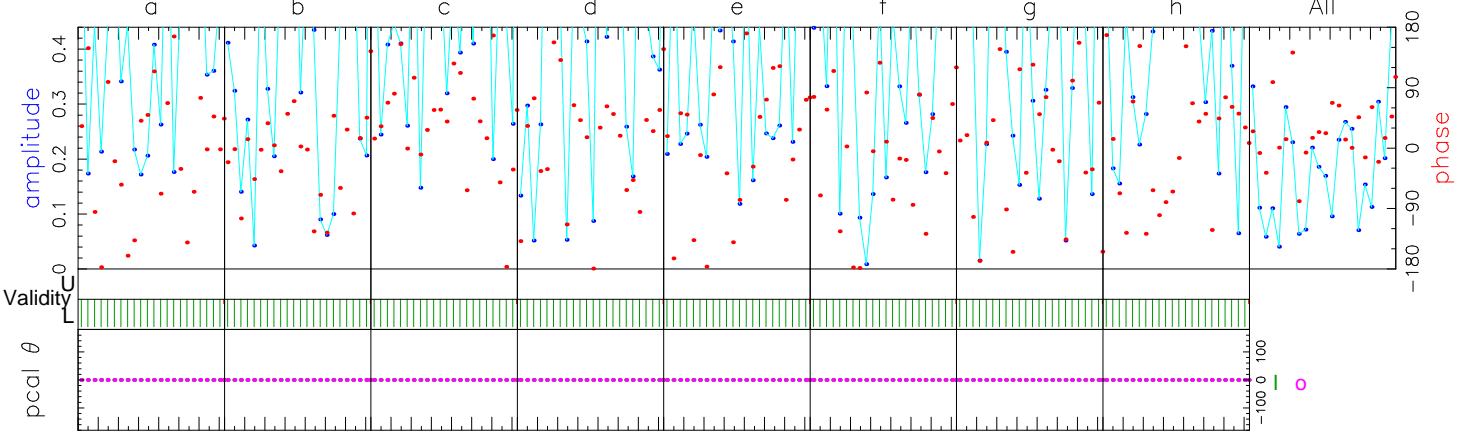
Fringe quality 0

SNR 5.7
Int time 419.827
Amp 0.147
Phase -154.6
PFD 7.3e-01
Delays (us)
SBD 0.412885
MBD -0.008501
Fringe rate (Hz)
0.188998
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110837
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



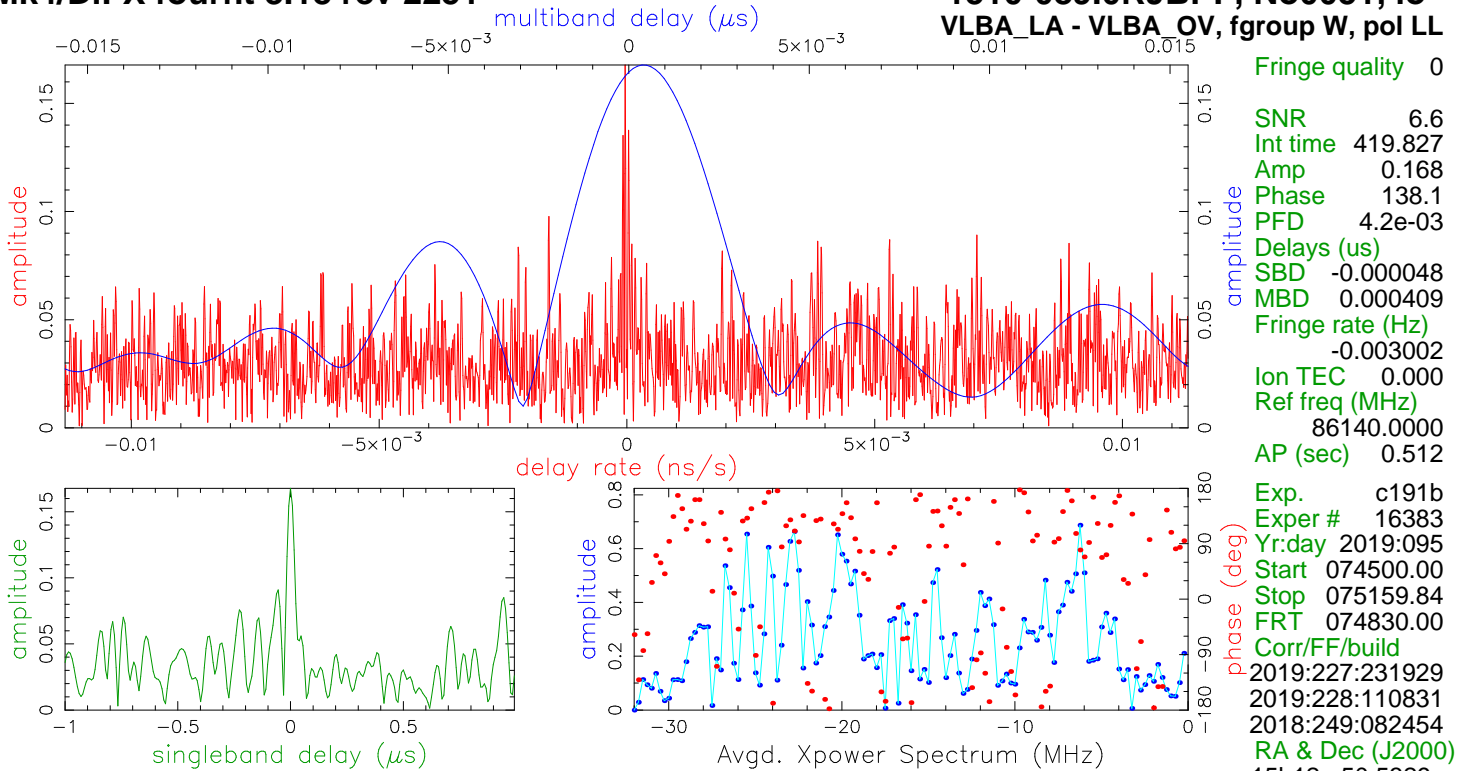
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



Validity	[Green bar]								Validity	[Green bar]
pcal θ	[Purple line]								pcal θ	[Purple line]
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	17.4	-0.6	48.5	26.7	72.4	21.1	28.1	-7.7	Phase	25.4
	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	97.6	180.7	182.7	189.0	103.2	199.2	243.8	105.8	Sbd box	181.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.11348559967E+03		Apriori delay (usec)		2.11308785039E+03		Resid mbdelay (usec)		-8.50072E-03	+/- 3.8E-04
Sband delay (usec)	2.11350073589E+03		Apriori clock (usec)		-1.6158321E+01		Resid sbdelay (usec)		4.12885E-01	+/- 3.0E-03
Phase delay (usec)	2.11308785121E+03		Apriori clockrate (us/s)		-3.5700002E-07		Resid phdelay (usec)		8.18620E-07	+/- 6.5E-07
Delay rate (us/s)	-2.11488158245E-01		Apriori rate (us/s)		-2.11490352327E-01		Resid rate (us/s)		2.19408E-06	+/- 2.7E-09
Total phase (deg)	-358.8		Apriori accel (us/s/s)		-1.09560844470E-05		Resid phase (deg)		-154.6	+/- 20.0

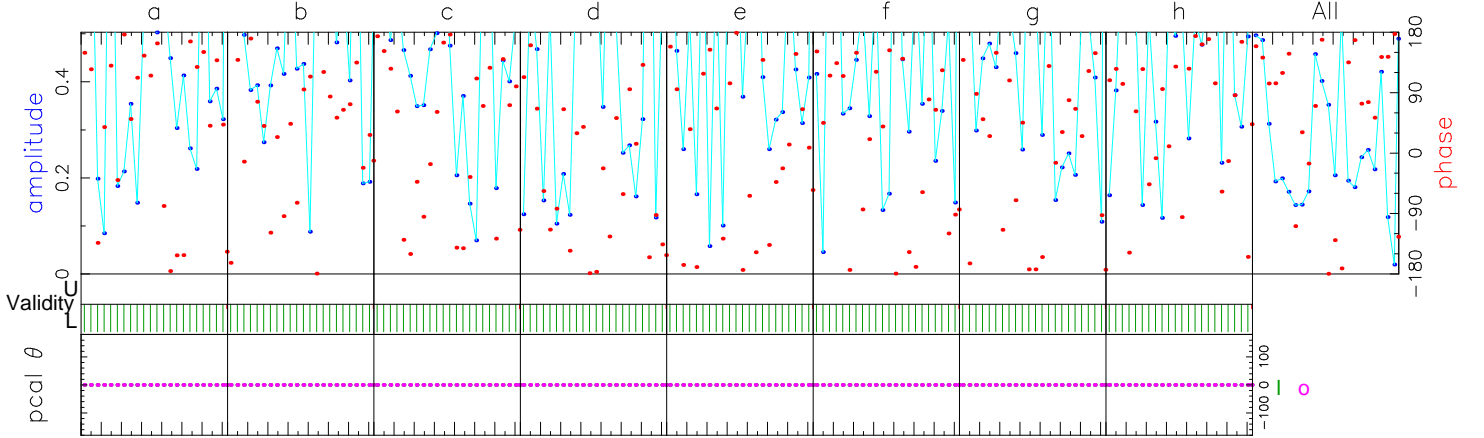
RMS Theor. Amplitude 0.147 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 46.4 48.0 Search (2048X32) 0.141 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 80.5 83.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 27.7 28.3 Inc. seg. avg. 0.140 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 50.6 49.4 Inc. frq. avg. 0.139 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 147.0 el 39.1 pa -25.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1209.411 -37.090 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lo.W.132.0RJBPf



Fringe quality 0
 SNR 6.6
 Int time 419.827
 Amp 0.168
 Phase 138.1
 PFD 4.2e-03
 Delays (us)
 SBD -0.000048
 MBD 0.000409
 Fringe rate (Hz)
 -0.003002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110831
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

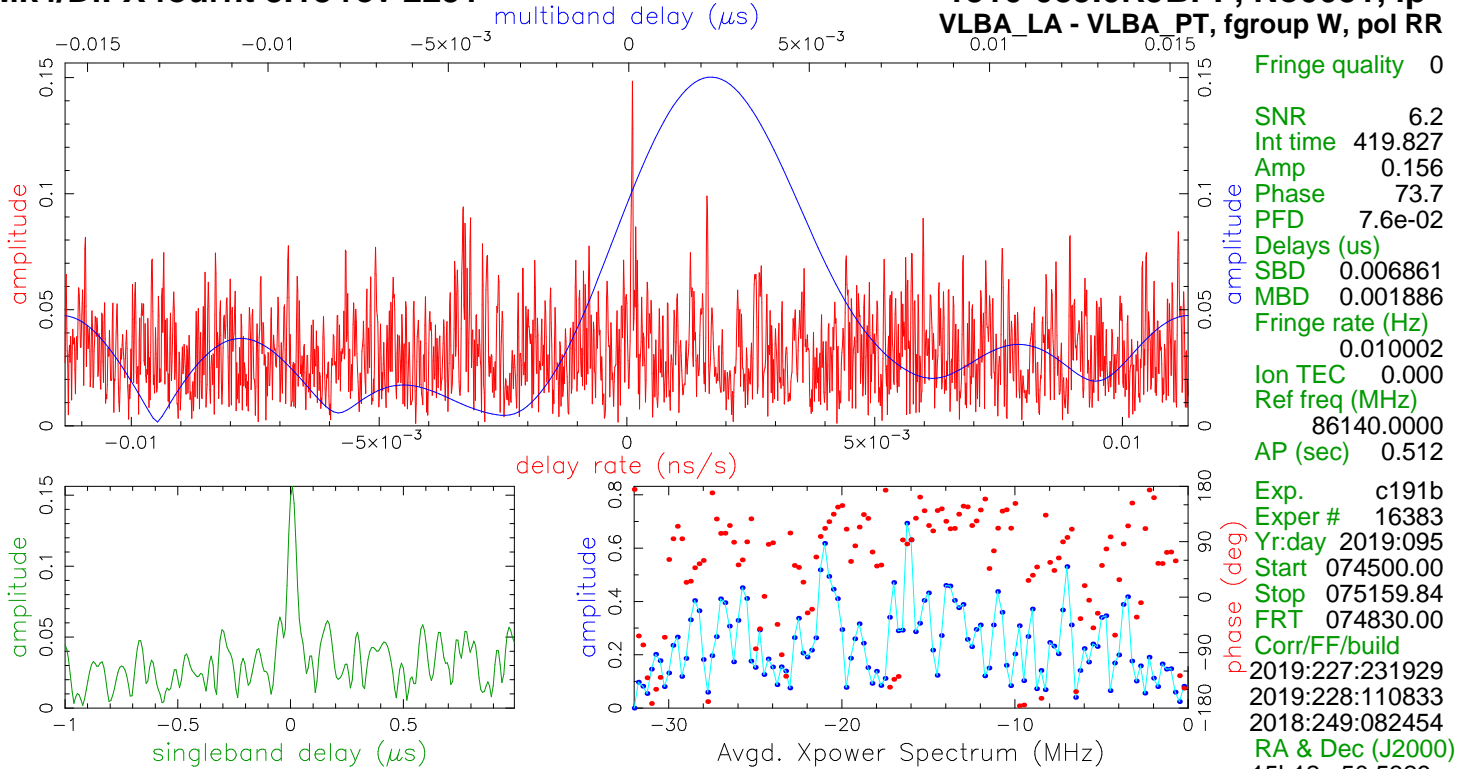
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



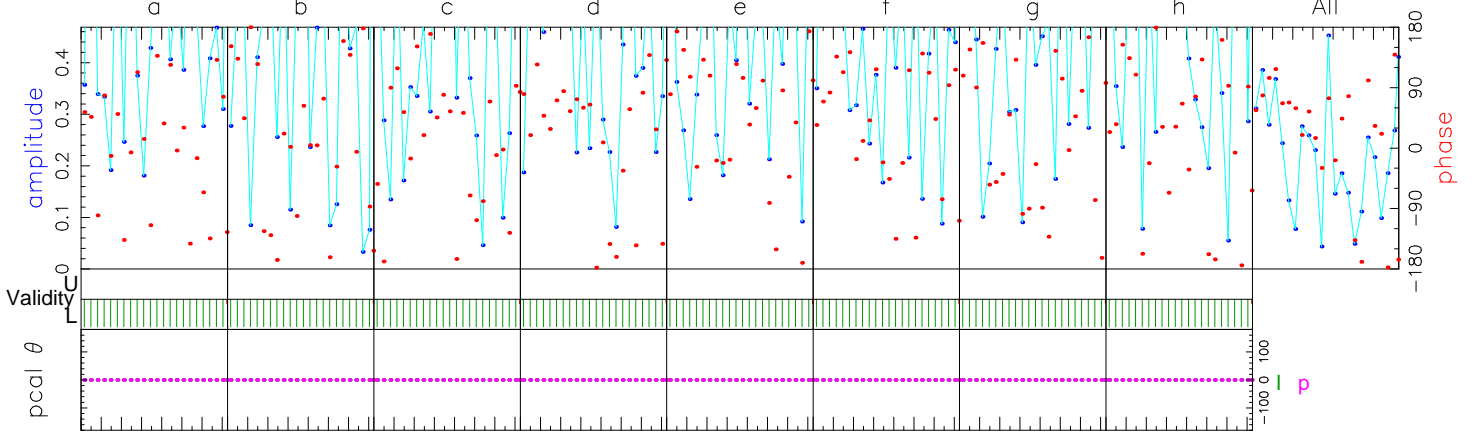
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	146.7	100.2	140.5	-169.3	131.1	149.9	138.1	115.9	138.1	138.1
o	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.2
o	129.5	168.4	228.1	26.6	179.4	48.1	139.0	133.9	Sbd box	129.0
o	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
o	Group delay (usec)(sbd)	2.11308825974E+03	Apriori delay (usec)	2.11308785039E+03	Resid mbdelay (usec)	4.09346E-04	+/-	3.3E-04		
o	Sband delay (usec)	2.11308780239E+03	Apriori clock (usec)	-1.6158321E+01	Resid sbdelay (usec)	-4.80000E-05	+/-	2.6E-03		
o	Phase delay (usec)	2.11308785484E+03	Apriori clockrate (us/s)	-3.5700002E-07	Resid phdelay (usec)	4.45180E-06	+/-	5.6E-07		
o	Delay rate (us/s)	-2.11490387174E-01	Apriori rate (us/s)	-2.11490352327E-01	Resid rate (us/s)	-3.48476E-08	+/-	2.3E-09		
o	Total phase (deg)	293.8	Apriori accel (us/s/s)	-1.09560844470E-05	Resid phase (deg)	138.1	+/-	17.2		

ph/seg (deg) 63.3 41.3 Search (2048X32) 0.163 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 103.2 72.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.8 24.4 Inc. seg. avg. 0.215 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 35.7 42.5 Inc. frq. avg. 0.166 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Ion TEC 0.000 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 147.0 el 39.1 pa -25.9 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 1209.411 -37.090 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lo.W.90.0RJBPf



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

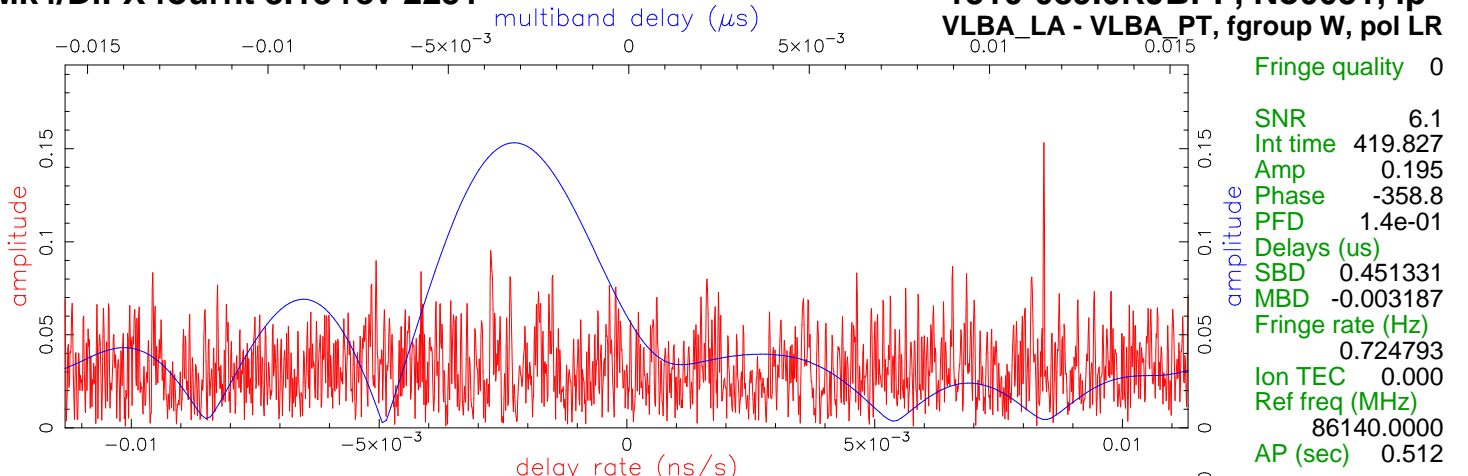


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
42.0	99.2	58.0	73.6	90.5	84.7	104.7	69.3	Phase	73.7
0.2	0.1	0.2	0.3	0.2	0.2	0.0	0.1	Ampl.	0.1
84.0	193.0	207.0	128.5	129.9	236.8	233.8	226.3	Sbd box	129.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.22267021087E+02		Apriori delay (usec)	-1.22268907256E+02		Resid mbdelay (usec)	1.88617E-03	+/-	3.5E-04
Sband delay (usec)	-1.22262046006E+02		Apriori clock (usec)	-1.0144382E+01		Resid sbdelay (usec)	6.86125E-03	+/-	2.8E-03
Phase delay (usec)	-1.22268904880E+02		Apriori clockrate (us/s)	-4.2200000E-07		Resid phdelay (usec)	2.37539E-06	+/-	6.0E-07
Delay rate (us/s)	-4.67880998720E-02		Apriori rate (us/s)	-4.67882159854E-02		Resid rate (us/s)	1.16113E-07	+/-	2.5E-09
Total phase (deg)		-167.9	Apriori accel (us/s/s)	2.18200604531E-07		Resid phase (deg)	73.7	+/-	18.5

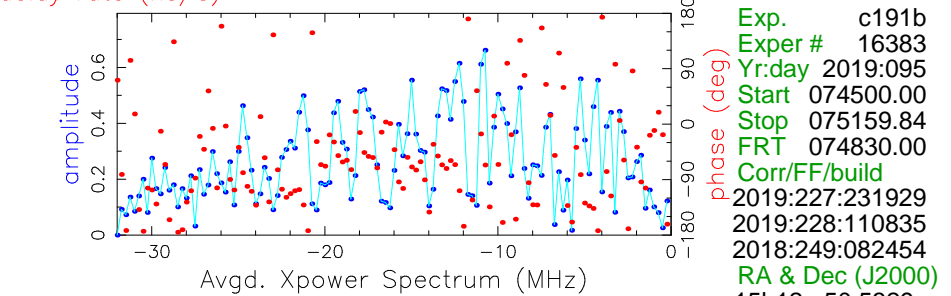
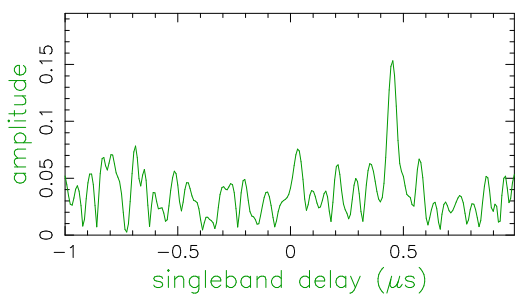
RMS Theor. Amplitude 0.156 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.7 44.4 Search (2048X32) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 79.0 77.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 23.4 26.2 Inc. seg. avg. 0.166 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.6 45.7 Inc. frq. avg. 0.141 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 147.0 el 39.1 pa -25.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 271.953 181.577 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lp.W.102.0RJBPf

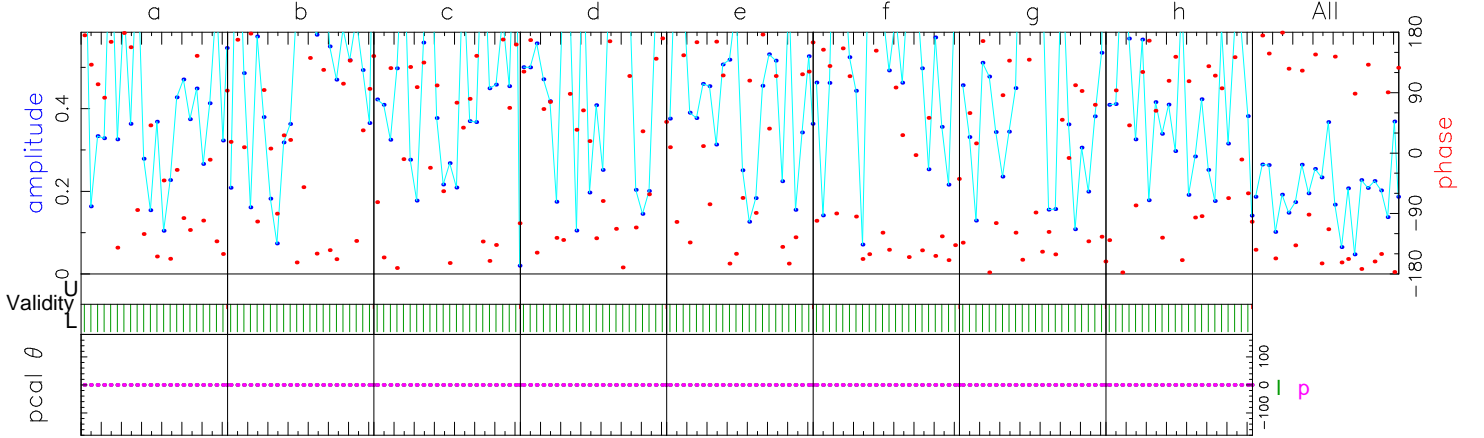


Fringe quality 0
SNR 6.1
Int time 419.827
Amp 0.195
Phase -358.8
PFD 1.4e-01
Delays (us)
SBD 0.451331
MBD -0.003187
Fringe rate (Hz) 0.724793
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512



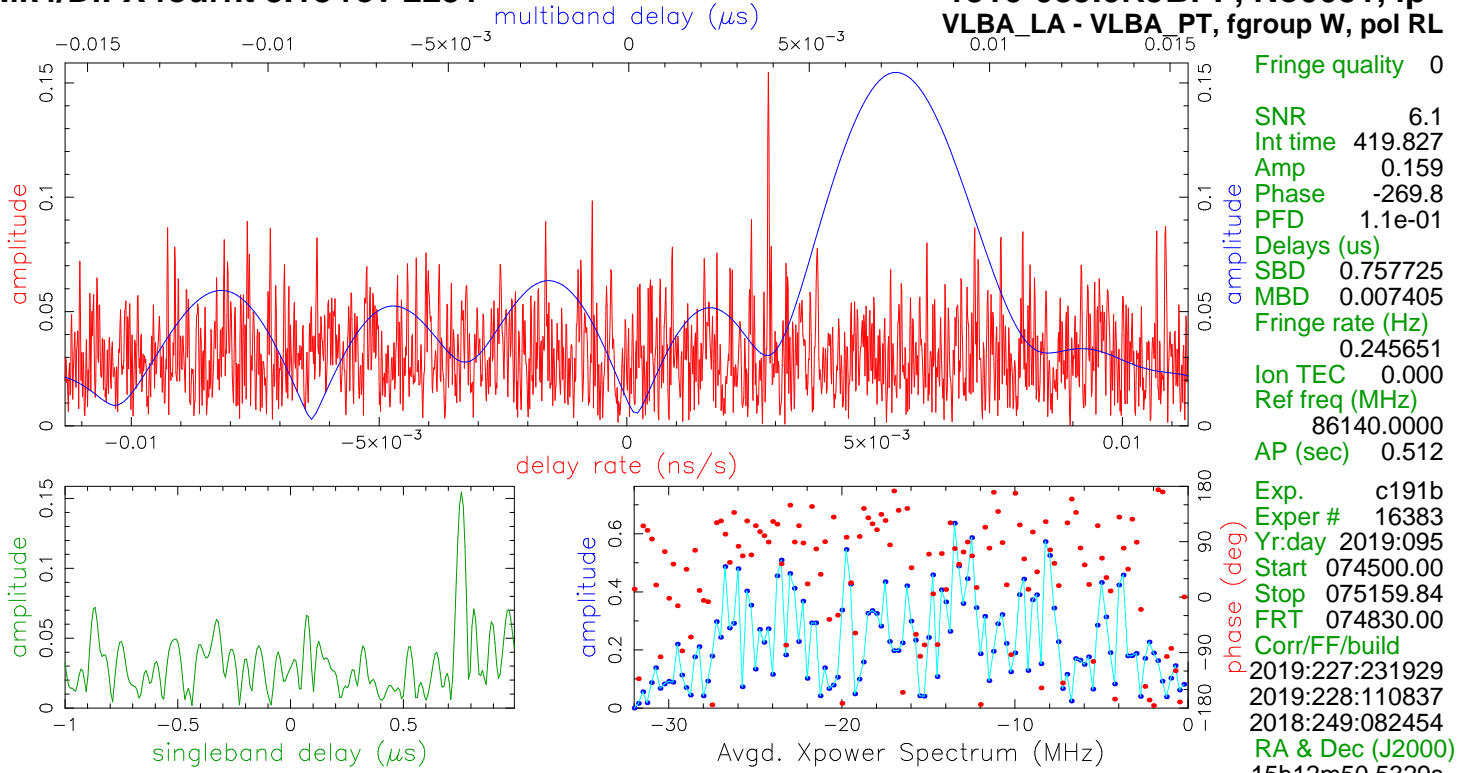
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110835
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

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

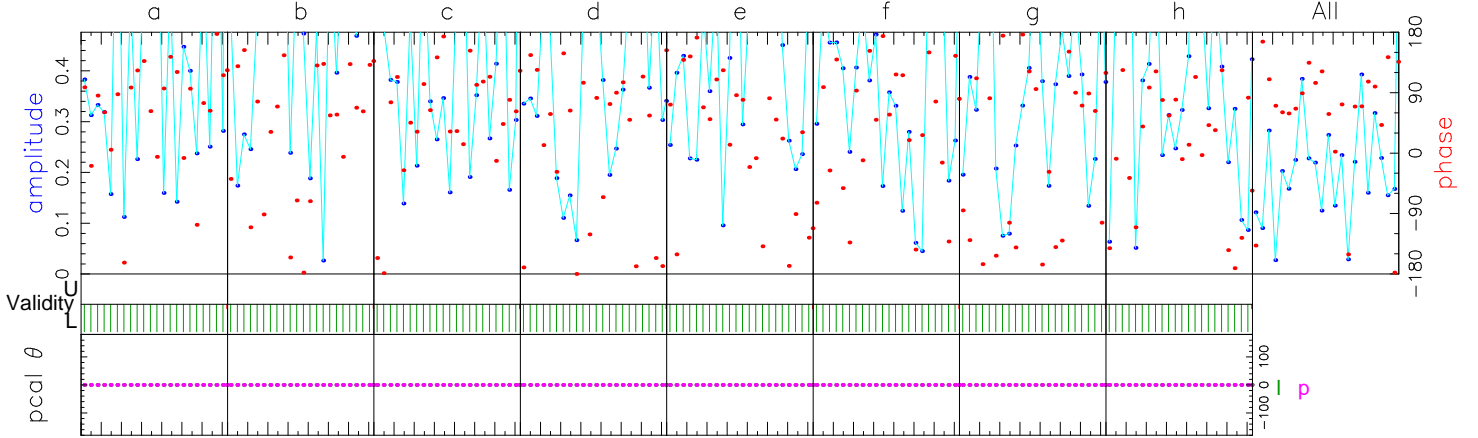


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-156.0	162.5	156.8	156.1	-179.6	-150.4	-167.3	151.1	Phase	-178.8
0.3	0.2	0.1	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
188.4	239.0	252.5	194.7	136.6	138.2	46.0	150.3	Sbd box	186.8
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
l W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
								Tracks	
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.21803344257E+02		Apriori delay (usec)	-1.22268907256E+02		Resid mbdelay (usec)	-3.18700E-03	+/-	3.6E-04
Sband delay (usec)	-1.21817575756E+02		Apriori clock (usec)	-1.0144382E+01		Resid sbdelay (usec)	4.51331E-01	+/-	2.8E-03
Phase delay (usec)	-1.22268913020E+02		Apriori clockrate (us/s)	-4.2200000E-07		Resid phdelay (usec)	-5.76431E-06	+/-	6.1E-07
Delay rate (us/s)	-4.67798018573E-02		Apriori rate (us/s)	-4.67882159854E-02		Resid rate (us/s)	8.41413E-06	+/-	2.5E-09
Total phase (deg)		-240.3	Apriori accel (us/s/s)	2.18200604531E-07		Resid phase (deg)	-358.8	+/-	18.8

ph/seg (deg) 46.3 45.1 Search (2048X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.4 78.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 25.6 26.6 Inc. seg. avg. 0.198 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 30.3 46.4 Inc. frq. avg. 0.190 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
l: az 147.0 el 39.1 pa -25.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 271.953 181.577 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lp.W.118.0RJBPf simultaneous interpolator



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

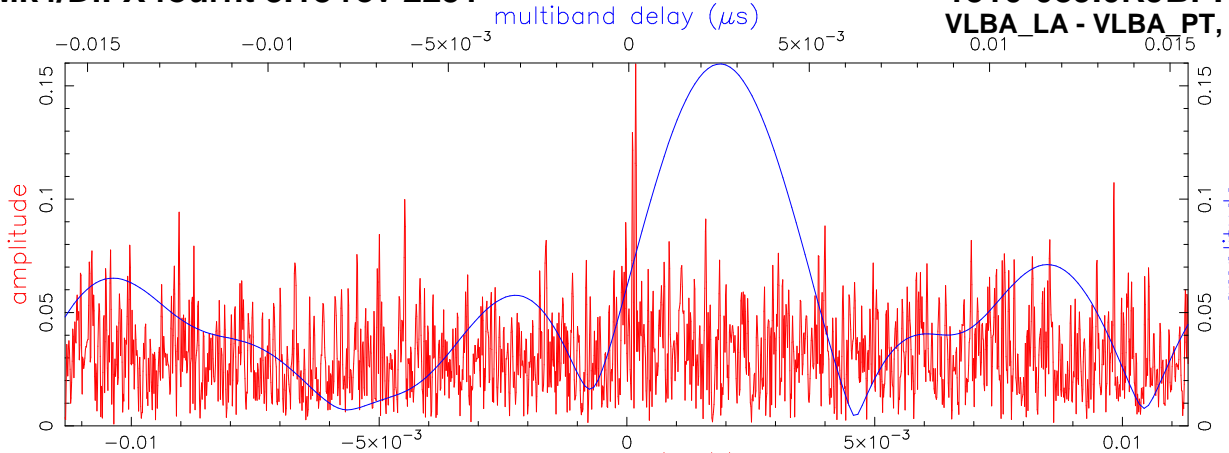


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
91.3	86.1	83.2	114.5	70.8	76.0	155.6	60.6	Phase	90.2
0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.2
225.5	117.9	227.6	185.0	18.8	155.5	177.7	223.8	Sbd box	226.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000		
l	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W07LR	Chan ids	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.21511502524E+02		Apriori delay (usec)	-1.22268907256E+02		Resid mbdelay (usec)	7.40473E-03	+/-	3.5E-04
Sband delay (usec)	-1.21511182256E+02		Apriori clock (usec)	-1.0144382E+01		Resid sbdelay (usec)	7.57725E-01	+/-	2.8E-03
Phase delay (usec)	-1.22268904346E+02		Apriori clockrate (us/s)	-4.2200000E-07		Resid phdelay (usec)	2.90945E-06	+/-	6.0E-07
Delay rate (us/s)	-4.67853642267E-02		Apriori rate (us/s)	-4.67882159854E-02		Resid rate (us/s)	2.85176E-06	+/-	2.5E-09
Total phase (deg)		-151.3	Apriori accel (us/s/s)	2.18200604531E-07		Resid phase (deg)	-269.8	+/-	18.7

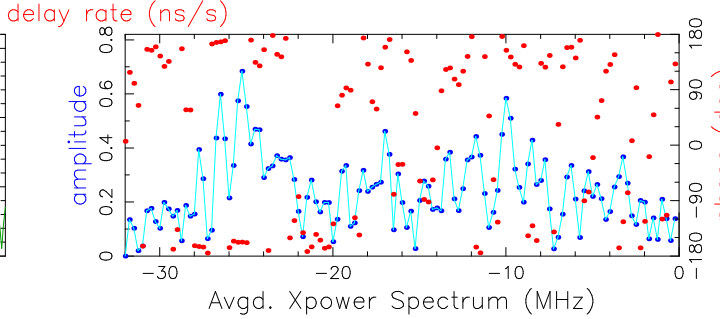
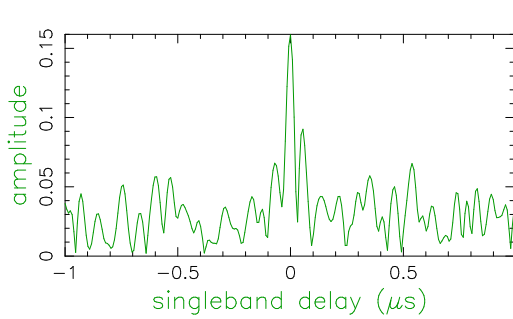
ph/seg (deg)	RMS	Theor.	Amplitude	0.159 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	55.4	44.8	Search (2048X32)	0.148	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	72.8	78.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	32.6	26.4	Inc. seg. avg.	0.159	Sample rate(MSamp/s):	64		dr window (ns/s)	-0.011	0.011
	29.3	46.2	Inc. frq. avg.	0.159	Data rate(Mb/s):	1024	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 147.0 el 39.1 pa -25.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 271.953 181.577 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lp.W.134.0RJBPf

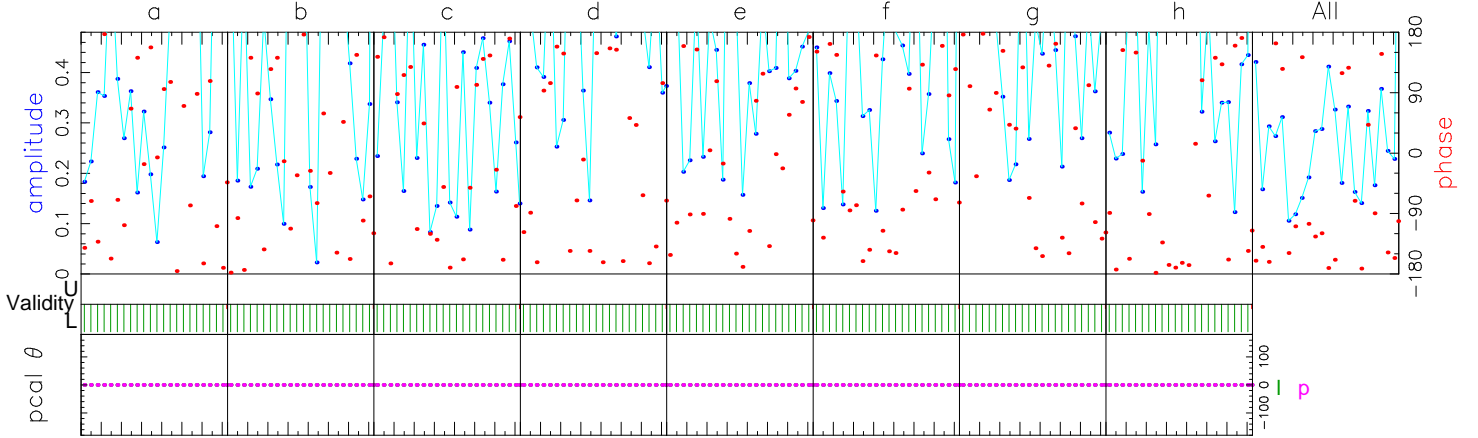


Fringe quality 0
 SNR 6.3
 Int time 419.827
 Amp 0.160
 Phase -166.7
 PFD 3.0e-02
 Delays (us)
 SBD -0.001377
 MBD 0.002515
 Fringe rate (Hz)
 0.015140
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110830
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



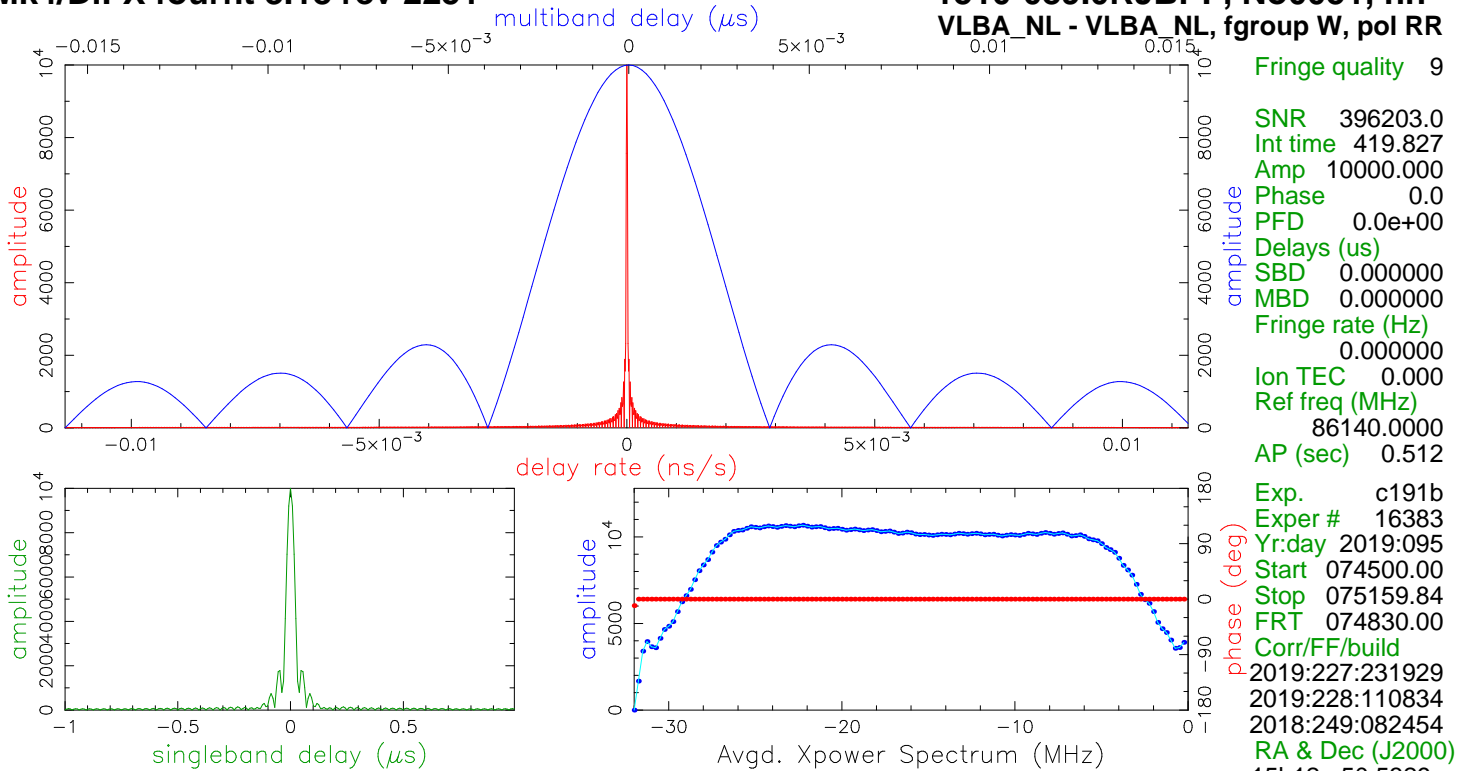
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-170.4	-148.1	165.3	-170.3	-133.8	-136.8	156.5	-161.2	Phase	-166.7
	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.3	Ampl.	0.2
	136.7	44.2	126.7	128.0	76.7	163.3	203.3	129.0	Sbd box	128.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
l	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Man'l PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd)	-1.22266392039E+02	Apriori delay (usec)	-1.22268907256E+02	Resid mbdelay (usec)	2.51522E-03	+/-	3.4E-04
Sband delay (usec)	-1.22270284256E+02	Apriori clock (usec)	-1.0144382E+01	Resid sbdelay (usec)	-1.37700E-03	+/-	2.7E-03
Phase delay (usec)	-1.22268912631E+02	Apriori clockrate (us/s)	-4.2200000E-07	Resid phdelay (usec)	-5.37515E-06	+/-	5.8E-07
Delay rate (us/s)	-4.67880402249E-02	Apriori rate (us/s)	-4.67882159854E-02	Resid rate (us/s)	1.75761E-07	+/-	2.4E-09
Total phase (deg)	-48.2	Apriori accel (us/s/s)	2.18200604531E-07	Resid phase (deg)	-166.7	+/-	18.1

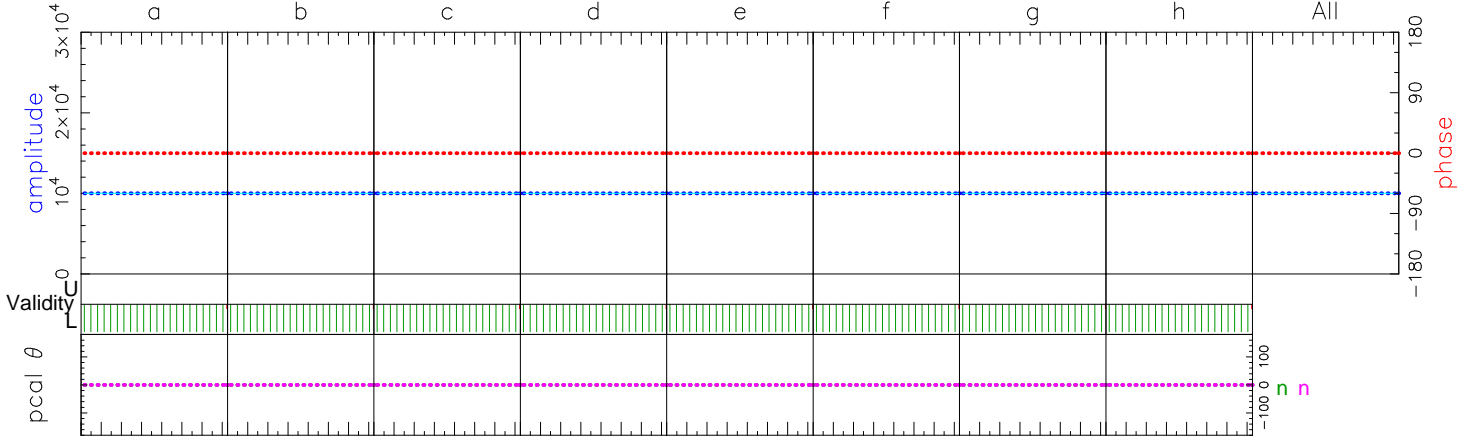
ph/seg (deg)	56.8	Theor.	43.3	Search (2048X32)	0.154	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	88.8		75.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	27.4		25.6	Inc. seg. avg.	0.198	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.1		44.6	Inc. frq. avg.	0.157	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

l: az 147.0 el 39.1 pa -25.9 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 271.953 181.577 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/lp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/lp.W.89.0RJBPf

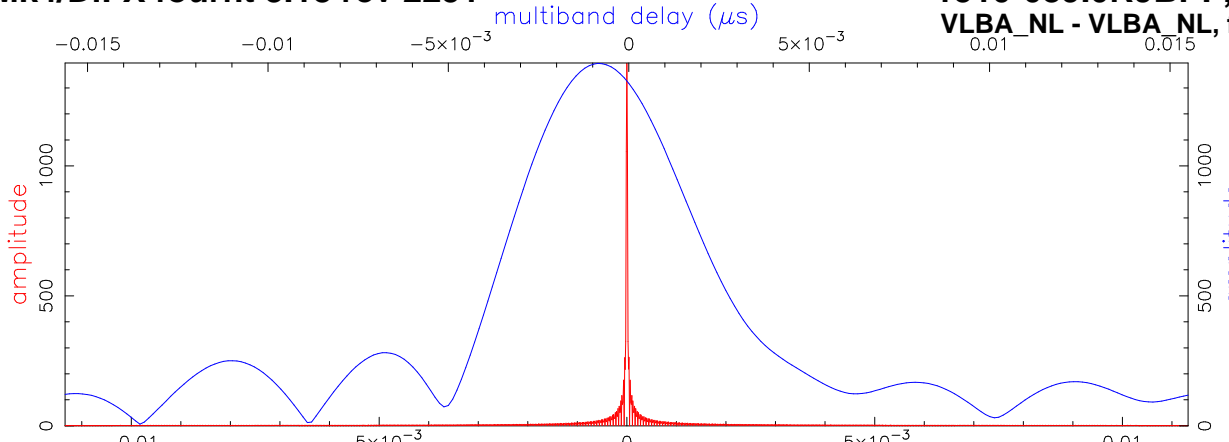


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

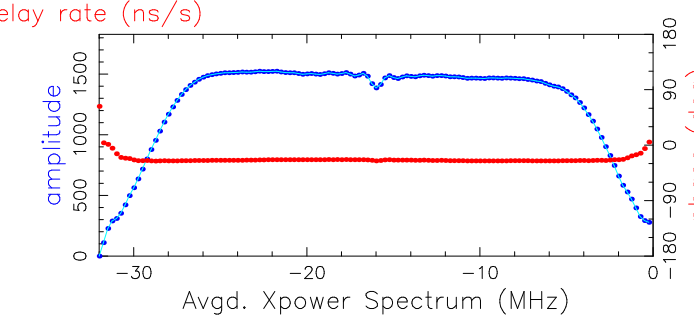
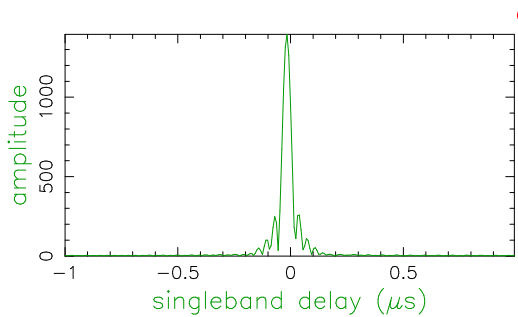


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

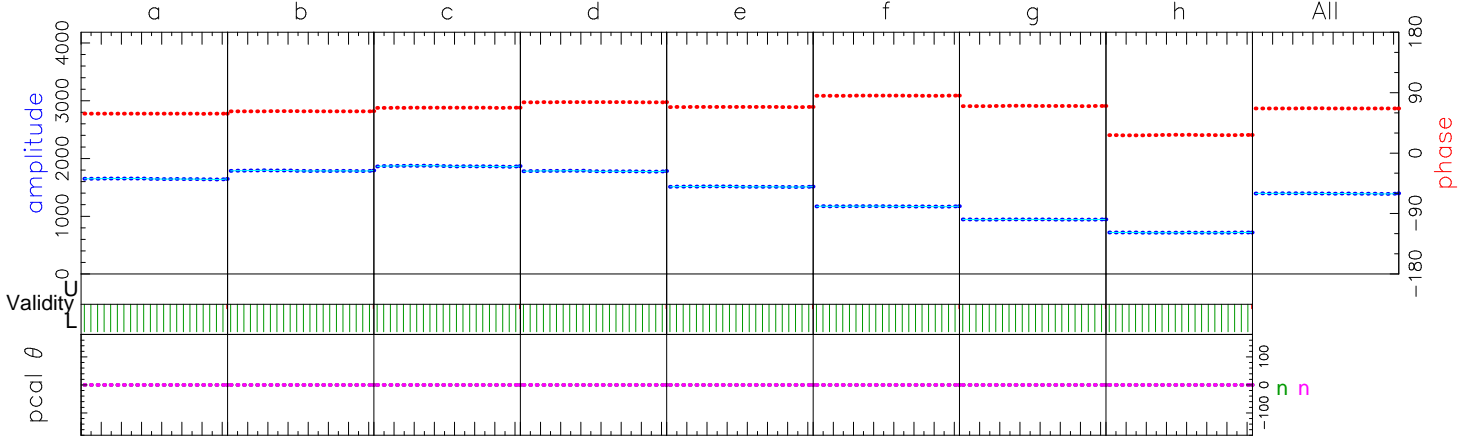
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 166.5 el 38.1 pa -9.4 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/nn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/nn.W.115.0RJBPf



Fringe quality 7
 SNR 55307.3
 Int time 419.827
 Amp 1395.933
 Phase 246.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.016594
 MBD -0.000834
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110836
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



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

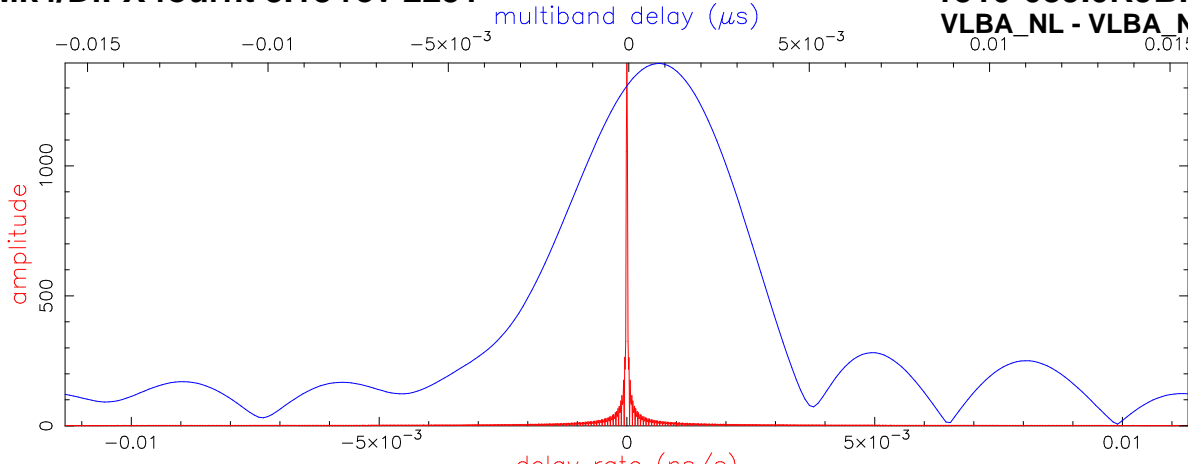


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

Group delay (usec)(sbd) -3.20835625000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -8.33563E-04 +/- 3.9E-08
 Sband delay (usec) -1.65945000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.65945E-02 +/- 3.1E-07
 Phase delay (usec) 2.14442003355E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 2.14442E-06 +/- 6.7E-11
 Delay rate (us/s) 1.41711523917E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.41712E-12 +/- 2.8E-13
 Total phase (deg) 246.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 246.5 +/- 0.0

RMS Theor. Amplitude 1395.933 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X32) 1391.607 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 18.8 0.0 Inc. seg. avg. 1394.281 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 29.1 0.0 Inc. frq. avg. 1428.728 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

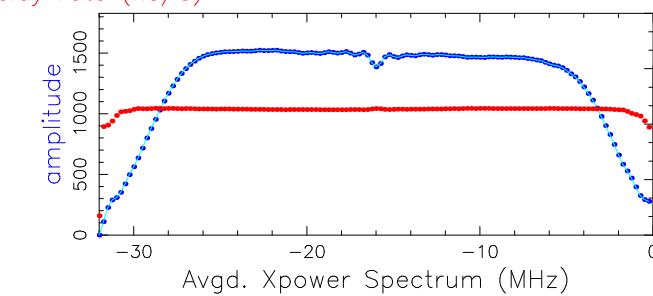
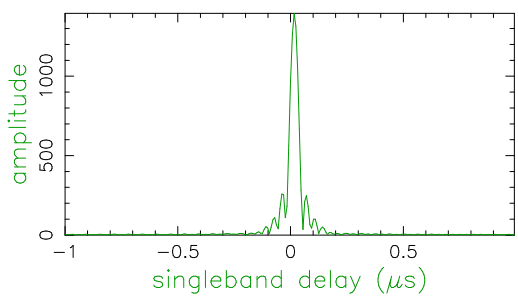
n: az 166.5 el 38.1 pa -9.4 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/nn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/nn.W.129.0RJBPf



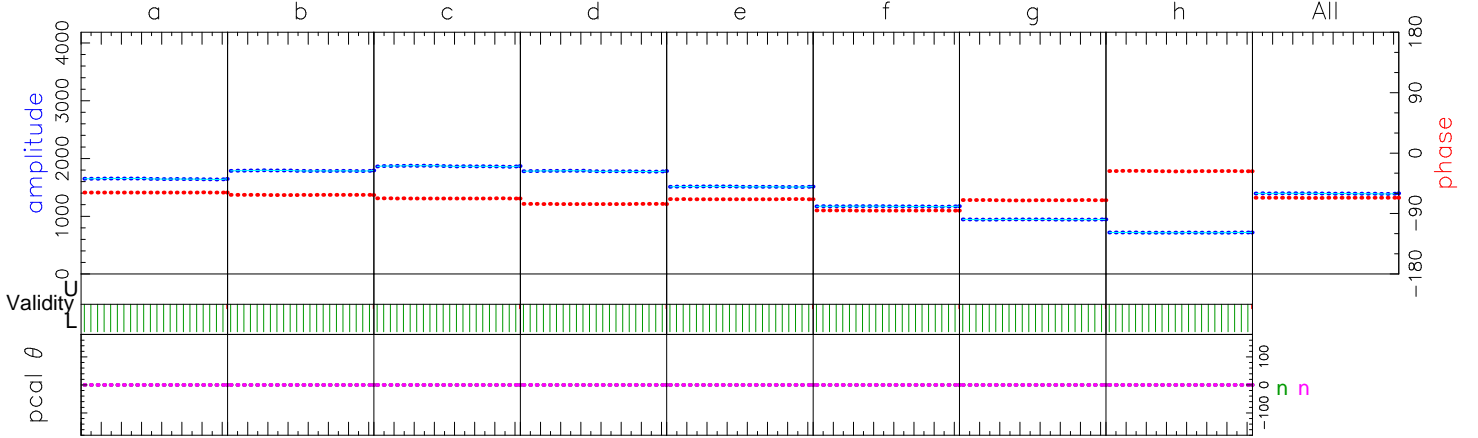
Fringe quality 7

SNR 55307.3
 Int time 419.827
 Amp 1395.933
 Phase -246.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.016594
 MBD 0.000834
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110838
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

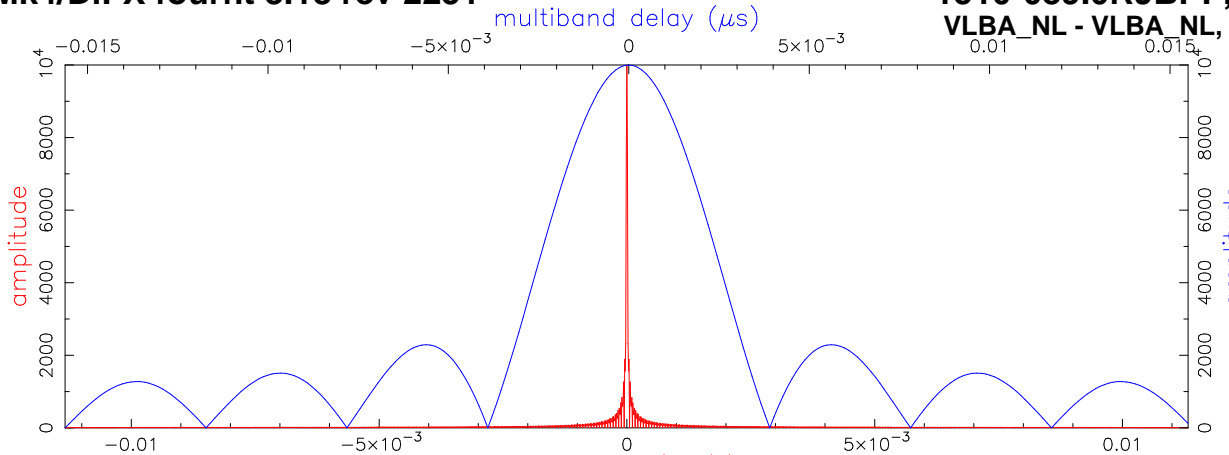


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

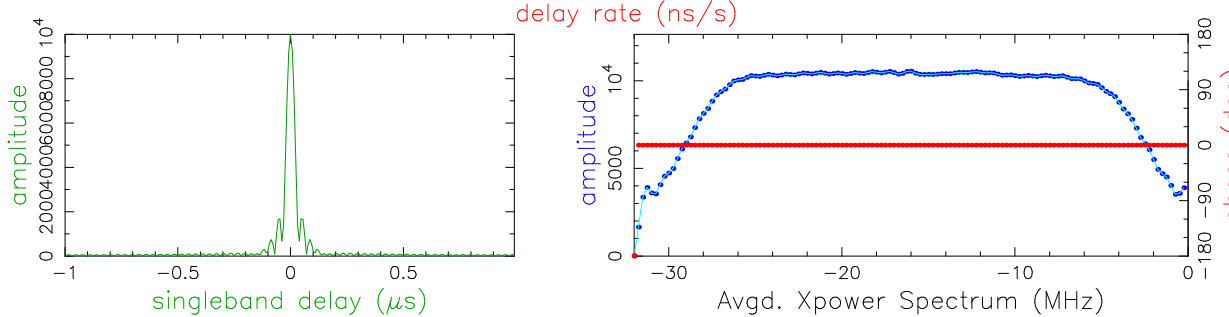


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-58.7	-62.3	-67.5	-75.8	-68.6	-85.4	-70.1	-26.8	Phase	-66.5
	1647.4	1788.4	1867.1	1781.8	1512.4	1171.8	943.7	717.3	Ampl.	1428.7
	131.1	131.0	130.9	131.2	131.0	130.9	131.7	131.6	Sbd box	131.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		3.208356250000E-02		Apriori delay (usec)	0.000000000000E+00		Resid mbdelay (usec)	8.33563E-04	+/-	3.9E-08
Sband delay (usec)		1.659450000000E-02		Apriori clock (usec)	0.000000000000E+00		Resid sbdelay (usec)	1.65945E-02	+/-	3.1E-07
Phase delay (usec)		-2.14442003362E-06		Apriori clockrate (us/s)	0.000000000000E+00		Resid phdelay (usec)	-2.14442E-06	+/-	6.7E-11
Delay rate (us/s)		-1.41711523917E-12		Apriori rate (us/s)	0.000000000000E+00		Resid rate (us/s)	-1.41712E-12	+/-	2.8E-13
Total phase (deg)			-246.5	Apriori accel (us/s/s)	0.000000000000E+00		Resid phase (deg)	-246.5	+/-	0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 1395.933 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.0 Search (2048X32) 1391.607 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 29.1 0.0 Inc. seg. avg. 1394.281 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 166.5 el 38.1 pa -9.4 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/nn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/nn.W.139.0RJBPf

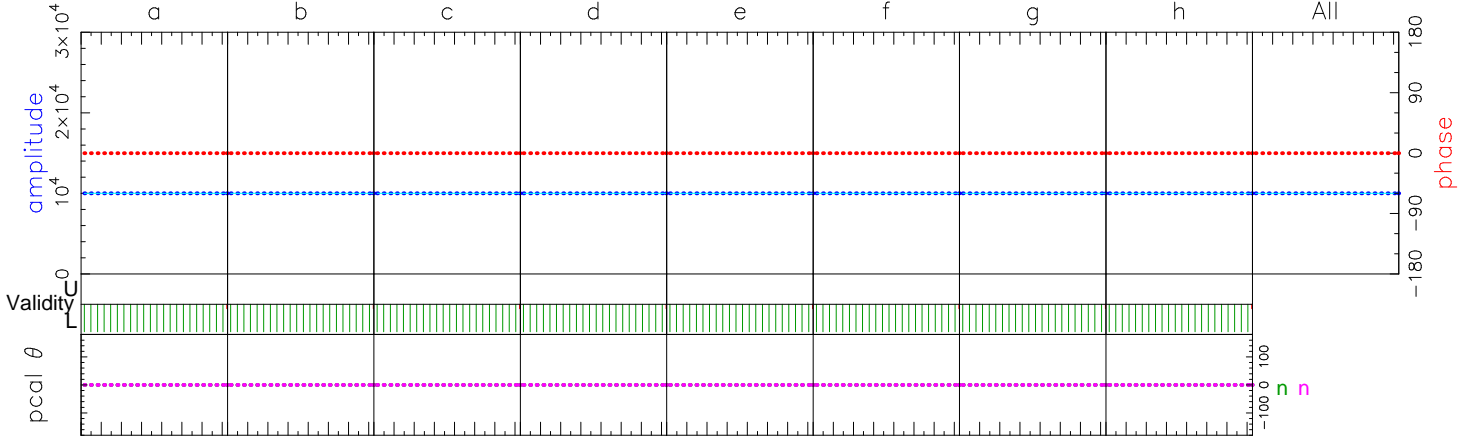


Fringe quality 9
 SNR 396203.0
 Int time 419.827
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



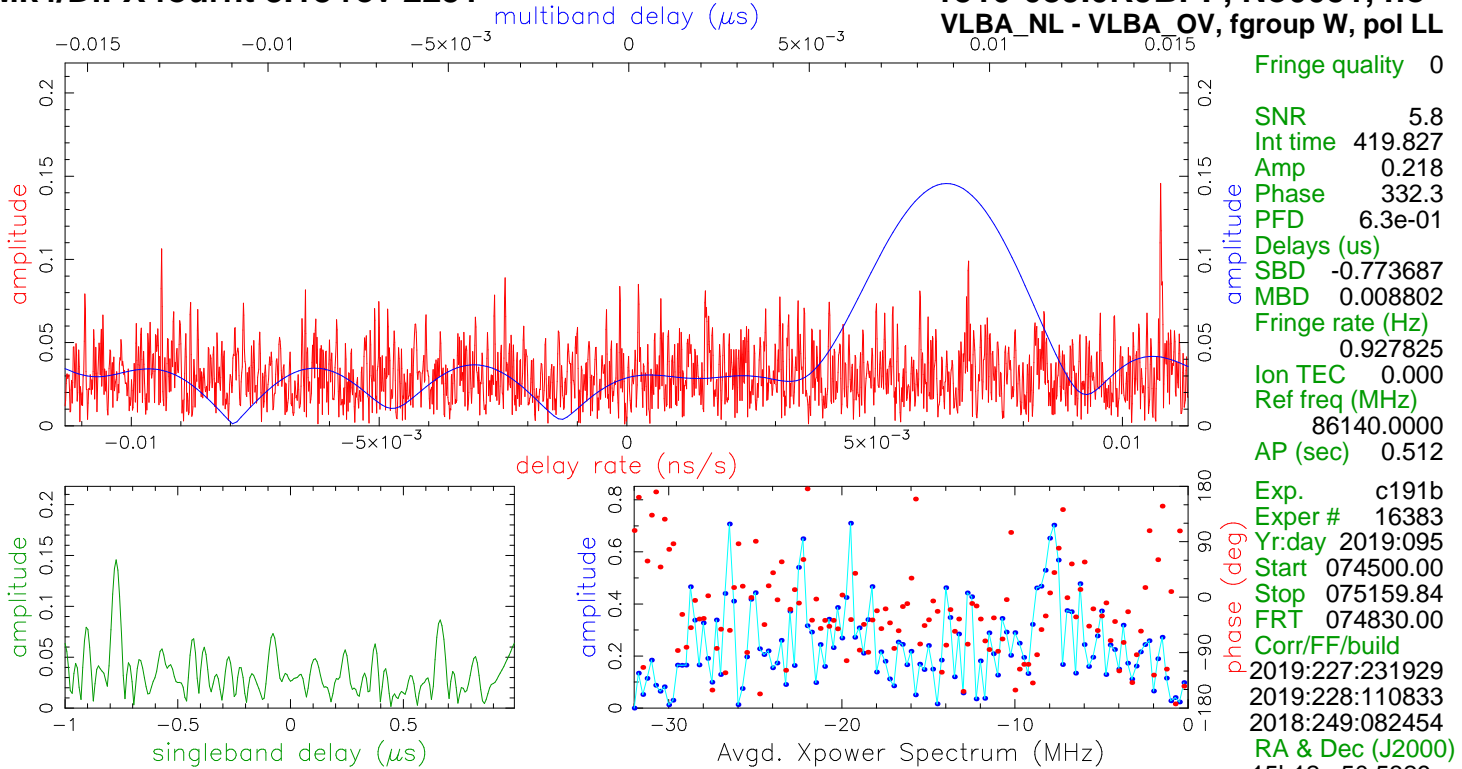
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110832
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

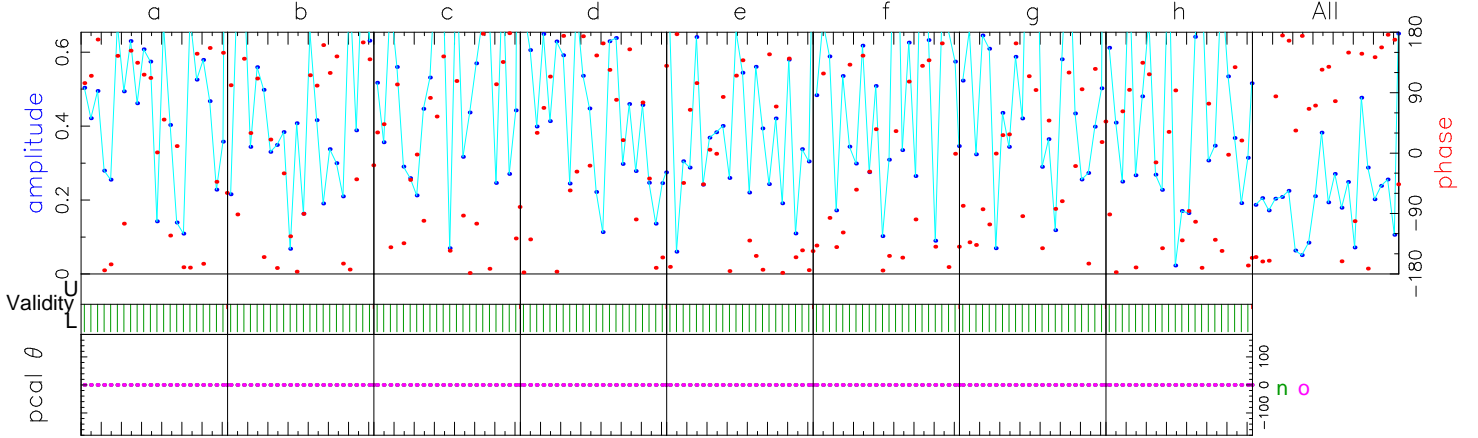


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	10000.0	10000.0
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	0.0	0.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	129.0	129.0
n	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
n	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	0.0	0.0
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	0.0	0.0
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 5.5E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 4.3E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 9.3E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 3.8E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 166.5 el 38.1 pa -9.4 n: az 166.5 el 38.1 pa -9.4 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/nn..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/nn.W.99.0RJBPf simultaneous interpolator



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



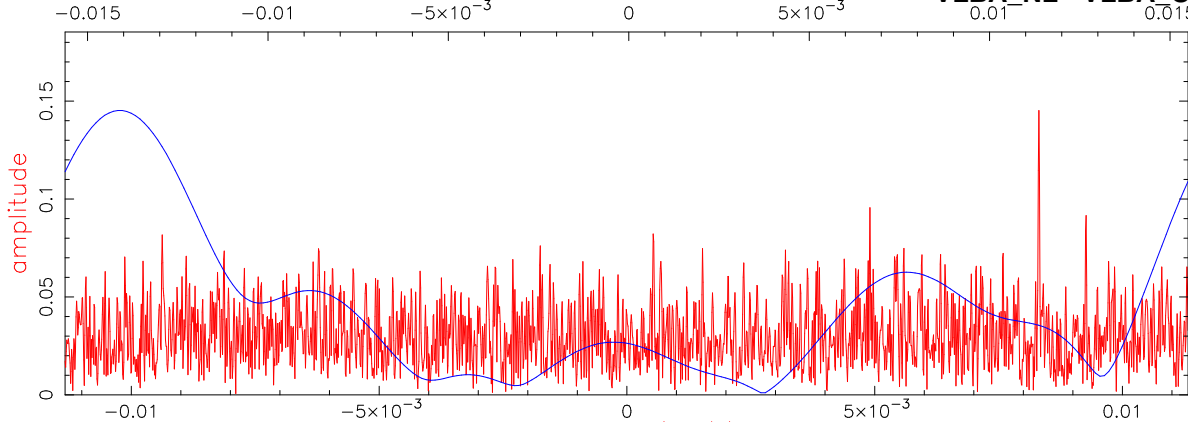
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
152.7	155.5	156.2	141.2	149.2	151.6	128.9	170.5	Phase	152.3
0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2
29.4	162.0	225.8	166.0	106.4	231.0	175.4	71.8	Sbd box	30.0
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Tracks	

Group delay (usec)(sbd)	1.77266792534E+03	Apriori delay (usec)	1.77344037329E+03	Resid mbdelay (usec)	8.80205E-03	+/-	3.8E-04
Sband delay (usec)	1.77266668579E+03	Apriori clock (usec)	8.1476297E+00	Resid sbdelay (usec)	-7.73687E-01	+/-	3.0E-03
Phase delay (usec)	1.77344037820E+03	Apriori clockrate (us/s)	1.4599997E-07	Resid phdelay (usec)	4.91078E-06	+/-	6.4E-07
Delay rate (us/s)	-5.3221851131E-01	Apriori rate (us/s)	-5.32229282265E-01	Resid rate (us/s)	1.07711E-05	+/-	2.6E-09
Total phase (deg)	244.2	Apriori accel (us/s/s)	-1.04844707783E-05	Resid phase (deg)	332.3	+/-	19.9

ph/seg (deg)	55.5	Theor.	47.6	Amplitude	0.218 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	83.9	Search (2048X32)	0.142	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	13.1	Inc. seg. avg.	0.233	Inc. frq. avg.	0.197	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	39.1	Inc. frq. avg.	0.197			Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
n: az 166.5 el 38.1 pa -9.4		o: az 135.1 el 31.9 pa -34.2		u,v (fr/asec)	3071.345 672.093	Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
Control file: cf_1234_gmva		Input file: /Exps/c191b/v1/1234/No0051/no..0RJBPf		Output file: /Exps/c191b/v1/1234/No0051/no.W.106.0RJBPf		nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

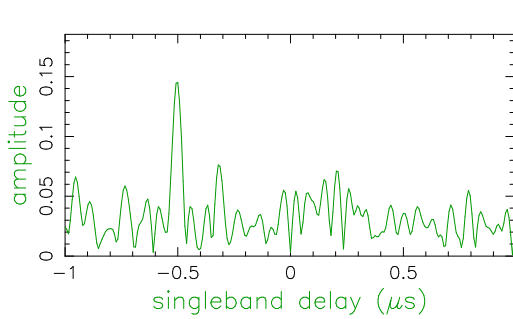
simultaneous interpolator

multiband delay (μ s)

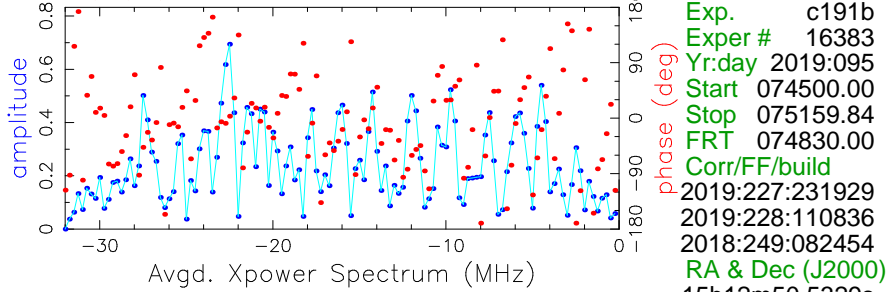


Fringe quality 0

SNR 5.8
Int time 419.827
Amp 0.185
Phase 294.7
PFD 5.2e-01
Delays (us)
SBD -0.503505
MBD -0.014048
Fringe rate (Hz) 0.716358
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

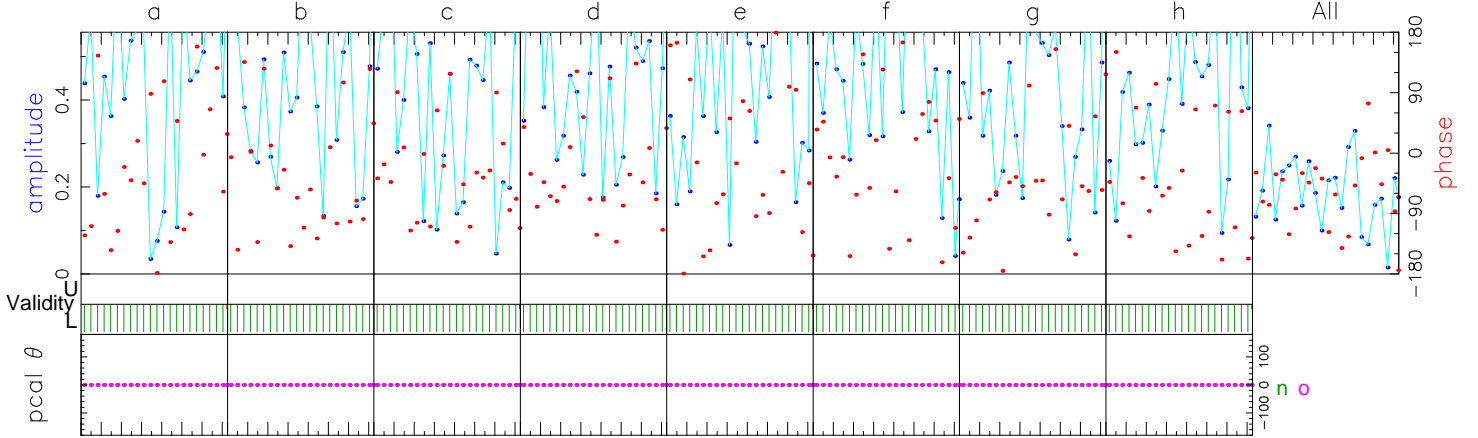


delay rate (ns/s)



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110836
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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

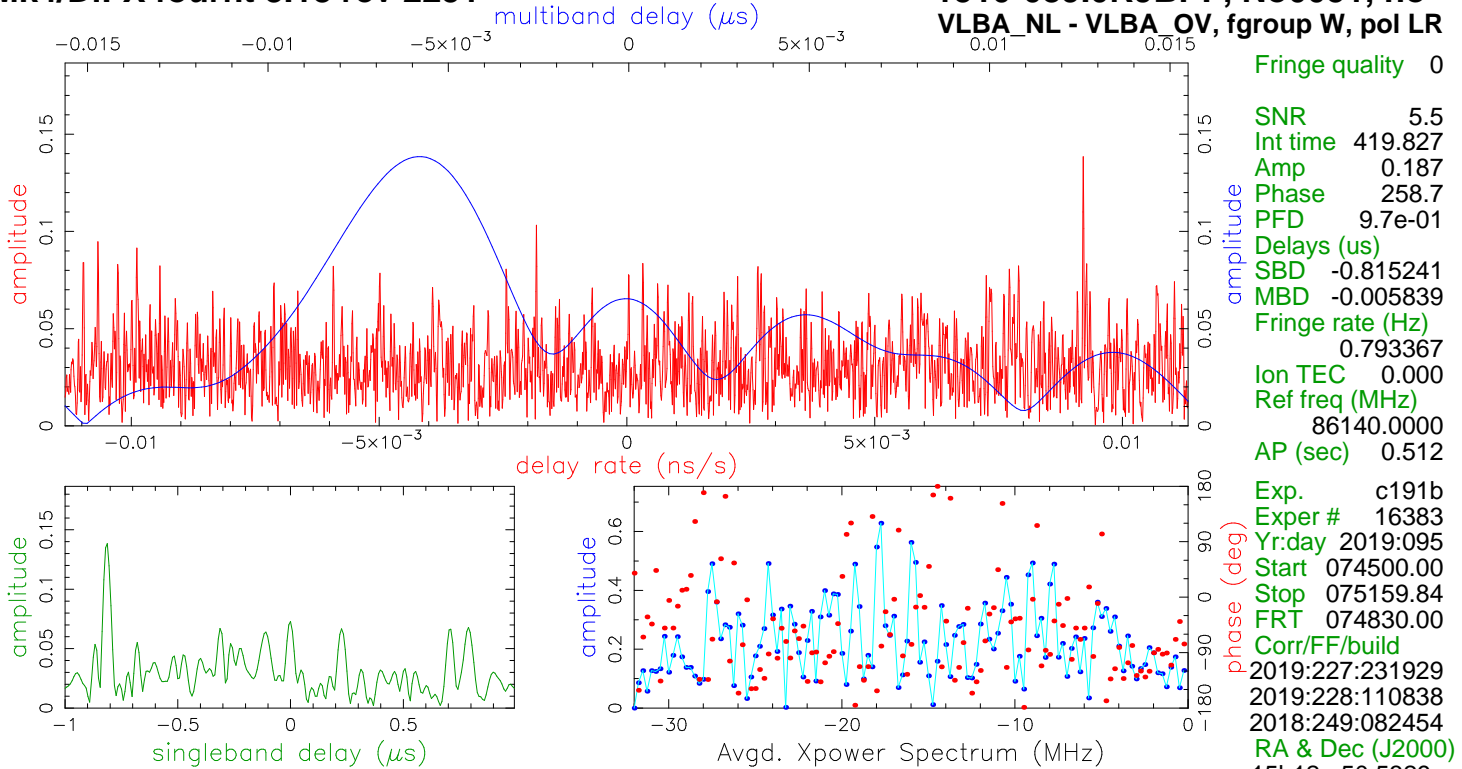


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-86.5	-77.4	-52.6	-52.8	-78.2	-13.8	-75.2	-97.1	Phase	-65.3
	0.2	0.2	0.3	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
	220.3	168.9	65.6	63.8	35.5	207.9	185.2	131.4	Sbd box	64.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.77292632508E+03		Apriori delay (usec)		1.77344037329E+03		Resid mbdelay (usec)		-1.40482E-02	+/- 3.7E-04
Sband delay (usec)	1.77293686829E+03		Apriori clock (usec)		8.1476297E+00		Resid sbdelay (usec)		-5.03505E-01	+/- 3.0E-03
Phase delay (usec)	1.77344037118E+03		Apriori clockrate (us/s)		1.4599997E-07		Resid phdelay (usec)		-2.10581E-06	+/- 6.3E-07
Delay rate (us/s)	-5.32220966053E-01		Apriori rate (us/s)		-5.32229282265E-01		Resid rate (us/s)		8.31621E-06	+/- 2.6E-09
Total phase (deg)	206.6		Apriori accel (us/s/s)		-1.04844707783E-05		Resid phase (deg)		294.7	+/- 19.7

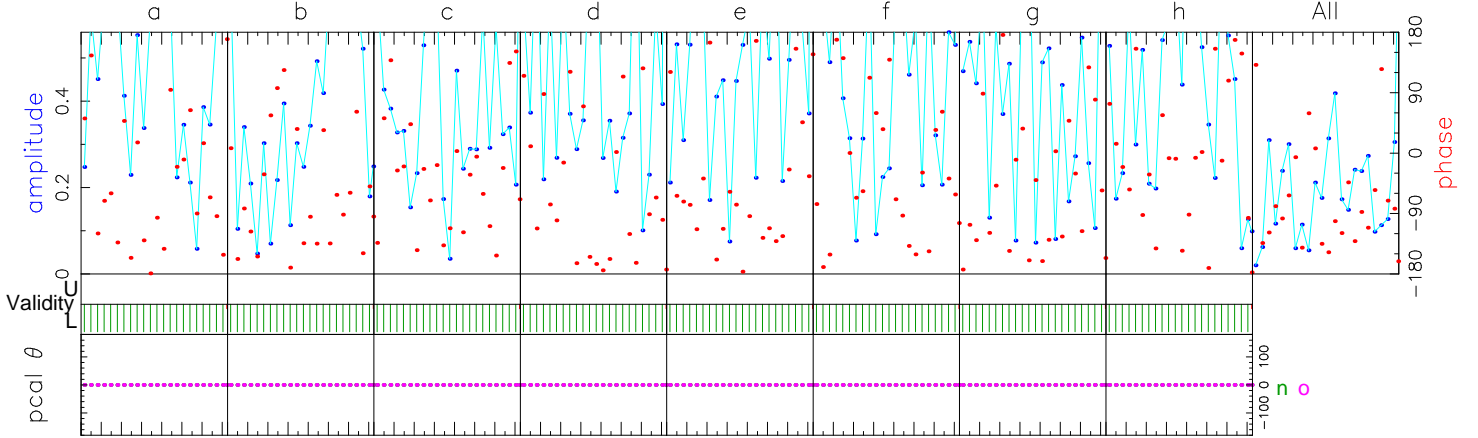
	RMS	Theor.	Amplitude	0.185 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.1	47.2	Search (2048X32)	0.143	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	62.7	82.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	28.4	27.8	Inc. seg. avg.	0.179	Sample rate(MSamp/s): 64	mb window (us) -0.016 0.016
amp/frq (%)	35.8	48.6	Inc. frq. avg.	0.178	Data rate(Mb/s): 1024	dr window (ns/s) -0.011 0.011

n: az 166.5 el 38.1 pa -9.4 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 3071.345 672.093 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/no..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/no.W.123.0RJBPf



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

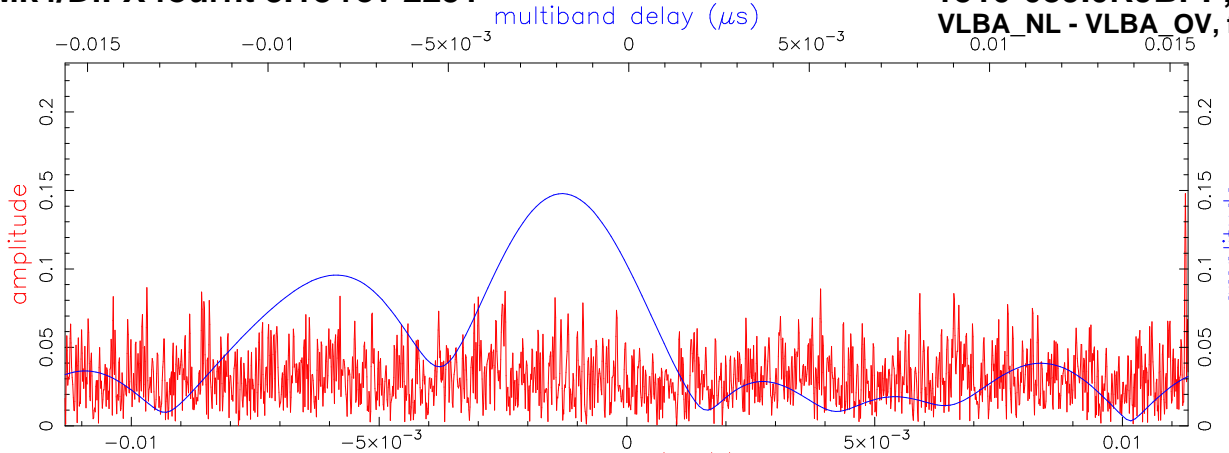


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-108.6	-76.5	-57.4	-140.5	-111.1	-117.6	-124.0	-29.3	Phase	-101.3
0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
29.6	221.1	229.7	220.4	25.1	127.4	5.6	114.3	Sbd box	24.6
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
n	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	
								Chan ids	
								Tracks	

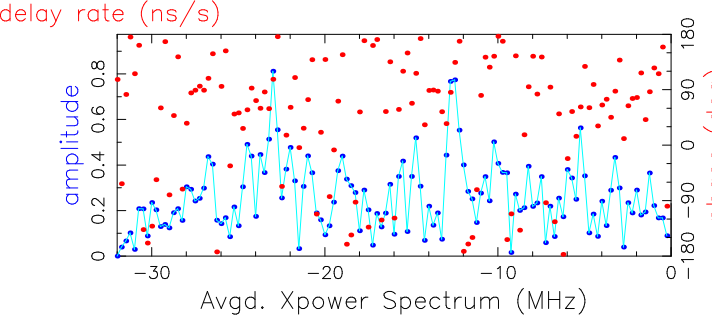
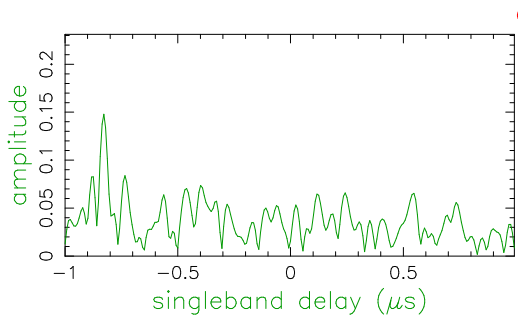
Group delay (usec)(sbd)	1.77262203473E+03	Apriori delay (usec)	1.77344037329E+03	Resid mbdelay (usec)	-5.83856E-03	+/-	3.9E-04
Sband delay (usec)	1.77262513229E+03	Apriori clock (usec)	8.1476297E+00	Resid sbdelay (usec)	-8.15241E-01	+/-	3.1E-03
Phase delay (usec)	1.77344037002E+03	Apriori clockrate (us/s)	1.4599997E-07	Resid phdelay (usec)	-3.26571E-06	+/-	6.7E-07
Delay rate (us/s)	-5.32220072056E-01	Apriori rate (us/s)	-5.32229282265E-01	Resid rate (us/s)	9.21021E-06	+/-	2.7E-09
Total phase (deg)	170.6	Apriori accel (us/s/s)	-1.04844707783E-05	Resid phase (deg)	258.7	+/-	20.7

ph/seg (deg)	66.4	Theor.	49.6	Amplitude	0.187 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	88.2	Search (2048X32)	0.136	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	41.2	Inc. seg. avg.	0.185	Inc. frq. avg.	0.195	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	32.0	Inc. frq. avg.	0.195			Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
n: az 166.5 el 38.1 pa -9.4		o: az 135.1 el 31.9 pa -34.2		u,v (fr/asec)	3071.345 672.093	Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
Control file: cf_1234_gmva		Input file: /Exps/c191b/v1/1234/No0051/no..0RJBPf		Output file: /Exps/c191b/v1/1234/No0051/no.W.137.0RJBPf		nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

simultaneous interpolator

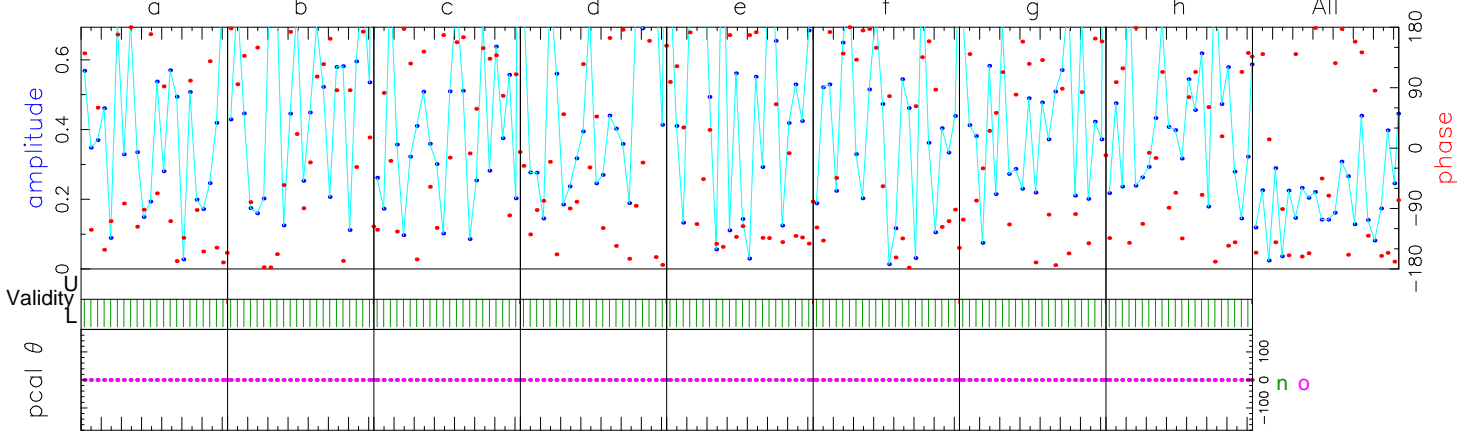


Fringe quality 0
 SNR 5.9
 Int time 419.827
 Amp 0.231
 Phase 188.6
 PFD 4.3e-01
 Delays (us)
 SBD -0.828879
 MBD -0.001843
 Fringe rate (Hz) 0.970709
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512



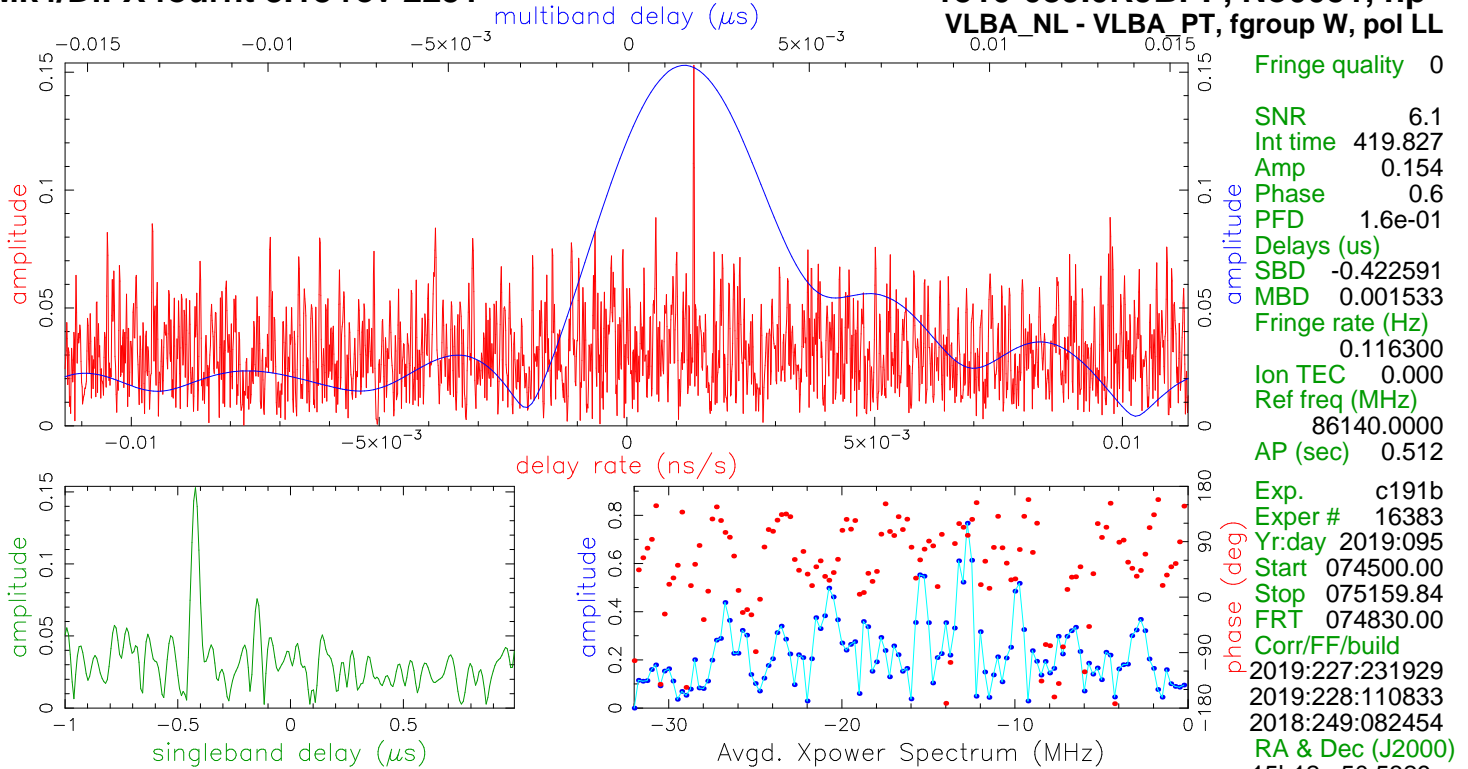
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110839
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-163.6	148.1	160.0	-116.5	-142.5	-173.6	152.6	-170.5	Phase	-171.4
0.3	0.3	0.2	0.2	0.3	0.4	0.2	0.2	Ampl.	0.2
23.9	122.3	209.2	31.9	21.1	23.4	46.0	91.3	Sbd box	22.9
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Tracks	
Group delay (usec)(sbd)	1.77262603002E+03	Apriori delay (usec)	1.77344037329E+03	Resid mbdelay (usec)	-1.84327E-03	+/-	3.7E-04		
Sband delay (usec)	1.77261149479E+03	Apriori clock (usec)	8.1476297E+00	Resid sbdelay (usec)	-8.28879E-01	+/-	2.9E-03		
Phase delay (usec)	1.77344036776E+03	Apriori clockrate (us/s)	1.4599997E-07	Resid phdelay (usec)	-5.52794E-06	+/-	6.3E-07		
Delay rate (us/s)	-5.32218013290E-01	Apriori rate (us/s)	-5.32229282265E-01	Resid rate (us/s)	1.12690E-05	+/-	2.6E-09		
Total phase (deg)	100.5	Apriori accel (us/s/s)	-1.04844707783E-05	Resid phase (deg)	188.6	+/-	19.5		

ph/seg (deg) 64.1 46.8 Theor. Amplitude 0.231 +/- 0.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.6 81.7 Search (2048X32) 0.143 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.7 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.9 48.2 Inc. seg. avg. 0.234 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 166.5 el 38.1 pa -9.4 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 3071.345 672.093 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/no..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/no.W.143.0RJBPf simultaneous interpolator



Fringe quality 0

SNR 6.1

Int time 419.827

Amp 0.154

Phase 0.6

PFD 1.6e-01

Delays (us)

SBD -0.422591

MBD 0.001533

Fringe rate (Hz) 0.116300

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

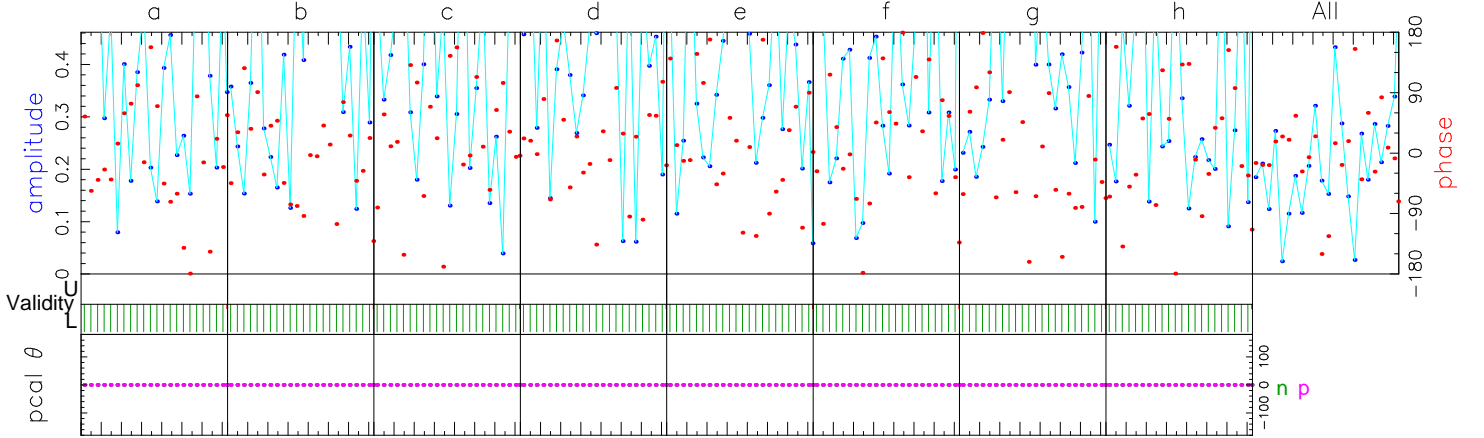
2019:227:231929

2019:228:110833

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-15.7	-1.3	18.6	14.9	3.2	11.6	-38.2	2.5	Phase	0.6
0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
28.8	74.3	119.9	56.3	167.0	23.9	46.8	116.6	Sbd box	74.9
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-4.62352351245E+02	Apriori delay (usec)	-4.61916384357E+02	Resid mbdelay (usec)	1.53311E-03	+/-	3.6E-04		
Sband delay (usec)	-4.62338975357E+02	Apriori clock (usec)	1.4161569E+01	Resid sbdelay (usec)	-4.22591E-01	+/-	2.8E-03		
Phase delay (usec)	-4.61916384337E+02	Apriori clockrate (us/s)	8.0999985E-08	Resid phdelay (usec)	1.94777E-08	+/-	6.1E-07		
Delay rate (us/s)	-3.67525795795E-01	Apriori rate (us/s)	-3.67527145924E-01	Resid rate (us/s)	1.35013E-06	+/-	2.5E-09		
Total phase (deg)	235.1	Apriori accel (us/s/s)	6.89814273291E-07	Resid phase (deg)	0.6	+/-	18.9		

RMS Theor. Amplitude 0.154 +/- 0.025

ph/seg (deg) 61.2 45.3 Search (2048X32) 0.150

amp/seg (%) 75.6 79.1 Interp. 0.000

ph/frq (deg) 20.1 26.7 Inc. seg. avg. 0.161

amp/frq (%) 39.7 46.7 Inc. frq. avg. 0.144

Group delay (usec)(sbd)

Sband delay (usec)

Phase delay (usec)

Delay rate (us/s)

Total phase (deg)

Apriori delay (usec)

Apriori clock (usec)

Apriori clockrate (us/s)

Apriori rate (us/s)

Apriori accel (us/s/s)

Resid mbdelay (usec)

Resid sbdelay (usec)

Resid phdelay (usec)

Resid rate (us/s)

Resid phase (deg)

PCal mode: MANUAL, MANUAL

PCal rate: 0.000E+00, 0.000E+00 (us/s)

Bits/sample: 2x2

Sample rate(MSamp/s): 64

Data rate(Mb/s): 1024

PC period (AP's) 5, 5

sb window (us) -1.000 1.000

SampCntNorm: enabled

mb window (us) -0.016 0.016

dr window (ns/s) -0.011 0.011

ion window (TEC) 0.00 0.00

n: az 166.5 el 38.1 pa -9.4

p: az 144.2 el 39.4 pa -28.7

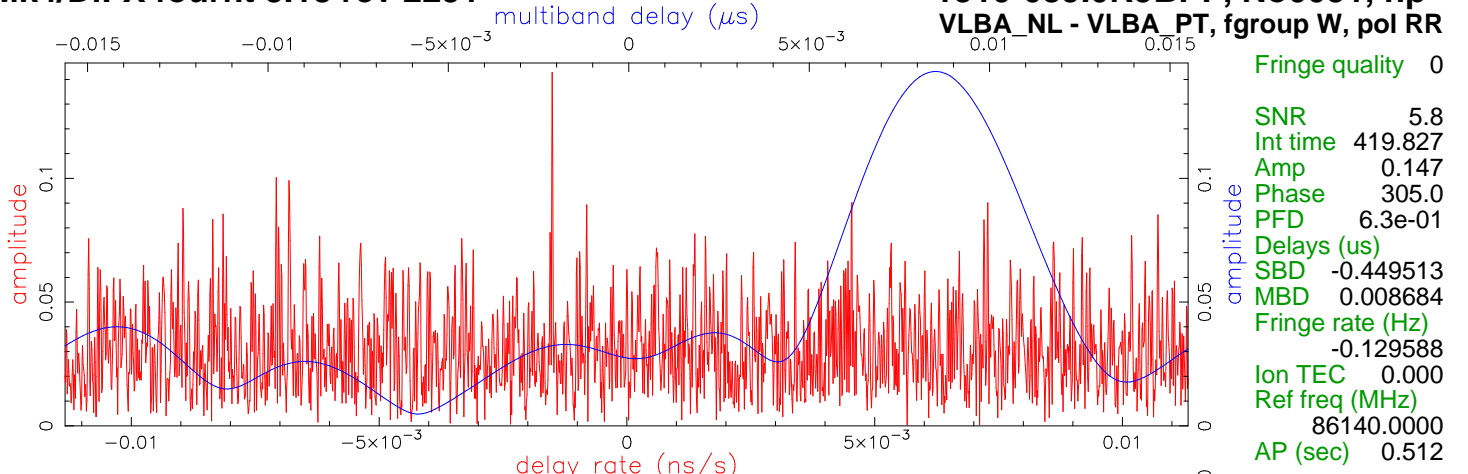
u,v (fr/asec) 2133.887 890.760

Control file: cf_1234_gmva

Input file: /Exps/c191b/v1/1234/No0051/np..0RJBPf

Output file: /Exps/c191b/v1/1234/No0051/np.W.101.0RJBPf

simultaneous interpolator



Fringe quality 0

SNR 5.8

Int time 419.827

Amp 0.147

Phase 305.0

PFD 6.3e-01

Delays (us)

SBD -0.449513

MBD 0.008684

Fringe rate (Hz)

-0.129588

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110835

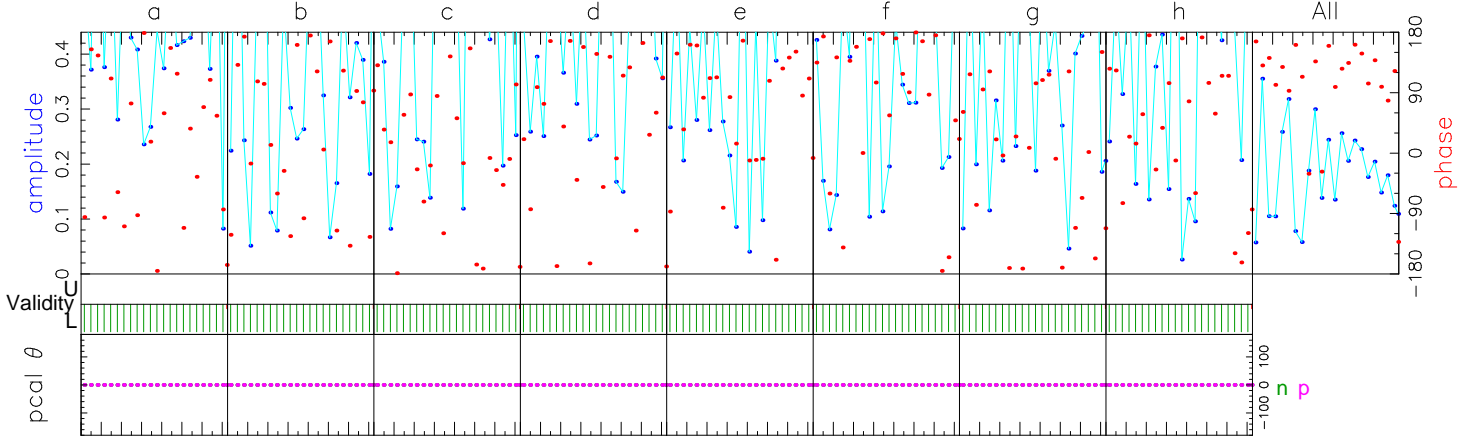
2018:249:082454

RA & Dec (J2000)

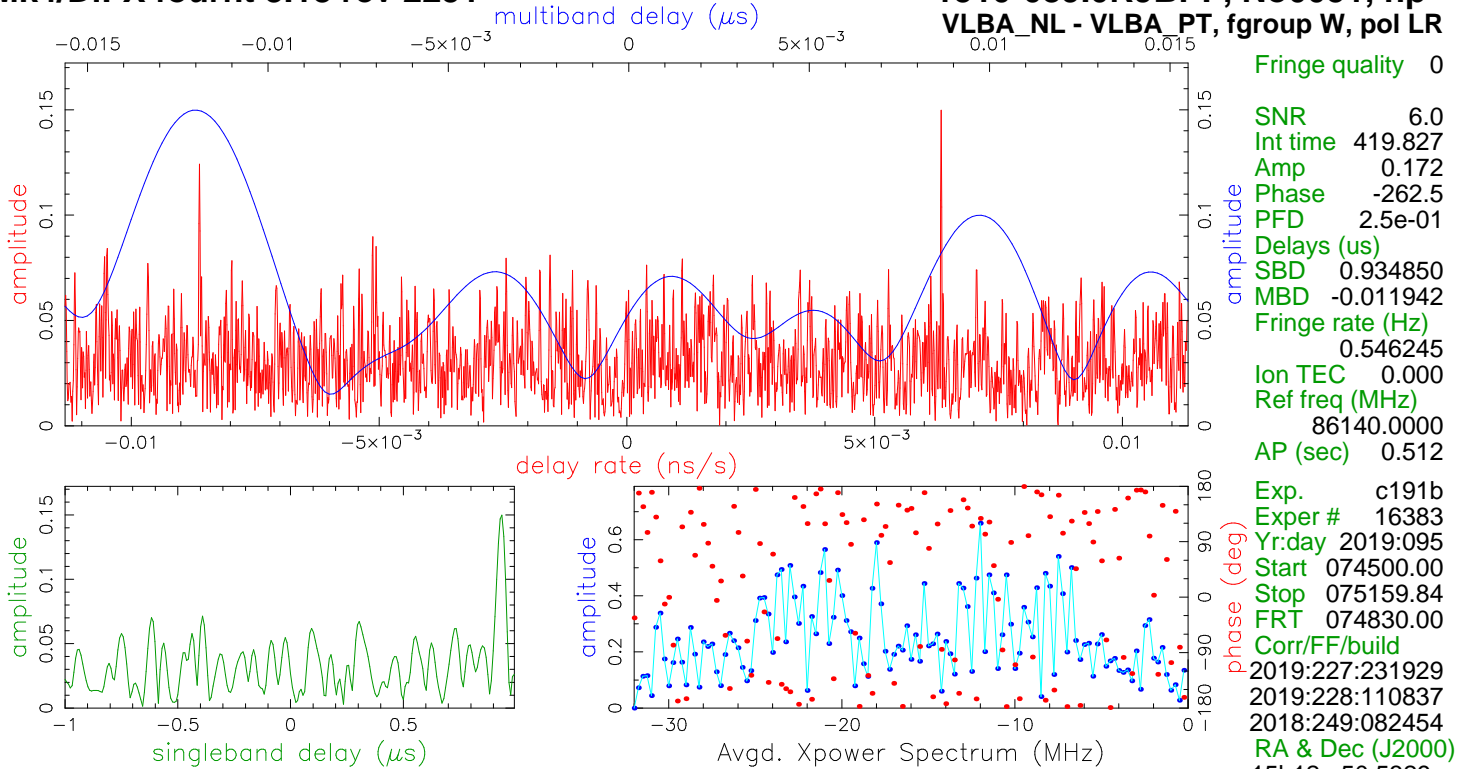
15h12m50.5329s

-9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	128.9	132.3	101.4	136.3	127.3	132.2	138.3	89.1	Phase	125.0
	0.1	0.2	0.1	0.3	0.3	0.2	0.1	0.1	Ampl.	0.1
	114.7	133.5	46.8	21.4	72.2	71.7	247.7	129.3	Sbd box	71.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.62376450603E+02		Apriori delay (usec)		-4.61916384357E+02		Resid mbdelay (usec)		8.68375E-03	+/- 3.8E-04
Sband delay (usec)	-4.62365897357E+02		Apriori clock (usec)		1.4161569E+01		Resid sbdelay (usec)		-4.49513E-01	+/- 3.0E-03
Phase delay (usec)	-4.61916380326E+02		Apriori clockrate (us/s)		8.0999985E-08		Resid phdelay (usec)		4.03084E-06	+/- 6.4E-07
Delay rate (us/s)	-3.67528650307E-01		Apriori rate (us/s)		-3.67527145924E-01		Resid rate (us/s)		-1.50438E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		6.89814273291E-07		Resid phase (deg)		305.0	+/- 19.9
	RMS	Theor.	Amplitude	0.147 +/- 0.025		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	52.8	47.6	Search (2048X32)	0.141		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000
amp/seg (%)	62.5	83.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	-0.016	0.016
ph/frq (deg)	19.5	28.1	Inc. seg. avg.	0.139		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.9	49.0	Inc. frq. avg.	0.133		Data rate(Mb/s): 1024		ion window (TEC)	0.00	0.00
n: az 166.5 el 38.1 pa -9.4	p: az 144.2 el 39.4 pa -28.7		u,v (fr/asec) 2133.887 890.760				nlags: 128 t_cohere infinite		simultaneous interpolator	
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/np..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/np.W.117.0RJBPf										



Fringe quality 0

SNR 6.0

Int time 419.827

Amp 0.172

Phase -262.5

PFD 2.5e-01

Delays (us)

SBD 0.934850

MBD -0.011942

Fringe rate (Hz) 0.546245

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

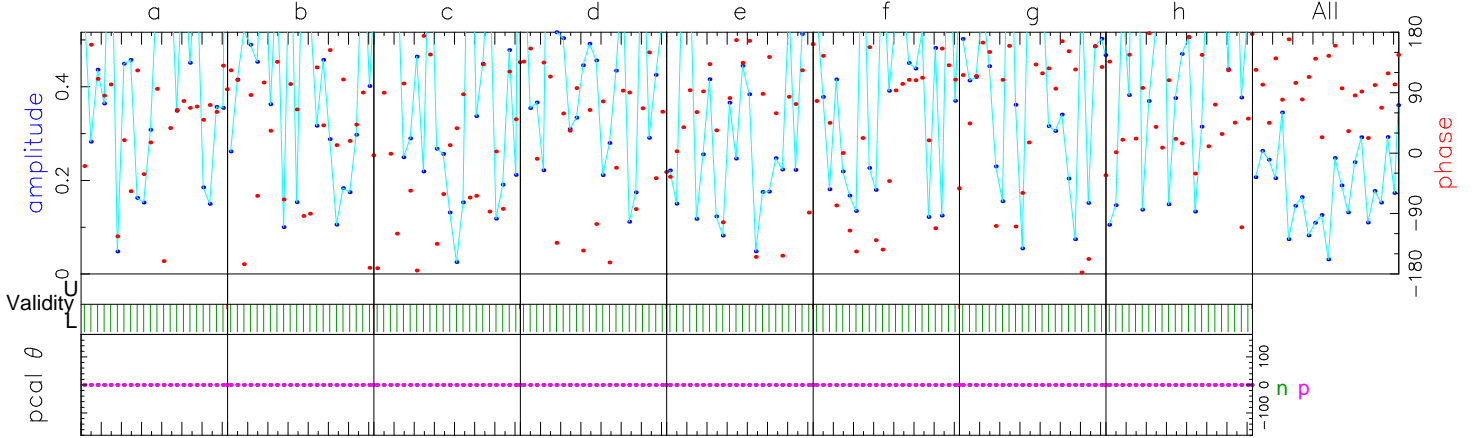
2019:227:231929

2019:228:110837

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	73.9	108.0	-155.7	96.0	102.4	112.4	138.8	44.7	Phase	97.5
	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
	8.3	79.4	2.3	227.9	230.1	116.6	248.1	250.4	Sbd box	248.7
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) -4.60990826532E+02 Apriori delay (usec) -4.61916384357E+02 Resid mbdelay (usec) -1.19422E-02 +/- 3.6E-04

Sband delay (usec) -4.60981534357E+02 Apriori clock (usec) 1.4161569E+01 Resid sbdelay (usec) 9.34850E-01 +/- 2.9E-03

Phase delay (usec) -4.61916381211E+02 Apriori clockrate (us/s) 8.0999985E-08 Resid phdelay (usec) 3.14525E-06 +/- 6.2E-07

Delay rate (us/s) -3.67520804556E-01 Apriori rate (us/s) -3.67527145924E-01 Resid rate (us/s) 6.34137E-06 +/- 2.6E-09

Total phase (deg) -27.9 Apriori accel (us/s/s) 6.89814273291E-07 Resid phase (deg) -262.5 +/- 19.2

RMS Theor. Amplitude 0.172 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 40.7 46.0 Search (2048X32) 0.144 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

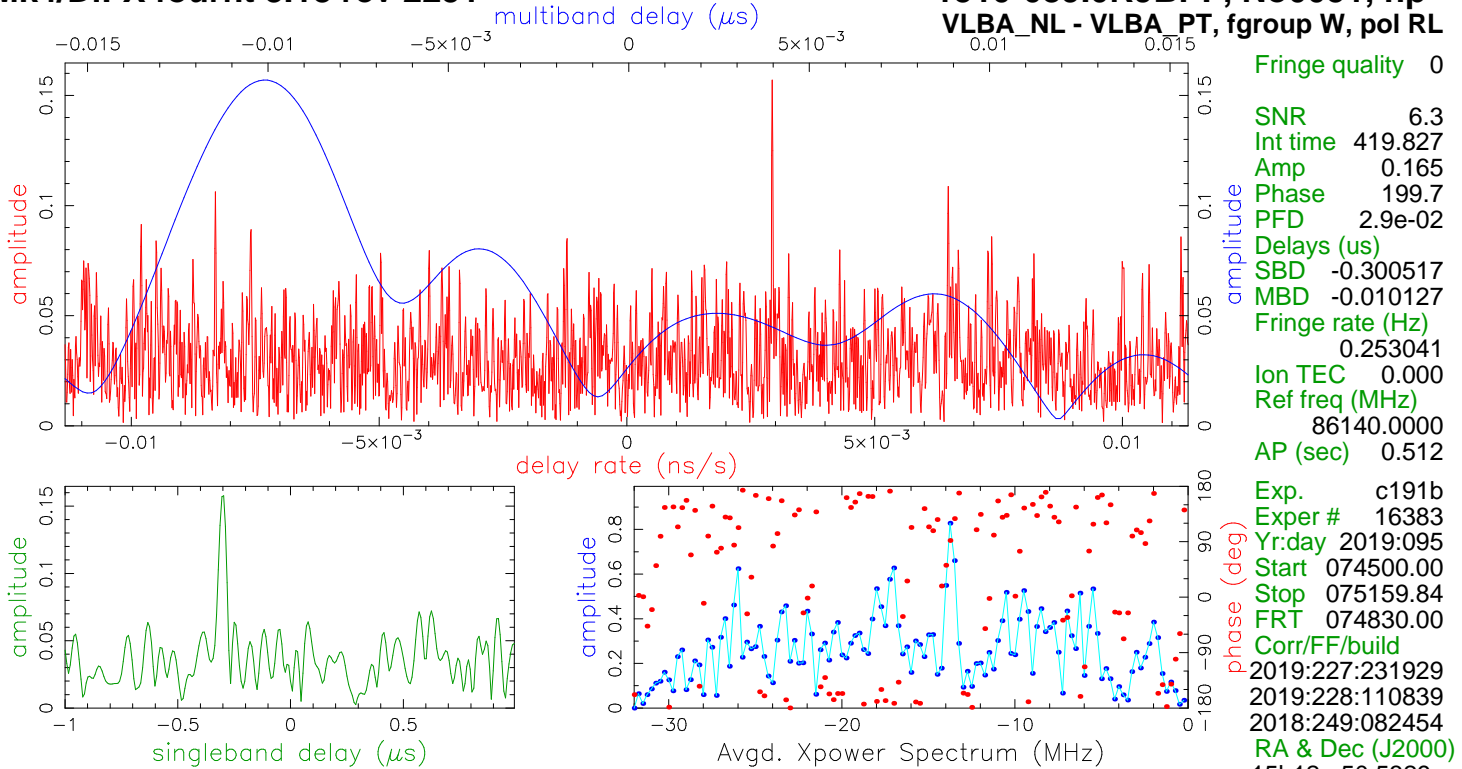
amp/seg (%) 56.5 80.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 52.9 27.1 Inc. seg. avg. 0.158 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

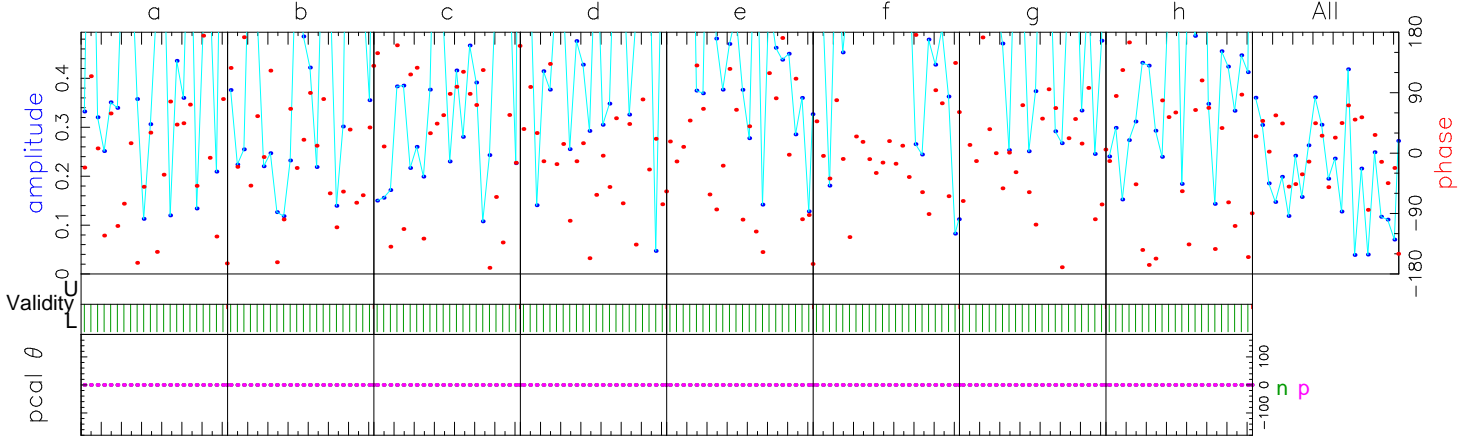
amp/frq (%) 51.2 47.3 Inc. frq. avg. 0.193 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 166.5 el 38.1 pa -9.4 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 2133.887 890.760 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/np..0RJBPF Output file: /Exps/c191b/v1/1234/No0051/np.W.133.0RJBPF

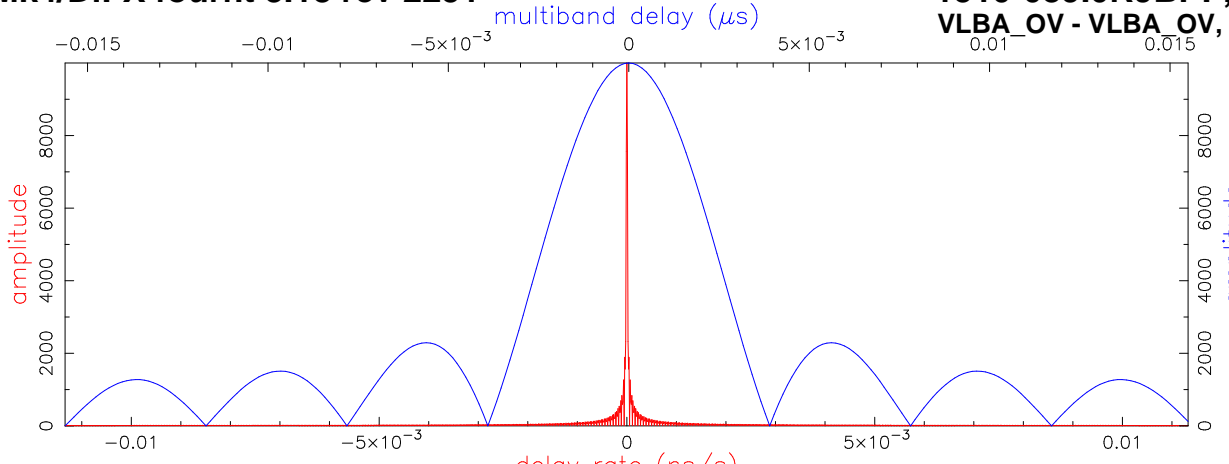


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

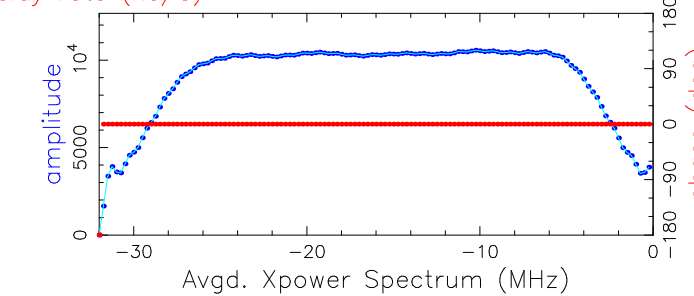
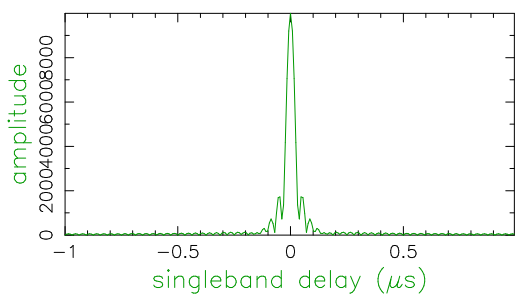


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	38.0	7.8	85.9	-7.1	15.6	3.8	18.0	105.6	Phase	19.7
	0.1	0.2	0.1	0.2	0.2	0.3	0.3	0.1	Ampl.	0.2
	198.8	118.3	176.7	91.1	219.4	90.8	90.2	249.8	Sbd box	90.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.62207760870E+02		Apriori delay (usec)		-4.61916384357E+02		Resid mbdelay (usec)		-1.01265E-02	+/- 3.4E-04
Sband delay (usec)	-4.62216901357E+02		Apriori clock (usec)		1.4161569E+01		Resid sbdelay (usec)		-3.00517E-01	+/- 2.7E-03
Phase delay (usec)	-4.61916383721E+02		Apriori clockrate (us/s)		8.099985E-08		Resid phdelay (usec)		6.36165E-07	+/- 5.8E-07
Delay rate (us/s)	-3.67524208368E-01		Apriori rate (us/s)		-3.67527145924E-01		Resid rate (us/s)		2.93756E-06	+/- 2.4E-09
Total phase (deg)	74.3		Apriori accel (us/s/s)		6.89814273291E-07		Resid phase (deg)		199.7	+/- 18.1

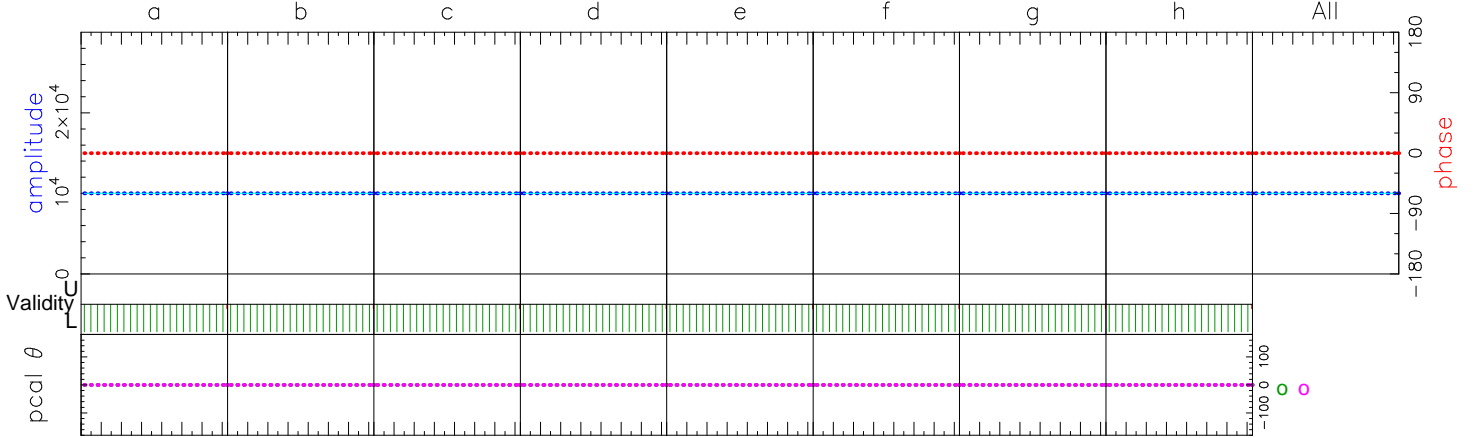
ph/seg (deg) 47.2 43.3 Search (2048X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.2 75.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.9 25.5 Inc. seg. avg. 0.163 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.0 44.6 Inc. frq. avg. 0.171 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 166.5 el 38.1 pa -9.4 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 2133.887 890.760 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/np..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/np.W.140.0RJBPf simultaneous interpolator



Fringe quality 9
 SNR 396203.8
 Int time 419.829
 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. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110833
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

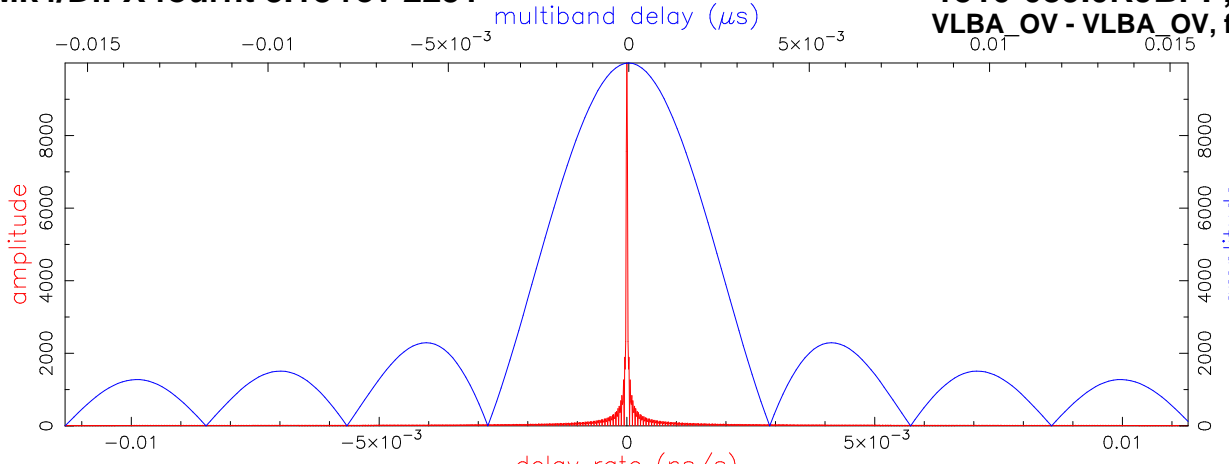


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

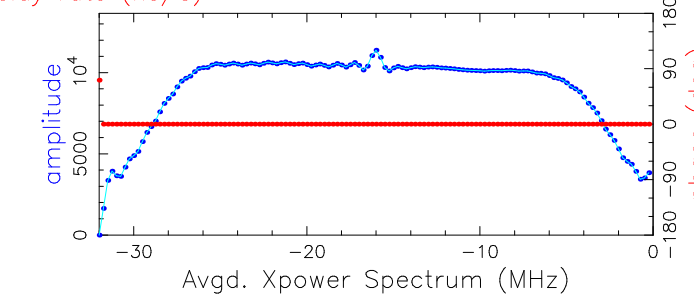
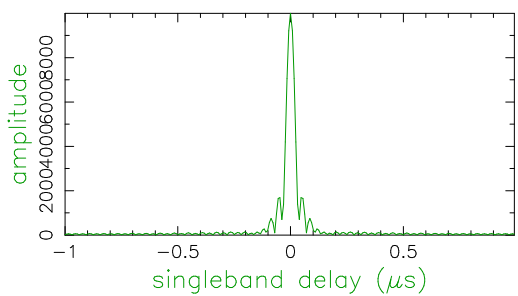


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

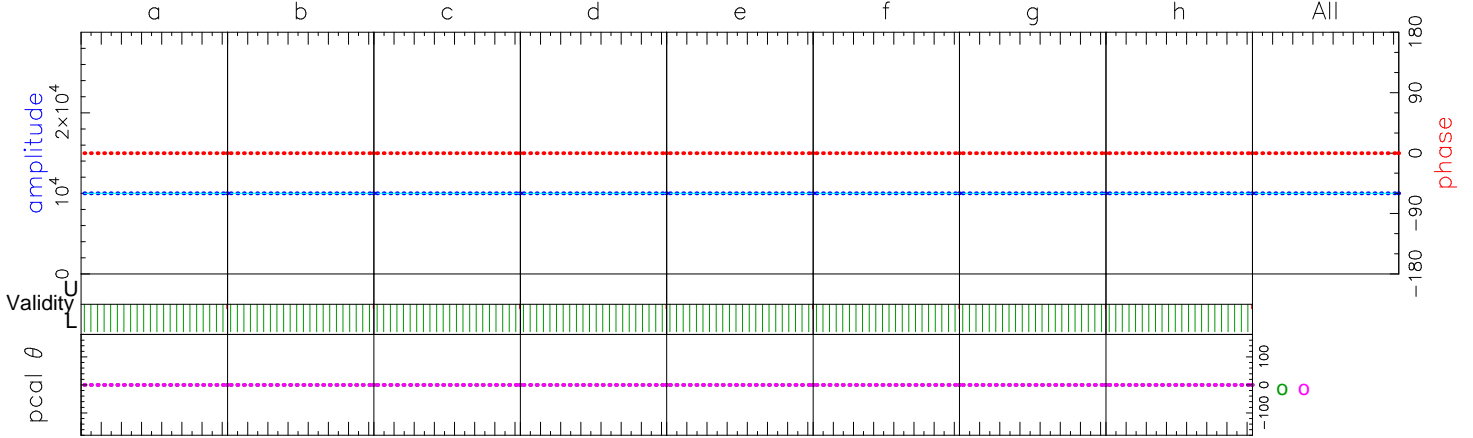
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 135.1 el 31.9 pa -34.2 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 simultaneous interpolator



Fringe quality 9
 SNR 396203.8
 Int time 419.829
 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. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110835
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

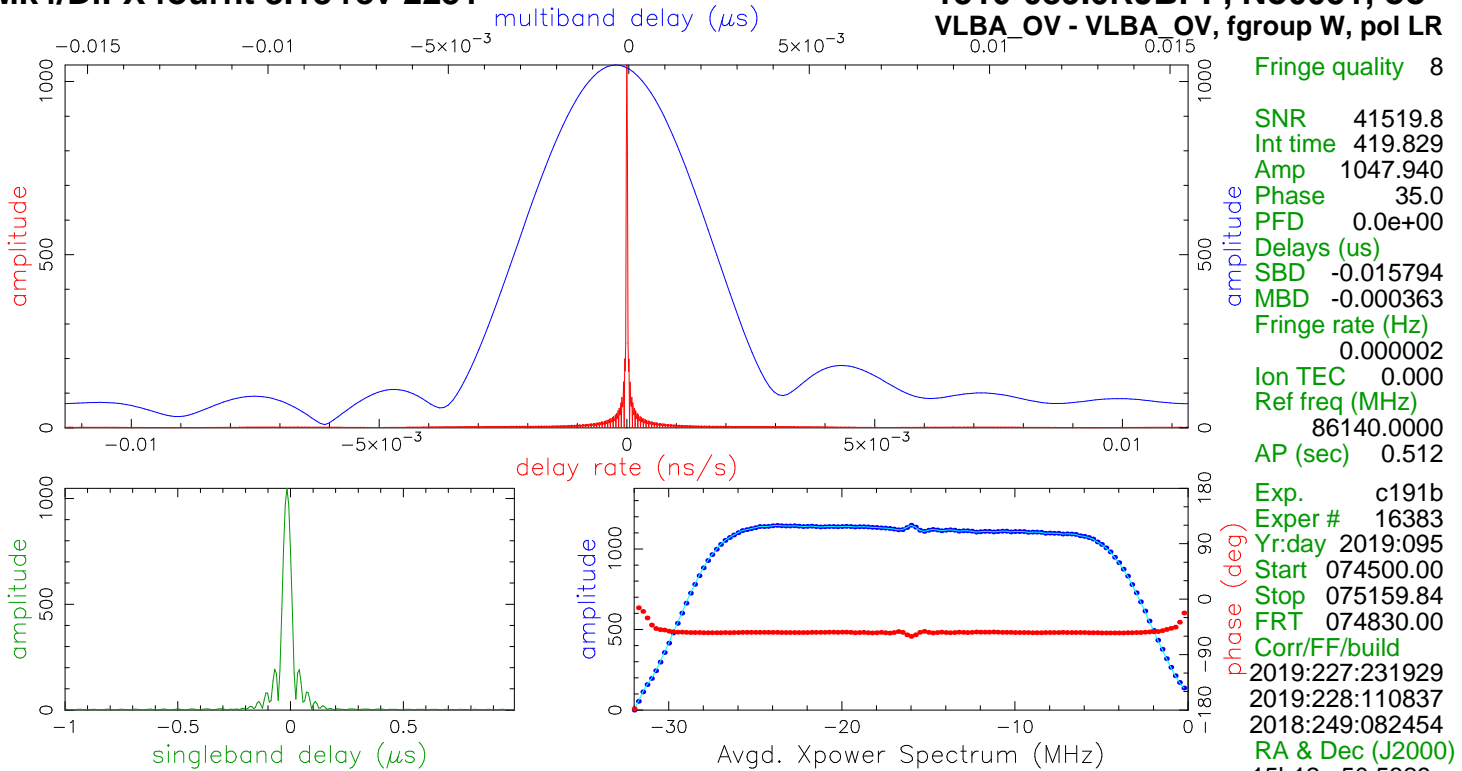


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
o W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 135.1 el 31.9 pa -34.2 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 simultaneous interpolator



Fringe quality 8

SNR 41519.8

Int time 419.829

Amp 1047.940

Phase 35.0

PFD 0.0e+00

Delays (us)

SBD -0.015794

MBD -0.000363

Fringe rate (Hz) 0.000002

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

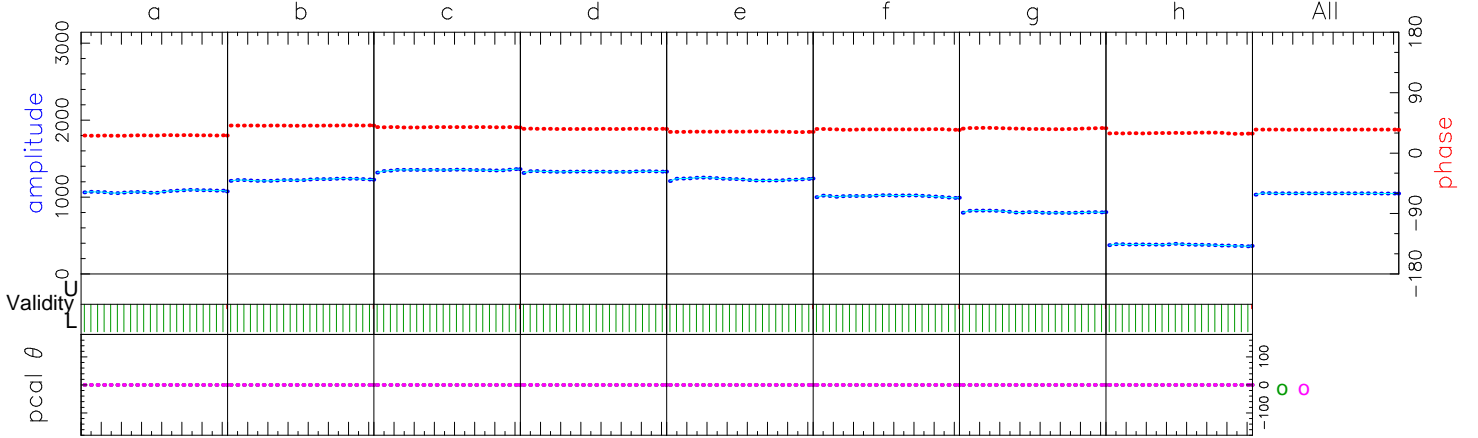
2019:227:231929

2019:228:110837

2018:249:082454

RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
26.3	41.0	38.6	36.0	31.8	35.3	36.5	29.7	Phase	35.0
1072.3	1225.0	1351.0	1331.3	1231.7	1012.4	806.1	379.2	Ampl.	1051.1
127.2	126.9	126.9	126.9	127.0	127.0	126.9	126.6	Sbd box	127.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
o 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-3.62687500000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.62688E-04	+/-	5.2E-08		
Sband delay (usec)	-1.57940000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.57940E-02	+/-	4.1E-07		
Phase delay (usec)	1.12769021253E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.12769E-06	+/-	8.9E-11		
Delay rate (us/s)	2.69251895442E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	2.69252E-11	+/-	3.7E-13		
Total phase (deg)	35.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	35.0	+/-	0.0		

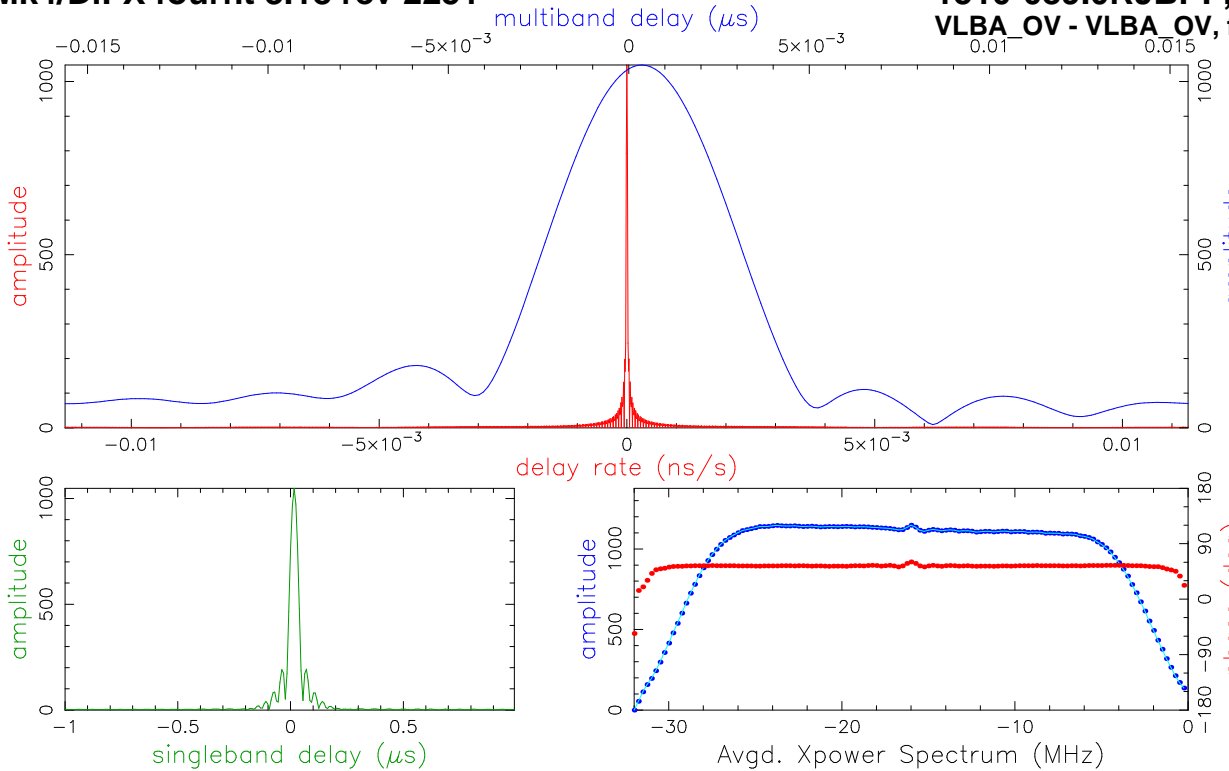
ph/seg (deg) 0.1 0.0 Theor. Amplitude 1047.940 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.3 0.0 Search (2048X32) 1036.661 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 5.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

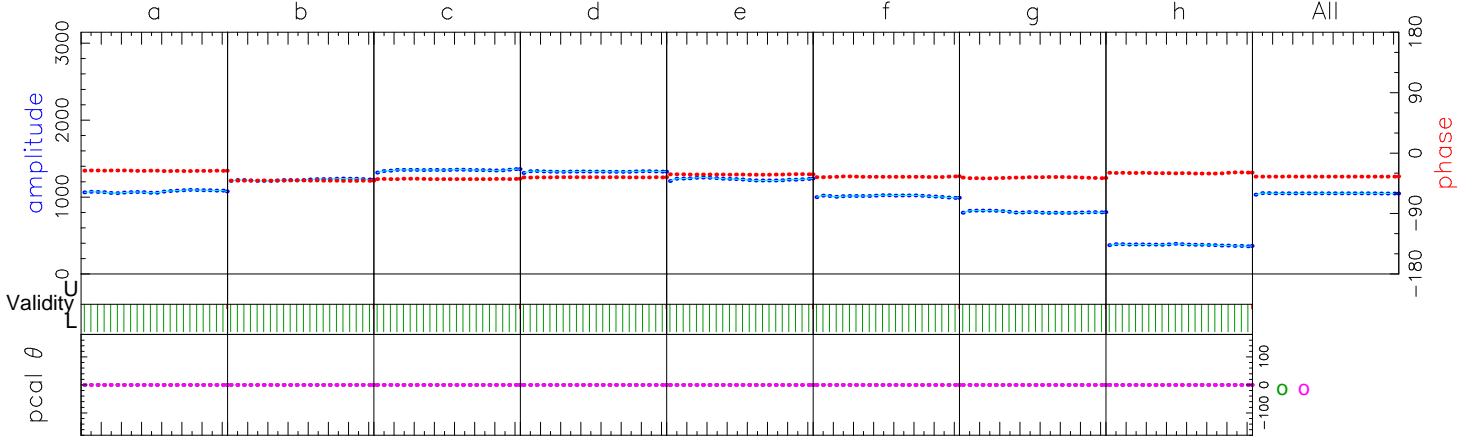
amp/frq (%) 29.1 0.0 Inc. seg. avg. 1047.906 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



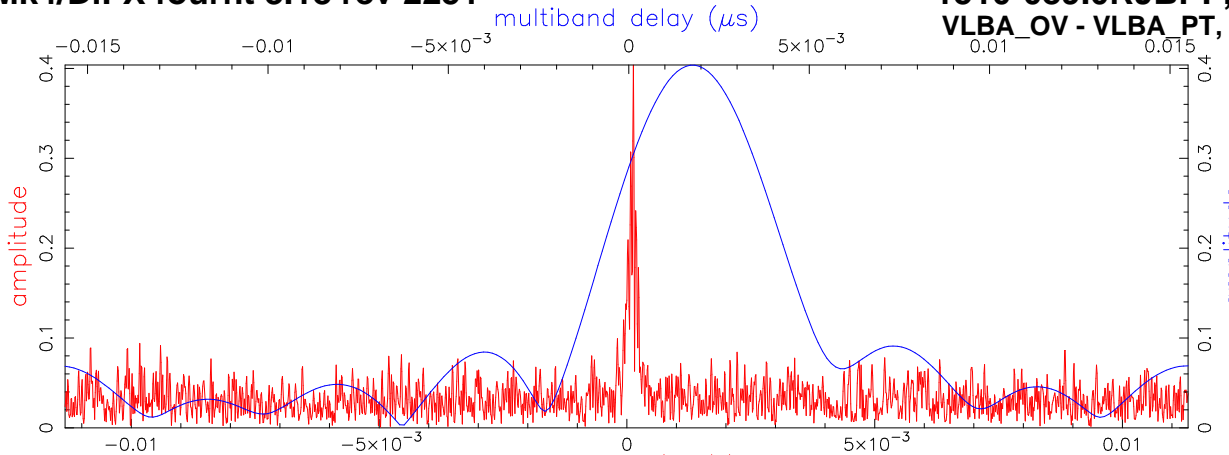
Fringe quality 8
 SNR 41519.8
 Int time 419.829
 Amp 1047.940
 Phase -35.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.015794
 MBD 0.000363
 Fringe rate (Hz)
 -0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110839
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

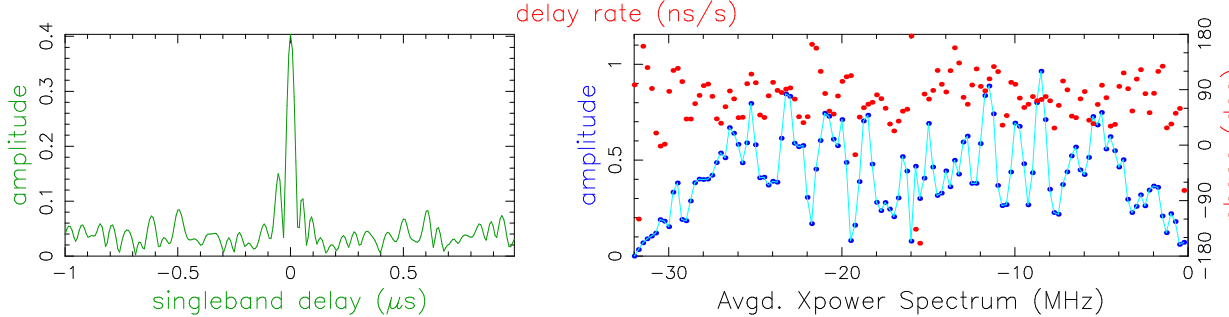


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-26.3	-41.0	-38.6	-36.0	-31.8	-35.3	-36.5	-29.7	Phase	-35.0	
	1072.3	1225.0	1351.0	1331.3	1231.7	1012.4	806.1	379.2	Ampl.	1051.1	
	130.8	131.1	131.1	131.1	131.0	131.0	131.1	131.4	Sbd box	131.0	
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used		
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
o	1000	1000	1000	1000	1000	1000	1000	1000			
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)		3.62687500000E-04				0.00000000000E+00			Resid mbdelay (usec)	3.62688E-04 +/- 5.2E-08	
Sband delay (usec)		1.57940000000E-02				0.0000000E+00			Resid sbdelay (usec)	1.57940E-02 +/- 4.1E-07	
Phase delay (usec)		-1.12769021253E-06				0.0000000E+00			Resid phdelay (usec)	-1.12769E-06 +/- 8.9E-11	
Delay rate (us/s)		-2.69251895442E-11				0.00000000000E+00			Resid rate (us/s)	-2.69252E-11 +/- 3.7E-13	
Total phase (deg)			-35.0						Resid phase (deg)	-35.0 +/- 0.0	
	RMS	Theor.	Amplitude	1047.940 +/- 0.025		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	0.1	0.0	Search (2048X32)	1036.661		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	0.3	0.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	5.3	0.0	Inc. seg. avg.	1047.906		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.1	0.0	Inc. frq. avg.	1051.119		Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

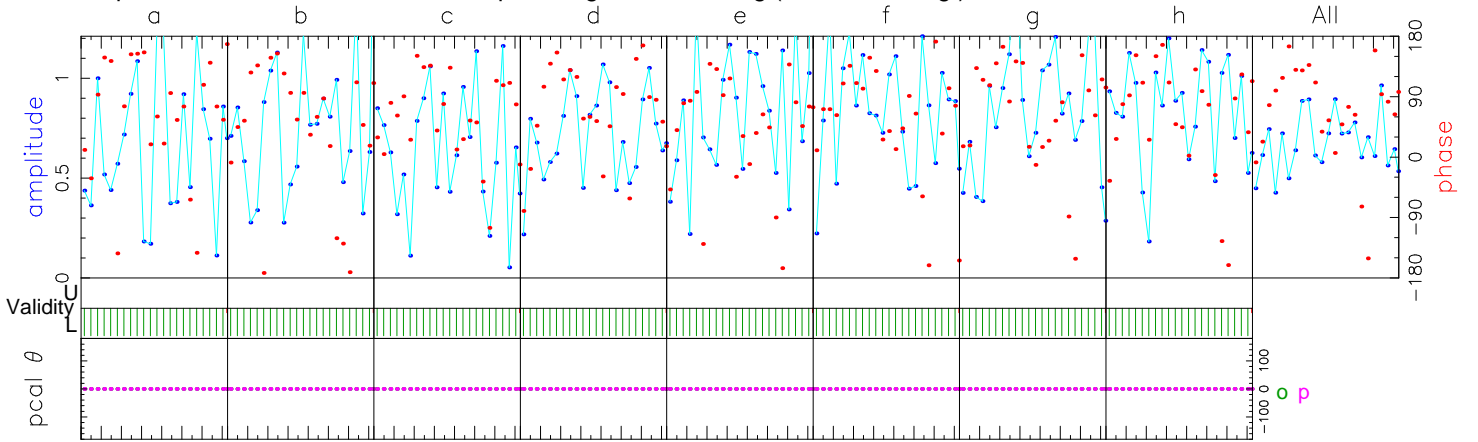
o: az 135.1 el 31.9 pa -34.2 o: az 135.1 el 31.9 pa -34.2 u,v (fr/asec) 0.000 0.000
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/oo..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/oo.W.141.0RJBPf



Fringe quality 9
SNR 16.0
Int time 419.827
Amp 0.404
Phase 86.7
PFD 0.0e+00
Delays (us)
SBD 0.000533
MBD 0.001773
Fringe rate (Hz) 0.011650
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110834
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

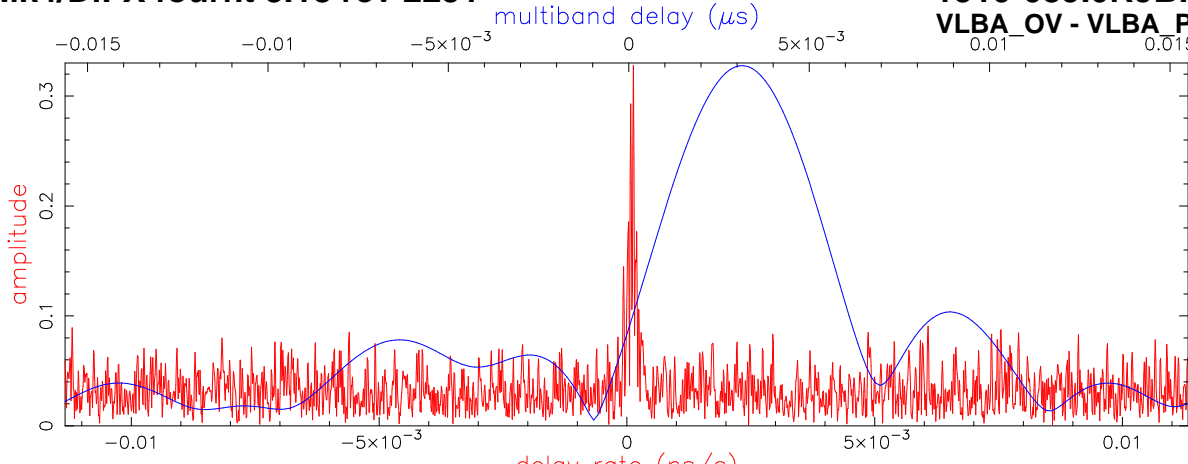


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

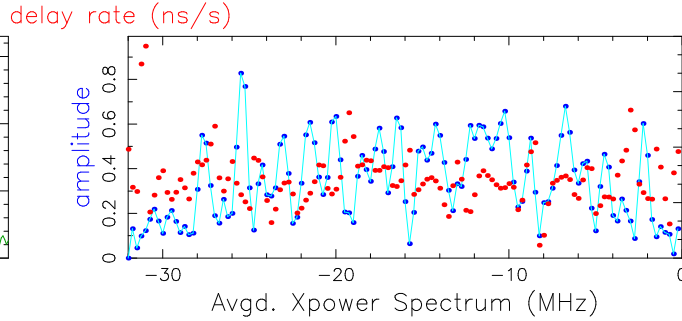
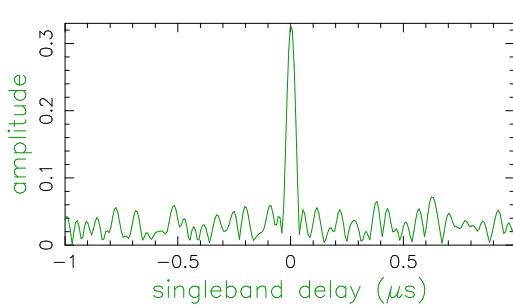


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	-2.23535498491E+03		Apriori delay (usec)		-2.23535675765E+03		Resid mbdelay (usec)		1.77274E-03	+/- 1.4E-04
Sband delay (usec)	-2.23535622465E+03		Apriori clock (usec)		6.0139389E+00		Resid sbdelay (usec)		5.33000E-04	+/- 1.1E-03
Phase delay (usec)	-2.23535675485E+03		Apriori clockrate (us/s)		-6.4999980E-08		Resid phdelay (usec)		2.79671E-06	+/- 2.3E-07
Delay rate (us/s)	1.64702271591E-01		Apriori rate (us/s)		1.64702136341E-01		Resid rate (us/s)		1.35249E-07	+/- 9.5E-10
Total phase (deg)	49.4		Apriori accel (us/s/s)		1.11742850515E-05		Resid phase (deg)		86.7	+/- 7.2

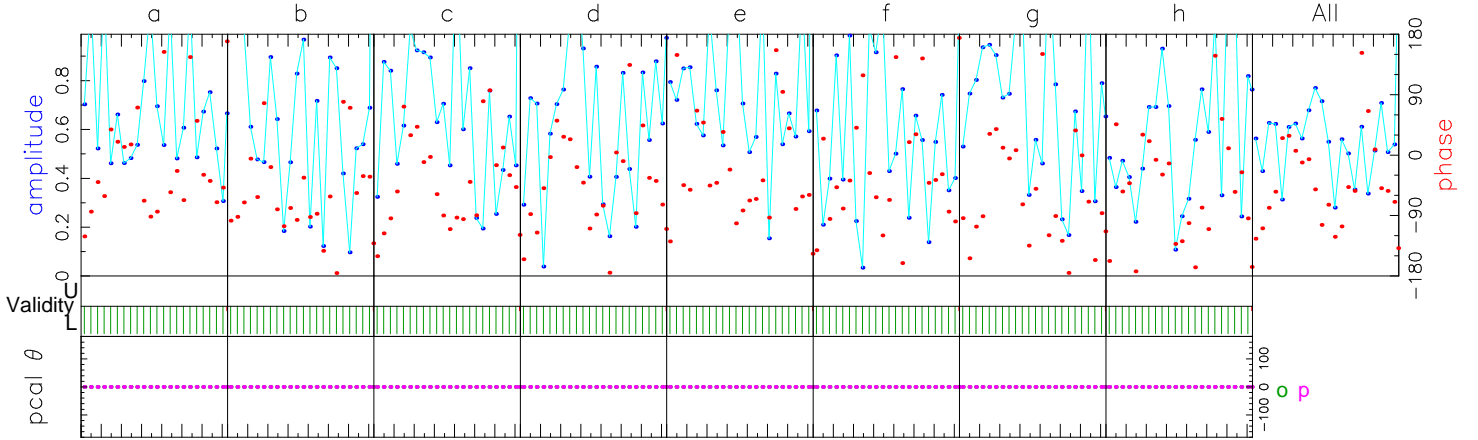
ph/seg (deg) 62.2 17.2 Theor. Amplitude 0.404 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.2 30.0 Search (2048X32) 0.395 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.3 10.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 13.3 17.7 Inc. seg. avg. 0.653 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 135.1 el 31.9 pa -34.2 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -937.458 218.667 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 9
SNR 13.1
Int time 419.827
Amp 0.330
Phase -53.6
PFD 1.2e-30
Delays (us)
SBD 0.002480
MBD 0.003141
Fringe rate (Hz) 0.011698
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 074500.00
Stop 075159.84
FRT 074830.00
Corr/FF/build
2019:227:231929
2019:228:110836
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

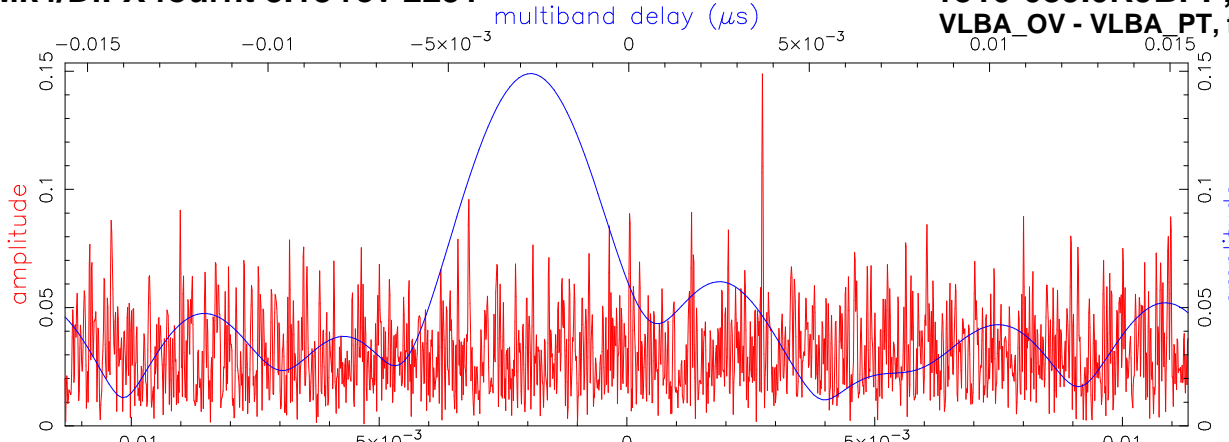


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

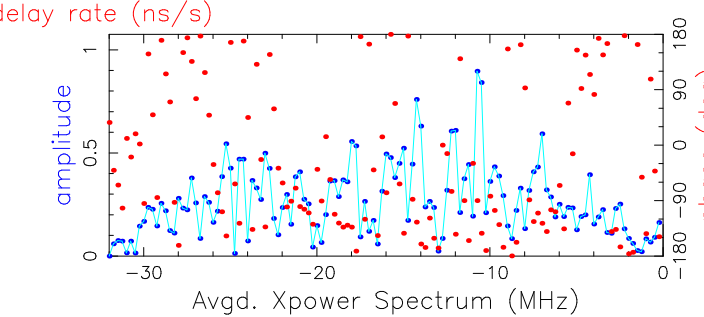
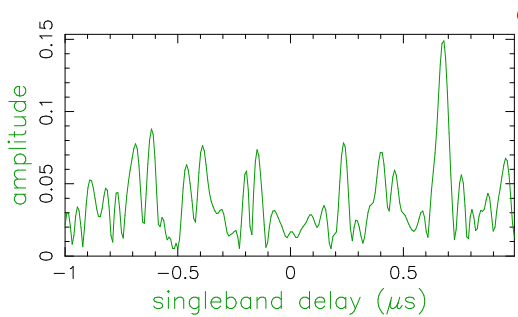


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-52.7	-68.1	-45.7	-29.6	-52.9	-67.0	-64.7	-44.0	Phase	-53.6
	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.2	Ampl.	0.3
	129.2	129.4	129.4	129.0	129.7	129.9	128.9	129.1	Sbd box	129.3
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.23535361616E+03		Apriori delay (usec)		-2.23535675765E+03		Resid mbdelay (usec)		3.14149E-03	+/- 1.7E-04
Sband delay (usec)	-2.23535427715E+03		Apriori clock (usec)		6.0139389E+00		Resid sbdelay (usec)		2.48050E-03	+/- 1.3E-03
Phase delay (usec)	-2.23535675938E+03		Apriori clockrate (us/s)		-6.4999980E-08		Resid phdelay (usec)		-1.72840E-06	+/- 2.8E-07
Delay rate (us/s)	1.64702272138E-01		Apriori rate (us/s)		1.64702136341E-01		Resid rate (us/s)		1.35797E-07	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.11742850515E-05		Resid phase (deg)		-53.6	+/- 8.8

ph/seg (deg) 61.2 21.0 Theor. Amplitude 0.330 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.9 36.7 Search (2048X32) 0.318 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.4 12.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.2 21.6 Inc. seg. avg. 0.515 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 135.1 el 31.9 pa -34.2 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -937.458 218.667 ion window (TEC) 0.00 0.00
 simultaneous interpolator

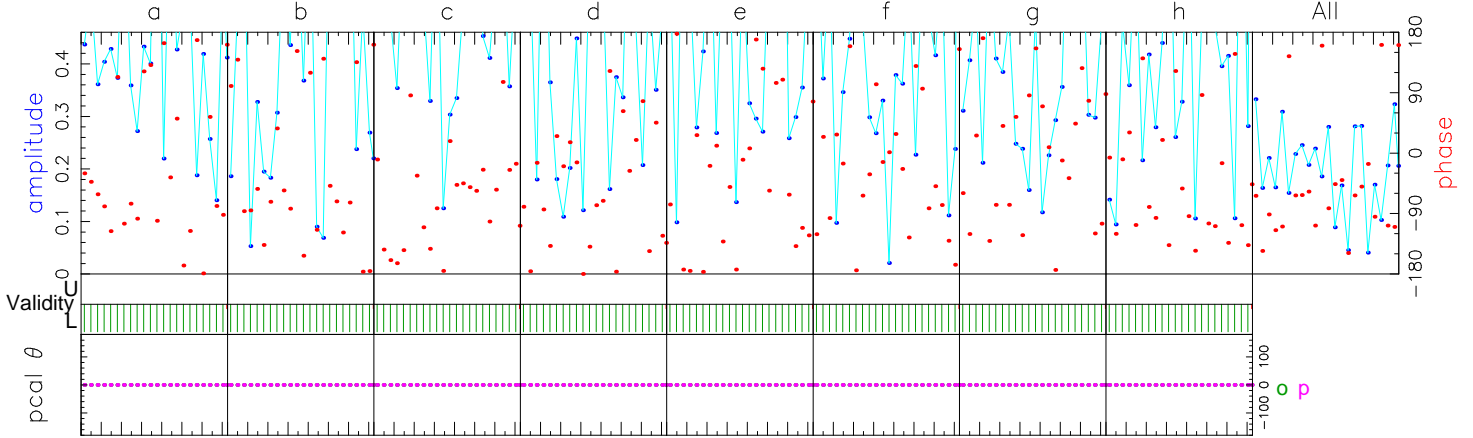


Fringe quality 0
 SNR 5.9
 Int time 419.827
 Amp 0.153
 Phase -89.7
 PFD 3.1e-01
 Delays (us)
 SBD 0.676812
 MBD -0.002807
 Fringe rate (Hz)
 0.235622
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110838
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

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

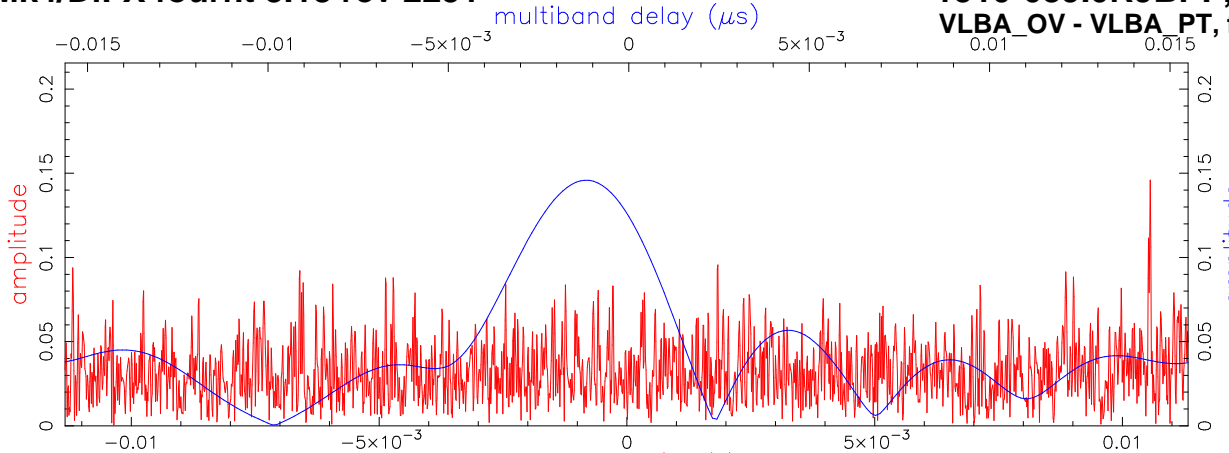


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) -2.23467206515E+03 Apriori delay (usec) -2.23535675765E+03 Resid mbdelay (usec) -2.80750E-03 +/- 3.7E-04
 Sband delay (usec) -2.23467994615E+03 Apriori clock (usec) 6.0139389E+00 Resid sbdelay (usec) 6.76812E-01 +/- 2.9E-03
 Phase delay (usec) -2.23535676054E+03 Apriori clockrate (us/s) -6.4999980E-08 Resid phdelay (usec) -2.89365E-06 +/- 6.2E-07
 Delay rate (us/s) 1.64704871682E-01 Apriori rate (us/s) 1.64702136341E-01 Resid rate (us/s) 2.73534E-06 +/- 2.6E-09
 Total phase (deg) -127.1 Apriori accel (us/s/s) 1.11742850515E-05 Resid phase (deg) -89.7 +/- 19.3

RMS 54.6 Theor. 46.3 Amplitude 0.153 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.6 Search (2048X32) 0.145 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 64.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 24.2 Inc. seg. avg. 0.156 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 43.2 Inc. frq. avg. 0.143 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 135.1 el 31.9 pa -34.2 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -937.458 218.667 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/op..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/op.W.138.0RJBPf



Fringe quality 0

SNR 5.8

Int time 419.827

Amp 0.216

Phase -280.4

PFD 5.6e-01

Delays (us)

SBD 0.802857

MBD -0.001195

Fringe rate (Hz)

0.909734

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

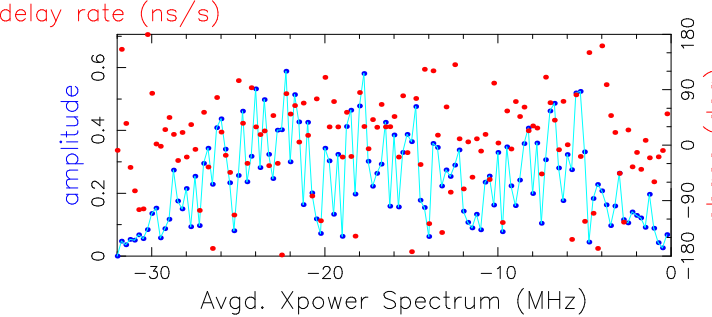
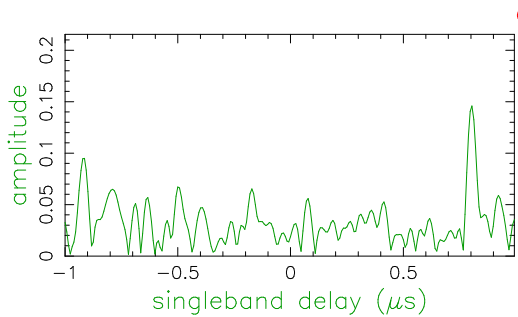
2019:228:110840

2018:249:082454

RA & Dec (J2000)

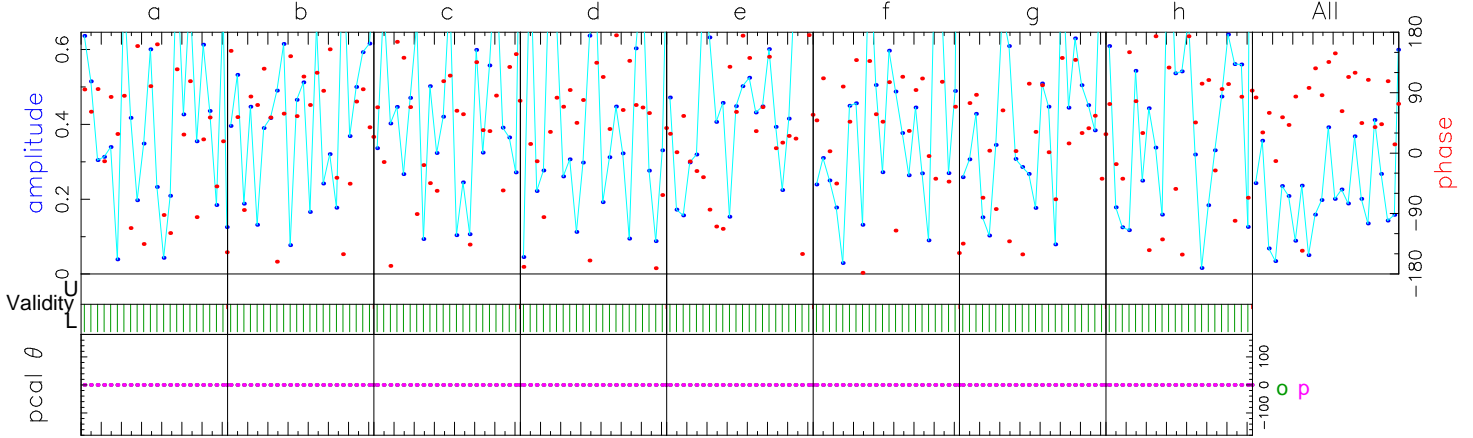
15h12m50.5329s

-9°05'59.830"



Avgd. Xpower Spectrum (MHz)

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



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	-2.23454545247E+03		Apriori delay (usec)		-2.23535675765E+03		Resid mbdelay (usec)		-1.19482E-03	+/- 3.7E-04
Sband delay (usec)	-2.23455390065E+03		Apriori clock (usec)		6.0139389E+00		Resid sbdelay (usec)		8.02857E-01	+/- 3.0E-03
Phase delay (usec)	-2.23535675508E+03		Apriori clockrate (us/s)		-6.4999980E-08		Resid phdelay (usec)		2.56789E-06	+/- 6.4E-07
Delay rate (us/s)	1.64712697451E-01		Apriori rate (us/s)		1.64702136341E-01		Resid rate (us/s)		1.05611E-05	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.11742850515E-05		Resid phase (deg)		-280.4	+/- 19.8

ph/seg (deg) 49.9 82.7 Search (2048X32) 0.140 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

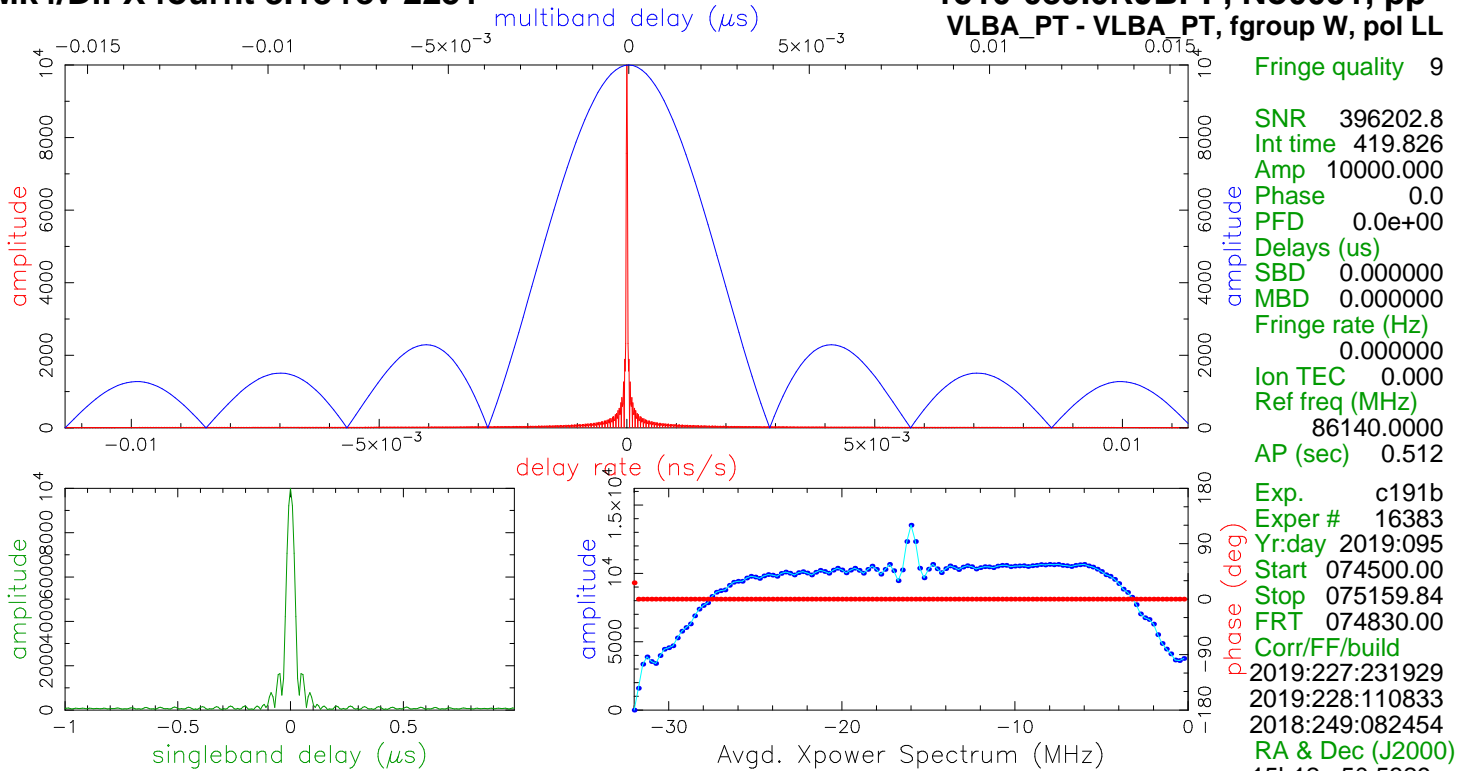
amp/seg (%) 85.7 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 29.4 27.9 Inc. seg. avg. 0.231 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 32.4 48.8 Inc. frq. avg. 0.205 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

o: az 135.1 el 31.9 pa -34.2 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) -937.458 218.667 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/op..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/op.W.144.0RJBPf simultaneous interpolator



Fringe quality 9

SNR 396202.8

Int time 419.826

Amp 10000.000

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. c191b

Exper # 16383

Yr:day 2019:095

Start 074500.00

Stop 075159.84

FRT 074830.00

Corr/FF/build

2019:227:231929

2019:228:110833

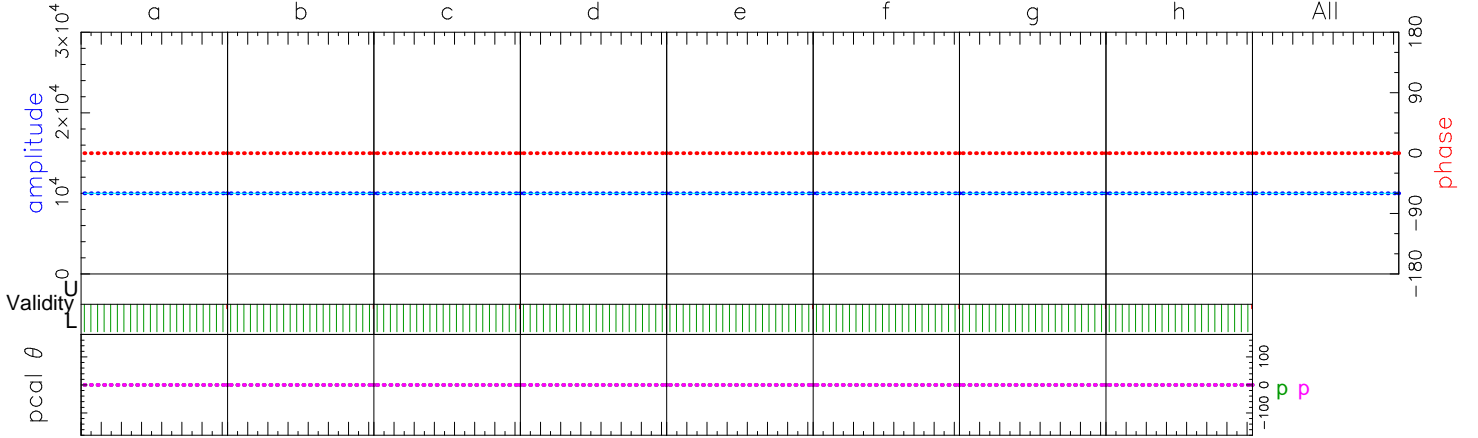
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

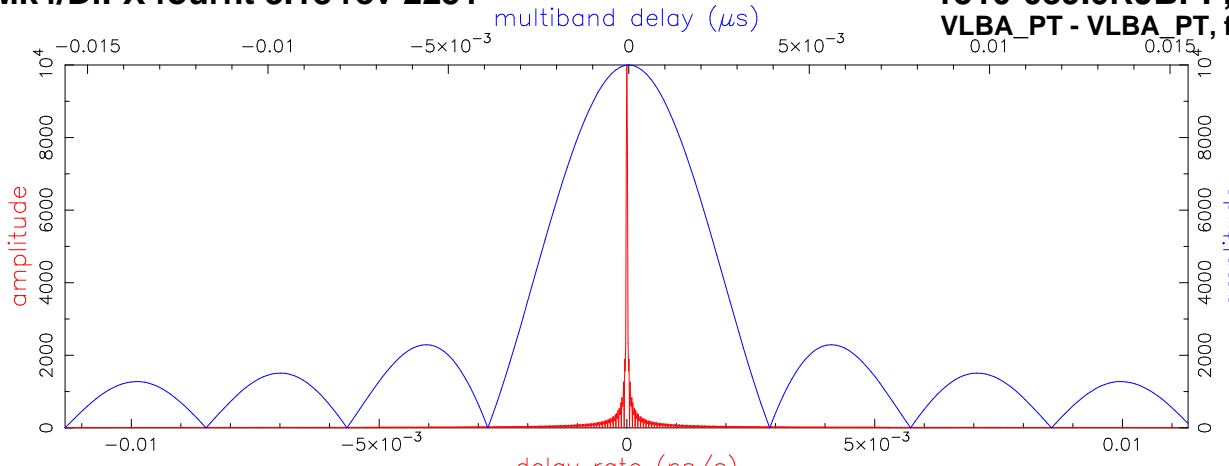
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

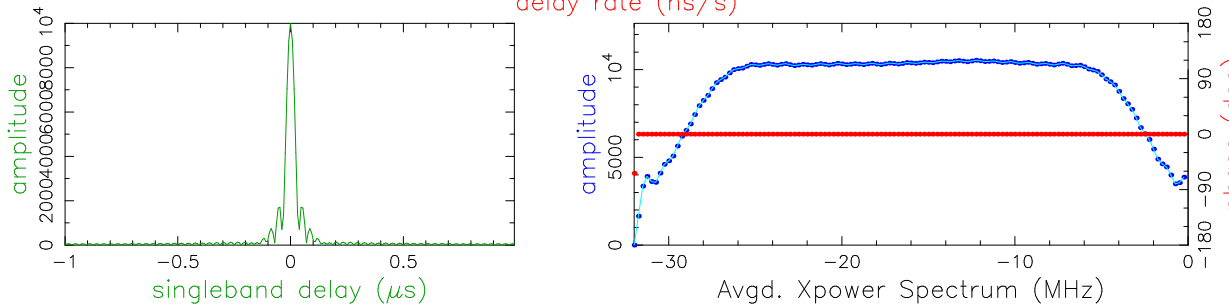
amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

p: az 144.2 el 39.4 pa -28.7 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

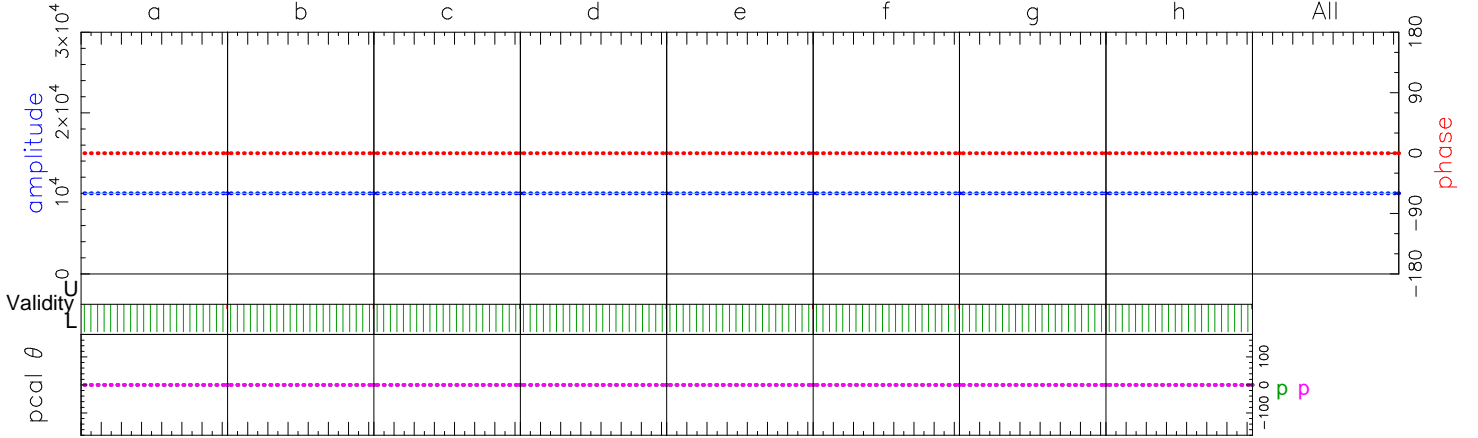
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/pp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/pp.W.104.0RJBPf



Fringe quality 9
 SNR 396202.8
 Int time 419.826
 Amp 10000.000
 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. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110835
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

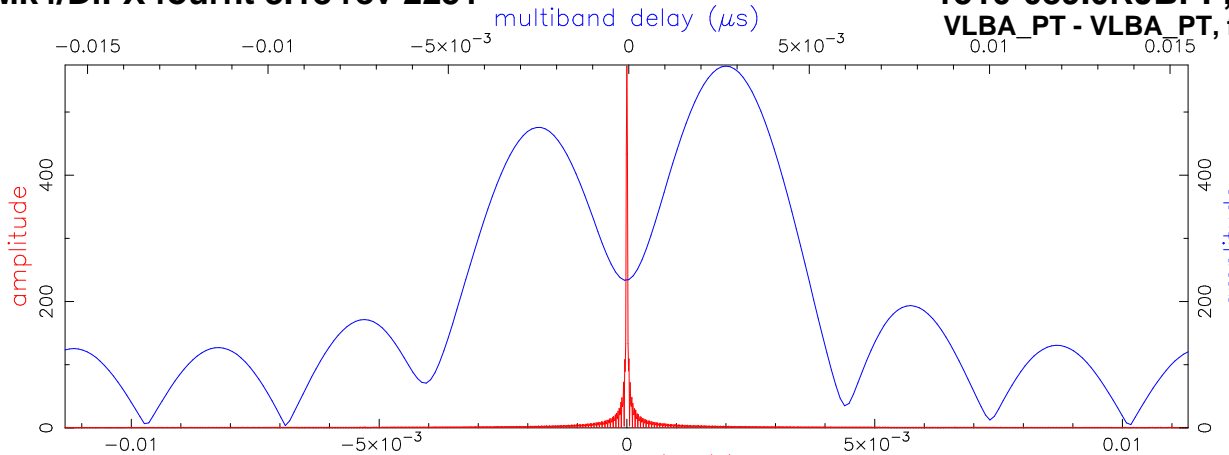


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

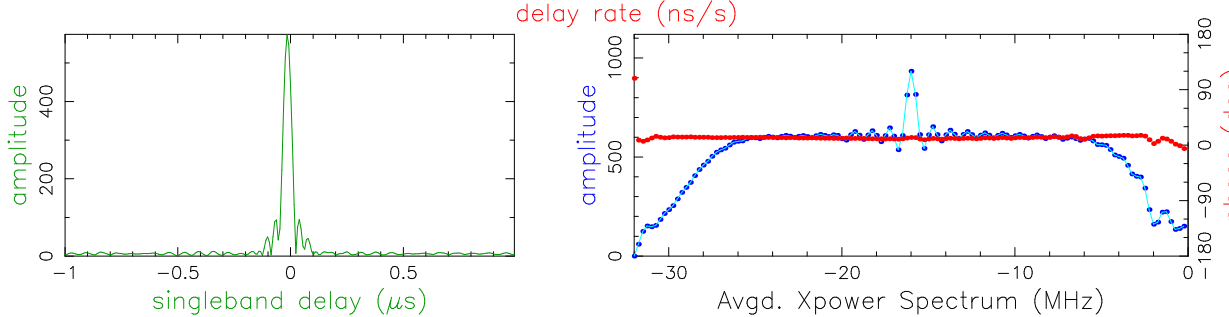


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

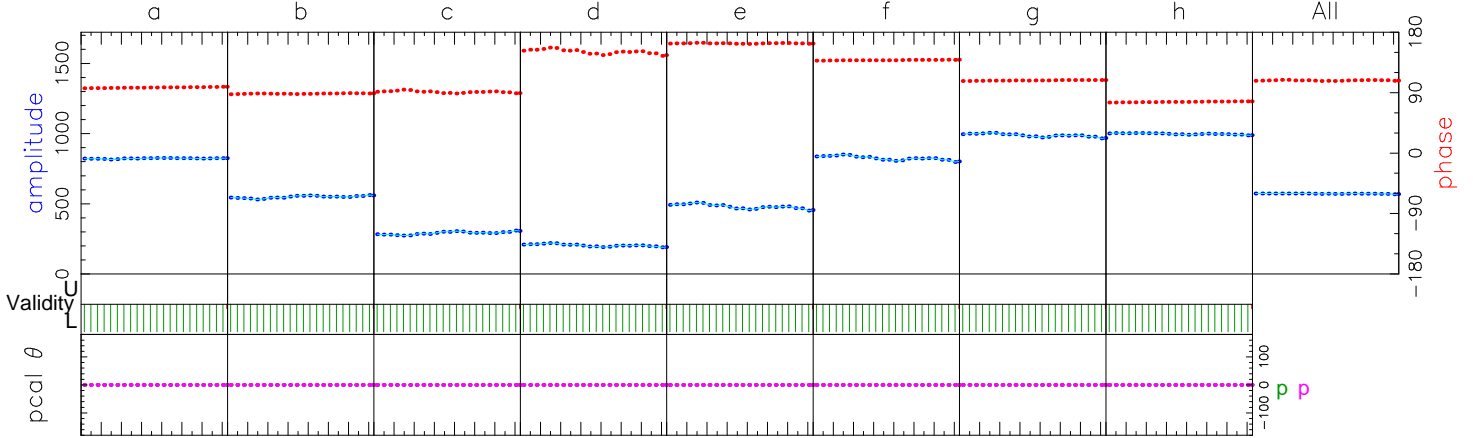
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 p: az 144.2 el 39.4 pa -28.7 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/pp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/pp.W.121.0RJBPf simultaneous interpolator



Fringe quality 5
 SNR 22755.2
 Int time 419.826
 Amp 574.332
 Phase 288.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.014020
 MBD 0.002689
 Fringe rate (Hz)
 -0.000013
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110837
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



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

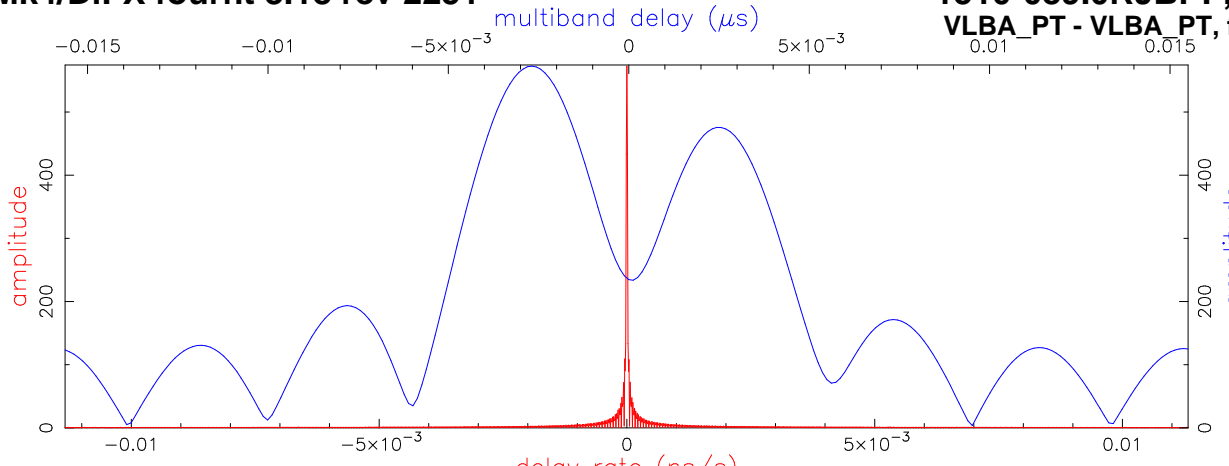


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
p	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Phase	108.2
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Ampl.	645.4
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	127.2
p	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC phase	
p	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	ManI PC	
									PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

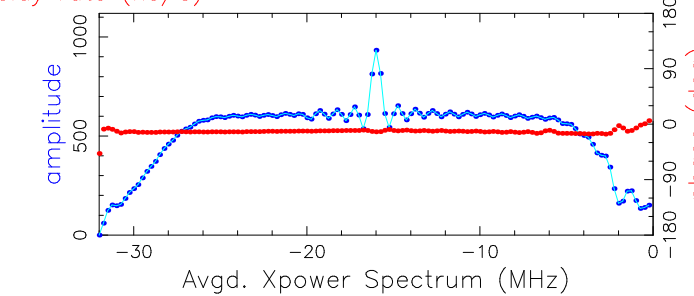
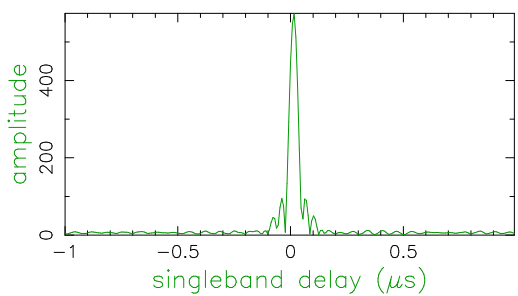
Group delay (usec)(sbd) -2.85606875000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.68931E-03 +/- 9.5E-08
 Sband delay (usec) -1.40200000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.40200E-02 +/- 7.6E-07
 Phase delay (usec) 3.48782068256E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.48782E-06 +/- 1.6E-10
 Delay rate (us/s) -1.51631330591E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -1.51631E-10 +/- 6.7E-13
 Total phase (deg) 288.2 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 288.2 +/- 0.0

RMS Theor. Amplitude 574.332 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.5 0.0 Search (2048X32) 568.054 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 35.6 0.0 Inc. seg. avg. 572.515 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.6 0.0 Inc. frq. avg. 645.440 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

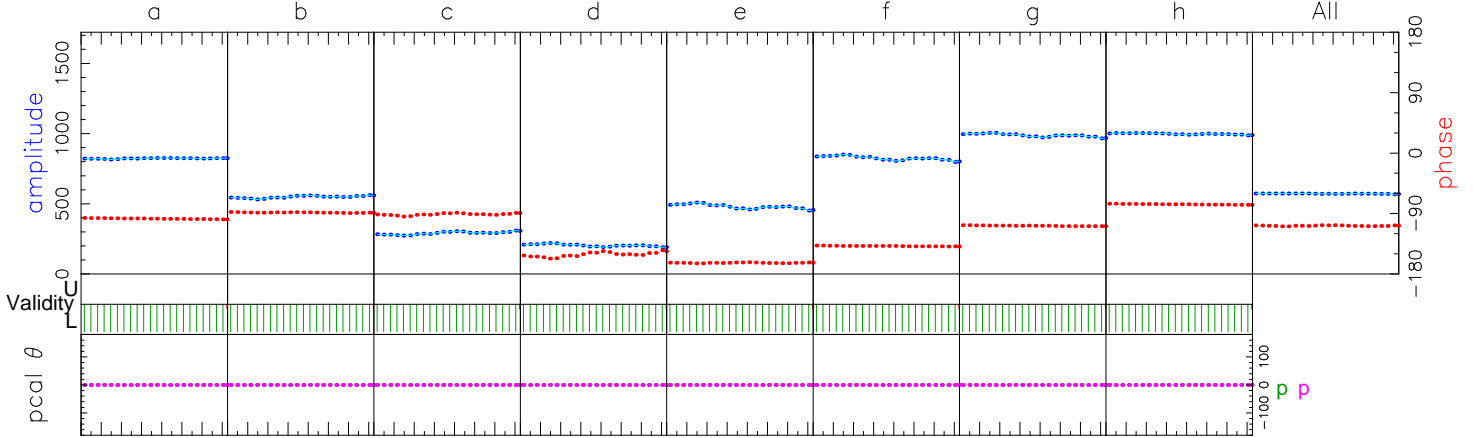
p: az 144.2 el 39.4 pa -28.7 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/pp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/pp.W.136.0RJBPf



Fringe quality 5
 SNR 22755.2
 Int time 419.826
 Amp 574.332
 Phase -288.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.014020
 MBD -0.002689
 Fringe rate (Hz) 0.000013
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 074500.00
 Stop 075159.84
 FRT 074830.00
 Corr/FF/build
 2019:227:231929
 2019:228:110839
 2018:249:082454
 RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



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



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-97.6	-88.5	-91.1	-151.1	-163.3	-138.3	-108.2	-76.2	Phase	-108.2
823.4	548.9	291.4	204.4	481.7	826.2	988.9	998.6	Ampl.	645.4
130.9	130.8	130.3	129.9	130.7	131.1	131.1	131.0	Sbd box	130.8
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
p:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000		
p W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
p W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.85606875000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.68931E-03	+/-	9.5E-08		
Sband delay (usec)	1.40200000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.40200E-02	+/-	7.6E-07		
Phase delay (usec)	-3.48782068257E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.48782E-06	+/-	1.6E-10		
Delay rate (us/s)	1.51631330591E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.51631E-10	+/-	6.7E-13		
Total phase (deg)		-288.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-288.2	+/-	0.0	

ph/seg (deg) 0.5 0.0 Theor. Amplitude 574.332 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.4 0.0 Search (2048X32) 568.054 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 51.6 0.0 Inc. seg. avg. 572.515 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 p: az 144.2 el 39.4 pa -28.7 p: az 144.2 el 39.4 pa -28.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0051/pp..0RJBPf Output file: /Exps/c191b/v1/1234/No0051/pp.W.142.0RJBPf