

Fringe quality 9

SNR 366662.0

Int time 359.556

Amp 10000.001

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110057

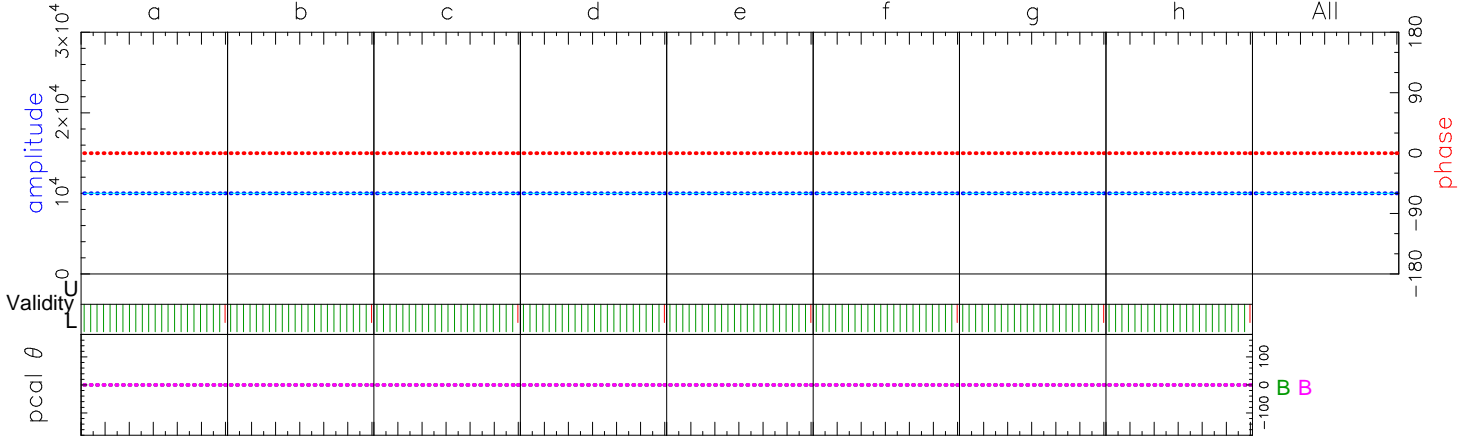
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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 W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
B W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
B 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	+/-	5.9E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

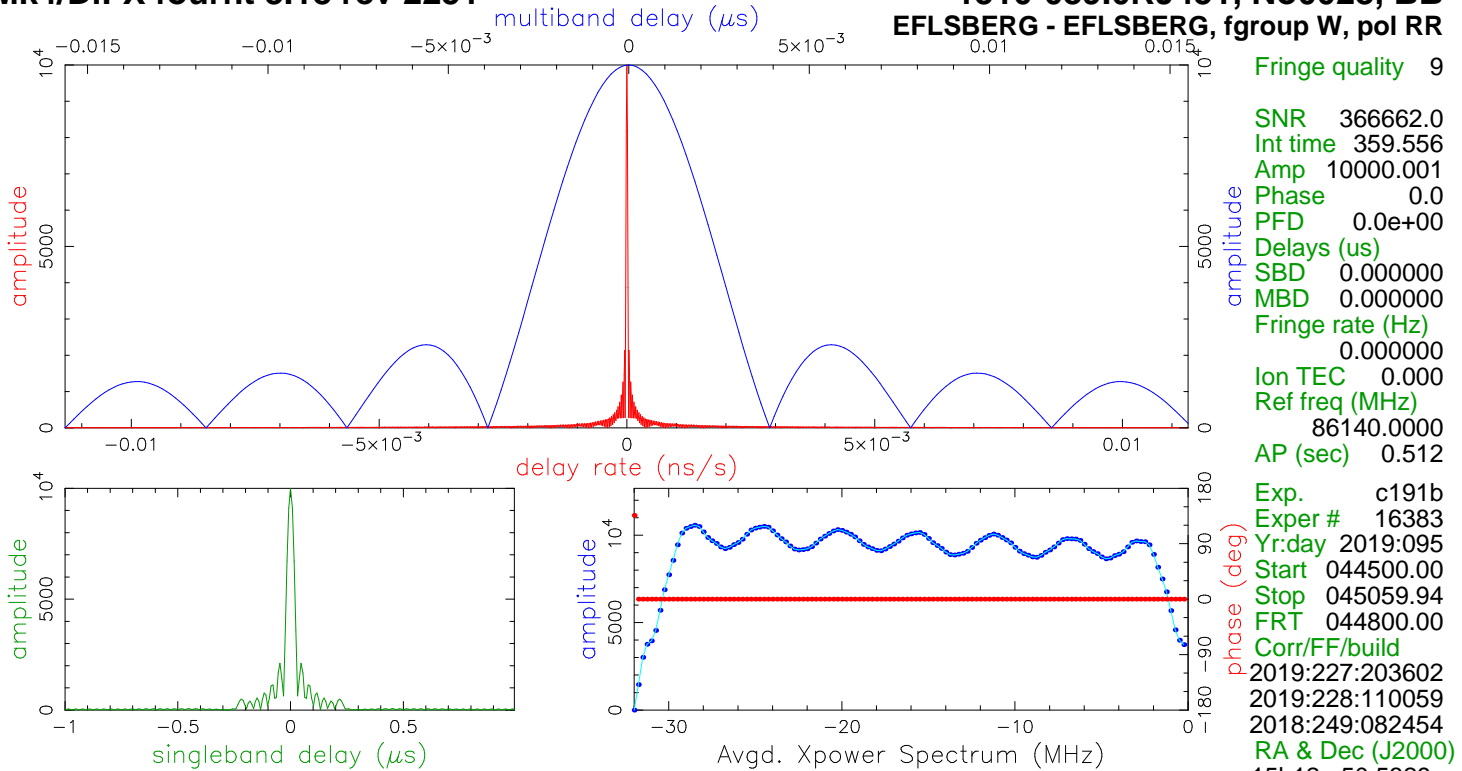
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

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 225.3 el 19.8 pa 27.2 B: az 225.3 el 19.8 pa 27.2 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/No0028/BB..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BB.W.2.0RJ451 simultaneous interpolator



Fringe quality 9

SNR 366662.0

Int time 359.556

Amp 10000.001

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110059

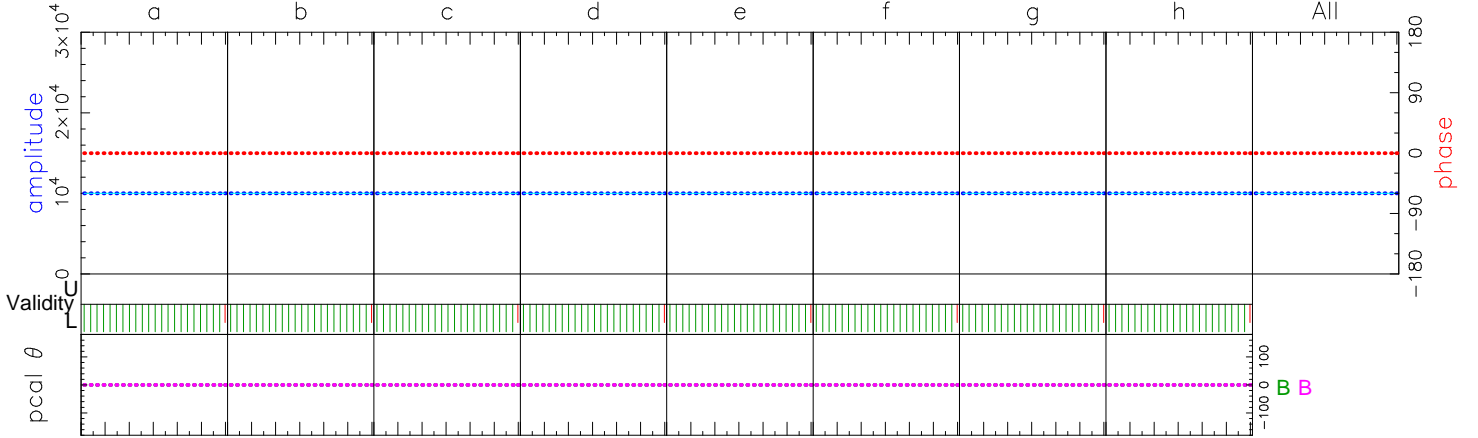
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	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	+/- 5.9E-09
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00	+/- 4.7E-08
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00	+/- 1.0E-11
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00	+/- 4.8E-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 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 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

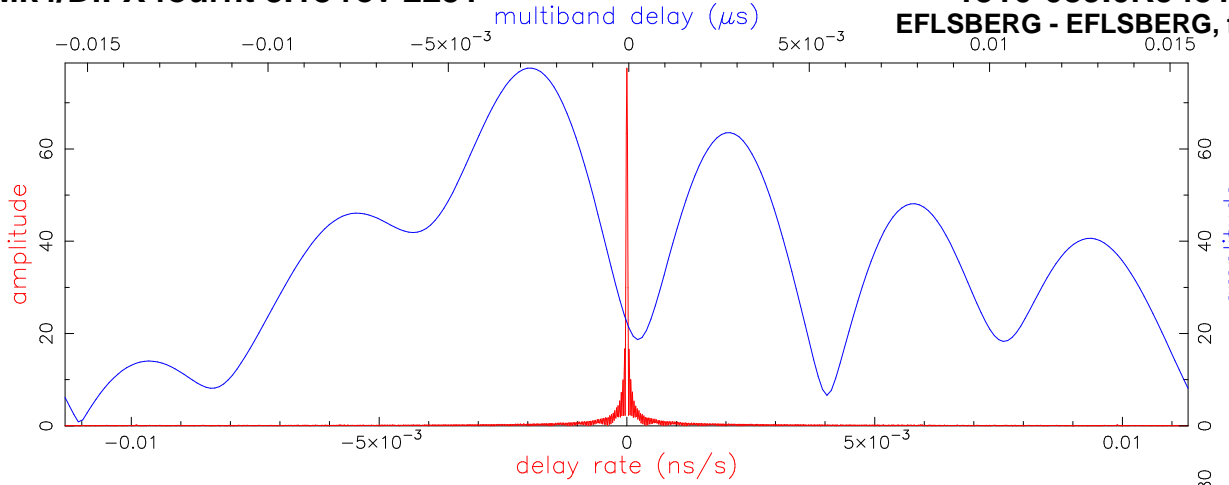
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

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

B: az 225.3 el 19.8 pa 27.2 B: az 225.3 el 19.8 pa 27.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

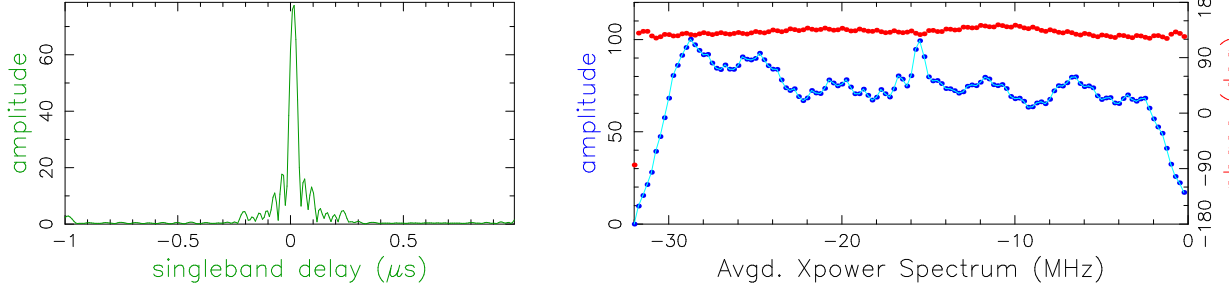
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BB..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BB.W.23.0RJ451



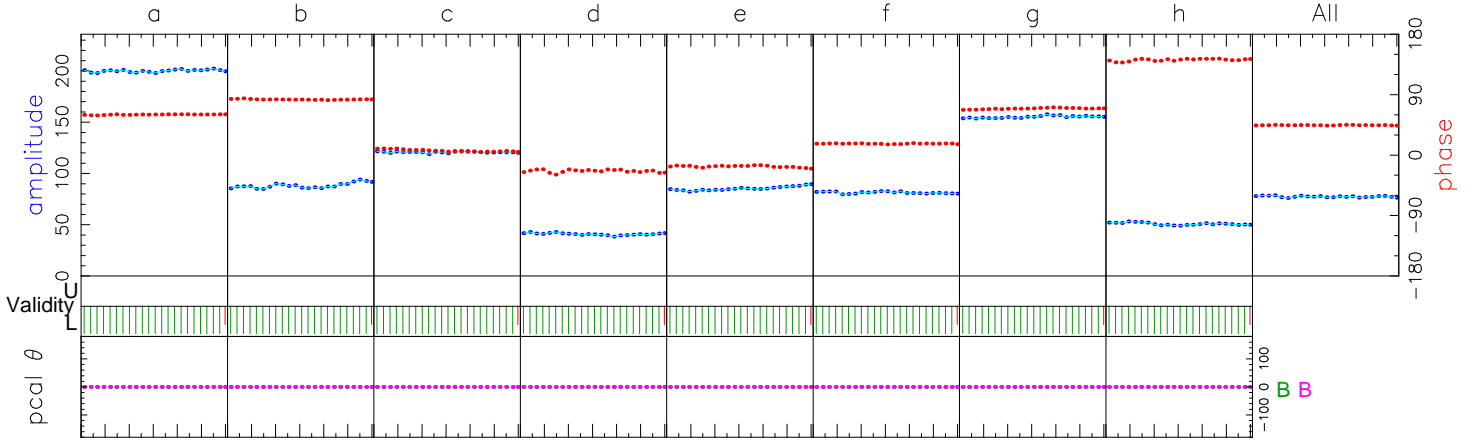
Fringe quality 5

SNR 2882.8
Int time 359.556
Amp 78.624
Phase 44.5
PFD 0.0e+00
Delays (us)
SBD 0.012503
MBD -0.002805
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 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110102
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

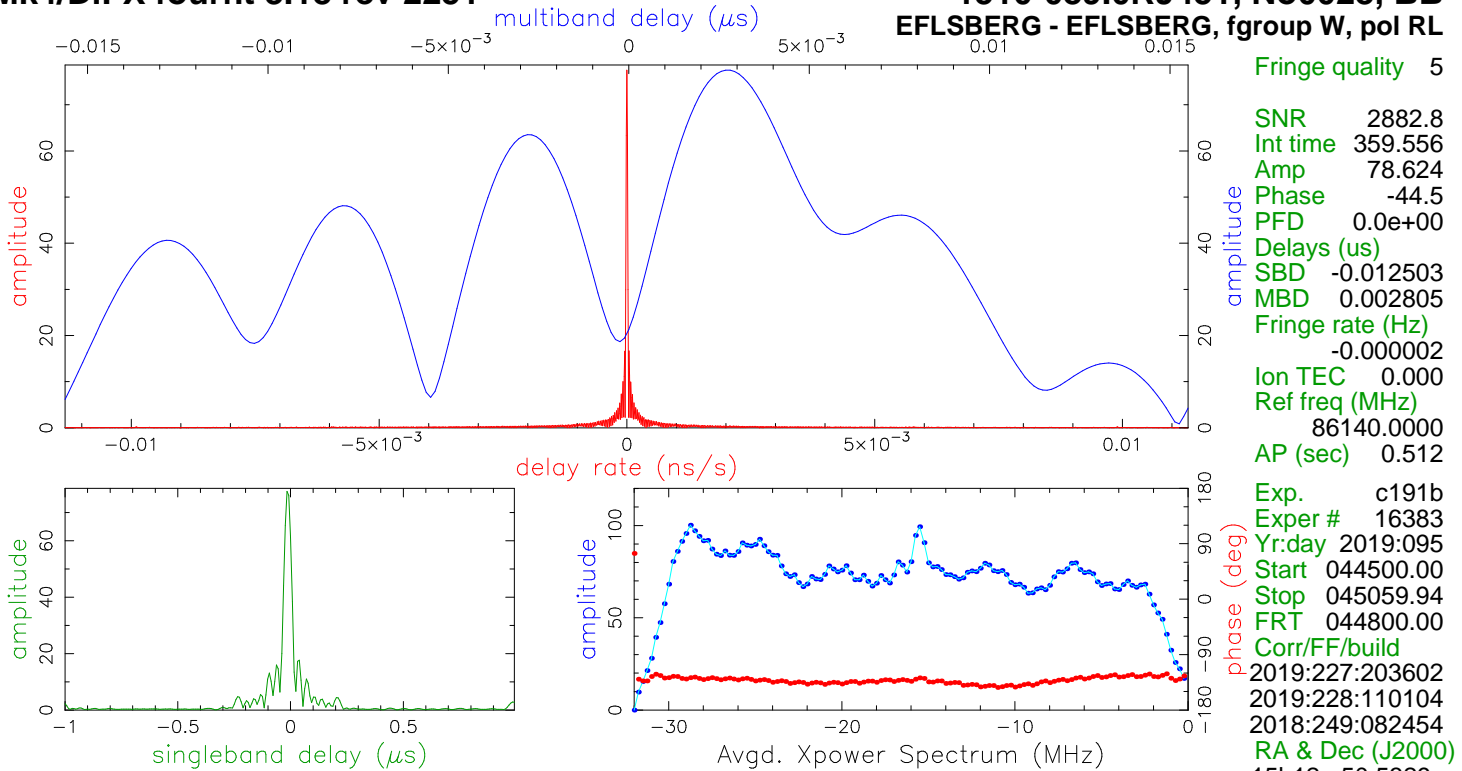


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

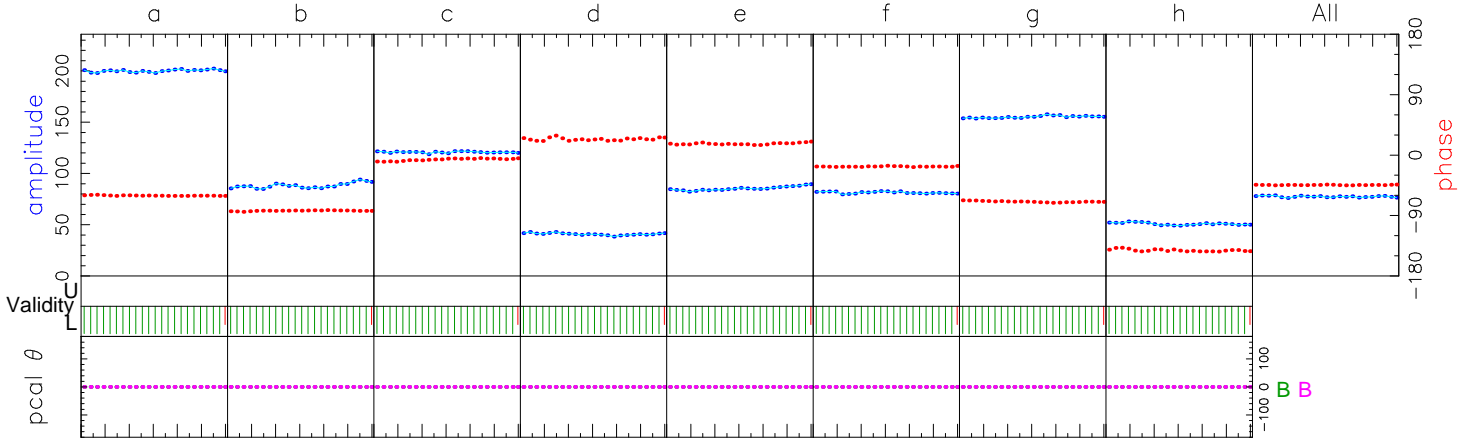


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	60.3	82.8	6.7	-23.7	-16.9	17.0	69.3	141.7	Phase	44.5
	200.1	88.2	120.7	40.9	85.3	81.4	155.2	50.9	Ampl.	102.8
	131.3	131.2	130.0	135.5	129.5	132.1	130.9	133.0	Sbd box	130.6
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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)	-2.80500000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.80500E-03	+/- 7.5E-07
Sband delay (usec)	1.25030000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.25030E-02	+/- 6.0E-06
Phase delay (usec)	1.43541744976E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		1.43542E-06	+/- 1.3E-09
Delay rate (us/s)	2.55080743050E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		2.55081E-11	+/- 6.2E-12
Total phase (deg)	44.5		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		44.5	+/- 0.0

ph/seg (deg) 0.3 0.1 Theor. Amplitude 78.624 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.7 0.2 Search (2048X32) 77.212 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.1 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 70.7 0.1 Inc. seg. avg. 77.502 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 225.3 el 19.8 pa 27.2 B: az 225.3 el 19.8 pa 27.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

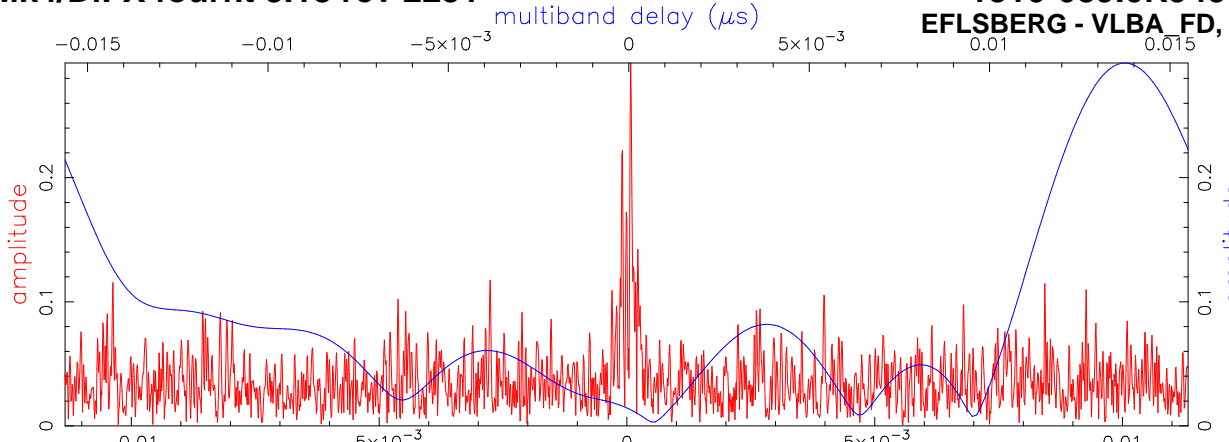


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

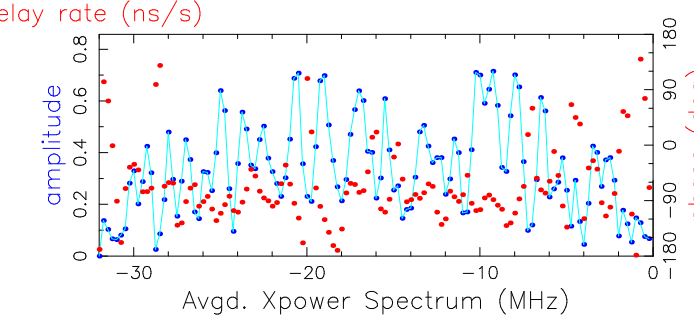
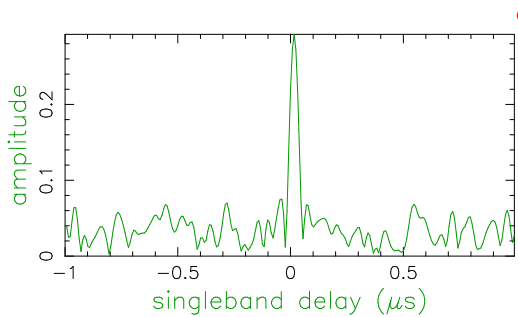


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
-60.3	-82.8	-6.7	23.7	16.9	-17.0	-69.3	-141.7	Phase	-44.5	
200.1	88.2	120.7	40.9	85.3	81.4	155.2	50.9	Ampl.	102.8	
126.7	126.8	128.0	122.5	128.5	125.9	127.1	125.0	Sbd box	127.4	
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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 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)	2.805000000000E-03	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	2.80500E-03	+/-	7.5E-07			
Sband delay (usec)	-1.250300000000E-02	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	-1.25030E-02	+/-	6.0E-06			
Phase delay (usec)	-1.43541744951E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	-1.43542E-06	+/-	1.3E-09			
Delay rate (us/s)	-2.55080743050E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	-2.55081E-11	+/-	6.2E-12			
Total phase (deg)		Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	-44.5	+/-	0.0			

ph/seg (deg)	0.3	Theor.	Amplitude	78.624 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5						
amp/seg (%)	1.7	0.1	Search (2048X32)	77.212	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000					
ph/frq (deg)	61.1	0.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016				
amp/frq (%)	70.7	0.1	Inc. seg. avg.	77.502	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

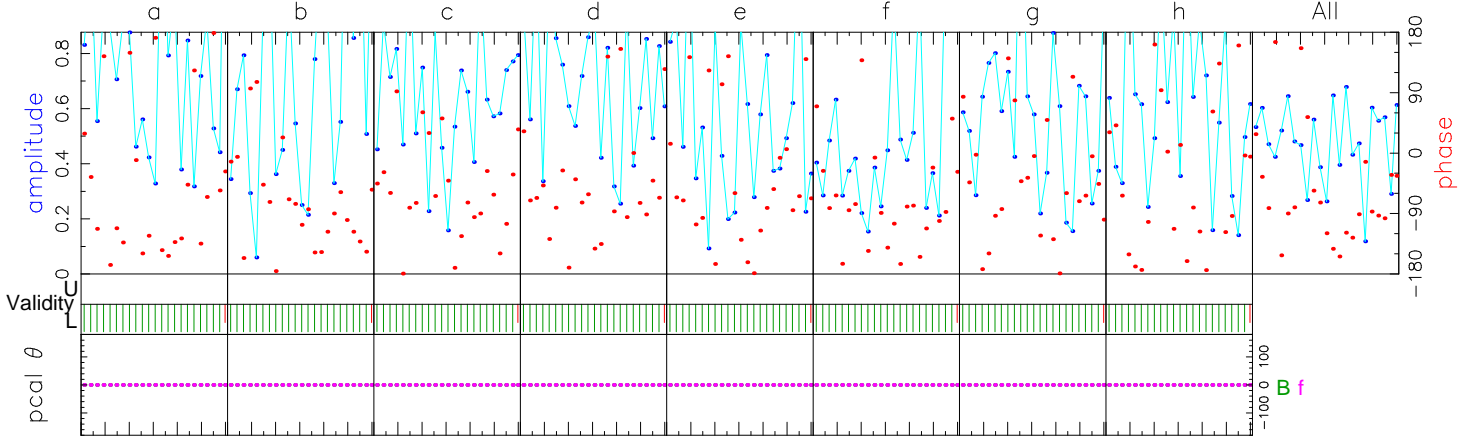


Fringe quality 9
 SNR 10.7
 Int time 359.556
 Amp 0.292
 Phase -94.9
 PFD 1.8e-18
 Delays (us)
 SBD 0.015519
 MBD 0.013752
 Fringe rate (Hz) 0.006979
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



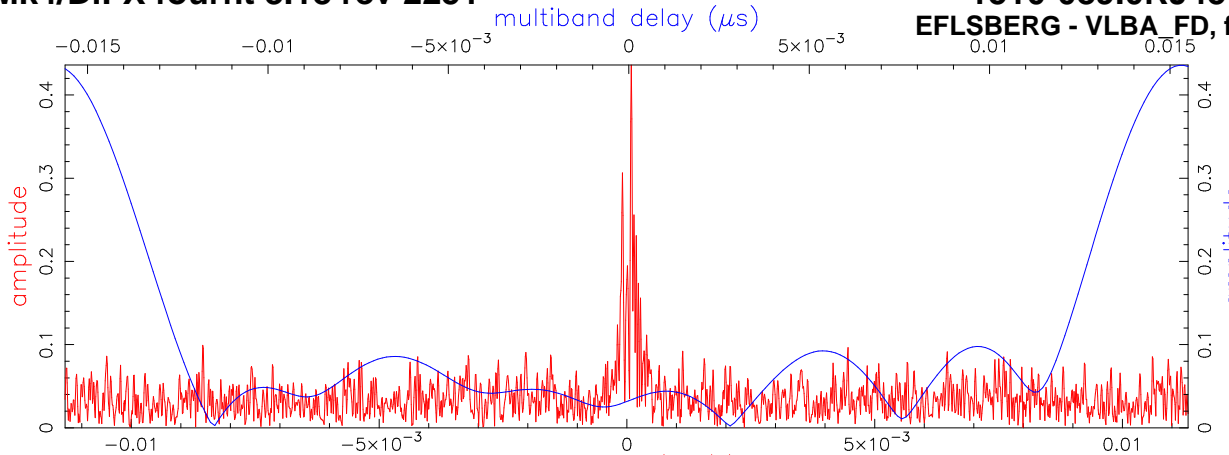
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110057
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

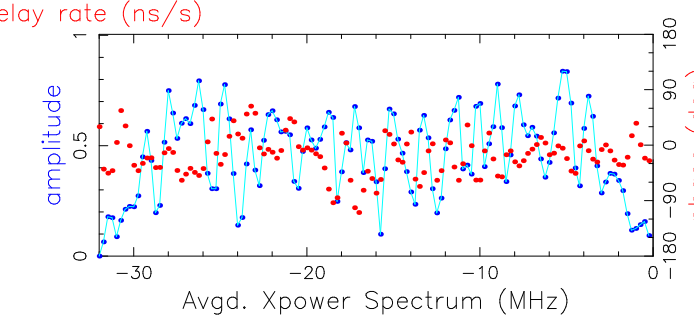
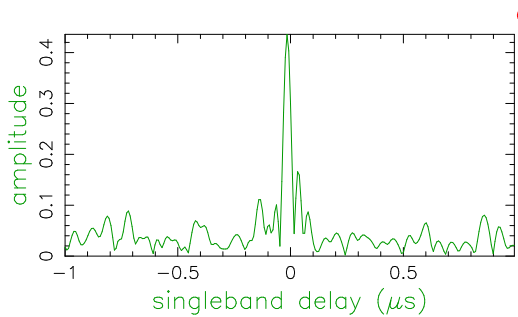


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-121.0	-98.4	-65.4	-82.1	-98.5	-87.7	-77.3	-142.3	Phase	-94.9
	0.4	0.5	0.3	0.4	0.2	0.3	0.2	0.2	Ampl.	0.3
	130.8	130.3	131.9	131.2	131.4	131.4	22.8	230.3	Sbd box	131.0
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.80481323711E+03		Apriori delay (usec)		1.80479948480E+03		Resid mbdelay (usec)		1.37523E-02	+/- 2.0E-04
Sband delay (usec)	1.80481500430E+03		Apriori clock (usec)		1.2658824E+01		Resid sbdelay (usec)		1.55195E-02	+/- 1.6E-03
Phase delay (usec)	1.80479948174E+03		Apriori clockrate (us/s)		-2.0000000E-07		Resid phdelay (usec)		-3.06084E-06	+/- 3.4E-07
Delay rate (us/s)	-1.88939265214E+00		Apriori rate (us/s)		-1.88939273315E+00		Resid rate (us/s)		8.10179E-08	+/- 1.7E-09
Total phase (deg)	128.6		Apriori accel (us/s/s)		-1.42445497250E-05		Resid phase (deg)		-94.9	+/- 10.7

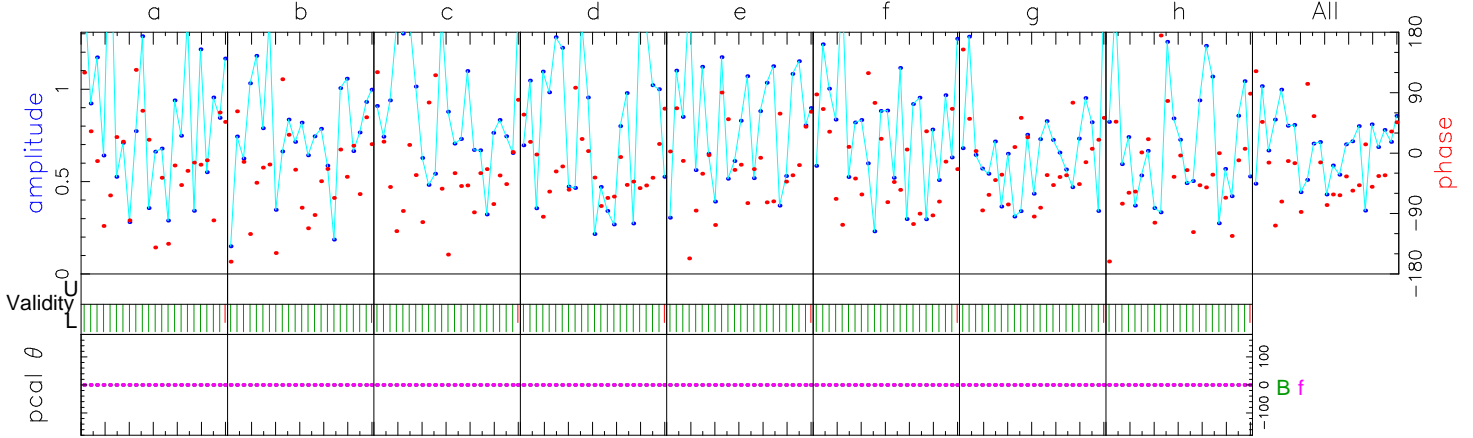
RMS Theor. Amplitude 0.292 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.7 25.6 Search (2048X32) 0.287 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 78.9 44.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 26.9 15.1 Inc. seg. avg. 0.433 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 32.0 26.4 Inc. frq. avg. 0.303 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 225.3 el 19.8 pa 27.2 f: az 109.5 el 13.5 pa -55.3 u,v (fr/asec) 10942.072 2490.041 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/Bf_0RJ451 Output file: /Exps/c191b/v1/1234/No0028/Bf.W.1.0RJ451



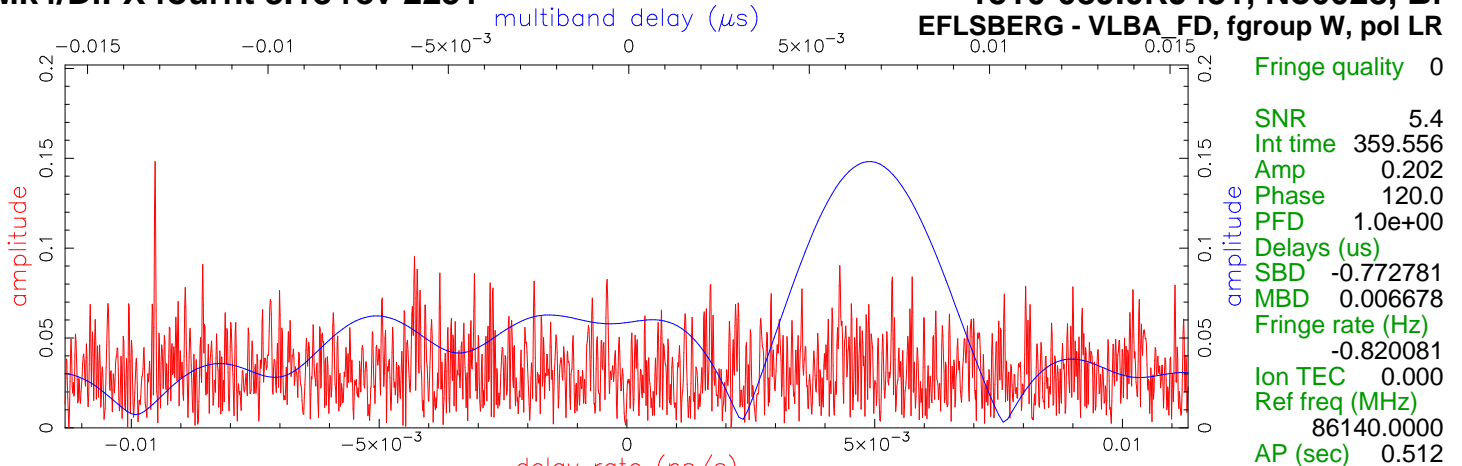
Fringe quality 9
 SNR 16.0
 Int time 359.556
 Amp 0.436
 Phase -25.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.014909
 MBD -0.015935
 Fringe rate (Hz) 0.007166
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110059
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



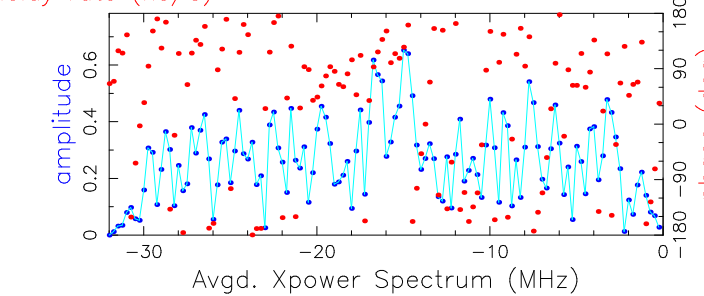
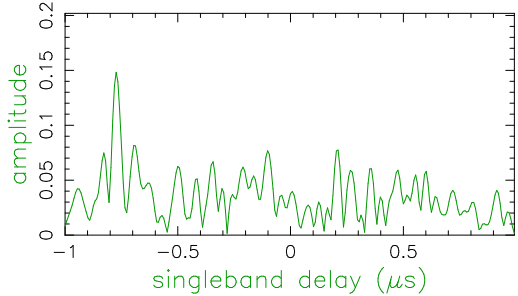
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-9.5	-26.8	-45.0	-24.1	-21.3	-35.8	-15.8	-23.6	Phase	-25.4	
	0.4	0.5	0.5	0.6	0.4	0.4	0.4	0.4	Ampl.	0.4	
	127.2	126.7	127.5	127.2	127.2	127.1	126.7	127.0	Sbd box	127.1	
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	1.80478354953E+03		Apriori delay (usec)		1.80479948480E+03		Resid mbdelay (usec)		-1.59353E-02	+/- 1.4E-04	
Sband delay (usec)	1.80478457630E+03		Apriori clock (usec)		1.2658824E+01		Resid sbdelay (usec)		-1.49085E-02	+/- 1.1E-03	
Phase delay (usec)	1.80479948398E+03		Apriori clockrate (us/s)		-2.0000000E-07		Resid phdelay (usec)		-8.20081E-07	+/- 2.3E-07	
Delay rate (us/s)	-1.88939264996E+00		Apriori rate (us/s)		-1.88939273315E+00		Resid rate (us/s)		8.31946E-08	+/- 1.1E-09	
Total phase (deg)	198.1		Apriori accel (us/s/s)		-1.42445497250E-05		Resid phase (deg)		-25.4	+/- 7.2	
	RMS	Theor.	Amplitude	0.436 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	59.0	17.2	Search (2048X32)	0.414		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	70.3	30.0	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	12.0	10.1	Inc. seg. avg.	0.661		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	16.4	17.7	Inc. frq. avg.	0.436		Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00



Fringe quality 0

SNR 5.4
Int time 359.556
Amp 0.202
Phase 120.0
PFD 1.0e+00
Delays (us)
SBD -0.772781
MBD 0.006678
Fringe rate (Hz)
-0.820081
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110101
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

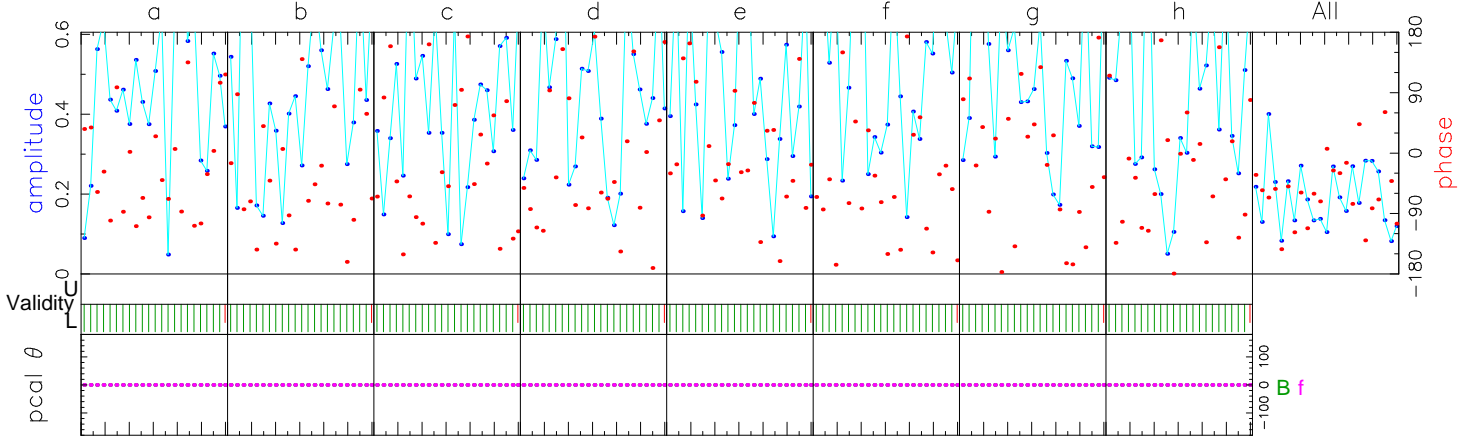


amplitude

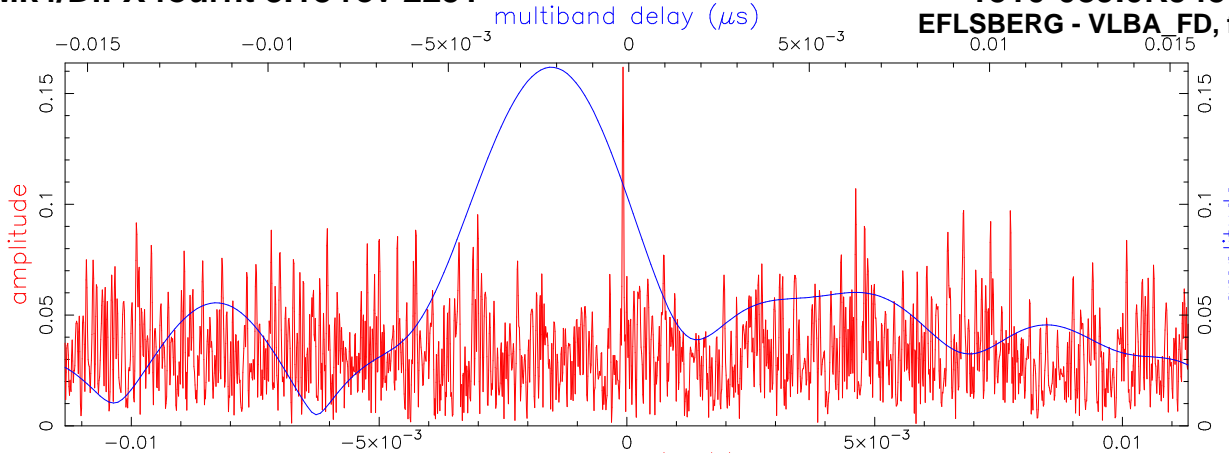
phase (deg)

Avgd. Xpower Spectrum (MHz)

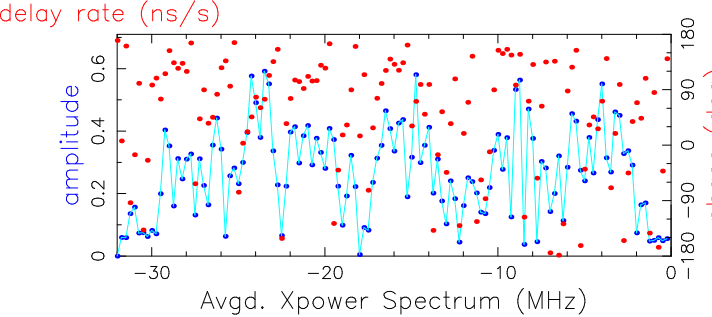
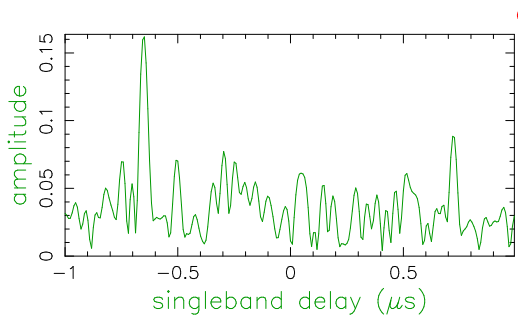
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Phase	-60.0	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	0.2	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	30.1	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
f	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC amp		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
									Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	1.80402491266E+03		Apriori delay (usec)		1.80479948480E+03		Resid mbdelay (usec)		6.67786E-03	+/- 4.0E-04	
Sband delay (usec)	1.80402670380E+03		Apriori clock (usec)		1.2658824E+01		Resid sbdelay (usec)		-7.72781E-01	+/- 3.2E-03	
Phase delay (usec)	1.80479948287E+03		Apriori clockrate (us/s)		-2.0000000E-07		Resid phdelay (usec)		-1.93409E-06	+/- 6.8E-07	
Delay rate (us/s)	-1.88940225348E+00		Apriori rate (us/s)		-1.88939273315E+00		Resid rate (us/s)		-9.52032E-06	+/- 3.3E-09	
Total phase (deg)	343.5		Apriori accel (us/s/s)		-1.42445497250E-05		Resid phase (deg)		120.0	+/- 21.1	
ph/seg (deg)	RMS 49.4	Theor. 50.6	Amplitude 50.6	0.202 +/- 0.037		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	62.1	88.2	Search (2048X32)	0.145		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	29.7	29.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	52.9	52.0	Inc. seg. avg.	0.193		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
			Inc. frq. avg.	0.186		Data rate(Mb/s): 1024		ion window (TEC)	0.00	0.00	
						nlags: 128 t_cohere infinite					

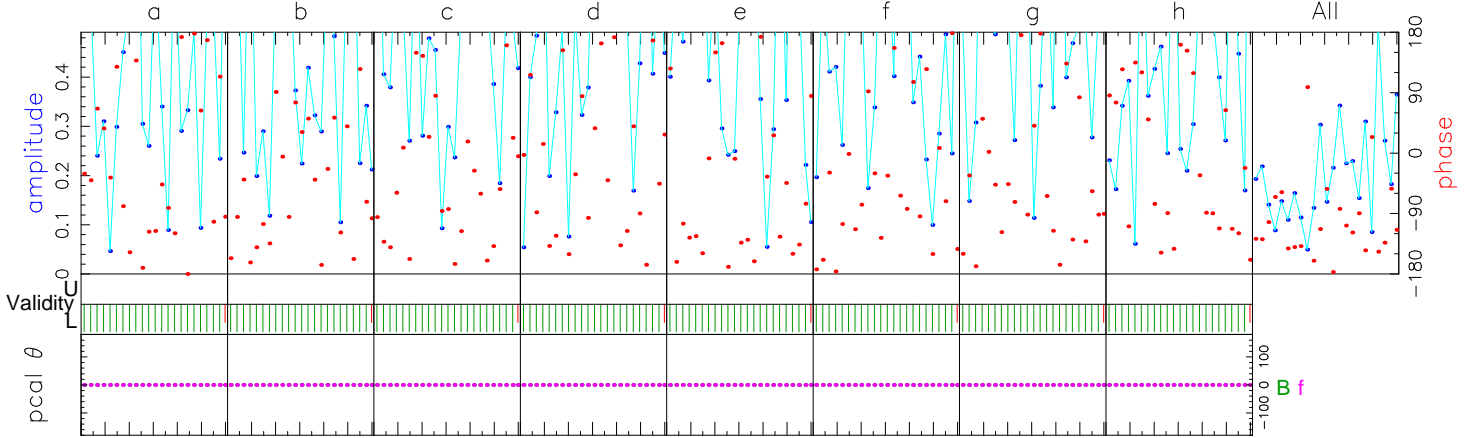


Fringe quality 0
 SNR 6.0
 Int time 359.556
 Amp 0.164
 Phase 61.4
 PFD 2.2e-01
 Delays (us)
 SBD -0.651617
 MBD -0.002160
 Fringe rate (Hz)
 -0.007105
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



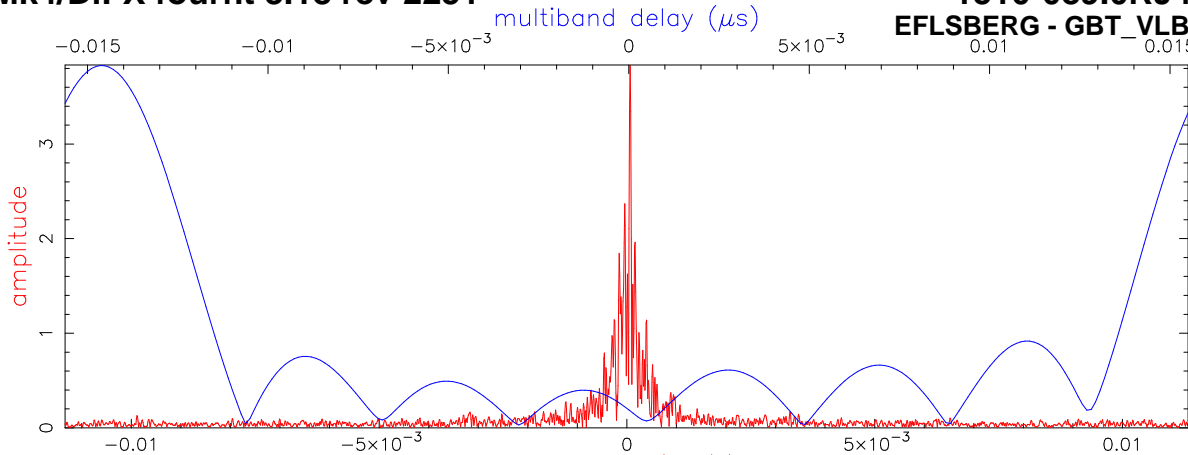
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110103
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



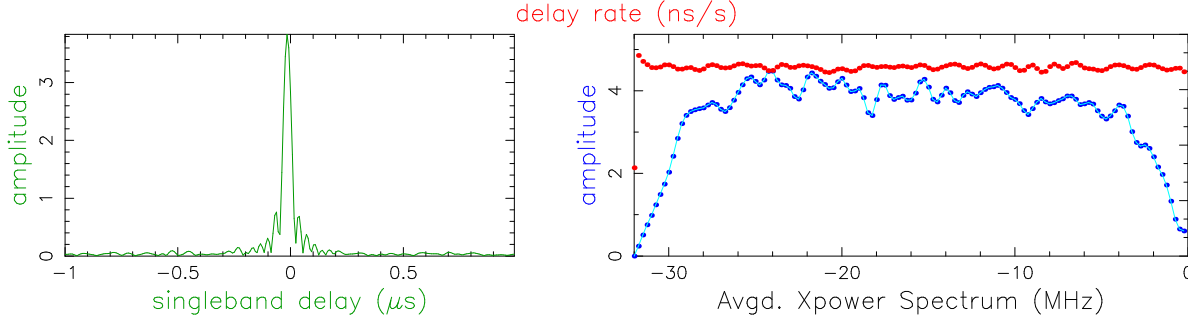
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-137.8	-92.6	-81.9	-123.6	-141.5	-92.3	-107.9	-135.1	Phase	-118.6
	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	192.6	85.2	126.9	215.3	45.9	47.0	51.0	222.0	Sbd box	45.6
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.80414107501E+03		Apriori delay (usec)		1.80479948480E+03		Resid mbdelay (usec)		-2.15979E-03	+/- 3.6E-04
Sband delay (usec)	1.80414786780E+03		Apriori clock (usec)		1.2658824E+01		Resid sbdelay (usec)		-6.51617E-01	+/- 2.9E-03
Phase delay (usec)	1.80479948098E+03		Apriori clockrate (us/s)		-2.0000000E-07		Resid phdelay (usec)		-3.82579E-06	+/- 6.2E-07
Delay rate (us/s)	-1.88939281564E+00		Apriori rate (us/s)		-1.88939273315E+00		Resid rate (us/s)		-8.24867E-08	+/- 3.0E-09
Total phase (deg)	284.8		Apriori accel (us/s/s)		-1.42445497250E-05		Resid phase (deg)		61.4	+/- 19.1

RMS Theor. Amplitude 0.164 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.3 45.8 Search (2048X32) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 67.5 79.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 25.9 27.0 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 (%) 48.8 47.1 Inc. frq. avg. 0.157 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



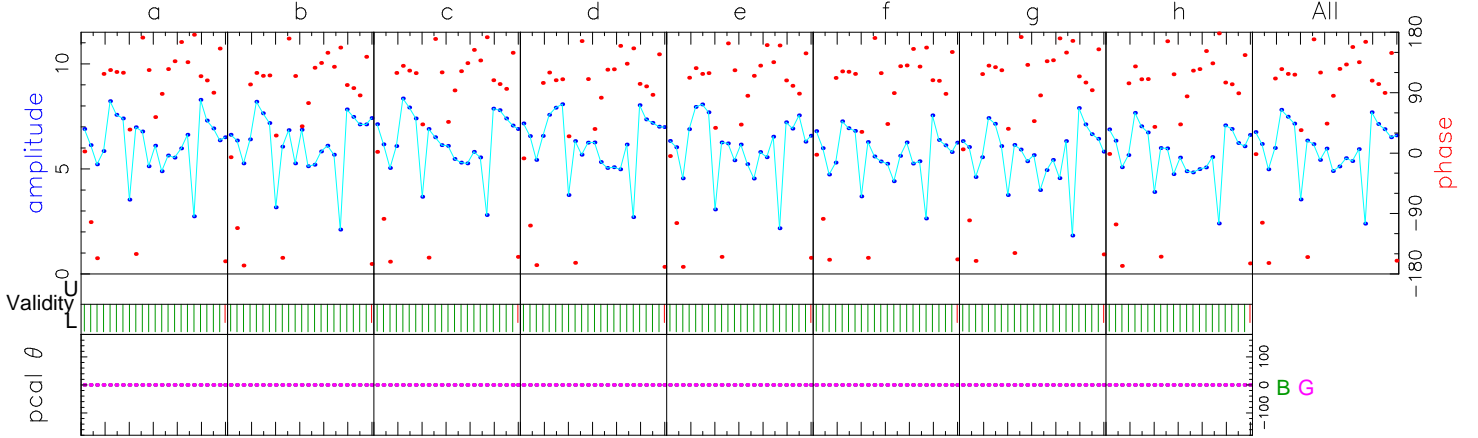
Fringe quality 5

SNR 140.6
Int time 359.280
Amp 3.836
Phase 126.5
PFD 0.0e+00
Delays (us)
SBD -0.014612
MBD -0.014611
Fringe rate (Hz) 0.005763
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512



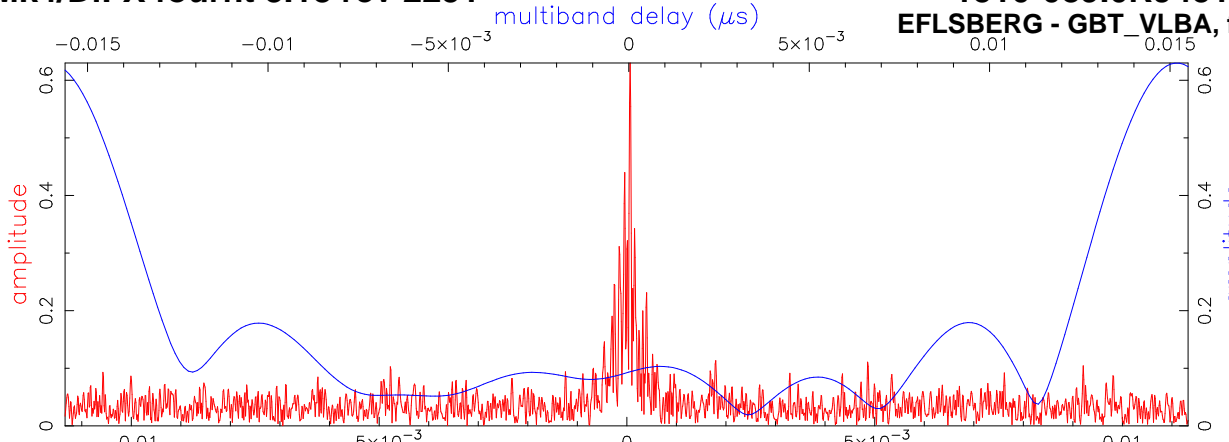
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110101
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

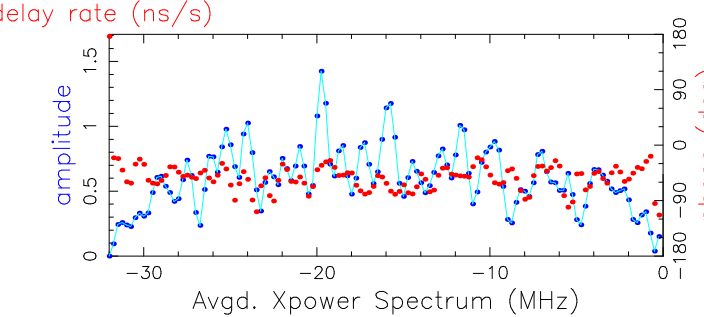
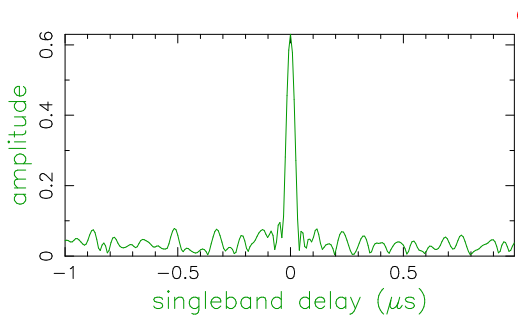


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	131.0	122.6	128.6	120.8	125.5	127.0	133.3	123.7	Phase	126.5
	4.0	3.9	4.1	3.9	3.9	3.6	3.6	3.6	Ampl.	3.8
	127.1	127.2	127.2	127.1	127.1	127.3	127.0	127.0	Sbd box	127.1
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.81689447812E+03		Apriori delay (usec)		-2.81687986688E+03		Resid mbdelay (usec)		-1.46112E-02	+/- 1.5E-05
Sband delay (usec)	-2.81689447888E+03		Apriori clock (usec)		3.3792507E+01		Resid sbdelay (usec)		-1.46120E-02	+/- 1.2E-04
Phase delay (usec)	-2.81687986280E+03		Apriori clockrate (us/s)		-2.6299999E-07		Resid phdelay (usec)		4.08008E-06	+/- 2.6E-08
Delay rate (us/s)	-1.49409277232E+00		Apriori rate (us/s)		-1.49409283923E+00		Resid rate (us/s)		6.69070E-08	+/- 1.3E-10
Total phase (deg)			Apriori accel (us/s/s)		1.24532956689E-05		Resid phase (deg)		126.5	+/- 0.8

ph/seg (deg) 56.5 2.0 Theor. Amplitude 3.836 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.0 3.4 Search (2048X32) 3.822 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.6 1.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 4.9 2.0 Inc. seg. avg. 5.983 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 225.3 el 19.8 pa 27.2 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) 8684.576 1169.676 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BG.W.34.0RJ451 simultaneous interpolator

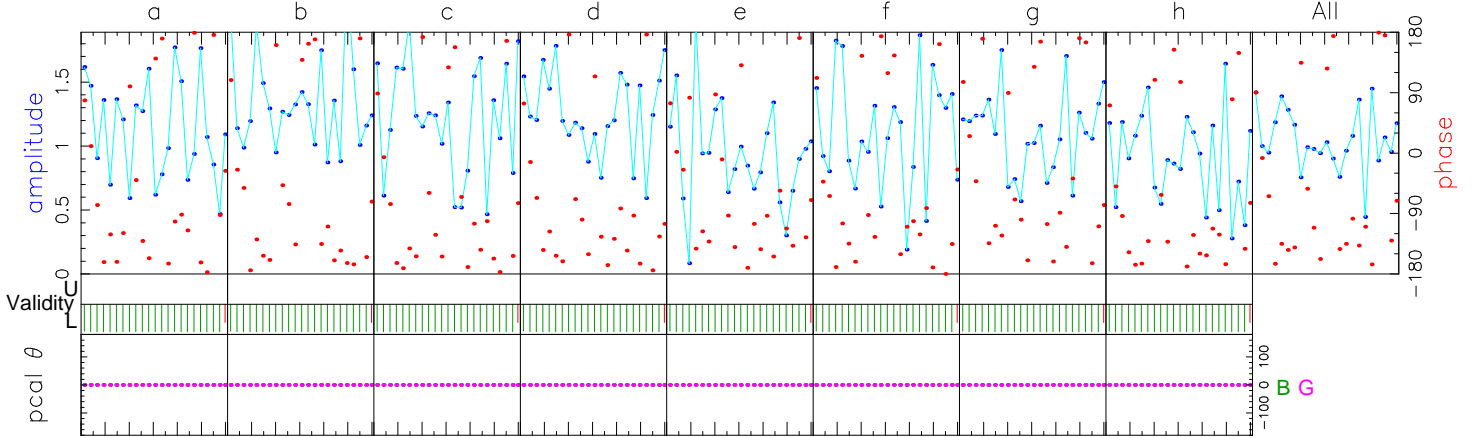


Fringe quality 9
 SNR 23.1
 Int time 359.280
 Amp 0.630
 Phase -324.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000301
 MBD -0.016060
 Fringe rate (Hz) 0.005869
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110102
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

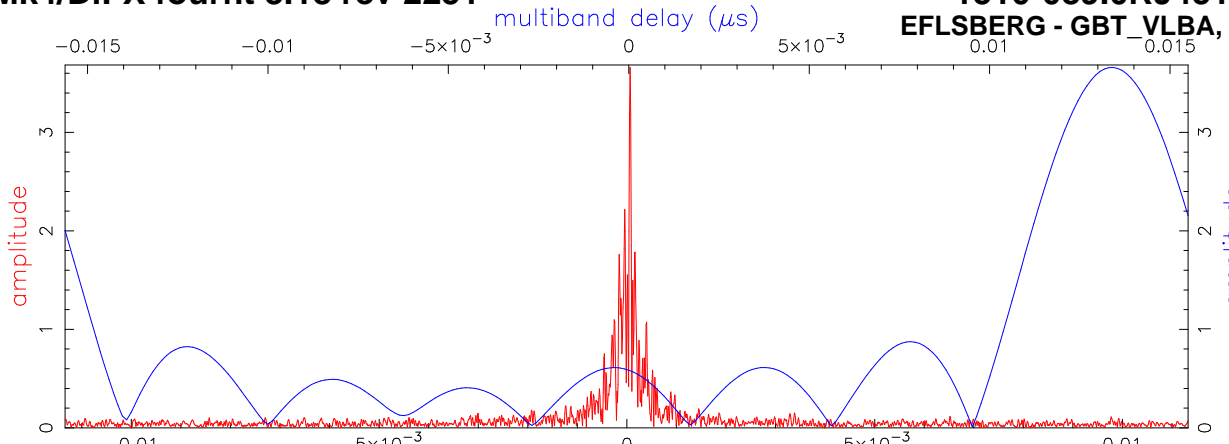
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-139.5	-153.2	-150.4	-134.0	-124.5	-152.1	-140.9	-150.7	Phase	-144.6
	0.6	0.8	0.8	0.8	0.7	0.5	0.5	0.5	Ampl.	0.6
	129.0	129.2	128.9	129.0	129.2	128.8	128.4	129.3	Sbd box	129.0
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) -2.81686467650E+03 Apriori delay (usec) -2.81687986688E+03 Resid mbdelay (usec) -1.60596E-02 +/- 9.4E-05
 Sband delay (usec) -2.81688016838E+03 Apriori clock (usec) 3.3792507E+01 Resid sbdelay (usec) -3.01500E-04 +/- 7.5E-04
 Phase delay (usec) -2.81687987154E+03 Apriori clockrate (us/s) -2.6299999E-07 Resid phdelay (usec) -4.66218E-06 +/- 1.6E-07
 Delay rate (us/s) -1.49409277109E+00 Apriori rate (us/s) -1.49409283923E+00 Resid rate (us/s) 6.81377E-08 +/- 7.7E-10
 Total phase (deg) -228.4 Apriori accel (us/s/s) 1.24532956689E-05 Resid phase (deg) -324.6 +/- 5.0

RMS Theor. Amplitude 0.630 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.6 11.9 Search (2048X32) 0.614 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 75.9 20.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 11.2 7.0 Inc. seg. avg. 1.025 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 (%) 24.1 12.2 Inc. frq. avg. 0.633 ion window (TEC) 0.00 0.00



Fringe quality 5

SNR 135.0

Int time 359.280

Amp 3.684

Phase -6.9

PFD 0.0e+00

Delays (us)

SBD 0.013381

MBD 0.013389

Fringe rate (Hz) 0.005786

Ion TEC 0.000

Ref freq (MHz) 86140.000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

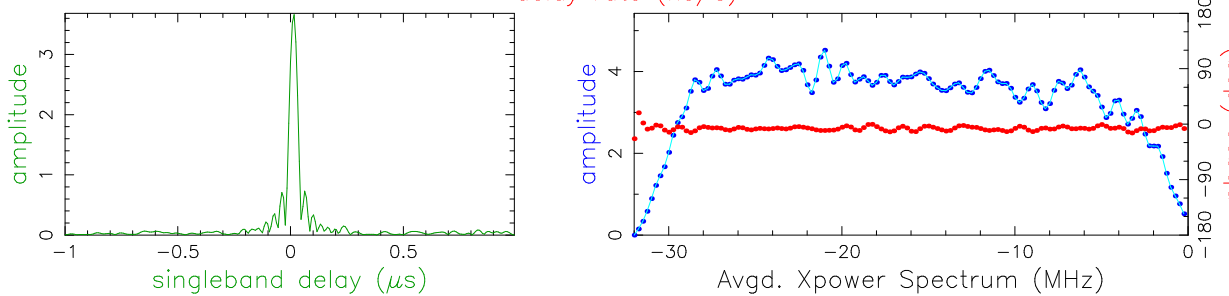
Corr/FF/build

2019:227:203602

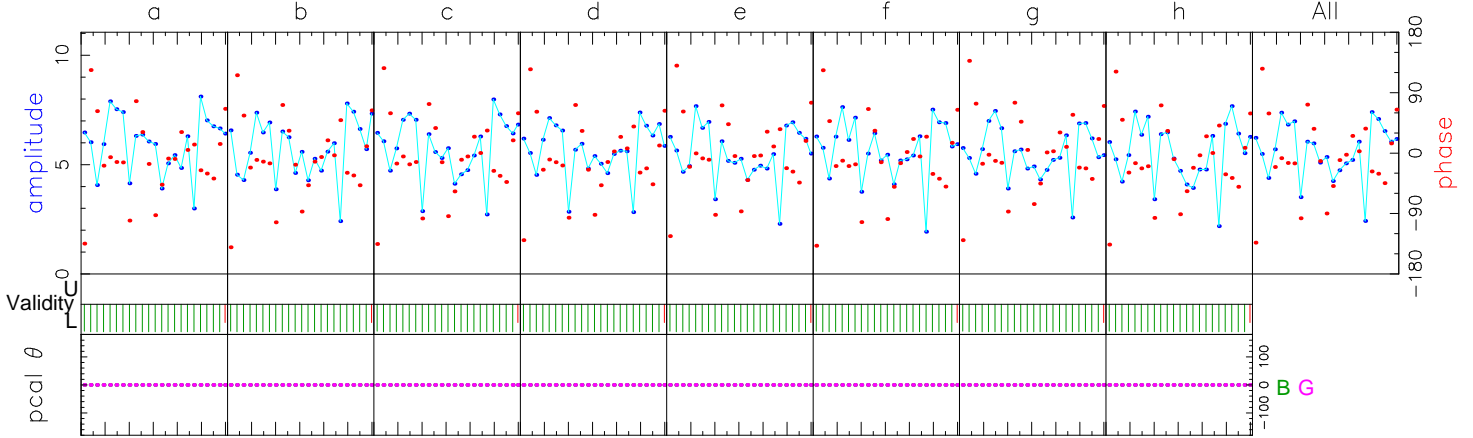
2019:228:110057

2018:249:082454

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



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



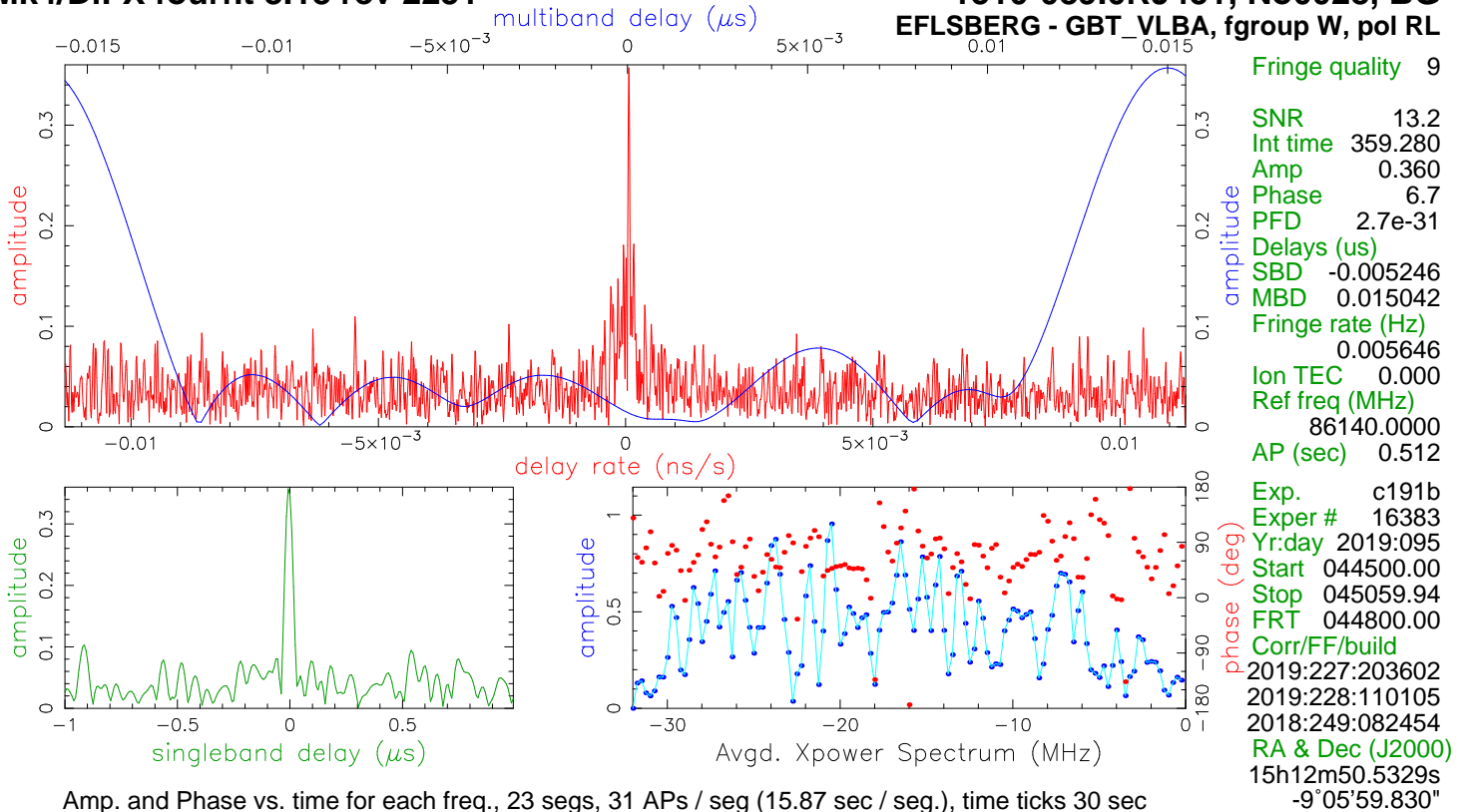
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-7.1	-9.0	-6.1	-7.5	-2.7	-11.0	-0.5	-11.2	Phase	-6.9
	3.9	3.7	3.7	3.7	3.5	3.7	3.6	3.6	Ampl.	3.7
	130.7	130.7	130.8	130.7	130.6	130.8	130.7	130.6	Sbd box	130.7
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs 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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	-2.81686647800E+03	Apriori delay (usec)	-2.81687986688E+03	Resid mbdelay (usec)	1.33889E-02	+/-	1.6E-05
Sband delay (usec)	-2.81686648588E+03	Apriori clock (usec)	3.3792507E+01	Resid sbdelay (usec)	1.33810E-02	+/-	1.3E-04
Phase delay (usec)	-2.81687986710E+03	Apriori clockrate (us/s)	-2.6299999E-07	Resid phdelay (usec)	-2.23119E-07	+/-	2.7E-08
Delay rate (us/s)	-1.49409277206E+00	Apriori rate (us/s)	-1.49409283923E+00	Resid rate (us/s)	6.71642E-08	+/-	1.3E-10
Total phase (deg)	-270.7	Apriori accel (us/s/s)	1.24532956689E-05	Resid phase (deg)	-6.9	+/-	0.8

ph/seg (deg)	56.4	RMS	2.0	Theor.	2.0	Amplitude	3.684 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	62.5	Search (2048X32)	3.617	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000				
ph/frq (deg)	4.1	Inc. seg. avg.	5.637	Inc. frq. avg.	3.666	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016	0.016		
amp/frq (%)	2.8	Inc. frq. avg.	3.666	Sample rate (MSamp/s):	64	Data rate (Mb/s):	1024	nlags:	128	t_cohere	infinite	ion window (TEC)	0.00	0.00

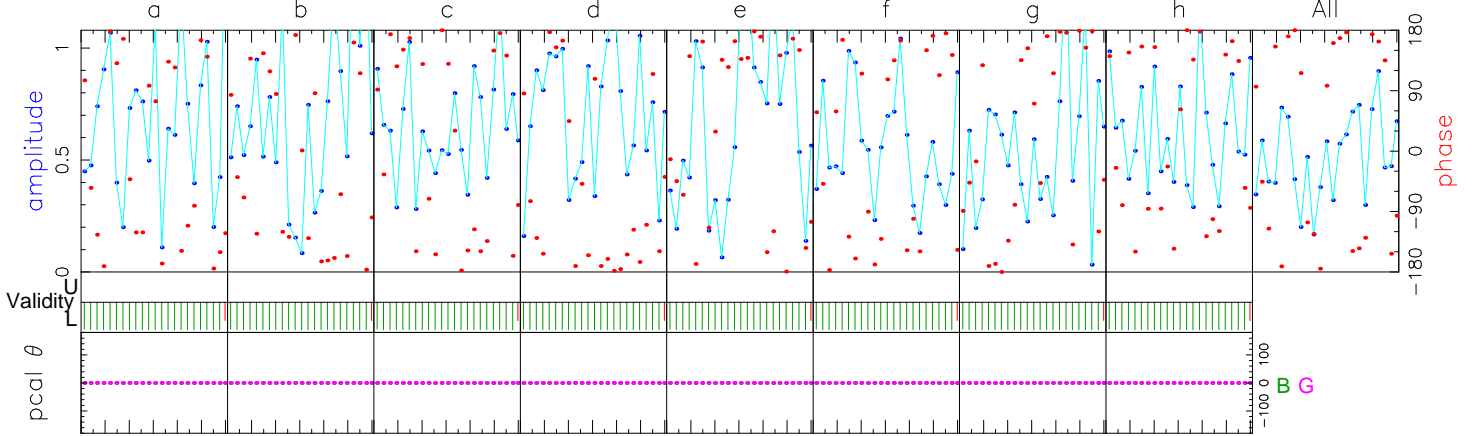
B: az 225.3 el 19.8 pa 27.2 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) 8684.576 1169.676 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BG.W.6.0RJ451



Fringe quality 9
 SNR 13.2
 Int time 359.280
 Amp 0.360
 Phase 6.7
 PFD 2.7e-31
 Delays (us)
 SBD -0.005246
 MBD 0.015042
 Fringe rate (Hz) 0.005646
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build 2019:227:203602
 2019:228:110105
 2018:249:082454
 RA & Dec (J2000) 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
-168.0	-167.8	178.2	-164.8	174.6	-179.5	-169.0	-167.4	Phase	-173.3
0.3	0.4	0.4	0.5	0.5	0.3	0.3	0.3	Ampl.	0.4
129.0	128.3	128.8	128.0	128.7	127.5	201.1	109.6	Sbd box	128.3
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	
G W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.81689607512E+03		Apriori delay (usec)	-2.81687986688E+03		Resid mbdelay (usec)	1.50418E-02	+/-	1.6E-04
Sband delay (usec)	-2.81688511288E+03		Apriori clock (usec)	3.3792507E+01		Resid sbdelay (usec)	-5.24600E-03	+/-	1.3E-03
Phase delay (usec)	-2.81687987246E+03		Apriori clockrate (us/s)	-2.6299999E-07		Resid phdelay (usec)	-5.58752E-06	+/-	2.8E-07
Delay rate (us/s)	-1.49409277368E+00		Apriori rate (us/s)	-1.49409283923E+00		Resid rate (us/s)	6.55465E-08	+/-	1.3E-09
Total phase (deg)		102.9	Apriori accel (us/s/s)	1.24532956689E-05		Resid phase (deg)	6.7	+/-	8.7

ph/seg (deg) 52.0 20.8
 amp/seg (%) 67.8 36.4
 ph/frq (deg) 8.6 12.3
 amp/frq (%) 20.6 21.4

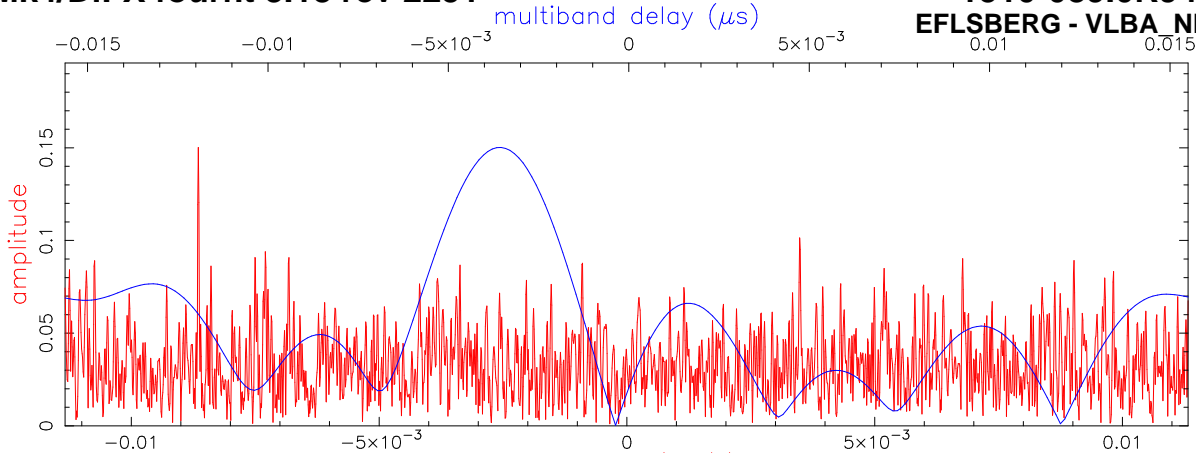
RMS Theor. Amplitude 0.360 +/- 0.027
 Search (2048X32) 0.352
 Interp. 0.000
 Inc. seg. avg. 0.484
 Inc. frq. avg. 0.352

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

B: az 225.3 el 19.8 pa 27.2 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) 8684.576 1169.676 simultaneous interpolator

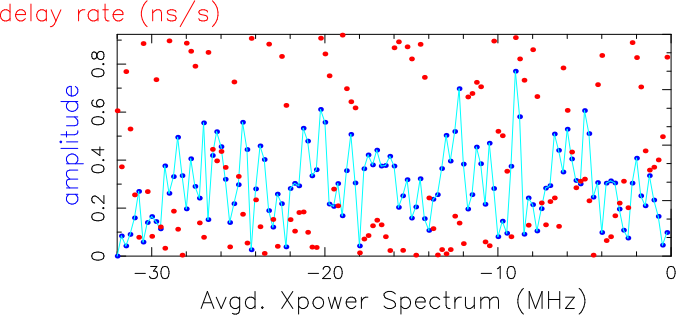
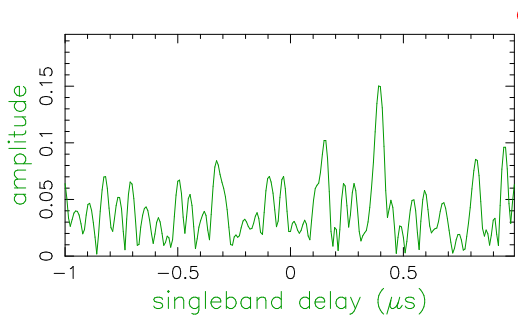
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BG.W.69.0RJ451



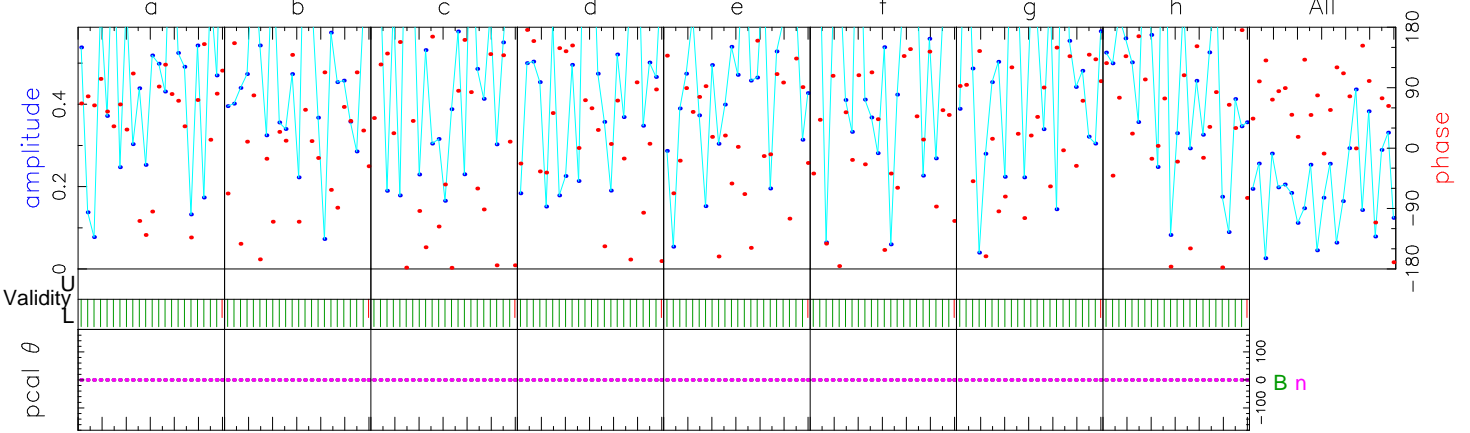
Fringe quality 0

SNR 5.6
Int time 359.556
Amp 0.196
Phase -109.6
PFD 9.5e-01
Delays (us)
SBD 0.394365
MBD -0.003621
Fringe rate (Hz)
-0.744990
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110059
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

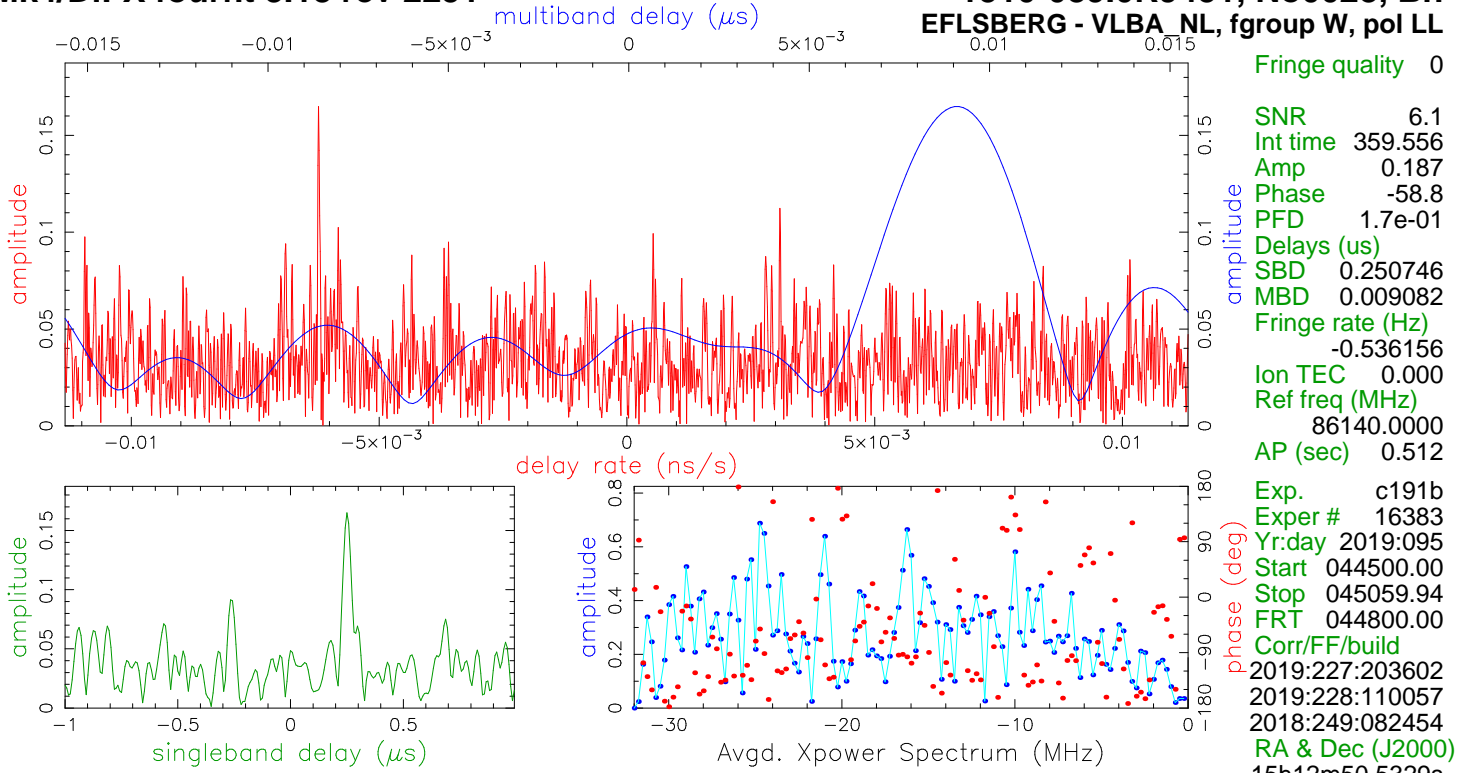


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

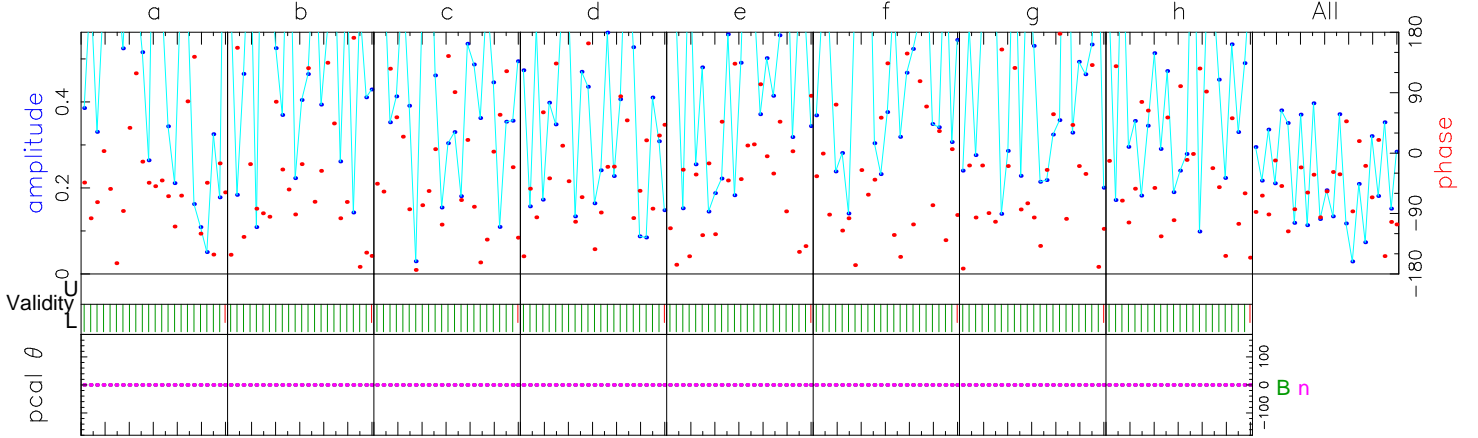


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	0.2
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	179.5
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	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)	2.92887401499E+02		Apriori delay (usec)		2.92484772489E+02		Resid mbdelay (usec)		-3.62099E-03	+/- 3.9E-04
Sband delay (usec)	2.92879136989E+02		Apriori clock (usec)		-2.1446488E+00		Resid sbdelay (usec)		3.94365E-01	+/- 3.1E-03
Phase delay (usec)	2.92484774759E+02		Apriori clockrate (us/s)		-5.0999997E-07		Resid phdelay (usec)		2.26940E-06	+/- 6.6E-07
Delay rate (us/s)	-1.60837323669E+00		Apriori rate (us/s)		-1.60836458810E+00		Resid rate (us/s)		-8.64859E-06	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.47064889644E-06		Resid phase (deg)		-109.6	+/- 20.5

ph/seg (deg) 58.7 49.2 Search (2048X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.1 86.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.3 29.0 Inc. seg. avg. 0.191 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 37.1 50.7 Inc. frq. avg. 0.195 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 225.3 el 19.8 pa 27.2 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 9324.964 983.099 ion window (TEC) 0.00 0.00

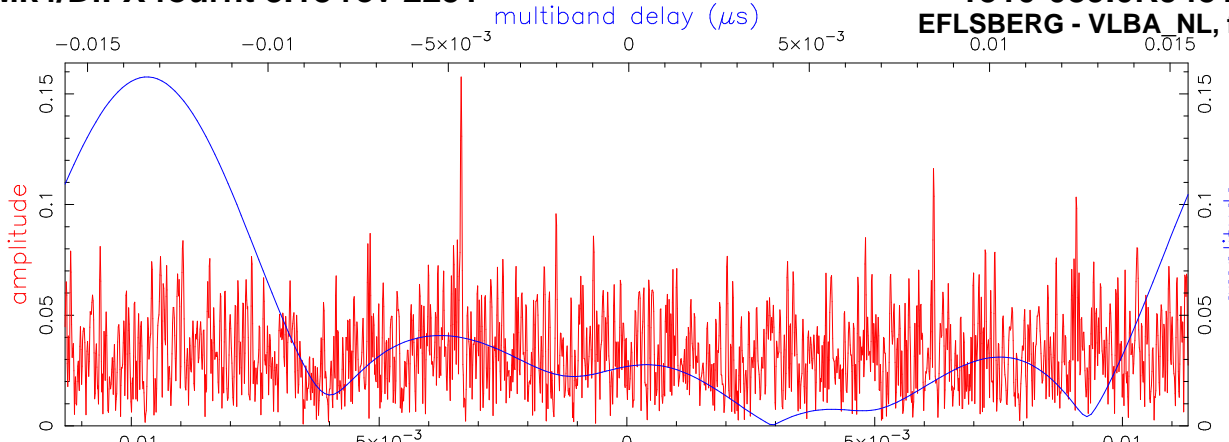


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

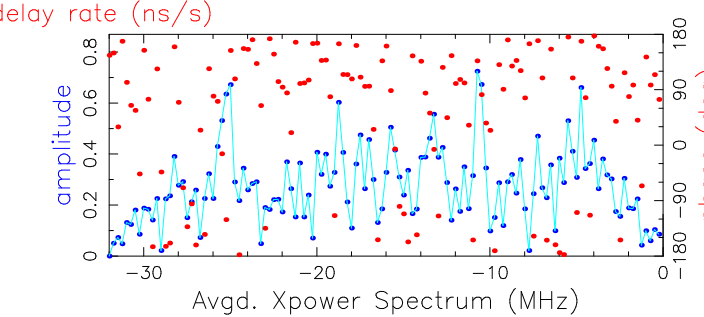
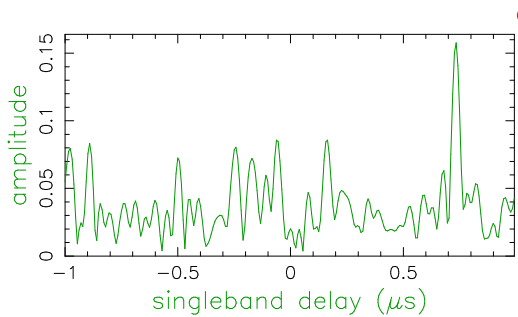


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-50.2	-83.6	-44.3	-37.9	-62.0	-75.2	-89.0	-26.4	Phase	-58.8
0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
161.1	136.9	216.8	24.0	165.0	138.3	68.6	180.3	Sbd box	161.1
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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)	2.92743854243E+02	Apriori delay (usec)	2.92484772489E+02	Resid mbdelay (usec)	9.08175E-03	+/-	3.6E-04		
Sband delay (usec)	2.92735518989E+02	Apriori clock (usec)	-2.1446488E+00	Resid sbdelay (usec)	2.50746E-01	+/-	2.8E-03		
Phase delay (usec)	2.92484770594E+02	Apriori clockrate (us/s)	-5.0999997E-07	Resid phdelay (usec)	-1.89501E-06	+/-	6.1E-07		
Delay rate (us/s)	-1.60837081234E+00	Apriori rate (us/s)	-1.60836458810E+00	Resid rate (us/s)	-6.22424E-06	+/-	2.9E-09		
Total phase (deg)		Apriori accel (us/s/s)	-3.47064889644E-06	Resid phase (deg)	-58.8	+/-	18.9		

ph/seg (deg)	47.6	Theor.	45.4	Amplitude	0.187 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	78.4	Search (2048X32)	0.159	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	24.4	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	28.0	Inc. seg. avg.	0.200	Inc. seg. avg.	0.200	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
		Inc. frq. avg.	0.181	Inc. frq. avg.	0.181	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

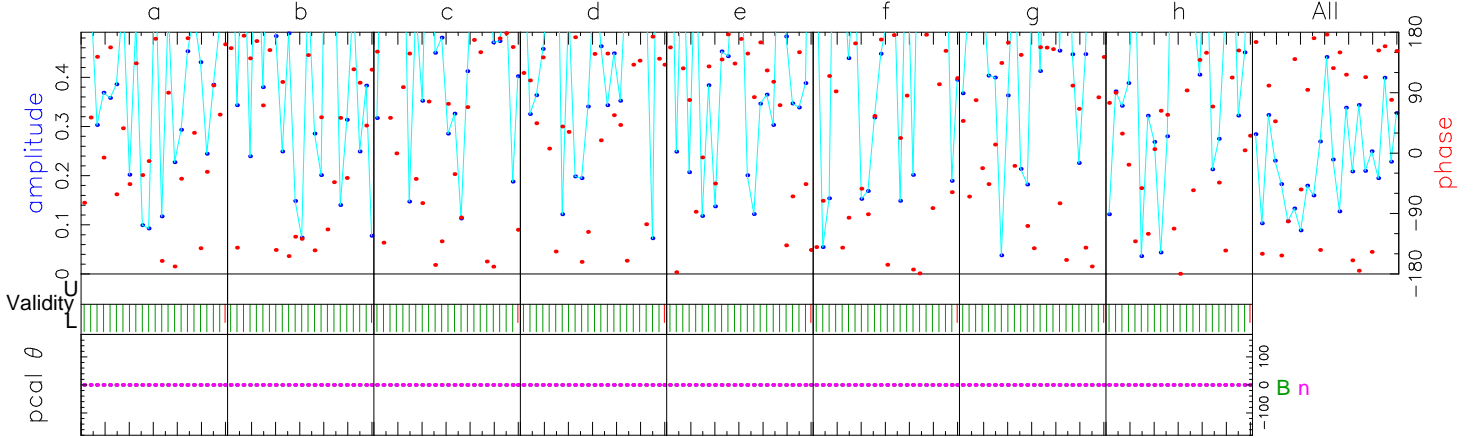


Fringe quality 0
 SNR 5.8
 Int time 359.556
 Amp 0.164
 Phase -204.4
 PFD 5.6e-01
 Delays (us)
 SBD 0.732774
 MBD -0.013389
 Fringe rate (Hz)
 -0.287946
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

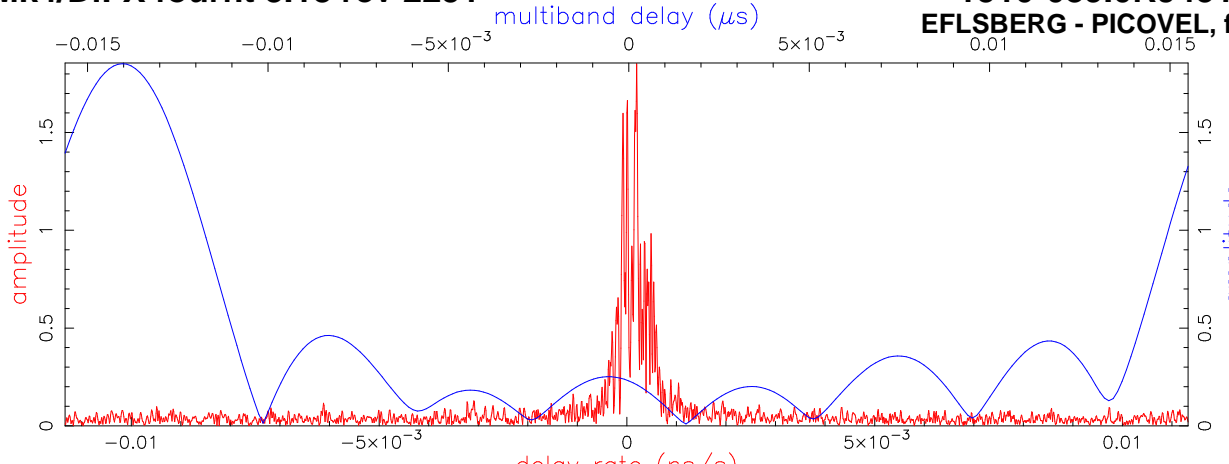


Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110104
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

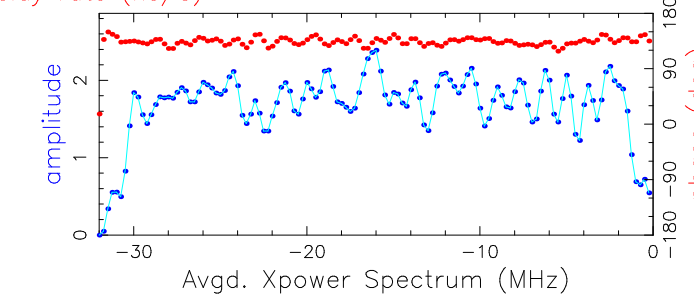
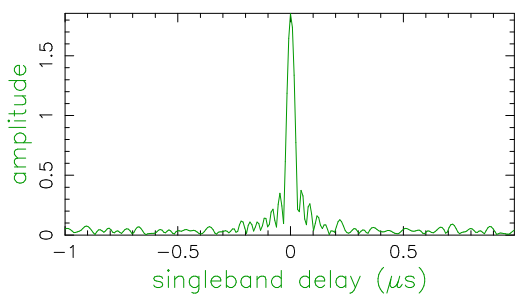
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



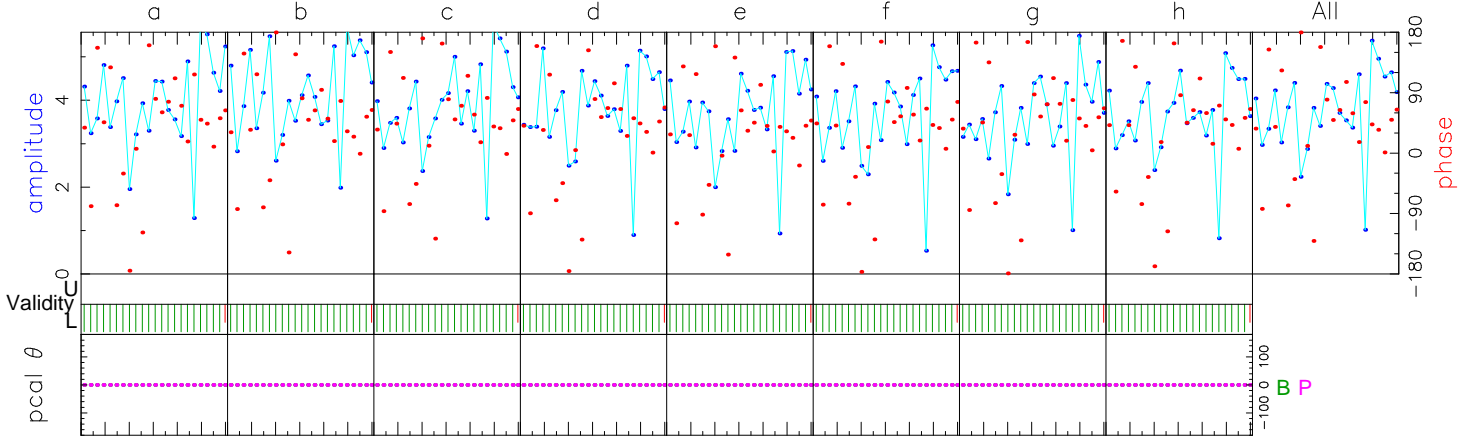
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All			
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703					
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000					
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000					
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
B	1000	1000	1000	1000	1000	1000	1000	1000					
n	1000	1000	1000	1000	1000	1000	1000	1000					
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR					
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL					
Group delay (usec)(sbd)	2.93221383452E+02		Apriori delay (usec)		2.92484772489E+02		Resid mbdelay (usec)		-1.33890E-02	+/- 3.7E-04			
Sband delay (usec)	2.93217546989E+02		Apriori clock (usec)		-2.1446488E+00		Resid sbdelay (usec)		7.32774E-01	+/- 3.0E-03			
Phase delay (usec)	2.9248477508E+02		Apriori clockrate (us/s)		-5.0999997E-07		Resid phdelay (usec)		5.01919E-06	+/- 6.4E-07			
Delay rate (us/s)	-1.60836793088E+00		Apriori rate (us/s)		-1.60836458810E+00		Resid rate (us/s)		-3.34277E-06	+/- 3.1E-09			
Total phase (deg)			-95.6		Apriori accel (us/s/s)		-3.47064889644E-06		Resid phase (deg)	-204.4	+/- 19.8		
RMS	58.8	47.4	Amplitude		0.164 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	75.6	82.7	Search (2048X32)		0.156		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	28.4	27.9	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016	
ph/frq (deg)	42.6	48.8	Inc. seg. avg.		0.179		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011		
amp/frq (%)			Inc. frq. avg.		0.154		Data rate(Mb/s): 1024		nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00



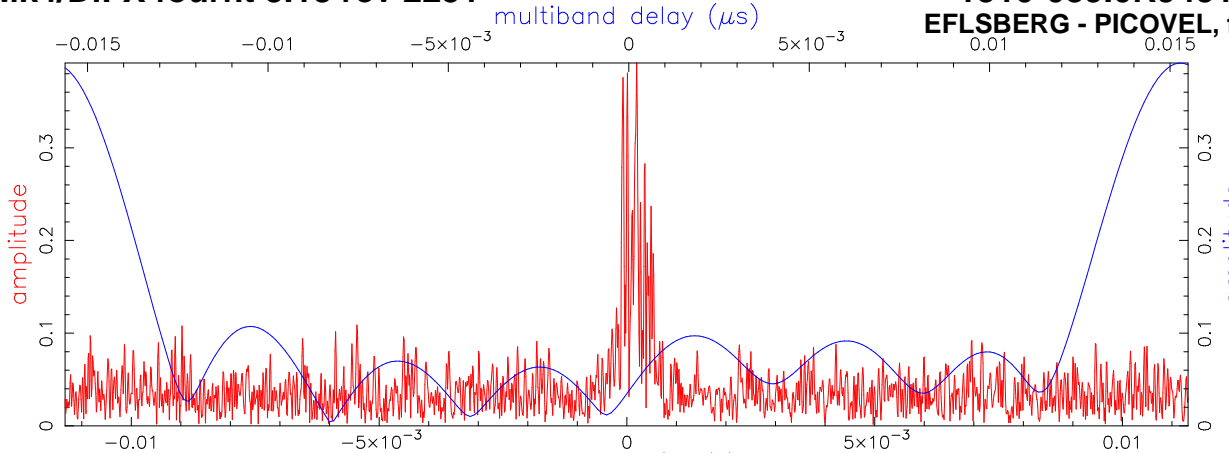
Fringe quality 5
 SNR 67.9
 Int time 358.287
 Amp 1.856
 Phase 46.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.001139
 MBD -0.014036
 Fringe rate (Hz) 0.016943
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110100
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



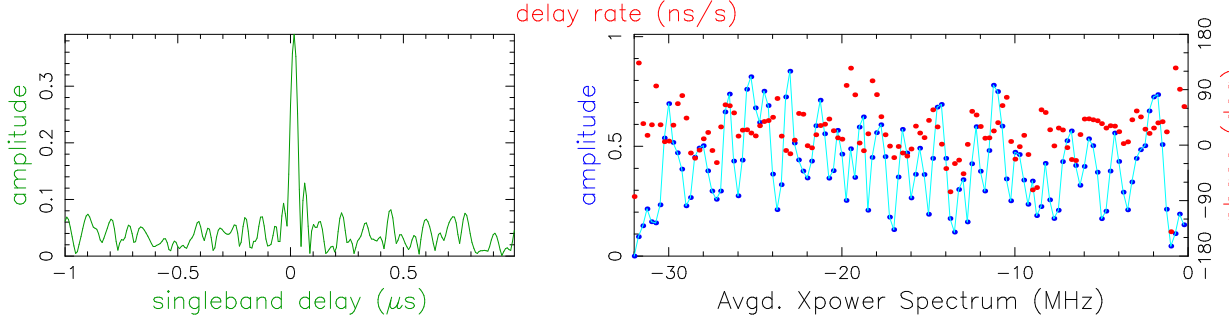
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	1.9	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.1	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
B:P	0:0	0:0	0:0	0:0	0:0	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	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)	-4.88934997359E+03		Apriori delay (usec)		-4.88933593778E+03		Resid mbdelay (usec)		-1.40358E-02	+/- 3.2E-05	
Sband delay (usec)	-4.88933479828E+03		Apriori clock (usec)		2.0034374E+01		Resid sbdelay (usec)		1.13950E-03	+/- 2.5E-04	
Phase delay (usec)	-4.88933593627E+03		Apriori clockrate (us/s)		-2.9999999E-08		Resid phdelay (usec)		1.50935E-06	+/- 5.4E-08	
Delay rate (us/s)	-2.57068088398E-04		Apriori rate (us/s)		-2.57264777616E-04		Resid rate (us/s)		1.96689E-07	+/- 2.6E-10	
Total phase (deg)			Apriori accel (us/s/s)		2.30648545696E-05		Resid phase (deg)		46.8	+/- 1.7	
	RMS	Theor.	Amplitude	1.856 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	75.6	4.0	Search (2048X32)	1.793	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	114.7	7.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016	
ph/frq (deg)	6.1	2.4	Inc. seg. avg.	3.758	Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	6.9	4.2	Inc. frq. avg.	1.859	Data rate(Mb/s): 1024		ion window (TEC)		0.00	0.00	
B: az 225.3 el 19.8 pa 27.2		P: az 220.0 el 34.7 pa 31.8		u,v (fr/asec) 35.176 1186.514						simultaneous interpolator	



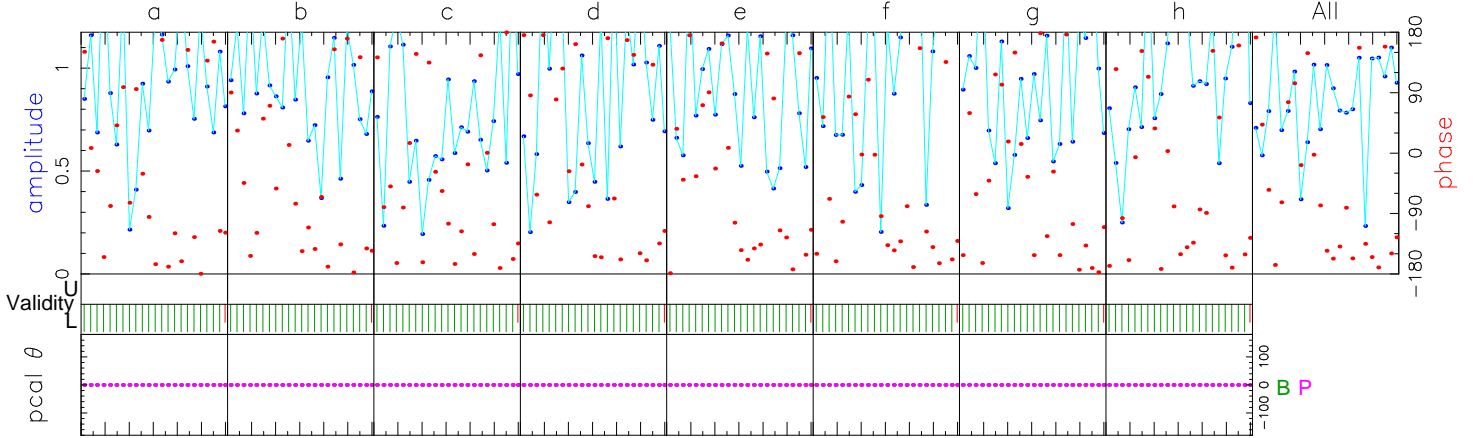
Fringe quality 9

SNR 14.3
 Int time 358.287
 Amp 0.392
 Phase -336.4
 PFD 4.4e-38
 Delays (us)
 SBD 0.015370
 MBD -0.015960
 Fringe rate (Hz)
 0.016852
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110102
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

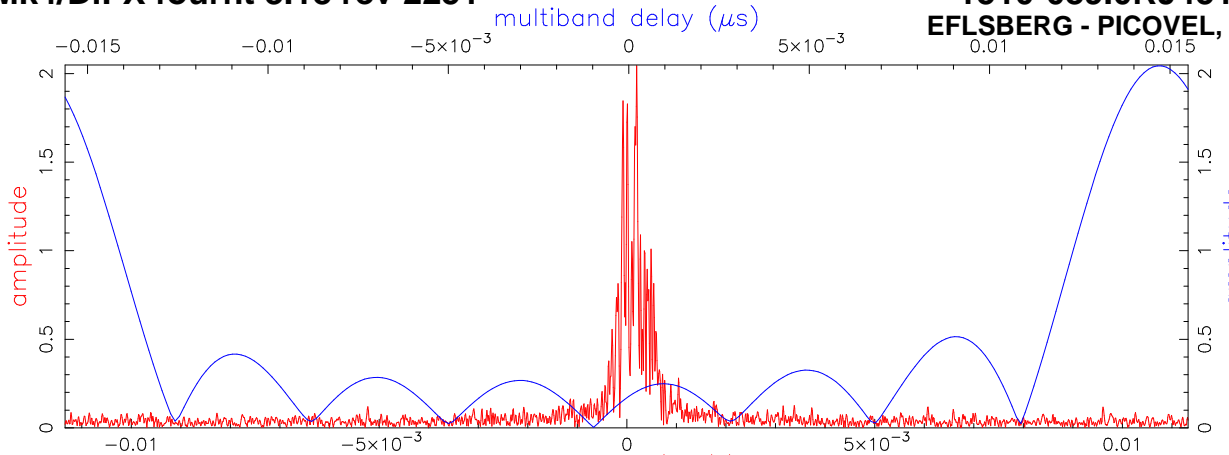


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

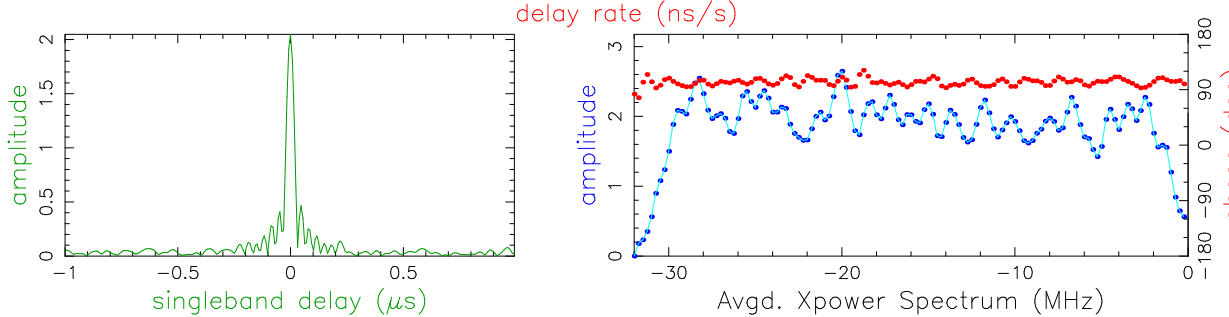
Group delay (usec)(sbd) -4.88932064740E+03 Apriori delay (usec) -4.88933593778E+03 Resid mbdelay (usec) -1.59596E-02 +/- 1.5E-04
 Sband delay (usec) -4.88932056778E+03 Apriori clock (usec) 2.0034374E+01 Resid sbdelay (usec) 1.53700E-02 +/- 1.2E-03
 Phase delay (usec) -4.88933594283E+03 Apriori clockrate (us/s) -2.9999999E-08 Resid phdelay (usec) -5.04453E-06 +/- 2.6E-07
 Delay rate (us/s) -2.57069142731E-04 Apriori rate (us/s) -2.57264777616E-04 Resid rate (us/s) 1.95635E-07 +/- 1.2E-09
 Total phase (deg) -221.4 Apriori accel (us/s/s) 2.30648545696E-05 Resid phase (deg) -336.4 +/- 8.0

RMS Theor. Amplitude 0.392 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 77.0 19.2 Search (2048X32) 0.378 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 128.3 33.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 10.4 11.3 Inc. seg. avg. 0.790 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 (%) 18.0 19.7 Inc. frq. avg. 0.389 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

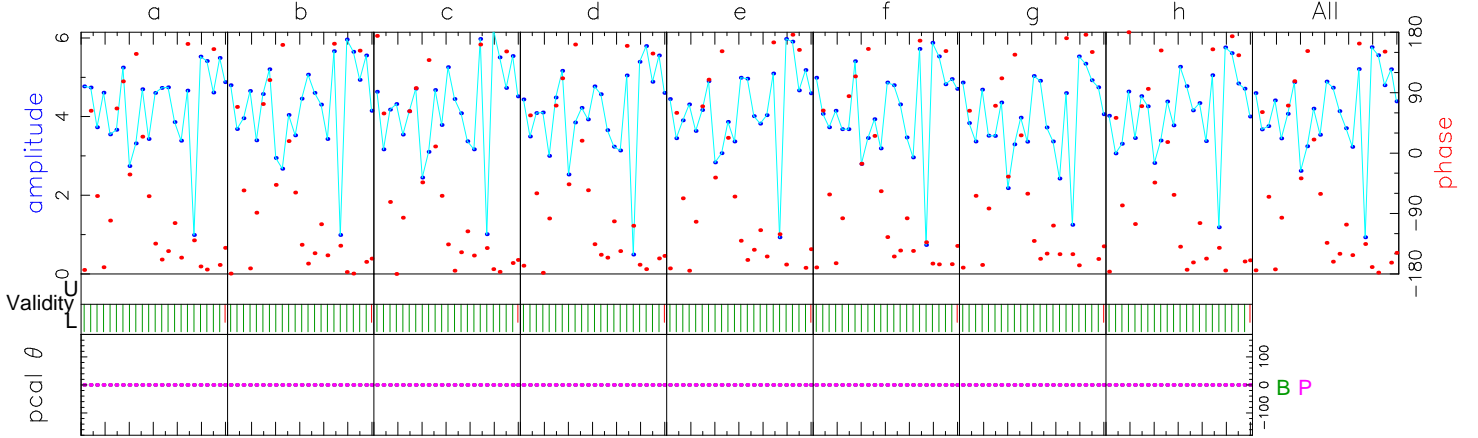
B: az 225.3 el 19.8 pa 27.2 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 35.176 1186.514 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BP.W.46.0RJ451



Fringe quality 5
 SNR 75.0
 Int time 358.287
 Amp 2.049
 Phase 13.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.001170
 MBD 0.014709
 Fringe rate (Hz) 0.016907
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110057
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

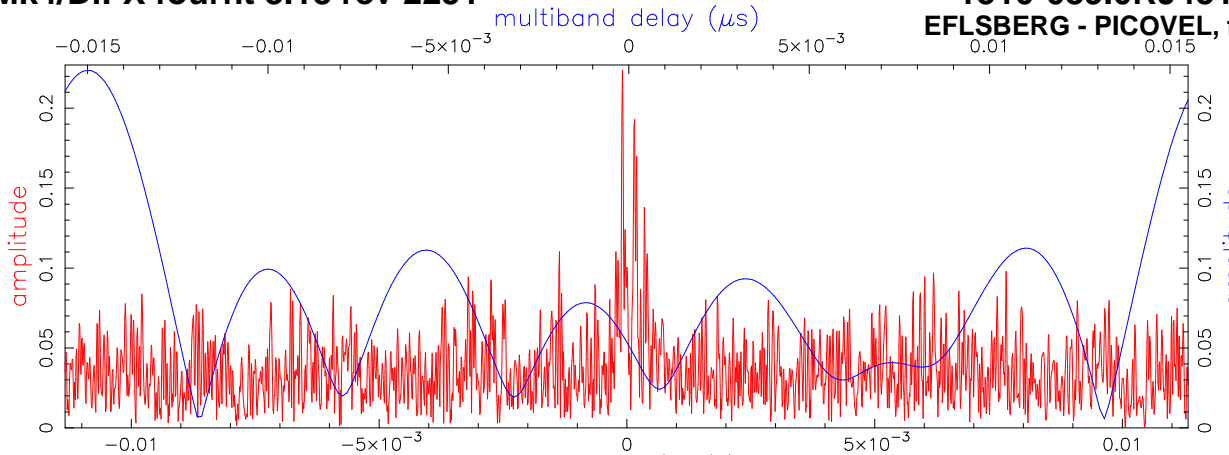


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

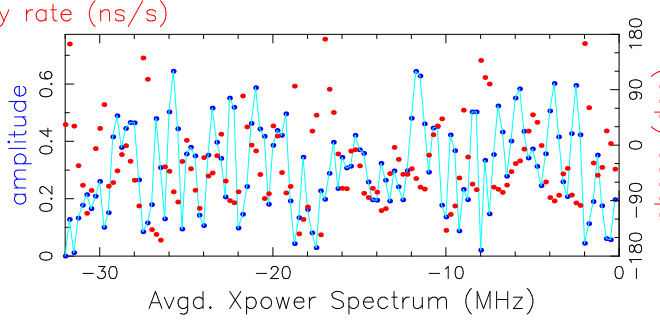
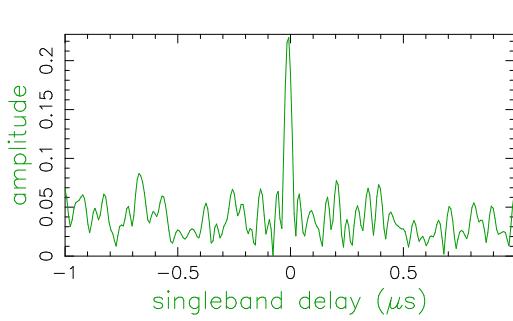


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Phase	-166.1
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	2.0
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	128.9
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
P	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC amp	
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.88935247834E+03		Apriori delay (usec)		-4.88933593778E+03		Resid mbdelay (usec)		1.47094E-02	+/- 2.9E-05
Sband delay (usec)	-4.88933710778E+03		Apriori clock (usec)		2.0034374E+01		Resid sbdelay (usec)		-1.17000E-03	+/- 2.3E-04
Phase delay (usec)	-4.88933594314E+03		Apriori clockrate (us/s)		-2.9999999E-08		Resid phdelay (usec)		-5.35737E-06	+/- 4.9E-08
Delay rate (us/s)	-2.57068500070E-04		Apriori rate (us/s)		-2.57264777616E-04		Resid rate (us/s)		1.96278E-07	+/- 2.4E-10
Total phase (deg)	128.9		Apriori accel (us/s/s)		2.30648545696E-05		Resid phase (deg)		13.9	+/- 1.5

ph/seg (deg) 74.1 3.7 Theor. Amplitude 2.049 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 113.6 6.4 Search (2048X32) 2.007 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 3.0 2.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 3.1 3.8 Inc. seg. avg. 4.119 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 225.3 el 19.8 pa 27.2 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 35.176 1186.514 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BP.W.5.0RJ451

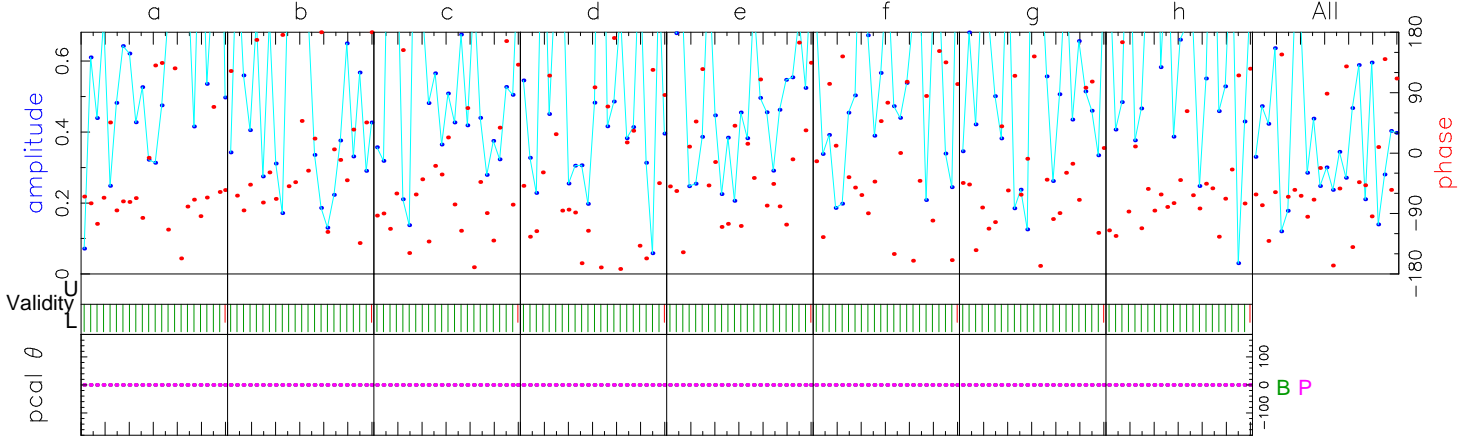


Fringe quality 9
 SNR 8.3
 Int time 358.287
 Amp 0.227
 Phase -73.6
 PFD 1.7e-08
 Delays (us)
 SBD -0.010892
 MBD -0.015049
 Fringe rate (Hz)
 -0.007460
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110104
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

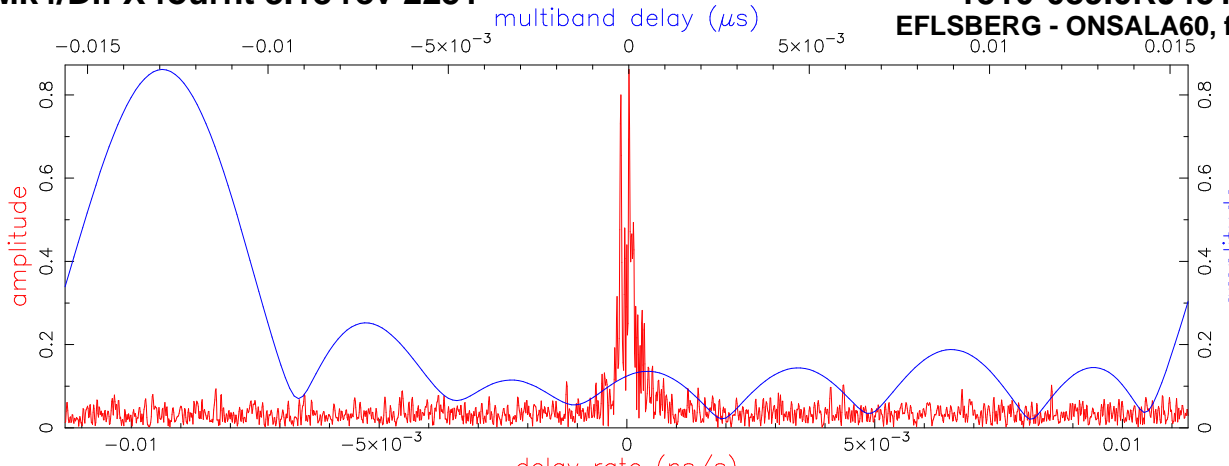


Avgd. Xpower Spectrum (MHz)

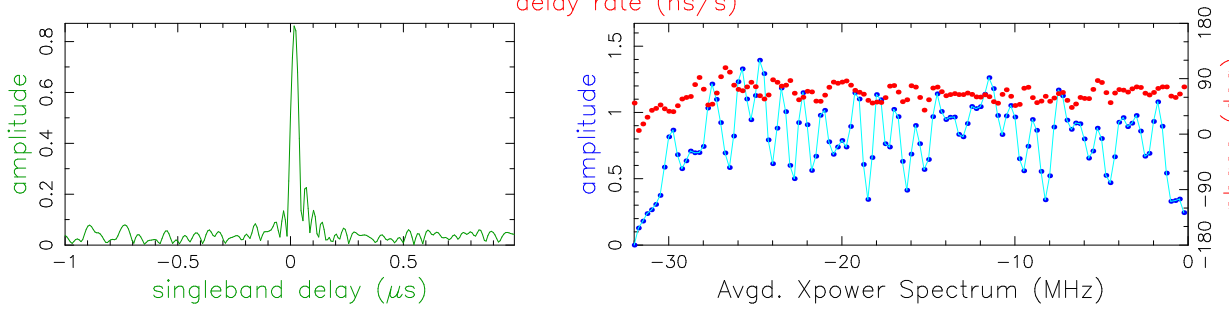
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



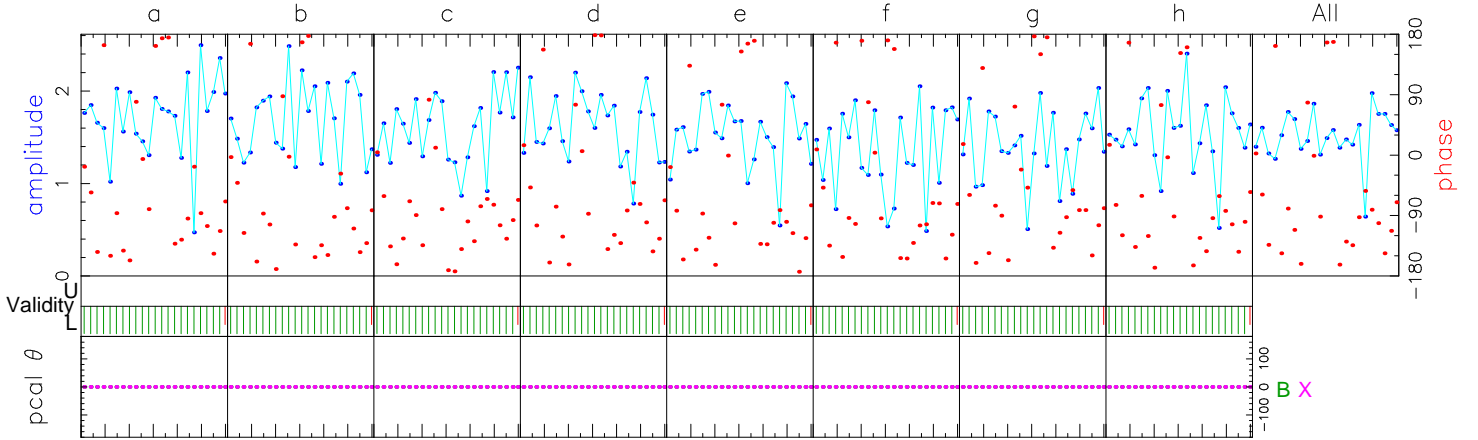
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All		
-85.1	-43.1	-84.4	-113.7	-56.4	-47.7	-78.1	-71.5	Phase	-73.6		
0.3	0.2	0.3	0.1	0.2	0.1	0.2	0.5	Ampl.	0.2		
127.0	134.0	128.2	234.1	78.0	255.6	102.8	128.0	Sbd box	127.6		
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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 W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids			
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks			
Group delay (usec)(sbd) -4.88935098633E+03 Apriori delay (usec) -4.88933593778E+03 Resid mbdelay (usec) -1.50485E-02 +/- 2.6E-04 Sband delay (usec) -4.88934682978E+03 Apriori clock (usec) 2.0034374E+01 Resid sbdelay (usec) -1.08920E-02 +/- 2.1E-03 Phase delay (usec) -4.88933594016E+03 Apriori clockrate (us/s) -2.9999999E-08 Resid phdelay (usec) -2.37493E-06 +/- 4.4E-07 Delay rate (us/s) -2.57351385322E-04 Apriori rate (us/s) -2.57264777616E-04 Resid rate (us/s) -8.66077E-08 +/- 2.1E-09 Total phase (deg) -318.6 Apriori accel (us/s/s) 2.30648545696E-05 Resid phase (deg) -73.6 +/- 13.8											
ph/seg (deg)	RMS 79.3	Theor. 33.1	Amplitude 0.227 +/- 0.027	Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	102.0	57.7	Search (2048X32) 0.219	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			SampCntNorm: enabled		mb window (us)	-0.016	0.016
ph/frq (deg)	25.1	19.5	Interp. 0.000	Bits/sample: 2x2			Data rate (Mb/s): 1024		dr window (ns/s)	-0.011	0.011
amp/frq (%)	52.7	34.0	Inc. seg. avg. 0.327	Sample rate (MSamp/s): 64			nlags: 128 t_cohere infinite		ion window (TEC)	0.00	0.00
B: az 225.3 el 19.8 pa 27.2 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 35.176 1186.514 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BP.W.63.0RJ451											



Fringe quality 7
 SNR 32.0
 Int time 359.555
 Amp 0.872
 Phase -295.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.018573
 MBD -0.012938
 Fringe rate (Hz) 0.004138
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110059
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

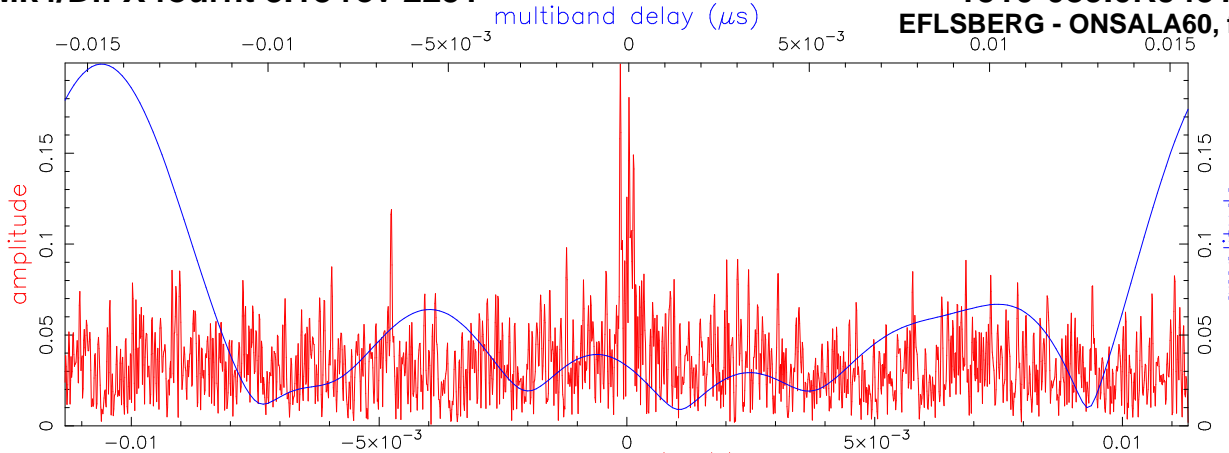


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-120.9	-121.5	-98.7	-111.0	-127.6	-115.2	-112.3	-116.3	Phase	-115.4
	1.0	0.9	1.0	0.8	0.9	0.8	0.7	0.8	Ampl.	0.9
	131.1	131.9	131.2	131.4	131.2	131.7	131.2	131.4	Sbd box	131.4
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.42733740995E+03		Apriori delay (usec)		2.42731909812E+03		Resid mbdelay (usec)		-1.29382E-02	+/- 6.8E-05
Sband delay (usec)	2.42733767112E+03		Apriori clock (usec)		-5.2400293E+00		Resid sbdelay (usec)		1.85730E-02	+/- 5.4E-04
Phase delay (usec)	2.42731909440E+03		Apriori clockrate (us/s)		-6.2399998E-07		Resid phdelay (usec)		-3.71983E-06	+/- 1.2E-07
Delay rate (us/s)	-5.19805875184E-02		Apriori rate (us/s)		-5.19806355600E-02		Resid rate (us/s)		4.80416E-08	+/- 5.6E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.16637141460E-05		Resid phase (deg)		-295.4	+/- 3.6

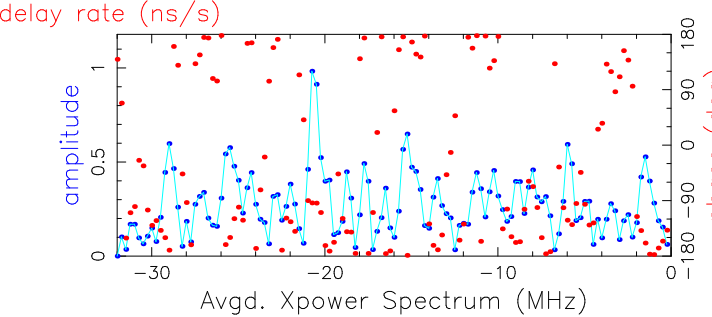
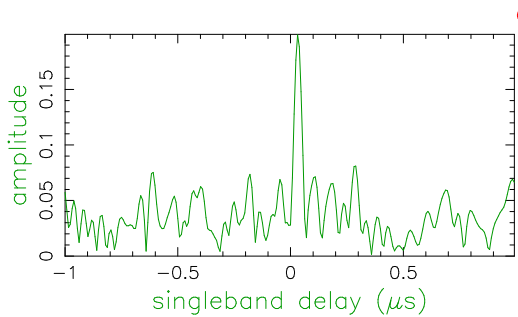
	RMS	Theor.	Amplitude	0.872 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	63.9	8.6	Search (2048X32)	0.836	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	79.9	15.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	9.4	5.1	Inc. seg. avg.	1.501	Sample rate(MSamp/s): 64	mb window (us) -0.016 0.016
amp/frq (%)	11.4	8.8	Inc. frq. avg.	0.867	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



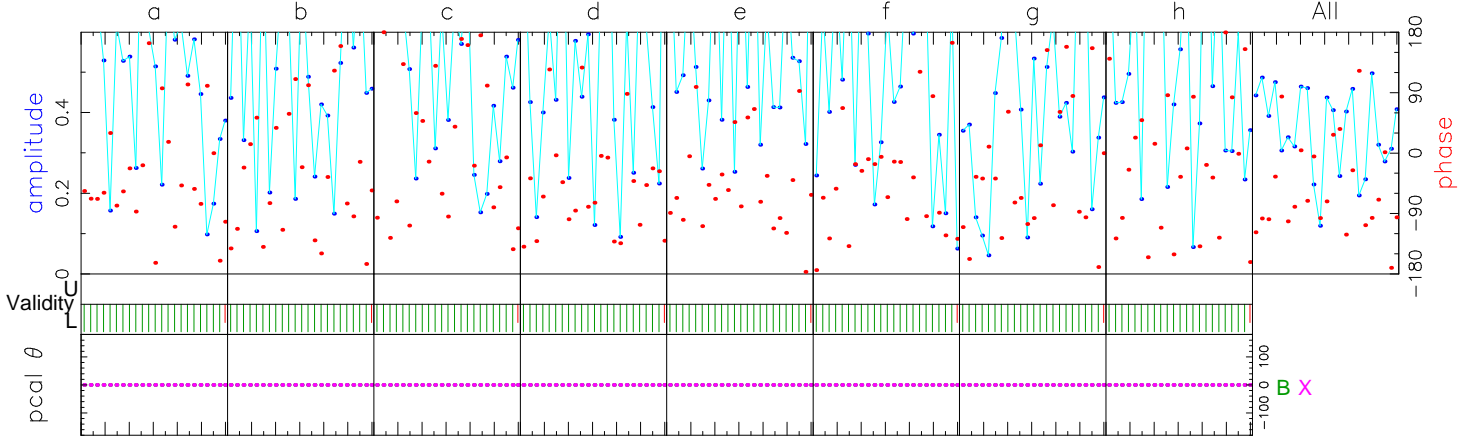
Fringe quality 9

SNR 7.3
Int time 359.555
Amp 0.200
Phase -68.8
PFD 3.9e-05
Delays (us)
SBD 0.032683
MBD -0.014612
Fringe rate (Hz)
-0.011018
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110101
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

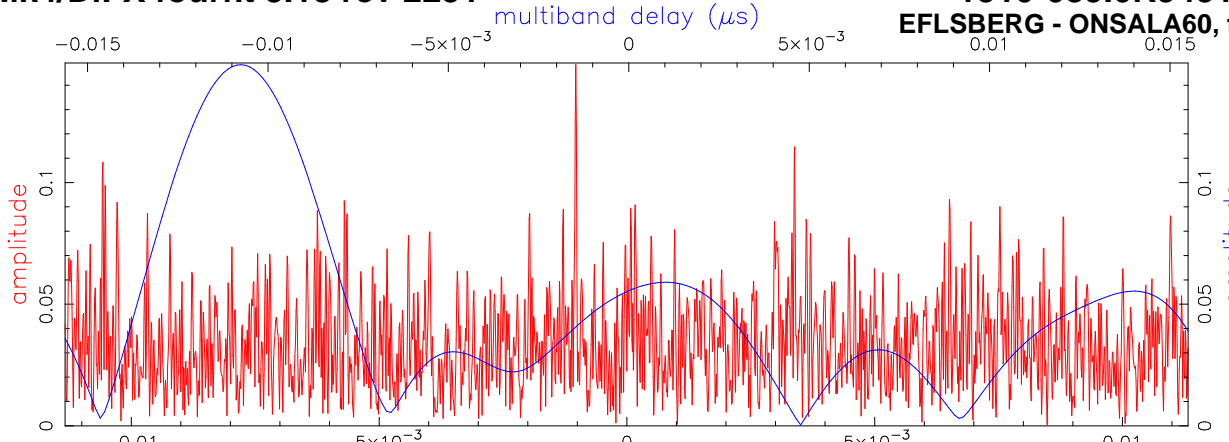


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

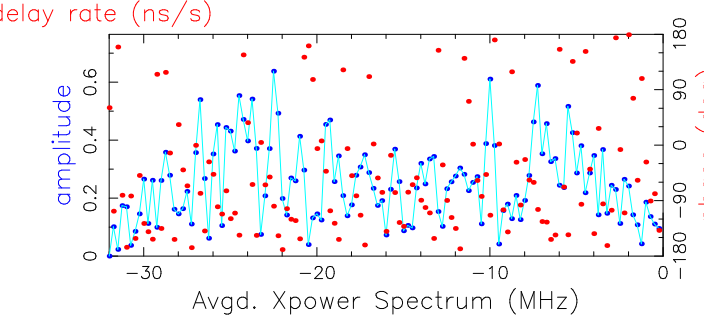
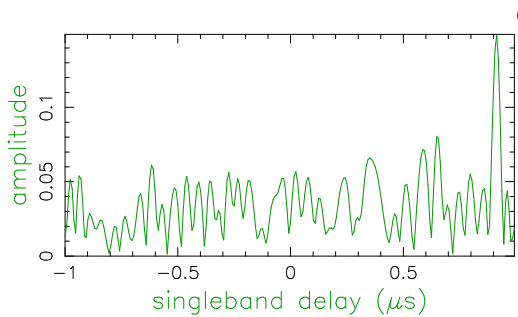


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-59.5	-78.9	-109.4	-63.5	-56.8	-64.3	-88.6	-62.9	Phase	-68.8
	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.1	Ampl.	0.2
	132.9	66.8	23.4	216.0	133.9	5.7	224.0	39.6	Sbd box	133.2
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.42736698592E+03		Apriori delay (usec)		2.42731909812E+03		Resid mbdelay (usec)		-1.46122E-02	+/- 3.0E-04
Sband delay (usec)	2.42735178112E+03		Apriori clock (usec)		-5.2400293E+00		Resid sbdelay (usec)		3.26830E-02	+/- 2.4E-03
Phase delay (usec)	2.42731909590E+03		Apriori clockrate (us/s)		-6.2399998E-07		Resid phdelay (usec)		-2.21740E-06	+/- 5.0E-07
Delay rate (us/s)	-5.19807634682E-02		Apriori rate (us/s)		-5.19806355600E-02		Resid rate (us/s)		-1.27908E-07	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.16637141460E-05		Resid phase (deg)		-68.8	+/- 15.7

ph/seg (deg) 70.1 37.5 Search (2048X32) 0.189 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 94.3 65.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 20.3 22.1 Inc. seg. avg. 0.293 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 35.1 38.6 Inc. frq. avg. 0.192 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
B: az 225.3 el 19.8 pa 27.2 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) 284.640 -469.730 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BX.W.40.0RJ451

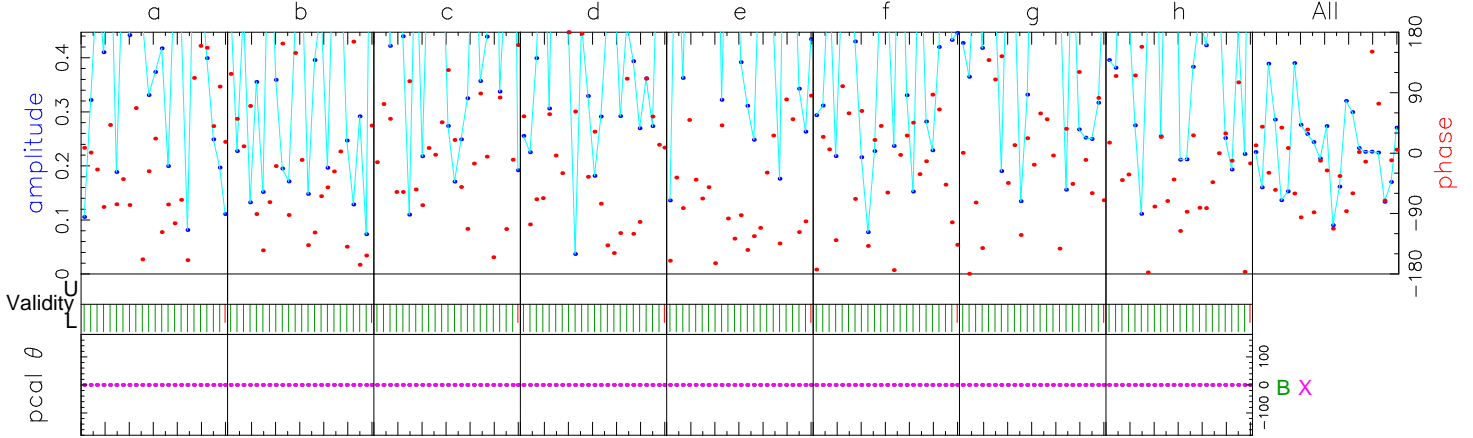


Fringe quality 0
 SNR 5.5
 Int time 359.555
 Amp 0.149
 Phase -29.5
 PFD 1.0e+00
 Delays (us)
 SBD 0.913161
 MBD -0.010779
 Fringe rate (Hz)
 -0.088553
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



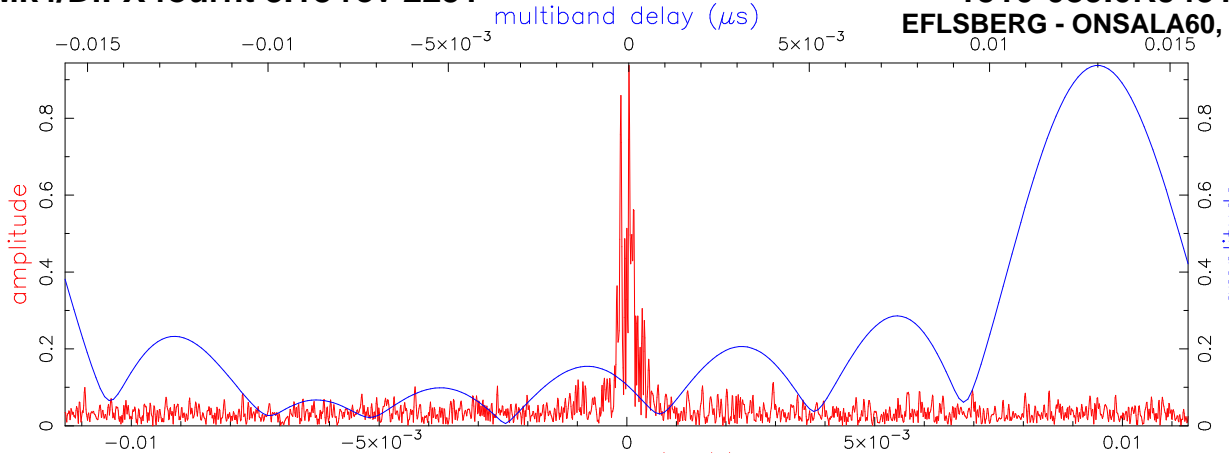
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110104
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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					
-32.8	-38.2	-13.4	-49.0	-64.8	-2.5	-7.3	-40.0	Phase	-29.5					
0.1	0.1	0.3	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1					
237.9	211.3	245.3	140.2	186.1	62.2	81.8	246.6	Sbd box	245.9					
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used						
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs						
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs						
B:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
B:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC						
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
X 1000	1000	1000	1000	1000	1000	1000	1000							
B W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids						
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks						
Group delay (usec)(sbd)									2.42824581917E+03	Apriori delay (usec)	2.42731909812E+03	Resid mbdelay (usec)	-1.07789E-02	+/- 4.0E-04
Sband delay (usec)									2.42823225912E+03	Apriori clock (usec)	-5.2400293E+00	Resid sbdelay (usec)	9.13161E-01	+/- 3.2E-03
Phase delay (usec)									2.42731909716E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	-9.51069E-07	+/- 6.8E-07
Delay rate (us/s)									-5.19816635702E-02	Apriori rate (us/s)	-5.19806355600E-02	Resid rate (us/s)	-1.02801E-06	+/- 3.3E-09
Total phase (deg)									-349.3	Apriori accel (us/s/s)	-1.16637141460E-05	Resid phase (deg)	-29.5	+/- 21.0

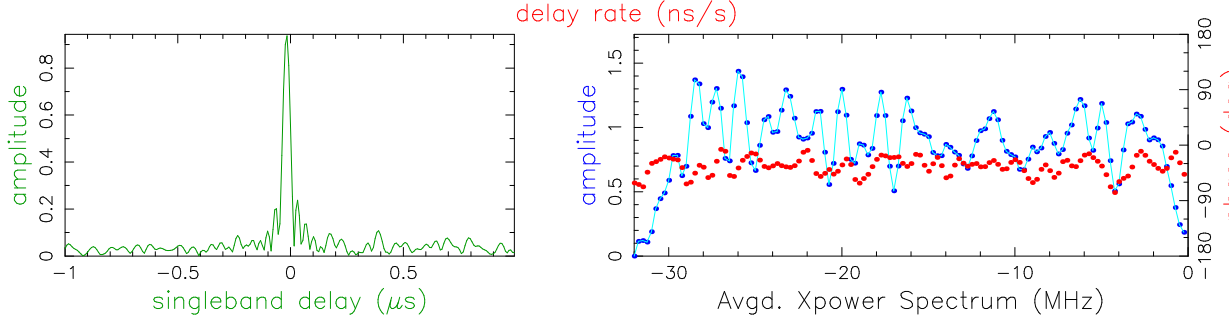
ph/seg (deg) 61.0 50.4 Search (2048X32) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.1 88.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.5 29.7 Inc. seg. avg. 0.168 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.8 51.9 Inc. frq. avg. 0.141 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 225.3 el 19.8 pa 27.2 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) 284.640 -469.730 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



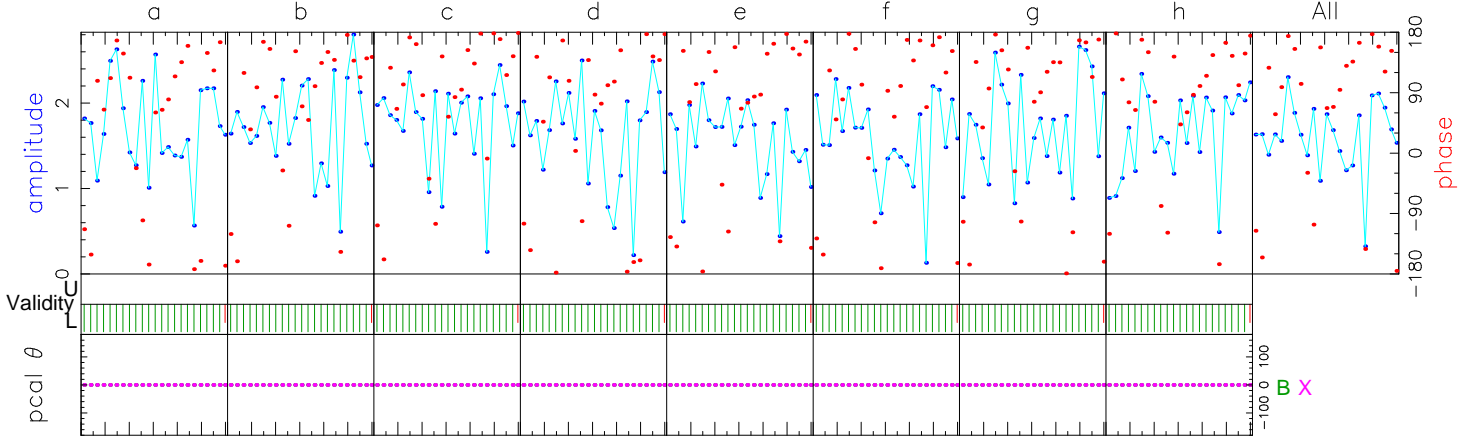
Fringe quality 7

SNR 34.6
 Int time 359.555
 Amp 0.944
 Phase 323.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.017755
 MBD 0.013012
 Fringe rate (Hz) 0.004033
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110057
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



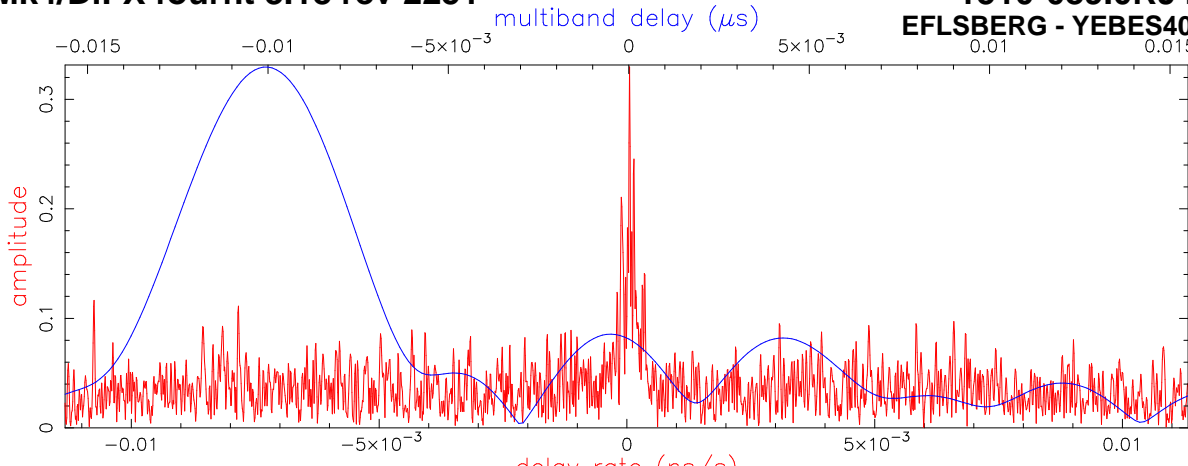
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



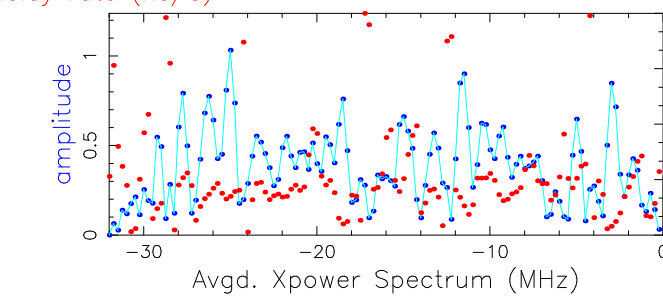
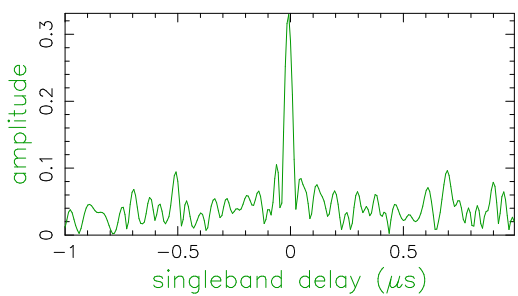
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	143.9	132.8	145.1	154.3	151.1	143.8	152.7	128.1	Phase	143.9
	0.9	1.0	1.0	0.9	0.8	0.9	1.1	1.0	Ampl.	0.9
	126.7	126.9	126.7	126.8	126.5	127.0	126.8	126.6	Sbd box	126.7
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	2.42730085983E+03	Apriori delay (usec)	2.42731909812E+03	Resid mbdelay (usec)	1.30117E-02	+/-	6.3E-05
Sband delay (usec)	2.42730134362E+03	Apriori clock (usec)	-5.2400293E+00	Resid sbdelay (usec)	-1.77545E-02	+/-	5.0E-04
Phase delay (usec)	2.42731910276E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	4.64065E-06	+/-	1.1E-07
Delay rate (us/s)	-5.19805887357E-02	Apriori rate (us/s)	-5.19806355600E-02	Resid rate (us/s)	4.68243E-08	+/-	5.1E-10
Total phase (deg)	4.1	Apriori accel (us/s/s)	-1.16637141460E-05	Resid phase (deg)	323.9	+/-	3.3

ph/seg (deg)	63.6	RMS	7.9	Theor.	Amplitude	0.944 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	83.2		13.9		Search (2048X32)	0.917	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	10.1		4.7		Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	8.9		8.2		Inc. seg. avg.	1.600	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
					Inc. frq. avg.	0.945	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
							nlags:	128	ion window (TEC)	0.00 0.00

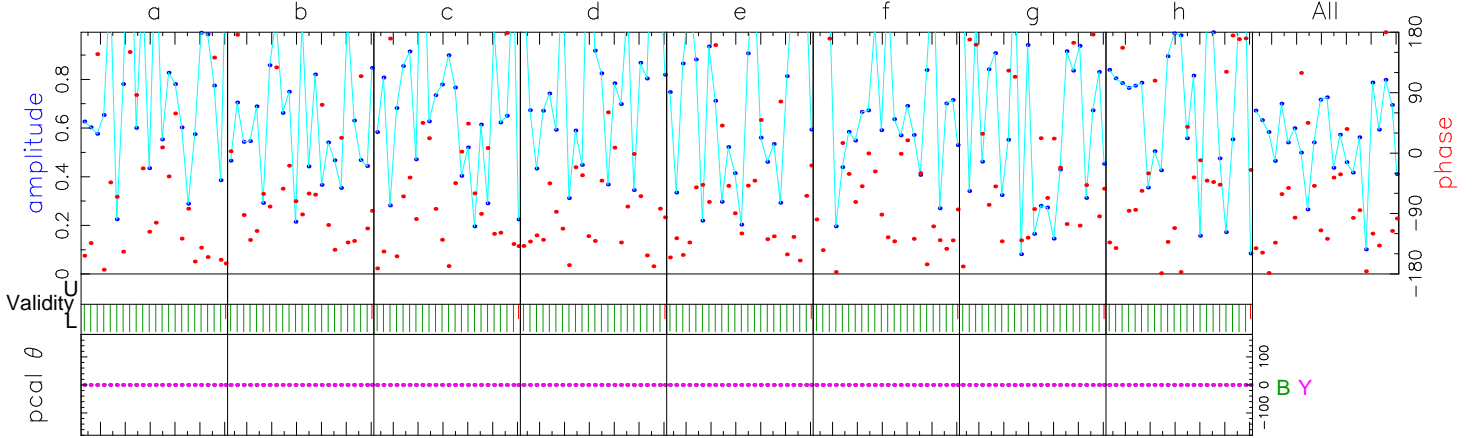


Fringe quality 9
SNR 11.9
Int time 345.612
Amp 0.331
Phase -110.8
PFD 2.5e-24
Delays (us)
SBD -0.009821
MBD -0.010054
Fringe rate (Hz) 0.004376
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

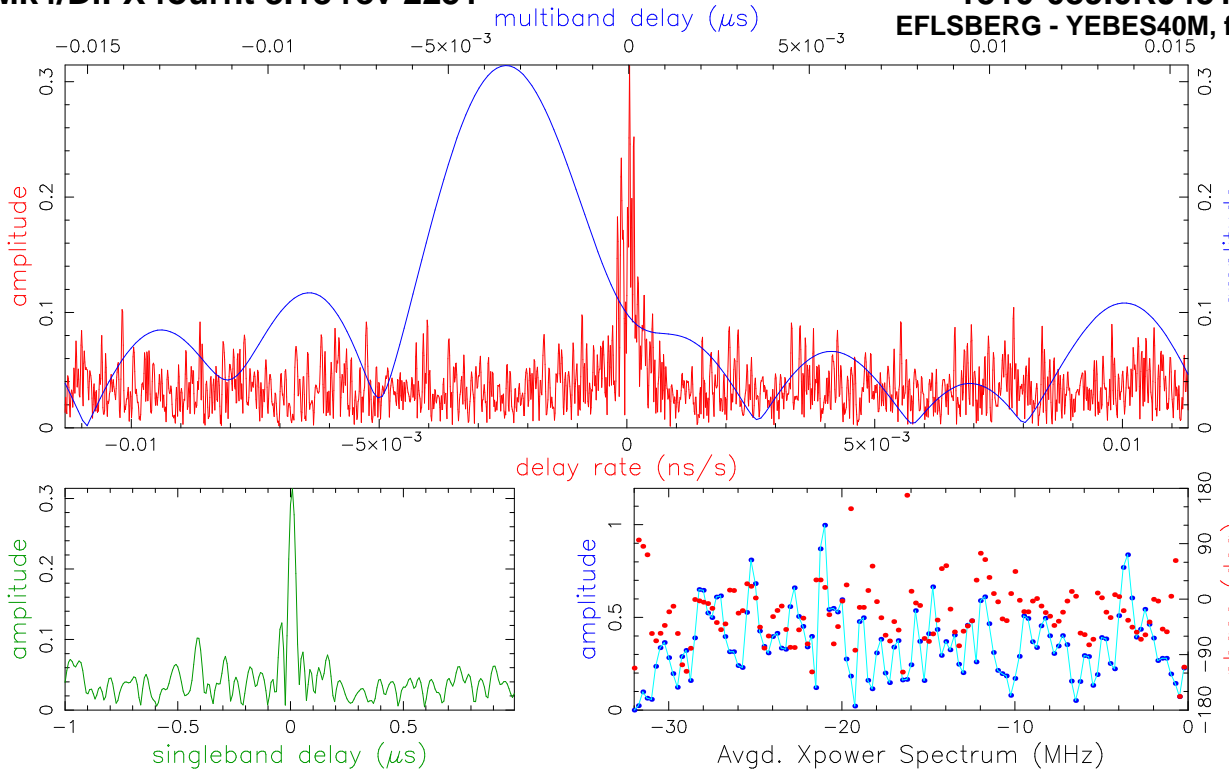


Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044513.31
Stop 045059.42
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110058
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

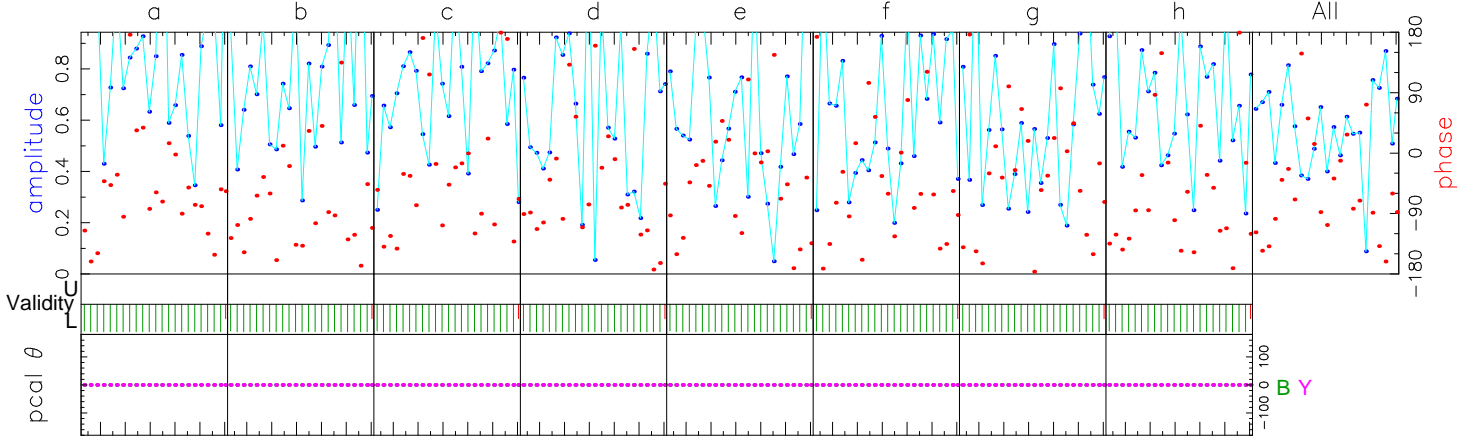


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	Ampl.	0.3
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	127.7
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	APs used	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.02498925899E+03			Apriori delay (usec)	-4.02497920526E+03			Resid mbdelay (usec)	-1.00537E-02	+/- 1.8E-04
Sband delay (usec)	-4.02498902626E+03			Apriori clock (usec)	1.2826337E+01			Resid sbdelay (usec)	-9.82100E-03	+/- 1.4E-03
Phase delay (usec)	-4.02497920884E+03			Apriori clockrate (us/s)	-3.6700000E-07			Resid phdelay (usec)	-3.57338E-06	+/- 3.1E-07
Delay rate (us/s)	-2.70198726272E-02			Apriori rate (us/s)	-2.70199234307E-02			Resid rate (us/s)	5.08036E-08	+/- 1.6E-09
Total phase (deg)		-17.7		Apriori accel (us/s/s)	1.92729997758E-05			Resid phase (deg)	-110.8	+/- 9.6
RMS	67.6	23.1		Amplitude	0.331 +/- 0.028			Pcal mode: MANUAL, MANUAL		
ph/seg (deg)	67.6	23.1		Search (2048X32)	0.315			Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
amp/seg (%)	84.0	40.3		Interp.	0.000			Bits/sample: 2x2	mb window (us)	-0.016 0.016
ph/frq (deg)	18.5	13.6		Inc. seg. avg.	0.517			Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011 0.011
amp/frq (%)	28.2	23.7		Inc. frq. avg.	0.331			Data rate(Mb/s): 1024	ion window (TEC)	0.00 0.00
								nlags: 128 t_cohere infinite		



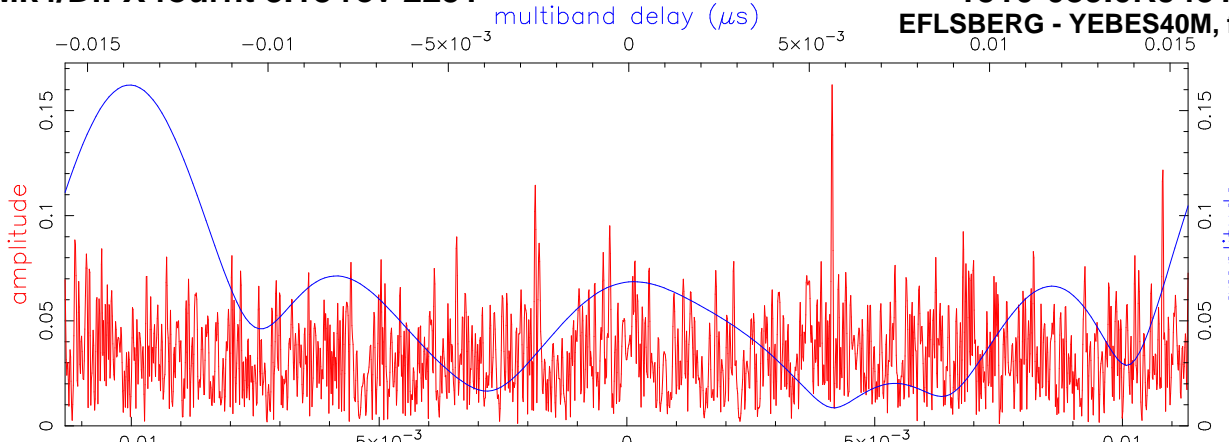
Fringe quality 9
 SNR 11.3
 Int time 345.612
 Amp 0.314
 Phase -82.2
 PFD 3.0e-21
 Delays (us)
 SBD 0.006823
 MBD -0.003429
 Fringe rate (Hz) 0.004510
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110100
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
	-79.1	-101.6	-83.1	-83.0	-51.5	-81.8	-65.4	-102.7	Phase	-82.2
	0.5	0.4	0.3	0.3	0.4	0.2	0.2	0.3	Ampl.	0.3
	130.1	129.9	130.6	130.7	131.0	251.0	92.0	129.5	Sbd box	129.9
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.02498263418E+03		Apriori delay (usec)		-4.02497920526E+03		Resid mbdelay (usec)		-3.42891E-03	+/- 1.9E-04
Sband delay (usec)	-4.02497238226E+03		Apriori clock (usec)		1.2826337E+01		Resid sbdelay (usec)		6.82300E-03	+/- 1.5E-03
Phase delay (usec)	-4.0249720792E+03		Apriori clockrate (us/s)		-3.6700000E-07		Resid phdelay (usec)		-2.65181E-06	+/- 3.3E-07
Delay rate (us/s)	-2.70198710790E-02		Apriori rate (us/s)		-2.70199234307E-02		Resid rate (us/s)		5.23518E-08	+/- 1.6E-09
Total phase (deg)	-349.2		Apriori accel (us/s/s)		1.92729997758E-05		Resid phase (deg)		-82.2	+/- 10.1

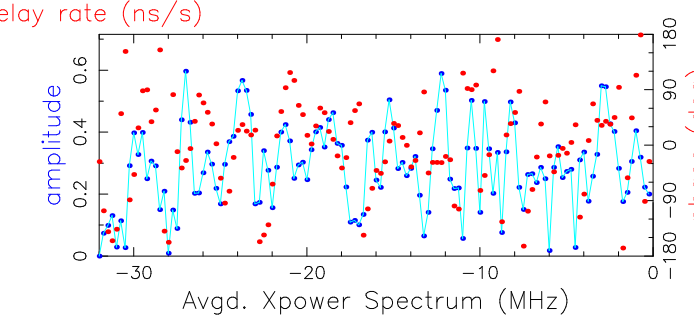
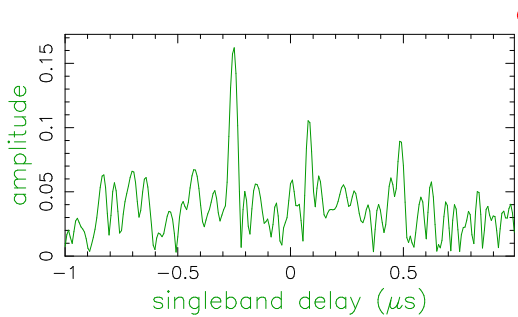
ph/seg (deg) 70.4 24.3 Search (2048X32) 0.300 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 97.7 42.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.4 14.3 Inc. seg. avg. 0.524 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.8 25.0 Inc. frq. avg. 0.317 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 225.3 el 19.8 pa 27.2 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 184.623 824.896 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BY.W.30.0RJ451



Fringe quality 0

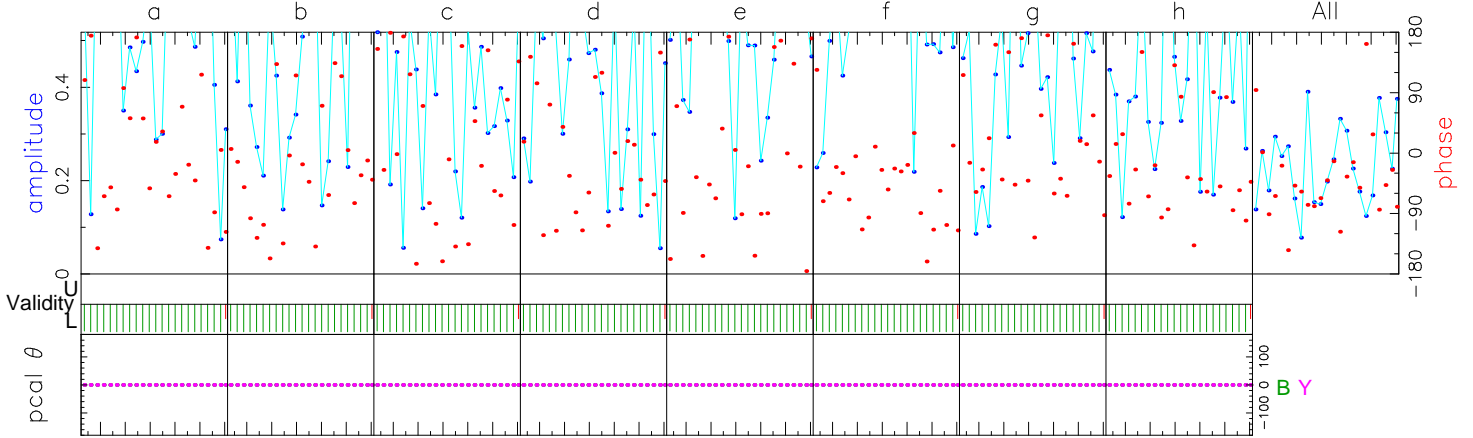
SNR 5.9
 Int time 345.612
 Amp 0.173
 Phase 304.3
 PFD 4.2e-01
 Delays (us)
 SBD -0.252327
 MBD -0.013842
 Fringe rate (Hz) 0.357065
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110103
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



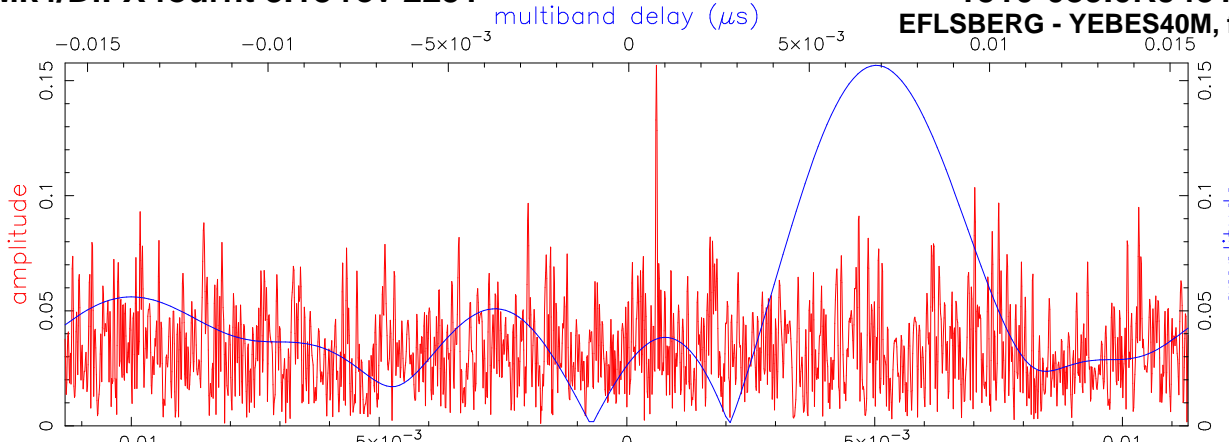
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

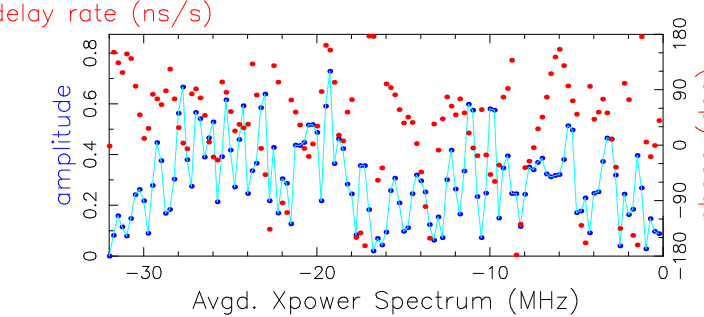
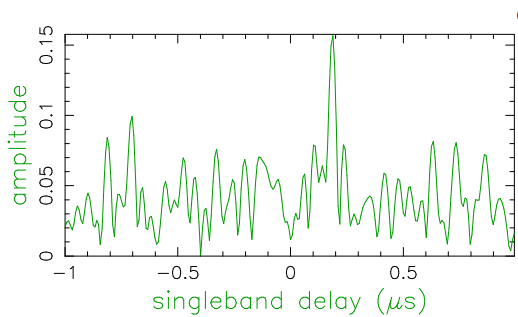


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-49.5	-50.0	-99.1	-39.1	-105.3	-53.3	-39.4	-60.6	Phase	-55.7
0.1	0.2	0.1	0.1	0.1	0.4	0.2	0.2	Ampl.	0.2
60.0	37.3	87.2	61.2	227.1	96.1	95.4	98.9	Sbd box	96.7
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-4.02524304726E+03		Apriori delay (usec)	-4.02497920526E+03		Resid mbdelay (usec)	-1.38420E-02	+/-	3.7E-04
Sband delay (usec)	-4.02523153226E+03		Apriori clock (usec)	1.2826337E+01		Resid sbdelay (usec)	-2.52327E-01	+/-	2.9E-03
Phase delay (usec)	-4.02497920706E+03		Apriori clockrate (us/s)	-3.6700000E-07		Resid phdelay (usec)	-1.79737E-06	+/-	6.3E-07
Delay rate (us/s)	-2.70157782631E-02		Apriori rate (us/s)	-2.70199234307E-02		Resid rate (us/s)	4.14517E-06	+/-	3.1E-09
Total phase (deg)		37.3	Apriori accel (us/s/s)	1.92729997758E-05		Resid phase (deg)	304.3	+/-	19.5

ph/seg (deg) 57.4 46.8 Theor. Amplitude 0.173 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.2 81.7 Search (2048X32) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.8 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.1 48.2 Inc. seg. avg. 0.184 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. 0.162 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

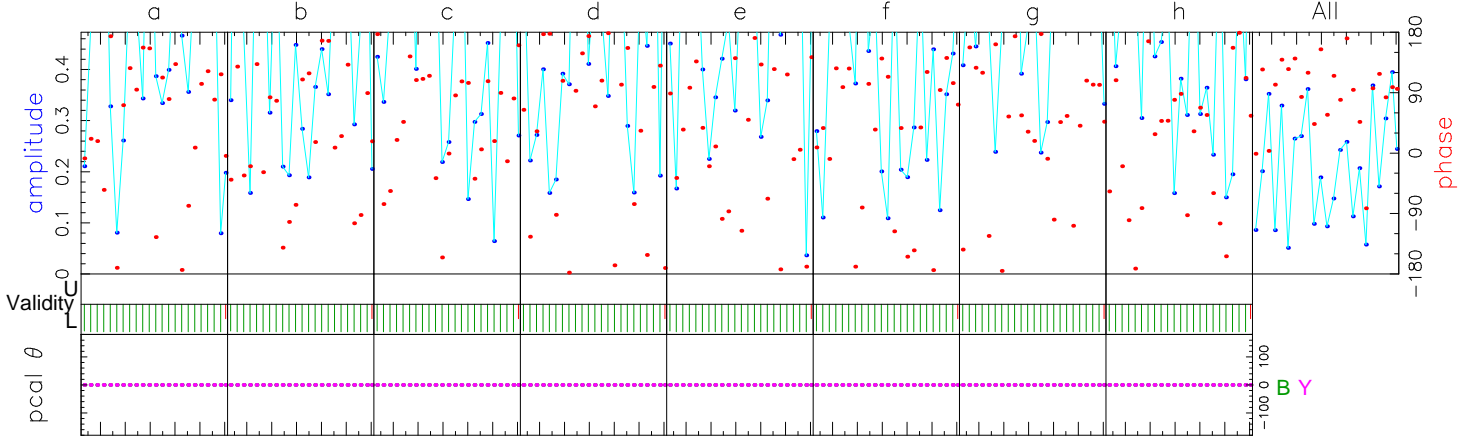


Fringe quality 0
 SNR 5.7
 Int time 345.612
 Amp 0.158
 Phase -259.3
 PFD 8.4e-01
 Delays (us)
 SBD 0.185620
 MBD 0.006833
 Fringe rate (Hz)
 0.051604
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110105
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

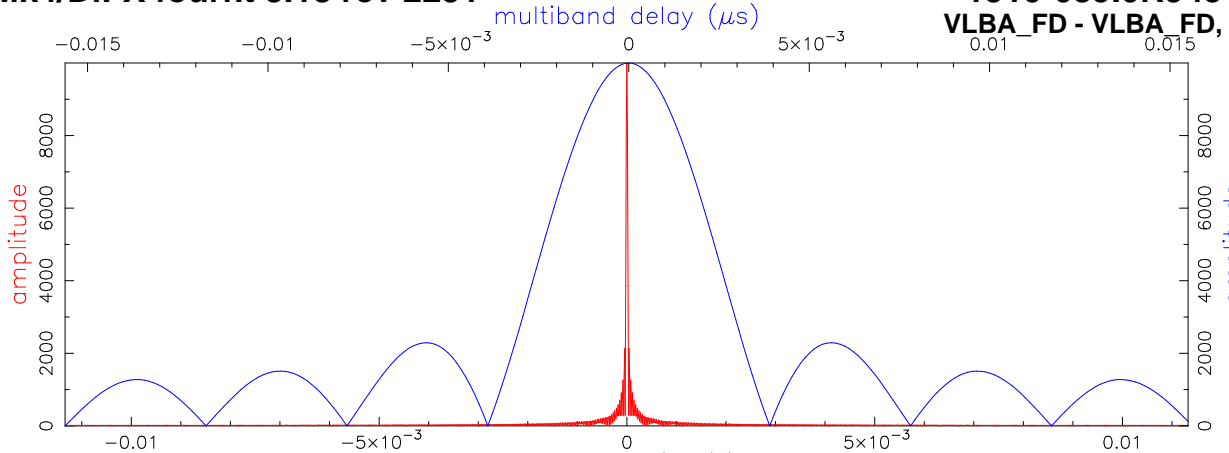
Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



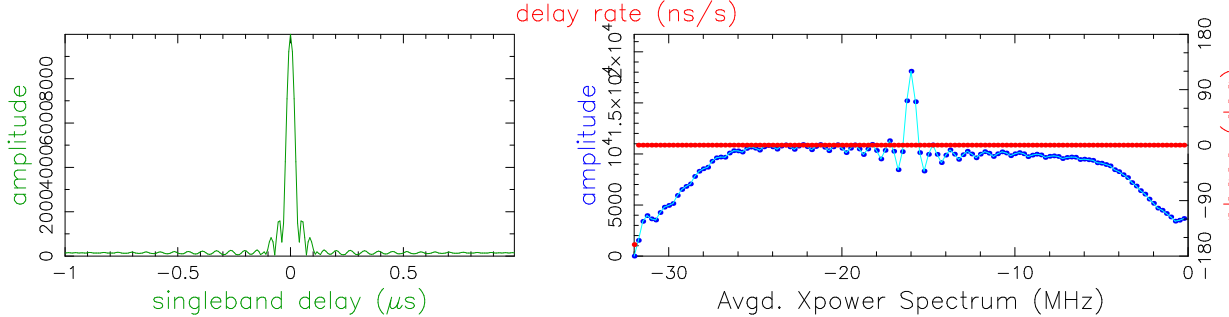
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
104.3	83.7	79.1	129.0	89.3	110.9	102.1	65.6	Phase	100.7
0.2	0.1	0.2	0.3	0.1	0.2	0.2	0.1	Ampl.	0.1
155.2	210.9	73.2	152.3	57.3	214.5	103.2	238.0	Sbd box	152.8
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)									
-4.02478487201E+03		Apriori delay (usec)		-4.02497920526E+03		Resid mbdelay (usec)		6.8325E-03	+/- 3.8E-04
-4.02479358576E+03		Apriori clock (usec)		1.2826337E+01		Resid sbdelay (usec)		1.85620E-01	+/- 3.0E-03
-4.02497920202E+03		Apriori clockrate (us/s)		-3.6700000E-07		Resid phdelay (usec)		3.24833E-06	+/- 6.5E-07
-2.70193243616E-02		Apriori rate (us/s)		-2.70199234307E-02		Resid rate (us/s)		5.99069E-07	+/- 3.3E-09
-166.2		Apriori accel (us/s/s)		1.92729997758E-05		Resid phase (deg)		-259.3	+/- 20.2

RMS Theor. Amplitude 0.158 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.0 48.5 Search (2048X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 76.2 84.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 22.5 28.6 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 (%) 45.7 50.0 Inc. frq. avg. 0.147 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

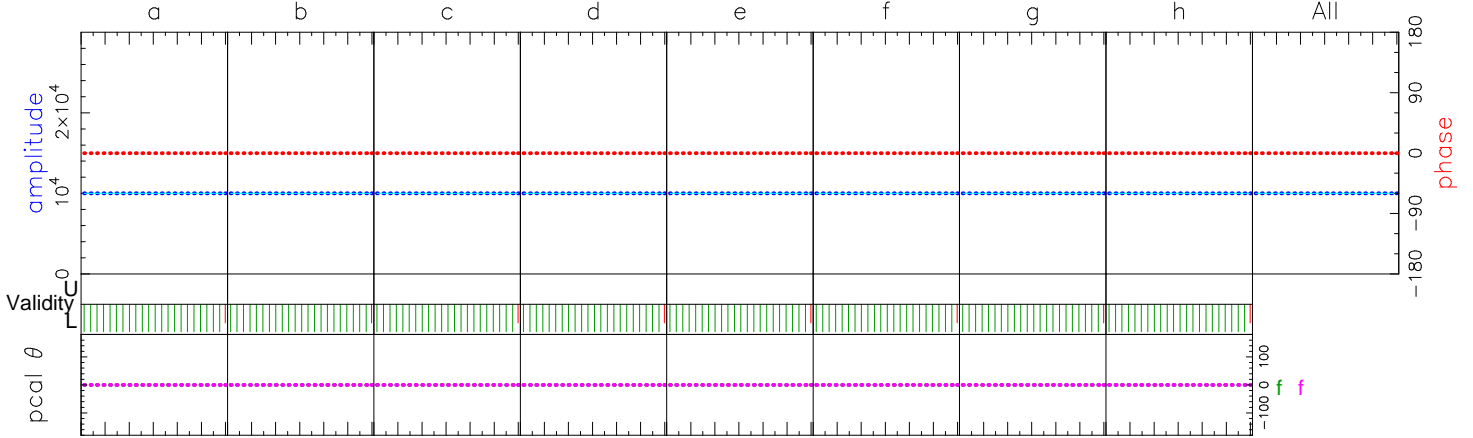
B: az 225.3 el 19.8 pa 27.2 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 184.623 824.896 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/BY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/BY.W.75.0RJ451



Fringe quality 9
 SNR 366853.1
 Int time 359.931
 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 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110057
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

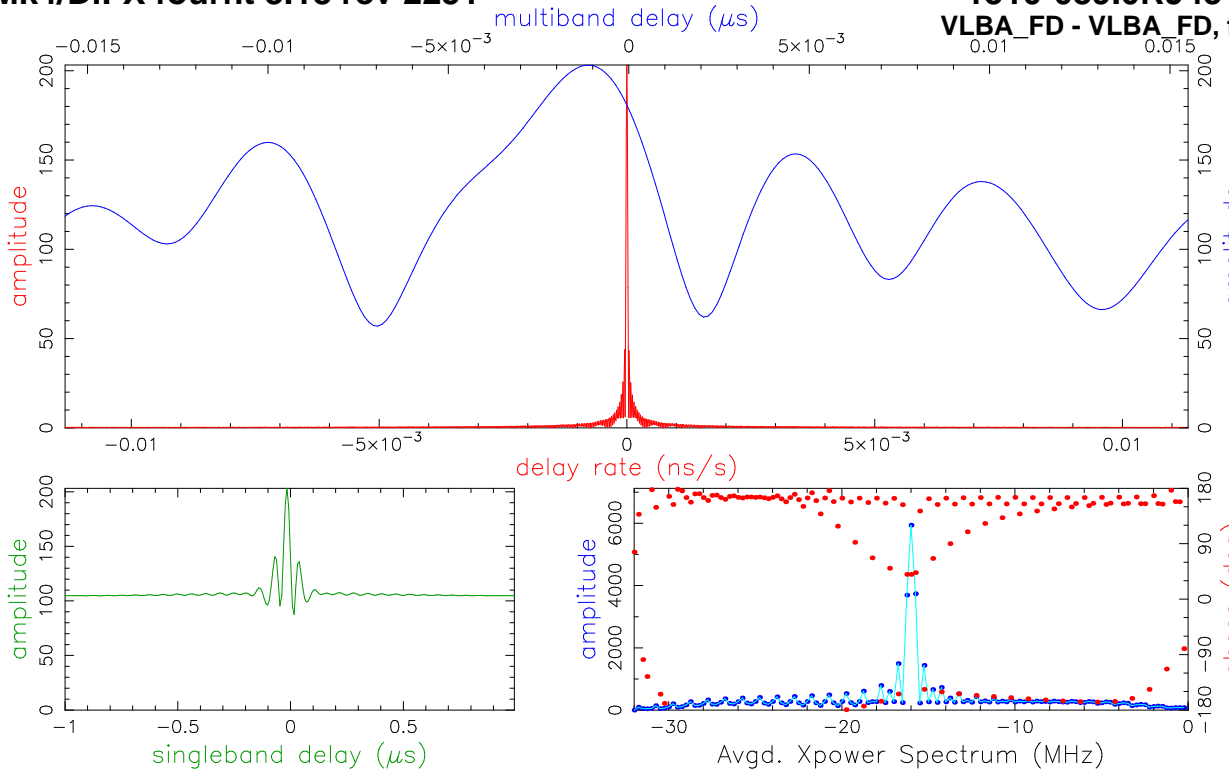


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



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 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
f 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	+/-	5.9E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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 +/- 0.027 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
 f: az 109.5 el 13.5 pa -55.3 f: az 109.5 el 13.5 pa -55.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/ff..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/ff.W.3.0RJ451

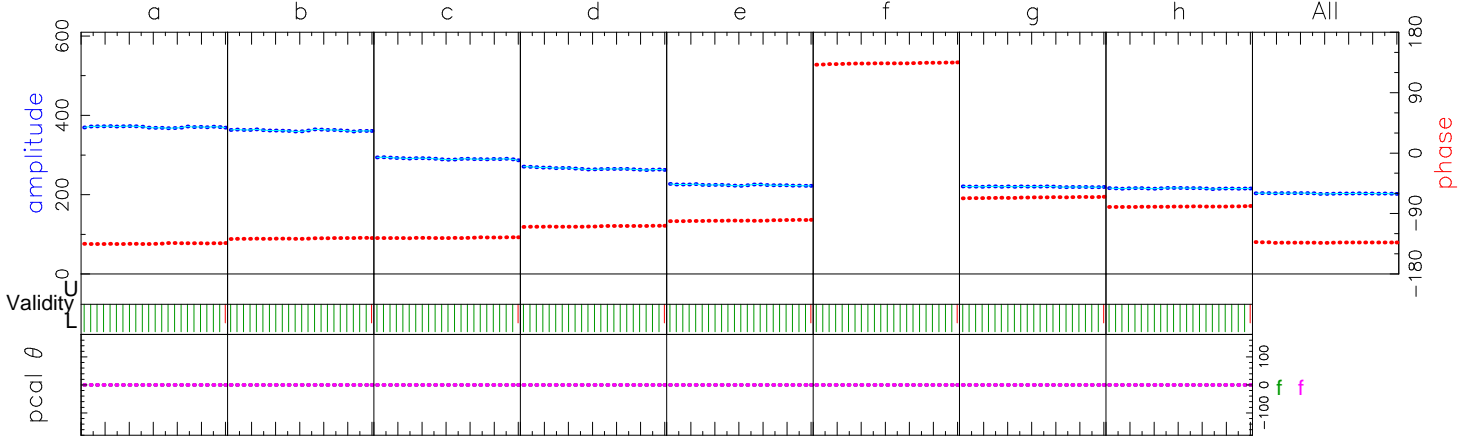


Fringe quality 5

SNR 7455.5
Int time 359.931
Amp 203.228
Phase -133.1
PFD 0.0e+00
Delays (us)
SBD -0.016149
MBD -0.001125
Fringe rate (Hz)
-0.000027
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110103
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

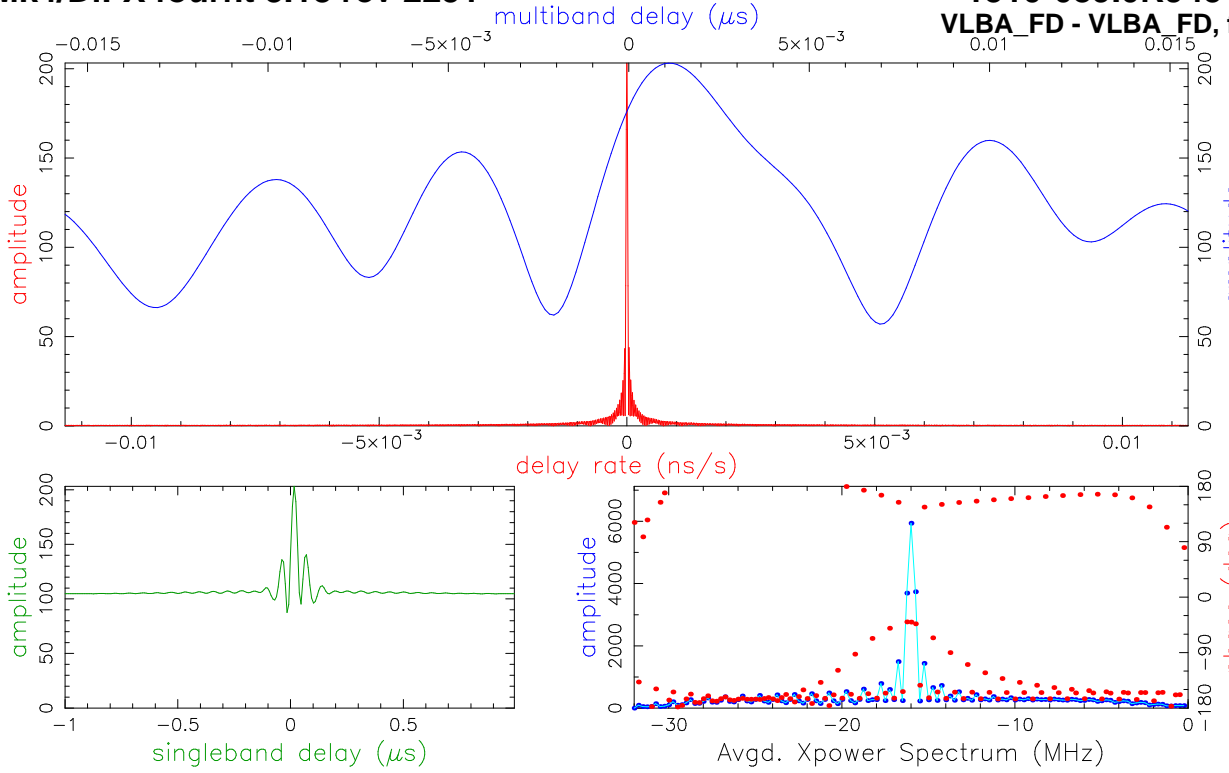


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-134.7	-127.0	-126.1	-109.0	-100.5	133.5	-66.1	-79.7	Phase	-133.1
	370.7	362.0	290.7	265.6	224.3	670.8	220.1	215.9	Ampl.	327.5
	126.9	127.0	126.9	127.0	127.0	133.8	126.8	127.1	Sbd box	126.9
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) -1.12475000000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.12475E-03 +/- 2.9E-07
 Sband delay (usec) -1.61490000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.61490E-02 +/- 2.3E-06
 Phase delay (usec) -4.29281751192E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -4.29282E-06 +/- 5.0E-10
 Delay rate (us/s) -3.11056794997E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -3.11057E-10 +/- 2.4E-12
 Total phase (deg) -133.1 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -133.1 +/- 0.0

RMS Theor. Amplitude 203.228 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.3 0.0 Search (2048X32) 202.727 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.3 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 54.5 0.0 Inc. seg. avg. 203.151 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 92.8 0.0 Inc. frq. avg. 327.515 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 109.5 el 13.5 pa -55.3 f: az 109.5 el 13.5 pa -55.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/ff..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/ff.W.56.0RJ451

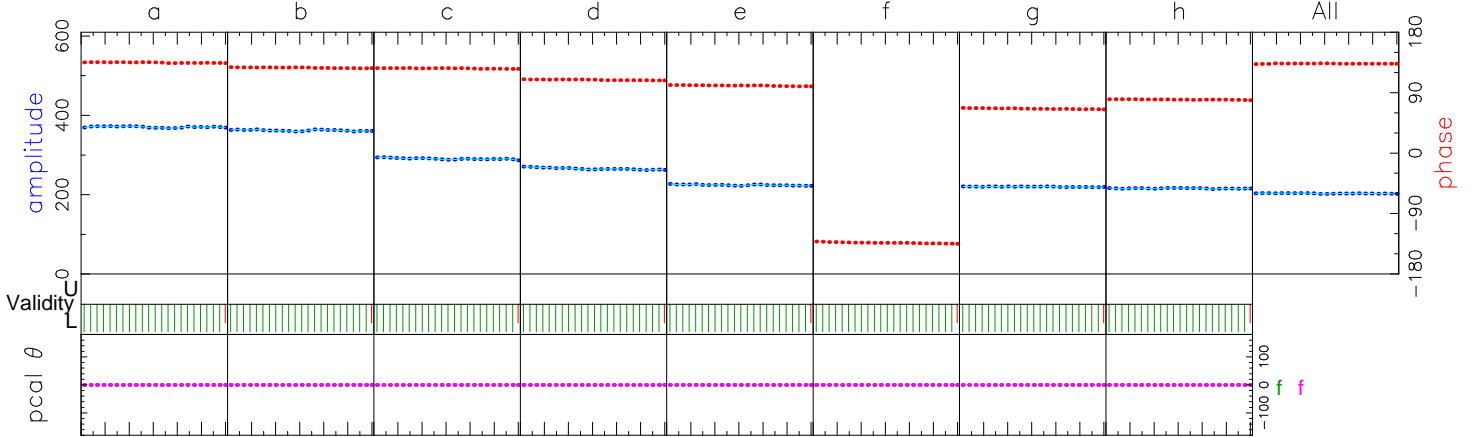


Fringe quality 5

SNR 7455.5
Int time 359.931
Amp 203.228
Phase 133.1
PFD 0.0e+00
Delays (us)
SBD 0.016149
MBD 0.001125
Fringe rate (Hz) 0.000027
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

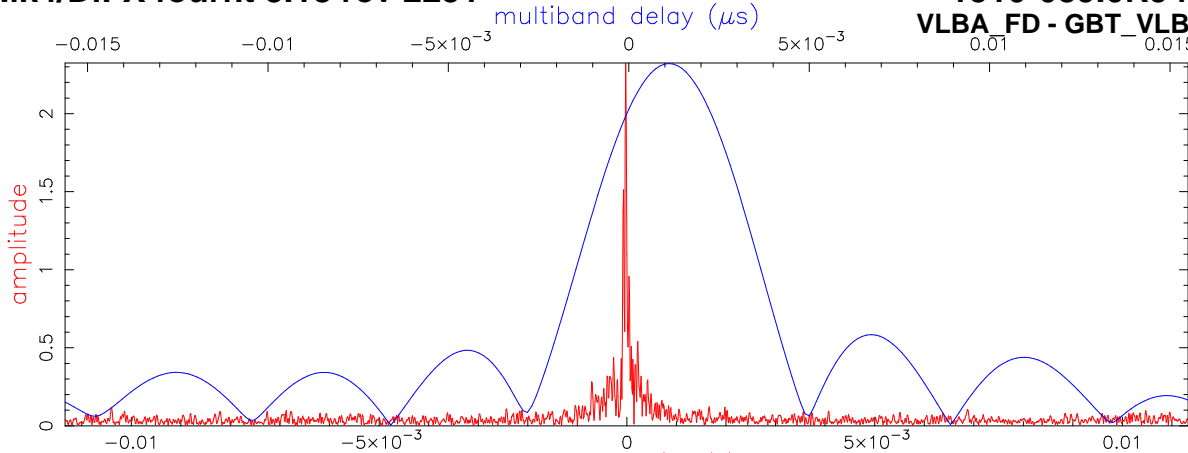
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110105
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
134.7	127.0	126.1	109.0	100.5	-133.5	66.1	79.7	Phase	133.1
370.7	362.0	290.7	265.6	224.3	670.8	220.1	215.9	Ampl.	327.5
131.1	131.0	131.1	131.0	131.0	124.2	131.2	130.9	Sbd box	131.1
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl 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	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.12475000000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.12475E-03	+/-	2.9E-07		
Sband delay (usec)	1.61490000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.61490E-02	+/-	2.3E-06		
Phase delay (usec)	4.29281750986E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	4.29282E-06	+/-	5.0E-10		
Delay rate (us/s)	3.11056794997E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.11057E-10	+/-	2.4E-12		
Total phase (deg)	133.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	133.1	+/-	0.0		

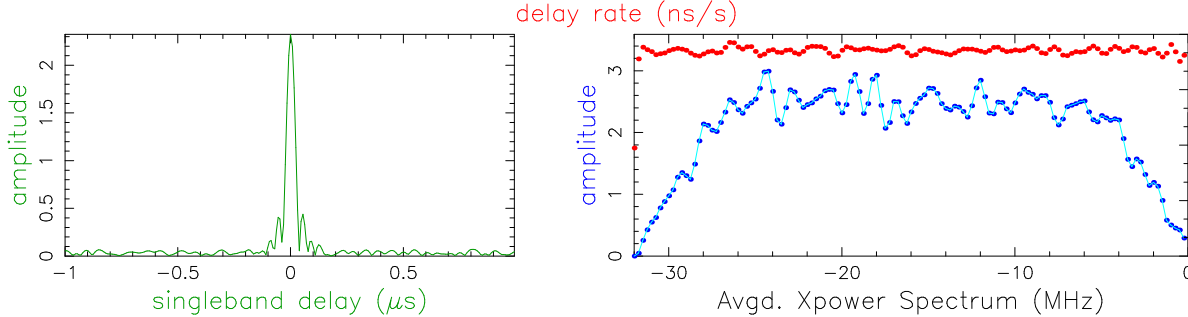
ph/seg (deg) 0.3 0.0 Theor. Amplitude 203.228 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.3 0.1 Search (2048X32) 202.727 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 92.8 0.0 Inc. seg. avg. 203.151 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 109.5 el 13.5 pa -55.3 f: az 109.5 el 13.5 pa -55.3 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/No0028/ff..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/ff.W.71.0RJ451 simultaneous interpolator



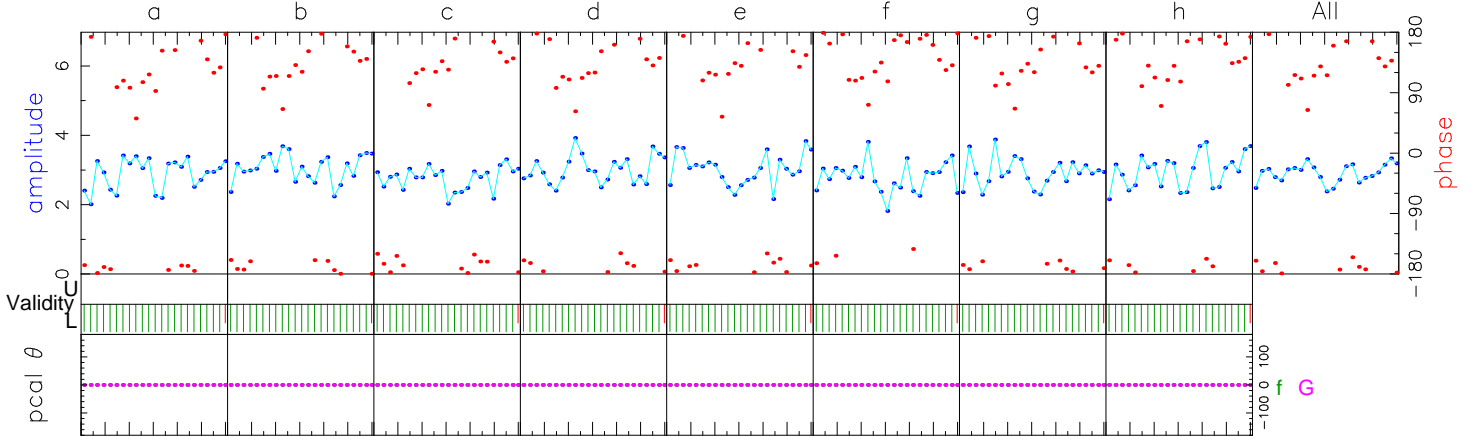
Fringe quality 6

SNR 85.3
Int time 359.651
Amp 2.325
Phase 154.0
PFD 0.0e+00
Delays (us)
SBD 0.001096
MBD 0.001114
Fringe rate (Hz)
-0.001807
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110100
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

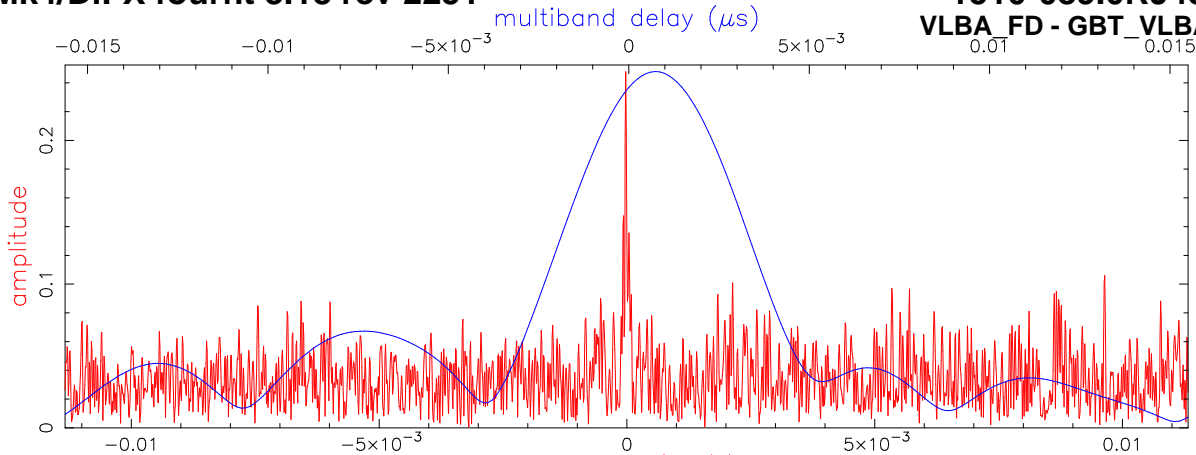


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

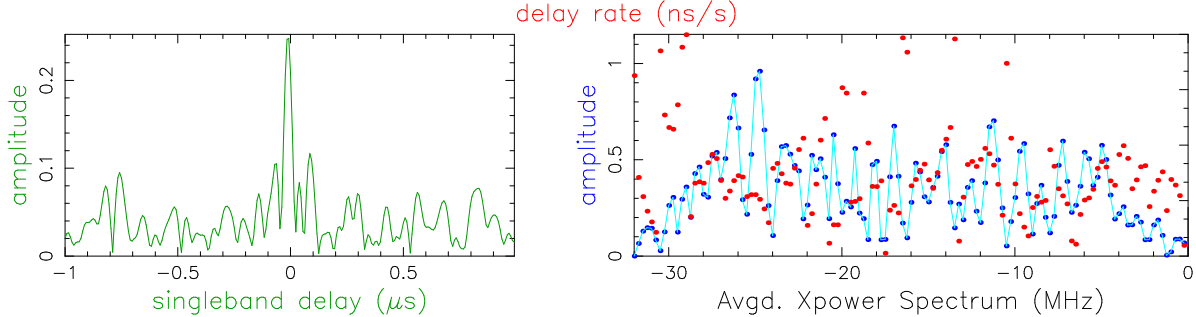


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	154.0	154.0
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	2.3
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.1
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f:G	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	
G	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC amp	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.62167823772E+03		Apriori delay (usec)		-4.62167935168E+03		Resid mbdelay (usec)		1.11396E-03	+/- 2.5E-05
Sband delay (usec)	-4.62167825568E+03		Apriori clock (usec)		2.1133682E+01		Resid sbdelay (usec)		1.09600E-03	+/- 2.0E-04
Phase delay (usec)	-4.62167934671E+03		Apriori clockrate (us/s)		-6.2999993E-08		Resid phdelay (usec)		4.96514E-06	+/- 4.3E-08
Delay rate (us/s)	3.95299872943E-01		Apriori rate (us/s)		3.95299893925E-01		Resid rate (us/s)		-2.09818E-08	+/- 2.1E-10
Total phase (deg)	26.7		Apriori accel (us/s/s)		2.66978453939E-05		Resid phase (deg)		154.0	+/- 1.3

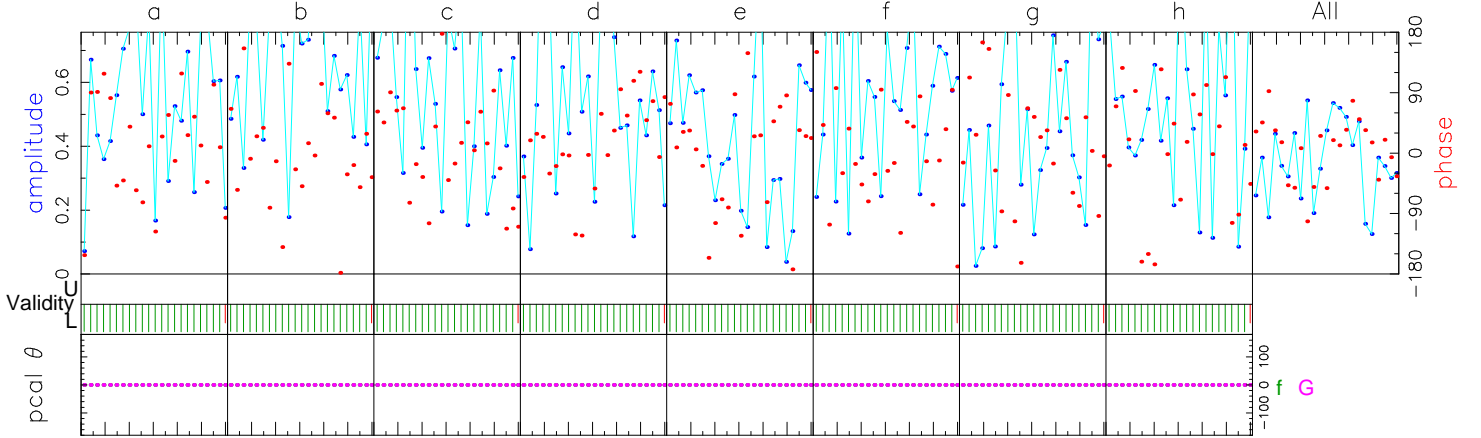
ph/seg (deg) 37.4 3.2 Theor. Amplitude 2.325 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.4 5.6 Search (2048X32) 2.310 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.2 1.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 4.3 3.3 Inc. seg. avg. 2.902 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 109.5 el 13.5 pa -55.3 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) -2257.496 -1320.366 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/No0028/fG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fG.W.26.0RJ451 simultaneous interpolator



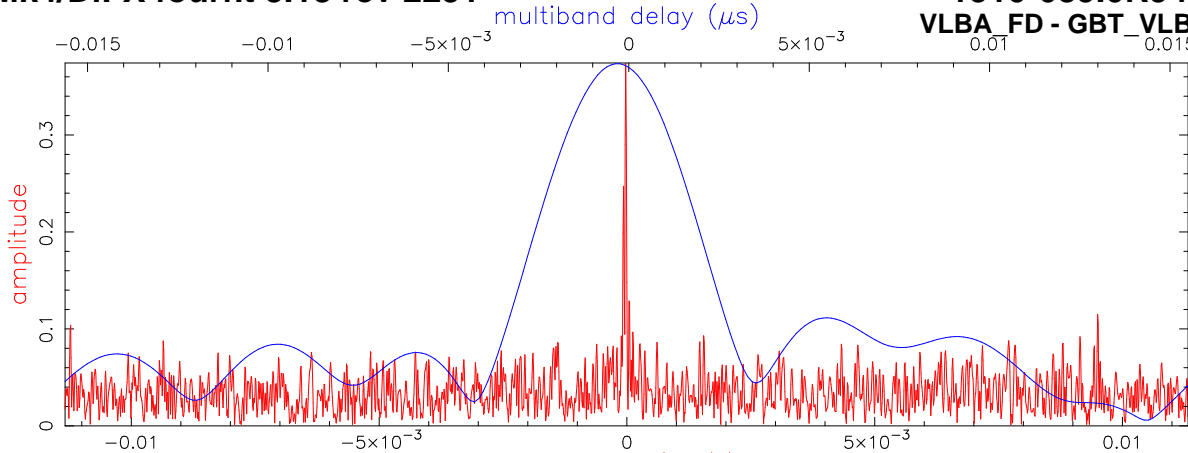
Fringe quality 9
 SNR 9.3
 Int time 359.651
 Amp 0.252
 Phase 6.6
 PFD 4.1e-12
 Delays (us)
 SBD -0.011498
 MBD 0.000693
 Fringe rate (Hz)
 -0.001834
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110101
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



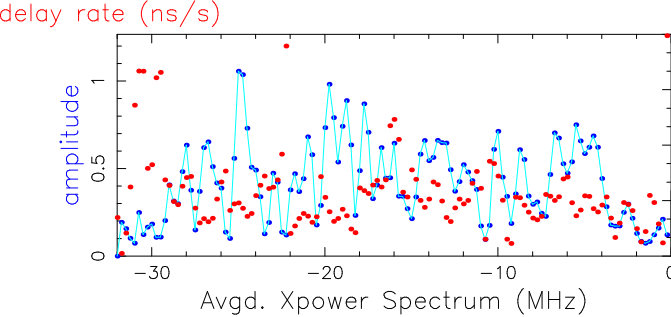
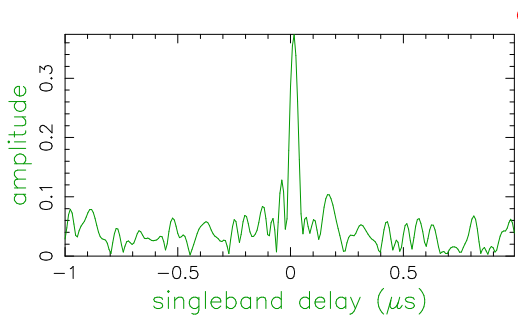
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.62167865872E+03					-4.62167935168E+03			Resid mbdelay (usec)	6.92958E-04 +/- 2.3E-04
Sband delay (usec)	-4.62169085018E+03					2.1133682E+01			Resid sbdelay (usec)	-1.14985E-02 +/- 1.9E-03
Phase delay (usec)	-4.62167935147E+03					-6.2999993E-08			Resid phdelay (usec)	2.12977E-07 +/- 4.0E-07
Delay rate (us/s)	3.95299872639E-01					3.95299893925E-01			Resid rate (us/s)	-2.12858E-08 +/- 1.9E-09
Total phase (deg)		-120.7				2.66978453939E-05			Resid phase (deg)	6.6 +/- 12.4
	RMS	Theor.	Amplitude	0.252 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.0	29.7	Search (2048X32)	0.247					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	62.6	51.8	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	16.3	17.5	Inc. seg. avg.	0.311					Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.2	30.5	Inc. frq. avg.	0.243					Data rate(Mb/s): 1024	ion window (TEC) 0.00 0.00
f: az 109.5 el 13.5 pa -55.3			G: az 129.5 el 27.1 pa -37.4			u,v (fr/asec) -2257.496 -1320.366			nlags: 128 t_cohere infinite	simultaneous interpolator



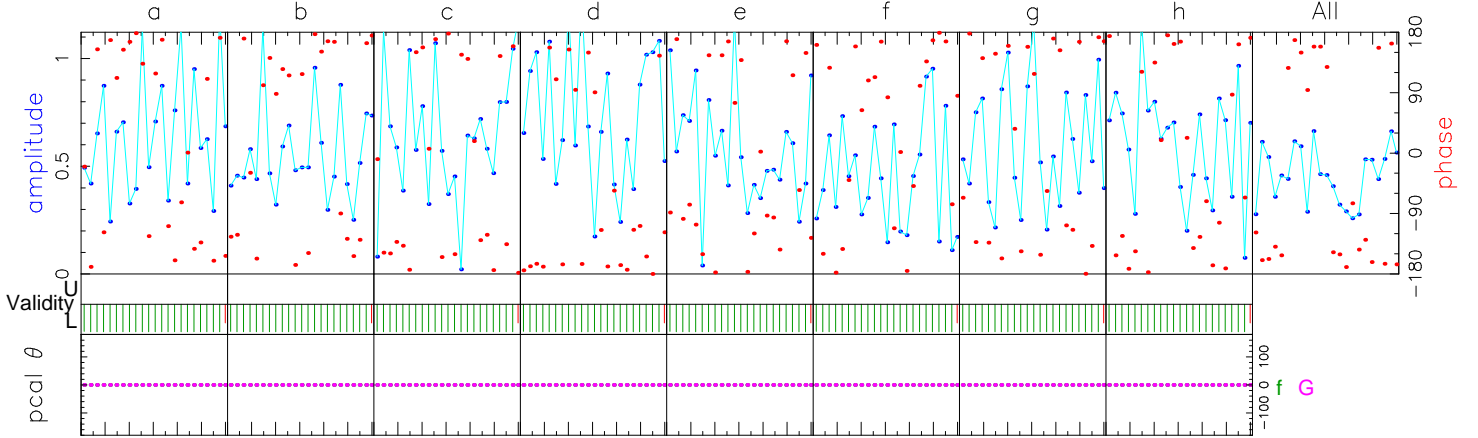
Fringe quality 9

SNR 13.7
Int time 359.651
Amp 0.374
Phase -176.3
PFD 2.2e-34
Delays (us)
SBD 0.014368
MBD -0.000303
Fringe rate (Hz)
-0.002041
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110105
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

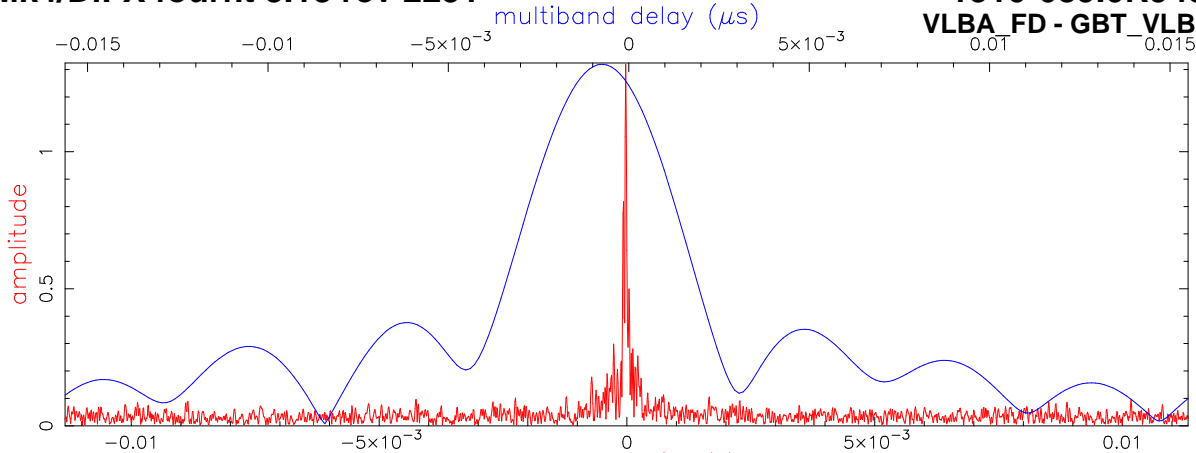


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

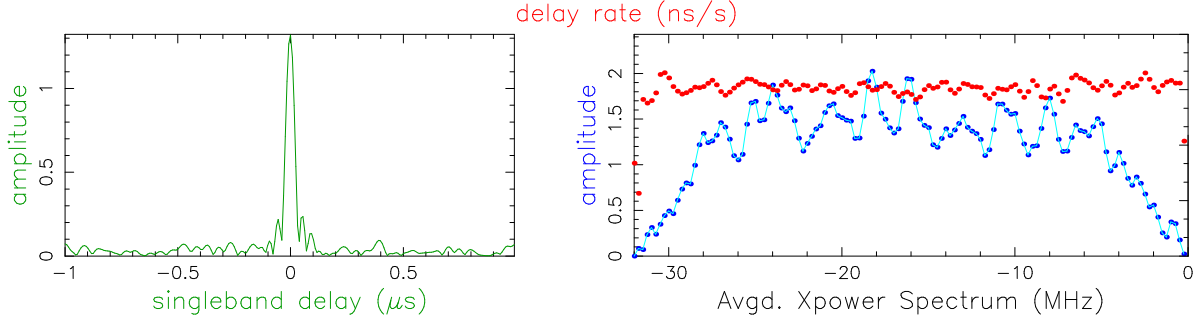


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-175.2	173.3	-171.1	-174.6	-156.4	160.0	-175.3	-176.0	Phase	-176.3
0.4	0.3	0.5	0.6	0.2	0.4	0.4	0.4	Ampl.	0.4
130.0	132.2	130.4	130.4	15.0	83.0	131.7	132.0	Sbd box	130.8
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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)	-4.62167965466E+03	Apriori delay (usec)	-4.62167935168E+03	Resid mbdelay (usec)	-3.02980E-04	+/-	1.6E-04		
Sband delay (usec)	-4.62166498368E+03	Apriori clock (usec)	2.1133682E+01	Resid sbdelay (usec)	1.43680E-02	+/-	1.3E-03		
Phase delay (usec)	-4.62167935736E+03	Apriori clockrate (us/s)	-6.2999993E-08	Resid phdelay (usec)	-5.68433E-06	+/-	2.7E-07		
Delay rate (us/s)	3.95299870229E-01	Apriori rate (us/s)	3.95299893925E-01	Resid rate (us/s)	-2.36963E-08	+/-	1.3E-09		
Total phase (deg)	-303.6	Apriori accel (us/s/s)	2.66978453939E-05	Resid phase (deg)	-176.3	+/-	8.4		

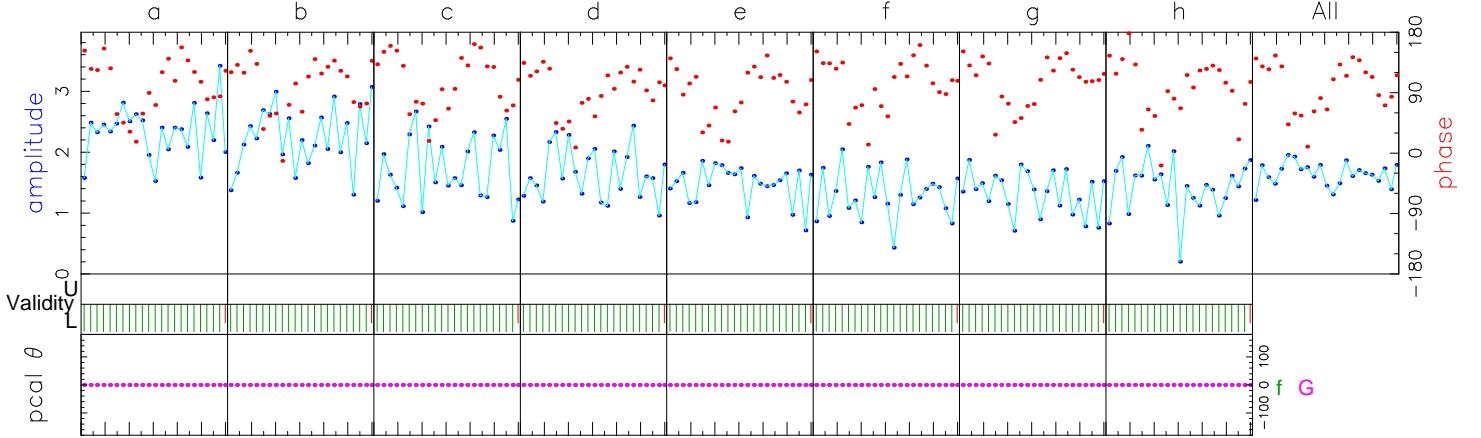
ph/seg (deg) 41.8 20.0 Theor. Amplitude 0.374 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.3 34.9 Search (2048X32) 0.369 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.5 11.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 28.1 20.6 Inc. seg. avg. 0.433 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 109.5 el 13.5 pa -55.3 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) -2257.496 -1320.366 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fG.W.68.0RJ451 simultaneous interpolator



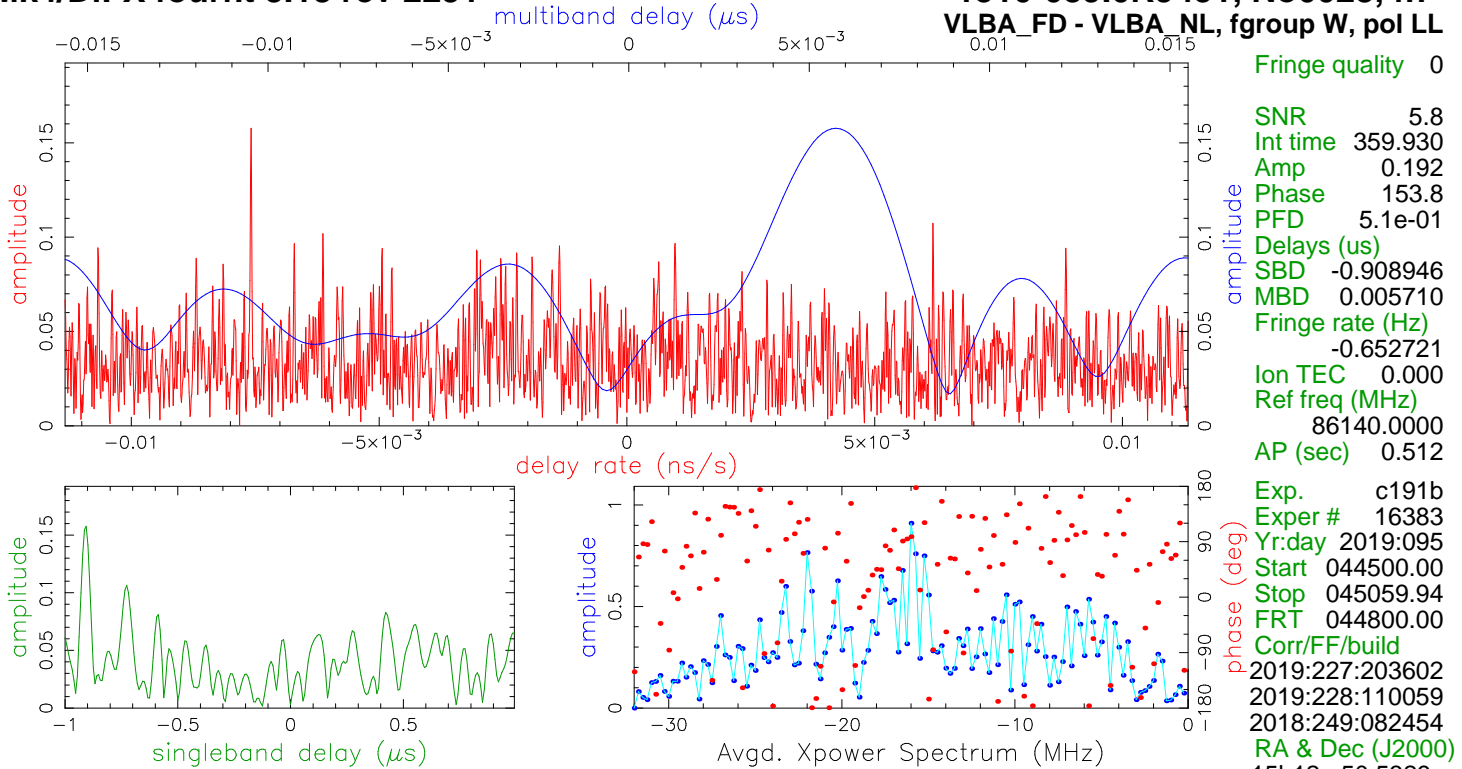
Fringe quality 5
 SNR 48.5
 Int time 359.651
 Amp 1.324
 Phase 98.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.001720
 MBD -0.000749
 Fringe rate (Hz)
 -0.001759
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110058
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



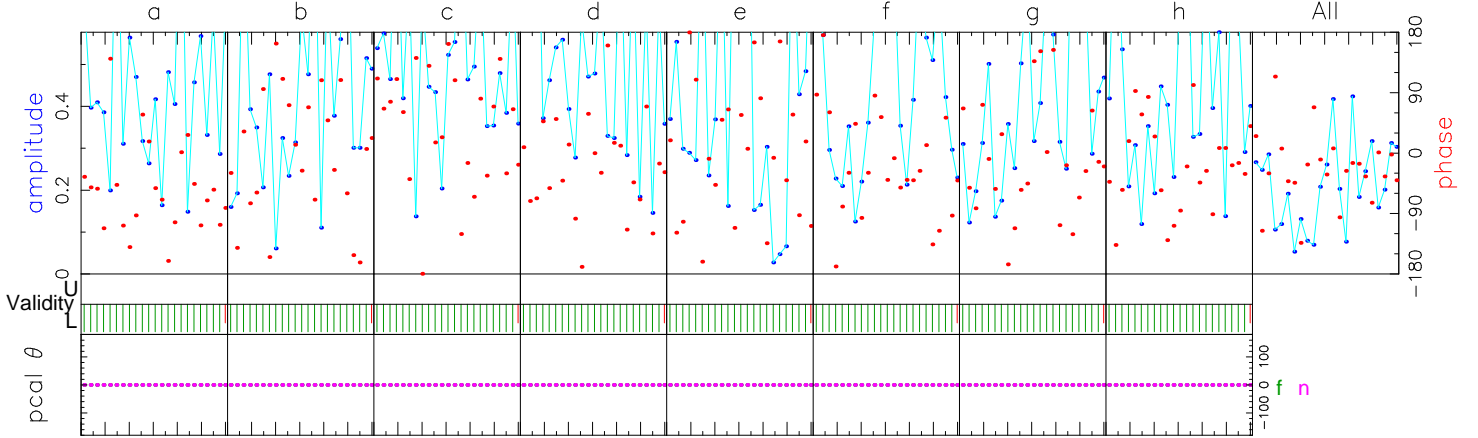
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
f:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:G	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		
G	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	-4.62168010110E+03				-4.62167935168E+03				-7.49417E-04	+/- 4.5E-05
Sband delay (usec)	-4.62168107218E+03				2.1133682E+01				-1.72050E-03	+/- 3.5E-04
Phase delay (usec)	-4.62167934850E+03				-6.2999993E-08				3.18176E-06	+/- 7.6E-08
Delay rate (us/s)	3.95299873508E-01				3.95299893925E-01				-2.04171E-08	+/- 3.7E-10
Total phase (deg)			-28.6						98.7	+/- 2.4
RMS	36.8	5.7			1.324 +/- 0.027					
ph/seg (deg)	27.6	9.9			0.000					
amp/seg (%)	7.6	3.3			1.630					
ph/frq (deg)	21.4	5.8			1.325					
amp/frq (%)										
f: az 109.5 el 13.5 pa -55.3	G: az 129.5 el 27.1 pa -37.4		u,v (fr/asec) -2257.496 -1320.366		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us) -1.000 1.000	
Control file: cf_1234_gmva	Input file: /Exps/c191b/v1/1234/No0028/fG..0RJ451		Output file: /Exps/c191b/v1/1234/No0028/fG.W.8.0RJ451		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us) -0.016 0.016	
					Bits/sample: 2x2				dr window (ns/s) -0.011 0.011	
					Sample rate(MSamp/s): 64				ion window (TEC) 0.00 0.00	
					Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite		simultaneous interpolator	



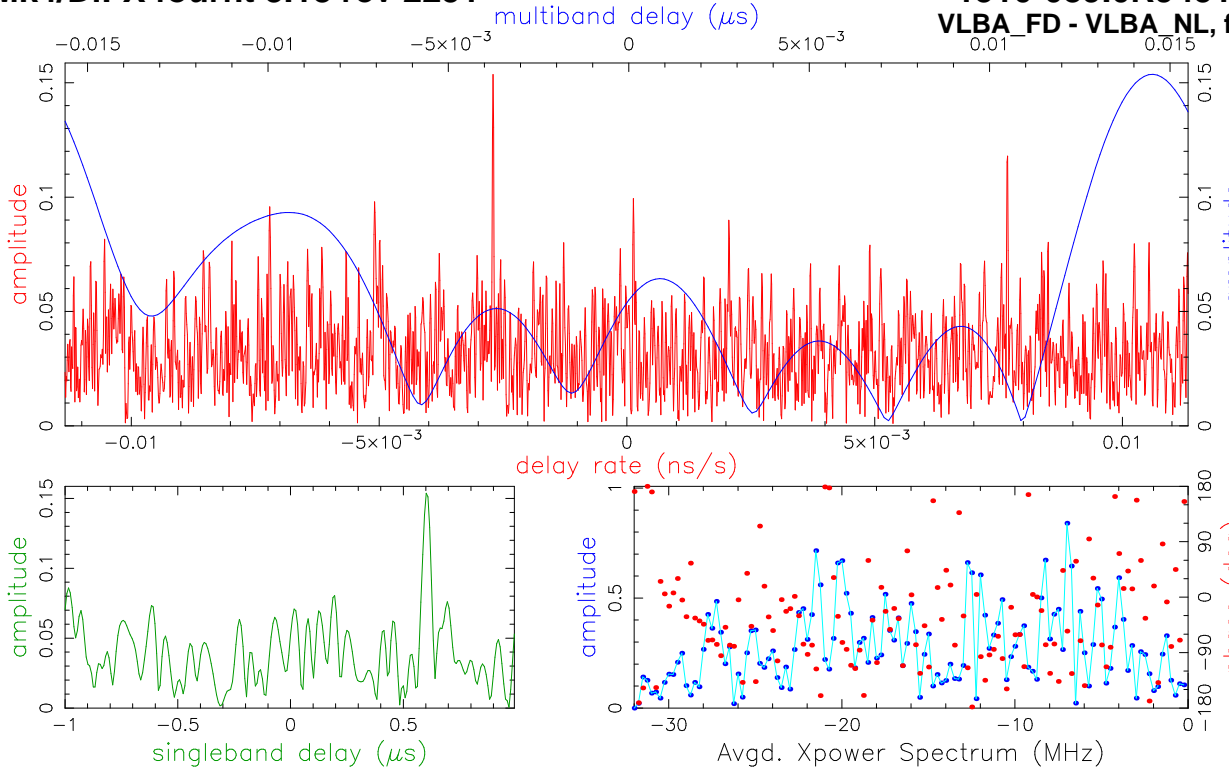
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-65.1	-7.3	80.0	-21.5	-19.8	-15.8	-45.6	-35.4	Phase	-26.2
0.4	0.2	0.2	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2
12.8	98.4	157.3	12.8	61.5	139.8	54.5	185.1	Sbd box	12.7
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	-1.51321525221E+03	Apriori delay (usec)	-1.51231471231E+03	Resid mbdelay (usec)	5.71010E-03	+/-	3.7E-04
Sband delay (usec)	-1.51322365831E+03	Apriori clock (usec)	-1.4803473E+01	Resid sbdelay (usec)	-9.08946E-01	+/-	3.0E-03
Phase delay (usec)	-1.51231471316E+03	Apriori clockrate (us/s)	-3.0999996E-07	Resid phdelay (usec)	-8.45112E-07	+/-	6.3E-07
Delay rate (us/s)	2.81020567609E-01	Apriori rate (us/s)	2.81028145049E-01	Resid rate (us/s)	-7.57744E-06	+/-	3.1E-09
Total phase (deg)	39.1	Apriori accel (us/s/s)	1.07739008286E-05	Resid phase (deg)	153.8	+/-	19.7

ph/seg (deg)	52.6	Theor.	47.1	Amplitude	0.192 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	72.2	Search (2048X32)	0.149	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	47.9	Inc. seg. avg.	0.190	Inc. seg. avg.	0.190	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	50.6	Inc. frq. avg.	0.213	Inc. frq. avg.	0.213	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

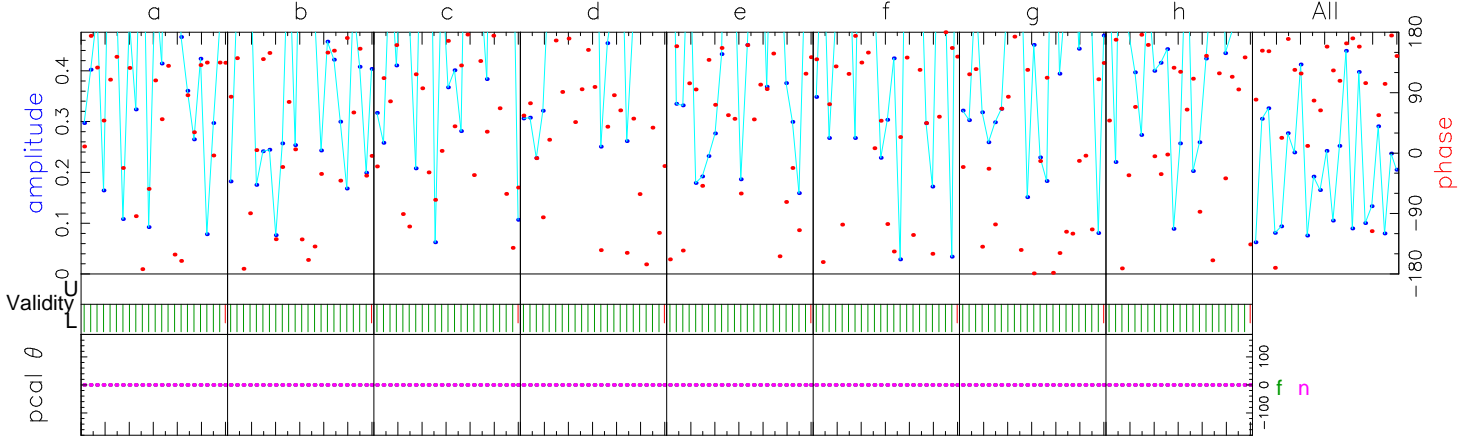


Fringe quality 0

SNR 5.7
Int time 359.930
Amp 0.159
Phase -44.6
PFD 8.0e-01
Delays (us)
SBD 0.604460
MBD 0.014467
Fringe rate (Hz) -0.232893
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110101
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

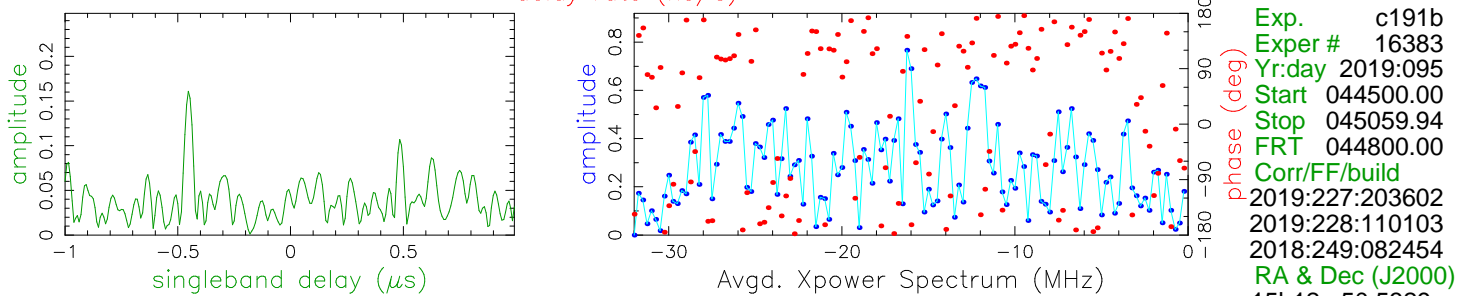
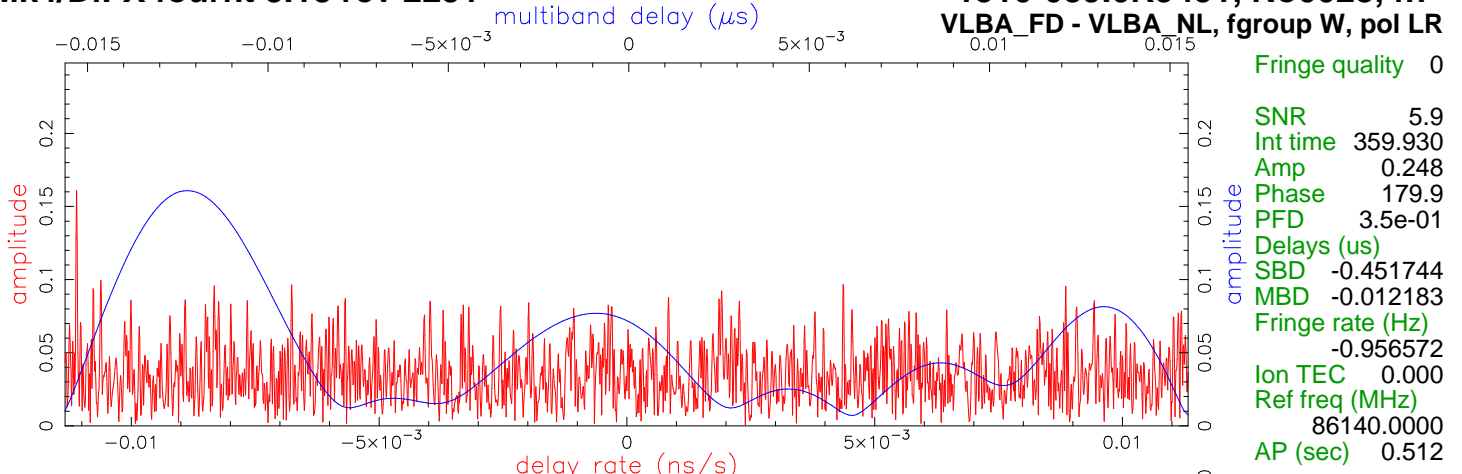


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	135.4	135.4
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Phase	135.4
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	0.2
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	206.4
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC phase	
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	ManI PC	
									PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

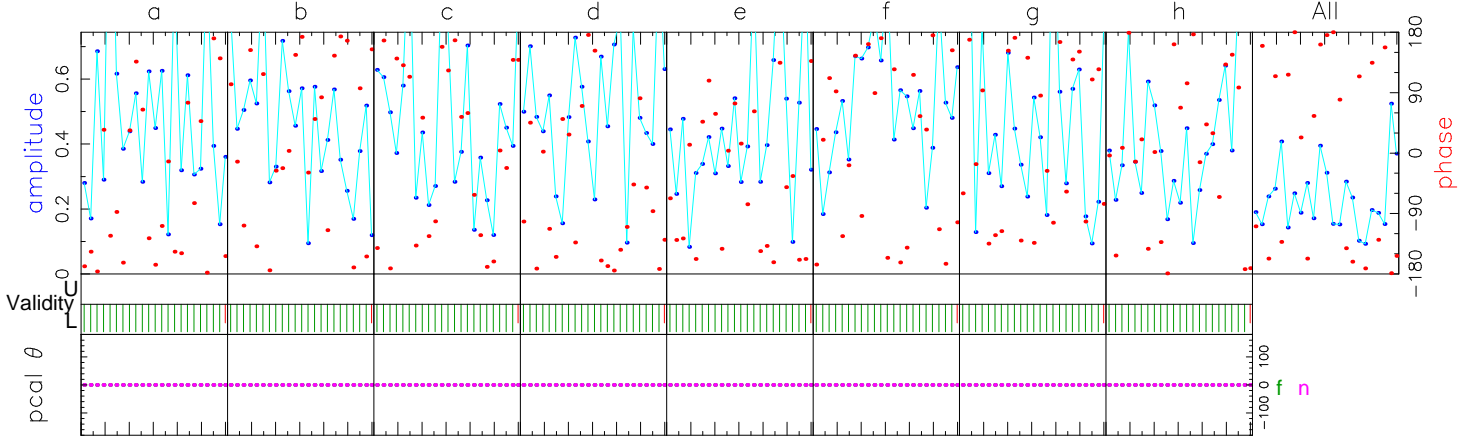
Group delay (usec)(sbd) -1.51170649512E+03 Apriori delay (usec) -1.51231471231E+03 Resid mbdelay (usec) 1.44672E-02 +/- 3.8E-04
 Sband delay (usec) -1.51171025231E+03 Apriori clock (usec) -1.4803473E+01 Resid sbdelay (usec) 6.04460E-01 +/- 3.0E-03
 Phase delay (usec) -1.51231470795E+03 Apriori clockrate (us/s) -3.0999996E-07 Resid phdelay (usec) 4.36690E-06 +/- 6.5E-07
 Delay rate (us/s) 2.81025441393E-01 Apriori rate (us/s) 2.81028145049E-01 Resid rate (us/s) -2.70366E-06 +/- 3.1E-09
 Total phase (deg) -159.3 Apriori accel (us/s/s) 1.07739008286E-05 Resid phase (deg) -44.6 +/- 20.2

RMS Theor. Amplitude 0.159 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 55.8 48.3 Search (2048X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 81.9 84.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 37.7 28.5 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 (%) 51.5 49.8 Inc. frq. avg. 0.161 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 109.5 el 13.5 pa -55.3 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) -1617.107 -1506.942 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fn.W.37.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



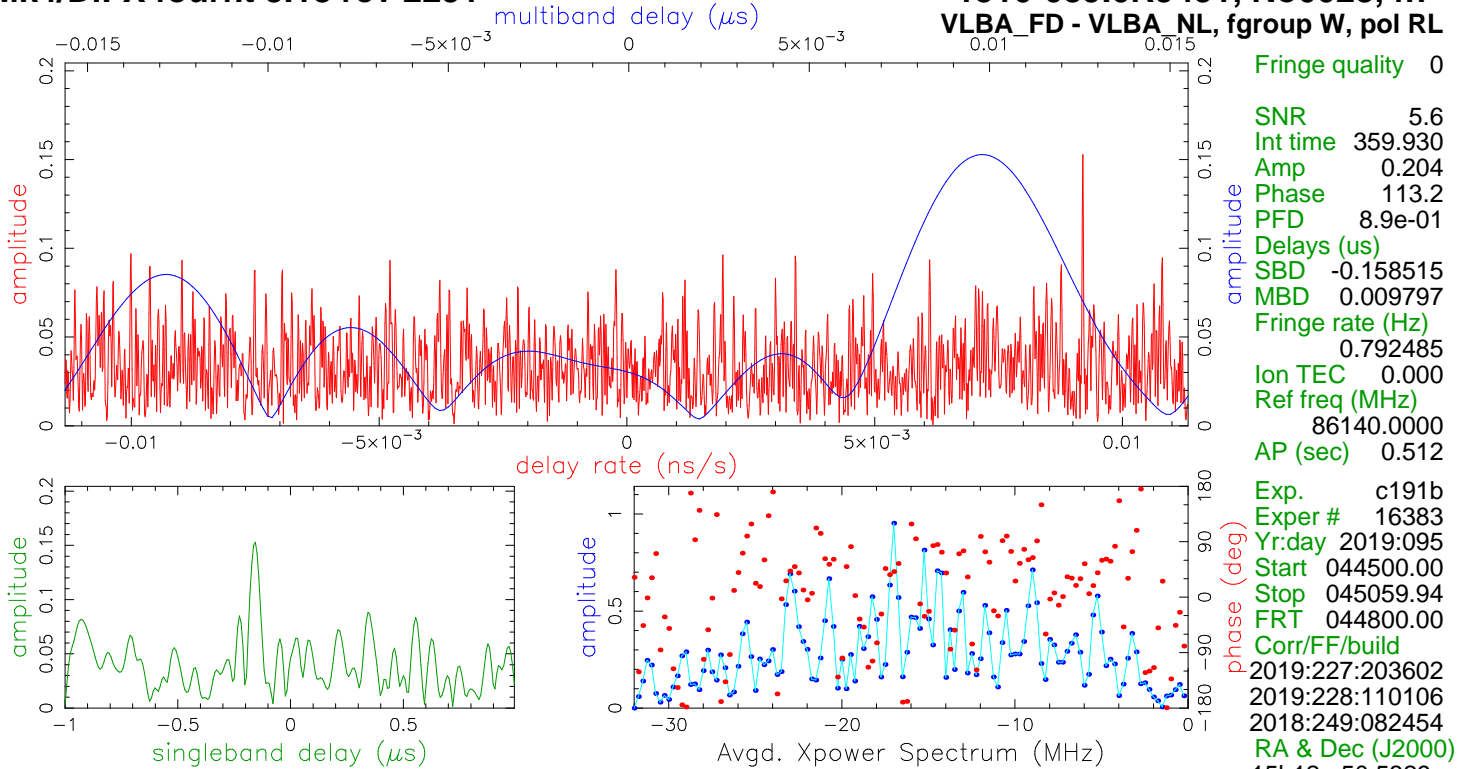
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

Group delay (usec)(sbd)	-1.51276439489E+03	Apriori delay (usec)	-1.51231471231E+03	Resid mbdelay (usec)	-1.21826E-02	+/-	3.7E-04
Sband delay (usec)	-1.51276645631E+03	Apriori clock (usec)	-1.4803473E+01	Resid sbdelay (usec)	-4.51744E-01	+/-	2.9E-03
Phase delay (usec)	-1.51231470651E+03	Apriori clockrate (us/s)	-3.0999996E-07	Resid phdelay (usec)	5.79969E-06	+/-	6.2E-07
Delay rate (us/s)	2.81017040196E-01	Apriori rate (us/s)	2.81028145049E-01	Resid rate (us/s)	-1.11049E-05	+/-	3.0E-09
Total phase (deg)	65.2	Apriori accel (us/s/s)	1.07739008286E-05	Resid phase (deg)	179.9	+/-	19.4

ph/seg (deg)	59.2	Theor.	46.5	Amplitude	0.248 +/- 0.042	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	79.3	Search (2048X32)	0.155	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	32.2	Interp.	0.000	Inc. seg. avg.	0.272	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	38.5	Inc. frq. avg.	0.249	Inc. frq. avg.	0.249	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

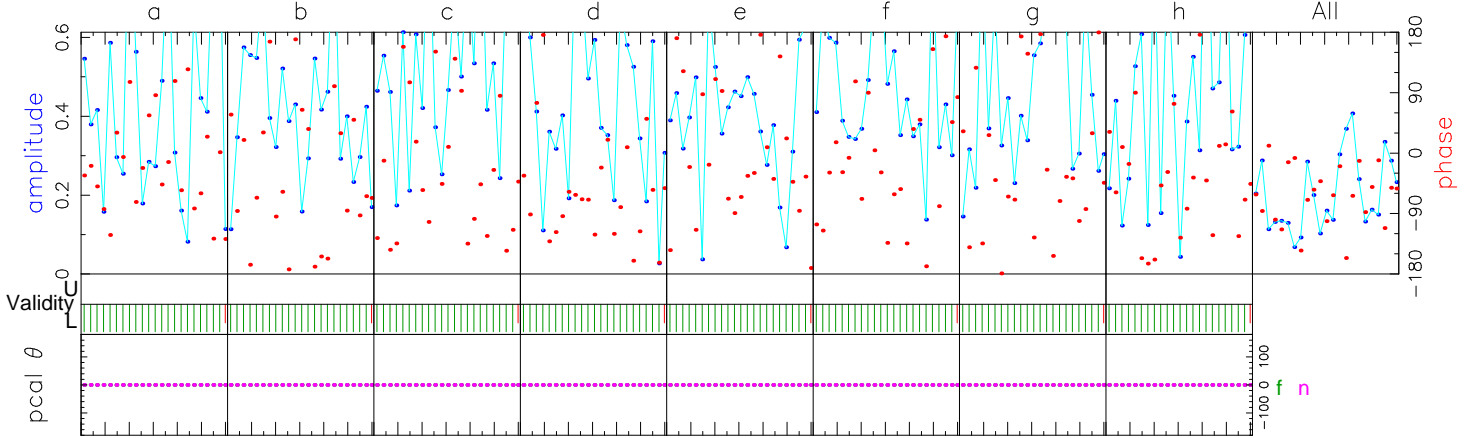
f: az 109.5 el 13.5 pa -55.3 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) -1617.107 -1506.942 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fn.W.55.0RJ451



Fringe quality 0
 SNR 5.6
 Int time 359.930
 Amp 0.204
 Phase 113.2
 PFD 8.9e-01
 Delays (us)
 SBD -0.158515
 MBD 0.009797
 Fringe rate (Hz)
 0.792485
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110106
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

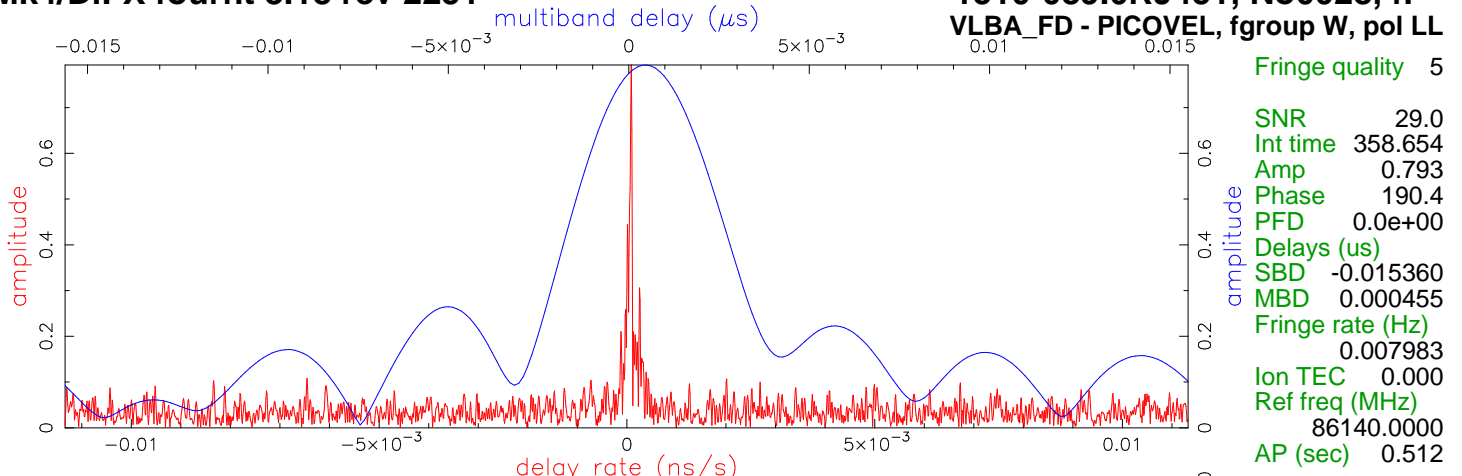


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-32.3	-116.5	-96.8	-71.0	-66.1	-32.9	-92.9	-43.9	Phase	-66.8
	0.3	0.1	0.3	0.4	0.2	0.3	0.3	0.2	Ampl.	0.2
	10.8	85.5	134.9	108.4	33.4	217.1	60.9	118.3	Sbd box	108.7
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd) -1.51246116495E+03 Apriori delay (usec) -1.51231471231E+03 Resid mbdelay (usec) 9.79736E-03 +/- 3.9E-04
 Sband delay (usec) -1.51247322781E+03 Apriori clock (usec) -1.4803473E+01 Resid sbdelay (usec) -1.58515E-01 +/- 3.1E-03
 Phase delay (usec) -1.51231471447E+03 Apriori clockrate (us/s) -3.0999996E-07 Resid phdelay (usec) -2.15332E-06 +/- 6.6E-07
 Delay rate (us/s) 2.81037345013E-01 Apriori rate (us/s) 2.81028145049E-01 Resid rate (us/s) 9.19996E-06 +/- 3.2E-09
 Total phase (deg) 358.5 Apriori accel (us/s/s) 1.07739008286E-05 Resid phase (deg) 113.2 +/- 20.4

RMS Theor. Amplitude 0.204 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.9 48.8 Search (2048X32) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 68.9 85.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 34.0 28.8 Inc. seg. avg. 0.198 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 (%) 42.2 50.3 Inc. frq. avg. 0.201 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

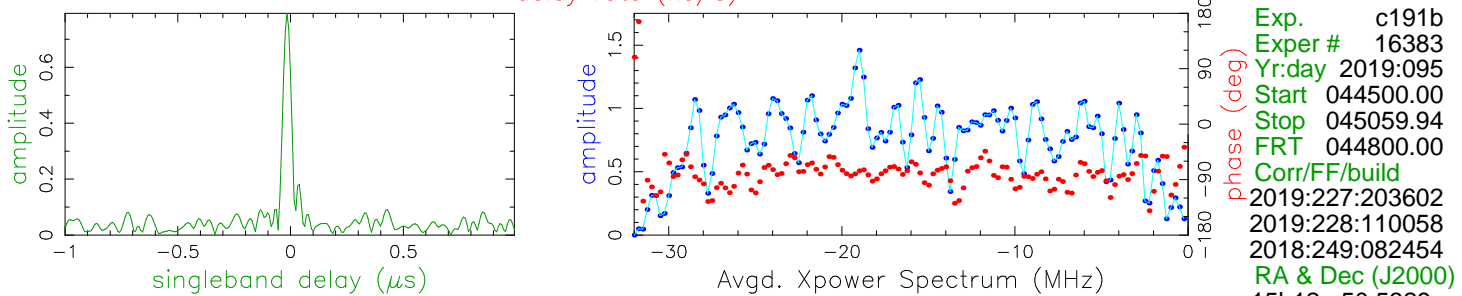
f: az 109.5 el 13.5 pa -55.3 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) -1617.107 -1506.942 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fn.0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fn.W.76.0RJ451



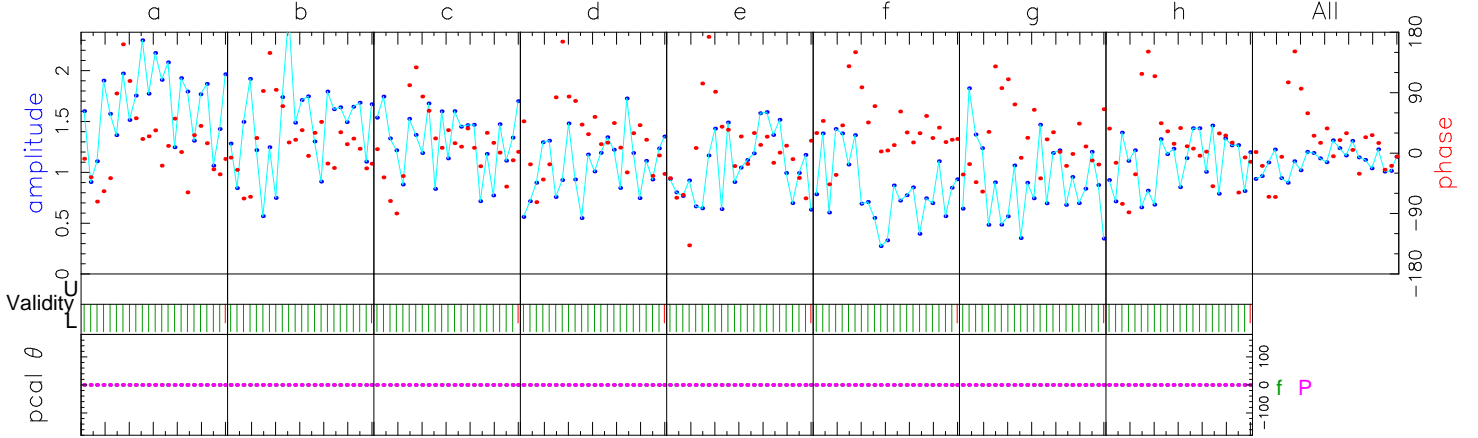
Fringe quality 5

SNR 29.0
Int time 358.654
Amp 0.793
Phase 190.4
PFD 0.0e+00
Delays (us)
SBD -0.015360
MBD 0.000455
Fringe rate (Hz) 0.007983
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110058
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
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	ManI 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)	-6.69416621797E+03		Apriori delay (usec)		-6.69413542258E+03		Resid mbdelay (usec)		4.54607E-04	+/- 7.5E-05
Sband delay (usec)	-6.69415078308E+03		Apriori clock (usec)		7.3755503E+00		Resid sbdelay (usec)		-1.53605E-02	+/- 5.9E-04
Phase delay (usec)	-6.69413542225E+03		Apriori clockrate (us/s)		1.7000000E-07		Resid phdelay (usec)		3.35761E-07	+/- 1.3E-07
Delay rate (us/s)	1.88913556105E+00		Apriori rate (us/s)		1.88913546838E+00		Resid rate (us/s)		9.26772E-08	+/- 6.1E-10
Total phase (deg)	82.0		Apriori accel (us/s/s)		3.73094042947E-05		Resid phase (deg)		190.4	+/- 3.9

ph/seg (deg) 50.3 9.5
amp/seg (%) 42.7 16.5
ph/frq (deg) 12.8 5.6
amp/frq (%) 23.3 9.7

RMS Theor. Amplitude 0.793 +/- 0.027
Search (2048X32) 0.757
Interp. 0.000
Inc. seg. avg. 1.096
Inc. frq. avg. 0.801

Group delay (usec)(sbd) -6.69416621797E+03
Sband delay (usec) -6.69415078308E+03
Phase delay (usec) -6.69413542225E+03
Delay rate (us/s) 1.88913556105E+00
Total phase (deg) 82.0

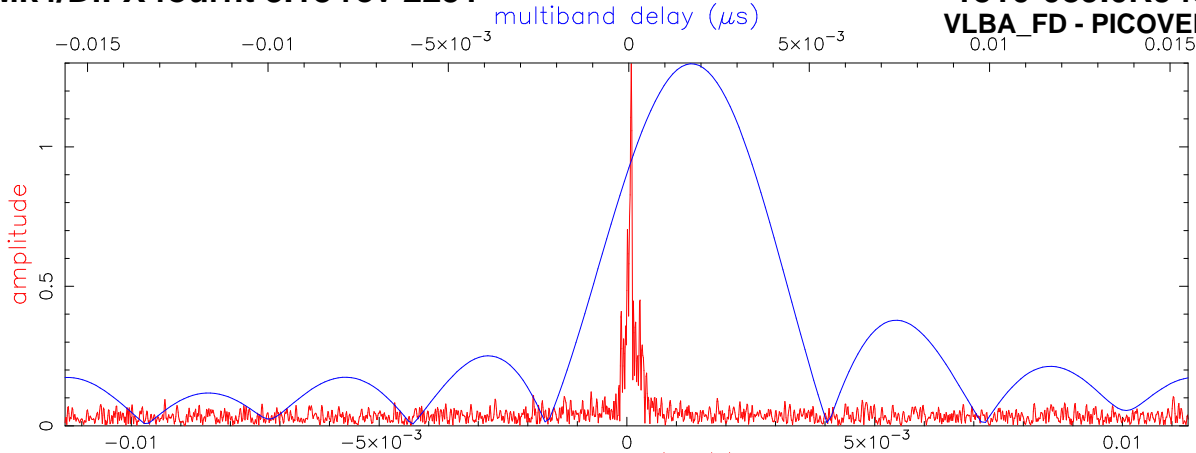
Apriori delay (usec) -6.69413542258E+03
Apriori clock (usec) 7.3755503E+00
Apriori clockrate (us/s) 1.7000000E-07
Apriori rate (us/s) 1.88913546838E+00
Apriori accel (us/s/s) 3.73094042947E-05

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

f: az 109.5 el 13.5 pa -55.3
P: az 220.0 el 34.7 pa 31.8
u,v (fr/asec) -10906.895 -1303.527

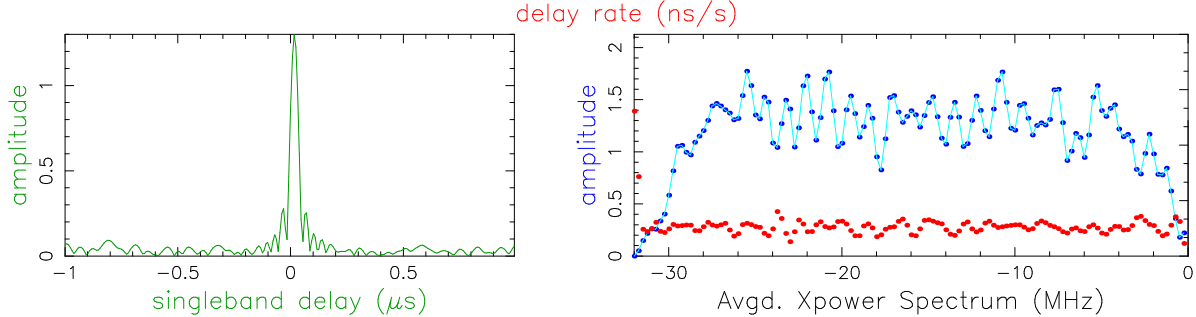
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fP.W.10.0RJ451



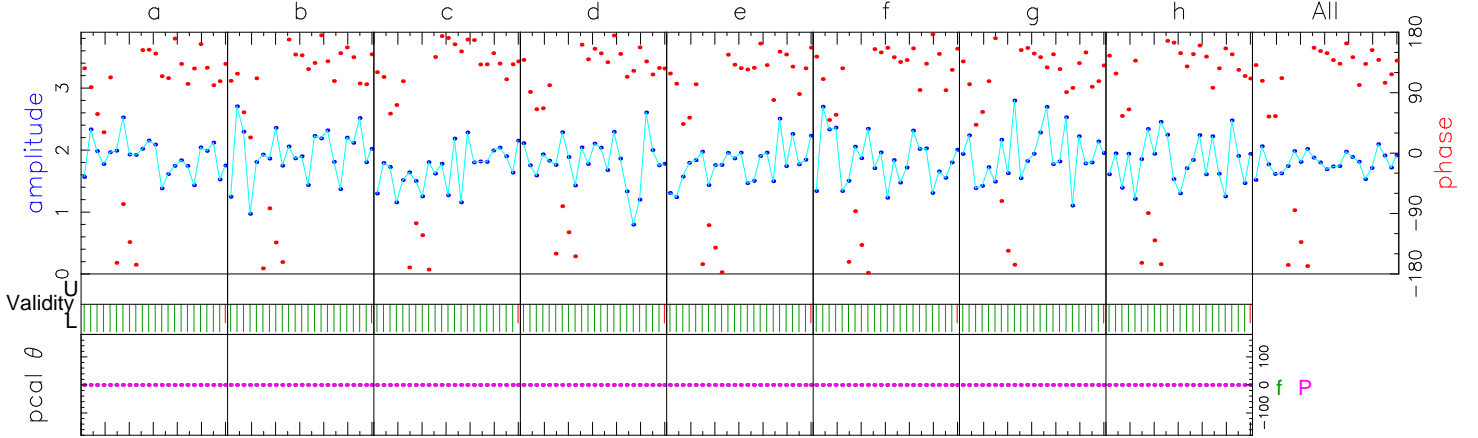
Fringe quality 7

SNR 47.6
Int time 358.654
Amp 1.300
Phase 139.4
PFD 0.0e+00
Delays (us)
SBD 0.016895
MBD 0.001736
Fringe rate (Hz) 0.007928
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110100
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

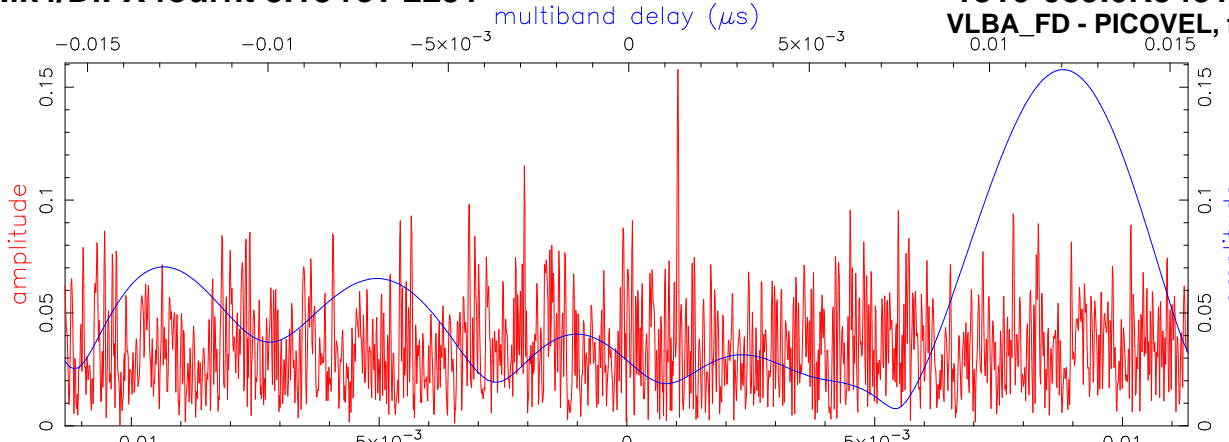


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

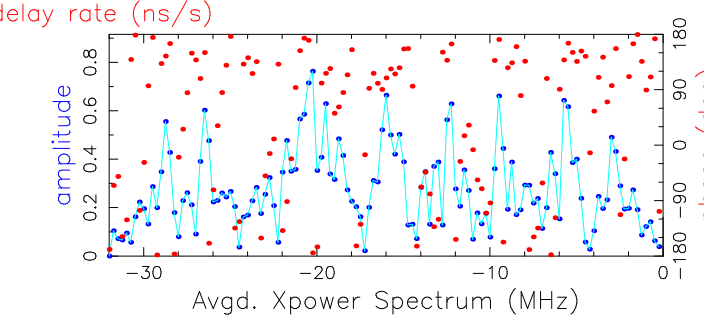
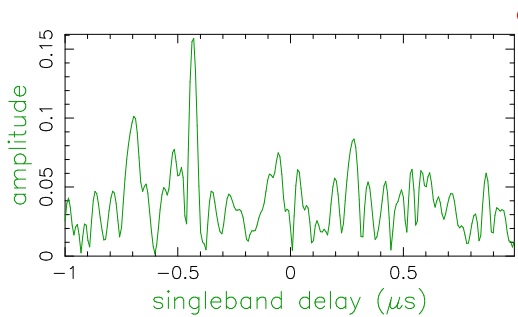
Group delay (usec)(sbd) -6.69413368654E+03 Apriori delay (usec) -6.69413542258E+03 Resid mbdelay (usec) 1.73604E-03 +/- 4.6E-05
 Sband delay (usec) -6.69411852808E+03 Apriori clock (usec) 7.3755503E+00 Resid sbdelay (usec) 1.68945E-02 +/- 3.6E-04
 Phase delay (usec) -6.69413541809E+03 Apriori clockrate (us/s) 1.7000000E-07 Resid phdelay (usec) 4.49518E-06 +/- 7.8E-08
 Delay rate (us/s) 1.88913556042E+00 Apriori rate (us/s) 1.88913546838E+00 Resid rate (us/s) 9.20395E-08 +/- 3.7E-10
 Total phase (deg) 31.0 Apriori accel (us/s/s) 3.73094042947E-05 Resid phase (deg) 139.4 +/- 2.4

RMS Theor. Amplitude 1.300 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.1 5.8 Search (2048X32) 1.264 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 40.6 10.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 5.9 3.4 Inc. seg. avg. 1.795 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 (%) 4.1 5.9 Inc. frq. avg. 1.300 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 109.5 el 13.5 pa -55.3 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -10906.895 -1303.527 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fP.W.25.0RJ451

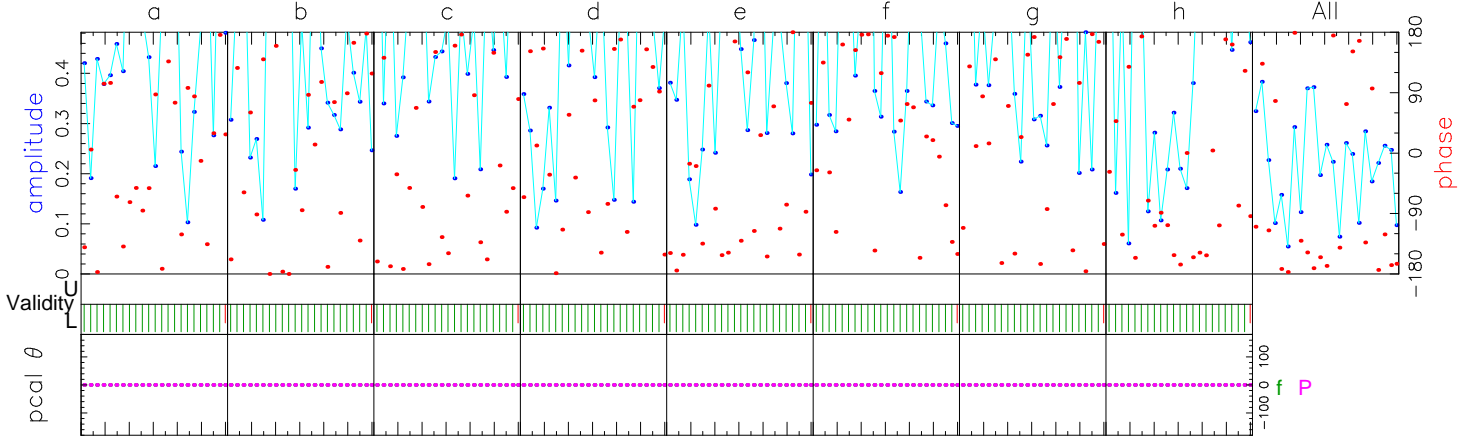


Fringe quality 0
 SNR 5.9
 Int time 358.654
 Amp 0.161
 Phase 189.9
 PFD 4.3e-01
 Delays (us)
 SBD -0.432947
 MBD 0.012074
 Fringe rate (Hz) 0.089060
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110102
 2018:249:082454
 RA & Dec (J2000) 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

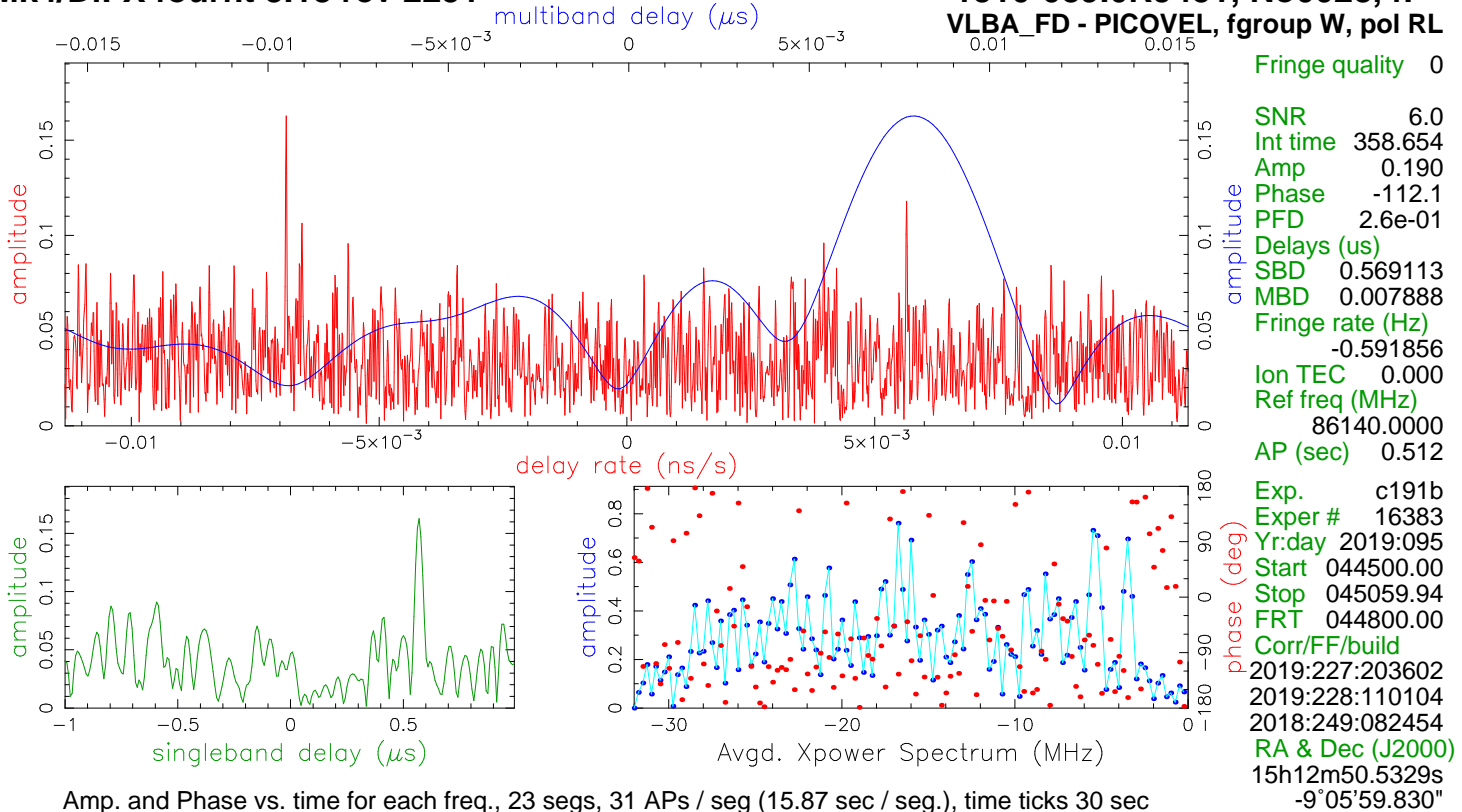


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

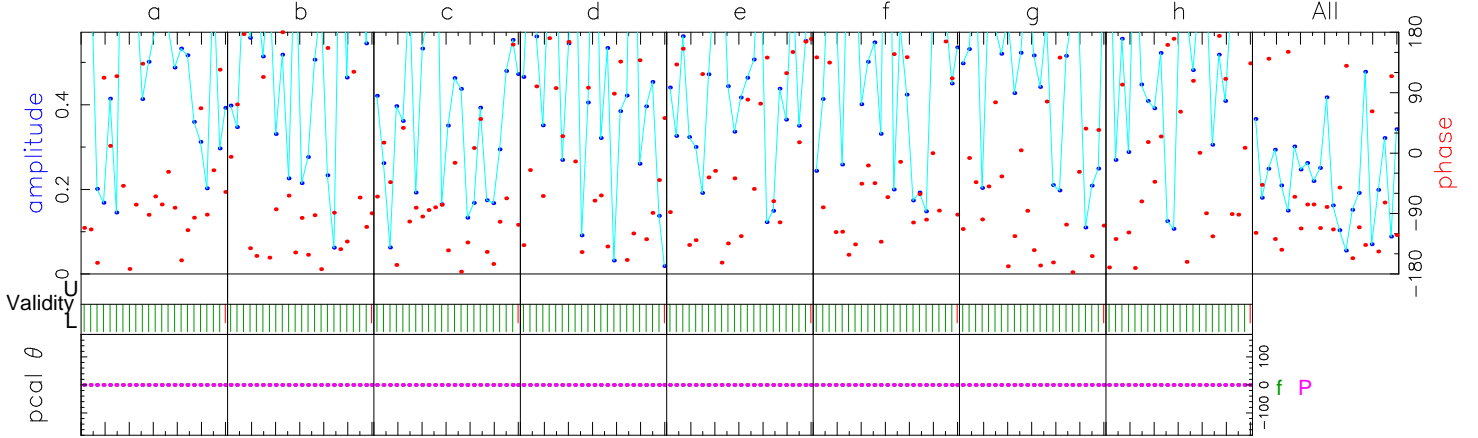
Group delay (usec)(sbd)	-6.69456084820E+03	Apriori delay (usec)	-6.69413542258E+03	Resid mbdelay (usec)	1.20744E-02	+/-	3.7E-04
Sband delay (usec)	-6.69456836958E+03	Apriori clock (usec)	7.3755503E+00	Resid sbdelay (usec)	-4.32947E-01	+/-	2.9E-03
Phase delay (usec)	-6.69413542807E+03	Apriori clockrate (us/s)	1.7000000E-07	Resid phdelay (usec)	-5.48382E-06	+/-	6.3E-07
Delay rate (us/s)	1.88913650227E+00	Apriori rate (us/s)	1.88913546838E+00	Resid rate (us/s)	1.03389E-06	+/-	3.0E-09
Total phase (deg)	81.5	Apriori accel (us/s/s)	3.73094042947E-05	Resid phase (deg)	189.9	+/-	19.5

ph/seg (deg)	49.0	Theor.	46.8	Amplitude	0.161 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	70.0	Search (2048X32)	0.154	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	32.1	Interp.	0.000	Inc. seg. avg.	0.167	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	36.2	Inc. frq. avg.	0.160	Inc. frq. avg.	0.160	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 109.5 el 13.5 pa -55.3 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -10906.895 -1303.527 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fP.W.43.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



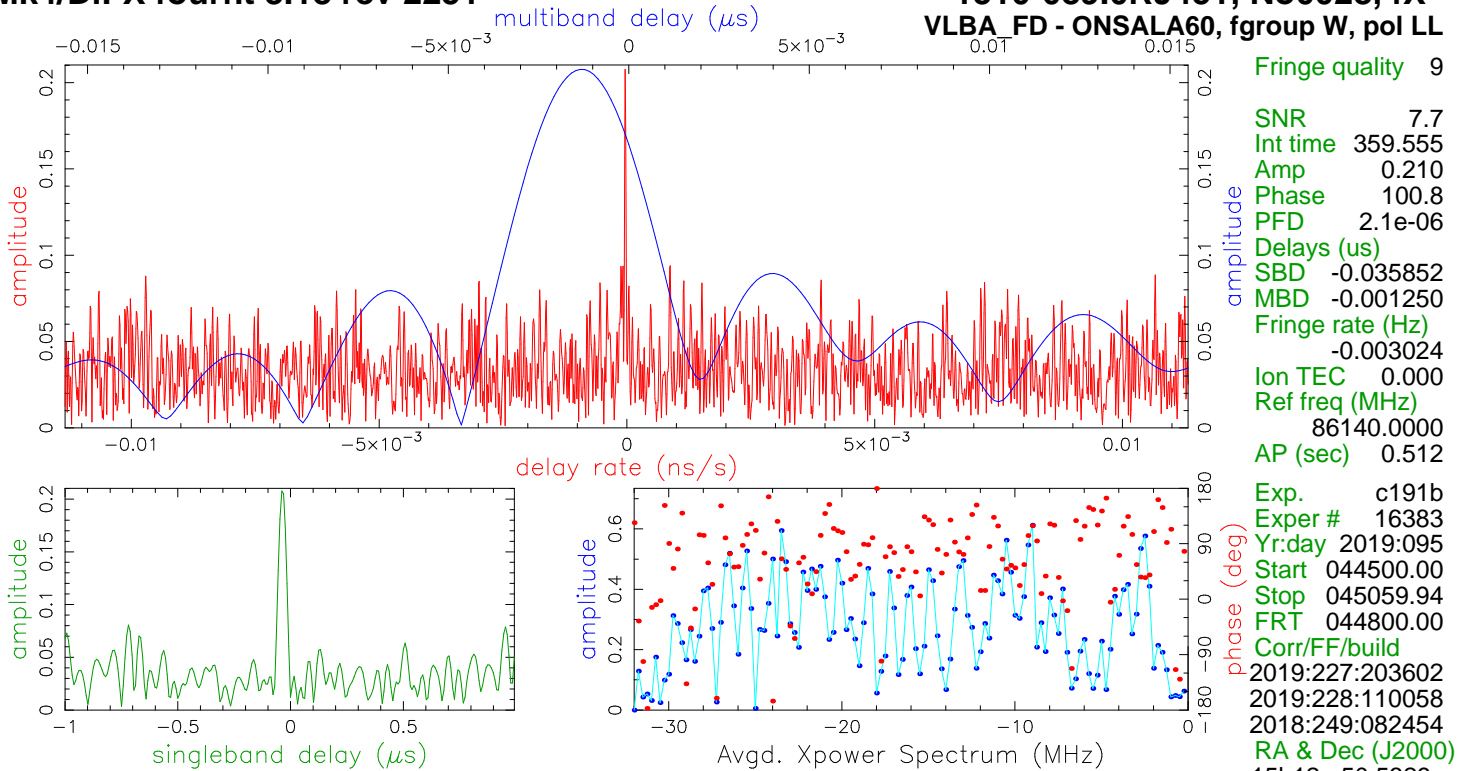
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	All
-87.9	-144.8	-93.0	-120.8	-164.9	-100.6	-86.3	-137.0	-112.1	Phase
0.3	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.2	Ampl.
202.6	202.4	226.5	121.6	89.7	171.8	250.3	248.9	201.8	Sbd box
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		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 W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Tracks

Group delay (usec)(sbd)	-6.69356503455E+03	Apriori delay (usec)	-6.69413542258E+03	Resid mbdelay (usec)	7.88803E-03	+/-	3.6E-04
Sband delay (usec)	-6.69356630958E+03	Apriori clock (usec)	7.3755503E+00	Resid sbdelay (usec)	5.69113E-01	+/-	2.9E-03
Phase delay (usec)	-6.69413542620E+03	Apriori clockrate (us/s)	1.7000000E-07	Resid phdelay (usec)	-3.61539E-06	+/-	6.2E-07
Delay rate (us/s)	1.88912859752E+00	Apriori rate (us/s)	1.88913546838E+00	Resid rate (us/s)	-6.87086E-06	+/-	3.0E-09
Total phase (deg)	-220.6	Apriori accel (us/s/s)	3.73094042947E-05	Resid phase (deg)	-112.1	+/-	19.2

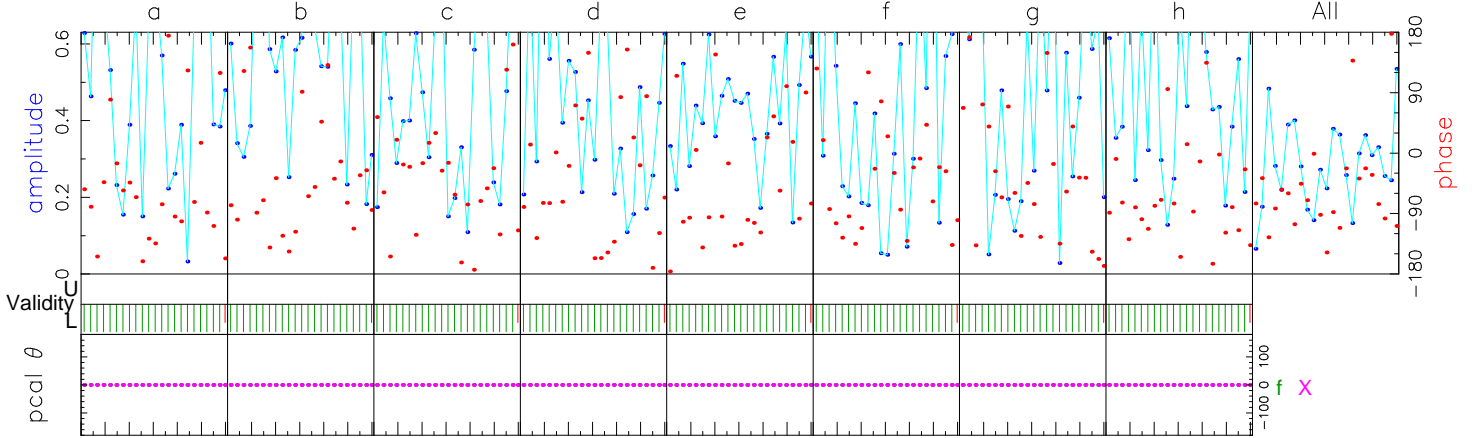
ph/seg (deg)	67.5	Theor.	46.0	Amplitude	0.190 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	77.0	Search (2048X32)	0.156	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	32.4	Interp.	0.000	Inc. seg. avg.	0.203	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	51.1	Inc. frq. avg.	0.191	Inc. frq. avg.	0.191	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 109.5 el 13.5 pa -55.3 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -10906.895 -1303.527 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fP.W.64.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

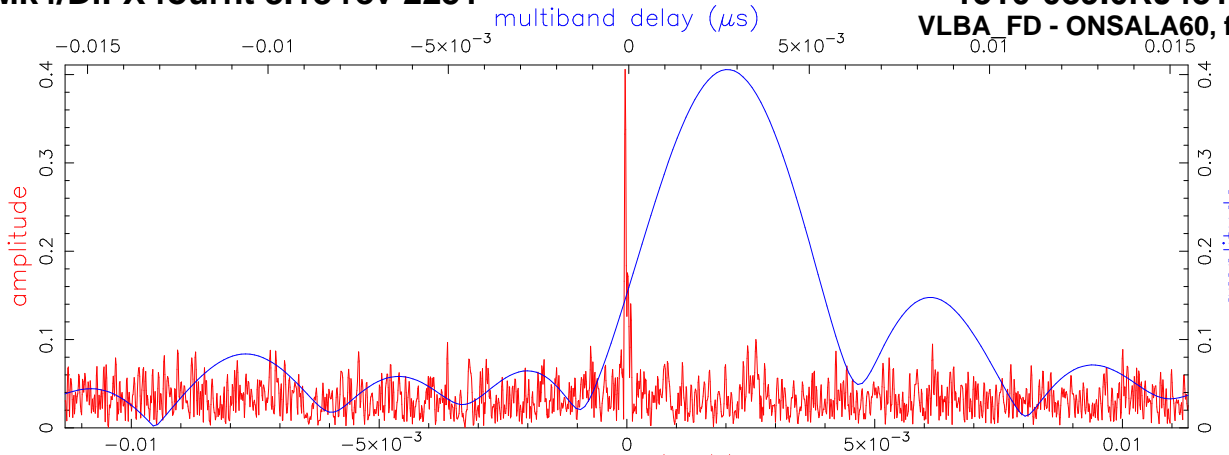


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-89.7	-73.3	-64.9	-69.6	-96.4	-68.6	-77.4	-90.0	Phase	-79.2
0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.3	Ampl.	0.2
124.8	125.0	23.2	37.2	30.1	122.9	233.9	123.9	Sbd box	124.4
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X 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	
X 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	6.22487113407E+02	Apriori delay (usec)	6.22519613314E+02	Resid mbdelay (usec)	-1.24991E-03	+/-	2.8E-04		
Sband delay (usec)	6.22483761814E+02	Apriori clock (usec)	-1.7898853E+01	Resid sbdelay (usec)	-3.58515E-02	+/-	2.2E-03		
Phase delay (usec)	6.22519610761E+02	Apriori clockrate (us/s)	-4.2399997E-07	Resid phdelay (usec)	-2.55343E-06	+/-	4.8E-07		
Delay rate (us/s)	1.83741206249E+00	Apriori rate (us/s)	1.83741209759E+00	Resid rate (us/s)	-3.51005E-08	+/-	2.3E-09		
Total phase (deg)	277.5	Apriori accel (us/s/s)	2.58083557909E-06	Resid phase (deg)	100.8	+/-	14.9		

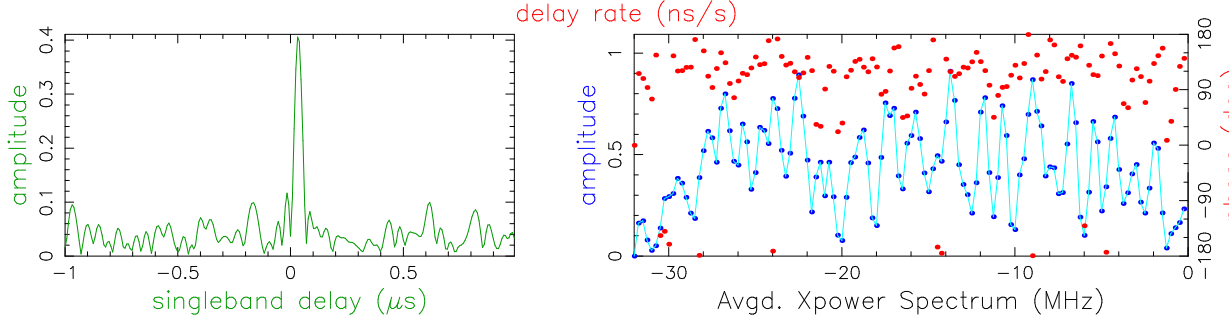
ph/seg (deg)	52.0	Theor.	35.7	Amplitude	0.210 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.4	Search (2048X32)	0.203	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	12.7	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016
amp/frq (%)	37.2	Inc. seg. avg.	0.237	Inc. seg. avg.	0.237	Sample rate (MSamp/s):	64	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.	0.198	Inc. frq. avg.	0.198	Data rate (Mb/s):	1024	nlags: 128 t_cohere infinite		

f: az 109.5 el 13.5 pa -55.3 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -10657.431 -2959.771 simultaneous interpolator

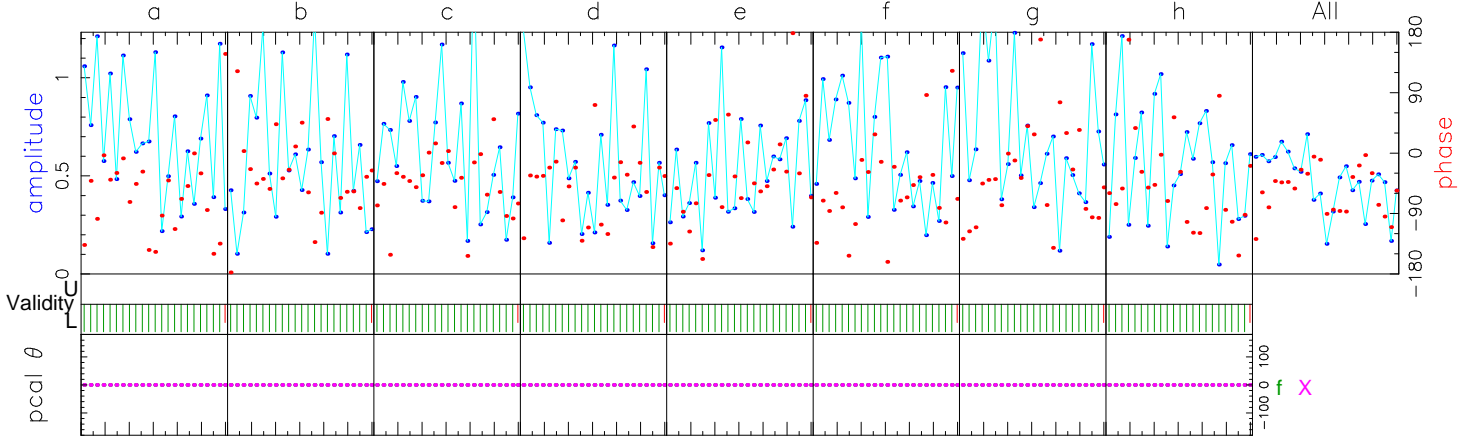
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fX.W.13.0RJ451



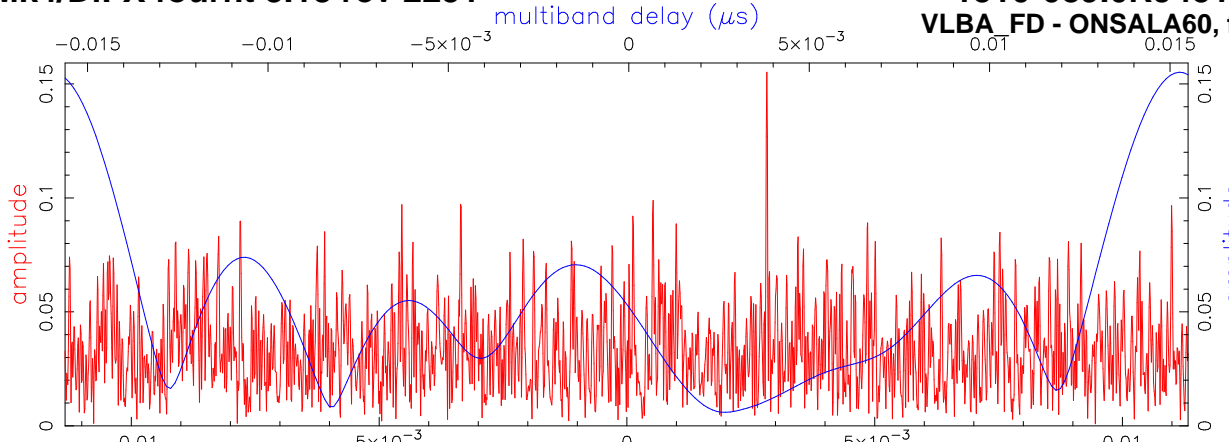
Fringe quality 9
SNR 15.1
Int time 359.555
Amp 0.411
Phase -234.3
PFD 8.5e-43
Delays (us)
SBD 0.034235
MBD 0.002738
Fringe rate (Hz)
-0.002943
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110100
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



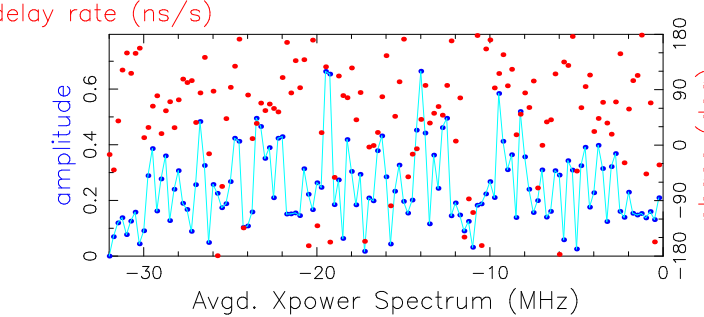
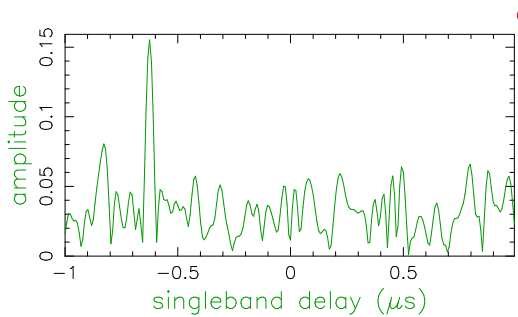
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-76.0	-45.8	-36.9	-51.4	-42.3	-66.7	-54.9	-59.9	Phase	-54.3	
	0.5	0.4	0.5	0.4	0.3	0.4	0.4	0.4	Ampl.	0.4	
	133.0	134.0	133.3	133.2	133.4	132.9	133.6	133.7	Sbd box	133.4	
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	6.22553601407E+02		Apriori delay (usec)		6.22519613314E+02		Resid mbdelay (usec)		2.73809E-03	+/- 1.4E-04	
Sband delay (usec)	6.22553847814E+02		Apriori clock (usec)		-1.7898853E+01		Resid sbdelay (usec)		3.42345E-02	+/- 1.1E-03	
Phase delay (usec)	6.22519611564E+02		Apriori clockrate (us/s)		-4.2399997E-07		Resid phdelay (usec)		-1.75079E-06	+/- 2.5E-07	
Delay rate (us/s)	1.83741206343E+00		Apriori rate (us/s)		1.83741209759E+00		Resid rate (us/s)		-3.41666E-08	+/- 1.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.58083557909E-06		Resid phase (deg)		-234.3	+/- 7.6	
	RMS	Theor.	Amplitude	0.411 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	34.3	18.2	Search (2048X32)	0.404		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	38.7	31.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	14.0	10.8	Inc. seg. avg.	0.454		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	10.9	18.8	Inc. frq. avg.	0.408		Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00
f: az 109.5 el 13.5 pa -55.3	X: az 228.5 el 12.9 pa 24.3		u,v (fr/asec)		-10657.431 -2959.771				simultaneous interpolator		

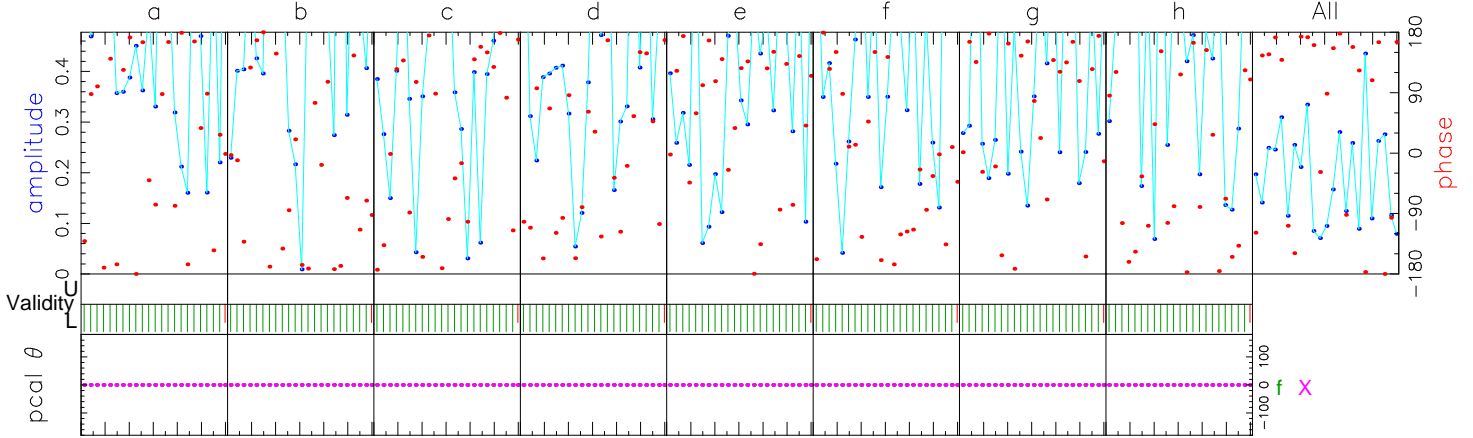


Fringe quality 0
SNR 5.7
Int time 359.555
Amp 0.159
Phase 353.9
PFD 7.9e-01
Delays (us)
SBD -0.625418
MBD 0.015270
Fringe rate (Hz) 0.243400
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110103
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

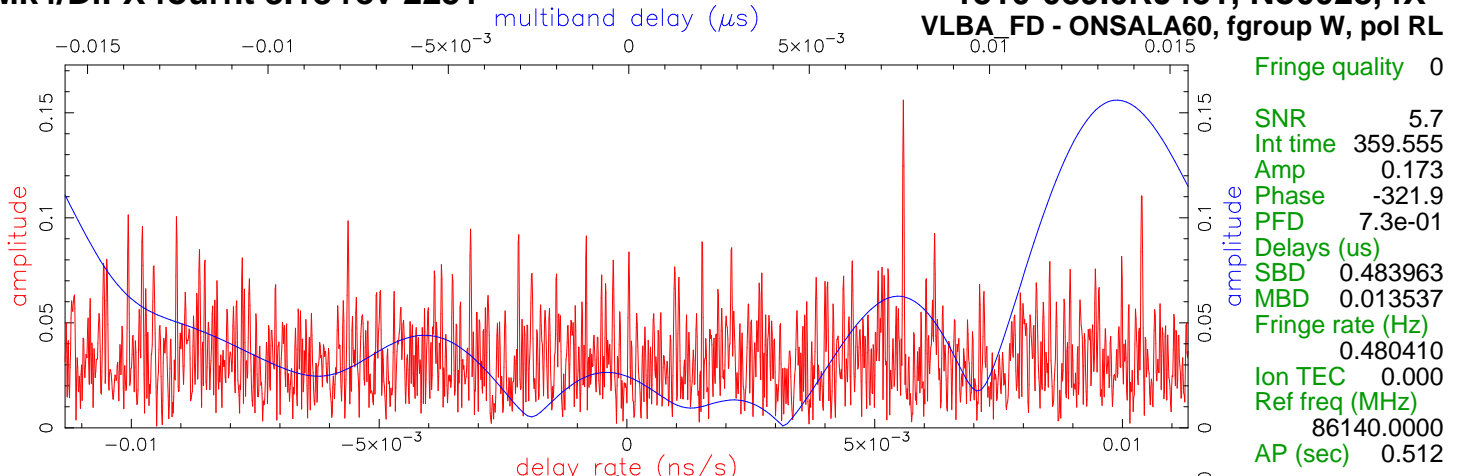


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	0.2
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	48.9
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) 6.21878633010E+02 Apriori delay (usec) 6.22519613314E+02 Resid mbdelay (usec) 1.52697E-02 +/- 3.8E-04
Sband delay (usec) 6.21894195314E+02 Apriori clock (usec) -1.7898853E+01 Resid sbdelay (usec) -6.25418E-01 +/- 3.0E-03
Phase delay (usec) 6.22519618922E+02 Apriori clockrate (us/s) -4.2399997E-07 Resid phdelay (usec) 5.60746E-06 +/- 6.5E-07
Delay rate (us/s) 1.83741492322E+00 Apriori rate (us/s) 1.83741209759E+00 Resid rate (us/s) 2.82563E-06 +/- 3.1E-09
Total phase (deg) 170.6 Apriori accel (us/s/s) 2.58083557909E-06 Resid phase (deg) 353.9 +/- 20.1

ph/seg (deg) 56.3 48.3 Search (2048X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 67.6 84.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 34.9 28.5 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 30.7 49.7 Inc. frq. avg. 0.160 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

f: az 109.5 el 13.5 pa -55.3 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -10657.431 -2959.771 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fX.W.57.0RJ451



Fringe quality 0

SNR 5.7

Int time 359.555

Amp 0.173

Phase -321.9

PFD 7.3e-01

Delays (us)

SBD 0.483963

MBD 0.013537

Fringe rate (Hz) 0.480410

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

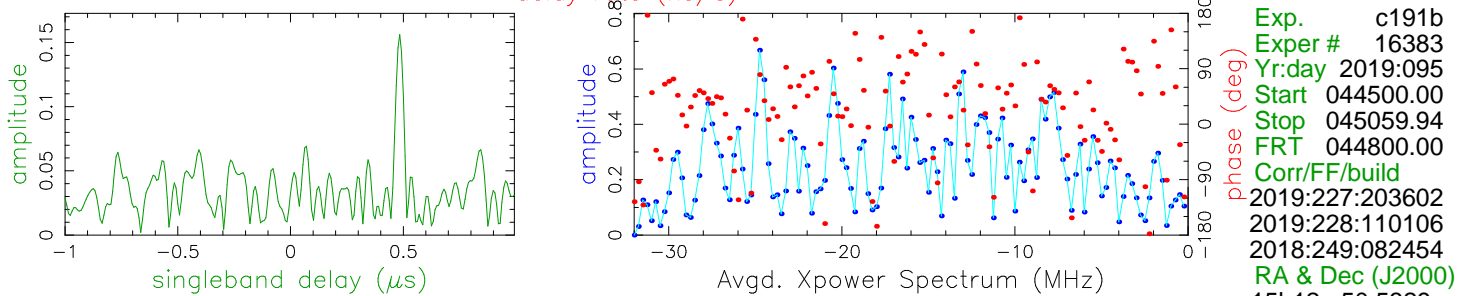
Corr/FF/build

2019:227:203602

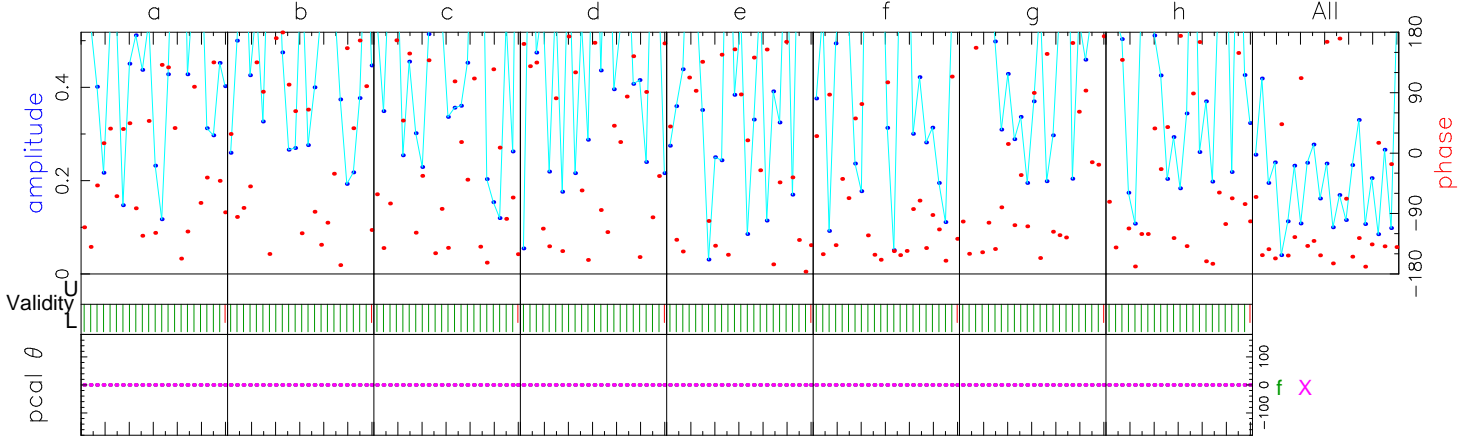
2019:228:110106

2018:249:082454

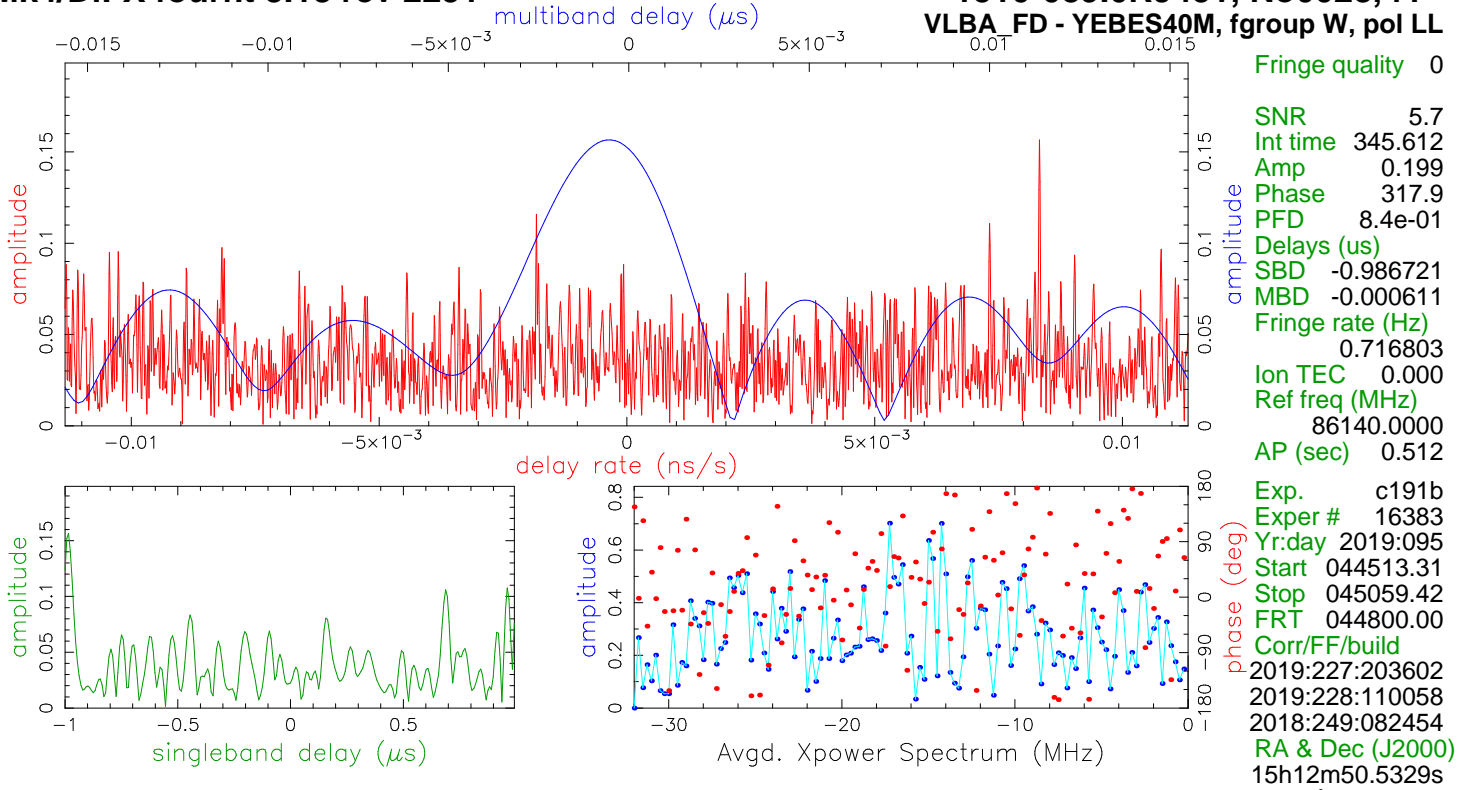
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"



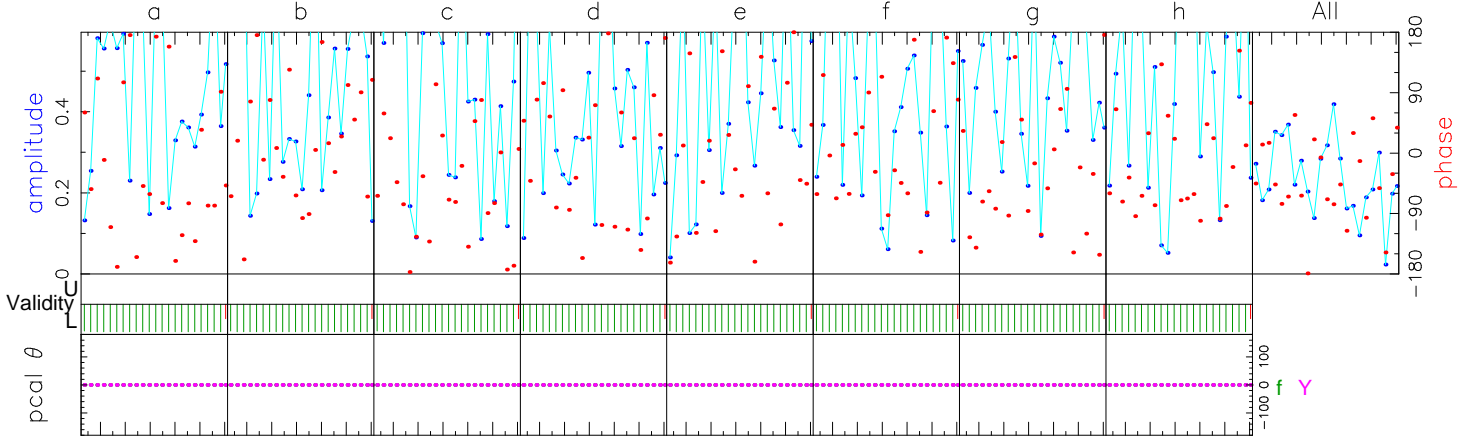
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-71.9	-148.0	-140.4	-179.4	177.5	-130.9	-130.9	-128.3	Phase	-141.9
0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.2	Ampl.	0.2
77.4	204.8	137.1	75.8	131.5	192.1	71.2	81.1	Sbd box	190.9
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X 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	
X 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	6.23001900766E+02	Apriori delay (usec)	6.22519613314E+02	Resid mbdelay (usec)	1.35375E-02	+/-	3.8E-04		
Sband delay (usec)	6.23003576314E+02	Apriori clock (usec)	-1.7898853E+01	Resid sbdelay (usec)	4.83963E-01	+/-	3.0E-03		
Phase delay (usec)	6.22519608740E+02	Apriori clockrate (us/s)	-4.2399997E-07	Resid phdelay (usec)	-4.57487E-06	+/-	6.5E-07		
Delay rate (us/s)	1.83741767468E+00	Apriori rate (us/s)	1.83741209759E+00	Resid rate (us/s)	5.57709E-06	+/-	3.1E-09		
Total phase (deg)	-145.1	Apriori accel (us/s/s)	2.58083557909E-06	Resid phase (deg)	-321.9	+/-	20.0		
RMS	Theor.	Amplitude	0.173 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
66.9	48.0	Search (2048X32)	0.152	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
73.3	83.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
37.5	28.3	Inc. seg. avg.	0.165	Sample rate(MSamp/s):	64	ion window (TEC)	0.00 0.00		
31.3	49.4	Inc. frq. avg.	0.173	Data rate(Mb/s):	1024	nlags: 128 t_cohere infinite			
f: az 109.5 el 13.5 pa -55.3	X: az 228.5 el 12.9 pa 24.3	u,v (fr/asec)	-10657.431 -2959.771						simultaneous interpolator

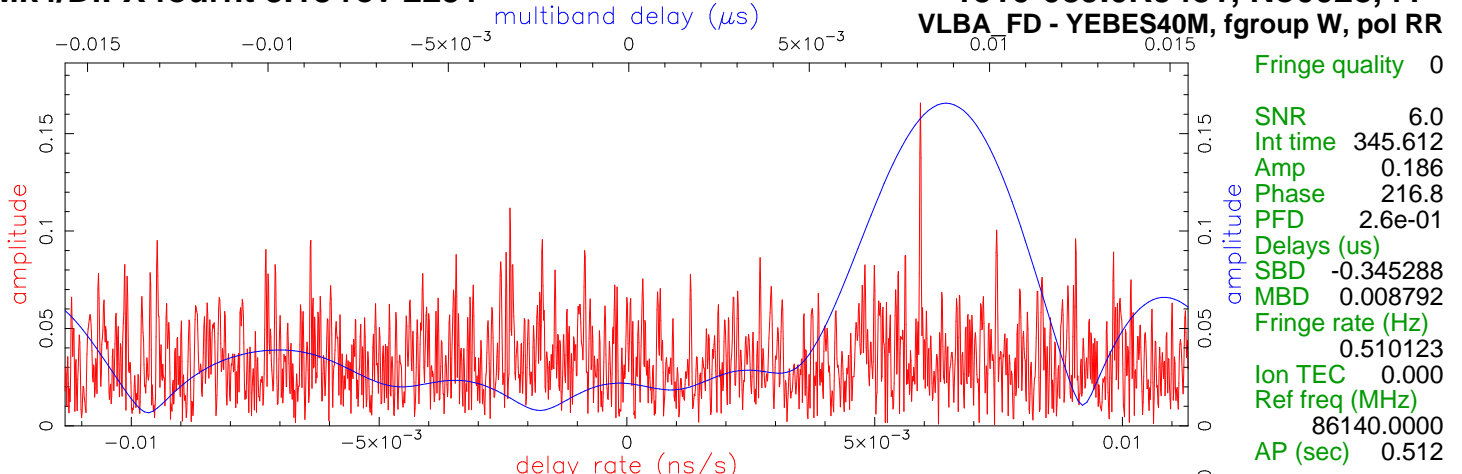


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-113.1	0.4	-37.8	-48.7	-37.5	-20.5	-61.9	-45.2	Phase	-42.1
	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.4	Ampl.	0.2
	148.4	240.5	217.1	221.9	205.0	197.1	222.8	4.2	Sbd box	2.7
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)		-5.83077930124E+03		Apriori delay (usec)		-5.82977869007E+03		Resid mbdelay (usec)		-6.11174E-04 +/- 3.8E-04
Sband delay (usec)		-5.83076541057E+03		Apriori clock (usec)		1.6751289E-01		Resid sbdelay (usec)		-9.86721E-01 +/- 3.0E-03
Phase delay (usec)		-5.82977869142E+03		Apriori clockrate (us/s)		-1.6700000E-07		Resid phdelay (usec)		-1.35749E-06 +/- 6.5E-07
Delay rate (us/s)		1.86238113110E+00		Apriori rate (us/s)		1.86237280972E+00		Resid rate (us/s)		8.32137E-06 +/- 3.3E-09
Total phase (deg)			187.5	Apriori accel (us/s/s)		3.35175495008E-05		Resid phase (deg)		317.9 +/- 20.2

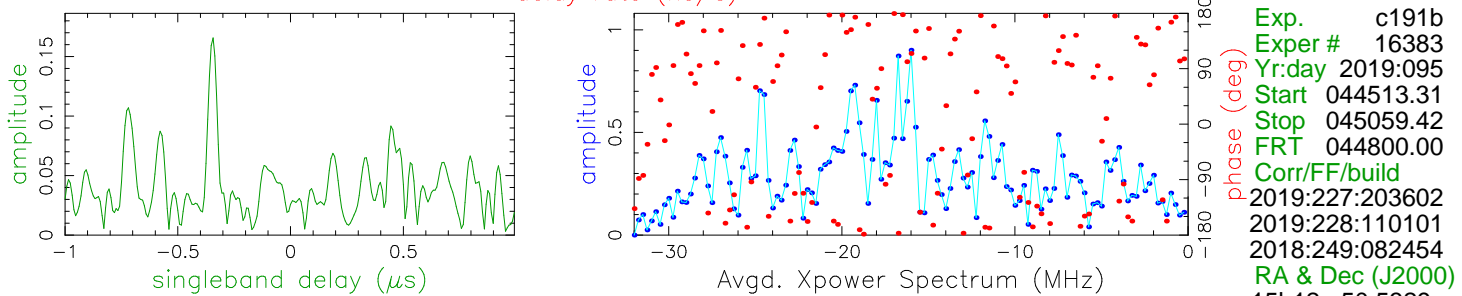
ph/seg (deg) 60.4 48.5 Search (2048X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.7 84.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.0 28.6 Inc. seg. avg. 0.219 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.8 49.9 Inc. frq. avg. 0.200 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 109.5 el 13.5 pa -55.3 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -10757.448 -1665.145 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fY.W.11.0RJ451 simultaneous interpolator



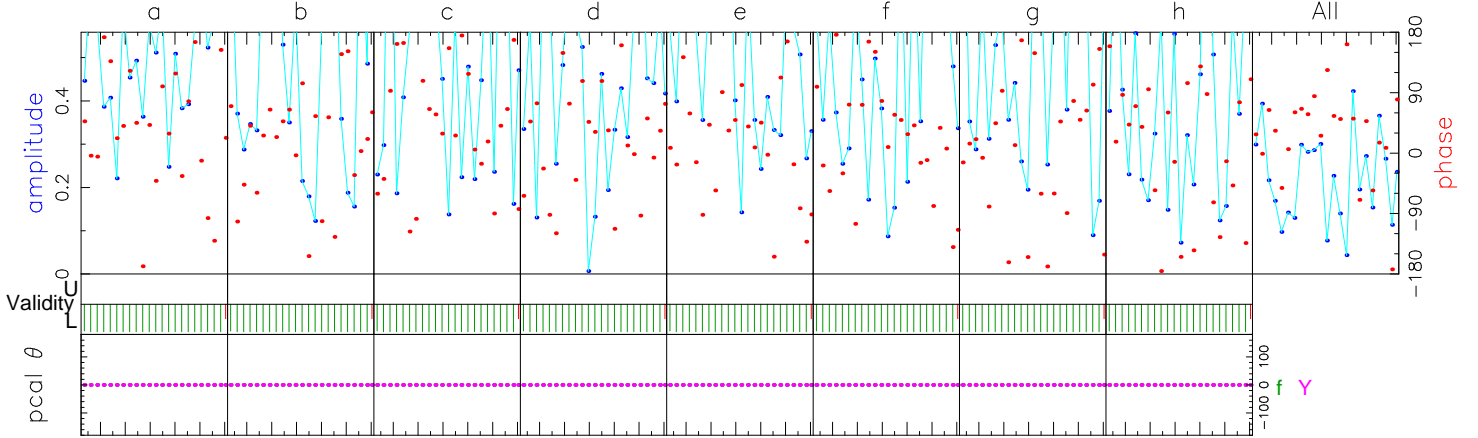
Fringe quality 0

SNR 6.0
 Int time 345.612
 Amp 0.186
 Phase 216.8
 PFD 2.6e-01
 Delays (us)
 SBD -0.345288
 MBD 0.008792
 Fringe rate (Hz)
 0.510123
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110101
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

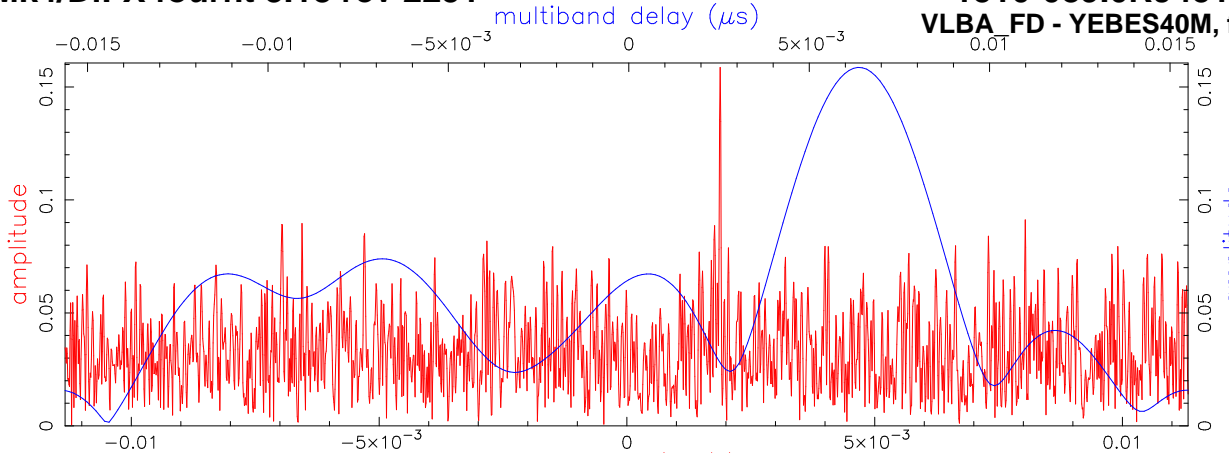


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

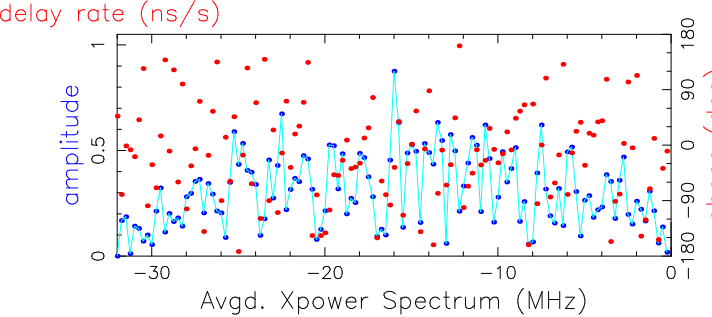
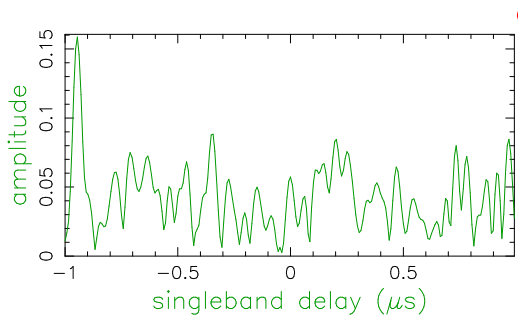


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	52.8	28.5	59.3	10.7	27.1	17.0	33.1	76.7	Phase	36.8
	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.2
	113.5	28.5	83.6	79.4	177.7	233.4	38.3	36.2	Sbd box	84.8
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.83011364765E+03		Apriori delay (usec)		-5.82977869007E+03		Resid mbdelay (usec)		8.79242E-03	+/- 3.6E-04
Sband delay (usec)	-5.83012397757E+03		Apriori clock (usec)		1.6751289E-01		Resid sbdelay (usec)		-3.45288E-01	+/- 2.9E-03
Phase delay (usec)	-5.82977868888E+03		Apriori clockrate (us/s)		-1.6700000E-07		Resid phdelay (usec)		1.18820E-06	+/- 6.2E-07
Delay rate (us/s)	1.86237873175E+00		Apriori rate (us/s)		1.86237280972E+00		Resid rate (us/s)		5.92203E-06	+/- 3.1E-09
Total phase (deg)	86.4		Apriori accel (us/s/s)		3.35175495008E-05		Resid phase (deg)		216.8	+/- 19.2

ph/seg (deg) 61.1 Theor. 46.0 Amplitude 0.186 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.8 80.3 Search (2048X32) 0.164 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 27.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 24.4 47.4 Inc. seg. avg. 0.189 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 109.5 el 13.5 pa -55.3 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -10757.448 -1665.145 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fy..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fy.W.35.0RJ451 simultaneous interpolator

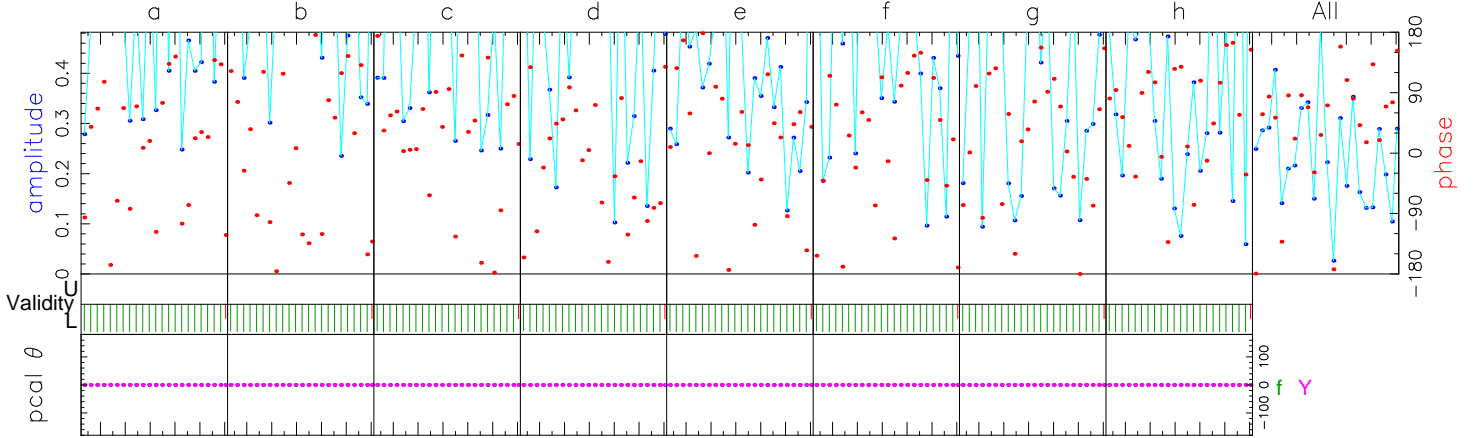


Fringe quality 0
 SNR 5.7
 Int time 345.612
 Amp 0.161
 Phase 70.7
 PFD 7.5e-01
 Delays (us)
 SBD -0.946202
 MBD 0.006367
 Fringe rate (Hz)
 0.161730
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110103
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

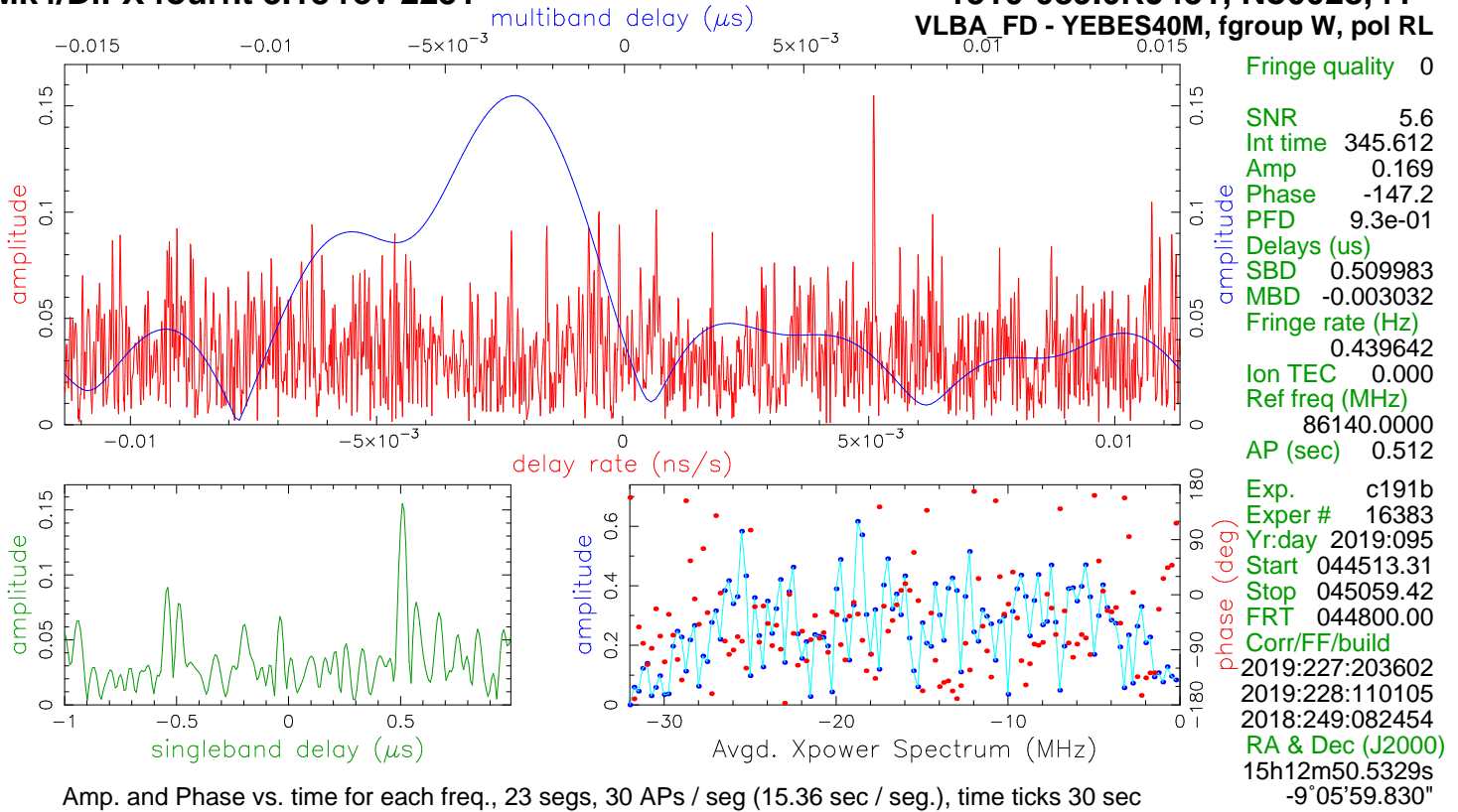
Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
72.7	126.9	63.9	-8.8	62.8	79.7	79.6	76.0	Phase	70.7
0.2	0.1	0.4	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
10.7	31.8	7.7	137.3	48.0	86.8	11.1	105.6	Sbd box	7.9
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-5.83070982320E+03		Apriori delay (usec)	-5.82977869007E+03		Resid mbdelay (usec)	6.36687E-03	+/-	3.8E-04
Sband delay (usec)	-5.83072489157E+03		Apriori clock (usec)	1.6751289E-01		Resid sbdelay (usec)	-9.46202E-01	+/-	3.0E-03
Phase delay (usec)	-5.82977868779E+03		Apriori clockrate (us/s)	-1.6700000E-07		Resid phdelay (usec)	2.27958E-06	+/-	6.5E-07
Delay rate (us/s)	1.86237468725E+00		Apriori rate (us/s)	1.86237280972E+00		Resid rate (us/s)	1.87753E-06	+/-	3.2E-09
Total phase (deg)		300.3	Apriori accel (us/s/s)	3.35175495008E-05		Resid phase (deg)	70.7	+/-	20.1

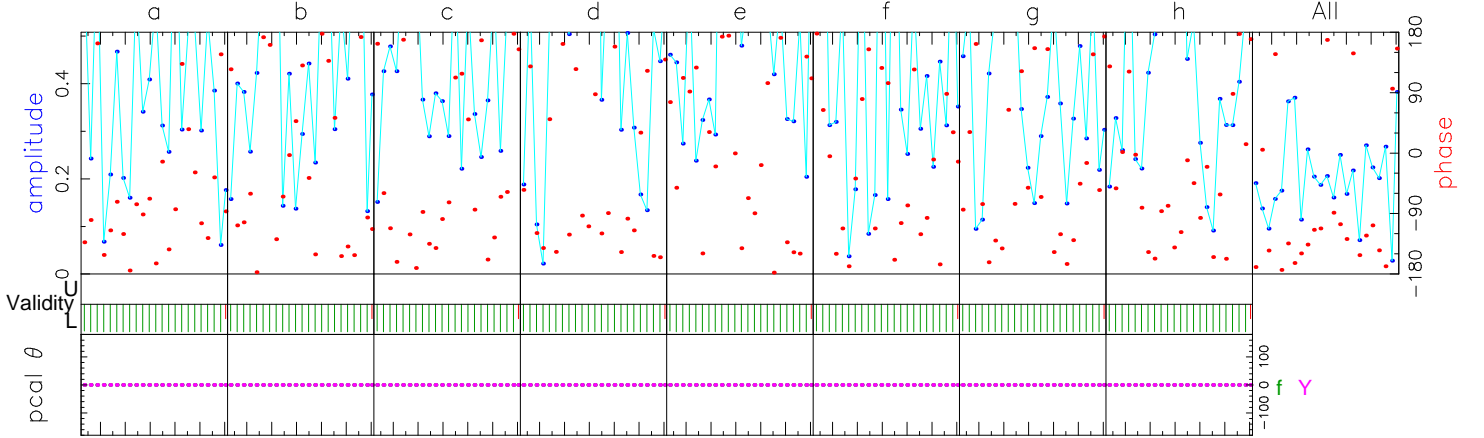
RMS Theor. Amplitude 0.161 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.7 48.1 Search (2048X32) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 84.1 84.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 40.4 28.4 Inc. seg. avg. 0.179 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 (%) 46.8 49.5 Inc. frq. avg. 0.158 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 109.5 el 13.5 pa -55.3 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -10757.448 -1665.145 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fY.W.58.0RJ451



Fringe quality 0
 SNR 5.6
 Int time 345.612
 Amp 0.169
 Phase -147.2
 PFD 9.3e-01
 Delays (us)
 SBD 0.509983
 MBD -0.003032
 Fringe rate (Hz)
 0.439642
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110105
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

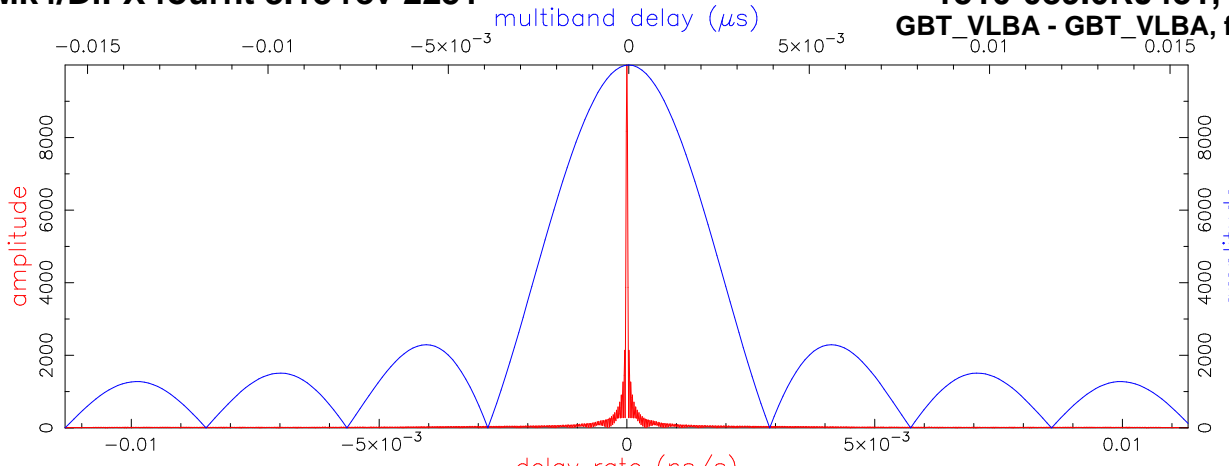
Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



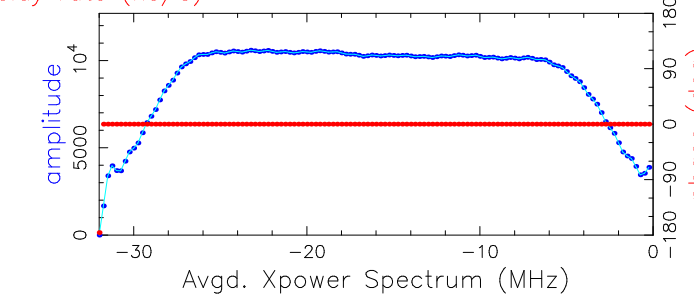
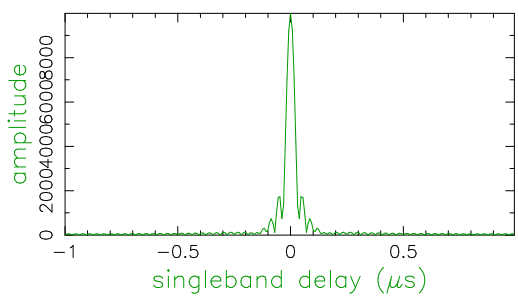
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-101.6	-160.3	-147.3	-170.3	179.0	149.5	-128.7	-110.3	Phase	-147.2
	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	185.5	172.6	193.2	65.9	232.6	173.3	131.2	213.2	Sbd box	194.3
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.82928172206E+03		Apriori delay (usec)		-5.82977869007E+03		Resid mbdelay (usec)		-3.03200E-03	+/- 3.9E-04
Sband delay (usec)	-5.82926870757E+03		Apriori clock (usec)		1.6751289E-01		Resid sbdelay (usec)		5.09983E-01	+/- 3.1E-03
Phase delay (usec)	-5.82977869481E+03		Apriori clockrate (us/s)		-1.6700000E-07		Resid phdelay (usec)		-4.74698E-06	+/- 6.6E-07
Delay rate (us/s)	1.86237791353E+00		Apriori rate (us/s)		1.86237280972E+00		Resid rate (us/s)		5.10380E-06	+/- 3.3E-09
Total phase (deg)			Apriori accel (us/s/s)		3.35175495008E-05		Resid phase (deg)		-147.2	+/- 20.5

RMS Theor. Amplitude 0.169 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.2 49.1 Search (2048X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 62.0 85.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 40.1 29.0 Inc. seg. avg. 0.160 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 (%) 36.7 50.5 Inc. frq. avg. 0.174 ion window (TEC) 0.00 0.00

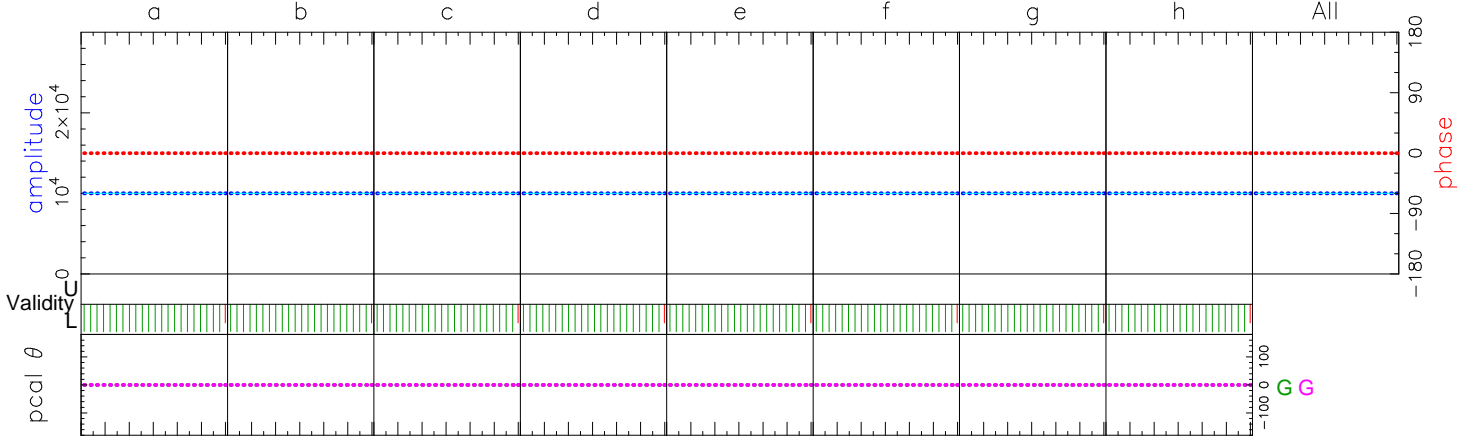
f: az 109.5 el 13.5 pa -55.3 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -10757.448 -1665.145 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/fY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/fY.W.73.0RJ451



Fringe quality 9
 SNR 366711.0
 Int time 359.652
 Amp 9999.998
 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 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110100
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



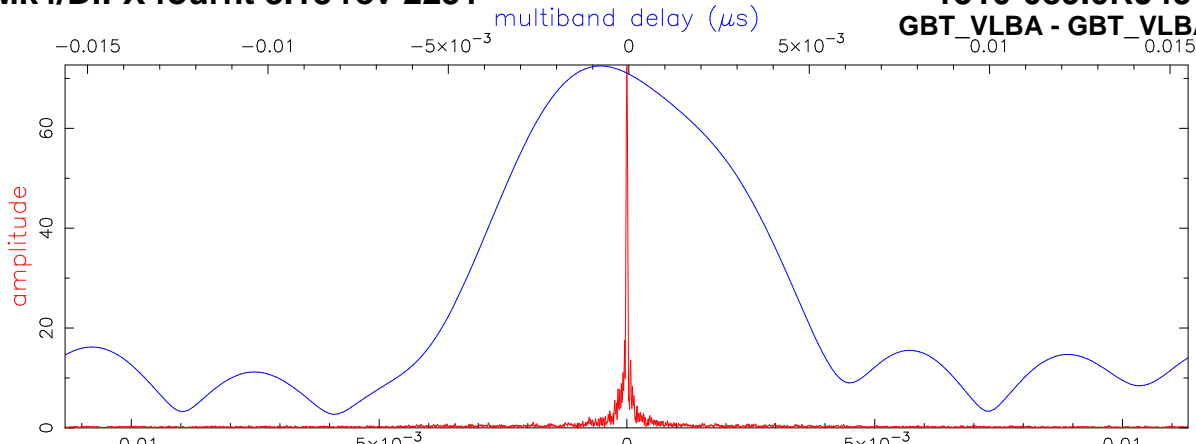
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



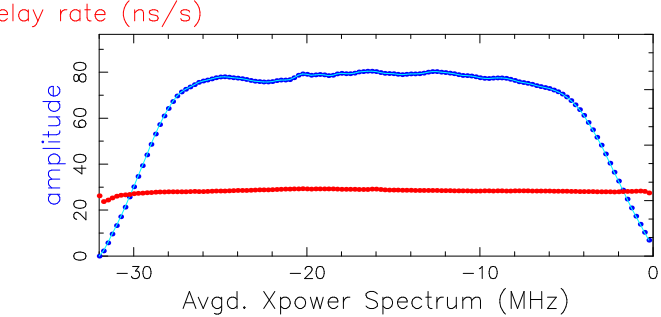
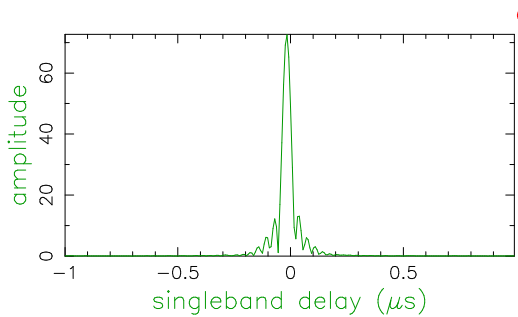
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	10000.0
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.0
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
G	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC amp	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

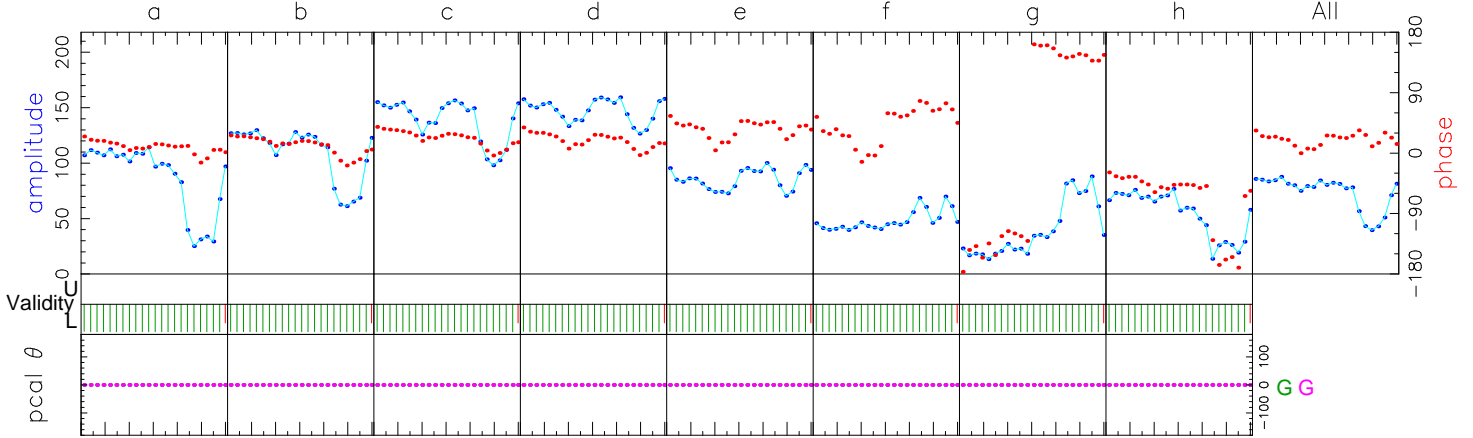
ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.998 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X32)	9999.998	Interp.	0.000	Apriori clockrate (us/s)	0.0000000E+00	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.998	Apriori rate (us/s)	0.0000000E+00	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	Inc. frq. avg.	9999.998	Apriori accel (us/s/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	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



Fringe quality 4
 SNR 2666.4
 Int time 359.652
 Amp 72.710
 Phase 200.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.017075
 MBD -0.000789
 Fringe rate (Hz) 0.000206
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110103
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

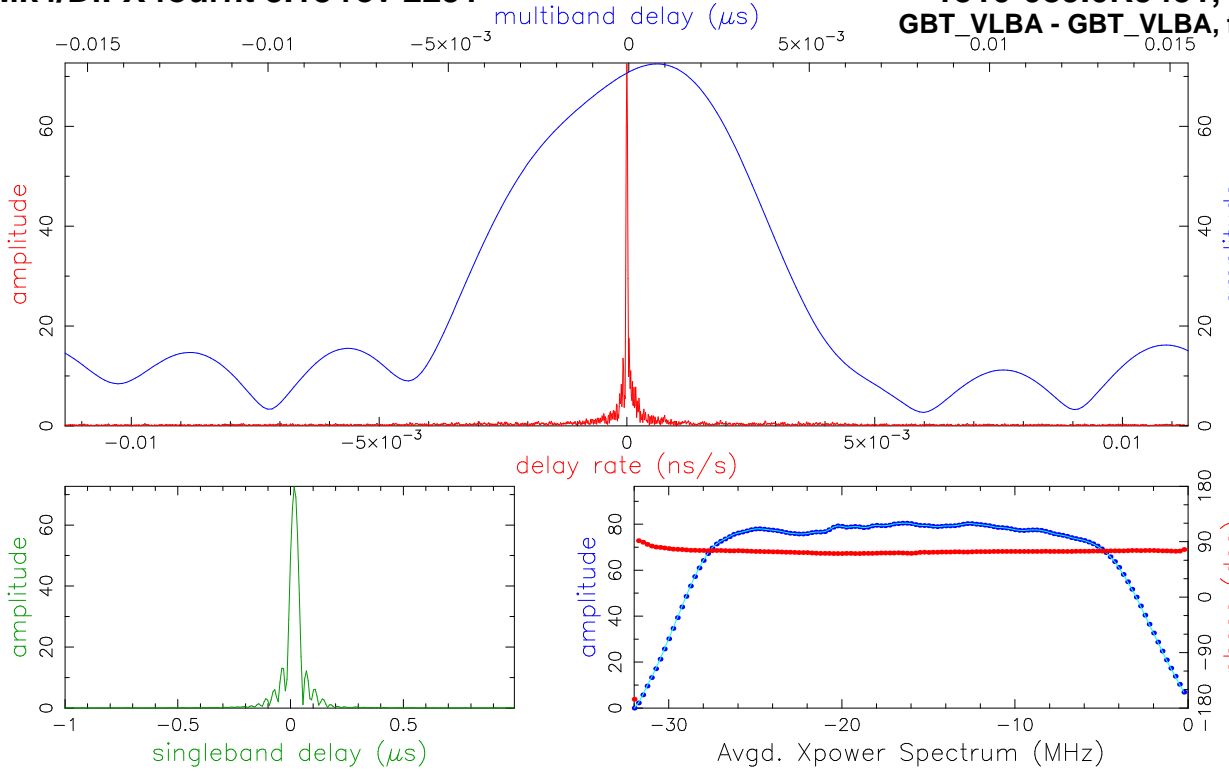


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	11.2	13.6	23.4	19.6	36.7	45.5	162.1	-50.5	Phase	20.0
	85.6	106.9	136.0	144.9	83.7	42.9	32.9	47.1	Ampl.	85.0
	127.1	126.9	127.0	127.0	127.3	125.9	126.2	127.9	Sbd box	126.8
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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)	-3.20388125000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-7.88813E-04	+/-	8.1E-07
Sband delay (usec)	-1.70755000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.70755E-02	+/-	6.5E-06
Phase delay (usec)	6.46235398910E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	6.46235E-07	+/-	1.4E-09
Delay rate (us/s)	2.38642206276E-09	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	2.38642E-09	+/-	6.7E-12
Total phase (deg)	200.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	200.0	+/-	0.0

ph/seg (deg)	8.9	Theor.	0.1	Amplitude	72.710 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	20.6		0.2	Search (2048X32)	71.825	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	66.1		0.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	57.1		0.1	Inc. seg. avg.	73.383	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
				Inc. frq. avg.	85.002	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

G: az 129.5 el 27.1 pa -37.4 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GG.W.51.0RJ451

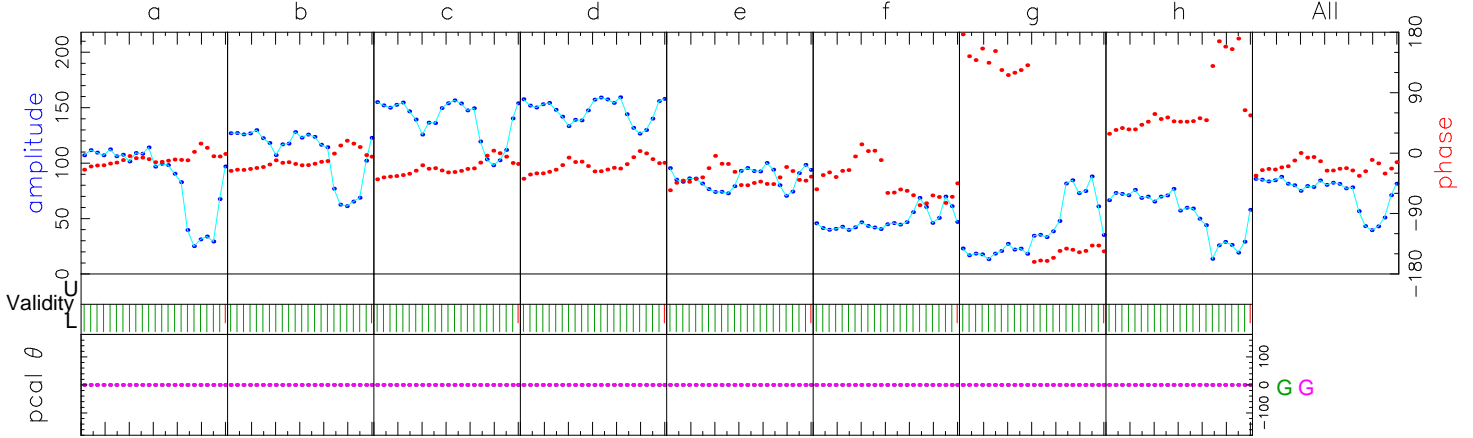


Fringe quality 4

SNR 2666.4
Int time 359.652
Amp 72.710
Phase -200.0
PFD 0.0e+00
Delays (us)
SBD 0.017075
MBD 0.000789
Fringe rate (Hz) -0.000206
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110105
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

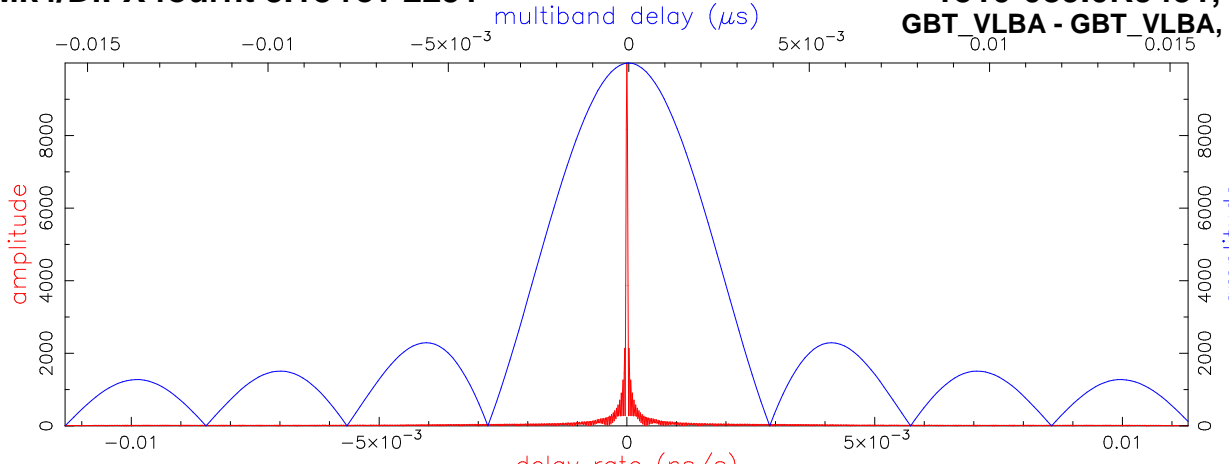


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-11.2	-13.6	-23.4	-19.6	-36.7	-45.5	-162.1	50.5	Phase	-20.0
	85.6	106.9	136.0	144.9	83.7	42.9	32.9	47.1	Ampl.	85.0
	130.9	131.1	131.0	131.0	130.7	132.1	131.8	130.1	Sbd box	131.2
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	

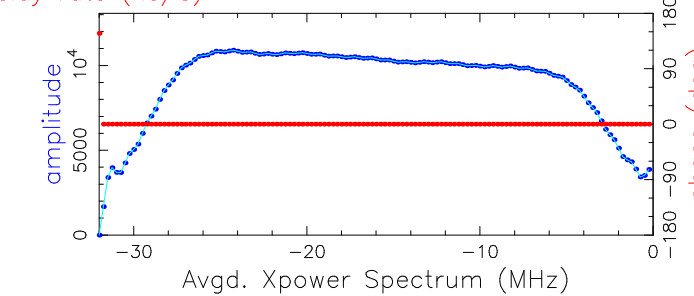
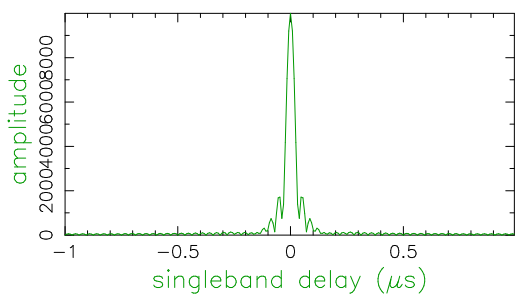
Group delay (usec)(sbd) 3.20388125000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 7.88813E-04 +/- 8.1E-07
 Sband delay (usec) 1.70755000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.70755E-02 +/- 6.5E-06
 Phase delay (usec) -6.46235398768E-07 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -6.46235E-07 +/- 1.4E-09
 Delay rate (us/s) -2.38642206276E-09 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -2.38642E-09 +/- 6.7E-12
 Total phase (deg) -200.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -200.0 +/- 0.0

RMS Theor. Amplitude 72.710 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 8.9 0.1 Search (2048X32) 71.825 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 20.6 0.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 66.1 0.1 Inc. seg. avg. 73.383 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.1 0.1 Inc. frq. avg. 85.002 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

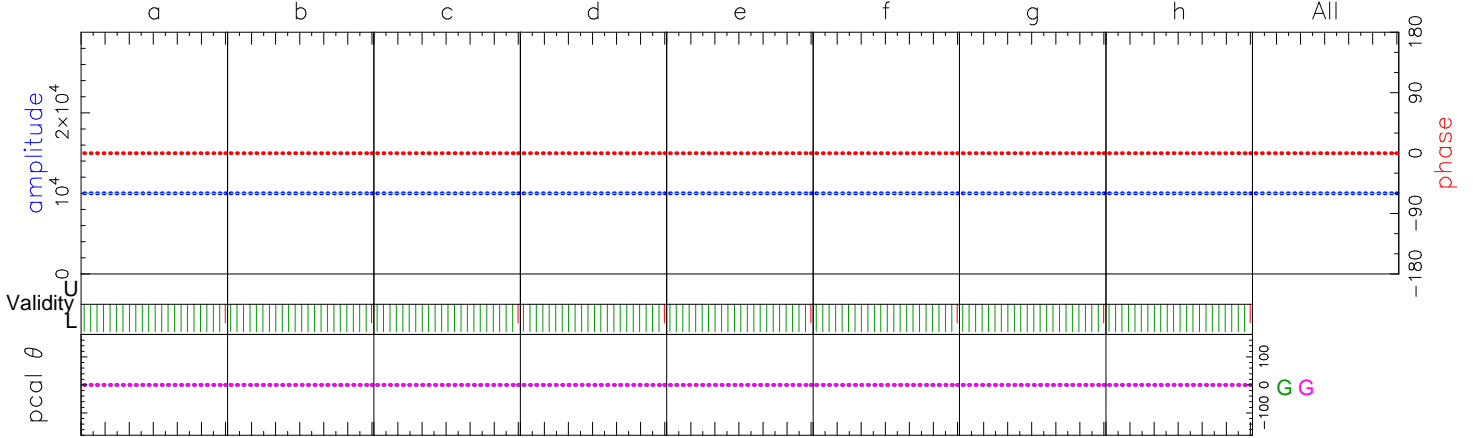
G: az 129.5 el 27.1 pa -37.4 G: az 129.5 el 27.1 pa -37.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GG..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GG.W.74.0RJ451



Fringe quality 9
 SNR 366711.0
 Int time 359.652
 Amp 9999.998
 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 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110058
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



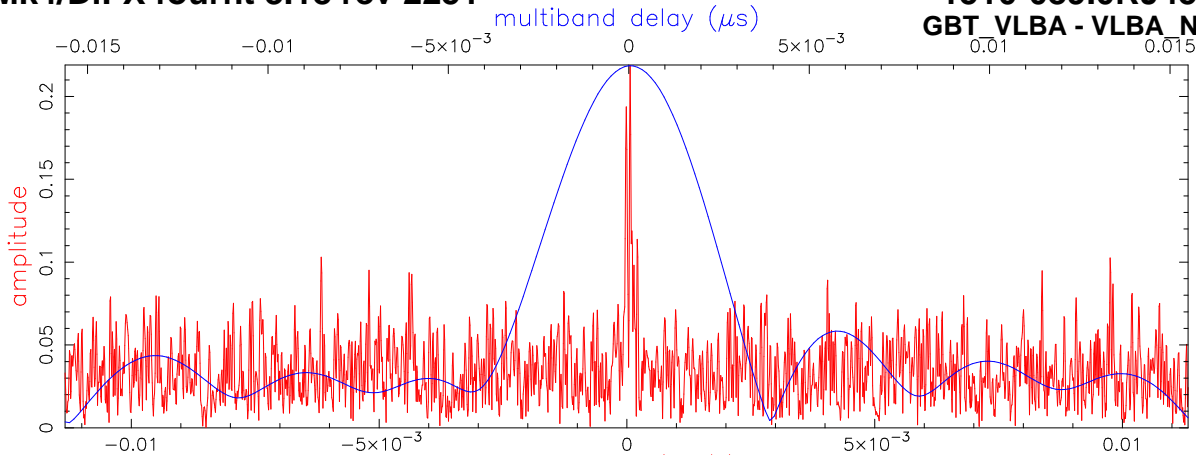
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



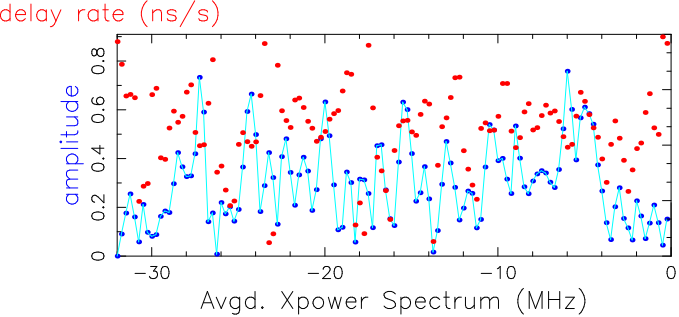
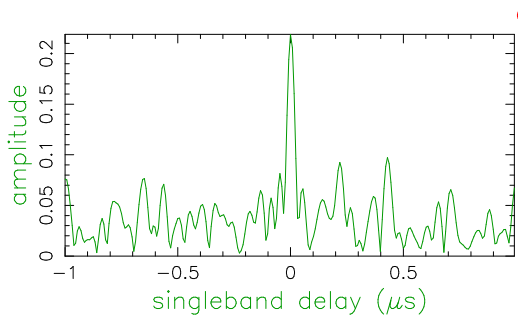
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	10000.0
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.0
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
G:G	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
G	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC amp	
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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	RMS	0.0	Theor.	0.0	Amplitude	9999.998 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X32)	9999.998	Interp.	0.000	Apriori clockrate (us/s)	0.0000000E+00	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.998	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016 0.016
amp/frq (%)	0.0	Inc. frq. avg.	9999.998	Data rate (Mb/s):	1024	Sample rate (MSamp/s):	64	nlags:	128	dr window (ns/s)	-0.011 0.011
						ion window (TEC)	0.00 0.00				

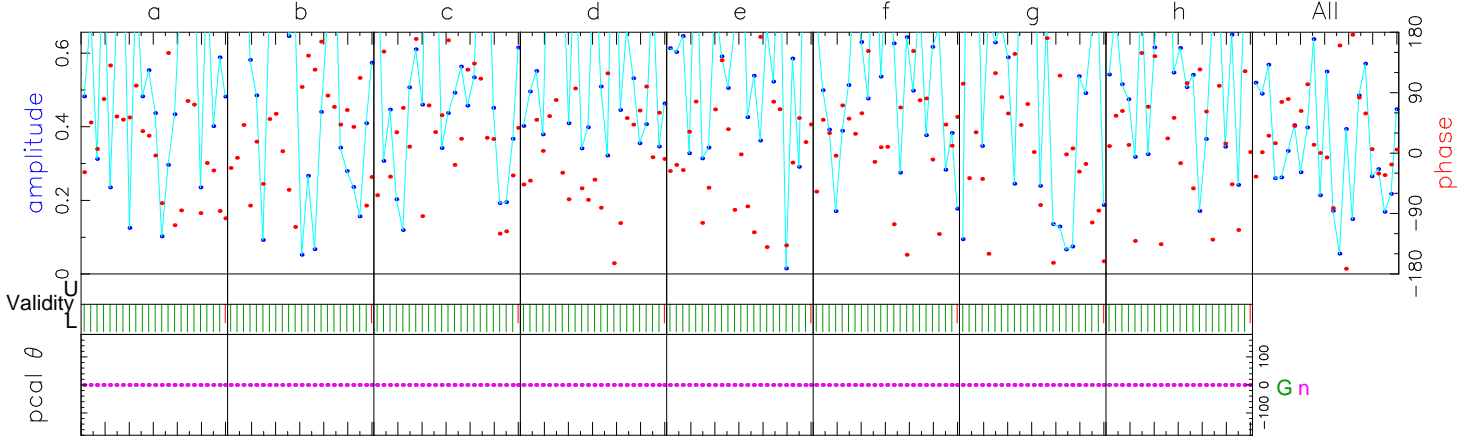


Fringe quality 9
 SNR 8.0
 Int time 359.651
 Amp 0.219
 Phase 25.4
 PFD 1.7e-07
 Delays (us)
 SBD 0.001243
 MBD 0.000049
 Fringe rate (Hz)
 0.006003
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110058
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
31.7	20.5	41.5	15.0	14.8	25.8	8.1	48.3	Phase	25.4
0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
129.8	128.3	207.8	122.4	147.9	111.0	75.8	119.9	Sbd box	129.2
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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 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)	3.10936468799E+03		Apriori delay (usec)	3.10936463937E+03		Resid mbdelay (usec)	4.86274E-05	+/-	2.7E-04
Sband delay (usec)	3.10936588187E+03		Apriori clock (usec)	-3.5937157E+01		Resid sbdelay (usec)	1.24250E-03	+/-	2.1E-03
Phase delay (usec)	3.10936464018E+03		Apriori clockrate (us/s)	-2.4699998E-07		Resid phdelay (usec)	8.17986E-07	+/-	4.6E-07
Delay rate (us/s)	-1.14271679193E-01		Apriori rate (us/s)	-1.14271748876E-01		Resid rate (us/s)	6.96831E-08	+/-	2.2E-09
Total phase (deg)		38.0	Apriori accel (us/s/s)	-1.59239445653E-05		Resid phase (deg)	25.4	+/-	14.3

ph/seg (deg) 70.1 34.2
 amp/seg (%) 94.0 59.7
 ph/frq (deg) 15.1 20.2
 amp/frq (%) 15.0 35.2

RMS Theor. Amplitude 0.219 +/- 0.027
 Search (2048X32) 0.214
 Interp. 0.000
 Inc. seg. avg. 0.299
 Inc. frq. avg. 0.211

Group delay (usec)(sbd) 3.10936468799E+03
 Sband delay (usec) 3.10936588187E+03
 Phase delay (usec) 3.10936464018E+03
 Delay rate (us/s) -1.14271679193E-01
 Total phase (deg) 38.0

Apriori delay (usec) 3.10936463937E+03
 Apriori clock (usec) -3.5937157E+01
 Apriori clockrate (us/s) -2.4699998E-07
 Apriori rate (us/s) -1.14271748876E-01
 Apriori accel (us/s/s) -1.59239445653E-05

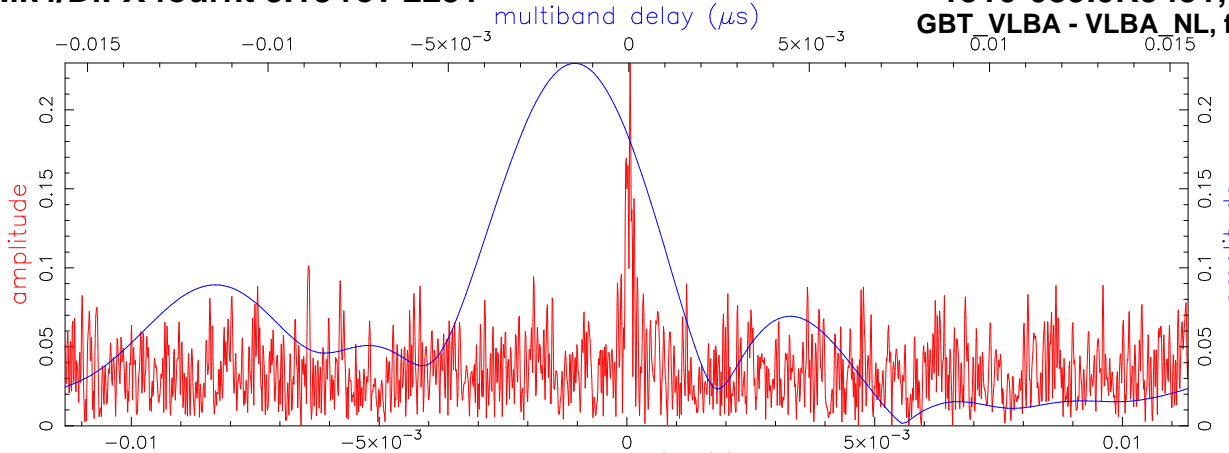
Resid mbdelay (usec) 4.86274E-05 +/- 2.7E-04
 Resid sbdelay (usec) 1.24250E-03 +/- 2.1E-03
 Resid phdelay (usec) 8.17986E-07 +/- 4.6E-07
 Resid rate (us/s) 6.96831E-08 +/- 2.2E-09
 Resid phase (deg) 25.4 +/- 14.3

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

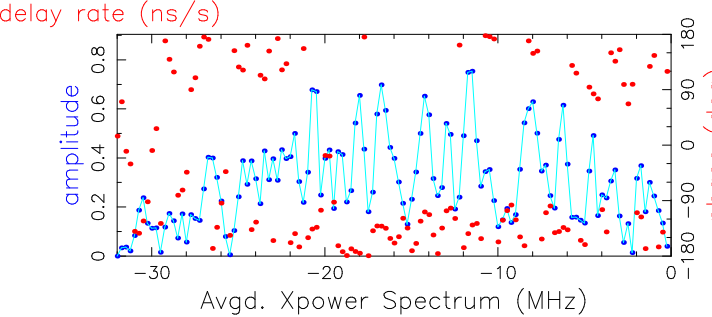
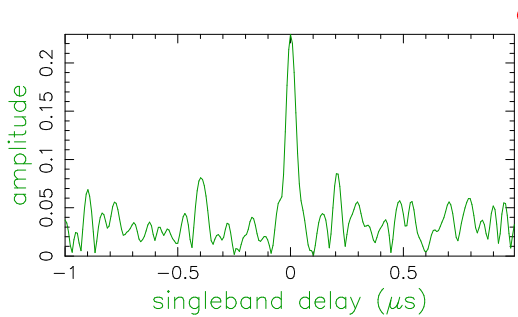
sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

G: az 129.5 el 27.1 pa -37.4 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 640.388 -186.577 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/Gn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/Gn.W.15.0RJ451

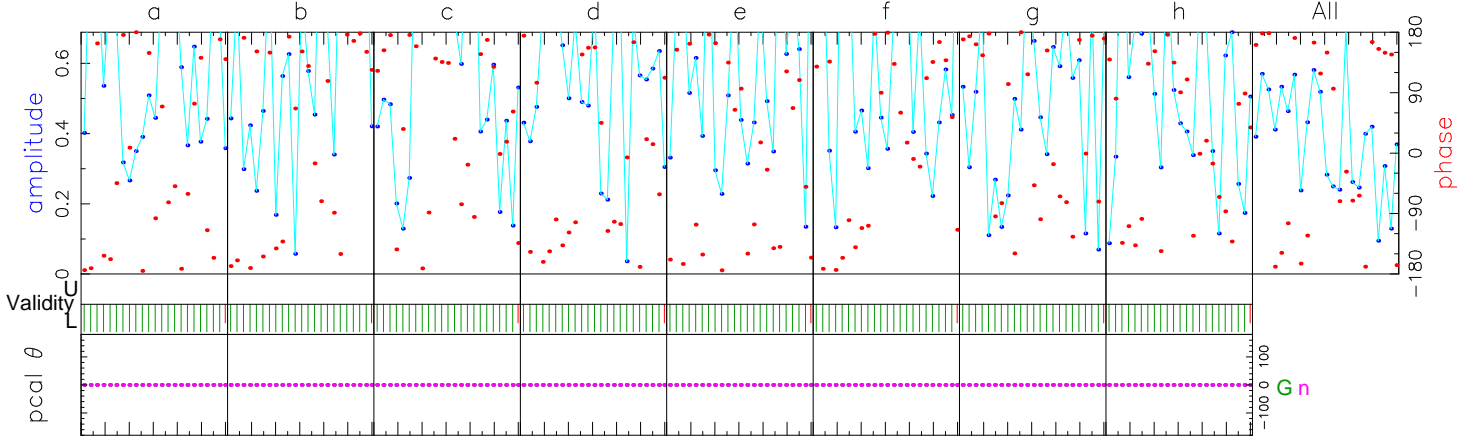


Fringe quality 9
 SNR 8.4
 Int time 359.651
 Amp 0.230
 Phase -171.5
 PFD 6.7e-09
 Delays (us)
 SBD 0.000975
 MBD -0.001506
 Fringe rate (Hz) 0.006109
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512



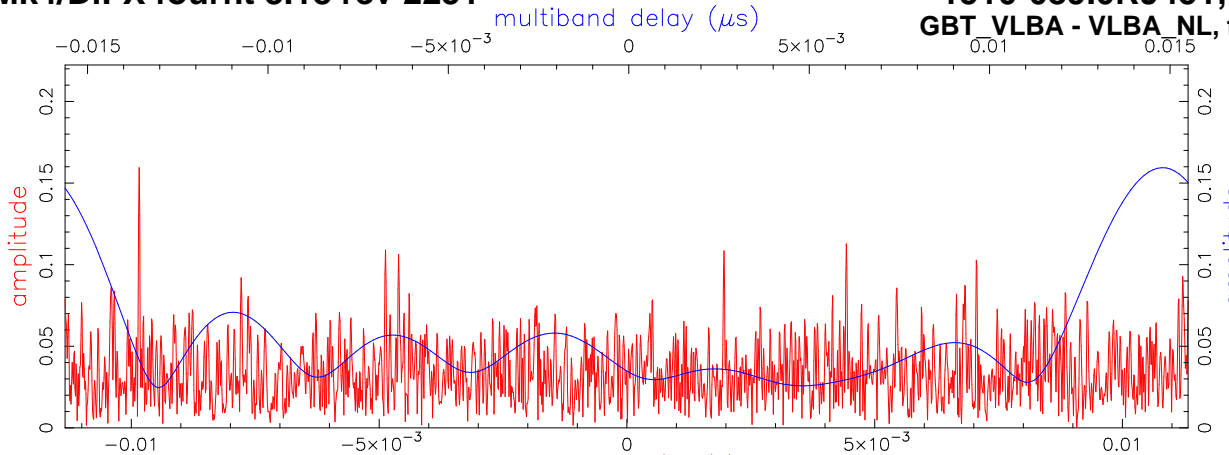
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110100
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-158.4	-179.9	174.2	-145.2	169.5	171.9	-162.0	-158.3	Phase	-171.5
	0.3	0.4	0.2	0.3	0.3	0.2	0.2	0.1	Ampl.	0.2
	128.3	129.2	213.3	127.9	130.4	33.4	42.1	163.8	Sbd box	129.1
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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)	3.10936313318E+03		Apriori delay (usec)		3.10936463937E+03		Resid mbdelay (usec)		-1.50619E-03	+/- 2.6E-04
Sband delay (usec)	3.10936561487E+03		Apriori clock (usec)		-3.5937157E+01		Resid sbdelay (usec)		9.75500E-04	+/- 2.0E-03
Phase delay (usec)	3.10936463384E+03		Apriori clockrate (us/s)		-2.4699998E-07		Resid phdelay (usec)		-5.53045E-06	+/- 4.4E-07
Delay rate (us/s)	-1.14271677950E-01		Apriori rate (us/s)		-1.14271748876E-01		Resid rate (us/s)		7.09252E-08	+/- 2.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.59239445653E-05		Resid phase (deg)		-171.5	+/- 13.6

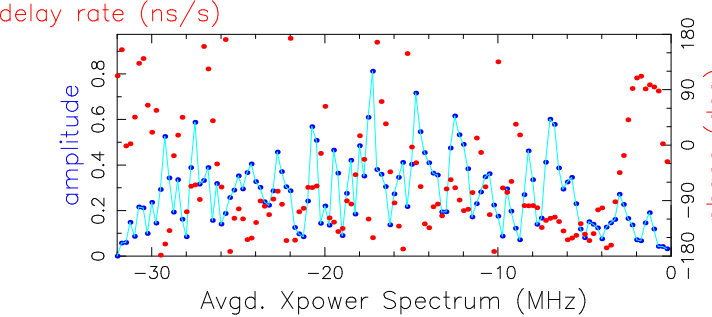
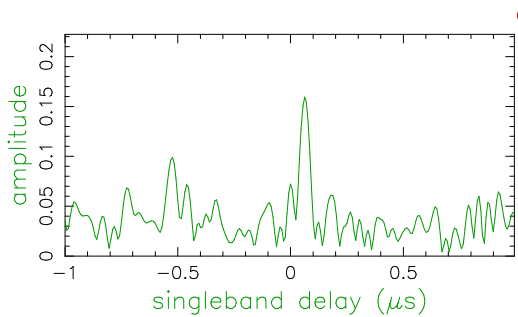
ph/seg (deg) 60.1 32.6 Search (2048X32) 0.220 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 96.2 56.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.4 19.2 Inc. seg. avg. 0.334 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 36.4 33.6 Inc. frq. 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
 G: az 129.5 el 27.1 pa -37.4 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 640.388 -186.577 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/Gn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/Gn.W.31.0RJ451 simultaneous interpolator



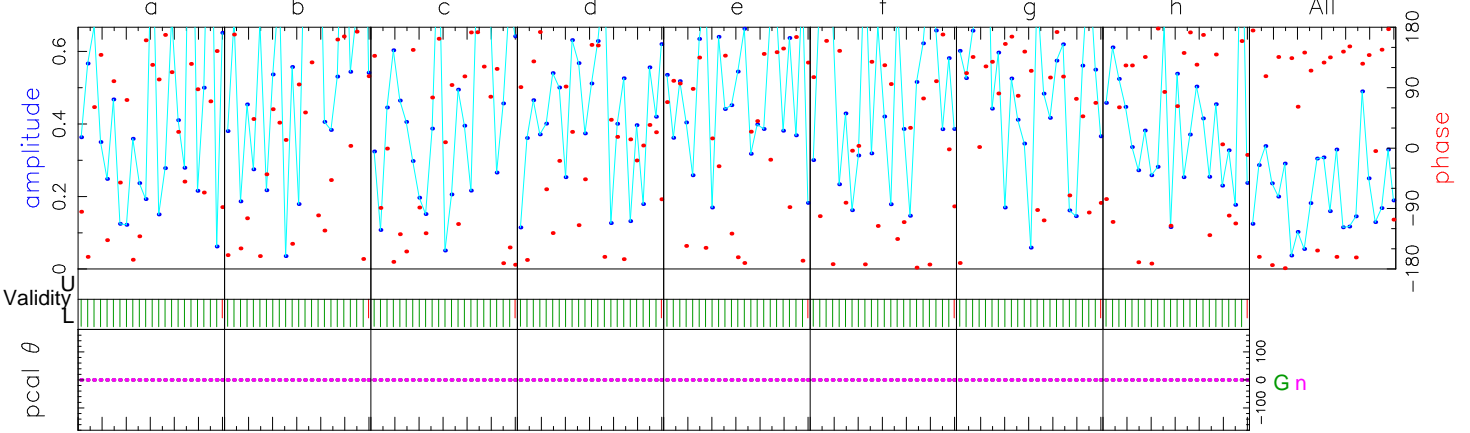
Fringe quality 0

SNR 5.9
Int time 359.651
Amp 0.222
Phase -22.9
PFD 4.6e-01
Delays (us)
SBD 0.063415
MBD -0.016453
Fringe rate (Hz)
-0.848106
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110102
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



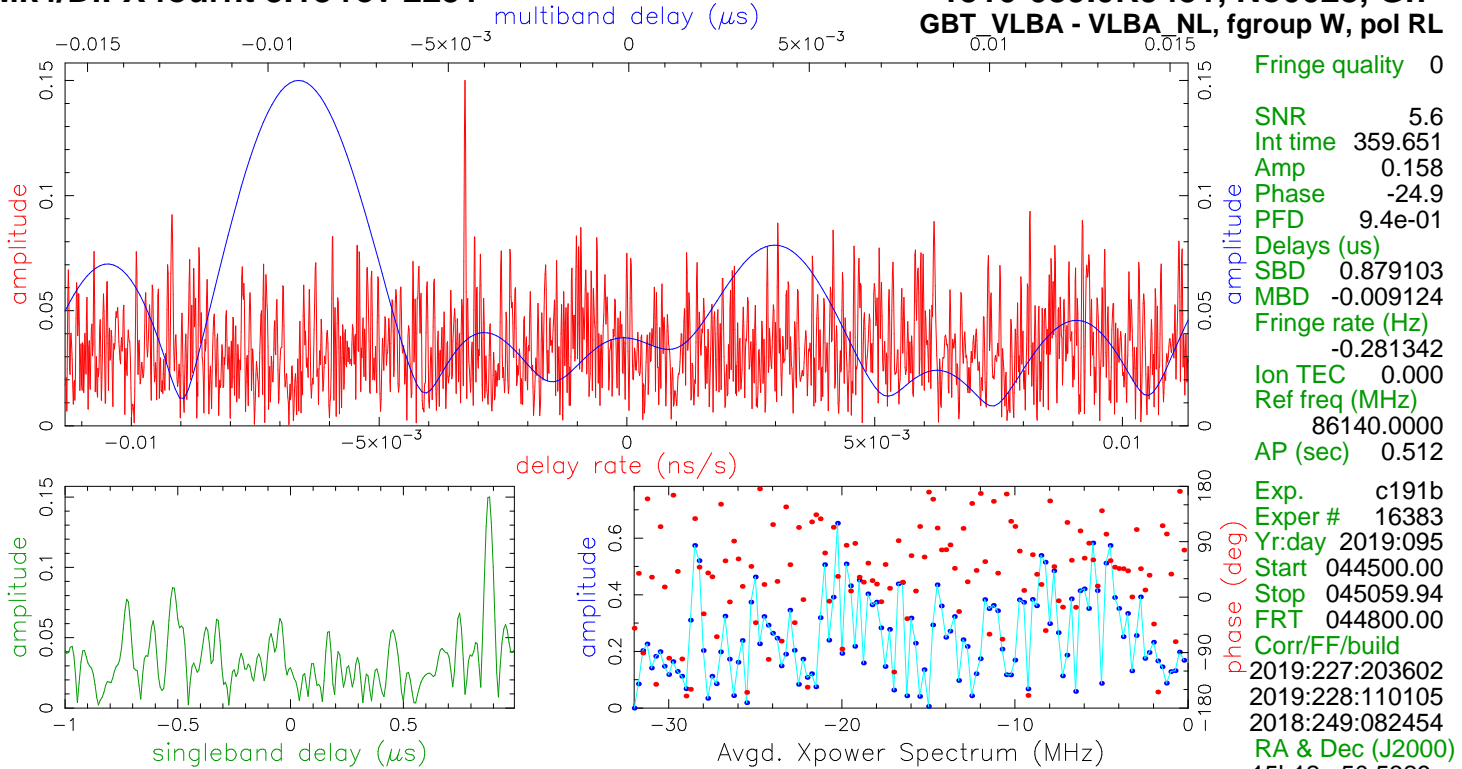
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	0.2
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	137.1
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:n	0:0	0:0	0:0	0:0	0:0	0:0	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	3.10944193649E+03	Apriori delay (usec)	3.10936463937E+03	Resid mbdelay (usec)	-1.64529E-02	+/-	3.7E-04
Sband delay (usec)	3.10942805487E+03	Apriori clock (usec)	-3.5937157E+01	Resid sbdelay (usec)	6.34155E-02	+/-	2.9E-03
Phase delay (usec)	3.10936464443E+03	Apriori clockrate (us/s)	-2.4699998E-07	Resid phdelay (usec)	5.06540E-06	+/-	6.3E-07
Delay rate (us/s)	-1.14281594549E-01	Apriori rate (us/s)	-1.14271748876E-01	Resid rate (us/s)	-9.84567E-06	+/-	3.0E-09
Total phase (deg)	-10.3	Apriori accel (us/s/s)	-1.59239445653E-05	Resid phase (deg)	-22.9	+/-	19.6

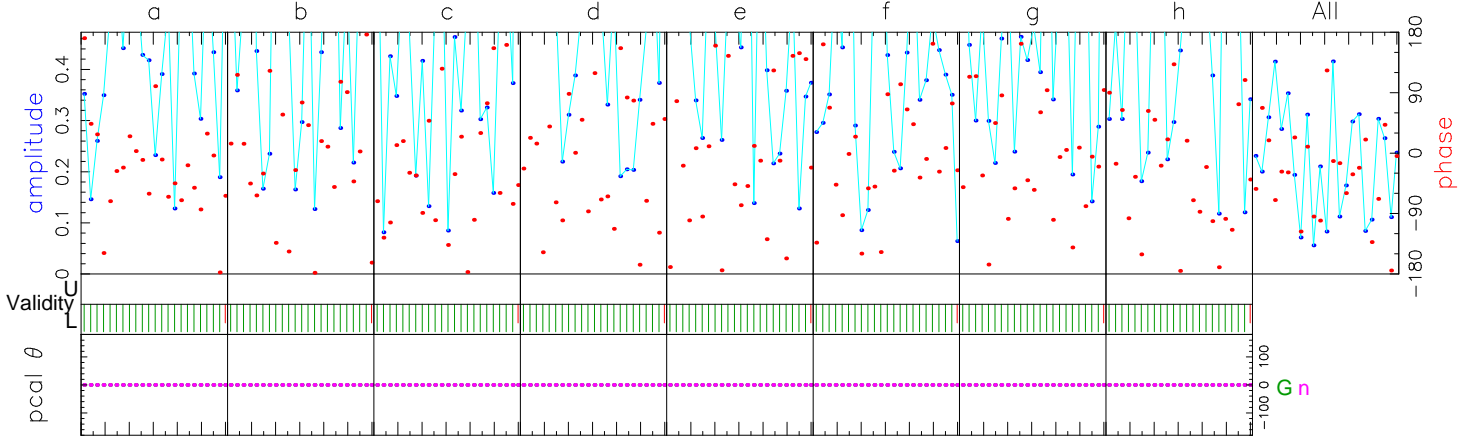
ph/seg (deg)	51.3	Theor.	47.0	Search (2048X32)	0.156	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.4		82.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	41.4		27.7	Inc. seg. avg.	0.222	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.4		48.3	Inc. frq. avg.	0.219	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00

G: az 129.5 el 27.1 pa -37.4 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 640.388 -186.577 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/Gn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/Gn.W.48.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
-28.0	4.6	-62.3	-8.9	-59.1	-5.4	-1.4	-45.6	Phase	-24.9
0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
241.8	45.7	30.2	225.5	146.0	229.4	127.5	165.4	Sbd box	241.5
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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 W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.11023051488E+03	Apriori delay (usec)	3.10936463937E+03	Resid mbdelay (usec)	-9.12448E-03	+/-	3.9E-04		
Sband delay (usec)	3.11024374187E+03	Apriori clock (usec)	-3.5937157E+01	Resid sbdelay (usec)	8.79103E-01	+/-	3.1E-03		
Phase delay (usec)	3.10936463856E+03	Apriori clockrate (us/s)	-2.4699998E-07	Resid phdelay (usec)	-8.01574E-07	+/-	6.6E-07		
Delay rate (us/s)	-1.14275014983E-01	Apriori rate (us/s)	-1.14271748876E-01	Resid rate (us/s)	-3.26611E-06	+/-	3.2E-09		
Total phase (deg)		Apriori accel (us/s/s)	-1.59239445653E-05	Resid phase (deg)	-24.9	+/-	20.5		

ph/seg (deg) 67.1 49.2 Search (2048X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

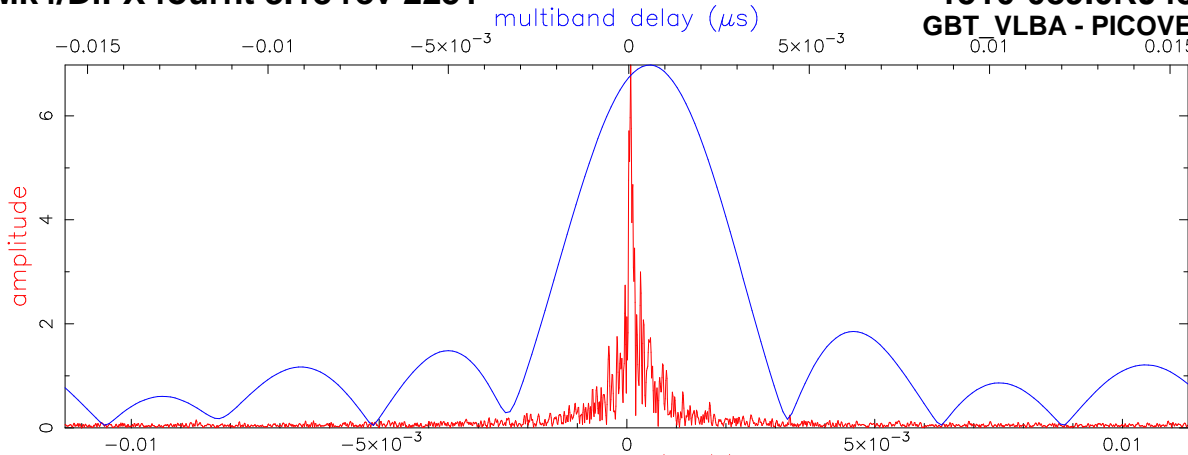
amp/seg (%) 84.8 85.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 29.1 29.0 Inc. seg. avg. 0.169 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 35.5 50.6 Inc. frq. avg. 0.150 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

G: az 129.5 el 27.1 pa -37.4 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 640.388 -186.577 ion window (TEC) 0.00 0.00

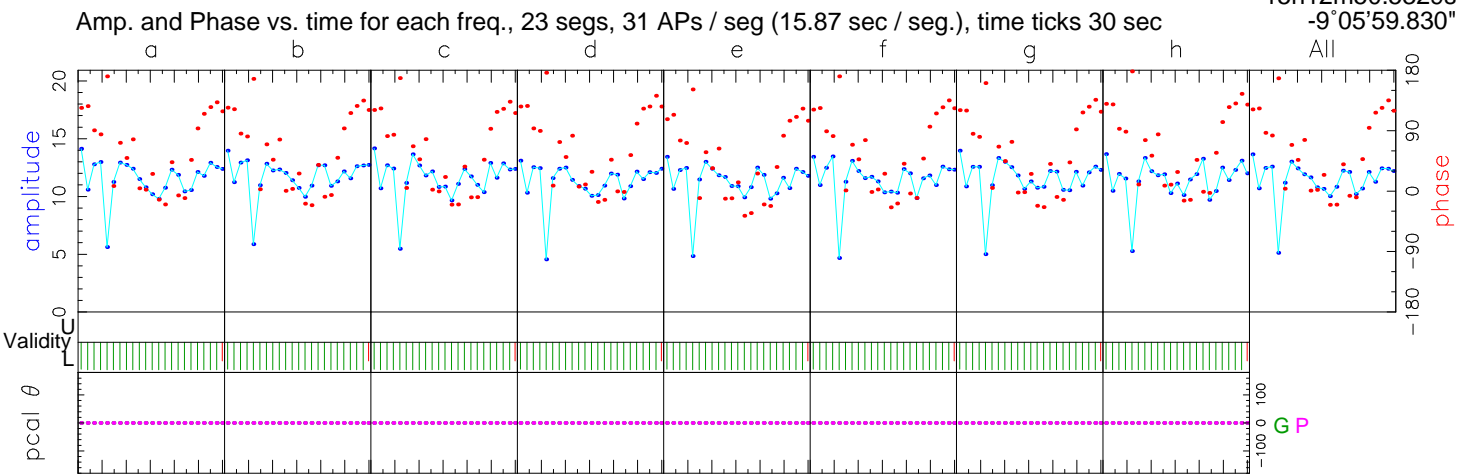
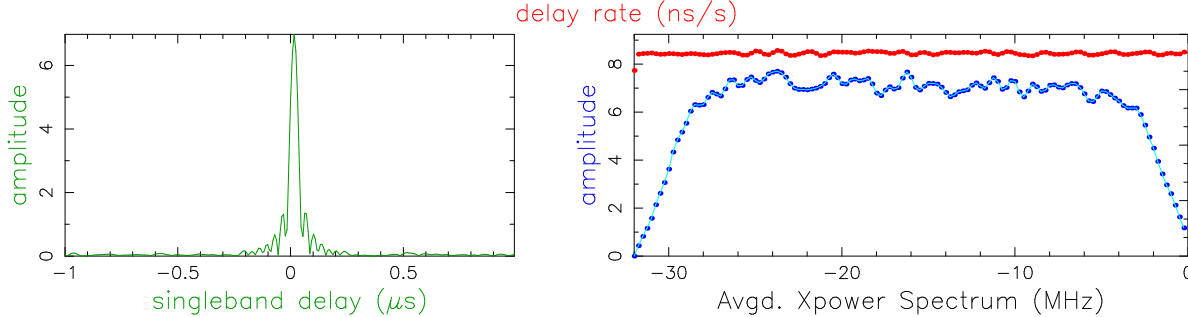
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/Gn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/Gn.W.67.0RJ451 simultaneous interpolator



Fringe quality 5

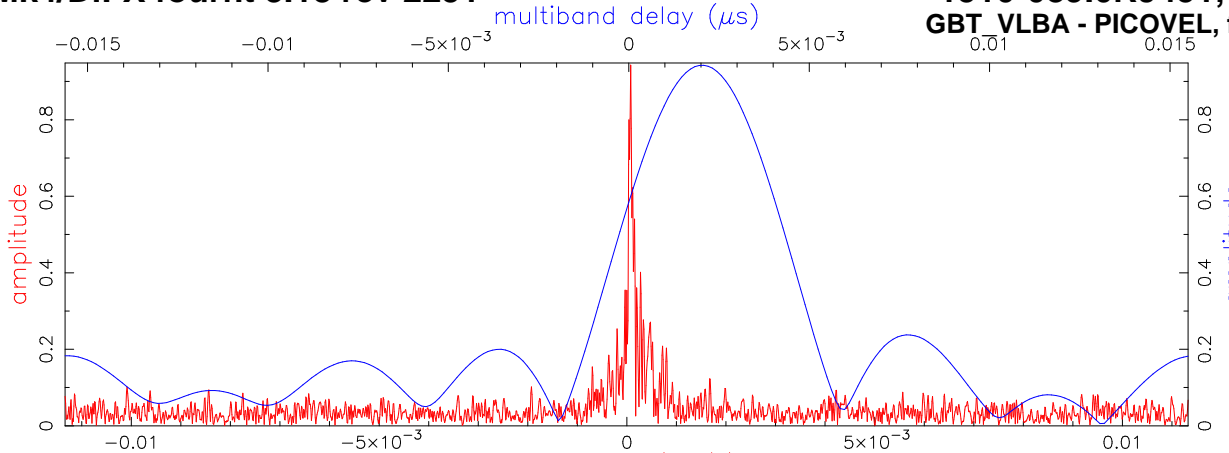
SNR 255.4
Int time 358.380
Amp 6.978
Phase 61.1
PFD 0.0e+00
Delays (us)
SBD 0.015878
MBD 0.000572
Fringe rate (Hz) 0.006909
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110103
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

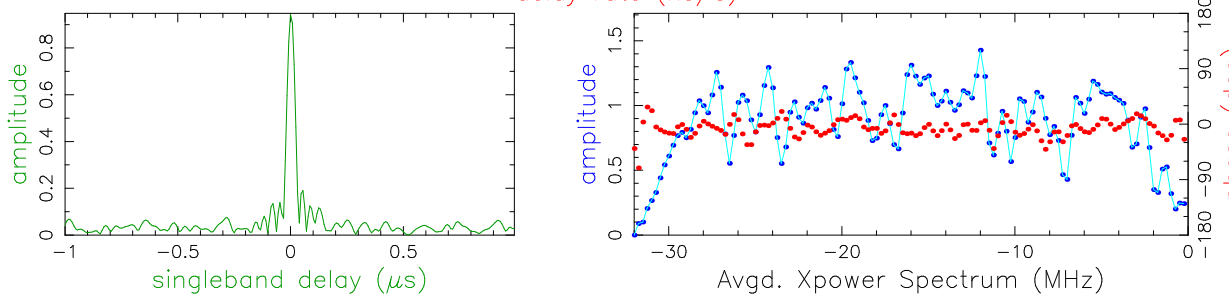


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	Ampl.	7.0
G	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	131.0
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC phase	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	ManI PC	
									PC amp	
Group delay (usec)(sbd)	-2.07245549897E+03		Apriori delay (usec)		-2.07245607090E+03		Resid mbdelay (usec)		5.71930E-04	+/- 8.5E-06
Sband delay (usec)	-2.07244019290E+03		Apriori clock (usec)		-1.3758133E+01		Resid sbdelay (usec)		1.58780E-02	+/- 6.7E-05
Phase delay (usec)	-2.07245606893E+03		Apriori clockrate (us/s)		2.3299998E-07		Resid phdelay (usec)		1.97002E-06	+/- 1.4E-08
Delay rate (us/s)	1.49383565465E+00		Apriori rate (us/s)		1.49383557445E+00		Resid rate (us/s)		8.02016E-08	+/- 7.0E-11
Total phase (deg)			Apriori accel (us/s/s)		1.06115589007E-05		Resid phase (deg)		61.1	+/- 0.4

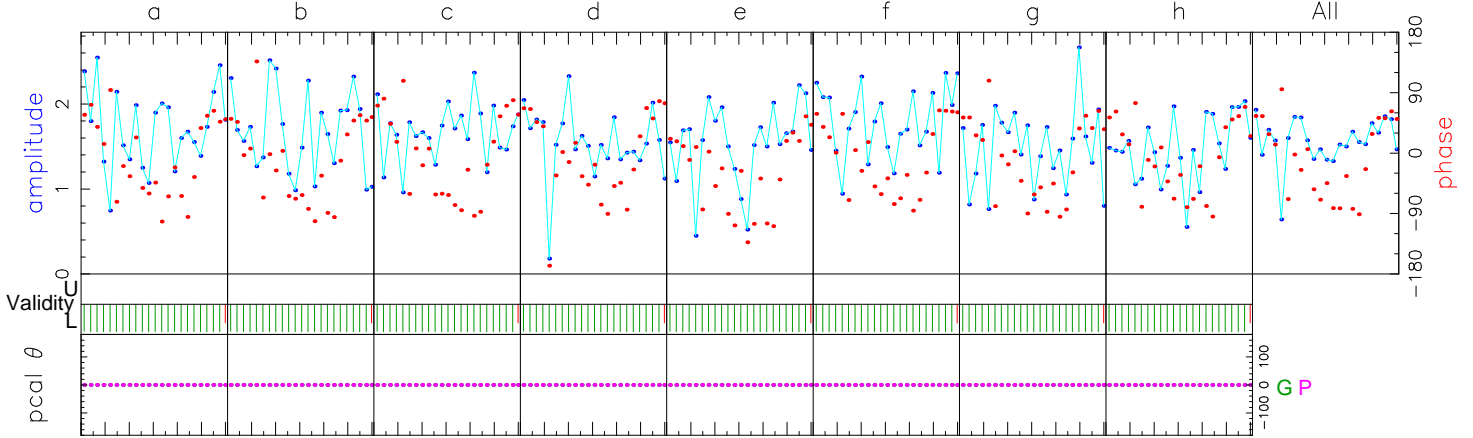
ph/seg (deg) 56.3 1.1 Search (2048X32) 6.760 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.7 1.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.5 0.6 Inc. seg. avg. 11.409 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 1.6 1.1 Inc. frq. avg. 7.010 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 129.5 el 27.1 pa -37.4 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -8649.400 16.839 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GP.W.50.0RJ451 simultaneous interpolator



Fringe quality 7
SNR 34.7
Int time 358.380
Amp 0.948
Phase -6.9
PFD 0.0e+00
Delays (us)
SBD 0.002118
MBD 0.002042
Fringe rate (Hz) 0.006956
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110104
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



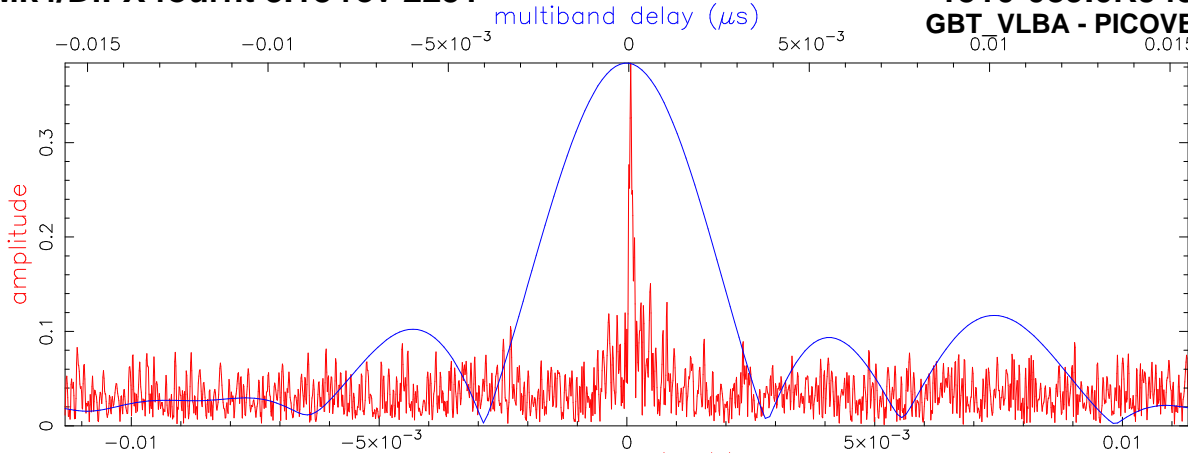
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



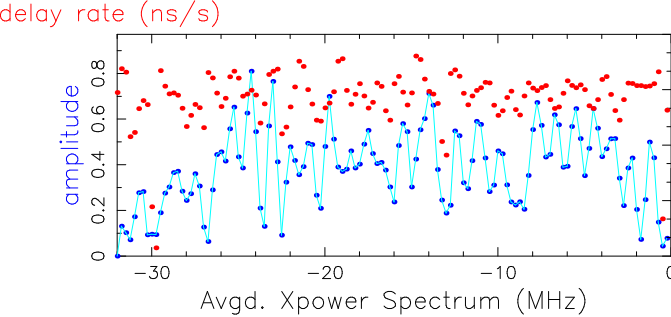
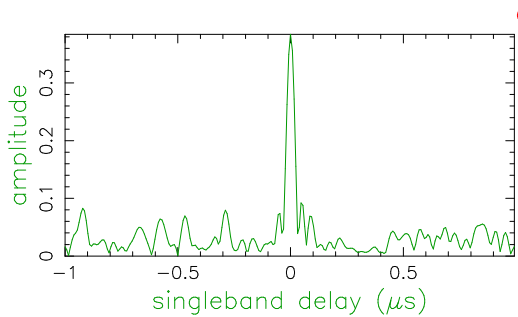
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-1.8	-9.3	-9.9	3.1	-23.3	-4.3	-8.9	-1.7	Phase	-6.9
	1.0	1.0	0.8	1.0	0.9	1.1	0.9	0.9	Ampl.	0.9
	129.0	129.2	129.4	129.0	129.5	129.7	129.2	129.2	Sbd box	129.3
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs 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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.07245402929E+03		Apriori delay (usec)		-2.07245607090E+03		Resid mbdelay (usec)		2.04162E-03	+/- 6.3E-05
Sband delay (usec)	-2.07245395290E+03		Apriori clock (usec)		-1.3758133E+01		Resid sbdelay (usec)		2.11800E-03	+/- 5.0E-04
Phase delay (usec)	-2.07245607113E+03		Apriori clockrate (us/s)		2.3299998E-07		Resid phdelay (usec)		-2.22857E-07	+/- 1.1E-07
Delay rate (us/s)	1.49383565520E+00		Apriori rate (us/s)		1.49383557445E+00		Resid rate (us/s)		8.07465E-08	+/- 5.1E-10
Total phase (deg)	-348.1		Apriori accel (us/s/s)		1.06115589007E-05		Resid phase (deg)		-6.9	+/- 3.3

RMS Theor. Amplitude 0.948 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 56.3 7.9 Search (2048X32) 0.926 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 70.7 13.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 8.6 4.7 Inc. seg. avg. 1.550 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 (%) 8.7 8.1 Inc. frq. avg. 0.947 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

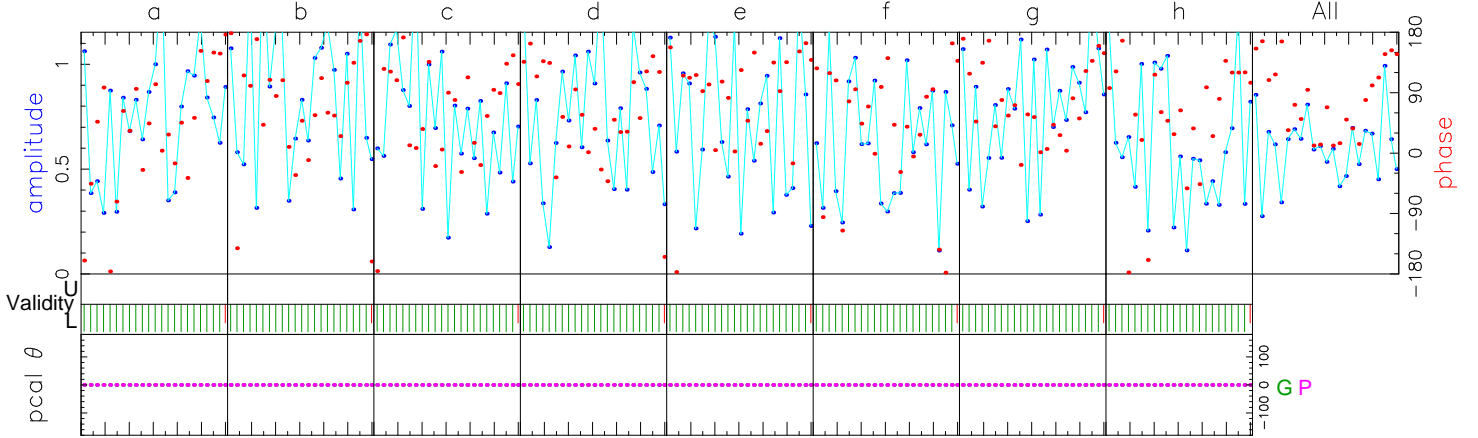
G: az 129.5 el 27.1 pa -37.4 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -8649.400 16.839 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GP.W.65.0RJ451



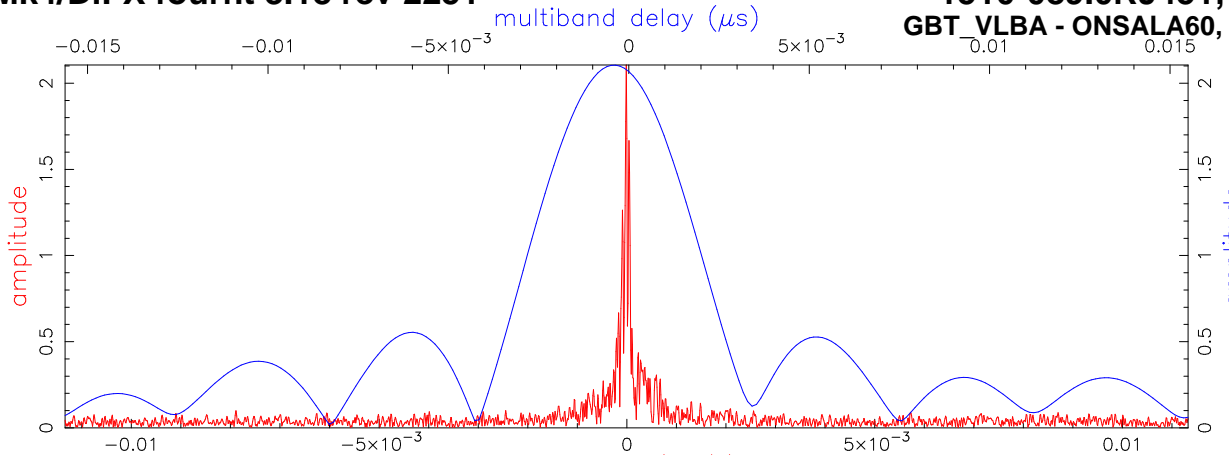
Fringe quality 9
SNR 14.1
Int time 358.380
Amp 0.384
Phase 82.7
PFD 1.7e-36
Delays (us)
SBD 0.000457
MBD -0.000068
Fringe rate (Hz) 0.006935
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110106
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



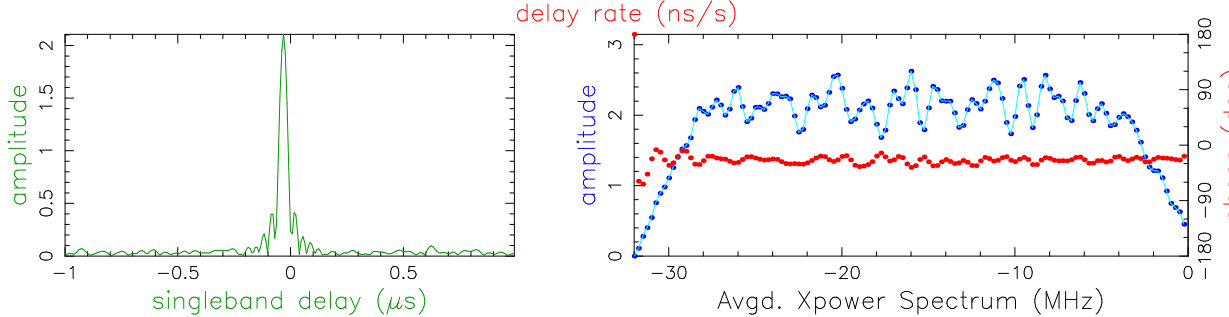
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



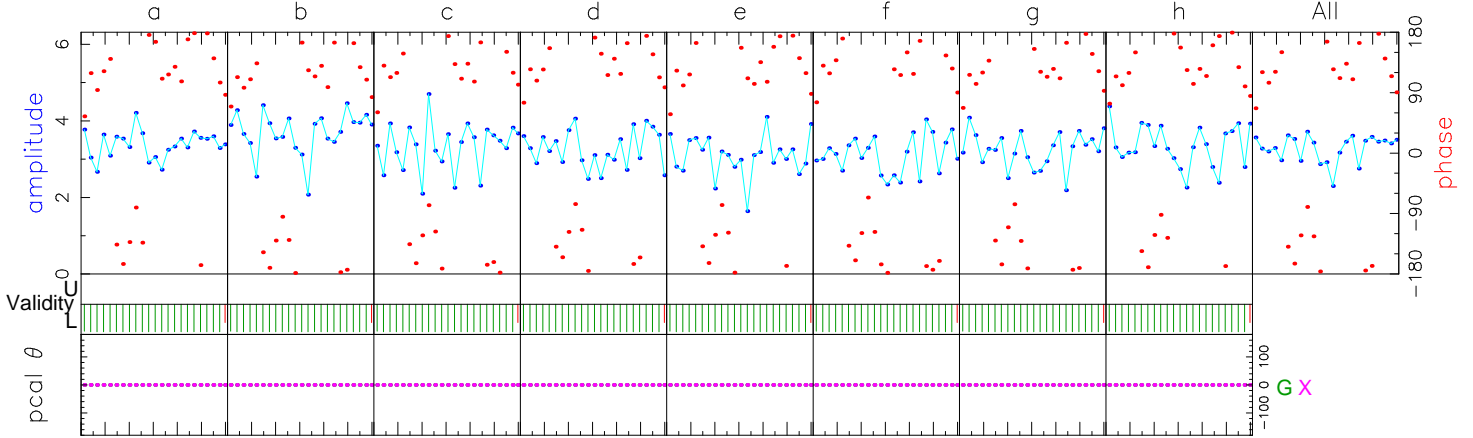
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
G:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
G:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
G	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	-2.07245613891E+03									
Sband delay (usec)	-2.07245561340E+03									
Phase delay (usec)	-2.07245606824E+03									
Delay rate (us/s)	1.49383565495E+00									
Total phase (deg)		-258.5								
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								
Bits/sample:	2x2									
Sample rate(MSamp/s):	64									
Data rate(Mb/s):	1024									
nlags:	128									
t_cohere:	infinite									
ion window (TEC)	0.00	0.00								
sb window (us)	-1.000	1.000								
mb window (us)	-0.016	0.016								
dr window (ns/s)	-0.011	0.011								
simultaneous interpolator										



Fringe quality 5
 SNR 77.2
 Int time 359.280
 Amp 2.106
 Phase 335.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.031657
 MBD -0.000407
 Fringe rate (Hz)
 -0.001123
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110058
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



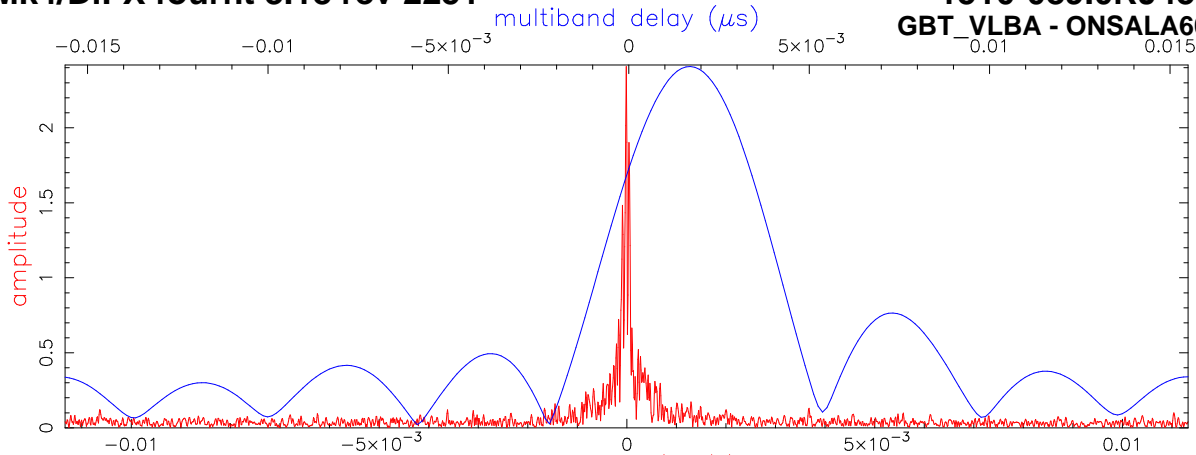
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
G:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	5.24416730757E+03		Apriori delay (usec)		5.24419896499E+03		Resid mbdelay (usec)		-4.07427E-04	+/- 2.8E-05
Sband delay (usec)	5.24416730749E+03		Apriori clock (usec)		-3.9032536E+01		Resid sbdelay (usec)		-3.16575E-02	+/- 2.2E-04
Phase delay (usec)	5.24419897000E+03		Apriori clockrate (us/s)		-3.6099999E-07		Resid phdelay (usec)		5.01203E-06	+/- 4.8E-08
Delay rate (us/s)	1.44211219063E+00		Apriori rate (us/s)		1.44211220367E+00		Resid rate (us/s)		-1.30375E-08	+/- 2.3E-10
Total phase (deg)	279.4		Apriori accel (us/s/s)		-2.41170098148E-05		Resid phase (deg)		335.4	+/- 1.5

RMS Theor. Amplitude 2.106 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.0 3.6 Search (2048X32) 2.055 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 58.2 6.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 6.1 2.1 Inc. seg. avg. 3.276 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 (%) 6.1 3.7 Inc. frq. avg. 2.113 ion window (TEC) 0.00 0.00

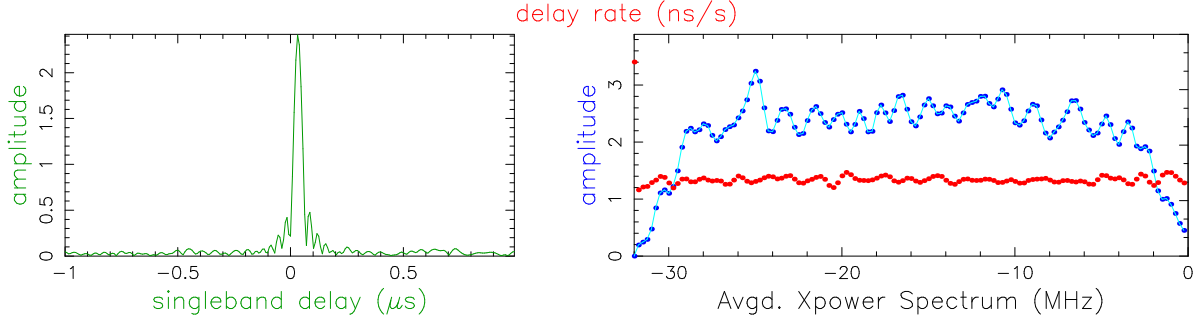
G: az 129.5 el 27.1 pa -37.4 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -8399.936 -1639.405 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GX.W.12.0RJ451



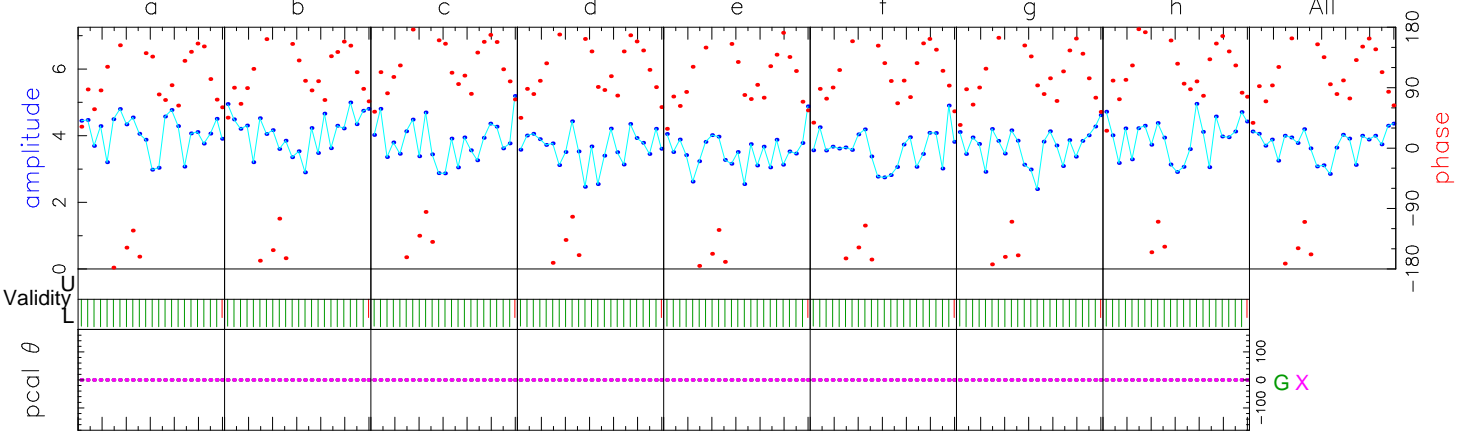
Fringe quality 5

SNR 88.6
Int time 359.280
Amp 2.418
Phase -56.7
PFD 0.0e+00
Delays (us)
SBD 0.032998
MBD 0.001685
Fringe rate (Hz)
-0.001122
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110100
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

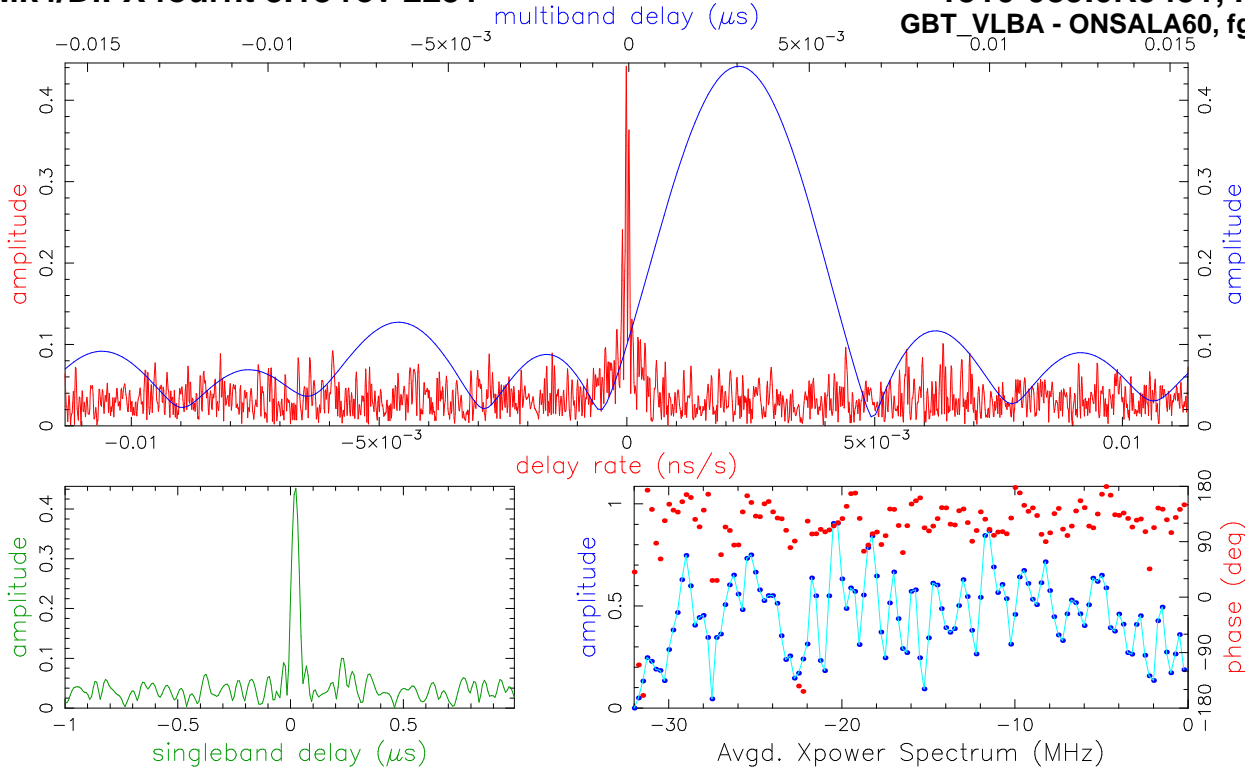


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	117.4	121.7	134.8	128.4	115.7	123.0	118.9	126.2	Phase	123.3
	2.5	2.7	2.4	2.3	2.2	2.3	2.3	2.5	Ampl.	2.4
	132.9	133.4	133.2	133.2	133.1	133.4	133.3	133.3	Sbd box	133.2
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) 5.24423189988E+03 Apriori delay (usec) 5.24419896499E+03 Resid mbdelay (usec) 1.68489E-03 +/- 2.4E-05
 Sband delay (usec) 5.24423196249E+03 Apriori clock (usec) -3.9032536E+01 Resid sbdelay (usec) 3.29975E-02 +/- 1.9E-04
 Phase delay (usec) 5.24419896897E+03 Apriori clockrate (us/s) -3.6099999E-07 Resid phdelay (usec) 3.97747E-06 +/- 4.2E-08
 Delay rate (us/s) 1.44211219064E+00 Apriori rate (us/s) 1.44211220367E+00 Resid rate (us/s) -1.30254E-08 +/- 2.0E-10
 Total phase (deg) -112.6 Apriori accel (us/s/s) -2.41170098148E-05 Resid phase (deg) -56.7 +/- 1.3

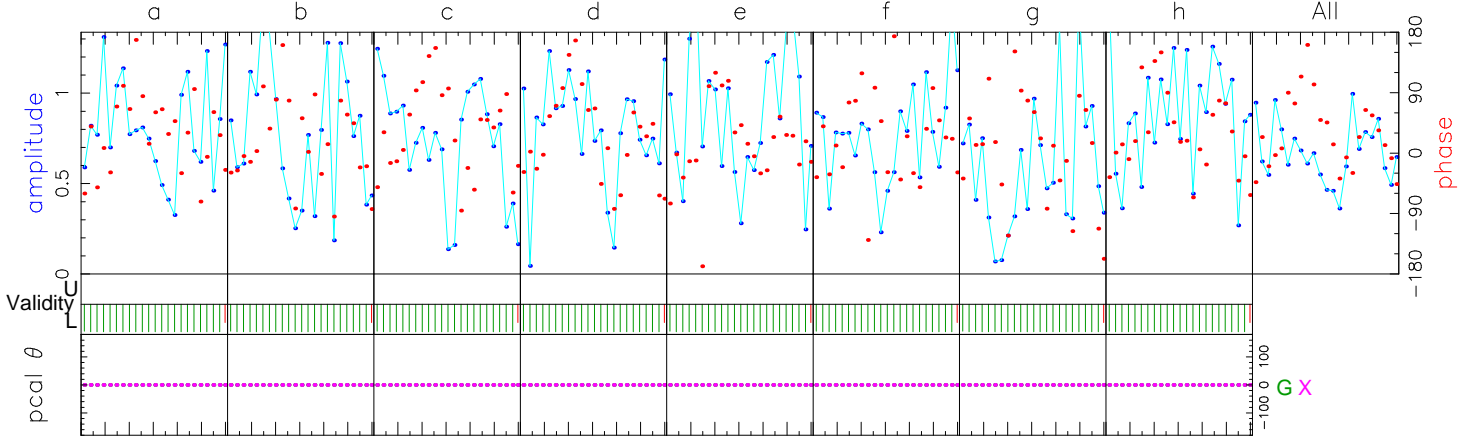
RMS Theor. Amplitude 2.418 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.0 3.1 Search (2048X32) 2.374 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 57.7 5.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 6.9 1.8 Inc. seg. avg. 3.750 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 6.4 3.2 Inc. frq. avg. 2.420 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

G: az 129.5 el 27.1 pa -37.4 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -8399.936 -1639.405 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GX.W.32.0RJ451

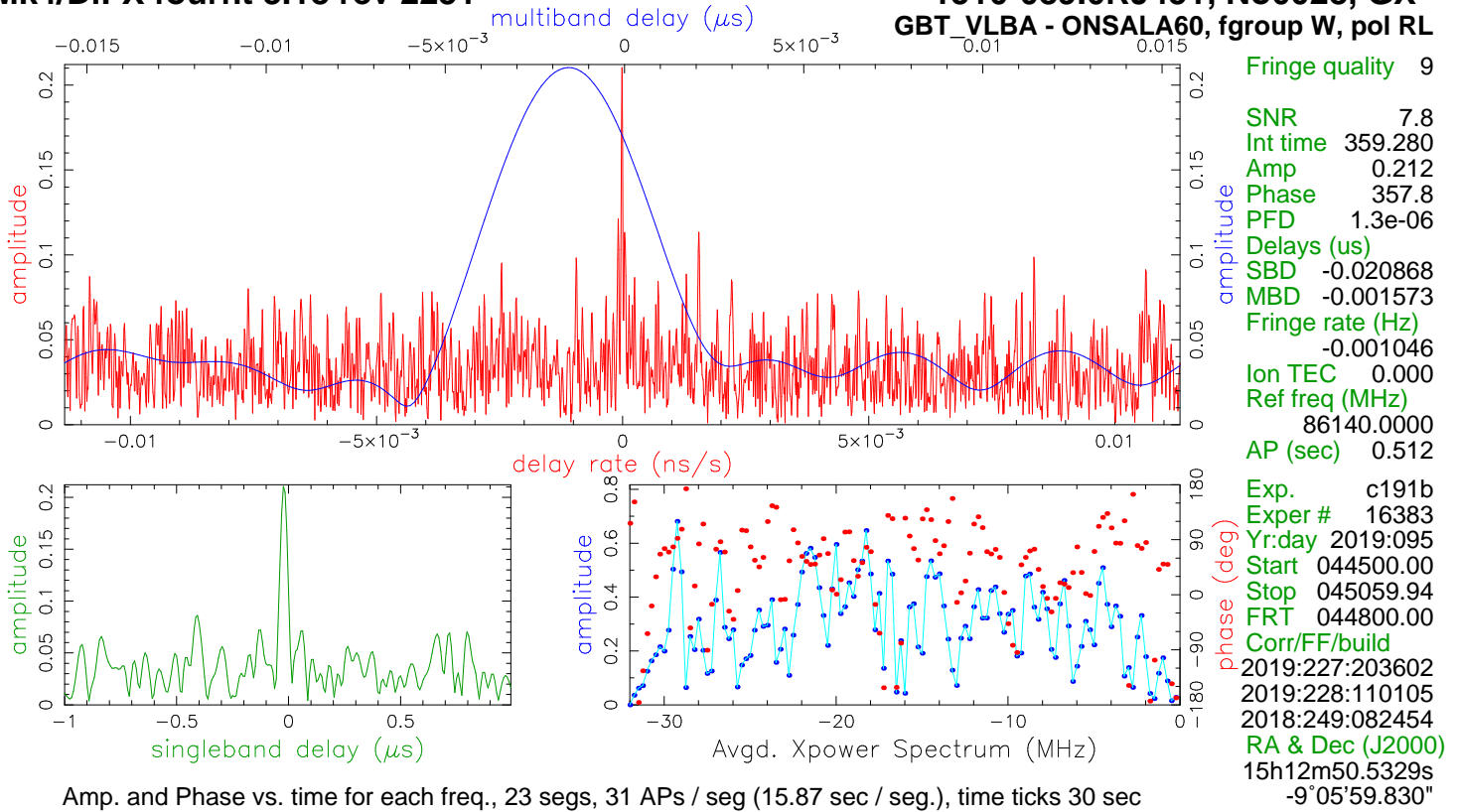


Fringe quality 9
 SNR 16.3
 Int time 359.280
 Amp 0.446
 Phase -155.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.020871
 MBD 0.003061
 Fringe rate (Hz)
 -0.001029
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110103
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

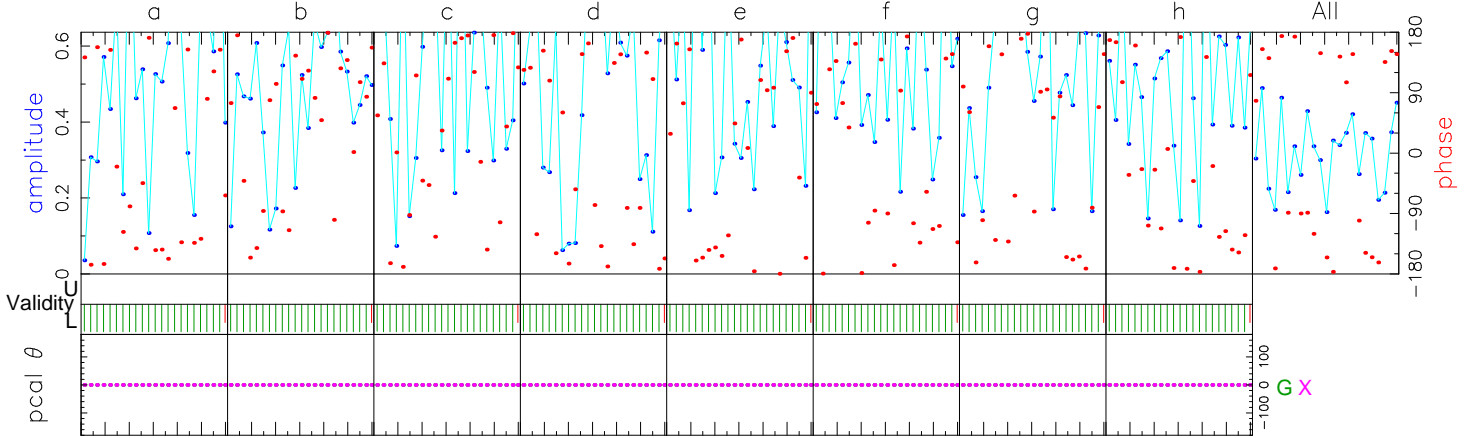
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	27.4	26.3	23.9	32.2	15.9	18.3	29.1	28.2	Phase	24.8	
	0.5	0.5	0.4	0.4	0.5	0.4	0.3	0.6	Ampl.	0.4	
	131.9	132.7	131.0	130.8	131.5	131.8	131.5	132.3	Sbd box	131.7	
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used		
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
G:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000			
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
									Tracks		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids		
									Tracks		
Group delay (usec)(sbd)	5.24423327582E+03		Apriori delay (usec)		5.24419896499E+03		Resid mbdelay (usec)		3.06082E-03 +/- 1.3E-04		
Sband delay (usec)	5.24421983649E+03		Apriori clock (usec)		-3.9032536E+01		Resid sbdelay (usec)		2.08715E-02 +/- 1.1E-03		
Phase delay (usec)	5.24419896579E+03		Apriori clockrate (us/s)		-3.6099999E-07		Resid phdelay (usec)		7.99338E-07 +/- 2.3E-07		
Delay rate (us/s)	1.44211219173E+00		Apriori rate (us/s)		1.44211220367E+00		Resid rate (us/s)		-1.19420E-08 +/- 1.1E-09		
Total phase (deg)	148.8		Apriori accel (us/s/s)		-2.41170098148E-05		Resid phase (deg)		-155.2 +/- 7.0		
	RMS	Theor.	Amplitude	0.446 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	52.7	16.8	Search (2048X32)	0.440		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	62.6	29.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	6.0	9.9	Inc. seg. avg.	0.644		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	19.9	17.3	Inc. frq. avg.	0.437		Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00
G: az 129.5 el 27.1 pa -37.4	X: az 228.5 el 12.9 pa 24.3		u,v (fr/asec) -8399.936 -1639.405						simultaneous interpolator		



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

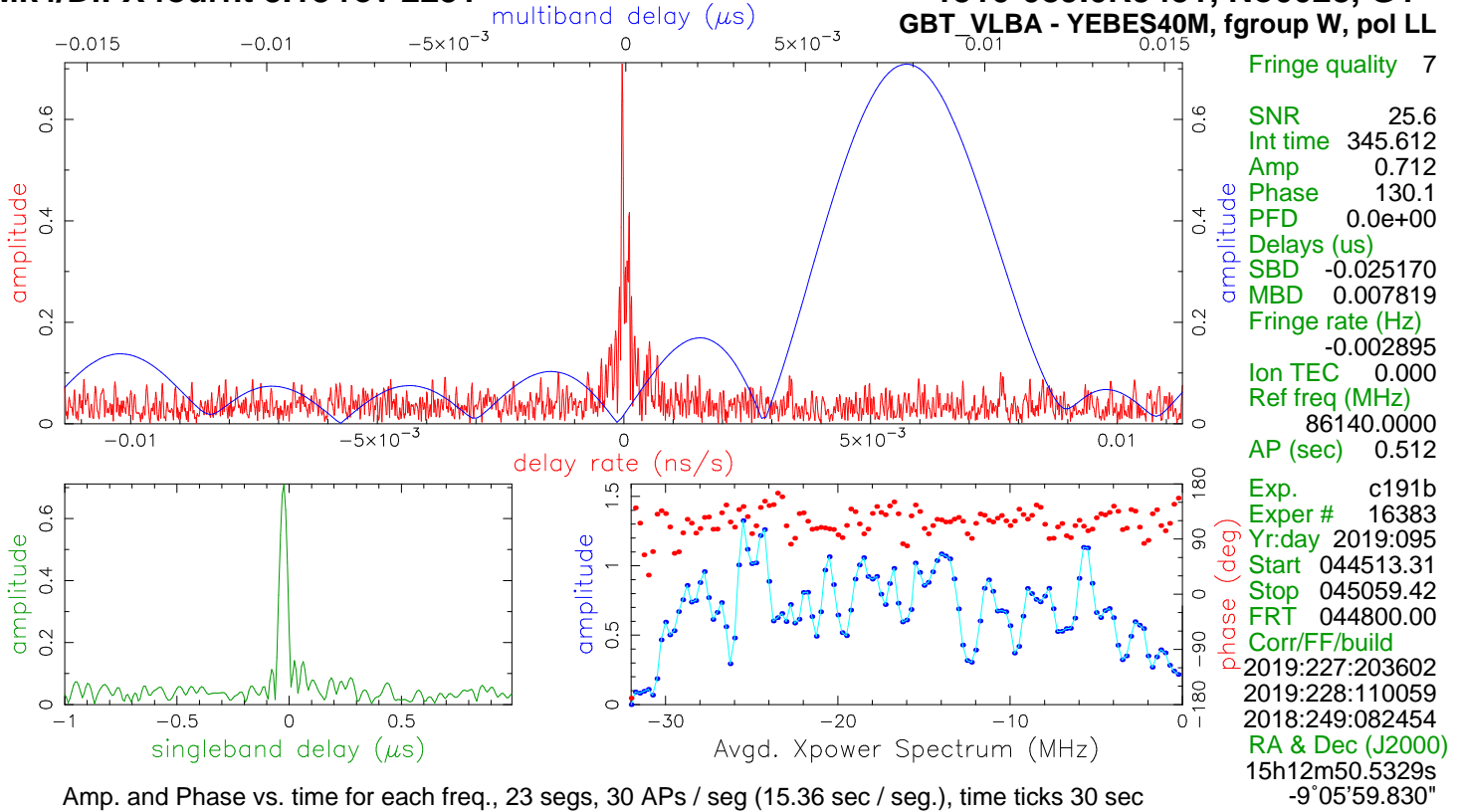


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-163.1	157.5	166.0	-169.7	159.2	176.2	167.0	-157.3	Phase	177.8
	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
	212.7	250.5	6.3	125.5	166.9	126.6	16.9	249.1	Sbd box	126.3
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.24416614225E+03		Apriori delay (usec)		5.24419896499E+03		Resid mbdelay (usec)		-1.57274E-03	+/- 2.8E-04
Sband delay (usec)	5.24417809699E+03		Apriori clock (usec)		-3.9032536E+01		Resid sbdelay (usec)		-2.08680E-02	+/- 2.2E-03
Phase delay (usec)	5.24419897073E+03		Apriori clockrate (us/s)		-3.6099999E-07		Resid phdelay (usec)		5.73276E-06	+/- 4.8E-07
Delay rate (us/s)	1.44211219153E+00		Apriori rate (us/s)		1.44211220367E+00		Resid rate (us/s)		-1.21404E-08	+/- 2.3E-09
Total phase (deg)	301.8		Apriori accel (us/s/s)		-2.41170098148E-05		Resid phase (deg)		357.8	+/- 14.7

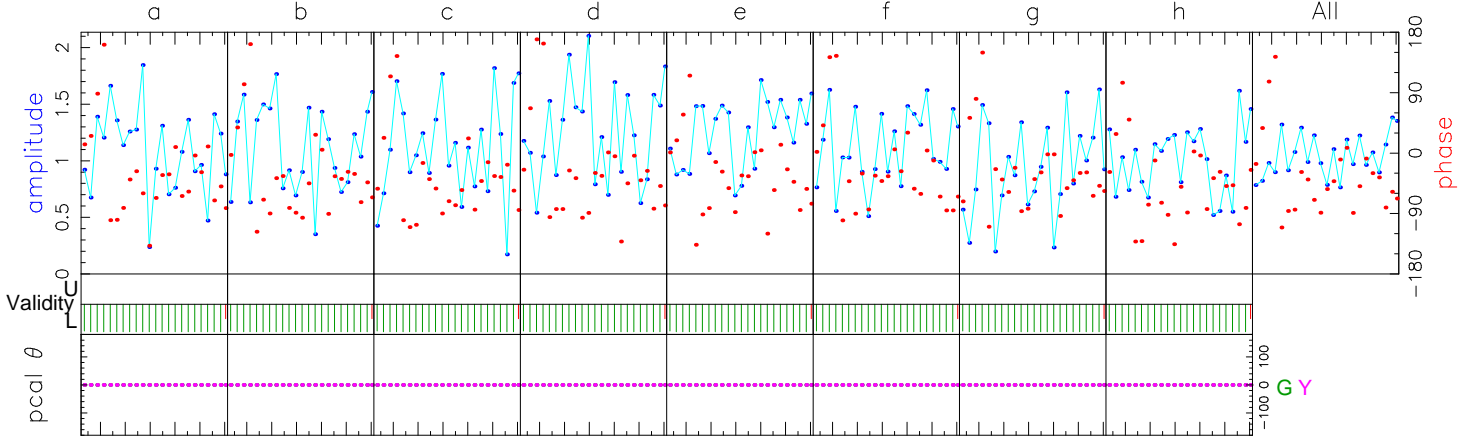
	RMS	Theor.	Amplitude	0.212 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.6	35.3	Search (2048X32)	0.207	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	67.0	61.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.0	20.8	Inc. seg. avg.	0.269	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	27.1	36.4	Inc. frq. avg.	0.205	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

G: az 129.5 el 27.1 pa -37.4 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -8399.936 -1639.405 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GX.W.70.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

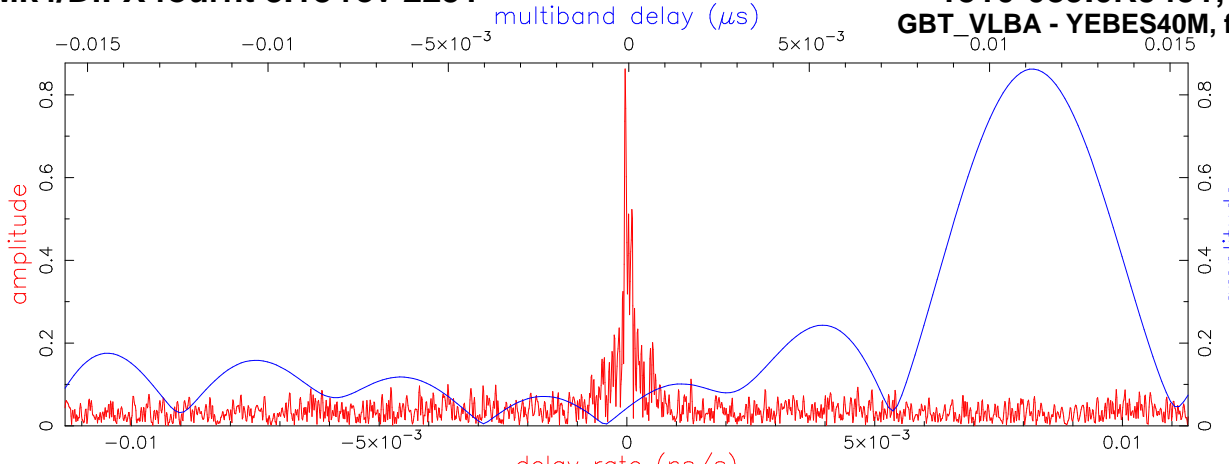


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-48.9	-49.8	-57.4	-54.1	-41.9	-38.7	-49.8	-60.1	Phase	-49.9
	0.7	0.7	0.7	0.9	0.9	0.7	0.6	0.6	Ampl.	0.7
	126.0	125.8	125.8	125.5	126.0	125.4	125.5	126.3	Sbd box	125.8
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.20812276954E+03		Apriori delay (usec)		-1.20809933839E+03		Resid mbdelay (usec)		7.81885E-03	+/- 8.5E-05
Sband delay (usec)	-1.20812450839E+03		Apriori clock (usec)		-2.0966171E+01		Resid sbdelay (usec)		-2.51700E-02	+/- 6.7E-04
Phase delay (usec)	-1.20809934000E+03		Apriori clockrate (us/s)		-1.0400001E-07		Resid phdelay (usec)		-1.60810E-06	+/- 1.4E-07
Delay rate (us/s)	1.46707288219E+00		Apriori rate (us/s)		1.46707291580E+00		Resid rate (us/s)		-3.36104E-08	+/- 7.2E-10
Total phase (deg)	127.0		Apriori accel (us/s/s)		6.81970410691E-06		Resid phase (deg)		130.1	+/- 4.5

	RMS	Theor.	Amplitude	0.712 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.6	10.7	Search (2048X32)	0.708	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	53.1	18.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	7.8	6.3	Inc. seg. avg.	1.025	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	11.2	11.1	Inc. frq. avg.	0.710	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

G: az 129.5 el 27.1 pa -37.4 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -8499.953 -344.780 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GY.W.21.0RJ451



Fringe quality 7

SNR 31.5

Int time 345.612

Amp 0.877

Phase -333.2

PFD 0.0e+00

Delays (us)

SBD 0.027011

MBD 0.011195

Fringe rate (Hz)

-0.003049

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044513.31

Stop 045059.42

FRT 044800.00

Corr/FF/build

2019:227:203602

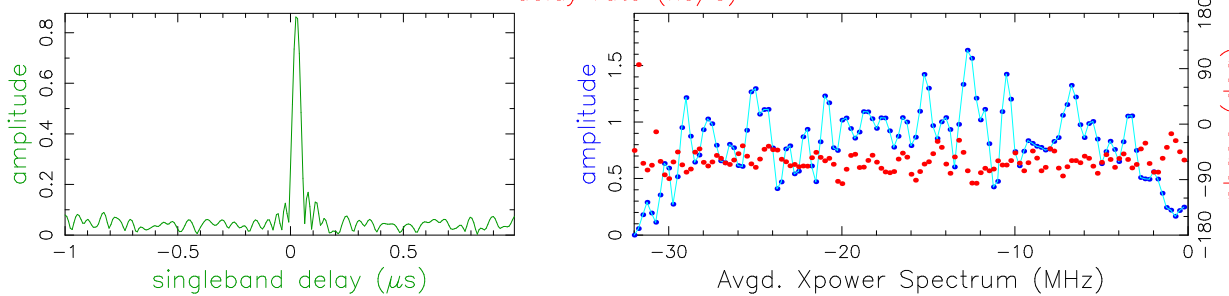
2019:228:110102

2018:249:082454

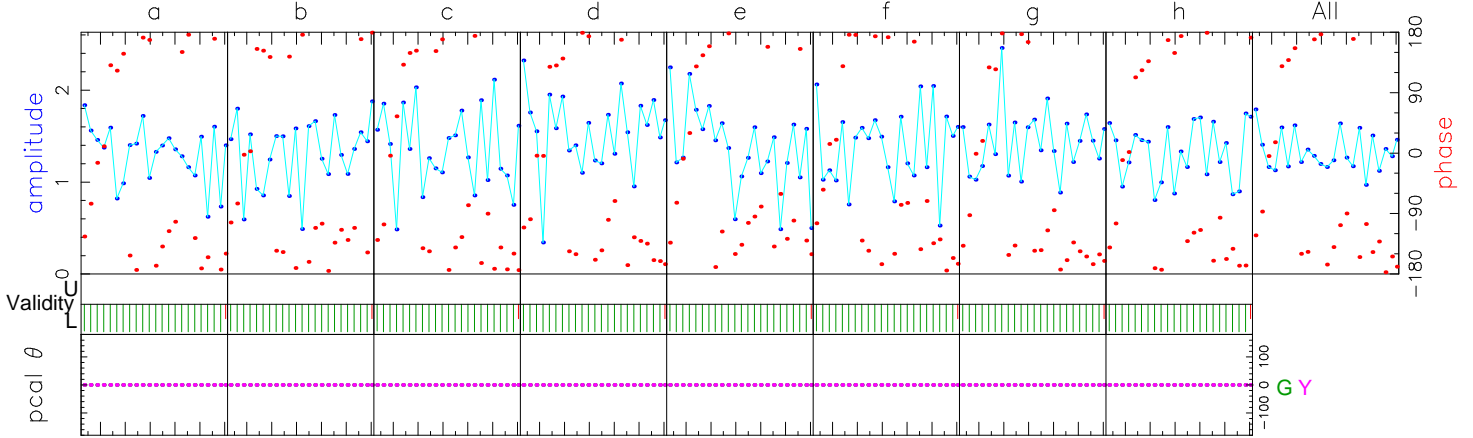
RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
-161.1	-144.3	-160.1	-153.9	-141.5	-144.7	-154.6	-163.0	Phase	-153.2
0.8	0.9	0.9	1.0	0.7	0.8	1.0	0.8	Ampl.	0.9
132.4	132.3	132.6	132.6	132.5	132.3	132.5	132.5	Sbd box	132.5
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:Y 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	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.20805689379E+03	Apriori delay (usec)	-1.20809933839E+03	Resid mbdelay (usec)	1.11946E-02	+/-	6.9E-05		
Sband delay (usec)	-1.20807232789E+03	Apriori clock (usec)	-2.0966171E+01	Resid sbdelay (usec)	2.70105E-02	+/-	5.5E-04		
Phase delay (usec)	-1.20809934333E+03	Apriori clockrate (us/s)	-1.0400001E-07	Resid phdelay (usec)	-4.93888E-06	+/-	1.2E-07		
Delay rate (us/s)	1.46707288041E+00	Apriori rate (us/s)	1.46707291580E+00	Resid rate (us/s)	-3.53903E-08	+/-	5.9E-10		
Total phase (deg)	-336.3	Apriori accel (us/s/s)	6.81970410691E-06	Resid phase (deg)	-333.2	+/-	3.6		

RMS Theor. Amplitude 0.877 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 60.8 8.7 Search (2048X32) 0.839 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

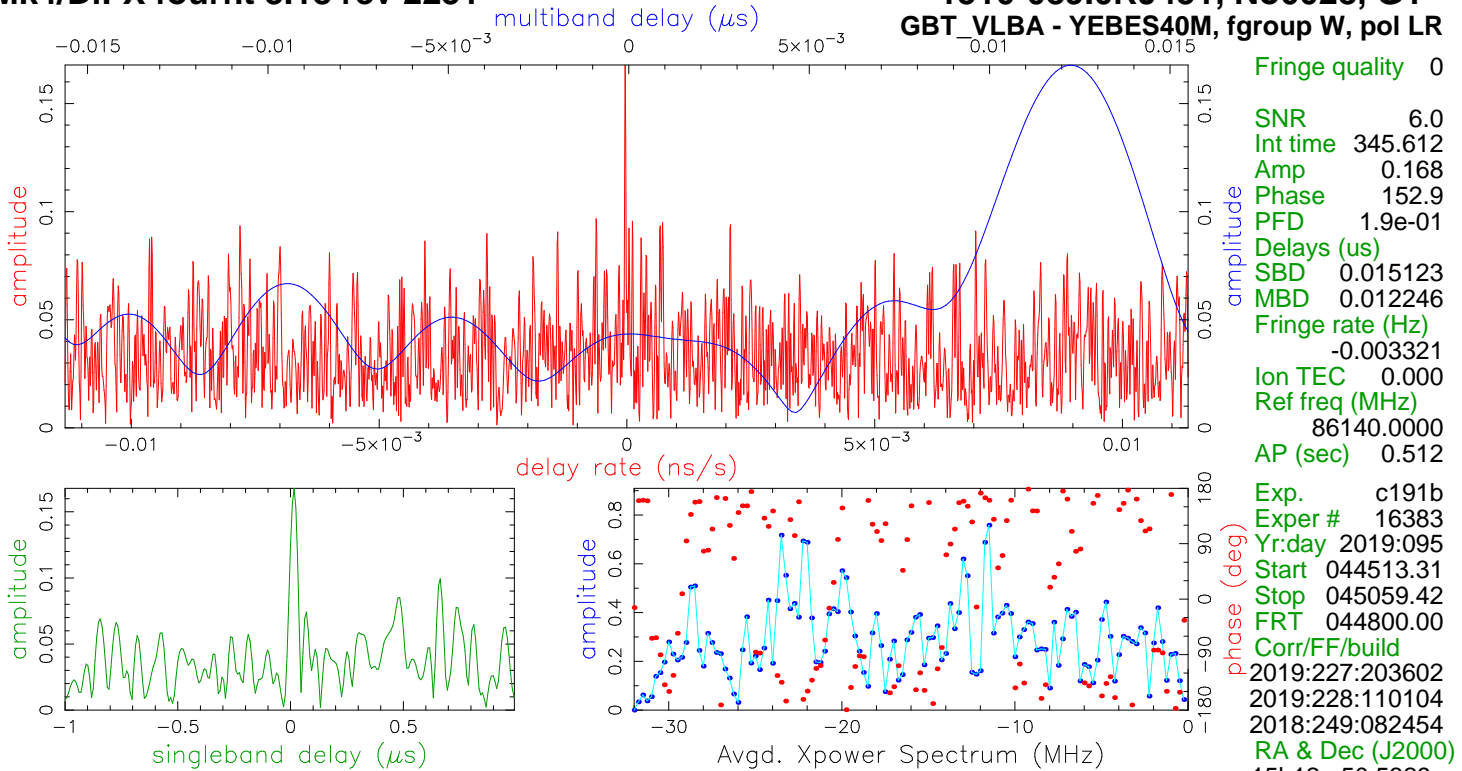
amp/seg (%) 56.8 15.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 9.1 5.1 Inc. seg. avg. 1.316 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

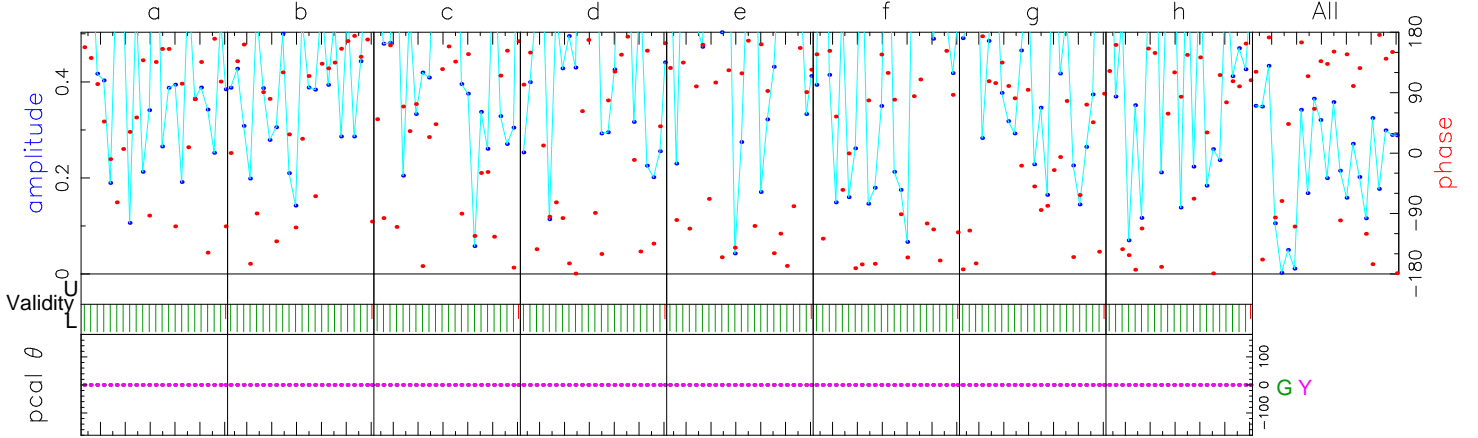
amp/frq (%) 11.1 9.0 Inc. frq. avg. 0.866 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

G: az 129.5 el 27.1 pa -37.4 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -8499.953 -344.780 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GY.W.45.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



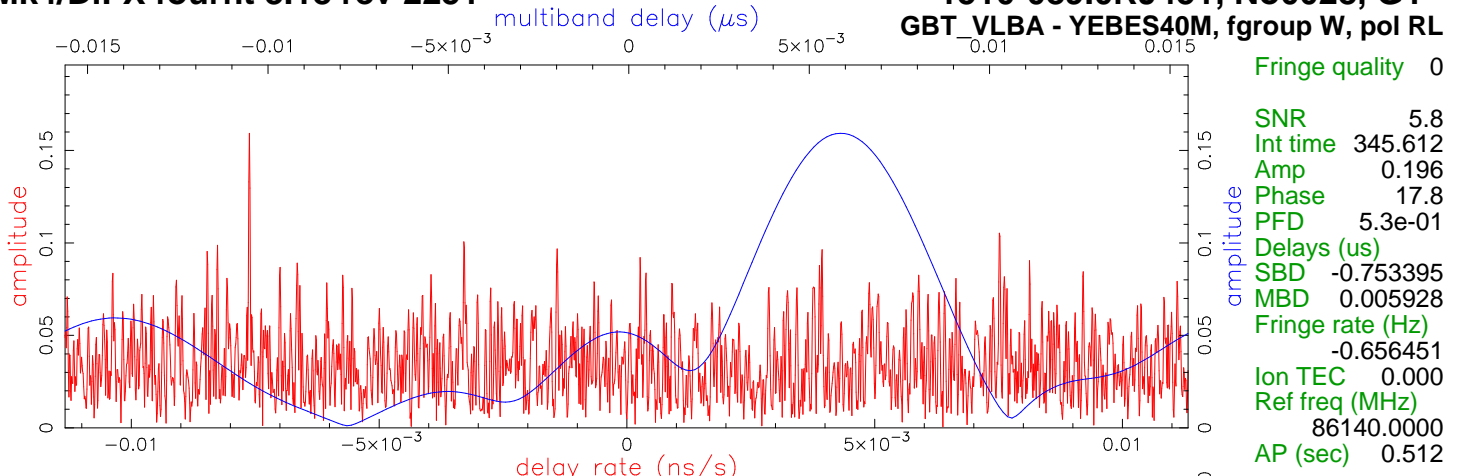
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	117.3	149.5	142.6	-179.7	178.0	172.4	125.7	133.9	Phase	152.9
	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.3	Ampl.	0.2
	67.1	255.6	45.6	82.3	129.6	168.8	250.8	130.7	Sbd box	130.9
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	

Group delay (usec)(sbd)	-1.20808709267E+03	Apriori delay (usec)	-1.20809933839E+03	Resid mbdelay (usec)	1.22457E-02	+/-	3.6E-04
Sband delay (usec)	-1.20808421489E+03	Apriori clock (usec)	-2.0966171E+01	Resid sbdelay (usec)	1.51235E-02	+/-	2.9E-03
Phase delay (usec)	-1.2080933346E+03	Apriori clockrate (us/s)	-1.0400001E-07	Resid phdelay (usec)	4.93042E-06	+/-	6.1E-07
Delay rate (us/s)	1.46707287725E+00	Apriori rate (us/s)	1.46707291580E+00	Resid rate (us/s)	-3.85519E-08	+/-	3.1E-09
Total phase (deg)	149.8	Apriori accel (us/s/s)	6.81970410691E-06	Resid phase (deg)	152.9	+/-	19.0

ph/seg (deg)	63.7	Theor.	45.5	Amplitude	0.168 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	81.0	Search (2048X32)	0.159	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	26.6	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	42.9	Inc. seg. avg.	0.177	Inc. seg. avg.	0.177	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
		Inc. frq. avg.	0.163	Inc. frq. avg.	0.163	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 129.5 el 27.1 pa -37.4 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -8499.953 -344.780 simultaneous interpolator

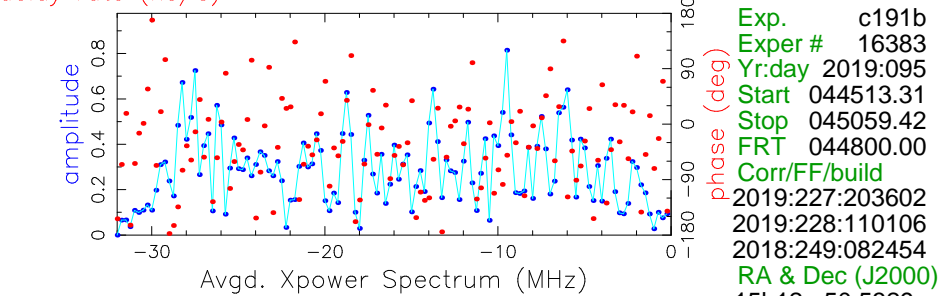
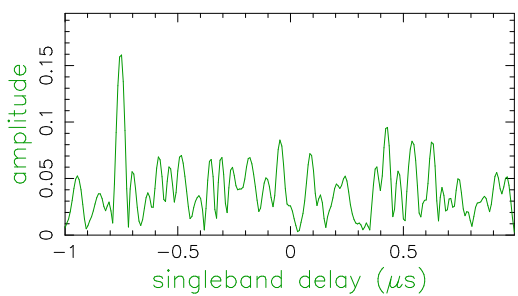
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GY.W.62.0RJ451



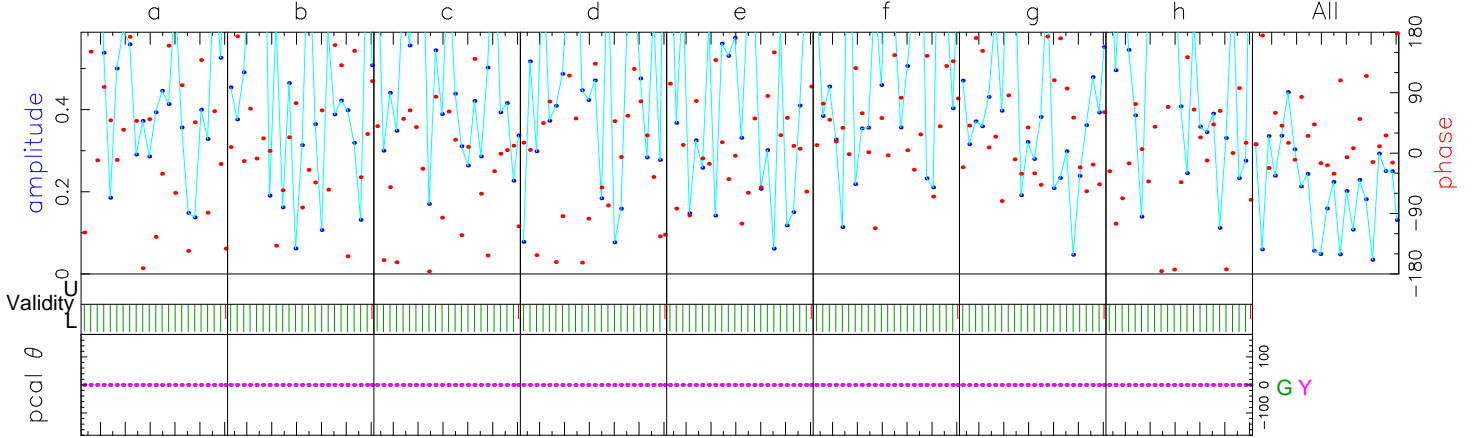
Fringe quality 0

SNR 5.8
Int time 345.612
Amp 0.196
Phase 17.8
PFD 5.3e-01
Delays (us)
SBD -0.753395
MBD 0.005928
Fringe rate (Hz)
-0.656451
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044513.31
Stop 045059.42
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110106
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

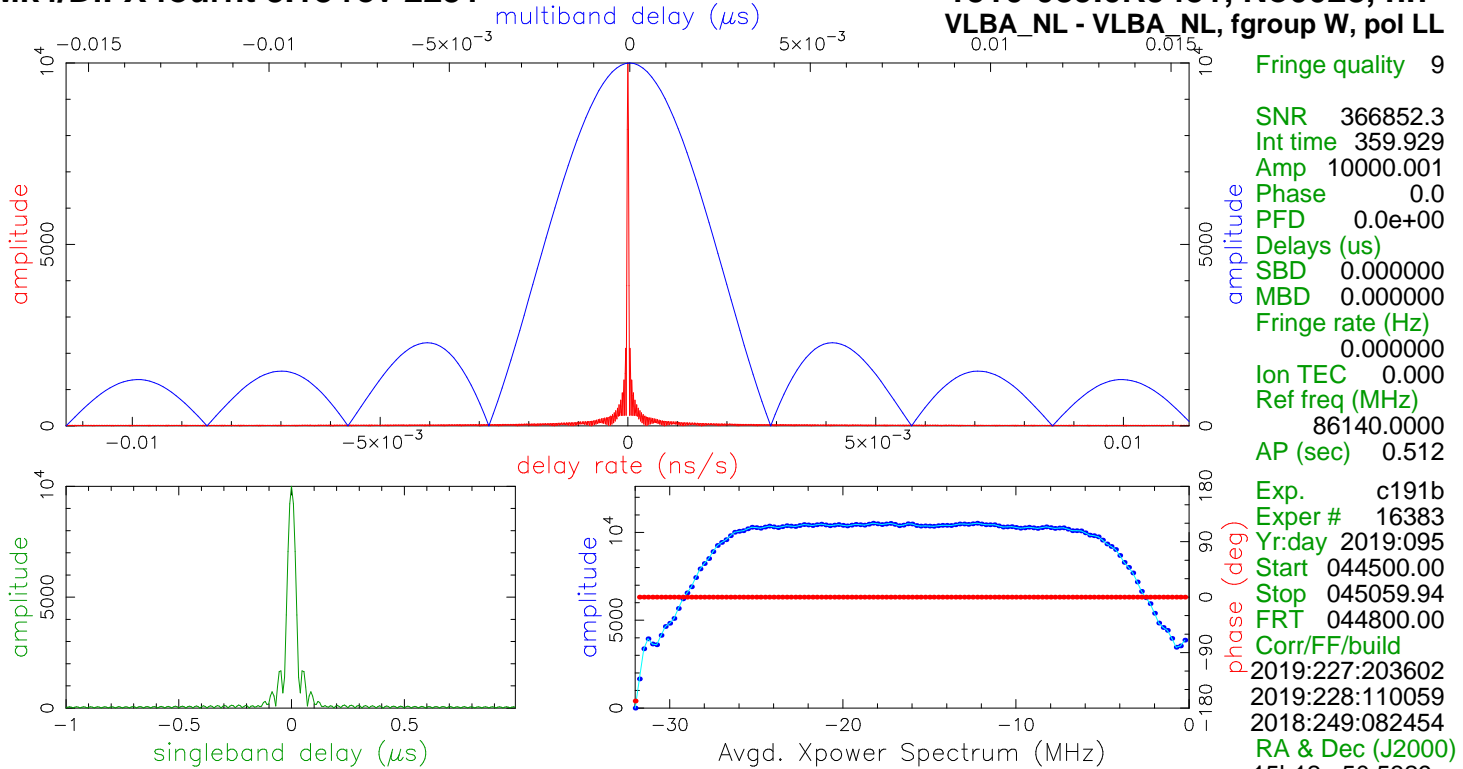


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
30.7	6.8	16.1	54.4	7.6	36.1	11.5	0.5	Phase	17.8
0.1	0.2	0.2	0.1	0.3	0.4	0.2	0.2	Ampl.	0.2
121.4	183.2	209.9	161.2	31.7	33.0	62.5	61.3	Sbd box	32.6
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:Y 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	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.20884341085E+03		Apriori delay (usec)	-1.20809933839E+03		Resid mbdelay (usec)	5.92754E-03	+/-	3.7E-04
Sband delay (usec)	-1.20885273339E+03		Apriori clock (usec)	-2.0966171E+01		Resid sbdelay (usec)	-7.53395E-01	+/-	3.0E-03
Phase delay (usec)	-1.20809933781E+03		Apriori clockrate (us/s)	-1.0400001E-07		Resid phdelay (usec)	5.74439E-07	+/-	6.4E-07
Delay rate (us/s)	1.46706529505E+00		Apriori rate (us/s)	1.46707291580E+00		Resid rate (us/s)	-7.62074E-06	+/-	3.2E-09
Total phase (deg)		14.7	Apriori accel (us/s/s)	6.81970410691E-06		Resid phase (deg)	17.8	+/-	19.7

ph/seg (deg) 57.3 Theor. 47.3 Amplitude 0.196 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.4 82.5 Search (2048X32) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.0 27.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.1 48.6 Inc. seg. avg. 0.187 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 129.5 el 27.1 pa -37.4 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -8499.953 -344.780 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/GY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/GY.W.78.0RJ451 simultaneous interpolator

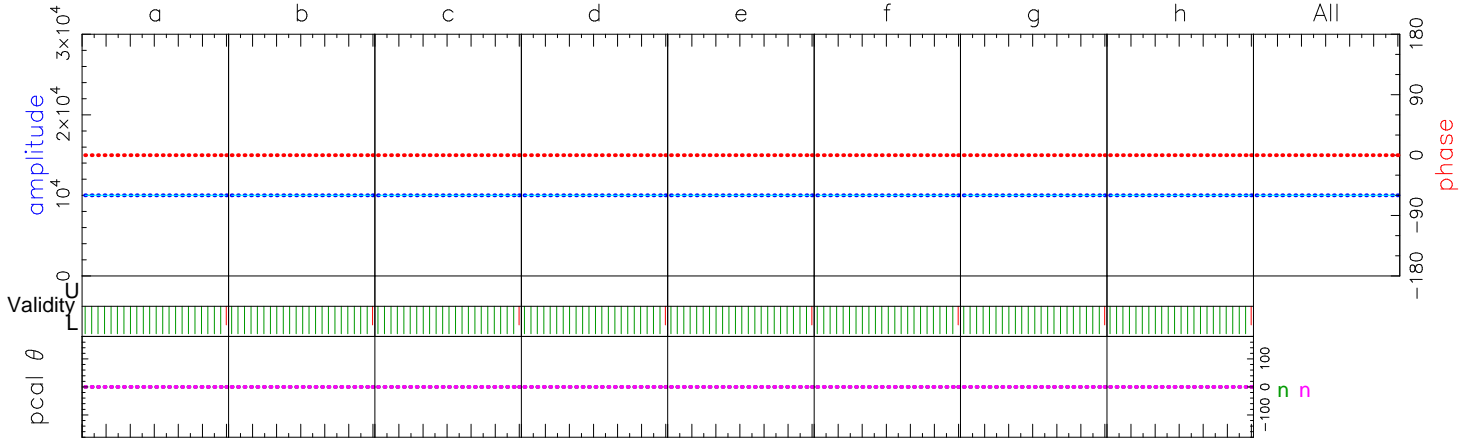


Fringe quality 9

SNR 366852.3
Int time 359.929
Amp 10000.001
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110059
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

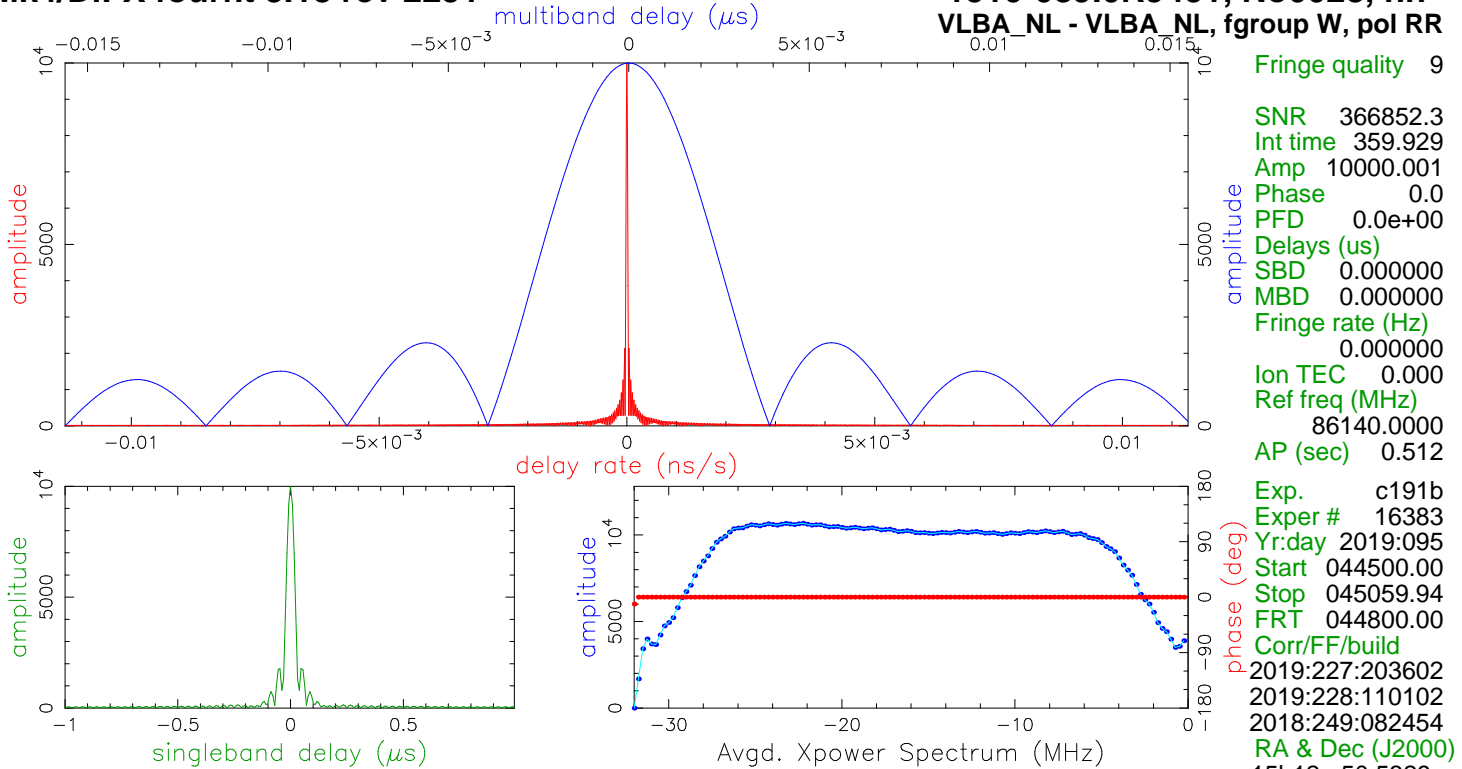


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n -1000	-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	0:0	PC phase	
n:n 0:0	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	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000		
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Chan ids	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Tracks	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Chan ids	
n 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	+/-	5.9E-09			
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08			
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11			
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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 10000.001 +/- 0.027 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
 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 120.9 el 17.9 pa -40.1 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nn.W.17.0RJ451



Fringe quality 9

SNR 366852.3

Int time 359.929

Amp 10000.001

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110102

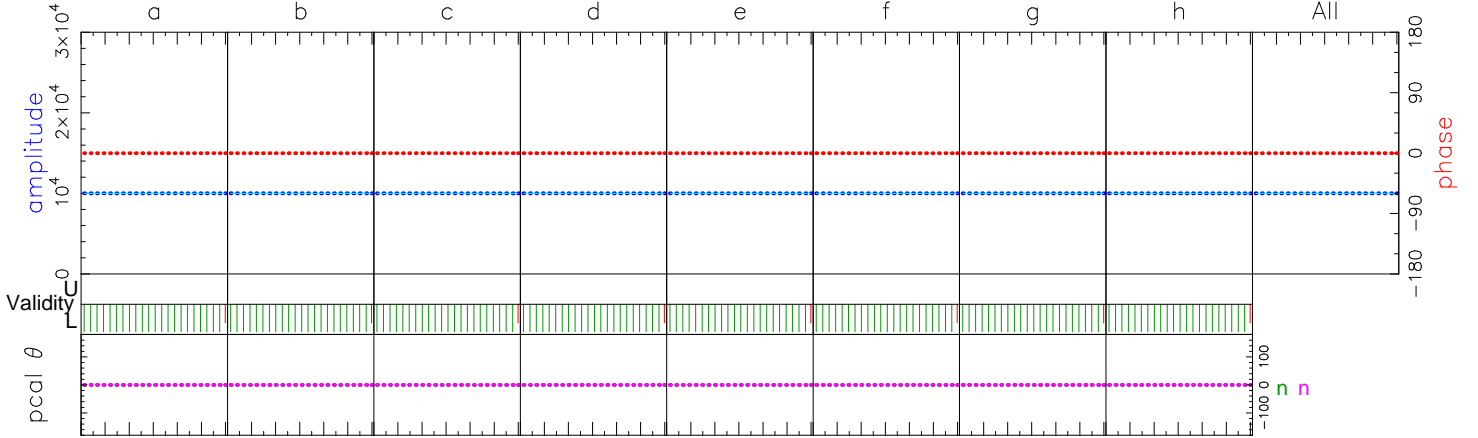
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	ManI 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	+/-	5.9E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

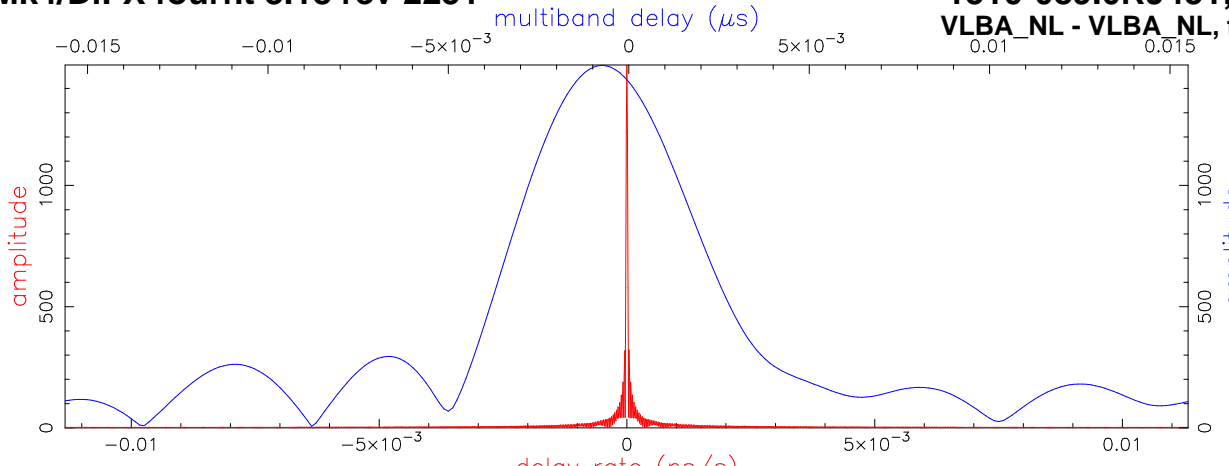
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

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

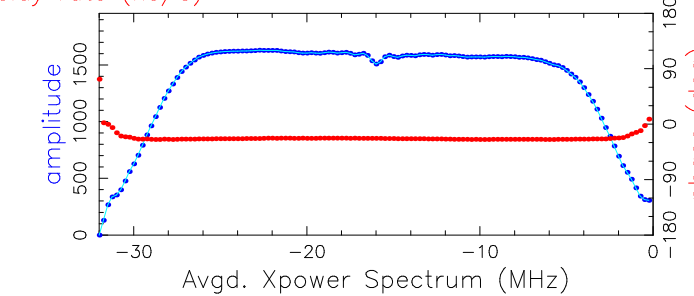
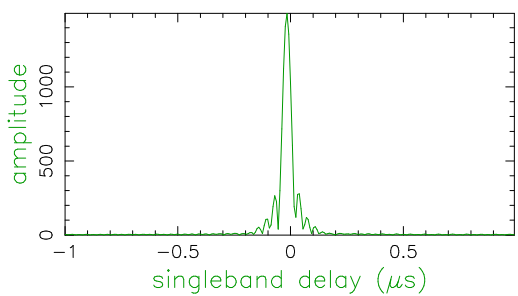
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

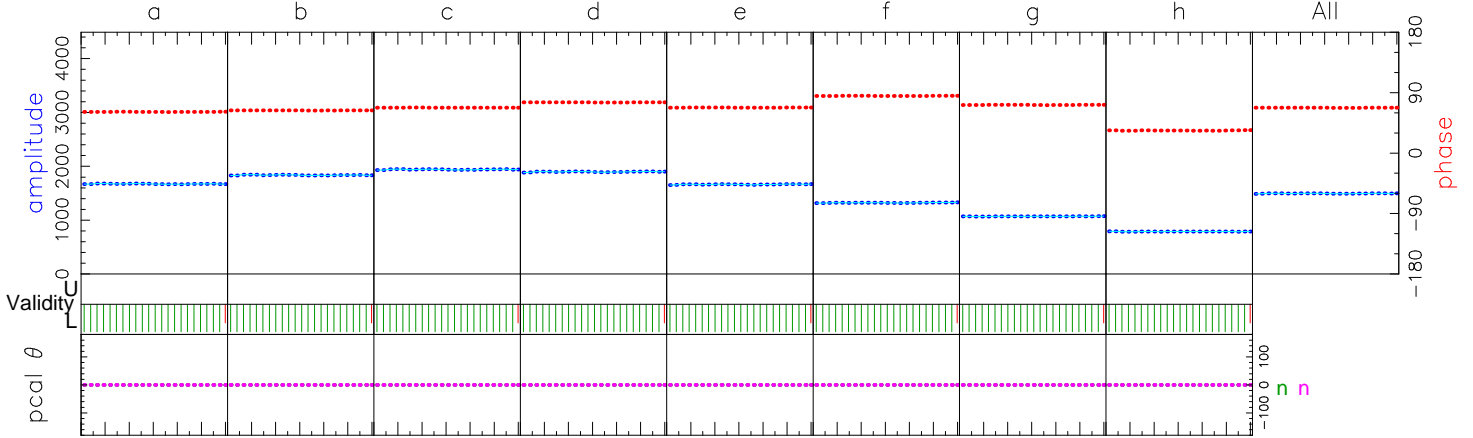
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 7
 SNR 54920.5
 Int time 359.929
 Amp 1497.074
 Phase 247.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.016539
 MBD -0.000748
 Fringe rate (Hz) 0.000004
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110104
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

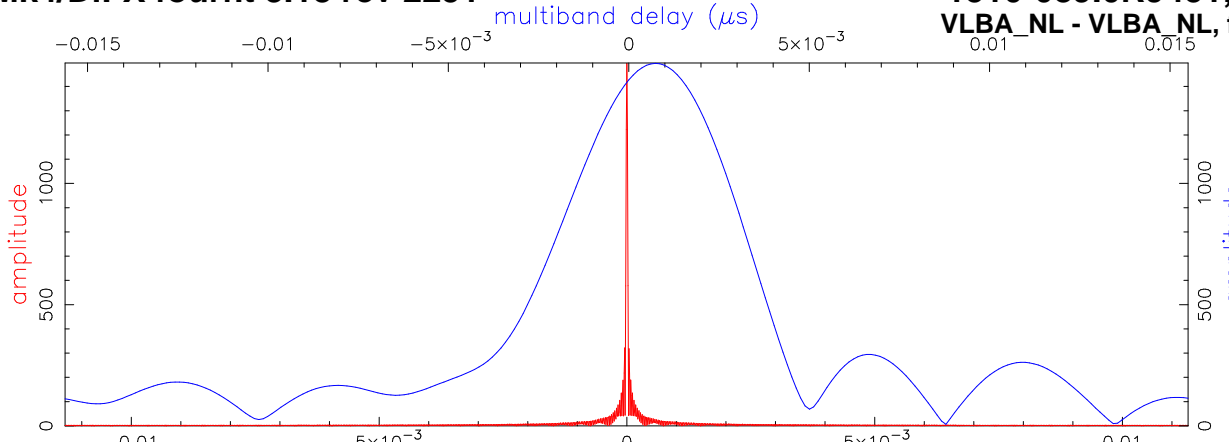


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
									Ampl.	1524.4
									Sbd box	126.9
									APs used	
									PC freqs	
									PC phase	
									ManI PC	
									PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) -3.19983125000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -7.48313E-04 +/- 4.0E-08
 Sband delay (usec) -1.65385000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.65385E-02 +/- 3.1E-07
 Phase delay (usec) 2.17790926432E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 2.17791E-06 +/- 6.7E-11
 Delay rate (us/s) 4.60562452730E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 4.60562E-11 +/- 3.2E-13
 Total phase (deg) 247.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 247.5 +/- 0.0

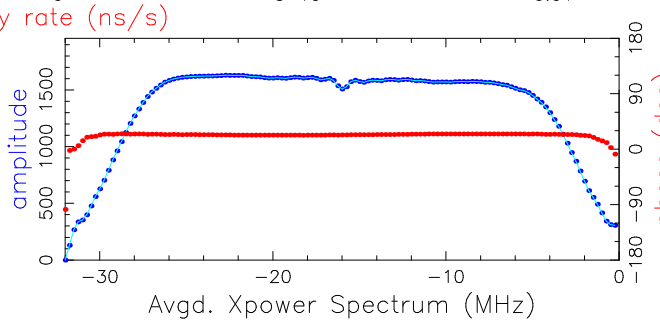
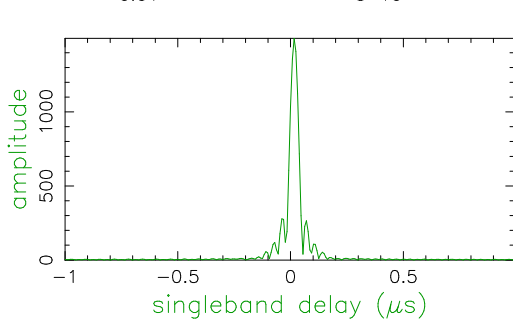
RMS Theor. Amplitude 1497.074 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X32) 1488.339 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 16.3 0.0 Inc. seg. avg. 1495.498 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 26.3 0.0 Inc. frq. avg. 1524.449 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 120.9 el 17.9 pa -40.1 n: az 120.9 el 17.9 pa -40.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nn..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nn.W.59.0RJ451



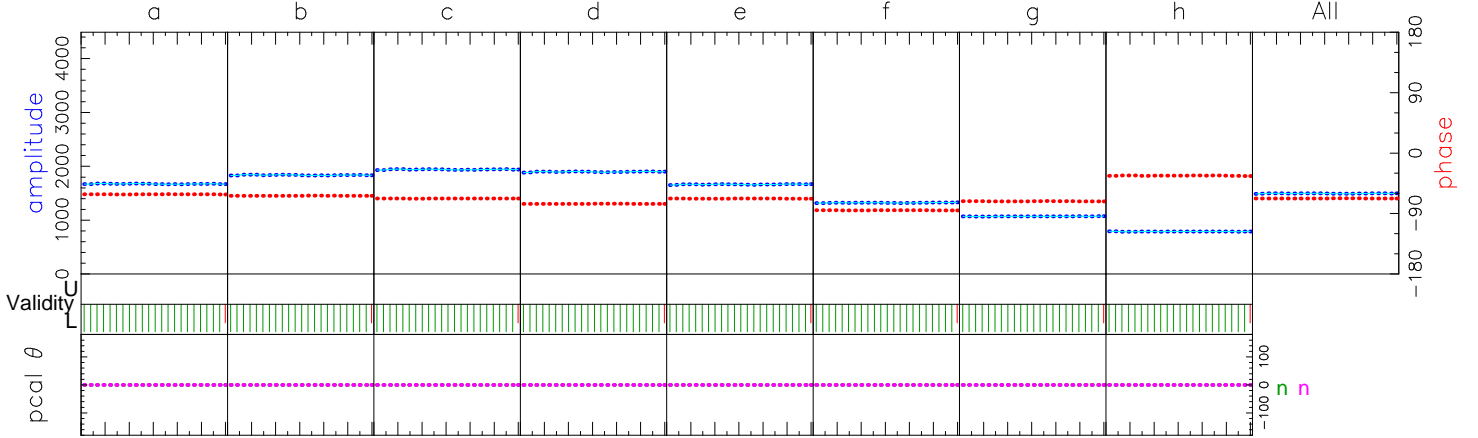
Fringe quality 7

SNR 54920.5
Int time 359.929
Amp 1497.074
Phase -247.5
PFD 0.0e+00
Delays (us)
SBD 0.016539
MBD 0.000748
Fringe rate (Hz)
-0.000004
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

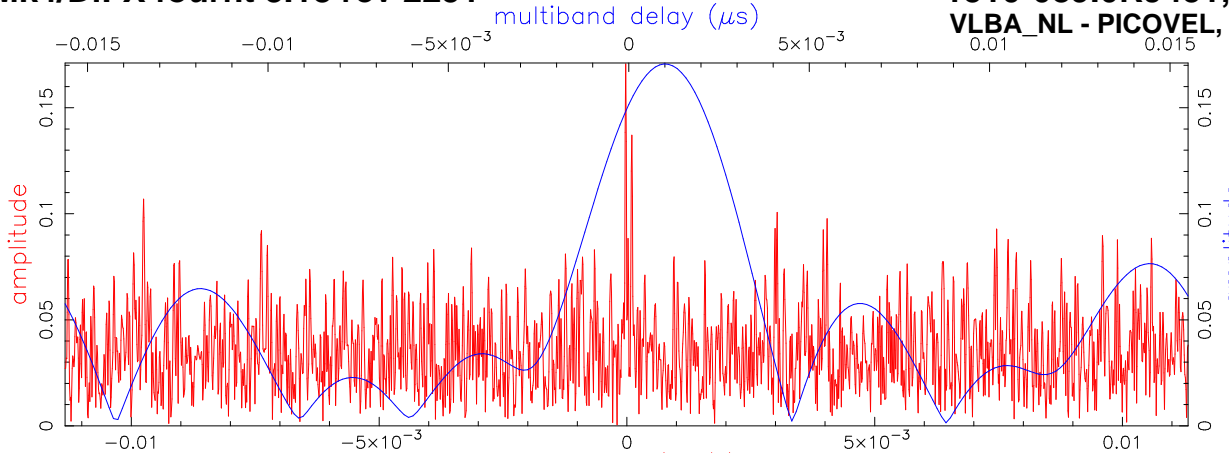


Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110106
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

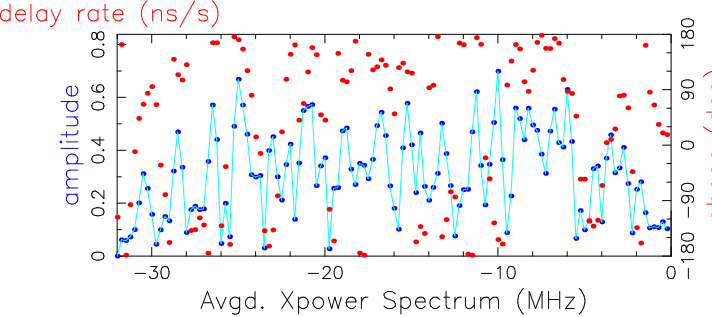
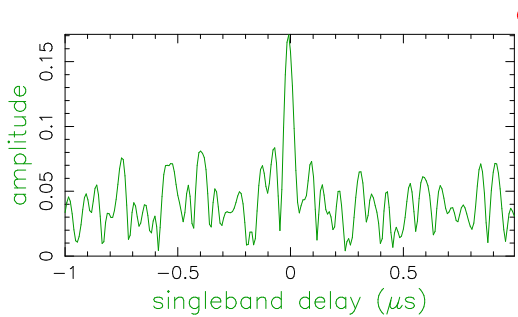
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)		3.19983125000E-02							7.48313E-04	+/- 4.0E-08
Sband delay (usec)		1.65385000000E-02							1.65385E-02	+/- 3.1E-07
Phase delay (usec)		-2.17790926442E-06							-2.17791E-06	+/- 6.7E-11
Delay rate (us/s)		-4.60562452730E-11							-4.60562E-11	+/- 3.2E-13
Total phase (deg)			-247.5						-247.5	+/- 0.0
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
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								
PCal period (AP's)	5	5								
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
n: az 120.9 el 17.9 pa -40.1										
n: az 120.9 el 17.9 pa -40.1										
u,v (fr/asec)	0.000	0.000								
simultaneous interpolator										

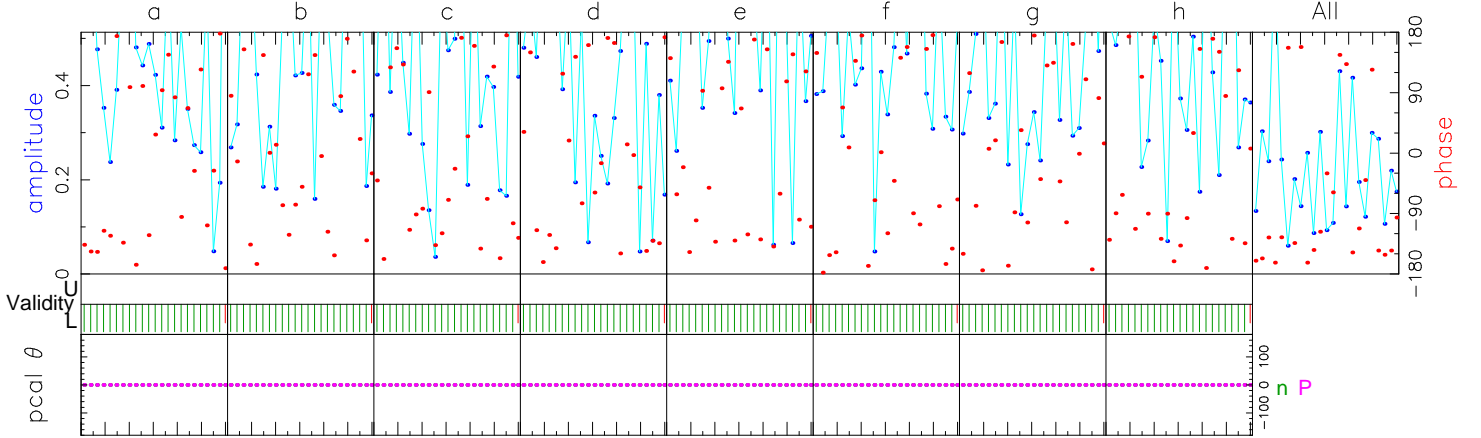


Fringe quality 0
SNR 6.3
Int time 358.654
Amp 0.171
Phase -153.8
PFD 4.8e-02
Delays (us)
SBD -0.009488
MBD 0.000981
Fringe rate (Hz)
-0.002050
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



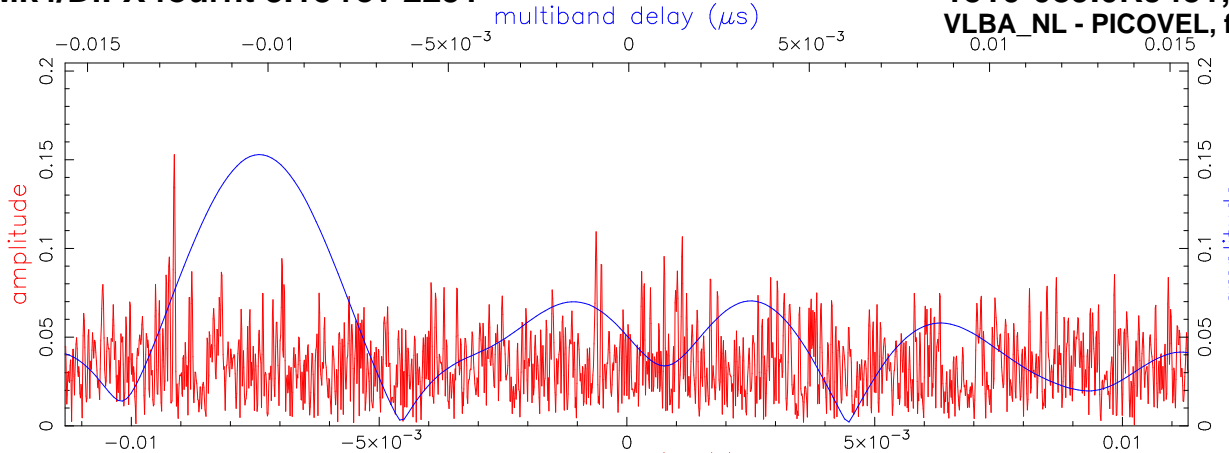
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110058
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

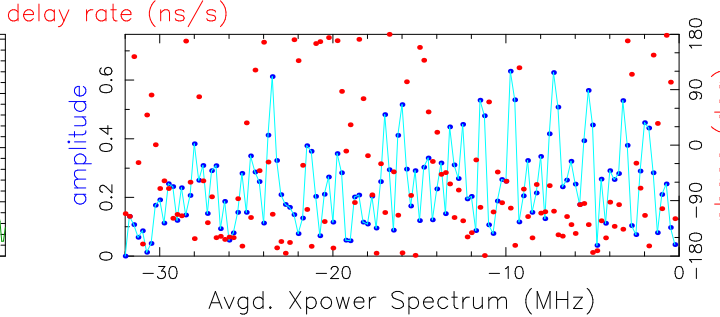
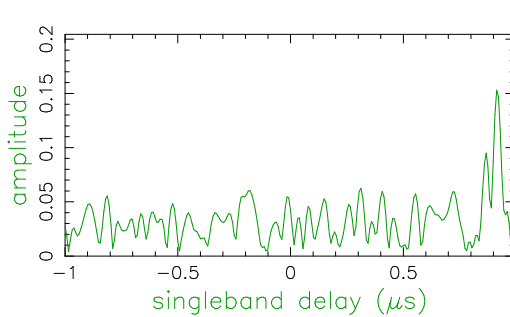


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-168.9	-157.1	-141.8	-128.8	-157.1	-148.3	175.6	-150.8	Phase	-153.8
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.3	Ampl.	0.2
	153.2	100.0	246.5	66.4	2.7	129.8	215.5	128.2	Sbd box	127.8
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	
									Tracks	
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.18181972894E+03		Apriori delay (usec)		-5.18182071027E+03		Resid mbdelay (usec)		9.81333E-04	+/- 3.5E-04
Sband delay (usec)	-5.18183019827E+03		Apriori clock (usec)		2.2179024E+01		Resid sbdelay (usec)		-9.48800E-03	+/- 2.7E-03
Phase delay (usec)	-5.18182071523E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-4.95836E-06	+/- 5.9E-07
Delay rate (us/s)	1.60810729952E+00		Apriori rate (us/s)		1.60810732333E+00		Resid rate (us/s)		-2.38026E-08	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.65355034660E-05		Resid phase (deg)		-153.8	+/- 18.3
RMS	53.8	43.8	Search (2048X32)	0.170	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
ph/seg (deg)	89.2	76.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.016 0.016
amp/seg (%)	18.2	25.9	Inc. seg. avg.	0.178	Bits/sample: 2x2		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011 0.011
amp/frq (%)	38.7	45.1	Inc. frq. avg.	0.160	Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite		ion window (TEC)	0.00 0.00

n: az 120.9 el 17.9 pa -40.1 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -9289.788 203.415 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nP.W.16.0RJ451

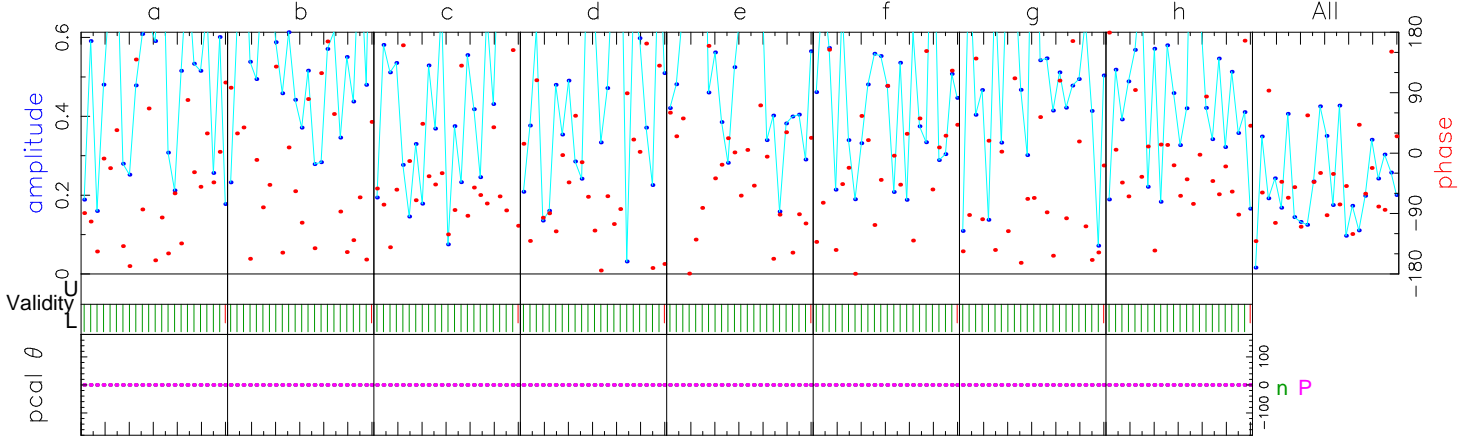


Fringe quality 0
 SNR 5.6
 Int time 358.654
 Amp 0.205
 Phase -60.2
 PFD 8.7e-01
 Delays (us)
 SBD 0.916345
 MBD -0.010226
 Fringe rate (Hz)
 -0.787051
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110100
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



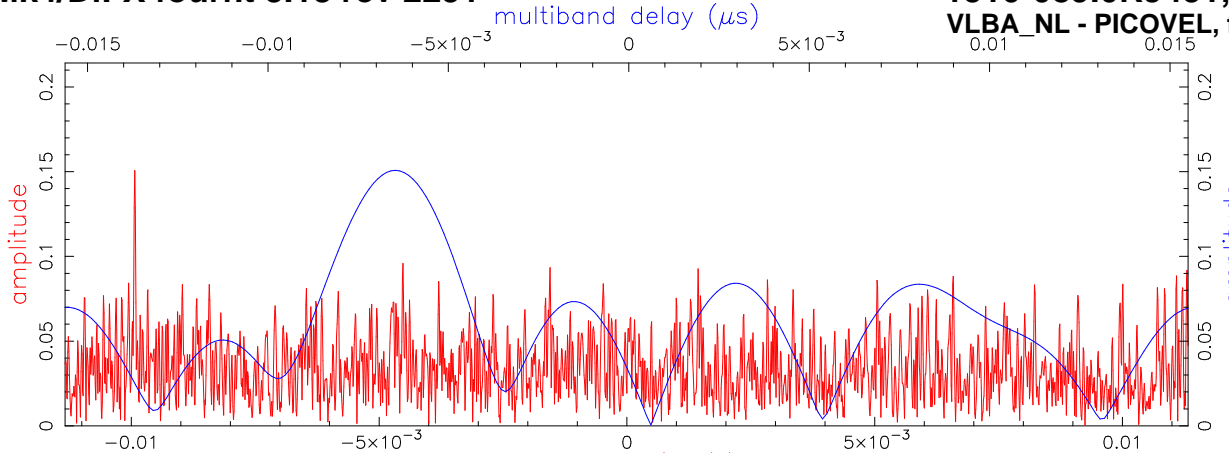
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

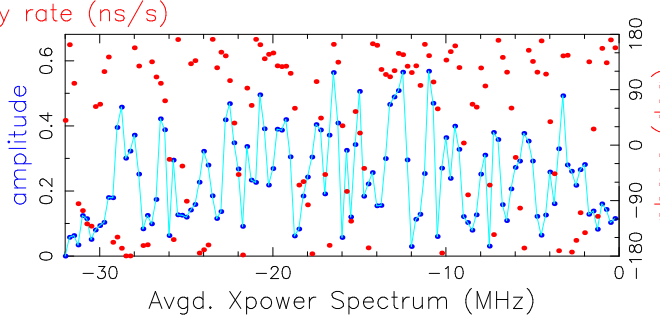
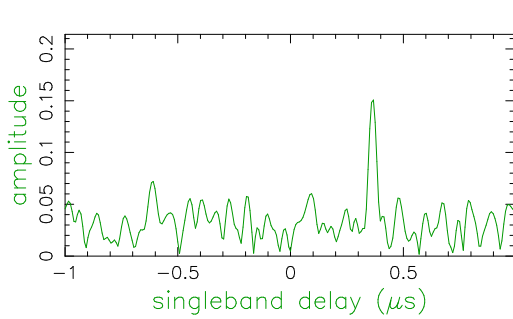


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)	-5.18089343657E+03	-5.18090436477E+03	-5.18182071221E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03		
Sband delay (usec)	-5.18090436477E+03	-5.18090436477E+03	-5.18182071221E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03		
Phase delay (usec)	-5.18182071221E+03	-5.18182071221E+03	-5.18182071221E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03	-5.18182071027E+03		
Delay rate (us/s)	1.60809818644E+00	1.60809818644E+00	1.60809818644E+00	1.60810732333E+00	1.60810732333E+00	1.60810732333E+00	1.60810732333E+00	1.60810732333E+00		
Total phase (deg)			-53.9							
Apriori delay (usec)				0.150	0.150	0.150	0.150	0.150		
Apriori clock (usec)				0.150	0.150	0.150	0.150	0.150		
Apriori clockrate (us/s)				4.7999999E-07	4.7999999E-07	4.7999999E-07	4.7999999E-07	4.7999999E-07		
Apriori rate (us/s)				1.60810732333E+00	1.60810732333E+00	1.60810732333E+00	1.60810732333E+00	1.60810732333E+00		
Apriori accel (us/s/s)				2.65355034660E-05	2.65355034660E-05	2.65355034660E-05	2.65355034660E-05	2.65355034660E-05		
Resid mbdelay (usec)				-1.02263E-02	-1.02263E-02	-1.02263E-02	-1.02263E-02	-1.02263E-02		+/- 3.8E-04
Resid sbdelay (usec)				9.16345E-01	9.16345E-01	9.16345E-01	9.16345E-01	9.16345E-01		+/- 3.1E-03
Resid phdelay (usec)				-1.93989E-06	-1.93989E-06	-1.93989E-06	-1.93989E-06	-1.93989E-06		+/- 6.5E-07
Resid rate (us/s)				-9.13688E-06	-9.13688E-06	-9.13688E-06	-9.13688E-06	-9.13688E-06		+/- 3.2E-09
Resid phase (deg)				-60.2	-60.2	-60.2	-60.2	-60.2		+/- 20.3
Pcal mode:	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL		
Pcal rate:	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
PC period (AP's)	5	5	5	5	5	5	5	5		
sb window (us)	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000	-1.000		1.000
mb window (us)	-0.016	-0.016	-0.016	-0.016	-0.016	-0.016	-0.016	-0.016		0.016
dr window (ns/s)	-0.011	-0.011	-0.011	-0.011	-0.011	-0.011	-0.011	-0.011		0.011
ion window (TEC)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
nlags:	128	128	128	128	128	128	128	128		
t_cohere	infinite	infinite	infinite	infinite	infinite	infinite	infinite	infinite		

n: az 120.9 el 17.9 pa -40.1 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -9289.788 203.415 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nP.W.33.0RJ451

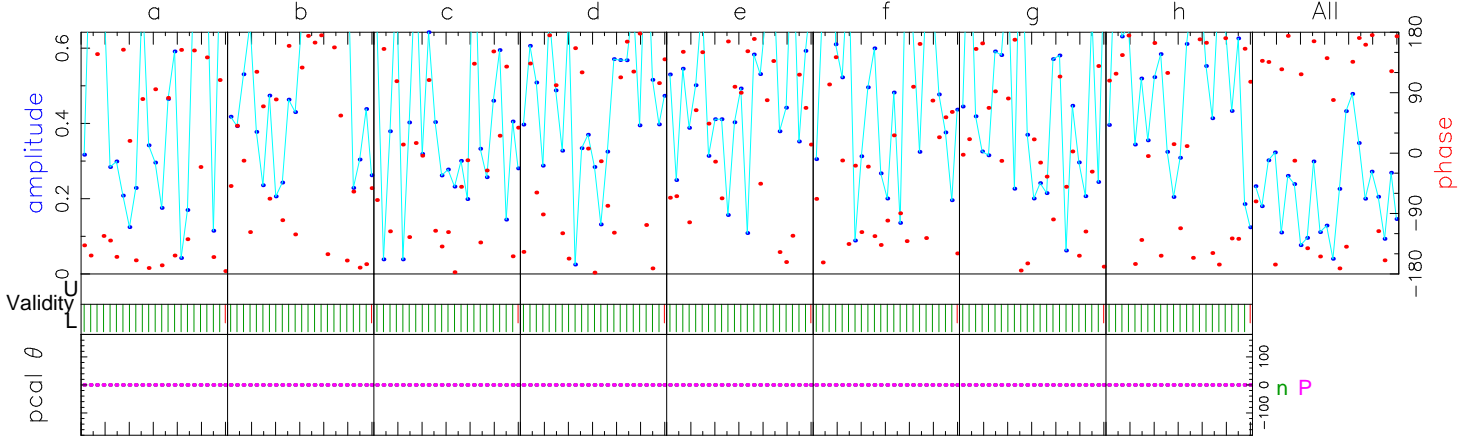


Fringe quality 0
 SNR 5.6
 Int time 358.654
 Amp 0.214
 Phase -187.2
 PFD 9.3e-01
 Delays (us)
 SBD 0.364049
 MBD -0.006412
 Fringe rate (Hz)
 -0.854924
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110102
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



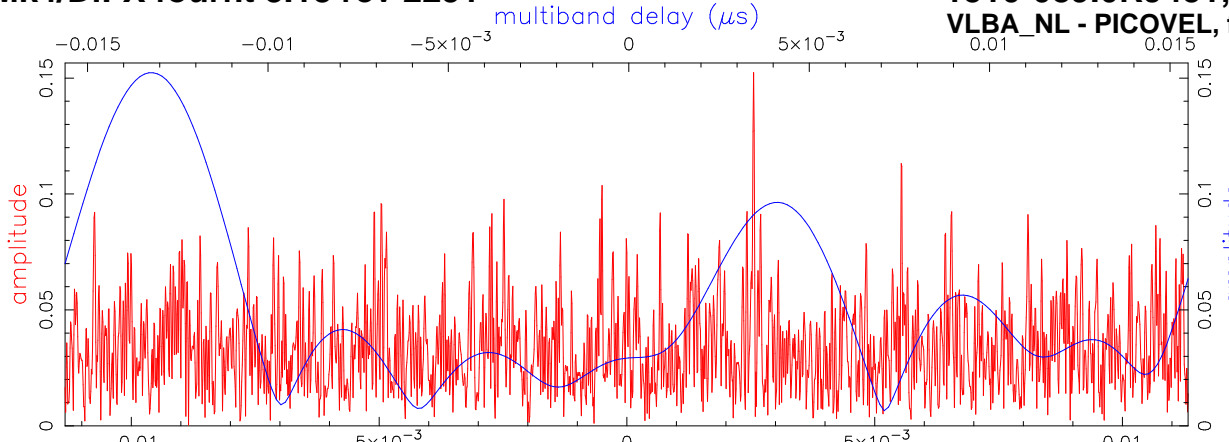
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

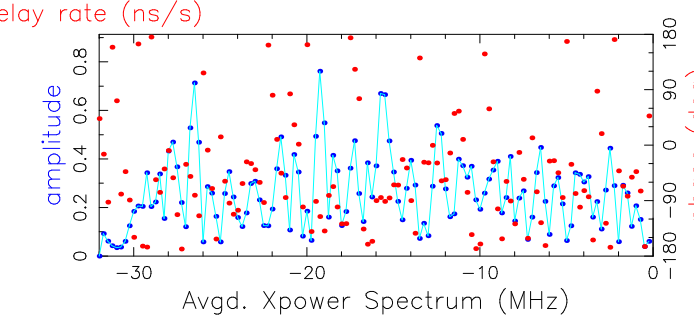
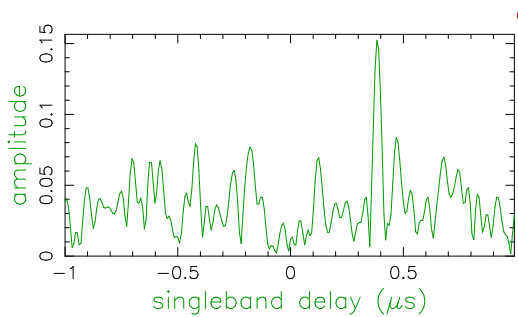


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)	-5.18145212185E+03	-5.18145666077E+03	-5.1818207470E+03	1.60809739851E+00	-5.18182071027E+03	2.2179024E+01	4.7999999E-07	1.60810732333E+00	-6.41158E-03	+/- 3.9E-04
Sband delay (usec)	-174.9	168.2	-178.2	134.7	-177.1	80.7	179.2		3.64049E-01	+/- 3.1E-03
Phase delay (usec)	0.3	0.4	0.1	0.3	0.1	0.1	0.4		5.57094E-06	+/- 6.6E-07
Delay rate (us/s)	176.9	243.4	228.8	73.1	180.8	225.3	176.9		-9.92482E-06	+/- 3.2E-09
Total phase (deg)	0.3	0.4	0.1	0.3	0.1	0.1	0.4		-187.2	+/- 20.5
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	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	PC period (AP's) 5, 5	
Pcal rate:	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	sb window (us)	-1.000 1.000
Bits/sample:	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2	mb window (us)	-0.016 0.016
Sample rate(MSamp/s):	64	64	64	64	64	64	64	64	dr window (ns/s)	-0.011 0.011
Data rate(Mb/s):	1024	1024	1024	1024	1024	1024	1024	1024	ion window (TEC)	0.00 0.00
nlags:	128	128	128	128	128	128	128	128		
t_cohere:	infinite	infinite	infinite	infinite	infinite	infinite	infinite	infinite		

n: az 120.9 el 17.9 pa -40.1 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -9289.788 203.415 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nP.W.47.0RJ451

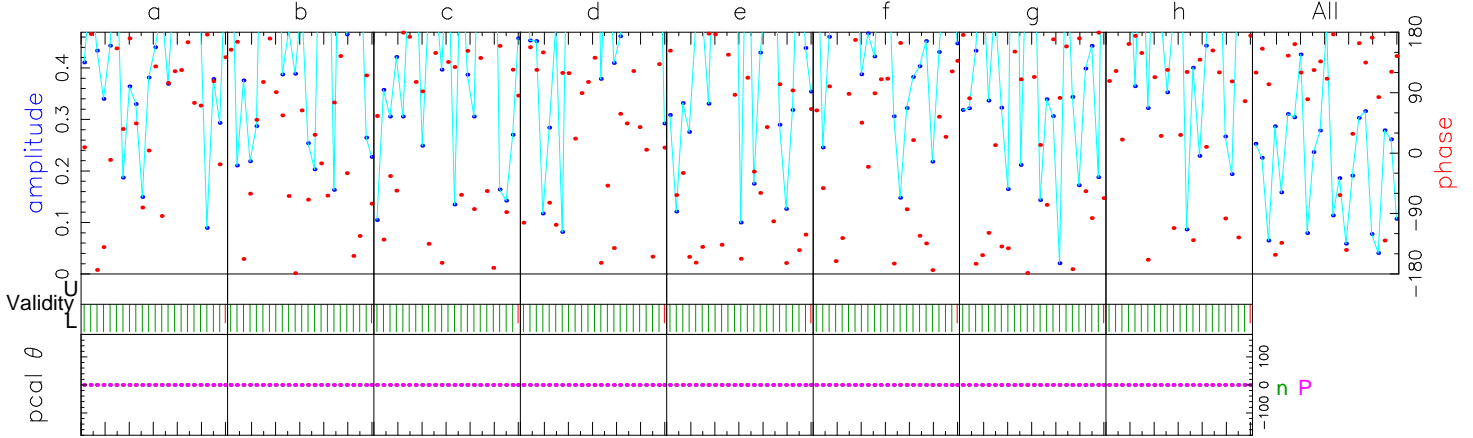


Fringe quality 0
SNR 5.6
Int time 358.654
Amp 0.157
Phase -35.4
PFD 9.1e-01
Delays (us)
SBD 0.384909
MBD -0.013282
Fringe rate (Hz)
0.219867
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110105
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

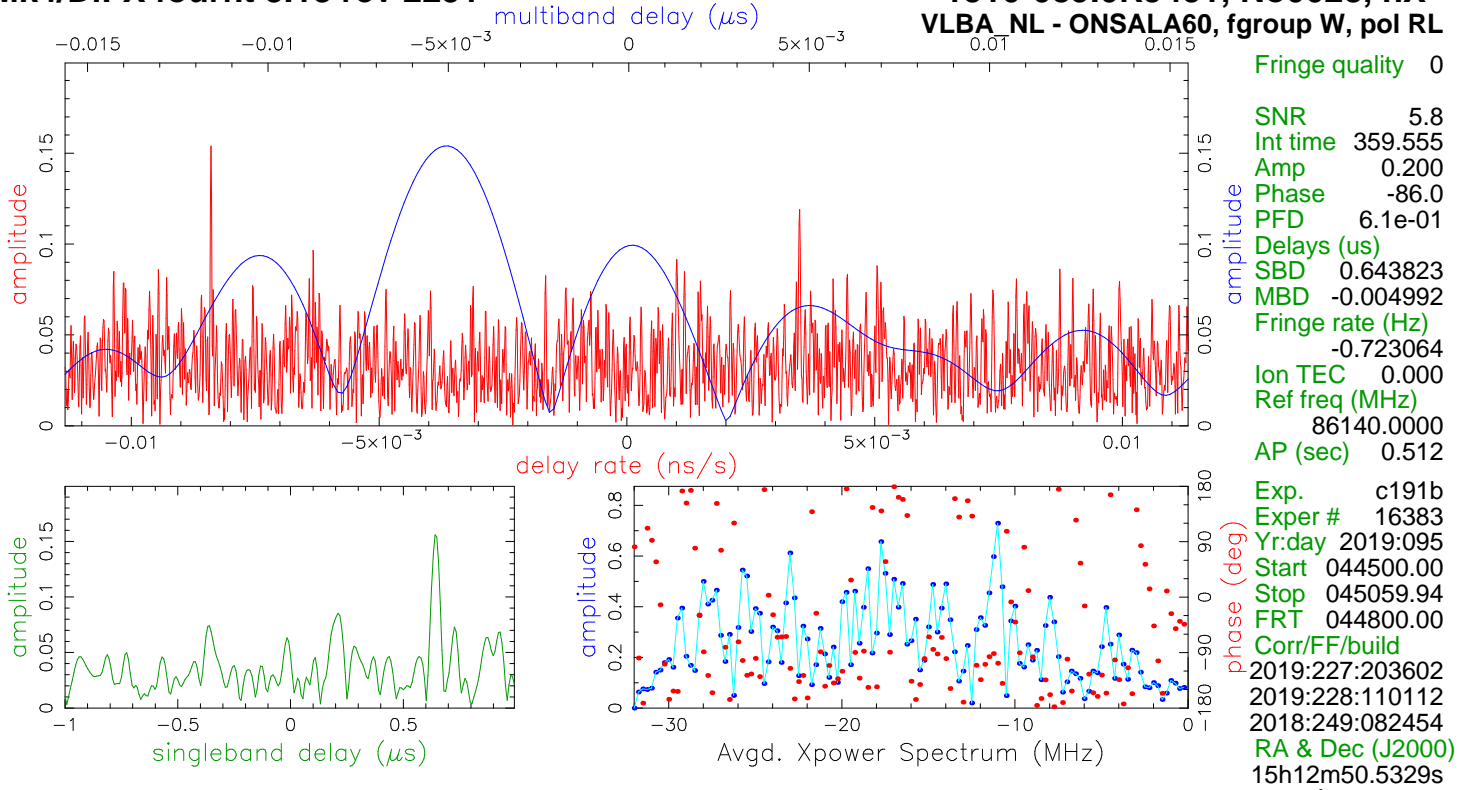
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



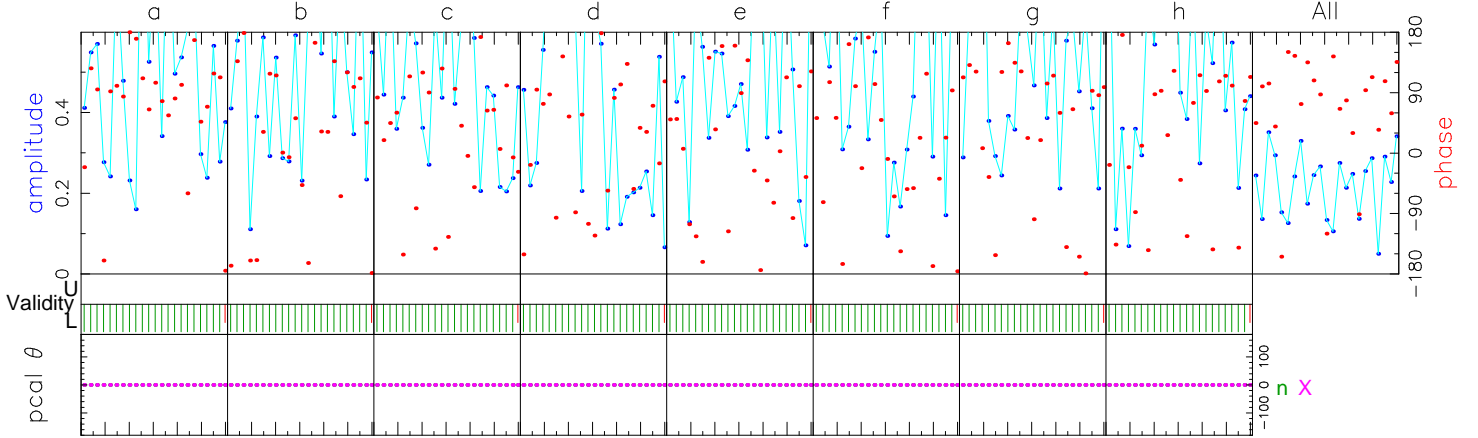
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	-5.18142774177E+03		Apriori delay (usec)	-5.18182071027E+03	Resid mbdelay (usec)	-1.32815E-02	+/-	3.9E-04		
Sband delay (usec)	-5.18143580127E+03		Apriori clock (usec)	2.2179024E+01	Resid sbdelay (usec)	3.84909E-01	+/-	3.1E-03		
Phase delay (usec)	-5.18182070561E+03		Apriori clockrate (us/s)	4.7999999E-07	Resid phdelay (usec)	4.66450E-06	+/-	6.6E-07		
Delay rate (us/s)	1.60810987577E+00		Apriori rate (us/s)	1.60810732333E+00	Resid rate (us/s)	2.55244E-06	+/-	3.2E-09		
Total phase (deg)		-29.1	Apriori accel (us/s/s)	2.65355034660E-05	Resid phase (deg)	-35.4	+/-	20.4		

ph/seg (deg) 57.8 49.0 Search (2048X32) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 87.5 85.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.2 28.9 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 31.9 50.4 Inc. frq. avg. 0.158 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

n: az 120.9 el 17.9 pa -40.1 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -9289.788 203.415 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nP.W.72.0RJ451

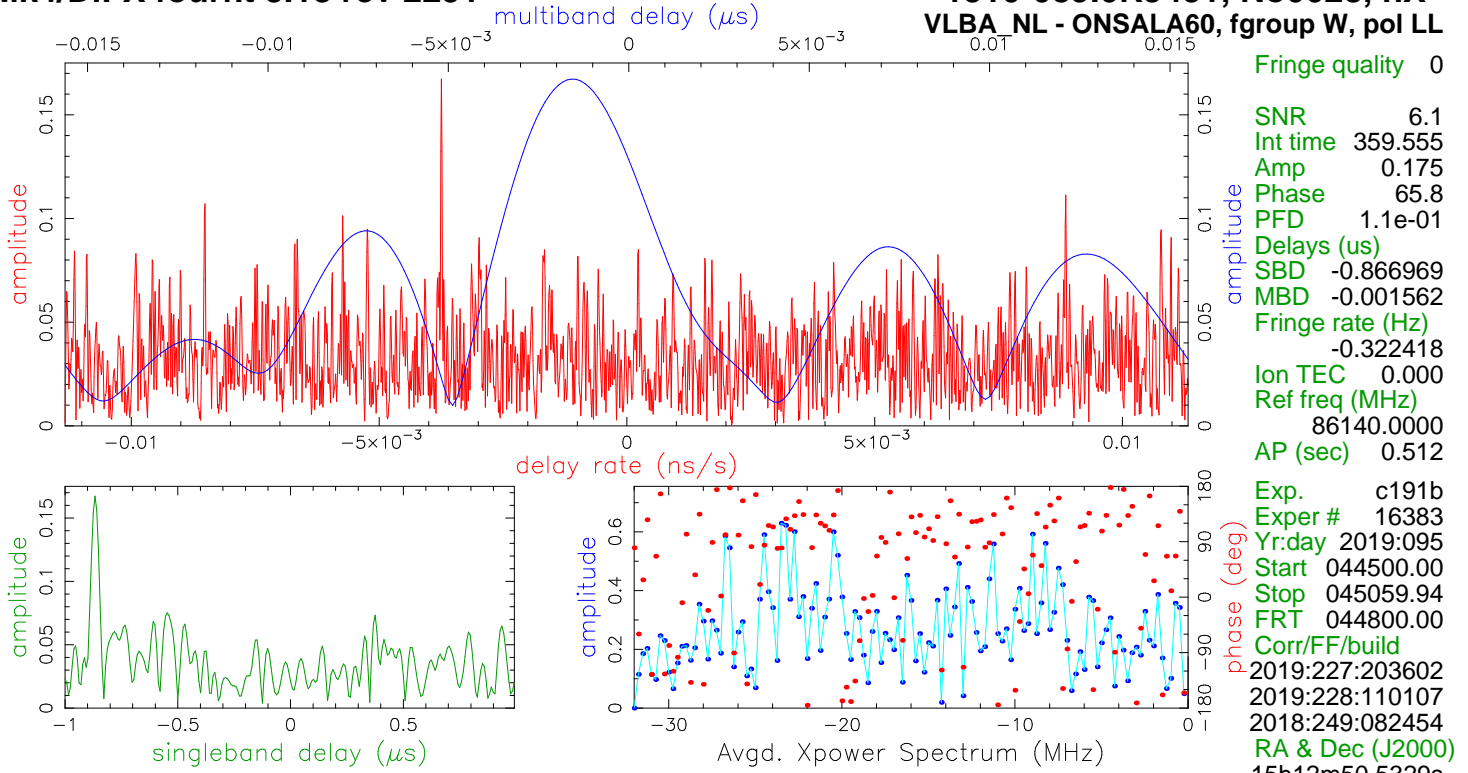


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
99.8	114.6	55.6	84.1	134.6	55.5	103.4	99.5	99.5	Phase	94.0
0.4	0.2	0.2	0.0	0.1	0.2	0.3	0.3	0.3	Ampl.	0.2
211.6	153.5	113.8	7.8	70.9	139.8	114.0	156.7	156.7	Sbd box	211.4
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.13548558353E+03		Apriori delay (usec)	2.13483432563E+03		Resid mbdelay (usec)	-4.99210E-03	+/-	3.8E-04	
Sband delay (usec)	2.13547814863E+03		Apriori clock (usec)	-3.0953805E+00		Resid sbdelay (usec)	6.43823E-01	+/-	3.0E-03	
Phase delay (usec)	2.13483432866E+03		Apriori clockrate (us/s)	-1.1400001E-07		Resid phdelay (usec)	3.03131E-06	+/-	6.4E-07	
Delay rate (us/s)	1.55637555849E+00		Apriori rate (us/s)	1.55638395254E+00		Resid rate (us/s)	-8.39405E-06	+/-	3.1E-09	
Total phase (deg)		-154.6	Apriori accel (us/s/s)	-8.19306524952E-06		Resid phase (deg)	-86.0	+/-	19.8	

ph/seg (deg) 63.8 47.6 Search (2048X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.3 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.7 28.0 Inc. seg. avg. 0.208 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.2 49.0 Inc. frq. avg. 0.188 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 120.9 el 17.9 pa -40.1 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -9040.324 -1452.829 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nX.W.106.0RJ451 simultaneous interpolator



Fringe quality 0

SNR 6.1

Int time 359.555

Amp 0.175

Phase 65.8

PFD 1.1e-01

Delays (us)

SBD -0.866969

MBD -0.001562

Fringe rate (Hz)

-0.322418

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110107

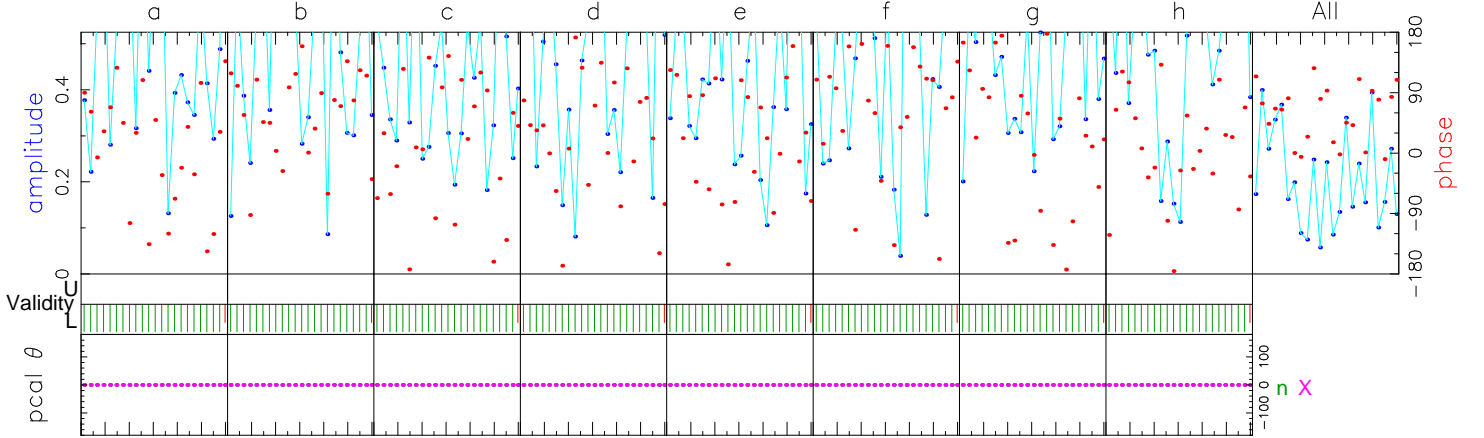
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	47.8	72.1	44.2	56.7	59.7	105.2	106.5	23.2	Phase	65.8
	0.2	0.3	0.1	0.2	0.1	0.3	0.1	0.3	Ampl.	0.2
	213.9	18.2	188.3	107.2	177.4	18.5	133.1	17.9	Sbd box	18.0
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.13395776332E+03		Apriori delay (usec)		2.13483432563E+03		Resid mbdelay (usec)		-1.56230E-03	+/- 3.5E-04
Sband delay (usec)	2.13396735663E+03		Apriori clock (usec)		-3.0953805E+00		Resid sbdelay (usec)		-8.66969E-01	+/- 2.8E-03
Phase delay (usec)	2.13483432775E+03		Apriori clockrate (us/s)		-1.1400001E-07		Resid phdelay (usec)		2.12203E-06	+/- 6.0E-07
Delay rate (us/s)	1.55638020959E+00		Apriori rate (us/s)		1.55638395254E+00		Resid rate (us/s)		-3.74296E-06	+/- 2.9E-09
Total phase (deg)	357.2		Apriori accel (us/s/s)		-8.19306524952E-06		Resid phase (deg)		65.8	+/- 18.7

RMS Theor. Amplitude 0.175 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 42.6 44.8 Search (2048X32) 0.166 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

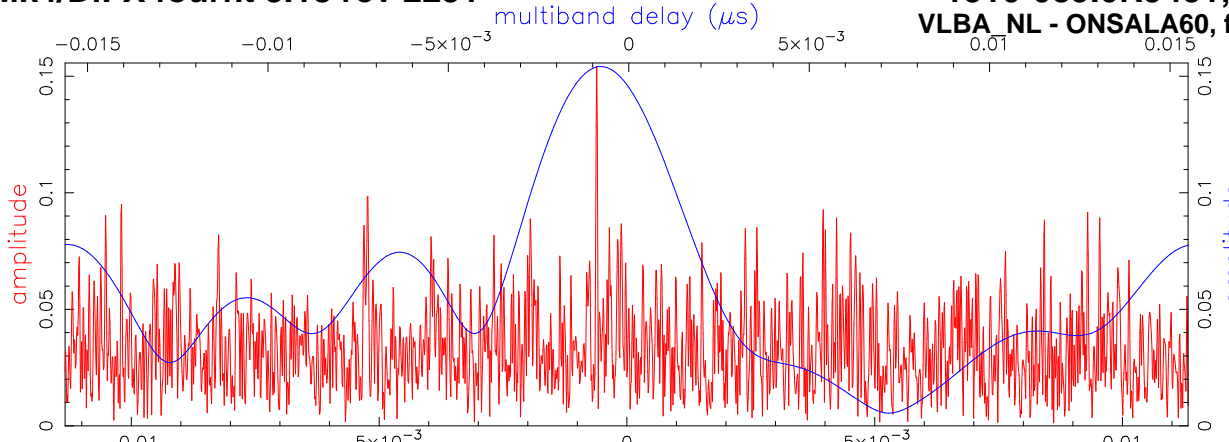
amp/seg (%) 67.0 78.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 31.6 26.4 Inc. seg. avg. 0.167 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

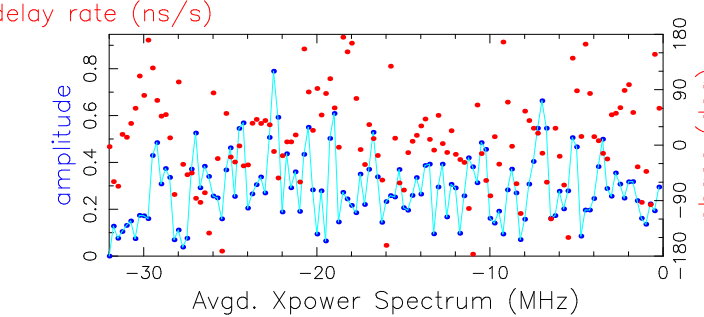
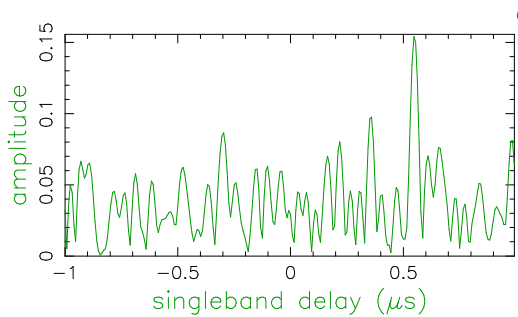
amp/frq (%) 55.4 46.1 Inc. frq. avg. 0.180 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 120.9 el 17.9 pa -40.1 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -9040.324 -1452.829 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nX.W.82.0RJ451

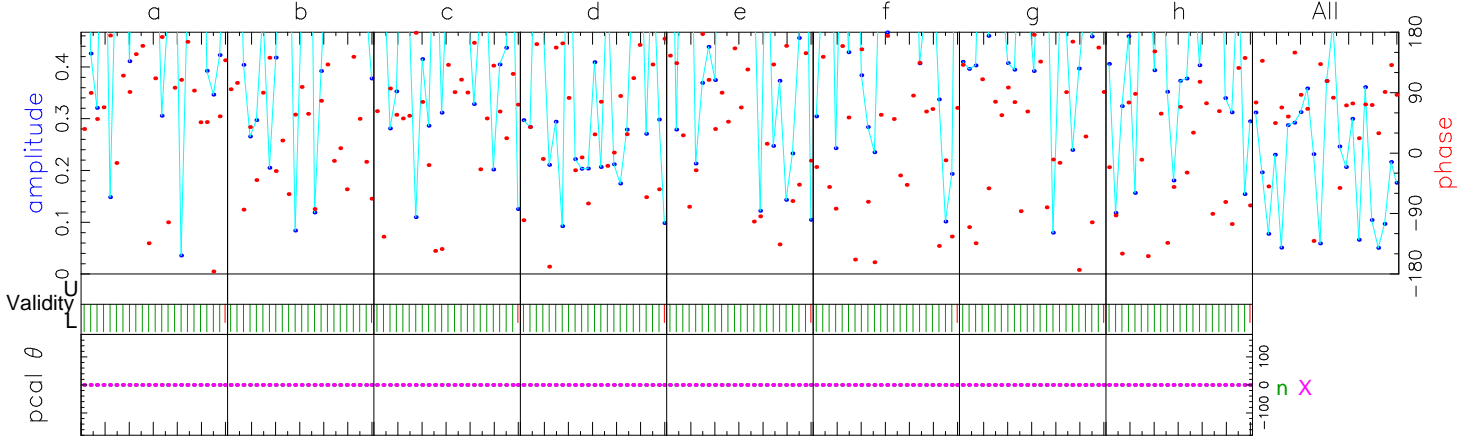


Fringe quality 0
 SNR 5.7
 Int time 359.555
 Amp 0.156
 Phase -277.0
 PFD 7.7e-01
 Delays (us)
 SBD 0.549434
 MBD -0.000818
 Fringe rate (Hz)
 -0.052373
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



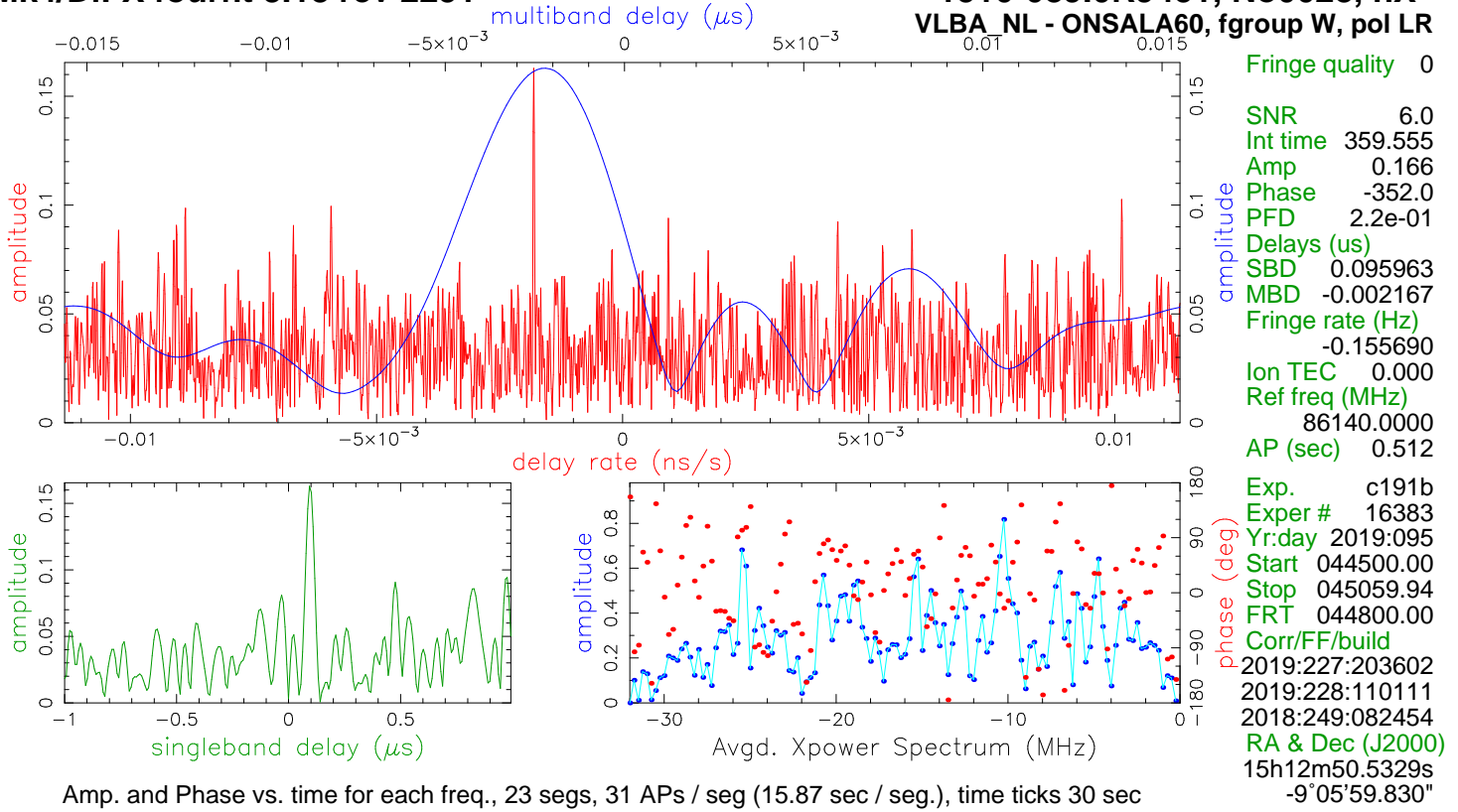
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110109
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

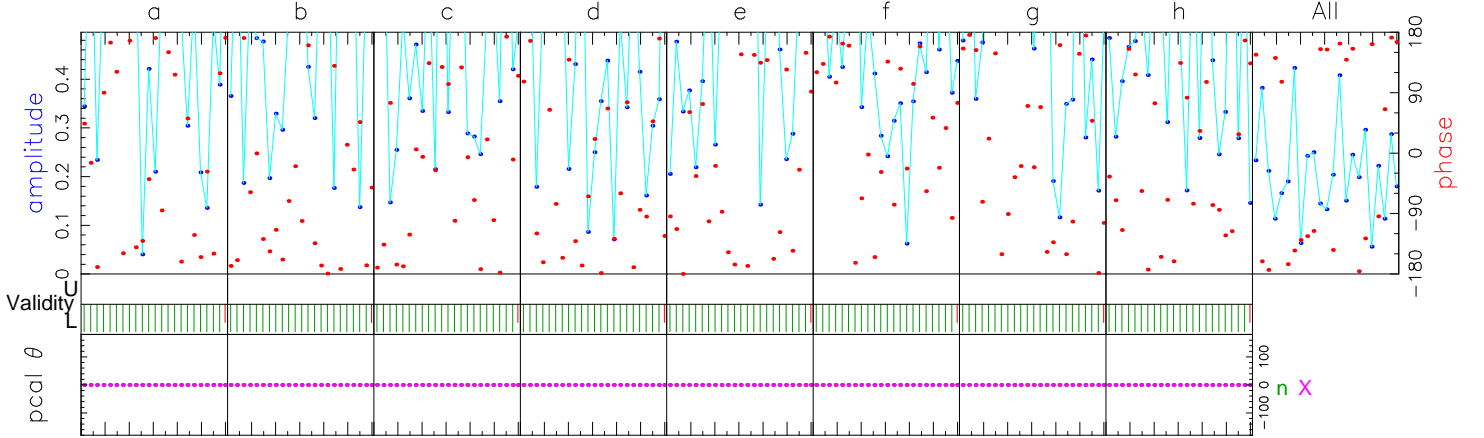


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)		2.13539600743E+03		Apriori delay (usec)	2.13483432563E+03		Resid mbdelay (usec)	-8.18199E-04		+/- 3.8E-04
Sband delay (usec)		2.13538375913E+03		Apriori clock (usec)	-3.0953805E+00		Resid sbdelay (usec)	5.49434E-01		+/- 3.0E-03
Phase delay (usec)		2.13483432830E+03		Apriori clockrate (us/s)	-1.1400001E-07		Resid phdelay (usec)	2.67801E-06		+/- 6.5E-07
Delay rate (us/s)		1.55638334455E+00		Apriori rate (us/s)	1.55638395254E+00		Resid rate (us/s)	-6.07995E-07		+/- 3.1E-09
Total phase (deg)		-345.5		Apriori accel (us/s/s)	-8.19306524952E-06		Resid phase (deg)	-277.0		+/- 20.1
RMS	59.4	48.2	Search (2048X32)	0.151		Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	87.9	84.1	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	28.3	28.4	Inc. seg. avg.	0.164		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	55.0	49.6	Inc. frq. avg.	0.152		Sample rate(MSamp/s): 64	ion window (TEC)	-0.011	0.011	
amp/frq (%)						Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite	0.00	0.00	

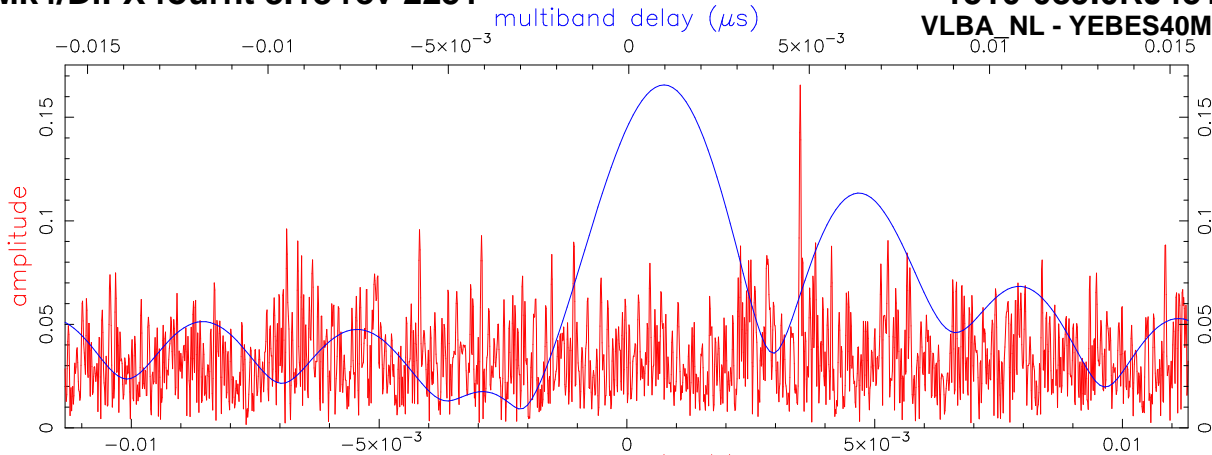
n: az 120.9 el 17.9 pa -40.1 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) -9040.324 -1452.829 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nX.W.90.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



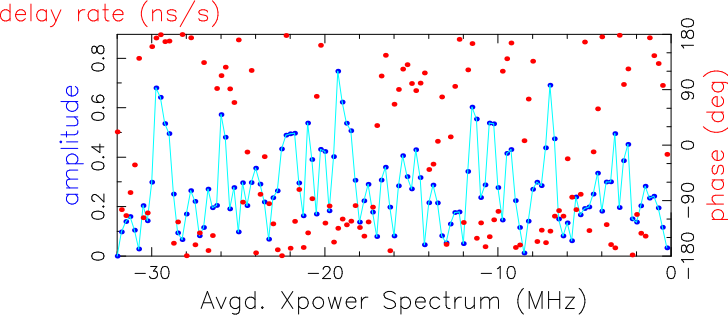
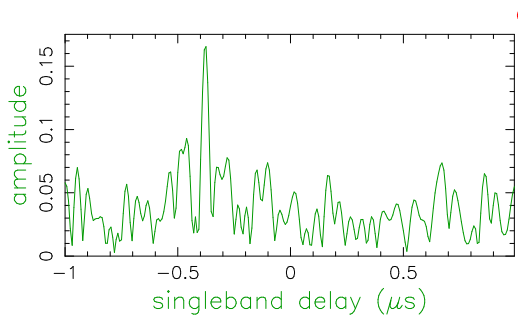
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
167.2	-127.3	178.4	-158.6	-173.7	127.9	-176.1	-149.6	-172.0	Phase	-172.0
0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.2	Ampl.	0.2
230.7	139.7	38.0	69.4	141.2	234.6	247.5	162.1	141.3	Sbd box	141.3
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.13492590895E+03		Apriori delay (usec)	2.13483432563E+03		Resid mbdelay (usec)	-2.16668E-03	+/-	3.6E-04	
Sband delay (usec)	2.13493028813E+03		Apriori clock (usec)	-3.0953805E+00		Resid sbdelay (usec)	9.59625E-02	+/-	2.9E-03	
Phase delay (usec)	2.13483432008E+03		Apriori clockrate (us/s)	-1.1400001E-07		Resid phdelay (usec)	-5.54502E-06	+/-	6.2E-07	
Delay rate (us/s)	1.55638214513E+00		Apriori rate (us/s)	1.55638395254E+00		Resid rate (us/s)	-1.80741E-06	+/-	3.0E-09	
Total phase (deg)		-60.5	Apriori accel (us/s/s)	-8.19306524952E-06		Resid phase (deg)	-352.0	+/-	19.1	
RMS	Theor.	Amplitude	0.166 +/- 0.028		Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	47.2	45.7	Search (2048X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	66.6	79.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016	
ph/frq (deg)	33.7	27.0	Inc. seg. avg.	0.164	Sample rate(MSamp/s): 64	nlags: 128 t_cohere infinite	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	32.9	47.1	Inc. frq. avg.	0.167	Data rate(Mb/s): 1024		ion window (TEC)	0.00	0.00	



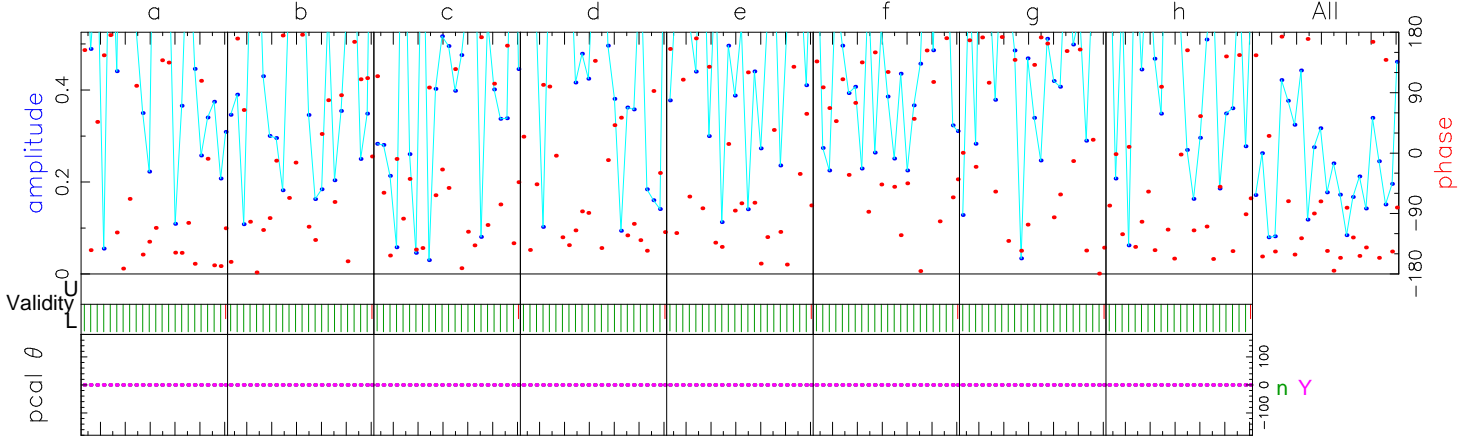
Fringe quality 0

SNR 6.1
Int time 345.612
Amp 0.175
Phase 217.6
PFD 1.7e-01
Delays (us)
SBD -0.378298
MBD 0.000906
Fringe rate (Hz) 0.301349
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044513.31
Stop 045059.42
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110112
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

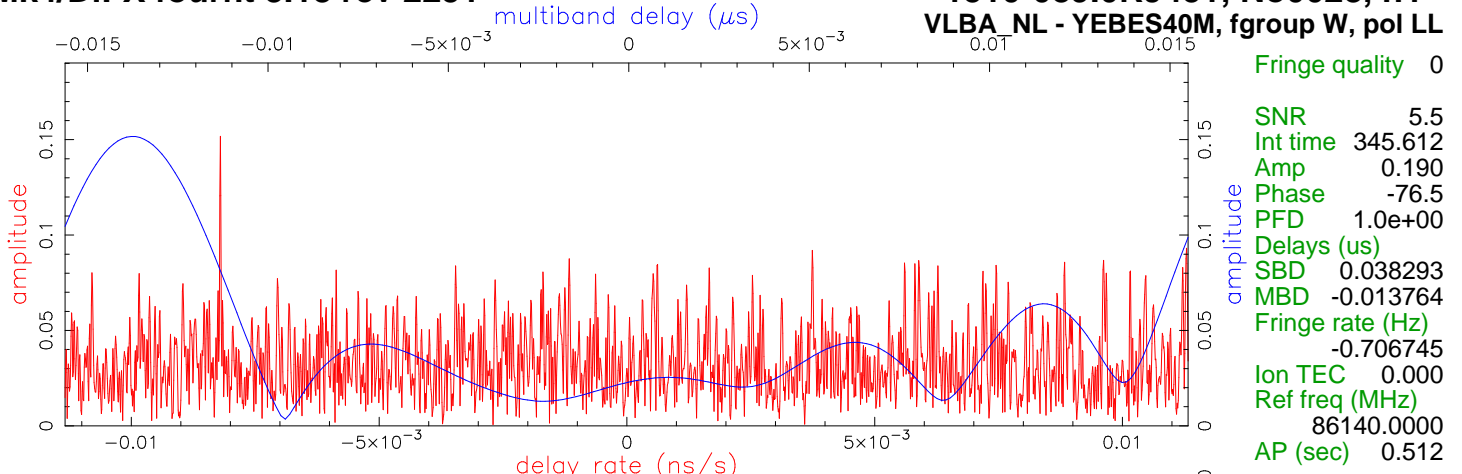


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-164.3	-154.5	-117.5	-114.9	-115.7	150.6	-178.0	-120.1	Phase	-142.4
	0.3	0.1	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	80.2	244.8	81.1	244.5	8.1	93.6	160.2	23.6	Sbd box	80.6
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.31783807218E+03		Apriori delay (usec)		-4.31746397775E+03		Resid mbdelay (usec)		9.05575E-04 +/- 3.6E-04	
Sband delay (usec)	-4.31784227575E+03		Apriori clock (usec)		1.4970985E+01		Resid sbdelay (usec)		-3.78298E-01 +/- 2.8E-03	
Phase delay (usec)	-4.31746398235E+03		Apriori clockrate (us/s)		1.4299998E-07		Resid phdelay (usec)		-4.59333E-06 +/- 6.1E-07	
Delay rate (us/s)	1.58134816303E+00		Apriori rate (us/s)		1.58134466467E+00		Resid rate (us/s)		3.49836E-06 +/- 3.1E-09	
Total phase (deg)	201.8		Apriori accel (us/s/s)		2.27436486722E-05		Resid phase (deg)		217.6 +/- 18.9	

ph/seg (deg) 54.7 45.4 Search (2048X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.4 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) 38.7 26.8 Inc. seg. avg. 0.184 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 40.5 46.7 Inc. frq. avg. 0.178 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 120.9 el 17.9 pa -40.1 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -9140.341 -158.203 ion window (TEC) 0.00 0.00
 simultaneous interpolator



Fringe quality 0

SNR 5.5

Int time 345.612

Amp 0.190

Phase -76.5

PFD 1.0e+00

Delays (us)

SBD 0.038293

MBD -0.013764

Fringe rate (Hz)

-0.706745

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044513.31

Stop 045059.42

FRT 044800.00

Corr/FF/build

2019:227:203602

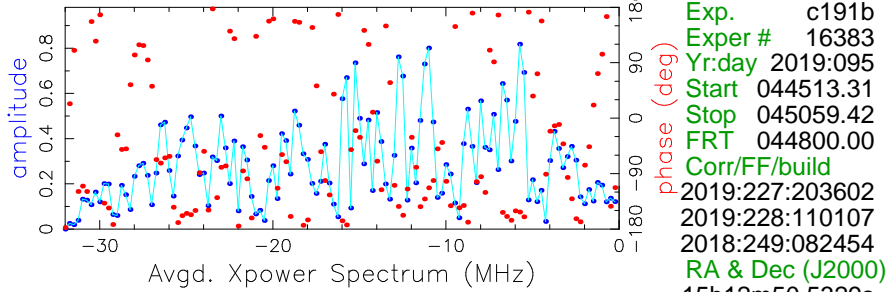
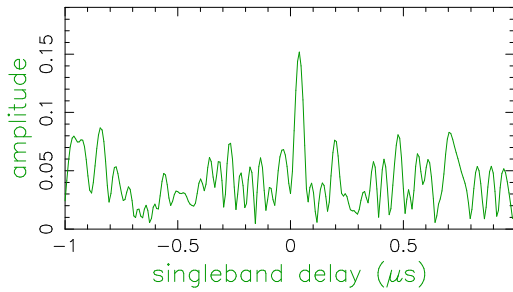
2019:228:110107

2018:249:082454

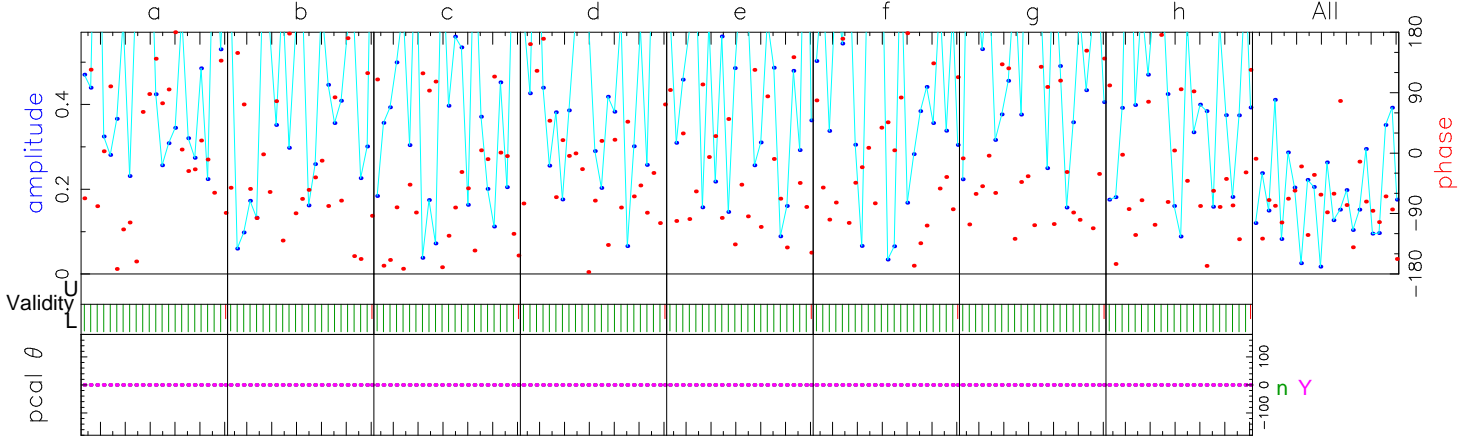
RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
	-40.6	-77.9	-112.7	-48.9	-64.9	-58.1	-84.6	-81.2	Phase	-76.5
	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
	43.4	155.7	131.8	237.6	8.6	45.2	133.6	236.1	Sbd box	133.9
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.31741524212E+03		Apriori delay (usec)		-4.31746397775E+03		Resid mbdelay (usec)		-1.37644E-02	+/- 4.0E-04
Sband delay (usec)	-4.31742568425E+03		Apriori clock (usec)		1.4970985E+01		Resid sbdelay (usec)		3.82935E-02	+/- 3.2E-03
Phase delay (usec)	-4.31746398022E+03		Apriori clockrate (us/s)		1.4299998E-07		Resid phdelay (usec)		-2.46535E-06	+/- 6.8E-07
Delay rate (us/s)	1.58133646007E+00		Apriori rate (us/s)		1.58134466467E+00		Resid rate (us/s)		-8.20460E-06	+/- 3.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.27436486722E-05		Resid phase (deg)		-76.5	+/- 21.0

RMS Theor. Amplitude 0.190 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 48.3 50.4 Search (2048X32) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

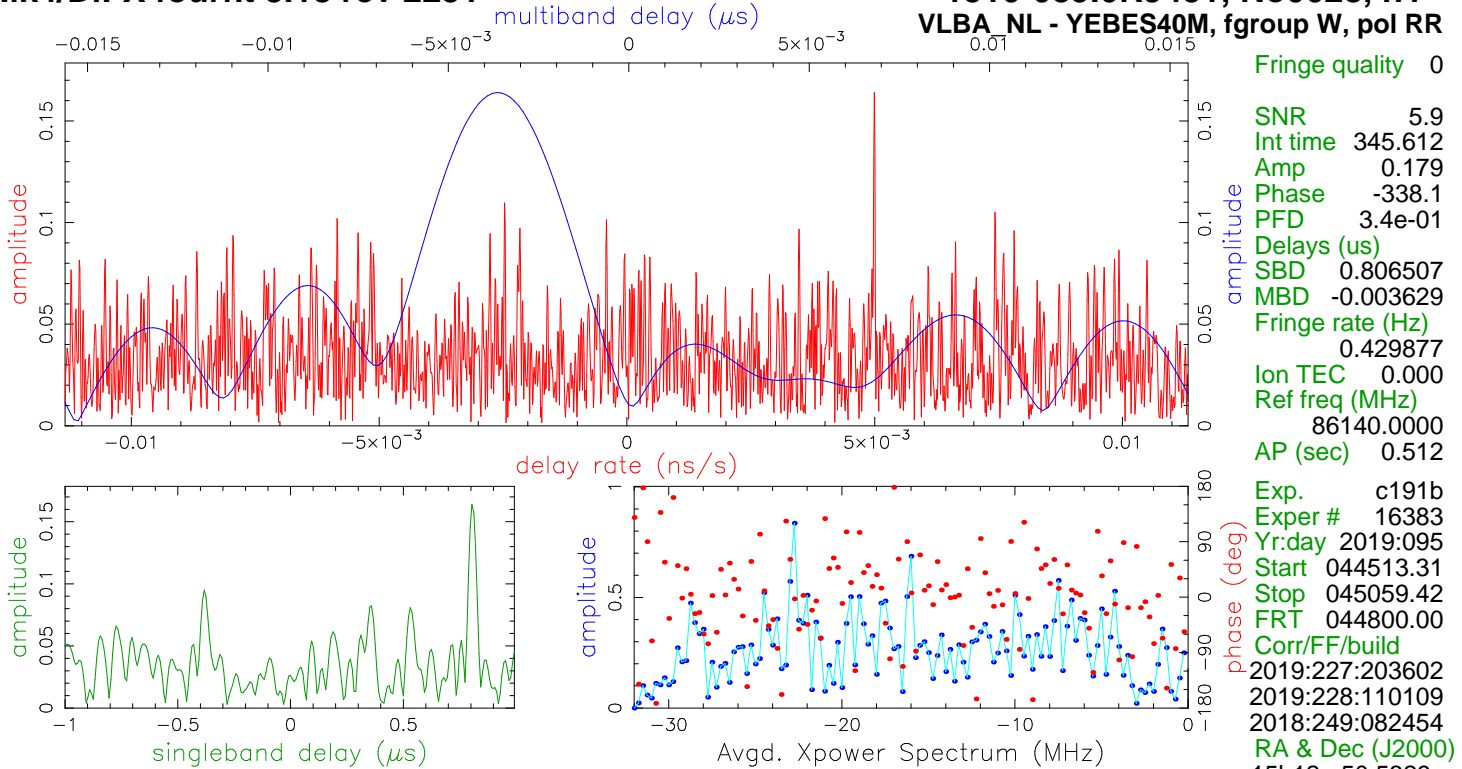
amp/seg (%) 74.2 87.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 25.6 29.7 Inc. seg. avg. 0.172 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 (%) 35.0 51.8 Inc. frq. avg. 0.178 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 120.9 el 17.9 pa -40.1 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -9140.341 -158.203 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nY.W.81.0RJ451



Fringe quality 0

SNR 5.9

Int time 345.612

Amp 0.179

Phase -338.1

PFD 3.4e-01

Delays (us)

SBD 0.806507

MBD -0.003629

Fringe rate (Hz) 0.429877

Ion TEC 0.000

Ref freq (MHz) 86140.000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044513.31

Stop 045059.42

FRT 044800.00

Corr/FF/build

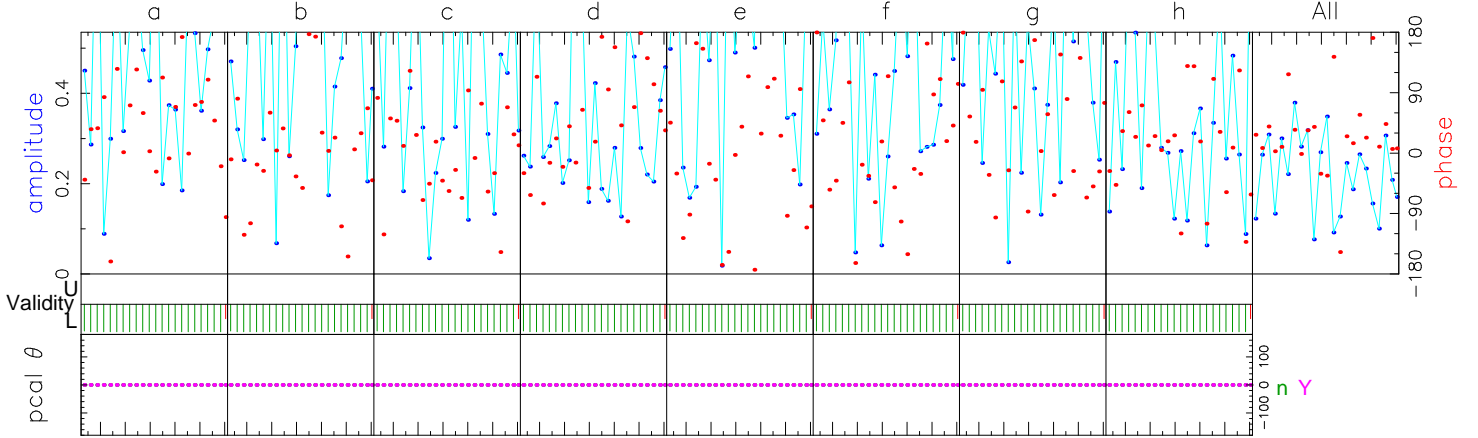
2019:227:203602

2019:228:110109

2018:249:082454

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

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
	43.7	-5.2	11.5	33.5	14.7	14.6	42.6	21.2	Phase	21.9
	0.3	0.2	0.3	0.1	0.1	0.2	0.1	0.2	Ampl.	0.2
	233.2	151.0	230.7	164.6	23.4	133.2	214.9	233.3	Sbd box	232.2
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.31665510655E+03		Apriori delay (usec)		-4.31746397775E+03		Resid mbdelay (usec)		-3.62880E-03	+/- 3.7E-04
Sband delay (usec)	-4.31665747075E+03		Apriori clock (usec)		1.4970985E+01		Resid sbdelay (usec)		8.06507E-01	+/- 2.9E-03
Phase delay (usec)	-4.31746397705E+03		Apriori clockrate (us/s)		1.4299998E-07		Resid phdelay (usec)		7.07598E-07	+/- 6.2E-07
Delay rate (us/s)	1.58134965511E+00		Apriori rate (us/s)		1.58134466467E+00		Resid rate (us/s)		4.99044E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		2.27436486722E-05		Resid phase (deg)		-338.1	+/- 19.4

RMS Theor. Amplitude 0.179 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 61.5 46.4 Search (2048X32) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

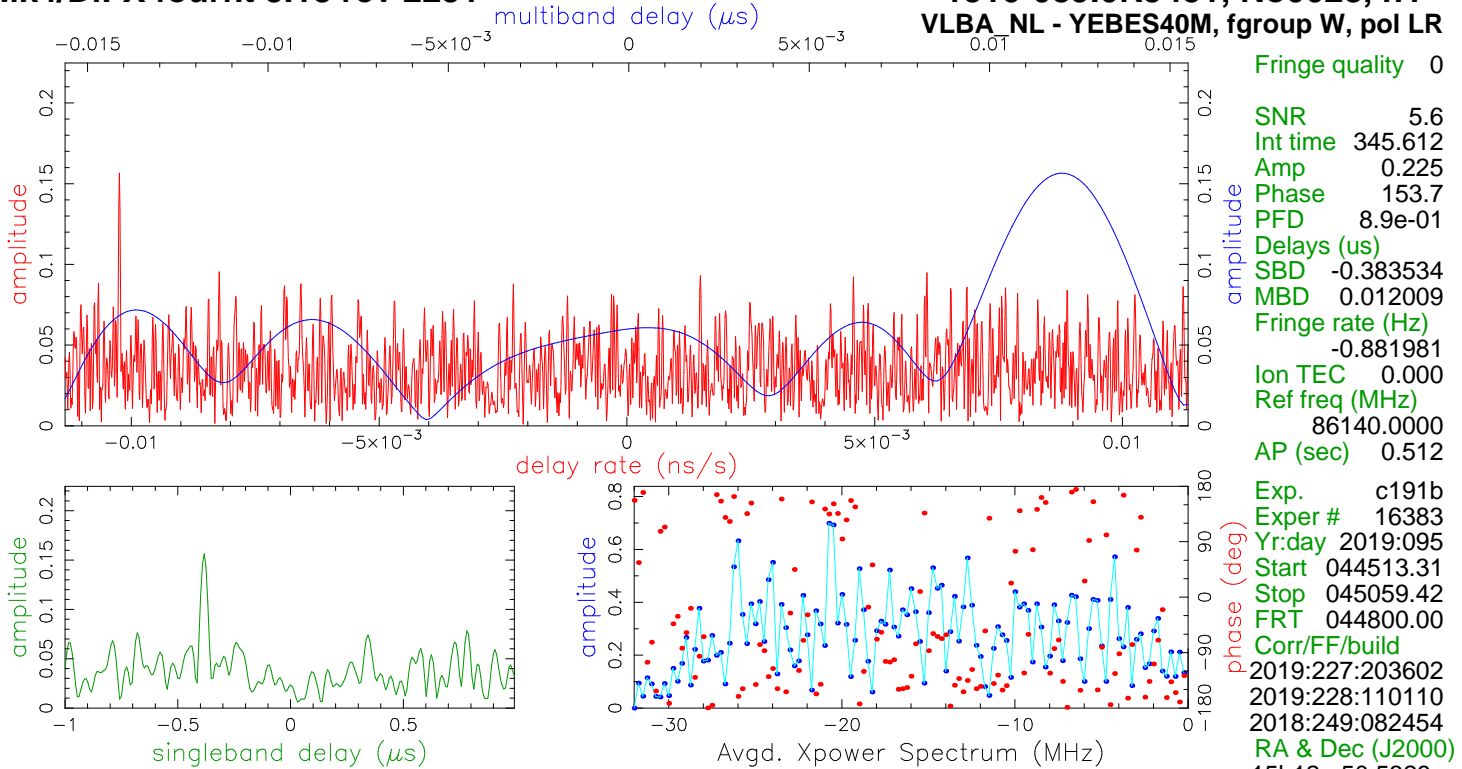
amp/seg (%) 63.5 81.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 18.2 27.4 Inc. seg. avg. 0.183 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

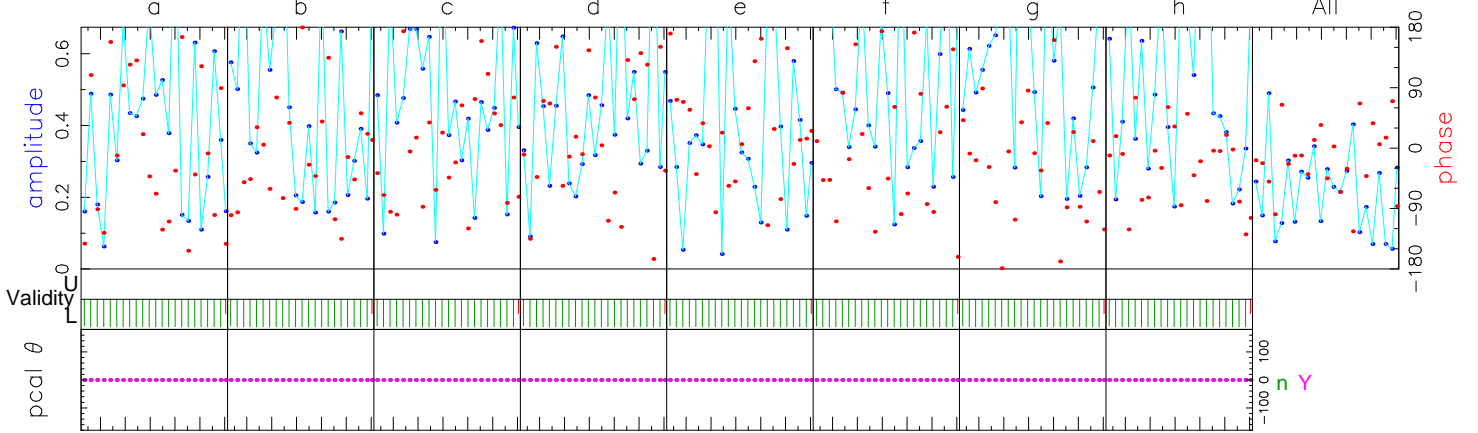
amp/frq (%) 32.6 47.8 Inc. frq. avg. 0.166 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 120.9 el 17.9 pa -40.1 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -9140.341 -158.203 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nY.W.89.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



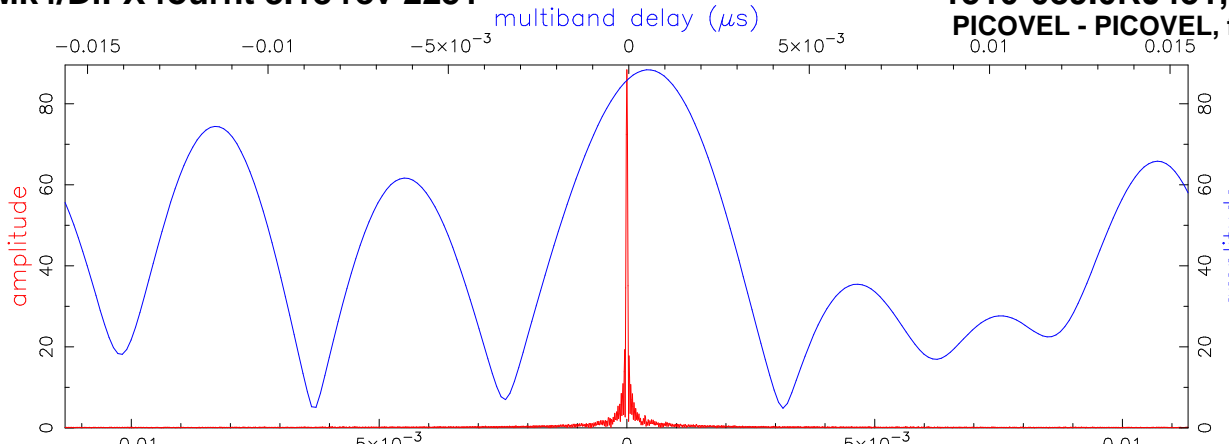
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-53.7	-31.0	0.4	-120.8	-21.4	-40.0	-1.9	-36.4	Phase	-26.3
0.1	0.3	0.3	0.0	0.3	0.2	0.3	0.5	Ampl.	0.2
62.0	79.1	4.3	228.4	39.0	70.9	117.0	79.0	Sbd box	79.9
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y 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	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	-4.31785821835E+03	Apriori delay (usec)	-4.31746397775E+03	Resid mbdelay (usec)	1.20094E-02	+/-	3.9E-04
Sband delay (usec)	-4.31784751125E+03	Apriori clock (usec)	1.4970985E+01	Resid sbdelay (usec)	-3.83534E-01	+/-	3.1E-03
Phase delay (usec)	-4.31746397860E+03	Apriori clockrate (us/s)	1.4299998E-07	Resid phdelay (usec)	-8.49449E-07	+/-	6.6E-07
Delay rate (us/s)	1.58133442575E+00	Apriori rate (us/s)	1.58134466467E+00	Resid rate (us/s)	-1.02389E-05	+/-	3.3E-09
Total phase (deg)	137.9	Apriori accel (us/s/s)	2.27436486722E-05	Resid phase (deg)	153.7	+/-	20.4

ph/seg (deg)	51.2	Theor.	48.8	Search (2048X32)	0.155	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.9		85.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	43.4		28.8	Inc. seg. avg.	0.225	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.6		50.2	Inc. frq. avg.	0.214	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

n: az 120.9 el 17.9 pa -40.1 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -9140.341 -158.203 simultaneous interpolator

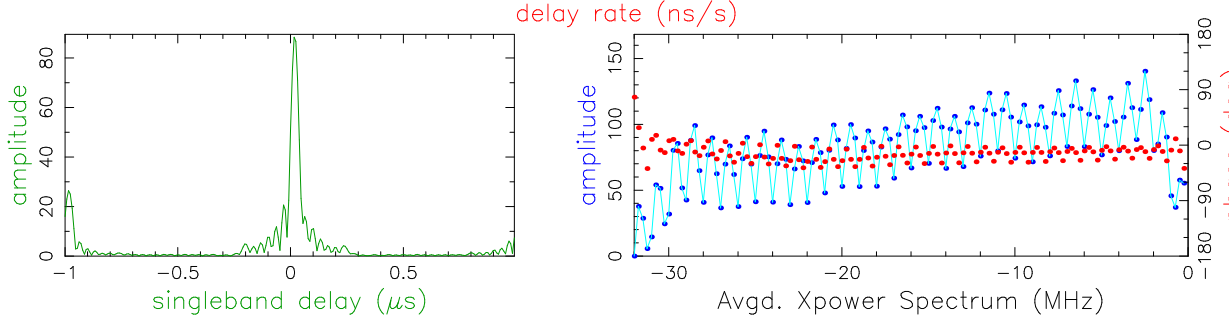
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/nY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/nY.W.97.0RJ451



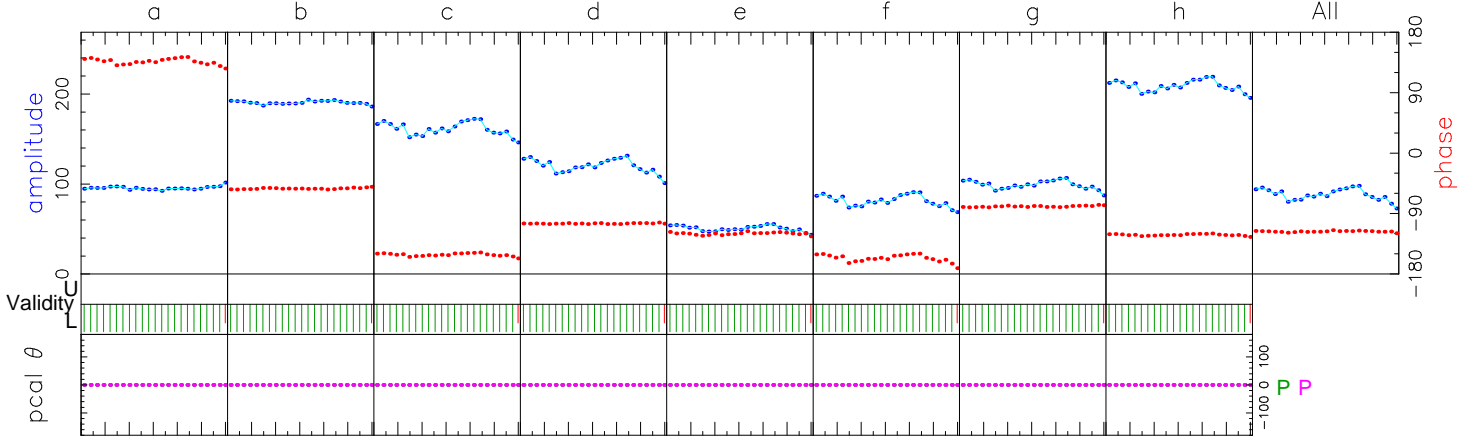
Fringe quality 5

SNR 3285.9
Int time 359.786
Amp 89.589
Phase -296.6
PFD 0.0e+00
Delays (us)
SBD 0.018666
MBD 0.000500
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 044500.00
Stop 045059.94
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110111
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	136.4	-52.8	-151.2	-104.8	-119.7	-156.0	-79.3	-121.7	Phase	-116.6
	95.3	190.6	161.3	120.2	50.7	81.3	99.3	209.1	Ampl.	126.0
	129.8	130.3	131.3	131.4	130.7	131.3	130.9	131.0	Sbd box	131.4
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	ManI 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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) 3.17502500000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 5.00250E-04 +/- 6.6E-07

Sband delay (usec) 1.86660000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.86660E-02 +/- 5.2E-06

Phase delay (usec) -3.75906360664E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -3.75906E-06 +/- 1.1E-09

Delay rate (us/s) -6.73129738605E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -6.73130E-11 +/- 5.4E-12

Total phase (deg) -296.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -296.6 +/- 0.0

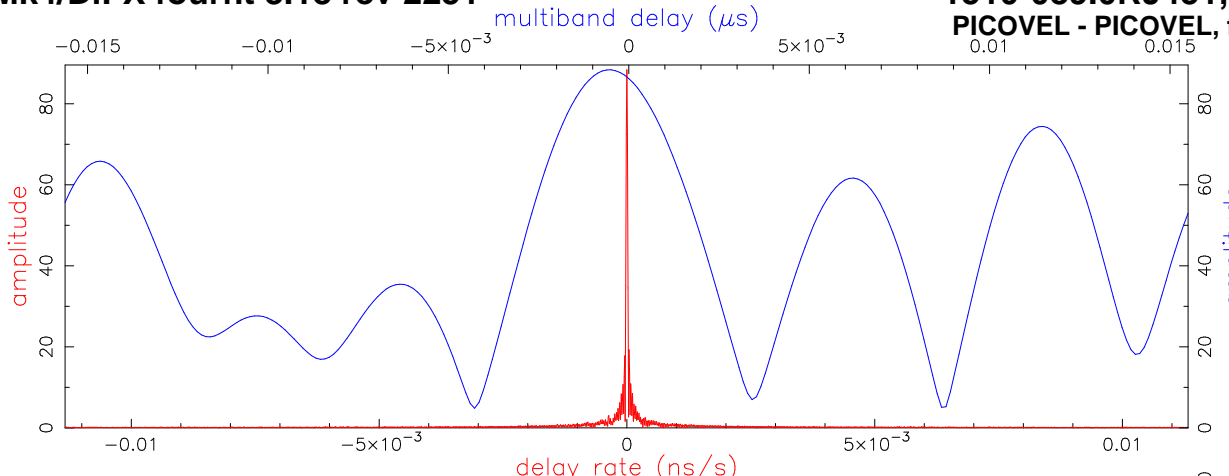
ph/seg (deg) 0.9 0.1 Theor. Amplitude 89.589 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 7.0 0.1 Search (2048X32) 86.881 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 57.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 70.9 0.1 Inc. seg. avg. 88.409 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 220.0 el 34.7 pa 31.8 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



Fringe quality 5

SNR 3285.9

Int time 359.786

Amp 89.589

Phase 296.6

PFD 0.0e+00

Delays (us)

SBD -0.018666

MBD -0.000500

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 044500.00

Stop 045059.94

FRT 044800.00

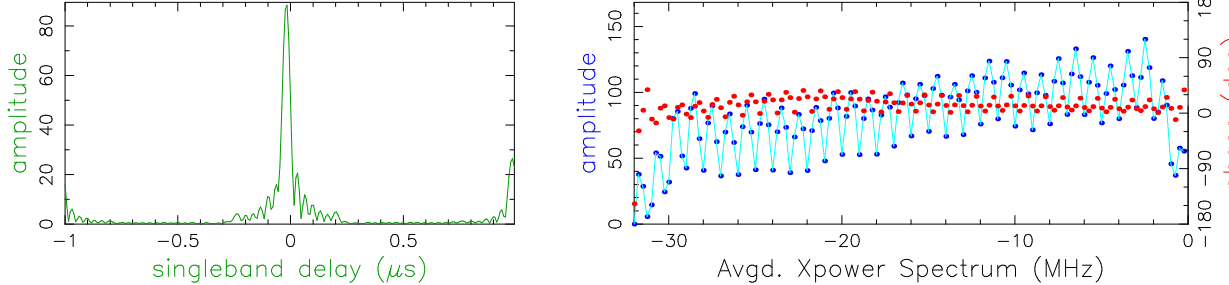
Corr/FF/build

2019:227:203602

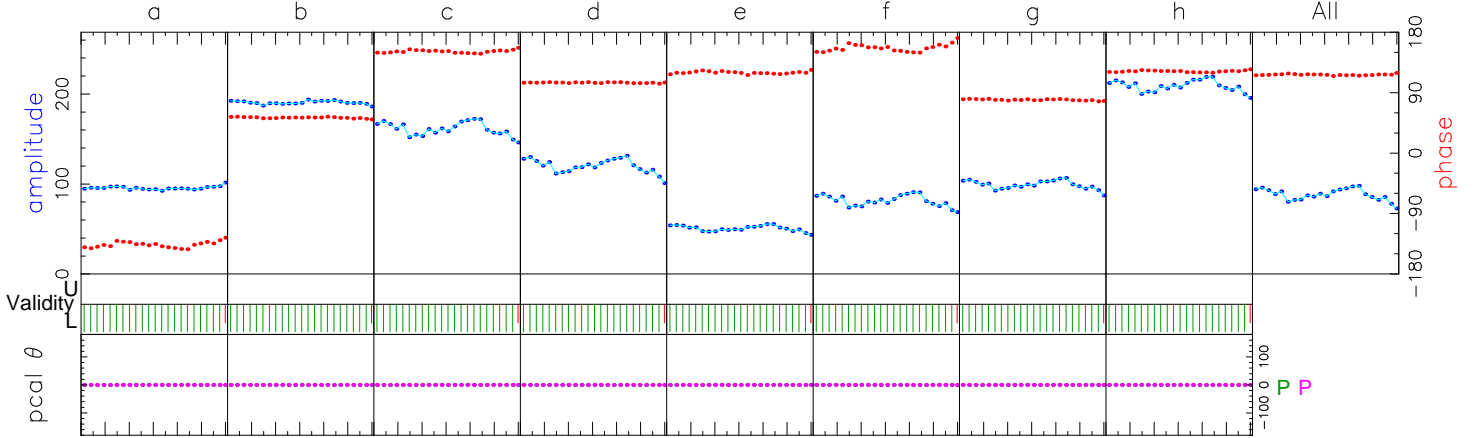
2019:228:110113

2018:249:082454

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



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
-136.4	52.8	151.2	104.8	119.7	156.0	79.3	121.7	Phase	116.6
95.3	190.6	161.3	120.2	50.7	81.3	99.3	209.1	Ampl.	126.0
128.2	127.7	126.7	126.6	127.3	126.7	127.1	127.0	Sbd box	126.6
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	ManI 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)	-3.17502500000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-5.00250E-04	+/-	6.6E-07		
Sband delay (usec)	-1.86660000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.86660E-02	+/-	5.2E-06		
Phase delay (usec)	3.75906360637E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.75906E-06	+/-	1.1E-09		
Delay rate (us/s)	6.73129738605E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	6.73130E-11	+/-	5.4E-12		
Total phase (deg)	296.6	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	296.6	+/-	0.0		

ph/seg (deg) 0.9 0.1 Theor. Amplitude 89.589 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

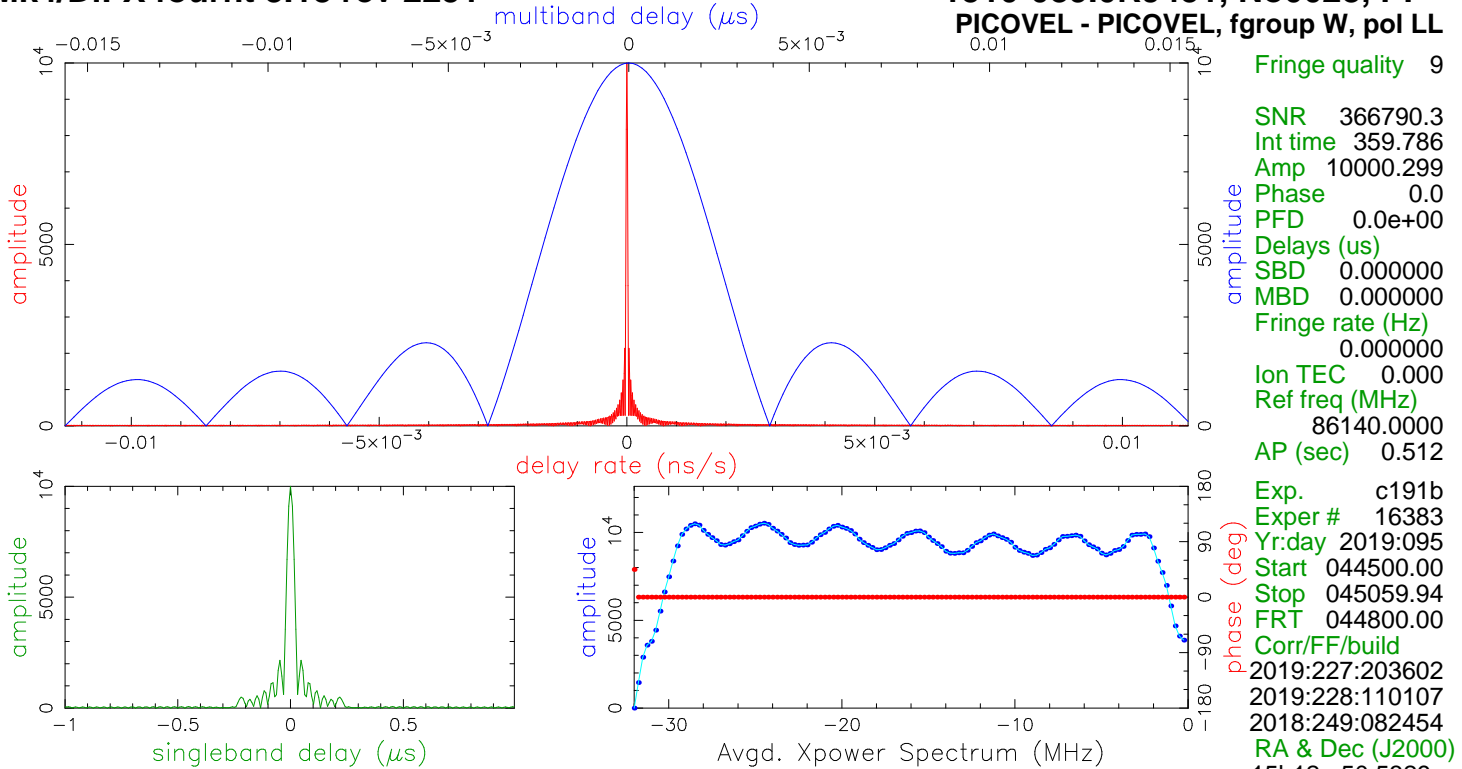
amp/seg (%) 7.0 0.1 Search (2048X32) 86.881 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 57.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 70.9 0.1 Inc. seg. avg. 88.409 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 220.0 el 34.7 pa 31.8 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/PP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/PP.W.107.0RJ451



Fringe quality 9

SNR 366790.3

Int time 359.786

Amp 10000.299

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 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110107

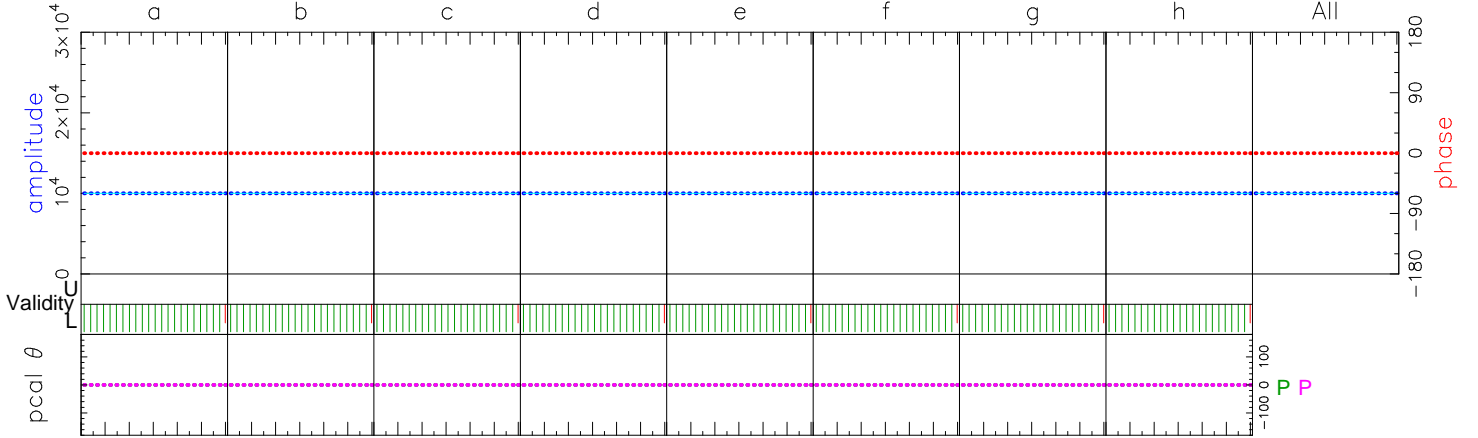
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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.	10000.3
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	+/-	5.9E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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 10000.299 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X32) 10000.299 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

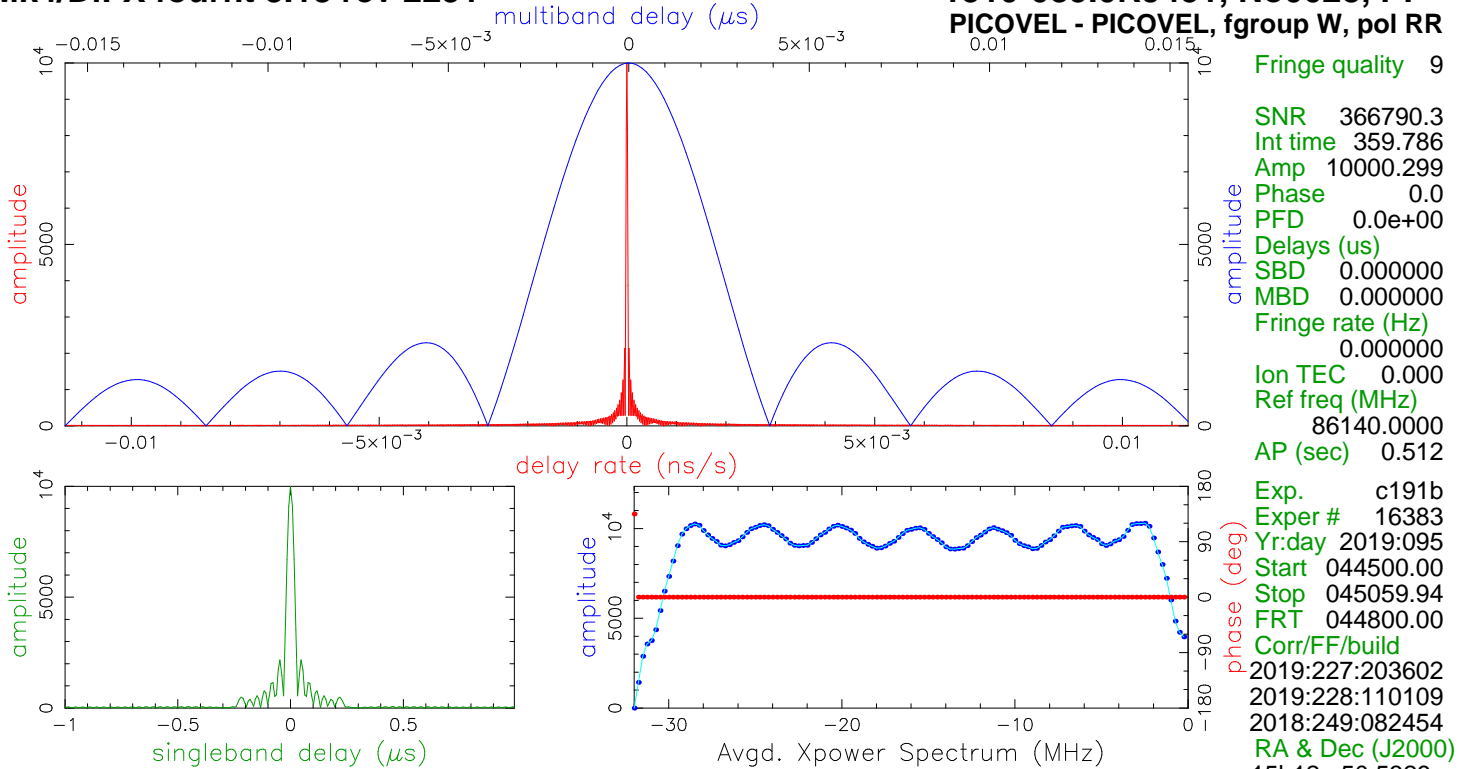
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.299 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

P: az 220.0 el 34.7 pa 31.8 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/PP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/PP.W.83.0RJ451



Fringe quality 9

SNR 366790.3

Int time 359.786

Amp 10000.299

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 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110109

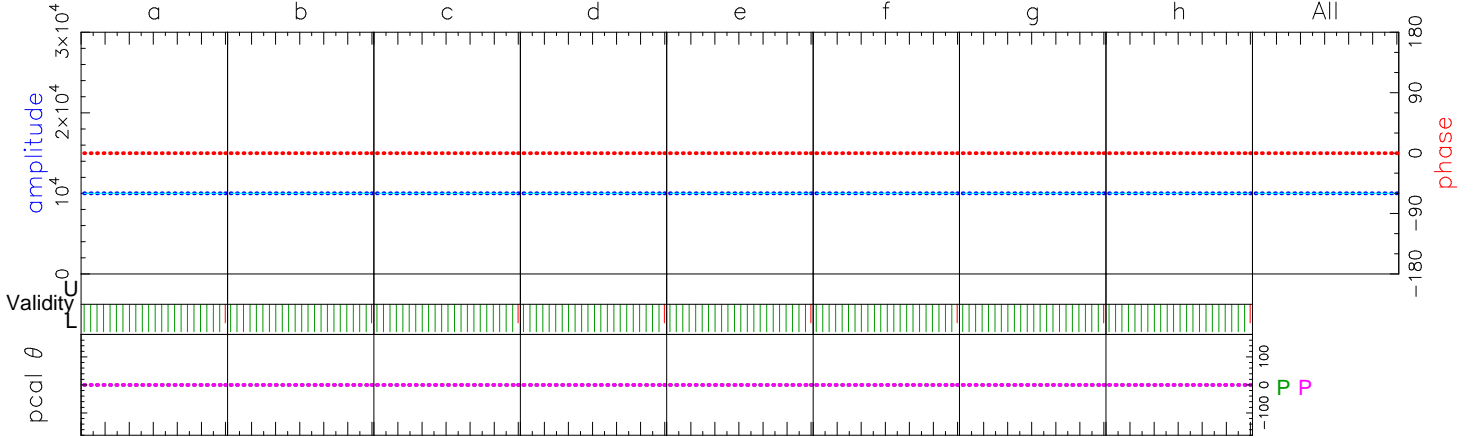
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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.	10000.3
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	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	ManI 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 +/- 5.9E-09	
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00 +/- 4.7E-08	
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00 +/- 1.0E-11	
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00 +/- 4.8E-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 10000.299 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X32) 10000.299 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

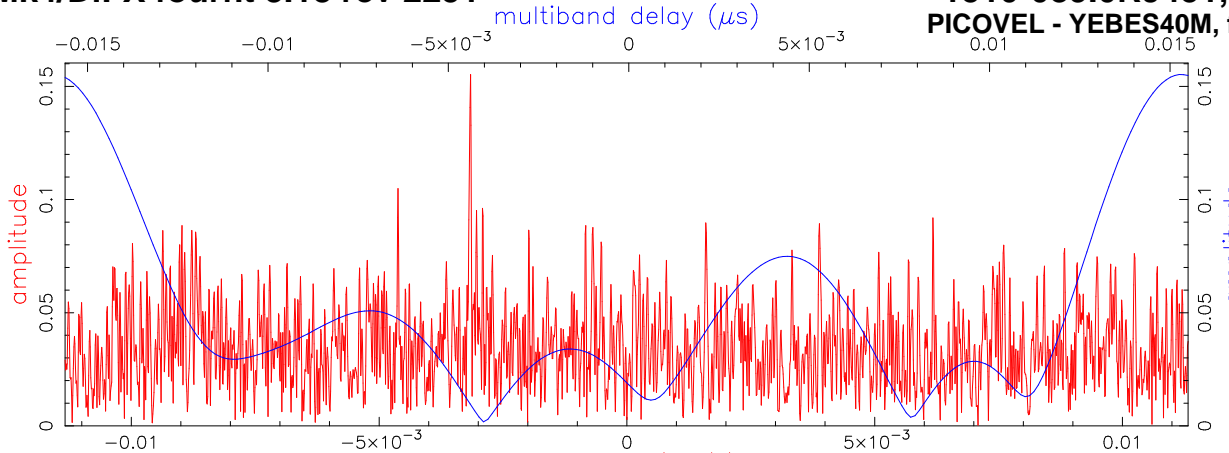
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

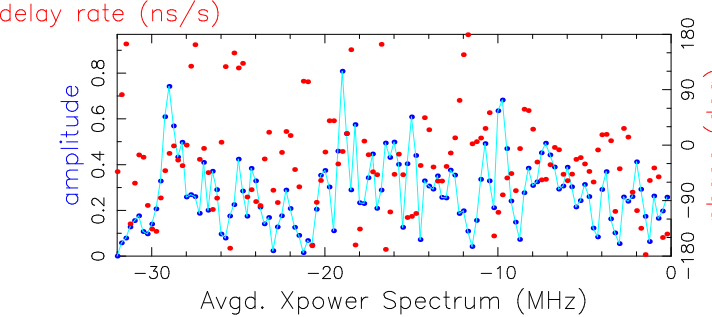
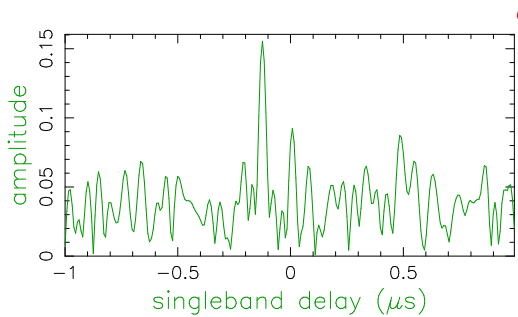
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.299 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

P: az 220.0 el 34.7 pa 31.8 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/PP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/PP.W.91.0RJ451

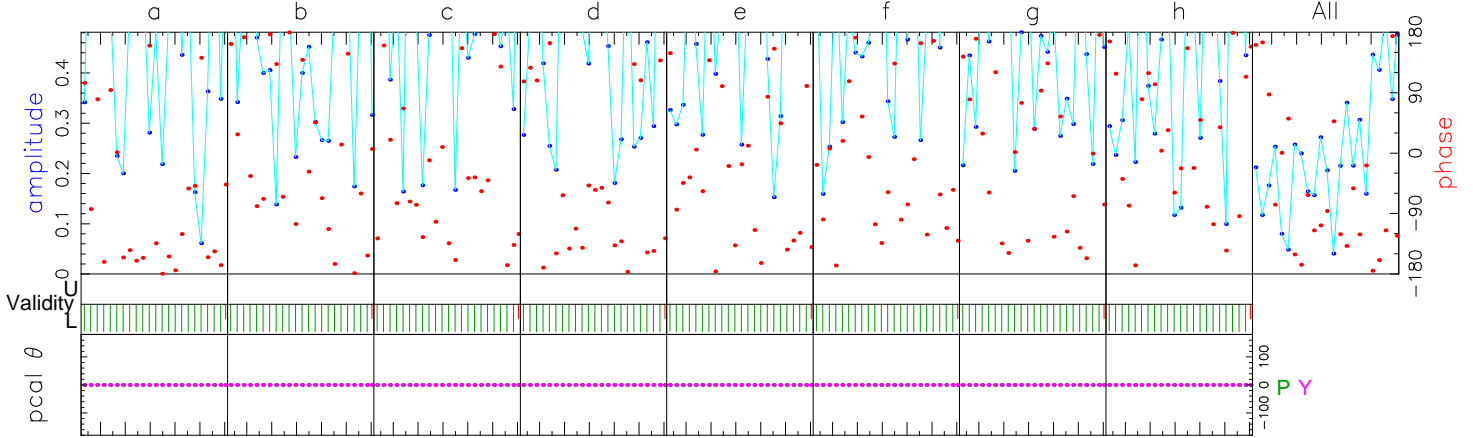


Fringe quality 0
SNR 5.6
Int time 344.392
Amp 0.160
Phase 47.1
PFD 9.5e-01
Delays (us)
SBD -0.124953
MBD -0.015938
Fringe rate (Hz)
-0.271988
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



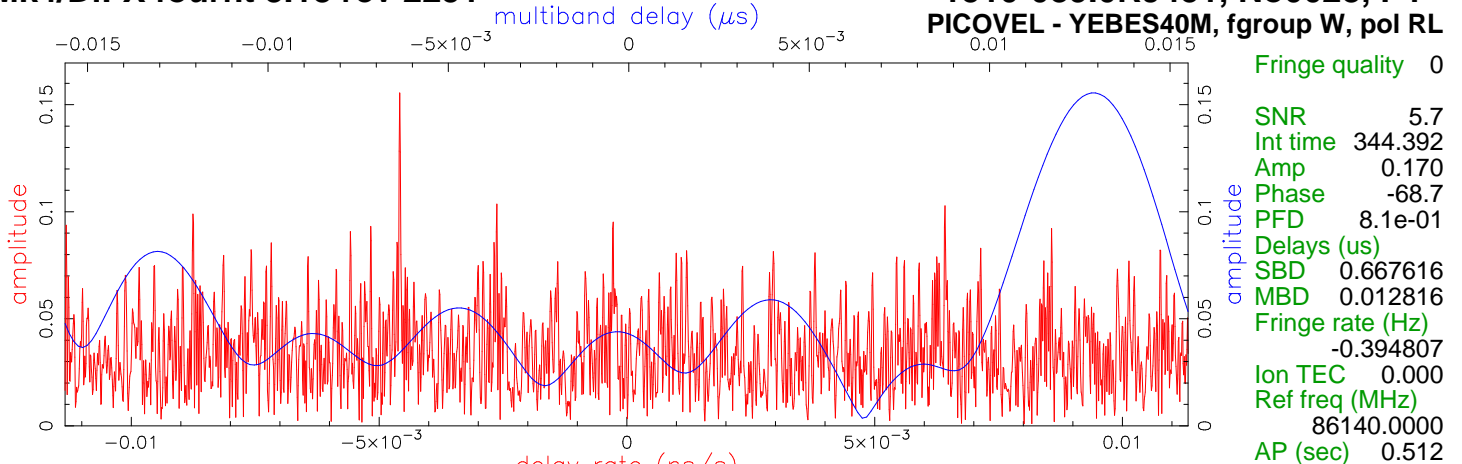
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044513.31
Stop 045059.42
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110111
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
-151.4	-130.4	-98.7	-144.8	-135.6	-100.2	-171.7	-171.0	Phase	-132.9
0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.0	Ampl.	0.2
123.0	176.9	114.2	218.1	97.3	163.9	16.1	160.0	Sbd box	113.0
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	8.64247044954E+02	Apriori delay (usec)	8.64356732516E+02	Resid mbdelay (usec)	-1.59376E-02	+/-	3.9E-04		
Sband delay (usec)	8.64231780016E+02	Apriori clock (usec)	-7.2080374E+00	Resid sbdelay (usec)	-1.24953E-01	+/-	3.1E-03		
Phase delay (usec)	8.64356728232E+02	Apriori clockrate (us/s)	-3.3699999E-07	Resid phdelay (usec)	-4.28434E-06	+/-	6.6E-07		
Delay rate (us/s)	-2.67658161651E-02	Apriori rate (us/s)	-2.67626586531E-02	Resid rate (us/s)	-3.15751E-06	+/-	3.3E-09		
Total phase (deg)	25.2	Apriori accel (us/s/s)	-3.79185479381E-06	Resid phase (deg)	47.1	+/-	20.6		

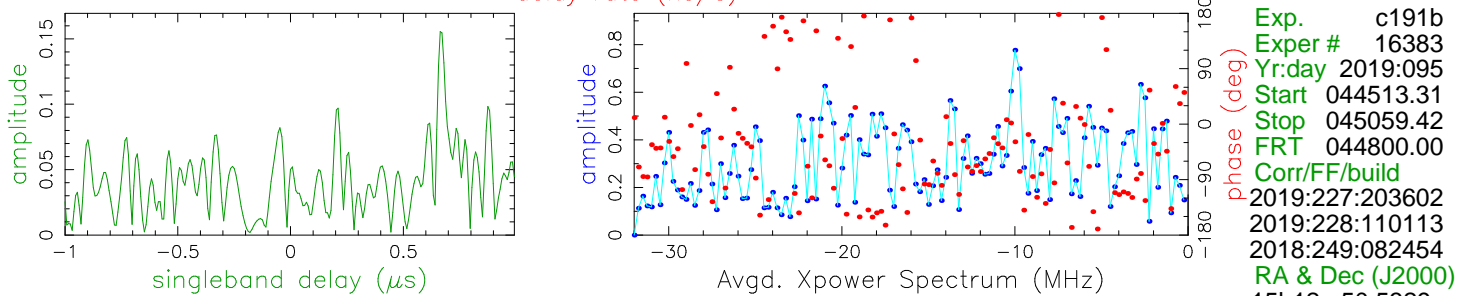
ph/seg (deg) 80.8 49.3 Search (2048X32) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 96.7 86.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 30.8 29.1 Inc. seg. avg. 0.181 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 45.1 50.7 Inc. frq. avg. 0.157 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
P: az 220.0 el 34.7 pa 31.8 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 149.447 -361.619 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/PY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/PY.W.101.0RJ451



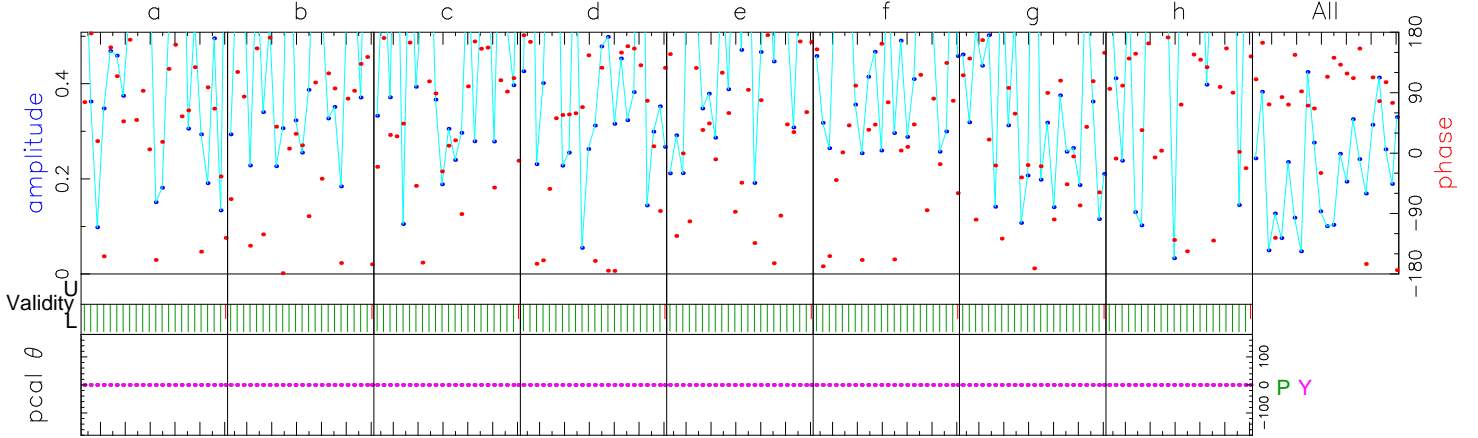
Fringe quality 0

SNR 5.7
Int time 344.392
Amp 0.170
Phase -68.7
PFD 8.1e-01
Delays (us)
SBD 0.667616
MBD 0.012816
Fringe rate (Hz)
-0.394807
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

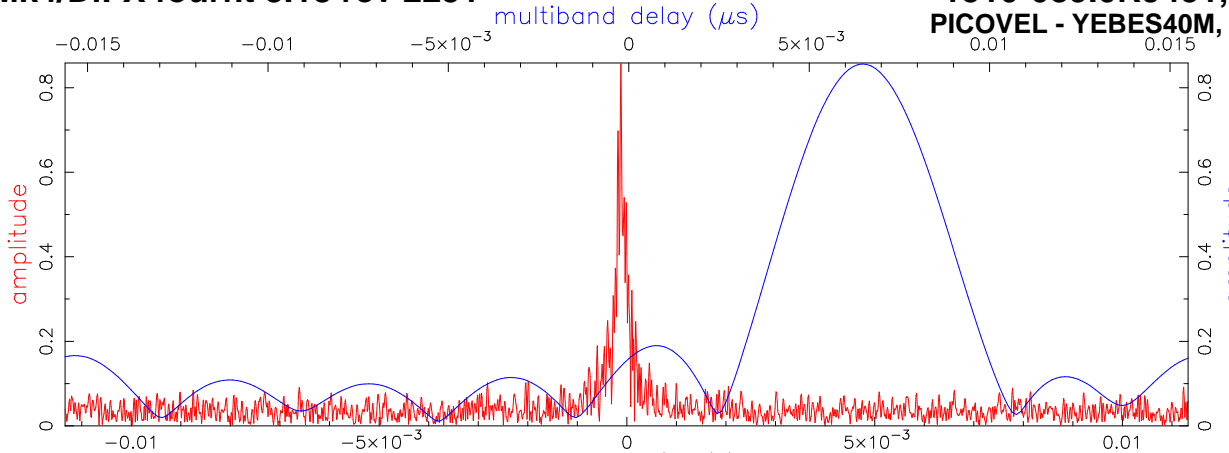
Exp. c191b
Exper # 16383
Yr:day 2019:095
Start 044513.31
Stop 045059.42
FRT 044800.00
Corr/FF/build
2019:227:203602
2019:228:110113
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



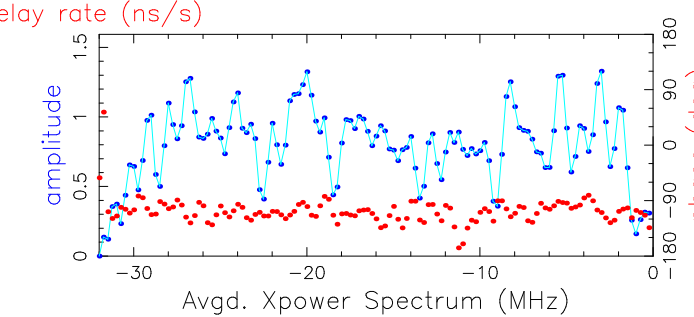
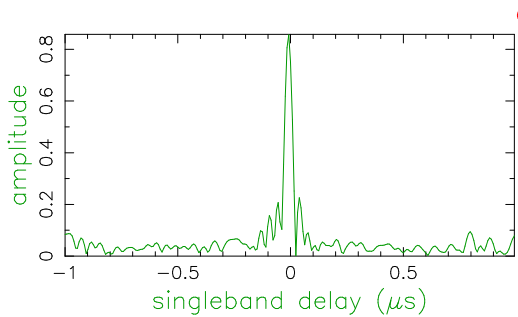
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
99.6	115.7	105.8	139.0	127.0	58.0	114.7	122.9	Phase	111.3
0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.2
242.4	80.8	1.3	132.2	154.8	61.0	130.9	157.4	Sbd box	214.5
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
P 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
P W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)									1.28158E-02 +/- 3.8E-04
Sband delay (usec)									6.67616E-01 +/- 3.0E-03
Phase delay (usec)									3.58888E-06 +/- 6.5E-07
Delay rate (us/s)									-4.58332E-06 +/- 3.3E-09
Total phase (deg)									-68.7 +/- 20.2
Apriori delay (usec)									8.64356732516E+02
Apriori clock (usec)									-7.2080374E+00
Apriori clockrate (us/s)									-3.3699999E-07
Apriori rate (us/s)									-2.67626586531E-02
Apriori accel (us/s/s)									-3.79185479381E-06
Resid mbdelay (usec)									1.28158E-02 +/- 3.8E-04
Resid sbdelay (usec)									6.67616E-01 +/- 3.0E-03
Resid phdelay (usec)									3.58888E-06 +/- 6.5E-07
Resid rate (us/s)									-4.58332E-06 +/- 3.3E-09
Resid phase (deg)									-68.7 +/- 20.2
RMS									0.170 +/- 0.030
Theor. Amplitude									0.170 +/- 0.030
Search (2048X32)									0.154
Interp.									0.000
Inc. seg. avg.									0.170
Inc. frq. avg.									0.160
Pcal mode: MANUAL, MANUAL									PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)									sb window (us) -1.000 1.000
Bits/sample: 2x2									mb window (us) -0.016 0.016
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									
P: az 220.0 el 34.7 pa 31.8									simultaneous interpolator
Y: az 218.8 el 31.9 pa 29.4									
u,v (fr/asec) 149.447 -361.619									



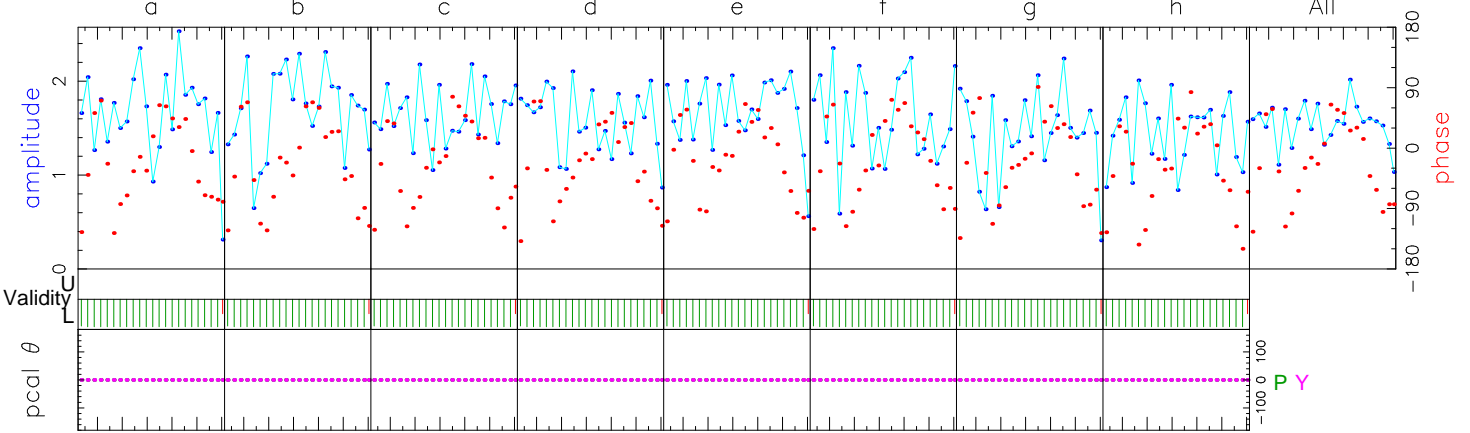
Fringe quality 7

SNR 30.8
 Int time 344.392
 Amp 0.859
 Phase 161.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.009197
 MBD 0.006479
 Fringe rate (Hz)
 -0.010514
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044513.31
 Stop 045059.42
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110107
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

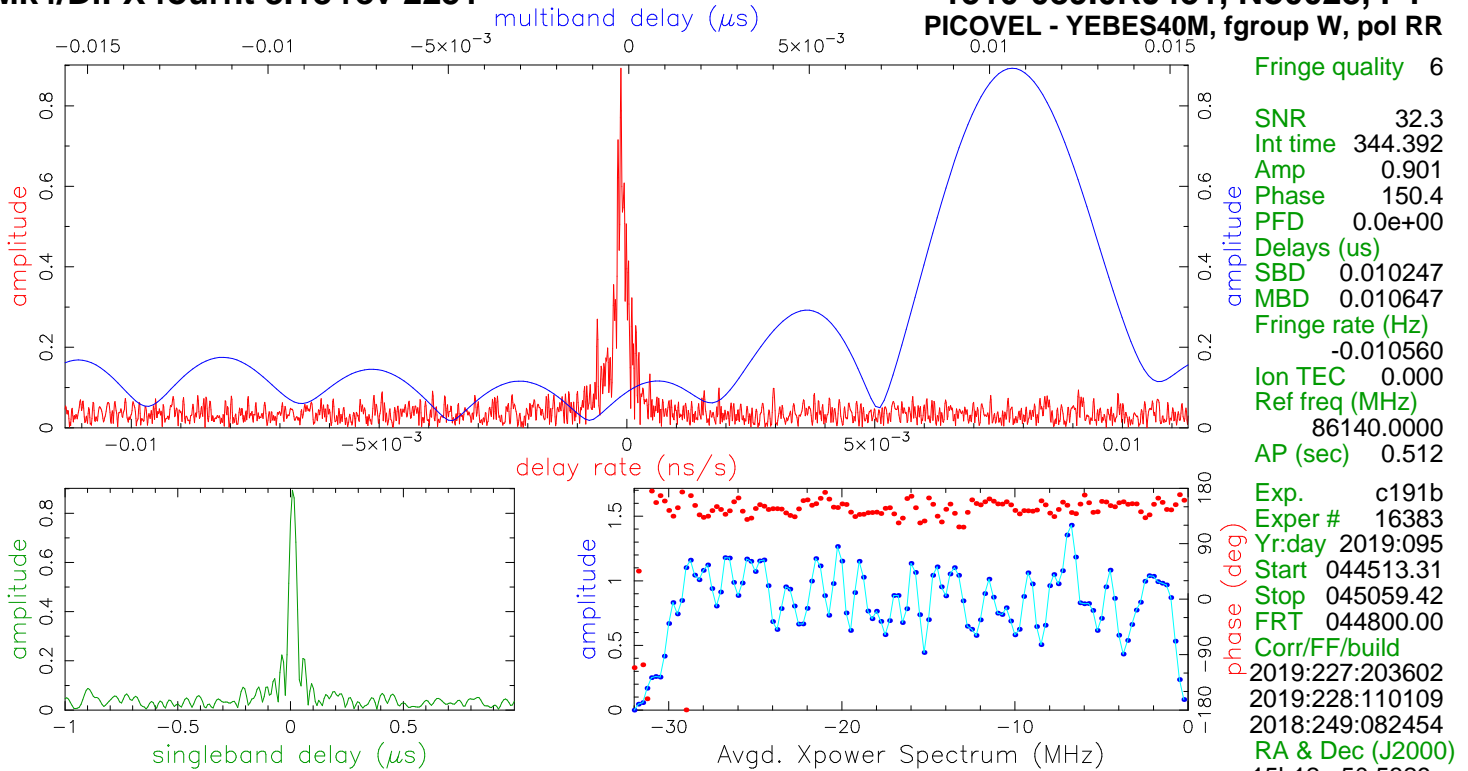


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

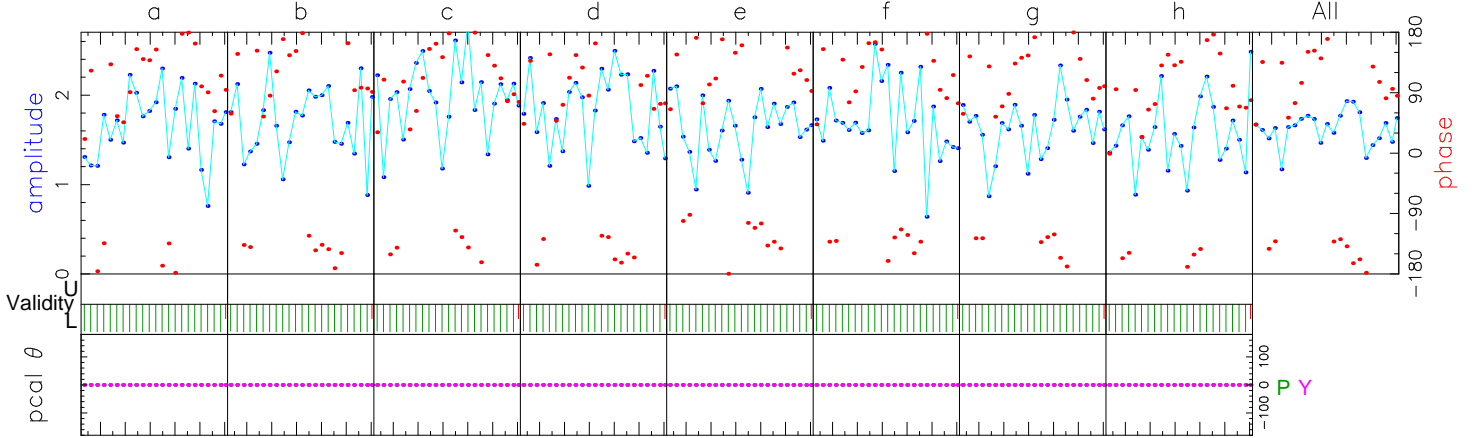


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-18.8	-13.2	-25.2	-22.7	-14.6	-11.2	-17.2	-23.3	Phase	-18.2
0.9	0.9	0.9	0.9	1.0	0.8	0.7	0.7	Ampl.	0.9
127.7	128.1	128.1	127.8	128.1	128.0	127.5	127.2	Sbd box	127.8
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
P 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	8.64331961685E+02	Apriori delay (usec)	8.64356732516E+02	Resid mbdelay (usec)	6.47917E-03	+/-	7.0E-05		
Sband delay (usec)	8.64347536016E+02	Apriori clock (usec)	-7.2080374E+00	Resid sbdelay (usec)	-9.19650E-03	+/-	5.6E-04		
Phase delay (usec)	8.64356731929E+02	Apriori clockrate (us/s)	-3.3699999E-07	Resid phdelay (usec)	-5.86876E-07	+/-	1.2E-07		
Delay rate (us/s)	-2.67627807107E-02	Apriori rate (us/s)	-2.67626586531E-02	Resid rate (us/s)	-1.22058E-07	+/-	6.0E-10		
Total phase (deg)	139.8	Apriori accel (us/s/s)	-3.79185479381E-06	Resid phase (deg)	161.8	+/-	3.7		

ph/seg (deg) 59.1 8.9 Search (2048X32) 0.844 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.4 15.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.5 5.3 Inc. seg. avg. 1.535 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 11.7 9.2 Inc. frq. avg. 0.855 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 220.0 el 34.7 pa 31.8 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 149.447 -361.619 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/PY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/PY.W.85.0RJ451

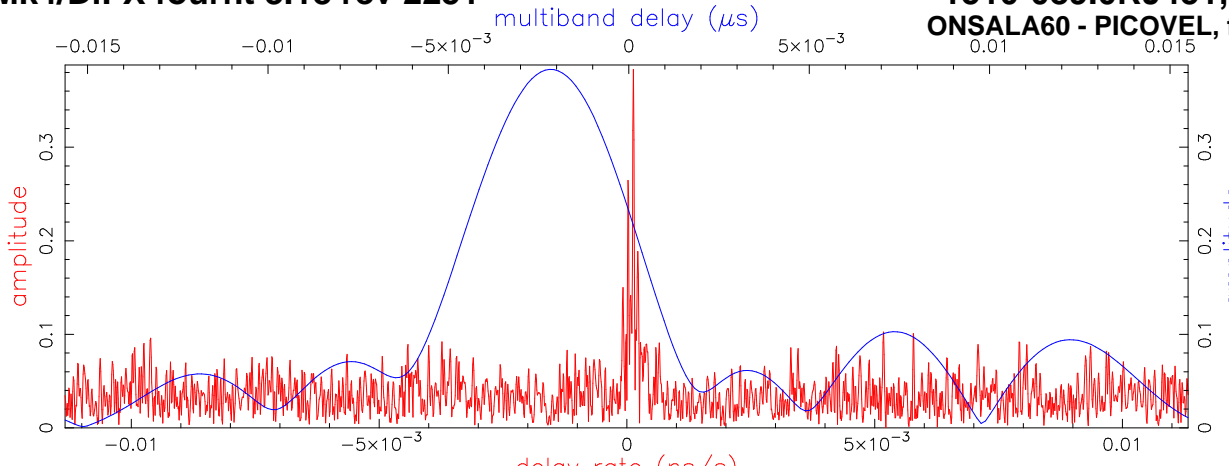


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

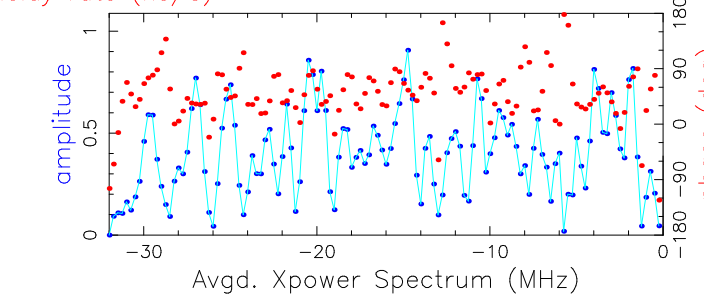
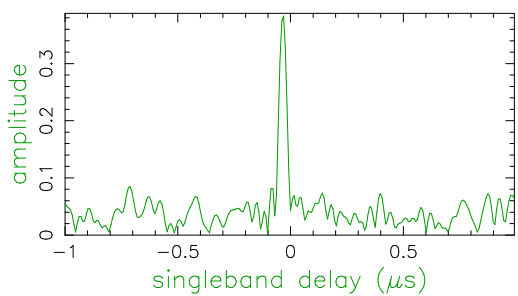


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
140.0	157.2	146.0	149.2	166.4	166.6	149.6	128.3	Phase	150.4
1.0	1.0	0.9	0.9	0.8	0.9	0.9	0.8	Ampl.	0.9
130.4	130.4	130.3	130.2	130.6	130.3	130.3	130.4	Sbd box	130.3
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
P 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
P W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	8.64367379310E+02		Apriori delay (usec)	8.64356732516E+02		Resid mbdelay (usec)	1.06468E-02	+/-	6.7E-05
Sband delay (usec)	8.64366979016E+02		Apriori clock (usec)	-7.2080374E+00		Resid sbdelay (usec)	1.02465E-02	+/-	5.3E-04
Phase delay (usec)	8.64356737366E+02		Apriori clockrate (us/s)	-3.3699999E-07		Resid phdelay (usec)	4.84961E-06	+/-	1.1E-07
Delay rate (us/s)	-2.67627812400E-02		Apriori rate (us/s)	-2.67626586531E-02		Resid rate (us/s)	-1.22587E-07	+/-	5.7E-10
Total phase (deg)		128.4	Apriori accel (us/s/s)	-3.79185479381E-06		Resid phase (deg)	150.4	+/-	3.5

ph/seg (deg) 58.2 8.5 Theor. Amplitude 0.901 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.9 14.8 Search (2048X32) 0.890 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.0 5.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 8.1 8.7 Inc. seg. avg. 1.609 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 220.0 el 34.7 pa 31.8 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 149.447 -361.619 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/PY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/PY.W.93.0RJ451

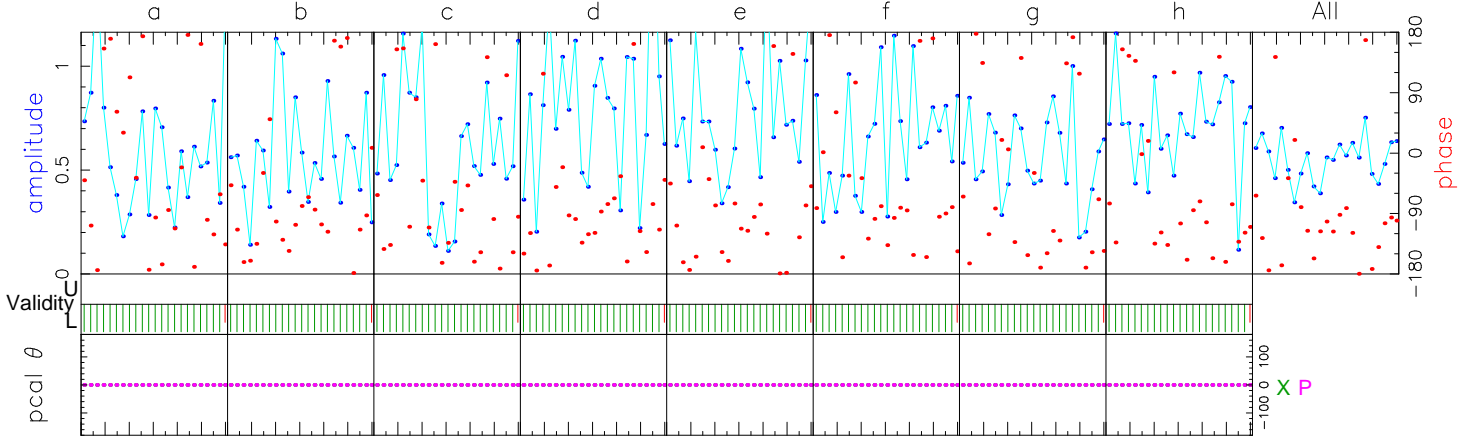


Fringe quality 9
 SNR 14.2
 Int time 358.286
 Amp 0.388
 Phase 56.7
 PFD 2.8e-37
 Delays (us)
 SBD -0.034154
 MBD -0.002152
 Fringe rate (Hz)
 0.011087
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512



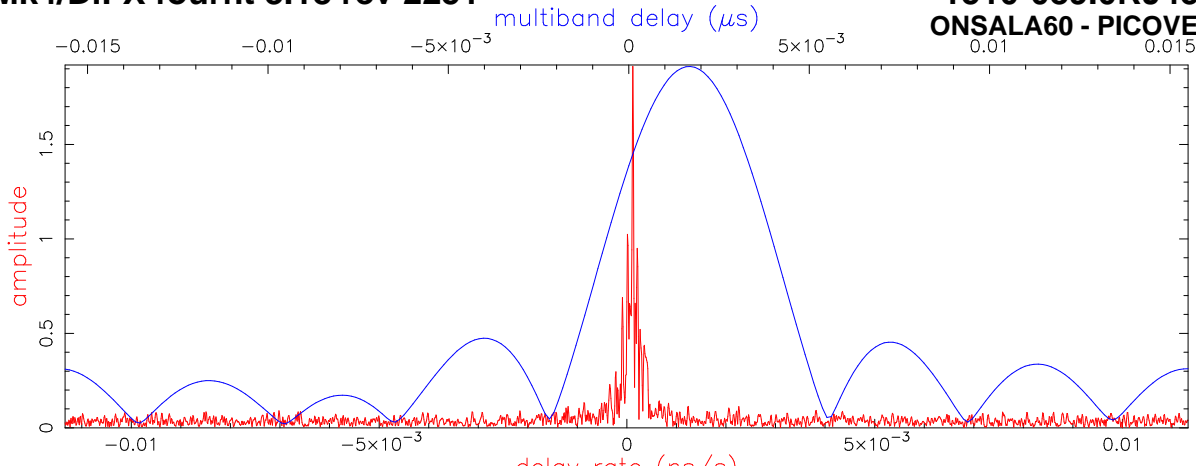
Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110113
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

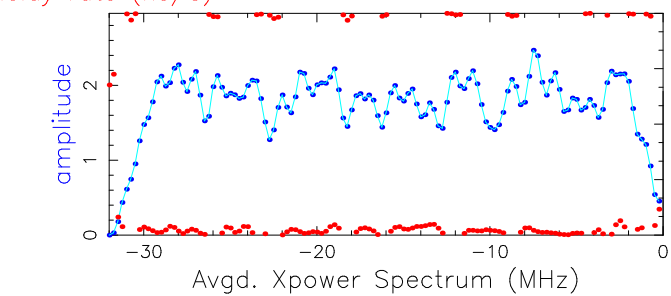
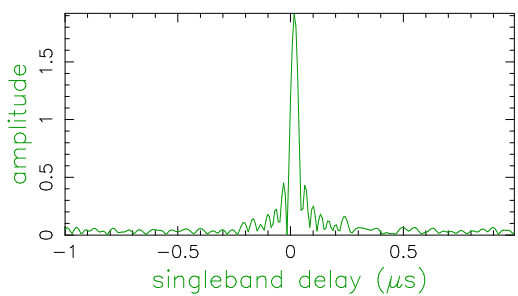


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-141.4	-116.2	-139.1	-108.5	-115.4	-110.5	-144.7	-129.9	Phase	-123.3
	0.3	0.4	0.3	0.5	0.5	0.4	0.3	0.4	Ampl.	0.4
	124.1	124.9	124.6	124.9	124.6	124.6	124.8	124.9	Sbd box	124.6
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-7.31668843758E+03		Apriori delay (usec)		-7.31665503590E+03		Resid mbdelay (usec)		-2.15168E-03	+/- 1.5E-04
Sband delay (usec)	-7.31668918990E+03		Apriori clock (usec)		2.5274403E+01		Resid sbdelay (usec)		-3.41540E-02	+/- 1.2E-03
Phase delay (usec)	-7.31665503987E+03		Apriori clockrate (us/s)		5.9400000E-07		Resid phdelay (usec)		-3.97519E-06	+/- 2.6E-07
Delay rate (us/s)	5.17234994912E-02		Apriori rate (us/s)		5.17233707824E-02		Resid rate (us/s)		1.28709E-07	+/- 1.3E-09
Total phase (deg)	131.6		Apriori accel (us/s/s)		3.47285687156E-05		Resid phase (deg)		56.7	+/- 8.1

RMS Theor. Amplitude 0.388 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.7 19.4 Search (2048X32) 0.368 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 49.6 33.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 16.2 11.4 Inc. seg. avg. 0.522 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 (%) 20.4 19.9 Inc. frq. avg. 0.386 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

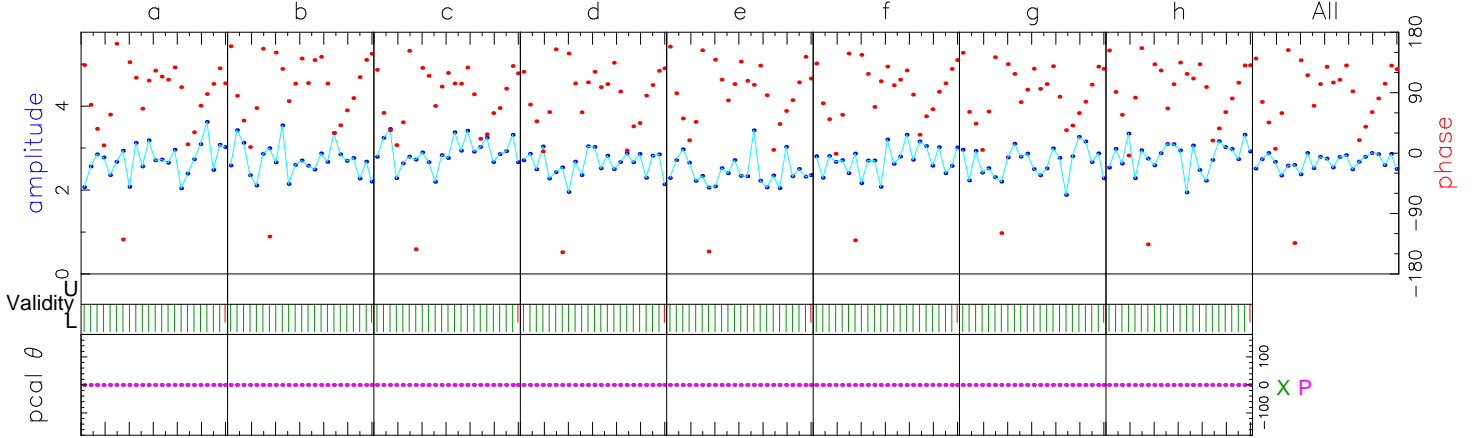


Fringe quality 5
 SNR 70.3
 Int time 358.286
 Amp 1.920
 Phase 95.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.017251
 MBD 0.001672
 Fringe rate (Hz) 0.010904
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110107
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Avgd. Xpower Spectrum (MHz)

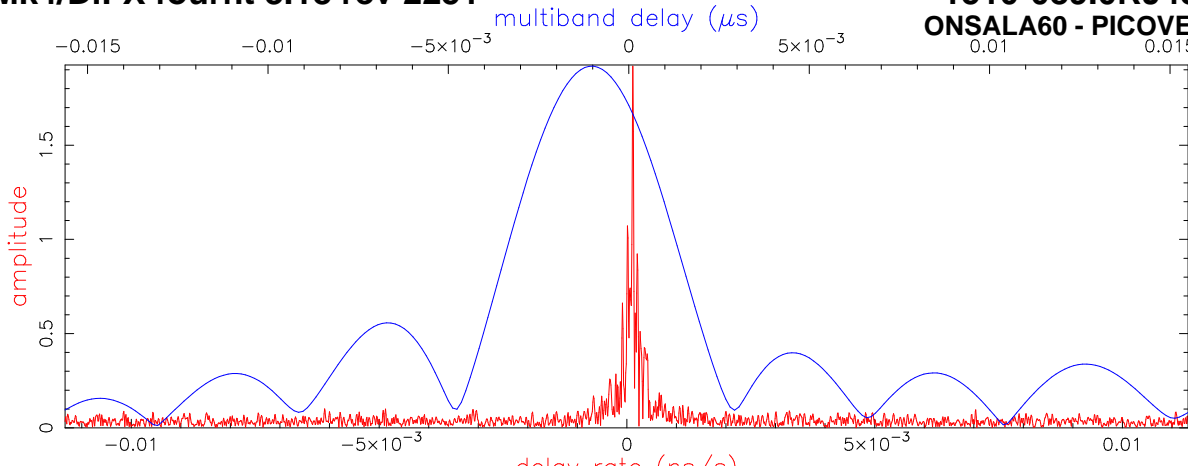
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



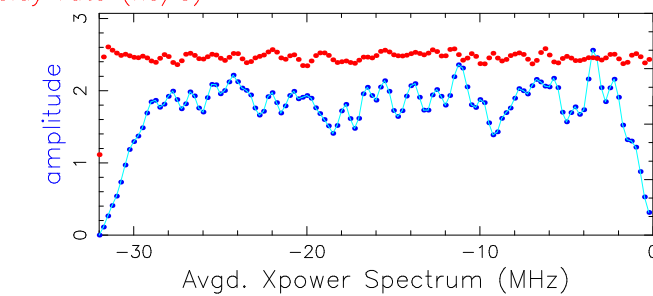
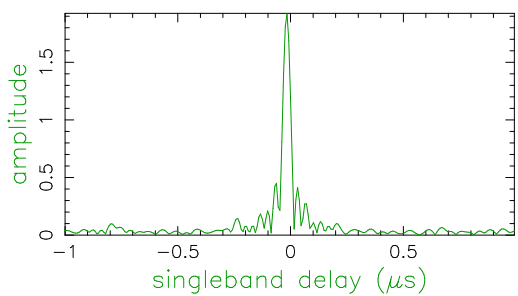
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
UL	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		

Group delay (usec)(sbd)	-7.31665336426E+03	Apriori delay (usec)	-7.31665503590E+03	Resid mbdelay (usec)	1.67164E-03	+/-	3.1E-05
Sband delay (usec)	-7.31663778490E+03	Apriori clock (usec)	2.5274403E+01	Resid sbdelay (usec)	1.72510E-02	+/-	2.5E-04
Phase delay (usec)	-7.31665503281E+03	Apriori clockrate (us/s)	5.9400000E-07	Resid phdelay (usec)	3.09006E-06	+/-	5.3E-08
Delay rate (us/s)	5.17234973684E-02	Apriori rate (us/s)	5.17233707824E-02	Resid rate (us/s)	1.26586E-07	+/-	2.5E-10
Total phase (deg)	-189.3	Apriori accel (us/s/s)	3.47285687156E-05	Resid phase (deg)	95.8	+/-	1.6

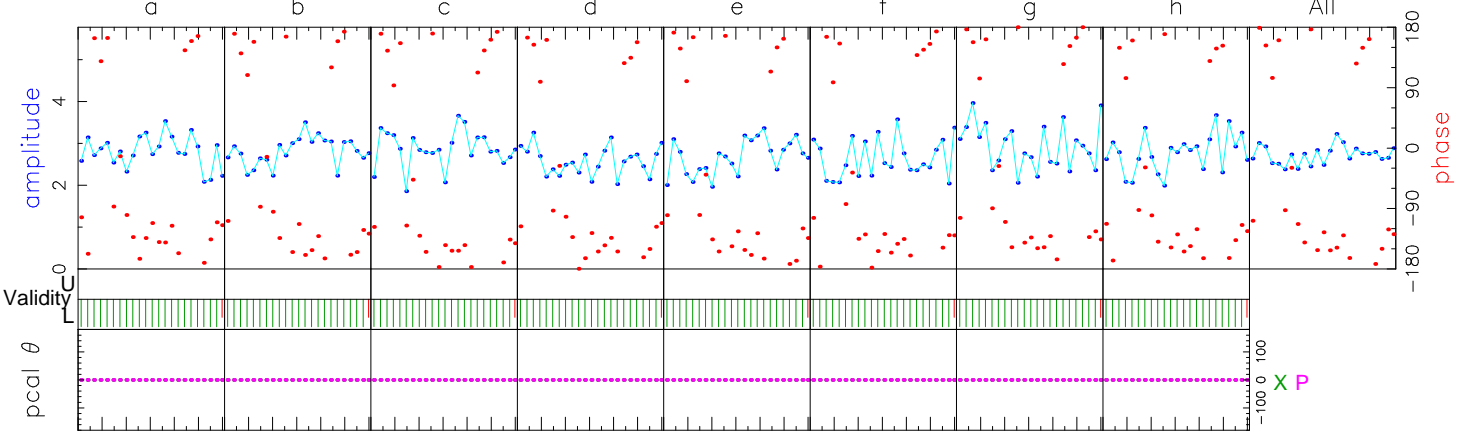
ph/seg (deg)	48.0	Theor.	3.9	Amplitude	1.920 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	40.2	Search (2048X32)	1.824	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	5.2	Inc. seg. avg.	2.669	Inc. frq. avg.	1.917	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	4.9	Inc. frq. avg.	1.917	u,v (fr/asec)	-249.464 1656.244	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



Fringe quality 5
 SNR 70.5
 Int time 358.286
 Amp 1.926
 Phase 21.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.017048
 MBD -0.001024
 Fringe rate (Hz) 0.010890
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110109
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

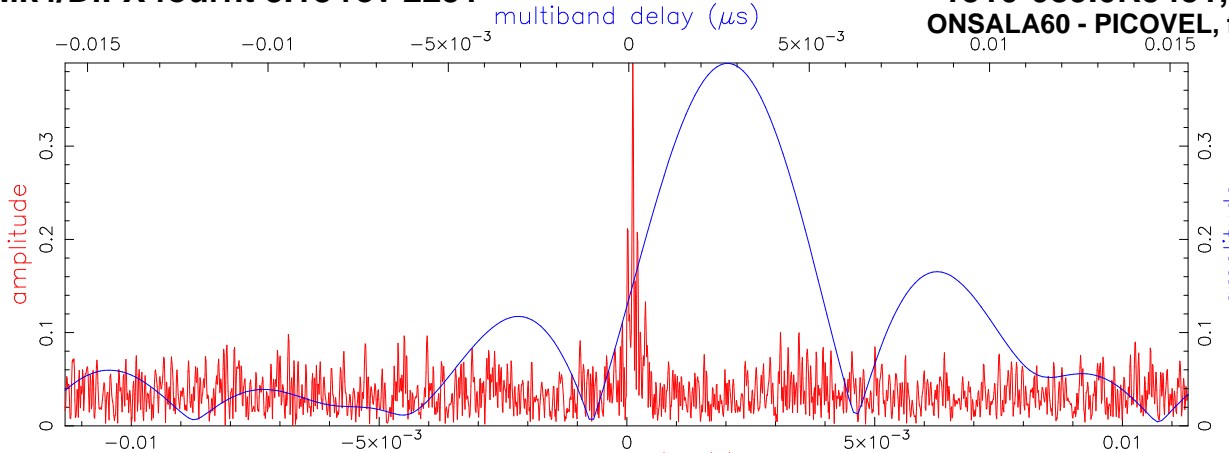


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

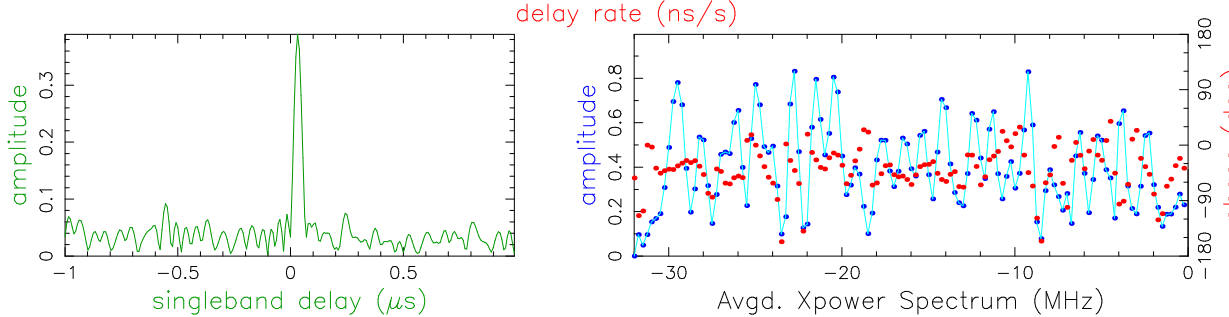


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-148.6	-157.8	-172.5	-158.9	-163.3	-154.9	-160.3	-153.8	Phase	-158.9
	2.0	1.9	2.1	1.7	1.9	1.9	2.0	1.9	Ampl.	1.9
	126.9	126.5	126.9	126.9	126.9	126.8	126.7	126.8	Sbd box	126.8
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-7.31668731019E+03		Apriori delay (usec)		-7.31665503590E+03		Resid mbdelay (usec)		-1.02430E-03	+/- 3.1E-05
Sband delay (usec)	-7.31667208390E+03		Apriori clock (usec)		2.5274403E+01		Resid sbdelay (usec)		-1.70480E-02	+/- 2.4E-04
Phase delay (usec)	-7.31665504102E+03		Apriori clockrate (us/s)		5.9400000E-07		Resid phdelay (usec)		-5.12330E-06	+/- 5.2E-08
Delay rate (us/s)	5.17234972026E-02		Apriori rate (us/s)		5.17233707824E-02		Resid rate (us/s)		1.26420E-07	+/- 2.5E-10
Total phase (deg)	96.0		Apriori accel (us/s/s)		3.47285687156E-05		Resid phase (deg)		21.1	+/- 1.6

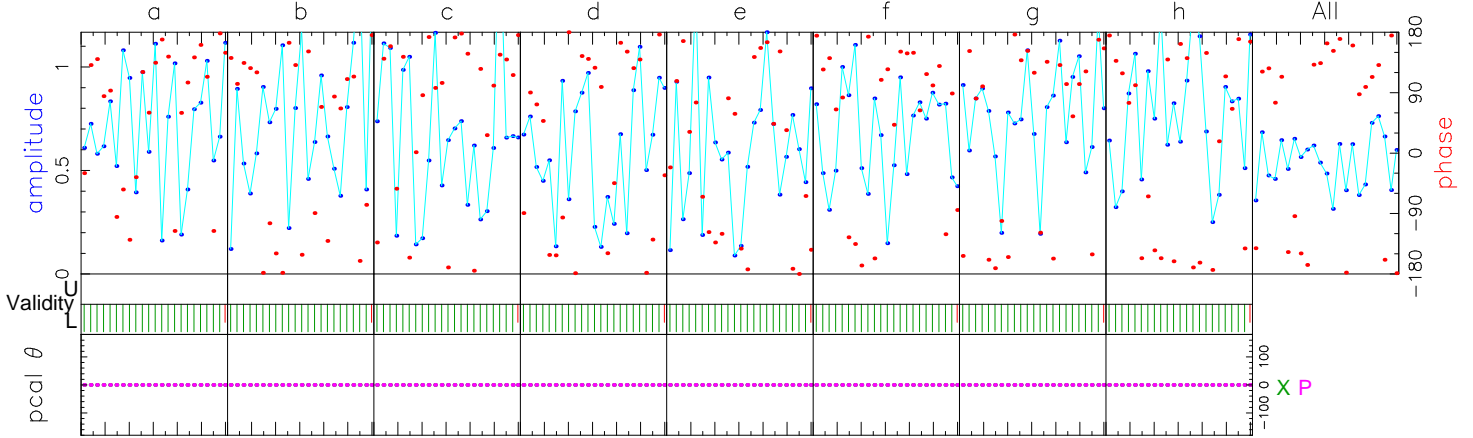
RMS Theor. Amplitude 1.926 +/- 0.027
 ph/seg (deg) 49.3 3.9 Search (2048X32) 1.853 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.0 6.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.7 2.3 Inc. seg. avg. 2.720 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 5.3 4.0 Inc. frq. avg. 1.932 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 228.5 el 12.9 pa 24.3 P: az 220.0 el 34.7 pa 31.8 u,v (fr/asec) -249.464 1656.244 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/XP..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/XP.W.92.0RJ451 simultaneous interpolator



Fringe quality 9
 SNR 14.2
 Int time 358.286
 Amp 0.389
 Phase -25.0
 PFD 1.4e-37
 Delays (us)
 SBD 0.032058
 MBD 0.002727
 Fringe rate (Hz) 0.010920
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:095
 Start 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110111
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



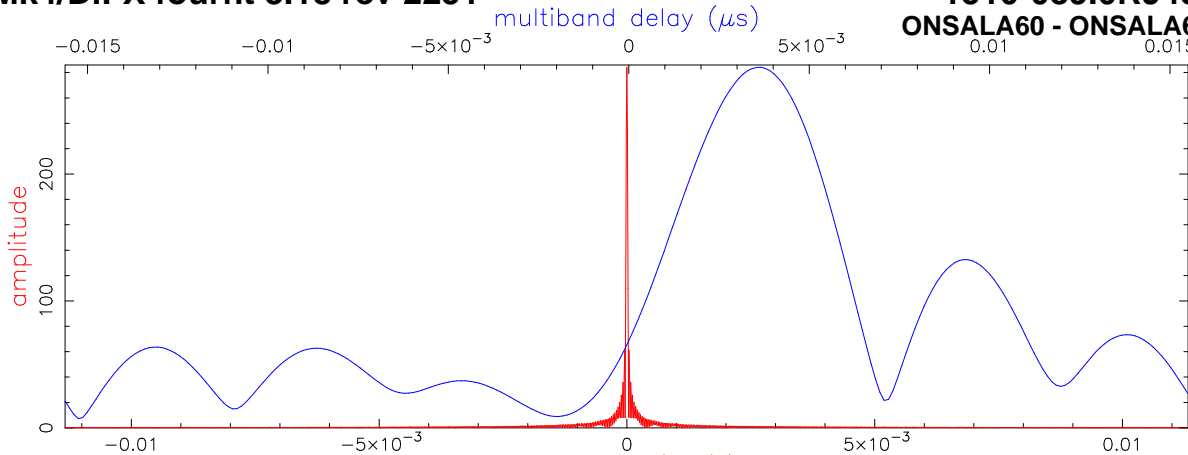
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

Group delay (usec)(sbd)	-7.31662105894E+03	Apriori delay (usec)	-7.31665503590E+03	Resid mbdelay (usec)	2.72695E-03	+/-	1.5E-04
Sband delay (usec)	-7.31662297790E+03	Apriori clock (usec)	2.5274403E+01	Resid sbdelay (usec)	3.20580E-02	+/-	1.2E-03
Phase delay (usec)	-7.31665503090E+03	Apriori clockrate (us/s)	5.9400000E-07	Resid phdelay (usec)	4.99895E-06	+/-	2.6E-07
Delay rate (us/s)	5.17234975547E-02	Apriori rate (us/s)	5.17233707824E-02	Resid rate (us/s)	1.26772E-07	+/-	1.2E-09
Total phase (deg)	-310.1	Apriori accel (us/s/s)	3.47285687156E-05	Resid phase (deg)	-25.0	+/-	8.0

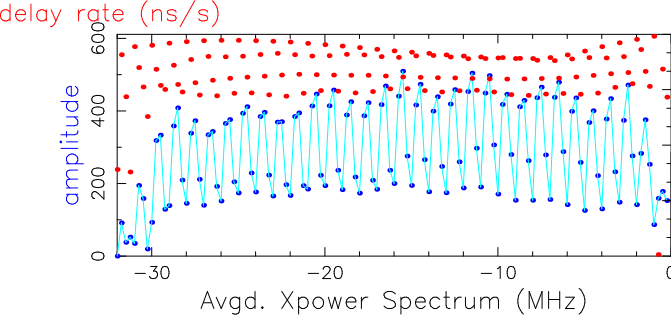
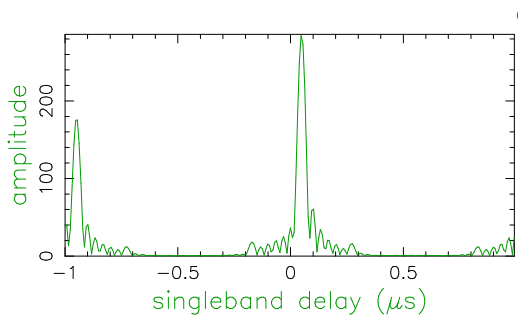
ph/seg (deg)	46.7	RMS	19.3	Theor.	19.3	Amplitude	0.389 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	51.0	Search (2048X32)	0.370	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	8.9	Inc. seg. avg.	0.515	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016	0.016	
amp/frq (%)	27.0	Inc. frq. avg.	0.385	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	



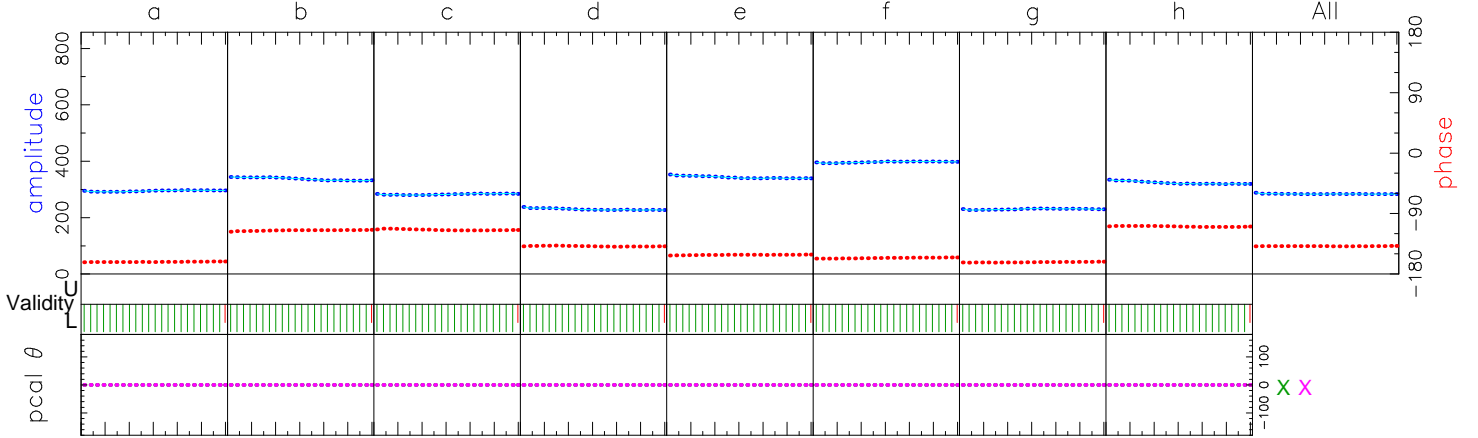
Fringe quality 7

SNR 10485.7
 Int time 359.556
 Amp 285.977
 Phase -318.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.049024
 MBD 0.003605
 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 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110111
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

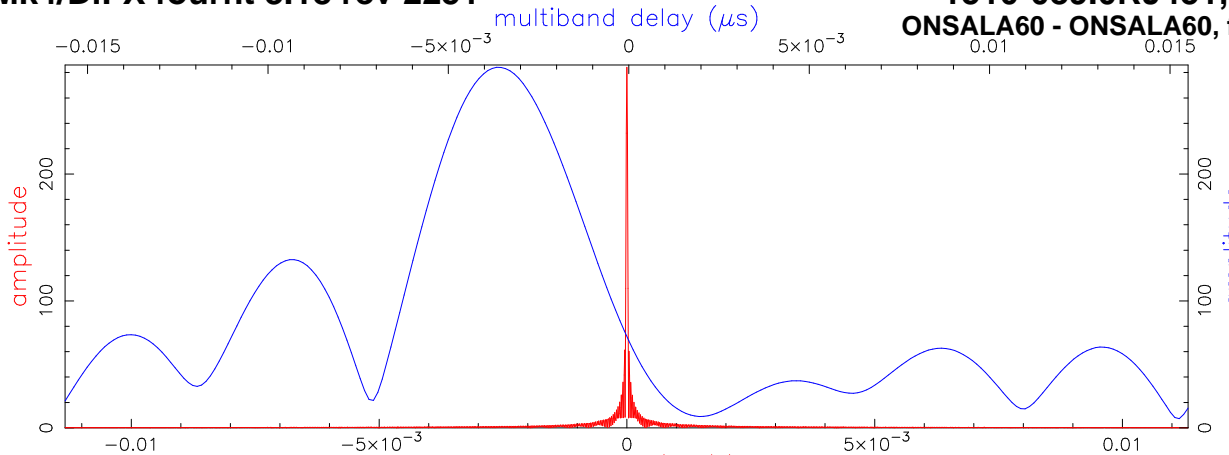


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

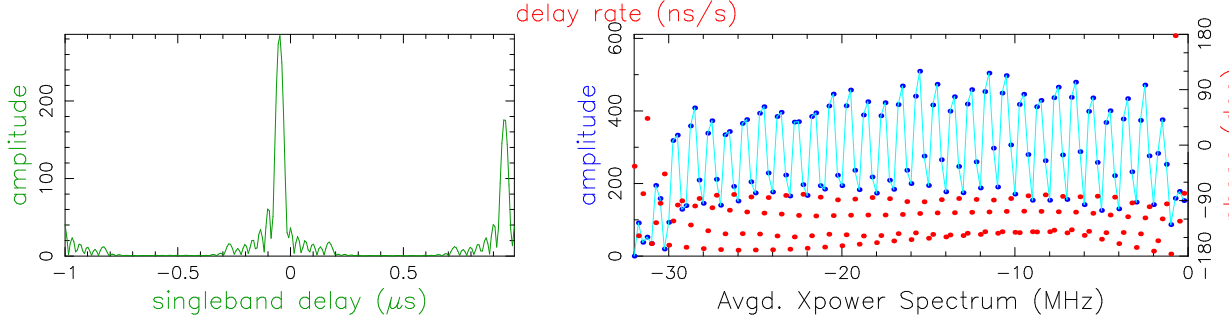


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-161.9	-115.1	-114.2	-138.6	-151.5	-156.1	-162.4	-109.2	Phase	-138.5
	294.9	337.4	282.9	229.9	343.4	397.0	230.1	323.8	Ampl.	304.9
	135.7	135.7	134.9	135.1	134.9	135.0	135.4	135.4	Sbd box	135.3
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.48548125000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.60481E-03	+/- 2.1E-07
Sband delay (usec)	4.90245000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		4.90245E-02	+/- 1.6E-06
Phase delay (usec)	-4.46534922014E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.46535E-06	+/- 3.5E-10
Delay rate (us/s)	-5.24332638492E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.24333E-11	+/- 1.7E-12
Total phase (deg)			-318.5		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)	-318.5 +/- 0.0

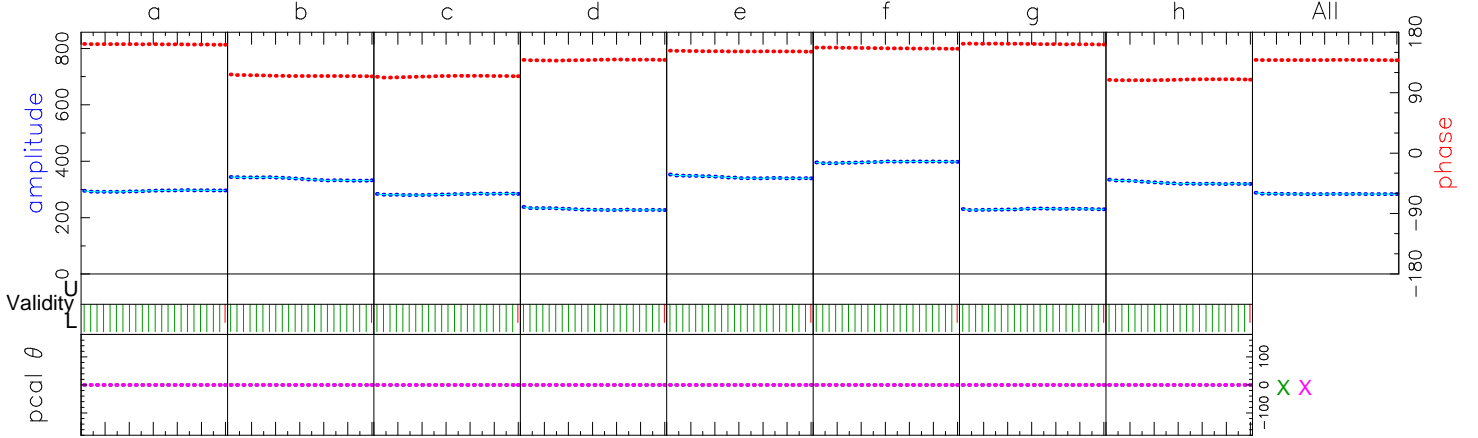
ph/seg (deg) 0.1 0.0 Theor. Amplitude 285.977 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 0.0 Search (2048X32) 281.526 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 20.0 0.0 Inc. seg. avg. 284.193 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. 304.929 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 7
 SNR 10485.7
 Int time 359.556
 Amp 285.977
 Phase 318.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.049024
 MBD -0.003605
 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 044500.00
 Stop 045059.94
 FRT 044800.00
 Corr/FF/build
 2019:227:203602
 2019:228:110113
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

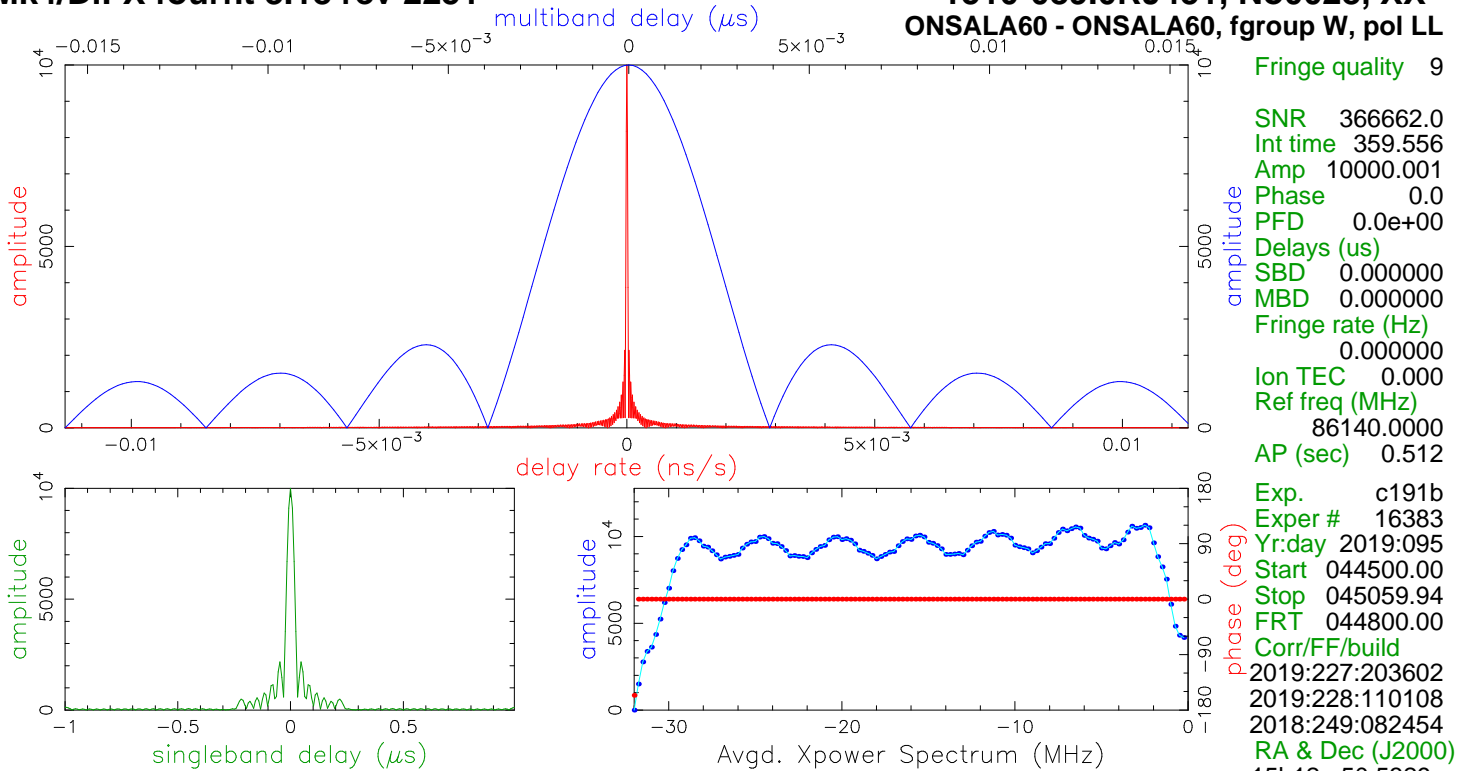


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	138.5
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Ampl.	304.9
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	122.7
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC amp	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		-3.48548125000E-02		Apriori delay (usec)	0.00000000000E+00		Resid mbdelay (usec)	-3.60481E-03	+/-	2.1E-07
Sband delay (usec)		-4.90245000000E-02		Apriori clock (usec)	0.0000000E+00		Resid sbdelay (usec)	-4.90245E-02	+/-	1.6E-06
Phase delay (usec)		4.46534922003E-06		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	4.46535E-06	+/-	3.5E-10
Delay rate (us/s)		5.24332638492E-11		Apriori rate (us/s)	0.00000000000E+00		Resid rate (us/s)	5.24333E-11	+/-	1.7E-12
Total phase (deg)			318.5	Apriori accel (us/s/s)	0.00000000000E+00		Resid phase (deg)	318.5	+/-	0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 285.977 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.7 0.0 Search (2048X32) 281.526 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 20.0 0.0 Inc. seg. avg. 284.193 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 228.5 el 12.9 pa 24.3 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/XX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/XX.W.111.0RJ451



Fringe quality 9

SNR 366662.0

Int time 359.556

Amp 10000.001

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110108

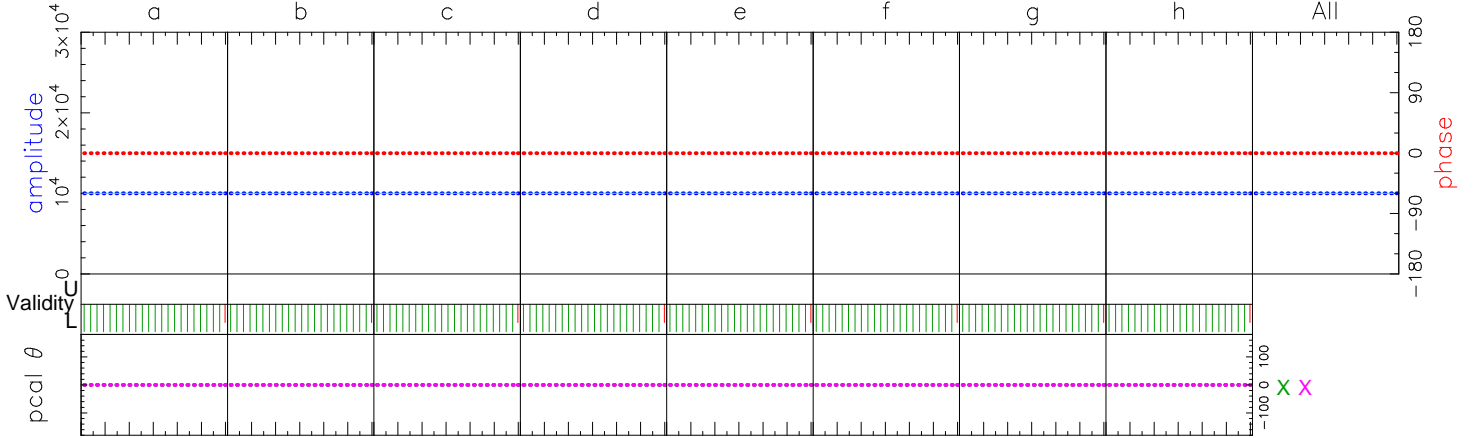
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X 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	+/-	5.9E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 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

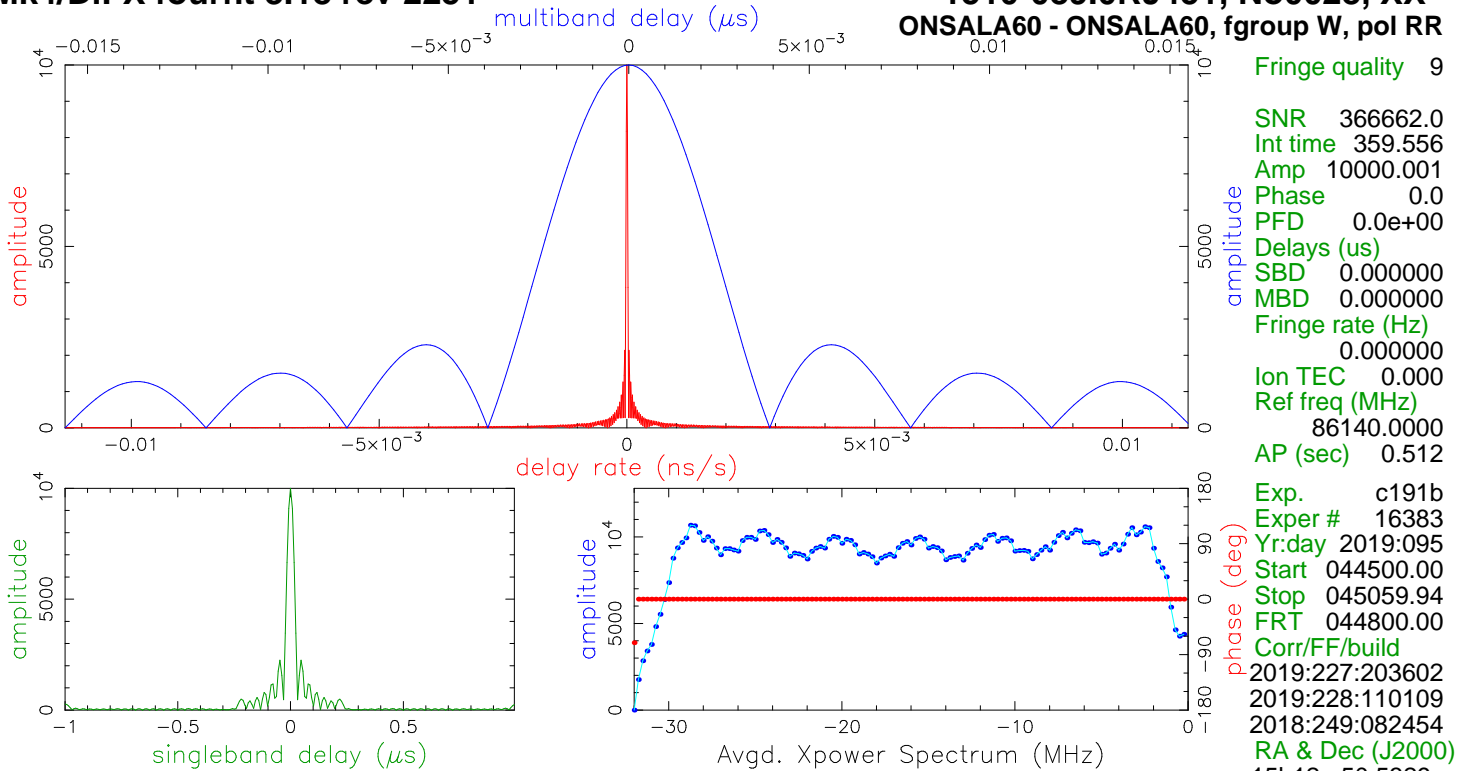
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

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

X: az 228.5 el 12.9 pa 24.3 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/XX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/XX.W.86.0RJ451



Fringe quality 9

SNR 366662.0

Int time 359.556

Amp 10000.001

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044500.00

Stop 045059.94

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110109

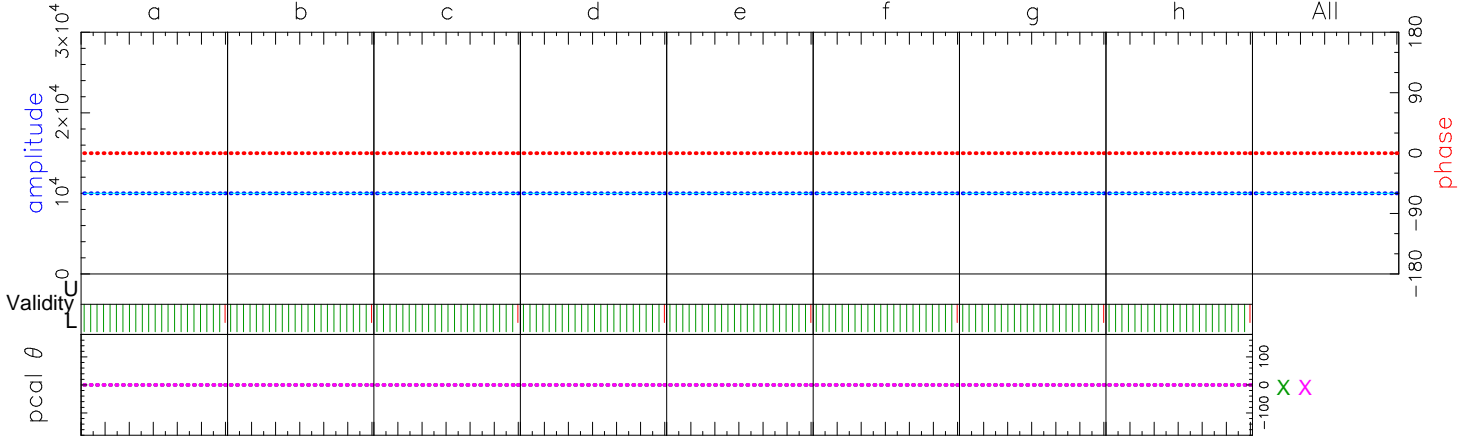
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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 0/703	0/703	0/703	0/703	0/703	0/703	0/703	0/703	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X 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	+/-	5.9E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.8E-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 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 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

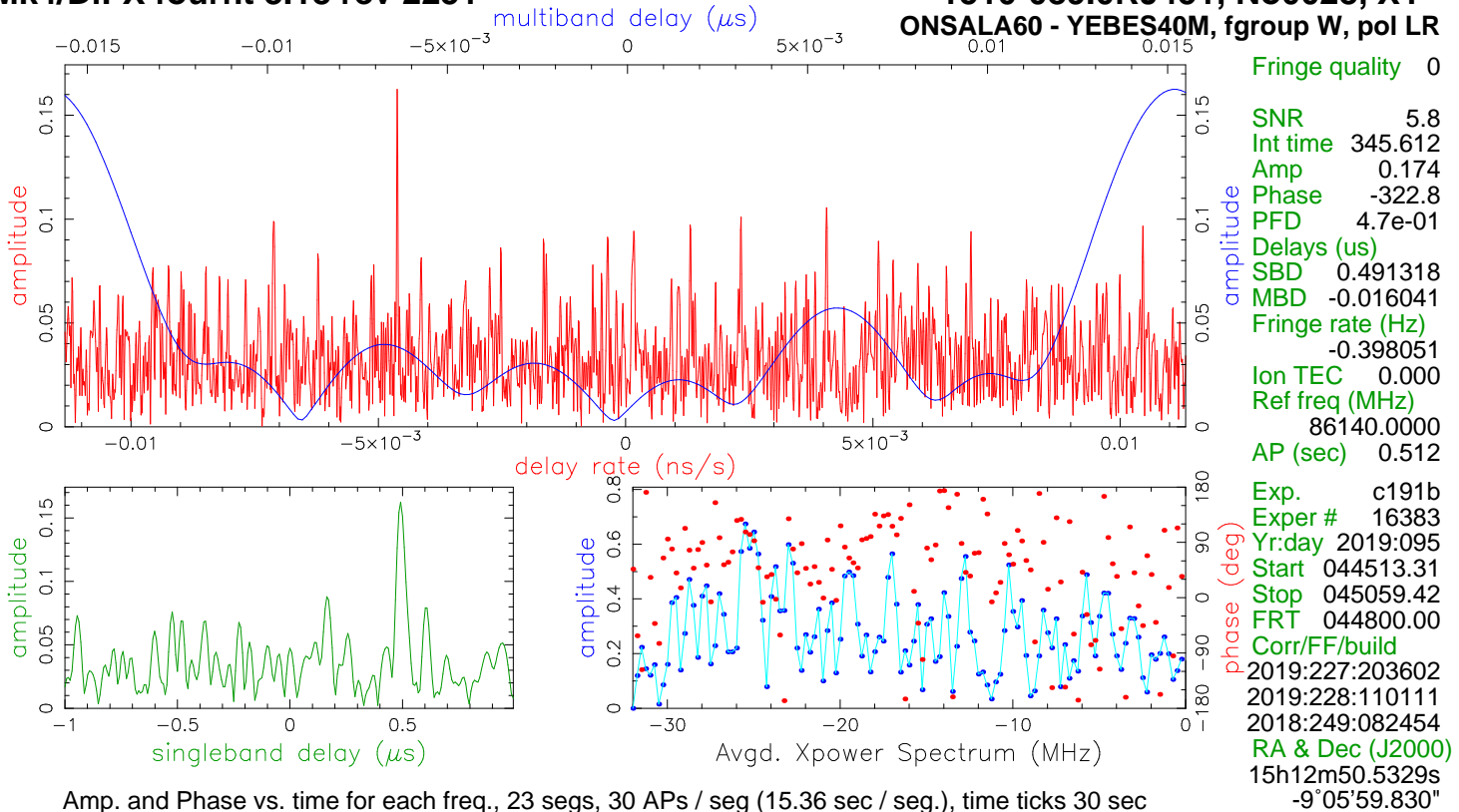
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

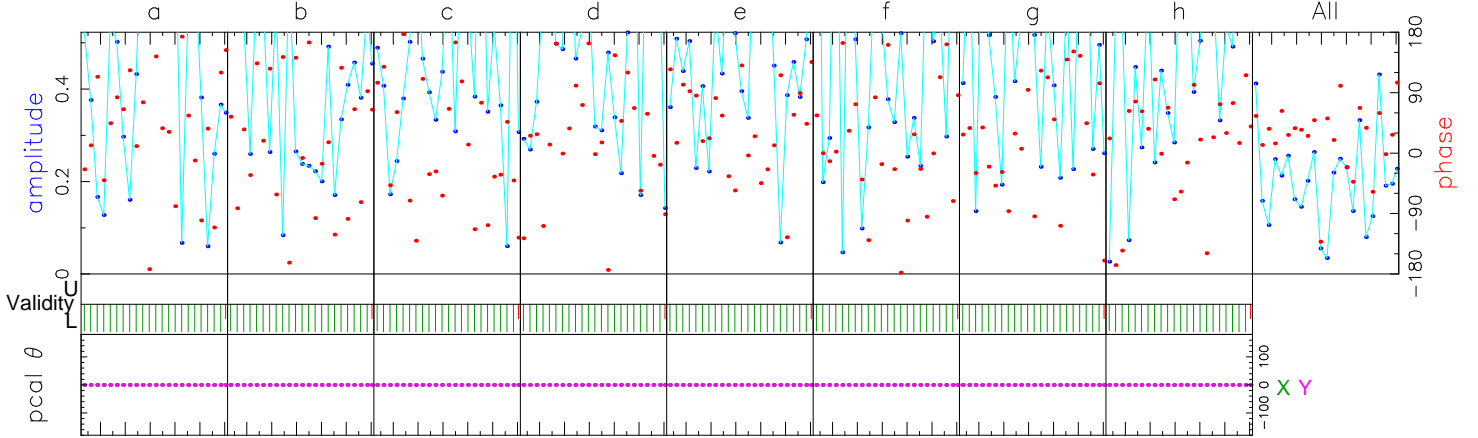
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.002 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 228.5 el 12.9 pa 24.3 X: az 228.5 el 12.9 pa 24.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/XX..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/XX.W.94.0RJ451

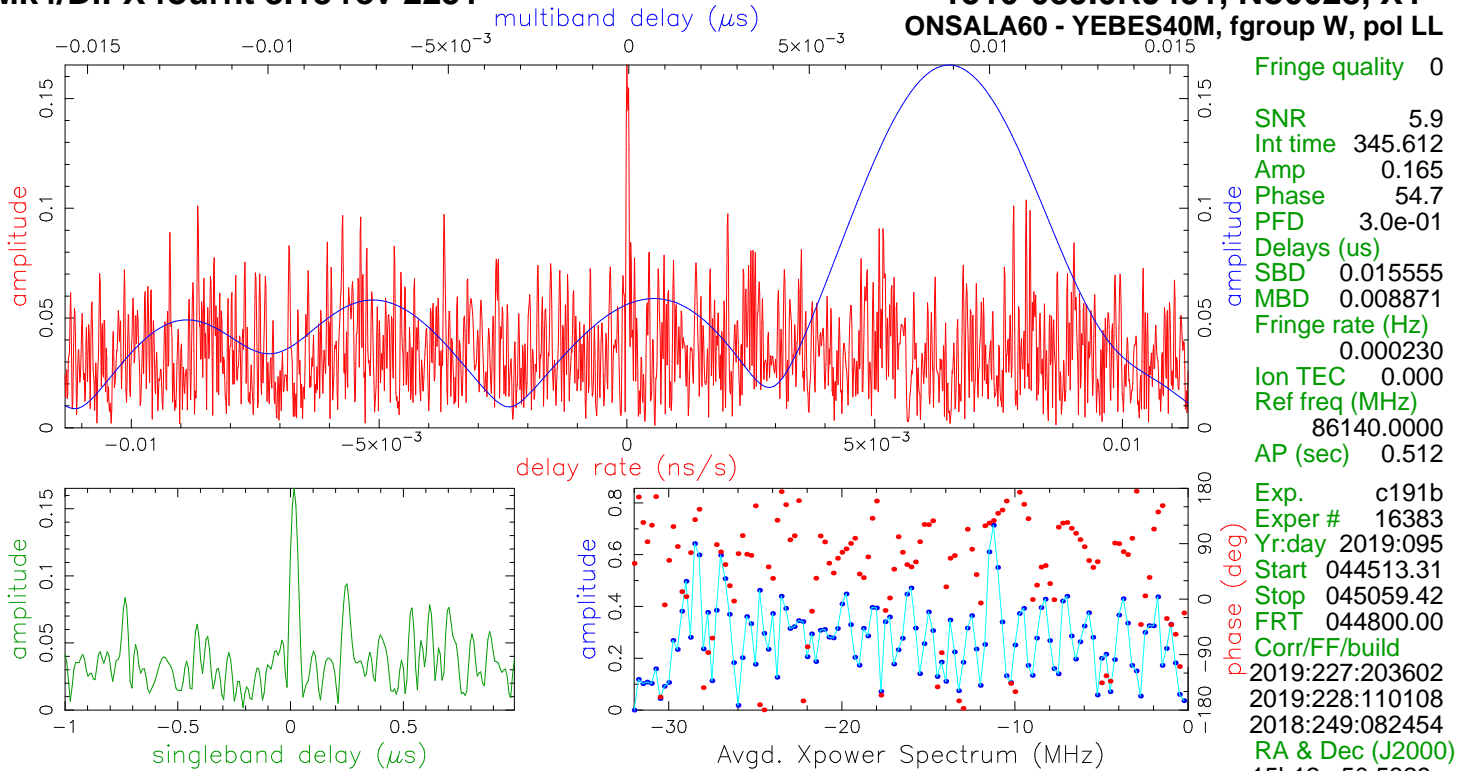


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

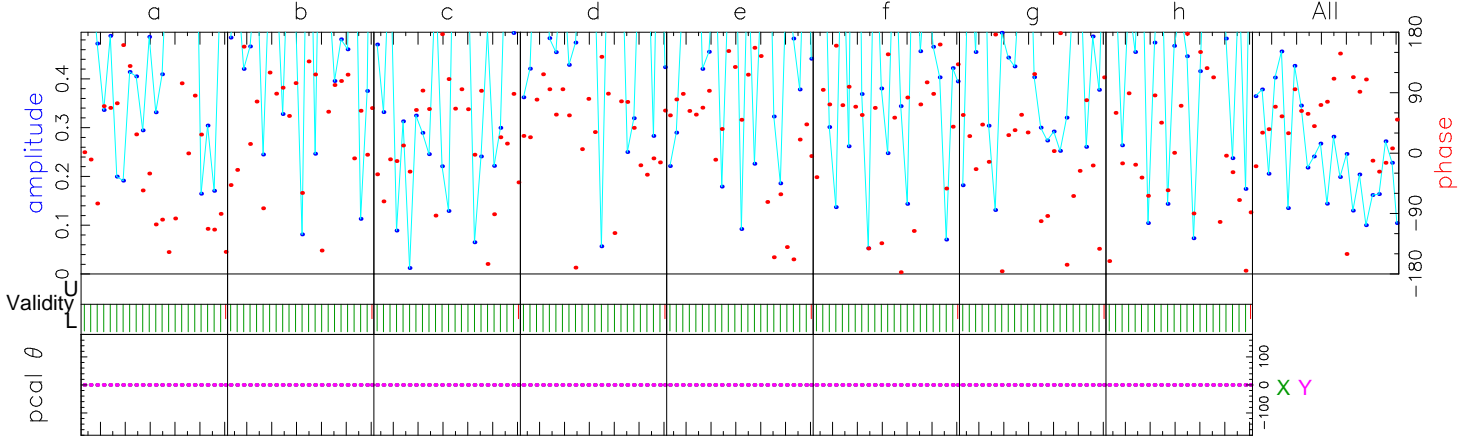


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
43.1	38.4	7.4	48.8	34.6	23.9	47.4	37.7	Phase	37.2
0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
242.5	148.3	100.2	7.5	200.0	246.7	194.9	61.5	Sbd box	191.9
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-6.45181434407E+03		Apriori delay (usec)	-6.45229830338E+03		Resid mbdelay (usec)	-1.60407E-02	+/-	3.7E-04
Sband delay (usec)	-6.45180698488E+03		Apriori clock (usec)	1.8066366E+01		Resid sbdelay (usec)	4.91318E-01	+/-	2.9E-03
Phase delay (usec)	-6.45229830218E+03		Apriori clockrate (us/s)	2.5699999E-07		Resid phdelay (usec)	1.20004E-06	+/-	6.3E-07
Delay rate (us/s)	2.49560911525E-02		Apriori rate (us/s)	2.49607121293E-02		Resid rate (us/s)	-4.62098E-06	+/-	3.2E-09
Total phase (deg)		-269.9	Apriori accel (us/s/s)	3.09367139218E-05		Resid phase (deg)	-322.8	+/-	19.6

ph/seg (deg) 51.5 47.0 Search (2048X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.0 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.0 27.7 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 33.6 48.4 Inc. frq. avg. 0.159 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 228.5 el 12.9 pa 24.3 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) -100.017 1294.626 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/No0028/XY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/XY.W.103.0RJ451 simultaneous interpolator



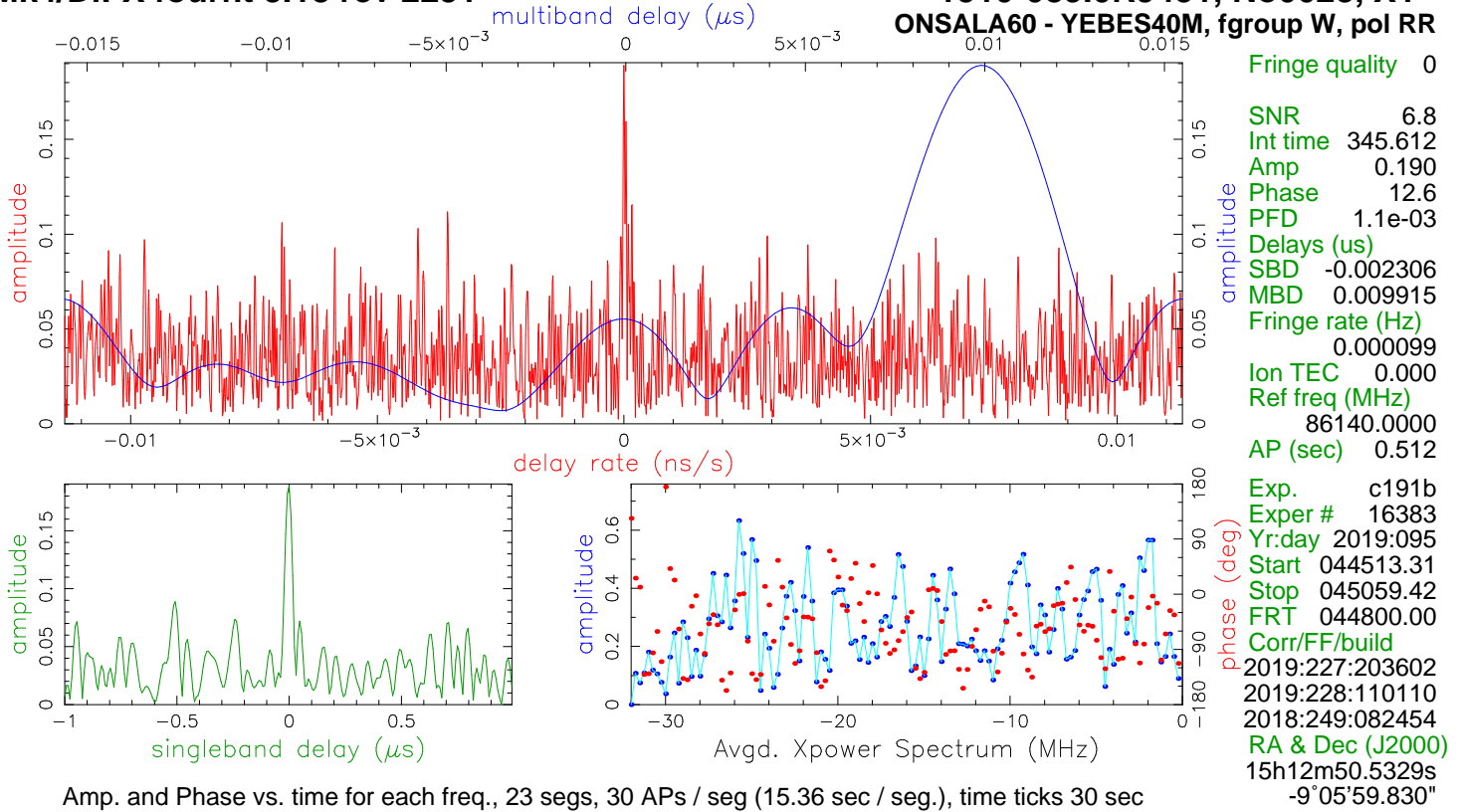
Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



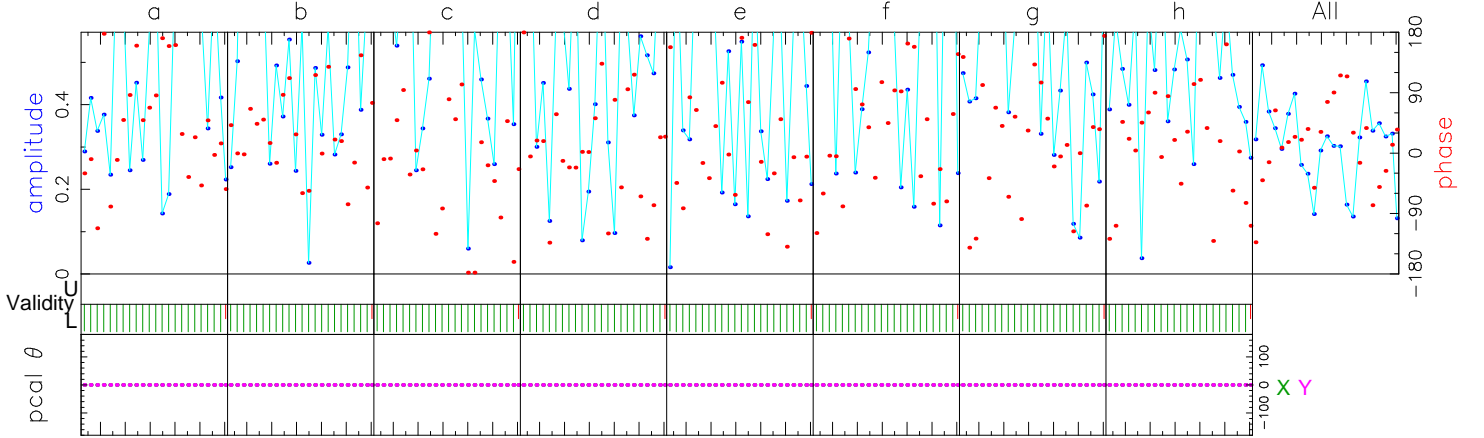
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-21.1	80.2	35.8	49.7	85.5	78.3	20.5	33.8	Phase	54.7
0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.1	Ampl.	0.2
156.1	166.9	94.7	130.6	160.8	131.7	207.5	190.3	Sbd box	131.0
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Tracks	

Group delay (usec)(sbd)	-6.45228943251E+03	Apriori delay (usec)	-6.45229830338E+03	Resid mbdelay (usec)	8.87088E-03	+/-	3.7E-04
Sband delay (usec)	-6.45228274838E+03	Apriori clock (usec)	1.8066366E+01	Resid sbdelay (usec)	1.55550E-02	+/-	2.9E-03
Phase delay (usec)	-6.45229830162E+03	Apriori clockrate (us/s)	2.5699999E-07	Resid phdelay (usec)	1.76287E-06	+/-	6.2E-07
Delay rate (us/s)	2.49607148006E-02	Apriori rate (us/s)	2.49607121293E-02	Resid rate (us/s)	2.67126E-09	+/-	3.1E-09
Total phase (deg)	-252.5	Apriori accel (us/s/s)	3.09367139218E-05	Resid phase (deg)	54.7	+/-	19.3

ph/seg (deg)	56.5	Theor.	46.2	Amplitude	0.165 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	80.0	Search (2048X32)	0.164	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	40.6	Inc. seg. avg.	0.188	Inc. frq. avg.	0.170	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	46.0					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

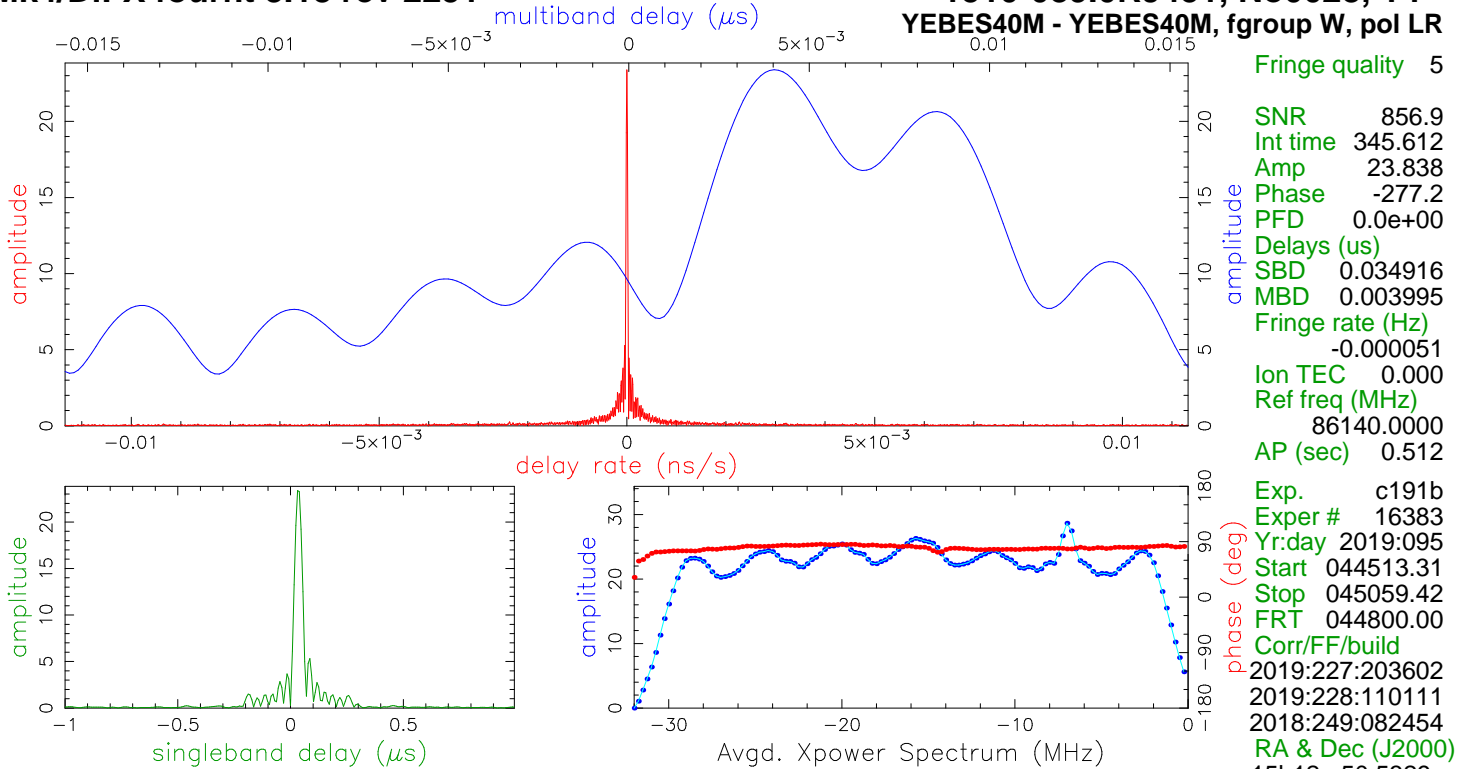


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

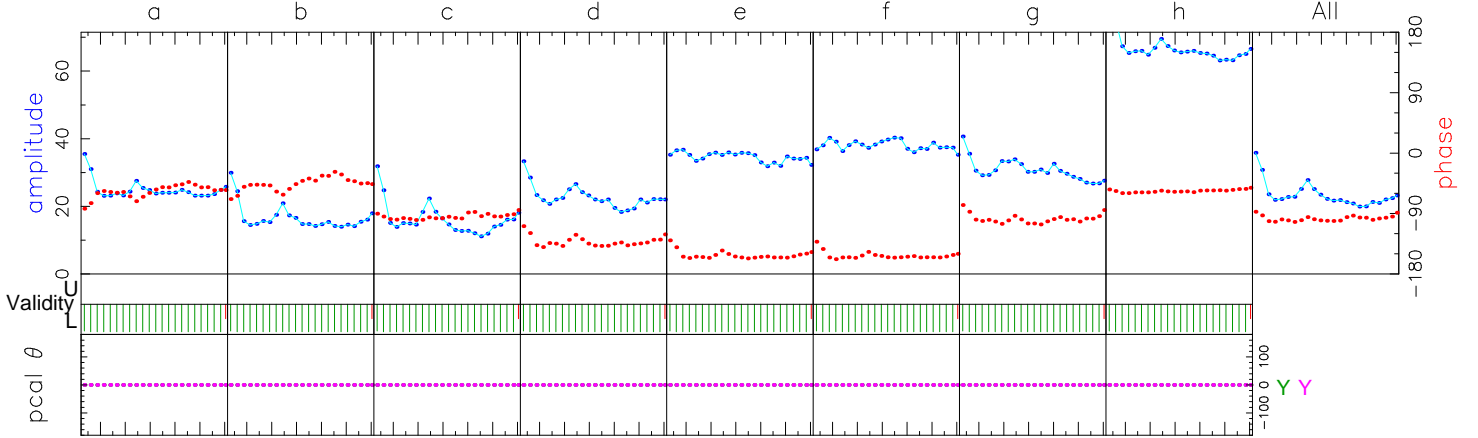


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
23.7	26.7	-15.2	4.0	-8.8	-3.0	37.5	23.3	23.3	Phase	12.6
0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
95.5	128.7	33.1	16.2	127.9	120.8	9.7	164.5	164.5	Sbd box	128.7
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.45228838813E+03		Apriori delay (usec)	-6.45229830338E+03		Resid mbdelay (usec)	9.91525E-03	+/-	3.2E-04	
Sband delay (usec)	-6.45230060988E+03		Apriori clock (usec)	1.8066366E+01		Resid sbdelay (usec)	-2.30650E-03	+/-	2.5E-03	
Phase delay (usec)	-6.45229830297E+03		Apriori clockrate (us/s)	2.5699999E-07		Resid phdelay (usec)	4.05965E-07	+/-	5.4E-07	
Delay rate (us/s)	2.49607132814E-02		Apriori rate (us/s)	2.49607121293E-02		Resid rate (us/s)	1.15211E-09	+/-	2.7E-09	
Total phase (deg)		-294.6	Apriori accel (us/s/s)	3.09367139218E-05		Resid phase (deg)	12.6	+/-	16.7	

	RMS	Theor.	Amplitude	0.190 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.0	40.1	Search (2048X32)	0.188	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	79.3	70.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	20.8	23.7	Inc. seg. avg.	0.249	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	21.4	41.3	Inc. frq. avg.	0.183	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

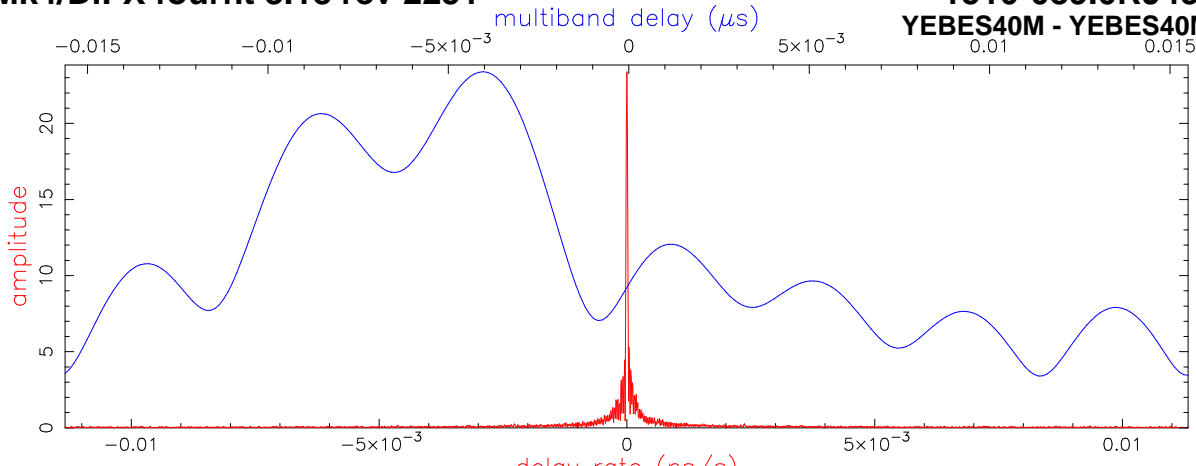


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-58.0	-47.7	-94.5	-131.0	-151.8	-152.6	-97.7	-56.5	Phase	-97.2
24.6	16.3	16.1	22.5	34.4	37.9	30.6	66.7	Ampl.	31.2
133.6	133.4	134.0	132.4	133.4	133.6	134.5	133.2	Sbd box	133.5
U/L 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Y 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.52448125000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	3.99481E-03	+/-	2.5E-06		
Sband delay (usec)	3.49160000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.49160E-02	+/-	2.0E-05		
Phase delay (usec)	-3.13312465060E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.13312E-06	+/-	4.3E-09		
Delay rate (us/s)	-5.96605515690E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-5.96606E-10	+/-	2.2E-11		
Total phase (deg)	-277.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-277.2	+/-	0.1		

ph/seg (deg)	3.8	0.3	Search (2048X32)	23.333	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	15.1	0.6	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	46.3	0.2	Inc. seg. avg.	23.447	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	71.3	0.3	Inc. frq. avg.	31.151	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
					Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			



Fringe quality 5

SNR 856.9

Int time 345.612

Amp 23.838

Phase 277.2

PFD 0.0e+00

Delays (us)

SBD -0.034916

MBD -0.003995

Fringe rate (Hz) 0.000051

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044513.31

Stop 045059.42

FRT 044800.00

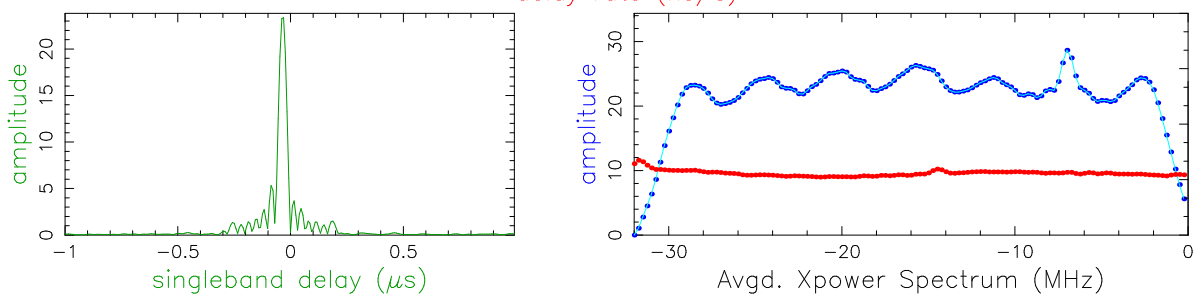
Corr/FF/build

2019:227:203602

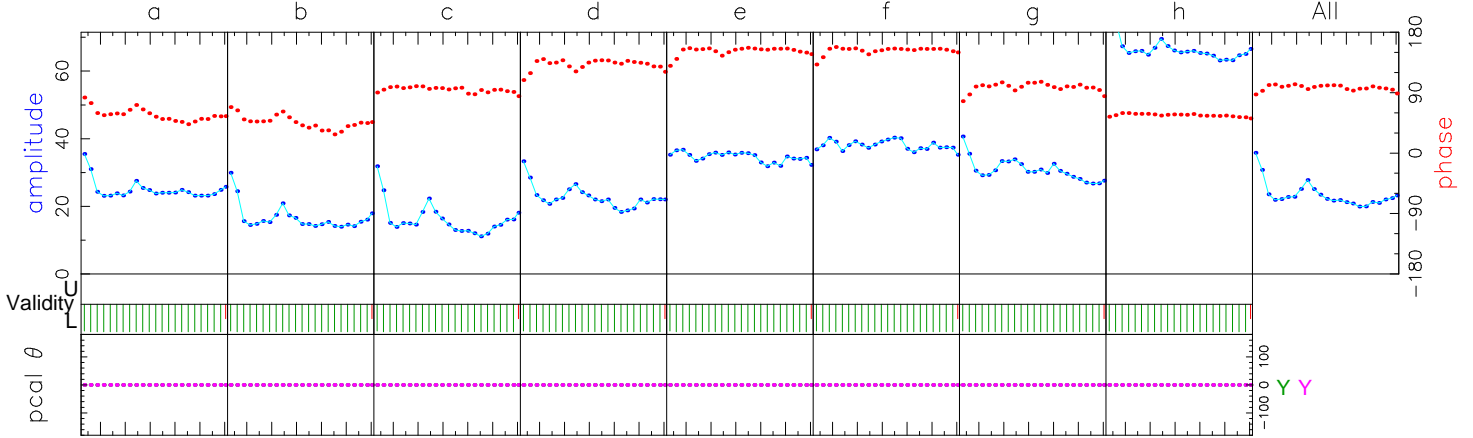
2019:228:110113

2018:249:082454

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

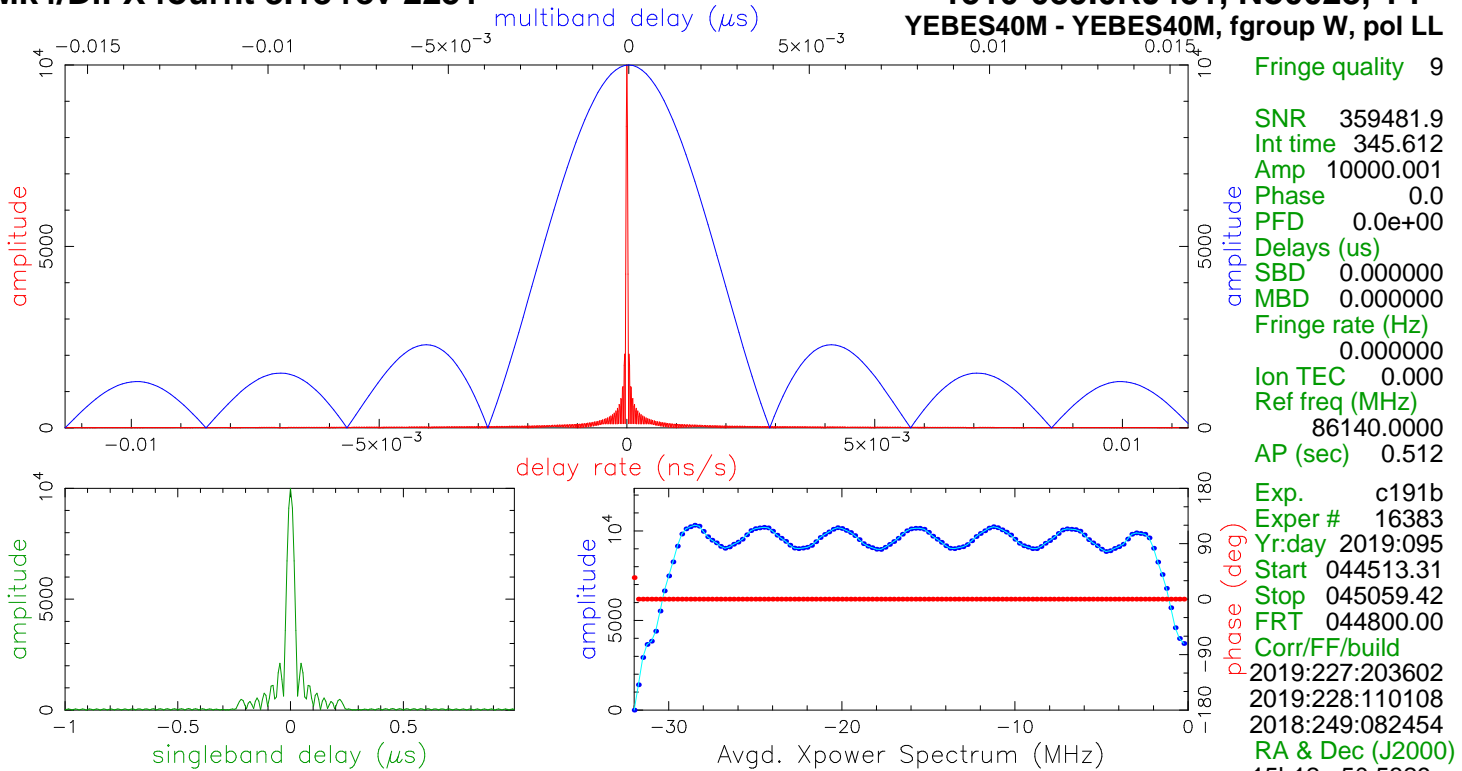


Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	58.0	47.7	94.5	131.0	151.8	152.6	97.7	56.5	Phase	97.2
	24.6	16.3	16.1	22.5	34.4	37.9	30.6	66.7	Ampl.	31.2
	124.4	124.6	124.0	125.6	124.6	124.4	123.5	124.8	Sbd box	124.5
U/L	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.52448125000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.99481E-03	+/- 2.5E-06
Sband delay (usec)	-3.49160000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.49160E-02	+/- 2.0E-05
Phase delay (usec)	3.13312465053E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.13312E-06	+/- 4.3E-09
Delay rate (us/s)	5.96605515690E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		5.96606E-10	+/- 2.2E-11
Total phase (deg)	277.2		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		277.2	+/- 0.1

	RMS	Theor.	Amplitude	23.838 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	3.8	0.3	Search (2048X32)	23.333	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	15.1	0.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	46.3	0.2	Inc. seg. avg.	23.447	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	71.3	0.3	Inc. frq. avg.	31.151	Data rate(Mb/s): 1024	ion window (TEC) 0.00 0.00



Fringe quality 9

SNR 359481.9

Int time 345.612

Amp 10000.001

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:095

Start 044513.31

Stop 045059.42

FRT 044800.00

Corr/FF/build

2019:227:203602

2019:228:110108

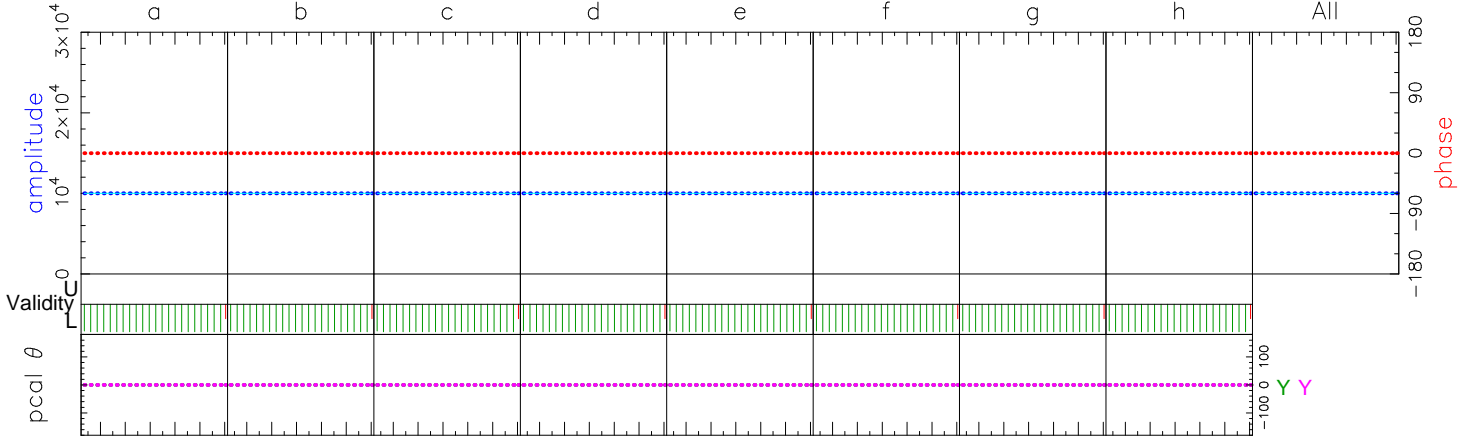
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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	0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	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 +/- 6.0E-09	
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00 +/- 4.8E-08	
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00 +/- 1.0E-11	
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00 +/- 5.1E-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 10000.001 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

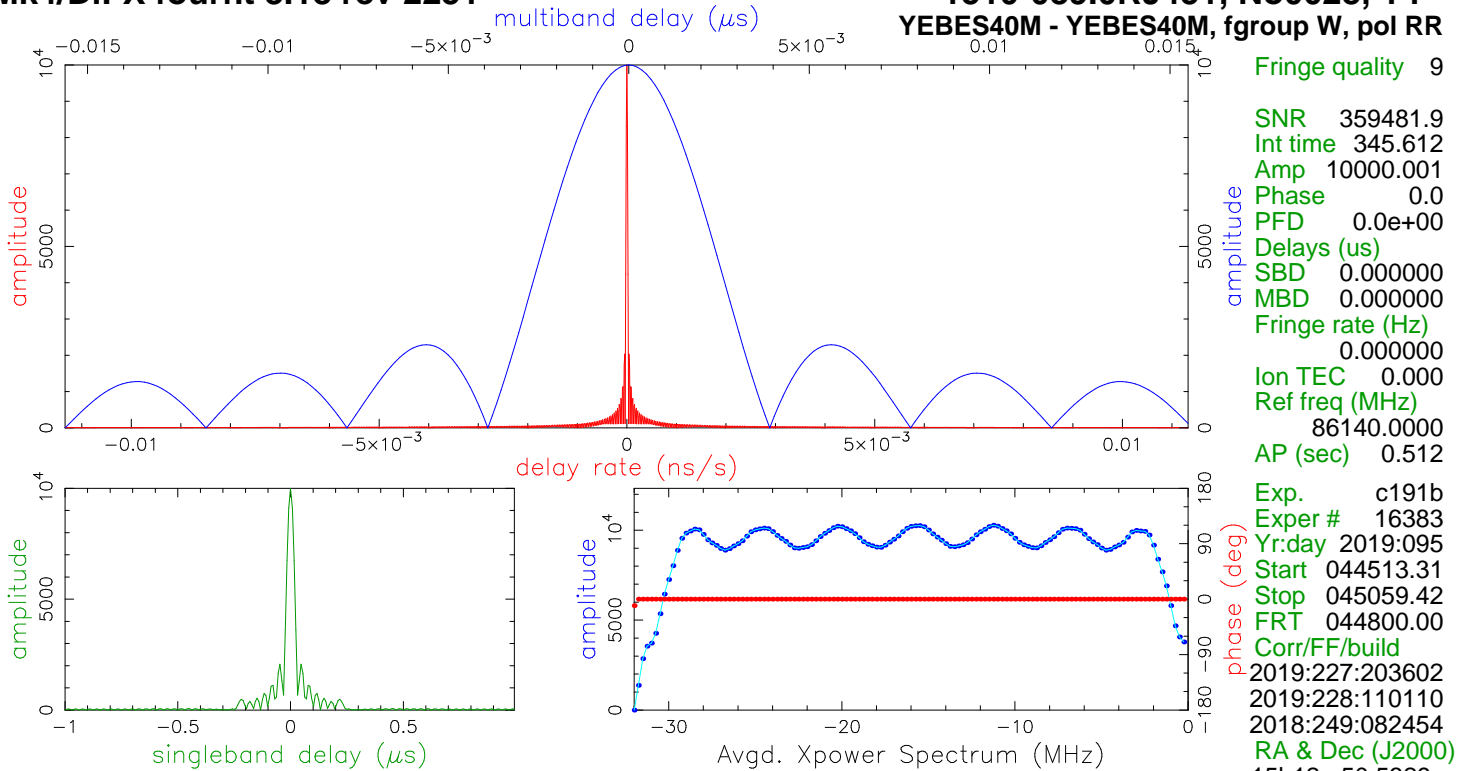
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

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

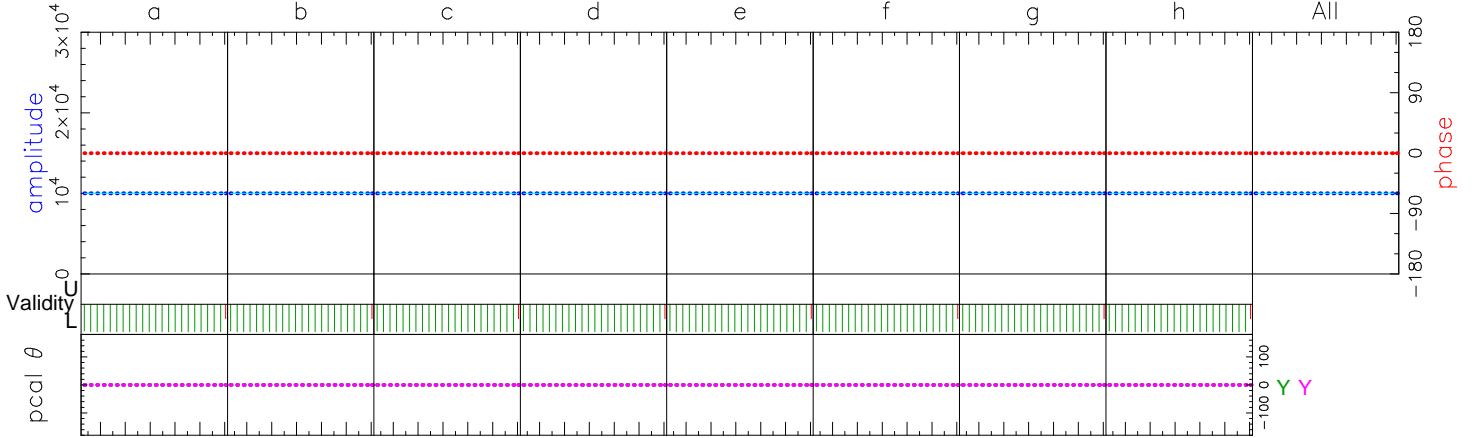
amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

Y: az 218.8 el 31.9 pa 29.4 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/YY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/YY.W.87.0RJ451



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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 0/676	0/676	0/676	0/676	0/676	0/676	0/676	0/676	APs used	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Y 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y 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	+/-	6.0E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.8E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	5.1E-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 10000.001 +/- 0.028 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
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Y: az 218.8 el 31.9 pa 29.4 Y: az 218.8 el 31.9 pa 29.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0028/YY..0RJ451 Output file: /Exps/c191b/v1/1234/No0028/YY.W.95.0RJ451