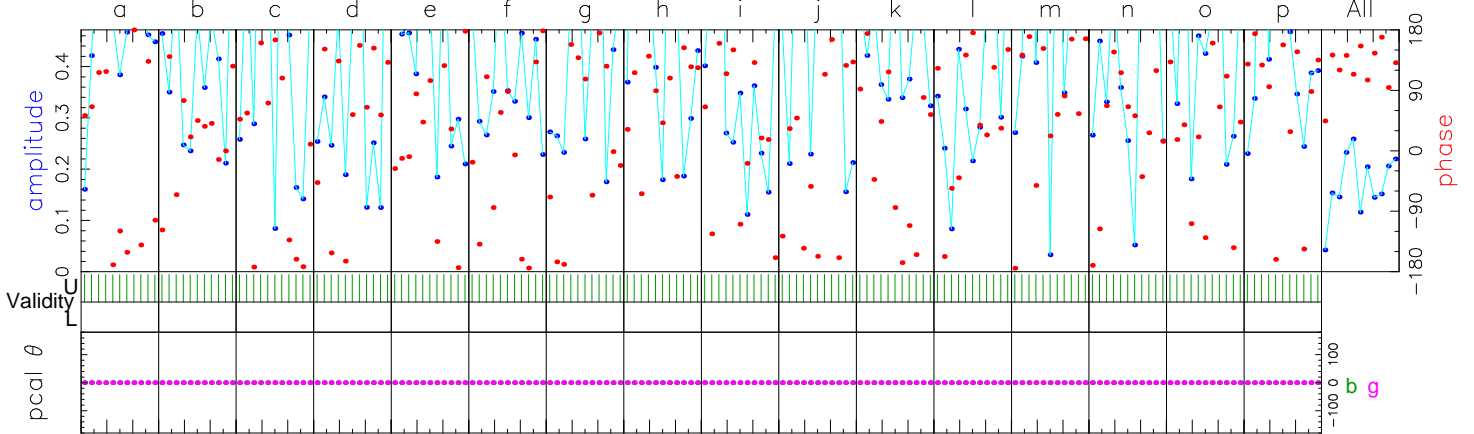


Fringe quality 0
SNR 5.7
Int time 179.574
Amp 0.157
Phase 127.5
PFD 7.5e-01
Delays (us)
SBD -0.326701
MBD 0.010929
Fringe rate (Hz)
-0.146961
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050808
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

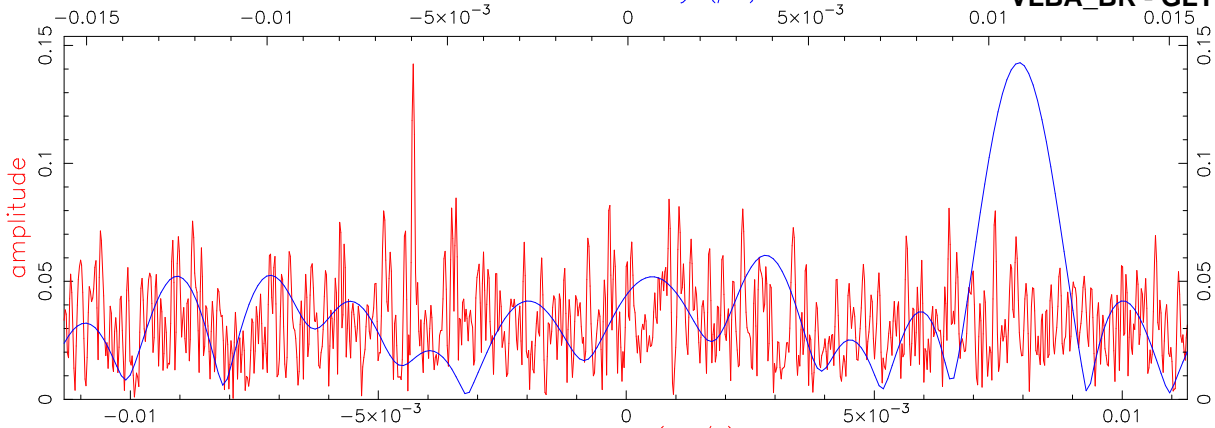
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
165.8	38.2	110.2	136.8	49.7	122.0	176.4	103.6	167.5	173.4	167.4	106.9	134.6	83.7	71.5	142.0		Phase	127.5	
0.3	0.1	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.3	0.1	0.2	0.4		Ampl.	0.2	
33.8	101.1	110.1	230.6	255.2	139.3	180.9	5.2	130.8	199.1	210.0	180.2	103.8	14.9	163.0	108.4		Sbd box	87.2	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used		
b	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		PC phase		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks		
b	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)	-5.87394290302E+03			Apriori delay (usec)			-5.87361008229E+03			Resid mbdelay (usec)			1.09293E-02			+/-	1.9E-04		
Sband delay (usec)	-5.87393678379E+03			Apriori clock (usec)			-1.9228637E+00			Resid sbdelay (usec)			-3.26701E-01			+/-	3.0E-03		
Phase delay (usec)	-5.87361007818E+03			Apriori clockrate (us/s)			-3.1739506E-07			Resid phdelay (usec)			4.11065E-06			+/-	6.5E-07		
Delay rate (us/s)	6.47676008863E-01			Apriori rate (us/s)			6.47677714936E-01			Resid rate (us/s)			-1.70607E-06			+/-	6.2E-09		
Total phase (deg)	-48.4			Apriori accel (us/s/s)			1.56105983456E-05			Resid phase (deg)			127.5			+/-	20.1		

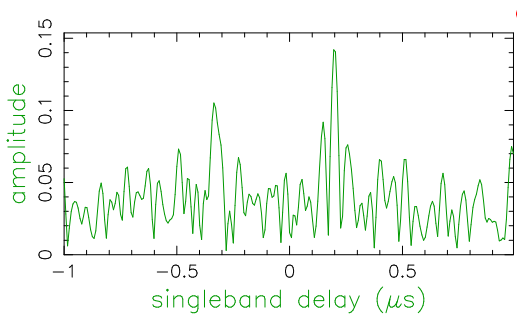
ph/seg (deg) 33.1 33.3 Search (1024X64) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 38.7 58.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.2 40.1 Inc. seg. avg. 0.147 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 64.6 70.1 Inc. frq. avg. 0.161 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 63.4 el 27.1 pa -48.6 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -4651.124 -652.656 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/bg.W.19.130L6H

multiband delay (μ s)

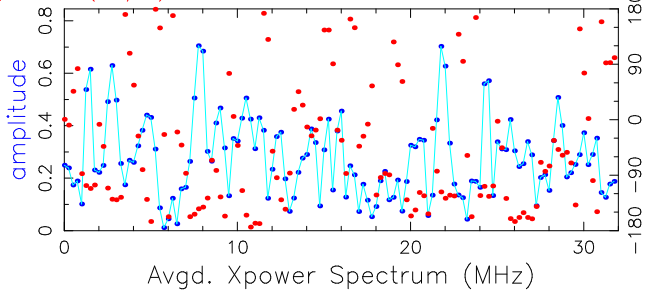


Fringe quality 0

SNR 5.3
Int time 179.589
Amp 0.154
Phase -117.4
PFD 1.0e+00
Delays (us)
SBD 0.198759
MBD 0.010934
Fringe rate (Hz)
-0.369904
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

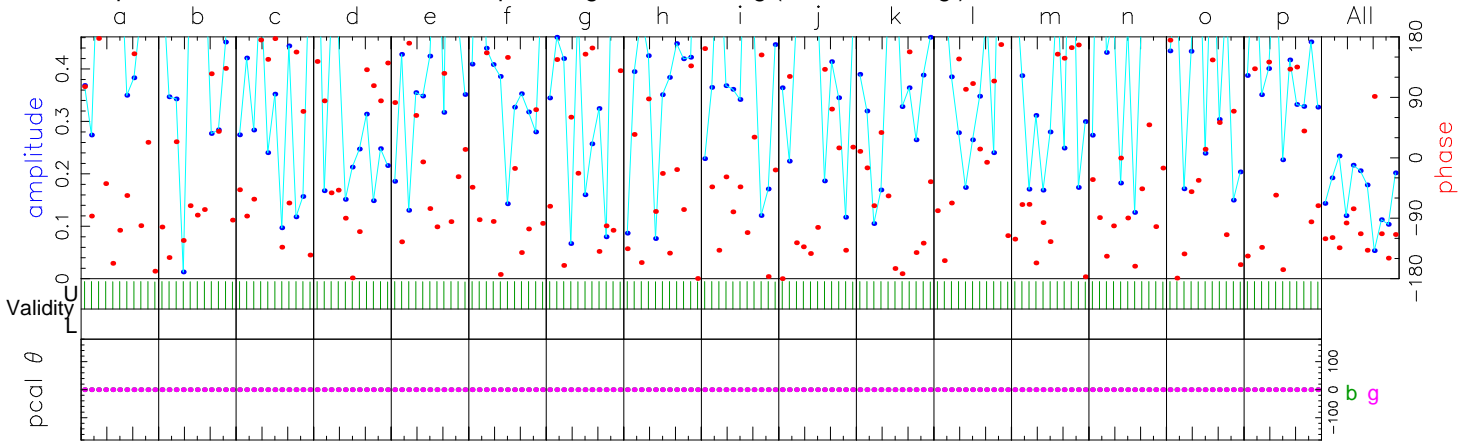


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050806
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-123.3	-90.2	-132.9	159.5	-76.0	-107.3	-148.8	-156.6	-78.6	-139.6	-99.1	-128.9	-160.8	-72.9	-140.9	-167.9	Phase	-117.4
	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.3	0.1	0.1	Ampl.	0.1
	159.7	175.8	87.6	21.6	99.4	101.8	135.9	181.3	2.9	47.3	234.5	75.6	33.2	71.4	36.6	160.9	Sbd box	154.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		-5.87341164845E+03		Apriori delay (usec)		-5.87361008229E+03		Resid mbdelay (usec)		1.09338E-02		+/-	2.0E-04					
Sband delay (usec)		-5.87341132279E+03		Apriori clock (usec)		-1.9228637E+00		Resid sbdelay (usec)		1.98759E-01		+/-	3.2E-03					
Phase delay (usec)		-5.87361008608E+03		Apriori clockrate (us/s)		-3.1739506E-07		Resid phdelay (usec)		-3.78523E-06		+/-	7.0E-07					
Delay rate (us/s)		6.47673420714E-01		Apriori rate (us/s)		6.47677714936E-01		Resid rate (us/s)		-4.29422E-06		+/-	6.7E-09					
Total phase (deg)			-293.2	Apriori accel (us/s/s)		1.56105983456E-05		Resid phase (deg)		-117.4		+/-	21.6					

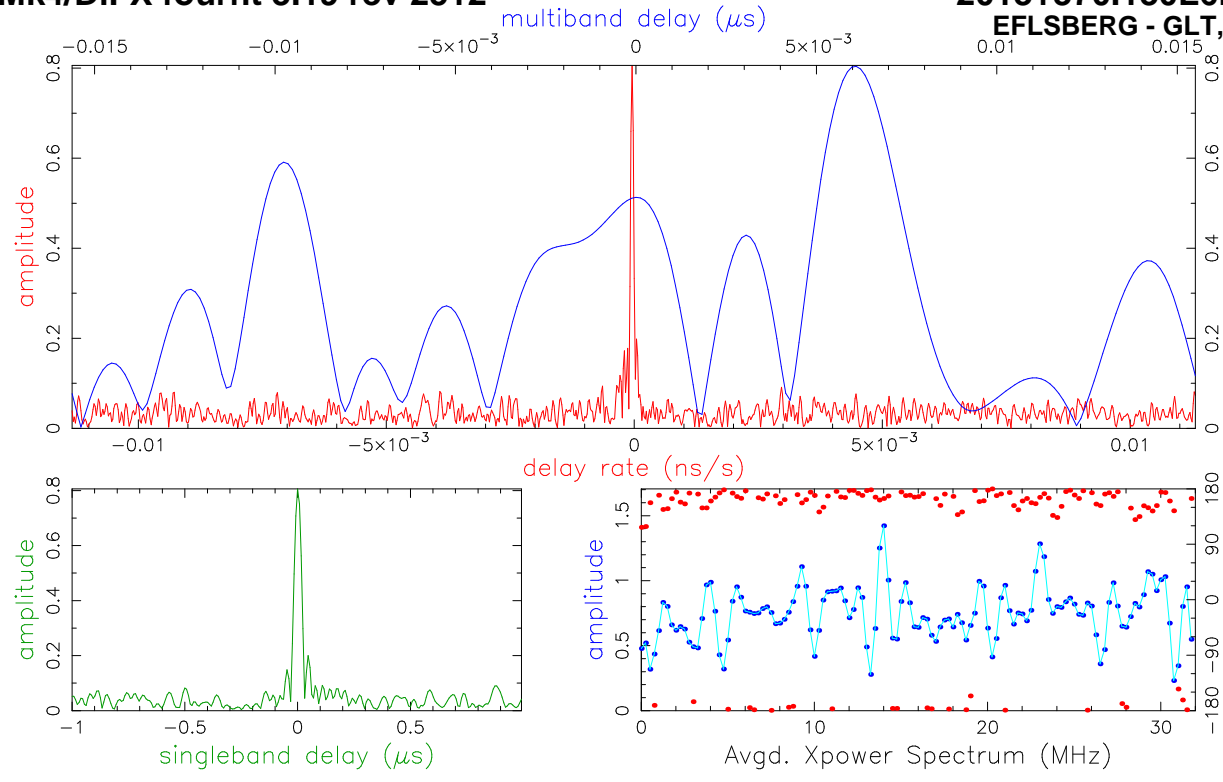
ph/seg (deg) 49.4 35.8
amp/seg (%) 39.0 62.5
ph/frq (deg) 39.4 43.2
amp/frq (%) 49.8 75.3

RMS Theor. Amplitude 0.154 +/- 0.029
Search (1024X64) 0.142
Interp. 0.000
Inc. seg. avg. 0.142
Inc. frq. avg. 0.142

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MSamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

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

b: az 63.4 el 27.1 pa -48.6 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -4651.124 -652.656 simultaneous interpolator

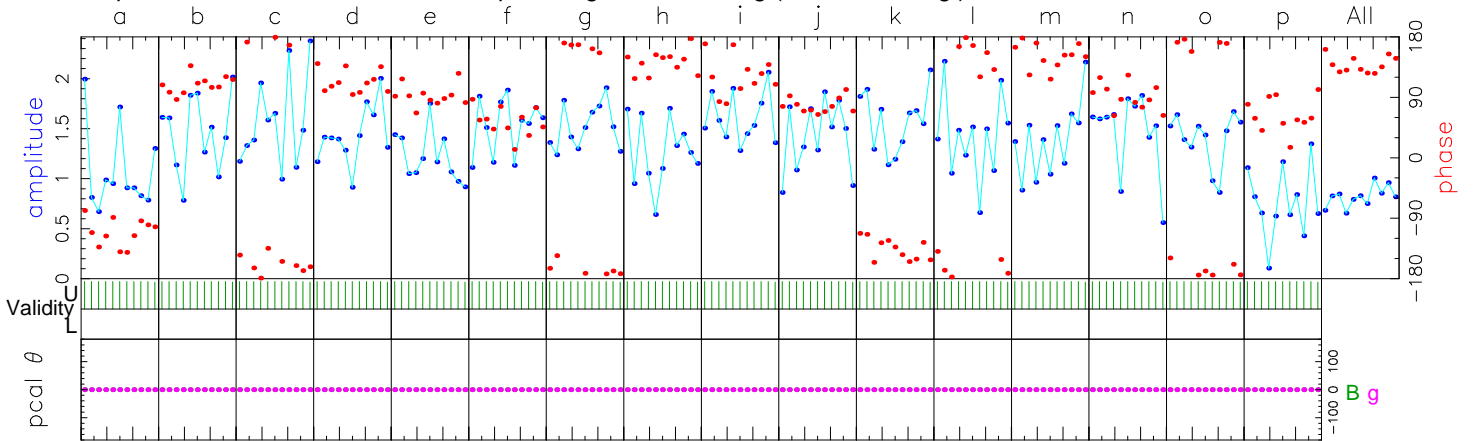


Fringe quality 7

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

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

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



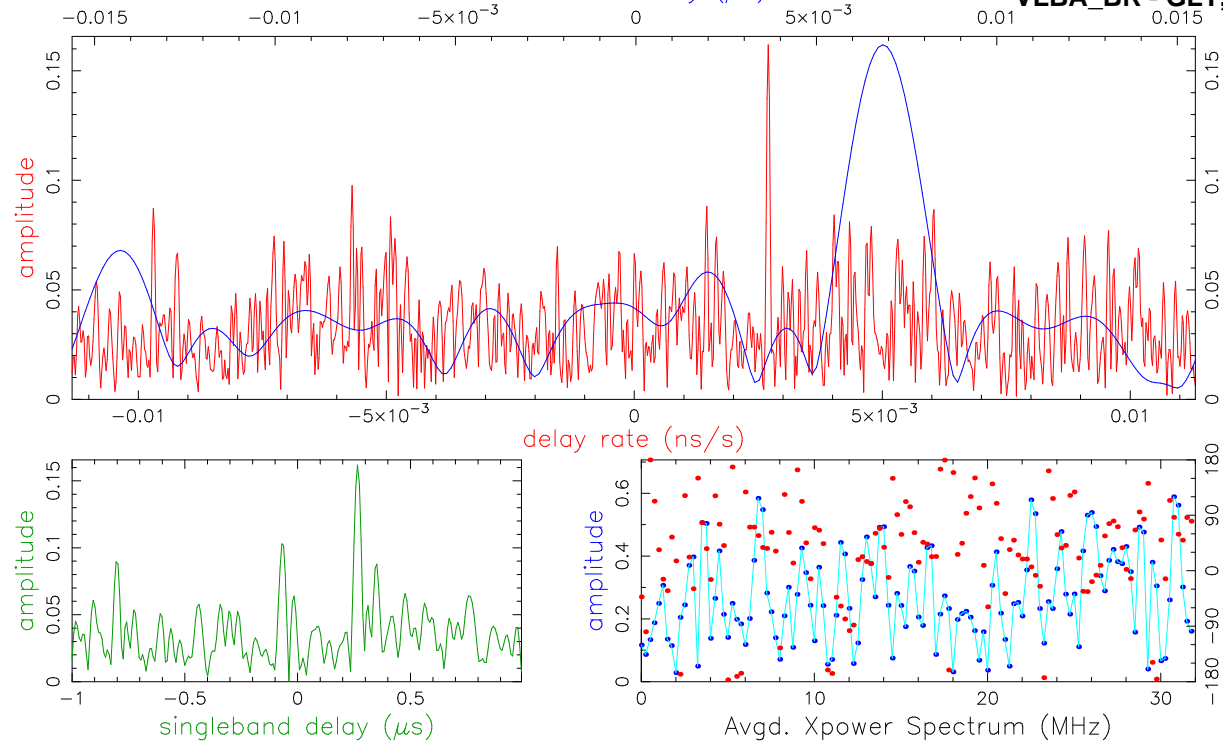
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-109.4	110.8	-168.2	114.3	92.6	54.5	179.8	142.8	123.6	78.7	-135.4	179.5	150.4	93.2	-176.5	61.5		Phase	138.5
	1.0	1.4	1.5	1.4	1.2	1.5	1.5	1.2	1.4	1.4	1.5	1.3	1.3	1.4	1.4	0.7		Ampl.	1.3
	128.0	128.8	128.9	129.4	129.2	129.6	129.3	129.4	129.4	129.5	129.3	129.2	129.0	129.3	128.1	129.4		Sbd box	129.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) 2.88089729628E+03 Apriori delay (usec) 2.88089122244E+03 Resid mbdelay (usec) 6.07384E-03 +/- 3.7E-05
 Sband delay (usec) 2.88089241144E+03 Apriori clock (usec) 1.5498650E+01 Resid sbdelay (usec) 1.18900E-03 +/- 5.8E-04
 Phase delay (usec) 2.88089122691E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 4.46639E-06 +/- 1.3E-07
 Delay rate (us/s) -6.56552090368E-01 Apriori rate (us/s) -6.56552046069E-01 Resid rate (us/s) -4.42990E-08 +/- 1.2E-09
 Total phase (deg) 103.0 Apriori accel (us/s/s) -2.89846979494E-05 Resid phase (deg) 138.5 +/- 3.9

ph/seg (deg) 11.7 Theor. 6.4 Amplitude 0.806 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 12.4 11.2 Search (1024X64) 0.791 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 60.2 7.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 67.7 13.5 Inc. seg. avg. 0.816 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 1.302 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

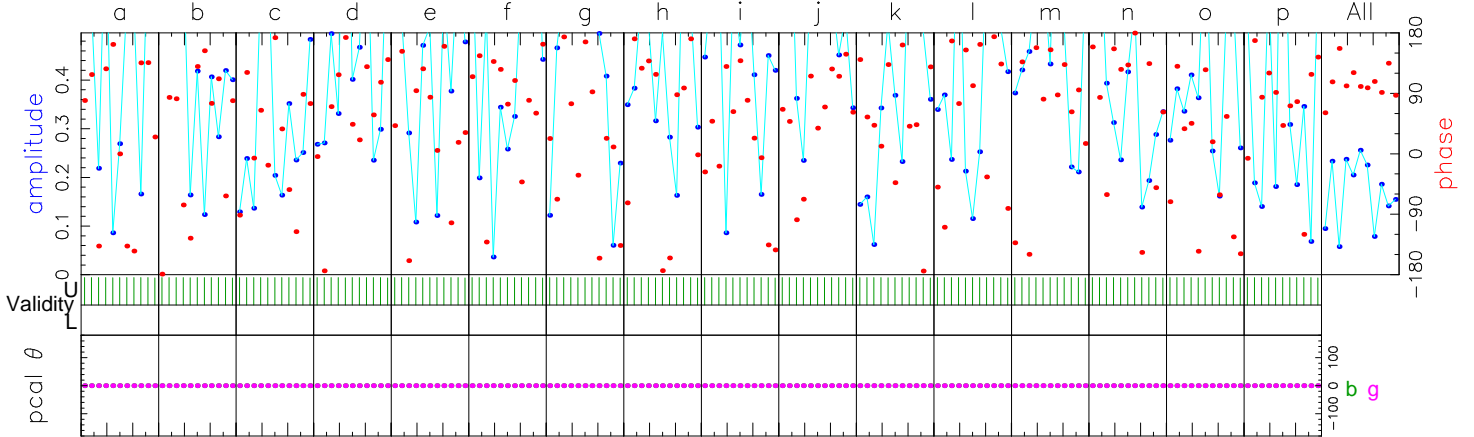
B: az 257.6 el 60.6 pa 51.1 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 4698.979 -3178.893 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.25.130L6H

multiband delay (μ s)



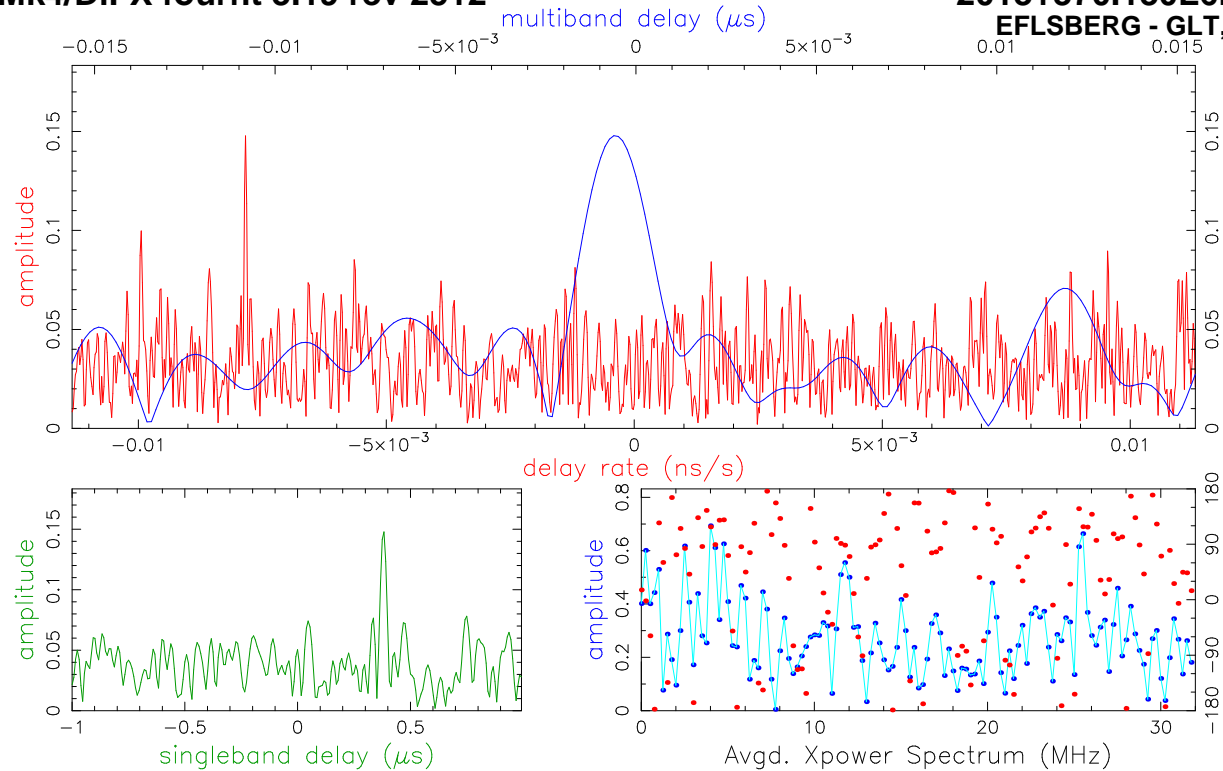
Fringe quality 0
SNR 5.9
Int time 179.574
Amp 0.166
Phase 103.7
PFD 3.2e-01
Delays (us)
SBD 0.266014
MBD 0.006838
Fringe rate (Hz) 0.232509
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050811
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



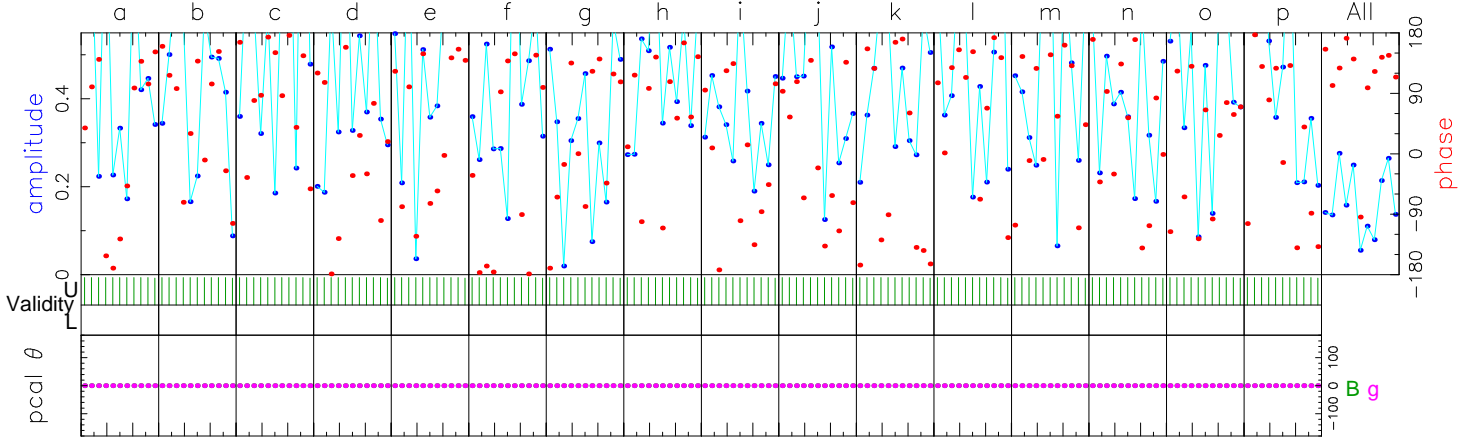
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
125.1	102.4	34.7	115.2	88.3	101.7	129.5	144.0	42.7	79.0	76.3	169.6	119.2	139.2	107.6	82.7	82.7	Phase	103.7
0.2	0.2	0.1	0.3	0.2	0.2	0.1	0.3	0.2	0.4	0.2	0.1	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
239.3	120.9	196.1	164.0	120.9	182.3	13.0	68.9	176.5	163.1	141.6	236.4	241.2	166.9	201.3	45.8	45.8	Sbd box	163.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-5.87335324423E+03			Apriori delay (usec)			-5.87361008229E+03			Resid mbdelay (usec)			6.83806E-03			+/- 1.8E-04		
Sband delay (usec)	-5.87334406879E+03			Apriori clock (usec)			-1.9228637E+00			Resid sbdelay (usec)			2.66014E-01			+/- 2.9E-03		
Phase delay (usec)	-5.87361007895E+03			Apriori clockrate (us/s)			-3.1739506E-07			Resid phdelay (usec)			3.34473E-06			+/- 6.2E-07		
Delay rate (us/s)	6.47680414135E-01			Apriori rate (us/s)			6.47677714936E-01			Resid rate (us/s)			2.69920E-06			+/- 6.0E-09		
Total phase (deg)	-72.1			Apriori accel (us/s/s)			1.56105983456E-05			Resid phase (deg)			103.7			+/- 19.3		

ph/seg (deg) 24.1 32.0 Search (1024X64) 0.157 PCAL mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 41.2 55.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.1 38.6 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 50.3 67.4 Inc. frq. avg. 0.157 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 63.4 el 27.1 pa -48.6 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -4651.124 -652.656 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/bg.W.39.130L6H



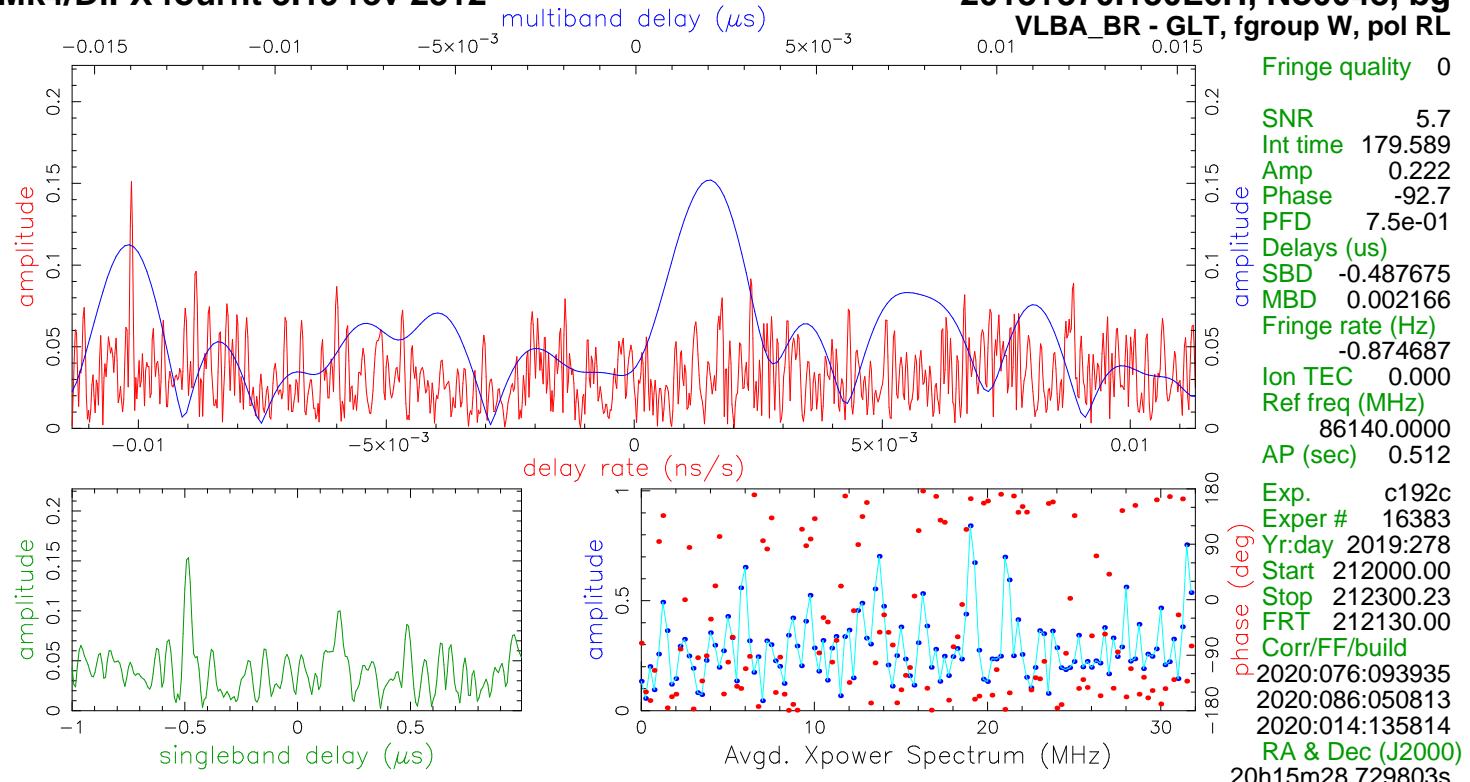
Fringe quality 0
SNR 5.5
Int time 179.720
Amp 0.183
Phase 136.9
PFD 9.9e-01
Delays (us)
SBD 0.380435
MBD -0.000619
Fringe rate (Hz)
-0.676600
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050813
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	130.5	93.7	133.4	112.1	134.2	164.2	145.6	127.9	179.6	47.2	-163.1	136.6	128.6	142.8	79.6	152.5	Phase	136.9
B	0.3	0.1	0.3	0.1	0.3	0.3	0.1	0.3	0.0	0.1	0.3	0.4	0.2	0.1	0.2	0.2	Ampl.	0.2
g	233.6	72.7	240.8	165.8	18.4	171.1	89.2	200.8	226.2	173.5	78.9	219.7	56.9	144.1	116.7	58.3	Sbd box	177.7
g	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	2.88126560341E+03		Apriori delay (usec)		2.88089122644E+03		Resid mbdelay (usec)		-6.19032E-04		+/-		2.0E-04					
Sband delay (usec)	2.88127165694E+03		Apriori clock (usec)		1.5498650E+01		Resid sbdelay (usec)		3.80435E-01		+/-		3.1E-03					
Phase delay (usec)	2.88089122686E+03		Apriori clockrate (us/s)		-2.7499999E-07		Resid phdelay (usec)		4.41590E-06		+/-		6.8E-07					
Delay rate (us/s)	-6.56559900722E-01		Apriori rate (us/s)		-6.56552046069E-01		Resid rate (us/s)		-7.85465E-06		+/-		6.5E-09					
Total phase (deg)	101.4		Apriori accel (us/s/s)		-2.89846979494E-05		Resid phase (deg)		136.9		+/-		20.9					

ph/seg (deg) 44.7 34.7 Search (1024X64) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.3 60.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.3 41.9 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.4 73.1 Inc. frq. avg. 0.165 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 257.6 el 60.6 pa 51.1 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 4698.979 -3178.893 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.54.130L6H



Fringe quality 0

SNR 5.7

Int time 179.589

Amp 0.222

Phase -92.7

PFD 7.5e-01

Delays (us)

SBD -0.487675

MBD 0.002166

Fringe rate (Hz)

-0.874687

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 212000.00

Stop 212300.23

FRT 212130.00

Corr/FF/build

2020:076:093935

2020:086:050813

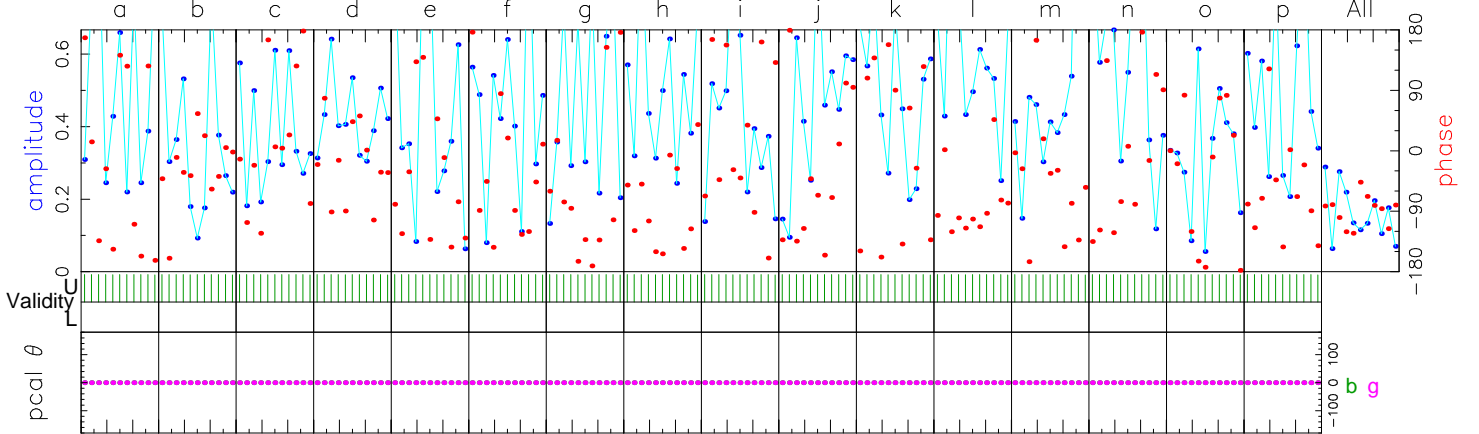
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-158.8	-33.9	-9.6	-24.6	-111.5	-96.2	-134.1	-73.3	-82.5	-98.3	156.7	-93.6	-95.6	-132.1	52.2	-67.6		Phase -92.7					
	0.4	0.4	0.2	0.3	0.3	0.2	0.4	0.4	0.2	0.2	0.4	0.6	0.4	0.3	0.1	0.5		Ampl. 0.3					
	227.0	101.0	4.3	143.1	70.9	23.4	209.5	73.5	198.1	192.4	48.8	65.9	199.2	103.4	190.5	66.6		Sbd box 66.6					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Tracks					
Group delay (usec)(sbd)			-5.87410791658E+03															Apriori delay (usec)	-5.87361008229E+03	Resid mbdelay (usec)	2.16571E-03	+/-	1.9E-04
Sband delay (usec)			-5.87409775779E+03															Apriori clock (usec)	-1.9228637E+00	Resid sbdelay (usec)	-4.87675E-01	+/-	3.0E-03
Phase delay (usec)			-5.87361008528E+03															Apriori clockrate (us/s)	-3.1739506E-07	Resid phdelay (usec)	-2.98858E-06	+/-	6.5E-07
Delay rate (us/s)			6.47667560690E-01															Apriori rate (us/s)	6.47677714936E-01	Resid rate (us/s)	-1.01542E-05	+/-	6.2E-09
Total phase (deg)																		Apriori accel (us/s/s)	1.56105983456E-05	Resid phase (deg)	-92.7	+/-	20.1

ph/seg (deg) 22.5 33.3 Amplitude 0.222 +/- 0.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 47.0 58.1 Search (1024X64) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 64.0 40.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

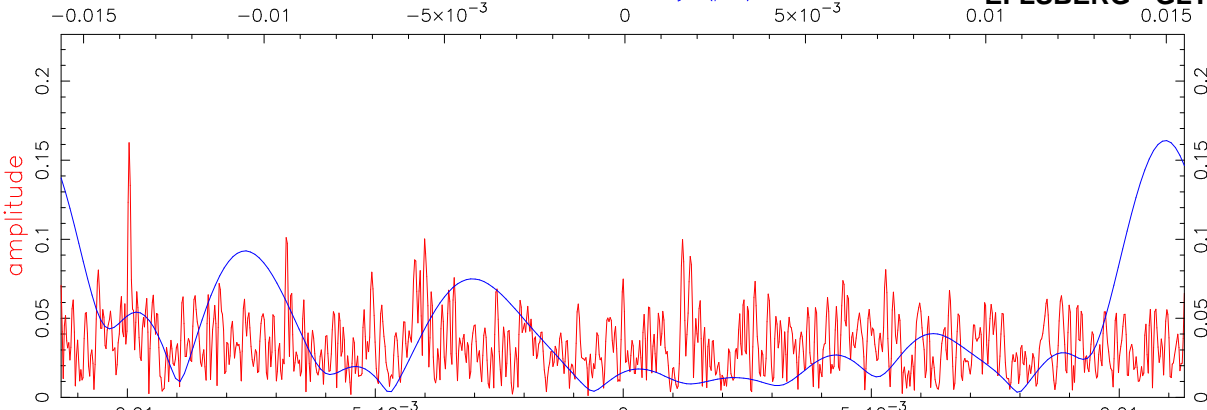
amp/frq (%) 75.1 70.0 Inc. seg. avg. 0.198 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

b: az 63.4 el 27.1 pa -48.6 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -4651.124 -652.656 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

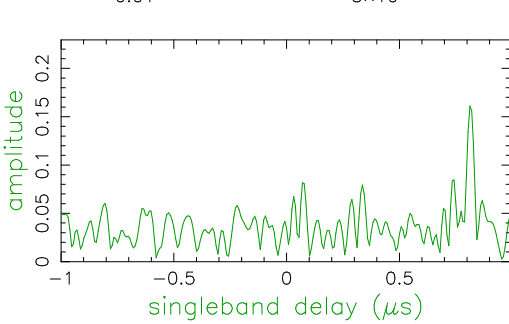
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/bg.W.56.130L6H simultaneous interpolator

multiband delay (μ s)

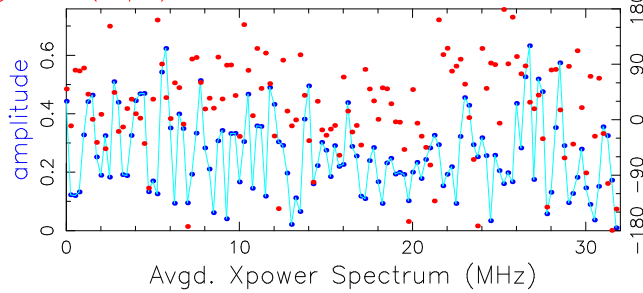
Fringe quality 0



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

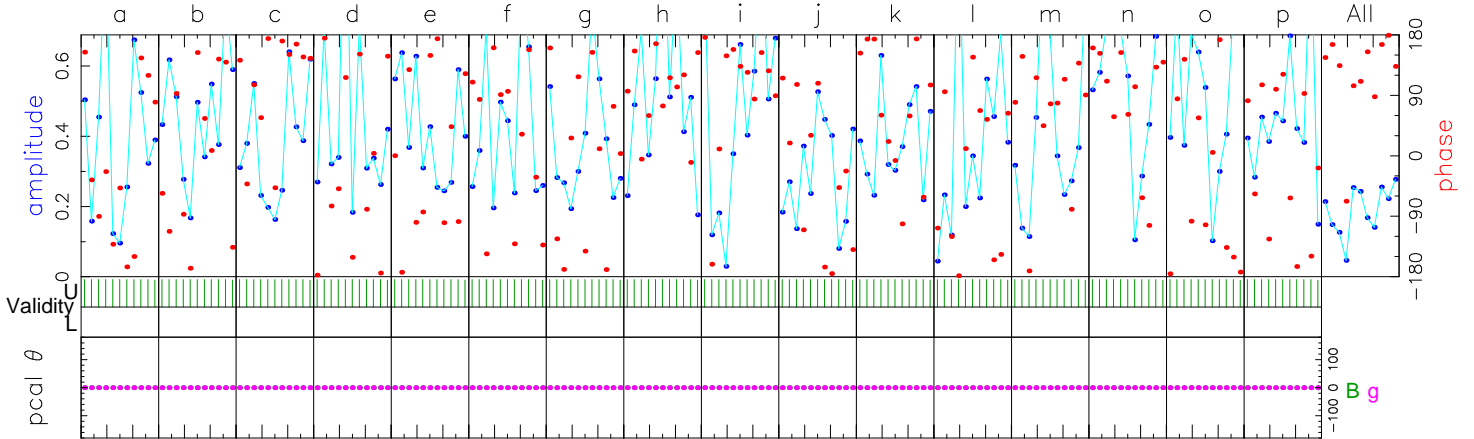


delay rate (ns/s)



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

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

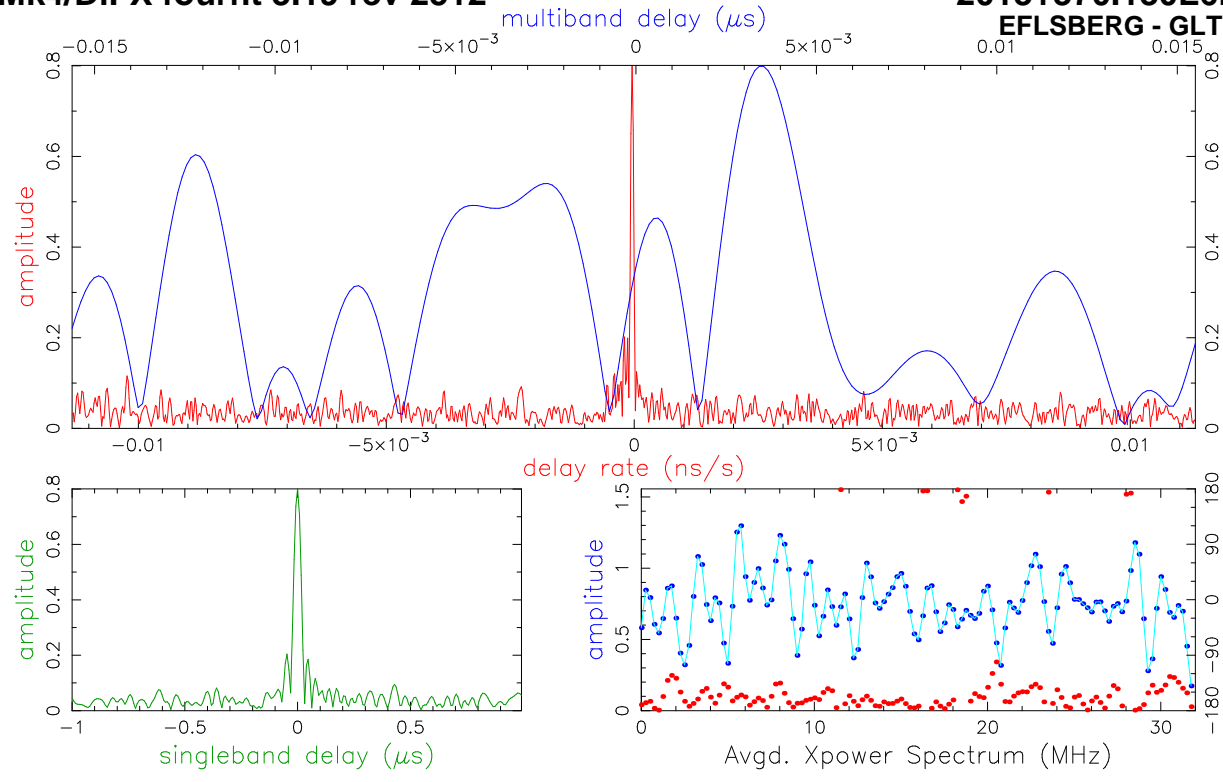


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-158.1	170.8	143.2	161.0	-145.1	121.5	157.1	91.7	133.2	172.0	105.0	157.0	87.1	127.7	-170.2	170.4	Phase	139.3
	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.5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

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

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

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.71.130L6H

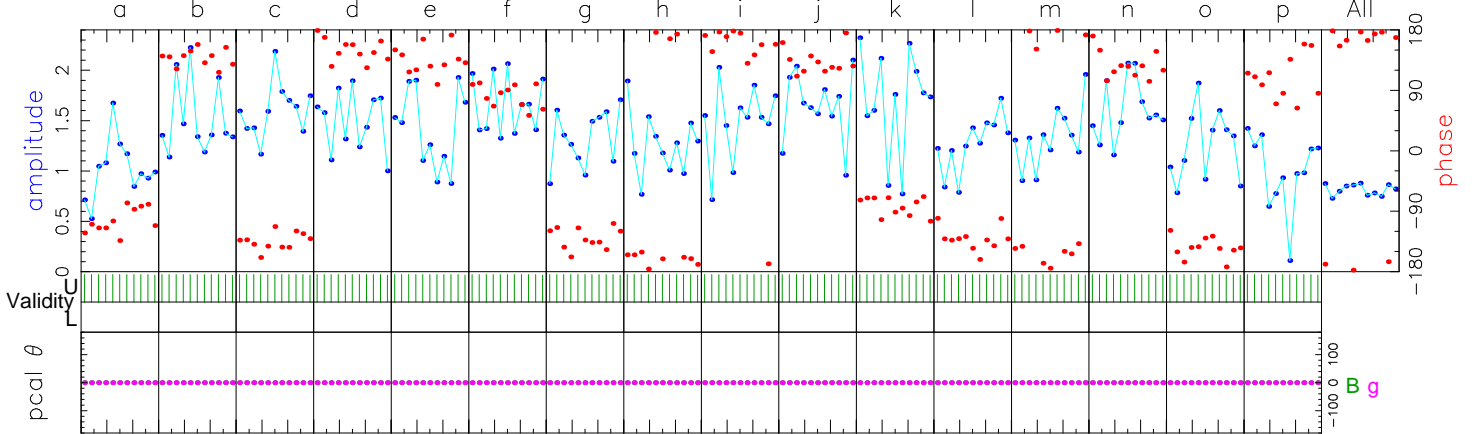


Fringe quality 7

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

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

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

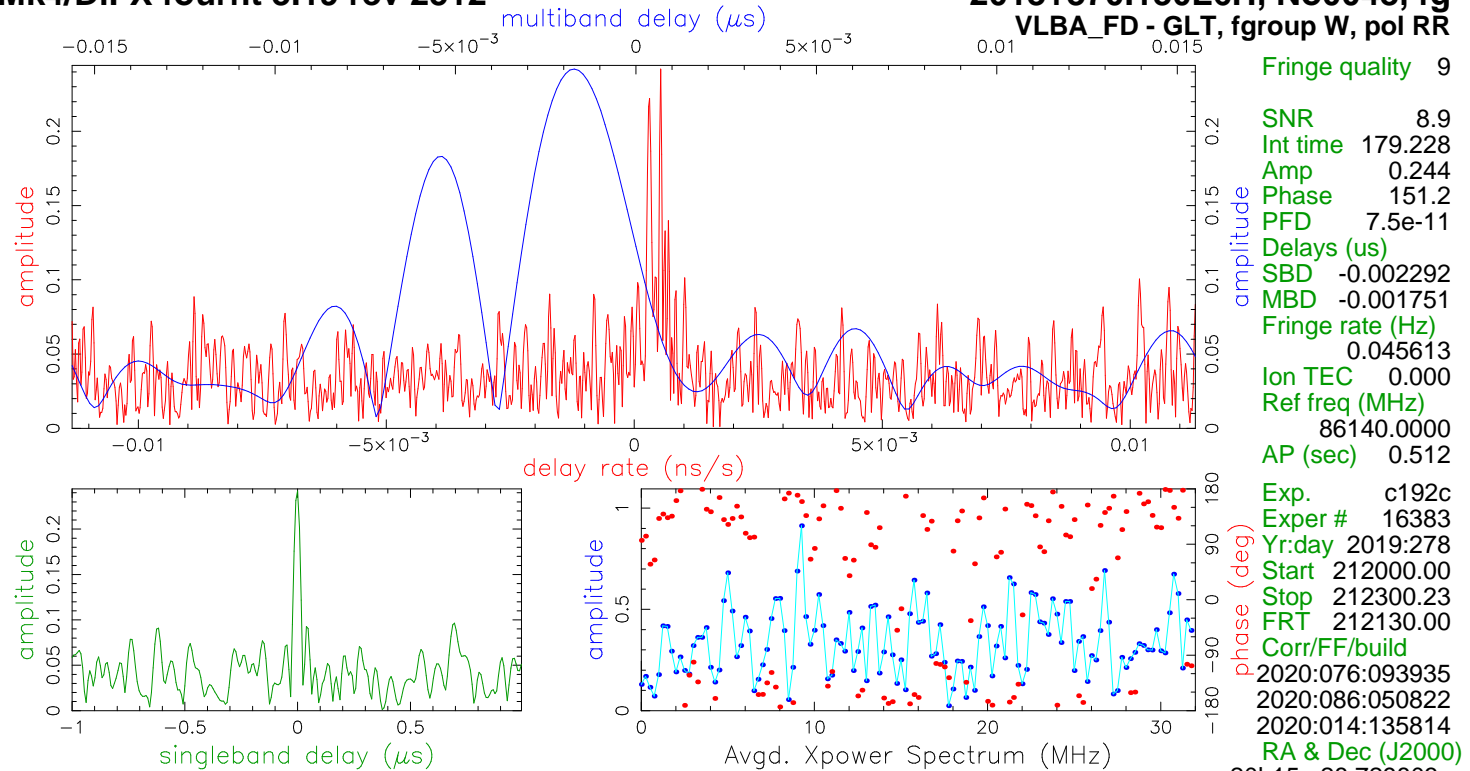


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-103.5	137.7	-133.3	151.5	133.9	81.2	-130.6	-168.0	163.9	129.9	-83.5	-130.0	-166.9	126.0	-144.7	107.1	Phase	175.5
	1.0	1.5	1.6	1.4	1.4	1.6	1.3	1.2	1.4	1.6	1.7	1.2	1.3	1.5	1.2	0.9	Ampl.	1.3
	128.0	128.5	128.5	129.0	129.0	129.1	129.1	128.9	128.8	129.2	129.0	129.1	128.4	128.7	128.3	129.0	Sbd box	128.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 2.88089469553E+03 Apriori delay (usec) 2.88089122244E+03 Resid mbdelay (usec) 3.47309E-03 +/- 3.7E-05
 Sband delay (usec) 2.88089041044E+03 Apriori clock (usec) 1.5498650E+01 Resid sbdelay (usec) -8.12000E-04 +/- 5.9E-04
 Phase delay (usec) 2.88089122810E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 5.65790E-06 +/- 1.3E-07
 Delay rate (us/s) -6.56552088844E-01 Apriori rate (us/s) -6.56552046069E-01 Resid rate (us/s) -4.27756E-08 +/- 1.2E-09
 Total phase (deg) 139.9 Apriori accel (us/s/s) -2.89846979494E-05 Resid phase (deg) 175.5 +/- 3.9

RMS Theor. Amplitude 0.801 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 11.2 6.5 Search (1024X64) 0.797 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 6.8 11.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 59.4 7.8 Inc. seg. avg. 0.810 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 74.3 13.6 Inc. frq. avg. 1.342 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 257.6 el 60.6 pa 51.1 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 4698.979 -3178.893 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/Bg..130L6H Output file: /Exps/c192c/v2/1234/No0048/Bg.W.9.130L6H



Fringe quality 9

SNR 8.9

Int time 179.228

Amp 0.244

Phase 151.2

PFD 7.5e-11

Delays (us)

SBD -0.002292

MBD -0.001751

Fringe rate (Hz)

0.045613

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 212000.00

Stop 212300.23

FRT 212130.00

Corr/FF/build

2020:076:093935

2020:086:050822

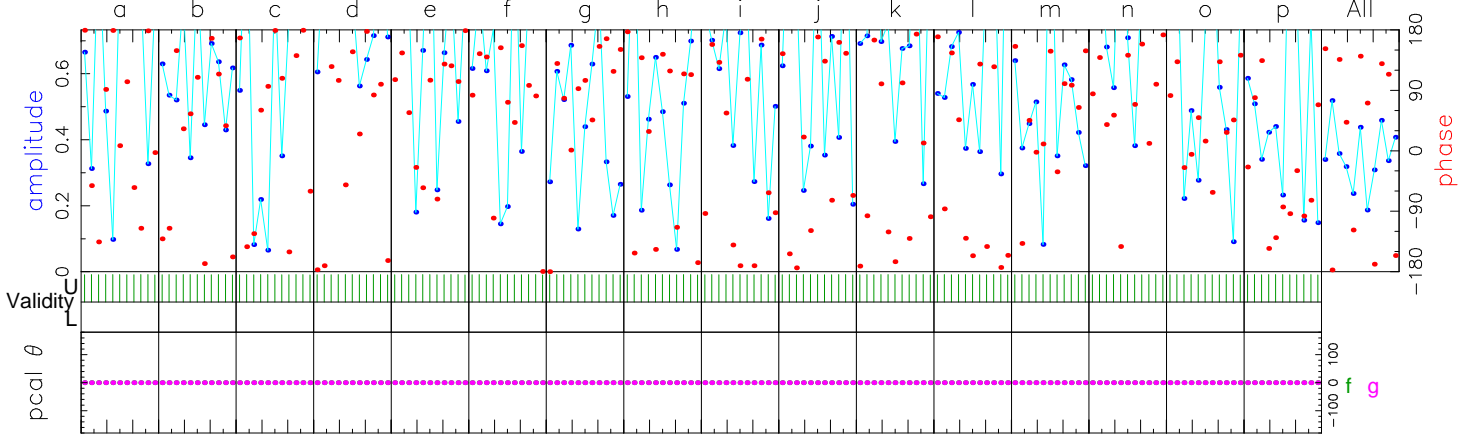
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-87.0	142.6	-178.7	138.0	117.3	113.7	109.4	167.4	169.5	-179.6	-164.1	-178.8	111.7	119.8	67.2	-75.2		Phase 151.2					
	0.1	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.2	0.2		Ampl. 0.3					
	139.5	59.4	128.7	66.4	129.1	129.2	123.0	129.2	255.3	129.9	128.5	129.1	54.9	128.8	215.4	108.7		Sbd box 128.7					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
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 freqs					
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		PC phase					
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		ManI PC					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	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					
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-4.89162703920E+03															Apriori delay (usec)	-4.89162528852E+03	Resid mbdelay (usec)	-1.75068E-03	+/-	1.2E-04
Sband delay (usec)			-4.89162758052E+03															Apriori clock (usec)	-8.2868928E-01	Resid sbdelay (usec)	-2.29200E-03	+/-	1.9E-03
Phase delay (usec)			-4.89162528364E+03															Apriori clockrate (us/s)	-1.6594950E-07	Resid phdelay (usec)	4.87531E-06	+/-	4.1E-07
Delay rate (us/s)			8.41236725891E-01															Apriori rate (us/s)	8.41236196369E-01	Resid rate (us/s)	5.29522E-07	+/-	4.0E-09
Total phase (deg)					24.1													Apriori accel (us/s/s)	-5.65381477693E-06	Resid phase (deg)	151.2	+/-	12.8

ph/seg (deg) 55.7 21.3 Search (1024X64) 0.238 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

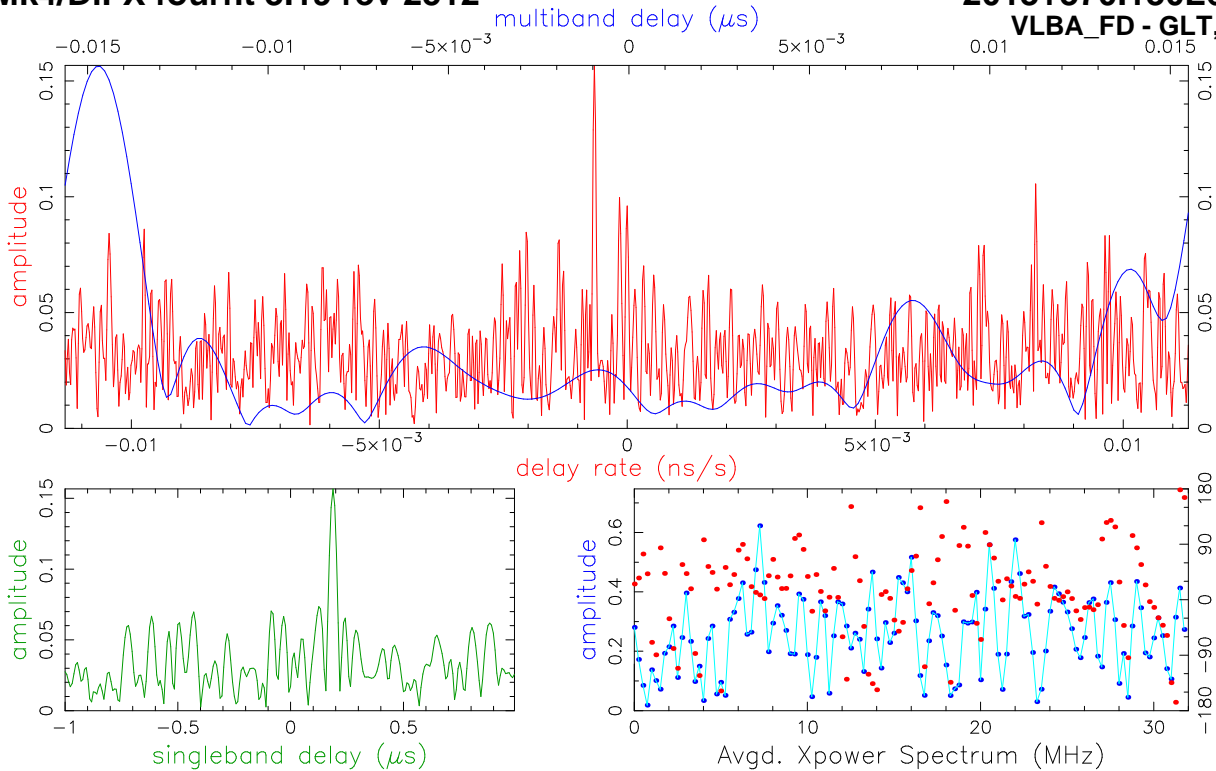
amp/seg (%) 59.2 37.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 61.0 25.6 Inc. seg. avg. 0.333 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 55.8 44.7 Inc. frq. avg. 0.301 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

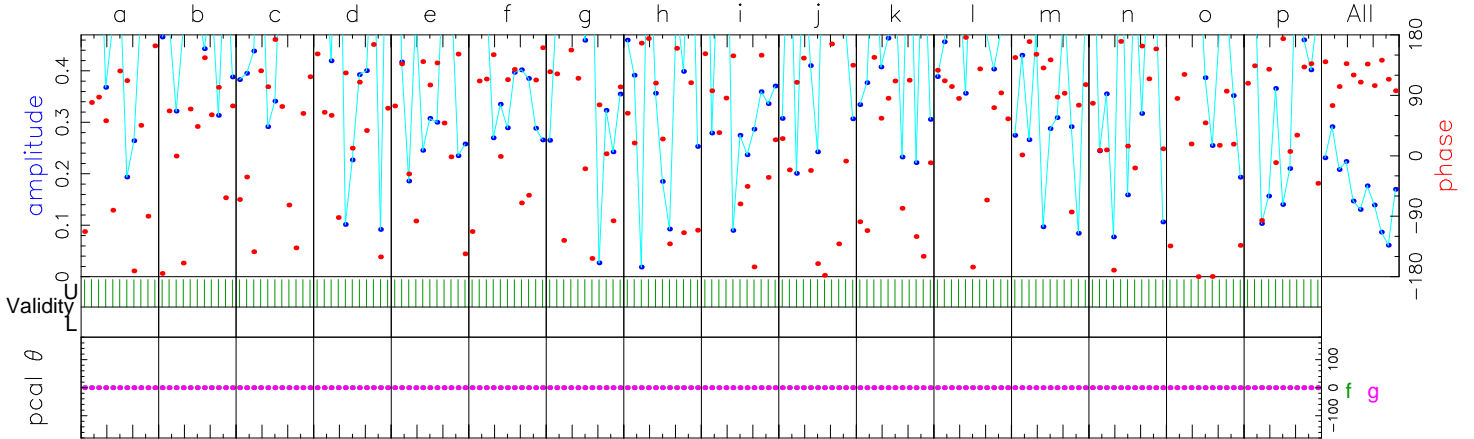
f: az 61.9 el 30.0 pa -72.5 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -6063.018 -3571.979 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/fg..130L6H Output file: /Exps/c192c/v2/1234/No0048/fg.W.114.130L6H



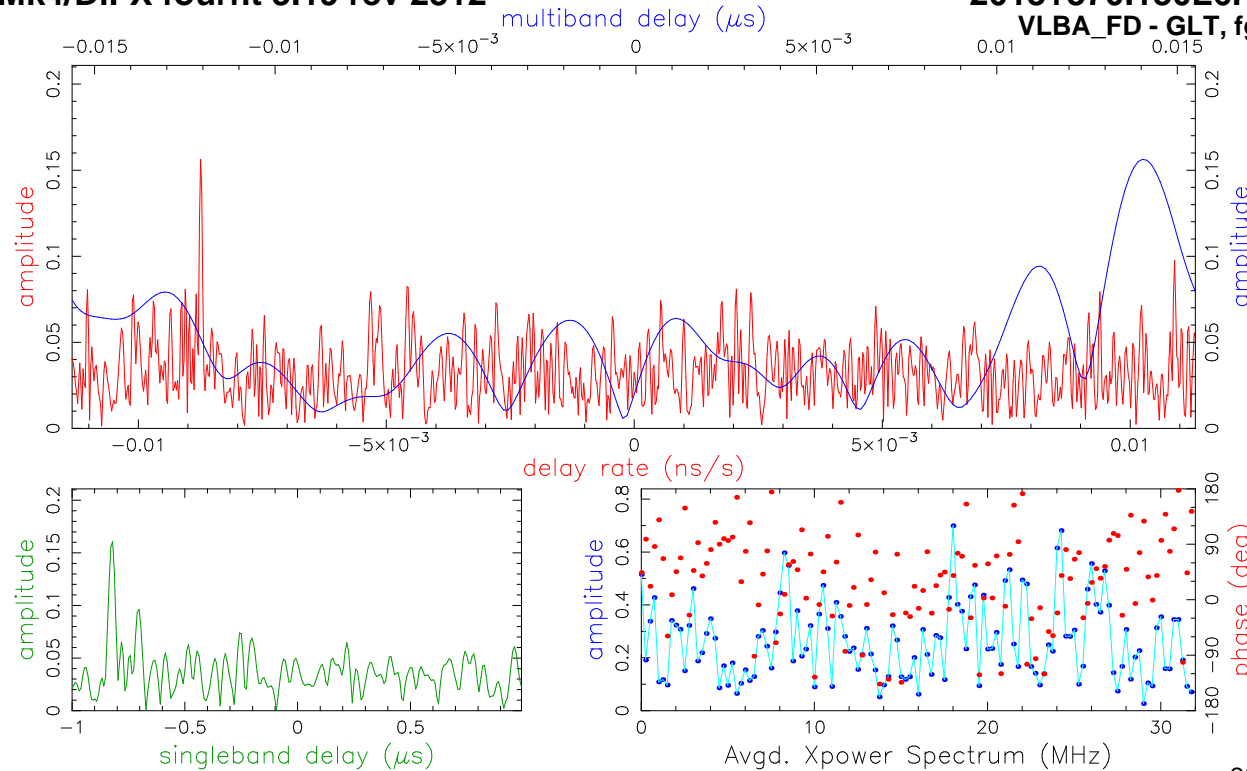
Fringe quality 0
SNR 5.7
Int time 179.228
Amp 0.157
Phase 114.1
PFD 7.1e-01
Delays (us)
SBD 0.187796
MBD -0.014702
Fringe rate (Hz)
-0.057265
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050824
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



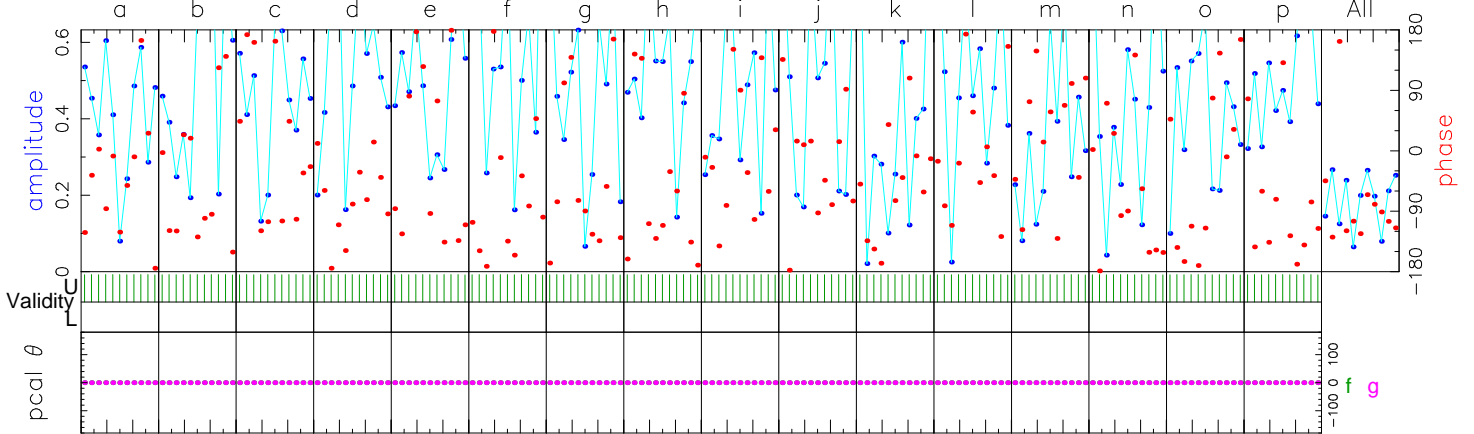
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	119.0	77.5	121.2	97.5	84.5	149.3	153.5	132.3	94.3	174.3	145.5	114.0	115.5	100.3	96.3	91.2		Phase 114.1					
f	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2		Ampl. 0.1					
g	2.9	102.0	118.4	134.8	123.5	229.6	227.6	164.5	238.0	166.3	65.7	152.1	72.5	168.2	72.7	180.1		Sbd box 153.0					
fg	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
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					
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		ManI PC					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-4.89145249063E+03															Apriori delay (usec)	-4.89162528852E+03	Resid mbdelay (usec)	-1.47021E-02	+/-	1.9E-04
Sband delay (usec)			-4.89143749252E+03															Apriori clock (usec)	-8.2868928E-01	Resid sbdelay (usec)	1.87796E-01	+/-	3.0E-03
Phase delay (usec)			-4.89162528484E+03															Apriori clockrate (us/s)	-1.6594950E-07	Resid phdelay (usec)	3.67991E-06	+/-	6.5E-07
Delay rate (us/s)			8.41235531579E-01															Apriori rate (us/s)	8.41236196369E-01	Resid rate (us/s)	-6.64790E-07	+/-	6.2E-09
Total phase (deg)					-13.0													Apriori accel (us/s/s)	-5.65381477693E-06	Resid phase (deg)	114.1	+/-	20.0

ph/seg (deg) 20.5 33.2
amp/seg (%) 41.7 57.9
ph/frq (deg) 28.9 40.0
amp/frq (%) 33.7 69.8
f: az 61.9 el 30.0 pa -72.5
g: az 133.2 el 47.2 pa -12.3
u,v (fr/asec) -6063.018 -3571.979
Control file: cf_1234_gmva
Input file: /Exps/c192c/v2/1234/No0048/fg..130L6H
Output file: /Exps/c192c/v2/1234/No0048/fg.W.131.130L6H
Pcal mode: MANUAL, MANUAL
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2
Sample rate(MSamp/s): 64
Data rate(Mb/s): 2048
PC period (AP's) 5, 5
sb window (us) -1.000 1.000
SampCntNorm: enabled
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00
nlags: 128 t_cohere infinite
simultaneous interpolator



Fringe quality 0
SNR 6.0
Int time 179.242
Amp 0.211
Phase -104.8
PFD 2.7e-01
Delays (us)
SBD -0.823172
MBD 0.014101
Fringe rate (Hz)
-0.753763
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050826
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

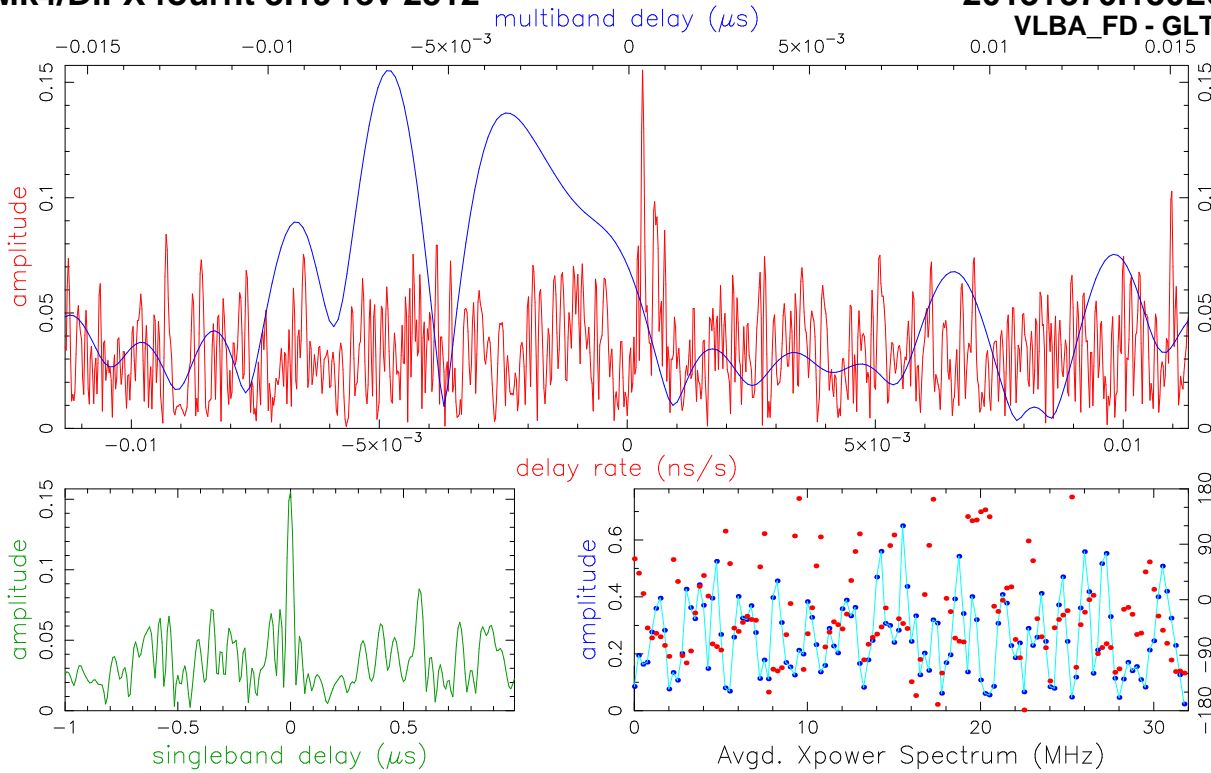
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-64.4	-119.7	-112.2	-71.4	-155.0	-109.4	-143.1	-142.7	-63.9	-56.1	-42.5	-55.7	57.2	-126.9	-143.5	-129.5	Phase	-104.8
	0.2	0.3	0.1	0.4	0.4	0.5	0.3	0.4	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.4	Ampl.	0.2
	36.8	230.1	210.9	23.4	147.5	23.6	174.9	172.4	129.6	190.9	66.3	204.5	47.1	104.7	124.3	14.7	Sbd box	23.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
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 freqs	
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	0:0	PC phase	
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	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	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	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

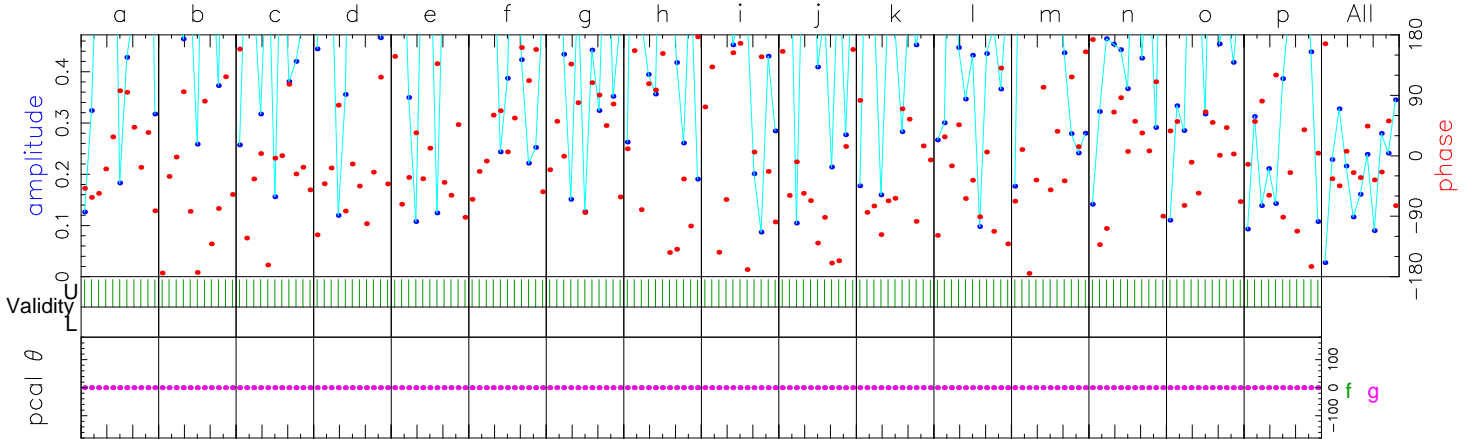
Group delay (usec)(sbd) -4.89245493776E+03 Apriori delay (usec) -4.89162528852E+03 Resid mbdelay (usec) 1.41008E-02 +/- 1.8E-04
 Sband delay (usec) -4.89244846052E+03 Apriori clock (usec) -8.2868928E-01 Resid sbdelay (usec) -8.23172E-01 +/- 2.9E-03
 Phase delay (usec) -4.89162529190E+03 Apriori clockrate (us/s) -1.6594950E-07 Resid phdelay (usec) -3.38080E-06 +/- 6.2E-07
 Delay rate (us/s) 8.41227445933E-01 Apriori rate (us/s) 8.41236196369E-01 Resid rate (us/s) -8.75044E-06 +/- 6.0E-09
 Total phase (deg) -232.0 Apriori accel (us/s/s) -5.65381477693E-06 Resid phase (deg) -104.8 +/- 19.2

ph/seg (deg) 37.8 31.9 Amplitude 0.211 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.7 55.6 Search (1024X64) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.3 38.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.0 67.1 Inc. seg. avg. 0.209 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 f: az 61.9 el 30.0 pa -72.5 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -6063.018 -3571.979 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/fg..130L6H Output file: /Exps/c192c/v2/1234/No0048/fg.W.148.130L6H simultaneous interpolator



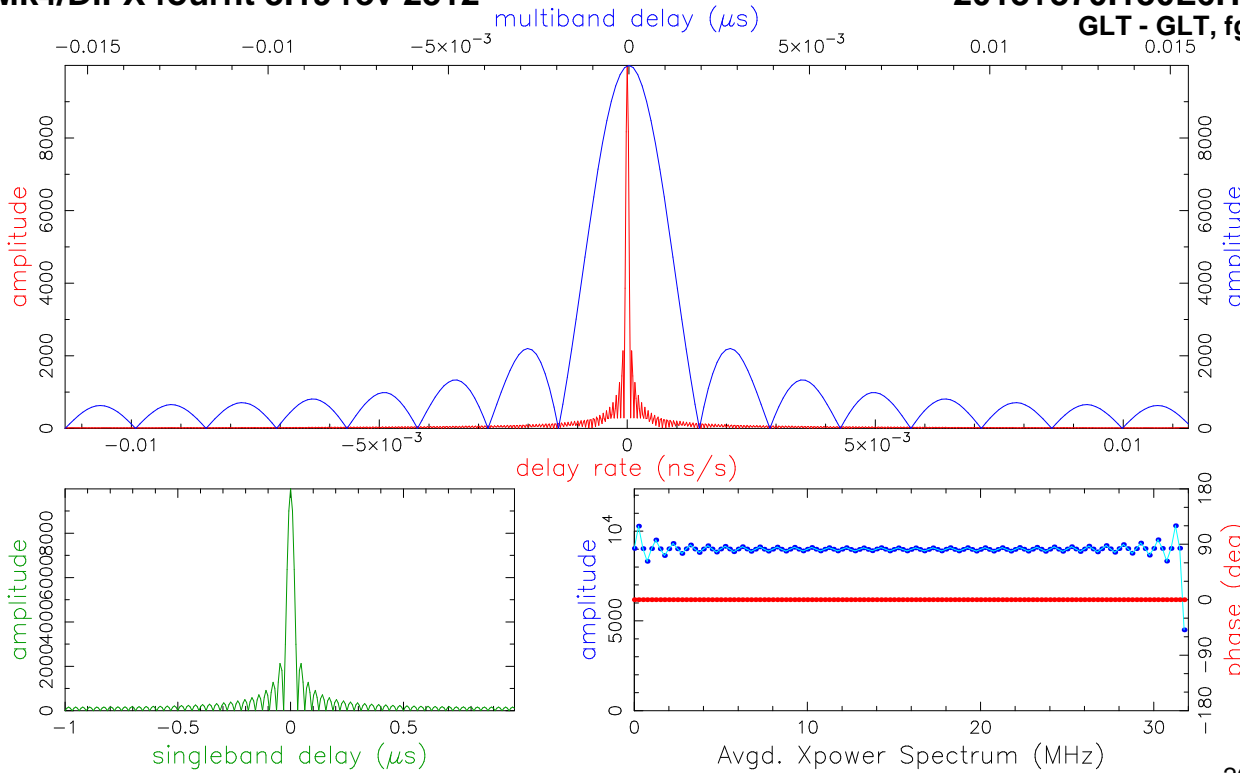
Fringe quality 0
 SNR 5.8
 Int time 179.242
 Amp 0.157
 Phase -20.7
 PFD 6.5e-01
 Delays (us)
 SBD -0.002591
 MBD -0.006668
 Fringe rate (Hz)
 0.026761
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050819
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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)		-4.89163195701E+03																
Sband delay (usec)		-4.89162787902E+03																
Phase delay (usec)		-4.89162528919E+03																
Delay rate (us/s)		8.41236507039E-01																
Total phase (deg)					-147.8													
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:																		
Pcal rate:																		
Bits/sample:																		
Sample rate(MSamp/s):																		
Data rate(Mb/s):																		
nlags:																		
t_cohere																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		

ph/seg (deg) 63.1 33.0 Search (1024X64) 0.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.6 57.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.4 39.8 Inc. seg. avg. 0.177 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 85.7 69.5 Inc. frq. avg. 0.193 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 61.9 el 30.0 pa -72.5 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) -6063.018 -3571.979 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/fg..130L6H Output file: /Exps/c192c/v2/1234/No0048/fg.W.92.130L6H

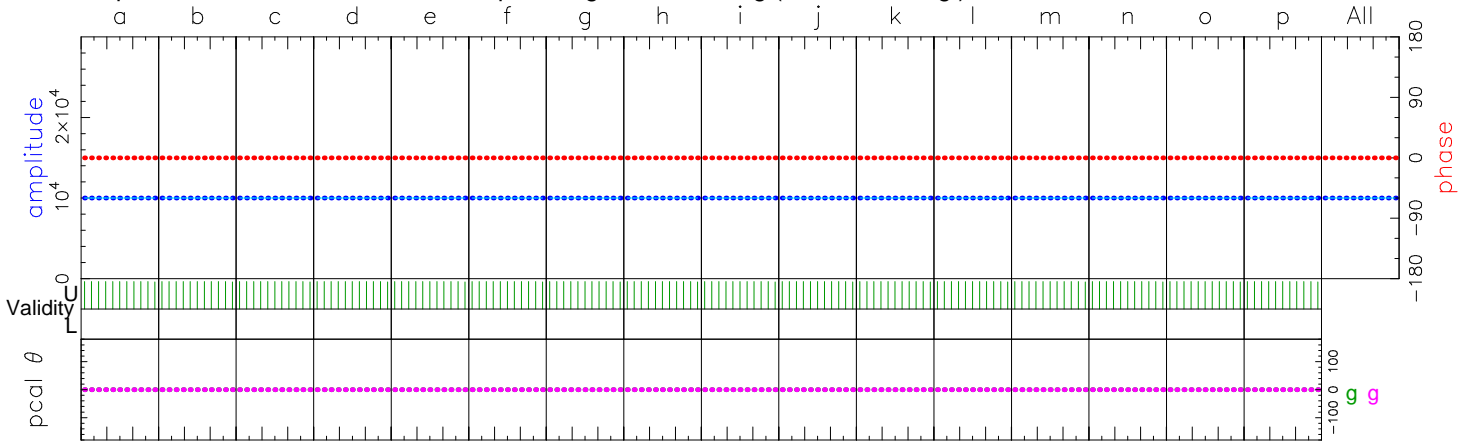


Fringe quality 9

SNR 366807.1
Int time 179.920
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
Yr:day 16383
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050823
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

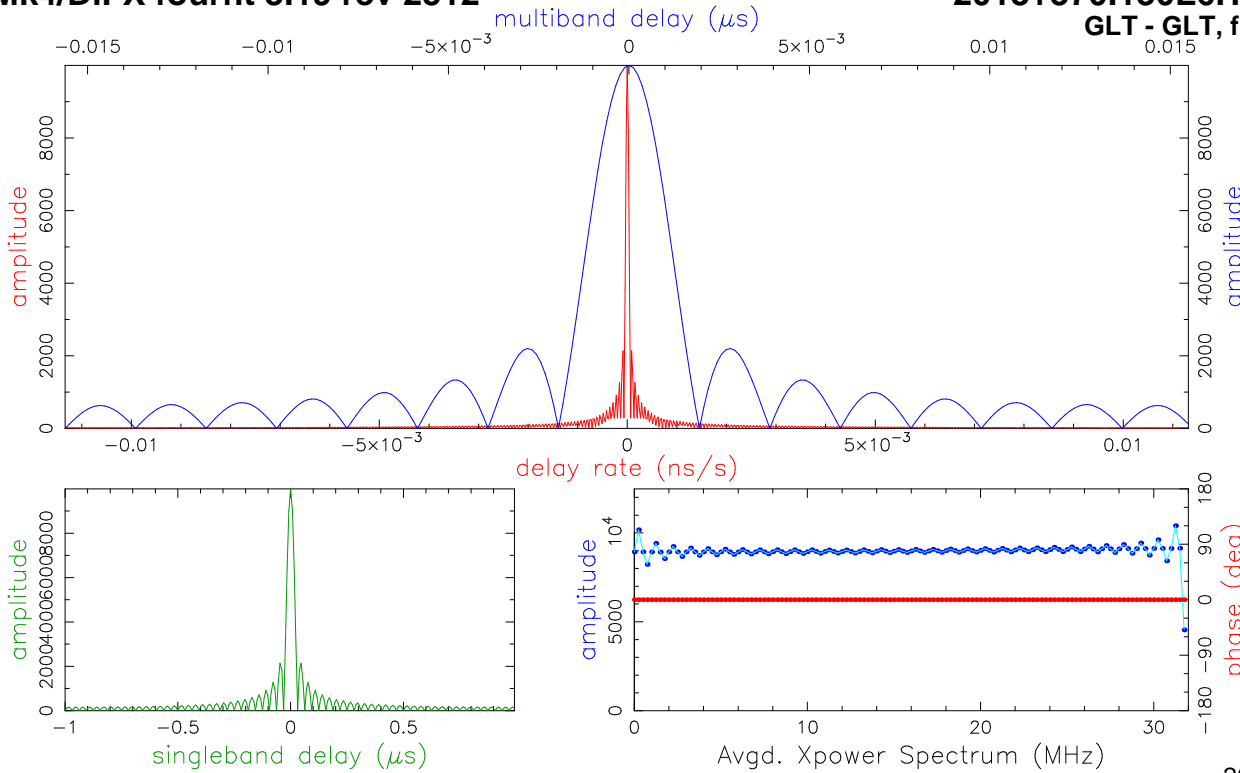


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0		Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	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	129.0		Sbd box	129.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	0
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	0
g: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	0
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	1000
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
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) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.7E-08
 Phase delay (usec) 9.91845012288E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 9.91845E-20 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

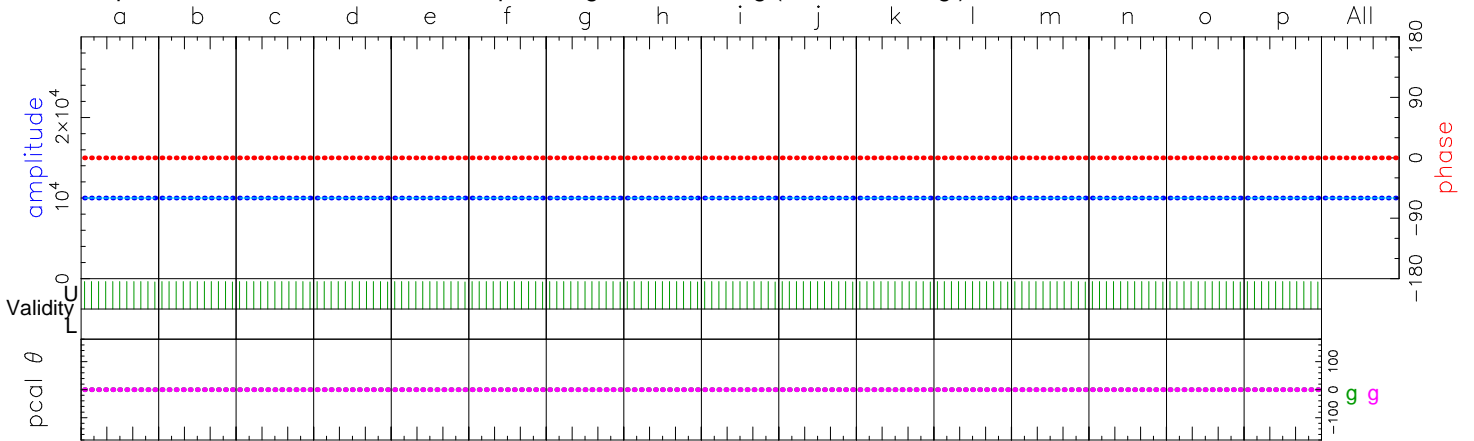
RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 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. 9999.999 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 133.2 el 47.2 pa -12.3 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gg..130L6H Output file: /Exps/c192c/v2/1234/No0048/gg.W.123.130L6H



Fringe quality 9
 SNR 366822.6
 Int time 179.936
 Amp 9999.991
 Phase -0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Yr:day 16383
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050820
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

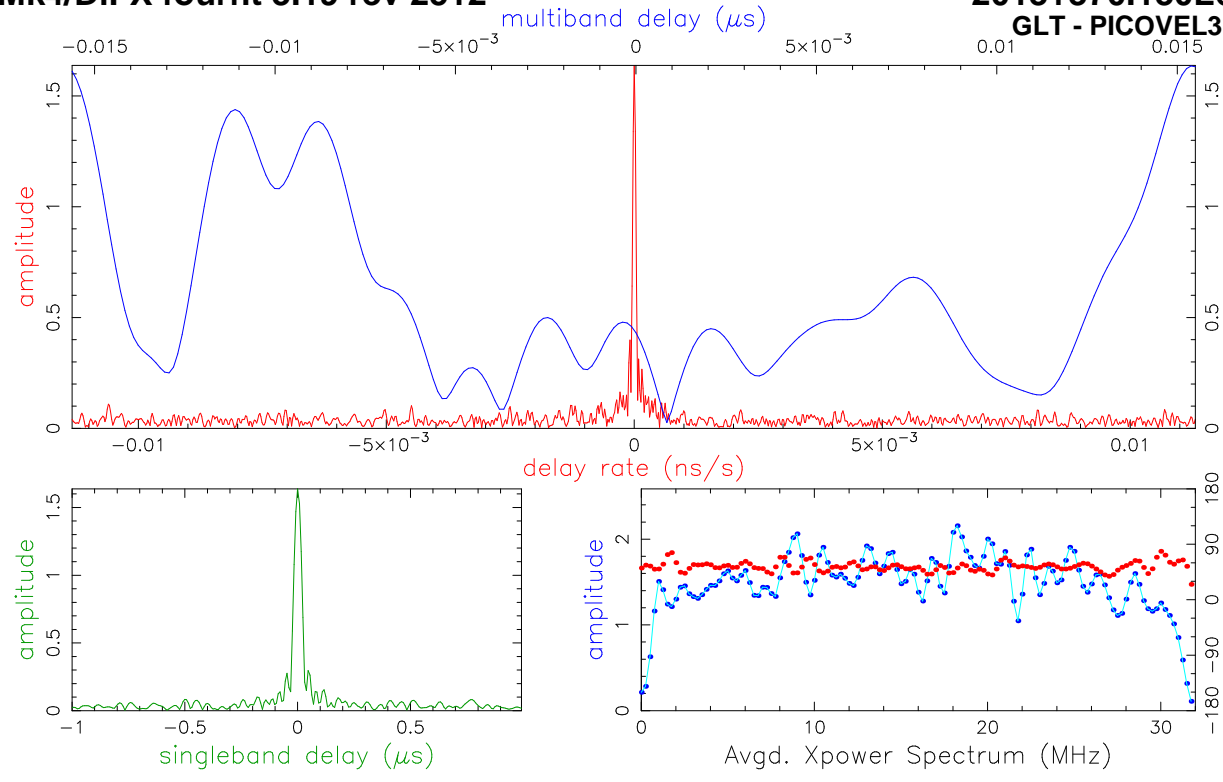
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.7E-08
 Phase delay (usec) -7.83047171162E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -7.83047E-20 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.991 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 9999.991 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. 9999.991 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 133.2 el 47.2 pa -12.3 g: az 133.2 el 47.2 pa -12.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

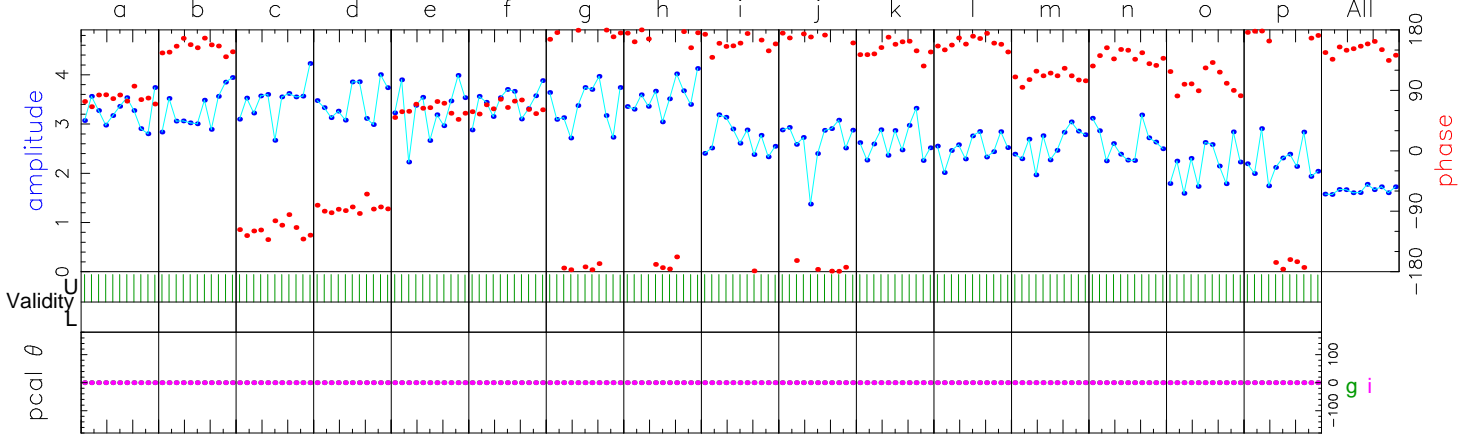


Fringe quality 5

SNR 60.1
Int time 179.932
Amp 1.638
Phase 149.4
PFD 0.0e+00
Delays (us)
SBD 0.000867
MBD -0.015830
Fringe rate (Hz)
-0.000161
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050820
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

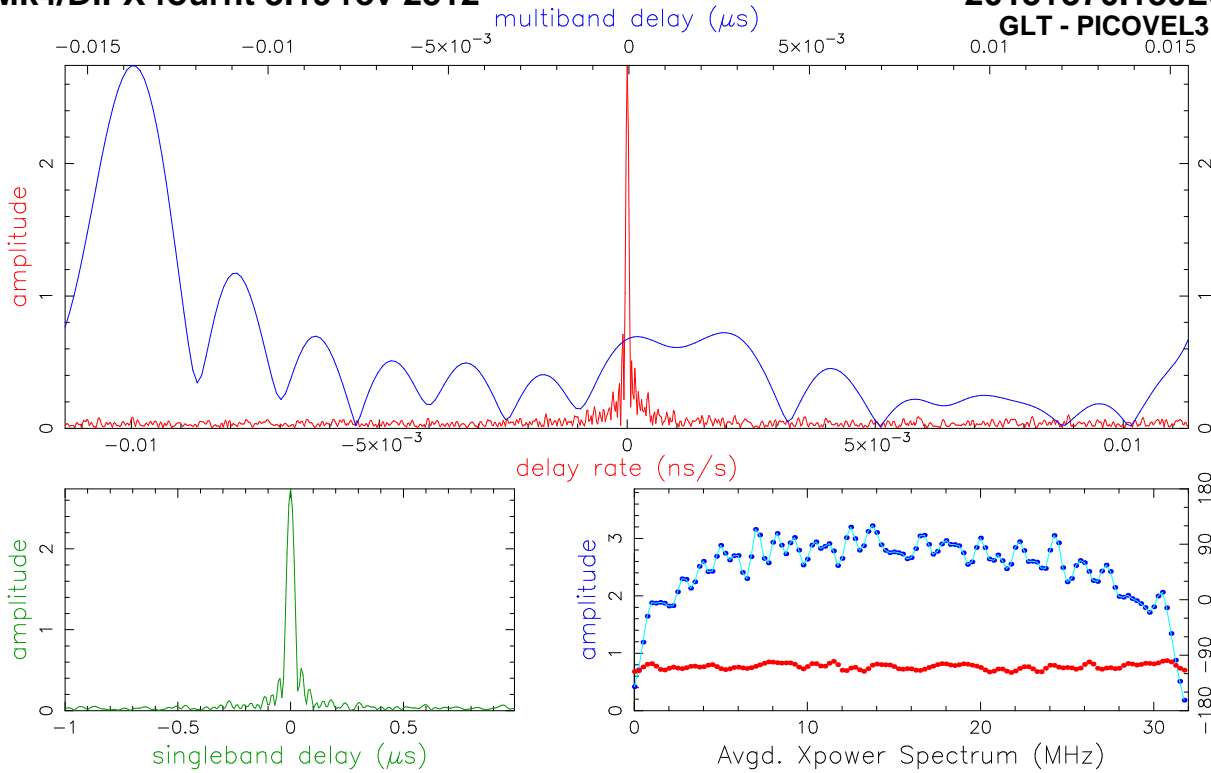


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)			-4.16934524263E+03															
Sband delay (usec)			-4.16935979644E+03															
Phase delay (usec)			-4.16936065812E+03															
Delay rate (us/s)			6.29004856666E-01															
Total phase (deg)																		
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

ph/seg (deg) 8.6 3.2 Theor. Amplitude 1.638 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.0 5.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.0 3.8 Inc. seg. avg. 1.652 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 82.4 6.7 Inc. frq. avg. 2.900 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) -4484.482 5474.439 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gi..130L6H Output file: /Exps/c192c/v2/1234/No0048/gi.W.102.130L6H simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gi
GLT - PICOVEL3, fgroup W, pol RR

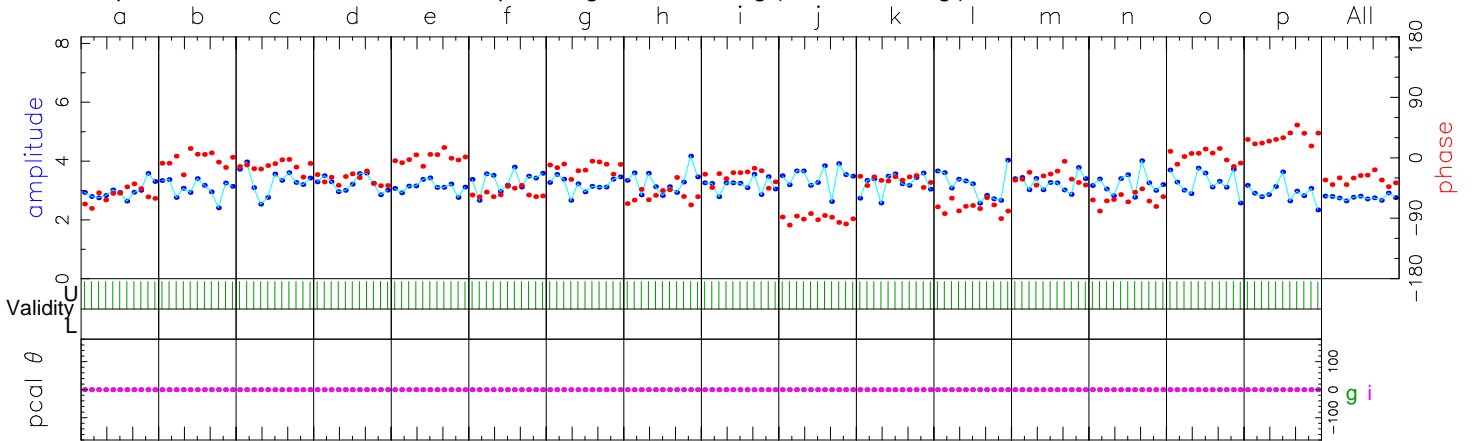


Fringe quality 7

SNR 100.6
Int time 179.916
Amp 2.742
Phase -32.4
PFD 0.0e+00
Delays (us)
SBD -0.000516
MBD -0.013736
Fringe rate (Hz)
-0.000207
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050823
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

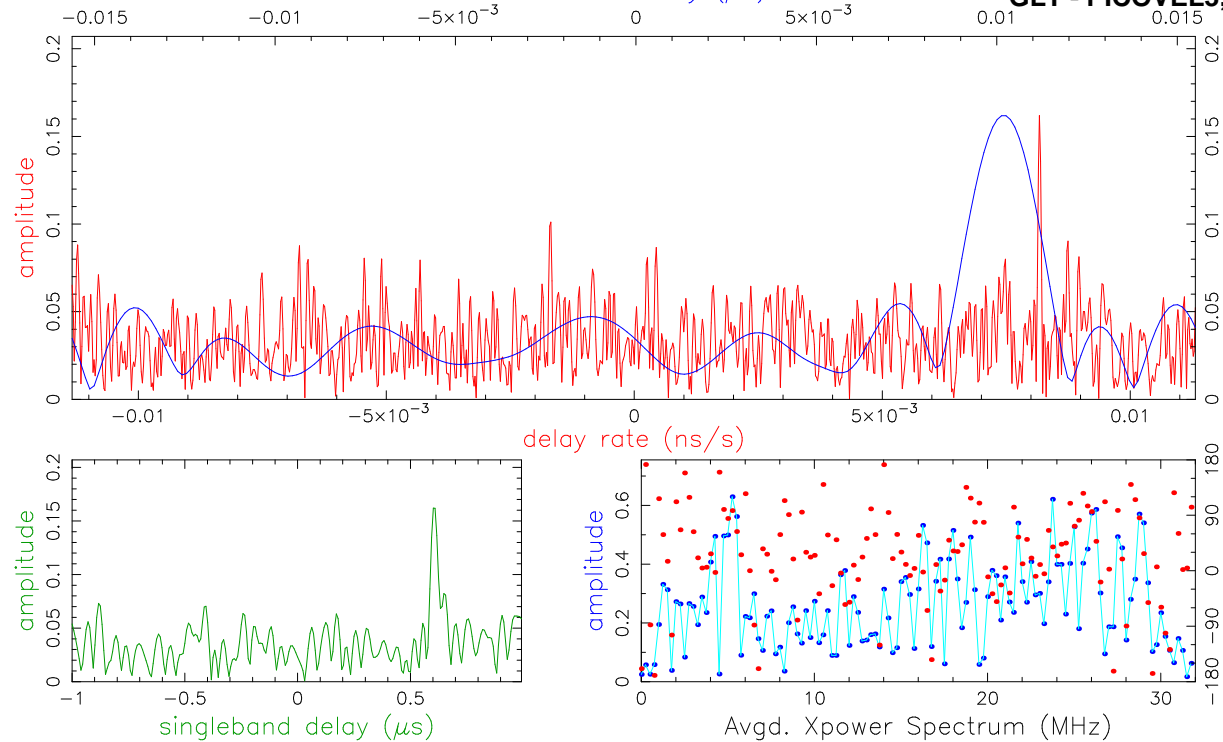
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-55.6	-2.6	-11.8	-31.7	-0.0	-52.3	-14.3	-56.3	-27.7	-91.0	-33.0	-74.1	-28.8	-61.7	2.5	29.6	Phase	-32.4				
	2.9	3.0	3.3	3.2	3.1	3.3	3.2	3.2	3.1	3.4	3.2	3.2	3.2	3.2	3.2	2.9	Ampl.	3.2				
	130.3	129.5	129.0	128.9	128.6	128.5	128.7	128.6	128.6	128.6	128.5	128.8	128.8	128.7	129.6	129.6	Sbd box	128.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.16937439847E+03														Apriori delay (usec)	-4.16936066294E+03	Resid mbdelay (usec)	-1.37355E-02	+/-	1.1E-05
Sband delay (usec)			-4.16936117944E+03														Apriori clock (usec)	1.8493625E+00	Resid sbdelay (usec)	-5.16500E-04	+/-	1.7E-04
Phase delay (usec)			-4.16936066399E+03														Apriori clockrate (us/s)	4.2799997E-07	Resid phdelay (usec)	-1.04471E-06	+/-	3.7E-08
Delay rate (us/s)			6.29004856132E-01														Apriori rate (us/s)	6.29004858539E-01	Resid rate (us/s)	-2.40768E-09	+/-	3.5E-10
Total phase (deg)			-214.5														Apriori accel (us/s/s)	4.74739786229E-05	Resid phase (deg)	-32.4	+/-	1.1

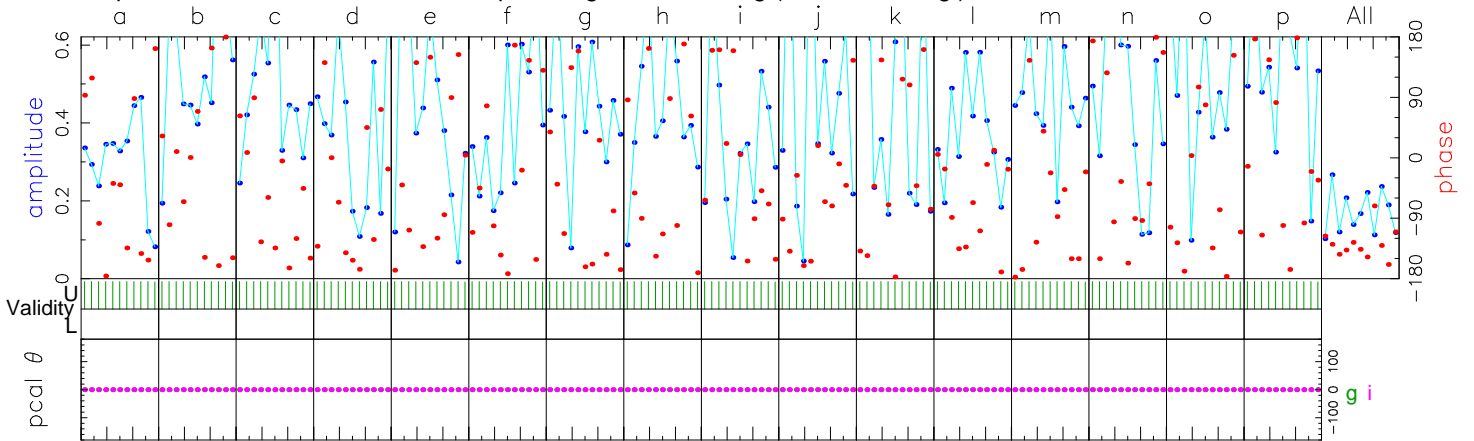
ph/seg (deg) 7.1 1.9 Search (1024X64) 2.730 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 2.6 3.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.1 2.3 Inc. seg. avg. 2.760 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 16.5 4.0 Inc. frq. avg. 3.173 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 133.2 el 47.2 pa -12.3 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) -4484.482 5474.439 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gi..130L6H Output file: /Exps/c192c/v2/1234/No0048/gi.W.127.130L6H

multiband delay (μ s)



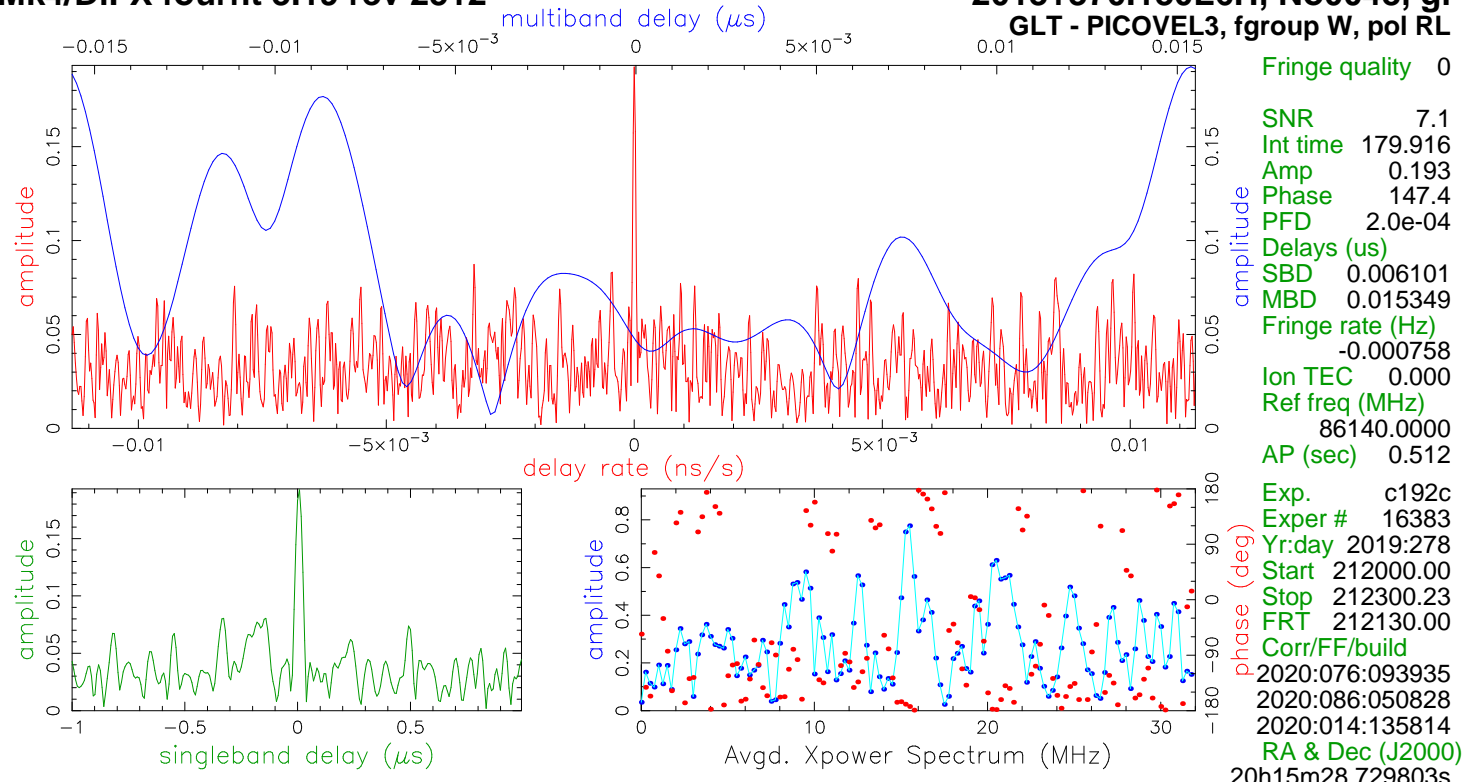
Fringe quality 0
SNR 6.1
Int time 179.932
Amp 0.207
Phase -131.8
PFD 1.5e-01
Delays (us)
SBD 0.605408
MBD 0.010238
Fringe rate (Hz) 0.704423
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050825
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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

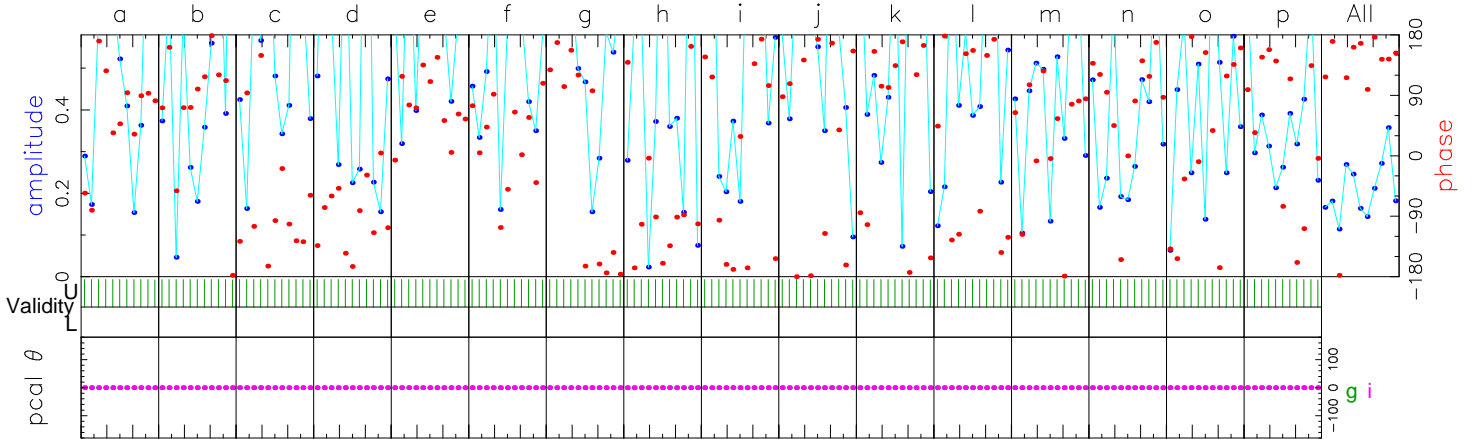


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-4.16875667503E+03															
Sband delay (usec)			-4.16875525444E+03															
Phase delay (usec)			-4.16936066719E+03															
Delay rate (us/s)			6.29013036193E-01															
Total phase (deg)				-313.9														
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)																		
PCal period (AP's) 5, 5																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
simultaneous interpolator																		

ph/seg (deg) 22.5 31.3 Search (1024X64) 0.157 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.9 54.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.7 37.7 Inc. seg. avg. 0.186 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.8 65.9 Inc. frq. avg. 0.191 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) -4484.482 5474.439 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gi..130L6H Output file: /Exps/c192c/v2/1234/No0048/gi.W.142.130L6H



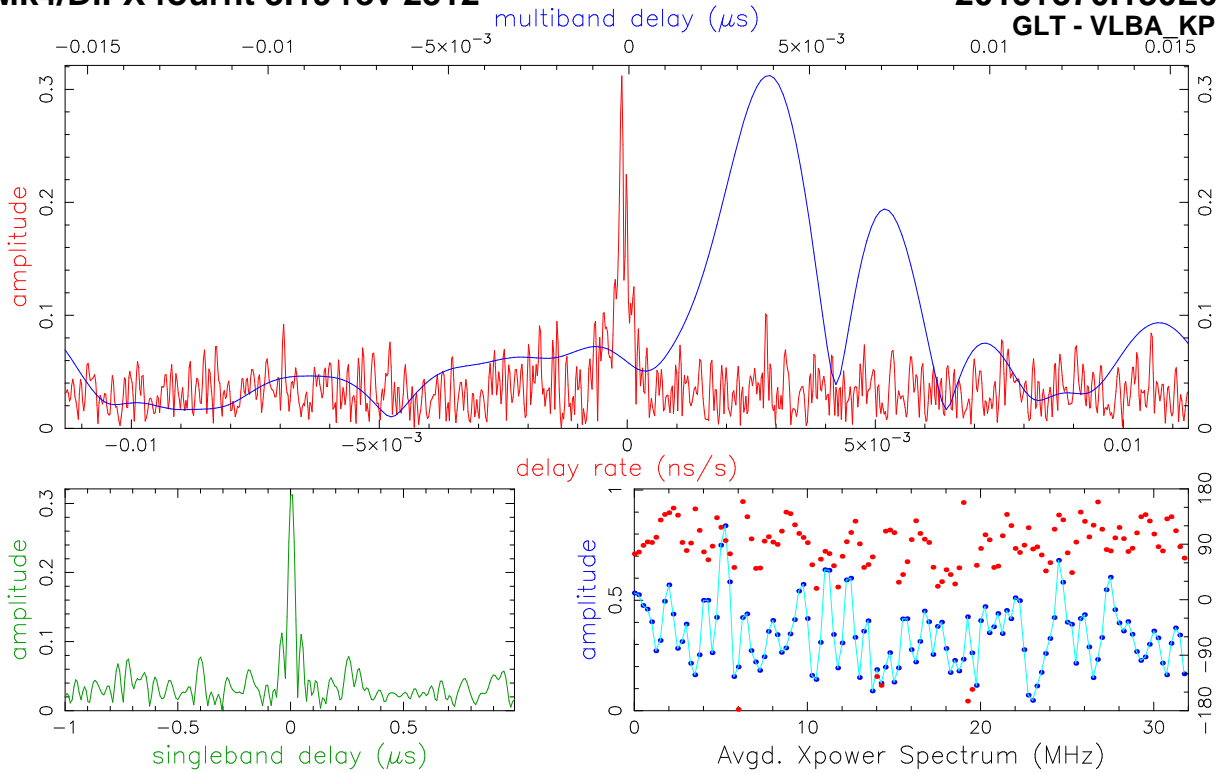
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
88.6	134.4	-126.5	-81.7	76.8	46.8	159.7	-151.7	159.8	156.6	161.8	-165.3	78.8	117.5	135.6	135.6	135.6	Phase	147.4
0.4	0.4	0.4	0.4	0.5	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.1	0.2	0.2	Ampl.	0.3
131.2	129.2	129.6	129.2	130.3	96.4	128.7	128.5	130.1	129.3	129.3	130.1	42.4	242.1	57.8	103.0	103.0	Sbd box	129.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	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)	-4.16934531382E+03				Apriori delay (usec)				-4.16936066294E+03				Resid mbdelay (usec)				1.53491E-02 +/- 1.5E-04	
Sband delay (usec)	-4.16935456244E+03				Apriori clock (usec)				1.8493625E+00				Resid sbdelay (usec)				6.10050E-03 +/- 2.4E-03	
Phase delay (usec)	-4.16936065819E+03				Apriori clockrate (us/s)				4.2799997E-07				Resid phdelay (usec)				4.75383E-06 +/- 5.2E-07	
Delay rate (us/s)	6.29004849735E-01				Apriori rate (us/s)				6.29004858539E-01				Resid rate (us/s)				-8.80454E-09 +/- 5.0E-09	
Total phase (deg)	-34.7				Apriori accel (us/s/s)				4.74739786229E-05				Resid phase (deg)				147.4 +/- 16.2	

	RMS	Theor.	Amplitude	0.193 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	26.1	26.8	Search (1024X64)	0.184	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000
amp/seg (%)	35.7	46.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016
ph/frq (deg)	63.1	32.3	Inc. seg. avg.	0.189	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.011	0.011
amp/frq (%)	97.5	56.4	Inc. frq. avg.	0.302	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite	ion window (TEC)	0.00 0.00

g: az 133.2 el 47.2 pa -12.3 i: az 278.7 el 68.7 pa 82.2 u,v (fr/asec) -4484.482 5474.439 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gi..130L6H Output file: /Exps/c192c/v2/1234/No0048/gi.W.162.130L6H

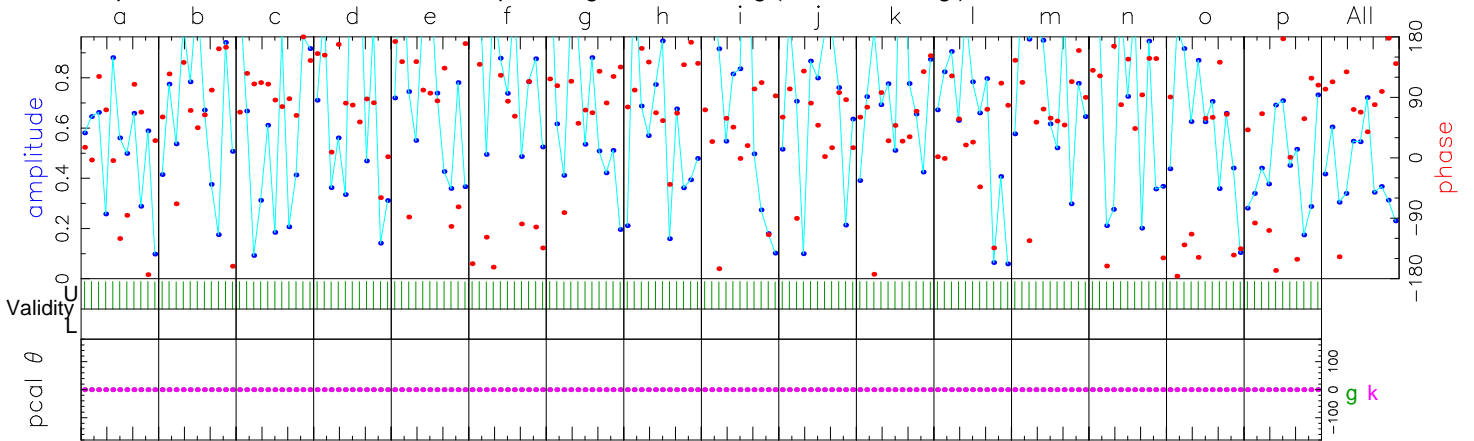


Fringe quality 9

SNR 11.8
Int time 179.121
Amp 0.321
Phase 95.5
PFD 1.7e-23
Delays (us)
SBD 0.003981
MBD 0.003939
Fringe rate (Hz) -0.008961
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

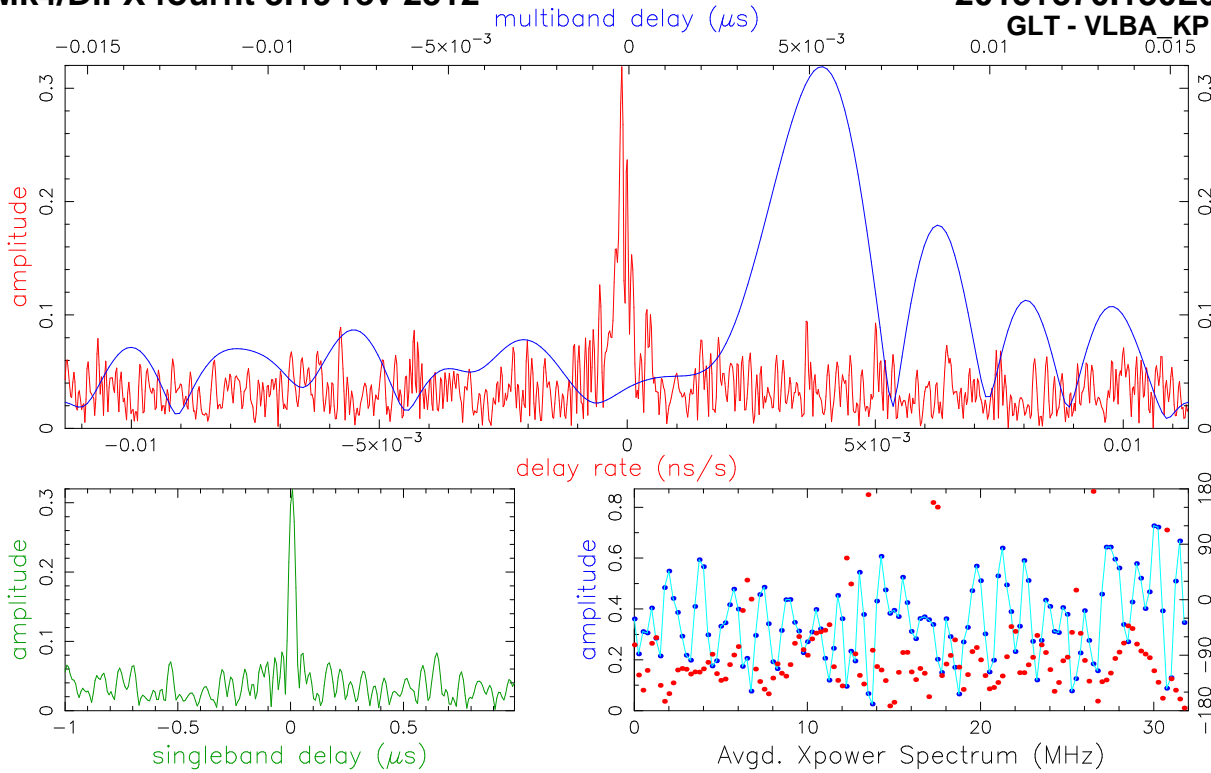
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050821
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



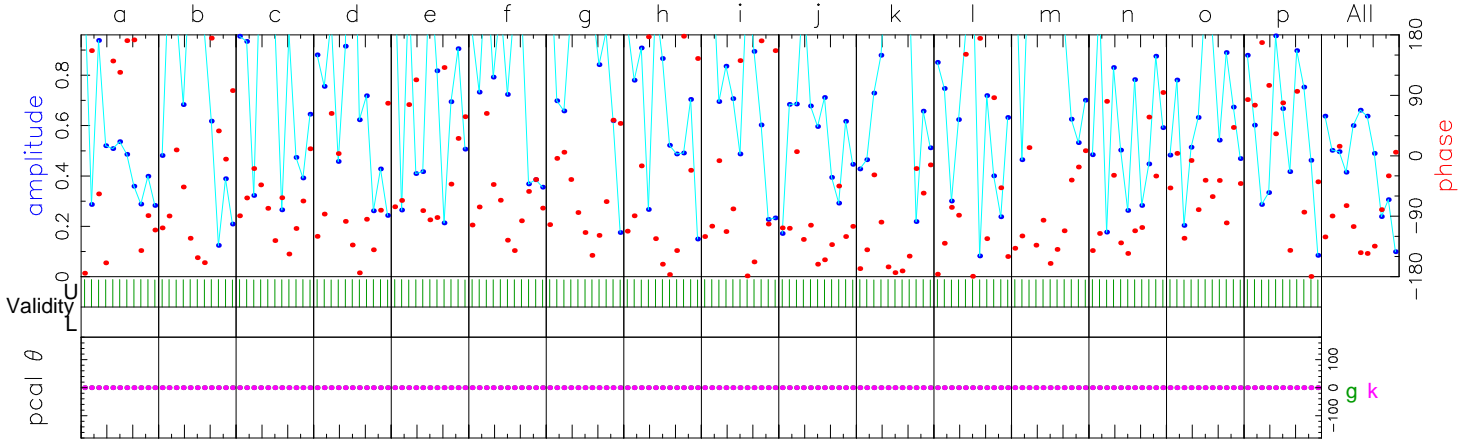
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	6.57309828622E+03			Apriori delay (usec)			6.57309434728E+03			Resid mbdelay (usec)			3.93894E-03			+/-	9.2E-05	
Sband delay (usec)	6.57309832778E+03			Apriori clock (usec)			1.7013429E+00			Resid sbdelay (usec)			3.98050E-03			+/-	1.5E-03	
Phase delay (usec)	6.57309435036E+03			Apriori clockrate (us/s)			2.6957898E-07			Resid phdelay (usec)			3.07922E-06			+/-	3.1E-07	
Delay rate (us/s)	-8.58244384102E-01			Apriori rate (us/s)			-8.58244280073E-01			Resid rate (us/s)			-1.04029E-07			+/-	3.0E-09	
Total phase (deg)	122.5			Apriori accel (us/s/s)			-4.62848133173E-06			Resid phase (deg)			95.5			+/-	9.7	

ph/seg (deg) 51.0 16.2 Search (1024X64) 0.321 +/- 0.027 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 56.6 28.2 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.1 19.5 Inc. seg. avg. 0.414 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 44.0 34.0 Inc. frq. avg. 0.370 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 133.2 el 47.2 pa -12.3 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 6177.331 2818.155 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gk..130L6H Output file: /Exps/c192c/v2/1234/No0048/gk.W.107.130L6H



Fringe quality 9
SNR 11.7
Int time 179.106
Amp 0.320
Phase -104.7
PFD 2.6e-23
Delays (us)
SBD 0.006386
MBD 0.005328
Fringe rate (Hz) -0.009200
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050823
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



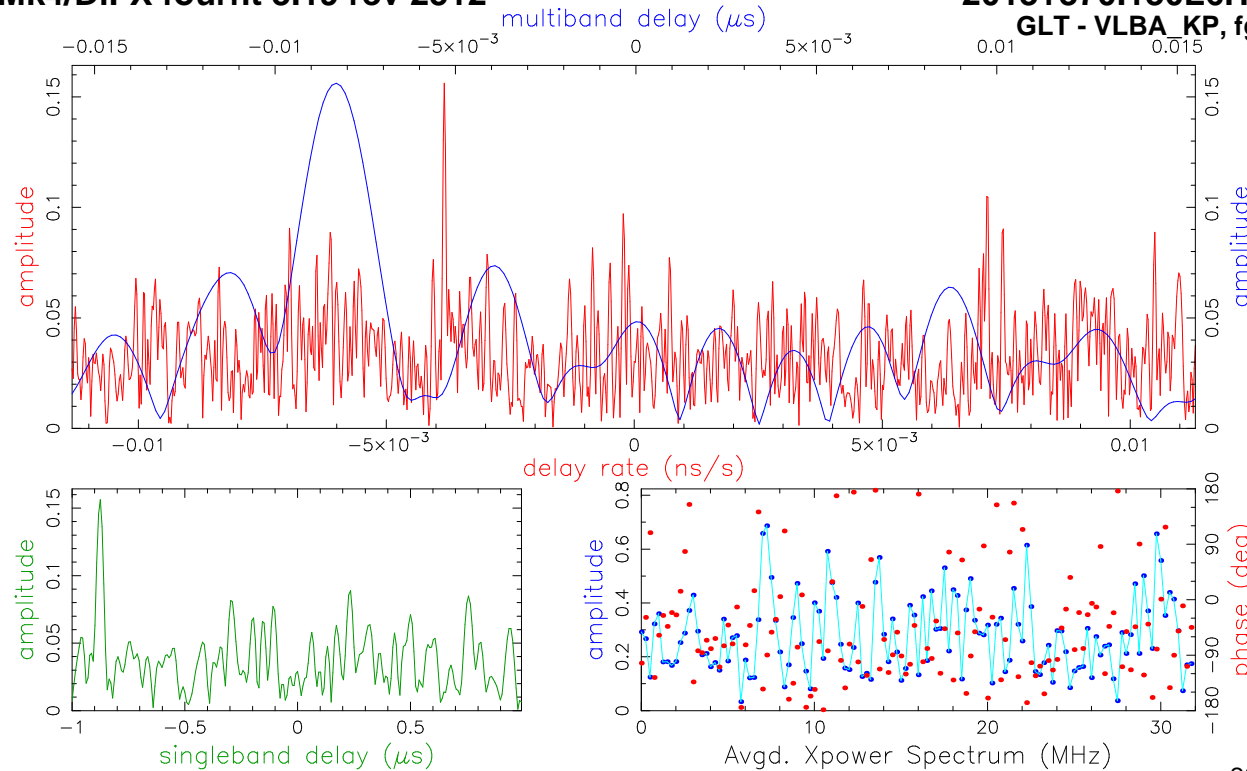
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	-164.4	-108.6	-78.2	-111.9	-45.8	-81.9	-81.1	-119.5	-133.0	-115.8	-137.6	-157.2	-103.7	-91.2	-42.2	88.1	Phase	-104.7
	0.3	0.3	0.6	0.4	0.2	0.5	0.6	0.4	0.5	0.4	0.5	0.4	0.5	0.2	0.5	0.3	Ampl.	0.4
	131.6	130.8	130.1	138.4	127.7	129.6	130.5	129.5	129.1	130.2	129.3	129.8	129.5	51.6	129.2	50.2	Sbd box	129.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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	
																	Tracks	
Group delay (usec)(sbd)	6.57309967519E+03			Apriori delay (usec)			6.57309434728E+03			Resid mbdelay (usec)			5.32791E-03			+/-	9.2E-05	
Sband delay (usec)	6.57310073378E+03			Apriori clock (usec)			1.7013429E+00			Resid sbdelay (usec)			6.38650E-03			+/-	1.5E-03	
Phase delay (usec)	6.57309434391E+03			Apriori clockrate (us/s)			2.6957898E-07			Resid phdelay (usec)			-3.37625E-06			+/-	3.2E-07	
Delay rate (us/s)	-8.58244386875E-01			Apriori rate (us/s)			-8.58244280073E-01			Resid rate (us/s)			-1.06802E-07			+/-	3.0E-09	
Total phase (deg)	-77.7			Apriori accel (us/s/s)			-4.62848133173E-06			Resid phase (deg)			-104.7			+/-	9.8	

ph/seg (deg) 58.6 16.2 Theor. Amplitude 0.320 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.1 28.3 Search (1024X64) 0.318 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.3 19.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.1 34.1 Inc. seg. avg. 0.445 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 6177.331 2818.155 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gk..130L6H Output file: /Exps/c192c/v2/1234/No0048/gk.W.125.130L6H simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

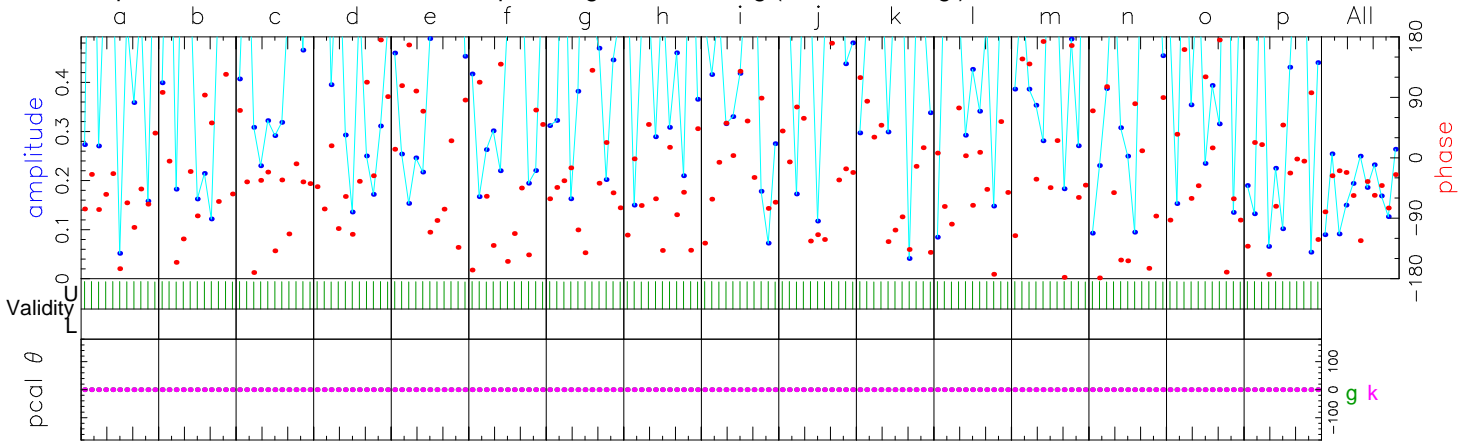
2013+370.130L6H, No0048, gk

GLT - VLBA_KP, fgroup W, pol LR



Fringe quality 0
 SNR 5.7
 Int time 179.122
 Amp 0.164
 Phase -49.5
 PFD 7.1e-01
 Delays (us)
 SBD -0.876261
 MBD -0.008314
 Fringe rate (Hz)
 -0.330889
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050825
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



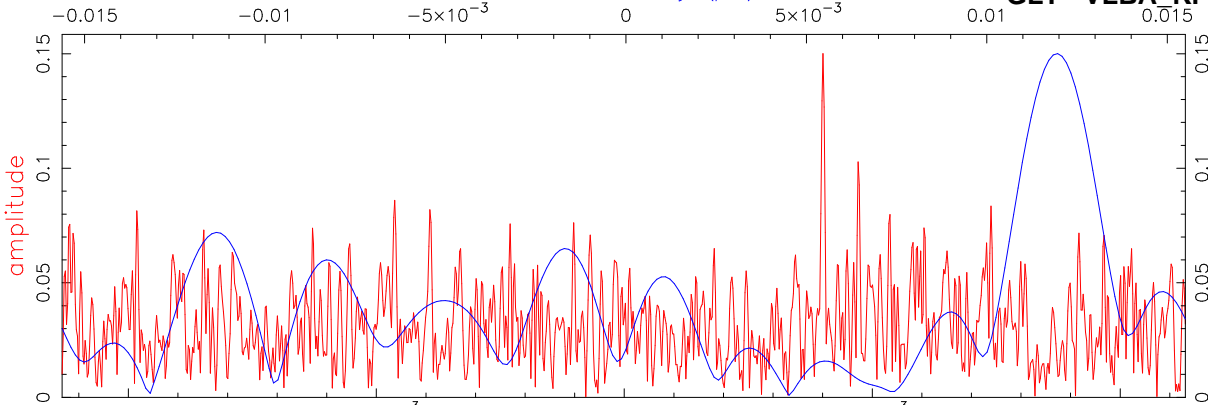
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-39.6	-41.8	-41.0	-59.9	-80.1	-122.3	-68.8	-84.1	-8.1	-21.4	-6.1	-33.7	-68.2	-98.8	-124.7	-12.9		Phase -49.5
	0.4	0.2	0.3	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2		Ampl. 0.2
	17.8	255.6	17.1	153.9	90.6	220.1	13.5	207.7	153.6	227.1	87.8	114.3	155.2	241.6	92.1	165.0		Sbd box 16.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
g	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)	6.57221103289E+03		Apriori delay (usec)		6.57309434728E+03		Resid mbdelay (usec)		-8.31439E-03		+/-		1.9E-04					
Sband delay (usec)	6.57221808578E+03		Apriori clock (usec)		1.7013429E+00		Resid sbdelay (usec)		-8.76261E-01		+/-		3.0E-03					
Phase delay (usec)	6.57309434569E+03		Apriori clockrate (us/s)		2.6957898E-07		Resid phdelay (usec)		-1.59503E-06		+/-		6.4E-07					
Delay rate (us/s)	-8.58248121371E-01		Apriori rate (us/s)		-8.58244280073E-01		Resid rate (us/s)		-3.84130E-06		+/-		6.2E-09					
Total phase (deg)			-22.4		Apriori accel (us/s/s)		-4.62848133173E-06		Resid phase (deg)		-49.5		+/-		20.0			

ph/seg (deg) RMS Theor. Amplitude 0.164 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.5 33.1 Search (1024X64) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.9 57.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 40.1 40.0 Inc. seg. avg. 0.164 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.9 69.8 Inc. frq. avg. 0.155 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 133.2 el 47.2 pa -12.3 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 6177.331 2818.155 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gk..130L6H Output file: /Exps/c192c/v2/1234/No0048/gk.W.141.130L6H

Mk4/DiFX fourfit 3.19 rev 2512

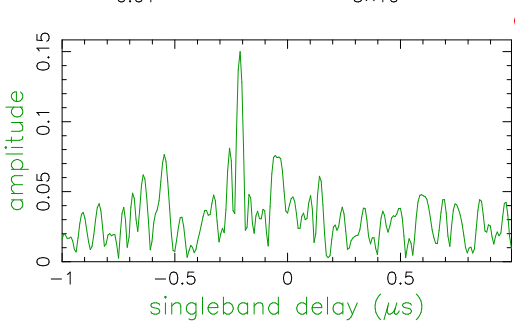
2013+370.130L6H, No0048, gk
GLT - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

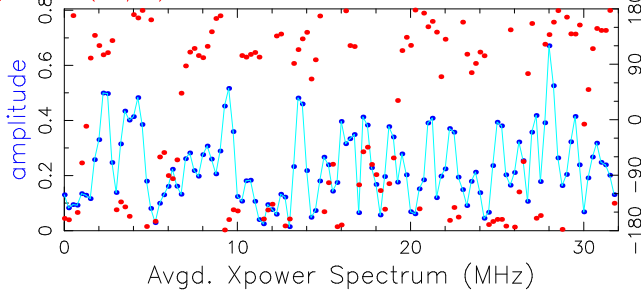


Fringe quality 0

SNR 5.5
Int time 179.106
Amp 0.158
Phase -46.4
PFD 9.9e-01
Delays (us)
SBD -0.211995
MBD 0.011937
Fringe rate (Hz) 0.346008
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

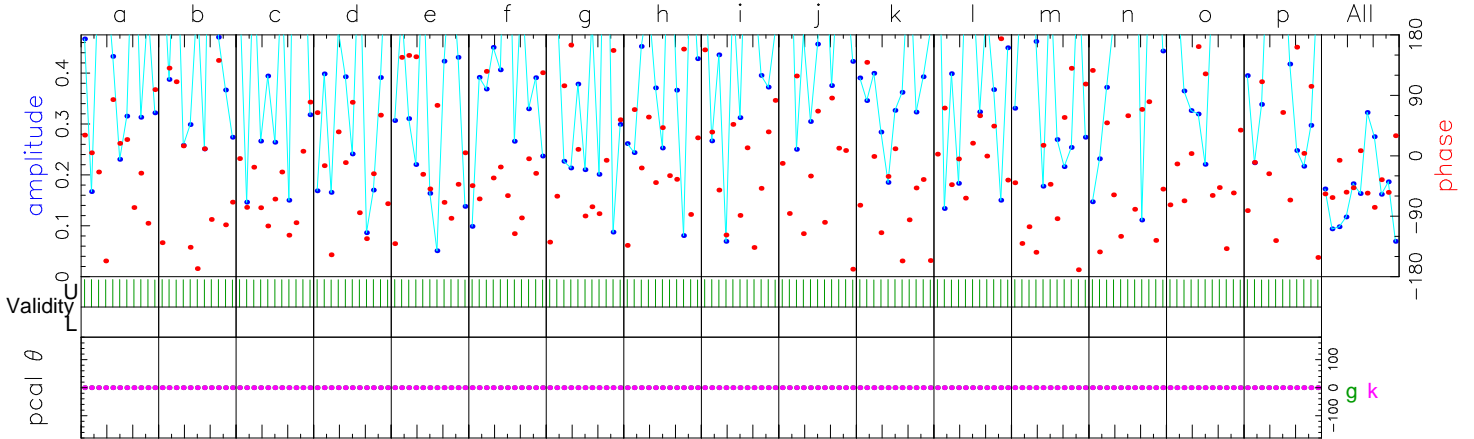


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050827
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

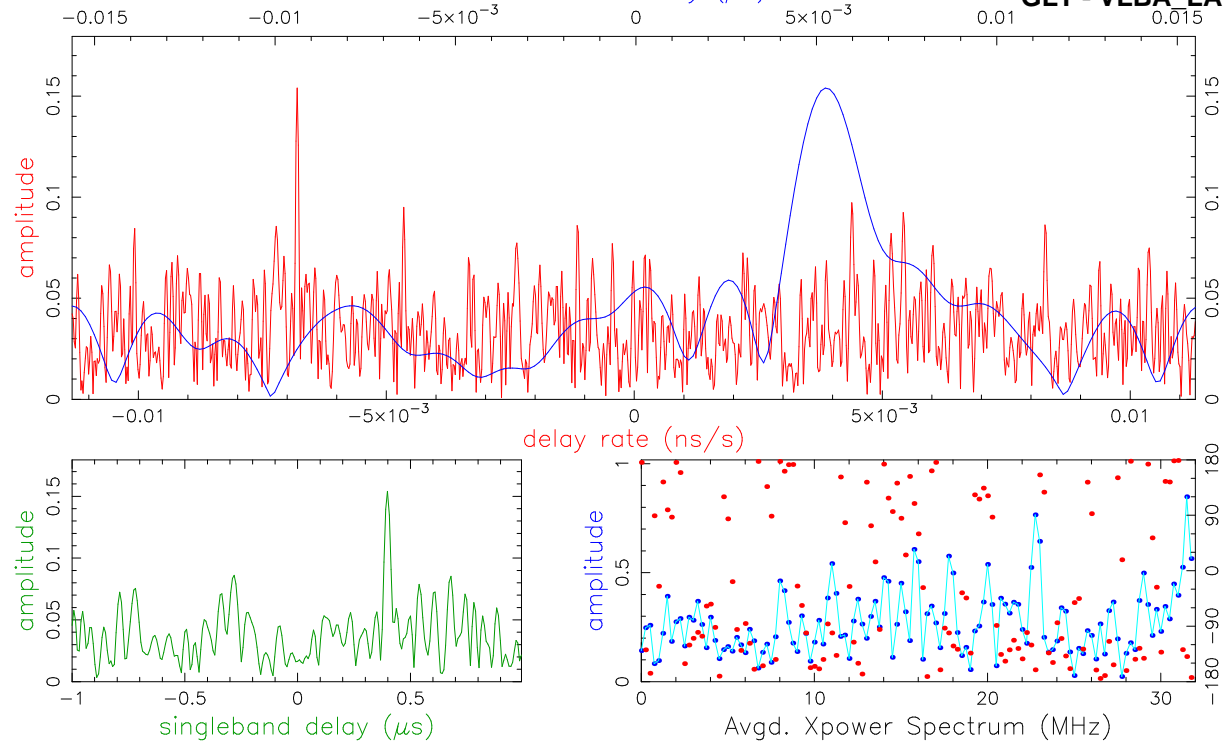
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-25.8	-147.1	-43.3	-23.0	-82.3	-51.3	-46.6	-17.0	11.3	-33.0	-80.3	-3.1	-115.7	-77.3	-42.3	-62.2		Phase	-46.4
	0.2	0.2	0.3	0.2	0.1	0.3	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.3	0.1		Ampl.	0.2
	14.2	139.5	179.3	180.8	55.5	10.0	121.0	16.1	15.7	95.2	186.6	203.3	7.3	75.4	77.8	215.7		Sbd box	101.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
k	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	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Tracks	
Group delay (usec)(sbd)	6.57288753405E+03			Apriori delay (usec)			6.57309434728E+03			Resid mbdelay (usec)			1.19368E-02			+/- 2.0E-04			
Sband delay (usec)	6.57288235228E+03			Apriori clock (usec)			1.7013429E+00			Resid sbdelay (usec)			-2.11995E-01			+/- 3.1E-03			
Phase delay (usec)	6.57309434579E+03			Apriori clockrate (us/s)			2.6957898E-07			Resid phdelay (usec)			-1.49716E-06			+/- 6.7E-07			
Delay rate (us/s)	-8.58240263258E-01			Apriori rate (us/s)			-8.58244280073E-01			Resid rate (us/s)			4.01681E-06			+/- 6.5E-09			
Total phase (deg)	-19.4			Apriori accel (us/s/s)			-4.62848133173E-06			Resid phase (deg)			-46.4			+/- 20.8			

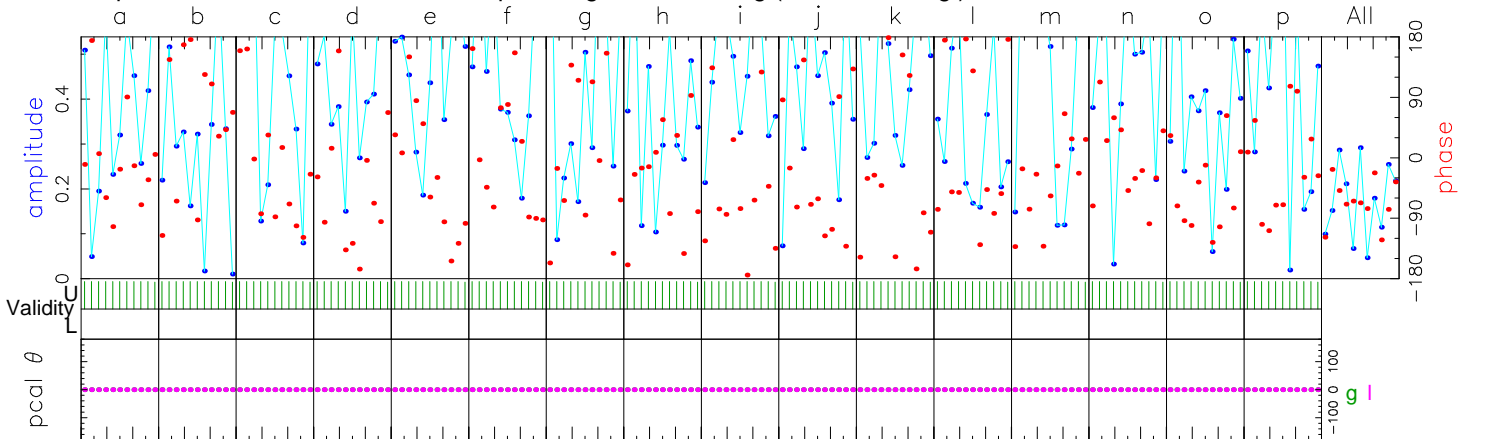
ph/seg (deg) 32.8 34.5 Search (1024X64) 0.143 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.9 60.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.0 41.6 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 51.4 72.7 Inc. frq. avg. 0.156 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 k: az 60.2 el 24.9 pa -67.8 u,v (fr/asec) 6177.331 2818.155 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gk..130L6H Output file: /Exps/c192c/v2/1234/No0048/gk.W.159.130L6H

multiband delay (μ s)



Fringe quality 0
SNR 5.6
Int time 179.673
Amp 0.180
Phase -59.6
PFD 8.6e-01
Delays (us)
SBD 0.397857
MBD 0.005275
Fringe rate (Hz)
-0.586227
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050820
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

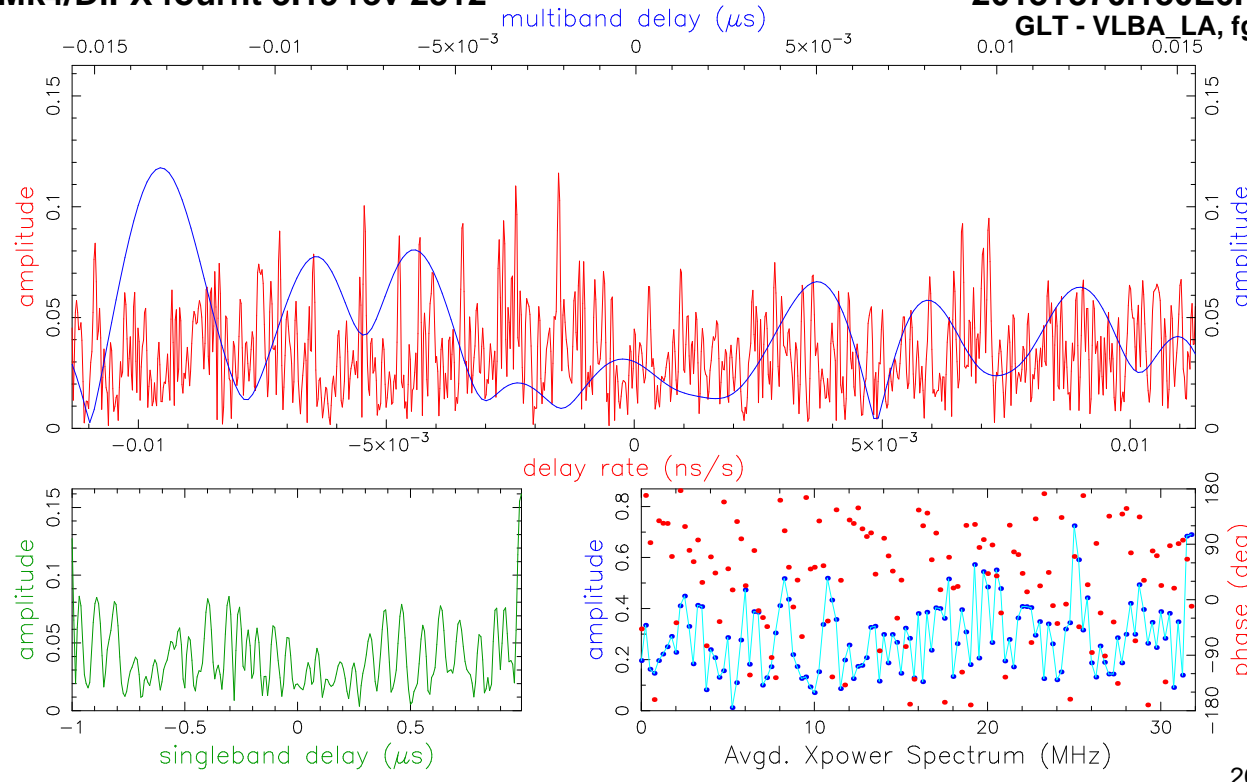


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-16.3	111.7	-45.7	-80.2	-62.4	-66.2	-129.1	-28.5	-95.8	-92.4	-124.0	-82.0	-33.7	-11.4	-54.6	-47.0		Phase	-59.6
	0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.3	0.2		Ampl.	0.2
	113.6	244.7	2.8	72.2	200.9	109.8	171.2	73.3	96.9	16.7	9.9	11.2	146.6	32.3	233.1	159.4		Sbd box	179.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g: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	
g: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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	4.69941537013E+03			Apriori delay (usec)			4.69900384481E+03			Resid mbdelay (usec)			5.27532E-03			+/- 1.9E-04			
Sband delay (usec)	4.69940170231E+03			Apriori clock (usec)			2.0683692E+00			Resid sbdelay (usec)			3.97857E-01			+/- 3.1E-03			
Phase delay (usec)	4.69900384288E+03			Apriori clockrate (us/s)			4.2647201E-07			Resid phdelay (usec)			-1.92273E-06			+/- 6.5E-07			
Delay rate (us/s)	-7.94137935325E-01			Apriori rate (us/s)			-7.94131129811E-01			Resid rate (us/s)			-6.80551E-06			+/- 6.3E-09			
Total phase (deg)	9.4			Apriori accel (us/s/s)			1.56186777637E-06			Resid phase (deg)			-59.6			+/- 20.3			

ph/seg (deg) 32.9 33.6 Search (1024X64) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.7 58.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.5 40.6 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.2 70.8 Inc. frq. avg. 0.179 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 l: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 5719.994 2800.493 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gl..130L6H Output file: /Exps/c192c/v2/1234/No0048/gl.W.104.130L6H

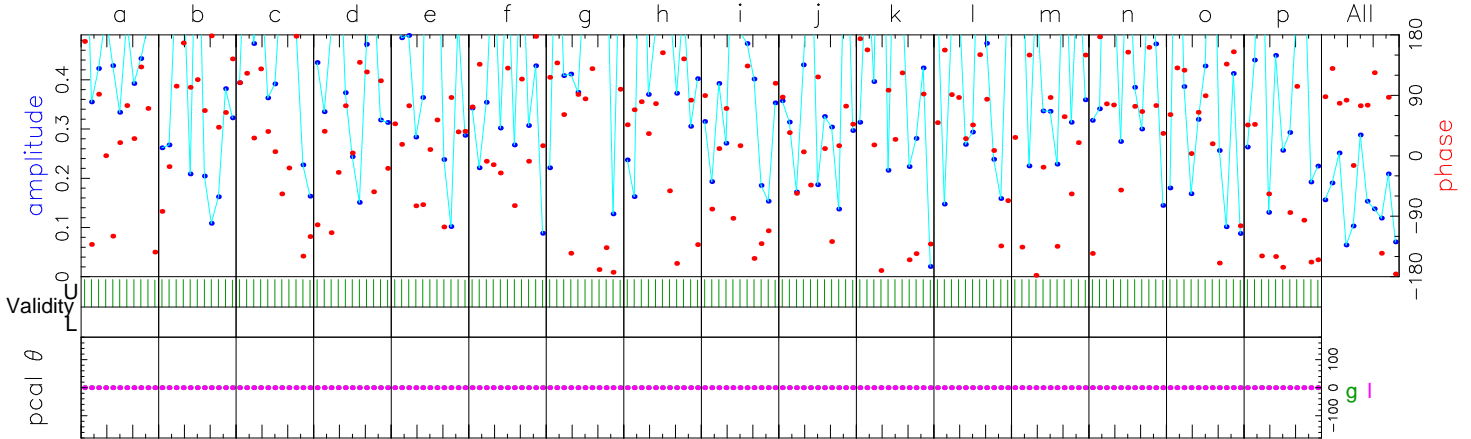
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gl
GLT - VLBA LA, fgroup W, pol RR



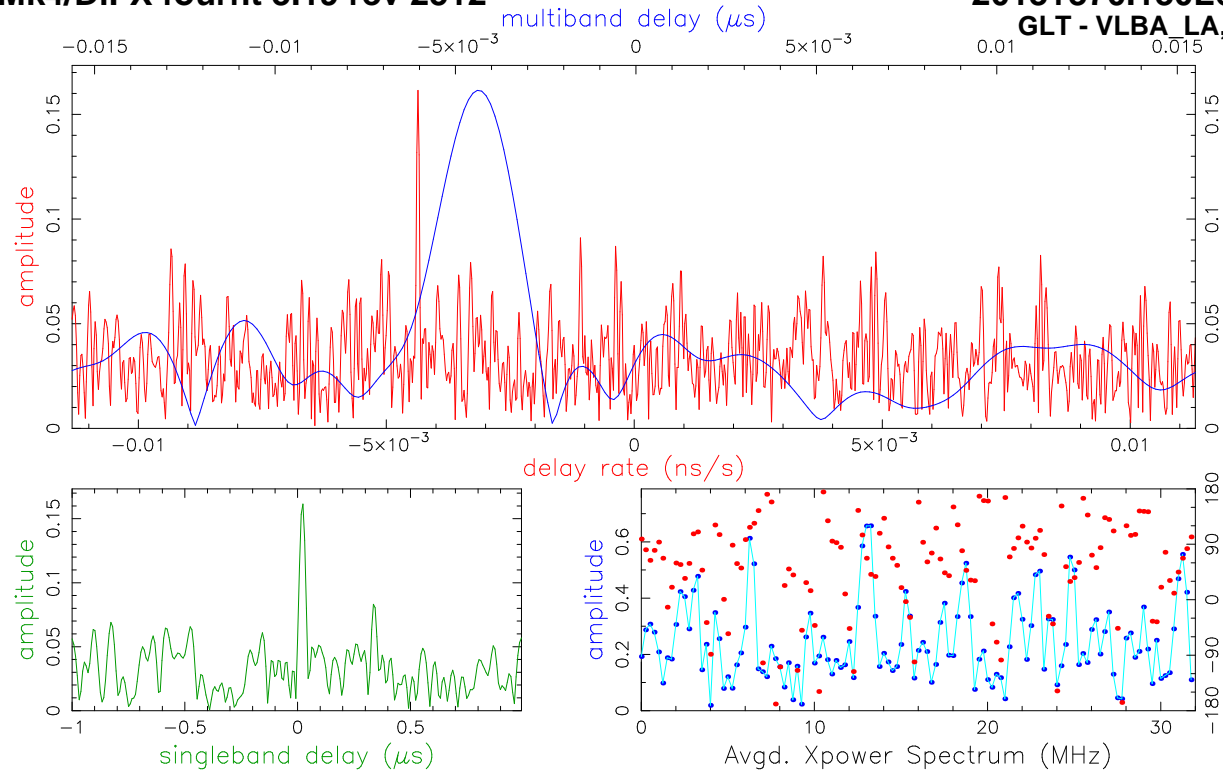
Fringe quality 0
SNR 6.0
Int time 179.657
Amp 0.164
Phase 93.2
PFD 2.8e-01
Delays (us)
SBD 0.989371
MBD -0.013403
Fringe rate (Hz)
-0.132474
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050822
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



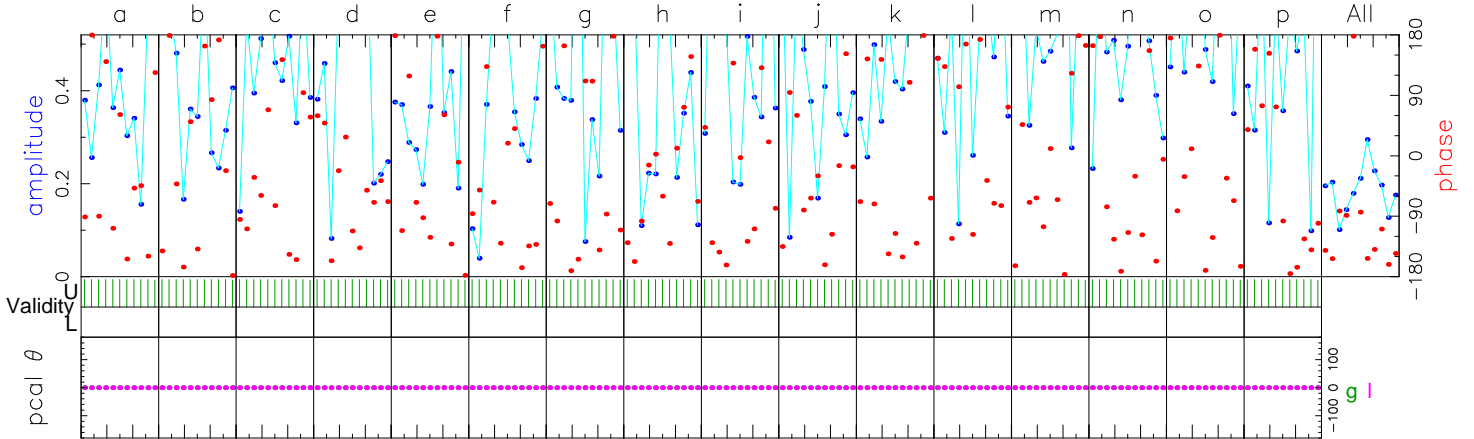
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
139.1	111.3	67.1	-20.4	24.8	62.6	137.2	103.7	104.9	24.6	142.4	79.7	68.0	106.3	96.6	-145.0		Phase	93.2
0.1	0.2	0.1	0.1	0.3	0.1	0.3	0.2	0.0	0.2	0.2	0.2	0.1	0.3	0.2	0.1		Ampl.	0.1
8.5	38.2	160.1	68.6	57.1	64.4	255.0	180.9	242.7	111.0	97.0	153.8	85.4	255.4	67.9	149.0		Sbd box	255.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g: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		PC phase	
g: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		ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	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)	4.69999044169E+03		Apriori delay (usec)		4.69900384481E+03		Resid mbdelay (usec)		-1.34031E-02		+/-		1.8E-04					
Sband delay (usec)	4.69999321531E+03		Apriori clock (usec)		2.0683692E+00		Resid sbdelay (usec)		9.89371E-01		+/-		2.9E-03					
Phase delay (usec)	4.69900384781E+03		Apriori clockrate (us/s)		4.2647201E-07		Resid phdelay (usec)		3.00556E-06		+/-		6.2E-07					
Delay rate (us/s)	-7.94132667703E-01		Apriori rate (us/s)		-7.94131129811E-01		Resid rate (us/s)		-1.53789E-06		+/-		6.0E-09					
Total phase (deg)	162.2		Apriori accel (us/s/s)		1.56186777637E-06		Resid phase (deg)		93.2		+/-		19.2					

ph/seg (deg) 58.7 31.9 Search (1024X64) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 41.7 55.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 57.8 38.5 Inc. seg. avg. 0.138 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 55.4 67.2 Inc. frq. avg. 0.145 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 133.2 el 47.2 pa -12.3 l: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 5719.994 2800.493 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gl..130L6H Output file: /Exps/c192c/v2/1234/No0048/gl.W.121.130L6H



Fringe quality 0
SNR 6.0
Int time 179.673
Amp 0.173
Phase -134.2
PFD 2.6e-01
Delays (us)
SBD 0.021215
MBD -0.004390
Fringe rate (Hz)
-0.375999
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050824
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

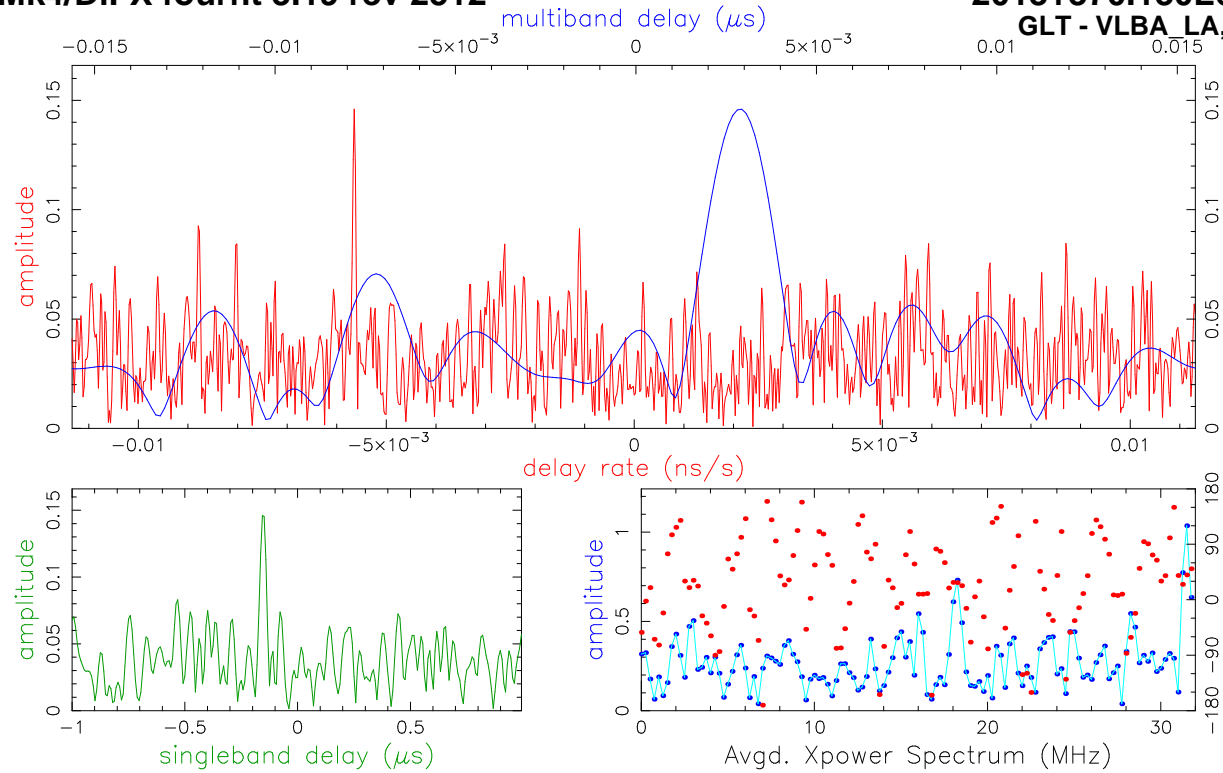


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-167.7	-167.2	-111.9	-51.3	-159.2	-133.7	-138.3	-104.8	-122.4	-94.6	-136.6	-144.2	-154.5	-125.4	-129.7	-158.6		Phase	-134.2
	0.2	0.2	0.0	0.2	0.2	0.1	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.1		Ampl.	0.2
	33.9	110.3	79.7	214.4	174.0	252.2	131.8	143.0	123.6	39.7	121.9	12.7	43.9	120.7	140.5	229.0		Sbd box	131.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g: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	
g: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	
g	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	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	4.69903070468E+03			Apriori delay (usec)			4.69900384481E+03			Resid mbdelay (usec)			-4.39012E-03			+/- 1.8E-04			
Sband delay (usec)	4.69902505981E+03			Apriori clock (usec)			2.0683692E+00			Resid sbdelay (usec)			2.12150E-02			+/- 2.9E-03			
Phase delay (usec)	4.69900384048E+03			Apriori clockrate (us/s)			4.2647201E-07			Resid phdelay (usec)			-4.32636E-06			+/- 6.2E-07			
Delay rate (us/s)	-7.94135494790E-01			Apriori rate (us/s)			-7.94131129811E-01			Resid rate (us/s)			-4.36498E-06			+/- 5.9E-09			
Total phase (deg)	-65.2			Apriori accel (us/s/s)			1.56186777637E-06			Resid phase (deg)			-134.2			+/- 19.2			

ph/seg (deg) 32.9 31.8 Amplitude 0.173 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 34.0 55.5 Search (1024X64) 0.159 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.6 38.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.1 66.9 Inc. seg. avg. 0.172 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 l: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 5719.994 2800.493 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gl..130L6H Output file: /Exps/c192c/v2/1234/No0048/gl.W.138.130L6H simultaneous interpolator

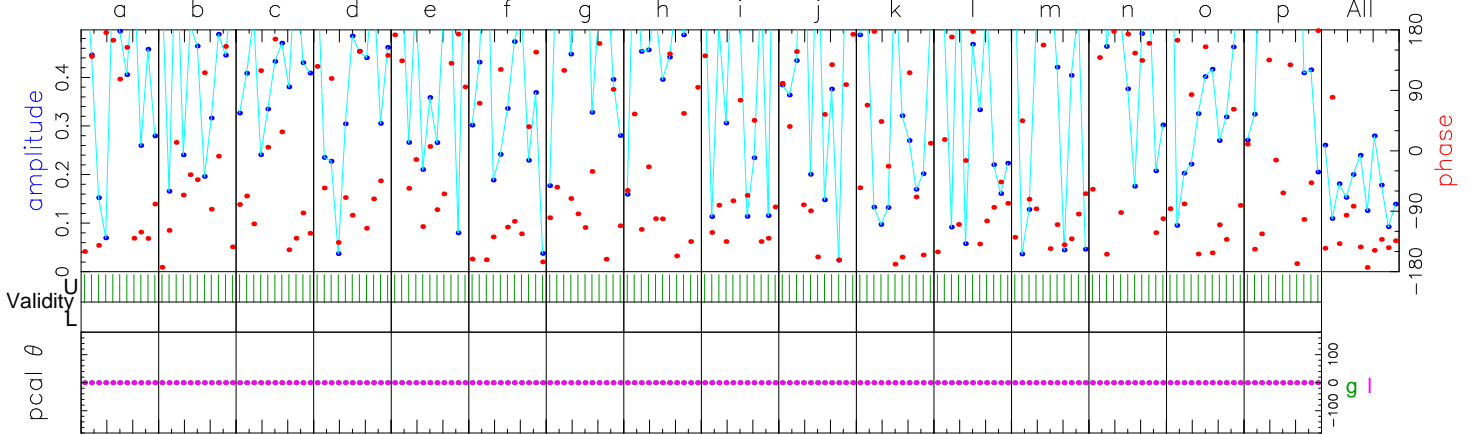
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gl
GLT - VLBA LA, fgroup W, pol RL



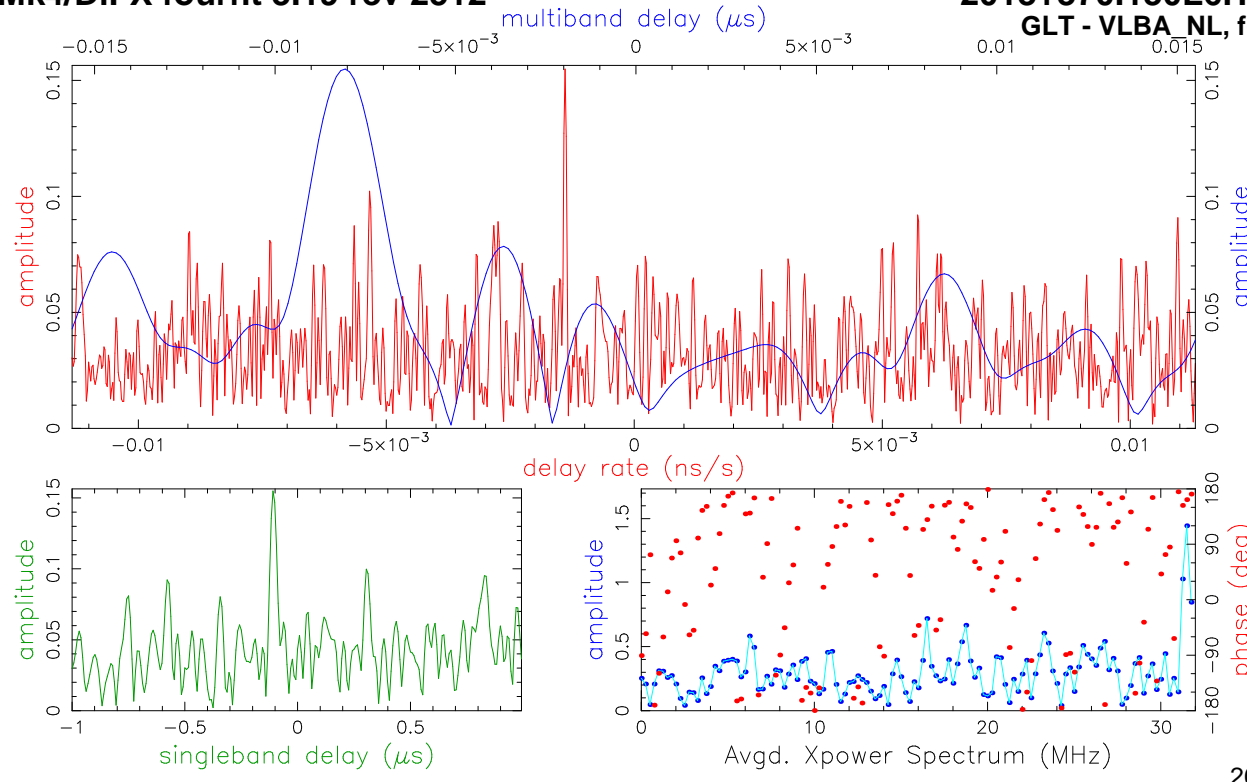
Fringe quality 0
SNR 5.5
Int time 179.657
Amp 0.166
Phase -136.4
PFD 9.9e-01
Delays (us)
SBD -0.152503
MBD 0.002847
Fringe rate (Hz)
-0.486408
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050827
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



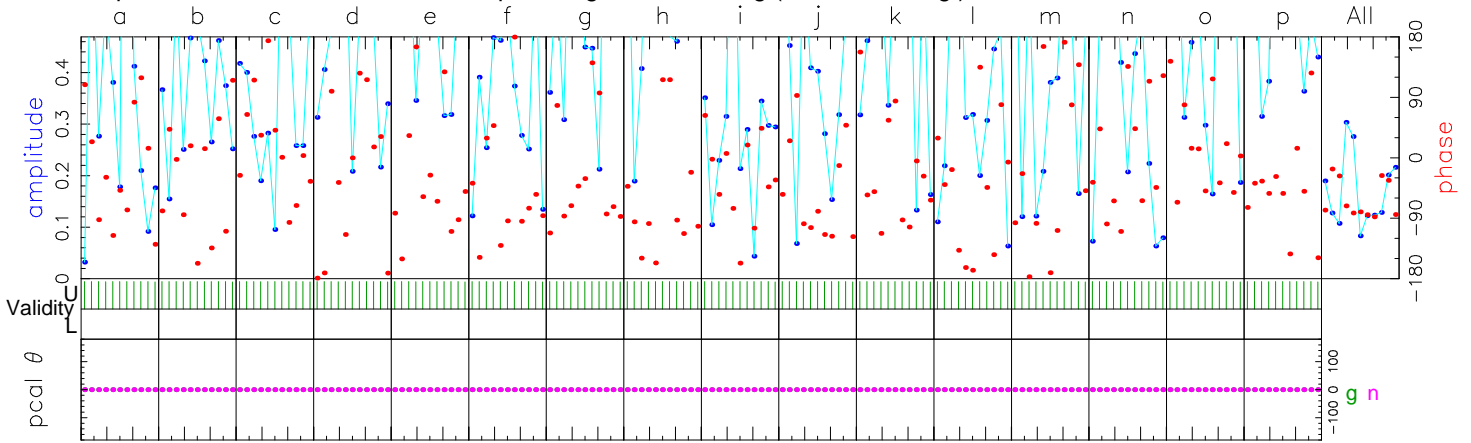
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-167.8	-70.5	-108.9	-131.4	148.7	-157.8	-121.6	-142.7	-103.3	159.5	-177.5	-116.0	-124.2	-174.2	-117.7	-118.4	Phase	-136.4
	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.0	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
	159.4	70.7	155.3	241.8	38.0	53.4	101.3	39.1	132.9	218.0	117.0	184.2	234.4	67.7	194.1	97.7	Sbd box	109.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g: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	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	4.69885044133E+03			Apriori delay (usec)			4.69900384481E+03			Resid mbdelay (usec)			2.84653E-03			+/- 2.0E-04		
Sband delay (usec)	4.69885134181E+03			Apriori clock (usec)			2.0683692E+00			Resid sbdelay (usec)			-1.52503E-01			+/- 3.1E-03		
Phase delay (usec)	4.69900384041E+03			Apriori clockrate (us/s)			4.2647201E-07			Resid phdelay (usec)			-4.39692E-06			+/- 6.7E-07		
Delay rate (us/s)	-7.94136776530E-01			Apriori rate (us/s)			-7.94131129811E-01			Resid rate (us/s)			-5.64672E-06			+/- 6.5E-09		
Total phase (deg)	-67.3			Apriori accel (us/s/s)			1.56186777637E-06			Resid phase (deg)			-136.4			+/- 20.9		

ph/seg (deg) RMS Theor. Amplitude 0.166 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.6 34.7 Search (1024X64) 0.145 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.9 60.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.6 41.8 Inc. seg. avg. 0.167 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 53.2 73.0 Inc. frq. avg. 0.152 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 g: az 133.2 el 47.2 pa -12.3 l: az 63.9 el 30.6 pa -66.4 u,v (fr/asec) 5719.994 2800.493 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gl..130L6H Output file: /Exps/c192c/v2/1234/No0048/gl.W.154.130L6H



Fringe quality 0
SNR 5.7
Int time 179.323
Amp 0.156
Phase -64.8
PFD 7.8e-01
Delays (us)
SBD -0.107782
MBD -0.008092
Fringe rate (Hz)
-0.120570
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050828
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-53.5	-22.5	-13.0	137.1	-73.5	-89.9	-70.1	-109.9	-27.3	-70.4	-68.9	-120.4	-149.3	-52.7	-12.9	-51.1	Phase	-64.8
	0.2	0.1	0.2	0.1	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.3	0.3	Ampl.	0.2
	232.5	92.0	42.8	103.2	184.7	77.3	8.0	41.1	139.9	153.9	169.2	83.4	176.7	161.8	42.8	38.7	Sbd box	115.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Tracks	
Group delay (usec)(sbd)	8.99112842936E+02			Apriori delay (usec)			8.99214685251E+02			Resid mbdelay (usec)			-8.09232E-03			+/- 1.9E-04		
Sband delay (usec)	8.99106903251E+02			Apriori clock (usec)			-2.5234045E+01			Resid sbdelay (usec)			-1.07782E-01			+/- 3.0E-03		
Phase delay (usec)	8.99214683161E+02			Apriori clockrate (us/s)			-5.9223514E-08			Resid phdelay (usec)			-2.09004E-06			+/- 6.5E-07		
Delay rate (us/s)	-6.28719135576E-01			Apriori rate (us/s)			-6.28717735877E-01			Resid rate (us/s)			-1.39970E-06			+/- 6.2E-09		
Total phase (deg)	290.7			Apriori accel (us/s/s)			1.60636194967E-05			Resid phase (deg)			-64.8			+/- 20.1		

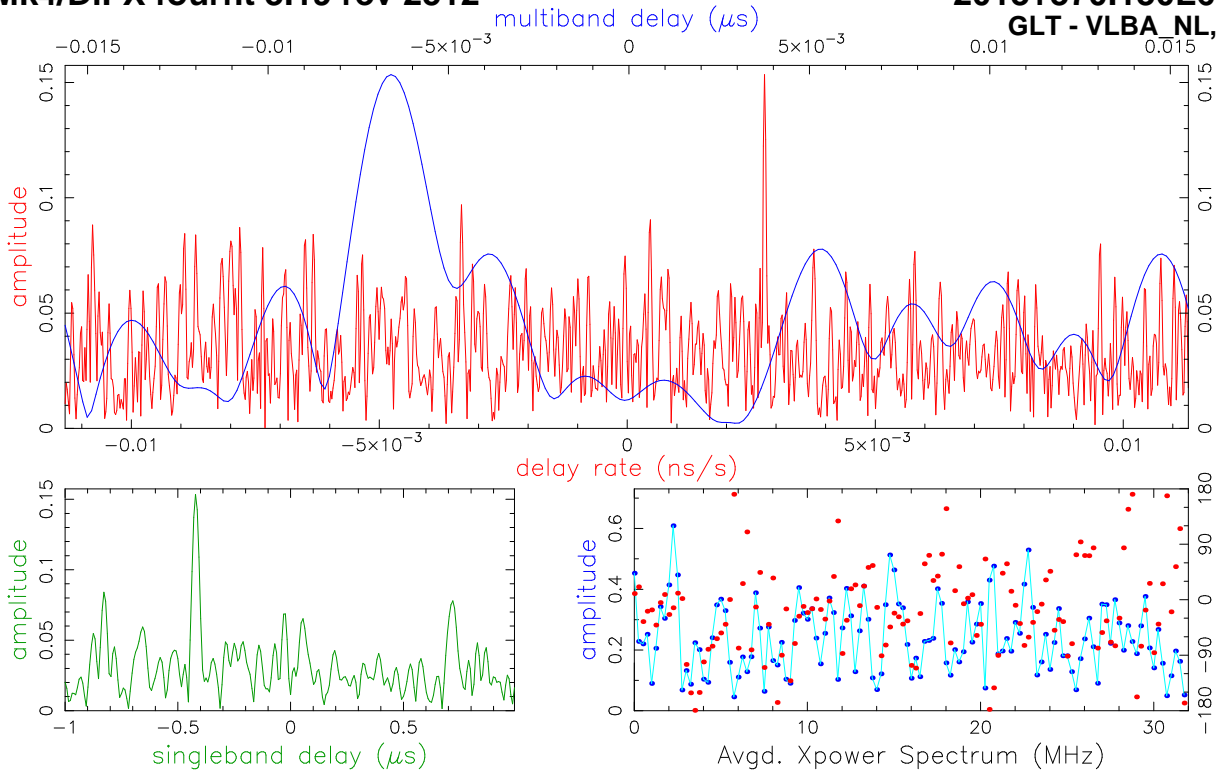
ph/seg (deg) 27.4 33.4
amp/seg (%) 45.3 58.3
ph/frq (deg) 58.0 40.3
amp/frq (%) 55.7 70.3

RMS Theor. Amplitude 0.156 +/- 0.027
Search (1024X64) 0.152
Interp. 0.000
Inc. seg. avg. 0.147
Inc. frq. avg. 0.162

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

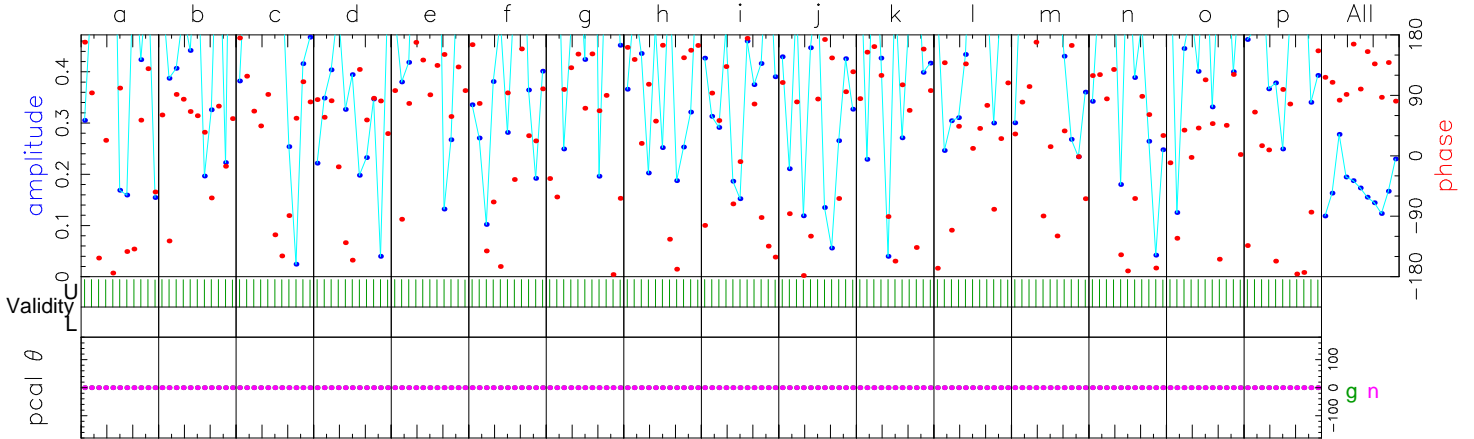
g: az 133.2 el 47.2 pa -12.3 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 4539.765 3099.507 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gn..130L6H Output file: /Exps/c192c/v2/1234/No0048/gn.W.163.130L6H



Fringe quality 0
SNR 5.6
Int time 179.308
Amp 0.157
Phase 111.5
PFD 9.0e-01
Delays (us)
SBD -0.421105
MBD -0.006576
Fringe rate (Hz) 0.239429
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050830
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



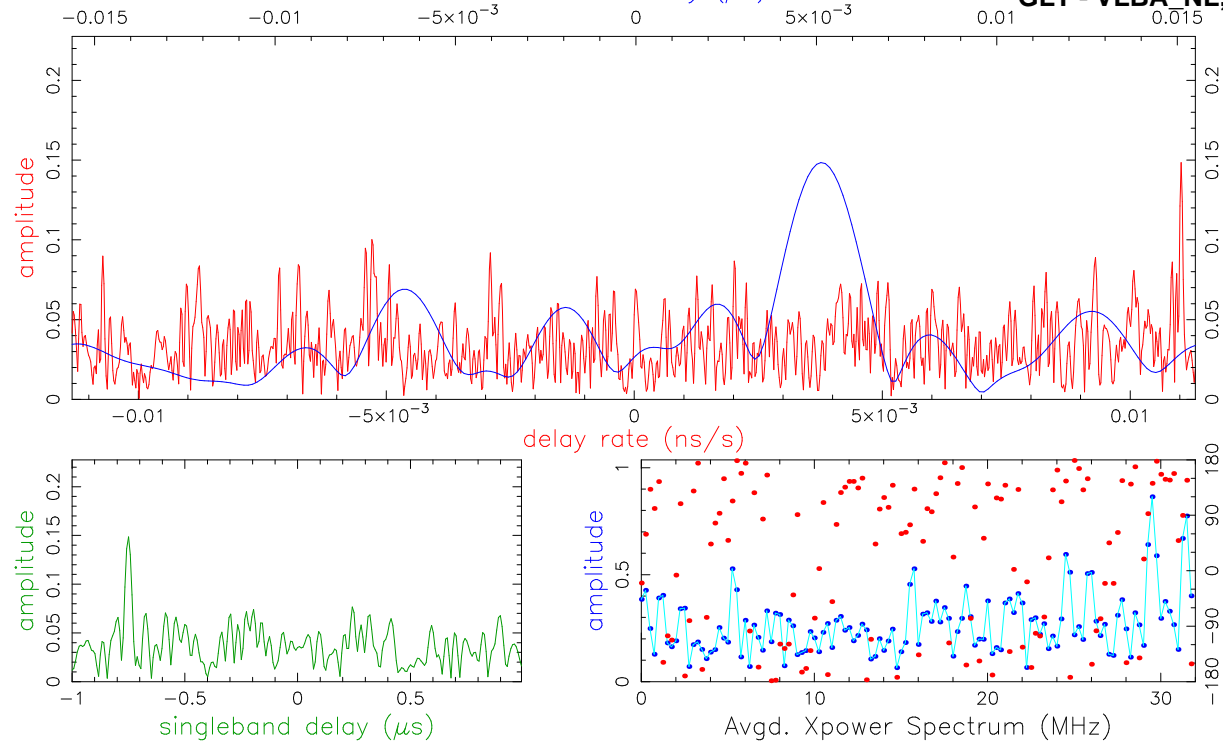
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
155.2	60.5	108.1	62.7	121.2	131.0	139.7	150.4	-162.4	113.1	140.3	61.7	91.9	116.2	40.8	150.4	150.4	Phase	111.5
0.2	0.4	0.2	0.1	0.4	0.1	0.2	0.2	0.1	0.1	0.3	0.2	0.0	0.2	0.2	0.1	0.1	Ampl.	0.2
154.7	74.4	68.6	190.1	75.7	30.3	175.2	20.4	229.2	93.0	76.9	103.6	11.2	19.8	156.2	230.6	230.6	Sbd box	75.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 8.98801859601E+02 Apriori delay (usec) 8.99214685251E+02 Resid mbdelay (usec) -6.57565E-03 +/- 1.9E-04
 Sband delay (usec) 8.98793580251E+02 Apriori clock (usec) -2.5234045E+01 Resid sbdelay (usec) -4.21105E-01 +/- 3.1E-03
 Phase delay (usec) 8.99214688848E+02 Apriori clockrate (us/s) -5.9223514E-08 Resid phdelay (usec) 3.59644E-06 +/- 6.6E-07
 Delay rate (us/s) -6.28714956345E-01 Apriori rate (us/s) -6.28717735877E-01 Resid rate (us/s) 2.77953E-06 +/- 6.3E-09
 Total phase (deg) 107.0 Apriori accel (us/s/s) 1.60636194967E-05 Resid phase (deg) 111.5 +/- 20.4

RMS Theor. Amplitude 0.157 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.9 33.8 Search (1024X64) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 32.2 59.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 44.2 40.8 Inc. seg. avg. 0.154 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 68.9 71.1 Inc. frq. avg. 0.162 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 133.2 el 47.2 pa -12.3 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 4539.765 3099.507 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gn..130L6H Output file: /Exps/c192c/v2/1234/No0048/gn.W.176.130L6H

multiband delay (μ s)

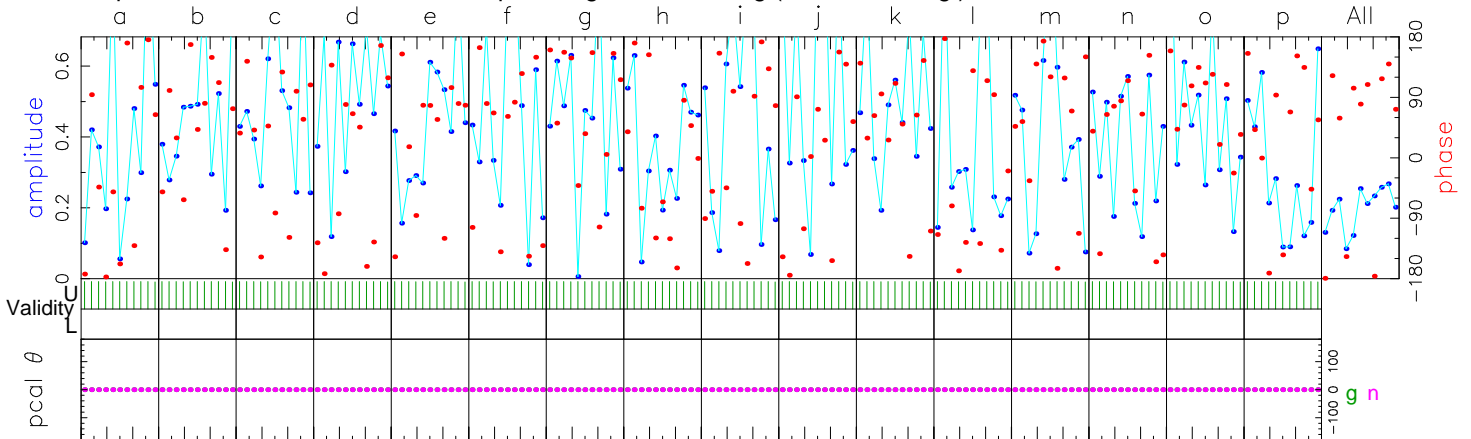


Fringe quality 0

SNR 5.4
Int time 179.324
Amp 0.228
Phase 116.9
PFD 1.0e+00
Delays (us)
SBD -0.750825
MBD 0.005148
Fringe rate (Hz) 0.950898
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050834
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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

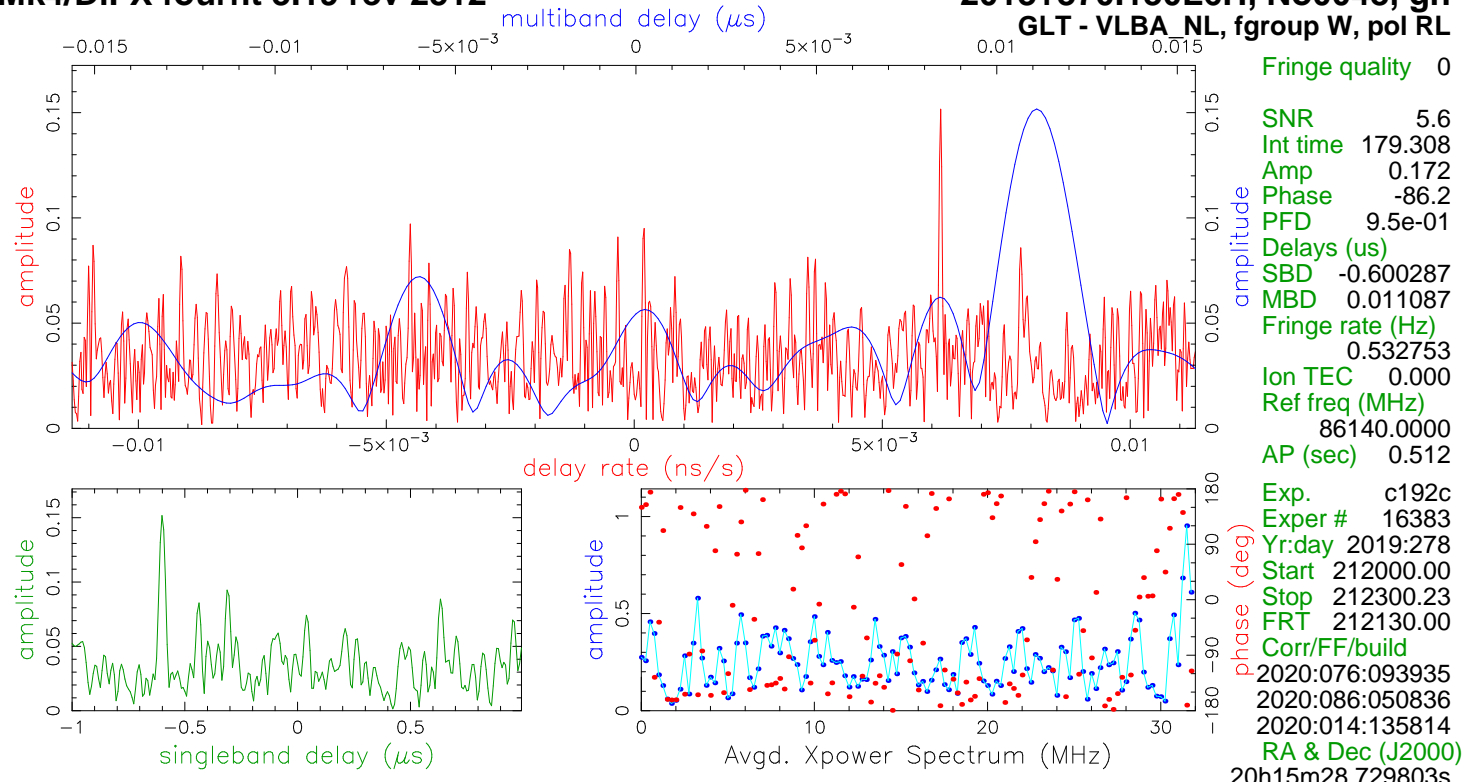


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-176.7	80.3	74.4	172.0	86.0	105.8	143.8	103.9	178.6	116.3	94.0	-173.9	125.5	110.4	108.4	77.0		Phase 116.9
	0.1	0.3	0.2	0.3	0.3	0.4	0.3	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.5	0.2		Ampl. 0.2
	38.1	89.4	155.7	120.8	20.9	216.1	234.1	47.8	190.4	84.0	224.1	112.1	173.7	177.9	32.0	59.1		Sbd box 32.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)		8.9846983308E+02								8.99214685251E+02						5.14806E-03		+/- 2.0E-04
Sband delay (usec)		8.98463860251E+02								-2.5234045E+01						-7.50825E-01		+/- 3.2E-03
Phase delay (usec)		8.99214689021E+02								-5.9223514E-08						3.77039E-06		+/- 6.8E-07
Delay rate (us/s)		-6.28706696893E-01								-6.28717735877E-01						1.10390E-05		+/- 6.5E-09
Total phase (deg)				112.4						1.60636194967E-05						116.9		+/- 21.0

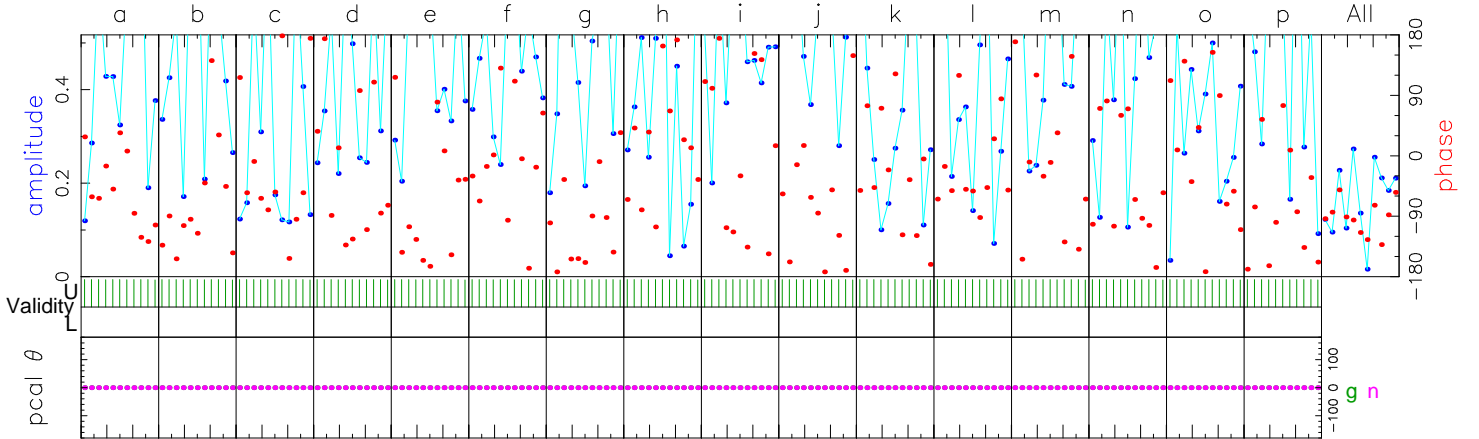
ph/seg (deg) 47.9 34.9 Search (1024X64) 0.142 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.4 60.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.9 42.1 Inc. seg. avg. 0.256 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 51.4 73.5 Inc. frq. avg. 0.216 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 4539.765 3099.507 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gn..130L6H Output file: /Exps/c192c/v2/1234/No0048/gn.W.202.130L6H

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gn
GLT - VLBA_NL, fgroup W, pol RL

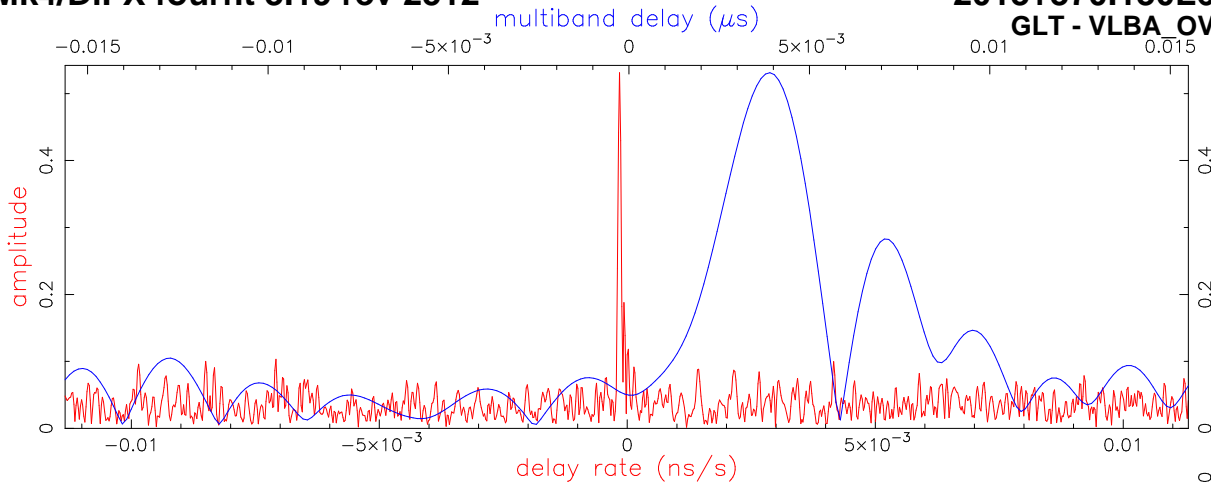


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



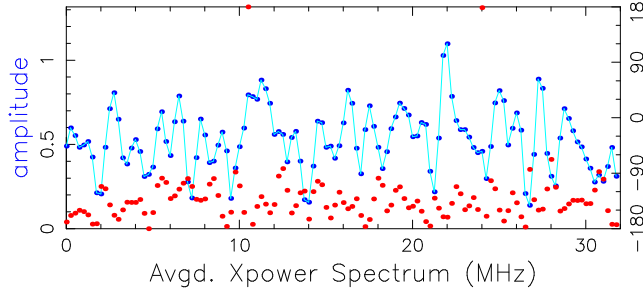
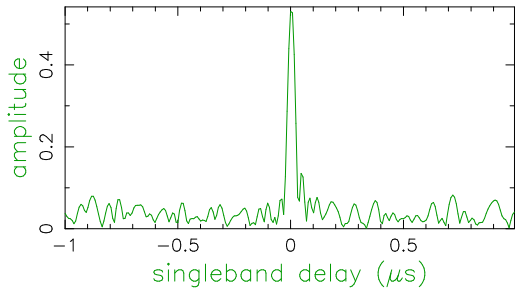
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	-63.5	-112.9	-69.7	-116.9	-123.2	-21.5	-82.2	-93.9	-160.3	-97.6	-59.9	-44.8	-110.6	-76.5	-58.7	-102.4		Phase	-86.2		
	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.1	0.2	0.0	0.2		Ampl.	0.2		
	48.1	153.2	193.0	180.5	82.0	91.2	145.7	116.1	26.4	99.0	148.9	90.7	133.2	18.8	88.0	196.5		Sbd box	52.2		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used			
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs			
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs			
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase			
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC			
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp			
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000					
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks			
																		Tracks			
Group delay (usec)(sbd)		8.98600771916E+02								8.99214685251E+02								Resid mbdelay (usec)	1.10867E-02	+/-	1.9E-04
Sband delay (usec)		8.98614398251E+02								-2.5234045E+01								Resid sbdelay (usec)	-6.00287E-01	+/-	3.1E-03
Phase delay (usec)		8.99214682472E+02								-5.9223514E-08								Resid phdelay (usec)	-2.77860E-06	+/-	6.6E-07
Delay rate (us/s)		-6.28711551144E-01								-6.28717735877E-01								Resid rate (us/s)	6.18473E-06	+/-	6.4E-09
Total phase (deg)				269.3						1.60636194967E-05								Resid phase (deg)	-86.2	+/-	20.6

ph/seg (deg) 25.2 34.1 Amplitude 0.172 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.2 59.5 Search (1024X64) 0.147 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.7 41.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 50.9 71.8 Inc. seg. avg. 0.161 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 n: az 74.2 el 43.4 pa -64.3 u,v (fr/asec) 4539.765 3099.507 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gn..130L6H Output file: /Exps/c192c/v2/1234/No0048/gn.W.219.130L6H simultaneous interpolator



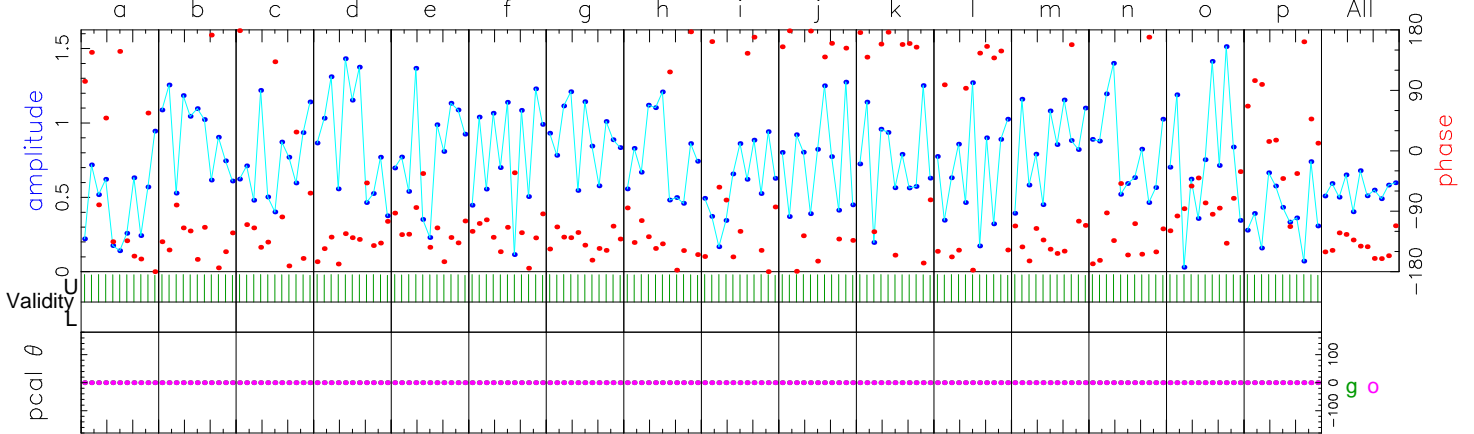
Fringe quality 9

SNR 19.8
Int time 178.517
Amp 0.542
Phase -140.9
PFD 0.0e+00
Delays (us)
SBD 0.003622
MBD 0.003924
Fringe rate (Hz)
-0.013485
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050827
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

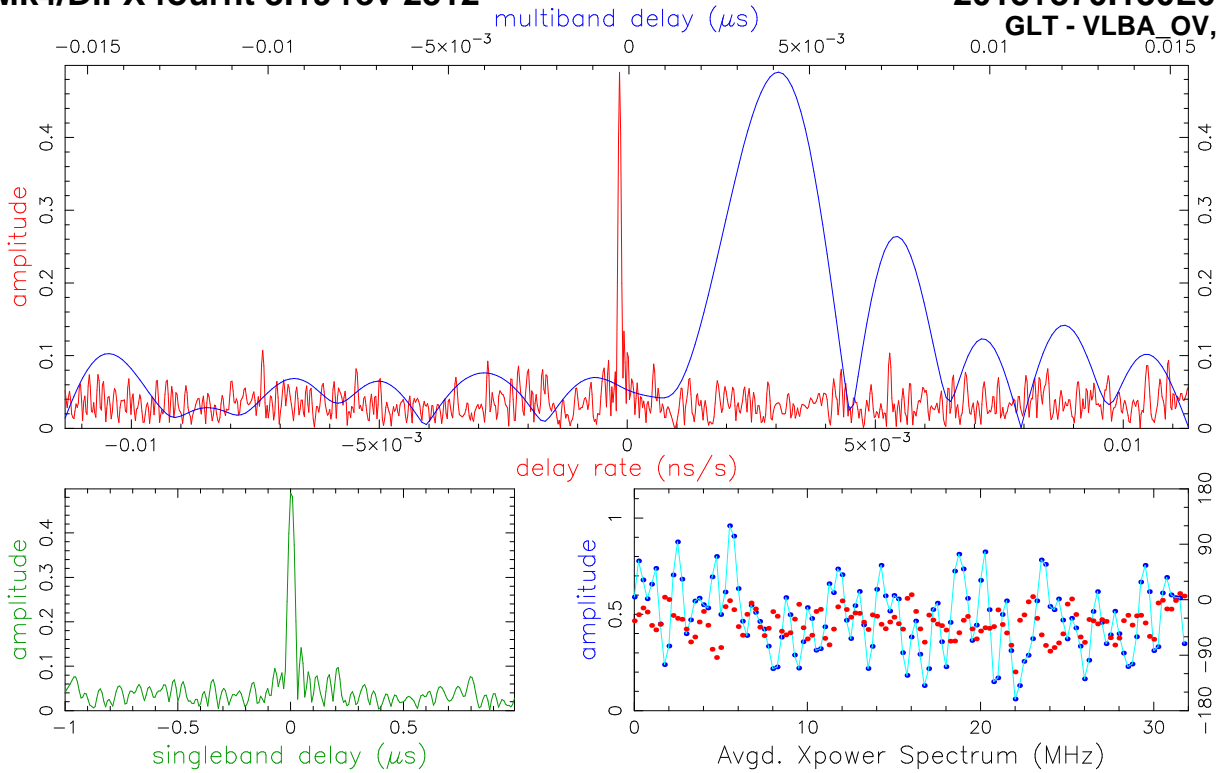
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	166.6	-137.5	-131.3	-133.3	-116.0	-120.8	-134.7	-144.2	-156.2	175.9	174.5	177.4	-140.0	-134.5	-92.1	21.2		Phase -140.9
	0.2	0.8	0.5	0.8	0.7	0.8	0.9	0.7	0.4	0.6	0.6	0.6	0.8	0.7	0.7	0.2		Ampl. 0.6
	71.7	129.8	130.7	129.7	129.1	129.2	129.2	129.5	129.6	129.1	129.7	129.2	129.9	130.0	130.1	131.2		Sbd box 129.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	7.28424458484E+03			Apriori delay (usec)			7.28424066112E+03			Resid mbdelay (usec)			3.92372E-03			+/-	5.4E-05	
Sband delay (usec)	7.28424428312E+03			Apriori clock (usec)			-1.5366121E+01			Resid sbdelay (usec)			3.62200E-03			+/-	8.7E-04	
Phase delay (usec)	7.28424065658E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			-4.54253E-06			+/-	1.9E-07	
Delay rate (us/s)	-8.05832715055E-01			Apriori rate (us/s)			-8.05832558509E-01			Resid rate (us/s)			-1.56546E-07			+/-	1.8E-09	
Total phase (deg)	56.8			Apriori accel (us/s/s)			-1.36677095313E-05			Resid phase (deg)			-140.9			+/-	5.8	

ph/seg (deg) 15.6 9.6 Search (1024X64) 0.530 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.1 16.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.5 11.6 Inc. seg. avg. 0.544 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.4 20.2 Inc. frq. avg. 0.607 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 5792.366 1746.850 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/go..130L6H Output file: /Exps/c192c/v2/1234/No0048/go.W.152.130L6H

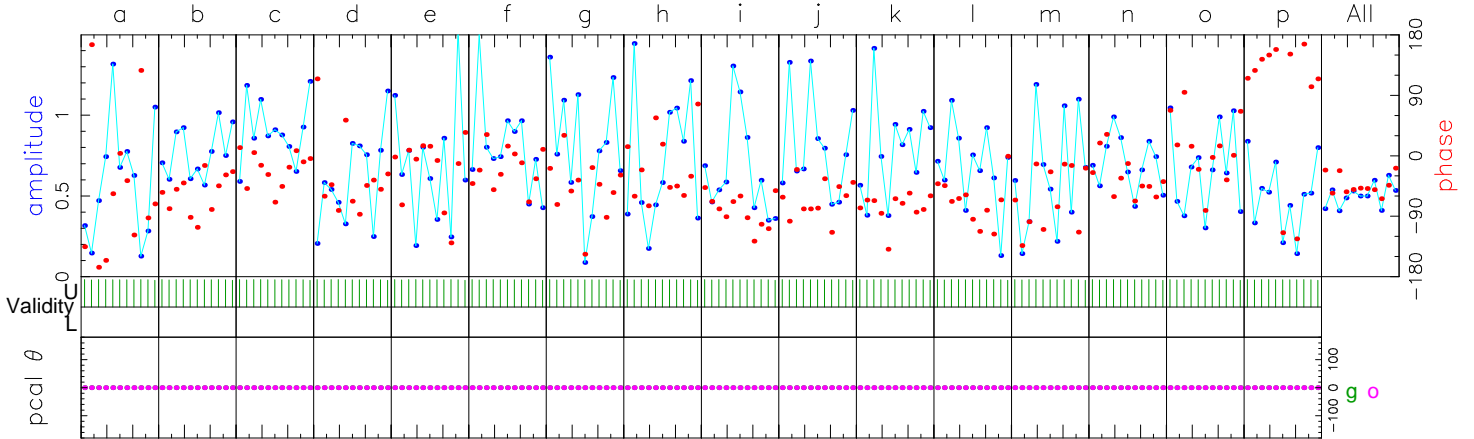


Fringe quality 9

SNR 18.2
Int time 178.500
Amp 0.499
Phase -43.9
PFD 0.0e+00
Delays (us)
SBD 0.003282
MBD 0.004159
Fringe rate (Hz) -0.013337
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

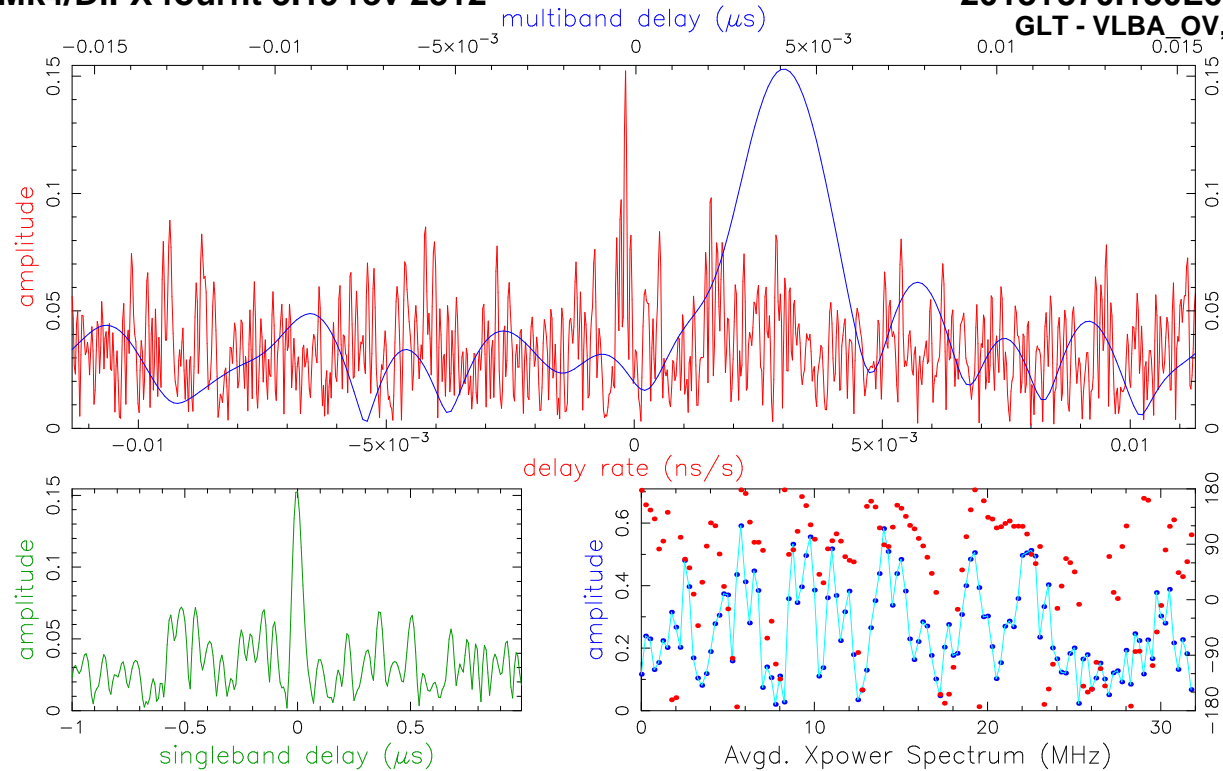
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050829
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



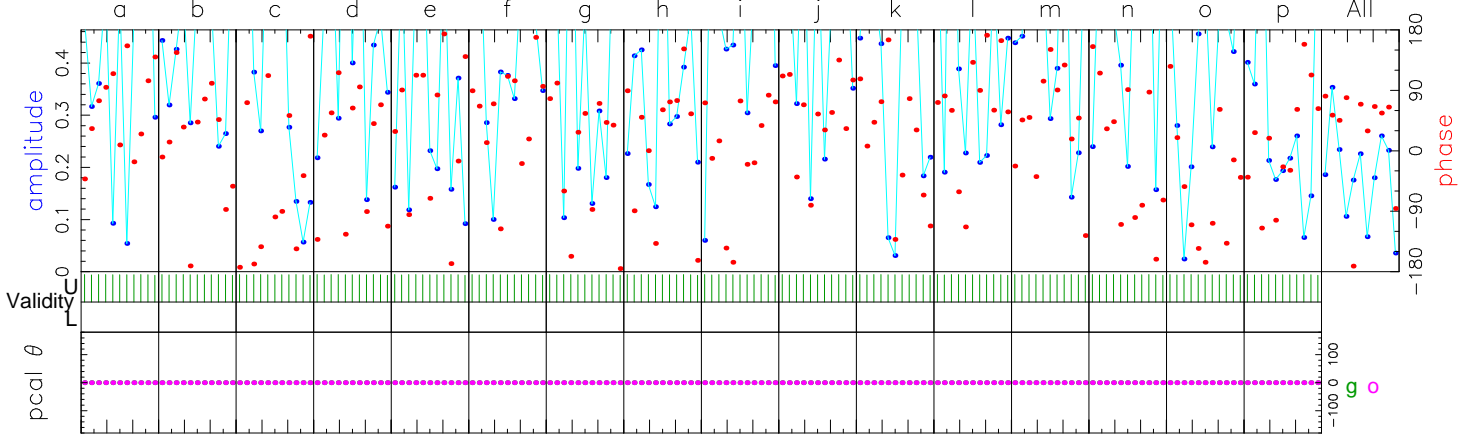
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-83.2	-53.1	-20.7	-50.7	-11.9	-15.5	-38.0	-32.4	-77.3	-66.1	-72.6	-68.8	-50.4	-32.4	13.3	139.1	Phase	-43.9
	0.4	0.7	0.8	0.5	0.5	0.7	0.7	0.6	0.6	0.7	0.8	0.6	0.5	0.6	0.5	0.4	Ampl.	0.6
	131.7	130.0	129.3	129.3	129.6	129.2	129.4	128.9	129.3	129.3	129.6	129.3	129.3	129.9	130.8	129.9	Sbd box	129.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	7.28424482040E+03			Apriori delay (usec)			7.28424066112E+03			Resid mbdelay (usec)			4.15928E-03			+/-	5.9E-05	
Sband delay (usec)	7.28424394312E+03			Apriori clock (usec)			-1.5366121E+01			Resid sbdelay (usec)			3.28200E-03			+/-	9.4E-04	
Phase delay (usec)	7.28424065971E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			-1.41434E-06			+/-	2.0E-07	
Delay rate (us/s)	-8.05832713339E-01			Apriori rate (us/s)			-8.05832558509E-01			Resid rate (us/s)			-1.54830E-07			+/-	1.9E-09	
Total phase (deg)	153.8			Apriori accel (us/s/s)			-1.36677095313E-05			Resid phase (deg)			-43.9			+/-	6.3	

ph/seg (deg) 14.7 10.4 Search (1024X64) 0.481 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 13.9 18.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.8 12.6 Inc. seg. avg. 0.497 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 32.4 21.9 Inc. frq. avg. 0.586 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 5792.366 1746.850 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/go..130L6H Output file: /Exps/c192c/v2/1234/No0048/go.W.166.130L6H



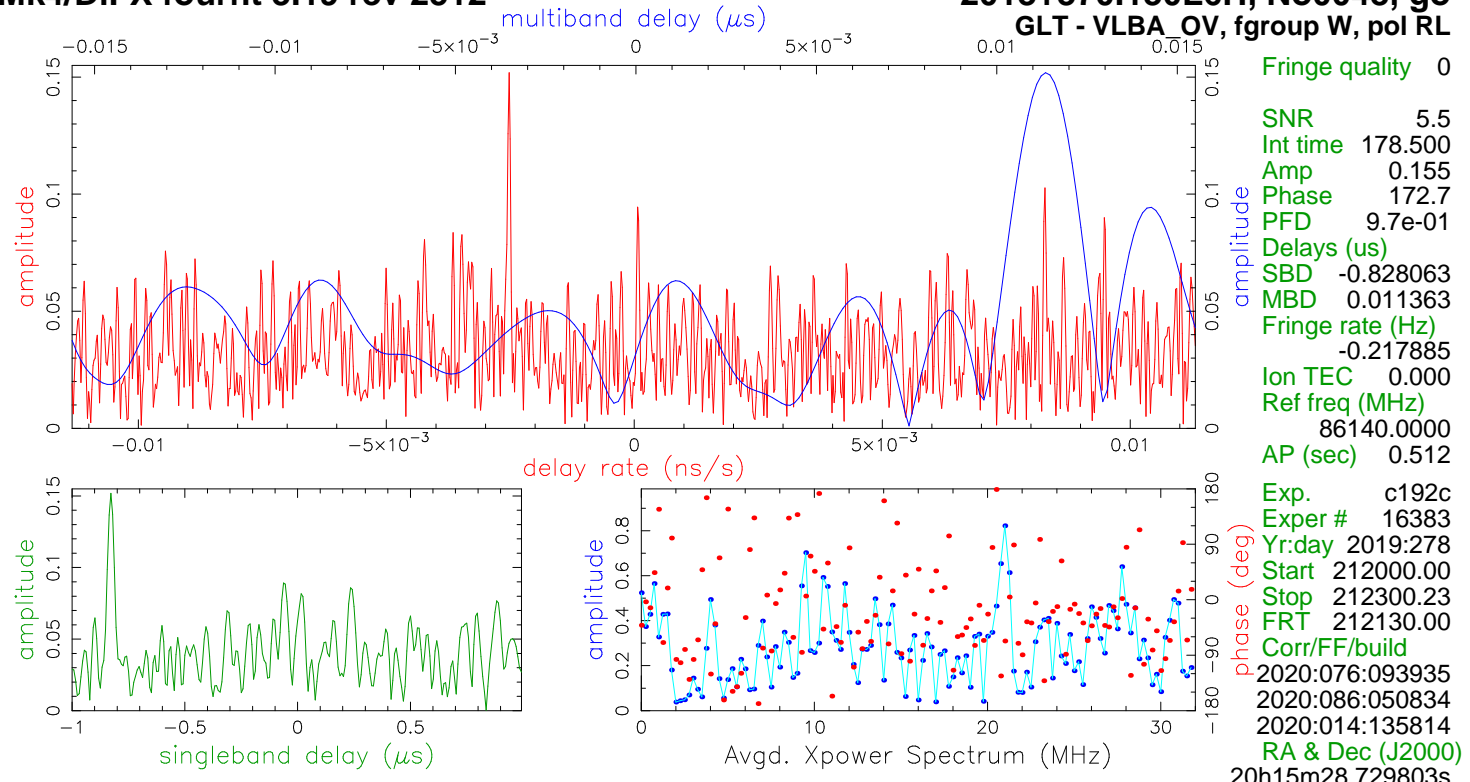
Fringe quality 0
SNR 5.6
Int time 178.516
Amp 0.155
Phase 64.9
PFD 8.7e-01
Delays (us)
SBD -0.003794
MBD 0.004247
Fringe rate (Hz)
-0.014942
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050831
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

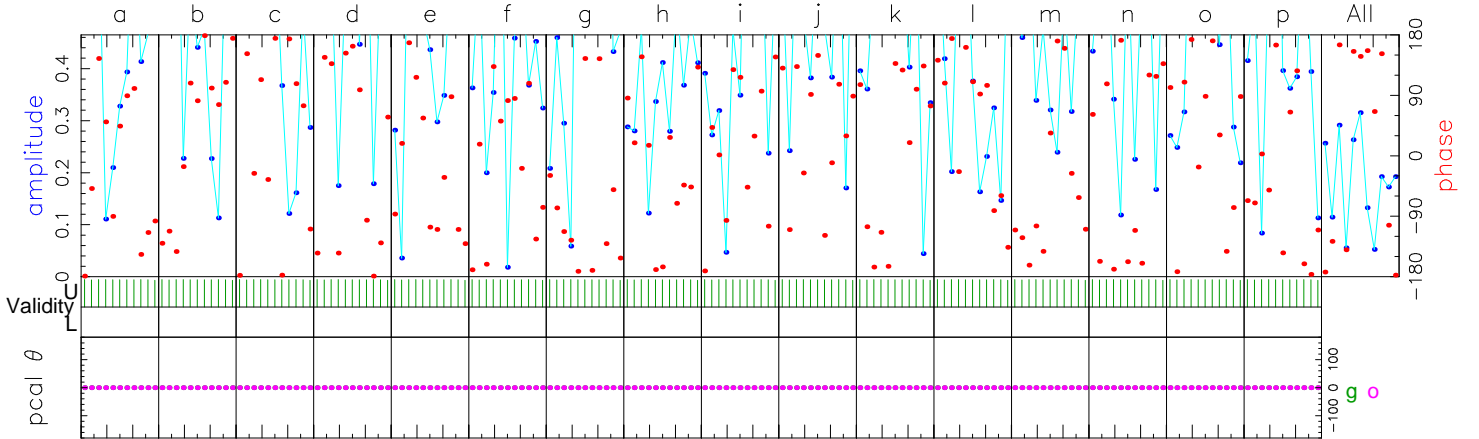


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
49.8	38.5	-174.7	72.2	114.2	67.8	91.1	69.9	40.7	73.7	35.3	78.9	76.4	-8.9	-108.8	-8.2		Phase	64.9
0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.0	0.1	0.1		Ampl.	0.2
81.0	16.8	35.5	29.0	138.0	174.4	252.5	9.1	129.6	128.2	89.2	57.0	130.2	170.7	68.1	53.2		Sbd box	128.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	7.28424490826E+03			Apriori delay (usec)			7.28424066112E+03			Resid mbdelay (usec)			4.24713E-03			+/-	1.9E-04	
Sband delay (usec)	7.28423686712E+03			Apriori clock (usec)			-1.5366121E+01			Resid sbdelay (usec)			-3.79400E-03			+/-	3.1E-03	
Phase delay (usec)	7.28424066321E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			2.09243E-06			+/-	6.5E-07	
Delay rate (us/s)	-8.05832731967E-01			Apriori rate (us/s)			-8.05832558509E-01			Resid rate (us/s)			-1.73458E-07			+/-	6.3E-09	
Total phase (deg)	262.5			Apriori accel (us/s/s)			-1.36677095313E-05			Resid phase (deg)			64.9			+/-	20.3	

ph/seg (deg) RMS Theor. Amplitude 0.155 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.2 33.7 Search (1024X64) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.9 58.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 66.2 40.6 Inc. seg. avg. 0.160 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 59.0 70.8 Inc. frq. avg. 0.151 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
g: az 133.2 el 47.2 pa -12.3 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 5792.366 1746.850 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/go..130L6H Output file: /Exps/c192c/v2/1234/No0048/go.W.182.130L6H

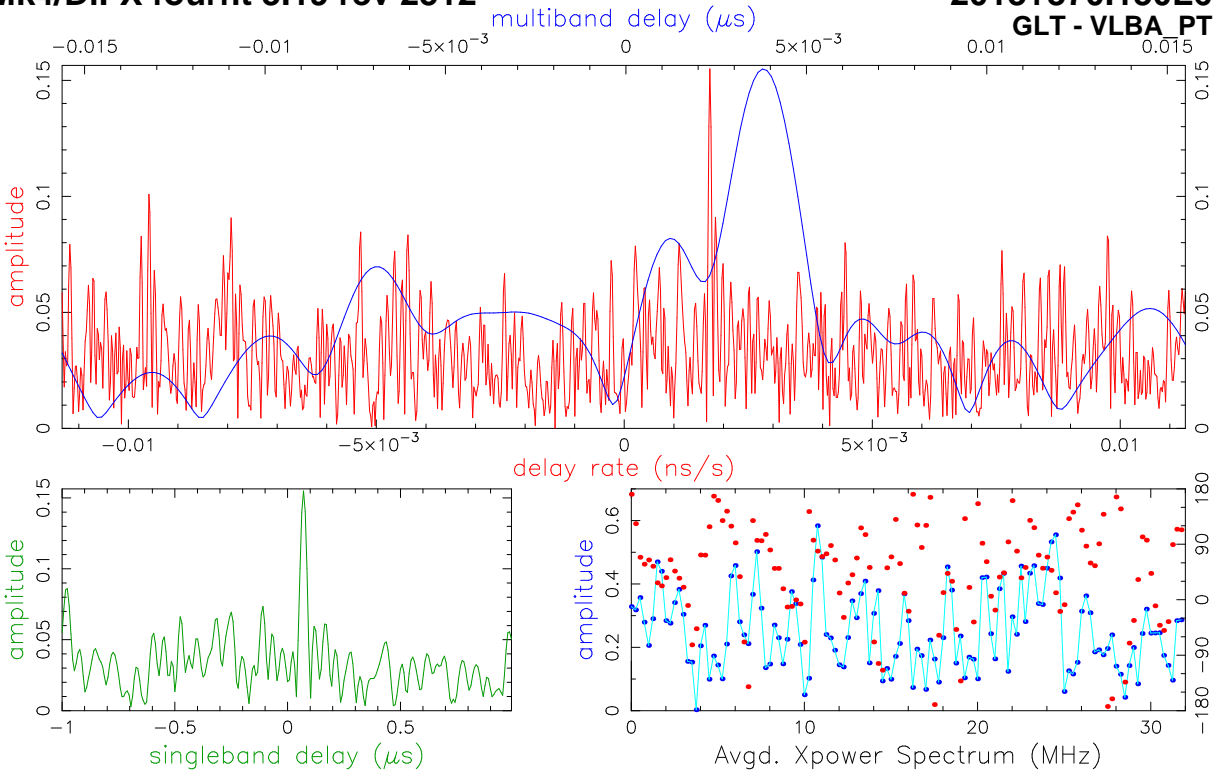


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



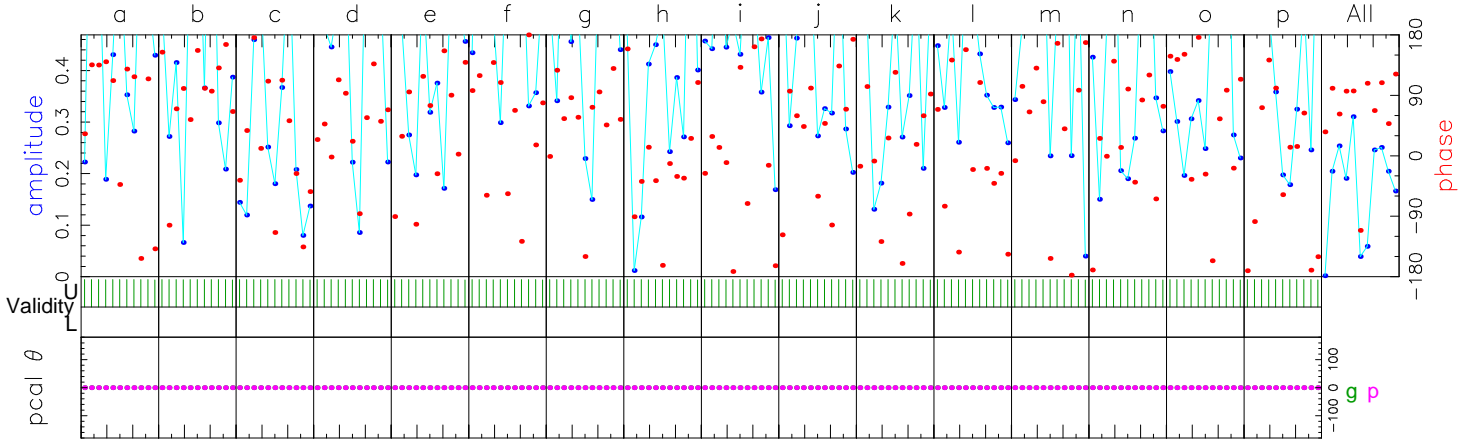
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
174.9	178.5	155.1	174.6	-148.2	54.6	-152.0	-79.3	81.8	112.3	156.1	156.4	-123.4	157.8	144.8	-152.1	172.7	Phase	172.7
0.1	0.3	0.2	0.3	0.2	0.1	0.4	0.0	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	Ampl.	0.2
107.5	86.0	157.6	22.0	243.1	65.3	23.5	135.4	180.4	181.0	79.4	77.6	42.4	53.7	56.7	195.2	23.0	Sbd box	23.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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	
																	Tracks	
Group delay (usec)(sbd)	7.28340827418E+03			Apriori delay (usec)			7.28424066112E+03			Resid mbdelay (usec)			1.13631E-02			+/- 1.9E-04		
Sband delay (usec)	7.28341259812E+03			Apriori clock (usec)			-1.5366121E+01			Resid sbdelay (usec)			-8.28063E-01			+/- 3.1E-03		
Phase delay (usec)	7.28424066669E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			5.57019E-06			+/- 6.7E-07		
Delay rate (us/s)	-8.05835087932E-01			Apriori rate (us/s)			-8.05832558509E-01			Resid rate (us/s)			-2.52942E-06			+/- 6.4E-09		
Total phase (deg)	10.4			Apriori accel (us/s/s)			-1.36677095313E-05			Resid phase (deg)			172.7			+/- 20.7		

ph/seg (deg) 48.9 34.3 Search (1024X64) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.0 59.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.3 41.3 Inc. seg. avg. 0.161 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 65.4 72.1 Inc. frq. avg. 0.160 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 o: az 59.7 el 22.8 pa -59.7 u,v (fr/asec) 5792.366 1746.850 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/go..130L6H Output file: /Exps/c192c/v2/1234/No0048/go.W.204.130L6H



Fringe quality 0
SNR 5.7
Int time 179.715
Amp 0.156
Phase 88.0
PFD 8.1e-01
Delays (us)
SBD 0.070384
MBD 0.003812
Fringe rate (Hz) 0.149874
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050826
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

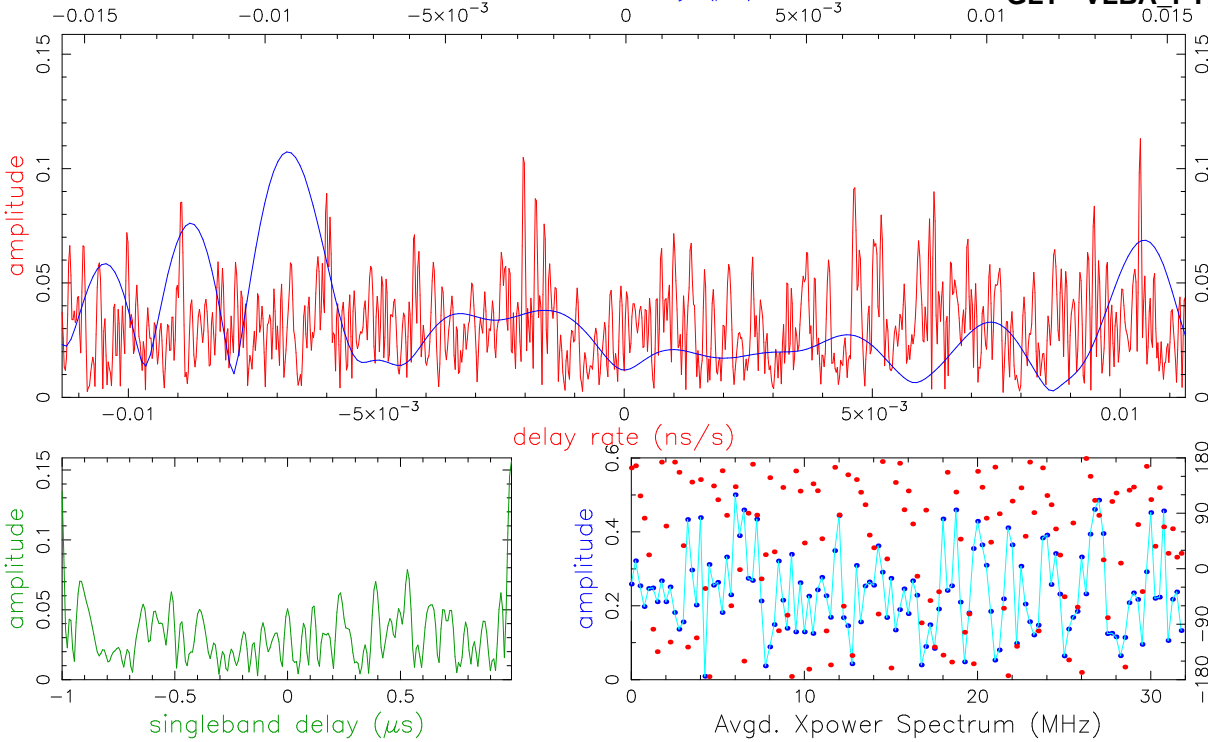
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	5.33998219191E+03			Apriori delay (usec)			5.33991588026E+03			Resid mbdelay (usec)			3.81164E-03			+/-	1.9E-04	
Sband delay (usec)	5.33998626426E+03			Apriori clock (usec)			-1.0679354E+01			Resid sbdelay (usec)			7.03840E-02			+/-	3.0E-03	
Phase delay (usec)	5.33991588310E+03			Apriori clockrate (us/s)			-1.2888659E-07			Resid phdelay (usec)			2.83642E-06			+/-	6.5E-07	
Delay rate (us/s)	-8.19550871826E-01			Apriori rate (us/s)			-8.19552611719E-01			Resid rate (us/s)			1.73989E-06			+/-	6.3E-09	
Total phase (deg)	61.3			Apriori accel (us/s/s)			-4.78397846029E-07			Resid phase (deg)			88.0			+/-	20.2	

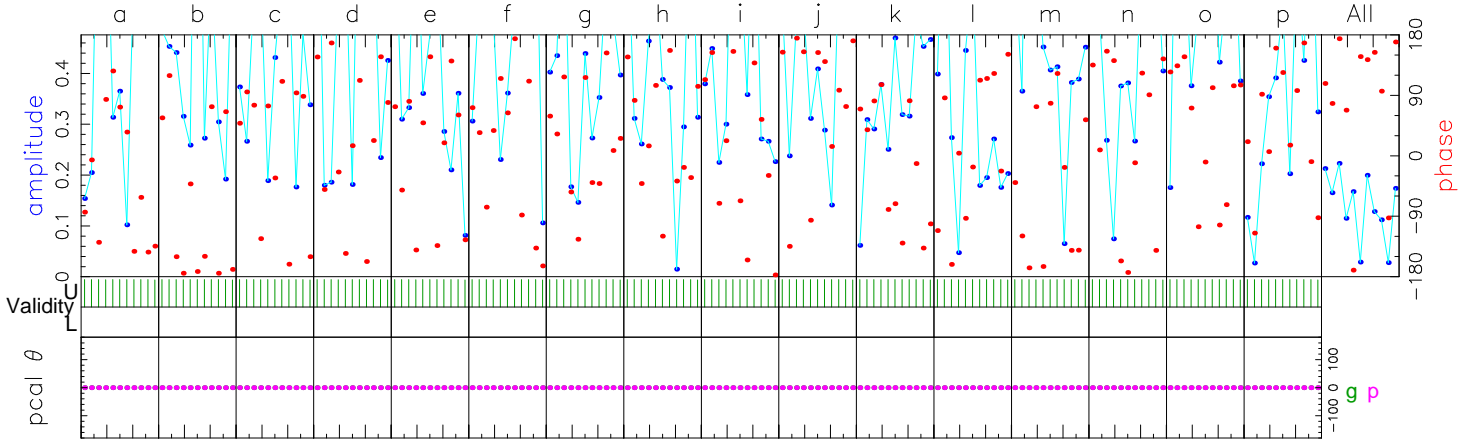
ph/seg (deg) 55.3 33.5 Search (1024X64) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 62.8 58.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.8 40.4 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 69.5 70.4 Inc. frq. avg. 0.151 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 133.2 el 47.2 pa -12.3 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 5901.631 2825.832 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gp..130L6H Output file: /Exps/c192c/v2/1234/No0048/gp.W.150.130L6H

multiband delay (μ s)



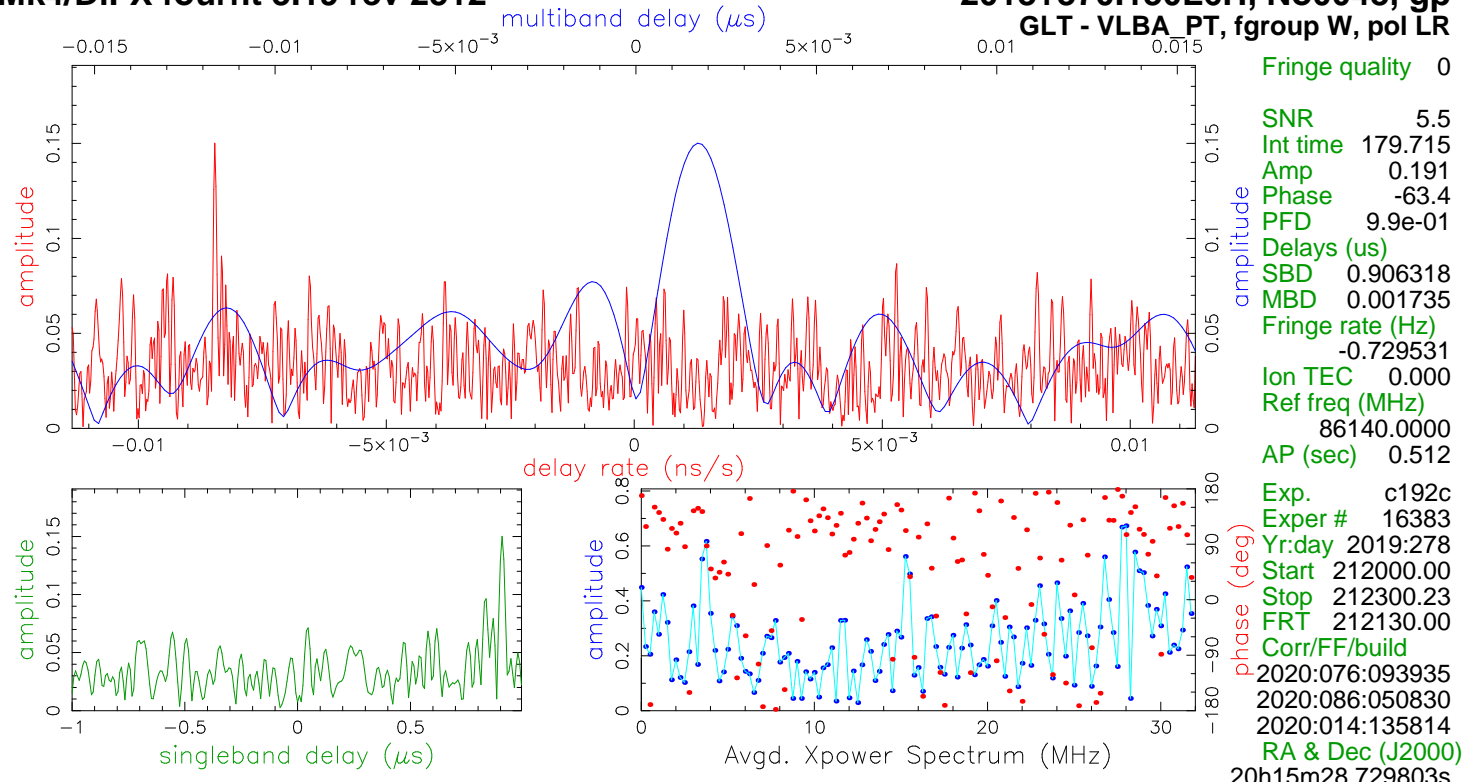
Fringe quality 0
SNR 5.7
Int time 179.699
Amp 0.159
Phase 137.9
PFD 6.9e-01
Delays (us)
SBD 0.991476
MBD -0.009154
Fringe rate (Hz)
-0.175655
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build
2020:076:093935
2020:086:050828
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-142.7	166.0	115.0	129.6	122.6	122.6	59.7	70.0	155.3	151.1	-61.3	99.1	174.6	144.1	115.4	78.3	Phase	137.9	
	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.1	0.0	0.1	0.2	0.2	0.1	Ampl.	0.1	
	147.7	255.6	187.7	55.6	177.3	204.4	147.1	147.7	111.1	198.2	45.0	221.1	136.6	170.9	210.1	57.0	Sbd box	255.9	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
																	Tracks		
Group delay (usec)(sbd)			5.34090672604E+03							5.33991588026E+03							Resid mbdelay (usec)	-9.15422E-03	+/- 1.9E-04
Sband delay (usec)			5.34090735601E+03							-1.0679354E+01							Resid sbdelay (usec)	9.91476E-01	+/- 3.0E-03
Phase delay (usec)			5.33991588471E+03							-1.2888659E-07							Resid phdelay (usec)	4.44621E-06	+/- 6.4E-07
Delay rate (us/s)			-8.19554650897E-01							-8.19552611719E-01							Resid rate (us/s)	-2.03918E-06	+/- 6.2E-09
Total phase (deg)				111.2						-4.78397846029E-07							Resid phase (deg)	137.9	+/- 20.0

ph/seg (deg) 55.1 33.1 Amplitude 0.159 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.9 57.8 Search (1024X64) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.0 39.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 46.2 69.7 Inc. seg. avg. 0.123 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 5901.631 2825.832 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gp..130L6H Output file: /Exps/c192c/v2/1234/No0048/gp.W.165.130L6H simultaneous interpolator



Fringe quality 0

SNR 5.5

Int time 179.715

Amp 0.191

Phase -63.4

PFD 9.9e-01

Delays (us)

SBD 0.906318

MBD 0.001735

Fringe rate (Hz)

-0.729531

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 212000.00

Stop 212300.23

FRT 212130.00

Corr/FF/build

2020:076:093935

2020:086:050830

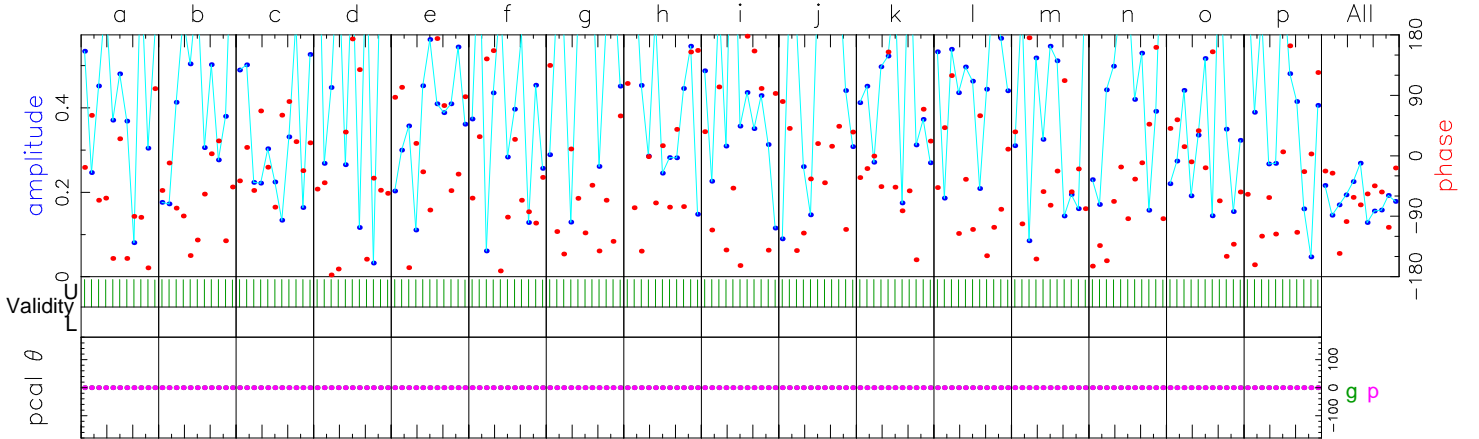
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	-71.4	-74.8	6.2	-107.3	-7.7	-65.9	-98.0	-83.8	169.8	-1.4	-37.0	-80.5	-72.8	-78.1	-23.7	-97.5		Phase	-63.4	
	0.2	0.4	0.3	0.3	0.1	0.2	0.4	0.1	0.1	0.4	0.3	0.3	0.3	0.3	0.2	0.2		Ampl.	0.2	
	95.0	70.2	232.6	57.1	27.9	60.9	52.2	99.2	79.3	39.3	213.6	125.3	118.3	66.5	100.4	79.2		Sbd box	245.0	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks		
																			Chan ids	
																			Tracks	
Group delay (usec)(sbd)	5.34082386480E+03		Apriori delay (usec)		5.33991588026E+03		Resid mbdelay (usec)		1.73453E-03		+/-		2.0E-04							
Sband delay (usec)	5.34082219876E+03		Apriori clock (usec)		-1.0679354E+01		Resid sbdelay (usec)		9.06318E-01		+/-		3.1E-03							
Phase delay (usec)	5.33991587822E+03		Apriori clockrate (us/s)		-1.2888659E-07		Resid phdelay (usec)		-2.04602E-06		+/-		6.7E-07							
Delay rate (us/s)	-8.19561080856E-01		Apriori rate (us/s)		-8.19552611719E-01		Resid rate (us/s)		-8.46914E-06		+/-		6.5E-09							
Total phase (deg)	269.9		Apriori accel (us/s/s)		-4.78397846029E-07		Resid phase (deg)		-63.4		+/-		20.8							

ph/seg (deg) RMS Theor. Amplitude 0.191 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 37.5 34.5 Search (1024X64) 0.143 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

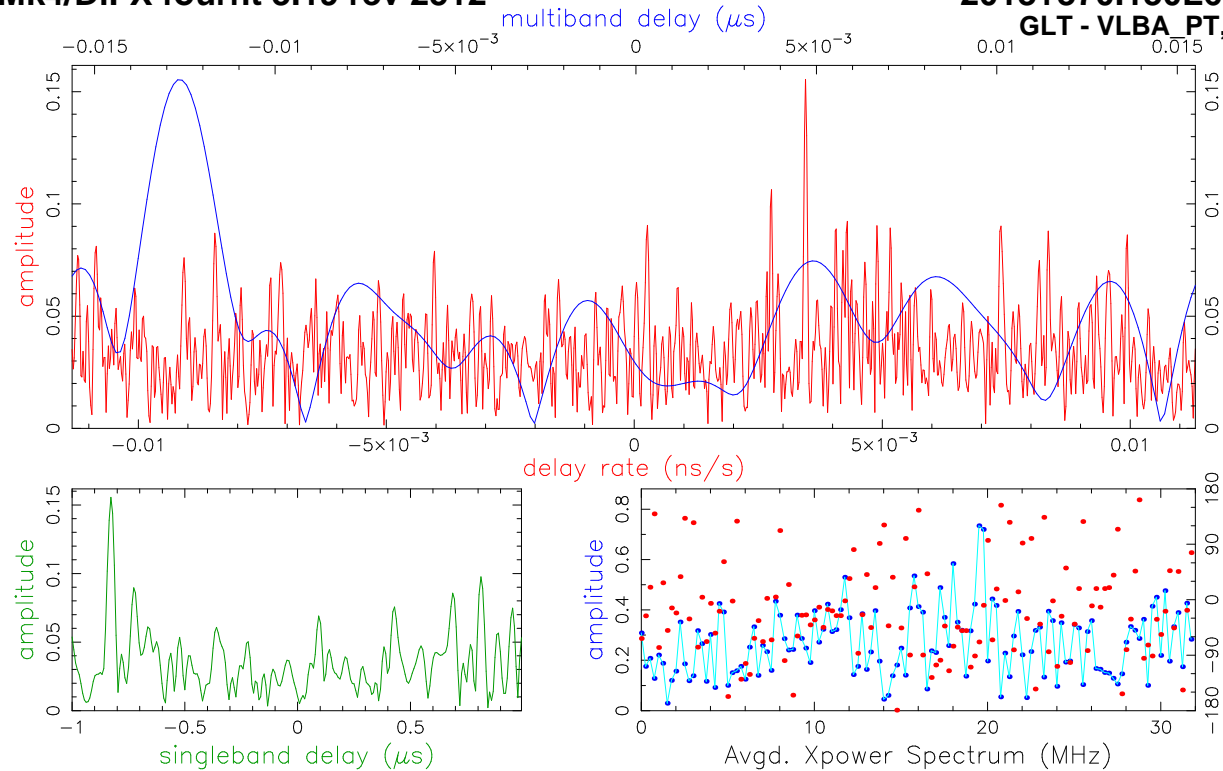
ph/frq (deg) 34.6 60.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 50.5 41.6 Inc. seg. avg. 0.199 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

59.4 72.7 Inc. frq. avg. 0.196 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 133.2 el 47.2 pa -12.3 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 5901.631 2825.832 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gp..130L6H Output file: /Exps/c192c/v2/1234/No0048/gp.W.178.130L6H

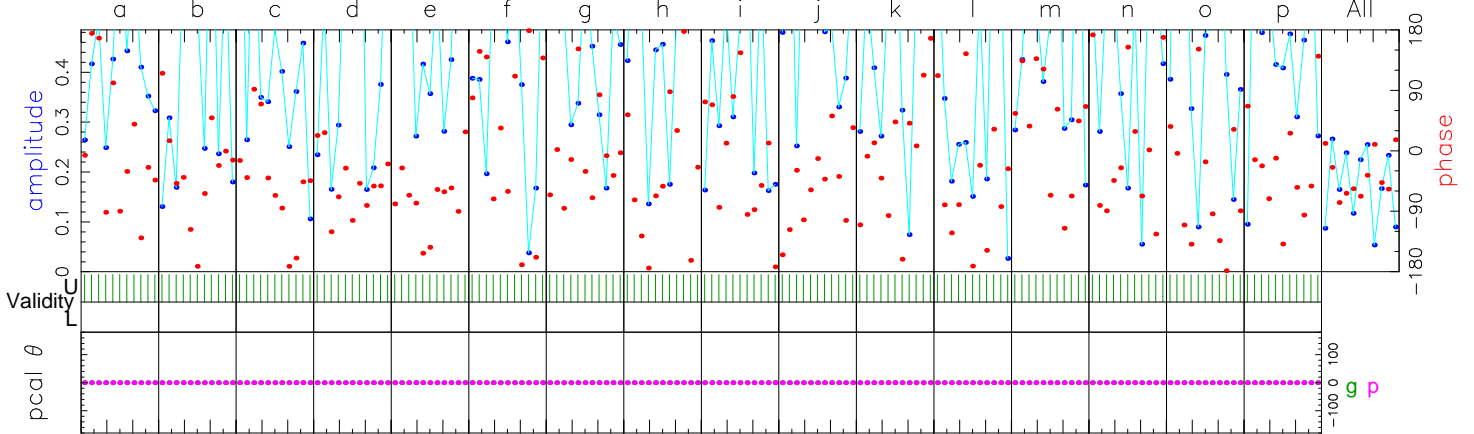


Fringe quality 0

SNR 5.7
Int time 179.699
Amp 0.162
Phase -45.1
PFD 7.6e-01
Delays (us)
SBD -0.827353
MBD -0.012646
Fringe rate (Hz) 0.297149
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

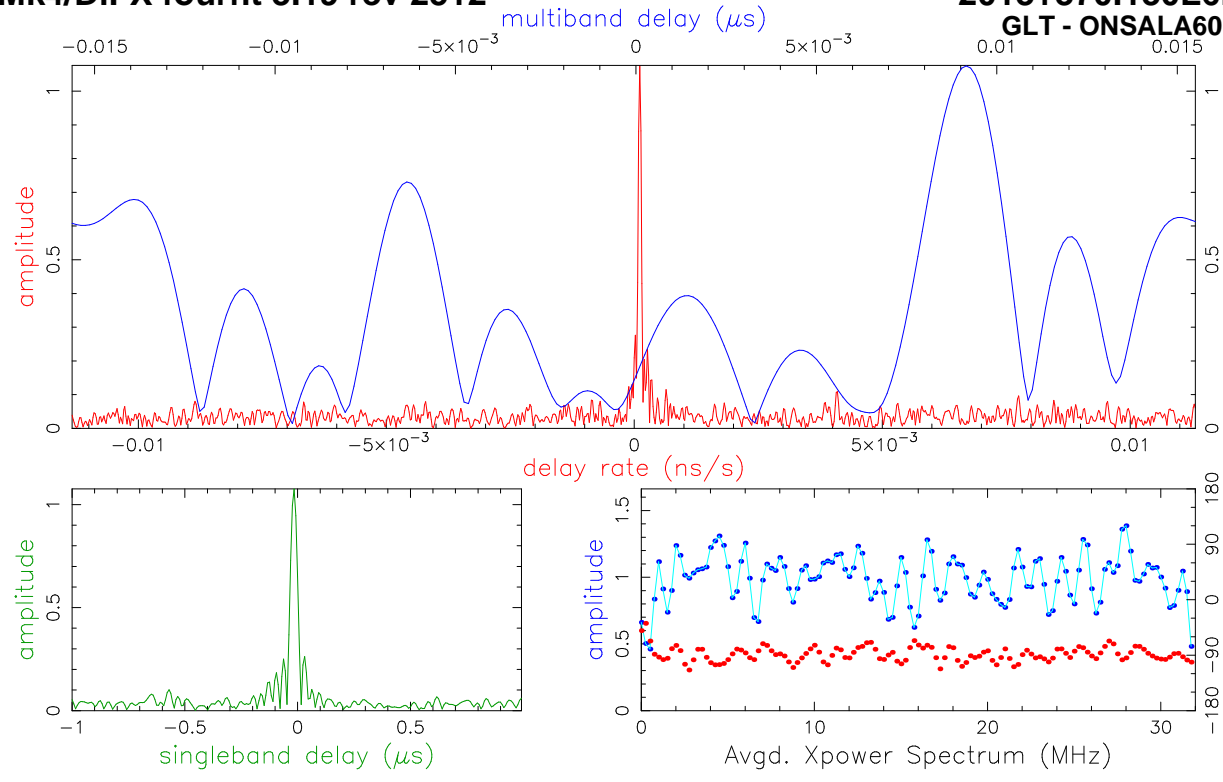
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050833
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-64.7	-30.8	-30.2	-41.8	-65.0	125.9	-34.4	-80.0	-27.2	-57.0	11.3	-42.1	62.2	-72.0	-82.9	-41.5	Phase	-45.1
	0.1	0.2	0.2	0.4	0.4	0.1	0.3	0.2	0.1	0.3	0.1	0.1	0.2	0.1	0.2	0.3	Ampl.	0.2
	101.8	79.7	165.9	23.1	22.3	18.6	221.2	114.3	70.4	29.3	217.8	54.3	253.7	255.6	40.8	117.8	Sbd box	23.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Tracks	
Group delay (usec)(sbd)	5.33909073476E+03		Apriori delay (usec)		5.33991588026E+03		Resid mbdelay (usec)		-1.26455E-02		+/-		1.9E-04					
Sband delay (usec)	5.33908852676E+03		Apriori clock (usec)		-1.0679354E+01		Resid sbdelay (usec)		-8.27353E-01		+/-		3.0E-03					
Phase delay (usec)	5.33991587881E+03		Apriori clockrate (us/s)		-1.2888659E-07		Resid phdelay (usec)		-1.45484E-06		+/-		6.5E-07					
Delay rate (us/s)	-8.19549162117E-01		Apriori rate (us/s)		-8.19552611719E-01		Resid rate (us/s)		3.44960E-06		+/-		6.2E-09					
Total phase (deg)	288.2		Apriori accel (us/s/s)		-4.78397846029E-07		Resid phase (deg)		-45.1		+/-		20.1					

ph/seg (deg) 33.7 Theor. 33.3 Amplitude 0.162 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.8 58.1 Search (1024X64) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.2 40.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 73.4 70.1 Inc. seg. avg. 0.153 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 p: az 62.4 el 28.6 pa -66.8 u,v (fr/asec) 5901.631 2825.832 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gp..130L6H Output file: /Exps/c192c/v2/1234/No0048/gp.W.197.130L6H simultaneous interpolator

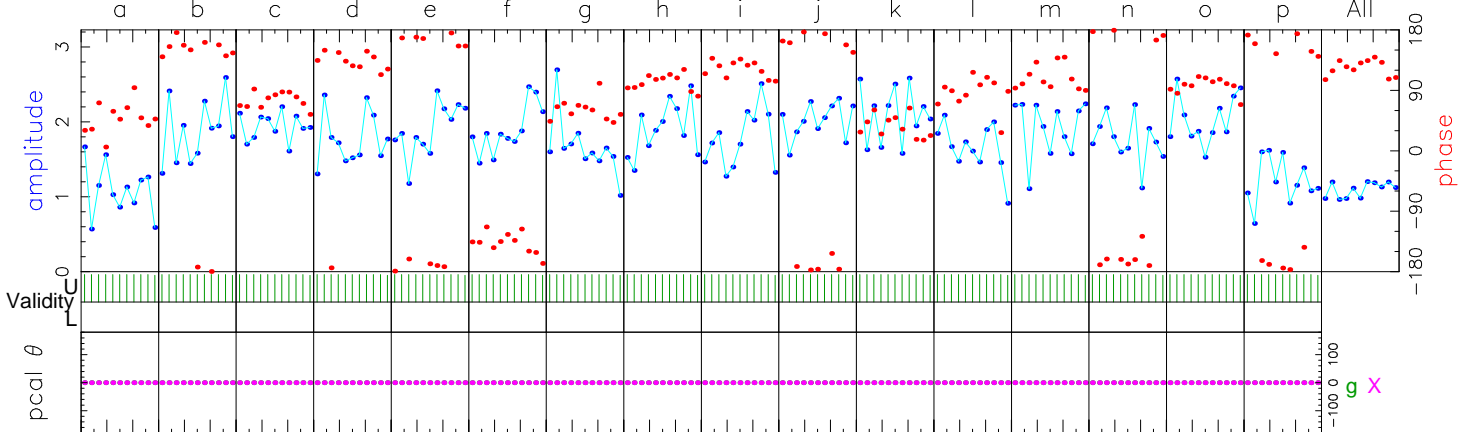


Fringe quality 7

SNR 39.5
Int time 179.736
Amp 1.076
Phase 123.4
PFD 0.0e+00
Delays (us)
SBD -0.016555
MBD 0.009150
Fringe rate (Hz) 0.008894
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050827
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	46.4	158.5	75.5	139.7	175.4	-137.9	61.4	102.8	122.2	175.6	37.6	88.3	108.9	-170.8	96.0	177.0		Phase 123.4					
	1.0	1.8	1.9	1.7	1.8	1.8	1.6	1.9	1.7	1.9	2.0	1.5	1.8	1.7	2.0	1.1		Ampl. 1.7					
	128.7	127.0	127.1	126.6	127.0	126.7	126.4	126.7	127.0	126.7	126.8	126.9	127.0	127.0	127.2	127.1		Sbd box 126.9					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	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)			-1.98364861141E+03															Apriori delay (usec)	-1.98362651162E+03	Resid mbdelay (usec)	9.15022E-03	+/-	2.7E-05
Sband delay (usec)			-1.98364306612E+03															Apriori clock (usec)	-3.1105976E+01	Resid sbdelay (usec)	-1.65545E-02	+/-	4.4E-04
Phase delay (usec)			-1.98362650765E+03															Apriori clockrate (us/s)	-4.5300002E-07	Resid phdelay (usec)	3.97818E-06	+/-	9.4E-08
Delay rate (us/s)			6.28705953762E-01															Apriori rate (us/s)	6.28705850516E-01	Resid rate (us/s)	1.03245E-07	+/-	9.0E-10
Total phase (deg)					-132.7													Apriori accel (us/s/s)	1.93057737586E-05	Resid phase (deg)	123.4	+/-	2.9

ph/seg (deg) 11.4 4.8
amp/seg (%) 9.1 8.4
ph/frq (deg) 57.3 5.8
amp/frq (%) 64.7 10.1

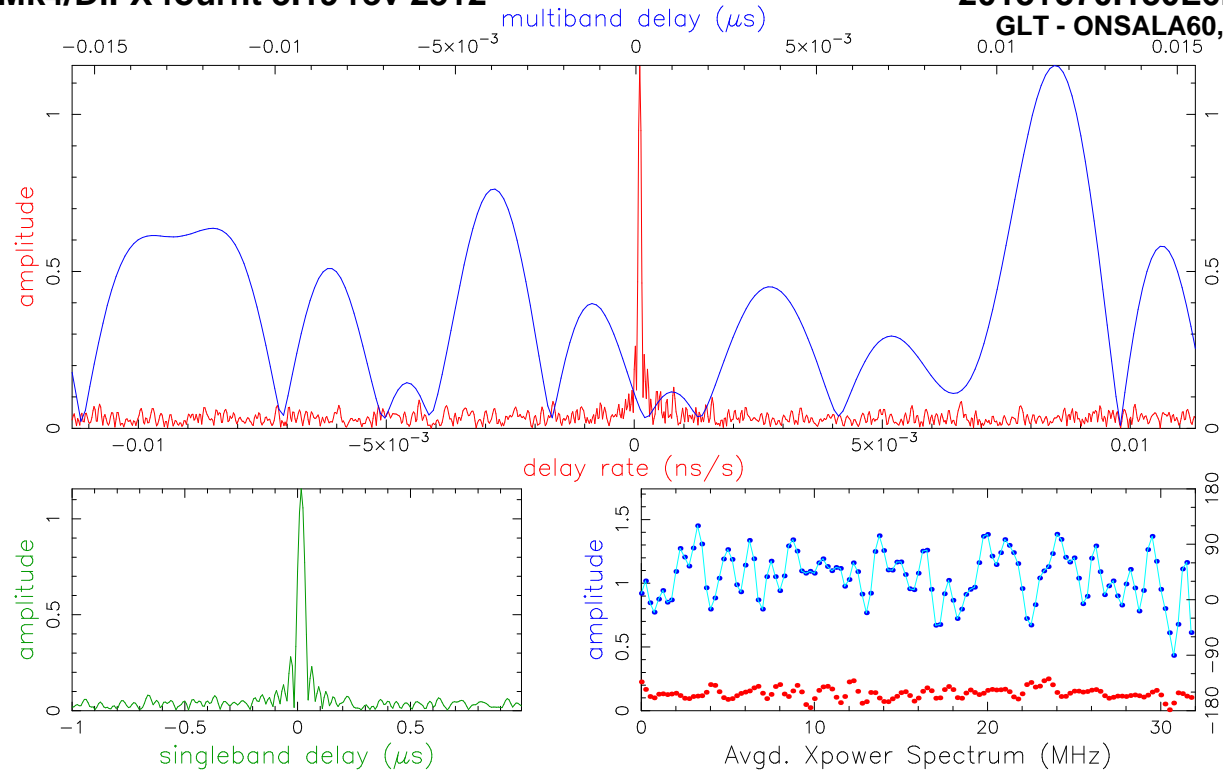
RMS Theor. Amplitude 1.076 +/- 0.027
Search (1024X64) 1.045
Interp. 0.000
Inc. seg. avg. 1.093
Inc. frq. avg. 1.706

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MSamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

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

g: az 133.2 el 47.2 pa -12.3 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) -4506.932 2101.339 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gX..130L6H Output file: /Exps/c192c/v2/1234/No0048/gX.W.157.130L6H

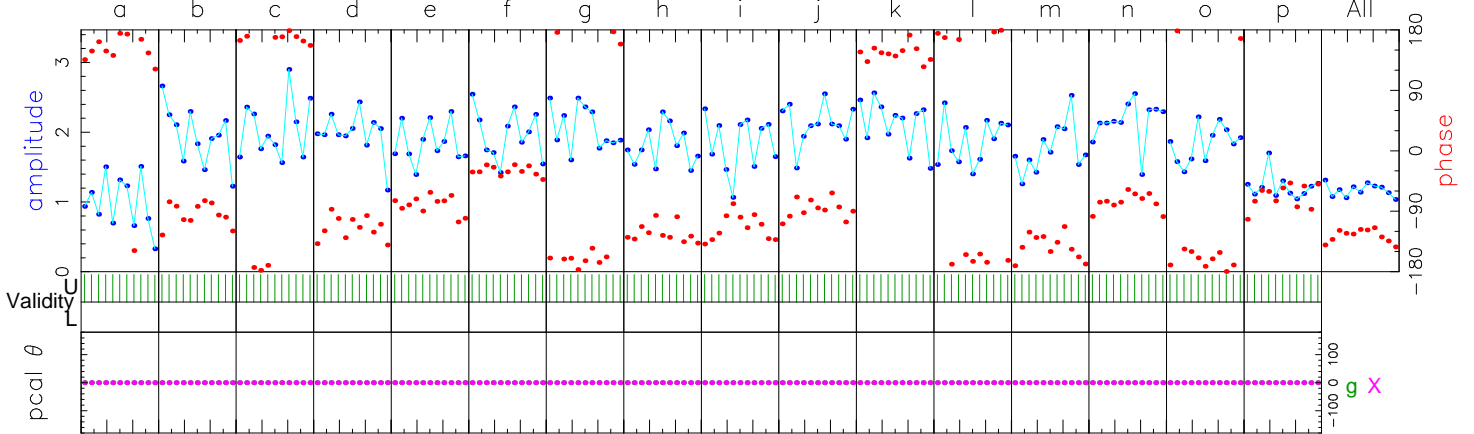


Fringe quality 5

SNR 42.4
Int time 179.720
Amp 1.156
Phase -126.3
PFD 0.0e+00
Delays (us)
SBD 0.016061
MBD 0.011624
Fringe rate (Hz) 0.008795
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212000.00
Stop 212300.23
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050830
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	Tracks
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	Tracks
Group delay (usec)(sbd)		-1.98361488735E+03																
Sband delay (usec)		-1.98361045062E+03																
Phase delay (usec)		-1.98362651570E+03																
Delay rate (us/s)		6.28705952612E-01																
Total phase (deg)					-22.4													
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)																		

ph/seg (deg) 9.2 4.5
amp/seg (%) 7.5 7.8
ph/frq (deg) 55.7 5.4
amp/frq (%) 61.5 9.4

RMS Theor. Amplitude 1.156 +/- 0.027
Search (1024X64) 1.116
Interp. 0.000
Inc. seg. avg. 1.167
Inc. frq. avg. 1.789

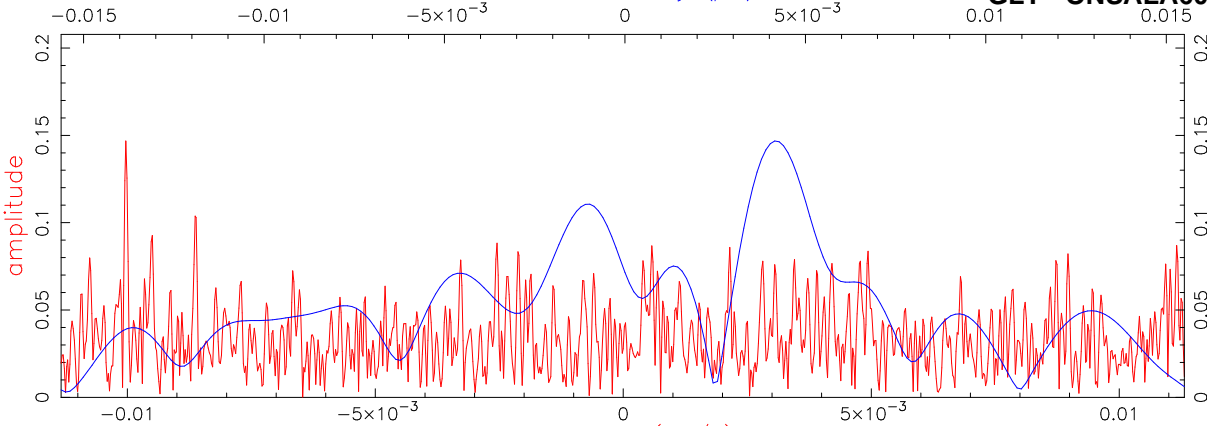
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MSamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

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

g: az 133.2 el 47.2 pa -12.3 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) -4506.932 2101.339 simultaneous interpolator

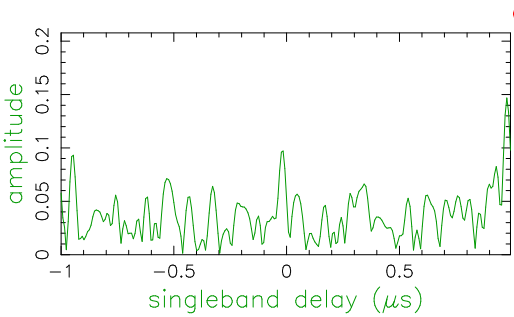
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gX..130L6H Output file: /Exps/c192c/v2/1234/No0048/gX.W.174.130L6H

multiband delay (μs)

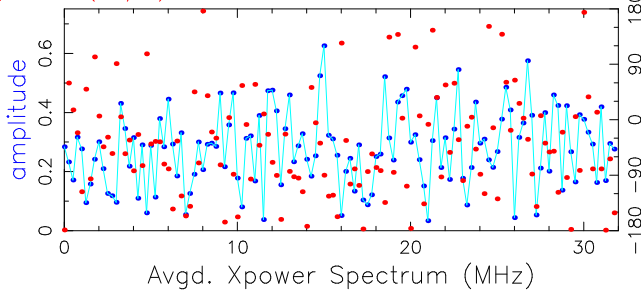


Fringe quality 0

SNR 5.4
 Int time 179.736
 Amp 0.208
 Phase 137.3
 PFD 1.0e+00
 Delays (us)
 SBD 0.976857
 MBD 0.004183
 Fringe rate (Hz)
 -0.866198
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

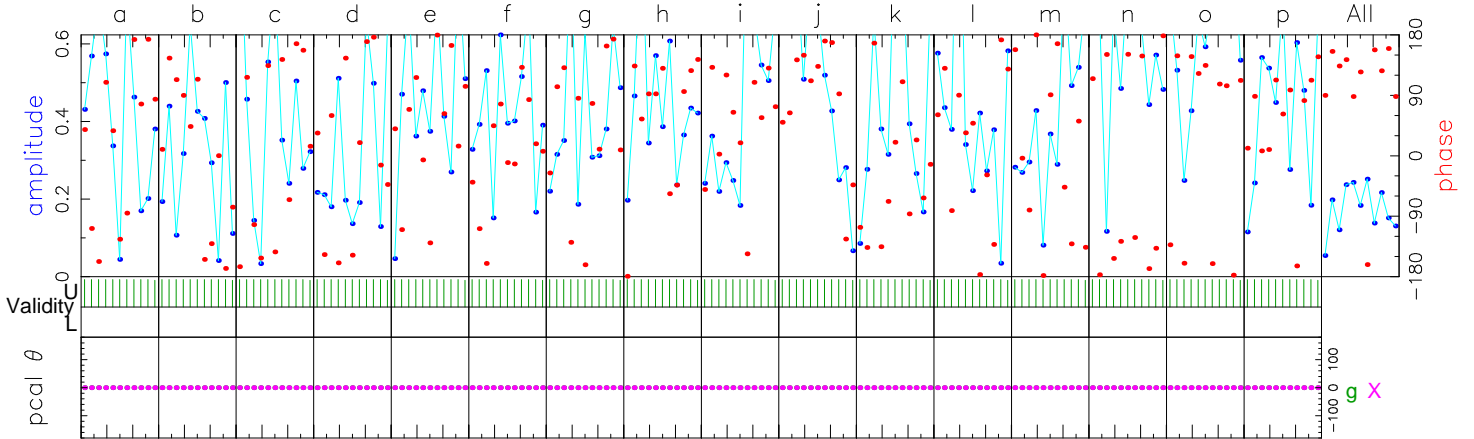


delay rate (ns/s)



Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050832
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

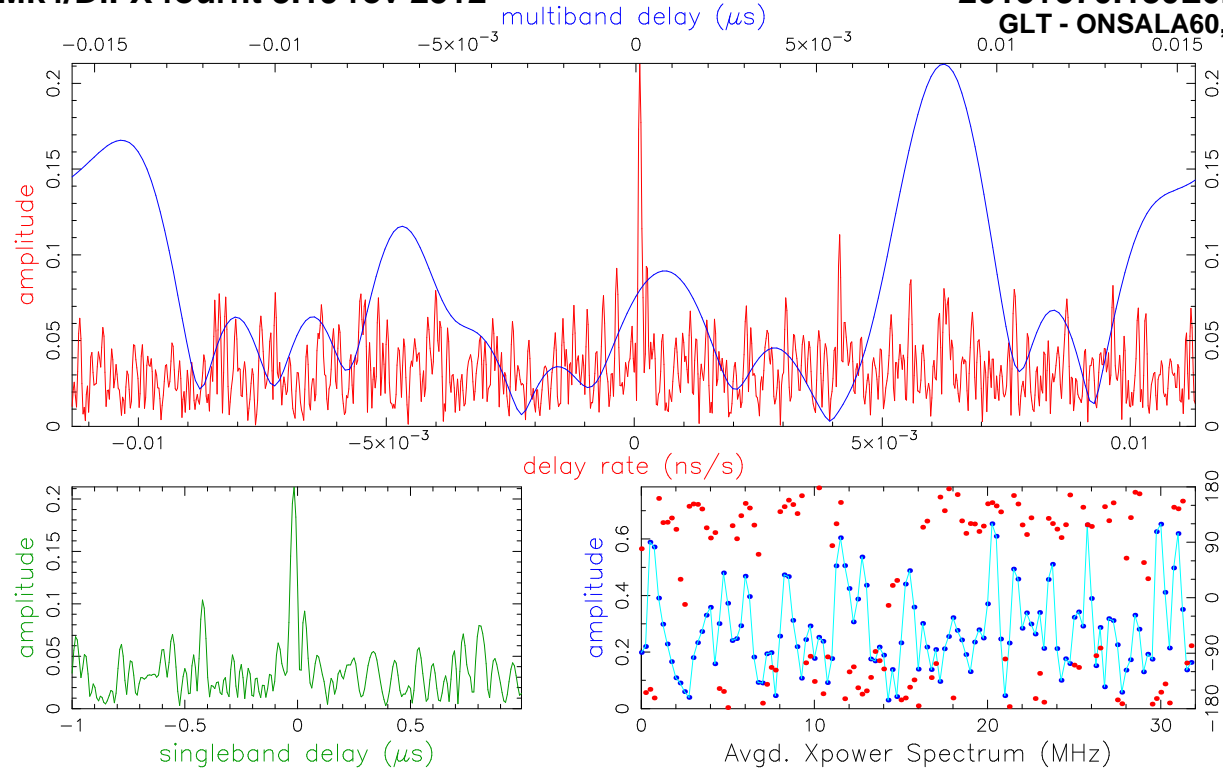


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	177.5	134.0	175.5	-168.1	86.1	47.1	164.0	98.3	105.9	123.5	-15.4	99.5	-131.5	-173.7	151.2	85.5	Phase	137.3				
	0.1	0.2	0.4	0.1	0.2	0.2	0.2	0.3	0.3	0.5	0.1	0.3	0.1	0.6	0.7	0.3	Ampl.	0.2				
	177.3	84.0	224.3	27.7	196.9	228.0	61.9	174.5	243.1	126.5	189.9	60.6	199.0	253.7	254.3	54.9	Sbd box	254.0				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
g	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)			-1.98265357867E+03														Apriori delay (usec)	-1.98362651162E+03	Resid mbdelay (usec)	4.18296E-03	+/-	2.0E-04
Sband delay (usec)			-1.98264965462E+03														Apriori clock (usec)	-3.1105976E+01	Resid sbdelay (usec)	9.76857E-01	+/-	3.2E-03
Phase delay (usec)			-1.98362650720E+03														Apriori clockrate (us/s)	-4.5300002E-07	Resid phdelay (usec)	4.42793E-06	+/-	6.9E-07
Delay rate (us/s)			6.28695794818E-01														Apriori rate (us/s)	6.28705850516E-01	Resid rate (us/s)	-1.00557E-05	+/-	6.6E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.93057737586E-05	Resid phase (deg)	137.3	+/-	21.3

	RMS	Theor.	Amplitude	0.208 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	33.4	35.3	Search (1024X64)	0.143	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	44.5	61.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg)	64.7	42.6	Inc. seg. avg.	0.209	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	92.1	74.3	Inc. frq. avg.	0.225	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128 t_cohere infinite	

g: az 133.2 el 47.2 pa -12.3 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) -4506.932 2101.339 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gX..130L6H Output file: /Exps/c192c/v2/1234/No0048/gX.W.188.130L6H

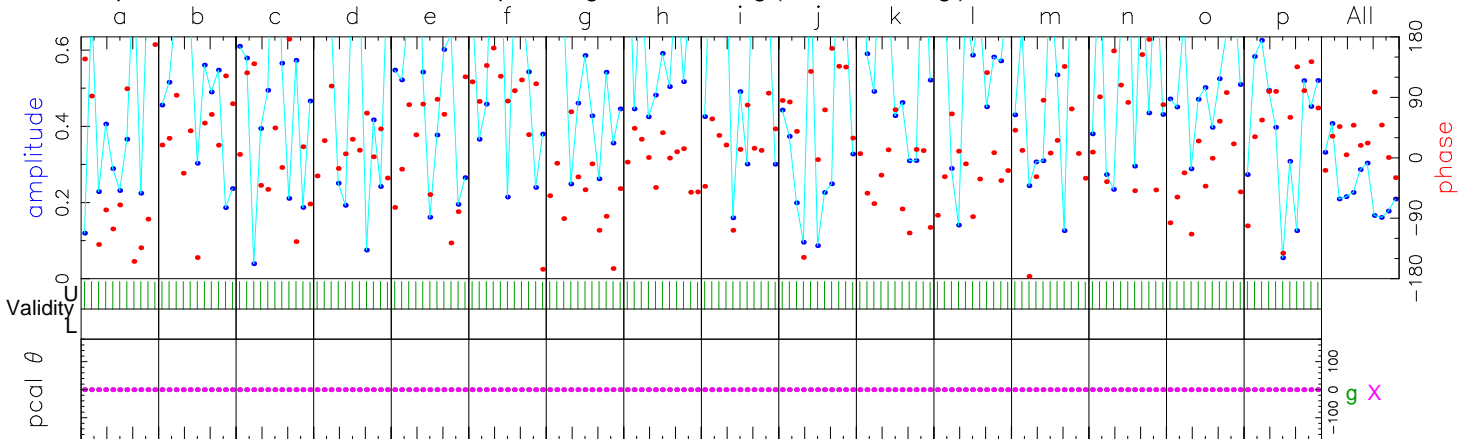


Fringe quality 9

SNR 7.8
 Int time 179.720
 Amp 0.212
 Phase 21.2
 PFD 1.4e-06
 Delays (us)
 SBD -0.016733
 MBD 0.008495
 Fringe rate (Hz)
 0.008798
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050836
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-148.2	42.9	-4.7	11.3	40.6	118.9	-51.7	-5.0	31.5	113.7	-20.8	-27.7	22.7	91.3	-10.1	83.2	Phase	21.2
	0.2	0.3	0.2	0.4	0.2	0.5	0.4	0.6	0.5	0.3	0.4	0.4	0.4	0.2	0.3	0.3	Ampl.	0.3
	148.1	127.1	52.1	127.3	148.7	126.6	127.1	126.3	126.8	126.0	126.3	127.9	126.4	128.9	92.1	30.7	Sbd box	126.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	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	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

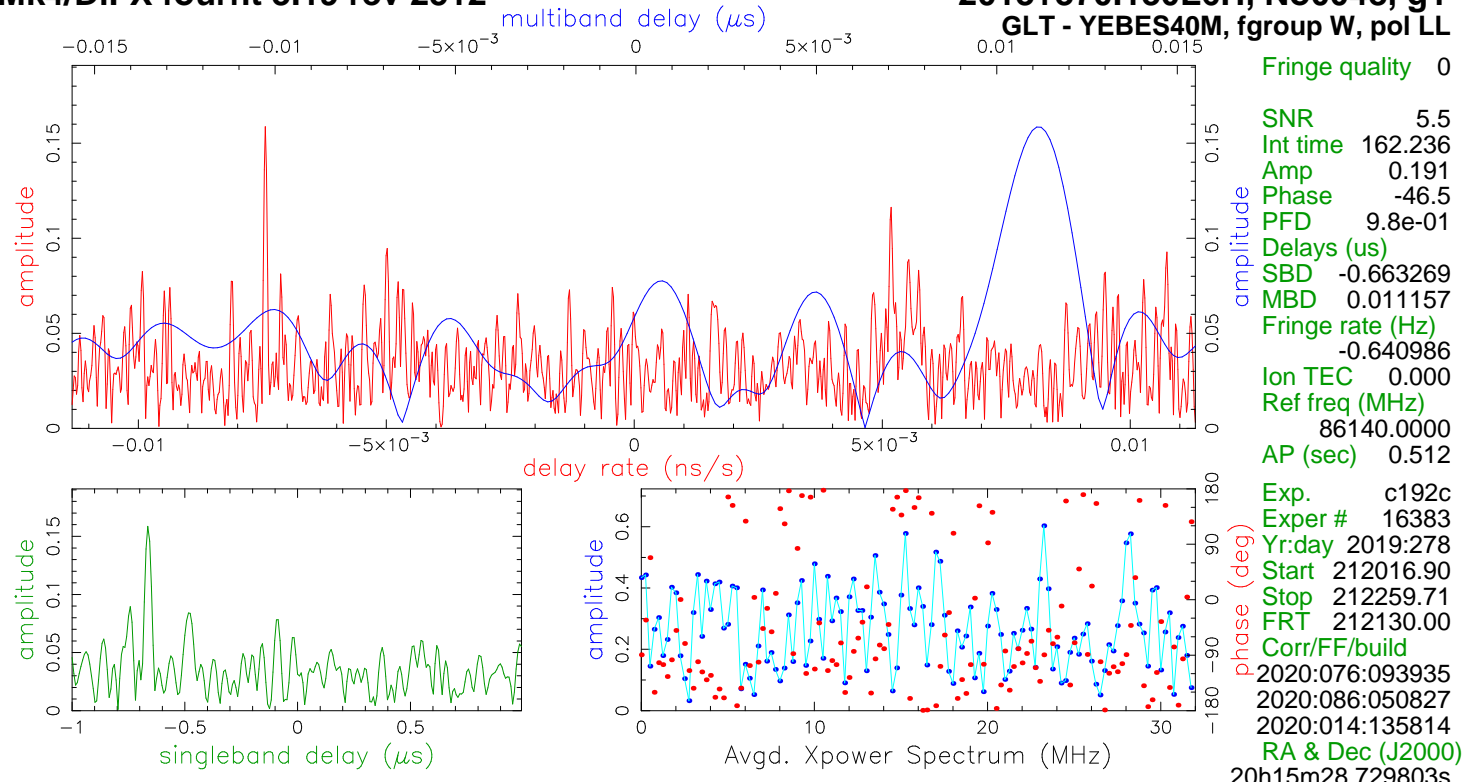
Group delay (usec)(sbd) -1.98364926653E+03 Apriori delay (usec) -1.98362651162E+03 Resid mbdelay (usec) 8.49509E-03 +/- 1.4E-04
 Sband delay (usec) -1.98364324512E+03 Apriori clock (usec) -3.1105976E+01 Resid sbdelay (usec) -1.67335E-02 +/- 2.2E-03
 Phase delay (usec) -1.98362651094E+03 Apriori clockrate (us/s) -4.5300002E-07 Resid phdelay (usec) 6.83782E-07 +/- 4.8E-07
 Delay rate (us/s) 6.28705952658E-01 Apriori rate (us/s) 6.28705850516E-01 Resid rate (us/s) 1.02141E-07 +/- 4.6E-09
 Total phase (deg) -234.9 Apriori accel (us/s/s) 1.93057737586E-05 Resid phase (deg) 21.2 +/- 14.8

RMS Theor. Amplitude 0.212 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.3 24.5 Search (1024X64) 0.205 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 38.5 42.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 69.9 29.5 Inc. seg. avg. 0.224 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 84.0 51.6 Inc. frq. avg. 0.309 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

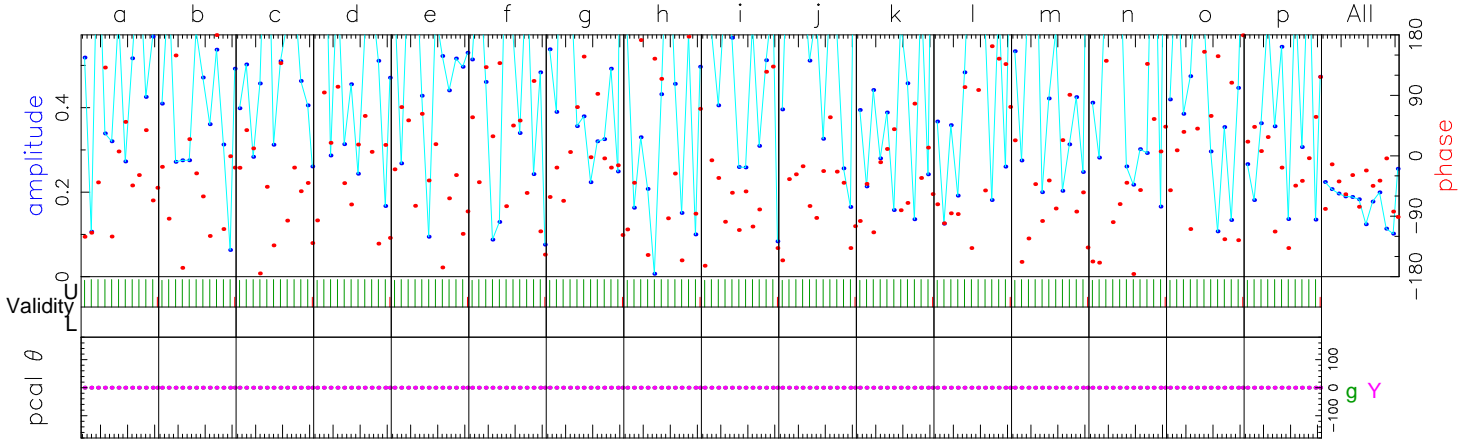
g: az 133.2 el 47.2 pa -12.3 X: az 252.2 el 55.9 pa 40.0 u,v (fr/asec) -4506.932 2101.339 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gX..130L6H Output file: /Exps/c192c/v2/1234/No0048/gX.W.218.130L6H

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gY
GLT - YEBES40M, fgroup W, pol LL



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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-38.7	-82.4	-46.5	29.2	-26.4	-22.5	-30.8	-126.9	-107.2	-40.0	-49.4	-178.2	-67.3	-93.0	14.7	-8.8	Phase	-46.5				
	0.4	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.5	0.3	0.1	0.3	0.0	0.1	0.3	Ampl.	0.2				
	38.0	156.7	136.7	230.8	49.6	200.1	204.9	190.6	126.6	116.4	61.9	199.1	108.3	21.3	32.2	70.5	Sbd box	44.1				
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.17866883986E+03														Apriori delay (usec)	-4.17799249672E+03	Resid mbdelay (usec)	1.11569E-02	+/-	2.0E-04
Sband delay (usec)			-4.17865576522E+03														Apriori clock (usec)	-8.3773756E+00	Resid sbdelay (usec)	-6.63269E-01	+/-	3.1E-03
Phase delay (usec)			-4.17799249822E+03														Apriori clockrate (us/s)	-1.4500001E-07	Resid phdelay (usec)	-1.49870E-06	+/-	6.7E-07
Delay rate (us/s)			6.12036711227E-01														Apriori rate (us/s)	6.12044152443E-01	Resid rate (us/s)	-7.44122E-06	+/-	7.1E-09
Total phase (deg)																	Apriori accel (us/s/s)	4.42654108615E-05	Resid phase (deg)	-46.5	+/-	20.7

ph/seg (deg) 26.7 35.9 Theor. Amplitude 0.191 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 28.0 62.6 Search (1024X64) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 55.8 41.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

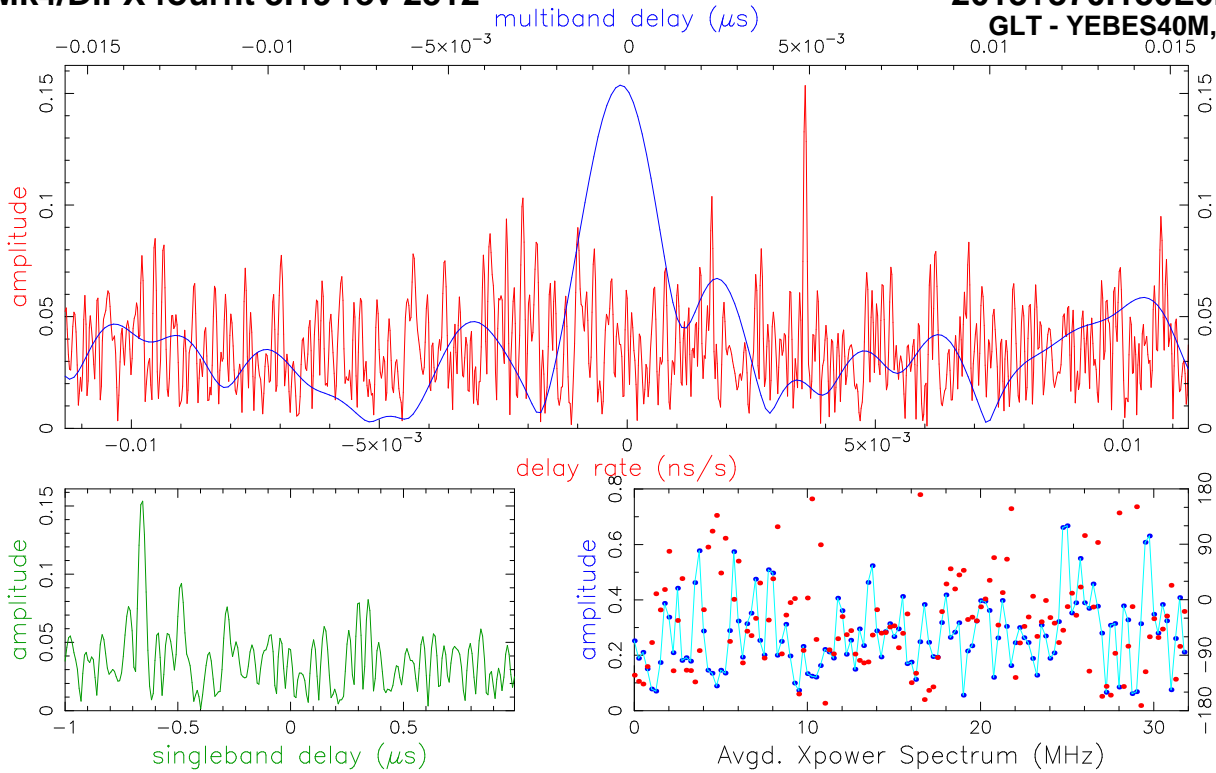
amp/frq (%) 67.4 72.3 Inc. seg. avg. 0.177 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

g: az 133.2 el 47.2 pa -12.3 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) -4365.528 4951.571 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gY..130L6H Output file: /Exps/c192c/v2/1234/No0048/gY.W.158.130L6H simultaneous interpolator

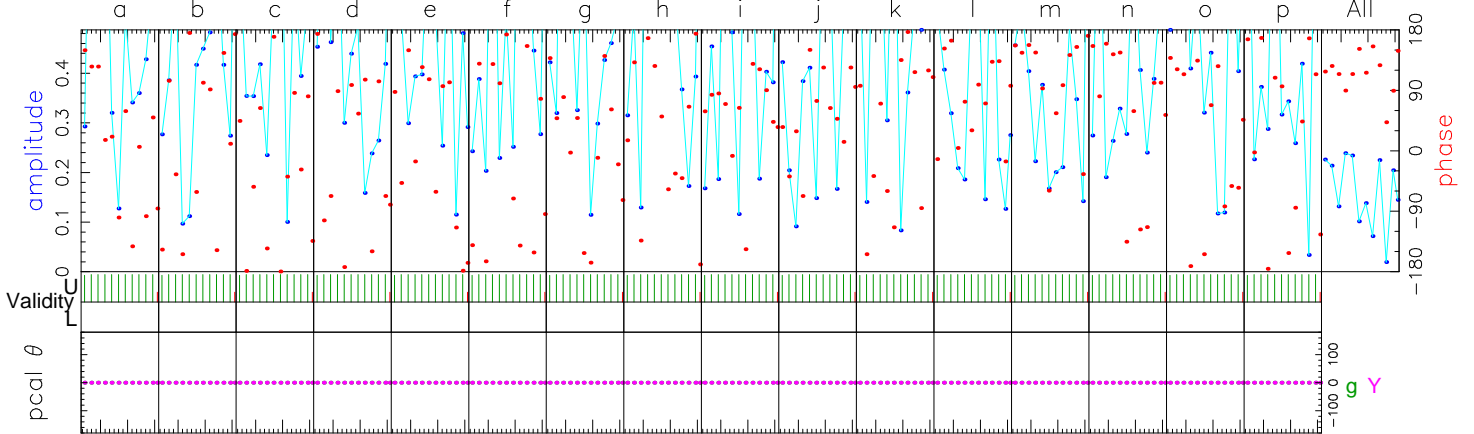
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gY
GLT - YEBES40M, fgroup W, pol RR



Fringe quality 0
SNR 5.4
Int time 162.222
Amp 0.163
Phase 115.8
PFD 1.0e+00
Delays (us)
SBD -0.659425
MBD -0.000273
Fringe rate (Hz) 0.309218
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212016.90
Stop 212259.71
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050830
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
80.4	157.2	125.0	-157.0	105.2	173.8	62.5	124.1	81.7	81.0	130.0	91.1	140.2	109.1	127.9	137.7	137.7	Phase	115.8
0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2
243.8	253.7	68.5	218.2	63.9	194.9	111.0	17.1	172.6	211.8	236.4	167.8	194.7	120.3	59.2	146.3	146.3	Sbd box	44.6
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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	

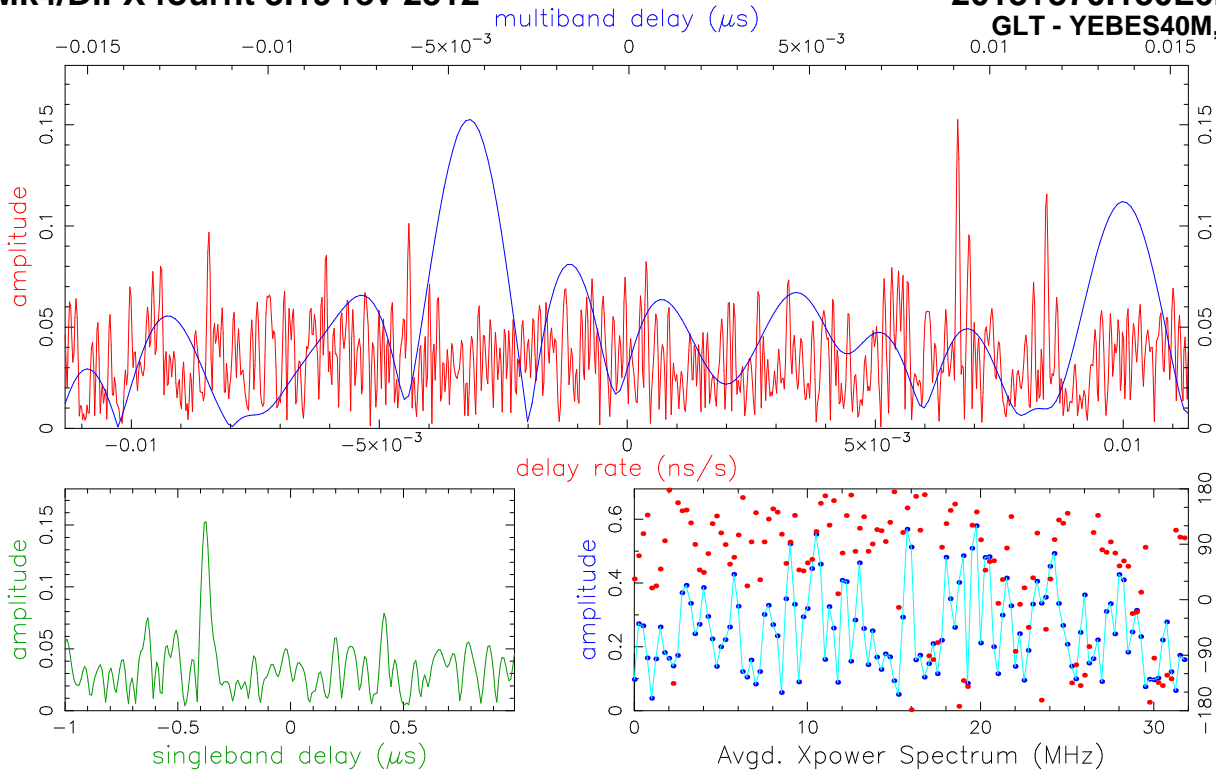
Group delay (usec)(sbd) -4.17864901976E+03 Apriori delay (usec) -4.17799249672E+03 Resid mbdelay (usec) -2.73033E-04 +/- 2.0E-04
 Sband delay (usec) -4.17865192222E+03 Apriori clock (usec) -8.3773756E+00 Resid sbdelay (usec) -6.59425E-01 +/- 3.2E-03
 Phase delay (usec) -4.17799249299E+03 Apriori clockrate (us/s) -1.4500001E-07 Resid phdelay (usec) 3.73449E-06 +/- 6.8E-07
 Delay rate (us/s) 6.12047742158E-01 Apriori rate (us/s) 6.12044152443E-01 Resid rate (us/s) 3.58972E-06 +/- 7.2E-09
 Total phase (deg) -124.6 Apriori accel (us/s/s) 4.42654108615E-05 Resid phase (deg) 115.8 +/- 21.1

RMS Theor. Amplitude 0.163 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 30.0 36.6 Search (1024X64) 0.153 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.9 63.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 39.2 42.2 Inc. seg. avg. 0.142 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 49.3 73.7 Inc. frq. avg. 0.152 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 133.2 el 47.2 pa -12.3 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) -4365.528 4951.571 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gY..130L6H Output file: /Exps/c192c/v2/1234/No0048/gY.W.175.130L6H

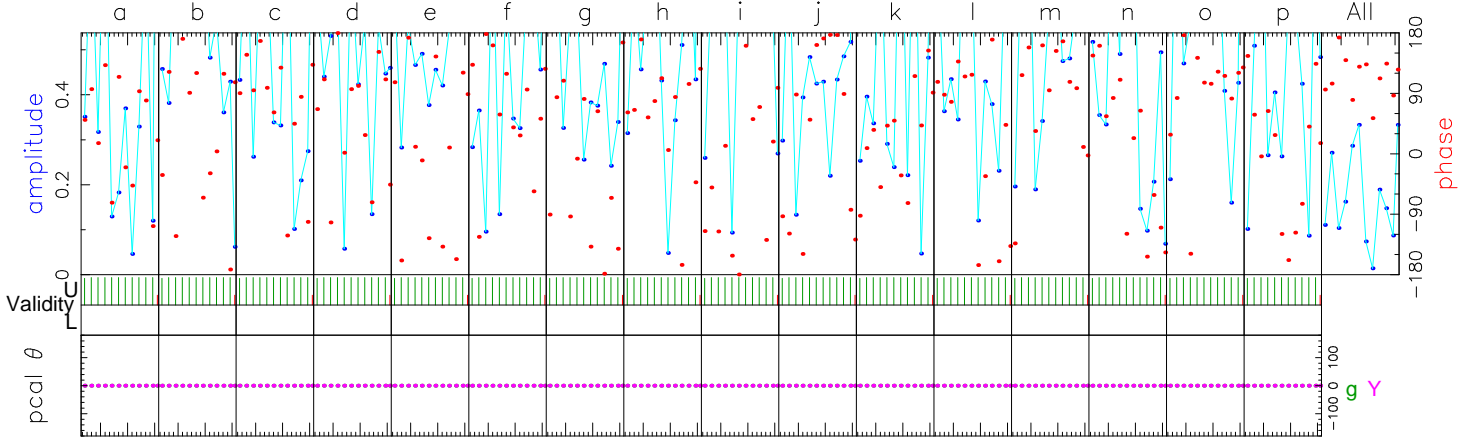
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gY
GLT - YEBES40M, fgroup W, pol LR



Fringe quality 0
SNR 5.4
Int time 162.236
Amp 0.179
Phase 115.6
PFD 1.0e+00
Delays (us)
SBD -0.378688
MBD -0.004446
Fringe rate (Hz) 0.574391
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212016.90
Stop 212259.71
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050833
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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

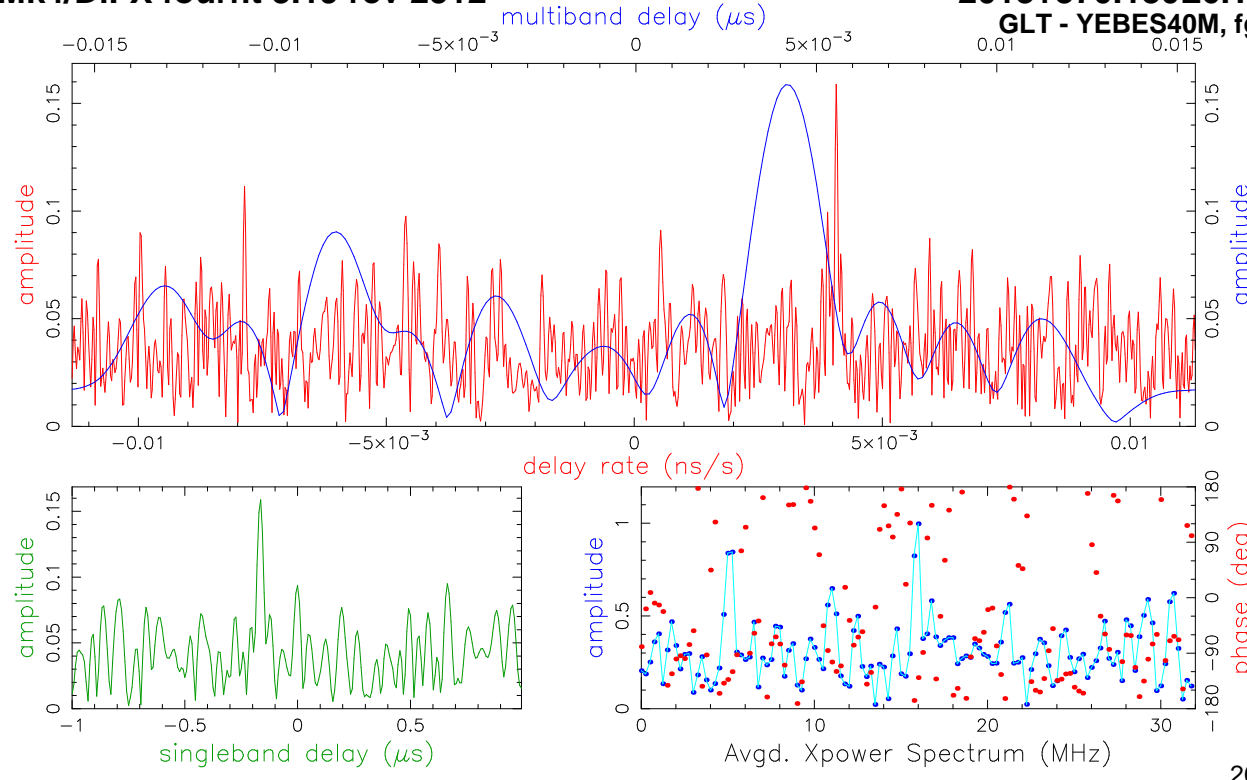


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
74.9	151.5	136.8	107.7	152.0	104.7	-148.4	92.9	-97.8	-157.8	19.6	114.4	116.6	117.3	121.3	20.0	20.0	Phase	115.6
0.3	0.1	0.3	0.2	0.2	0.2	0.0	0.4	0.0	0.2	0.2	0.3	0.4	0.1	0.5	0.0	0.0	Ampl.	0.2
212.2	95.8	74.6	234.1	63.4	222.0	230.5	255.6	180.3	241.9	244.0	249.1	69.0	34.0	80.5	89.1	89.1	Sbd box	80.5
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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	

Group delay (usec)(sbd) -4.17837194276E+03 Apriori delay (usec) -4.17799249672E+03 Resid mbdelay (usec) -4.44604E-03 +/- 2.0E-04
 Sband delay (usec) -4.17837118422E+03 Apriori clock (usec) -8.3773756E+00 Resid sbdelay (usec) -3.78688E-01 +/- 3.2E-03
 Phase delay (usec) -4.17799249299E+03 Apriori clockrate (us/s) -1.4500001E-07 Resid phdelay (usec) 3.72858E-06 +/- 6.9E-07
 Delay rate (us/s) 6.12050820548E-01 Apriori rate (us/s) 6.12044152443E-01 Resid rate (us/s) 6.66811E-06 +/- 7.3E-09
 Total phase (deg) -124.8 Apriori accel (us/s/s) 4.42654108615E-05 Resid phase (deg) 115.6 +/- 21.2

RMS Theor. Amplitude 0.179 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 31.6 36.8 Search (1024X64) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 63.8 64.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 66.5 42.5 Inc. seg. avg. 0.161 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 80.6 74.2 Inc. frq. avg. 0.177 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 133.2 el 47.2 pa -12.3 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) -4365.528 4951.571 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gY..130L6H Output file: /Exps/c192c/v2/1234/No0048/gY.W.193.130L6H

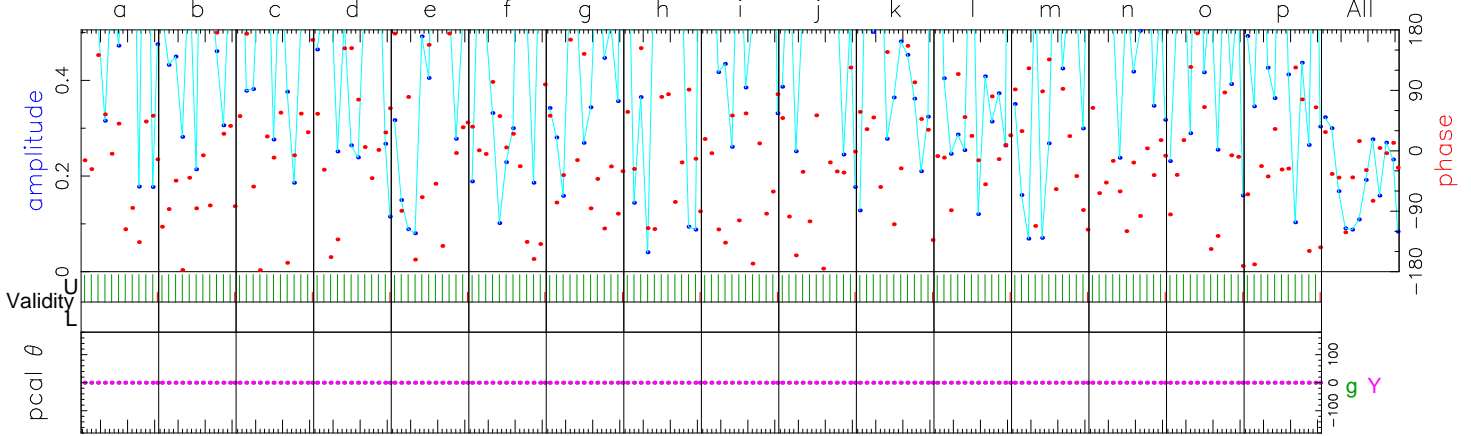


Fringe quality 0

SNR 5.6
Int time 162.222
Amp 0.169
Phase -18.3
PFD 9.6e-01
Delays (us)
SBD -0.165869
MBD 0.004185
Fringe rate (Hz) 0.350862
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 212016.90
Stop 212259.71
FRT 212130.00
Corr/FF/build 2020:076:093935
2020:086:050835
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

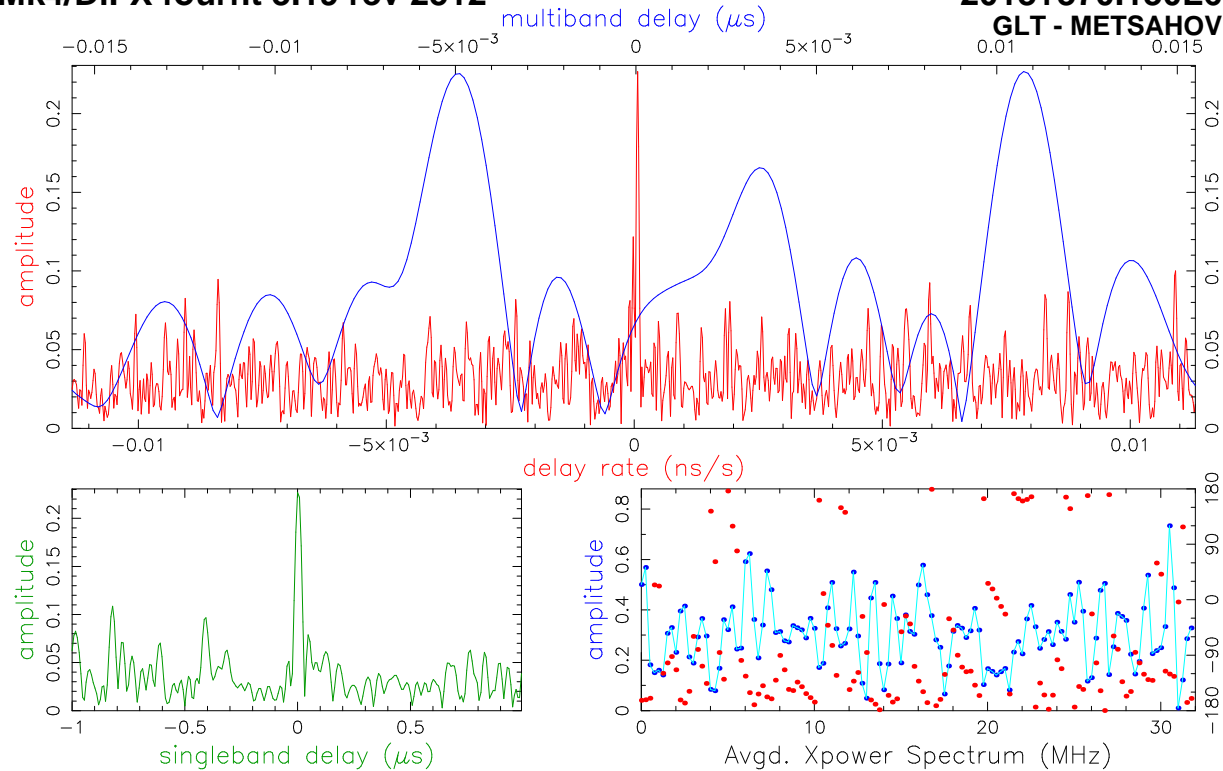
Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g: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		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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

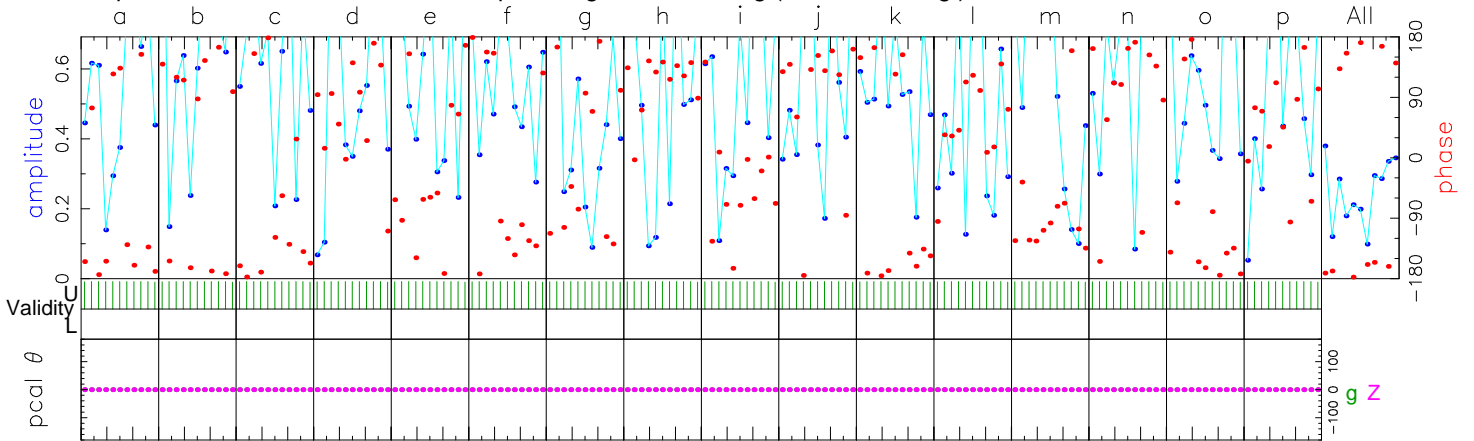
Group delay (usec)(sbd) -4.17814456136E+03 Apriori delay (usec) -4.17799249672E+03 Resid mbdelay (usec) 4.18536E-03 +/- 1.9E-04
 Sband delay (usec) -4.17815836572E+03 Apriori clock (usec) -8.3773756E+00 Resid sbdelay (usec) -1.65869E-01 +/- 3.1E-03
 Phase delay (usec) -4.17799249731E+03 Apriori clockrate (us/s) -1.4500001E-07 Resid phdelay (usec) -5.90436E-07 +/- 6.6E-07
 Delay rate (us/s) 6.120448225597E-01 Apriori rate (us/s) 6.12044152443E-01 Resid rate (us/s) 4.07315E-06 +/- 7.1E-09
 Total phase (deg) -258.7 Apriori accel (us/s/s) 4.42654108615E-05 Resid phase (deg) -18.3 +/- 20.6

ph/seg (deg) 41.8 RMS 35.7 Theor. Amplitude 0.169 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.5 62.2 Search (1024X64) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.2 41.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.2 71.9 Inc. seg. avg. 0.174 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 Y: az 270.0 el 68.7 pa 72.6 u,v (fr/asec) -4365.528 4951.571 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gY..130L6H Output file: /Exps/c192c/v2/1234/No0048/gY.W.211.130L6H simultaneous interpolator



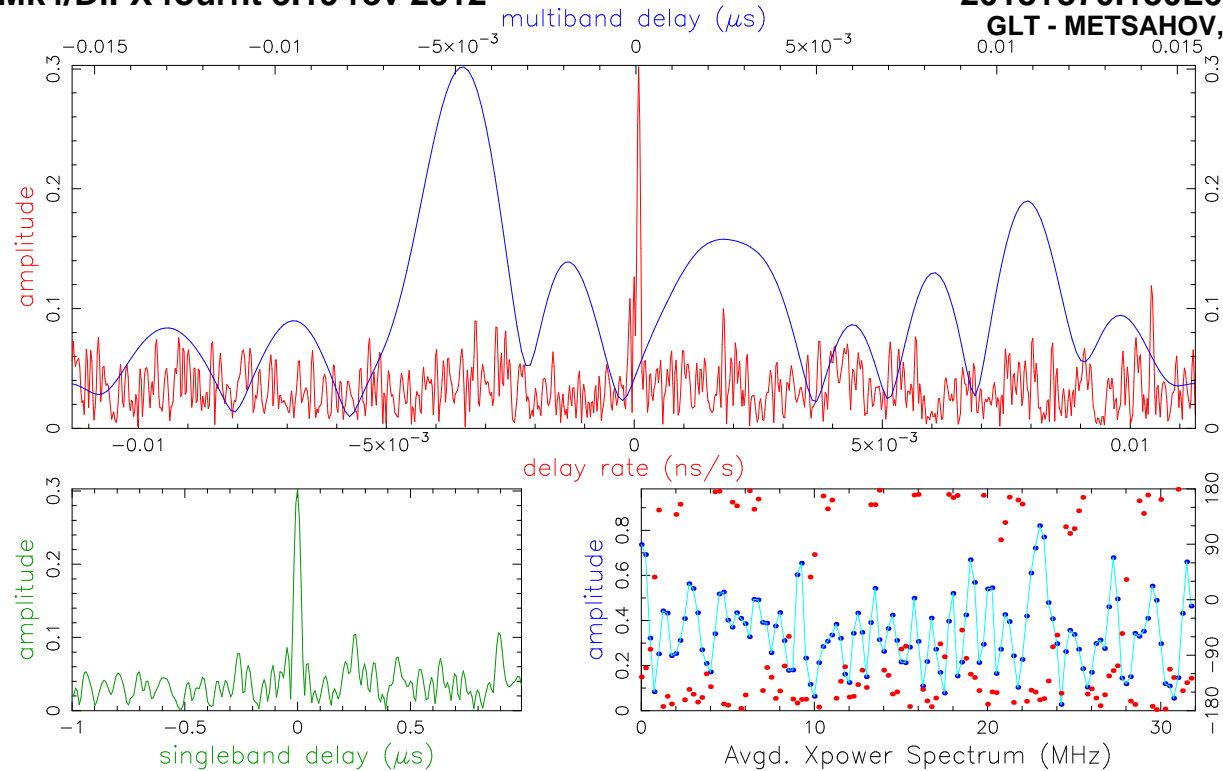
Fringe quality 9
 SNR 8.5
 Int time 179.676
 Amp 0.231
 Phase 174.3
 PFD 5.1e-09
 Delays (us)
 SBD 0.003110
 MBD 0.010770
 Fringe rate (Hz) 0.006054
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build 2020:076:093935
 2020:086:050827
 2020:014:135814
 RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g: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		
Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-3.77161763466E+02																
Sband delay (usec)		-3.77169423865E+02																
Phase delay (usec)		-3.77172528243E+02																
Delay rate (us/s)		6.81604243975E-01																
Total phase (deg)				150.2														
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)																		

ph/seg (deg) 23.5
 amp/seg (%) 39.2
 ph/frq (deg) 67.5
 amp/frq (%) 84.5
 g: az 133.2 el 47.2 pa -12.3
 Z: az 261.3 el 49.0 pa 38.0
 u,v (fr/asec) -4895.522 1318.738
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/gZ.W.155.130L6H

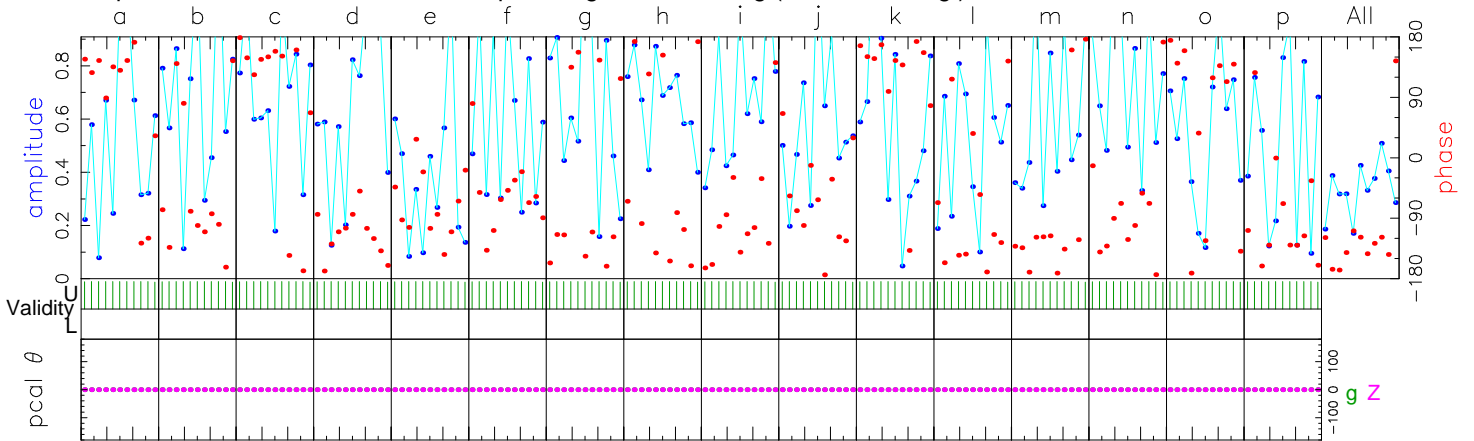


Fringe quality 9

SNR 11.1
 Int time 179.661
 Amp 0.303
 Phase -140.8
 PFD 2.8e-20
 Delays (us)
 SBD -0.001516
 MBD -0.004808
 Fringe rate (Hz)
 0.007378
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

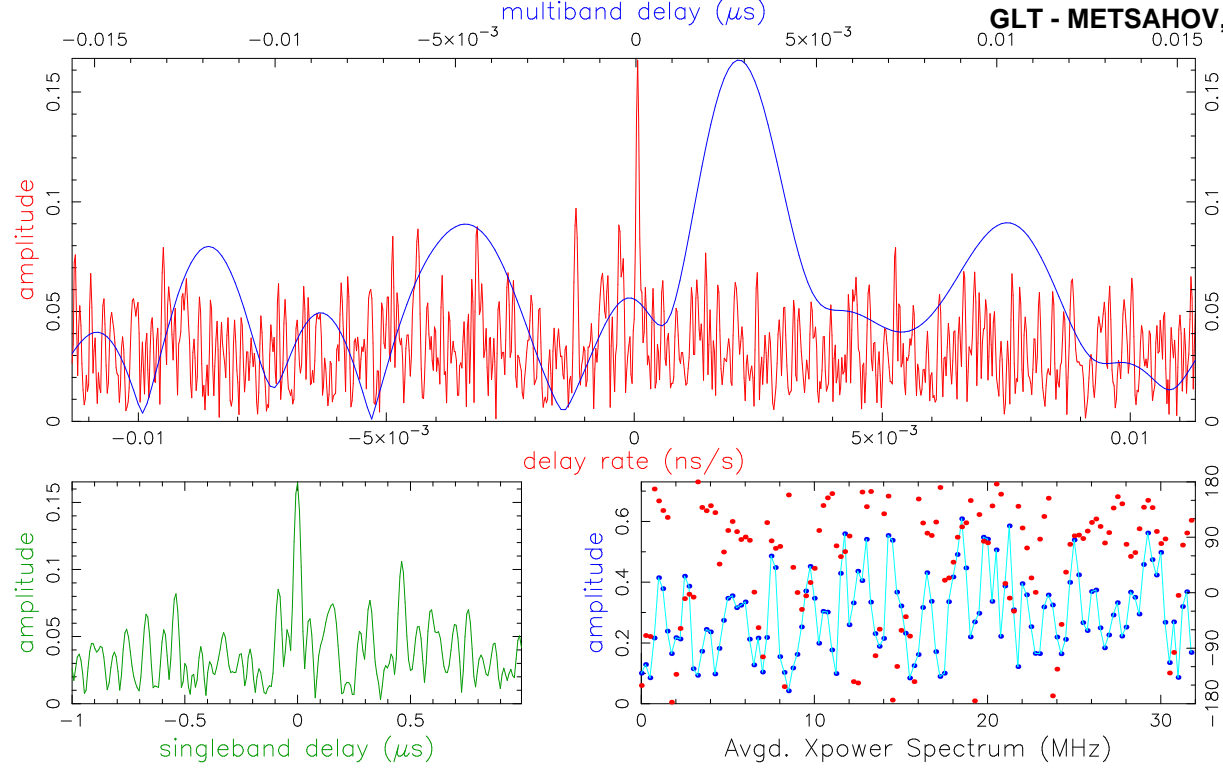
Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050829
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	135.5	-119.8	153.0	-111.1	-88.9	-62.9	-149.2	-142.6	-119.4	-69.1	147.8	-153.7	-142.4	-96.3	146.9	-130.3	Phase	-140.8				
	0.4	0.4	0.6	0.6	0.3	0.5	0.5	0.4	0.5	0.3	0.5	0.4	0.5	0.5	0.5	0.3	Ampl.	0.4				
	129.4	129.4	128.5	129.1	30.0	128.3	128.9	128.5	129.0	38.7	129.6	128.6	128.9	129.4	129.2	128.9	Sbd box	128.8				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g: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					
g: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					
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.77177342291E+02														Apriori delay (usec)	-3.77172533865E+02	Resid mbdelay (usec)	-4.80843E-03	+/-	9.7E-05
Sband delay (usec)			-3.77174049365E+02														Apriori clock (usec)	1.1196480E+00	Resid sbdelay (usec)	-1.51550E-03	+/-	1.6E-03
Phase delay (usec)			-3.77172538407E+02														Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-4.54198E-06	+/-	3.3E-07
Delay rate (us/s)			6.81604259354E-01														Apriori rate (us/s)	6.81604173698E-01	Resid rate (us/s)	8.56561E-08	+/-	3.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	9.18692184784E-06	Resid phase (deg)	-140.8	+/-	10.3

ph/seg (deg) RMS Theor. Amplitude 0.303 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 33.5 29.5 17.1 Search (1024X64) 0.300 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.3 20.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.3 36.0 Inc. seg. avg. 0.324 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -4895.522 1318.738 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/gZ.W.167.130L6H simultaneous interpolator

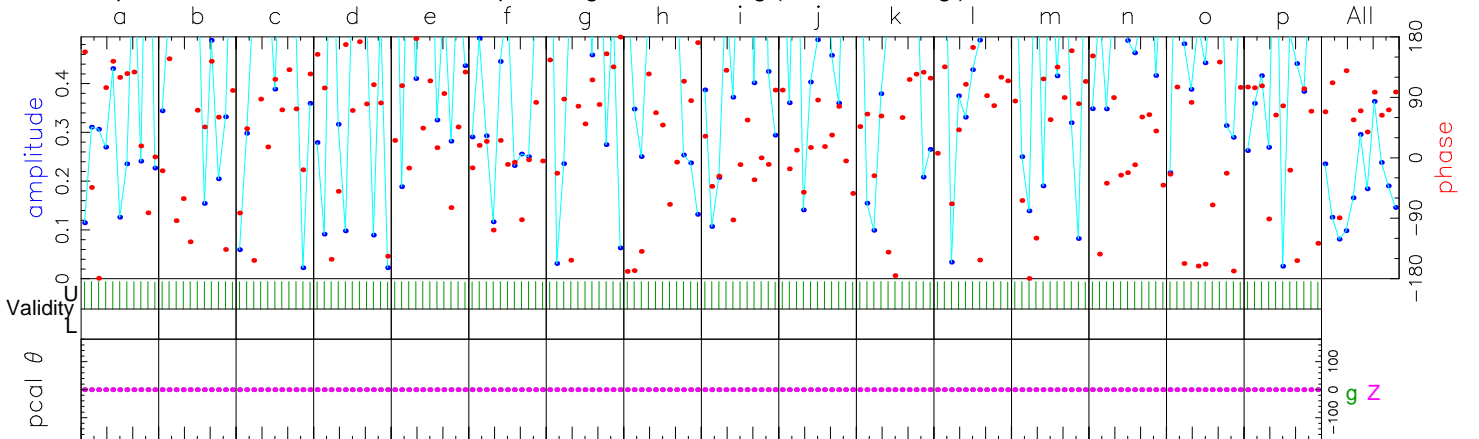


Fringe quality 0

SNR 6.1
 Int time 179.676
 Amp 0.165
 Phase 76.6
 PFD 1.6e-01
 Delays (us)
 SBD -0.001809
 MBD 0.002812
 Fringe rate (Hz) 0.006285
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build 2020:076:093935
 2020:086:050832
 2020:014:135814
 RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



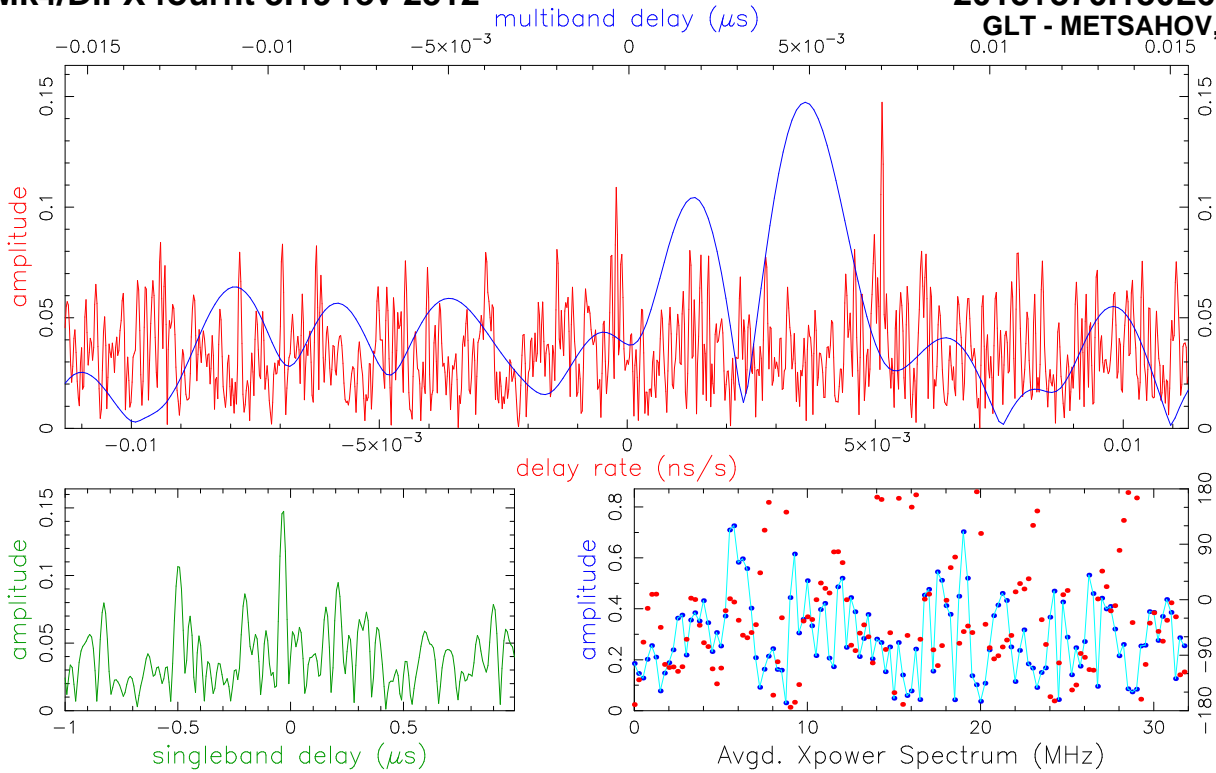
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g: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		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	-3.77169722216E+02			Apriori delay (usec)			-3.77172533865E+02			Resid mbdelay (usec)			2.81165E-03			+/-	1.8E-04	
Sband delay (usec)	-3.77174342365E+02			Apriori clock (usec)			1.1196480E+00			Resid sbdelay (usec)			-1.80850E-03			+/-	2.8E-03	
Phase delay (usec)	-3.77172531393E+02			Apriori clockrate (us/s)			5.8707190E-08			Resid phdelay (usec)			2.47167E-06			+/-	6.1E-07	
Delay rate (us/s)	6.81604246664E-01			Apriori rate (us/s)			6.81604173698E-01			Resid rate (us/s)			7.29658E-08			+/-	5.9E-09	
Total phase (deg)	52.5			Apriori accel (us/s/s)			9.18692184784E-06			Resid phase (deg)			76.6			+/-	18.9	

ph/seg (deg) 56.1 31.4 Search (1024X64) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.0 54.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.9 37.8 Inc. seg. avg. 0.168 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 77.7 66.0 Inc. frq. avg. 0.197 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 133.2 el 47.2 pa -12.3 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -4895.522 1318.738 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/gZ.W.184.130L6H

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130L6H, No0048, gZ

GLT - METSAHOV, fgroup W, pol RL

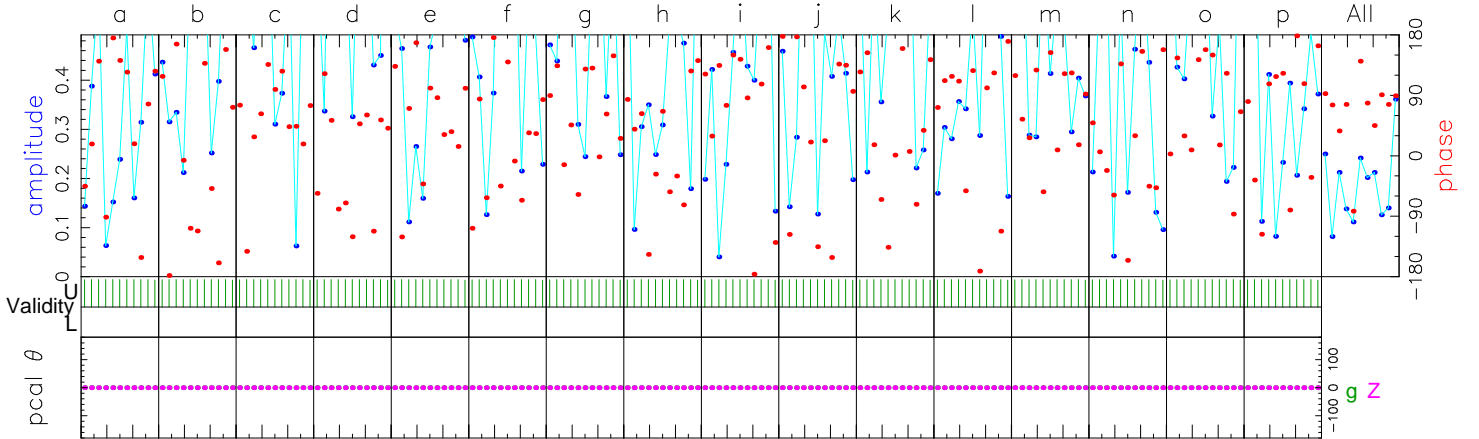


Fringe quality 0

SNR 5.5
 Int time 179.661
 Amp 0.164
 Phase 80.6
 PFD 9.8e-01
 Delays (us)
 SBD -0.034708
 MBD 0.004886
 Fringe rate (Hz)
 0.442495
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 212000.00
 Stop 212300.23
 FRT 212130.00
 Corr/FF/build
 2020:076:093935
 2020:086:050834
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
115.8	169.4	74.9	23.0	64.8	5.6	61.3	48.2	130.3	117.5	58.3	127.7	74.3	25.2	70.9	58.2	58.2	Phase	80.6
0.2	0.2	0.4	0.4	0.3	0.2	0.3	0.1	0.3	0.2	0.1	0.3	0.3	0.1	0.2	0.1	0.1	Ampl.	0.2
149.6	21.3	125.9	123.4	156.8	35.0	130.1	23.3	122.9	197.2	185.5	238.5	15.3	249.4	87.9	138.9	138.9	Sbd box	124.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g: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	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) -3.77198897909E+02 Apriori delay (usec) -3.77172533865E+02 Resid mbdelay (usec) 4.88596E-03 +/- 2.0E-04
 Sband delay (usec) -3.77207241365E+02 Apriori clock (usec) 1.1196480E+00 Resid sbdelay (usec) -3.47075E-02 +/- 3.1E-03
 Phase delay (usec) -3.77172531267E+02 Apriori clockrate (us/s) 5.8707190E-08 Resid phdelay (usec) 2.59770E-06 +/- 6.7E-07
 Delay rate (us/s) 6.81609310630E-01 Apriori rate (us/s) 6.81604173698E-01 Resid rate (us/s) 5.13693E-06 +/- 6.4E-09
 Total phase (deg) 56.4 Apriori accel (us/s/s) 9.18692184784E-06 Resid phase (deg) 80.6 +/- 20.8

RMS Theor. Amplitude 0.164 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 55.5 34.4 Search (1024X64) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 56.3 60.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 46.3 41.5 Inc. seg. avg. 0.174 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 66.3 72.5 Inc. frq. avg. 0.170 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 133.2 el 47.2 pa -12.3 Z: az 261.3 el 49.0 pa 38.0 u,v (fr/asec) -4895.522 1318.738 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0048/gZ..130L6H Output file: /Exps/c192c/v2/1234/No0048/gZ.W.203.130L6H