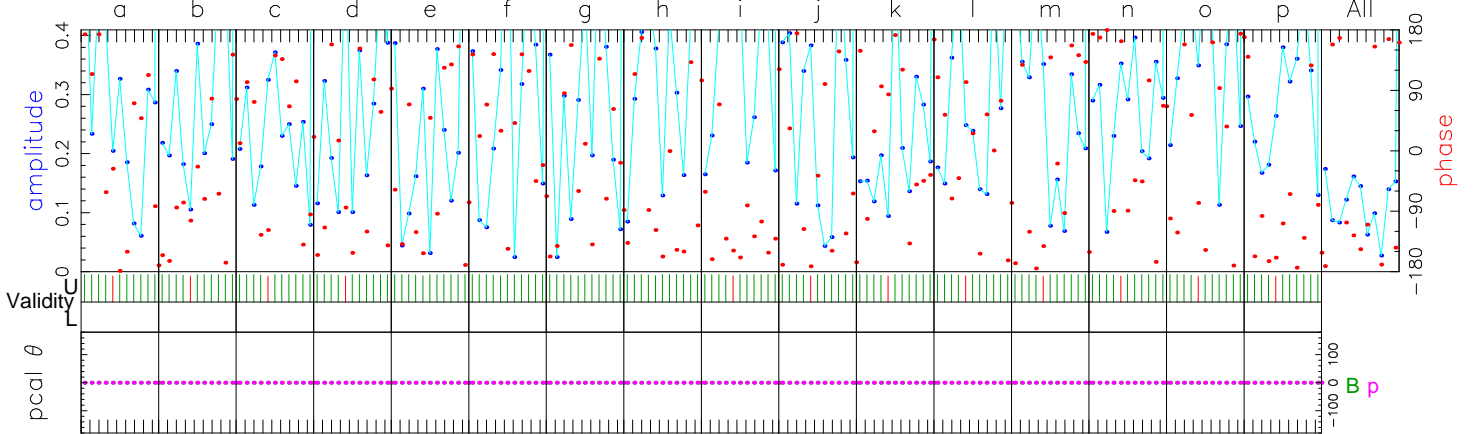


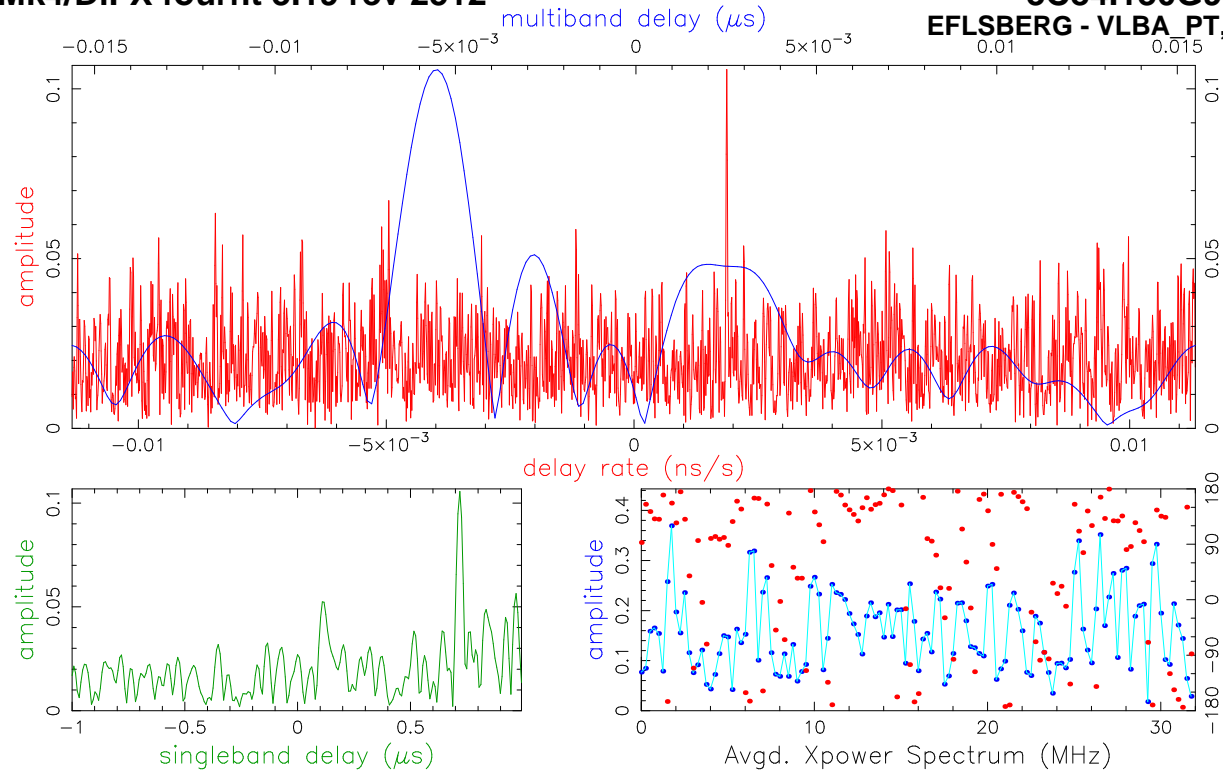
Fringe quality 0
SNR 5.8
Int time 475.934
Amp 0.137
Phase -159.6
PFD 8.7e-01
Delays (us)
SBD 0.156274
MBD 0.015575
Fringe rate (Hz) 0.864010
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112321
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				
	-175.5	-102.8	137.8	-162.8	-154.1	142.9	154.0	-144.6	-137.8	-161.8	-156.7	6.0	-179.2	-156.9	-174.7	-146.5	Phase	-159.6				
	0.2	0.2	0.1	0.1	0.2	0.1	0.0	0.2	0.3	0.2	0.0	0.1	0.3	0.1	0.2	0.3	Ampl.	0.1				
	34.2	145.2	239.0	191.5	58.5	135.7	144.1	198.5	149.2	213.3	136.8	15.3	39.3	123.9	50.9	233.0	Sbd box	149.0				
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					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
B: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 amp					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-1.29328623293E+04														Apriori delay (usec)	-1.29330341548E+04	Resid mbdelay (usec)	1.55754E-02	+/-	1.9E-04
Sband delay (usec)			-1.29328778808E+04														Apriori clock (usec)	4.8551683E+00	Resid sbdelay (usec)	1.56274E-01	+/-	3.0E-03
Phase delay (usec)			-1.29330341599E+04														Apriori clockrate (us/s)	-4.0388659E-07	Resid phdelay (usec)	-5.14634E-06	+/-	6.4E-07
Delay rate (us/s)			-8.53693389506E-01														Apriori rate (us/s)	-8.53703419806E-01	Resid rate (us/s)	1.00303E-05	+/-	2.3E-09
Total phase (deg)					-193.3												Apriori accel (us/s/s)	8.43943833353E-05	Resid phase (deg)	-159.6	+/-	19.9

ph/seg (deg) 34.5 34.4 Search (2048X64) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.1 60.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 54.7 39.7 Inc. seg. avg. 0.138 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 64.1 69.4 Inc. frq. avg. 0.133 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 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 6674.663 7197.680 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bp.W.109.130G9L

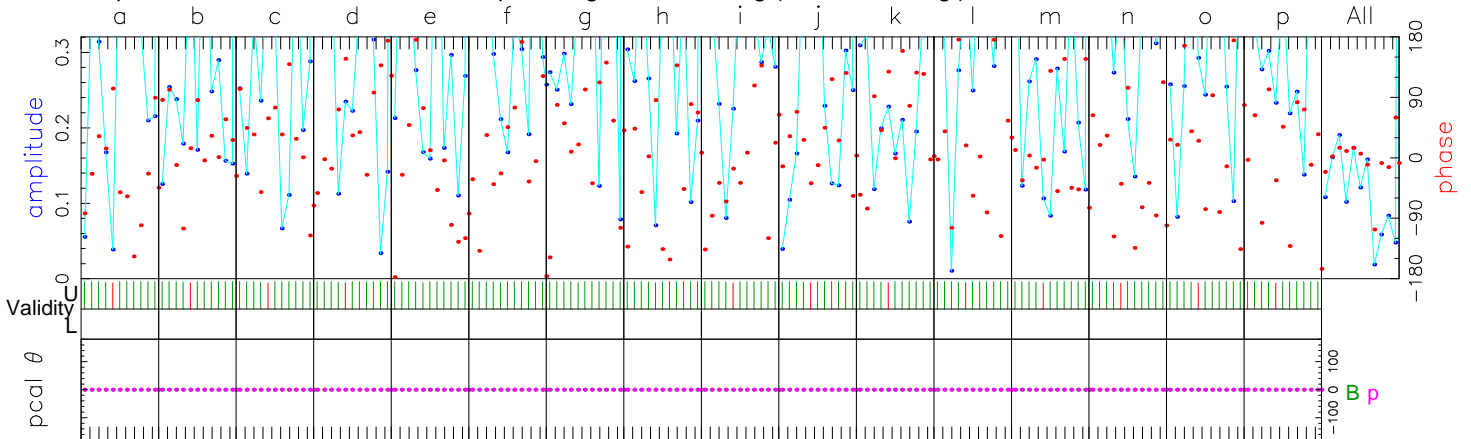


Fringe quality 0

SNR 6.3
Int time 475.933
Amp 0.107
Phase 2.7
PFD 7.5e-02
Delays (us)
SBD 0.718511
MBD -0.005533
Fringe rate (Hz) 0.161034
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

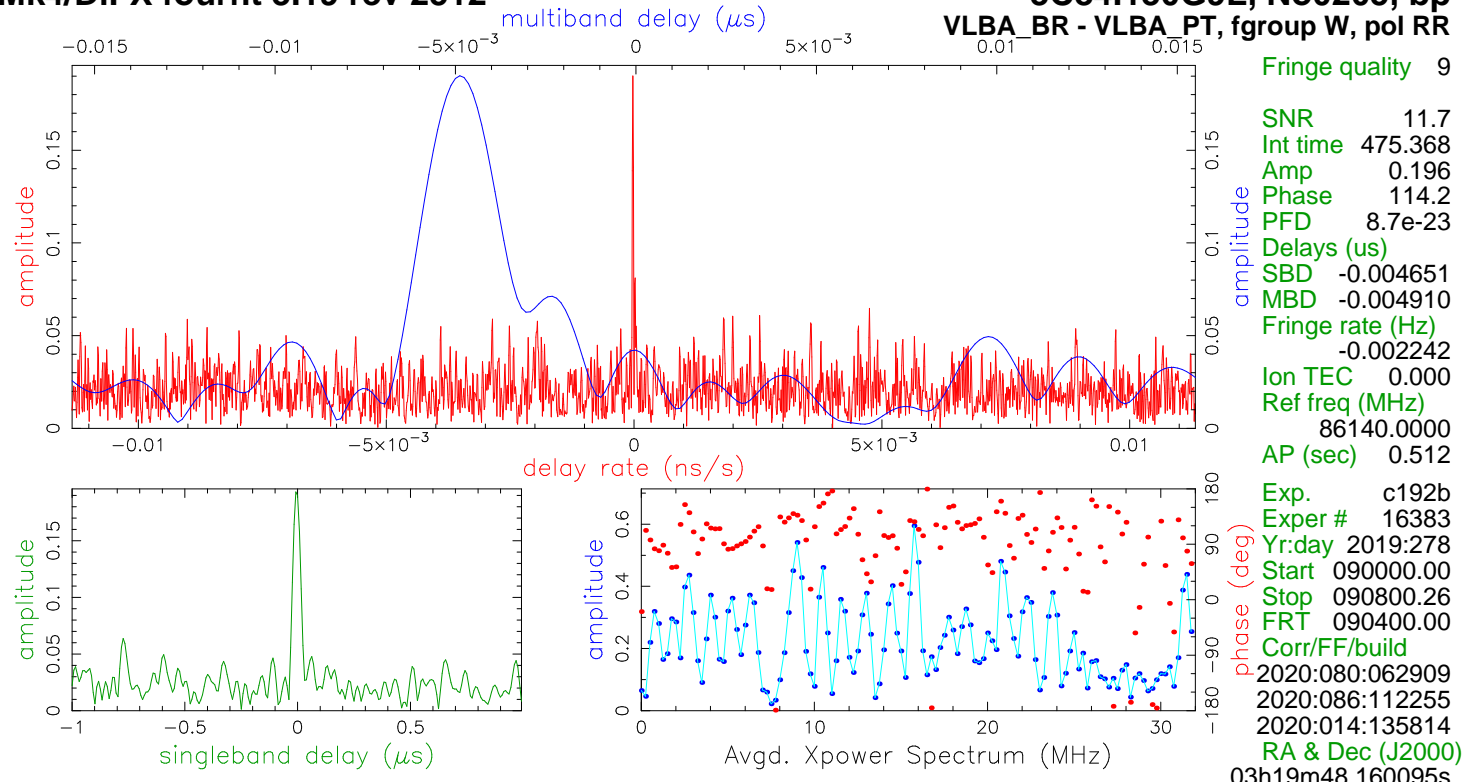
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112327
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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

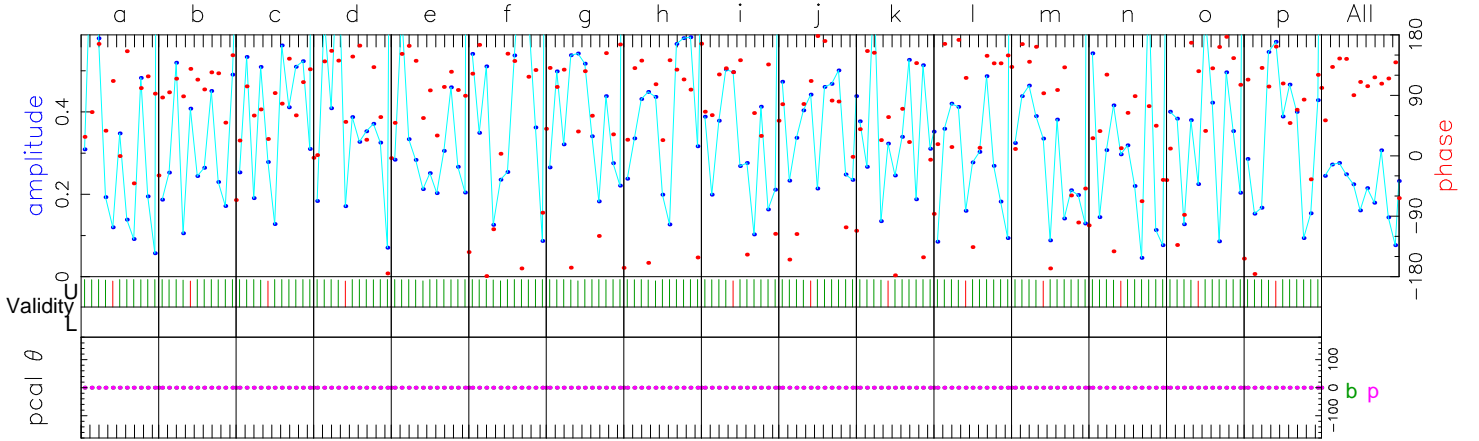


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-42.8	20.1	40.4	9.2	-45.1	4.2	66.1	-81.3	-47.7	16.1	49.4	-12.8	-17.0	-10.4	4.4	25.6	Phase	2.7				
	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1				
	199.1	221.8	107.7	135.1	80.8	56.3	77.9	69.5	185.7	235.5	7.0	244.1	201.1	247.9	157.1	140.4	Sbd box	221.0				
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					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.29323209378E+04														Apriori delay (usec)	-1.29330341548E+04	Resid mbdelay (usec)	-5.53306E-03	+/-	1.7E-04
Sband delay (usec)			-1.29323156443E+04														Apriori clock (usec)	4.8551683E+00	Resid sbdelay (usec)	7.18511E-01	+/-	2.7E-03
Phase delay (usec)			-1.29330341547E+04														Apriori clockrate (us/s)	-4.0388659E-07	Resid phdelay (usec)	8.65494E-08	+/-	5.9E-07
Delay rate (us/s)			-8.53701550360E-01														Apriori rate (us/s)	-8.53703419806E-01	Resid rate (us/s)	1.86945E-06	+/-	2.1E-09
Total phase (deg)																	Apriori accel (us/s/s)	8.43943833353E-05	Resid phase (deg)	2.7	+/-	18.2

ph/seg (deg) RMS 39.0 Theor. 31.5 Amplitude 0.107 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.4 54.9 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.9 36.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 42.1 63.4 Inc. seg. avg. 0.099 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 B: az 308.6 el 22.7 pa 41.3 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 6674.663 7197.680 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bp.W.130.130G9L simultaneous interpolator



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

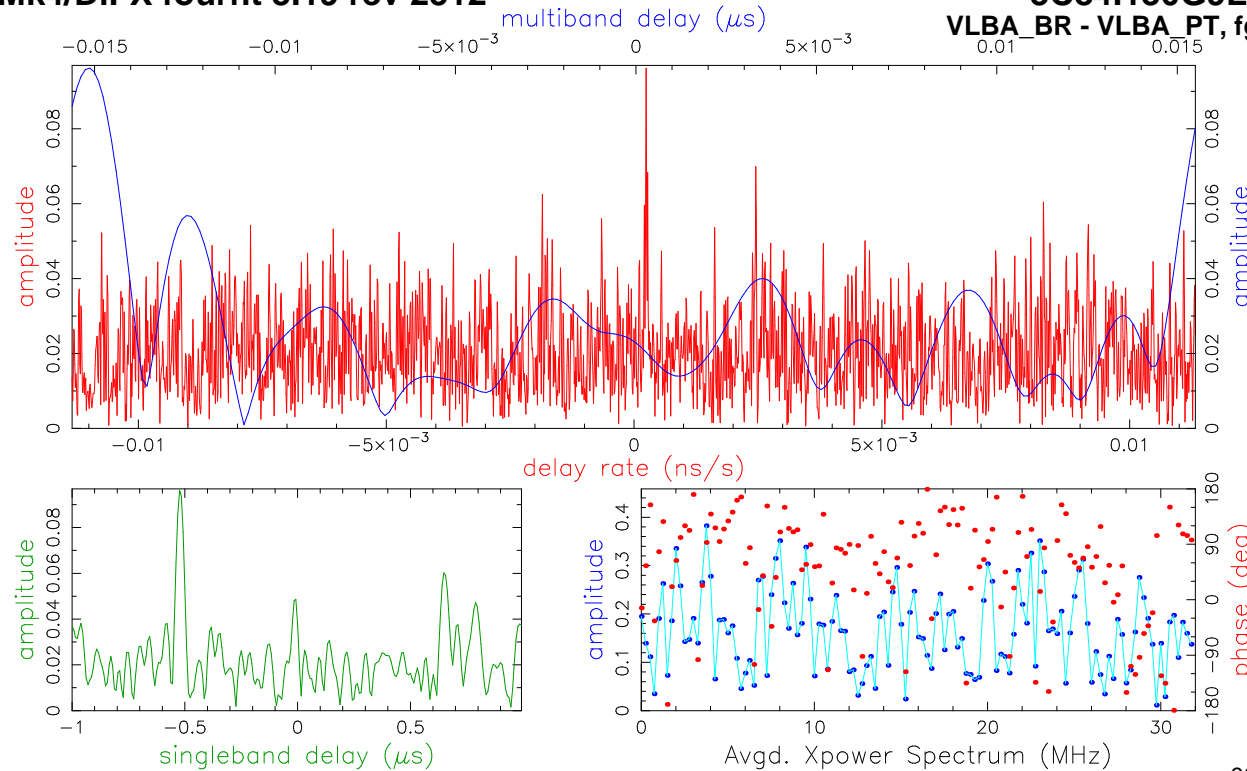


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
80.1	115.2	83.8	126.6	114.0	151.9	120.8	125.9	111.9	112.8	99.4	140.3	138.3	59.3	135.2	106.5	Phase	114.2	
0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.2	
176.1	129.2	129.7	127.6	128.3	129.1	128.6	128.3	176.0	23.8	85.7	78.2	138.1	144.4	2.4	128.8	Sbd box	128.4	
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	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
p	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	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	-4.92935425609E+02			Apriori delay (usec)			-4.92930515457E+02			Resid mbdelay (usec)			-4.91015E-03			+/-	9.2E-05	
Sband delay (usec)	-4.92935165957E+02			Apriori clock (usec)			-1.2580469E+01			Resid sbdelay (usec)			-4.65050E-03			+/-	1.5E-03	
Phase delay (usec)	-4.92930511775E+02			Apriori clockrate (us/s)			-4.4628166E-07			Resid phdelay (usec)			3.68196E-06			+/-	3.2E-07	
Delay rate (us/s)	1.23762864974E-01			Apriori rate (us/s)			1.23762891006E-01			Resid rate (us/s)			-2.60324E-08			+/-	1.1E-09	
Total phase (deg)	-102.3			Apriori accel (us/s/s)			1.61080683570E-05			Resid phase (deg)			114.2			+/-	9.8	

ph/seg (deg)	RMS	Theor.	Amplitude	0.196 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	27.3	17.0	Search (2048X64)	0.185	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.3	29.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	25.1	19.6	Inc. seg. avg.	0.205	Sample rate(MISamp/s): 64	dr window (ns/s) -0.016 0.016
	33.0	34.3	Inc. frq. avg.	0.195	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
b: az 105.8 el 73.7 pa -58.9	p: az 43.4 el 79.5 pa -128.2		u,v (fr/asec) -922.535 2331.033		simultaneous interpolator	

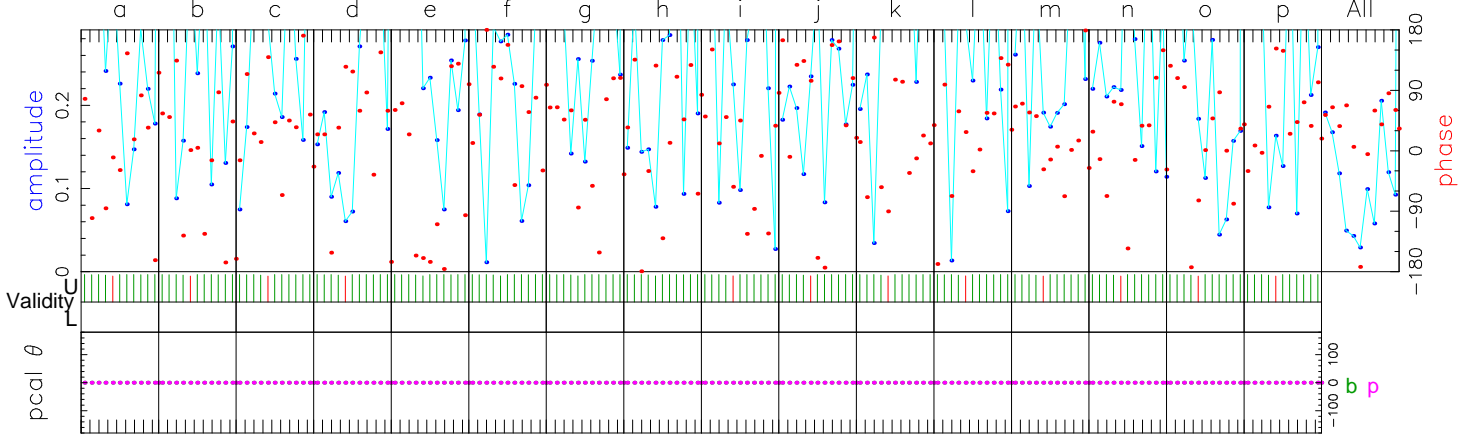
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bp
VLBA_BR - VLBA_PT, fgroup W, pol LR



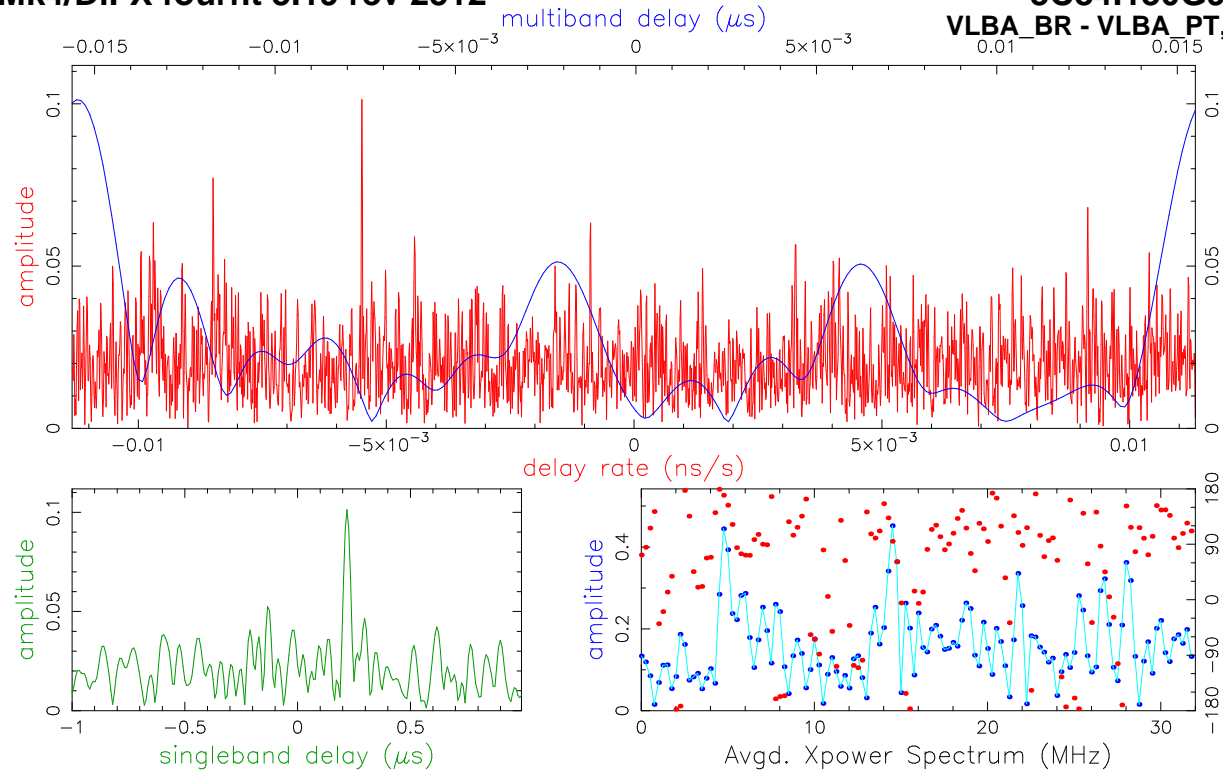
Fringe quality 0
SNR 5.8
Int time 475.368
Amp 0.097
Phase 50.1
PFD 8.5e-01
Delays (us)
SBD -0.520984
MBD -0.015136
Fringe rate (Hz)
0.020927
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112300
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		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.93445651001E+02																
Sband delay (usec)		-4.93451498957E+02																
Phase delay (usec)		-4.92930513842E+02																
Delay rate (us/s)		1.23763133943E-01																
Total phase (deg)					-166.4													
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(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)																		
pcal mode: MANUAL, MANUAL																		
PC period (AP's) 5, 5																		
simultaneous interpolator																		

b: az 105.8 el 73.7 pa -58.9 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -922.535 2331.033
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bp..130G9L Output file: /Exps/c192b/v2/1234/No0205/bp.W.47.130G9L

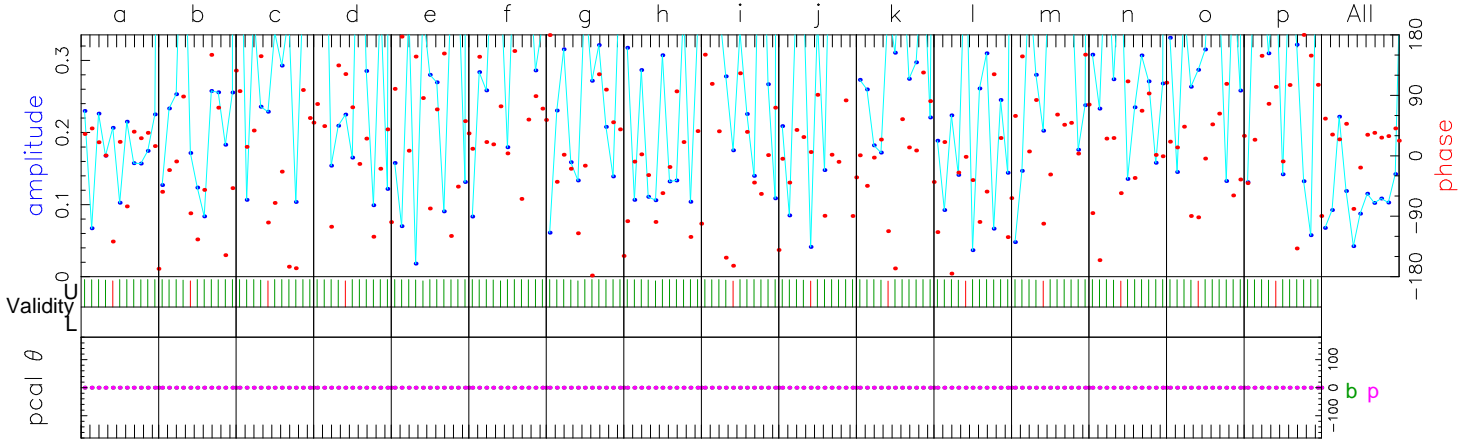


Fringe quality 0

SNR 6.0
Int time 475.367
Amp 0.112
Phase 28.5
PFD 3.3e-01
Delays (us)
SBD 0.219129
MBD -0.015461
Fringe rate (Hz)
-0.473361
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
2020:086:112304
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	10.3	21.2	73.1	33.3	8.3	58.7	27.5	-18.3	90.9	10.2	28.6	-48.0	39.2	6.7	6.6	103.6	Phase	28.5				
b	0.1	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1				
p	48.9	176.2	171.2	165.6	107.6	228.7	56.7	208.6	118.9	156.8	161.9	162.2	158.6	51.9	93.2	70.6	Sbd box	157.0				
b:1000	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:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
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					
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)			-4.92695976437E+02														Apriori delay (usec)	-4.92930515457E+02	Resid mbdelay (usec)	-1.54610E-02	+/-	1.8E-04
Sband delay (usec)			-4.92711386457E+02														Apriori clock (usec)	-1.2580469E+01	Resid sbdelay (usec)	2.19129E-01	+/-	2.9E-03
Phase delay (usec)			-4.92930514537E+02														Apriori clockrate (us/s)	-4.4628166E-07	Resid phdelay (usec)	9.19308E-07	+/-	6.1E-07
Delay rate (us/s)			1.23757395749E-01														Apriori rate (us/s)	1.23762891006E-01	Resid rate (us/s)	-5.49526E-06	+/-	2.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.61080683570E-05	Resid phase (deg)	28.5	+/-	19.0

ph/seg (deg) 36.2 32.8
amp/seg (%) 45.4 57.3
ph/frq (deg) 40.3 37.9
amp/frq (%) 54.0 66.2

RMS Theor. Amplitude 0.112 +/- 0.019
Search (2048X64) 0.095
Interp. 0.000
Inc. seg. avg. 0.104
Inc. frq. avg. 0.112

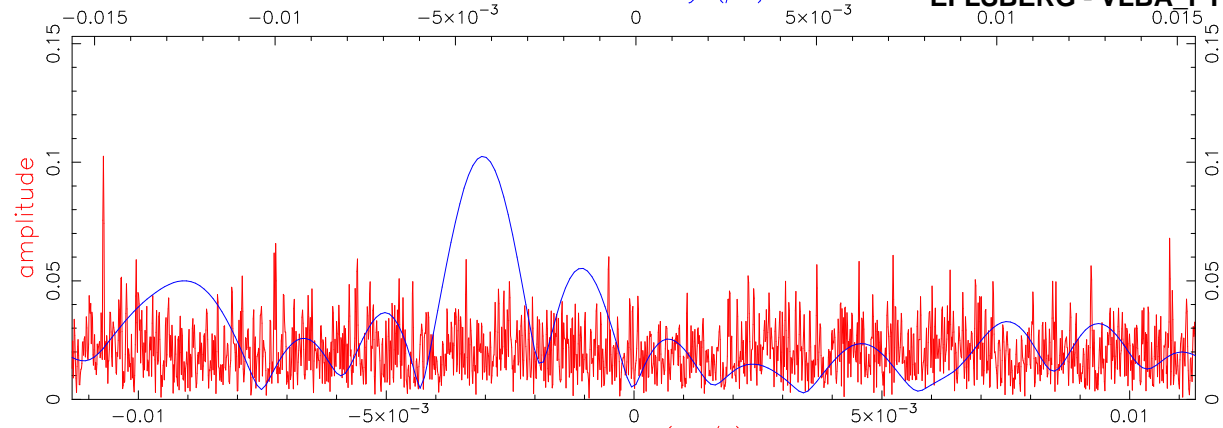
pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

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 105.8 el 73.7 pa -58.9 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -922.535 2331.033 simultaneous interpolator

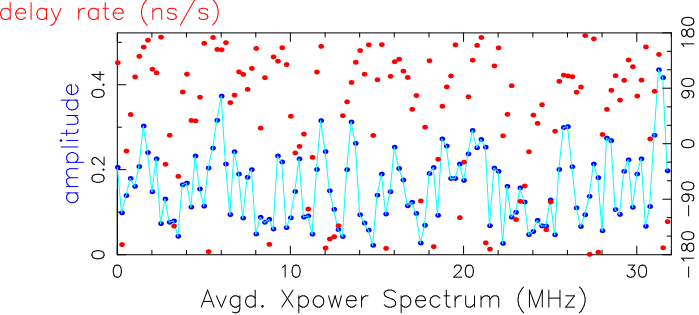
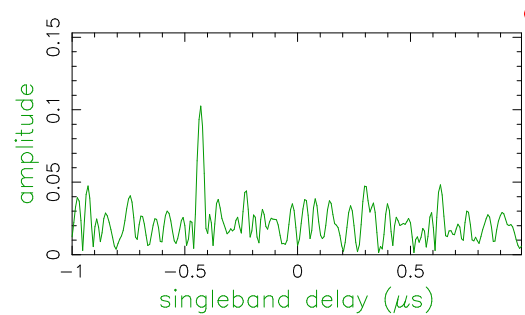
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bp..130G9L Output file: /Exps/c192b/v2/1234/No0205/bp.W.61.130G9L

multiband delay (μ s)



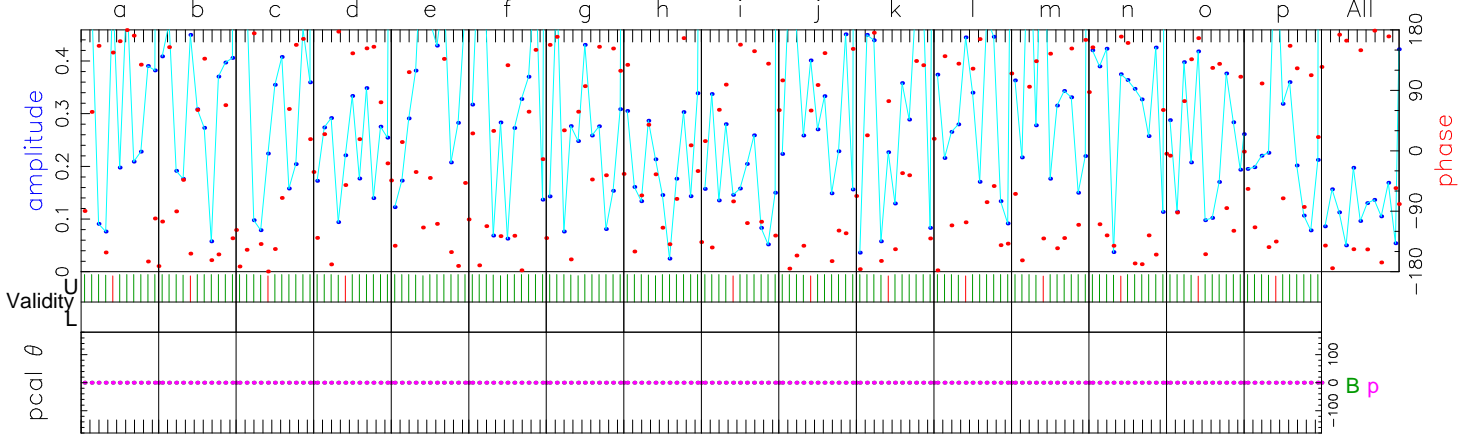
Fringe quality 0

SNR 6.1
Int time 475.933
Amp 0.153
Phase -169.1
PFD 2.2e-01
Delays (us)
SBD -0.430502
MBD -0.004258
Fringe rate (Hz)
-0.923969
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



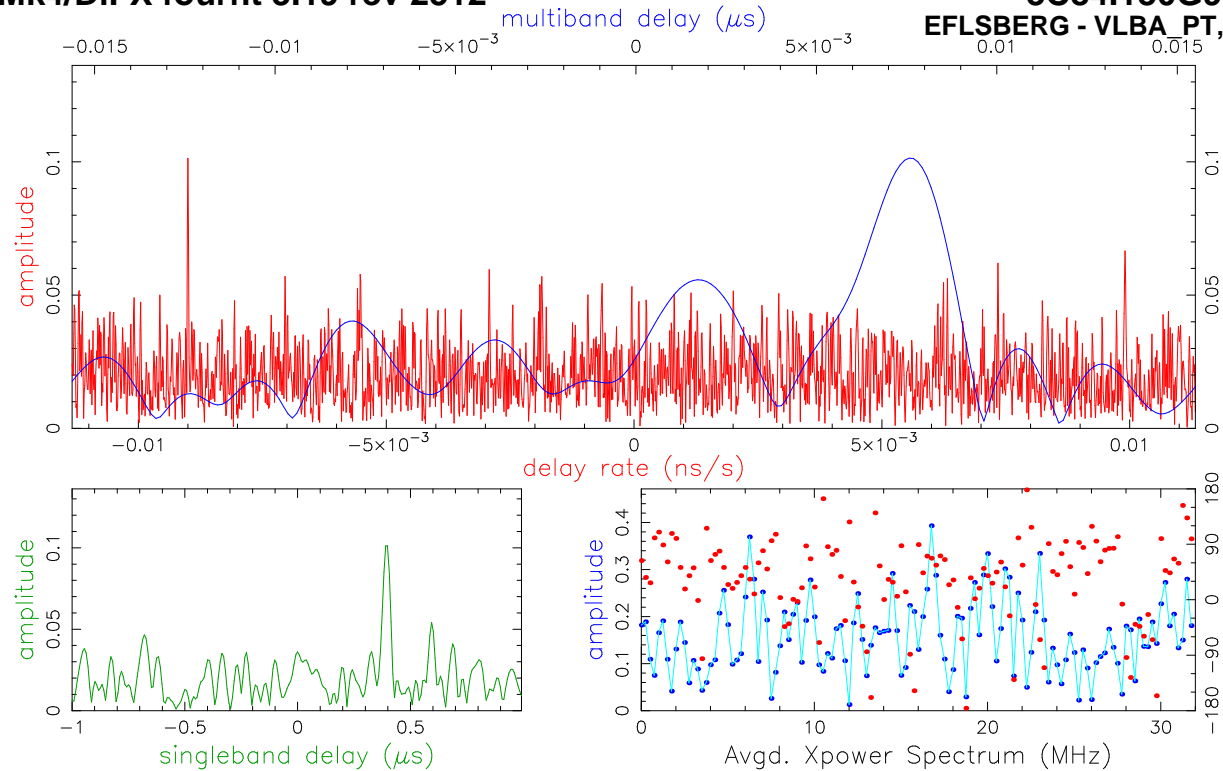
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112311
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



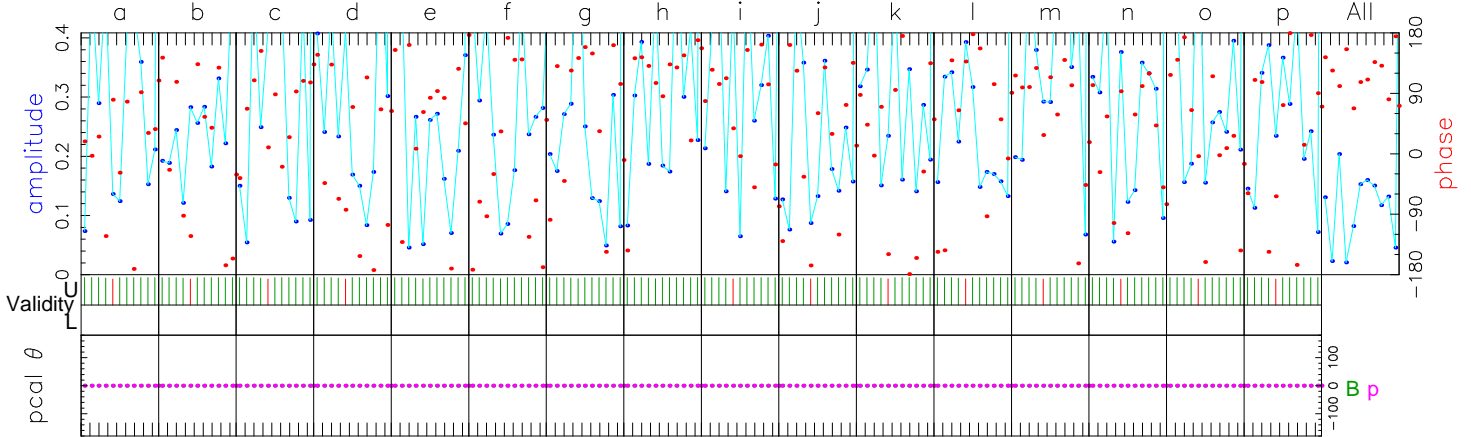
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-179.9	-163.5	-161.1	127.6	-101.8	-171.1	137.6	-58.0	-178.3	179.5	116.1	-138.6	-172.3	-162.8	161.2	-144.7		Phase	-169.1				
	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.3	0.1	0.2	0.3	0.4	0.1	0.1		Ampl.	0.1				
	72.6	104.0	108.4	56.9	10.8	38.7	215.2	53.1	65.1	73.5	209.8	236.8	252.6	73.9	189.0	100.1		Sbd box	73.9				
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					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
B: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 amp					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Group delay (usec)(sbd)			-1.29334759129E+04															Apriori delay (usec)	-1.29330341548E+04	Resid mbdelay (usec)	-4.25810E-03	+/-	1.8E-04
Sband delay (usec)			-1.29334646568E+04															Apriori clock (usec)	4.8551683E+00	Resid sbdelay (usec)	-4.30502E-01	+/-	2.8E-03
Phase delay (usec)			-1.29330341602E+04															Apriori clockrate (us/s)	-4.0388659E-07	Resid phdelay (usec)	-5.45338E-06	+/-	6.0E-07
Delay rate (us/s)			-8.53714146170E-01															Apriori rate (us/s)	-8.53703419806E-01	Resid rate (us/s)	-1.07264E-05	+/-	2.2E-09
Total phase (deg)					-202.8													Apriori accel (us/s/s)	8.43943833353E-05	Resid phase (deg)	-169.1	+/-	18.7

ph/seg (deg) 40.8 32.4 Search (2048X64) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.7 56.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.0 37.4 Inc. seg. avg. 0.152 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.0 65.3 Inc. frq. avg. 0.150 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 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 6674.663 7197.680 ion window (TEC) 0.00 0.00
 simultaneous interpolator



Fringe quality 0
SNR 6.2
Int time 475.934
Amp 0.136
Phase 114.0
PFD 1.7e-01
Delays (us)
SBD 0.394652
MBD 0.007672
Fringe rate (Hz)
-0.776861
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
2020:086:112316
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

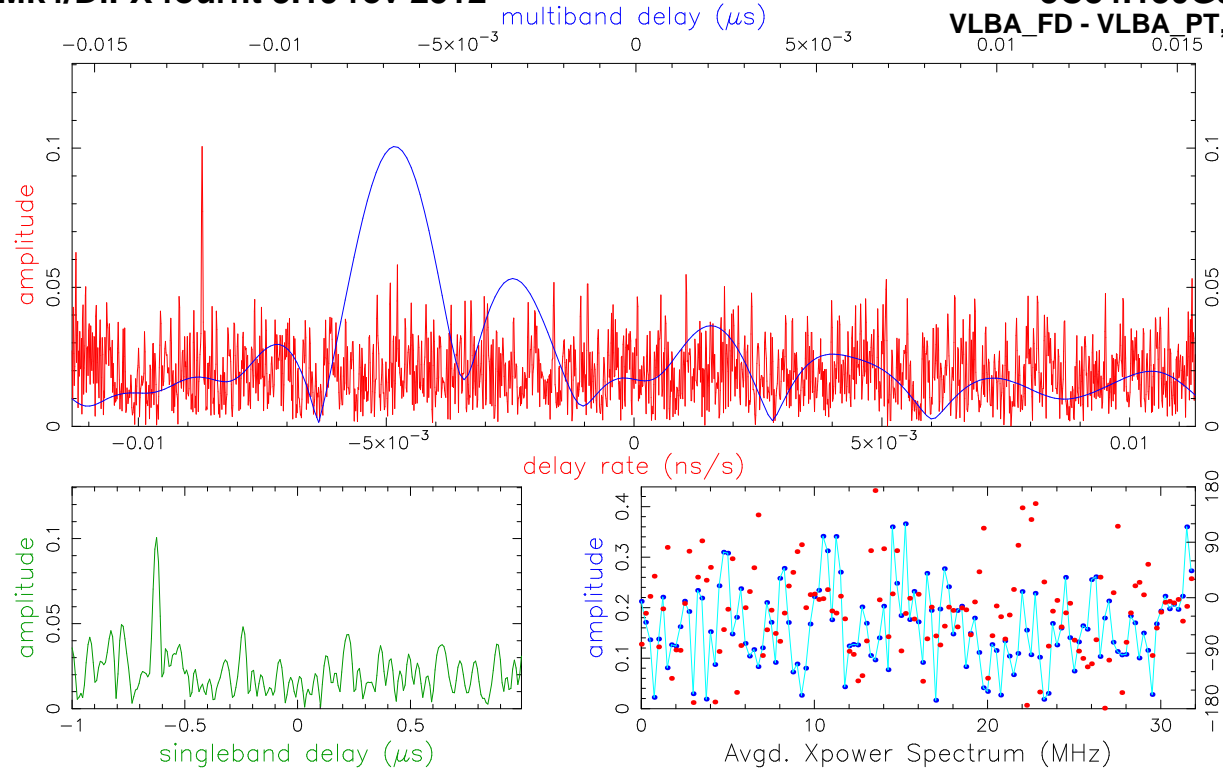


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-1.29326514826E+04															
Sband delay (usec)			-1.29326395023E+04															
Phase delay (usec)			-1.29330341511E+04															
Delay rate (us/s)			-8.53712438397E-01															
Total phase (deg)					80.3													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
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)																		

B: az 308.6 el 22.7 pa 41.3 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 6674.663 7197.680 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Bp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Bp.W.93.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fp
VLBA_FD - VLBA_PT, fgroup W, pol LR

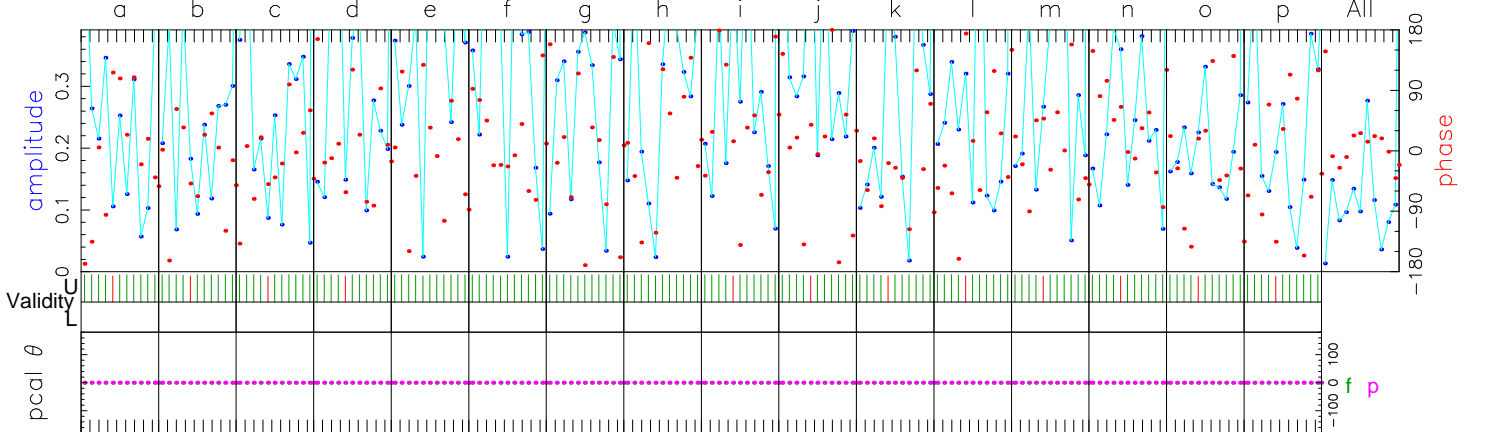


Fringe quality 0

SNR 6.0
Int time 473.976
Amp 0.130
Phase 3.5
PFD 3.9e-01
Delays (us)
SBD -0.626374
MBD -0.006660
Fringe rate (Hz)
-0.751909
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
2020:086:112329
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

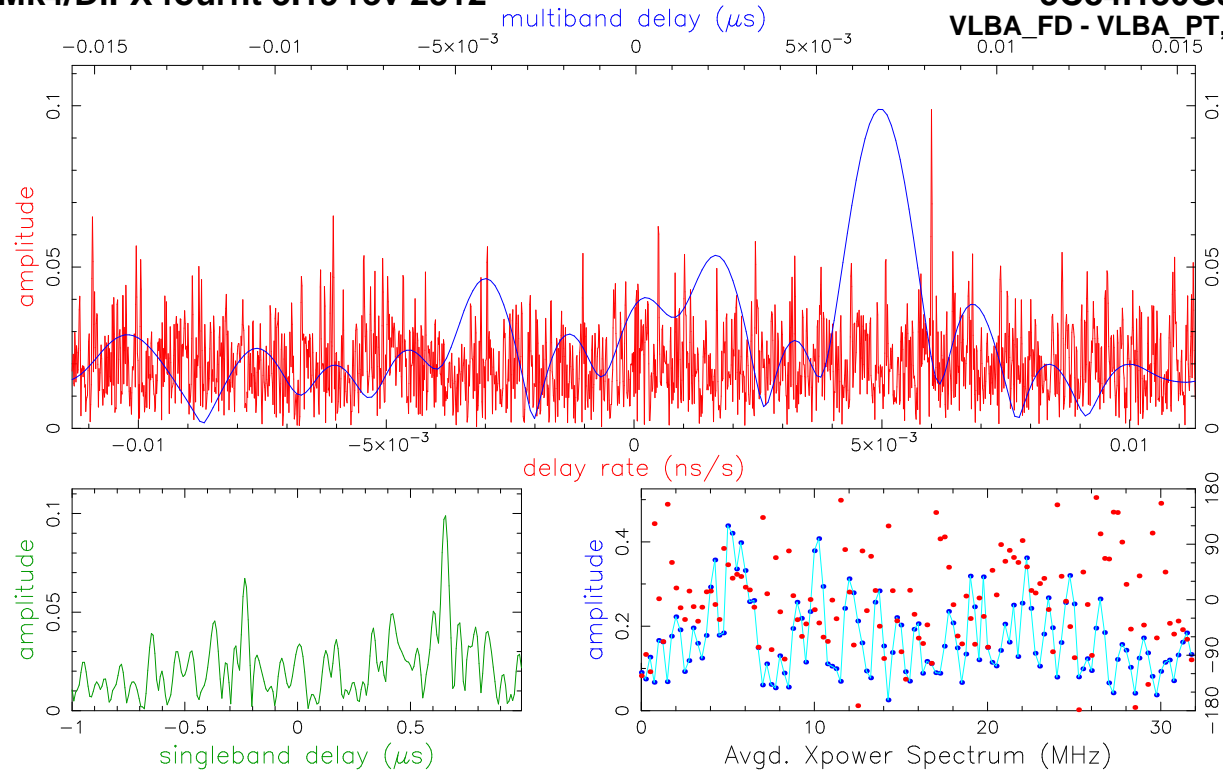


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-131.7	-7.0	-1.2	9.4	-6.5	11.5	96.5	21.8	16.9	50.9	-3.9	-53.8	-11.3	43.1	-14.8	-19.3	Phase	3.5				
	0.0	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.1	Ampl.	0.1				
	155.8	15.8	159.3	249.8	138.3	55.4	122.0	152.0	53.8	8.7	175.9	110.6	49.9	233.4	186.0	174.9	Sbd box	48.8				
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					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.21519197137E+02														Apriori delay (usec)	-1.20887536646E+02	Resid mbdelay (usec)	-6.66049E-03	+/-	1.8E-04
Sband delay (usec)			-1.21513911146E+02														Apriori clock (usec)	-1.1491997E+01	Resid sbdelay (usec)	-6.26374E-01	+/-	2.9E-03
Phase delay (usec)			-1.20887536532E+02														Apriori clockrate (us/s)	-2.9483610E-07	Resid phdelay (usec)	1.13684E-07	+/-	6.2E-07
Delay rate (us/s)			-6.63943324848E-02														Apriori rate (us/s)	-6.63856035644E-02	Resid rate (us/s)	-8.72892E-06	+/-	2.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	-3.46122414667E-06	Resid phase (deg)	3.5	+/-	19.1

ph/seg (deg) 48.1 33.0 Search (2048X64) 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 70.4 57.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 50.7 38.1 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 56.0 66.6 Inc. frq. avg. 0.123 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 20.4 el 78.2 pa -154.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 503.020 -603.875 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fp..130G9L Output file: /Exps/c192b/v2/1234/No0205/fp.W.139.130G9L

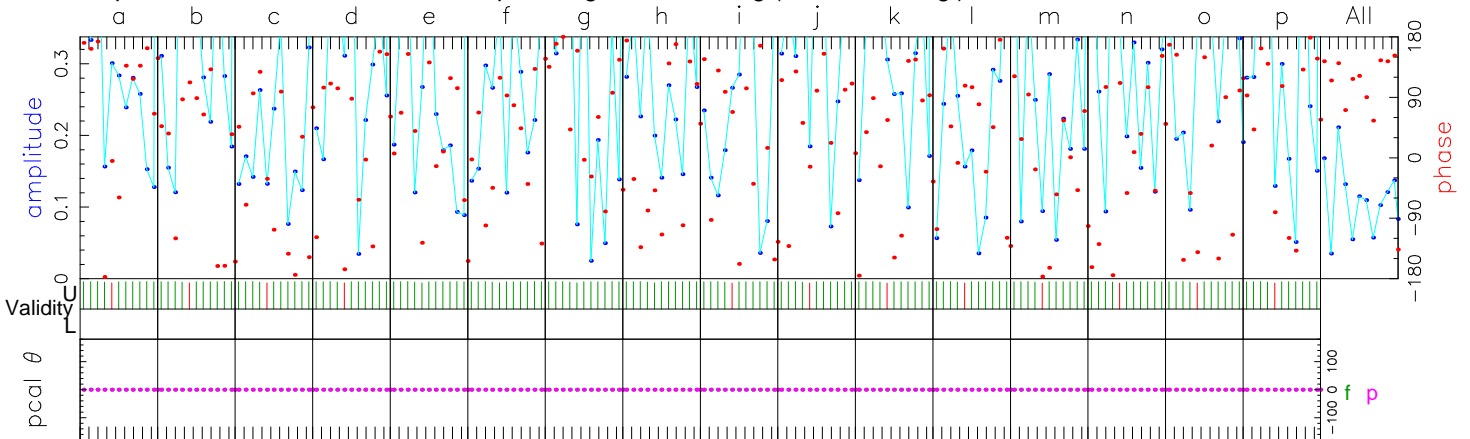
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fp
VLBA_FD - VLBA_PT, fgroup W, pol RL



Fringe quality 0
SNR 6.0
Int time 473.974
Amp 0.113
Phase 125.5
PFD 4.9e-01
Delays (us)
SBD 0.653244
MBD 0.006708
Fringe rate (Hz) 0.517485
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



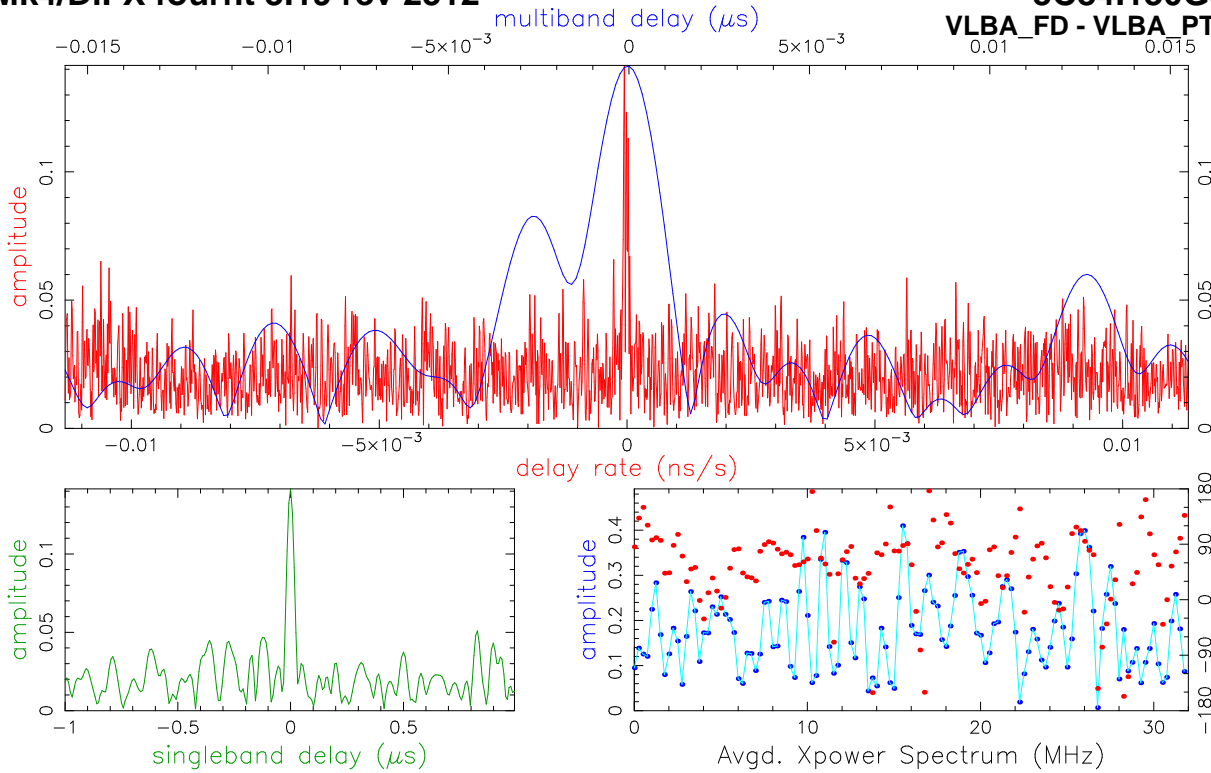
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd) -1.20224579103E+02 Apriori delay (usec) -1.20887536646E+02 Resid mbdelay (usec) 6.70754E-03 +/- 1.8E-04
 Sband delay (usec) -1.20234292646E+02 Apriori clock (usec) -1.1491997E+01 Resid sbdelay (usec) 6.53244E-01 +/- 2.9E-03
 Phase delay (usec) -1.20887532598E+02 Apriori clockrate (us/s) -2.9483610E-07 Resid phdelay (usec) 4.04716E-06 +/- 6.2E-07
 Delay rate (us/s) -6.63795960742E-02 Apriori rate (us/s) -6.63856035644E-02 Resid rate (us/s) 6.00749E-06 +/- 2.2E-09
 Total phase (deg) -20.9 Apriori accel (us/s/s) -3.46122414667E-06 Resid phase (deg) 125.5 +/- 19.3

ph/seg (deg) 32.4 33.3 Search (2048X64) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.7 58.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.2 38.5 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 61.1 67.2 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 20.4 el 78.2 pa -154.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 503.020 -603.875 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fp..130G9L Output file: /Exps/c192b/v2/1234/No0205/fp.W.154.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fp
VLBA_FD - VLBA_PT, fgroup W, pol LL

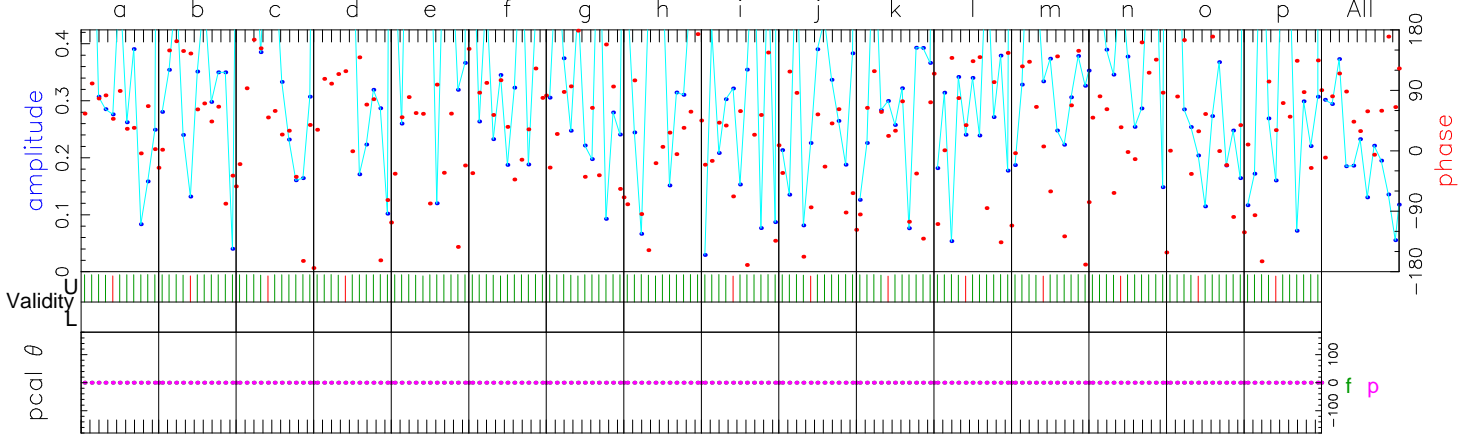


Fringe quality 9

SNR 8.4
Int time 473.975
Amp 0.142
Phase 59.0
PFD 1.3e-08
Delays (us)
SBD -0.001124
MBD -0.000042
Fringe rate (Hz)
-0.004416
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
2020:086:112317
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



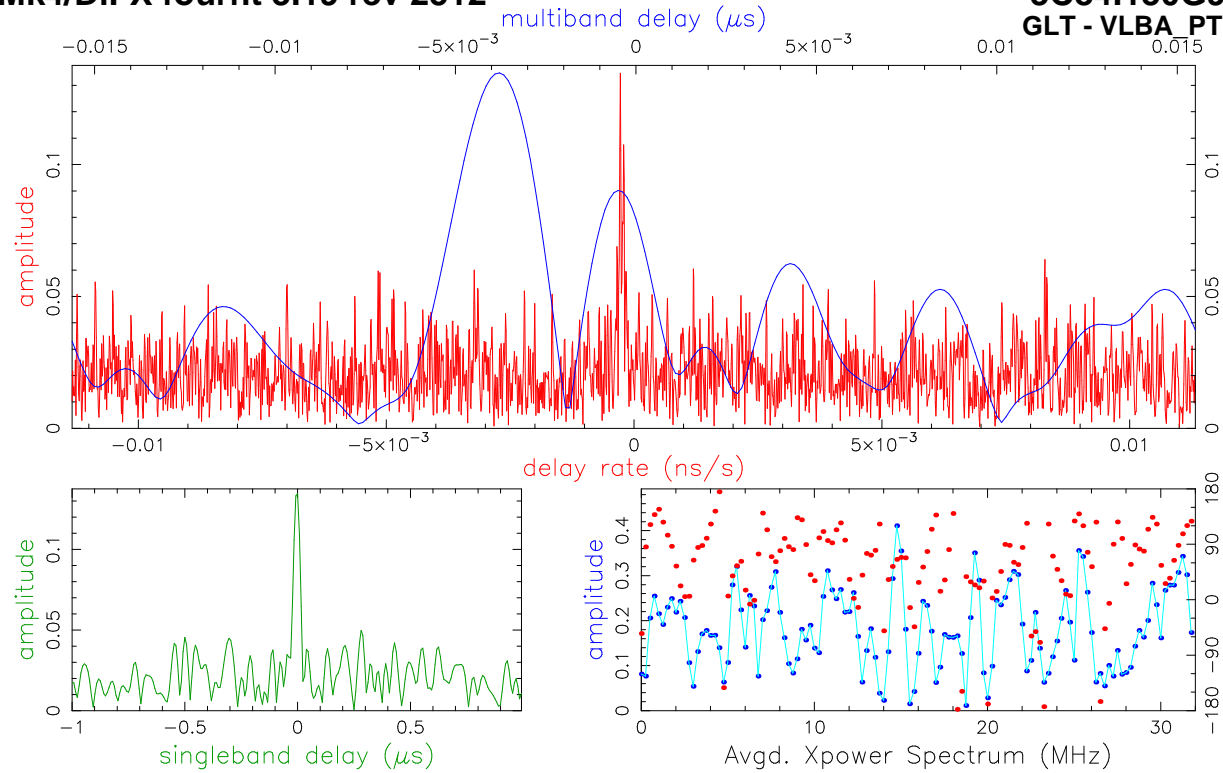
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All									
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used								
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs							
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase							
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC							
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp							
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids							
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks							
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Chan ids							
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks							
Group delay (usec)(sbd)		-1.20887579073E+02																		Apriori delay (usec)	-1.20887536646E+02		Resid mbdelay (usec)	-4.24275E-05	+/-	1.3E-04	
Sband delay (usec)		-1.20888661146E+02																			Apriori clock (usec)	-1.1491997E+01		Resid sbdelay (usec)	-1.12450E-03	+/-	2.0E-03
Phase delay (usec)		-1.20887534742E+02																			Apriori clockrate (us/s)	-2.9483610E-07		Resid phdelay (usec)	1.90378E-06	+/-	4.4E-07
Delay rate (us/s)		-6.63856548299E-02																			Apriori rate (us/s)	-6.63856035644E-02		Resid rate (us/s)	-5.12656E-08	+/-	1.6E-09
Total phase (deg)					-87.4																Apriori accel (us/s/s)	-3.46122414667E-06		Resid phase (deg)	59.0	+/-	13.6

ph/seg (deg) 49.6 23.6
amp/seg (%) 77.5 41.1
ph/frq (deg) 41.5 27.2
amp/frq (%) 54.0 47.5

f: az 20.4 el 78.2 pa -154.6
p: az 43.4 el 79.5 pa -128.2
u,v (fr/asec) 503.020 -603.875

Control file: cf_1234_gmva
Input file: /Exps/c192b/v2/1234/No0205/fp..130G9L
Output file: /Exps/c192b/v2/1234/No0205/fp.W.96.130G9L

simultaneous interpolator

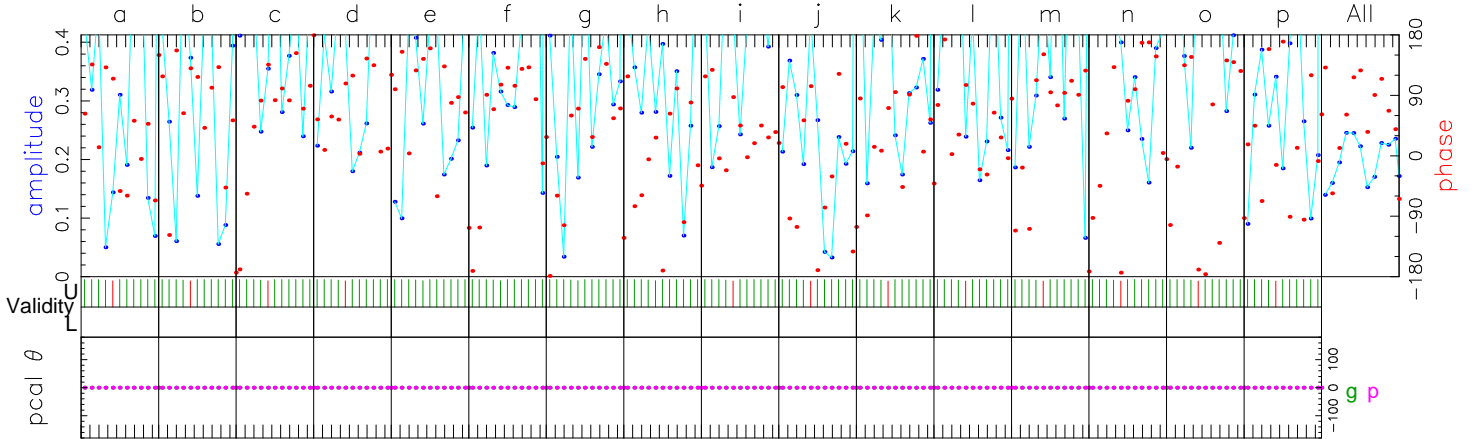


Fringe quality 9

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

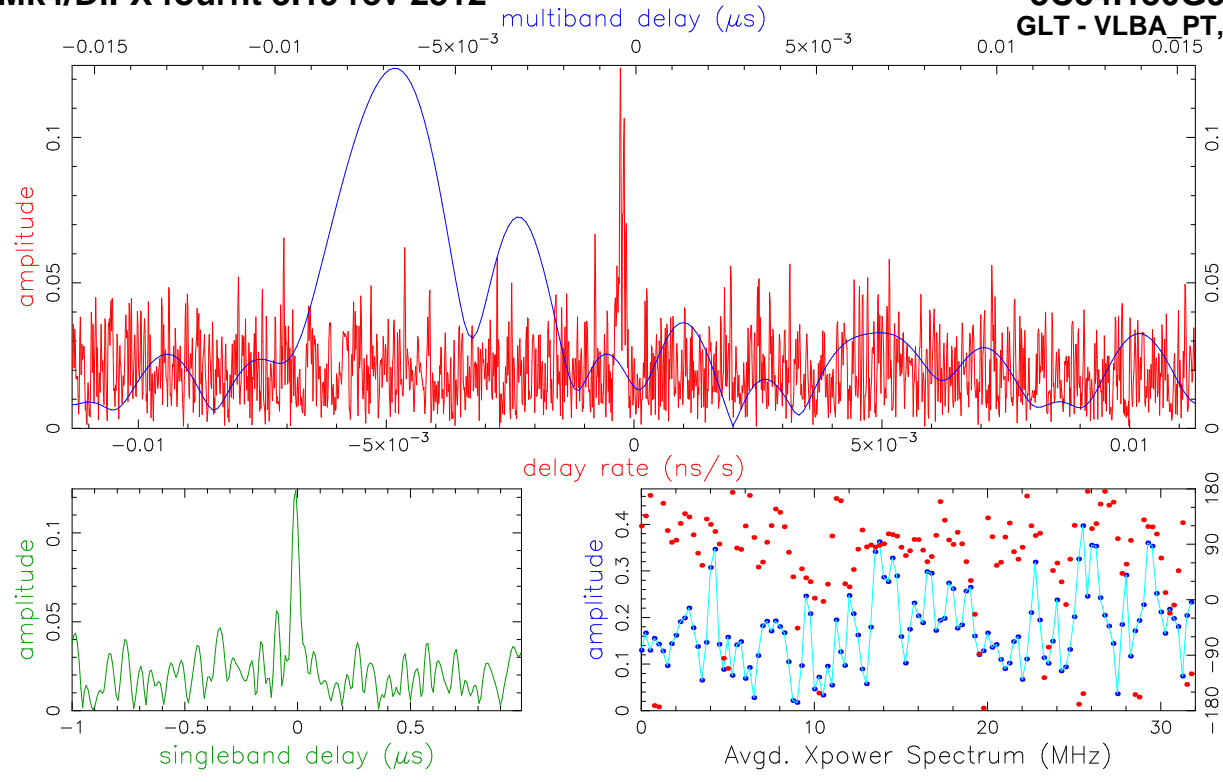
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112336
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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

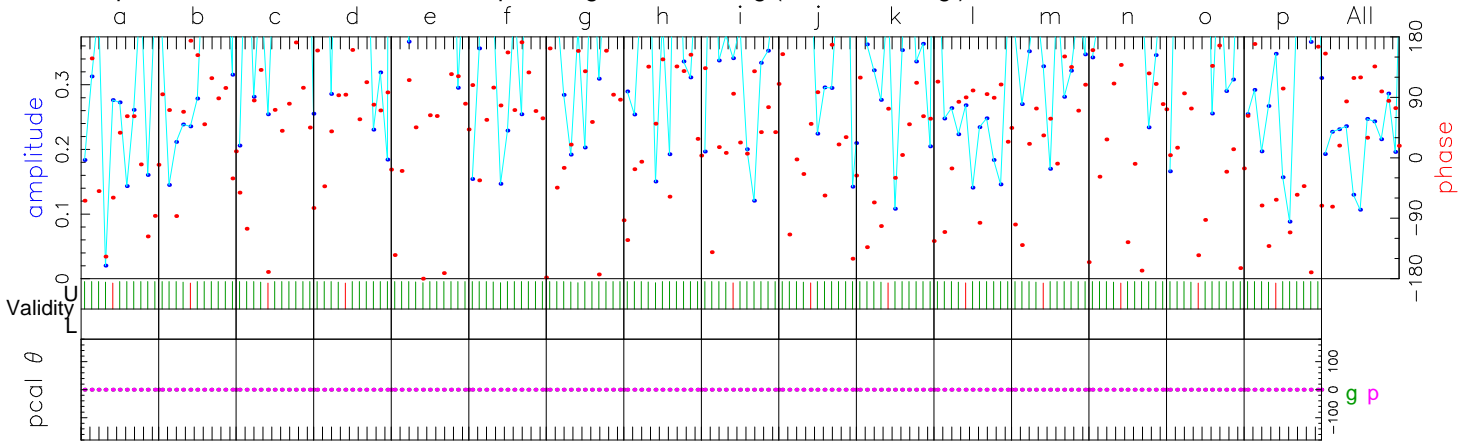


Fringe quality 9

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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-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		

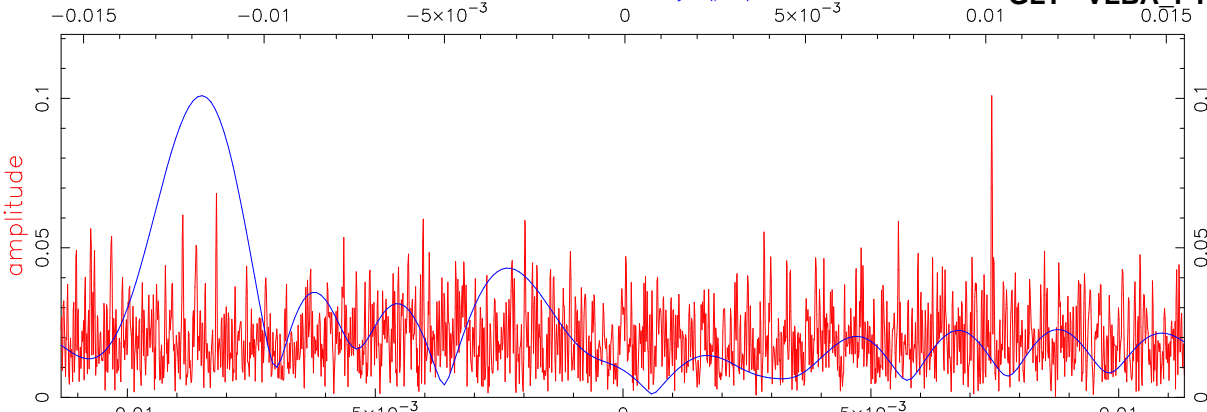
ph/seg (deg) 62.3 26.7 Theor. Amplitude 0.125 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.4 46.6 Search (2048X64) 0.120 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.7 30.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (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

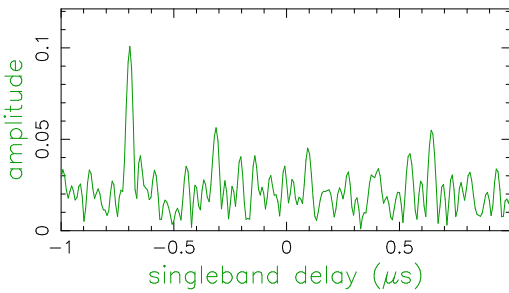
3C84.130G9L, No0205, gp
GLT - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

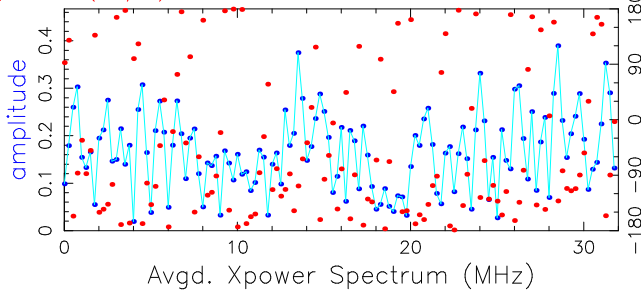
Fringe quality 0



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

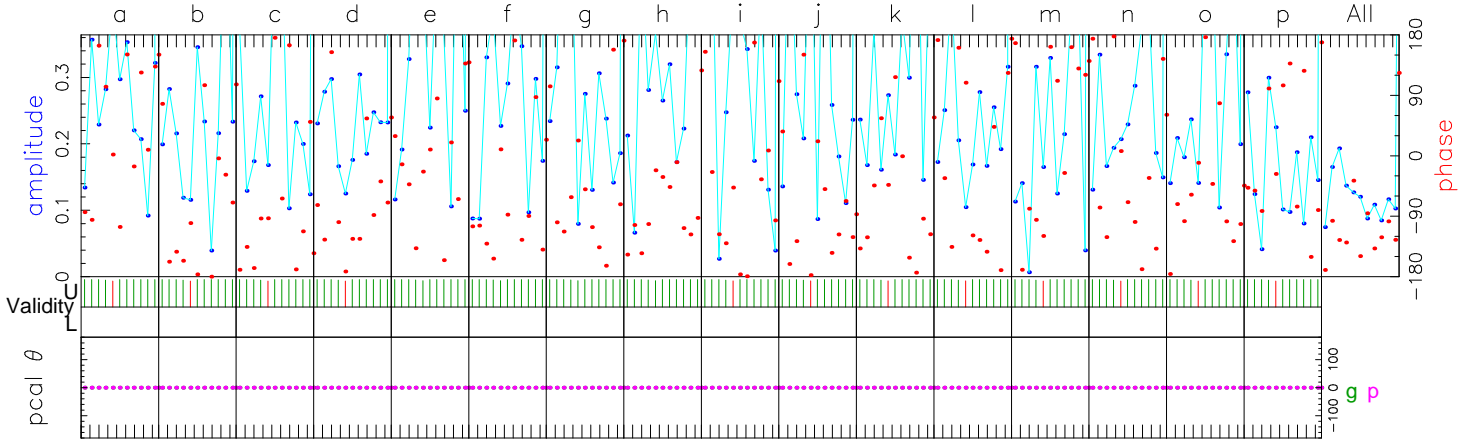


delay rate (ns/s)



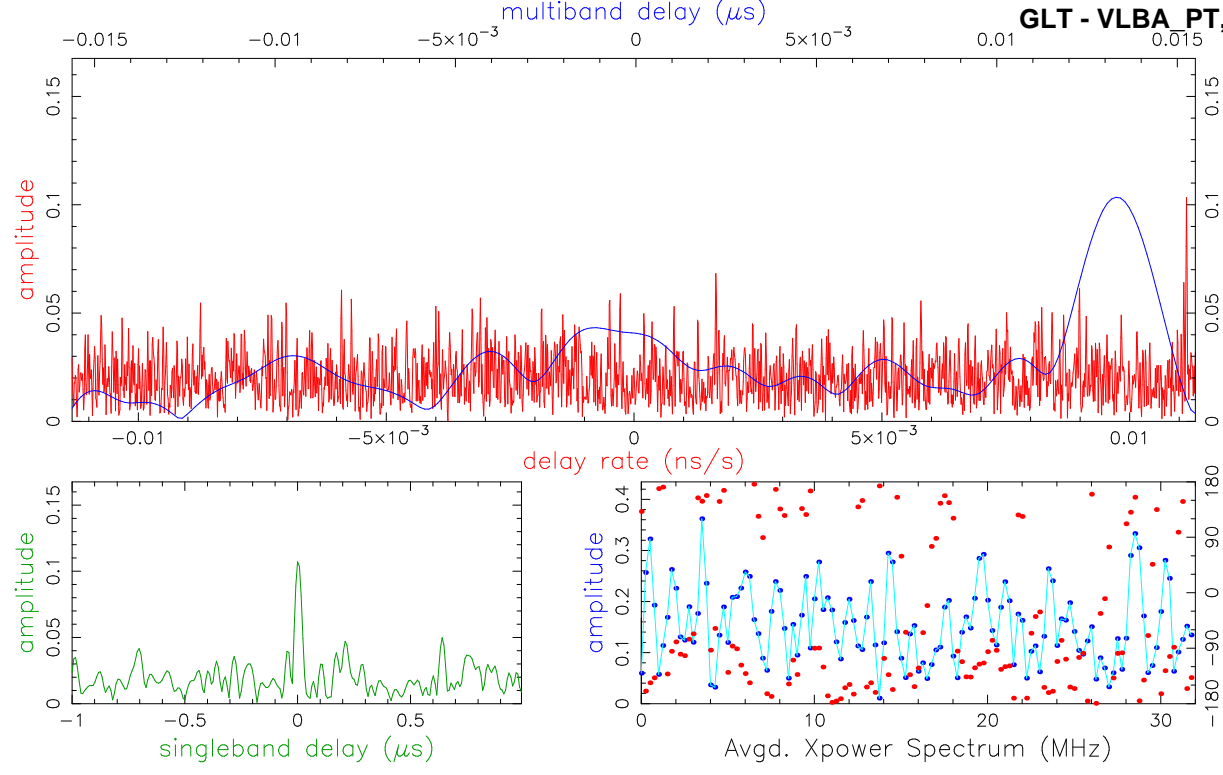
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112346
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



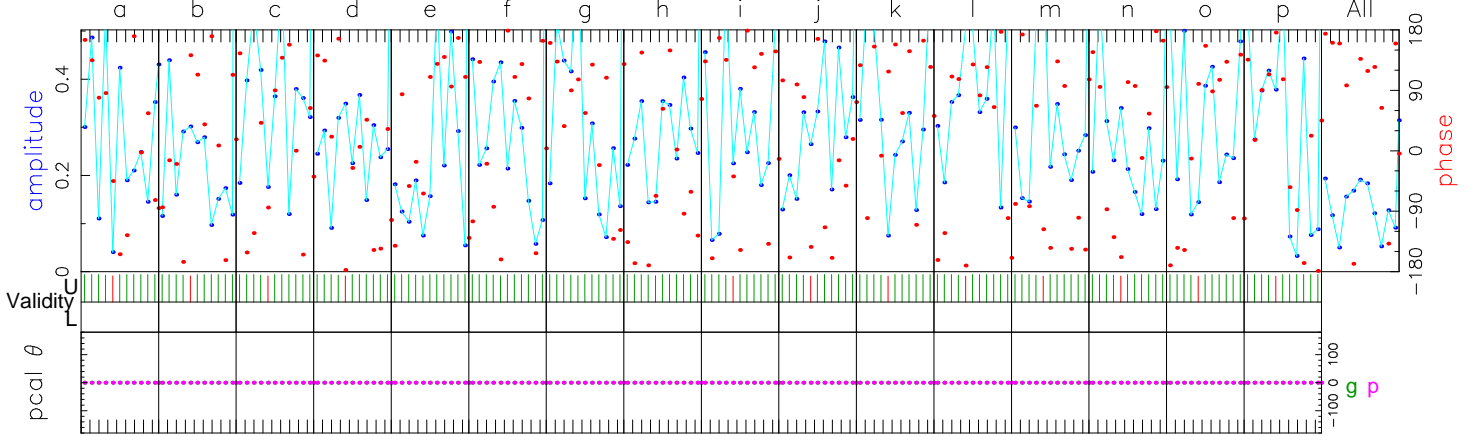
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
p	1000	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



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

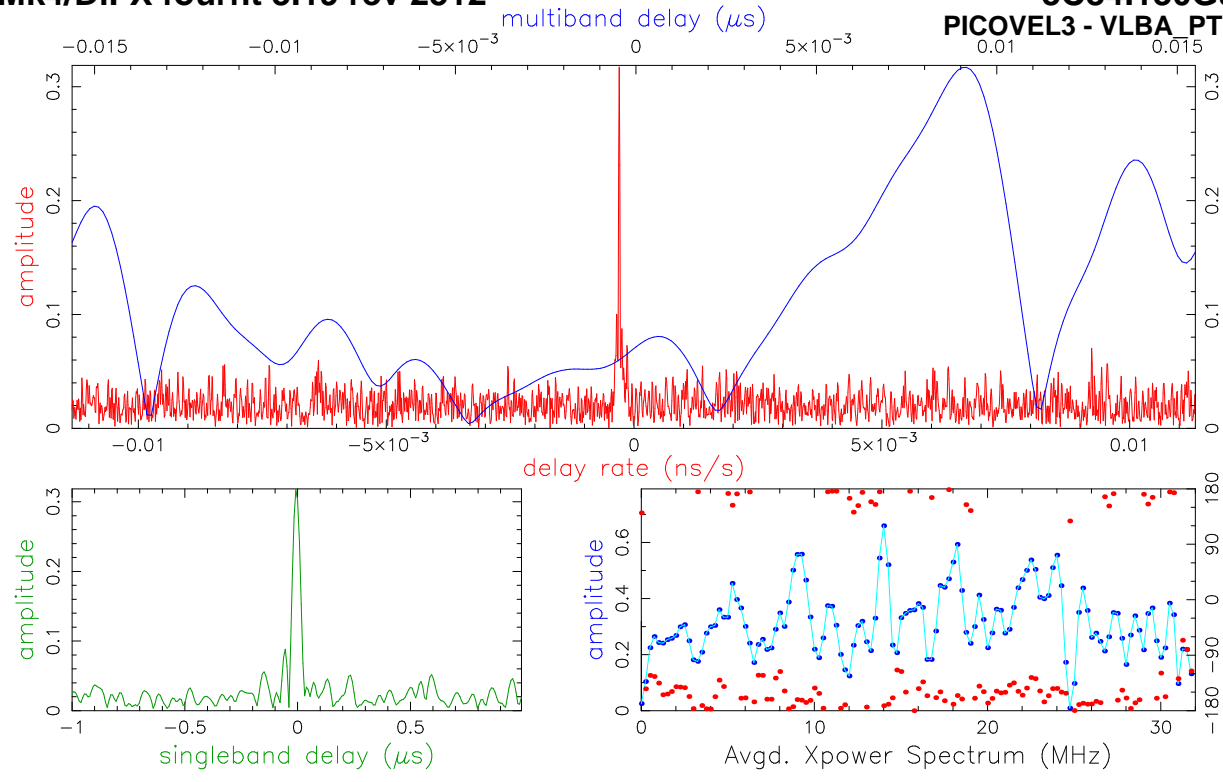


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	149.2	Phase
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	Ampl.
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.3	Sbd box
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	0:0	0	APs used
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	0:0	0	PC freqs
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0	PC freqs
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0	PC phase
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		0	Mani PC
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		0	PC amp
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) 43.0 30.7 Search (2048X64) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 51.5 53.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 45.5 35.5 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.8 61.9 Inc. frq. avg. 0.156 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.209.130G9L

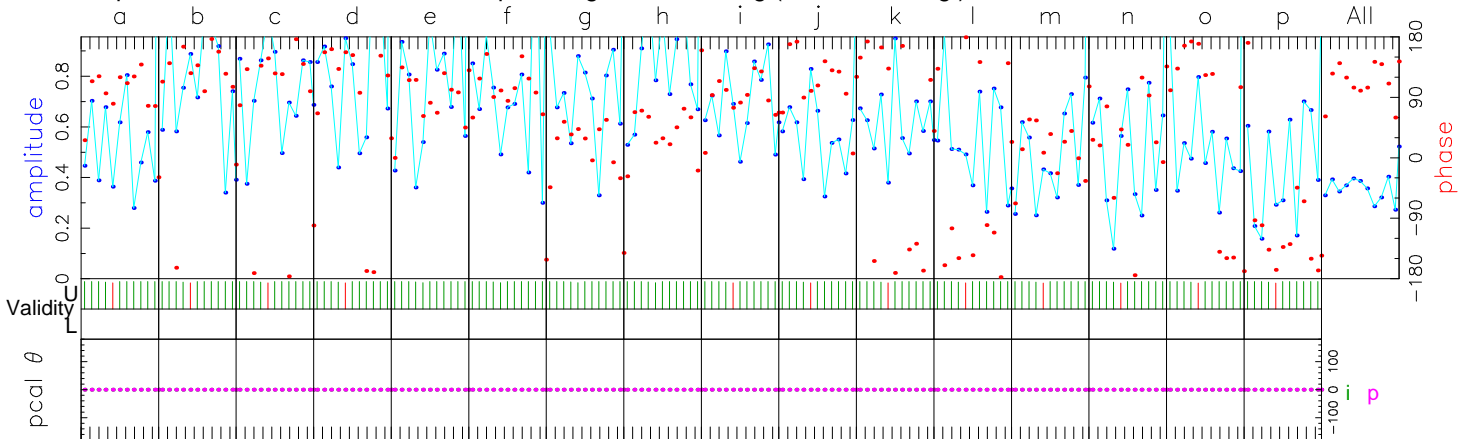
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ip
 PICOVEL3 - VLBA_PT, fgroup W, pol LL



Fringe quality 8
 SNR 19.0
 Int time 476.345
 Amp 0.319
 Phase 111.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.006050
 MBD 0.009111
 Fringe rate (Hz)
 -0.026034
 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

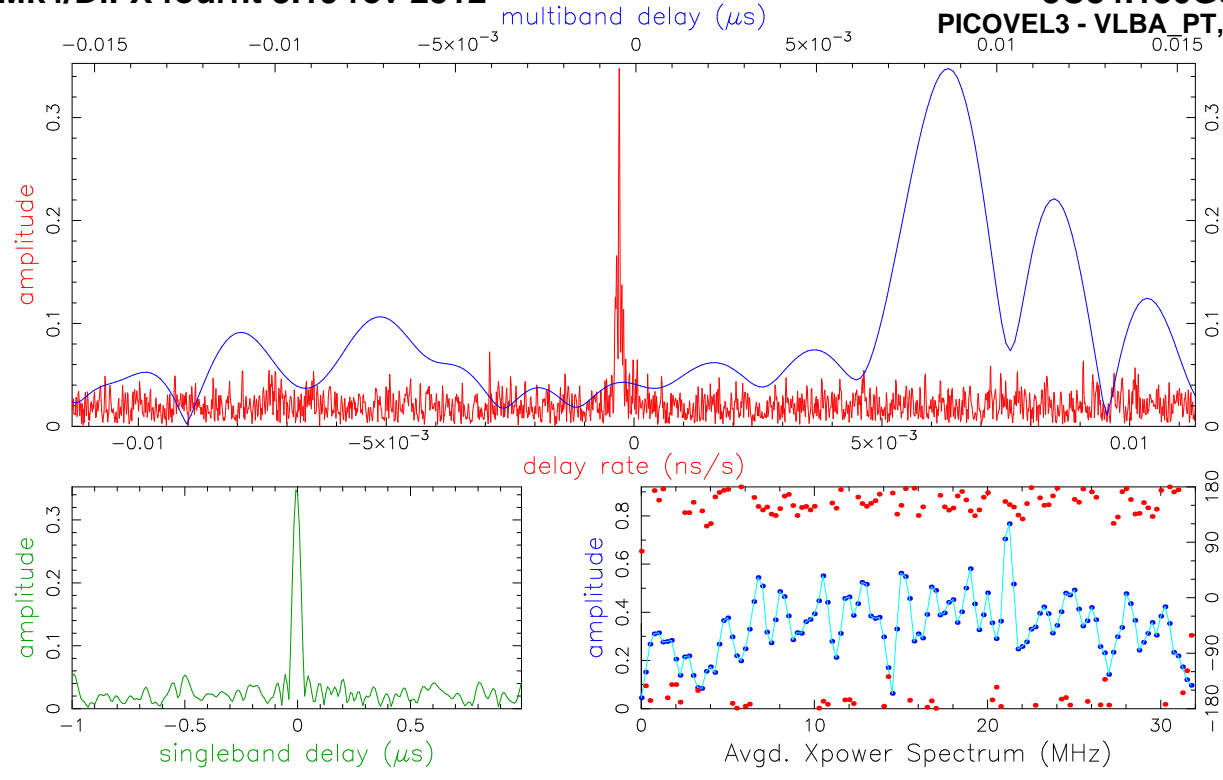


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	111.1	Phase
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	111.1	Ampl.
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	128.2	Sbd box
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.5	APs used
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.5	PC freqs
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.5	PC phase
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.5	ManI PC
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	1000	PC amp
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	1000	Chan ids
																	1000	Tracks
																	1000	Tracks

Group delay (usec)(sbd) -1.38233287706E+04 Apriori delay (usec) -1.38233378816E+04 Resid mbdelay (usec) 9.11105E-03 +/- 5.7E-05
 Sband delay (usec) -1.38233439316E+04 Apriori clock (usec) -1.2490074E+01 Resid sbdelay (usec) -6.05000E-03 +/- 9.1E-04
 Phase delay (usec) -1.38233378780E+04 Apriori clockrate (us/s) -5.5688657E-07 Resid phdelay (usec) 3.58266E-06 +/- 1.9E-07
 Delay rate (us/s) -1.06666509564E+00 Apriori rate (us/s) -1.06666479342E+00 Resid rate (us/s) -3.02225E-07 +/- 7.0E-10
 Total phase (deg) 67.2 Apriori accel (us/s/s) 7.63766848581E-05 Resid phase (deg) 111.1 +/- 6.0

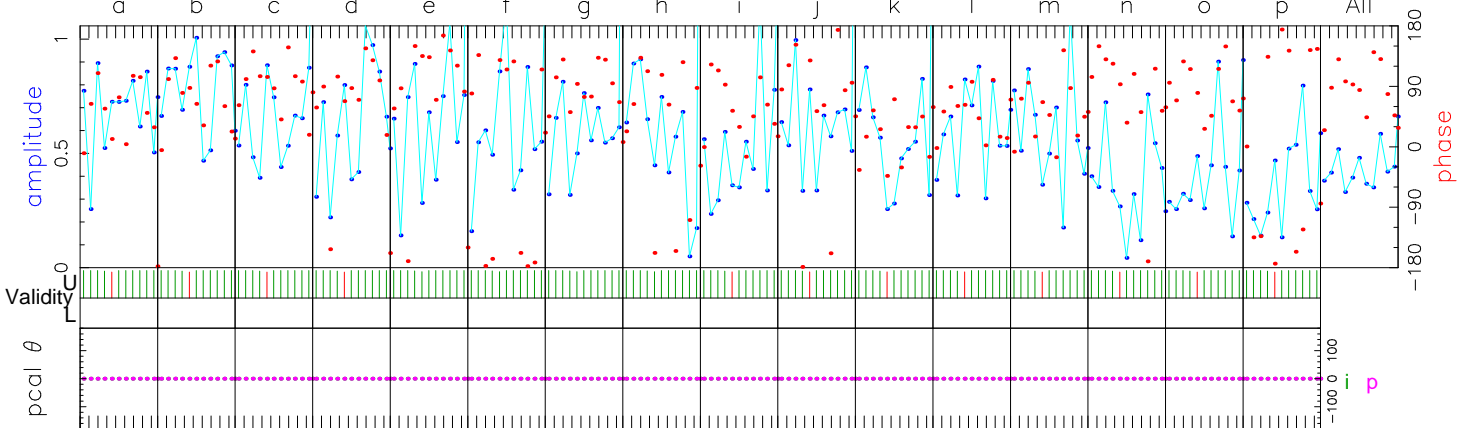
RMS Theor. Amplitude 0.319 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 27.4 10.4 Search (2048X64) 0.307 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 17.0 18.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.6 12.1 Inc. seg. avg. 0.346 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 78.0 21.0 Inc. frq. avg. 0.520 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.169.130G9L



Fringe quality 7
 SNR 21.0
 Int time 476.346
 Amp 0.353
 Phase 89.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.004585
 MBD 0.008661
 Fringe rate (Hz)
 -0.026161
 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
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		
i	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		
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

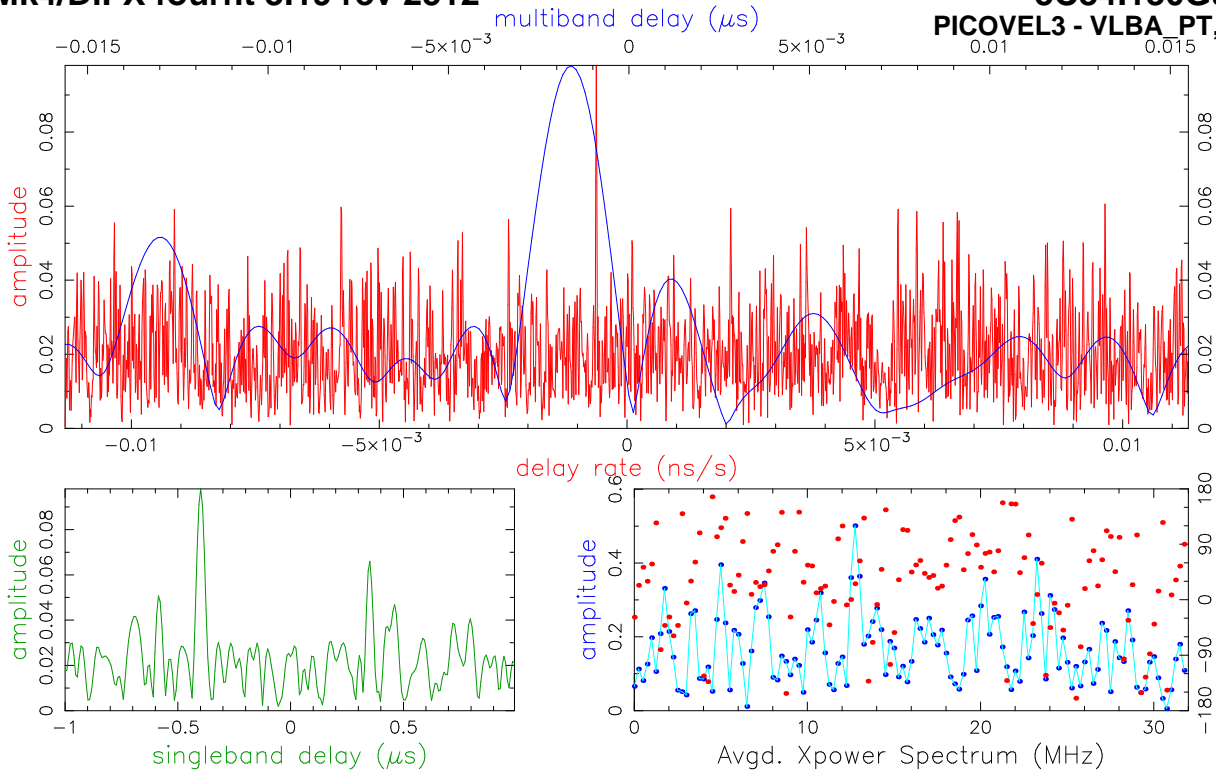
Group delay (usec)(sbd) -1.38233292206E+04 Apriori delay (usec) -1.38233378816E+04 Resid mbdelay (usec) 8.66105E-03 +/- 5.1E-05
 Sband delay (usec) -1.38233424671E+04 Apriori clock (usec) -1.2490074E+01 Resid sbdelay (usec) -4.58550E-03 +/- 8.2E-04
 Phase delay (usec) -1.38233378787E+04 Apriori clockrate (us/s) -5.5688657E-07 Resid phdelay (usec) 2.88743E-06 +/- 1.8E-07
 Delay rate (us/s) -1.06666509713E+00 Apriori rate (us/s) -1.06666479342E+00 Resid rate (us/s) -3.03708E-07 +/- 6.3E-10
 Total phase (deg) 45.7 Apriori accel (us/s/s) 7.63766848581E-05 Resid phase (deg) 89.5 +/- 5.4

ph/seg (deg) RMS Theor. Amplitude 0.353 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.3 9.4 Search (2048X64) 0.326 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.8 16.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 44.8 10.9 Inc. seg. avg. 0.422 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 36.0 19.0 Inc. frq. avg. 0.431 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.185.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, ip
 PICOVEL3 - VLBA_PT, fgroup W, pol LR

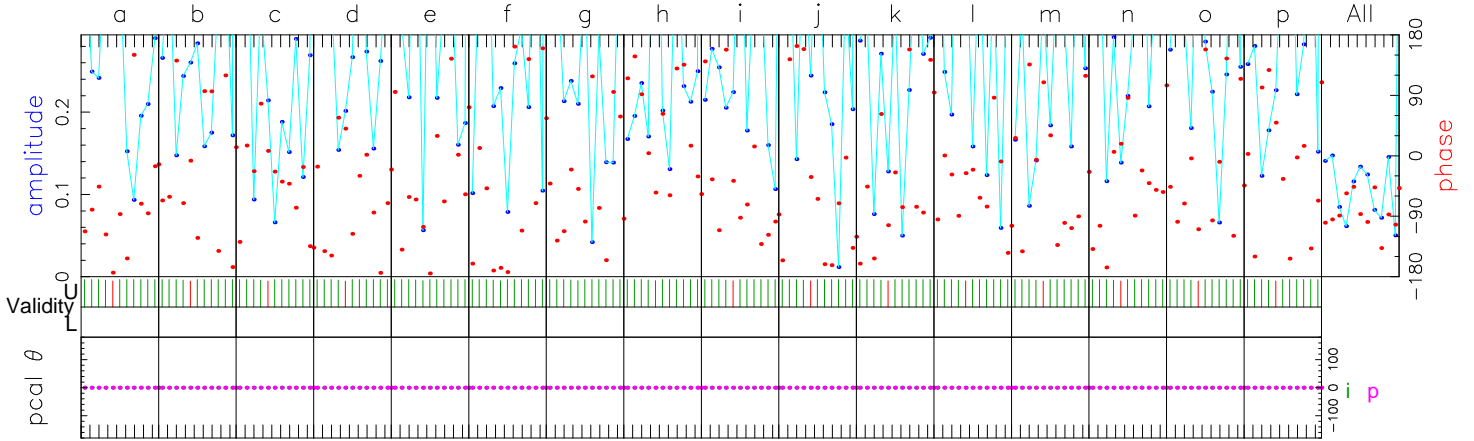


Fringe quality 0

SNR 5.8
 Int time 476.346
 Amp 0.098
 Phase -86.1
 PFD 7.3e-01
 Delays (us)
 SBD -0.398815
 MBD -0.001608
 Fringe rate (Hz)
 -0.053492
 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					
	-99.9	-115.4	-45.2	-68.7	-105.0	-102.1	-66.8	33.8	-89.1	-149.1	-90.9	-65.6	-122.8	-55.7	-106.0	-94.7		Phase	-86.1				
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1		Ampl.	0.1				
	76.9	117.1	199.6	174.8	14.6	48.3	132.1	197.8	169.2	129.2	60.4	111.1	245.1	79.2	51.1	104.5		Sbd box	78.0				
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					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
ip	0:0	0:0	0:0	0:0	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					
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.38237457397E+04															Apriori delay (usec)	-1.38233378816E+04	Resid mbdelay (usec)	-1.60804E-03	+/-	1.8E-04
Sband delay (usec)			-1.38237366966E+04															Apriori clock (usec)	-1.2490074E+01	Resid sbdelay (usec)	-3.98815E-01	+/-	2.9E-03
Phase delay (usec)			-1.38233378844E+04															Apriori clockrate (us/s)	-5.5688657E-07	Resid phdelay (usec)	-2.77567E-06	+/-	6.3E-07
Delay rate (us/s)			-1.06666541440E+00															Apriori rate (us/s)	-1.06666479342E+00	Resid rate (us/s)	-6.20986E-07	+/-	2.3E-09
Total phase (deg)					-130.0													Apriori accel (us/s/s)	7.63766848581E-05	Resid phase (deg)	-86.1	+/-	19.6

ph/seg (deg) 25.8 34.0
 amp/seg (%) 42.2 59.3
 ph/frq (deg) 42.7 39.2
 amp/frq (%) 51.1 68.5

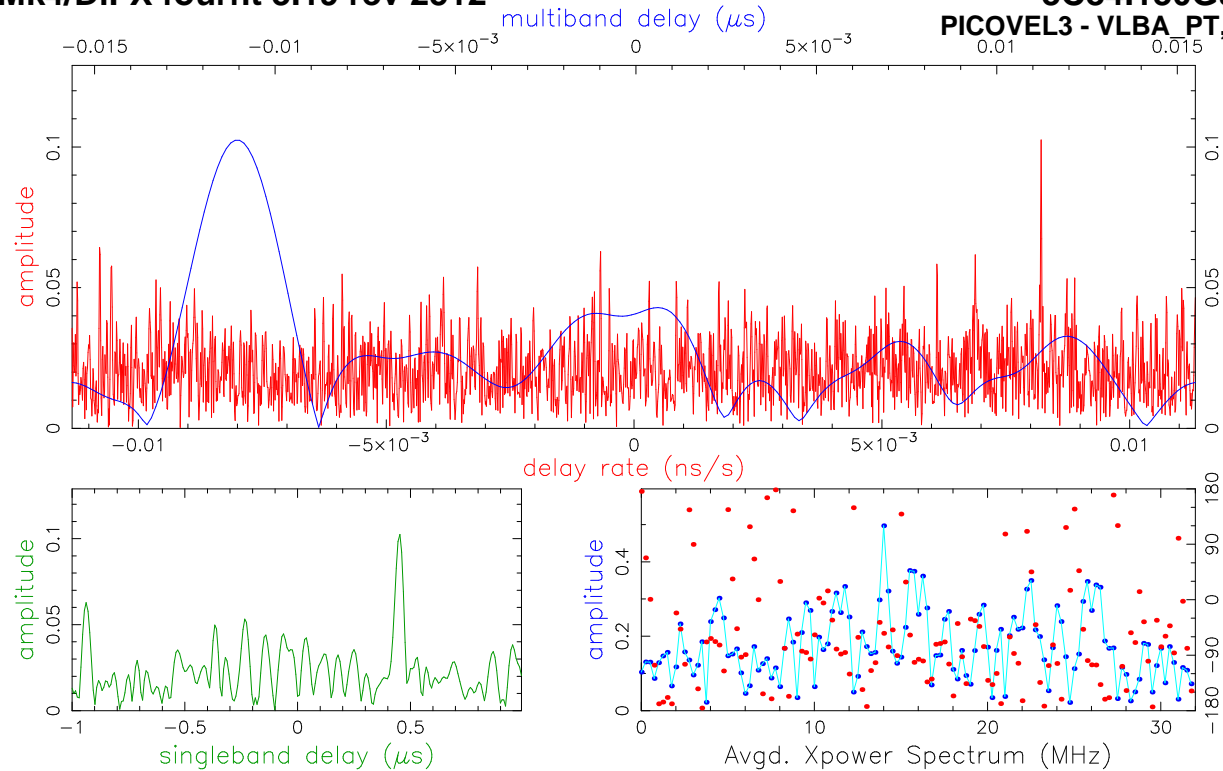
RMS Theor. Amplitude 0.098 +/- 0.017
 Search (2048X64) 0.096
 Interp. 0.000
 Inc. seg. avg. 0.091
 Inc. frq. avg. 0.093

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

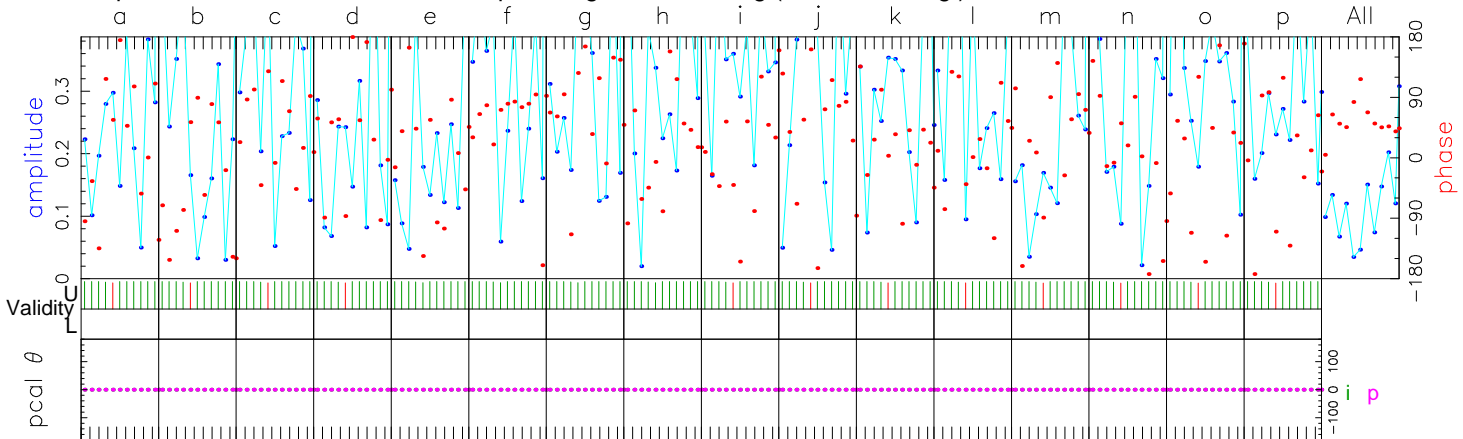
i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.206.130G9L



Fringe quality 0
 SNR 6.1
 Int time 476.345
 Amp 0.129
 Phase 50.7
 PFD 2.0e-01
 Delays (us)
 SBD 0.451544
 MBD -0.011050
 Fringe rate (Hz) 0.708714
 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
68.3	-81.5	64.0	32.7	-4.3	69.8	113.7	4.8	18.0	75.7	32.6	59.5	55.3	73.8	49.8	32.9	32.9	50.7	Phase
0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.
101.4	14.6	202.4	149.1	203.9	186.9	29.3	74.0	10.2	82.4	185.7	38.2	10.0	65.2	153.0	115.3	115.3	186.8	Sbd box
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
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
ip	0:0	0:0	0:0	0:0	0:0	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
ip	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

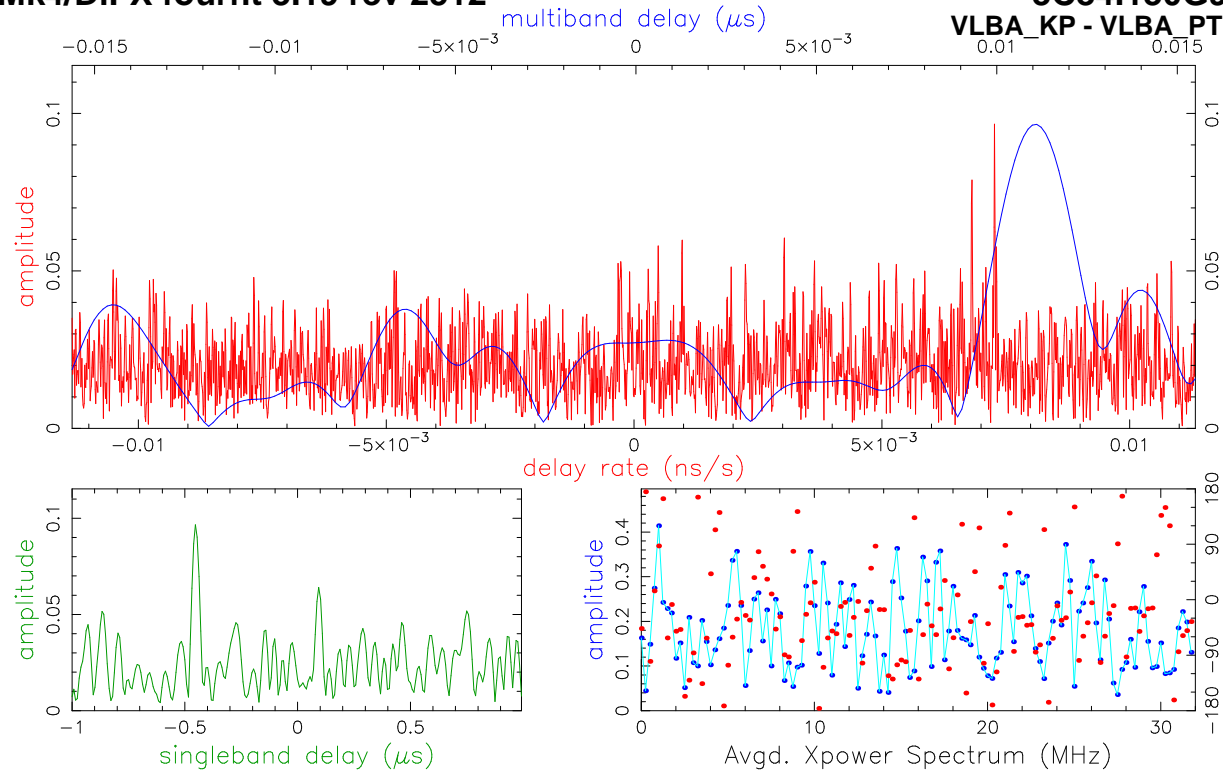
Group delay (usec)(sbd) -1.38228801818E+04 Apriori delay (usec) -1.38233378816E+04 Resid mbdelay (usec) -1.10502E-02 +/- 1.8E-04
 Sband delay (usec) -1.38228863381E+04 Apriori clock (usec) -1.2490074E+01 Resid sbdelay (usec) 4.51544E-01 +/- 2.8E-03
 Phase delay (usec) -1.38233378800E+04 Apriori clockrate (us/s) -5.5688657E-07 Resid phdelay (usec) 1.63629E-06 +/- 6.0E-07
 Delay rate (us/s) -1.06665656595E+00 Apriori rate (us/s) -1.06666479342E+00 Resid rate (us/s) 8.22746E-06 +/- 2.2E-09
 Total phase (deg) 6.9 Apriori accel (us/s/s) 7.63766848581E-05 Resid phase (deg) 50.7 +/- 18.7

RMS Theor. Amplitude 0.129 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 27.4 32.3 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 48.0 56.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 46.9 37.4 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.4 65.2 Inc. frq. avg. 0.133 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

i: az 307.4 el 20.3 pa 58.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 8293.491 5502.940 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ip..130G9L Output file: /Exps/c192b/v2/1234/No0205/ip.W.227.130G9L

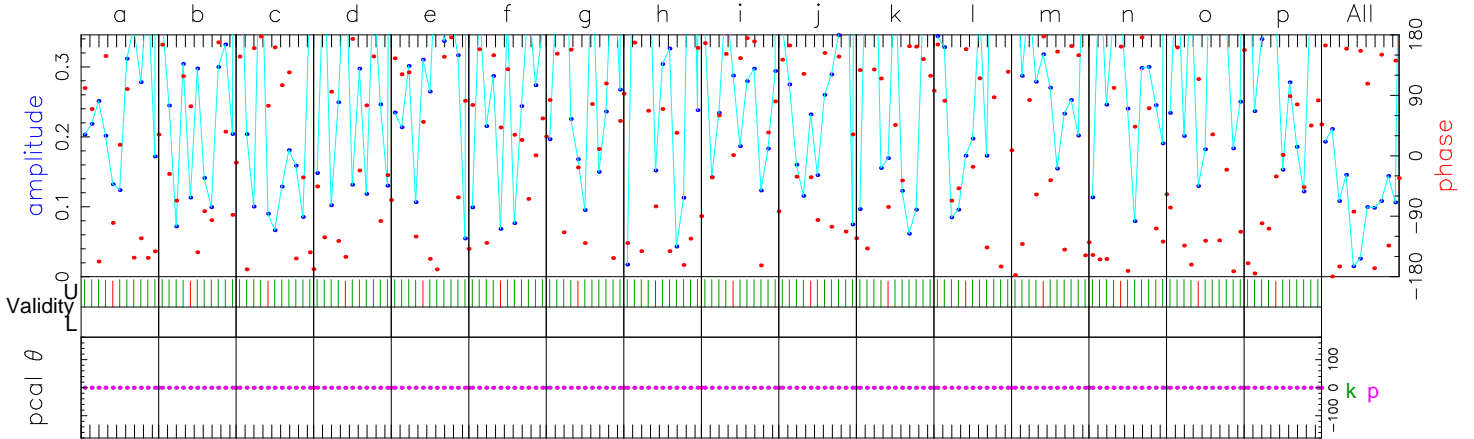
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, kp
VLBA_KP - VLBA_PT, fgroup W, pol LL



Fringe quality 0
SNR 5.8
Int time 474.291
Amp 0.115
Phase 171.7
PFD 8.8e-01
Delays (us)
SBD -0.452248
MBD 0.011080
Fringe rate (Hz) 0.627435
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

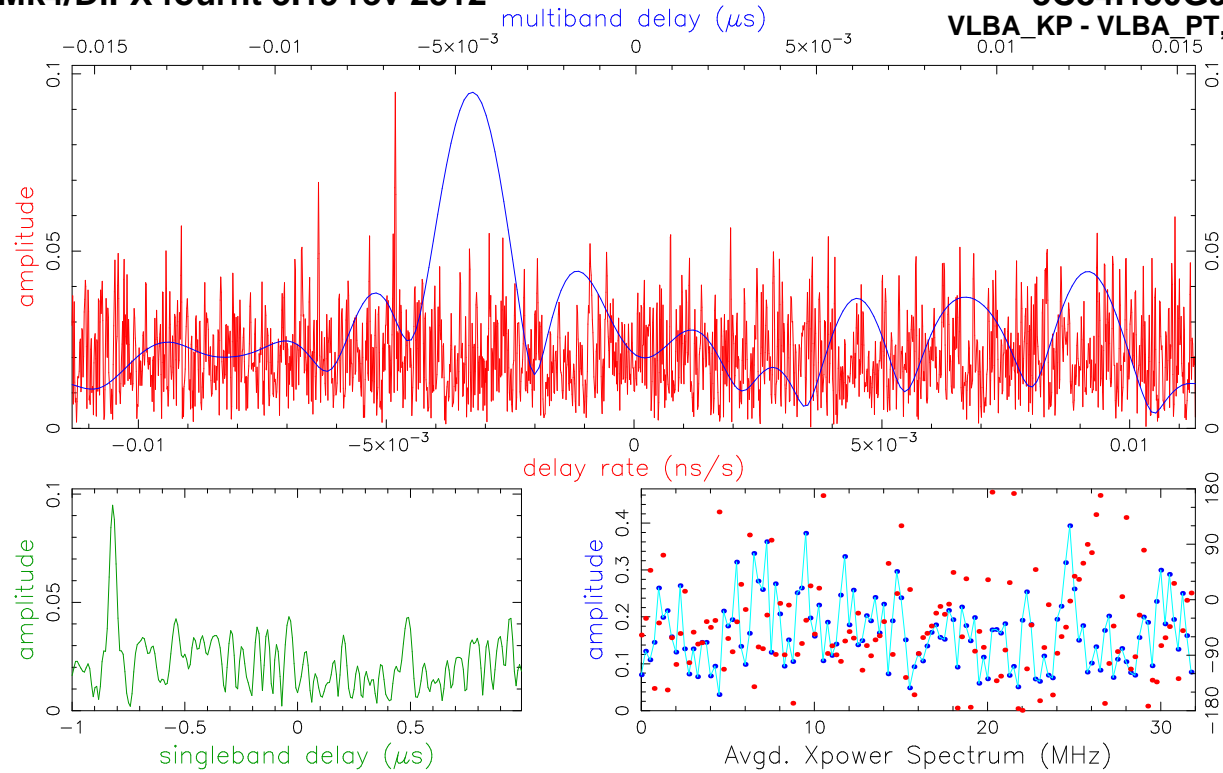


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-178.5	-168.0	170.2	-130.0	164.5	80.4	148.9	-168.4	134.0	-155.8	133.7	129.8	-165.1	-179.2	-133.7	52.3	Phase	171.7				
	0.1	0.0	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.0	Ampl.	0.1				
	145.0	241.5	69.6	119.3	141.5	78.2	92.7	103.8	173.0	111.6	123.9	81.9	71.9	229.1	56.2	94.4	Sbd box	71.1				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k: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					
k: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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
k	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)			-2.94551164033E+02														Apriori delay (usec)	-2.94093493596E+02	Resid mbdelay (usec)	1.10796E-02	+/-	1.9E-04
Sband delay (usec)			-2.94545741596E+02														Apriori clock (usec)	-1.2363065E+01	Resid sbdelay (usec)	-4.52248E-01	+/-	3.0E-03
Phase delay (usec)			-2.94093488058E+02														Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	5.53782E-06	+/-	6.4E-07
Delay rate (us/s)			6.29946399387E-02														Apriori rate (us/s)	6.29873560401E-02	Resid rate (us/s)	7.28390E-06	+/-	2.3E-09
Total phase (deg)					-22.1												Apriori accel (us/s/s)	-1.06912238851E-06	Resid phase (deg)	171.7	+/-	19.9

ph/seg (deg) 44.0 34.5 Search (2048X64) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 65.1 60.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 51.2 39.8 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.0 69.5 Inc. frq. avg. 0.113 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 43.8 el 75.8 pa -127.2 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -483.499 -297.075 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/kp..130G9L Output file: /Exps/c192b/v2/1234/No0205/kp.W.201.130G9L simultaneous interpolator

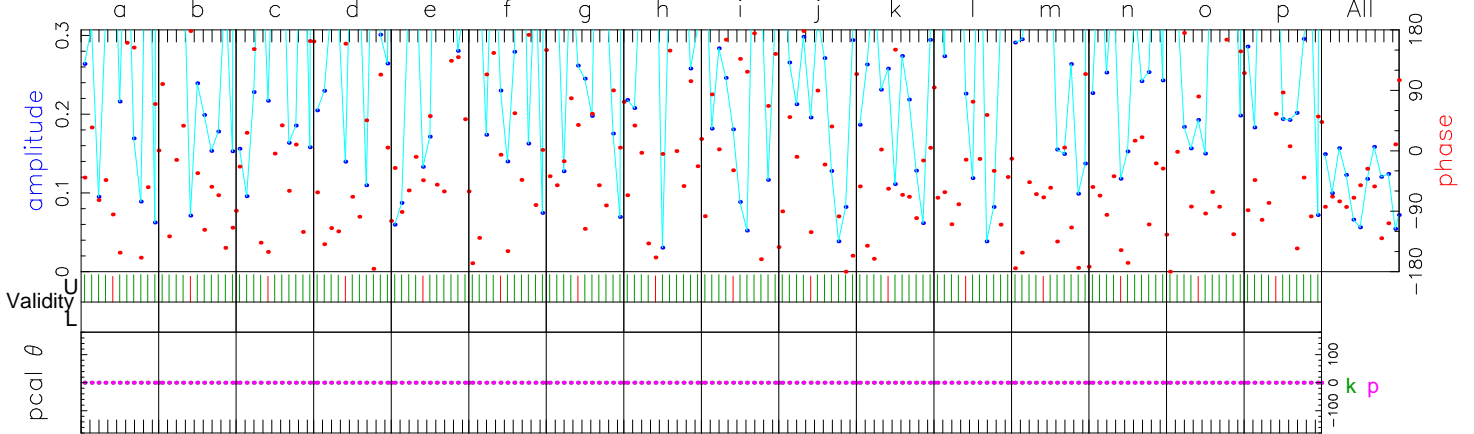
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, kp
VLBA_KP - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.7
Int time 474.292
Amp 0.102
Phase -73.1
PFD 9.8e-01
Delays (us)
SBD -0.819389
MBD -0.004521
Fringe rate (Hz)
-0.415150
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
2020:086:112401
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



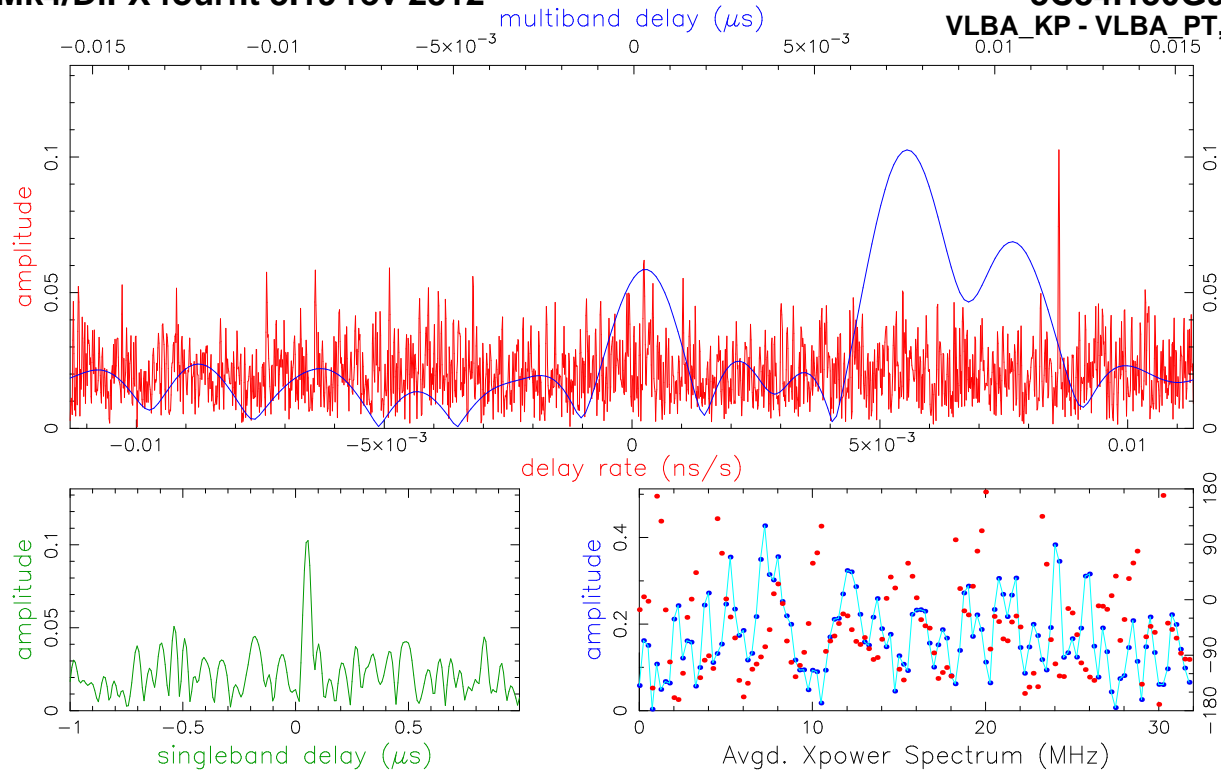
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-79.6	-58.6	-76.3	-115.7	-28.4	-125.0	-26.8	-49.7	177.3	-93.6	-72.9	-62.1	-93.0	-46.0	-126.4	-64.6	Phase	-73.1				
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.3	0.2	0.2	0.1	0.2	Ampl.	0.1				
	41.2	218.3	82.5	21.9	202.1	241.3	254.5	215.6	75.0	59.2	125.9	24.4	248.4	20.2	213.3	55.9	Sbd box	24.1				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k: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					
k: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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.94910514729E+02														Apriori delay (usec)	-2.94093493596E+02	Resid mbdelay (usec)	-4.52113E-03	+/-	1.9E-04
Sband delay (usec)			-2.94912882096E+02														Apriori clock (usec)	-1.2363065E+01	Resid sbdelay (usec)	-8.19389E-01	+/-	3.0E-03
Phase delay (usec)			-2.94093495953E+02														Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	-2.35658E-06	+/-	6.5E-07
Delay rate (us/s)			6.29825365636E-02														Apriori rate (us/s)	6.29873560401E-02	Resid rate (us/s)	-4.81948E-06	+/-	2.4E-09
Total phase (deg)																	Apriori accel (us/s/s)	-1.06912238851E-06	Resid phase (deg)	-73.1	+/-	20.3

ph/seg (deg) RMS Theor. Amplitude 0.102 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.6 35.1 Search (2048X64) 0.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.2 61.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.1 40.5 Inc. seg. avg. 0.101 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.7 70.7 Inc. frq. avg. 0.102 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 k: az 43.8 el 75.8 pa -127.2 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -483.499 -297.075 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/kp..130G9L Output file: /Exps/c192b/v2/1234/No0205/kp.W.234.130G9L

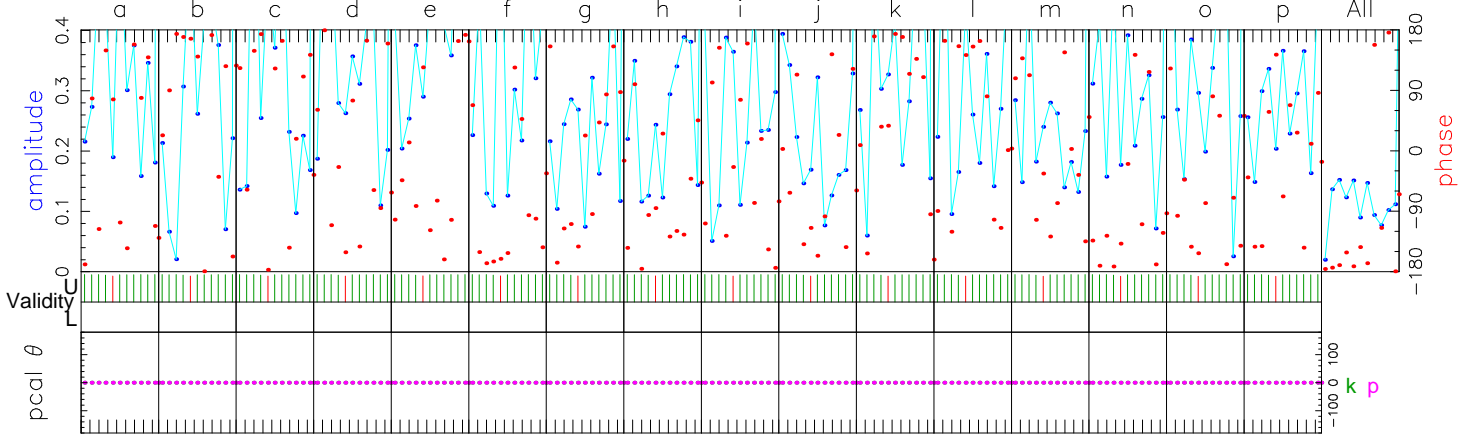
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, kp
VLBA_KP - VLBA_PT, fgroup W, pol RL



Fringe quality 0
SNR 6.2
Int time 474.291
Amp 0.134
Phase -167.2
PFD 1.4e-01
Delays (us)
SBD 0.051392
MBD 0.007586
Fringe rate (Hz) 0.742853
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
2020:086:112406
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



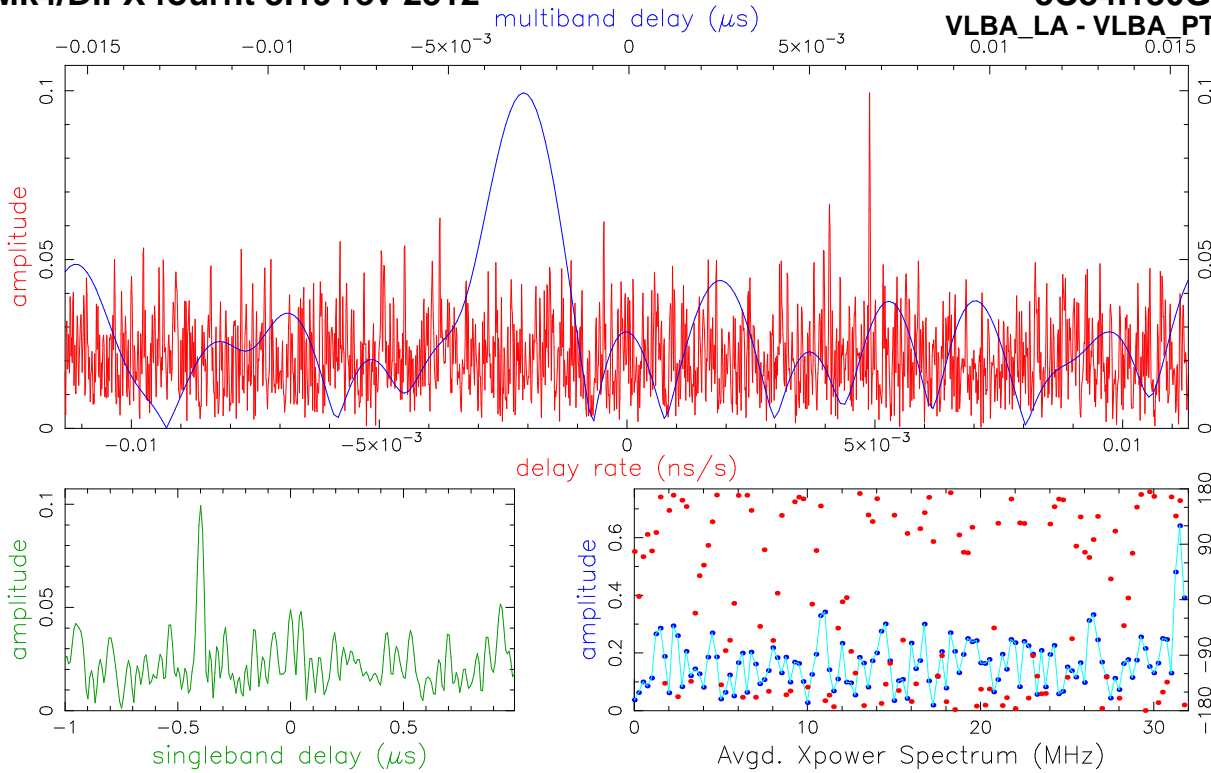
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-172.0	167.9	156.5	-148.9	-130.3	-146.1	-168.8	-109.8	-111.6	-137.4	128.9	162.3	-170.4	-151.7	175.7	38.1	Phase	-167.2				
	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.2	0.1	0.0	Ampl.	0.1				
	189.0	39.7	134.5	81.1	38.9	135.3	93.3	169.9	176.2	72.3	53.4	164.0	191.2	85.0	66.2	191.7	Sbd box	135.6				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
k: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					
k: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 amp					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
Group delay (usec)(sbd)			-2.94054657336E+02														Apriori delay (usec)	-2.94093493596E+02	Resid mbdelay (usec)	7.58626E-03	+/-	1.7E-04
Sband delay (usec)			-2.94042101096E+02														Apriori clock (usec)	-1.2363065E+01	Resid sbdelay (usec)	5.13925E-02	+/-	2.8E-03
Phase delay (usec)			-2.94093498988E+02														Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	-5.39187E-06	+/-	6.0E-07
Delay rate (us/s)			6.29959798233E-02														Apriori rate (us/s)	6.29873560401E-02	Resid rate (us/s)	8.62378E-06	+/-	2.1E-09
Total phase (deg)					-1.0												Apriori accel (us/s/s)	-1.06912238851E-06	Resid phase (deg)	-167.2	+/-	18.5

RMS Theor. Amplitude 0.134 +/- 0.022
 ph/seg (deg) 22.8 32.0 Search (2048X64) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.6 55.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.0 37.0 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.9 64.5 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 43.8 el 75.8 pa -127.2 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -483.499 -297.075 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/kp..130G9L Output file: /Exps/c192b/v2/1234/No0205/kp.W.250.130G9L

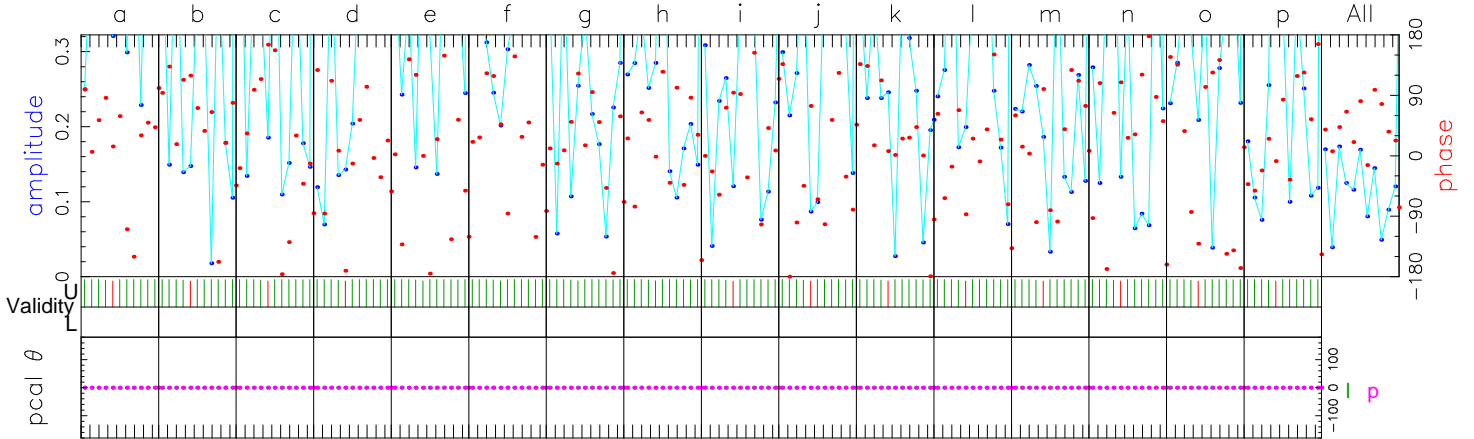
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, lp
VLBA_LA - VLBA_PT, fgroup W, pol LL



Fringe quality 0
SNR 5.9
Int time 475.241
Amp 0.107
Phase 47.7
PFD 5.5e-01
Delays (us)
SBD -0.398782
MBD -0.002917
Fringe rate (Hz) 0.422537
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
2020:086:112405
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		
l	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		
l: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		
l: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		
l	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		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

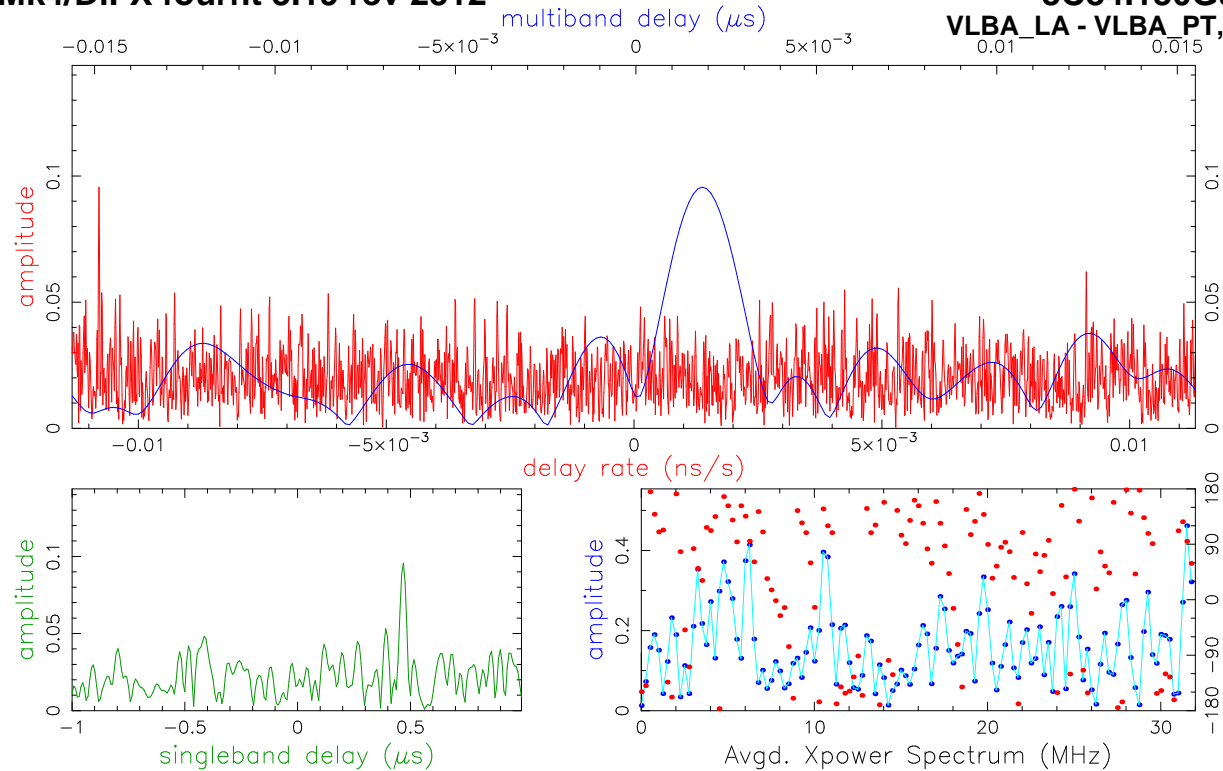
Group delay (usec)(sbd) 1.07095781765E+02 Apriori delay (usec) 1.07504948929E+02 Resid mbdelay (usec) -2.91716E-03 +/- 1.8E-04
Sband delay (usec) 1.07106166429E+02 Apriori clock (usec) -1.2723148E+01 Resid sbdelay (usec) -3.98782E-01 +/- 2.9E-03
Phase delay (usec) 1.07504950466E+02 Apriori clockrate (us/s) -5.5535860E-07 Resid phdelay (usec) 1.53705E-06 +/- 6.2E-07
Delay rate (us/s) -3.31266684762E-02 Apriori rate (us/s) -3.31315737122E-02 Resid rate (us/s) 4.90524E-06 +/- 2.2E-09
Total phase (deg) 155.9 Apriori accel (us/s/s) 9.34714077200E-07 Resid phase (deg) 47.7 +/- 19.3

ph/seg (deg) 33.6 Theor. Amplitude 0.107 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 51.3 33.5 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 51.9 38.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 60.1 67.5 Inc. seg. avg. 0.108 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
Inc. frq. avg. 0.108 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 43.9 el 81.6 pa -134.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 254.906 202.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/lp..130G9L Output file: /Exps/c192b/v2/1234/No0205/lp.W.245.130G9L

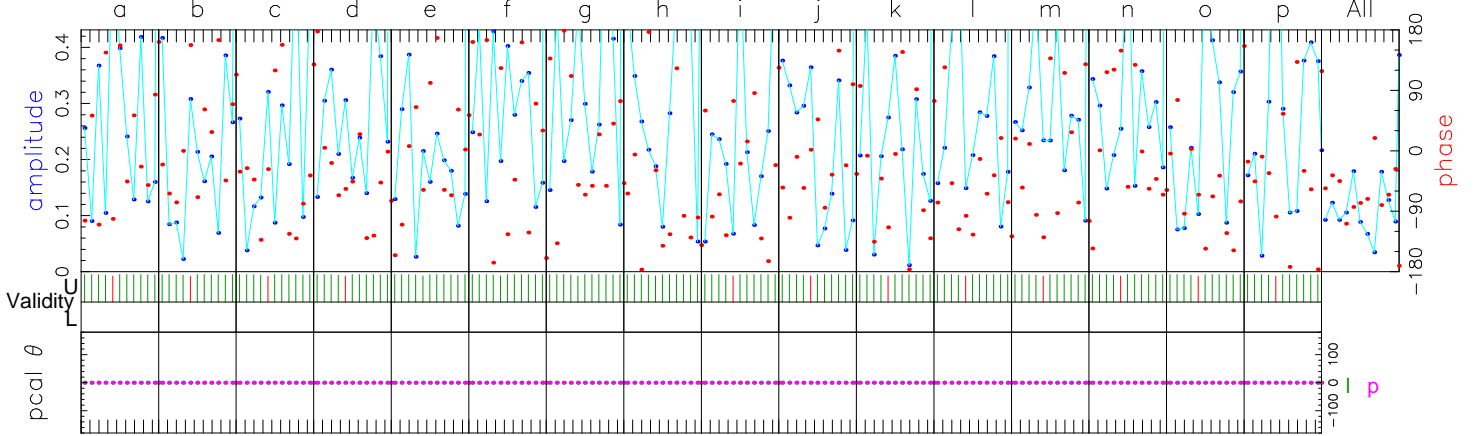
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, Ip
VLBA_LA - VLBA_PT, fgroup W, pol RR



Fringe quality 0
SNR 5.7
Int time 475.243
Amp 0.144
Phase -65.9
PFD 9.4e-01
Delays (us)
SBD 0.467678
MBD 0.001842
Fringe rate (Hz)
-0.930979
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
2020:086:112410
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

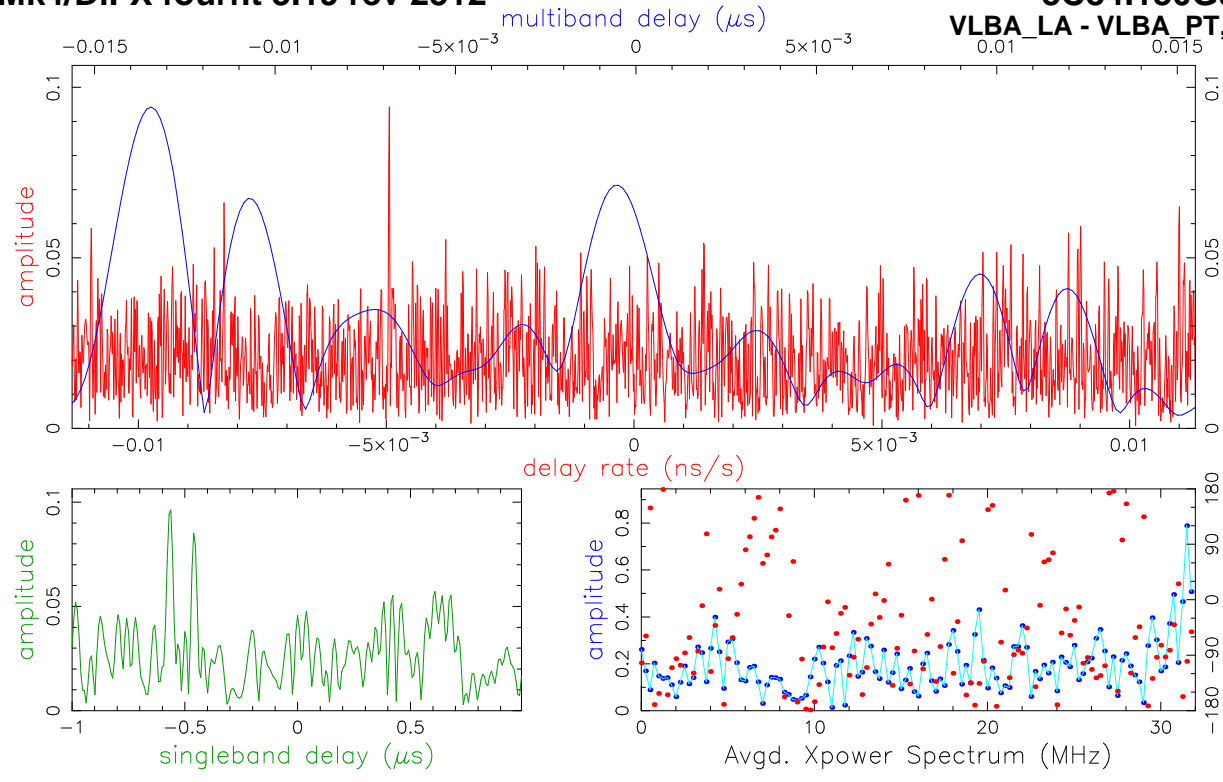


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-90.6	-8.4	-86.2	-49.0	-45.8	-167.0	-46.9	-114.7	-44.4	-42.8	-8.9	-72.8	-62.7	-46.2	-83.2	-68.6	Phase	-65.9				
	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1				
	134.0	207.1	112.9	58.5	252.9	221.4	143.0	169.0	66.3	93.6	3.2	192.8	57.3	140.5	6.2	203.4	Sbd box	188.9				
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					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
l: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					
l: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 amp					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
l	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					
Group delay (usec)(sbd)			1.07975540969E+02														Apriori delay (usec)	1.07504948929E+02	Resid mbdelay (usec)	1.84204E-03	+/-	1.9E-04
Sband delay (usec)			1.07972626929E+02														Apriori clock (usec)	-1.2723148E+01	Resid sbdelay (usec)	4.67678E-01	+/-	3.0E-03
Phase delay (usec)			1.07504946803E+02														Apriori clockrate (us/s)	-5.5535860E-07	Resid phdelay (usec)	-2.12612E-06	+/-	6.5E-07
Delay rate (us/s)			-3.31423814570E-02														Apriori rate (us/s)	-3.31315737122E-02	Resid rate (us/s)	-1.08077E-05	+/-	2.3E-09
Total phase (deg)					42.3												Apriori accel (us/s/s)	9.34714077200E-07	Resid phase (deg)	-65.9	+/-	20.1

ph/seg (deg) 34.3 34.8 Theor. Amplitude 0.144 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.1 60.7 Search (2048X64) 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.5 40.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 41.8 70.1 Inc. seg. avg. 0.137 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.136 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 l: az 43.9 el 81.6 pa -134.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 254.906 202.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/lp..130G9L Output file: /Exps/c192b/v2/1234/No0205/lp.W.263.130G9L

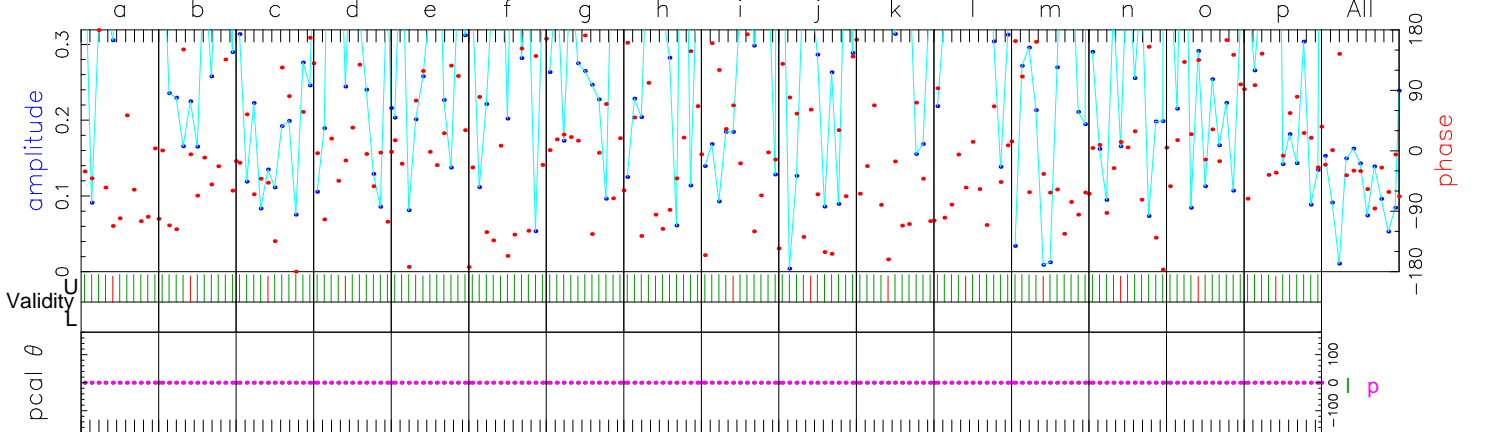
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, Ip
VLBA_LA - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.9
Int time 475.242
Amp 0.106
Phase -34.5
PFD 6.9e-01
Delays (us)
SBD -0.565733
MBD -0.013458
Fringe rate (Hz)
-0.425907
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
2020:086:112416
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

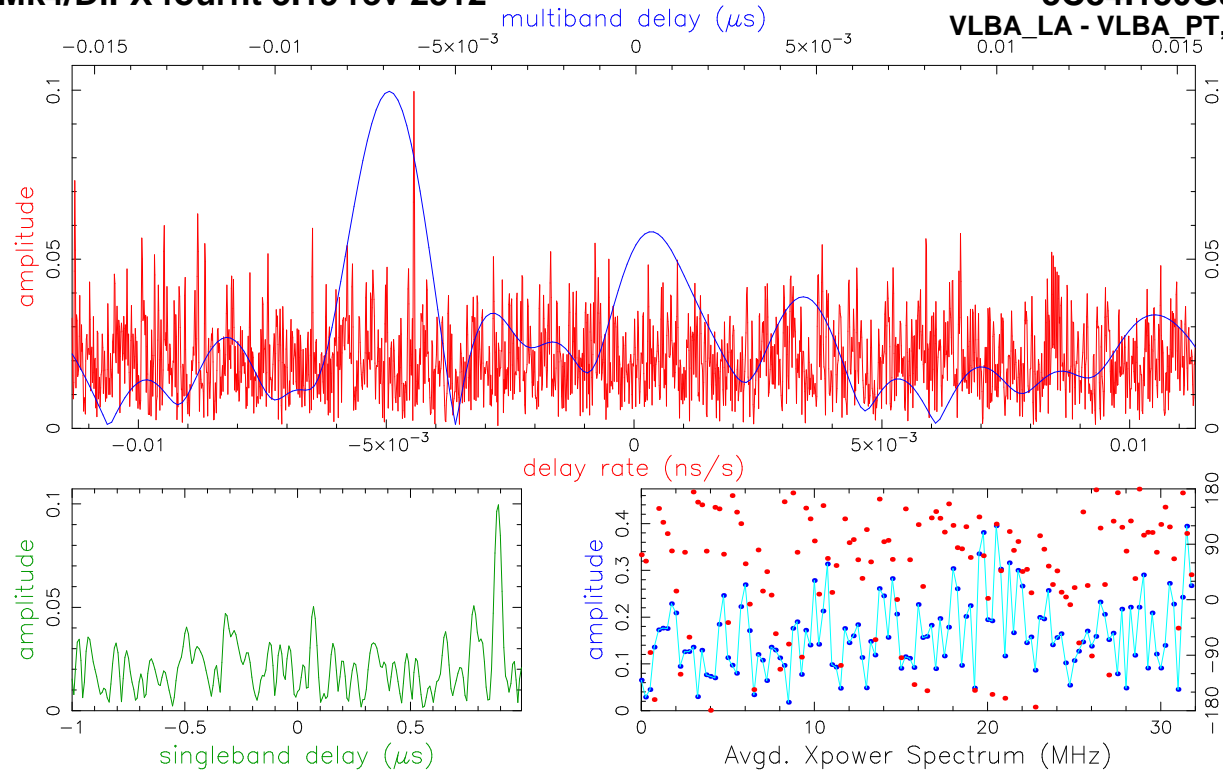


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	-65.6	-34.9	38.4	-10.1	26.4	-99.6	-2.9	-17.9	-56.7	-172.9	-73.6	-38.9	-94.8	-20.7	88.3	-15.9		Phase -34.5			
	0.2	0.2	0.0	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2		Ampl. 0.1			
	207.3	237.8	225.4	205.9	150.0	220.2	246.6	97.6	246.7	42.4	70.9	24.3	51.6	26.5	60.9	207.3		Sbd box 56.6			
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			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs			
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase			
l: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			
l: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 amp			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids			
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks			
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids			
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks			
Group delay (usec)(sbd)			1.06928990508E+02						1.07504948929E+02									Resid mbdelay (usec)	-1.34584E-02	+/-	1.8E-04
Sband delay (usec)			1.06939215429E+02						-1.2723148E+01									Resid sbdelay (usec)	-5.65733E-01	+/-	2.9E-03
Phase delay (usec)			1.07504947816E+02						-5.5535860E-07									Resid phdelay (usec)	-1.11305E-06	+/-	6.3E-07
Delay rate (us/s)			-3.31365180733E-02						-3.31315737122E-02									Resid rate (us/s)	-4.94436E-06	+/-	2.3E-09
Total phase (deg)					73.8				9.34714077200E-07									Resid phase (deg)	-34.5	+/-	19.6

ph/seg (deg) 59.1 33.9 Amplitude 0.106 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.9 59.1 Search (2048X64) 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.6 39.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.1 68.3 Inc. seg. avg. 0.097 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.116 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 l: az 43.9 el 81.6 pa -134.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 254.906 202.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/lp..130G9L Output file: /Exps/c192b/v2/1234/No0205/lp.W.281.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, Ip
VLBA_LA - VLBA_PT, fgroup W, pol RL

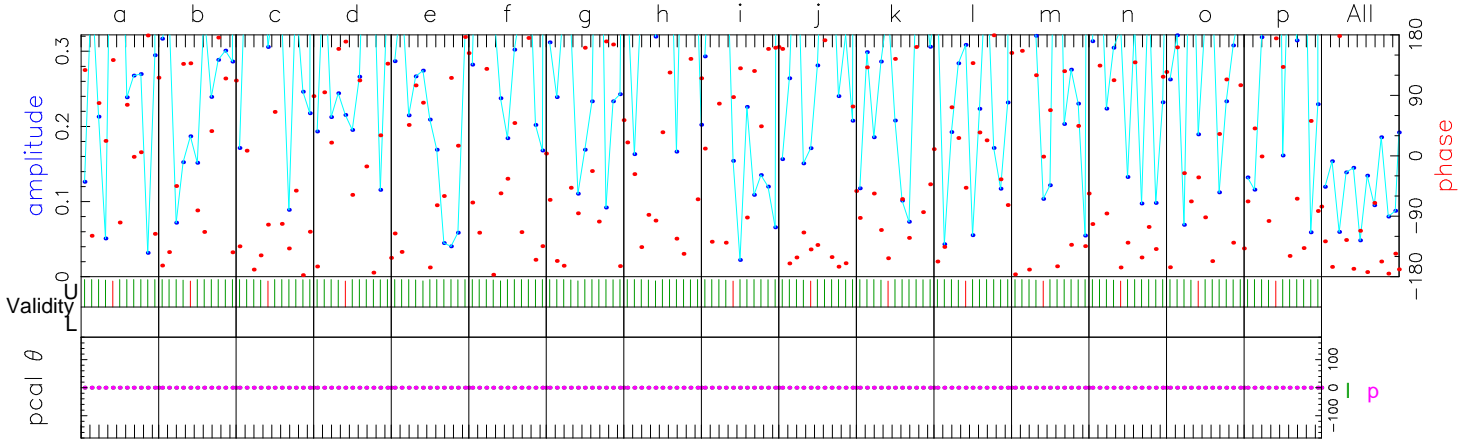


Fringe quality 0

SNR 6.0
Int time 475.242
Amp 0.107
Phase -149.7
PFD 4.0e-01
Delays (us)
SBD 0.888057
MBD -0.006846
Fringe rate (Hz)
-0.383284
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
2020:086:112421
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

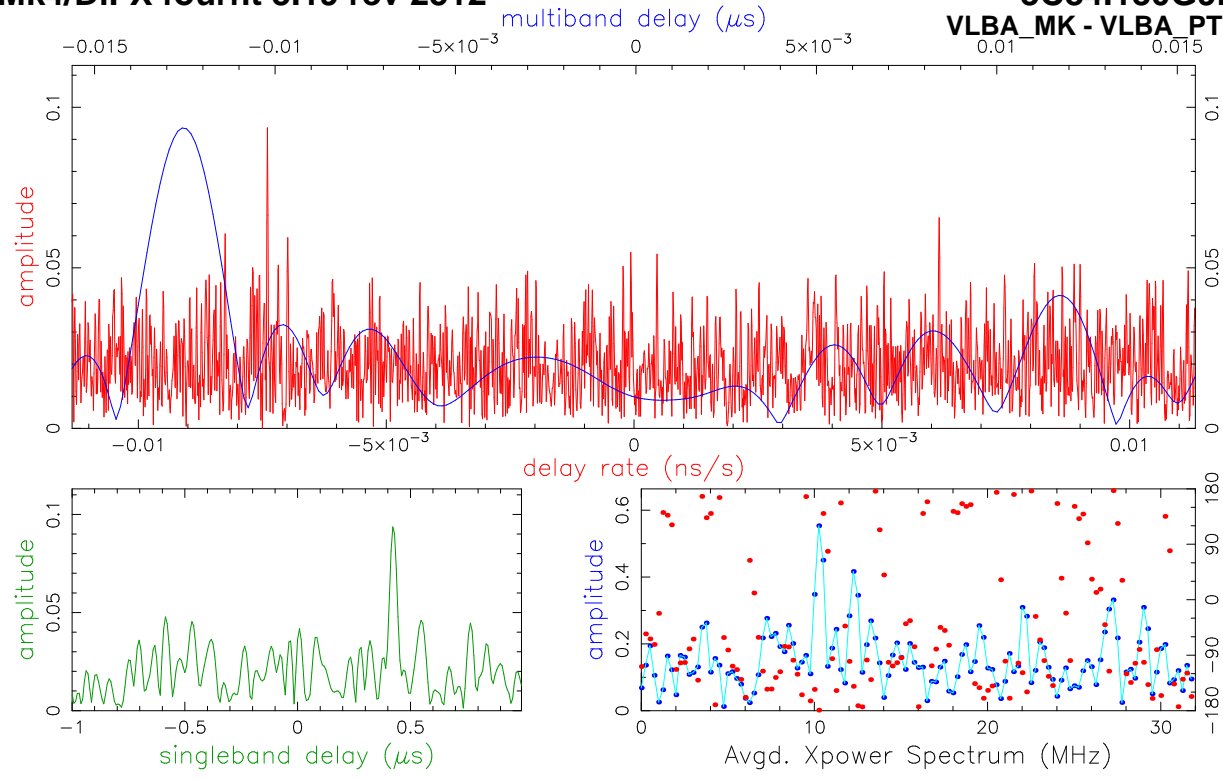
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	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
	-154.6	-167.7	-118.4	128.1	179.0	-133.8	-116.9	-115.1	-163.3	-160.6	-127.7	-1.7	171.7	-174.1	-137.3	-131.4	Phase	-149.7
	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.3	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	60.9	151.1	97.5	224.9	176.9	205.3	29.1	95.9	2.0	133.1	197.3	178.8	207.8	132.4	144.1	242.2	Sbd box	242.7
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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l: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	
l: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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			1.08404352449E+02					Apriori delay (usec)	1.07504948929E+02				Resid mbdelay (usec)	-6.84648E-03			+/-	1.8E-04
Sband delay (usec)			1.08393005429E+02					Apriori clock (usec)	-1.2723148E+01				Resid sbdelay (usec)	8.88057E-01			+/-	2.9E-03
Phase delay (usec)			1.07504944104E+02					Apriori clockrate (us/s)	-5.5535860E-07				Resid phdelay (usec)	-4.82580E-06			+/-	6.2E-07
Delay rate (us/s)			-3.31360232549E-02					Apriori rate (us/s)	-3.31315737122E-02				Resid rate (us/s)	-4.44954E-06			+/-	2.2E-09
Total phase (deg)					-41.4			Apriori accel (us/s/s)	9.34714077200E-07				Resid phase (deg)				+/-	19.1

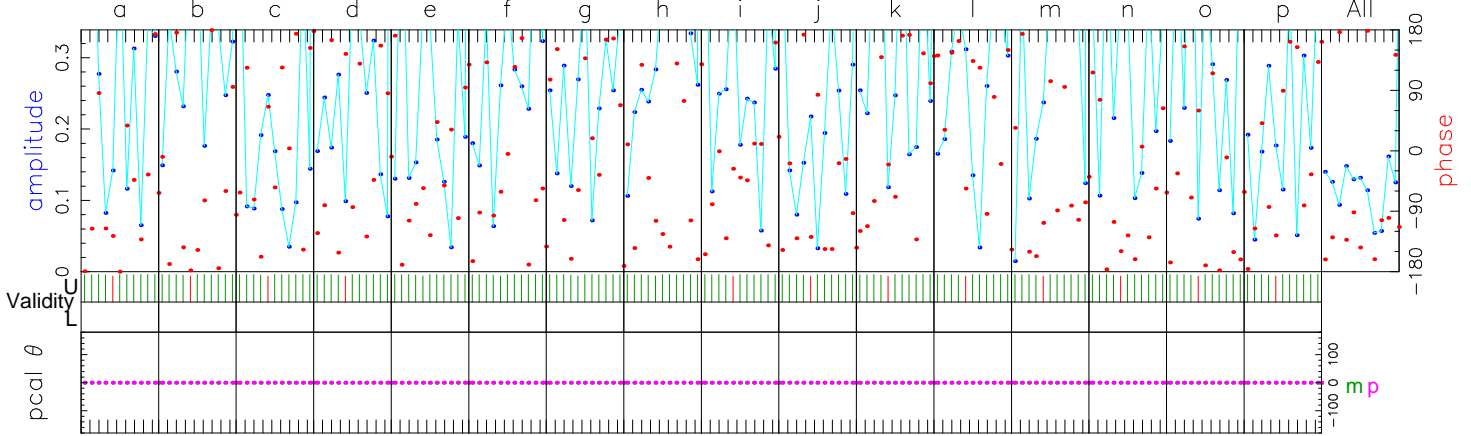
ph/seg (deg) 32.7 33.1 Amplitude 0.107 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.5 57.7 Search (2048X64) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.3 38.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.2 66.7 Inc. seg. avg. 0.104 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.105 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 43.9 el 81.6 pa -134.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 254.906 202.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/lp..130G9L Output file: /Exps/c192b/v2/1234/No0205/lp.W.299.130G9L



Fringe quality 0
SNR 5.6
Int time 475.027
Amp 0.113
Phase -143.5
PFD 9.9e-01
Delays (us)
SBD 0.424026
MBD -0.012516
Fringe rate (Hz)
-0.638064
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
2020:086:112411
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

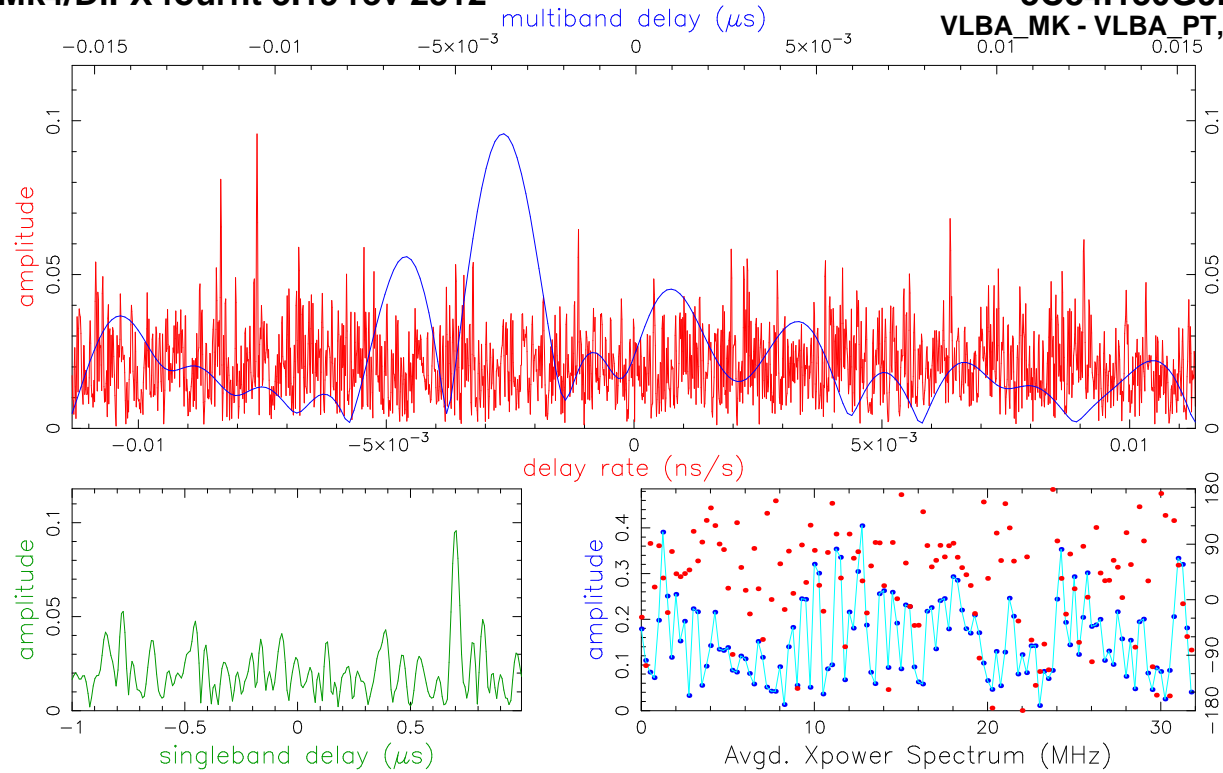


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-140.9	-163.8	-127.3	-130.3	-117.6	-108.2	152.4	-156.8	-83.4	-121.6	-168.9	130.9	-123.0	-155.5	-126.1	-166.4	Phase	-143.5				
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1				
	148.6	70.6	164.0	79.3	177.9	161.2	236.1	242.1	71.1	66.3	83.7	233.2	114.7	149.2	14.0	190.6	Sbd box	183.3				
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					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
m: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					
m: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 amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
Group delay (usec)(sbd)		-7.79915664579E+03															Apriori delay (usec)	-7.79958162953E+03	Resid mbdelay (usec)	-1.25163E-02	+/-	1.9E-04
Sband delay (usec)		-7.79915760403E+03															Apriori clock (usec)	-9.3713360E+00	Resid sbdelay (usec)	4.24026E-01	+/-	3.1E-03
Phase delay (usec)		-7.79958163415E+03															Apriori clockrate (us/s)	-2.1257888E-07	Resid phdelay (usec)	-4.62870E-06	+/-	6.6E-07
Delay rate (us/s)		7.61570850834E-01															Apriori rate (us/s)	7.61578258122E-01	Resid rate (us/s)	-7.40729E-06	+/-	2.4E-09
Total phase (deg)					-347.8												Apriori accel (us/s/s)	2.46247297313E-05	Resid phase (deg)	-143.5	+/-	20.4

ph/seg (deg) 37.7 35.3 Search (2048X64) 0.093 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 46.3 61.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.3 40.8 Inc. seg. avg. 0.118 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 40.2 71.2 Inc. frq. avg. 0.104 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 52.2 el 37.5 pa -95.9 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -5784.979 284.765 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mp..130G9L Output file: /Exps/c192b/v2/1234/No0205/mp.W.265.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, mp
VLBA_MK - VLBA_PT, fgroup W, pol RR

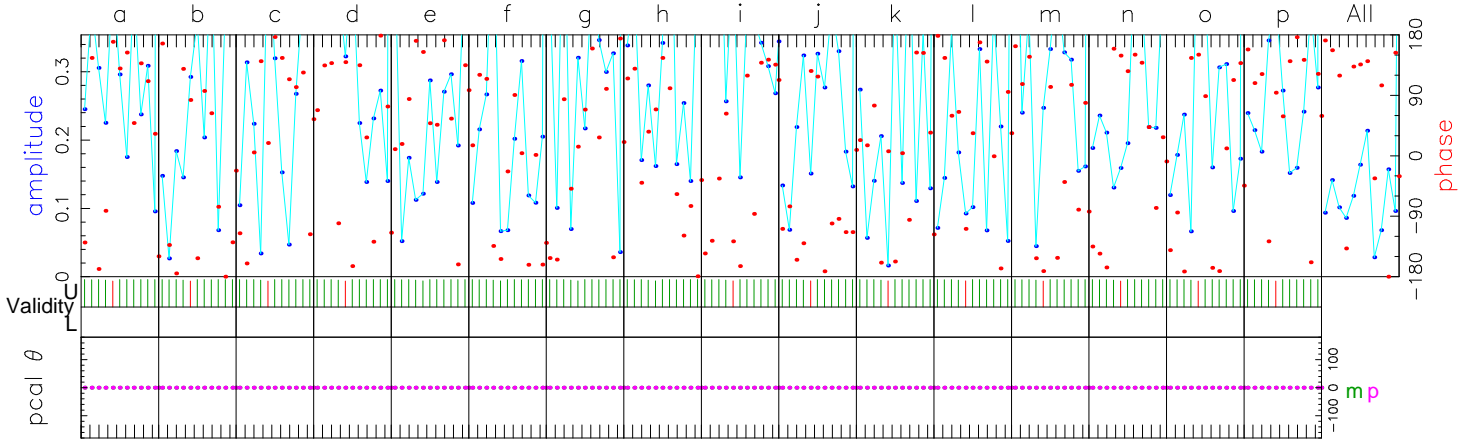


Fringe quality 0

SNR 5.8
Int time 475.029
Amp 0.118
Phase 150.6
PFD 8.1e-01
Delays (us)
SBD 0.699714
MBD -0.003730
Fringe rate (Hz)
-0.656156
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
2020:086:112417
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



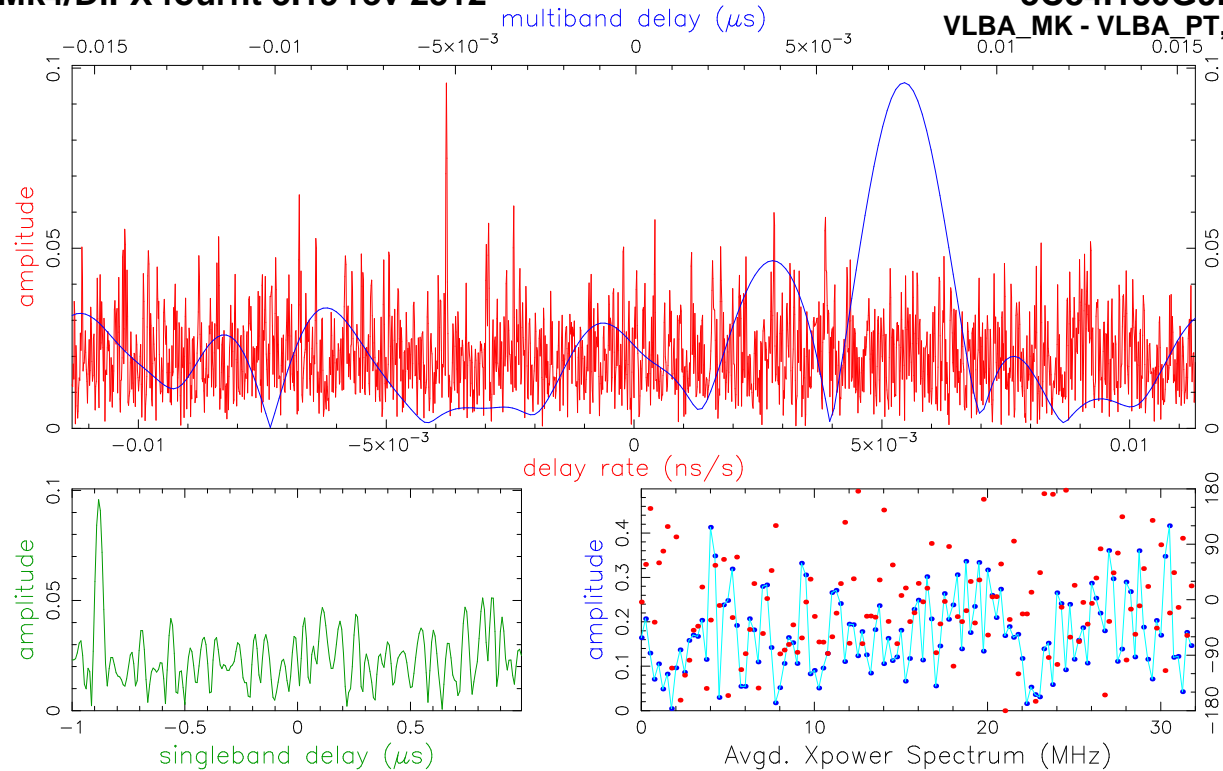
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	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		
m: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		
m: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		
m	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		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-7.79886660994E+03																
Sband delay (usec)		-7.79888191603E+03																
Phase delay (usec)		-7.79958162467E+03																
Delay rate (us/s)		7.61570640807E-01																
Total phase (deg)					-53.7													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: 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) 61.7 34.2
amp/seg (%) 63.8 59.7
ph/frq (deg) 38.7 39.5
amp/frq (%) 47.4 69.0

m: az 52.2 el 37.5 pa -95.9
p: az 43.4 el 79.5 pa -128.2
u,v (fr/asec) -5784.979 284.765

Control file: cf_1234_gmva
Input file: /Exps/c192b/v2/1234/No0205/mp..130G9L
Output file: /Exps/c192b/v2/1234/No0205/mp.W.286.130G9L

simultaneous interpolator

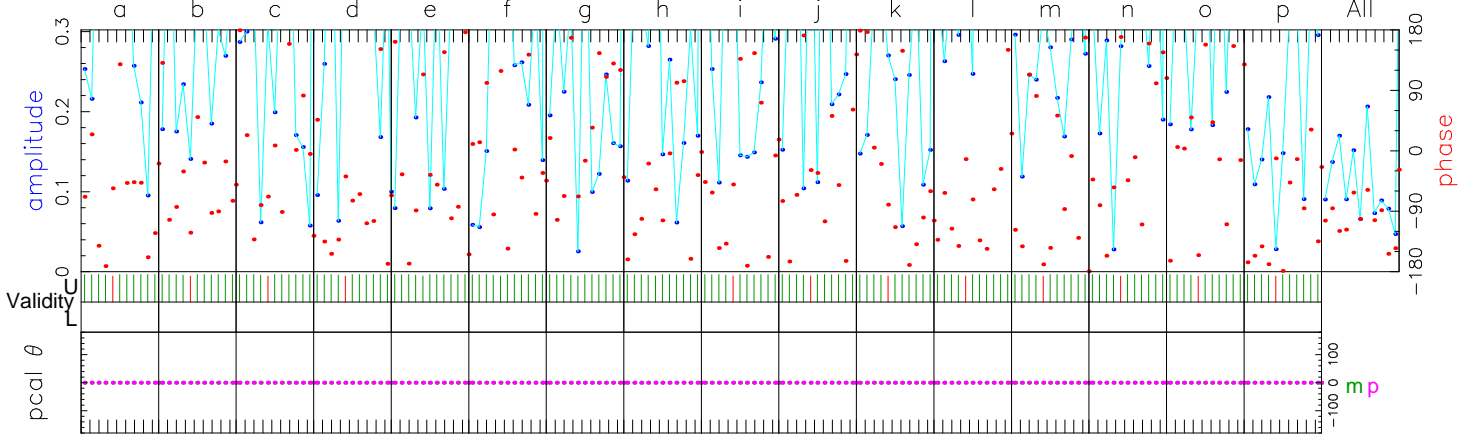


Fringe quality 0

SNR 5.7
Int time 475.029
Amp 0.101
Phase -94.7
PFD 9.2e-01
Delays (us)
SBD -0.881299
MBD 0.007485
Fringe rate (Hz)
-0.326945
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
2020:086:112422
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					
	-98.8	-61.4	-112.6	-107.9	-111.8	-96.9	17.1	-78.9	-90.2	-69.2	-100.9	-99.4	-159.3	-98.8	19.2	-93.6		Phase	-94.7				
	0.2	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1		Ampl.	0.1				
	137.5	141.5	194.0	245.5	125.4	129.6	218.1	30.3	37.3	68.8	144.9	16.3	240.8	169.2	58.2	225.0		Sbd box	16.2				
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					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
m: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					
m: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 amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
Group delay (usec)(sbd)			-7.80044914459E+03															Apriori delay (usec)	-7.79958162953E+03	Resid mbdelay (usec)	7.48493E-03	+/-	1.9E-04
Sband delay (usec)			-7.80046292853E+03															Apriori clock (usec)	-9.3713360E+00	Resid sbdelay (usec)	-8.81299E-01	+/-	3.0E-03
Phase delay (usec)			-7.79958163258E+03															Apriori clockrate (us/s)	-2.1257888E-07	Resid phdelay (usec)	-3.05257E-06	+/-	6.4E-07
Delay rate (us/s)			7.61574462616E-01															Apriori rate (us/s)	7.61578258122E-01	Resid rate (us/s)	-3.79551E-06	+/-	2.3E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.46247297313E-05	Resid phase (deg)	-94.7	+/-	20.0

ph/seg (deg) 30.0 34.6
amp/seg (%) 53.4 60.4
ph/frq (deg) 48.2 40.0
amp/frq (%) 62.6 69.8

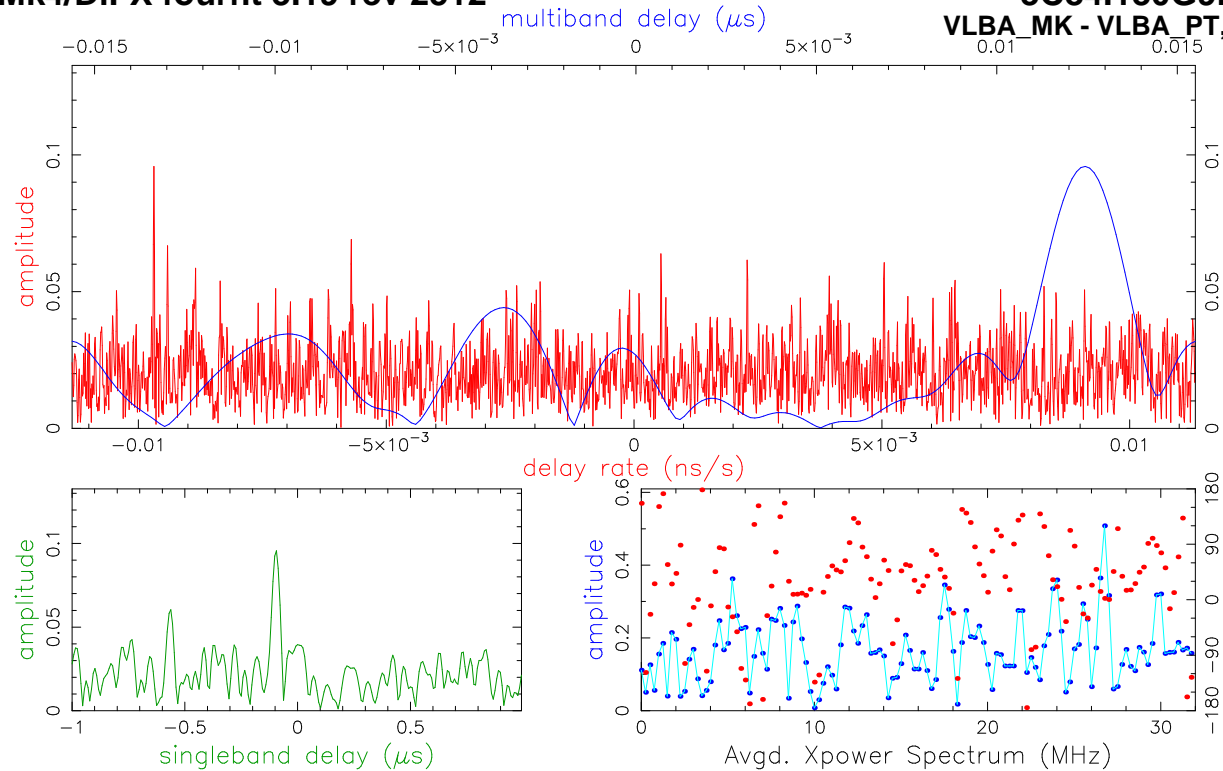
RMS Theor. Amplitude 0.101 +/- 0.018
Search (2048X64) 0.094
Interp. 0.000
Inc. seg. avg. 0.097
Inc. frq. avg. 0.090

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

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

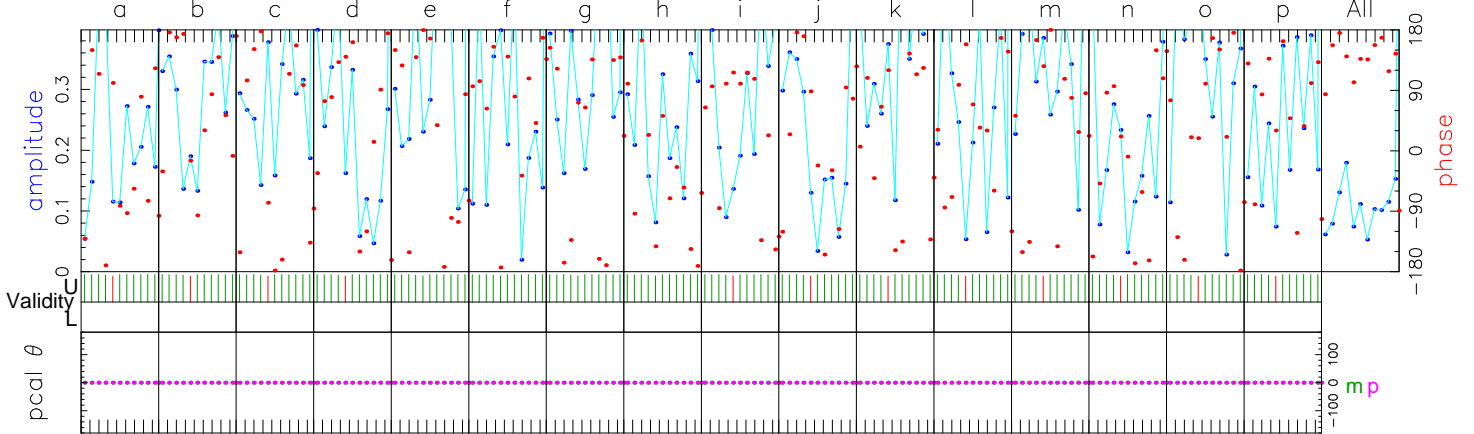
m: az 52.2 el 37.5 pa -95.9 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -5784.979 284.765 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mp..130G9L Output file: /Exps/c192b/v2/1234/No0205/mp.W.306.130G9L



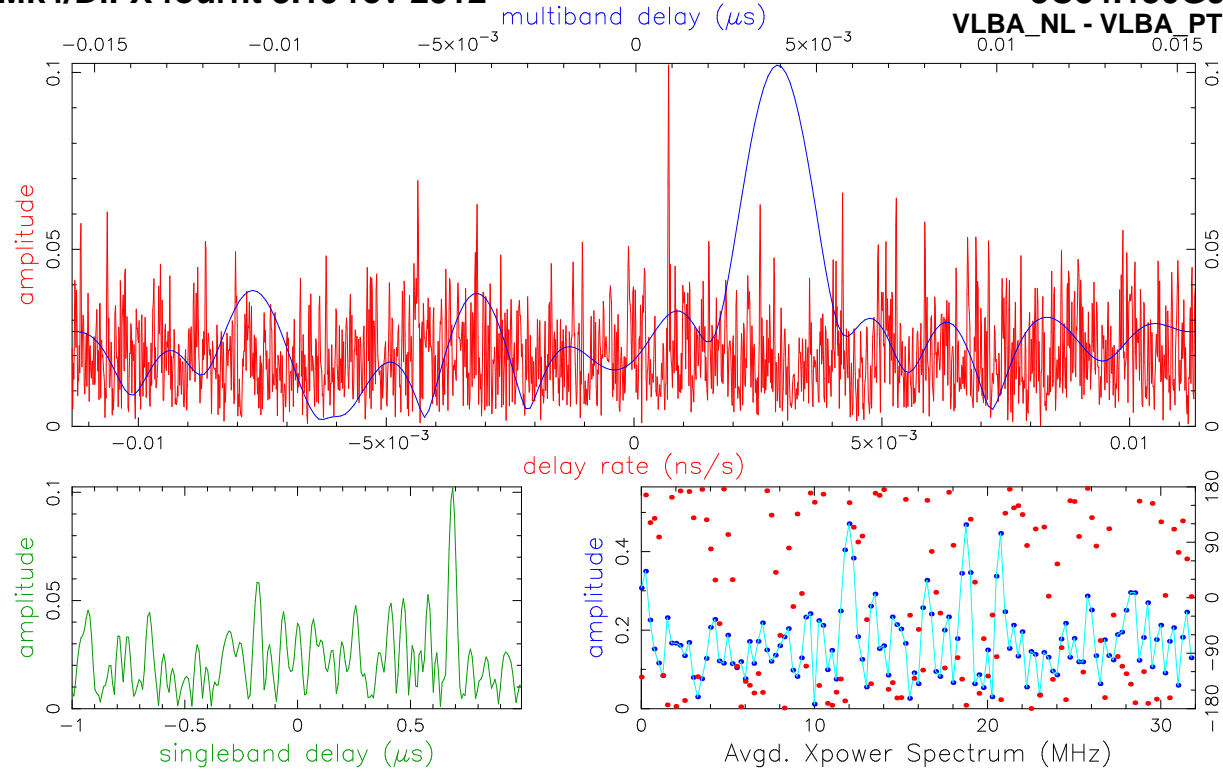
Fringe quality 0
SNR 5.7
Int time 475.028
Amp 0.133
Phase 143.2
PFD 9.1e-01
Delays (us)
SBD -0.095772
MBD 0.012475
Fringe rate (Hz) -0.835628
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112429
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



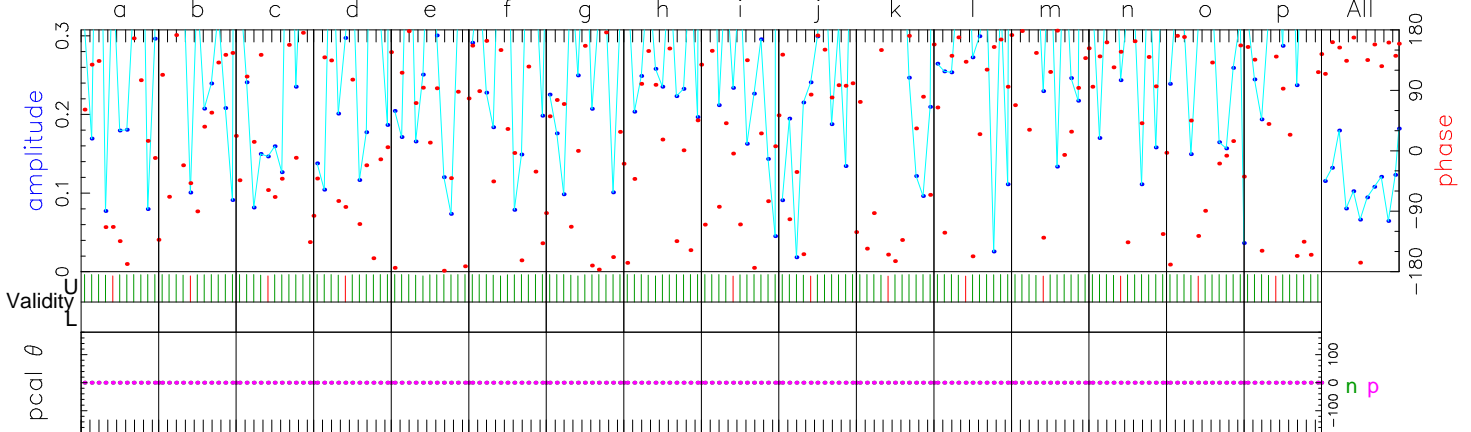
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
177.2	75.0	165.9	125.2	162.7	116.3	162.1	-162.9	108.2	121.8	150.2	-25.7	136.1	145.3	158.4	135.1	143.2	Phase	143.2
0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.1	0.2	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
149.1	12.1	244.9	147.6	45.5	61.7	116.8	209.3	76.0	33.4	96.3	56.3	56.0	56.7	129.8	46.2	46.2	Sbd box	116.7
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m: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	
m: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 amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	-7.79966290456E+03			Apriori delay (usec)			-7.79958162953E+03			Resid mbdelay (usec)			1.24750E-02			+/- 1.9E-04		
Sband delay (usec)	-7.79967740153E+03			Apriori clock (usec)			-9.3713360E+00			Resid sbdelay (usec)			-9.57720E-02			+/- 3.0E-03		
Phase delay (usec)	-7.79958162491E+03			Apriori clockrate (us/s)			-2.1257888E-07			Resid phdelay (usec)			4.61674E-06			+/- 6.4E-07		
Delay rate (us/s)	7.61568557315E-01			Apriori rate (us/s)			7.61578258122E-01			Resid rate (us/s)			-9.70081E-06			+/- 2.3E-09		
Total phase (deg)	-61.1			Apriori accel (us/s/s)			2.46247297313E-05			Resid phase (deg)			143.2			+/- 20.0		

ph/seg (deg) RMS Theor. Amplitude 0.133 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 27.6 34.6 Search (2048X64) 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 49.3 60.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.5 40.0 Inc. seg. avg. 0.125 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 57.9 69.8 Inc. frq. avg. 0.122 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
m: az 52.2 el 37.5 pa -95.9 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -5784.979 284.765 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mp..130G9L Output file: /Exps/c192b/v2/1234/No0205/mp.W.323.130G9L



Fringe quality 0
SNR 6.1
Int time 474.628
Amp 0.103
Phase 148.0
PFD 2.4e-01
Delays (us)
SBD 0.685983
MBD 0.003908
Fringe rate (Hz)
0.060159
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
2020:086:112427
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

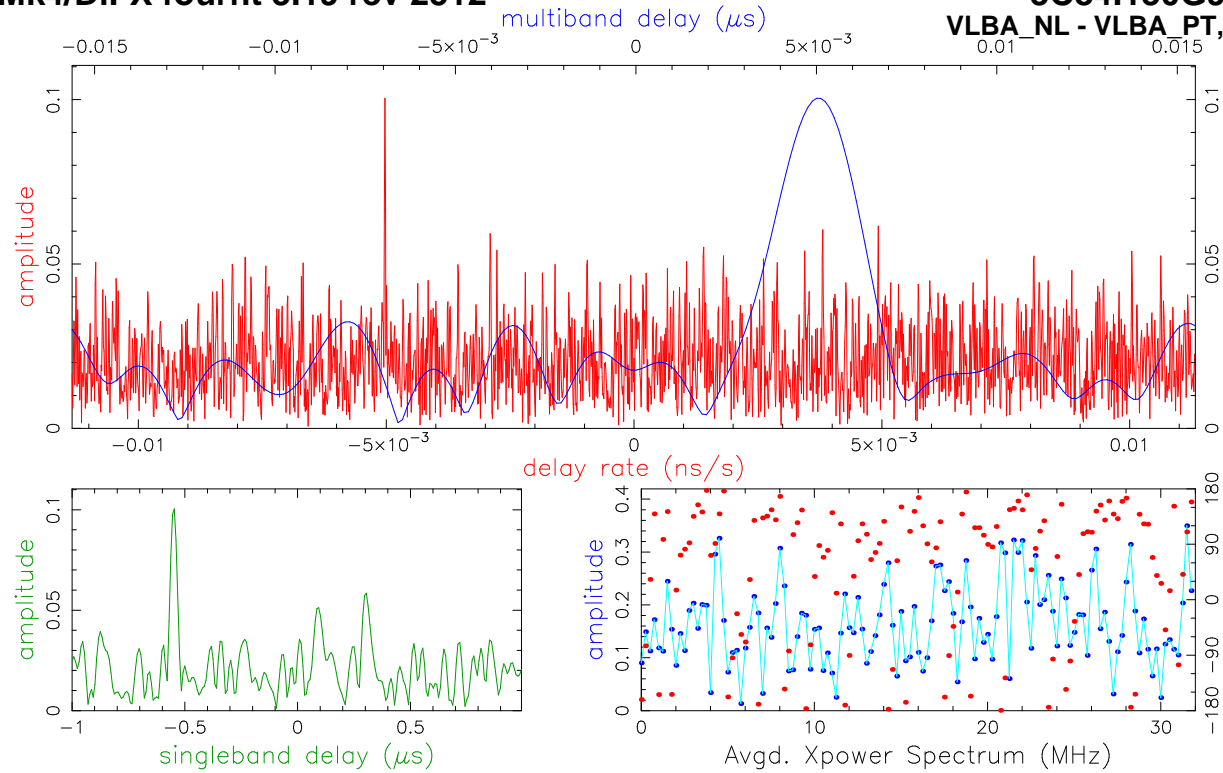
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



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	
139.9	121.5	-157.9	-157.0	124.0	118.9	155.3	149.4	-125.2	127.9	-157.6	141.9	110.4	149.9	-166.8	148.7	Phase	148.0	
0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.1	0.2	Ampl.	0.1	
10.4	155.1	181.6	90.4	23.3	179.0	27.0	156.7	152.8	211.7	218.2	125.6	19.7	217.6	62.1	105.4	Sbd box	216.8	
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		
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
p 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
n: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		
n:p 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
n	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	
Group delay (usec)(sbd)	2.15803114328E+02			Apriori delay (usec)			2.15111706329E+02			Resid mbdelay (usec)			3.90800E-03			+/- 1.8E-04		
Sband delay (usec)	2.15797689329E+02			Apriori clock (usec)			1.4559775E+01			Resid sbdelay (usec)			6.85983E-01			+/- 2.8E-03		
Phase delay (usec)	2.15111711102E+02			Apriori clockrate (us/s)			-6.9663080E-08			Resid phdelay (usec)			4.77350E-06			+/- 6.1E-07		
Delay rate (us/s)	-2.63448075513E-01			Apriori rate (us/s)			-2.63448773905E-01			Resid rate (us/s)			6.98391E-07			+/- 2.2E-09		
Total phase (deg)	286.0			Apriori accel (us/s/s)			6.60196201405E-06			Resid phase (deg)			148.0			+/- 18.8		
ph/seg (deg)	RMS	Theor.	Amplitude			0.103 +/- 0.017			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	21.3	32.5	Search (2048X64)			0.100			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
ph/frq (deg)	31.3	56.8	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016	
amp/frq (%)	40.2	37.6	Inc. seg. avg.			0.093			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011			
	57.9	65.6	Inc. frq. avg.			0.097			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00	
n: az 270.2 el 84.8 pa 84.7	p: az 43.4 el 79.5 pa -128.2			u,v (fr/asec) 2026.399 1119.334												simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c192b/v2/1234/No0205/np..130G9L			Output file: /Exps/c192b/v2/1234/No0205/np.W.316.130G9L														

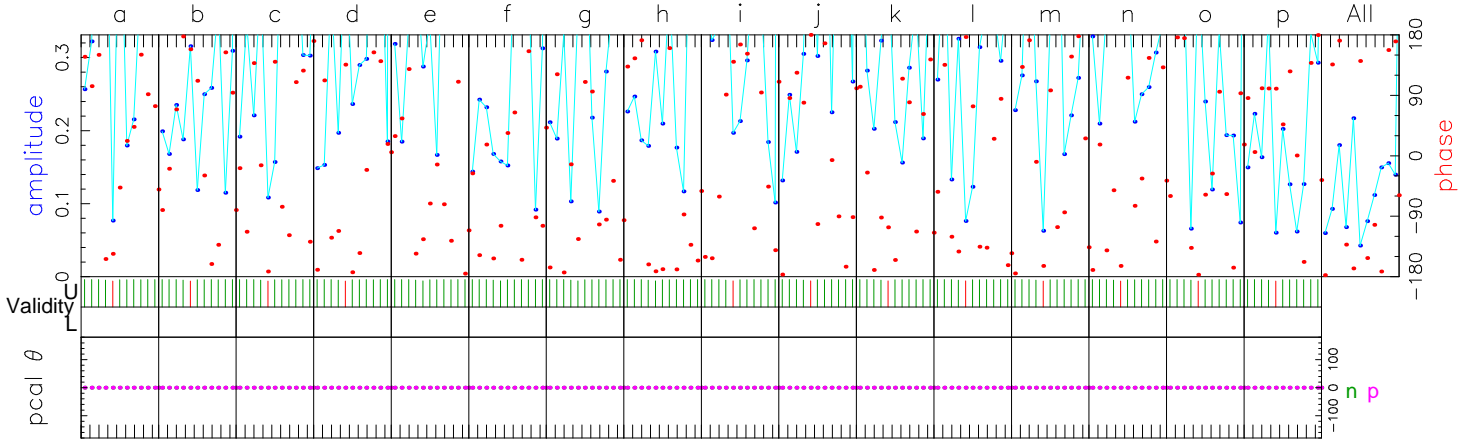
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, np
VLBA_NL - VLBA_PT, fgroup W, pol RR



Fringe quality 0
SNR 6.1
Int time 474.628
Amp 0.110
Phase -176.3
PFD 3.1e-01
Delays (us)
SBD -0.549670
MBD 0.005016
Fringe rate (Hz)
-0.434030
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
2020:086:112432
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



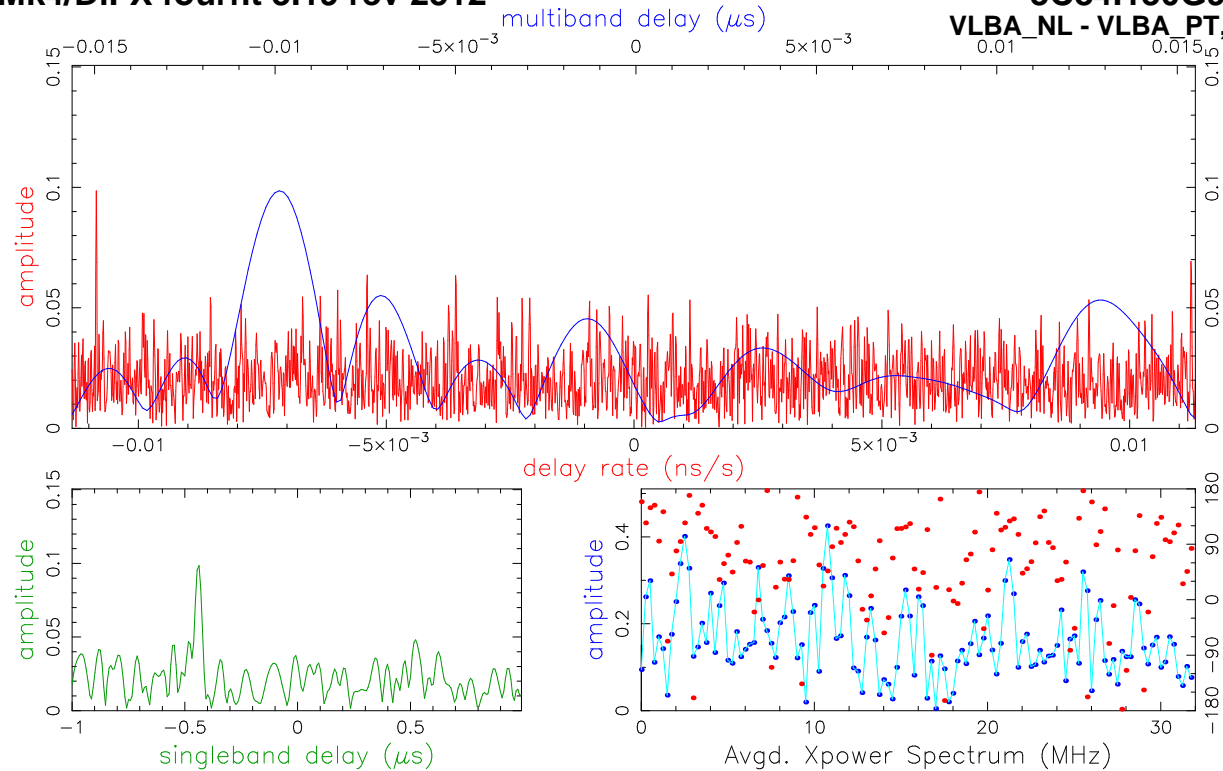
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
121.1	177.8	-131.5	170.1	-136.6	-156.4	-162.8	-168.6	-177.8	-165.6	171.5	-167.4	174.6	-151.8	-157.5	108.7	108.7	Phase	-176.3
0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
112.7	231.4	129.1	33.8	115.7	204.6	82.5	59.0	90.9	168.0	140.0	229.0	84.9	21.3	214.2	144.0	144.0	Sbd box	58.6
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	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n: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	
n:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	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	
Group delay (usec)(sbd)	2.14554221923E+02			Apriori delay (usec)			2.15111706329E+02			Resid mbdelay (usec)			5.01559E-03			+/- 1.8E-04		
Sband delay (usec)	2.14562036829E+02			Apriori clock (usec)			1.4559775E+01			Resid sbdelay (usec)			-5.49670E-01			+/- 2.8E-03		
Phase delay (usec)	2.15111700643E+02			Apriori clockrate (us/s)			-6.9663080E-08			Resid phdelay (usec)			-5.68589E-06			+/- 6.1E-07		
Delay rate (us/s)	-2.63453812563E-01			Apriori rate (us/s)			-2.63448773905E-01			Resid rate (us/s)			-5.03866E-06			+/- 2.2E-09		
Total phase (deg)	-38.4			Apriori accel (us/s/s)			6.60196201405E-06			Resid phase (deg)			-176.3			+/- 18.9		

ph/seg (deg) 35.1 32.8 Amplitude 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.4 57.2 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.1 37.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.2 66.0 Inc. seg. avg. 0.110 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.103 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 270.2 el 84.8 pa 84.7 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 2026.399 1119.334 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/np..130G9L Output file: /Exps/c192b/v2/1234/No0205/np.W.334.130G9L

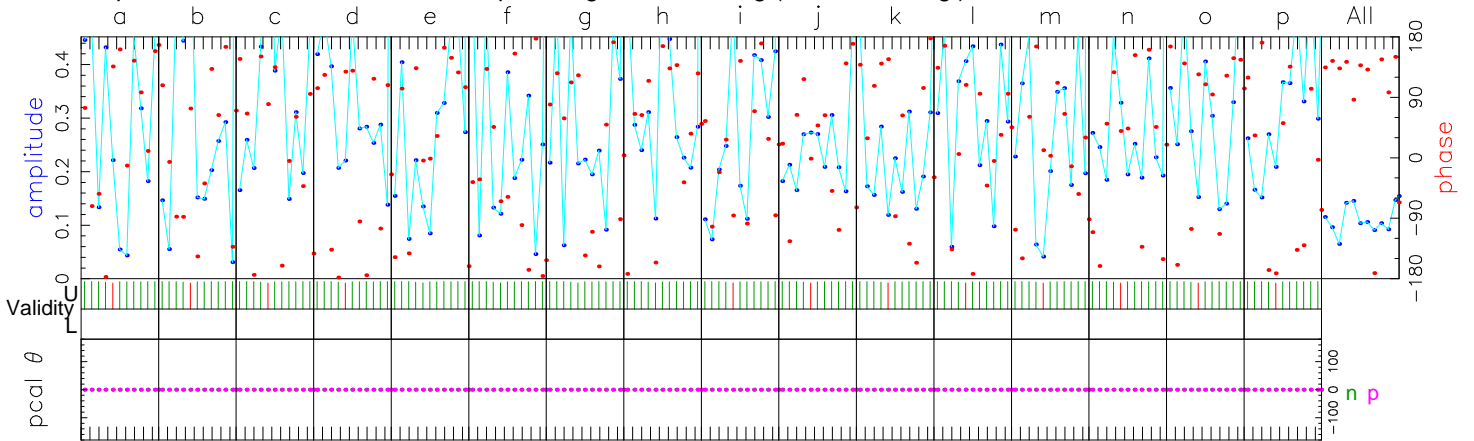
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, np
VLBA_NL - VLBA_PT, fgroup W, pol LR



Fringe quality 0
SNR 5.9
Int time 474.629
Amp 0.151
Phase 135.1
PFD 5.1e-01
Delays (us)
SBD -0.440185
MBD -0.009891
Fringe rate (Hz)
-0.936414
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
2020:086:112439
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

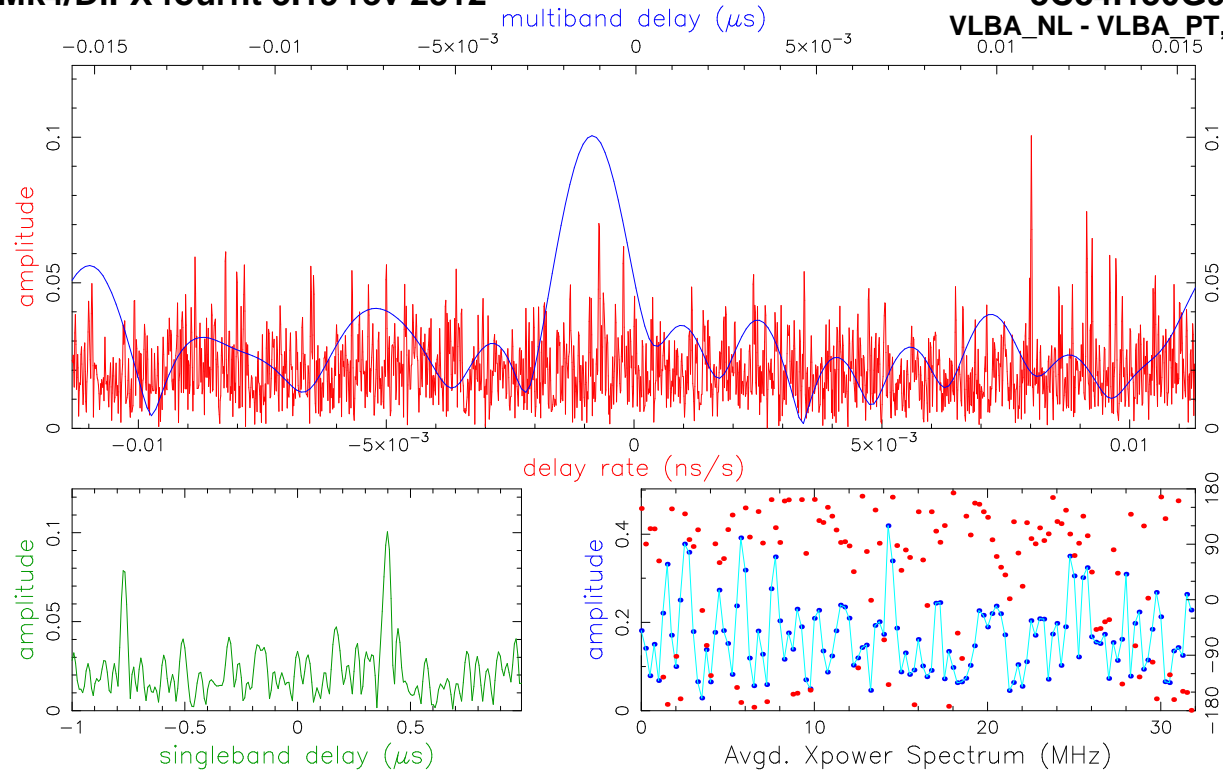


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	139.8	142.0	109.4	155.3	125.6	-119.5	153.4	133.0	-32.7	75.5	151.9	102.0	24.4	139.4	147.0	145.3	Phase	135.1
	0.2	0.0	0.3	0.3	0.3	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.4	0.2	0.2	Ampl.	0.1
	204.7	100.8	78.1	97.8	222.4	180.9	185.3	147.0	208.6	209.6	193.8	65.4	226.5	203.2	47.5	131.3	Sbd box	72.7
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	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n: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	
n: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 amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	2.14664314973E+02			Apriori delay (usec)			2.15111706329E+02			Resid mbdelay (usec)			-9.89136E-03			+/- 1.8E-04		
Sband delay (usec)	2.14671521829E+02			Apriori clock (usec)			1.4559775E+01			Resid sbdelay (usec)			-4.40185E-01			+/- 2.9E-03		
Phase delay (usec)	2.15111710685E+02			Apriori clockrate (us/s)			-6.9663080E-08			Resid phdelay (usec)			4.35616E-06			+/- 6.2E-07		
Delay rate (us/s)	-2.63459644745E-01			Apriori rate (us/s)			-2.63448773905E-01			Resid rate (us/s)			-1.08708E-05			+/- 2.2E-09		
Total phase (deg)	273.0			Apriori accel (us/s/s)			6.60196201405E-06			Resid phase (deg)			135.1			+/- 19.3		

ph/seg (deg) 26.6 33.4 Search (2048X64) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 26.5 58.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 64.5 38.5 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 69.2 67.3 Inc. frq. avg. 0.148 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
n: az 270.2 el 84.8 pa 84.7 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 2026.399 1119.334 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/np..130G9L Output file: /Exps/c192b/v2/1234/No0205/np.W.357.130G9L

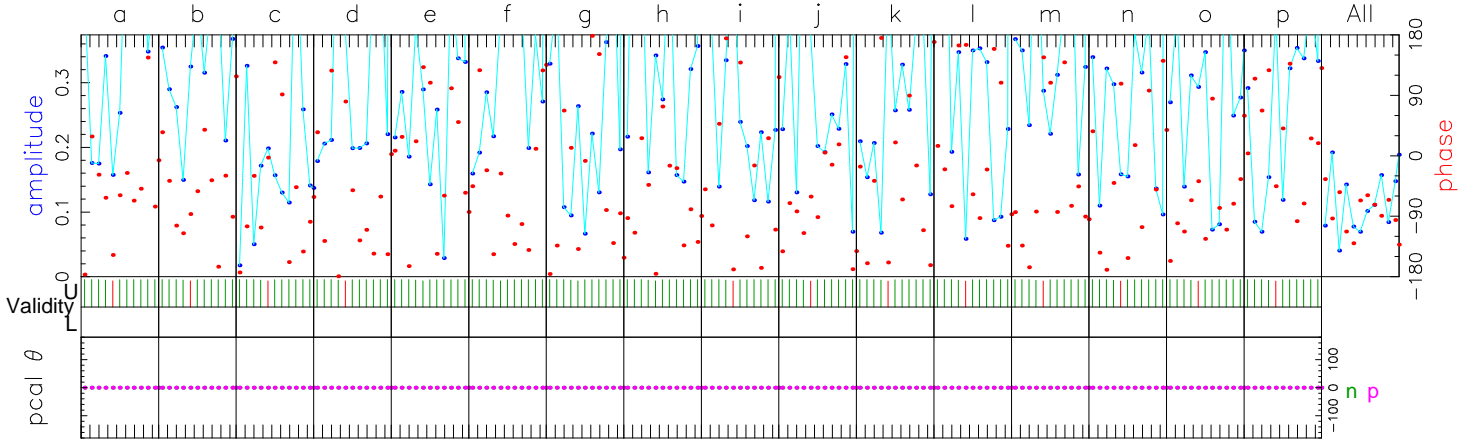
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, np
VLBA_NL - VLBA_PT, fgroup W, pol RL



Fringe quality 0
SNR 6.0
Int time 474.627
Amp 0.125
Phase -84.4
PFD 4.2e-01
Delays (us)
SBD 0.398179
MBD -0.001215
Fringe rate (Hz)
0.691195
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
2020:086:112445
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

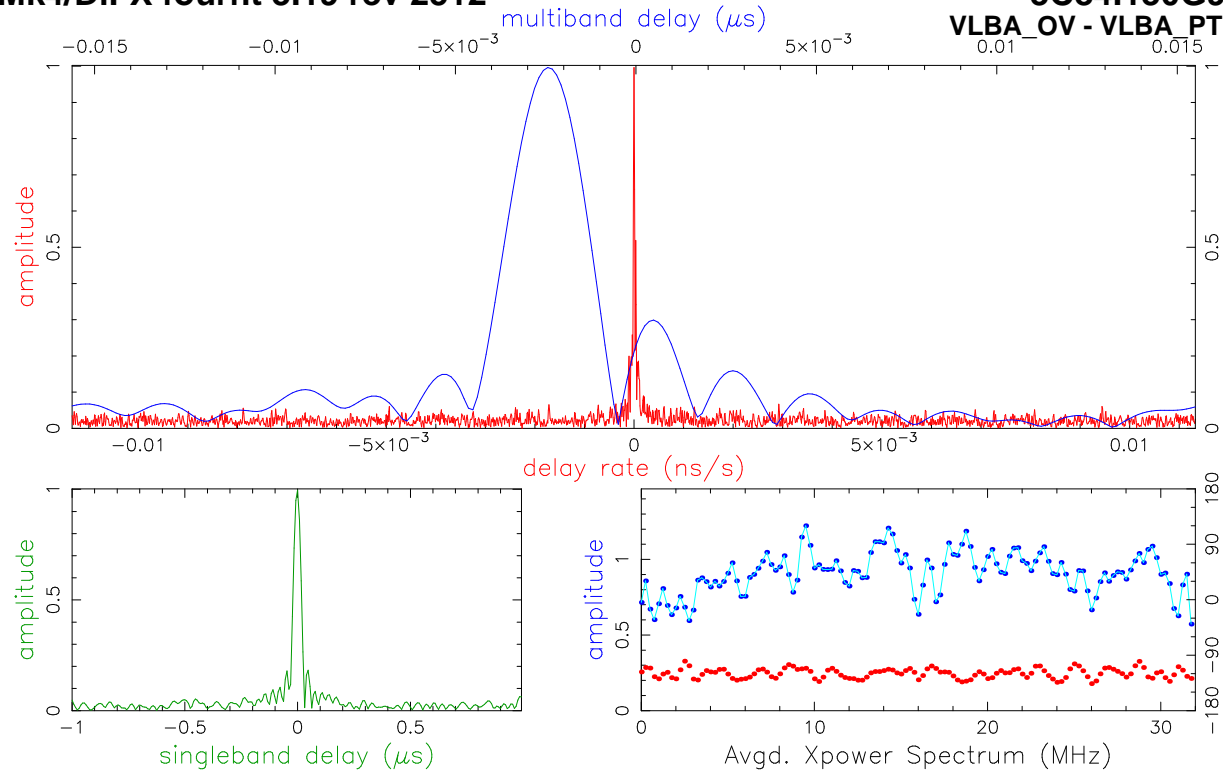


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-63.0	-58.2	-88.6	-139.4	56.2	-86.1	-134.2	-75.6	-136.7	-84.1	-75.1	-47.9	-108.5	38.2	-92.1	-2.5	Phase	-84.4
	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.0	0.3	0.1	Ampl.	0.1
	181.8	71.5	195.0	100.2	132.9	244.2	177.9	93.7	18.5	30.0	223.1	138.8	48.3	119.6	178.7	68.6	Sbd box	180.0
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	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n: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	
n: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 amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	2.15516741727E+02			Apriori delay (usec)			2.15111706329E+02			Resid mbdelay (usec)			-1.21460E-03			+/- 1.8E-04		
Sband delay (usec)	2.15509885329E+02			Apriori clock (usec)			1.4559775E+01			Resid sbdelay (usec)			3.98179E-01			+/- 2.9E-03		
Phase delay (usec)	2.15111703608E+02			Apriori clockrate (us/s)			-6.9663080E-08			Resid phdelay (usec)			-2.72090E-06			+/- 6.2E-07		
Delay rate (us/s)	-2.63440749810E-01			Apriori rate (us/s)			-2.63448773905E-01			Resid rate (us/s)			8.02409E-06			+/- 2.2E-09		
Total phase (deg)	53.6			Apriori accel (us/s/s)			6.60196201405E-06			Resid phase (deg)			-84.4			+/- 19.1		

ph/seg (deg) RMS Theor. Amplitude 0.125 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.2 57.8 Search (2048X64) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.6 38.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.9 66.8 Inc. seg. avg. 0.117 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 n: az 270.2 el 84.8 pa 84.7 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 2026.399 1119.334 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/np..130G9L Output file: /Exps/c192b/v2/1234/No0205/np.W.377.130G9L simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, op
VLBA_OV - VLBA_PT, fgroup W, pol LL

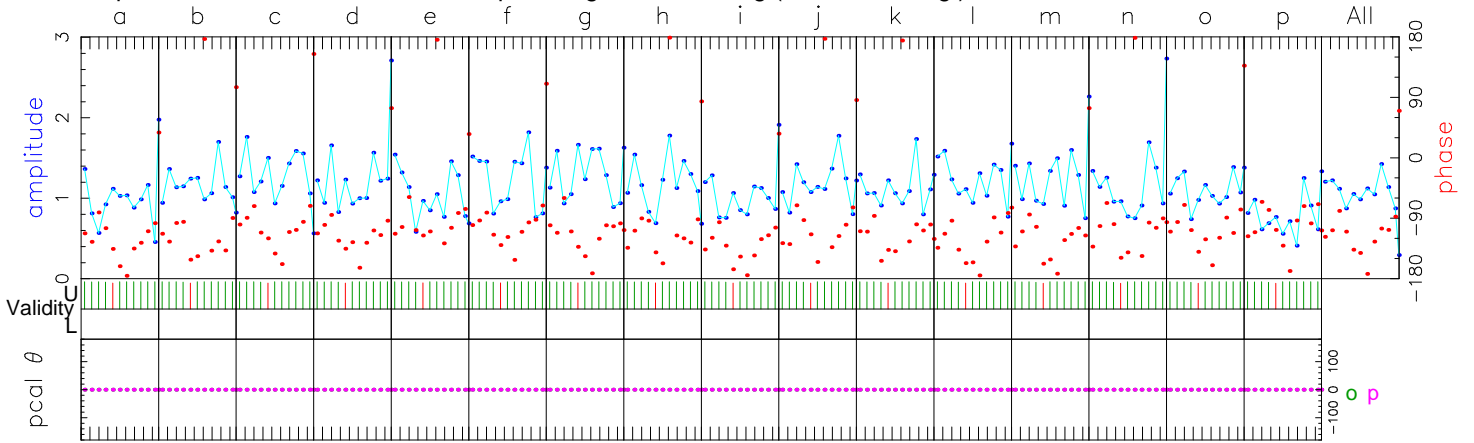


Fringe quality 7

SNR 59.6
Int time 473.150
Amp 1.002
Phase -116.6
PFD 0.0e+00
Delays (us)
SBD -0.001948
MBD -0.002442
Fringe rate (Hz)
-0.000257
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

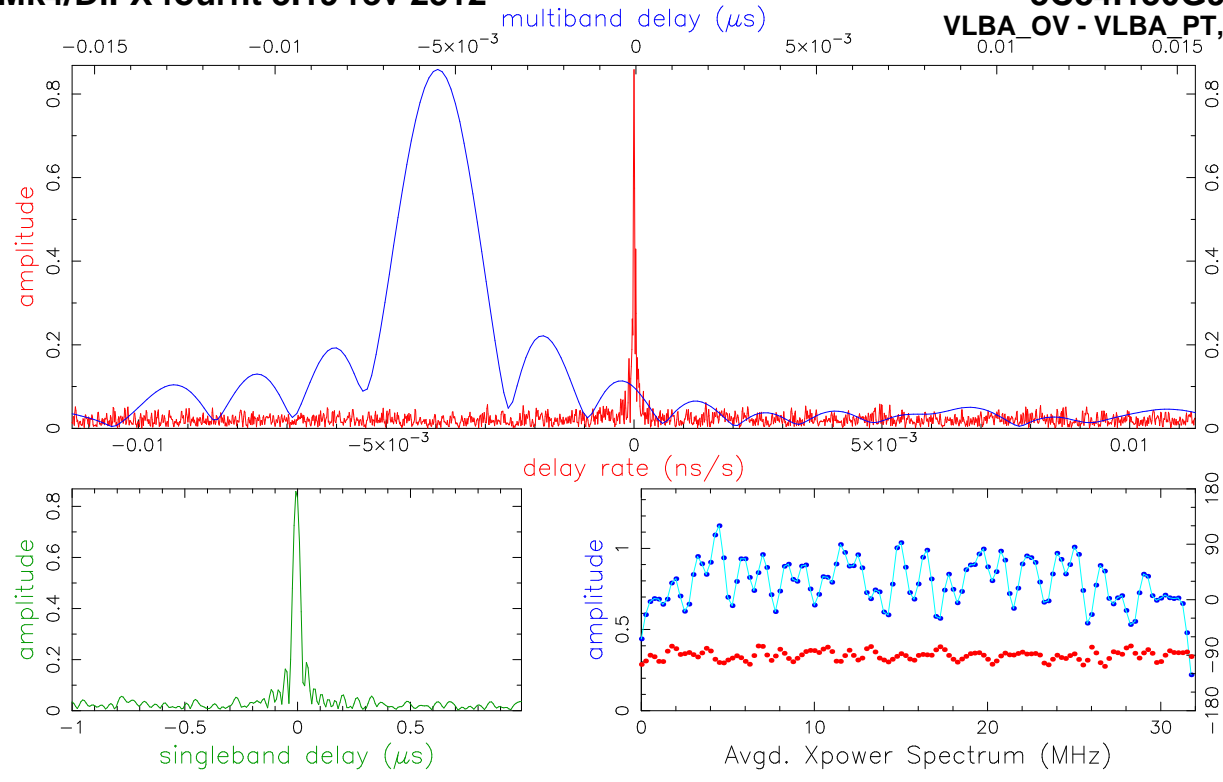
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112428
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



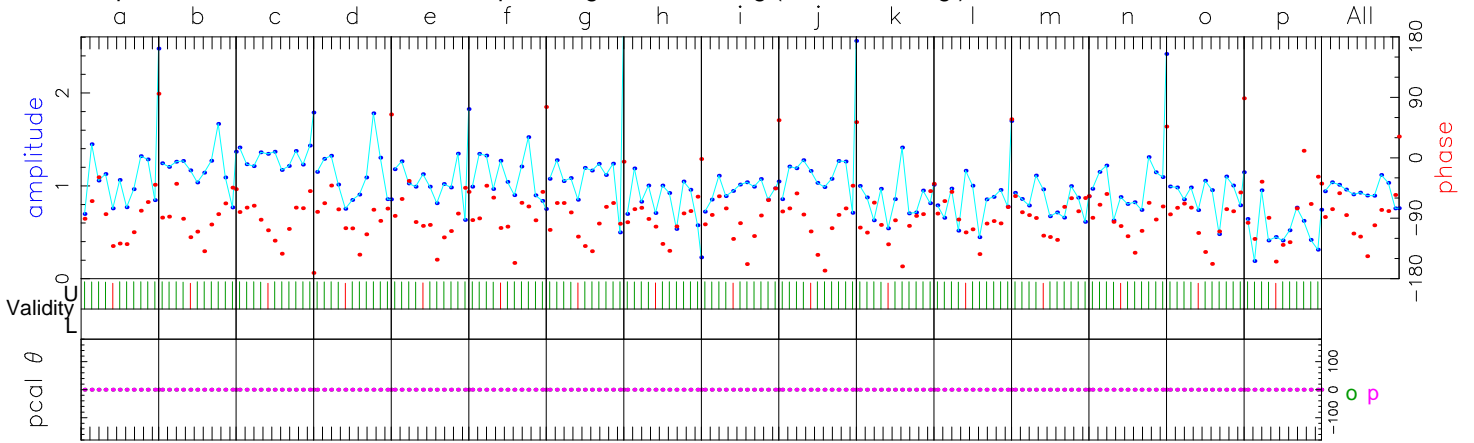
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-126.4	-127.2	-105.7	-114.5	-105.1	-105.2	-117.6	-125.3	-132.0	-116.8	-119.5	-124.0	-124.3	-113.5	-107.6	-98.9	Phase	-116.6				
	0.8	1.1	1.2	1.1	0.9	1.1	1.1	1.1	0.9	1.0	1.0	1.1	1.1	1.0	1.0	0.7	Ampl.	1.0				
	128.8	128.9	128.9	128.7	129.0	128.7	128.8	128.6	128.8	128.9	128.6	128.8	128.7	128.6	128.9	128.5	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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
o: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					
o: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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
o	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)			-4.16917536940E+02														Apriori delay (usec)	-4.16915094908E+02	Resid mbdelay (usec)	-2.44203E-03	+/-	1.8E-05
Sband delay (usec)			-4.16917042408E+02														Apriori clock (usec)	4.6987467E+00	Resid sbdelay (usec)	-1.94750E-03	+/-	2.9E-04
Phase delay (usec)			-4.16915098670E+02														Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-3.76142E-06	+/-	6.2E-08
Delay rate (us/s)			1.53924875535E-01														Apriori rate (us/s)	1.53924878514E-01	Resid rate (us/s)	-2.97878E-09	+/-	2.2E-10
Total phase (deg)																	Apriori accel (us/s/s)	5.34022509176E-06	Resid phase (deg)	-116.6	+/-	1.9

ph/seg (deg) 26.5 3.3 Search (2048X64) 1.002 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 18.3 5.8 Interp. 0.970 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.1 3.8 Inc. seg. avg. 1.093 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 12.5 6.7 Inc. frq. avg. 1.007 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 68.0 el 74.1 pa -98.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -1169.759 657.623 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/op..130G9L Output file: /Exps/c192b/v2/1234/No0205/op.W.321.130G9L



Fringe quality 6
SNR 51.7
Int time 473.152
Amp 0.868
Phase -88.9
PFD 0.0e+00
Delays (us)
SBD -0.005110
MBD -0.005483
Fringe rate (Hz)
-0.000364
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
2020:086:112432
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				
	-83.2	-88.7	-89.7	-85.5	-89.0	-82.0	-93.6	-93.6	-90.3	-90.8	-101.4	-90.8	-84.6	-87.0	-91.6	-76.7	Phase	-88.9				
	0.9	1.1	1.2	1.0	0.9	1.0	1.0	0.8	0.8	0.9	0.7	0.8	0.8	0.9	0.8	0.4	Ampl.	0.9				
	128.2	128.1	128.4	128.5	128.3	128.4	128.5	128.3	128.2	128.4	128.6	128.2	128.6	128.1	128.5	128.5	Sbd box	128.3				
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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
o: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					
o: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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.16920577502E+02														Apriori delay (usec)	-4.16915094908E+02	Resid mbdelay (usec)	-5.48259E-03	+/-	2.1E-05
Sband delay (usec)			-4.16920204408E+02														Apriori clock (usec)	4.6987467E+00	Resid sbdelay (usec)	-5.10950E-03	+/-	3.3E-04
Phase delay (usec)			-4.16915097775E+02														Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-2.86717E-06	+/-	7.2E-08
Delay rate (us/s)			1.53924874288E-01														Apriori rate (us/s)	1.53924878514E-01	Resid rate (us/s)	-4.22584E-09	+/-	2.6E-10
Total phase (deg)																	Apriori accel (us/s/s)	5.34022509176E-06	Resid phase (deg)	-88.9	+/-	2.2

ph/seg (deg) 27.1 3.8
amp/seg (%) 14.4 6.7
ph/frq (deg) 5.9 4.4
amp/frq (%) 20.2 7.7

RMS Theor. Amplitude 0.868 +/- 0.017
Search (2048X64) 0.809
Interp. 0.000
Inc. seg. avg. 0.951
Inc. frq. avg. 0.859

o: az 68.0 el 74.1 pa -98.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -1169.759 657.623

Group delay (usec)(sbd) -4.16920577502E+02 Apriori delay (usec) -4.16915094908E+02 Resid mbdelay (usec) -5.48259E-03 +/- 2.1E-05
Sband delay (usec) -4.16920204408E+02 Apriori clock (usec) 4.6987467E+00 Resid sbdelay (usec) -5.10950E-03 +/- 3.3E-04
Phase delay (usec) -4.16915097775E+02 Apriori clockrate (us/s) -2.0290559E-07 Resid phdelay (usec) -2.86717E-06 +/- 7.2E-08
Delay rate (us/s) 1.53924874288E-01 Apriori rate (us/s) 1.53924878514E-01 Resid rate (us/s) -4.22584E-09 +/- 2.6E-10
Total phase (deg) -188.1 Apriori accel (us/s/s) 5.34022509176E-06 Resid phase (deg) -88.9 +/- 2.2

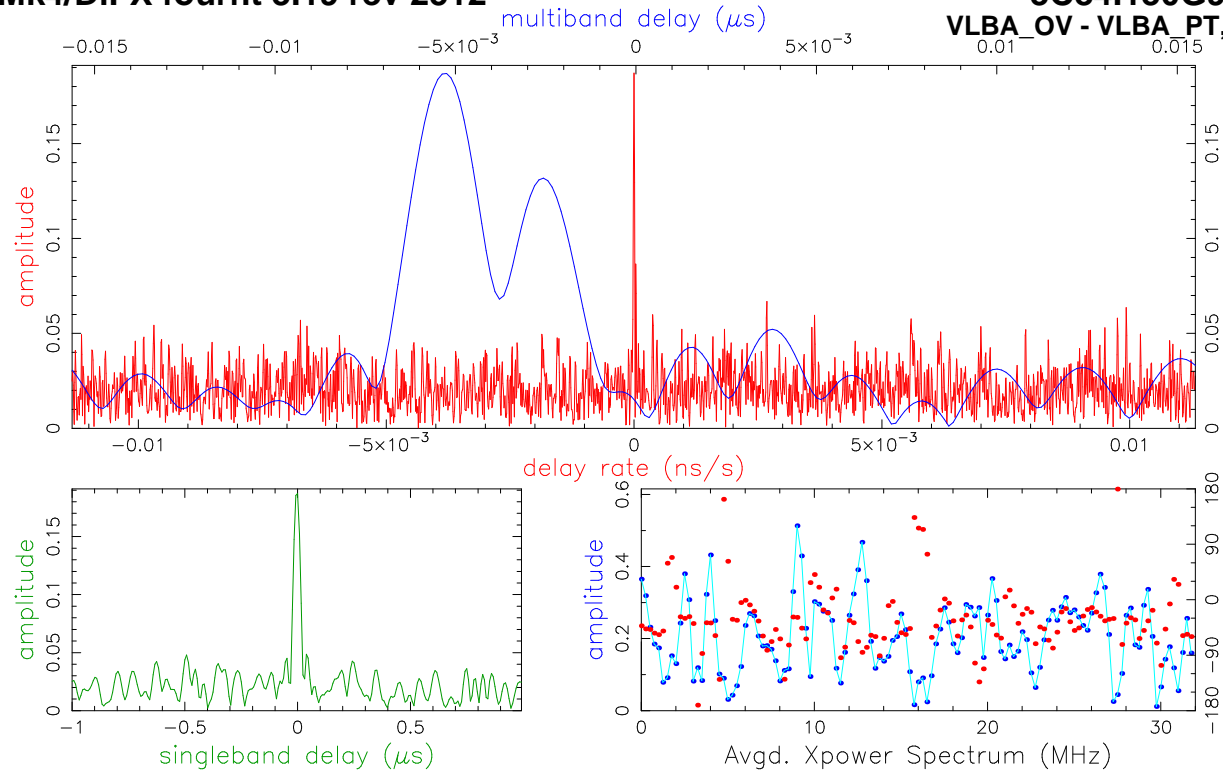
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC)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

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/op..130G9L Output file: /Exps/c192b/v2/1234/No0205/op.W.332.130G9L

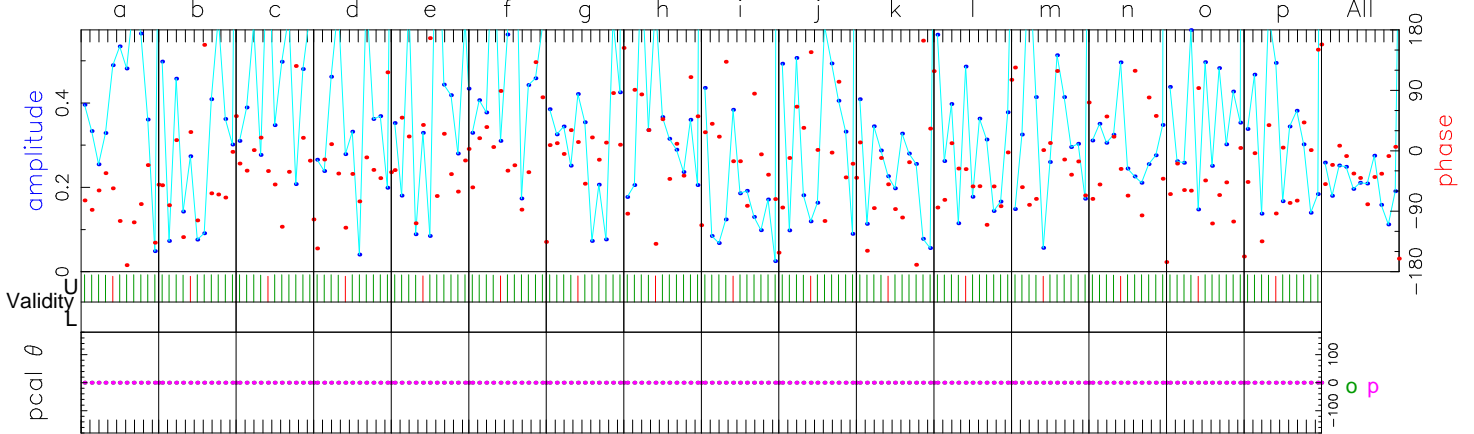
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, op
VLBA_OV - VLBA_PT, fgroup W, pol LR



Fringe quality 9
SNR 11.4
Int time 473.151
Amp 0.191
Phase -28.4
PFD 2.9e-21
Delays (us)
SBD -0.003569
MBD -0.005289
Fringe rate (Hz)
-0.000359
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
2020:086:112438
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

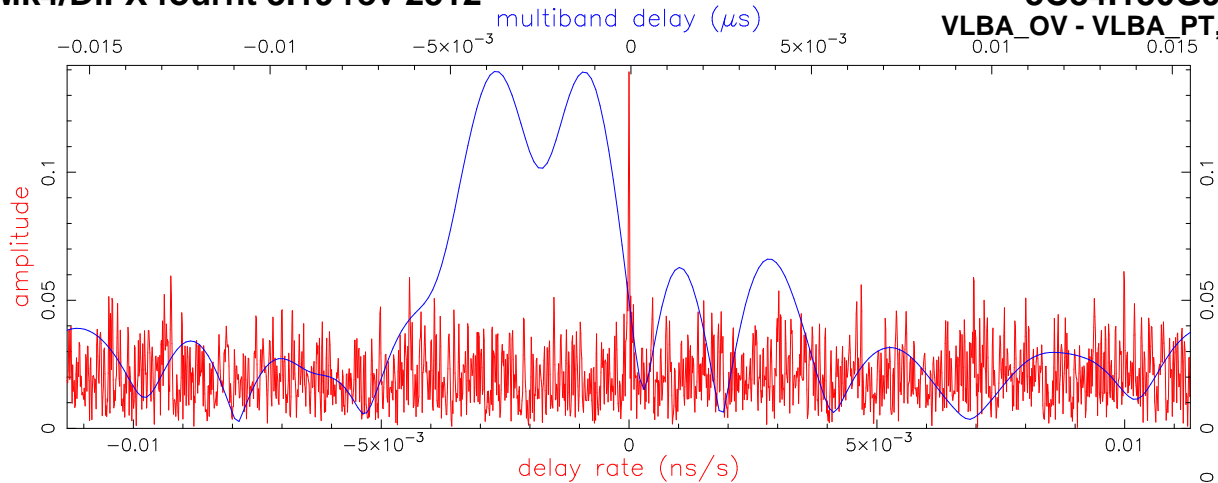


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-83.2	-43.2	-22.8	-29.0	-18.2	4.5	16.2	48.0	-0.4	-16.0	-58.3	-49.0	-40.9	-16.0	-58.2	-28.5	Phase	-28.4				
	0.3	0.2	0.4	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.2	Ampl.	0.2				
	128.0	42.2	128.4	128.6	128.9	128.6	128.9	235.3	103.5	126.7	88.5	128.3	127.7	76.9	129.4	128.4	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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
o: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					
o: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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.16920383721E+02														Apriori delay (usec)	-4.16915094908E+02	Resid mbdelay (usec)	-5.28881E-03	+/-	9.5E-05
Sband delay (usec)			-4.16918663408E+02														Apriori clock (usec)	4.6987467E+00	Resid sbdelay (usec)	-3.56850E-03	+/-	1.5E-03
Phase delay (usec)			-4.16915095824E+02														Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-9.15752E-07	+/-	3.3E-07
Delay rate (us/s)			1.53924874342E-01														Apriori rate (us/s)	1.53924878514E-01	Resid rate (us/s)	-4.17199E-09	+/-	1.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	5.34022509176E-06	Resid phase (deg)	-28.4	+/-	10.1

ph/seg (deg) RMS Theor. Amplitude 0.191 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 31.4 30.5 Search (2048X64) 0.178 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.5 20.2 Inc. seg. avg. 0.201 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.7 35.2 Inc. frq. avg. 0.203 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 68.0 el 74.1 pa -98.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -1169.759 657.623 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/op..130G9L Output file: /Exps/c192b/v2/1234/No0205/op.W.353.130G9L

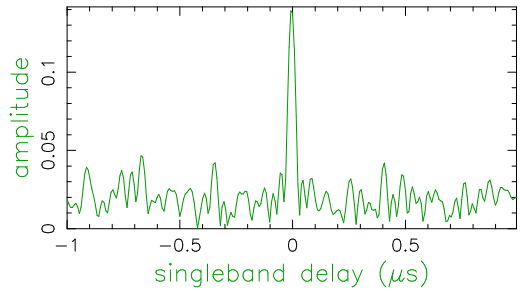
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, op
VLBA_OV - VLBA_PT, fgroup W, pol RL

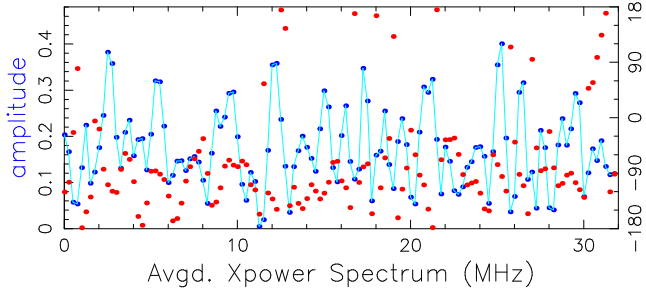


Fringe quality 9

SNR 8.4
Int time 473.151
Amp 0.142
Phase -127.7
PFD 1.3e-08
Delays (us)
SBD -0.004329
MBD -0.001307
Fringe rate (Hz)
-0.000274
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

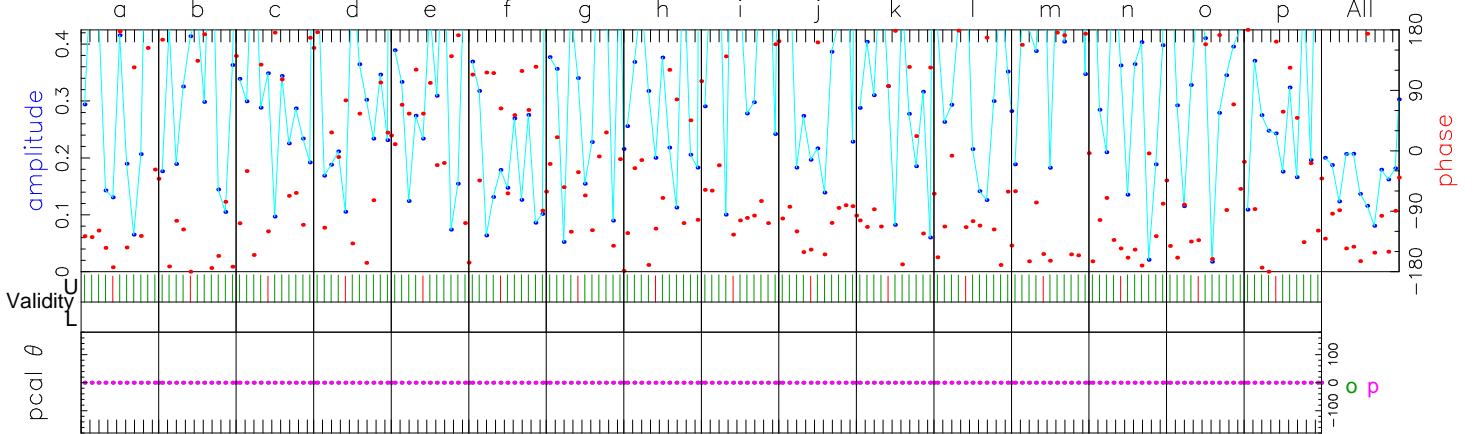


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112444
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
	-145.4	-172.6	-133.7	164.1	30.4	67.5	-23.0	-80.0	-89.4	-103.6	-134.8	-129.0	-161.7	-134.3	-139.2	-146.4	Phase	-127.7
	0.2	0.3	0.1	0.0	0.1	0.1	0.2	0.1	0.3	0.3	0.2	0.2	0.4	0.3	0.2	0.1	Ampl.	0.2
	127.3	128.7	176.9	43.9	42.9	116.9	175.2	182.1	128.8	128.4	130.0	108.0	128.2	128.1	129.7	123.8	Sbd box	128.4
UL	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o: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	
o: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 amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

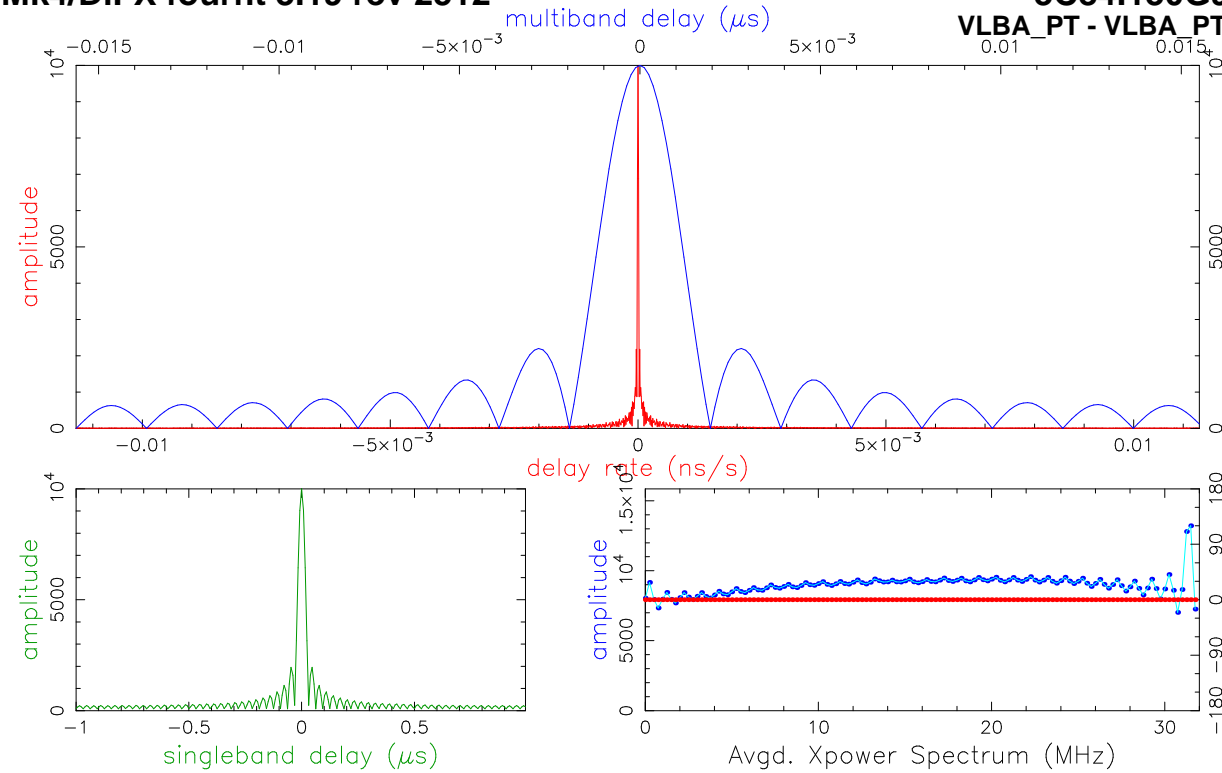
Group delay (usec)(sbd) -4.16916401783E+02 Apriori delay (usec) -4.16915094908E+02 Resid mbdelay (usec) -1.30688E-03 +/- 1.3E-04
 Sband delay (usec) -4.16919423408E+02 Apriori clock (usec) 4.6987467E+00 Resid sbdelay (usec) -4.32850E-03 +/- 2.0E-03
 Phase delay (usec) -4.16915099026E+02 Apriori clockrate (us/s) -2.0290559E-07 Resid phdelay (usec) -4.11816E-06 +/- 4.4E-07
 Delay rate (us/s) 1.53924875337E-01 Apriori rate (us/s) 1.53924878514E-01 Resid rate (us/s) -3.17717E-09 +/- 1.6E-09
 Total phase (deg) -226.8 Apriori accel (us/s/s) 5.34022509176E-06 Resid phase (deg) -127.7 +/- 13.6

RMS Theor. Amplitude 0.142 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 32.7 23.5 Search (2048X64) 0.134 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 32.1 41.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 73.8 27.2 Inc. seg. avg. 0.149 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 77.2 47.5 Inc. frq. avg. 0.180 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 68.0 el 74.1 pa -98.6 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) -1169.759 657.623 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/op..130G9L Output file: /Exps/c192b/v2/1234/No0205/op.W.372.130G9L

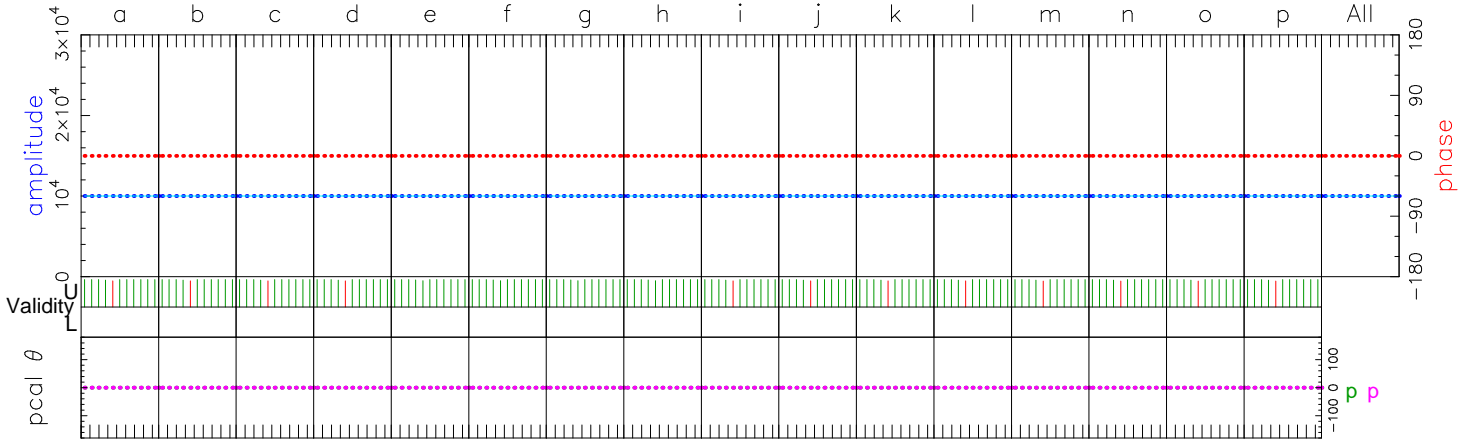
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, pp
VLBA_PT - VLBA_PT, fgroup W, pol LL



Fringe quality 9
SNR 596842.1
Int time 476.345
Amp 10000.018
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
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112428
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.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
p: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: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 amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
p	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	

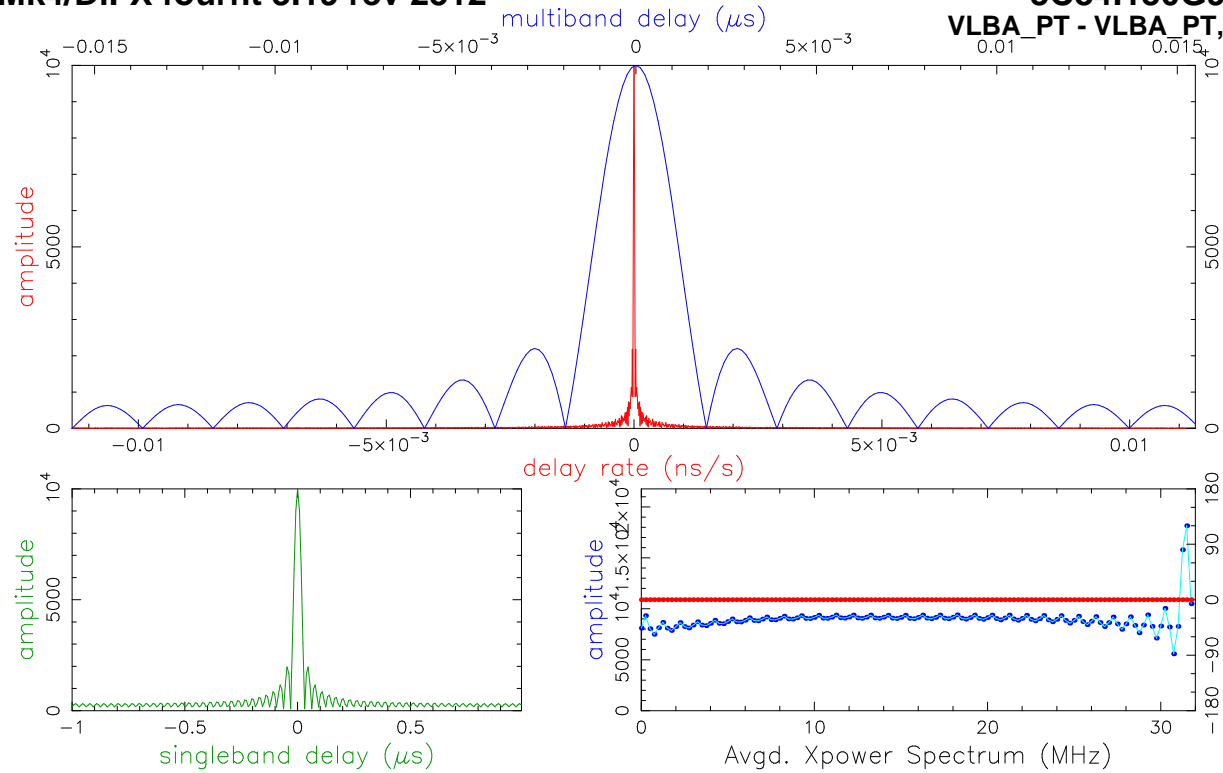
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.8E-09
Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.9E-08
Phase delay (usec) 4.03854685330E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 4.03855E-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 10000.018 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.018 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.018 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
p: az 43.4 el 79.5 pa -128.2 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/pp..130G9L Output file: /Exps/c192b/v2/1234/No0205/pp.W.322.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

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

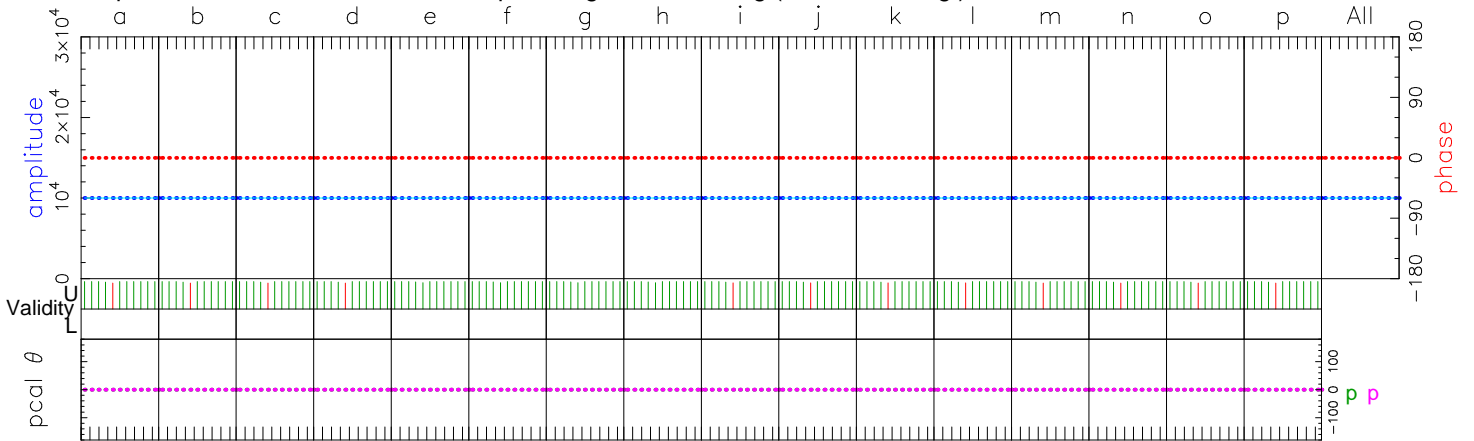


Fringe quality 9

SNR 596842.1
Int time 476.346
Amp 10000.011
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
Exper # 16383
Yr:day 2019:278
Start 090000.00
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112433
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

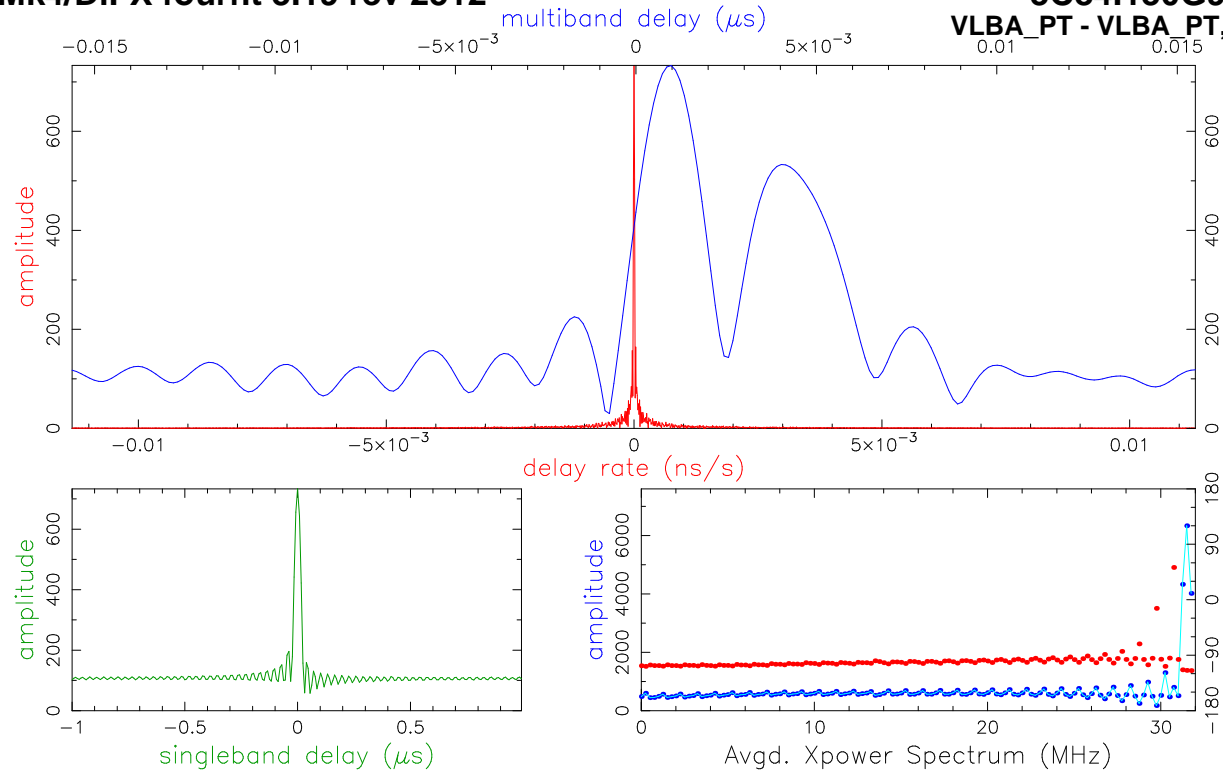


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p: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:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

Group delay (usec)(sbd) 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) -2.41960173323E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.41960E-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 10000.011 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 10000.011 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 10000.011 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 43.4 el 79.5 pa -128.2 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/pp..130G9L Output file: /Exps/c192b/v2/1234/No0205/pp.W.338.130G9L

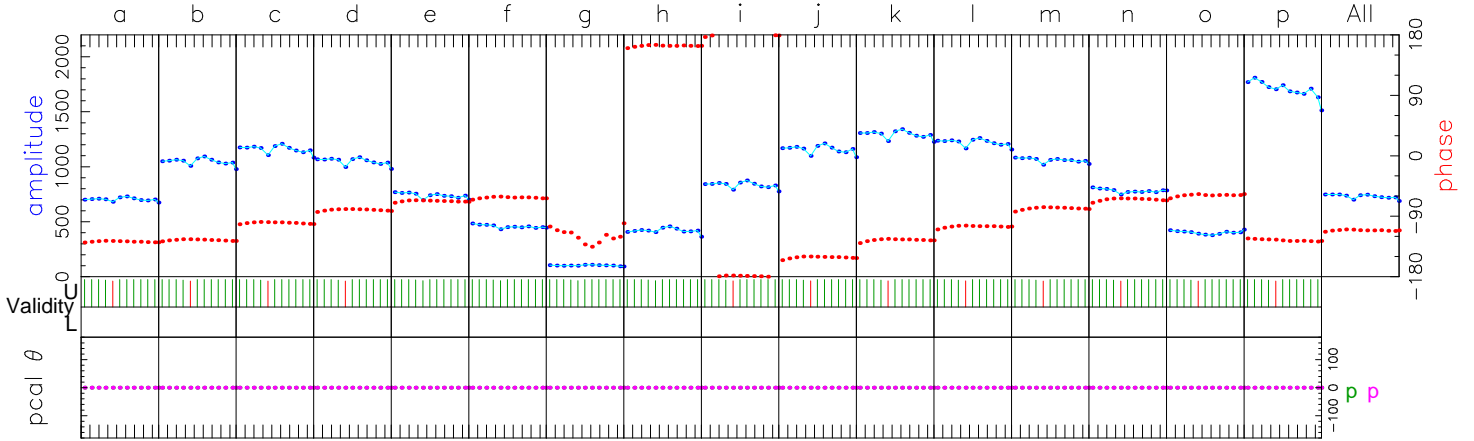


Fringe quality 5

SNR 43766.6
Int time 476.346
Amp 733.304
Phase -111.0
PFD 0.0e+00
Delays (us)
SBD -0.000324
MBD 0.000946
Fringe rate (Hz) 0.000030
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
2020:086:112444
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

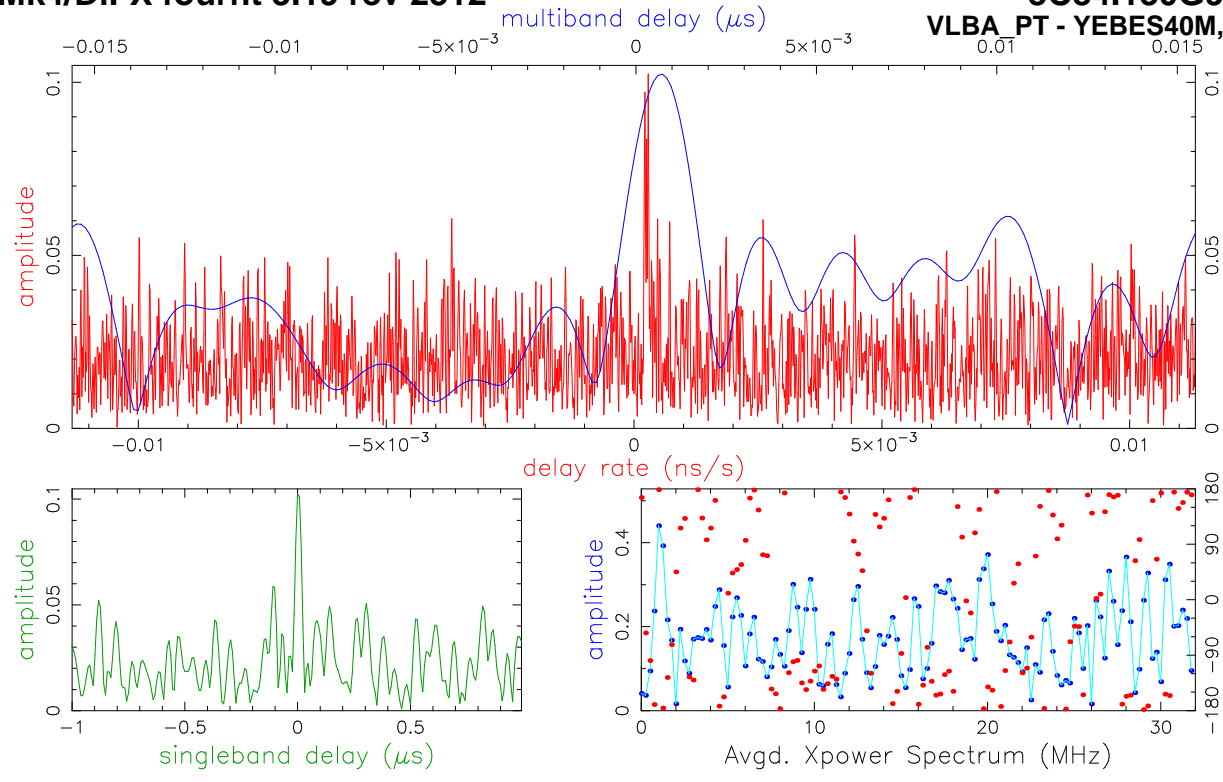


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-127.7	-125.4	-99.8	-80.5	-67.4	-62.4	-120.3	163.4	-179.6	-151.3	-125.4	-105.4	-78.4	-65.1	-59.0	-125.4	Phase	-111.0
	705.6	1051.7	1164.3	1052.8	742.3	458.3	101.9	423.6	837.7	1163.1	1298.0	1224.5	1062.2	781.5	400.9	1715.8	Ampl.	886.4
	129.4	129.4	129.4	129.2	129.0	129.1	127.3	129.1	129.4	129.4	129.4	129.4	129.4	129.3	129.2	128.8	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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
p: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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 9.45968750000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 9.45969E-04 +/- 2.5E-08
 Sband delay (usec) -3.24000000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -3.24000E-04 +/- 3.9E-07
 Phase delay (usec) -3.57945166953E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -3.57945E-06 +/- 8.4E-11
 Delay rate (us/s) 3.50736021694E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 3.50736E-10 +/- 3.0E-13
 Total phase (deg) -111.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -111.0 +/- 0.0

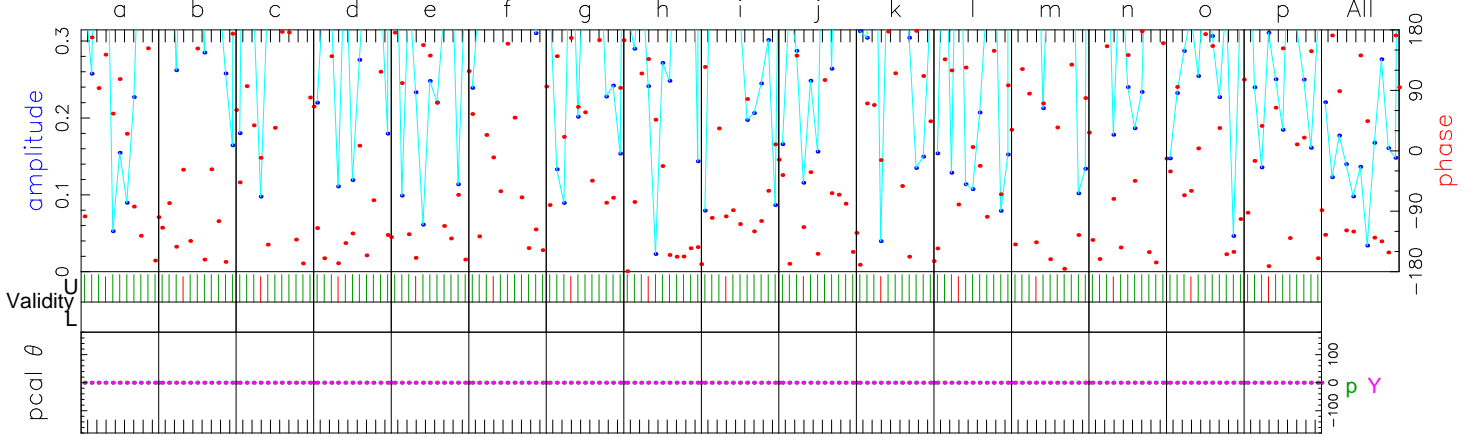
RMS Theor. Amplitude 733.304 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.9 0.0 Search (2048X64) 732.443 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 43.0 0.0 Inc. seg. avg. 733.248 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.1 0.0 Inc. frq. avg. 886.413 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 43.4 el 79.5 pa -128.2 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/pp..130G9L Output file: /Exps/c192b/v2/1234/No0205/pp.W.375.130G9L



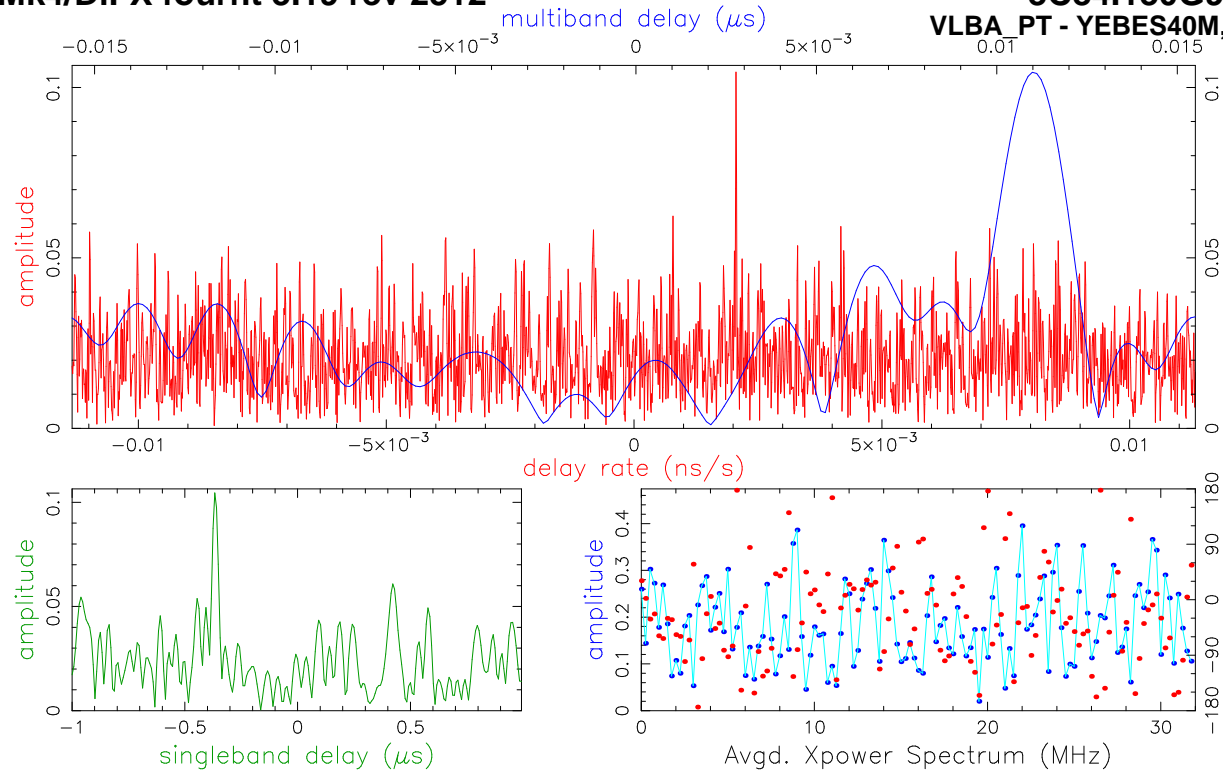
Fringe quality 0
SNR 6.1
Int time 458.521
Amp 0.105
Phase -156.4
PFD 2.0e-01
Delays (us)
SBD 0.003482
MBD 0.000706
Fringe rate (Hz) 0.024694
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090017.41
Stop 090759.74
FRT 090400.00
Corr/FF/build 2020:080:062909
2020:086:112436
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



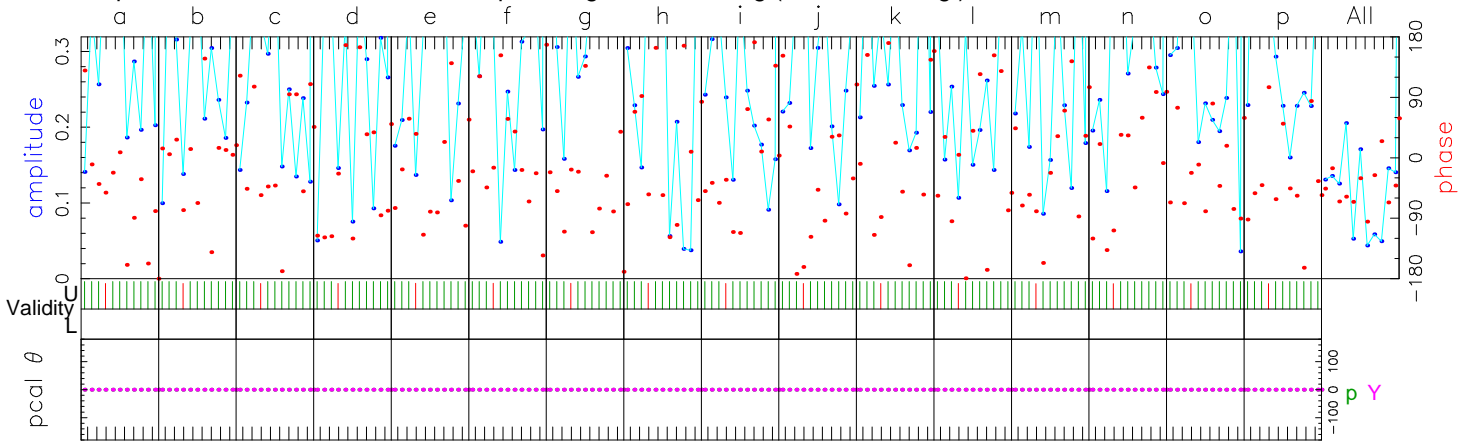
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	167.3	-110.3	121.7	-149.9	-160.5	-74.5	-106.2	-159.2	-84.0	-110.2	113.7	-169.1	158.0	-165.7	-121.9	-112.6	Phase	-156.4
	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.1	0.1	Ampl.	0.1
	123.1	129.8	130.1	217.4	47.4	167.9	177.1	130.1	147.7	104.6	114.8	167.2	113.0	129.2	226.1	196.1	Sbd box	129.4
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p: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	
p: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	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			1.31535497793E+04					Apriori delay (usec)	1.31535490736E+04								Resid mbdelay (usec)	7.05750E-04 +/- 1.8E-04
Sband delay (usec)			1.31535525556E+04					Apriori clock (usec)	2.2816906E+00								Resid sbdelay (usec)	3.48200E-03 +/- 2.8E-03
Phase delay (usec)			1.31535490685E+04					Apriori clockrate (us/s)	-1.6113413E-08								Resid phdelay (usec)	-5.04269E-06 +/- 6.0E-07
Delay rate (us/s)			1.02235132851E+00					Apriori rate (us/s)	1.02235104184E+00								Resid rate (us/s)	2.86678E-07 +/- 2.3E-09
Total phase (deg)								Apriori accel (us/s/s)	-7.63782307849E-05								Resid phase (deg)	-156.4 +/- 18.7

ph/seg (deg) 67.3 32.3 Amplitude 0.105 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.8 56.4 Search (2048X64) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.7 37.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 81.3 65.1 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 p: az 43.4 el 79.5 pa -128.2 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -7953.670 -5816.867 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/pY..130G9L Output file: /Exps/c192b/v2/1234/No0205/pY.W.344.130G9L simultaneous interpolator



Fringe quality 0
SNR 6.1
Int time 458.521
Amp 0.106
Phase -45.0
PFD 1.9e-01
Delays (us)
SBD -0.365561
MBD 0.011040
Fringe rate (Hz)
0.177750
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
2020:086:112440
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

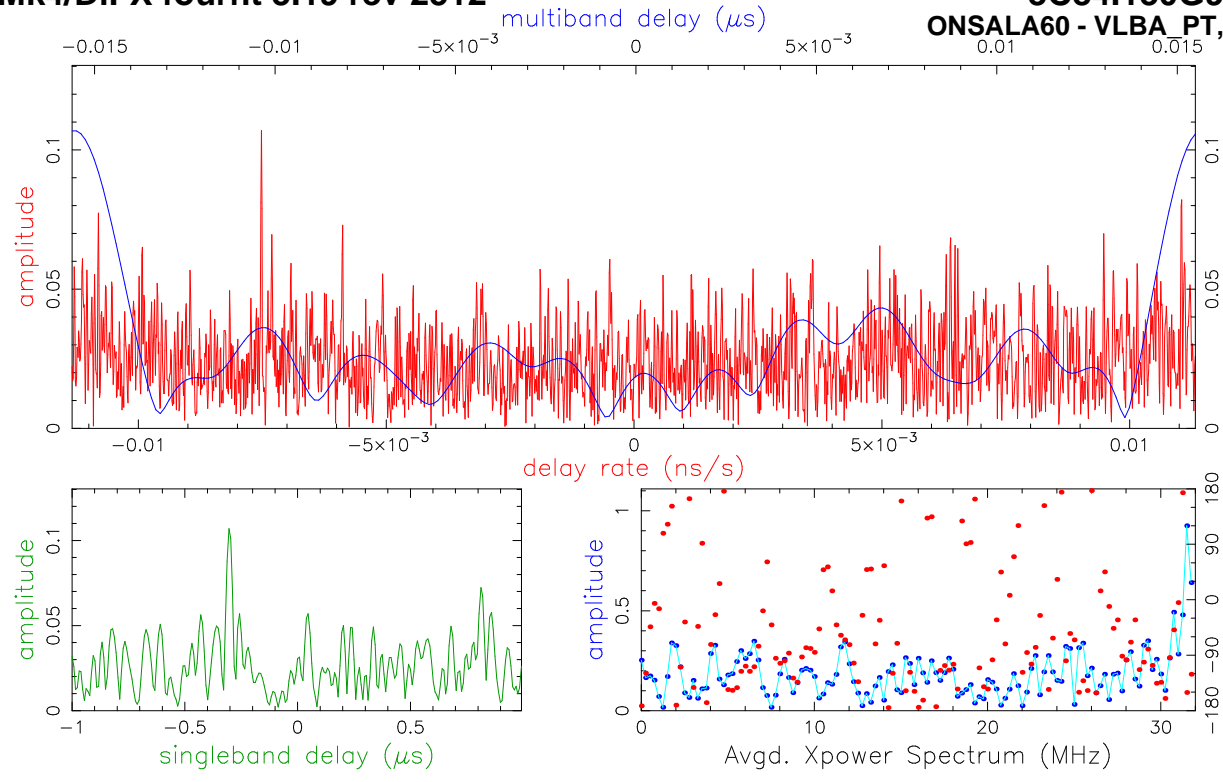
Amp. and Phase vs. time for each freq., 12 segs, 82 APs / seg (41.98 sec / seg.), time ticks 60 sec



	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		
	-47.9	-6.2	-9.6	-121.3	-47.7	-21.1	-40.6	-66.3	-56.7	-105.4	-76.7	-139.9	-36.7	25.3	-38.4	-42.0		Phase	-45.0	
	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		Ampl.	0.1	
	35.2	164.2	24.4	45.7	211.2	166.7	81.8	198.9	184.9	124.2	131.6	232.2	229.7	150.9	201.2	225.6		Sbd box	82.2	
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		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase		
p: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		
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids		
																			Tracks	
Group delay (usec)(sbd)			1.31531851139E+04							1.31535490736E+04								Resid mbdelay (usec)	1.10403E-02	+/- 1.8E-04
Sband delay (usec)			1.31531835126E+04							2.2816906E+08								Resid sbdelay (usec)	-3.65561E-01	+/- 2.8E-03
Phase delay (usec)			1.31535490721E+04							-1.6113413E-08								Resid phdelay (usec)	-1.45095E-06	+/- 6.0E-07
Delay rate (us/s)			1.02235310534E+00							1.02235104184E+00								Resid rate (us/s)	2.06350E-06	+/- 2.3E-09
Total phase (deg)				26.4						-7.63782307849E-05								Resid phase (deg)	-45.0	+/- 18.6

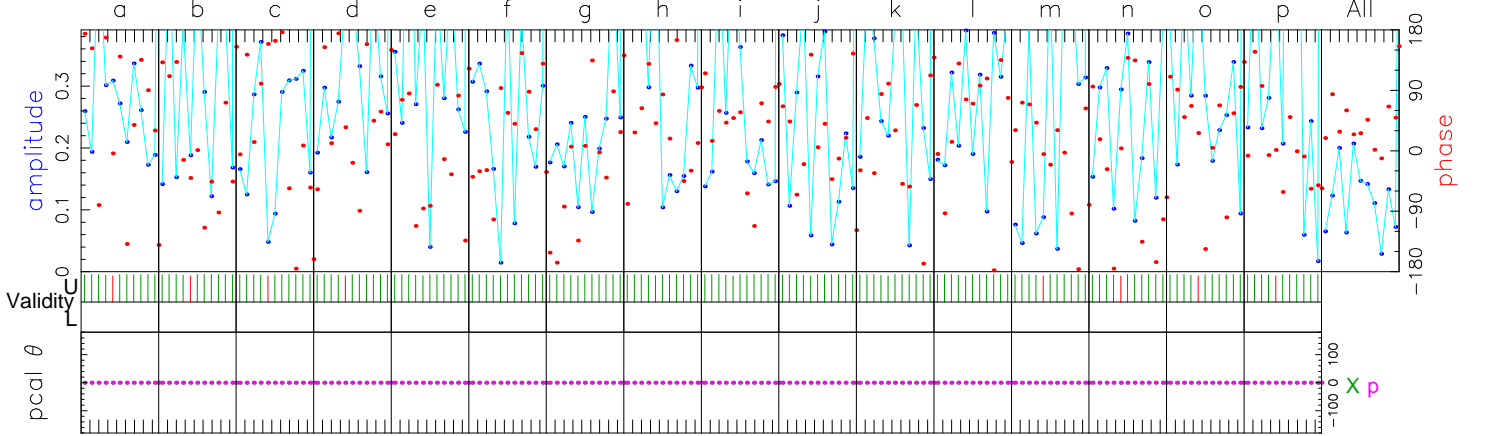
ph/seg (deg) 30.8 32.3
 amp/seg (%) 54.6 56.3
 ph/frq (deg) 45.1 37.3
 amp/frq (%) 47.7 65.0
 p: az 43.4 el 79.5 pa -128.2 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -7953.670 -5816.867
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/pY..130G9L Output file: /Exps/c192b/v2/1234/No0205/pY.W.358.130G9L

simultaneous interpolator



Fringe quality 0
 SNR 6.4
 Int time 475.443
 Amp 0.130
 Phase 38.0
 PFD 3.3e-02
 Delays (us)
 SBD -0.302509
 MBD -0.015583
 Fringe rate (Hz)
 -0.648413
 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
 2020:086:112441
 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				
	147.9	3.3	58.2	25.4	39.3	39.1	21.5	29.3	52.4	14.7	34.7	91.8	0.9	79.7	60.6	27.7		Phase 38.0				
	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.2	0.4		Ampl. 0.1				
	110.5	215.9	162.4	35.7	29.2	214.4	232.5	77.1	70.6	189.8	141.0	189.6	49.6	181.3	66.6	163.8		Sbd box 90.3				
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				
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs				
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase				
X: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				
X:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp				
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
X	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				
Group delay (usec)(sbd)			-1.22040481403E+04															Apriori delay (usec)	-1.22037513073E+04	Resid mbdelay (usec)	-1.55830E-02	+/- 1.7E-04
Sband delay (usec)			-1.22040538158E+04															Apriori clock (usec)	2.0433281E+01	Resid sbdelay (usec)	-3.02509E-01	+/- 2.7E-03
Phase delay (usec)			-1.22037513060E+04															Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	1.22650E-06	+/- 5.7E-07
Delay rate (us/s)			-7.27925272384E-01															Apriori rate (us/s)	-7.27917744957E-01	Resid rate (us/s)	-7.52743E-06	+/- 2.1E-09
Total phase (deg)					-181.0													Apriori accel (us/s/s)	8.58895599860E-05	Resid phase (deg)	38.0	+/- 17.8

ph/seg (deg) 27.6 30.8
 amp/seg (%) 55.2 53.8
 ph/frq (deg) 39.3 35.6
 amp/frq (%) 69.0 62.1

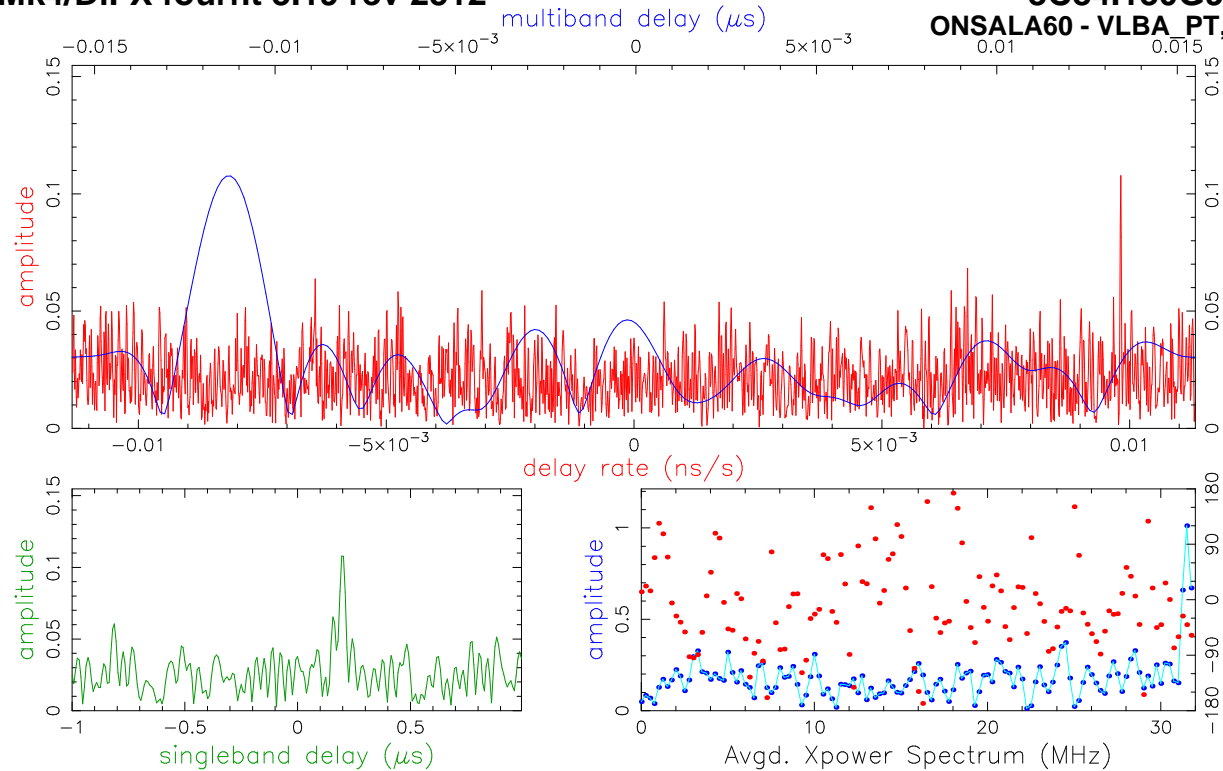
RMS Theor. Amplitude 0.130 +/- 0.020
 Search (2048X64) 0.106
 Interp. 0.000
 Inc. seg. avg. 0.125
 Inc. frq. avg. 0.122

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

X: az 309.5 el 24.7 pa 33.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 5713.419 7779.326 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xp.W.363.130G9L

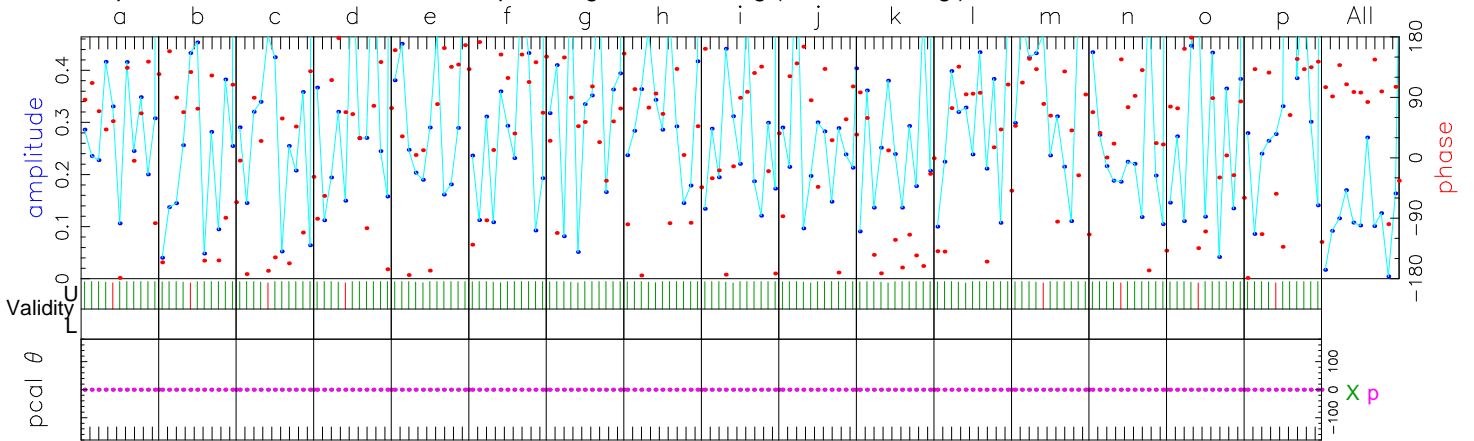


Fringe quality 0

SNR 6.6
 Int time 475.443
 Amp 0.155
 Phase 103.8
 PFD 9.7e-03
 Delays (us)
 SBD 0.199181
 MBD -0.011252
 Fringe rate (Hz)
 0.846946
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

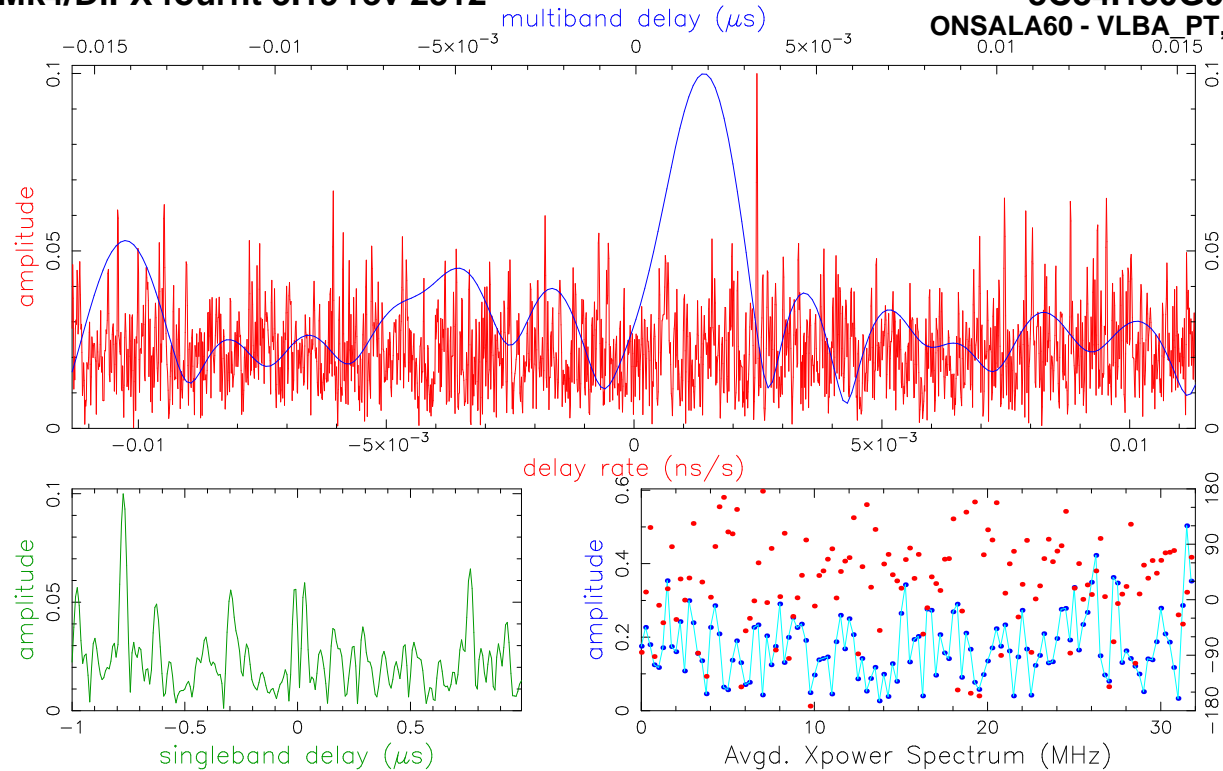
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112446
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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				
	81.3	114.4	-170.1	92.4	132.6	138.9	57.6	94.1	84.7	127.5	-140.1	100.0	92.8	75.6	109.6	106.8	Phase	103.8				
	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.3	Ampl.	0.1				
	194.9	38.3	135.1	149.7	113.8	125.1	155.0	118.1	226.9	203.0	109.0	174.8	180.1	55.6	241.3	215.8	Sbd box	154.5				
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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
X: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					
X:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-1.22035438094E+04														Apriori delay (usec)	-1.22037513073E+04	Resid mbdelay (usec)	-1.12522E-02	+/-	1.6E-04
Sband delay (usec)			-1.22035521263E+04														Apriori clock (usec)	2.0433281E+01	Resid sbdelay (usec)	1.99181E-01	+/-	2.6E-03
Phase delay (usec)			-1.22037513039E+04														Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	3.34664E-06	+/-	5.6E-07
Delay rate (us/s)			-7.27907912755E-01														Apriori rate (us/s)	-7.27917744957E-01	Resid rate (us/s)	9.83220E-06	+/-	2.0E-09
Total phase (deg)																	Apriori accel (us/s/s)	8.58895599860E-05	Resid phase (deg)	103.8	+/-	17.3

ph/seg (deg) 51.3 29.9 Search (2048X64) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.2 52.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.6 34.6 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 50.6 60.3 Inc. frq. avg. 0.149 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 5713.419 7779.326 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xp.W.382.130G9L

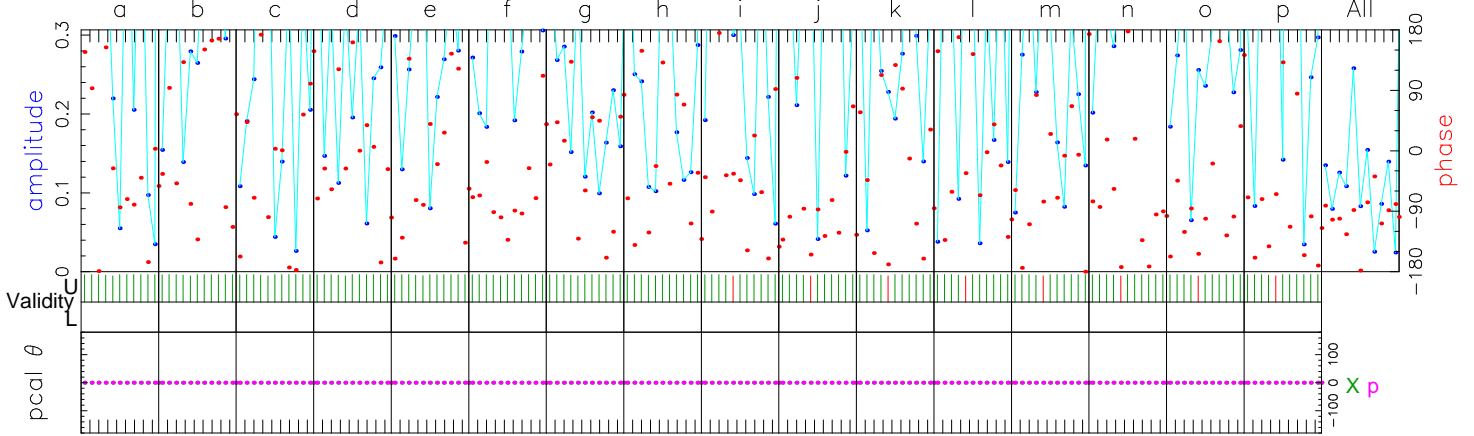


Fringe quality 0

SNR 6.0
 Int time 475.442
 Amp 0.102
 Phase -96.3
 PFD 4.4e-01
 Delays (us)
 SBD -0.772062
 MBD 0.001861
 Fringe rate (Hz)
 0.213566
 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
 2020:086:112450
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

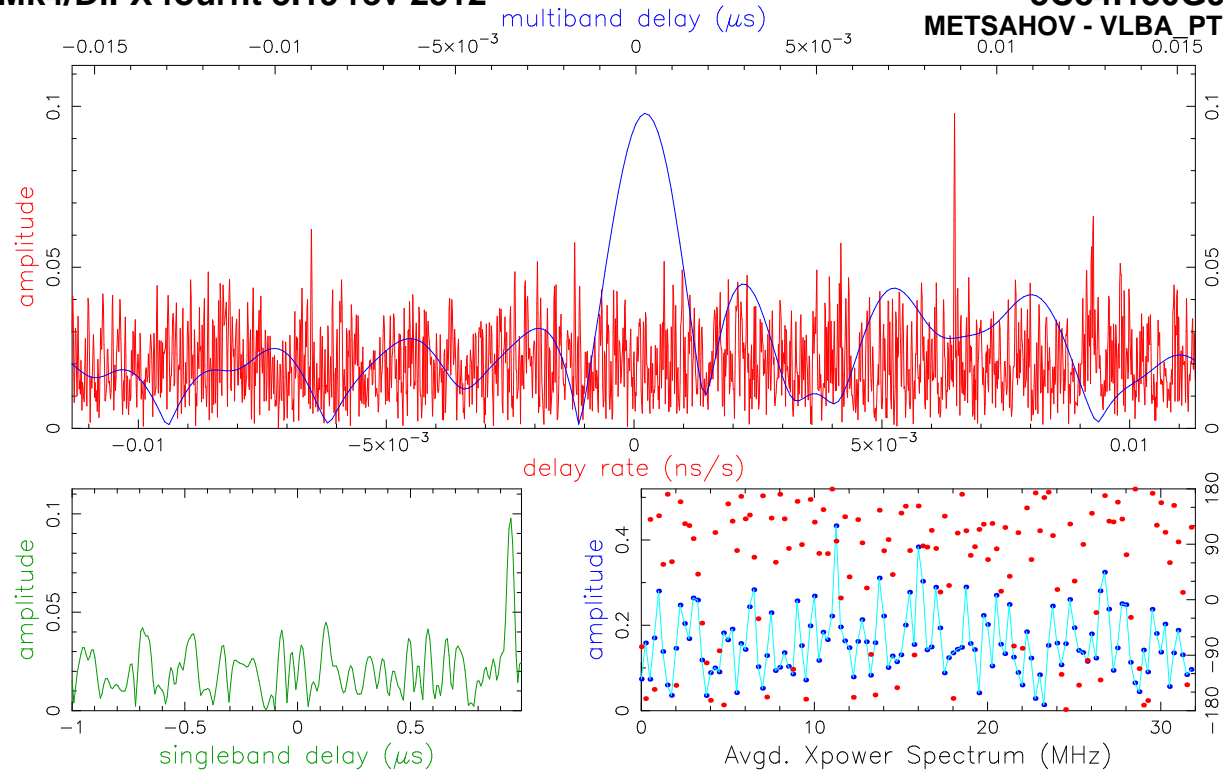
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	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				
	-156.9	-147.7	-172.3	-38.6	-135.4	-81.2	-6.1	-87.4	-71.8	-113.7	85.3	-55.2	-47.7	-108.3	-109.2	-108.8	Phase	-96.3				
	0.0	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.2	0.0	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1				
	248.0	228.1	92.1	143.8	35.4	30.1	253.6	104.8	10.9	30.2	22.1	196.1	251.1	31.0	67.6	65.7	Sbd box	30.2				
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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
X: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					
X:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.22045306967E+04														Apriori delay (usec)	-1.22037513073E+04	Resid mbdelay (usec)	1.86053E-03	+/-	1.8E-04
Sband delay (usec)			-1.22045233698E+04														Apriori clock (usec)	2.0433281E+01	Resid sbdelay (usec)	-7.72062E-01	+/-	2.9E-03
Phase delay (usec)			-1.22037513104E+04														Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	-3.10609E-06	+/-	6.2E-07
Delay rate (us/s)			-7.27915265671E-01														Apriori rate (us/s)	-7.27917744957E-01	Resid rate (us/s)	2.47929E-06	+/-	2.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	8.58895599860E-05	Resid phase (deg)	-96.3	+/-	19.2

ph/seg (deg) 33.2 33.2 Theor. Amplitude 0.102 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.6 57.9 Search (2048X64) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 66.9 38.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 77.5 66.9 Inc. seg. avg. 0.097 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.106 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 309.5 el 24.7 pa 33.4 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 5713.419 7779.326 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xp.W.395.130G9L

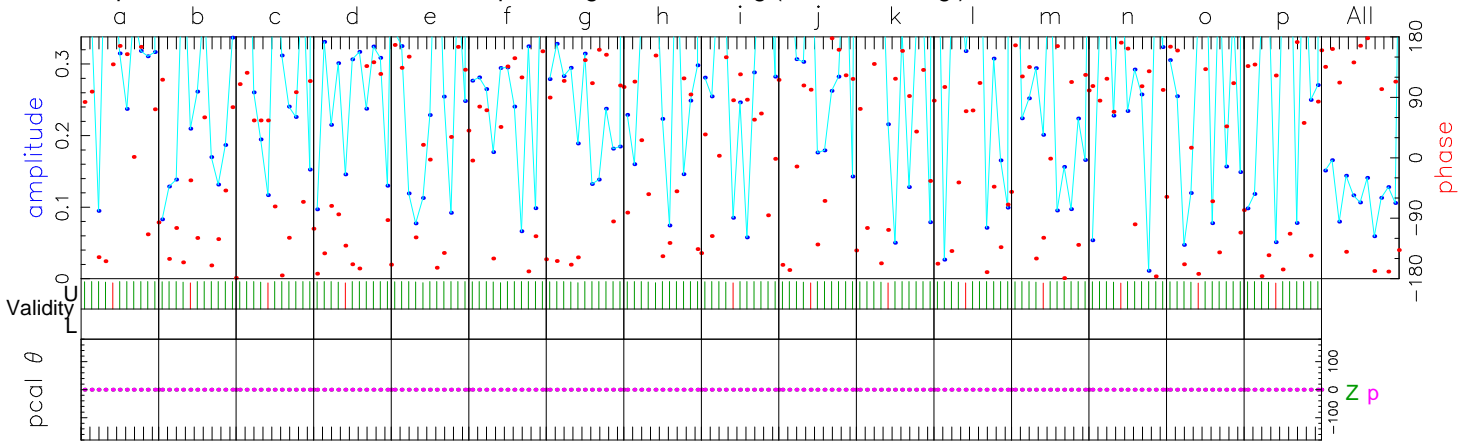


Fringe quality 0

SNR 5.9
 Int time 475.848
 Amp 0.113
 Phase 157.9
 PFD 7.0e-01
 Delays (us)
 SBD 0.943662
 MBD 0.000241
 Fringe rate (Hz)
 0.557875
 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
 2020:086:112448
 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	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	249.8				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
Z: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	0:0	Mani PC					
Z: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	0:0	PC amp					
p	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					
Group delay (usec)(sbd)		-1.31544699164E+04																Apriori delay (usec)	-1.31554076569E+04	Resid mbdelay (usec)	2.40522E-04	+/-	1.8E-04
Sband delay (usec)		-1.31544639954E+04																Apriori clock (usec)	-1.1772700E+01	Resid sbdelay (usec)	9.43662E-01	+/-	2.9E-03
Phase delay (usec)		-1.31554076518E+04																Apriori clockrate (us/s)	-1.8759378E-07	Resid phdelay (usec)	5.09279E-06	+/-	6.3E-07
Delay rate (us/s)		-6.24160301063E-01																Apriori rate (us/s)	-6.2416677444E-01	Resid rate (us/s)	6.47638E-06	+/-	2.3E-09
Total phase (deg)					-46.4													Apriori accel (us/s/s)	9.26952768393E-05	Resid phase (deg)	157.9	+/-	19.6

ph/seg (deg) 36.5 33.9
 amp/seg (%) 42.1 59.2
 ph/frq (deg) 50.4 39.1
 amp/frq (%) 50.5 68.3

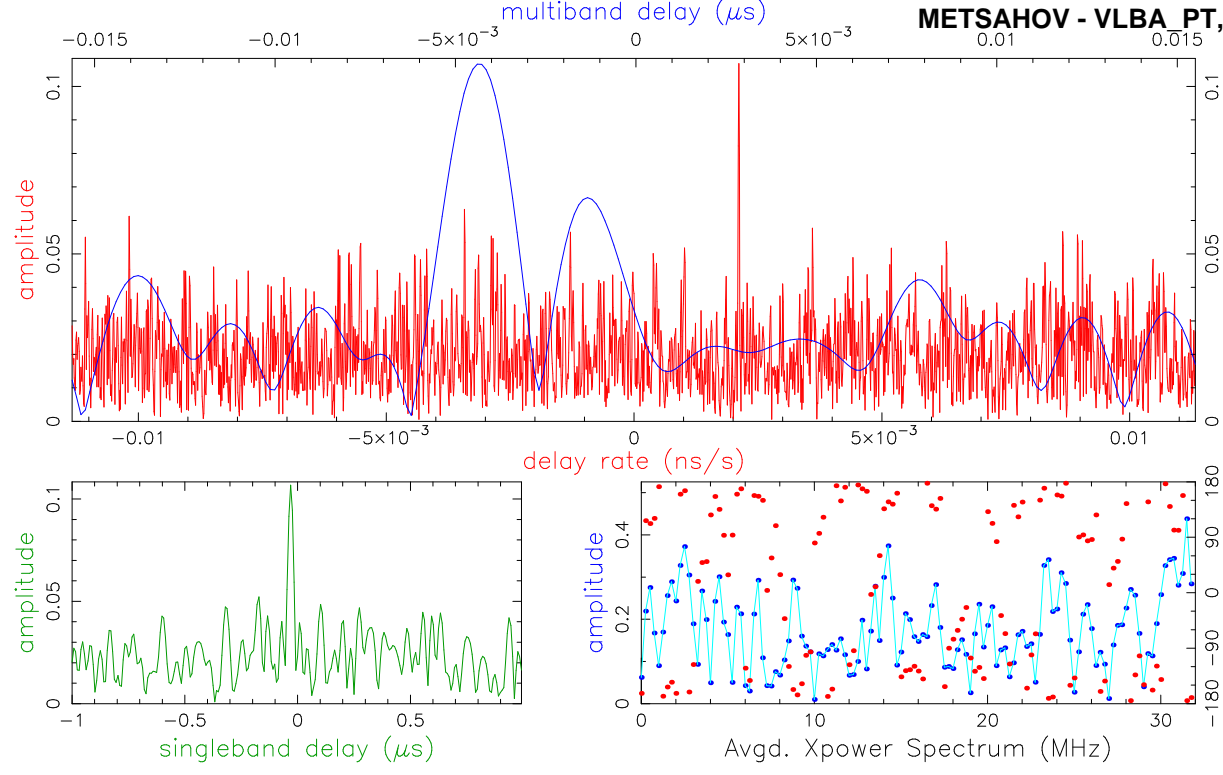
RMS Theor. Amplitude 0.113 +/- 0.019
 Search (2048X64) 0.095
 Interp. 0.000
 Inc. seg. avg. 0.117
 Inc. frq. avg. 0.111

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

Z: az 317.3 el 22.0 pa 28.8 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 4930.406 8430.754 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Zp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Zp.W.386.130G9L

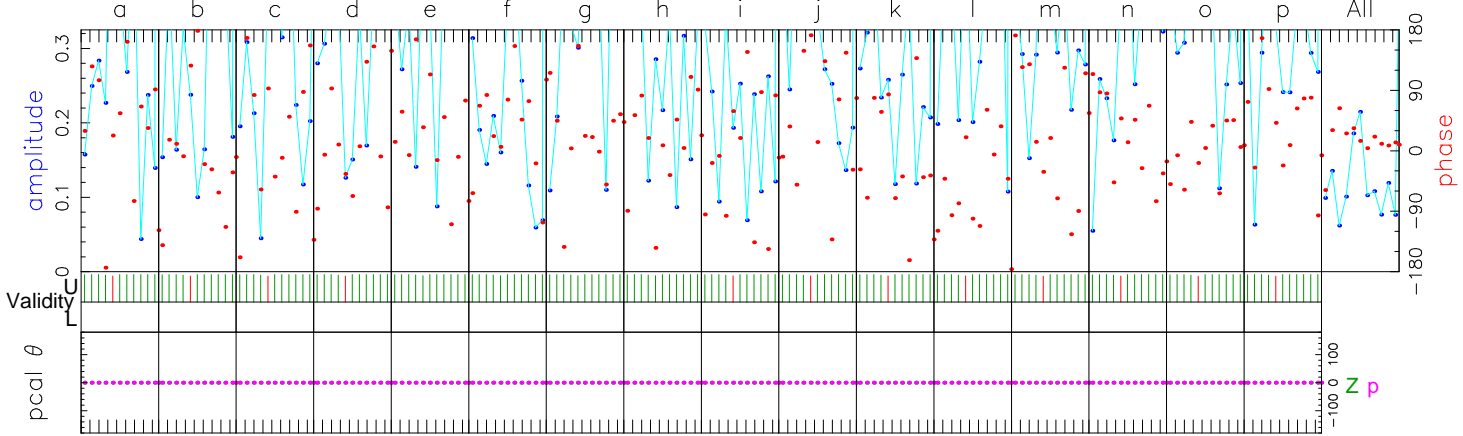


Fringe quality 0

SNR 6.4
 Int time 475.849
 Amp 0.108
 Phase 16.3
 PFD 5.0e-02
 Delays (us)
 SBD -0.030808
 MBD -0.004344
 Fringe rate (Hz)
 0.182430
 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
 2020:086:112452
 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



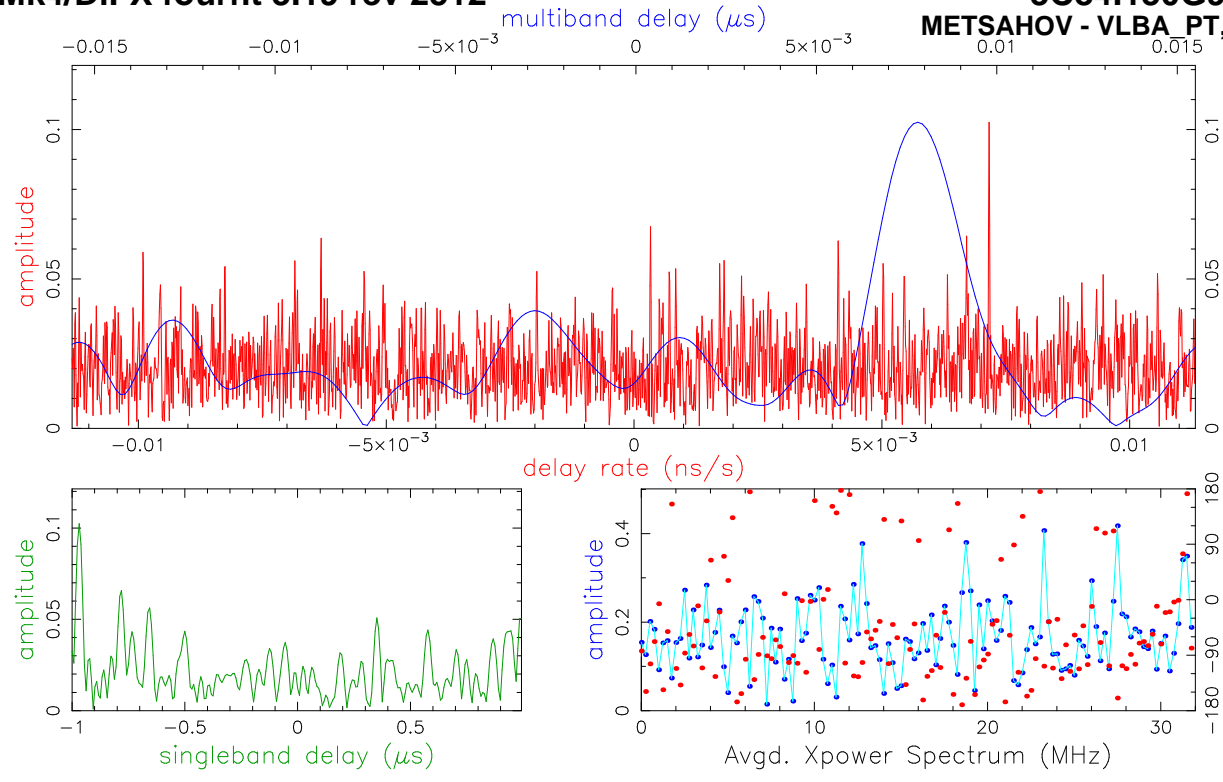
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
58.2	-36.6	61.2	-18.3	32.8	62.4	32.0	29.5	-66.3	34.5	-13.9	-24.3	39.8	20.2	3.3	62.9	62.9	Phase	16.3	
0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.2	0.0	0.2	0.3	0.2	0.2	Ampl.	0.1	
215.1	59.0	213.3	54.1	122.0	7.6	85.1	217.8	91.2	142.1	224.1	95.2	121.2	123.7	124.4	194.3	194.3	Sbd box	125.1	
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	938/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z: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	0:0	PC phase	
Z: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	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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	

Group delay (usec)(sbd) -1.31554432507E+04 Apriori delay (usec) -1.31554076569E+04 Resid mbdelay (usec) -4.34382E-03 +/- 1.7E-04
 Sband delay (usec) -1.31554384644E+04 Apriori clock (usec) -1.1772700E+01 Resid sbdelay (usec) -3.08075E-02 +/- 2.7E-03
 Phase delay (usec) -1.31554076564E+04 Apriori clockrate (us/s) -1.8759378E-07 Resid phdelay (usec) 5.26884E-07 +/- 5.8E-07
 Delay rate (us/s) -6.24164659612E-01 Apriori rate (us/s) -6.24166774444E-01 Resid rate (us/s) 2.11783E-06 +/- 2.1E-09
 Total phase (deg) -187.9 Apriori accel (us/s/s) 9.26952768393E-05 Resid phase (deg) 16.3 +/- 18.0

RMS Theor. Amplitude 0.108 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.1 31.1 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 44.4 54.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 40.7 36.0 Inc. seg. avg. 0.103 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 68.9 62.8 Inc. frq. avg. 0.109 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 317.3 el 22.0 pa 28.8 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 4930.406 8430.754 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Zp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Zp.W.400.130G9L

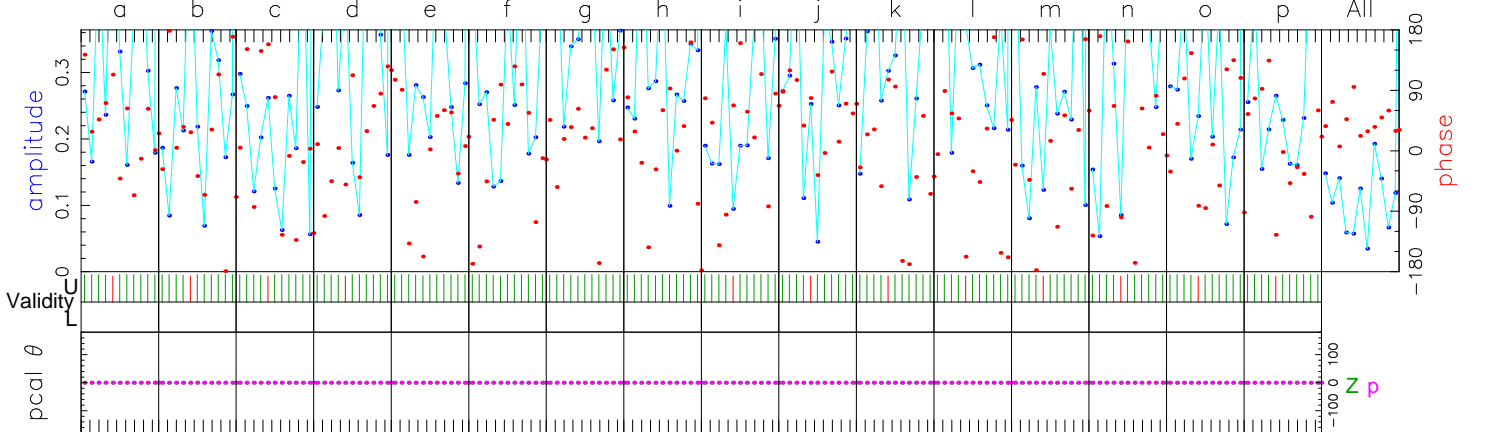


Fringe quality 0

SNR 6.1
 Int time 475.849
 Amp 0.121
 Phase 39.2
 PFD 2.3e-01
 Delays (us)
 SBD -0.968647
 MBD 0.007809
 Fringe rate (Hz)
 0.617964
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

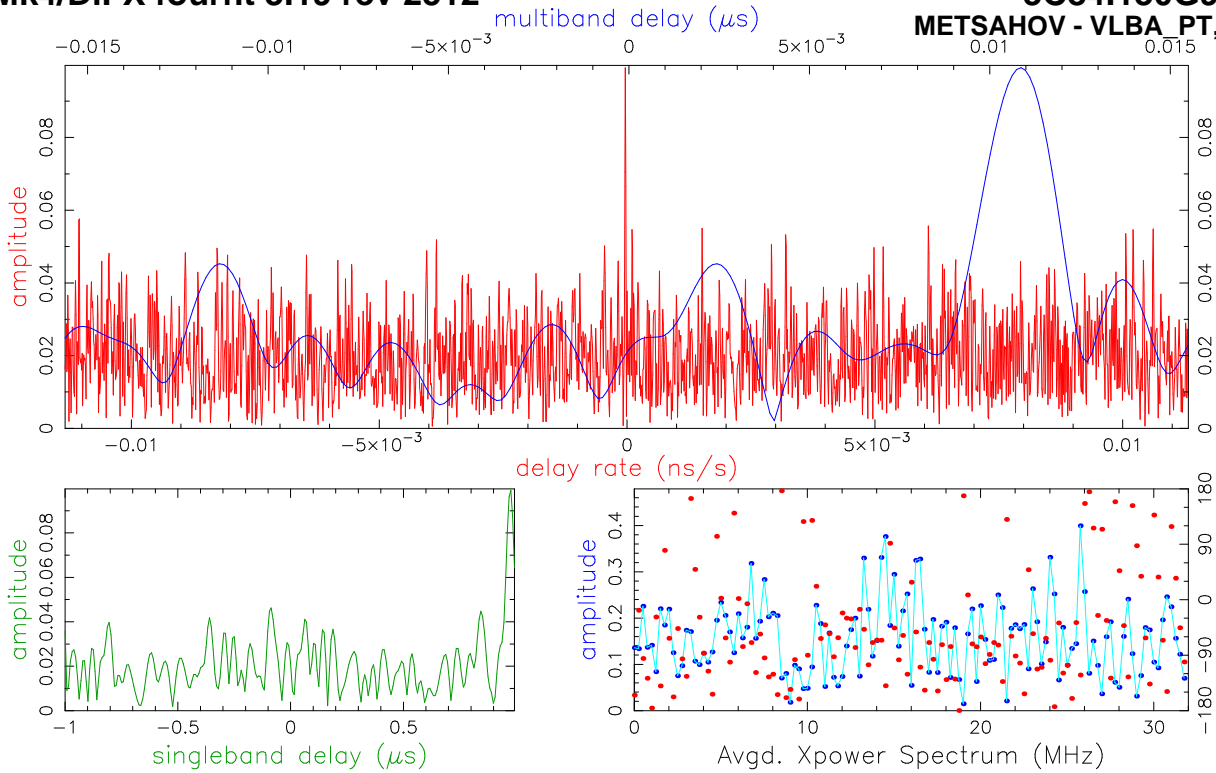
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.00
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112456
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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				
	37.9	31.9	-8.8	12.4	58.2	74.9	43.1	15.8	77.3	73.1	22.3	46.8	10.7	80.8	-13.9	16.3	Phase	39.2				
	0.2	0.1	0.0	0.2	0.2	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1				
	9.8	148.6	158.0	49.6	7.0	132.0	243.8	74.4	61.3	5.2	109.9	49.9	255.6	126.8	217.7	216.2	Sbd box	5.0				
UL	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					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z: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					
Z: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					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.31563685977E+04														Apriori delay (usec)	-1.31554076569E+04	Resid mbdelay (usec)	7.80927E-03	+/-	1.8E-04
Sband delay (usec)			-1.31563763039E+04														Apriori clock (usec)	-1.1772700E+01	Resid sbdelay (usec)	-9.68647E-01	+/-	2.8E-03
Phase delay (usec)			-1.31554076557E+04														Apriori clockrate (us/s)	-1.8759378E-07	Resid phdelay (usec)	1.26286E-06	+/-	6.0E-07
Delay rate (us/s)			-6.24159603493E-01														Apriori rate (us/s)	-6.2416677444E-01	Resid rate (us/s)	7.17395E-06	+/-	2.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	9.26952768393E-05	Resid phase (deg)	39.2	+/-	18.8

ph/seg (deg) RMS Theor. Amplitude 0.121 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.1 56.7 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.7 37.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.7 65.5 Inc. seg. avg. 0.112 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 317.3 el 22.0 pa 28.8 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 4930.406 8430.754 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Zp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Zp.W.408.130G9L simultaneous interpolator

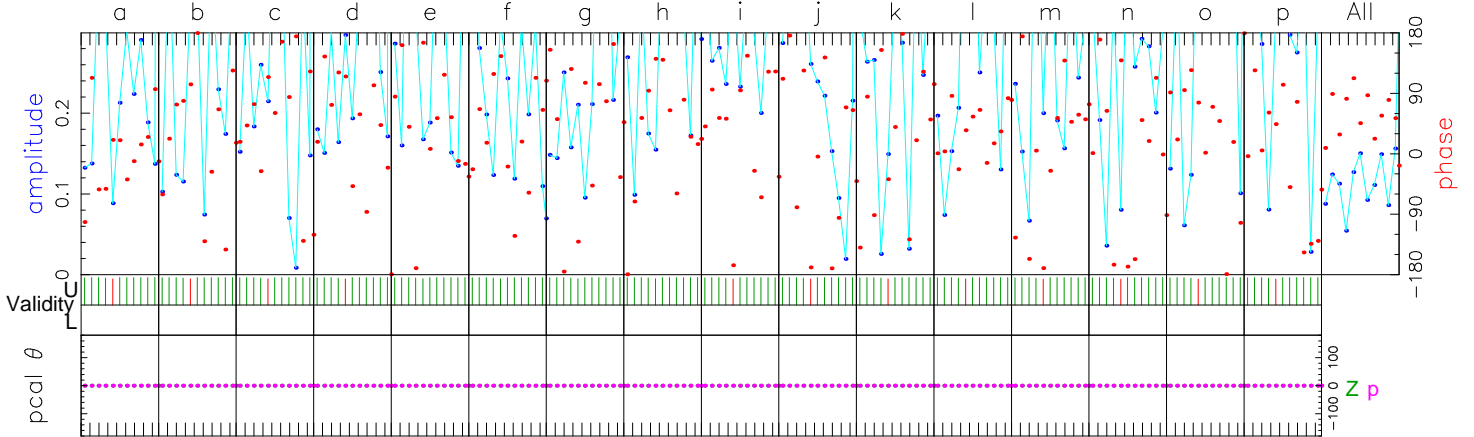


Fringe quality 0

SNR 6.0
 Int time 475.848
 Amp 0.100
 Phase 59.0
 PFD 4.9e-01
 Delays (us)
 SBD 0.974239
 MBD 0.010844
 Fringe rate (Hz)
 -0.003169
 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
 2020:086:112459
 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				
	-14.9	78.6	83.9	71.8	55.6	25.0	103.7	62.2	98.1	154.7	61.2	38.0	32.6	133.2	47.6	47.6	Phase	59.0				
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.1	0.0	0.2	0.1	Ampl.	0.1				
	13.0	184.1	191.3	40.9	91.4	62.4	123.9	65.4	97.7	194.0	83.9	252.8	40.0	107.2	253.6	27.4	Sbd box	253.7				
UL	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					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z: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					
Z: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					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.31544280634E+04														Apriori delay (usec)	-1.31554076569E+04	Resid mbdelay (usec)	1.08435E-02	+/-	1.8E-04
Sband delay (usec)			-1.31544334184E+04														Apriori clock (usec)	-1.1772700E+01	Resid sbdelay (usec)	9.74239E-01	+/-	2.9E-03
Phase delay (usec)			-1.31554076550E+04														Apriori clockrate (us/s)	-1.8759378E-07	Resid phdelay (usec)	1.90104E-06	+/-	6.2E-07
Delay rate (us/s)			-6.24166814229E-01														Apriori rate (us/s)	-6.2416677444E-01	Resid rate (us/s)	-3.67848E-08	+/-	2.2E-09
Total phase (deg)					-145.3												Apriori accel (us/s/s)	9.26952768393E-05	Resid phase (deg)	59.0	+/-	19.2

ph/seg (deg) 31.0 33.3 Search (2048X64) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.2 58.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.2 38.5 Inc. seg. avg. 0.098 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.9 67.2 Inc. frq. avg. 0.100 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 317.3 el 22.0 pa 28.8 p: az 43.4 el 79.5 pa -128.2 u,v (fr/asec) 4930.406 8430.754 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Zp..130G9L Output file: /Exps/c192b/v2/1234/No0205/Zp.W.413.130G9L