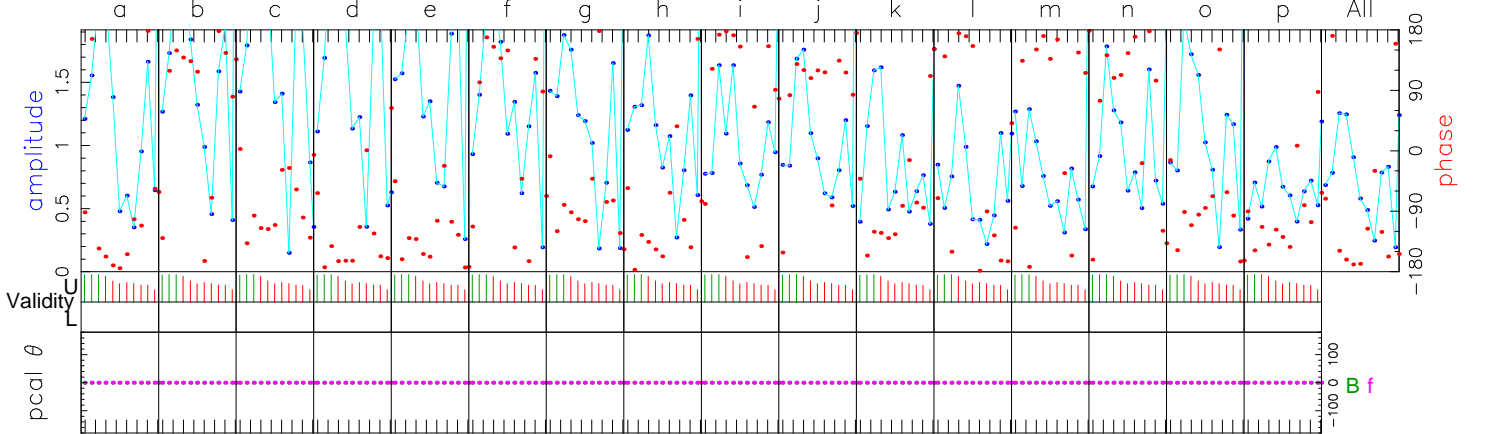


Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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
	-152.0	149.4	-95.5	-146.4	-124.6	160.9	-81.4	-128.9	168.8	124.4	-113.3	-166.2	178.8	135.9	-92.3	-121.0		Phase -149.4
	1.1	1.3	1.4	1.4	1.2	1.0	1.0	0.8	0.7	0.8	0.7	0.5	0.6	0.7	0.9	0.5		Ampl. 0.9
	129.8	128.4	128.9	128.8	129.0	128.5	128.9	128.5	128.6	128.8	128.6	128.7	128.8	129.2	128.8	130.4		Sbd box 128.8
U/L	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0		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

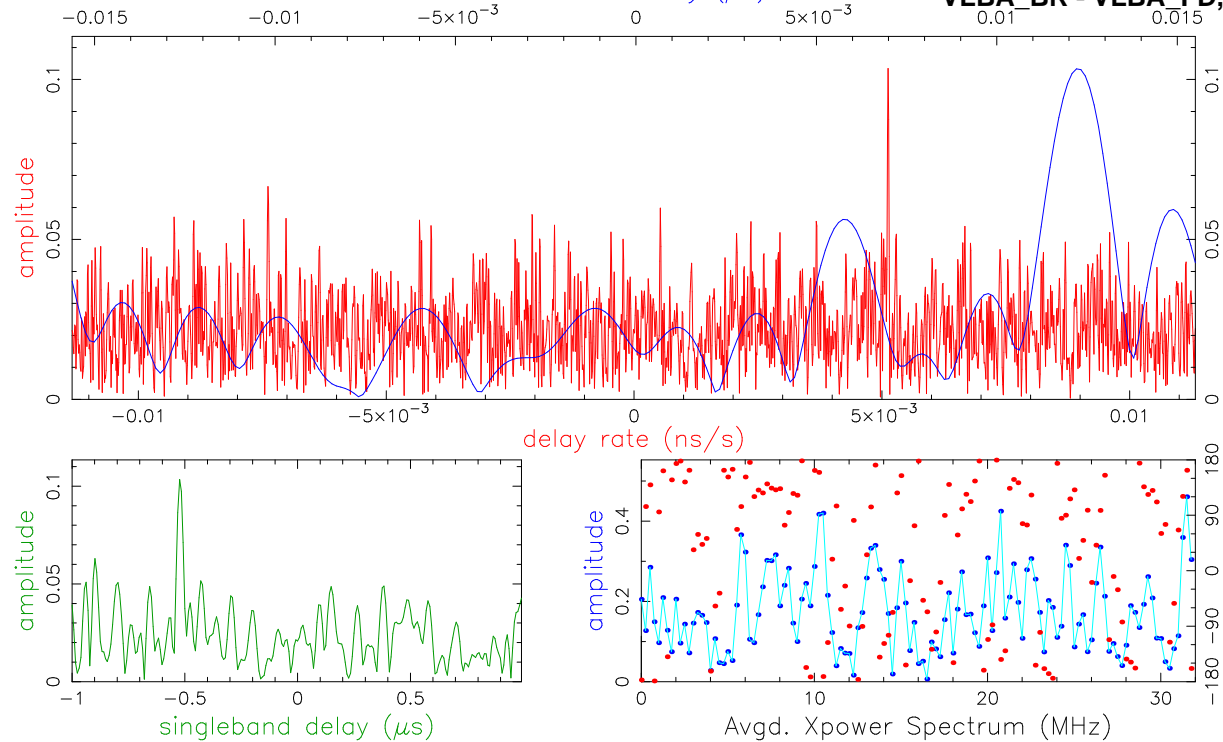
Group delay (usec)(sbd)	-7.33080406351E+03	Apriori delay (usec)	-7.33080738144E+03	Resid mbdelay (usec)	3.31792E-03	+/-	3.5E-05
Sband delay (usec)	-7.33080860994E+03	Apriori clock (usec)	1.6325451E+01	Resid sbdelay (usec)	-1.22850E-03	+/-	5.6E-04
Phase delay (usec)	-7.33080738625E+03	Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	-4.81761E-06	+/-	1.2E-07
Delay rate (us/s)	-1.72924323621E+00	Apriori rate (us/s)	-1.72924290421E+00	Resid rate (us/s)	-3.32002E-07	+/-	5.9E-10
Total phase (deg)		Apriori accel (us/s/s)	4.73514325271E-05	Resid phase (deg)	-149.4	+/-	3.7

	RMS	Theor.	Amplitude	0.639 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.1	5.9	Search (2048X64)	0.634	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	55.4	10.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	50.9	7.4	Inc. seg. avg.	0.776	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	63.2	12.9	Inc. frq. avg.	0.920	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

Mk4/DiFX fourfit 3.19 rev 2512

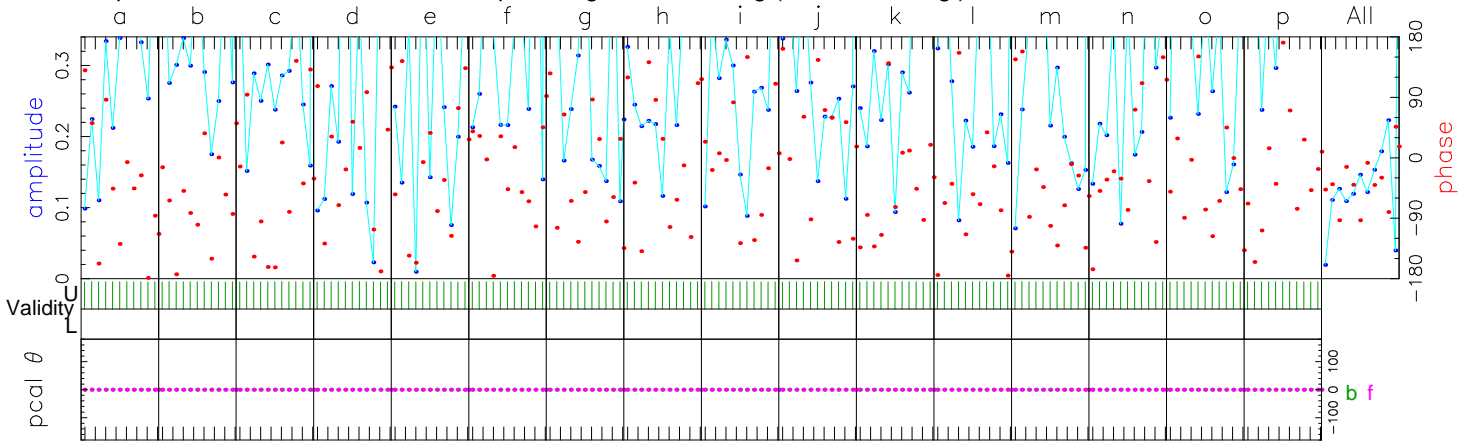
3C454_3.130MTI, No0080, bf
VLBA_BR - VLBA_FD, fgroup W, pol RR

multiband delay (μ s)



Fringe quality 0
SNR 5.8
Int time 408.243
Amp 0.113
Phase -48.0
PFD 8.9e-01
Delays (us)
SBD -0.521579
MBD 0.012247
Fringe rate (Hz)
0.442552
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020637.68
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055547
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

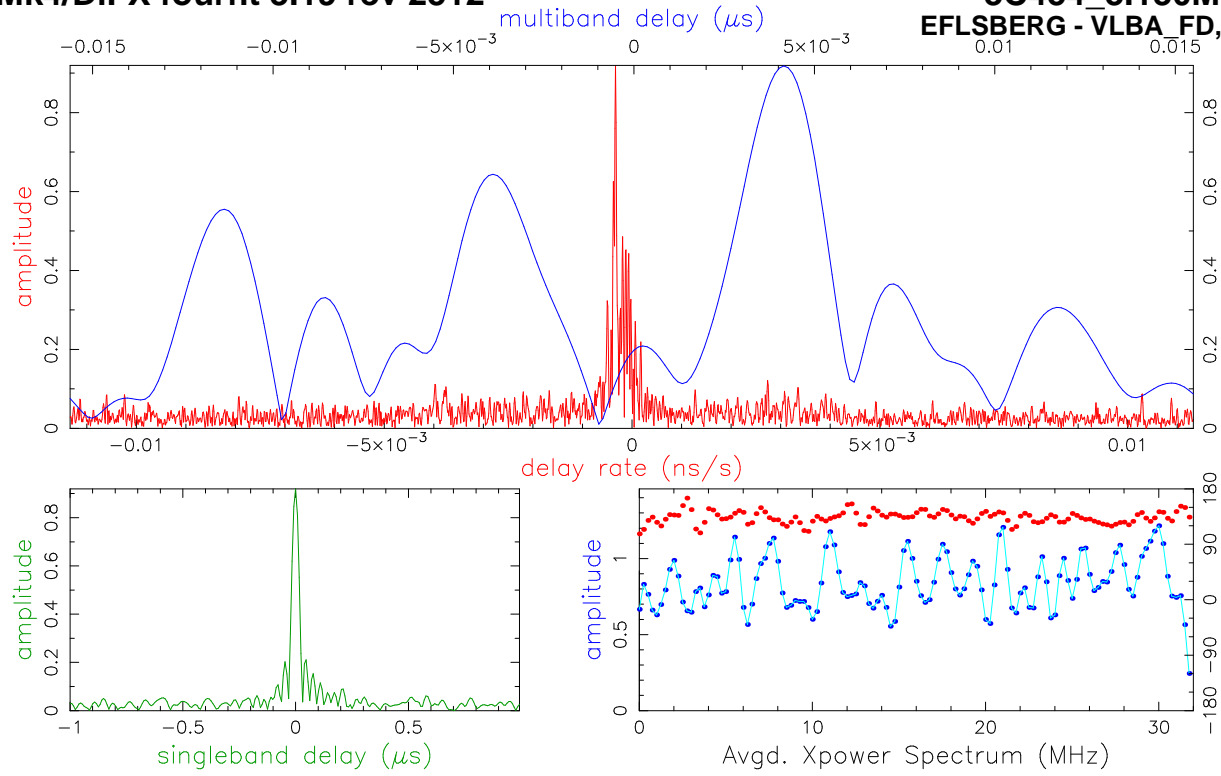
Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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				
	-51.8	-58.4	-119.6	9.2	-43.4	-29.0	-66.3	-123.2	8.4	92.8	-60.5	-64.4	-73.8	-53.3	-44.1	-36.1	Phase	-48.0				
	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.0	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1				
	138.5	229.5	183.2	29.3	103.6	149.9	69.0	25.3	243.9	23.5	234.1	102.1	138.6	221.8	120.8	13.9	Sbd box	62.2				
U/L	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	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	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					
																	Tracks					
Group delay (usec)(sbd)			-4.39377731469E+03														Apriori delay (usec)	-4.39325831179E+03	Resid mbdelay (usec)	1.22471E-02	+/-	1.9E-04
Sband delay (usec)			-4.39377989079E+03														Apriori clock (usec)	-1.0967960E+00	Resid sbdelay (usec)	-5.21579E-01	+/-	3.0E-03
Phase delay (usec)			-4.39325831334E+03														Apriori clockrate (us/s)	-1.5144557E-07	Resid phdelay (usec)	-1.54912E-06	+/-	6.4E-07
Delay rate (us/s)			-6.88118717919E-03														Apriori rate (us/s)	-6.88632477461E-03	Resid rate (us/s)	5.13760E-06	+/-	2.7E-09
Total phase (deg)					-40.0												Apriori accel (us/s/s)	3.07768094301E-05	Resid phase (deg)	-48.0	+/-	19.9

ph/seg (deg) 39.8 34.5 Theor. Amplitude 0.113 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.7 60.2 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.9 39.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.6 69.5 Inc. seg. avg. 0.115 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 103.7 el 33.6 pa -42.4 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 86.426 2703.700 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/bf..130MTI Output file: /Exps/c192c/v2/1234/No0080/bf.W.28.130MTI



Fringe quality 1

SNR 44.6

Int time 314.361

Amp 0.920

Phase 104.8

PFD 0.0e+00

Delays (us)

SBD -0.000814

MBD 0.004154

Fringe rate (Hz)

-0.028561

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 020636.66

Stop 021328.82

FRT 021000.00

Corr/FF/build

2020:076:181504

2020:086:055548

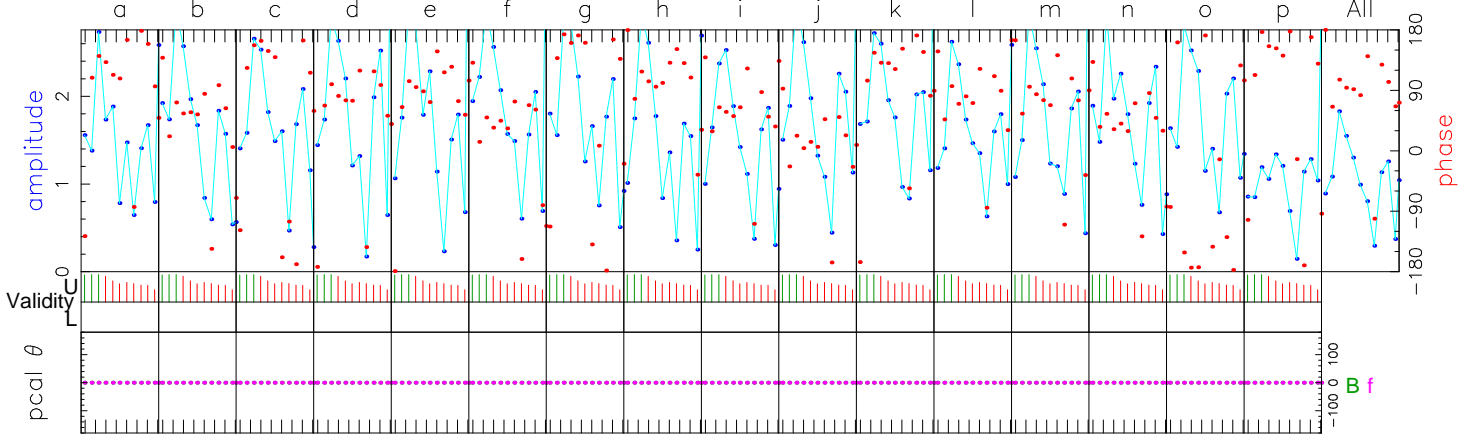
2020:014:135814

RA & Dec (J2000)

22h53m57.747940s

+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

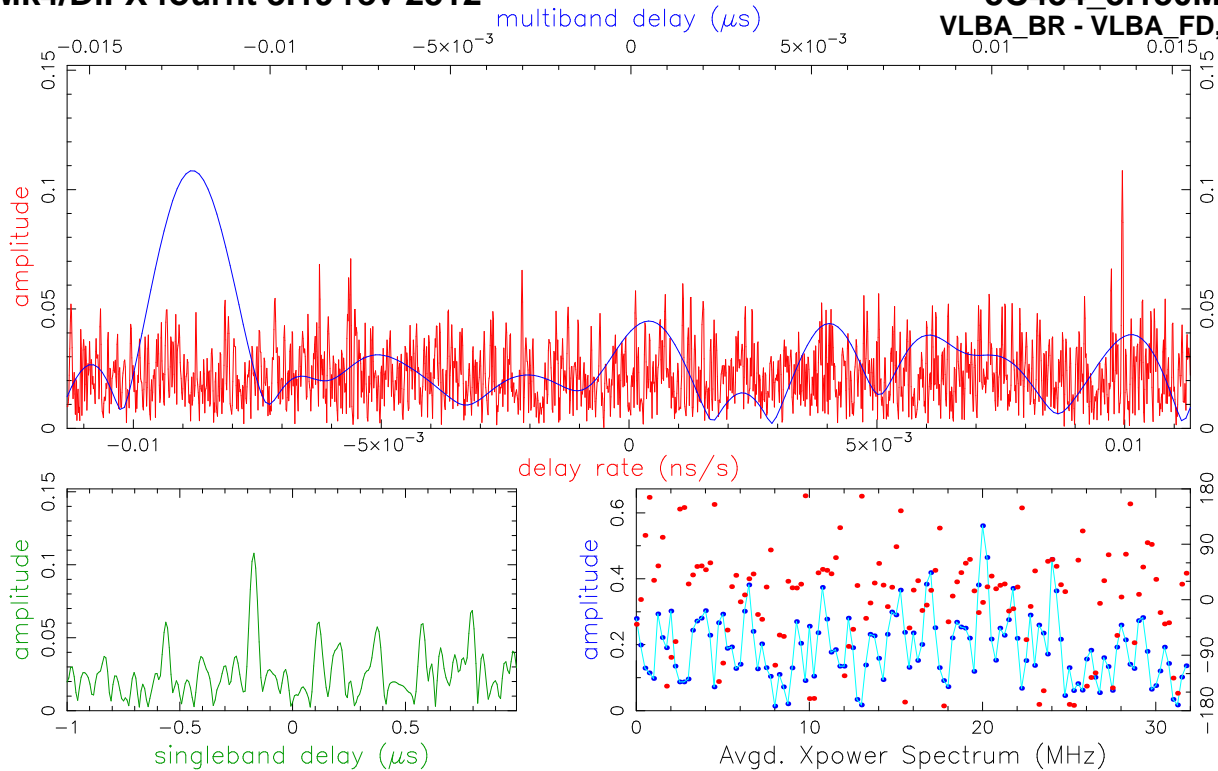


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0							
B	1000	1000	1000	1000	1000	1000	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							
f	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)		-7.33080322736E+03															Apriori delay (usec)	-7.33080738144E+03	Resid mbdelay (usec)	4.15408E-03	+/-	2.4E-05	
Sband delay (usec)		-7.33080819594E+03															Apriori clock (usec)	1.6325451E+01	Resid sbdelay (usec)	-8.14500E-04	+/-	3.9E-04	
Phase delay (usec)		-7.33080737806E+03															Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	3.38030E-06	+/-	8.3E-08	
Delay rate (us/s)		-1.72924323577E+00															Apriori rate (us/s)	-1.72924290421E+00	Resid rate (us/s)	-3.31562E-07	+/-	4.1E-10	
Total phase (deg)																	Apriori accel (us/s/s)	4.73514325271E-05	Resid phase (deg)	104.8	+/-	2.6	
ph/seg (deg)	RMS	Theor.															Amplitude	0.920 +/- 0.021	Pcal mode: MANUAL, MANUAL				
amp/seg (%)	55.0	4.1															Search (2048X64)	0.903	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				
ph/frq (deg)	53.7	5.1															Interp.	0.000	SampCntNorm: enabled				
amp/frq (%)	54.4	9.0															Inc. seg. avg.	1.104	mb window (us)	-1.000	1.000		
																	Inc. frq. avg.	1.380	dr window (ns/s)	-0.016	0.016		
B: az 264.5 el 25.7 pa 41.2																			Sample rate(MISamp/s): 64				
f: az 101.0 el 49.4 pa -61.6																			Data rate(Mb/s): 2048				
u,v (fr/asec) 10383.784 3259.730																			nlags: 128				
Control file: cf_1234_gmva																				t_cohere infinite			
Input file: /Exps/c192c/v2/1234/No0080/Bf..130MTI																				ion window (TEC)	0.00	0.00	
Output file: /Exps/c192c/v2/1234/No0080/Bf.W.32.130MTI																							

simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C454_3.130MTI, No0080, bf
VLBA_BR - VLBA_FD, fgroup W, pol LR

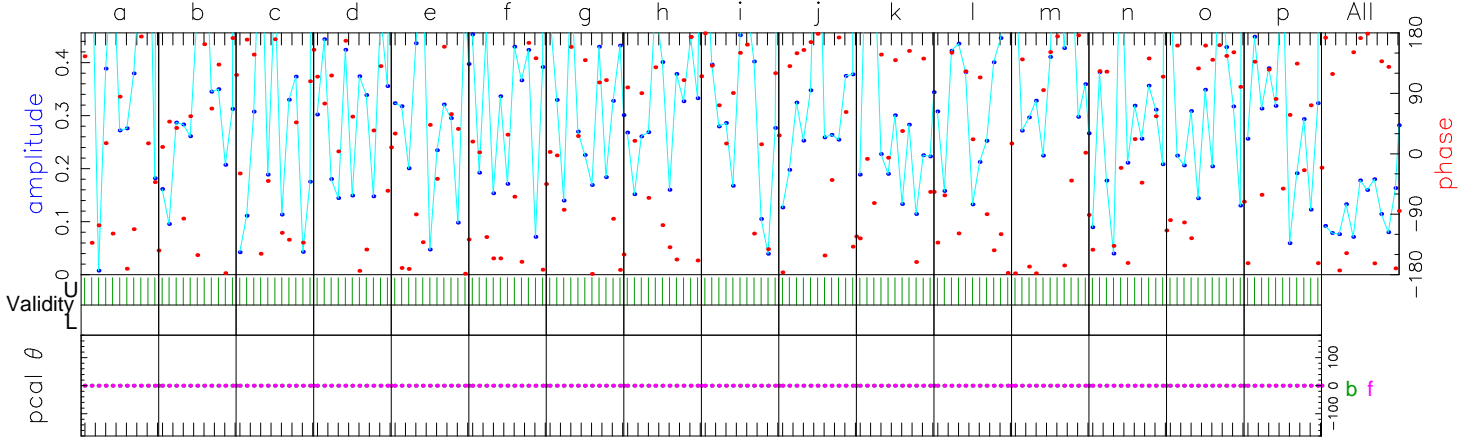


Fringe quality 0

SNR 6.0
Int time 408.243
Amp 0.152
Phase 174.4
PFD 4.5e-01
Delays (us)
SBD -0.173040
MBD -0.012145
Fringe rate (Hz) 0.858238
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020637.68
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055553
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



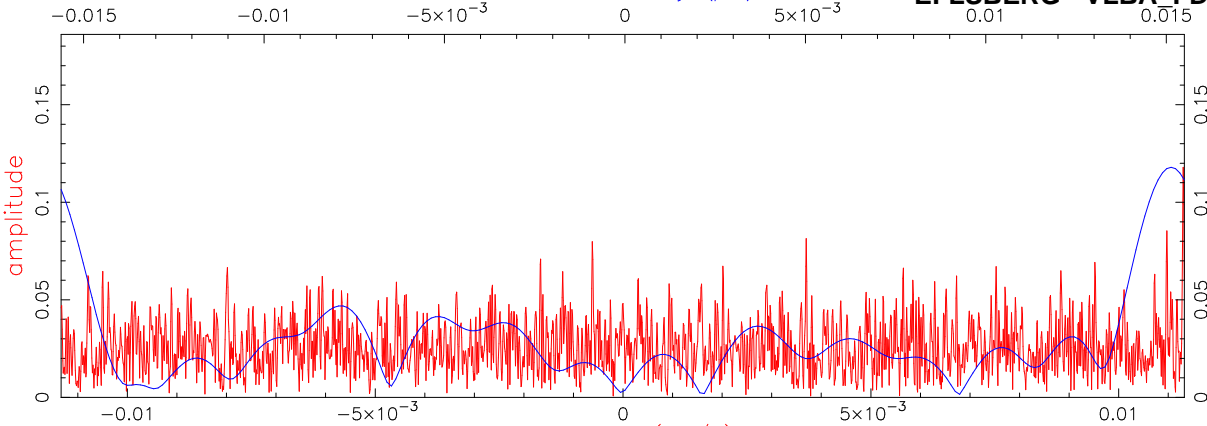
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-153.0	144.9	-173.3	131.0	-153.4	-138.7	129.4	167.5	146.7	173.6	-60.7	-155.5	178.0	66.9	177.6	146.2	Phase	174.4
	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.3	0.1	0.3	0.3	0.1	0.3	0.0	Ampl.	0.1
	99.9	139.6	93.0	244.9	70.1	166.8	156.3	253.2	104.4	107.6	213.8	54.5	155.3	102.9	106.3	25.7	Sbd box	106.9
U/L	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	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: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 amp	
f	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	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-4.39342670631E+03			Apriori delay (usec)			-4.39325831179E+03			Resid mbdelay (usec)			-1.21445E-02			+/- 1.8E-04		
Sband delay (usec)	-4.39343135229E+03			Apriori clock (usec)			-1.0967960E+00			Resid sbdelay (usec)			-1.73040E-01			+/- 2.9E-03		
Phase delay (usec)	-4.39325830617E+03			Apriori clockrate (us/s)			-1.5144557E-07			Resid phdelay (usec)			5.62443E-06			+/- 6.2E-07		
Delay rate (us/s)	-6.87636147950E-03			Apriori rate (us/s)			-6.88632477461E-03			Resid rate (us/s)			9.96330E-06			+/- 2.6E-09		
Total phase (deg)	-177.5			Apriori accel (us/s/s)			3.07768094301E-05			Resid phase (deg)			174.4			+/- 19.2		

ph/seg (deg) RMS Theor. Amplitude 0.152 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.6 33.2 Search (2048X64) 0.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.8 58.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.7 38.4 Inc. seg. avg. 0.146 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.9 66.9 Inc. frq. avg. 0.149 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

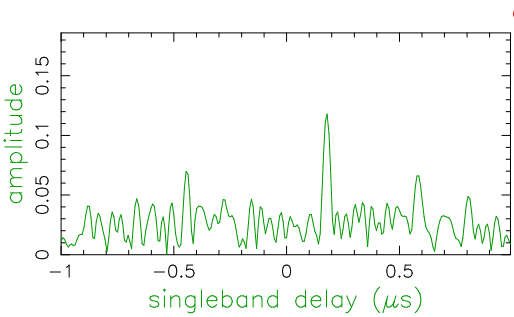
b: az 103.7 el 33.6 pa -42.4 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 86.426 2703.700 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/bf..130MTI Output file: /Exps/c192c/v2/1234/No0080/bf.W.50.130MTI

multiband delay (μ s)

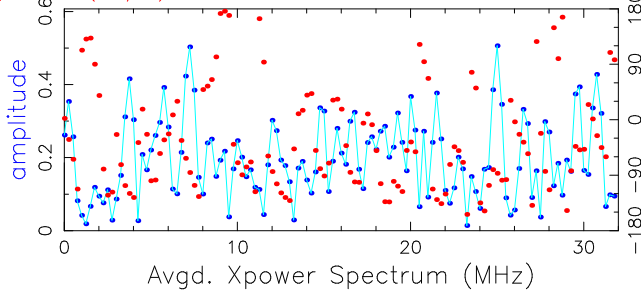
Fringe quality 0



SNR 5.7
Int time 314.361
Amp 0.186
Phase 148.9
PFD 8.9e-01
Delays (us)
SBD 0.177857
MBD 0.015107
Fringe rate (Hz) 0.975565
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

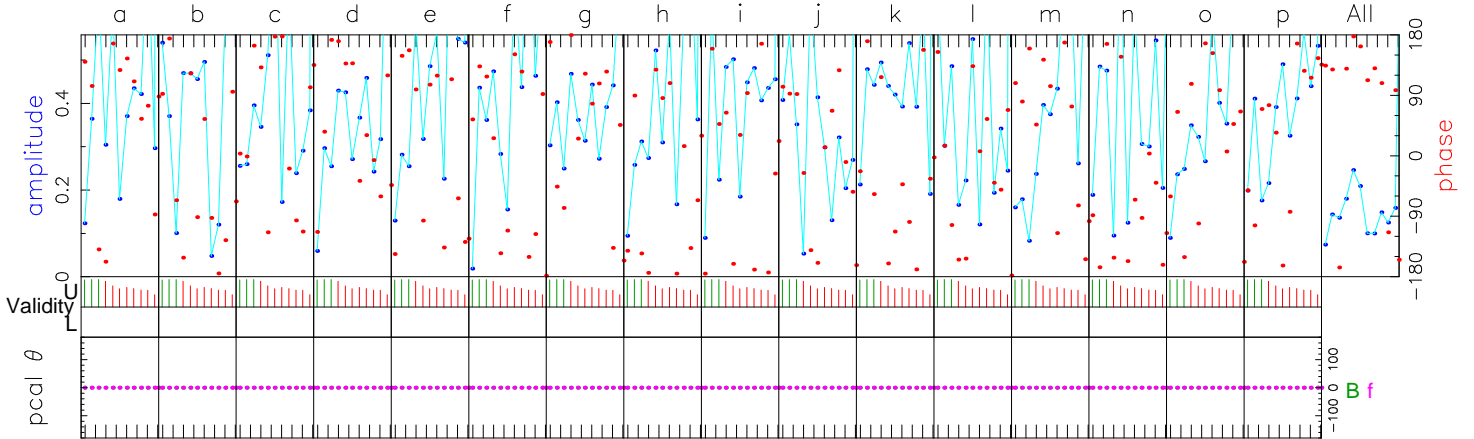


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021328.82
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055553
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

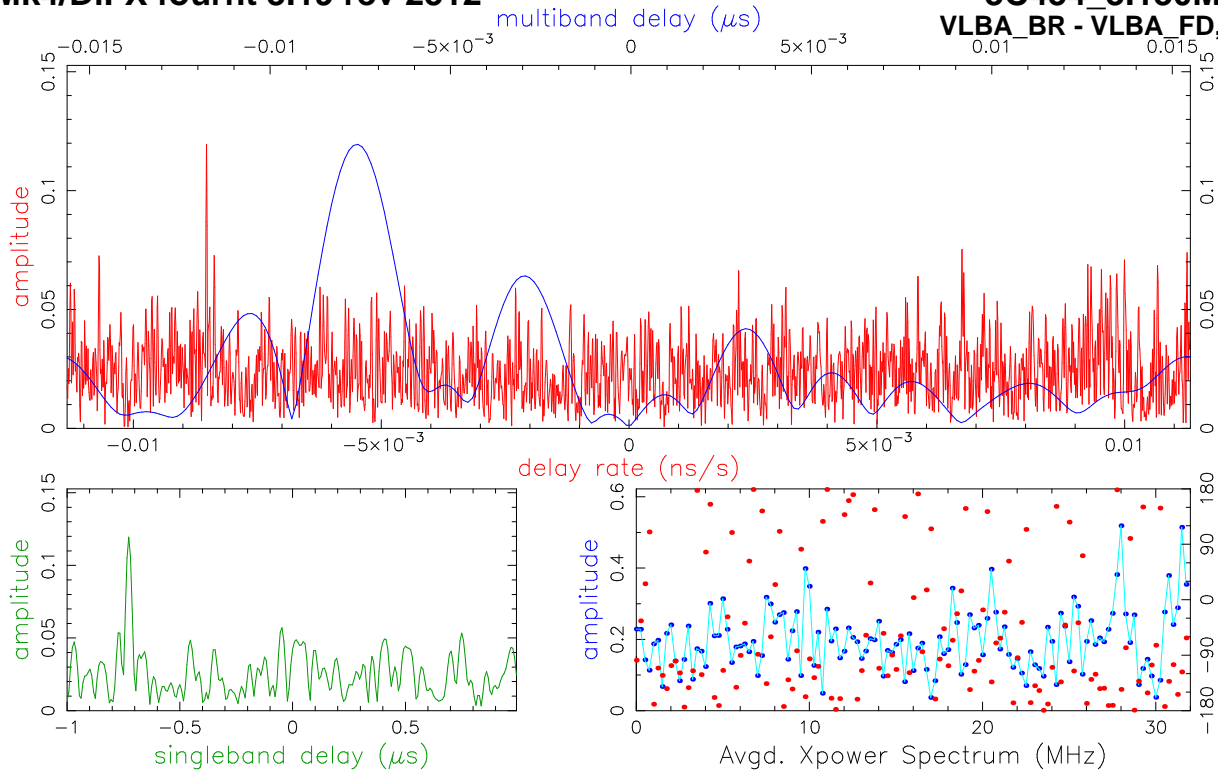
Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0								
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								
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids							
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks							
Group delay (usec)(sbd)		-7.33063602442E+03															Apriori delay (usec)	-7.33080738144E+03	Resid mbdelay (usec)	1.51070E-02	+/-	1.9E-04		
Sband delay (usec)		-7.33062952494E+03															Apriori clock (usec)	1.6325451E+01	Resid sbdelay (usec)	1.77857E-01	+/-	3.0E-03		
Phase delay (usec)		-7.33080737663E+03															Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	4.80214E-06	+/-	6.4E-07		
Delay rate (us/s)		-1.72923157887E+00															Apriori rate (us/s)	-1.72924290421E+00	Resid rate (us/s)	1.13253E-05	+/-	3.2E-09		
Total phase (deg)					-152.4												Apriori accel (us/s/s)	4.73514325271E-05	Resid phase (deg)	148.9	+/-	19.9		
ph/seg (deg)	RMS	39.1	Theor.	31.8													Amplitude	0.186 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	50.7	55.5	Search (2048X64)	0.116													Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	36.0	39.9	Inc. seg. avg.	0.195													Inc. frq. avg.	0.176	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
amp/frq (%)	44.0	69.6	Inc. frq. avg.	0.176													Search (2048X64)	0.116	Sample rate(MISamp/s):	64	dr window (ns/s)	-0.011 0.011		
B: az 264.5 el 25.7 pa 41.2	f: az 101.0 el 49.4 pa -61.6	u,v (fr/asec)	10383.784 3259.730														Inc. frq. avg.	0.176	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/No0080/Bf..130MTI	Output file: /Exps/c192c/v2/1234/No0080/Bf.W.51.130MTI															Inc. frq. avg.	0.176						

Mk4/DiFX fourfit 3.19 rev 2512

3C454_3.130MTI, No0080, bf
VLBA_BR - VLBA_FD, fgroup W, pol RL

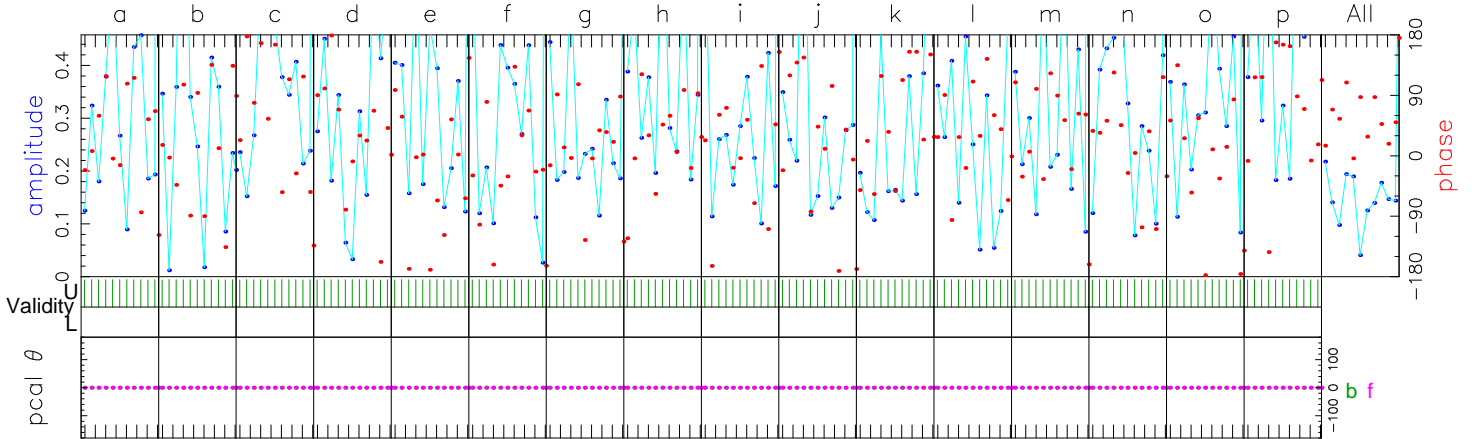


Fringe quality 0

SNR 6.6
Int time 408.243
Amp 0.153
Phase 47.2
PFD 1.1e-02
Delays (us)
SBD -0.726489
MBD -0.007595
Fringe rate (Hz)
-0.735159
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020637.68
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055557
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

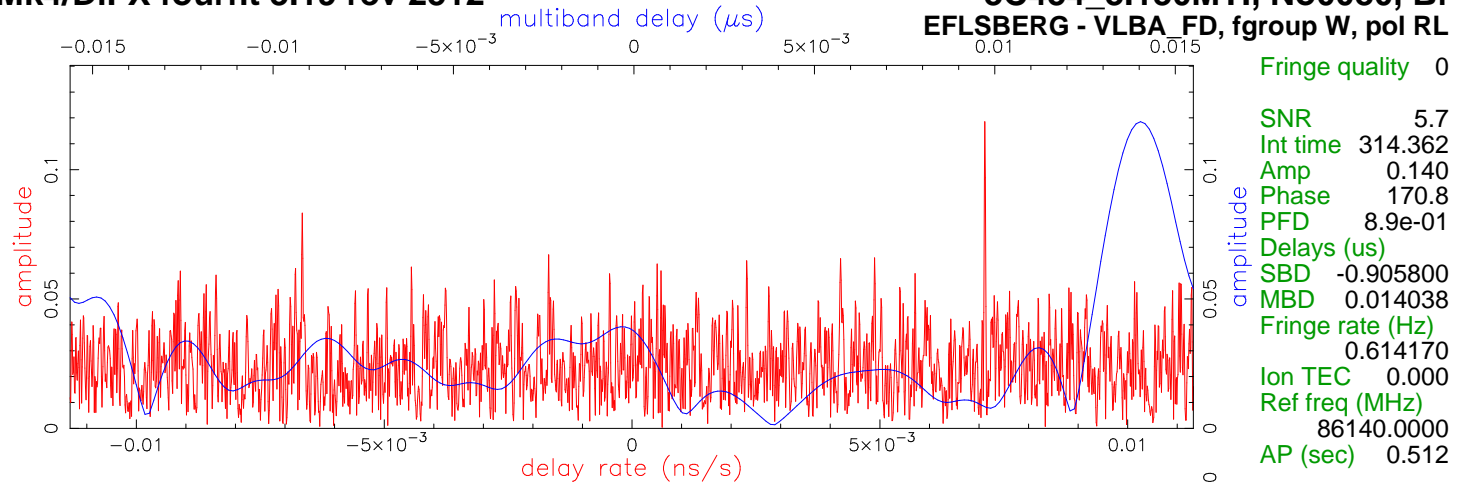


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
28.8	83.2	103.8	72.1	12.3	-1.3	17.6	44.9	22.8	93.4	114.1	6.5	43.8	50.5	31.6	63.5	Phase	47.2	
0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	Ampl.	0.1	
28.8	225.2	214.4	132.8	240.9	146.3	215.9	36.9	46.3	198.5	96.1	182.1	166.9	249.1	210.4	229.3	Sbd box	36.0	
UL	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	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) -4.39398465681E+03 Apriori delay (usec) -4.39325831179E+03 Resid mbdelay (usec) -7.59502E-03 +/- 1.6E-04
 Sband delay (usec) -4.39398480079E+03 Apriori clock (usec) -1.0967960E+00 Resid sbdelay (usec) -7.26489E-01 +/- 2.6E-03
 Phase delay (usec) -4.39325831027E+03 Apriori clockrate (us/s) -1.5144557E-07 Resid phdelay (usec) 1.52357E-06 +/- 5.6E-07
 Delay rate (us/s) -6.89485923635E-03 Apriori rate (us/s) -6.88632477461E-03 Resid rate (us/s) -8.53446E-06 +/- 2.4E-09
 Total phase (deg) -304.7 Apriori accel (us/s/s) 3.07768094301E-05 Resid phase (deg) 47.2 +/- 17.4

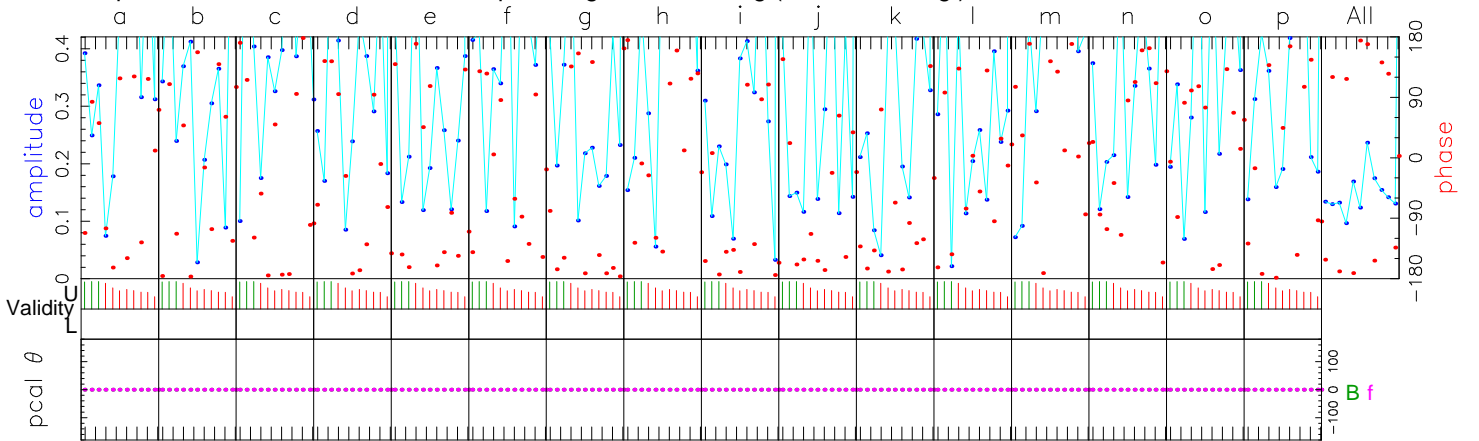
RMS Theor. Amplitude 0.153 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.2 30.1 Search (2048X64) 0.117 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.2 52.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 37.1 34.7 Inc. seg. avg. 0.166 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 40.1 60.6 Inc. frq. avg. 0.149 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 103.7 el 33.6 pa -42.4 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 86.426 2703.700 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/bf..130MTI Output file: /Exps/c192c/v2/1234/No0080/bf.W.67.130MTI



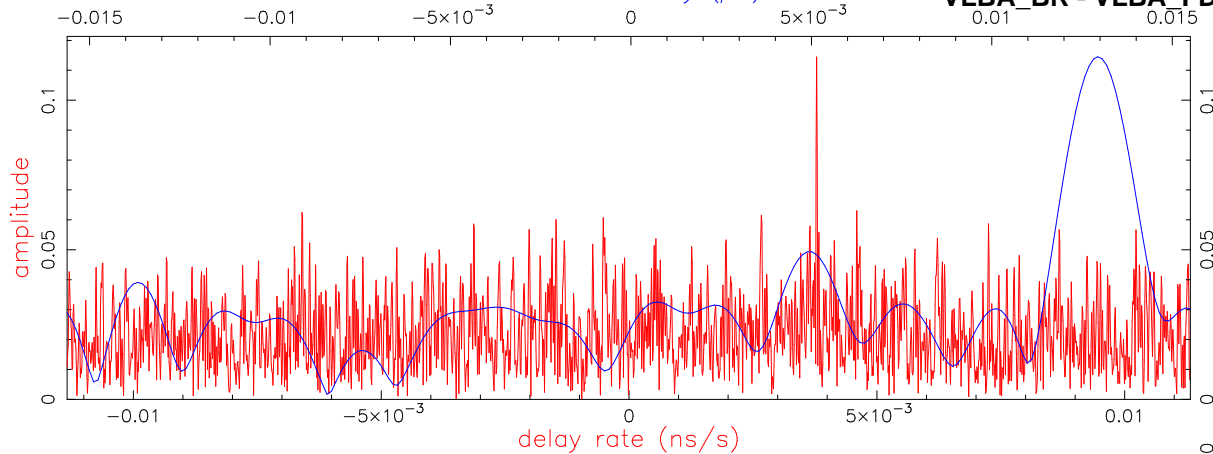
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021328.82
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055558
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



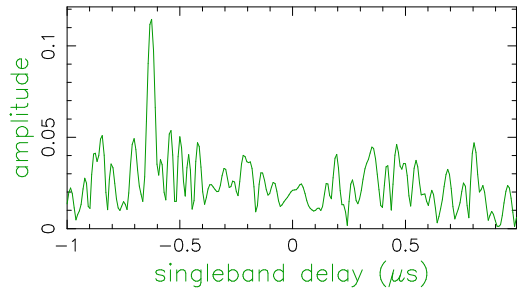
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	683/0	170.8	Phase
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	170.8	Ampl.
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	170.8	Sbd box
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	13.1	APs used
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	13.1	PC freqs
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	13.1	PC phase
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	13.1	ManI PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	13.1	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
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	-7.33169959301E+03			Apriori delay (usec)			-7.33080738144E+03			Resid mbdelay (usec)			1.40384E-02			+/- 1.9E-04		
Sband delay (usec)	-7.33171318094E+03			Apriori clock (usec)			1.6325451E+01			Resid sbdelay (usec)			-9.05800E-01			+/- 3.0E-03		
Phase delay (usec)	-7.33080737593E+03			Apriori clockrate (us/s)			-1.0905050E-07			Resid phdelay (usec)			5.50753E-06			+/- 6.4E-07		
Delay rate (us/s)	-1.72923577430E+00			Apriori rate (us/s)			-1.72924290421E+00			Resid rate (us/s)			7.12991E-06			+/- 3.2E-09		
Total phase (deg)	-130.5			Apriori accel (us/s/s)			4.73514325271E-05			Resid phase (deg)			170.8			+/- 19.9		
ph/seg (deg)	RMS	Theor.	Amplitude	0.140 +/- 0.024			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			sb window (us)		-1.000	1.000		
amp/seg (%)	37.4	31.8	Search (2048X64)	0.117			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			SampCntNorm: enabled			mb window (us)		-0.016	0.016		
ph/frq (deg)	45.0	55.5	Interp.	0.000			Sample rate(MISamp/s): 64			Data rate(Mb/s): 2048			dr window (ns/s)		-0.011	0.011		
amp/frq (%)	38.1	39.9	Inc. seg. avg.	0.147			nlags: 128 t_cohere infinite			ion window (TEC)			0.00		0.00			
	47.9	69.6	Inc. frq. avg.	0.131			u,v (fr/asec) 10383.784 3259.730			simultaneous interpolator								

multiband delay (μ s)

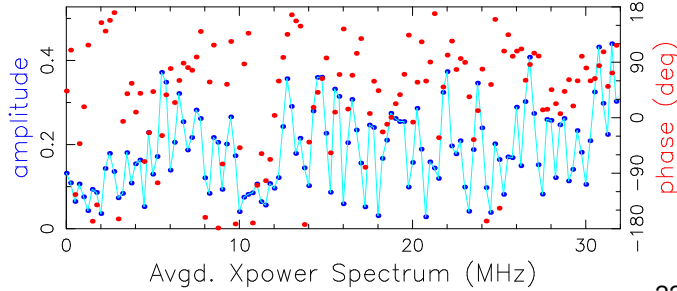


Fringe quality 0

SNR 6.4
Int time 408.244
Amp 0.121
Phase -24.2
PFD 4.2e-02
Delays (us)
SBD -0.627820
MBD 0.012908
Fringe rate (Hz) 0.326312
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

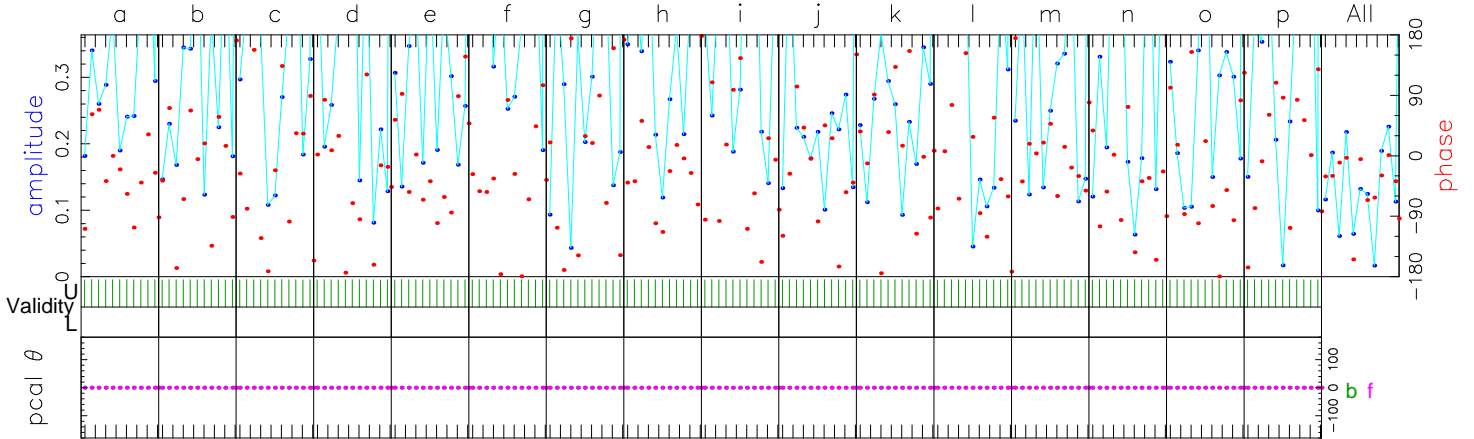


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020637.68
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055543
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

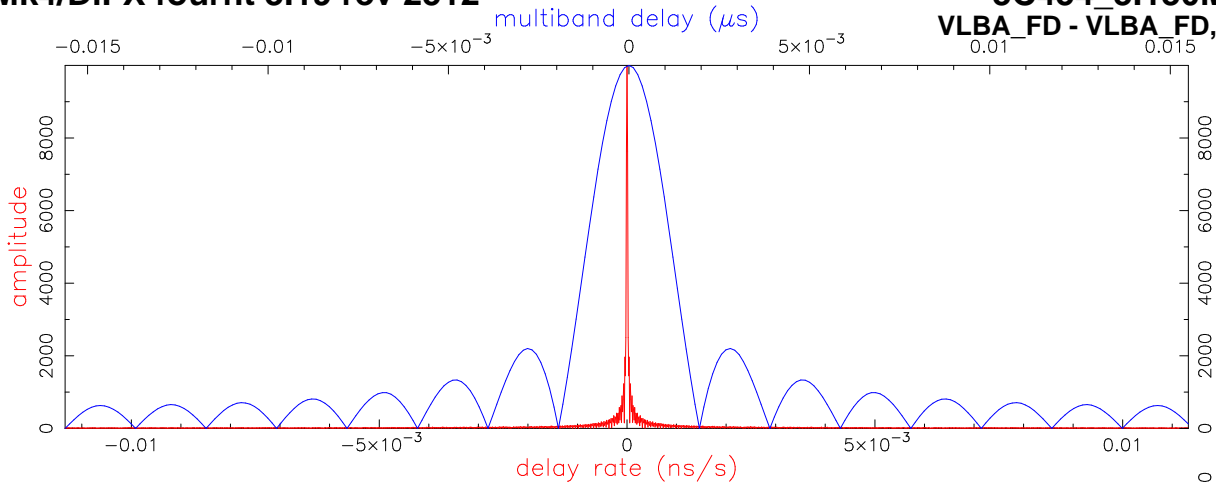


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-11.7	-2.0	-44.8	-12.0	-34.5	-39.7	-142.2	-23.9	-65.2	-22.0	58.8	-31.6	-11.5	-43.1	-25.9	30.9		Phase -24.2					
	0.2	0.1	0.0	0.1	0.1	0.2	0.1	0.3	0.2	0.1	0.0	0.1	0.2	0.2	0.1	0.1		Ampl. 0.1					
	212.7	46.7	117.4	16.8	21.8	148.7	86.7	48.2	73.4	170.3	119.0	225.6	38.5	15.3	168.3	187.6		Sbd box 48.6					
U/L	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0	805/0		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	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					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-4.39390165349E+03															Apriori delay (usec)	-4.39325831179E+03	Resid mbdelay (usec)	1.29083E-02	+/-	1.7E-04
Sband delay (usec)			-4.39388613229E+03															Apriori clock (usec)	-1.0967960E+00	Resid sbdelay (usec)	-6.27820E-01	+/-	2.7E-03
Phase delay (usec)			-4.39325831257E+03															Apriori clockrate (us/s)	-1.5144557E-07	Resid phdelay (usec)	-7.80788E-07	+/-	5.8E-07
Delay rate (us/s)			-6.88253661159E-03															Apriori rate (us/s)	-6.88632477461E-03	Resid rate (us/s)	3.78816E-06	+/-	2.4E-09
Total phase (deg)																		Apriori accel (us/s/s)	3.07768094301E-05	Resid phase (deg)	-24.2	+/-	17.9

ph/seg (deg) 44.8 31.0 Theor. Amplitude 0.121 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.8 54.1 Search (2048X64) 0.113 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.5 35.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.4 62.5 Inc. seg. avg. 0.121 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

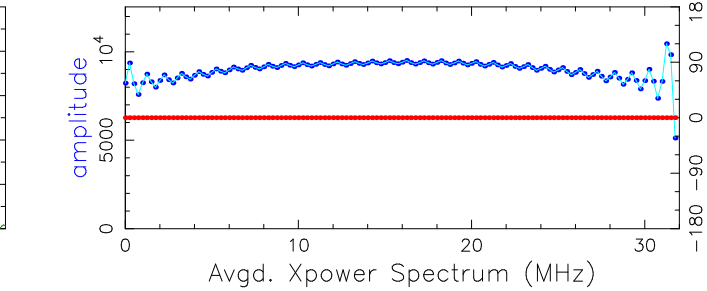
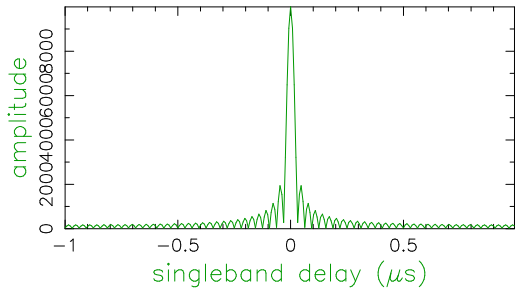
b: az 103.7 el 33.6 pa -42.4 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 86.426 2703.700 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/bf..130MTI Output file: /Exps/c192c/v2/1234/No0080/bf.W.8.130MTI



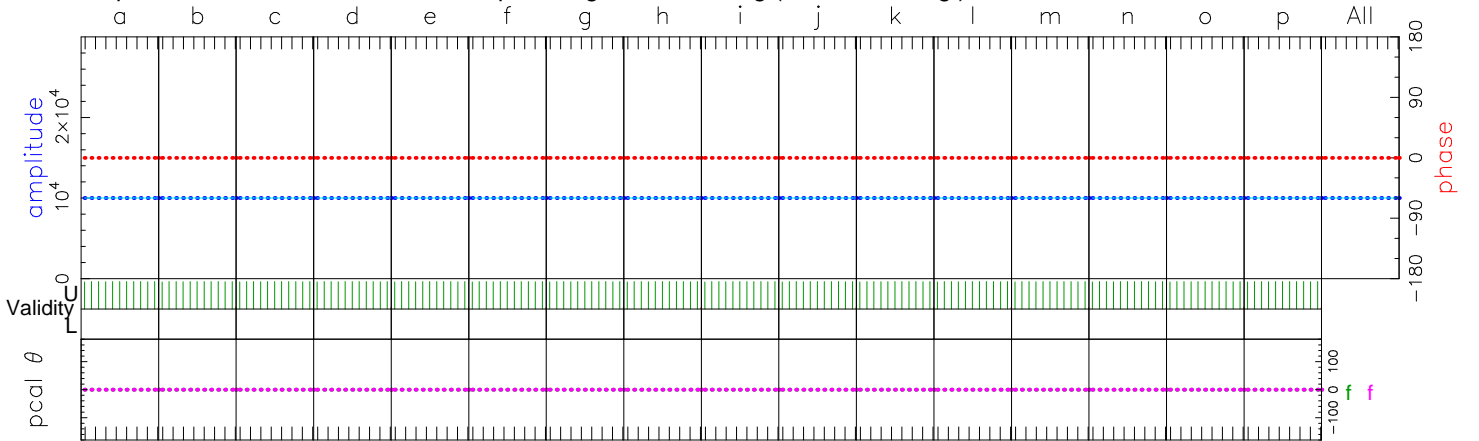
Fringe quality 9

SNR 554450.4
Int time 411.084
Amp 9999.995
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



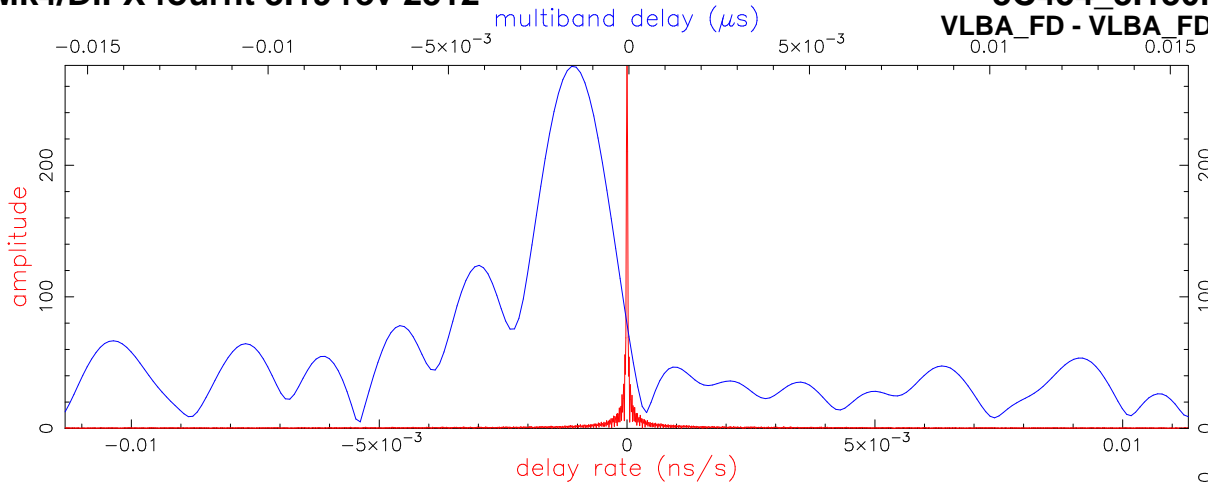
Exp. c192c
Yr:day 16383
Start 2019:279
Stop 2020:076:181504
FRT 021000.00
Corr/FF/build
2020:086:055611
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



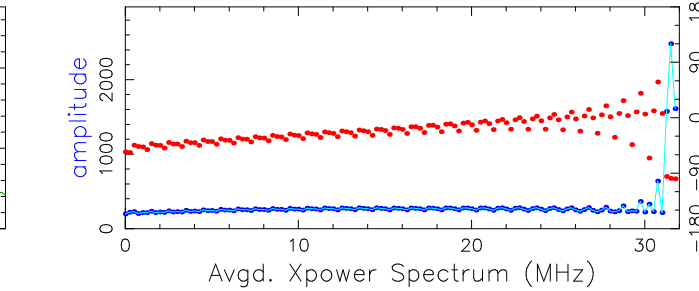
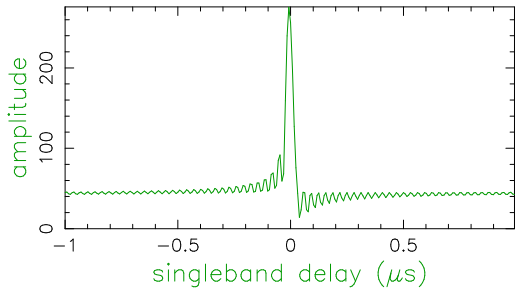
86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	Phase	-0.0	
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0	
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0	
U/L 807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used		
f 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		
f: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: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 amp		
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks		
f	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)	0.00000000000E+00		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		0.000000E+00		+/- 1.9E-09							
Sband delay (usec)	0.00000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.000000E+00		+/- 3.1E-08							
Phase delay (usec)	-2.26258832931E-20		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.26259E-20		+/- 6.7E-12							
Delay rate (us/s)	0.00000000000E+00		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		0.000000E+00		+/- 2.8E-14							
Total phase (deg)	-0.0		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-0.0		+/- 0.0							

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.995 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 9999.995 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
 f: az 101.0 el 49.4 pa -61.6 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/ff..130MTI Output file: /Exps/c192c/v2/1234/No0080/ff.W.110.130MTI



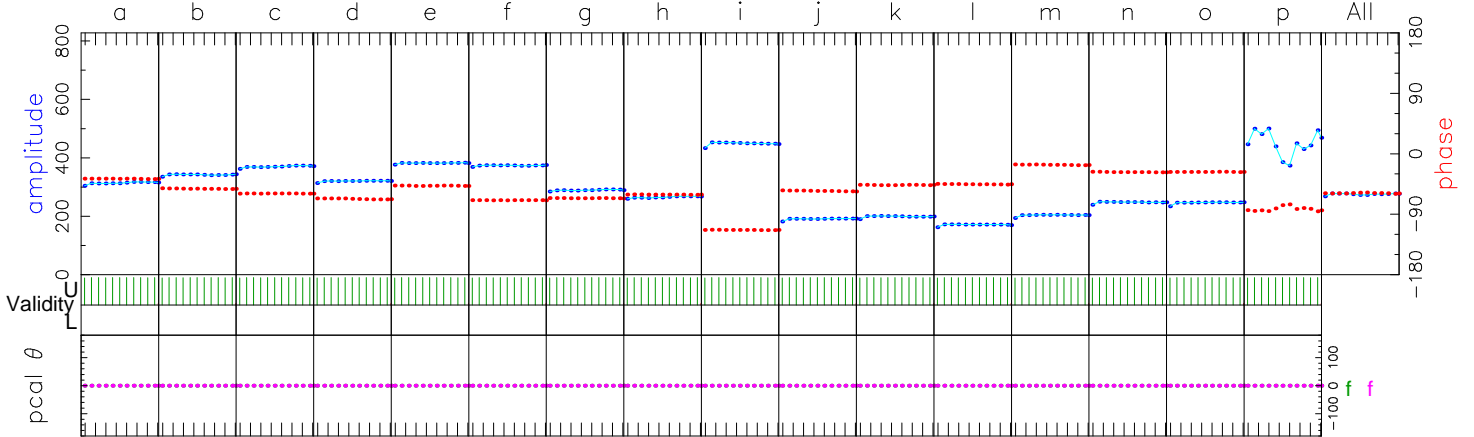
Fringe quality 6

SNR 15301.6
Int time 411.085
Amp 275.977
Phase -58.6
PFD 0.0e+00
Delays (us)
SBD -0.006738
MBD -0.001542
Fringe rate (Hz)
0.000005
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



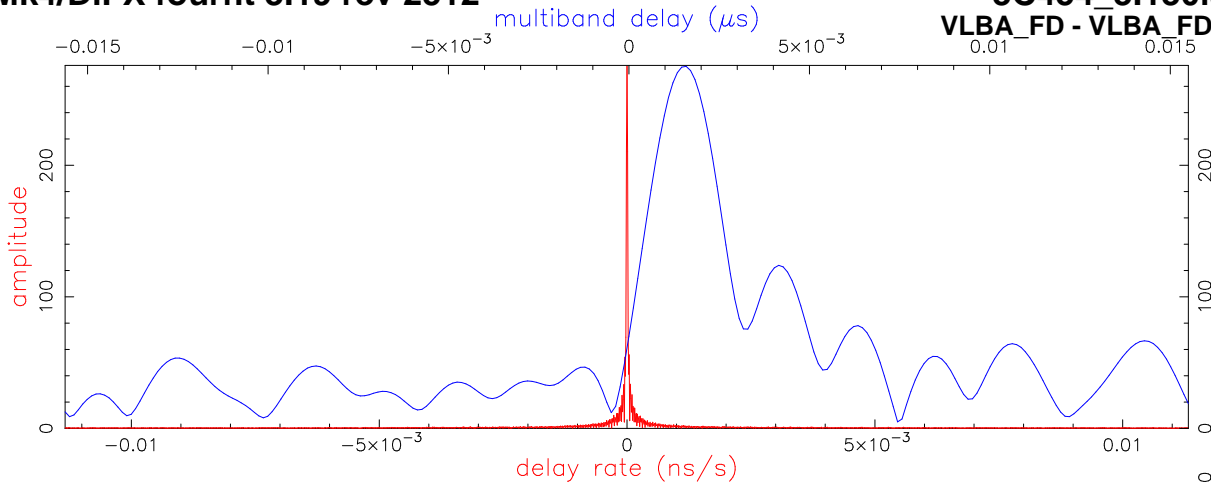
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055617
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



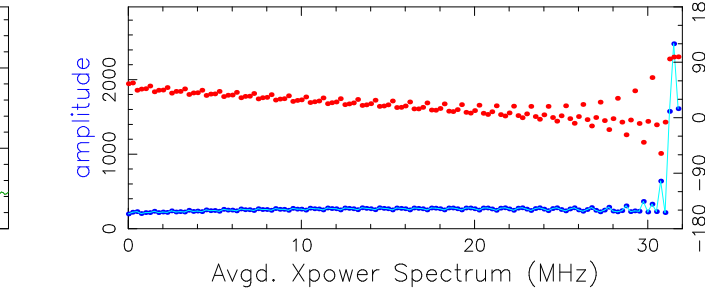
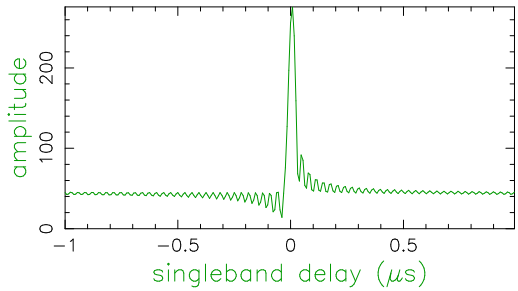
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-37.1	-52.0	-59.1	-67.0	-47.5	-69.1	-66.0	-60.7	-113.3	-55.1	-46.4	-45.3	-16.4	-27.2	-27.0	-82.3	Phase	-58.6				
	314.0	341.9	370.0	320.4	381.9	373.7	289.6	265.3	449.1	190.9	199.0	171.1	203.7	247.8	246.2	448.8	Ampl.	300.8				
	128.8	128.8	128.6	128.9	128.7	128.8	128.8	128.6	126.9	129.2	128.7	129.2	128.9	128.7	128.8	126.9	Sbd box	128.1				
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used					
f	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					
f: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					
f: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					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.54221875000E-03														Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.54222E-03	+/-	7.1E-08
Sband delay (usec)			-6.73800000000E-03														Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-6.73800E-03	+/-	1.1E-06
Phase delay (usec)			-1.88836639767E-06														Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.88837E-06	+/-	2.4E-10
Delay rate (us/s)			6.30616281430E-11														Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	6.30616E-11	+/-	1.0E-12
Total phase (deg)																	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-58.6	+/-	0.0

ph/seg (deg) 0.5 0.0 Theor. Amplitude 275.977 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.1 0.0 Search (2048X64) 274.671 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 32.5 0.0 Inc. seg. avg. 275.457 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator



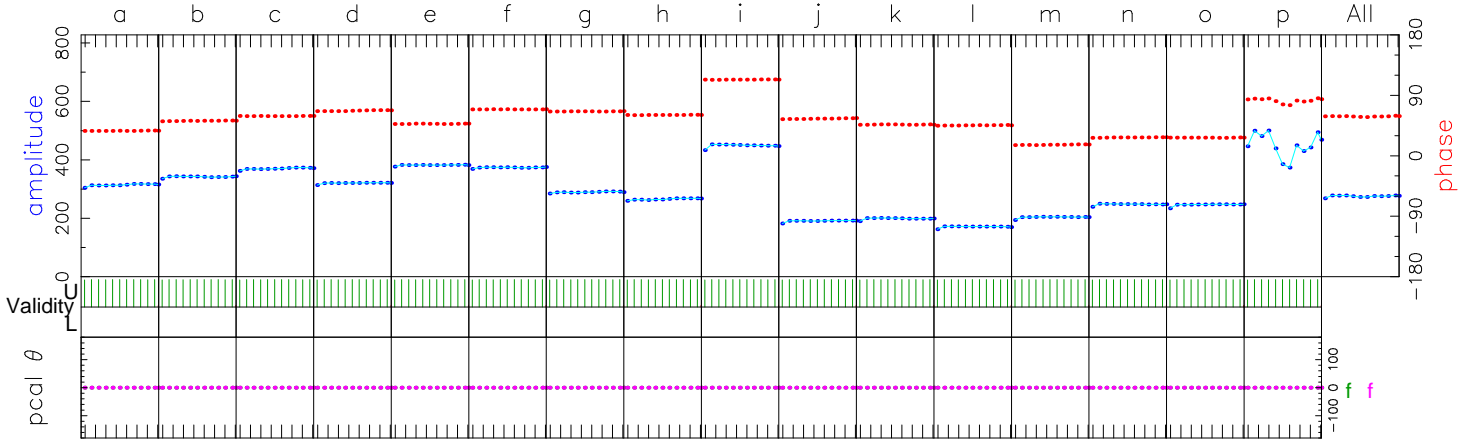
Fringe quality 6

SNR 15301.6
Int time 411.084
Amp 275.977
Phase 58.6
PFD 0.0e+00
Delays (us)
SBD 0.006738
MBD 0.001542
Fringe rate (Hz)
-0.000005
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055622
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

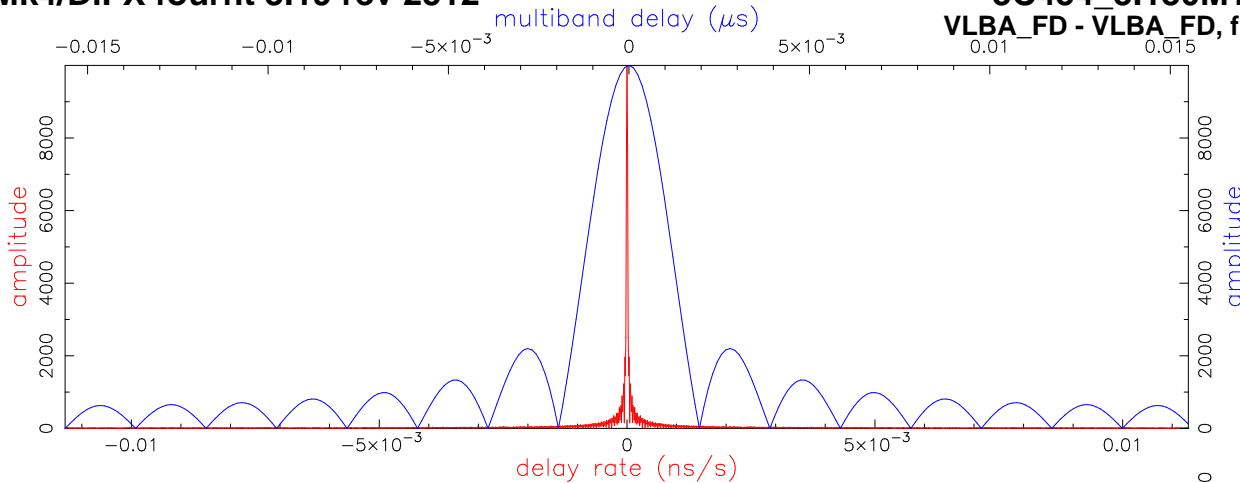


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	37.1	52.0	59.1	67.0	47.5	69.1	66.0	60.7	113.3	55.1	46.4	45.3	16.4	27.2	27.0	82.3		Phase	58.6
	314.0	341.9	370.0	320.4	381.9	373.7	289.6	265.3	449.1	190.9	199.0	171.1	203.7	247.8	246.2	448.8		Ampl.	300.8
	129.2	129.2	129.4	129.1	129.3	129.2	129.2	129.4	131.1	128.8	129.3	128.8	129.1	129.3	129.2	131.1		Sbd box	129.9
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
f	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	

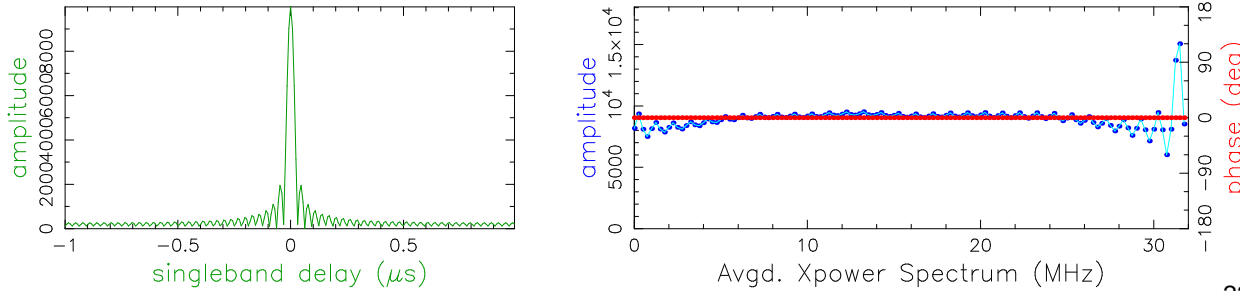
Group delay (usec)(sbd) 1.54221875000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.54222E-03 +/- 7.1E-08
 Sband delay (usec) 6.73800000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 6.73800E-03 +/- 1.1E-06
 Phase delay (usec) 1.88836639797E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.88837E-06 +/- 2.4E-10
 Delay rate (us/s) -6.30616281430E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -6.30616E-11 +/- 1.0E-12
 Total phase (deg) 58.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 58.6 +/- 0.0

RMS Theor. Amplitude 275.977 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.5 0.0 Search (2048X64) 274.672 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 24.7 0.0 Inc. seg. avg. 275.457 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 32.5 0.0 Inc. frq. avg. 300.838 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

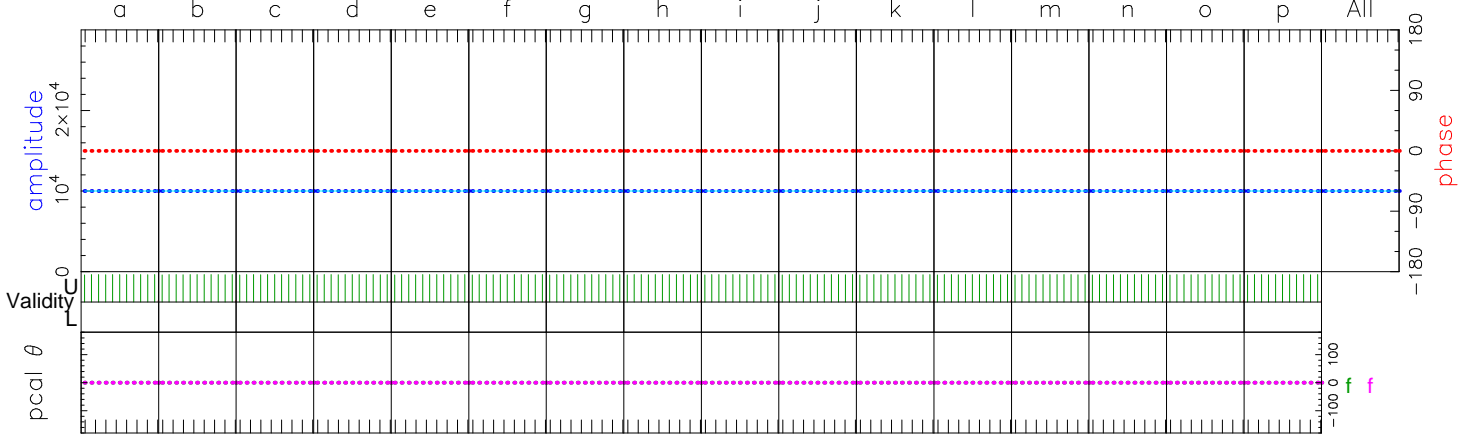
f: az 101.0 el 49.4 pa -61.6 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



Fringe quality 9
SNR 554451.0
Int time 411.085
Amp 9999.999
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055605
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"



Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



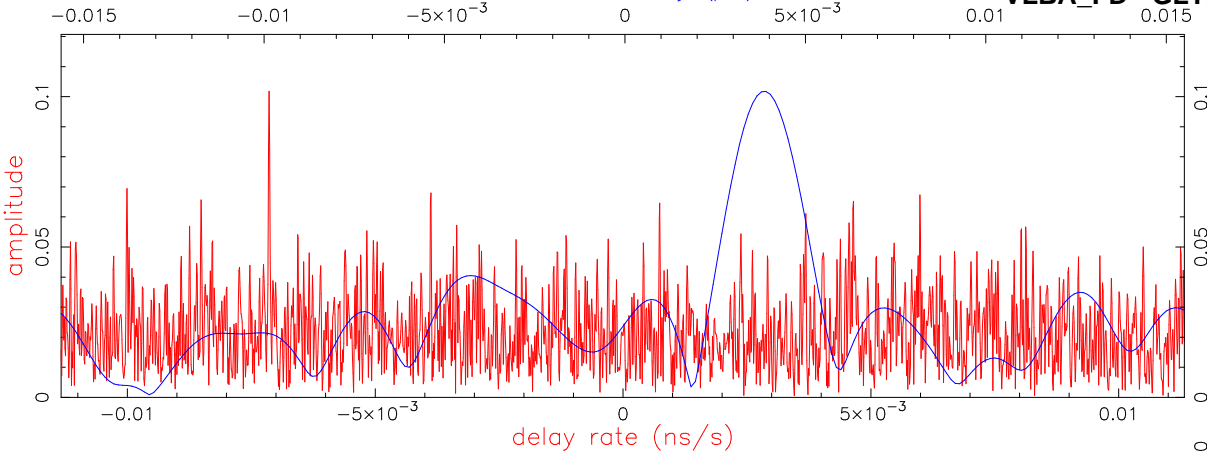
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f: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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
f	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 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) -3.00950583499E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -3.00951E-20 +/- 6.7E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.8E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

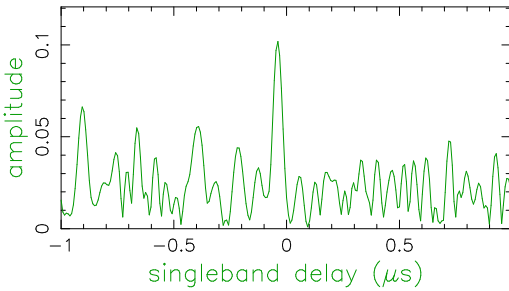
f: az 101.0 el 49.4 pa -61.6 f: az 101.0 el 49.4 pa -61.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/ff..130MTI Output file: /Exps/c192c/v2/1234/No0080/ff.W.87.130MTI

multiband delay (μ s)

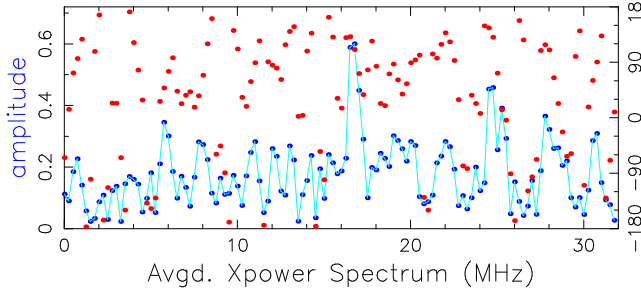


Fringe quality 0

SNR 5.6
Int time 410.976
Amp 0.121
Phase -166.0
PFD 9.8e-01
Delays (us)
SBD -0.039975
MBD 0.003850
Fringe rate (Hz)
-0.616013
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

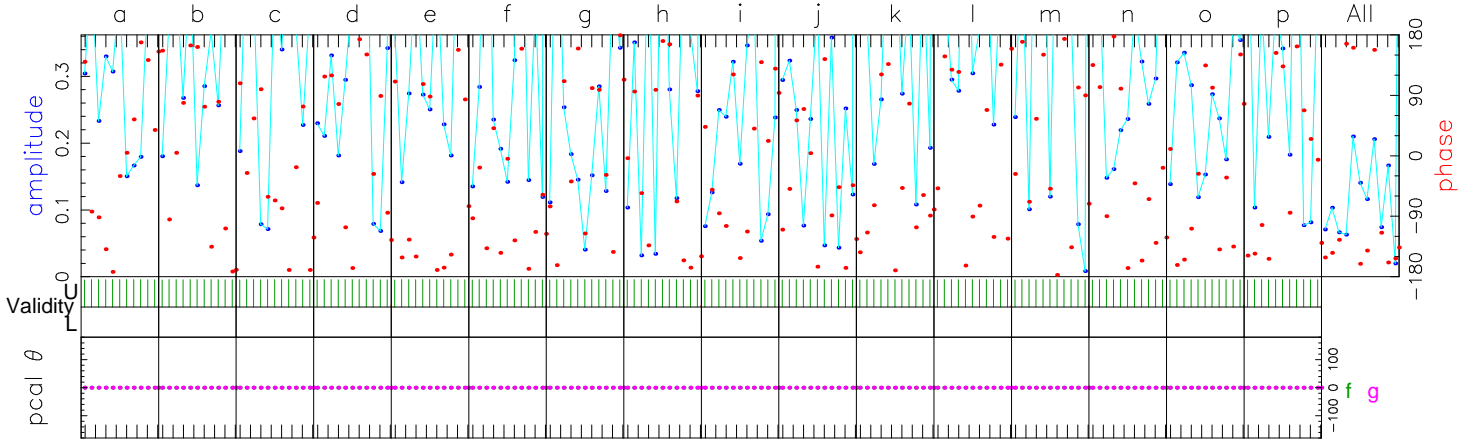


delay rate (ns/s)

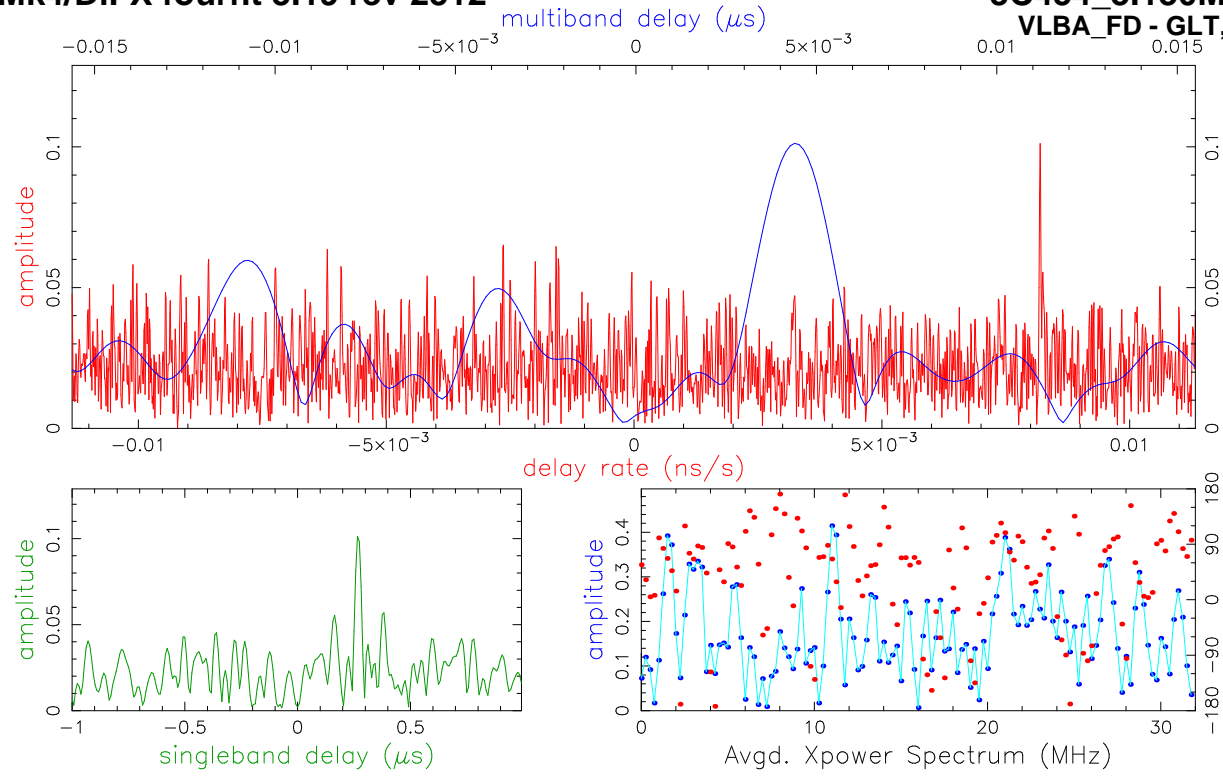


Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055611
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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		
	-143.0	-172.3	-51.7	178.8	163.6	-133.8	-179.2	179.9	-175.6	-96.4	-140.1	-172.3	165.3	-134.8	-159.5	-167.3	Phase	-166.0		
	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.2	0.2	0.0	0.1	0.2	Ampl.	0.1		
	130.4	191.1	250.3	157.8	126.4	204.7	183.2	13.8	110.6	105.6	60.8	112.8	106.3	106.4	121.6	224.1	Sbd box	123.9		
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used			
f	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 phase			
f: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			
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
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)		5.82964193374E+03							5.82966933360E+03								Resid mbdelay (usec)	3.85014E-03 +/- 1.9E-04		
Sband delay (usec)		5.82962935860E+03							-8.3156186E-01								Resid sbdelay (usec)	-3.99750E-02 +/- 3.0E-03		
Phase delay (usec)		5.82966932824E+03							-1.6594950E-07								Resid phdelay (usec)	-5.35340E-06 +/- 6.5E-07		
Delay rate (us/s)		8.03900322103E-01							8.03907473408E-01								Resid rate (us/s)	-7.15130E-06 +/- 2.7E-09		
Total phase (deg)				-23.4					-4.56449080141E-05								Resid phase (deg)	-166.0 +/- 20.3		
ph/seg (deg)	RMS	Theor.							0.121 +/- 0.021								PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	28.7	35.1							Search (2048X64)	0.101							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	73.9	61.3							Interp.	0.000							Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.016 0.016	
amp/frq (%)	41.1	40.6							Inc. seg. avg.	0.115							Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011		
	57.1	70.8							Inc. frq. avg.	0.112							Data rate(Mb/s): 2048	nlags: 128	t_cohere infinite	ion window (TEC) 0.00 0.00
f: az 101.0 el 49.4 pa -61.6									g: az 172.9 el 29.6 pa -1.6								u,v (fr/asec) -4862.860 -4963.140		simultaneous interpolator	

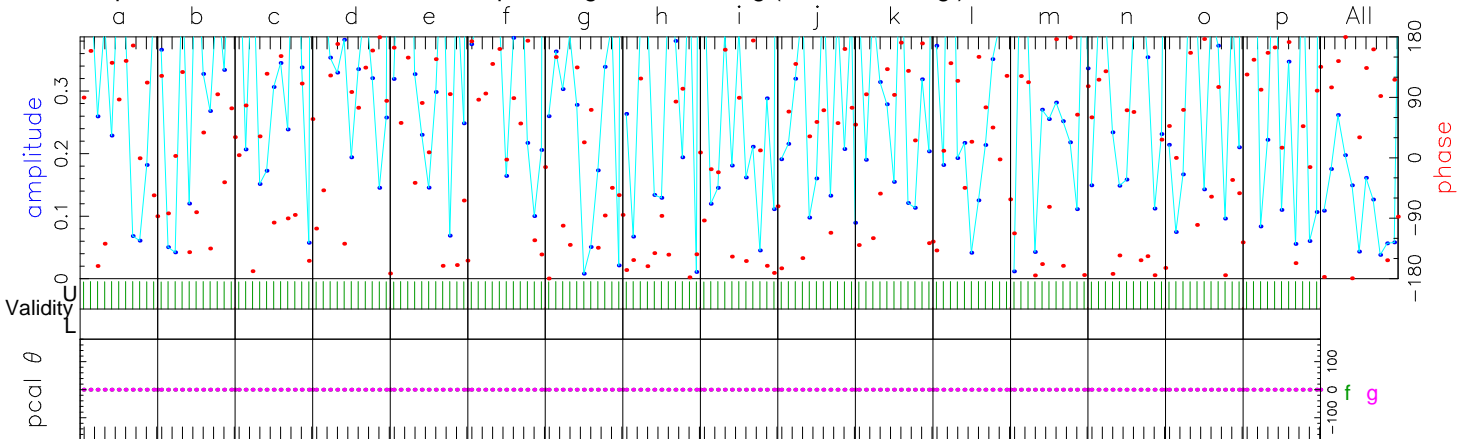


Fringe quality 0

SNR 5.7
Int time 410.976
Amp 0.129
Phase 151.3
PFD 9.4e-01
Delays (us)
SBD 0.268542
MBD 0.004442
Fringe rate (Hz) 0.706690
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

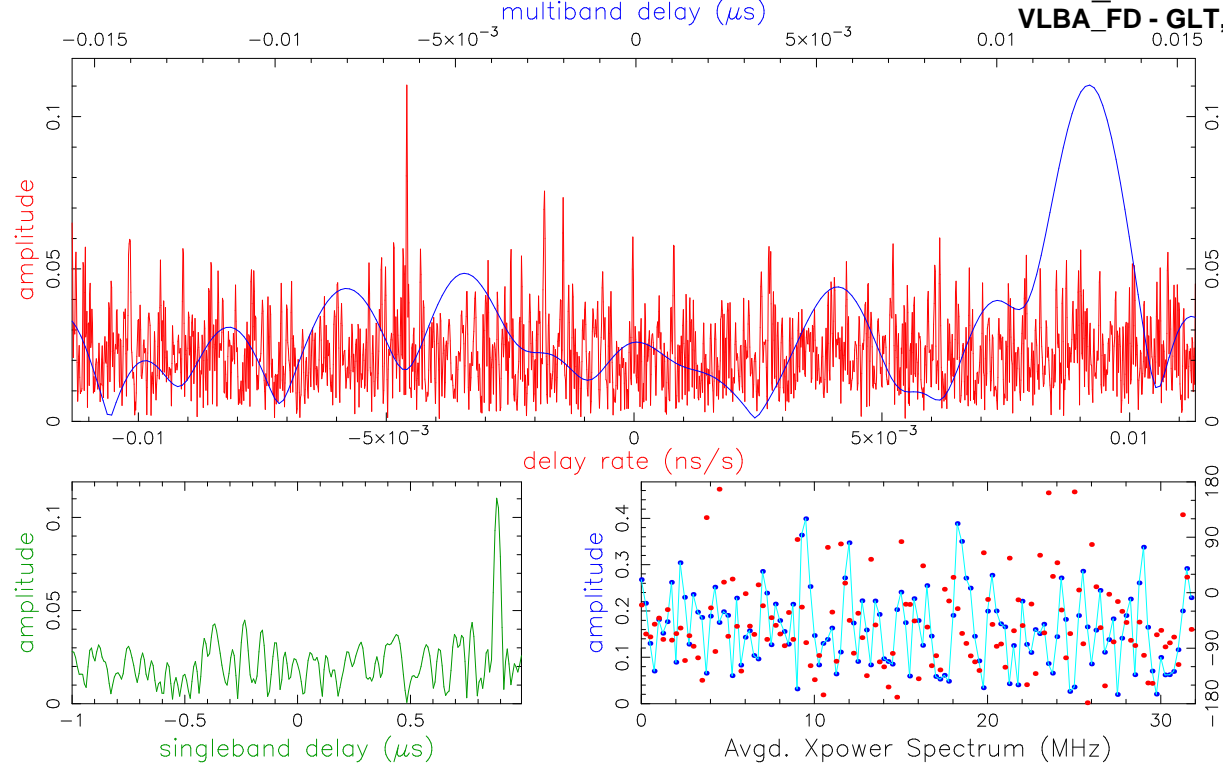
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055616
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	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		
fg	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fg	0:0	0:0	0:0	0:0	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		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		5.82992377568E+03								5.82966933360E+03							4.44209E-03	+/- 1.9E-04
Sband delay (usec)		5.82993787510E+03								-8.3156186E-01							2.68542E-01	+/- 3.0E-03
Phase delay (usec)		5.82966933847E+03								-1.6594950E-07							4.87766E-06	+/- 6.5E-07
Delay rate (us/s)		8.03915677373E-01								8.03907473408E-01							8.20397E-06	+/- 2.7E-09
Total phase (deg)					293.8												151.3	+/- 20.1
pcal mode:										MANUAL							MANUAL	
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

ph/seg (deg) 50.9 34.8 Search (2048X64) 0.099 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.0 60.7 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.6 40.2 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.8 70.1 Inc. frq. avg. 0.132 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 g: az 172.9 el 29.6 pa -1.6 u,v (fr/asec) -4862.860 -4963.140 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fg..130MTI Output file: /Exps/c192c/v2/1234/No0080/fg.W.129.130MTI

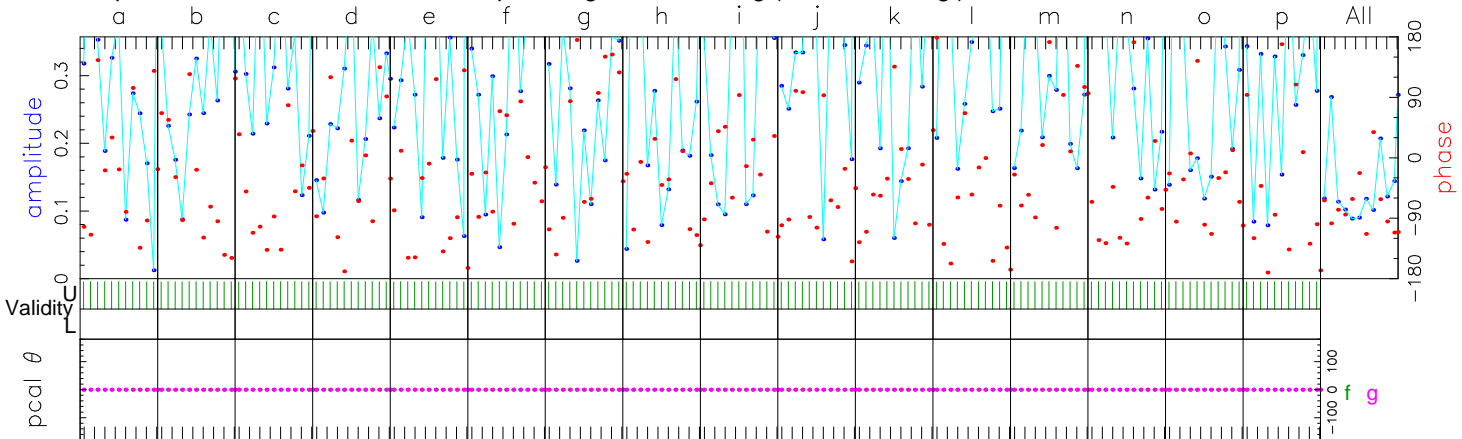


Fringe quality 0

SNR 6.2
Int time 410.867
Amp 0.119
Phase -78.5
PFD 1.7e-01
Delays (us)
SBD 0.884983
MBD 0.012566
Fringe rate (Hz)
-0.395117
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055621
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



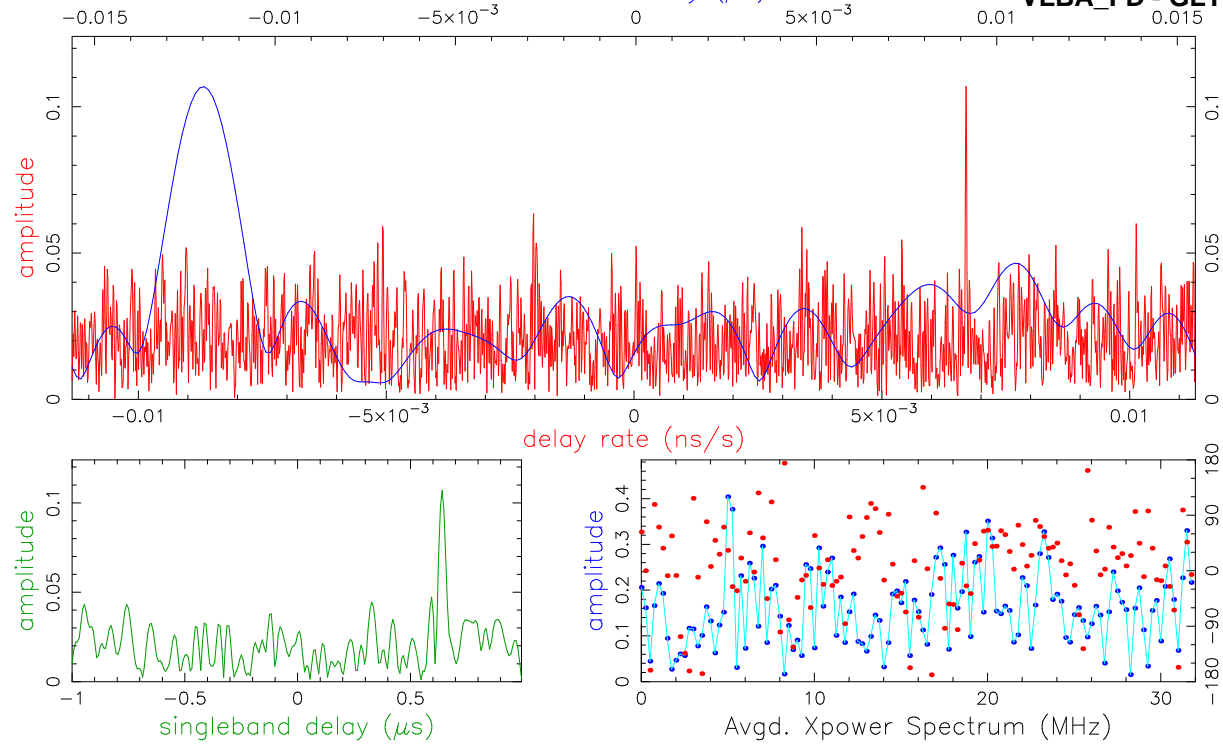
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-90.0	-111.7	-74.6	-24.9	-109.4	-46.8	179.8	-62.0	-19.0	-79.2	-66.9	-104.0	-31.6	-100.3	-53.3	-117.3		Phase	-78.5
	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.0	0.3	0.2	0.1		Ampl.	0.1
	82.2	42.6	33.2	150.5	105.1	243.5	218.7	61.4	158.8	82.1	242.4	253.8	162.4	242.1	136.4	107.3		Sbd box	242.3
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used	
f	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 phase	
f: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	
f: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 amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
f	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	

Group delay (usec)(sbd) 5.83055690000E+03 Apriori delay (usec) 5.82966933360E+03 Resid mbdelay (usec) 1.25664E-02 +/- 1.7E-04
 Sband delay (usec) 5.83055431660E+03 Apriori clock (usec) -8.3156186E-01 Resid sbdelay (usec) 8.84983E-01 +/- 2.8E-03
 Phase delay (usec) 5.82966933106E+03 Apriori clockrate (us/s) -1.6594950E-07 Resid phdelay (usec) -2.53164E-06 +/- 6.0E-07
 Delay rate (us/s) 8.03902886493E-01 Apriori rate (us/s) 8.03907473408E-01 Resid rate (us/s) -4.58692E-06 +/- 2.5E-09
 Total phase (deg) 64.1 Apriori accel (us/s/s) -4.56449080141E-05 Resid phase (deg) -78.5 +/- 18.6

RMS Theor. Amplitude 0.119 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.2 32.2 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 52.6 56.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 43.0 37.2 Inc. seg. avg. 0.125 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 66.0 64.9 Inc. frq. avg. 0.114 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

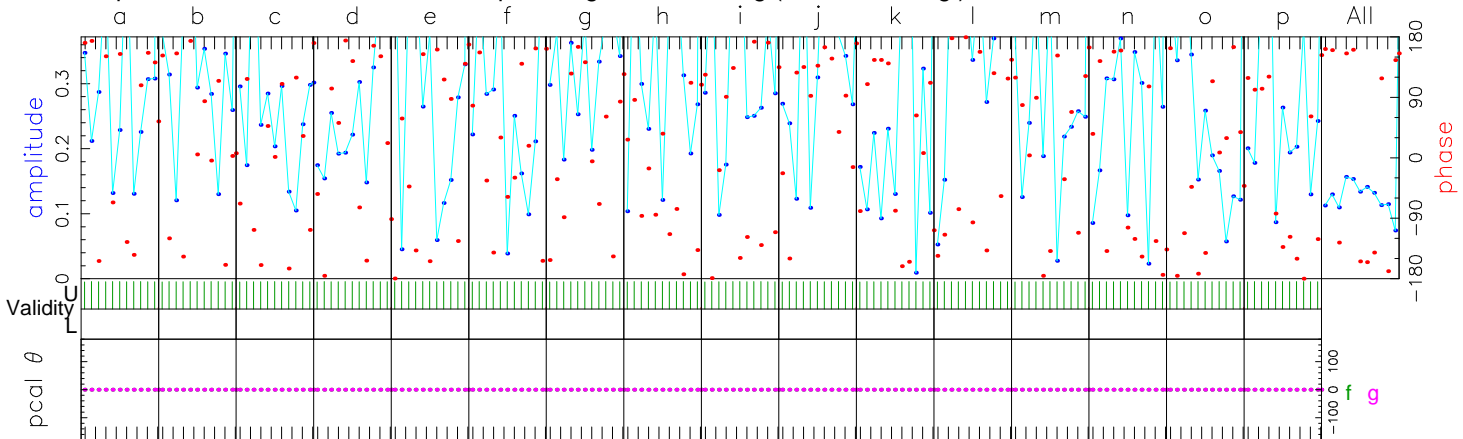
f: az 101.0 el 49.4 pa -61.6 g: az 172.9 el 29.6 pa -1.6 u,v (fr/asec) -4862.860 -4963.140 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fg..130MTI Output file: /Exps/c192c/v2/1234/No0080/fg.W.147.130MTI

multiband delay (μ s)



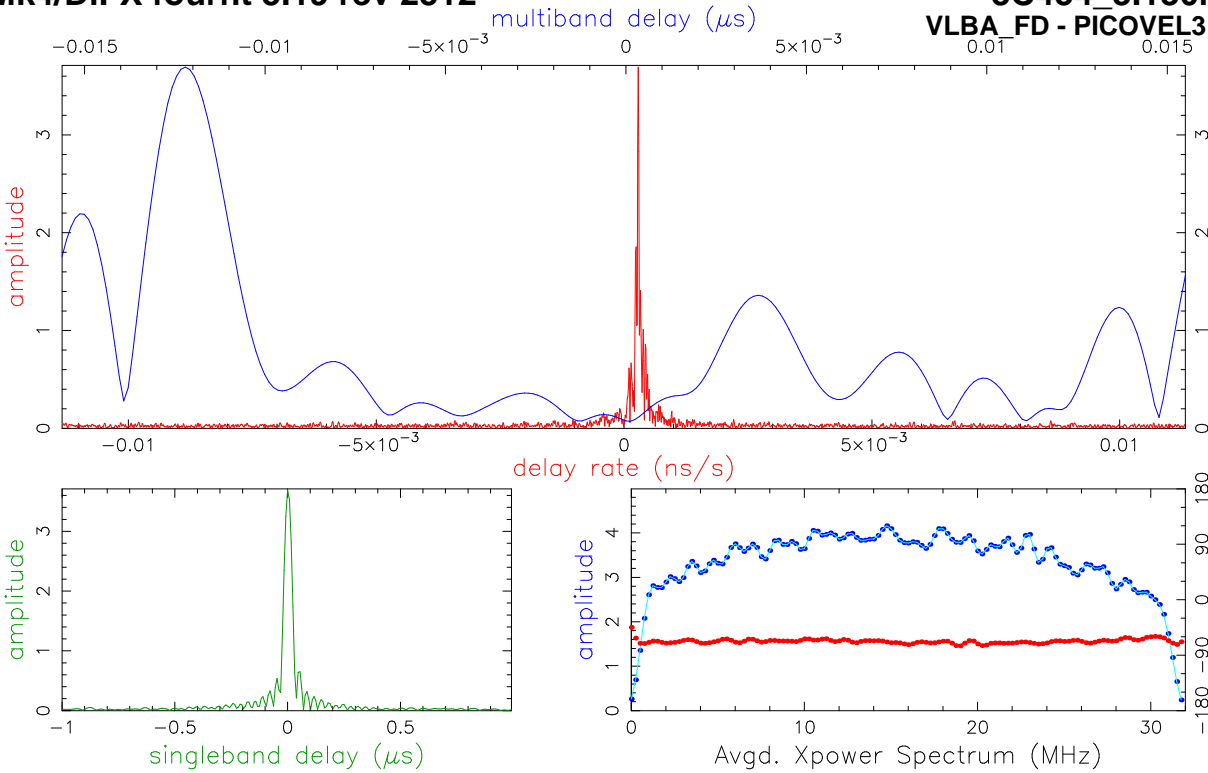
Fringe quality 0
SNR 5.9
Int time 410.867
Amp 0.124
Phase 178.3
PFD 5.4e-01
Delays (us)
SBD 0.640106
MBD -0.011996
Fringe rate (Hz)
0.577645
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055605
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	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		
fg	0:0	0:0	0:0	0:0	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		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		5.83031358730E+03																
Sband delay (usec)		5.83030943960E+03																
Phase delay (usec)		5.82966933935E+03																
Delay rate (us/s)		8.03914179295E-01																
Total phase (deg)				320.8														
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(MISamp/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)																		
simultaneous interpolator																		

ph/seg (deg) 33.7 33.5
amp/seg (%) 34.5 58.4
ph/frq (deg) 40.0 38.7
amp/frq (%) 58.8 67.5
f: az 101.0 el 49.4 pa -61.6
g: az 172.9 el 29.6 pa -1.6
u,v (fr/asec) -4862.860 -4963.140
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fg..130MTI Output file: /Exps/c192c/v2/1234/No0080/fg.W.90.130MTI

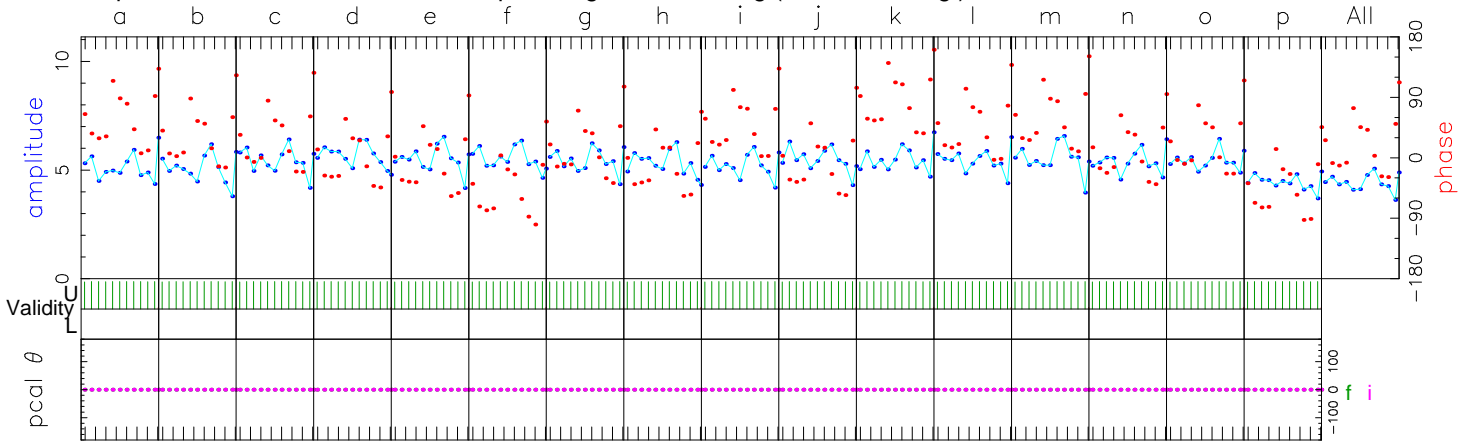


Fringe quality 3

SNR 205.7
Int time 411.084
Amp 3.711
Phase 13.0
PFD 0.0e+00
Delays (us)
SBD 0.001856
MBD -0.012200
Fringe rate (Hz) 0.024439
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

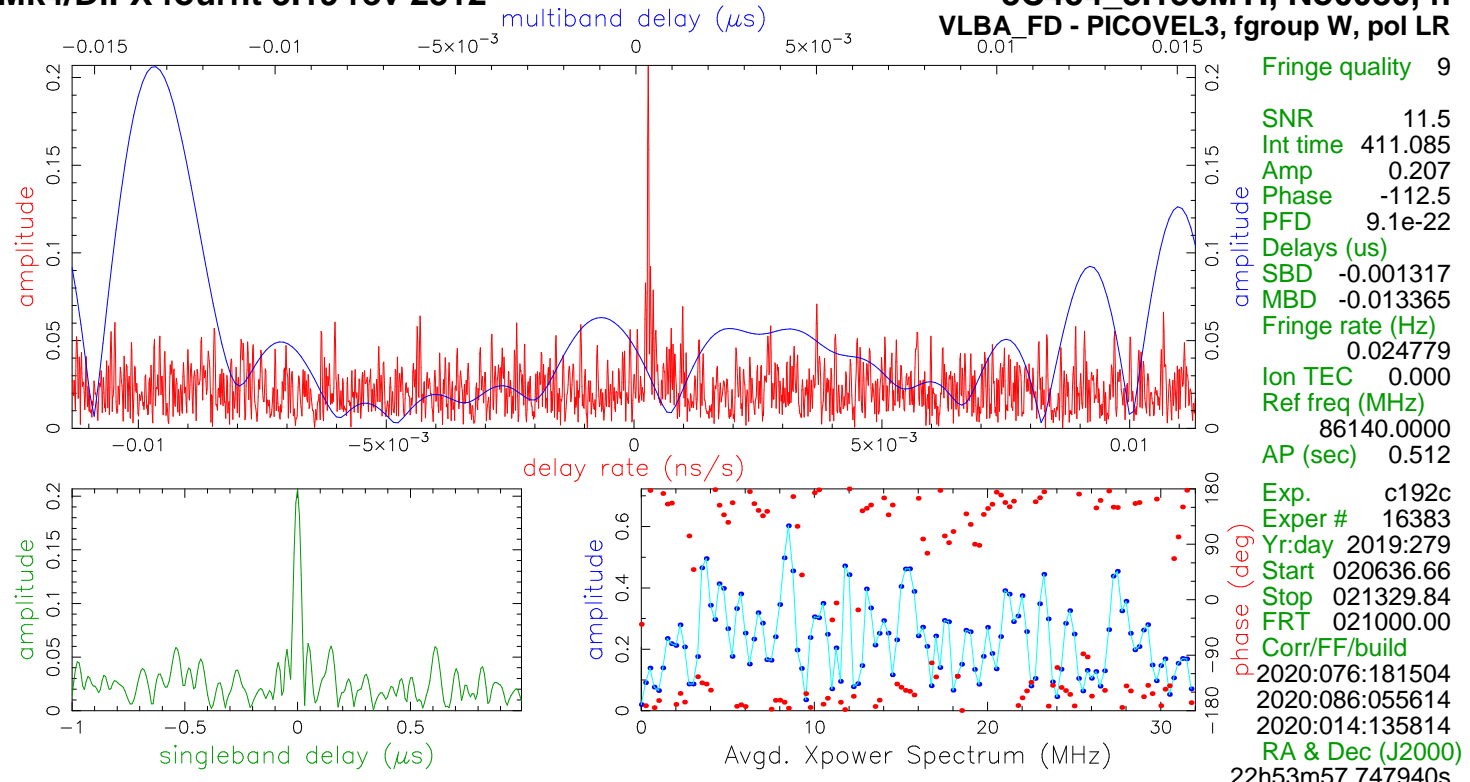
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055609
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

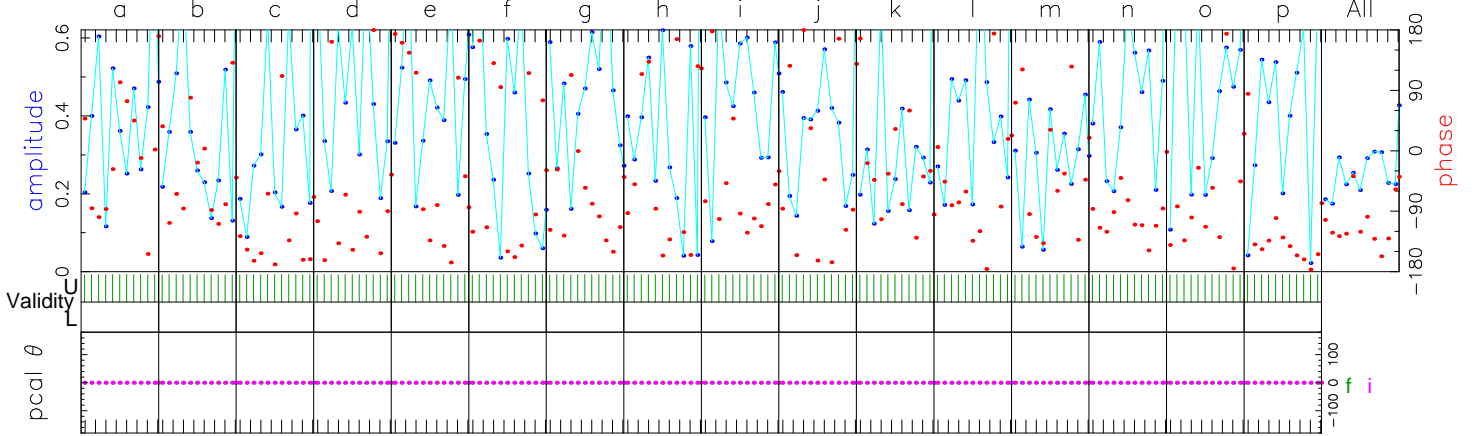


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f <i>i</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		
f <i>i</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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)	4.57527910265E+03			Apriori delay (usec)			4.57529130244E+03			Resid mbdelay (usec)			-1.21998E-02			+/- 5.2E-06		
Sband delay (usec)	4.57529315844E+03			Apriori clock (usec)			1.0252094E+00			Resid sbdelay (usec)			1.85600E-03			+/- 8.4E-05		
Phase delay (usec)	4.57529130286E+03			Apriori clockrate (us/s)			2.6205050E-07			Resid phdelay (usec)			4.19155E-07			+/- 1.8E-08		
Delay rate (us/s)	1.86619816115E+00			Apriori rate (us/s)			1.86619787743E+00			Resid rate (us/s)			2.83716E-07			+/- 7.5E-11		
Total phase (deg)	298.2			Apriori accel (us/s/s)			-2.72676129677E-05			Resid phase (deg)			13.0			+/- 0.6		

ph/seg (deg) 33.8 1.0 Theor. Amplitude 3.711 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 20.8 1.7 Search (2048X64) 3.532 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.0 1.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 21.6 1.9 Inc. seg. avg. 4.388 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 i: az 264.7 el 34.4 pa 55.8 u,v (fr/asec) -11171.025 -1357.167 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fi..130MTI Output file: /Exps/c192c/v2/1234/No0080/fi.W.102.130MTI simultaneous interpolator

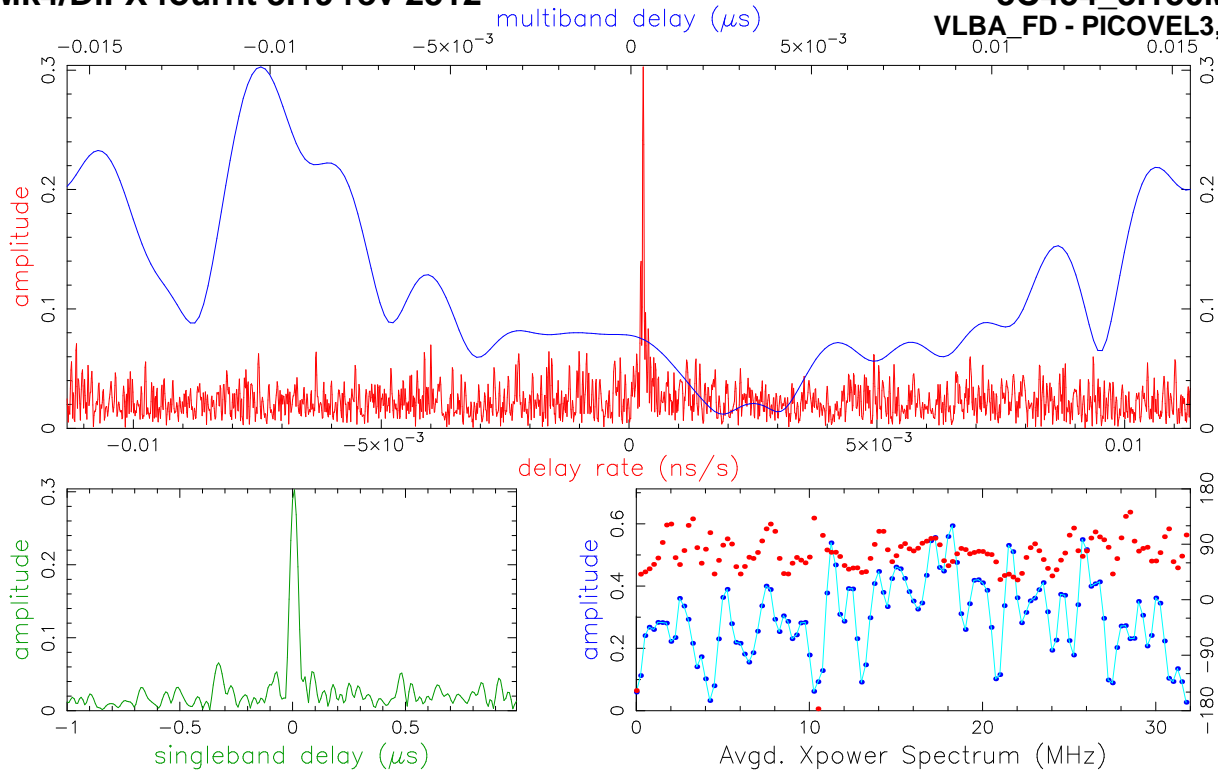


Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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
	-15.2	-66.1	-128.7	-127.6	-161.3	-159.3	-102.4	-161.4	-83.8	-138.2	-65.7	-95.2	-57.5	-99.0	-102.3	-142.3	Phase	-112.5
	0.2	0.2	0.2	0.4	0.2	0.3	0.3	0.2	0.3	0.1	0.2	0.2	0.1	0.4	0.3	0.4	Ampl.	0.2
	211.9	84.8	59.2	129.8	128.9	128.2	129.1	127.9	128.9	32.6	98.3	128.3	166.9	128.4	128.6	127.0	Sbd box	128.8
UL	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
fi	0:0	0:0	0:0	0:0	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	
fi	0:0	0:0	0:0	0:0	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	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	4.57527793755E+03			Apriori delay (usec)			4.57529130244E+03			Resid mbdelay (usec)			-1.33649E-02			+/- 9.4E-05		
Sband delay (usec)	4.57528998544E+03			Apriori clock (usec)			1.0252094E+00			Resid sbdelay (usec)			-1.31700E-03			+/- 1.5E-03		
Phase delay (usec)	4.57529129881E+03			Apriori clockrate (us/s)			2.6205050E-07			Resid phdelay (usec)			-3.62703E-06			+/- 3.2E-07		
Delay rate (us/s)	1.86619816509E+00			Apriori rate (us/s)			1.86619787743E+00			Resid rate (us/s)			2.87658E-07			+/- 1.4E-09		
Total phase (deg)	172.7			Apriori accel (us/s/s)			-2.72676129677E-05			Resid phase (deg)			-112.5			+/- 10.0		

ph/seg (deg) 33.4 17.3 Search (2048X64) 0.201 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.9 30.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.2 20.0 Inc. seg. avg. 0.236 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.5 34.9 Inc. frq. avg. 0.238 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 i: az 264.7 el 34.4 pa 55.8 u,v (fr/asec) -11171.025 -1357.167 ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fi..130MTI Output file: /Exps/c192c/v2/1234/No0080/fi.W.121.130MTI

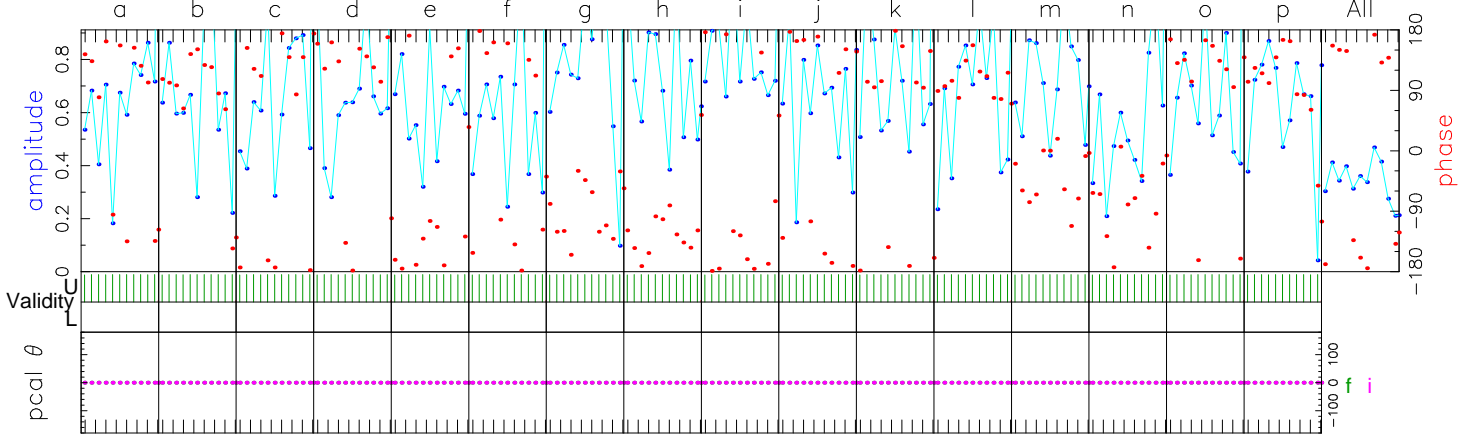


Fringe quality 9

SNR 16.9
Int time 411.084
Amp 0.304
Phase 171.4
PFD 0.0e+00
Delays (us)
SBD 0.006088
MBD -0.010263
Fringe rate (Hz) 0.024402
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055619
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

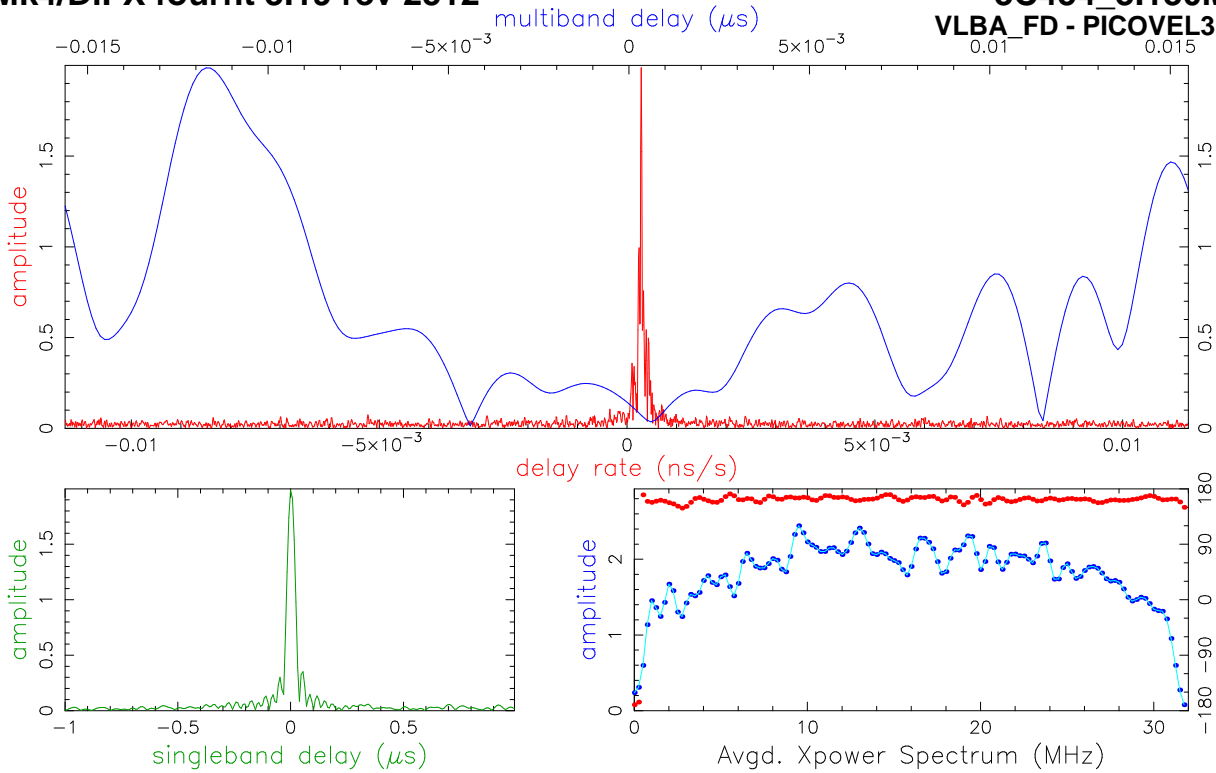
Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f <i>i</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		
f <i>i</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		
f	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		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	4.57531228977E+03			Apriori delay (usec)			4.57529130244E+03			Resid mbdelay (usec)			-1.02627E-02			+/- 6.4E-05		
Sband delay (usec)	4.57529739044E+03			Apriori clock (usec)			1.0252094E-07			Resid sbdelay (usec)			6.08800E-03			+/- 1.0E-03		
Phase delay (usec)	4.57529130797E+03			Apriori clockrate (us/s)			2.6205050E-07			Resid phdelay (usec)			5.52623E-06			+/- 2.2E-07		
Delay rate (us/s)	1.86619816072E+00			Apriori rate (us/s)			1.86619787743E+00			Resid rate (us/s)			2.83282E-07			+/- 9.2E-10		
Total phase (deg)	96.5			Apriori accel (us/s/s)			-2.72676129677E-05			Resid phase (deg)			171.4			+/- 6.8		
ph/seg (deg)	RMS	Theor.	Amplitude		0.304 +/- 0.018		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 (%)	31.8	11.8	Search (2048X64)		0.289		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016 0.016					
ph/frq (deg)	27.3	20.6	Interp.		0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011 0.011					
amp/frq (%)	66.3	13.6	Inc. seg. avg.		0.341		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00					
	81.9	23.7	Inc. frq. avg.		0.525		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00					

f: az 101.0 el 49.4 pa -61.6 i: az 264.7 el 34.4 pa 55.8 u,v (fr/asec) -11171.025 -1357.167 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fi..130MTI Output file: /Exps/c192c/v2/1234/No0080/fi.W.140.130MTI

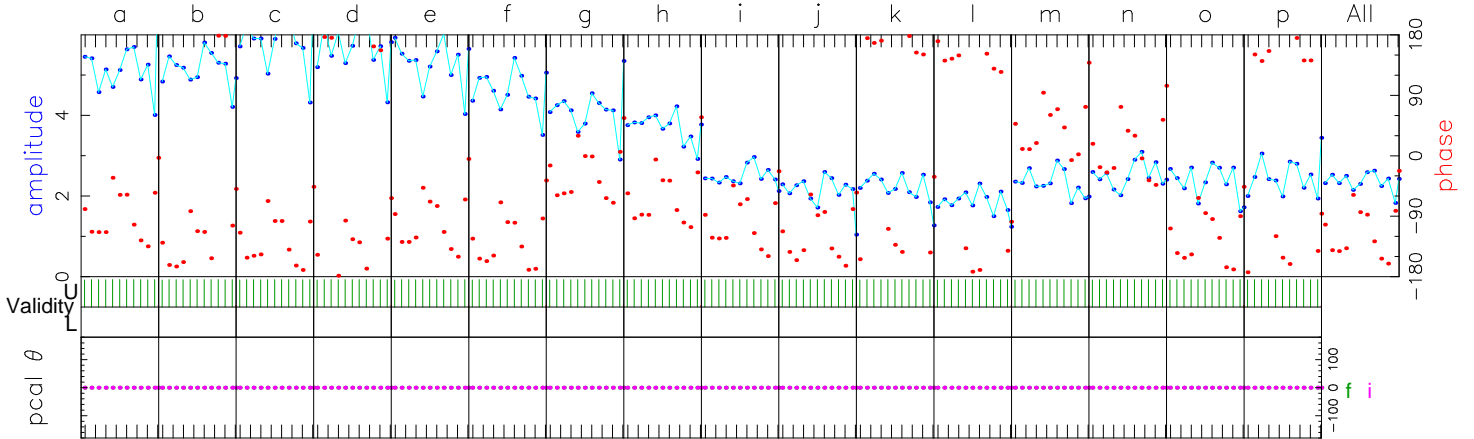


Fringe quality 2

SNR 110.9
Int time 411.085
Amp 2.000
Phase -117.5
PFD 0.0e+00
Delays (us)
SBD 0.002155
MBD -0.011634
Fringe rate (Hz) 0.024410
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055605
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

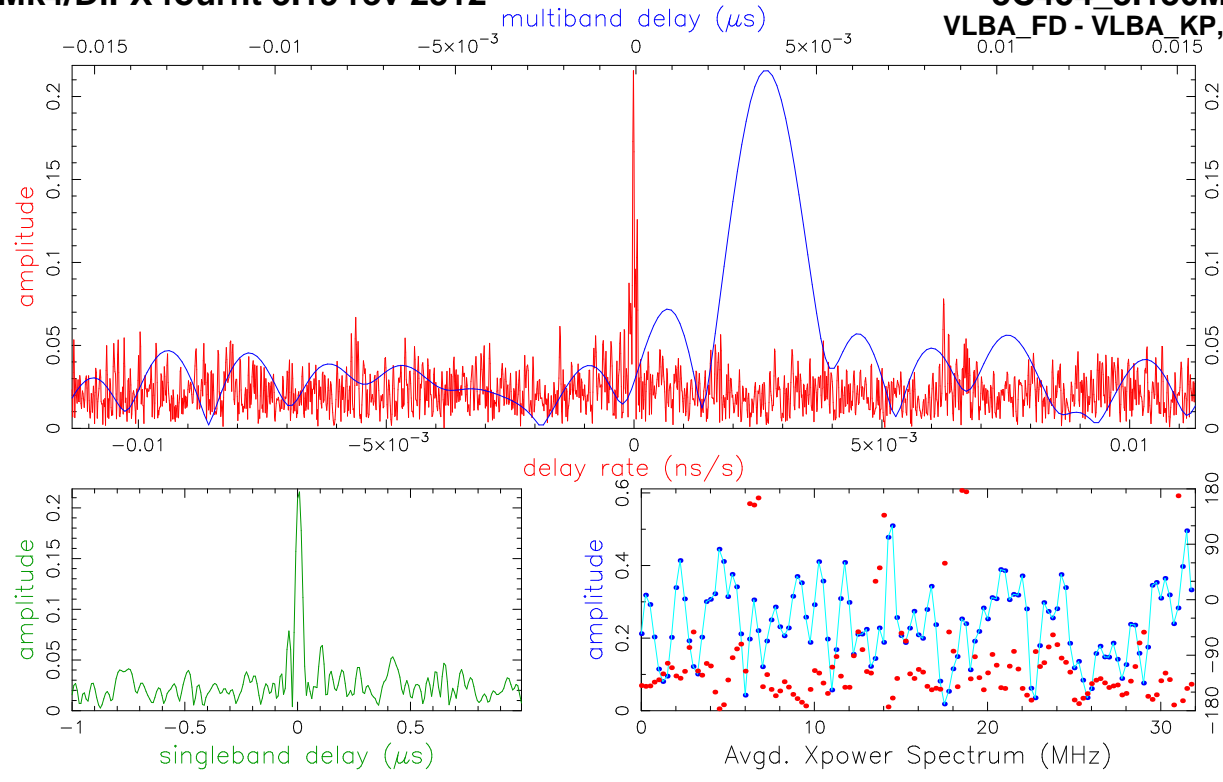


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-90.5	-141.7	-128.3	-159.2	-103.8	-130.0	-31.4	-65.7	-101.4	-121.0	-169.4	166.3	39.0	3.9	-124.2	175.7		Phase -117.5
	4.3	4.4	4.9	4.7	4.5	3.9	3.4	3.1	2.1	1.8	1.9	1.6	2.0	2.1	2.0	2.0		Ampl. 3.0
	128.2	129.4	129.1	129.2	129.1	129.2	129.1	129.1	129.4	129.1	129.2	129.2	129.1	128.9	129.2	127.8		Sbd box 129.3
UL	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used
f	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
fi	0:0	0:0	0:0	0:0	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
fi	0:0	0:0	0:0	0:0	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
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
f	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
																		Chan ids
																		Tracks

Group delay (usec)(sbd) 4.57527966837E+03 Apriori delay (usec) 4.57529130244E+03 Resid mbdelay (usec) -1.16341E-02 +/- 9.7E-06
 Sband delay (usec) 4.57529345794E+03 Apriori clock (usec) 1.0252094E+00 Resid sbdelay (usec) 2.15550E-03 +/- 1.6E-04
 Phase delay (usec) 4.57529129865E+03 Apriori clockrate (us/s) 2.6205050E-07 Resid phdelay (usec) -3.78894E-06 +/- 3.3E-08
 Delay rate (us/s) 1.86619816081E+00 Apriori rate (us/s) 1.86619787743E+00 Resid rate (us/s) 2.83377E-07 +/- 1.4E-10
 Total phase (deg) 167.7 Apriori accel (us/s/s) -2.72676129677E-05 Resid phase (deg) -117.5 +/- 1.0

RMS Theor. Amplitude 2.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 33.4 1.8 Search (2048X64) 1.898 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 20.7 3.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 68.7 2.1 Inc. seg. avg. 2.352 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 79.2 3.6 Inc. frq. avg. 3.046 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 i: az 264.7 el 34.4 pa 55.8 u,v (fr/asec) -11171.025 -1357.167 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fi..130MTI Output file: /Exps/c192c/v2/1234/No0080/fi.W.89.130MTI

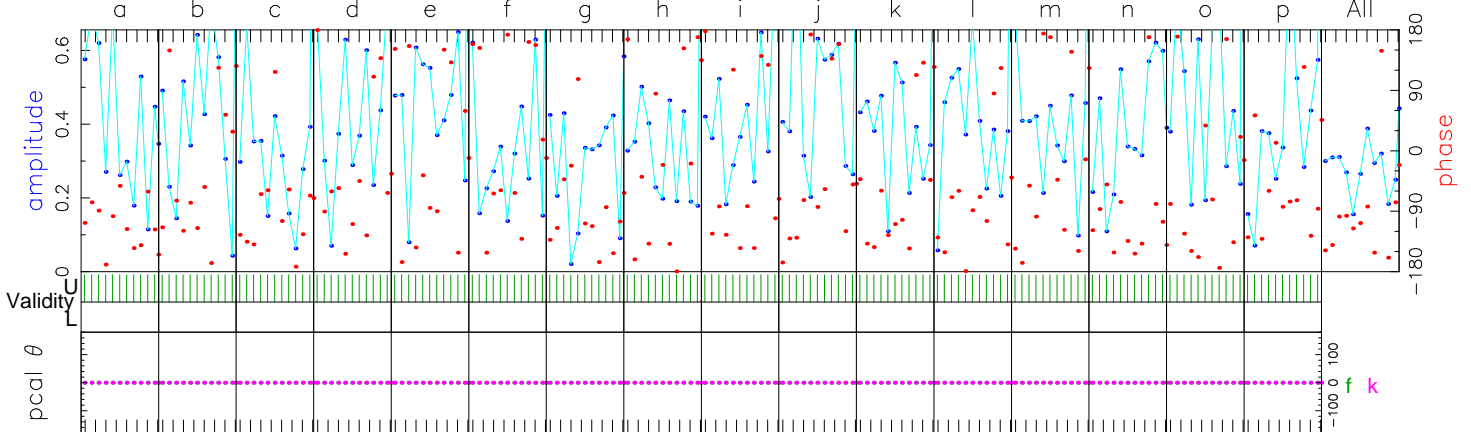


Fringe quality 9

SNR 12.1
Int time 408.867
Amp 0.219
Phase -122.8
PFD 5.8e-25
Delays (us)
SBD 0.005009
MBD 0.003571
Fringe rate (Hz)
-0.001101
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055610
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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
	-104.6	-132.1	-113.1	-119.3	-152.7	-158.7	-114.7	-157.5	-138.8	-128.9	-109.0	-103.6	-134.4	-115.1	-143.0	-85.3	Phase	-122.8
	0.4	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	Ampl.	0.2
	130.3	128.9	82.9	123.6	131.7	50.4	129.3	181.1	196.1	130.1	66.6	129.5	1.9	130.1	129.3	129.7	Sbd box	129.6
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

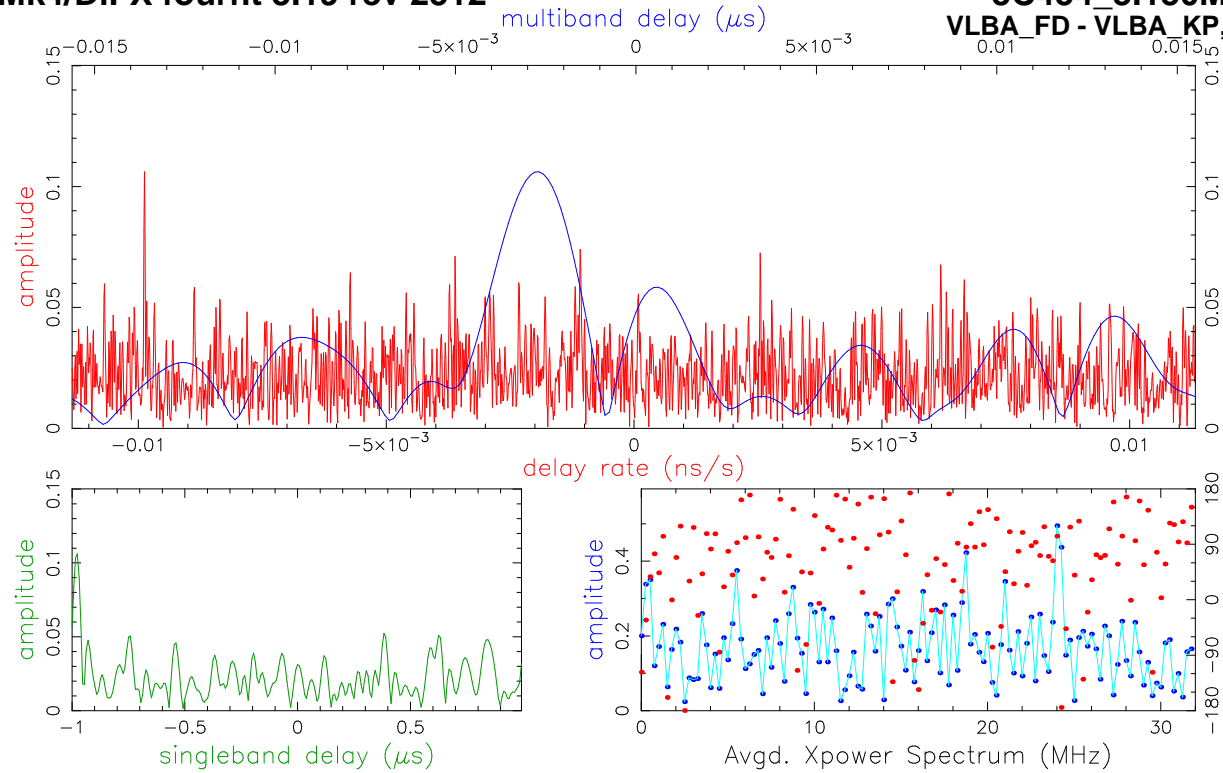
Group delay (usec)(sbd) 1.69593712139E+03 Apriori delay (usec) 1.69593355085E+03 Resid mbdelay (usec) 3.57053E-03 +/- 8.9E-05
 Sband delay (usec) 1.69593855935E+03 Apriori clock (usec) 8.7444746E-01 Resid sbdelay (usec) 5.00850E-03 +/- 1.4E-03
 Phase delay (usec) 1.69593354689E+03 Apriori clockrate (us/s) 1.0362949E-07 Resid phdelay (usec) -3.96127E-06 +/- 3.1E-07
 Delay rate (us/s) -1.08996211507E-01 Apriori rate (us/s) -1.08996198729E-01 Resid rate (us/s) -1.27781E-08 +/- 1.3E-09
 Total phase (deg) -97.5 Apriori accel (us/s/s) -9.63584515790E-06 Resid phase (deg) -122.8 +/- 9.5

RMS Theor. Amplitude 0.219 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.0 16.4 Search (2048X64) 0.211 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 39.3 28.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 22.1 18.9 Inc. seg. avg. 0.267 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 27.7 33.1 Inc. frq. avg. 0.217 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 k: az 97.3 el 42.7 pa -61.1 u,v (fr/asec) 636.175 -391.837 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fk..130MTI Output file: /Exps/c192c/v2/1234/No0080/fk.W.107.130MTI

Mk4/DiFX fourfit 3.19 rev 2512

3C454_3.130MTI, No0080, fk
VLBA_FD - VLBA_KP, fgroup W, pol LR

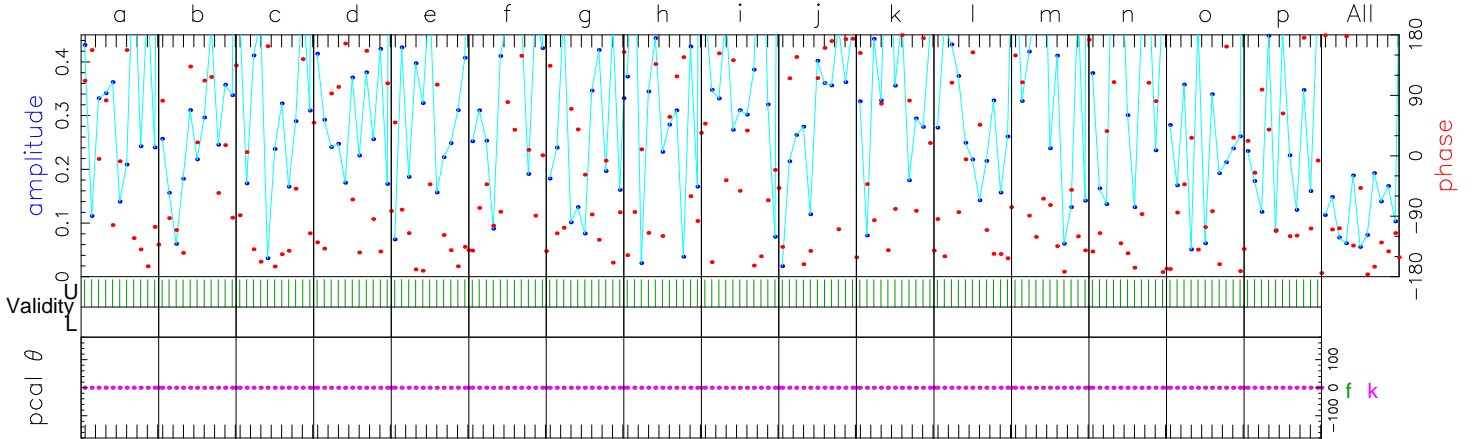


Fringe quality 0

SNR 5.9
Int time 408.868
Amp 0.150
Phase -139.7
PFD 5.3e-01
Delays (us)
SBD -0.979266
MBD -0.002727
Fringe rate (Hz)
-0.852306
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055616
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

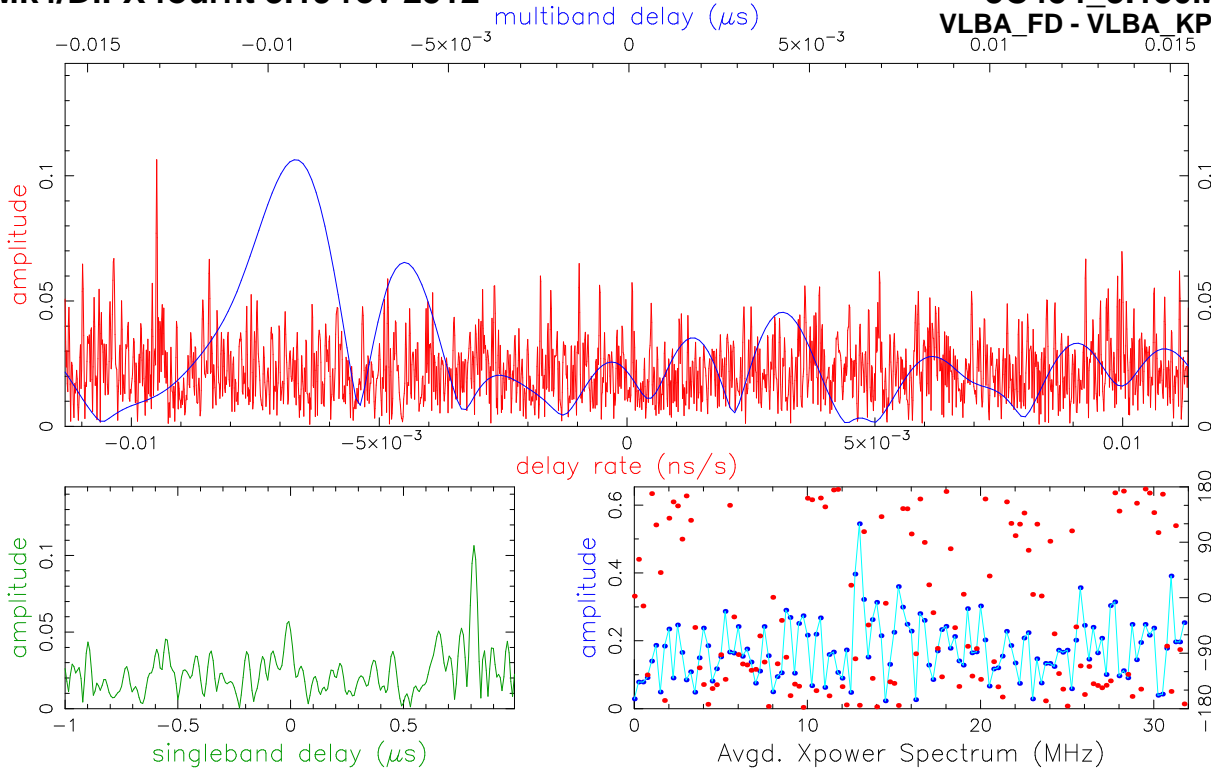


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-150.9	94.1	-138.5	-153.2	-127.5	-43.4	-113.4	-117.2	-125.7	173.0	-140.9	-139.4	-119.9	-177.4	-124.3	17.7	Phase	-139.7
	0.2	0.1	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.3	0.3	0.2	0.1	Ampl.	0.2
	143.7	153.1	248.3	49.8	214.0	93.6	10.9	211.1	206.8	3.7	23.1	36.2	5.2	183.6	98.7	17.0	Sbd box	3.7
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	1.69496207413E+03			Apriori delay (usec)			1.69593355085E+03			Resid mbdelay (usec)			-2.72672E-03			+/- 1.8E-04		
Sband delay (usec)	1.69495428485E+03			Apriori clock (usec)			8.7444746E-01			Resid sbdelay (usec)			-9.79266E-01			+/- 2.9E-03		
Phase delay (usec)	1.69593354635E+03			Apriori clockrate (us/s)			1.0362949E-07			Resid phdelay (usec)			-4.50479E-06			+/- 6.2E-07		
Delay rate (us/s)	-1.09006093155E-01			Apriori rate (us/s)			-1.08996198729E-01			Resid rate (us/s)			-9.89443E-06			+/- 2.6E-09		
Total phase (deg)	-114.3			Apriori accel (us/s/s)			-9.63584515790E-06			Resid phase (deg)			-139.7			+/- 19.3		
	RMS	Theor.	Amplitude	0.150 +/- 0.025		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5										
ph/seg (deg)	38.8	33.4	Search (2048X64)	0.101		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000						
amp/seg (%)	53.4	58.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016				
ph/frq (deg)	63.3	38.6	Inc. seg. avg.	0.146		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011						
amp/frq (%)	56.1	67.4	Inc. frq. avg.	0.154		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00		
f: az 101.0 el 49.4 pa -61.6	k: az 97.3 el 42.7 pa -61.1			u,v (fr/asec) 636.175 -391.837			simultaneous interpolator											

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fk..130MTI Output file: /Exps/c192c/v2/1234/No0080/fk.W.128.130MTI

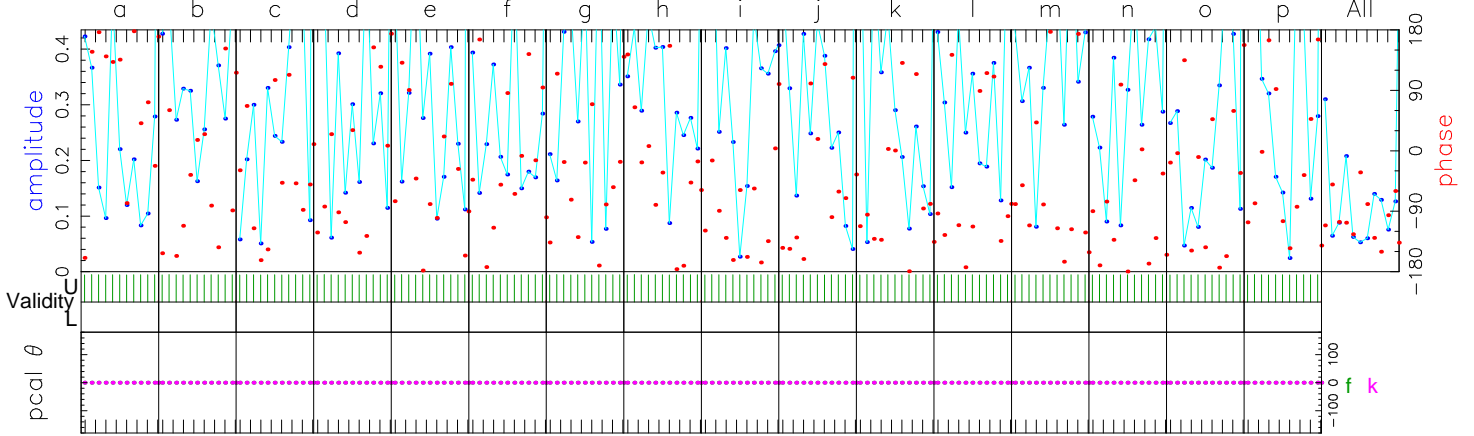
Mk4/DiFX fourfit 3.19 rev 2512

3C454_3.130MTI, No0080, fk
VLBA_FD - VLBA_KP, fgroup W, pol RL

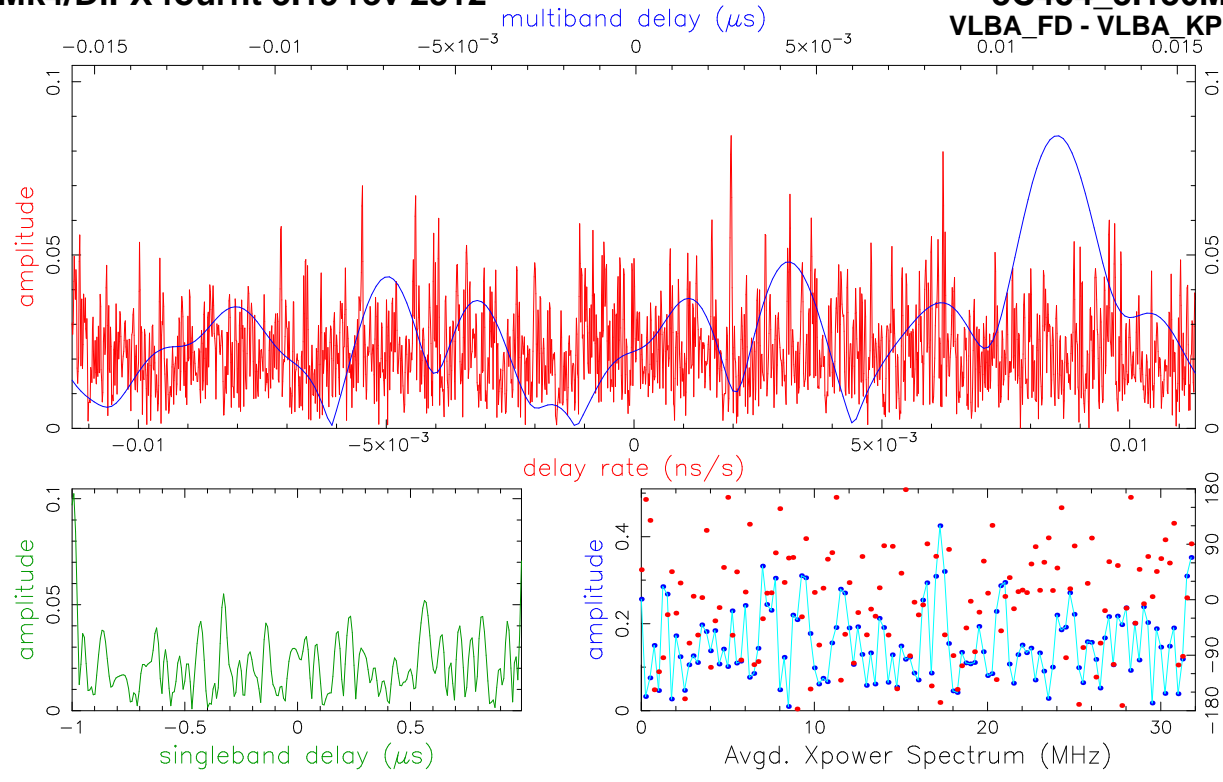


Fringe quality 0
SNR 5.9
Int time 408.868
Amp 0.145
Phase -104.8
PFD 6.3e-01
Delays (us)
SBD 0.813055
MBD -0.009227
Fringe rate (Hz)
-0.818231
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055621
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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		
155.6	-105.0	-79.9	-116.9	-58.4	-69.8	-66.3	-22.4	-91.6	-146.0	-109.5	-130.1	-121.2	-112.7	-172.7	-83.2	Phase	-104.8		
0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.4	0.2	0.0	0.2	Ampl.	0.1		
255.5	50.1	150.5	85.5	209.0	9.4	135.8	230.3	226.4	170.3	117.7	42.3	233.5	173.1	245.5	185.9	Sbd box	233.1		
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used			
f	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 freqs			
f: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 phase			
f: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			
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
Group delay (usec)(sbd)	1.69673682389E+03				Apriori delay (usec)				1.69593355085E+03				Resid mbdelay (usec)				-9.22697E-03 +/- 1.8E-04		
Sband delay (usec)	1.69674660585E+03				Apriori clock (usec)				8.7444746E-01				Resid sbdelay (usec)				8.13055E-01 +/- 2.9E-03		
Phase delay (usec)	1.69593354747E+03				Apriori clockrate (us/s)				1.0362949E-07				Resid phdelay (usec)				-3.37951E-06 +/- 6.3E-07		
Delay rate (us/s)	-1.09005697579E-01				Apriori rate (us/s)				-1.08996198729E-01				Resid rate (us/s)				-9.49885E-06 +/- 2.6E-09		
Total phase (deg)	-79.4				Apriori accel (us/s/s)				-9.63584515790E-06				Resid phase (deg)				-104.8 +/- 19.5		
ph/seg (deg)	RMS	Theor.	Amplitude		0.145 +/- 0.025		Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5				sb window (us)		-1.000	1.000	
amp/seg (%)	35.8	33.7	Search (2048X64)		0.106		Pcal rate: 0.000E+00, 0.000E+00 (us/s)				SampCntNorm: enabled				mb window (us)		-0.016	0.016	
ph/frq (deg)	77.3	58.8	Interp.		0.000		Bits/sample: 2x2				Data rate (Mb/s): 2048				nlags: 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.5	38.9	Inc. seg. avg.		0.141		Sample rate(MSamp/s): 64				ion window (TEC)				0.00		0.00		
	62.1	67.9	Inc. frq. avg.		0.145		Data rate(Mb/s): 2048												
f: az 101.0 el 49.4 pa -61.6		k: az 97.3 el 42.7 pa -61.1		u,v (fr/asec) 636.175 -391.837		simultaneous interpolator													
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fk..130MTI Output file: /Exps/c192c/v2/1234/No0080/fk.W.146.130MTI																			

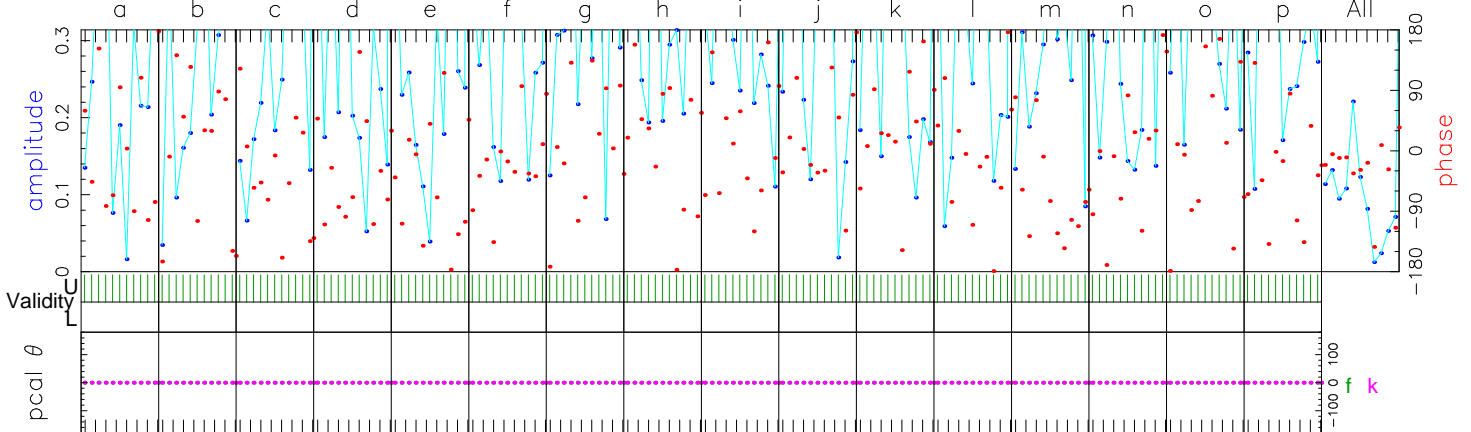


Fringe quality 0

SNR 5.7
Int time 408.868
Amp 0.105
Phase -23.8
PFD 9.3e-01
Delays (us)
SBD -0.994399
MBD 0.011659
Fringe rate (Hz)
0.169361
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055605
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



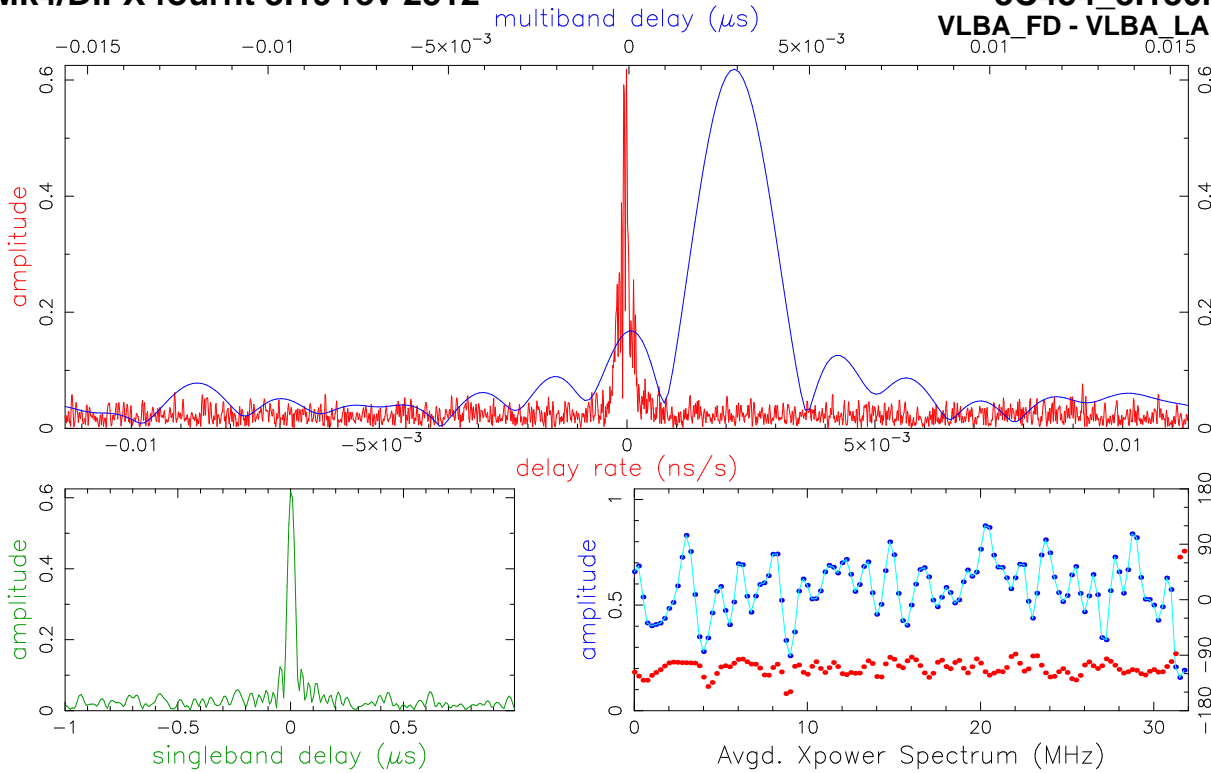
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-99.9	52.8	-22.6	-59.3	-94.8	-24.3	24.9	37.6	-35.4	37.6	31.3	-4.1	-92.4	-16.6	-148.2	-40.1		Phase	-23.8
	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.2		Ampl.	0.1
	57.0	160.0	61.1	170.6	103.9	220.8	250.7	160.8	144.6	185.0	22.2	28.1	5.0	208.0	248.0	112.7		Sbd box	1.7
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
f	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) 1.69494520964E+03 Apriori delay (usec) 1.69593355085E+03 Resid mbdelay (usec) 1.16588E-02 +/- 1.9E-04
 Sband delay (usec) 1.69493915185E+03 Apriori clock (usec) 8.7444746E-01 Resid sbdelay (usec) -9.94399E-01 +/- 3.0E-03
 Phase delay (usec) 1.69593355009E+03 Apriori clockrate (us/s) 1.0362949E-07 Resid phdelay (usec) -7.67514E-07 +/- 6.5E-07
 Delay rate (us/s) -1.08994232621E-01 Apriori rate (us/s) -1.08996198729E-01 Resid rate (us/s) 1.96611E-06 +/- 2.7E-09
 Total phase (deg) 1.6 Apriori accel (us/s/s) -9.63584515790E-06 Resid phase (deg) -23.8 +/- 20.0

RMS Theor. Amplitude 0.105 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.2 34.7 Search (2048X64) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 56.2 60.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 60.9 40.1 Inc. seg. avg. 0.082 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.3 70.0 Inc. frq. avg. 0.101 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 k: az 97.3 el 42.7 pa -61.1 u,v (fr/asec) 636.175 -391.837 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fk..130MTI Output file: /Exps/c192c/v2/1234/No0080/fk.W.86.130MTI

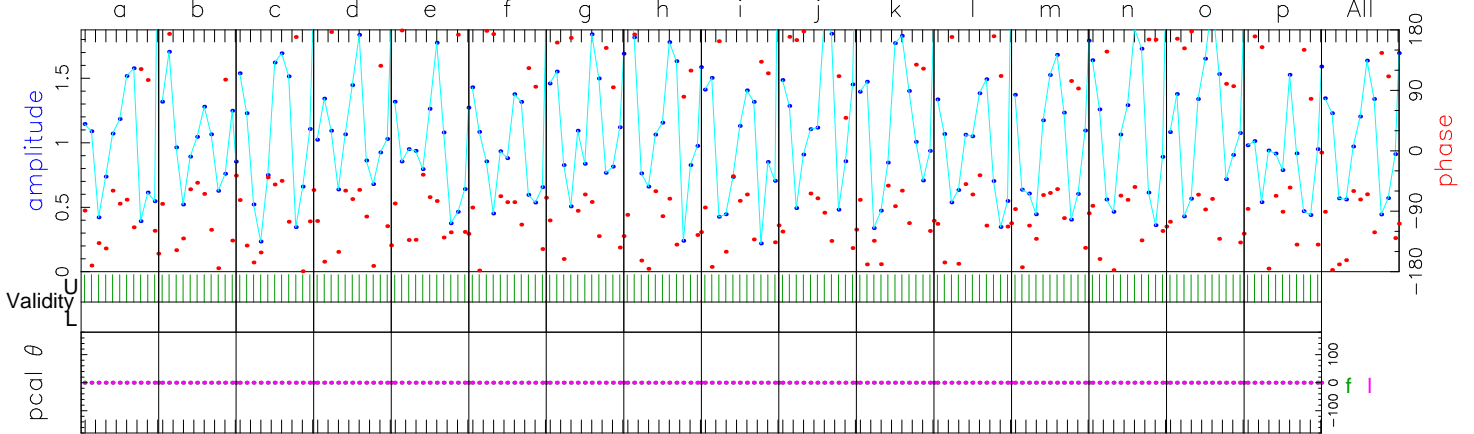


Fringe quality 7

SNR 34.6
Int time 410.148
Amp 0.625
Phase -113.0
PFD 0.0e+00
Delays (us)
SBD 0.002644
MBD 0.002944
Fringe rate (Hz) -0.000685
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

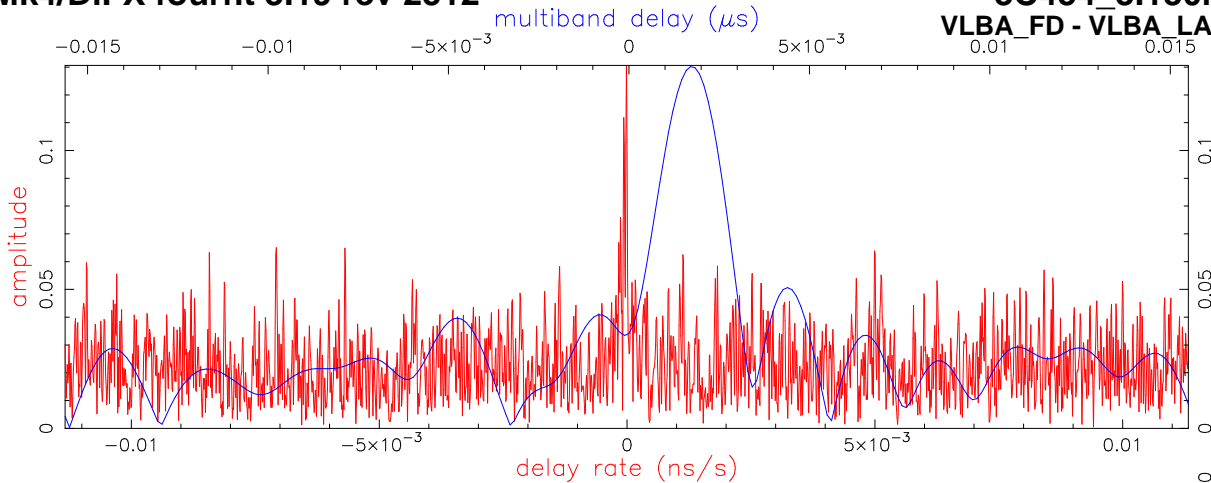
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055609
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



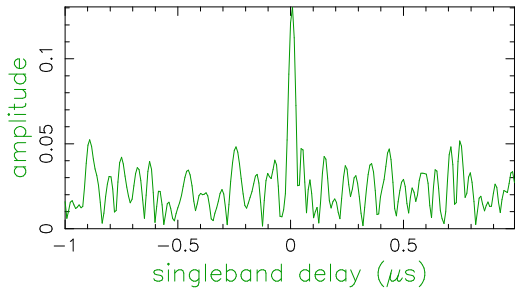
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	-108.2	-117.1	-90.3	-114.5	-104.6	-117.7	-131.7	-123.8	-117.0	-127.9	-106.1	-109.2	-91.7	-109.5	-120.2	-124.2	Phase	-113.0		
	0.6	0.6	0.7	0.7	0.7	0.5	0.7	0.8	0.5	0.7	0.6	0.5	0.6	0.7	0.6	0.4	Ampl.	0.6		
	129.1	129.8	129.2	128.9	129.1	129.6	129.3	129.2	129.9	129.3	129.4	129.6	129.7	129.4	128.9	127.6	Sbd box	129.3		
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used			
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
l	1000	1000	1000	1000	1000	1000	1000	1000	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				
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks			
																	Chan ids			
																	Tracks			
Group delay (usec)(sbd)	7.57428299214E+02			Apriori delay (usec)			7.57425354962E+02			Resid mbdelay (usec)			2.94425E-03			+/-	3.1E-05			
Sband delay (usec)	7.57427999462E+02			Apriori clock (usec)			1.2441895E+00			Resid sbdelay (usec)			2.64450E-03			+/-	5.0E-04			
Phase delay (usec)	7.57425351317E+02			Apriori clockrate (us/s)			2.6052251E-07			Resid phdelay (usec)			-3.64544E-06			+/-	1.1E-07			
Delay rate (us/s)	1.13372650980E-02			Apriori rate (us/s)			1.13372730530E-02			Resid rate (us/s)			-7.95498E-09			+/-	4.5E-10			
Total phase (deg)				-85.5			Apriori accel (us/s/s)			-6.39000711623E-06			Resid phase (deg)			-113.0			+/-	3.3

ph/seg (deg) 64.6 5.7 Search (2048X64) 0.607 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 84.1 10.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.1 6.6 Inc. seg. avg. 0.979 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 13.4 11.6 Inc. frq. avg. 0.627 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 l: az 104.8 el 46.4 pa -54.4 u,v (fr/asec) -77.155 -784.097 ion window (TEC) 0.00 0.00 simultaneous interpolator

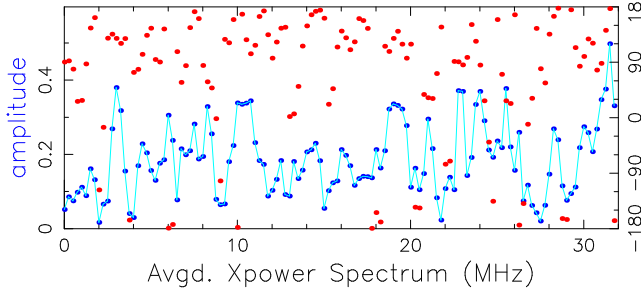


Fringe quality 0

SNR 7.2
Int time 410.149
Amp 0.131
Phase 151.4
PFD 1.5e-04
Delays (us)
SBD 0.006562
MBD 0.001735
Fringe rate (Hz)
-0.000611
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

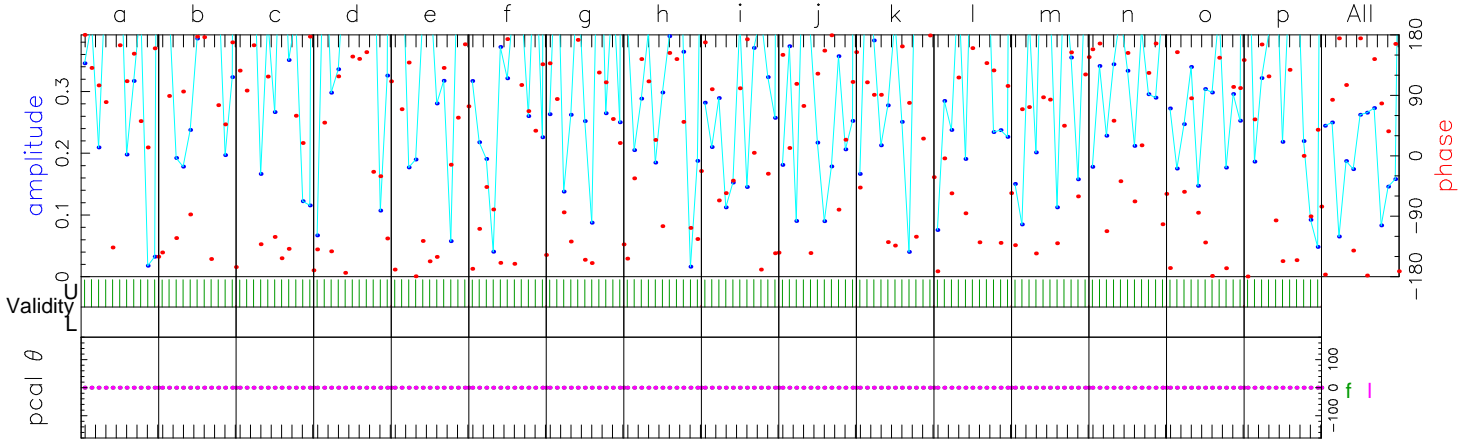


delay rate (ns/s)



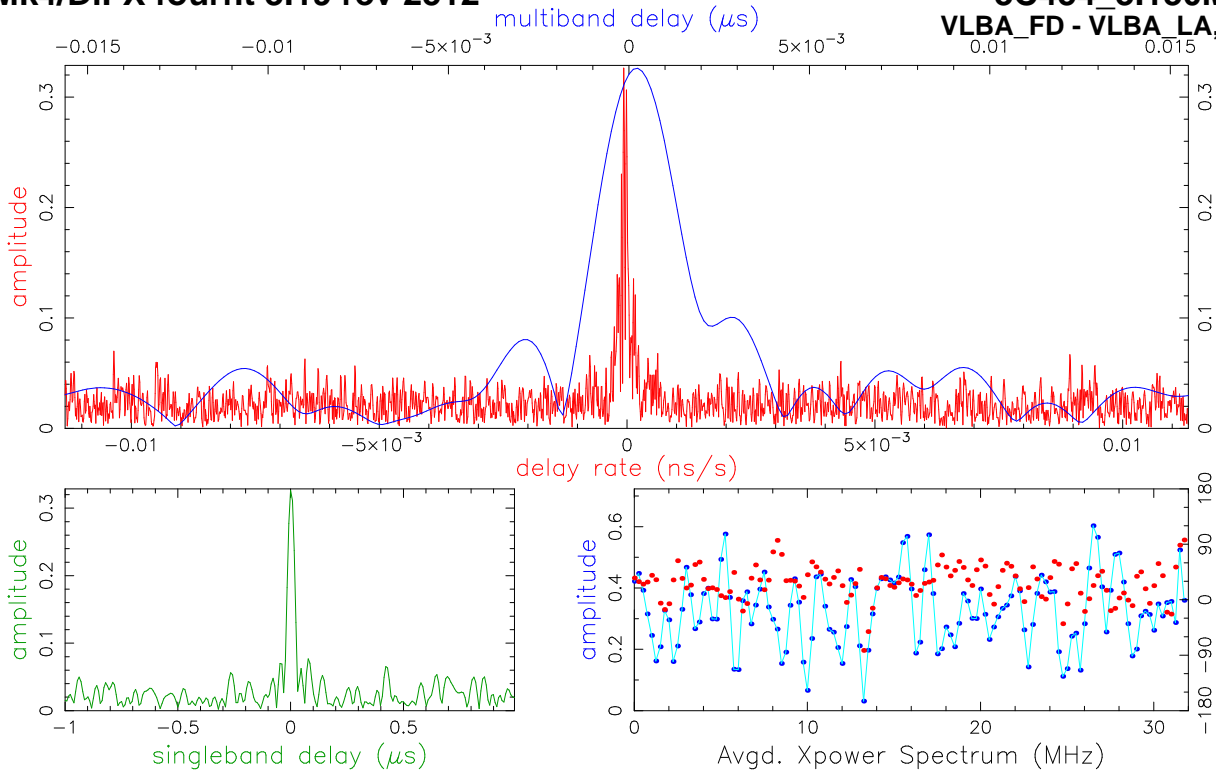
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055614
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
l	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
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	7.57427089620E+02			Apriori delay (usec)			7.57425354962E+02			Resid mbdelay (usec)			1.73466E-03			+/-	1.5E-04	
Sband delay (usec)	7.57431916962E+02			Apriori clock (usec)			1.2441895E+00			Resid sbdelay (usec)			6.56200E-03			+/-	2.4E-03	
Phase delay (usec)	7.57425359844E+02			Apriori clockrate (us/s)			2.6052251E-07			Resid phdelay (usec)			4.88109E-06			+/-	5.1E-07	
Delay rate (us/s)	1.13372659546E-02			Apriori rate (us/s)			1.13372730530E-02			Resid rate (us/s)			-7.09833E-09			+/-	2.1E-09	
Total phase (deg)	178.9			Apriori accel (us/s/s)			-6.39000711623E-06			Resid phase (deg)			151.4			+/-	15.8	

ph/seg (deg) 54.9 27.4 Search (2048X64) 0.125 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.2 47.9 Interp. 0.000 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 30.3 31.7 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 43.5 55.3 Inc. frq. avg. 0.123 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 l: az 104.8 el 46.4 pa -54.4 u,v (fr/asec) -77.155 -784.097 ion window (TEC) 0.00 0.00 simultaneous interpolator

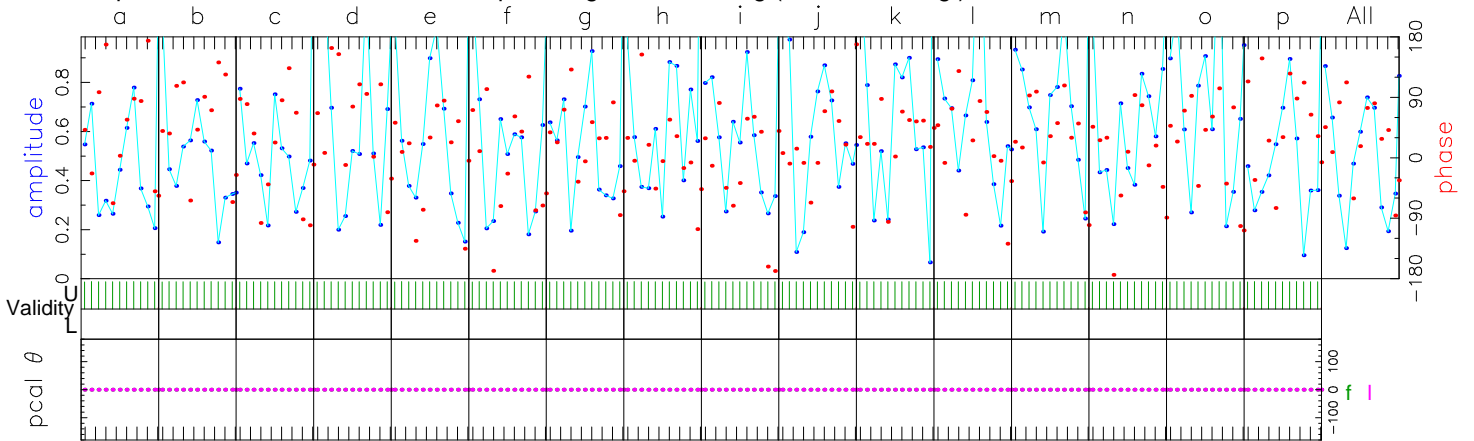


Fringe quality 7

SNR 18.2
Int time 410.149
Amp 0.329
Phase 38.2
PFD 0.0e+00
Delays (us)
SBD 0.002111
MBD 0.000232
Fringe rate (Hz)
-0.005379
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

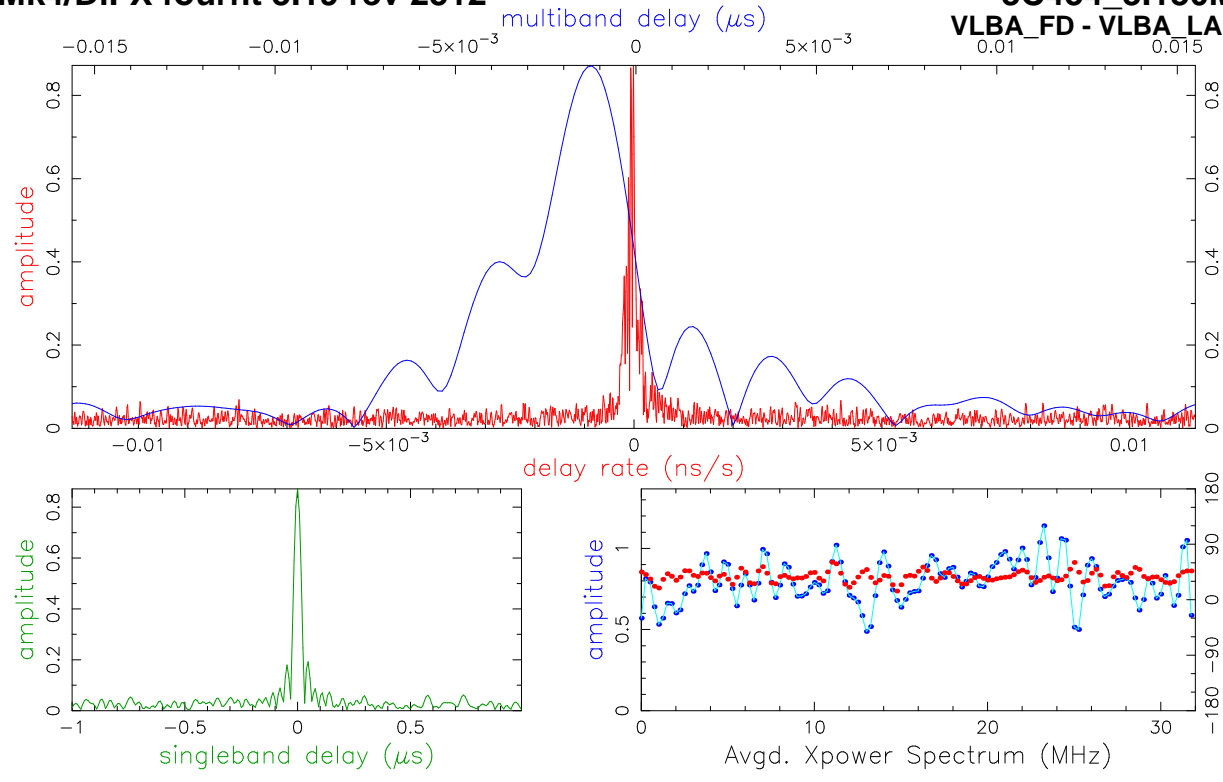
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055618
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	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:l	0:0	0:0	0:0	0:0	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		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		7.57425586691E+02																
Sband delay (usec)		7.57427466462E+02																
Phase delay (usec)		7.57425356195E+02																
Delay rate (us/s)		1.13372106113E-02																
Total phase (deg)					65.7													
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:																		
PCal rate:																		
Bits/sample:																		
Sample rate(MSamp/s):																		
Data rate(Mb/s):																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 58.2 10.9 Search (2048X64) 0.311 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 85.3 19.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 20.2 12.6 Inc. seg. avg. 0.477 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 30.6 22.0 Inc. frq. avg. 0.335 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 l: az 104.8 el 46.4 pa -54.4 u,v (fr/asec) -77.155 -784.097 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fl..130MTI Output file: /Exps/c192c/v2/1234/No0080/fl.W.136.130MTI

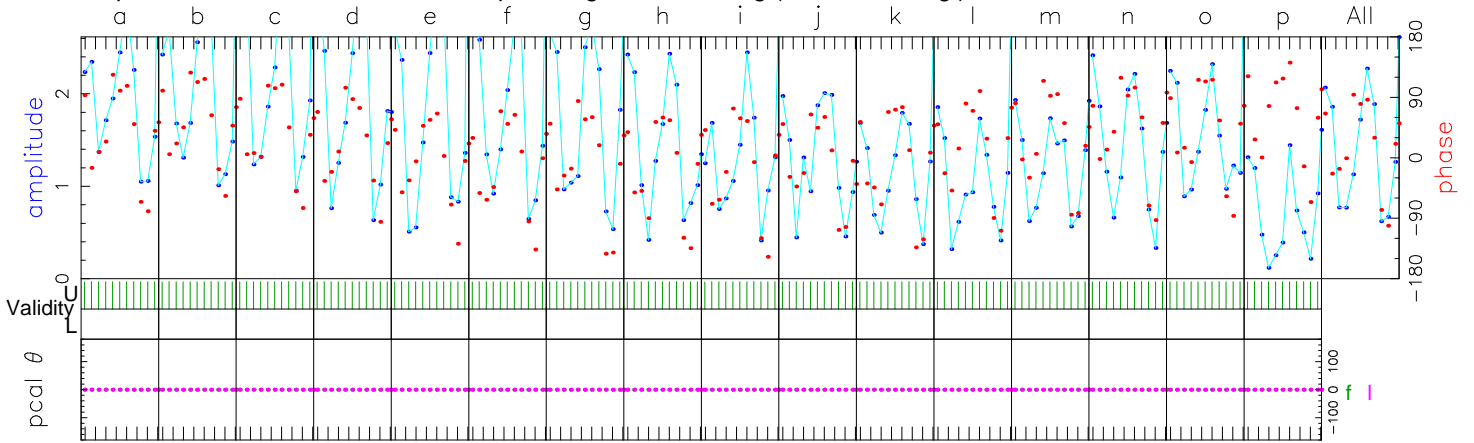


Fringe quality 2

SNR 48.3
Int time 410.149
Amp 0.872
Phase 40.3
PFD 0.0e+00
Delays (us)
SBD -0.000779
MBD -0.001258
Fringe rate (Hz)
-0.000691
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

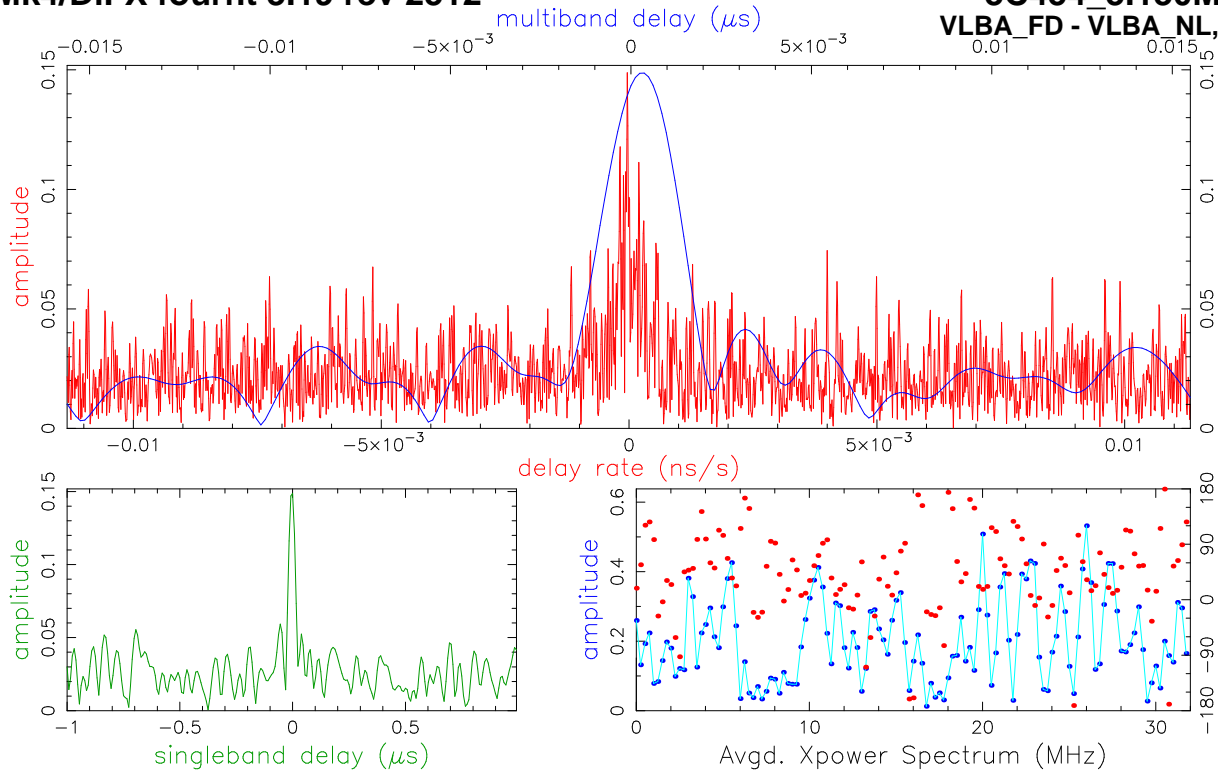
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055605
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	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:l	0:0	0:0	0:0	0:0	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		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	7.57424096714E+02			Apriori delay (usec)			7.57425354962E+02			Resid mbdelay (usec)			-1.25825E-03			+/-	2.2E-05	
Sband delay (usec)	7.57424575462E+02			Apriori clock (usec)			1.2441895E+00			Resid sbdelay (usec)			-7.79500E-04			+/-	3.6E-04	
Phase delay (usec)	7.57425356262E+02			Apriori clockrate (us/s)			2.6052251E-07			Resid phdelay (usec)			1.29951E-06			+/-	7.7E-08	
Delay rate (us/s)	1.13372650328E-02			Apriori rate (us/s)			1.13372730530E-02			Resid rate (us/s)			-8.02016E-09			+/-	3.2E-10	
Total phase (deg)	67.8			Apriori accel (us/s/s)			-6.39000711623E-06			Resid phase (deg)			40.3			+/-	2.4	

ph/seg (deg) 67.6 4.1 Search (2048X64) 0.841 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.8 7.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.4 4.7 Inc. seg. avg. 1.370 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 31.7 8.3 Inc. frq. avg. 0.936 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 l: az 104.8 el 46.4 pa -54.4 u,v (fr/asec) -77.155 -784.097 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fl..130MTI Output file: /Exps/c192c/v2/1234/No0080/fl.W.88.130MTI

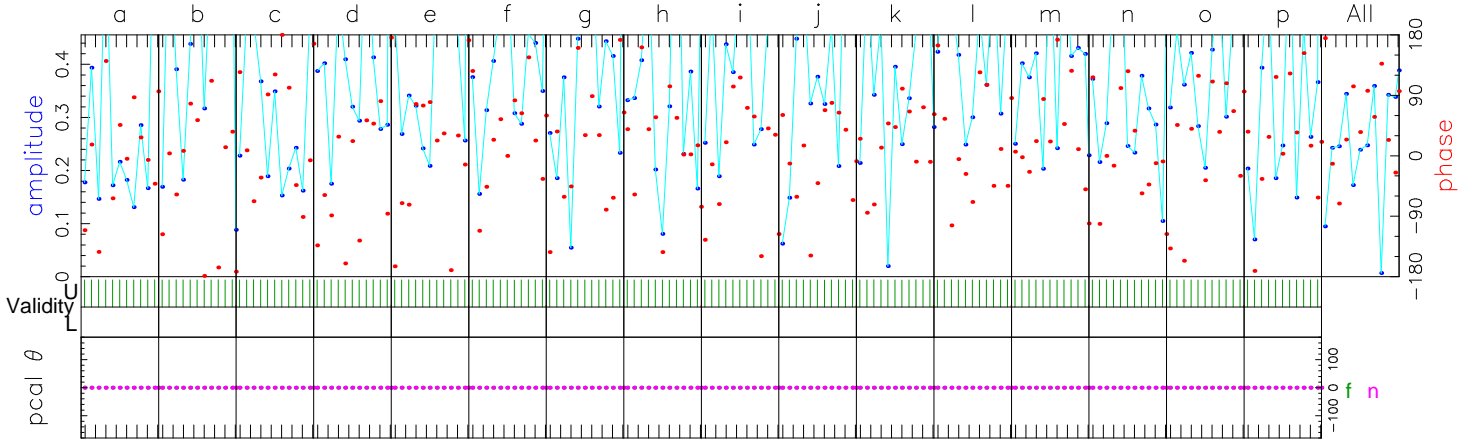


Fringe quality 9

SNR 8.4
Int time 407.302
Amp 0.152
Phase 26.6
PFD 1.8e-08
Delays (us)
SBD -0.003438
MBD 0.000280
Fringe rate (Hz)
-0.003116
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055612
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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				
5.4	39.7	-3.8	3.4	33.2	37.9	12.6	43.3	51.7	7.6	11.1	-10.4	21.4	14.9	53.4	44.3	44.3	Phase	26.6				
0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.1	0.2	0.1	0.1	Ampl.	0.1				
32.9	227.1	105.7	11.3	185.3	255.3	48.6	255.7	42.6	206.7	80.1	243.8	128.2	52.5	126.8	45.7	45.7	Sbd box	128.6				
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used					
f	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	PC freqs					
f: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					
f: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					
f	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	PC amp					
f	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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.04740807494E+03														Apriori delay (usec)	-1.04740835507E+03	Resid mbdelay (usec)	2.80130E-04	+/-	1.3E-04
Sband delay (usec)			-1.04741179307E+03														Apriori clock (usec)	-2.6066631E+01	Resid sbdelay (usec)	-3.43800E-03	+/-	2.1E-03
Phase delay (usec)			-1.04740835421E+03														Apriori clockrate (us/s)	-2.2517302E-07	Resid phdelay (usec)	8.58945E-07	+/-	4.4E-07
Delay rate (us/s)			3.08689546846E-01														Apriori rate (us/s)	3.08689583023E-01	Resid rate (us/s)	-3.61768E-08	+/-	1.8E-09
Total phase (deg)																	Apriori accel (us/s/s)	4.91527435050E-07	Resid phase (deg)	26.6	+/-	13.7

ph/seg (deg) 73.7 23.7
amp/seg (%) 91.4 41.3
ph/frq (deg) 21.6 27.3
amp/frq (%) 39.7 47.7

RMS Theor. Amplitude 0.152 +/- 0.018
Search (2048X64) 0.147
Interp. 0.000
Inc. seg. avg. 0.221
Inc. frq. avg. 0.141

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

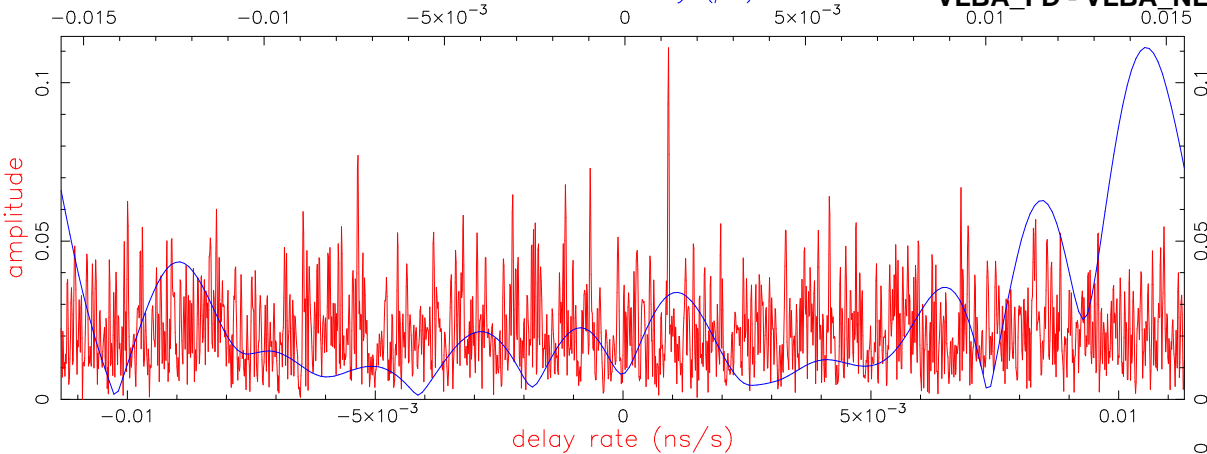
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 n: az 126.5 el 54.1 pa -38.5 u,v (fr/asec) -1841.241 -1309.289 simultaneous interpolator

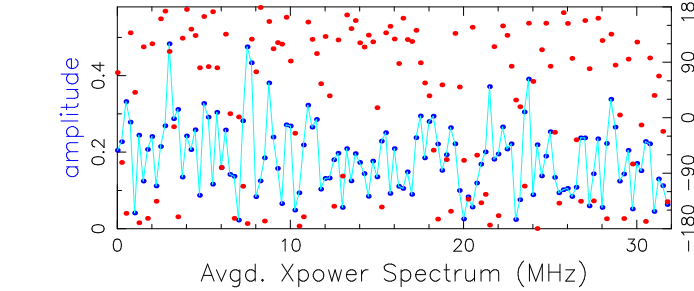
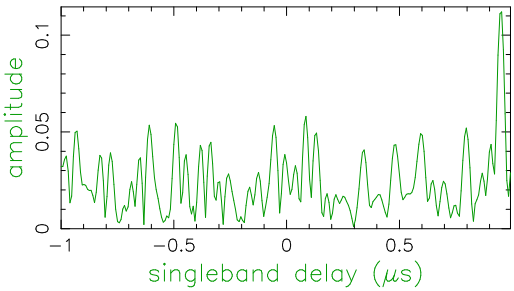
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fn..130MTI Output file: /Exps/c192c/v2/1234/No0080/fn.W.116.130MTI

multiband delay (μ s)

Fringe quality 0

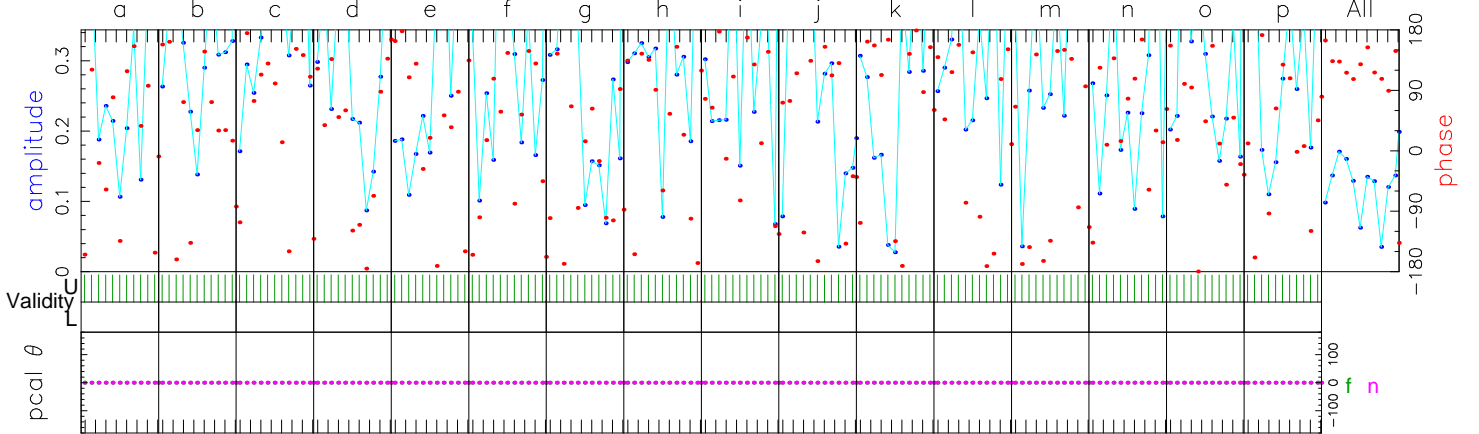


SNR 6.3
Int time 407.302
Amp 0.115
Phase 128.5
PFD 7.3e-02
Delays (us)
SBD 0.949579
MBD 0.014485
Fringe rate (Hz)
0.079409
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



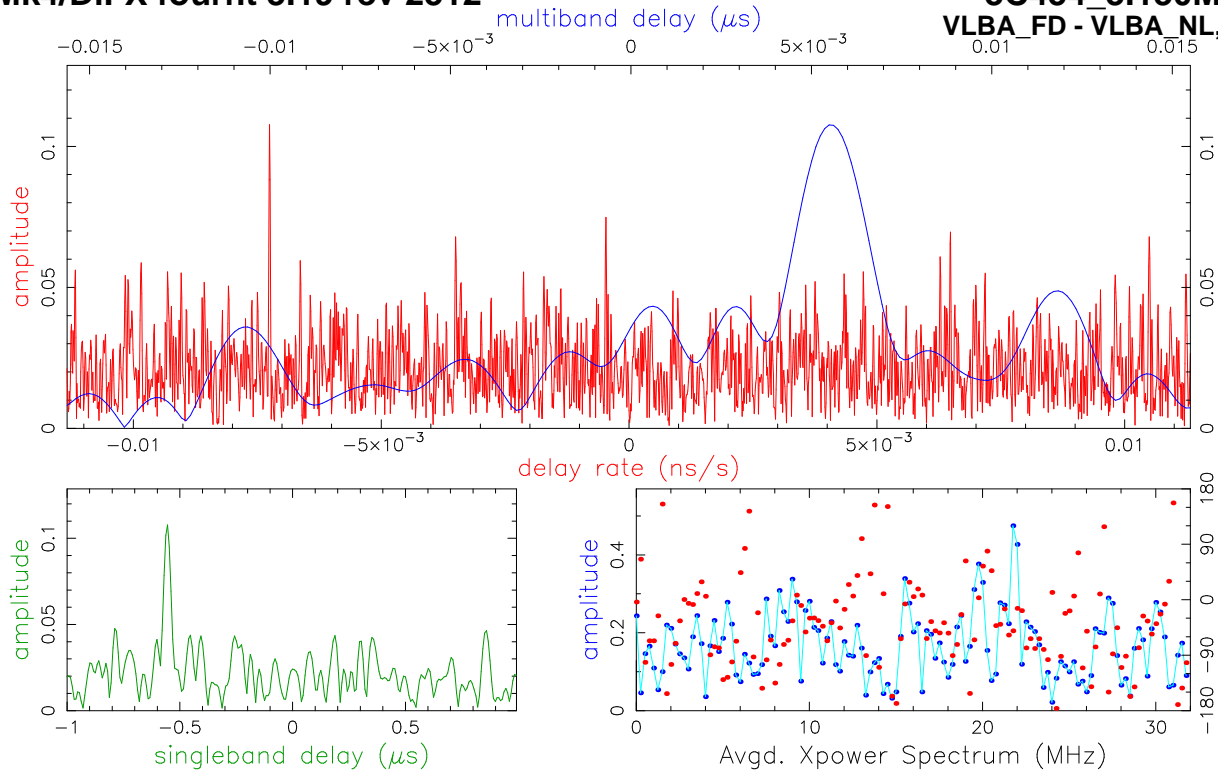
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055618
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	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		
f: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		
fn	0:0	0:0	0:0	0:0	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		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-1.04645637033E+03															
Sband delay (usec)			-1.04645877557E+03															
Phase delay (usec)			-1.04740835093E+03															
Delay rate (us/s)			3.08690504880E-01															
Total phase (deg)					-125.6													
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(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 22.5 31.5 Search (2048X64) 0.110 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 34.1 54.9 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.9 36.3 Inc. seg. avg. 0.104 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.2 63.4 Inc. frq. avg. 0.110 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 n: az 126.5 el 54.1 pa -38.5 u,v (fr/asec) -1841.241 -1309.289 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fn..130MTI Output file: /Exps/c192c/v2/1234/No0080/fn.W.137.130MTI

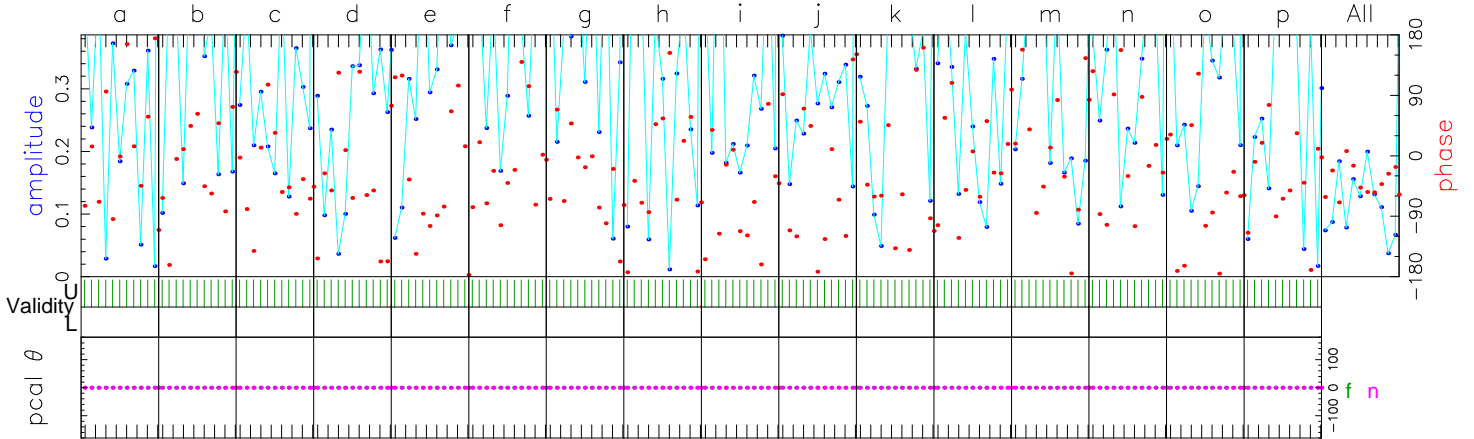


Fringe quality 0

SNR 6.0
Int time 407.302
Amp 0.129
Phase -42.0
PFD 4.7e-01
Delays (us)
SBD -0.556199
MBD 0.005534
Fringe rate (Hz)
-0.625973
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055624
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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					
	-42.9	-2.1	-48.1	-93.5	-65.8	-30.5	-41.5	-13.7	-98.8	-143.5	-102.2	0.2	-7.4	17.5	-69.6	-46.9		Phase	-42.0				
	0.1	0.2	0.2	0.1	0.1	0.3	0.3	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.2		Ampl.	0.1				
	165.4	119.5	51.1	194.6	109.4	58.2	58.5	60.1	178.8	101.6	227.3	48.3	214.1	230.9	34.2	57.2		Sbd box	57.8				
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used					
f	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		PC freqs					
f: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					
fn	0:0	0:0	0:0	0:0	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					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
f	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					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.04796532098E+03															Apriori delay (usec)	-1.04740835507E+03	Resid mbdelay (usec)	5.53409E-03	+/-	1.8E-04
Sband delay (usec)			-1.04796455407E+03															Apriori clock (usec)	-2.6066631E+01	Resid sbdelay (usec)	-5.56199E-01	+/-	2.9E-03
Phase delay (usec)			-1.04740835643E+03															Apriori clockrate (us/s)	-2.2517302E-07	Resid phdelay (usec)	-1.35342E-06	+/-	6.2E-07
Delay rate (us/s)			3.08682316093E-01															Apriori rate (us/s)	3.08689583023E-01	Resid rate (us/s)	-7.26693E-06	+/-	2.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	4.91527435050E-07	Resid phase (deg)	-42.0	+/-	19.2

ph/seg (deg) 23.0 33.3
amp/seg (%) 51.1 58.1
ph/frq (deg) 46.5 38.4
amp/frq (%) 54.0 67.1

RMS Theor. Amplitude 0.129 +/- 0.022
Search (2048X64) 0.104
Interp. 0.000
Inc. seg. avg. 0.118
Inc. frq. avg. 0.125

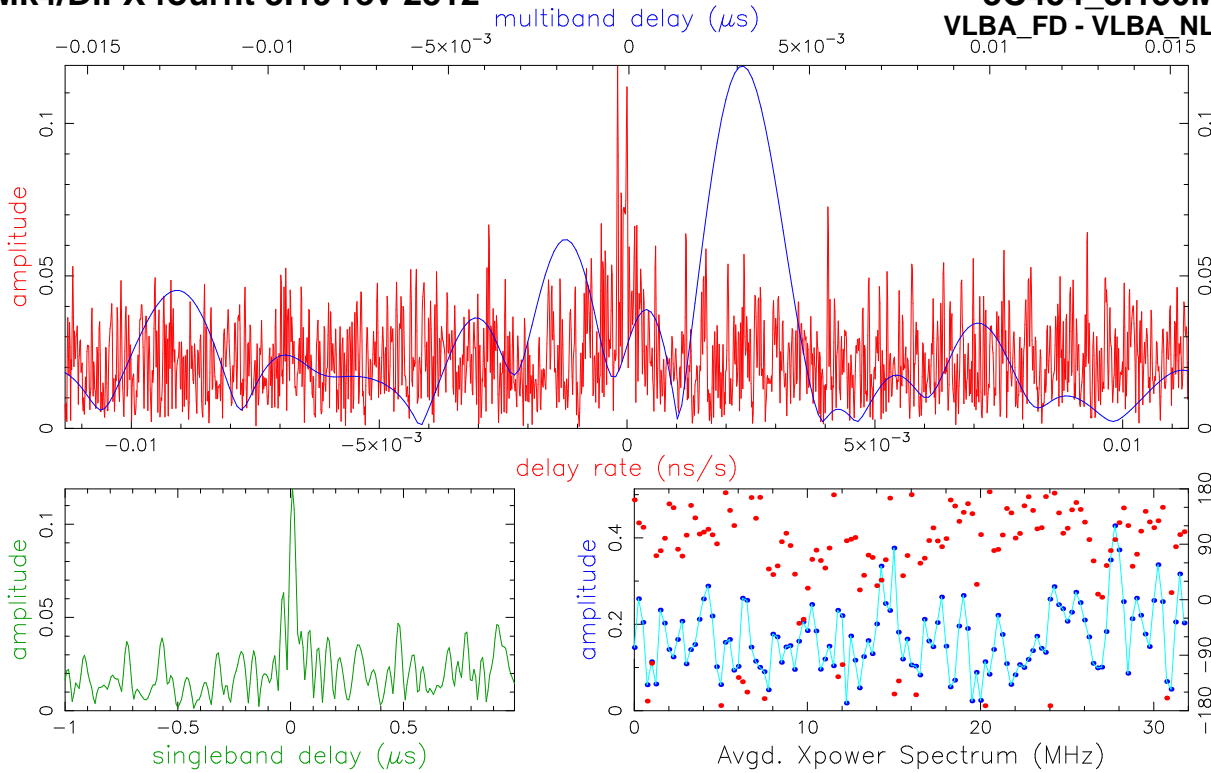
f: az 101.0 el 49.4 pa -61.6
n: az 126.5 el 54.1 pa -38.5
u,v (fr/asec) -1841.241 -1309.289

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

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fn..130MTI Output file: /Exps/c192c/v2/1234/No0080/fn.W.155.130MTI

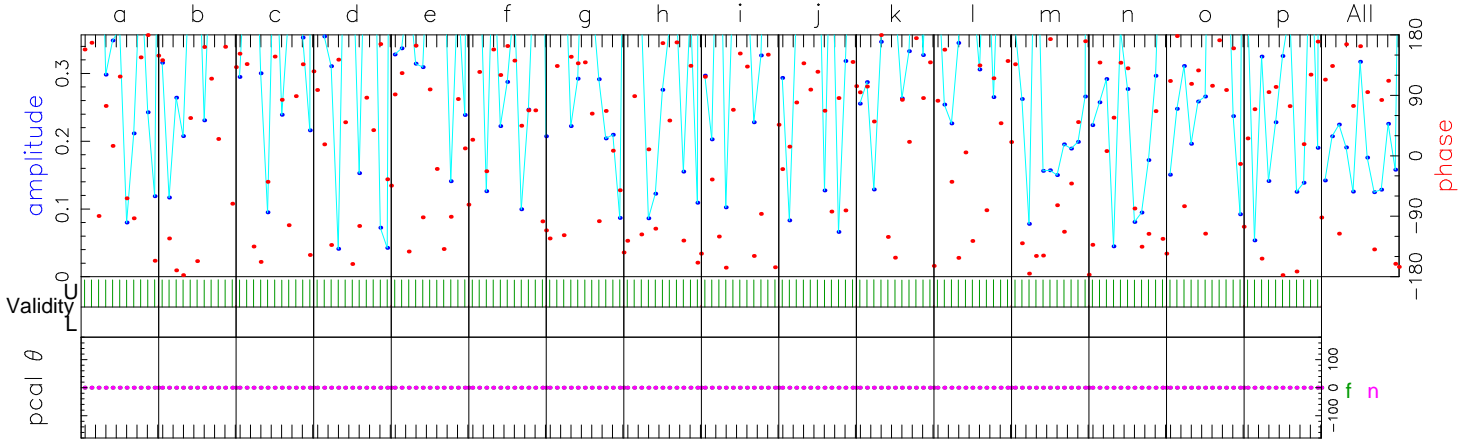


Fringe quality 0

SNR 6.6
Int time 407.302
Amp 0.119
Phase 147.5
PFD 1.4e-02
Delays (us)
SBD 0.008653
MBD 0.003148
Fringe rate (Hz)
-0.015914
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055606
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

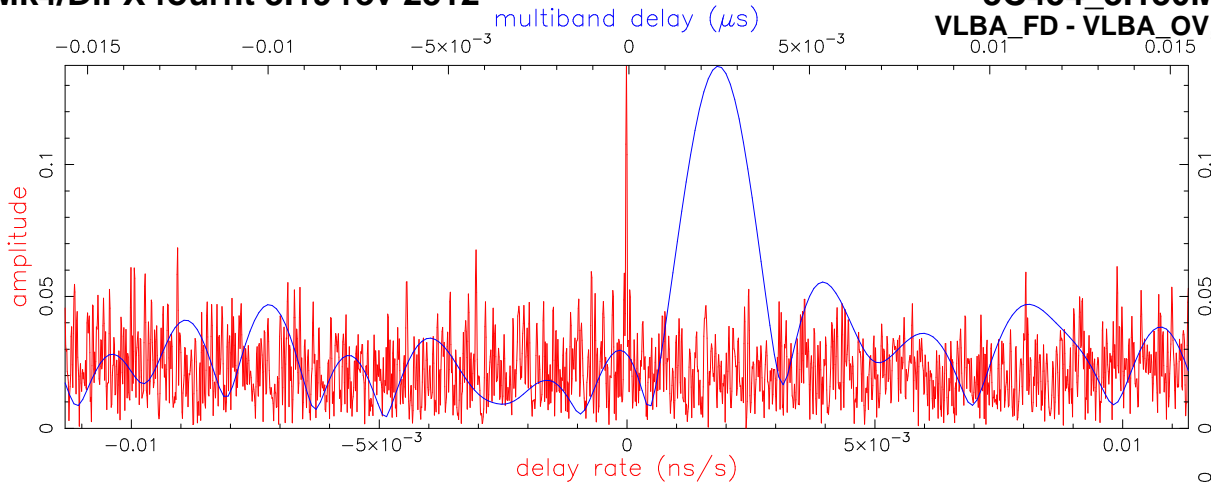


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	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		
f: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		
fn	0:0	0:0	0:0	0:0	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		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd) -1.04740520664E+03 Apriori delay (usec) -1.04740835507E+03 Resid mbdelay (usec) 3.14843E-03 +/- 1.6E-04
 Sband delay (usec) -1.04739970207E+03 Apriori clock (usec) -2.6066631E+01 Resid sbdelay (usec) 8.65300E-03 +/- 2.6E-03
 Phase delay (usec) -1.04740835032E+03 Apriori clockrate (us/s) -2.2517302E-07 Resid phdelay (usec) 4.75614E-06 +/- 5.6E-07
 Delay rate (us/s) 3.08689398283E-01 Apriori rate (us/s) 3.08689583023E-01 Resid rate (us/s) -1.84740E-07 +/- 2.4E-09
 Total phase (deg) -106.7 Apriori accel (us/s/s) 4.91527435050E-07 Resid phase (deg) 147.5 +/- 17.4

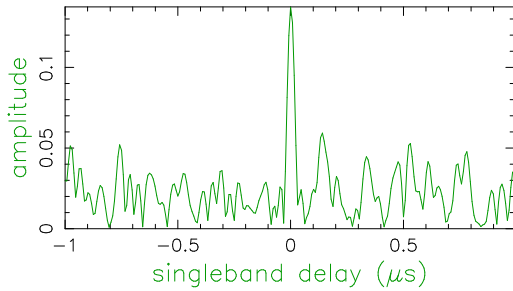
RMS Theor. Amplitude 0.119 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.7 30.2 Search (2048X64) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 76.4 52.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 36.5 34.9 Inc. seg. avg. 0.163 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 40.4 60.9 Inc. frq. avg. 0.117 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 n: az 126.5 el 54.1 pa -38.5 u,v (fr/asec) -1841.241 -1309.289 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fn..130MTI Output file: /Exps/c192c/v2/1234/No0080/fn.W.94.130MTI

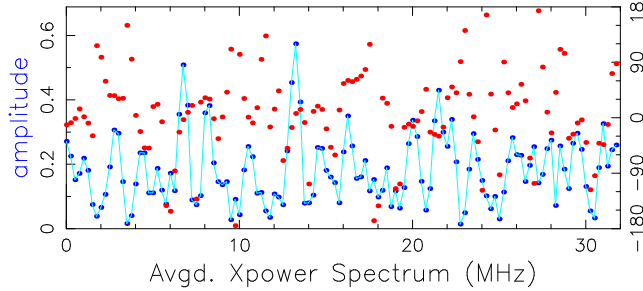


Fringe quality 9

SNR 7.6
Int time 407.240
Amp 0.138
Phase -1.3
PFD 1.0e-05
Delays (us)
SBD 0.001191
MBD 0.002495
Fringe rate (Hz)
-0.000623
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

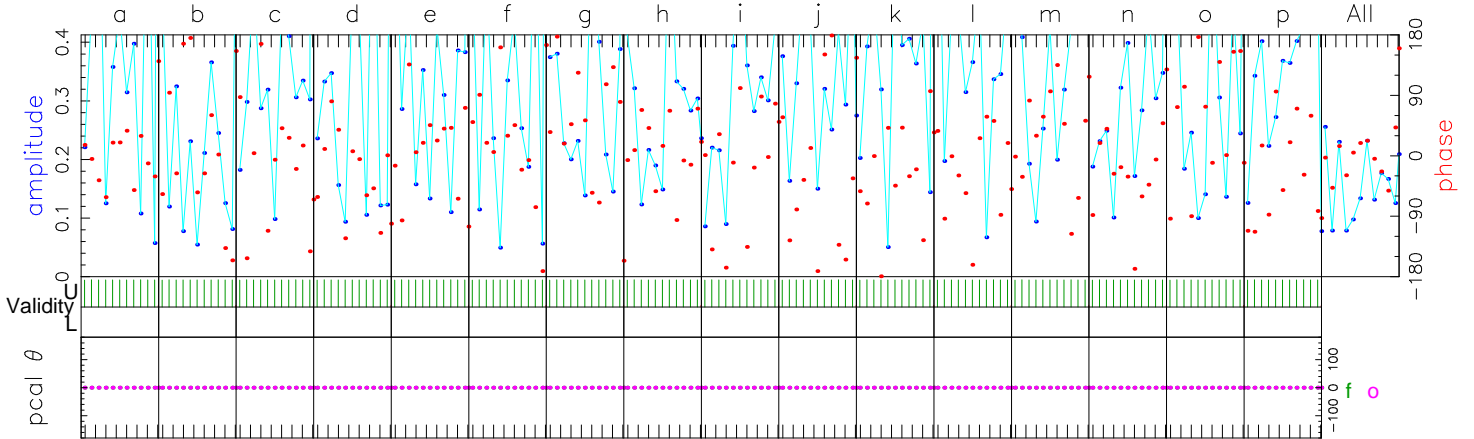


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055613
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

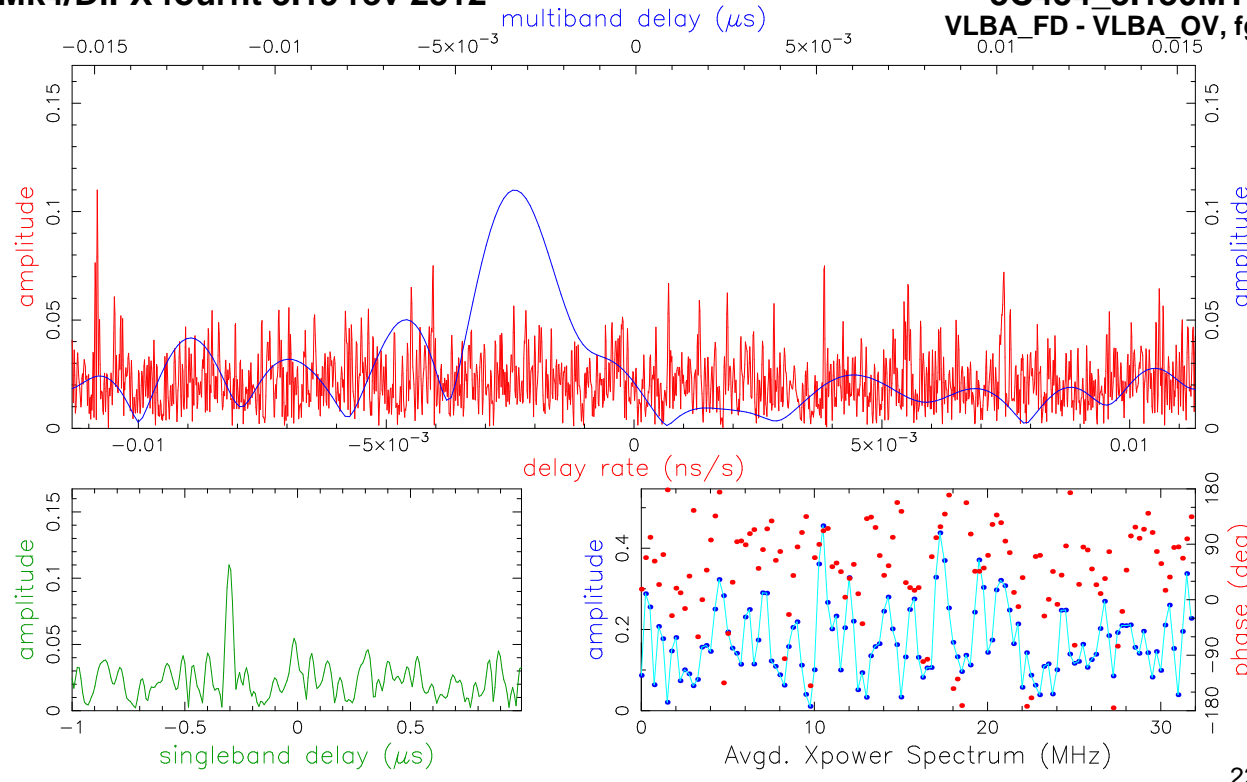
Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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					
	-7.4	-24.4	2.8	-15.6	15.8	12.3	44.4	15.5	51.9	-74.9	-34.5	0.4	14.8	-17.5	100.5	-14.6		Phase	-1.3				
	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.1		Ampl.	0.1				
	129.4	203.2	95.4	128.4	10.1	93.9	60.9	242.7	247.4	109.9	49.5	128.9	238.4	137.0	32.1	98.4		Sbd box	129.2				
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used					
f	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					
fo	0:0	0:0	0:0	0:0	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					
fo	0:0	0:0	0:0	0:0	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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
f	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)			3.42343859778E+03															Apriori delay (usec)	3.42343610250E+03	Resid mbdelay (usec)	2.49528E-03	+/-	1.4E-04
Sband delay (usec)			3.42343729400E+03															Apriori clock (usec)	-1.6196402E+01	Resid sbdelay (usec)	1.19150E-03	+/-	2.3E-03
Phase delay (usec)			3.42343610246E+03															Apriori clockrate (us/s)	-9.1930498E-08	Resid phdelay (usec)	-4.19401E-08	+/-	4.9E-07
Delay rate (us/s)			-1.3640222224E-01															Apriori rate (us/s)	-1.36402214993E-01	Resid rate (us/s)	-7.23154E-09	+/-	2.0E-09
Total phase (deg)					311.7													Apriori accel (us/s/s)	-2.13020366360E-05	Resid phase (deg)	-1.3	+/-	15.1

ph/seg (deg) RMS 30.8 Theor. 26.1 Amplitude 0.138 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.3 45.6 Interp. 0.134 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.5 30.2 Inc. seg. avg. 0.141 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 51.5 52.7 Inc. frq. avg. 0.135 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 o: az 97.3 el 36.6 pa -55.3 u,v (fr/asec) 782.512 -1303.529 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fo..130MTI Output file: /Exps/c192c/v2/1234/No0080/fo.W.118.130MTI

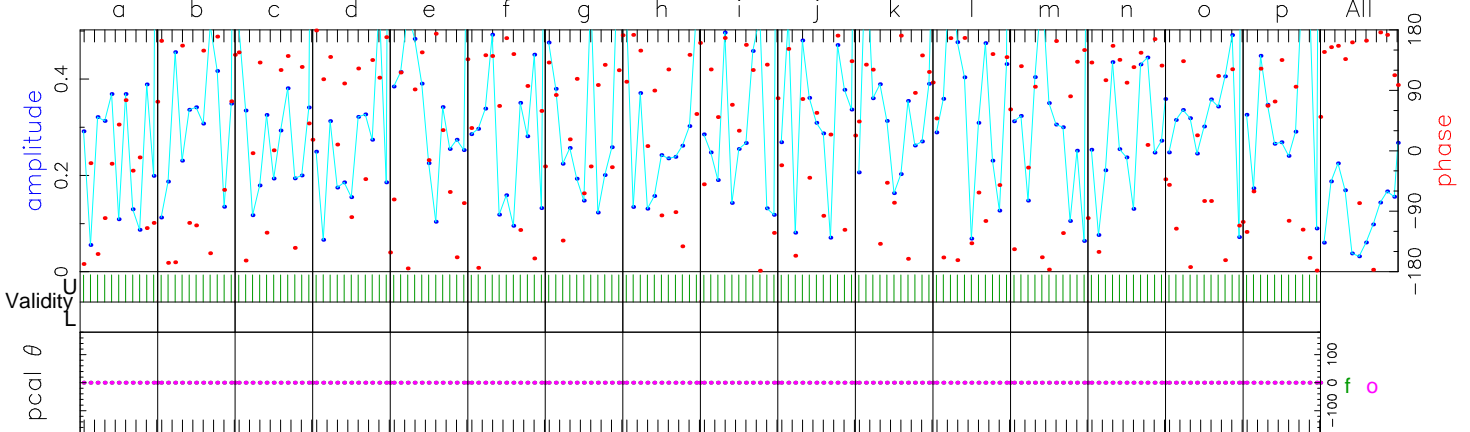


Fringe quality 0

SNR 6.1
Int time 407.240
Amp 0.167
Phase 155.5
PFD 2.0e-01
Delays (us)
SBD -0.302120
MBD -0.003364
Fringe rate (Hz)
-0.934548
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055619
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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
	-93.6	-169.4	143.8	131.6	158.6	151.7	89.0	124.6	138.0	146.0	143.0	-173.7	171.5	128.5	-160.2	176.3	Phase	155.5
	0.1	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.1	0.2	Ampl.	0.2
	73.0	63.0	100.7	25.9	248.4	252.6	173.8	251.9	236.5	250.6	235.4	25.8	68.4	52.7	46.3	152.3	Sbd box	90.3
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
fo	0:0	0:0	0:0	0:0	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	
fo	0:0	0:0	0:0	0:0	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
f	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	

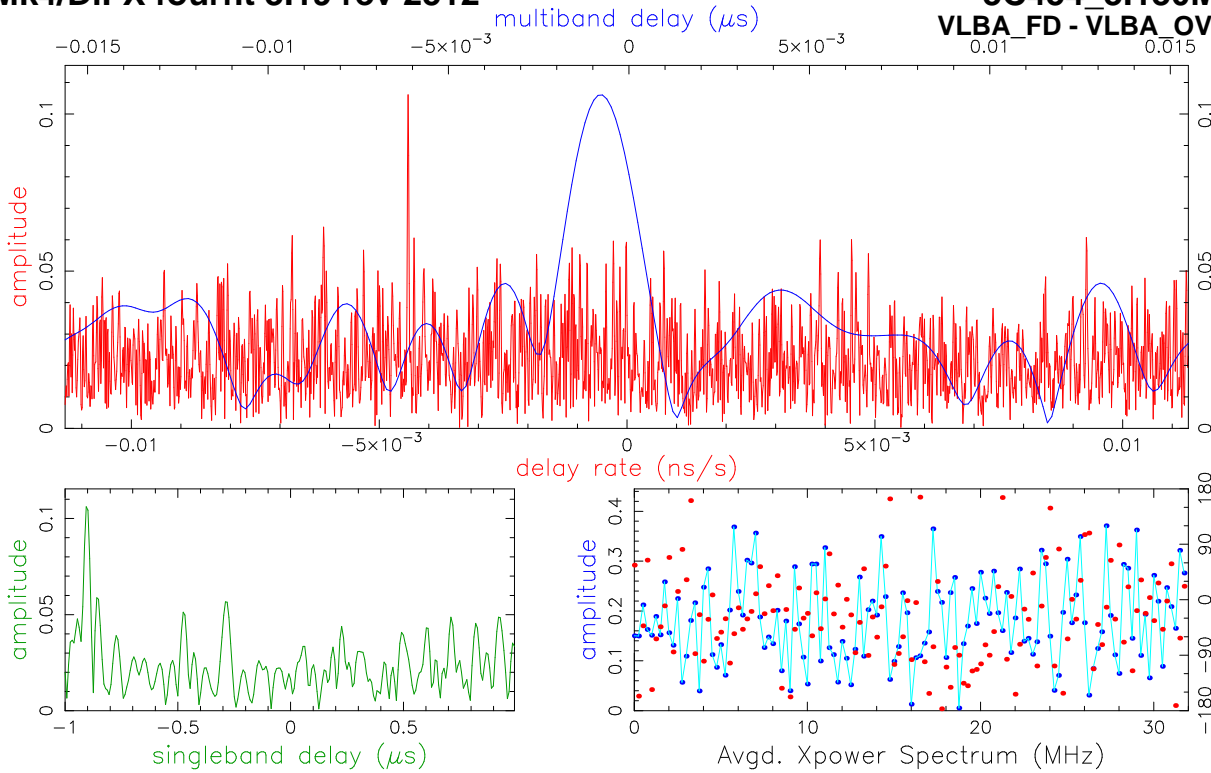
Group delay (usec)(sbd) 3.42312023857E+03 Apriori delay (usec) 3.42343610250E+03 Resid mbdelay (usec) -3.36393E-03 +/- 1.8E-04
 Sband delay (usec) 3.42313398250E+03 Apriori clock (usec) -1.6196402E+01 Resid sbdelay (usec) -3.02120E-01 +/- 2.8E-03
 Phase delay (usec) 3.42343610751E+03 Apriori clockrate (us/s) -9.1930498E-08 Resid phdelay (usec) 5.01438E-06 +/- 6.0E-07
 Delay rate (us/s) -1.36413064165E-01 Apriori rate (us/s) -1.36402214993E-01 Resid rate (us/s) -1.08492E-05 +/- 2.5E-09
 Total phase (deg) 108.5 Apriori accel (us/s/s) -2.13020366360E-05 Resid phase (deg) 155.5 +/- 18.7

RMS Theor. Amplitude 0.167 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 42.6 32.4 Search (2048X64) 0.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 58.3 56.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 41.9 37.4 Inc. seg. avg. 0.159 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 43.1 65.2 Inc. frq. avg. 0.162 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 o: az 97.3 el 36.6 pa -55.3 u,v (fr/asec) 782.512 -1303.529 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fo..130MTI Output file: /Exps/c192c/v2/1234/No0080/fo.W.139.130MTI

Mk4/DiFX fourfit 3.19 rev 2512

3C454_3.130MTI, No0080, fo
VLBA_FD - VLBA_OV, fgroup W, pol RL

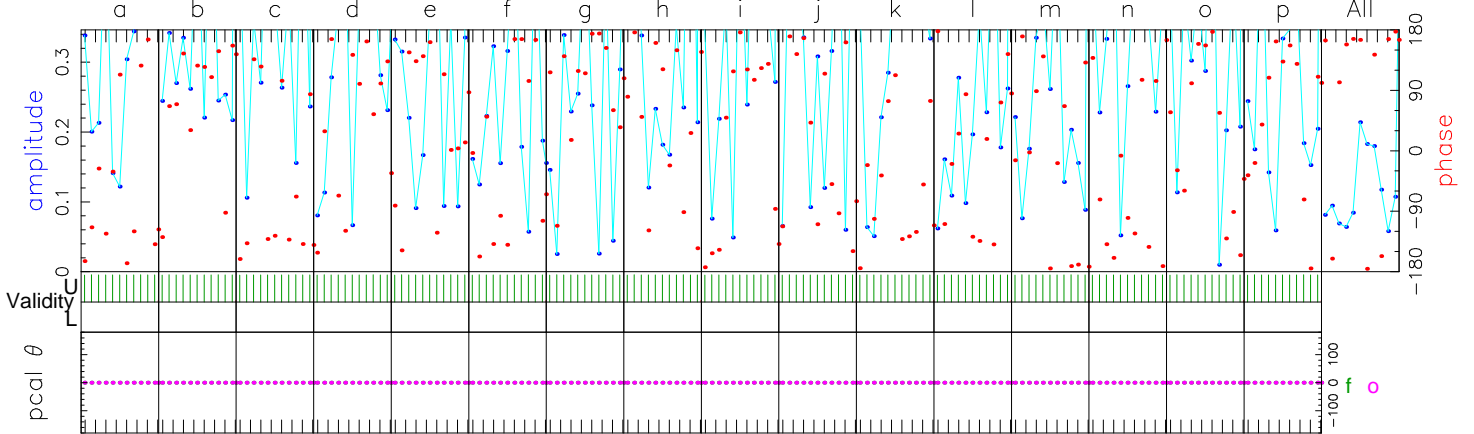


Fringe quality 0

SNR 6.0
Int time 407.239
Amp 0.115
Phase 168.8
PFD 4.4e-01
Delays (us)
SBD -0.902875
MBD -0.000748
Fringe rate (Hz)
-0.380708
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055623
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

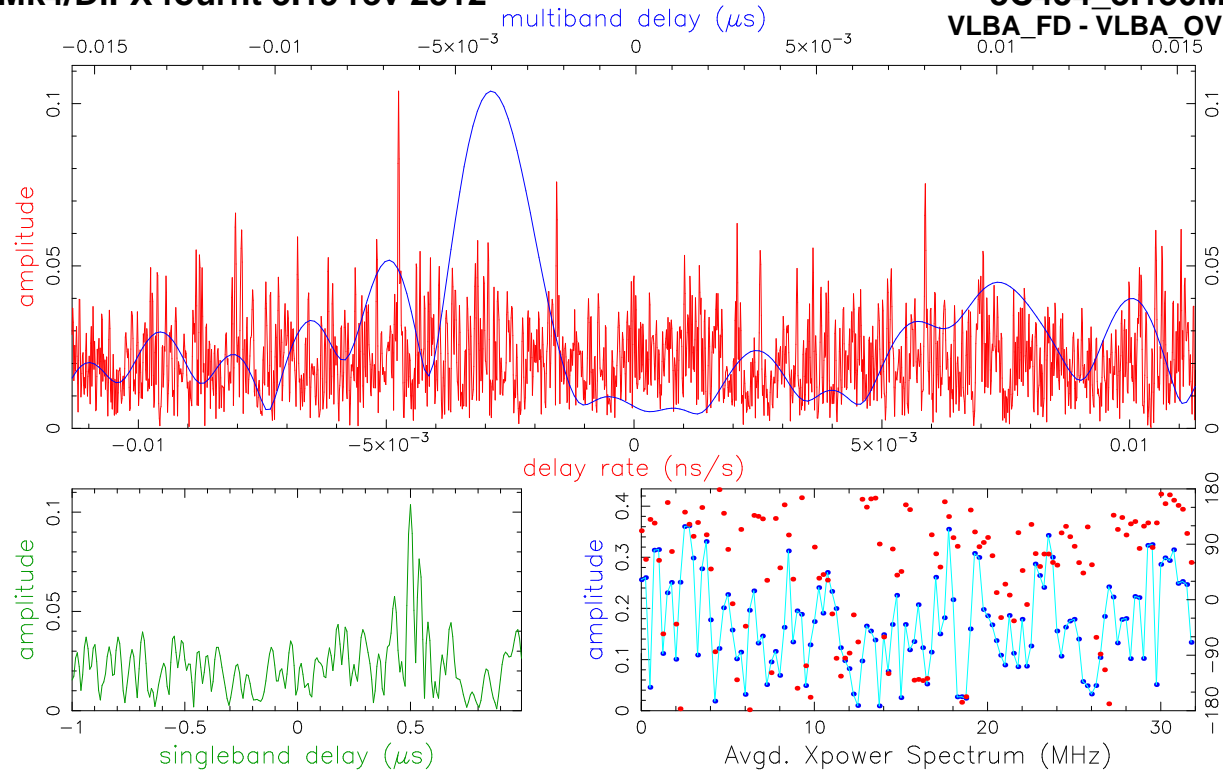


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-152.2	120.0	-158.5	145.9	-153.9	-169.8	119.4	110.1	141.6	-150.1	-139.9	-151.7	110.7	-168.6	-170.2	105.3	Phase	168.8
	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	15.7	226.9	124.2	151.0	219.8	39.0	107.7	95.6	13.2	133.2	158.6	175.3	81.8	13.6	19.6	26.1	Sbd box	13.4
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
fo	0:0	0:0	0:0	0:0	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	
fo	0:0	0:0	0:0	0:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	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	

Group delay (usec)(sbd) 3.42252910491E+03 Apriori delay (usec) 3.42343610250E+03 Resid mbdelay (usec) -7.47592E-04 +/- 1.8E-04
 Sband delay (usec) 3.42253322750E+03 Apriori clock (usec) -1.6196402E+01 Resid sbdelay (usec) -9.02875E-01 +/- 2.9E-03
 Phase delay (usec) 3.42343610794E+03 Apriori clockrate (us/s) -9.1930498E-08 Resid phdelay (usec) 5.44176E-06 +/- 6.2E-07
 Delay rate (us/s) -1.36406634637E-01 Apriori rate (us/s) -1.36402214993E-01 Resid rate (us/s) -4.41964E-06 +/- 2.6E-09
 Total phase (deg) 121.7 Apriori accel (us/s/s) -2.13020366360E-05 Resid phase (deg) 168.8 +/- 19.2

RMS Theor. Amplitude 0.115 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 26.5 33.2 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.6 57.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 44.9 38.3 Inc. seg. avg. 0.105 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 61.9 66.9 Inc. frq. avg. 0.120 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 o: az 97.3 el 36.6 pa -55.3 u,v (fr/asec) 782.512 -1303.529 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fo..130MTI Output file: /Exps/c192c/v2/1234/No0080/fo.W.154.130MTI

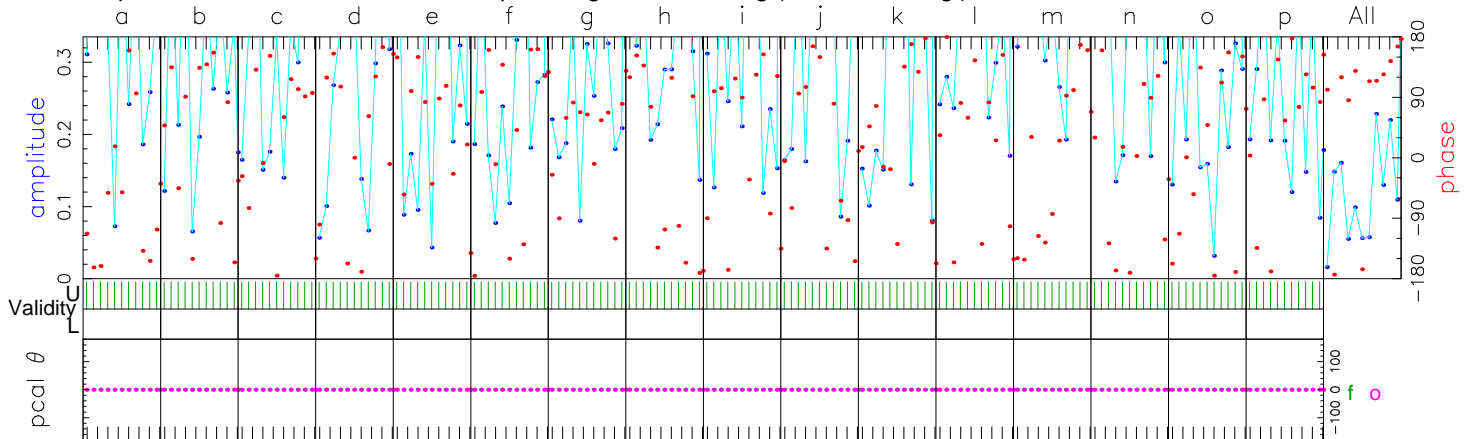


Fringe quality 0

SNR 5.7
Int time 407.239
Amp 0.112
Phase 137.0
PFD 9.2e-01
Delays (us)
SBD 0.500116
MBD -0.004010
Fringe rate (Hz)
-0.409991
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055607
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

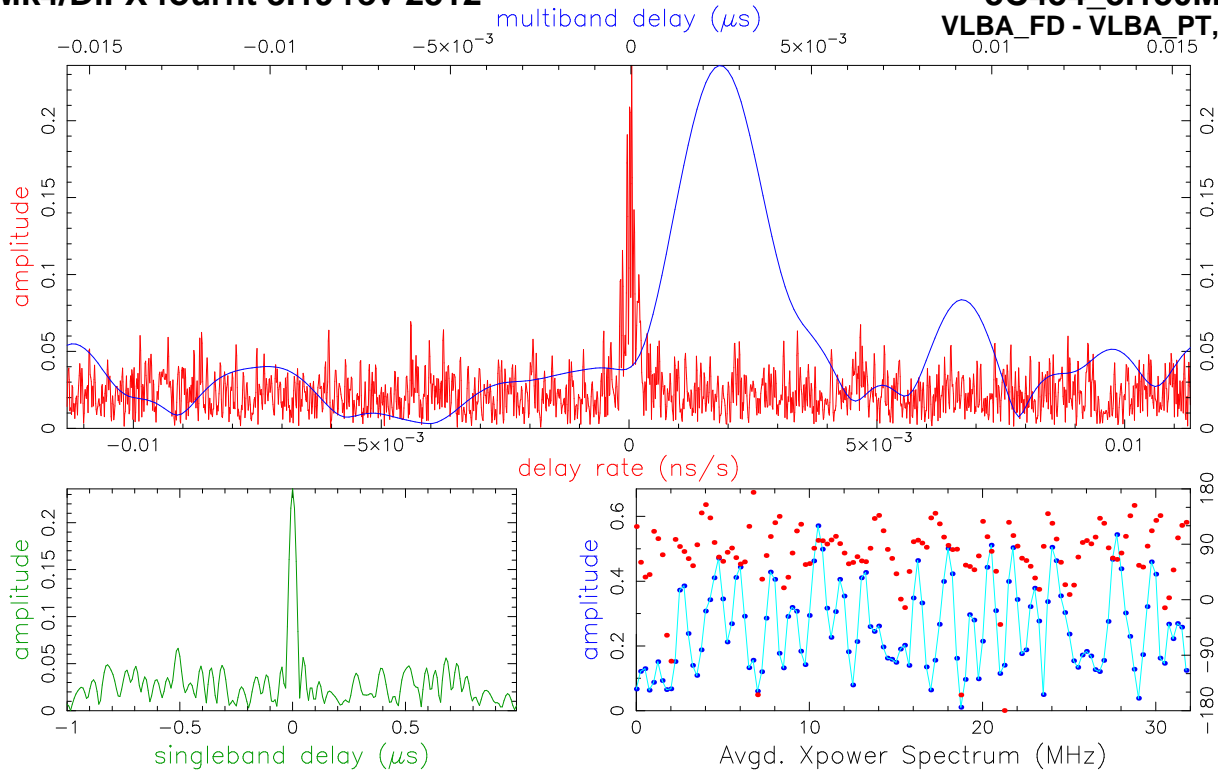


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-129.9	138.4	111.3	139.9	99.0	158.8	52.9	162.5	124.4	163.0	142.4	129.0	172.6	141.4	-178.1	110.2	Phase	137.0
	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	203.1	197.6	245.3	118.7	194.2	145.1	50.0	61.8	150.7	124.4	189.5	248.8	93.7	41.0	197.4	18.4	Sbd box	193.0
UL	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
fo	0:0	0:0	0:0	0:0	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	
fo	0:0	0:0	0:0	0:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	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	

Group delay (usec)(sbd) 3.42393209208E+03 Apriori delay (usec) 3.42343610250E+03 Resid mbdelay (usec) -4.01042E-03 +/- 1.9E-04
 Sband delay (usec) 3.42393621850E+03 Apriori clock (usec) -1.6196402E+01 Resid sbdelay (usec) 5.00116E-01 +/- 3.0E-03
 Phase delay (usec) 3.42343610692E+03 Apriori clockrate (us/s) -9.1930498E-08 Resid phdelay (usec) 4.41689E-06 +/- 6.4E-07
 Delay rate (us/s) -1.36406974584E-01 Apriori rate (us/s) -1.36402214993E-01 Resid rate (us/s) -4.75959E-06 +/- 2.7E-09
 Total phase (deg) 89.9 Apriori accel (us/s/s) -2.13020366360E-05 Resid phase (deg) 137.0 +/- 20.0

RMS Theor. Amplitude 0.112 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 33.0 34.6 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 66.7 60.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 41.4 40.0 Inc. seg. avg. 0.107 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.6 69.8 Inc. frq. avg. 0.115 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 o: az 97.3 el 36.6 pa -55.3 u,v (fr/asec) 782.512 -1303.529 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fo...130MTI Output file: /Exps/c192c/v2/1234/No0080/fo.W.96.130MTI

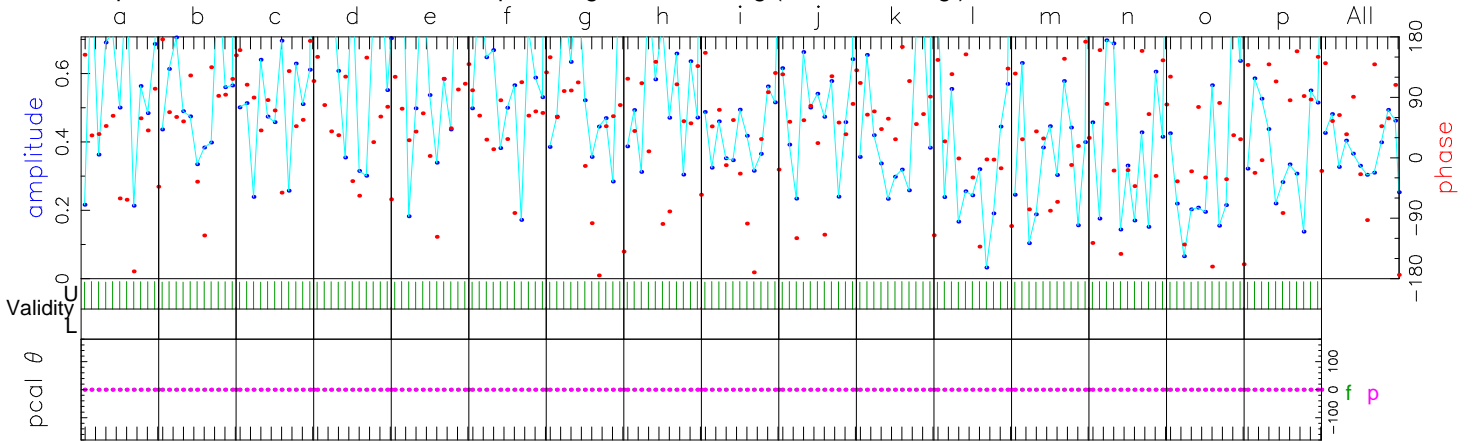


Fringe quality 9

SNR 13.1
Int time 409.583
Amp 0.236
Phase 71.1
PFD 3.2e-30
Delays (us)
SBD -0.000009
MBD 0.002469
Fringe rate (Hz) 0.004973
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055611
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



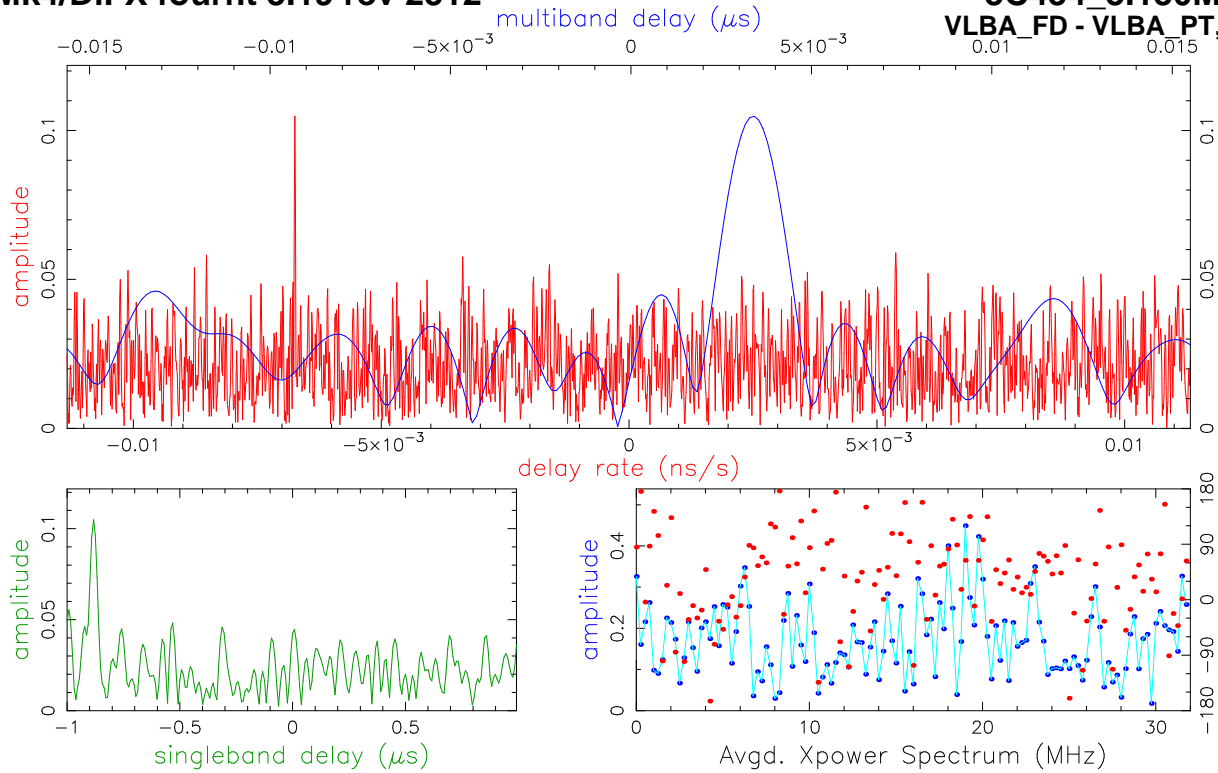
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0						
f	1000	1000	1000	1000	1000	1000	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						
f: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						
fp	0:0	0:0	0:0	0:0	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						
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR						
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR						
Group delay (usec)(sbd)		1.03242517199E+03															1.03242270272E+03	Resid mbdelay (usec)	2.46927E-03	+/-	8.3E-05	
Sband delay (usec)		1.03242269322E+03																-1.1513147E+01	Resid sbdelay (usec)	-9.50000E-06	+/-	1.3E-03
Phase delay (usec)		1.03242270501E+03																-2.9483610E-07	Resid phdelay (usec)	2.29357E-06	+/-	2.8E-07
Delay rate (us/s)		-3.26803728630E-02																-3.26804305948E-02	Resid rate (us/s)	5.77319E-08	+/-	1.2E-09
Total phase (deg)				291.5														-7.25627950760E-06	Resid phase (deg)	71.1	+/-	8.8

ph/seg (deg) 67.5 15.2
amp/seg (%) 71.4 26.5
ph/frq (deg) 30.2 17.6
amp/frq (%) 55.7 30.6

f: az 101.0 el 49.4 pa -61.6
p: az 101.9 el 45.2 pa -57.3
u,v (fr/asec) 184.242 -626.536

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fp..130MTI Output file: /Exps/c192c/v2/1234/No0080/fp.W.111.130MTI

simultaneous interpolator

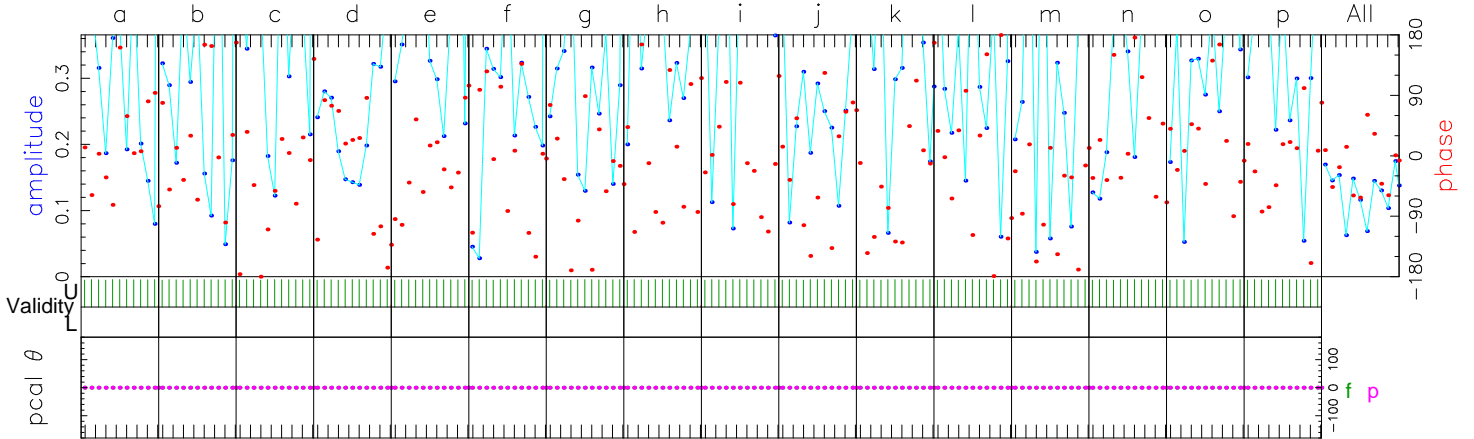


Fringe quality 0

SNR 5.8
Int time 409.584
Amp 0.122
Phase -19.1
PFD 8.1e-01
Delays (us)
SBD -0.882655
MBD 0.003390
Fringe rate (Hz)
-0.581849
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055617
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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
	-6.8	-9.1	-19.6	144.3	-24.8	-67.7	-21.1	-84.1	-8.8	36.3	-32.2	-51.6	-53.7	25.5	-0.7	-22.6	Phase	-19.1
	0.2	0.2	0.1	0.0	0.3	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.2	0.2	0.1	0.2	Ampl.	0.1
	75.7	72.3	164.9	113.2	15.9	31.5	205.9	208.6	159.2	141.6	30.8	222.7	153.9	160.0	4.7	16.7	Sbd box	16.0
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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	
f: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	
fp	0:0	0:0	0:0	0:0	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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	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	

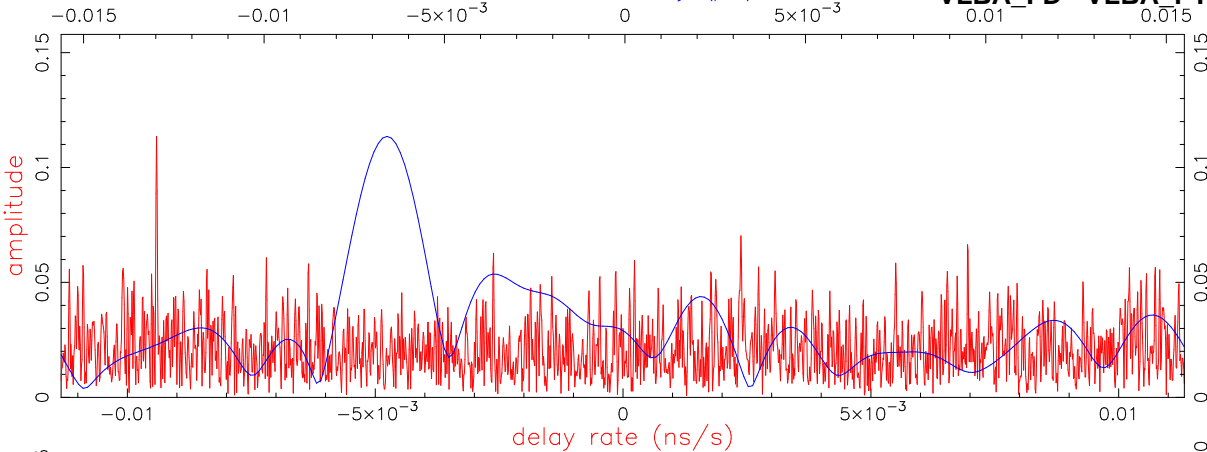
Group delay (usec)(sbd) 1.03155109277E+03 Apriori delay (usec) 1.03242270272E+03 Resid mbdelay (usec) 3.39005E-03 +/- 1.9E-04
 Sband delay (usec) 1.03154004772E+03 Apriori clock (usec) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Phase delay (usec) 1.03242270210E+03 Apriori clockrate (us/s) -2.9483610E-07 Resid sbdelay (usec) -8.82655E-01 +/- 3.0E-03
 Delay rate (us/s) -3.26871852796E-02 Apriori rate (us/s) -3.26804305948E-02 Resid phdelay (usec) -6.15245E-07 +/- 6.4E-07
 Total phase (deg) 201.3 Apriori accel (us/s/s) -7.25627950760E-06 Resid rate (us/s) -6.75468E-06 +/- 2.7E-09
 Resid phase (deg) -19.1 +/- 19.7

RMS Theor. Amplitude 0.122 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.9 34.2 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 41.1 59.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 54.5 39.5 Inc. seg. avg. 0.127 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 68.8 68.9 Inc. frq. avg. 0.112 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 p: az 101.9 el 45.2 pa -57.3 u,v (fr/asec) 184.242 -626.536 simultaneous interpolator

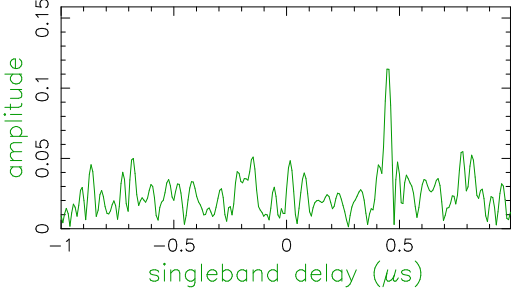
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fp..130MTI Output file: /Exps/c192c/v2/1234/No0080/fp.W.131.130MTI

multiband delay (μ s)

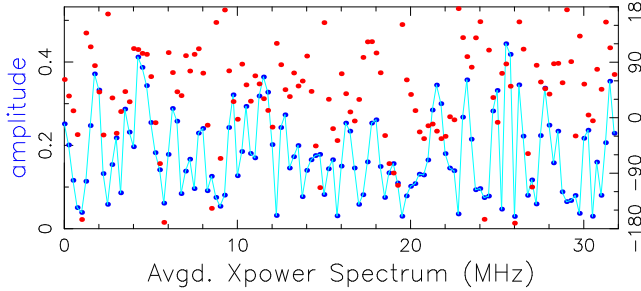


Fringe quality 0

SNR 6.5
Int time 409.585
Amp 0.158
Phase 160.0
PFD 2.8e-02
Delays (us)
SBD 0.449217
MBD -0.006570
Fringe rate (Hz)
-0.811380
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

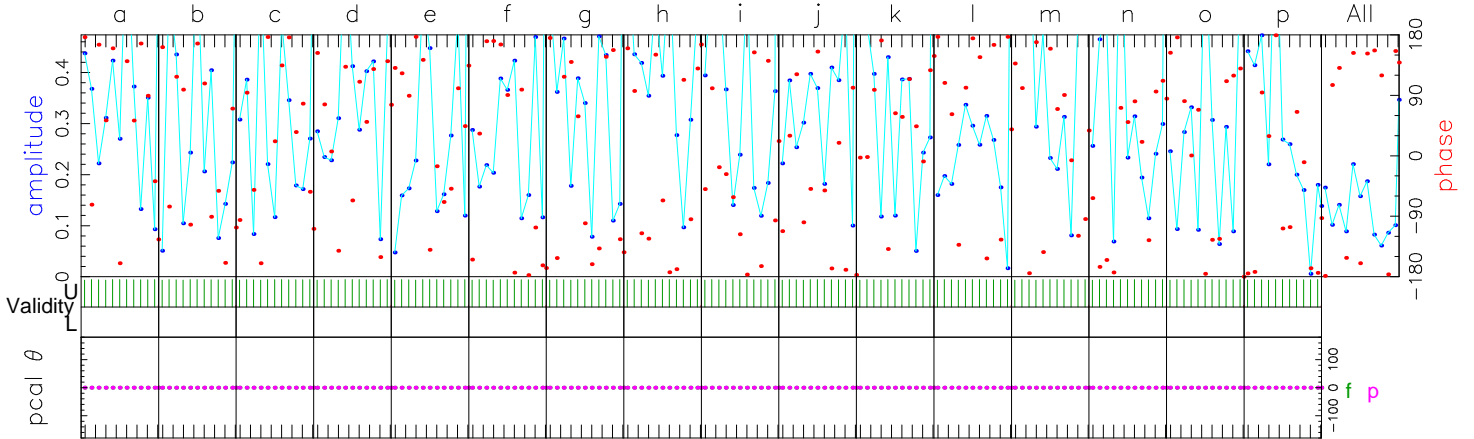


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055623
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	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		
fp	0:0	0:0	0:0	0:0	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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

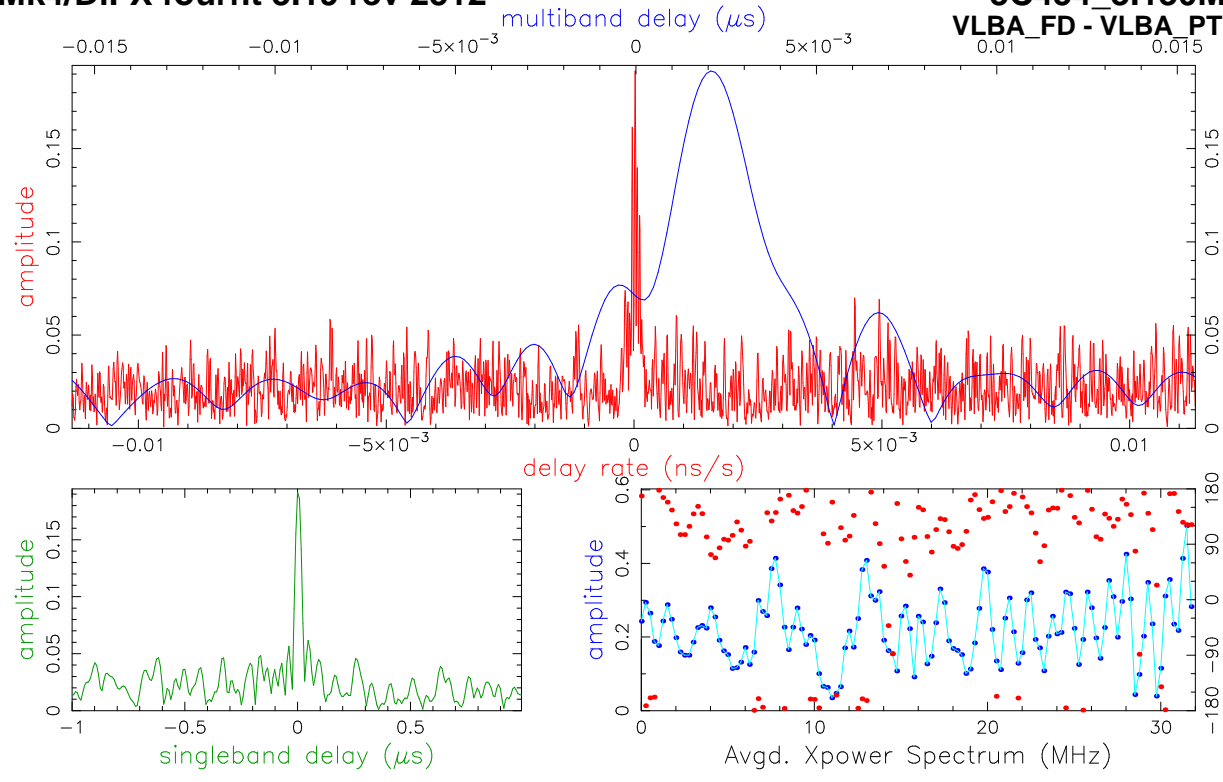
Group delay (usec)(sbd) 1.03288488321E+03 Apriori delay (usec) 1.03242270272E+03 Resid mbdelay (usec) -6.56951E-03 +/- 1.7E-04
 Sband delay (usec) 1.03287191922E+03 Apriori clock (usec) -1.1513147E+01 Resid sbdelay (usec) 4.49217E-01 +/- 2.7E-03
 Phase delay (usec) 1.03242270788E+03 Apriori clockrate (us/s) -2.9483610E-07 Resid phdelay (usec) 5.16062E-06 +/- 5.7E-07
 Delay rate (us/s) -3.26898499090E-02 Apriori rate (us/s) -3.26804305948E-02 Resid rate (us/s) -9.41931E-06 +/- 2.4E-09
 Total phase (deg) 20.4 Apriori accel (us/s/s) -7.25627950760E-06 Resid phase (deg) 160.0 +/- 17.7

RMS Theor. Amplitude 0.158 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 30.9 30.7 Search (2048X64) 0.109 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.1 53.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 49.6 35.5 Inc. seg. avg. 0.152 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.8 61.9 Inc. frq. avg. 0.157 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 p: az 101.9 el 45.2 pa -57.3 u,v (fr/asec) 184.242 -626.536 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fp..130MTI Output file: /Exps/c192c/v2/1234/No0080/fp.W.153.130MTI

Mk4/DiFX fourfit 3.19 rev 2512

3C454_3.130MTI, No0080, fp
VLBA_FD - VLBA_PT, fgroup W, pol LL

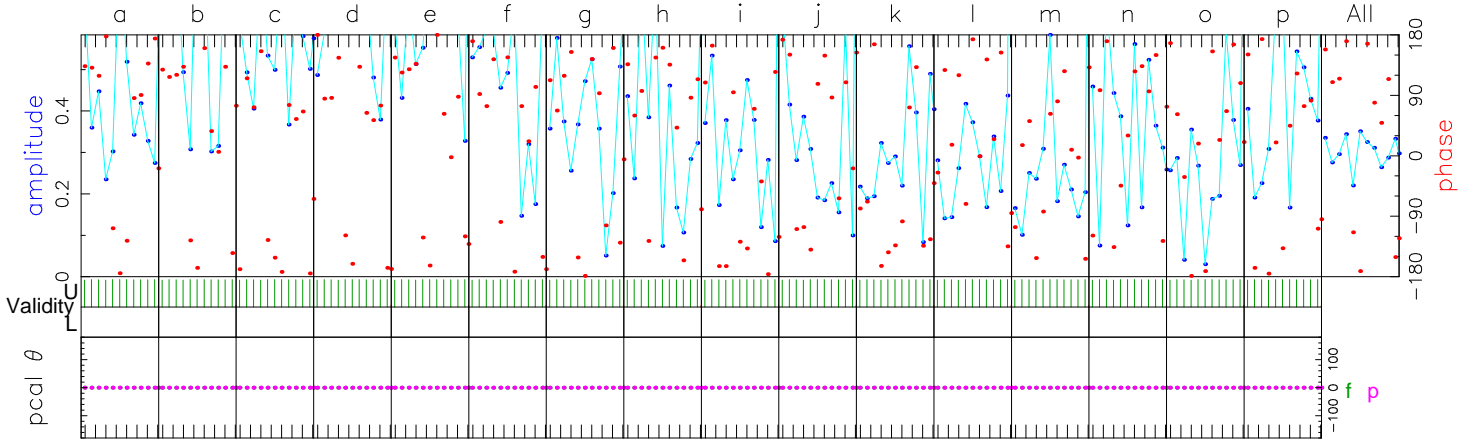


Fringe quality 9

SNR 10.8
Int time 409.586
Amp 0.195
Phase 148.0
PFD 2.1e-18
Delays (us)
SBD 0.002866
MBD 0.002113
Fringe rate (Hz) 0.001741
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055606
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

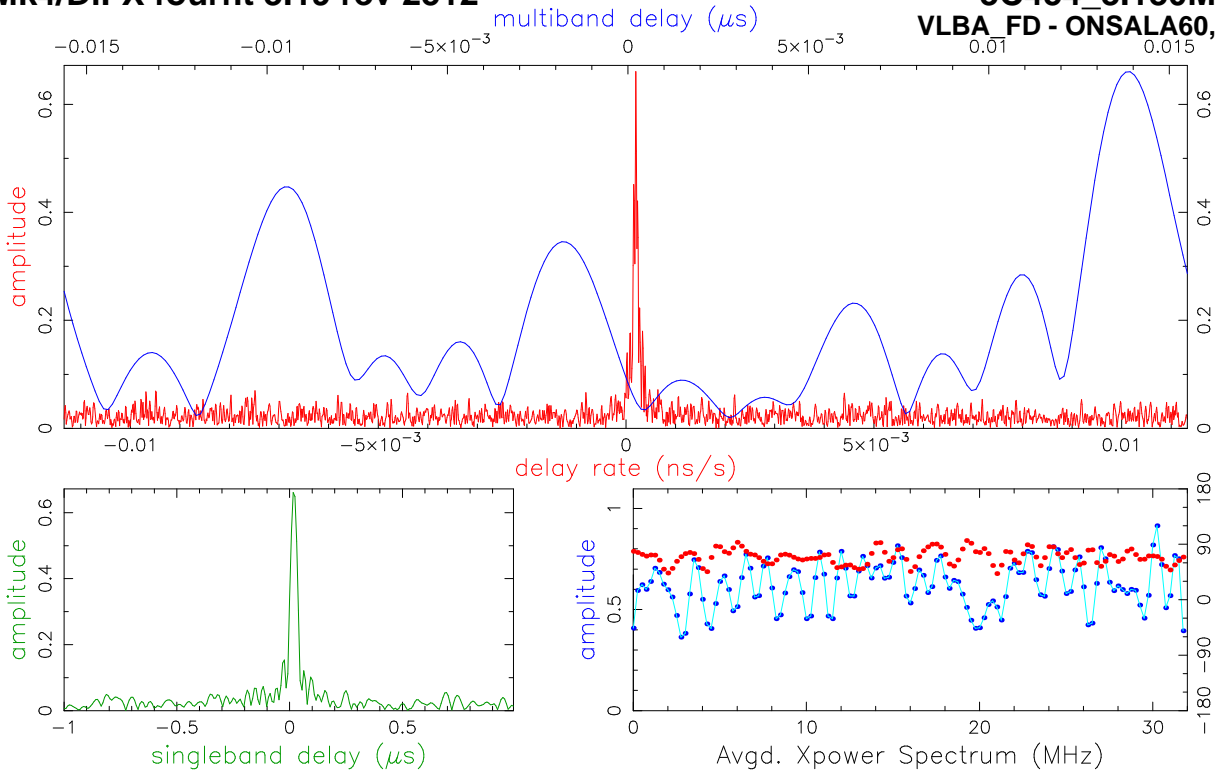


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	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		
f: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		
fp	0:0	0:0	0:0	0:0	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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)		1.03242481531E+03									1.03242270272E+03					2.11259E-03	+/-	1.0E-04
Sband delay (usec)		1.03242556872E+03									-1.1513147E+01					2.86600E-03	+/-	1.6E-03
Phase delay (usec)		1.03242270749E+03									-2.9483610E-07					4.77307E-06	+/-	3.4E-07
Delay rate (us/s)		-3.26804103889E-02									-3.26804305948E-02					2.02059E-08	+/-	1.4E-09
Total phase (deg)					8.4						-7.25627950760E-06					148.0	+/-	10.6

ph/seg (deg) 56.1 18.4
amp/seg (%) 59.3 32.2
ph/frq (deg) 42.3 21.3
amp/frq (%) 54.9 37.1

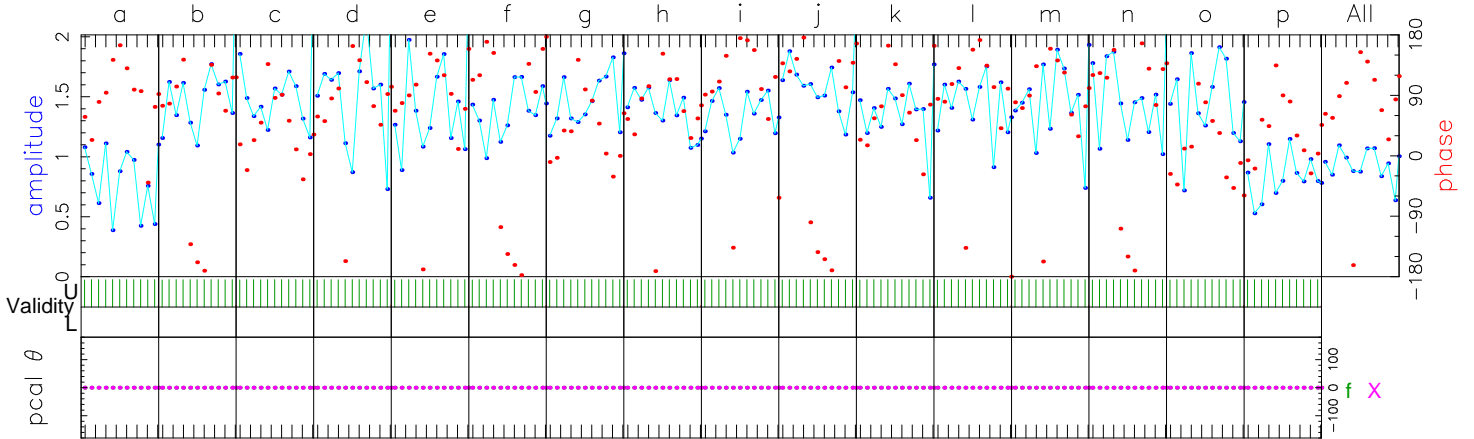
f: az 101.0 el 49.4 pa -61.6
p: az 101.9 el 45.2 pa -57.3
u,v (fr/asec) 184.242 -626.536

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fp..130MTI Output file: /Exps/c192c/v2/1234/No0080/fp.W.91.130MTI



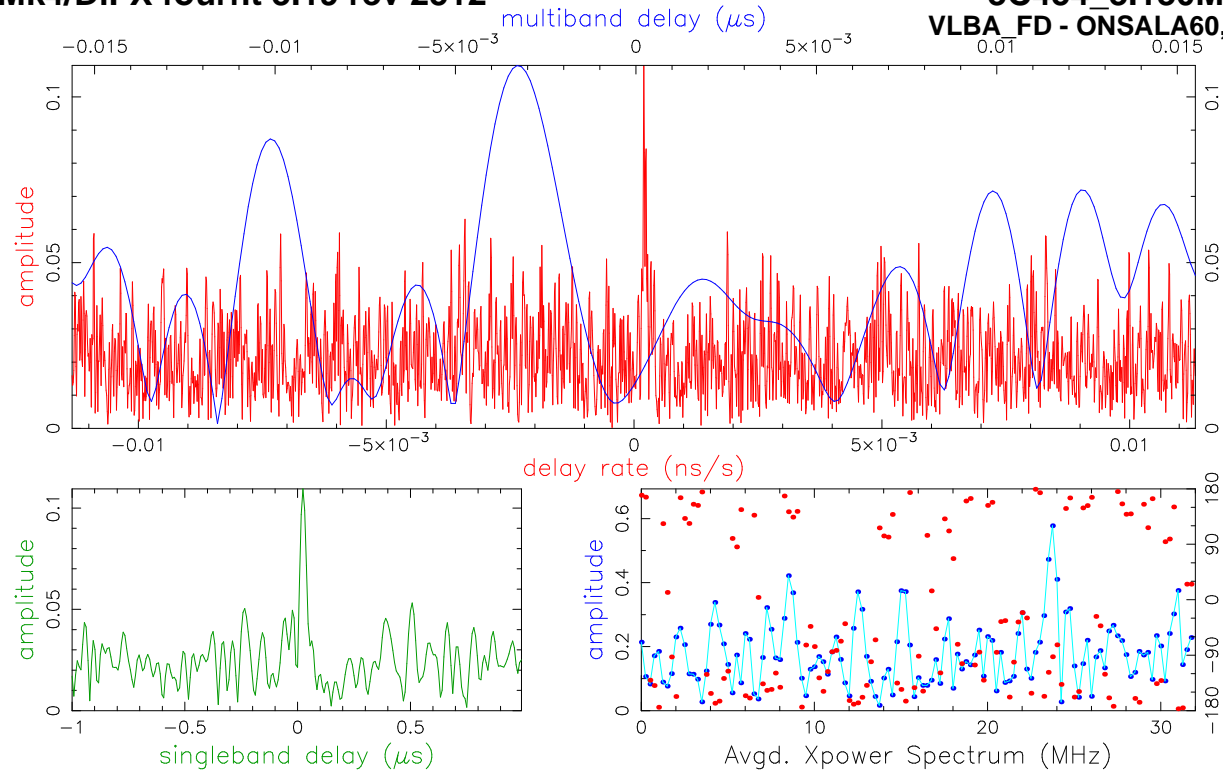
Fringe quality 3
SNR 37.3
Int time 411.084
Amp 0.672
Phase 98.1
PFD 0.0e+00
Delays (us)
SBD 0.018824
MBD 0.013899
Fringe rate (Hz) 0.017420
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055612
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



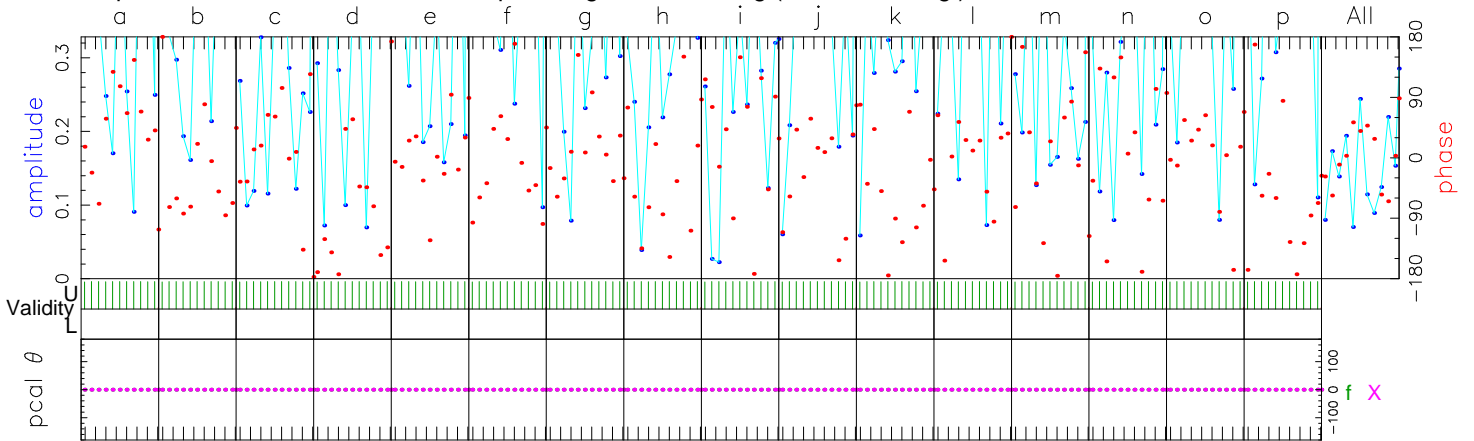
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	89.2	122.2	34.5	93.6	103.0	160.6	30.6	88.0	126.4	164.8	61.6	120.2	106.7	146.7	8.0	33.5	Phase	98.1
f	0.5	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.2	0.8	1.0	1.0	1.0	1.0	0.6	Ampl.	0.9
X	129.9	131.7	131.4	131.1	131.5	131.4	131.7	131.6	131.3	131.1	131.8	131.3	130.9	131.3	131.0	130.4	Sbd box	131.4
f: X	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f: X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f: X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f: X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f: X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f: X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.49576848026E+03			Apriori delay (usec)			8.49575458085E+03			Resid mbdelay (usec)			1.38994E-02			+/- 2.9E-05		
Sband delay (usec)	8.49577340485E+03			Apriori clock (usec)			-3.1945377E+01			Resid sbdelay (usec)			1.88240E-02			+/- 4.6E-04		
Phase delay (usec)	8.49575458401E+03			Apriori clockrate (us/s)			-6.1894950E-07			Resid phdelay (usec)			3.16433E-06			+/- 9.9E-08		
Delay rate (us/s)	1.61462354773E+00			Apriori rate (us/s)			1.61462334551E+00			Resid rate (us/s)			2.02225E-07			+/- 4.2E-10		
Total phase (deg)	312.1			Apriori accel (us/s/s)			-5.58602398068E-05			Resid phase (deg)			98.1			+/- 3.1		

ph/seg (deg) 47.3 5.3 Search (2048X64) 0.640 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 42.6 9.3 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 6.2 Inc. seg. avg. 0.925 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 48.0 10.7 Inc. frq. avg. 0.943 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 X: az 265.7 el 22.2 pa 34.0 u,v (fr/asec) -9712.674 -4059.294 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fX..130MTI Output file: /Exps/c192c/v2/1234/No0080/fX.W.114.130MTI



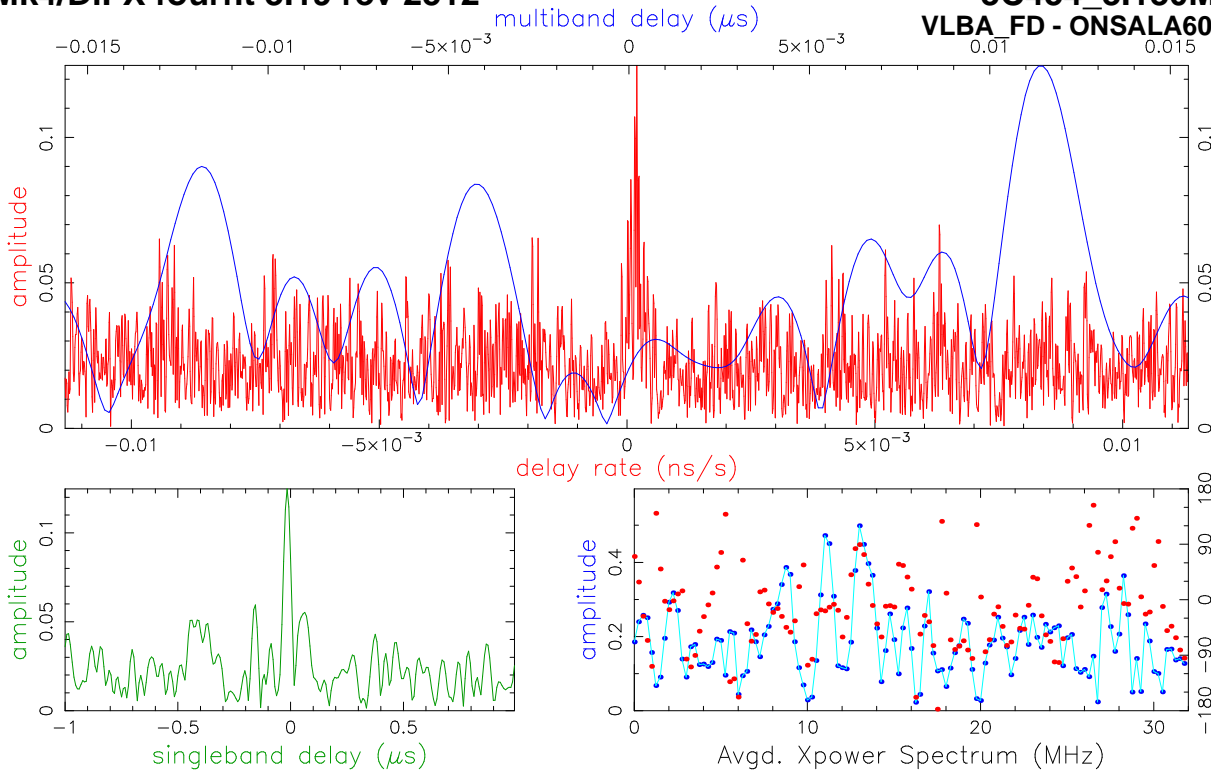
Fringe quality 0
SNR 6.1
Int time 411.085
Amp 0.110
Phase -6.3
PFD 2.8e-01
Delays (us)
SBD 0.023683
MBD -0.003268
Fringe rate (Hz) 0.017069
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055617
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	
	41.4	-57.5	46.3	-126.1	1.8	-30.8	5.0	-46.5	114.6	11.0	-41.3	10.4	45.6	-9.2	29.2	-108.3		Phase	-6.3
	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.0	0.0	0.3	0.2		Ampl.	0.1
	130.5	130.5	69.9	129.1	131.6	92.0	130.1	136.4	110.4	95.5	198.0	214.8	228.0	166.6	132.7	148.8		Sbd box	132.0
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used	
f	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 freqs	
f: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 phase	
f: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	
f	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		PC amp	
f	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	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	8.49578256301E+03			Apriori delay (usec)			8.49575458085E+03			Resid mbdelay (usec)			-3.26784E-03			+/- 1.8E-04			
Sband delay (usec)	8.49577826435E+03			Apriori clock (usec)			-3.1945377E+01			Resid sbdelay (usec)			2.36835E-02			+/- 2.8E-03			
Phase delay (usec)	8.49575458065E+03			Apriori clockrate (us/s)			-6.1894950E-07			Resid phdelay (usec)			-2.02945E-07			+/- 6.1E-07			
Delay rate (us/s)	1.61462354366E+00			Apriori rate (us/s)			1.61462334551E+00			Resid rate (us/s)			1.98157E-07			+/- 2.6E-09			
Total phase (deg)	207.7			Apriori accel (us/s/s)			-5.58602398068E-05			Resid phase (deg)			-6.3			+/- 18.9			

ph/seg (deg) 41.6 32.7 Search (2048X64) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.8 57.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 62.8 37.8 Inc. seg. avg. 0.126 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 94.9 65.9 Inc. frq. avg. 0.143 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 X: az 265.7 el 22.2 pa 34.0 u,v (fr/asec) -9712.674 -4059.294 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fX..130MTI Output file: /Exps/c192c/v2/1234/No0080/fX.W.130.130MTI

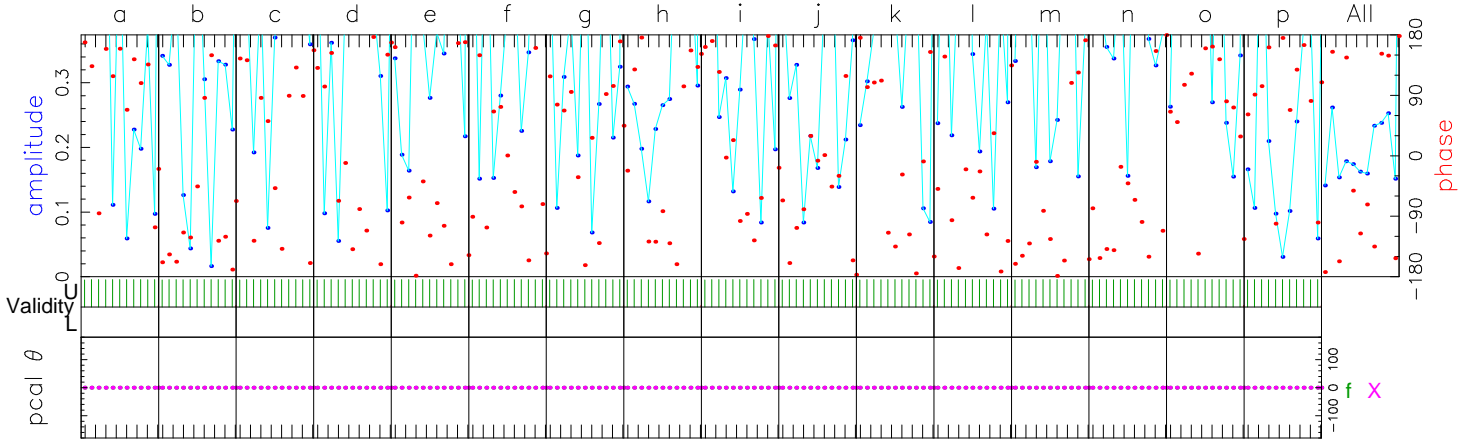


Fringe quality 0

SNR 6.9
Int time 411.084
Amp 0.125
Phase -167.6
PFD 1.4e-03
Delays (us)
SBD -0.015332
MBD 0.011418
Fringe rate (Hz) 0.017424
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

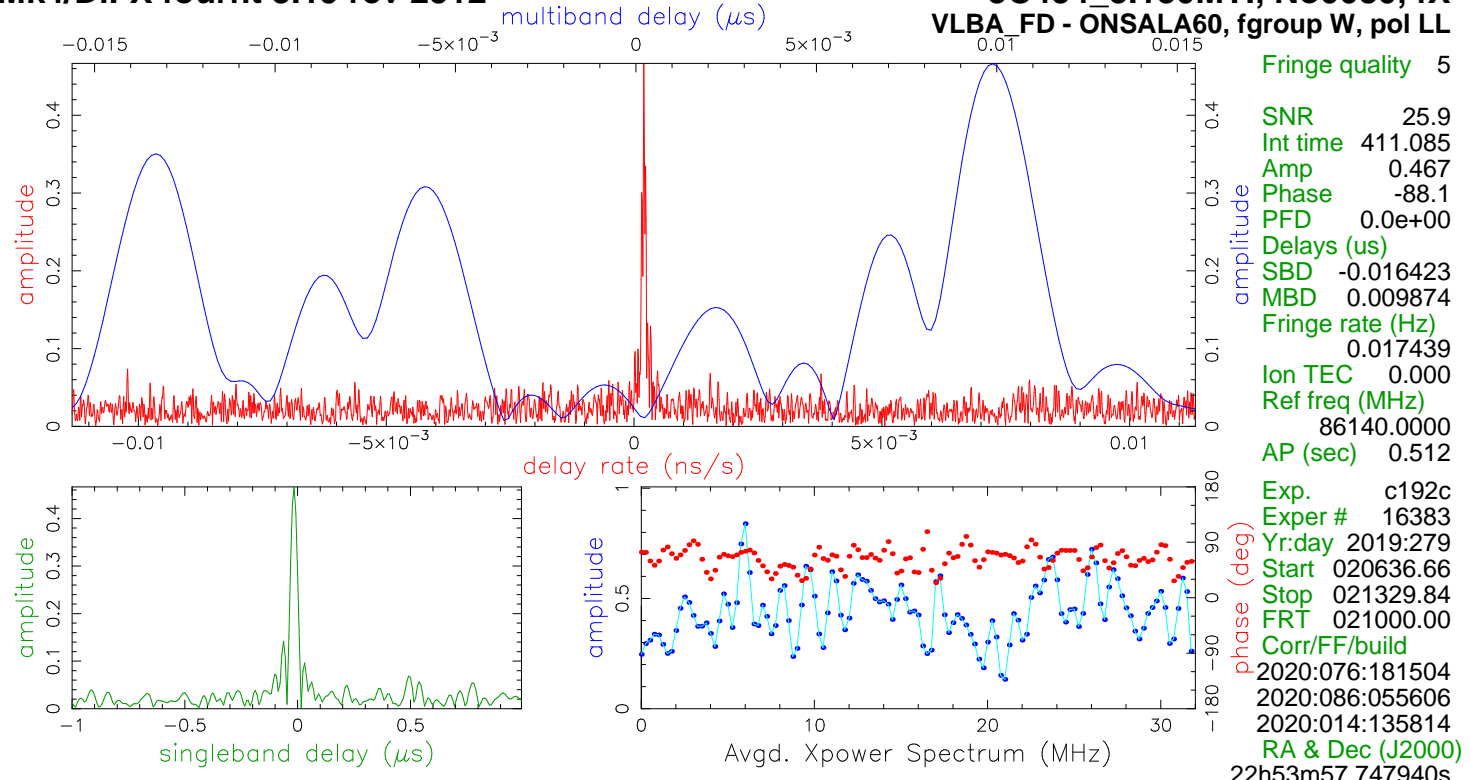
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055622
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

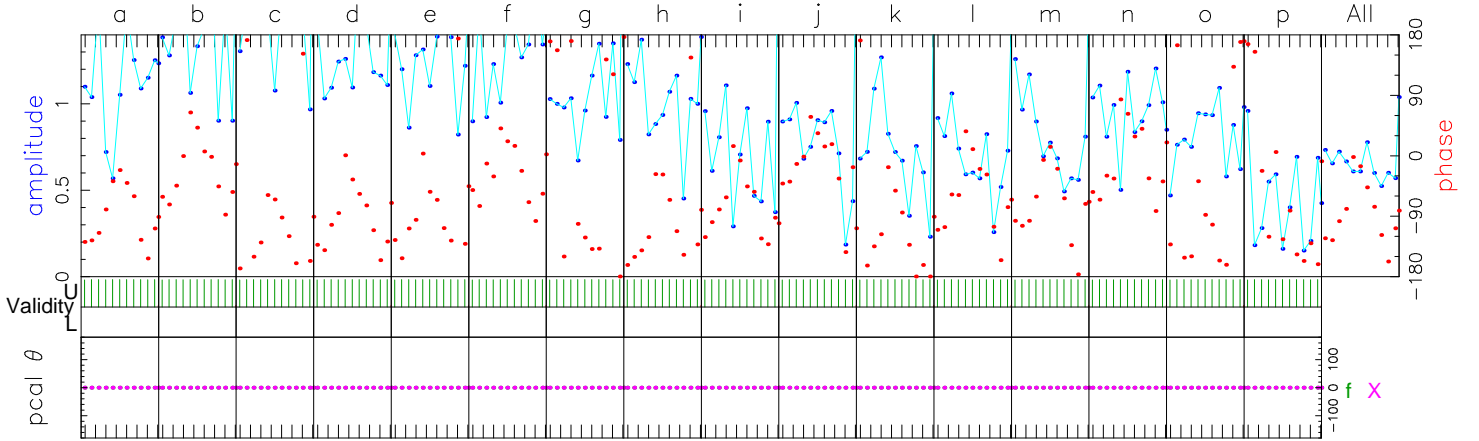


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	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		
f: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		
f: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		
f	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		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)		8.49573474838E+03																
Sband delay (usec)		8.49573924885E+03																
Phase delay (usec)		8.49575457544E+03																
Delay rate (us/s)		1.61462354778E+00																
Total phase (deg)				46.3														
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:																		
Pcal rate:																		
Bits/sample:																		
Sample rate(MSamp/s):																		
Data rate(Mb/s):																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 55.2 28.7 Search (2048X64) 0.119 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.6 50.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 57.3 33.1 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 71.7 57.8 Inc. frq. avg. 0.169 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 X: az 265.7 el 22.2 pa 34.0 u,v (fr/asec) -9712.674 -4059.294 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fX..130MTI Output file: /Exps/c192c/v2/1234/No0080/fX.W.150.130MTI

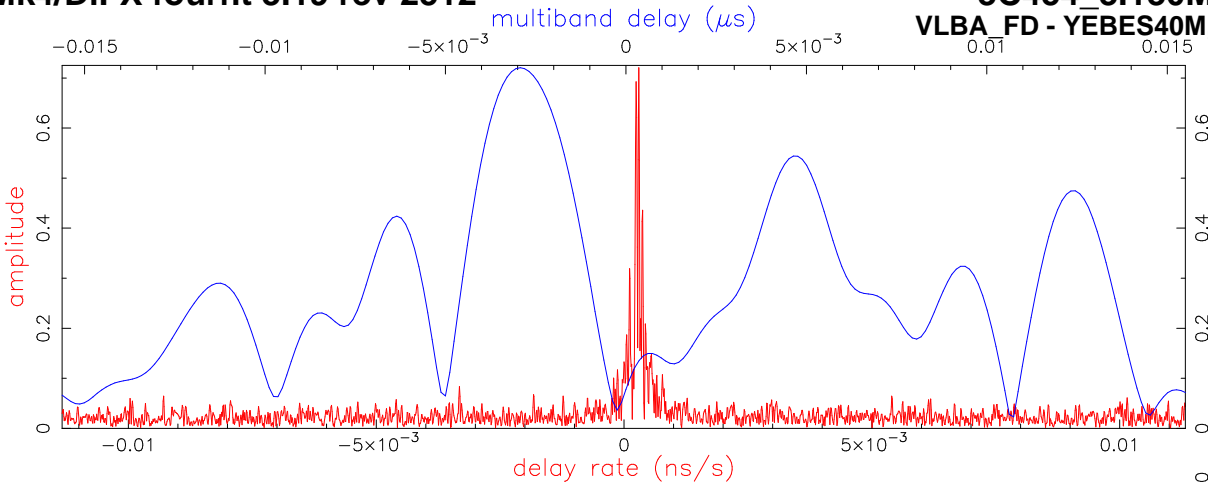


Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



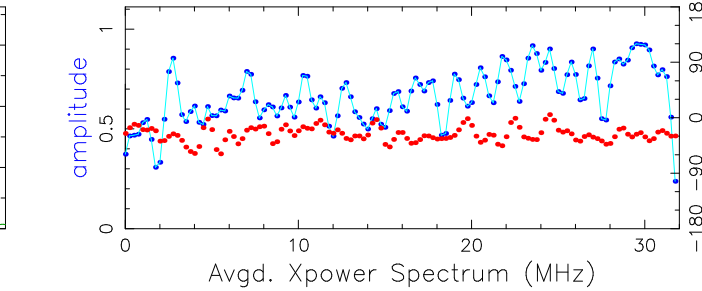
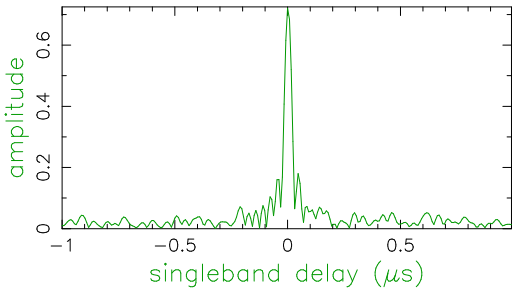
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-93.8	-24.2	-137.6	-92.8	-105.2	-34.6	-172.1	-123.5	-78.8	-4.1	-128.5	-62.0	-75.2	-22.0	-145.4	-142.3	Phase	-88.1
	0.8	1.0	1.0	0.9	0.9	1.0	0.8	0.6	0.5	0.6	0.5	0.5	0.6	0.6	0.5	0.2	Ampl.	0.7
	126.7	127.2	127.2	126.5	126.8	126.9	127.0	126.9	127.4	127.0	126.6	128.0	127.3	126.8	126.4	125.5	Sbd box	126.9
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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 freqs	
f: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 phase	
f: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	
f	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	PC amp	
f	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.49573320523E+03			Apriori delay (usec)			8.49575458085E+03			Resid mbdelay (usec)			9.87438E-03			+/-	4.2E-05	
Sband delay (usec)	8.49573815735E+03			Apriori clock (usec)			-3.1945377E+01			Resid sbdelay (usec)			-1.64235E-02			+/-	6.7E-04	
Phase delay (usec)	8.49575457801E+03			Apriori clockrate (us/s)			-6.1894950E-07			Resid phdelay (usec)			-2.84096E-06			+/-	1.4E-07	
Delay rate (us/s)	1.61462354795E+00			Apriori rate (us/s)			1.61462334551E+00			Resid rate (us/s)			2.02446E-07			+/-	6.0E-10	
Total phase (deg)	125.9			Apriori accel (us/s/s)			-5.58602398068E-05			Resid phase (deg)			-88.1			+/-	4.4	

ph/seg (deg) 46.0 7.7 Search (2048X64) 0.453 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.8 13.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.3 8.9 Inc. seg. avg. 0.639 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 68.0 15.5 Inc. frq. avg. 0.684 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 X: az 265.7 el 22.2 pa 34.0 u,v (fr/asec) -9712.674 -4059.294 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fX..130MTI Output file: /Exps/c192c/v2/1234/No0080/fX.W.92.130MTI



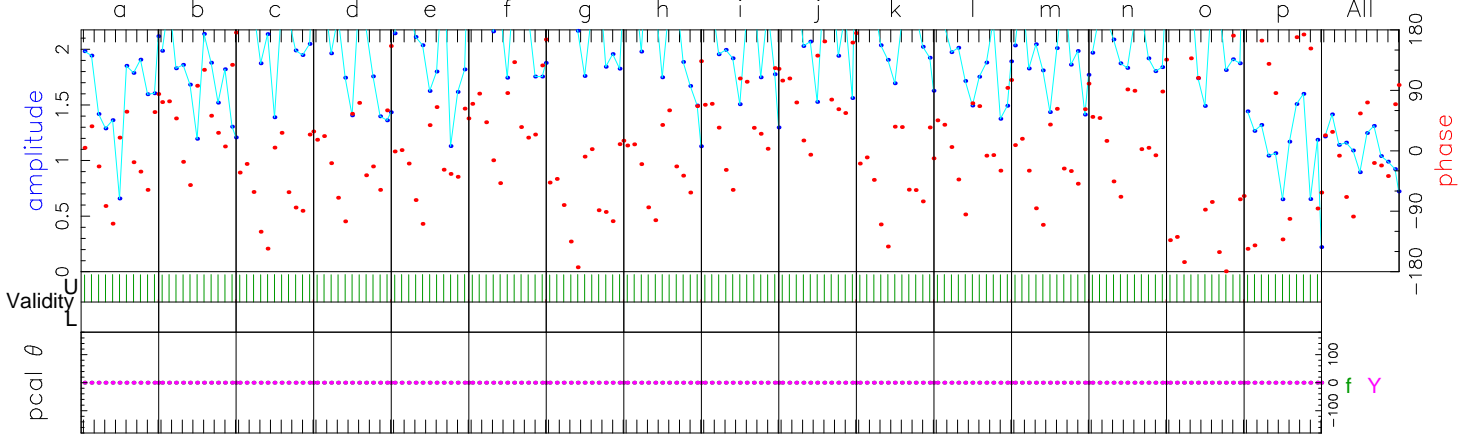
Fringe quality 3

SNR 39.7
Int time 400.594
Amp 0.725
Phase 2.0
PFD 0.0e+00
Delays (us)
SBD 0.001944
MBD -0.002939
Fringe rate (Hz)
0.025756
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020646.90
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055611
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec

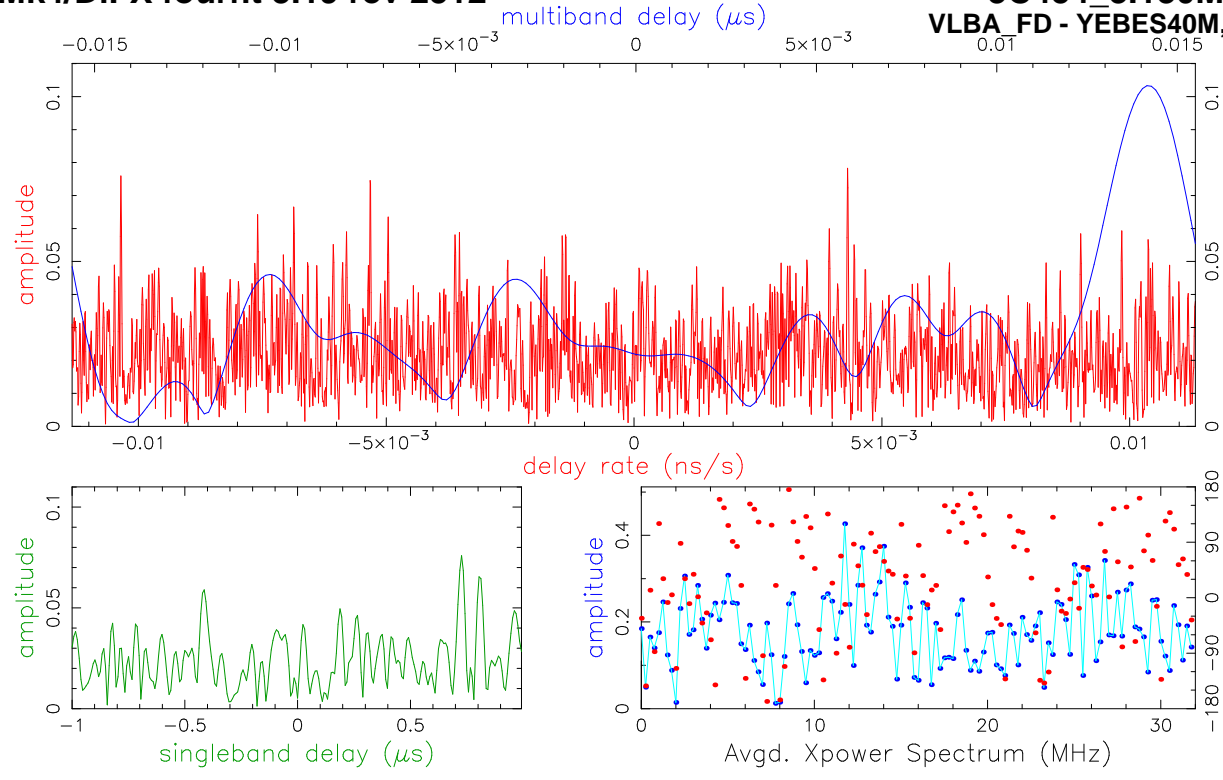


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-6.9	53.5	-48.6	-5.9	-12.7	52.5	-67.6	-16.3	46.3	87.3	-35.9	15.7	-12.8	27.2	-147.9	-170.2	Phase	2.0
	1.0	1.1	1.3	1.2	1.4	1.4	1.4	1.3	1.3	1.5	1.4	1.2	1.3	1.3	0.8	0.8	Ampl.	1.3
	129.1	129.8	129.5	128.7	129.5	129.0	129.6	129.4	129.2	129.1	129.2	129.0	129.1	128.8	128.8	127.2	Sbd box	129.2
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 4.74825355352E+03 Apriori delay (usec) 4.74825649278E+03 Resid mbdelay (usec) -2.93926E-03 +/- 2.7E-05
 Sband delay (usec) 4.74825843628E+03 Apriori clock (usec) -9.2114477E+00 Resid sbdelay (usec) 1.94350E-03 +/- 4.3E-04
 Phase delay (usec) 4.74825649284E+03 Apriori clockrate (us/s) -3.1094951E-07 Resid phdelay (usec) 6.43090E-08 +/- 9.3E-08
 Delay rate (us/s) 1.82035179198E+00 Apriori rate (us/s) 1.82035149298E+00 Resid rate (us/s) 2.98999E-07 +/- 4.0E-10
 Total phase (deg) 105.7 Apriori accel (us/s/s) -2.97216416756E-05 Resid phase (deg) 2.0 +/- 2.9

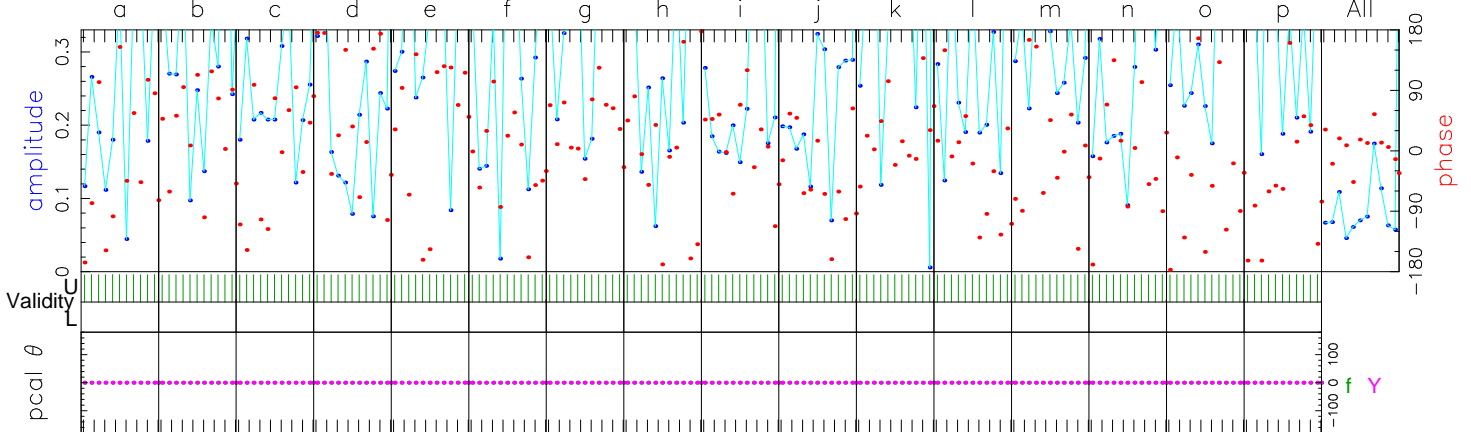
RMS Theor. Amplitude 0.725 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 53.5 5.0 Search (2048X64) 0.716 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 59.6 8.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 74.2 5.8 Inc. seg. avg. 1.123 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 78.0 10.1 Inc. frq. avg. 1.257 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 Y: az 262.6 el 33.8 pa 51.6 u,v (fr/asec) -10901.307 -1813.478 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fY..130MTI Output file: /Exps/c192c/v2/1234/No0080/fY.W.112.130MTI



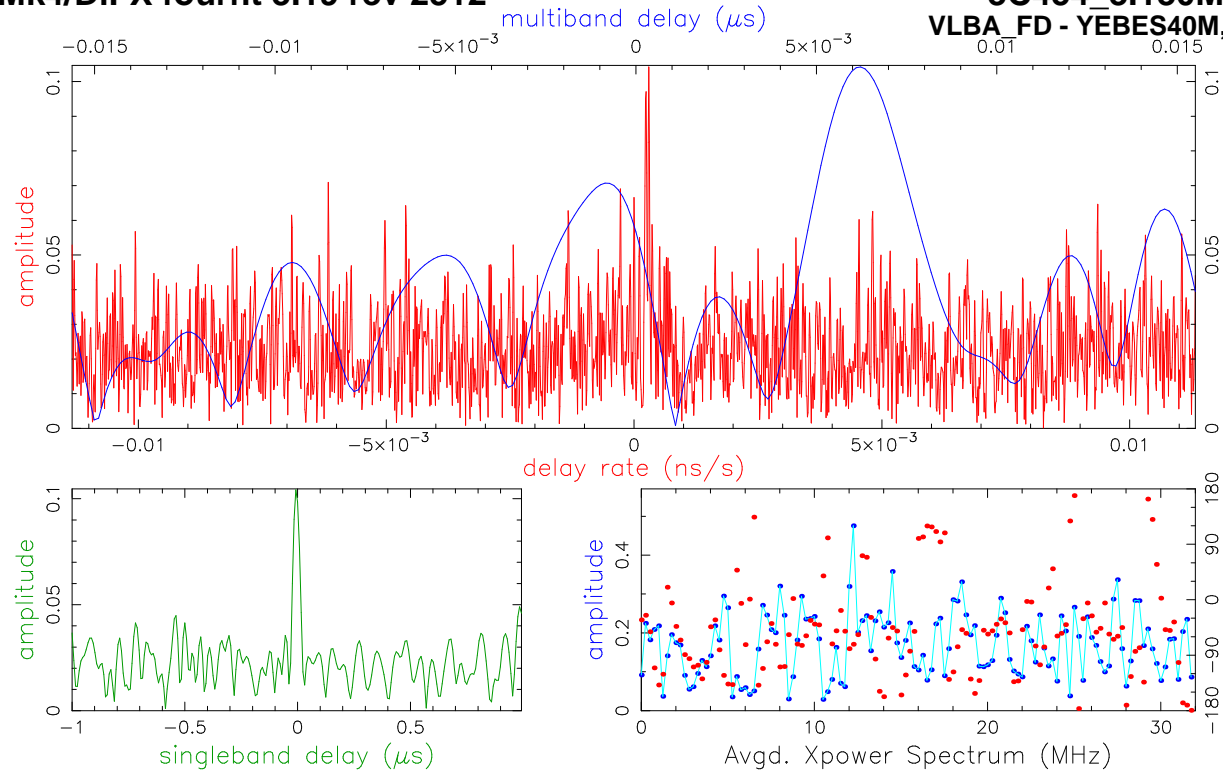
Fringe quality 0
SNR 4.2
Int time 400.594
Amp 0.110
Phase 12.3
PFD 1.0e+00
Delays (us)
SBD 0.726718
MBD -0.016113
Fringe rate (Hz)
-0.892678
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020646.90
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055618
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



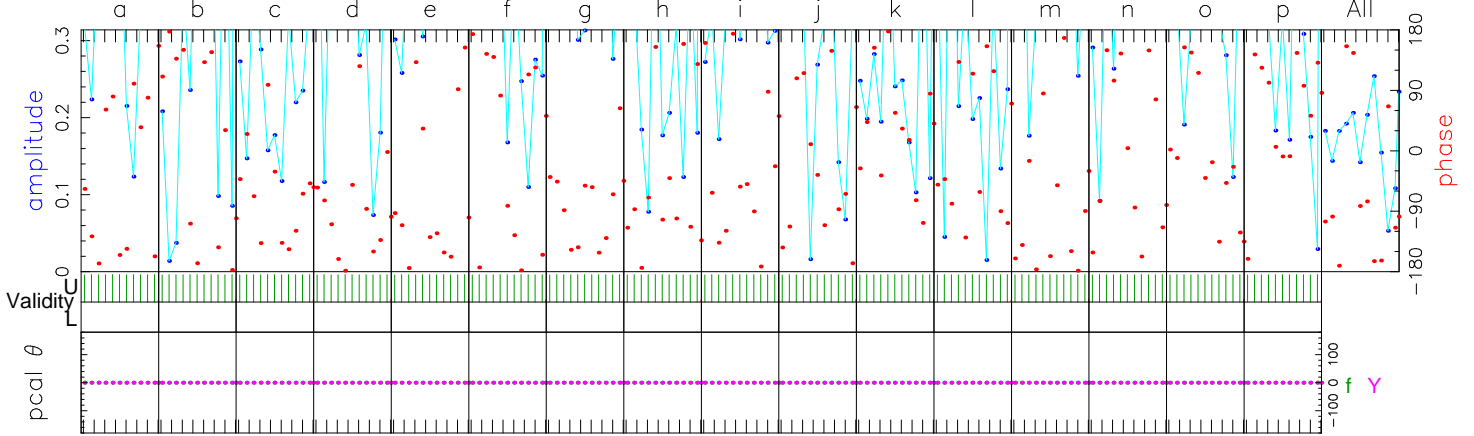
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
94.4	54.7	26.9	-161.4	118.7	8.3	47.5	109.4	14.1	-25.6	17.0	-6.8	-36.2	-15.5	-94.3	-90.3		Phase	12.3	
0.0	0.3	0.1	0.1	0.2	0.3	0.4	0.0	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2		Ampl.	0.1	
178.2	144.2	108.0	74.0	78.3	164.1	222.3	254.1	231.4	133.8	220.6	1.4	136.5	75.6	214.1	13.8		Sbd box	222.0	
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			Tracks
																			Chan ids
																			Tracks
Group delay (usec)(sbd)	4.74899037950E+03			Apriori delay (usec)			4.74825649278E+03			Resid mbdelay (usec)			-1.61133E-02			+/- 2.6E-04			
Sband delay (usec)	4.74898321078E+03			Apriori clock (usec)			-9.2114477E+00			Resid sbdelay (usec)			7.26718E-01			+/- 4.1E-03			
Phase delay (usec)	4.74825649318E+03			Apriori clockrate (us/s)			-3.1094951E-07			Resid phdelay (usec)			3.97436E-07			+/- 8.9E-07			
Delay rate (us/s)	1.82034112987E+00			Apriori rate (us/s)			1.82035149298E+00			Resid rate (us/s)			-1.03631E-05			+/- 3.8E-09			
Total phase (deg)	116.0			Apriori accel (us/s/s)			-2.97216416756E-05			Resid phase (deg)			12.3			+/- 27.6			

ph/seg (deg) 26.0 47.7 Search (2048X64) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.6 83.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 79.2 55.1 Inc. seg. avg. 0.092 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 114.9 96.2 Inc. frq. avg. 0.125 Data rate (Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 Y: az 262.6 el 33.8 pa 51.6 u,v (fr/asec) -10901.307 -1813.478 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fY..130MTI Output file: /Exps/c192c/v2/1234/No0080/fY.W.134.130MTI



Fringe quality 0
SNR 5.7
Int time 400.594
Amp 0.105
Phase -144.5
PFD 9.2e-01
Delays (us)
SBD -0.006236
MBD 0.006195
Fringe rate (Hz)
0.025835
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020646.90
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055623
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec

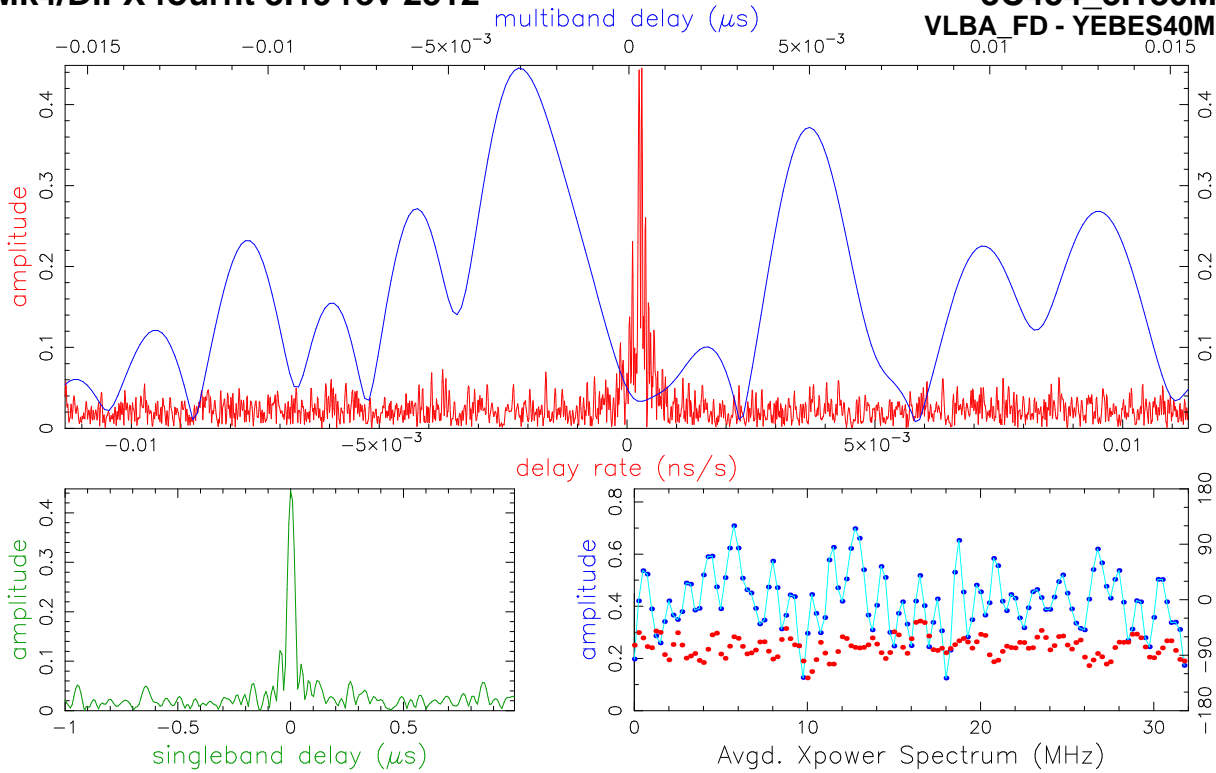


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	133.9	153.0	-77.3	-99.9	-163.1	159.4	-88.2	-130.7	-113.0	-158.1	-15.5	-95.9	-146.2	-165.2	-59.9	116.5		Phase -144.5
	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.0	0.1	0.2	0.1	0.1	0.2		Ampl. 0.1
	117.0	131.0	208.5	129.2	128.7	129.0	129.4	130.1	130.8	130.2	141.2	1.4	127.5	166.3	163.0	149.7		Sbd box 128.2
UL	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		APs used
f	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
f: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
f: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
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
f	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

Group delay (usec)(sbd) 4.74826268777E+03 Apriori delay (usec) 4.74825649278E+03 Resid mbdelay (usec) 6.19499E-03 +/- 1.9E-04
 Sband delay (usec) 4.74825025678E+03 Apriori clock (usec) -9.2114477E+00 Resid sbdelay (usec) -6.23600E-03 +/- 3.0E-03
 Phase delay (usec) 4.74825648812E+03 Apriori clockrate (us/s) -3.1094951E-07 Resid phdelay (usec) -4.65879E-06 +/- 6.5E-07
 Delay rate (us/s) 1.82035179290E+00 Apriori rate (us/s) 1.82035149298E+00 Resid rate (us/s) 2.99923E-07 +/- 2.8E-09
 Total phase (deg) -40.8 Apriori accel (us/s/s) -2.97216416756E-05 Resid phase (deg) -144.5 +/- 20.0

RMS Theor. Amplitude 0.105 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 64.2 34.7 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 76.9 60.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 66.3 40.0 Inc. seg. avg. 0.141 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 86.4 69.8 Inc. frq. avg. 0.133 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 Y: az 262.6 el 33.8 pa 51.6 u,v (fr/asec) -10901.307 -1813.478 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fY..130MTI Output file: /Exps/c192c/v2/1234/No0080/fY.W.152.130MTI

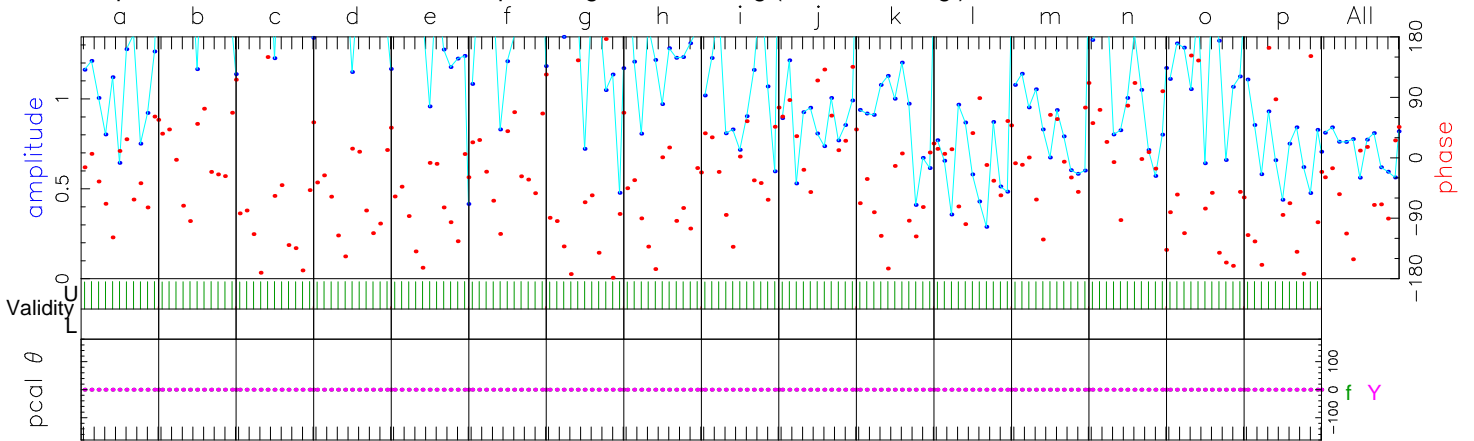


Fringe quality 5

SNR 24.5
Int time 400.594
Amp 0.448
Phase -47.5
PFD 0.0e+00
Delays (us)
SBD 0.002115
MBD -0.003015
Fringe rate (Hz) 0.025854
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020646.90
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055607
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec

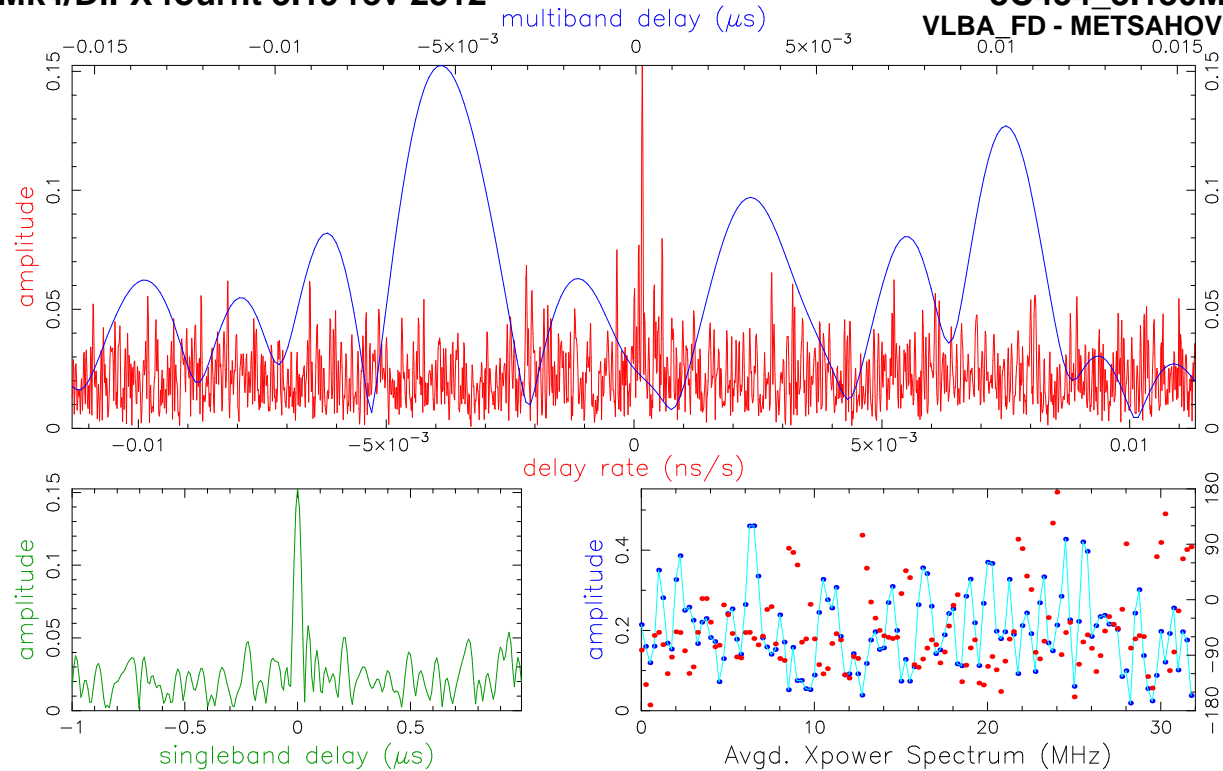


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-24.2	5.5	-110.2	-61.0	-73.2	-5.6	-130.2	-64.3	-15.2	57.7	-64.8	-16.1	-7.0	43.0	-111.7	-138.0		Phase	-47.5
	0.7	1.1	1.3	1.0	0.9	1.0	0.8	0.8	0.7	0.5	0.5	0.4	0.5	0.7	0.6	0.5		Ampl.	0.7
	127.8	129.9	129.4	129.3	129.0	129.2	129.4	129.5	129.7	129.3	129.0	129.0	129.1	128.8	128.6	128.9		Sbd box	129.3
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		APs used	
f	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	
f: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	
f: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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
f	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	

Group delay (usec)(sbd) 4.74825347790E+03 Apriori delay (usec) 4.74825649278E+03 Resid mbdelay (usec) -3.01488E-03 +/- 4.4E-05
 Sband delay (usec) 4.74825860828E+03 Apriori clock (usec) -9.2114477E+00 Resid sbdelay (usec) 2.11550E-03 +/- 7.0E-04
 Phase delay (usec) 4.74825649125E+03 Apriori clockrate (us/s) -3.1094951E-07 Resid phdelay (usec) -1.53315E-06 +/- 1.5E-07
 Delay rate (us/s) 1.82035179312E+00 Apriori rate (us/s) 1.82035149298E+00 Resid rate (us/s) 3.00141E-07 +/- 6.5E-10
 Total phase (deg) 56.2 Apriori accel (us/s/s) -2.97216416756E-05 Resid phase (deg) -47.5 +/- 4.7

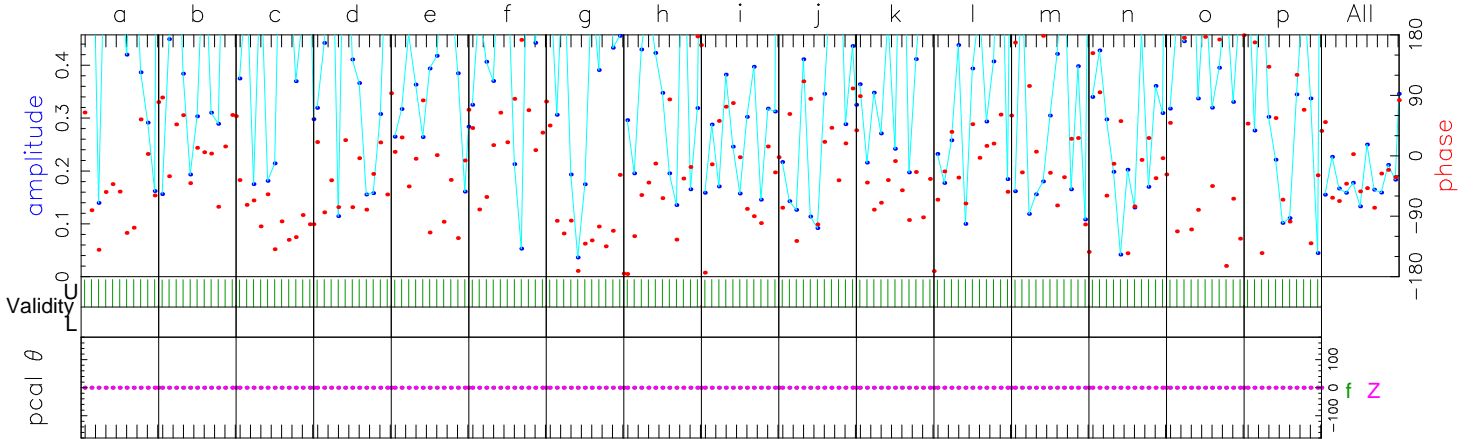
RMS Theor. Amplitude 0.448 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.4 8.1 Search (2048X64) 0.438 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 64.1 14.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 61.3 9.3 Inc. seg. avg. 0.710 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 84.3 16.3 Inc. frq. avg. 0.729 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 Y: az 262.6 el 33.8 pa 51.6 u,v (fr/asec) -10901.307 -1813.478 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fY..130MTI Output file: /Exps/c192c/v2/1234/No0080/fY.W.95.130MTI



Fringe quality 9
SNR 8.5
Int time 410.871
Amp 0.152
Phase -37.0
PFD 1.0e-08
Delays (us)
SBD 0.000177
MBD -0.005400
Fringe rate (Hz)
0.014206
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055609
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

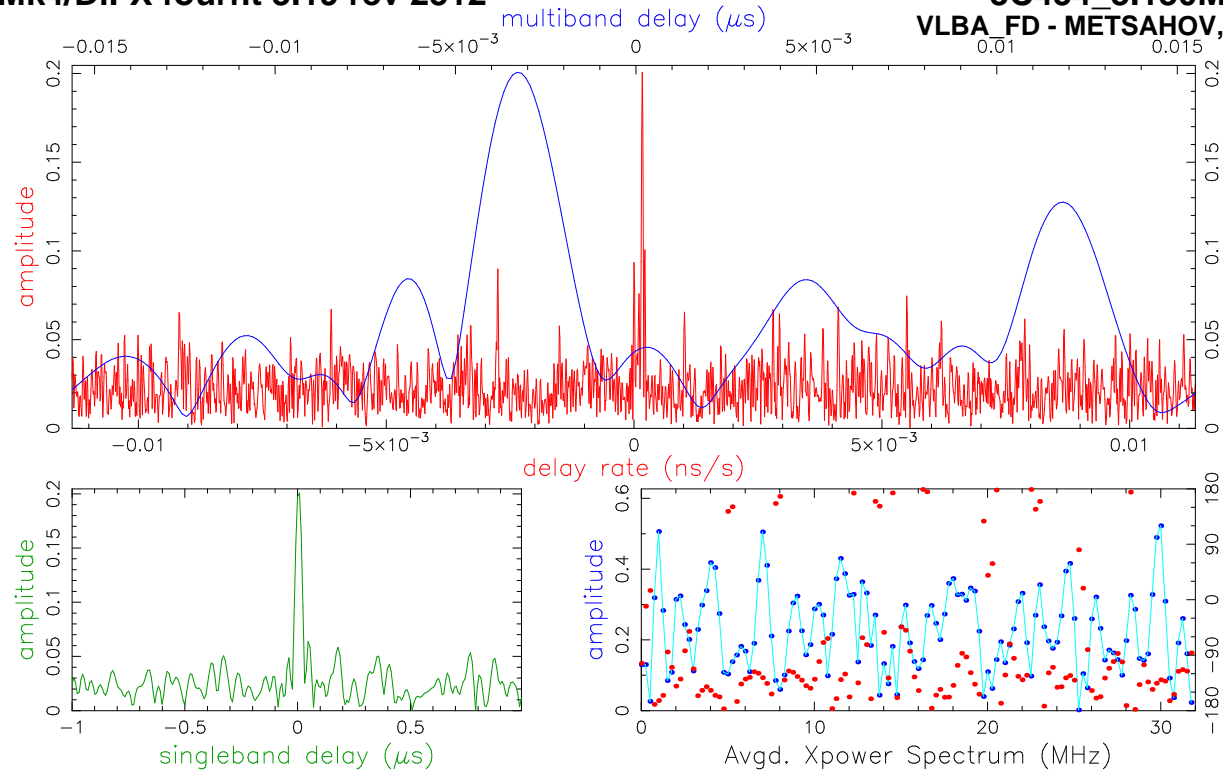


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-57.2	20.5	-95.8	-28.5	-40.3	29.8	-107.8	-54.8	-10.8	29.3	-48.3	11.2	-25.8	-6.9	-132.4	121.8	Phase	-37.0
	0.3	0.4	0.4	0.3	0.2	0.3	0.3	0.2	0.1	0.2	0.3	0.3	0.2	0.1	0.3	0.1	Ampl.	0.2
	128.6	129.0	128.8	128.9	185.6	129.1	127.9	27.2	215.1	126.3	128.9	129.2	2.6	10.2	128.4	101.9	Sbd box	129.0
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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 freqs	
f: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 phase	
f: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	
Z	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		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.07804255609E+04 Apriori delay (usec) 1.07804309606E+04 Resid mbdelay (usec) -5.39974E-03 +/- 1.3E-04
 Sband delay (usec) 1.07804311371E+04 Apriori clock (usec) 2.8910232E-01 Resid sbdelay (usec) 1.76500E-04 +/- 2.0E-03
 Phase delay (usec) 1.07804309594E+04 Apriori clockrate (us/s) -1.0724231E-07 Resid phdelay (usec) -1.19291E-06 +/- 4.4E-07
 Delay rate (us/s) 1.57808306605E+00 Apriori rate (us/s) 1.57808290113E+00 Resid rate (us/s) 1.64923E-07 +/- 1.8E-09
 Total phase (deg) 303.7 Apriori accel (us/s/s) -6.86453638265E-05 Resid phase (deg) -37.0 +/- 13.6

RMS Theor. Amplitude 0.152 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 35.4 23.5 Search (2048X64) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 29.9 41.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 65.4 27.1 Inc. seg. avg. 0.167 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 87.2 47.3 Inc. frq. avg. 0.220 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 101.0 el 49.4 pa -61.6 Z: az 275.4 el 15.7 pa 31.0 u,v (fr/asec) -9513.225 -4570.989 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fZ..130MTI Output file: /Exps/c192c/v2/1234/No0080/fZ.W.100.130MTI

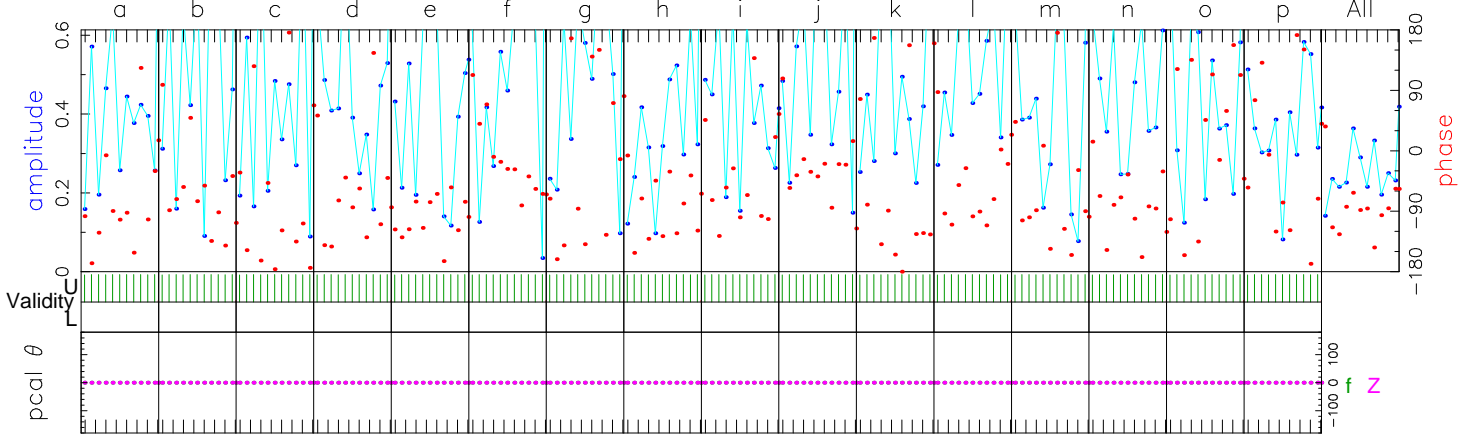


Fringe quality 9

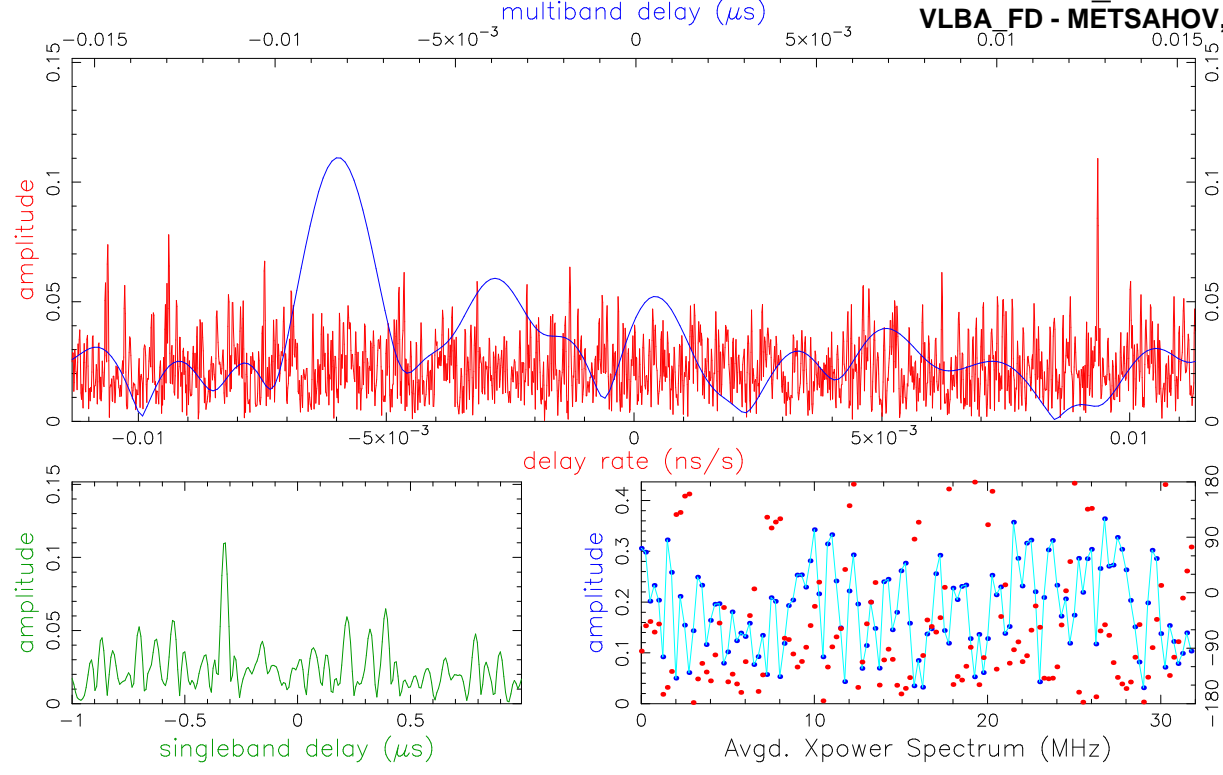
SNR 11.3
Int time 410.870
Amp 0.205
Phase -90.3
PFD 4.0e-21
Delays (us)
SBD 0.004479
MBD -0.003309
Fringe rate (Hz) 0.014045
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055615
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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											
	-106.7	-82.8	-145.0	-76.9	-95.4	-26.2	-157.7	-83.8	-68.8	-25.7	-135.2	-60.3	-109.7	-76.0	143.4	-147.2		Phase	-90.3										
	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.2	0.4	0.3	0.4	0.2	0.3	0.1	0.1		Ampl.	0.3										
	128.9	130.6	128.7	128.8	129.9	128.8	128.8	223.4	151.7	129.4	129.2	128.8	128.2	129.4	189.7	126.9		Sbd box	129.6										
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		APs used											
f	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											
f: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											
f	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		Chan ids											
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks											
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids											
	Group delay (usec)(sbd)		1.07804276519E+04				Apriori delay (usec)				1.07804309606E+04				Resid mbdelay (usec)				-3.30871E-03		+/- 9.5E-05								
	Sband delay (usec)		1.07804354396E+04				Apriori clock (usec)				2.8910232E-01				Resid sbdelay (usec)				4.47900E-03		+/- 1.5E-03								
	Phase delay (usec)		1.07804309577E+04				Apriori clockrate (us/s)				-1.0724231E-07				Resid phdelay (usec)				-2.91225E-06		+/- 3.3E-07								
	Delay rate (us/s)		1.57808306418E+00				Apriori rate (us/s)				1.57808290113E+00				Resid rate (us/s)				1.63053E-07		+/- 1.4E-09								
	Total phase (deg)		250.4				Apriori accel (us/s/s)				-6.86453638265E-05				Resid phase (deg)				-90.3		+/- 10.1								
	ph/seg (deg)	RMS	Theor.	Amplitude				0.205 +/- 0.018				Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5													
	amp/seg (%)	45.1	17.5	Search (2048X64)				0.197				Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)				-1.000		1.000							
	ph/frq (deg)	36.1	30.5	Interp.				0.000				Bits/sample: 2x2				SampCntNorm: enabled				mb window (us)		-0.016		0.016					
	amp/frq (%)	53.1	20.2	Inc. seg. avg.				0.235				Sample rate(MISamp/s): 64				dr window (ns/s)				-0.011		0.011							
		53.0	35.3	Inc. frq. avg.				0.257				Data rate(Mb/s): 2048				nlags: 128				t_cohere infinite				ion window (TEC)		0.00		0.00	
	f: az 101.0 el 49.4 pa -61.6		Z: az 275.4 el 15.7 pa 31.0				u,v (fr/asec)				-9513.225 -4570.989														simultaneous interpolator				

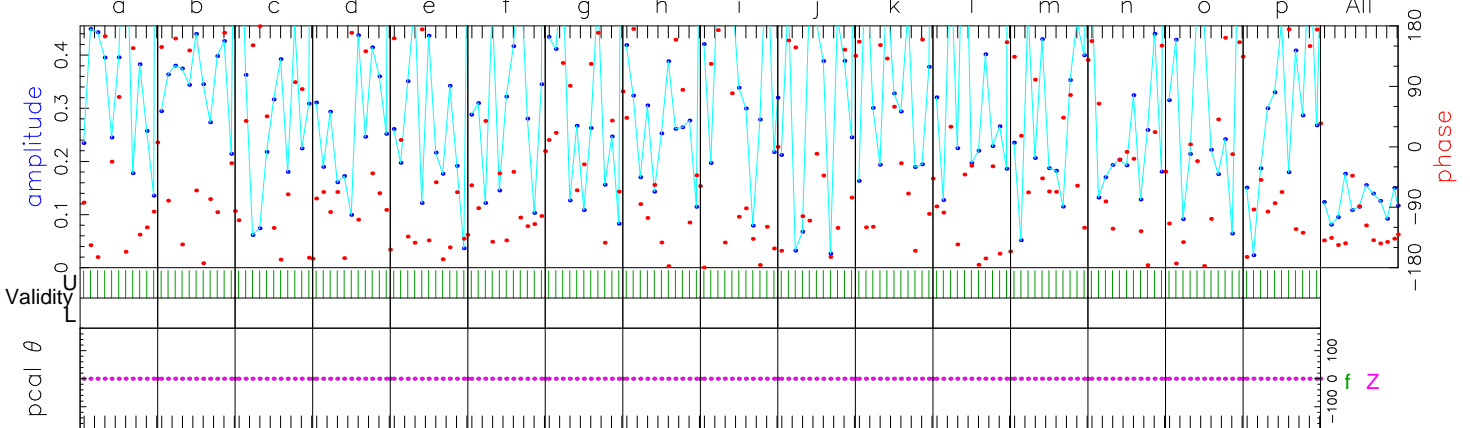


Fringe quality 0

SNR 6.2
Int time 410.871
Amp 0.152
Phase -128.3
PFD 1.1e-01
Delays (us)
SBD -0.324039
MBD -0.008336
Fringe rate (Hz) 0.807218
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055620
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

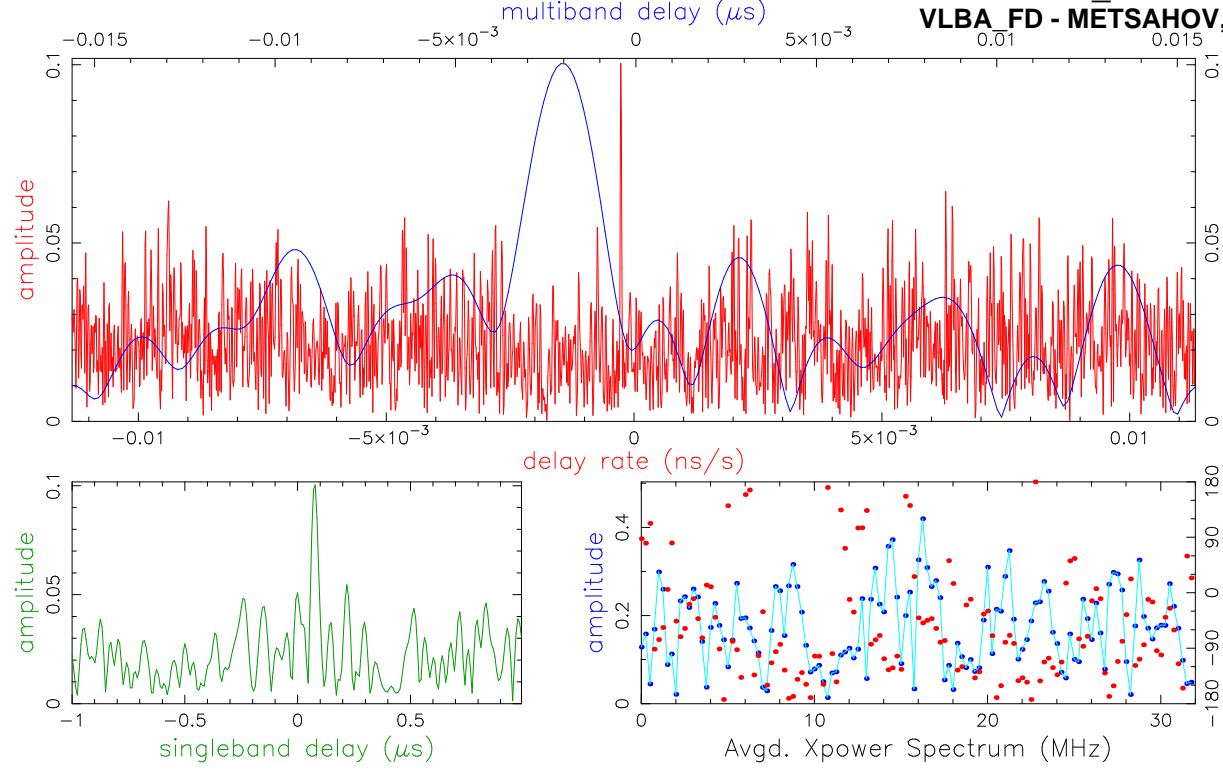
Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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
	-151.5	-140.0	-158.7	-91.7	-137.7	-95.2	79.9	-150.7	-158.1	-121.7	-132.2	-83.0	-56.9	-37.0	-168.5	-129.0	Phase	-128.3
	0.3	0.2	0.1	0.3	0.2	0.3	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.0	0.2	0.2	Ampl.	0.2
	130.3	175.9	177.4	57.7	42.2	63.6	109.4	108.0	88.9	16.3	14.8	72.6	64.6	141.8	245.7	175.8	Sbd box	87.5
U/L	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	APs used	
f	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 freqs	
f: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 phase	
f: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	
f	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	PC amp	
f	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	
																	Chan ids	
																	Tracks	

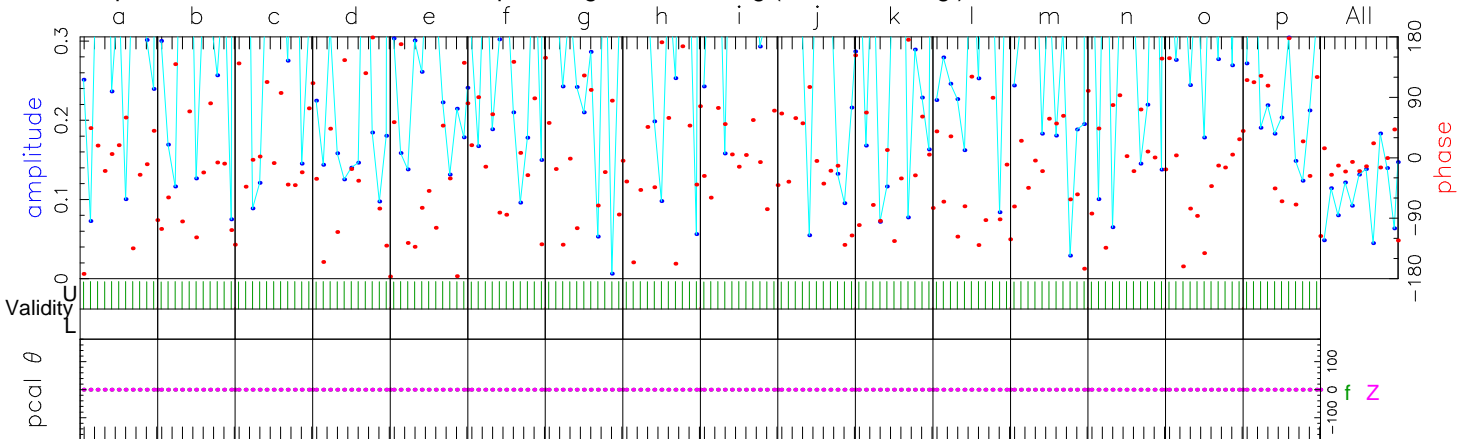
Group delay (usec)(sbd) 1.07801101249E+04 Apriori delay (usec) 1.07804309606E+04 Resid mbdelay (usec) -8.33567E-03 +/- 1.7E-04
 Sband delay (usec) 1.07801069211E+04 Apriori clock (usec) 2.8910232E-01 Resid sbdelay (usec) -3.24039E-01 +/- 2.8E-03
 Phase delay (usec) 1.07804309565E+04 Apriori clockrate (us/s) -1.0724231E-07 Resid phdelay (usec) -4.13728E-06 +/- 5.9E-07
 Delay rate (us/s) 1.57809227213E+00 Apriori rate (us/s) 1.57808290113E+00 Resid rate (us/s) 9.37100E-06 +/- 2.5E-09
 Total phase (deg) 212.4 Apriori accel (us/s/s) -6.86453638265E-05 Resid phase (deg) -128.3 +/- 18.4

RMS Theor. Amplitude 0.152 +/- 0.024
 ph/seg (deg) 30.6 31.8 Search (2048X64) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 26.9 55.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.1 36.7 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.8 64.1 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 101.0 el 49.4 pa -61.6 Z: az 275.4 el 15.7 pa 31.0 u,v (fr/asec) -9513.225 -4570.989 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fZ..130MTI Output file: /Exps/c192c/v2/1234/No0080/fZ.W.141.130MTI simultaneous interpolator



Fringe quality 0
SNR 5.6
Int time 410.870
Amp 0.102
Phase -9.1
PFD 9.8e-01
Delays (us)
SBD 0.075096
MBD -0.002047
Fringe rate (Hz)
-0.023055
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 020636.66
Stop 021329.84
FRT 021000.00
Corr/FF/build
2020:076:181504
2020:086:055624
2020:014:135814
RA & Dec (J2000)
22h53m57.747940s
+16°08'53.560909"

Amp. and Phase vs. time for each freq., 12 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 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	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f: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		
f: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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	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

Group delay (usec)(sbd) 1.07804914136E+04 Apriori delay (usec) 1.07804309606E+04 Resid mbdelay (usec) -2.04702E-03 +/- 1.9E-04
Sband delay (usec) 1.07805060566E+04 Apriori clock (usec) 2.8910232E-01 Resid sbdelay (usec) 7.50960E-02 +/- 3.1E-03
Phase delay (usec) 1.07804309603E+04 Apriori clockrate (us/s) -1.0724231E-07 Resid phdelay (usec) -2.92012E-07 +/- 6.6E-07
Delay rate (us/s) 1.57808263348E+00 Apriori rate (us/s) 1.57808290113E+00 Resid rate (us/s) -2.67650E-07 +/- 2.7E-09
Total phase (deg) 331.6 Apriori accel (us/s/s) -6.86453638265E-05 Resid phase (deg) -9.1 +/- 20.3

ph/seg (deg) 22.2 35.2 Amplitude 0.102 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 40.8 61.4 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 65.9 40.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 68.6 70.9 Inc. seg. avg. 0.089 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
f: az 101.0 el 49.4 pa -61.6 Z: az 275.4 el 15.7 pa 31.0 u,v (fr/asec) -9513.225 -4570.989 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0080/fZ..130MTI Output file: /Exps/c192c/v2/1234/No0080/fZ.W.156.130MTI simultaneous interpolator