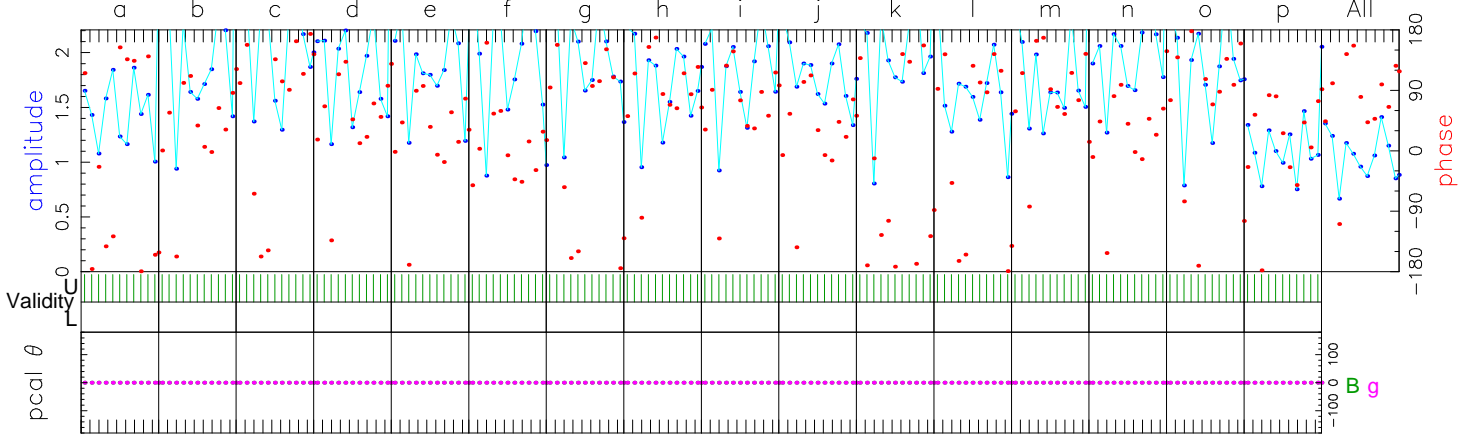


Fringe quality 1

SNR 44.1
Int time 479.367
Amp 0.736
Phase 90.8
PFD 0.0e+00
Delays (us)
SBD -0.000677
MBD 0.003873
Fringe rate (Hz) 0.010241
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

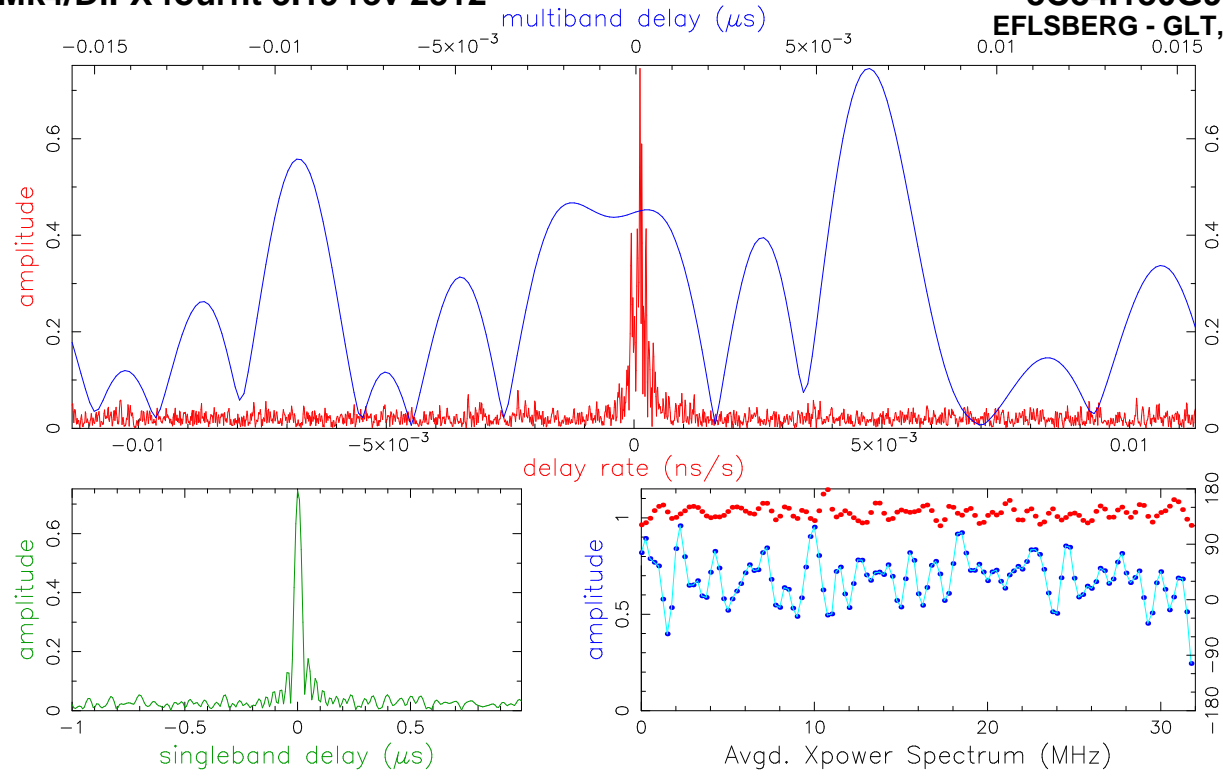
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:086:112252
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
UL	170.4	49.7	150.0	64.7	39.5	-1.6	144.0	104.3	82.0	39.4	-173.1	134.4	102.9	39.5	126.9	33.2	Phase	90.8				
B	1.0	1.3	1.4	1.2	1.3	1.4	1.3	1.2	1.3	1.1	1.4	1.1	1.2	1.4	1.3	0.7	Ampl.	1.2				
B:g	128.1	128.4	128.6	129.0	129.0	129.0	129.1	128.9	129.0	129.2	129.0	128.9	128.5	128.8	128.2	128.2	Sbd box	128.9				
B:g	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	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					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
g	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	Tracks					
Group delay (usec)(sbd)			-8.86808547218E+03														Apriori delay (usec)	-8.86808934485E+03	Resid mbdelay (usec)	3.87267E-03	+/-	2.4E-05
Sband delay (usec)			-8.86809002135E+03														Apriori clock (usec)	1.5508819E+01	Resid sbdelay (usec)	-6.76500E-04	+/-	3.9E-04
Phase delay (usec)			-8.86808934192E+03														Apriori clockrate (us/s)	-2.7499999E-07	Resid phdelay (usec)	2.92962E-06	+/-	8.4E-08
Delay rate (us/s)			-5.70626661070E-01														Apriori rate (us/s)	-5.70626779953E-01	Resid rate (us/s)	1.18883E-07	+/-	3.0E-10
Total phase (deg)				31.3													Apriori accel (us/s/s)	3.21640226458E-05	Resid phase (deg)	90.8	+/-	2.6

ph/seg (deg) 61.3 4.5 Search (2048X64) 0.710 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.3 7.9 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 5.2 Inc. seg. avg. 1.071 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 71.1 9.1 Inc. frq. avg. 1.218 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 308.6 el 22.7 pa 41.3 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) 4424.967 864.759 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bg.W.20.130G9L

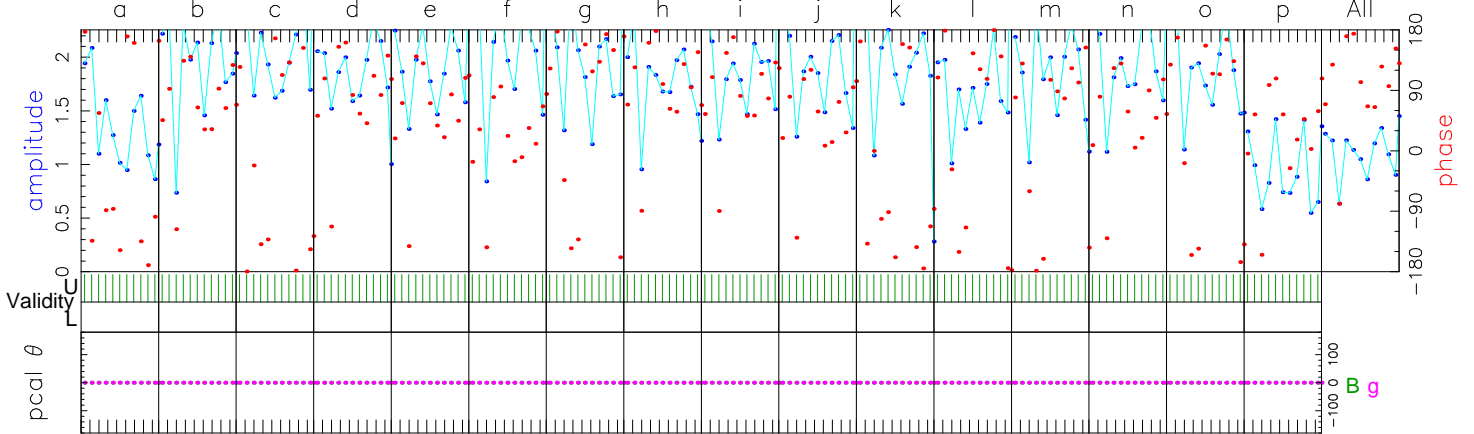


Fringe quality 1

SNR 45.0
Int time 479.271
Amp 0.752
Phase 116.0
PFD 0.0e+00
Delays (us)
SBD 0.002234
MBD 0.006458
Fringe rate (Hz) 0.010235
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

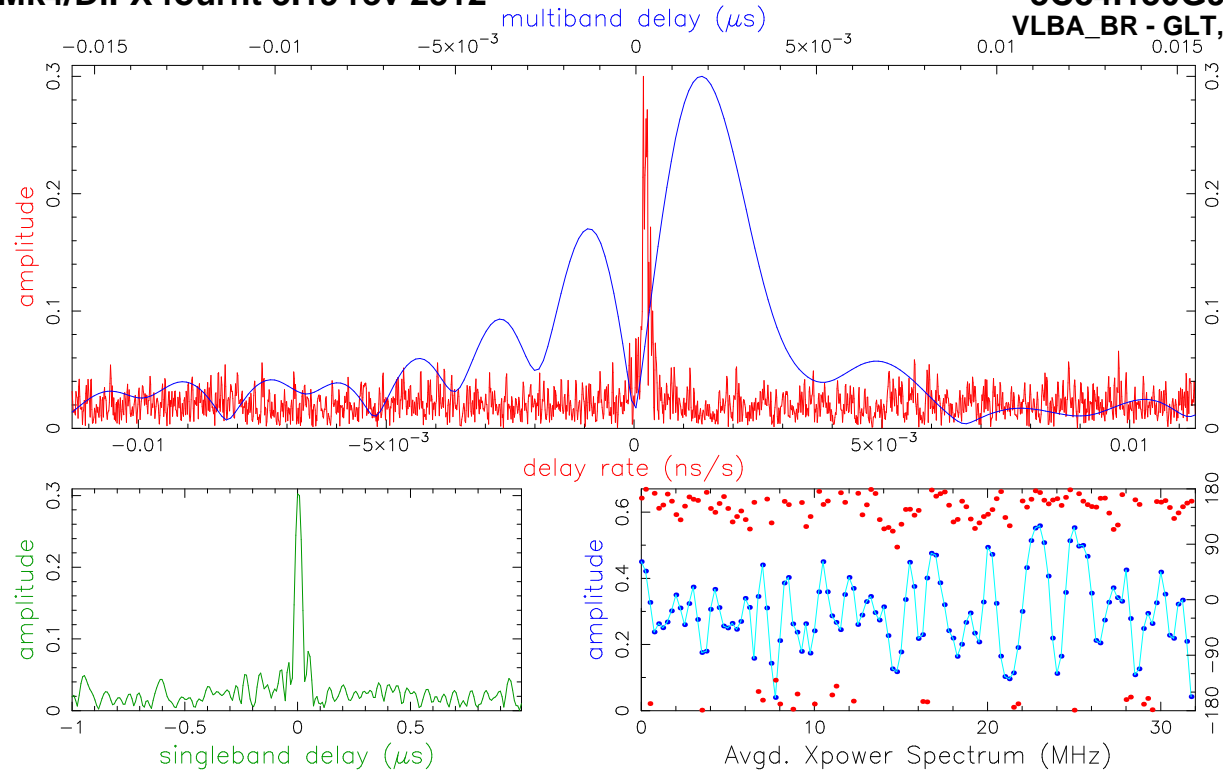
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112256
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-146.6	84.3	171.5	102.2	75.7	27.4	172.0	113.2	96.7	60.2	-149.4	160.3	122.2	66.0	158.5	46.4	Phase	116.0	
	0.9	1.4	1.4	1.2	1.2	1.5	1.4	1.2	1.3	1.3	1.4	1.1	1.3	1.2	1.4	0.6	Ampl.	1.2	
	127.7	128.6	129.1	129.1	129.1	129.4	129.2	129.4	129.4	129.7	129.5	129.3	129.2	129.1	128.5	129.0	Sbd box	129.3	
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	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		
B	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			
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		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			-8.86808288675E+03								-8.86808934485E+03						Resid mbdelay (usec)	6.45810E-03	+/- 2.4E-05
Sband delay (usec)			-8.86808711035E+03								1.5508819E+01						Resid sbdelay (usec)	2.23450E-03	+/- 3.8E-04
Phase delay (usec)			-8.86808934111E+03								-2.7499999E-07						Resid phdelay (usec)	3.73969E-06	+/- 8.2E-08
Delay rate (us/s)			-5.70626661139E-01								-5.70626779953E-01						Resid rate (us/s)	1.18814E-07	+/- 3.0E-10
Total phase (deg)				56.4							3.21640226458E-05						Resid phase (deg)	116.0	+/- 2.5

ph/seg (deg) 62.5 4.4 Search (2048X64) 0.719 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.1 7.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.8 5.1 Inc. seg. avg. 1.084 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 70.0 8.9 Inc. frq. avg. 1.229 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 308.6 el 22.7 pa 41.3 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) 4424.967 864.759 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bg.W.31.130G9L

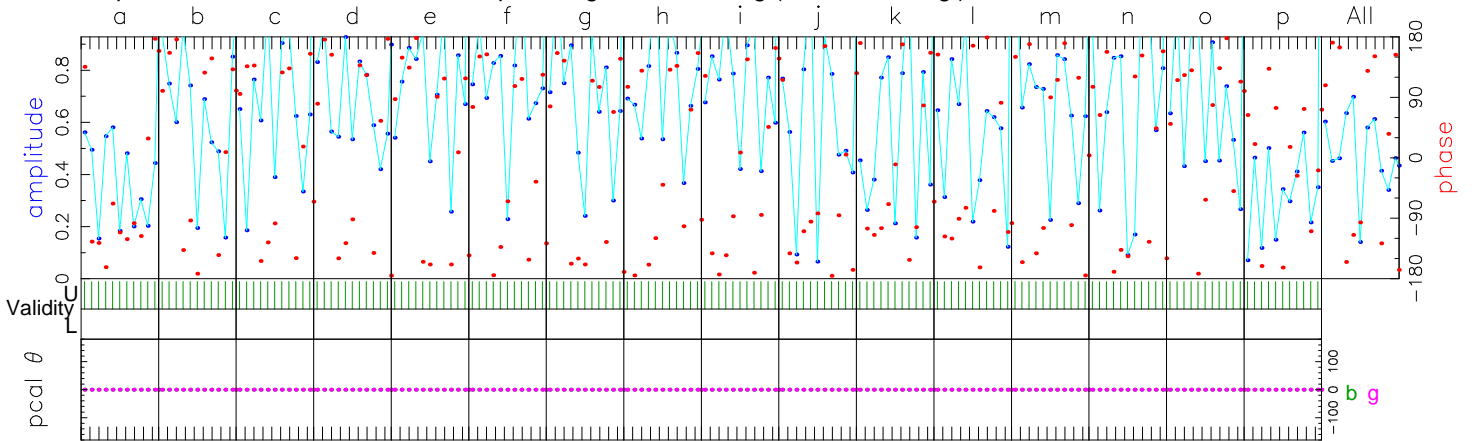


Fringe quality 7

SNR 18.5
Int time 478.702
Amp 0.309
Phase 170.5
PFD 0.0e+00
Delays (us)
SBD 0.003605
MBD 0.001788
Fringe rate (Hz) 0.015978
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112256
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

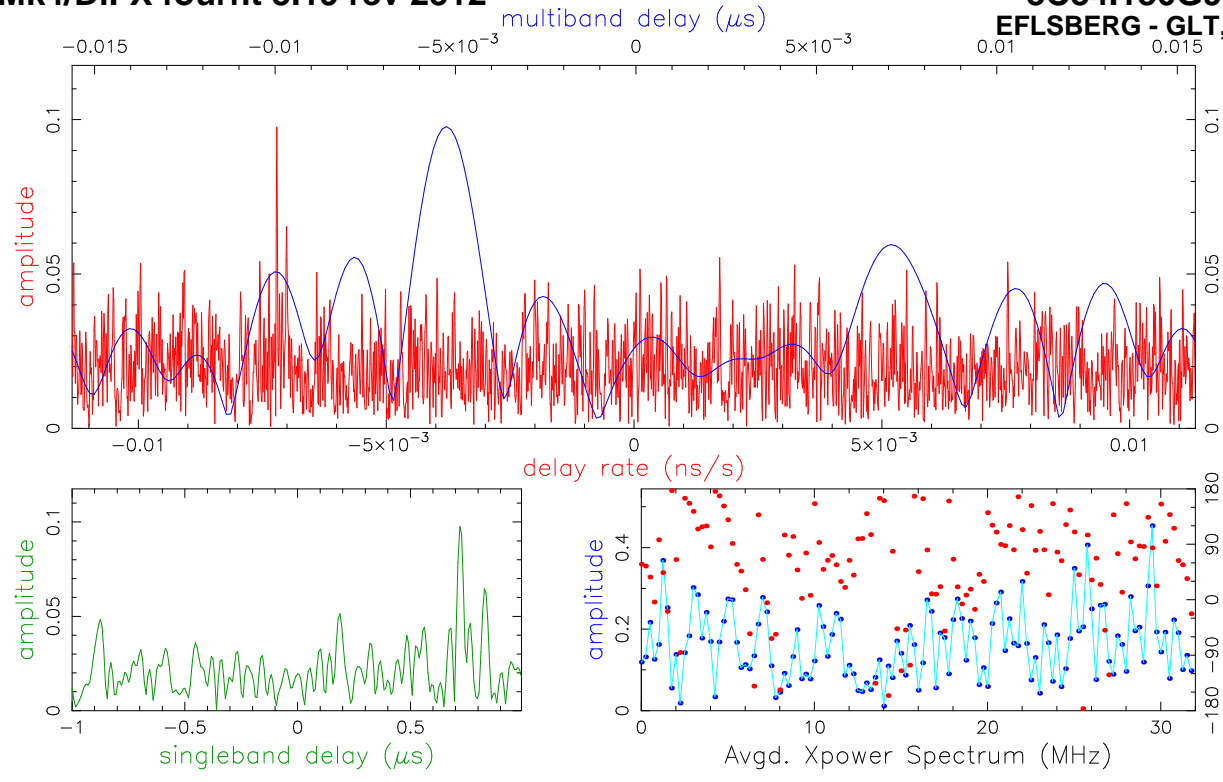


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-136.4	164.9	162.9	169.0	138.1	148.2	152.1	162.3	-170.6	-144.1	-143.0	-126.9	178.8	166.5	126.4	43.6	Phase	170.5
	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.5	0.4	0.4	0.1	Ampl.	0.3
	127.9	128.2	129.0	129.1	129.2	129.8	129.1	129.8	129.3	129.5	129.7	129.5	129.8	129.1	128.4	126.8	Sbd box	129.5
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		3.57201608201E+03								3.57201429448E+03							Resid mbdelay (usec)	1.78753E-03 +/- 5.8E-05
Sband delay (usec)		3.57201789898E+03								-1.9268190E+00							Resid sbdelay (usec)	3.60450E-03 +/- 9.3E-04
Phase delay (usec)		3.57201429998E+03								-3.1739506E-07							Resid phdelay (usec)	5.49908E-06 +/- 2.0E-07
Delay rate (us/s)		4.06839716348E-01								4.06839530859E-01							Resid rate (us/s)	1.85489E-07 +/- 7.2E-10
Total phase (deg)				288.2						-3.61222923325E-05							Resid phase (deg)	170.5 +/- 6.2

ph/seg (deg) 63.1 10.7 Search (2048X64) 0.291 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.4 18.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.4 12.4 Inc. seg. avg. 0.483 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 33.0 21.6 Inc. frq. avg. 0.345 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 105.8 el 73.7 pa -58.9 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) -3172.231 -4001.888 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/bg.W.32.130G9L

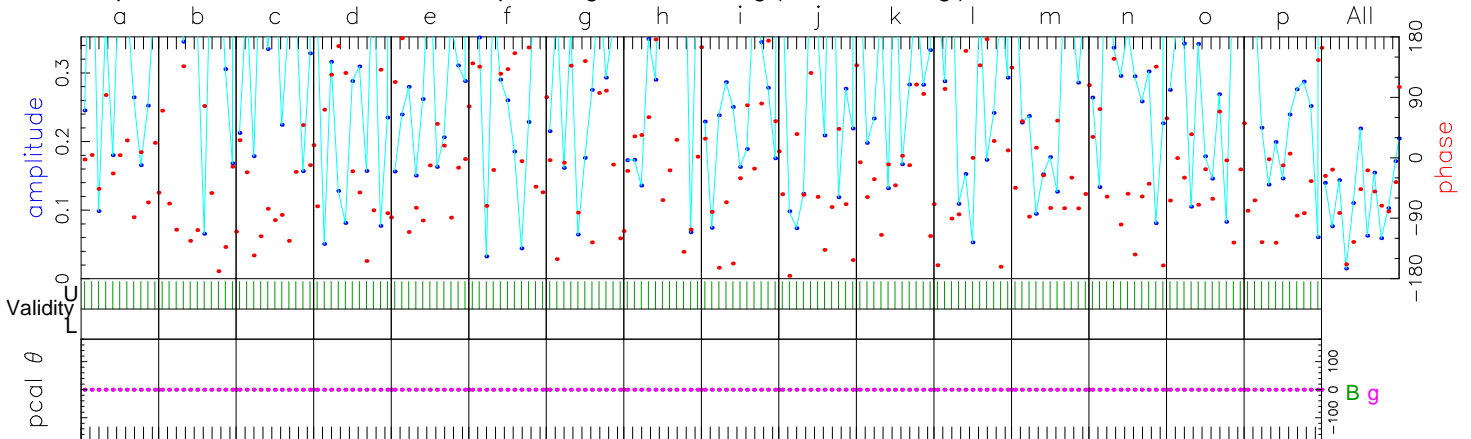
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, Bg
EFLSBERG - GLT, fgroup W, pol LR



Fringe quality 0
SNR 5.9
Int time 479.271
Amp 0.118
Phase -54.6
PFD 5.6e-01
Delays (us)
SBD 0.721309
MBD -0.005208
Fringe rate (Hz) -0.621993
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112301
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

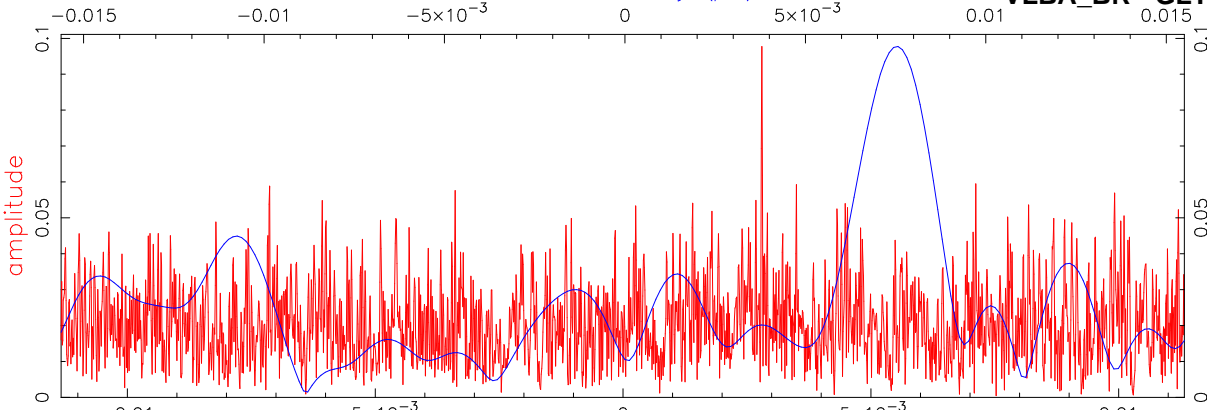
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-8.86737580274E+03																
Sband delay (usec)		-8.86736803635E+03																
Phase delay (usec)		-8.86808934661E+03																
Delay rate (us/s)		-5.70634000672E-01																
Total phase (deg)			-114.2															
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)																		
Pcal mode: MANUAL, MANUAL																		
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

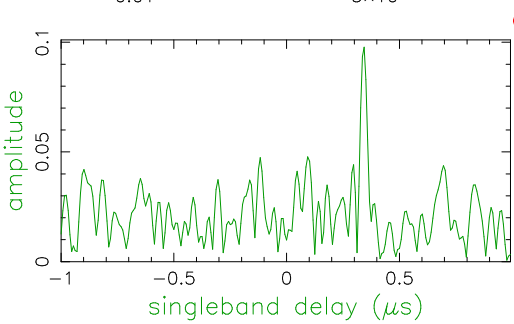
ph/seg (deg) 44.5 33.5 Search (2048X64) 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 58.9 58.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 75.9 38.7 Inc. seg. avg. 0.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 71.5 67.5 Inc. frq. avg. 0.129 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
B: az 308.6 el 22.7 pa 41.3 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) 4424.967 864.759 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bg.W.48.130G9L simultaneous interpolator

multiband delay (μ s)

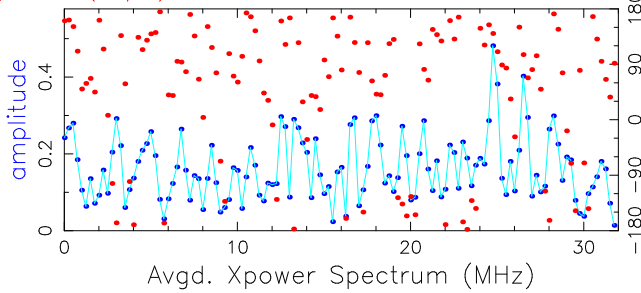


Fringe quality 0

SNR 5.9
Int time 478.701
Amp 0.101
Phase -109.8
PFD 6.1e-01
Delays (us)
SBD 0.341499
MBD 0.007510
Fringe rate (Hz) 0.241208
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

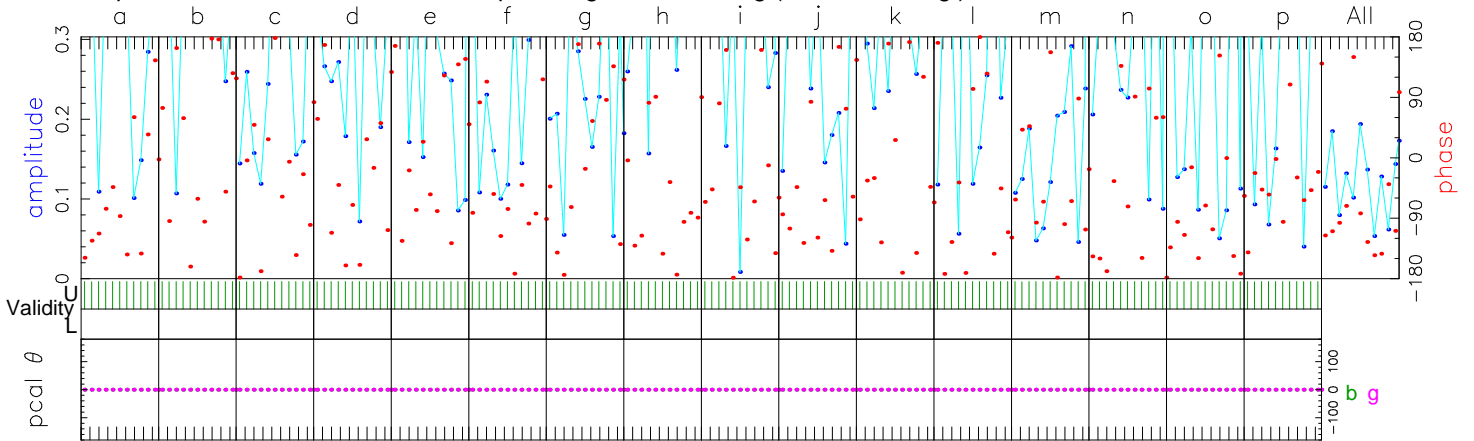


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112303
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

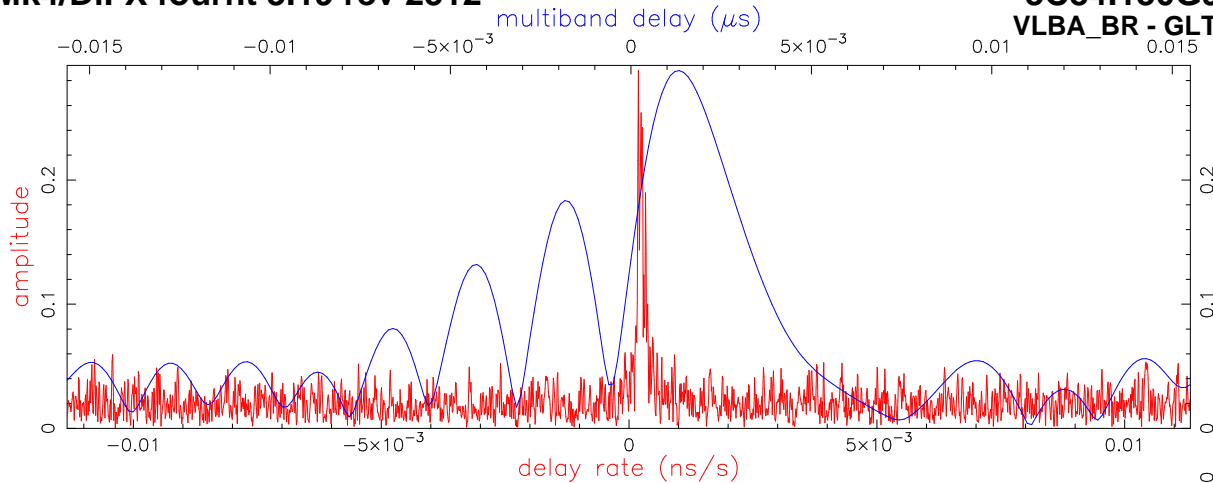
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-113.1	-161.1	-67.5	-41.1	-108.1	-123.9	-146.4	-101.2	-105.0	-98.9	-111.2	-153.5	-85.8	165.4	-110.8	-50.7		Phase -109.8
	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2		Ampl. 0.1
	67.4	75.6	245.6	120.9	2.9	154.7	25.8	227.0	206.2	51.9	232.9	173.0	154.7	86.7	193.8	240.0		Sbd box 172.7
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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
	Group delay (usec)(sbd)			3.57236555498E+03			Apriori delay (usec)			3.57201429448E+03			Resid mbdelay (usec)			7.51050E-03 +/- 1.8E-04		
	Sband delay (usec)			3.57235579348E+03			Apriori clock (usec)			-1.9268190E+00			Resid sbdelay (usec)			3.41499E-01 +/- 2.9E-03		
	Phase delay (usec)			3.57201429094E+03			Apriori clockrate (us/s)			-3.1739506E-07			Resid phdelay (usec)			-3.54161E-06 +/- 6.3E-07		
	Delay rate (us/s)			4.06842331039E-01			Apriori rate (us/s)			4.06839530859E-01			Resid rate (us/s)			2.80018E-06 +/- 2.3E-09		
	Total phase (deg)			7.8			Apriori accel (us/s/s)			-3.61222923325E-05			Resid phase (deg)			-109.8 +/- 19.4		
	ph/seg (deg)	RMS	Theor.	Amplitude		0.101 +/- 0.017		Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5						
	amp/seg (%)	43.3	33.6	Search (2048X64)		0.096		Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us) -1.000 1.000						
	ph/frq (deg)	49.4	58.7	Interp.		0.000		Bits/sample: 2x2				SampCntNorm: enabled				mb window (us) -0.016 0.016		
	amp/frq (%)	41.5	38.9	Inc. seg. avg.		0.106		Sample rate(MISamp/s): 64				Data rate(Mb/s): 2048				dr window (ns/s) -0.011 0.011		
		56.7	67.8	Inc. frq. avg.		0.098		nlags: 128				t_cohere infinite				ion window (TEC) 0.00 0.00		
	b: az 105.8 el 73.7 pa -58.9			g: az 217.9 el 52.8 pa 10.1			u,v (fr/asec) -3172.231 -4001.888			simultaneous interpolator								

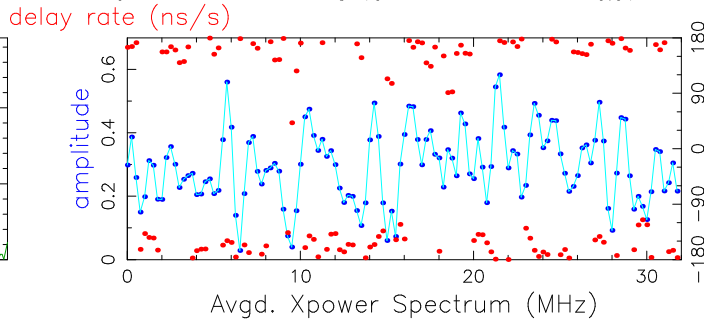
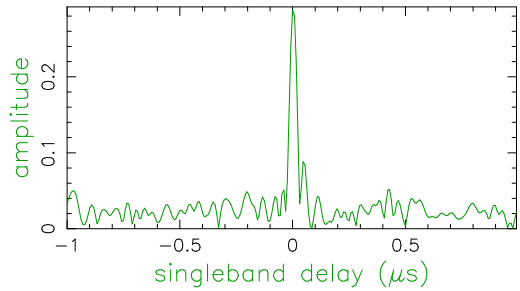
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bg
VLBA_BR - GLT, fgroup W, pol LL



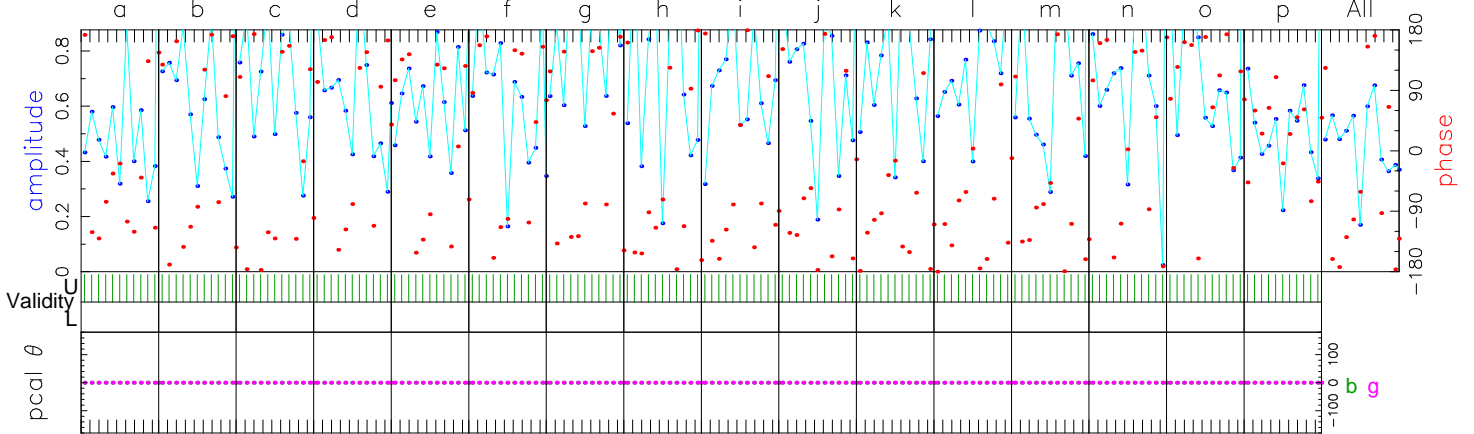
Fringe quality 7

SNR 17.5
Int time 478.798
Amp 0.292
Phase -167.4
PFD 0.0e+00
Delays (us)
SBD 0.002960
MBD 0.001356
Fringe rate (Hz)
0.015998
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112250
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

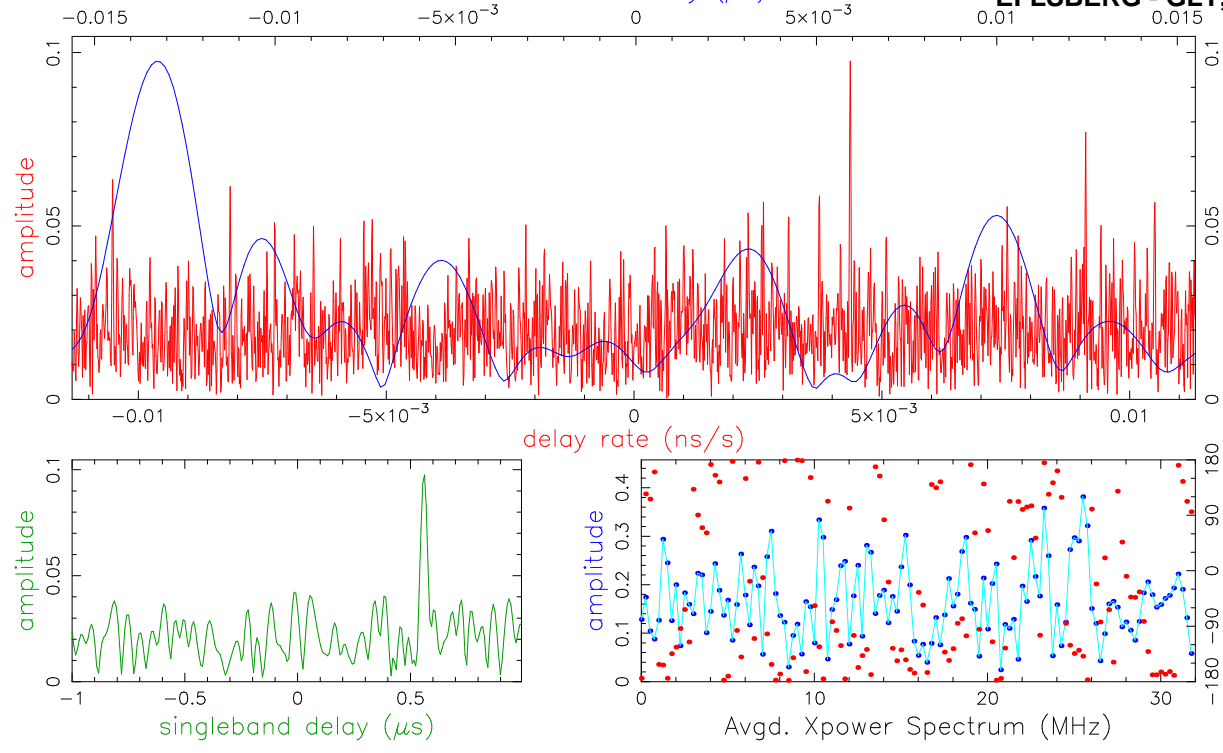


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-98.6	-177.7	177.7	160.5	149.7	166.4	-172.4	-157.2	-129.3	-150.3	-120.9	-127.1	-148.8	161.9	137.8	28.4		Phase -167.4	
	0.3	0.4	0.5	0.4	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.3		Ampl. 0.4	
	127.4	129.2	129.1	129.6	129.4	129.5	128.9	129.6	129.2	129.3	129.4	129.2	129.0	128.6	128.9	127.3		Sbd box 129.4	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)		3.57201565045E+03							3.57201429448E+03									Resid mbdelay (usec)	1.35597E-03 +/- 6.2E-05
Sband delay (usec)		3.57201725398E+03							-1.9268190E+00									Resid sbdelay (usec)	2.95950E-03 +/- 9.9E-04
Phase delay (usec)		3.57201428908E+03							-3.1739506E-07									Resid phdelay (usec)	-5.39907E-06 +/- 2.1E-07
Delay rate (us/s)		4.06839716578E-01							4.06839530859E-01									Resid rate (us/s)	1.85719E-07 +/- 7.6E-10
Total phase (deg)					-49.8				-3.61222923325E-05									Resid phase (deg)	-167.4 +/- 6.6

RMS Theor. Amplitude 0.292 +/- 0.017
 ph/seg (deg) 64.4 11.3 Search (2048X64) 0.279
 amp/seg (%) 76.6 19.8 Interp. 0.000
 ph/frq (deg) 57.0 13.1 Inc. seg. avg. 0.464
 amp/frq (%) 38.2 22.9 Inc. frq. avg. 0.378

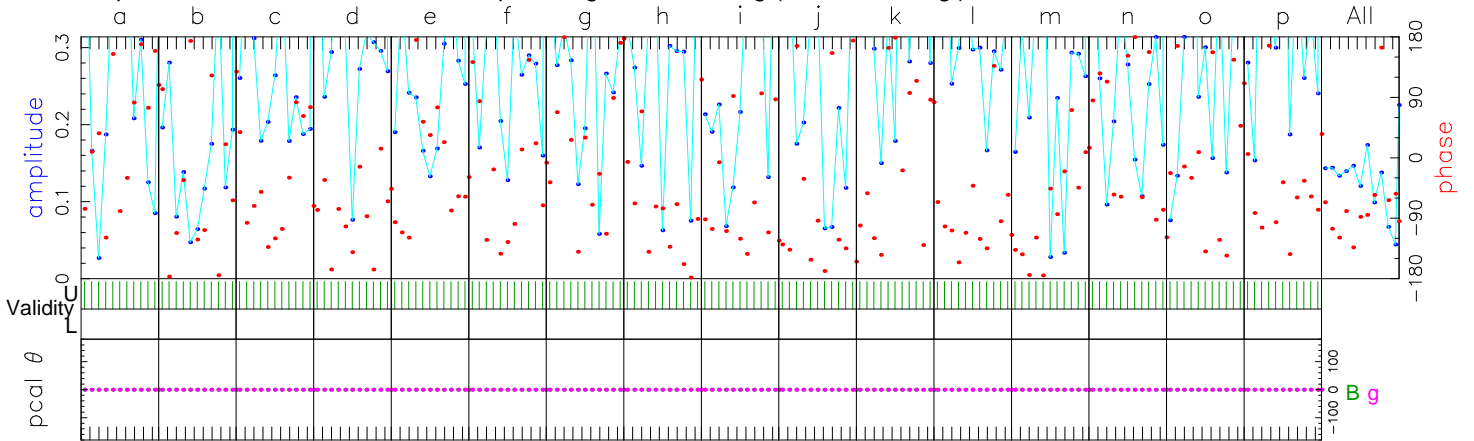
b: az 105.8 el 73.7 pa -58.9 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) -3172.231 -4001.888 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/bg.W.6.130G9L

multiband delay (μ s)



Fringe quality 0
SNR 5.9
Int time 479.367
Amp 0.105
Phase -96.4
PFD 6.2e-01
Delays (us)
SBD 0.560179
MBD -0.013236
Fringe rate (Hz)
0.376727
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112307
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-87.8	-170.8	-73.4	-79.1	-68.5	-86.2	-55.3	-93.0	-108.0	-139.3	-125.5	-99.3	-127.4	-170.0	-56.1	-70.8	Phase	-96.4				
	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.2	0.1	0.2	0.1	0.3	0.1	0.0	0.1	0.3	Ampl.	0.1				
	230.4	154.5	193.1	217.3	208.2	216.4	31.9	208.0	217.8	38.3	231.1	201.4	153.0	254.7	57.2	200.9	Sbd box	200.7				
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-8.86754008098E+03														Apriori delay (usec)	-8.86808934485E+03	Resid mbdelay (usec)	-1.32361E-02	+/-	1.8E-04
Sband delay (usec)			-8.86752916635E+03														Apriori clock (usec)	1.5508819E+01	Resid sbdelay (usec)	5.60179E-01	+/-	2.9E-03
Phase delay (usec)			-8.86808934796E+03														Apriori clockrate (us/s)	-2.7499999E-07	Resid phdelay (usec)	-3.10844E-06	+/-	6.3E-07
Delay rate (us/s)			-5.70622406529E-01														Apriori rate (us/s)	-5.70626779953E-01	Resid rate (us/s)	4.37342E-06	+/-	2.3E-09
Total phase (deg)																	Apriori accel (us/s/s)	3.21640226458E-05	Resid phase (deg)	-96.4	+/-	19.5

ph/seg (deg) 40.4 33.7
amp/seg (%) 44.7 58.8
ph/frq (deg) 38.3 38.9
amp/frq (%) 77.5 67.9

RMS Theor. Amplitude 0.105 +/- 0.018
Search (2048X64) 0.096
Interp. 0.000
Inc. seg. avg. 0.112
Inc. frq. avg. 0.097

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

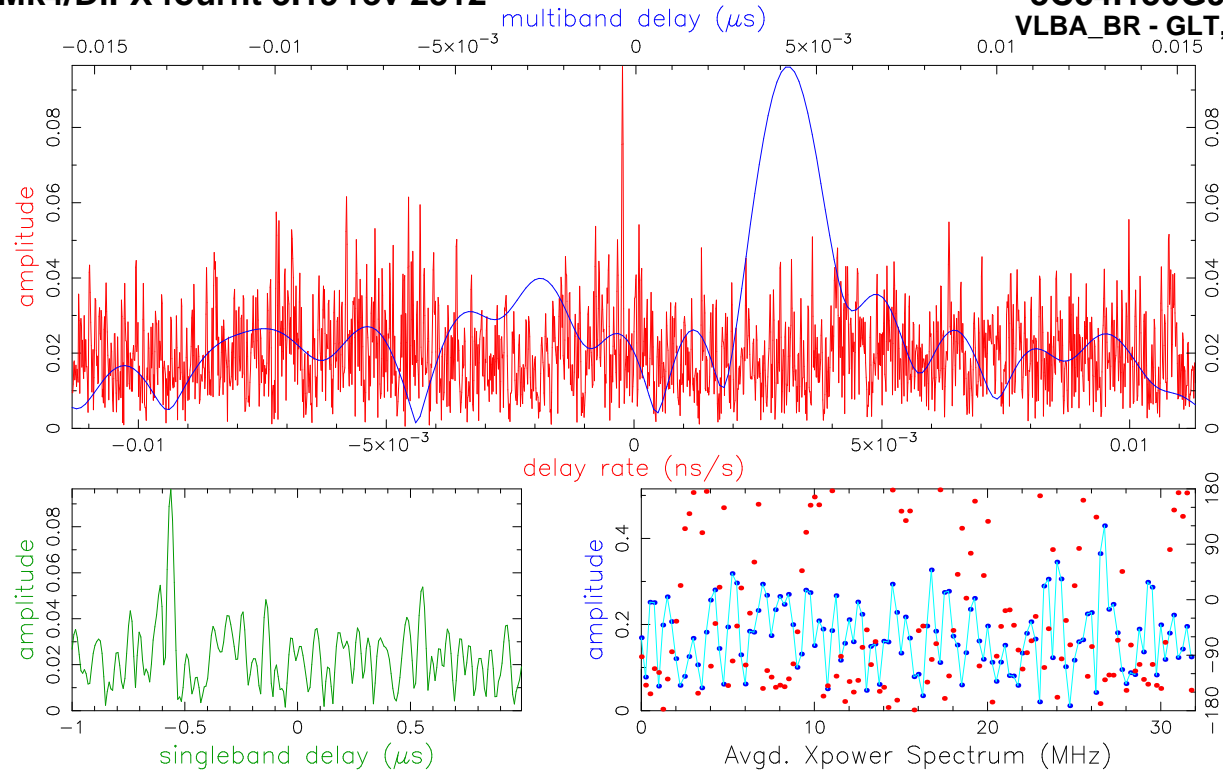
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

B: az 308.6 el 22.7 pa 41.3 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) 4424.967 864.759 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bg.W.69.130G9L

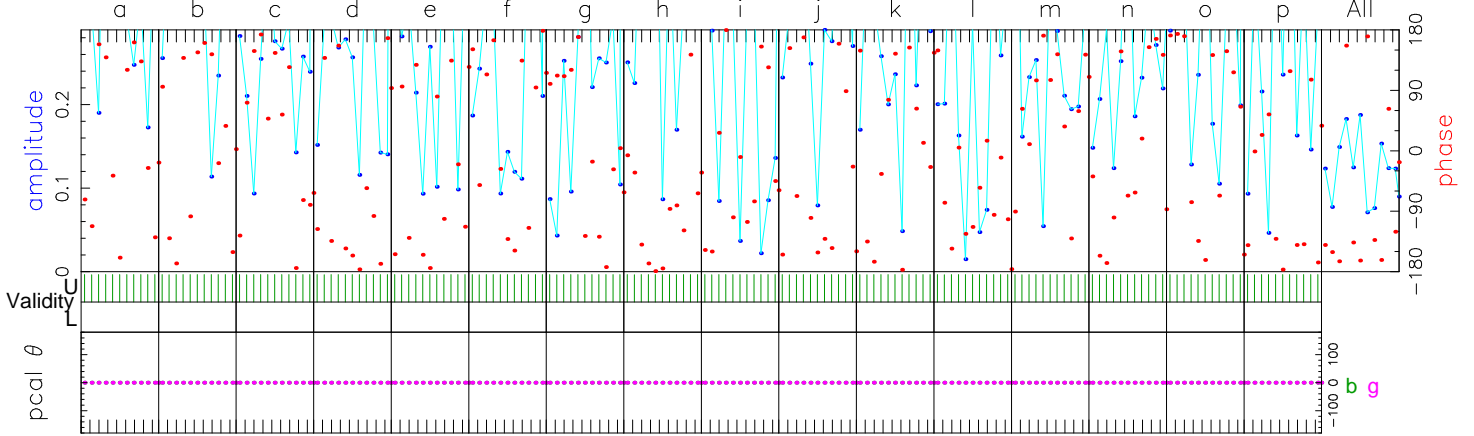
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bg
VLBA_BR - GLT, fgroup W, pol RL



Fringe quality 0
SNR 5.8
Int time 478.798
Amp 0.097
Phase -162.9
PFD 8.5e-01
Delays (us)
SBD -0.563779
MBD 0.004204
Fringe rate (Hz)
-0.019639
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112308
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

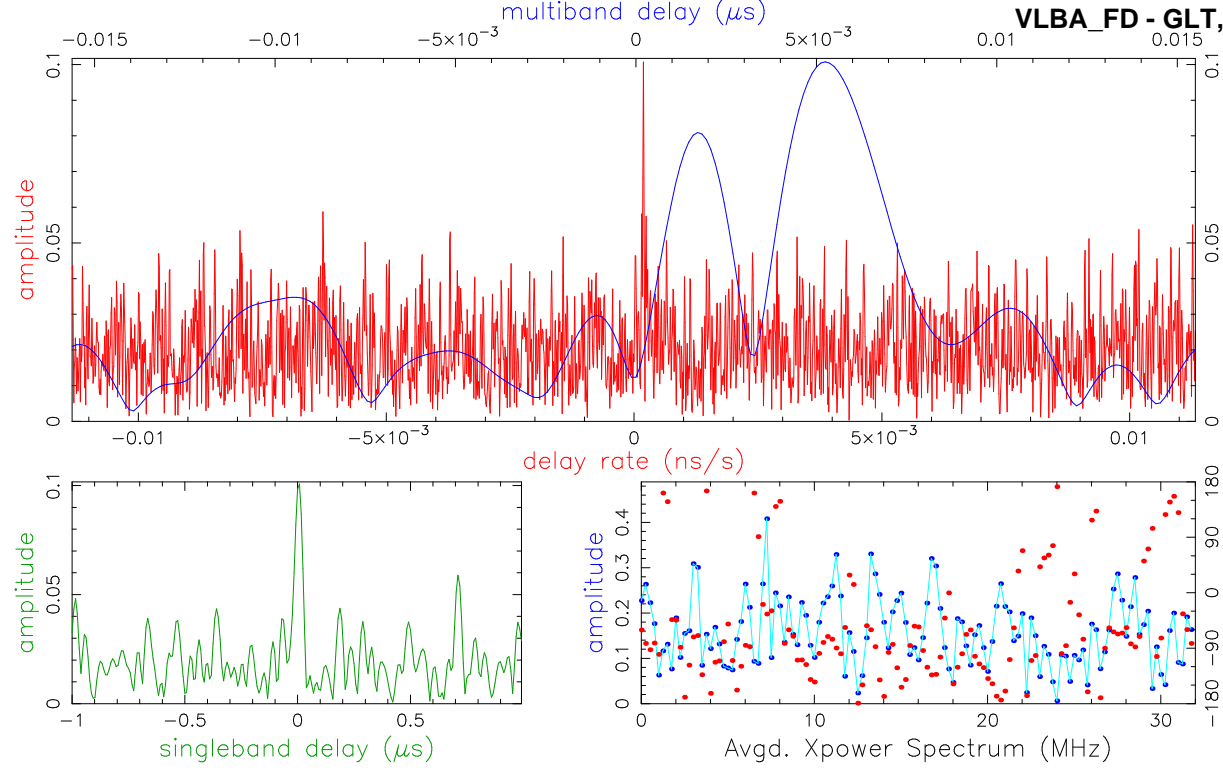


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	-171.1	175.9	132.1	-147.1	-163.0	164.3	-142.1	-124.8	-123.3	-165.4	140.9	-100.5	111.0	-152.2	169.8	-173.4		Phase	-162.9	
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1		Ampl.	0.1	
	222.0	134.1	118.6	132.2	253.6	131.9	162.7	116.3	202.0	231.1	2.4	201.2	71.6	77.9	57.1	99.4		Sbd box	56.8	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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 phase		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids		
b	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks		
Group delay (usec)(sbd)		3.57145599884E+03								3.57201429448E+03								Resid mbdelay (usec)	4.20435E-03	+/- 1.9E-04
Sband delay (usec)		3.57145051598E+03								-1.9268190E+00								Resid sbdelay (usec)	-5.63779E-01	+/- 3.0E-03
Phase delay (usec)		3.57201428923E+03								-3.1739506E-07								Resid phdelay (usec)	-5.25294E-06	+/- 6.4E-07
Delay rate (us/s)		4.06839302865E-01								4.06839530859E-01								Resid rate (us/s)	-2.27994E-07	+/- 2.3E-09
Total phase (deg)					-45.3					-3.61222923325E-05								Resid phase (deg)	-162.9	+/- 19.8

ph/seg (deg) 47.8 34.4 Search (2048X64) 0.091 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 50.5 60.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 42.2 39.7 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 47.9 69.3 Inc. frq. avg. 0.094 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 105.8 el 73.7 pa -58.9 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) -3172.231 -4001.888 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bg..130G9L Output file: /Exps/c192b/v2/1234/No0205/bg.W.75.130G9L

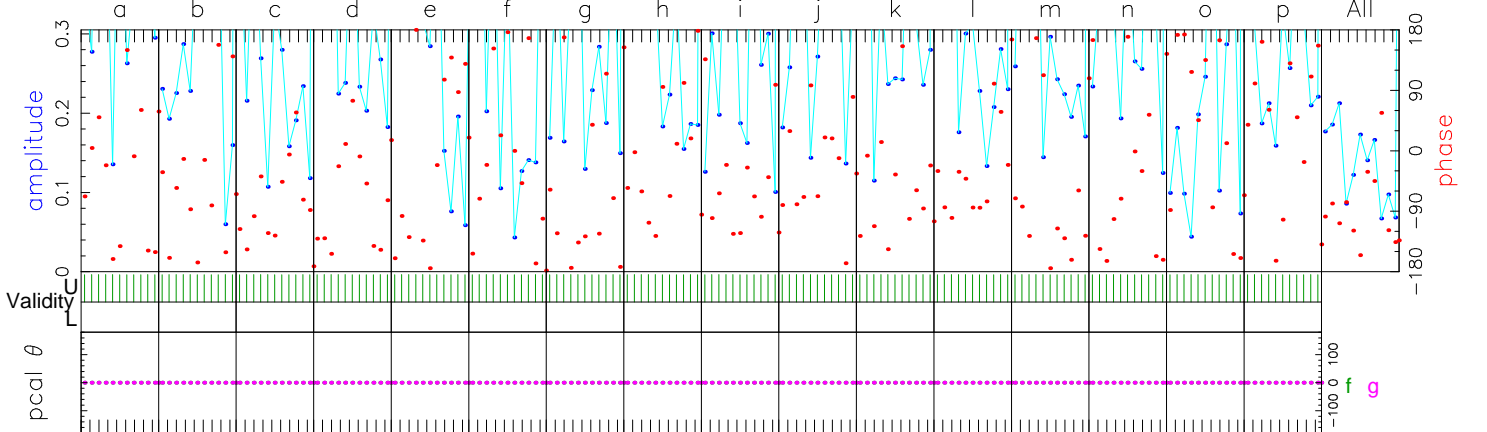
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fg
VLBA_FD - GLT, fgroup W, pol RR



Fringe quality 0
SNR 6.1
Int time 477.308
Amp 0.102
Phase -94.3
PFD 2.8e-01
Delays (us)
SBD 0.005094
MBD 0.005206
Fringe rate (Hz) 0.016413
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112321
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-25.7	-95.4	-90.0	-118.1	-146.7	-127.7	-132.0	-50.8	-76.2	-17.2	-67.5	-65.2	-131.4	-152.9	-131.7	83.1	Phase	-94.3
	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	235.7	208.2	37.6	107.4	36.7	53.3	130.9	120.6	130.7	101.8	166.7	128.7	129.2	143.9	107.6	92.0	Sbd box	129.7
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	

Group delay (usec)(sbd) 3.94406247964E+03 Apriori delay (usec) 3.94405727329E+03 Resid mbdelay (usec) 5.20634E-03 +/- 1.8E-04
 Sband delay (usec) 3.94406236779E+03 Apriori clock (usec) -8.3834600E-01 Resid sbdelay (usec) 5.09450E-03 +/- 2.8E-03
 Phase delay (usec) 3.94405727025E+03 Apriori clockrate (us/s) -1.6594950E-07 Resid phdelay (usec) -3.04055E-06 +/- 6.1E-07
 Delay rate (us/s) 2.16691226829E-01 Apriori rate (us/s) 2.16691036288E-01 Resid rate (us/s) 1.90541E-07 +/- 2.2E-09
 Total phase (deg) 93.5 Apriori accel (us/s/s) -5.56915848362E-05 Resid phase (deg) -94.3 +/- 18.9

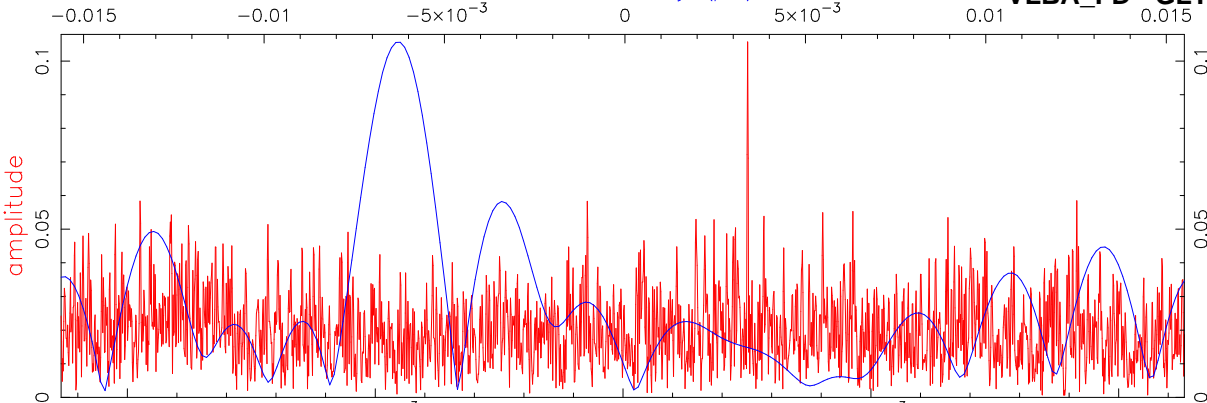
ph/seg (deg) RMS Theor. Amplitude 0.102 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.5 32.7 Search (2048X64) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.5 57.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.4 37.7 Inc. seg. avg. 0.118 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 63.4 65.8 Inc. frq. avg. 0.120 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 20.4 el 78.2 pa -154.6 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) -1746.676 -6936.796 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fg..130G9L Output file: /Exps/c192b/v2/1234/No0205/fg.W.108.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

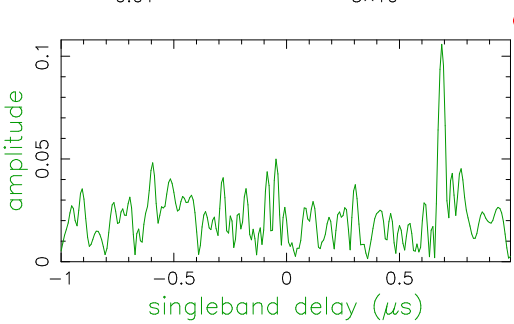
3C84.130G9L, No0205, fg
VLBA_FD - GLT, fgroup W, pol LR

multiband delay (μ s)

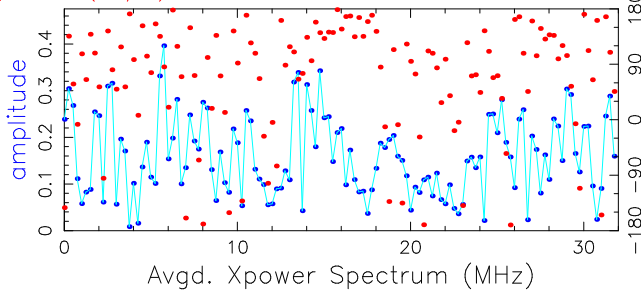


Fringe quality 0

SNR 6.3
Int time 477.308
Amp 0.108
Phase 153.3
PFD 6.9e-02
Delays (us)
SBD 0.687858
MBD -0.006274
Fringe rate (Hz)
0.217193
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

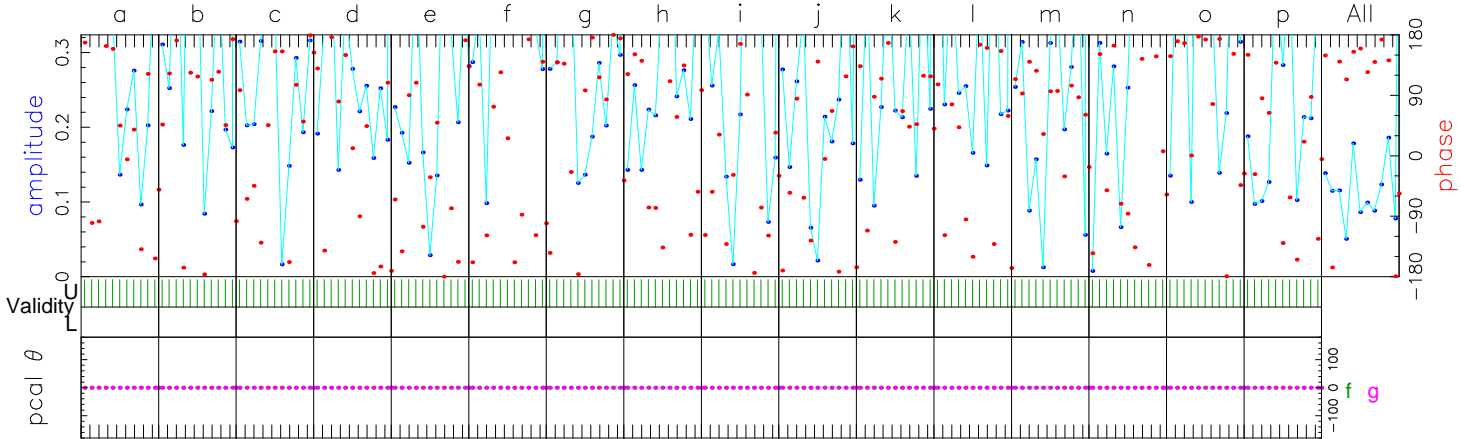


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112326
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

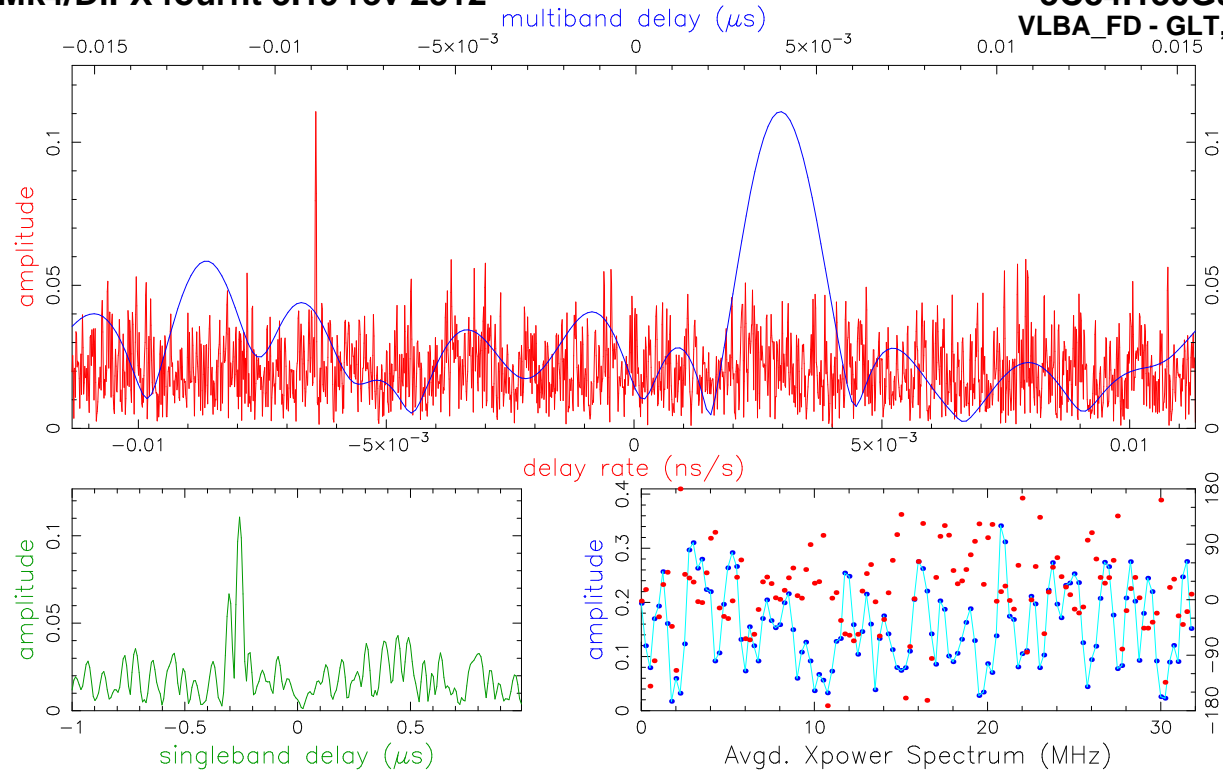


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
f																		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		3.94473849943E+03								3.94405727329E+03								
Sband delay (usec)		3.94474513129E+03								-8.3834600E-01								
Phase delay (usec)		3.94405727824E+03								-1.6594950E-07								
Delay rate (us/s)		2.16693557682E-01								2.16691036288E-01								
Total phase (deg)				341.1						-5.56915848362E-05								
ph/seg (deg)	24.2	31.4																
amp/seg (%)	45.9	54.8																
ph/frq (deg)	32.6	36.3																
amp/frq (%)	62.3	63.3																
f: az 20.4 el 78.2 pa -154.6																		
g: az 217.9 el 52.8 pa 10.1																		
u,v (fr/asec)																		
Control file: cf_1234_gmva																		
Input file: /Exps/c192b/v2/1234/No0205/fg..130G9L																		
Output file: /Exps/c192b/v2/1234/No0205/fg.W.126.130G9L																		

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
 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fg
VLBA_FD - GLT, fgroupp W, pol RL

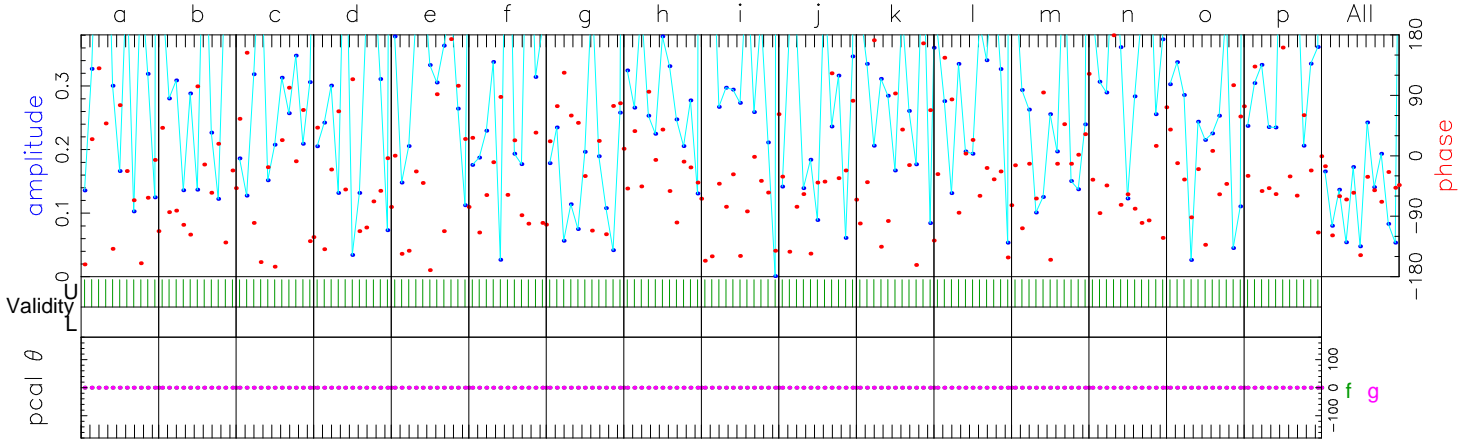


Fringe quality 0

SNR 6.6
Int time 477.404
Amp 0.127
Phase -51.3
PFD 1.0e-02
Delays (us)
SBD -0.257535
MBD 0.004005
Fringe rate (Hz)
-0.554049
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112331
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		3.94381127826E+03																
Sband delay (usec)		3.94379973829E+03																
Phase delay (usec)		3.94405727164E+03																
Delay rate (us/s)		2.16684604329E-01																
Total phase (deg)			136.5															
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
simultaneous interpolator																		

f: az 20.4 el 78.2 pa -154.6 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) -1746.676 -6936.796

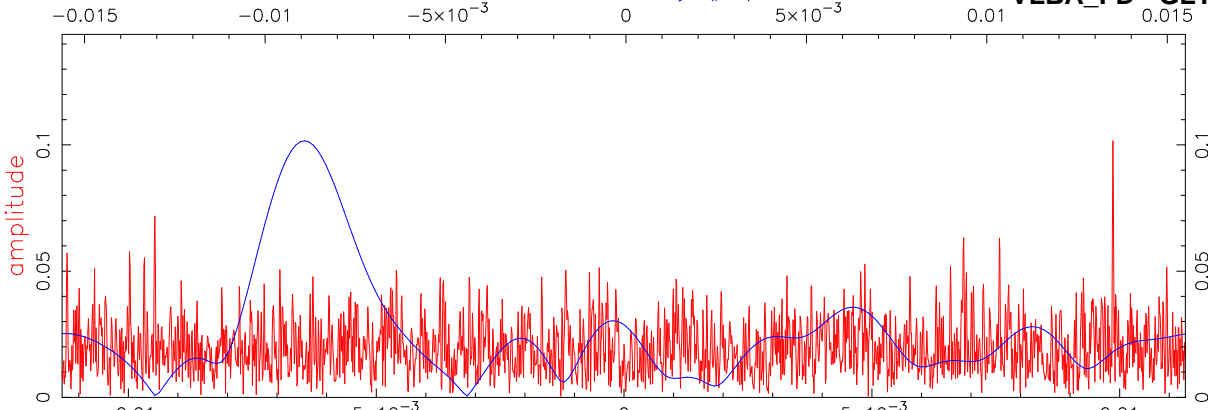
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fg..130G9L Output file: /Exps/c192b/v2/1234/No0205/fg.W.145.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

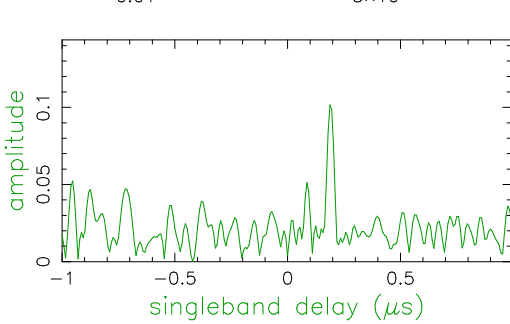
3C84.130G9L, No0205, fg
VLBA_FD - GLT, fgroup W, pol LL

multiband delay (μ s)

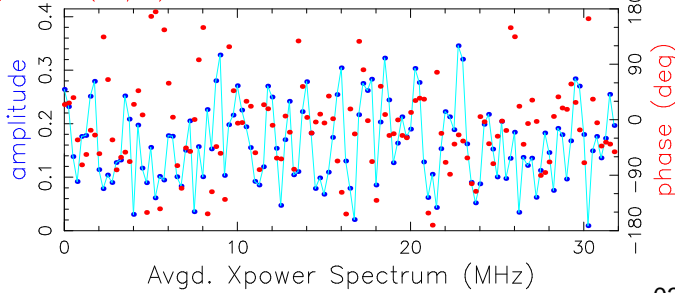
Fringe quality 0



SNR 6.2
Int time 477.404
Amp 0.144
Phase 52.7
PFD 1.9e-01
Delays (us)
SBD 0.190290
MBD -0.008976
Fringe rate (Hz) 0.850651
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

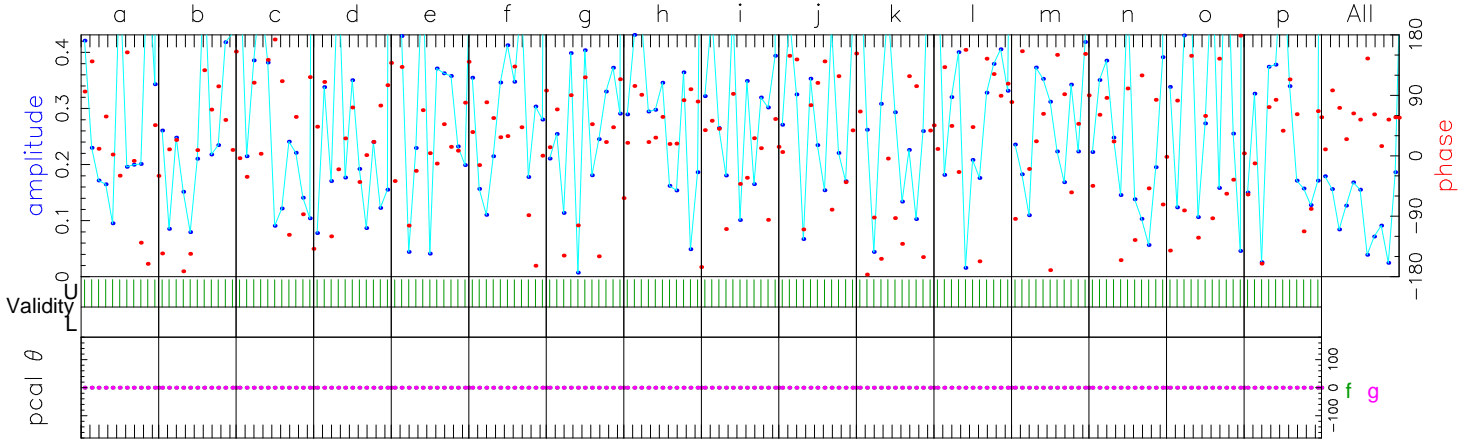


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112316
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

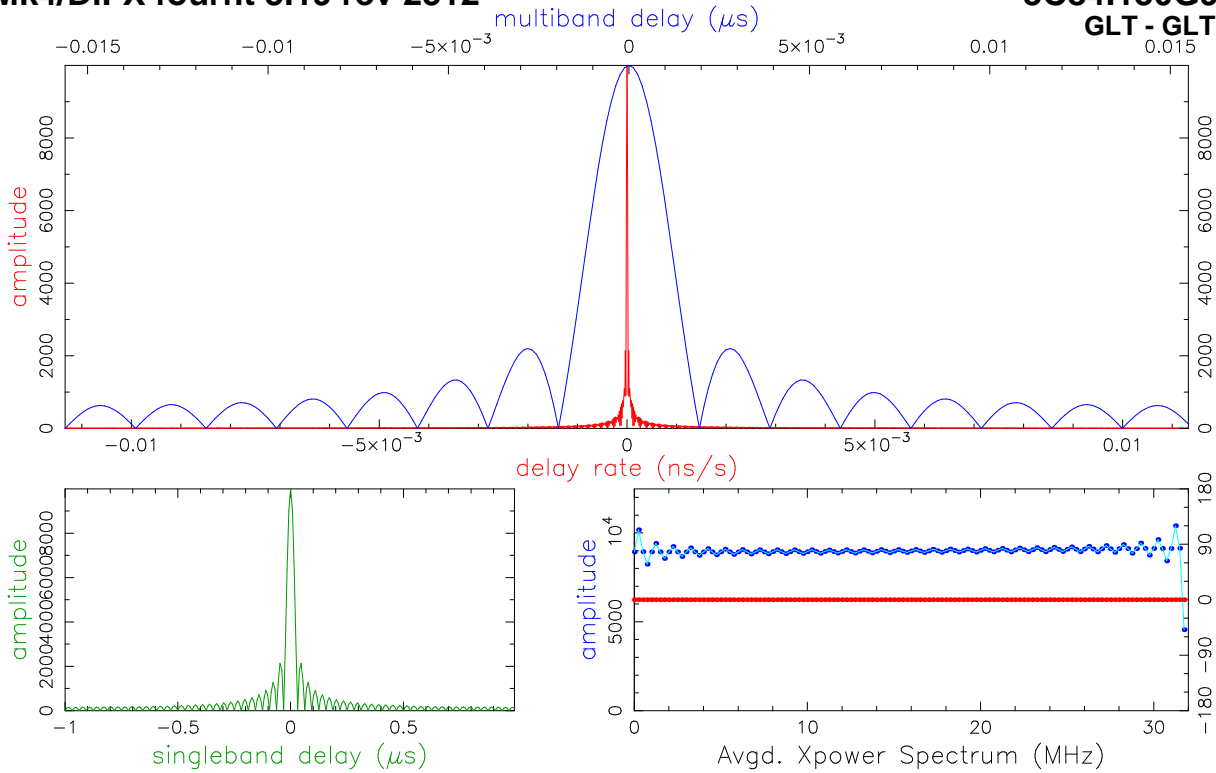


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
fg	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fg	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd)	3.94423579698E+03	Apriori delay (usec)	3.94405727329E+03	Resid mbdelay (usec)	-8.97631E-03	+/-	1.8E-04
Sband delay (usec)	3.94424756379E+03	Apriori clock (usec)	-8.3834600E-01	Resid sbdelay (usec)	1.90290E-01	+/-	2.8E-03
Phase delay (usec)	3.94405727499E+03	Apriori clockrate (us/s)	-1.6594950E-07	Resid phdelay (usec)	1.69871E-06	+/-	6.0E-07
Delay rate (us/s)	2.16700911508E-01	Apriori rate (us/s)	2.16691036288E-01	Resid rate (us/s)	9.87522E-06	+/-	2.2E-09
Total phase (deg)	240.4	Apriori accel (us/s/s)	-5.56915848362E-05	Resid phase (deg)	52.7	+/-	18.6

ph/seg (deg)	37.0	RMS	37.0	Theor.	32.3	Amplitude	0.144 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	57.3	Search (2048X64)	0.101	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	sb window (us)	-1.000	1.000		
ph/frq (deg)	45.3	Inc. seg. avg.	0.142	Bits/sample:	2x2	Inc. frq. avg.	0.141	SampCntNorm:	enabled	mb window (us)	-0.016	0.016
amp/frq (%)	53.1	Inc. frq. avg.	0.141	Sample rate (MSamp/s):	64	ion window (TEC)	0.00	0.00				
				Data rate (Mb/s):	2048	nlags:	128	t_cohere:	infinite			

f: az 20.4 el 78.2 pa -154.6 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) -1746.676 -6936.796 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fg..130G9L Output file: /Exps/c192b/v2/1234/No0205/fg.W.89.130G9L

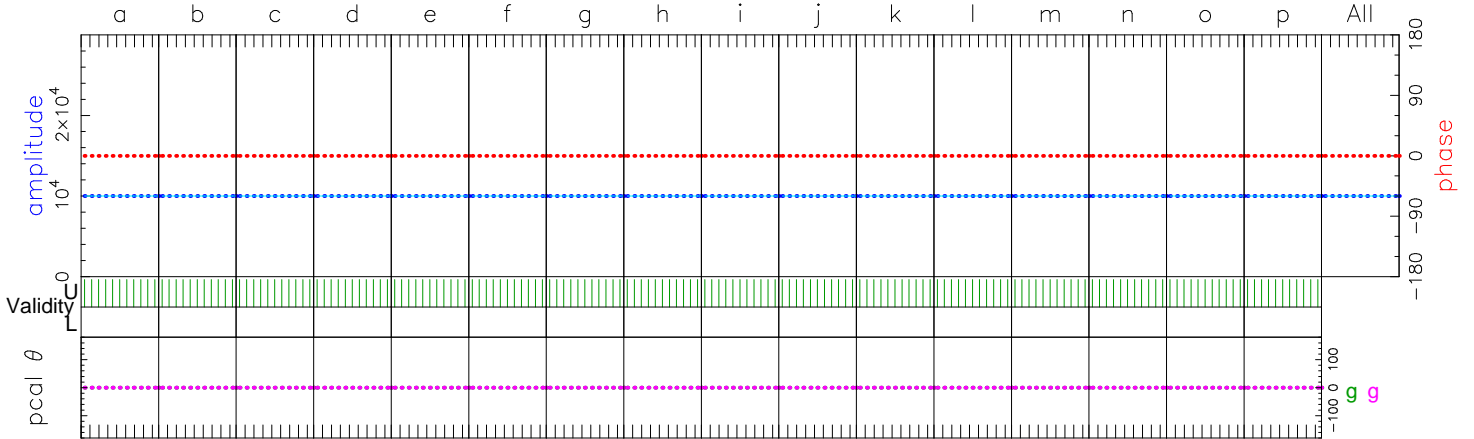


Fringe quality 9

SNR 598979.1
Int time 479.780
Amp 9999.840
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. c192b
Yr:day 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112320
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

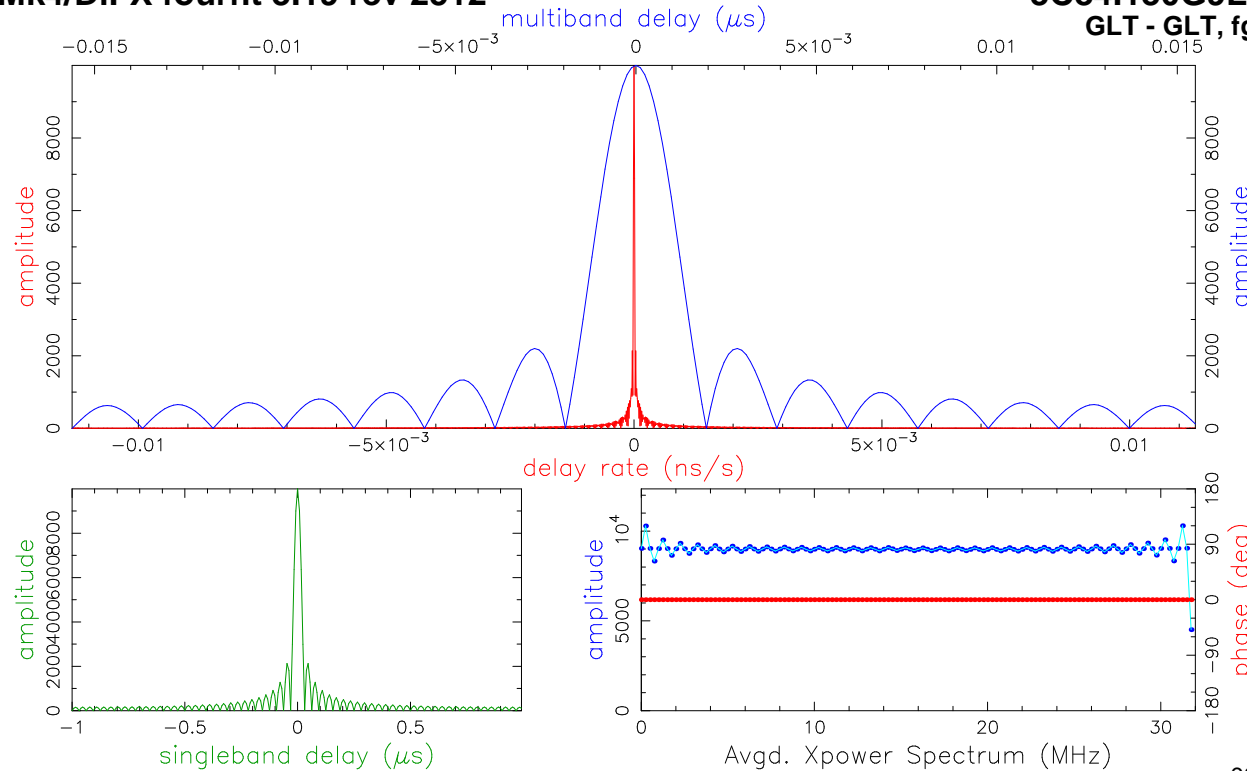


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
g:g	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			+/-	1.8E-09	
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/-	2.9E-08	
Phase delay (usec)	-2.88576321591E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-2.88576E-20			+/-	6.2E-12	
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/-	2.2E-14	
Total phase (deg)	-0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			-0.0			+/-	0.0	

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.840 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 9999.840 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Intp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gg..130G9L Output file: /Exps/c192b/v2/1234/No0205/gg.W.104.130G9L simultaneous interpolator

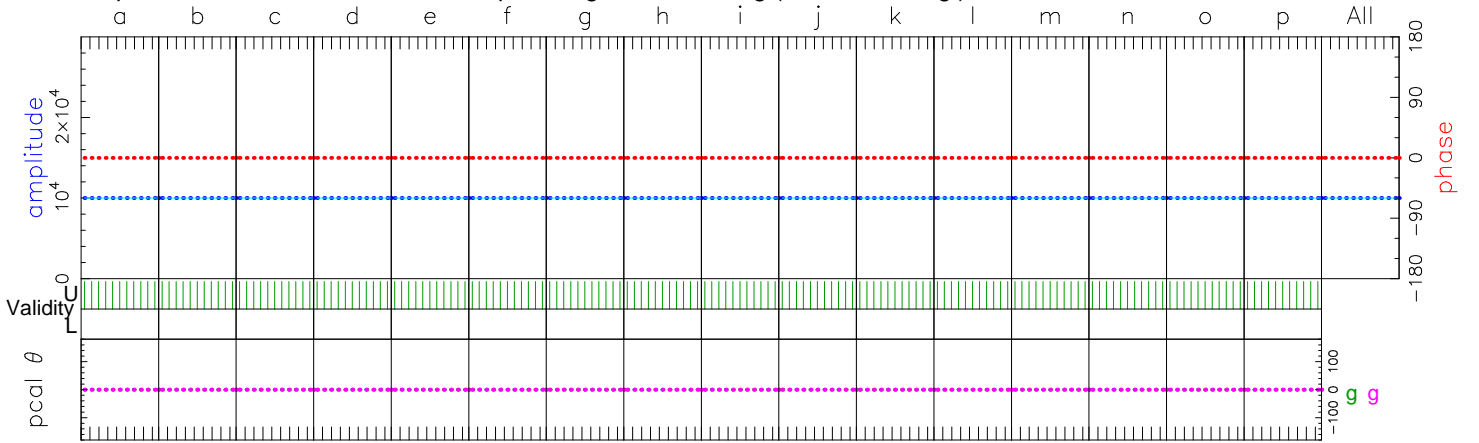
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gg
GLT - GLT, fgroup W, pol RR



Fringe quality 9
SNR 598919.8
Int time 479.684
Amp 9999.853
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. c192b
Yr:day 16383
Start 2019:278
Stop 2019:278
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112325
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0	-0.0	-0.0	-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.	9999.9
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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
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	
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	
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	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

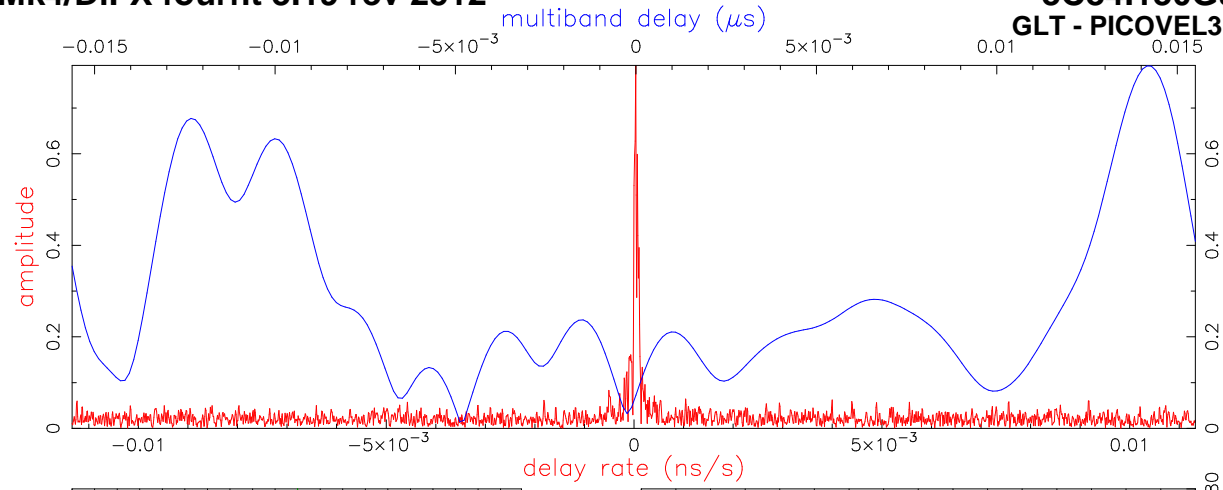
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.8E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.9E-08
 Phase delay (usec) -4.36141792687E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -4.36142E-20 +/- 6.2E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.2E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.853 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.853 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. 9999.853 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

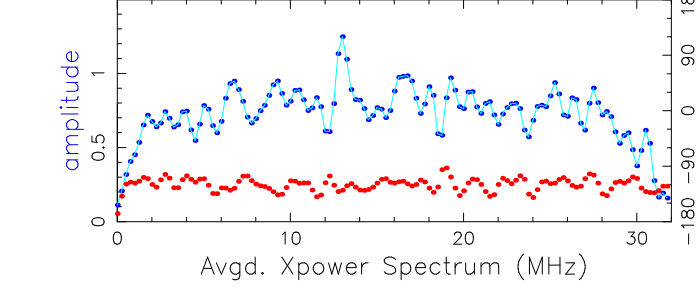
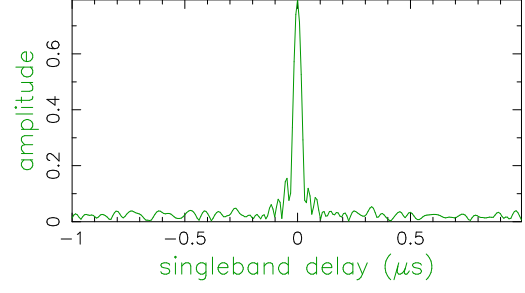
g: az 217.9 el 52.8 pa 10.1 g: az 217.9 el 52.8 pa 10.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gg..130G9L Output file: /Exps/c192b/v2/1234/No0205/gg.W.124.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

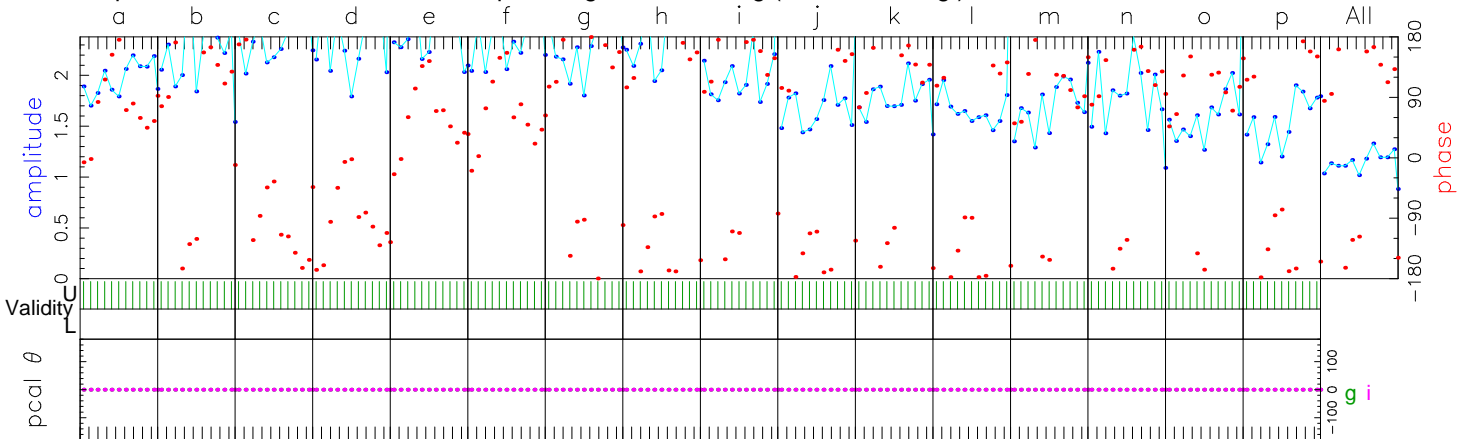
3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol LL



Fringe quality 1
SNR 47.5
Int time 479.780
Amp 0.793
Phase 153.3
PFD 0.0e+00
Delays (us)
SBD -0.000878
MBD 0.014202
Fringe rate (Hz) 0.003164
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112336
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"



Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
72.6	154.1	-126.9	-96.3	60.2	62.2	170.7	-177.4	168.1	176.4	154.8	169.0	116.1	149.6	113.6	-179.1		Phase	153.3
1.3	1.5	1.6	1.5	1.7	1.5	1.6	1.6	1.4	1.2	1.2	1.0	1.1	1.2	1.1	1.0		Ampl.	1.3
130.2	129.3	129.2	128.9	128.8	128.9	128.8	128.9	128.8	128.8	128.8	128.8	128.6	129.2	129.0	129.7	129.6	Sbd box	128.9
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

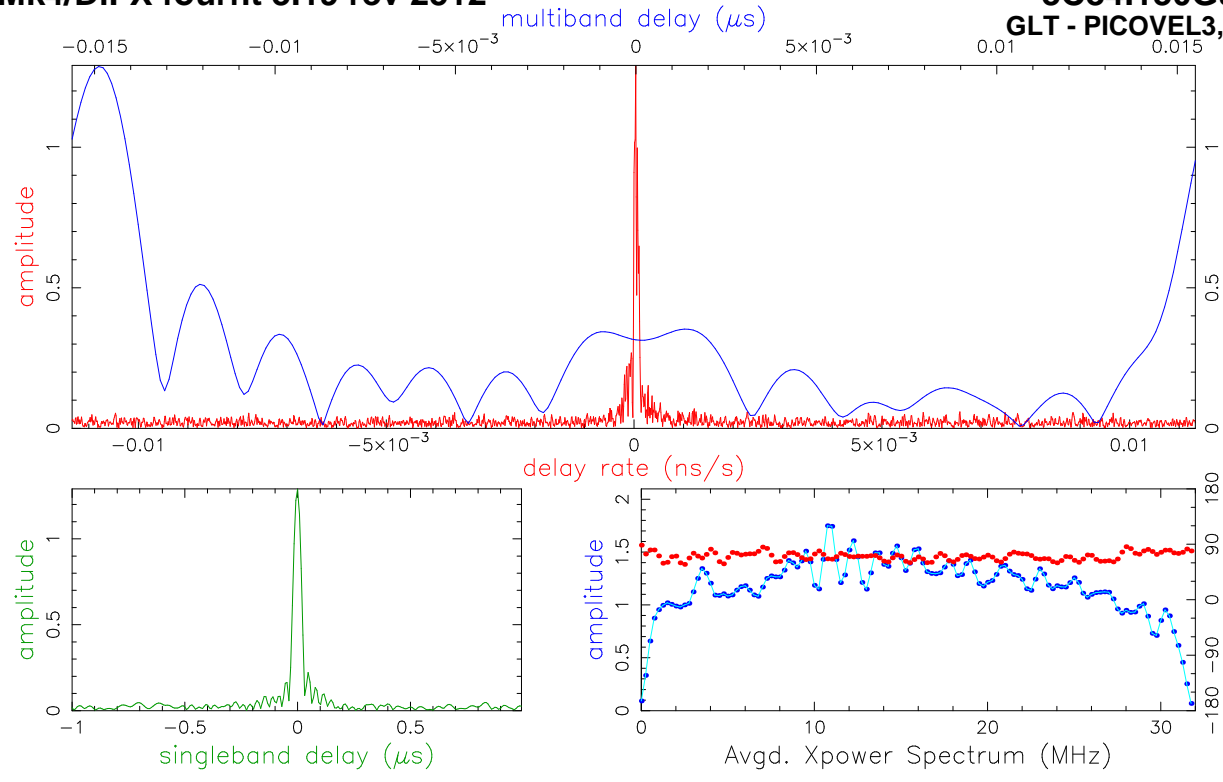
Group delay (usec)(sbd) 9.75840727370E+03 Apriori delay (usec) 9.75839307167E+03 Resid mbdelay (usec) 1.42020E-02 +/- 2.3E-05
 Sband delay (usec) 9.75839219317E+03 Apriori clock (usec) 1.8364235E+00 Resid sbdelay (usec) -8.78500E-04 +/- 3.6E-04
 Phase delay (usec) 9.75839307661E+03 Apriori clockrate (us/s) 4.2799997E-07 Resid phdelay (usec) 4.94404E-06 +/- 7.8E-08
 Delay rate (us/s) 7.83588190297E-01 Apriori rate (us/s) 7.83588153565E-01 Resid rate (us/s) 3.67316E-08 +/- 2.8E-10
 Total phase (deg) 223.0 Apriori accel (us/s/s) -2.41463241686E-05 Resid phase (deg) 153.3 +/- 2.4

ph/seg (deg) RMS Theor. Amplitude 0.793 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.2 4.2 Search (2048X64) 0.766 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.5 7.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 58.5 4.8 Inc. seg. avg. 1.156 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 75.5 8.4 Inc. frq. avg. 1.342 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.161.130G9L

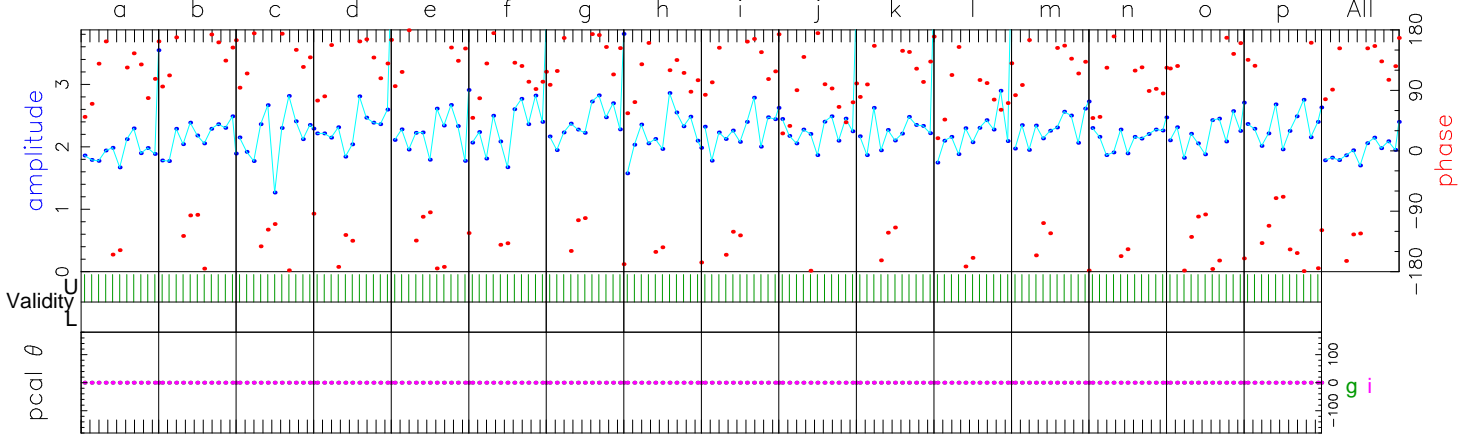
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol RR



Fringe quality 3
SNR 77.3
Int time 479.684
Amp 1.291
Phase 147.1
PFD 0.0e+00
Delays (us)
SBD -0.001527
MBD -0.014871
Fringe rate (Hz) 0.003195
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112343
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

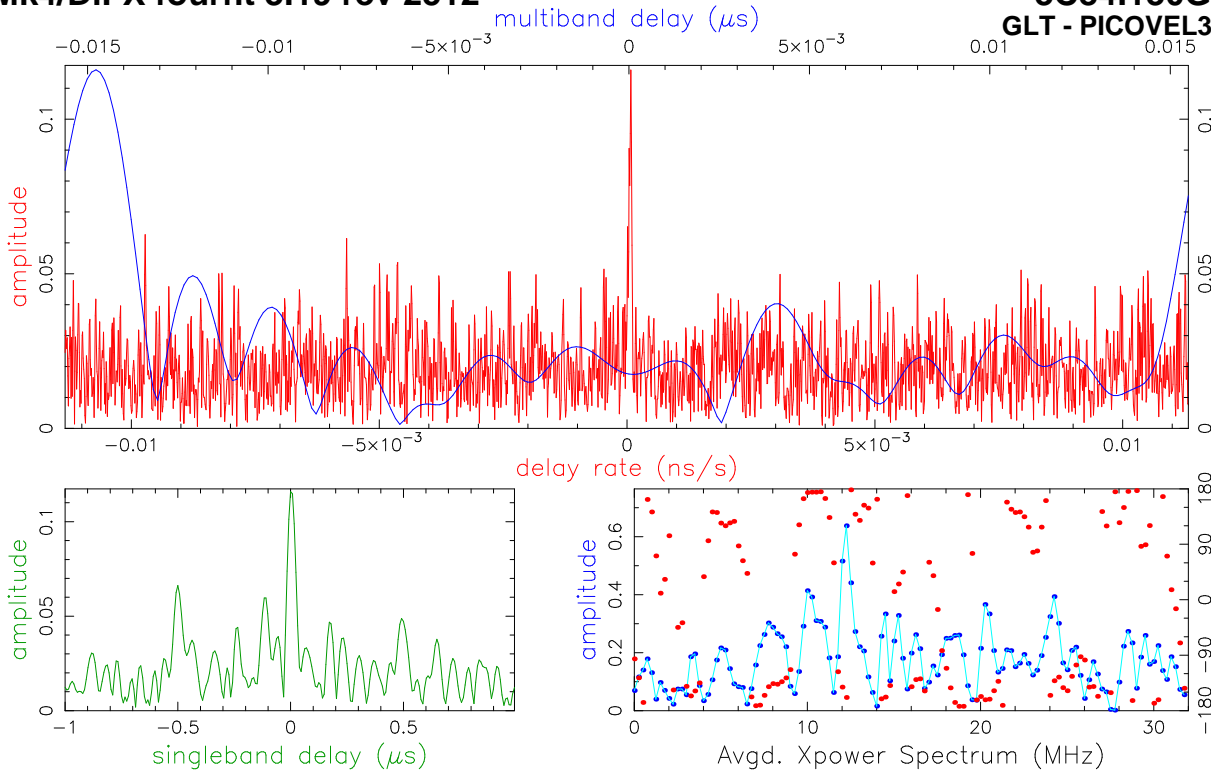


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
127.3	175.1	167.7	148.9	174.0	122.1	167.2	125.0	153.4	86.6	146.3	98.0	153.4	113.0	-179.1	-157.3		Phase	147.1	
1.3	1.4	1.5	1.6	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.6	1.5		Ampl.	1.5	
130.1	129.2	129.0	128.7	128.7	128.4	128.7	128.5	128.3	128.5	128.2	128.4	128.7	128.8	129.3	129.3		Sbd box	128.8	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	
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	
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)	9.75837820079E+03			Apriori delay (usec)			9.75839307167E+03			Resid mbdelay (usec)			-1.48709E-02			+/- 1.4E-05			
Sband delay (usec)	9.75839154417E+03			Apriori clock (usec)			1.8364235E+00			Resid sbdelay (usec)			-1.52750E-03			+/- 2.2E-04			
Phase delay (usec)	9.75839307641E+03			Apriori clockrate (us/s)			4.2799997E-07			Resid phdelay (usec)			4.74213E-06			+/- 4.8E-08			
Delay rate (us/s)	7.83588190654E-01			Apriori rate (us/s)			7.83588153565E-01			Resid rate (us/s)			3.70887E-08			+/- 1.7E-10			
Total phase (deg)	216.8			Apriori accel (us/s/s)			-2.41463241686E-05			Resid phase (deg)			147.1			+/- 1.5			

ph/seg (deg) 51.3 2.6 Search (2048X64) 1.210 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 50.0 4.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.2 3.0 Inc. seg. avg. 1.921 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 16.9 5.2 Inc. frq. avg. 1.490 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 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.178.130G9L

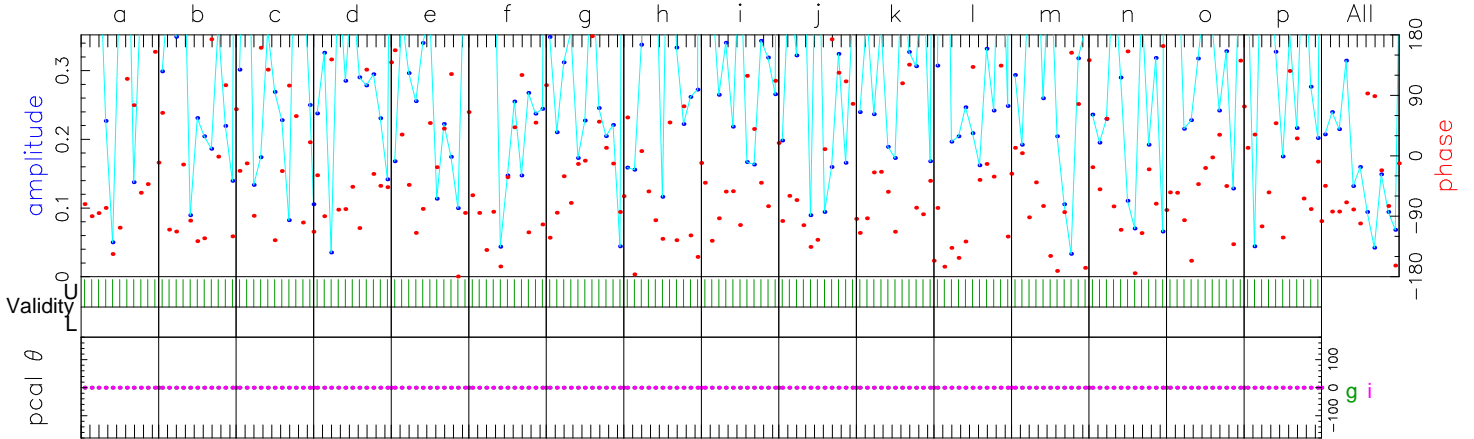
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol LR



Fringe quality 0
SNR 7.0
Int time 479.780
Amp 0.117
Phase -71.1
PFD 6.2e-04
Delays (us)
SBD 0.003309
MBD -0.014756
Fringe rate (Hz) 0.006754
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112349
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

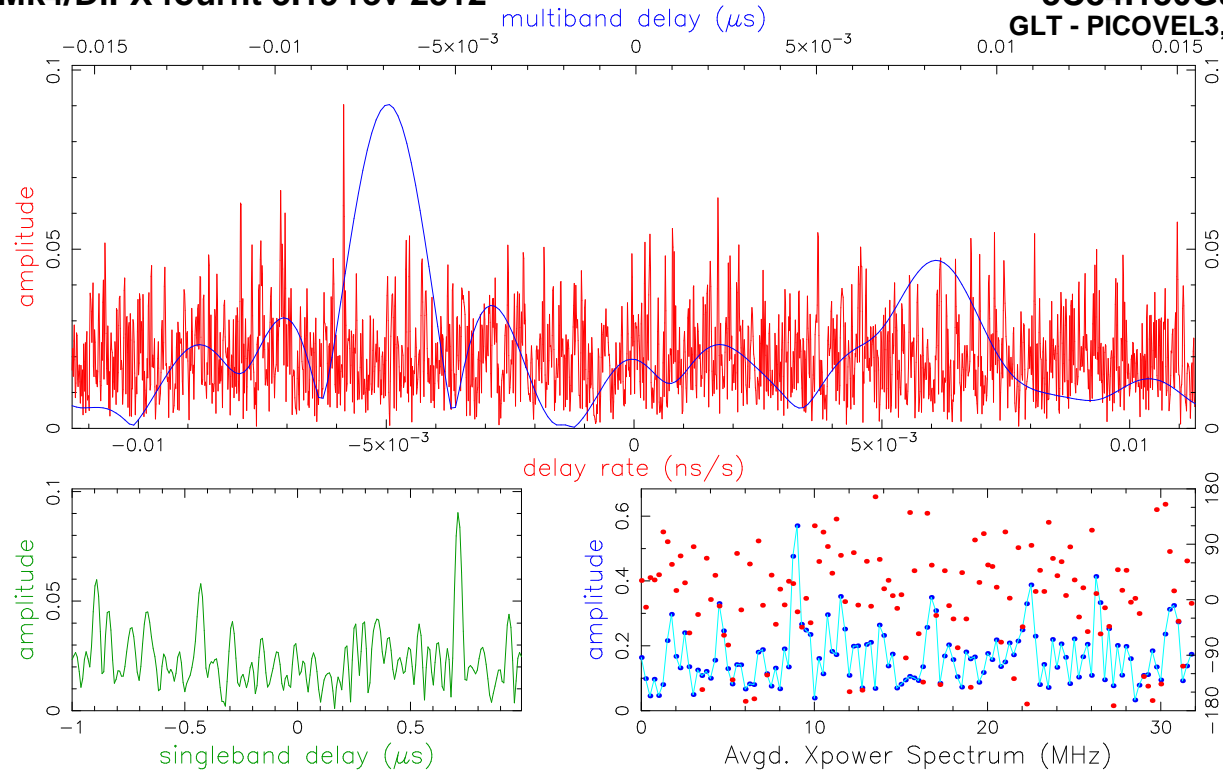


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-83.8	-76.7	-5.7	-65.8	-30.4	-86.7	-51.7	-54.7	-69.9	-109.7	-77.3	-145.8	-92.9	-75.3	-45.1	-42.2		Phase	-71.1
	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1		Ampl.	0.1
	216.3	145.5	83.9	130.2	163.3	122.7	59.0	238.0	127.5	133.7	205.9	122.5	58.3	175.6	240.8	109.1		Sbd box	129.4
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	
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	
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)	9.75840956591E+03			Apriori delay (usec)			9.75839307167E+03			Resid mbdelay (usec)			-1.47558E-02			+/- 1.5E-04			
Sband delay (usec)	9.75839638067E+03			Apriori clock (usec)			1.8364235E+00			Resid sbdelay (usec)			3.30900E-03			+/- 2.5E-03			
Phase delay (usec)	9.75839306938E+03			Apriori clockrate (us/s)			4.2799997E-07			Resid phdelay (usec)			-2.29290E-06			+/- 5.3E-07			
Delay rate (us/s)	7.83588231978E-01			Apriori rate (us/s)			7.83588153565E-01			Resid rate (us/s)			7.84125E-08			+/- 1.9E-09			
Total phase (deg)	-1.4			Apriori accel (us/s/s)			-2.41463241686E-05			Resid phase (deg)			-71.1			+/- 16.3			

ph/seg (deg) 76.9 28.2 Search (2048X64) 0.115 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 75.3 49.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 34.0 32.6 Inc. seg. avg. 0.140 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 35.3 56.9 Inc. frq. avg. 0.115 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 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.199.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gi
GLT - PICOVEL3, fgroup W, pol RL

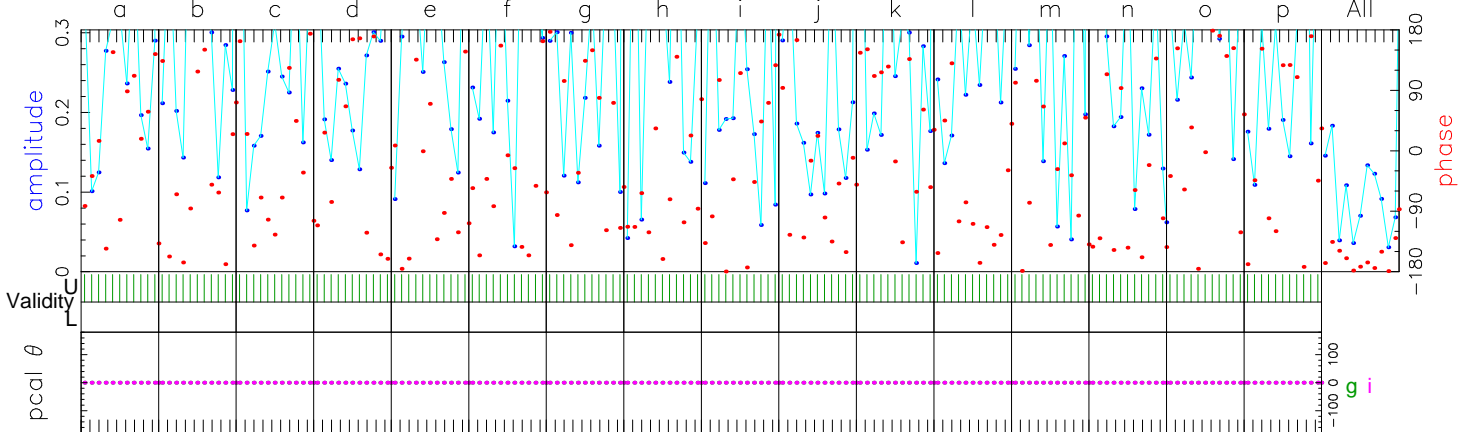


Fringe quality 0

SNR 5.4
Int time 479.684
Amp 0.101
Phase -157.4
PFD 1.0e+00
Delays (us)
SBD 0.711819
MBD -0.006863
Fringe rate (Hz)
-0.505530
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

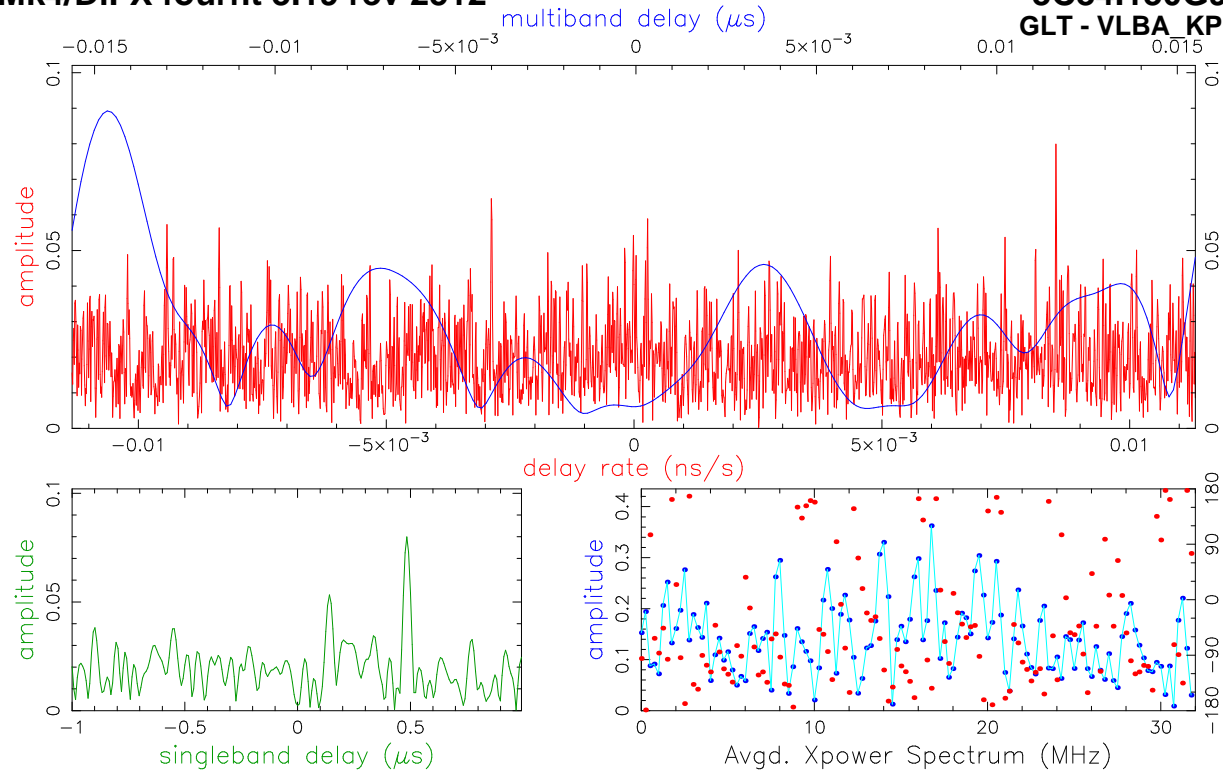
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112356
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
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		
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		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		9.75910495891E+03								9.75839307167E+03							-6.86276E-03	+/- 2.0E-04
Sband delay (usec)		9.75910489067E+03								1.8364235E+00							7.11819E-01	+/- 3.2E-03
Phase delay (usec)		9.75839306659E+03								4.2799997E-07							-5.07654E-06	+/- 6.8E-07
Delay rate (us/s)		7.83582284862E-01								7.83588153565E-01							-5.86870E-06	+/- 2.5E-09
Total phase (deg)																	-157.4	+/- 21.1
pcal mode:										MANUAL							MANUAL	
PCal rate:										0.000E+00							0.000E+00	(us/s)
Bits/sample:										2x2							SampCntNorm: enabled	
Sample rate(MSamp/s):										64							mb window (us)	-1.000 1.000
Data rate(Mb/s):										2048							dr window (ns/s)	-0.016 0.016
																	ion window (TEC)	0.00 0.00

ph/seg (deg) 16.7 36.6 Search (2048X64) 0.089 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 55.2 63.9 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 35.6 42.3 Inc. seg. avg. 0.088 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 46.8 73.8 Inc. frq. avg. 0.095 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 217.9 el 52.8 pa 10.1 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -6043.794 829.981 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gi..130G9L Output file: /Exps/c192b/v2/1234/No0205/gi.W.221.130G9L

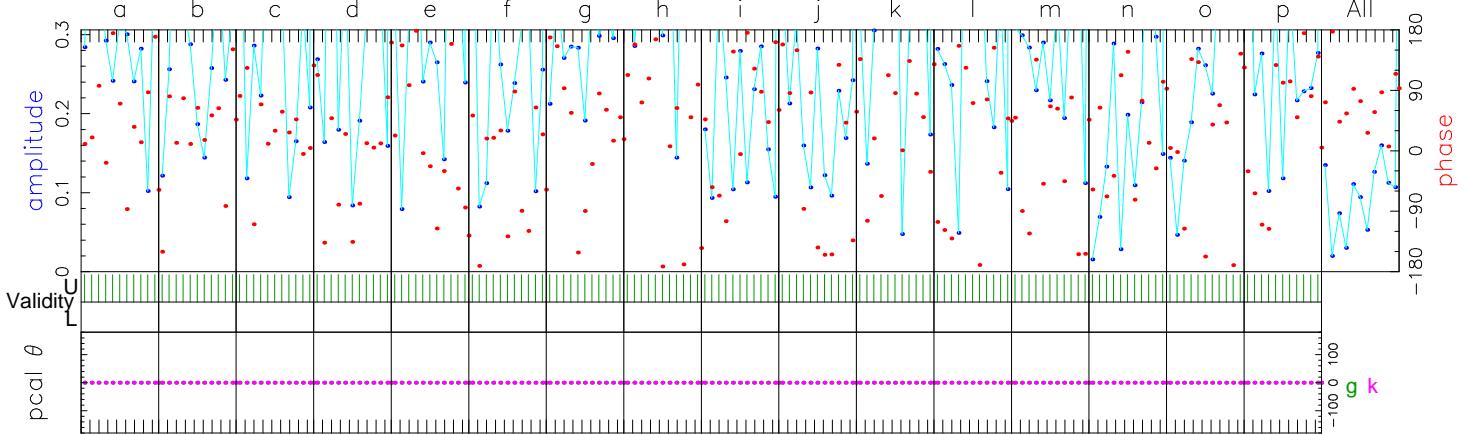


Fringe quality 0

SNR 4.8
Int time 477.706
Amp 0.102
Phase 69.8
PFD 1.0e+00
Delays (us)
SBD 0.484423
MBD 0.016113
Fringe rate (Hz) 0.734320
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

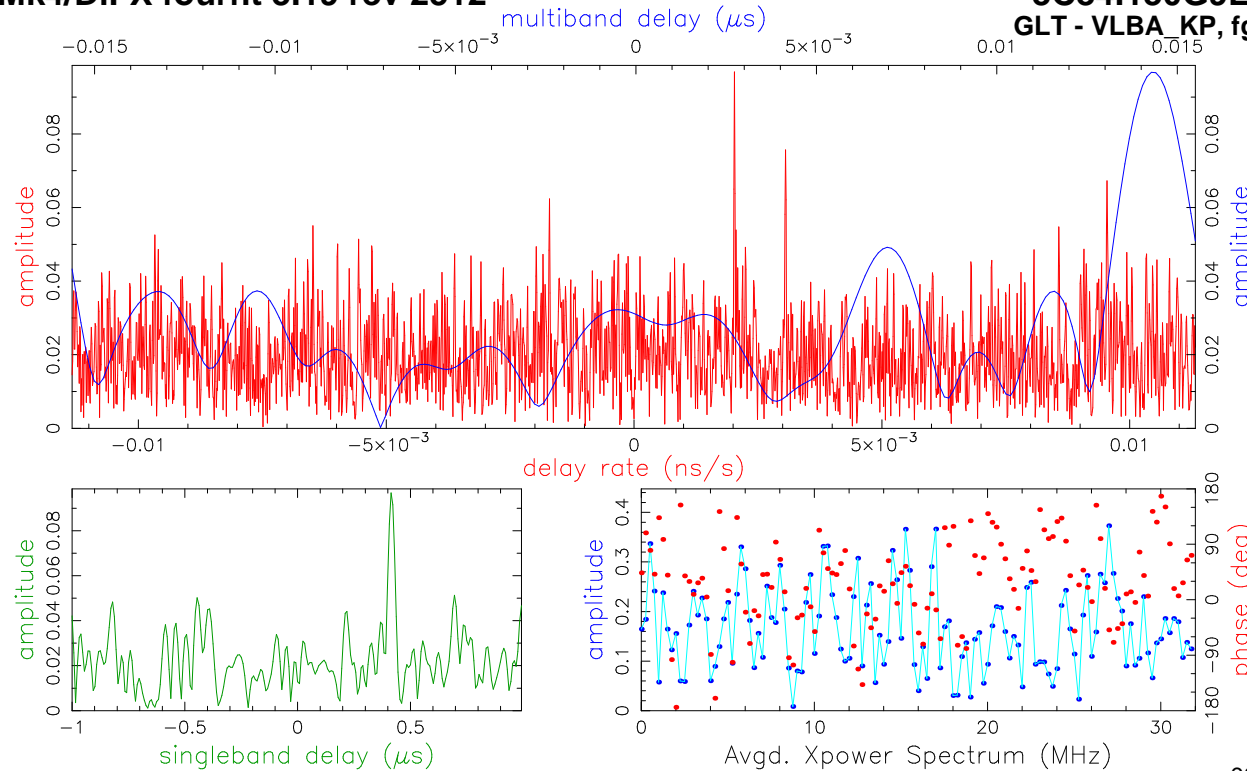
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112337
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



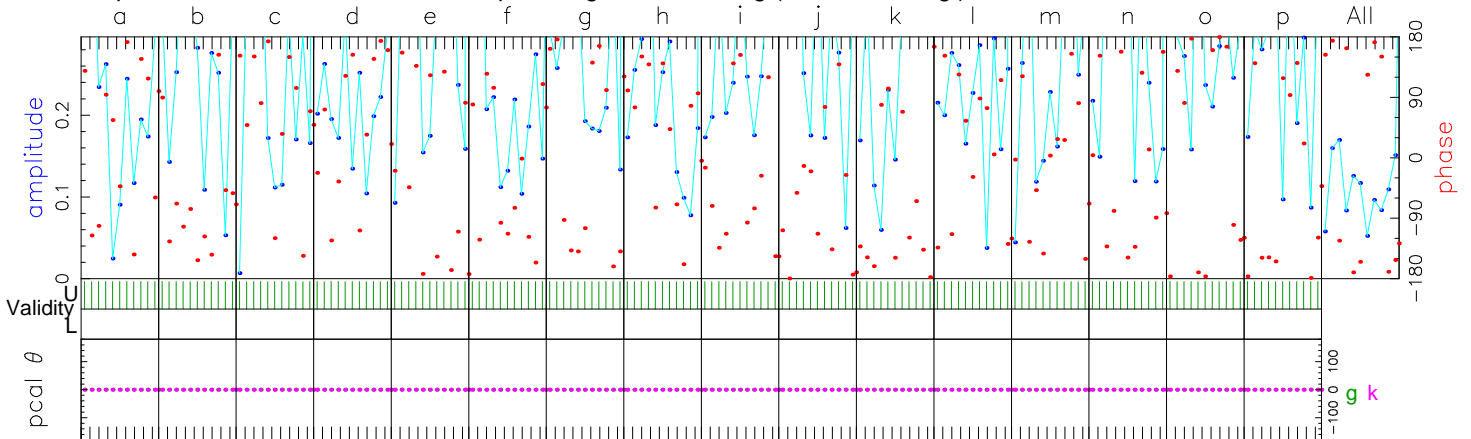
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
42.8	49.7	37.4	26.8	-122.9	20.3	67.2	114.8	32.0	160.9	80.4	148.7	76.5	9.0	123.2	103.1	103.1	Phase	69.8				
0.2	0.2	0.3	0.2	0.0	0.1	0.2	0.3	0.0	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.1	Ampl.	0.1				
139.2	230.7	190.9	51.7	153.0	59.1	146.6	192.5	28.0	198.0	205.6	97.1	121.0	23.0	155.9	140.9	140.9	Sbd box	191.0				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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					
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					
																	Tracks					
Group delay (usec)(sbd)			-3.77036645306E+03														Apriori delay (usec)	-3.77085131634E+03	Resid mbdelay (usec)	1.61133E-02	+/-	2.3E-04
Sband delay (usec)			-3.77036689384E+03														Apriori clock (usec)	1.7094140E+00	Resid sbdelay (usec)	4.84423E-01	+/-	3.6E-03
Phase delay (usec)			-3.77085131409E+03														Apriori clockrate (us/s)	2.6957898E-07	Resid phdelay (usec)	2.25177E-06	+/-	7.7E-07
Delay rate (us/s)			-3.46055471162E-01														Apriori rate (us/s)	-3.46063995892E-01	Resid rate (us/s)	8.52473E-06	+/-	2.8E-09
Total phase (deg)					-70.5												Apriori accel (us/s/s)	5.32994830780E-05	Resid phase (deg)	69.8	+/-	24.0

ph/seg (deg) 43.9 41.6 Search (2048X64) 0.102 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.1 72.5 Interp. 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 65.6 48.0 Inc. seg. avg. 0.096 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 93.5 83.8 Inc. frq. avg. 0.109 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 217.9 el 52.8 pa 10.1 k: az 43.8 el 75.8 pa -127.2 u,v (fr/asec) 2733.195 6629.996 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gk..130G9L Output file: /Exps/c192b/v2/1234/No0205/gk.W.163.130G9L



Fringe quality 0
SNR 5.8
Int time 477.610
Amp 0.099
Phase -172.1
PFD 7.8e-01
Delays (us)
SBD 0.415792
MBD 0.014321
Fringe rate (Hz) 0.174376
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112344
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-167.6	-109.9	119.9	154.0	169.1	-157.3	-160.6	116.1	-141.4	-118.3	-152.6	143.2	153.2	-157.4	-179.6	174.8		Phase -172.1
	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.1		Ampl. 0.1
	45.4	22.2	211.6	30.6	154.5	209.8	137.6	10.2	39.2	255.6	167.5	41.3	73.1	217.5	181.7	112.0		Sbd box 182.2
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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
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
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

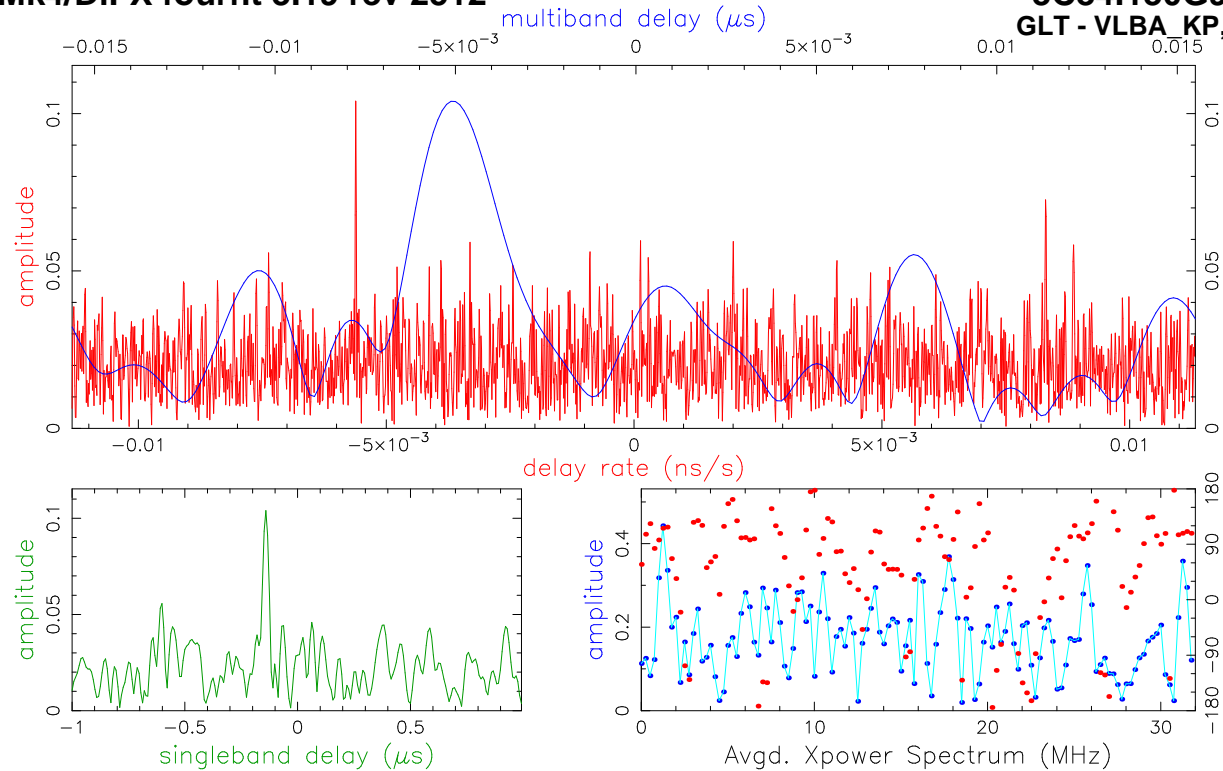
Group delay (usec)(sbd) -3.77043074571E+03 Apriori delay (usec) -3.77085131634E+03 Resid mbdelay (usec) 1.43206E-02 +/- 1.9E-04
 Sband delay (usec) -3.77043552434E+03 Apriori clock (usec) 1.7094140E+00 Resid sbdelay (usec) 4.15792E-01 +/- 3.0E-03
 Phase delay (usec) -3.77085132189E+03 Apriori clockrate (us/s) 2.6957898E-07 Resid phdelay (usec) -5.54850E-06 +/- 6.4E-07
 Delay rate (us/s) -3.46061971559E-01 Apriori rate (us/s) -3.46063995892E-01 Resid rate (us/s) 2.02433E-06 +/- 2.3E-09
 Total phase (deg) -312.4 Apriori accel (us/s/s) 5.32994830780E-05 Resid phase (deg) -172.1 +/- 19.7

ph/seg (deg) RMS Theor. Amplitude 0.099 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 31.5 34.1 Search (2048X64) 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.4 59.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 40.9 39.4 Inc. seg. avg. 0.095 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 60.2 68.8 Inc. frq. avg. 0.099 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 217.9 el 52.8 pa 10.1 k: az 43.8 el 75.8 pa -127.2 u,v (fr/asec) 2733.195 6629.996 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gk..130G9L Output file: /Exps/c192b/v2/1234/No0205/gk.W.180.130G9L

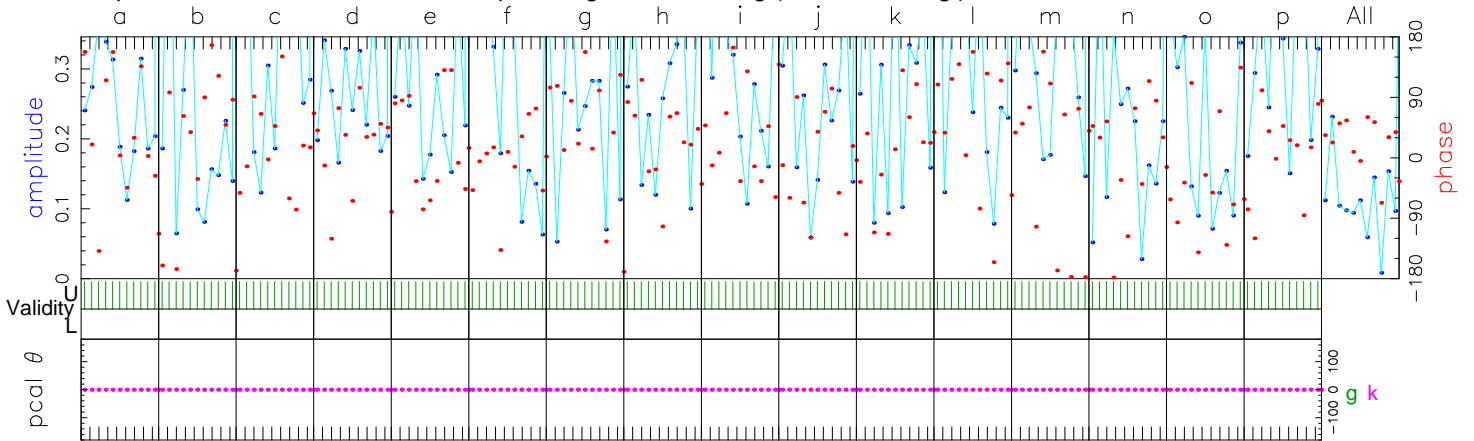
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gk
GLT - VLBA_KP, fgroup W, pol LR



Fringe quality 0
SNR 6.2
Int time 477.706
Amp 0.115
Phase 32.0
PFD 1.3e-01
Delays (us)
SBD -0.140942
MBD -0.005074
Fringe rate (Hz)
-0.484528
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112349
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

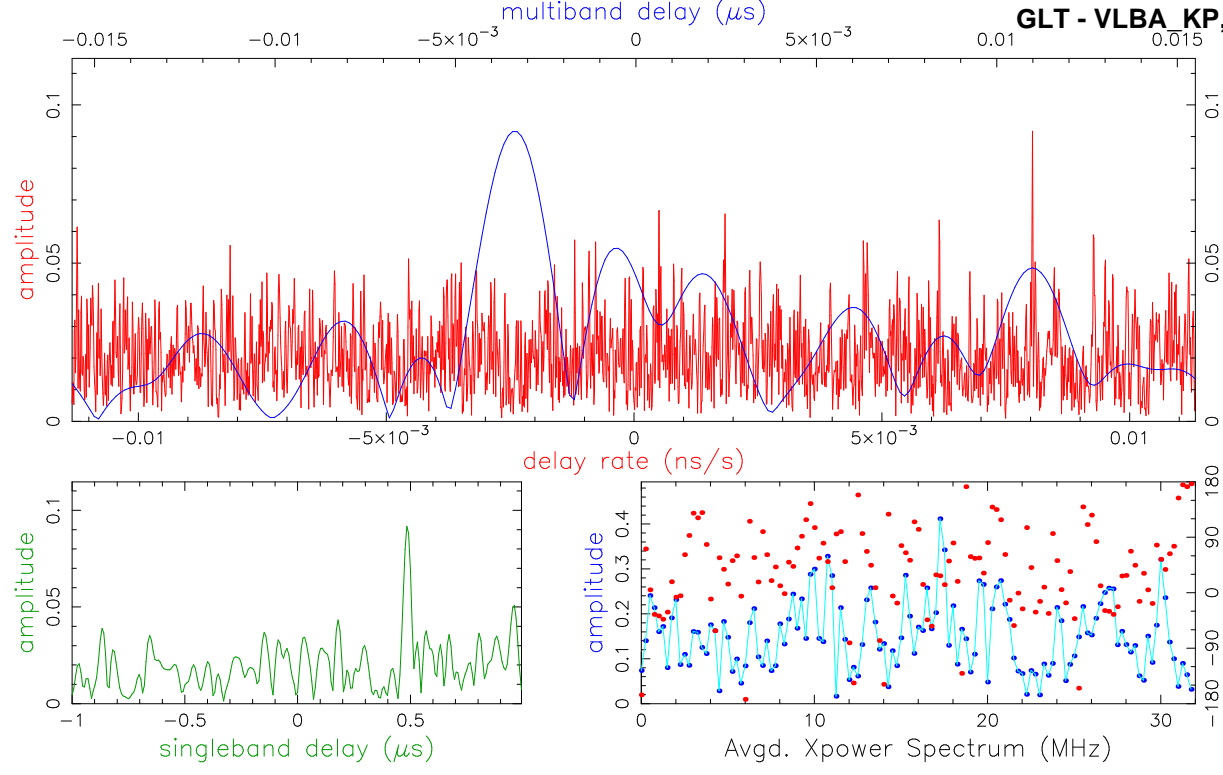


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
108.5	85.0	-16.8	28.7	13.2	-2.0	70.2	42.6	11.9	-29.9	24.7	117.6	101.0	47.7	-63.6	17.7		Phase	32.0	
0.0	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2		Ampl.	0.1	
61.1	174.6	165.0	137.6	184.1	110.2	248.5	254.8	110.3	179.7	167.4	111.6	160.5	203.1	15.3	112.4		Sbd box	111.0	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	
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)			-3.77098139064E+03								-3.77085131634E+03						Resid mbdelay (usec)	-5.07430E-03	+/- 1.7E-04
Sband delay (usec)			-3.77099225784E+03								1.7094140E+00						Resid sbdelay (usec)	-1.40942E-01	+/- 2.8E-03
Phase delay (usec)			-3.77085131531E+03								2.6957898E-07						Resid phdelay (usec)	1.03344E-06	+/- 5.9E-07
Delay rate (us/s)			-3.46069620777E-01								-3.46063995892E-01						Resid rate (us/s)	-5.62488E-06	+/- 2.1E-09
Total phase (deg)											5.32994830780E-05						Resid phase (deg)	32.0	+/- 18.4

ph/seg (deg) RMS 35.8 Theor. 31.9 Amplitude 0.115 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 54.7 55.7 Search (2048X64) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 53.5 36.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 60.3 64.4 Inc. seg. avg. 0.107 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 k: az 43.8 el 75.8 pa -127.2 u,v (fr/asec) 2733.195 6629.996 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gk..130G9L Output file: /Exps/c192b/v2/1234/No0205/gk.W.197.130G9L simultaneous interpolator

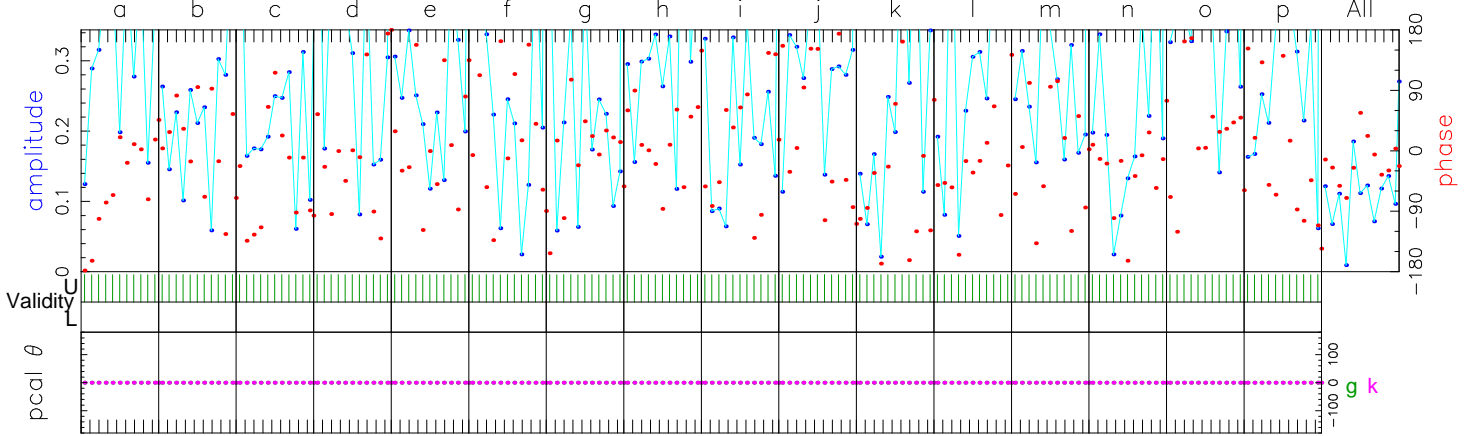
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gk
GLT - VLBA_KP, fgroup W, pol RL



Fringe quality 0
SNR 5.5
Int time 477.611
Amp 0.115
Phase -13.3
PFD 1.0e+00
Delays (us)
SBD 0.486610
MBD -0.003335
Fringe rate (Hz) 0.693056
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112355
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-36.1	14.4	-22.5	-14.2	-17.1	15.5	27.3	7.5	43.4	-111.7	-129.4	-30.9	-8.2	-18.2	23.0	-68.5	Phase	-13.3				
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.0	0.0	0.1	0.3	0.1	0.2	0.2	0.1	Ampl.	0.1				
	181.2	4.6	202.7	226.0	217.9	36.8	131.2	189.7	203.5	2.9	89.7	192.2	44.2	133.7	243.6	8.4	Sbd box	191.3				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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					
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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.77035465107E+03														Apriori delay (usec)	-3.77085131634E+03	Resid mbdelay (usec)	-3.33473E-03	+/-	2.0E-04
Sband delay (usec)			-3.77036470634E+03														Apriori clock (usec)	1.7094140E+00	Resid sbdelay (usec)	4.86610E-01	+/-	3.1E-03
Phase delay (usec)			-3.77085131677E+03														Apriori clockrate (us/s)	2.6957898E-07	Resid phdelay (usec)	-4.29414E-07	+/-	6.7E-07
Delay rate (us/s)			-3.46055950198E-01														Apriori rate (us/s)	-3.46063995892E-01	Resid rate (us/s)	8.04569E-06	+/-	2.4E-09
Total phase (deg)					-153.7												Apriori accel (us/s/s)	5.32994830780E-05	Resid phase (deg)	-13.3	+/-	20.8

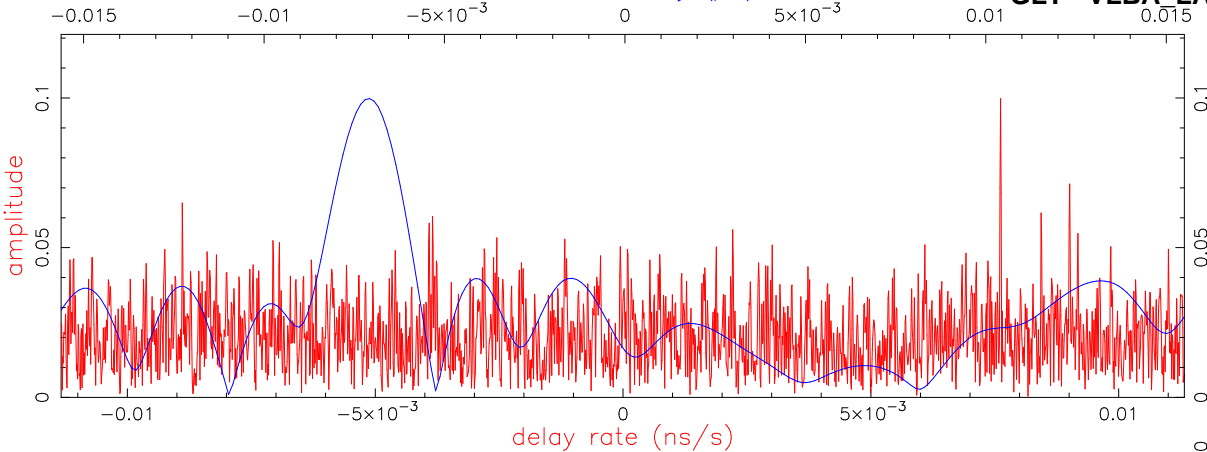
ph/seg (deg) 33.2 35.9 Search (2048X64) 0.089 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 48.9 62.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 50.3 41.5 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 70.3 72.4 Inc. frq. avg. 0.111 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 217.9 el 52.8 pa 10.1 k: az 43.8 el 75.8 pa -127.2 u,v (fr/asec) 2733.195 6629.996 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gk..130G9L Output file: /Exps/c192b/v2/1234/No0205/gk.W.218.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

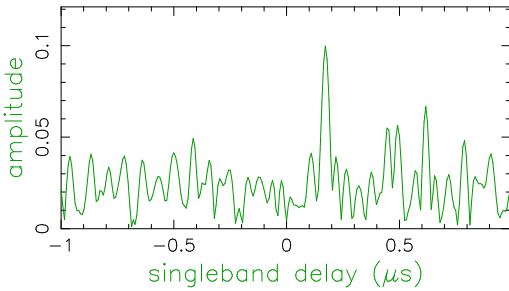
3C84.130G9L, No0205, gl
GLT - VLBA LA, fgroup W, pol LL

multiband delay (μ s)

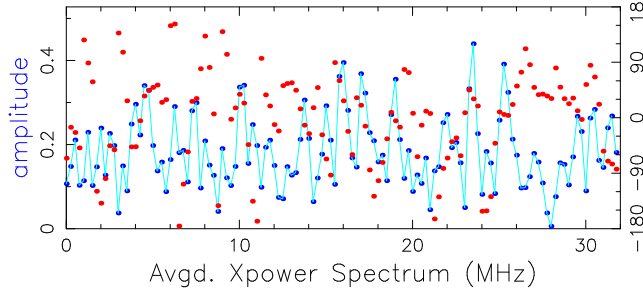
Fringe quality 0



SNR 6.0
Int time 478.671
Amp 0.121
Phase -38.9
PFD 4.4e-01
Delays (us)
SBD 0.172510
MBD -0.007109
Fringe rate (Hz)
0.657104
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

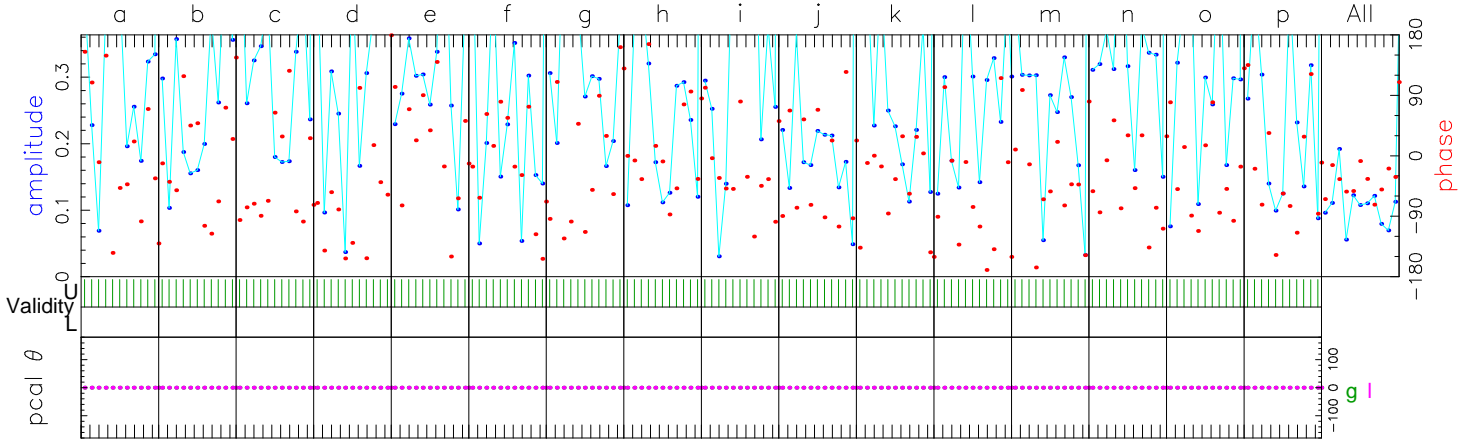


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112336
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

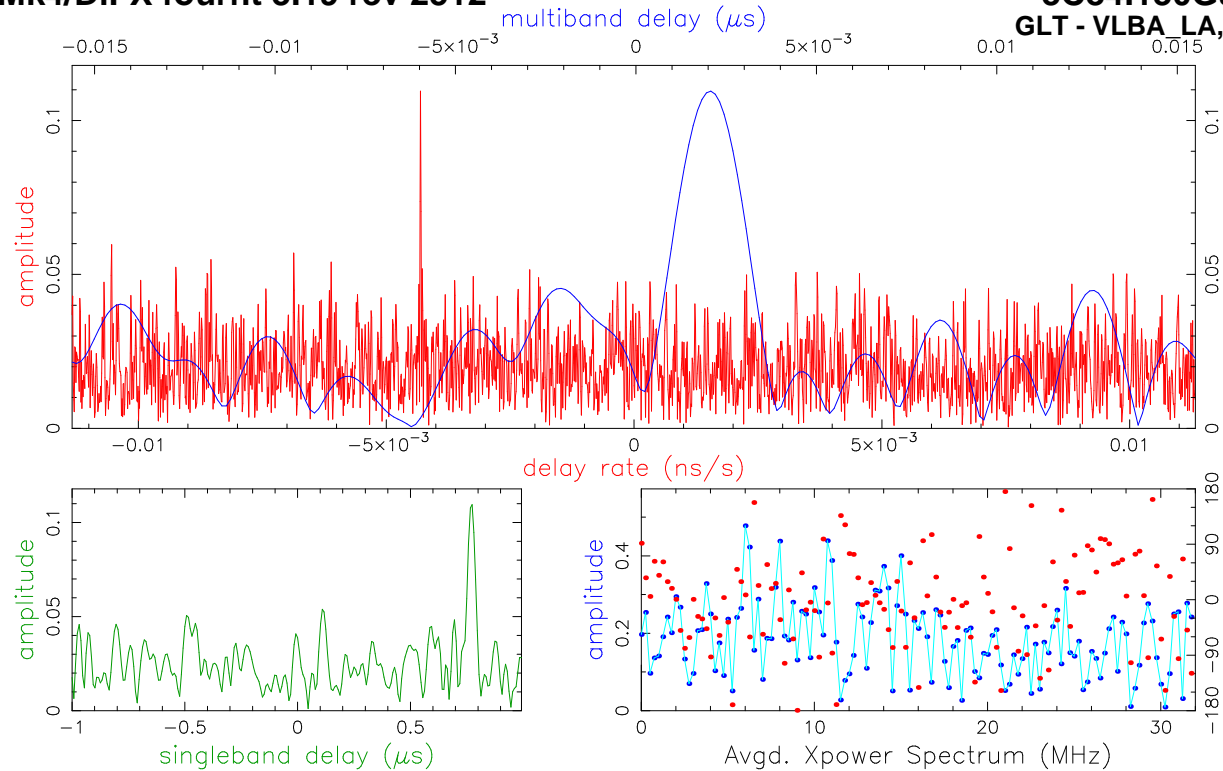


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-134.6	-6.5	-74.6	-73.9	42.0	14.0	-105.7	-1.7	-44.6	-42.1	-25.9	-60.2	-24.6	-45.1	-45.0	-59.2		Phase	-38.9				
	0.0	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1		Ampl.	0.1				
	18.5	163.0	152.2	152.7	143.7	180.3	187.0	190.5	157.5	101.8	149.6	146.8	111.2	66.7	146.6	116.2		Sbd box	151.1				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	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)			-4.17226936799E+03															Apriori delay (usec)	-4.17244975887E+03	Resid mbdelay (usec)	-7.10912E-03	+/-	1.8E-04
Sband delay (usec)			-4.17227724887E+03															Apriori clock (usec)	2.0694978E+00	Resid sbdelay (usec)	1.72510E-01	+/-	2.9E-03
Phase delay (usec)			-4.17244976012E+03															Apriori clockrate (us/s)	4.2647201E-07	Resid phdelay (usec)	-1.25287E-06	+/-	6.2E-07
Delay rate (us/s)			-2.49937437811E-01															Apriori rate (us/s)	-2.49945066140E-01	Resid rate (us/s)	7.62833E-06	+/-	2.2E-09
Total phase (deg)																		Apriori accel (us/s/s)	5.12956466123E-05	Resid phase (deg)	-38.9	+/-	19.2

ph/seg (deg) 21.4 33.2 Theor. Amplitude 0.121 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 37.9 58.0 Search (2048X64) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 45.7 38.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 58.4 66.9 Inc. seg. avg. 0.112 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 l: az 43.9 el 81.6 pa -134.4 u,v (fr/asec) 1994.790 6130.921 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gl..130G9L Output file: /Exps/c192b/v2/1234/No0205/gl.W.158.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gl
GLT - VLBA LA, fgroup W, pol RR

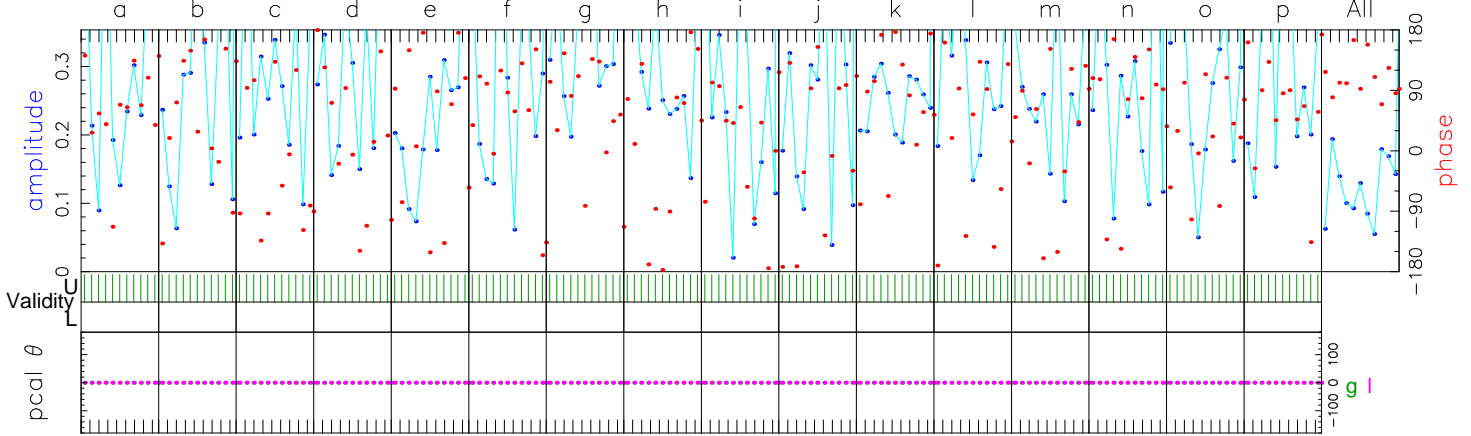


Fringe quality 0

SNR 6.6
Int time 478.578
Amp 0.118
Phase 101.9
PFD 8.9e-03
Delays (us)
SBD 0.770287
MBD 0.002078
Fringe rate (Hz)
-0.371809
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112342
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

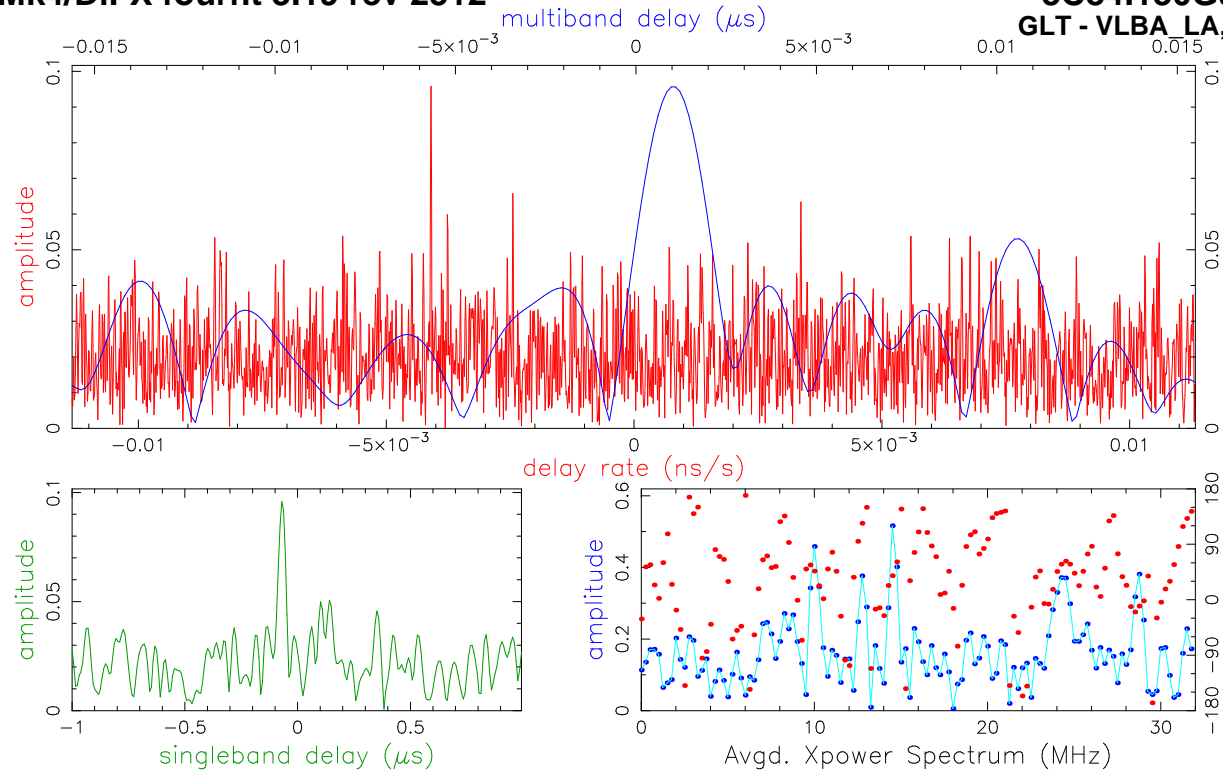


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
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		
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		
l	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.17166643050E+03																
Sband delay (usec)		-4.17167947237E+03																
Phase delay (usec)		-4.17244975558E+03																
Delay rate (us/s)		-2.49949382473E-01																
Total phase (deg)				19.5														
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
Pcal mode: MANUAL, MANUAL																		
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																		
sb window (us)																		
Bits/sample: 2x2																		
SampCntNorm: enabled																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
simultaneous interpolator																		

ph/seg (deg) 29.8 29.9 Search (2048X64) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 43.7 52.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.6 34.5 Inc. seg. avg. 0.115 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 53.4 60.2 Inc. frq. avg. 0.112 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 217.9 el 52.8 pa 10.1 l: az 43.9 el 81.6 pa -134.4 u,v (fr/asec) 1994.790 6130.921 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gl..130G9L Output file: /Exps/c192b/v2/1234/No0205/gl.W.174.130G9L

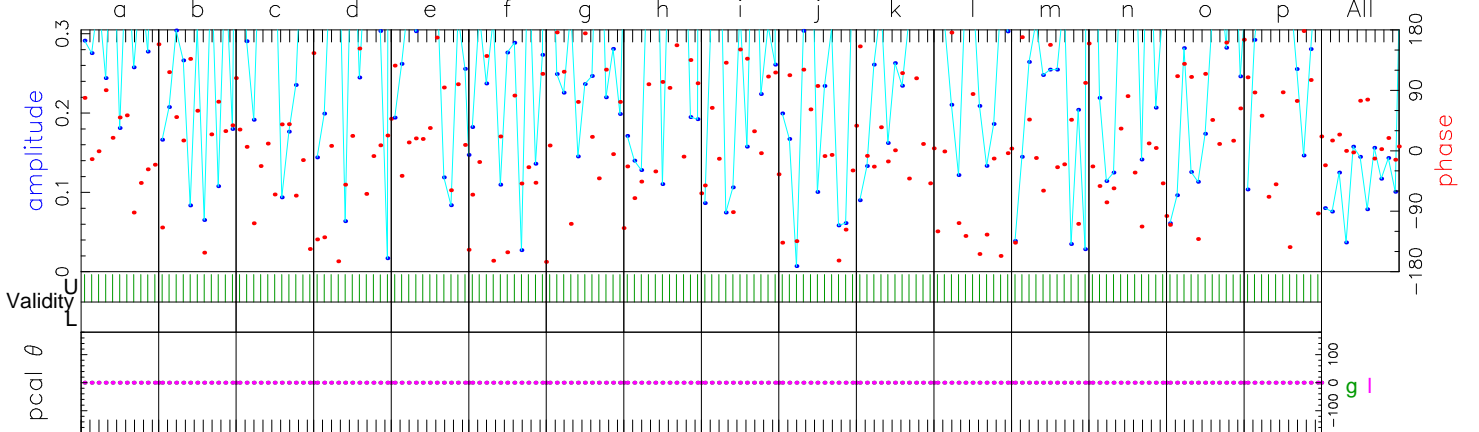
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gl
GLT - VLBA LA, fgroup W, pol LR



Fringe quality 0
SNR 5.8
Int time 478.672
Amp 0.102
Phase 13.6
PFD 8.8e-01
Delays (us)
SBD -0.068379
MBD 0.001016
Fringe rate (Hz)
-0.353825
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112348
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

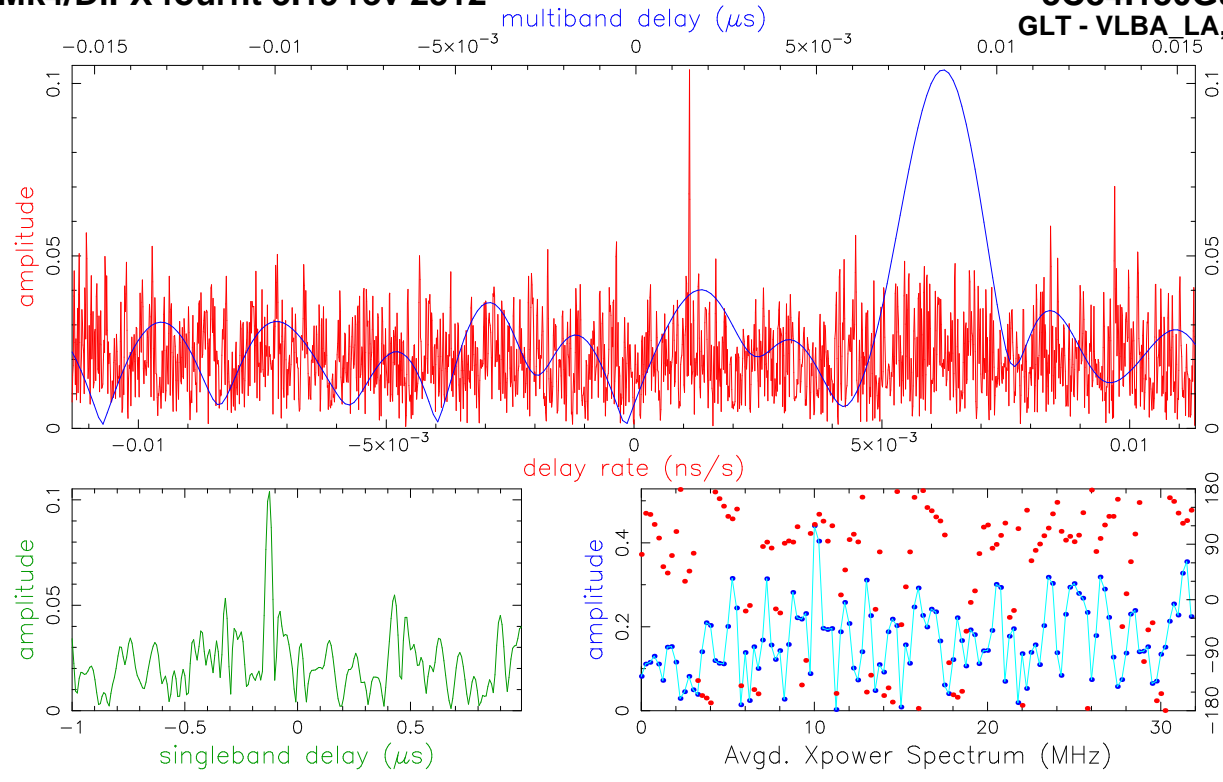
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
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		
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		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.17251124257E+03																
Sband delay (usec)		-4.17251813737E+03																
Phase delay (usec)		-4.17244975843E+03																
Delay rate (us/s)		-2.49949173700E-01																
Total phase (deg)					-68.8													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
simultaneous interpolator																		

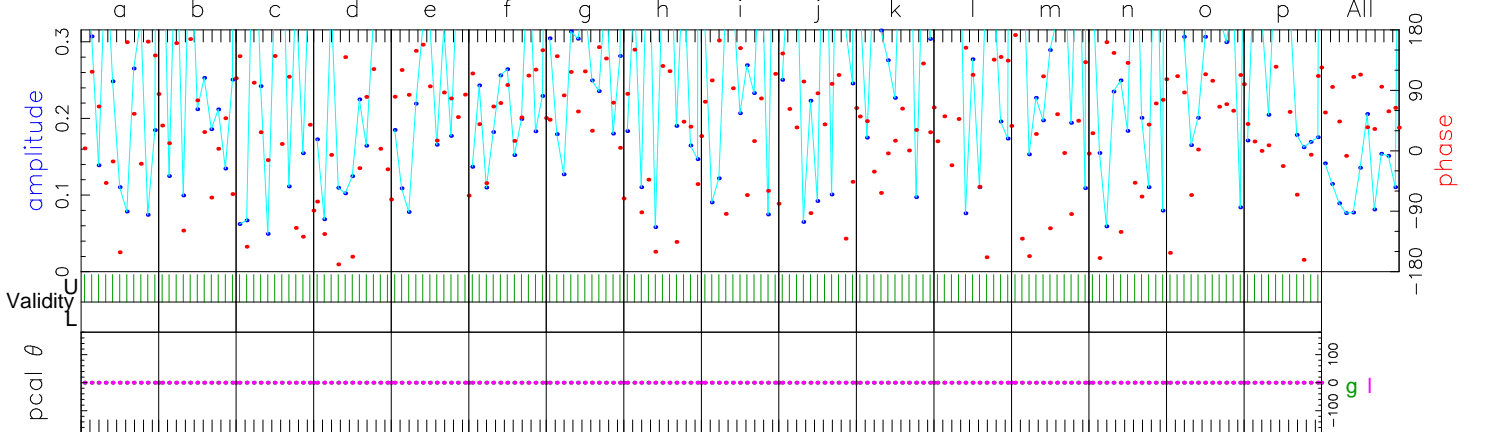
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gl
GLT - VLBA LA, fgroup W, pol RL



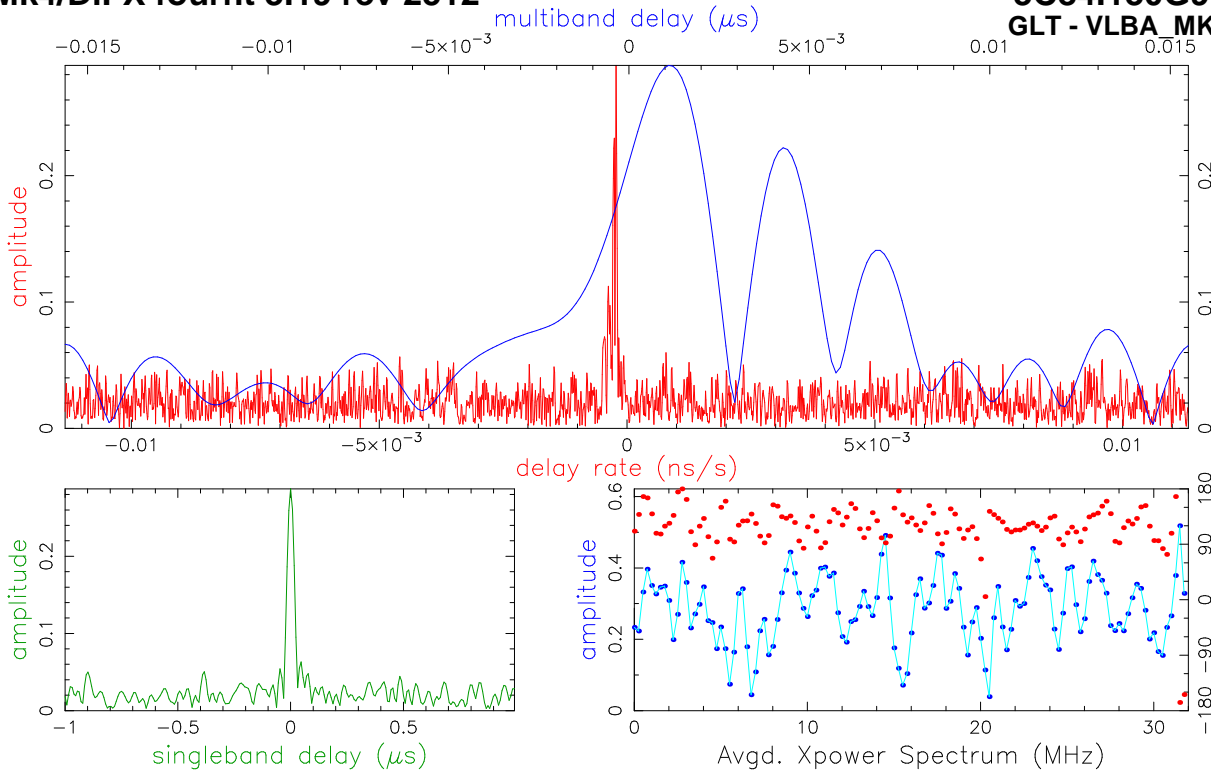
Fringe quality 0
SNR 6.3
Int time 478.576
Amp 0.105
Phase 64.5
PFD 9.3e-02
Delays (us)
SBD -0.127199
MBD 0.008534
Fringe rate (Hz)
0.096252
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112353
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
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		
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		
l	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-4.17256622504E+03																
Sband delay (usec)		-4.17257695737E+03																
Phase delay (usec)		-4.17244975679E+03																
Delay rate (us/s)		-2.49943948747E-01																
Total phase (deg)					-17.9													
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)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 35.6 31.7 Search (2048X64) 0.102 0.105 +/- 0.017
amp/seg (%) 47.5 55.3 Interp. 0.000
ph/frq (deg) 33.6 36.6 Inc. seg. avg. 0.107
amp/frq (%) 58.1 63.8 Inc. frq. avg. 0.102
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
g: az 217.9 el 52.8 pa 10.1 l: az 43.9 el 81.6 pa -134.4 u,v (fr/asec) 1994.790 6130.921 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gl..130G9L Output file: /Exps/c192b/v2/1234/No0205/gl.W.212.130G9L

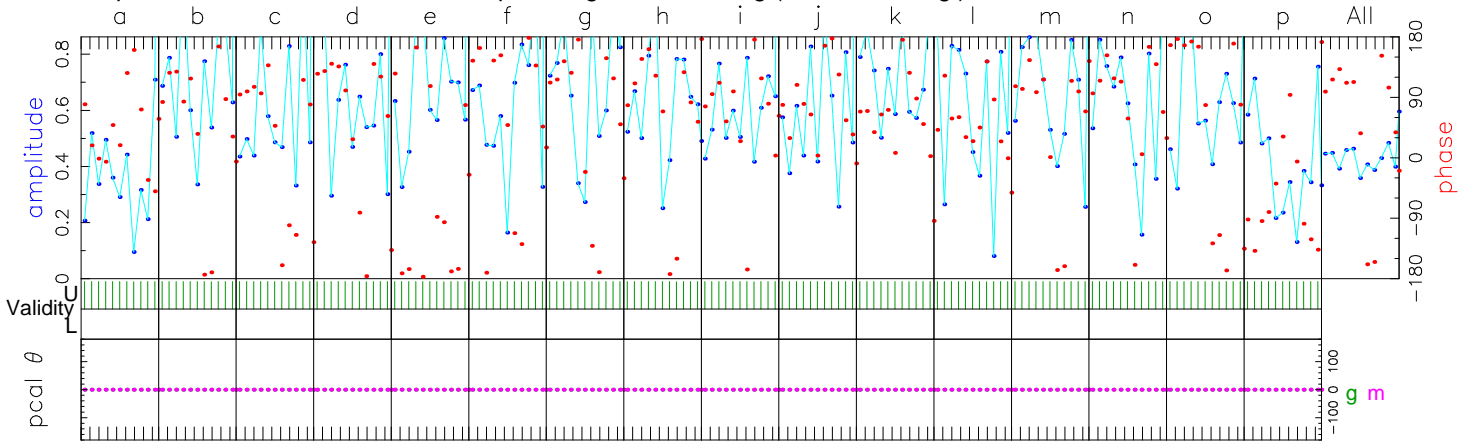


Fringe quality 9

SNR 17.2
Int time 478.432
Amp 0.287
Phase 117.9
PFD 0.0e+00
Delays (us)
SBD 0.000108
MBD 0.001139
Fringe rate (Hz)
-0.019416
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112335
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

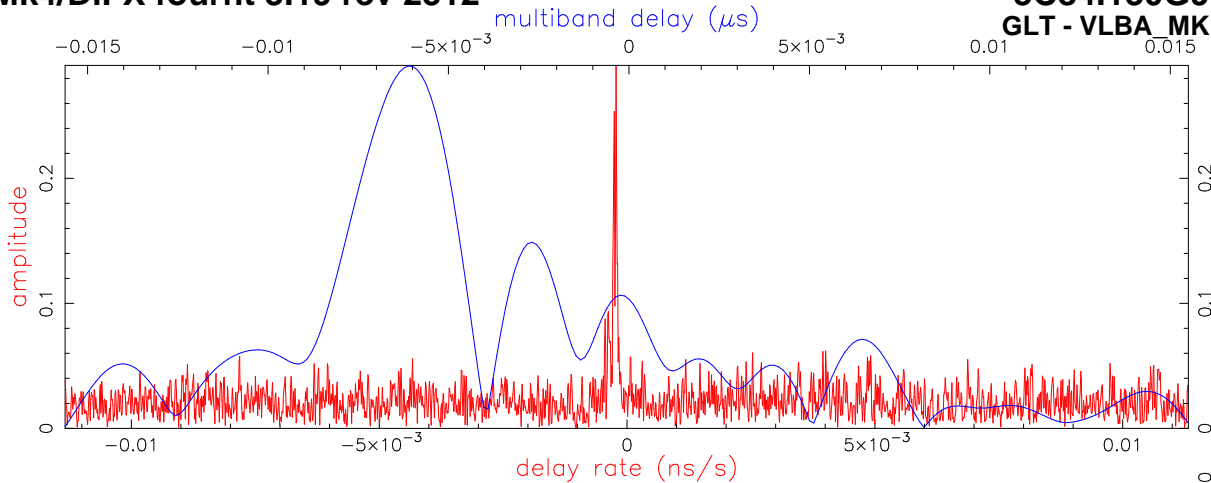


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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		
m	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		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		3.73463795859E+03								3.73463681959E+03							1.13901E-03	+/- 6.3E-05
Sband delay (usec)		3.73463692809E+03								-1.2823149E+00							1.08500E-04	+/- 1.0E-03
Phase delay (usec)		3.73463682339E+03								8.3692290E-08							3.80226E-06	+/- 2.2E-07
Delay rate (us/s)		-1.04465512338E+00								-1.04465489797E+00							-2.25401E-07	+/- 7.8E-10
Total phase (deg)				348.0						2.76056309582E-05							117.9	+/- 6.7

ph/seg (deg) 52.3 11.5 Search (2048X64) 0.271 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.9 20.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.4 13.3 Inc. seg. avg. 0.417 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.4 23.3 Inc. frq. avg. 0.395 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 m: az 52.2 el 37.5 pa -95.9 u,v (fr/asec) 8034.675 6048.156 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gm..130G9L Output file: /Exps/c192b/v2/1234/No0205/gm.W.157.130G9L

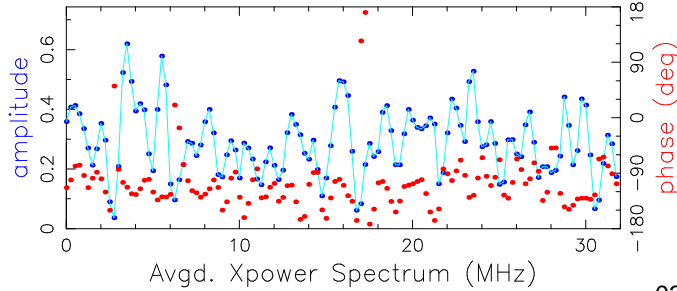
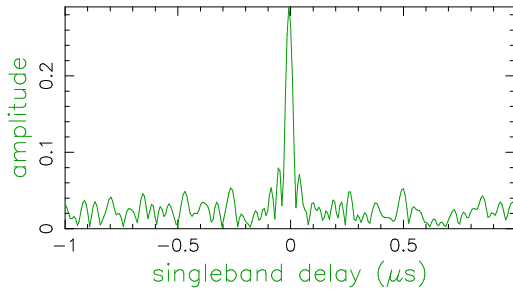
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gm
GLT - VLBA_MK, fgroup W, pol RR



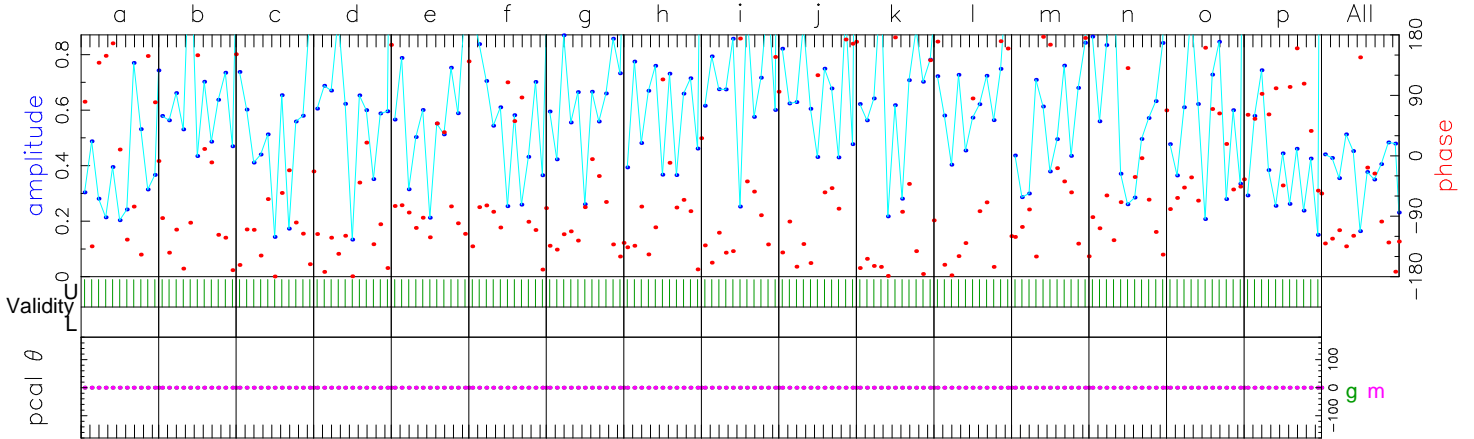
Fringe quality 7

SNR 17.4
Int time 478.332
Amp 0.290
Phase -118.6
PFD 0.0e+00
Delays (us)
SBD -0.006931
MBD -0.006074
Fringe rate (Hz)
-0.019487
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112340
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

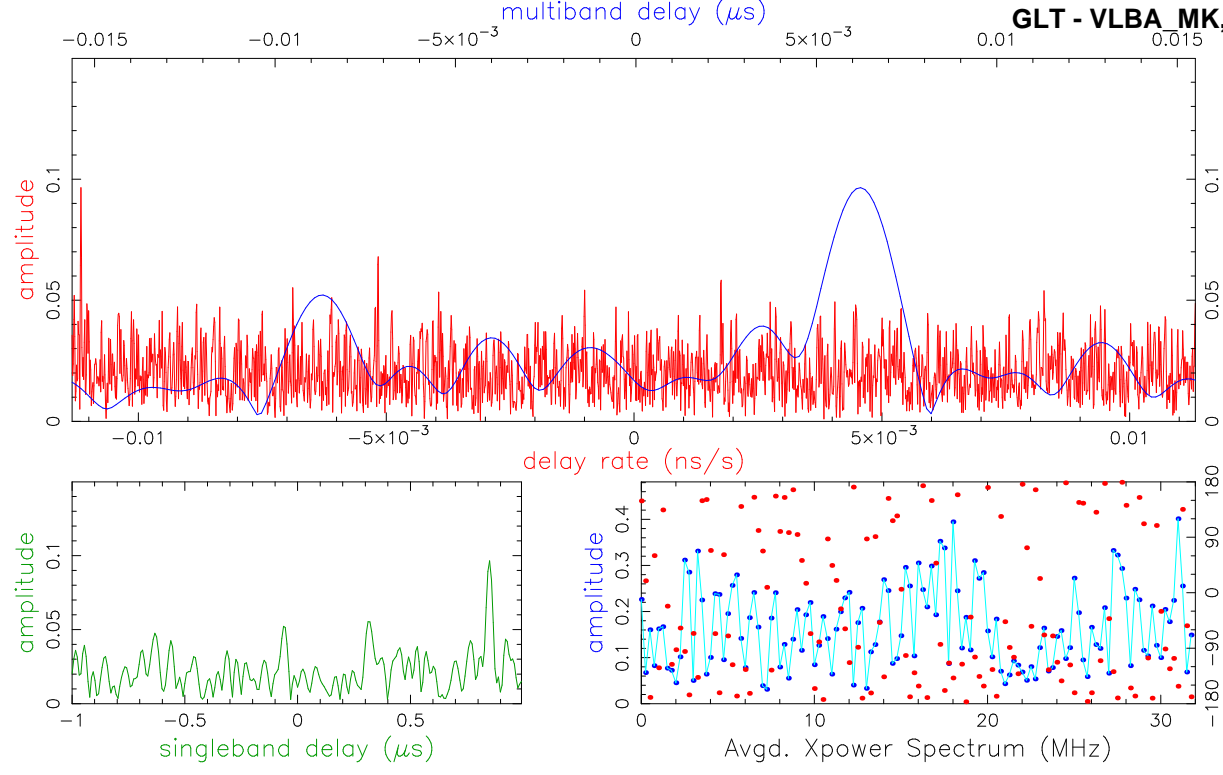


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	-166.9	-115.1	-117.4	-125.3	-83.1	-102.1	-107.6	-102.4	-124.1	-136.3	-161.3	-165.4	-125.2	-94.8	-25.4	71.6		Phase -118.6			
	0.1	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.5	0.4	0.5	0.4	0.3	0.4	0.3	0.2		Ampl. 0.4			
	130.8	128.9	128.0	127.5	128.6	128.8	128.4	128.3	127.9	128.2	128.0	128.5	128.8	128.2	128.3	130.5		Sbd box 128.1			
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		APs used			
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs			
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs			
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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			
m	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			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks			
																		Chan ids			
																		Tracks			
Group delay (usec)(sbd)		3.73463074584E+03								3.73463681959E+03								Resid mbdelay (usec)	-6.07374E-03	+/-	6.2E-05
Sband delay (usec)		3.73462988859E+03								-1.2823149E+00								Resid sbdelay (usec)	-6.93100E-03	+/-	9.9E-04
Phase delay (usec)		3.73463681576E+03								8.3692290E-08								Resid phdelay (usec)	-3.82407E-06	+/-	2.1E-07
Delay rate (us/s)		-1.04465512419E+00								-1.04465489797E+00								Resid rate (us/s)	-2.26219E-07	+/-	7.7E-10
Total phase (deg)					111.5					2.76056309582E-05								Resid phase (deg)	-118.6	+/-	6.6

ph/seg (deg) 53.6 11.4 Theor. Amplitude 0.290 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.3 19.9 Search (2048X64) 0.266 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.8 13.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 41.3 23.0 Inc. seg. avg. 0.396 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 m: az 52.2 el 37.5 pa -95.9 u,v (fr/asec) 8034.675 6048.156 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gm..130G9L Output file: /Exps/c192b/v2/1234/No0205/gm.W.170.130G9L simultaneous interpolator

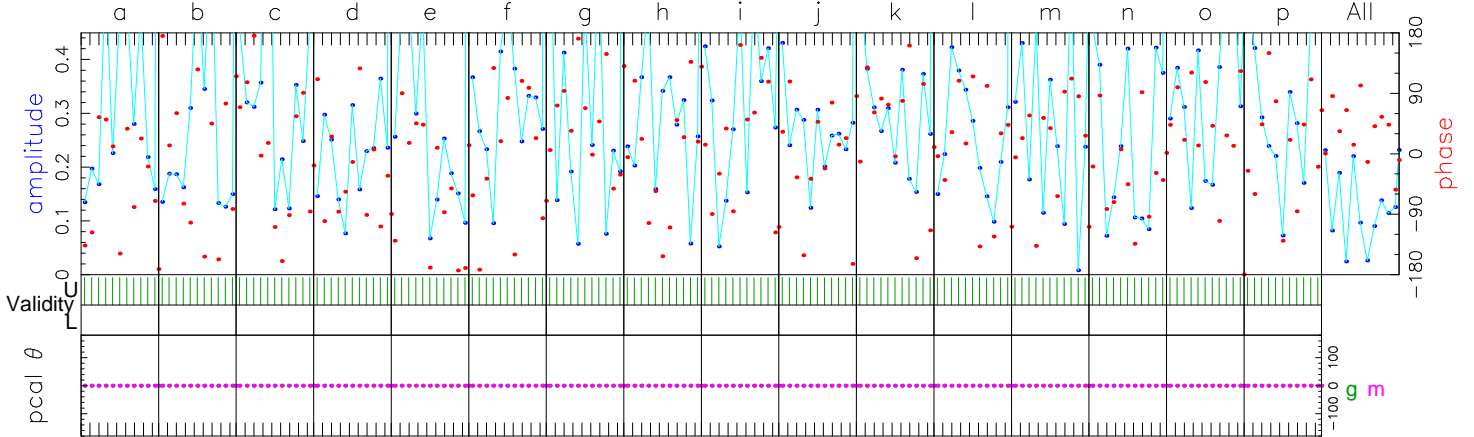
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gm
GLT - VLBA_MK, fgroup W, pol LR



Fringe quality 0
SNR 5.8
Int time 478.432
Amp 0.150
Phase 28.1
PFD 8.4e-01
Delays (us)
SBD 0.850430
MBD 0.006203
Fringe rate (Hz)
-0.963095
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112345
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

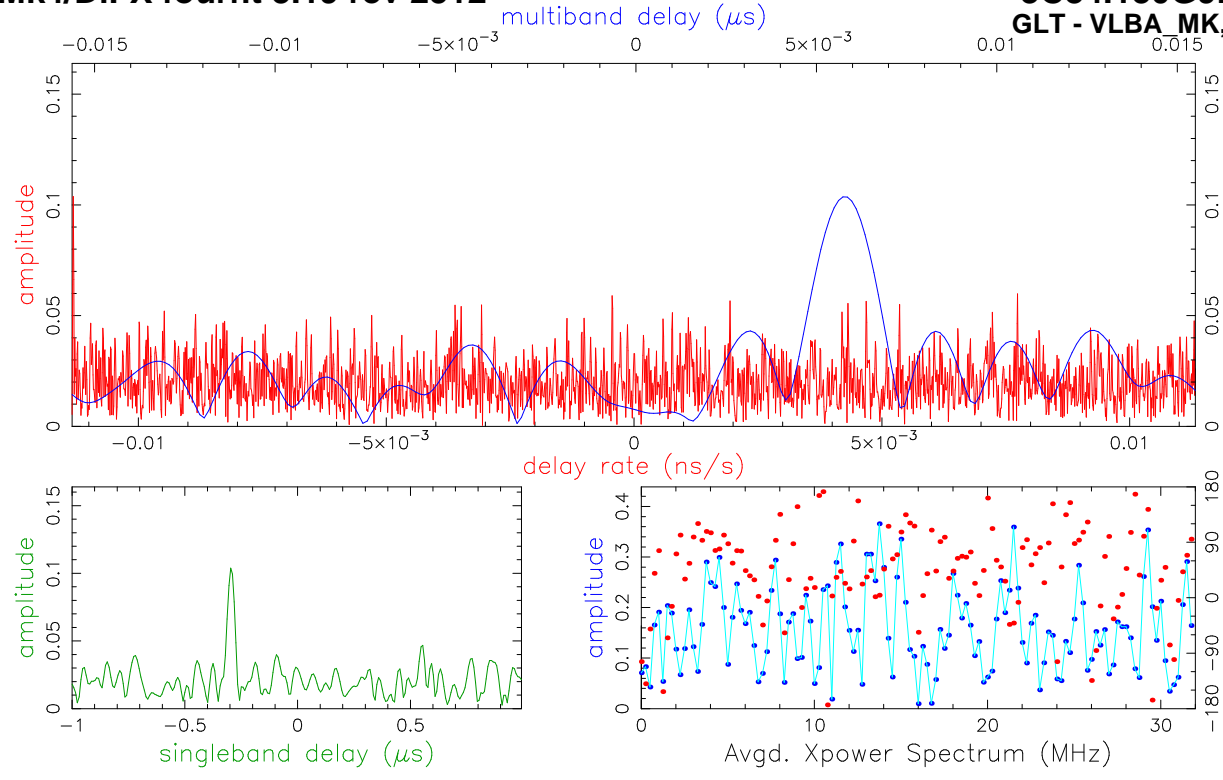
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
4.5	108.2	31.5	-52.6	32.7	49.8	38.0	-25.1	96.2	29.8	75.0	46.3	41.9	-23.8	40.0	5.7		Phase	28.1		
0.2	0.1	0.2	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2		Ampl.	0.1	
172.5	252.7	203.3	140.3	109.0	186.6	237.0	233.6	71.1	170.0	235.9	162.4	103.0	243.1	189.1	187.6			Sbd box	237.9	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0			APs used	938/0
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			PC freqs	0
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			PC freqs	0
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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
m	1000	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	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			Tracks	

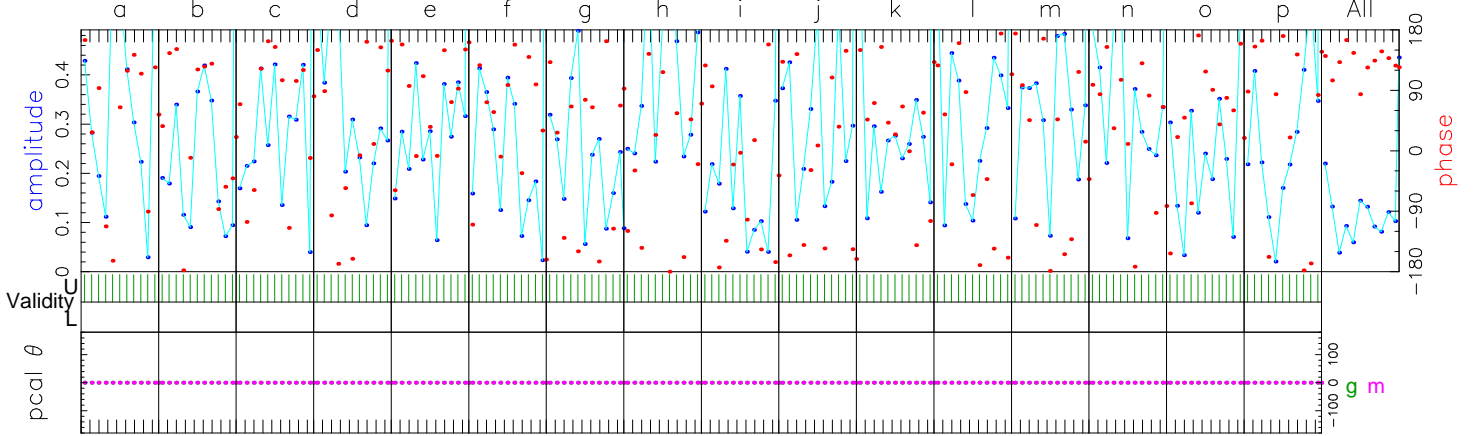
Group delay (usec)(sbd) 3.73548677216E+03 Apriori delay (usec) 3.73463681959E+03 Resid mbdelay (usec) 6.20258E-03 +/- 1.9E-04
 Sband delay (usec) 3.73548725009E+03 Apriori clock (usec) -1.2823149E+00 Resid sbdelay (usec) 8.50430E-01 +/- 3.0E-03
 Phase delay (usec) 3.73463682049E+03 Apriori clockrate (us/s) 8.3692290E-08 Resid phdelay (usec) 9.04663E-07 +/- 6.4E-07
 Delay rate (us/s) -1.04466607856E+00 Apriori rate (us/s) -1.04465489797E+00 Resid rate (us/s) -1.11806E-05 +/- 2.3E-09
 Total phase (deg) 258.1 Apriori accel (us/s/s) 2.76056309582E-05 Resid phase (deg) 28.1 +/- 19.8

ph/seg (deg) 43.1 34.3 Search (2048X64) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.5 59.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.4 39.6 Inc. seg. avg. 0.160 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.6 69.1 Inc. frq. avg. 0.147 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 217.9 el 52.8 pa 10.1 m: az 52.2 el 37.5 pa -95.9 u,v (fr/asec) 8034.675 6048.156 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gm..130G9L Output file: /Exps/c192b/v2/1234/No0205/gm.W.188.130G9L



Fringe quality 0
SNR 6.2
Int time 478.332
Amp 0.164
Phase 129.0
PFD 1.1e-01
Delays (us)
SBD -0.294874
MBD 0.005792
Fringe rate (Hz)
-0.976424
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112350
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

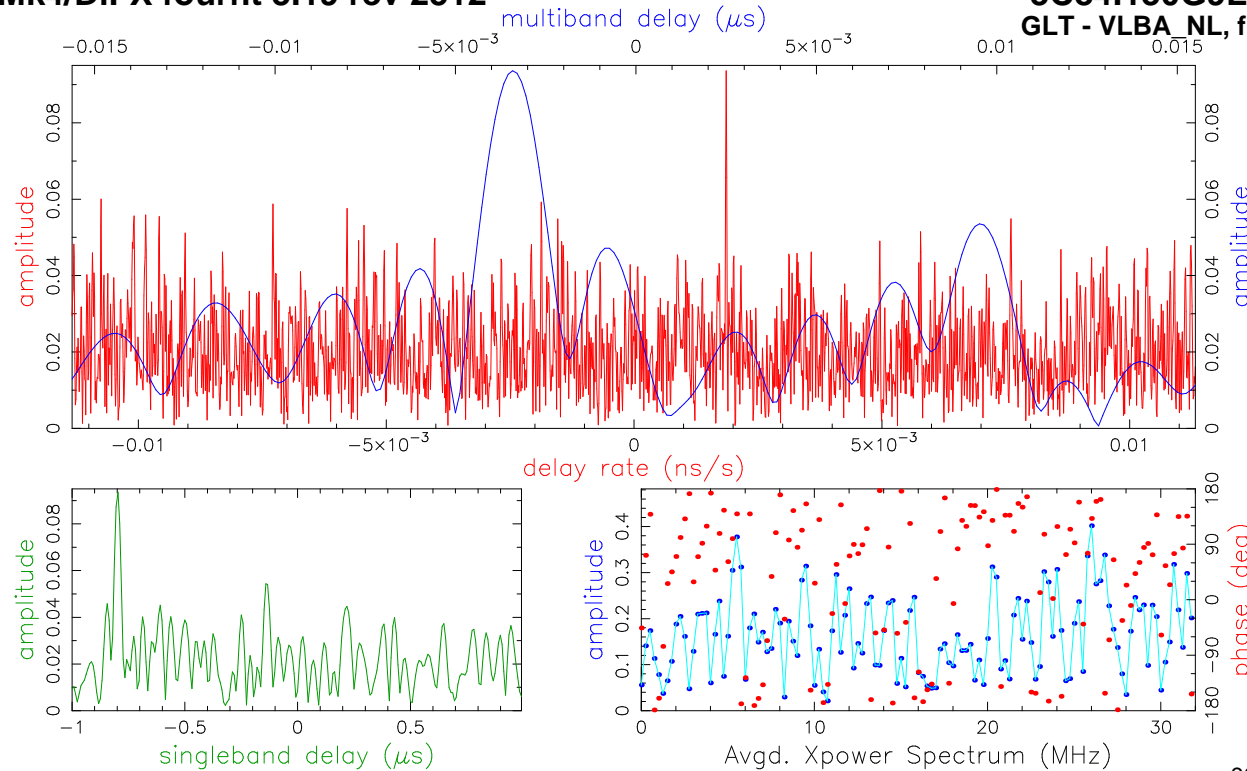


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
125.6	128.5	141.2	174.2	96.0	104.4	128.8	134.8	-152.3	139.3	86.7	176.5	133.8	97.0	118.4	152.8	129.0	Phase	129.0						
0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.1	0.3	0.2	Ampl.	0.2						
90.3	93.3	213.2	21.1	123.0	3.5	7.2	250.2	149.2	62.3	204.7	248.1	243.5	89.5	56.2	28.7	28.7	Sbd box	91.3						
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used							
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs							
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs							
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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							
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp							
m	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							
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks							
																	Tracks							
Group delay (usec)(sbd)		3.7343301116E+03															Apriori delay (usec)	3.73463681959E+03	Resid mbdelay (usec)	5.79157E-03	+/-	1.7E-04		
Sband delay (usec)		3.73434194559E+03															Apriori clock (usec)	-1.2823149E+00	Resid sbdelay (usec)	-2.94874E-01	+/-	2.8E-03		
Phase delay (usec)		3.73463682374E+03															Apriori clockrate (us/s)	8.3692290E-08	Resid phdelay (usec)	4.15868E-06	+/-	5.9E-07		
Delay rate (us/s)		-1.04466623329E+00															Apriori rate (us/s)	-1.04465489797E+00	Resid rate (us/s)	-1.13353E-05	+/-	2.1E-09		
Total phase (deg)			359.0														Apriori accel (us/s/s)	2.76056309582E-05	Resid phase (deg)	129.0	+/-	18.4		
ph/seg (deg)	RMS	Theor.															Amplitude	0.164 +/- 0.026	Pcal mode: MANUAL, MANUAL					
amp/seg (%)	20.9	31.8															Search (2048X64)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)					
ph/frq (deg)	47.4	55.5															Interp.	0.000	Bits/sample: 2x2					
amp/frq (%)	33.8	36.7															Inc. seg. avg.	0.152	SampCntNorm: enabled					
	52.4	64.1															Inc. frq. avg.	0.154	Sample rate(MSamp/s): 64					
																			Data rate(Mb/s): 2048					
																			nlags: 128					
																			t_cohere infinite					
g: az 217.9 el 52.8 pa 10.1																			ion window (TEC)					
m: az 52.2 el 37.5 pa -95.9																								
u,v (fr/asec) 8034.675 6048.156																								
Control file: cf_1234_gmva																								
Input file: /Exps/c192b/v2/1234/No0205/gm..130G9L																								
Output file: /Exps/c192b/v2/1234/No0205/gm.W.203.130G9L																								

simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gn
GLT - VLBA_NL, fgroup W, pol LL

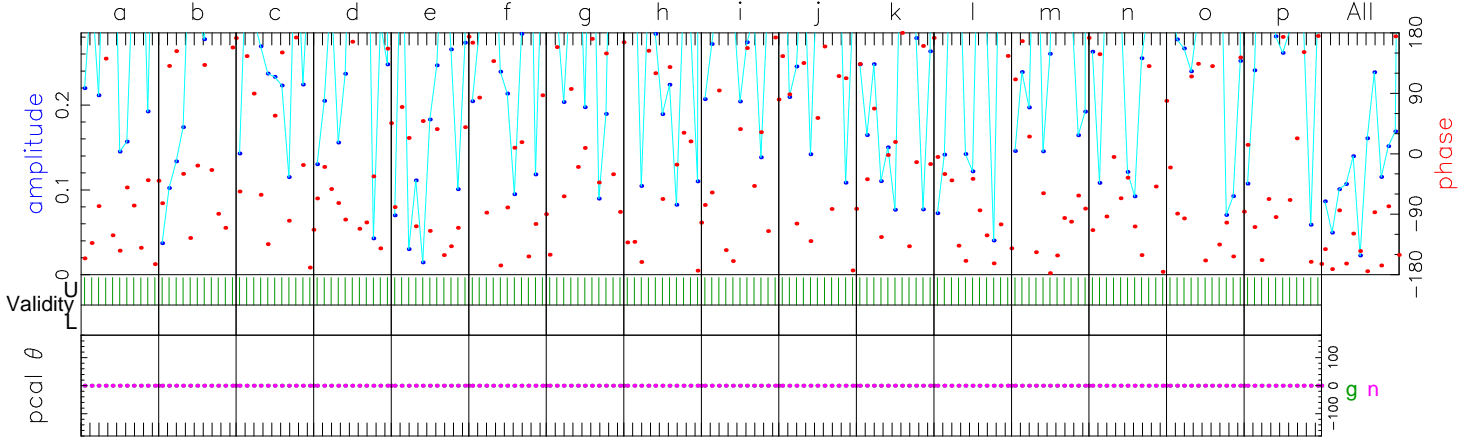


Fringe quality 0

SNR 5.6
Int time 478.052
Amp 0.095
Phase -133.3
PFD 9.9e-01
Delays (us)
SBD -0.798347
MBD -0.003397
Fringe rate (Hz) 0.160928
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

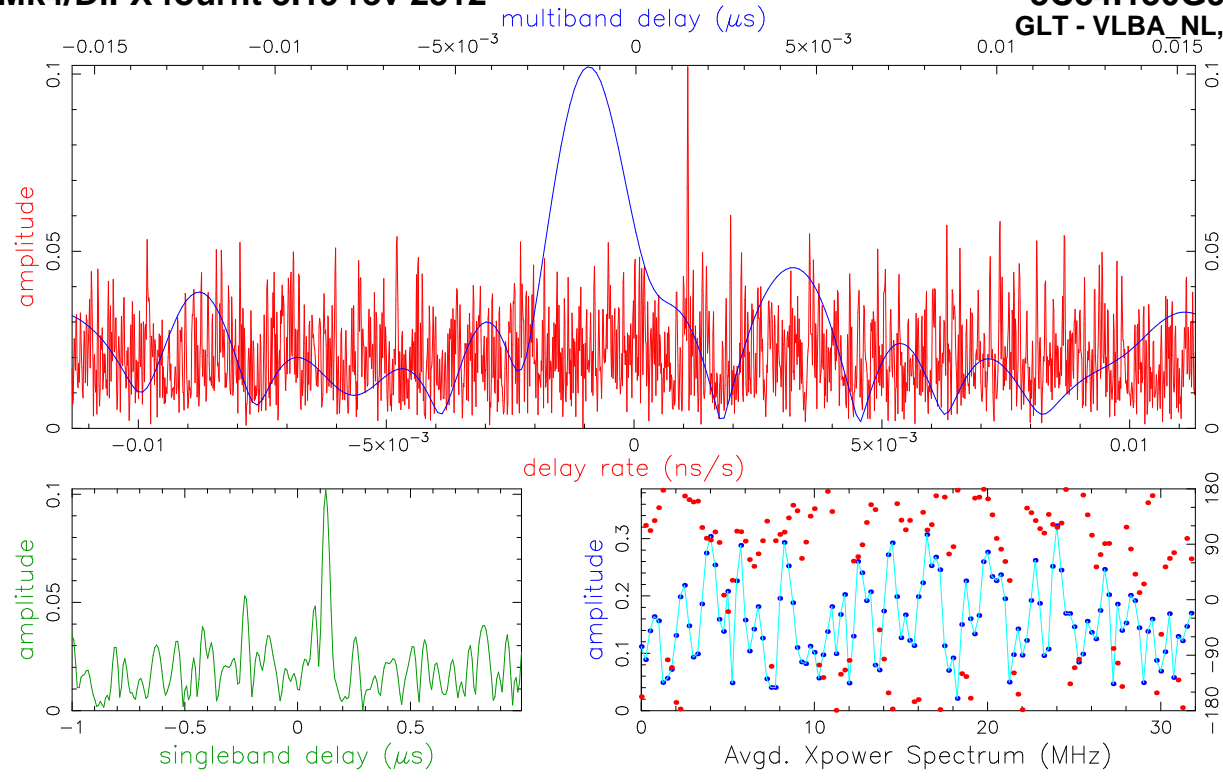
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112336
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-131.3	-83.8	175.8	-113.8	-158.3	-168.8	-88.7	-165.7	-138.5	148.2	-142.3	-101.8	-128.1	-93.7	-160.1	-121.2	Phase	-133.3				
	0.2	0.1	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.0	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1				
	25.6	64.8	56.2	29.5	213.1	240.1	116.9	245.4	220.5	72.6	40.6	46.3	28.1	105.9	42.7	88.5	Sbd box	26.8				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.28084116320E+03														Apriori delay (usec)	-4.28005651627E+03	Resid mbdelay (usec)	-3.39693E-03	+/-	1.9E-04
Sband delay (usec)			-4.28085486327E+03														Apriori clock (usec)	-2.5213427E+01	Resid sbdelay (usec)	-7.98347E-01	+/-	3.1E-03
Phase delay (usec)			-4.28005652057E+03														Apriori clockrate (us/s)	-5.9223514E-08	Resid phdelay (usec)	-4.29944E-06	+/-	6.6E-07
Delay rate (us/s)			-1.96259977385E-02														Apriori rate (us/s)	-1.96278659478E-02	Resid rate (us/s)	1.86821E-06	+/-	2.4E-09
Total phase (deg)																	Apriori accel (us/s/s)	4.56283986755E-05	Resid phase (deg)	-133.3	+/-	20.4

ph/seg (deg) 37.9 35.3 Search (2048X64) 0.095 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.8 61.7 Interp. 0.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.9 40.8 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.9 71.2 Inc. frq. avg. 0.092 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 217.9 el 52.8 pa 10.1 n: az 270.2 el 84.8 pa 84.7 u,v (fr/asec) 223.297 5213.587 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gn..130G9L Output file: /Exps/c192b/v2/1234/No0205/gn.W.160.130G9L

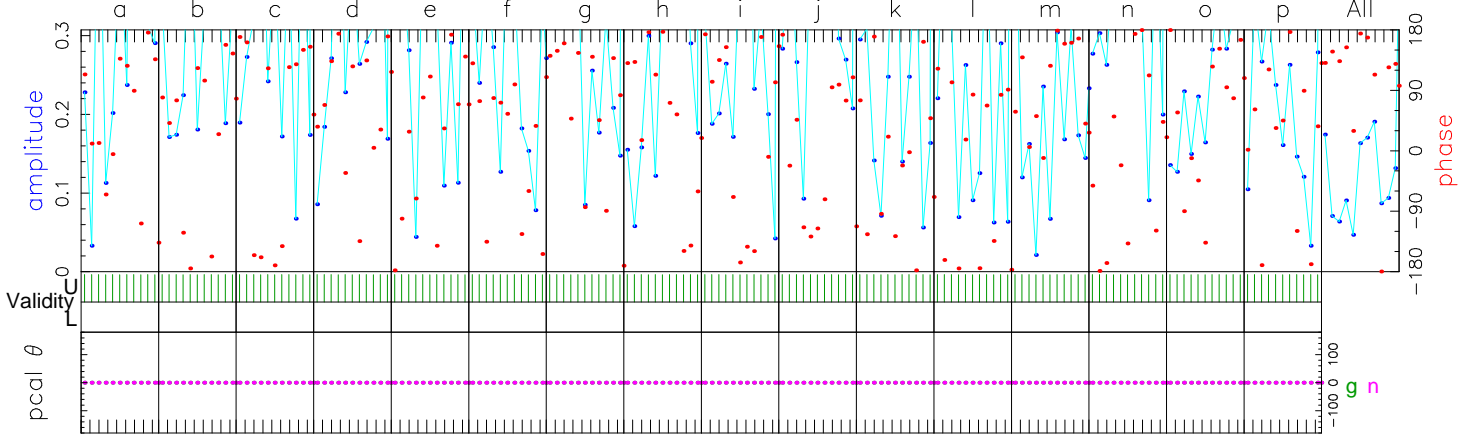


Fringe quality 0

SNR 6.1
Int time 477.956
Amp 0.102
Phase 141.9
PFD 2.4e-01
Delays (us)
SBD 0.124684
MBD -0.001319
Fringe rate (Hz)
0.093546
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112343
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

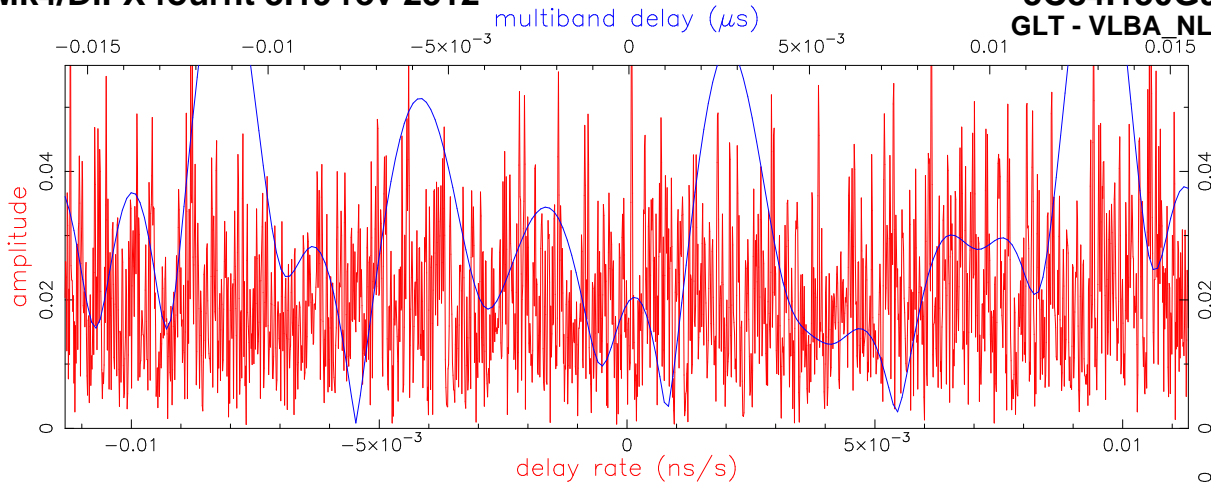


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
106.6	134.4	167.8	114.0	146.0	113.7	138.1	142.6	-173.4	127.6	-126.5	109.8	107.7	-156.8	134.8	91.6	Phase	141.9	
0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1	
94.7	250.8	144.4	241.7	143.7	28.8	145.8	123.2	143.9	182.7	38.9	142.6	112.9	99.9	222.1	75.2	Sbd box	145.0	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-4.27993283478E+03			Apriori delay (usec)			-4.28005651627E+03			Resid mbdelay (usec)			-1.31851E-03			+/- 1.8E-04		
Sband delay (usec)	-4.27993183227E+03			Apriori clock (usec)			-2.5213427E+01			Resid sbdelay (usec)			1.24684E-01			+/- 2.8E-03		
Phase delay (usec)	-4.28005651169E+03			Apriori clockrate (us/s)			-5.9223514E-08			Resid phdelay (usec)			4.57557E-06			+/- 6.1E-07		
Delay rate (us/s)	-1.96267799748E-02			Apriori rate (us/s)			-1.96278659478E-02			Resid rate (us/s)			1.08597E-06			+/- 2.2E-09		
Total phase (deg)	29.8			Apriori accel (us/s/s)			4.56283986755E-05			Resid phase (deg)			141.9			+/- 18.8		

ph/seg (deg) 40.0 32.5 Amplitude 0.102 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.6 56.8 Search (2048X64) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.3 37.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.5 65.5 Inc. seg. avg. 0.101 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.100 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

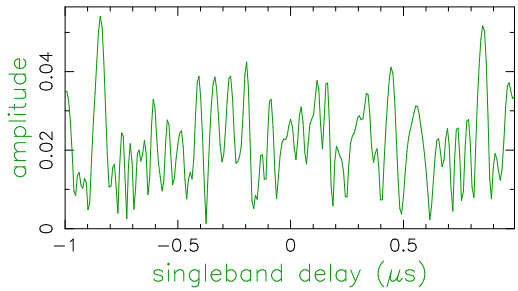
g: az 217.9 el 52.8 pa 10.1 n: az 270.2 el 84.8 pa 84.7 u,v (fr/asec) 223.297 5213.587 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gn..130G9L Output file: /Exps/c192b/v2/1234/No0205/gn.W.176.130G9L

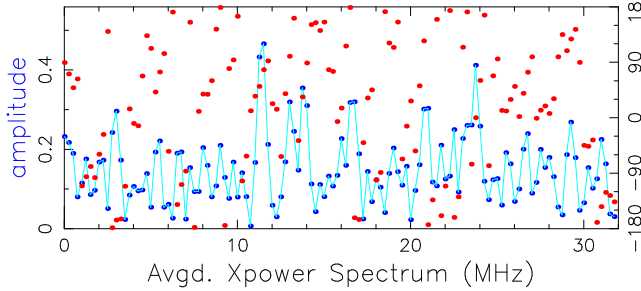


Fringe quality 0

SNR 2.3
Int time 478.052
Amp 0.057
Phase 55.7
PFD 1.0e+00
Delays (us)
SBD -0.335938
MBD -0.016082
Fringe rate (Hz)
-0.903130
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

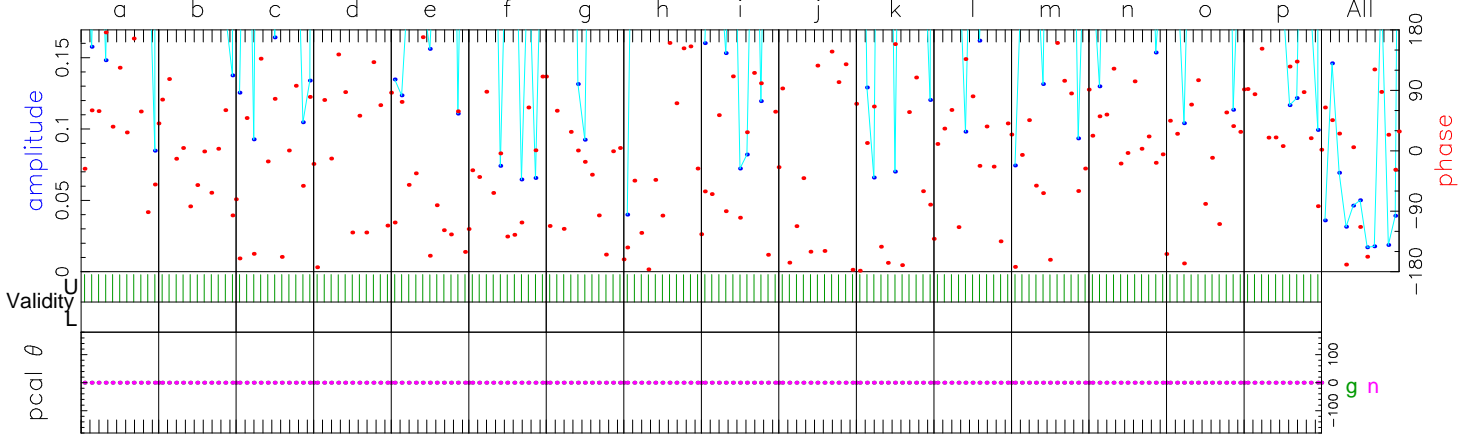


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112349
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	86.0				
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	0				
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	0				
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	0:0	PC phase	0				
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	0:0	Mani PC	0				
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	0				
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-4.28038509783E+03															Apriori delay (usec)	-4.28005651627E+03	Resid mbdelay (usec)	-1.60816E-02	+/-	4.7E-04
Sband delay (usec)			-4.28039245377E+03															Apriori clock (usec)	-2.5213427E+01	Resid sbdelay (usec)	-3.35938E-01	+/-	7.5E-03
Phase delay (usec)			-4.28005651447E+03															Apriori clockrate (us/s)	-5.9223514E-08	Resid phdelay (usec)	1.79655E-06	+/-	1.6E-06
Delay rate (us/s)			-1.96383503863E-02															Apriori rate (us/s)	-1.96278659478E-02	Resid rate (us/s)	-1.04844E-05	+/-	5.8E-09
Total phase (deg)					-56.4													Apriori accel (us/s/s)	4.56283986755E-05	Resid phase (deg)	55.7	+/-	49.6

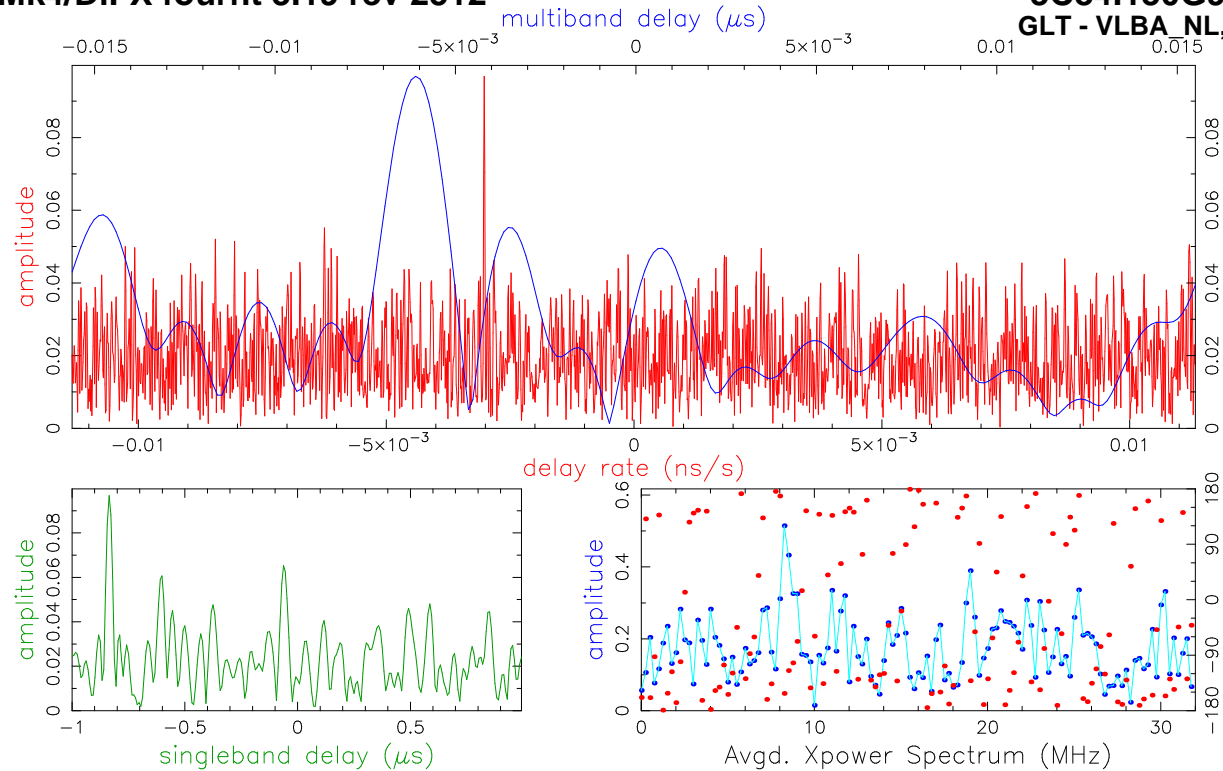
ph/seg (deg) 87.8 85.9
amp/seg (%) 165.4 150.0
ph/frq (deg) 93.3 99.2
amp/frq (%) 287.8 173.2

RMS Theor. Amplitude 0.057 +/- 0.024
Search (2048X64) 0.093
Interp. 0.000
Inc. seg. avg. 0.043
Inc. frq. avg. 0.078

g: az 217.9 el 52.8 pa 10.1 n: az 270.2 el 84.8 pa 84.7 u,v (fr/asec) 223.297 5213.587

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

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gn..130G9L Output file: /Exps/c192b/v2/1234/No0205/gn.W.198.130G9L simultaneous interpolator

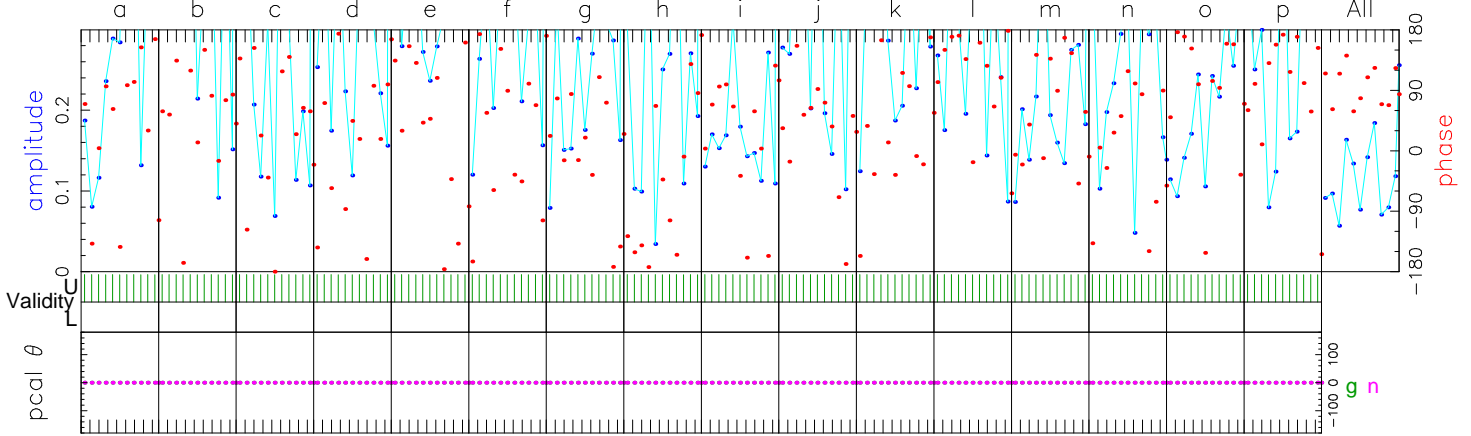


Fringe quality 0

SNR 5.8
Int time 477.956
Amp 0.100
Phase 101.7
PFD 8.2e-01
Delays (us)
SBD -0.835142
MBD -0.006088
Fringe rate (Hz)
-0.261145
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112354
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
103.0	94.7	125.4	107.9	132.8	82.7	54.4	-153.8	80.1	59.6	38.3	133.8	42.0	77.7	130.6	111.6		Phase	101.7					
0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.2		Ampl.	0.1					
162.2	22.5	36.6	61.5	248.6	104.7	67.1	34.2	215.8	192.0	210.4	109.6	34.6	73.3	172.5	225.9		Sbd box	22.1					
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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					
Group delay (usec)(sbd)			-4.28090635385E+03															Apriori delay (usec)	-4.28005651627E+03	Resid mbdelay (usec)	-6.08758E-03	+/-	1.9E-04
Sband delay (usec)			-4.28089165877E+03															Apriori clock (usec)	-2.5213427E+01	Resid sbdelay (usec)	-8.35142E-01	+/-	3.0E-03
Phase delay (usec)			-4.28005651299E+03															Apriori clockrate (us/s)	-5.9223514E-08	Resid phdelay (usec)	3.27967E-06	+/-	6.4E-07
Delay rate (us/s)			-1.96308975803E-02															Apriori rate (us/s)	-1.96278659478E-02	Resid rate (us/s)	-3.03163E-06	+/-	2.3E-09
Total phase (deg)																		Apriori accel (us/s/s)	4.56283986755E-05	Resid phase (deg)	101.7	+/-	19.8

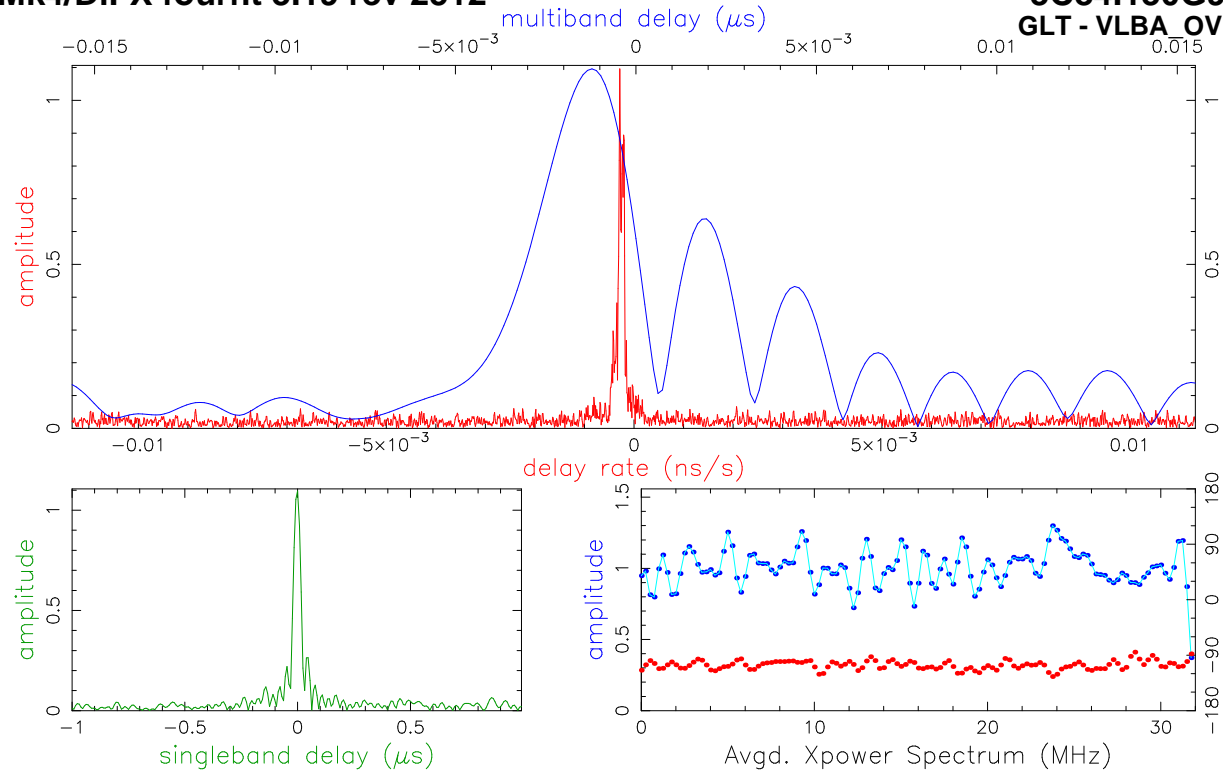
ph/seg (deg) 28.7 34.2
amp/seg (%) 43.5 59.8
ph/frq (deg) 44.3 39.5
amp/frq (%) 66.4 69.0

RMS Theor. Amplitude 0.100 +/- 0.017
Search (2048X64) 0.094
Interp. 0.000
Inc. seg. avg. 0.097
Inc. frq. avg. 0.102

g: az 217.9 el 52.8 pa 10.1 n: az 270.2 el 84.8 pa 84.7 u,v (fr/asec) 223.297 5213.587

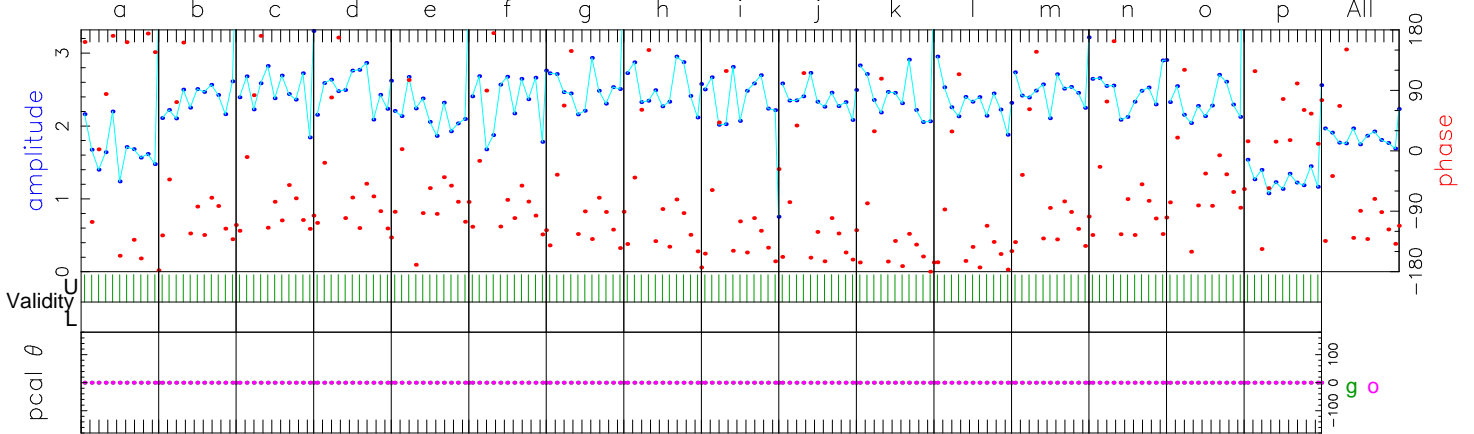
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gn..130G9L Output file: /Exps/c192b/v2/1234/No0205/gn.W.216.130G9L

simultaneous interpolator



Fringe quality 2
SNR 66.1
Int time 476.579
Amp 1.107
Phase -112.8
PFD 0.0e+00
Delays (us)
SBD -0.002400
MBD -0.001250
Fringe rate (Hz)
-0.024581
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112337
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

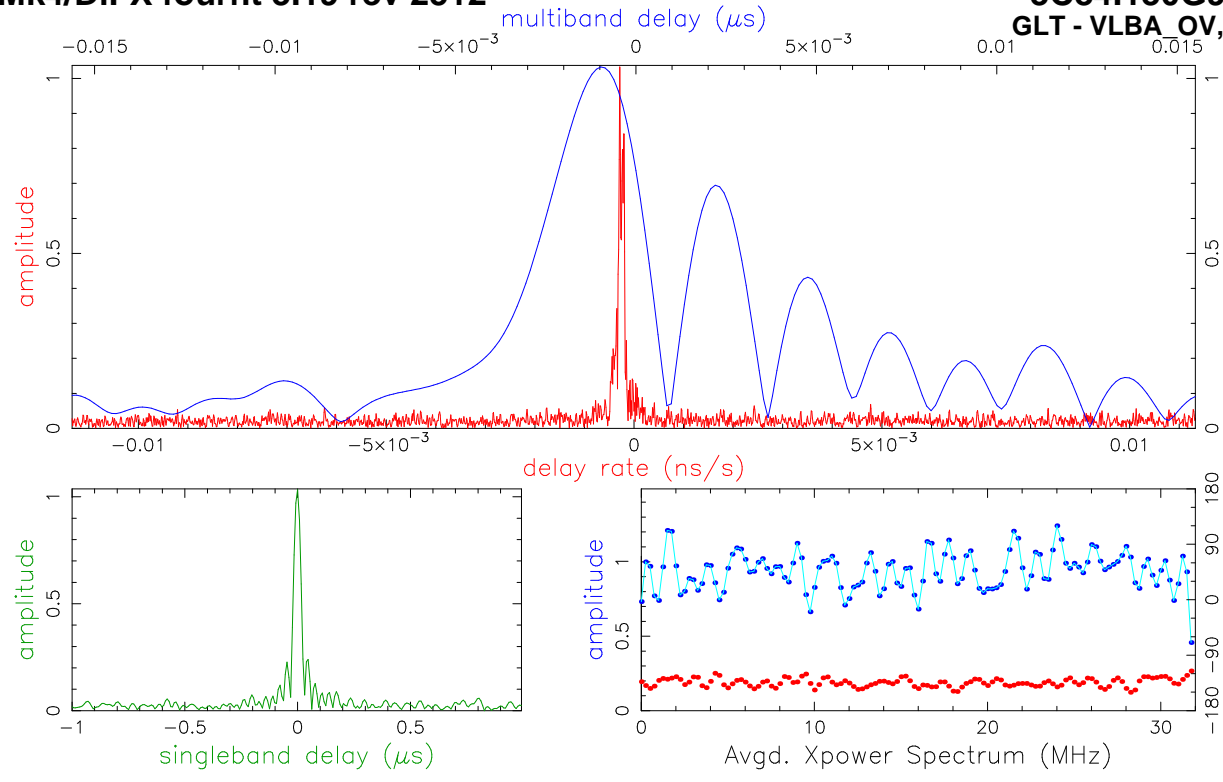


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
178.4	-108.4	-94.1	-86.8	-76.7	-89.8	-114.6	-114.8	-133.5	-143.5	-152.6	-153.3	-114.1	-99.5	-54.9	44.3		Phase	-112.8
1.0	1.5	1.4	1.4	1.2	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.4	1.4	0.7	Ampl.	1.4
130.5	129.1	128.8	128.8	128.3	128.8	128.4	128.6	128.5	128.7	128.8	129.0	128.9	128.8	129.5	131.4		Sbd box	128.7
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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)	-3.64803096542E+03			Apriori delay (usec)			-3.64802971503E+03			Resid mbdelay (usec)			-1.25039E-03			+/- 1.6E-05		
Sband delay (usec)	-3.64803211503E+03			Apriori clock (usec)			-1.5352397E+01			Resid sbdelay (usec)			-2.40000E-03			+/- 2.6E-04		
Phase delay (usec)	-3.64802971867E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			-3.63765E-06			+/- 5.6E-08		
Delay rate (us/s)	-4.37001803728E-01			Apriori rate (us/s)			-4.37001518366E-01			Resid rate (us/s)			-2.85362E-07			+/- 2.0E-10		
Total phase (deg)	-347.8			Apriori accel (us/s/s)			4.6890135977E-05			Resid phase (deg)			-112.8			+/- 1.7		

ph/seg (deg) 68.5 3.0 Theor. Amplitude 1.107 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.5 5.2 Search (2048X64) 1.052 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.7 3.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 29.8 6.1 Inc. seg. avg. 1.834 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 o: az 68.0 el 74.1 pa -98.6 u,v (fr/asec) 3419.456 5675.298 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/go..130G9L Output file: /Exps/c192b/v2/1234/No0205/go.W.162.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, go
GLT - VLBA_OV, fgroup W, pol RR

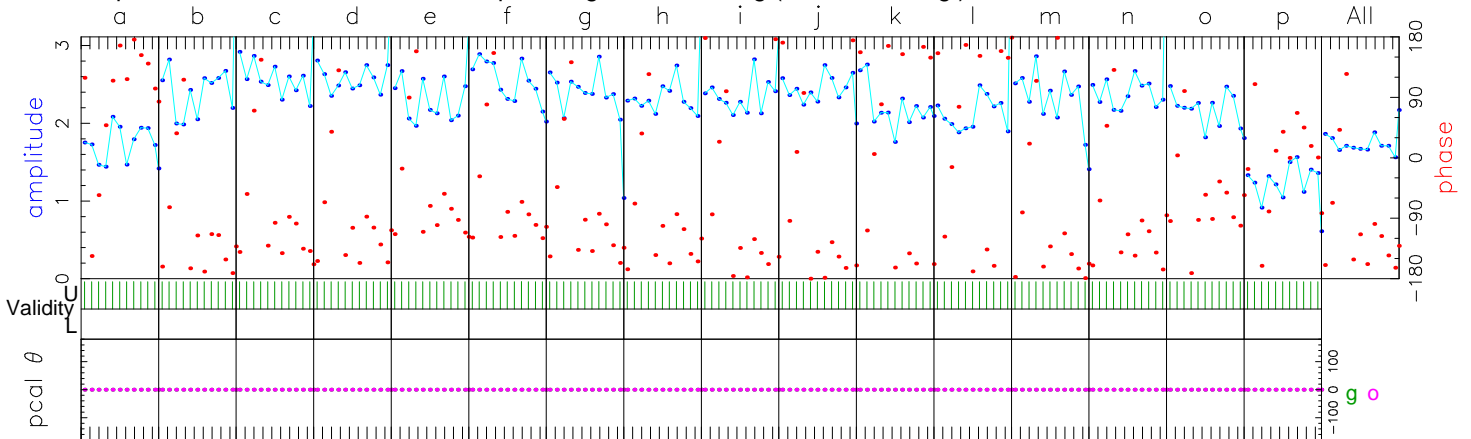


Fringe quality 2

SNR 61.9
Int time 476.485
Amp 1.037
Phase -138.0
PFD 0.0e+00
Delays (us)
SBD -0.001570
MBD -0.000965
Fringe rate (Hz)
-0.024601
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112343
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
139.1	-143.6	-123.8	-128.7	-89.3	-99.3	-122.4	-129.5	-158.3	-163.4	174.9	175.6	-156.0	-133.6	-76.7	18.9	Phase	-138.0					
1.1	1.5	1.5	1.6	1.4	1.4	1.4	1.3	1.4	1.5	1.3	1.3	1.3	1.4	1.4	1.3	0.8	Ampl.	1.4				
130.5	129.3	128.9	128.7	128.9	128.7	128.9	128.7	128.7	128.8	128.8	128.8	128.8	129.0	129.4	129.7	131.1	Sbd box	128.8				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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					
o	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)			-3.64803067976E+03														Apriori delay (usec)	-3.64802971503E+03	Resid mbdelay (usec)	-9.64729E-04	+/-	1.7E-05
Sband delay (usec)			-3.64803128553E+03														Apriori clock (usec)	-1.5352397E+01	Resid sbdelay (usec)	-1.57050E-03	+/-	2.8E-04
Phase delay (usec)			-3.64802971948E+03														Apriori clockrate (us/s)	7.4018997E-08	Resid phdelay (usec)	-4.45080E-06	+/-	6.0E-08
Delay rate (us/s)			-4.37001803959E-01														Apriori rate (us/s)	-4.37001518366E-01	Resid rate (us/s)	-2.85593E-07	+/-	2.2E-10
Total phase (deg)																	Apriori accel (us/s/s)	4.68901355977E-05	Resid phase (deg)	-138.0	+/-	1.9

ph/seg (deg) 68.1 3.2
amp/seg (%) 66.6 5.6
ph/frq (deg) 57.0 3.7
amp/frq (%) 35.7 6.5

RMS Theor. Amplitude 1.037 +/- 0.017
Search (2048X64) 1.003
Interp. 0.000
Inc. seg. avg. 1.719
Inc. frq. avg. 1.352

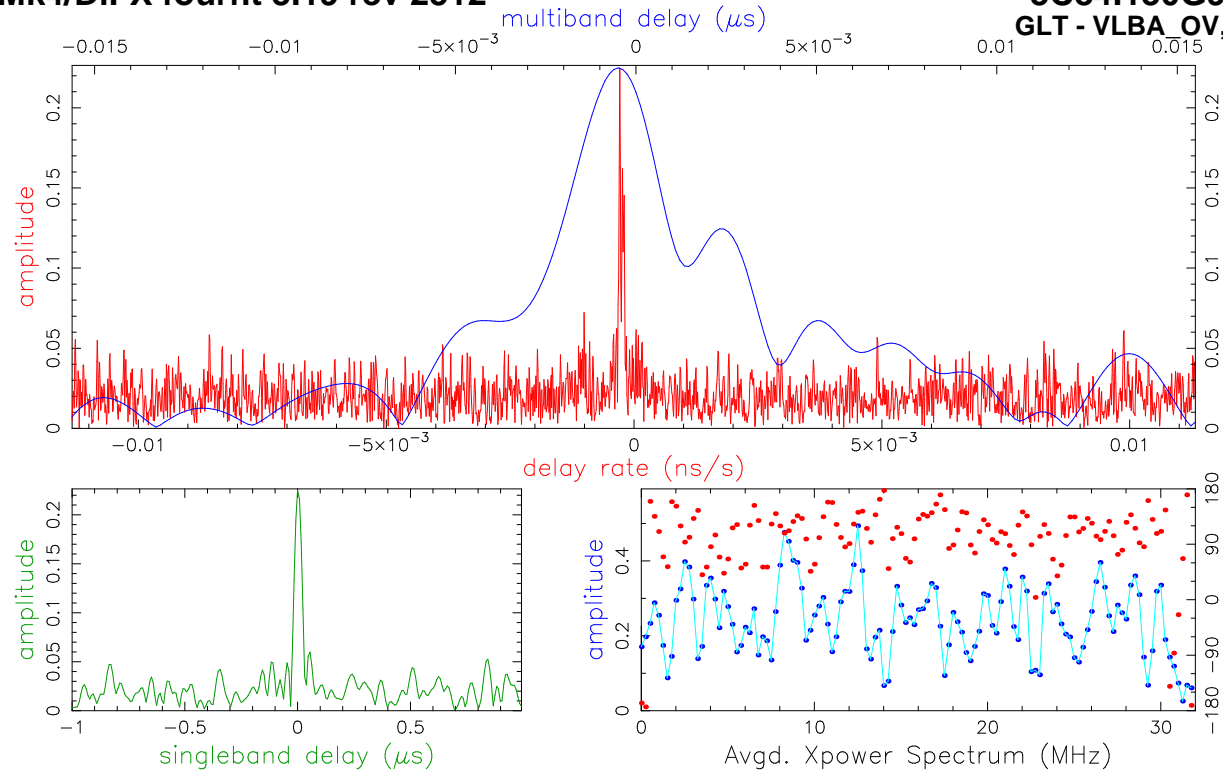
g: az 217.9 el 52.8 pa 10.1
o: az 68.0 el 74.1 pa -98.6
u,v (fr/asec) 3419.456 5675.298

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

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

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/go..130G9L Output file: /Exps/c192b/v2/1234/No0205/go.W.179.130G9L

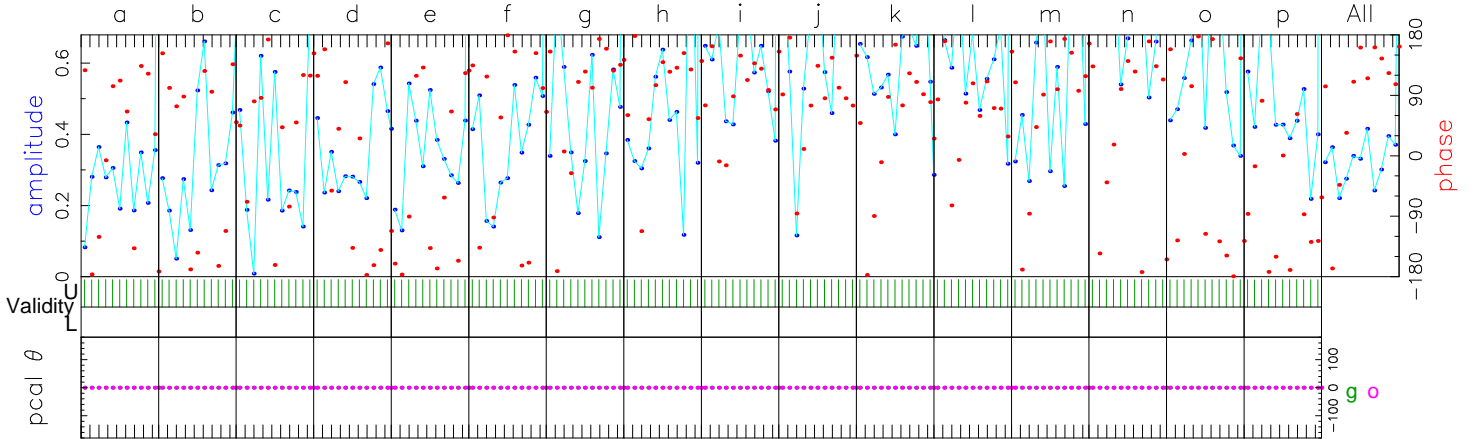


Fringe quality 9

SNR 13.5
Int time 476.579
Amp 0.226
Phase 126.6
PFD 7.1e-33
Delays (us)
SBD 0.002188
MBD -0.000456
Fringe rate (Hz)
-0.024536
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112348
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
112.7	152.3	107.5	176.9	-174.7	160.3	131.6	120.4	105.1	97.9	95.3	74.5	117.8	139.9	-171.6	-121.1	-121.1	Phase	126.6				
0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.1	Ampl.	0.3				
113.8	129.5	135.2	83.0	7.2	128.6	129.9	129.2	129.1	128.4	128.9	128.6	129.6	129.5	129.8	210.9	210.9	Sbd box	129.3				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.64803017135E+03														Apriori delay (usec)	-3.64802971503E+03	Resid mbdelay (usec)	-4.56323E-04	+/-	8.0E-05
Sband delay (usec)			-3.64802752703E+03														Apriori clock (usec)	-1.5352397E+01	Resid sbdelay (usec)	2.18800E-03	+/-	1.3E-03
Phase delay (usec)			-3.64802971095E+03														Apriori clockrate (us/s)	7.4018997E-08	Resid phdelay (usec)	4.08246E-06	+/-	2.7E-07
Delay rate (us/s)			-4.37001803201E-01														Apriori rate (us/s)	-4.37001518366E-01	Resid rate (us/s)	-2.84835E-07	+/-	9.9E-10
Total phase (deg)																	Apriori accel (us/s/s)	4.68901355977E-05	Resid phase (deg)	126.6	+/-	8.5

ph/seg (deg) 64.5 14.7
amp/seg (%) 56.3 25.6
ph/frq (deg) 46.3 17.0
amp/frq (%) 57.2 29.6

RMS Theor. Amplitude 0.226 +/- 0.017
Search (2048X64) 0.216
Interp. 0.000
Inc. seg. avg. 0.317
Inc. frq. avg. 0.266

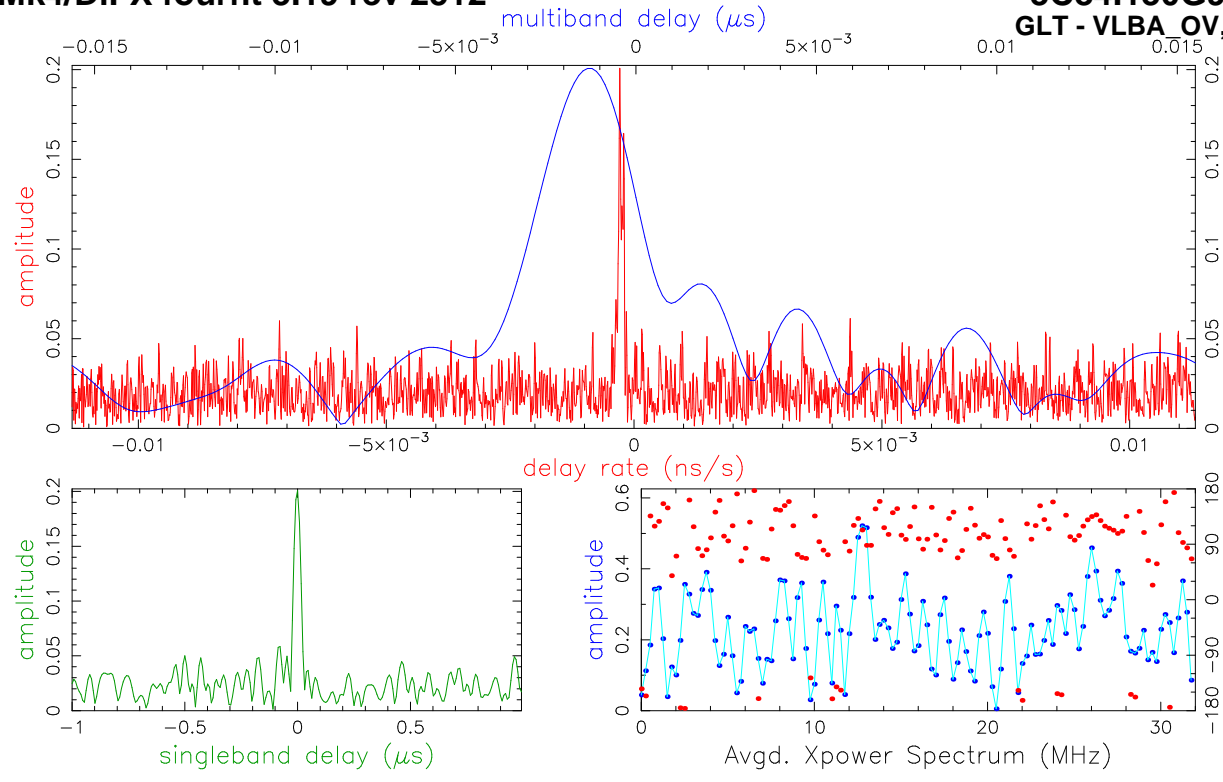
g: az 217.9 el 52.8 pa 10.1
o: az 68.0 el 74.1 pa -98.6
u,v (fr/asec) 3419.456 5675.298

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

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/go..130G9L Output file: /Exps/c192b/v2/1234/No0205/go.W.194.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, go
GLT - VLBA OV, fgroup W, pol RL

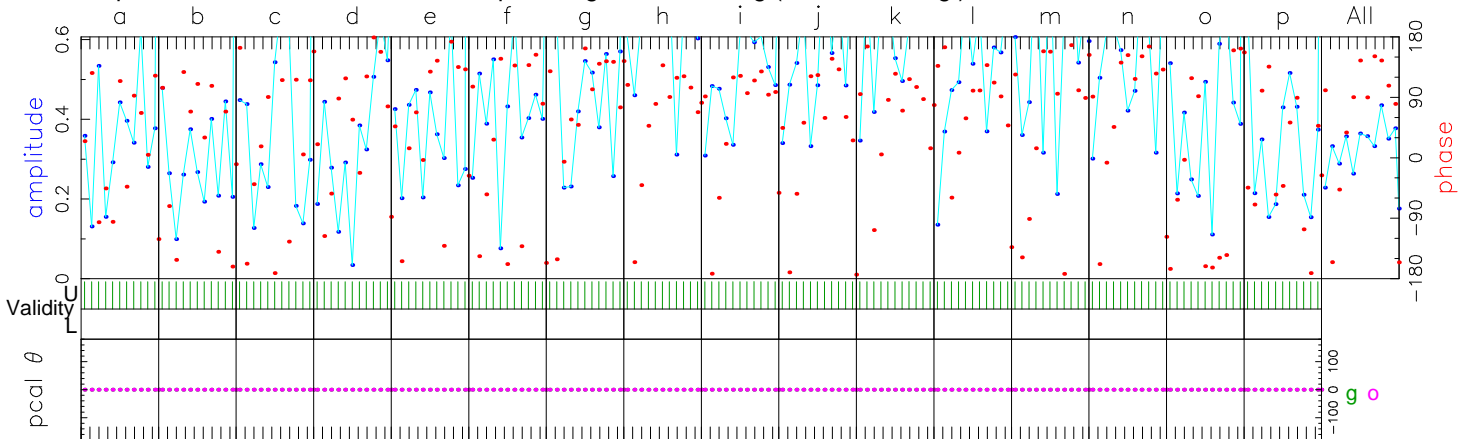


Fringe quality 9

SNR 12.1
Int time 476.484
Amp 0.202
Phase 112.7
PFD 7.0e-25
Delays (us)
SBD -0.002241
MBD -0.001341
Fringe rate (Hz)
-0.024415
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112353
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

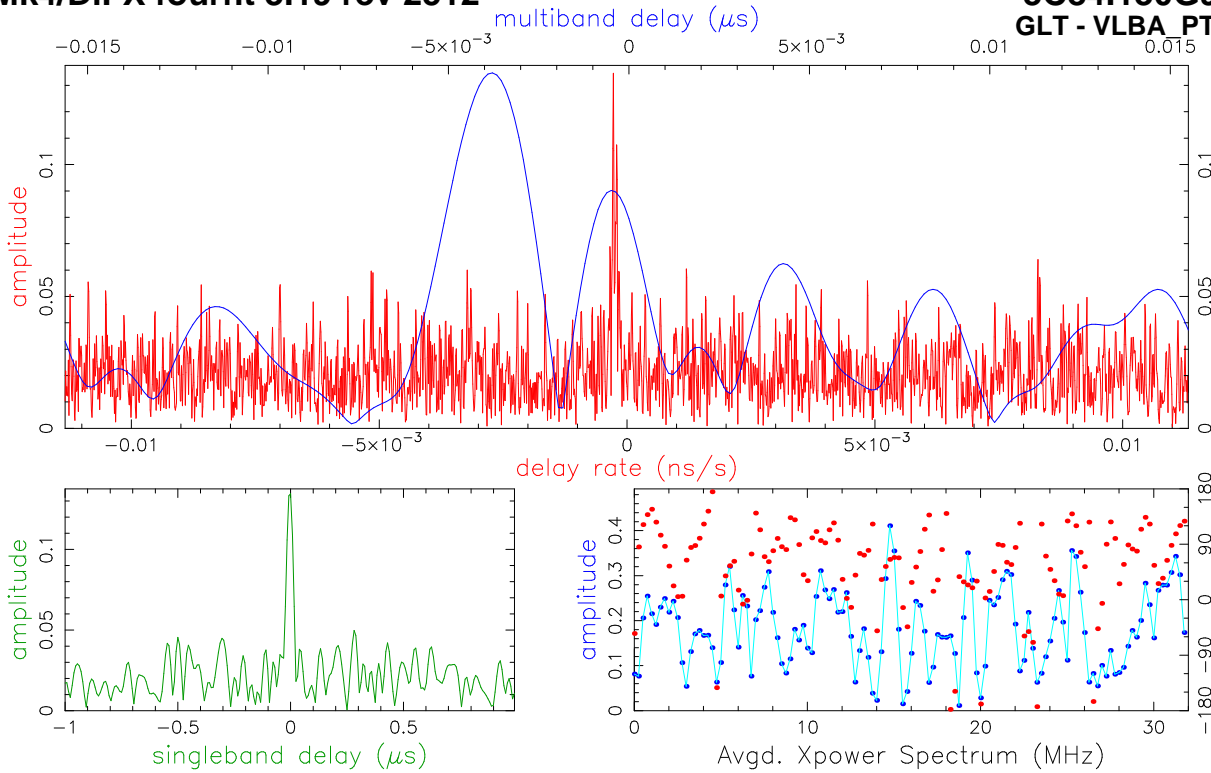
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
45.1	101.4	158.9	135.6	118.0	153.3	124.4	95.4	108.4	81.7	91.8	83.5	140.8	131.3	-168.6	9.2		Phase	112.7
0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1		Ampl.	0.2
87.6	1.4	77.1	73.9	171.8	155.0	128.8	128.8	129.2	128.3	128.9	128.8	128.1	128.9	224.9	66.0		Sbd box	128.7
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) -3.64803105573E+03 Apriori delay (usec) -3.64802971503E+03 Resid mbdelay (usec) -1.34070E-03 +/- 8.9E-05
 Sband delay (usec) -3.64803195603E+03 Apriori clock (usec) -1.5352397E+01 Resid sbdelay (usec) -2.24100E-03 +/- 1.4E-03
 Phase delay (usec) -3.64802971140E+03 Apriori clockrate (us/s) 7.4018997E-08 Resid phdelay (usec) 3.63487E-06 +/- 3.1E-07
 Delay rate (us/s) -4.37001801802E-01 Apriori rate (us/s) -4.37001518366E-01 Resid rate (us/s) -2.83436E-07 +/- 1.1E-09
 Total phase (deg) -122.3 Apriori accel (us/s/s) 4.68901355977E-05 Resid phase (deg) 112.7 +/- 9.5

RMS Theor. Amplitude 0.202 +/- 0.017
 ph/seg (deg) 64.4 16.4 Search (2048X64) 0.188 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.0 28.7 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 19.0 Inc. seg. avg. 0.322 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.3 33.1 Inc. frq. avg. 0.231 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 217.9 el 52.8 pa 10.1 o: az 68.0 el 74.1 pa -98.6 u,v (fr/asec) 3419.456 5675.298 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/go..130G9L Output file: /Exps/c192b/v2/1234/No0205/go.W.213.130G9L

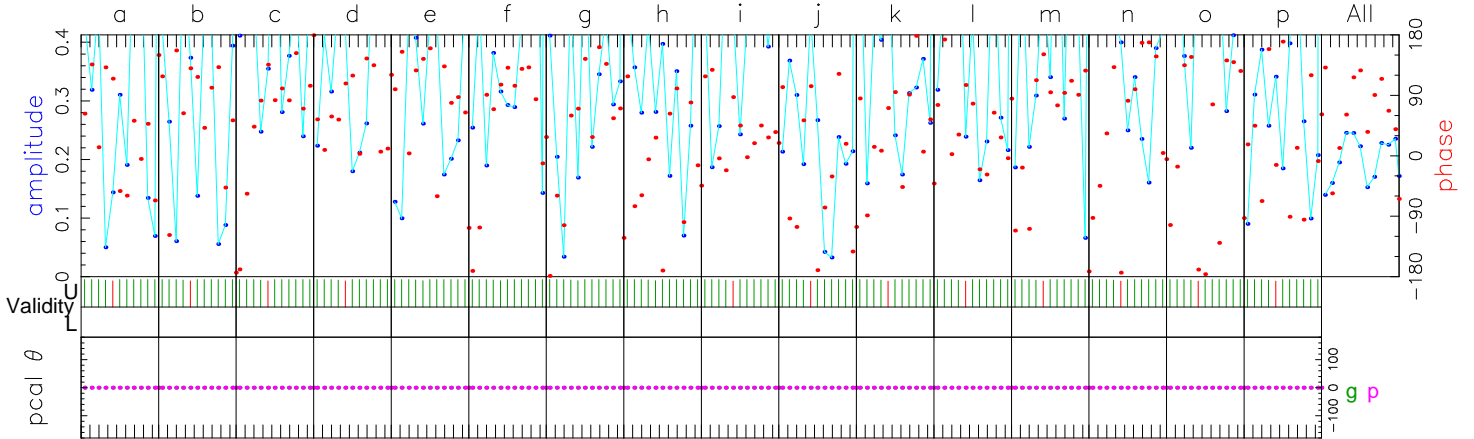


Fringe quality 9

SNR 8.2
Int time 476.144
Amp 0.138
Phase 75.6
PFD 7.9e-08
Delays (us)
SBD -0.003523
MBD -0.003861
Fringe rate (Hz)
-0.023757
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112336
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

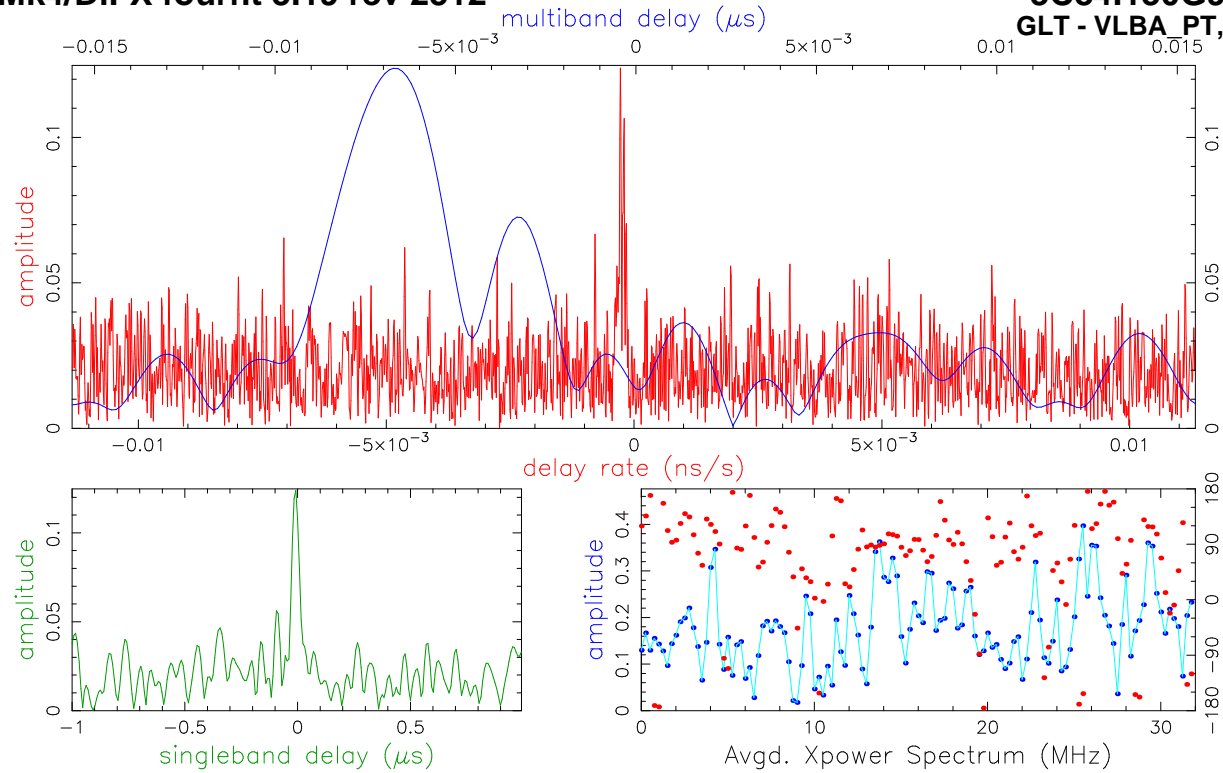


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
28.9	88.6	97.8	54.6	97.0	112.2	111.8	17.2	35.8	170.5	52.3	48.2	97.8	89.9	171.0	-24.9		Phase	75.6	
0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.1	0.3	0.0	0.2	0.2	0.2	0.1	0.2	0.1		Ampl.	0.2	
6.4	222.8	128.6	128.5	65.4	184.0	140.2	208.4	128.8	185.2	127.7	128.6	127.7	200.0	129.8	209.5		Sbd box	128.5	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	-4.06494867111E+03			Apriori delay (usec)			-4.06494480994E+03			Resid mbdelay (usec)			-3.86117E-03			+/-	1.3E-04		
Sband delay (usec)	-4.06494833344E+03			Apriori clock (usec)			-1.0653650E+01			Resid sbdelay (usec)			-3.52350E-03			+/-	2.1E-03		
Phase delay (usec)	-4.06494480750E+03			Apriori clockrate (us/s)			-1.2888659E-07			Resid phdelay (usec)			2.43772E-06			+/-	4.5E-07		
Delay rate (us/s)	-2.83076915652E-01			Apriori rate (us/s)			-2.83076639852E-01			Resid rate (us/s)			-2.75800E-07			+/-	1.6E-09		
Total phase (deg)	-258.6			Apriori accel (us/s/s)			5.22303606895E-05			Resid phase (deg)			75.6			+/-	14.0		

ph/seg (deg) 55.8 24.2 Search (2048X64) 0.132 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.0 42.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.5 27.9 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 61.1 48.7 Inc. frq. avg. 0.164 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 2249.696 6332.921 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gp..130G9L Output file: /Exps/c192b/v2/1234/No0205/gp.W.159.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gp
GLT - VLBA_PT, fgroup W, pol RR

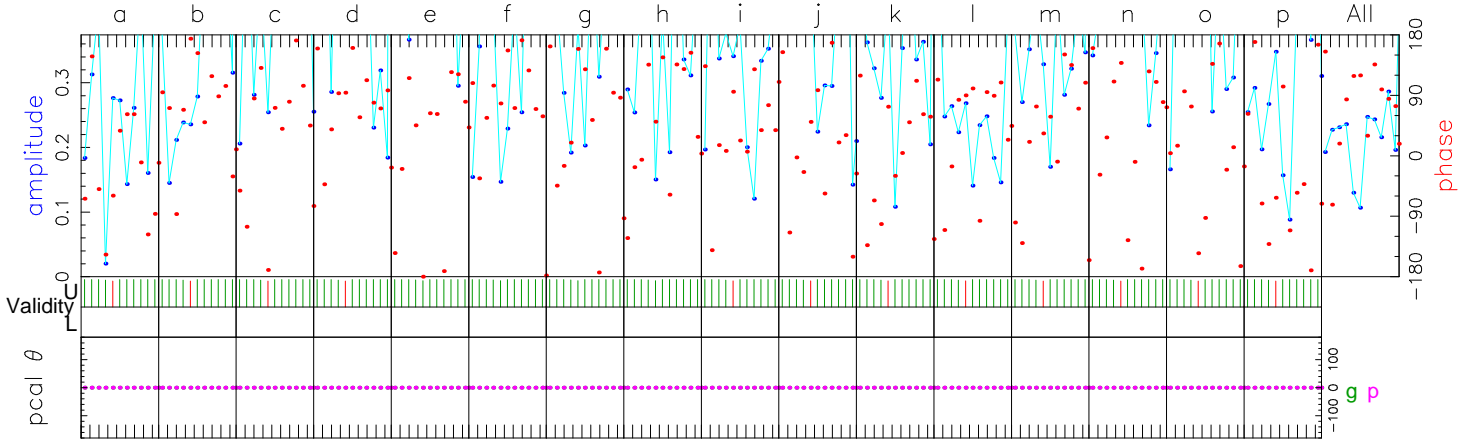


Fringe quality 9

SNR 7.4
Int time 476.047
Amp 0.125
Phase 84.7
PFD 3.2e-05
Delays (us)
SBD -0.010150
MBD -0.006679
Fringe rate (Hz)
-0.024149
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112340
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-33.0	90.0	95.3	90.9	103.9	84.3	110.8	112.1	48.3	13.7	62.5	78.9	68.0	101.5	175.6	-116.3	Phase	84.7				
	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	Ampl.	0.1				
	98.2	128.0	198.5	127.9	212.4	127.4	126.4	47.9	180.9	1.4	23.2	94.4	80.2	87.5	190.5	10.8	Sbd box	127.7				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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)			-4.06495148892E+03														Apriori delay (usec)	-4.06494480994E+03	Resid mbdelay (usec)	-6.67898E-03	+/-	1.4E-04
Sband delay (usec)			-4.06495495994E+03														Apriori clock (usec)	-1.0653650E+01	Resid sbdelay (usec)	-1.01500E-02	+/-	2.3E-03
Phase delay (usec)			-4.06494480721E+03														Apriori clockrate (us/s)	-1.2888659E-07	Resid phdelay (usec)	2.73272E-06	+/-	5.0E-07
Delay rate (us/s)			-2.83076920202E-01														Apriori rate (us/s)	-2.83076639852E-01	Resid rate (us/s)	-2.80350E-07	+/-	1.8E-09
Total phase (deg)					-249.4												Apriori accel (us/s/s)	5.22303606895E-05	Resid phase (deg)	84.7	+/-	15.4

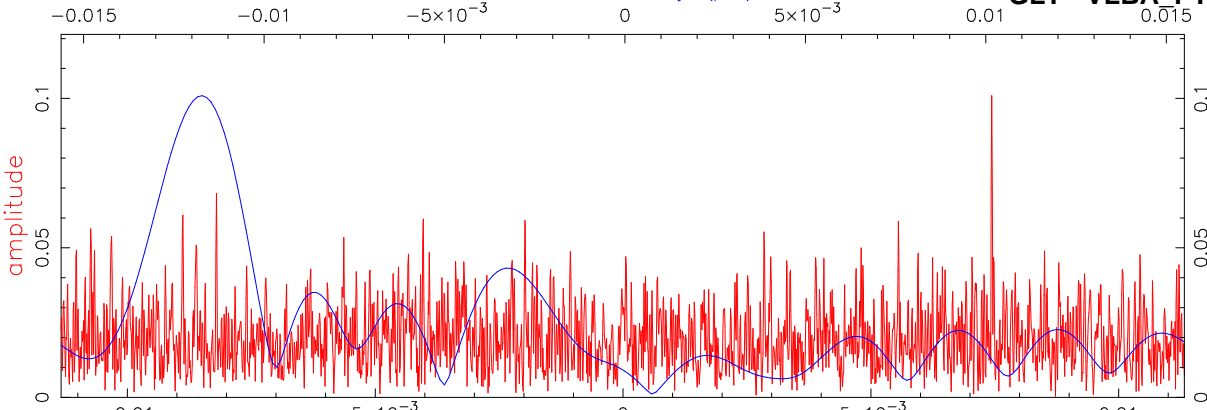
ph/seg (deg) 62.3 26.7 Theor. Amplitude 0.125 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 80.4 46.6 Search (2048X64) 0.120 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 63.7 30.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 61.7 53.8 Inc. seg. avg. 0.191 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 2249.696 6332.921 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gp..130G9L Output file: /Exps/c192b/v2/1234/No0205/gp.W.171.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

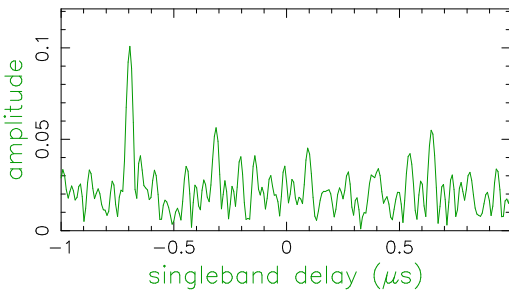
3C84.130G9L, No0205, gp
GLT - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

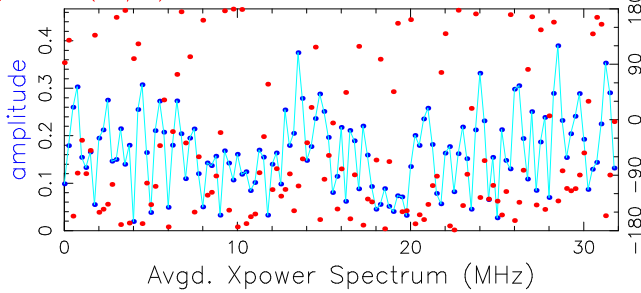
Fringe quality 0



SNR 6.0
Int time 476.144
Amp 0.121
Phase -117.0
PFD 3.6e-01
Delays (us)
SBD -0.695901
MBD -0.011722
Fringe rate (Hz)
0.641599
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

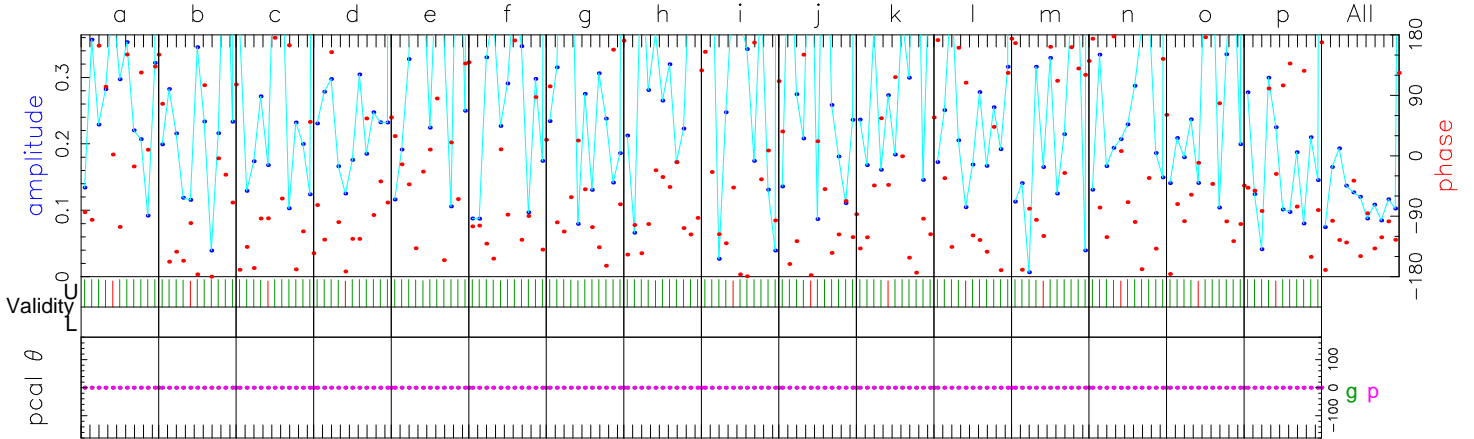


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112346
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

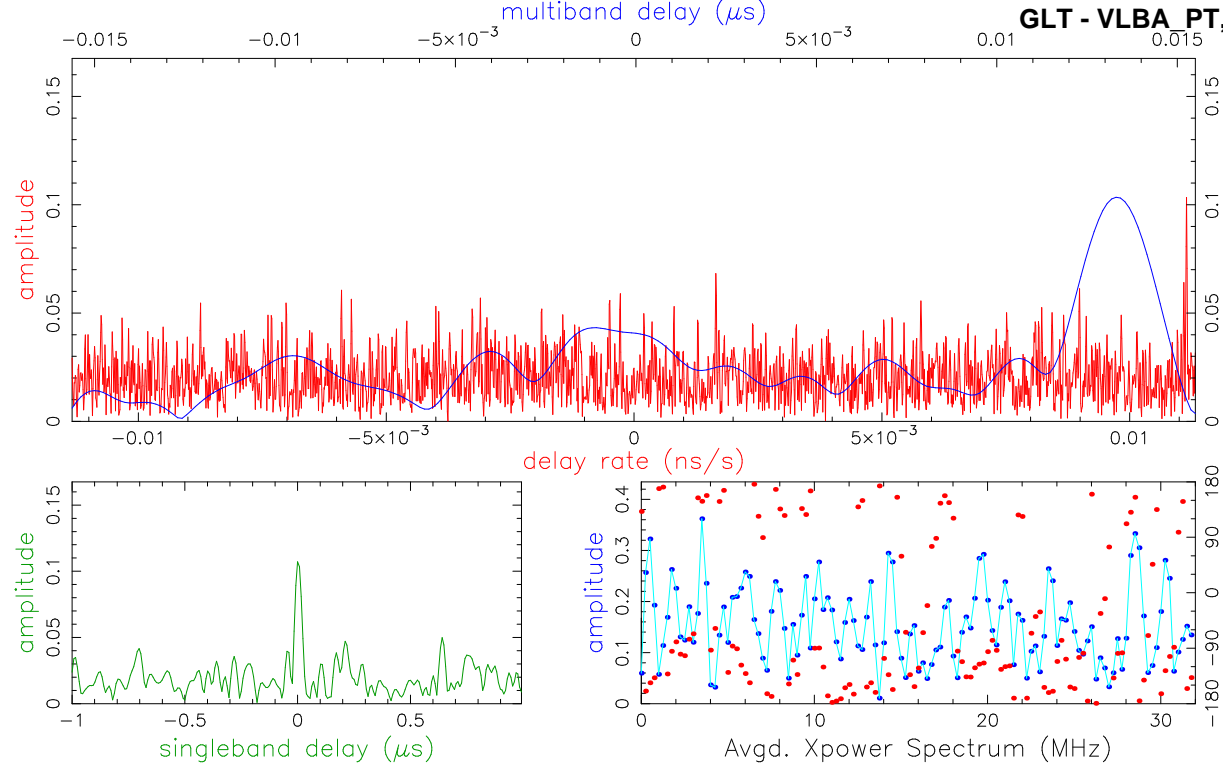


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
p	1000	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.06564403222E+03																
Sband delay (usec)		-4.06564071094E+03																
Phase delay (usec)		-4.06494481371E+03																
Delay rate (us/s)		-2.83069191526E-01																
Total phase (deg)					-91.2													
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)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 34.2 32.9 Search (2048X64) 0.099 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 54.6 57.5 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 38.0 Inc. seg. avg. 0.126 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.0 66.4 Inc. frq. avg. 0.116 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 217.9 el 52.8 pa 10.1 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 2249.696 6332.921 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gp..130G9L Output file: /Exps/c192b/v2/1234/No0205/gp.W.189.130G9L

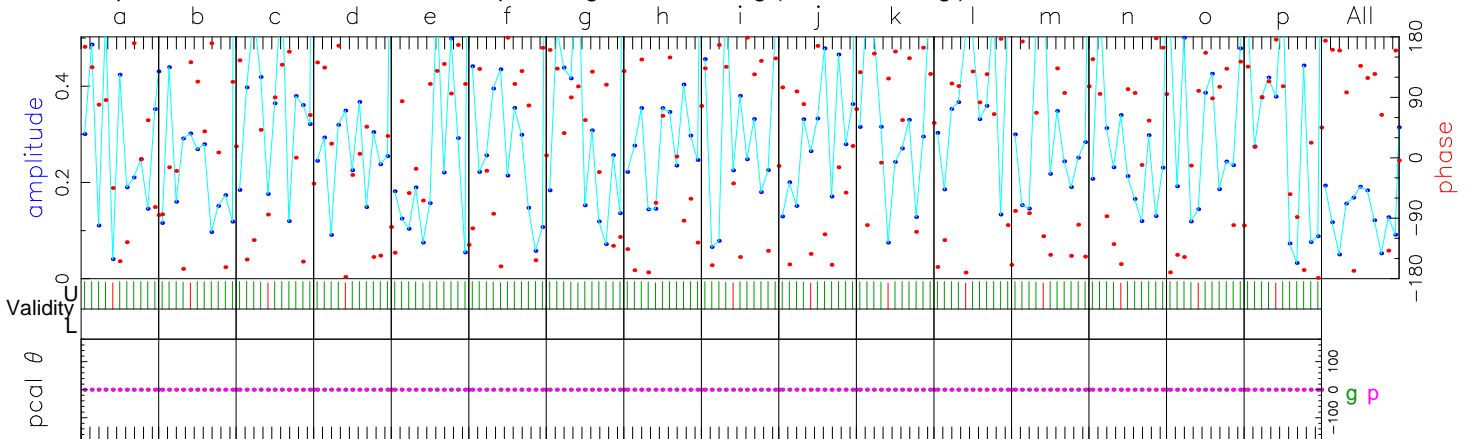
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gp
GLT - VLBA_PT, fgroup W, pol RL



Fringe quality 0
SNR 6.5
Int time 476.046
Amp 0.168
Phase 149.2
PFD 2.9e-02
Delays (us)
SBD 0.002499
MBD 0.013267
Fringe rate (Hz) 0.961771
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112351
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

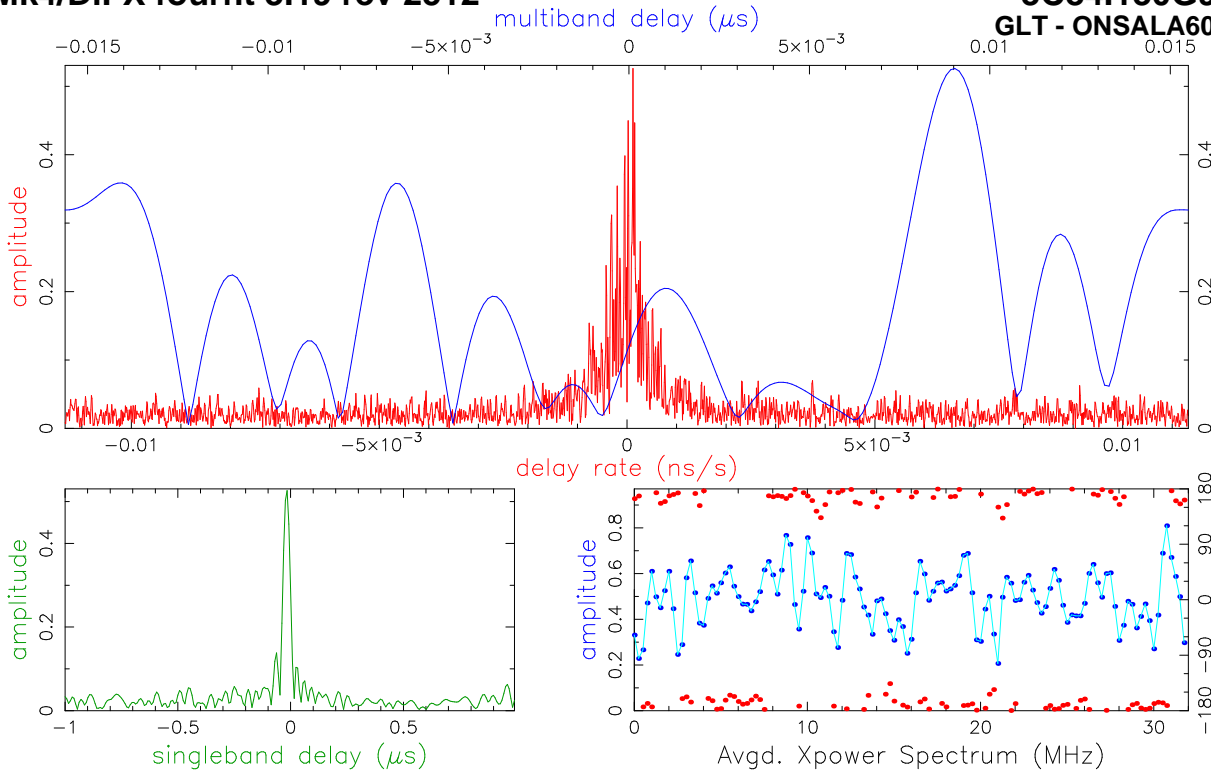
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	-4.06493154320E+03			Apriori delay (usec)			-4.06494480994E+03			Resid mbdelay (usec)			1.32667E-02			+/- 1.7E-04		
Sband delay (usec)	-4.06494231094E+03			Apriori clock (usec)			-1.0653650E+01			Resid sbdelay (usec)			2.49900E-03			+/- 2.7E-03		
Phase delay (usec)	-4.06494480513E+03			Apriori clockrate (us/s)			-1.2888659E-07			Resid phdelay (usec)			4.81081E-06			+/- 5.7E-07		
Delay rate (us/s)	-2.83065474644E-01			Apriori rate (us/s)			-2.83076639852E-01			Resid rate (us/s)			1.11652E-05			+/- 2.1E-09		
Total phase (deg)	-185.0			Apriori accel (us/s/s)			5.22303606895E-05			Resid phase (deg)			149.2			+/- 17.7		
ph/seg (deg)	RMS	Theor.	Amplitude		0.168 +/- 0.026		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000			
amp/seg (%)	43.0	30.7	Search (2048X64)		0.098		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016 0.016					
ph/frq (deg)	51.5	53.6	Interp.		0.000		Bits/sample: 2x2		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011 0.011					
amp/frq (%)	45.5	35.5	Inc. seg. avg.		0.179		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00					
	54.8	61.9	Inc. frq. avg.		0.156		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00					
g: az 217.9 el 52.8 pa 10.1	p: az 43.4 el 79.5 pa -128.2			u, v (fr/asec) 2249.696 6332.921									simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c192b/v2/1234/No0205/gp..130G9L			Output file: /Exps/c192b/v2/1234/No0205/gp.W.209.130G9L														

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gX
GLT - ONSALA60, fgroup W, pol LL

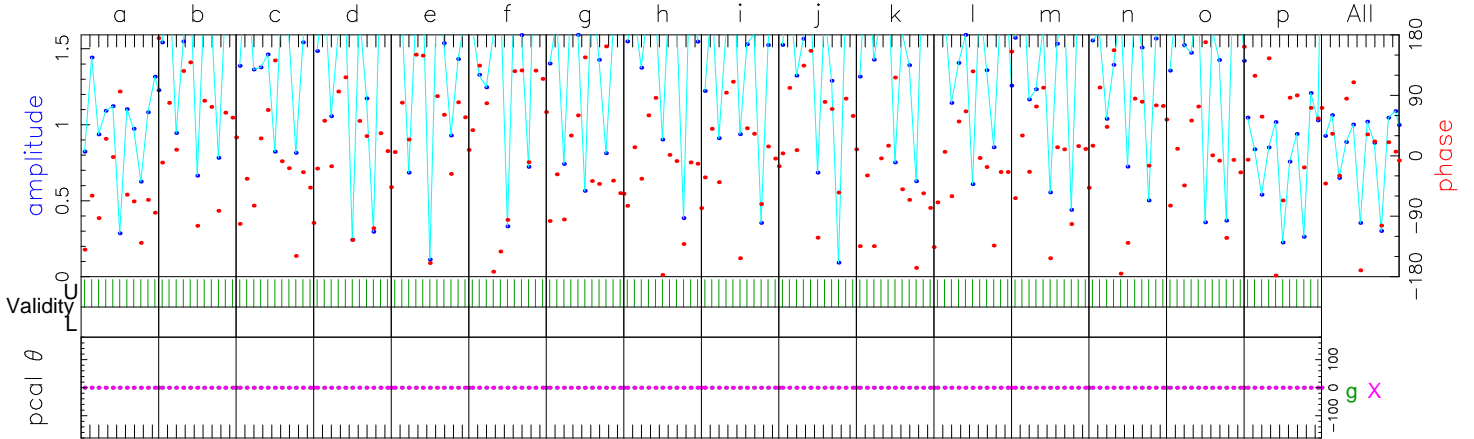


Fringe quality 5

SNR 31.8
Int time 478.872
Amp 0.531
Phase 25.1
PFD 0.0e+00
Delays (us)
SBD -0.017793
MBD 0.009002
Fringe rate (Hz) 0.010117
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112340
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-63.8	72.2	-29.5	39.8	76.4	127.3	-32.7	1.1	32.2	82.2	-54.7	-10.5	15.1	88.0	-2.6	83.5	Phase	25.1
	0.7	0.9	0.9	1.0	0.9	0.9	0.8	1.0	0.8	0.9	0.9	0.9	1.0	0.8	1.0	0.5	Ampl.	0.9
	128.0	127.1	127.2	126.7	127.1	126.6	126.3	126.3	126.8	126.5	126.6	126.6	126.9	126.9	127.2	126.9	Sbd box	126.7
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	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)			8.13878424918E+03							8.13880649733E+03						9.00185E-03	+/-	3.4E-05
Sband delay (usec)			8.13878870483E+03							-3.1086933E+01						-1.77925E-02	+/-	5.4E-04
Phase delay (usec)			8.13880649814E+03							-4.5300002E-07						8.08566E-07	+/-	1.2E-07
Delay rate (us/s)			4.44841222552E-01							4.44841105105E-01						1.17447E-07	+/-	4.2E-10
Total phase (deg)				269.9												25.1	+/-	3.6

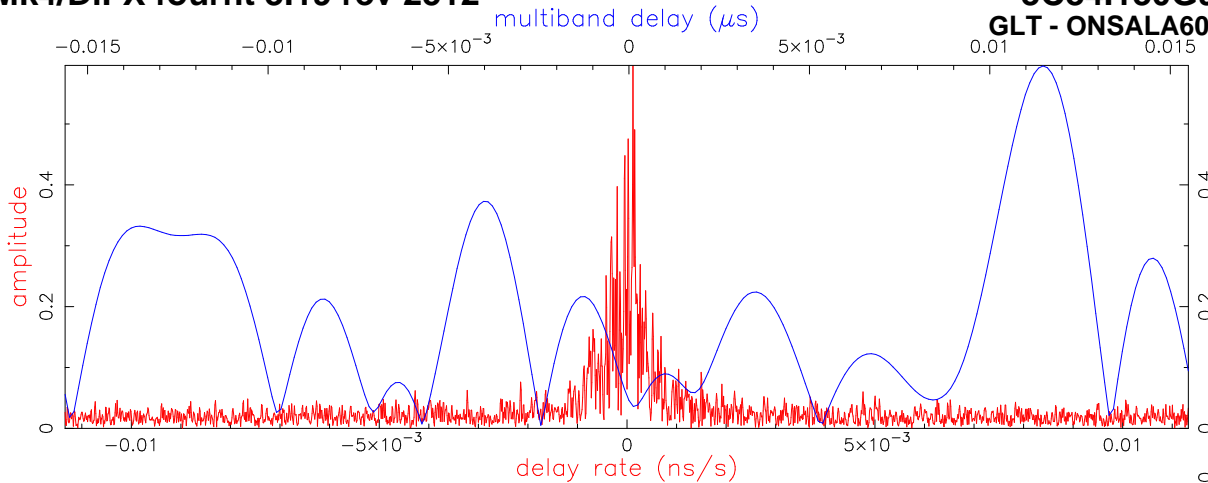
ph/seg (deg) RMS Theor. Amplitude 0.531 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 75.2 6.3 Search (2048X64) 0.480 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 76.9 10.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 59.5 7.2 Inc. seg. avg. 0.834 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 67.7 12.6 Inc. frq. avg. 0.858 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 217.9 el 52.8 pa 10.1 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3463.723 -1446.406 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gX..130G9L Output file: /Exps/c192b/v2/1234/No0205/gX.W.167.130G9L

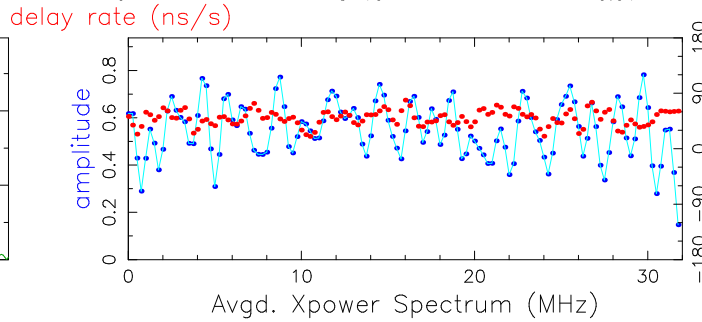
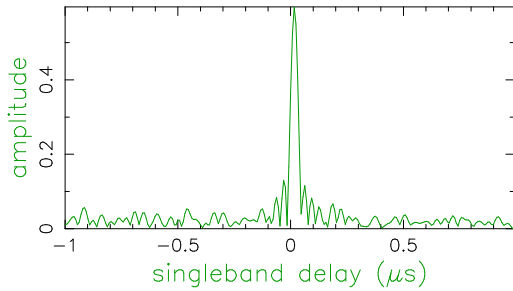
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gX
GLT - ONSALA60, fgroup W, pol RR



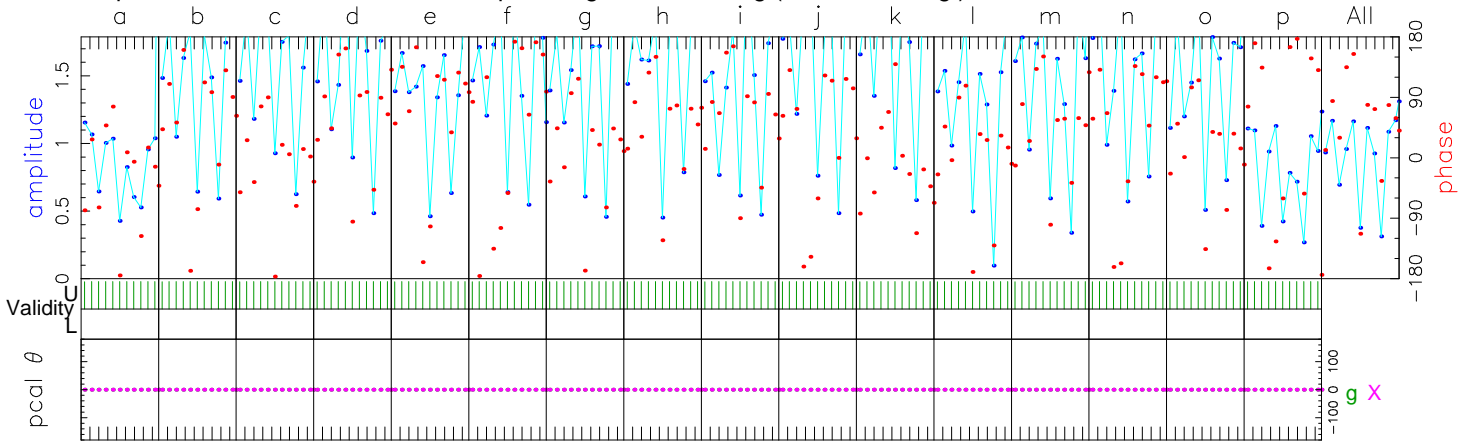
Fringe quality 3

SNR 35.7
Int time 478.776
Amp 0.596
Phase 78.1
PFD 0.0e+00
Delays (us)
SBD 0.016483
MBD 0.011493
Fringe rate (Hz) 0.010084
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



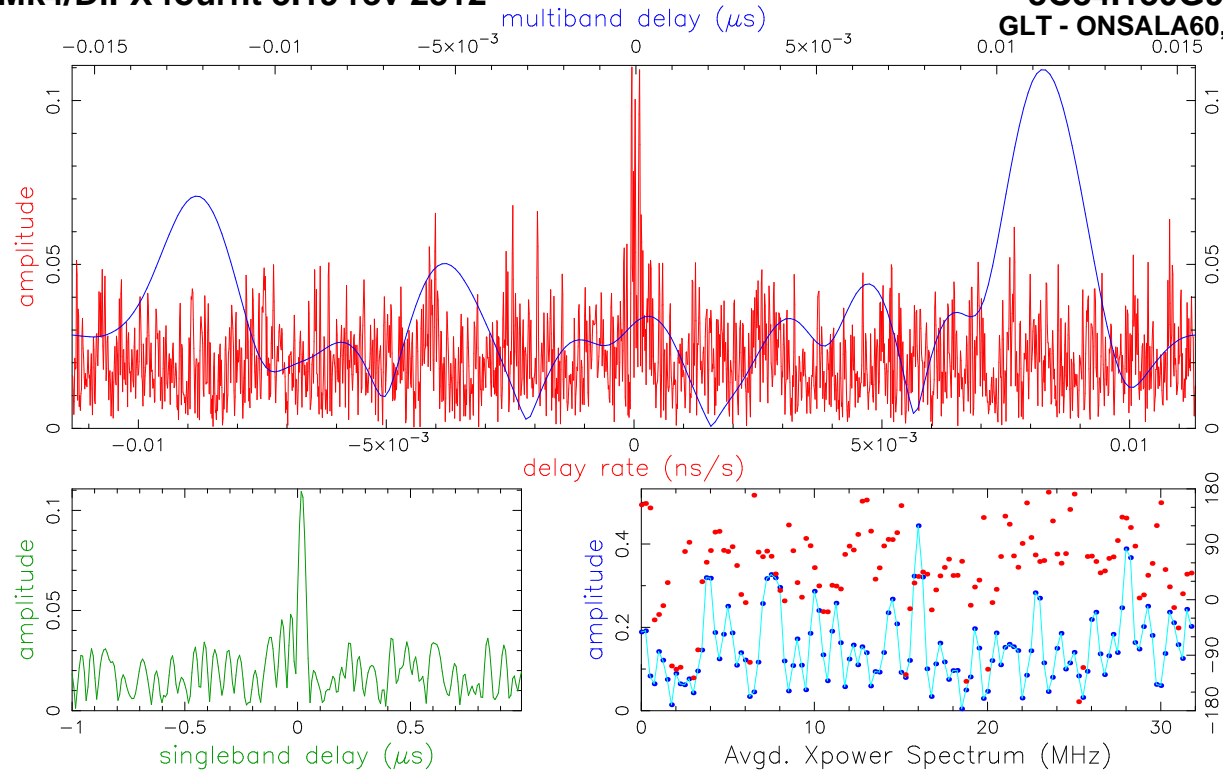
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112345
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



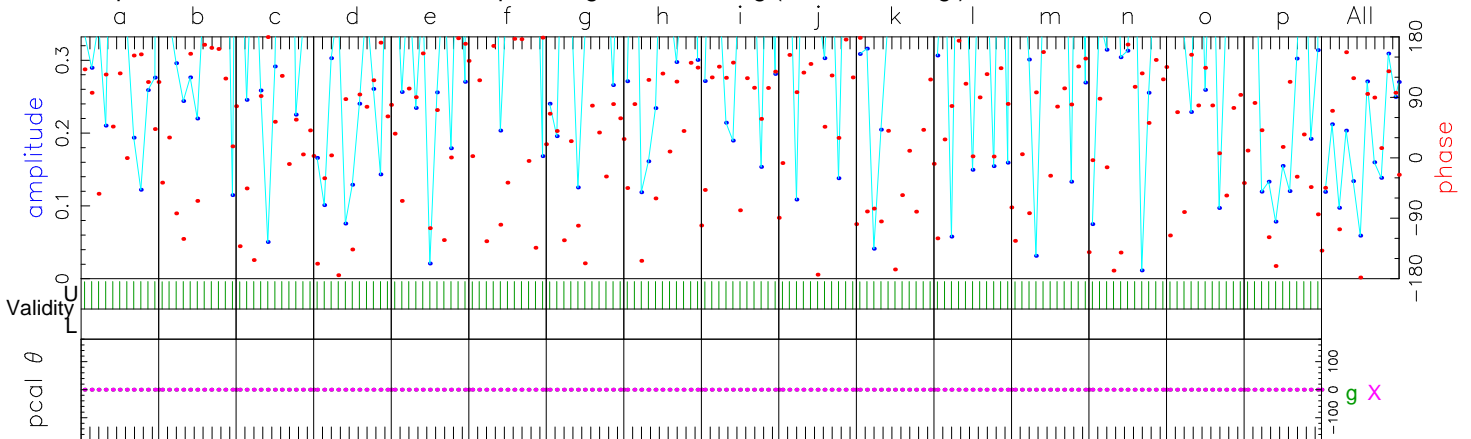
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.3	109.5	18.2	94.6	120.4	174.7	40.9	72.8	89.9	125.3	-6.0	39.2	66.2	124.2	41.2	166.3	166.3	Phase	78.1
0.5	1.0	1.0	1.0	0.9	0.9	1.0	1.1	0.9	1.0	1.1	0.9	1.0	0.9	1.0	0.9	0.5	Ampl.	0.9
132.7	131.6	131.5	131.3	131.0	131.0	131.2	131.0	130.8	130.8	131.0	130.9	131.0	131.0	131.6	131.5	132.7	Sbd box	131.1
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.13881798984E+03			Apriori delay (usec)			8.13880649733E+03			Resid mbdelay (usec)			1.14925E-02			+/- 3.0E-05		
Sband delay (usec)	8.13882298033E+03			Apriori clock (usec)			-3.1086933E+01			Resid sbdelay (usec)			1.64830E-02			+/- 4.8E-04		
Phase delay (usec)	8.13880649985E+03			Apriori clockrate (us/s)			-4.5300002E-07			Resid phdelay (usec)			2.51987E-06			+/- 1.0E-07		
Delay rate (us/s)	4.44841222168E-01			Apriori rate (us/s)			4.44841105105E-01			Resid rate (us/s)			1.17063E-07			+/- 3.7E-10		
Total phase (deg)	323.0			Apriori accel (us/s/s)			-3.36591992965E-05			Resid phase (deg)			78.1			+/- 3.2		

ph/seg (deg) 72.2 5.6 Search (2048X64) 0.533 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.3 9.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 57.2 6.4 Inc. seg. avg. 0.897 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 60.4 11.2 Inc. frq. avg. 0.904 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 217.9 el 52.8 pa 10.1 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3463.723 -1446.406 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gX..130G9L Output file: /Exps/c192b/v2/1234/No0205/gX.W.187.130G9L



Fringe quality 0
SNR 6.6
Int time 478.872
Amp 0.111
Phase 103.8
PFD 9.9e-03
Delays (us)
SBD 0.018408
MBD 0.011340
Fringe rate (Hz) 0.009384
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112350
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
85.5	163.1	39.2	96.3	133.3	-156.6	38.7	97.9	117.3	130.1	-31.3	113.1	121.9	134.9	77.7	16.4	103.8	Phase	103.8
0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
227.8	116.2	37.0	156.0	88.3	20.3	213.8	130.3	255.6	131.7	231.6	120.2	199.2	238.1	133.1	174.0	131.4	Sbd box	131.4
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	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	

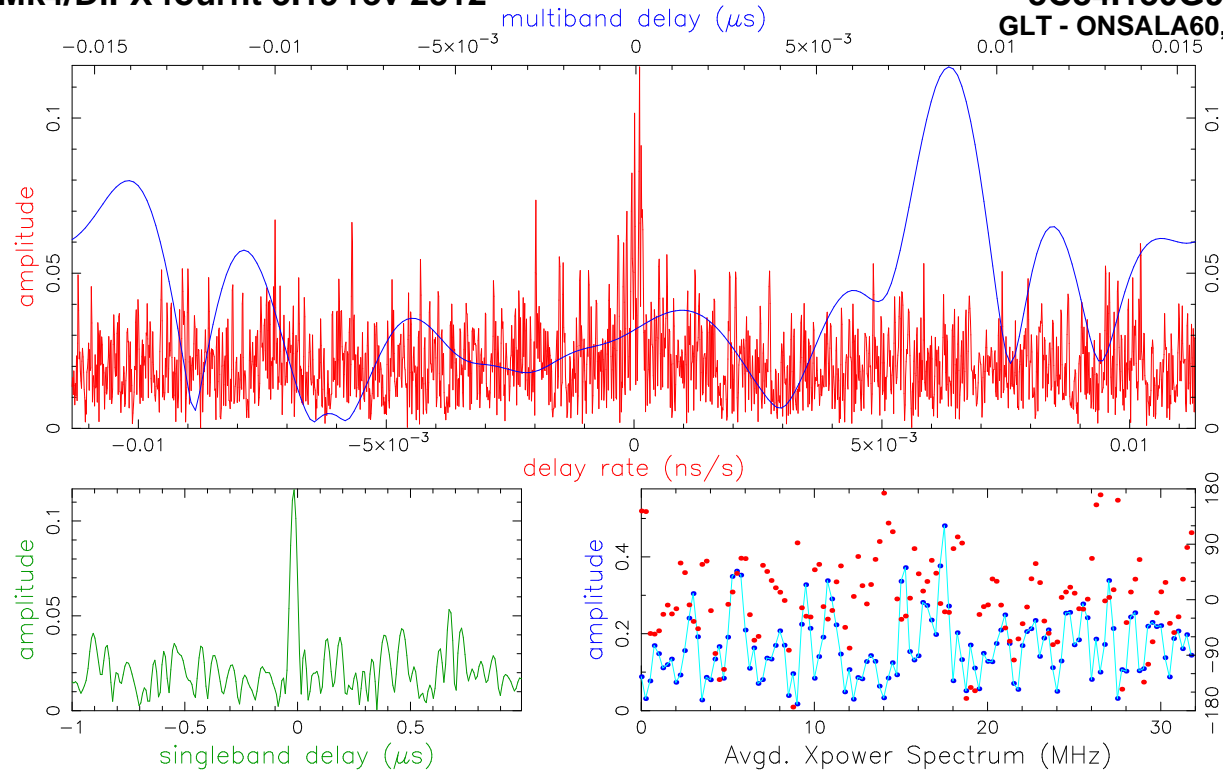
Group delay (usec)(sbd) 8.13881783716E+03 Apriori delay (usec) 8.13880649733E+03 Resid mbdelay (usec) 1.13398E-02 +/- 1.6E-04
 Sband delay (usec) 8.13882490583E+03 Apriori clock (usec) -3.1086933E+01 Resid sbdelay (usec) 1.84085E-02 +/- 2.6E-03
 Phase delay (usec) 8.13880650068E+03 Apriori clockrate (us/s) -4.5300002E-07 Resid phdelay (usec) 3.34758E-06 +/- 5.6E-07
 Delay rate (us/s) 4.44841214047E-01 Apriori rate (us/s) 4.44841105105E-01 Resid rate (us/s) 1.08941E-07 +/- 2.0E-09
 Total phase (deg) 348.7 Apriori accel (us/s/s) -3.36591992965E-05 Resid phase (deg) 103.8 +/- 17.3

RMS Theor. Amplitude 0.111 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 76.1 30.0 Search (2048X64) 0.108 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 90.4 52.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 60.9 34.6 Inc. seg. avg. 0.156 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.2 60.4 Inc. frq. avg. 0.131 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 217.9 el 52.8 pa 10.1 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3463.723 -1446.406 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gX..130G9L Output file: /Exps/c192b/v2/1234/No0205/gX.W.202.130G9L

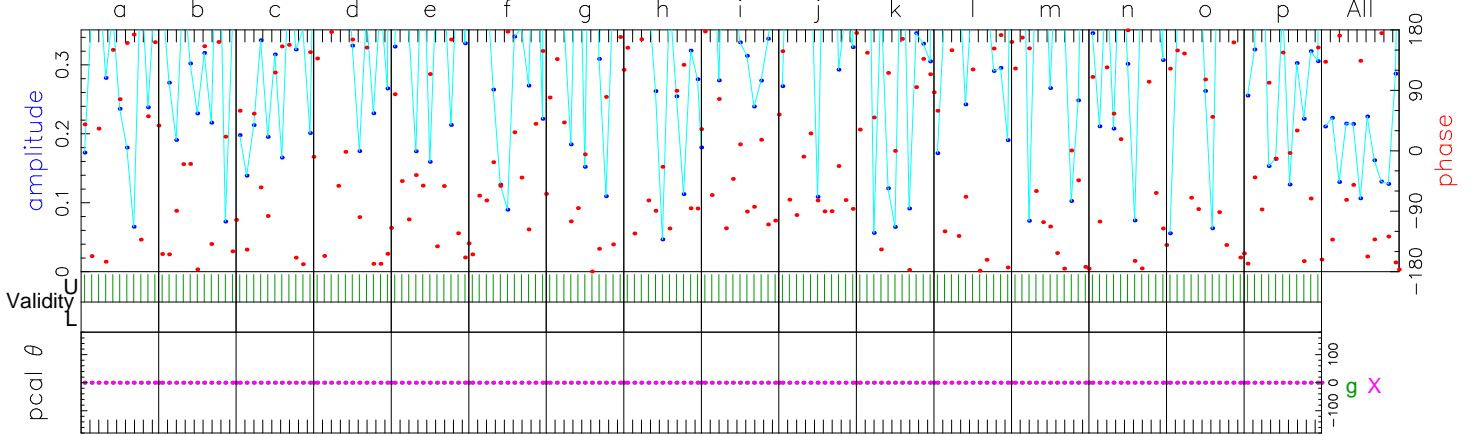
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gX
GLT - ONSALA60, fgroup W, pol RL



Fringe quality 0
SNR 7.0
Int time 478.776
Amp 0.117
Phase -149.5
PFD 7.8e-04
Delays (us)
SBD -0.017394
MBD 0.008666
Fringe rate (Hz)
0.009810
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112355
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

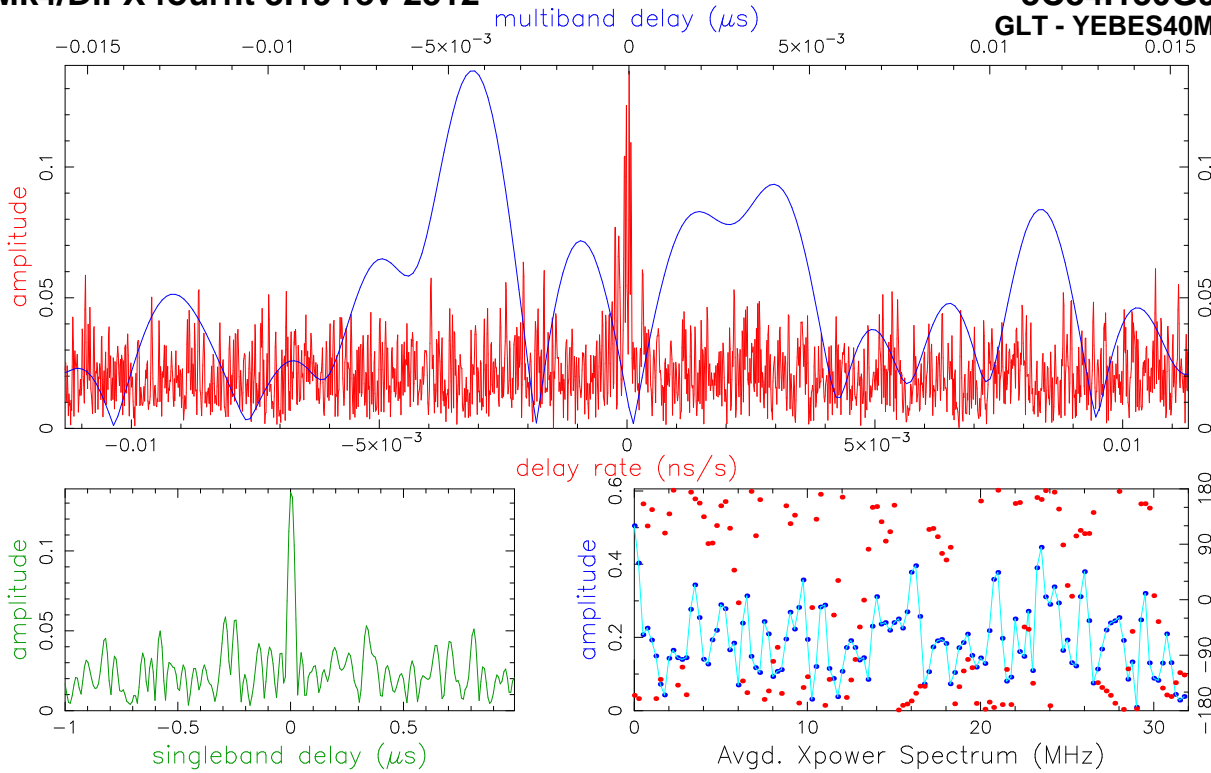


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
X	1000	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
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)		8.13878391307E+03																
Sband delay (usec)		8.13878910283E+03																
Phase delay (usec)		8.13880649251E+03																
Delay rate (us/s)		4.44841218989E-01																
Total phase (deg)			95.4															
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)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 53.8 28.4 Search (2048X64) 0.111 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 75.1 49.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 55.3 32.7 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 75.0 57.2 Inc. frq. avg. 0.153 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 217.9 el 52.8 pa 10.1 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3463.723 -1446.406 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gX..130G9L Output file: /Exps/c192b/v2/1234/No0205/gX.W.219.130G9L

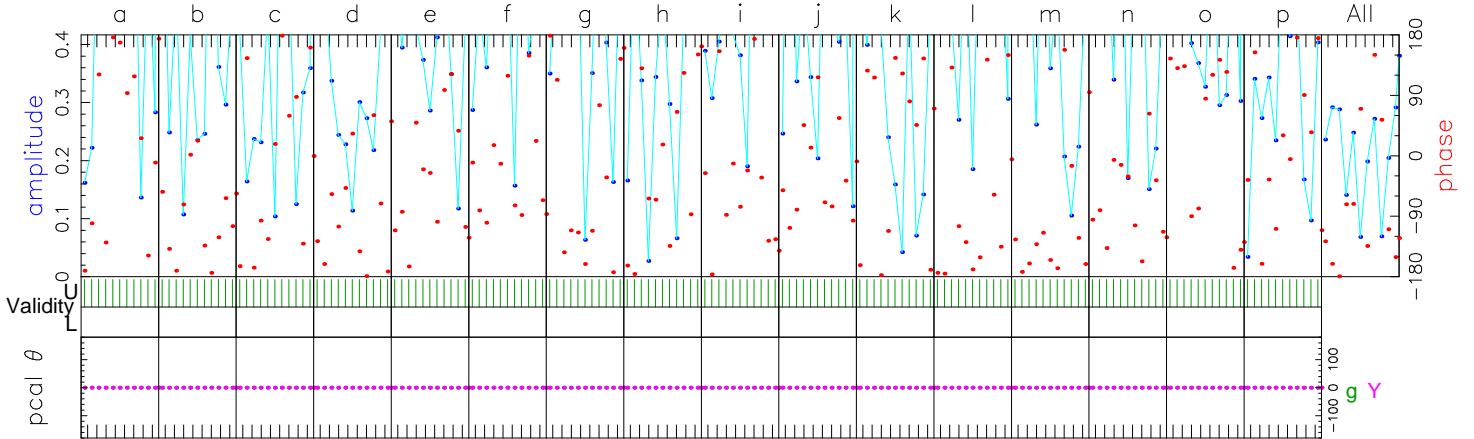
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gY
GLT - YEBES40M, fgroup W, pol LL



Fringe quality 9
SNR 8.2
Int time 461.911
Amp 0.139
Phase -144.1
PFD 1.1e-07
Delays (us)
SBD 0.003069
MBD -0.004261
Fringe rate (Hz) 0.004123
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112339
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec

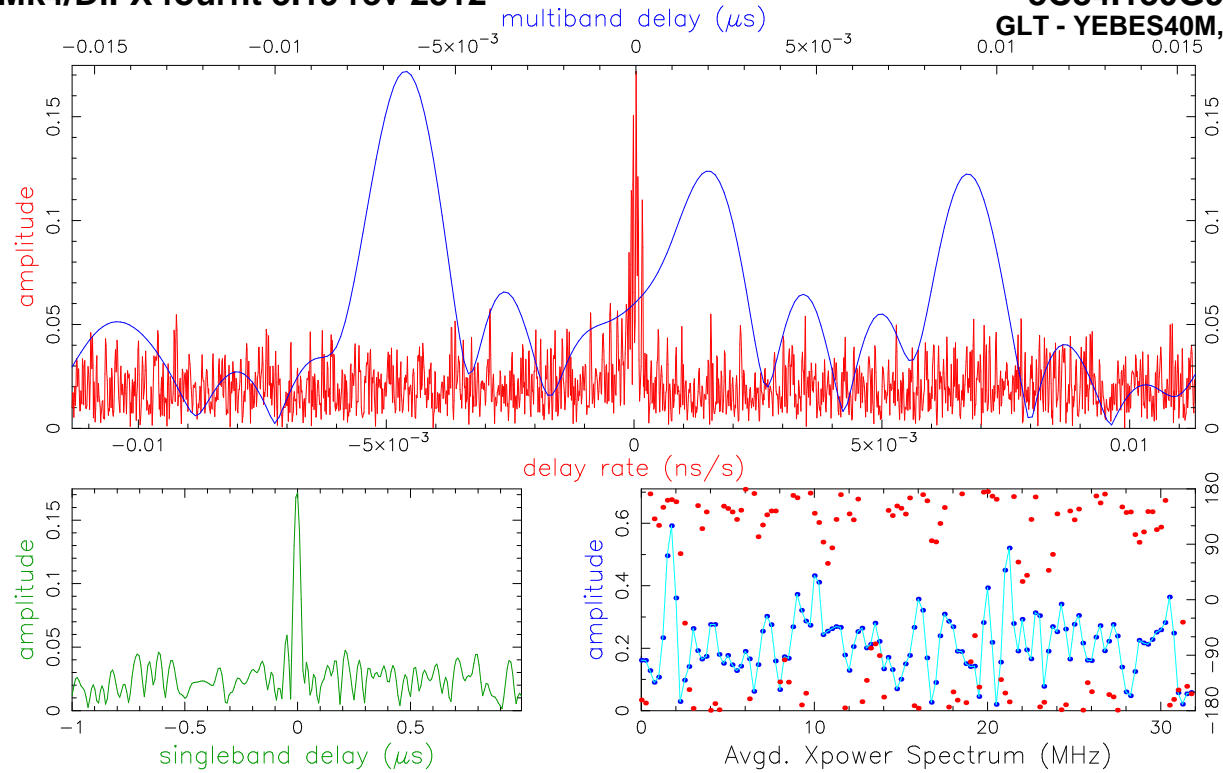


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0			
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Y	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)			9.08860000258E+03																
Sband delay (usec)			9.08860733314E+03																
Phase delay (usec)			9.08860425900E+03																
Delay rate (us/s)			7.39274449847E-01																
Total phase (deg)					-46.8														
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
Pcal mode: MANUAL, MANUAL																			
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																			
Bits/sample: 2x2																			
Sample rate(MISamp/s): 64																			
Data rate(Mb/s): 2048																			
nlags: 128																			
t_cohere infinite																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
ion window (TEC)																			
simultaneous interpolator																			

ph/seg (deg) 77.2 24.3 Search (2048X64) 0.129 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 77.2 42.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 56.6 28.1 Inc. seg. avg. 0.193 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 81.0 49.0 Inc. frq. avg. 0.187 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -5703.973 516.054 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/c192b/v2/1234/No0205/gY..130G9L Output file: /Exps/c192b/v2/1234/No0205/gY.W.166.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gY
GLT - YEBES40M, fgroup W, pol RR

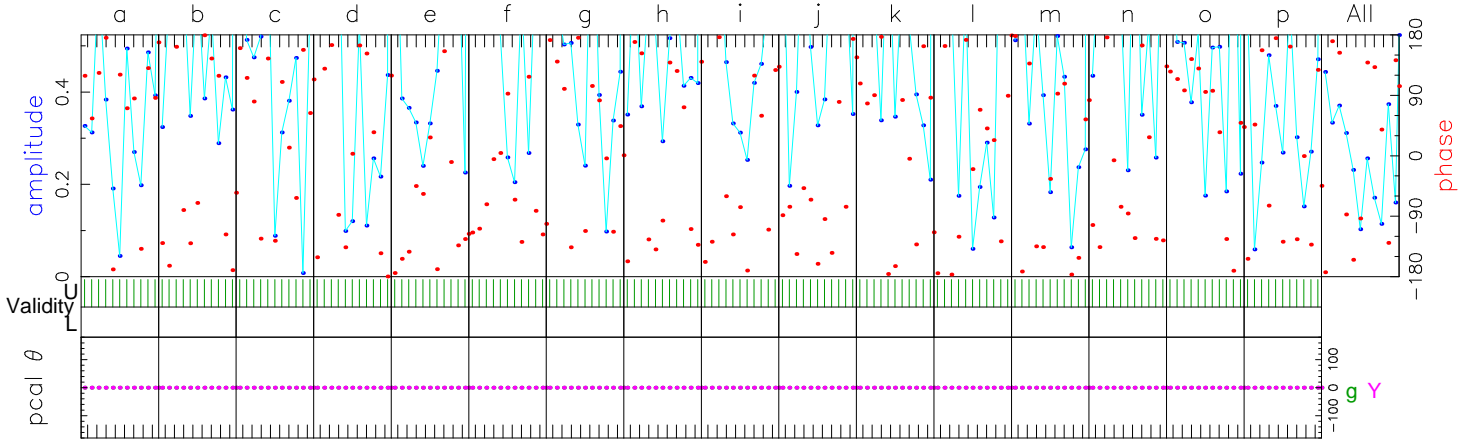


Fringe quality 9

SNR 10.3
Int time 461.803
Amp 0.175
Phase -175.2
PFD 4.5e-16
Delays (us)
SBD -0.003085
MBD -0.006412
Fringe rate (Hz) 0.004274
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112344
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec

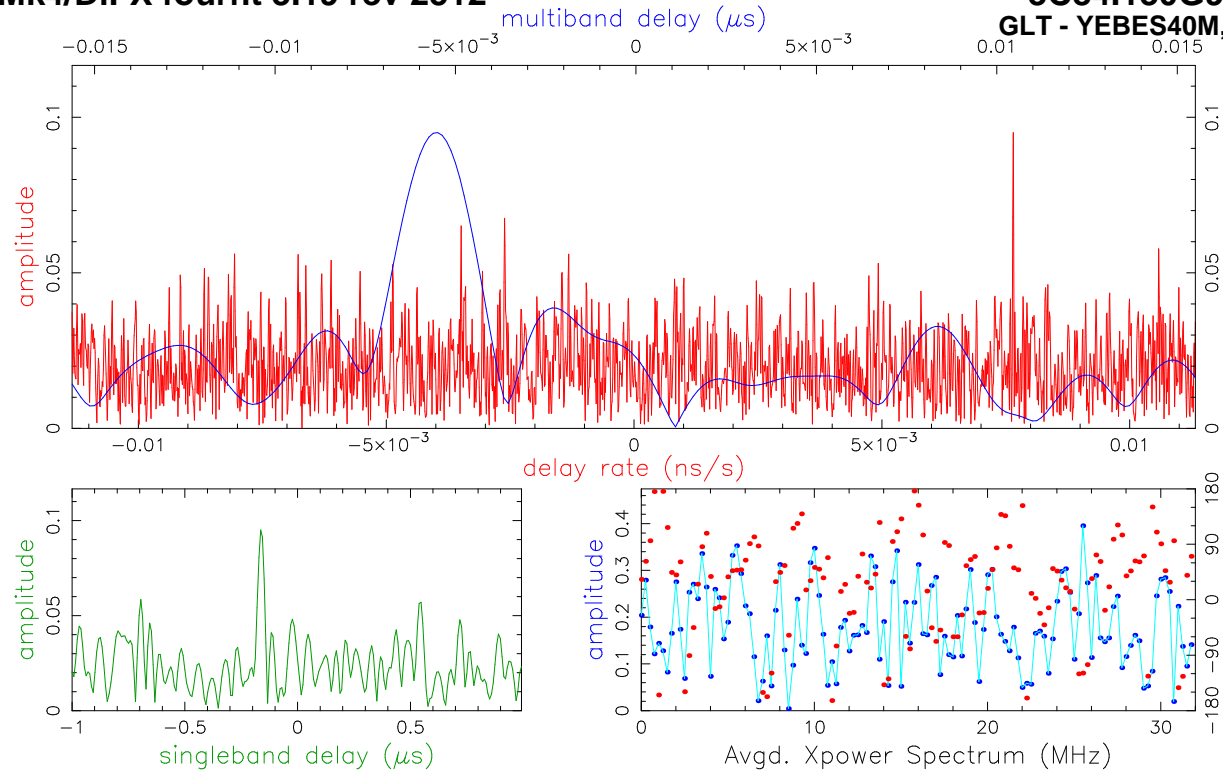


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Y	1000	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		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		9.08859785161E+03																
Sband delay (usec)		9.08860117864E+03																
Phase delay (usec)		9.08860425799E+03																
Delay rate (us/s)		7.39274451605E-01																
Total phase (deg)					-78.0													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

RMS Theor. Amplitude 0.175 +/- 0.017
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 64.8 19.3 Search (2048X64) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 79.9 33.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 52.6 22.3 Inc. seg. avg. 0.247 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 55.0 39.0 Inc. frq. avg. 0.243 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
g: az 217.9 el 52.8 pa 10.1 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -5703.973 516.054 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gY..130G9L Output file: /Exps/c192b/v2/1234/No0205/gY.W.182.130G9L

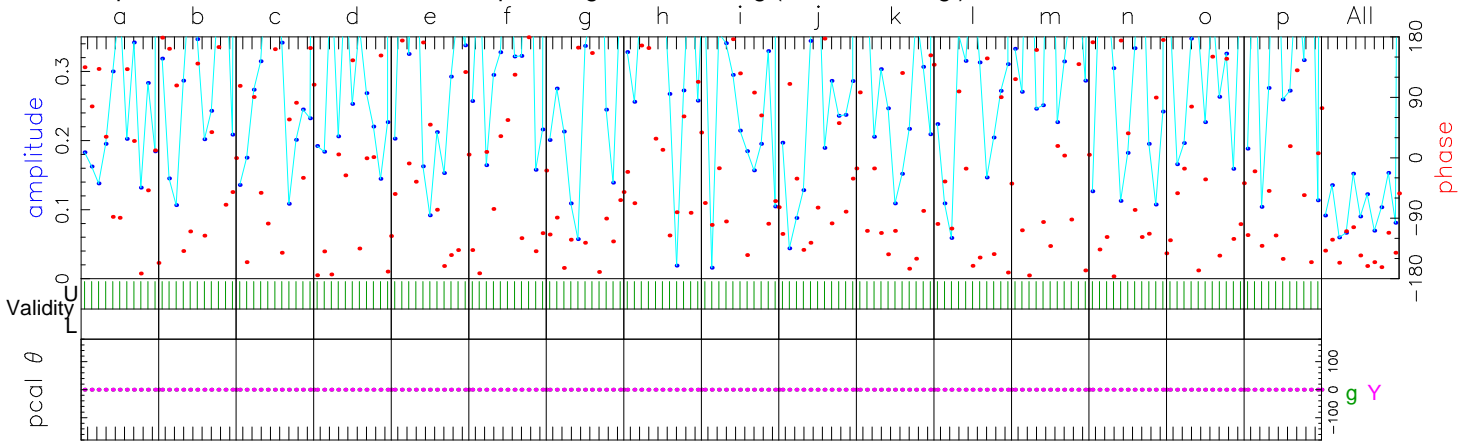
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gY
GLT - YEBES40M, fgroup W, pol LR



Fringe quality 0
SNR 5.6
Int time 461.911
Amp 0.117
Phase -133.1
PFD 9.8e-01
Delays (us)
SBD -0.161661
MBD -0.005577
Fringe rate (Hz) 0.660009
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112349
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec

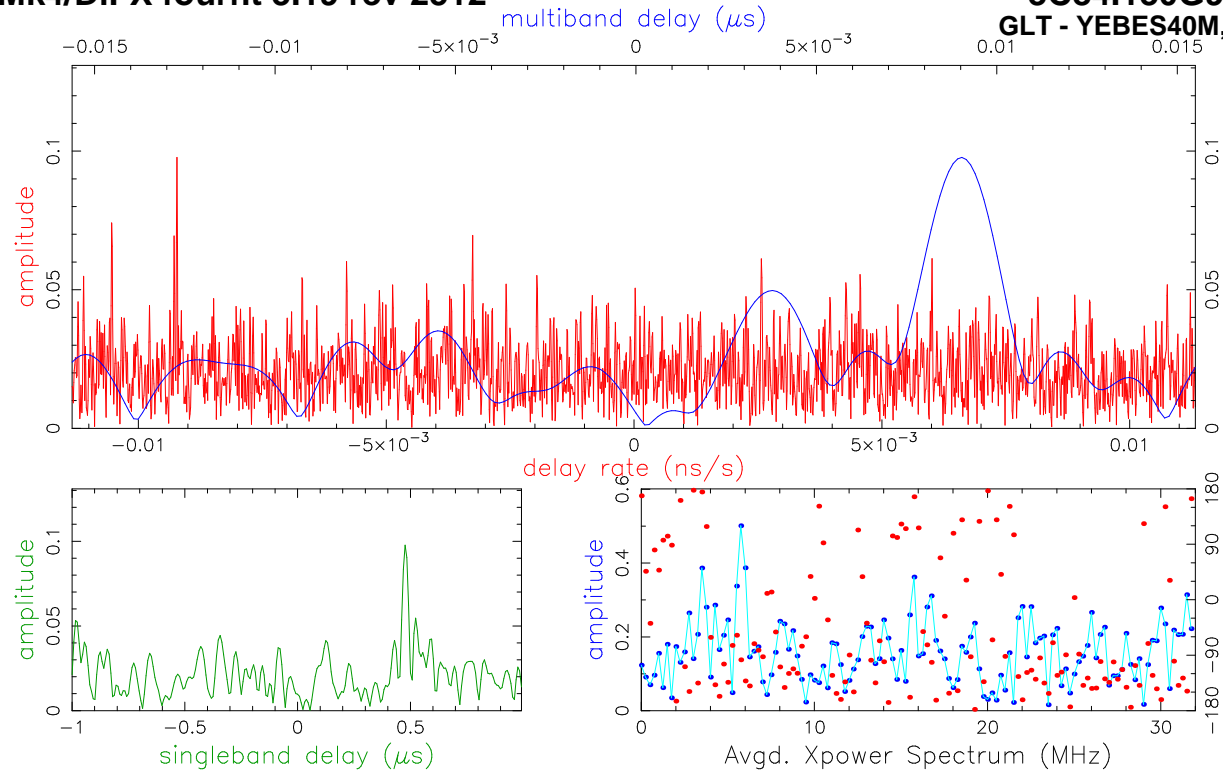


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-17.8	-145.1	-163.9	-136.5	-123.6	-169.3	-134.6	-18.9	-91.2	-87.3	-139.7	-166.4	-154.2	-134.9	-143.4	-100.7	Phase	-133.1				
	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.1				
	146.7	129.1	63.2	64.5	218.9	124.0	107.0	185.3	148.9	44.9	23.8	49.4	88.7	184.8	245.9	123.3	Sbd box	108.3				
U/L	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	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					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			9.08844243643E+03														Apriori delay (usec)	9.08860426364E+03	Resid mbdelay (usec)	-5.57722E-03	+/-	1.9E-04
Sband delay (usec)			9.08844260264E+03														Apriori clock (usec)	-8.3719597E+00	Resid sbdelay (usec)	-1.61661E-01	+/-	3.1E-03
Phase delay (usec)			9.08860425935E+03														Apriori clockrate (us/s)	-1.4500001E-07	Resid phdelay (usec)	-4.29139E-06	+/-	6.6E-07
Delay rate (us/s)			7.39282064040E-01														Apriori rate (us/s)	7.39274401984E-01	Resid rate (us/s)	7.66206E-06	+/-	2.5E-09
Total phase (deg)					-35.8												Apriori accel (us/s/s)	-2.41478700954E-05	Resid phase (deg)	-133.1	+/-	20.3

ph/seg (deg) 21.4 35.2 Theor. Amplitude 0.117 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.0 61.4 Search (2048X64) 0.094 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.3 40.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.5 70.9 Inc. seg. avg. 0.106 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -5703.973 516.054 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gY..130G9L Output file: /Exps/c192b/v2/1234/No0205/gY.W.196.130G9L simultaneous interpolator

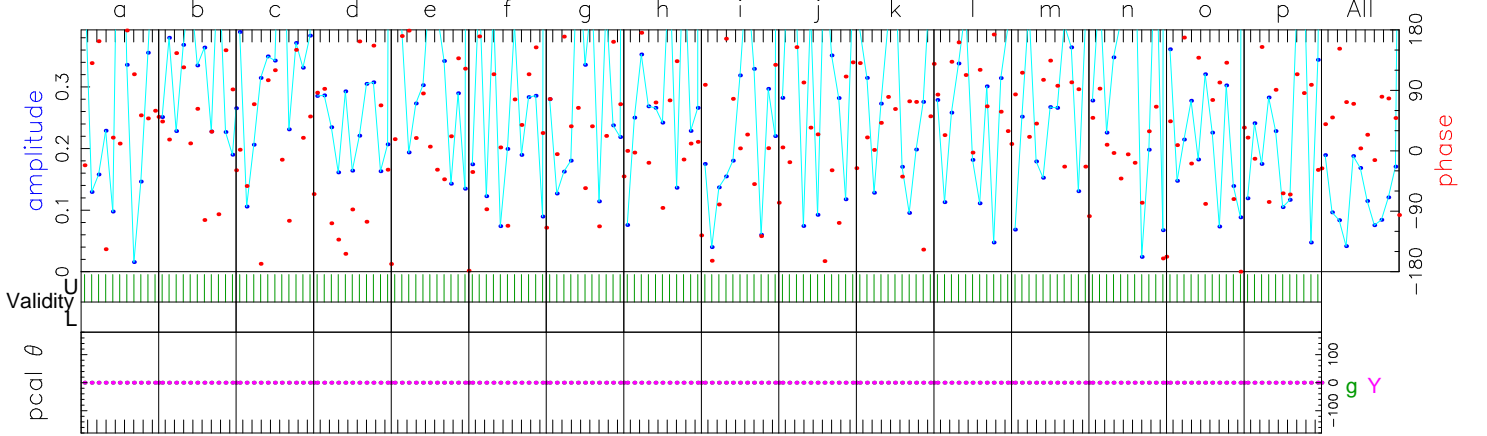
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gY
GLT - YEBES40M, fgroup W, pol RL



Fringe quality 0
SNR 5.8
Int time 461.803
Amp 0.131
Phase 48.8
PFD 8.7e-01
Delays (us)
SBD 0.477910
MBD 0.009027
Fringe rate (Hz)
-0.795169
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112354
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

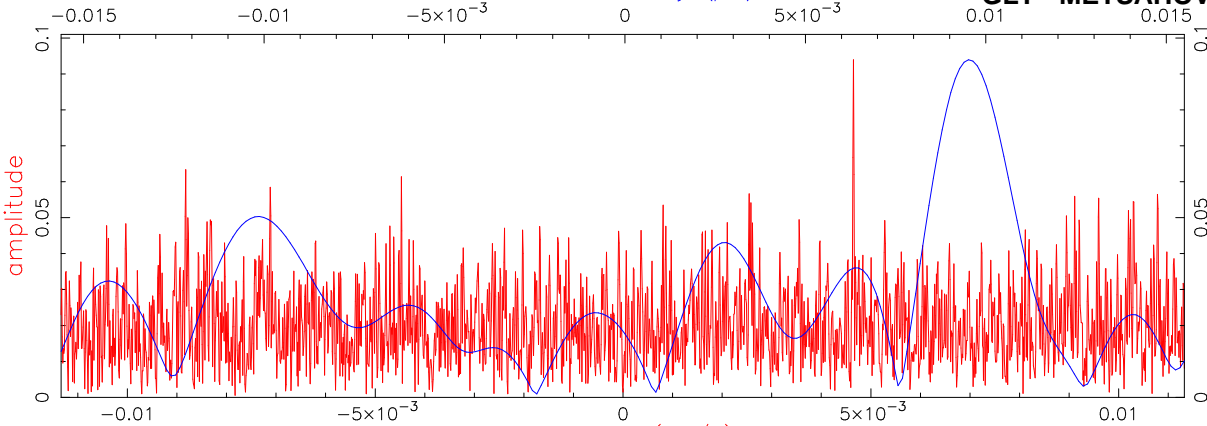
Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	36.9	45.0	45.4	-170.9	29.6	118.7	45.2	19.5	18.9	45.5	62.8	82.9	57.2	17.4	64.9	49.3	Phase	48.8	
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.3	0.2	0.2	0.3	0.1	0.1	Ampl.	0.1	
	1.5	150.1	85.7	139.2	230.1	44.8	144.8	32.1	131.0	145.0	190.3	200.4	57.0	188.6	89.2	178.4	Sbd box	190.2	
U/L	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	903/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			9.08908204104E+03									9.08860426364E+03					Resid mbdelay (usec)	9.02740E-03	+/- 1.9E-04
Sband delay (usec)			9.08908217314E+03									-8.3719597E+00					Resid sbdelay (usec)	4.77910E-01	+/- 3.0E-03
Phase delay (usec)			9.08860426521E+03									-1.4500001E-07					Resid phdelay (usec)	1.57283E-06	+/- 6.4E-07
Delay rate (us/s)			7.39265170863E-01									7.39274401984E-01					Resid rate (us/s)	-9.23112E-06	+/- 2.4E-09
Total phase (deg)				146.0								-2.41478700954E-05					Resid phase (deg)	48.8	+/- 19.9

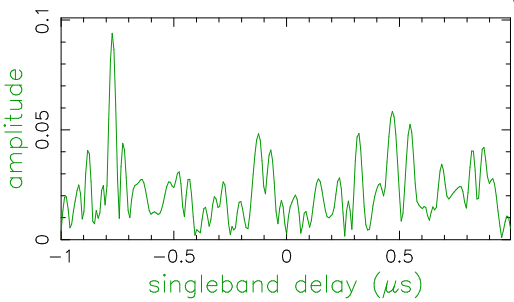
ph/seg (deg) RMS Theor. Amplitude 0.131 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 58.9 60.1 Search (2048X64) 0.094 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 45.9 39.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 55.8 69.4 Inc. seg. avg. 0.138 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -5703.973 516.054 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gY..130G9L Output file: /Exps/c192b/v2/1234/No0205/gY.W.215.130G9L simultaneous interpolator

multiband delay (μ s)

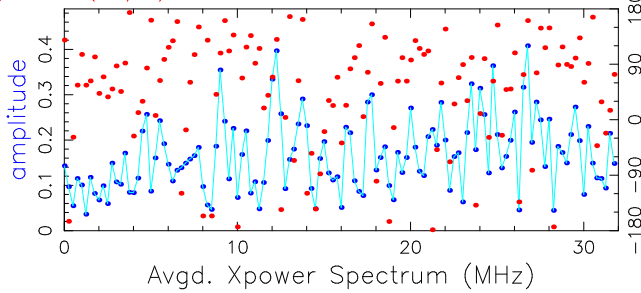


Fringe quality 0

SNR 5.6
Int time 479.278
Amp 0.101
Phase -92.2
PFD 9.9e-01
Delays (us)
SBD -0.772398
MBD 0.009553
Fringe rate (Hz)
0.401466
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

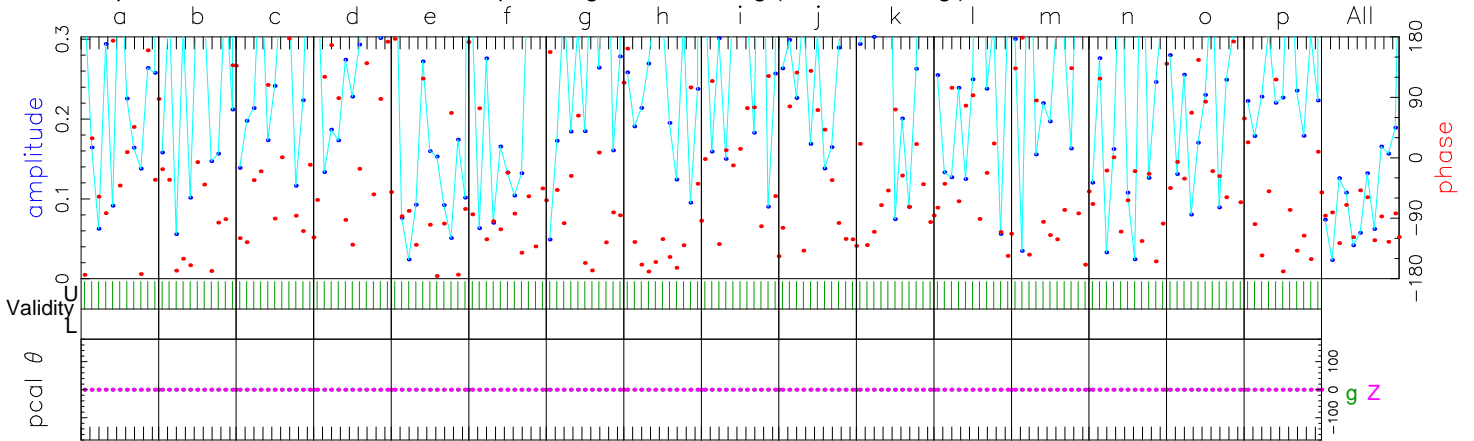


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112339
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-57.1	-75.7	-54.2	-139.5	-166.7	-90.0	-103.8	-145.8	-17.7	-138.7	-62.6	-64.8	-130.7	-109.2	-31.9	-103.5	Phase	-92.2
	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.3	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	245.3	53.4	255.4	177.0	45.9	234.1	18.2	17.8	170.8	125.8	30.2	209.1	66.6	156.2	80.8	243.1	Sbd box	30.1
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	9.08969114980E+03	Apriori delay (usec)	9.09046284698E+03	Resid mbdelay (usec)	9.55282E-03	+/-	1.9E-04
Sband delay (usec)	9.08969044898E+03	Apriori clock (usec)	1.1190500E+00	Resid sbdelay (usec)	-7.72398E-01	+/-	3.1E-03
Phase delay (usec)	9.09046284401E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-2.97412E-06	+/-	6.6E-07
Delay rate (us/s)	3.41094798220E-01	Apriori rate (us/s)	3.41090137592E-01	Resid rate (us/s)	4.66063E-06	+/-	2.4E-09
Total phase (deg)	137.9	Apriori accel (us/s/s)	-4.04649161498E-05	Resid phase (deg)	-92.2	+/-	20.3

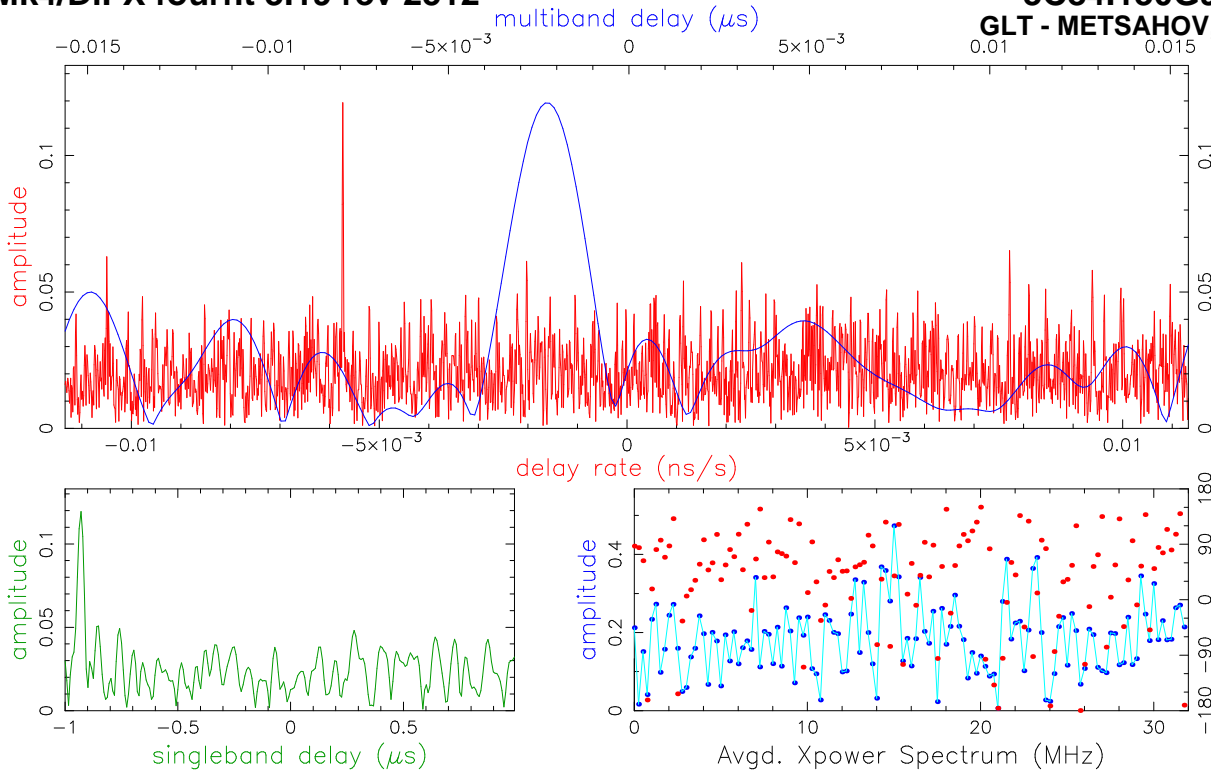
ph/seg (deg)	RMS 26.4	Theor. 35.2	Amplitude Search (2048X64)	0.101 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	58.6	61.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	45.2	40.7	Inc. seg. avg.	0.094	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	66.1	71.0	Inc. frq. avg.	0.104	Sample rate(MISamp/s): 64		dr window (ns/s)	-0.011	0.011
g: az 217.9 el 52.8 pa 10.1	Z: az 317.3 el 22.0 pa 28.8	u,v (fr/asec)	-2680.710 -2097.833	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/c192b/v2/1234/No0205/gZ..130G9L Output file: /Exps/c192b/v2/1234/No0205/gZ.W.164.130G9L

simultaneous interpolator

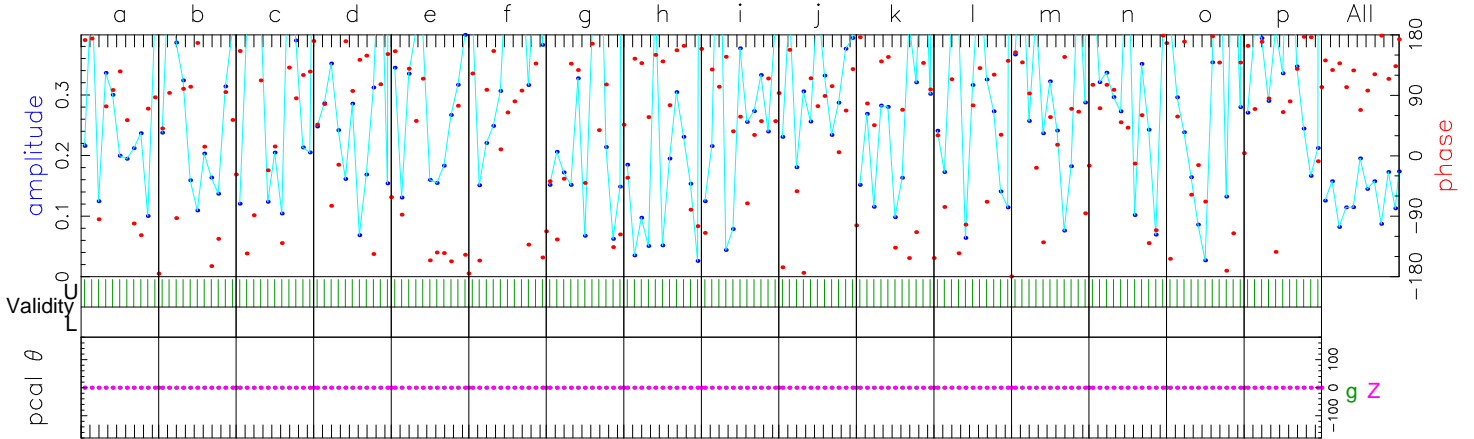
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gZ
GLT - METSAHOV, fgroup W, pol RR



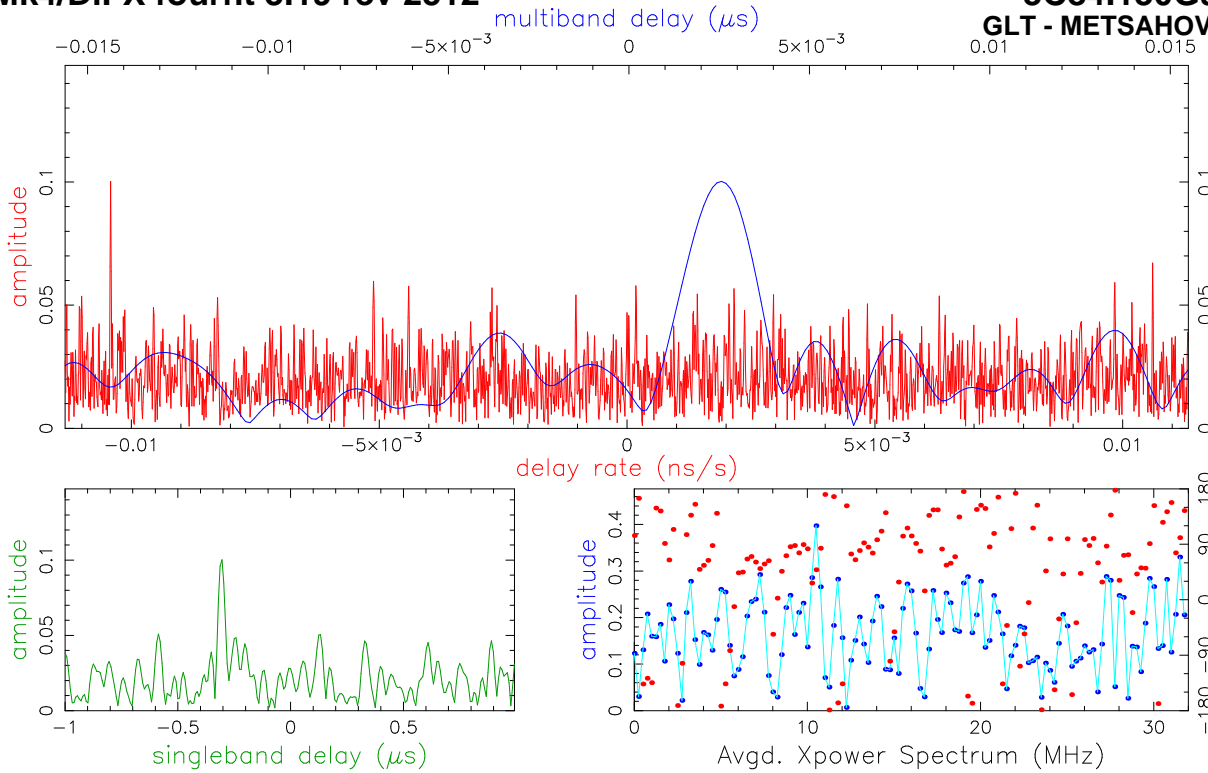
Fringe quality 0
SNR 7.2
Int time 479.181
Amp 0.133
Phase 117.9
PFD 2.6e-04
Delays (us)
SBD -0.930302
MBD -0.002265
Fringe rate (Hz)
-0.494278
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112345
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
128.9	84.5	137.7	111.5	154.1	114.8	96.9	148.8	73.8	110.6	146.8	125.8	80.3	86.6	-178.4	117.7		Phase	117.9				
0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.1				
32.3	126.1	234.4	117.3	72.4	9.7	243.1	46.3	191.5	61.6	246.5	6.0	166.8	153.3	101.2	9.0		Sbd box	9.9				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	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					
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)			9.08952308186E+03														Apriori delay (usec)	9.09046284698E+03	Resid mbdelay (usec)	-2.26512E-03	+/-	1.5E-04
Sband delay (usec)			9.08953254498E+03														Apriori clock (usec)	1.1190500E+08	Resid sbdelay (usec)	-9.30302E-01	+/-	2.4E-03
Phase delay (usec)			9.09046285079E+03														Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	3.80153E-06	+/-	5.2E-07
Delay rate (us/s)			3.41084399513E-01														Apriori rate (us/s)	3.41090137592E-01	Resid rate (us/s)	-5.73808E-06	+/-	1.9E-09
Total phase (deg)				348.0													Apriori accel (us/s/s)	-4.04649161498E-05	Resid phase (deg)	117.9	+/-	16.0

ph/seg (deg) RMS Theor. Amplitude 0.133 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.6 48.4 Search (2048X64) 0.113 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.3 32.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 40.6 55.9 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 217.9 el 52.8 pa 10.1 Z: az 317.3 el 22.0 pa 28.8 u,v (fr/asec) -2680.710 -2097.833 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gZ..130G9L Output file: /Exps/c192b/v2/1234/No0205/gZ.W.186.130G9L simultaneous interpolator

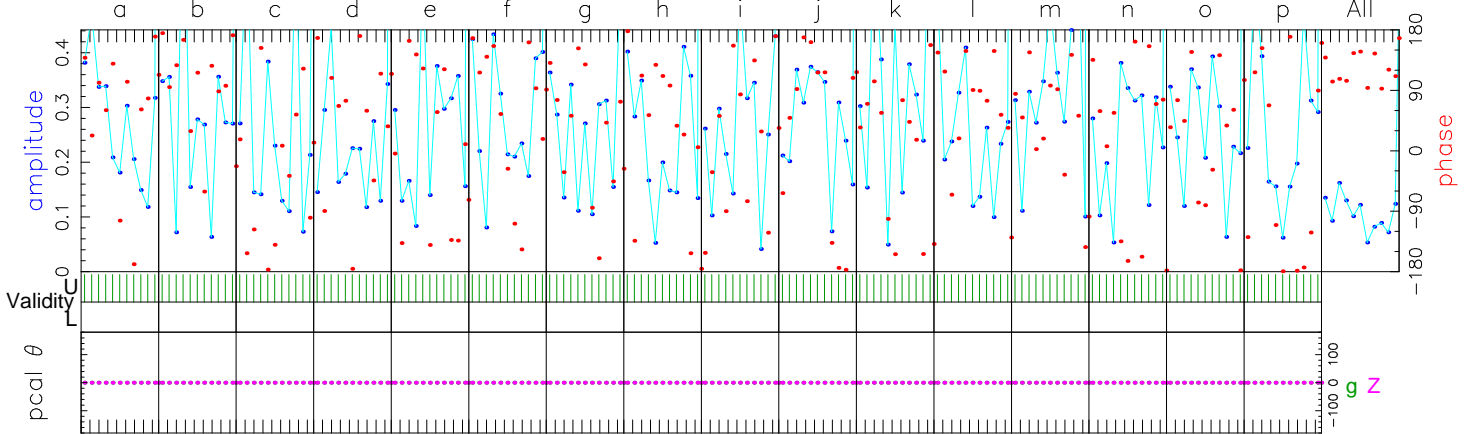


Fringe quality 0

SNR 6.1
Int time 479.278
Amp 0.147
Phase 120.2
PFD 3.1e-01
Delays (us)
SBD -0.306986
MBD 0.002547
Fringe rate (Hz)
-0.898661
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112351
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec

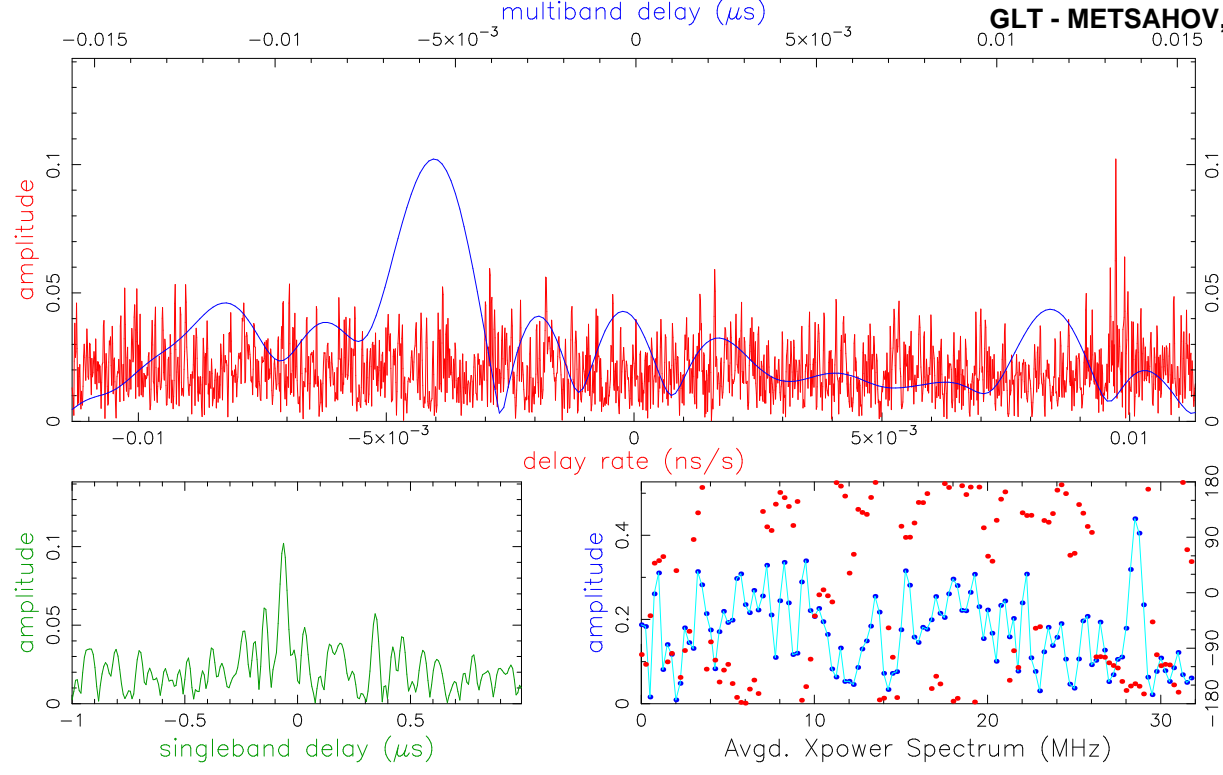


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	104.7	132.4	-164.9	102.0	147.4	124.6	83.8	124.9	159.6	139.1	103.2	95.3	75.6	154.3	59.0	164.5	Phase	120.2				
	0.2	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.2	Ampl.	0.1				
	226.7	91.1	97.3	8.2	147.0	214.6	11.1	149.0	55.4	88.2	1.3	112.7	89.3	144.3	167.5	244.8	Sbd box	89.7				
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			9.09015289408E+03														Apriori delay (usec)	9.09046284698E+03	Resid mbdelay (usec)	2.54710E-03	+/-	1.8E-04
Sband delay (usec)			9.09015586098E+03														Apriori clock (usec)	1.1190500E+00	Resid sbdelay (usec)	-3.06986E-01	+/-	2.8E-03
Phase delay (usec)			9.09046285086E+03														Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	3.87553E-06	+/-	6.1E-07
Delay rate (us/s)			3.41079705029E-01														Apriori rate (us/s)	3.41090137592E-01	Resid rate (us/s)	-1.04326E-05	+/-	2.2E-09
Total phase (deg)					350.3												Apriori accel (us/s/s)	-4.04649161498E-05	Resid phase (deg)	120.2	+/-	18.9

ph/seg (deg) RMS 20.6 Theor. 32.8 Amplitude 0.147 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.5 57.2 Interp. 0.094 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.9 37.9 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.7 66.1 Inc. frq. avg. 0.140 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 217.9 el 52.8 pa 10.1 Z: az 317.3 el 22.0 pa 28.8 u,v (fr/asec) -2680.710 -2097.833 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gZ..130G9L Output file: /Exps/c192b/v2/1234/No0205/gZ.W.207.130G9L

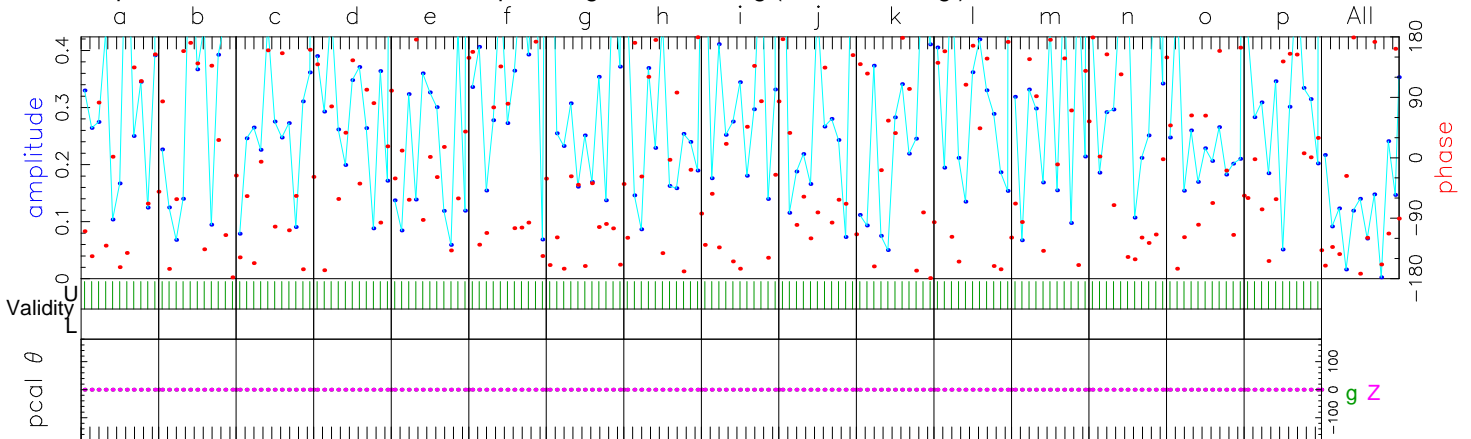
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, gZ
GLT - METSAHOV, fgroup W, pol RL



Fringe quality 0
SNR 6.1
Int time 479.181
Amp 0.141
Phase -155.5
PFD 2.2e-01
Delays (us)
SBD -0.063197
MBD -0.005606
Fringe rate (Hz) 0.838883
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112357
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-164.9	179.9	-151.8	99.5	-44.9	-159.3	-122.9	-161.9	-160.1	-143.8	-168.4	173.3	165.6	-145.7	-164.2	-46.0		Phase -155.5
	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1		Ampl. 0.2
	119.2	119.8	247.2	31.0	102.6	94.8	121.1	187.8	109.2	111.7	108.6	120.8	176.5	73.9	222.3	70.1		Sbd box 120.9
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		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	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
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)	9.09039474076E+03			Apriori delay (usec)			9.09046284698E+03			Resid mbdelay (usec)			-5.60622E-03			+/- 1.8E-04		
Sband delay (usec)	9.09039965048E+03			Apriori clock (usec)			1.1190500E+08			Resid sbdelay (usec)			-6.31965E-02			+/- 2.8E-03		
Phase delay (usec)	9.09046284197E+03			Apriori clockrate (us/s)			5.8707190E-08			Resid phdelay (usec)			-5.01455E-06			+/- 6.0E-07		
Delay rate (us/s)	3.41099876188E-01			Apriori rate (us/s)			3.41090137592E-01			Resid rate (us/s)			9.73860E-06			+/- 2.2E-09		
Total phase (deg)	74.6			Apriori accel (us/s/s)			-4.04649161498E-05			Resid phase (deg)			-155.5			+/- 18.7		
ph/seg (deg)	RMS	Theor.	Amplitude		0.141 +/- 0.023		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000		1.000			
amp/seg (%)	46.9	32.4	Search (2048X64)		0.095		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016		0.016			
ph/frq (deg)	71.4	56.6	Interp.		0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011			
amp/frq (%)	53.5	37.5	Inc. seg. avg.		0.143		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00		0.00			
	57.7	65.4	Inc. frq. avg.		0.151													
g: az 217.9 el 52.8 pa 10.1	Z: az 317.3 el 22.0 pa 28.8			u,v (fr/asec) -2680.710 -2097.833									simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c192b/v2/1234/No0205/gZ..130G9L			Output file: /Exps/c192b/v2/1234/No0205/gZ.W.225.130G9L														