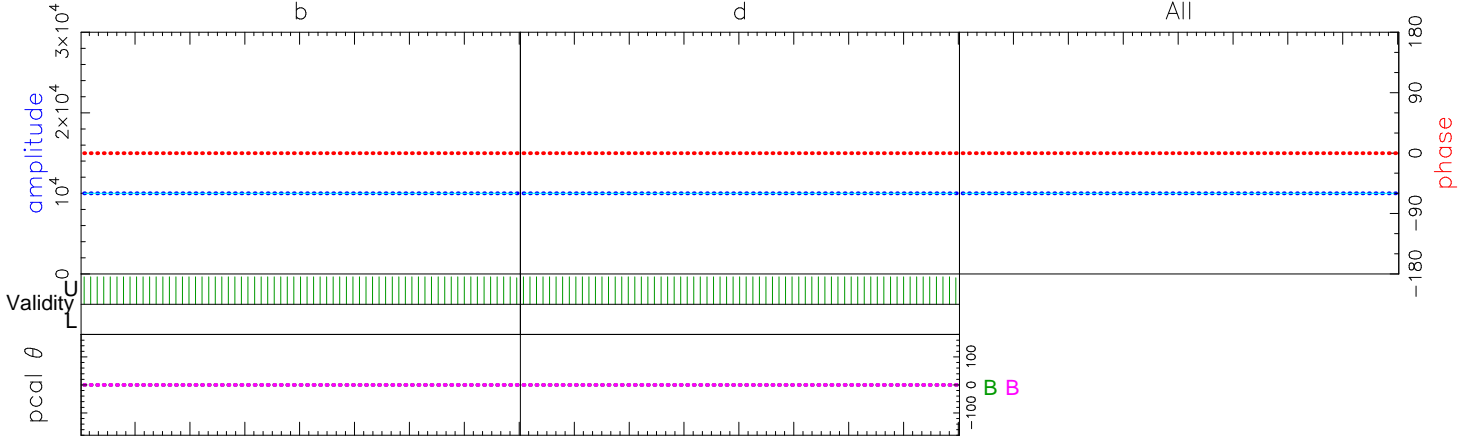


Fringe quality 9
 SNR 211822.5
 Int time 479.997
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153208
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

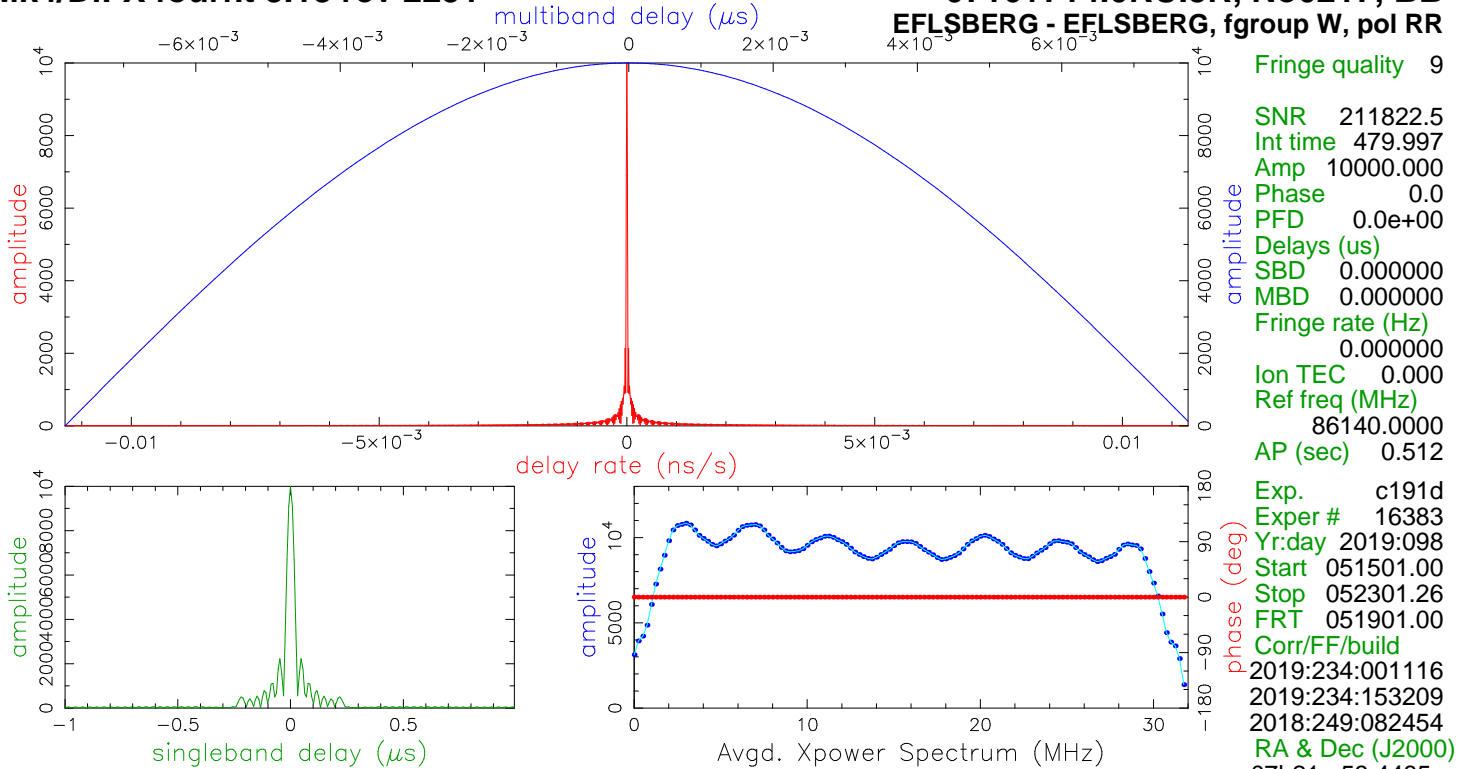
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



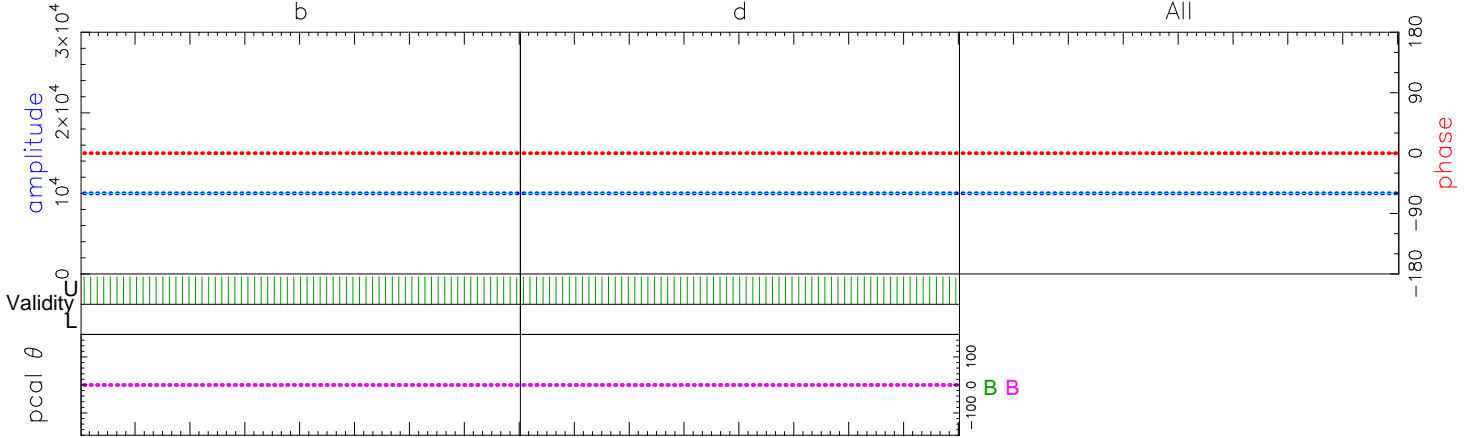
86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 938/0	938/0	APs used	
B 1000	1000	PC freqs	
B 1000	1000	PC freqs	
B:B 0:0	0:0	PC phase	
B:B 0:0	0:0	Manl PC	
B 1000	1000	PC amp	
B 1000	1000		
B W01UL	W03UL	Chan ids	
B		Tracks	
B W01UL	W03UL	Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.3E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	8.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.7E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	6.3E-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	10000.000 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0		0.0		0.0	Search (2048X8)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0		0.0		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Inc. frq. avg.	10000.000	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
								nlags:	128	t_cohere	infinite
										ion window (TEC)	0.00 0.00



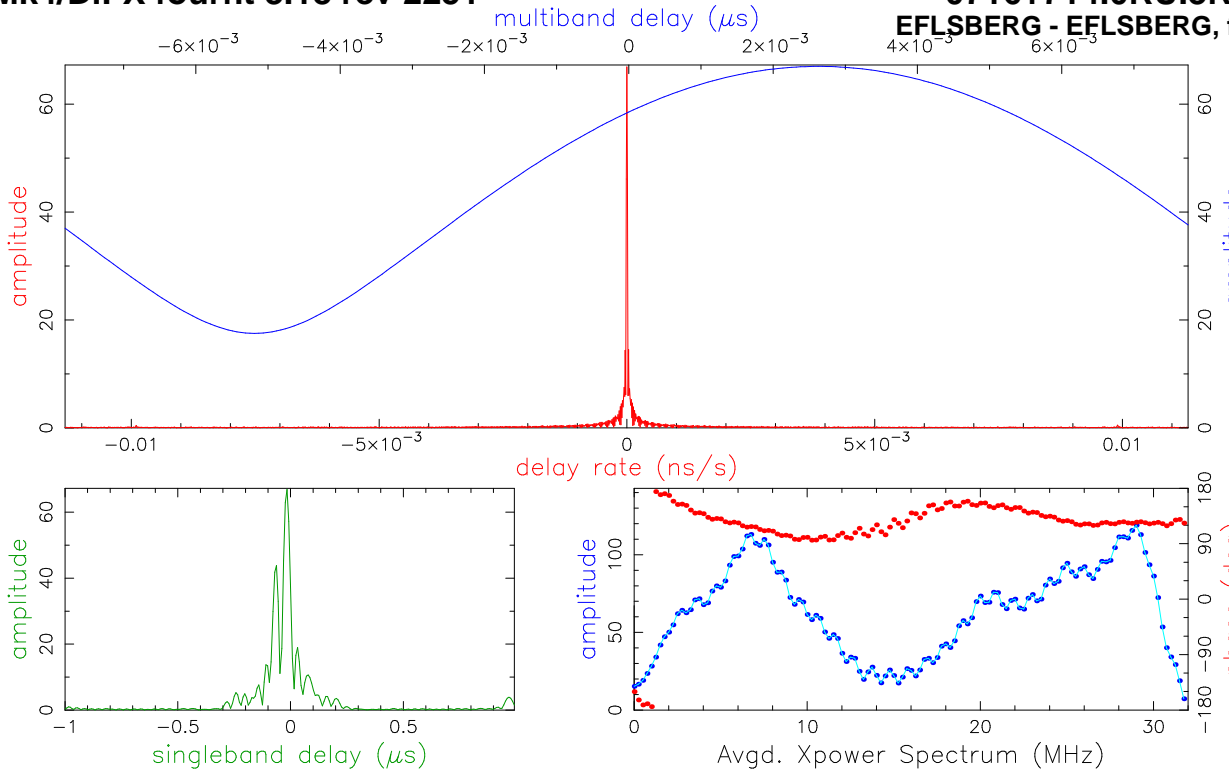
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 938/0	938/0	APs used	
B 1000	1000	PC freqs	
B 1000	1000	PC freqs	
B:B 0:0	0:0	PC phase	
B:B 0:0	0:0	Manl PC	
B 1000	1000	PC amp	
B 1000	1000		
B W01UR	W03UR	Chan ids	
B		Tracks	
B W01UR	W03UR	Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.3E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	8.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.7E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	6.3E-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	10000.000 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X8)	0.000	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
		Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	nlags:	128	ion window (TEC)	0.00 0.00

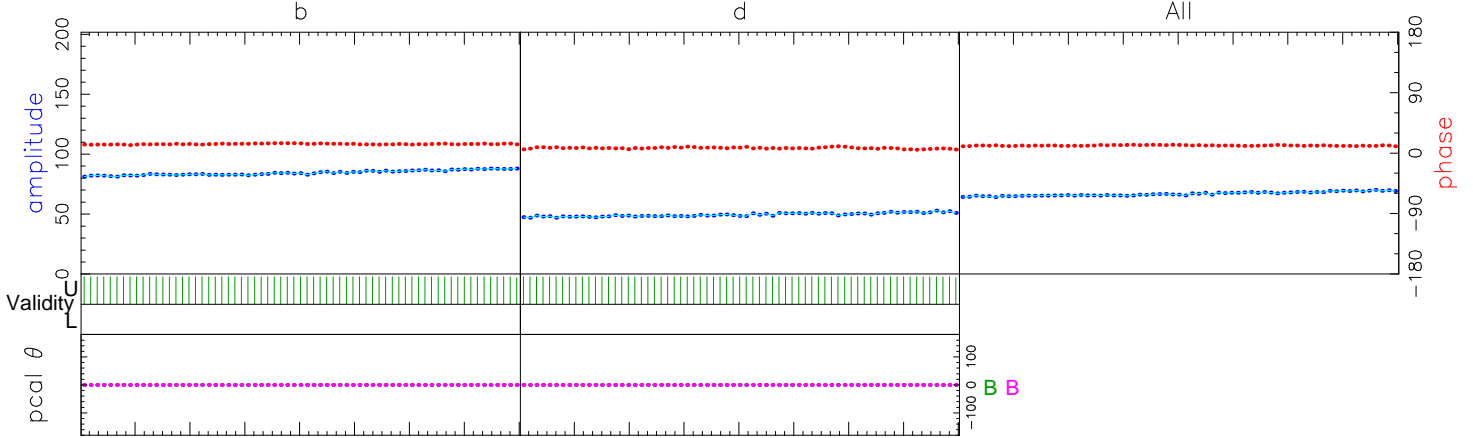


Fringe quality 8

SNR 1424.7
Int time 479.997
Amp 67.259
Phase 101.3
PFD 0.0e+00
Delays (us)
SBD -0.017345
MBD 0.002886
Fringe rate (Hz)
-0.000010
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

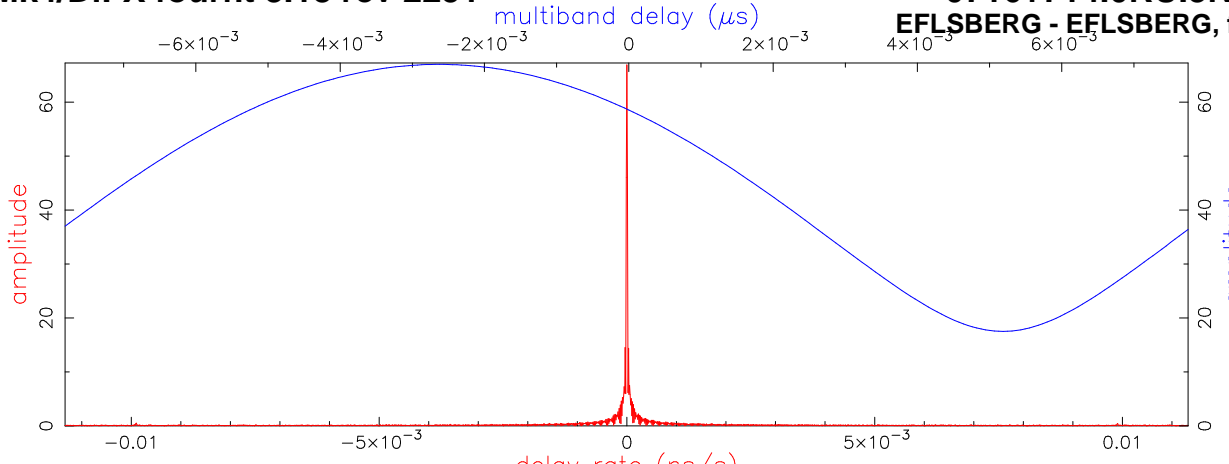
Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.00
Stop 052301.26
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153212
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)		All
U/L	938/0	938/0	1000	7.5	11.3	
B	1000	1000	1000	49.5	67.0	
B	1000	1000	1000	120.6	126.8	
B:B	0:0	0:0	0:0			
B:B	0:0	0:0	0:0			
B	1000	1000	1000			
B	1000	1000	1000			
B	W01UL	W03UL	W03UL			
B	W01UR	W03UR	W03UR			
Group delay (usec)(sbd)	-1.27392500000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.88575E-03	+/- 3.5E-06
Sband delay (usec)	-1.73450000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.73450E-02	+/- 1.2E-05
Phase delay (usec)	3.63815510223E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.63816E-07	+/- 2.6E-09
Delay rate (us/s)	-1.17620564851E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.17621E-10	+/- 9.4E-12
Total phase (deg)	101.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	101.3	+/- 0.1

RMS Theor. Amplitude 67.259 +/- 0.047 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.6 0.3 Search (2048X8) 66.422 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.5 0.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.1 Inc. seg. avg. 66.913 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 26.0 0.1 Inc. frq. avg. 66.996 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 8

SNR 1424.7

Int time 479.997

Amp 67.259

Phase -101.3

PFD 0.0e+00

Delays (us)

SBD 0.017345

MBD -0.002886

Fringe rate (Hz)

0.000010

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.00

Stop 052301.26

FRT 051901.00

Corr/FF/build

2019:234:001116

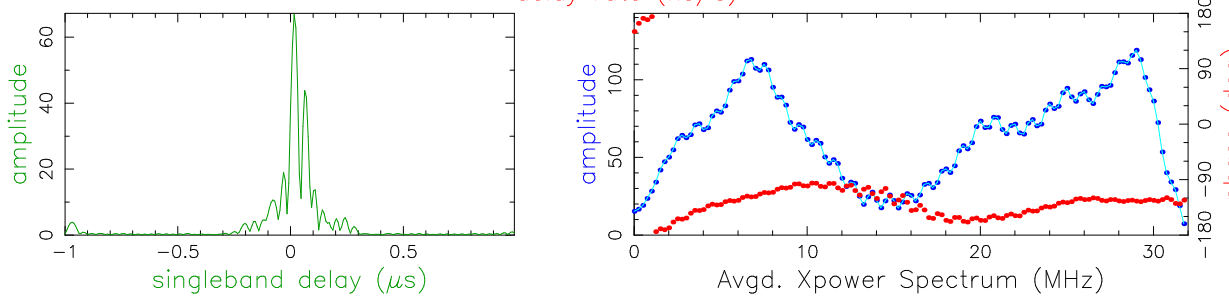
2019:234:153213

2018:249:082454

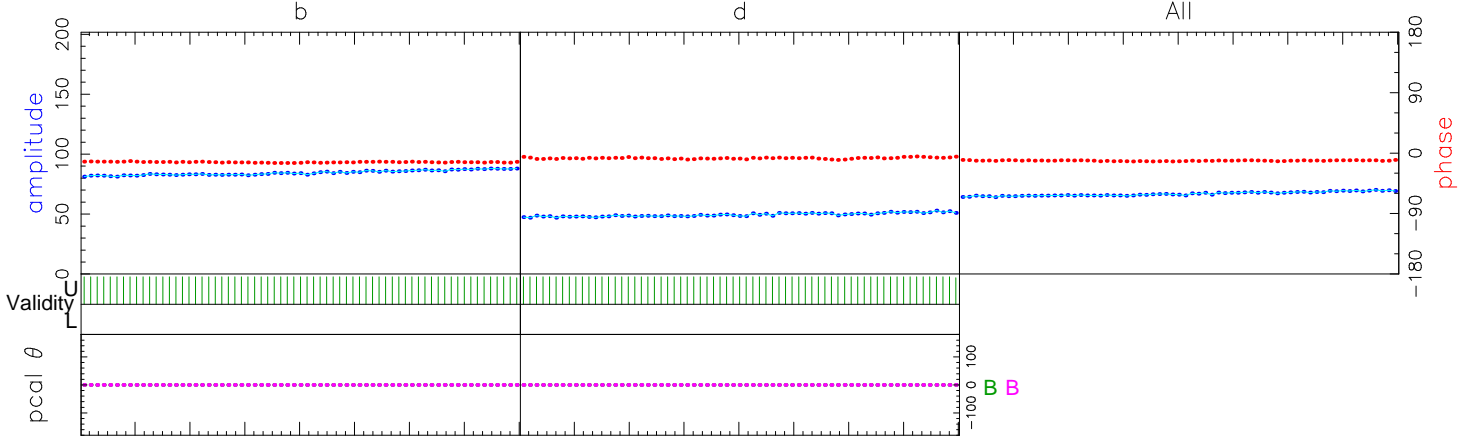
RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"



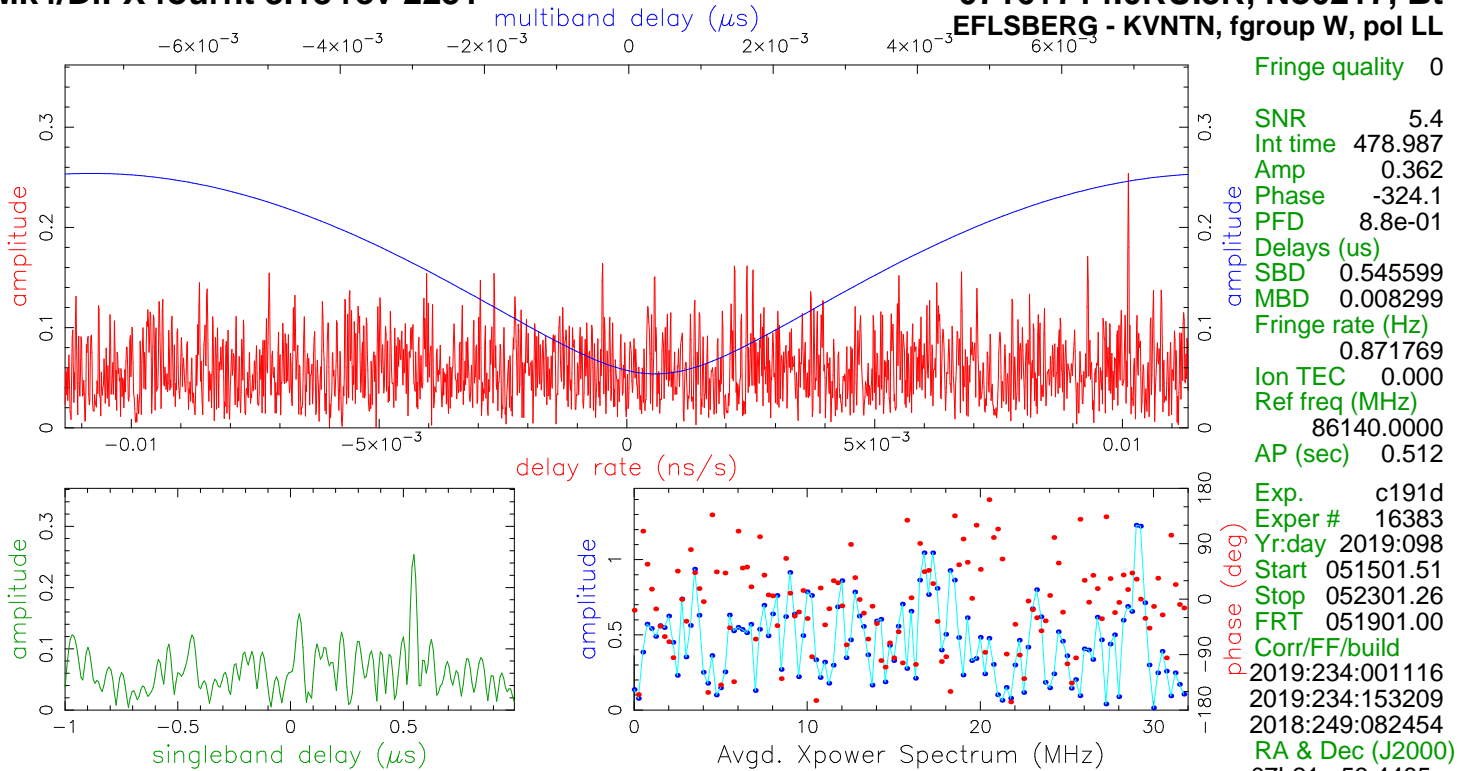
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



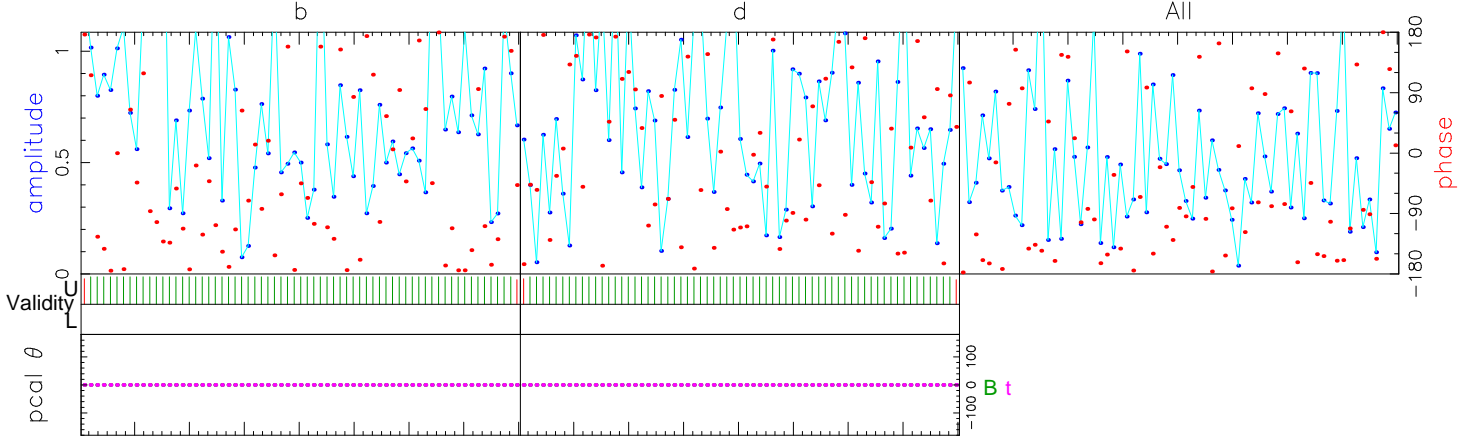
86156.00	86220.00	Freq (MHz)	All
-13.5	-7.5	Phase	-11.3
84.5	49.5	Ampl.	67.0
131.0	137.4	Sbd box	131.2
U/L 938/0	938/0	APs used	
B 1000	1000	PC freqs	
B 1000	1000	PC freqs	
B:B 0:0	0:0	PC phase	
B:B 0:0	0:0	Manl PC	
B 1000	1000	PC amp	
B 1000	1000		
B W01UR	W03UR	Chan ids	
B W01UL	W03UL	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	1.27392500000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.88575E-03	+/-	3.5E-06
Sband delay (usec)	1.73450000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.73450E-02	+/-	1.2E-05
Phase delay (usec)	-3.63815509907E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.63816E-07	+/-	2.6E-09
Delay rate (us/s)	1.17620564851E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.17621E-10	+/-	9.4E-12
Total phase (deg)	-101.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-101.3	+/-	0.1

ph/seg (deg)	0.6	0.3	Amplitude	67.259 +/- 0.047	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	2.5	0.6	Search (2048X8)	66.422	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.0	0.1	Inc. seg. avg.	66.913	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	66.996	Data rate(Mb/s): 256	nlags: 128 t_cohere infinite	ion window (TEC)	0.00 0.00



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

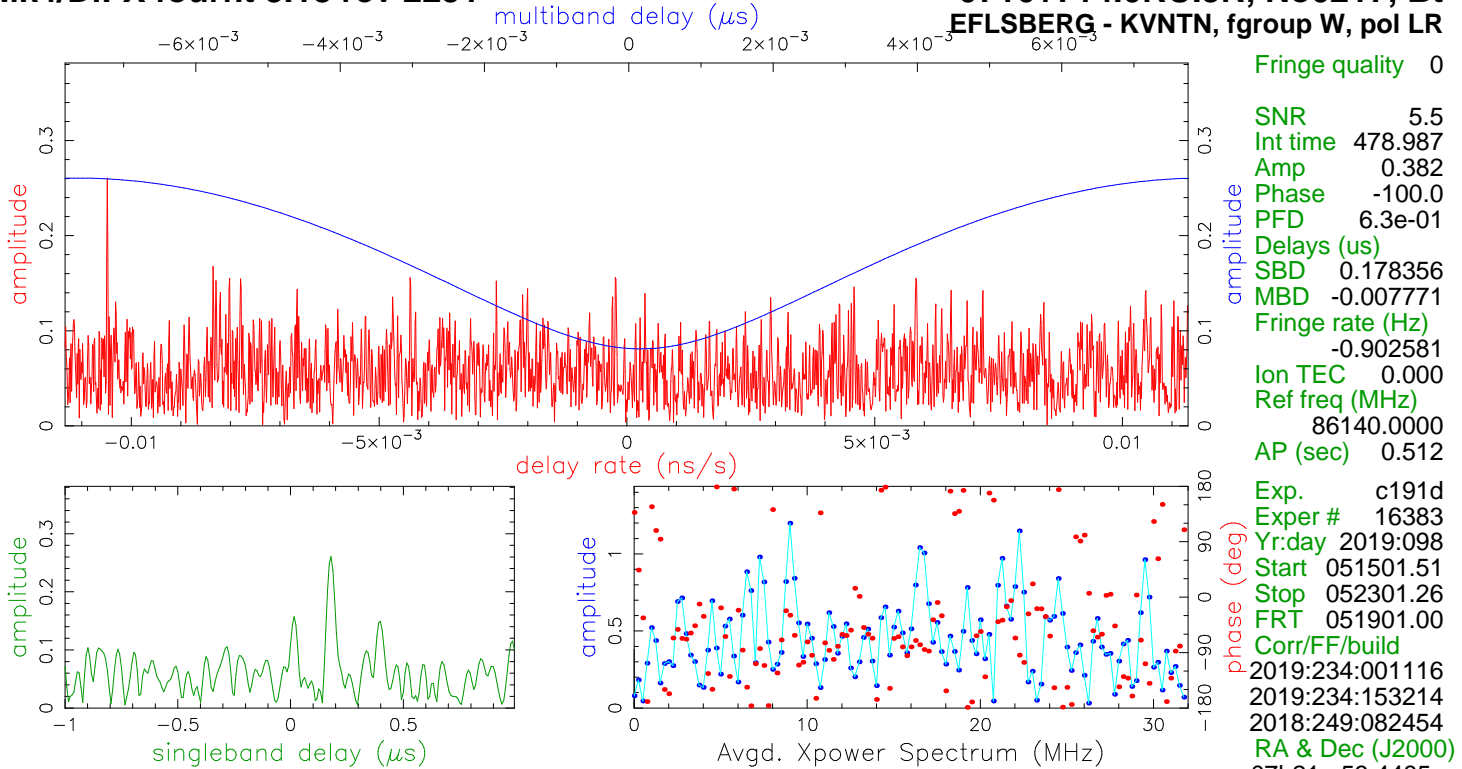


86156.00		86220.00		Freq (MHz)	All
-143.1		-145.8		Phase	-144.1
0.4		0.3		Ampl.	0.3
198.5		167.9		Sbd box	198.8
U/L 937/0		937/0		APs used	
B 1000		1000		PC freqs	
t 0		0		PC freqs	
B:t 0:0		0:0		PC phase	
B:t 0:0		0:0		Manl PC	
B 1000		1000		PC amp	
t 1000		1000			
B W01UL		W03UL		Chan ids	
t W01UL		W03UL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.89408330311E+03	Apriori delay (usec)	-1.89462285211E+03	Resid mbdelay (usec)	8.29900E-03 +/- 9.2E-04
Sband delay (usec)	-1.89407725311E+03	Apriori clock (usec)	1.1086281E-01	Resid sbdelay (usec)	5.45599E-01 +/- 3.2E-03
Phase delay (usec)	-1.89462285675E+03	Apriori clockrate (us/s)	-5.9000000E-07	Resid phdelay (usec)	-4.64823E-06 +/- 6.9E-07
Delay rate (us/s)	-4.32466446747E-01	Apriori rate (us/s)	-4.32476567124E-01	Resid rate (us/s)	1.01204E-05 +/- 2.5E-09
Total phase (deg)	-137.1	Apriori accel (us/s/s)	3.39239153480E-05	Resid phase (deg)	-324.1 +/- 21.3

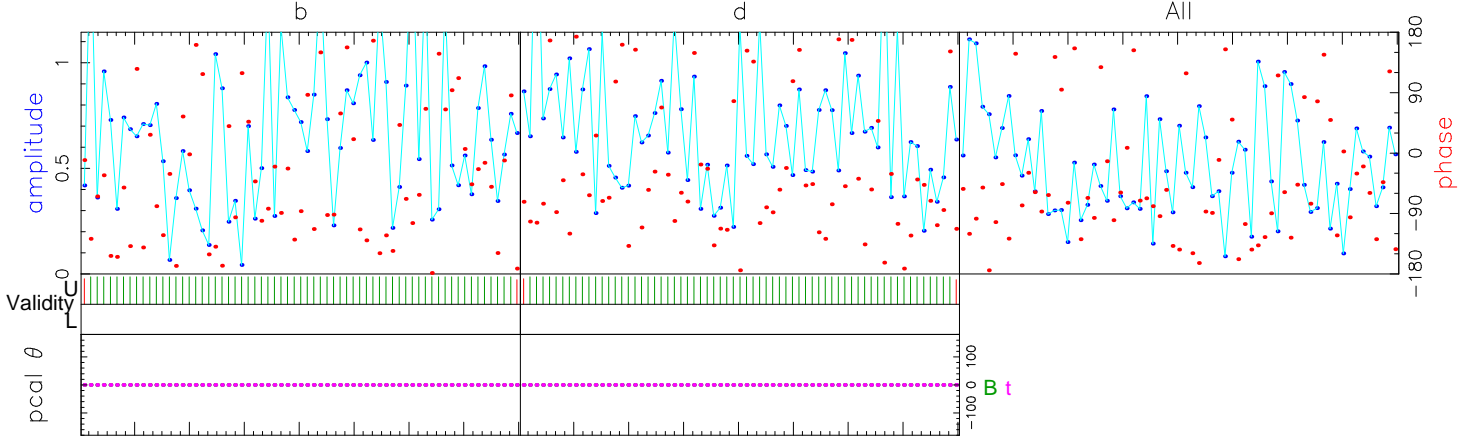
ph/seg (deg)	RMS 76.8	Theor. 87.1	Amplitude 0.362 +/- 0.067	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	159.3	152.0	Search (2048X8) 0.248	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	15.0	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	21.1	26.3	Inc. seg. avg. 0.346	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.349	Data rate(Mb/s): 256	dr window (ns/s) -0.011 0.011
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

B: az 356.4 el 32.0 pa 7.1 t: az 22.4 el 37.7 pa -97.3 u,v (fr/asec) 7863.913 8389.536 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/Bt..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/Bt.W.20.0RUI3R



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

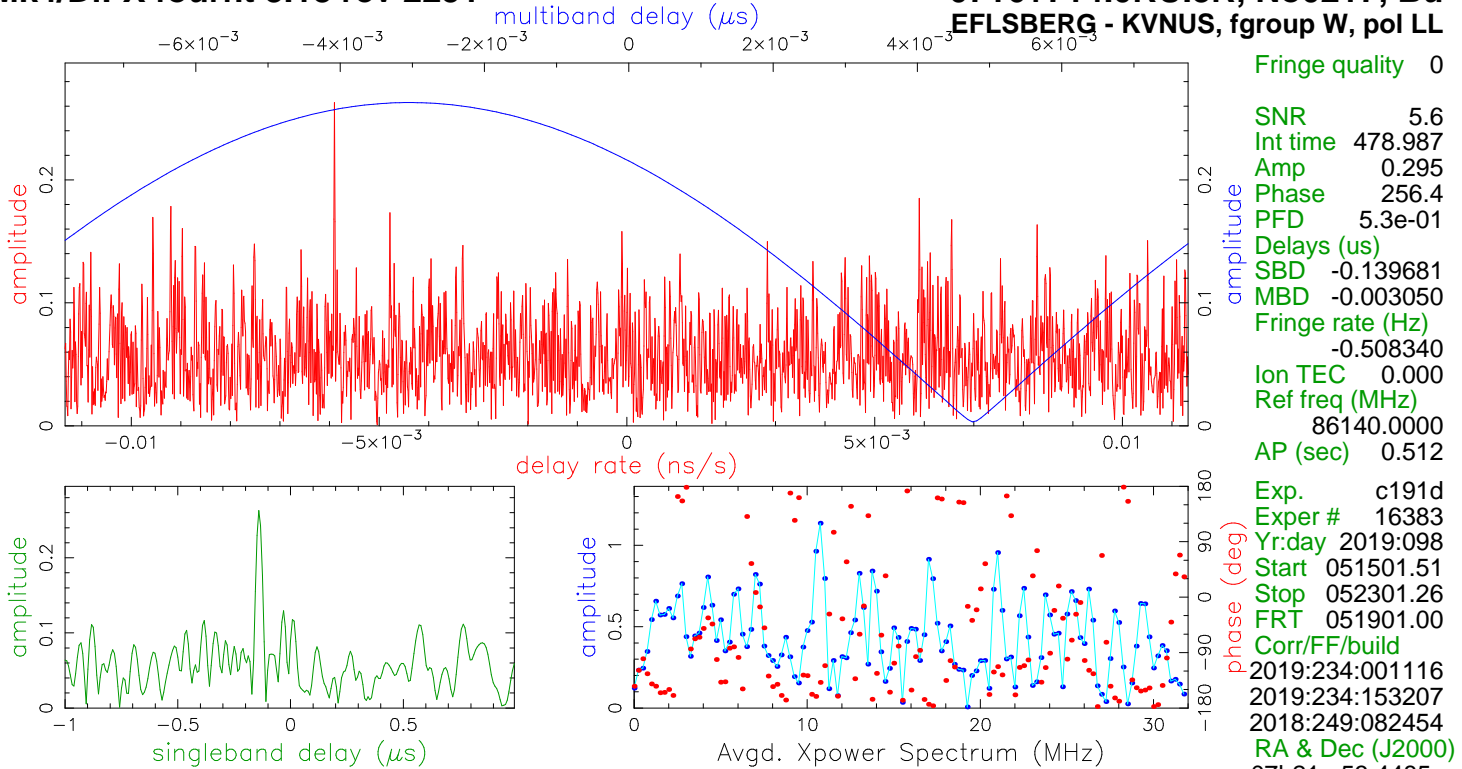


86156.00		86220.00		Freq (MHz)	All
-101.8		-99.0		Phase	-100.0
0.3		0.5		Ampl.	0.4
130.7		152.3		Sbd box	151.8
U/L 937/0		937/0		APs used	
B 1000		1000		PC freqs	
t 0		0		PC freqs	
B:t 0:0		0:0		PC phase	
B:t 0:0		0:0		Mani PC	
B 1000		1000		PC amp	
t 1000		1000			
B W01UL		W03UL		Chan ids	
t W01UR		W03UR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.89444312336E+03	Apriori delay (usec)	-1.89462285211E+03	Resid mbdelay (usec)	-7.77125E-03 +/- 9.0E-04
Sband delay (usec)	-1.89444449661E+03	Apriori clock (usec)	1.1086281E-01	Resid sbdelay (usec)	1.78356E-01 +/- 3.1E-03
Phase delay (usec)	-1.89462285533E+03	Apriori clockrate (us/s)	-5.9000000E-07	Resid phdelay (usec)	-3.22329E-06 +/- 6.7E-07
Delay rate (us/s)	-4.32487045189E-01	Apriori rate (us/s)	-4.32476567124E-01	Resid rate (us/s)	-1.04781E-05 +/- 2.4E-09
Total phase (deg)	-272.9	Apriori accel (us/s/s)	3.39239153480E-05	Resid phase (deg)	-100.0 +/- 20.7

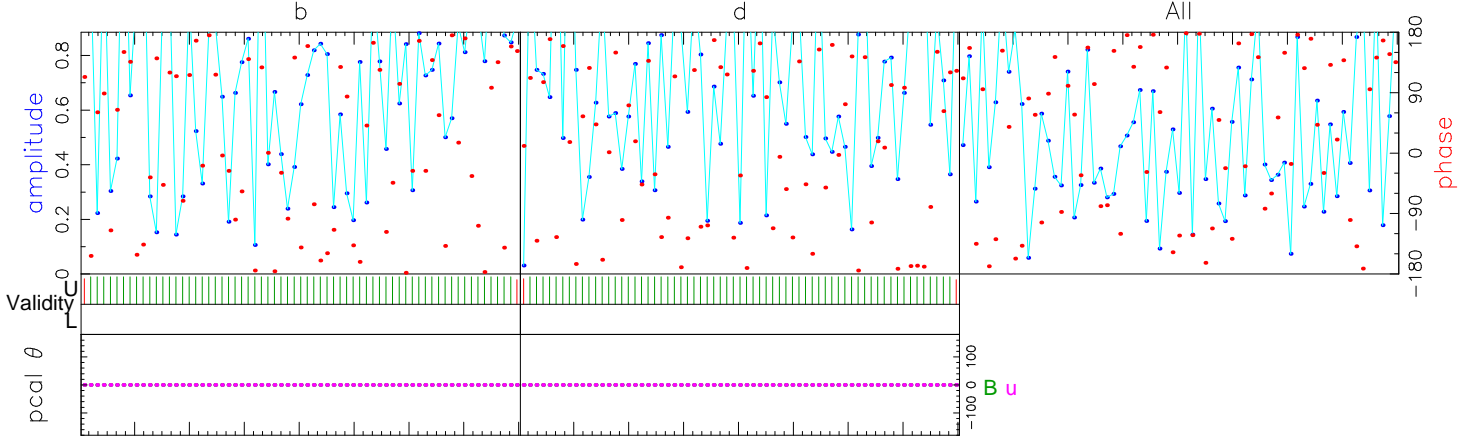
ph/seg (deg)	RMS 77.0	Theor. 84.9	Amplitude Search (2048X8)	0.382 +/- 0.069	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	135.3	148.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.7	Inc. seg. avg.	0.361	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	31.0	25.6	Inc. frq. avg.	0.369	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 256	dr window (ns/s) -0.011 0.011
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

B: az 356.4 el 32.0 pa 7.1 t: az 22.4 el 37.7 pa -97.3 u,v (fr/asec) 7863.913 8389.536 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/Bt..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/Bt.W.71.0RUI3R



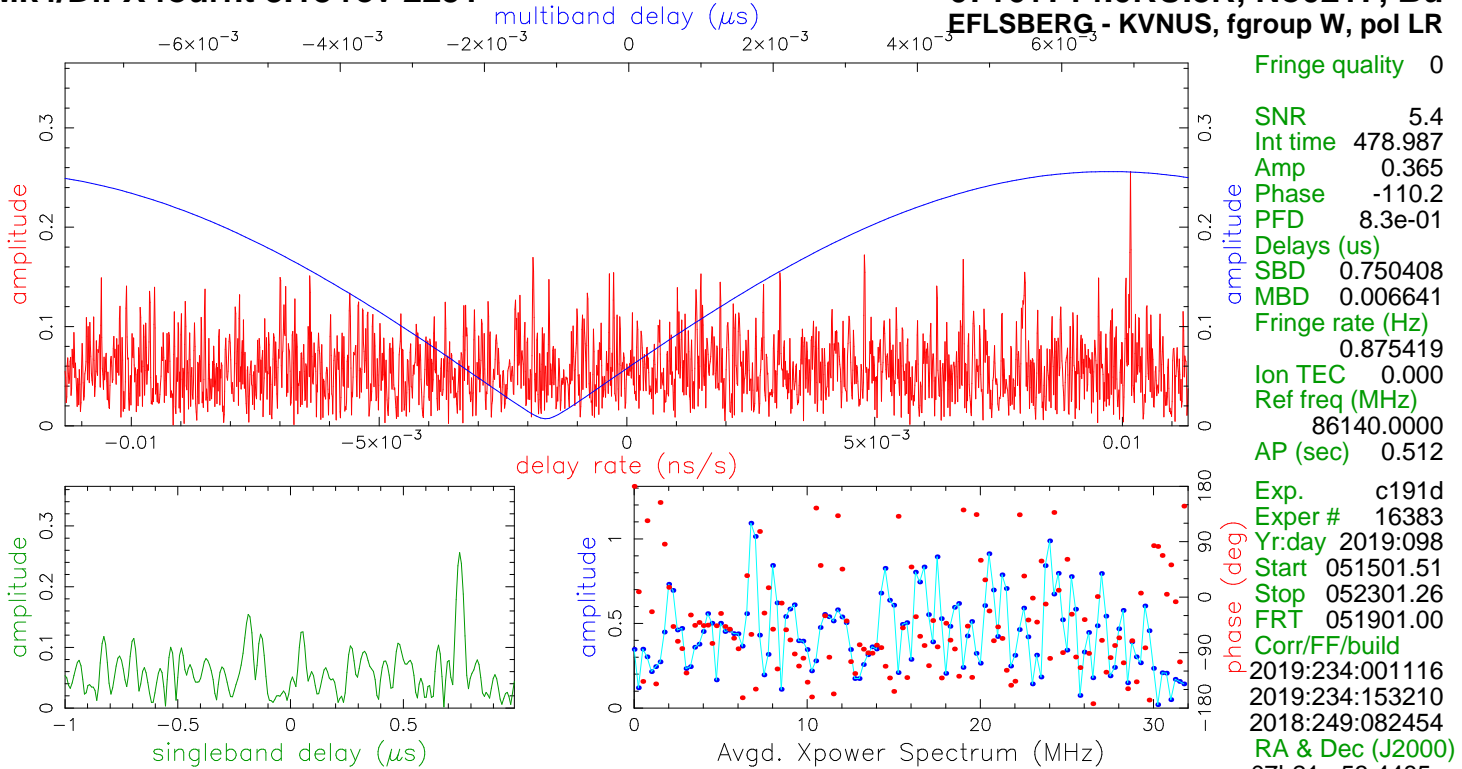
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



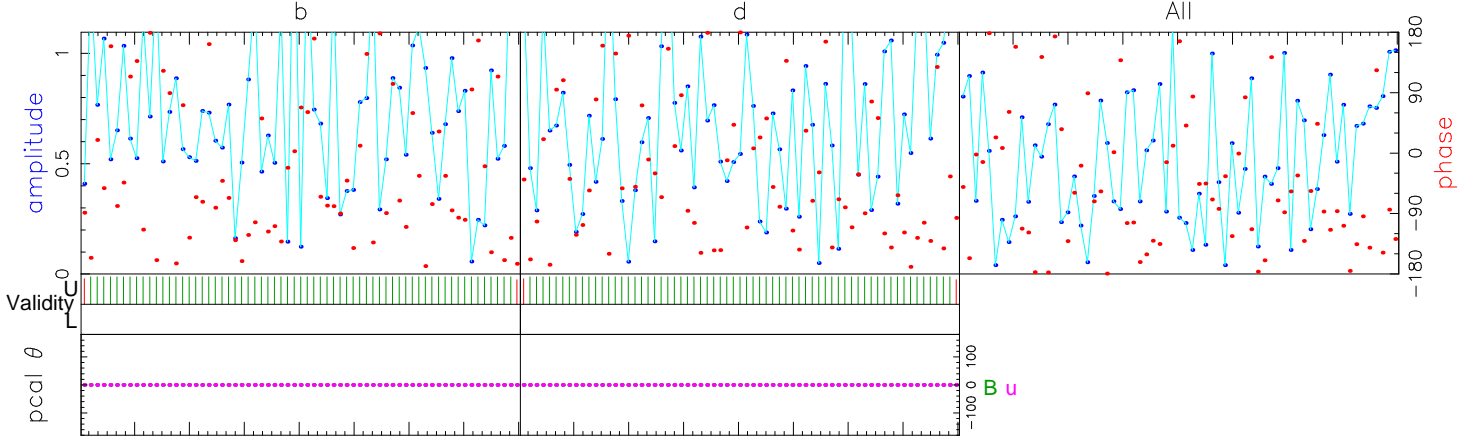
86156.00	86220.00	Freq (MHz)	All				
166.2	166.5	Phase	166.4				
0.3	0.3	Ampl.	0.3				
111.1	111.1	Sbd box	111.1				
U/L 937/0	937/0	APs used					
B 1000	1000	PC freqs					
u 0	0	PC freqs					
B:u 0:0	0:0	PC phase					
B:u 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
u 1000	1000						
B W01UL	W03UL	Chan ids					
u W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-2.72225471920E+03	Apriori delay (usec)	-2.72211104437E+03	Resid mbdelay (usec)	-3.04982E-03	+/-	8.9E-04
Sband delay (usec)	-2.72225072487E+03	Apriori clock (usec)	1.8685856E+01	Resid sbdelay (usec)	-1.39681E-01	+/-	3.1E-03
Phase delay (usec)	-2.72211103901E+03	Apriori clockrate (us/s)	-3.3000000E-07	Resid phdelay (usec)	5.36506E-06	+/-	6.6E-07
Delay rate (us/s)	-4.14560062765E-01	Apriori rate (us/s)	-4.14554161442E-01	Resid rate (us/s)	-5.90132E-06	+/-	2.4E-09
Total phase (deg)	125.9	Apriori accel (us/s/s)	3.49559227110E-05	Resid phase (deg)	256.4	+/-	20.6

ph/seg (deg)	83.2	Theor.	84.2	Amplitude	0.295 +/- 0.053	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	140.9	Search (2048X8)	0.259	Interp.	0.000	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.	0.276	Inc. frq. avg.	0.286	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	1.2	Inc. frq. avg.	0.286			Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
B: az 356.4 el 32.0 pa 7.1		u: az 22.9 el 40.7 pa -100.2		u,v (fr/asec)	7548.363 8541.949	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/Bu..0RUI3R		Output file: /Exps/c191d/v1/1234/No0217/Bu.W.1.0RUI3R		nlags:	128	ion window (TEC)	0.00 0.00

simultaneous interpolator

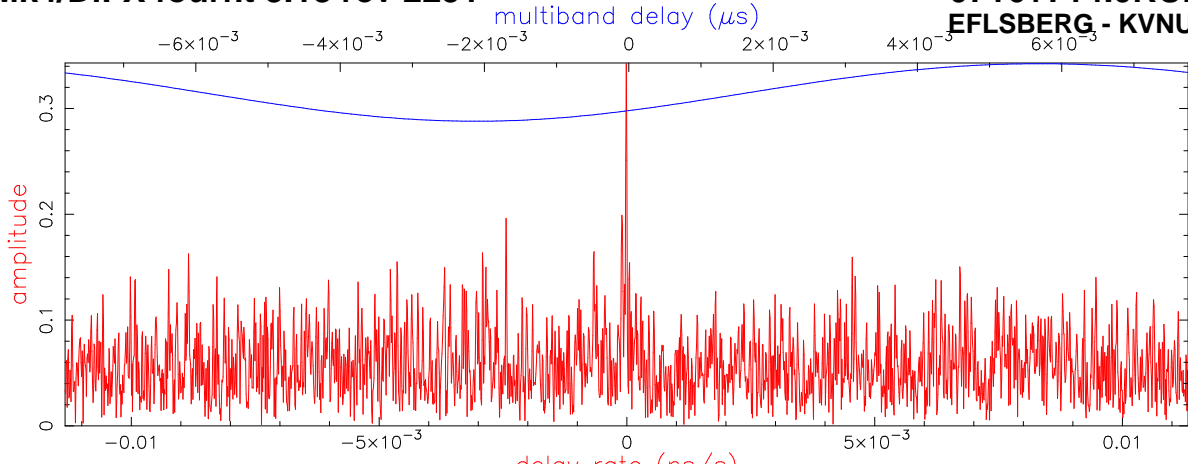


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

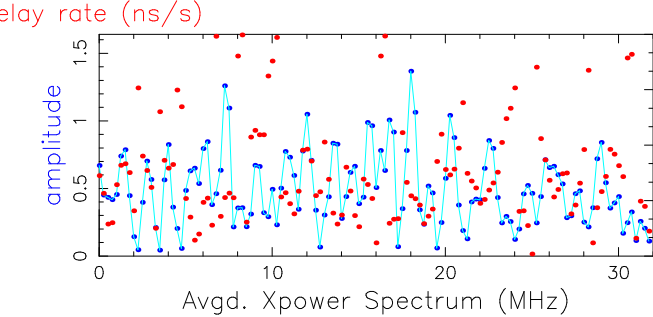
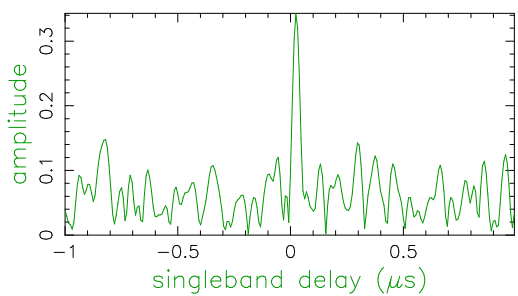


86156.00	86220.00	Freq (MHz)	All
-110.4	-109.9	Phase	-110.2
0.4	0.4	Ampl.	0.4
225.4	224.7	Sbd box	225.1
U/L 937/0	937/0	APs used	
B 1000	1000	PC freqs	
u 0	0	PC freqs	
B:u 0:0	0:0	PC phase	
B:u 0:0	0:0	Manl PC	
B 1000	1000	PC amp	
u 1000	1000		
B W01UL	W03UL	Chan ids	
u W01UR	W03UR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	-2.72135440347E+03	Apriori delay (usec)	-2.72211104437E+03	Resid mbdelay (usec)	6.64090E-03	+/-	9.2E-04
Sband delay (usec)	-2.72136063637E+03	Apriori clock (usec)	1.8685856E+01	Resid sbdelay (usec)	7.50408E-01	+/-	3.2E-03
Phase delay (usec)	-2.72211104793E+03	Apriori clockrate (us/s)	-3.3000000E-07	Resid phdelay (usec)	-3.55311E-06	+/-	6.8E-07
Delay rate (us/s)	-4.14543998694E-01	Apriori rate (us/s)	-4.14554161442E-01	Resid rate (us/s)	1.01627E-05	+/-	2.5E-09
Total phase (deg)	-240.6	Apriori accel (us/s/s)	3.49559227110E-05	Resid phase (deg)	-110.2	+/-	21.1

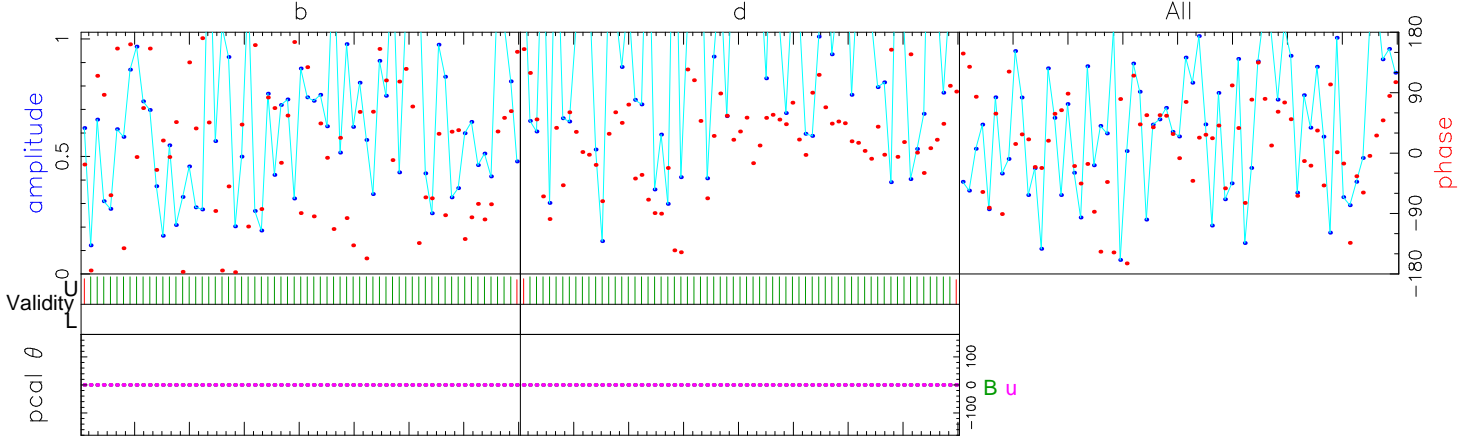


Fringe quality 8
 SNR 7.3
 Int time 478.987
 Amp 0.343
 Phase -57.0
 PFD 1.5e-05
 Delays (us)
 SBD 0.024606
 MBD 0.005718
 Fringe rate (Hz)
 -0.001036
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153212
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

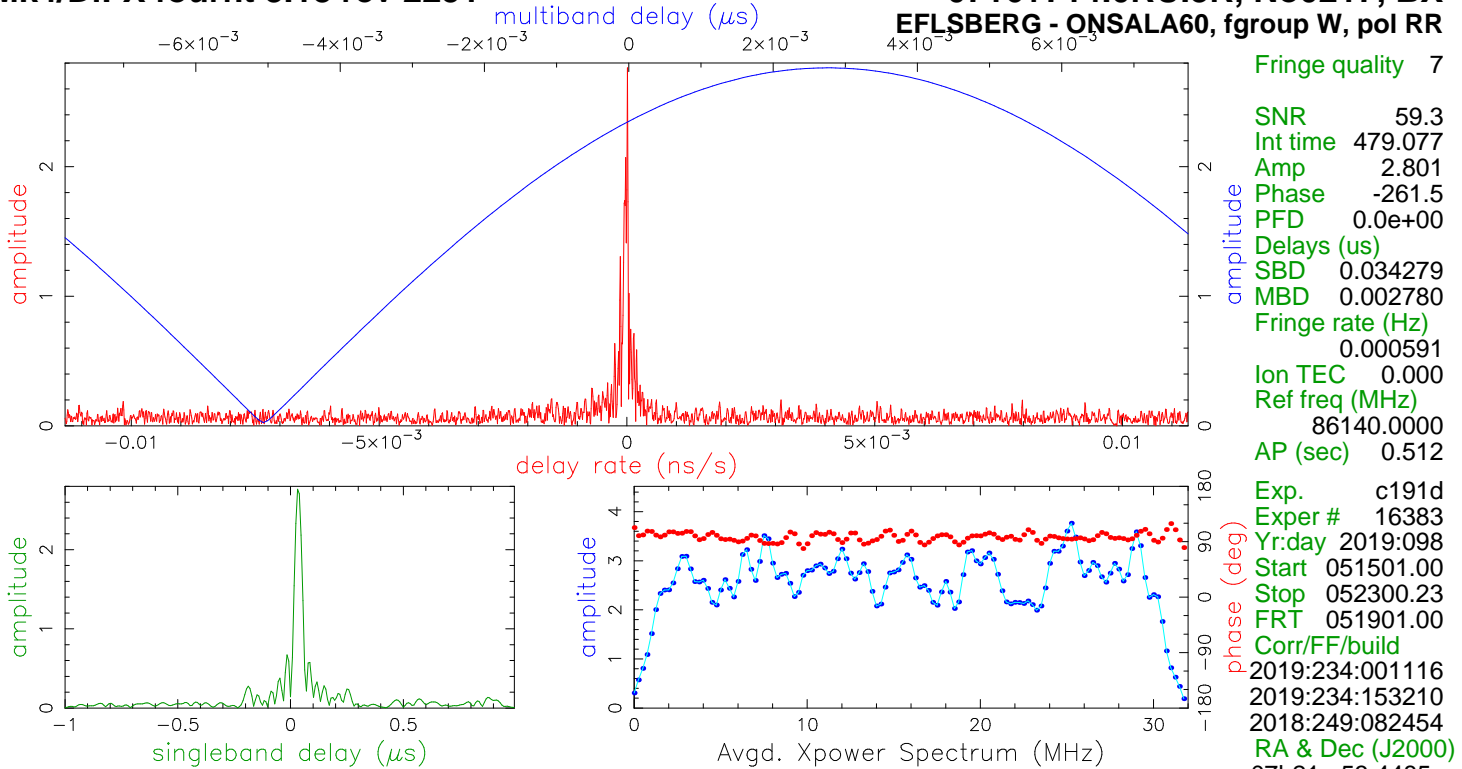


86156.00	86220.00	Freq (MHz)		All			
33.6	33.0	Phase		33.0			
0.1	0.6	Ampl.		0.3			
228.3	132.0	Sbd box		132.1			
U/L 937/0	937/0	APs used					
B 1000	1000	PC freqs					
u 0	0	PC freqs					
B:u 0:0	0:0	PC phase					
B:u 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
u 1000	1000	Chan ids					
B W01UR	W03UR	Tracks					
u W01UL	W03UL	Chan ids					
		Tracks					
Group delay (usec)(sbd)	-2.72208970090E+03	Apriori delay (usec)	-2.72211104437E+03	Resid mbdelay (usec)	5.71848E-03	+/-	6.9E-04
Sband delay (usec)	-2.72208643837E+03	Apriori clock (usec)	1.8685856E+01	Resid sbdelay (usec)	2.46060E-02	+/-	2.4E-03
Phase delay (usec)	-2.72211104331E+03	Apriori clockrate (us/s)	-3.3000000E-07	Resid phdelay (usec)	1.06557E-06	+/-	5.1E-07
Delay rate (us/s)	-4.14554173471E-01	Apriori rate (us/s)	-4.14554161442E-01	Resid rate (us/s)	-1.20292E-08	+/-	1.8E-09
Total phase (deg)	-187.4	Apriori accel (us/s/s)	3.49559227110E-05	Resid phase (deg)	-57.0	+/-	15.8

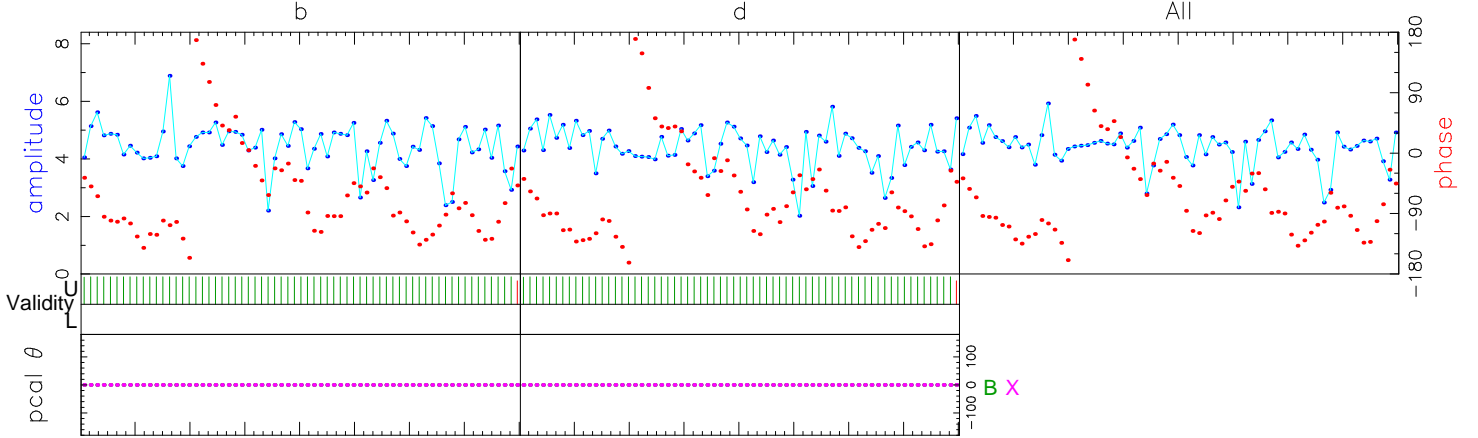
ph/seg (deg)	RMS 71.7	Theor. 64.6	Amplitude Search (2048X8)	0.343 +/- 0.047	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	117.4	112.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	11.2	Inc. seg. avg.	0.385	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	83.9	19.5	Inc. frq. avg.	0.336	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 256	dr window (ns/s) -0.011 0.011
					nlags: 128	ion window (TEC) 0.00 0.00

B: az 356.4 el 32.0 pa 7.1 u: az 22.9 el 40.7 pa -100.2 u,v (fr/asec) 7548.363 8541.949 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/Bu..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/Bu.W.52.0RUI3R



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

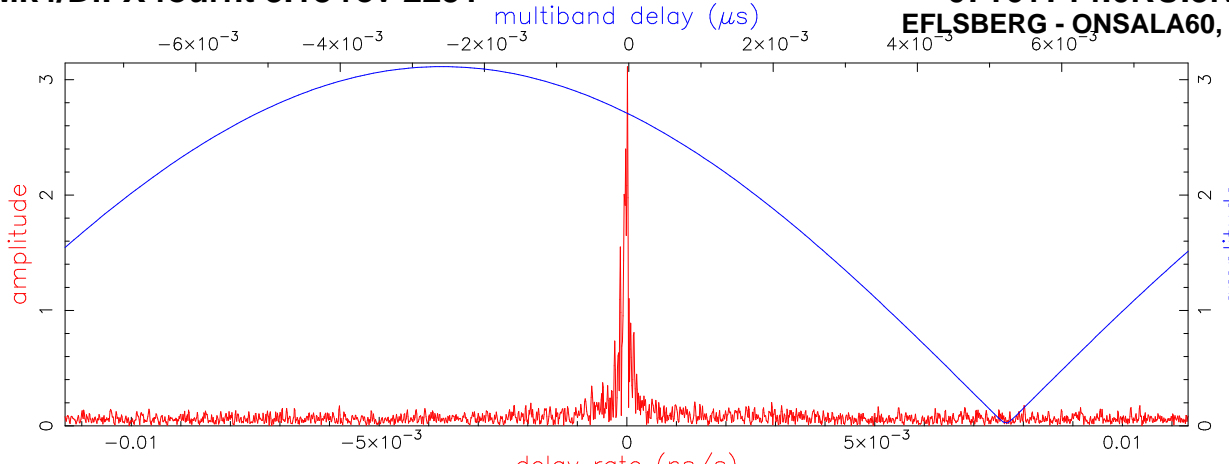


86156.00	86220.00	Freq (MHz)	All				
-81.2	-81.8	Phase	-81.5				
2.7	2.8	Ampl.	2.8				
133.5	133.3	Sbd box	133.4				
U/L 936/0	936/0	APs used					
B 1000	1000	PC freqs					
X 1000	1000	PC freqs					
B:X 0:0	0:0	PC phase					
B:X 0:0	0:0	Mani PC					
B 1000	1000	PC amp					
X 1000	1000						
B W01UR	W03UR	Chan ids					
X W01UR	W03UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-2.04753980433E+03	Apriori delay (usec)	-2.04757383398E+03	Resid mbdelay (usec)	2.77965E-03	+/-	8.4E-05
Sband delay (usec)	-2.04753955498E+03	Apriori clock (usec)	-5.4334960E+00	Resid sbdelay (usec)	3.42790E-02	+/-	2.9E-04
Phase delay (usec)	-2.04757383661E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	-2.62742E-06	+/-	6.2E-08
Delay rate (us/s)	-3.03739452691E-02	Apriori rate (us/s)	-3.03739521272E-02	Resid rate (us/s)	6.85813E-09	+/-	2.3E-10
Total phase (deg)	-282.8	Apriori accel (us/s/s)	3.30833306355E-06	Resid phase (deg)	-261.5	+/-	1.9

ph/seg (deg)	RMS	Theor.	Amplitude	2.801 +/- 0.047	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	57.9	7.9	Search (2048X8)	2.563	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	61.8	13.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	1.4	Inc. seg. avg.	4.366	Sample rate(MSamp/s): 64	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00
	1.6	2.4	Inc. frq. avg.	2.762	Data rate(Mb/s): 256				

B: az 356.4 el 32.0 pa 7.1 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) 557.399 559.039 simultaneous interpolator

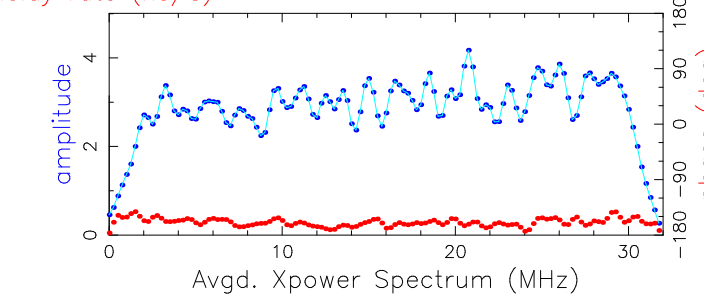
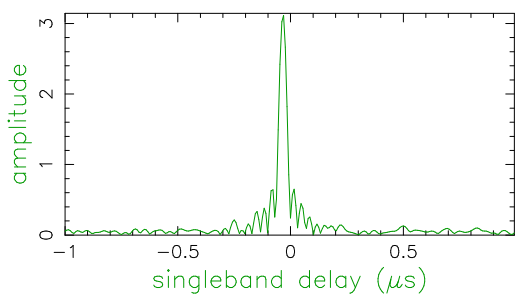
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/BX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/BX.W.29.0RUI3R



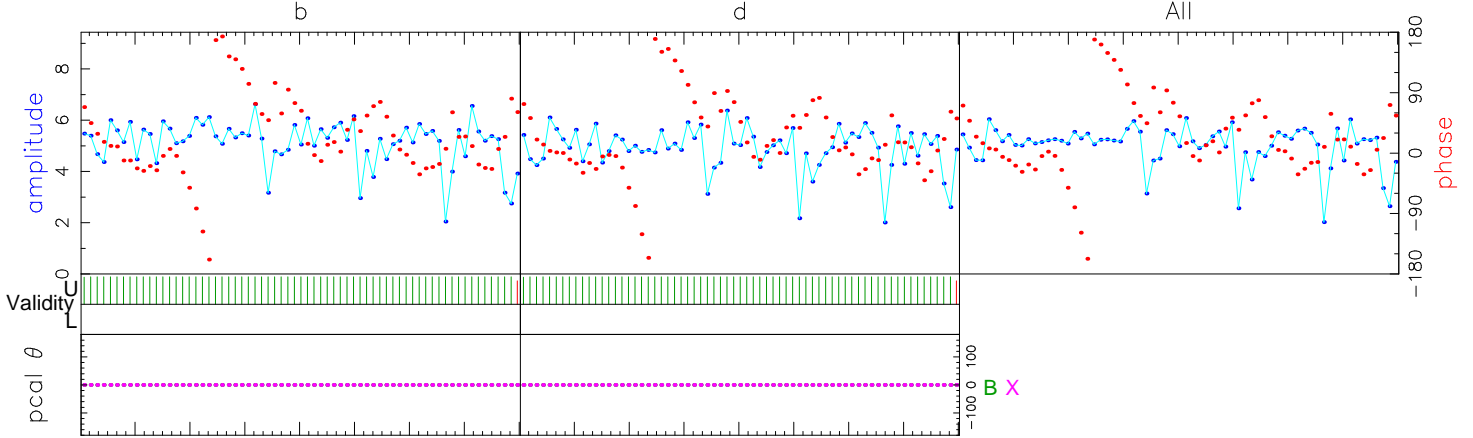
Fringe quality 7

SNR 66.6
Int time 479.077
Amp 3.145
Phase 199.9
PFD 0.0e+00
Delays (us)
SBD -0.033902
MBD -0.002592
Fringe rate (Hz) 0.000583
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.00
Stop 052300.23
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153207
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

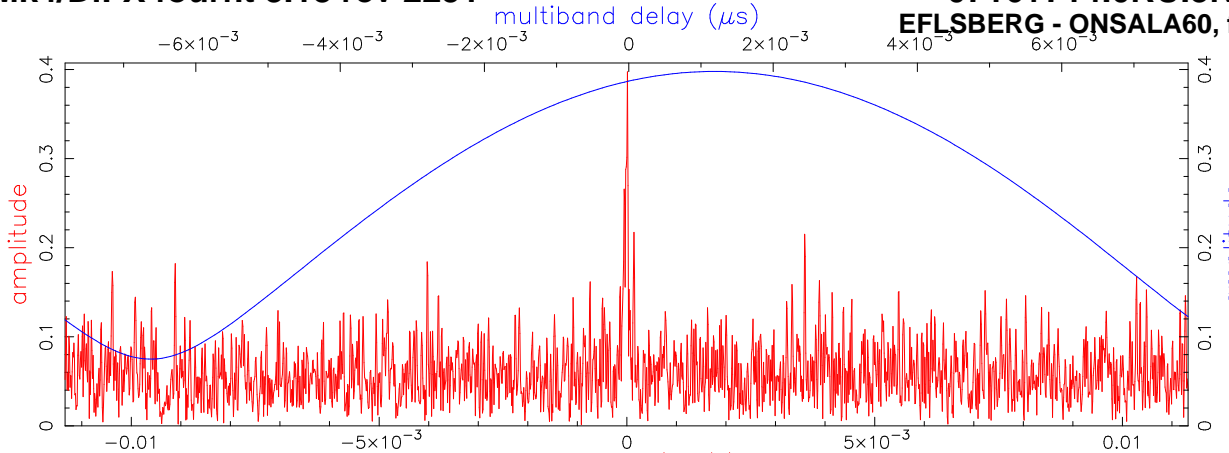


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

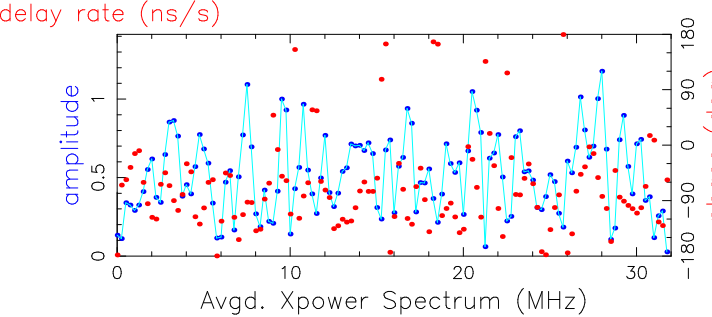
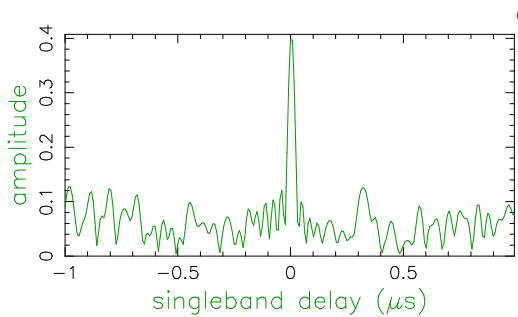


86156.00	86220.00	Freq (MHz)	All				
19.8	20.0	Phase	19.9				
3.1	3.1	Ampl.	3.1				
124.7	124.6	Sbd box	124.7				
U/L 936/0	936/0	APs used					
B 1000	1000	PC freqs					
X 1000	1000	PC freqs					
B:X 0:0	0:0	PC phase					
B:X 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
X 1000	1000						
B W01UL	W03UL	Chan ids					
X W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-2.04760767583E+03	Apriori delay (usec)	-2.04757383398E+03	Resid mbdelay (usec)	-2.59185E-03	+/-	7.5E-05
Sband delay (usec)	-2.04760773598E+03	Apriori clock (usec)	-5.4334960E+00	Resid sbdelay (usec)	-3.39020E-02	+/-	2.6E-04
Phase delay (usec)	-2.04757383334E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	6.41966E-07	+/-	5.6E-08
Delay rate (us/s)	-3.03739453619E-02	Apriori rate (us/s)	-3.03739521272E-02	Resid rate (us/s)	6.76531E-09	+/-	2.0E-10
Total phase (deg)	178.6	Apriori accel (us/s/s)	3.30833306355E-06	Resid phase (deg)	199.9	+/-	1.7

ph/seg (deg) 58.3 7.0 Theor. Amplitude 3.145 +/- 0.047 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.4 12.3 Search (2048X8) 2.901 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 1.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 1.2 2.1 Inc. seg. avg. 4.969 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 356.4 el 32.0 pa 7.1 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) 557.399 559.039 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/BX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/BX.W.4.0RUI3R

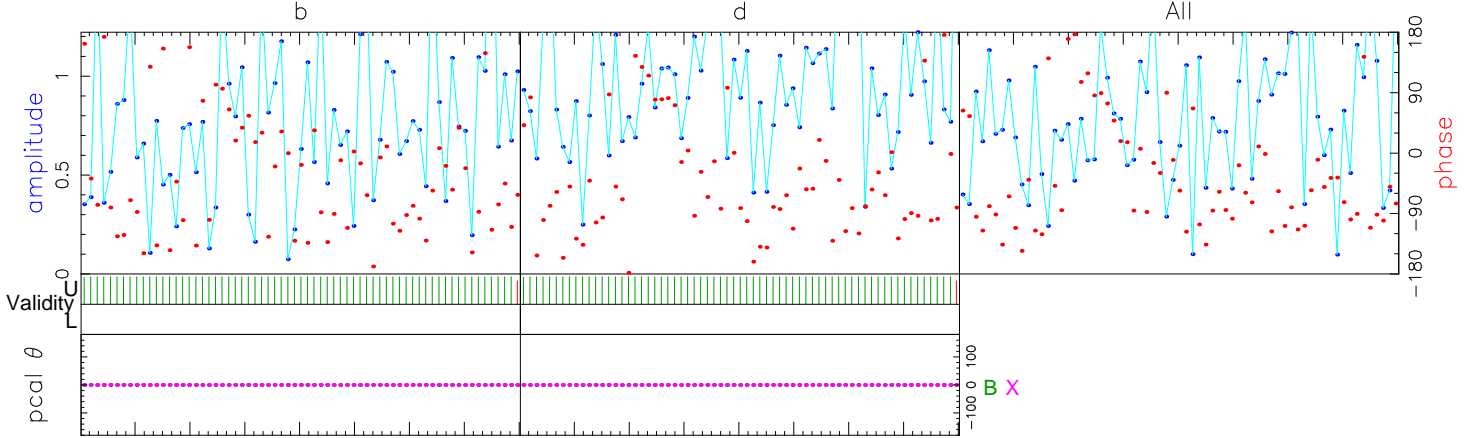


Fringe quality 9
 SNR 8.6
 Int time 479.077
 Amp 0.407
 Phase -71.9
 PFD 3.0e-10
 Delays (us)
 SBD 0.003826
 MBD 0.001389
 Fringe rate (Hz) 0.000569
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build 2019:234:001116
 2019:234:153212
 2018:249:082454
 RA & Dec (J2000) 07h21m53.4485s
 +71°20'36.363"



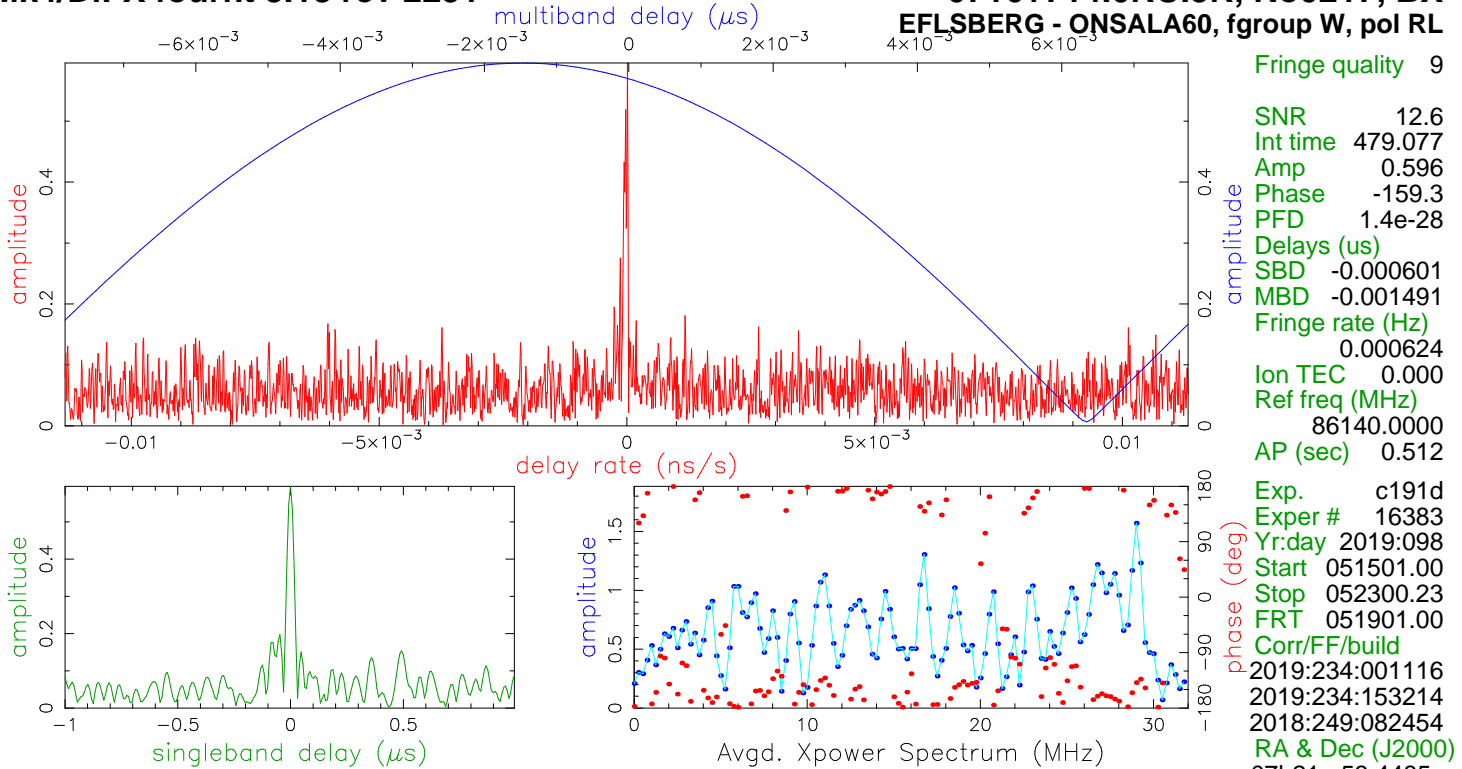
Avgd. Xpower Spectrum (MHz)
 amplitude
 phase (deg)

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

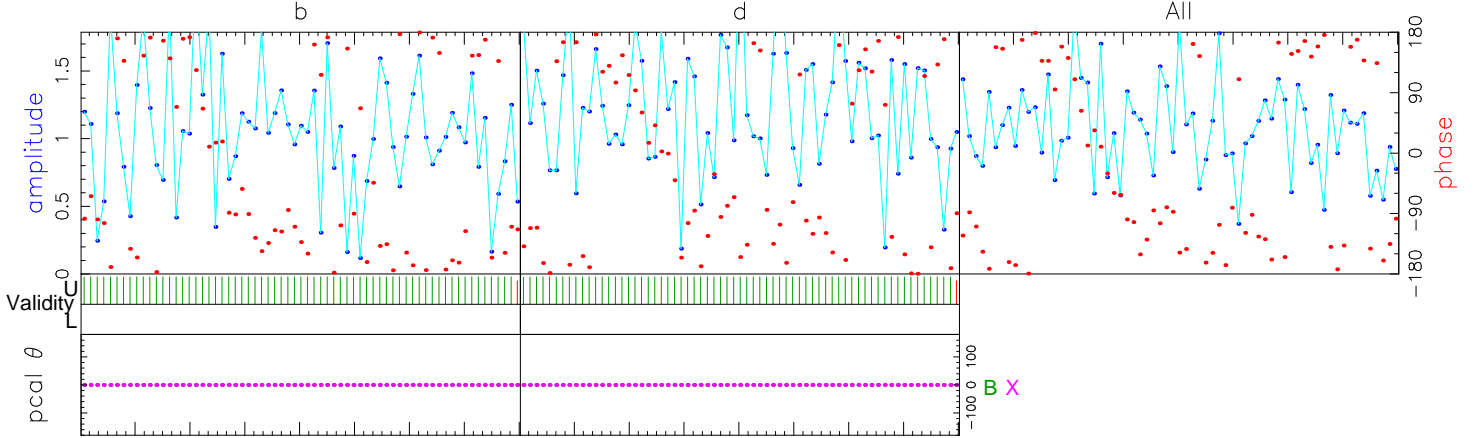


86156.00	86220.00	Freq (MHz)	All				
-69.1	-73.8	Phase	-71.9				
0.3	0.5	Ampl.	0.4				
129.7	129.3	Sbd box	129.5				
U/L 936/0	936/0	APs used					
B 1000	1000	PC freqs					
X 1000	1000	PC freqs					
B:X 0:0	0:0	PC phase					
B:X 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
X 1000	1000						
B W01UL	W03UL	Chan ids					
X W01UR	W03UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-2.04757244508E+03	Apriori delay (usec)	-2.04757383398E+03	Resid mbdelay (usec)	1.38890E-03	+/-	5.8E-04
Sband delay (usec)	-2.04757000798E+03	Apriori clock (usec)	-5.4334960E+00	Resid sbdelay (usec)	3.82600E-03	+/-	2.0E-03
Phase delay (usec)	-2.04757383630E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	-2.31931E-06	+/-	4.3E-07
Delay rate (us/s)	-3.03739455242E-02	Apriori rate (us/s)	-3.03739521272E-02	Resid rate (us/s)	6.60305E-09	+/-	1.5E-09
Total phase (deg)	-93.2	Apriori accel (us/s/s)	3.30833306355E-06	Resid phase (deg)	-71.9	+/-	13.3

RMS Theor. Amplitude 0.407 +/- 0.047
 ph/seg (deg) 76.2 54.4 Search (2048X8) 0.372
 amp/seg (%) 122.7 94.9 Interp. 0.000
 ph/frq (deg) 0.0 9.4 Inc. seg. avg. 0.536
 amp/frq (%) 18.5 16.4 Inc. frq. avg. 0.393
 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): 256 nlags: 128 t_cohere infinite
 B: az 356.4 el 32.0 pa 7.1 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) 557.399 559.039
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/BX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/BX.W.53.0RUI3R simultaneous interpolator

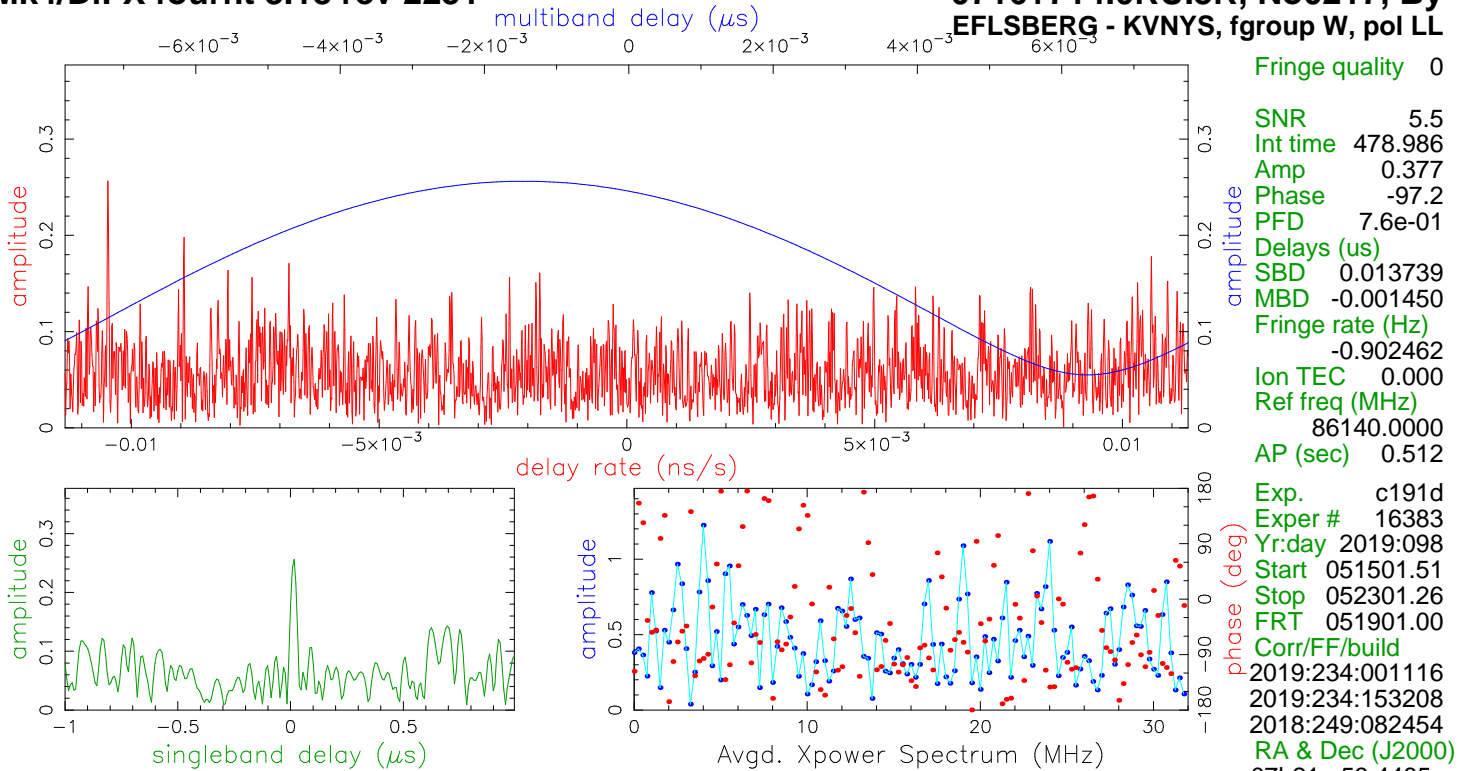


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

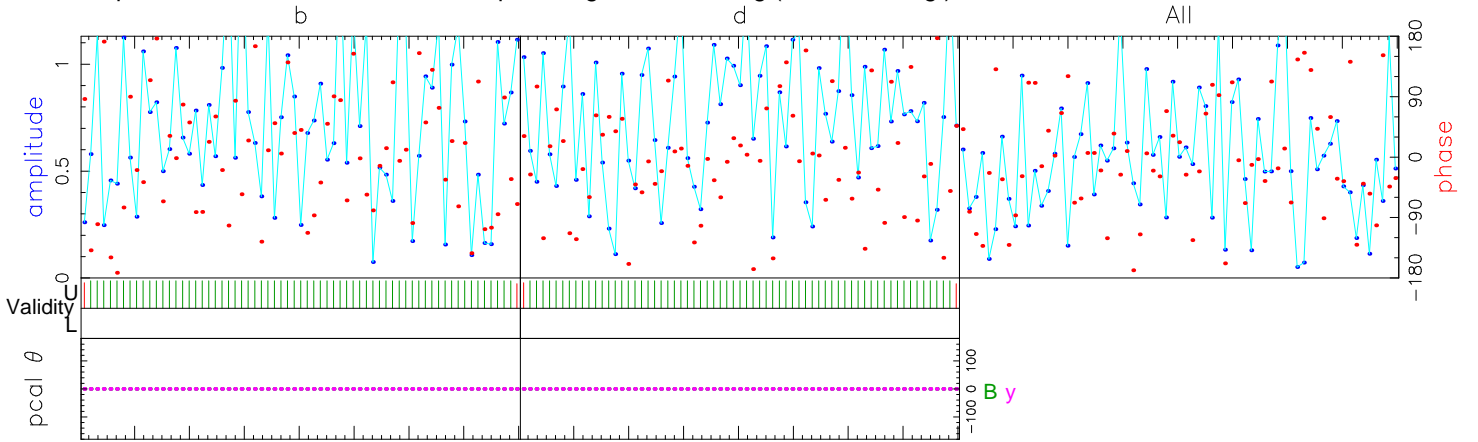


86156.00		86220.00		Freq (MHz)	All
-159.5		-159.1		Phase	-159.3
0.6		0.6		Ampl.	0.6
128.9		129.0		Sbd box	128.9
U/L 936/0		936/0		APs used	
B 1000		1000		PC freqs	
X 1000		1000		PC freqs	
B:X 0:0		0:0		PC phase	
B:X 0:0		0:0		Manl PC	
B 1000		1000		PC amp	
X 1000		1000			
B W01UR		W03UR		Chan ids	
X W01UL		W03UL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-2.04757532520E+03	Apriori delay (usec)	-2.04757383398E+03	Resid mbdelay (usec)	-1.49122E-03 +/- 3.9E-04
Sband delay (usec)	-2.04757443498E+03	Apriori clock (usec)	-5.4334960E+00	Resid sbdelay (usec)	-6.01000E-04 +/- 1.4E-03
Phase delay (usec)	-2.04757383912E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	-5.13726E-06 +/- 2.9E-07
Delay rate (us/s)	-3.03739448851E-02	Apriori rate (us/s)	-3.03739521272E-02	Resid rate (us/s)	7.24217E-09 +/- 1.1E-09
Total phase (deg)	-180.6	Apriori accel (us/s/s)	3.30833306355E-06	Resid phase (deg)	-159.3 +/- 9.1

ph/seg (deg)	64.3	Theor.	37.2	Amplitude	0.596 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	97.9		65.0	Search (2048X8)	0.565	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0		6.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	1.1		11.2	Inc. seg. avg.	0.889	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	0.592	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00
B: az 356.4 el 32.0 pa 7.1		X: az 358.2 el 38.7 pa 2.3		u,v (fr/asec)	557.399 559.039				simultaneous interpolator
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/BX..0RUI3R		Output file: /Exps/c191d/v1/1234/No0217/BX.W.65.0RUI3R					

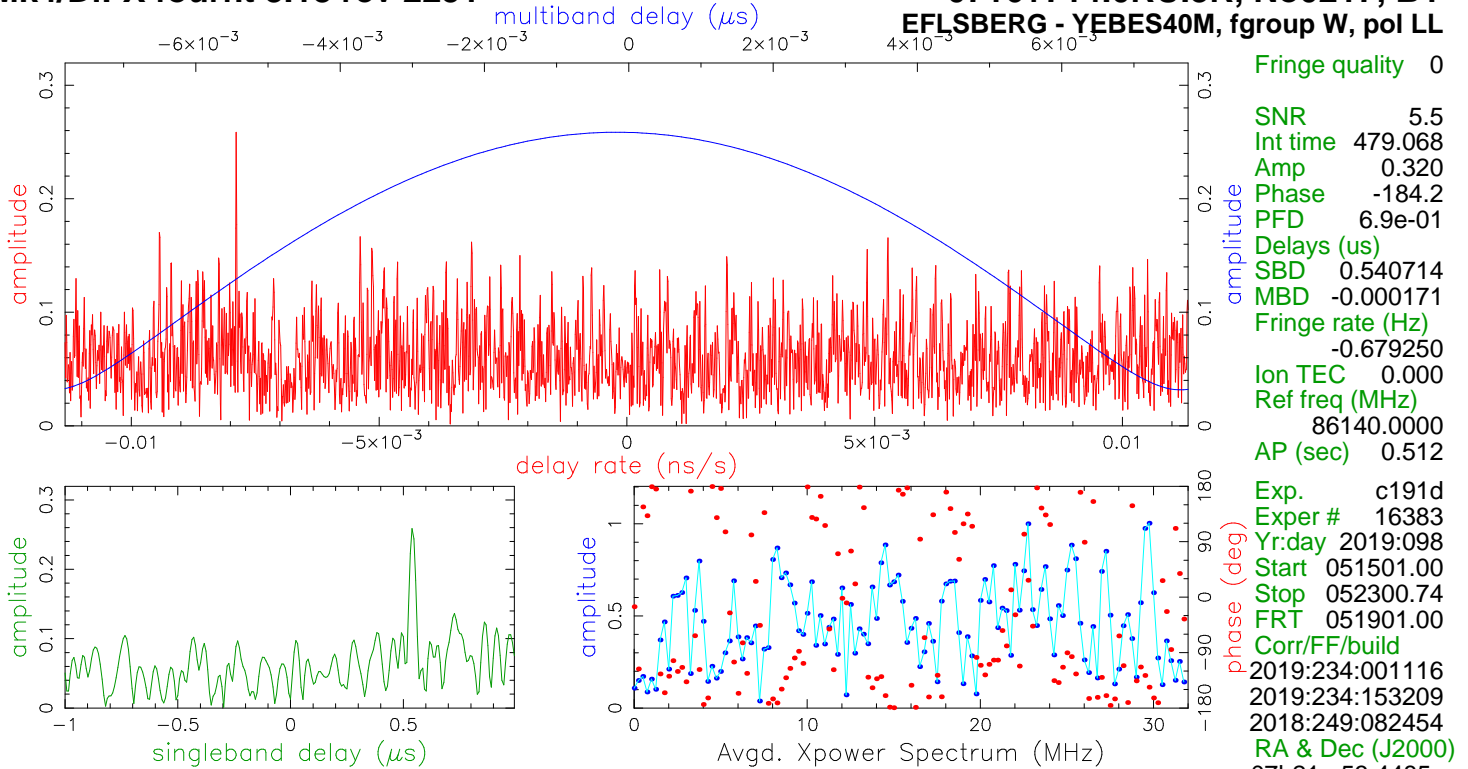


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

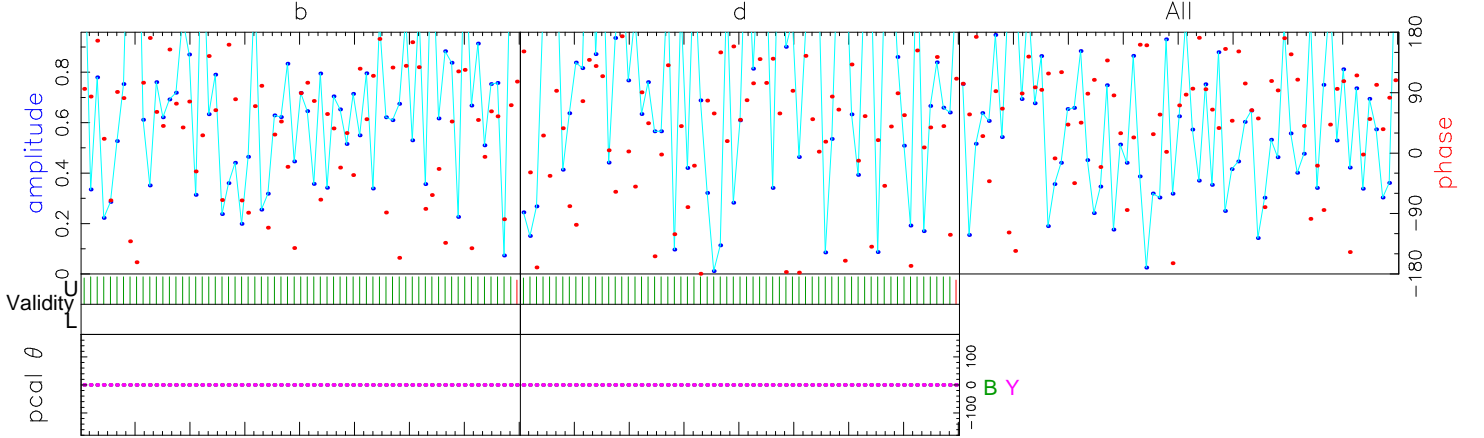


86156.00		86220.00		Freq (MHz)	All
-7.2		-7.2		Phase	-7.2
0.3		0.5		Ampl.	0.4
21.9		130.5		Sbd box	130.8
U/L 937/0		937/0		APs used	
B 1000		1000		PC freqs	
y 0		0		PC freqs	
B:y 0:0		0:0		PC phase	
B:y 0:0		0:0		Manl PC	
B 1000		1000		PC amp	
y 1000		1000			
B W01UL		W03UL		Chan ids	
y W01UL		W03UL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-3.05422159619E+03	Apriori delay (usec)	-3.05423577088E+03	Resid mbdelay (usec)	-1.45031E-03 +/- 9.1E-04
Sband delay (usec)	-3.05422203188E+03	Apriori clock (usec)	-3.8100593E+00	Resid sbdelay (usec)	1.37390E-02 +/- 3.2E-03
Phase delay (usec)	-3.05423577111E+03	Apriori clockrate (us/s)	-6.1999998E-07	Resid phdelay (usec)	-2.31896E-07 +/- 6.8E-07
Delay rate (us/s)	-4.11289704308E-01	Apriori rate (us/s)	-4.11279227623E-01	Resid rate (us/s)	-1.04767E-05 +/- 2.4E-09
Total phase (deg)	-206.5	Apriori accel (us/s/s)	3.35781264974E-05	Resid phase (deg)	-97.2 +/- 21.0

ph/seg (deg)	83.0	Theor.	85.9	Amplitude	0.377 +/- 0.069	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	163.1	Search (2048X8)	0.245	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.384	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	21.3	Inc. frq. avg.	0.362	Inc. frq. avg.	0.362	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00
B: az 356.4 el 32.0 pa 7.1		y: az 23.7 el 41.8 pa -96.8		u,v (fr/asec)	7484.624 8142.665				
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/By..0RUI3R		Output file: /Exps/c191d/v1/1234/No0217/By.W.15.0RUI3R					simultaneous interpolator



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00				86220.00		Freq (MHz)	All
85.8				85.9		Phase	85.8
0.3				0.4		Ampl.	0.3
198.7				197.8		Sbd box	198.2
U/L 937/0				937/0		APs used	
B 1000				1000		PC freqs	
Y 1000				1000		PC freqs	
B:Y 0:0				0:0		PC phase	
B:Y 0:0				0:0		Manl PC	
B 1000				1000		PC amp	
Y 1000				1000			
B W01UL				W03UL		Chan ids	
Y W01UL				W03UL		Tracks	
						Chan ids	
						Tracks	
Group delay (usec)(sbd)	3.10245370896E+03	Apriori delay (usec)	3.10190700504E+03	Resid mbdelay (usec)	-1.71081E-04	+/-	9.0E-04
Sband delay (usec)	3.10244771904E+03	Apriori clock (usec)	1.2717309E+01	Resid sbdelay (usec)	5.40714E-01	+/-	3.1E-03
Phase delay (usec)	3.10190700781E+03	Apriori clockrate (us/s)	-3.6700000E-07	Resid phdelay (usec)	2.76811E-06	+/-	6.7E-07
Delay rate (us/s)	7.28404789907E-02	Apriori rate (us/s)	7.28483644151E-02	Resid rate (us/s)	-7.88542E-06	+/-	2.4E-09
Total phase (deg)	-35.0	Apriori accel (us/s/s)	-3.36595785754E-06	Resid phase (deg)	-184.2	+/-	20.9

RMS 73.2 Theor. 85.3 Amplitude 0.320 +/- 0.058 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 163.8 148.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

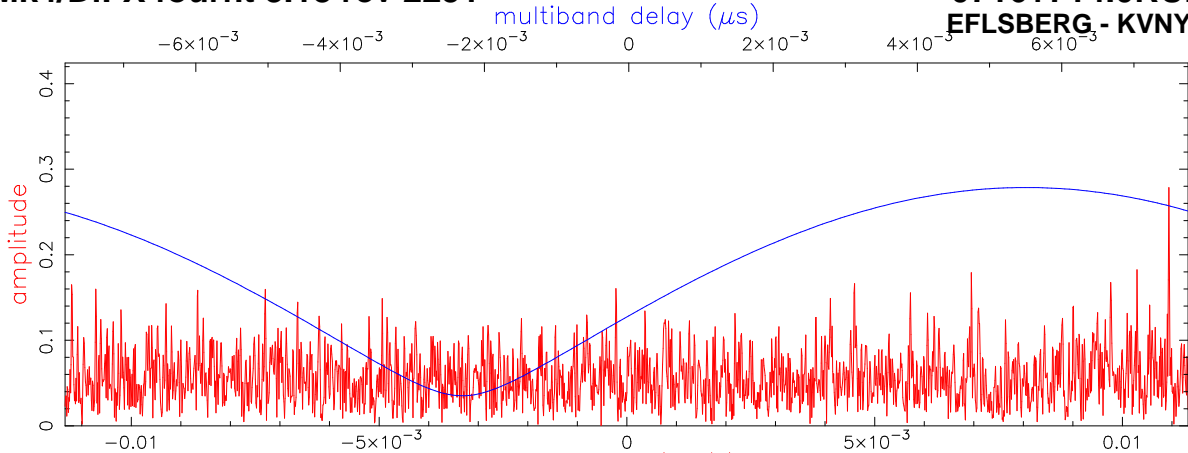
amp/seg (%) 12.2 25.7 Inc. seg. avg. 0.339 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

ph/frq (deg) 0.0 14.7 Inc. frq. avg. 0.308 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

amp/frq (%) 12.2 25.7 u,v (fr/asec) -1317.458 -414.323 ion window (TEC) 0.00 0.00

B: az 356.4 el 32.0 pa 7.1 Y: az 353.4 el 22.7 pa 15.1 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/BY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/BY.W.17.0RUI3R



Fringe quality 0

SNR 5.9

Int time 478.986

Amp 0.424

Phase -138.0

PFD 9.9e-02

Delays (us)

SBD 0.251464

MBD 0.005547

Fringe rate (Hz)

0.941614

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052301.26

FRT 051901.00

Corr/FF/build

2019:234:001116

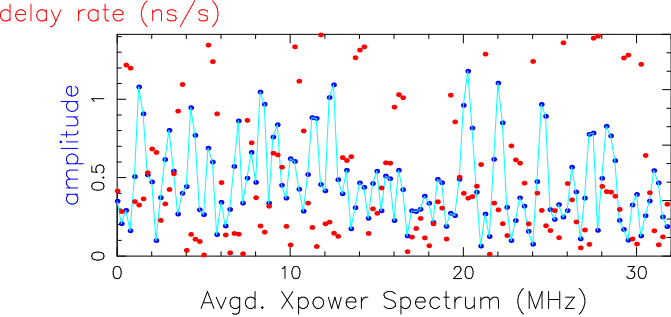
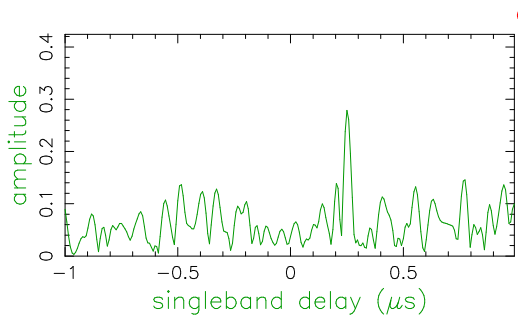
2019:234:153211

2018:249:082454

RA & Dec (J2000)

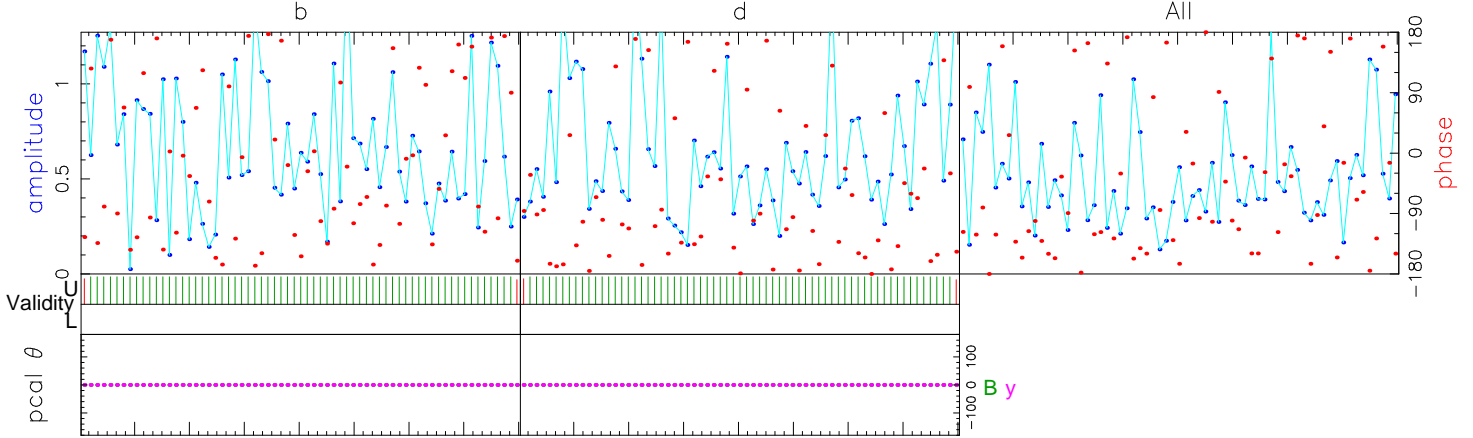
07h21m53.4485s

+71°20'36.363"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
-137.5	-138.5	Phase	-138.0
0.4	0.5	Ampl.	0.4
161.5	160.9	Sbd box	161.2
U/L 937/0	937/0	APs used	
B 1000	1000	PC freqs	
y 0	0	PC freqs	
B:y 0:0	0:0	PC phase	
B:y 0:0	0:0	Mani PC	
B 1000	1000	PC amp	
y 1000	1000		
B W01UR	W03UR	Chan ids	
y W01UR	W03UR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	-3.05398022410E+03	Apriori delay (usec)	-3.05423577088E+03	Resid mbdelay (usec)	5.54678E-03	+/-	8.4E-04
Sband delay (usec)	-3.05398430688E+03	Apriori clock (usec)	-3.8100593E+00	Resid sbdelay (usec)	2.51464E-01	+/-	2.9E-03
Phase delay (usec)	-3.05423577533E+03	Apriori clockrate (us/s)	-6.1999998E-07	Resid phdelay (usec)	-4.45155E-06	+/-	6.2E-07
Delay rate (us/s)	-4.11268296413E-01	Apriori rate (us/s)	-4.11279227623E-01	Resid rate (us/s)	1.09312E-05	+/-	2.3E-09
Total phase (deg)	-247.3	Apriori accel (us/s/s)	3.35781264974E-05	Resid phase (deg)	-138.0	+/-	19.4

ph/seg (deg) 73.5 79.3 Theor. Amplitude 0.424 +/- 0.072 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

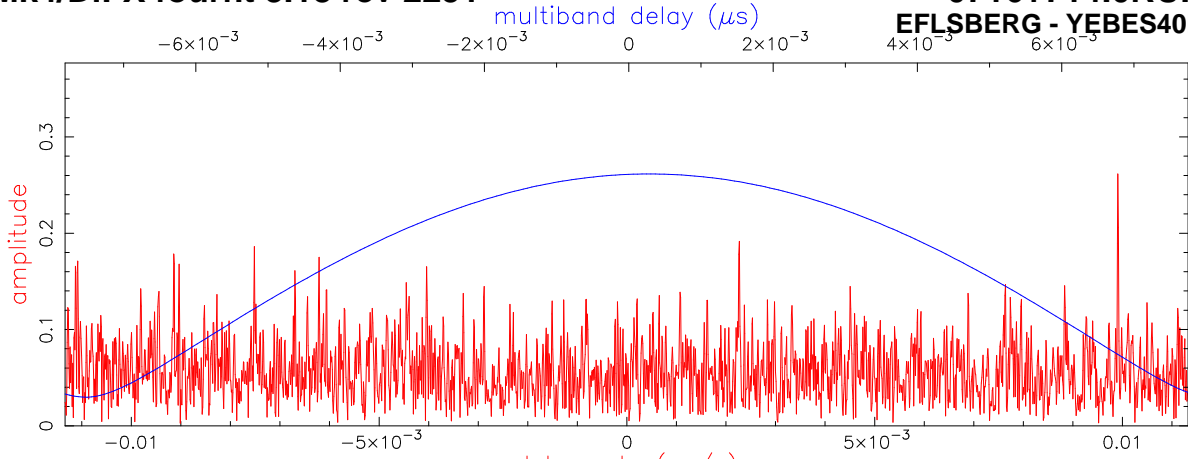
amp/seg (%) 127.2 138.3 Search (2048X8) 0.255 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 13.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

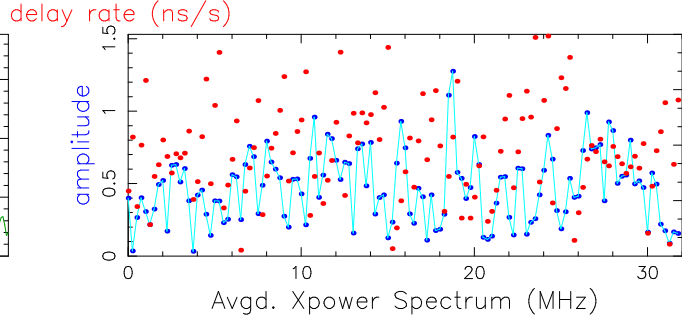
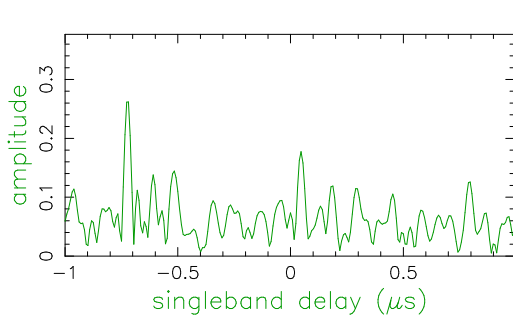
amp/frq (%) 12.6 23.9 Inc. seg. avg. 0.403 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

B: az 356.4 el 32.0 pa 7.1 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) 7484.624 8142.665 simultaneous interpolator

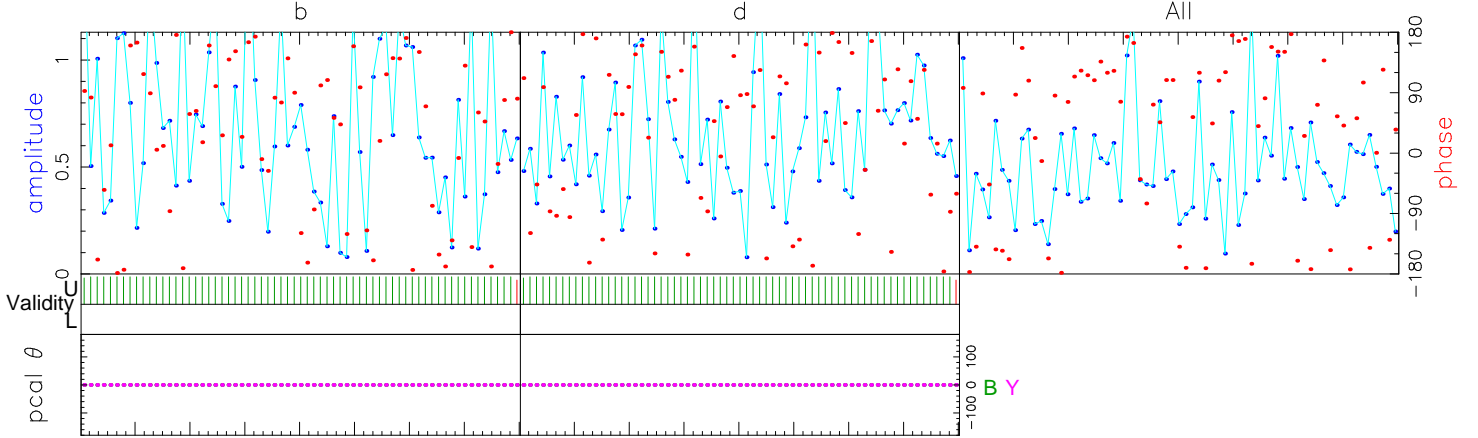
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/By..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/By.W.42.0RUI3R



Fringe quality 0
SNR 5.7
Int time 479.068
Amp 0.377
Phase 317.2
PFD 3.2e-01
Delays (us)
SBD -0.722606
MBD 0.000205
Fringe rate (Hz) 0.853478
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.00
Stop 052300.74
FRT 051901.00
Corr/FF/build 2019:234:001116
2019:234:153212
2018:249:082454
RA & Dec (J2000) 07h21m53.4485s +71°20'36.363"



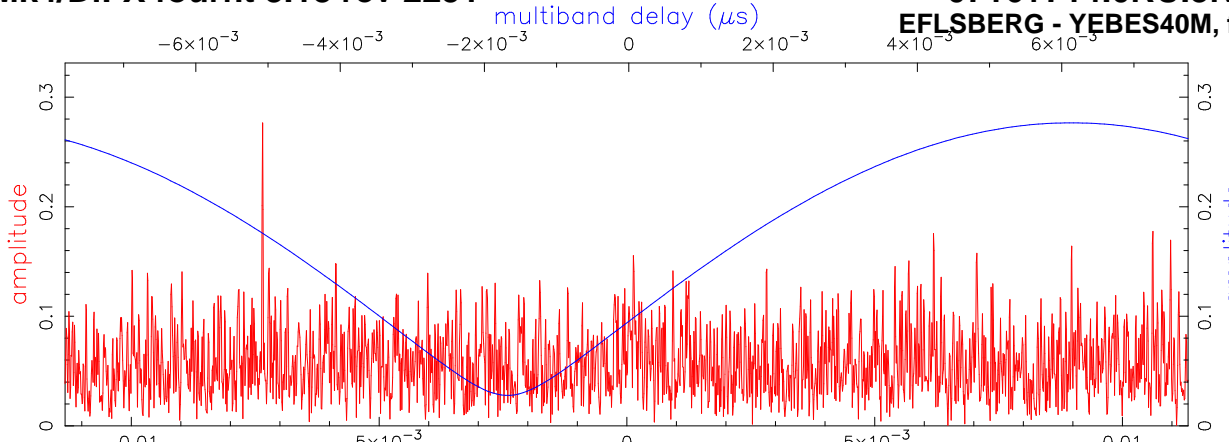
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



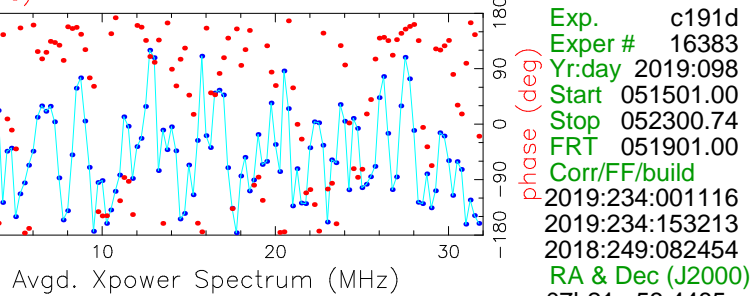
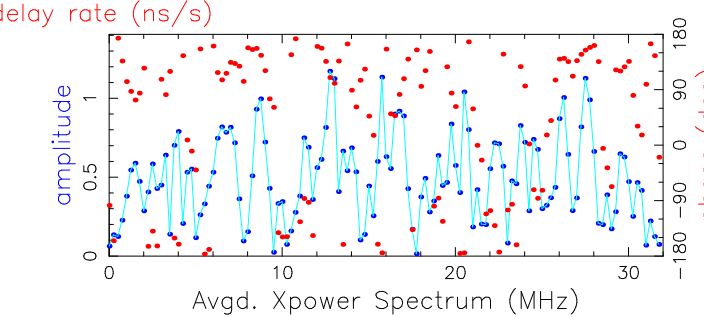
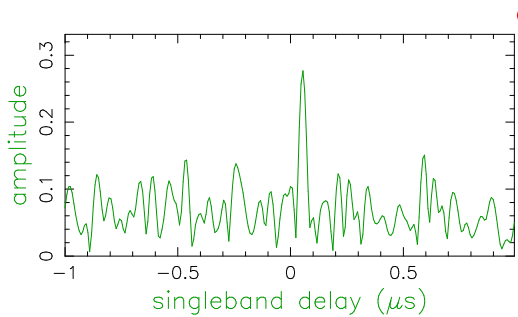
86156.00	86220.00	Freq (MHz)	All				
136.4	138.2	Phase	137.2				
0.4	0.3	Ampl.	0.4				
36.3	36.6	Sbd box	36.5				
U/L 937/0	937/0	APs used					
B 1000	1000	PC freqs					
Y 1000	1000	PC freqs					
B:Y 0:0	0:0	PC phase					
B:Y 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
Y 1000	1000						
B W01UR	W03UR	Chan ids					
Y W01UR	W03UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	3.10118845985E+03	Apriori delay (usec)	3.10190700504E+03	Resid mbdelay (usec)	2.04810E-04	+/-	8.7E-04
Sband delay (usec)	3.10118439904E+03	Apriori clock (usec)	1.2717309E+01	Resid sbdelay (usec)	-7.22606E-01	+/-	3.0E-03
Phase delay (usec)	3.10190700947E+03	Apriori clockrate (us/s)	-3.6700000E-07	Resid phdelay (usec)	4.42425E-06	+/-	6.5E-07
Delay rate (us/s)	7.28582724512E-02	Apriori rate (us/s)	7.28483644151E-02	Resid rate (us/s)	9.90804E-06	+/-	2.3E-09
Total phase (deg)	106.3	Apriori accel (us/s/s)	-3.36595785754E-06	Resid phase (deg)	317.2	+/-	20.1

ph/seg (deg)	RMS 71.2	Theor. 82.4	Amplitude Search (2048X8) 0.377 +/- 0.066	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	124.7	143.8	Interp. 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	14.2	Inc. seg. avg. 0.346	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	11.4	24.8	Inc. frq. avg. 0.355	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
				Data rate(Mb/s): 256	nlags: 128	t_cohere infinite		

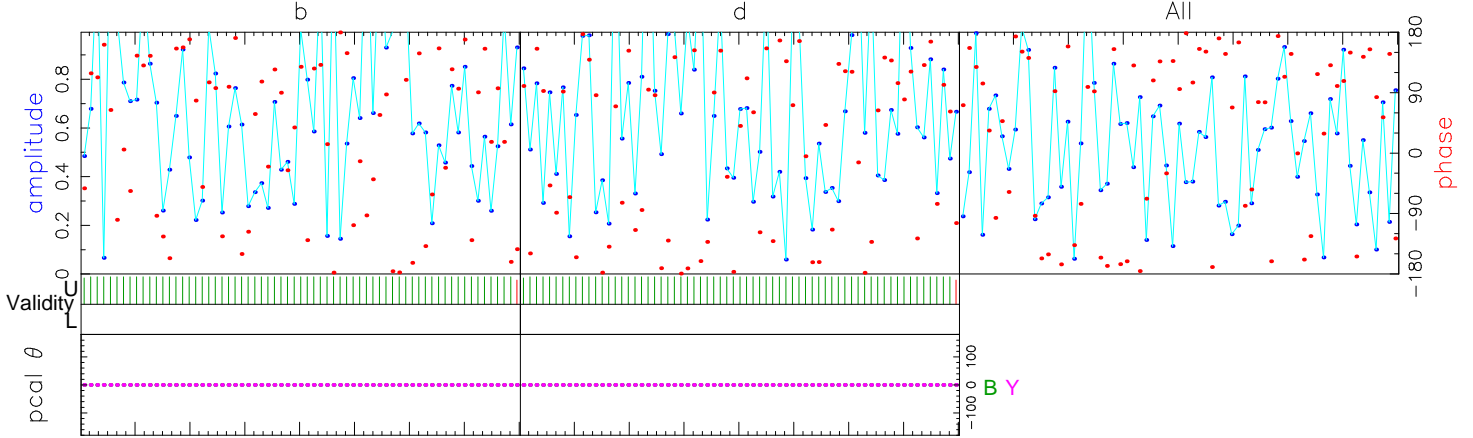
B: az 356.4 el 32.0 pa 7.1 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -1317.458 -414.323 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/BY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/BY.W.46.0RUI3R



Fringe quality 0
 SNR 5.9
 Int time 479.068
 Amp 0.331
 Phase -214.4
 PFD 1.4e-01
 Delays (us)
 SBD 0.053766
 MBD -0.009512
 Fringe rate (Hz)
 -0.633007
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.74
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153213
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

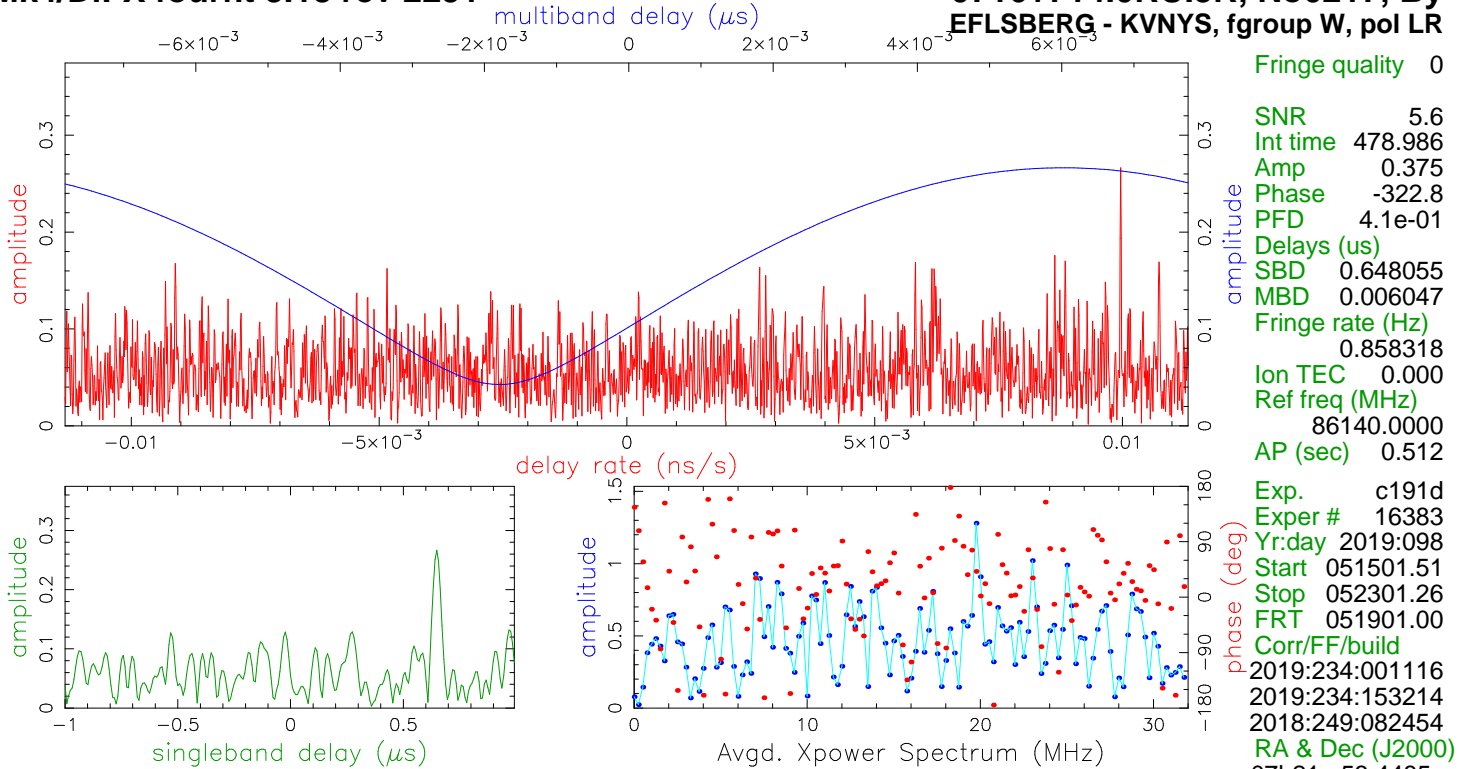


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

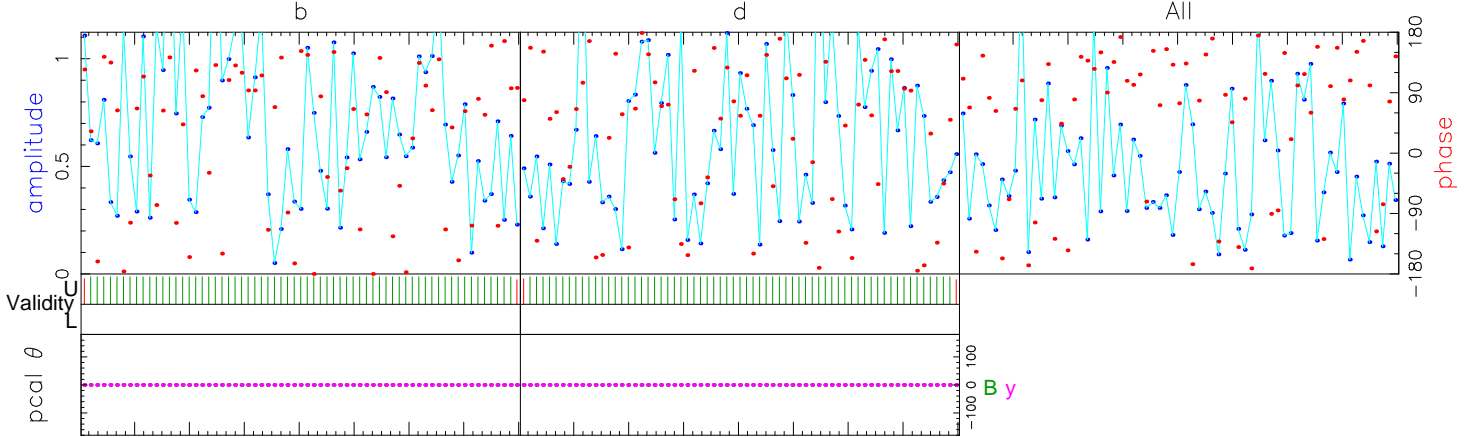


86156.00	86220.00	Freq (MHz)	All				
145.4	145.8	Phase	145.6				
0.3	0.4	Ampl.	0.3				
136.0	135.8	Sbd box	135.9				
U/L 937/0	937/0	APs used					
B 1000	1000	PC freqs					
Y 1000	1000	PC freqs					
B:Y 0:0	0:0	PC phase					
B:Y 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
Y 1000	1000						
B W01UL	W03UL	Chan ids					
Y W01UR	W03UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	3.10195999329E+03	Apriori delay (usec)	3.10190700504E+03	Resid mbdelay (usec)	-9.51175E-03	+/-	8.5E-04
Sband delay (usec)	3.10196077104E+03	Apriori clock (usec)	1.2717309E+01	Resid sbdelay (usec)	5.37660E-02	+/-	2.9E-03
Phase delay (usec)	3.10190700974E+03	Apriori clockrate (us/s)	-3.6700000E-07	Resid phdelay (usec)	4.69653E-06	+/-	6.3E-07
Delay rate (us/s)	7.28410158301E-02	Apriori rate (us/s)	7.28483644151E-02	Resid rate (us/s)	-7.34858E-06	+/-	2.3E-09
Total phase (deg)	-65.2	Apriori accel (us/s/s)	-3.36595785754E-06	Resid phase (deg)	-214.4	+/-	19.6

ph/seg (deg)	RMS 71.3	Theor. 80.0	Amplitude Search (2048X8)	0.331 +/- 0.057	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	131.6	139.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	0.0	13.8	Inc. seg. avg.	0.318	Bits/sample: 2x2	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	10.0	24.1	Inc. frq. avg.	0.321	Data rate(Mb/s): 256	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

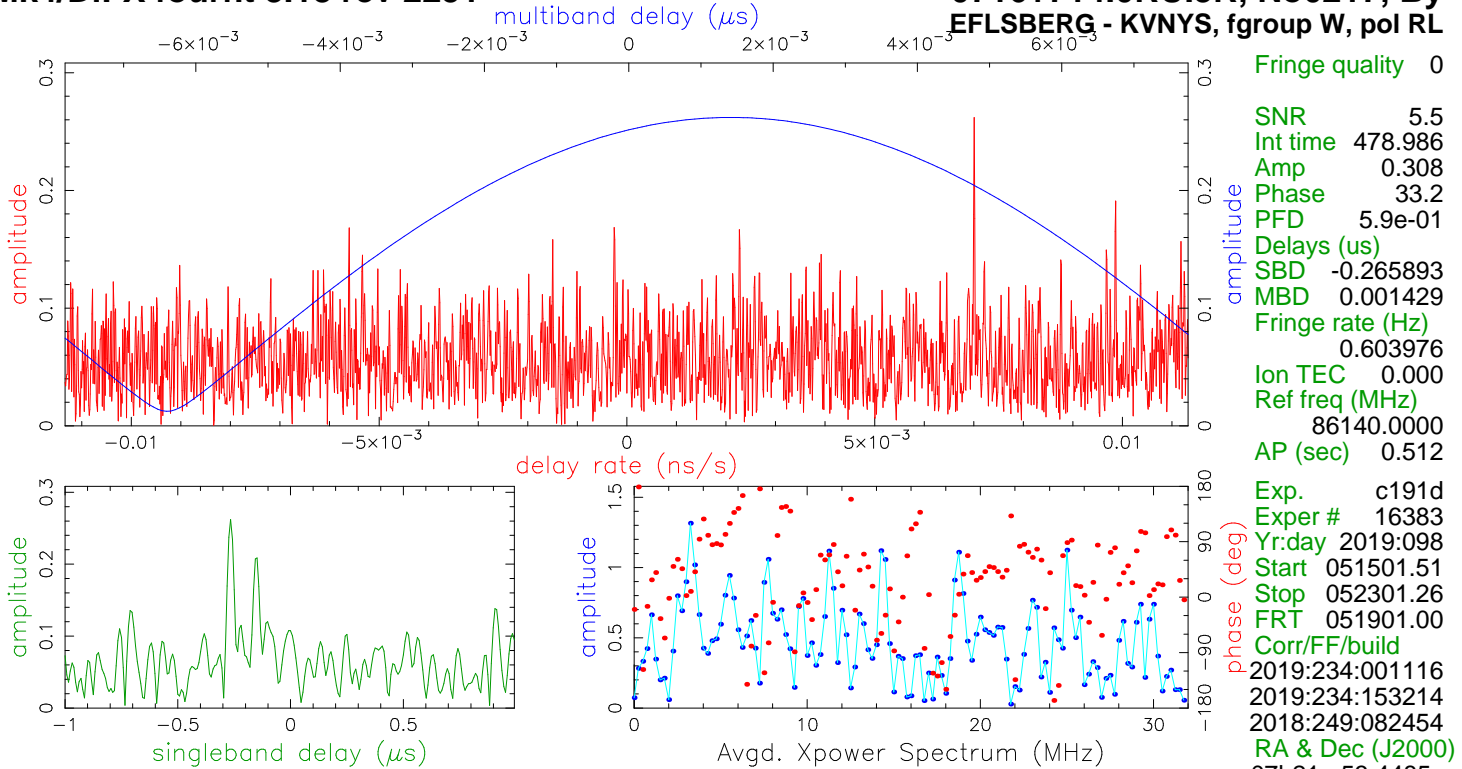


86156.00		86220.00		Freq (MHz)	All
127.4		126.8		Phase	127.2
0.4		0.3		Ampl.	0.4
211.7		213.1		Sbd box	212.0
U/L 937/0		937/0		APs used	
B 1000		1000		PC freqs	
y 0		0		PC freqs	
B:y 0:0		0:0		PC phase	
B:y 0:0		0:0		Manl PC	
B 1000		1000		PC amp	
y 1000		1000			
B W01UL		W03UL		Chan ids	
y W01UR		W03UR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-3.05358909865E+03	Apriori delay (usec)	-3.05423577088E+03	Resid mbdelay (usec)	6.04723E-03 +/- 8.8E-04
Sband delay (usec)	-3.05358771538E+03	Apriori clock (usec)	-3.8100593E+00	Resid sbdelay (usec)	6.48055E-01 +/- 3.1E-03
Phase delay (usec)	-3.05423576678E+03	Apriori clockrate (us/s)	-6.1999998E-07	Resid phdelay (usec)	4.10173E-06 +/- 6.6E-07
Delay rate (us/s)	-4.11269263399E-01	Apriori rate (us/s)	-4.11279227623E-01	Resid rate (us/s)	9.96422E-06 +/- 2.4E-09
Total phase (deg)	-72.1	Apriori accel (us/s/s)	3.35781264974E-05	Resid phase (deg)	-322.8 +/- 20.3

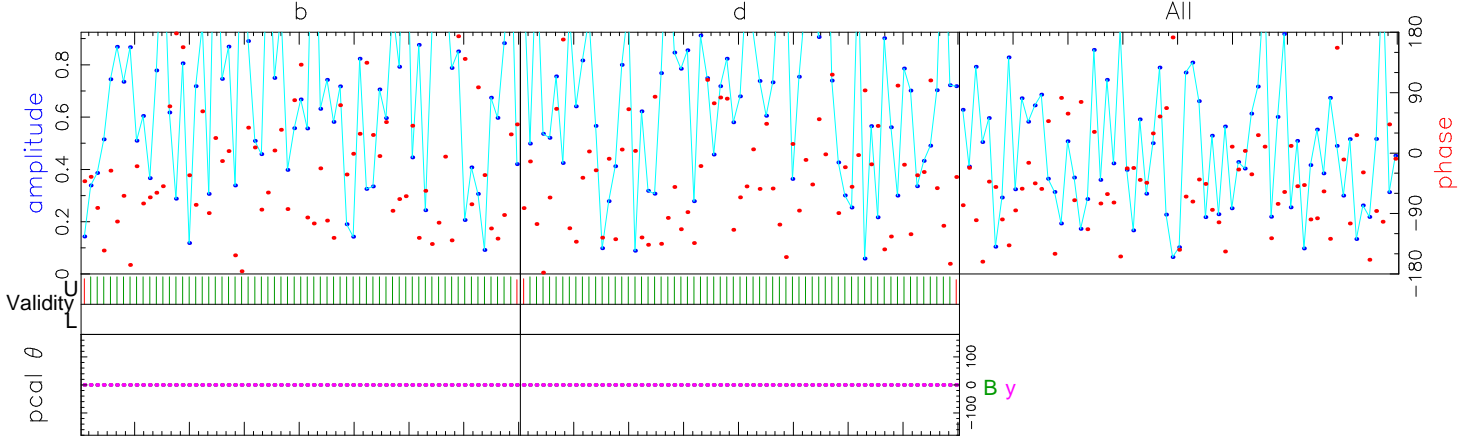
ph/seg (deg)	RMS 67.9	Theor. 83.2	Amplitude 0.375 +/- 0.066	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	139.2	145.2	Search (2048X8) 0.262	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	16.0	25.1	Inc. seg. avg. 0.338	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.363	Data rate(Mb/s): 256	dr window (ns/s) -0.011 0.011
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

B: az 356.4 el 32.0 pa 7.1 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) 7484.624 8142.665 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/By..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/By.W.64.0RUI3R

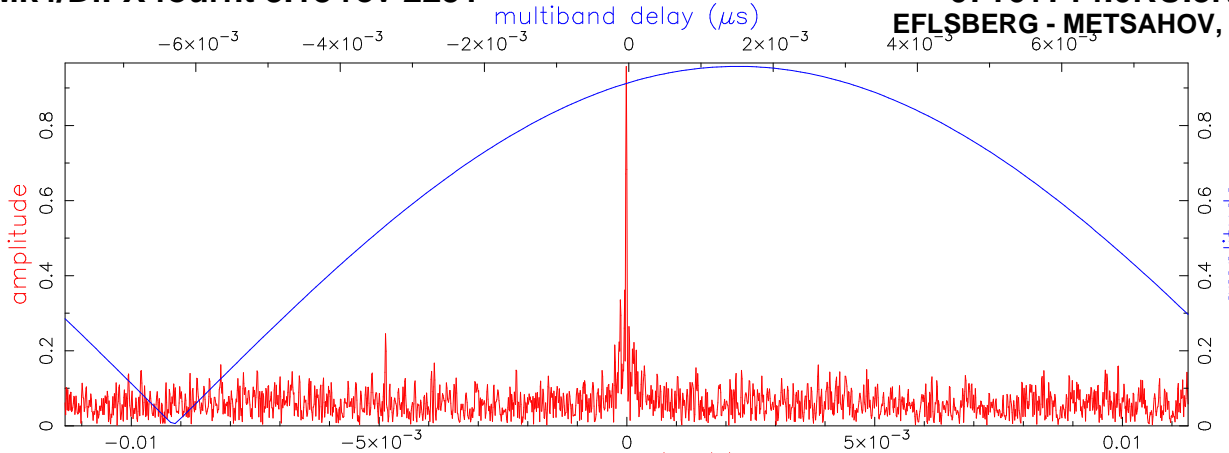


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

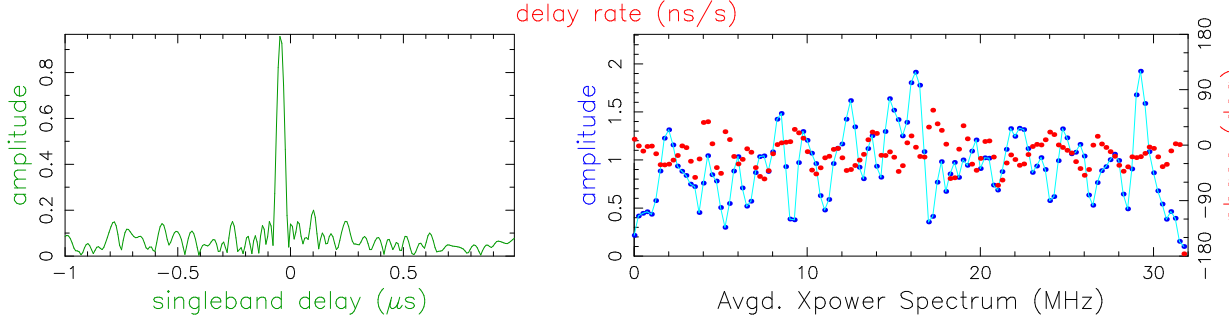


86156.00	86220.00	Freq (MHz)	All				
-56.6	-56.9	Phase	-56.8				
0.3	0.3	Ampl.	0.3				
95.0	110.3	Sbd box	95.0				
U/L 937/0	937/0	APs used					
B 1000	1000	PC freqs					
y 0	0	PC freqs					
B:y 0:0	0:0	PC phase					
B:y 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
y 1000	1000						
B W01UR	W03UR	Chan ids					
y W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.05449996682E+03	Apriori delay (usec)	-3.05423577088E+03	Resid mbdelay (usec)	1.42906E-03	+/-	9.0E-04
Sband delay (usec)	-3.05450166338E+03	Apriori clock (usec)	-3.8100593E+00	Resid sbdelay (usec)	-2.65893E-01	+/-	3.1E-03
Phase delay (usec)	-3.05423577271E+03	Apriori clockrate (us/s)	-6.1999998E-07	Resid phdelay (usec)	-1.83004E-06	+/-	6.7E-07
Delay rate (us/s)	-4.11272216055E-01	Apriori rate (us/s)	-4.11279227623E-01	Resid rate (us/s)	7.01157E-06	+/-	2.4E-09
Total phase (deg)	284.0	Apriori accel (us/s/s)	3.35781264974E-05	Resid phase (deg)	33.2	+/-	20.7

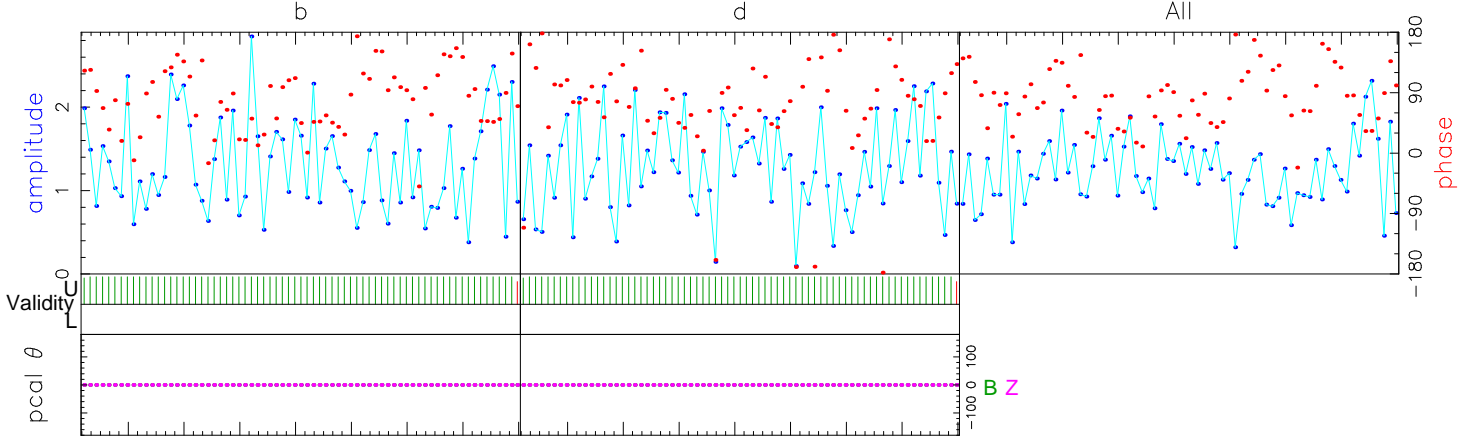
ph/seg (deg)	65.8	Theor.	84.6	Amplitude	0.308 +/- 0.056	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	125.6	Search (2048X8)	0.247	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.269	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	4.7	Inc. frq. avg.	0.299	Inc. frq. avg.	0.299	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00
B: az 356.4 el 32.0 pa 7.1		y: az 23.7 el 41.8 pa -96.8		u,v (fr/asec)	7484.624 8142.665				simultaneous interpolator



Fringe quality 9
 SNR 20.3
 Int time 471.094
 Amp 0.967
 Phase 351.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.044329
 MBD 0.001487
 Fringe rate (Hz)
 -0.001050
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051509.19
 Stop 052300.74
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153207
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

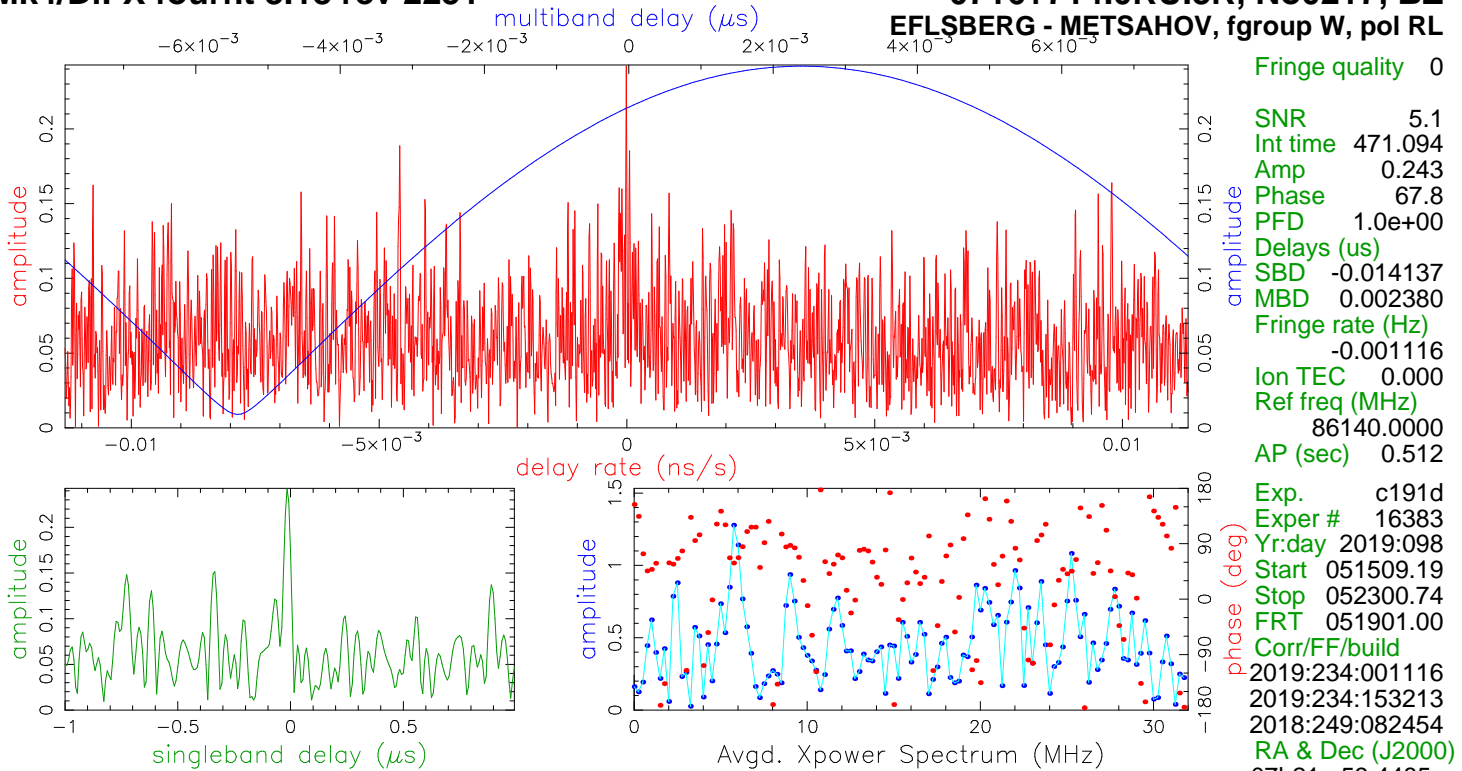


86156.00	86220.00	Freq (MHz)	All
81.7	82.1	Phase	81.9
1.0	1.0	Ampl.	1.0
123.2	123.4	Sbd box	123.3
U/L 921/0	921/0	APs used	
B 1000	1000	PC freqs	
Z 1000	1000	PC freqs	
B:Z 0:0	0:0	PC phase	
B:Z 0:0	0:0	Manl PC	
B 1000	1000	PC amp	
Z 1000	1000		
B W01UL	W03UL	Chan ids	
Z W01UL	W03UL	Tracks	
		Chan ids	
		Tracks	

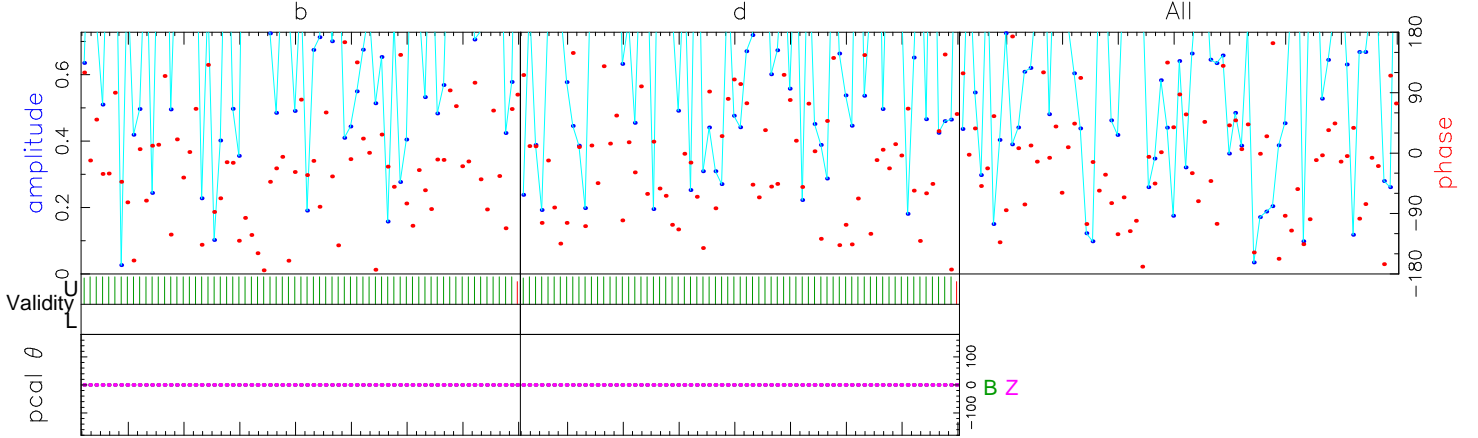
Group delay (usec)(sbd)	-2.86364987407E+03	Apriori delay (usec)	-2.86360448651E+03	Resid mbdelay (usec)	1.48744E-03	+/-	2.5E-04
Sband delay (usec)	-2.86364881551E+03	Apriori clock (usec)	1.9656218E+01	Resid sbdelay (usec)	-4.43290E-02	+/-	8.5E-04
Phase delay (usec)	-2.86360448387E+03	Apriori clockrate (us/s)	-1.7400000E-07	Resid phdelay (usec)	2.64068E-06	+/-	1.8E-07
Delay rate (us/s)	-8.52059659606E-02	Apriori rate (us/s)	-8.52059537734E-02	Resid rate (us/s)	-1.21872E-08	+/-	6.7E-10
Total phase (deg)	183.5	Apriori accel (us/s/s)	5.04551325174E-06	Resid phase (deg)	351.9	+/-	5.6

ph/seg (deg)	42.0	Theor.	23.8	Amplitude	0.967 +/- 0.048	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	50.8	Search (2048X8)	0.950	Search	0.000	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.	1.141	Inc. seg. avg.	1.141	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008
amp/frq (%)	1.1	Inc. frq. avg.	0.955	Inc. frq. avg.	0.955	Sample rate(MSamp/s):	64	ion window (TEC)	0.00 0.00	dr window (ns/s)	-0.011 0.011

B: az 356.4 el 32.0 pa 7.1 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) 1544.765 874.526 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/BZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/BZ.W.3.0RUI3R

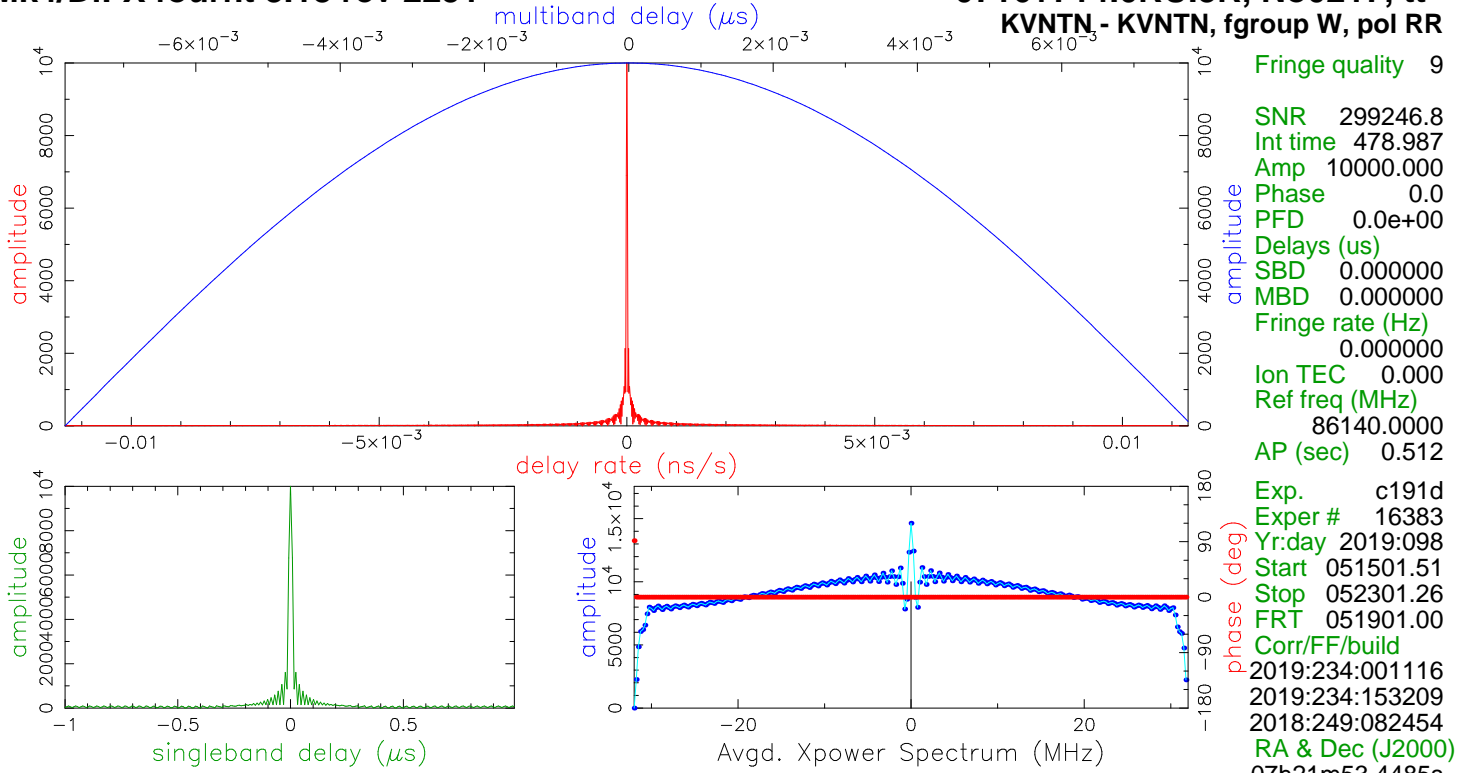


Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

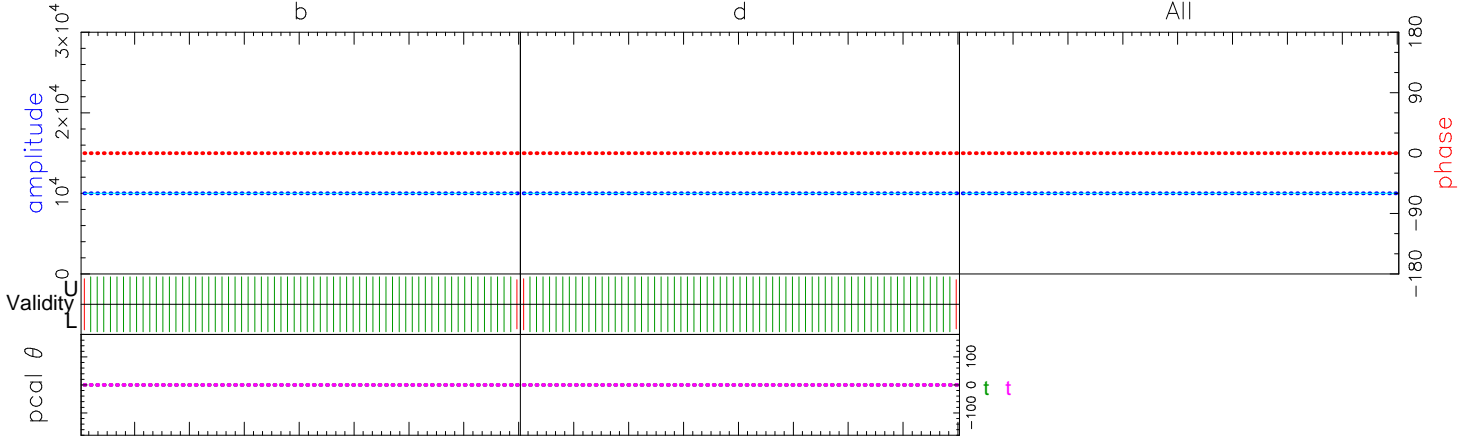


86156.00		86220.00		Freq (MHz)	All
-22.3		-22.0		Phase	-22.2
0.2		0.3		Ampl.	0.2
127.4		127.0		Sbd box	127.2
U/L 921/0		921/0		APs used	
B 1000		1000		PC freqs	
Z 1000		1000		PC freqs	
B:Z 0:0		0:0		PC phase	
B:Z 0:0		0:0		Manl PC	
B 1000		1000		PC amp	
Z 1000		1000			
B W01UR		W03UR		Chan ids	
Z W01UL		W03UL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-2.86361773182E+03	Apriori delay (usec)	-2.86360448651E+03	Resid mbdelay (usec)	2.37969E-03 +/- 9.8E-04
Sband delay (usec)	-2.86361862351E+03	Apriori clock (usec)	1.9656218E+01	Resid sbdelay (usec)	-1.41370E-02 +/- 3.4E-03
Phase delay (usec)	-2.86360448722E+03	Apriori clockrate (us/s)	-1.7400000E-07	Resid phdelay (usec)	-7.14613E-07 +/- 7.3E-07
Delay rate (us/s)	-8.52059667343E-02	Apriori rate (us/s)	-8.52059537734E-02	Resid rate (us/s)	-1.29609E-08 +/- 2.7E-09
Total phase (deg)	-100.6	Apriori accel (us/s/s)	5.04551325174E-06	Resid phase (deg)	67.8 +/- 22.5

ph/seg (deg)	80.1	Theor.	94.8	Amplitude	0.243 +/- 0.048	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	194.7	Search (2048X8)	0.238	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	3.7	Inc. seg. avg.	0.254	Inc. seg. avg.	0.254	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
		Inc. frq. avg.	0.233	Inc. frq. avg.	0.233	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

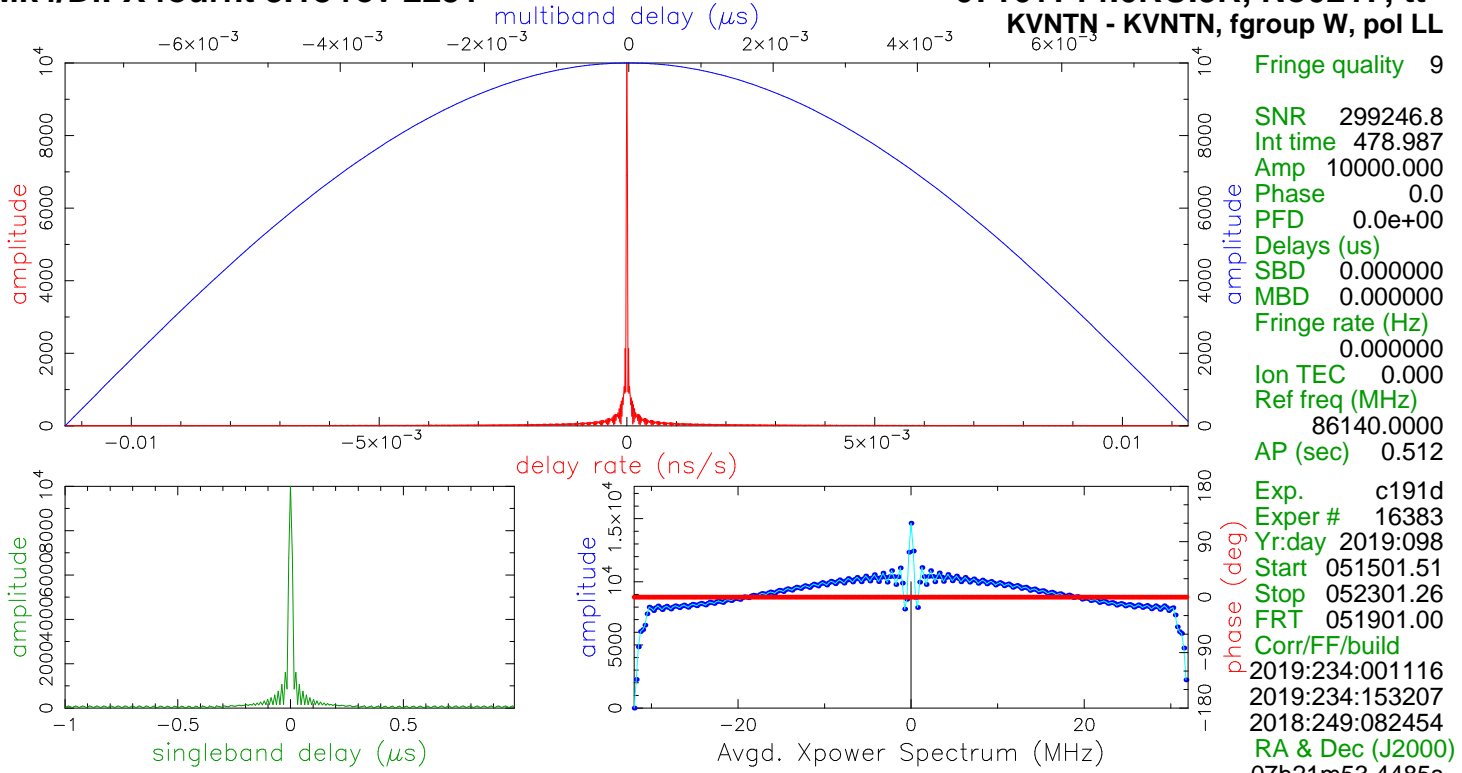


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
0.0	0.0	Phase	0.0				
10000.0	10000.0	Ampl.	10000.0				
129.0	129.0	Sbd box	129.0				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
t 0	0	PC freqs					
t:t 0:0	0:0	PC phase					
t:t 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
t 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
t W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.7E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.9E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.5E-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	Theor.	0.0	Amplitude	10000.000 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X8)	10000.000	Search	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	10000.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00



Fringe quality 9

SNR 299246.8

Int time 478.987

Ampl 10000.000

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052301.26

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153207

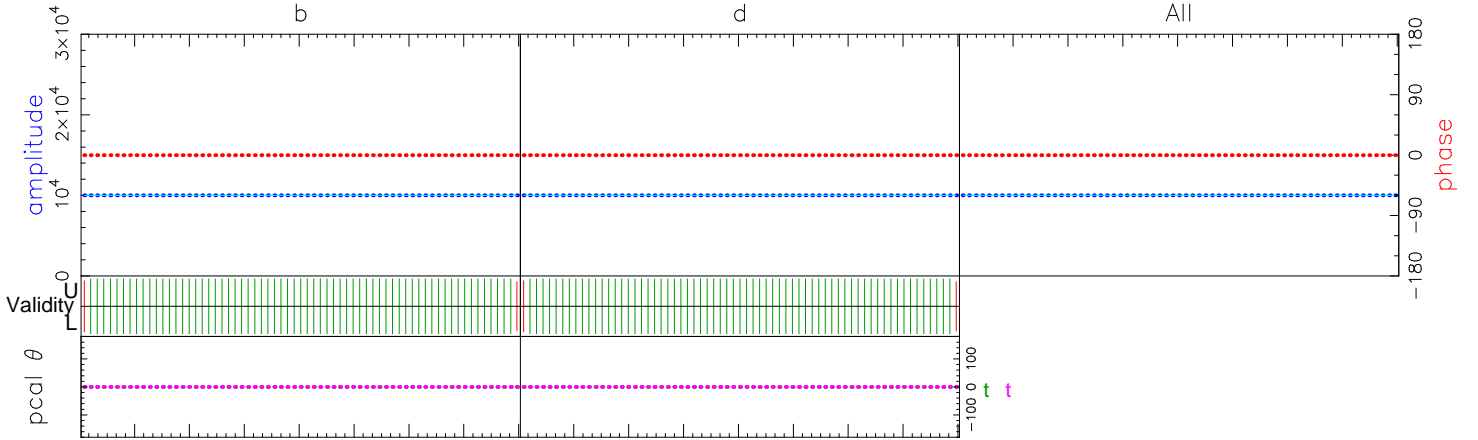
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 937/937	937/937	APs used	
t 0	0	PC freqs	
t 0	0	PC freqs	
t:t 0:0	0:0	PC phase	
t:t 0:0	0:0	Manl PC	
t 1000	1000	PC amp	
t 1000	1000		
t W01UL,W01LL	W03UL,W03LL	Chan ids	
t W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.5E-14
		Resid phase (deg)	0.0 +/- 0.0

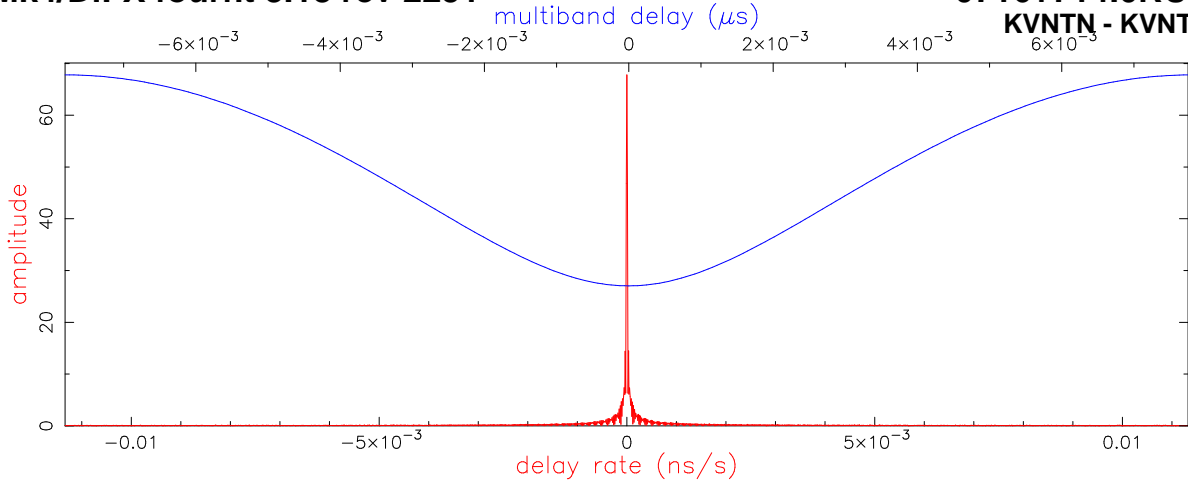
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X8) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

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

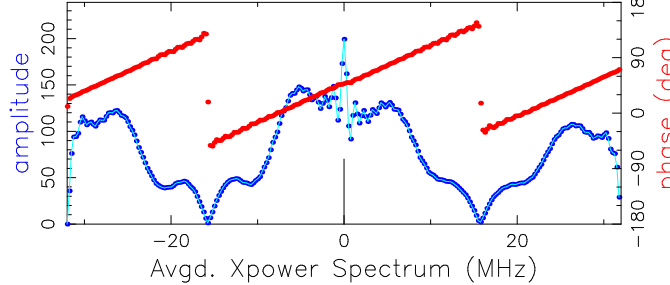
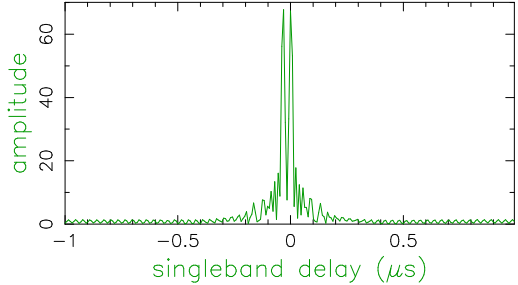
0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



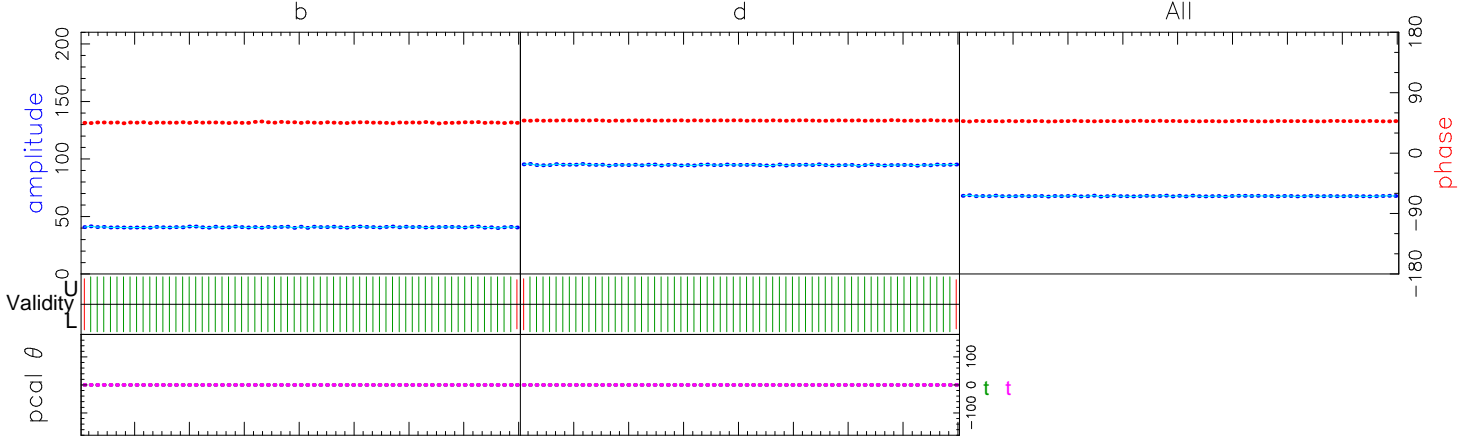
Fringe quality 8

SNR 2097.9
 Int time 478.987
 Amp 70.105
 Phase 227.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.033496
 MBD -0.007947
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153211
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

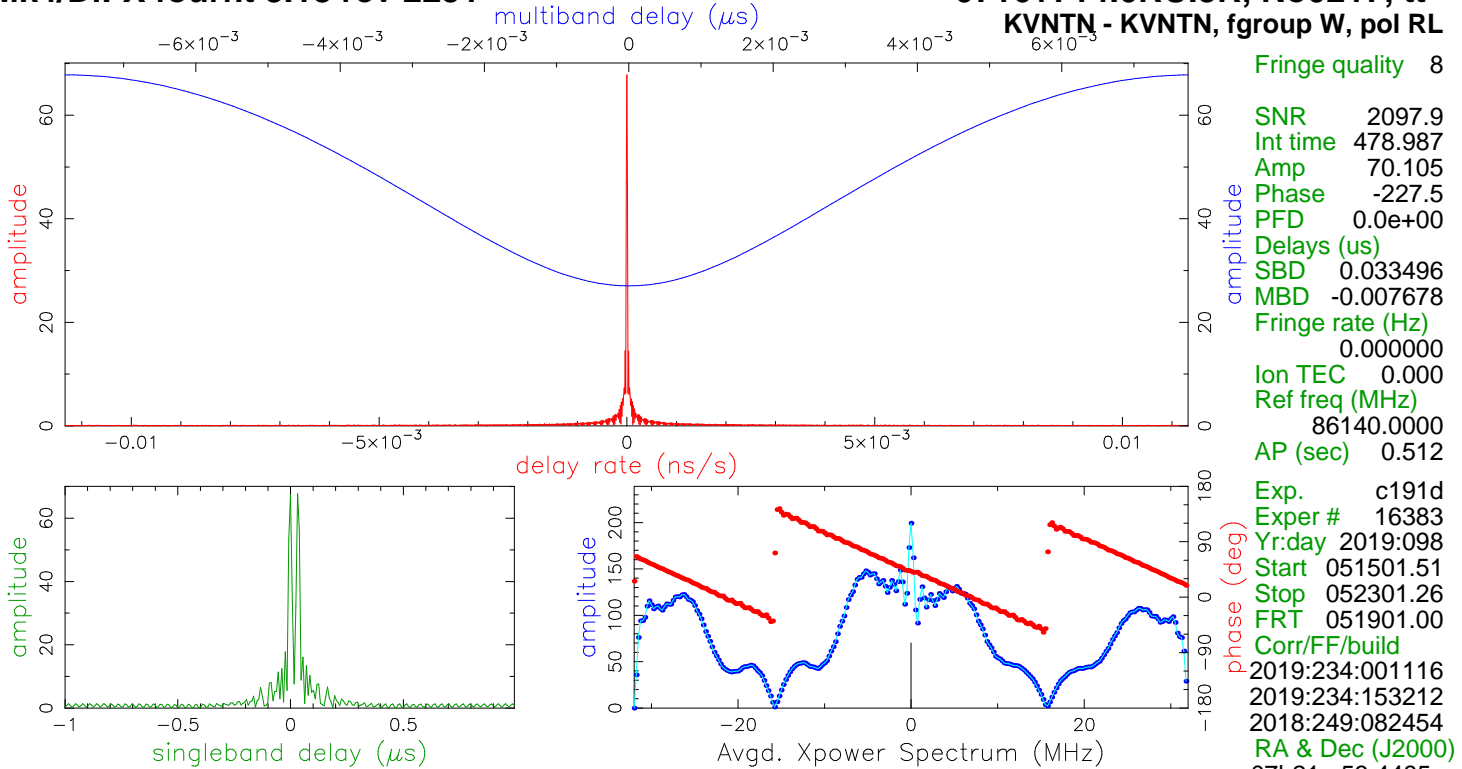


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

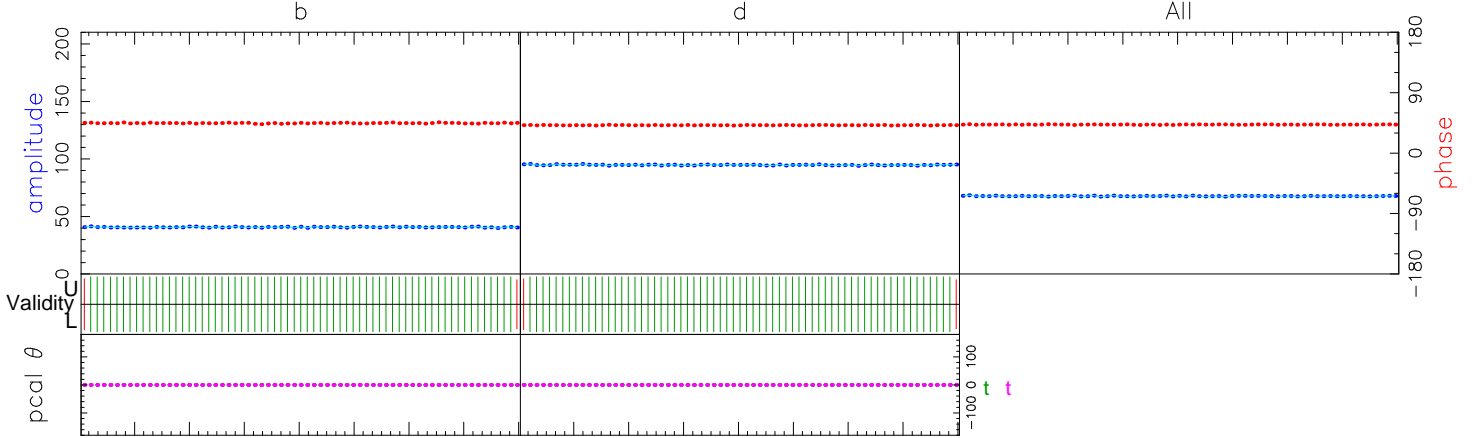


86156.00	86220.00	Freq (MHz)	All				
45.4	48.5	Phase	47.5				
40.8	94.9	Ampl.	67.8				
124.7	124.8	Sbd box	124.7				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
t 0	0	PC freqs					
t:t 0:0	0:0	PC phase					
t:t 0:0	0:0	Mani PC					
t 1000	1000	PC amp					
t 1000	1000						
t W01UL,W01LL	W03UL,W03LL	Chan ids					
t W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.91973750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-7.94738E-03	+/-	2.4E-06
Sband delay (usec)	-3.34965000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-3.34965E-02	+/-	4.1E-06
Phase delay (usec)	1.53326976929E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.53327E-06	+/-	8.8E-10
Delay rate (us/s)	-3.54278809792E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-3.54279E-12	+/-	6.4E-12
Total phase (deg)	227.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	227.5	+/-	0.0

ph/seg (deg) 0.2 0.2 Theor. Amplitude 70.105 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.3 0.4 Search (2048X8) 67.807 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.7 0.1 Inc. seg. avg. 67.787 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 22.4 el 37.7 pa -97.3 t: az 22.4 el 37.7 pa -97.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tt.0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tt.W.39.0RUI3R

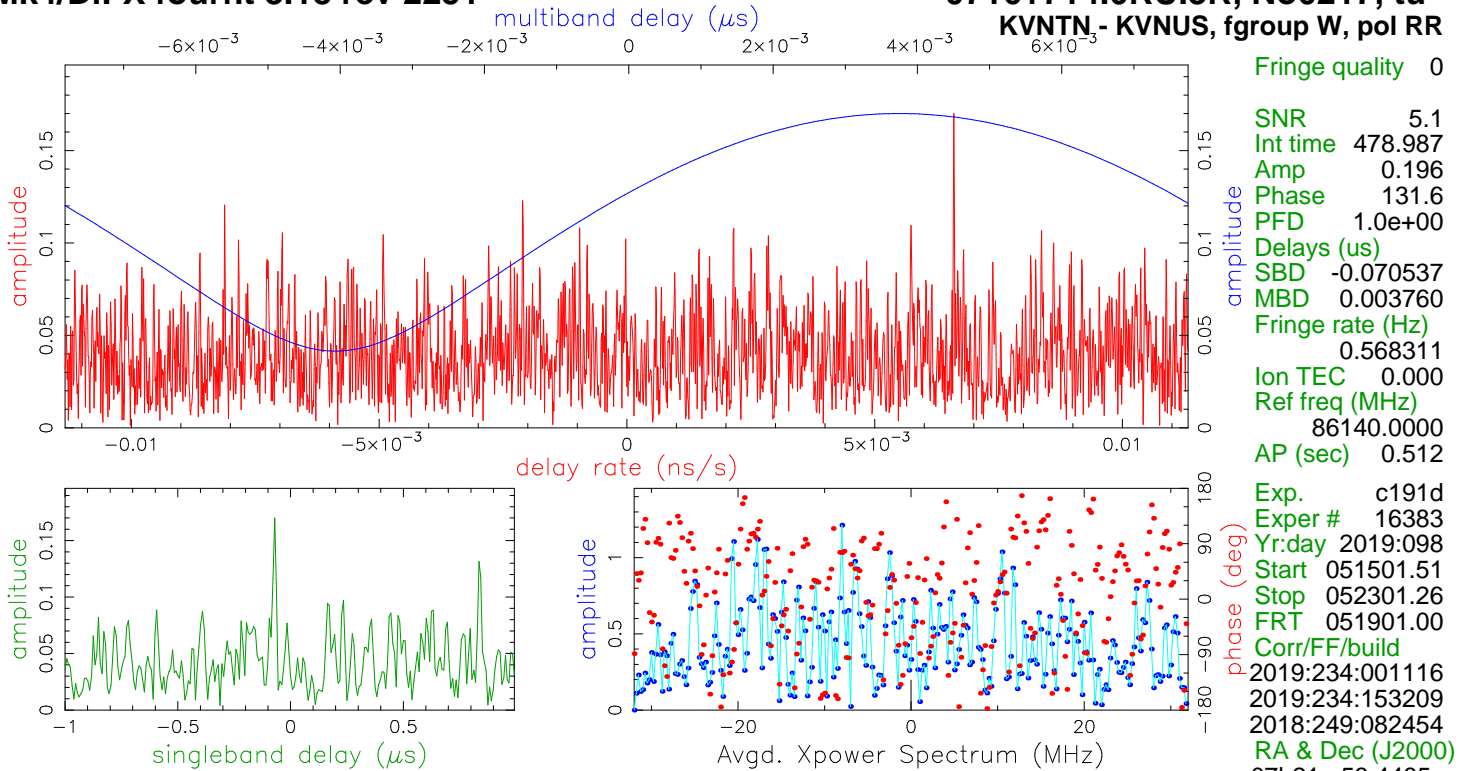


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

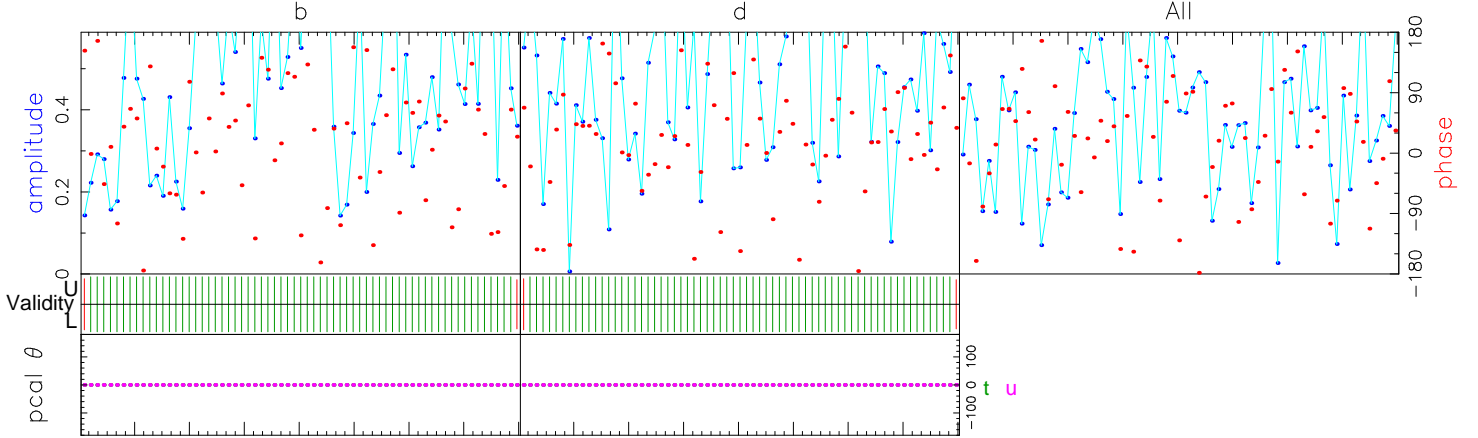


86156.00	86220.00	Freq (MHz)	All				
44.6	41.5	Phase	42.5				
40.8	94.9	Ampl.	67.8				
133.3	133.2	Sbd box	133.3				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
t 0	0	PC freqs					
t:t 0:0	0:0	PC phase					
t:t 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
t 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
t W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	3.91973750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-7.67762E-03	+/-	2.4E-06
Sband delay (usec)	3.34965000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.34965E-02	+/-	4.1E-06
Phase delay (usec)	1.36898237811E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.36898E-06	+/-	8.8E-10
Delay rate (us/s)	3.54278809792E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.54279E-12	+/-	6.4E-12
Total phase (deg)	-227.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-227.5	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.2	Amplitude	70.105 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	3.3		0.4	Search (2048X8)	67.807	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
amp/frq (%)	38.7		0.1	Inc. seg. avg.	67.787	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	67.807	Data rate(Mb/s):	512	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., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

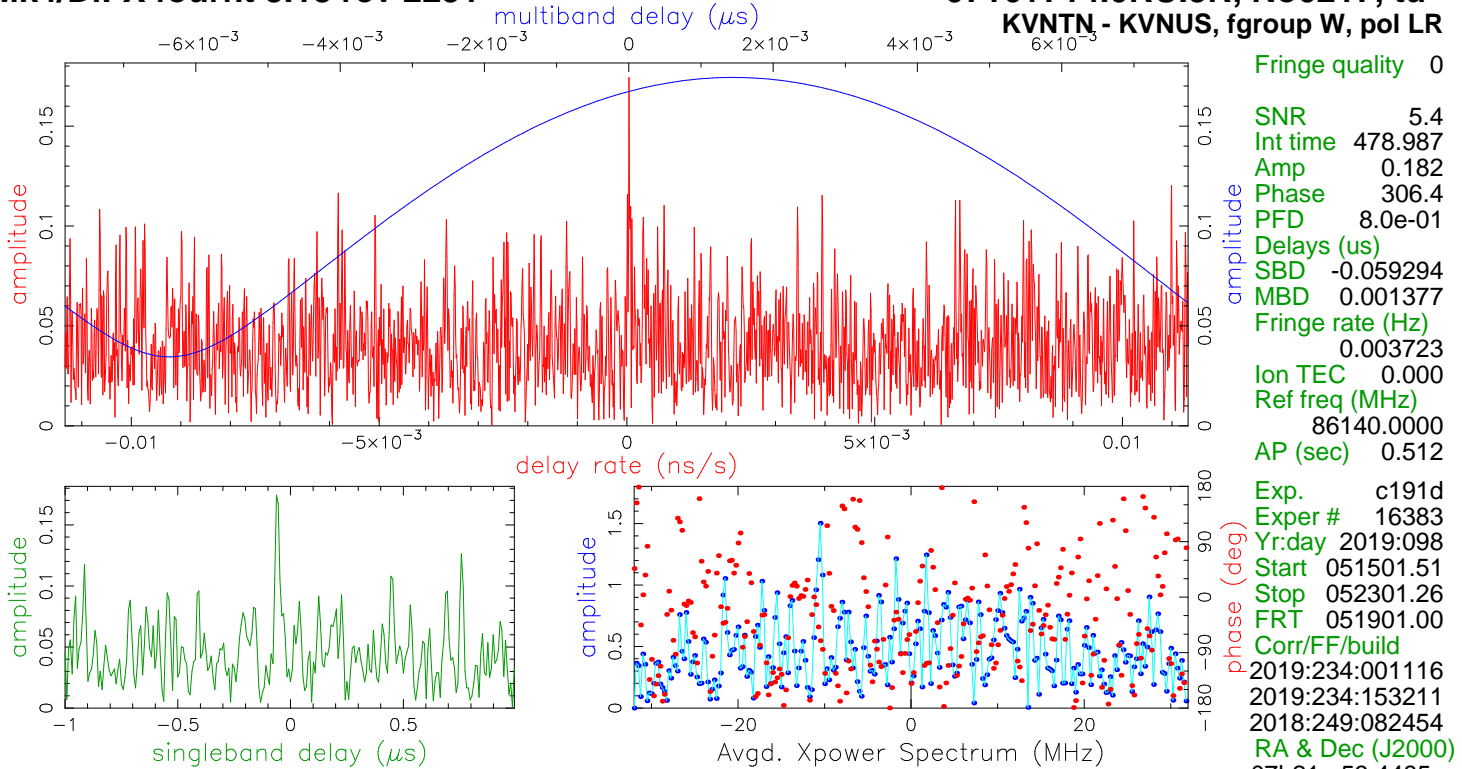


86156.00	86220.00	Freq (MHz)	All				
41.8	41.4	Phase	41.6				
0.1	0.2	Ampl.	0.2				
36.4	120.0	Sbd box	120.0				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
t:u 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
u W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-8.27562557334E+02	Apriori delay (usec)	-8.27488192268E+02	Resid mbdelay (usec)	3.75993E-03	+/-	9.8E-04
Sband delay (usec)	-8.27558728768E+02	Apriori clock (usec)	1.8574993E+01	Resid sbdelay (usec)	-7.05365E-02	+/-	1.7E-03
Phase delay (usec)	-8.27488190928E+02	Apriori clockrate (us/s)	2.6000000E-07	Resid phdelay (usec)	1.34031E-06	+/-	3.6E-07
Delay rate (us/s)	1.79290032040E-02	Apriori rate (us/s)	1.79224056823E-02	Resid rate (us/s)	6.59752E-06	+/-	2.6E-09
Total phase (deg)	174.1	Apriori accel (us/s/s)	1.03200736304E-06	Resid phase (deg)	131.6	+/-	11.3

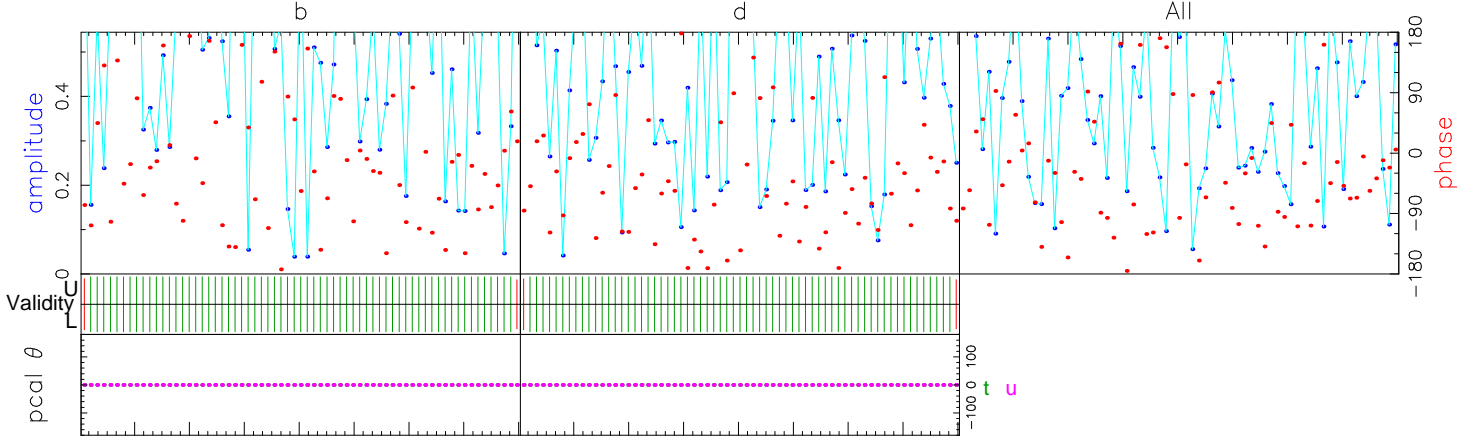
ph/seg (deg)	RMS 80.7	Theor. 92.1	Amplitude 157.5	Search (2048X8) 160.8	Interp. 0.0	Inc. seg. avg. 0.191	Inc. frq. avg. 0.189	0.196 +/- 0.039	0.000	0.167	0.189	0.000E+00	0.000E+00	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us) -1.000	1.000	
amp/seg (%)	157.5	160.8	24.4	27.8	0.0	15.9	24.4	27.8	0.0	15.9	24.4	27.8	0.0	0.0	0.0	0.0	0.0	0.008
ph/frq (deg)	0.0	15.9	0.0	15.9	0.0	15.9	0.0	15.9	0.0	15.9	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.011
amp/frq (%)	24.4	27.8	0.0	15.9	0.0	15.9	0.0	15.9	0.0	15.9	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.000

t: az 22.4 el 37.7 pa -97.3 u: az 22.9 el 40.7 pa -100.2 u,v (fr/asec) -315.549 152.413 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tu..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tu.W.22.0RUI3R

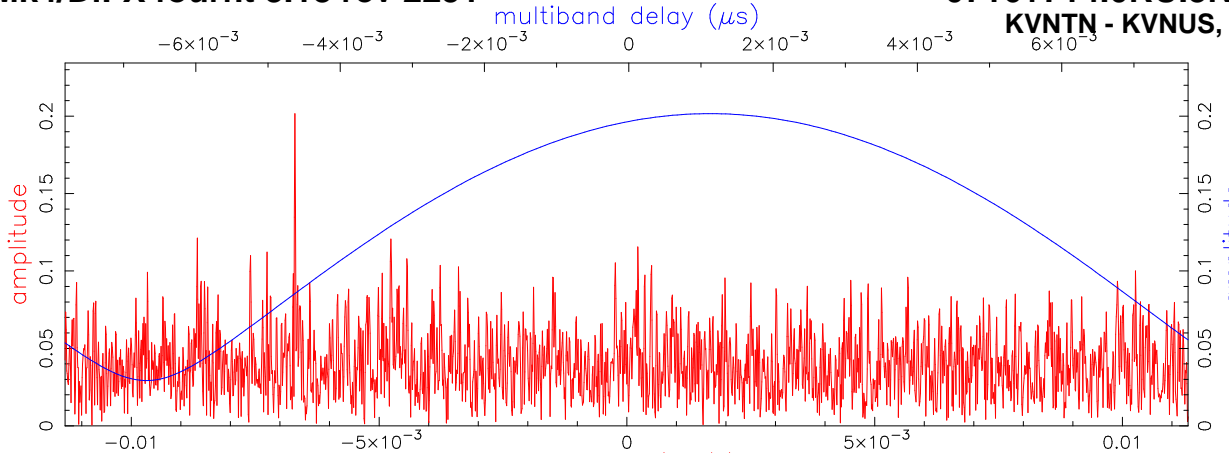


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
-54.6		-53.0		Phase	-53.6
0.1		0.2		Ampl.	0.2
121.6		121.2		Sbd box	121.4
U/L 937/937		937/937		APs used	
t 0		0		PC freqs	
u 0		0		PC freqs	
tu 0:0		0:0		PC phase	
tu 0:0		0:0		Manl PC	
t 1000		1000		PC amp	
u 1000		1000			
t W01UL,W01LL		W03UL,W03LL		Chan ids	
u W01UR,W01LR		W03UR,W03LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-8.27549315048E+02	Apriori delay (usec)	-8.27488192268E+02	Resid mbdelay (usec)	1.37722E-03 +/- 9.2E-04
Sband delay (usec)	-8.27547486268E+02	Apriori clock (usec)	1.8574993E+01	Resid sbdelay (usec)	-5.92940E-02 +/- 1.6E-03
Phase delay (usec)	-8.27488193997E+02	Apriori clockrate (us/s)	2.6000000E-07	Resid phdelay (usec)	-1.72874E-06 +/- 3.4E-07
Delay rate (us/s)	1.79224489057E-02	Apriori rate (us/s)	1.79224056823E-02	Resid rate (us/s)	4.32234E-08 +/- 2.5E-09
Total phase (deg)	348.9	Apriori accel (us/s/s)	1.03200736304E-06	Resid phase (deg)	306.4 +/- 10.5

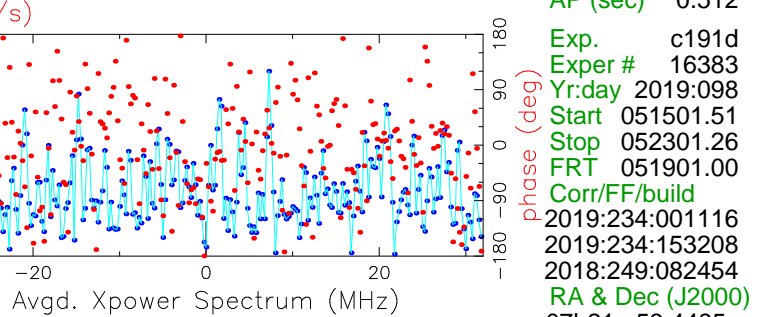
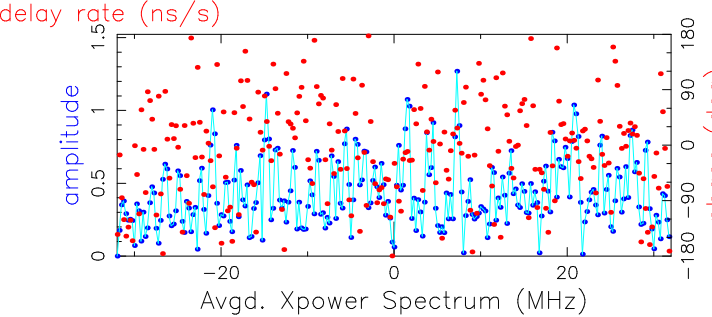
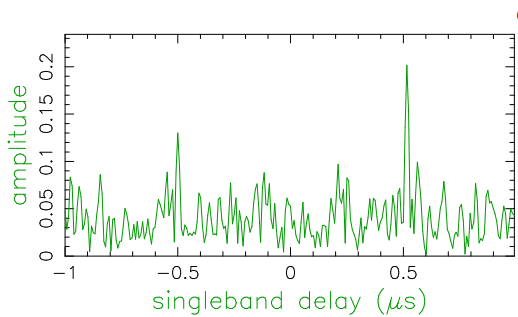
ph/seg (deg)	RMS 78.5	Theor. 86.3	Amplitude 0.182 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	154.7	150.6	Search (2048X8) 0.173	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	19.4	26.0	Inc. seg. avg. 0.181	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.169	Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00



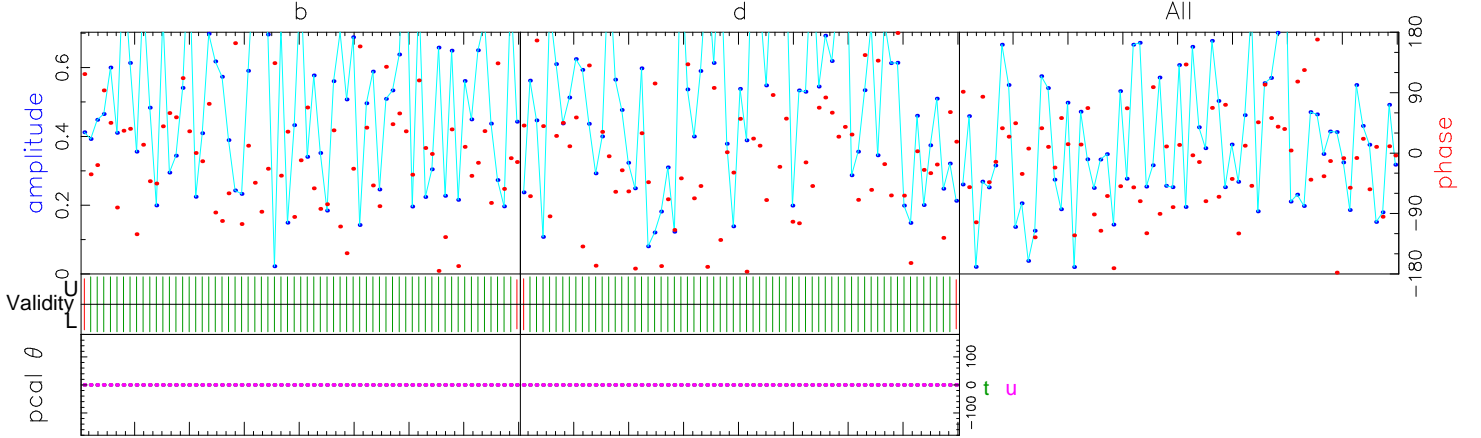
Fringe quality 0

SNR 6.0
Int time 478.987
Amp 0.234
Phase -92.5
PFD 4.7e-02
Delays (us)
SBD 0.516328
MBD 0.001150
Fringe rate (Hz)
-0.577177
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052301.26
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153208
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

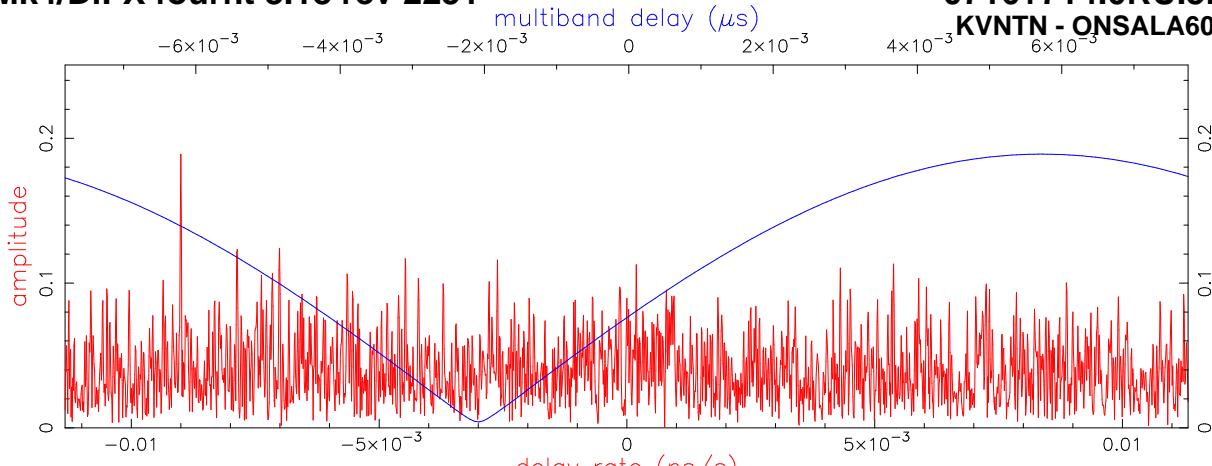


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-2.3	-2.8	Phase	-2.5				
0.3	0.2	Ampl.	0.2				
195.1	195.1	Sbd box	195.1				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
tu 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W01UL,W01LL	W03UL,W03LL	Chan ids					
u W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-8.26971417664E+02	Apriori delay (usec)	-8.27488192268E+02	Resid mbdelay (usec)	1.14960E-03	+/-	8.2E-04
Sband delay (usec)	-8.26971864768E+02	Apriori clock (usec)	1.8574993E+01	Resid sbdelay (usec)	5.16328E-01	+/-	1.4E-03
Phase delay (usec)	-8.27488192350E+02	Apriori clockrate (us/s)	2.6000000E-07	Resid phdelay (usec)	-8.19130E-08	+/-	3.1E-07
Delay rate (us/s)	1.79157052334E-02	Apriori rate (us/s)	1.79224056823E-02	Resid rate (us/s)	-6.70045E-06	+/-	2.2E-09
Total phase (deg)	-50.0	Apriori accel (us/s/s)	1.03200736304E-06	Resid phase (deg)	-92.5	+/-	9.5

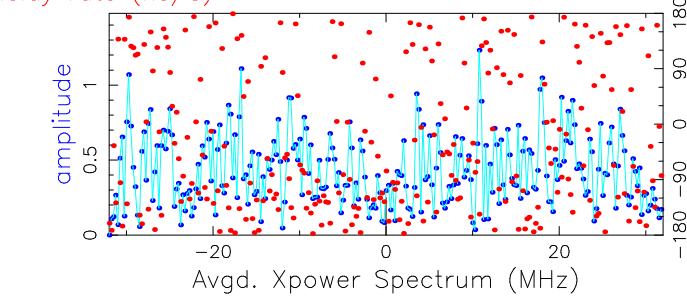
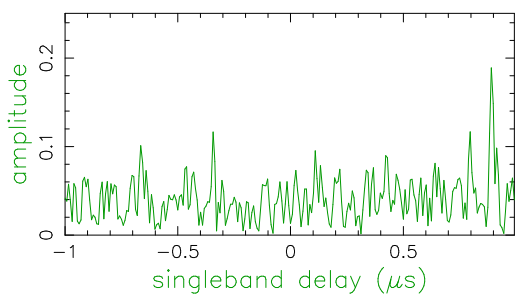
ph/seg (deg) 73.3 77.5 Search (2048X8) 0.193 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 133.5 135.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 13.4 Inc. seg. avg. 0.231 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 14.5 23.4 Inc. frq. avg. 0.228 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 22.4 el 37.7 pa -97.3 u: az 22.9 el 40.7 pa -100.2 u,v (fr/asec) -315.549 152.413 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tu..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tu.W.8.0RUI3R simultaneous interpolator



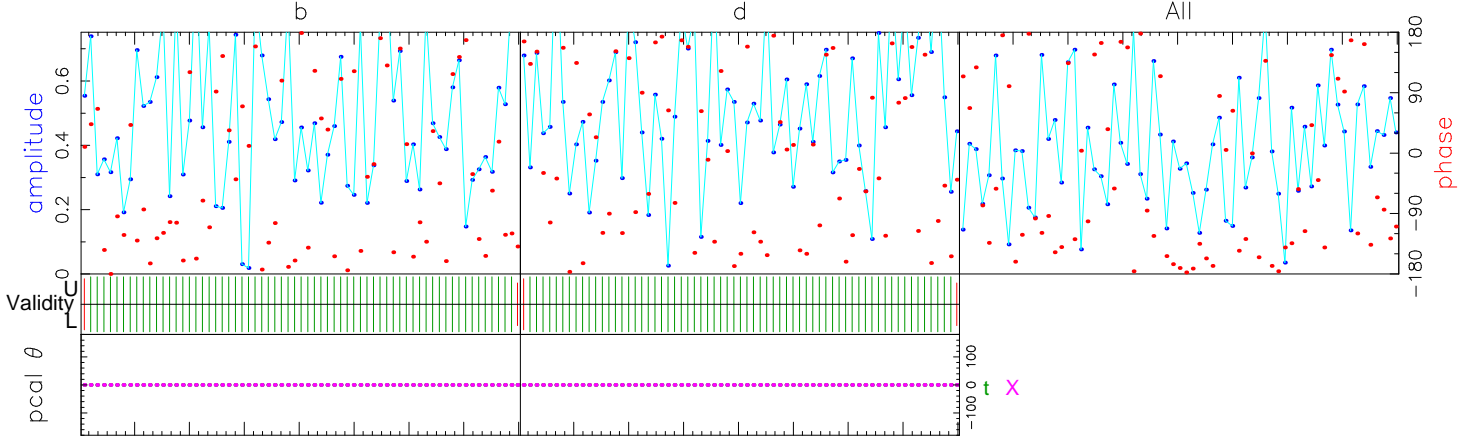
Fringe quality 0

SNR 5.7
Int time 478.165
Amp 0.251
Phase -334.6
PFD 3.1e-01
Delays (us)
SBD 0.891840
MBD -0.009766
Fringe rate (Hz)
-0.775359
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052300.23
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153208
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

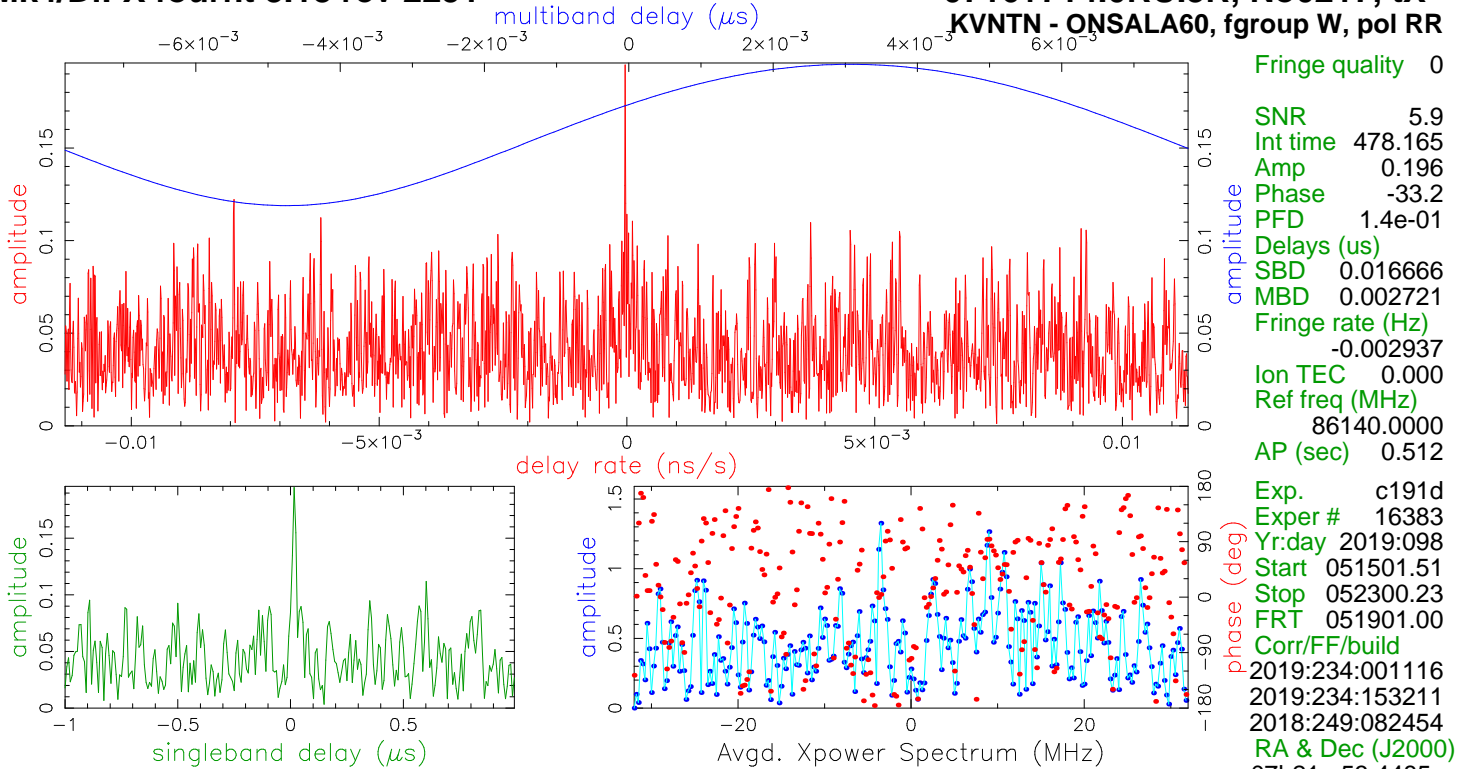


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
-153.1		-156.2		Phase	-154.6
0.3		0.2		Ampl.	0.2
243.0		243.3		Sbd box	243.2
U/L 935/935		935/935		APs used	
t 0		0		PC freqs	
X 1000		1000		PC freqs	
t:X 0:0		0:0		PC phase	
t:X 0:0		0:0		Manl PC	
t 1000		1000		PC amp	
X 1000		1000			
t W01UL,W01LL		W03UL,W03LL		Chan ids	
X W01UL,W01LL		W03UL,W03LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.52054497501E+02	Apriori delay (usec)	-1.52950981876E+02	Resid mbdelay (usec)	-9.76562E-03 +/- 8.7E-04
Sband delay (usec)	-1.52059142376E+02	Apriori clock (usec)	-5.5443587E+00	Resid sbdelay (usec)	8.91840E-01 +/- 1.5E-03
Phase delay (usec)	-1.52950986861E+02	Apriori clockrate (us/s)	-3.3999984E-08	Resid phdelay (usec)	-4.98554E-06 +/- 3.2E-07
Delay rate (us/s)	4.02093613847E-01	Apriori rate (us/s)	4.02102614997E-01	Resid rate (us/s)	-9.00115E-06 +/- 2.3E-09
Total phase (deg)	-183.0	Apriori accel (us/s/s)	-3.06155822845E-05	Resid phase (deg)	-334.6 +/- 10.1

ph/seg (deg) 73.4 82.3 Search (2048X8) 0.187 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 139.4 143.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 14.2 Inc. seg. avg. 0.251 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 2.3 24.8 Inc. frq. avg. 0.241 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 22.4 el 37.7 pa -97.3 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -7306.514 -7830.496 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tX.W.14.0RUI3R simultaneous interpolator



Fringe quality 0

SNR 5.9

Int time 478.165

Amp 0.196

Phase -33.2

PFD 1.4e-01

Delays (us)

SBD 0.016666

MBD 0.002721

Fringe rate (Hz)

-0.002937

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052300.23

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153211

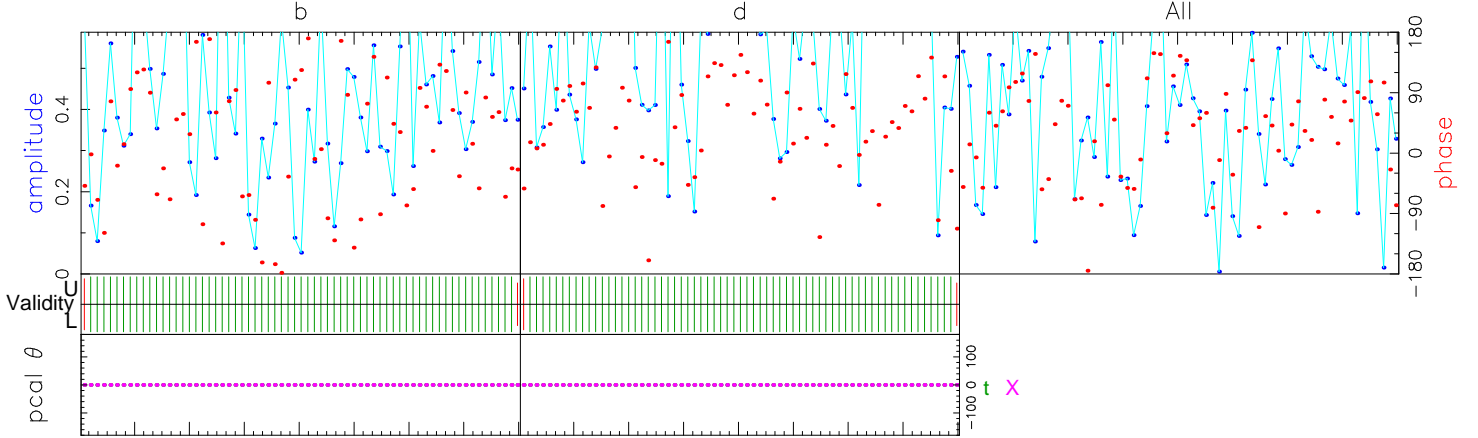
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
50.4	58.3	Phase	56.8				
0.1	0.3	Ampl.	0.2				
42.2	131.3	Sbd box	131.1				
U/L 935/935	935/935	APs used					
t 0	0	PC freqs					
X 1000	1000	PC freqs					
t:X 0:0	0:0	PC phase					
t:X 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
X 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
X W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.52932636071E+02	Apriori delay (usec)	-1.52950981876E+02	Resid mbdelay (usec)	2.72080E-03	+/-	8.5E-04
Sband delay (usec)	-1.52934315876E+02	Apriori clock (usec)	-5.5443587E+00	Resid sbdelay (usec)	1.66660E-02	+/-	1.5E-03
Phase delay (usec)	-1.52950980044E+02	Apriori clockrate (us/s)	-3.3999984E-08	Resid phdelay (usec)	1.83150E-06	+/-	3.2E-07
Delay rate (us/s)	4.02102580896E-01	Apriori rate (us/s)	4.02102614997E-01	Resid rate (us/s)	-3.41008E-08	+/-	2.3E-09
Total phase (deg)	-241.6	Apriori accel (us/s/s)	-3.06155822845E-05	Resid phase (deg)	-33.2	+/-	9.8

ph/seg (deg) 73.2 80.1 Search (2048X8) 0.193 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

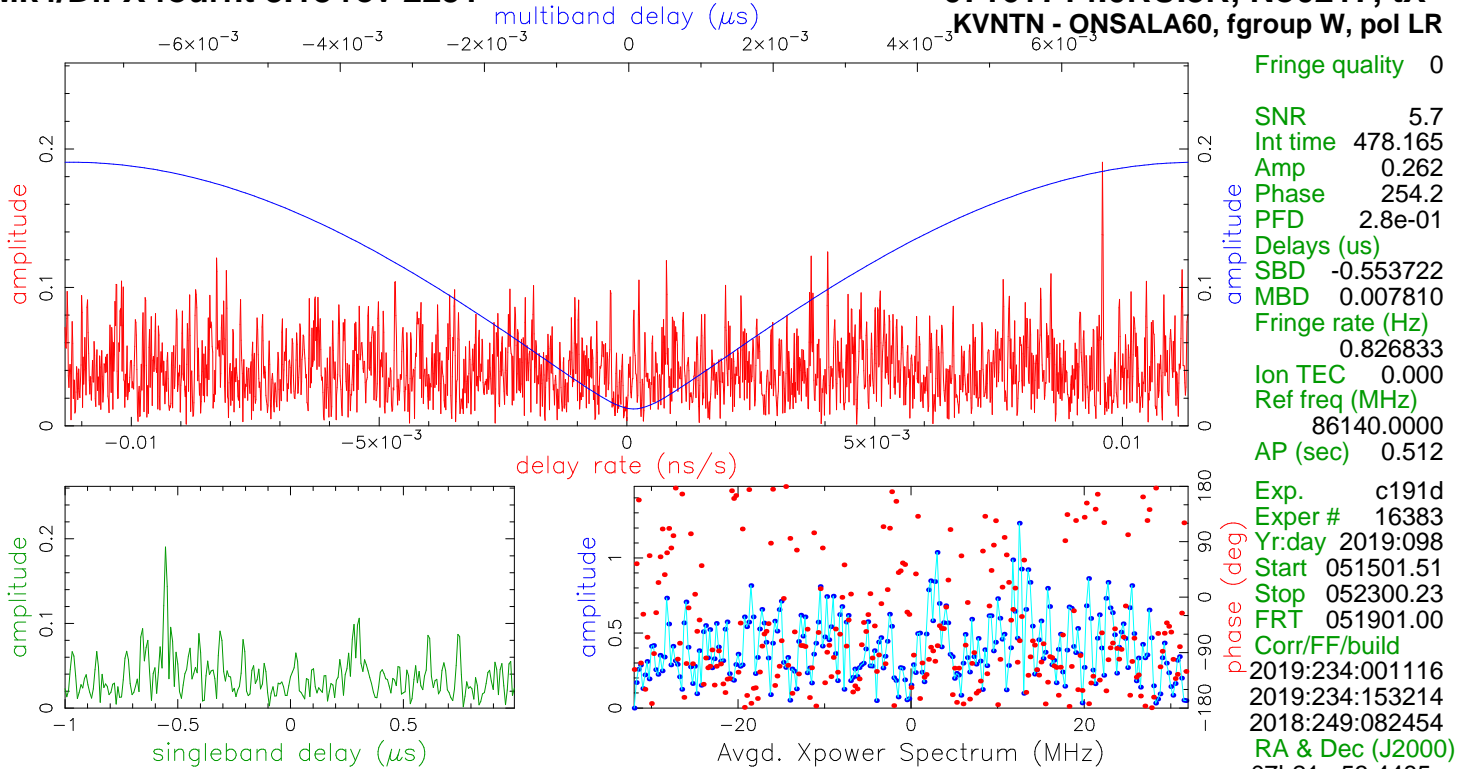
amp/seg (%) 149.7 139.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 13.8 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

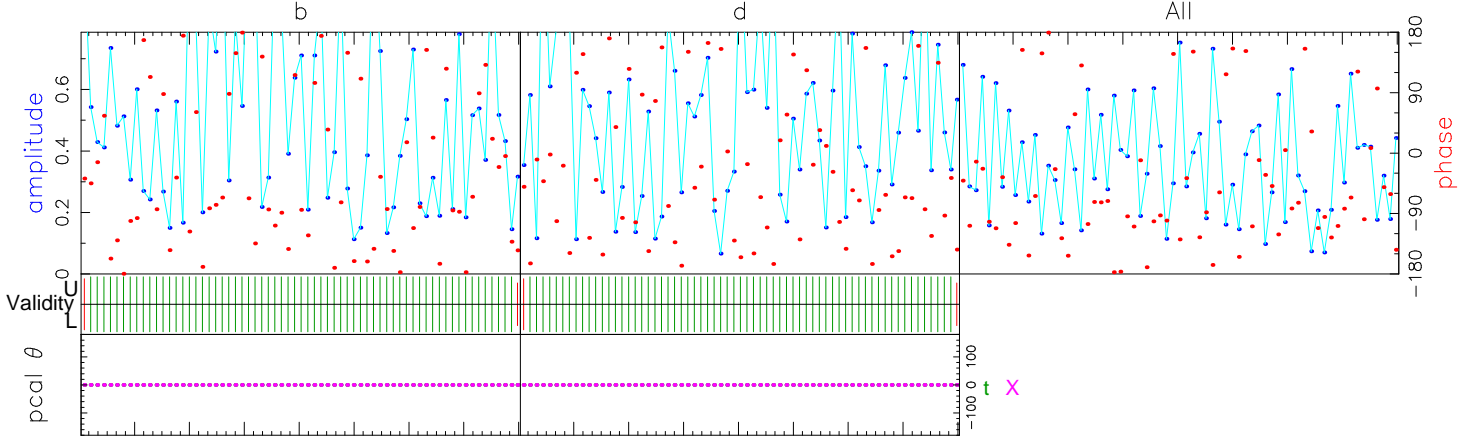
amp/frq (%) 60.7 24.1 Inc. frq. avg. 0.190 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

t: az 22.4 el 37.7 pa -97.3 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -7306.514 -7830.496 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tX.W.36.0RUI3R simultaneous interpolator



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

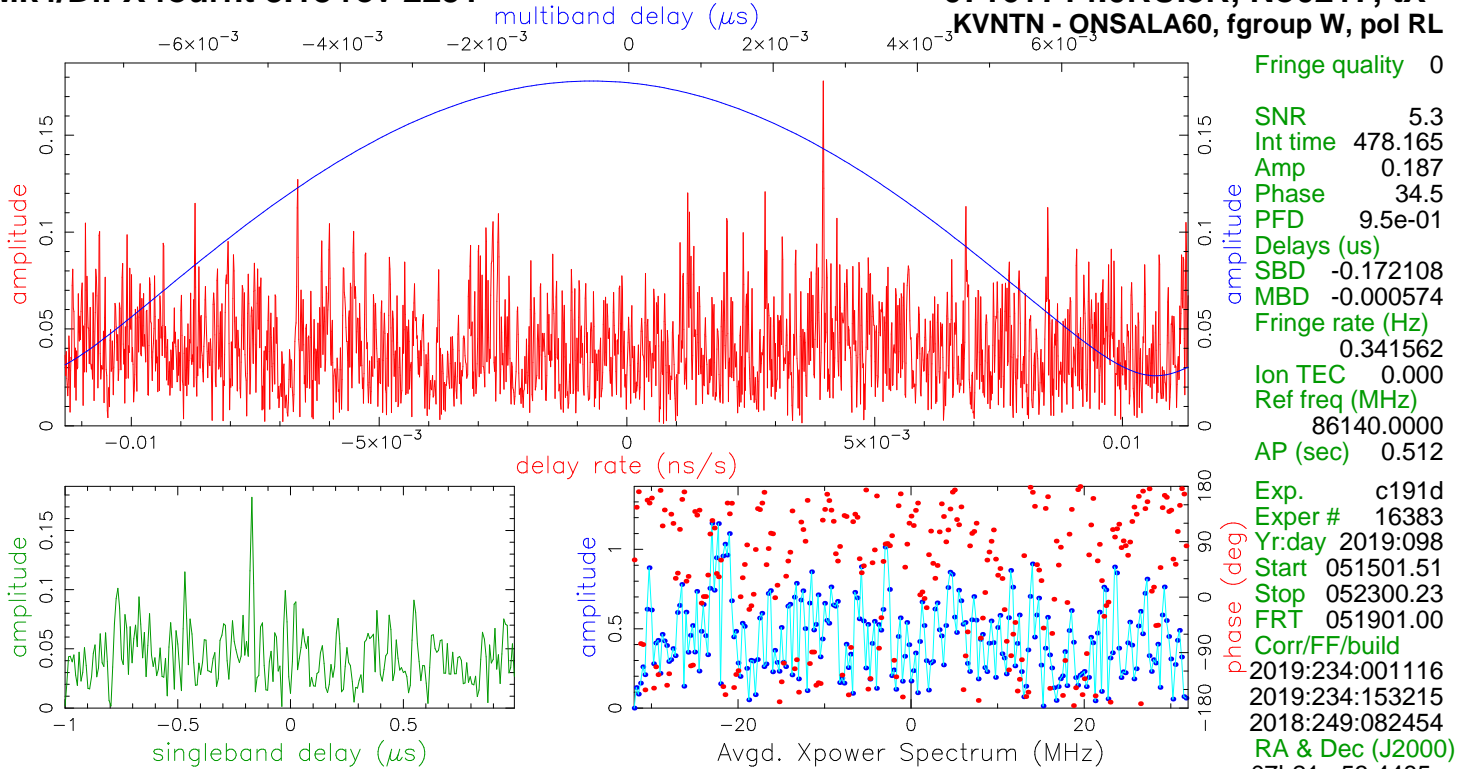


86156.00		86220.00		Freq (MHz)	All
-106.7		-105.0		Phase	-105.8
0.2		0.3		Ampl.	0.3
58.2		58.0		Sbd box	58.1
U/L 935/935		935/935		APs used	
t 0		0		PC freqs	
X 1000		1000		PC freqs	
t:X 0:0		0:0		PC phase	
t:X 0:0		0:0		Manl PC	
t 1000		1000		PC amp	
X 1000		1000			
t W01UL,W01LL		W03UL,W03LL		Chan ids	
X W01UR,W01LR		W03UR,W03LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.53505672376E+02	Apriori delay (usec)	-1.52950981876E+02	Resid mbdelay (usec)	7.80950E-03 +/- 8.7E-04
Sband delay (usec)	-1.53504703876E+02	Apriori clock (usec)	-5.5443587E+00	Resid sbdelay (usec)	-5.53722E-01 +/- 1.5E-03
Phase delay (usec)	-1.52950985287E+02	Apriori clockrate (us/s)	-3.3999984E-08	Resid phdelay (usec)	-3.41101E-06 +/- 3.2E-07
Delay rate (us/s)	4.02112213712E-01	Apriori rate (us/s)	4.02102614997E-01	Resid rate (us/s)	9.59872E-06 +/- 2.3E-09
Total phase (deg)	45.9	Apriori accel (us/s/s)	-3.06155822845E-05	Resid phase (deg)	254.2 +/- 10.0

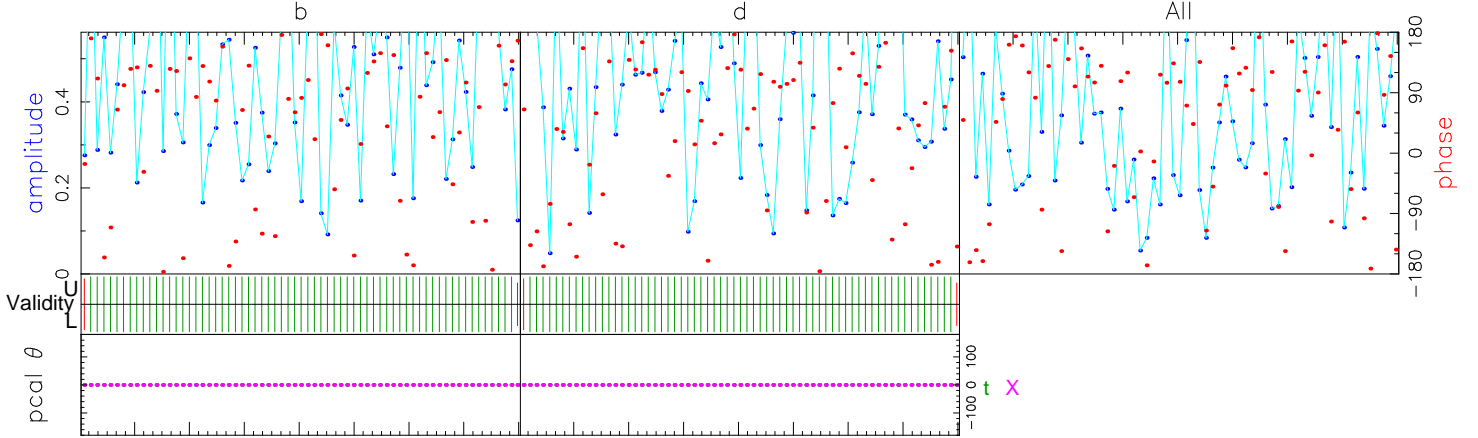
ph/seg (deg)	RMS 70.8	Theor. 82.0	Amplitude 0.262 +/- 0.046	Search (2048X8) 0.187	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	128.2	143.0	Interp. 0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.2	Inc. seg. avg. 0.246	0.253	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.4	24.7	Inc. frq. avg. 0.253		Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

t: az 22.4 el 37.7 pa -97.3 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -7306.514 -7830.496 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tX.W.66.0RUI3R

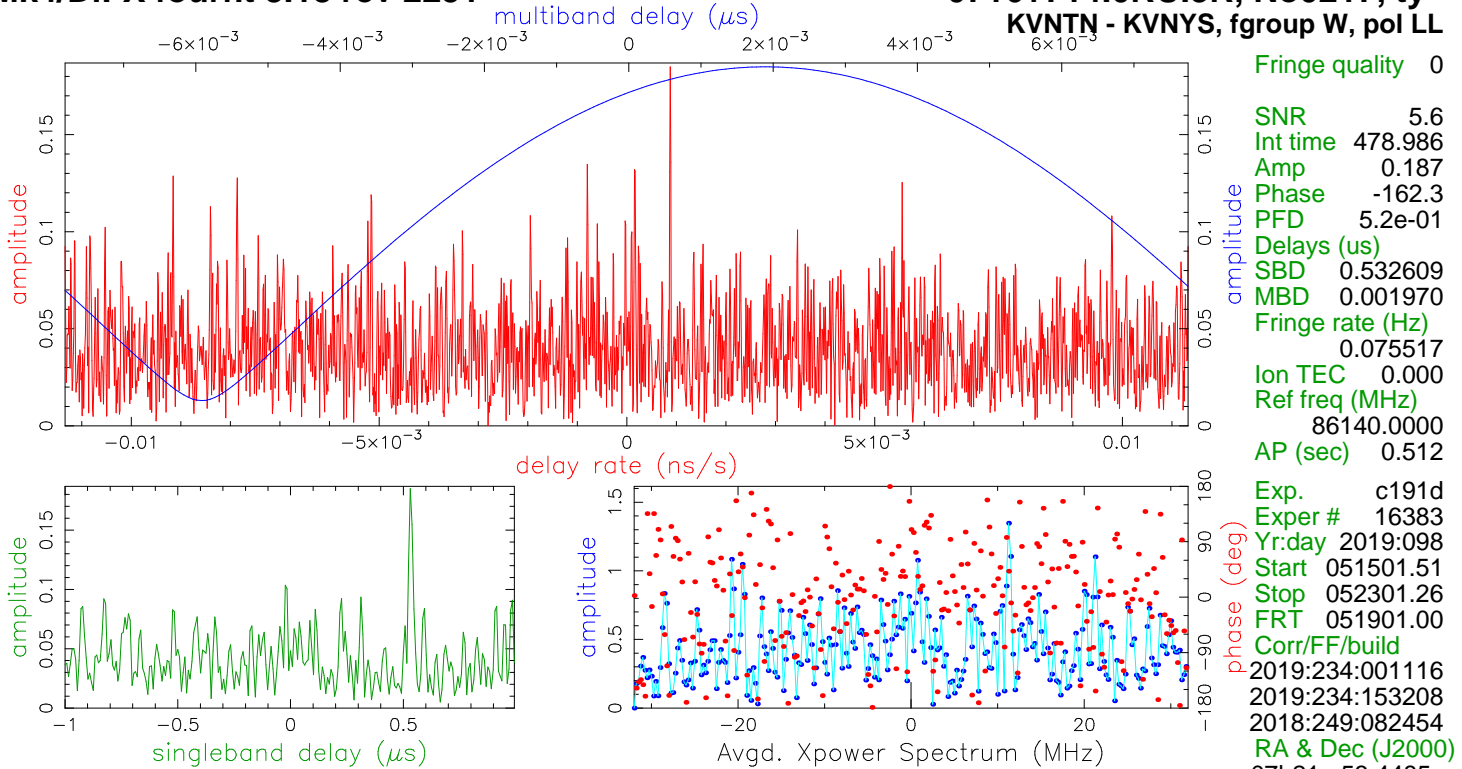


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
123.9	125.4	Phase	124.5				
0.2	0.2	Ampl.	0.2				
106.7	107.2	Sbd box	107.0				
U/L 935/935	935/935	APs used					
t 0	0	PC freqs					
X 1000	1000	PC freqs					
t:X 0:0	0:0	PC phase					
t:X 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
X 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
X W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.53123430431E+02	Apriori delay (usec)	-1.52950981876E+02	Resid mbdelay (usec)	-5.73555E-04	+/-	9.3E-04
Sband delay (usec)	-1.53123089376E+02	Apriori clock (usec)	-5.5443587E+00	Resid sbdelay (usec)	-1.72108E-01	+/-	1.6E-03
Phase delay (usec)	-1.52950977860E+02	Apriori clockrate (us/s)	-3.3999984E-08	Resid phdelay (usec)	4.01585E-06	+/-	3.5E-07
Delay rate (us/s)	4.02106580191E-01	Apriori rate (us/s)	4.02102614997E-01	Resid rate (us/s)	3.96519E-06	+/-	2.5E-09
Total phase (deg)	186.2	Apriori accel (us/s/s)	-3.06155822845E-05	Resid phase (deg)	34.5	+/-	10.8

RMS Theor. Amplitude 0.187 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 80.5 88.1 Search (2048X8) 0.173 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 165.0 153.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 15.2 Inc. seg. avg. 0.184 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 14.5 26.6 Inc. frq. avg. 0.181 ion window (TEC) 0.00 0.00
 t: az 22.4 el 37.7 pa -97.3 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -7306.514 -7830.496 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tX.W.76.0RUI3R



Fringe quality 0

SNR 5.6

Int time 478.986

Amp 0.187

Phase -162.3

PFD 5.2e-01

Delays (us)

SBD 0.532609

MBD 0.001970

Fringe rate (Hz)

0.075517

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052301.26

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153208

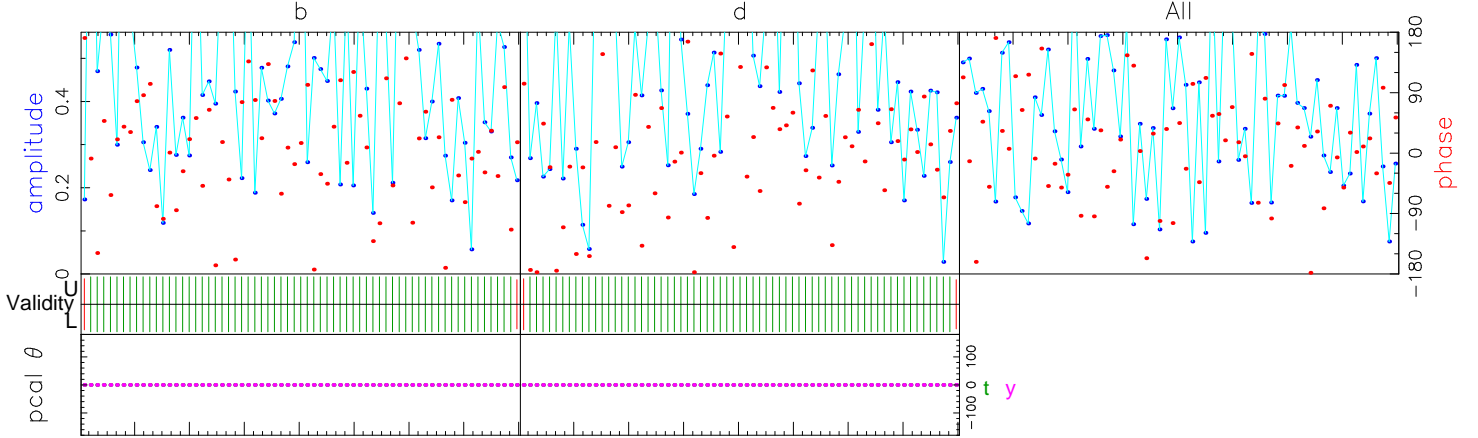
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
18.6	16.8	Phase	17.7				
0.2	0.2	Ampl.	0.2				
196.9	197.7	Sbd box	197.2				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
y 0	0	PC freqs					
ty 0:0	0:0	PC phase					
ty 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
y 1000	1000						
t W01UL,W01LL	W03UL,W03LL	Chan ids					
y W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.15907969891E+03	Apriori delay (usec)	-1.15961291877E+03	Resid mbdelay (usec)	1.96986E-03	+/-	8.9E-04
Sband delay (usec)	-1.15908030977E+03	Apriori clock (usec)	-3.9209220E+00	Resid sbdelay (usec)	5.32609E-01	+/-	1.5E-03
Phase delay (usec)	-1.15961291820E+03	Apriori clockrate (us/s)	-2.9999983E-08	Resid phdelay (usec)	5.72281E-07	+/-	3.3E-07
Delay rate (us/s)	2.11982161798E-02	Apriori rate (us/s)	2.11973395013E-02	Resid rate (us/s)	8.76678E-07	+/-	2.4E-09
Total phase (deg)	-98.6	Apriori accel (us/s/s)	-3.45788850588E-07	Resid phase (deg)	-162.3	+/-	10.3

ph/seg (deg) 76.2 84.1 Search (2048X8) 0.180 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

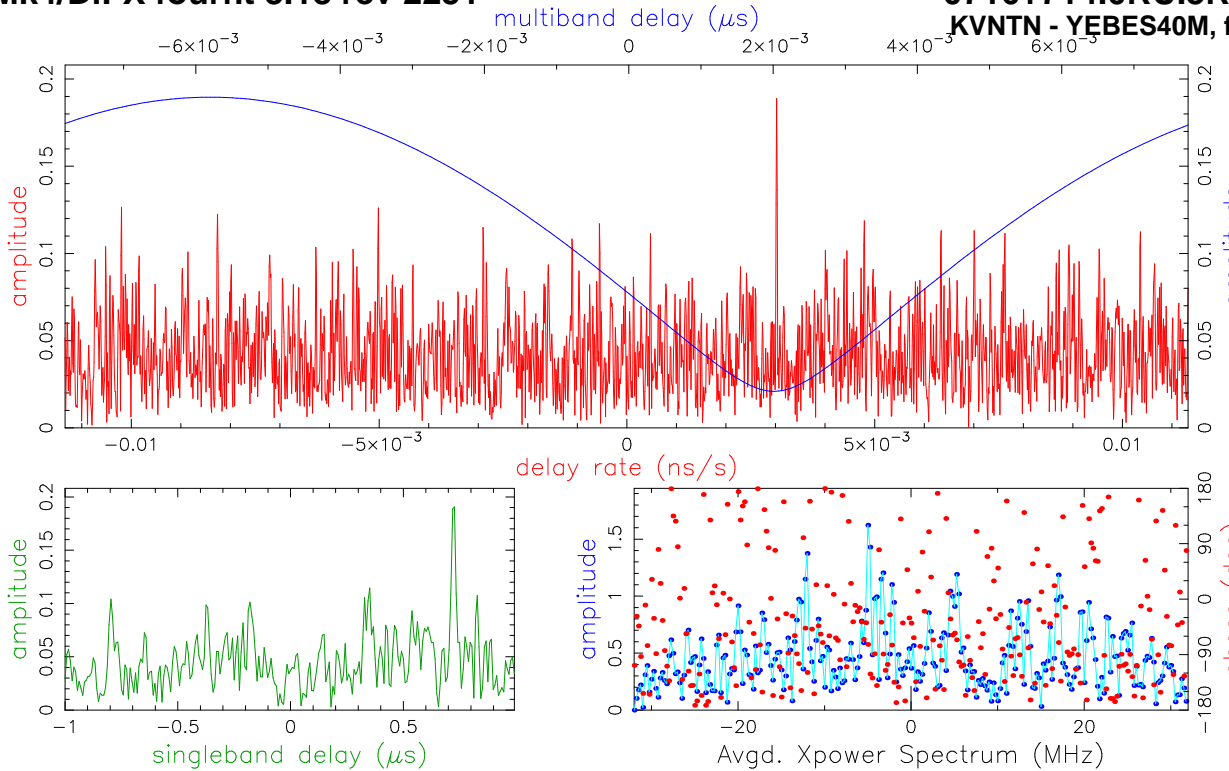
amp/seg (%) 132.9 146.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 14.5 Inc. seg. avg. 0.178 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 7.0 25.3 Inc. frq. avg. 0.180 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

t: az 22.4 el 37.7 pa -97.3 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) -379.289 -246.871 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ty..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ty.W.13.0RUI3R

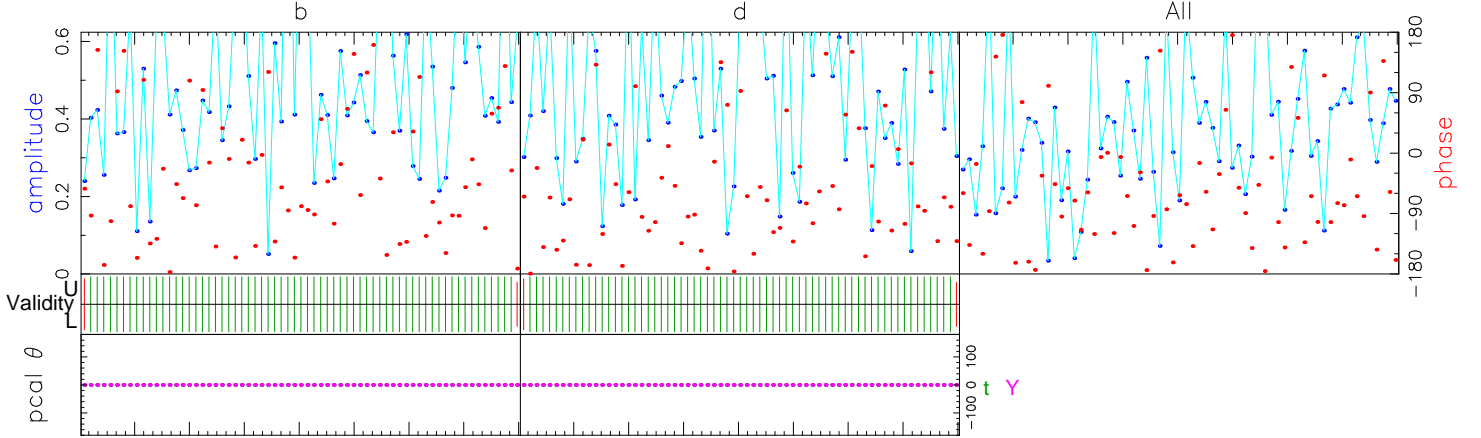


Fringe quality 0

SNR 6.0
Int time 478.345
Amp 0.208
Phase -360.0
PFD 4.8e-02
Delays (us)
SBD 0.722798
MBD -0.005352
Fringe rate (Hz)
0.260093
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

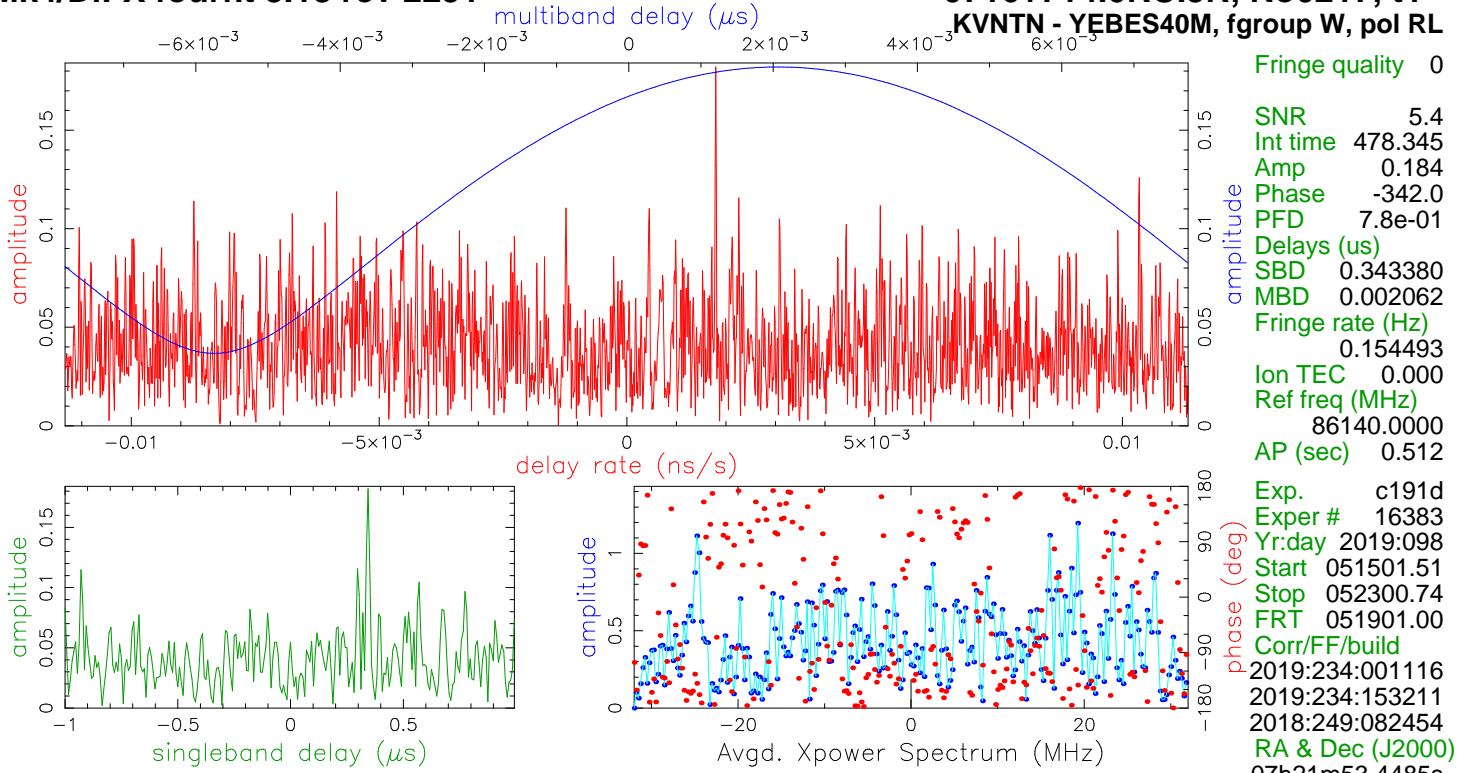
Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052300.74
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153210
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

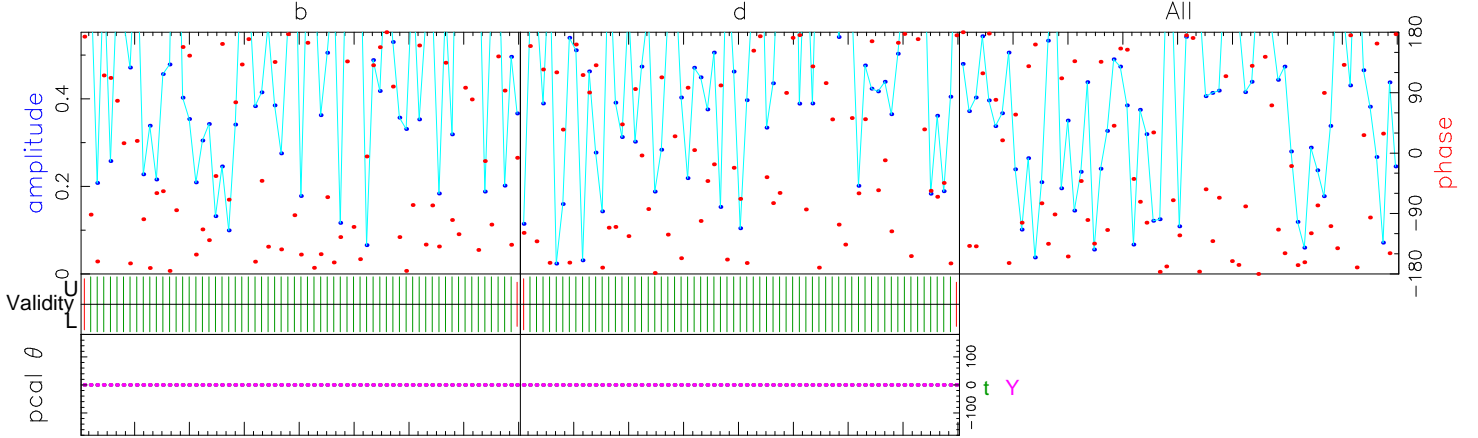


86156.00	86220.00	Freq (MHz)	All				
-84.2	-94.6	Phase	-90.0				
0.2	0.2	Ampl.	0.2				
221.4	221.6	Sbd box	221.5				
U/L 936/936	936/936	APs used					
t 0	0	PC freqs					
Y 1000	1000	PC freqs					
t:Y 0:0	0:0	PC phase					
t:Y 0:0	0:0	ManI PC					
t 1000	1000	PC amp					
Y 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
Y W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	4.99725888034E+03	Apriori delay (usec)	4.99652985715E+03	Resid mbdelay (usec)	-5.35181E-03	+/-	8.2E-04
Sband delay (usec)	4.99725265515E+03	Apriori clock (usec)	1.2606446E+01	Resid sbdelay (usec)	7.22798E-01	+/-	1.4E-03
Phase delay (usec)	4.99652985425E+03	Apriori clockrate (us/s)	2.2300000E-07	Resid phdelay (usec)	-2.90083E-06	+/-	3.1E-07
Delay rate (us/s)	5.05327950961E-01	Apriori rate (us/s)	5.05324931539E-01	Resid rate (us/s)	3.01942E-06	+/-	2.2E-09
Total phase (deg)	-37.9	Apriori accel (us/s/s)	-3.72898732055E-05	Resid phase (deg)	-360.0	+/-	9.5

ph/seg (deg) 75.1 77.6 Search (2048X8) 0.183 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 127.9 135.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 13.4 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 12.1 23.4 Inc. frq. avg. 0.190 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 22.4 el 37.7 pa -97.3 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -9181.371 -8803.859 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tY.W.28.0RUI3R simultaneous interpolator

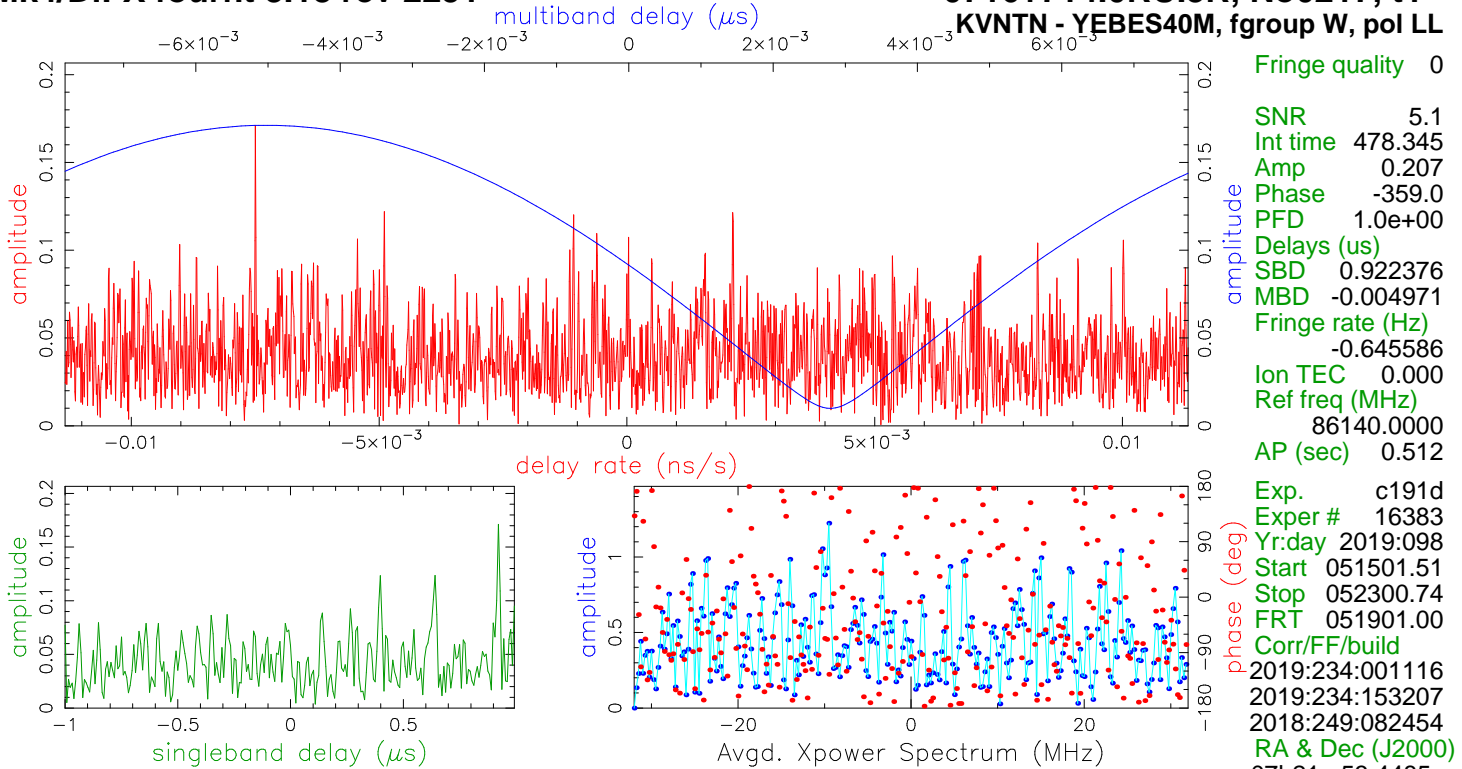


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

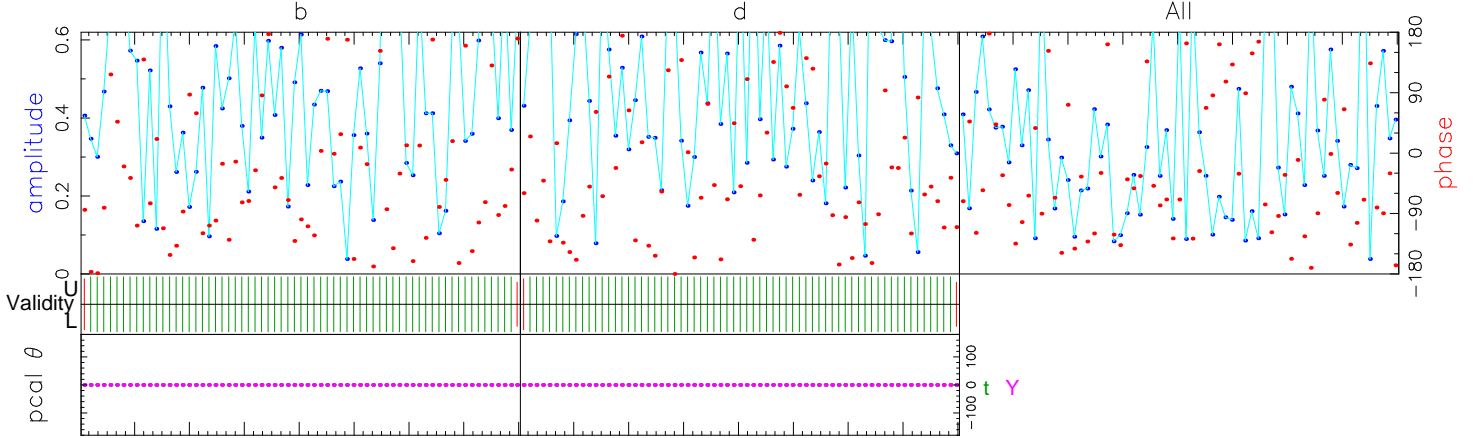


86156.00		86220.00		Freq (MHz)		All
-162.1		-161.9		Phase		-162.0
0.2		0.1		Ampl.		0.2
173.0		166.9		Sbd box		173.0
U/L 936/936		936/936		APs used		
t 0		0		PC freqs		
Y 1000		1000		PC freqs		
t:Y 0:0		0:0		PC phase		
t:Y 0:0		0:0		Manl PC		
t 1000		1000		PC amp		
Y 1000		1000				
t W01UR,W01LR		W03UR,W03LR		Chan ids		
Y W01UL,W01LL		W03UL,W03LL		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	4.99687566897E+03	Apriori delay (usec)	4.99652985715E+03	Resid mbdelay (usec)	2.06182E-03	+/- 9.1E-04
Sband delay (usec)	4.99687323715E+03	Apriori clock (usec)	1.2606446E+01	Resid sbdelay (usec)	3.43380E-01	+/- 1.6E-03
Phase delay (usec)	4.99652985192E+03	Apriori clockrate (us/s)	2.2300000E-07	Resid phdelay (usec)	-5.22452E-06	+/- 3.4E-07
Delay rate (us/s)	5.05326725053E-01	Apriori rate (us/s)	5.05324931539E-01	Resid rate (us/s)	1.79351E-06	+/- 2.5E-09
Total phase (deg)	-20.0	Apriori accel (us/s/s)	-3.72898732055E-05	Resid phase (deg)	-342.0	+/- 10.5

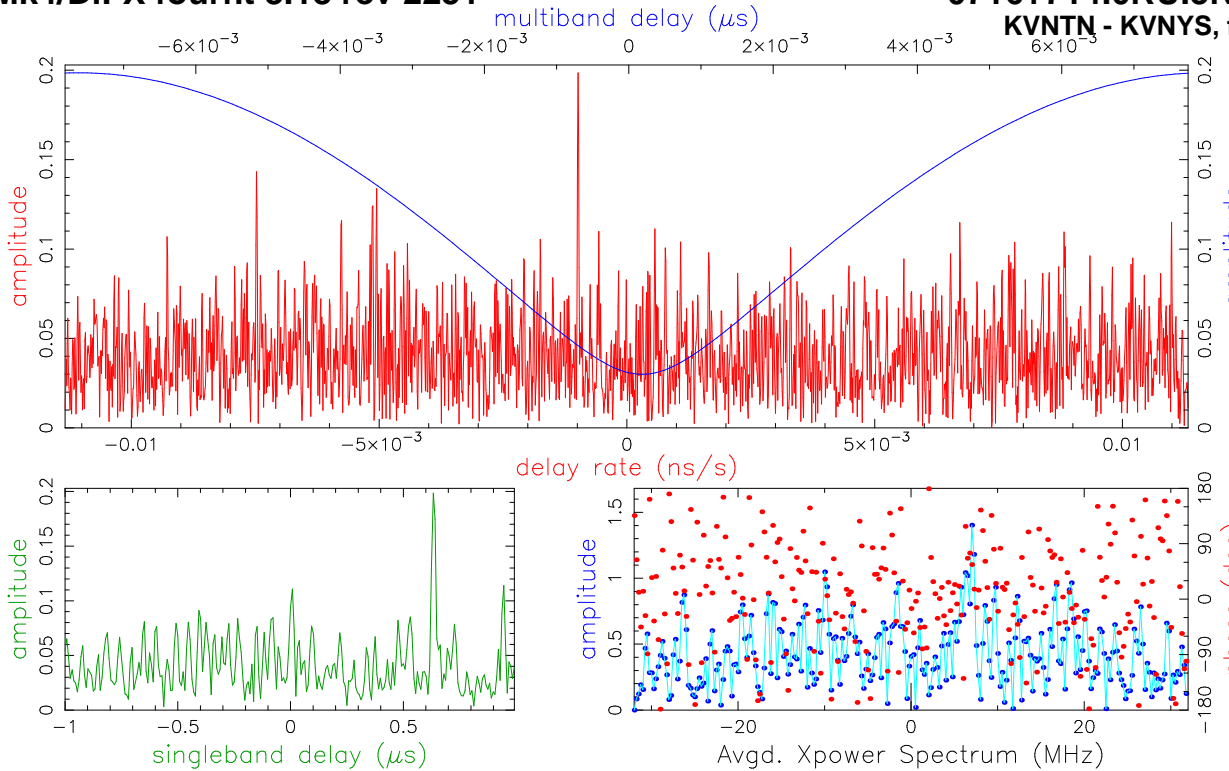
ph/seg (deg)	RMS 77.8	Theor. 86.1	Amplitude 0.184 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	156.8	150.2	Search (2048X8) 0.179	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	20.2	26.0	Inc. seg. avg. 0.184	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.178	Data rate(Mb/s): 512	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., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

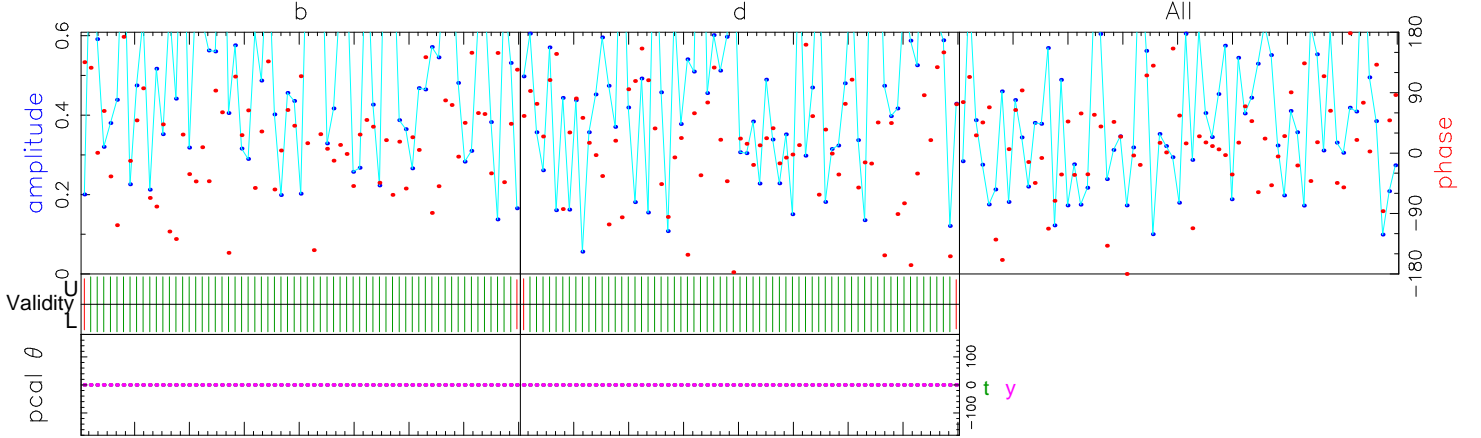


86156.00		86220.00		Freq (MHz)		All
-88.5		-89.6		Phase		-89.0
0.2		0.2		Ampl.		0.2
247.1		246.9		Sbd box		247.1
U/L 936/936		936/936		APs used		
t 0		0		PC freqs		
Y 1000		1000		PC freqs		
t:Y 0:0		0:0		PC phase		
t:Y 0:0		0:0		Manl PC		
t 1000		1000		PC amp		
Y 1000		1000				
t W01UL,W01LL		W03UL,W03LL		Chan ids		
Y W01UL,W01LL		W03UL,W03LL		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	4.99744676093E+03	Apriori delay (usec)	4.99652985715E+03	Resid mbdelay (usec)	-4.97122E-03	+/- 9.7E-04
Sband delay (usec)	4.99745223315E+03	Apriori clock (usec)	1.2606446E+01	Resid sbdelay (usec)	9.22376E-01	+/- 1.7E-03
Phase delay (usec)	4.99652985428E+03	Apriori clockrate (us/s)	2.2300000E-07	Resid phdelay (usec)	-2.87030E-06	+/- 3.6E-07
Delay rate (us/s)	5.05317436926E-01	Apriori rate (us/s)	5.05324931539E-01	Resid rate (us/s)	-7.49461E-06	+/- 2.6E-09
Total phase (deg)	-37.0	Apriori accel (us/s/s)	-3.72898732055E-05	Resid phase (deg)	-359.0	+/- 11.2
RMS	84.3	Theor.	91.5	Amplitude	0.207 +/- 0.040	
ph/seg (deg)	159.2	Search (2048X8)	0.165	PCal mode:	MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	0.0	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	5.8	Inc. seg. avg.	0.182	Bits/sample:	2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	27.6	Inc. frq. avg.	0.199	Sample rate(MSamp/s):	64	dr window (ns/s) -0.011 0.011
t: az 22.4 el 37.7 pa -97.3		Y: az 353.4 el 22.7 pa 15.1		Data rate(Mb/s):	512	ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/tY..0RUI3R		nlags:	128	t_cohere infinite
		Output file: /Exps/c191d/v1/1234/No0217/tY.W.5.0RUI3R				simultaneous interpolator



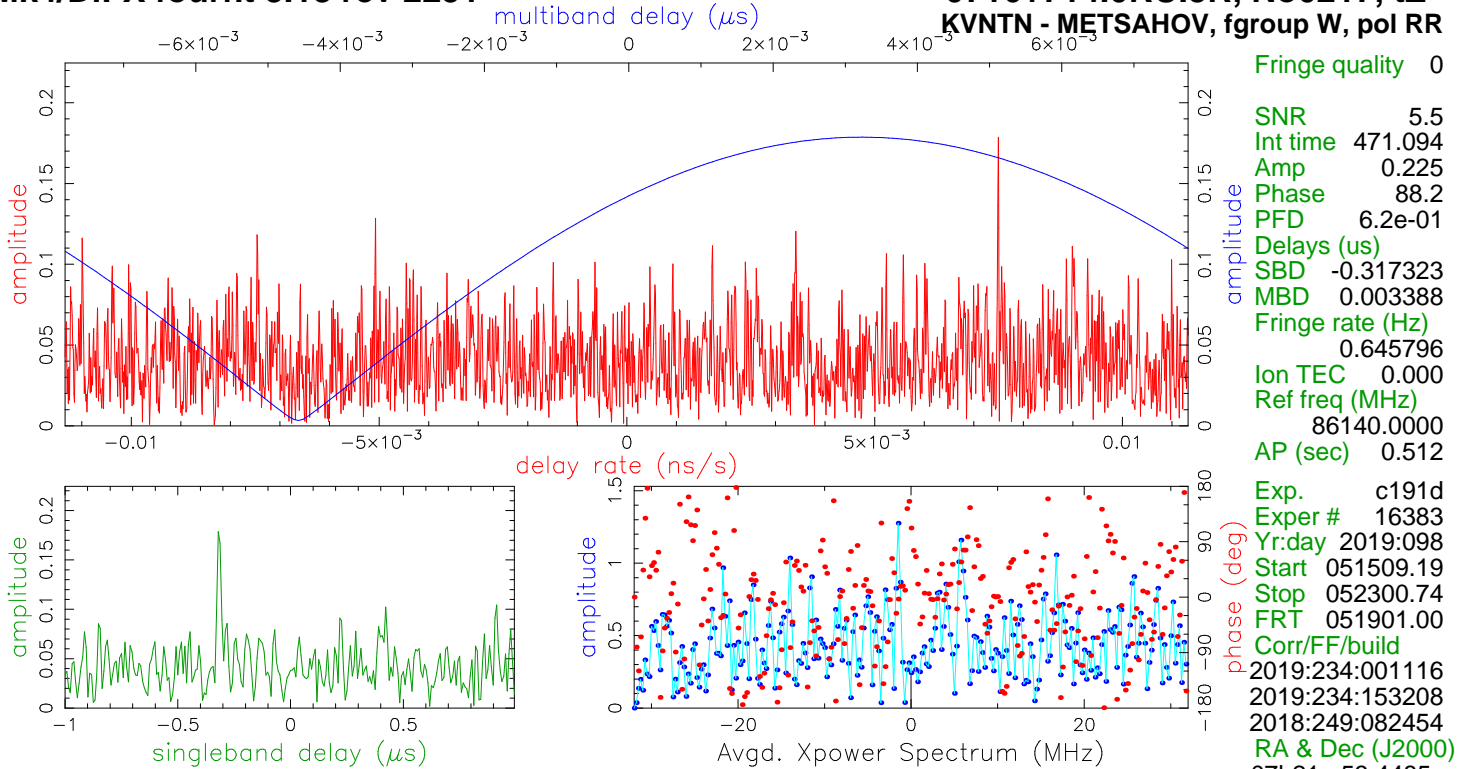
Fringe quality 0
 SNR 6.1
 Int time 478.986
 Amp 0.203
 Phase -67.4
 PFD 4.5e-02
 Delays (us)
 SBD 0.634914
 MBD -0.007630
 Fringe rate (Hz)
 -0.084580
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153214
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

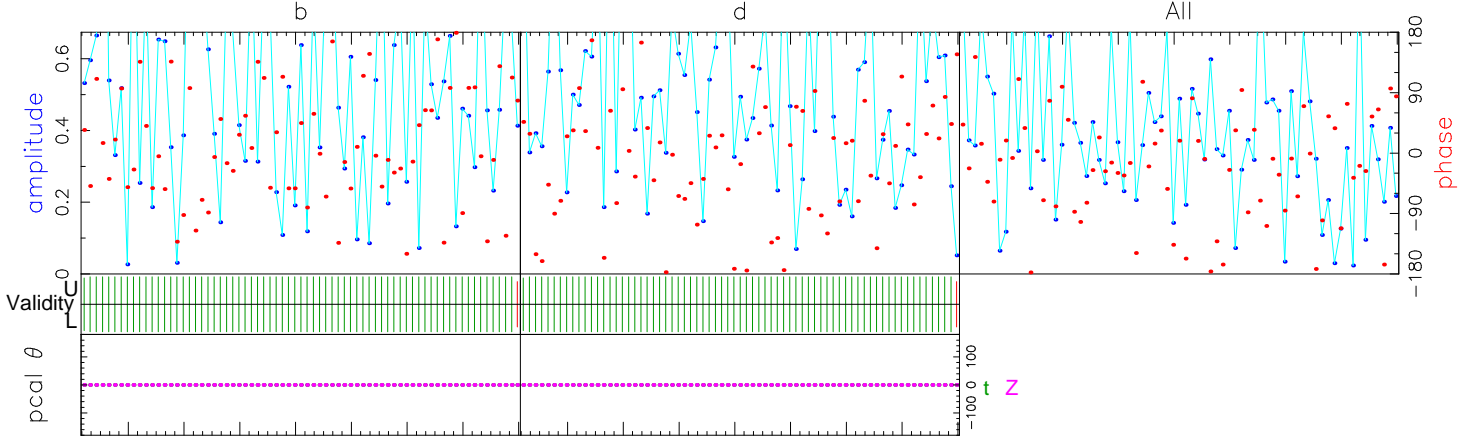


86156.00	86220.00	Freq (MHz)	All				
22.5	22.6	Phase	22.6				
0.2	0.2	Ampl.	0.2				
210.4	210.0	Sbd box	210.3				
U/L 937/937	937/937	APs used					
t 0	0	PC freqs					
y 0	0	PC freqs					
ty 0:0	0:0	PC phase					
ty 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
y 1000	1000						
t W01UR,W01LR	W03UR,W03LR	Chan ids					
y W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.15897992365E+03	Apriori delay (usec)	-1.15961291877E+03	Resid mbdelay (usec)	-7.62988E-03	+/-	8.2E-04
Sband delay (usec)	-1.15897800477E+03	Apriori clock (usec)	-3.9209220E+00	Resid sbdelay (usec)	6.34914E-01	+/-	1.4E-03
Phase delay (usec)	-1.15961291805E+03	Apriori clockrate (us/s)	-2.9999983E-08	Resid phdelay (usec)	7.28128E-07	+/-	3.1E-07
Delay rate (us/s)	2.11963576076E-02	Apriori rate (us/s)	2.11973395013E-02	Resid rate (us/s)	-9.81894E-07	+/-	2.2E-09
Total phase (deg)	-3.8	Apriori accel (us/s/s)	-3.45788850588E-07	Resid phase (deg)	-67.4	+/-	9.5

ph/seg (deg) 72.3 77.5 Theor. Amplitude 0.203 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 124.8 135.2 Search (2048X8) 0.193 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 13.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 14.9 23.4 Inc. seg. avg. 0.201 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 22.4 el 37.7 pa -97.3 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) -379.289 -246.871 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ty..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ty.W.73.0RUI3R



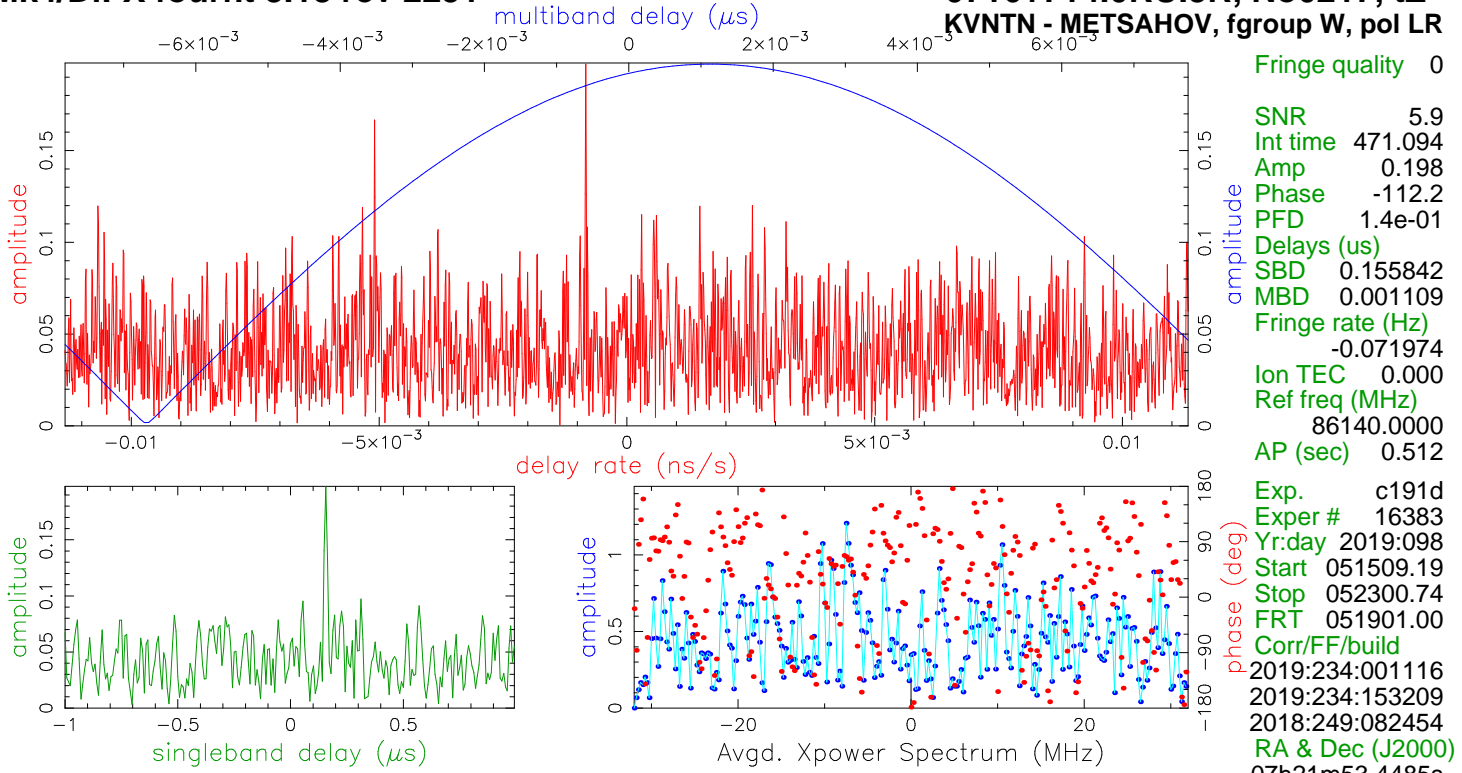
Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00				86220.00		Freq (MHz)	All
-0.0				-3.7		Phase	-1.8
0.2				0.2		Ampl.	0.2
88.4				88.3		Sbd box	88.4
U/L 921/921				921/921		APs used	
t 0				0		PC freqs	
Z 1000				1000		PC freqs	
t:Z 0:0				0:0		PC phase	
t:Z 0:0				0:0		Manl PC	
t 1000				1000		PC amp	
Z 1000				1000			
t W01UR,W01LR				W03UR,W03LR		Chan ids	
						Tracks	
Z W01UR,W01LR				W03UR,W03LR		Chan ids	
						Tracks	
Group delay (usec)(sbd)	-9.69306371497E+02	Apriori delay (usec)	-9.68981634403E+02	Resid mbdelay (usec)	3.38791E-03	+/-	9.0E-04
Sband delay (usec)	-9.69298957403E+02	Apriori clock (usec)	1.9545355E+01	Resid sbdelay (usec)	-3.17323E-01	+/-	1.6E-03
Phase delay (usec)	-9.68981634463E+02	Apriori clockrate (us/s)	4.1600000E-07	Resid phdelay (usec)	-5.92610E-08	+/-	3.3E-07
Delay rate (us/s)	3.47278110402E-01	Apriori rate (us/s)	3.47270613351E-01	Resid rate (us/s)	7.49705E-06	+/-	2.5E-09
Total phase (deg)	92.7	Apriori accel (us/s/s)	-2.88784020963E-05	Resid phase (deg)	88.2	+/-	10.4

ph/seg (deg)	80.6	Theor.	87.3	Amplitude	0.225 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	163.0	Search (2048X8)	0.174	Search	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.222	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.5	Inc. seg. avg.	0.209	Inc. frq. avg.	0.209	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
						Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
						nlags: 128	t_cohere infinite
t: az 22.4 el 37.7 pa -97.3		Z: az 3.4 el 41.6 pa -5.4		u,v (fr/asec)	-6319.148 -7515.009		ion window (TEC) 0.00 0.00

simultaneous interpolator



Fringe quality 0

SNR 5.9

Int time 471.094

Amp 0.198

Phase -112.2

PFD 1.4e-01

Delays (us)

SBD 0.155842

MBD 0.001109

Fringe rate (Hz)

-0.071974

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051509.19

Stop 052300.74

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153209

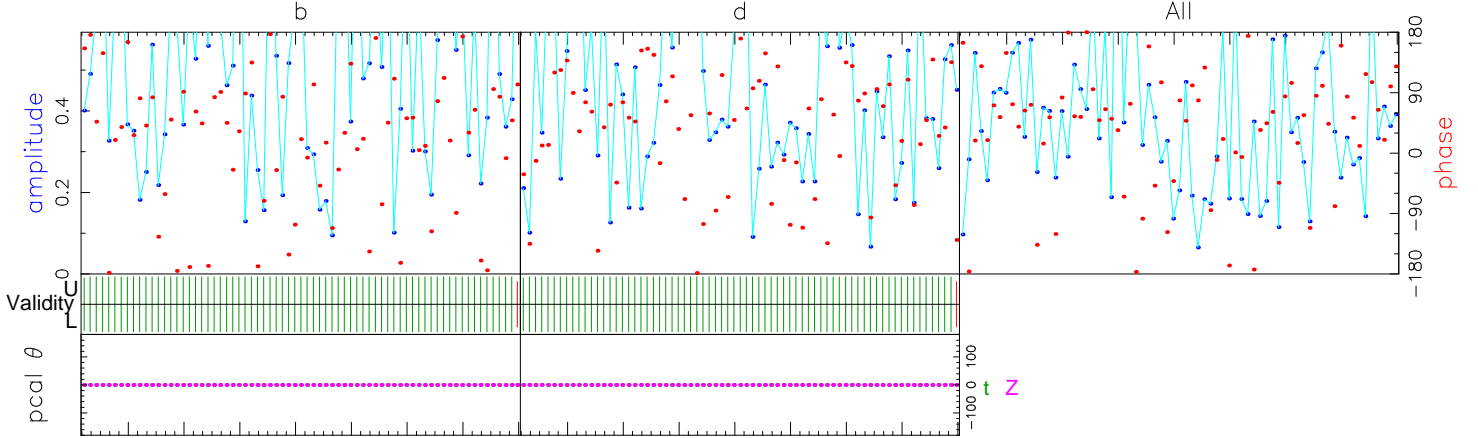
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

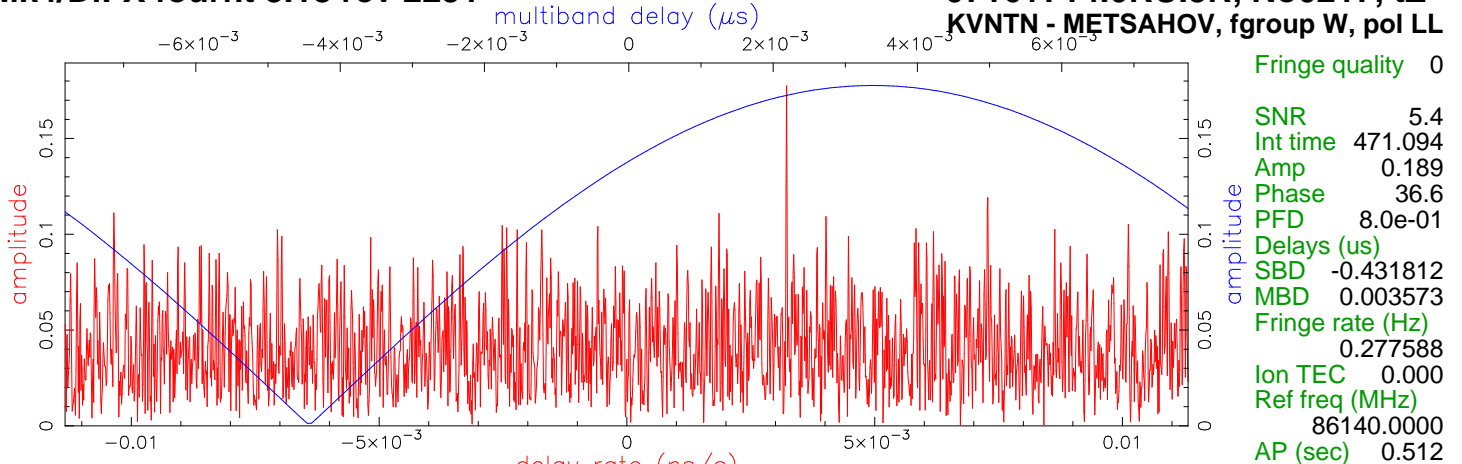
+71°20'36.363"

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00				86220.00		Freq (MHz)	All
67.6				68.0		Phase	67.8
0.2				0.2		Ampl.	0.2
149.0				149.0		Sbd box	148.9
U/L 921/921				921/921		APs used	
t 0				0		PC freqs	
Z 1000				1000		PC freqs	
t:Z 0:0				0:0		PC phase	
t:Z 0:0				0:0		Manl PC	
t 1000				1000		PC amp	
Z 1000				1000			
t W01UL,W01LL				W03UL,W03LL		Chan ids	
						Tracks	
Z W01UR,W01LR				W03UR,W03LR		Chan ids	
						Tracks	
Group delay (usec)(sbd)	-9.68824274920E+02	Apriori delay (usec)	-9.68981634403E+02	Resid mbdelay (usec)	1.10948E-03	+/-	8.5E-04
Sband delay (usec)	-9.68825792403E+02	Apriori clock (usec)	1.9545355E+01	Resid sbdelay (usec)	1.55842E-01	+/-	1.5E-03
Phase delay (usec)	-9.68981632218E+02	Apriori clockrate (us/s)	4.1600000E-07	Resid phdelay (usec)	2.18523E-06	+/-	3.2E-07
Delay rate (us/s)	3.47269777803E-01	Apriori rate (us/s)	3.47270613351E-01	Resid rate (us/s)	-8.35547E-07	+/-	2.3E-09
Total phase (deg)	-107.7	Apriori accel (us/s/s)	-2.88784020963E-05	Resid phase (deg)	-112.2	+/-	9.8

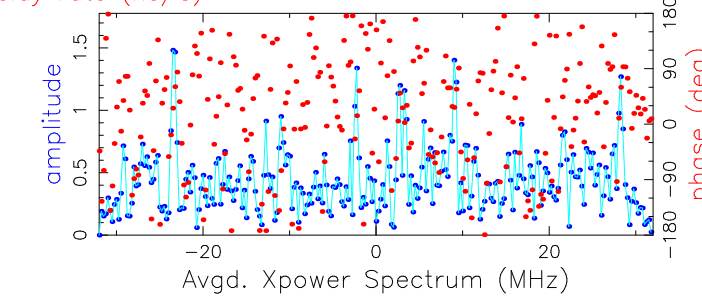
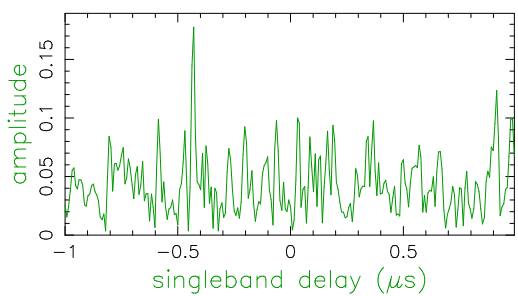
ph/seg (deg)	RMS 78.1	Theor. 82.5	Amplitude Search (2048X8)	0.198 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	134.6	143.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	13.8	Inc. seg. avg.	0.187	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	0.7	24.2	Inc. frq. avg.	0.192	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
t: az 22.4 el 37.7 pa -97.3		Z: az 3.4 el 41.6 pa -5.4		u,v (fr/asec) -6319.148 -7515.009	Data rate(Mb/s): 512	nlags: 128 t_cohere infinite			



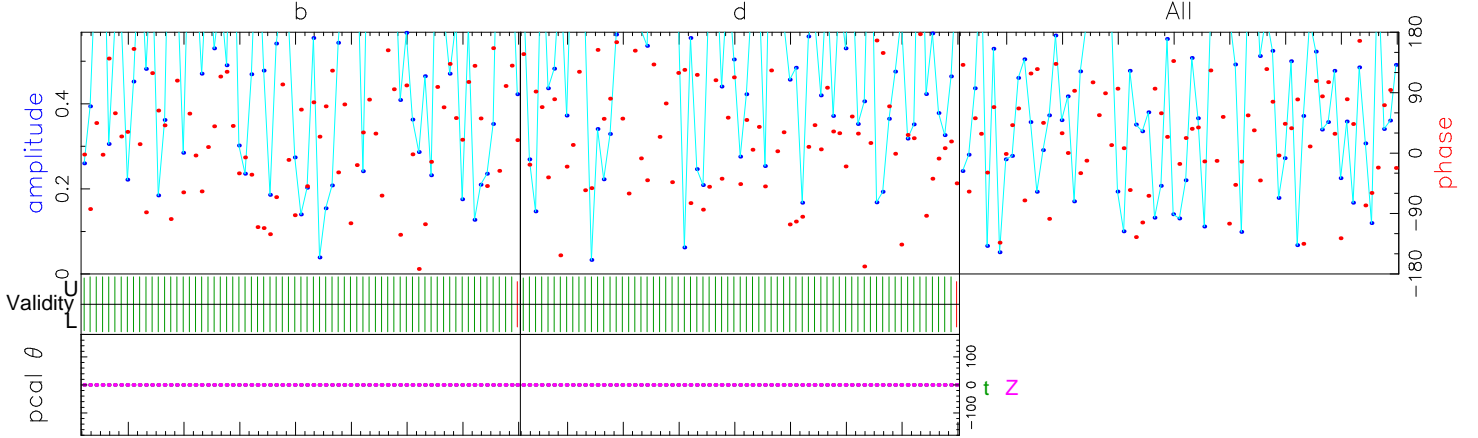
Fringe quality 0

SNR 5.4
Int time 471.094
Amp 0.189
Phase 36.6
PFD 8.0e-01
Delays (us)
SBD -0.431812
MBD 0.003573
Fringe rate (Hz)
0.277588
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051509.19
Stop 052300.74
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153207
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

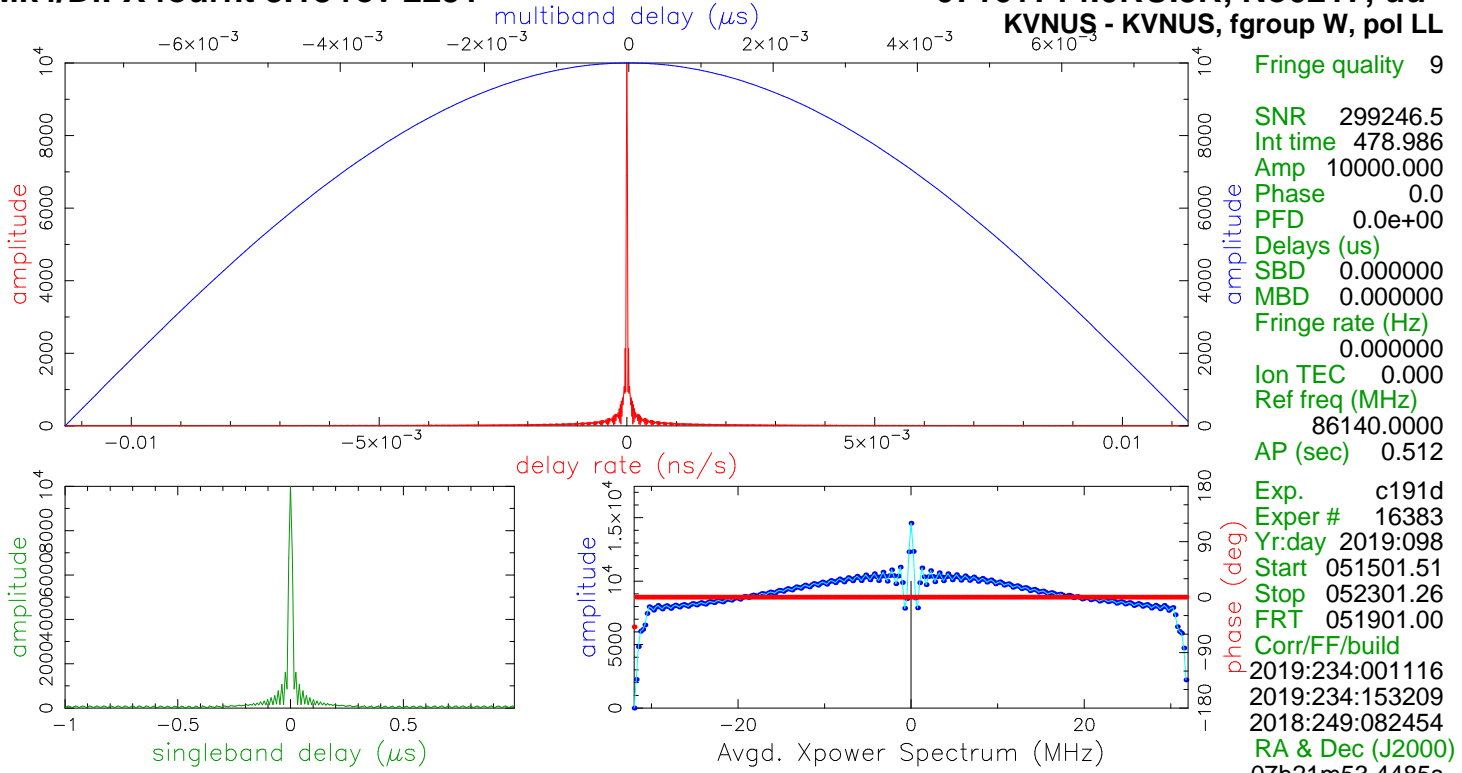


Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



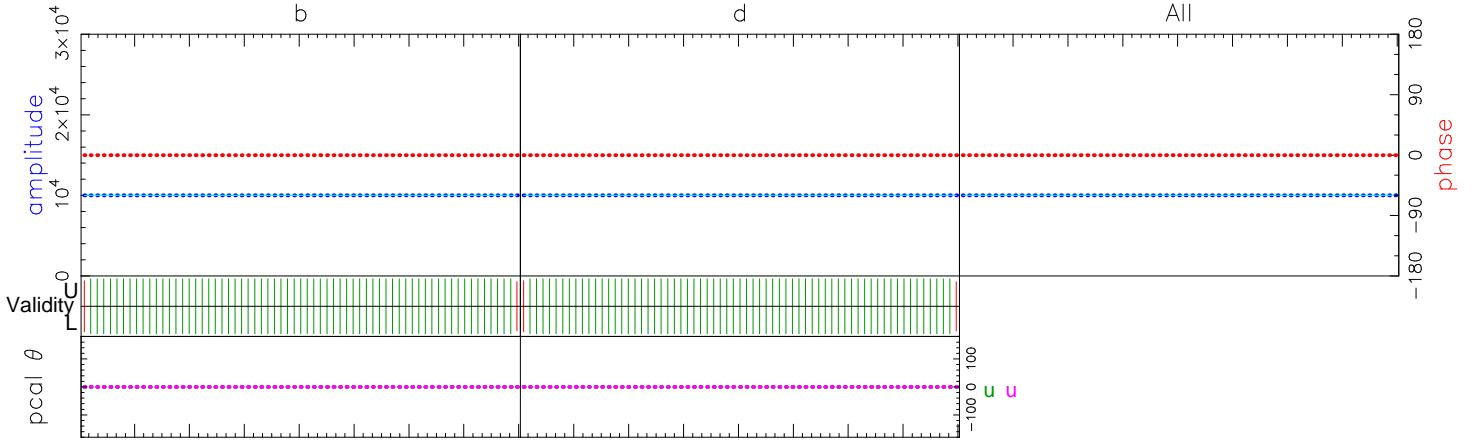
86156.00	86220.00	Freq (MHz)	All				
38.8	34.4	Phase	36.6				
0.2	0.2	Ampl.	0.2				
73.9	73.7	Sbd box	73.7				
U/L 921/921	921/921	APs used					
t 0	0	PC freqs					
Z 1000	1000	PC freqs					
t:Z 0:0	0:0	PC phase					
t:Z 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
Z 1000	1000						
t W01UL,W01LL	W03UL,W03LL	Chan ids					
Z W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-9.69415561157E+02	Apriori delay (usec)	-9.68981634403E+02	Resid mbdelay (usec)	3.57325E-03	+/-	9.1E-04
Sband delay (usec)	-9.69413446903E+02	Apriori clock (usec)	1.9545355E+01	Resid sbdelay (usec)	-4.31812E-01	+/-	1.6E-03
Phase delay (usec)	-9.68981633224E+02	Apriori clockrate (us/s)	4.1600000E-07	Resid phdelay (usec)	1.17926E-06	+/-	3.4E-07
Delay rate (us/s)	3.47273835873E-01	Apriori rate (us/s)	3.47270613351E-01	Resid rate (us/s)	3.22252E-06	+/-	2.5E-09
Total phase (deg)	41.1	Apriori accel (us/s/s)	-2.88784020963E-05	Resid phase (deg)	36.6	+/-	10.5

ph/seg (deg) 74.7 88.8 Search (2048X8) 0.174 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 153.2 155.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 14.9 Inc. seg. avg. 0.184 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 3.0 26.0 Inc. frq. avg. 0.178 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 22.4 el 37.7 pa -97.3 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -6319.148 -7515.009 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/tZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/tZ.W.6.0RUI3R



Fringe quality 9
 SNR 299246.5
 Int time 478.986
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153209
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

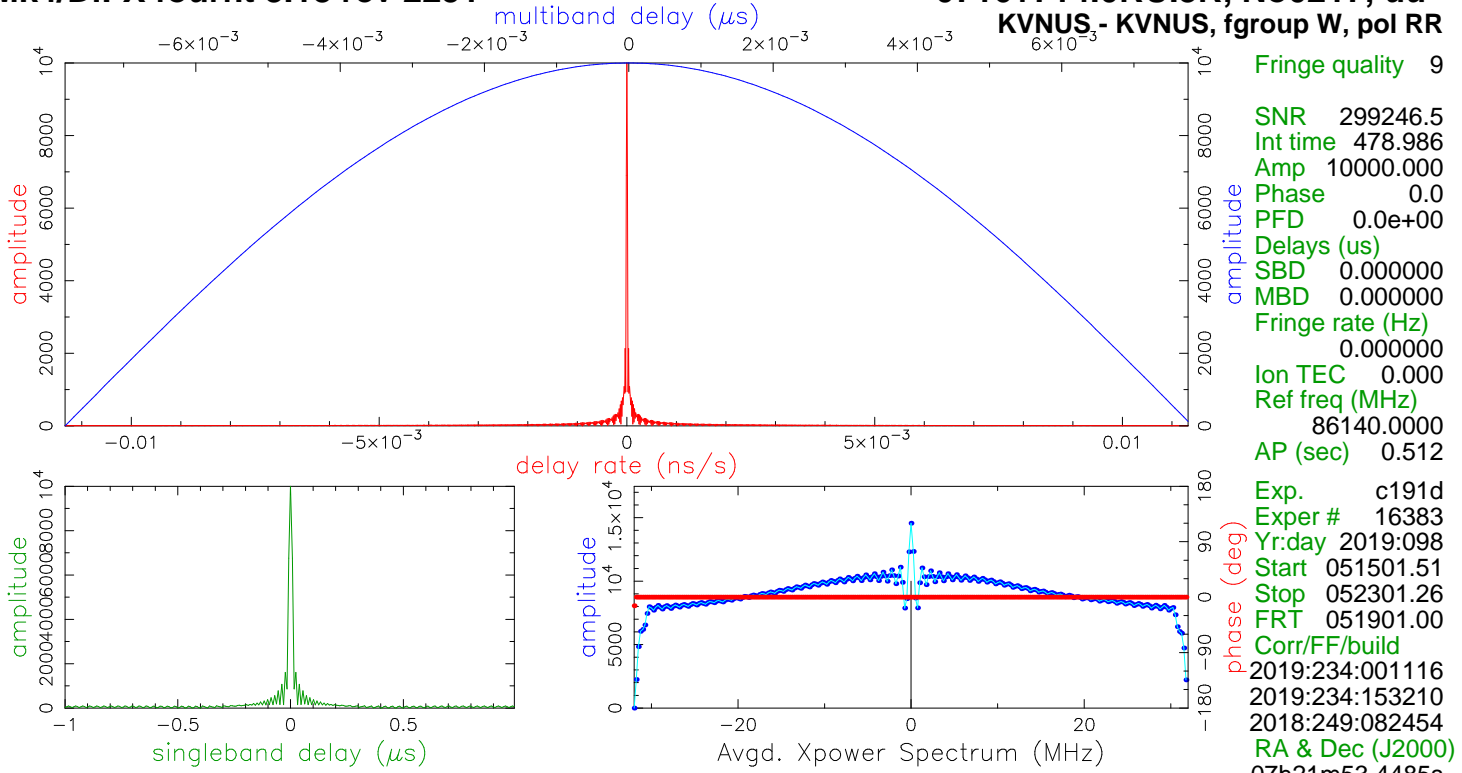


86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 937/937	937/937	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W01UL,W01LL	W03UL,W03LL	Chan ids	
u W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.7E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.9E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.5E-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	Theor.	0.0	Amplitude	10000.000 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (2048X8)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	10000.000	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

u: az 22.9 el 40.7 pa -100.2 u: az 22.9 el 40.7 pa -100.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uu..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uu.W.16.0RUI3R



Fringe quality 9

SNR 299246.5

Int time 478.986

Ampl 10000.000

Phase 0.0

PFD 0.0e+00

Delays (us)

SBD 0.000000

MBD 0.000000

Fringe rate (Hz)

0.000000

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052301.26

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153210

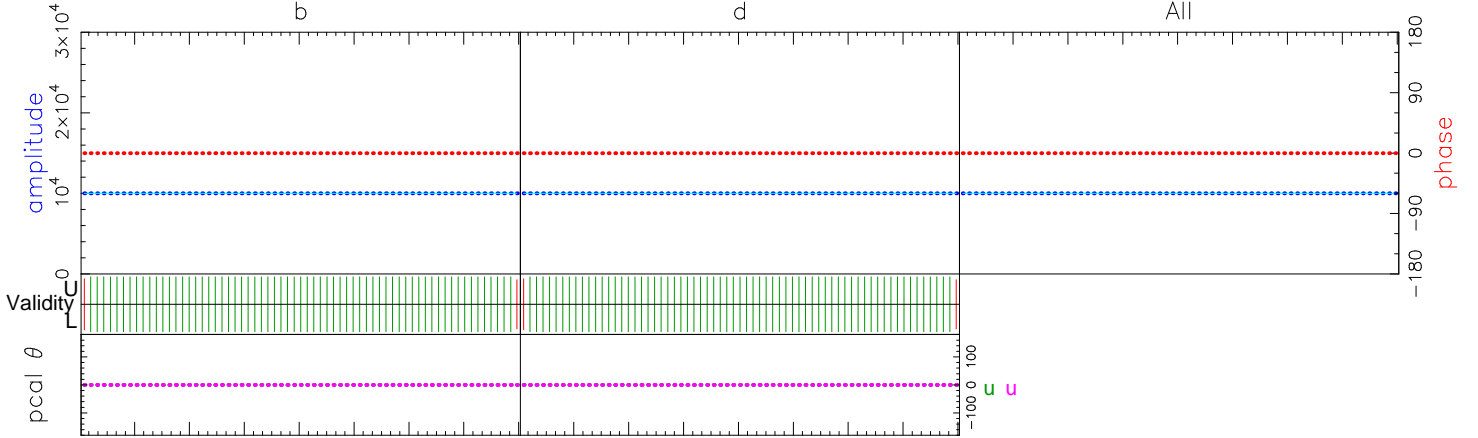
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 937/937	937/937	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W01UR,W01LR	W03UR,W03LR	Chan ids	
u W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.5E-14
		Resid phase (deg)	0.0 +/- 0.0

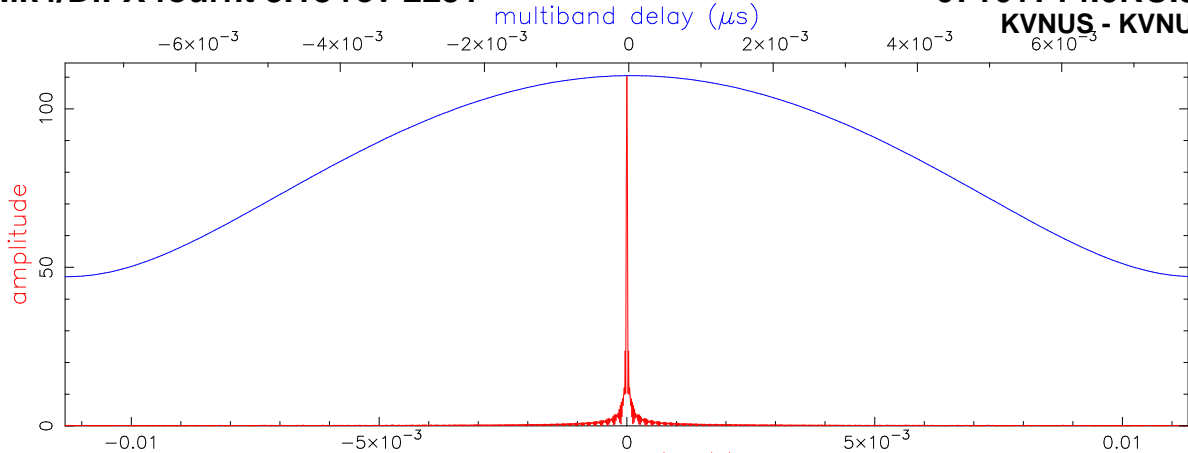
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X8) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

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

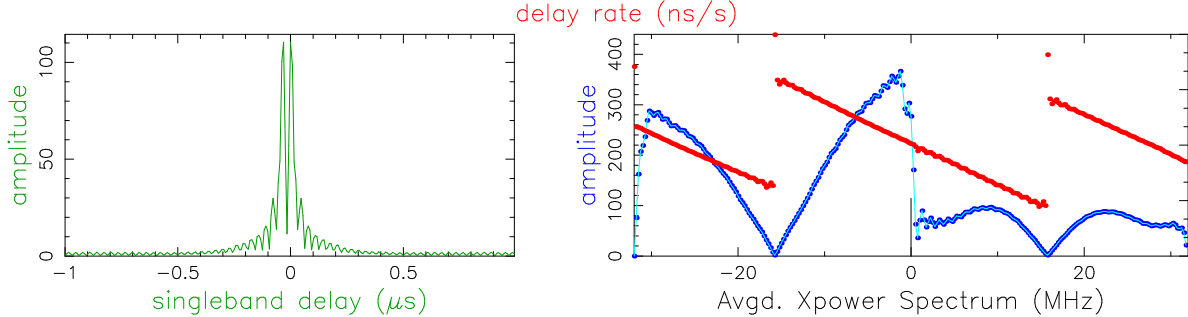
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



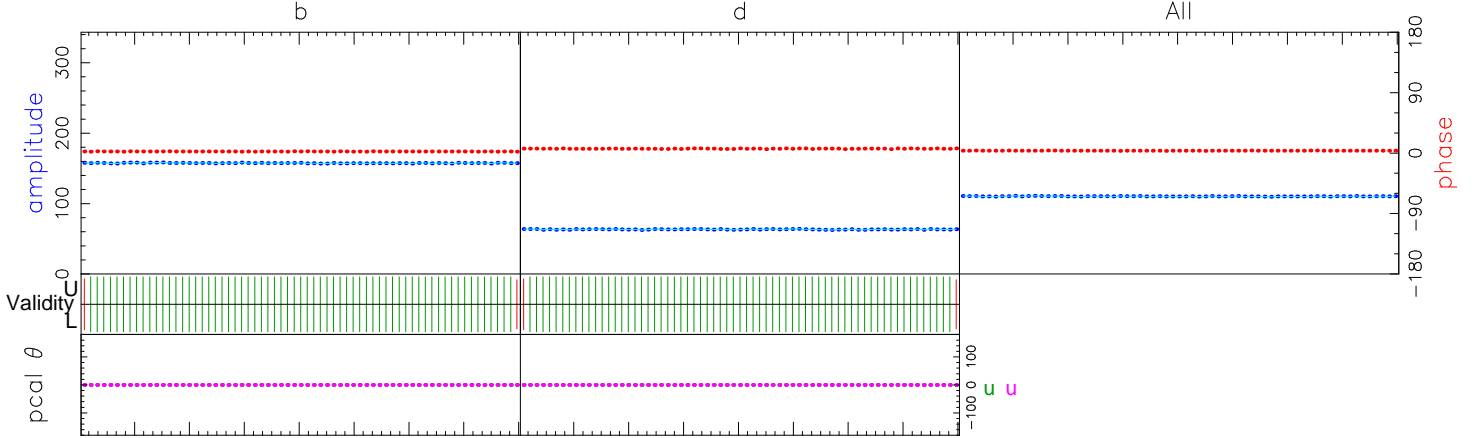
Fringe quality 7

SNR 3426.3
 Int time 478.986
 Amp 114.497
 Phase 3.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002556
 MBD -0.000146
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153212
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"



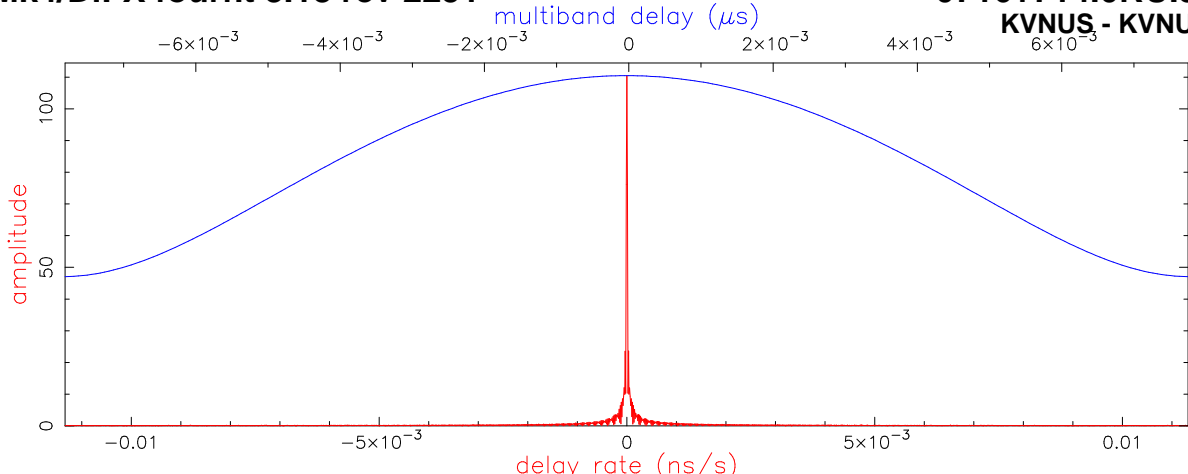
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
2.4	6.6	Phase	3.6
157.6	63.4	Ampl.	110.5
124.7	129.3	Sbd box	129.3
U/L 937/937	937/937	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W01UL,W01LL	W03UL,W03LL	Chan ids	
u W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	-1.45625000000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.45625E-04	+/-	1.5E-06
Sband delay (usec)	2.55550000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.55550E-03	+/-	2.5E-06
Phase delay (usec)	1.16332694271E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.16333E-07	+/-	5.4E-10
Delay rate (us/s)	7.79413381543E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.79413E-12	+/-	3.9E-12
Total phase (deg)	3.6	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	3.6	+/-	0.0

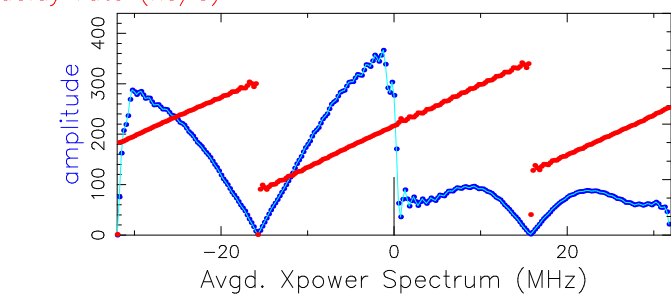
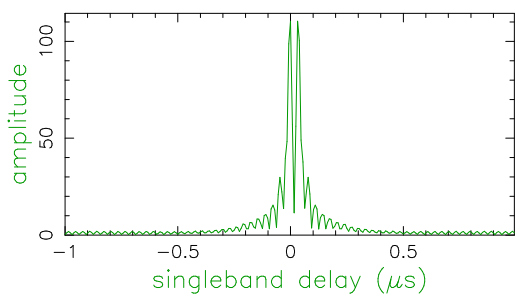
ph/seg (deg) 0.1 0.1 Search (2048X8) 110.491 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.6 0.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 110.434 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.3 0.0 Inc. frq. avg. 110.493 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 22.9 el 40.7 pa -100.2 u: az 22.9 el 40.7 pa -100.2 u, v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uu..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uu.W.50.0RUI3R simultaneous interpolator



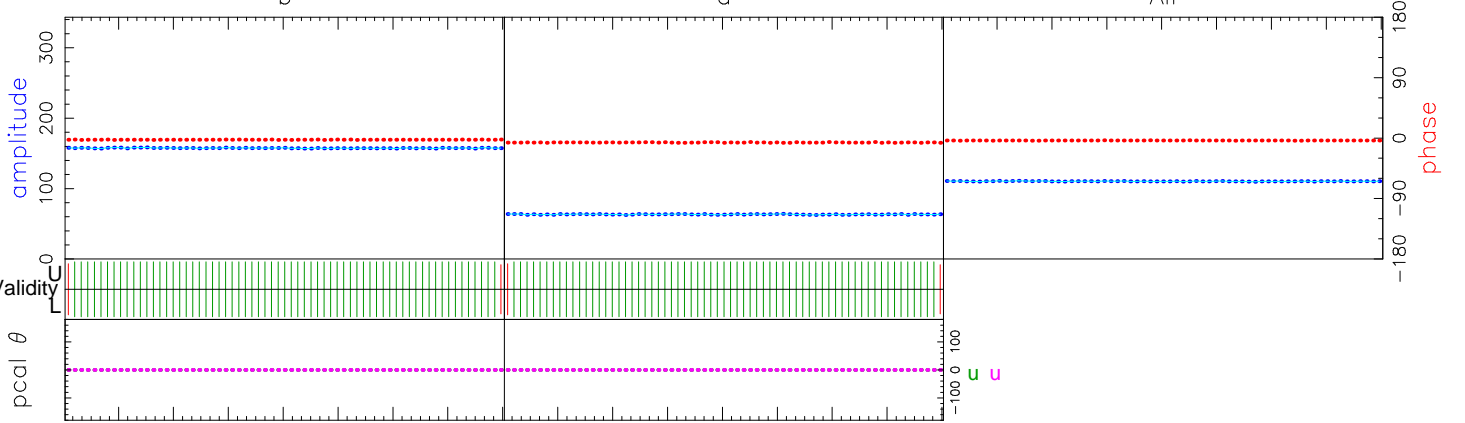
Fringe quality 7

SNR 3426.3
 Int time 478.986
 Amp 114.497
 Phase -3.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.002556
 MBD 0.000146
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153214
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

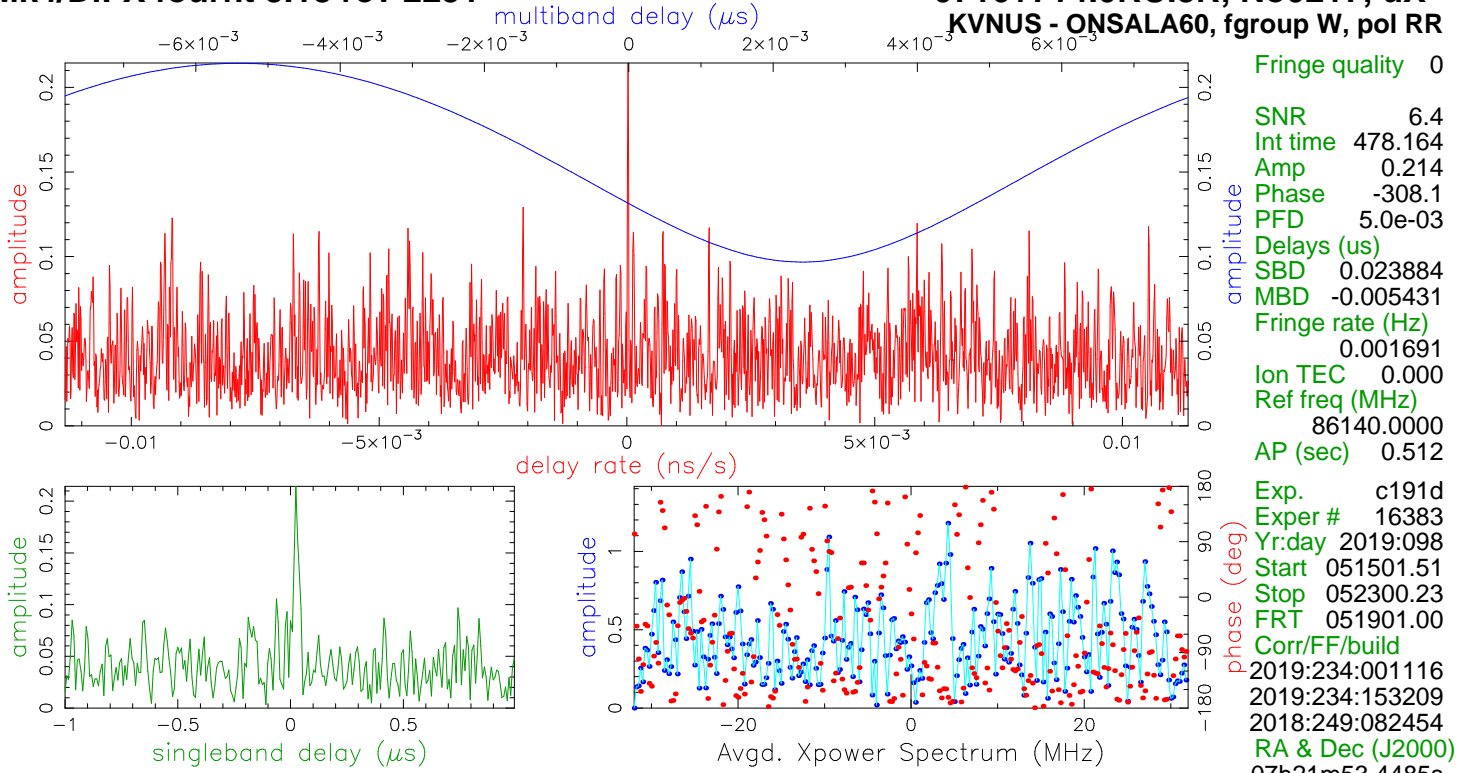


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

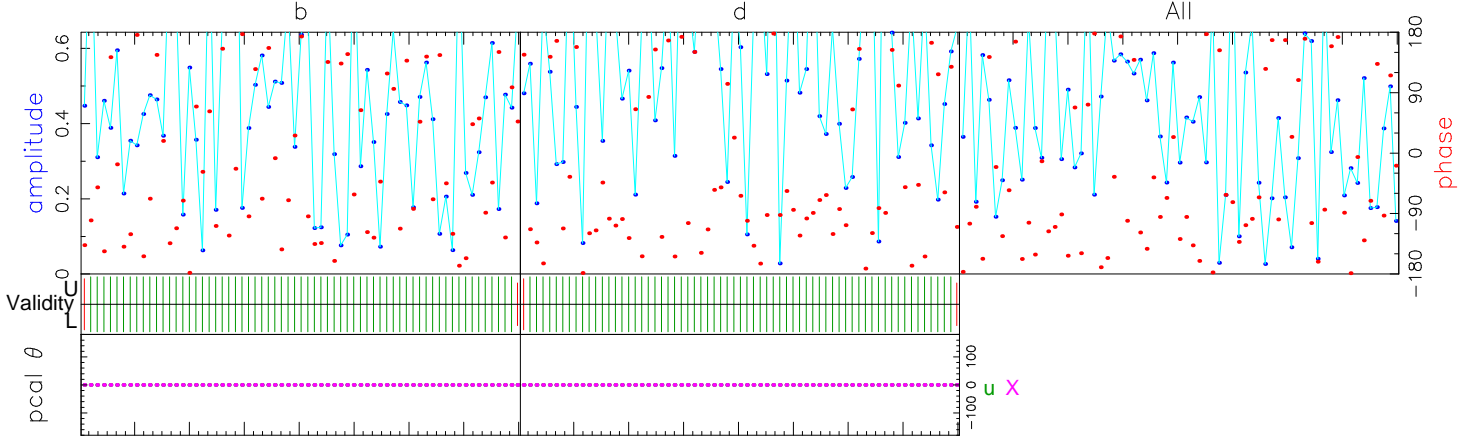


86156.00	86220.00	Freq (MHz)	All
-2.4	-6.6	Phase	-3.6
157.6	63.4	Ampl.	110.5
133.3	128.7	Sbd box	128.7
U/L 937/937	937/937	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W01UR,W01LR	W03UR,W03LR	Chan ids	
u W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	1.45625000000E-04	Apriori delay (usec)	0.00000000000E+00
Sband delay (usec)	-2.55550000000E-03	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	-1.16332694383E-07	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	-7.79413381543E-12	Apriori rate (us/s)	0.00000000000E+00
Total phase (deg)	-3.6	Apriori accel (us/s/s)	0.00000000000E+00
		Resid mbdelay (usec)	1.45625E-04 +/- 1.5E-06
		Resid sbdelay (usec)	-2.55550E-03 +/- 2.5E-06
		Resid phdelay (usec)	-1.16333E-07 +/- 5.4E-10
		Resid rate (us/s)	-7.79413E-12 +/- 3.9E-12
		Resid phase (deg)	-3.6 +/- 0.0

ph/seg (deg) 0.1 0.1 Theor. Amplitude 114.497 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.6 0.2 Search (2048X8) 110.491 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.3 0.0 Inc. seg. avg. 110.434 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 22.9 el 40.7 pa -100.2 u: az 22.9 el 40.7 pa -100.2 u, v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uu..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uu.W.67.0RUI3R simultaneous interpolator



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

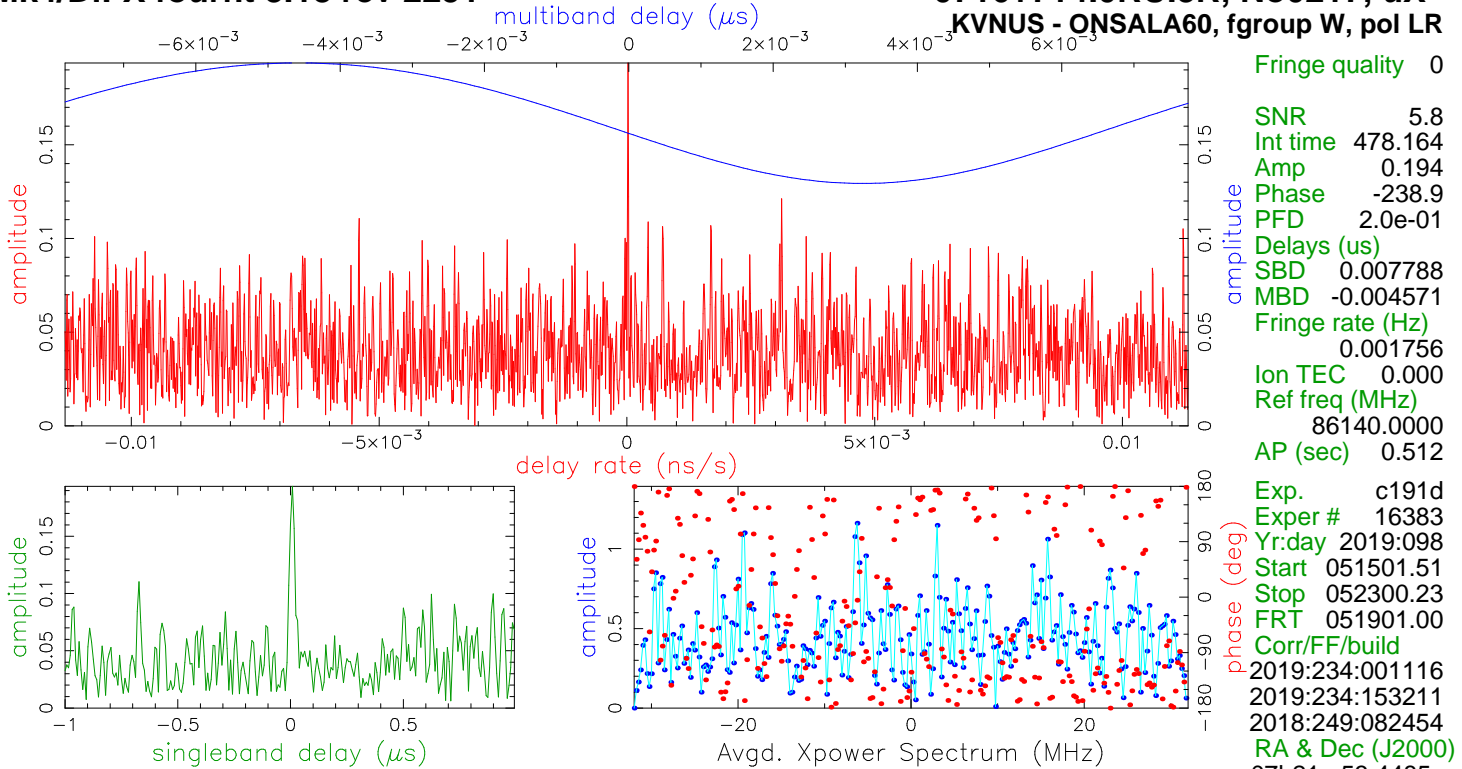


86156.00		86220.00		Freq (MHz)		All
-128.5		-128.0		Phase	-128.1	
0.1		0.3		Ampl.	0.2	
235.5		132.3		Sbd box	132.1	
U/L 935/935		935/935		APs used		
u 0		0		PC freqs		
X 1000		1000		PC freqs		
u:X 0:0		0:0		PC phase		
u:X 0:0		0:0		Manl PC		
u 1000		1000		PC amp		
X 1000		1000				
u W01UR,W01LR		W03UR,W03LR		Chan ids		
X W01UR,W01LR		W03UR,W03LR		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	6.74563028939E+02	Apriori delay (usec)	6.74537210392E+02	Resid mbdelay (usec)	-5.43145E-03	+/- 7.8E-04
Sband delay (usec)	6.74561094892E+02	Apriori clock (usec)	-2.4119352E+01	Resid sbdelay (usec)	2.38845E-02	+/- 1.3E-03
Phase delay (usec)	6.74537206260E+02	Apriori clockrate (us/s)	-2.9399999E-07	Resid phdelay (usec)	-4.13195E-06	+/- 2.9E-07
Delay rate (us/s)	3.84180228940E-01	Apriori rate (us/s)	3.84180209315E-01	Resid rate (us/s)	1.96256E-08	+/- 2.1E-09
Total phase (deg)	-199.0	Apriori accel (us/s/s)	-3.16475896475E-05	Resid phase (deg)	-308.1	+/- 8.9

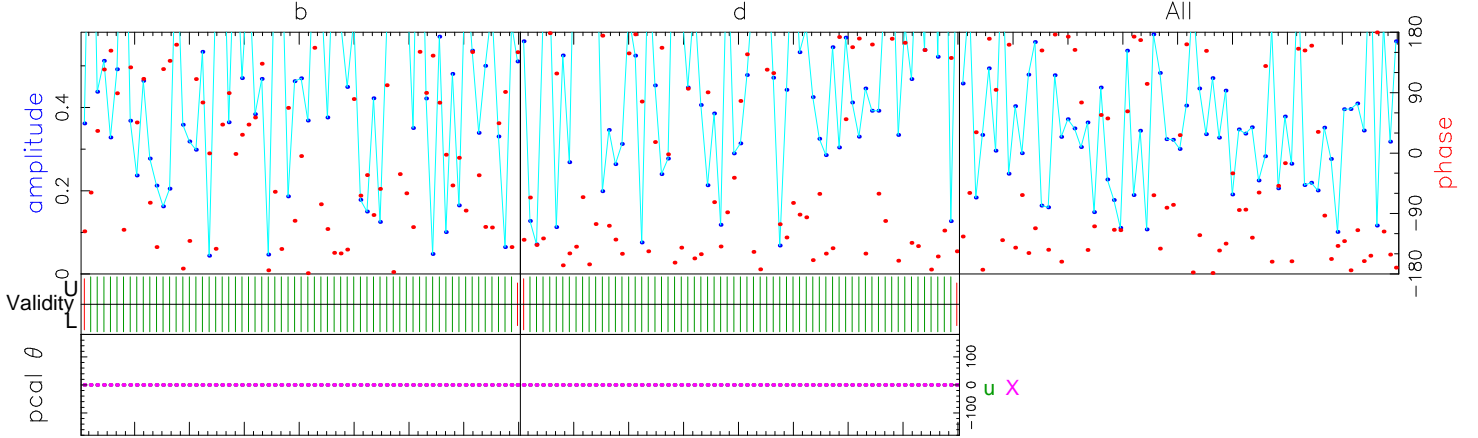
ph/seg (deg)	RMS 70.0	Theor. 73.2	Amplitude Search (2048X8) 0.211	0.214 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	137.3	127.7	Interp. 0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	12.6	Inc. seg. avg. 0.228	0.228	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	45.1	22.1	Inc. frq. avg. 0.209	0.209	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 22.9 el 40.7 pa -100.2 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -6990.964 -7982.910 simultaneous interpolator

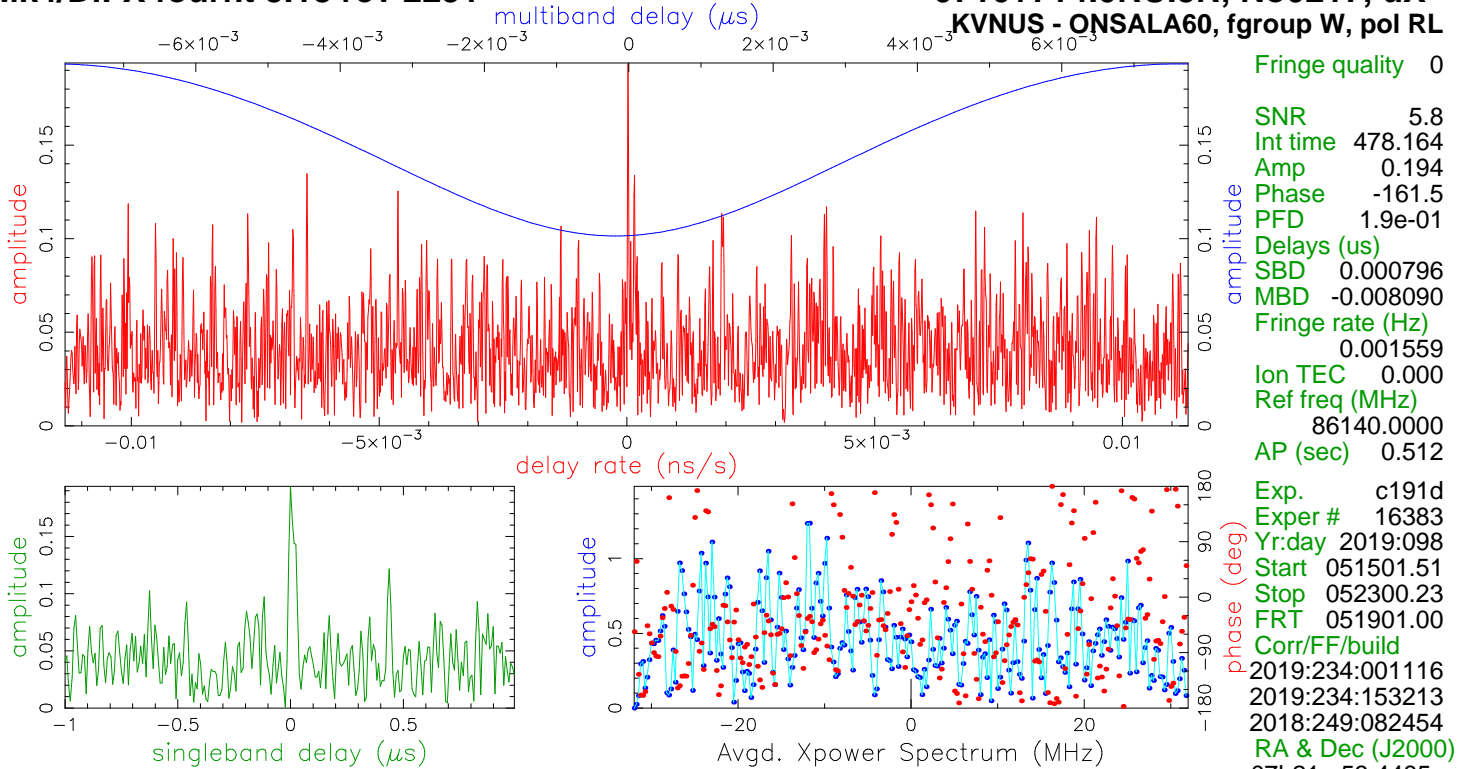
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uX.W.25.0RUI3R



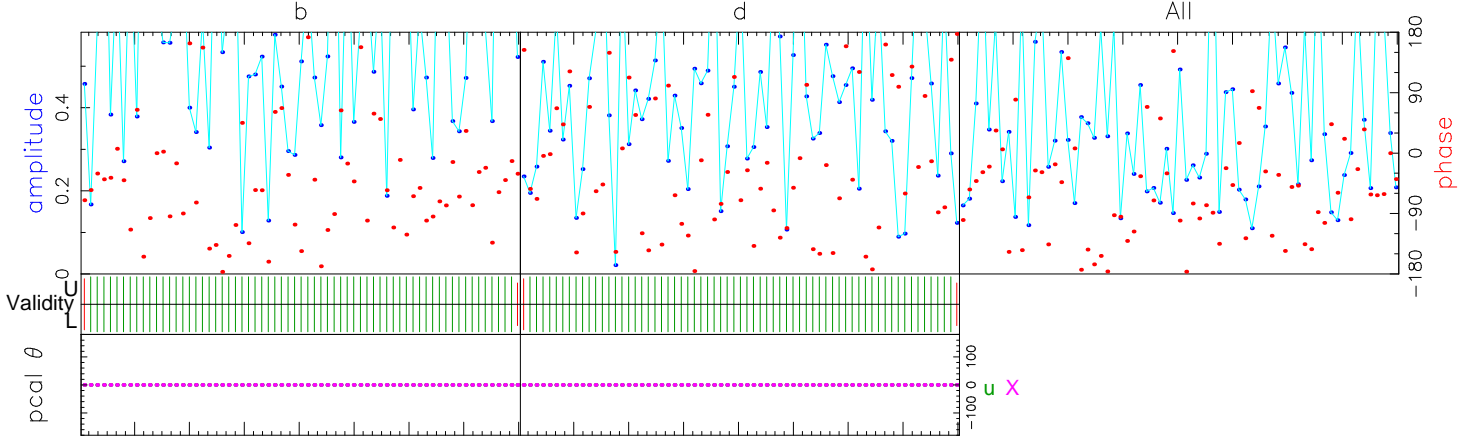
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00					86220.00					Freq (MHz)	All						
-148.8					-148.9					Phase	-148.9						
0.1					0.3					Ampl.	0.2						
5.8					129.8					Sbd box	130.0						
U/L 935/935					935/935					APs used							
u 0					0					PC freqs							
X 1000					1000					PC freqs							
u:X 0:0					0:0					PC phase							
u:X 0:0					0:0					Manl PC							
u 1000					1000					PC amp							
X 1000					1000												
u W01UL,W01LL					W03UL,W03LL					Chan ids							
X W01UR,W01LR					W03UR,W03LR					Tracks							
										Chan ids							
										Tracks							
Group delay (usec)(sbd)	6.74548264564E+02			Apriori delay (usec)	6.74537210392E+02			Resid mbdelay (usec)	-4.57083E-03	+/-	8.6E-04						
Sband delay (usec)	6.74544998392E+02			Apriori clock (usec)	-2.4119352E+01			Resid sbdelay (usec)	7.78800E-03	+/-	1.5E-03						
Phase delay (usec)	6.74537205591E+02			Apriori clockrate (us/s)	-2.9399999E-07			Resid phdelay (usec)	-4.80090E-06	+/-	3.2E-07						
Delay rate (us/s)	3.84180229703E-01			Apriori rate (us/s)	3.84180209315E-01			Resid rate (us/s)	2.03887E-08	+/-	2.3E-09						
Total phase (deg)	-129.7			Apriori accel (us/s/s)	-3.16475896475E-05			Resid phase (deg)	-238.9	+/-	9.9						
	RMS	Theor.	Amplitude	0.194 +/- 0.033				Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
ph/seg (deg)	73.4	81.0	Search (2048X8)	0.191				Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000	1.000				
amp/seg (%)	120.9	141.3	Interp.	0.000				Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008	0.008			
ph/frq (deg)	0.0	14.0	Inc. seg. avg.	0.181				Sample rate(MSamp/s): 64			nlags: 128	t_cohere infinite	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	66.8	24.4	Inc. frq. avg.	0.188				Data rate(Mb/s): 512					ion window (TEC)	0.00	0.00		
u: az 22.9 el 40.7 pa -100.2			X: az 358.2 el 38.7 pa 2.3													simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c191d/v1/1234/No0217/uX..0RUI3R														Output file: /Exps/c191d/v1/1234/No0217/uX.W.41.0RUI3R

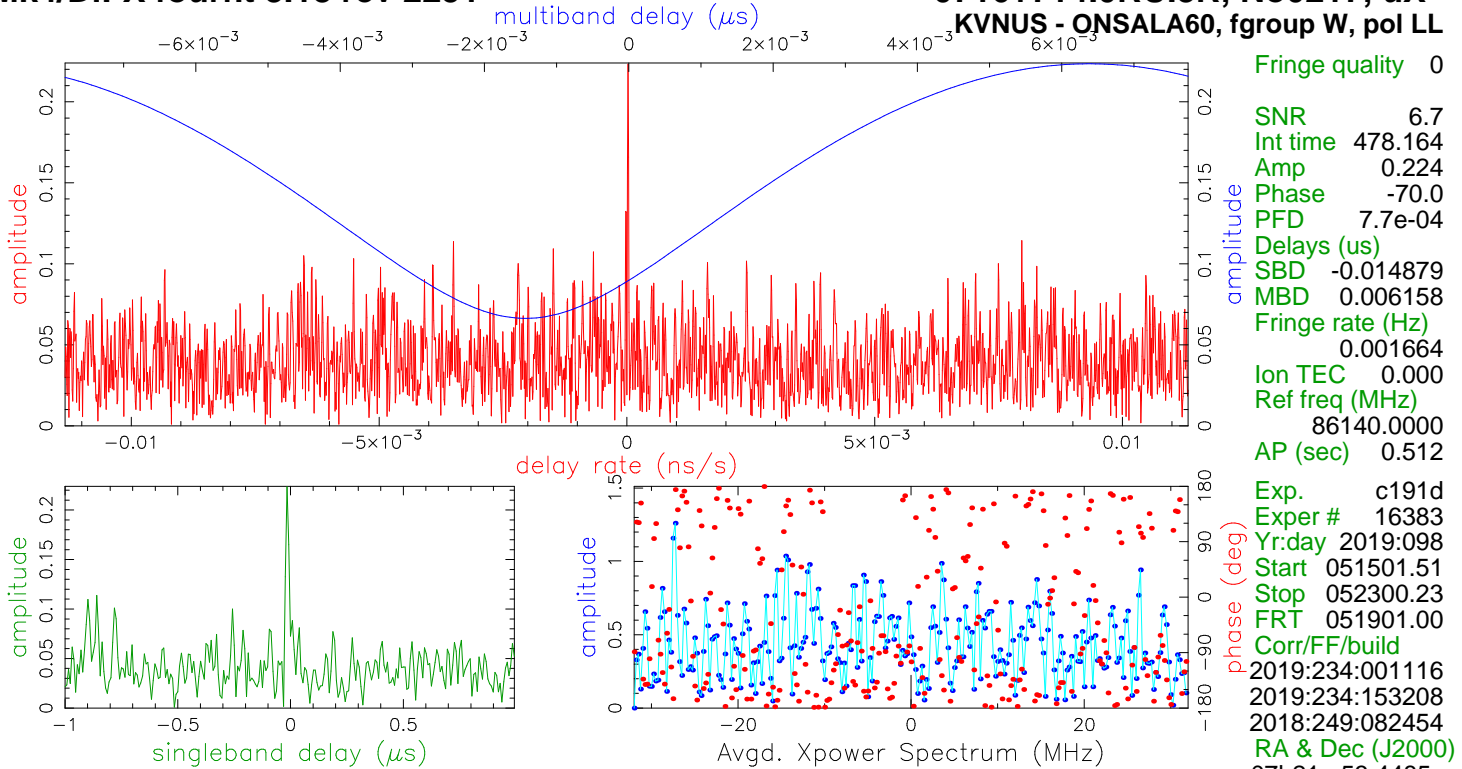


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

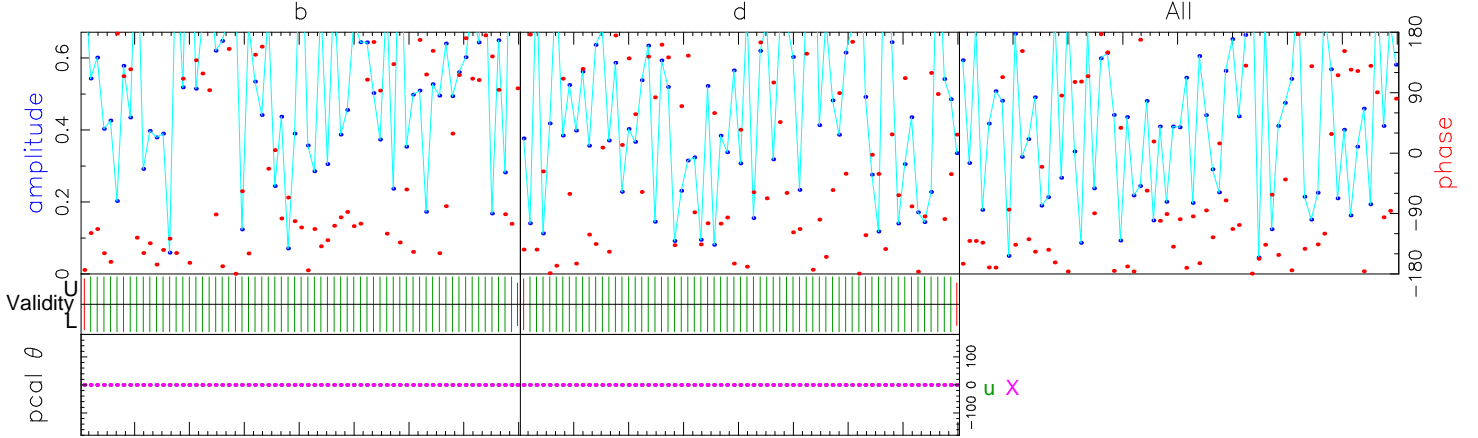


86156.00		86220.00		Freq (MHz)	All
-72.0		-69.8		Phase	-71.5
0.3		0.1		Ampl.	0.2
129.4		184.8		Sbd box	129.1
U/L 935/935		935/935		APs used	
u 0		0		PC freqs	
X 1000		1000		PC freqs	
u:X 0:0		0:0		PC phase	
u:X 0:0		0:0		Mani PC	
u 1000		1000		PC amp	
X 1000		1000			
u W01UR,W01LR		W03UR,W03LR		Chan ids	
X W01UL,W01LL		W03UL,W03LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	6.74544745814E+02	Apriori delay (usec)	6.74537210392E+02	Resid mbdelay (usec)	-8.08958E-03 +/- 8.6E-04
Sband delay (usec)	6.74538006392E+02	Apriori clock (usec)	-2.4119352E+01	Resid sbdelay (usec)	7.96000E-04 +/- 1.5E-03
Phase delay (usec)	6.74537208088E+02	Apriori clockrate (us/s)	-2.9399999E-07	Resid phdelay (usec)	-2.30410E-06 +/- 3.2E-07
Delay rate (us/s)	3.84180227411E-01	Apriori rate (us/s)	3.84180209315E-01	Resid rate (us/s)	1.80966E-08 +/- 2.3E-09
Total phase (deg)	-52.3	Apriori accel (us/s/s)	-3.16475896475E-05	Resid phase (deg)	-161.5 +/- 9.9

ph/seg (deg)	RMS 71.8	Theor. 80.9	Amplitude 0.194 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	137.1	141.2	Search (2048X8) 0.185	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.0	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	52.3	24.4	Inc. seg. avg. 0.184	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.188	Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
u: az 22.9 el 40.7 pa -100.2		X: az 358.2 el 38.7 pa 2.3	u,v (fr/asec) -6990.964 -7982.910	nlags: 128 t_cohere infinite	ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/uX..0RUI3R			simultaneous interpolator
		Output file: /Exps/c191d/v1/1234/No0217/uX.W.61.0RUI3R			



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-161.8	-156.6	Phase	-160.0				
0.3	0.2	Ampl.	0.2				
127.6	126.5	Sbd box	127.1				
U/L 935/935	935/935	APs used					
u 0	0	PC freqs					
X 1000	1000	PC freqs					
u:X 0:0	0:0	PC phase					
u:X 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
X 1000	1000						
u W01UL,W01LL	W03UL,W03LL	Chan ids					
X W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	6.74527742939E+02	Apriori delay (usec)	6.74537210392E+02	Resid mbdelay (usec)	6.15755E-03	+/-	7.4E-04
Sband delay (usec)	6.74522331892E+02	Apriori clock (usec)	-2.4119352E+01	Resid sbdelay (usec)	-1.48785E-02	+/-	1.3E-03
Phase delay (usec)	6.74537205232E+02	Apriori clockrate (us/s)	-2.9399999E-07	Resid phdelay (usec)	-5.15994E-06	+/-	2.8E-07
Delay rate (us/s)	3.84180228633E-01	Apriori rate (us/s)	3.84180209315E-01	Resid rate (us/s)	1.93188E-08	+/-	2.0E-09
Total phase (deg)	39.1	Apriori accel (us/s/s)	-3.16475896475E-05	Resid phase (deg)	-70.0	+/-	8.6

ph/seg (deg) 72.5 70.0 Theor. Amplitude 0.224 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

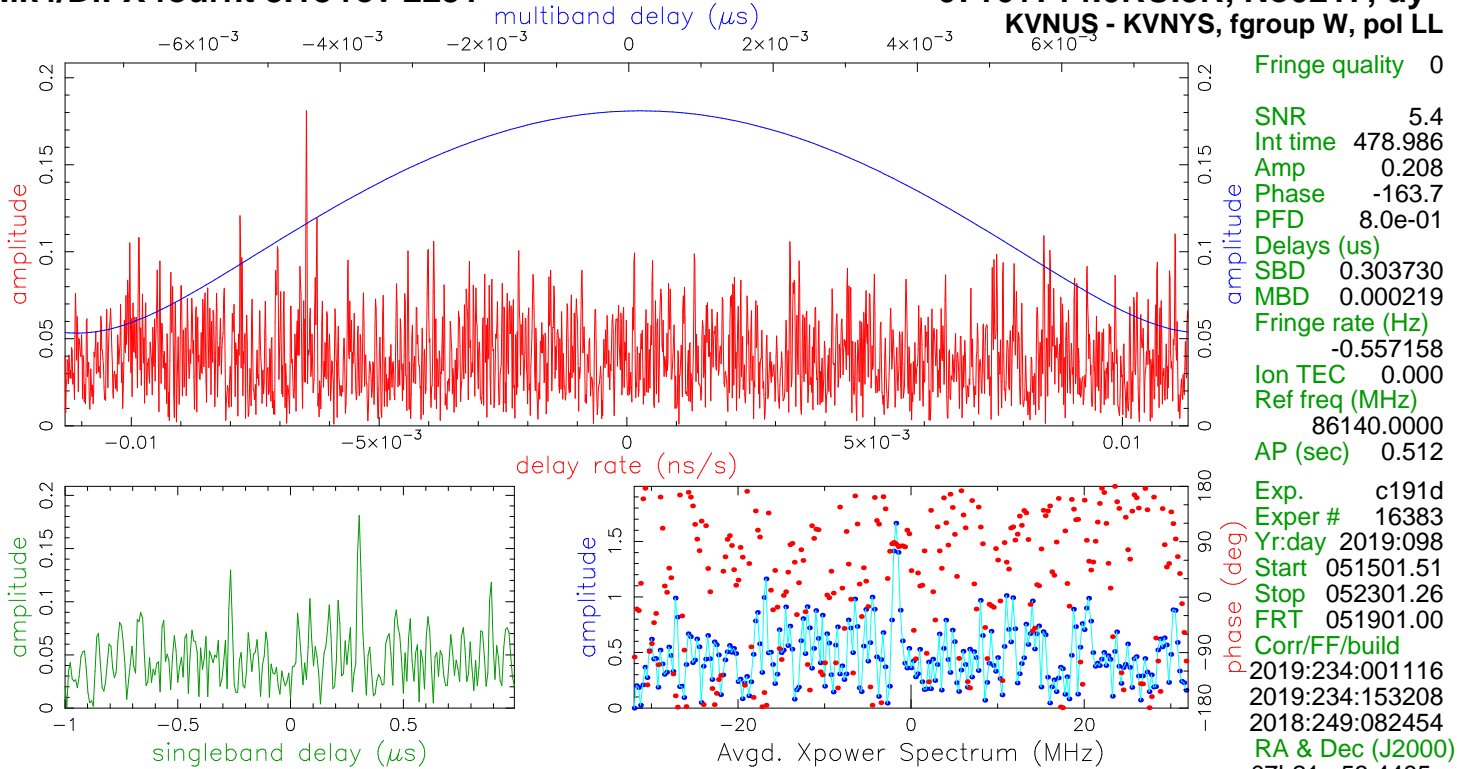
amp/seg (%) 129.0 122.2 Search (2048X8) 0.217 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 12.1 Inc. seg. avg. 0.240 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

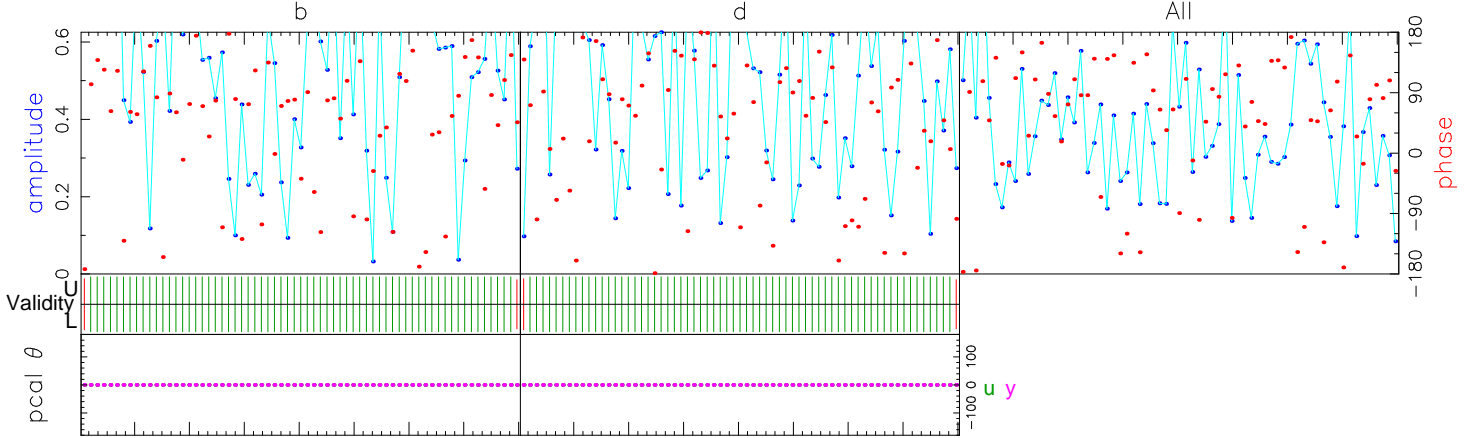
amp/frq (%) 29.6 21.1 Inc. frq. avg. 0.219 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

u: az 22.9 el 40.7 pa -100.2 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -6990.964 -7982.910 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uX.W.9.0RUI3R



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

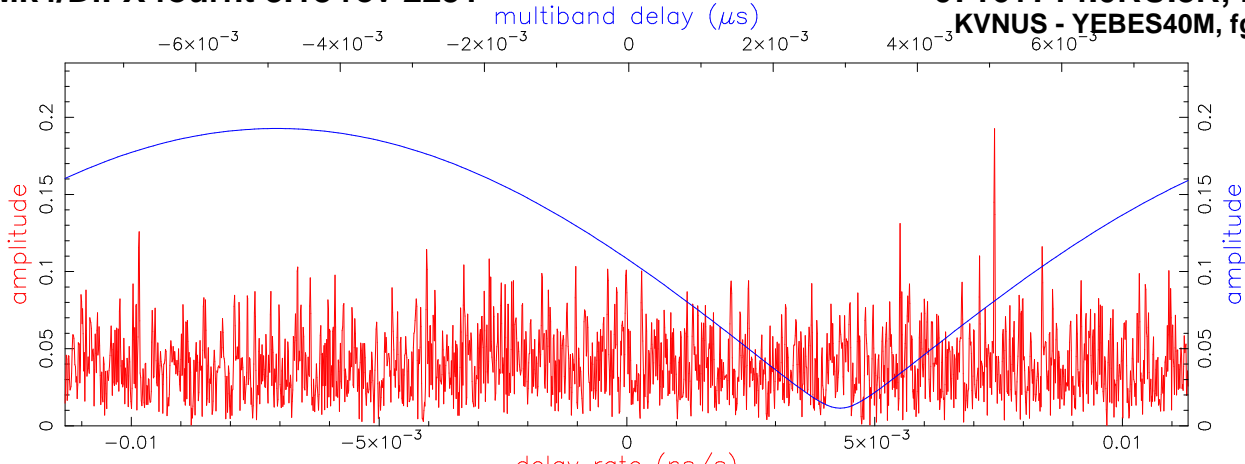


86156.00		86220.00		Freq (MHz)	All
106.7		105.5		Phase	106.3
0.3		0.1		Ampl.	0.2
168.1		242.5		Sbd box	167.9
U/L 937/937		937/937		APs used	
u 0		0		PC freqs	
y 0		0		PC freqs	
u:y 0:0		0:0		PC phase	
u:y 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
y 1000		1000			
u W01UL,W01LL		W03UL,W03LL		Chan ids	
y W01UL,W01LL		W03UL,W03LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-3.31827632657E+02	Apriori delay (usec)	-3.32124726507E+02	Resid mbdelay (usec)	2.18849E-04 +/- 9.1E-04
Sband delay (usec)	-3.31820996507E+02	Apriori clock (usec)	-2.2495914E+01	Resid sbdelay (usec)	3.03730E-01 +/- 1.6E-03
Phase delay (usec)	-3.32124723079E+02	Apriori clockrate (us/s)	-2.8999998E-07	Resid phdelay (usec)	3.42751E-06 +/- 3.4E-07
Delay rate (us/s)	3.26846577275E-03	Apriori rate (us/s)	3.27493381902E-03	Resid rate (us/s)	-6.46805E-06 +/- 2.5E-09
Total phase (deg)	-142.6	Apriori accel (us/s/s)	-1.37779621363E-06	Resid phase (deg)	-163.7 +/- 10.5

ph/seg (deg)	74.7	Theor.	86.3	Amplitude	0.208 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	145.6	Search (2048X8)	0.174	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.207	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	29.3	Inc. frq. avg.	0.201	Inc. frq. avg.	0.201	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

u: az 22.9 el 40.7 pa -100.2 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) -63.740 -399.285 simultaneous interpolator

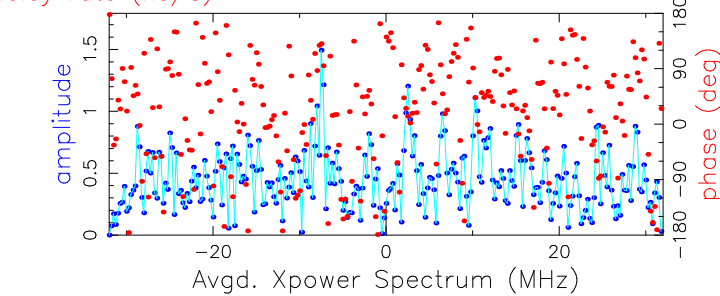
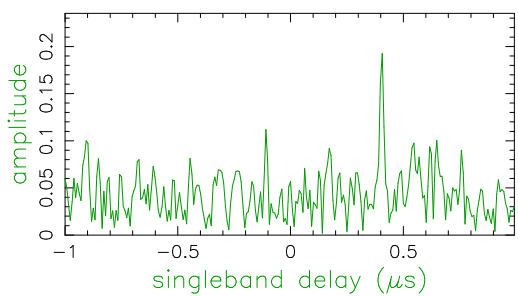
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uy..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uy.W.10.0RUI3R



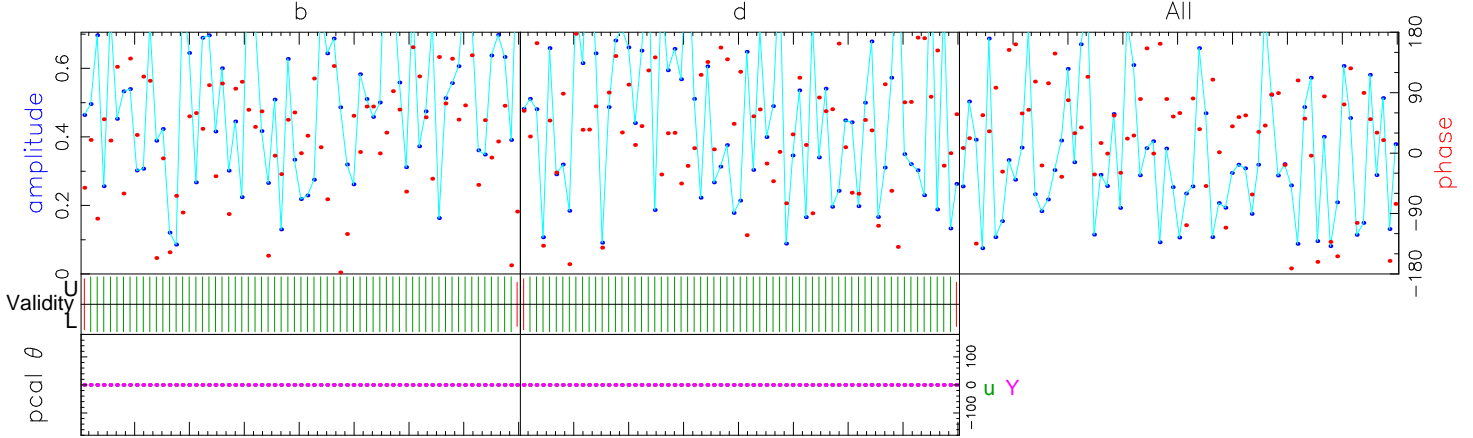
Fringe quality 0

SNR 5.9
Int time 478.344
Amp 0.235
Phase -131.0
PFD 1.4e-01
Delays (us)
SBD 0.404471
MBD -0.004714
Fringe rate (Hz)
0.638998
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052300.74
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153210
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

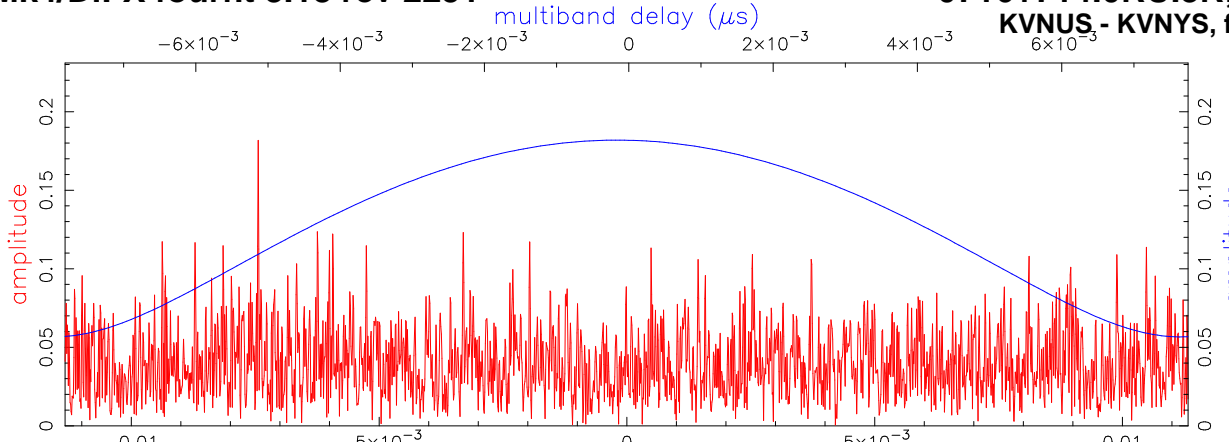


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
50.8	46.9	Phase	49.0				
0.2	0.2	Ampl.	0.2				
180.9	180.7	Sbd box	180.8				
U/L 936/936	936/936	APs used					
u 0	0	PC freqs					
Y 1000	1000	PC freqs					
u:Y 0:0	0:0	PC phase					
u:Y 0:0	0:0	Manl PC					
Y 1000	1000	PC amp					
Y 1000	1000						
u W01UL,W01LL	W03UL,W03LL	Chan ids					
Y W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.82441958509E+03	Apriori delay (usec)	5.82401804941E+03	Resid mbdelay (usec)	-4.71432E-03	+/-	8.5E-04
Sband delay (usec)	5.82442252091E+03	Apriori clock (usec)	-5.9685469E+00	Resid sbdelay (usec)	4.04471E-01	+/-	1.5E-03
Phase delay (usec)	5.82401805099E+03	Apriori clockrate (us/s)	-3.6999998E-08	Resid phdelay (usec)	1.58010E-06	+/-	3.2E-07
Delay rate (us/s)	4.87409943992E-01	Apriori rate (us/s)	4.87402525857E-01	Resid rate (us/s)	7.41813E-06	+/-	2.3E-09
Total phase (deg)	-211.5	Apriori accel (us/s/s)	-3.83218805686E-05	Resid phase (deg)	-131.0	+/-	9.8

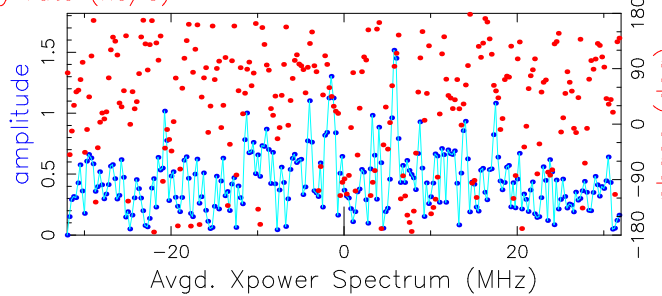
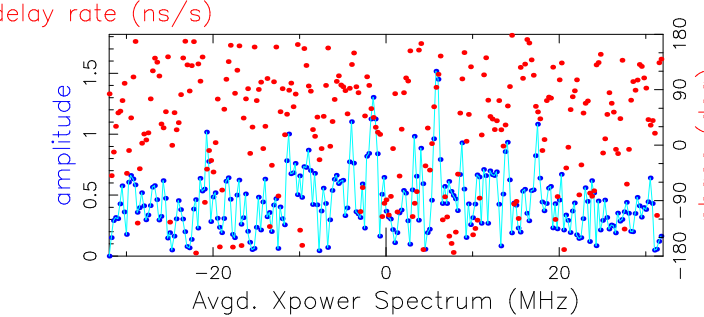
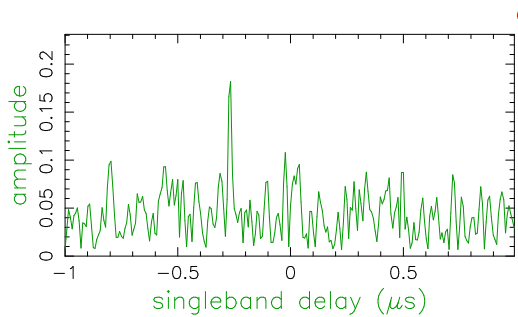
ph/seg (deg) 78.1 80.0 Theor. Amplitude 0.235 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 123.3 139.7 Search (2048X8) 0.186 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 13.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.0 24.1 Inc. seg. avg. 0.208 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 22.9 el 40.7 pa -100.2 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8865.822 -8956.272 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uY...0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uY.W.26.0RUI3R simultaneous interpolator



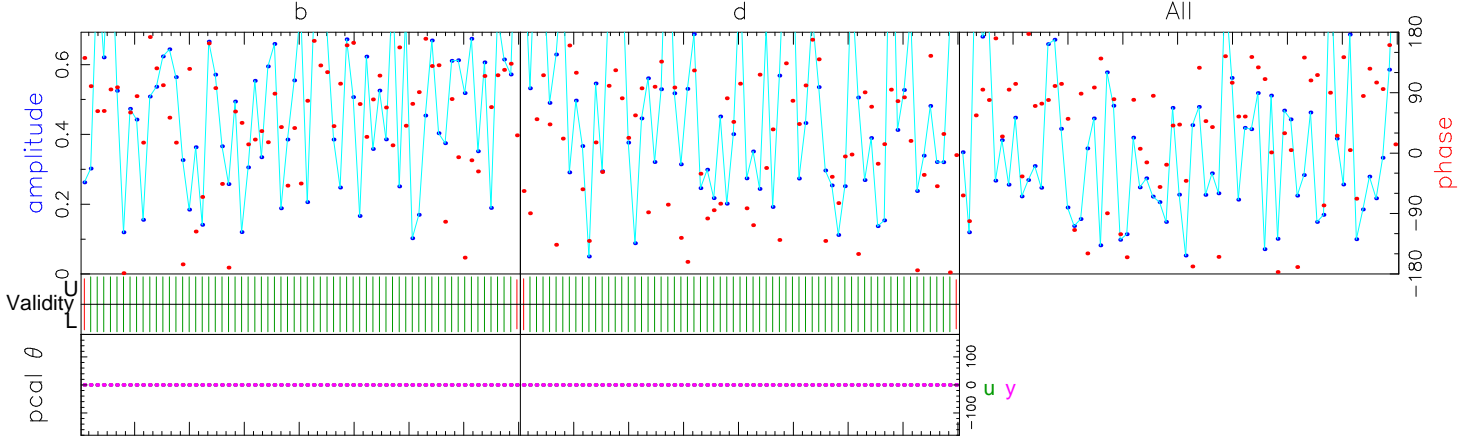
Fringe quality 0

SNR 5.8
Int time 478.986
Amp 0.231
Phase 172.1
PFD 2.4e-01
Delays (us)
SBD -0.268633
MBD 0.000029
Fringe rate (Hz)
-0.640952
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052301.26
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153210
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

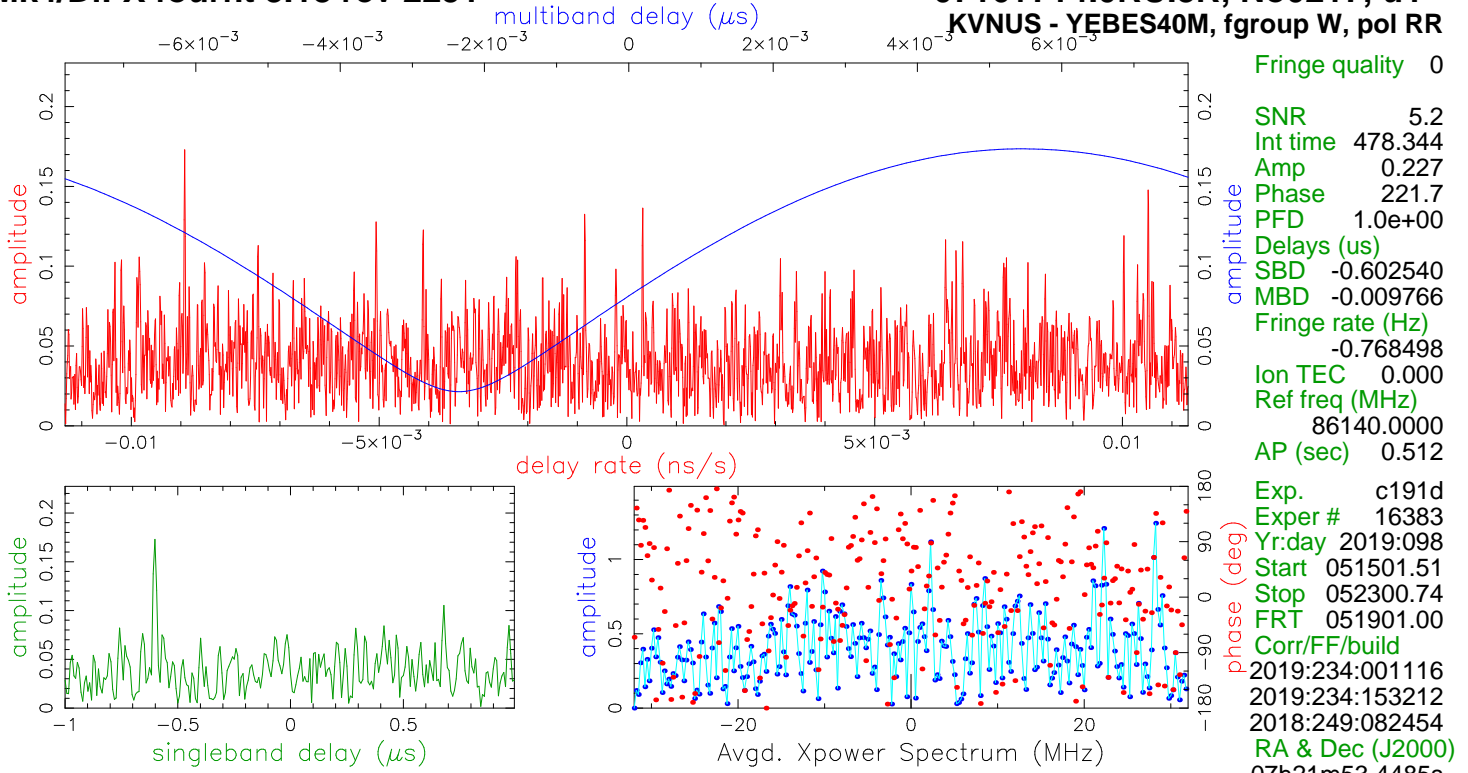


86156.00	86220.00	Freq (MHz)	All				
83.6	79.2	Phase	82.1				
0.3	0.2	Ampl.	0.2				
94.8	144.8	Sbd box	94.6				
U/L 937/937	937/937	APs used					
u 0	0	PC freqs					
y 0	0	PC freqs					
u:y 0:0	0:0	PC phase					
u:y 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
y 1000	1000						
u W01UR,W01LR	W03UR,W03LR	Chan ids					
y W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.32390322733E+02	Apriori delay (usec)	-3.32124726507E+02	Resid mbdelay (usec)	2.87736E-05	+/-	8.6E-04
Sband delay (usec)	-3.32393359507E+02	Apriori clock (usec)	-2.2495914E+01	Resid sbdelay (usec)	-2.68633E-01	+/-	1.5E-03
Phase delay (usec)	-3.32124723858E+02	Apriori clockrate (us/s)	-2.8999998E-07	Resid phdelay (usec)	2.64810E-06	+/-	3.2E-07
Delay rate (us/s)	3.26749299683E-03	Apriori rate (us/s)	3.27493381902E-03	Resid rate (us/s)	-7.44082E-06	+/-	2.3E-09
Total phase (deg)	193.3	Apriori accel (us/s/s)	-1.37779621363E-06	Resid phase (deg)	172.1	+/-	10.0

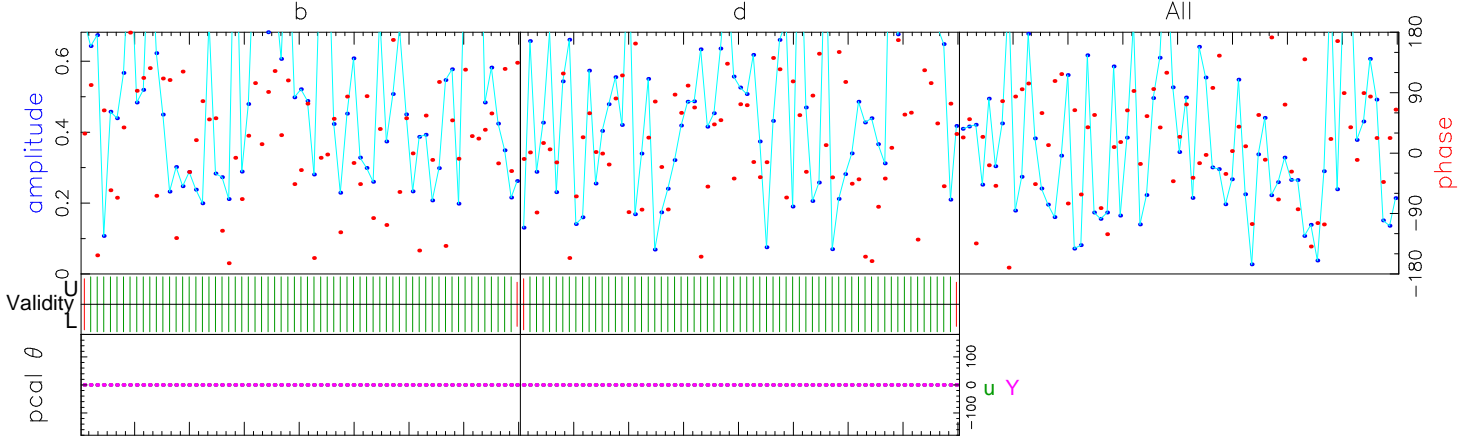
ph/seg (deg)	RMS 79.9	Theor. 81.5	Amplitude 0.231 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	144.0	142.3	Search (2048X8) 0.177	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.1	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	29.9	24.6	Inc. seg. avg. 0.216	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.212	Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

u: az 22.9 el 40.7 pa -100.2 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) -63.740 -399.285 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uy..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uy.W.30.0RUI3R



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

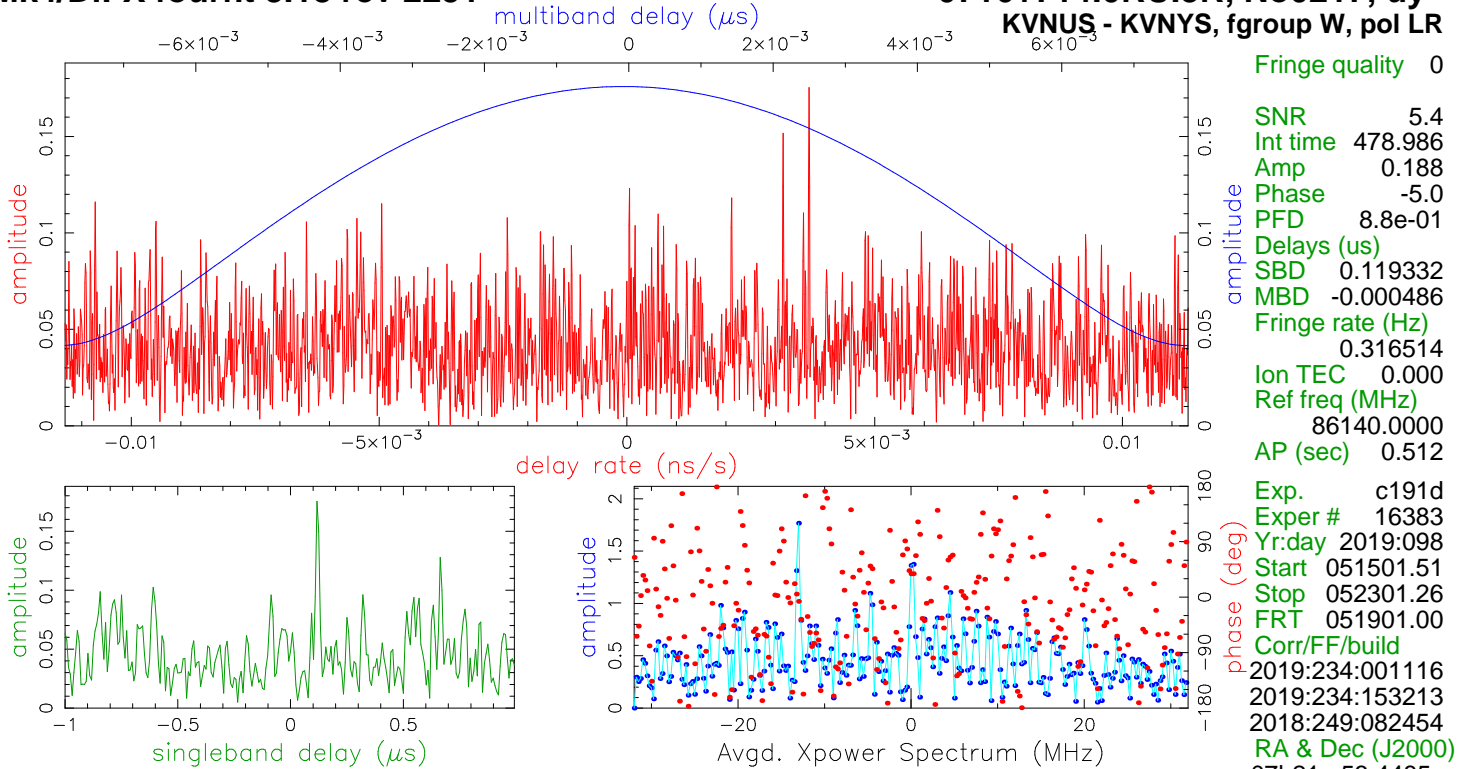


86156.00		86220.00		Freq (MHz)		All
45.7		36.5		Phase		41.7
0.3		0.2		Ampl.		0.2
51.8		135.2		Sbd box		51.9
U/L 936/936		936/936		APs used		
u 0		0		PC freqs		
Y 1000		1000		PC freqs		
u:Y 0:0		0:0		PC phase		
u:Y 0:0		0:0		Manl PC		
u 1000		1000		PC amp		
Y 1000		1000				
u W01UR,W01LR		W03UR,W03LR		Chan ids		
Y W01UR,W01LR		W03UR,W03LR		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	5.82341453379E+03	Apriori delay (usec)	5.82401804941E+03	Resid mbdelay (usec)	-9.76562E-03	+/- 9.6E-04
Sband delay (usec)	5.82341550941E+03	Apriori clock (usec)	-5.9685469E+00	Resid sbdelay (usec)	-6.02540E-01	+/- 1.7E-03
Phase delay (usec)	5.82401805076E+03	Apriori clockrate (us/s)	-3.6999998E-08	Resid phdelay (usec)	1.34312E-06	+/- 3.6E-07
Delay rate (us/s)	4.87393604358E-01	Apriori rate (us/s)	4.87402525857E-01	Resid rate (us/s)	-8.92150E-06	+/- 2.6E-09
Total phase (deg)	141.2	Apriori accel (us/s/s)	-3.83218805686E-05	Resid phase (deg)	221.7	+/- 11.0

ph/seg (deg)	RMS 78.6	Theor. 90.3	Amplitude Search (2048X8) 0.170	0.227 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	167.2	157.6	Interp. 0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	15.6	Inc. seg. avg. 0.214		Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	12.3	27.2	Inc. frq. avg. 0.219		Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 22.9 el 40.7 pa -100.2 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8865.822 -8956.272 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uY...0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uY.W.49.0RUI3R



Fringe quality 0

SNR 5.4

Int time 478.986

Amp 0.188

Phase -5.0

PFD 8.8e-01

Delays (us)

SBD 0.119332

MBD -0.000486

Fringe rate (Hz)

0.316514

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052301.26

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153213

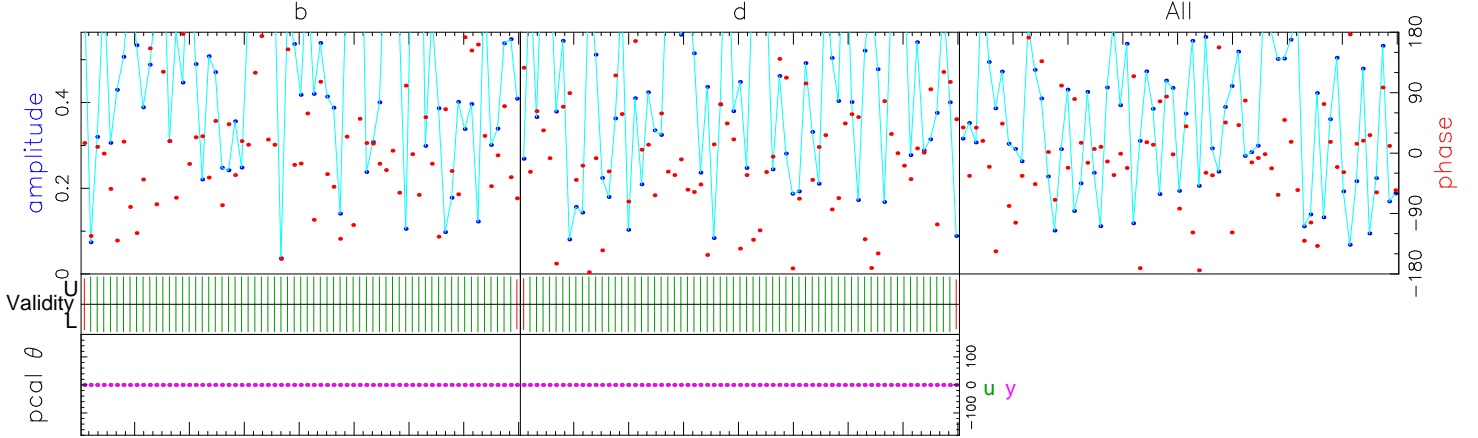
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-8.6	0.8	Phase	-5.0				
0.2	0.1	Ampl.	0.2				
144.1	198.0	Sbd box	144.3				
U/L 937/937	937/937	APs used					
u 0	0	PC freqs					
y 0	0	PC freqs					
u:y 0:0	0:0	PC phase					
u:y 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
y 1000	1000						
u W01UL,W01LL	W03UL,W03LL	Chan ids					
y W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.32000212300E+02	Apriori delay (usec)	-3.32124726507E+02	Resid mbdelay (usec)	-4.85794E-04	+/-	9.2E-04
Sband delay (usec)	-3.32005394507E+02	Apriori clock (usec)	-2.2495914E+01	Resid sbdelay (usec)	1.19332E-01	+/-	1.6E-03
Phase delay (usec)	-3.32124726668E+02	Apriori clockrate (us/s)	-2.8999998E-07	Resid phdelay (usec)	-1.61615E-07	+/-	3.4E-07
Delay rate (us/s)	3.27860823020E-03	Apriori rate (us/s)	3.27493381902E-03	Resid rate (us/s)	3.67441E-06	+/-	2.5E-09
Total phase (deg)	-343.9	Apriori accel (us/s/s)	-1.37779621363E-06	Resid phase (deg)	-5.0	+/-	10.6

ph/seg (deg) 76.4 87.0 Search (2048X8) 0.170 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

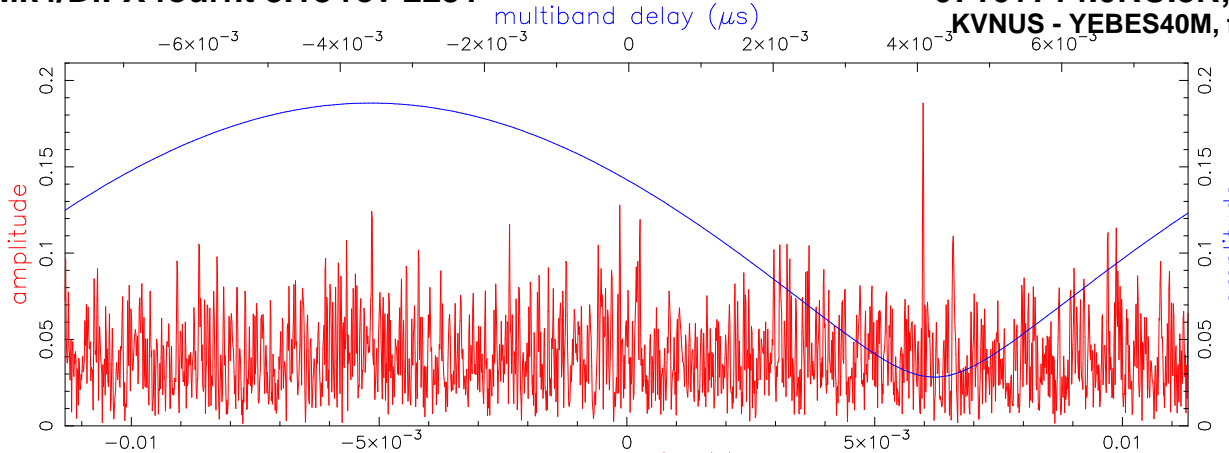
amp/seg (%) 130.8 151.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 15.0 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

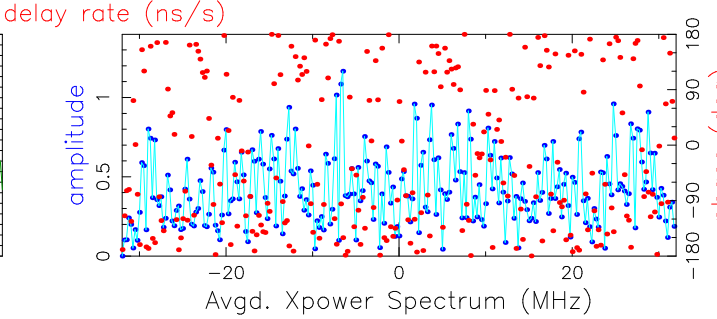
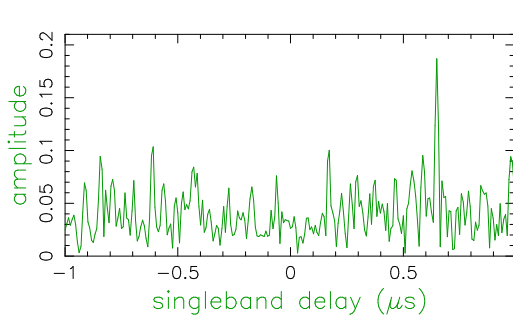
amp/frq (%) 23.2 26.2 Inc. frq. avg. 0.178 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

u: az 22.9 el 40.7 pa -100.2 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) -63.740 -399.285 ion window (TEC) 0.00 0.00 simultaneous interpolator

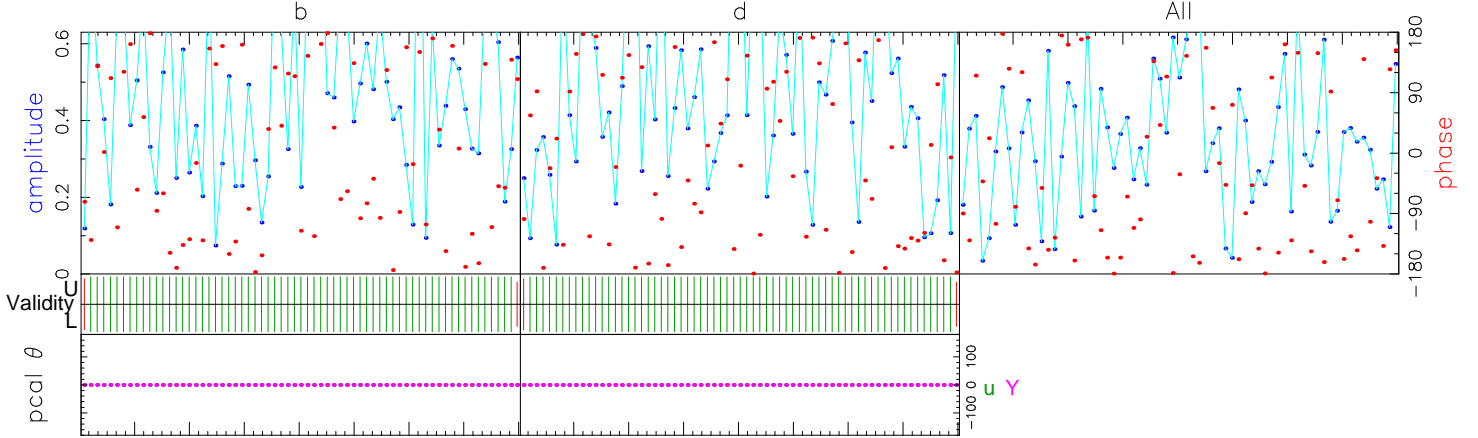
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uy..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uy.W.55.0RUI3R



Fringe quality 0
 SNR 5.6
 Int time 478.344
 Amp 0.210
 Phase -346.4
 PFD 5.0e-01
 Delays (us)
 SBD 0.648479
 MBD -0.003577
 Fringe rate (Hz)
 0.515082
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052300.74
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153214
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"



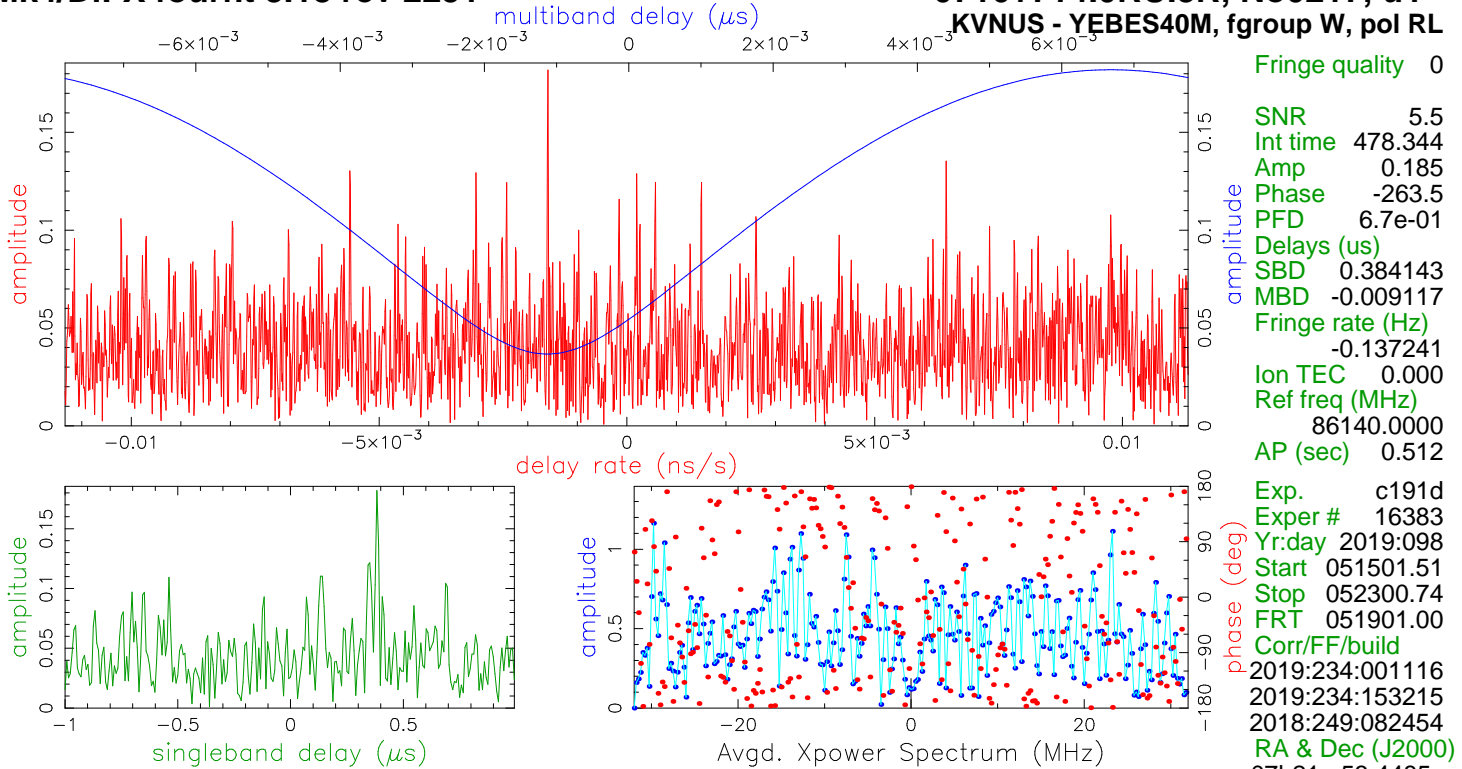
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



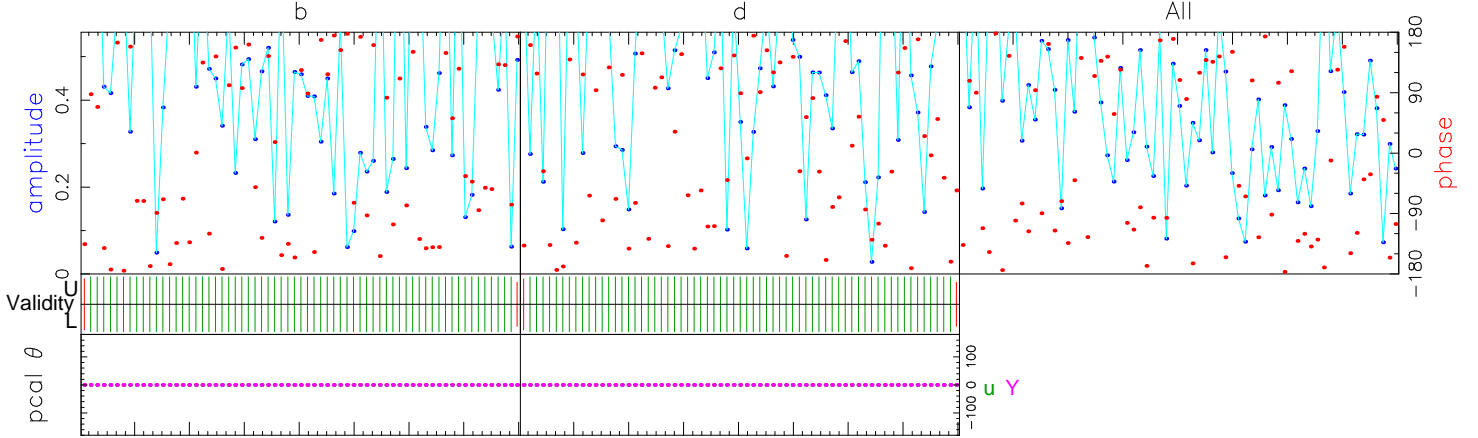
86156.00	86220.00	Freq (MHz)	All				
-166.4	-166.4	Phase	-166.4				
0.2	0.2	Ampl.	0.2				
211.5	212.2	Sbd box	212.0				
U/L 936/936	936/936	APs used					
u 0	0	PC freqs					
Y 1000	1000	PC freqs					
u:Y 0:0	0:0	PC phase					
u:Y 0:0	0:0	Manl PC					
Y 1000	1000	PC amp					
u W01UL,W01LL	W03UL,W03LL	Chan ids					
Y W01UR,W01LR	W03UR,W03LR	Tracks					
Group delay (usec)(sbd)	5.82467072278E+03	Apriori delay (usec)	5.82401804941E+03	Resid mbdelay (usec)	-3.57664E-03	+/-	8.9E-04
Sband delay (usec)	5.82466652841E+03	Apriori clock (usec)	-5.9685469E+00	Resid sbdelay (usec)	6.48479E-01	+/-	1.5E-03
Phase delay (usec)	5.82401804405E+03	Apriori clockrate (us/s)	-3.6999998E-08	Resid phdelay (usec)	-5.36608E-06	+/-	3.3E-07
Delay rate (us/s)	4.87408505443E-01	Apriori rate (us/s)	4.87402525857E-01	Resid rate (us/s)	5.97959E-06	+/-	2.4E-09
Total phase (deg)	-66.9	Apriori accel (us/s/s)	-3.83218805686E-05	Resid phase (deg)	-346.4	+/-	10.3

ph/seg (deg)	RMS 75.6	Theor. 83.9	Amplitude 0.210 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	127.9	146.5	Search (2048X8) 0.182	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	14.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	15.1	25.3	Inc. seg. avg. 0.190	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.204	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite		

u: az 22.9 el 40.7 pa -100.2 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8865.822 -8956.272 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uY.W.69.0RUI3R



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

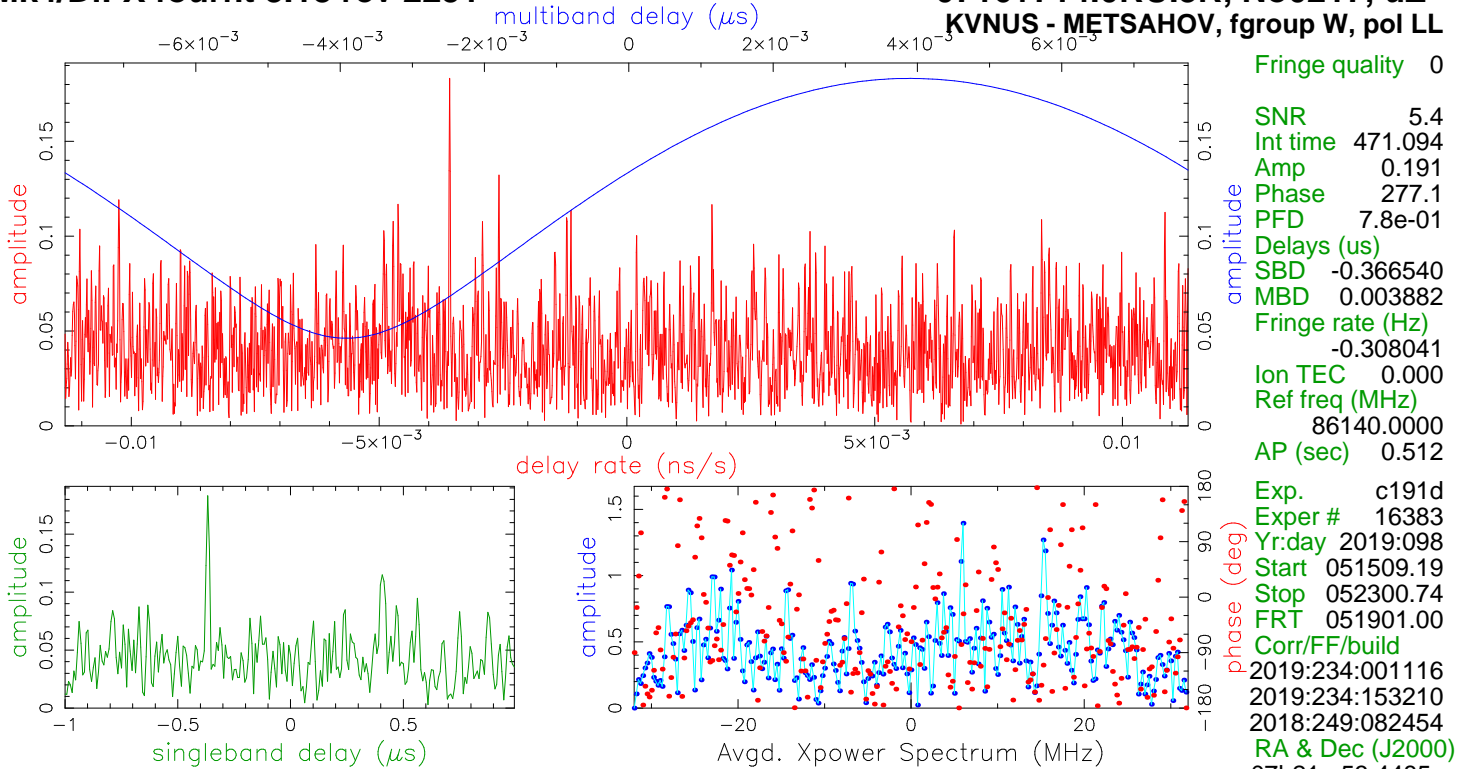


86156.00		86220.00		Freq (MHz)	All
-175.1		-171.0		Phase	-173.5
0.2		0.1		Ampl.	0.2
178.0		113.5		Sbd box	178.2
U/L 936/936		936/936		APs used	
u 0		0		PC freqs	
Y 1000		1000		PC freqs	
u:Y 0:0		0:0		PC phase	
u:Y 0:0		0:0		Manl PC	
Y 1000		1000		PC amp	
Y 1000		1000			
u W01UR,W01LR		W03UR,W03LR		Chan ids	
Y W01UL,W01LL		W03UL,W03LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	5.82439955691E+03	Apriori delay (usec)	5.82401804941E+03	Resid mbdelay (usec)	-9.11750E-03 +/- 9.0E-04
Sband delay (usec)	5.82440219241E+03	Apriori clock (usec)	-5.9685469E+00	Resid sbdelay (usec)	3.84143E-01 +/- 1.6E-03
Phase delay (usec)	5.82401804382E+03	Apriori clockrate (us/s)	-3.6999998E-08	Resid phdelay (usec)	-5.59385E-06 +/- 3.4E-07
Delay rate (us/s)	4.87400932620E-01	Apriori rate (us/s)	4.87402525857E-01	Resid rate (us/s)	-1.59324E-06 +/- 2.4E-09
Total phase (deg)	-343.9	Apriori accel (us/s/s)	-3.83218805686E-05	Resid phase (deg)	-263.5 +/- 10.4

ph/seg (deg)	RMS 72.7	Theor. 85.2	Amplitude 0.185 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	149.7	148.8	Search (2048X8) 0.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.7	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	20.0	25.7	Inc. seg. avg. 0.186	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.178	Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

u: az 22.9 el 40.7 pa -100.2 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8865.822 -8956.272 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uY.W.82.0RUI3R



Fringe quality 0

SNR 5.4

Int time 471.094

Amp 0.191

Phase 277.1

PFD 7.8e-01

Delays (us)

SBD -0.366540

MBD 0.003882

Fringe rate (Hz)

-0.308041

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051509.19

Stop 052300.74

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153210

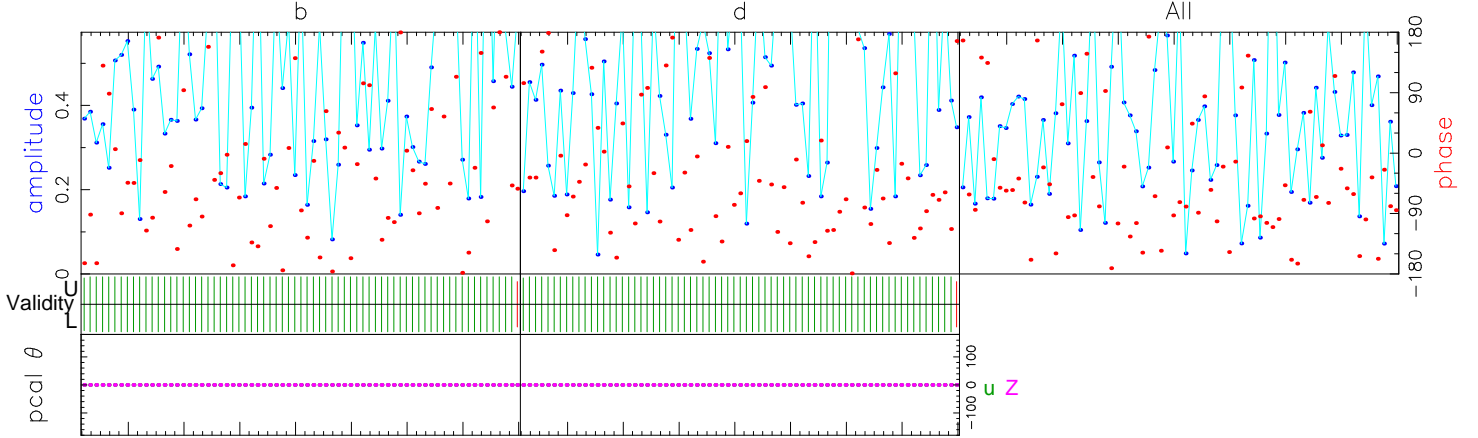
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-83.2	-82.8	Phase	-82.9				
0.1	0.2	Ampl.	0.2				
148.8	81.9	Sbd box	82.1				
U/L 921/921	921/921	APs used					
u 0	0	PC freqs					
Z 1000	1000	PC freqs					
u:Z 0:0	0:0	PC phase					
u:Z 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
Z 1000	1000						
u W01UL,W01LL	W03UL,W03LL	Chan ids					
Z W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.41864559791E+02	Apriori delay (usec)	-1.41493442135E+02	Resid mbdelay (usec)	3.88234E-03	+/-	9.1E-04
Sband delay (usec)	-1.41859982135E+02	Apriori clock (usec)	9.7036171E-01	Resid sbdelay (usec)	-3.66540E-01	+/-	1.6E-03
Phase delay (usec)	-1.41493444810E+02	Apriori clockrate (us/s)	1.5600000E-07	Resid phdelay (usec)	-2.67436E-06	+/-	3.4E-07
Delay rate (us/s)	3.29344631619E-01	Apriori rate (us/s)	3.29348207668E-01	Resid rate (us/s)	-3.57605E-06	+/-	2.5E-09
Total phase (deg)	239.1	Apriori accel (us/s/s)	-2.99104094593E-05	Resid phase (deg)	277.1	+/-	10.5

ph/seg (deg) 78.4 88.6 Search (2048X8) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

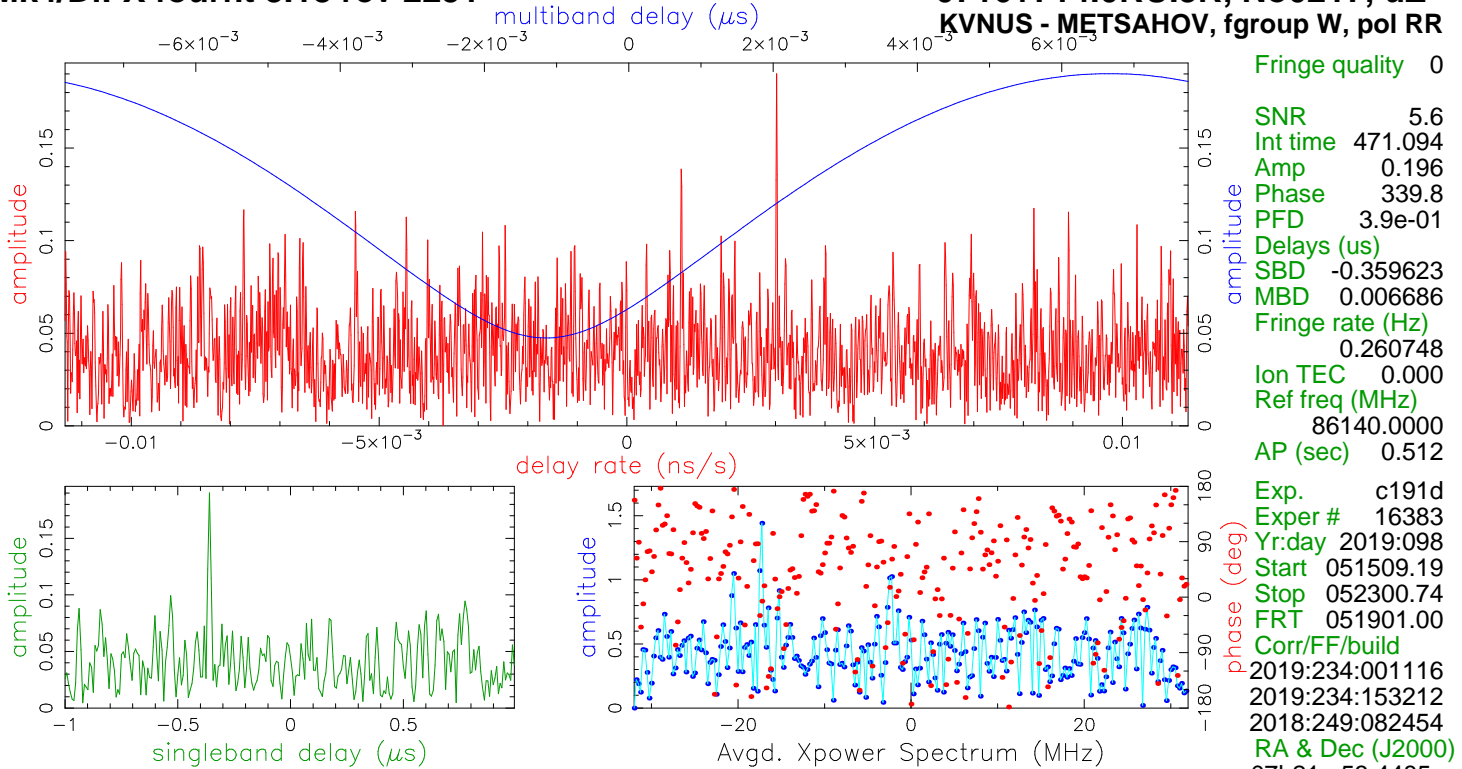
amp/seg (%) 147.6 154.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 14.9 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

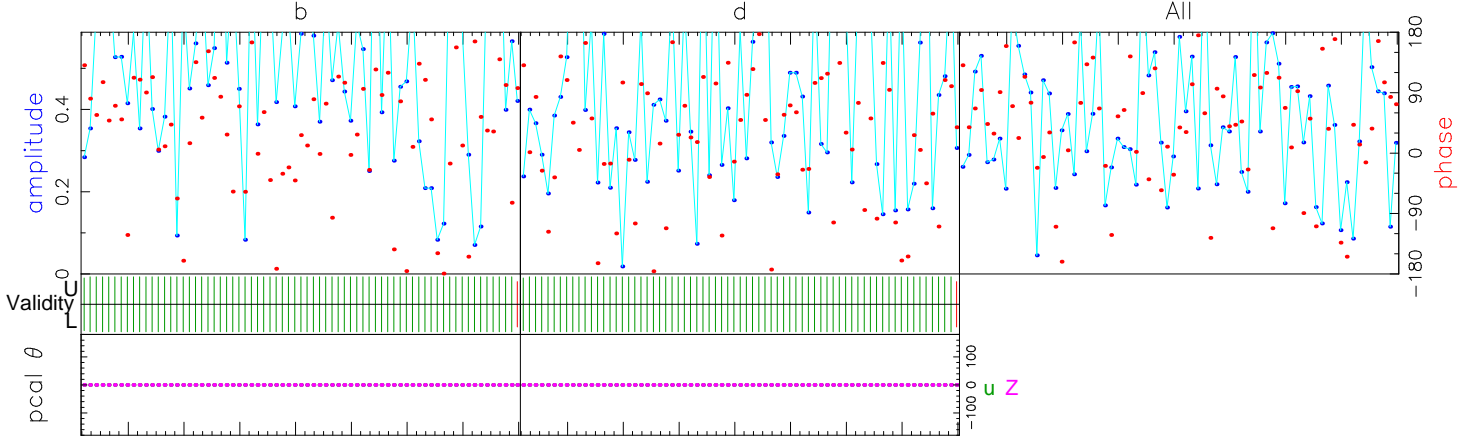
amp/frq (%) 25.2 26.0 Inc. frq. avg. 0.185 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

u: az 22.9 el 40.7 pa -100.2 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -6003.599 -7667.423 ion window (TEC) 0.00 0.00

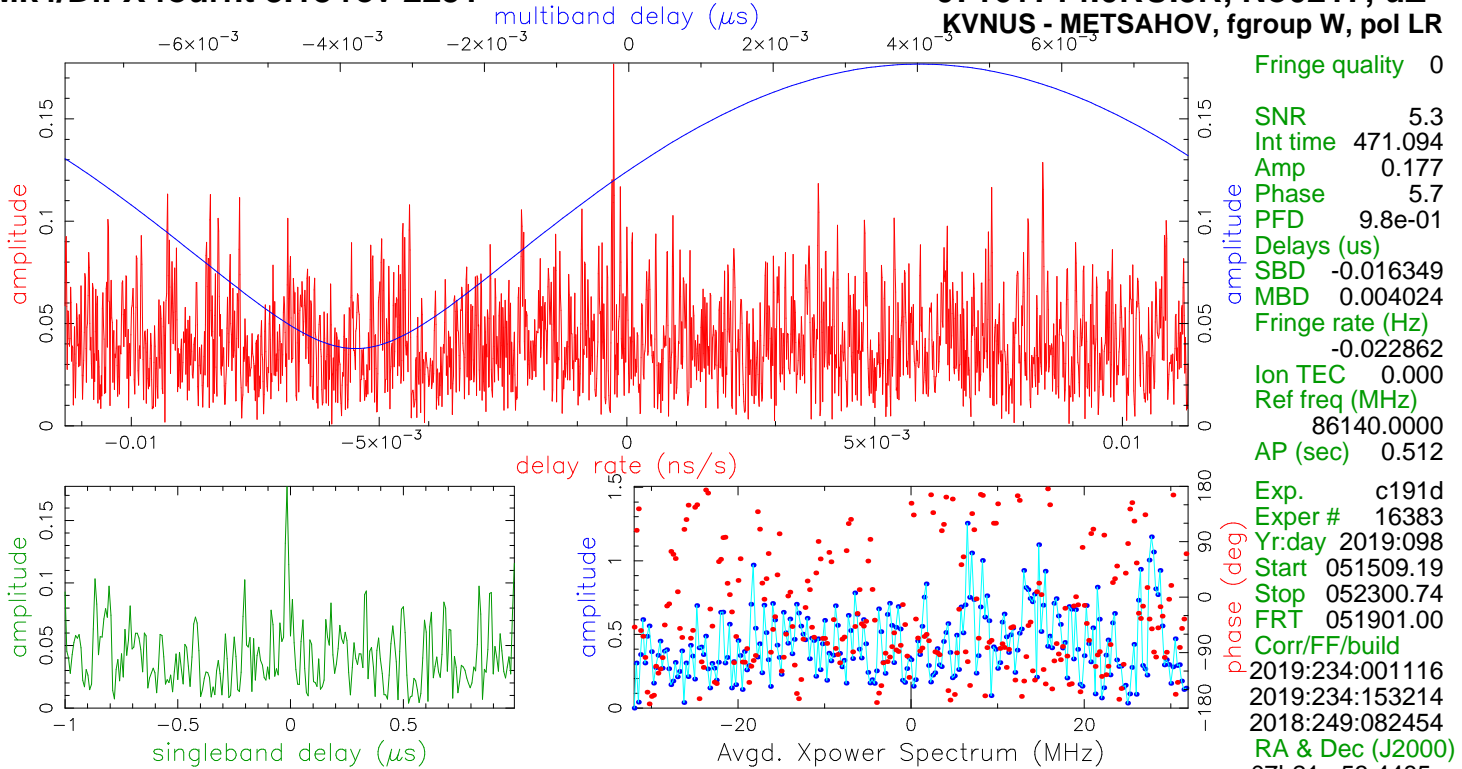
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uZ.W.27.0RUI3R simultaneous interpolator



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
70.0		69.5		Phase	69.8
0.2		0.1		Ampl.	0.2
83.1		9.1		Sbd box	83.0
U/L 921/921		921/921		APs used	
u 0		0		PC freqs	
Z 1000		1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W01UR,W01LR		W03UR,W03LR		Chan ids	
Z W01UR,W01LR		W03UR,W03LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.41846131533E+02	Apriori delay (usec)	-1.41493442135E+02	Resid mbdelay (usec)	6.68560E-03 +/- 8.8E-04
Sband delay (usec)	-1.41853064635E+02	Apriori clock (usec)	9.7036171E-01	Resid sbdelay (usec)	-3.59623E-01 +/- 1.5E-03
Phase delay (usec)	-1.41493439884E+02	Apriori clockrate (us/s)	1.5600000E-07	Resid phdelay (usec)	2.25165E-06 +/- 3.3E-07
Delay rate (us/s)	3.29351234694E-01	Apriori rate (us/s)	3.29348207668E-01	Resid rate (us/s)	3.02703E-06 +/- 2.4E-09
Total phase (deg)	301.8	Apriori accel (us/s/s)	-2.99104094593E-05	Resid phase (deg)	339.8 +/- 10.1
RMS	78.6	Theor.	85.5	Amplitude	0.196 +/- 0.035
ph/seg (deg)	78.6	Search (2048X8)	0.178	Pcal mode:	MANUAL, MANUAL
amp/seg (%)	136.7	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)
ph/frq (deg)	0.0	Inc. seg. avg.	0.185	Bits/sample:	2x2
amp/frq (%)	24.9	Inc. frq. avg.	0.190	Sample rate(MSamp/s):	64
u: az 22.9 el 40.7 pa -100.2		Z: az 3.4 el 41.6 pa -5.4		Data rate(Mb/s):	512
		u,v (fr/asec)	-6003.599 -7667.423	nlags:	128
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/uZ..0RUI3R		t_cohere	infinite
		Output file: /Exps/c191d/v1/1234/No0217/uZ.W.54.0RUI3R		ion window (TEC)	0.00 0.00
					simultaneous interpolator

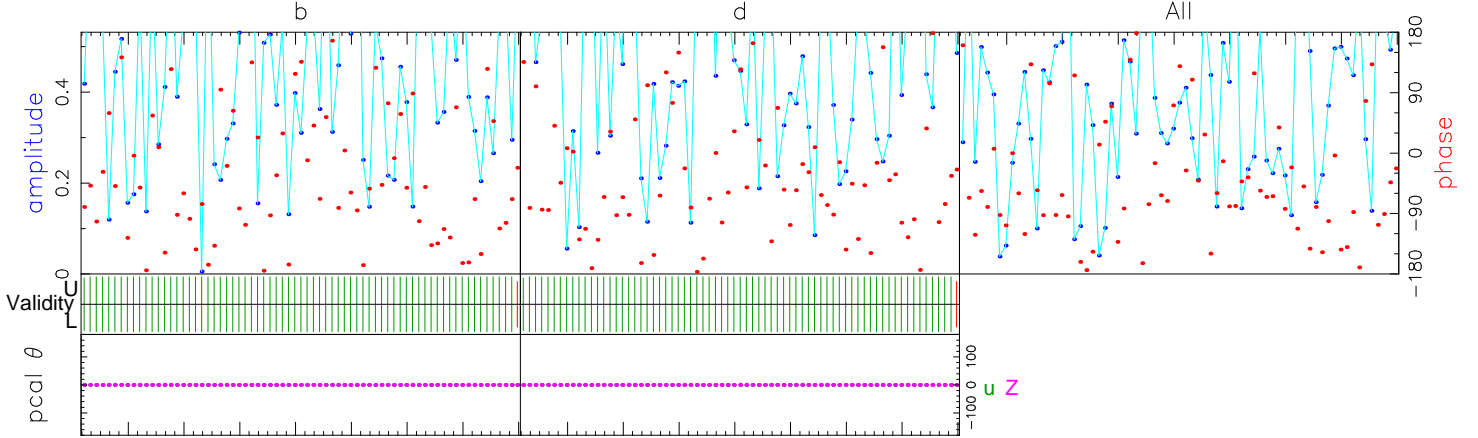


Fringe quality 0

SNR 5.3
Int time 471.094
Amp 0.177
Phase 5.7
PFD 9.8e-01
Delays (us)
SBD -0.016349
MBD 0.004024
Fringe rate (Hz)
-0.022862
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

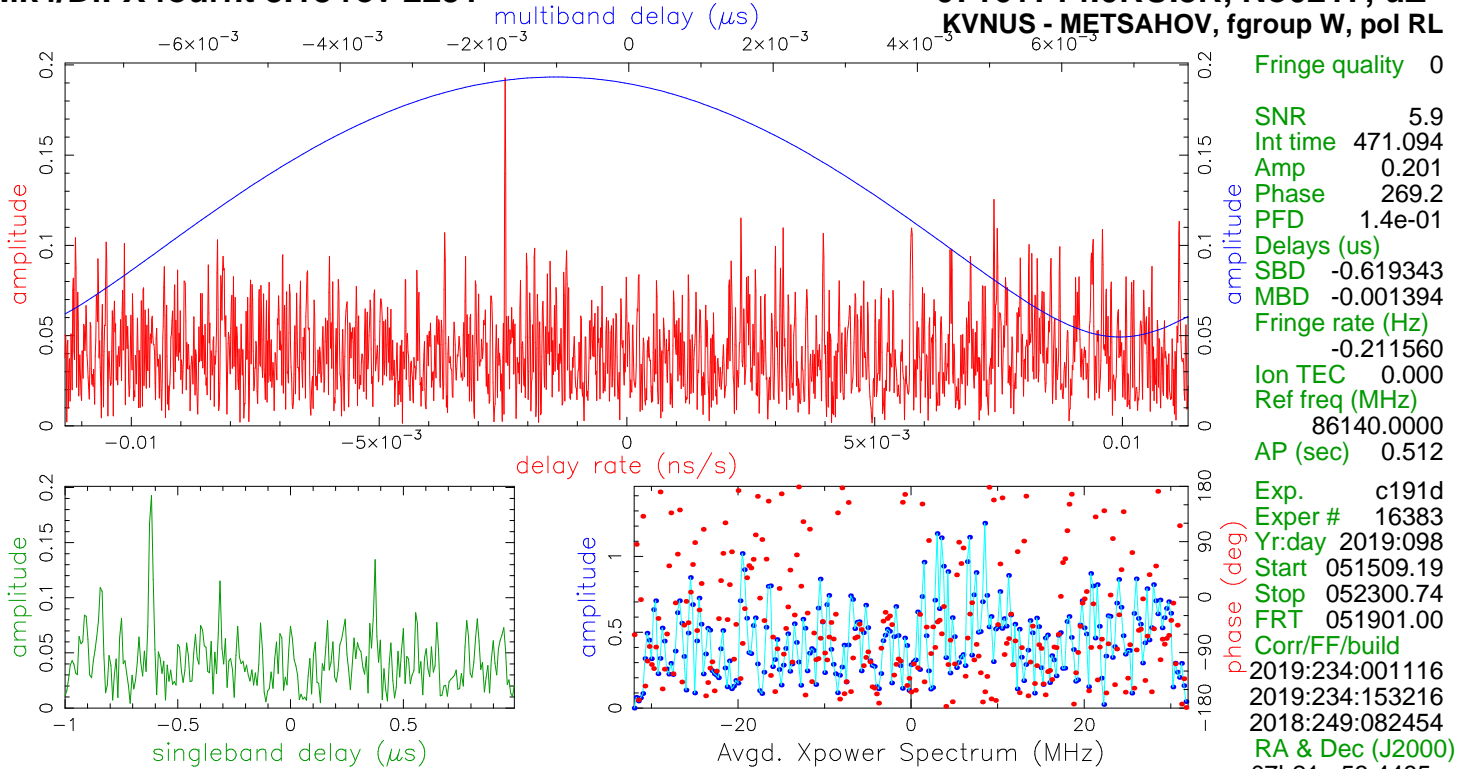
Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051509.19
Stop 052300.74
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153214
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

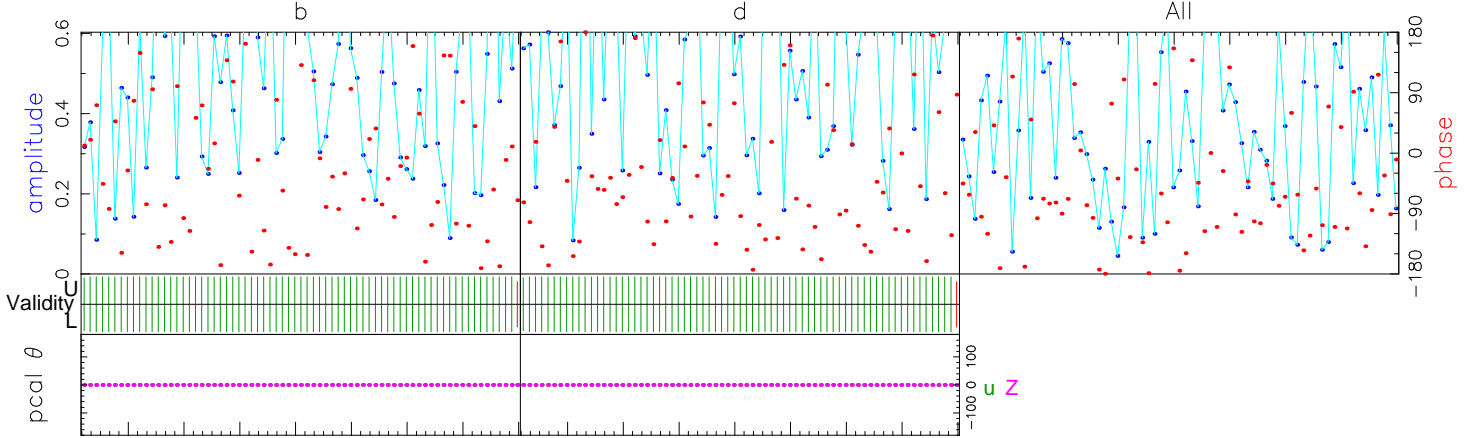


86156.00	86220.00	Freq (MHz)	All				
-84.4	-84.3	Phase	-84.3				
0.1	0.2	Ampl.	0.2				
1.2	127.1	Sbd box	126.9				
U/L 921/921	921/921	APs used					
u 0	0	PC freqs					
Z 1000	1000	PC freqs					
u:Z 0:0	0:0	PC phase					
u:Z 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
Z 1000	1000						
u W01UL,W01LL	W03UL,W03LL	Chan ids					
Z W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.41505043161E+02	Apriori delay (usec)	-1.41493442135E+02	Resid mbdelay (usec)	4.02397E-03	+/-	9.5E-04
Sband delay (usec)	-1.41509791135E+02	Apriori clock (usec)	9.7036171E-01	Resid sbdelay (usec)	-1.63490E-02	+/-	1.6E-03
Phase delay (usec)	-1.41493444854E+02	Apriori clockrate (us/s)	1.5600000E-07	Resid phdelay (usec)	-2.71895E-06	+/-	3.5E-07
Delay rate (us/s)	3.29347942262E-01	Apriori rate (us/s)	3.29348207668E-01	Resid rate (us/s)	-2.65407E-07	+/-	2.6E-09
Total phase (deg)	-32.3	Apriori accel (us/s/s)	-2.99104094593E-05	Resid phase (deg)	5.7	+/-	10.9

ph/seg (deg) 80.1 91.8 Theor. Amplitude 0.177 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 163.7 160.2 Search (2048X8) 0.176 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 15.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.3 26.9 Inc. seg. avg. 0.168 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 22.9 el 40.7 pa -100.2 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -6003.599 -7667.423 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uZ.W.72.0RUI3R simultaneous interpolator



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

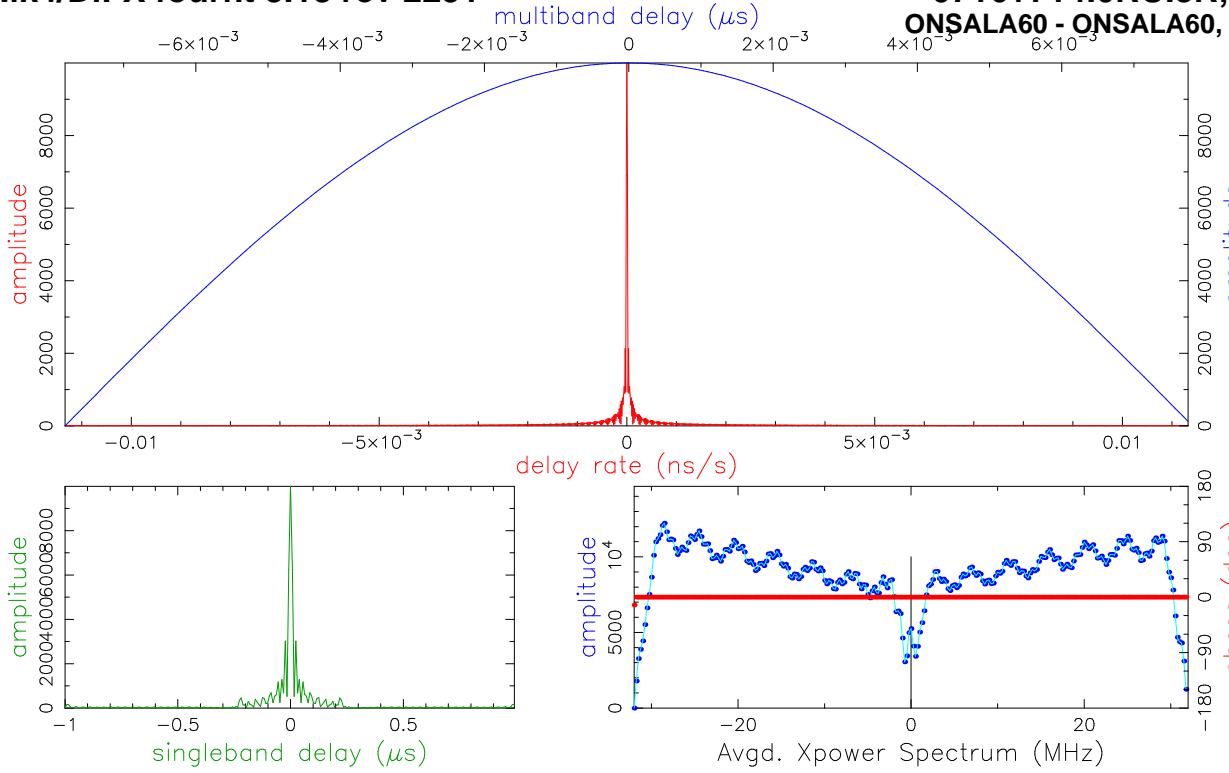


86156.00		86220.00		Freq (MHz)	All
-96.3		-87.5		Phase	-90.8
0.1		0.2		Ampl.	0.2
177.0		49.7		Sbd box	49.7
U/L 921/921		921/921		APs used	
u 0		0		PC freqs	
Z 1000		1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W01UR,W01LR		W03UR,W03LR		Chan ids	
Z W01UL,W01LL		W03UL,W03LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.42119836121E+02	Apriori delay (usec)	-1.41493442135E+02	Resid mbdelay (usec)	-1.39399E-03 +/- 8.5E-04
Sband delay (usec)	-1.42112784635E+02	Apriori clock (usec)	9.7036171E-01	Resid sbdelay (usec)	-6.19343E-01 +/- 1.5E-03
Phase delay (usec)	-1.41493445062E+02	Apriori clockrate (us/s)	1.5600000E-07	Resid phdelay (usec)	-2.92646E-06 +/- 3.2E-07
Delay rate (us/s)	3.29345751670E-01	Apriori rate (us/s)	3.29348207668E-01	Resid rate (us/s)	-2.45600E-06 +/- 2.3E-09
Total phase (deg)	231.3	Apriori accel (us/s/s)	-2.99104094593E-05	Resid phase (deg)	269.2 +/- 9.8

ph/seg (deg)	82.8	Theor.	82.5	Amplitude	0.201 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	135.3	Search (2048X8)	0.187	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.187	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	25.0	Inc. seg. avg.	0.187	Inc. frq. avg.	0.191	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

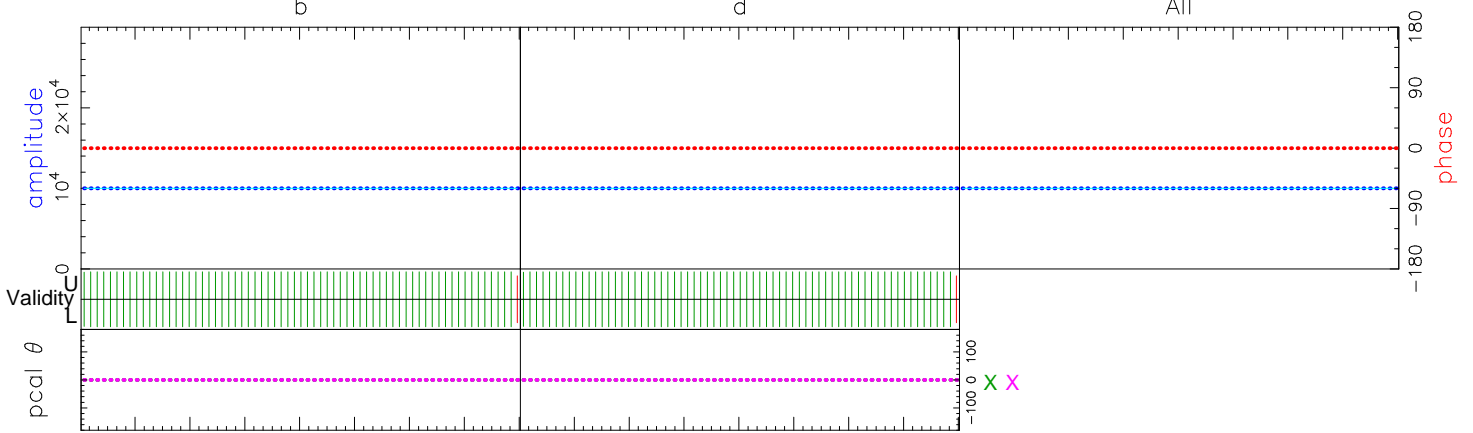
u: az 22.9 el 40.7 pa -100.2 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -6003.599 -7667.423 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/uZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/uZ.W.86.0RUI3R



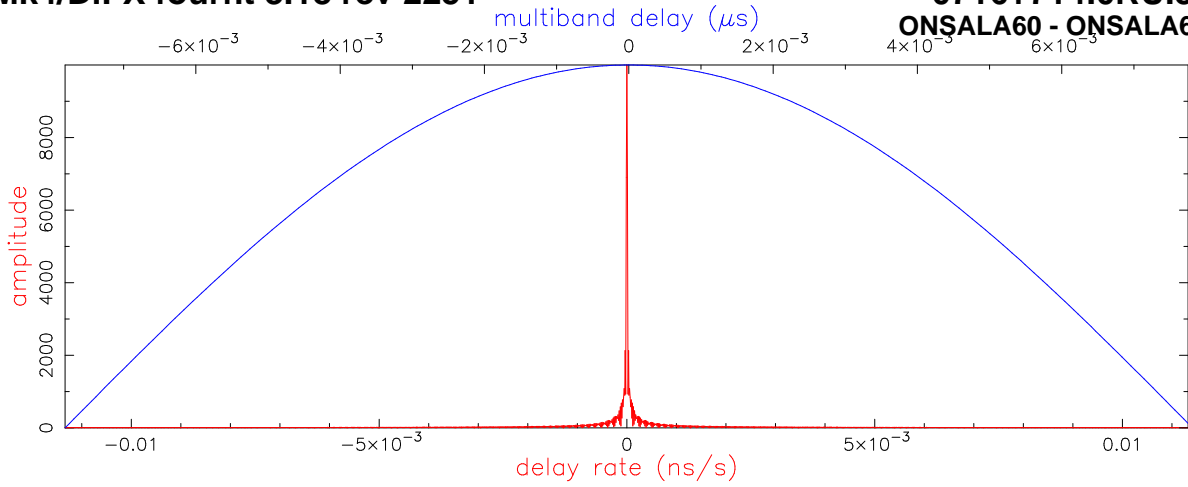
Fringe quality 9
 SNR 299274.6
 Int time 479.076
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153209
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

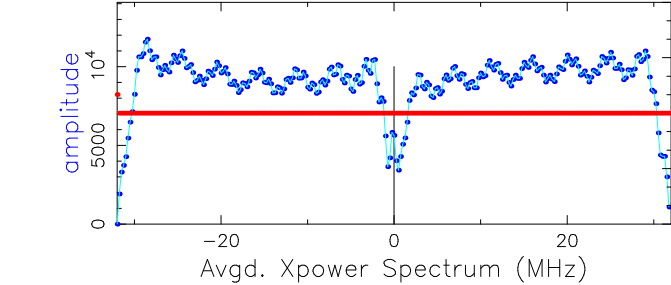
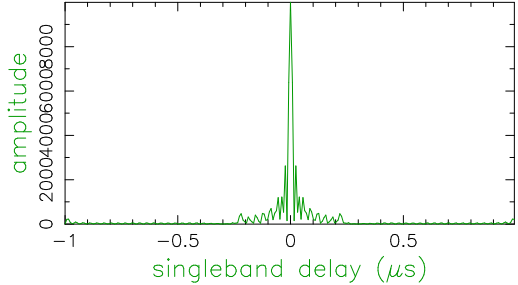


86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 936/936	936/936	APs used	
X 1000	1000	PC freqs	
X 1000	1000	PC freqs	
X:X 0:0	0:0	PC phase	
X:X 0:0	0:0	Manl PC	
X 1000	1000	PC amp	
X 1000	1000		
X W01UL,W01LL	W03UL,W03LL	Chan ids	
X W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.5E-14
		Resid phase (deg)	0.0 +/- 0.0

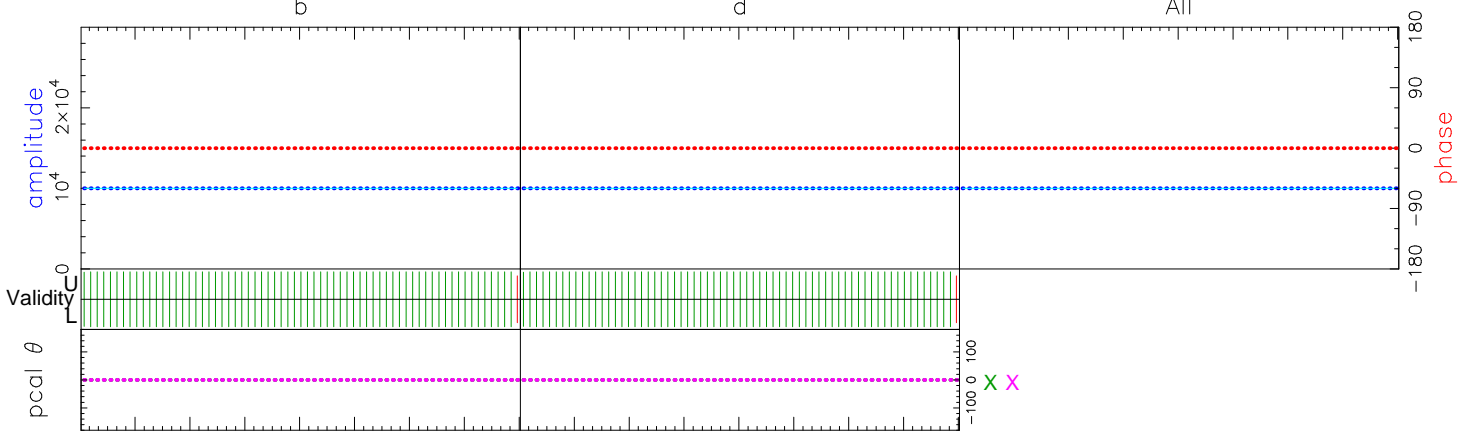
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X8) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 358.2 el 38.7 pa 2.3 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/XX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/XX.W.23.0RUI3R



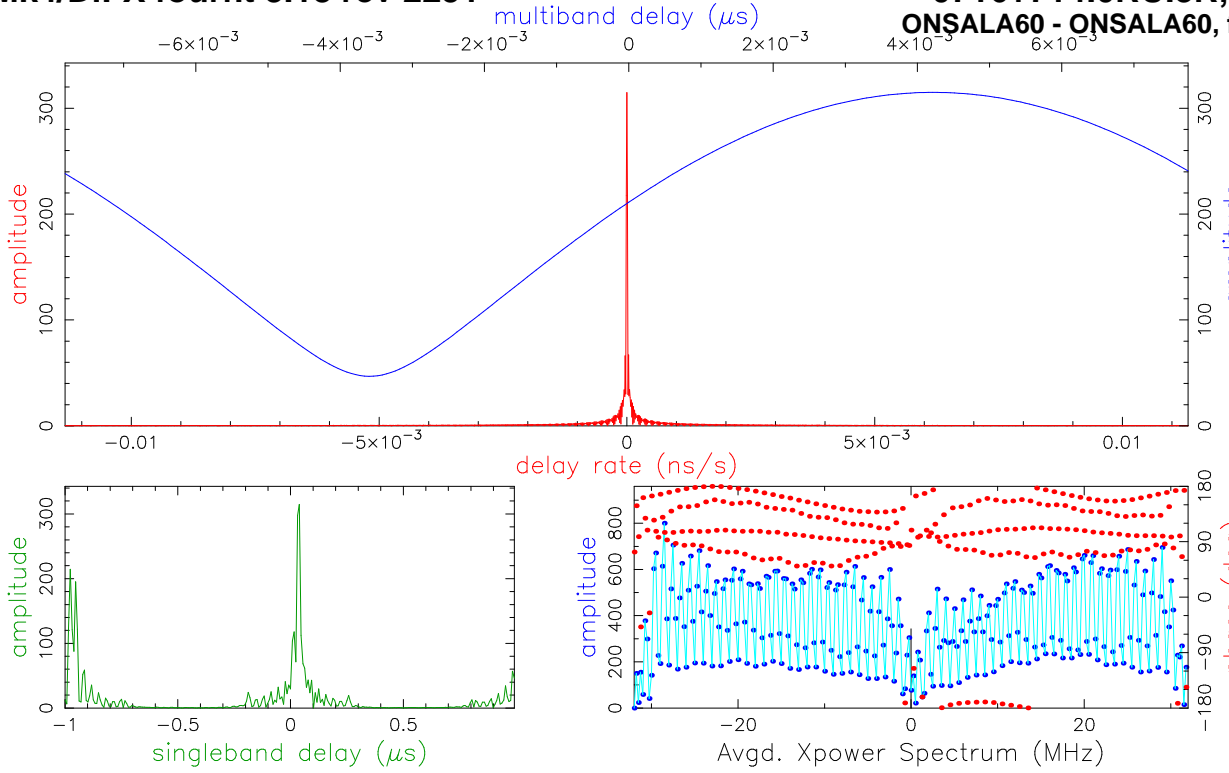
Fringe quality 9
 SNR 299274.6
 Int time 479.076
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153211
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 936/936	936/936	APs used	
X 1000	1000	PC freqs	
X 1000	1000	PC freqs	
X:X 0:0	0:0	PC phase	
X:X 0:0	0:0	Manl PC	
X 1000	1000	PC amp	
X 1000	1000		
X W01UR,W01LR	W03UR,W03LR	Chan ids	
X W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.5E-14
		Resid phase (deg)	0.0 +/- 0.0
RMS	Theor.	Amplitude	9999.999 +/- 0.033
ph/seg (deg)	0.0	Search (2048X8)	9999.999
amp/seg (%)	0.0	Interp.	0.000
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000
amp/frq (%)	0.0	Inc. frq. avg.	9999.999
X: az 358.2 el 38.7 pa 2.3		u,v (fr/asec) 0.000 0.000	
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/XX..0RUI3R	
		Output file: /Exps/c191d/v1/1234/No0217/XX.W.35.0RUI3R	

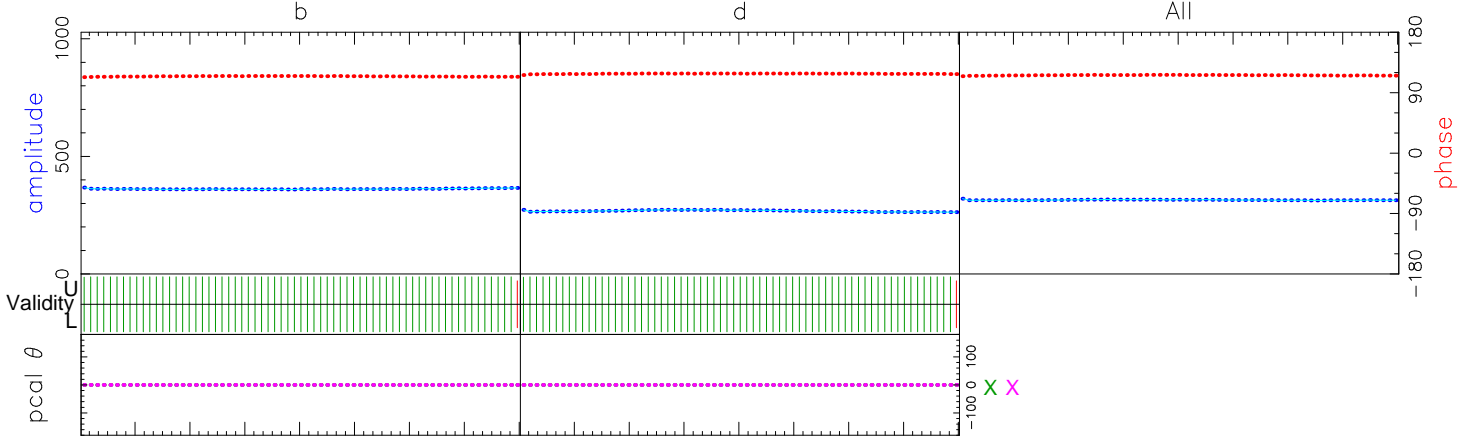


Fringe quality 9

SNR 10258.2
 Int time 479.076
 Amp 342.768
 Phase -64.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.035612
 MBD 0.004049
 Fringe rate (Hz)
 -0.000007
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

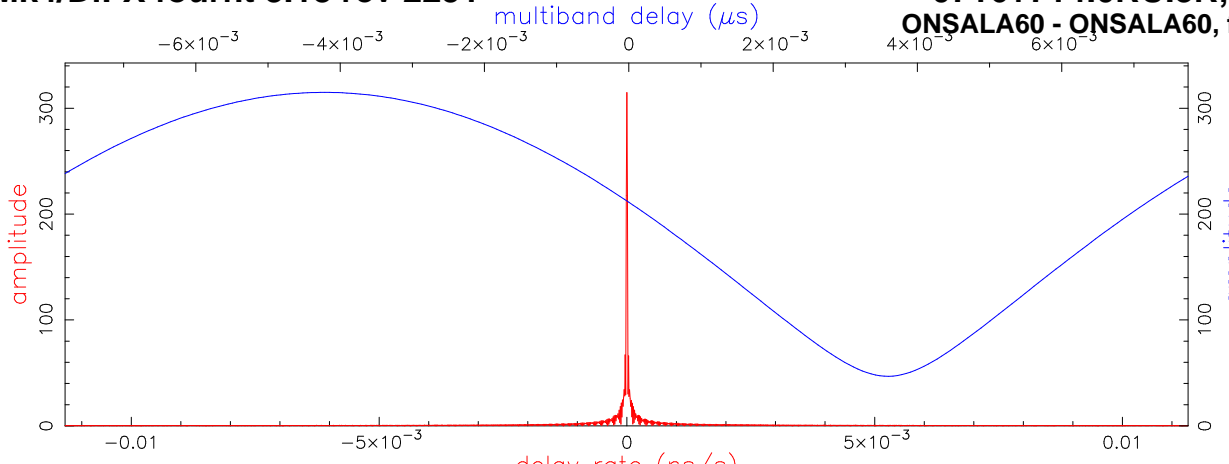
Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153213
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
114.2	118.1	Phase	115.9
361.8	268.2	Ampl.	315.0
133.7	133.4	Sbd box	133.6
U/L 936/936	936/936	APs used	
X 1000	1000	PC freqs	
X 1000	1000	PC freqs	
X:X 0:0	0:0	PC phase	
X:X 0:0	0:0	Manl PC	
X 1000	1000	PC amp	
X 1000	1000		
X W01UL,W01LL	W03UL,W03LL	Chan ids	
X W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	3.52993750000E-02	Apriori delay (usec)	0.00000000000E+00
Sband delay (usec)	3.56120000000E-02	Apriori clock (usec)	0.00000000000E+00
Phase delay (usec)	3.73610486585E-06	Apriori clockrate (us/s)	0.00000000000E+00
Delay rate (us/s)	-8.21926838718E-11	Apriori rate (us/s)	0.00000000000E+00
Total phase (deg)	-64.1	Apriori accel (us/s/s)	0.00000000000E+00
		Resid mbdelay (usec)	4.04938E-03 +/- 4.8E-07
		Resid sbdelay (usec)	3.56120E-02 +/- 8.4E-07
		Resid phdelay (usec)	3.73610E-06 +/- 1.8E-10
		Resid rate (us/s)	-8.21927E-11 +/- 1.3E-12
		Resid phase (deg)	-64.1 +/- 0.0

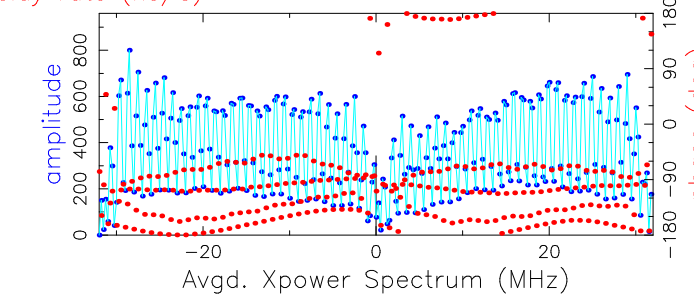
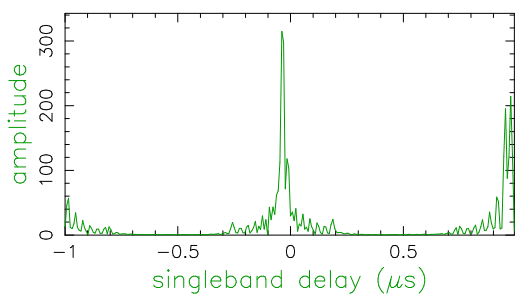
ph/seg (deg)	0.4	0.0	Amplitude	342.768 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	8.2	0.1	Search (2048X8)	314.353	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	15.9	0.0	Inc. seg. avg.	314.797	Sample rate(MSamp/s): 64	nlags: 128 t_cohere infinite	dr window (ns/s)	-0.011 0.011
			Inc. frq. avg.	314.968	Data rate(Mb/s): 512		ion window (TEC)	0.00 0.00



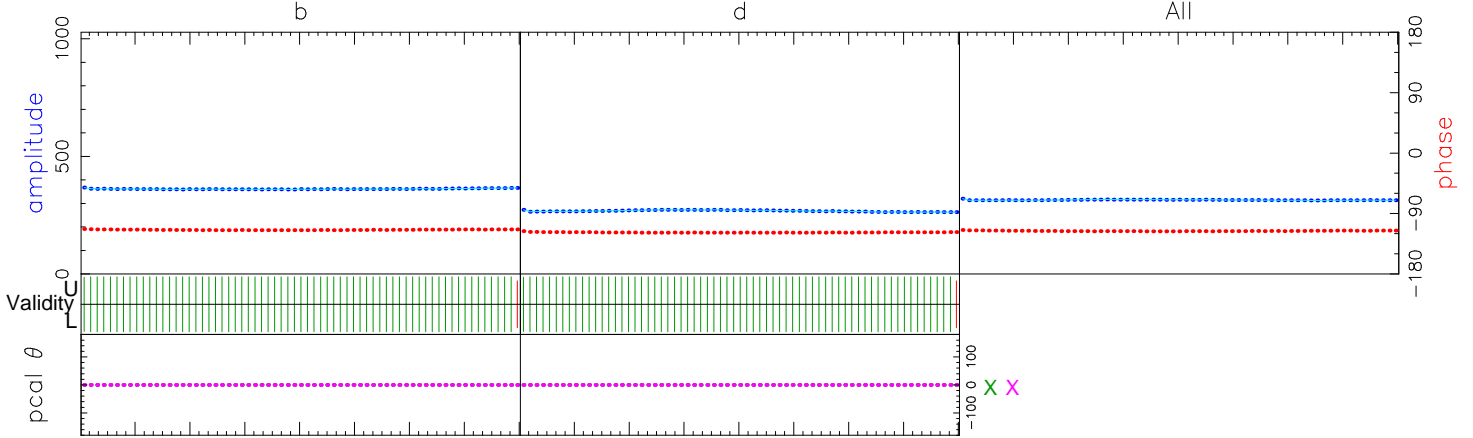
Fringe quality 9

SNR 10258.2
 Int time 479.076
 Amp 342.768
 Phase 64.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.035612
 MBD -0.004049
 Fringe rate (Hz)
 0.000007
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153215
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

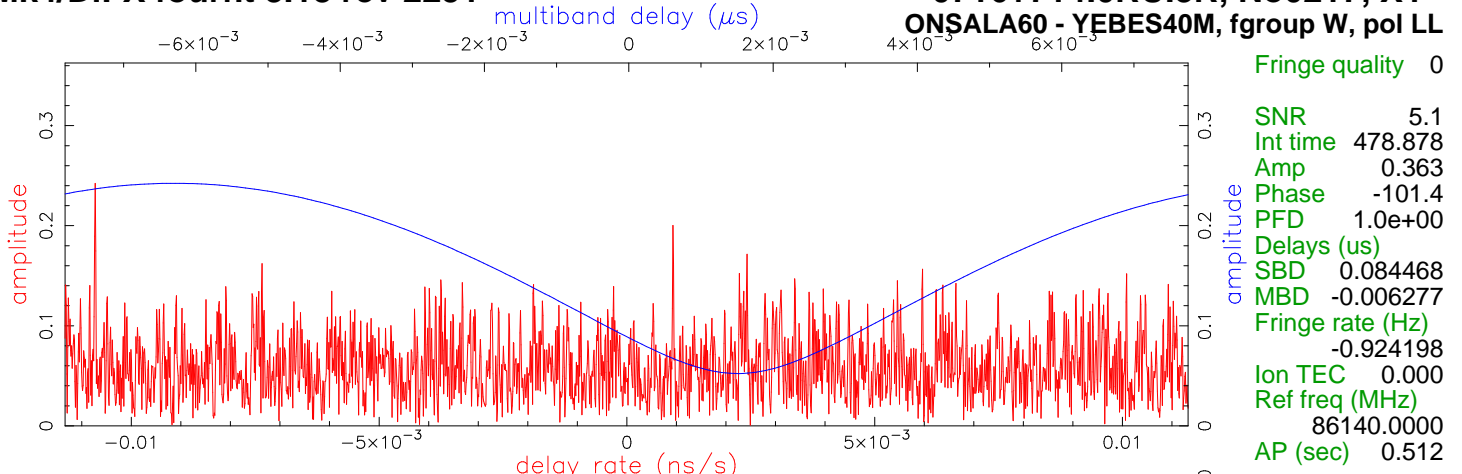


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-114.2	-118.1	Phase	-115.9				
361.8	268.2	Ampl.	315.0				
124.3	124.6	Sbd box	124.4				
U/L 936/936	936/936	APs used					
X 1000	1000	PC freqs					
X 1000	1000	PC freqs					
X:X 0:0	0:0	PC phase					
X:X 0:0	0:0	Manl PC					
X 1000	1000	PC amp					
X 1000	1000						
X W01UR,W01LR	W03UR,W03LR	Chan ids					
X W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.52993750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-4.04938E-03	+/-	4.8E-07
Sband delay (usec)	-3.56120000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-3.56120E-02	+/-	8.4E-07
Phase delay (usec)	-3.73610486578E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.73610E-06	+/-	1.8E-10
Delay rate (us/s)	8.21926838718E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	8.21927E-11	+/-	1.3E-12
Total phase (deg)	64.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	64.1	+/-	0.0

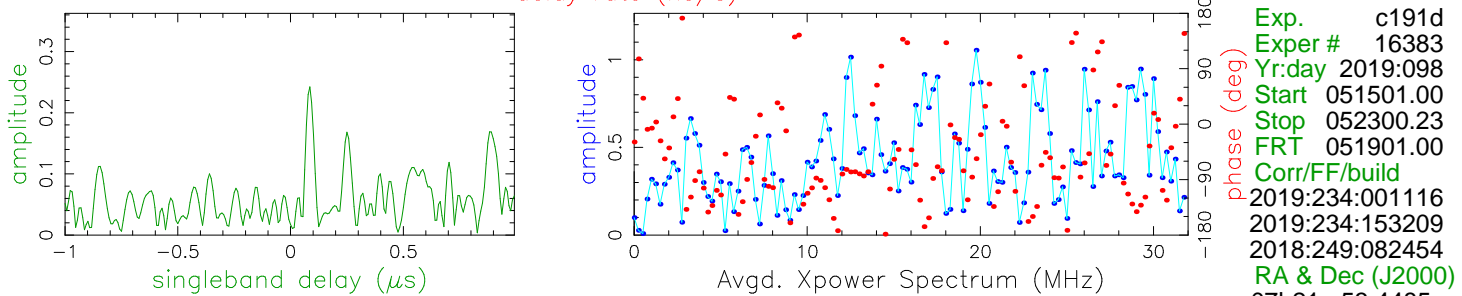
ph/seg (deg)	0.4	0.0	Amplitude	342.768 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	8.2	0.1	Search (2048X8)	314.353	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	15.9	0.0	Inc. seg. avg.	314.797	Sample rate(MSamp/s): 64	ion window (TEC)	0.00 0.00	
			Inc. frq. avg.	314.968	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite	



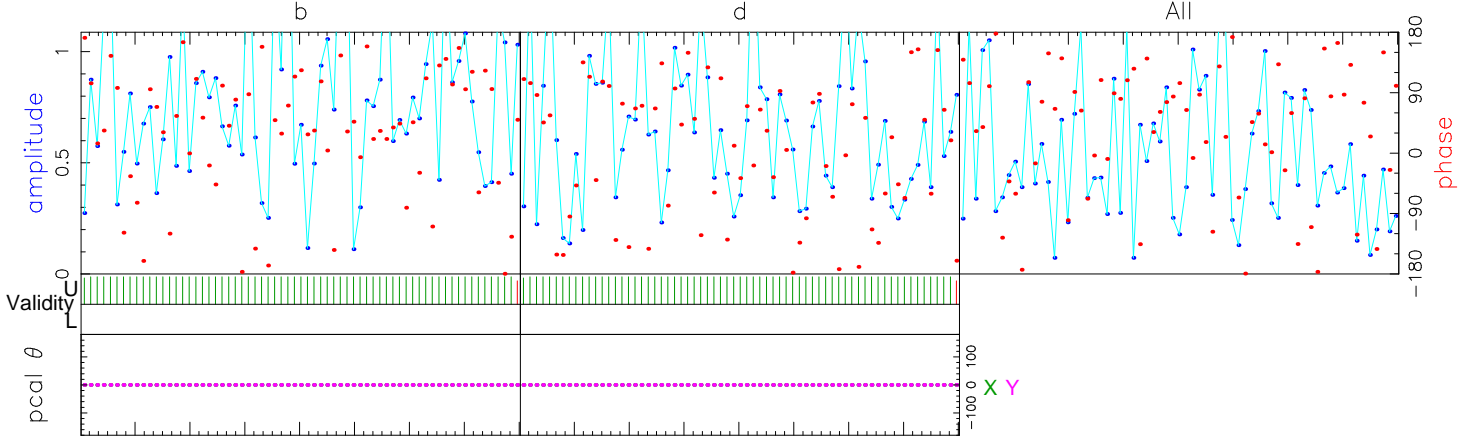
Fringe quality 0

SNR 5.1
Int time 478.878
Amp 0.363
Phase -101.4
PFD 1.0e+00
Delays (us)
SBD 0.084468
MBD -0.006277
Fringe rate (Hz)
-0.924198
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.00
Stop 052300.23
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153209
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

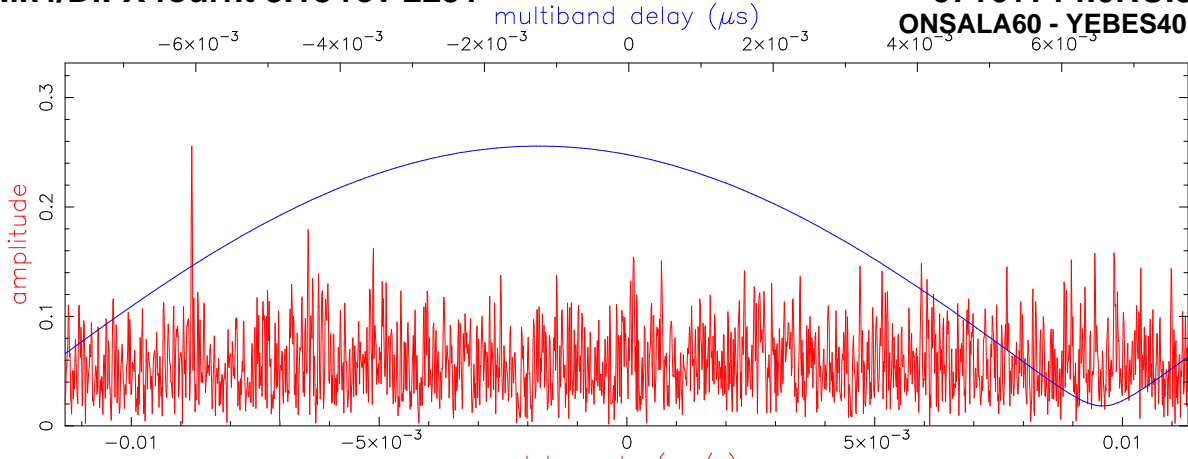


86156.00		86220.00		Freq (MHz)	All
78.9		78.3		Phase	78.6
0.4		0.3		Ampl.	0.3
140.6		246.0		Sbd box	139.8
U/L 936/0		936/0		APs used	
X 1000		1000		PC freqs	
Y 1000		1000		PC freqs	
X:Y 0:0		0:0		PC phase	
X:Y 0:0		0:0		Manl PC	
X 1000		1000		PC amp	
Y 1000		1000			
X W01UL		W03UL		Chan ids	
Y W01UL		W03UL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	5.14956831205E+03	Apriori delay (usec)	5.14948083902E+03	Resid mbdelay (usec)	-6.27697E-03 +/- 9.7E-04
Sband delay (usec)	5.14956530702E+03	Apriori clock (usec)	1.8150805E+01	Resid sbdelay (usec)	8.44680E-02 +/- 3.4E-03
Phase delay (usec)	5.14948084156E+03	Apriori clockrate (us/s)	2.5699999E-07	Resid phdelay (usec)	2.53615E-06 +/- 7.2E-07
Delay rate (us/s)	1.03211587521E-01	Apriori rate (us/s)	1.03222316542E-01	Resid rate (us/s)	-1.07290E-05 +/- 2.6E-09
Total phase (deg)	-290.9	Apriori accel (us/s/s)	-6.67429092109E-06	Resid phase (deg)	-101.4 +/- 22.3

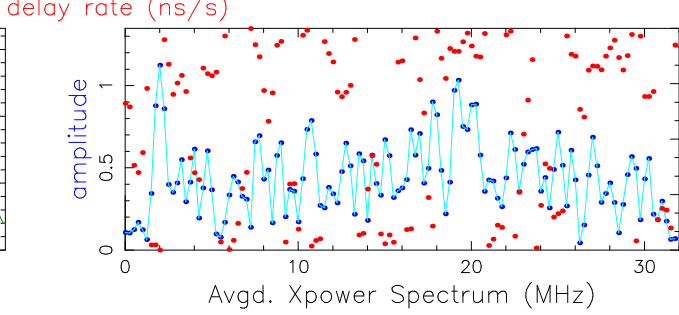
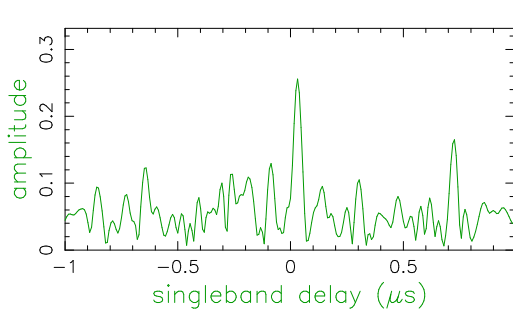
RMS Theor. Amplitude 0.363 +/- 0.071 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 82.9 91.2 Search (2048X8) 0.238 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 172.5 159.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 15.8 Inc. seg. avg. 0.352 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 21.5 27.5 Inc. frq. avg. 0.348 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 358.2 el 38.7 pa 2.3 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -1874.857 -973.362 simultaneous interpolator

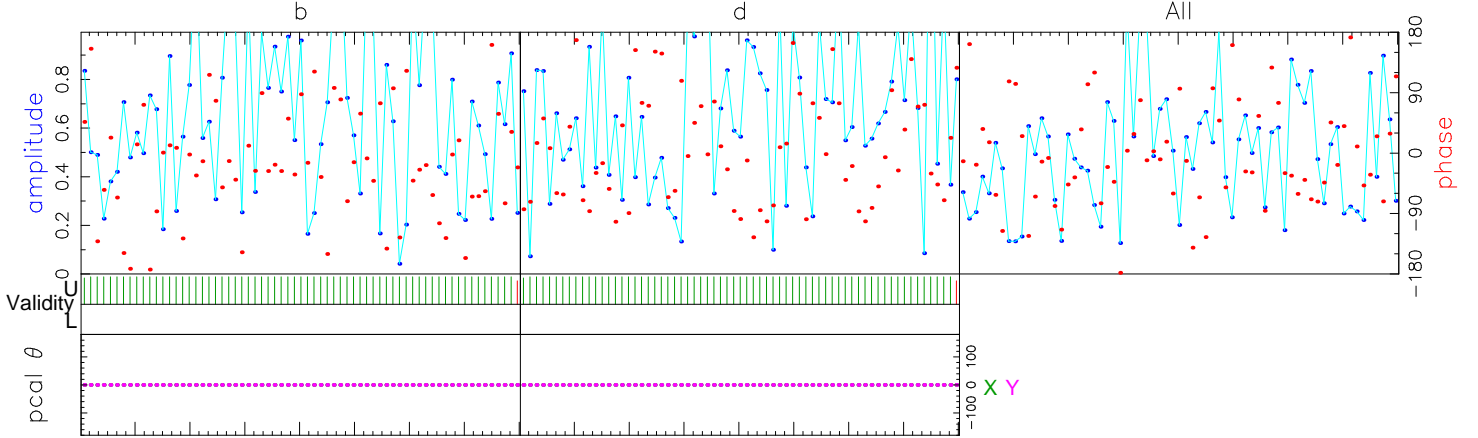
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/XY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/XY.W.21.0RUI3R



Fringe quality 0
 SNR 5.4
 Int time 478.878
 Amp 0.332
 Phase -193.8
 PFD 8.5e-01
 Delays (us)
 SBD 0.030925
 MBD -0.001250
 Fringe rate (Hz)
 -0.756422
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.00
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153212
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

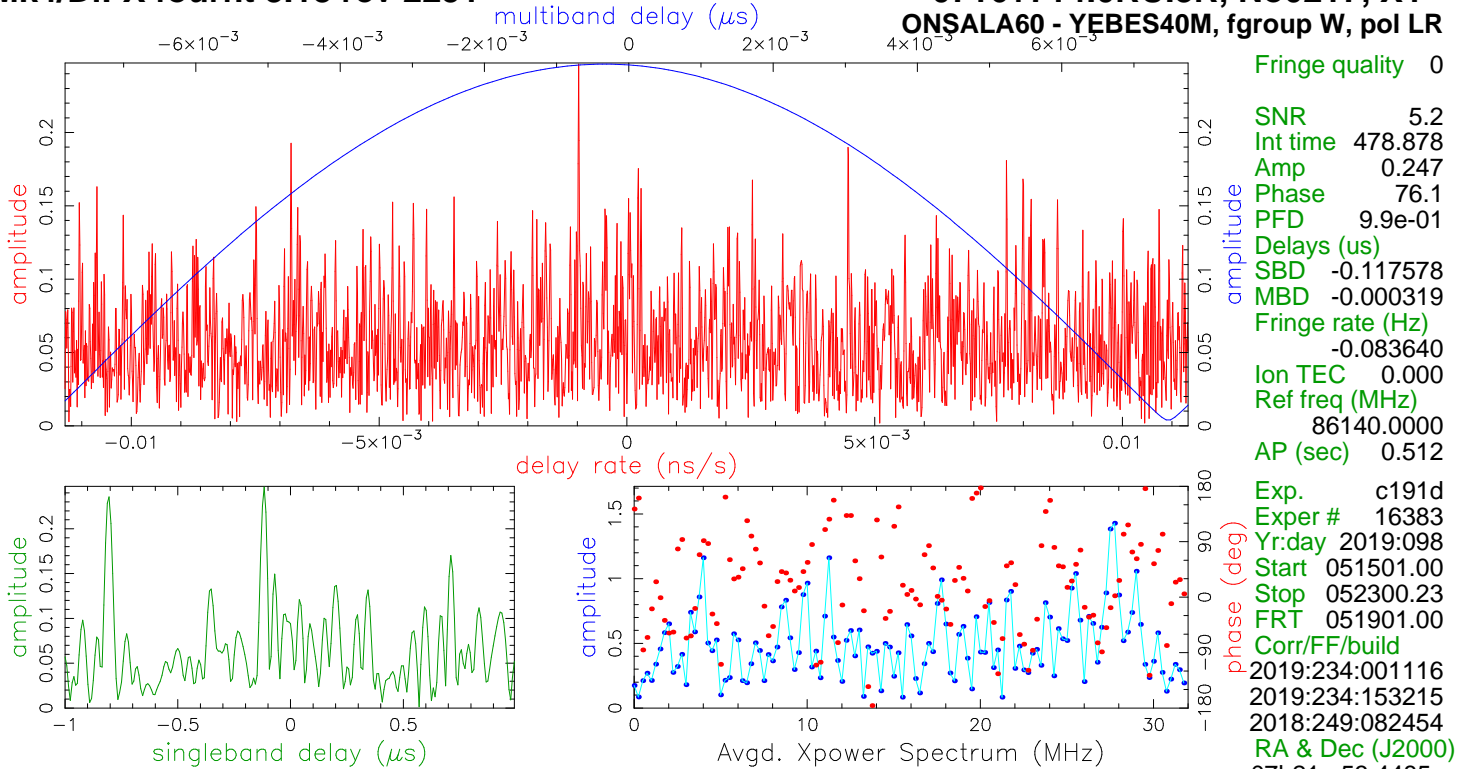


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
-13.8		-13.8		Phase	-13.8
0.4		0.3		Ampl.	0.3
132.5		133.3		Sbd box	133.0
U/L 936/0		936/0		APs used	
X 1000		1000		PC freqs	
Y 1000		1000		PC freqs	
X:Y 0:0		0:0		PC phase	
X:Y 0:0		0:0		Manl PC	
X 1000		1000		PC amp	
Y 1000		1000			
X W01UR		W03UR		Chan ids	
Y W01UR		W03UR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	5.14951083945E+03	Apriori delay (usec)	5.14948083902E+03	Resid mbdelay (usec)	-1.24958E-03 +/- 9.2E-04
Sband delay (usec)	5.14951176402E+03	Apriori clock (usec)	1.8150805E+01	Resid sbdelay (usec)	3.09250E-02 +/- 3.2E-03
Phase delay (usec)	5.14948083858E+03	Apriori clockrate (us/s)	2.5699999E-07	Resid phdelay (usec)	-4.43622E-07 +/- 6.8E-07
Delay rate (us/s)	1.03213535235E-01	Apriori rate (us/s)	1.03222316542E-01	Resid rate (us/s)	-8.78131E-06 +/- 2.5E-09
Total phase (deg)	-23.4	Apriori accel (us/s/s)	-6.67429092109E-06	Resid phase (deg)	-193.8 +/- 21.2

ph/seg (deg) 76.9 86.7 RMS Theor. Amplitude 0.332 +/- 0.061 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 134.9 151.4 Search (2048X8) 0.246 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 15.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.1 26.2 Inc. seg. avg. 0.303 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 358.2 el 38.7 pa 2.3 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -1874.857 -973.362 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/XY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/XY.W.48.0RUI3R simultaneous interpolator

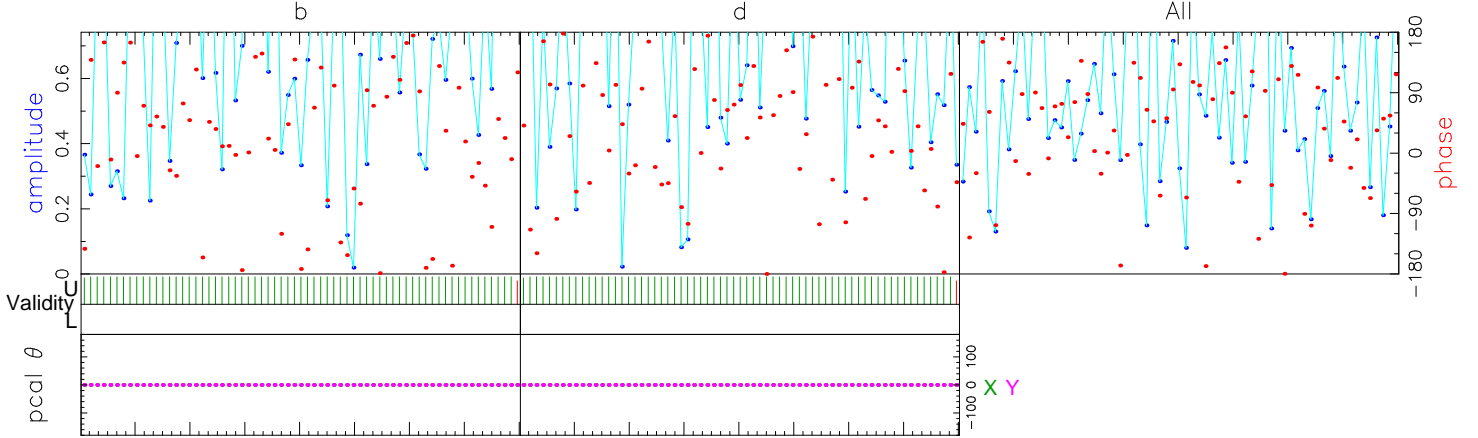


Fringe quality 0

SNR 5.2
Int time 478.878
Amp 0.247
Phase 76.1
PFD 9.9e-01
Delays (us)
SBD -0.117578
MBD -0.000319
Fringe rate (Hz)
-0.083640
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.00
Stop 052300.23
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153215
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

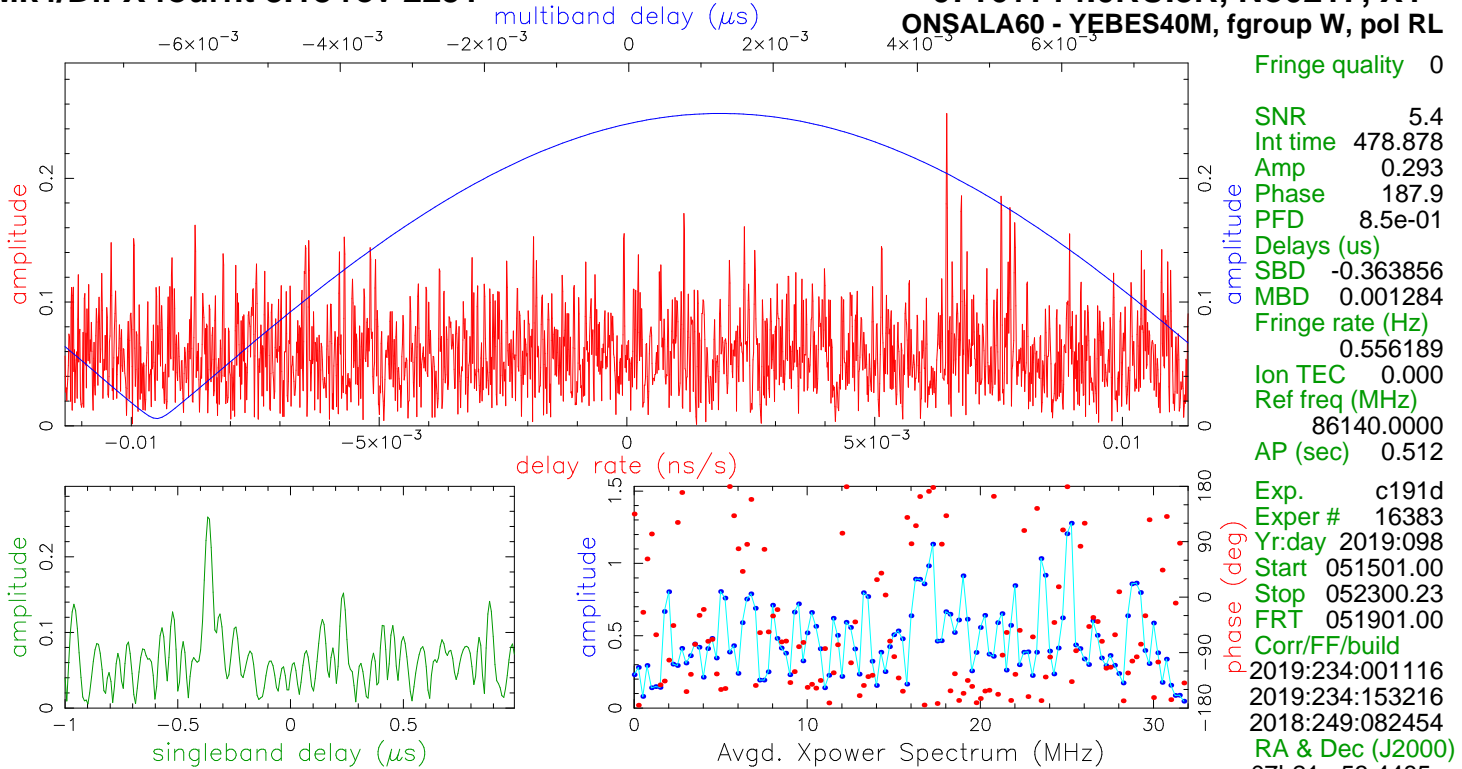


86156.00	86220.00	Freq (MHz)	All				
76.3	75.9	Phase	76.1				
0.3	0.2	Ampl.	0.2				
115.1	113.0	Sbd box	114.0				
U/L 936/0	936/0	APs used					
X 1000	1000	PC freqs					
Y 1000	1000	PC freqs					
X:Y 0:0	0:0	PC phase					
X:Y 0:0	0:0	Manl PC					
X 1000	1000	PC amp					
Y 1000	1000						
X W01UL	W03UL	Chan ids					
Y W01UR	W03UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.14935551982E+03	Apriori delay (usec)	5.14948083902E+03	Resid mbdelay (usec)	-3.19200E-04	+/-	9.5E-04
Sband delay (usec)	5.14936326152E+03	Apriori clock (usec)	1.8150805E+01	Resid sbdelay (usec)	-1.17578E-01	+/-	3.3E-03
Phase delay (usec)	5.14948084147E+03	Apriori clockrate (us/s)	2.5699999E-07	Resid phdelay (usec)	2.45279E-06	+/-	7.1E-07
Delay rate (us/s)	1.03221345570E-01	Apriori rate (us/s)	1.03222316542E-01	Resid rate (us/s)	-9.70972E-07	+/-	2.6E-09
Total phase (deg)	246.5	Apriori accel (us/s/s)	-6.67429092109E-06	Resid phase (deg)	76.1	+/-	22.0

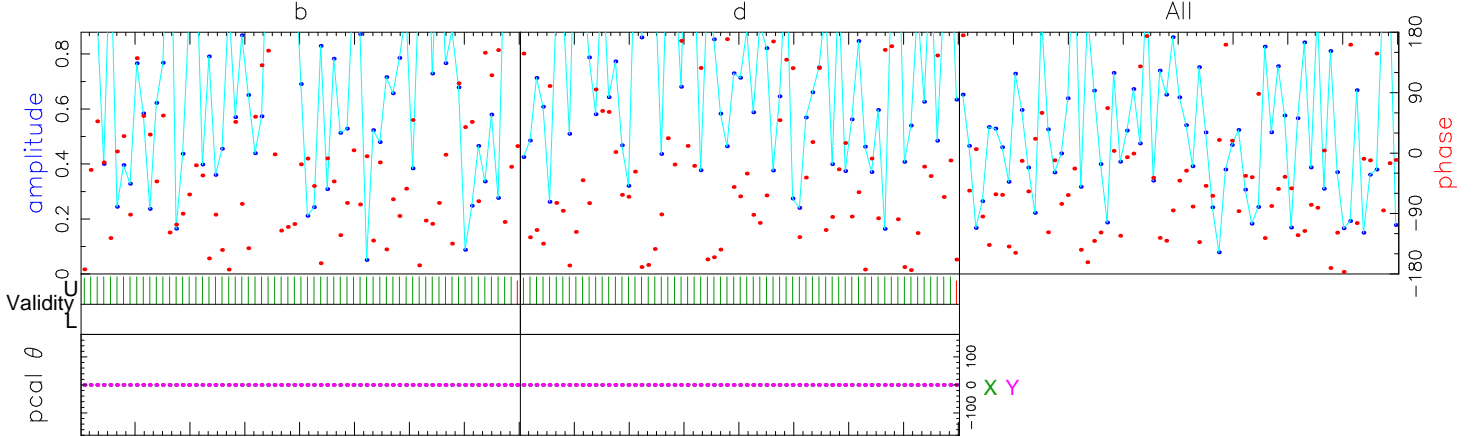
ph/seg (deg)	81.0	Theor.	89.9	Amplitude	0.247 +/- 0.047	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	175.6	Search (2048X8)	0.237	Search	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	0.0	Interp.	0.000	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	1.5	Inc. seg. avg.	0.257	Inc. seg. avg.	0.257	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	0.239	Inc. frq. avg.	0.239	Data rate(Mb/s): 256	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 358.2 el 38.7 pa 2.3 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -1874.857 -973.362 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/XY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/XY.W.74.0RUI3R



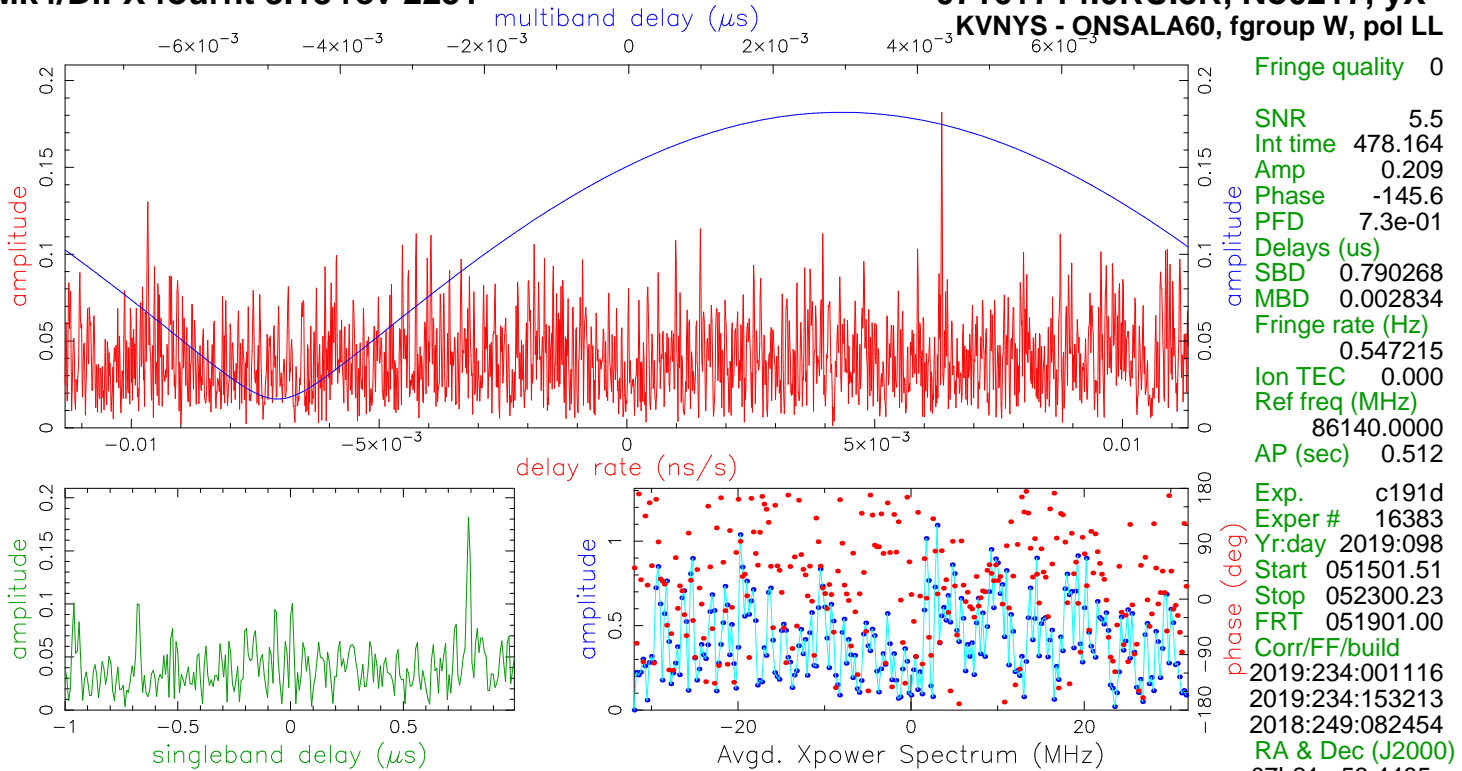
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



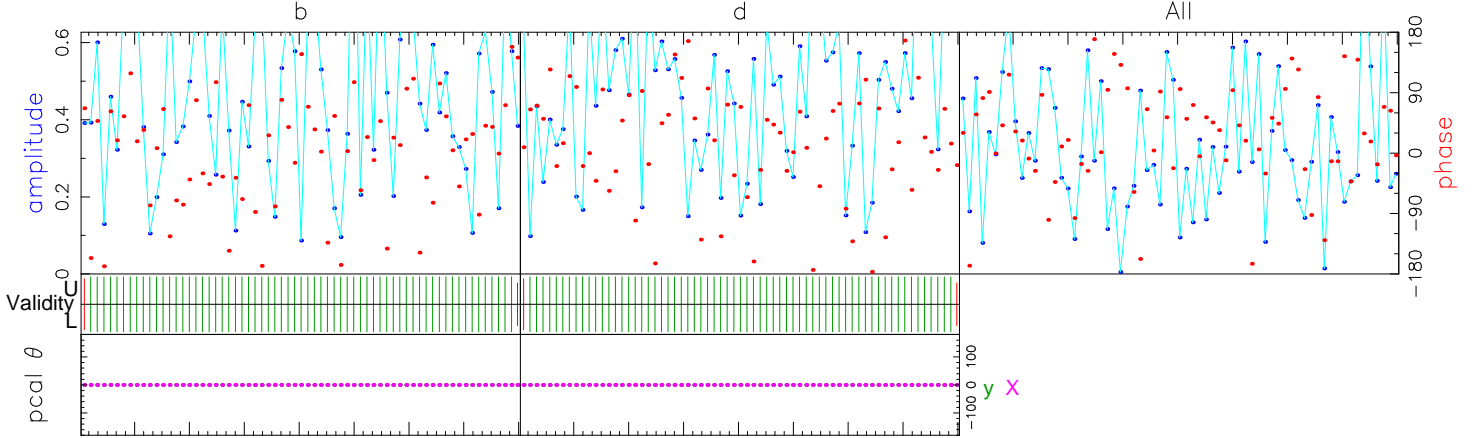
86156.00	86220.00	Freq (MHz)	All				
-81.9	-82.3	Phase	-82.1				
0.3	0.3	Ampl.	0.3				
82.8	82.2	Sbd box	82.4				
U/L 936/0	936/0	APs used					
X 1000	1000	PC freqs					
Y 1000	1000	PC freqs					
X:Y 0:0	0:0	PC phase					
X:Y 0:0	0:0	Manl PC					
X 1000	1000	PC amp					
Y 1000	1000						
X W01UR	W03UR	Chan ids					
Y W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.14912274795E+03	Apriori delay (usec)	5.14948083902E+03	Resid mbdelay (usec)	1.28393E-03	+/-	9.2E-04
Sband delay (usec)	5.14911698252E+03	Apriori clock (usec)	1.8150805E+01	Resid sbdelay (usec)	-3.63856E-01	+/-	3.2E-03
Phase delay (usec)	5.14948083638E+03	Apriori clockrate (us/s)	2.5699999E-07	Resid phdelay (usec)	-2.64683E-06	+/-	6.8E-07
Delay rate (us/s)	1.03228773344E-01	Apriori rate (us/s)	1.03222316542E-01	Resid rate (us/s)	6.45680E-06	+/-	2.5E-09
Total phase (deg)	358.3	Apriori accel (us/s/s)	-6.67429092109E-06	Resid phase (deg)	187.9	+/-	21.2

ph/seg (deg)	70.8	Theor.	86.7	Amplitude	0.293 +/- 0.054	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	146.5	Search (2048X8)	0.243	Interp.	0.000	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.	0.280	Inc. frq. avg.	0.280	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	2.6	Inc. frq. avg.	0.280			Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
X: az 358.2 el 38.7 pa 2.3	Y: az 353.4 el 22.7 pa 15.1	u,v (fr/asec)	-1874.857 -973.362			Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
Control file: cf_1234_gmva	Input file: /Exps/c191d/v1/1234/No0217/XY..0RUI3R	Output file: /Exps/c191d/v1/1234/No0217/XY.W.83.0RUI3R				nlags:	128	t_cohere	infinite
						ion window (TEC)	0.00	0.00	

simultaneous interpolator



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



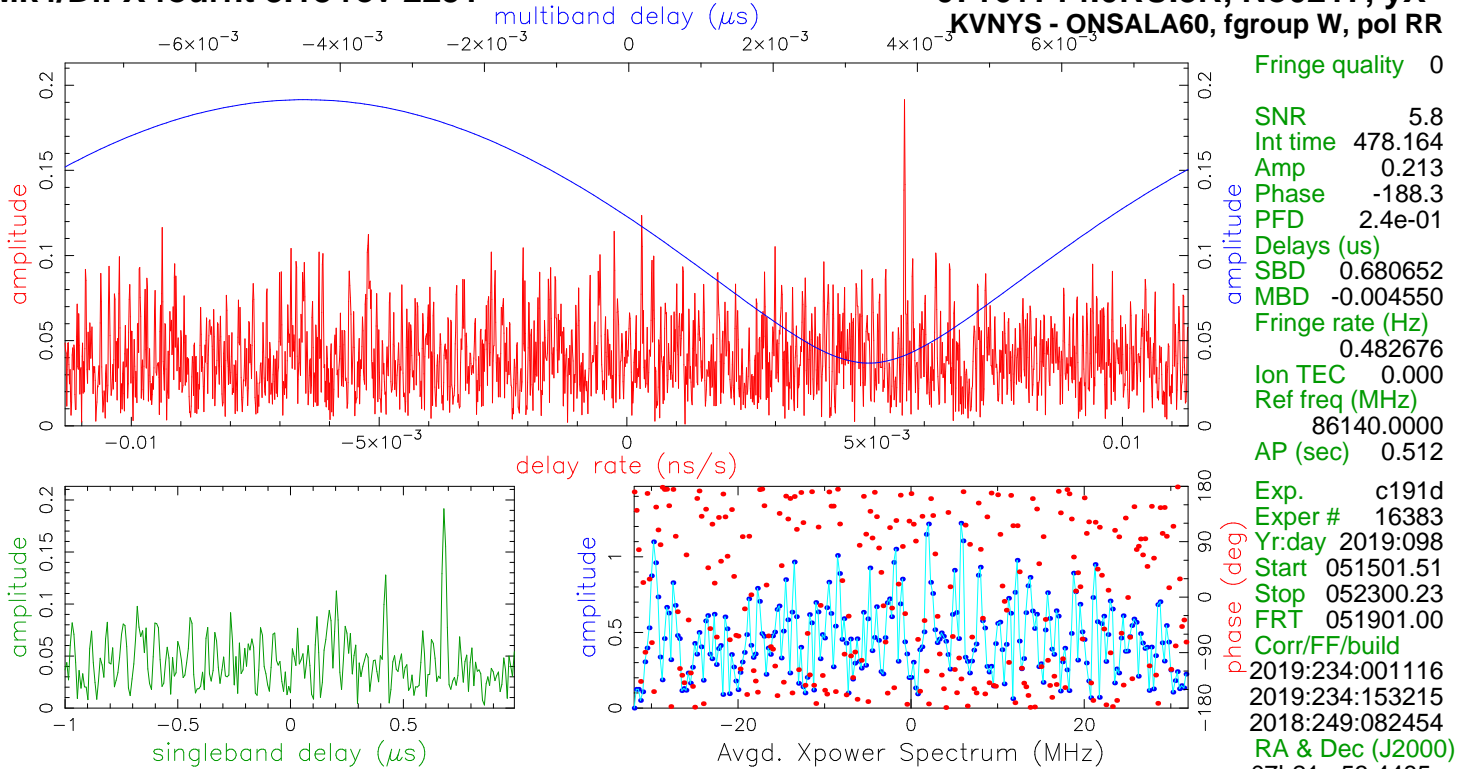
86156.00	86220.00	Freq (MHz)	All
33.0	35.6	Phase	34.4
0.2	0.2	Ampl.	0.2
5.7	230.2	Sbd box	230.2
U/L 935/935	935/935	APs used	
y 0	0	PC freqs	
X 1000	1000	PC freqs	
y:X 0:0	0:0	PC phase	
y:X 0:0	0:0	Manl PC	
y 1000	1000	PC amp	
X 1000	1000		
y W01UL,W01LL	W03UL,W03LL	Chan ids	
X W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	1.00744602119E+03	Apriori delay (usec)	1.00666193690E+03	Resid mbdelay (usec)	2.83429E-03	+/-	9.1E-04
Sband delay (usec)	1.00745220540E+03	Apriori clock (usec)	-1.6234367E+00	Resid sbdelay (usec)	7.90268E-01	+/-	1.6E-03
Phase delay (usec)	1.00666193801E+03	Apriori clockrate (us/s)	-4.0000013E-09	Resid phdelay (usec)	1.10929E-06	+/-	3.4E-07
Delay rate (us/s)	3.80911628115E-01	Apriori rate (us/s)	3.80905275496E-01	Resid rate (us/s)	6.35262E-06	+/-	2.4E-09
Total phase (deg)	-57.6	Apriori accel (us/s/s)	-3.02697934339E-05	Resid phase (deg)	-145.6	+/-	10.5

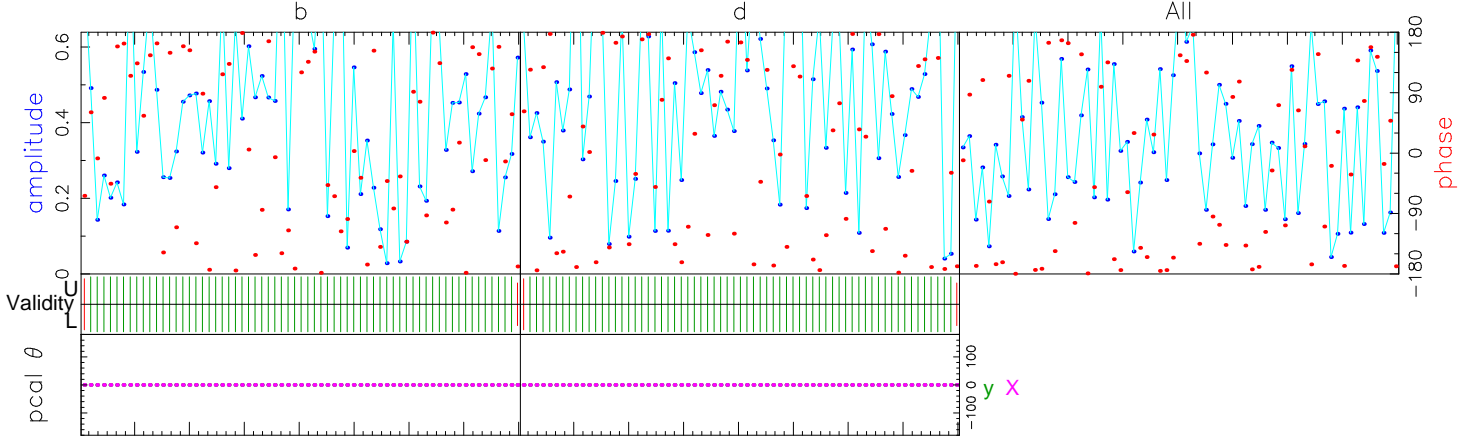
ph/seg (deg)	RMS 72.0	Theor. 85.7	Amplitude Search (2048X8)	0.209 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	128.7	149.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.8	Inc. seg. avg.	0.180	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	9.1	25.8	Inc. frq. avg.	0.201	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

y: az 23.7 el 41.8 pa -96.8 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -6927.225 -7583.625 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yX.W.58.0RUI3R

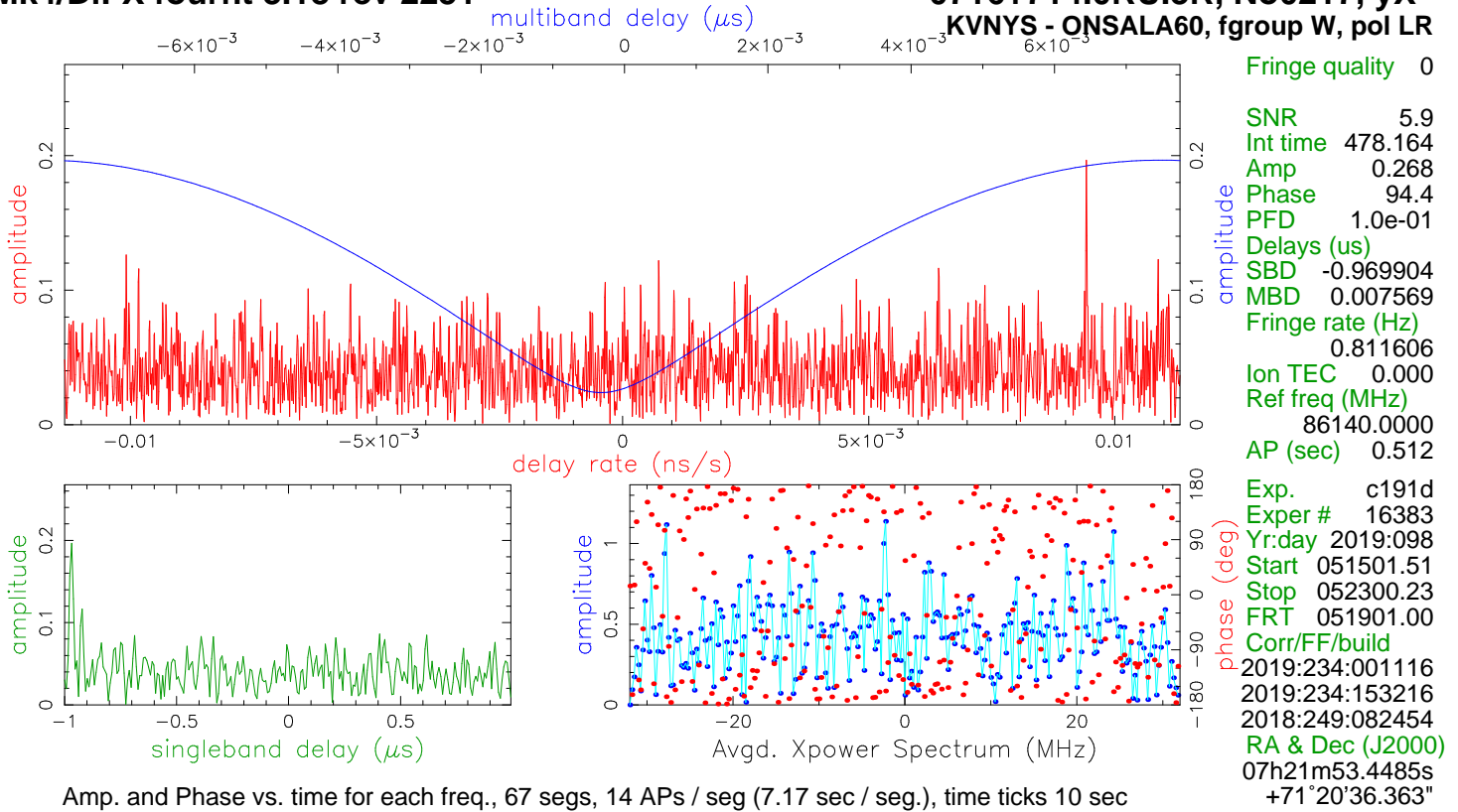


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

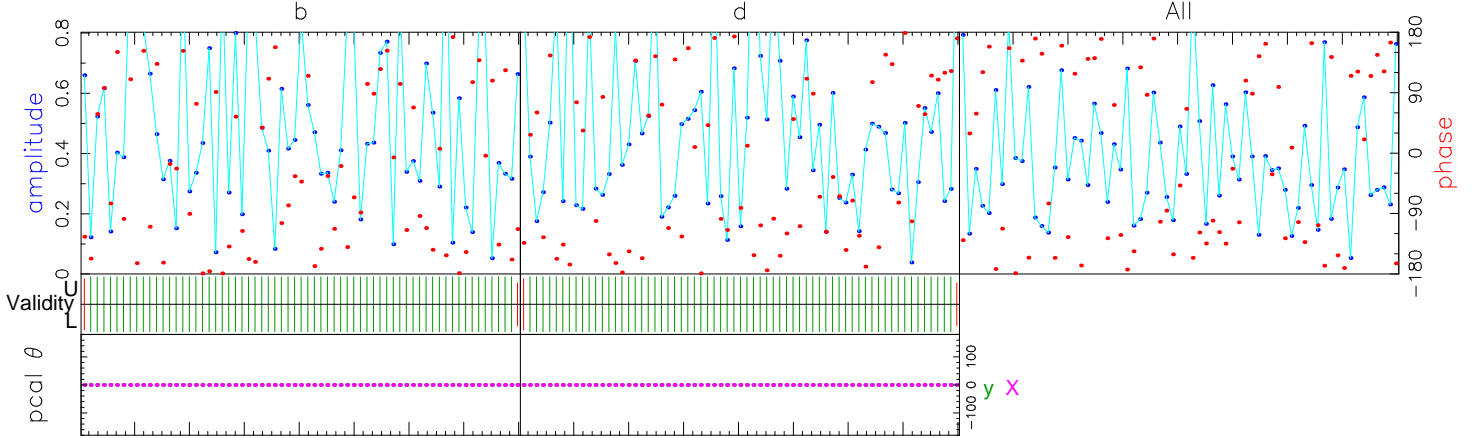


86156.00	86220.00	Freq (MHz)	All				
170.8	172.3	Phase	171.7				
0.2	0.3	Ampl.	0.2				
45.1	216.0	Sbd box	216.1				
U/L 935/935	935/935	APs used					
y 0	0	PC freqs					
X 1000	1000	PC freqs					
y:X 0:0	0:0	PC phase					
y:X 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
X 1000	1000						
y W01UR,W01LR	W03UR,W03LR	Chan ids					
X W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.00734488646E+03	Apriori delay (usec)	1.00666193690E+03	Resid mbdelay (usec)	-4.55044E-03	+/-	8.6E-04
Sband delay (usec)	1.00734258890E+03	Apriori clock (usec)	-1.6234367E+00	Resid sbdelay (usec)	6.80652E-01	+/-	1.5E-03
Phase delay (usec)	1.00666194243E+03	Apriori clockrate (us/s)	-4.000013E-09	Resid phdelay (usec)	5.53594E-06	+/-	3.2E-07
Delay rate (us/s)	3.80910878880E-01	Apriori rate (us/s)	3.80905275496E-01	Resid rate (us/s)	5.60338E-06	+/-	2.3E-09
Total phase (deg)	-100.3	Apriori accel (us/s/s)	-3.02697934339E-05	Resid phase (deg)	-188.3	+/-	10.0

ph/seg (deg)	81.5	Theor.	81.6	Amplitude	0.213 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	129.4	Search (2048X8)	0.188	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.197	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	19.2	Inc. frq. avg.	0.206	Inc. frq. avg.	0.206	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
y: az 23.7 el 41.8 pa -96.8		X: az 358.2 el 38.7 pa 2.3		u,v (fr/asec)	-6927.225 -7583.625	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/yX..0RUI3R				nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00
									simultaneous interpolator



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

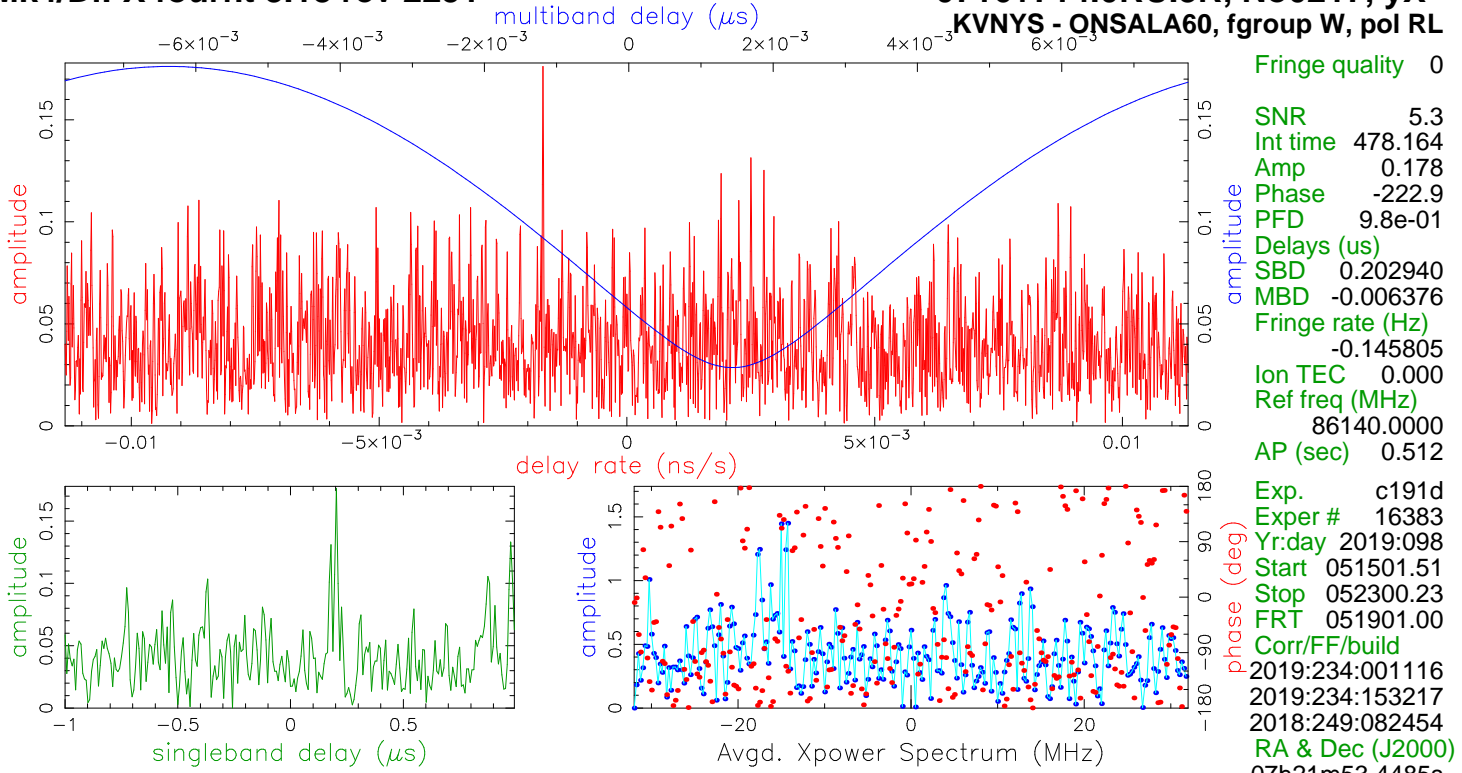


86156.00		86220.00		Freq (MHz)	All
-174.6		-176.5		Phase	-175.6
0.2		0.3		Ampl.	0.3
5.2		4.7		Sbd box	4.9
U/L 935/935		935/935		APs used	
y 0		0		PC freqs	
X 1000		1000		PC freqs	
y:X 0:0		0:0		PC phase	
y:X 0:0		0:0		Manl PC	
y 1000		1000		PC amp	
X 1000		1000			
y W01UL,W01LL		W03UL,W03LL		Chan ids	
X W01UR,W01LR		W03UR,W03LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.00568513077E+03	Apriori delay (usec)	1.00666193690E+03	Resid mbdelay (usec)	7.56887E-03 +/- 8.4E-04
Sband delay (usec)	1.00569203290E+03	Apriori clock (usec)	-1.6234367E+00	Resid sbdelay (usec)	-9.69904E-01 +/- 1.5E-03
Phase delay (usec)	1.00666193124E+03	Apriori clockrate (us/s)	-4.000013E-09	Resid phdelay (usec)	-5.66360E-06 +/- 3.1E-07
Delay rate (us/s)	3.80914697432E-01	Apriori rate (us/s)	3.80905275496E-01	Resid rate (us/s)	9.42194E-06 +/- 2.3E-09
Total phase (deg)	182.4	Apriori accel (us/s/s)	-3.02697934339E-05	Resid phase (deg)	94.4 +/- 9.7

ph/seg (deg)	RMS 71.2	Theor. 79.3	Amplitude 0.268 +/- 0.045	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	135.1	138.4	Search (2048X8) 0.193	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	13.7	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	12.1	23.9	Inc. seg. avg. 0.263	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.259	Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

y: az 23.7 el 41.8 pa -96.8 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -6927.225 -7583.625 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yX.W.87.0RUI3R

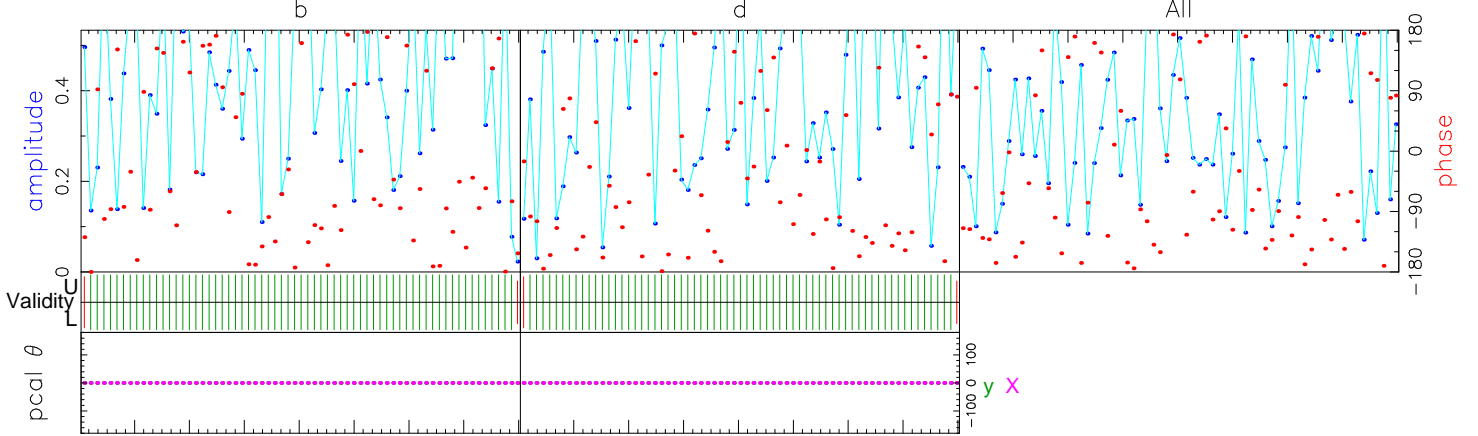


Fringe quality 0

SNR 5.3
Int time 478.164
Amp 0.178
Phase -222.9
PFD 9.8e-01
Delays (μs)
SBD 0.202940
MBD -0.006376
Fringe rate (Hz)
-0.145805
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052300.23
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153217
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

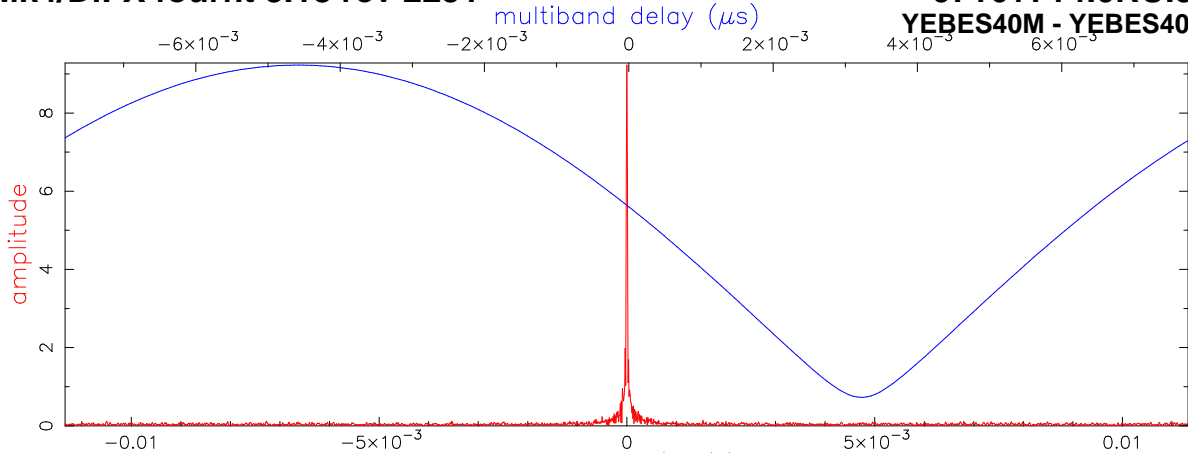
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
-132.9		-132.9		Phase	-132.9
0.2		0.1		Ampl.	0.2
155.1		151.7		Sbd box	155.0
U/L 935/935		935/935		APs used	
y 0		0		PC freqs	
X 1000		1000		PC freqs	
y:X 0:0		0:0		PC phase	
y:X 0:0		0:0		Manl PC	
y 1000		1000		PC amp	
X 1000		1000			
y W01UR,W01LR		W03UR,W03LR		Chan ids	
X W01UL,W01LL		W03UL,W03LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.00685868541E+03	Apriori delay (usec)	1.00666193690E+03	Resid mbdelay (usec)	-6.37648E-03 +/- 9.4E-04
Sband delay (usec)	1.00686487740E+03	Apriori clock (usec)	-1.6234367E+00	Resid sbdelay (usec)	2.02940E-01 +/- 1.6E-03
Phase delay (usec)	1.00666193261E+03	Apriori clockrate (us/s)	-4.0000013E-09	Resid phdelay (usec)	-4.28544E-06 +/- 3.5E-07
Delay rate (us/s)	3.80903582846E-01	Apriori rate (us/s)	3.80905275496E-01	Resid rate (us/s)	-1.69265E-06 +/- 2.5E-09
Total phase (deg)	-134.9	Apriori accel (us/s/s)	-3.02697934339E-05	Resid phase (deg)	-222.9 +/- 10.9

ph/seg (deg)	RMS 74.3	Theor. 89.0	Amplitude 0.178 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	136.0	155.3	Search (2048X8) 0.173	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	15.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.2	26.8	Inc. seg. avg. 0.155	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.172	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite		

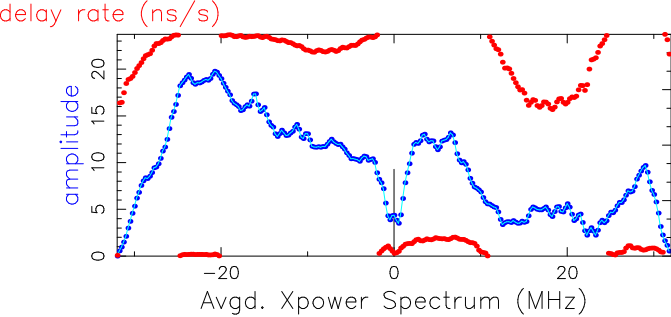
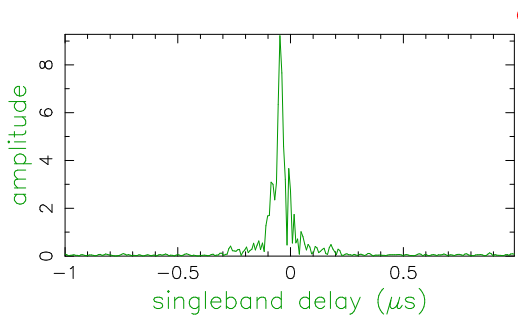
y: az 23.7 el 41.8 pa -96.8 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -6927.225 -7583.625 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yX.W.94.0RUI3R



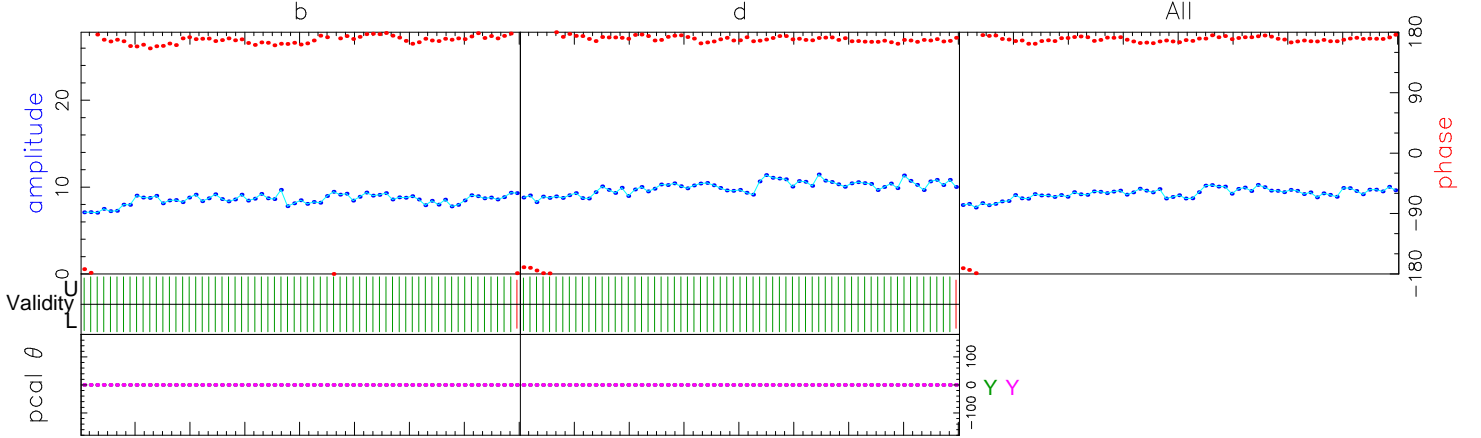
Fringe quality 9

SNR 277.7
Int time 479.069
Amp 9.279
Phase 80.1
PFD 0.0e+00
Delays (us)
SBD -0.045713
MBD -0.004659
Fringe rate (Hz)
0.000154
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

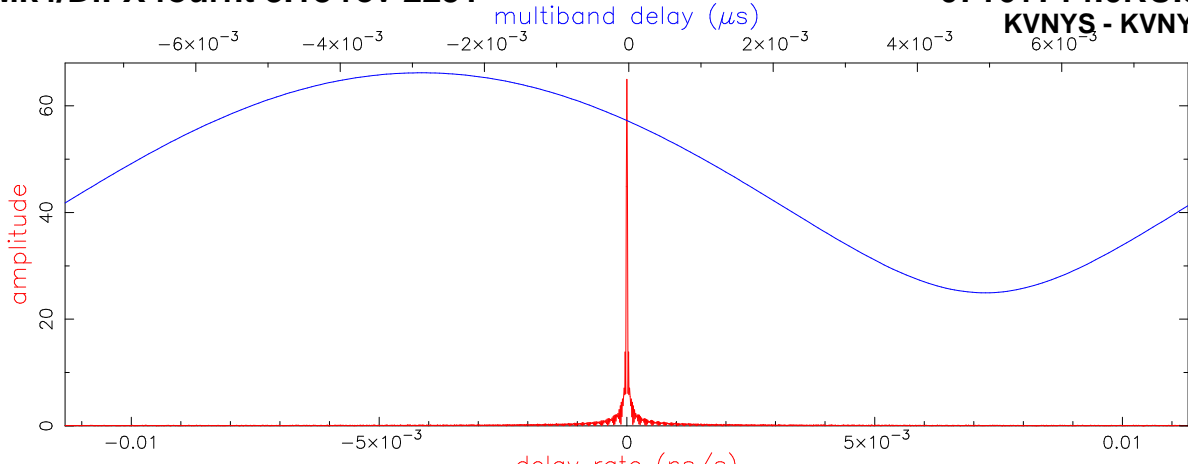
Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.00
Stop 052300.74
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153218
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



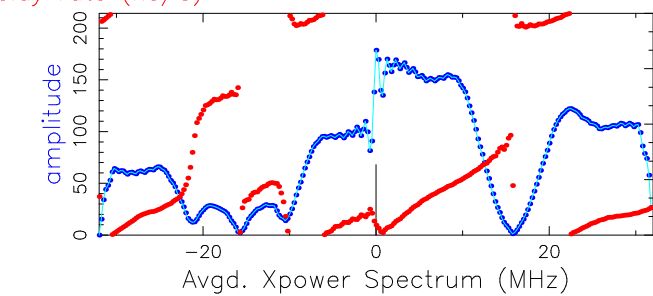
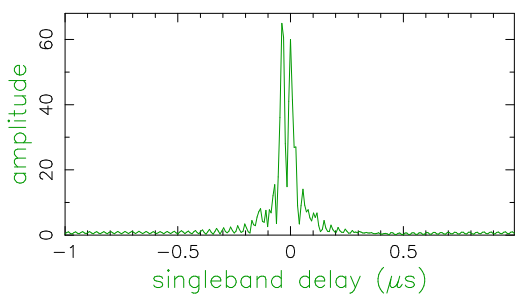
86156.00	86220.00	Freq (MHz)		All	
169.2	170.9	Phase		170.1	
8.5	10.0	Ampl.		9.2	
124.1	122.6	Sbd box		123.1	
U/L 937/937	937/937	APs used			
Y 1000	1000	PC freqs			
Y 1000	1000	PC freqs			
Y:Y 0:0	0:0	PC phase			
Y:Y 0:0	0:0	Manl PC			
Y 1000	1000	PC amp			
Y 1000	1000				
Y W01UR,W01LR	W03UR,W03LR	Chan ids			
Y W01UL,W01LL	W03UL,W03LL	Tracks			
		Chan ids			
		Tracks			
Group delay (usec)(sbd)	-5.15345000000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-4.65950E-03 +/- 1.8E-05
Sband delay (usec)	-4.57130000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-4.57130E-02 +/- 3.1E-05
Phase delay (usec)	5.48495488287E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.48495E-06 +/- 6.7E-09
Delay rate (us/s)	1.79123366231E-09	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.79123E-09 +/- 4.8E-11
Total phase (deg)	80.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	80.1 +/- 0.2
RMS	Theor.	Amplitude	9.279 +/- 0.033	Pcal mode:	MANUAL, MANUAL
4.7	1.7	Search (2048X8)	9.077	Pcal rate:	0.000E+00, 0.000E+00 (us/s)
6.4	2.9	Interp.	0.000	sb window (us)	-1.000 1.000
0.0	0.3	Inc. seg. avg.	9.249	Bits/sample:	2x2
7.9	0.5	Inc. frq. avg.	9.225	SampCntNorm:	enabled
				Sample rate(MSamp/s):	64
				Data rate(Mb/s):	512
				nlags:	128
				t_cohere:	infinite
				ion window (TEC)	0.00 0.00



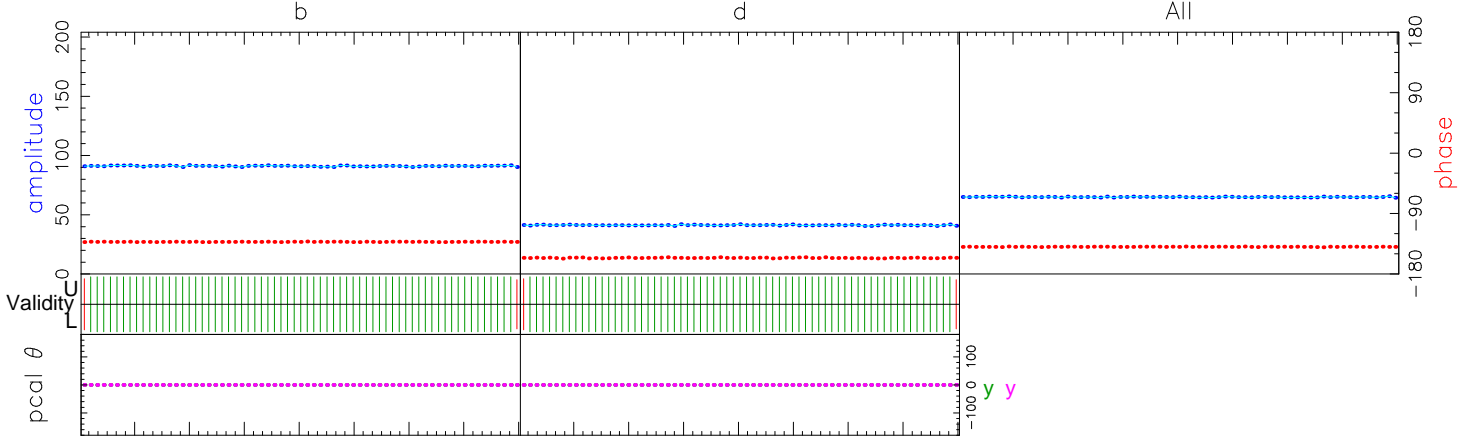
Fringe quality 8

SNR 2036.1
Int time 478.986
Amp 68.040
Phase 40.5
PFD 0.0e+00
Delays (us)
SBD -0.036023
MBD -0.001840
Fringe rate (Hz)
-0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052301.26
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153218
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

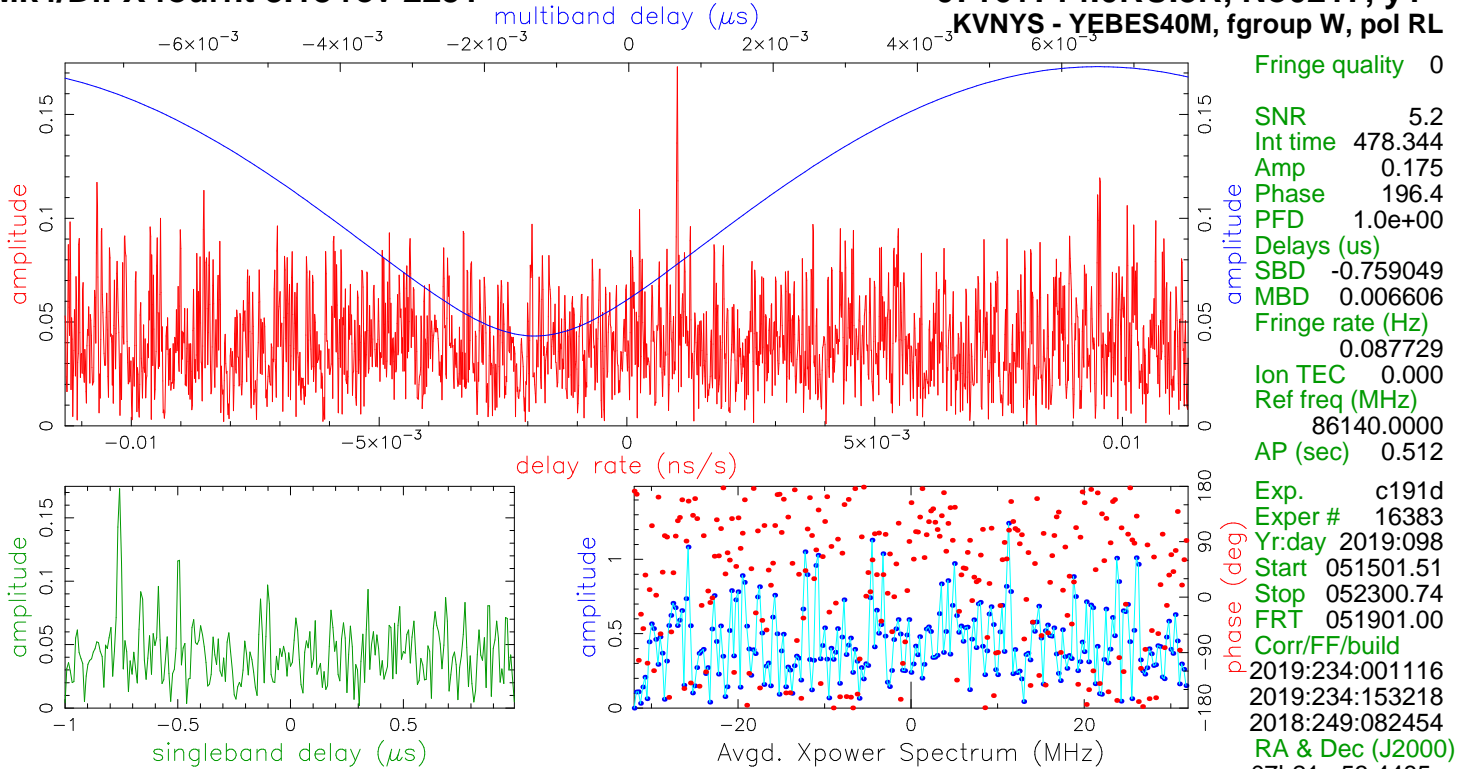


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-132.1	-156.0	Phase	-139.5				
91.1	41.3	Ampl.	66.2				
124.4	124.5	Sbd box	124.4				
U/L 937/937	937/937	APs used					
y 0	0	PC freqs					
y 0	0	PC freqs					
y:y 0:0	0:0	PC phase					
y:y 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
y 1000	1000						
y W01UL,W01LL	W03UL,W03LL	Chan ids					
y W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.30902500000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.84025E-03	+/-	2.4E-06
Sband delay (usec)	-3.60230000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-3.60230E-02	+/-	4.2E-06
Phase delay (usec)	-4.49804192427E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.49804E-06	+/-	9.1E-10
Delay rate (us/s)	-7.08557619584E-13	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-7.08558E-13	+/-	6.6E-12
Total phase (deg)	40.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	40.5	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.2	Amplitude	68.040 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	4.5		0.4	Search (2048X8)	65.223	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
amp/frq (%)	36.8		0.1	Inc. seg. avg.	64.971	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	66.197	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00



Fringe quality 0

SNR 5.2

Int time 478.344

Amp 0.175

Phase 196.4

PFD 1.0e+00

Delays (us)

SBD -0.759049

MBD 0.006606

Fringe rate (Hz) 0.087729

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.51

Stop 052300.74

FRT 051901.00

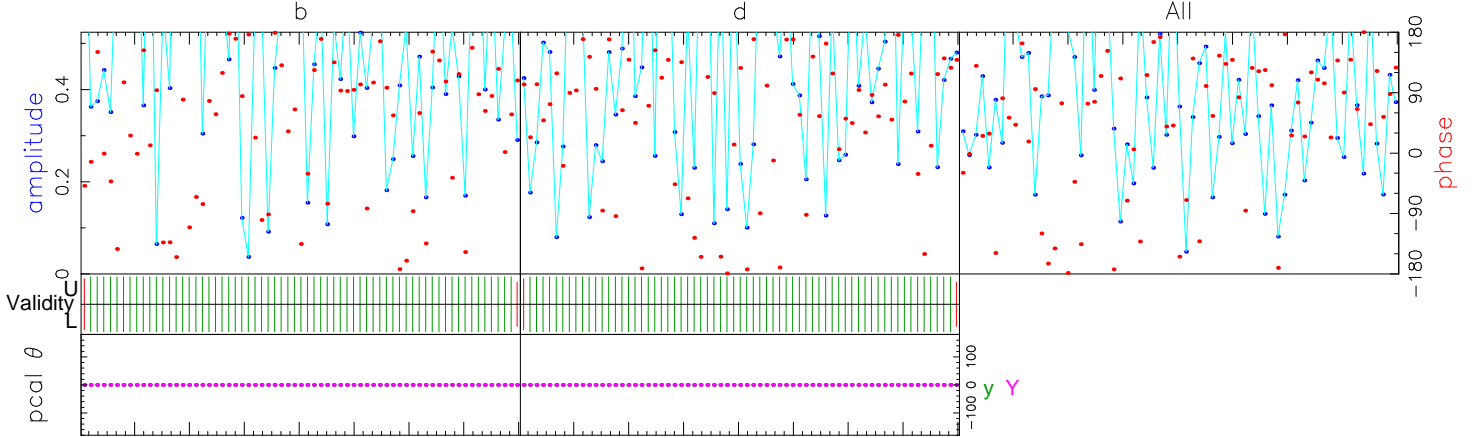
Corr/FF/build 2019:234:001116

2019:234:153218

2018:249:082454

RA & Dec (J2000) 07h21m53.4485s +71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
107.8	105.6	Phase	106.4				
0.1	0.2	Ampl.	0.2				
51.6	32.0	Sbd box	31.8				
U/L 936/936	936/936	APs used					
y 0	0	PC freqs					
Y 1000	1000	PC freqs					
y:Y 0:0	0:0	PC phase					
y:Y 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
Y 1000	1000						
y W01UR,W01LR	W03UR,W03LR	Chan ids					
Y W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	6.15538375722E+03	Apriori delay (usec)	6.15614277592E+03	Resid mbdelay (usec)	6.60630E-03	+/-	9.5E-04
Sband delay (usec)	6.15538372692E+03	Apriori clock (usec)	1.6527369E+01	Resid sbdelay (usec)	-7.59049E-01	+/-	1.7E-03
Phase delay (usec)	6.15614277935E+03	Apriori clockrate (us/s)	2.5299999E-07	Resid phdelay (usec)	3.43105E-06	+/-	3.5E-07
Delay rate (us/s)	4.84128610480E-01	Apriori rate (us/s)	4.84127592038E-01	Resid rate (us/s)	1.01844E-06	+/-	2.6E-09
Total phase (deg)	94.8	Apriori accel (us/s/s)	-3.69440843550E-05	Resid phase (deg)	196.4	+/-	11.0

ph/seg (deg) RMS Theor. Amplitude 0.175 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

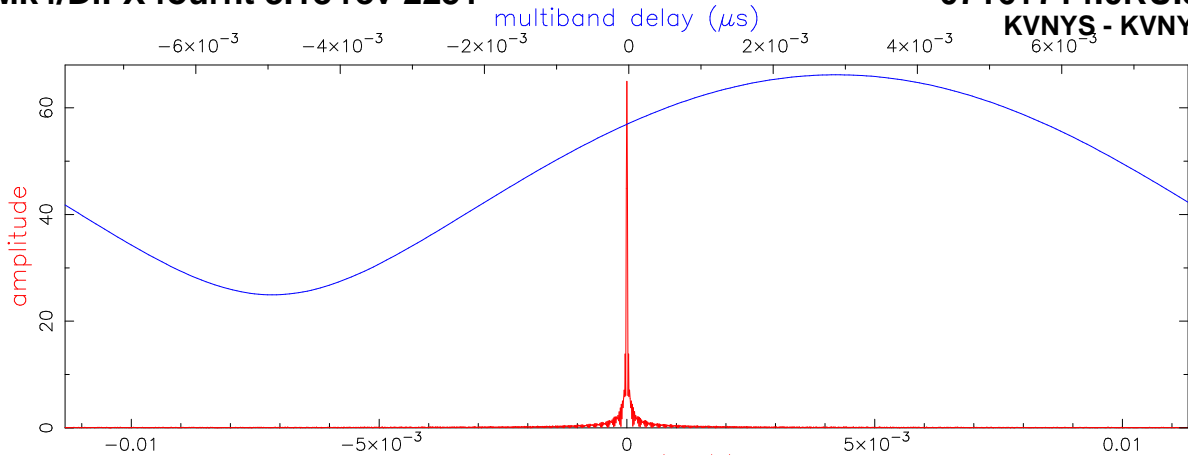
amp/seg (%) 163.2 157.1 Search (2048X8) 0.170 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 15.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 24.8 27.1 Inc. seg. avg. 0.176 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

y: az 23.7 el 41.8 pa -96.8 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8802.082 -8556.988 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

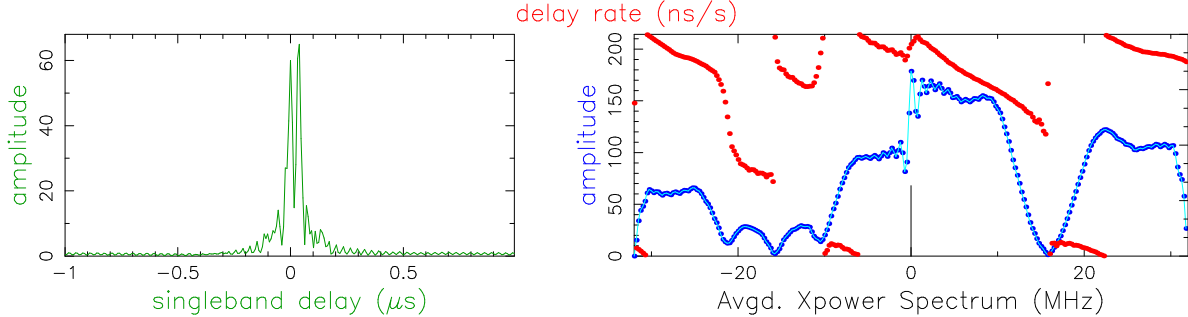
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yY.W.108.0RUI3R simultaneous interpolator



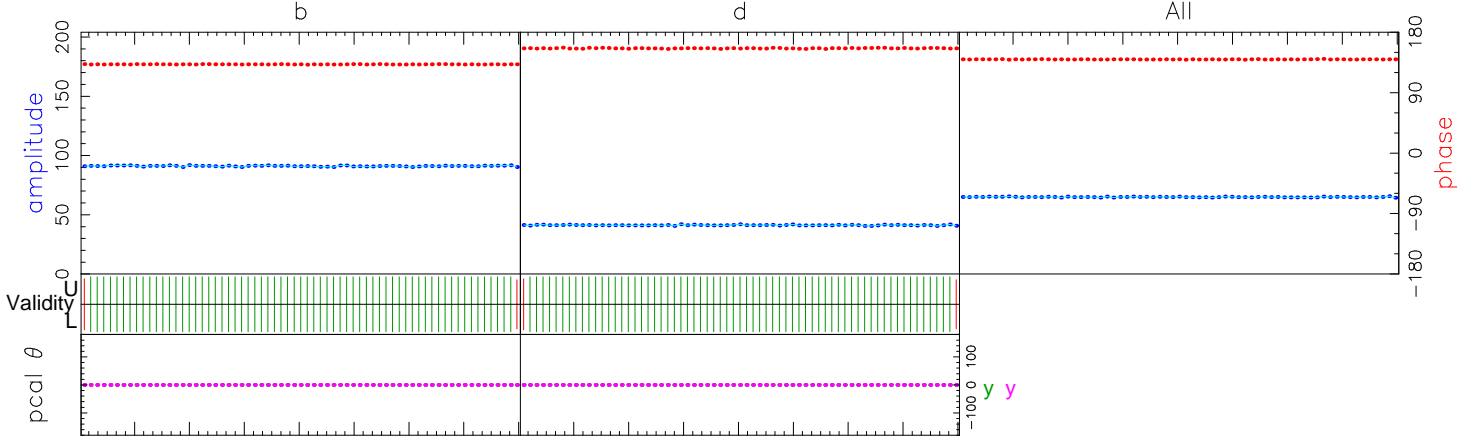
Fringe quality 8

SNR 2036.1
Int time 478.986
Amp 68.040
Phase -40.5
PFD 0.0e+00
Delays (us)
SBD 0.036023
MBD 0.001840
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051501.51
Stop 052301.26
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153219
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

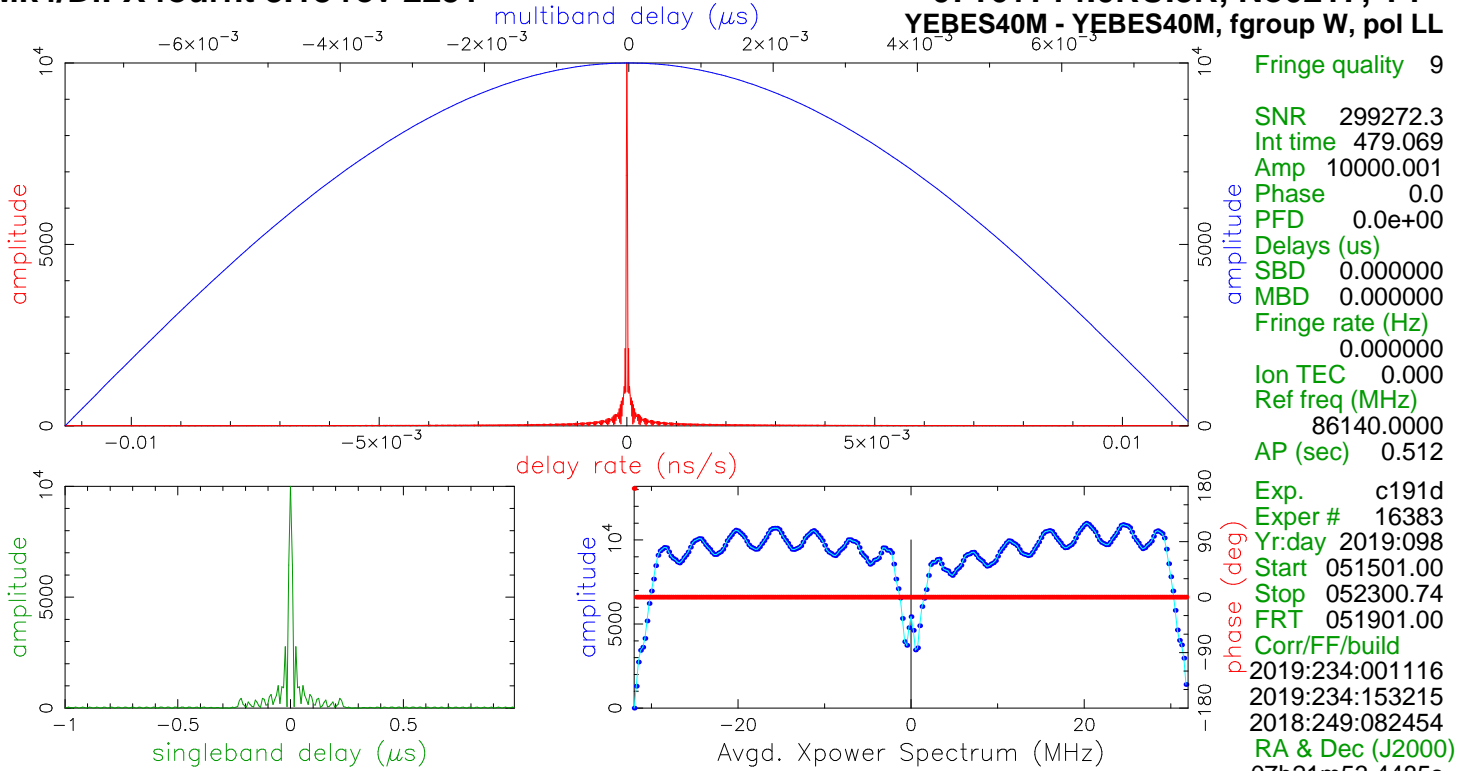


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

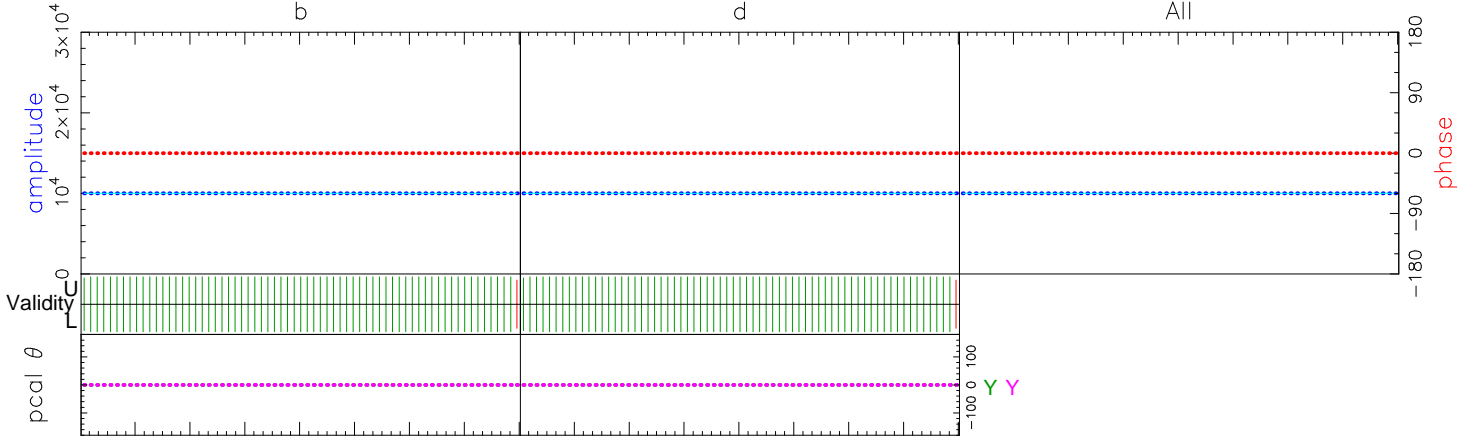


86156.00	86220.00	Freq (MHz)	All				
132.1	156.0	Phase	139.5				
91.1	41.3	Ampl.	66.2				
133.6	133.5	Sbd box	133.6				
U/L 937/937	937/937	APs used					
y 0	0	PC freqs					
y 0	0	PC freqs					
y:y 0:0	0:0	PC phase					
y:y 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
y 1000	1000						
y W01UR,W01LR	W03UR,W03LR	Chan ids					
y W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	3.30902500000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.84025E-03	+/-	2.4E-06
Sband delay (usec)	3.60230000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.60230E-02	+/-	4.2E-06
Phase delay (usec)	4.49804192429E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	4.49804E-06	+/-	9.1E-10
Delay rate (us/s)	7.08557619584E-13	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.08558E-13	+/-	6.6E-12
Total phase (deg)	-40.5	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-40.5	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.2	Amplitude	68.040 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	4.5		0.4	Search (2048X8)	65.223	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
amp/frq (%)	36.8		0.1	Inc. seg. avg.	64.971	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	66.197	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00



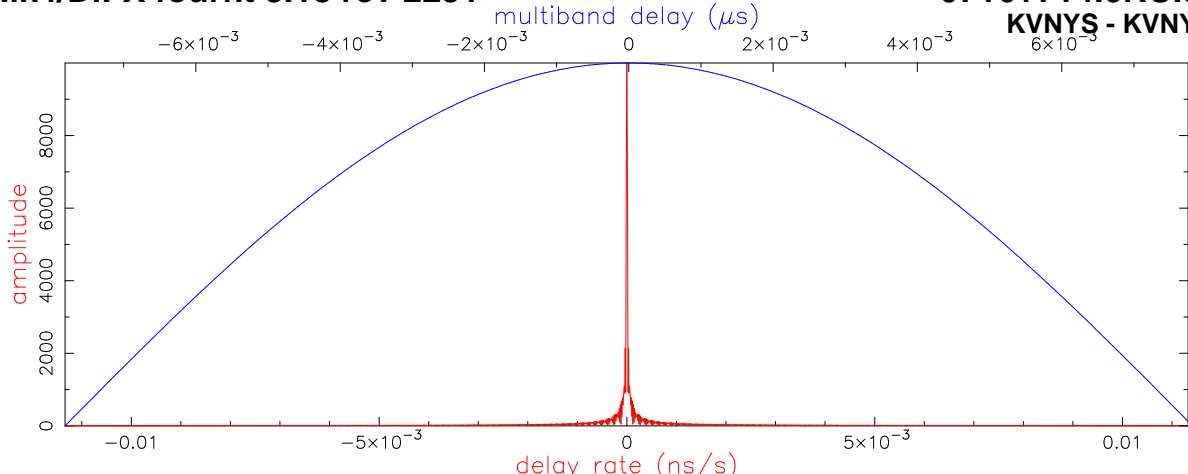
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



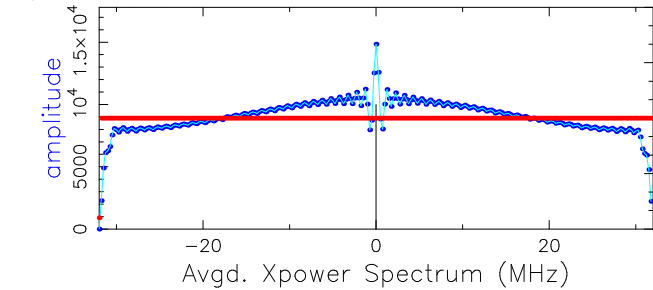
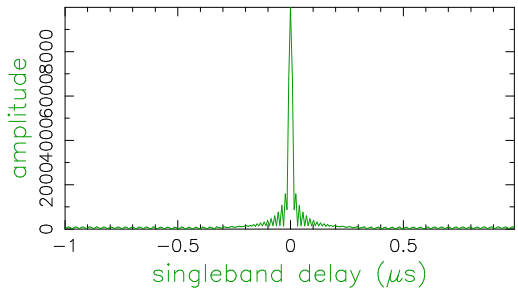
86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
UL 937/937	937/937	APs used	
Y 1000	1000	PC freqs	
Y 1000	1000	PC freqs	
Y:Y 0:0	0:0	PC phase	
Y:Y 0:0	0:0	Manl PC	
Y 1000	1000	PC amp	
Y 1000	1000		
Y W01UL,W01LL	W03UL,W03LL	Chan ids	
Y W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.7E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.9E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

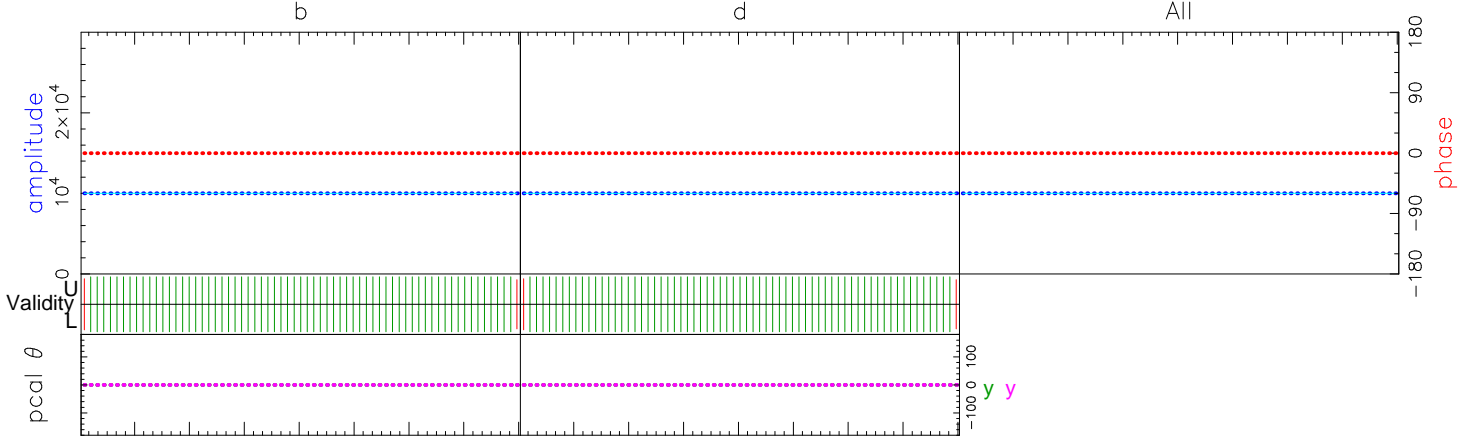
ph/seg (deg)	0.0	Theor.	0.0	Amplitude	10000.001 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0		0.0	Search (2048X8)	10000.001	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0		0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	10000.001	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00



Fringe quality 9
 SNR 299246.4
 Int time 478.986
 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. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153216
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"



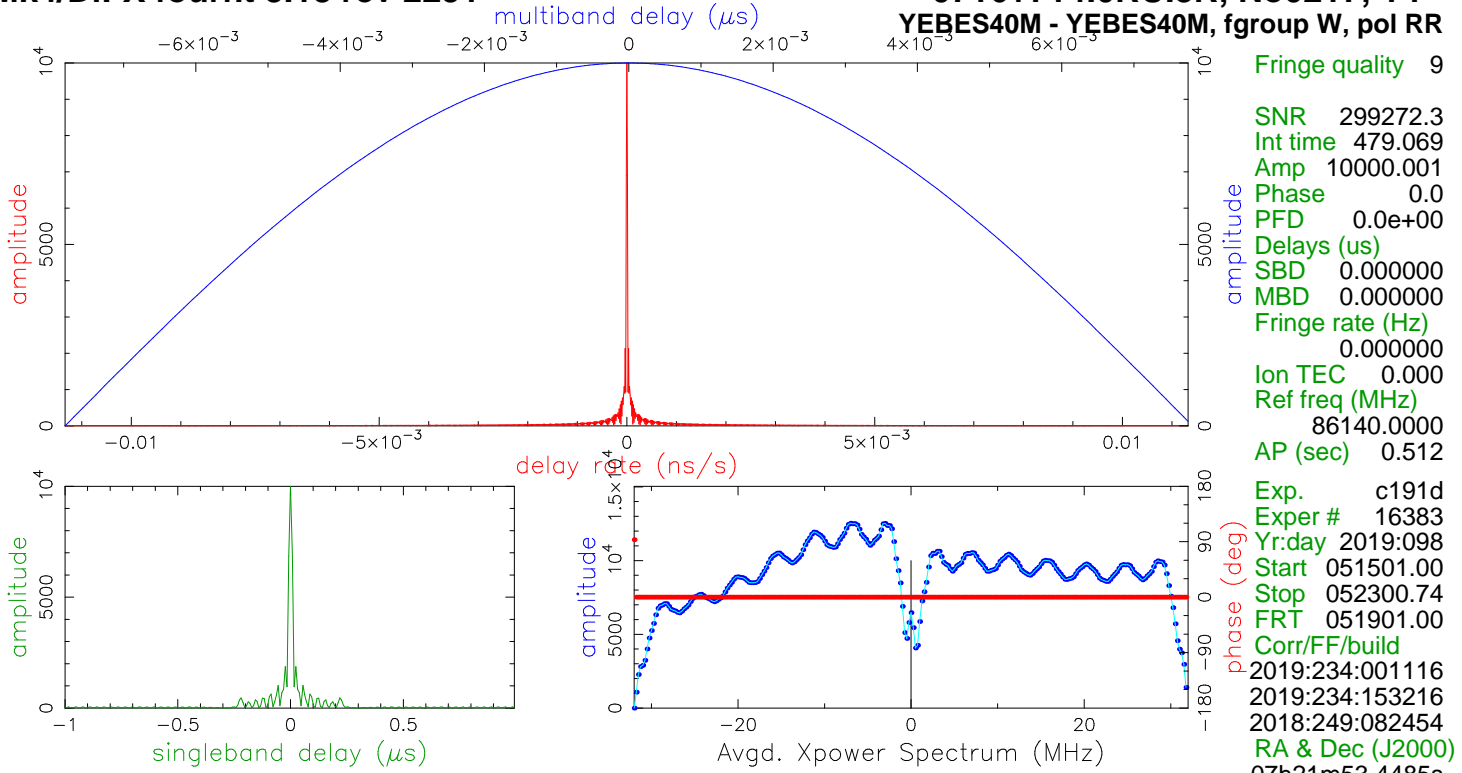
Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
0.0	0.0	Phase	0.0				
10000.0	10000.0	Ampl.	10000.0				
129.0	129.0	Sbd box	129.0				
U/L 937/937	937/937	APs used					
y 0	0	PC freqs					
y 0	0	PC freqs					
y:y 0:0	0:0	PC phase					
y:y 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
y 1000	1000						
y W01UL,W01LL	W03UL,W03LL	Chan ids					
y W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.7E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.9E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.5E-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	Theor.	0.0	Amplitude	9999.999 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (2048X8)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	10000.000	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

y: az 23.7 el 41.8 pa -96.8 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yy..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yy.W.85.0RUI3R



Fringe quality 9

SNR 299272.3

Int time 479.069

Ampl 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. c191d

Exper # 16383

Yr:day 2019:098

Start 051501.00

Stop 052300.74

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153216

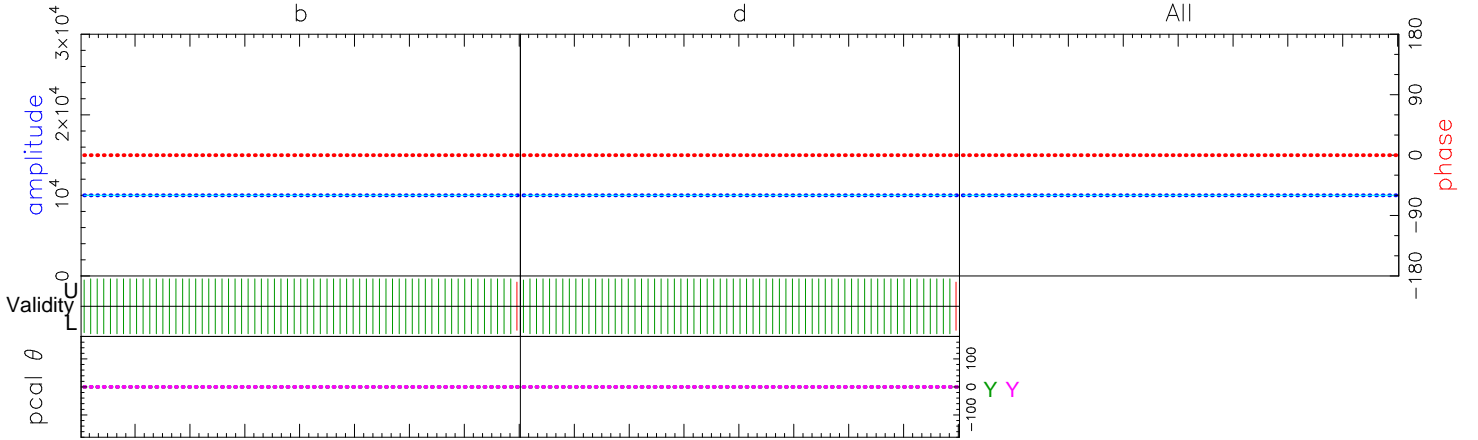
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 937/937	937/937	APs used	
Y 1000	1000	PC freqs	
Y 1000	1000	PC freqs	
Y:Y 0:0	0:0	PC phase	
Y:Y 0:0	0:0	Manl PC	
Y 1000	1000	PC amp	
Y 1000	1000		
Y W01UR,W01LR	W03UR,W03LR	Chan ids	
Y W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.5E-14
		Resid phase (deg)	0.0 +/- 0.0

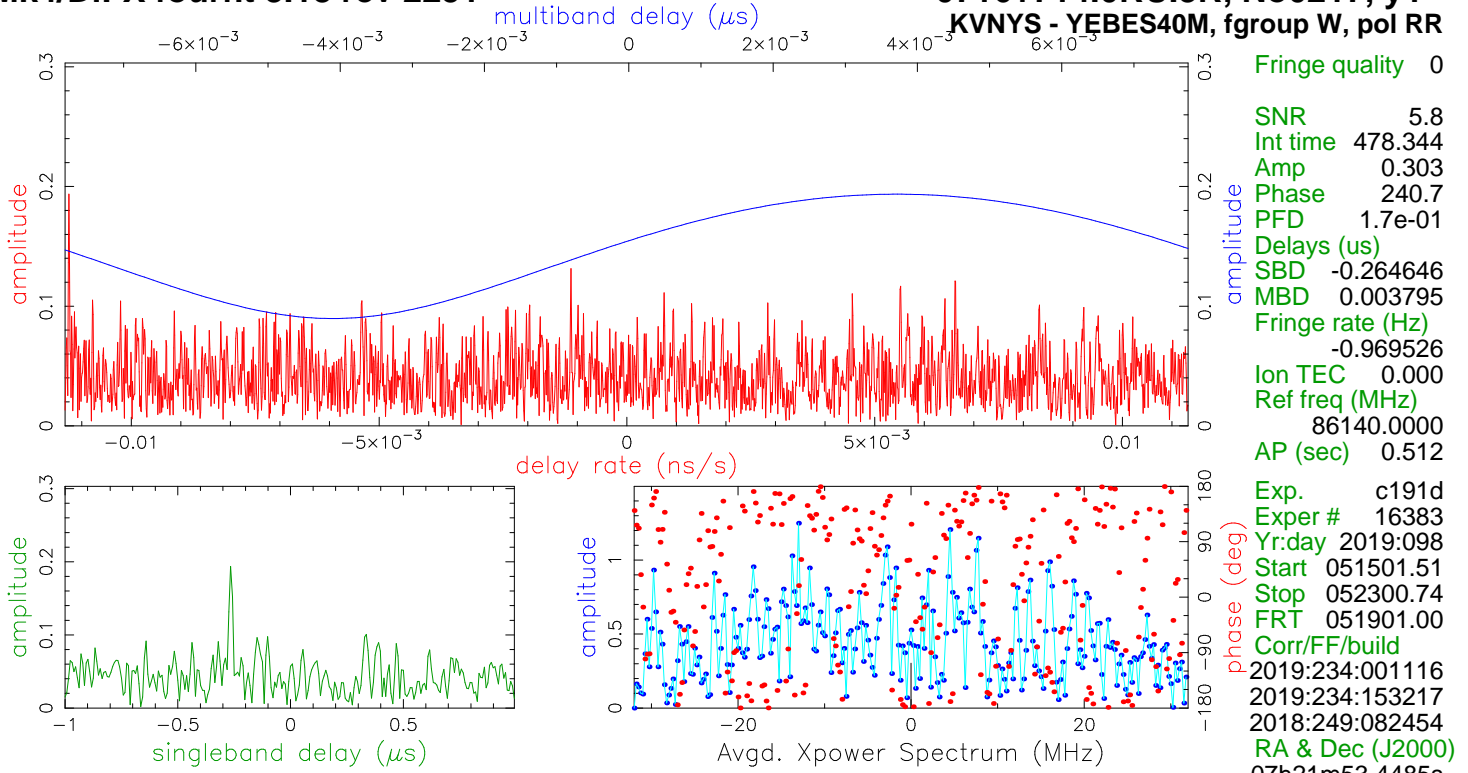
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X8) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

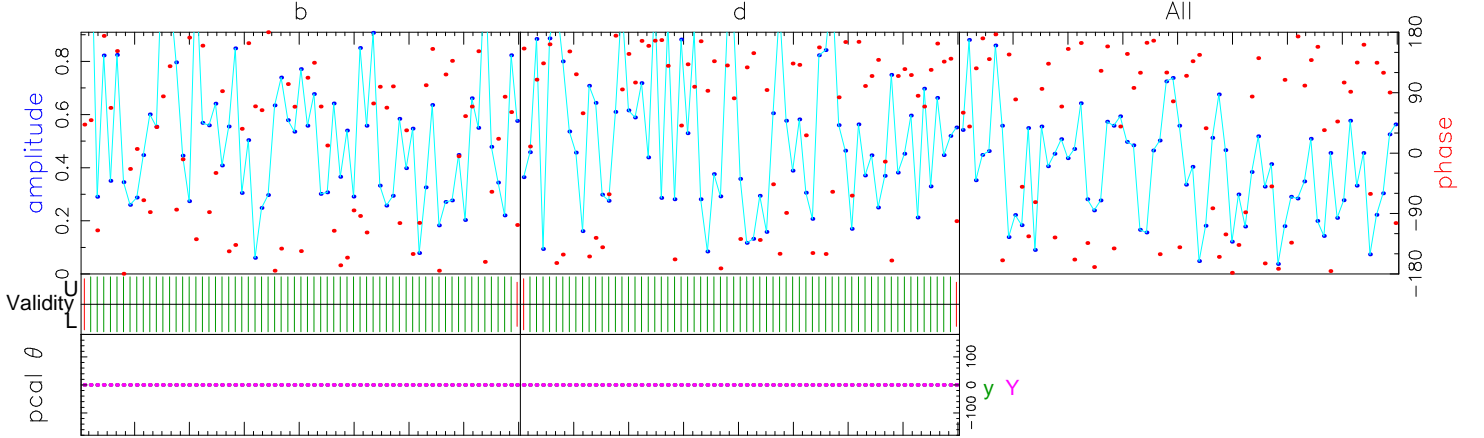
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

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): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

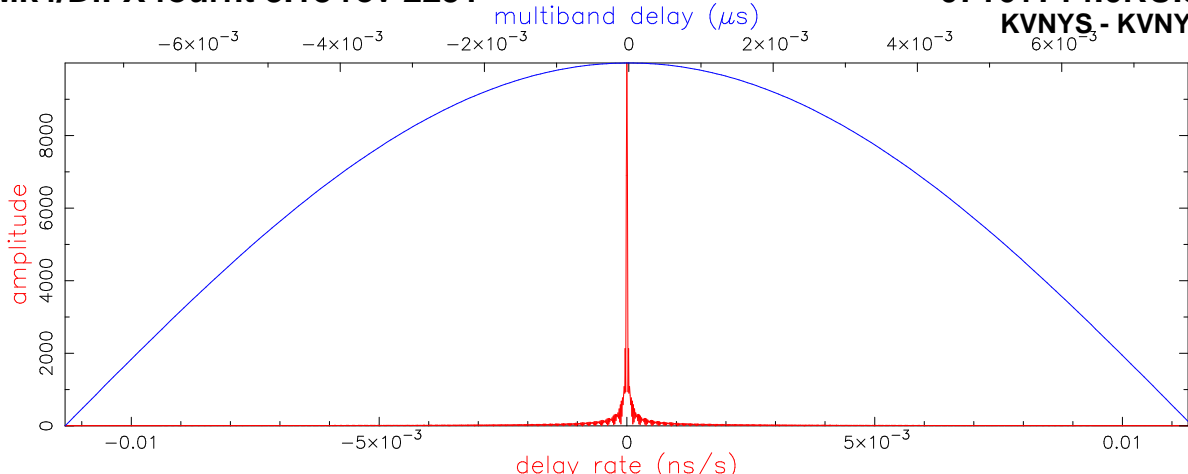


86156.00		86220.00		Freq (MHz)	All
152.1		150.2		Phase	150.7
0.2		0.4		Ampl.	0.3
116.1		95.1		Sbd box	95.1
U/L 936/936		936/936		APs used	
y 0		0		PC freqs	
Y 1000		1000		PC freqs	
y:Y 0:0		0:0		PC phase	
y:Y 0:0		0:0		Manl PC	
y 1000		1000		PC amp	
Y 1000		1000			
y W01UR,W01LR		W03UR,W03LR		Chan ids	
Y W01UR,W01LR		W03UR,W03LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	6.15588094606E+03	Apriori delay (usec)	6.15614277592E+03	Resid mbdelay (usec)	3.79514E-03 +/- 8.6E-04
Sband delay (usec)	6.15587812992E+03	Apriori clock (usec)	1.6527369E+01	Resid sbdelay (usec)	-2.64646E-01 +/- 1.5E-03
Phase delay (usec)	6.15614278078E+03	Apriori clockrate (us/s)	2.5299999E-07	Resid phdelay (usec)	4.85988E-06 +/- 3.2E-07
Delay rate (us/s)	4.84116336797E-01	Apriori rate (us/s)	4.84127592038E-01	Resid rate (us/s)	-1.12552E-05 +/- 2.3E-09
Total phase (deg)	139.1	Apriori accel (us/s/s)	-3.69440843550E-05	Resid phase (deg)	240.7 +/- 9.9

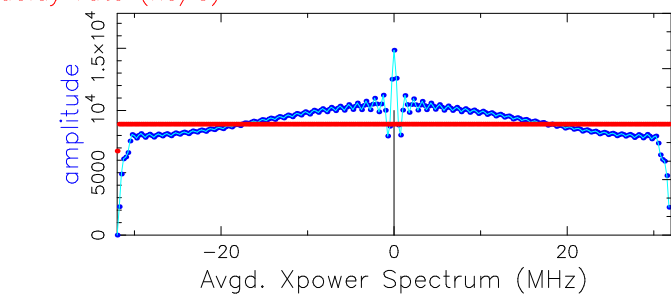
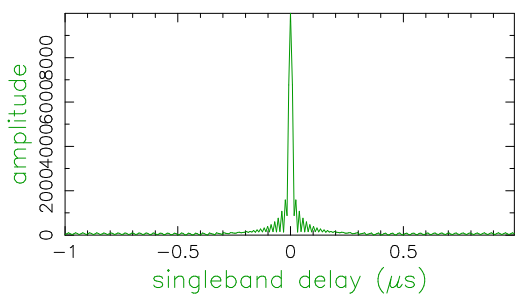
ph/seg (deg)	RMS 69.0	Theor. 80.7	Amplitude Search (2048X8)	0.303 +/- 0.052	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	141.8	140.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	13.9	Inc. seg. avg.	0.308	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	46.1	24.3	Inc. frq. avg.	0.293	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.011 0.011
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

y: az 23.7 el 41.8 pa -96.8 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8802.082 -8556.988 simultaneous interpolator

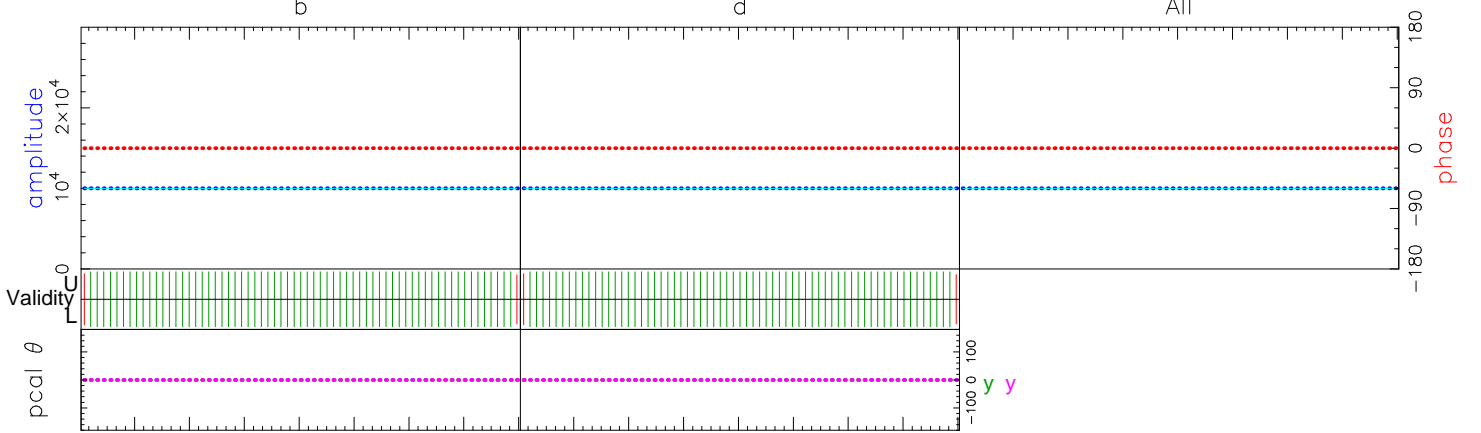
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yY.W.93.0RUI3R



Fringe quality 9
 SNR 299246.4
 Int time 478.986
 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. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051501.51
 Stop 052301.26
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153217
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

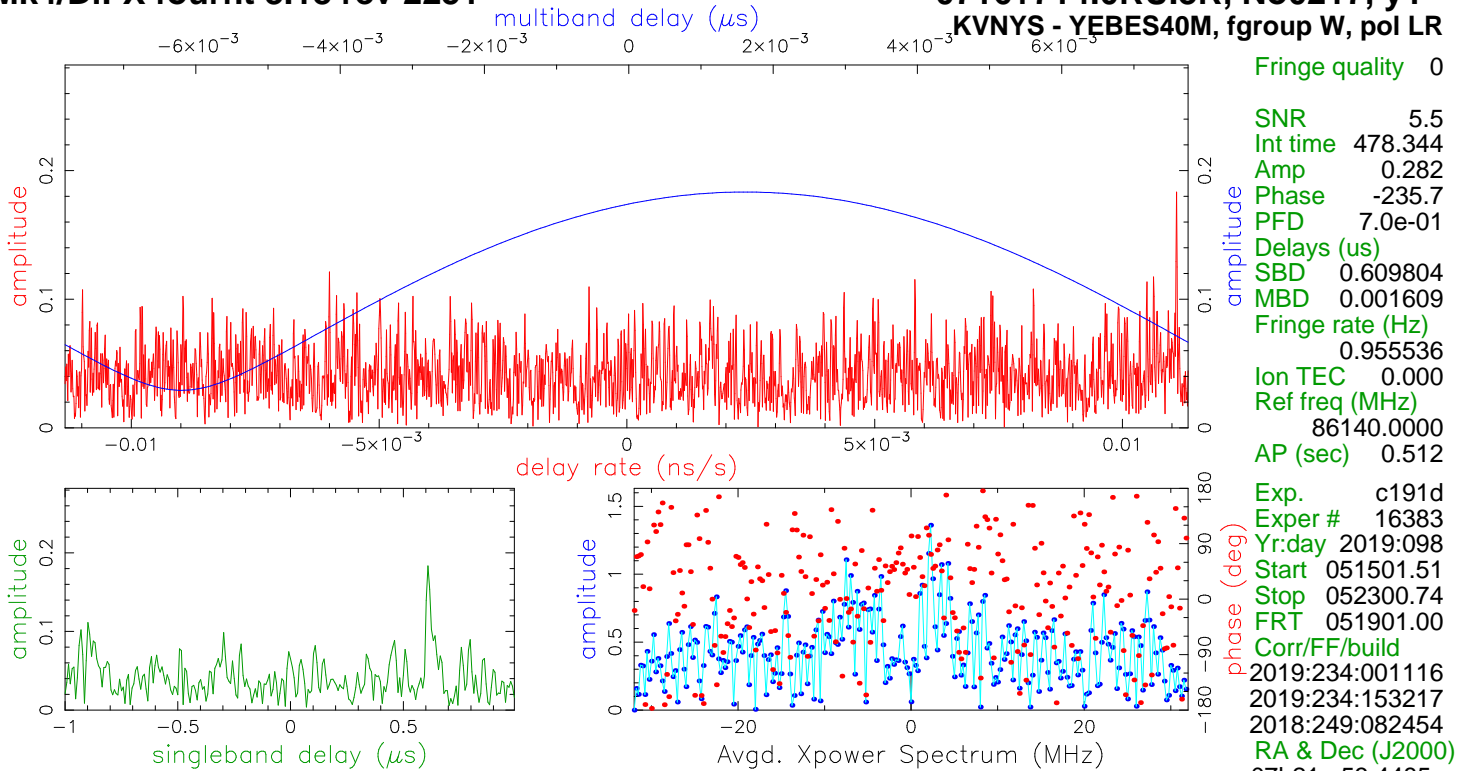


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

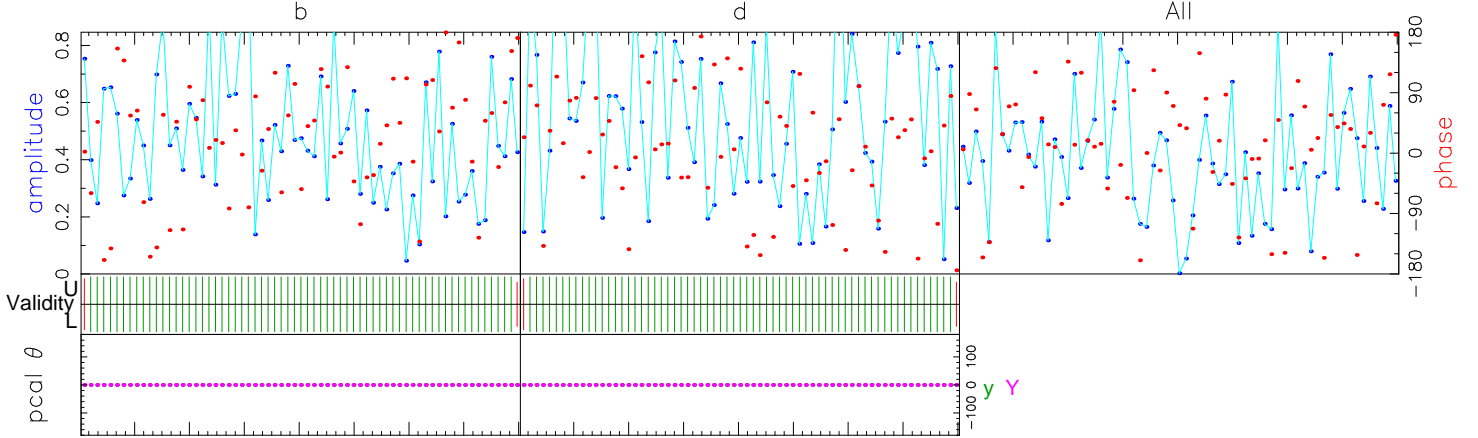


86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 937/937	937/937	APs used	
y 0	0	PC freqs	
y 0	0	PC freqs	
y:y 0:0	0:0	PC phase	
y:y 0:0	0:0	Manl PC	
y 1000	1000	PC amp	
y 1000	1000		
y W01UR,W01LR	W03UR,W03LR	Chan ids	
y W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.5E-14
		Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X8) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 23.7 el 41.8 pa -96.8 y: az 23.7 el 41.8 pa -96.8 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yy..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yy.W.98.0RUI3R simultaneous interpolator

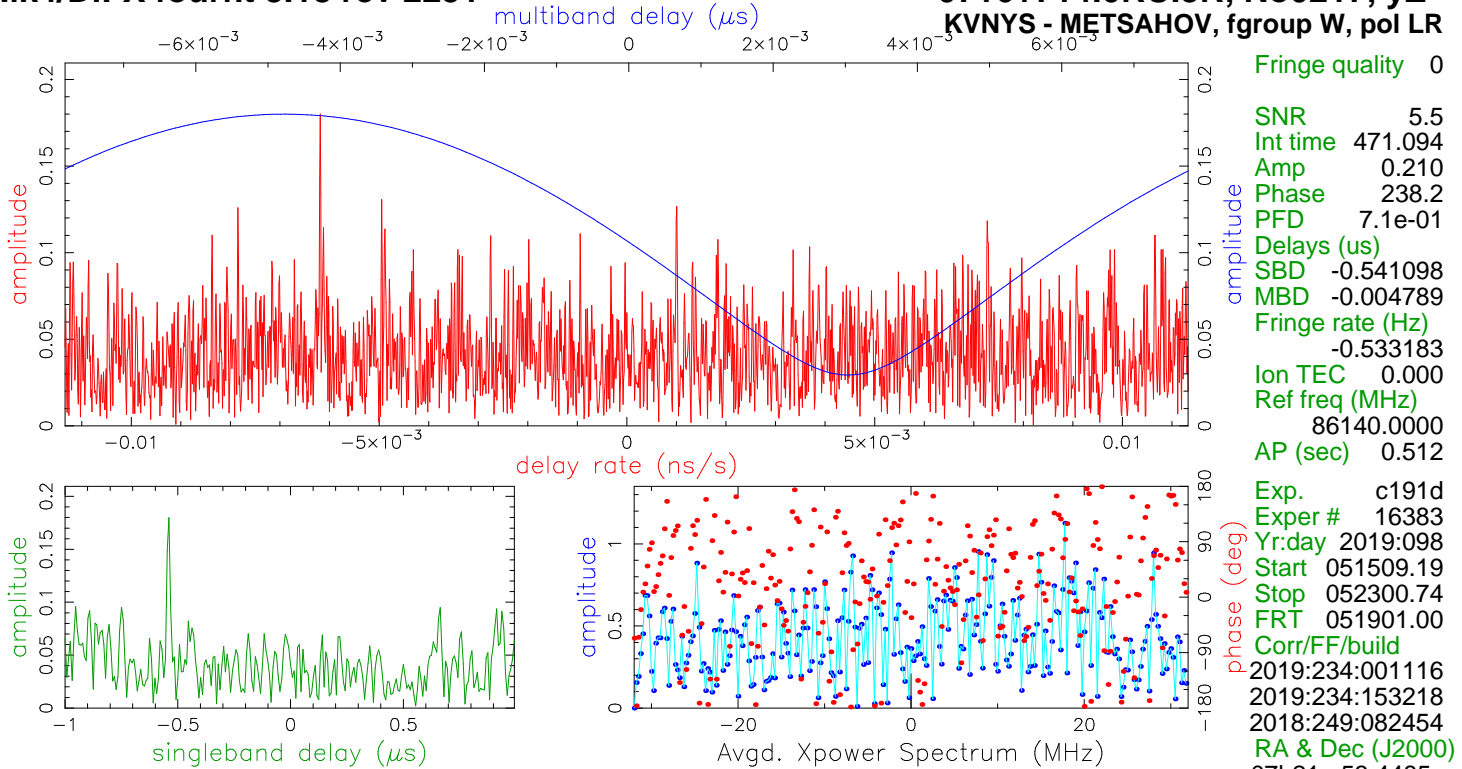


Amp. and Phase vs. time for each freq., 67 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

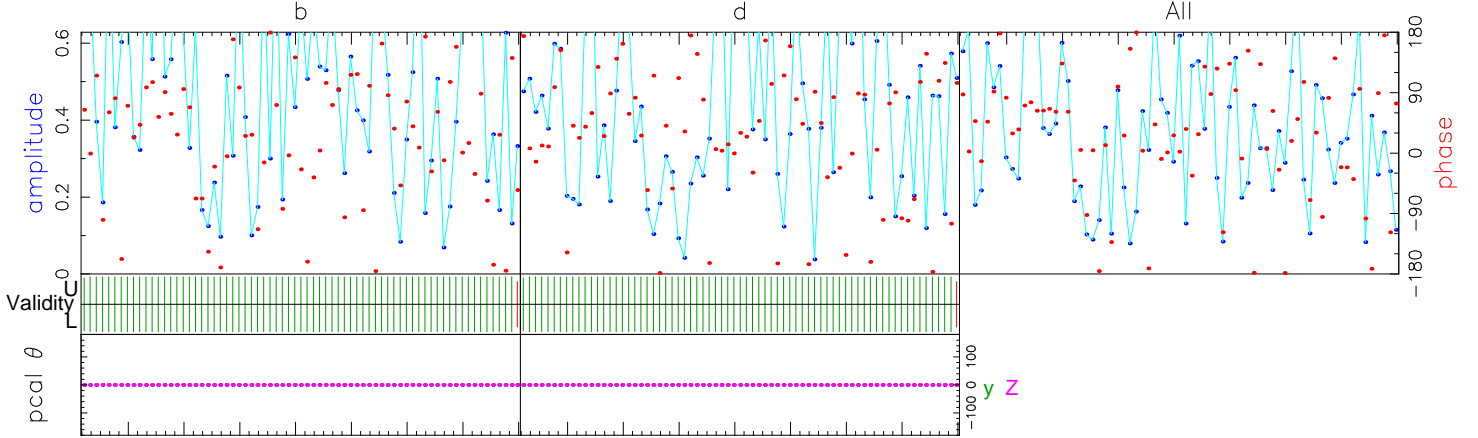


86156.00	86220.00	Freq (MHz)	All				
34.2	34.3	Phase	34.3				
0.2	0.3	Ampl.	0.3				
207.4	207.0	Sbd box	207.1				
U/L 936/936	936/936	APs used					
y 0	0	PC freqs					
Y 1000	1000	PC freqs					
y:Y 0:0	0:0	PC phase					
y:Y 0:0	0:0	Mani PC					
y 1000	1000	PC amp					
Y 1000	1000						
y W01UL,W01LL	W03UL,W03LL	Chan ids					
Y W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	6.15675375956E+03	Apriori delay (usec)	6.15614277592E+03	Resid mbdelay (usec)	1.60864E-03	+/-	9.1E-04
Sband delay (usec)	6.15675257992E+03	Apriori clock (usec)	1.6527369E+01	Resid sbdelay (usec)	6.09804E-01	+/-	1.6E-03
Phase delay (usec)	6.15614277703E+03	Apriori clockrate (us/s)	2.5299999E-07	Resid phdelay (usec)	1.10551E-06	+/-	3.4E-07
Delay rate (us/s)	4.84138684867E-01	Apriori rate (us/s)	4.84127592038E-01	Resid rate (us/s)	1.10928E-05	+/-	2.4E-09
Total phase (deg)	-337.3	Apriori accel (us/s/s)	-3.69440843550E-05	Resid phase (deg)	-235.7	+/-	10.4

ph/seg (deg) 81.8 85.5 Search (2048X8) 0.177 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 167.5 149.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 14.8 Inc. seg. avg. 0.300 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 15.9 25.8 Inc. frq. avg. 0.273 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 23.7 el 41.8 pa -96.8 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -8802.082 -8556.988 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yY.W.99.0RUI3R simultaneous interpolator



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
58.0	58.4	Phase	58.2				
0.2	0.2	Ampl.	0.2				
59.8	59.7	Sbd box	59.7				
U/L 921/921	921/921	APs used					
y 0	0	PC freqs					
Z 1000	1000	PC freqs					
y:Z 0:0	0:0	PC phase					
y:Z 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
Z 1000	1000						
y W01UL,W01LL	W03UL,W03LL	Chan ids					
Z W01UR,W01LR	W03UR,W03LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.90095245840E+02	Apriori delay (usec)	1.90631284371E+02	Resid mbdelay (usec)	-4.78853E-03	+/-	9.1E-04
Sband delay (usec)	1.90090186371E+02	Apriori clock (usec)	2.3466276E+01	Resid sbdelay (usec)	-5.41098E-01	+/-	1.6E-03
Phase delay (usec)	1.90631286247E+02	Apriori clockrate (us/s)	4.4599998E-07	Resid phdelay (usec)	1.87569E-06	+/-	3.4E-07
Delay rate (us/s)	3.26067084129E-01	Apriori rate (us/s)	3.26073273849E-01	Resid rate (us/s)	-6.18972E-06	+/-	2.5E-09
Total phase (deg)	179.0	Apriori accel (us/s/s)	-2.85326132457E-05	Resid phase (deg)	238.2	+/-	10.4

ph/seg (deg) 80.3 88.1 Search (2048X8) 0.177 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

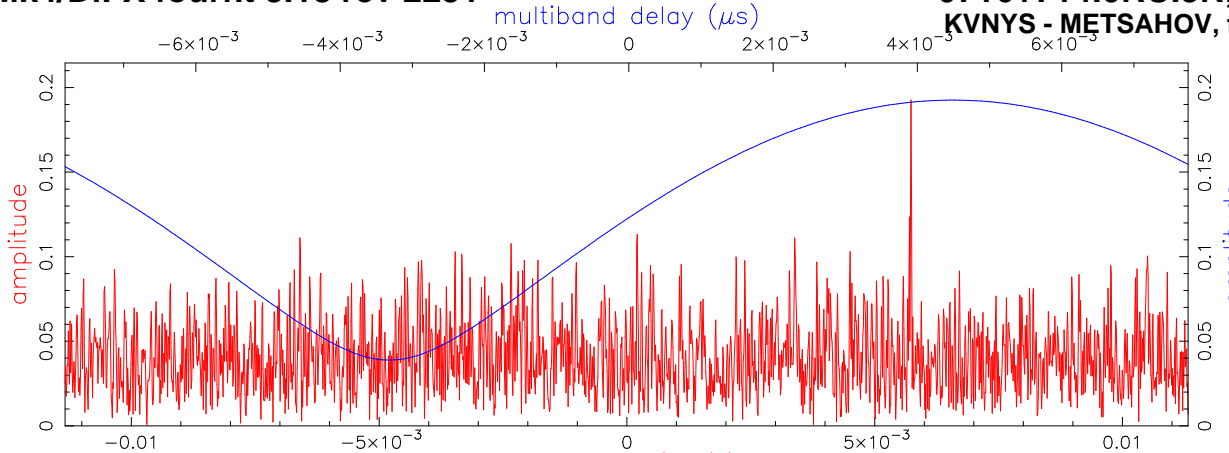
amp/seg (%) 144.7 153.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 14.8 Inc. seg. avg. 0.194 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 16.1 25.8 Inc. frq. avg. 0.198 Data rate (Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

y: az 23.7 el 41.8 pa -96.8 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -5939.859 -7268.138 Data rate (TEC) 0.00 0.00 simultaneous interpolator

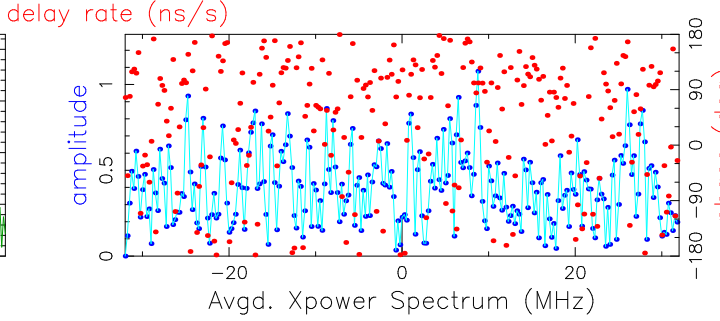
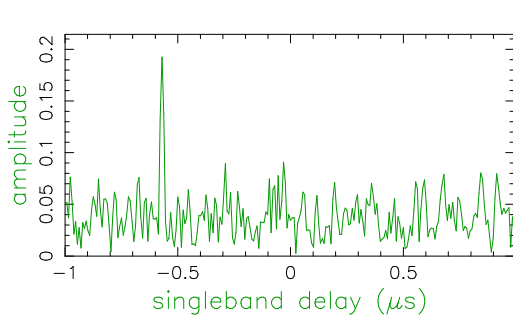
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yZ.W.101.0RUI3R



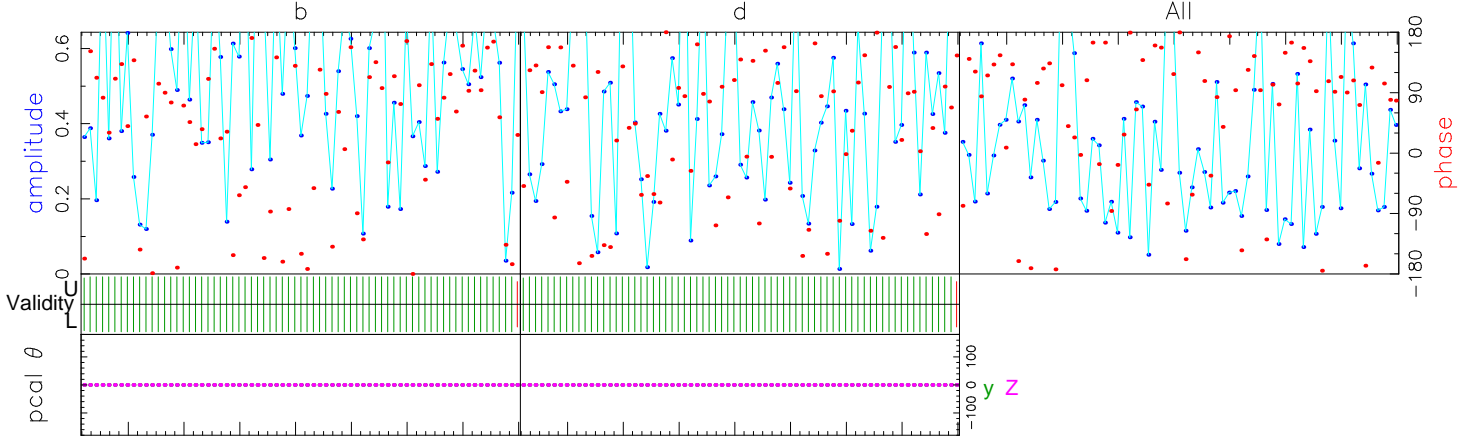
Fringe quality 0

SNR 5.7
Int time 471.094
Amp 0.215
Phase 199.6
PFD 2.9e-01
Delays (us)
SBD -0.570117
MBD 0.004485
Fringe rate (Hz)
0.494284
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051509.19
Stop 052300.74
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153218
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

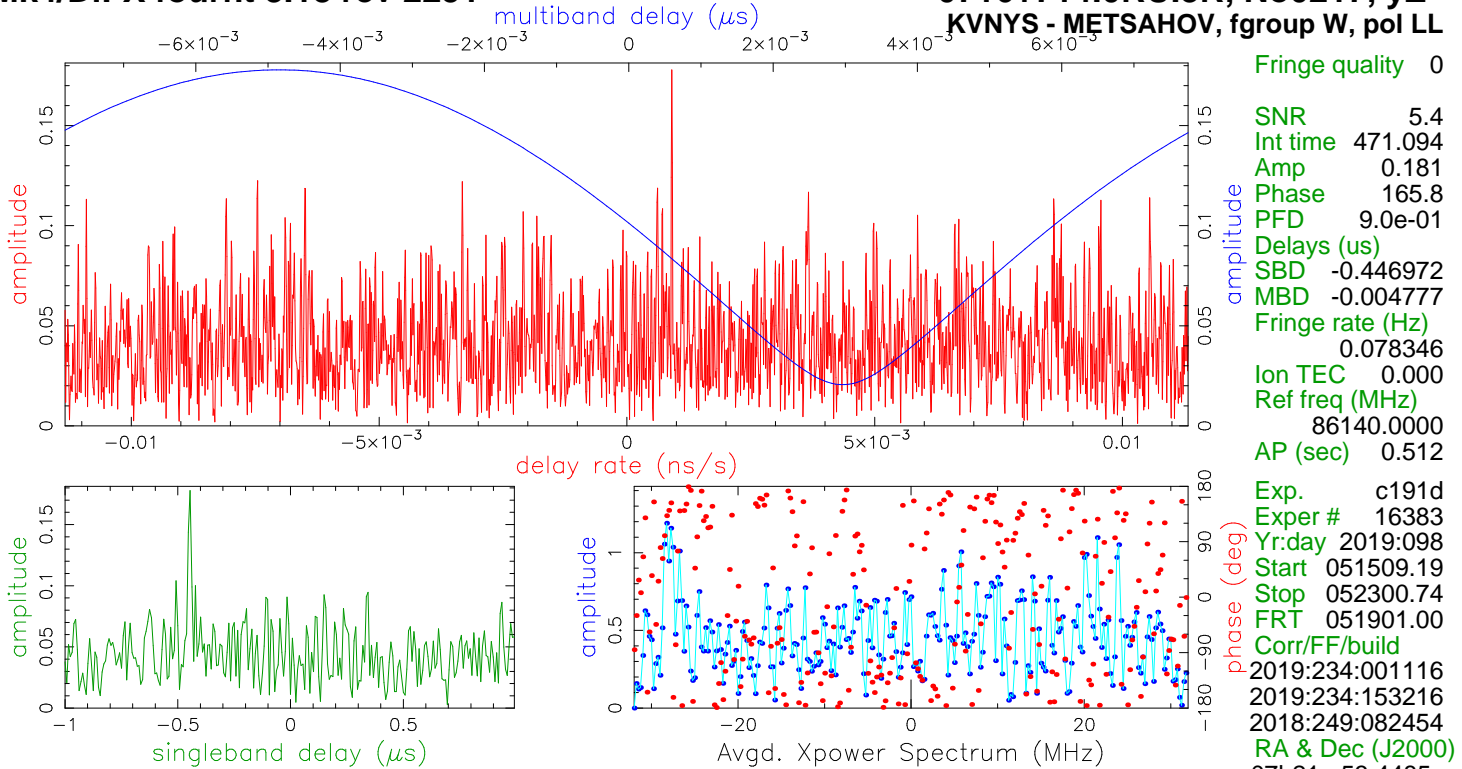


86156.00	86220.00	Freq (MHz)	All				
109.6	109.8	Phase	109.6				
0.3	0.2	Ampl.	0.2				
56.4	55.4	Sbd box	56.0				
U/L 921/921	921/921	APs used					
y 0	0	PC freqs					
Z 1000	1000	PC freqs					
y:Z 0:0	0:0	PC phase					
y:Z 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
Z 1000	1000						
y W01UR,W01LR	W03UR,W03LR	Chan ids					
Z W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.90057644296E+02	Apriori delay (usec)	1.90631284371E+02	Resid mbdelay (usec)	4.48492E-03	+/-	8.7E-04
Sband delay (usec)	1.90061167371E+02	Apriori clock (usec)	2.3466276E+01	Resid sbdelay (usec)	-5.70117E-01	+/-	1.5E-03
Phase delay (usec)	1.90631287906E+02	Apriori clockrate (us/s)	4.4599998E-07	Resid phdelay (usec)	3.53535E-06	+/-	3.2E-07
Delay rate (us/s)	3.26079012000E-01	Apriori rate (us/s)	3.26073273849E-01	Resid rate (us/s)	5.73815E-06	+/-	2.4E-09
Total phase (deg)	140.5	Apriori accel (us/s/s)	-2.85326132457E-05	Resid phase (deg)	199.6	+/-	10.0

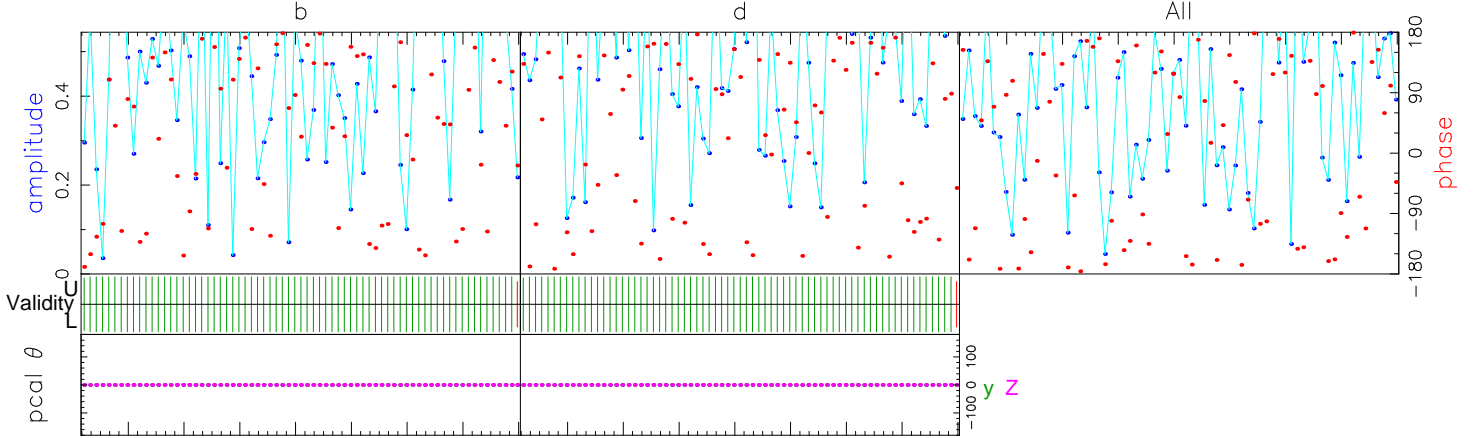
ph/seg (deg) RMS Theor. Amplitude 0.215 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.6 84.4 Search (2048X8) 0.181 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 132.3 147.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 14.2 Inc. seg. avg. 0.184 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 20.2 24.7 Inc. frq. avg. 0.208 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 23.7 el 41.8 pa -96.8 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -5939.859 -7268.138 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yZ.W.106.0RUI3R



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
166.7	165.1	Phase	165.8				
0.2	0.2	Ampl.	0.2				
253.9	71.8	Sbd box	71.8				
U/L 921/921	921/921	APs used					
y 0	0	PC freqs					
Z 1000	1000	PC freqs					
y:Z 0:0	0:0	PC phase					
y:Z 0:0	0:0	Manl PC					
y 1000	1000	PC amp					
Z 1000	1000						
y W01UL,W01LL	W03UL,W03LL	Chan ids					
Z W01UL,W01LL	W03UL,W03LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.90189007833E+02	Apriori delay (usec)	1.90631284371E+02	Resid mbdelay (usec)	-4.77654E-03	+/-	9.3E-04
Sband delay (usec)	1.90184312371E+02	Apriori clock (usec)	2.3466276E+01	Resid sbdelay (usec)	-4.46972E-01	+/-	1.6E-03
Phase delay (usec)	1.90631289718E+02	Apriori clockrate (us/s)	4.4599998E-07	Resid phdelay (usec)	5.34677E-06	+/-	3.4E-07
Delay rate (us/s)	3.26074183365E-01	Apriori rate (us/s)	3.26073273849E-01	Resid rate (us/s)	9.09515E-07	+/-	2.5E-09
Total phase (deg)	106.7	Apriori accel (us/s/s)	-2.85326132457E-05	Resid phase (deg)	165.8	+/-	10.7

ph/seg (deg) 73.9 90.0 Theor. Amplitude 0.181 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

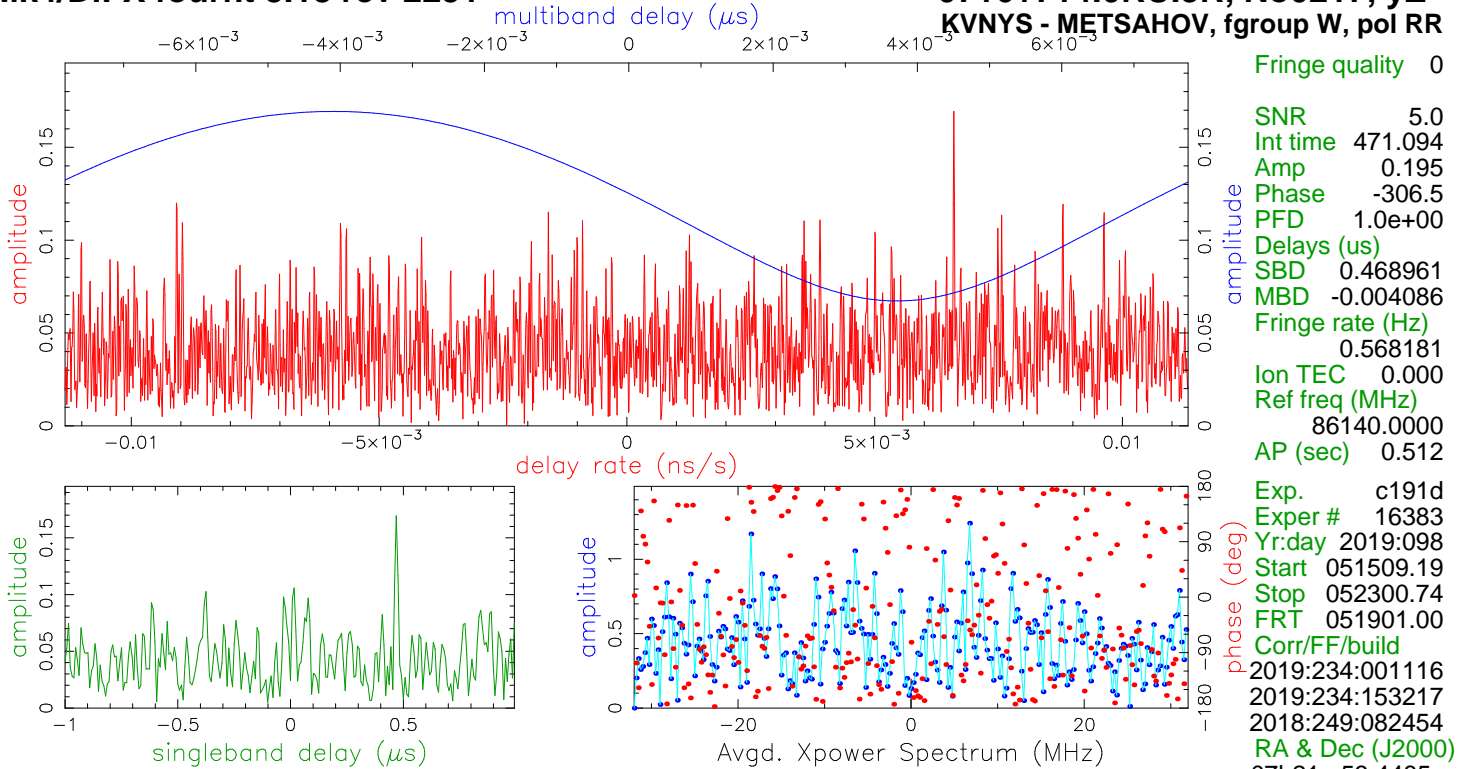
amp/seg (%) 161.5 157.0 Search (2048X8) 0.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 15.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

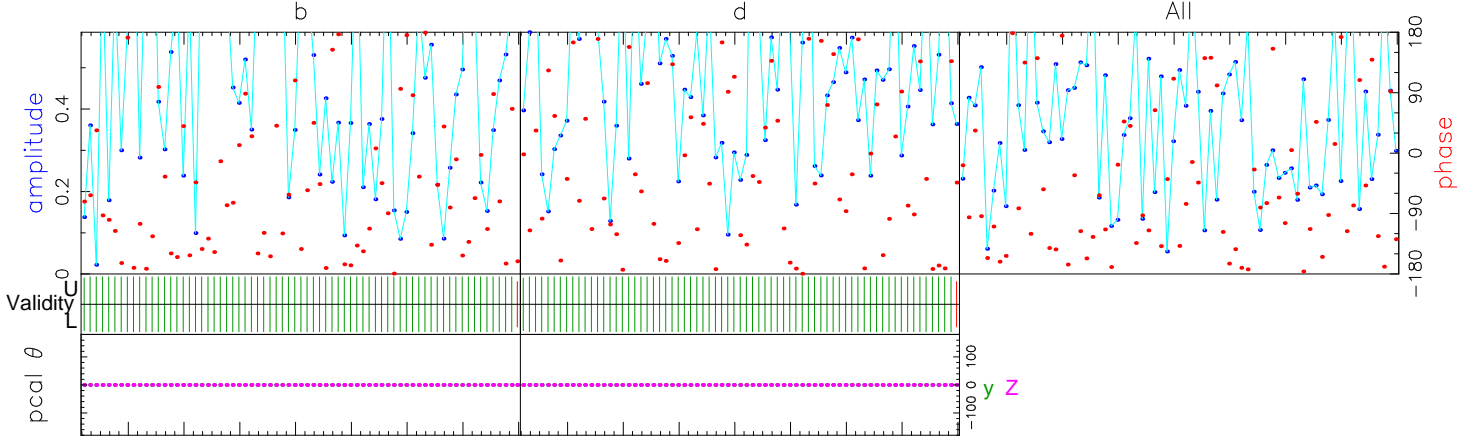
amp/frq (%) 11.5 26.4 Inc. seg. avg. 0.181 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

y: az 23.7 el 41.8 pa -96.8 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -5939.859 -7268.138 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yZ.W.89.0RUI3R simultaneous interpolator



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

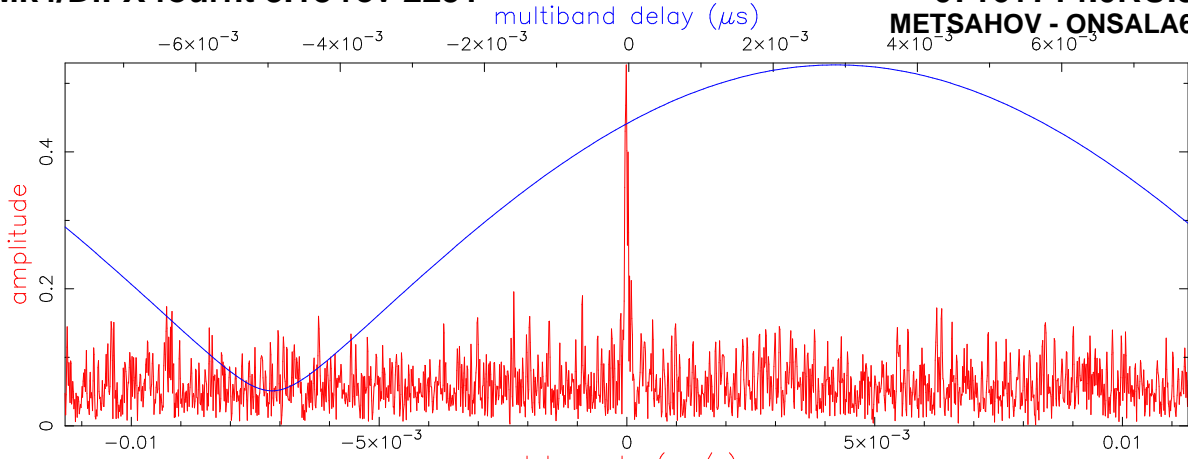


86156.00		86220.00		Freq (MHz)	All
-126.4		-126.7		Phase	-126.5
0.3		0.1		Ampl.	0.2
188.8		181.0		Sbd box	189.0
U/L 921/921		921/921		APs used	
y 0		0		PC freqs	
Z 1000		1000		PC freqs	
y:Z 0:0		0:0		PC phase	
y:Z 0:0		0:0		Manl PC	
y 1000		1000		PC amp	
Z 1000		1000			
y W01UR,W01LR		W03UR,W03LR		Chan ids	
Z W01UR,W01LR		W03UR,W03LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.91095948004E+02	Apriori delay (usec)	1.90631284371E+02	Resid mbdelay (usec)	-4.08637E-03 +/- 9.9E-04
Sband delay (usec)	1.91100245371E+02	Apriori clock (usec)	2.3466276E+01	Resid sbdelay (usec)	4.68961E-01 +/- 1.7E-03
Phase delay (usec)	1.90631280291E+02	Apriori clockrate (us/s)	4.4599998E-07	Resid phdelay (usec)	-4.08002E-06 +/- 3.7E-07
Delay rate (us/s)	3.26079869873E-01	Apriori rate (us/s)	3.26073273849E-01	Resid rate (us/s)	6.59602E-06 +/- 2.7E-09
Total phase (deg)	-5.7	Apriori accel (us/s/s)	-2.85326132457E-05	Resid phase (deg)	-306.5 +/- 11.4

ph/seg (deg)	RMS 78.6	Theor. 96.1	Amplitude Search (2048X8)	0.195 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	164.0	167.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	16.1	Inc. seg. avg.	0.179	Bits/sample: 2x2	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.7	28.1	Inc. frq. avg.	0.188	Data rate(Mb/s): 512	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 23.7 el 41.8 pa -96.8 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) -5939.859 -7268.138 simultaneous interpolator

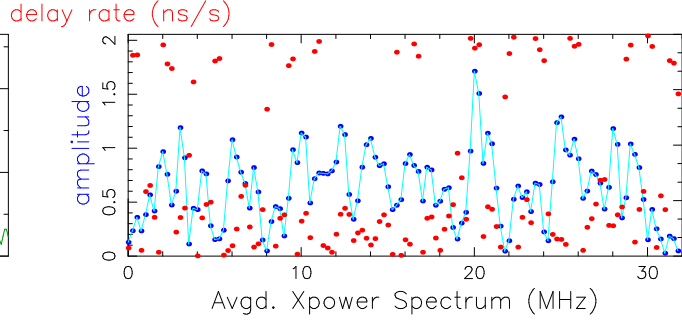
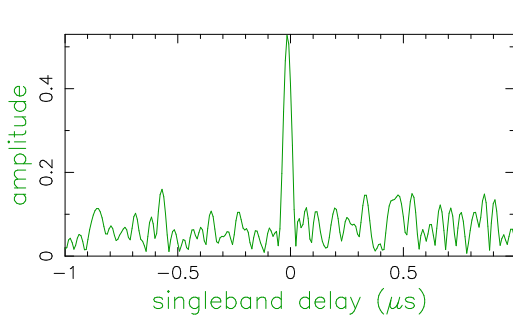
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/yZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/yZ.W.96.0RUI3R



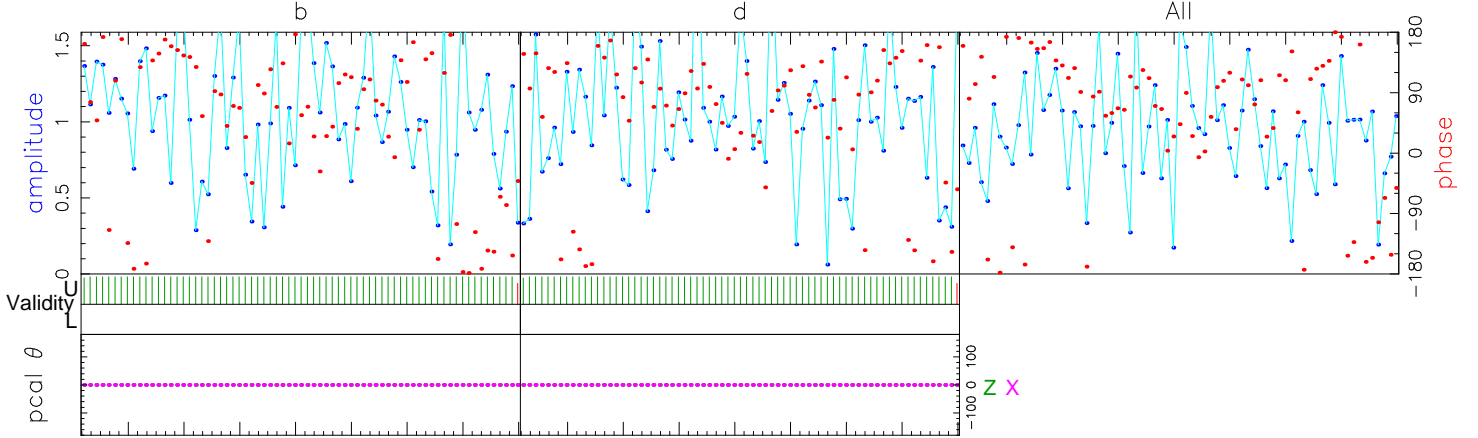
Fringe quality 9

SNR 11.1
Int time 470.657
Amp 0.530
Phase 204.1
PFD 6.4e-21
Delays (us)
SBD -0.013632
MBD 0.002919
Fringe rate (Hz)
-0.001056
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191d
Exper # 16383
Yr:day 2019:098
Start 051509.19
Stop 052300.23
FRT 051901.00
Corr/FF/build
2019:234:001116
2019:234:153218
2018:249:082454
RA & Dec (J2000)
07h21m53.4485s
+71°20'36.363"

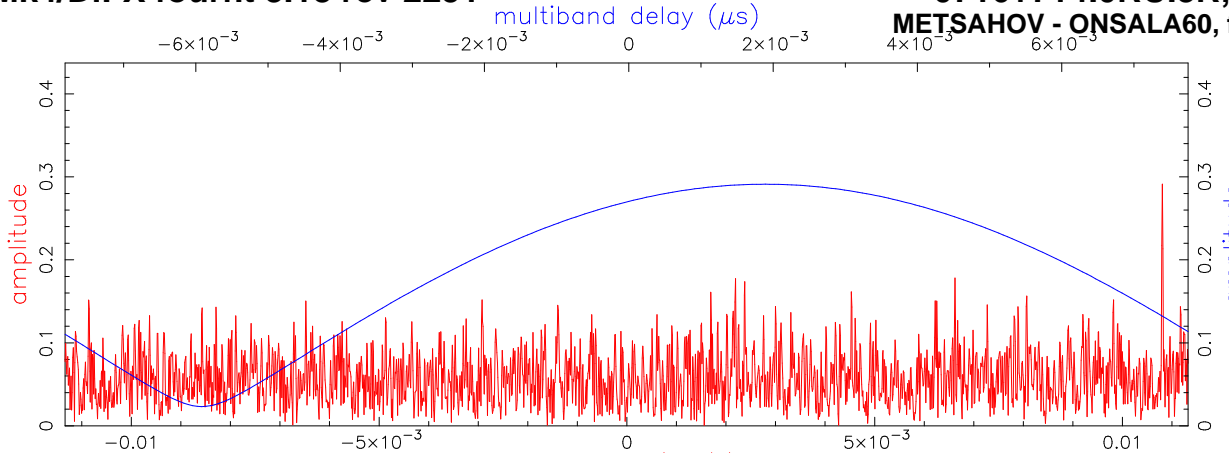


Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

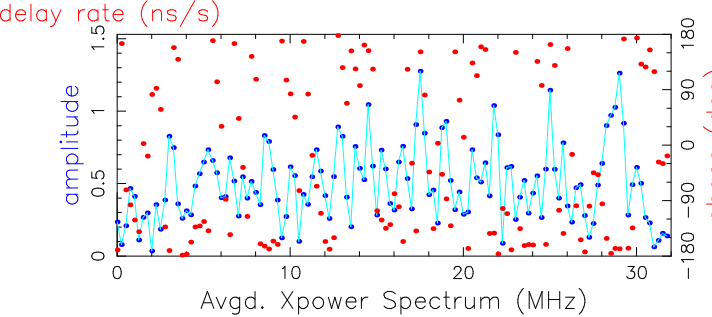
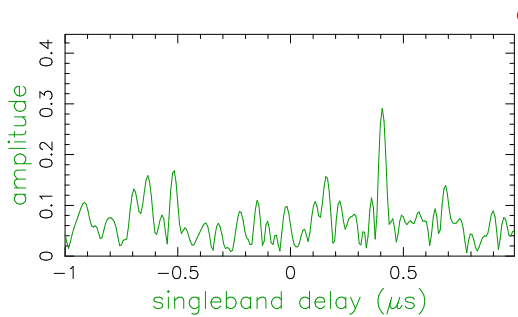


86156.00	86220.00	Freq (MHz)	All			
114.8	113.6	Phase	114.1			
0.5	0.6	Ampl.	0.5			
127.5	127.1	Sbd box	127.3			
U/L 920/0	920/0	APs used				
Z 1000	1000	PC freqs				
X 1000	1000	PC freqs				
Z:X 0:0	0:0	PC phase				
Z:X 0:0	0:0	Manl PC				
Z 1000	1000	PC amp				
X 1000	1000					
Z W01UR	W03UR	Chan ids				
X W01UR	W03UR	Tracks				
		Chan ids				
		Tracks				
Group delay (usec)(sbd)	8.16017946839E+02	Apriori delay (usec)	8.16030652528E+02	Resid mbdelay (usec)	2.91931E-03	+/- 4.5E-04
Sband delay (usec)	8.16017020528E+02	Apriori clock (usec)	-2.5089714E+01	Resid sbdelay (usec)	-1.36320E-02	+/- 1.6E-03
Phase delay (usec)	8.16030656208E+02	Apriori clockrate (us/s)	-4.4999998E-07	Resid phdelay (usec)	3.68064E-06	+/- 3.3E-07
Delay rate (us/s)	5.48319893917E-02	Apriori rate (us/s)	5.48320016462E-02	Resid rate (us/s)	-1.22545E-08	+/- 1.2E-09
Total phase (deg)	351.3	Apriori accel (us/s/s)	-1.73718018819E-06	Resid phase (deg)	204.1	+/- 10.3

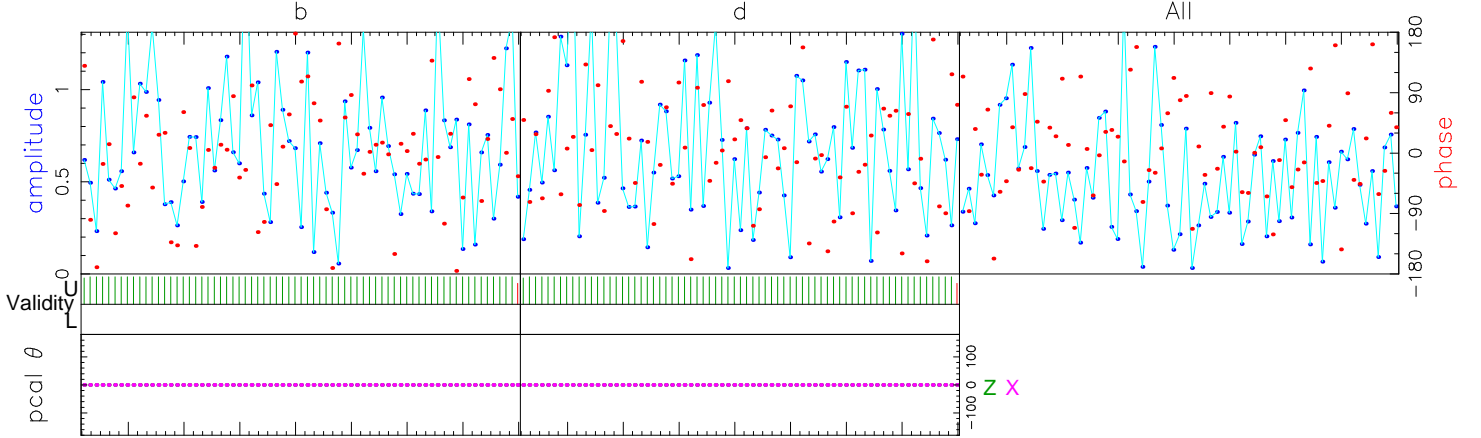
ph/seg (deg) 65.1 43.4 Theor. Amplitude 0.530 +/- 0.048 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 102.7 75.8 Search (2048X8) 0.517 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 7.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.7 12.7 Inc. seg. avg. 0.732 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 3.4 el 41.6 pa -5.4 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -987.366 -315.487 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZX.W.105.0RUI3R simultaneous interpolator



Fringe quality 0
 SNR 6.1
 Int time 470.657
 Amp 0.437
 Phase -177.4
 PFD 3.3e-02
 Delays (us)
 SBD 0.406675
 MBD 0.001884
 Fringe rate (Hz) 0.931054
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051509.19
 Stop 052300.23
 FRT 051901.00
 Corr/FF/build 2019:234:001116
 2019:234:153219
 2018:249:082454
 RA & Dec (J2000) 07h21m53.4485s +71°20'36.363"

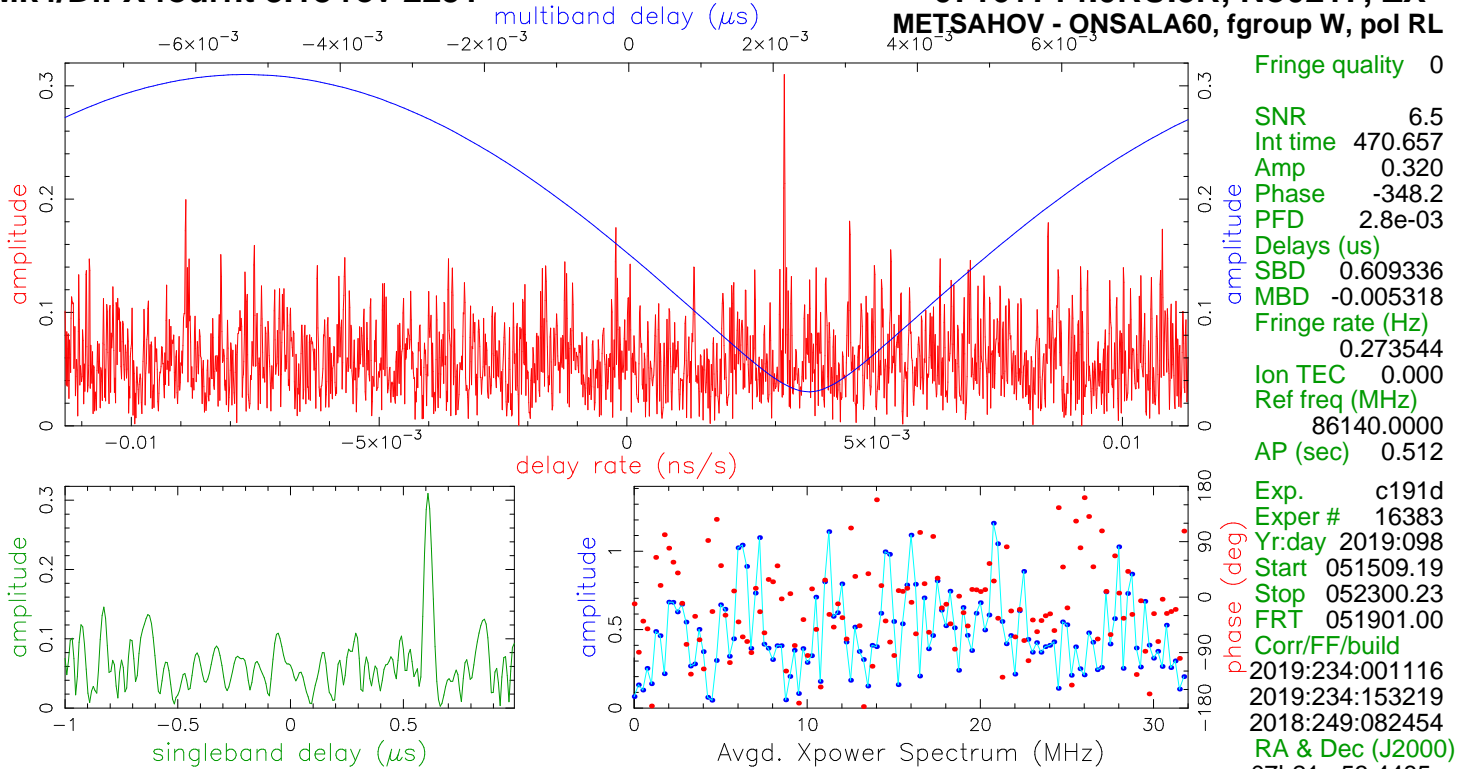


Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

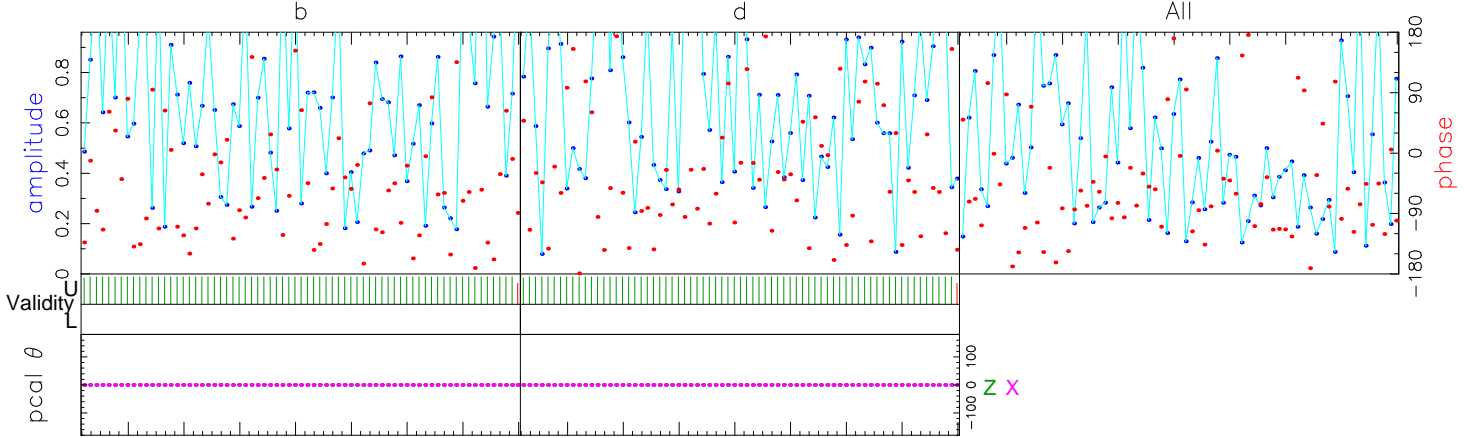


86156.00	86220.00	Freq (MHz)	All				
2.6	2.8	Phase	2.6				
0.5	0.4	Ampl.	0.4				
181.5	180.6	Sbd box	181.1				
U/L 920/0	920/0	APs used					
Z 1000	1000	PC freqs					
X 1000	1000	PC freqs					
Z:X 0:0	0:0	PC phase					
Z:X 0:0	0:0	Manl PC					
Z 1000	1000	PC amp					
X 1000	1000						
Z W01UL	W03UL	Chan ids					
X W01UR	W03UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	8.16438786939E+02	Apriori delay (usec)	8.16030652528E+02	Resid mbdelay (usec)	1.88441E-03	+/-	8.1E-04
Sband delay (usec)	8.16437327028E+02	Apriori clock (usec)	-2.5089714E+01	Resid sbdelay (usec)	4.06675E-01	+/-	2.8E-03
Phase delay (usec)	8.16030652613E+02	Apriori clockrate (us/s)	-4.4999998E-07	Resid phdelay (usec)	8.53895E-08	+/-	6.1E-07
Delay rate (us/s)	5.48428102576E-02	Apriori rate (us/s)	5.48320016462E-02	Resid rate (us/s)	1.08086E-05	+/-	2.2E-09
Total phase (deg)	-30.2	Apriori accel (us/s/s)	-1.73718018819E-06	Resid phase (deg)	-177.4	+/-	18.8

ph/seg (deg) 72.2 79.0 Theor. Amplitude 0.437 +/- 0.072 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 130.6 138.0 Search (2048X8) 0.277 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 13.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.0 23.2 Inc. seg. avg. 0.404 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 3.4 el 41.6 pa -5.4 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -987.366 -315.487 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZX.W.110.0RUI3R

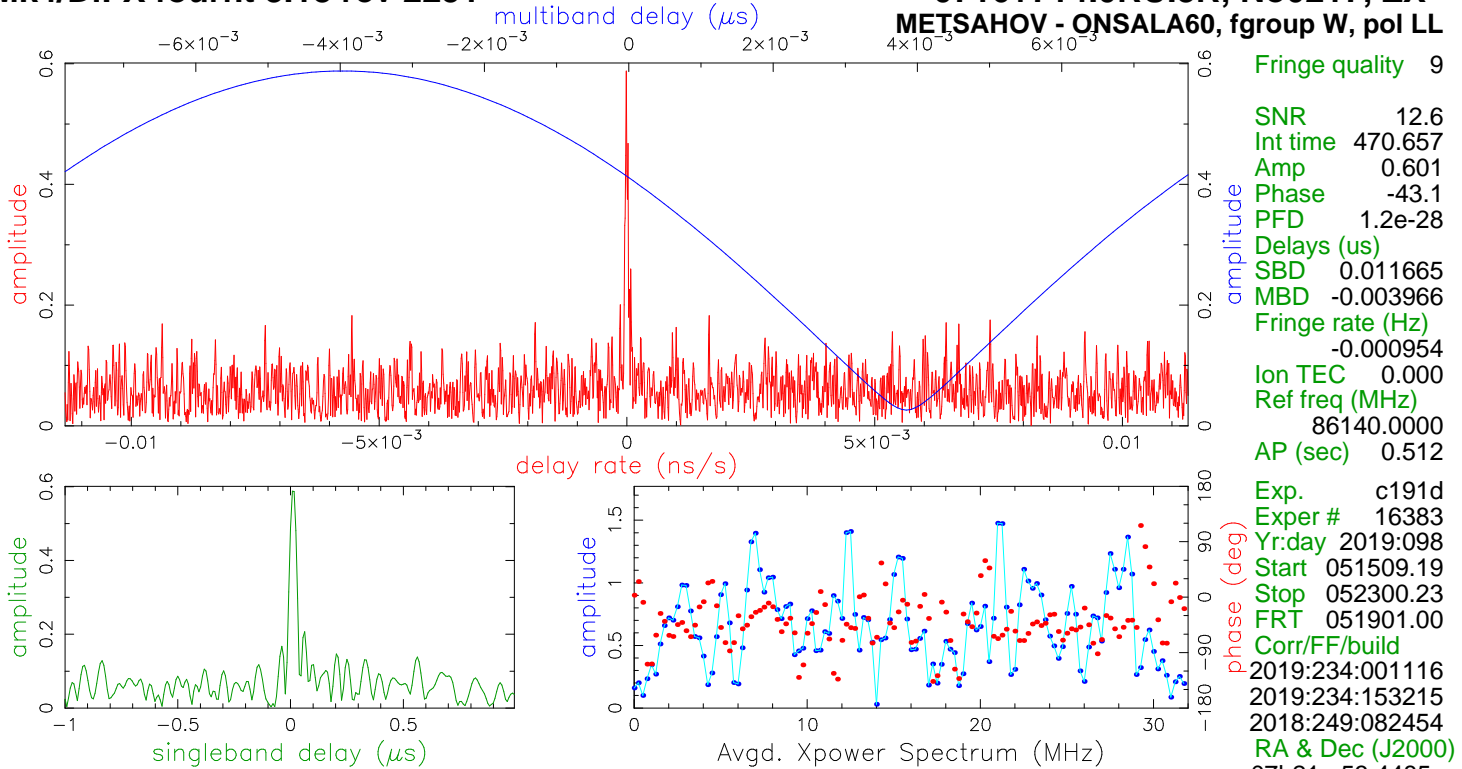


Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

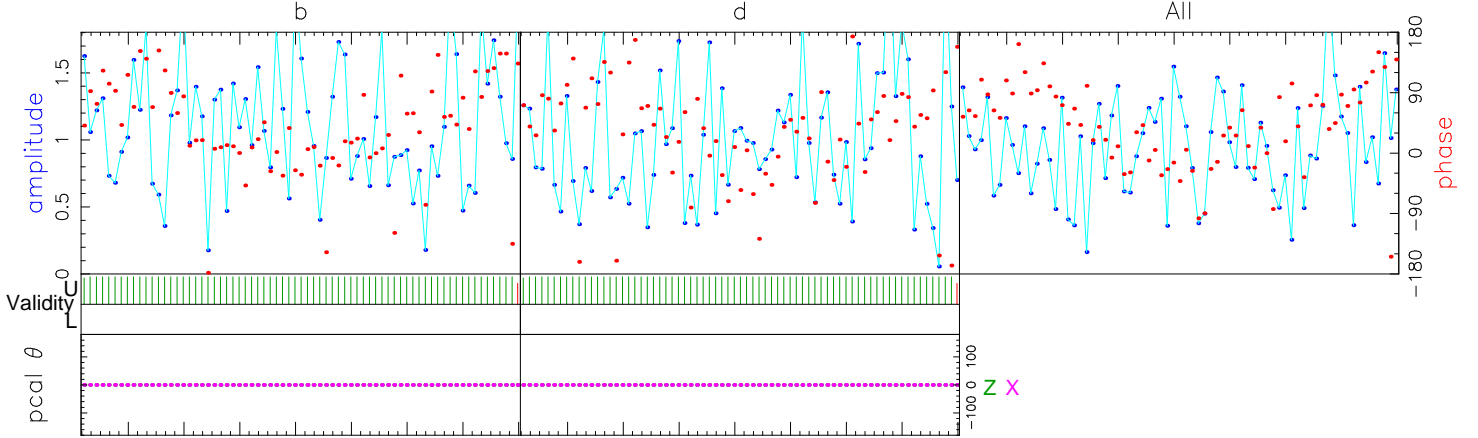


86156.00	86220.00	Freq (MHz)	All				
-78.2	-78.2	Phase	-78.2				
0.4	0.3	Ampl.	0.3				
207.8	206.4	Sbd box	207.0				
U/L 920/0	920/0	APs used					
Z 1000	1000	PC freqs					
X 1000	1000	PC freqs					
Z:X 0:0	0:0	PC phase					
Z:X 0:0	0:0	Manl PC					
Z 1000	1000	PC amp					
X 1000	1000						
Z W01UR	W03UR	Chan ids					
X W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	8.16634709895E+02	Apriori delay (usec)	8.16030652528E+02	Resid mbdelay (usec)	-5.31763E-03	+/-	7.7E-04
Sband delay (usec)	8.16639988528E+02	Apriori clock (usec)	-2.5089714E+01	Resid sbdelay (usec)	6.09336E-01	+/-	2.7E-03
Phase delay (usec)	8.16030650006E+02	Apriori clockrate (us/s)	-4.4999998E-07	Resid phdelay (usec)	-2.52168E-06	+/-	5.7E-07
Delay rate (us/s)	5.48351772186E-02	Apriori rate (us/s)	5.48320016462E-02	Resid rate (us/s)	3.17557E-06	+/-	2.1E-09
Total phase (deg)	-201.1	Apriori accel (us/s/s)	-1.73718018819E-06	Resid phase (deg)	-348.2	+/-	17.6

RMS Theor. Amplitude 0.320 +/- 0.049 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 76.2 74.3 Search (2048X8) 0.304 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 119.1 129.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 12.5 Inc. seg. avg. 0.289 Sample rate(MSamp/s): 64 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 9.7 21.8 Inc. frq. avg. 0.313 Data rate(Mb/s): 256 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Z: az 3.4 el 41.6 pa -5.4 X: az 358.2 el 38.7 pa 2.3 u,v (fr/asec) -987.366 -315.487 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZX..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZX.W.112.0RUI3R



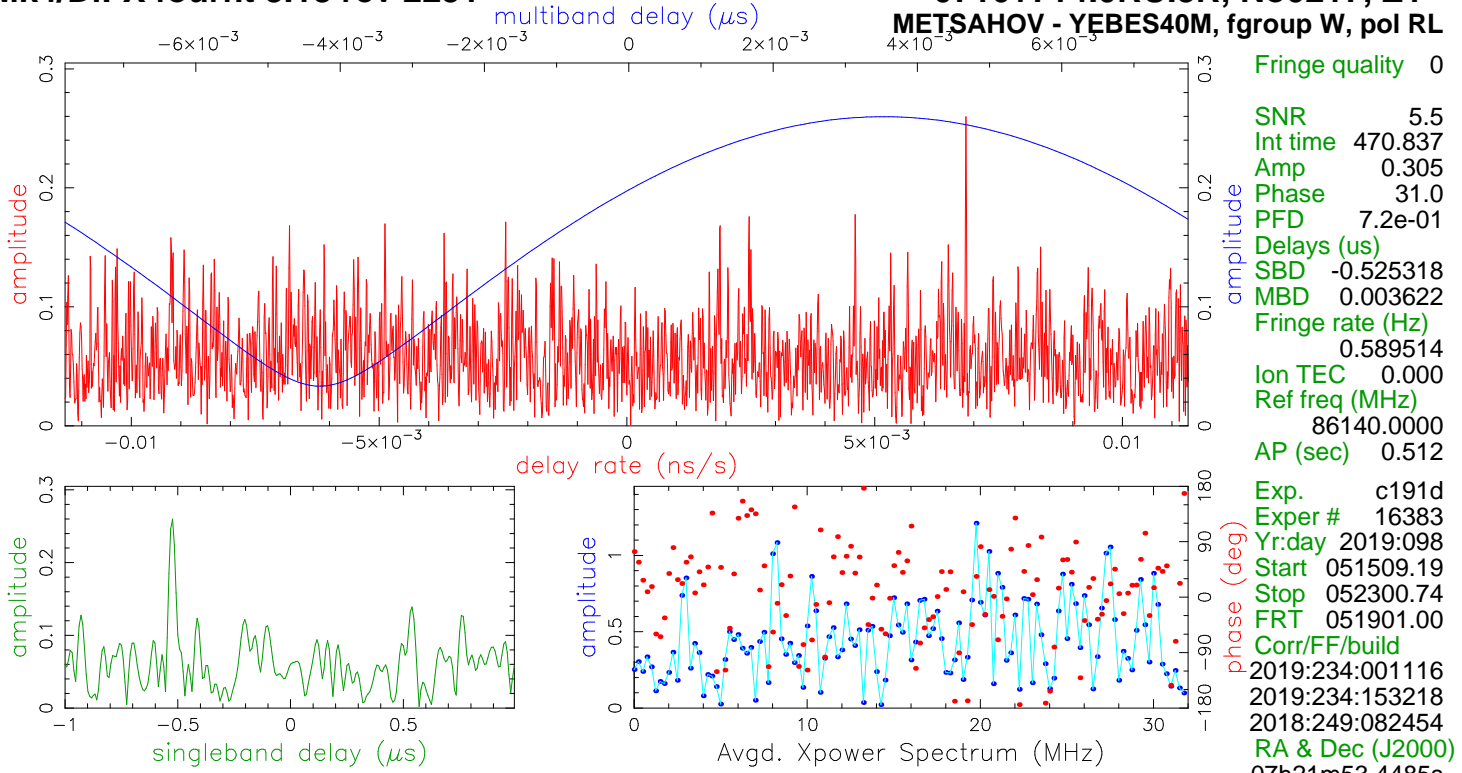
Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



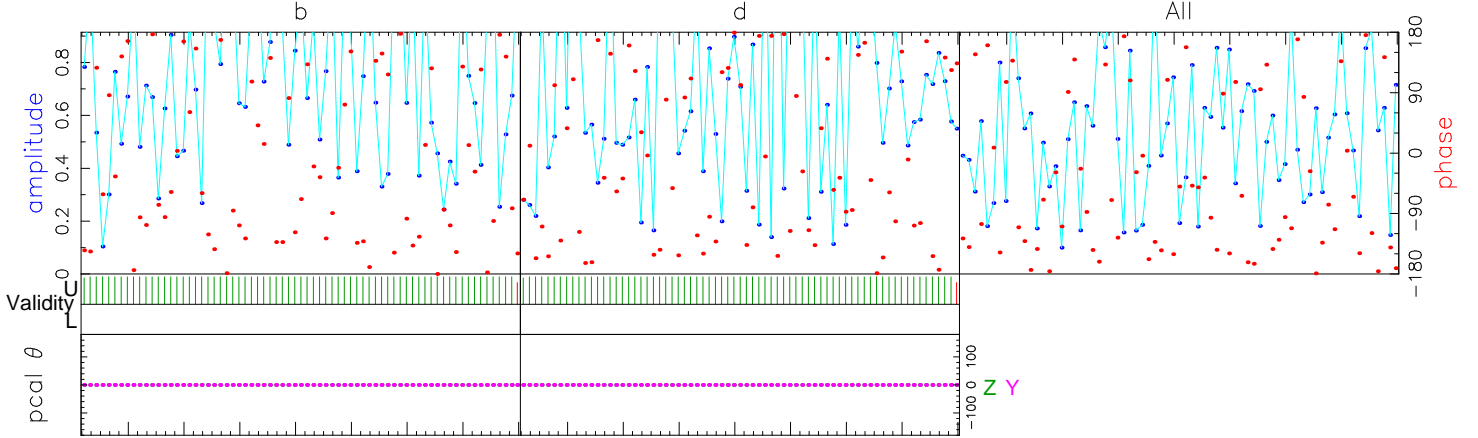
86156.00	86220.00	Freq (MHz)	All				
46.9	46.9	Phase	46.9				
0.6	0.6	Ampl.	0.6				
130.6	130.4	Sbd box	130.5				
U/L 920/0	920/0	APs used					
Z 1000	1000	PC freqs					
X 1000	1000	PC freqs					
Z:X 0:0	0:0	PC phase					
Z:X 0:0	0:0	Manl PC					
Z 1000	1000	PC amp					
X 1000	1000						
Z W01UL	W03UL	Chan ids					
X W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	8.16042311214E+02	Apriori delay (usec)	8.16030652528E+02	Resid mbdelay (usec)	-3.96631E-03	+/-	3.9E-04
Sband delay (usec)	8.16042318028E+02	Apriori clock (usec)	-2.5089714E+01	Resid sbdelay (usec)	1.16655E-02	+/-	1.4E-03
Phase delay (usec)	8.16030654040E+02	Apriori clockrate (us/s)	-4.4999998E-07	Resid phdelay (usec)	1.51206E-06	+/-	2.9E-07
Delay rate (us/s)	5.48319905657E-02	Apriori rate (us/s)	5.48320016462E-02	Resid rate (us/s)	-1.10804E-08	+/-	1.1E-09
Total phase (deg)	104.0	Apriori accel (us/s/s)	-1.73718018819E-06	Resid phase (deg)	-43.1	+/-	9.1

ph/seg (deg)	RMS 60.1	Theor. 38.3	Amplitude Search (2048X8)	0.601 +/- 0.048	0.588	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	86.1	66.8	Interp.	0.000	0.588	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	6.4	Inc. seg. avg.	0.782	0.588	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.9	11.2	Inc. frq. avg.	0.584	0.584	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
Z: az 3.4 el 41.6 pa -5.4		X: az 358.2 el 38.7 pa 2.3		u,v (fr/asec) -987.366 -315.487		Data rate(Mb/s): 256	dr window (ns/s) -0.011 0.011
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/ZX..0RUI3R		Output file: /Exps/c191d/v1/1234/No0217/ZX.W.79.0RUI3R		nlags: 128 t_cohere infinite	ion window (TEC) 0.00 0.00

simultaneous interpolator



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



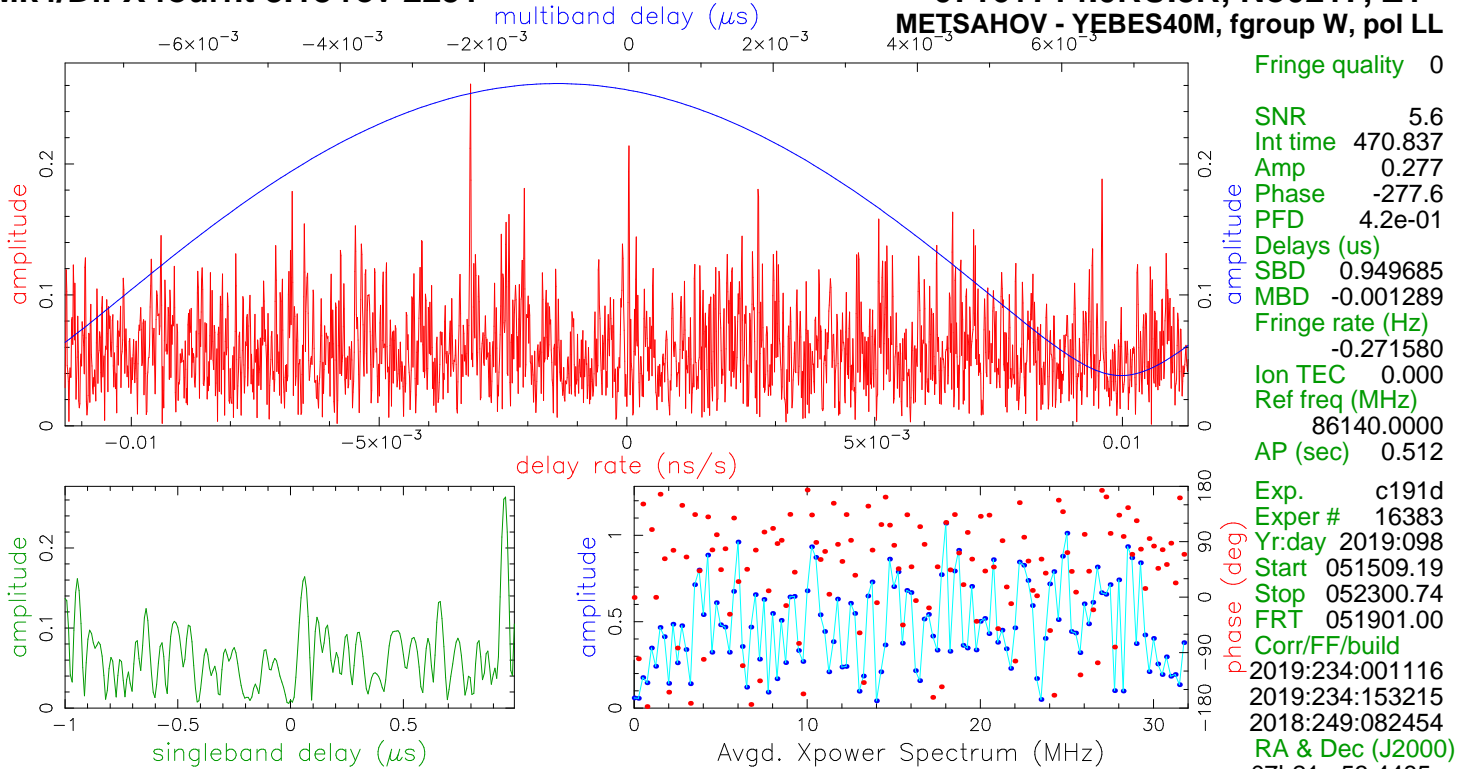
86156.00	86220.00	Freq (MHz)	All
-148.1	-150.2	Phase	-149.0
0.3	0.3	Ampl.	0.3
61.9	61.7	Sbd box	61.8
U/L 921/0	921/0	APs used	
Z 1000	1000	PC freqs	
Y 1000	1000	PC freqs	
Z:Y 0:0	0:0	PC phase	
Z:Y 0:0	0:0	Manl PC	
Z 1000	1000	PC amp	
Y 1000	1000		
Z W01UR	W03UR	Chan ids	
Y W01UL	W03UL	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	5.96498386308E+03	Apriori delay (usec)	5.96551149155E+03	Resid mbdelay (usec)	3.62153E-03	+/-	9.1E-04
Sband delay (usec)	5.96498617355E+03	Apriori clock (usec)	-6.9389086E+00	Resid sbdelay (usec)	-5.25318E-01	+/-	3.1E-03
Phase delay (usec)	5.96551148674E+03	Apriori clockrate (us/s)	-1.9299999E-07	Resid phdelay (usec)	-4.80582E-06	+/-	6.7E-07
Delay rate (us/s)	1.58061161861E-01	Apriori rate (us/s)	1.58054318189E-01	Resid rate (us/s)	6.84367E-06	+/-	2.5E-09
Total phase (deg)	348.5	Apriori accel (us/s/s)	-8.41147110928E-06	Resid phase (deg)	31.0	+/-	20.9

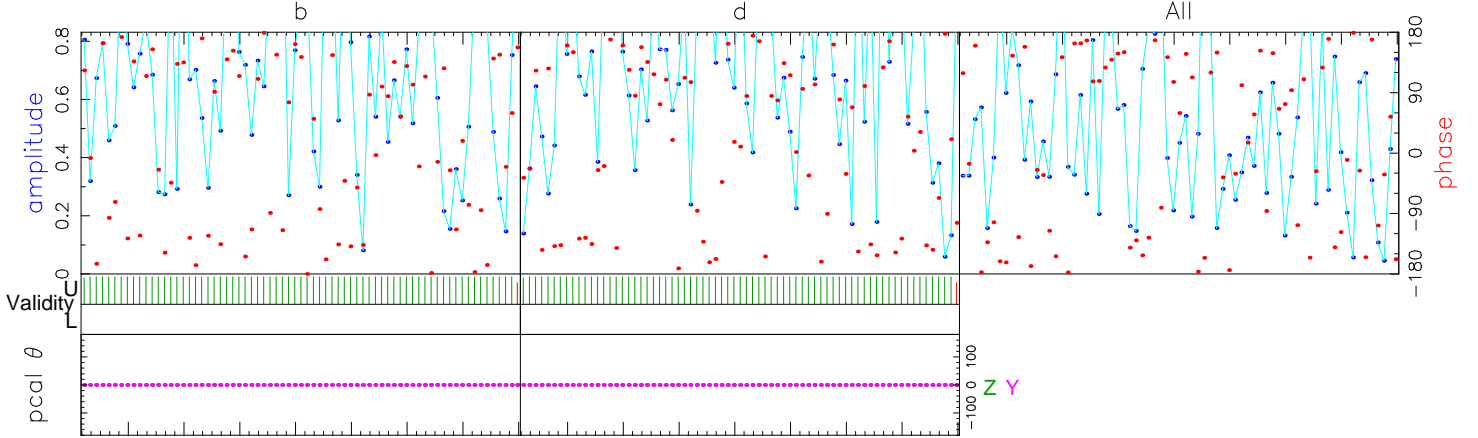
ph/seg (deg)	73.0	Theor.	88.1	Amplitude	0.305 +/- 0.056	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	145.3	Search (2048X8)	0.252	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	12.8	Inc. seg. avg.	0.287	Inc. seg. avg.	0.287	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
		Inc. frq. avg.	0.293	Inc. frq. avg.	0.293	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

Z: az 3.4 el 41.6 pa -5.4 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -2862.223 -1288.849 simultaneous interpolator

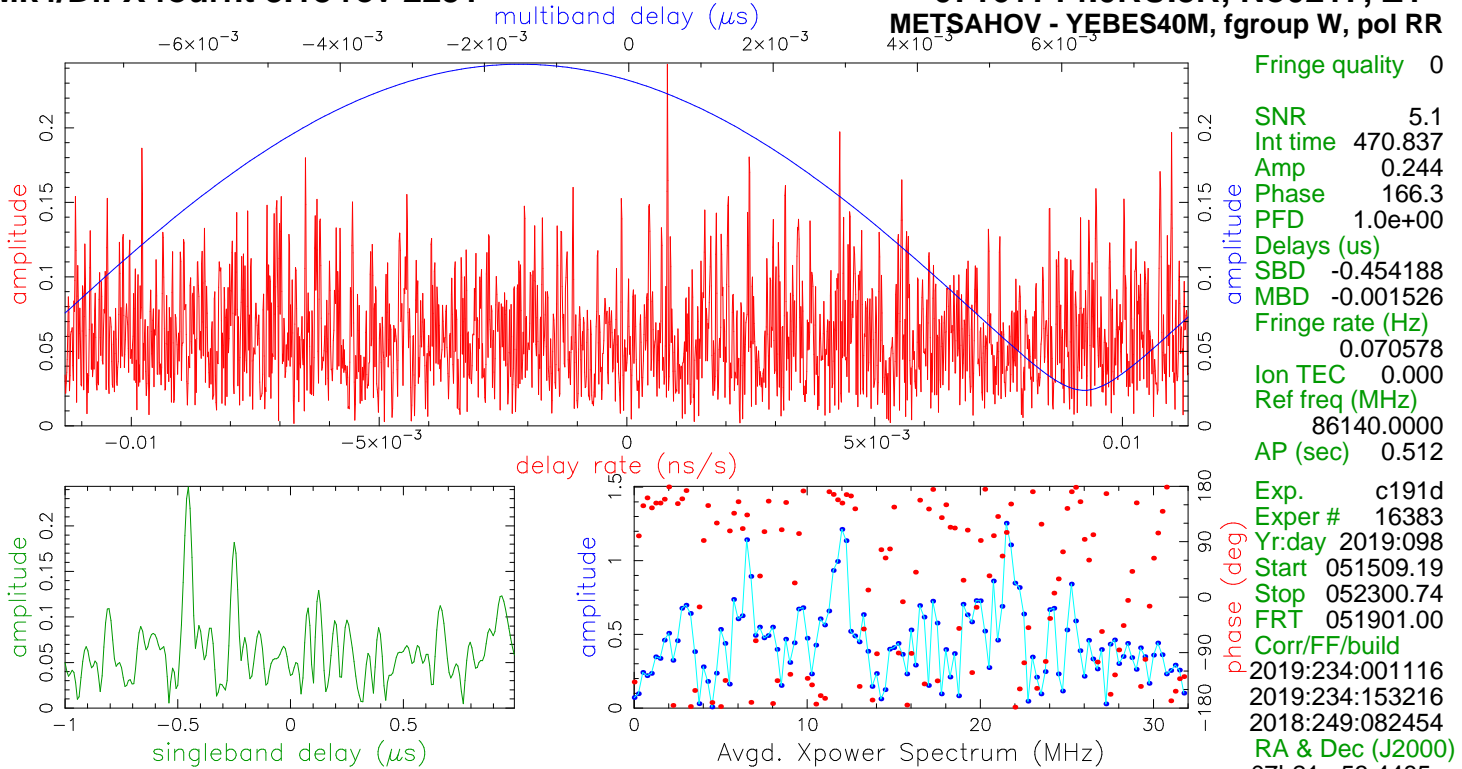
Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZY.W.103.0RUI3R



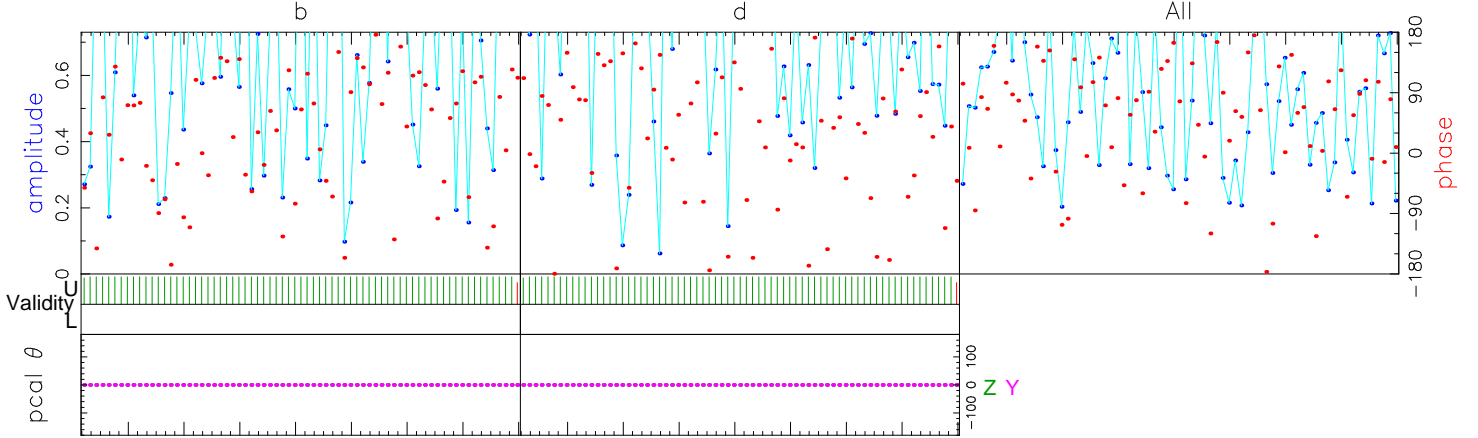
Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
169.5	176.4	Phase	172.4				
0.3	0.2	Ampl.	0.3				
249.7	251.5	Sbd box	250.6				
U/L 921/0	921/0	APs used					
Z 1000	1000	PC freqs					
Y 1000	1000	PC freqs					
Z:Y 0:0	0:0	PC phase					
Z:Y 0:0	0:0	Manl PC					
Z 1000	1000	PC amp					
Y 1000	1000						
Z W01UL	W03UL	Chan ids					
Y W01UL	W03UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.96646332756E+03	Apriori delay (usec)	5.96551149155E+03	Resid mbdelay (usec)	-1.28899E-03	+/-	8.8E-04
Sband delay (usec)	5.96646117605E+03	Apriori clock (usec)	-6.9389086E+00	Resid sbdelay (usec)	9.49685E-01	+/-	3.1E-03
Phase delay (usec)	5.96551149711E+03	Apriori clockrate (us/s)	-1.9299999E-07	Resid phdelay (usec)	5.56076E-06	+/-	6.6E-07
Delay rate (us/s)	1.58051165413E-01	Apriori rate (us/s)	1.58054318189E-01	Resid rate (us/s)	-3.15278E-06	+/-	2.4E-09
Total phase (deg)	-320.0	Apriori accel (us/s/s)	-8.41147110928E-06	Resid phase (deg)	-277.6	+/-	20.4
RMS	Theor.	Amplitude	0.277 +/- 0.049	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
ph/seg (deg)	79.6	Search (2048X8)	0.258	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
amp/seg (%)	142.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
ph/frq (deg)	0.0	Inc. seg. avg.	0.251	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
amp/frq (%)	14.5	Inc. frq. avg.	0.262	Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
Z: az 3.4 el 41.6 pa -5.4	Y: az 353.4 el 22.7 pa 15.1	u,v (fr/asec)	-2862.223 -1288.849	nlags:	128	t_cohere	infinite
Control file: cf_1234_gmva	Input file: /Exps/c191d/v1/1234/No0217/ZY..0RUI3R	Output file:	/Exps/c191d/v1/1234/No0217/ZY.W.80.0RUI3R	simultaneous interpolator			

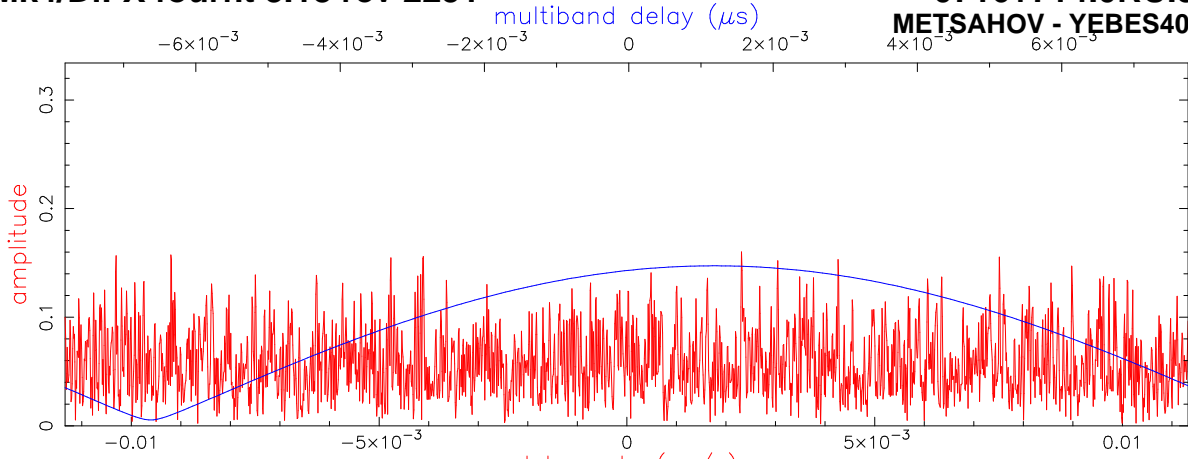


Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

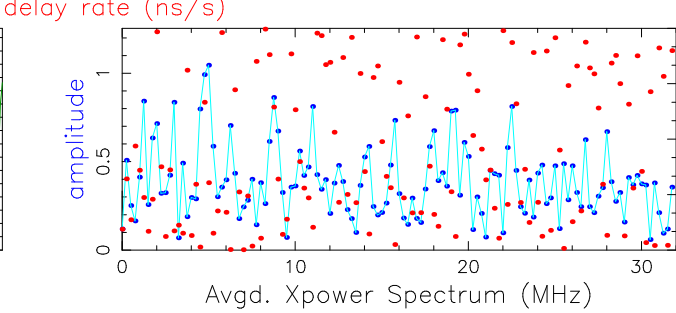
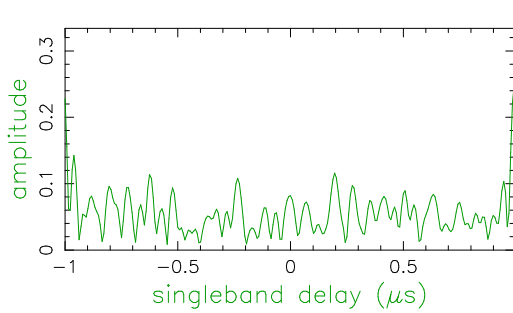


86156.00		86220.00		Freq (MHz)	All
76.0		76.5		Phase	76.3
0.2		0.3		Ampl.	0.2
96.9		71.3		Sbd box	70.9
U/L 921/0		921/0		APs used	
Z 1000		1000		PC freqs	
Y 1000		1000		PC freqs	
Z:Y 0:0		0:0		PC phase	
Z:Y 0:0		0:0		Manl PC	
Z 1000		1000		PC amp	
Y 1000		1000			
Z W01UR		W03UR		Chan ids	
Y W01UR		W03UR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	5.96505684063E+03	Apriori delay (usec)	5.96551149155E+03	Resid mbdelay (usec)	-1.52592E-03 +/- 9.8E-04
Sband delay (usec)	5.96505730355E+03	Apriori clock (usec)	-6.9389086E+00	Resid sbdelay (usec)	-4.54188E-01 +/- 3.4E-03
Phase delay (usec)	5.96551149401E+03	Apriori clockrate (us/s)	-1.9299999E-07	Resid phdelay (usec)	2.45974E-06 +/- 7.2E-07
Delay rate (us/s)	1.58055137524E-01	Apriori rate (us/s)	1.58054318189E-01	Resid rate (us/s)	8.19336E-07 +/- 2.7E-09
Total phase (deg)	123.8	Apriori accel (us/s/s)	-8.41147110928E-06	Resid phase (deg)	166.3 +/- 22.5

ph/seg (deg)	RMS 79.1	Theor. 94.7	Amplitude 0.244 +/- 0.048	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	164.6	165.3	Search (2048X8) 0.240	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	15.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	9.8	27.7	Inc. seg. avg. 0.237	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.234	Data rate(Mb/s): 256	dr window (ns/s) -0.011 0.011
Z: az 3.4 el 41.6 pa -5.4		Y: az 353.4 el 22.7 pa 15.1	u,v (fr/asec) -2862.223 -1288.849	nlags: 128 t_cohere infinite	ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c191d/v1/1234/No0217/ZY..0RUI3R			simultaneous interpolator
		Output file: /Exps/c191d/v1/1234/No0217/ZY.W.90.0RUI3R			

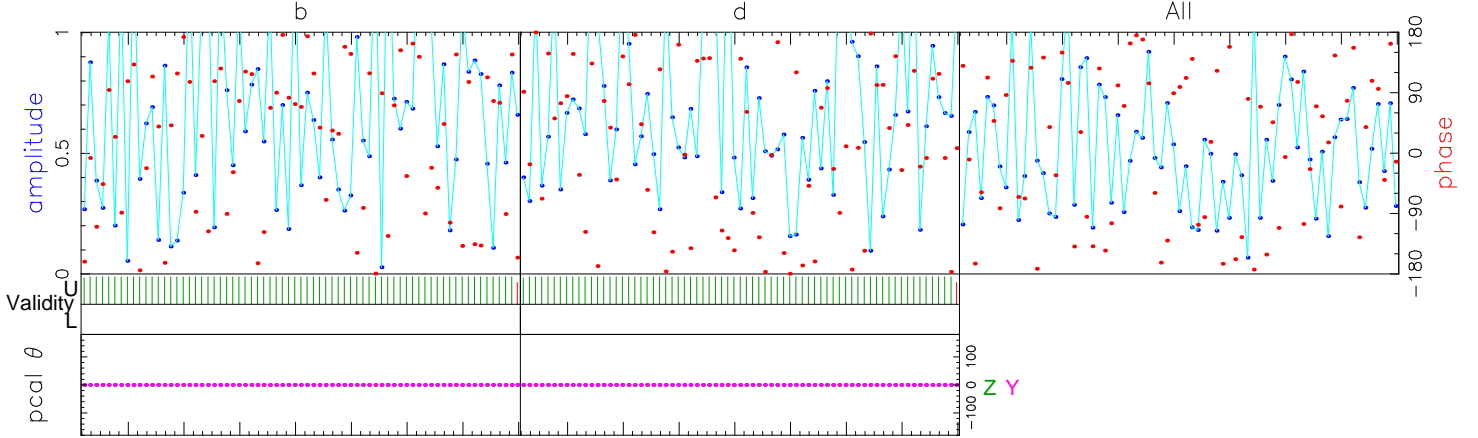


Fringe quality 0
 SNR 5.3
 Int time 470.837
 Amp 0.334
 Phase -119.7
 PFD 9.4e-01
 Delays (us)
 SBD 0.993164
 MBD 0.001483
 Fringe rate (Hz) 0.773683
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051509.19
 Stop 052300.74
 FRT 051901.00
 Corr/FF/build 2019:234:001116
 2019:234:153217
 2018:249:082454
 RA & Dec (J2000) 07h21m53.4485s +71°20'36.363"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

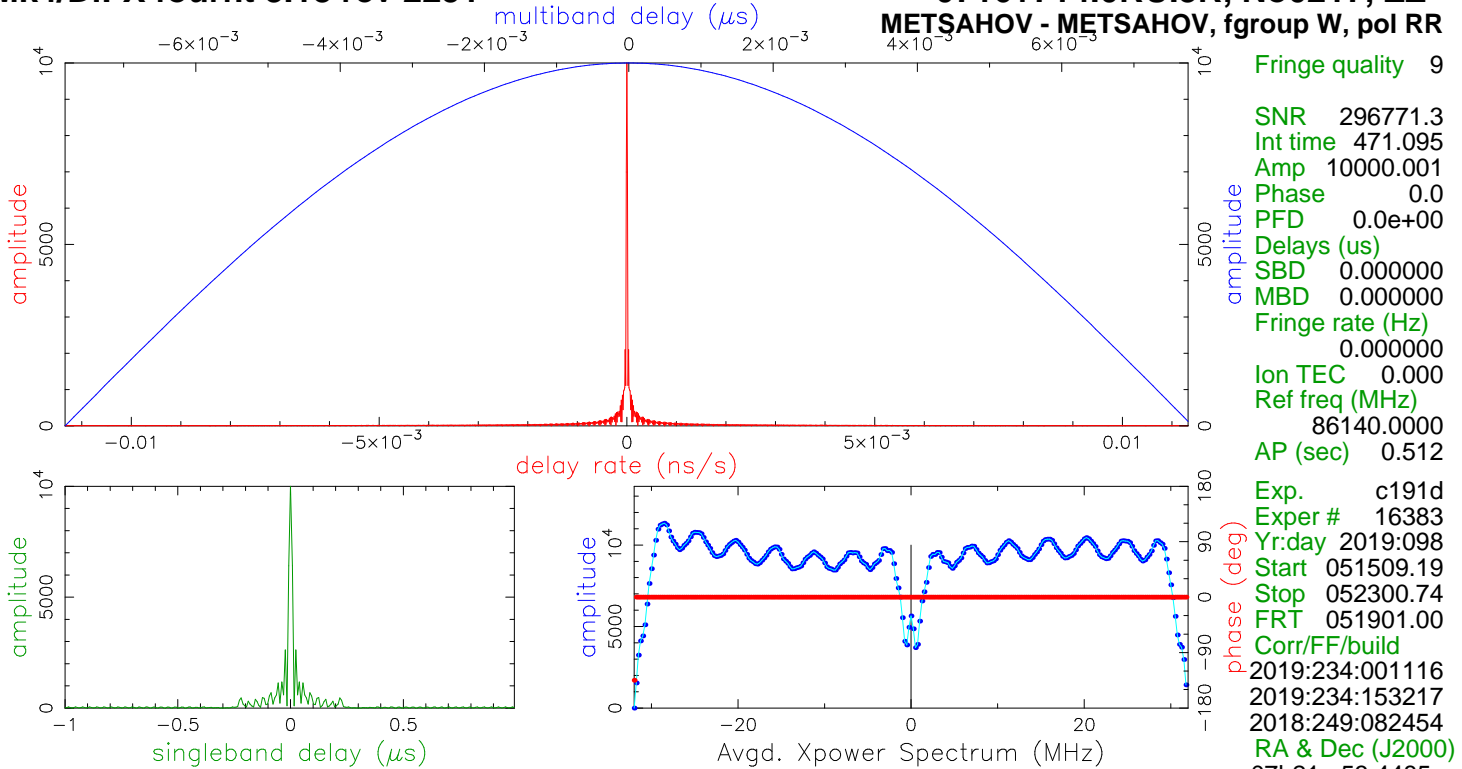


86156.00	86220.00	Freq (MHz)	All
153.6	146.7	Phase	150.3
0.2	0.2	Ampl.	0.2
175.6	1.4	Sbd box	256.1
U/L 921/0	921/0	APs used	
Z 1000	1000	PC freqs	
Y 1000	1000	PC freqs	
Z:Y 0:0	0:0	PC phase	
Z:Y 0:0	0:0	Manl PC	
Z 1000	1000	PC amp	
Y 1000	1000		
Z W01UL	W03UL	Chan ids	
Y W01UR	W03UR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	5.96649734960E+03	Apriori delay (usec)	5.96551149155E+03	Resid mbdelay (usec)	1.48305E-03	+/-	9.3E-04
Sband delay (usec)	5.96650465530E+03	Apriori clock (usec)	-6.9389086E+00	Resid sbdelay (usec)	9.93164E-01	+/-	3.2E-03
Phase delay (usec)	5.96551149639E+03	Apriori clockrate (us/s)	-1.9299999E-07	Resid phdelay (usec)	4.84546E-06	+/-	6.9E-07
Delay rate (us/s)	1.58063299876E-01	Apriori rate (us/s)	1.58054318189E-01	Resid rate (us/s)	8.98169E-06	+/-	2.5E-09
Total phase (deg)	-162.2	Apriori accel (us/s/s)	-8.41147110928E-06	Resid phase (deg)	-119.7	+/-	21.5

ph/seg (deg)	89.5	Theor.	90.5	Amplitude	0.334 +/- 0.063	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	144.8	Search (2048X8)	0.245	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	0.305	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	42.1	Inc. frq. avg.	0.187	Inc. frq. avg.	0.187	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	256	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

Z: az 3.4 el 41.6 pa -5.4 Y: az 353.4 el 22.7 pa 15.1 u,v (fr/asec) -2862.223 -1288.849 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZY..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZY.W.95.0RUI3R



Fringe quality 9

SNR 296771.3

Int time 471.095

Ampl 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. c191d

Exper # 16383

Yr:day 2019:098

Start 051509.19

Stop 052300.74

FRT 051901.00

Corr/FF/build

2019:234:001116

2019:234:153217

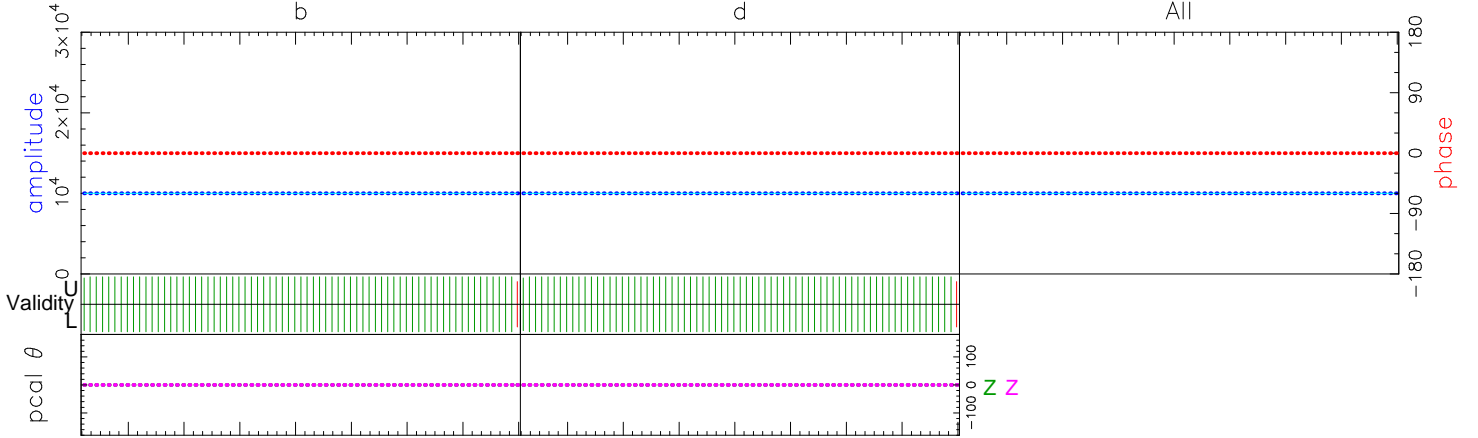
2018:249:082454

RA & Dec (J2000)

07h21m53.4485s

+71°20'36.363"

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



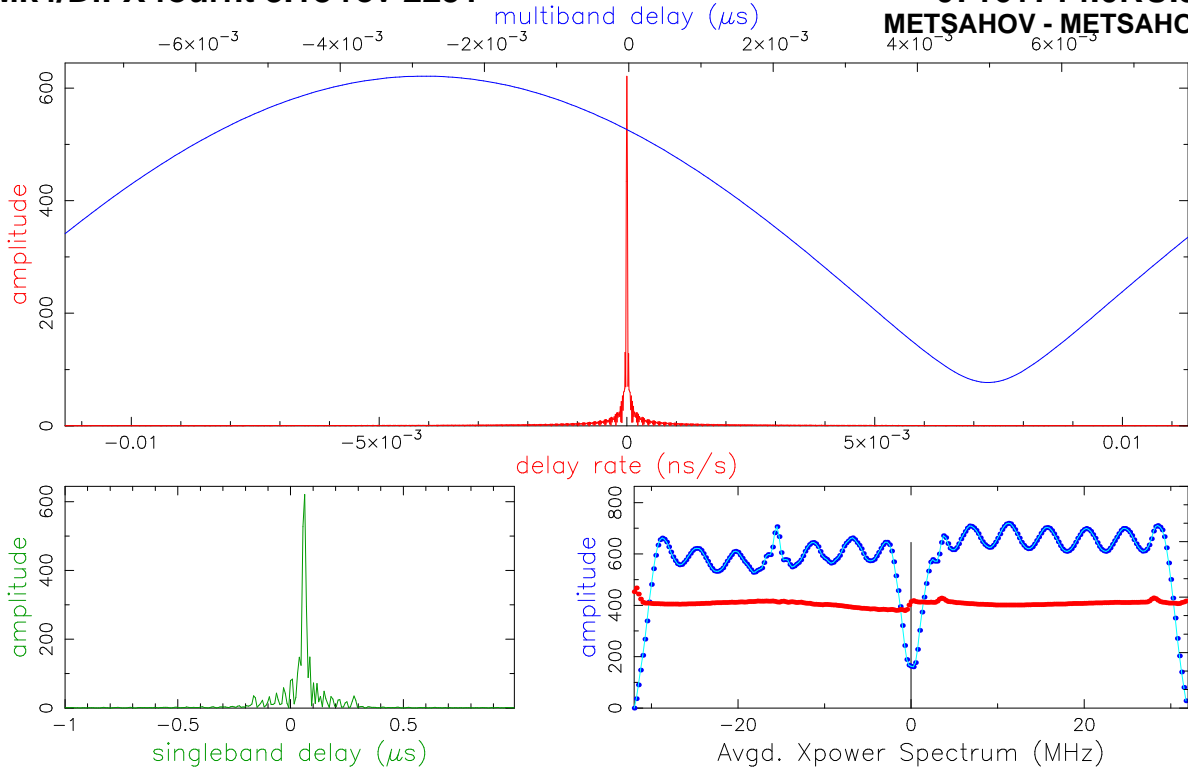
86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 921/921	921/921	APs used	
Z 1000	1000	PC freqs	
Z 1000	1000	PC freqs	
Z:Z 0:0	0:0	PC phase	
Z:Z 0:0	0:0	Manl PC	
Z 1000	1000	PC amp	
Z 1000	1000		
Z W01UR,W01LR	W03UR,W03LR	Chan ids	
Z W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.7E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.9E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.6E-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	10000.001 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	0.0		0.0		0.0	Search (2048X8)	10000.001	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	0.0		0.0		0.0	Interp.	0.000	Bits/sample:	2x2	dr window (ns/s)	-0.011	0.011			
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	64	ion window (TEC)	0.00	0.00			
			0.0		0.0	Inc. frq. avg.	10000.001	Data rate(Mb/s):	512	nlags:	128	t_cohere	infinite		

Z: az 3.4 el 41.6 pa -5.4 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZZ.W.100.0RUI3R

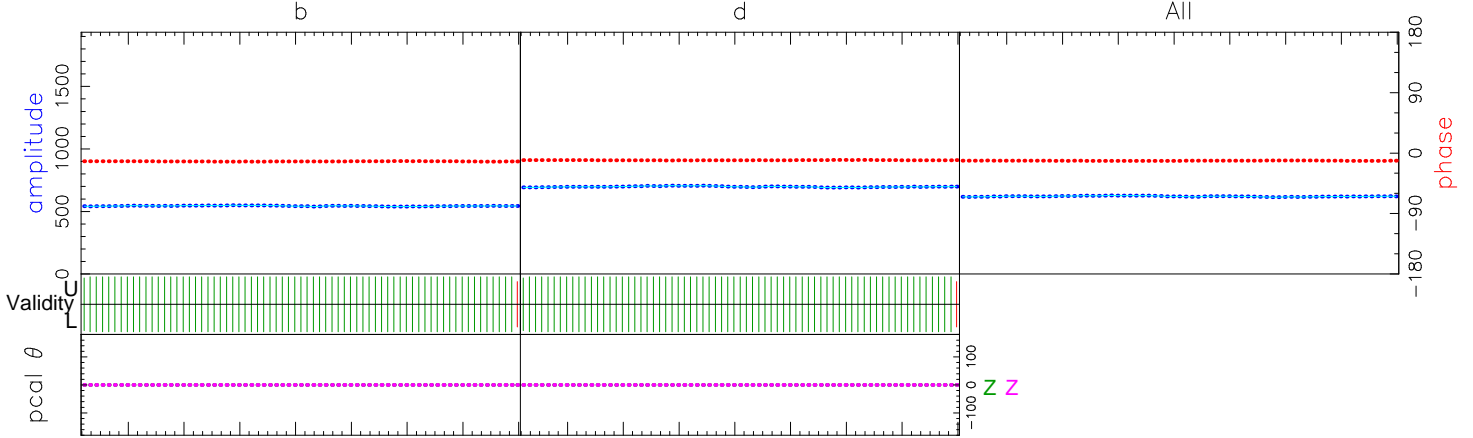


Fringe quality 9

SNR 19131.6
 Int time 471.095
 Amp 644.657
 Phase -11.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.060111
 MBD -0.002911
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051509.19
 Stop 052300.74
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153218
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



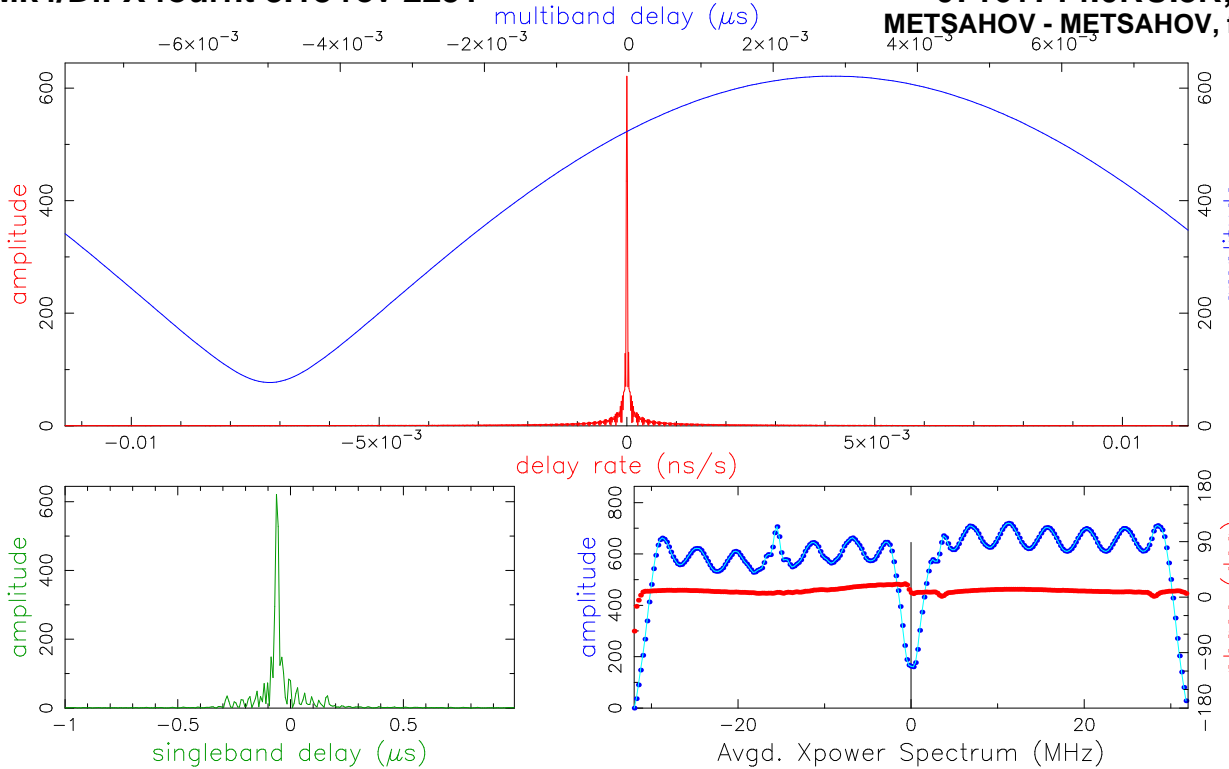
86156.00	86220.00	Freq (MHz)	All
-12.3	-10.6	Phase	-11.4
544.4	698.1	Ampl.	621.2
136.7	136.7	Sbd box	136.7
U/L 921/921	921/921	APs used	
Z 1000	1000	PC freqs	
Z 1000	1000	PC freqs	
Z:Z 0:0	0:0	PC phase	
Z:Z 0:0	0:0	Manl PC	
Z 1000	1000	PC amp	
Z 1000	1000		
Z W01UL,W01LL	W03UL,W03LL	Chan ids	
Z W01UR,W01LR	W03UR,W03LR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	5.95888750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.91113E-03	+/-	2.6E-07
Sband delay (usec)	6.01110000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	6.01110E-02	+/-	4.5E-07
Phase delay (usec)	-3.66139987322E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.66140E-07	+/-	9.7E-11
Delay rate (us/s)	-1.62968252504E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.62968E-11	+/-	7.1E-13
Total phase (deg)	-11.4	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-11.4	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.0	Amplitude	644.657 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	3.7	0.0	0.0	Search (2048X8)	611.637	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	12.5	0.0	0.0	Inc. seg. avg.	621.161	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	621.229	Data rate(Mb/s):	512	dr window (ns/s)	-0.011 0.011

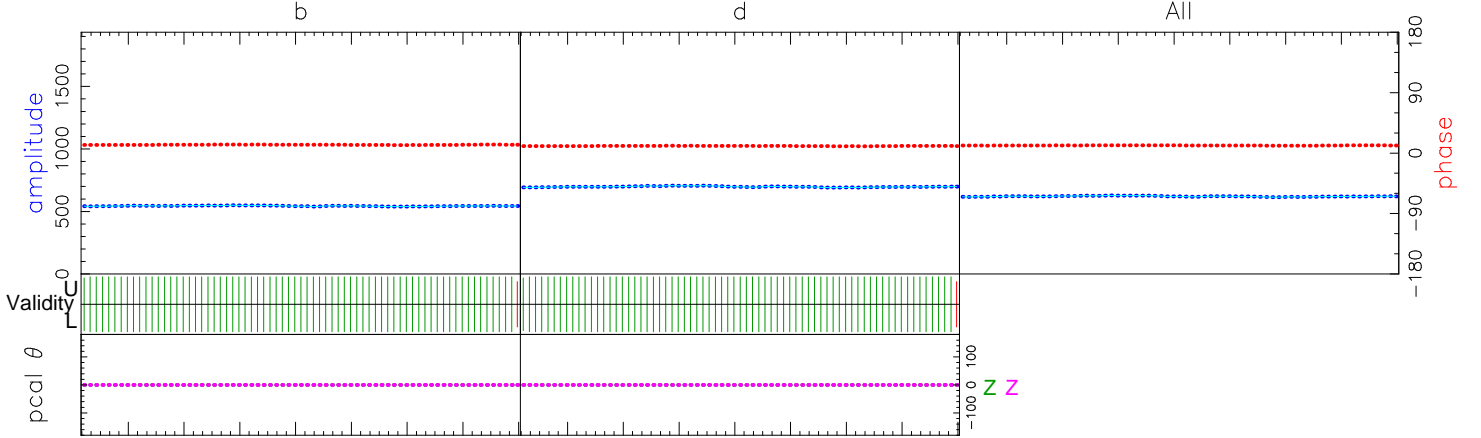
Z: az 3.4 el 41.6 pa -5.4 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZZ.W.107.0RUI3R



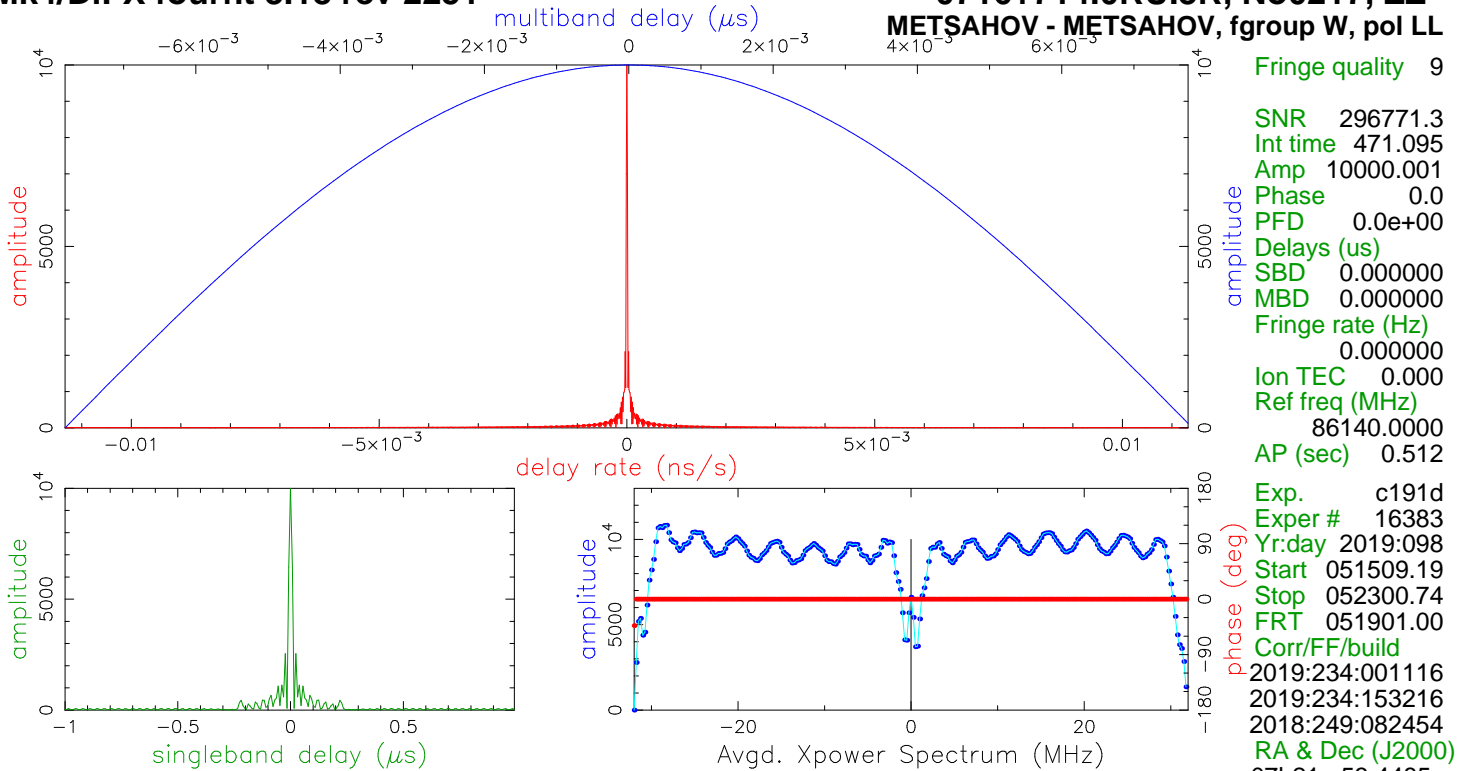
Fringe quality 9
 SNR 19131.6
 Int time 471.095
 Amp 644.657
 Phase 11.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.060111
 MBD 0.002911
 Fringe rate (Hz) 0.000001
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191d
 Exper # 16383
 Yr:day 2019:098
 Start 051509.19
 Stop 052300.74
 FRT 051901.00
 Corr/FF/build
 2019:234:001116
 2019:234:153219
 2018:249:082454
 RA & Dec (J2000)
 07h21m53.4485s
 +71°20'36.363"

Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

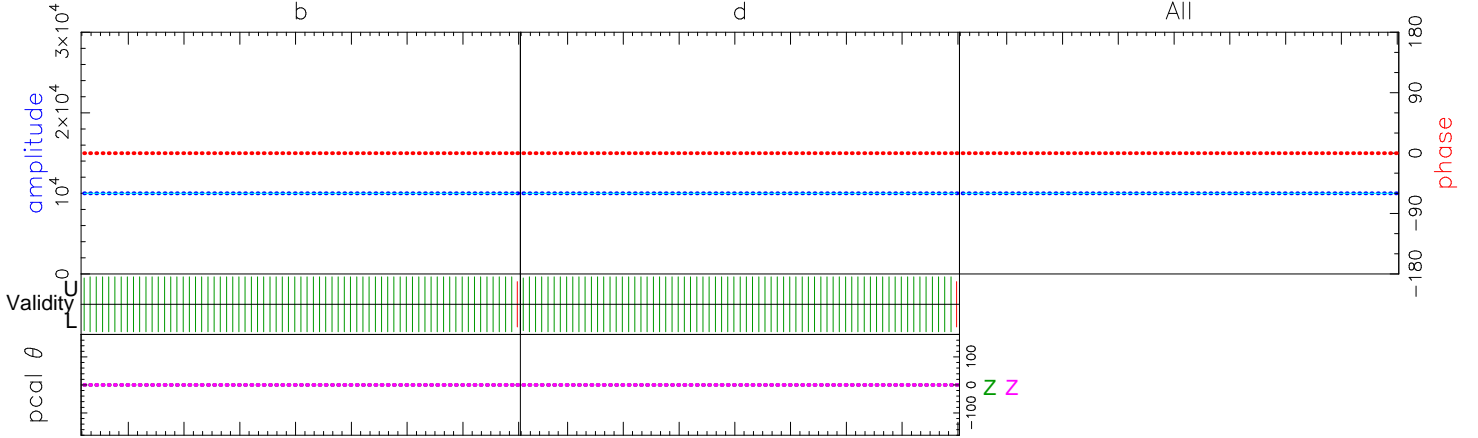


86156.00		86220.00		Freq (MHz)		All	
12.3	10.6			Phase			11.4
544.4	698.1			Ampl.			621.2
121.3	121.3			Sbd box			121.3
U/L 921/921	921/921			APs used			
Z 1000	1000			PC freqs			
Z 1000	1000			PC freqs			
Z:Z 0:0	0:0			PC phase			
Z:Z 0:0	0:0			Manl PC			
Z 1000	1000			PC amp			
Z 1000	1000						
Z W01UR,W01LR	W03UR,W03LR			Chan ids			
Z W01UL,W01LL	W03UL,W03LL			Tracks			
				Chan ids			
				Tracks			
Group delay (usec)(sbd)	-5.95888750000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.91113E-03	+/-	2.6E-07
Sband delay (usec)	-6.01110000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-6.01110E-02	+/-	4.5E-07
Phase delay (usec)	3.66139987242E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.66140E-07	+/-	9.7E-11
Delay rate (us/s)	1.62968252504E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.62968E-11	+/-	7.1E-13
Total phase (deg)	11.4	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	11.4	+/-	0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 644.657 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 3.7 0.0 Search (2048X8) 611.637 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 12.5 0.0 Inc. seg. avg. 621.161 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 3.4 el 41.6 pa -5.4 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZZ.W.111.0RUI3R



Amp. and Phase vs. time for each freq., 71 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 921/921	921/921	APs used	
Z 1000	1000	PC freqs	
Z 1000	1000	PC freqs	
Z:Z 0:0	0:0	PC phase	
Z:Z 0:0	0:0	Manl PC	
Z 1000	1000	PC amp	
Z 1000	1000		
Z W01UL,W01LL	W03UL,W03LL	Chan ids	
Z W01UL,W01LL	W03UL,W03LL	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.7E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 2.9E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.2E-12
		Resid rate (us/s)	0.00000E+00 +/- 4.6E-14
		Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X8) 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) -0.008 0.008
 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): 512 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 3.4 el 41.6 pa -5.4 Z: az 3.4 el 41.6 pa -5.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191d/v1/1234/No0217/ZZ..0RUI3R Output file: /Exps/c191d/v1/1234/No0217/ZZ.W.92.0RUI3R