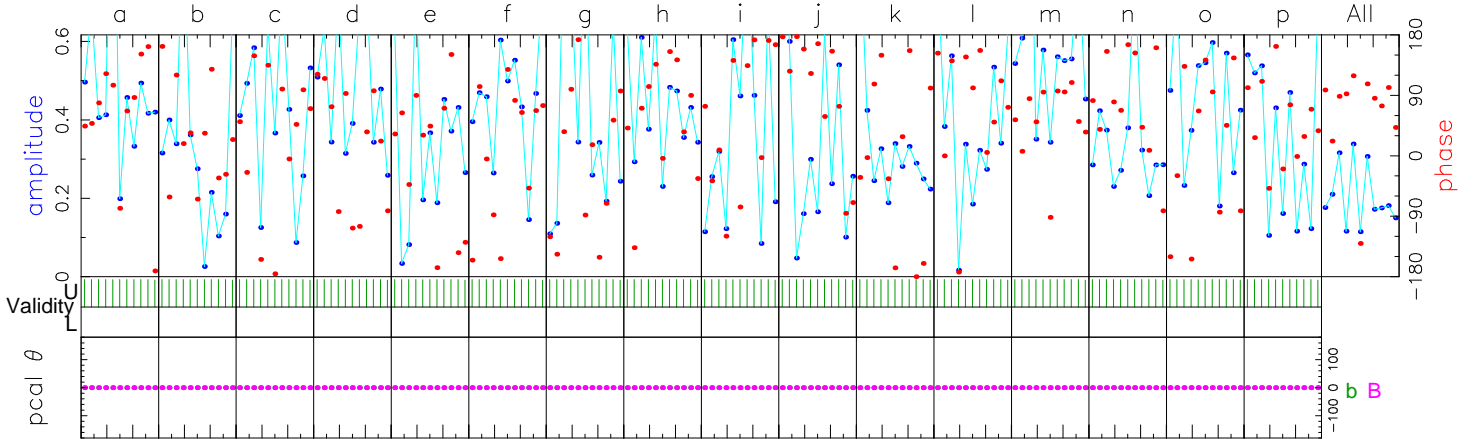


Fringe quality 0

SNR 6.1  
Int time 179.432  
Amp 0.206  
Phase 90.6  
PFD 1.3e-01  
Delays (us)  
SBD -0.026014  
MBD 0.000606  
Fringe rate (Hz)  
-0.685769  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050807  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

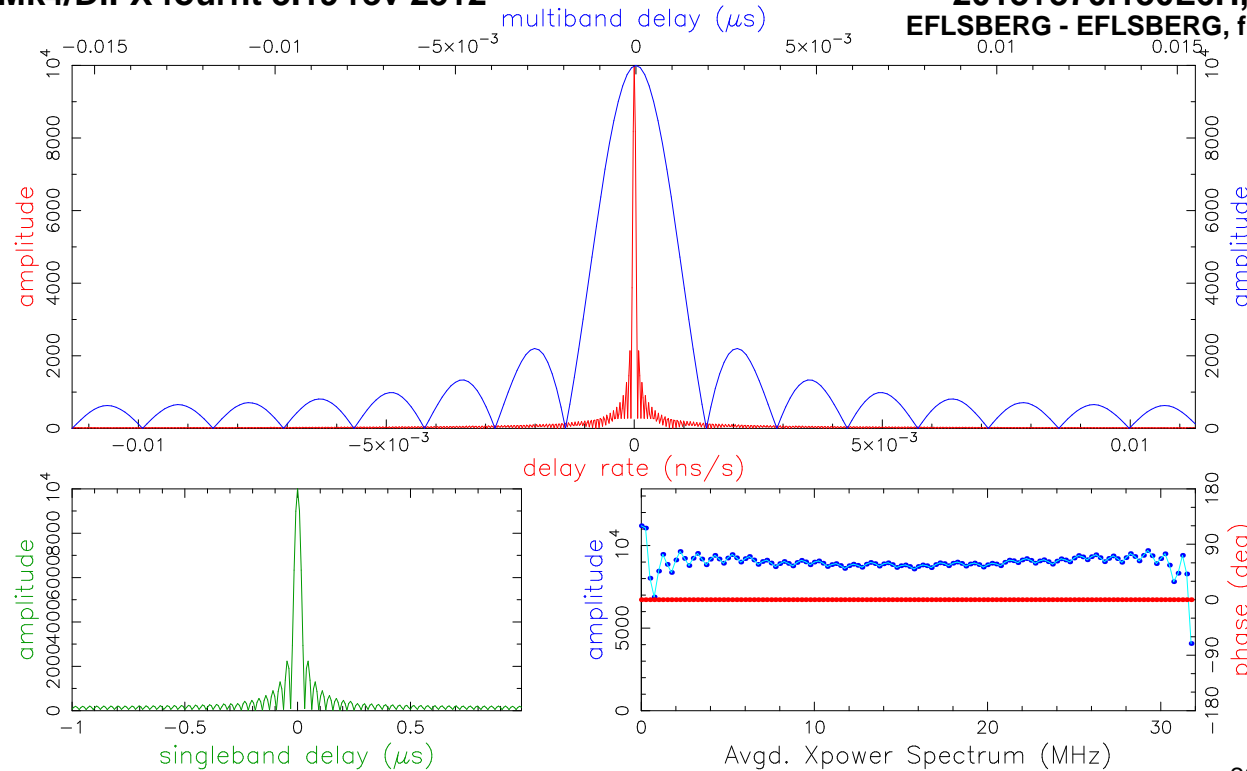


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd) -8.75453194923E+03 Apriori delay (usec) -8.75450130474E+03 Resid mbdelay (usec) 6.05501E-04 +/- 1.8E-04  
 Sband delay (usec) -8.75452731874E+03 Apriori clock (usec) -1.7421515E+01 Resid sbdelay (usec) -2.60140E-02 +/- 2.8E-03  
 Phase delay (usec) -8.75450130181E+03 Apriori clockrate (us/s) -4.2395080E-08 Resid phdelay (usec) 2.92025E-06 +/- 6.1E-07  
 Delay rate (us/s) 1.30422179990E+00 Apriori rate (us/s) 1.30422976100E+00 Resid rate (us/s) -7.96110E-06 +/- 5.8E-09  
 Total phase (deg) -49.8 Apriori accel (us/s/s) 4.45952962950E-05 Resid phase (deg) 90.6 +/- 18.8

ph/seg (deg) 50.4 31.2 Amplitude 0.206 +/- 0.034 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 51.1 54.4 Search (1024X64) 0.155 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.8 37.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 65.5 65.6 Inc. seg. avg. 0.221 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.191 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 63.4 el 27.1 pa -48.6 B: az 257.6 el 60.6 pa 51.1 u,v (fr/asec) -9350.103 2526.237 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/bB..130L6H Output file: /Exps/c192c/v2/1234/No0048/bB.W.11.130L6H

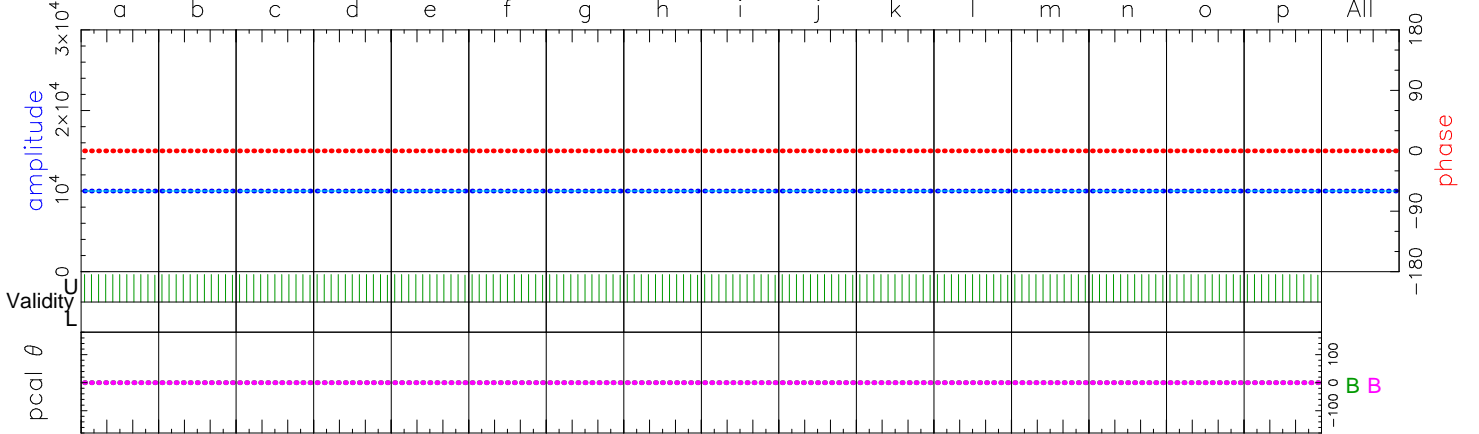


Fringe quality 9

SNR 366662.0  
Int time 179.778  
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. c192c  
Yr:day 16383  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050806  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



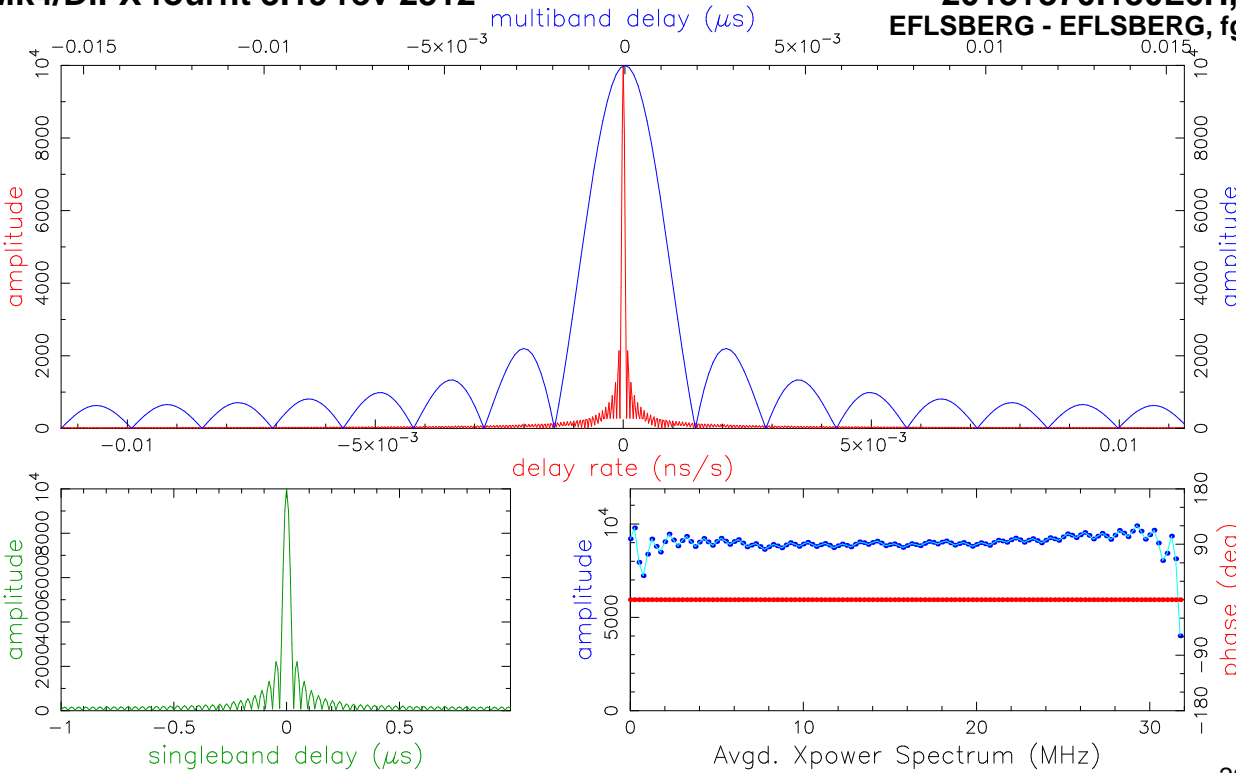
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.7E-08
Phase delay (usec)	-1.26529335154E-19	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.26529E-19	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.7E-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 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0		0.0		0.0	Search (1024X64)	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	mb window (us)	-0.016 0.016	
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s):	64		dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	10000.000	Data rate(Mb/s):	2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 257.6 el 60.6 pa 51.1      B: az 257.6 el 60.6 pa 51.1      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c192c/v2/1234/No0048/BB..130L6H    Output file: /Exps/c192c/v2/1234/No0048/BB.W.1.130L6H

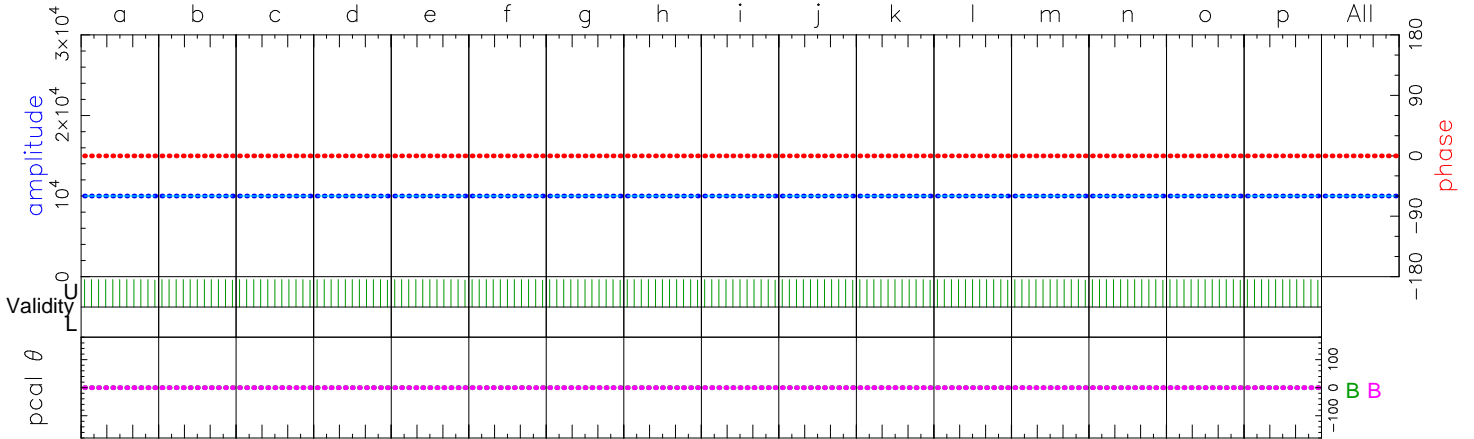


Fringe quality 9

SNR 366662.0  
Int time 179.778  
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. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050808  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

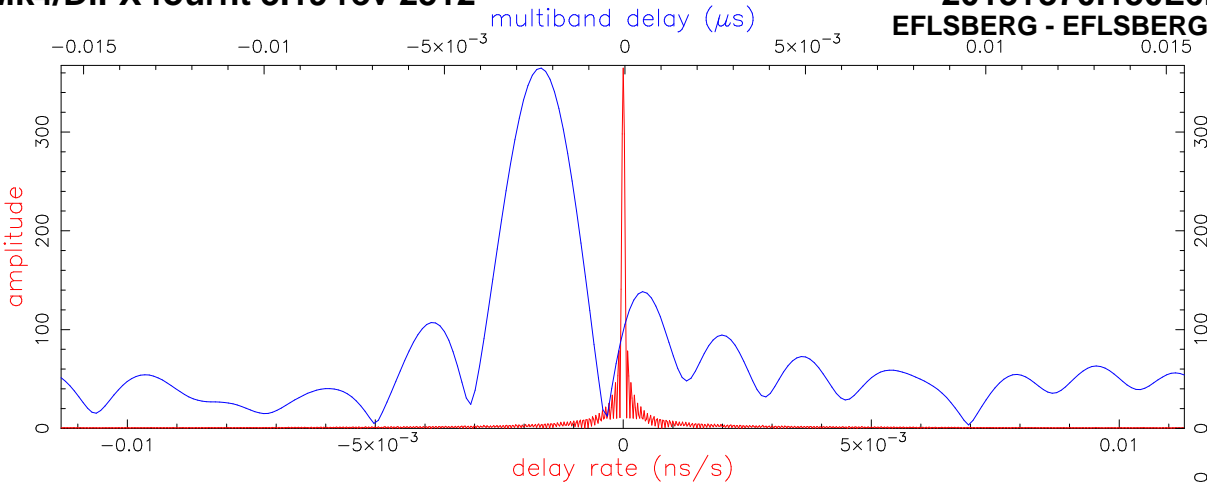


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	0.0000000000E+00			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			0.00000E+00			+/- 2.9E-09		
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/- 4.7E-08		
Phase delay (usec)	8.52751260316E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			8.52751E-20			+/- 1.0E-11		
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/- 9.7E-14		
Total phase (deg)	0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			0.0			+/- 0.0		

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (1024X64) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

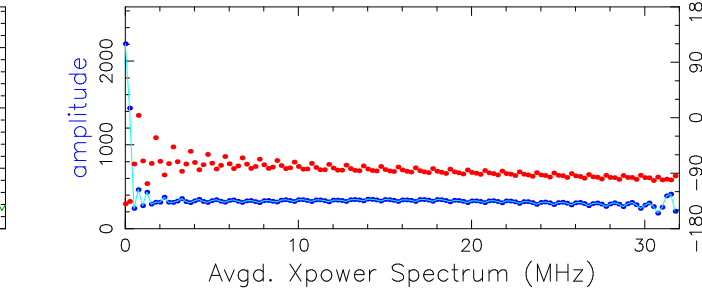
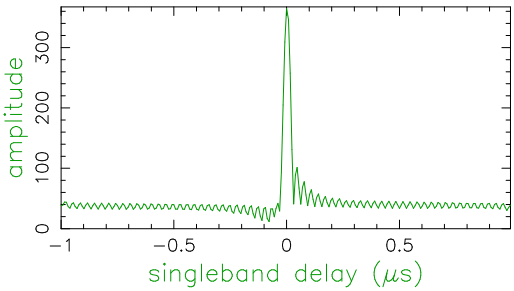
B: az 257.6 el 60.6 pa 51.1 B: az 257.6 el 60.6 pa 51.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BB..130L6H Output file: /Exps/c192c/v2/1234/No0048/BB.W.17.130L6H



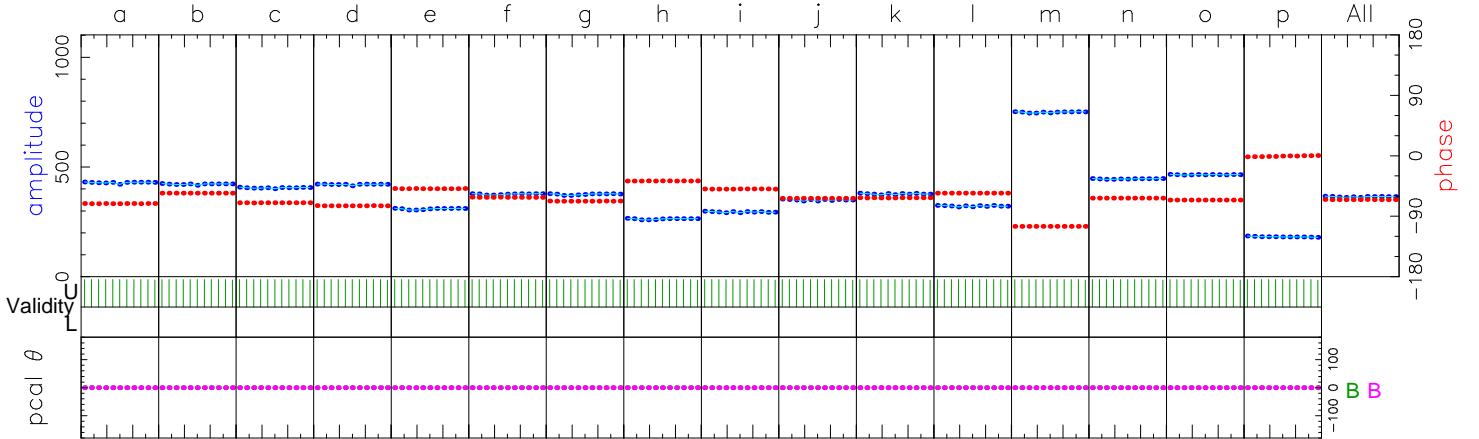
Fringe quality 6

SNR 13475.1  
Int time 179.778  
Amp 367.506  
Phase -65.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.002054  
MBD -0.002321  
Fringe rate (Hz)  
0.000001  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



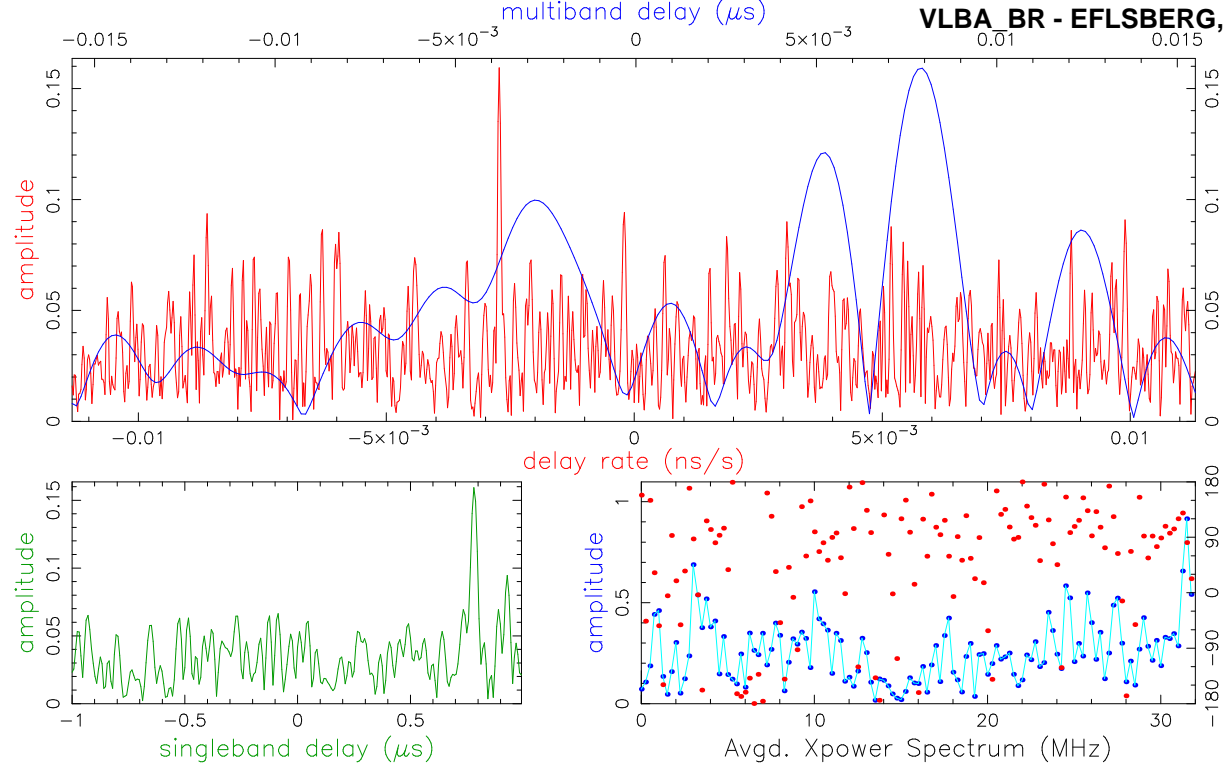
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050810  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



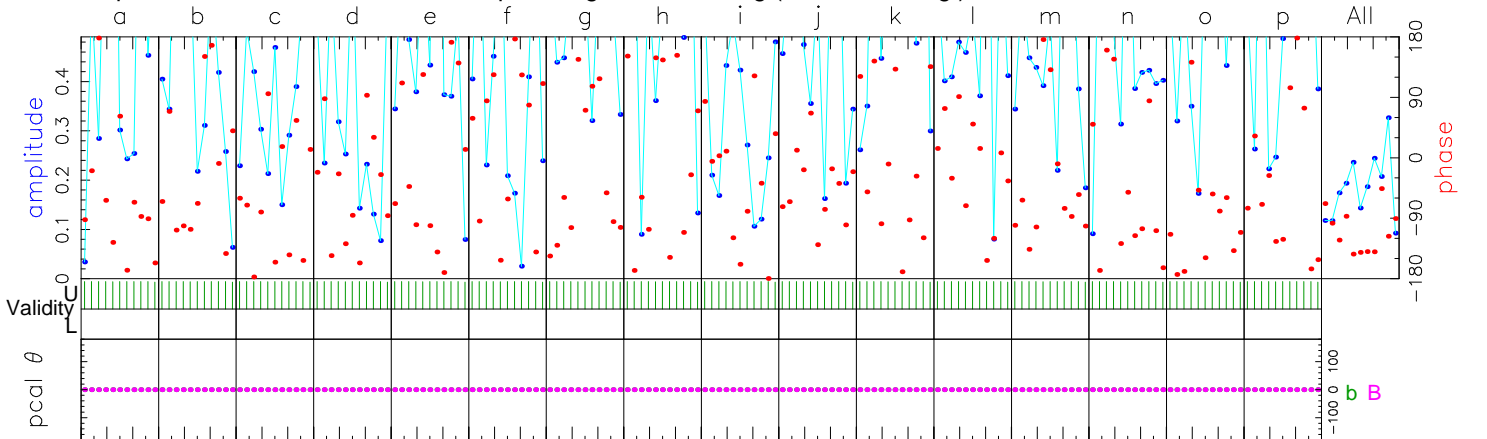
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	129.3					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	386.9				
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			Chan ids					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			Tracks					
																			Chan ids					
																			Tracks					
Group delay (usec)(sbd)			-2.32065625000E-03																Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.32066E-03	+/-	8.0E-08
Sband delay (usec)			2.05450000000E-03																Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.05450E-03	+/-	1.3E-06
Phase delay (usec)			-2.10216596609E-06																Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.10217E-06	+/-	2.7E-10
Delay rate (us/s)			1.13369219133E-11																Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.13369E-11	+/-	2.6E-12
Total phase (deg)																			Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-65.2	+/-	0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 367.506 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.9 0.0 Search (1024X64) 363.457 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 23.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 32.6 0.0 Inc. seg. avg. 364.819 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 B: az 257.6 el 60.6 pa 51.1 u,v (fr/asec) 0.000 0.000 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BB..130L6H Output file: /Exps/c192c/v2/1234/No0048/BB.W.32.130L6H simultaneous interpolator



Fringe quality 0  
SNR 5.9  
Int time 179.432  
Amp 0.164  
Phase -113.1  
PFD 4.6e-01  
Delays (us)  
SBD 0.782542  
MBD 0.007885  
Fringe rate (Hz) -0.234777  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050810  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

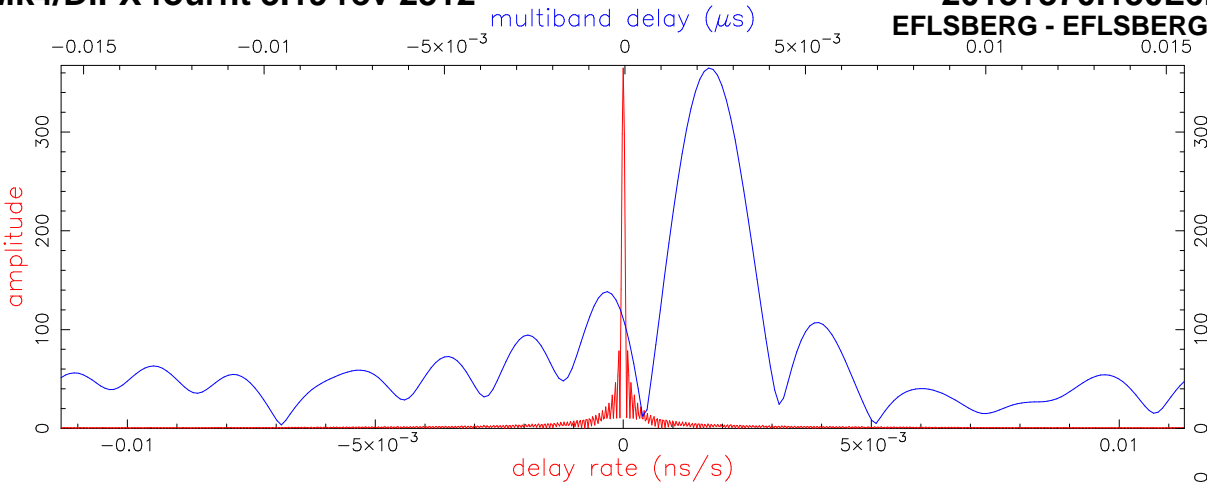


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-101.0	-110.1	-103.9	-81.0	-160.1	-169.9	-131.3	-164.9	4.1	-35.5	-137.7	3.5	-95.0	-146.8	-114.5	-129.4	Phase	-113.1
	0.4	0.2	0.1	0.2	0.3	0.1	0.2	0.2	0.0	0.4	0.2	0.2	0.3	0.2	0.4	0.2	Ampl.	0.2
	227.8	12.9	193.6	176.0	161.8	56.3	48.7	66.4	121.9	228.2	149.2	160.5	249.2	47.5	227.8	239.0	Sbd box	229.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) -8.75371216947E+03 Apriori delay (usec) -8.75450130474E+03 Resid mbdelay (usec) 7.88527E-03 +/- 1.8E-04  
 Sband delay (usec) -8.75371876274E+03 Apriori clock (usec) -1.7421515E+01 Resid sbdelay (usec) 7.82542E-01 +/- 2.9E-03  
 Phase delay (usec) -8.75450130838E+03 Apriori clockrate (us/s) -4.2395080E-08 Resid phdelay (usec) -3.64560E-06 +/- 6.3E-07  
 Delay rate (us/s) 1.30422703548E+00 Apriori rate (us/s) 1.30422976100E+00 Resid rate (us/s) -2.72553E-06 +/- 6.1E-09  
 Total phase (deg) -253.4 Apriori accel (us/s/s) 4.45952962950E-05 Resid phase (deg) -113.1 +/- 19.6

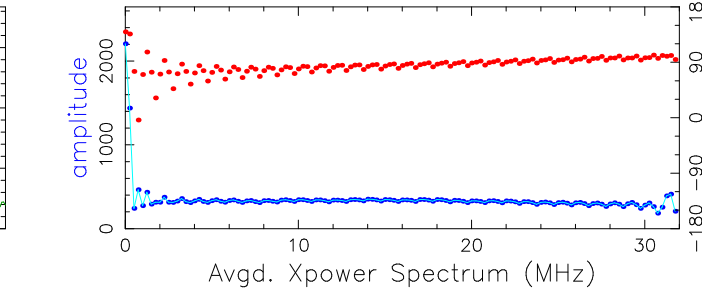
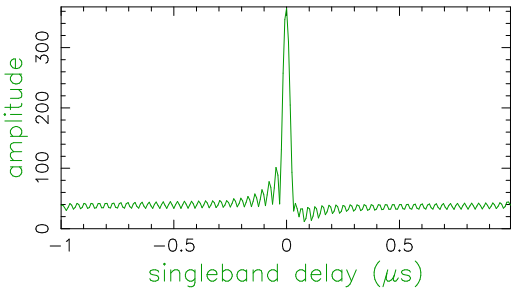
ph/seg (deg) RMS 31.9 Theor. 32.5 Amplitude 0.164 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 43.7 56.7 Search (1024X64) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 56.9 39.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 70.2 68.4 Inc. seg. avg. 0.164 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 63.4 el 27.1 pa -48.6 B: az 257.6 el 60.6 pa 51.1 u,v (fr/asec) -9350.103 2526.237 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/bB..130L6H Output file: /Exps/c192c/v2/1234/No0048/bB.W.35.130L6H



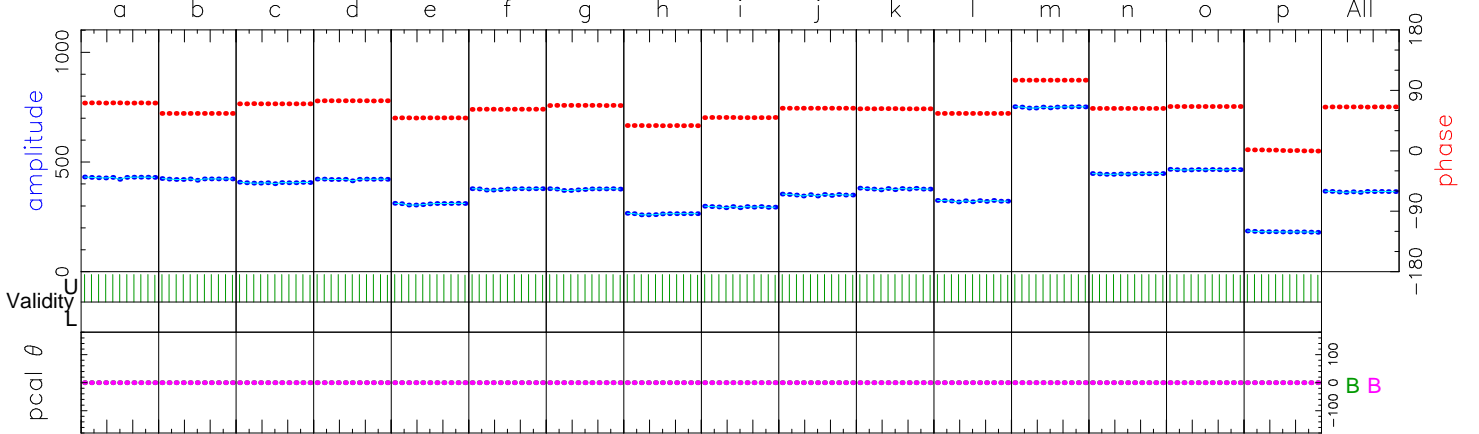
Fringe quality 6

SNR 13475.1  
Int time 179.778  
Amp 367.506  
Phase 65.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.002054  
MBD 0.002321  
Fringe rate (Hz)  
-0.000001  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



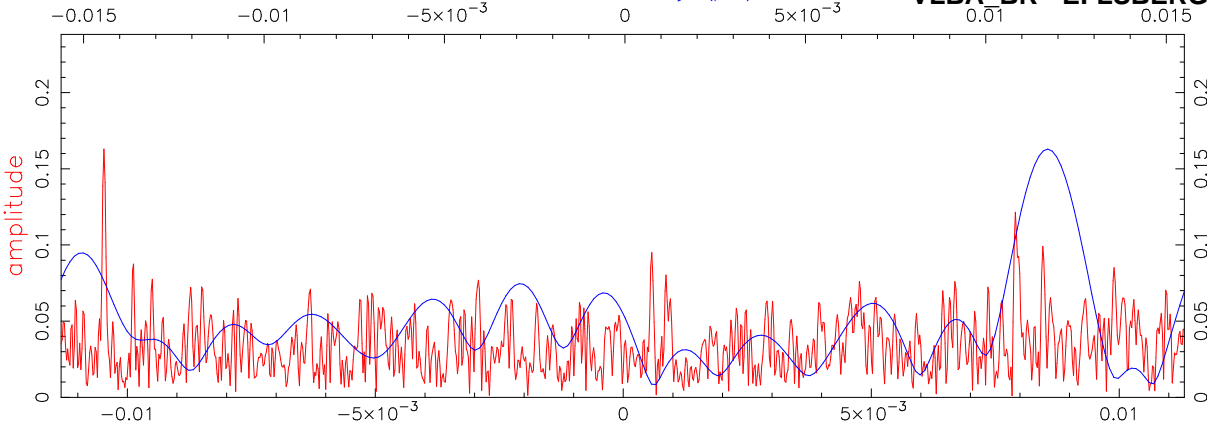
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050812  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



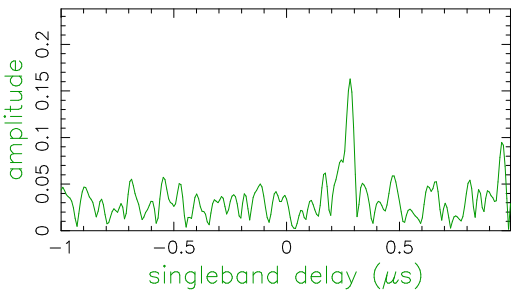
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
71.2	55.6	69.9	74.4	48.9	61.8	67.5	37.5	49.4	63.3	62.6	55.6	105.0	63.0	65.9	0.6		Phase	65.2	
429.2	422.1	405.5	420.7	309.2	376.6	375.6	263.4	295.4	349.7	377.4	322.2	749.7	446.0	465.0	182.1		Ampl.	386.9	
128.7	129.3	129.5	128.9	129.4	129.5	128.9	128.5	129.3	129.4	129.4	128.9	127.9	129.6	129.9	127.3		Sbd box	128.7	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)	2.320656250000E-03			Apriori delay (usec)			0.000000000000E+00			Resid mbdelay (usec)			2.32066E-03			+/- 8.0E-08			
Sband delay (usec)	-2.054500000000E-03			Apriori clock (usec)			0.000000000000E+00			Resid sbdelay (usec)			-2.05450E-03			+/- 1.3E-06			
Phase delay (usec)	2.10216596612E-06			Apriori clockrate (us/s)			0.000000000000E+00			Resid phdelay (usec)			2.10217E-06			+/- 2.7E-10			
Delay rate (us/s)	-1.13369219133E-11			Apriori rate (us/s)			0.000000000000E+00			Resid rate (us/s)			-1.13369E-11			+/- 2.6E-12			
Total phase (deg)	65.2			Apriori accel (us/s/s)			0.000000000000E+00			Resid phase (deg)			65.2			+/- 0.0			
RMS	Theor.			Amplitude			367.506 +/- 0.027			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
ph/seg (deg)	0.0			Search (1024X64)			363.457			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
amp/seg (%)	0.9			Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016	
ph/frq (deg)	23.0			Inc. seg. avg.			364.819			Sample rate(MSamp/s): 64			dr window (ns/s)			-0.011 0.011			
amp/frq (%)	32.6			Inc. frq. avg.			386.886			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00	

multiband delay ( $\mu$ s)

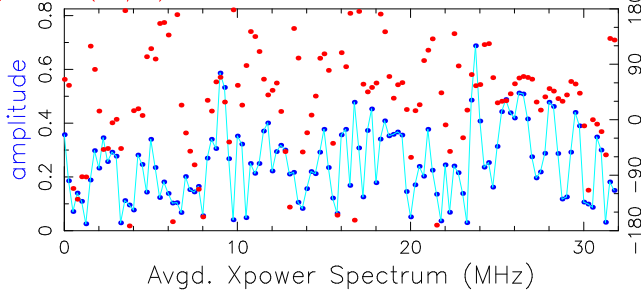


Fringe quality 0

SNR 6.0  
Int time 179.432  
Amp 0.238  
Phase 169.5  
PFD 2.7e-01  
Delays (us)  
SBD 0.281186  
MBD 0.011713  
Fringe rate (Hz)  
-0.902670  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

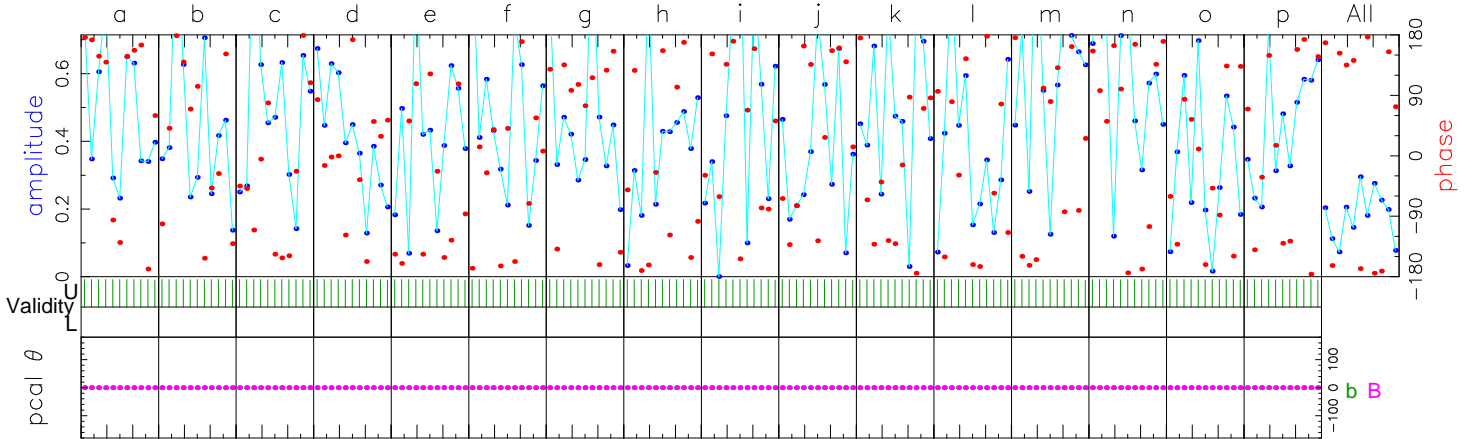


delay rate (ns/s)



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050812  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

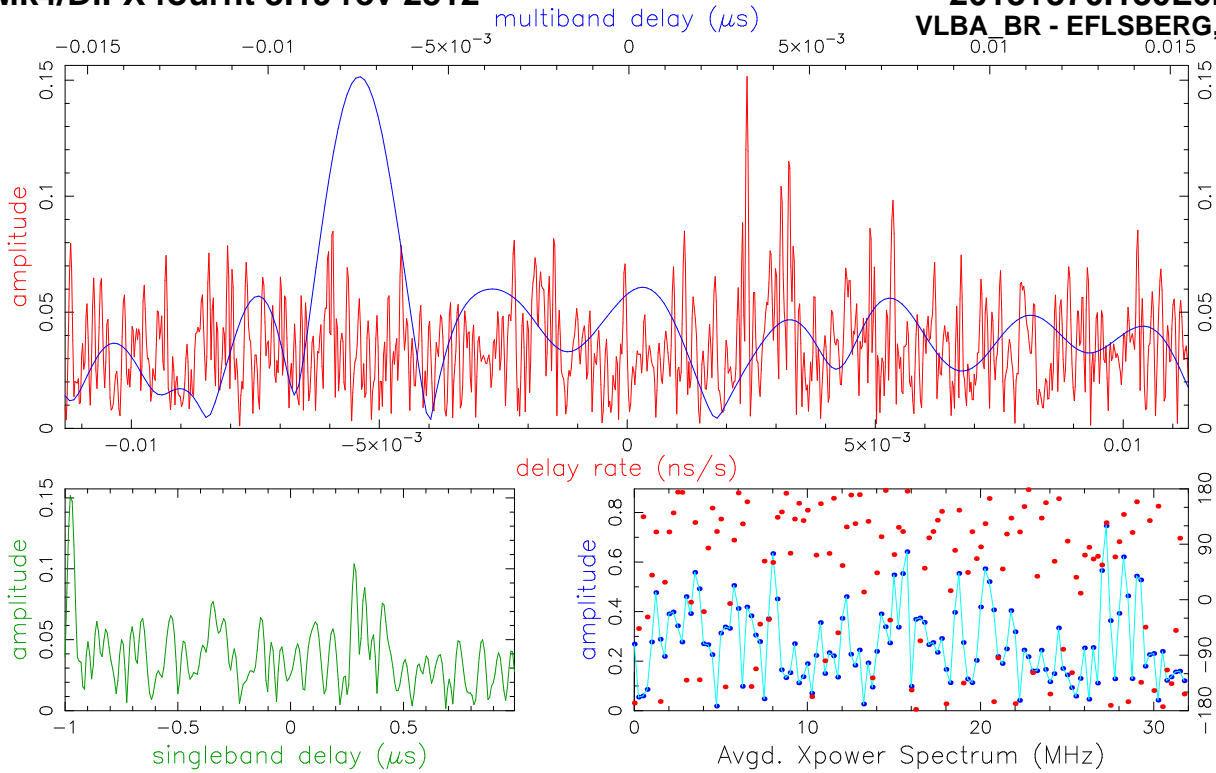


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		-8.75420834141E+03																
Sband delay (usec)		-8.75422011874E+03																
Phase delay (usec)		-8.75450129927E+03																
Delay rate (us/s)		1.30421928190E+00																
Total phase (deg)					29.1													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128 t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 35.0 31.8 Search (1024X64) 0.160 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 44.4 55.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 50.1 38.4 Inc. seg. avg. 0.230 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 68.1 67.0 Inc. frq. avg. 0.243 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 b: az 63.4 el 27.1 pa -48.6 B: az 257.6 el 60.6 pa 51.1 u,v (fr/asec) -9350.103 2526.237 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/bB..130L6H Output file: /Exps/c192c/v2/1234/No0048/bB.W.52.130L6H simultaneous interpolator

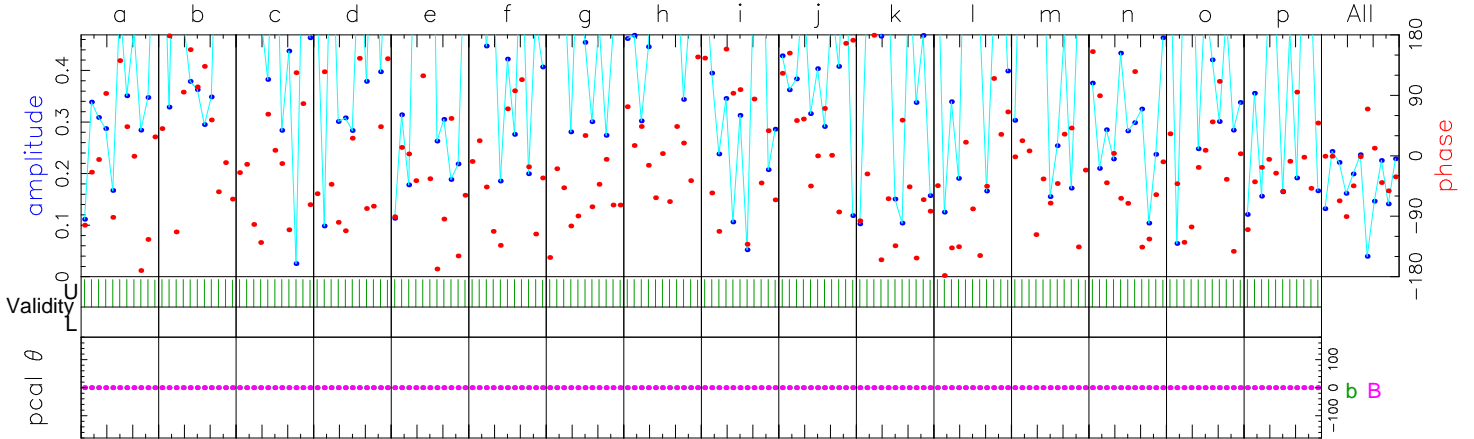
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, bB  
VLBA\_BR - EFLSBERG, fgroup W, pol RL



Fringe quality 0  
SNR 5.6  
Int time 179.432  
Amp 0.156  
Phase -29.6  
PFD 9.0e-01  
Delays (us)  
SBD -0.973747  
MBD -0.007471  
Fringe rate (Hz) 0.207755  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050814  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



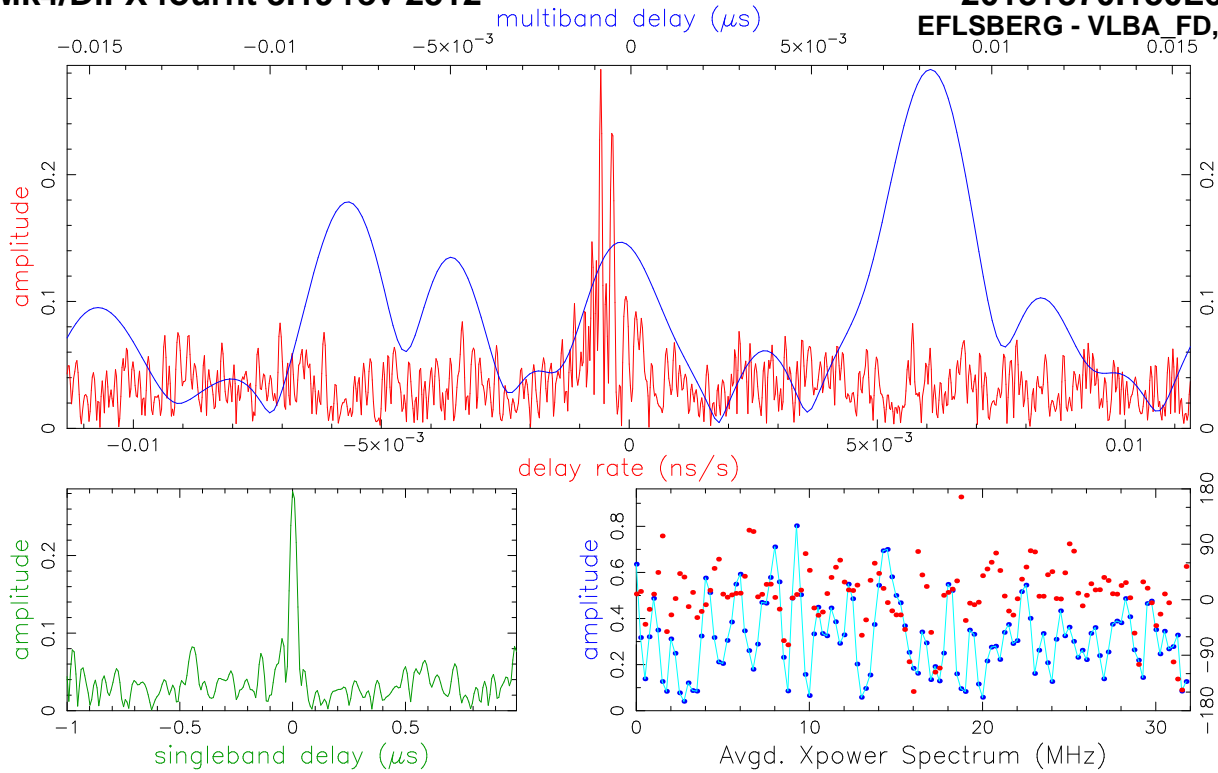
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd)	-8.75547752529E+03	Apriori delay (usec)	-8.75450130474E+03	Resid mbdelay (usec)	-7.47056E-03	+/-	1.9E-04
Sband delay (usec)	-8.75547505224E+03	Apriori clock (usec)	-1.7421515E+01	Resid sbdelay (usec)	-9.73747E-01	+/-	3.1E-03
Phase delay (usec)	-8.75450130569E+03	Apriori clockrate (us/s)	-4.2395080E-08	Resid phdelay (usec)	-9.55498E-07	+/-	6.6E-07
Delay rate (us/s)	1.30423217283E+00	Apriori rate (us/s)	1.30422976100E+00	Resid rate (us/s)	2.41183E-06	+/-	6.3E-09
Total phase (deg)	-170.0	Apriori accel (us/s/s)	4.45952962950E-05	Resid phase (deg)	-29.6	+/-	20.4

ph/seg (deg)	42.6	RMS	42.6	Theor.	33.8	Amplitude	0.156 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	42.2		59.0		59.0	Search (1024X64)	0.149	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	42.7		40.8		40.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
amp/frq (%)	66.2		71.2		71.2	Inc. seg. avg.	0.156	Sample rate(MSamp/s):	64	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.147	Data rate(Mb/s):	2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 63.4 el 27.1 pa -48.6 B: az 257.6 el 60.6 pa 51.1 u,v (fr/asec) -9350.103 2526.237 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/bB..130L6H Output file: /Exps/c192c/v2/1234/No0048/bB.W.69.130L6H



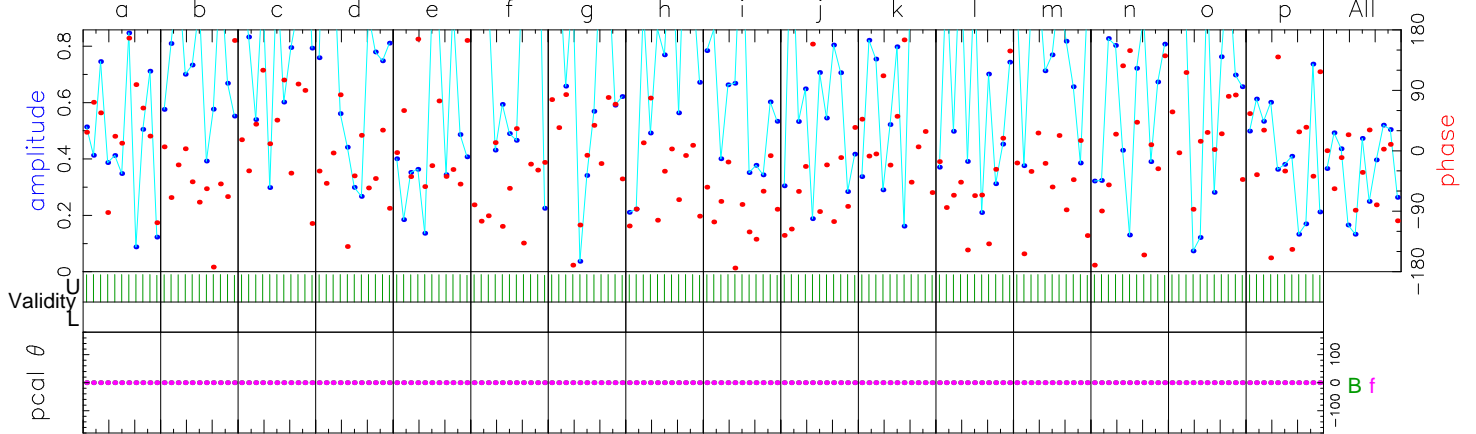


Fringe quality 9

SNR 10.5  
Int time 179.084  
Amp 0.286  
Phase -23.0  
PFD 3.0e-17  
Delays (us)  
SBD 0.002559  
MBD 0.008299  
Fringe rate (Hz)  
-0.048926  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050809  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0						
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0						
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)		7.77252480952E+03															Apriori delay (usec)	7.77251651096E+03	Resid mbdelay (usec)	8.29855E-03	+/-	1.0E-04
Sband delay (usec)		7.77251906996E+03															Apriori clock (usec)	1.6327339E+01	Resid sbdelay (usec)	2.55900E-03	+/-	1.6E-03
Phase delay (usec)		7.77251651022E+03															Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	-7.42993E-07	+/-	3.5E-07
Delay rate (us/s)		-1.49778881042E+00															Apriori rate (us/s)	-1.49778824244E+00	Resid rate (us/s)	-5.67980E-07	+/-	3.4E-09
Total phase (deg)					68.6												Apriori accel (us/s/s)	-2.33308831724E-05	Resid phase (deg)	-23.0	+/-	11.0

ph/seg (deg) 45.5 18.2  
amp/seg (%) 54.1 31.7  
ph/frq (deg) 48.4 21.9  
amp/frq (%) 65.3 38.2

RMS Theor. Amplitude 0.286 +/- 0.027  
Search (1024X64) 0.274  
Interp. 0.000  
Inc. seg. avg. 0.347  
Inc. frq. avg. 0.368

Group delay (usec)(sbd) 7.77252480952E+03  
Sband delay (usec) 7.77251906996E+03  
Phase delay (usec) 7.77251651022E+03  
Delay rate (us/s) -1.49778881042E+00  
Total phase (deg) 68.6

Apriori delay (usec) 7.77251651096E+03  
Apriori clock (usec) 1.6327339E+01  
Apriori clockrate (us/s) -1.0905050E-07  
Apriori rate (us/s) -1.49778824244E+00  
Apriori accel (us/s/s) -2.33308831724E-05

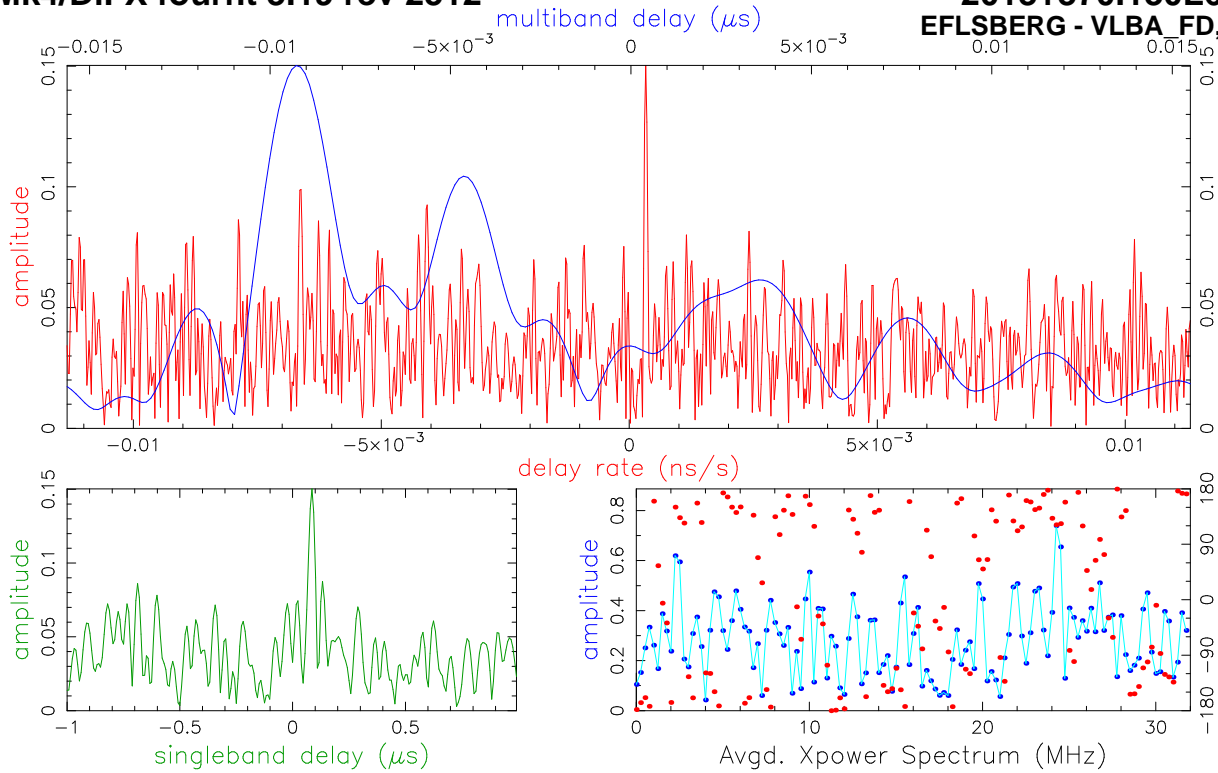
Resid mbdelay (usec) 8.29855E-03  
Resid sbdelay (usec) 2.55900E-03  
Resid phdelay (usec) -7.42993E-07  
Resid rate (us/s) -5.67980E-07  
Resid phase (deg) -23.0

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
PCal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2 SampCntNorm: enabled  
Sample rate(MISamp/s): 64  
Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite

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

B: az 257.6 el 60.6 pa 51.1 f: az 61.9 el 30.0 pa -72.5 u,v (fr/asec) 10761.998 393.086 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bf..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bf.W.22.130L6H

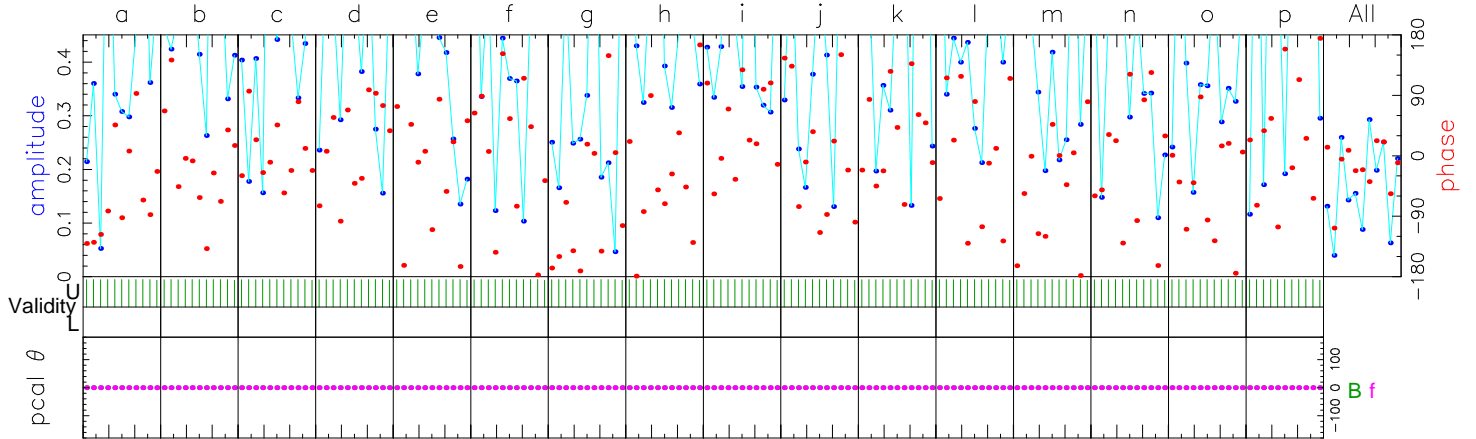


Fringe quality 0

SNR 5.5  
Int time 179.084  
Amp 0.150  
Phase -7.3  
PFD 9.9e-01  
Delays (us)  
SBD 0.085859  
MBD -0.009251  
Fringe rate (Hz) 0.028778  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

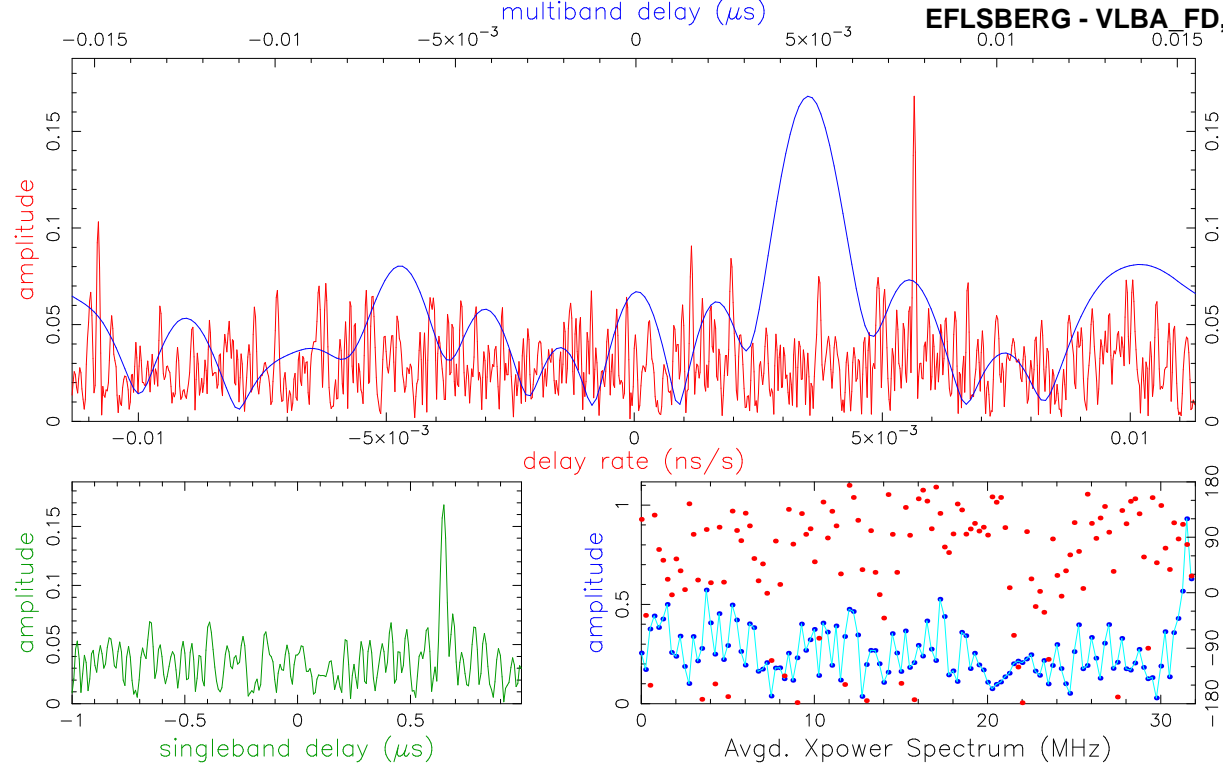
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050811  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-64.9	-18.7	-3.3	31.8	29.0	45.1	-84.1	-42.9	32.2	-105.2	33.0	-1.6	-14.8	-12.7	-43.7	-27.9	Phase	-7.3
	0.2	0.3	0.4	0.2	0.1	0.1	0.1	0.2	0.3	0.1	0.3	0.1	0.1	0.1	0.2	0.2	Ampl.	0.2
	151.8	213.3	140.0	122.2	210.0	110.2	29.7	37.5	36.2	242.0	197.9	18.8	109.1	77.3	50.6	90.8	Sbd box	140.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	7.77260101024E+03			Apriori delay (usec)			7.77251651096E+03			Resid mbdelay (usec)			-9.25072E-03			+/- 2.0E-04		
Sband delay (usec)	7.77260237046E+03			Apriori clock (usec)			1.6327339E+01			Resid sbdelay (usec)			8.58595E-02			+/- 3.1E-03		
Phase delay (usec)	7.77251651073E+03			Apriori clockrate (us/s)			-1.0905050E-07			Resid phdelay (usec)			-2.36951E-02			+/- 6.7E-07		
Delay rate (us/s)	-1.49778790835E+00			Apriori rate (us/s)			-1.49778824244E+00			Resid rate (us/s)			3.34086E-07			+/- 6.5E-09		
Total phase (deg)	84.3			Apriori accel (us/s/s)			-2.33308831724E-05			Resid phase (deg)			-7.3			+/- 20.8		

ph/seg (deg) 38.4 34.6 Search (1024X64) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.5 60.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 46.9 41.7 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 67.4 72.7 Inc. frq. avg. 0.151 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 f: az 61.9 el 30.0 pa -72.5 u,v (fr/asec) 10761.998 393.086 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bf..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bf.W.38.130L6H

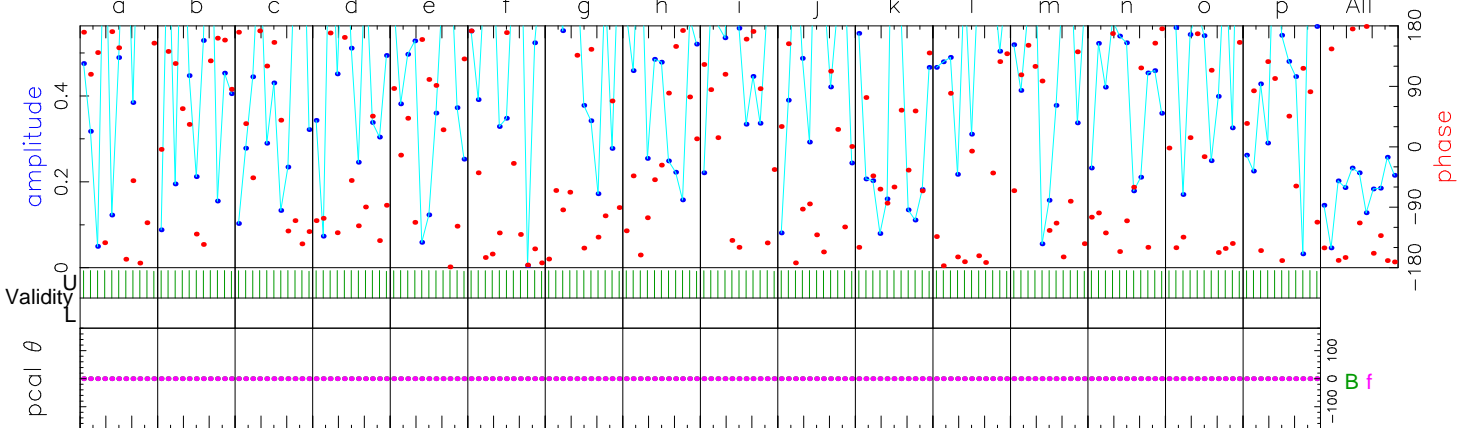


Fringe quality 0

SNR 6.2  
Int time 179.084  
Amp 0.188  
Phase -161.0  
PFD 7.7e-02  
Delays (us)  
SBD 0.646709  
MBD 0.004770  
Fringe rate (Hz)  
0.486667  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050813  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-169.4	120.0	-149.5	-132.2	90.4	-146.9	-116.8	-76.5	164.7	-141.2	-53.3	179.4	-166.0	-149.7	-169.5	110.0	Phase	-161.0
	0.5	0.3	0.3	0.3	0.1	0.4	0.3	0.1	0.2	0.3	0.1	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
	210.9	18.9	95.4	138.3	10.3	100.3	214.3	224.9	110.3	203.1	126.0	6.5	177.9	92.4	231.1	250.3	Sbd box	211.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 7.77317753069E+03 Apriori delay (usec) 7.77251651096E+03 Resid mbdelay (usec) 4.76972E-03 +/- 1.7E-04  
 Sband delay (usec) 7.77316321996E+03 Apriori clock (usec) 1.6327339E+01 Resid sbdelay (usec) 6.46709E-01 +/- 2.8E-03  
 Phase delay (usec) 7.77251650577E+03 Apriori clockrate (us/s) -1.0905050E-07 Resid phdelay (usec) -5.19317E-06 +/- 6.0E-07  
 Delay rate (us/s) -1.49778259272E+00 Apriori rate (us/s) -1.49778824244E+00 Resid rate (us/s) 5.64972E-06 +/- 5.7E-09  
 Total phase (deg) -69.4 Apriori accel (us/s/s) -2.33308831724E-05 Resid phase (deg) -161.0 +/- 18.5

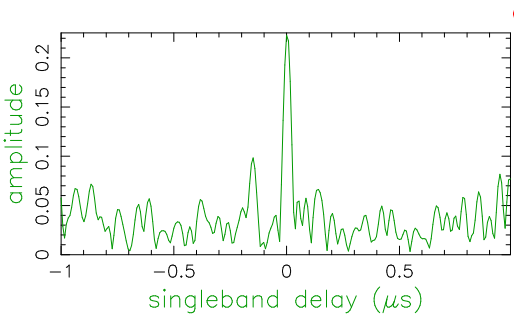
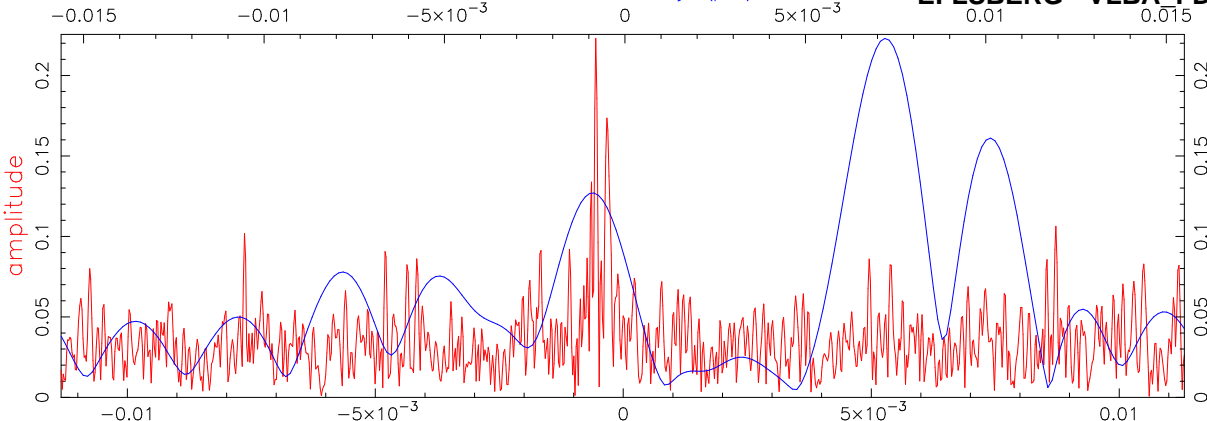
RMS Theor. Amplitude 0.188 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 25.8 30.7 Search (1024X64) 0.165 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 33.7 53.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 59.8 37.0 Inc. seg. avg. 0.177 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 64.1 64.6 Inc. frq. avg. 0.205 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 f: az 61.9 el 30.0 pa -72.5 u,v (fr/asec) 10761.998 393.086 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bf..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bf.W.57.130L6H

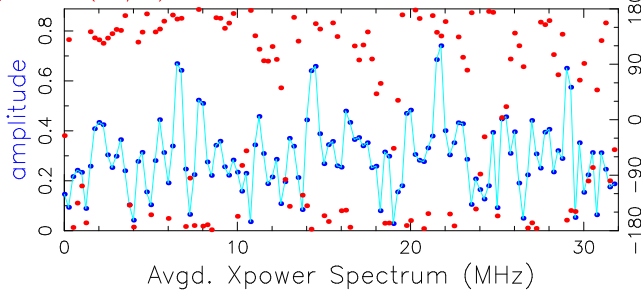
multiband delay ( $\mu$ s)

Fringe quality 9

SNR 8.2  
Int time 179.084  
Amp 0.225  
Phase 134.2  
PFD 2.9e-08  
Delays (us)  
SBD 0.002708  
MBD 0.007240  
Fringe rate (Hz)  
-0.048421  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

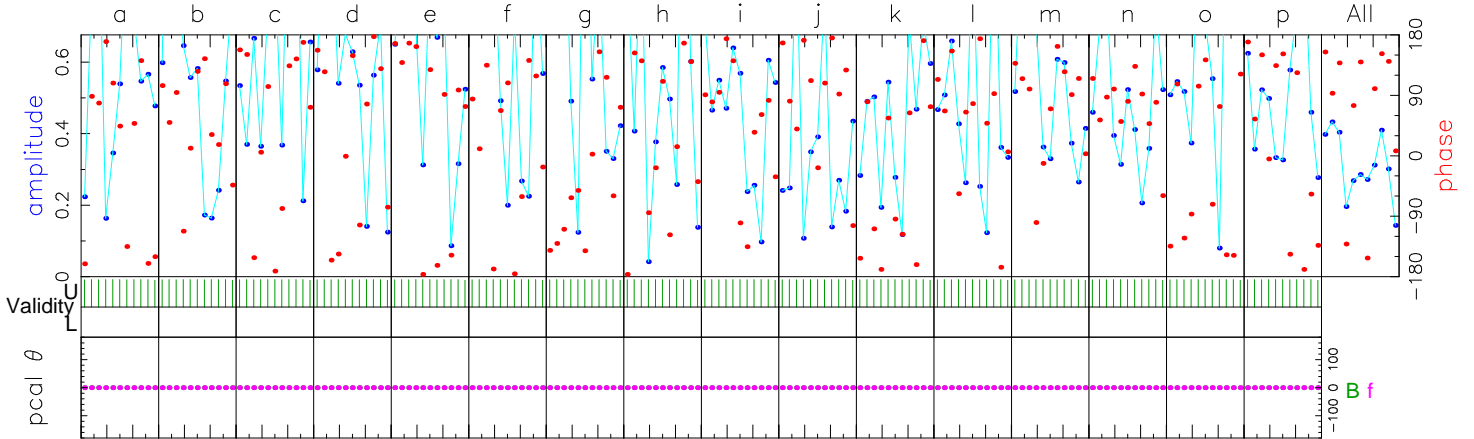


delay rate (ns/s)



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050807  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

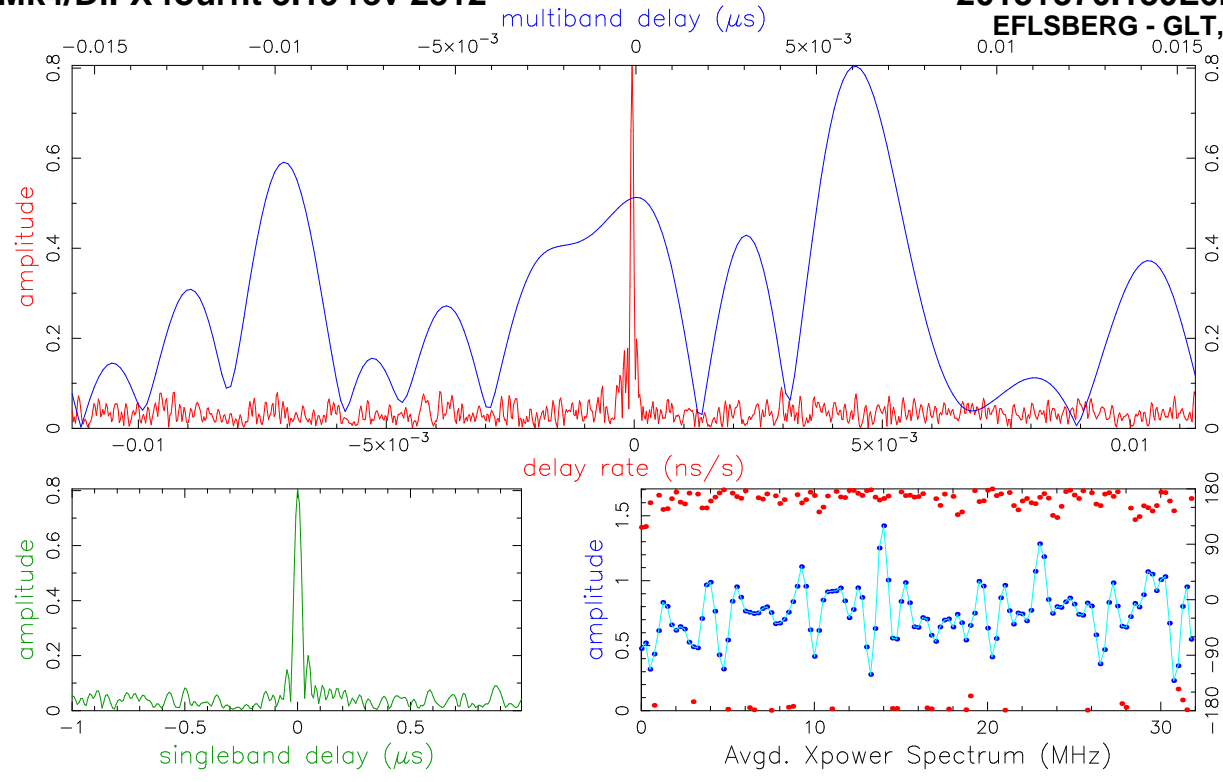


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	122.8	66.1	146.0	167.5	143.3	116.6	-131.1	159.4	101.7	88.2	131.1	94.8	111.9	78.3	-177.6	167.9	Phase	134.2
	0.2	0.3	0.4	0.3	0.5	0.2	0.4	0.4	0.2	0.2	0.1	0.3	0.3	0.4	0.3	0.2	Ampl.	0.3
	55.1	197.1	129.4	129.7	129.0	41.8	128.7	129.9	93.6	167.4	214.5	127.8	92.9	17.8	139.0	233.9	Sbd box	129.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	7.77252375129E+03	Apriori delay (usec)	7.77251651096E+03	Resid mbdelay (usec)	7.24032E-03	+/-	1.3E-04
Sband delay (usec)	7.77251921896E+03	Apriori clock (usec)	1.6327339E+01	Resid sbdelay (usec)	2.70800E-03	+/-	2.1E-03
Phase delay (usec)	7.77251651529E+03	Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	4.32621E-06	+/-	4.5E-07
Delay rate (us/s)	-1.49778880455E+00	Apriori rate (us/s)	-1.49778824244E+00	Resid rate (us/s)	-5.62114E-07	+/-	4.3E-09
Total phase (deg)	225.8	Apriori accel (us/s/s)	-2.33308831724E-05	Resid phase (deg)	134.2	+/-	13.9

B: az 257.6 el 60.6 pa 51.1 f: az 61.9 el 30.0 pa -72.5 u,v (fr/asec) 10761.998 393.086 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bf..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bf.W.7.130L6H

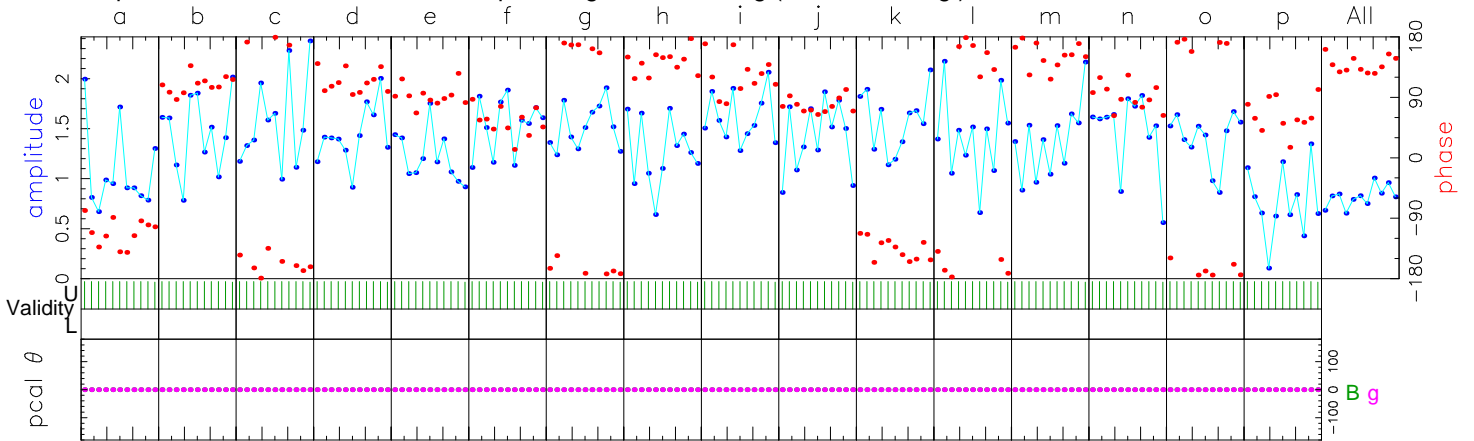


Fringe quality 7

SNR 29.6  
Int time 179.720  
Amp 0.806  
Phase 138.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.001189  
MBD 0.006074  
Fringe rate (Hz)  
-0.003816  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

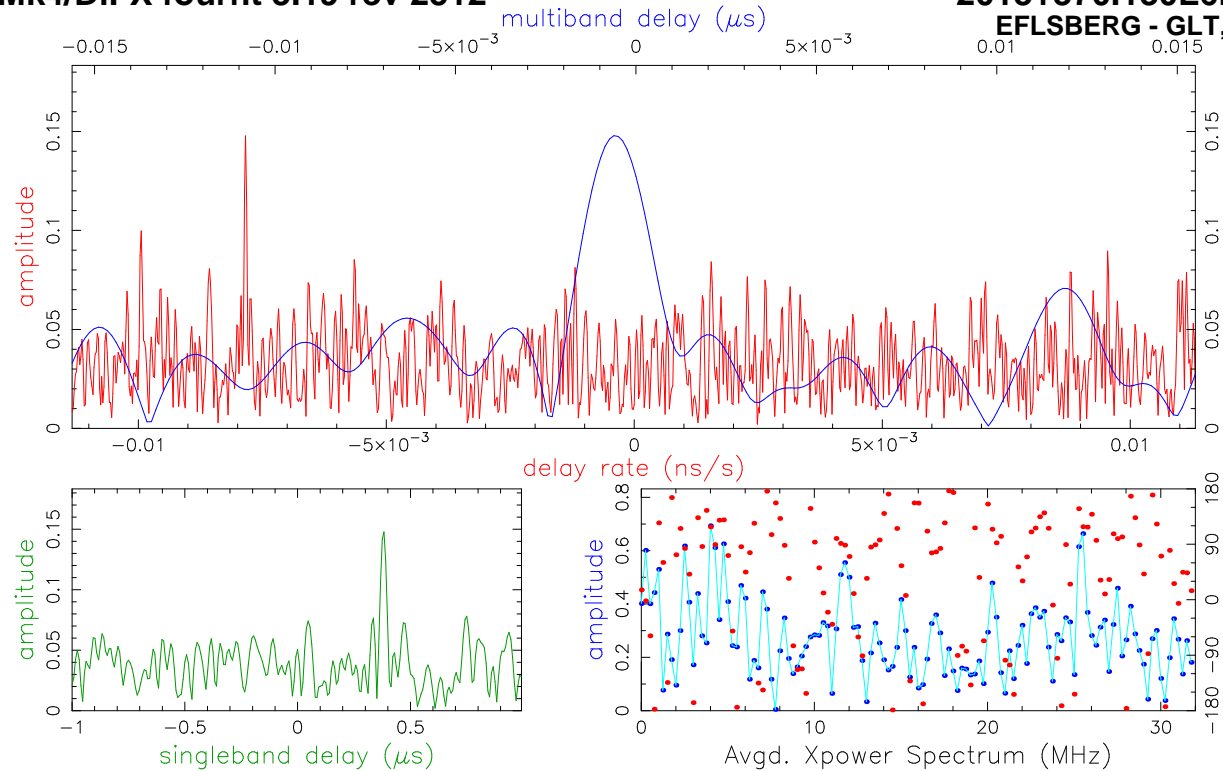
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050809  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	109.4	110.8	114.3	114.3	92.6	54.5	179.8	142.8	123.6	78.7	-135.4	179.5	150.4	93.2	-176.5	61.5		Phase	138.5
B	1.0	1.4	1.5	1.4	1.2	1.5	1.5	1.2	1.4	1.4	1.5	1.3	1.3	1.4	1.4	0.7		Ampl.	1.3
g	128.0	128.8	128.9	129.4	129.2	129.6	129.3	129.4	129.4	129.5	129.3	129.2	129.0	129.3	128.1	129.4		Sbd box	129.2
B	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
Group delay (usec)(sbd)	2.88089729628E+03		Apriori delay (usec)		2.88089122244E+03		Resid mbdelay (usec)		6.07384E-03		+/-		3.7E-05						
Sband delay (usec)	2.88089241144E+03		Apriori clock (usec)		1.5498650E+01		Resid sbdelay (usec)		1.18900E-03		+/-		5.8E-04						
Phase delay (usec)	2.88089122691E+03		Apriori clockrate (us/s)		-2.7499999E-07		Resid phdelay (usec)		4.46639E-06		+/-		1.3E-07						
Delay rate (us/s)	-6.56552090368E-01		Apriori rate (us/s)		-6.56552046069E-01		Resid rate (us/s)		-4.42990E-08		+/-		1.2E-09						
Total phase (deg)	103.0		Apriori accel (us/s/s)		-2.89846979494E-05		Resid phase (deg)		138.5		+/-		3.9						

ph/seg (deg) 11.7 6.4 Search (1024X64) 0.791 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 12.4 11.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 60.2 7.8 Inc. seg. avg. 0.816 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 67.7 13.5 Inc. frq. avg. 1.302 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 4698.979 -3178.893 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.25.130L6H

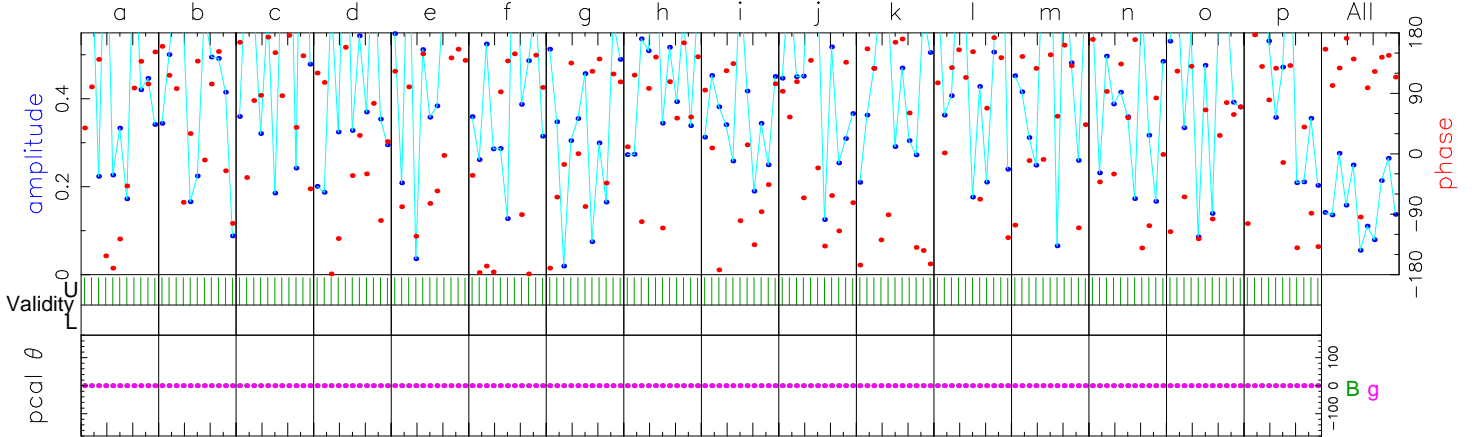


Fringe quality 0

SNR 5.5  
Int time 179.720  
Amp 0.183  
Phase 136.9  
PFD 9.9e-01  
Delays (us)  
SBD 0.380435  
MBD -0.000619  
Fringe rate (Hz)  
-0.676600  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050813  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

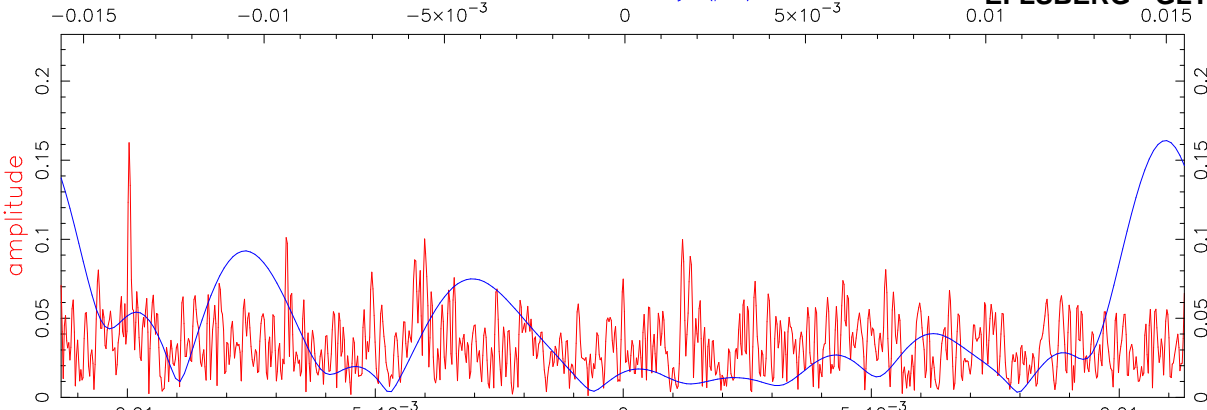


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	130.5	93.7	133.4	112.1	134.2	164.2	145.6	127.9	179.6	47.2	-163.1	136.6	128.6	142.8	79.6	152.5	Phase	136.9
B	0.3	0.1	0.3	0.1	0.3	0.3	0.1	0.3	0.0	0.1	0.3	0.4	0.2	0.1	0.2	0.2	Ampl.	0.2
g	233.6	72.7	240.8	165.8	18.4	171.1	89.2	200.8	226.2	173.5	78.9	219.7	56.9	144.1	116.7	58.3	Sbd box	177.7
g	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	2.88126560341E+03		Apriori delay (usec)		2.88089122244E+03		Resid mbdelay (usec)		-6.19032E-04		+/-		2.0E-04					
Sband delay (usec)	2.88127165694E+03		Apriori clock (usec)		1.5498650E+01		Resid sbdelay (usec)		3.80435E-01		+/-		3.1E-03					
Phase delay (usec)	2.88089122686E+03		Apriori clockrate (us/s)		-2.7499999E-07		Resid phdelay (usec)		4.41590E-06		+/-		6.8E-07					
Delay rate (us/s)	-6.56559900722E-01		Apriori rate (us/s)		-6.56552046069E-01		Resid rate (us/s)		-7.85465E-06		+/-		6.5E-09					
Total phase (deg)	101.4		Apriori accel (us/s/s)		-2.89846979494E-05		Resid phase (deg)		136.9		+/-		20.9					

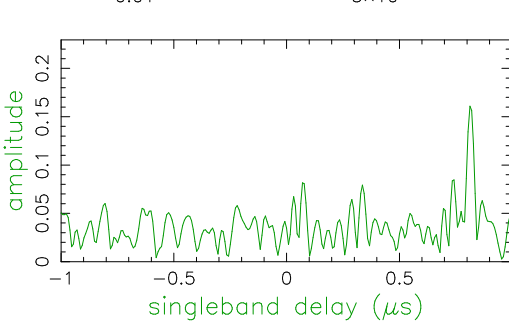
ph/seg (deg) 44.7 34.7 Search (1024X64) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 49.3 60.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.3 41.9 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 64.4 73.1 Inc. frq. avg. 0.165 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 4698.979 -3178.893 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.54.130L6H

multiband delay ( $\mu$ s)

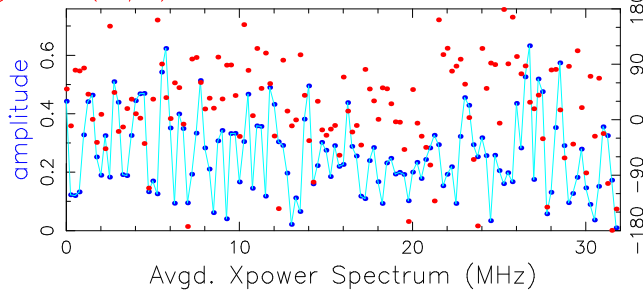
Fringe quality 0



SNR 6.0  
Int time 179.736  
Amp 0.230  
Phase 139.3  
PFD 2.5e-01  
Delays (us)  
SBD 0.815266  
MBD -0.016113  
Fringe rate (Hz)  
-0.859577  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

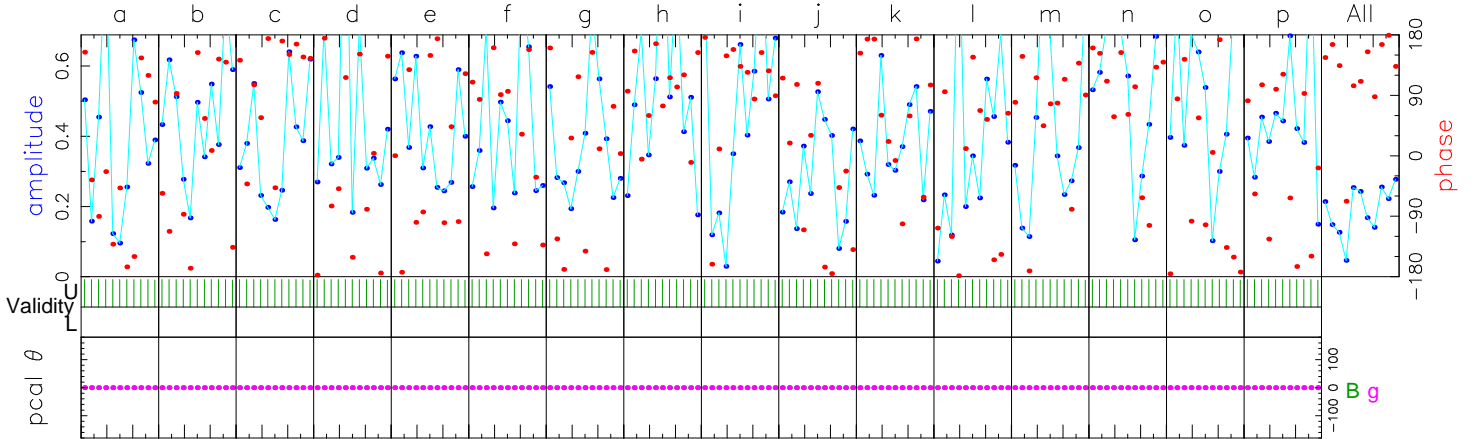


delay rate (ns/s)



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050815  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

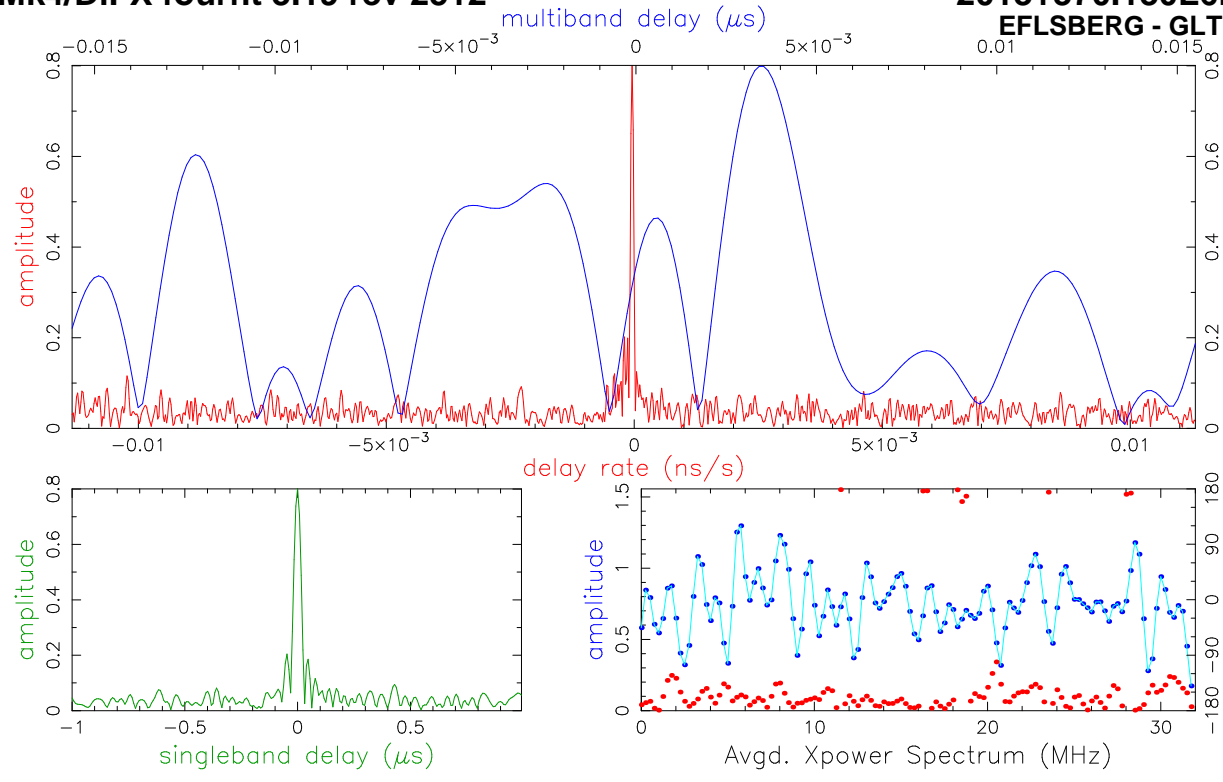


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-158.1	170.8	143.2	161.0	-145.1	121.5	157.1	91.7	133.2	172.0	105.0	157.0	87.1	127.7	-170.2	170.4	Phase	139.3
	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.5	0.5	0.1	0.2	0.2	0.4	0.5	0.3	0.2	Ampl.	0.2
	127.2	242.0	173.2	84.0	138.0	77.6	76.2	232.3	233.2	168.0	94.4	33.0	74.6	232.8	227.8	247.9	Sbd box	233.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Tracks	
Group delay (usec)(sbd)	2.88171885916E+03		Apriori delay (usec)		2.88089122244E+03		Resid mbdelay (usec)		-1.61133E-02		+/-		1.8E-04					
Sband delay (usec)	2.88170648894E+03		Apriori clock (usec)		1.5498650E+01		Resid sbdelay (usec)		8.15266E-01		+/-		2.9E-03					
Phase delay (usec)	2.88089122694E+03		Apriori clockrate (us/s)		-2.7499999E-07		Resid phdelay (usec)		4.49163E-06		+/-		6.2E-07					
Delay rate (us/s)	-6.56562024911E-01		Apriori rate (us/s)		-6.56552046069E-01		Resid rate (us/s)		-9.97884E-06		+/-		5.9E-09					
Total phase (deg)	103.8		Apriori accel (us/s/s)		-2.89846979494E-05		Resid phase (deg)		139.3		+/-		19.2					

	RMS	Theor.	Amplitude	0.230 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.6	31.8	Search (1024X64)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	44.4	55.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	40.5	38.3	Inc. seg. avg.	0.232	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	62.9	66.9	Inc. frq. avg.	0.225	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 4698.979 -3178.893 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.71.130L6H

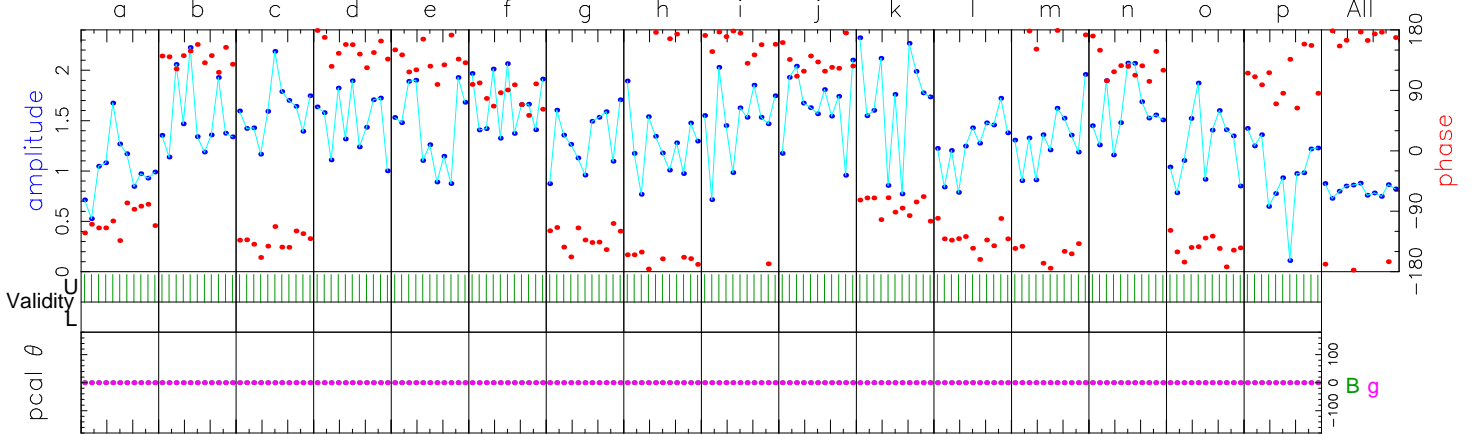


Fringe quality 7

SNR 29.4  
Int time 179.736  
Amp 0.801  
Phase 175.5  
PFD 0.0e+00  
Delays (us)  
SBD -0.000812  
MBD 0.003473  
Fringe rate (Hz)  
-0.003685  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050807  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



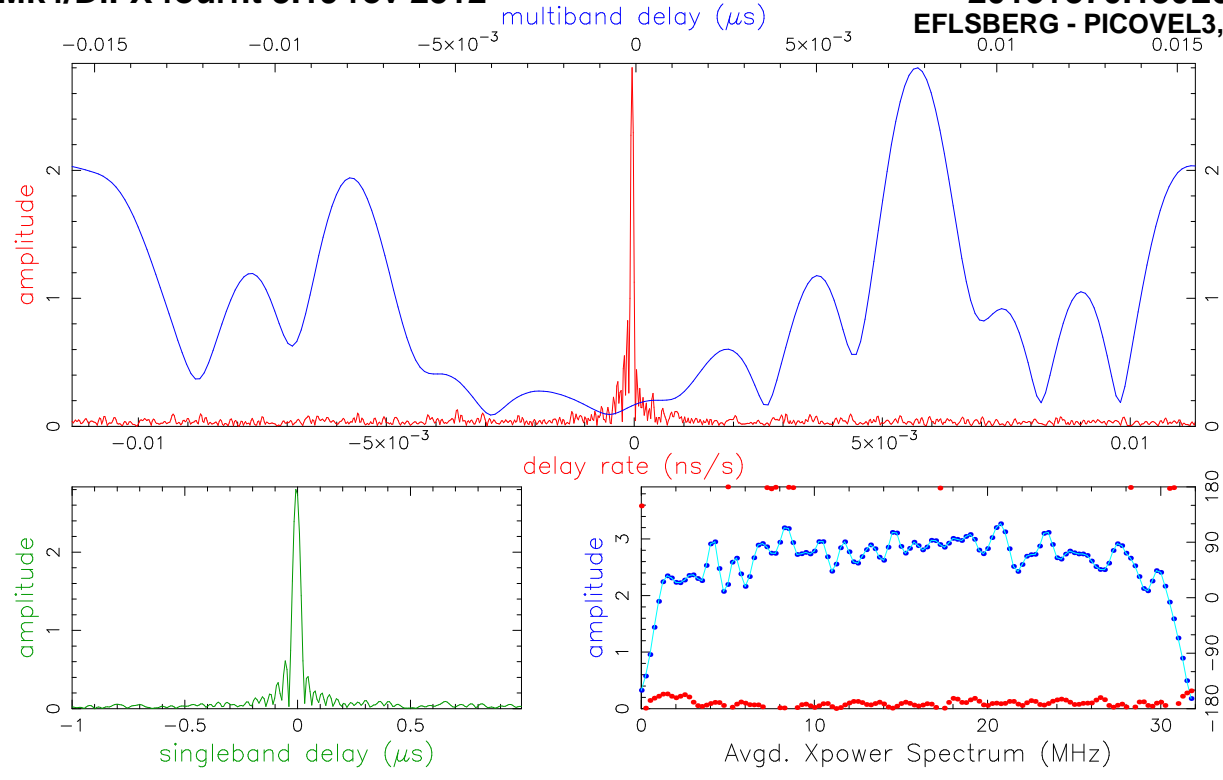
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)		2.88089469553E+03								2.88089122244E+03							3.47309E-03	+/- 3.7E-05
Sband delay (usec)		2.88089041044E+03								1.5498650E+01							-8.12000E-04	+/- 5.9E-04
Phase delay (usec)		2.88089122810E+03								-2.7499999E-07							5.65790E-06	+/- 1.3E-07
Delay rate (us/s)		-6.56552088844E-01								-6.56552046069E-01							-4.27756E-08	+/- 1.2E-09
Total phase (deg)					139.9												175.5	+/- 3.9
ph/seg (deg)	11.2	6.5																
amp/seg (%)	6.8	11.3																
ph/frq (deg)	59.4	7.8																
amp/frq (%)	74.3	13.6																
B: az 257.6 el 60.6 pa 51.1																		
g: az 133.2 el 47.2 pa -12.3																		
u,v (fr/asec) 4698.979 -3178.893																		
Control file: cf_1234_gmva																		
Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H																		
Output file: /Exps/c192c/v2/1234/No0048/Bg.W.9.130L6H																		

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): 2048 nlags: 128 t\_cohere infinite

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

simultaneous interpolator



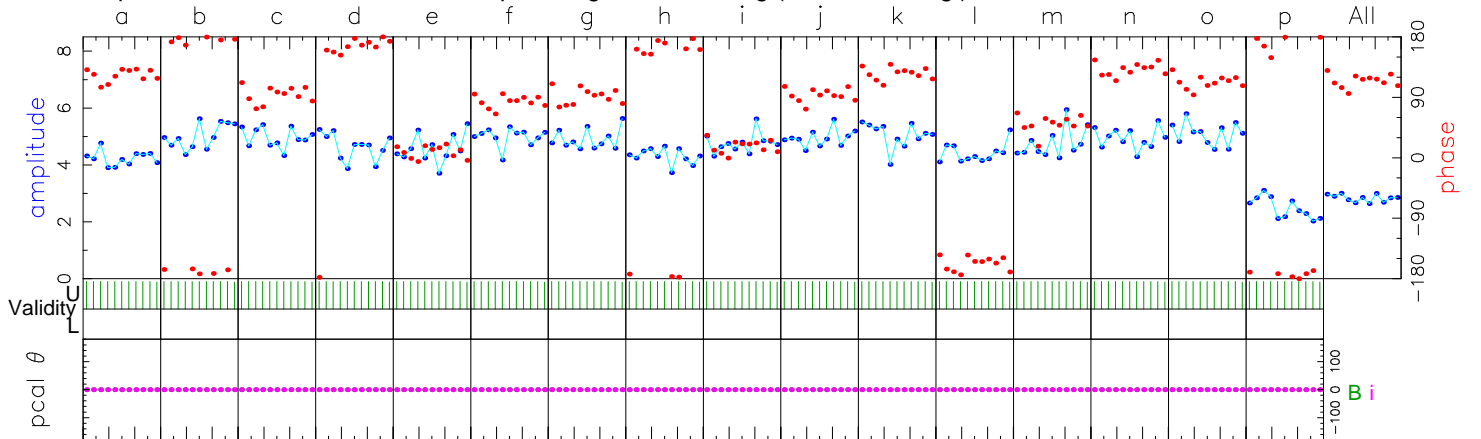


Fringe quality 5

SNR 104.0  
Int time 179.778  
Amp 2.835  
Phase 114.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.004934  
MBD 0.007793  
Fringe rate (Hz)  
-0.004019  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Yr:day 16383  
2020:076:093935  
2020:086:050809  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



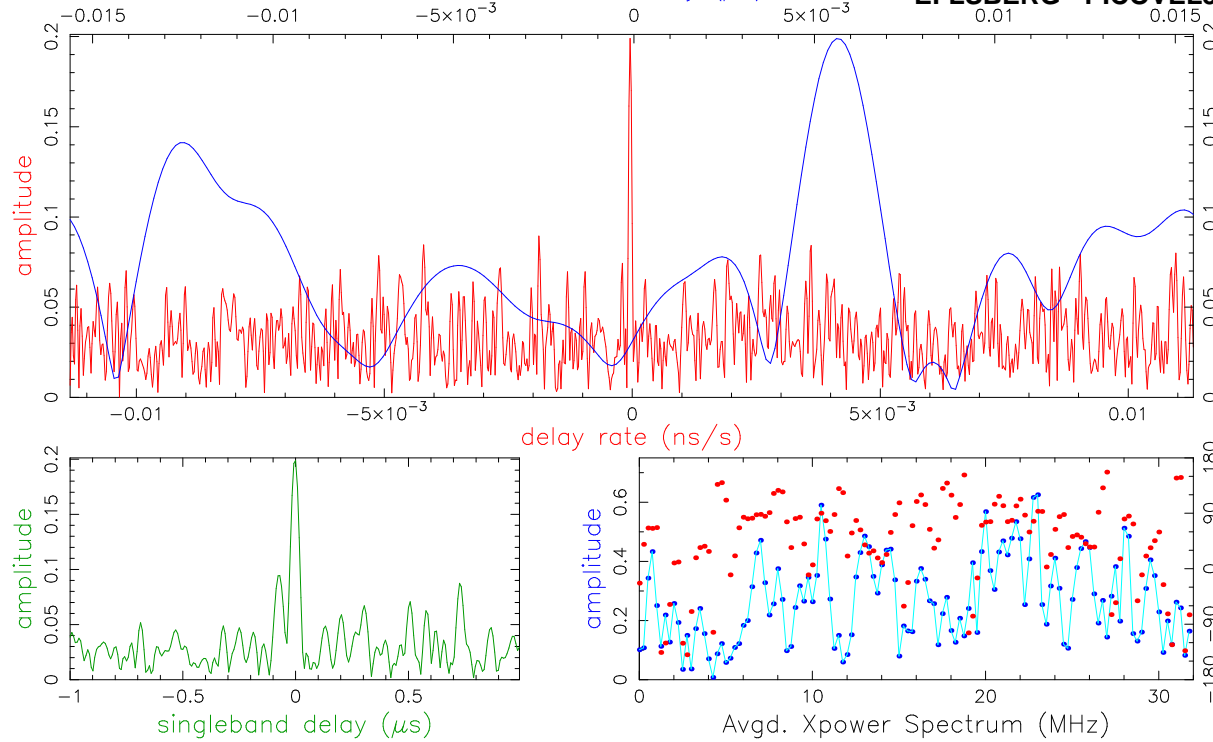
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	122.7	-177.4	93.5	168.6	7.9	83.4	91.0	169.7	17.0	93.4	125.1	-157.9	50.4	131.6	112.6	178.3	Phase	114.4
B	4.2	5.0	4.9	4.6	4.5	4.9	4.8	4.2	4.7	4.9	5.0	4.4	4.7	4.9	5.0	2.4	Ampl.	4.6
B:i	129.0	129.0	129.0	129.0	128.9	128.9	128.9	129.0	129.0	128.9	128.9	128.9	129.0	129.0	129.0	128.9	Sbd box	128.4
B:i	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B:i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.28846164744E+03			Apriori delay (usec)			-1.28846944050E+03			Resid mbdelay (usec)			7.79306E-03			+/- 1.0E-05		
Sband delay (usec)	-1.28847437450E+03			Apriori clock (usec)			1.7348013E+01			Resid sbdelay (usec)			-4.93400E-03			+/- 1.7E-04		
Phase delay (usec)	-1.28846943681E+03			Apriori clockrate (us/s)			1.5299999E-07			Resid phdelay (usec)			3.68974E-06			+/- 3.6E-08		
Delay rate (us/s)	-2.75472341876E-02			Apriori rate (us/s)			-2.75471875291E-02			Resid rate (us/s)			-4.66585E-08			+/- 3.4E-10		
Total phase (deg)	-103.2			Apriori accel (us/s/s)			1.84892806735E-05			Resid phase (deg)			114.4			+/- 1.1		

ph/seg (deg) 9.2 1.8 Theor. Amplitude 2.835 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 4.4 3.2 Search (1024X64) 2.793 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 59.9 2.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 64.7 3.8 Inc. seg. avg. 2.837 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 4.563 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) 214.498 2295.546 simultaneous interpolator

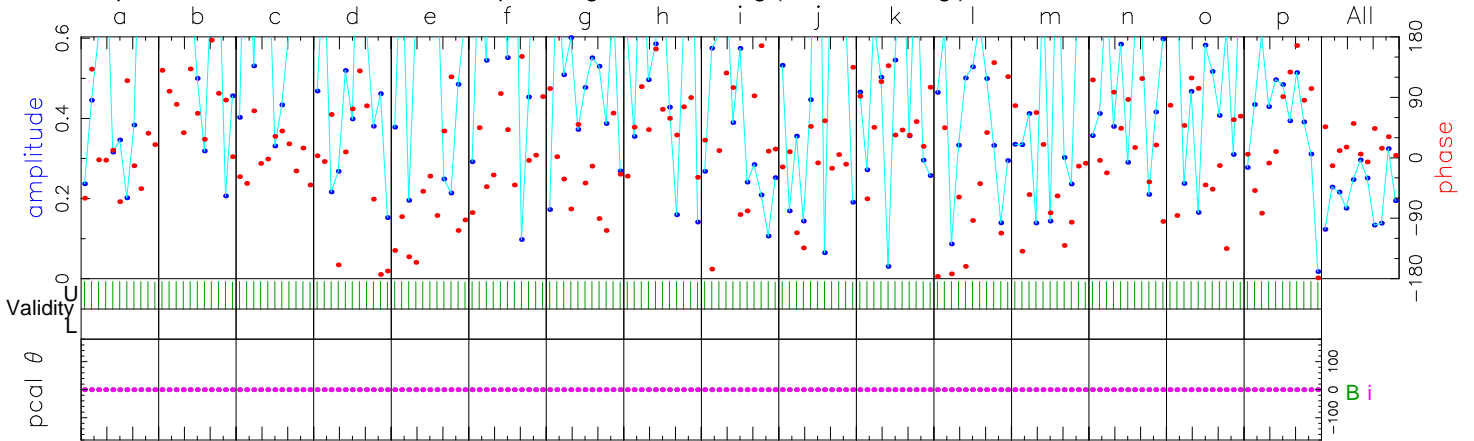
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bi..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bi.W.26.130L6H

multiband delay ( $\mu$ s)



Fringe quality 9  
SNR 7.4  
Int time 179.778  
Amp 0.201  
Phase 16.8  
PFD 2.5e-05  
Delays (us)  
SBD -0.003110  
MBD 0.005646  
Fringe rate (Hz)  
-0.004549  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050812  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

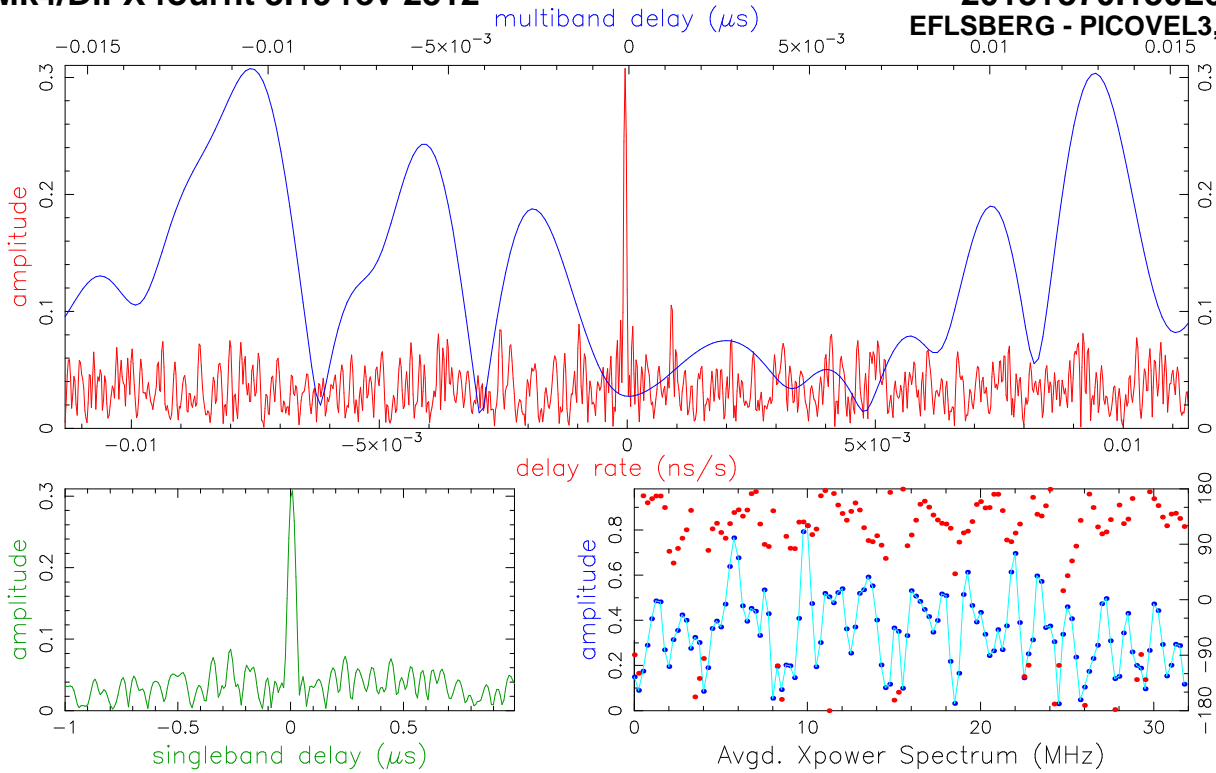


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-2.3	93.1	-4.8	64.2	-90.8	11.0	-21.6	74.3	93.7	-6.9	52.6	-89.9	-29.4	30.2	18.3	43.9		Phase	16.8
	0.4	0.4	0.6	0.2	0.3	0.4	0.3	0.4	0.1	0.4	0.4	0.0	0.3	0.2	0.1	0.1		Ampl.	0.3
	129.5	128.7	128.3	126.6	129.0	129.4	91.9	129.7	49.3	130.0	222.8	235.1	212.5	42.9	221.3	31.0		Sbd box	128.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) -1.28846379463E+03 Apriori delay (usec) -1.28846944050E+03 Resid mbdelay (usec) 5.64587E-03 +/- 1.5E-04  
 Sband delay (usec) -1.28847255050E+03 Apriori clock (usec) 1.7348013E+01 Resid sbdelay (usec) -3.11000E-03 +/- 2.3E-03  
 Phase delay (usec) -1.28846943995E+03 Apriori clockrate (us/s) 1.5299999E-07 Resid phdelay (usec) 5.43263E-07 +/- 5.0E-07  
 Delay rate (us/s) -2.75472403421E-02 Apriori rate (us/s) -2.75471875291E-02 Resid rate (us/s) -5.28130E-08 +/- 4.8E-09  
 Total phase (deg) -200.8 Apriori accel (us/s/s) 1.84892806735E-05 Resid phase (deg) 16.8 +/- 15.5

RMS Theor. Amplitude 0.201 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 20.5 25.8 Search (1024X64) 0.192 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 31.8 45.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 58.3 31.1 Inc. seg. avg. 0.193 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 89.3 54.2 Inc. frq. avg. 0.253 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) 214.498 2295.546 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bi..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bi.W.45.130L6H

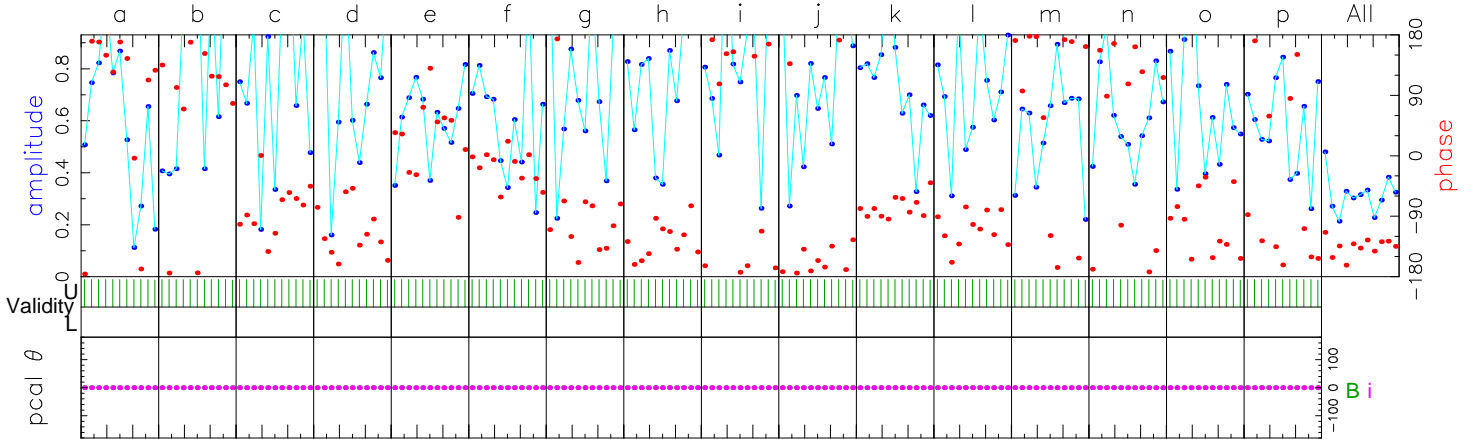


Fringe quality 9

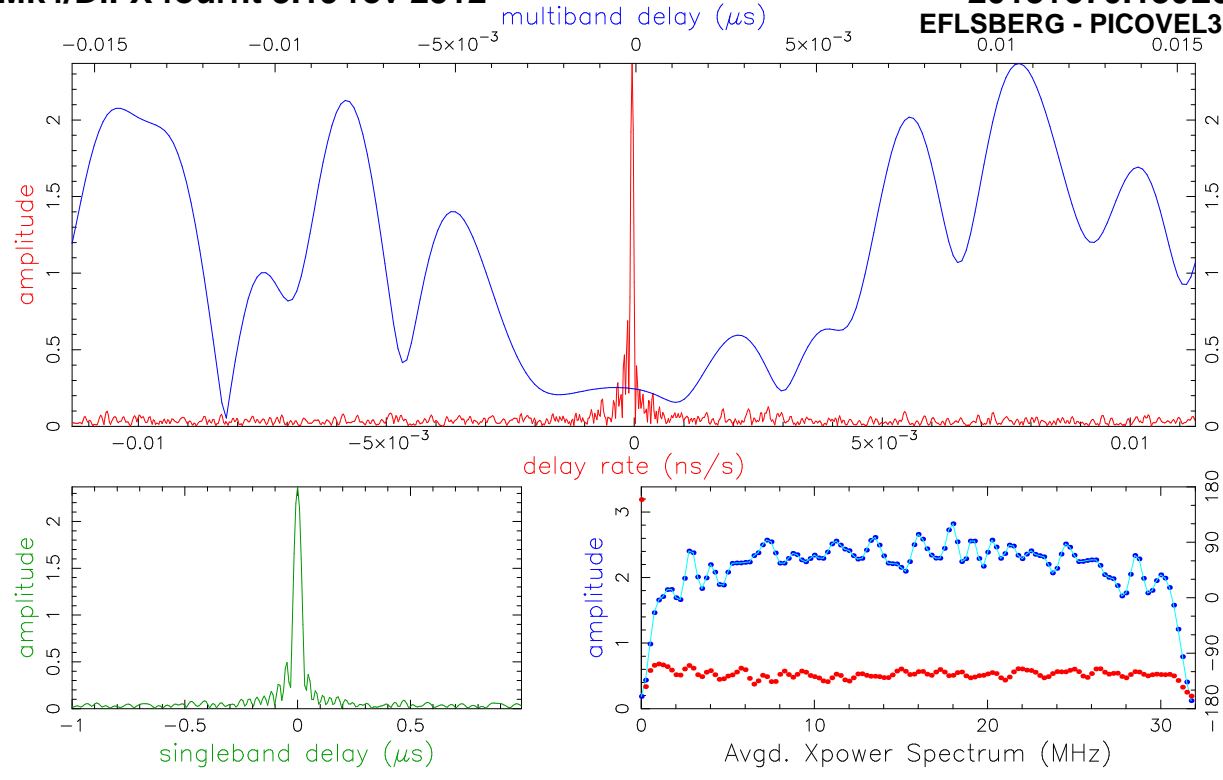
SNR 11.4  
Int time 179.778  
Amp 0.310  
Phase -133.7  
PFD 1.3e-21  
Delays (us)  
SBD 0.005319  
MBD -0.010484  
Fringe rate (Hz)  
-0.004098  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050813  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	153.7	125.2	-80.9	-107.1	23.2	-14.3	-104.3	-126.6	171.4	-164.8	-78.5	-108.3	175.9	156.5	-109.0	-150.6	Phase	-133.7	
B	0.5	0.7	0.7	0.4	0.6	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.4	0.4	0.5	0.4	Ampl.	0.6	
i	129.3	128.9	129.0	130.1	128.2	129.6	129.2	129.5	129.6	130.0	129.5	129.5	129.3	128.8	129.7	130.9	Sbd box	129.7	
B	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
B	Group delay (usec)(sbd)	-1.28844867497E+03		Apriori delay (usec)		-1.28846944050E+03		Resid mbdelay (usec)		-1.04845E-02		+/-		9.5E-05					
B	Sband delay (usec)	-1.28846412100E+03		Apriori clock (usec)		1.7348013E+01		Resid sbdelay (usec)		5.31950E-03		+/-		1.5E-03					
B	Phase delay (usec)	-1.28846944481E+03		Apriori clockrate (us/s)		1.5299999E-07		Resid phdelay (usec)		-4.31104E-06		+/-		3.2E-07					
B	Delay rate (us/s)	-2.75472350974E-02		Apriori rate (us/s)		-2.75471875291E-02		Resid rate (us/s)		-4.75683E-08		+/-		3.1E-09					
B	Total phase (deg)	-351.3		Apriori accel (us/s/s)		1.84892806735E-05		Resid phase (deg)		-133.7		+/-		10.1					
B	ph/seg (deg)	RMS	Theor.	Amplitude		0.310 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5									
B	amp/seg (%)	12.7	16.7	Search (1024X64)		0.301		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000					
B	ph/frq (deg)	22.4	29.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016			
B	amp/frq (%)	73.1	20.1	Inc. seg. avg.		0.303		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011		0.011					
B		98.9	35.2	Inc. frq. avg.		0.553		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00	

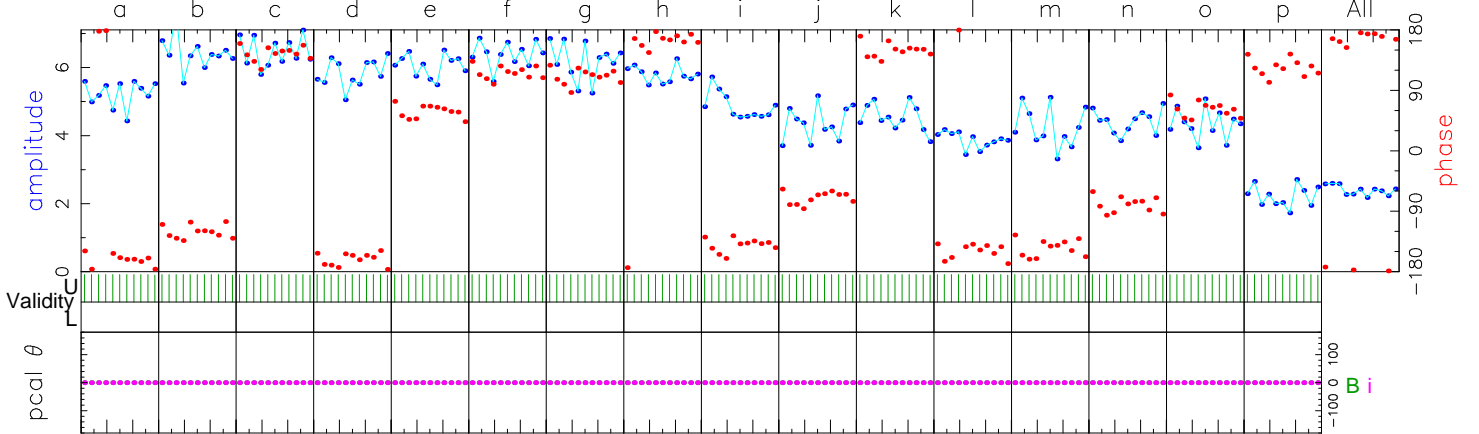


Fringe quality 5

SNR 86.9  
Int time 179.778  
Amp 2.370  
Phase 172.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.000439  
MBD 0.010603  
Fringe rate (Hz)  
-0.004015  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

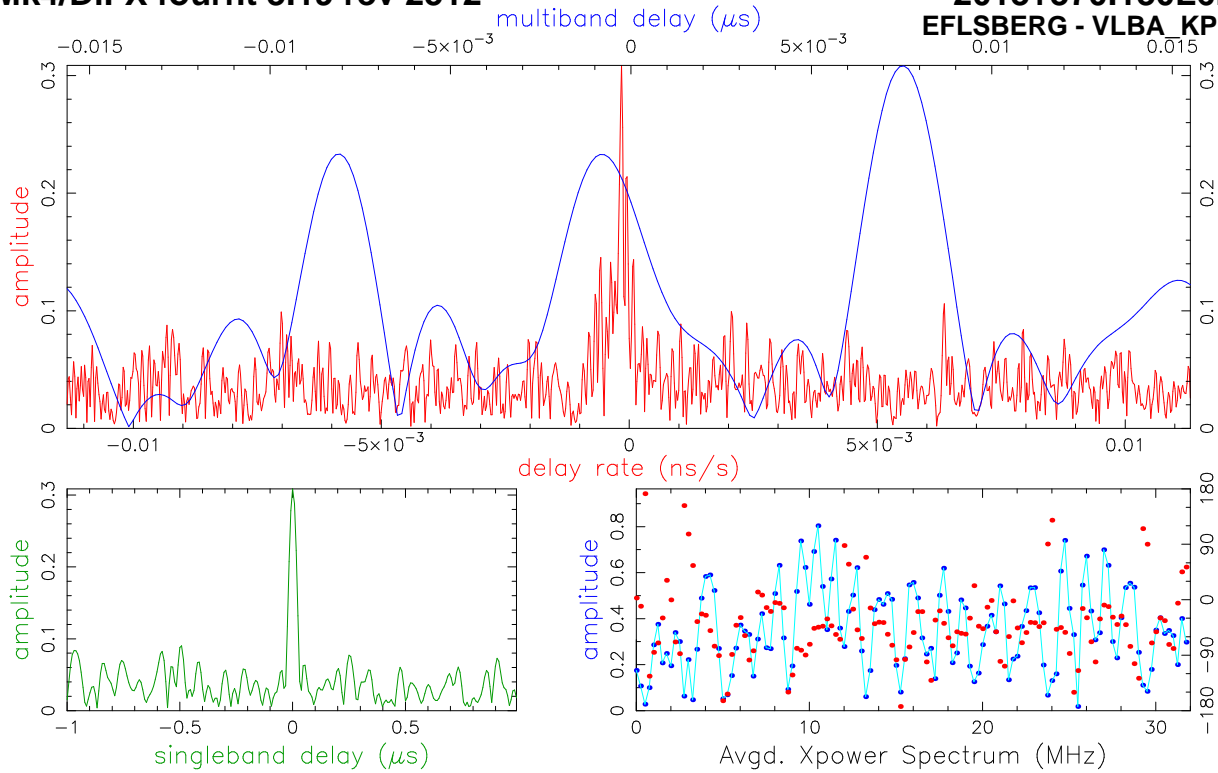
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050807  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	129.6	129.9
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.6	129.9
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	172.1	172.1
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	5.0	5.0
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	128.9	128.9
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	128.9	128.9
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	-1.28845883728E+03			Apriori delay (usec)			-1.28846944050E+03			Resid mbdelay (usec)			1.06032E-02			+/- 1.2E-05		
Sband delay (usec)	-1.28846988000E+03			Apriori clock (usec)			1.7348013E+01			Resid sbdelay (usec)			-4.39500E-04			+/- 2.0E-04		
Phase delay (usec)	-1.28846943495E+03			Apriori clockrate (us/s)			1.5299999E-07			Resid phdelay (usec)			5.55064E-06			+/- 4.3E-08		
Delay rate (us/s)	-2.75472341380E-02			Apriori rate (us/s)			-2.75471875291E-02			Resid rate (us/s)			-4.66089E-08			+/- 4.1E-10		
Total phase (deg)	-45.5			Apriori accel (us/s/s)			1.84892806735E-05			Resid phase (deg)			172.1			+/- 1.3		

ph/seg (deg) 9.3 2.2 Search (1024X64) 2.351 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 6.1 3.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 71.8 2.6 Inc. seg. avg. 2.398 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 121.0 4.6 Inc. frq. avg. 4.996 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
B: az 257.6 el 60.6 pa 51.1 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) 214.498 2295.546 ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bi..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bi.W.8.130L6H simultaneous interpolator

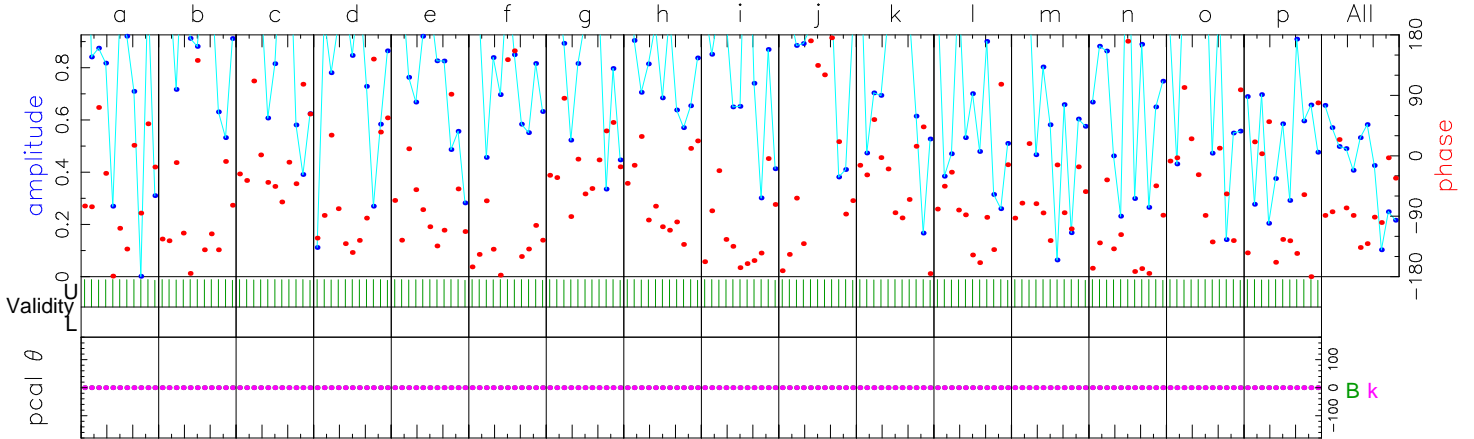


Fringe quality 9

SNR 11.3  
Int time 178.963  
Amp 0.309  
Phase -85.2  
PFD 3.4e-21  
Delays (us)  
SBD 0.000807  
MBD 0.007541  
Fringe rate (Hz)  
-0.013320  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

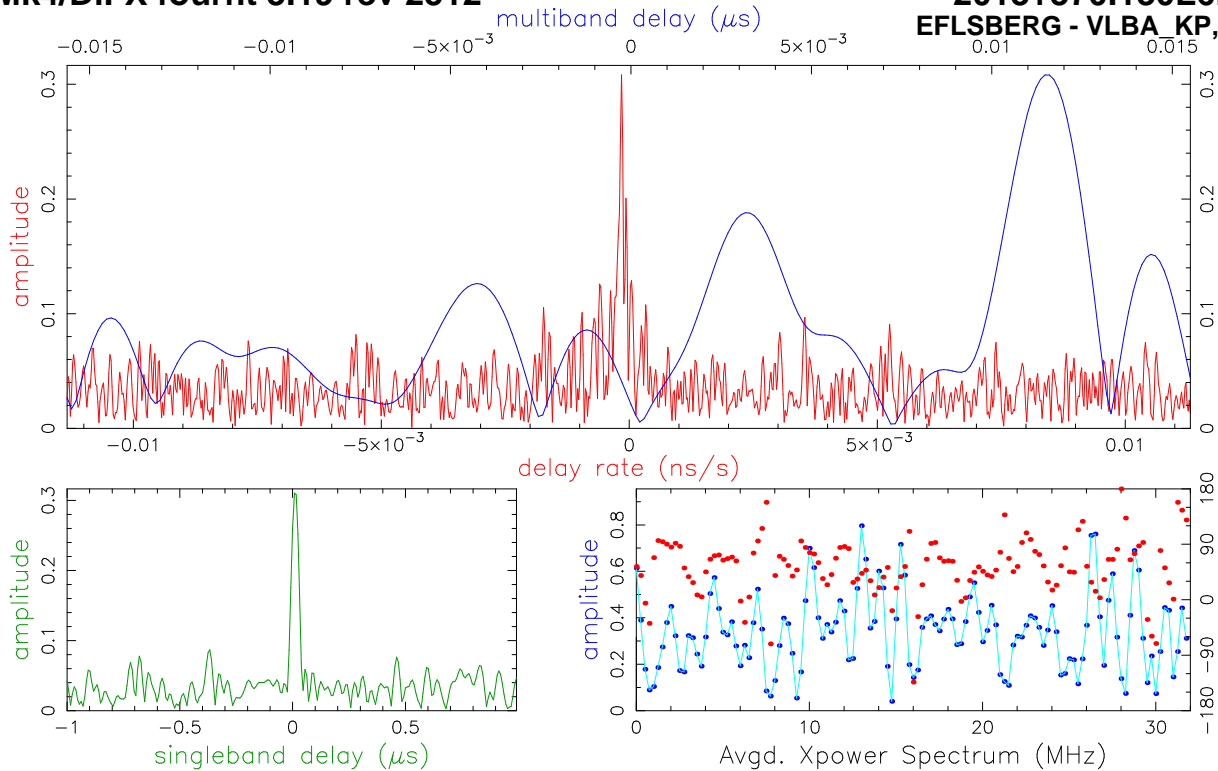
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050808  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		9.45399311091E+03																
Sband delay (usec)		9.45398637723E+03																
Phase delay (usec)		9.45398556698E+03																
Delay rate (us/s)		-1.51479648077E+00																
Total phase (deg)				266.3														
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
SampCntNorm: enabled																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128 t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 49.0 16.8 Search (1024X64) 0.302 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.4 29.4 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 52.7 20.3 Inc. seg. avg. 0.413 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 69.3 35.4 Inc. frq. avg. 0.450 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 10876.310 -360.737 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bk..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bk.W.15.130L6H simultaneous interpolator

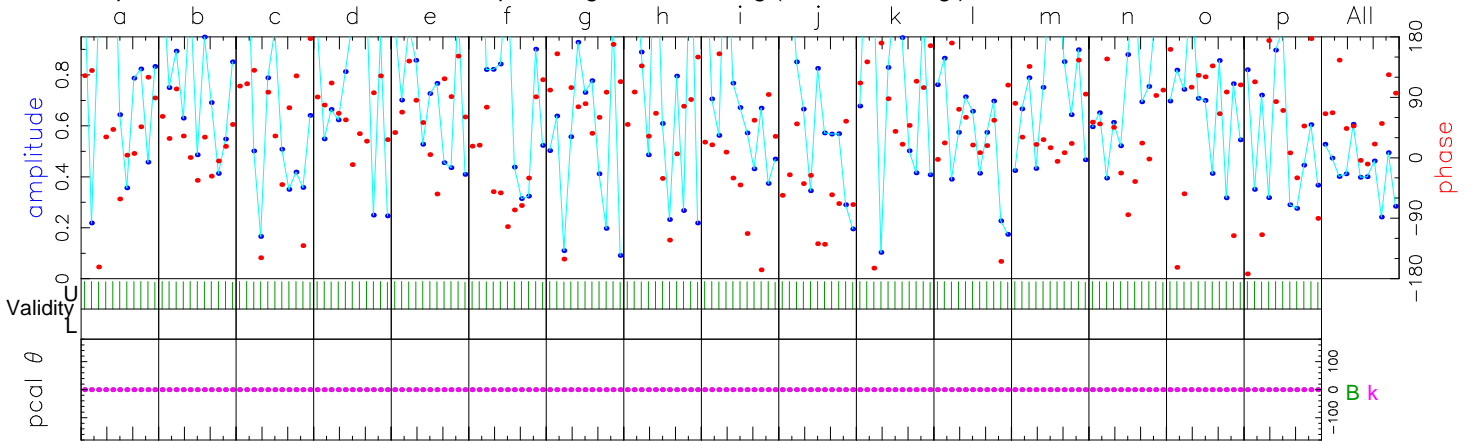


Fringe quality 9

SNR 11.6  
Int time 178.964  
Amp 0.316  
Phase 56.6  
PFD 1.3e-22  
Delays (us)  
SBD 0.011417  
MBD 0.011481  
Fringe rate (Hz)  
-0.012553  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

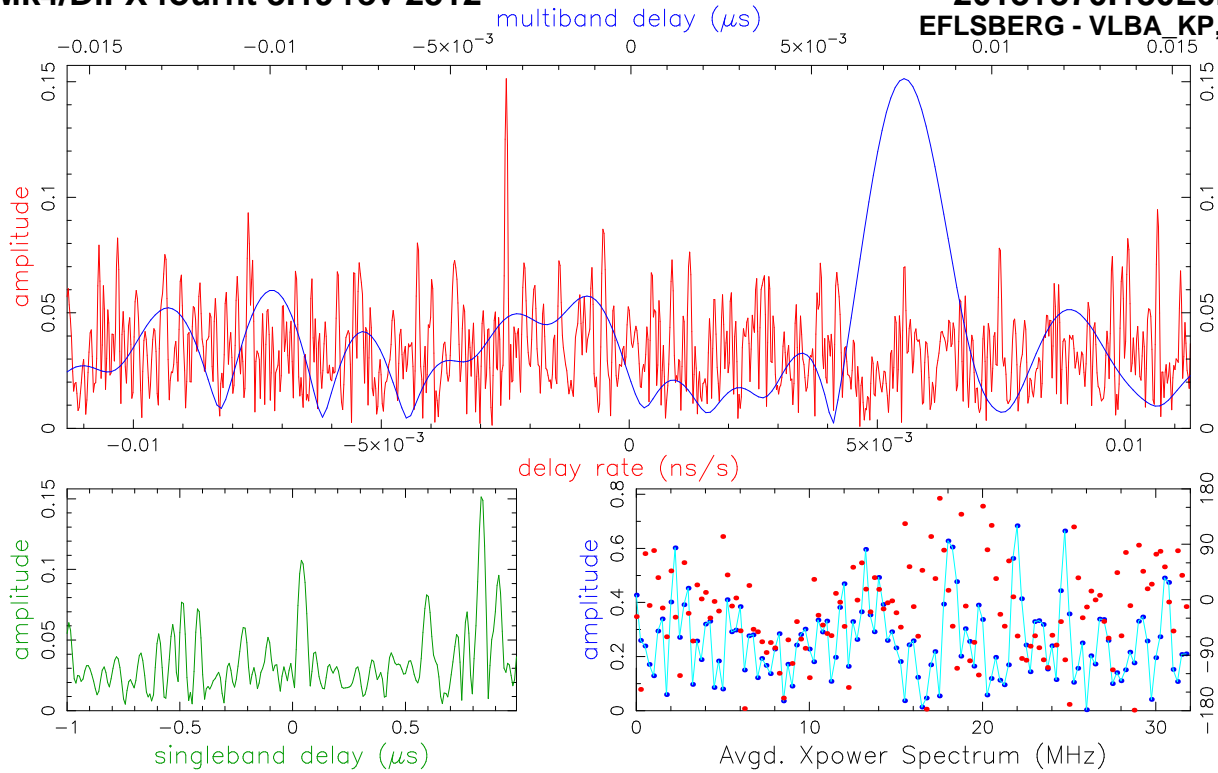
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050810  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
																		Tracks
Group delay (usec)(sbd)	9.45399705063E+03			Apriori delay (usec)			9.45398556973E+03			Resid mbdelay (usec)			1.14809E-02			+/-	9.3E-05	
Sband delay (usec)	9.45399698673E+03			Apriori clock (usec)			1.7199993E+01			Resid sbdelay (usec)			1.14170E-02			+/-	1.5E-03	
Phase delay (usec)	9.45398557155E+03			Apriori clockrate (us/s)			-5.4210100E-09			Resid phdelay (usec)			1.82418E-06			+/-	3.2E-07	
Delay rate (us/s)	-1.51479647187E+00			Apriori rate (us/s)			-1.51479632614E+00			Resid rate (us/s)			-1.45726E-07			+/-	3.1E-09	
Total phase (deg)	48.1			Apriori accel (us/s/s)			-3.36131792811E-05			Resid phase (deg)			56.6			+/-	9.9	

ph/seg (deg) 46.4 16.4 Search (1024X64) 0.296 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 47.1 28.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 51.0 19.8 Inc. seg. avg. 0.411 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 46.6 34.6 Inc. frq. avg. 0.395 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 10876.310 -360.737 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bk..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bk.W.33.130L6H

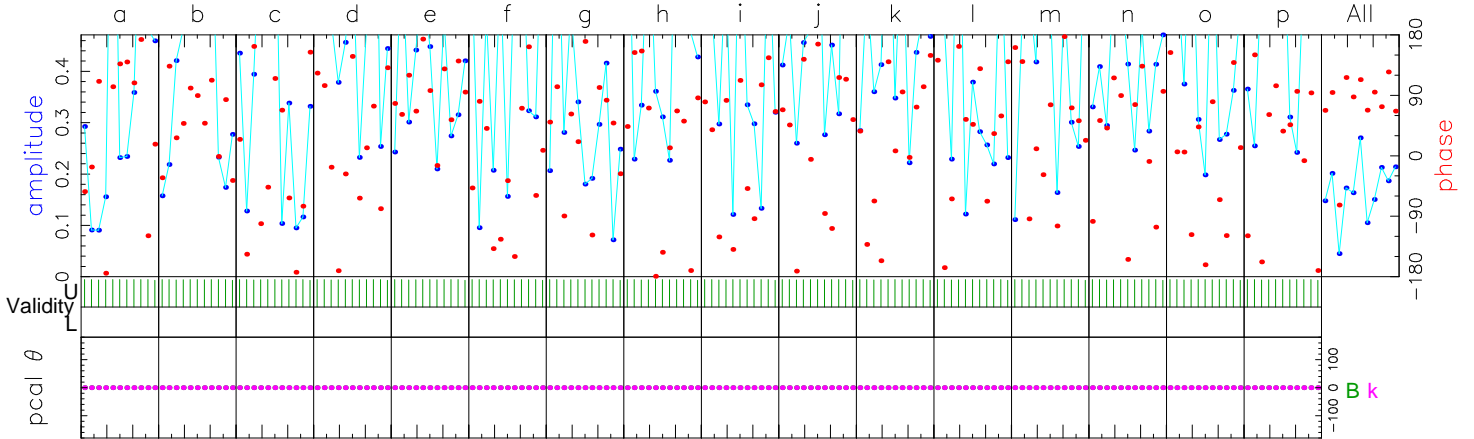


Fringe quality 0

SNR 5.6  
Int time 178.964  
Amp 0.157  
Phase 91.9  
PFD 8.8e-01  
Delays (us)  
SBD 0.839272  
MBD 0.007571  
Fringe rate (Hz)  
-0.213920  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050813  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

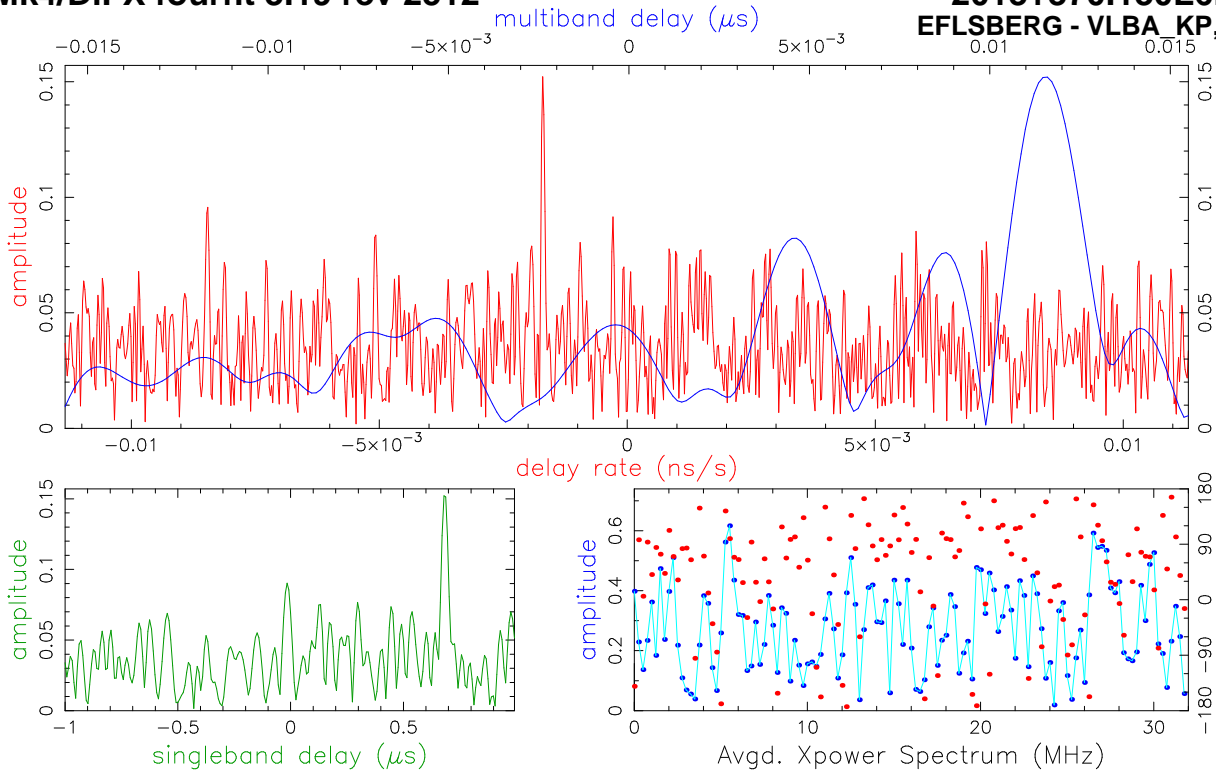


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
132.5	69.5	-131.6	85.6	98.7	-30.4	74.3	84.8	94.7	111.6	118.2	124.6	26.7	101.6	35.4	91.7		Phase	91.9	
0.2	0.3	0.0	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2		Ampl.	0.1	
131.3	66.2	87.8	199.5	36.9	205.1	69.0	98.2	190.9	51.1	226.6	172.8	48.3	129.2	75.4	212.0		Sbd box	236.4	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	9.45483689064E+03			Apriori delay (usec)			9.45398556973E+03			Resid mbdelay (usec)			7.57091E-03			+/- 1.9E-04			
Sband delay (usec)	9.45482484173E+03			Apriori clock (usec)			1.7199993E+01			Resid sbdelay (usec)			8.39272E-01			+/- 3.1E-03			
Phase delay (usec)	9.45398557269E+03			Apriori clockrate (us/s)			-5.4210100E-09			Resid phdelay (usec)			2.96375E-06			+/- 6.6E-07			
Delay rate (us/s)	-1.51479880954E+00			Apriori rate (us/s)			-1.51479632614E+00			Resid rate (us/s)			-2.48340E-06			+/- 6.3E-09			
Total phase (deg)	83.4			Apriori accel (us/s/s)			-3.36131792811E-05			Resid phase (deg)			91.9			+/- 20.3			

ph/seg (deg) RMS Theor. Amplitude 0.157 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 53.5 33.7 Search (1024X64) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.5 58.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 57.2 40.7 Inc. seg. avg. 0.148 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 51.9 71.0 Inc. frq. avg. 0.145 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 10876.310 -360.737 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bk..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bk.W.60.130L6H

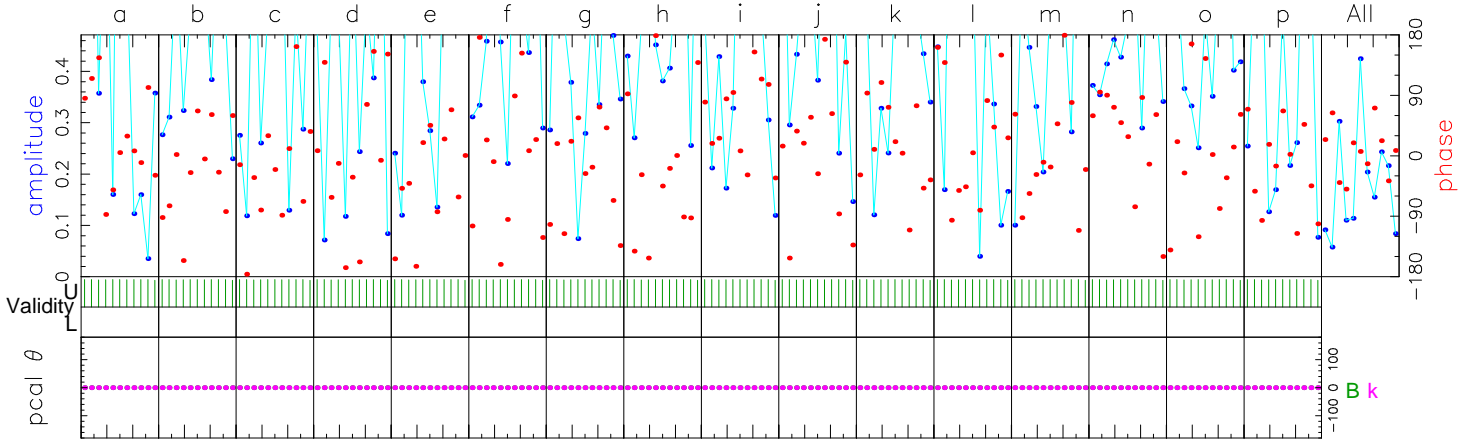


Fringe quality 0

SNR 5.7  
Int time 178.963  
Amp 0.157  
Phase -0.8  
PFD 7.8e-01  
Delays (us)  
SBD 0.683357  
MBD 0.011560  
Fringe rate (Hz)  
-0.147070  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050815  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



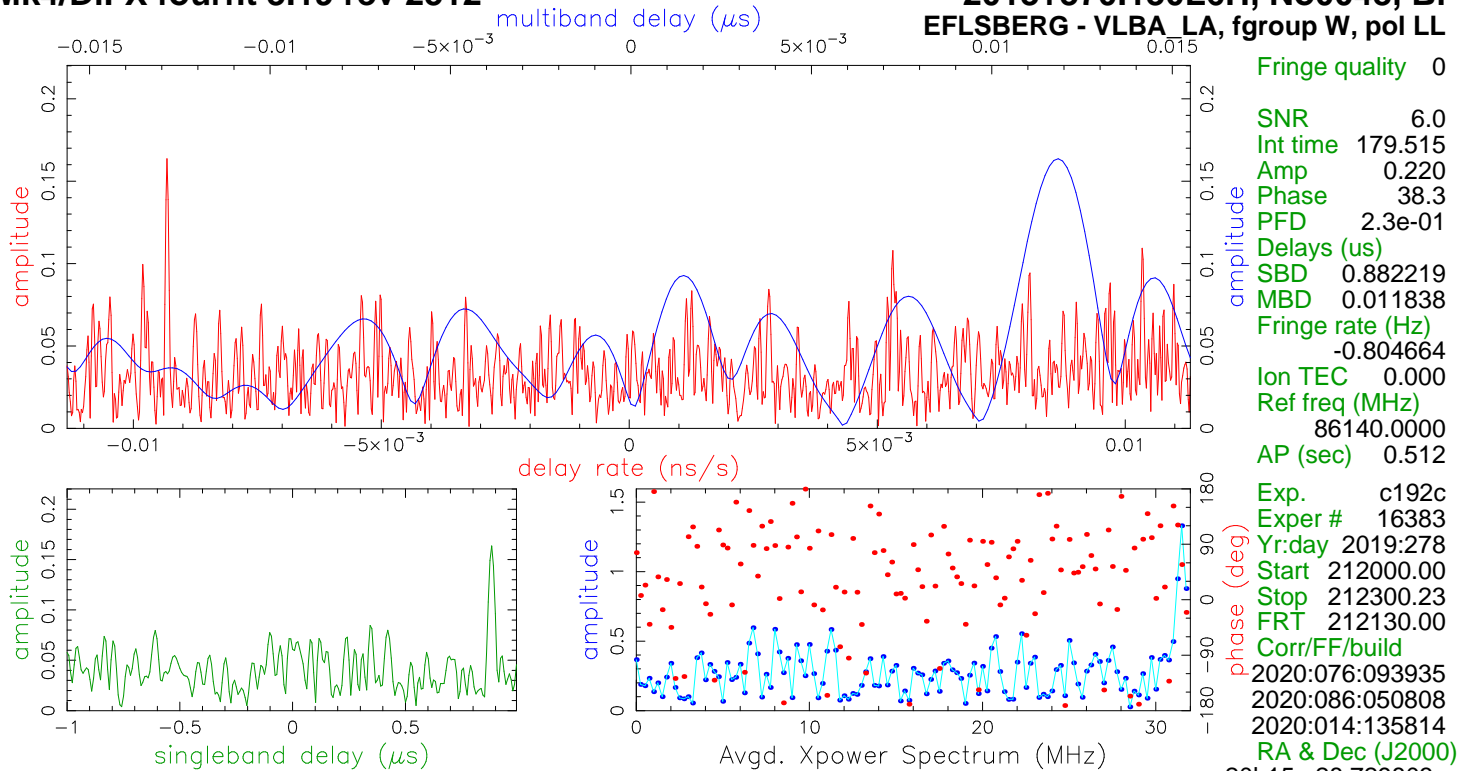
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
29.6	-13.2	-27.5	-8.8	-7.3	23.8	-11.6	-110.6	52.2	52.3	9.4	-32.8	-52.5	46.4	-38.6	-16.7		Phase	-0.8
0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
43.1	242.9	66.7	18.3	146.9	224.6	1.4	202.9	145.3	37.3	158.7	90.0	12.2	76.6	62.3	151.6		Sbd box	216.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	9.45465337950E+03			Apriori delay (usec)			9.45398556973E+03			Resid mbdelay (usec)			1.15598E-02			+/-	1.9E-04	
Sband delay (usec)	9.45466892623E+03			Apriori clock (usec)			1.7199993E+01			Resid sbdelay (usec)			6.83357E-01			+/-	3.0E-03	
Phase delay (usec)	9.45398556970E+03			Apriori clockrate (us/s)			-5.4210100E-09			Resid phdelay (usec)			-2.55351E-08			+/-	6.5E-07	
Delay rate (us/s)	-1.51479803348E+00			Apriori rate (us/s)			-1.51479632614E+00			Resid rate (us/s)			-1.70734E-06			+/-	6.2E-09	
Total phase (deg)	350.7			Apriori accel (us/s/s)			-3.36131792811E-05			Resid phase (deg)			-0.8			+/-	20.1	

ph/seg (deg) 38.6 33.4 Search (1024X64) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.0 58.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 44.7 40.3 Inc. seg. avg. 0.157 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 34.9 70.3 Inc. frq. avg. 0.155 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 10876.310 -360.737 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bk..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bk.W.76.130L6H

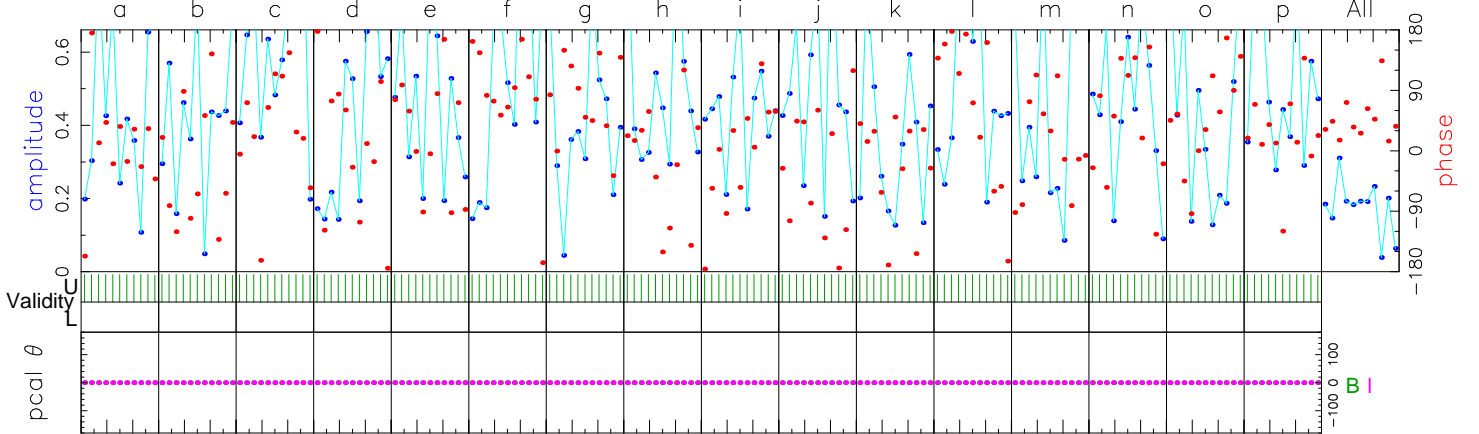


Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, BI  
EFLSBERG - VLBA LA, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

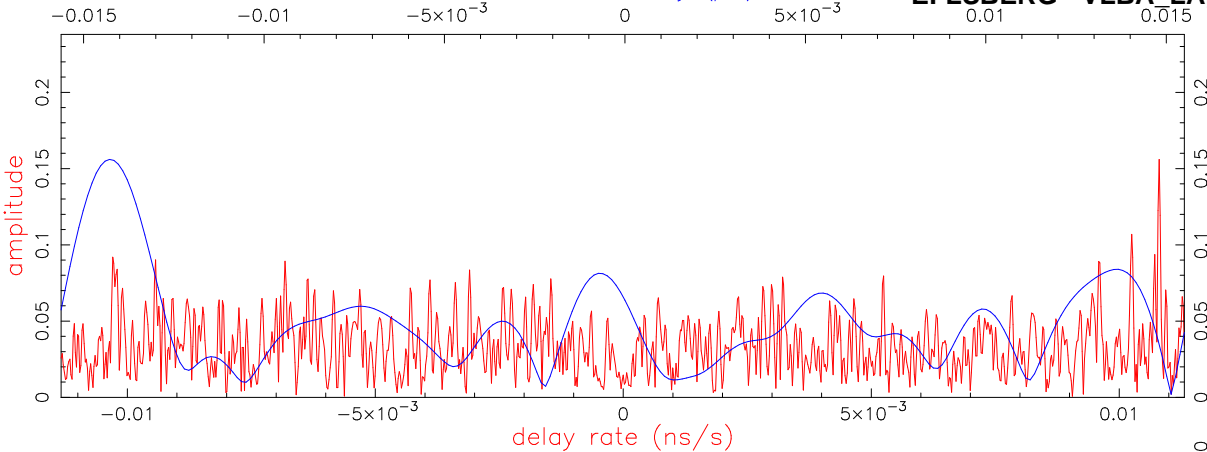


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
4.4	-59.4	57.7	25.1	44.0	113.2	76.7	3.0	10.2	4.9	5.6	136.0	-8.4	78.8	52.9	27.1		Phase	38.3	
0.4	0.2	0.5	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.3	0.5		Ampl.	0.2
241.8	121.2	242.6	99.9	2.1	43.1	201.1	148.1	190.9	179.0	156.0	67.7	39.9	34.8	37.5	90.9		Sbd box	241.9	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)	7.58078190508E+03		Apriori delay (usec)		7.57989506725E+03		Resid mbdelay (usec)		1.18378E-02		+/-		1.8E-04						
Sband delay (usec)	7.58077728625E+03		Apriori clock (usec)		1.7567019E+01		Resid sbdelay (usec)		8.82219E-01		+/-		2.9E-03						
Phase delay (usec)	7.57989506849E+03		Apriori clockrate (us/s)		1.5147200E-07		Resid phdelay (usec)		1.23565E-06		+/-		6.2E-07						
Delay rate (us/s)	-1.45069251723E+00		Apriori rate (us/s)		-1.45068317588E+00		Resid rate (us/s)		-9.34135E-06		+/-		5.9E-09						
Total phase (deg)	71.8		Apriori accel (us/s/s)		-2.74228301730E-05		Resid phase (deg)		38.3		+/-		19.1						

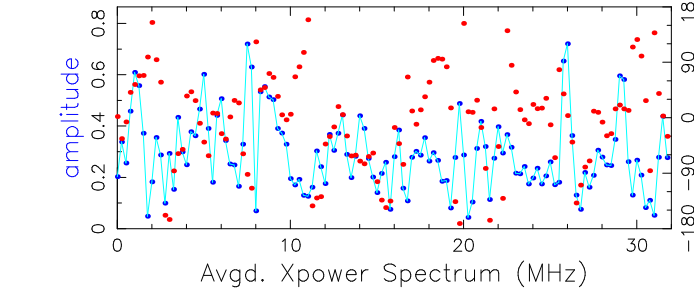
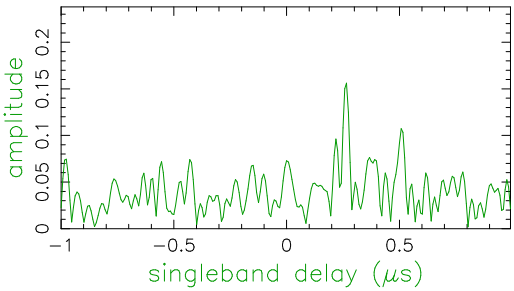
	RMS	Theor.	Amplitude	0.220 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
ph/seg (deg)	33.4	31.7	Search (1024X64)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
amp/seg (%)	43.8	55.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.016 0.016
ph/frq (deg)	50.9	38.2	Inc. seg. avg.	0.206	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011 0.011
amp/frq (%)	64.0	66.7	Inc. frq. avg.	0.247	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite	ion window (TEC) 0.00 0.00
B: az 257.6 el 60.6 pa 51.1	I: az 63.9 el 30.6 pa -66.4		u,v (fr/asec) 10418.974 -378.400				simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c192c/v2/1234/No0048/BI..130L6H		Output file: /Exps/c192c/v2/1234/No0048/BI.W.13.130L6H				

multiband delay ( $\mu$ s)

Fringe quality 0

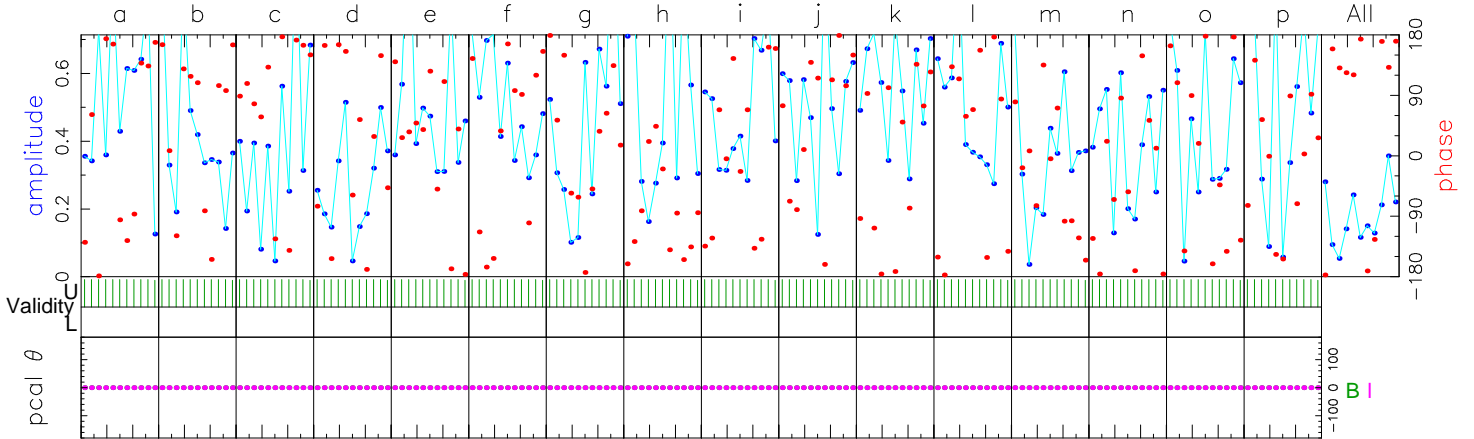


SNR 5.8  
Int time 179.515  
Amp 0.238  
Phase 159.1  
PFD 5.5e-01  
Delays (us)  
SBD 0.262900  
MBD -0.014260  
Fringe rate (Hz)  
0.931363  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050810  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

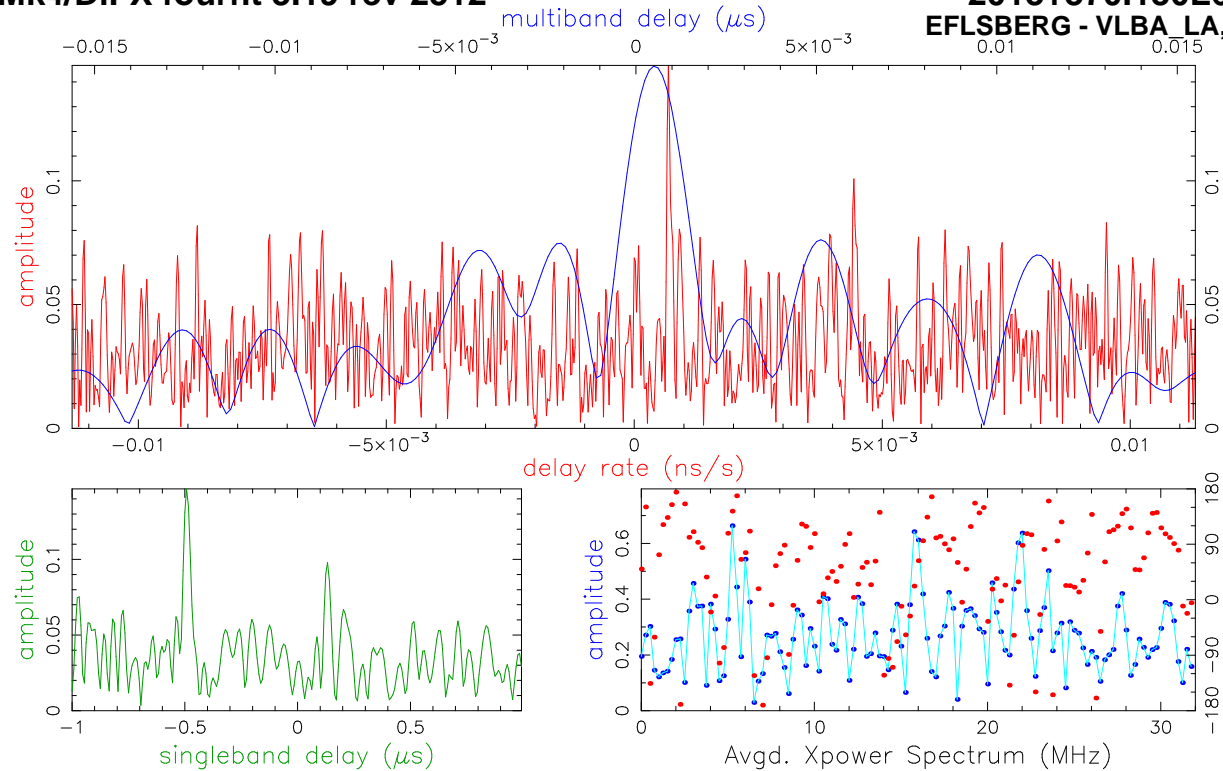
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-176.7	143.2	149.0	167.2	74.2	165.0	104.2	-127.8	-157.3	138.7	147.3	143.9	-59.2	119.5	171.0	10.5	Phase	159.1
	0.5	0.4	0.5	0.1	0.3	0.4	0.3	0.5	0.3	0.3	0.3	0.5	0.1	0.1	0.4	0.1	Ampl.	0.3
	29.0	160.1	169.8	9.0	207.5	130.3	57.1	252.6	250.4	25.3	255.4	161.9	83.2	127.8	15.8	173.5	Sbd box	162.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			7.58016205764E+03					Apriori delay (usec)		7.57989506725E+03				Resid mbdelay (usec)		-1.42596E-02	+/-	1.9E-04
Sband delay (usec)			7.58015796725E+03					Apriori clock (usec)		1.7567019E+01				Resid sbdelay (usec)		2.62900E-01	+/-	3.0E-03
Phase delay (usec)			7.57989507238E+03					Apriori clockrate (us/s)		1.5147200E-07				Resid phdelay (usec)		5.12985E-06	+/-	6.4E-07
Delay rate (us/s)			-1.45067236368E+00					Apriori rate (us/s)		-1.45068317588E+00				Resid rate (us/s)		1.08122E-05	+/-	6.1E-09
Total phase (deg)				192.6				Apriori accel (us/s/s)		-2.74228301730E-05				Resid phase (deg)		159.1	+/-	19.7

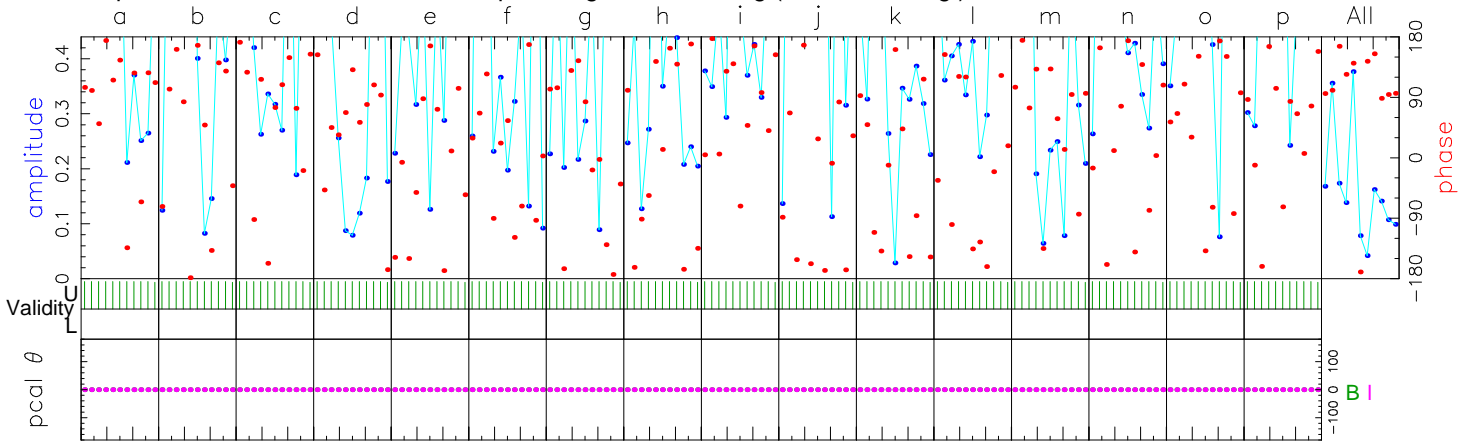
ph/seg (deg) 33.1 32.7 Amplitude 0.238 +/- 0.041 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 55.8 57.1 Search (1024X64) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 67.2 39.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 68.5 68.9 Inc. seg. avg. 0.234 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.256 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 I: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 10418.974 -378.400 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BI..130L6H Output file: /Exps/c192c/v2/1234/No0048/BI.W.30.130L6H



Fringe quality 0  
SNR 5.4  
Int time 179.515  
Amp 0.147  
Phase 123.7  
PFD 1.0e+00  
Delays (us)  
SBD -0.491763  
MBD 0.000517  
Fringe rate (Hz) 0.059106  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050812  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



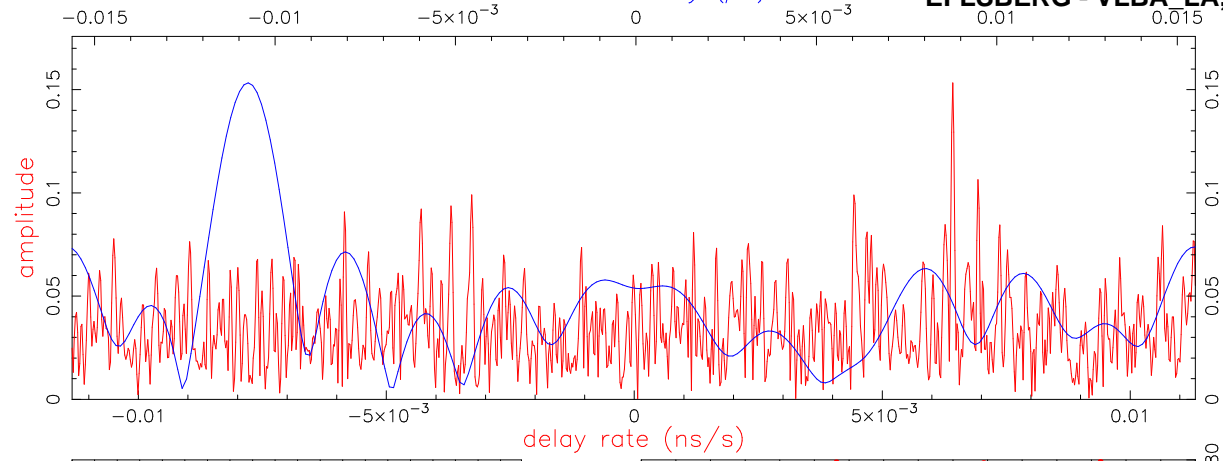
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	114.7	149.5	142.8	90.6	46.5	26.1	142.5	162.2	105.3	131.3	-136.1	-107.6	102.8	145.7	123.2	106.5	Phase	123.7
B	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.1	0.2	0.1	Ampl.	0.1
I	66.6	10.1	111.0	58.8	118.8	72.0	79.1	82.3	245.2	68.9	192.3	171.7	220.9	20.4	102.8	86.9	Sbd box	66.1
B:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) 7.57939558392E+03 Apriori delay (usec) 7.57989506725E+03 Resid mbdelay (usec) 5.16664E-04 +/- 2.0E-04  
Sband delay (usec) 7.57940330425E+03 Apriori clock (usec) 1.7567019E+01 Resid sbdelay (usec) -4.91763E-01 +/- 3.2E-03  
Phase delay (usec) 7.57989507124E+03 Apriori clockrate (us/s) 1.5147200E-07 Resid phdelay (usec) 3.98911E-06 +/- 6.9E-07  
Delay rate (us/s) -1.45068248971E+00 Apriori rate (us/s) -1.45068317588E+00 Resid rate (us/s) 6.86167E-07 +/- 6.6E-09  
Total phase (deg) 157.2 Apriori accel (us/s/s) -2.74228301730E-05 Resid phase (deg) 123.7 +/- 21.4

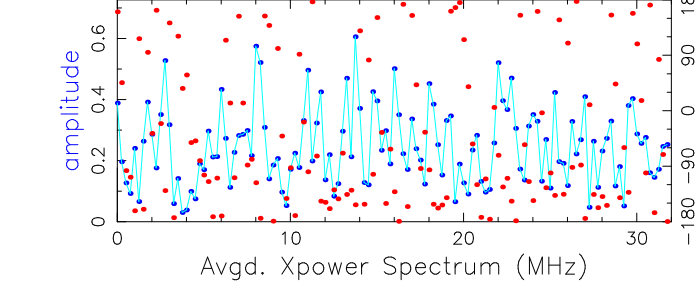
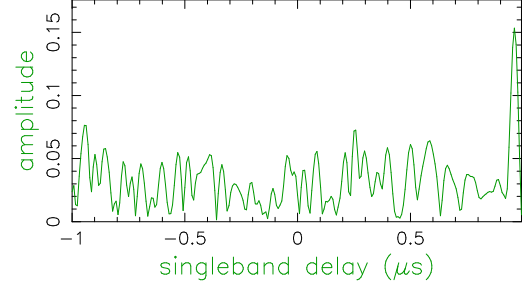
RMS Theor. Amplitude 0.147 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 33.1 35.4 Search (1024X64) 0.145 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 70.7 61.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
ph/frq (deg) 58.4 42.7 Inc. seg. avg. 0.141 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
amp/frq (%) 71.6 74.5 Inc. frq. avg. 0.137 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 I: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 10418.974 -378.400 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BI..130L6H Output file: /Exps/c192c/v2/1234/No0048/BI.W.53.130L6H

multiband delay ( $\mu$ s)

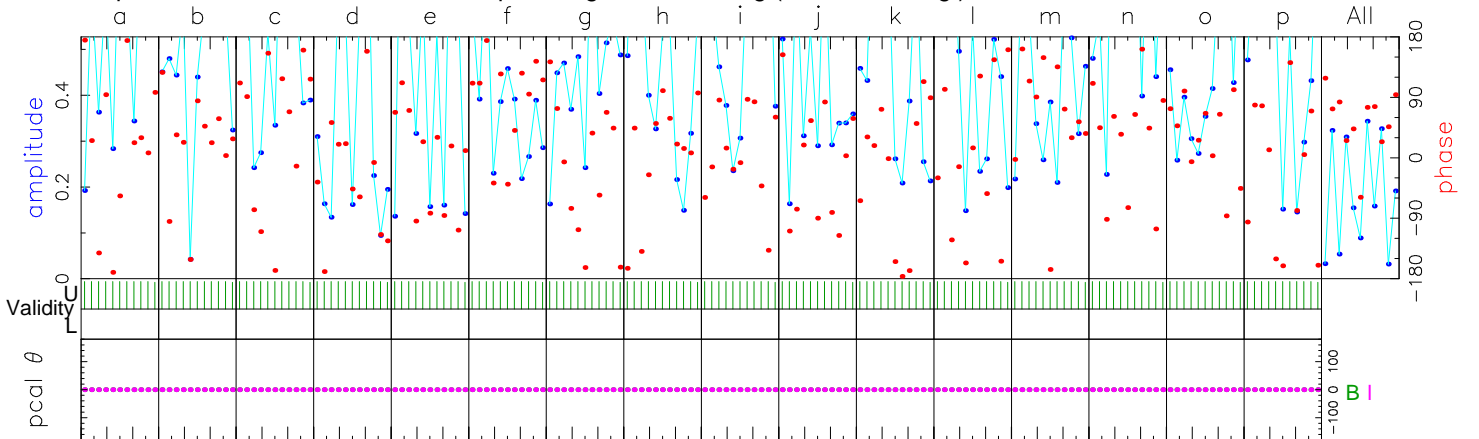


Fringe quality 0  
SNR 5.6  
Int time 179.515  
Amp 0.176  
Phase 55.2  
PFD 9.0e-01  
Delays (us)  
SBD 0.961379  
MBD -0.010749  
Fringe rate (Hz) 0.554843  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050815  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

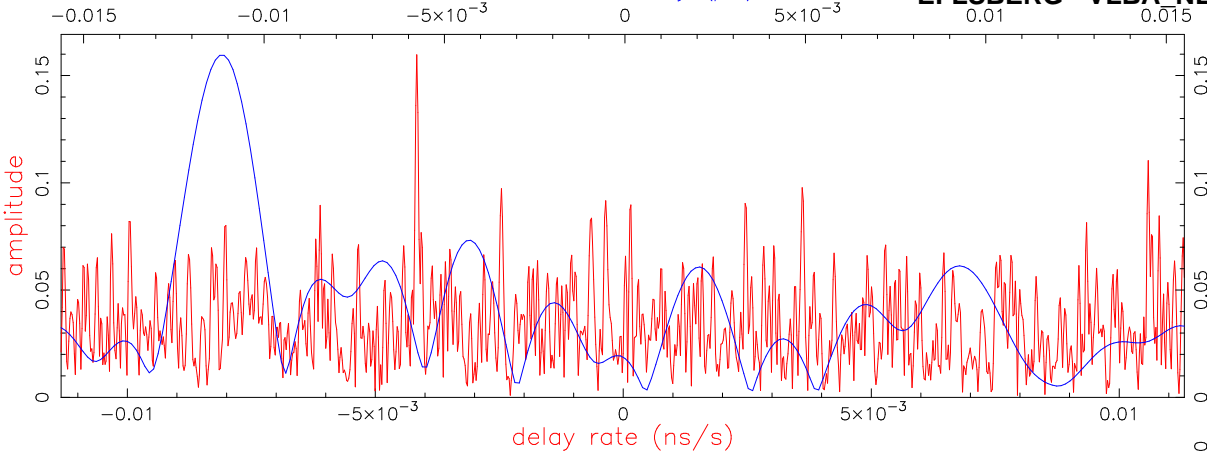
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	252.1
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	W15UL	Tracks	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	W15UR	Tracks	
Group delay (usec)(sbd)	7.58085306861E+03			Apriori delay (usec)			7.57989506725E+03			Resid mbdelay (usec)			-1.07486E-02			+/- 1.9E-04			
Sband delay (usec)	7.58085644575E+03			Apriori clock (usec)			1.7567019E+01			Resid sbdelay (usec)			9.61379E-01			+/- 3.1E-03			
Phase delay (usec)	7.57989506903E+03			Apriori clockrate (us/s)			1.5147200E-07			Resid phdelay (usec)			1.78051E-06			+/- 6.6E-07			
Delay rate (us/s)	-1.45067673471E+00			Apriori rate (us/s)			-1.45068317588E+00			Resid rate (us/s)			6.44117E-06			+/- 6.3E-09			
Total phase (deg)	88.7			Apriori accel (us/s/s)			-2.74228301730E-05			Resid phase (deg)			55.2			+/- 20.4			
ph/seg (deg)	RMS	Theor.	Amplitude		0.176 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000 1.000						
amp/seg (%)	45.2	33.8	Search (1024X64)		0.151		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016 0.016						
ph/frq (deg)	79.8	59.0	Interp.		0.000		Bits/sample: 2x2		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011 0.011						
amp/frq (%)	61.4	40.8	Inc. seg. avg.		0.179		Data rate(Mb/s): 2048		nlags: 128 t_cohere infinite		ion window (TEC)		0.00 0.00						
	67.0	71.2	Inc. frq. avg.		0.176														

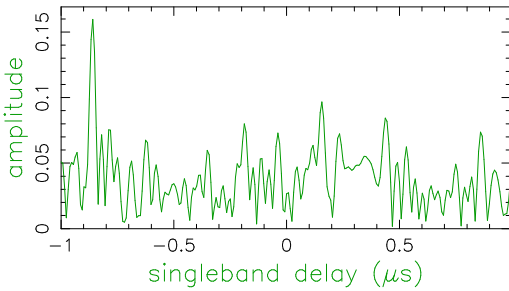
B: az 257.6 el 60.6 pa 51.1 I: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 10418.974 -378.400 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BI..130L6H Output file: /Exps/c192c/v2/1234/No0048/BI.W.73.130L6H

multiband delay ( $\mu$ s)

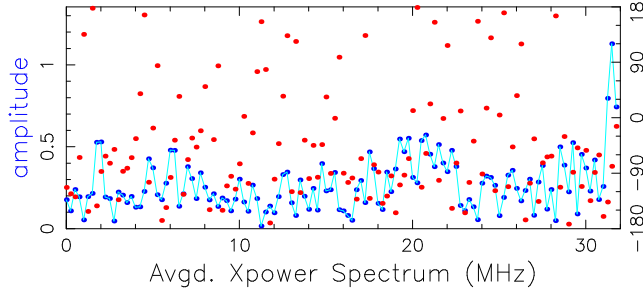


Fringe quality 0

SNR 5.9  
Int time 179.166  
Amp 0.169  
Phase 59.6  
PFD 4.5e-01  
Delays (us)  
SBD -0.860237  
MBD -0.011165  
Fringe rate (Hz)  
-0.359085  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

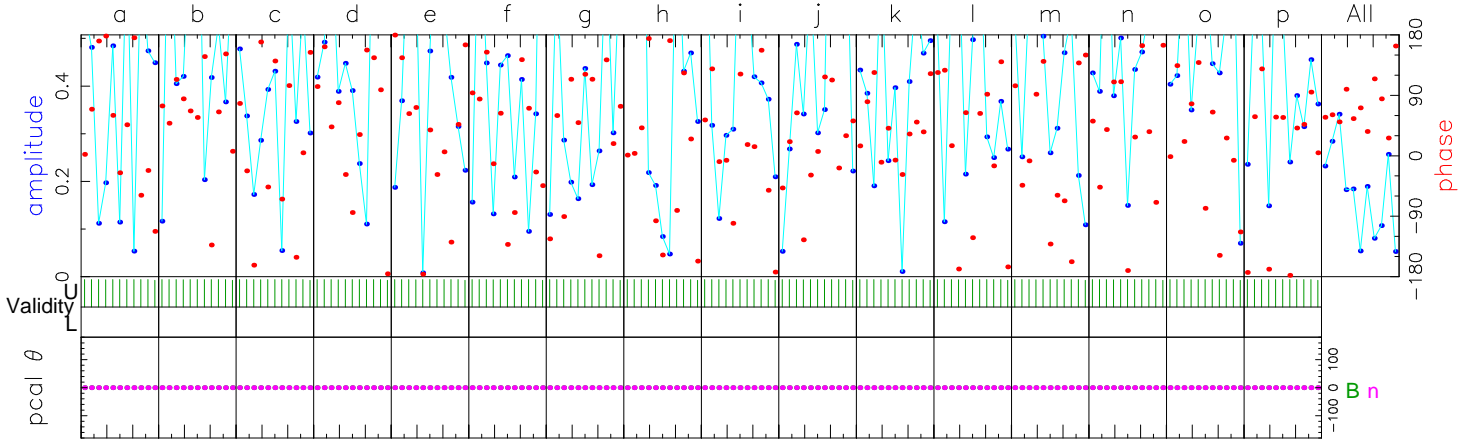


delay rate (ns/s)



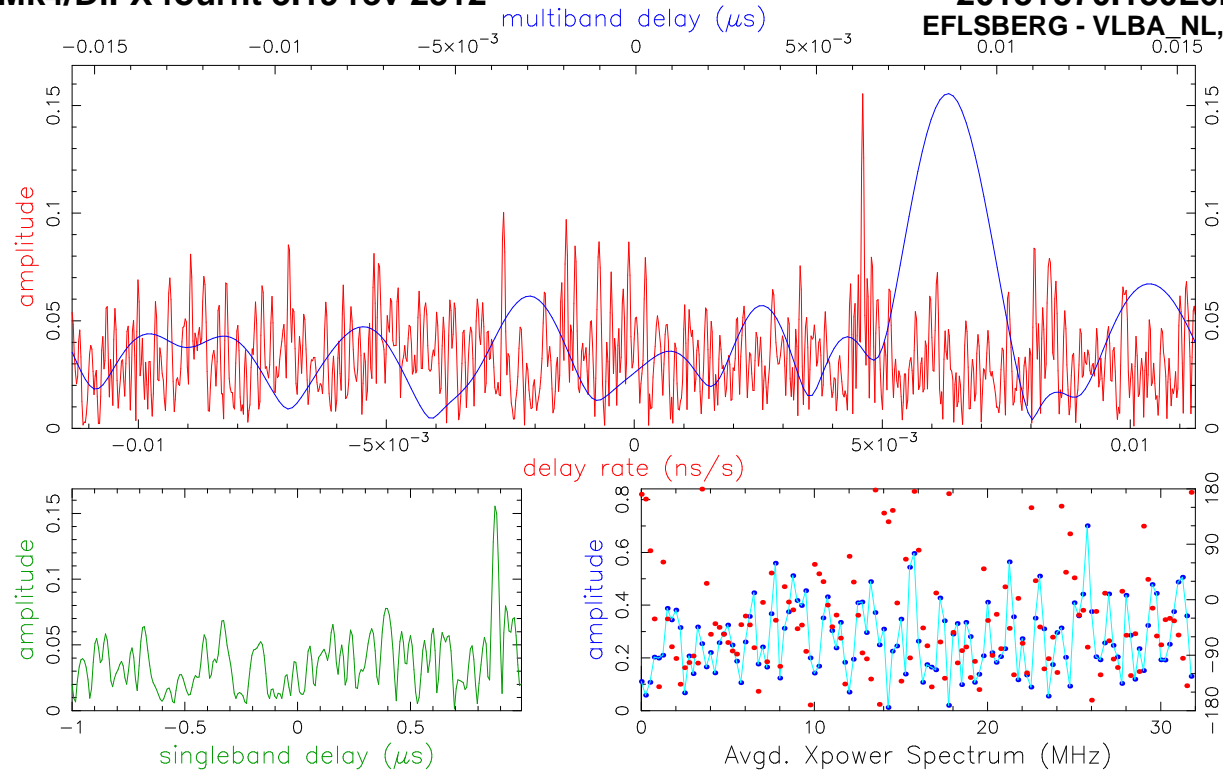
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050809  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)		3.77925099227E+03																
Sband delay (usec)		3.77924567020E+03																
Phase delay (usec)		3.78010590962E+03																
Delay rate (us/s)		-1.28527395056E+00																
Total phase (deg)				19.6														
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 40.0 32.5 Search (1024X64) 0.156 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 58.6 56.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 37.7 39.1 Inc. seg. avg. 0.163 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 52.1 68.3 Inc. frq. avg. 0.162 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
B: az 257.6 el 60.6 pa 51.1 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 9238.745 -79.386 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bn..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bn.W.21.130L6H simultaneous interpolator

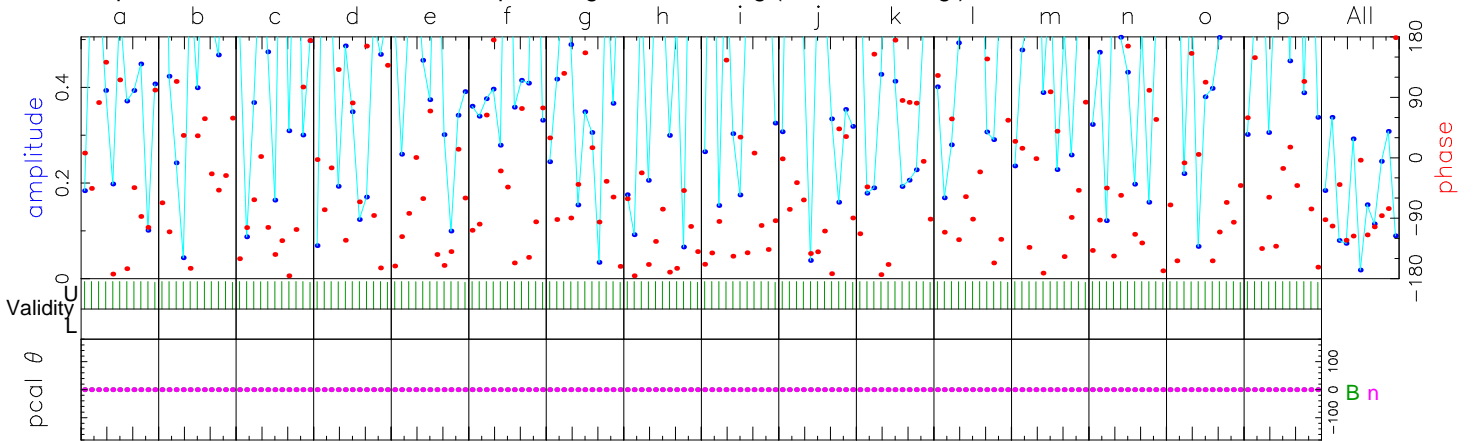


Fringe quality 0

SNR 5.8  
Int time 179.166  
Amp 0.169  
Phase -98.4  
PFD 6.5e-01  
Delays (us)  
SBD 0.877613  
MBD 0.008697  
Fringe rate (Hz) 0.398193  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050811  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

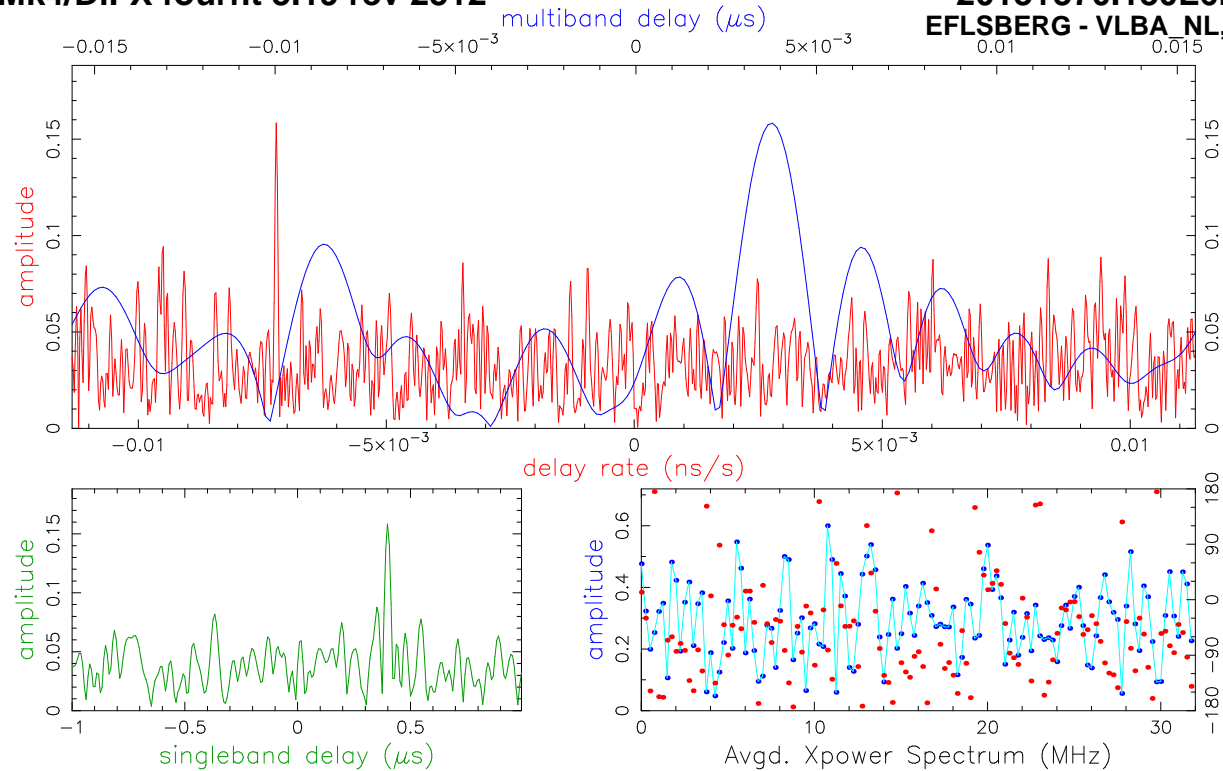


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	115.4	-25.3	-120.4	-107.1	-93.0	-86.2	-92.0	-111.1	-134.7	-77.1	-139.9	-65.3	11.6	-137.4	-99.4	-71.6		Phase	-98.4
B	0.0	0.2	0.3	0.1	0.2	0.2	0.1	0.3	0.3	0.2	0.1	0.1	0.2	0.3	0.2	0.2		Ampl.	0.2
n	245.7	166.8	115.9	105.9	203.1	103.1	213.4	83.1	243.2	249.5	248.2	186.5	152.9	15.2	241.8	207.5		Sbd box	241.3
B	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) 3.78098960442E+03 Apriori delay (usec) 3.78010590770E+03 Resid mbdelay (usec) 8.69672E-03 +/- 1.9E-04  
 Sband delay (usec) 3.78098352120E+03 Apriori clock (usec) -9.7353954E+00 Resid sbdelay (usec) 8.77613E-01 +/- 3.0E-03  
 Phase delay (usec) 3.78010590452E+03 Apriori clockrate (us/s) -3.3422351E-07 Resid phdelay (usec) -3.17208E-06 +/- 6.4E-07  
 Delay rate (us/s) -1.28526515932E+00 Apriori rate (us/s) -1.28526978195E+00 Resid rate (us/s) 4.62263E-06 +/- 6.2E-09  
 Total phase (deg) 221.6 Apriori accel (us/s/s) -1.29210784527E-05 Resid phase (deg) -98.4 +/- 19.9

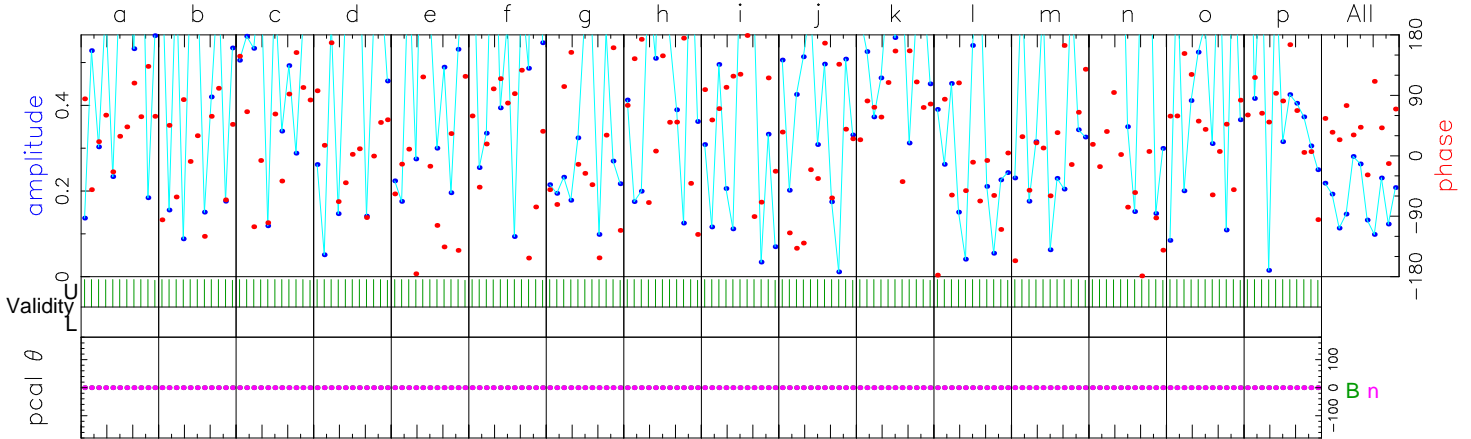
RMS Theor. Amplitude 0.169 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 43.8 33.0 Search (1024X64) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 66.6 57.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 57.7 39.8 Inc. seg. avg. 0.159 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 55.3 69.4 Inc. frq. avg. 0.167 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 9238.745 -79.386 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bn..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bn.W.41.130L6H



Fringe quality 0  
SNR 5.8  
Int time 179.166  
Amp 0.188  
Phase 41.4  
PFD 5.7e-01  
Delays (us)  
SBD 0.398858  
MBD 0.003762  
Fringe rate (Hz)  
-0.621954  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050814  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	47.6	6.8	75.0	16.7	106.5	71.5	-25.5	25.2	128.3	-34.0	80.4	-45.5	22.7	6.7	32.3	71.2	Phase	41.4
B	0.5	0.2	0.3	0.3	0.0	0.2	0.2	0.1	0.2	0.1	0.4	0.2	0.2	0.3	0.3	0.4	Ampl.	0.2
n	68.0	106.6	70.7	55.1	113.2	153.0	123.7	80.9	233.0	241.7	168.5	250.6	143.3	68.7	52.3	179.9	Sbd box	180.1
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	3.78051591926E+03			Apriori delay (usec)			3.78010590770E+03			Resid mbdelay (usec)			3.76156E-03			+/- 1.9E-04		
Sband delay (usec)	3.78050476570E+03			Apriori clock (usec)			-9.7353954E+00			Resid sbdelay (usec)			3.98858E-01			+/- 3.0E-03		
Phase delay (usec)	3.78010590903E+03			Apriori clockrate (us/s)			-3.3422351E-07			Resid phdelay (usec)			1.33378E-06			+/- 6.4E-07		
Delay rate (us/s)	-1.28527700222E+00			Apriori rate (us/s)			-1.28526978195E+00			Resid rate (us/s)			-7.22027E-06			+/- 6.1E-09		
Total phase (deg)	1.4			Apriori accel (us/s/s)			-1.29210784527E-05			Resid phase (deg)			41.4			+/- 19.8		

ph/seg (deg) 37.0 32.8  
amp/seg (%) 41.0 57.2  
ph/frq (deg) 51.9 39.5  
amp/frq (%) 68.5 69.0

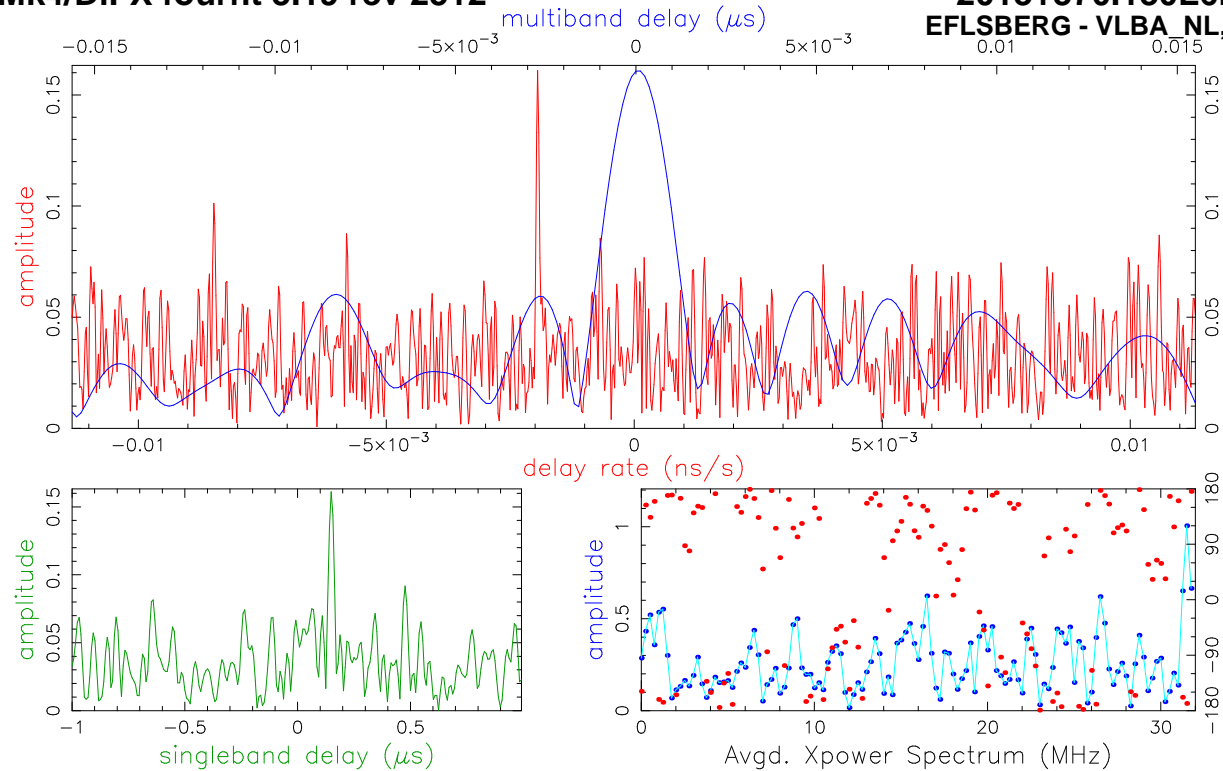
RMS Theor. Amplitude 0.188 +/- 0.032  
Search (1024X64) 0.157  
Interp. 0.000  
Inc. seg. avg. 0.186  
Inc. frq. avg. 0.198

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): 2048 nlags: 128 t\_cohere infinite

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

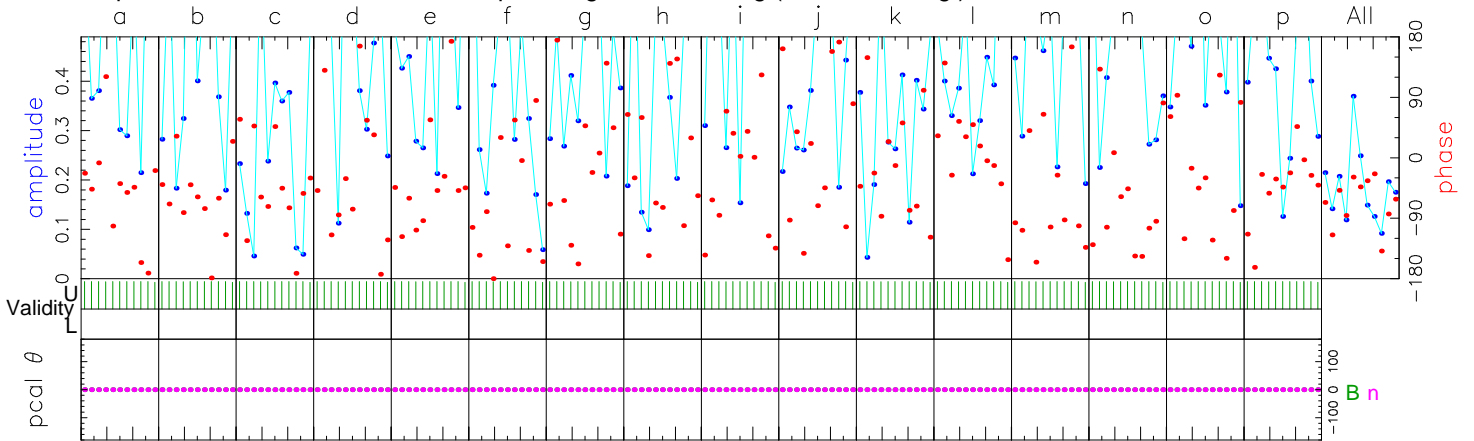
B: az 257.6 el 60.6 pa 51.1 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 9238.745 -79.386 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bn..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bn.W.62.130L6H



Fringe quality 0  
 SNR 5.9  
 Int time 179.166  
 Amp 0.163  
 Phase -57.4  
 PFD 3.6e-01  
 Delays (us)  
 SBD 0.149272  
 MBD 0.000070  
 Fringe rate (Hz)  
 -0.167489  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c192c  
 Exper # 16383  
 Yr:day 2019:278  
 Start 212000.00  
 Stop 212300.23  
 FRT 212130.00  
 Corr/FF/build  
 2020:076:093935  
 2020:086:050815  
 2020:014:135814  
 RA & Dec (J2000)  
 20h15m28.729803s  
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



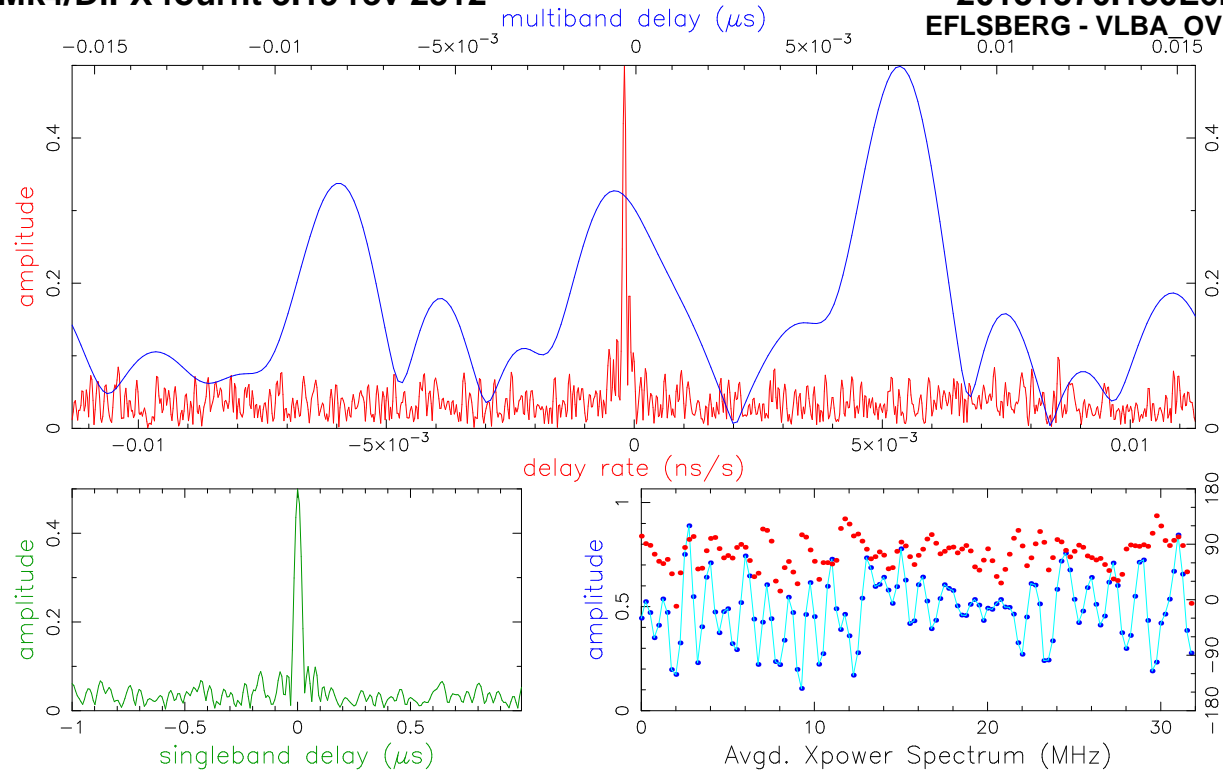
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				Chan ids
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks
																				Tracks

Group delay (usec)(sbd) 3.78026222764E+03 Apriori delay (usec) 3.78010590770E+03 Resid mbdelay (usec) 6.99433E-05 +/- 1.8E-04  
 Sband delay (usec) 3.78025517920E+03 Apriori clock (usec) -9.7353954E+00 Resid sbdelay (usec) 1.49272E-01 +/- 2.9E-03  
 Phase delay (usec) 3.78010590584E+03 Apriori clockrate (us/s) -3.3422351E-07 Resid phdelay (usec) -1.85187E-06 +/- 6.3E-07  
 Delay rate (us/s) -1.28527172632E+00 Apriori rate (us/s) -1.28526978195E+00 Resid rate (us/s) -1.94438E-06 +/- 6.0E-09  
 Total phase (deg) 262.6 Apriori accel (us/s/s) -1.29210784527E-05 Resid phase (deg) -57.4 +/- 19.4

B: az 257.6 el 60.6 pa 51.1 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 9238.745 -79.386 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bn..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bn.W.77.130L6H



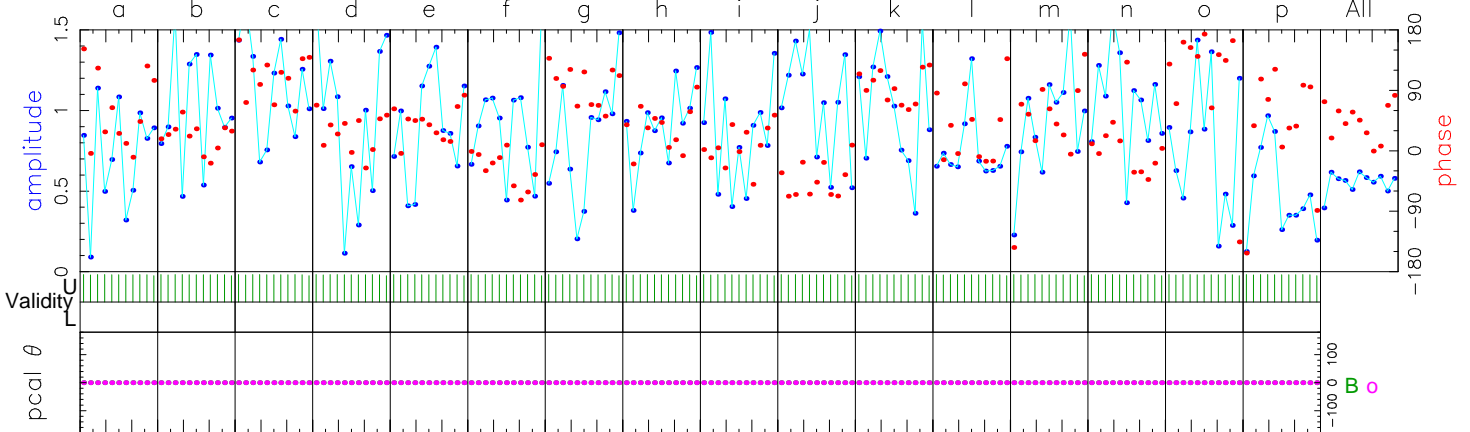


Fringe quality 8

SNR 18.3  
Int time 178.358  
Amp 0.500  
Phase 42.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.001253  
MBD 0.007315  
Fringe rate (Hz)  
-0.017260  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050808  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

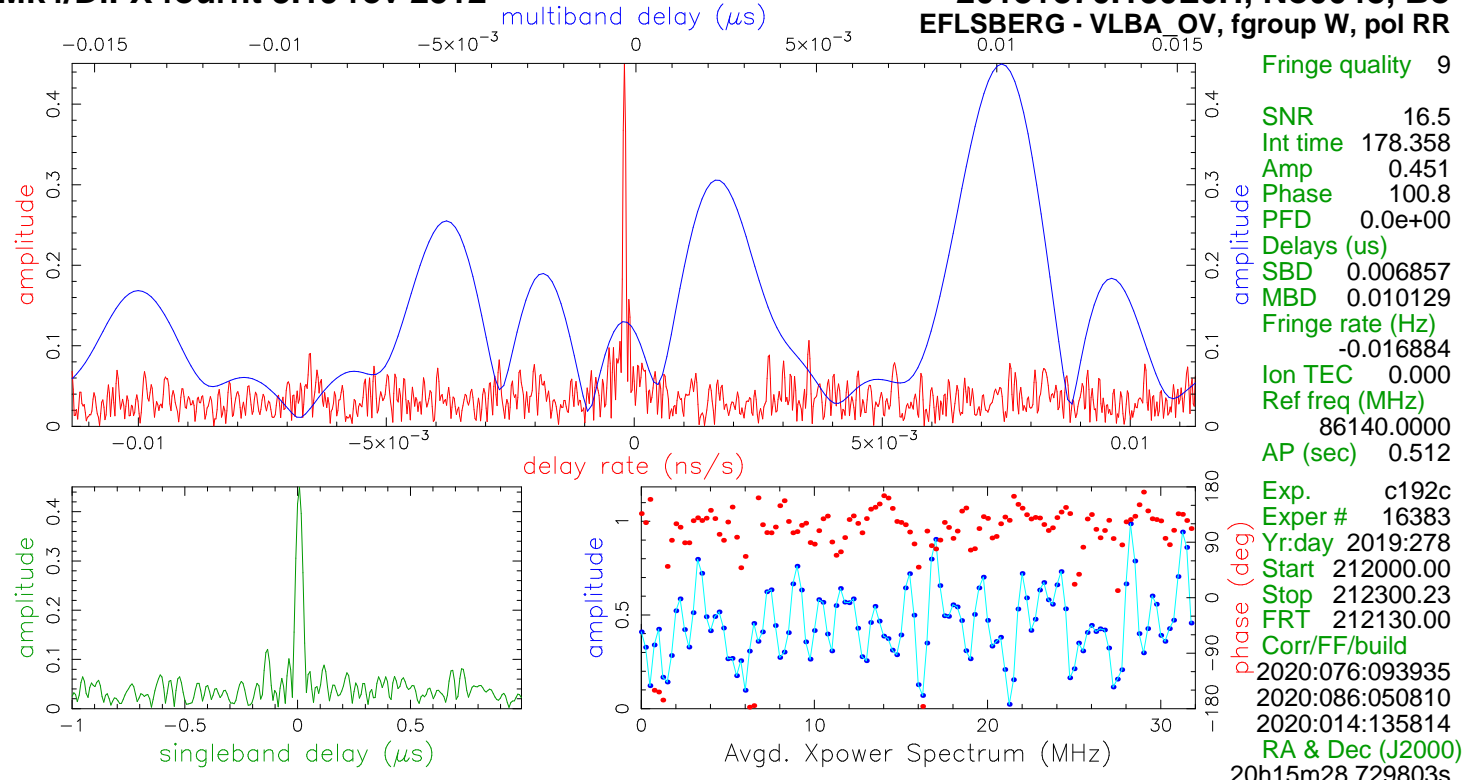
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
75.5	20.0	111.0	32.7	38.6	-24.1	95.6	38.6	4.9	-45.8	100.9	36.1	50.0	1.3	140.2	80.3	80.3	Phase	42.1
0.5	1.0	1.0	0.8	0.8	0.8	0.7	0.8	0.8	1.0	0.9	0.5	0.7	0.9	0.5	0.4	0.4	Ampl.	0.7
129.3	129.0	129.1	129.2	129.3	129.9	129.9	129.4	128.8	129.2	129.7	128.9	129.0	129.0	129.2	129.1	129.5	Sbd box	129.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	1.01651391982E+04			Apriori delay (usec)			1.01651318836E+04			Resid mbdelay (usec)			7.31458E-03			+/-	5.9E-05	
Sband delay (usec)	1.01651331371E+04			Apriori clock (usec)			1.3252831E-01			Resid sbdelay (usec)			1.25350E-03			+/-	9.4E-04	
Phase delay (usec)	1.01651318849E+04			Apriori clockrate (us/s)			-2.0098100E-07			Resid phdelay (usec)			1.35809E-06			+/-	2.0E-07	
Delay rate (us/s)	-1.46238480495E+00			Apriori rate (us/s)			-1.46238460458E+00			Resid rate (us/s)			-2.00377E-07			+/-	1.9E-09	
Total phase (deg)	204.3			Apriori accel (us/s/s)			-4.26524074807E-05			Resid phase (deg)			42.1			+/-	6.3	
ph/seg (deg)	RMS	Theor.	Amplitude			0.50 +/- 0.027			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	26.2	10.4	Search (1024X64)			0.497			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000	1.000		
ph/frq (deg)	16.4	18.2	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)	-0.016	0.016	
amp/frq (%)	52.9	12.6	Inc. seg. avg.			0.545			Sample rate(MSamp/s): 64			dr window (ns/s)			-0.011	0.011		
	62.9	21.9	Inc. frq. avg.			0.733			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)	0.00	0.00	

B: az 257.6 el 60.6 pa 51.1 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 10491.346 -1432.043 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bo..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bo.W.18.130L6H



Fringe quality 9

SNR 16.5

Int time 178.358

Amp 0.451

Phase 100.8

PFD 0.0e+00

Delays (us)

SBD 0.006857

MBD 0.010129

Fringe rate (Hz)

-0.016884

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 212000.00

Stop 212300.23

FRT 212130.00

Corr/FF/build

2020:076:093935

2020:086:050810

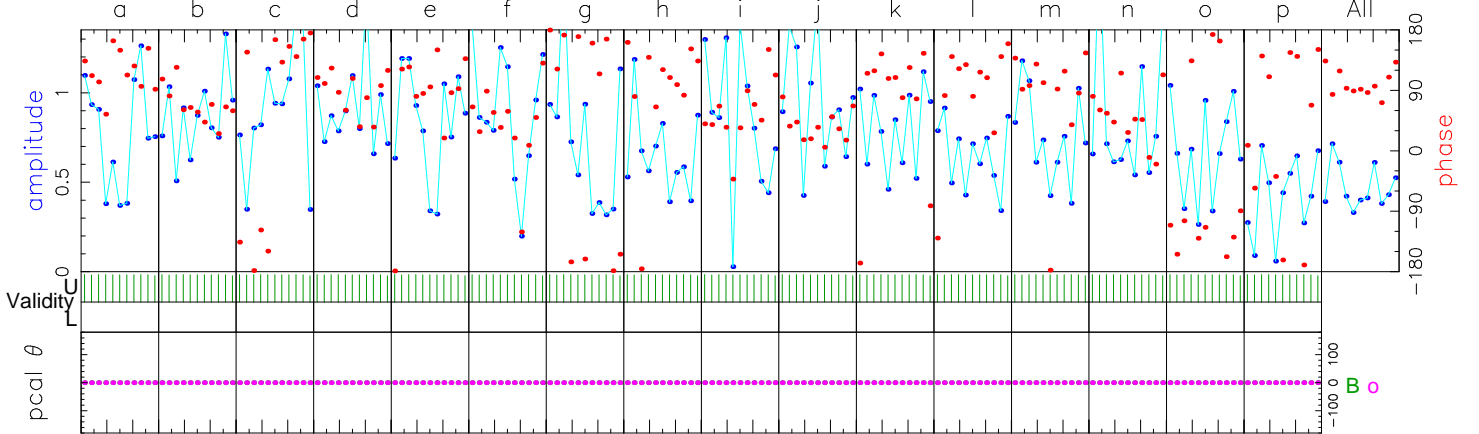
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	117.8	66.2	173.1	88.5	103.5	56.8	175.2	116.3	57.3	38.5	130.7	119.2	108.6	57.3	-140.4	139.1	Phase	100.8
B	0.7	0.8	0.8	0.7	0.7	0.7	0.5	0.7	0.9	0.5	0.4	0.7	0.5	0.4	0.5	0.3	Ampl.	0.6
o	130.4	129.3	129.5	129.5	129.2	130.5	129.5	129.3	129.9	129.8	130.2	129.4	130.4	130.3	128.9	162.3	Sbd box	129.9
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	1.01651420126E+04			Apriori delay (usec)			1.01651318836E+04			Resid mbdelay (usec)			1.01290E-02			+/- 6.6E-05		
Sband delay (usec)	1.01651387401E+04			Apriori clock (usec)			1.3252831E-01			Resid sbdelay (usec)			6.85650E-03			+/- 1.0E-03		
Phase delay (usec)	1.01651318868E+04			Apriori clockrate (us/s)			-2.0098100E-07			Resid phdelay (usec)			3.25068E-06			+/- 2.2E-07		
Delay rate (us/s)	-1.46238480058E+00			Apriori rate (us/s)			-1.46238460458E+00			Resid rate (us/s)			-1.96005E-07			+/- 2.2E-09		
Total phase (deg)	263.0			Apriori accel (us/s/s)			-4.26524074807E-05			Resid phase (deg)			100.8			+/- 7.0		

ph/seg (deg) RMS Theor. Amplitude 0.451 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

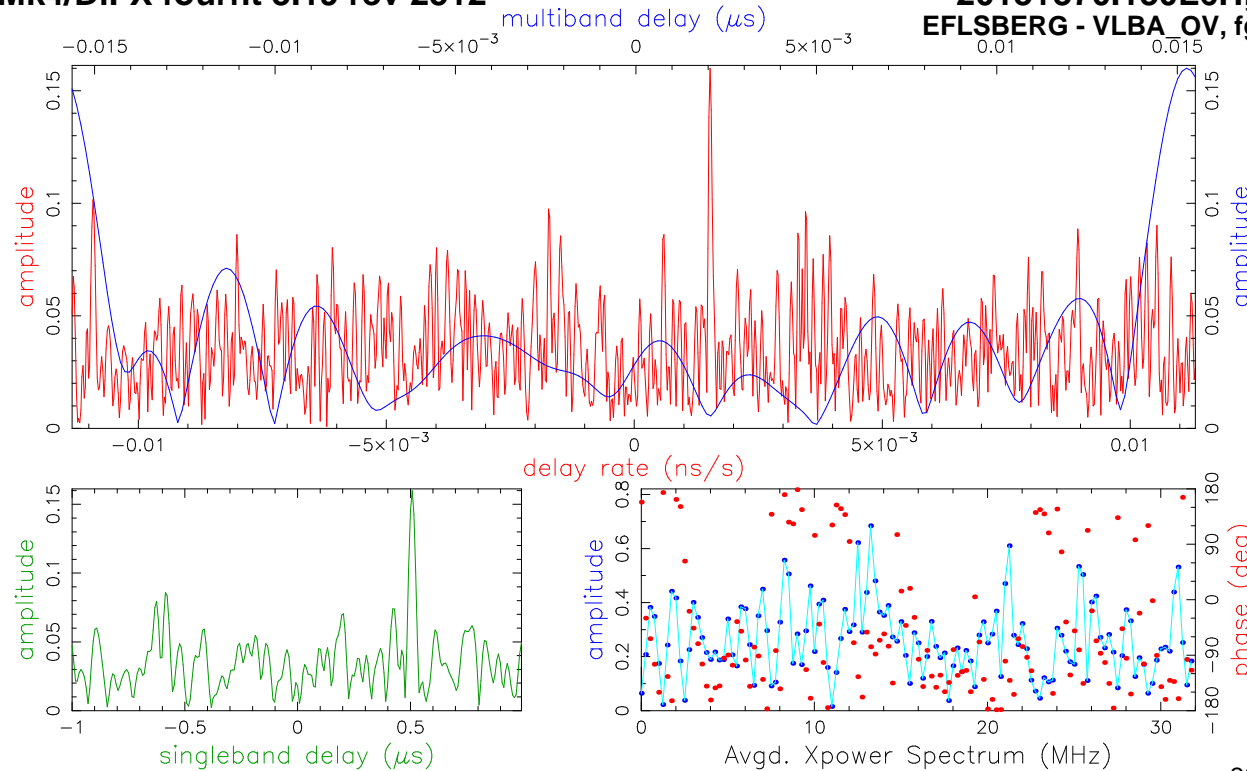
amp/seg (%) 26.3 20.2 Interp. 0.445 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 52.9 13.9 Inc. seg. avg. 0.466 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 55.6 24.3 Inc. frq. avg. 0.634 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011

B: az 257.6 el 60.6 pa 51.1 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 10491.346 -1432.043 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bo..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bo.W.36.130L6H

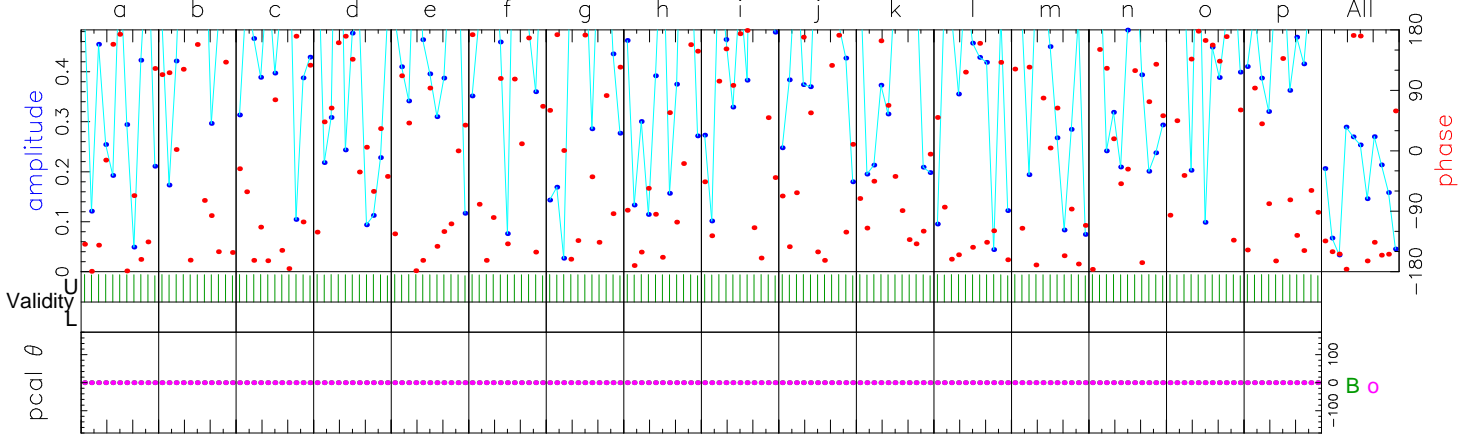


Fringe quality 0

SNR 5.8  
Int time 178.358  
Amp 0.161  
Phase -164.0  
PFD 4.7e-01  
Delays (us)  
SBD 0.507386  
MBD 0.015271  
Fringe rate (Hz)  
0.132236  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

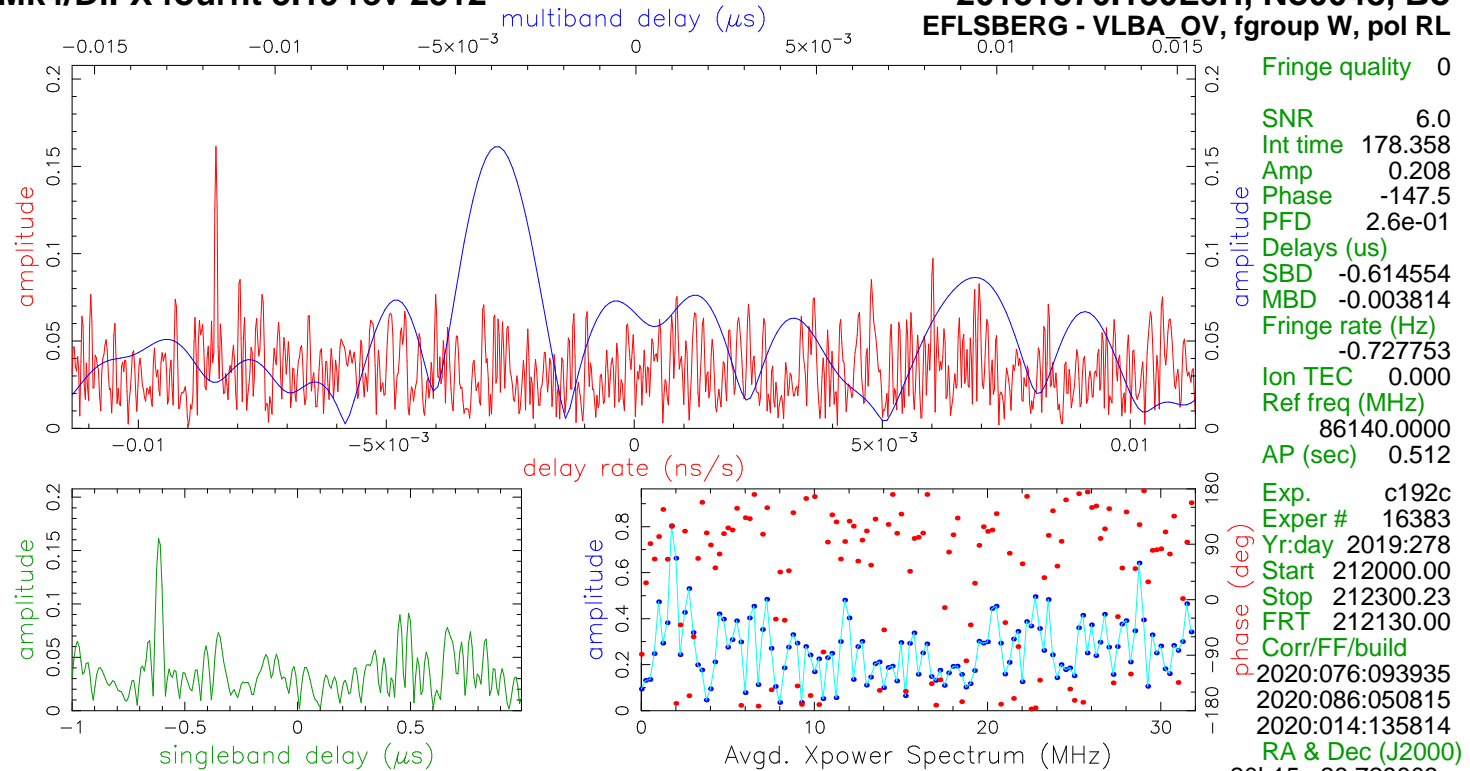
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050813  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

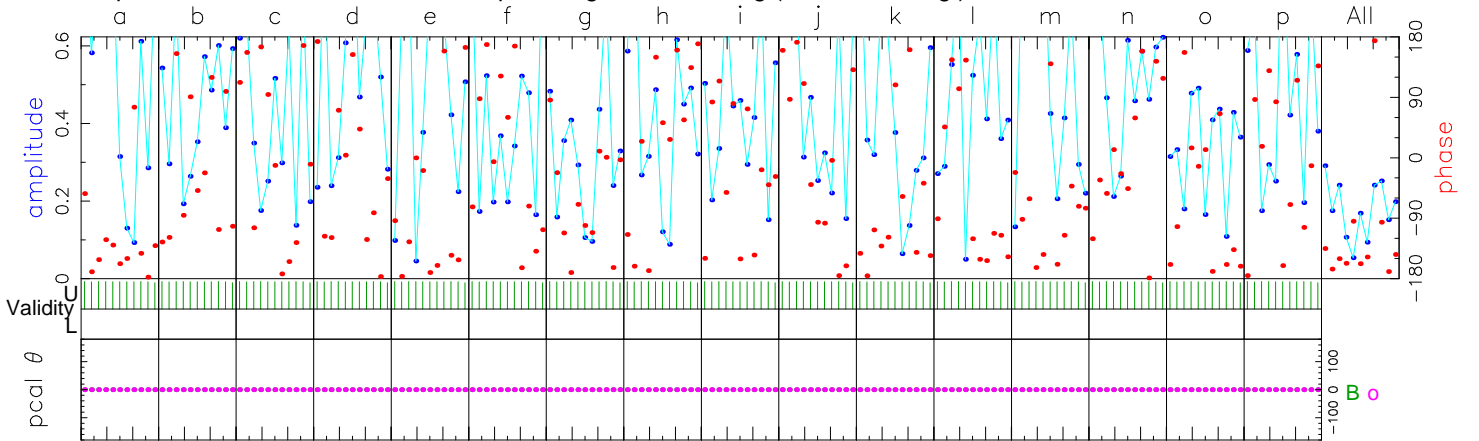


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-158.8	174.3	-149.7	179.6	-153.0	153.2	-161.7	-124.7	-173.2	-153.6	-95.3	-171.4	150.9	133.2	176.5	-132.2		Phase	-164.0				
	0.3	0.3	0.2	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2		Ampl.	0.2				
	37.3	155.0	120.8	153.3	177.6	187.8	237.8	2.5	35.5	227.4	204.3	173.9	74.3	220.7	72.8	154.6		Sbd box	193.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)		1.01656471544E+04																Apriori delay (usec)	1.01651318836E+04	Resid mbdelay (usec)	1.52709E-02	+/-	1.8E-04
Sband delay (usec)		1.01656392696E+04																Apriori clock (usec)	1.3252831E-01	Resid sbdelay (usec)	5.07386E-01	+/-	2.9E-03
Phase delay (usec)		1.01651318783E+04																Apriori clockrate (us/s)	-2.0098100E-07	Resid phdelay (usec)	-5.28772E-06	+/-	6.3E-07
Delay rate (us/s)		-1.46238306945E+00																Apriori rate (us/s)	-1.46238460458E+00	Resid rate (us/s)	1.53513E-06	+/-	6.1E-09
Total phase (deg)				-1.8														Apriori accel (us/s/s)	-4.26524074807E-05	Resid phase (deg)	-164.0	+/-	19.6

ph/seg (deg) 44.4 32.5 Search (1024X64) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 57.3 56.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.7 39.2 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 42.3 68.4 Inc. frq. avg. 0.152 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 10491.346 -1432.043 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bo..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bo.W.55.130L6H



Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-133.2	-129.8	169.1	-129.0	-161.2	-130.1	-25.4	167.1	-45.3	154.5	-138.1	-155.5	-107.9	-110.4	-131.6	142.1		Phase	-147.5
	0.6	0.2	0.3	0.2	0.5	0.2	0.1	0.3	0.1	0.3	0.4	0.3	0.4	0.1	0.1	0.2		Ampl.	0.2
	50.3	182.3	93.6	4.3	51.3	116.9	82.6	45.5	165.8	34.3	60.3	214.4	50.8	193.2	209.6	181.9		Sbd box	50.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	1.01645030692E+04			Apriori delay (usec)			1.01651318836E+04			Resid mbdelay (usec)			-3.81437E-03			+/- 1.8E-04			
Sband delay (usec)	1.01645173296E+04			Apriori clock (usec)			1.3252831E-01			Resid sbdelay (usec)			-6.14554E-01			+/- 2.9E-03			
Phase delay (usec)	1.01651318788E+04			Apriori clockrate (us/s)			-2.0098100E-07			Resid phdelay (usec)			-4.75603E-06			+/- 6.2E-07			
Delay rate (us/s)	-1.46239305307E+00			Apriori rate (us/s)			-1.46238460458E+00			Resid rate (us/s)			-8.44849E-06			+/- 5.9E-09			
Total phase (deg)	14.7			Apriori accel (us/s/s)			-4.26524074807E-05			Resid phase (deg)			-147.5			+/- 19.2			

ph/seg (deg) 27.2 31.8 Amplitude 0.208 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 44.4 55.5 Search (1024X64) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 55.0 38.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

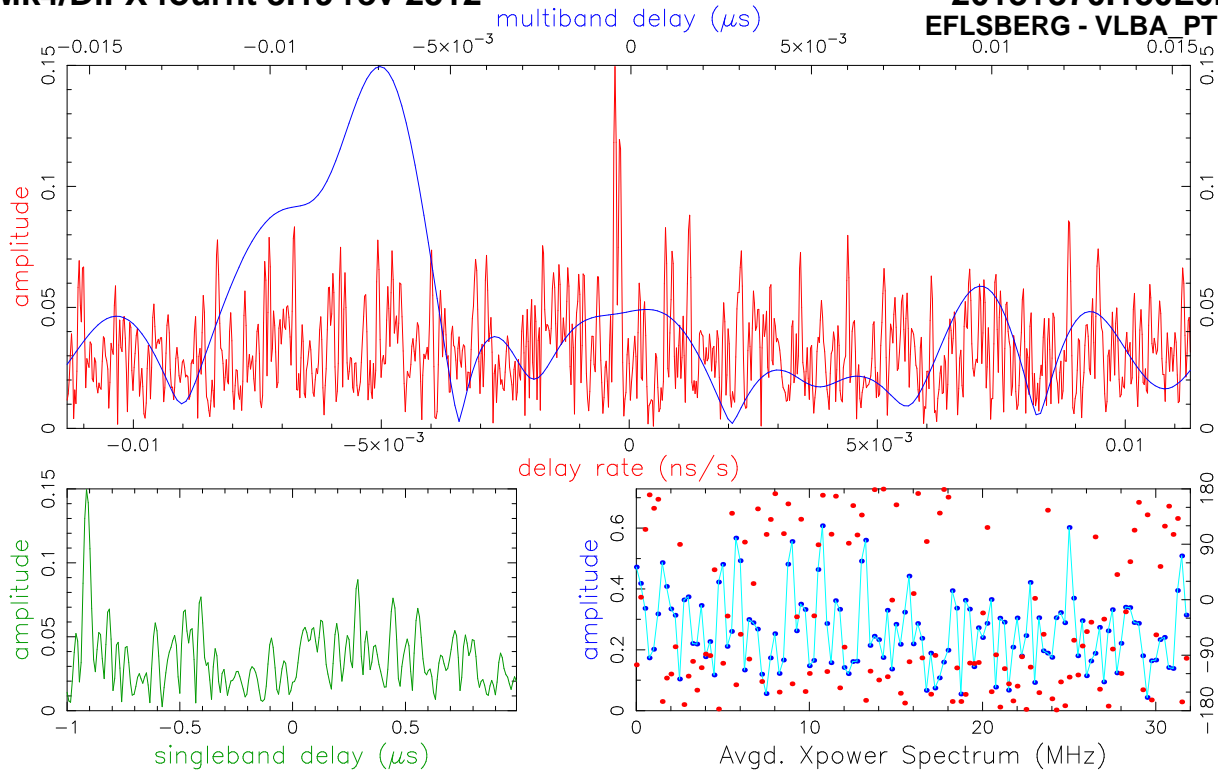
amp/frq (%) 75.4 67.0 Inc. seg. avg. 0.198 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

B: az 257.6 el 60.6 pa 51.1 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 10491.346 -1432.043 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bo..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bo.W.74.130L6H simultaneous interpolator

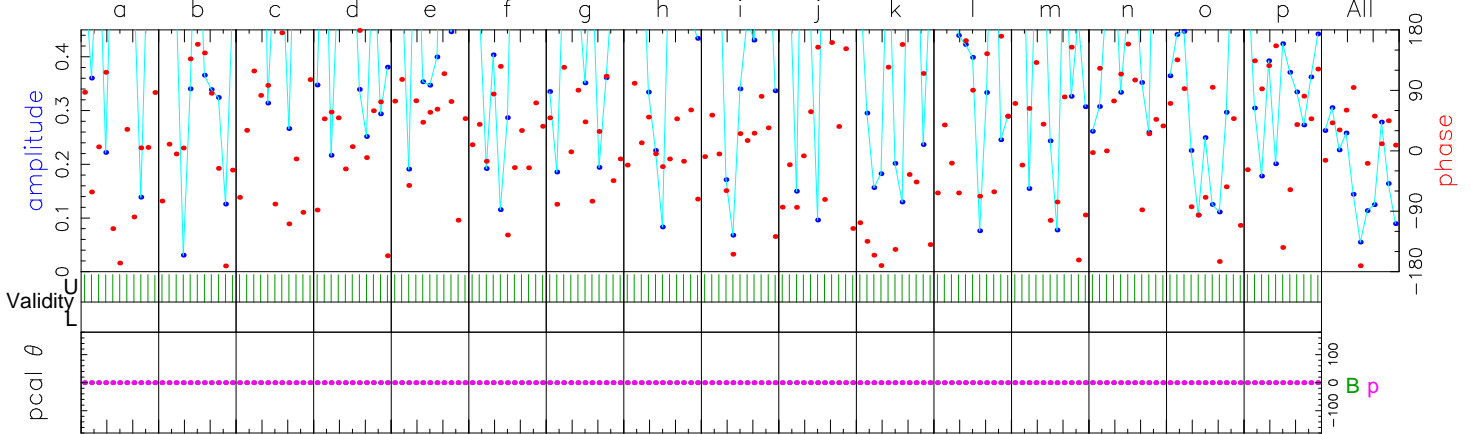
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, Bp  
EFLSBERG - VLBA\_PT, fgroup W, pol LL



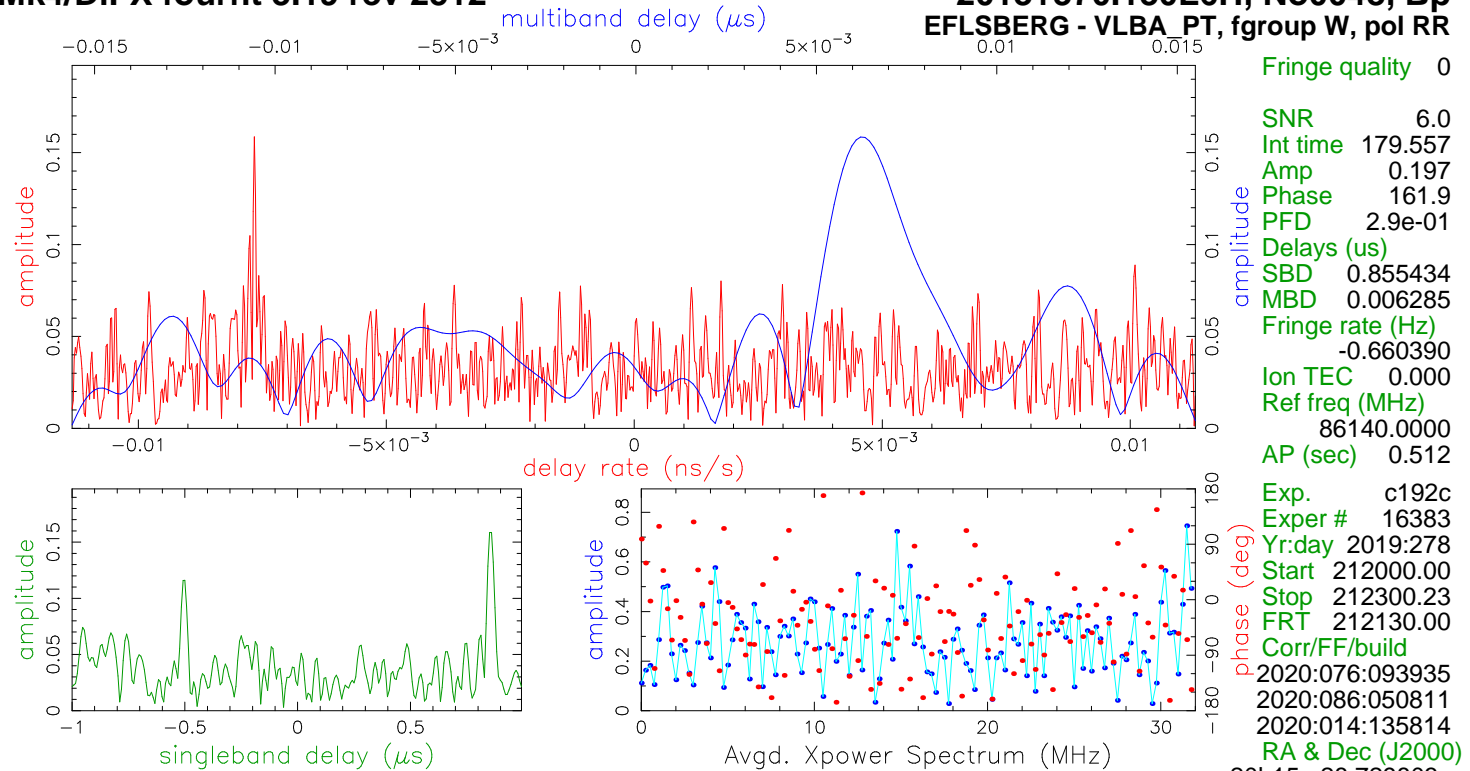
Fringe quality 0  
SNR 5.5  
Int time 179.557  
Amp 0.150  
Phase 31.3  
PFD 9.9e-01  
Delays (us)  
SBD -0.912666  
MBD -0.006968  
Fringe rate (Hz)  
-0.024741  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050808  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		8.21989388516E+03									8.22080710271E+03						-6.96755E-03	+/- 2.0E-04
Sband delay (usec)		8.21989443671E+03									4.8192959E+00						-9.12666E-01	+/- 3.1E-03
Phase delay (usec)		8.22080710372E+03									-4.0388659E-07						1.01079E-06	+/- 6.7E-07
Delay rate (us/s)		-1.47610494500E+00									-1.47610465779E+00						-2.87214E-07	+/- 6.5E-09
Total phase (deg)					329.2												31.3	+/- 20.9
ph/seg (deg)	RMS	Theor.																
amp/seg (%)	57.2	34.6																
ph/frq (deg)	53.1	41.7																
amp/frq (%)	77.4	72.8																
B: az 257.6 el 60.6 pa 51.1																		
p: az 62.4 el 28.6 pa -66.8																		
u,v (fr/asec)											10600.611	-353.061						
Control file: cf_1234_gmva																		
Input file: /Exps/c192c/v2/1234/No0048/Bp..130L6H																		
Output file: /Exps/c192c/v2/1234/No0048/Bp.W.16.130L6H																		

simultaneous interpolator



Fringe quality 0

SNR 6.0

Int time 179.557

Amp 0.197

Phase 161.9

PFD 2.9e-01

Delays (us)

SBD 0.855434

MBD 0.006285

Fringe rate (Hz)

-0.660390

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 212000.00

Stop 212300.23

FRT 212130.00

Corr/FF/build

2020:076:093935

2020:086:050811

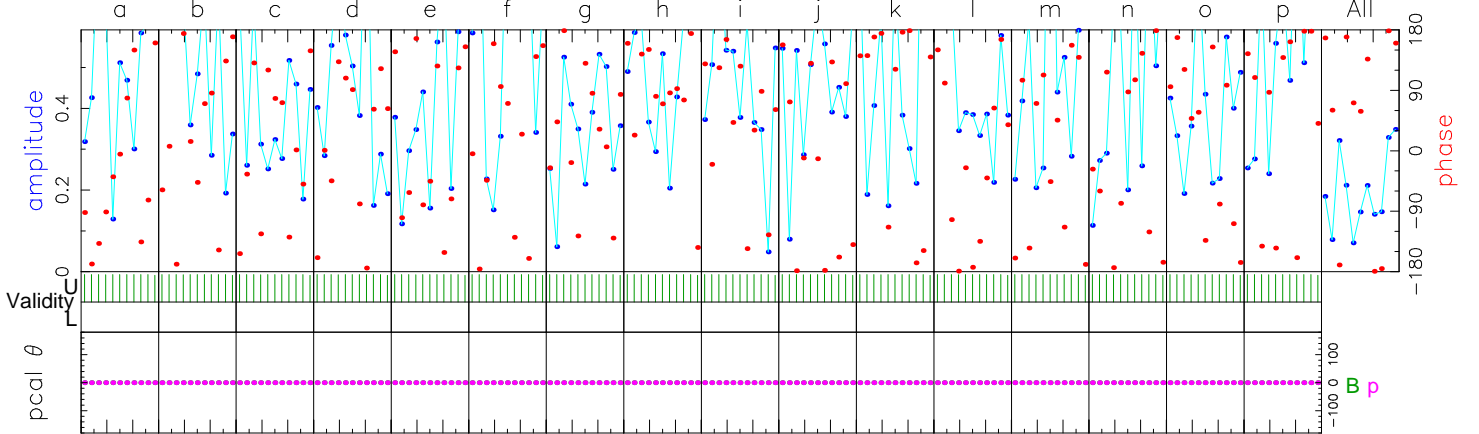
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-127.7	-99.4	164.4	138.9	177.3	140.1	42.1	125.4	103.4	166.2	168.5	173.5	-160.7	-169.5	128.0	171.9	Phase	161.9
	0.3	0.0	0.1	0.2	0.3	0.2	0.1	0.4	0.3	0.3	0.5	0.2	0.1	0.3	0.2	0.5	Ampl.	0.2
	78.3	151.4	220.0	52.3	160.8	11.5	50.7	9.4	168.4	226.4	238.5	222.7	63.2	124.8	54.1	237.3	Sbd box	238.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			8.22165713778E+03								8.22080710271E+03						Resid mbdelay (usec)	6.28507E-03 +/- 1.8E-04
Sband delay (usec)			8.22166253721E+03								4.8192959E+00						Resid sbdelay (usec)	8.55434E-01 +/- 2.9E-03
Phase delay (usec)			8.22080710793E+03								-4.0388659E-07						Resid phdelay (usec)	5.22240E-06 +/- 6.2E-07
Delay rate (us/s)			-1.47611232426E+00								-1.47610465779E+00						Resid rate (us/s)	-7.66647E-06 +/- 6.0E-09
Total phase (deg)				99.8							-2.94630957954E-05						Resid phase (deg)	161.9 +/- 19.3

ph/seg (deg) 53.9 31.9 Search (1024X64) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 61.2 55.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 52.6 38.5 Inc. seg. avg. 0.209 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 67.8 67.2 Inc. frq. avg. 0.192 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011

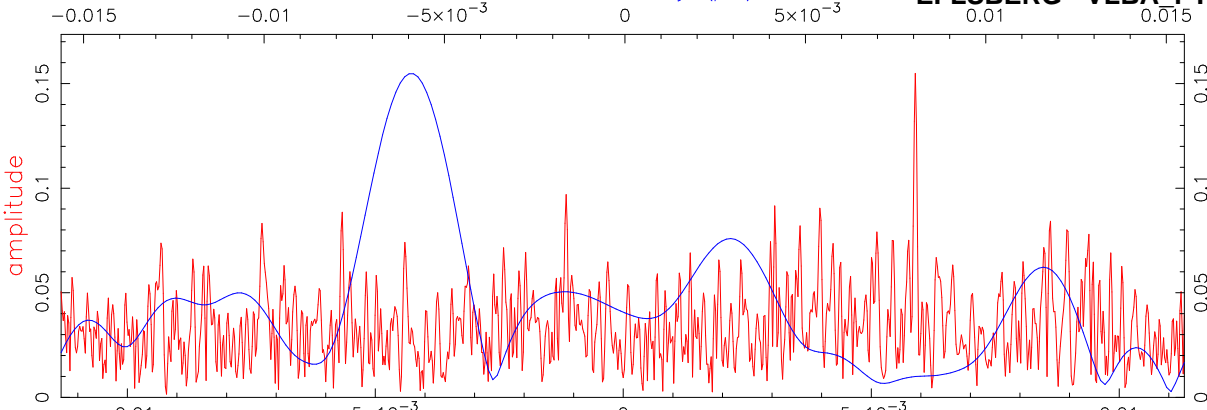
B: az 257.6 el 60.6 pa 51.1 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 10600.611 -353.061 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bp..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bp.W.37.130L6H

Mk4/DiFX fourfit 3.19 rev 2512

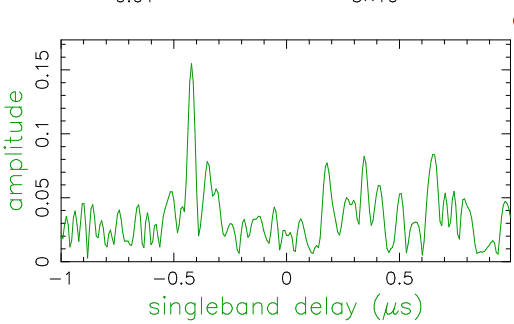
2013+370.130L6H, No0048, Bp  
EFLSBERG - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

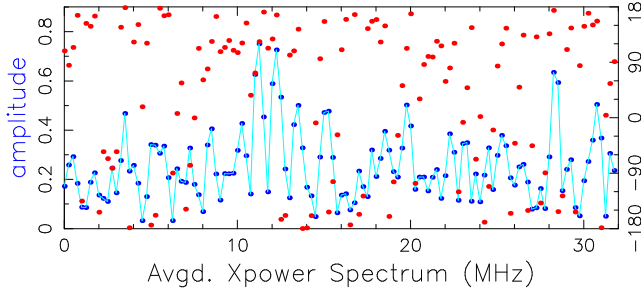


Fringe quality 0

SNR 5.7  
Int time 179.557  
Amp 0.174  
Phase -90.0  
PFD 8.2e-01  
Delays (us)  
SBD -0.421939  
MBD -0.005923  
Fringe rate (Hz)  
0.507164  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

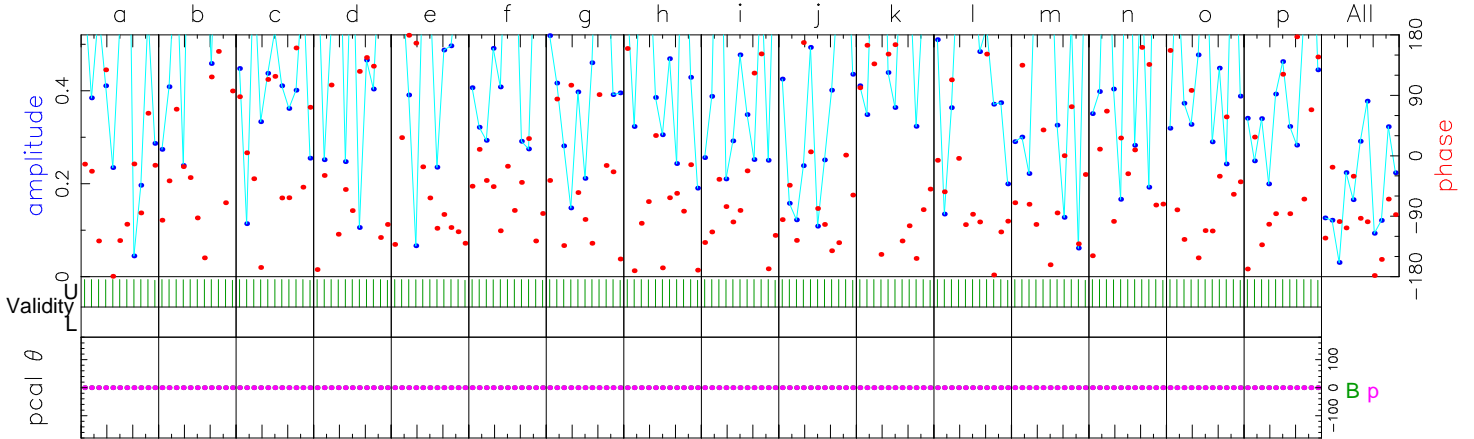


delay rate (ns/s)



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050813  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

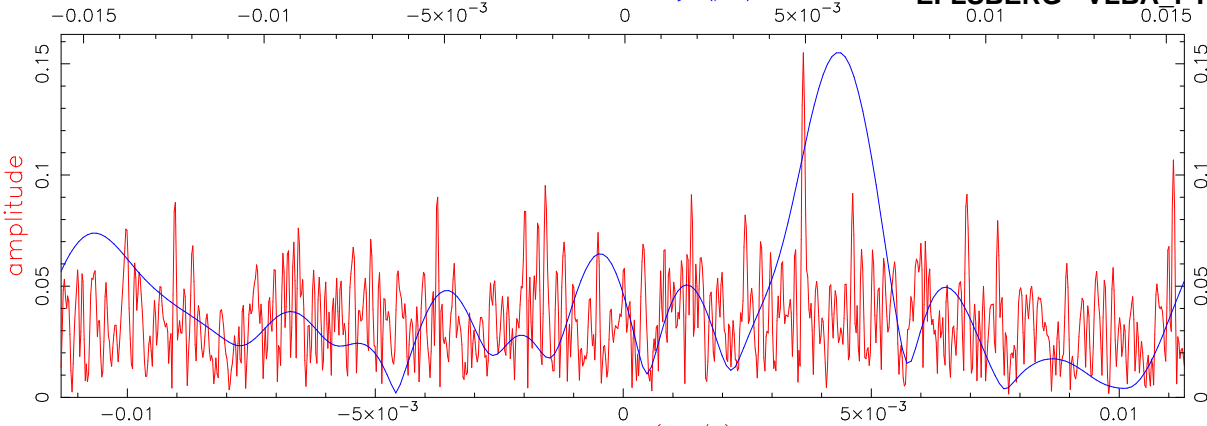
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-85.7	-86.1	11.3	-132.0	-94.7	-59.0	-26.5	-89.6	-97.8	-74.5	-151.8	-90.8	-33.6	-38.6	-89.3	-169.9	Phase	-90.0
	0.2	0.1	0.0	0.3	0.3	0.4	0.1	0.3	0.3	0.2	0.4	0.2	0.1	0.2	0.3	0.1	Ampl.	0.2
	83.7	58.6	200.3	144.7	218.3	74.2	18.2	194.9	230.8	205.7	219.0	110.9	175.5	98.2	61.2	152.0	Sbd box	75.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.22039492967E+03			Apriori delay (usec)			8.22080710271E+03			Resid mbdelay (usec)			-5.92304E-03			+/- 1.9E-04		
Sband delay (usec)	8.22038516321E+03			Apriori clock (usec)			4.8192959E+00			Resid sbdelay (usec)			-4.21939E-01			+/- 3.0E-03		
Phase delay (usec)	8.22080709980E+03			Apriori clockrate (us/s)			-4.0388659E-07			Resid phdelay (usec)			-2.90380E-06			+/- 6.5E-07		
Delay rate (us/s)	-1.47609877012E+00			Apriori rate (us/s)			-1.47610465779E+00			Resid rate (us/s)			5.88767E-06			+/- 6.3E-09		
Total phase (deg)	207.8			Apriori accel (us/s/s)			-2.94630957954E-05			Resid phase (deg)			-90.0			+/- 20.2		
	RMS	Theor.	Amplitude	0.174 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5										
ph/seg (deg)	45.7	33.5	Search (1024X64)	0.153		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000						
amp/seg (%)	69.8	58.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016				
ph/frq (deg)	48.9	40.4	Inc. seg. avg.	0.182		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011		0.011						
amp/frq (%)	68.3	70.5	Inc. frq. avg.	0.171		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00		

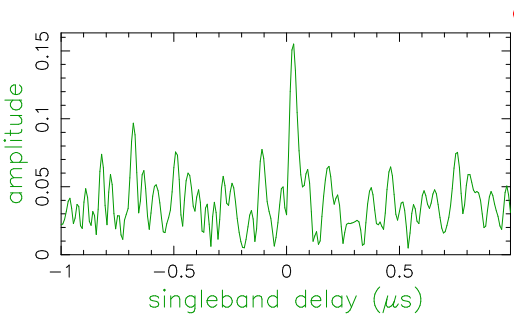
B: az 257.6 el 60.6 pa 51.1 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 10600.611 -353.061 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bp..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bp.W.59.130L6H

multiband delay ( $\mu$ s)

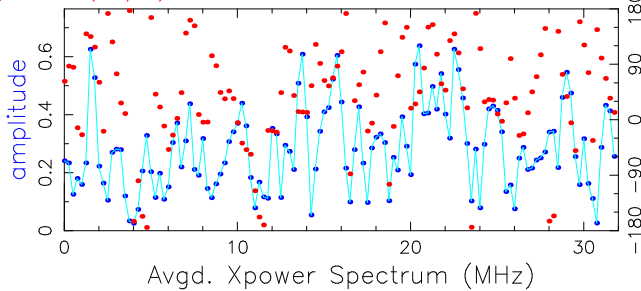


Fringe quality 0

SNR 5.7  
Int time 179.557  
Amp 0.163  
Phase -168.5  
PFD 7.0e-01  
Delays (us)  
SBD 0.028608  
MBD 0.005861  
Fringe rate (Hz) 0.312597  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

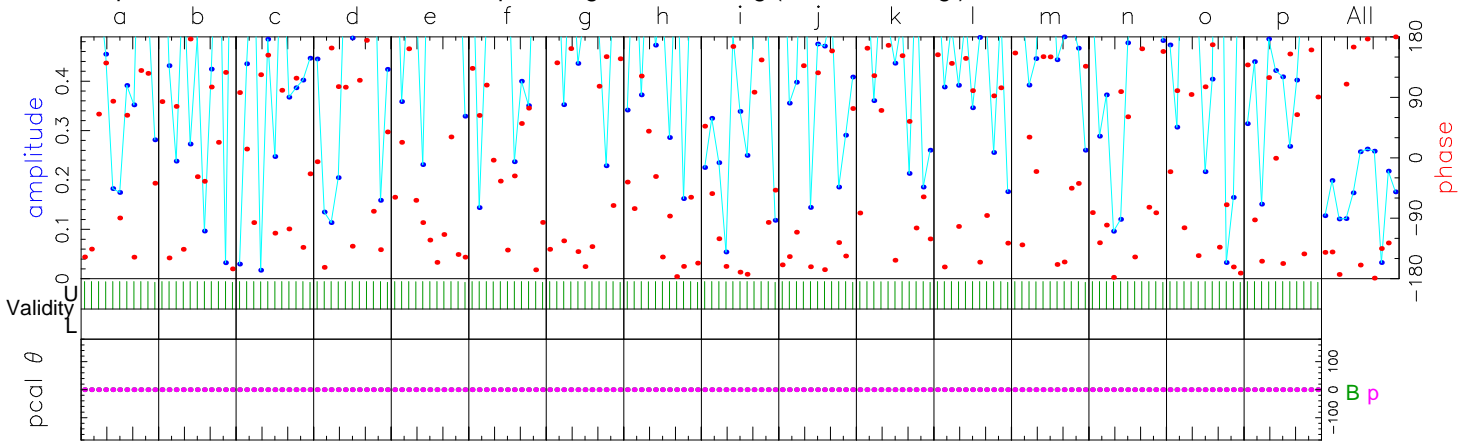


delay rate (ns/s)



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050815  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



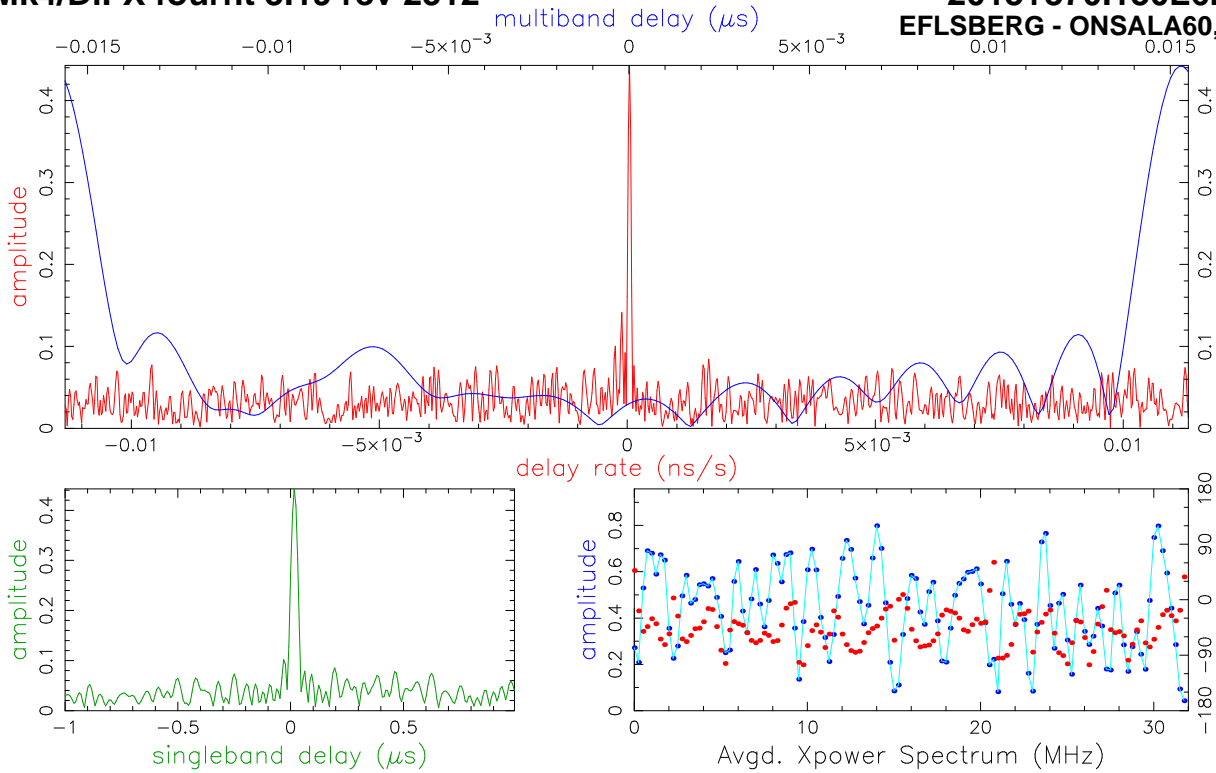
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	159.2	134.2	-144.9	147.7	-113.0	163.9	-171.0	-98.7	175.6	176.6	-168.7	165.5	-171.3	-121.6	-154.6	147.6	Phase	-168.5
B	0.2	0.1	0.1	0.1	0.3	0.0	0.4	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	Ampl.	0.2
p	239.6	145.5	146.8	23.7	151.0	35.3	142.5	174.8	137.5	78.9	124.9	214.3	248.0	91.9	243.0	115.7	Sbd box	132.7
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	8.22084421357E+03	Apriori delay (usec)	8.22080710271E+03	Resid mbdelay (usec)	5.86086E-03	+/-	1.9E-04
Sband delay (usec)	8.22083571071E+03	Apriori clock (usec)	4.8192959E+00	Resid sbdelay (usec)	2.86080E-02	+/-	3.0E-03
Phase delay (usec)	8.22080709727E+03	Apriori clockrate (us/s)	-4.0388659E-07	Resid phdelay (usec)	-5.43437E-06	+/-	6.4E-07
Delay rate (us/s)	-1.47610102885E+00	Apriori rate (us/s)	-1.47610465779E+00	Resid rate (us/s)	3.62894E-06	+/-	6.2E-09
Total phase (deg)	129.3	Apriori accel (us/s/s)	-2.94630957954E-05	Resid phase (deg)	-168.5	+/-	20.0

ph/seg (deg)	RMS 33.6	Theor. 33.1	Amplitude Search (1024X64)	0.163 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	45.9	57.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	38.7	40.0	Inc. seg. avg.	0.158	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016	
amp/frq (%)	59.7	69.8	Inc. frq. avg.	0.157	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
					Data rate(Mb/s): 2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 257.6 el 60.6 pa 51.1 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 10600.611 -353.061 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/Bp..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bp.W.75.130L6H



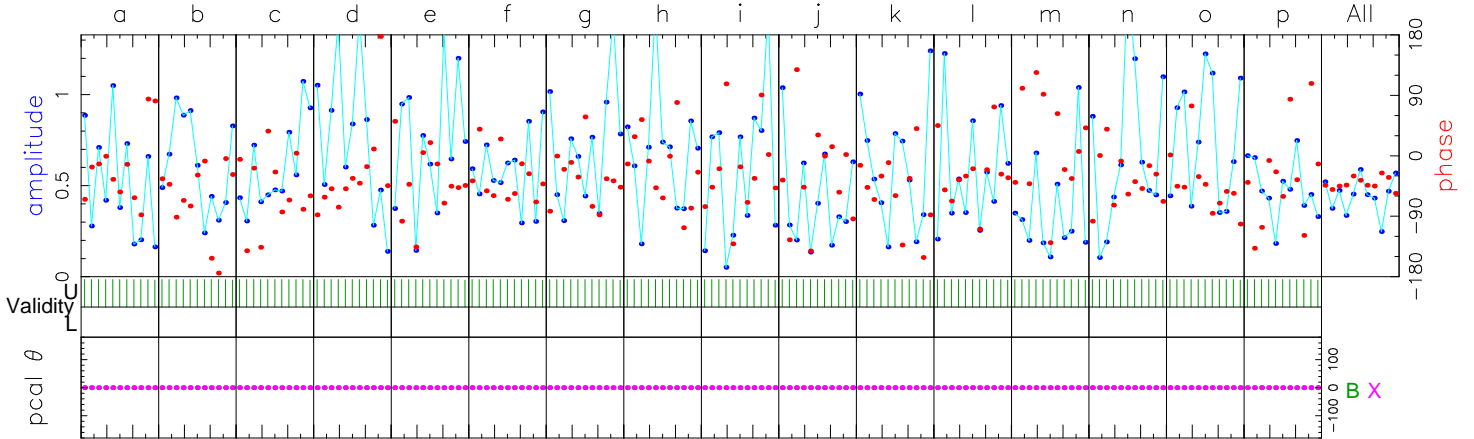


Fringe quality 9

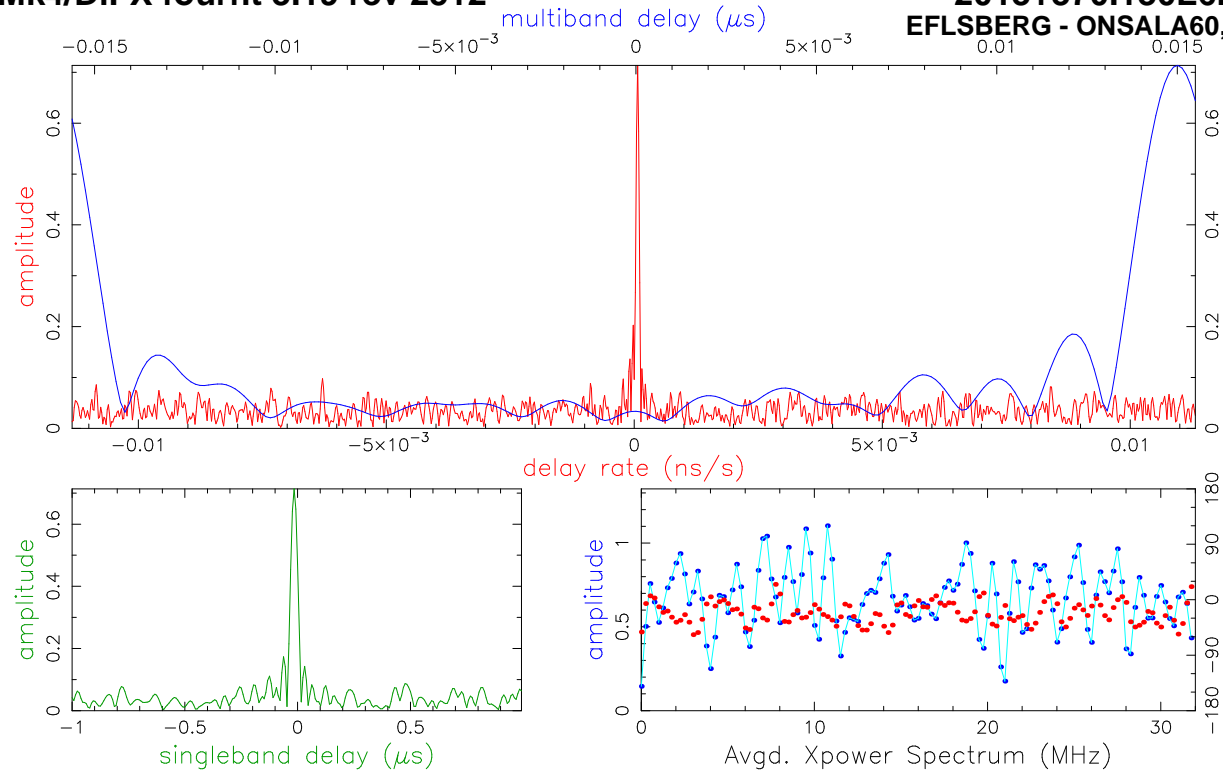
SNR 16.2  
Int time 179.771  
Amp 0.443  
Phase -41.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.016472  
MBD 0.015297  
Fringe rate (Hz) 0.004767  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050821  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

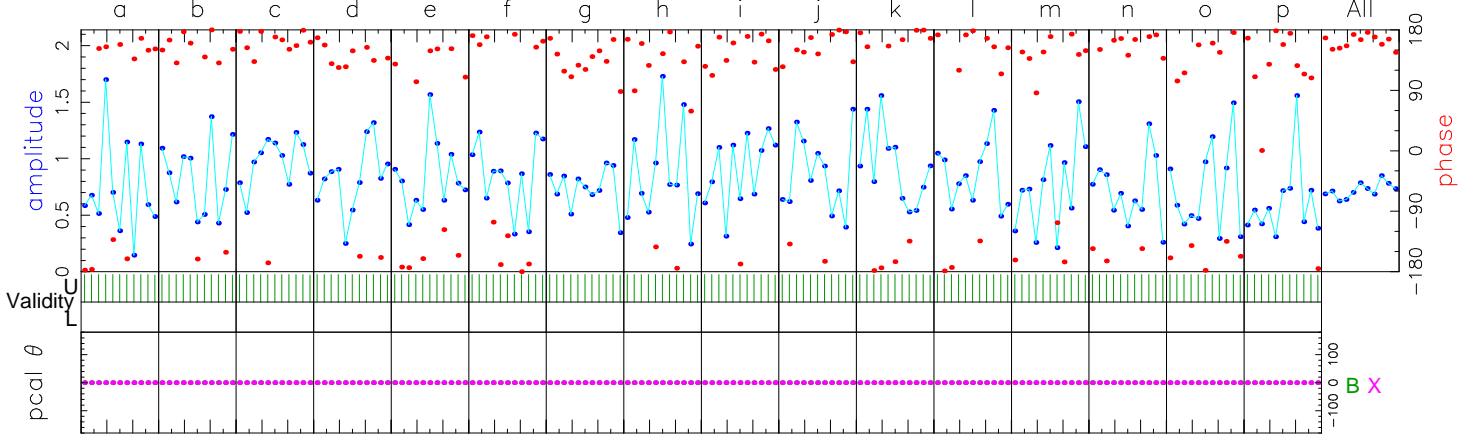


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-23.8	-58.6	-51.0	-54.0	-42.8	-36.5	-40.0	-28.6	-18.4	-36.4	-60.2	-30.9	32.5	-49.7	-54.1	-52.7		Phase -41.7
	0.4	0.5	0.4	0.6	0.6	0.5	0.6	0.5	0.4	0.3	0.4	0.5	0.2	0.6	0.6	0.2		Ampl. 0.4
	131.6	130.4	130.3	131.2	130.3	132.0	131.6	131.1	130.4	255.6	131.1	131.0	175.9	131.3	130.3	15.0		Sbd box 131.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	8.97280008000E+02			Apriori delay (usec)			8.97264710820E+02			Resid mbdelay (usec)			1.52972E-02			+/- 6.6E-05		
Sband delay (usec)	8.97281183320E+02			Apriori clock (usec)			-1.5607327E+01			Resid sbdelay (usec)			1.64725E-02			+/- 1.1E-03		
Phase delay (usec)	8.97264709476E+02			Apriori clockrate (us/s)			-7.2800002E-07			Resid phdelay (usec)			-1.34402E-06			+/- 2.3E-07		
Delay rate (us/s)	-2.78461402082E-02			Apriori rate (us/s)			-2.78461955522E-02			Resid rate (us/s)			5.53440E-08			+/- 2.2E-09		
Total phase (deg)	26.7			Apriori accel (us/s/s)			-9.67892419073E-06			Resid phase (deg)			-41.7			+/- 7.1		
ph/seg (deg)	RMS	Theor.	Amplitude		0.443 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000			
amp/seg (%)	8.6	11.7	Search (1024X64)		0.417		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016 0.016					
ph/frq (deg)	21.4	20.4	Interp.		0.000		Bits/sample: 2x2		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011 0.011					
amp/frq (%)	23.8	14.1	Inc. seg. avg.		0.438		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00					
	31.3	24.6	Inc. frq. avg.		0.448													



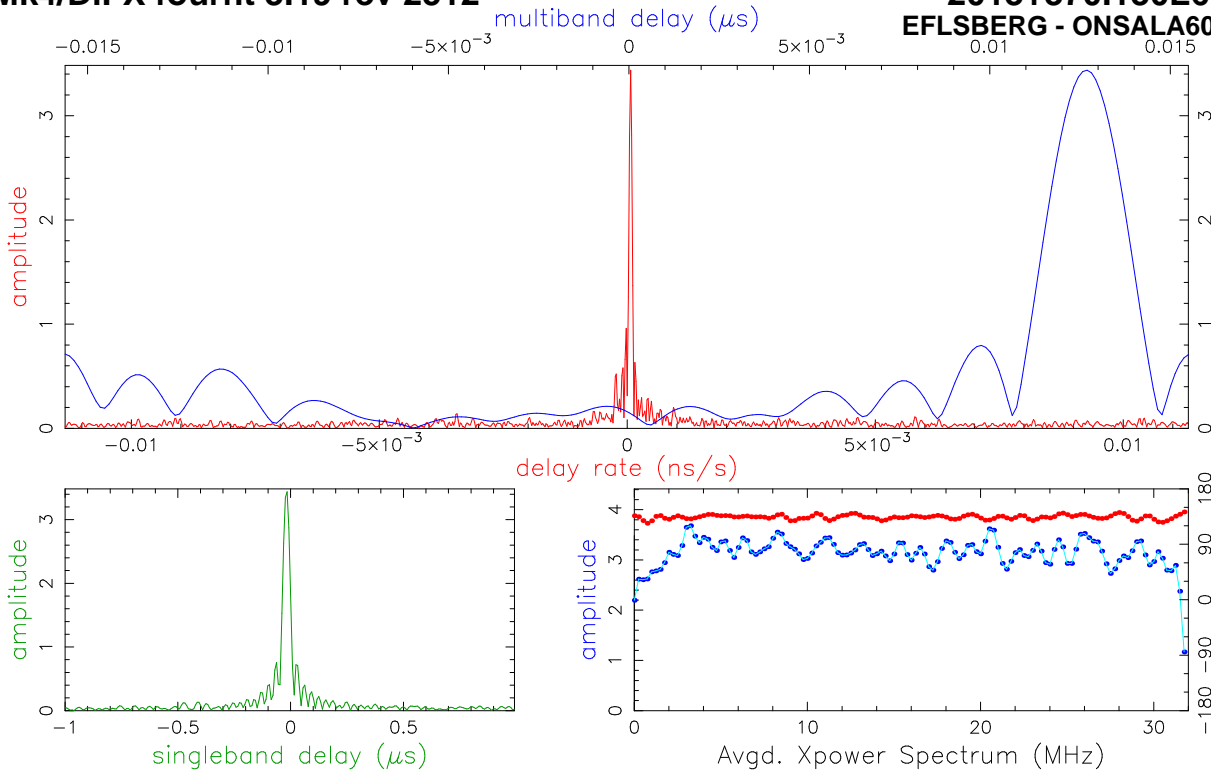
Fringe quality 9  
SNR 26.2  
Int time 179.771  
Amp 0.714  
Phase 162.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.015413  
MBD 0.015001  
Fringe rate (Hz) 0.005050  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050824  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	172.1	164.0	166.6	152.0	159.3	-179.5	136.9	149.3	153.6	159.2	176.2	168.2	158.4	174.5	176.9	136.9	Phase	162.2
	0.7	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.8	0.7	0.7	0.6	0.5	Ampl.	0.7
	126.7	126.9	126.7	127.1	128.2	127.3	126.2	126.9	127.2	127.4	127.0	126.4	127.3	126.9	127.0	126.7	Sbd box	127.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.97248462281E+02		Apriori delay (usec)		8.97264710820E+02		Resid mbdelay (usec)		1.50015E-02		+/-		4.1E-05					
Sband delay (usec)	8.97249298320E+02		Apriori clock (usec)		-1.5607327E+01		Resid sbdelay (usec)		-1.54125E-02		+/-		6.6E-04					
Phase delay (usec)	8.97264716050E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		5.23031E-06		+/-		1.4E-07					
Delay rate (us/s)	-2.78461369233E-02		Apriori rate (us/s)		-2.78461955522E-02		Resid rate (us/s)		5.86289E-08		+/-		1.4E-09					
Total phase (deg)	230.6		Apriori accel (us/s/s)		-9.67892419073E-06		Resid phase (deg)		162.2		+/-		4.4					

ph/seg (deg) 9.2 7.3 Search (1024X64) 0.689 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 8.9 12.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 13.9 8.8 Inc. seg. avg. 0.717 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 14.7 15.3 Inc. frq. avg. 0.722 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
B: az 257.6 el 60.6 pa 51.1 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) 192.048 -1077.554 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BX..130L6H Output file: /Exps/c192c/v2/1234/No0048/BX.W.135.130L6H

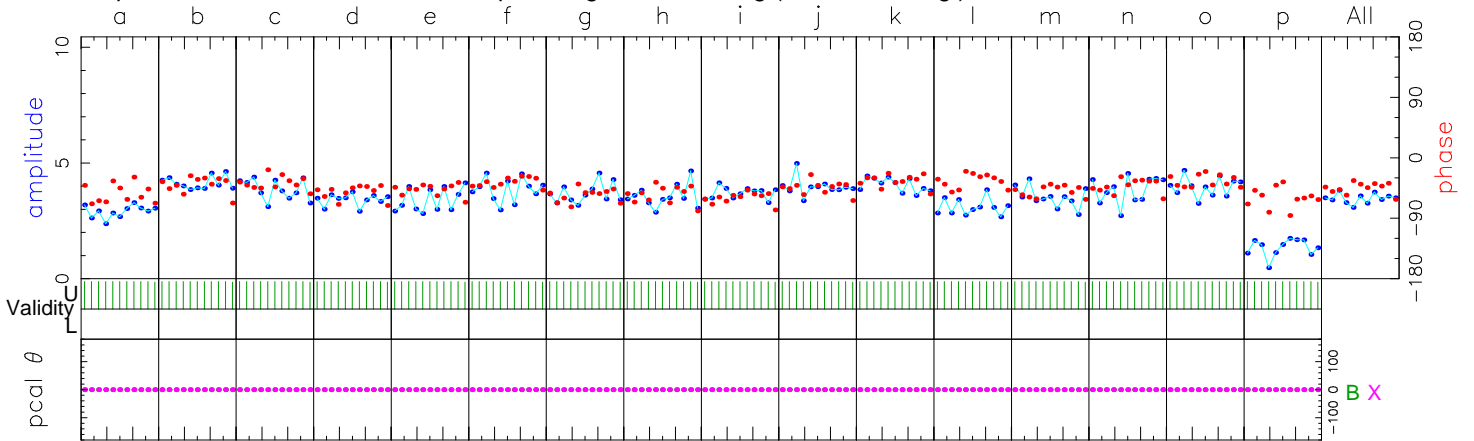


Fringe quality 9

SNR 127.7  
Int time 179.771  
Amp 3.484  
Phase -44.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.018481  
MBD 0.012653  
Fringe rate (Hz) 0.004940  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

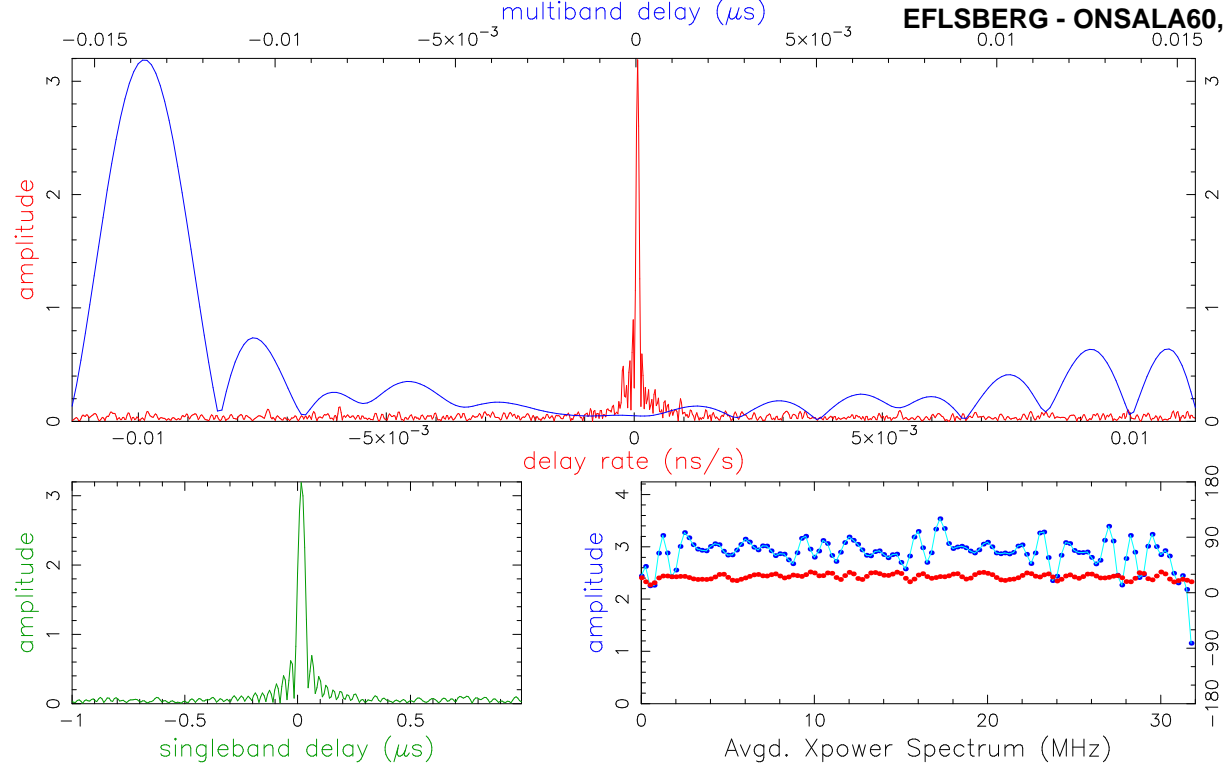
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050816  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)	8.97246113687E+02			Apriori delay (usec)			8.97264710820E+02			Resid mbdelay (usec)			1.26529E-02			+/-	8.4E-06	
Sband delay (usec)	8.97246229820E+02			Apriori clock (usec)			-1.5607327E+01			Resid sbdelay (usec)			-1.84810E-02			+/-	1.3E-04	
Phase delay (usec)	8.97264709373E+02			Apriori clockrate (us/s)			-7.2800002E-07			Resid phdelay (usec)			-1.44709E-06			+/-	2.9E-08	
Delay rate (us/s)	-2.78461382072E-02			Apriori rate (us/s)			-2.78461955522E-02			Resid rate (us/s)			5.73450E-08			+/-	2.8E-10	
Total phase (deg)	23.5			Apriori accel (us/s/s)			-9.67892419073E-06			Resid phase (deg)			-44.9			+/-	0.9	

ph/seg (deg) 7.9 1.5 Search (1024X64) 3.324 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 5.8 2.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 9.4 1.8 Inc. seg. avg. 3.469 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 18.7 3.1 Inc. frq. avg. 3.474 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) 192.048 -1077.554 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BX..130L6H Output file: /Exps/c192c/v2/1234/No0048/BX.W.82.130L6H

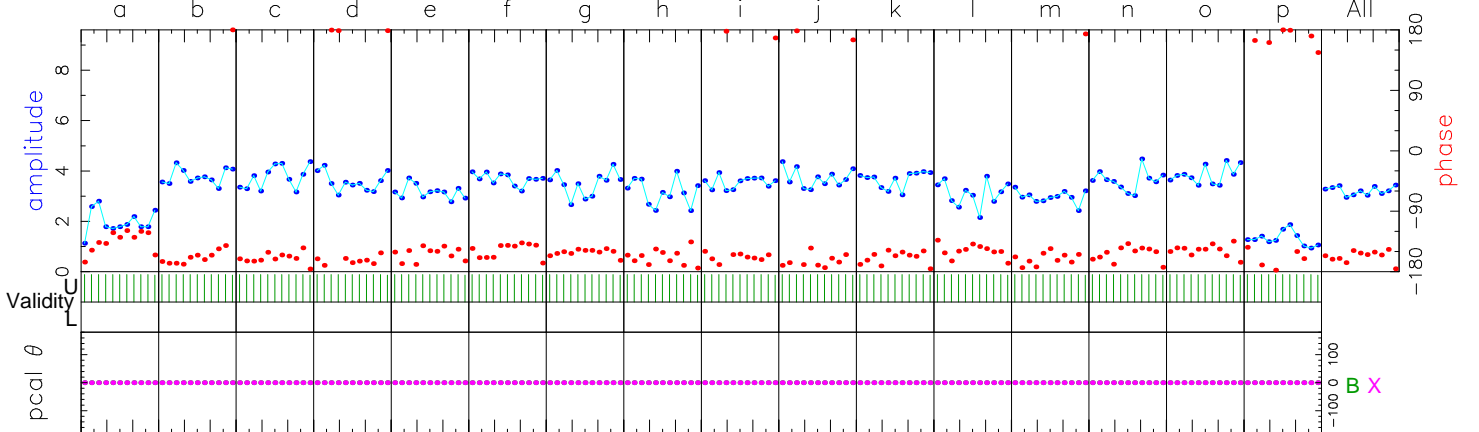


Fringe quality 8

SNR 117.4  
Int time 179.771  
Amp 3.202  
Phase -157.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.017112  
MBD -0.013608  
Fringe rate (Hz) 0.004960  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050818  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

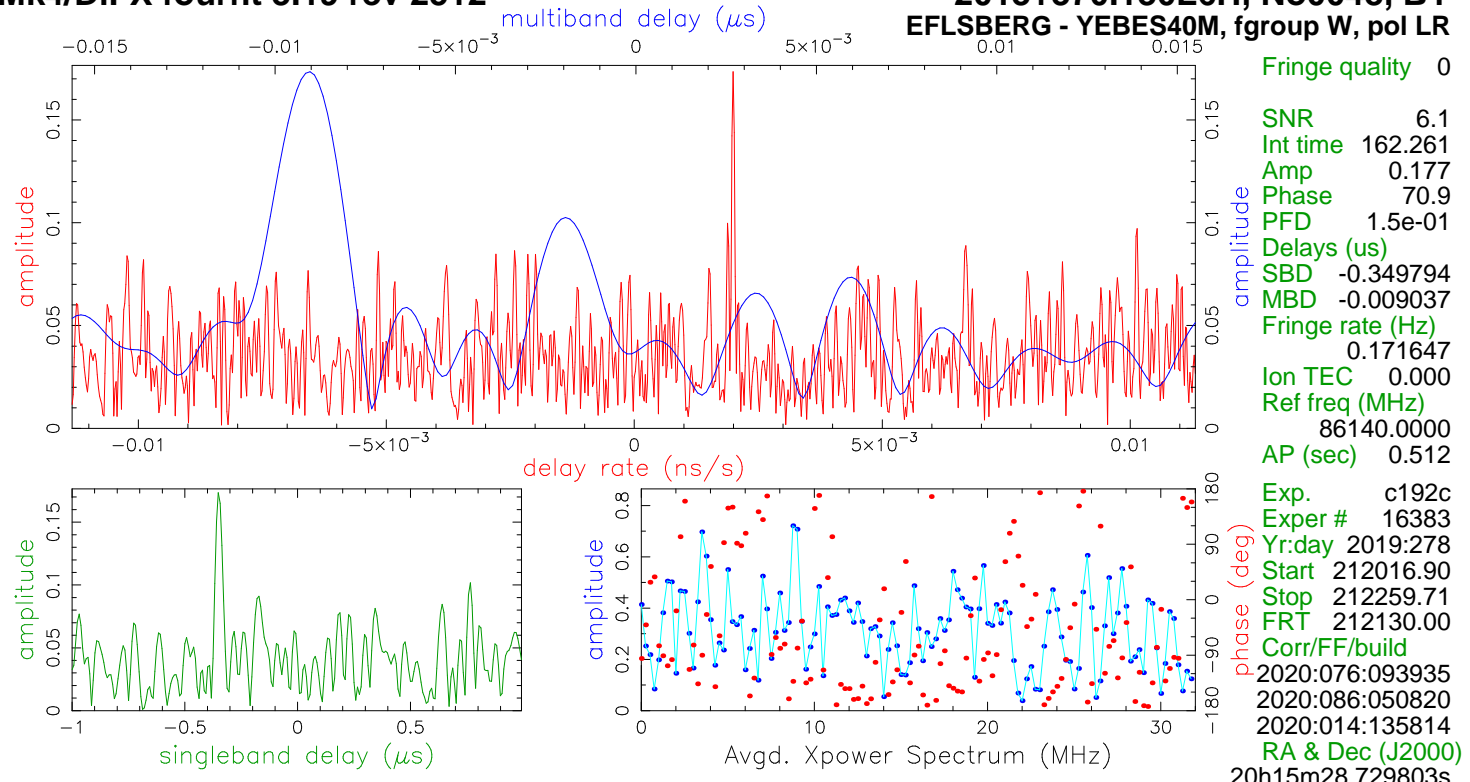
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



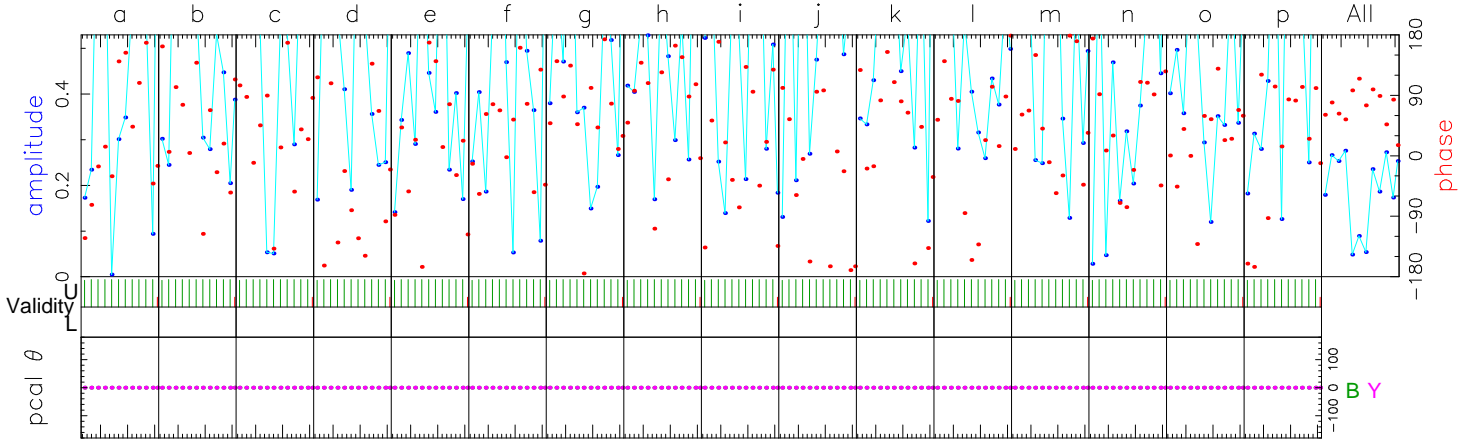
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-134.7	-160.8	-159.6	-167.8	-153.0	-148.0	-151.3	-158.5	-163.1	-168.9	-159.1	-149.0	-162.9	-153.3	-148.3	-177.4		Phase	-157.1
	1.9	3.7	3.7	3.5	3.1	3.6	3.5	3.1	3.5	3.6	3.6	3.1	2.9	3.6	3.8	1.2		Ampl.	3.2
	129.9	131.1	131.2	131.1	131.3	131.3	131.0	131.3	131.1	131.2	131.4	131.2	131.2	131.4	130.9	131.0		Sbd box	131.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) 8.97282353250E+02 Apriori delay (usec) 8.97264710820E+02 Resid mbdelay (usec) -1.36076E-02 +/- 9.2E-06  
 Sband delay (usec) 8.97281822320E+02 Apriori clock (usec) -1.5607327E+01 Resid sbdelay (usec) 1.71115E-02 +/- 1.5E-04  
 Phase delay (usec) 8.97264705755E+02 Apriori clockrate (us/s) -7.2800002E-07 Resid phdelay (usec) -5.06484E-06 +/- 3.1E-08  
 Delay rate (us/s) -2.78461379734E-02 Apriori rate (us/s) -2.78461955522E-02 Resid rate (us/s) 5.75788E-08 +/- 3.0E-10  
 Total phase (deg) -88.7 Apriori accel (us/s/s) -9.67892419073E-06 Resid phase (deg) -157.1 +/- 1.0

RMS Theor. Amplitude 3.202 +/- 0.027  
 ph/seg (deg) 8.0 1.6 Search (1024X64) 3.086 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 5.0 2.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 10.5 2.0 Inc. seg. avg. 3.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 21.3 3.4 Inc. frq. avg. 3.223 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 257.6 el 60.6 pa 51.1 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) 192.048 -1077.554 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BX..130L6H Output file: /Exps/c192c/v2/1234/No0048/BX.W.88.130L6H



Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec

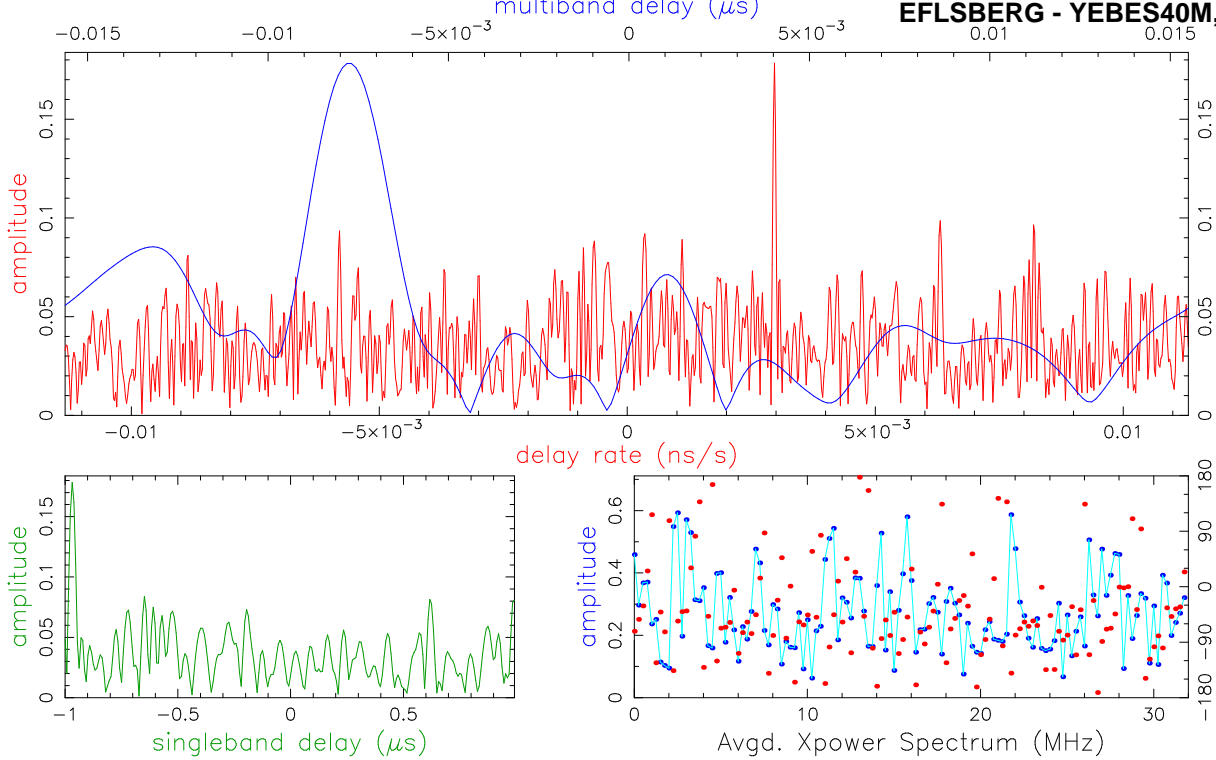


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
53.5	64.0	53.1	-149.0	5.6	54.7	108.0	109.2	15.7	54.8	83.9	88.7	20.1	77.4	21.9	93.1	93.1	Phase	70.9				
0.1	0.2	0.3	0.2	0.1	0.2	0.3	0.3	0.1	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.4	Ampl.	0.2				
1.4	38.9	85.2	196.0	121.6	73.8	235.4	85.5	220.2	9.6	100.9	86.7	243.5	192.6	209.9	134.1	134.1	Sbd box	84.2				
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.29745406089E+03														Apriori delay (usec)	-1.29710127428E+03	Resid mbdelay (usec)	-9.03661E-03	+/-	1.8E-04
Sband delay (usec)			-1.29745106828E+03														Apriori clock (usec)	7.1212740E+00	Resid sbdelay (usec)	-3.49794E-01	+/-	2.8E-03
Phase delay (usec)			-1.29710127199E+03														Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	2.28654E-06	+/-	6.1E-07
Delay rate (us/s)			-4.45059009706E-02														Apriori rate (us/s)	-4.45078936260E-02	Resid rate (us/s)	1.99266E-06	+/-	6.5E-09
Total phase (deg)					-205.0												Apriori accel (us/s/s)	1.52807129121E-05	Resid phase (deg)	70.9	+/-	18.9

	RMS	Theor.	Amplitude	0.177 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	23.2	32.7	Search (1024X64)	0.172	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.7	57.1	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	51.4	37.7	Inc. seg. avg.	0.163	SampCntNorm: enabled	dr window (ns/s) -0.011 0.011
amp/frq (%)	56.5	65.9	Inc. frq. avg.	0.188	Sample rate(MISamp/s): 64	ion window (TEC) 0.00 0.00
					Data rate(Mb/s): 2048	
					nlags: 128	
					t_cohere infinite	

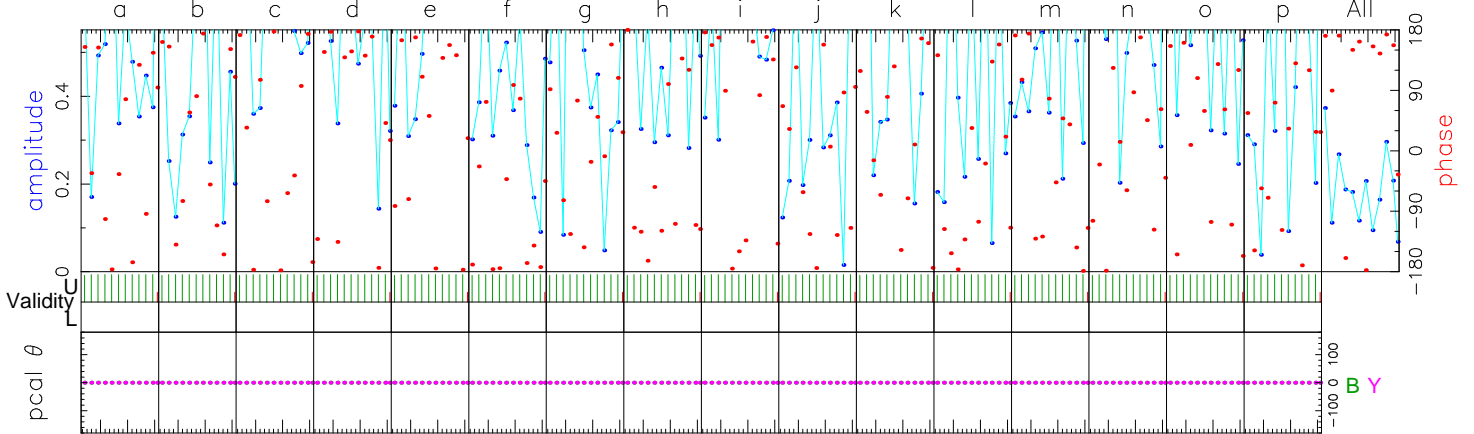
B: az 257.6 el 60.6 pa 51.1 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) 333.452 1772.679 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BY..130L6H Output file: /Exps/c192c/v2/1234/No0048/BY.W.103.130L6H



Fringe quality 0  
SNR 6.2  
Int time 162.261  
Amp 0.184  
Phase 165.8  
PFD 6.3e-02  
Delays (us)  
SBD -0.967873  
MBD -0.007768  
Fringe rate (Hz) 0.255657  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212016.90  
Stop 212259.71  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050822  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s  
+37°10'59.514664"

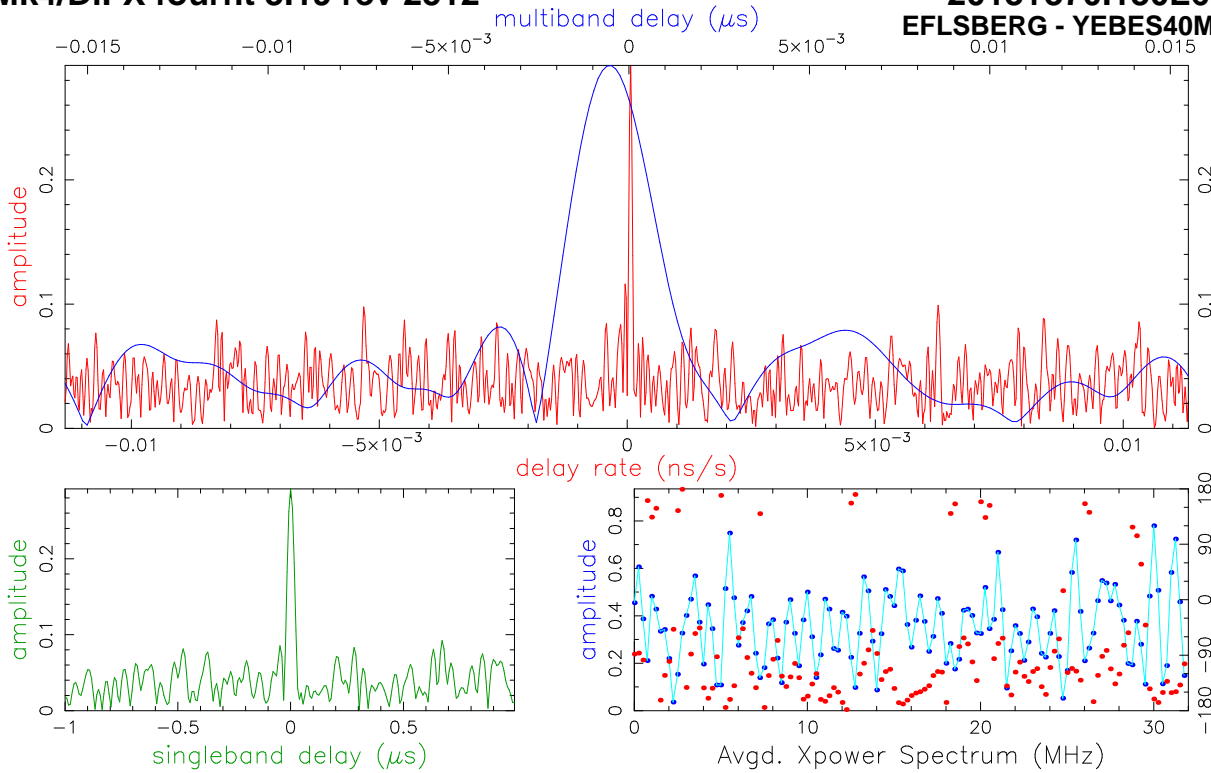
Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	167.9	171.2	-172.6	157.4	146.9	117.9	74.6	-150.1	162.3	-178.7	130.8	-150.0	-140.8	116.5	140.7	-167.0	Phase	165.8				
	0.2	0.2	0.2	0.4	0.4	0.1	0.1	0.4	0.5	0.1	0.2	0.1	0.1	0.0	0.3	0.1	Ampl.	0.2				
	187.8	247.7	206.4	5.6	5.8	207.5	59.7	87.7	6.7	46.4	201.4	164.3	196.1	210.2	186.4	50.0	Sbd box	5.1				
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.29807779238E+03														Apriori delay (usec)	-1.29710127428E+03	Resid mbdelay (usec)	-7.76810E-03	+/-	1.7E-04
Sband delay (usec)			-1.29806914728E+03														Apriori clock (usec)	7.1212740E+00	Resid sbdelay (usec)	-9.67873E-01	+/-	2.8E-03
Phase delay (usec)			-1.29710126893E+03														Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	5.34553E-06	+/-	5.9E-07
Delay rate (us/s)			-4.45049256963E-02														Apriori rate (us/s)	-4.45078936260E-02	Resid rate (us/s)	2.96793E-06	+/-	6.3E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.52807129121E-05	Resid phase (deg)	165.8	+/-	18.4

	RMS	Theor.	Amplitude	0.184 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	39.0	31.9	Search (1024X64)	0.176	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.1	55.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	41.0	36.8	Inc. seg. avg.	0.175	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	69.9	64.3	Inc. frq. avg.	0.174	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) 333.452 1772.679 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BY..130L6H Output file: /Exps/c192c/v2/1234/No0048/BY.W.120.130L6H

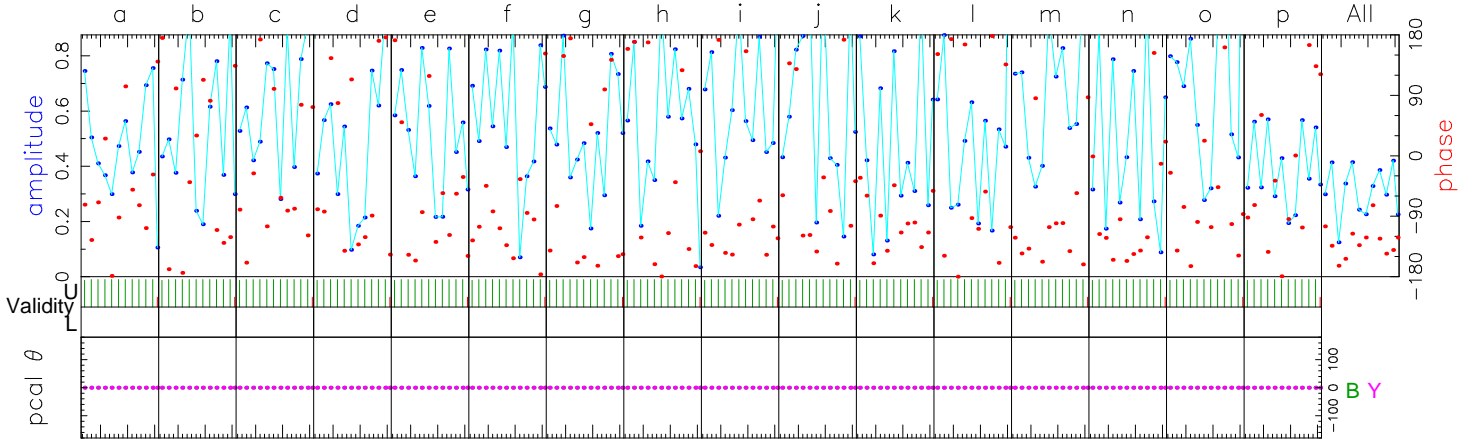


Fringe quality 9

SNR 10.2  
Int time 162.261  
Amp 0.292  
Phase -126.7  
PFD 5.7e-16  
Delays (us)  
SBD 0.000188  
MBD -0.000531  
Fringe rate (Hz) 0.005984  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212016.90  
Stop 212259.71  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050816  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

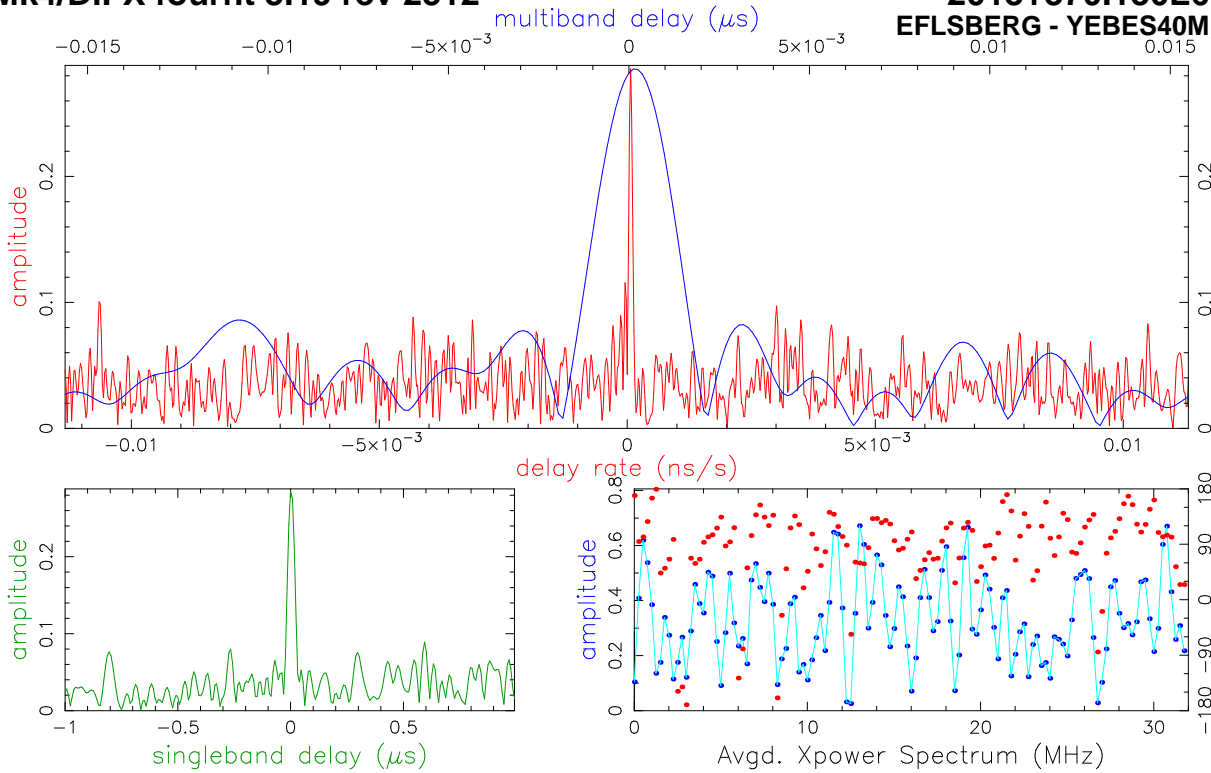
Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All								
	-75.8	-145.2	-109.0	-150.4	-114.1	-117.0	-174.3	-166.1	-122.2	-113.1	-84.5	-151.1	-127.1	-131.1	-110.9	-130.8		Phase -126.7								
	0.3	0.2	0.2	0.3	0.2	0.4	0.4	0.4	0.5	0.3	0.4	0.3	0.5	0.3	0.4	0.1		Ampl. 0.3								
	107.8	214.7	115.0	172.1	39.6	129.4	129.7	16.3	128.8	255.1	129.8	127.8	128.1	130.2	128.7	219.3		Sbd box 129.0								
UL	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used								
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs								
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase								
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC								
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp								
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000										
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids								
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks								
																		Chan ids								
																		Tracks								
Group delay (usec)(sbd)			-1.29710180485E+03															Apriori delay (usec)	-1.29710127428E+03	Resid mbdelay (usec)	-5.30567E-04	+/-	1.1E-04			
Sband delay (usec)			-1.29710108628E+03															Apriori clock (usec)	7.1212740E+00	Resid sbdelay (usec)	1.88000E-04	+/-	1.7E-03			
Phase delay (usec)			-1.29710127836E+03															Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	-4.08494E-06	+/-	3.6E-07			
Delay rate (us/s)			-4.45078241618E-02															Apriori rate (us/s)	-4.45078936260E-02	Resid rate (us/s)	6.94642E-08	+/-	3.9E-09			
Total phase (deg)					-42.6													Apriori accel (us/s/s)	1.52807129121E-05	Resid phase (deg)	-126.7	+/-	11.3			
		RMS	Theor.																PCal mode: MANUAL, MANUAL					PC period (AP's) 5, 5		
ph/seg (deg)		23.3	19.5																Search (1024X64)	0.291				sb window (us)	-1.000	1.000
amp/seg (%)		31.4	34.1																Interp.	0.000				mb window (us)	-0.016	0.016
ph/frq (deg)		27.7	22.5																Inc. seg. avg.	0.297				dr window (ns/s)	-0.011	0.011
amp/frq (%)		37.2	39.3																Inc. frq. avg.	0.301				ion window (TEC)	0.00	0.00

B: az 257.6 el 60.6 pa 51.1 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) 333.452 1772.679 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BY..130L6H Output file: /Exps/c192c/v2/1234/No0048/BY.W.80.130L6H

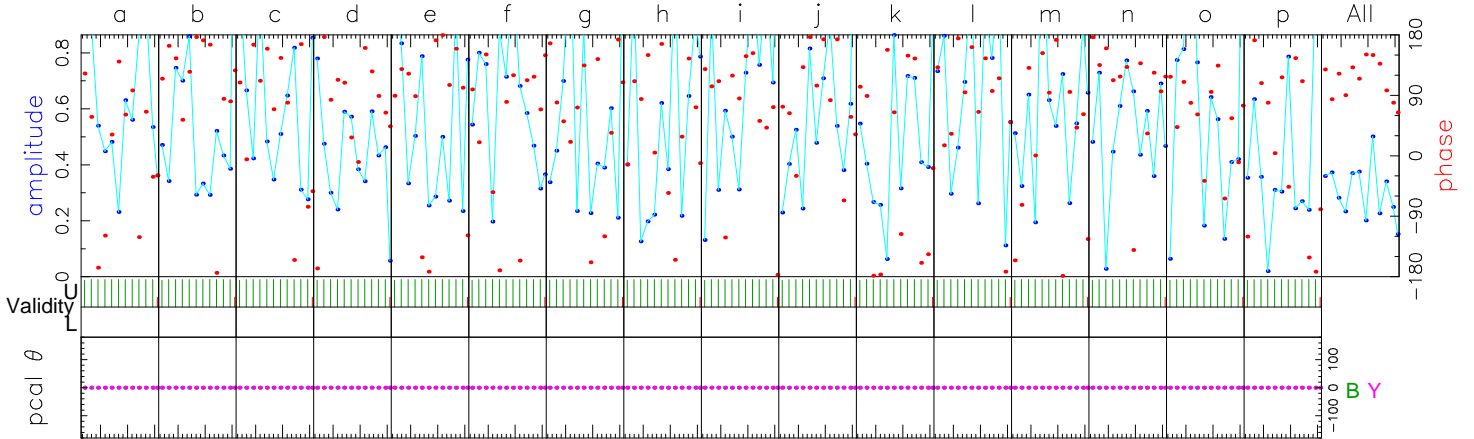


Fringe quality 9

SNR 10.0  
Int time 162.261  
Amp 0.288  
Phase 117.3  
PFD 2.2e-15  
Delays (us)  
SBD 0.002429  
MBD 0.000198  
Fringe rate (Hz) 0.006193  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212016.90  
Stop 212259.71  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050818  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	83.2	128.9	125.7	111.4	143.5	122.2	84.8	121.5	109.5	100.4	139.8	114.7	133.7	128.1	73.8	-168.8	Phase	117.3				
	0.2	0.4	0.3	0.2	0.4	0.4	0.3	0.2	0.4	0.2	0.2	0.5	0.3	0.4	0.5	0.2	Ampl.	0.3				
	104.2	128.6	242.6	94.0	129.5	131.0	39.3	80.0	255.0	209.1	41.3	128.9	232.1	129.6	129.3	134.1	Sbd box	129.3				
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.29710107669E+03														Apriori delay (usec)	-1.29710127428E+03	Resid mbdelay (usec)	1.97589E-04	+/-	1.1E-04
Sband delay (usec)			-1.29709884528E+03														Apriori clock (usec)	7.1212740E+00	Resid sbdelay (usec)	2.42900E-03	+/-	1.7E-03
Phase delay (usec)			-1.29710127050E+03														Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	3.78232E-06	+/-	3.7E-07
Delay rate (us/s)			-4.45078217300E-02														Apriori rate (us/s)	-4.45078936260E-02	Resid rate (us/s)	7.18959E-08	+/-	3.9E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.52807129121E-05	Resid phase (deg)	117.3	+/-	11.4

ph/seg (deg) 25.9 19.8  
amp/seg (%) 32.2 34.5  
ph/frq (deg) 29.0 22.8  
amp/frq (%) 34.5 39.8

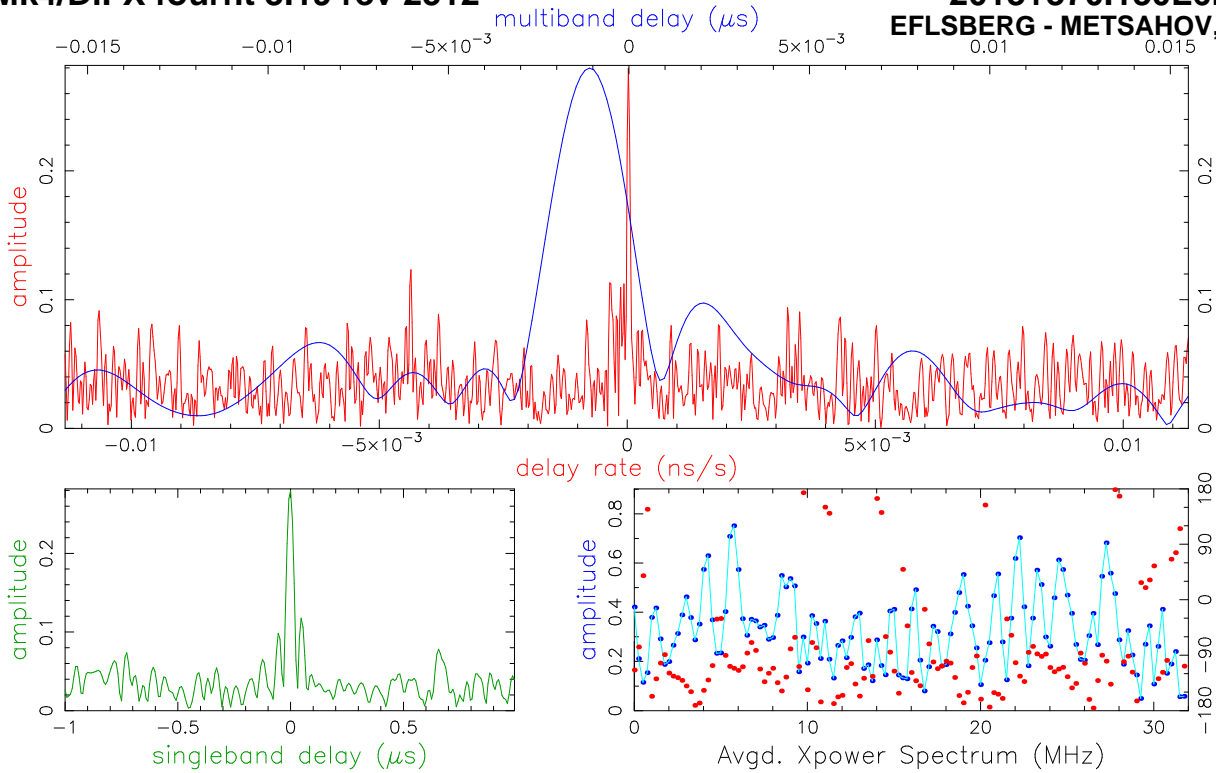
RMS Theor. Amplitude 0.288 +/- 0.029  
Search (1024X64) 0.279  
Interp. 0.000  
Inc. seg. avg. 0.297  
Inc. frq. avg. 0.289

Group delay (usec)(sbd) -1.29710107669E+03 Apriori delay (usec) -1.29710127428E+03 Resid mbdelay (usec) 1.97589E-04 +/- 1.1E-04  
Sband delay (usec) -1.29709884528E+03 Apriori clock (usec) 7.1212740E+00 Resid sbdelay (usec) 2.42900E-03 +/- 1.7E-03  
Phase delay (usec) -1.29710127050E+03 Apriori clockrate (us/s) -4.2000000E-07 Resid phdelay (usec) 3.78232E-06 +/- 3.7E-07  
Delay rate (us/s) -4.45078217300E-02 Apriori rate (us/s) -4.45078936260E-02 Resid rate (us/s) 7.18959E-08 +/- 3.9E-09  
Total phase (deg) -158.6 Apriori accel (us/s/s) 1.52807129121E-05 Resid phase (deg) 117.3 +/- 11.4

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) 333.452 1772.679 simultaneous interpolator



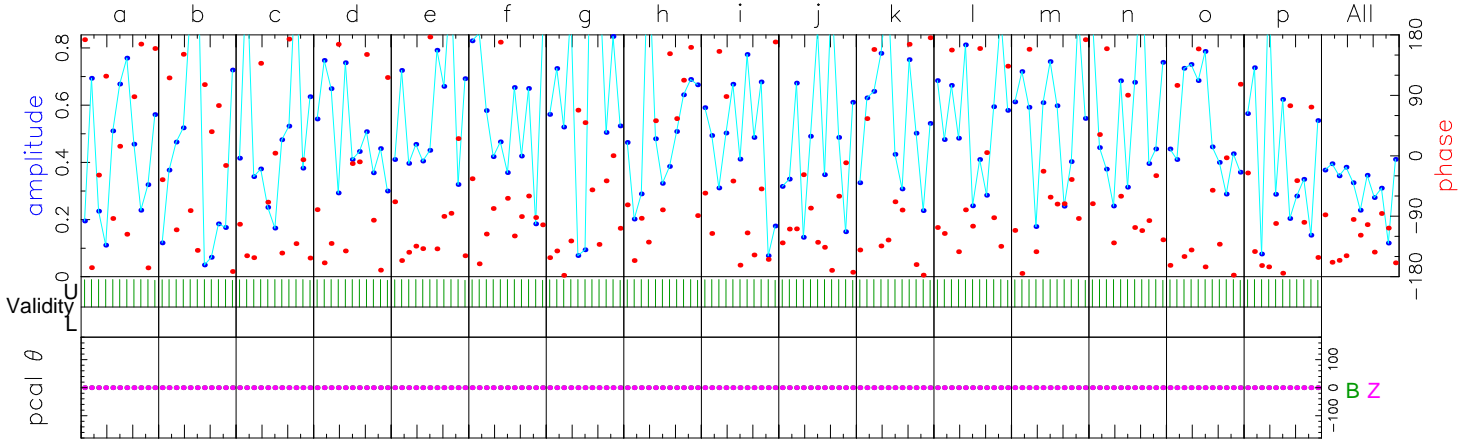


Fringe quality 9

SNR 10.3  
Int time 179.639  
Amp 0.282  
Phase -126.5  
PFD 1.1e-16  
Delays (us)  
SBD -0.002287  
MBD -0.001125  
Fringe rate (Hz) 0.002723  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050821  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

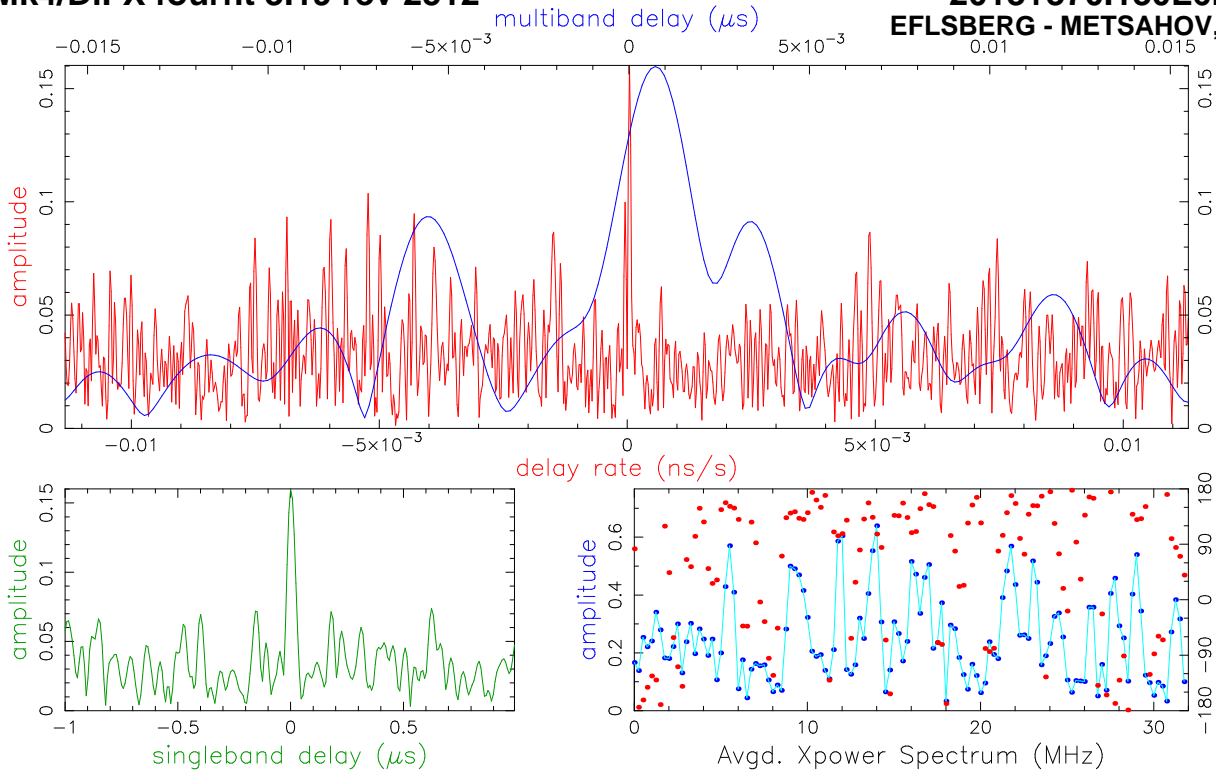


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-159.8	-142.4	-141.9	-140.1	-124.4	-100.0	-100.5	-146.1	-103.0	-124.1	-156.3	-131.3	-101.9	-92.6	-165.4	-138.8		Phase -126.5
	0.1	0.2	0.4	0.3	0.4	0.4	0.4	0.2	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.2		Ampl. 0.3
	212.5	215.1	144.1	111.0	127.6	129.2	130.5	177.8	121.1	130.1	127.7	127.5	134.5	27.6	128.3	211.2		Sbd box 128.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	2.50371756354E+03			Apriori delay (usec)			2.50371868858E+03			Resid mbdelay (usec)			-1.12504E-03			+/- 1.0E-04		
Sband delay (usec)	2.50371640208E+03			Apriori clock (usec)			1.6618298E+01			Resid sbdelay (usec)			-2.28650E-03			+/- 1.7E-03		
Phase delay (usec)	2.50371868450E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			-4.07885E-06			+/- 3.6E-07		
Delay rate (us/s)	2.50521592408E-02			Apriori rate (us/s)			2.50521276292E-02			Resid rate (us/s)			3.16116E-08			+/- 3.4E-09		
Total phase (deg)	173.8			Apriori accel (us/s/s)			-1.97977761015E-05			Resid phase (deg)			-126.5			+/- 11.1		

ph/seg (deg) 28.4 18.4 Theor. Amplitude 0.282 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 32.1 32.1 Search (1024X64) 0.268 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.6 22.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 31.2 38.7 Inc. seg. avg. 0.305 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.282 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

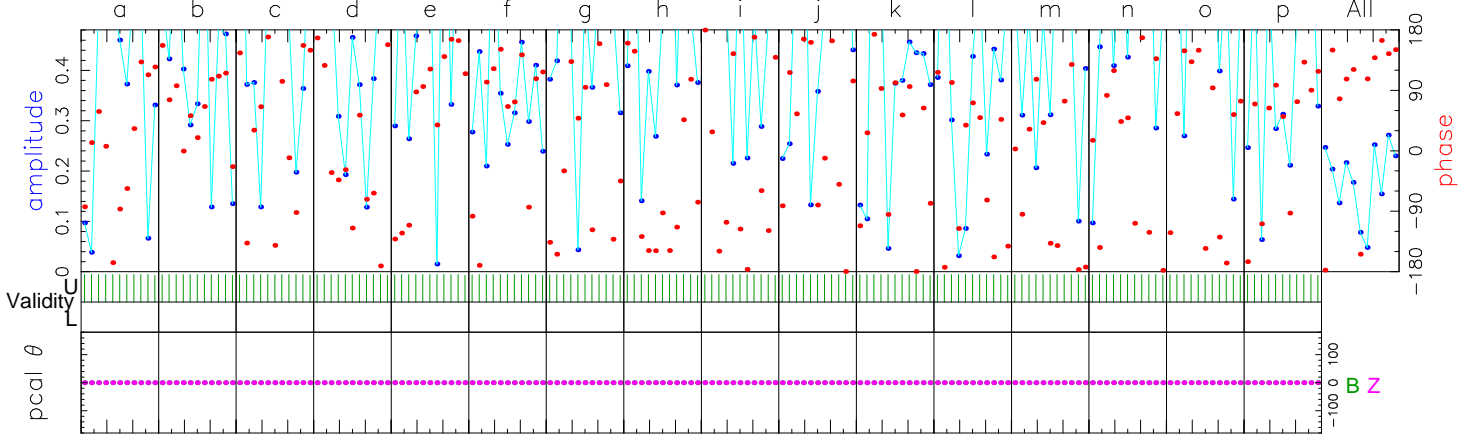
B: az 257.6 el 60.6 pa 51.1 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -196.543 -1860.155 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/BZ.W.108.130L6H



Fringe quality 0  
SNR 5.9  
Int time 179.639  
Amp 0.160  
Phase 142.2  
PFD 4.2e-01  
Delays (us)  
SBD 0.001569  
MBD 0.000729  
Fringe rate (Hz) 0.002910  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050823  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

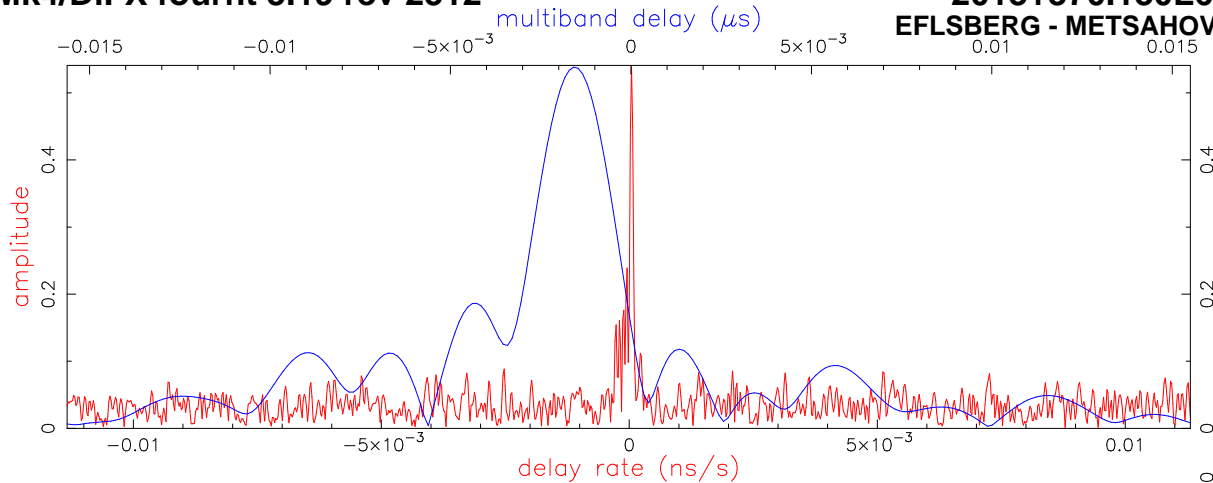


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	142.2	Phase
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.2	Ampl.
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.2	Sbd box
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	PC freqs
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	PC phase
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.0	ManI PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.0	PC amp
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
																		Chan ids
																		Tracks

Group delay (usec)(sbd) 2.50371941743E+03 Apriori delay (usec) 2.50371868858E+03 Resid mbdelay (usec) 7.28849E-04 +/- 1.8E-04  
Sband delay (usec) 2.50372025808E+03 Apriori clock (usec) 1.6618298E+01 Resid sbdelay (usec) 1.56950E-03 +/- 2.9E-03  
Phase delay (usec) 2.50371869316E+03 Apriori clockrate (us/s) -2.1629280E-07 Resid phdelay (usec) 4.58405E-06 +/- 6.3E-07  
Delay rate (us/s) 2.50521614147E-02 Apriori rate (us/s) 2.50521276292E-02 Resid rate (us/s) 3.37854E-08 +/- 6.0E-09  
Total phase (deg) 82.5 Apriori accel (us/s/s) -1.97977761015E-05 Resid phase (deg) 142.2 +/- 19.5

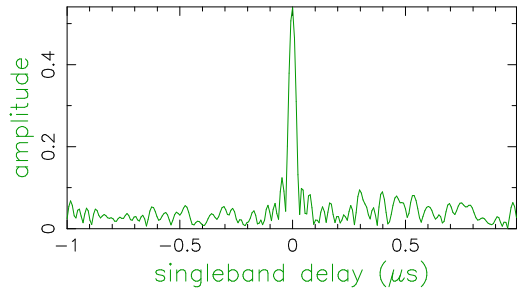
ph/seg (deg) RMS Theor. Amplitude 0.160 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 35.0 32.4 Search (1024X64) 0.147 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 45.5 56.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 47.1 39.0 Inc. seg. avg. 0.158 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
amp/frq (%) 60.1 68.1 Inc. frq. avg. 0.169 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -196.543 -1860.155 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/BZ.W.126.130L6H

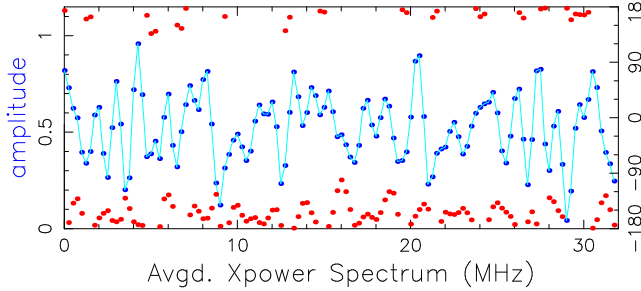


Fringe quality 8

SNR 19.8  
Int time 179.639  
Amp 0.541  
Phase -164.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.001611  
MBD -0.001572  
Fringe rate (Hz)  
0.002914  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

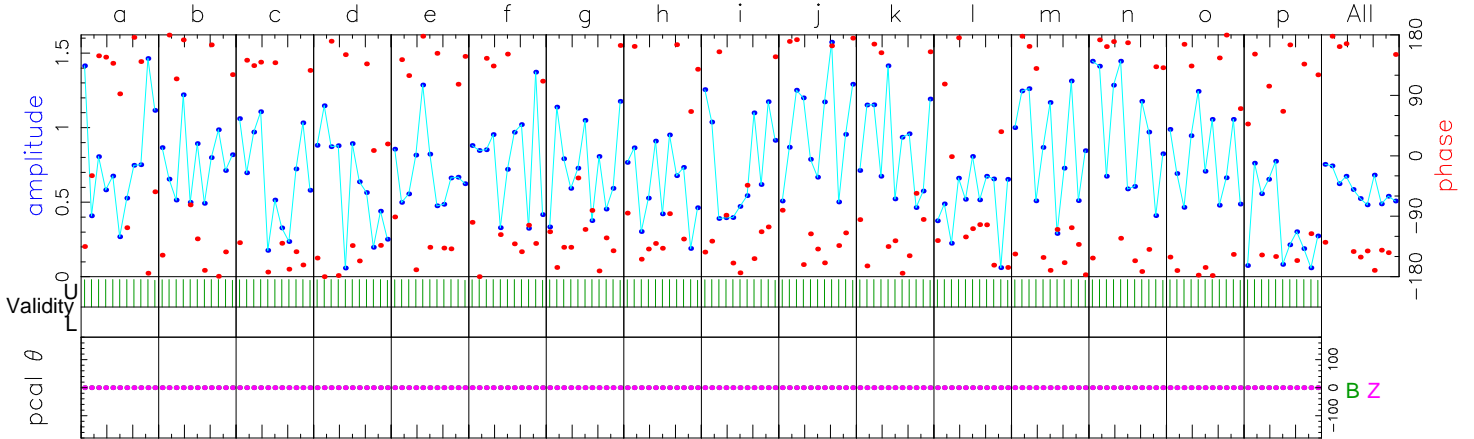


delay rate (ns/s)



Exp. c192c  
Exper # 16383  
Yr:day 2019:278  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build  
2020:076:093935  
2020:086:050816  
2020:014:135814  
RA & Dec (J2000)  
20h15m28.729803s  
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

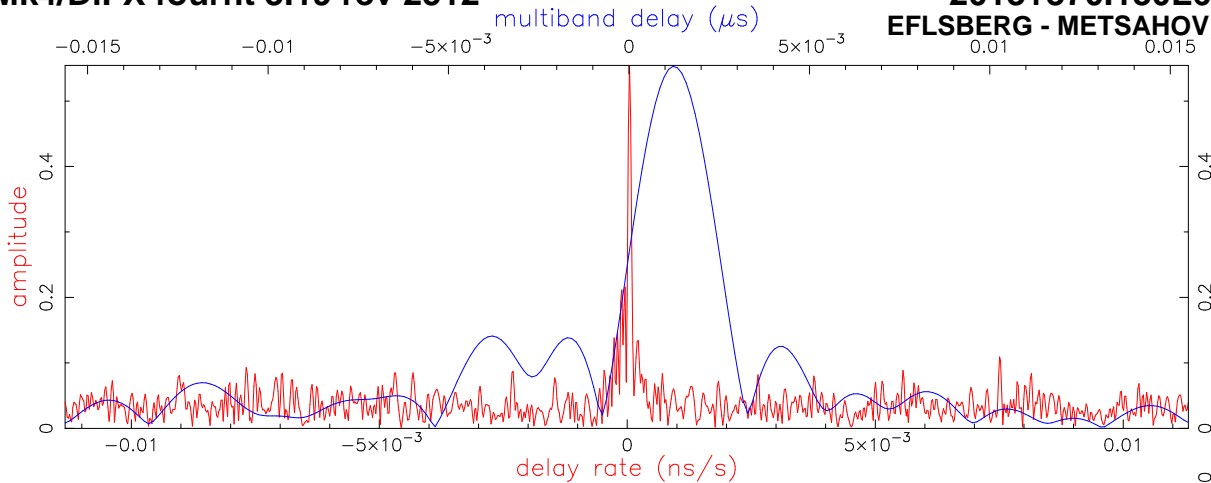


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-171.2	-173.9	172.4	-169.1	-176.6	-160.9	-139.5	-141.4	-139.1	-162.0	-156.7	-138.3	-161.9	-172.1	179.3	165.6	Phase	-164.1
	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.8	0.7	0.3	0.8	0.8	0.7	0.2	Ampl.	0.5
	130.2	128.8	128.6	128.8	129.7	129.1	128.9	128.8	128.5	128.6	128.3	130.8	128.9	128.5	128.4	133.2	Sbd box	128.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	

Group delay (usec)(sbd) 2.50371711649E+03 Apriori delay (usec) 2.50371868858E+03 Resid mbdelay (usec) -1.57209E-03 +/- 5.4E-05  
 Sband delay (usec) 2.50371707758E+03 Apriori clock (usec) 1.6618298E+01 Resid sbdelay (usec) -1.61100E-03 +/- 8.7E-04  
 Phase delay (usec) 2.50371868329E+03 Apriori clockrate (us/s) -2.1629280E-07 Resid phdelay (usec) -5.29021E-06 +/- 1.9E-07  
 Delay rate (us/s) 2.50521614572E-02 Apriori rate (us/s) 2.50521276292E-02 Resid rate (us/s) 3.38280E-08 +/- 1.8E-09  
 Total phase (deg) 136.3 Apriori accel (us/s/s) -1.97977761015E-05 Resid phase (deg) -164.1 +/- 5.8

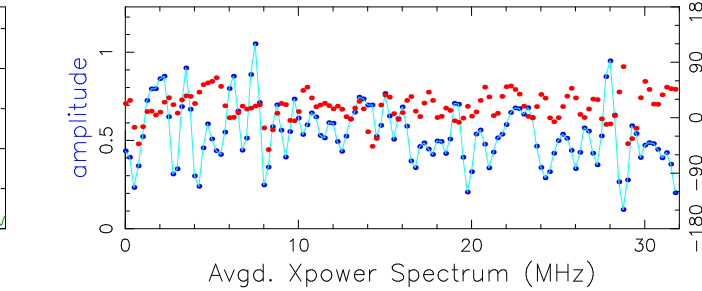
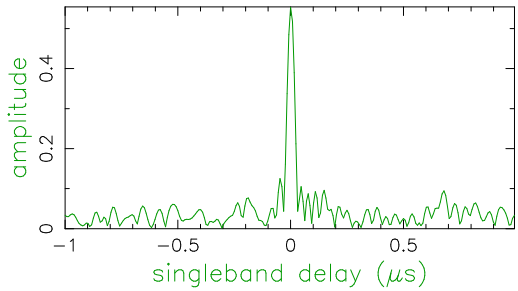
RMS Theor. Amplitude 0.541 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 26.5 9.6 Search (1024X64) 0.515 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 20.9 16.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 18.2 11.6 Inc. seg. avg. 0.592 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 29.9 20.2 Inc. frq. avg. 0.547 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -196.543 -1860.155 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/BZ.W.83.130L6H



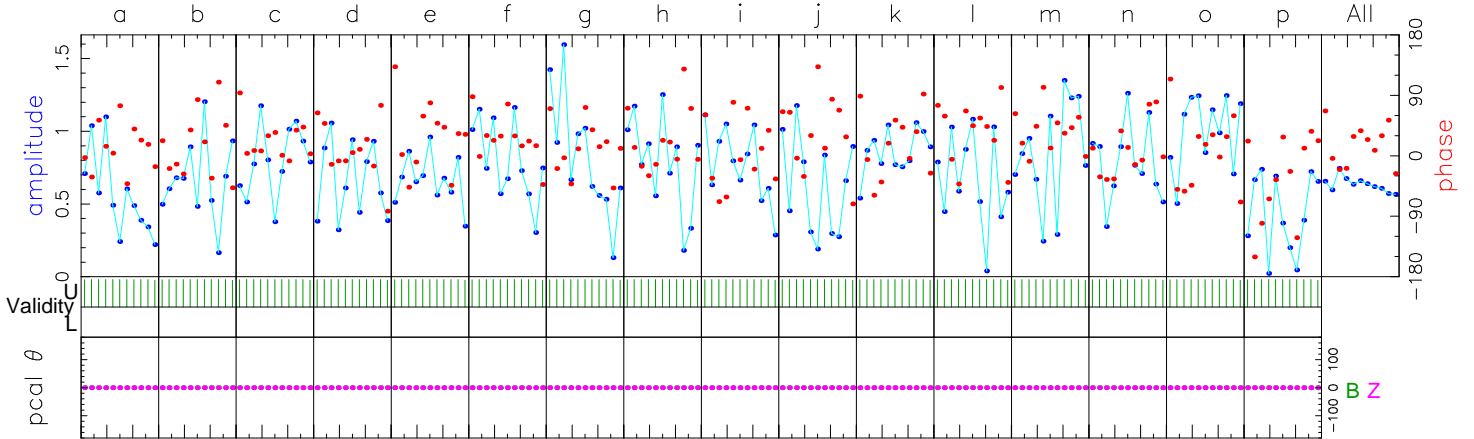
Fringe quality 8

SNR 20.3  
Int time 179.639  
Amp 0.554  
Phase 15.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.001284  
MBD 0.001251  
Fringe rate (Hz) 0.003124  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c192c  
Yr:day 16383  
Start 212000.00  
Stop 212300.23  
FRT 212130.00  
Corr/FF/build 2020:076:093935  
2020:086:050818  
2020:014:135814  
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

Group delay (usec)(sbd)	2.50371993980E+03	Apriori delay (usec)	2.50371868858E+03	Resid mbdelay (usec)	1.25122E-03	+/-	5.3E-05
Sband delay (usec)	2.50371997258E+03	Apriori clock (usec)	1.6618298E+01	Resid sbdelay (usec)	1.28400E-03	+/-	8.5E-04
Phase delay (usec)	2.50371868909E+03	Apriori clockrate (us/s)	-2.1629280E-07	Resid phdelay (usec)	5.10965E-07	+/-	1.8E-07
Delay rate (us/s)	2.50521638975E-02	Apriori rate (us/s)	2.50521276292E-02	Resid rate (us/s)	3.62682E-08	+/-	1.7E-09
Total phase (deg)	316.2	Apriori accel (us/s/s)	-1.97977761015E-05	Resid phase (deg)	15.8	+/-	5.6

ph/seg (deg)	RMS 29.5	Theor. 9.4	Amplitude Search (1024X64)	0.554 +/- 0.027	0.529	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	16.9	16.3	Interp.	0.000	0.529	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	13.2	11.3	Inc. seg. avg.	0.626	0.529	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	24.8	19.7	Inc. frq. avg.	0.552	0.529	Sample rate(MISamp/s): 64	dr window (ns/s) -0.016 0.016
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 128	t_cohere infinite

B: az 257.6 el 60.6 pa 51.1 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -196.543 -1860.155 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192c/v2/1234/No0048/BZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/BZ.W.89.130L6H