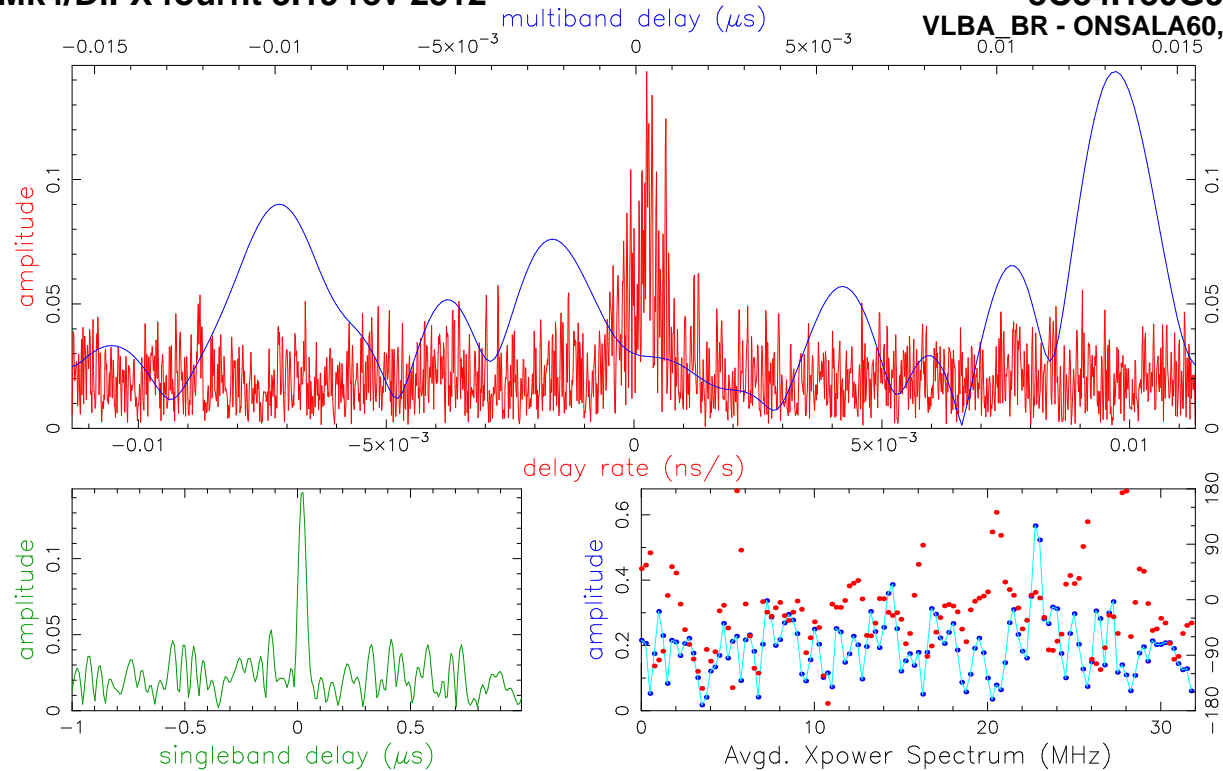


Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, bX

VLBA_BR - ONSALA60, fgroup W, pol RR

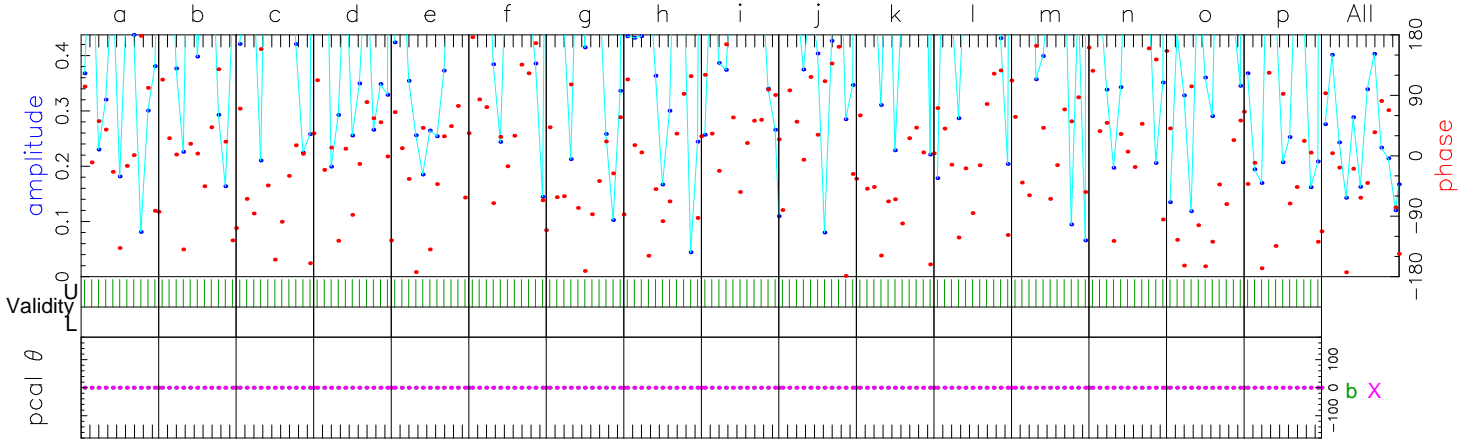


Fringe quality 9

SNR 8.7
 Int time 478.098
 Amp 0.146
 Phase 10.7
 PFD 1.0e-09
 Delays (us)
 SBD 0.019810
 MBD 0.013306
 Fringe rate (Hz) 0.021565
 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
 2020:086:112318
 2020:014:135814
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

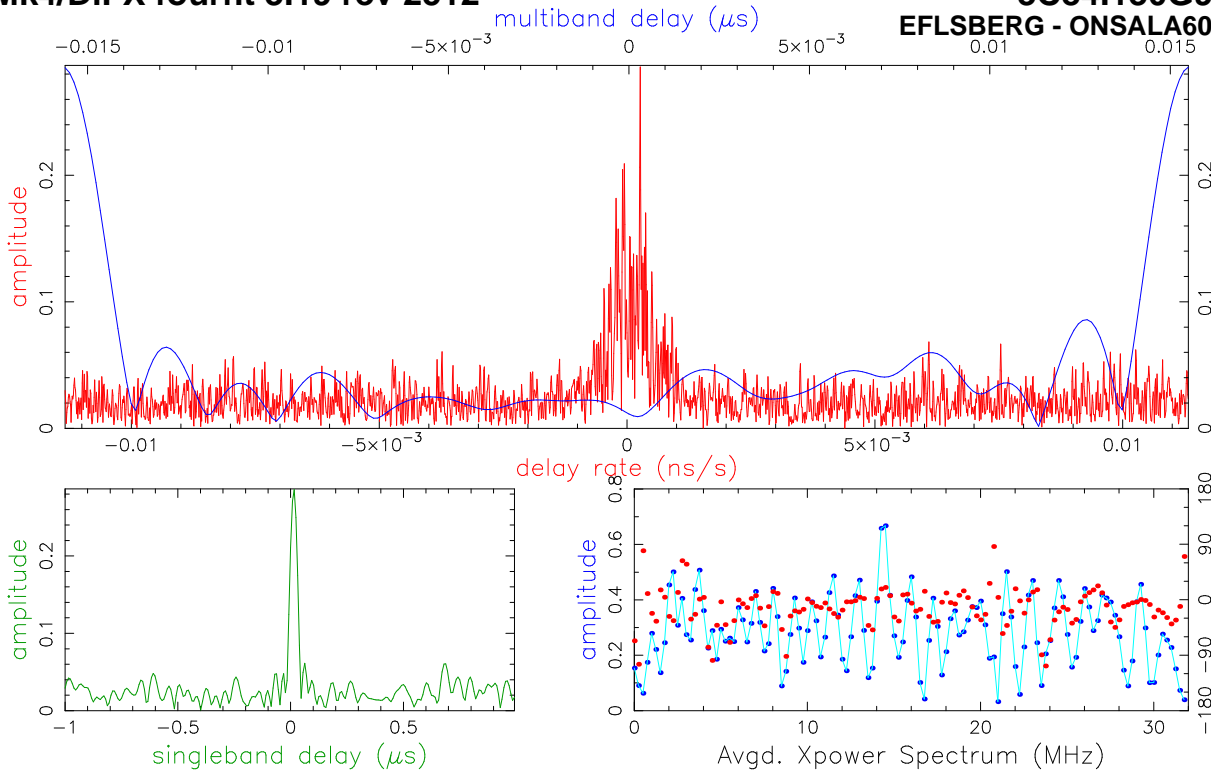
Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	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	1.7	21.1	-60.9	18.2	25.6	96.9	-49.8	16.2	46.8	97.0	-26.5	45.2	5.7	37.3	-80.1	-47.4	10.7	Phase
b	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.
X	130.8	131.0	130.7	131.3	131.0	133.0	131.1	108.9	131.0	130.0	131.0	66.1	132.1	35.9	18.0	158.3	131.5	Sbd box
b:X	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	937/0	APs used
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)		1.17108340974E+04									1.17108207918E+04						1.33056E-02	+/- 1.2E-04
Sband delay (usec)		1.17108406018E+04									-3.3013752E+01						1.98100E-02	+/- 2.0E-03
Phase delay (usec)		1.17108207922E+04									-7.7039509E-07						3.44433E-07	+/- 4.2E-07
Delay rate (us/s)		8.51680886311E-01									8.51680635964E-01						2.50347E-07	+/- 1.5E-09
Total phase (deg)				13.2							-6.97814916290E-05						10.7	+/- 13.1

ph/seg (deg) RMS Theor. Amplitude 0.146 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.8 39.7 Interp. 0.138 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.7 26.3 Inc. seg. avg. 0.238 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.9 45.9 Inc. frq. avg. 0.188 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 105.8 el 73.7 pa -58.9 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6635.954 -5448.293 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bX..130G9L Output file: /Exps/c192b/v2/1234/No0205/bX.W.101.130G9L

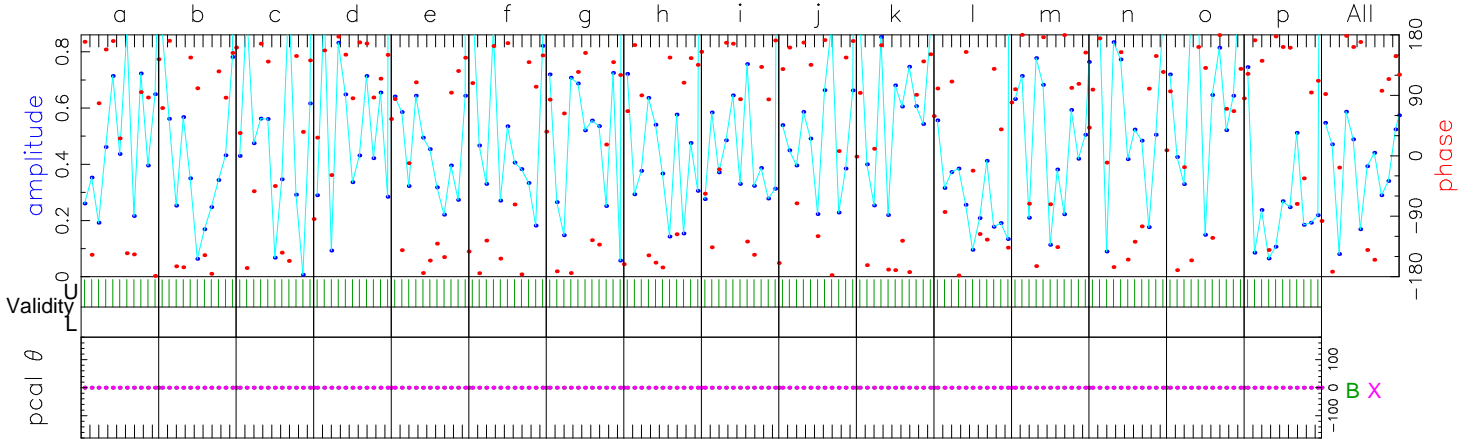


Fringe quality 9

SNR 17.2
Int time 478.749
Amp 0.287
Phase 159.6
PFD 0.0e+00
Delays (us)
SBD 0.013968
MBD -0.015718
Fringe rate (Hz) 0.023280
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 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112322
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	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	159.6	Phase			
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	159.6	Ampl.			
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	130.8	Sbd box			
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1000	APs used			
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1000	PC freqs			
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		PC amp			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids			
																		Tracks			
																		Tracks			
Group delay (usec)(sbd)		-7.29267315703E+02																Resid mbdelay (usec)	-1.57182E-02	+/-	6.3E-05
Sband delay (usec)		-7.29268880019E+02																Resid sbdelay (usec)	1.39675E-02	+/-	1.0E-03
Phase delay (usec)		-7.29282842372E+02																Resid phdelay (usec)	5.14699E-06	+/-	2.2E-07
Delay rate (us/s)		-1.25785404590E-01																Resid rate (us/s)	2.70258E-07	+/-	7.8E-10
Total phase (deg)					-15.1													Resid phase (deg)	159.6	+/-	6.7

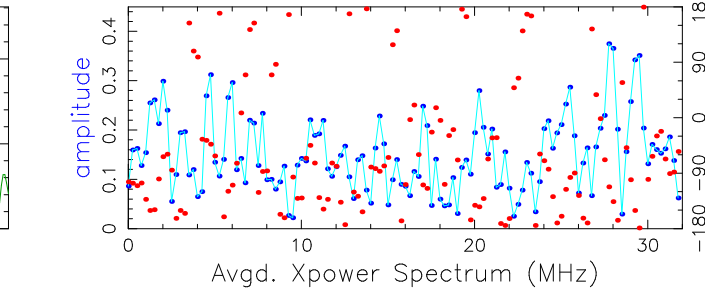
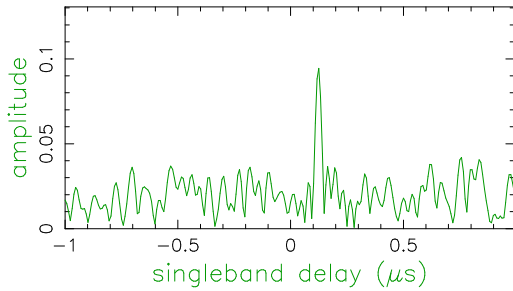
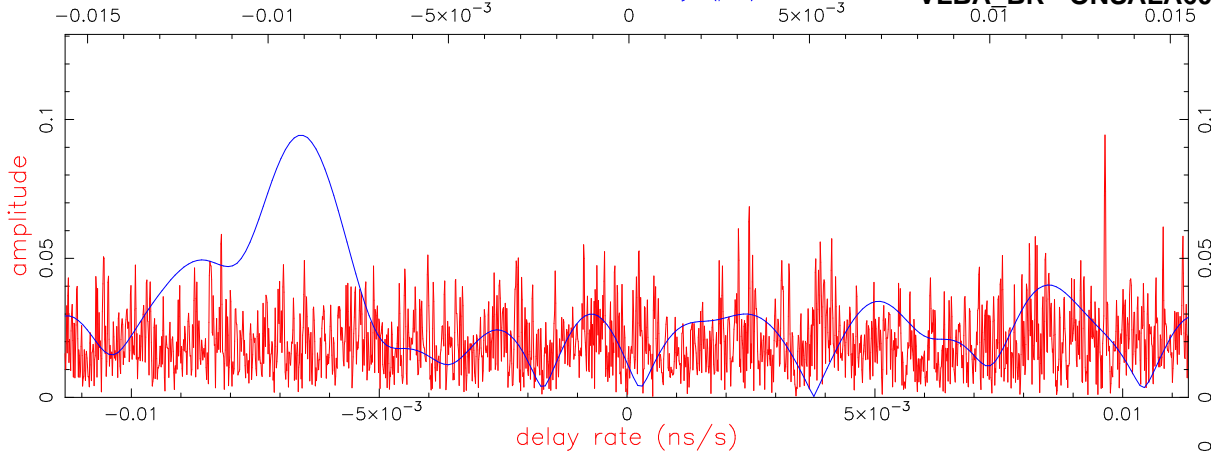
ph/seg (deg) 66.8 11.6 Search (2048X64) 0.263 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.1 20.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.6 13.4 Inc. seg. avg. 0.386 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 31.9 23.3 Inc. frq. avg. 0.284 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 961.244 -581.647 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/BX..130G9L Output file: /Exps/c192b/v2/1234/No0205/BX.W.115.130G9L

multiband delay (μ s)

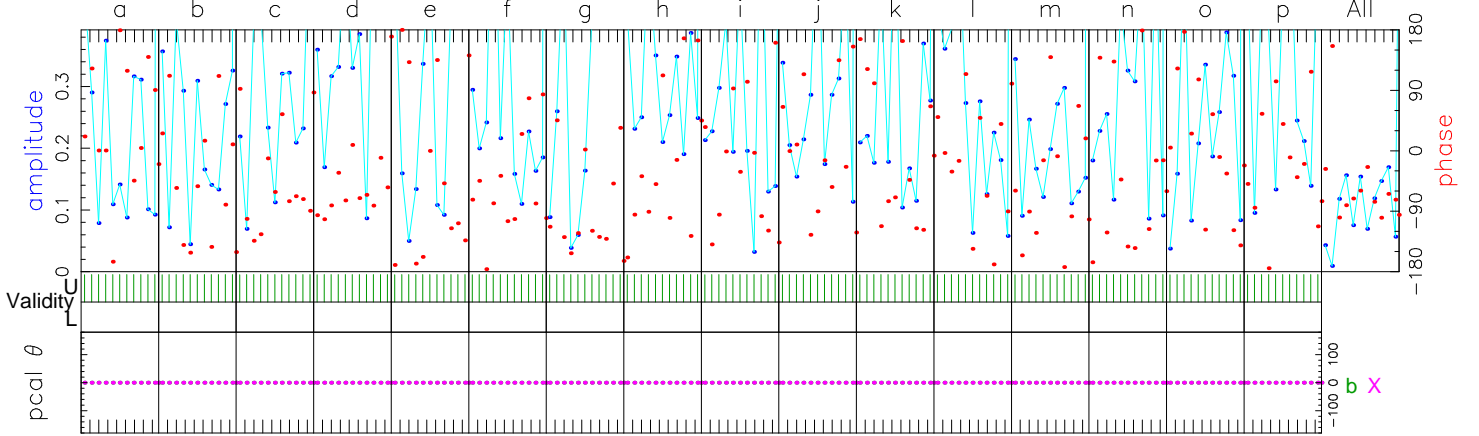
Fringe quality 0

SNR 5.7
 Int time 478.097
 Amp 0.131
 Phase -73.5
 PFD 9.6e-01
 Delays (us)
 SBD 0.123178
 MBD -0.009112
 Fringe rate (Hz)
 0.831561
 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
 2020:086:112324
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

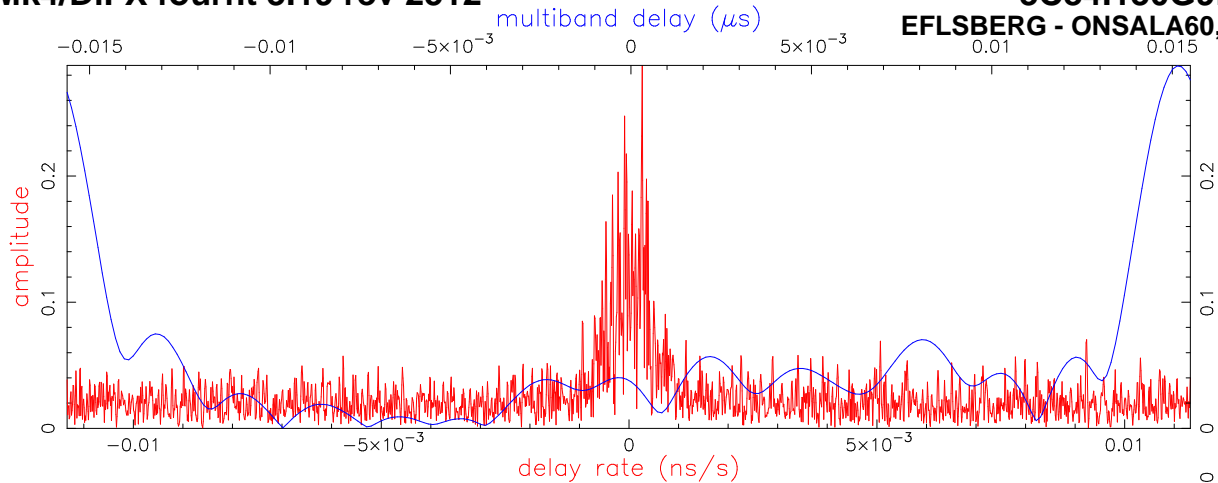


Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



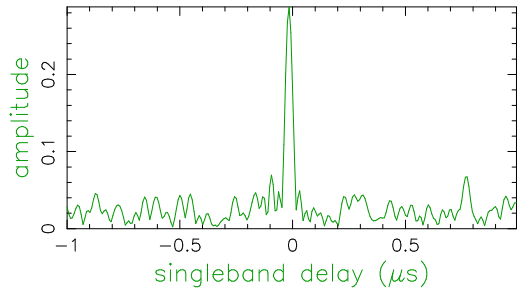
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	23.5	-43.6	-84.3	-61.8	-134.7	-78.6	-96.1	-103.2	-62.2	-38.6	-107.7	11.7	-80.6	-123.5	-116.1	-19.7		Phase -73.5			
	0.1	0.1	0.2	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2		Ampl. 0.1			
	12.2	155.6	31.9	145.3	197.2	34.1	200.2	221.8	177.3	193.7	37.9	2.1	171.9	127.6	236.3	158.3		Sbd box 144.8			
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		APs used			
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs			
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase			
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC			
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp			
x	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000					
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks			
																		Chan ids			
																		Tracks			
Group delay (usec)(sbd)		1.17109366801E+04									1.17108207918E+04							Resid mbdelay (usec)	-9.11171E-03	+/-	1.9E-04
Sband delay (usec)		1.17109439703E+04									-3.3013752E+01							Resid sbdelay (usec)	1.23178E-01	+/-	3.0E-03
Phase delay (usec)		1.17108207894E+04									-7.7039509E-07							Resid phdelay (usec)	-2.36858E-06	+/-	6.5E-07
Delay rate (us/s)		8.51690289566E-01									8.51680635964E-01							Resid rate (us/s)	9.65360E-06	+/-	2.3E-09
Total phase (deg)					-71.0						-6.97814916290E-05							Resid phase (deg)	-73.5	+/-	20.2

ph/seg (deg) RMS Theor. Amplitude 0.131 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.5 61.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.4 40.3 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 70.3 70.4 Inc. frq. avg. 0.139 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 105.8 el 73.7 pa -58.9 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6635.954 -5448.293 ion window (TEC) 0.00 0.00
 simultaneous interpolator

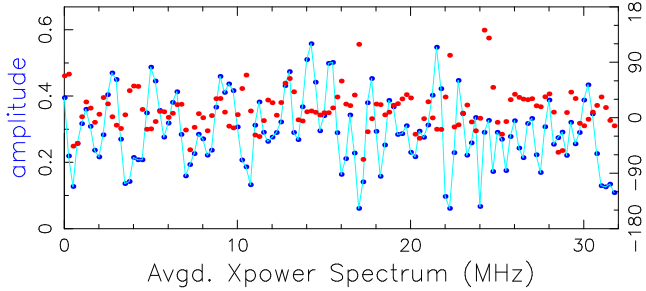


Fringe quality 9

SNR 17.2
Int time 478.749
Amp 0.288
Phase -172.2
PFD 0.0e+00
Delays (us)
SBD -0.016587
MBD 0.015165
Fringe rate (Hz)
0.023242
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

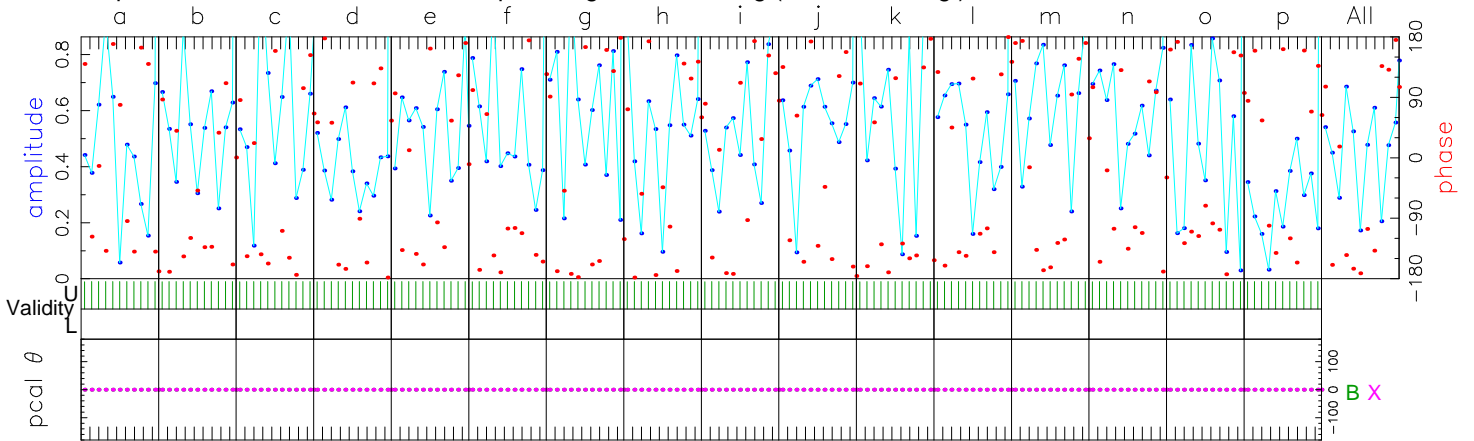


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090759.74
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				
	-146.6	-160.1	-166.9	158.0	-163.0	-156.0	174.3	159.6	156.7	-167.5	165.3	-167.1	-164.5	-158.8	-129.2	162.2	Phase	-172.2				
	0.3	0.2	0.4	0.2	0.3	0.3	0.5	0.3	0.3	0.4	0.4	0.3	0.4	0.2	0.3	0.1	Ampl.	0.3				
	129.5	126.1	127.2	126.2	126.2	126.7	126.2	126.9	126.9	127.2	127.4	125.3	126.5	128.2	126.1	135.2	Sbd box	126.9				
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-7.29298932859E+02														Apriori delay (usec)	-7.29282847519E+02	Resid mbdelay (usec)	1.51647E-02	+/-	6.3E-05
Sband delay (usec)			-7.29299434519E+02														Apriori clock (usec)	-1.5578114E+01	Resid sbdelay (usec)	-1.65870E-02	+/-	1.0E-03
Phase delay (usec)			-7.29282853071E+02														Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-5.55164E-06	+/-	2.1E-07
Delay rate (us/s)			-1.25785405033E-01														Apriori rate (us/s)	-1.25785674848E-01	Resid rate (us/s)	2.69815E-07	+/-	7.8E-10
Total phase (deg)																	Apriori accel (us/s/s)	-1.49517665067E-06	Resid phase (deg)	-172.2	+/-	6.7

RMS Theor. Amplitude 0.288 +/- 0.017
 ph/seg (deg) 66.4 11.5 Search (2048X64) 0.273
 amp/seg (%) 79.5 20.1 Interp. 0.000
 ph/frq (deg) 22.8 13.3 Inc. seg. avg. 0.445
 amp/frq (%) 30.2 23.2 Inc. frq. avg. 0.299
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MISamp/s): 64
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite
 sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

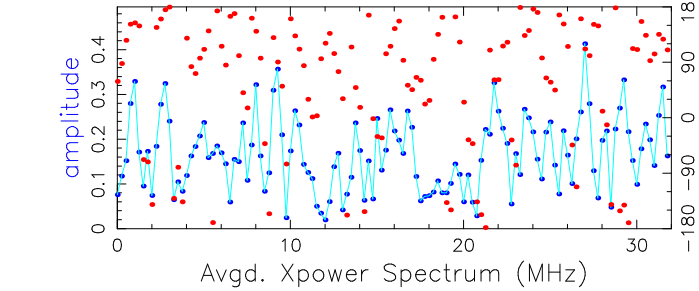
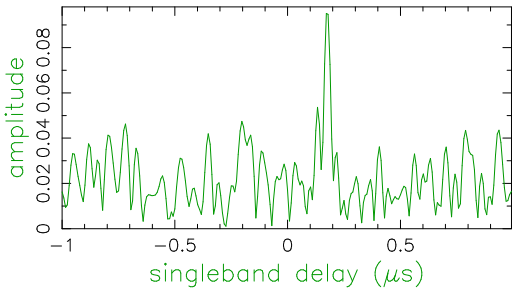
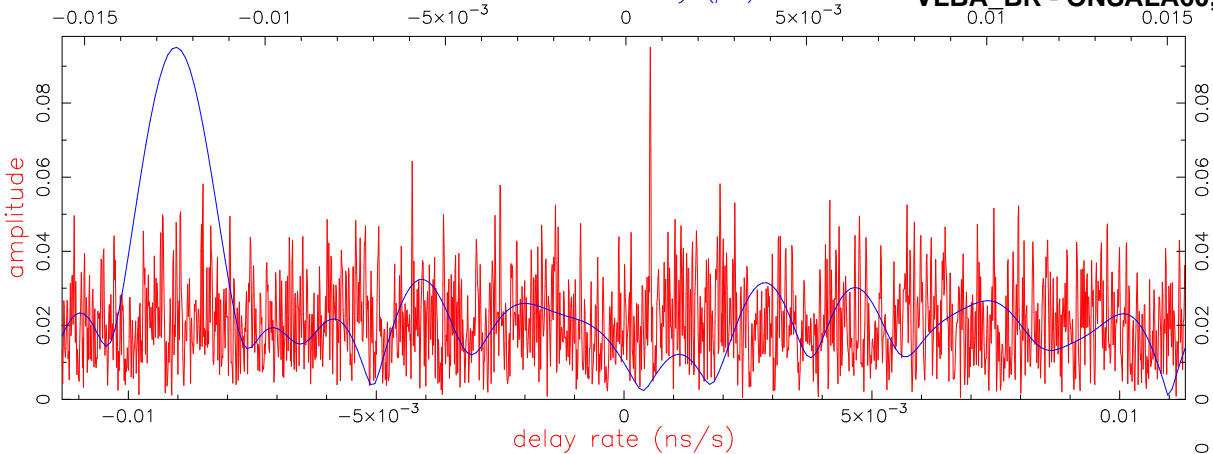
B: az 308.6 el 22.7 pa 41.3 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 961.244 -581.647 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/BX..130G9L Output file: /Exps/c192b/v2/1234/No0205/BX.W.140.130G9L

multiband delay (μ s)

Fringe quality 0

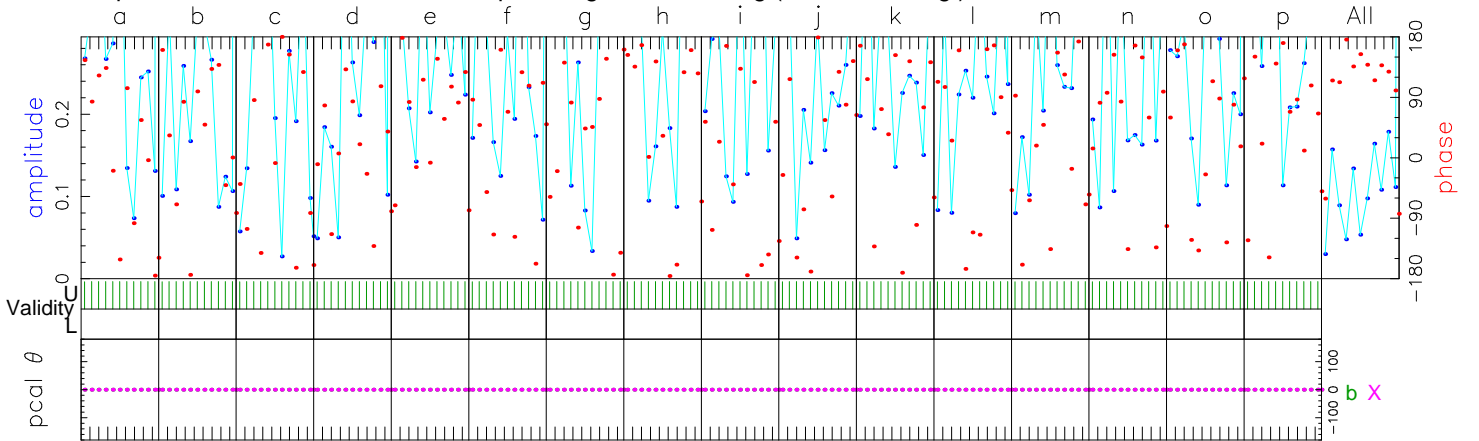
SNR 5.9
 Int time 478.098
 Amp 0.098
 Phase 126.9
 PFD 7.0e-01
 Delays (us)
 SBD 0.175638
 MBD -0.012471
 Fringe rate (Hz)
 0.045787
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112329
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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

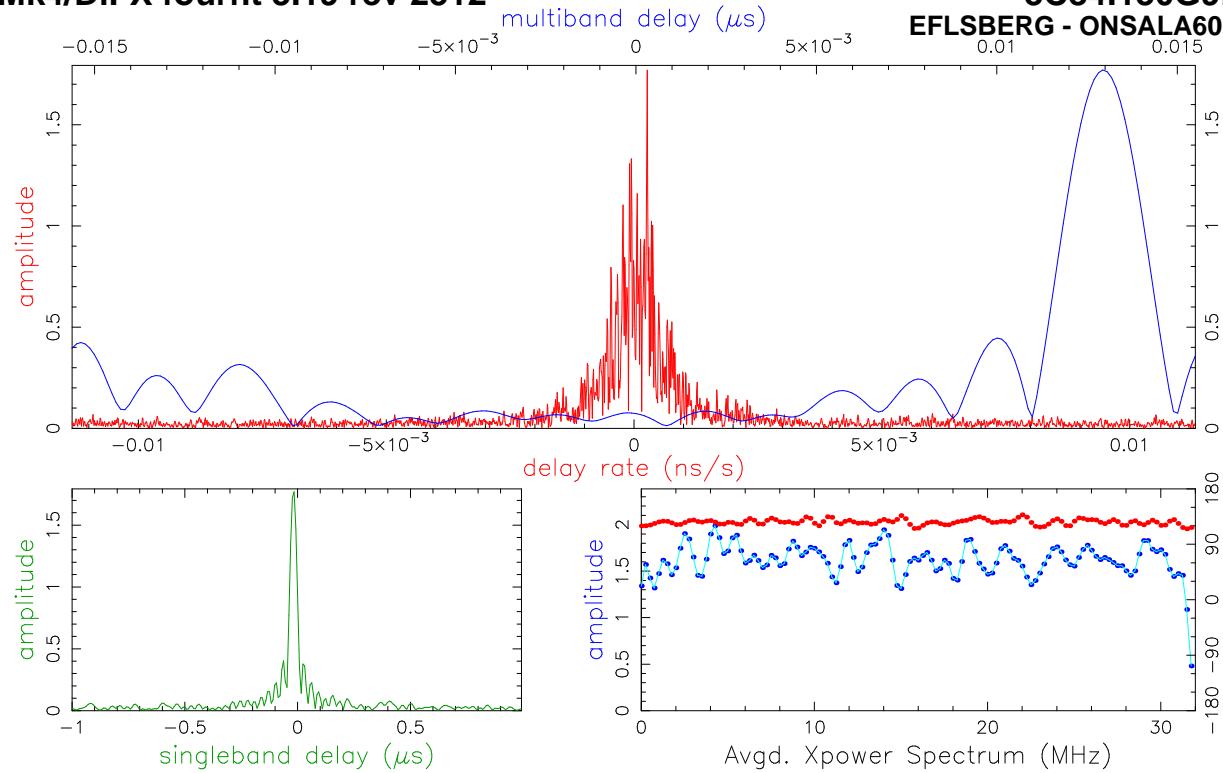


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
125.5	78.9	172.4	90.4	100.4	106.7	-168.5	139.4	143.8	127.0	131.4	153.3	-148.3	98.7	107.8	121.4	121.4	Phase	126.9
0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.1	Ampl.	0.1
180.5	180.7	201.7	99.2	208.9	245.5	209.2	145.7	14.3	157.7	247.5	216.7	201.8	4.9	29.2	134.5	134.5	Sbd box	151.5
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	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
x	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	1.17109958213E+04	Apriori delay (usec)	1.17108207918E+04	Resid mbdelay (usec)	-1.24705E-02	+/-	1.8E-04
Sband delay (usec)	1.17109964298E+04	Apriori clock (usec)	-3.3013752E+01	Resid sbdelay (usec)	1.75638E-01	+/-	2.9E-03
Phase delay (usec)	1.17108207959E+04	Apriori clockrate (us/s)	-7.7039509E-07	Resid phdelay (usec)	4.09259E-06	+/-	6.3E-07
Delay rate (us/s)	8.51681167509E-01	Apriori rate (us/s)	8.51680635964E-01	Resid rate (us/s)	5.31546E-07	+/-	2.3E-09
Total phase (deg)	129.4	Apriori accel (us/s/s)	-6.97814916290E-05	Resid phase (deg)	126.9	+/-	19.6

b: az 105.8 el 73.7 pa -58.9 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6635.954 -5448.293 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bX..130G9L Output file: /Exps/c192b/v2/1234/No0205/bX.W.141.130G9L

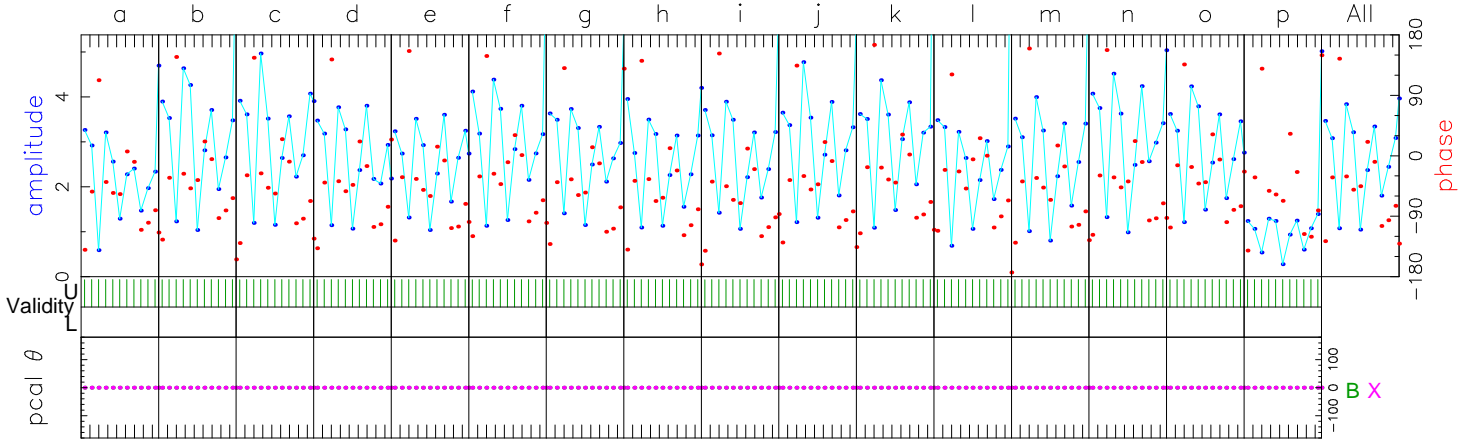


Fringe quality 5

SNR 107.3
Int time 478.749
Amp 1.793
Phase -54.2
PFD 0.0e+00
Delays (us)
SBD -0.018459
MBD 0.012926
Fringe rate (Hz) 0.023233
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

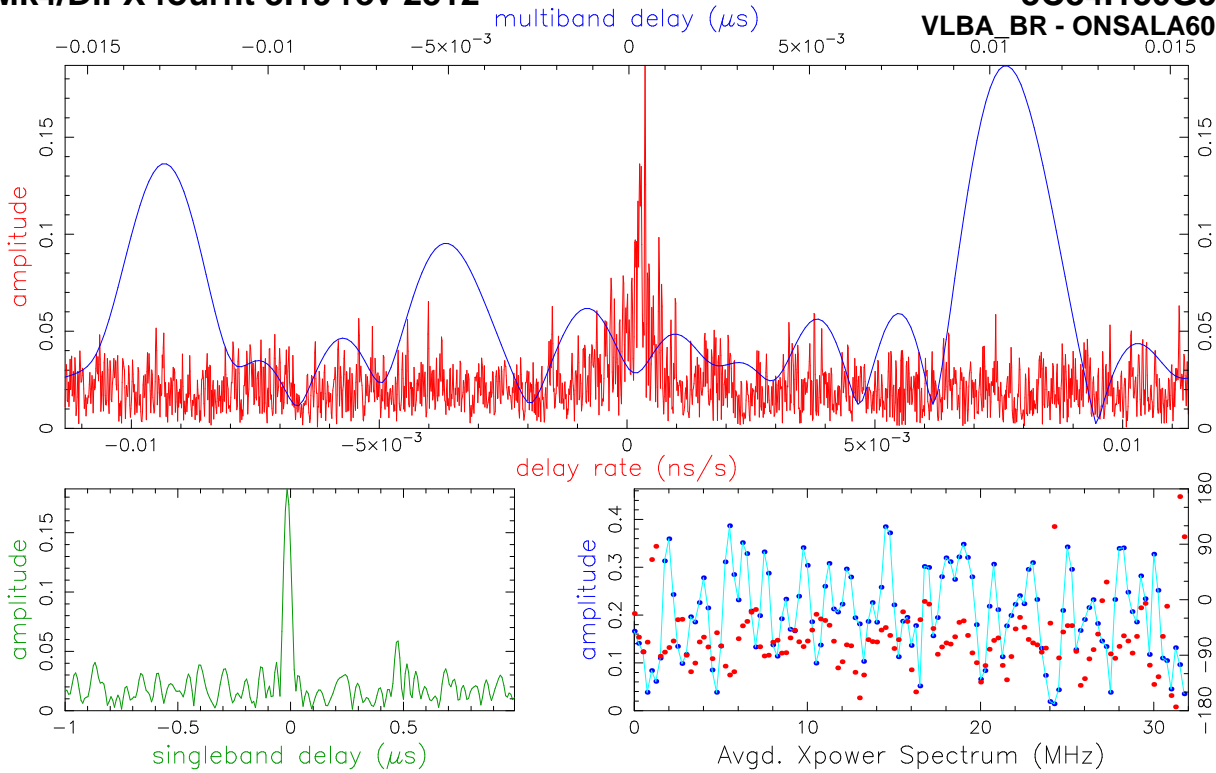
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090759.74
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112311
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



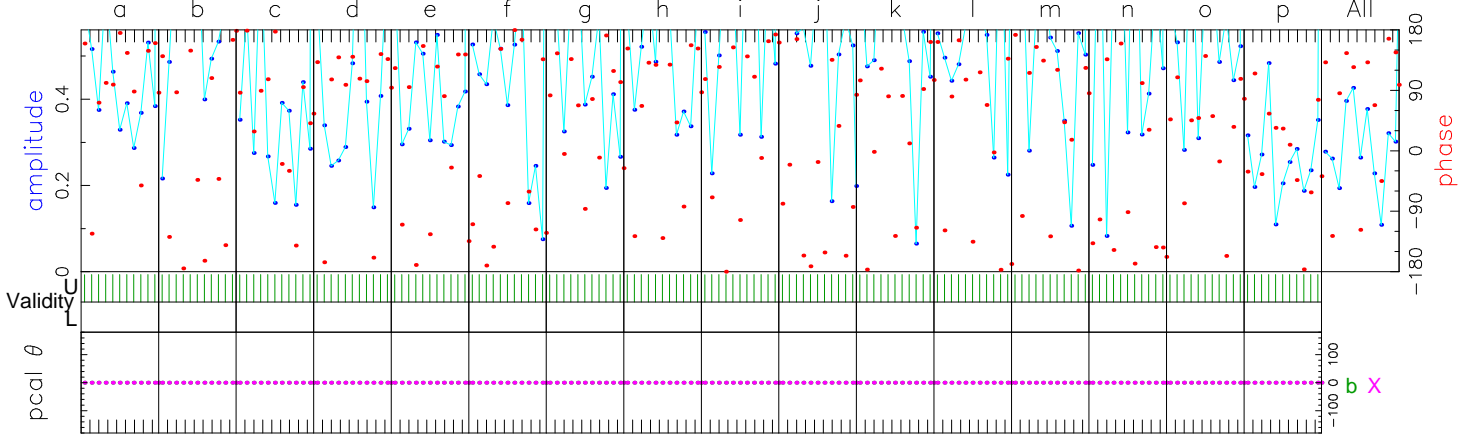
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-62.1	-47.8	-51.9	-57.9	-57.4	-45.7	-60.9	-66.4	-70.7	-53.3	-41.9	-45.3	-60.0	-53.0	-42.4	-68.0	Phase	-54.2				
	1.5	2.1	2.1	1.8	1.7	2.0	1.8	1.7	1.8	2.0	2.0	1.7	1.8	2.2	2.0	0.6	Ampl.	1.8				
	127.1	126.7	126.6	126.3	126.9	126.6	126.5	126.5	126.7	126.8	126.6	126.7	126.6	126.9	126.4	125.4	Sbd box	126.6				
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)		-7.29301171891E+02															Apriori delay (usec)	-7.29282847519E+02	Resid mbdelay (usec)	1.29256E-02	+/-	1.0E-05
Sband delay (usec)		-7.29301306519E+02															Apriori clock (usec)	-1.5578114E+01	Resid sbdelay (usec)	-1.84590E-02	+/-	1.6E-04
Phase delay (usec)		-7.29282849269E+02															Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-1.74930E-06	+/-	3.4E-08
Delay rate (us/s)		-1.25785405131E-01															Apriori rate (us/s)	-1.25785674848E-01	Resid rate (us/s)	2.69717E-07	+/-	1.2E-10
Total phase (deg)					-229.0												Apriori accel (us/s/s)	-1.49517665067E-06	Resid phase (deg)	-54.2	+/-	1.1

ph/seg (deg) 63.8 1.9 Search (2048X64) 1.648 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.4 3.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.5 2.1 Inc. seg. avg. 2.615 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 19.9 3.7 Inc. frq. avg. 1.789 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 961.244 -581.647 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/BX..130G9L Output file: /Exps/c192b/v2/1234/No0205/BX.W.82.130G9L



Fringe quality 9
SNR 11.2
Int time 478.097
Amp 0.187
Phase 144.2
PFD 2.6e-20
Delays (us)
SBD -0.015003
MBD 0.010449
Fringe rate (Hz) 0.031340
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Yr:day 16383
Start 2020:0800.51
Stop 2020:090800.26
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

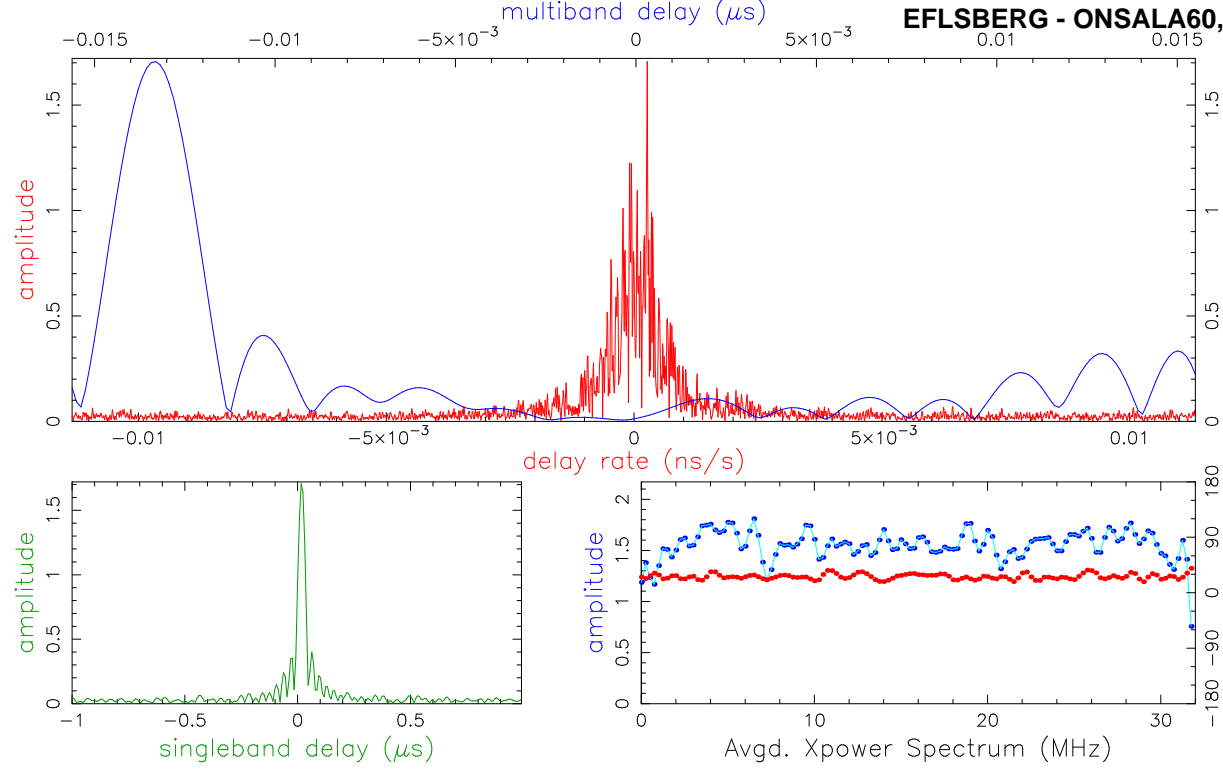


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	137.5	178.7	83.1	129.0	146.2	-148.5	89.3	152.0	147.0	-116.5	107.4	150.5	159.7	-153.1	67.7	14.6	Phase	144.2
b	0.3	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.3	0.4	0.3	0.1	Ampl.	0.3
X	231.9	112.6	65.4	127.1	126.9	126.1	125.6	127.7	126.2	125.9	126.7	126.4	133.8	127.3	126.5	211.0	Sbd box	127.1
b:1000	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:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.17107999911E+04 Apriori delay (usec) 1.17108207918E+04 Resid mbdelay (usec) 1.04493E-02 +/- 9.7E-05
 Sband delay (usec) 1.17108057893E+04 Apriori clock (usec) -3.3013752E+01 Resid sbdelay (usec) -1.50025E-02 +/- 1.5E-03
 Phase delay (usec) 1.17108207965E+04 Apriori clockrate (us/s) -7.7039509E-07 Resid phdelay (usec) 4.65055E-06 +/- 3.3E-07
 Delay rate (us/s) 8.51680999785E-01 Apriori rate (us/s) 8.51680635964E-01 Resid rate (us/s) 3.63822E-07 +/- 1.2E-09
 Total phase (deg) 146.7 Apriori accel (us/s/s) -6.97814916290E-05 Resid phase (deg) 144.2 +/- 10.3

ph/seg (deg) RMS Theor. Amplitude 0.187 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.1 17.8 Search (2048X64) 0.183 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.2 31.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.3 20.5 Inc. seg. avg. 0.275 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 60.5 35.8 Inc. frq. avg. 0.255 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 105.8 el 73.7 pa -58.9 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6635.954 -5448.293 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/bX..130G9L Output file: /Exps/c192b/v2/1234/No0205/bX.W.83.130G9L

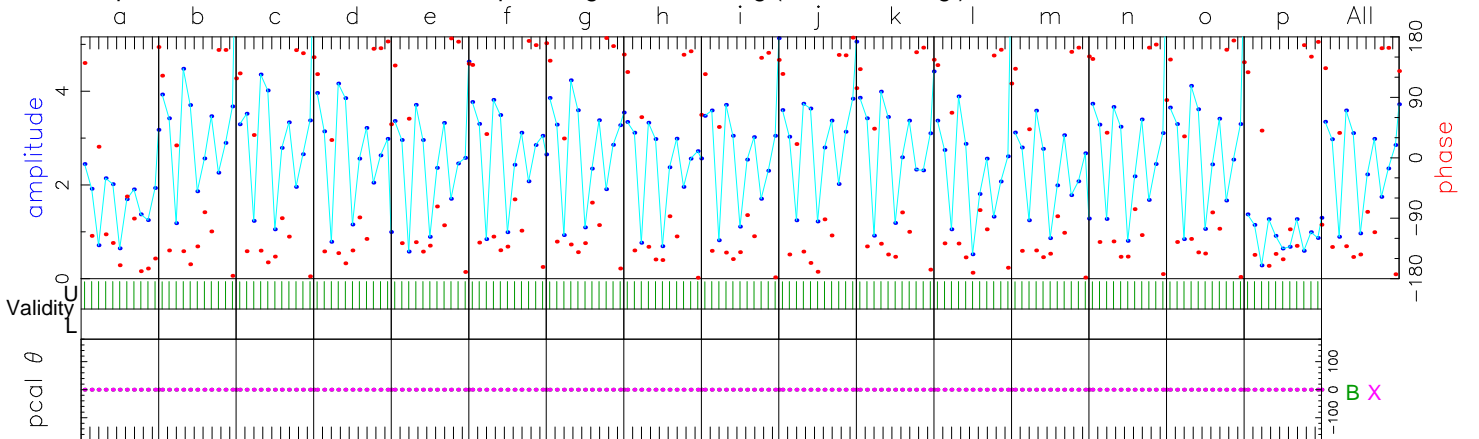


Fringe quality 4

SNR 103.0
Int time 478.749
Amp 1.721
Phase -153.8
PFD 0.0e+00
Delays (us)
SBD 0.017969
MBD -0.013321
Fringe rate (Hz) 0.023209
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 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

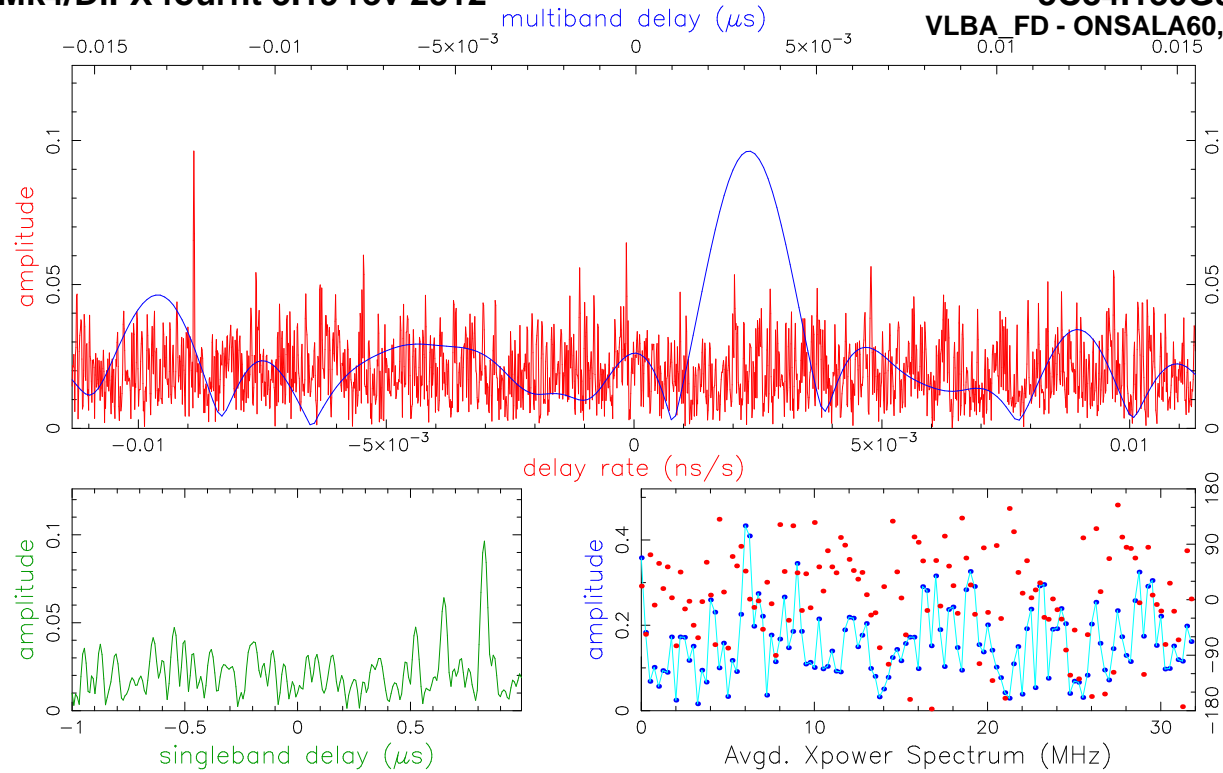


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-132.9	-157.6	-158.0	-161.6	-145.2	-145.7	-145.8	-160.3	-159.1	-164.2	-152.3	-154.3	-157.4	-151.1	-146.8	-167.9	Phase	-153.8				
	1.1	2.1	2.0	2.0	1.7	1.8	2.0	1.7	1.8	2.0	1.9	1.5	1.6	1.8	1.9	0.7	Ampl.	1.7				
	130.3	131.2	131.3	131.2	131.5	131.5	131.2	131.1	131.1	131.3	131.6	131.4	131.1	131.6	130.8	131.9	Sbd box	131.3				
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)		-7.29264918203E+02															Apriori delay (usec)	-7.29282847519E+02	Resid mbdelay (usec)	-1.33207E-02	+/-	1.0E-05
Sband delay (usec)		-7.29264878519E+02															Apriori clock (usec)	-1.5578114E+01	Resid sbdelay (usec)	1.79690E-02	+/-	1.7E-04
Phase delay (usec)		-7.29282852478E+02															Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	-4.95894E-06	+/-	3.6E-08
Delay rate (us/s)		-1.25785405416E-01															Apriori rate (us/s)	-1.25785674848E-01	Resid rate (us/s)	2.69433E-07	+/-	1.3E-10
Total phase (deg)					-328.5												Apriori accel (us/s/s)	-1.49517665067E-06	Resid phase (deg)	-153.8	+/-	1.1

ph/seg (deg) 64.9 1.9 Search (2048X64) 1.590 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.6 3.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.2 2.2 Inc. seg. avg. 2.459 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 20.6 3.9 Inc. frq. avg. 1.720 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 961.244 -581.647 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/BX..130G9L Output file: /Exps/c192b/v2/1234/No0205/BX.W.92.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fX
VLBA_FD - ONSALA60, fgroup W, pol RR

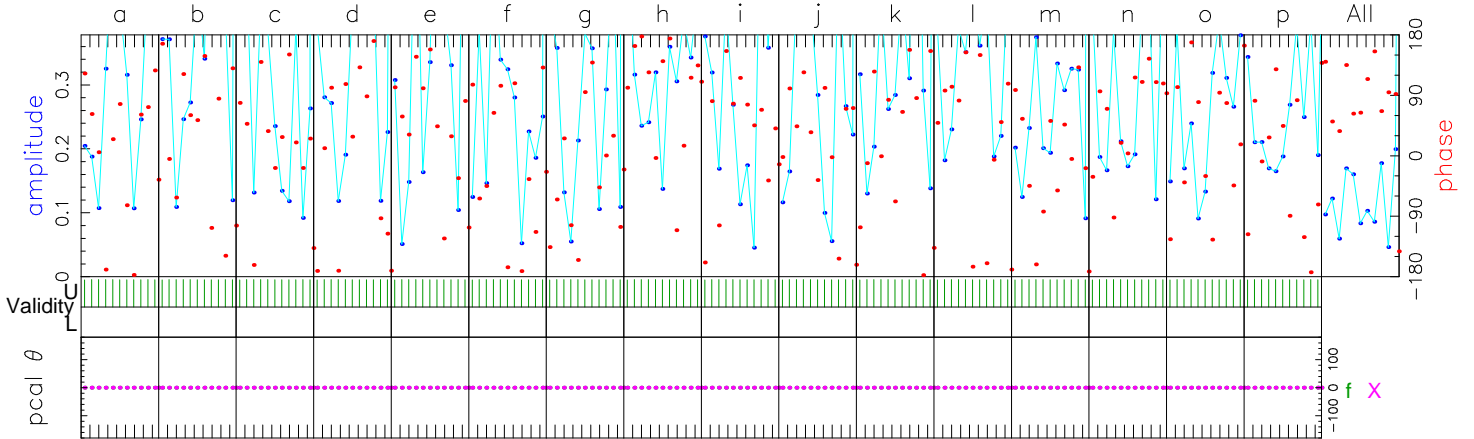


Fringe quality 0

SNR 5.8
Int time 476.705
Amp 0.126
Phase 91.6
PFD 8.7e-01
Delays (us)
SBD 0.826937
MBD 0.003101
Fringe rate (Hz)
-0.765617
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
2020:086:112326
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



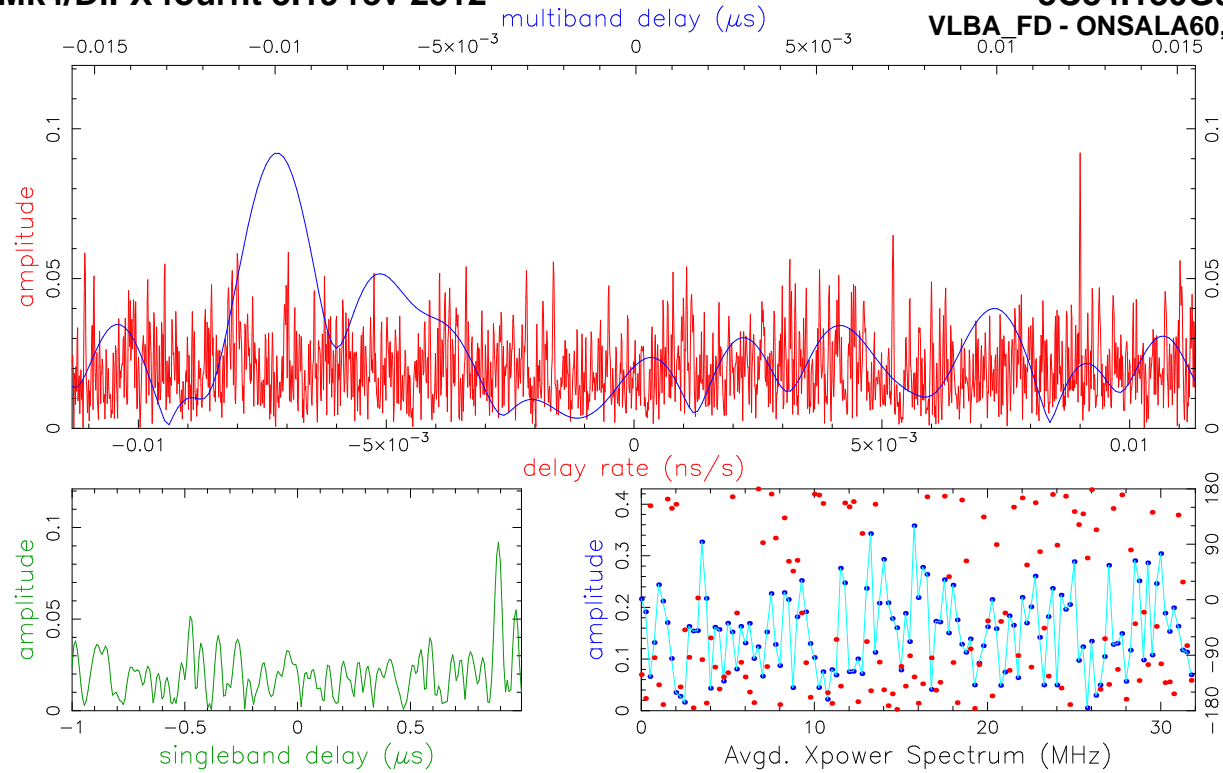
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	82.4	134.5	55.8	124.0	90.7	97.6	-3.8	128.5	76.4	67.9	87.9	122.9	10.3	92.1	69.4	-146.5	Phase	91.6
	0.2	0.1	0.3	0.2	0.3	0.1	0.0	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.0	Ampl.	0.1
	33.1	212.8	146.9	139.7	221.8	29.7	220.1	161.0	255.6	38.7	47.5	101.7	121.2	118.7	67.7	188.4	Sbd box	234.8
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 1.20836793720E+04 Apriori delay (usec) 1.20828637706E+04 Resid mbdelay (usec) 3.10137E-03 +/- 1.9E-04
 Sband delay (usec) 1.20836907081E+04 Apriori clock (usec) -3.1925278E+01 Resid sbdelay (usec) 8.26937E-01 +/- 3.0E-03
 Phase delay (usec) 1.20828637736E+04 Apriori clockrate (us/s) -6.1894950E-07 Resid phdelay (usec) 2.95379E-06 +/- 6.4E-07
 Delay rate (us/s) 6.61523253339E-01 Apriori rate (us/s) 6.61532141393E-01 Resid rate (us/s) -8.88805E-06 +/- 2.3E-09
 Total phase (deg) 164.2 Apriori accel (us/s/s) -8.93507841326E-05 Resid phase (deg) 91.6 +/- 19.9

RMS Theor. Amplitude 0.126 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 38.0 34.4 Search (2048X64) 0.094 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 64.1 60.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 52.5 39.7 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.1 69.4 Inc. frq. avg. 0.118 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

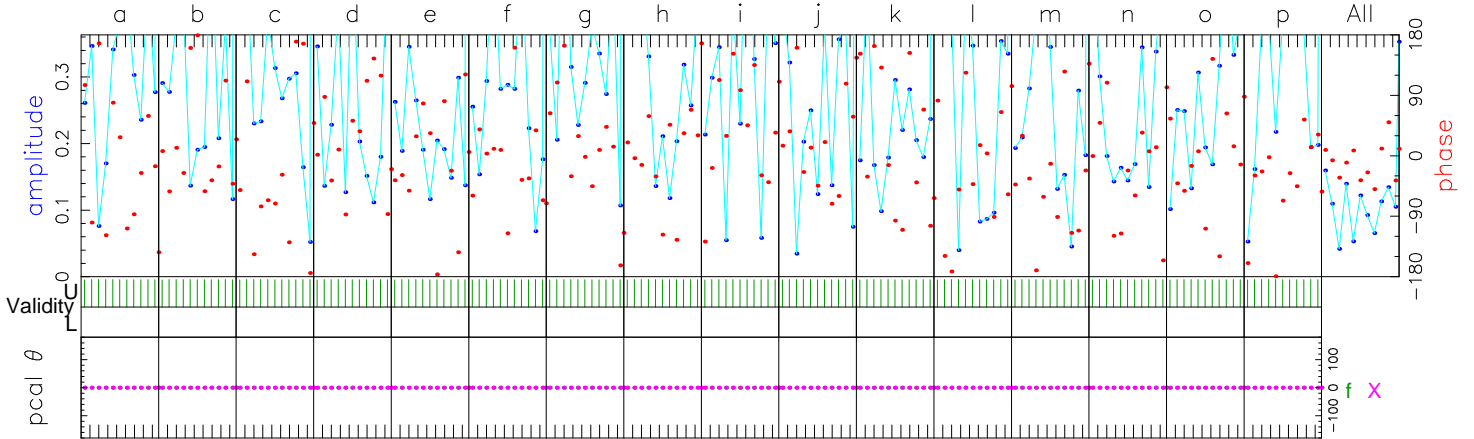
f: az 20.4 el 78.2 pa -154.6 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5210.399 -8383.202 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fX..130G9L Output file: /Exps/c192b/v2/1234/No0205/fX.W.125.130G9L



Fringe quality 0
SNR 5.5
Int time 476.705
Amp 0.121
Phase -7.2
PFD 1.0e+00
Delays (us)
SBD 0.889853
MBD -0.009953
Fringe rate (Hz) 0.776347
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
2020:086:112331
2020:014:135814
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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

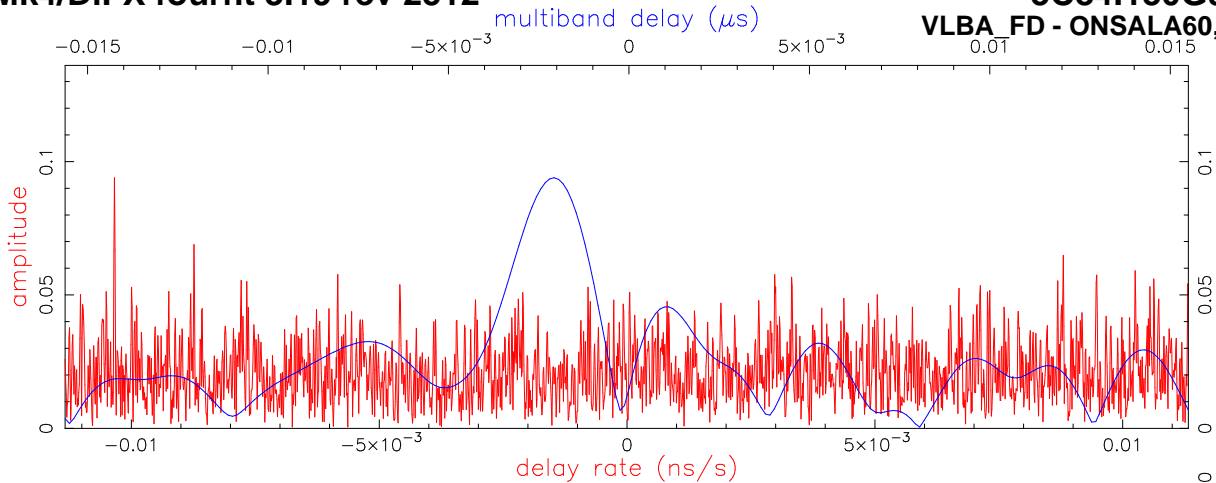


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-21.9	-16.5	-101.0	13.5	-5.8	-22.5	26.0	14.5	63.5	11.2	-89.7	169.2	-58.5	2.3	-1.2	-17.6		Phase	-7.2
	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.3	0.1	0.2	0.1	0.0	0.2	0.1	0.2	0.2		Ampl.	0.1
	57.4	96.0	227.7	194.7	90.7	53.3	23.0	241.9	33.8	177.4	205.4	135.4	167.7	42.4	66.7	162.5		Sbd box	242.9
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	1.20837600672E+04			Apriori delay (usec)			1.20828637706E+04			Resid mbdelay (usec)			-9.95342E-03			+/- 2.0E-04			
Sband delay (usec)	1.20837536231E+04			Apriori clock (usec)			-3.1925278E+01			Resid sbdelay (usec)			8.89853E-01			+/- 3.1E-03			
Phase delay (usec)	1.20828637704E+04			Apriori clockrate (us/s)			-6.1894950E-07			Resid phdelay (usec)			-2.32867E-07			+/- 6.7E-07			
Delay rate (us/s)	6.61541154009E-01			Apriori rate (us/s)			6.61532141393E-01			Resid rate (us/s)			9.01262E-06			+/- 2.4E-09			
Total phase (deg)	65.4			Apriori accel (us/s/s)			-8.93507841326E-05			Resid phase (deg)			-7.2			+/- 20.9			

ph/seg (deg) RMS Theor. Amplitude 0.121 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.9 36.1 Search (2048X64) 0.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.8 63.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.1 41.7 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.6 72.8 Inc. frq. avg. 0.123 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 f: az 20.4 el 78.2 pa -154.6 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5210.399 -8383.202 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fX..130G9L Output file: /Exps/c192b/v2/1234/No0205/fX.W.144.130G9L

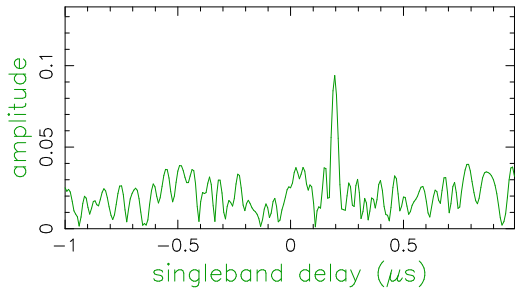
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, fX
VLBA_FD - ONSALA60, fgroup W, pol RL

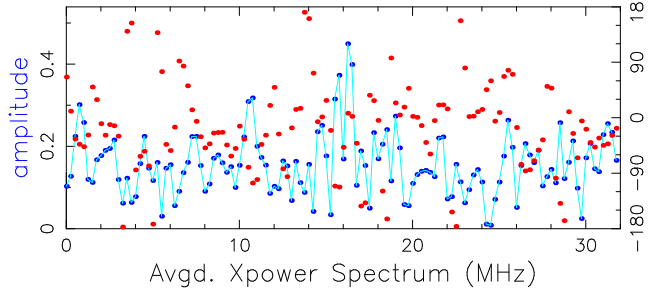


Fringe quality 0

SNR 5.6
Int time 476.705
Amp 0.136
Phase 27.7
PFD 9.9e-01
Delays (us)
SBD 0.194741
MBD -0.002073
Fringe rate (Hz)
-0.891722
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

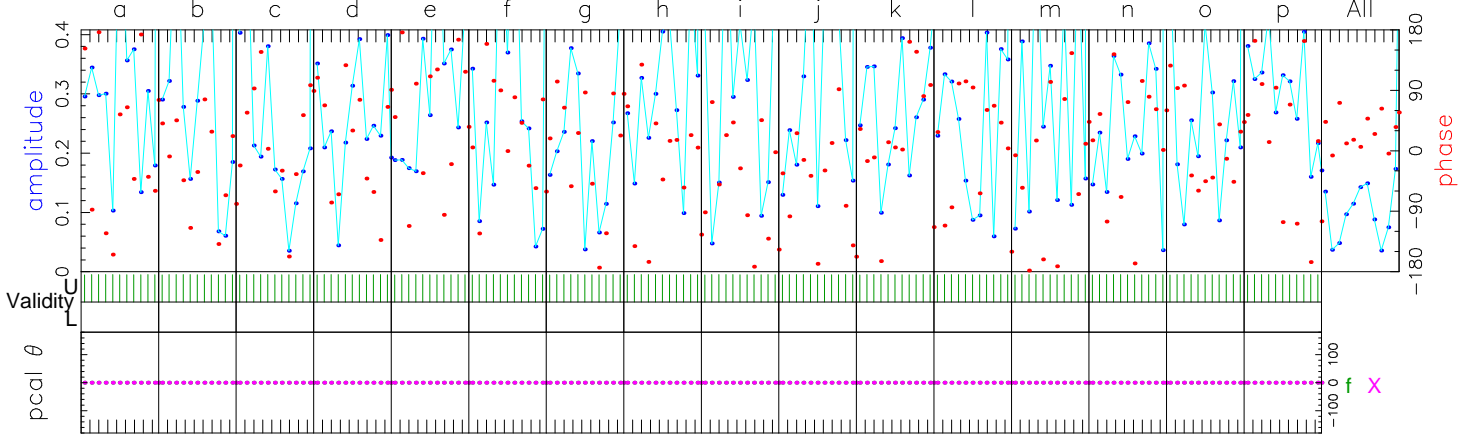


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
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
	-30.1	18.2	32.0	54.3	116.7	59.3	23.5	19.8	-29.4	-23.8	35.7	31.2	11.7	81.8	-10.9	97.4	Phase	27.7
	0.0	0.3	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	86.6	45.1	164.6	159.7	230.8	26.6	118.0	68.2	103.2	149.3	104.4	151.4	110.2	181.4	187.5	21.7	Sbd box	153.9
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

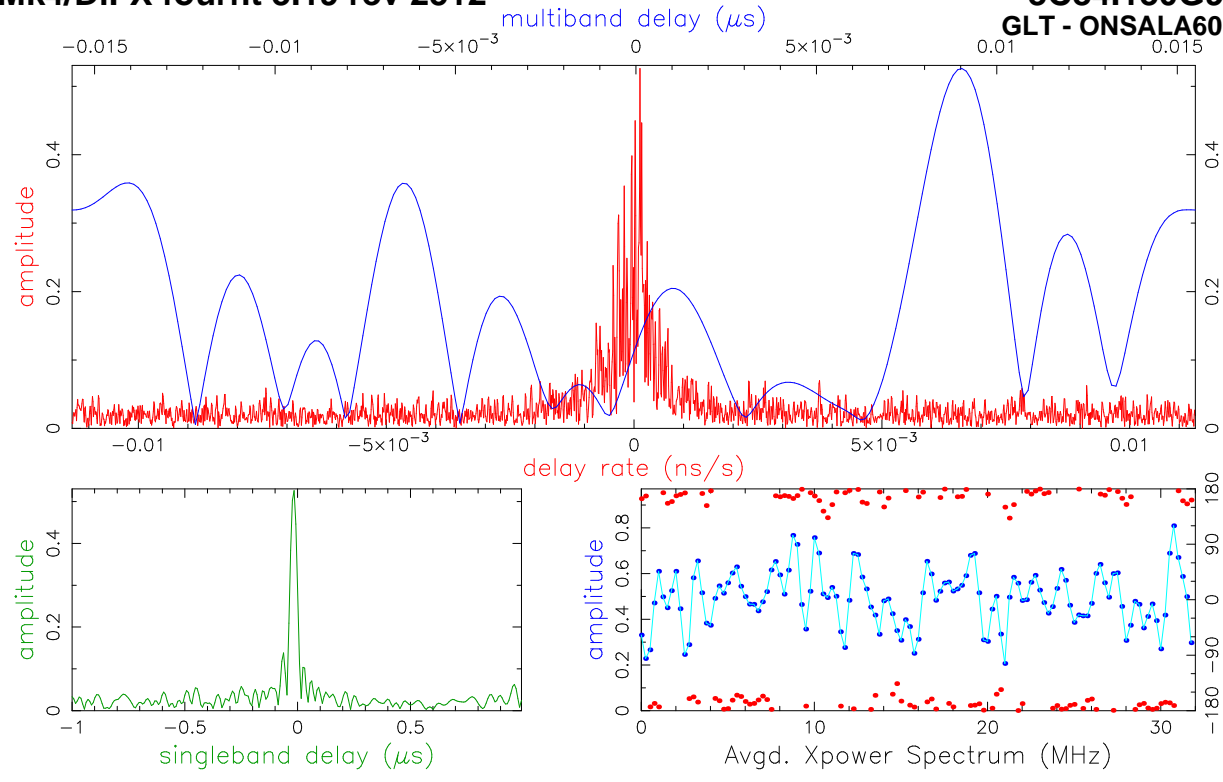
Group delay (usec)(sbd) 1.20830491981E+04 Apriori delay (usec) 1.20828637706E+04 Resid mbdelay (usec) -2.07252E-03 +/- 1.9E-04
 Sband delay (usec) 1.20830585111E+04 Apriori clock (usec) -3.1925278E+01 Resid sbdelay (usec) 1.94741E-01 +/- 3.1E-03
 Phase delay (usec) 1.20828637715E+04 Apriori clockrate (us/s) -6.1894950E-07 Resid phdelay (usec) 8.93860E-07 +/- 6.6E-07
 Delay rate (us/s) 6.61521789382E-01 Apriori rate (us/s) 6.61532141393E-01 Resid rate (us/s) -1.03520E-05 +/- 2.4E-09
 Total phase (deg) 100.3 Apriori accel (us/s/s) -8.93507841326E-05 Resid phase (deg) 27.7 +/- 20.4

RMS Theor. Amplitude 0.136 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 25.2 35.4 Search (2048X64) 0.092 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 52.7 61.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.3 40.8 Inc. seg. avg. 0.122 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.3 71.3 Inc. frq. avg. 0.136 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 20.4 el 78.2 pa -154.6 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5210.399 -8383.202 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/fX..130G9L Output file: /Exps/c192b/v2/1234/No0205/fX.W.155.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

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

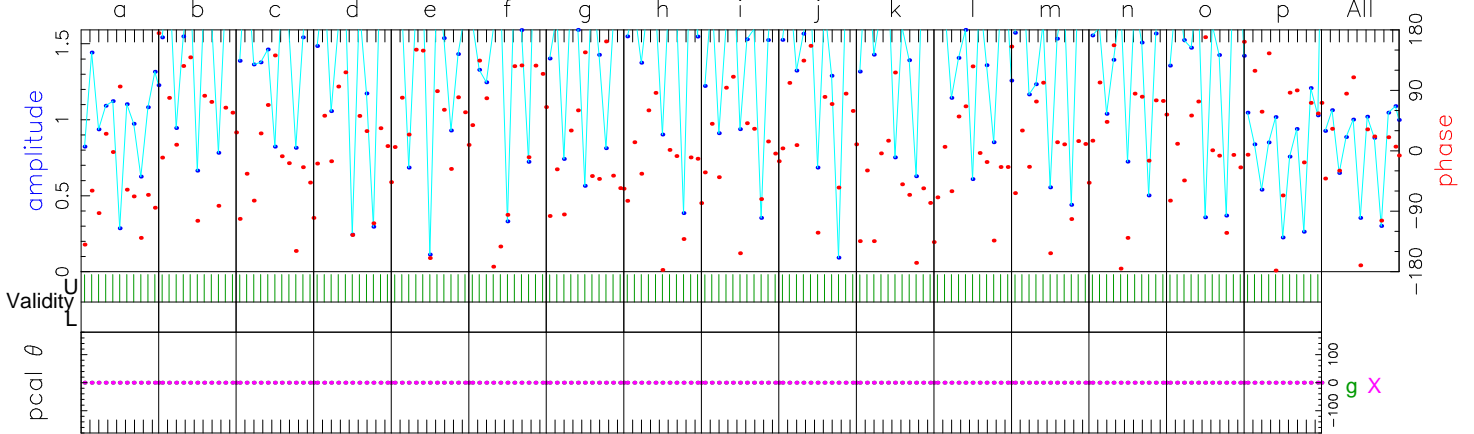


Fringe quality 5

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

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

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

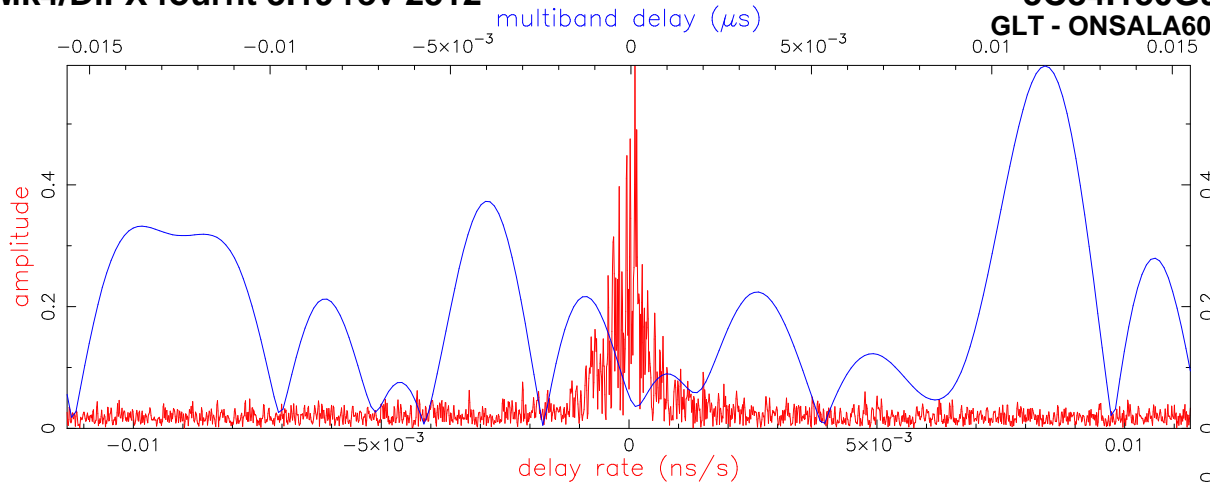


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-63.8	72.2	-29.5	39.8	76.4	127.3	-32.7	1.1	32.2	82.2	-54.7	-10.5	15.1	88.0	-2.6	83.5	Phase	25.1				
	0.7	0.9	0.9	1.0	0.9	0.9	0.8	1.0	0.8	0.9	0.9	0.9	1.0	0.8	1.0	0.5	Ampl.	0.9				
	128.0	127.1	127.2	126.7	127.1	126.6	126.3	126.3	126.8	126.5	126.6	126.6	126.9	126.9	127.2	126.9	Sbd box	126.7				
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			8.13878424918E+03														Apriori delay (usec)	8.13880649733E+03	Resid mbdelay (usec)	9.00185E-03	+/-	3.4E-05
Sband delay (usec)			8.13878870483E+03														Apriori clock (usec)	-3.1086933E+01	Resid sbdelay (usec)	-1.77925E-02	+/-	5.4E-04
Phase delay (usec)			8.13880649814E+03														Apriori clockrate (us/s)	-4.5300002E-07	Resid phdelay (usec)	8.08566E-07	+/-	1.2E-07
Delay rate (us/s)			4.44841222552E-01														Apriori rate (us/s)	4.44841105105E-01	Resid rate (us/s)	1.17447E-07	+/-	4.2E-10
Total phase (deg)				269.9													Apriori accel (us/s/s)	-3.36591992965E-05	Resid phase (deg)	25.1	+/-	3.6

ph/seg (deg) 75.2 Theor. 6.3 Amplitude 0.531 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.9 10.9 Search (2048X64) 0.480 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.5 7.2 Inc. seg. avg. 0.834 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 67.7 12.6 Inc. frq. avg. 0.858 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3463.723 -1446.406 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gX..130G9L Output file: /Exps/c192b/v2/1234/No0205/gX.W.167.130G9L

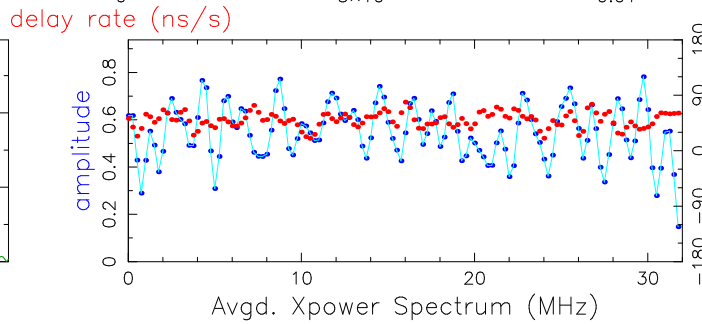
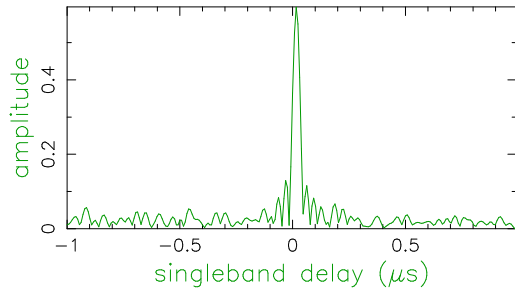
Mk4/DiFX fourfit 3.19 rev 2512

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



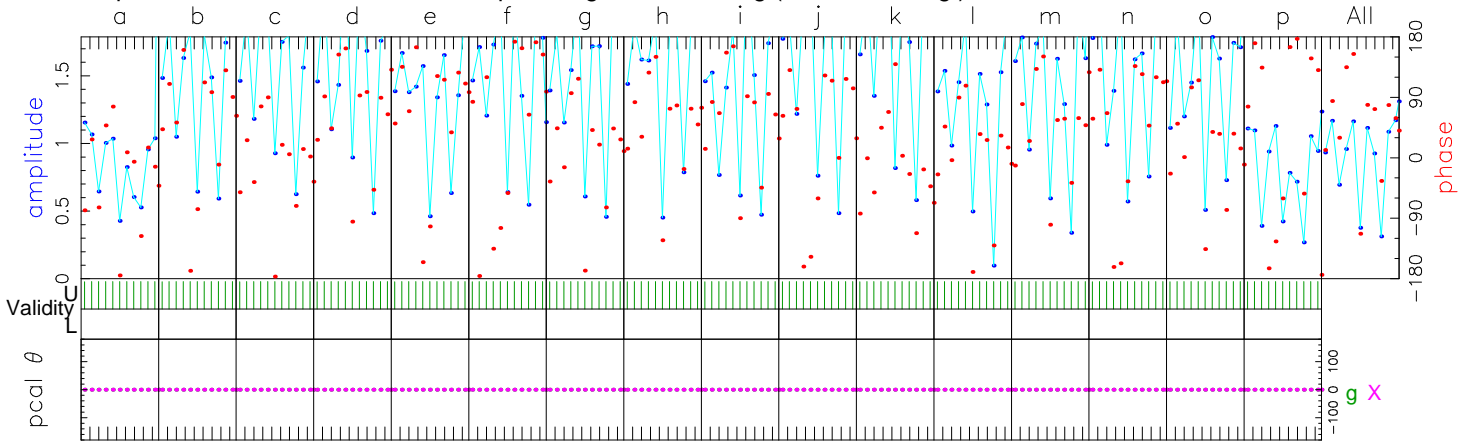
Fringe quality 3

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



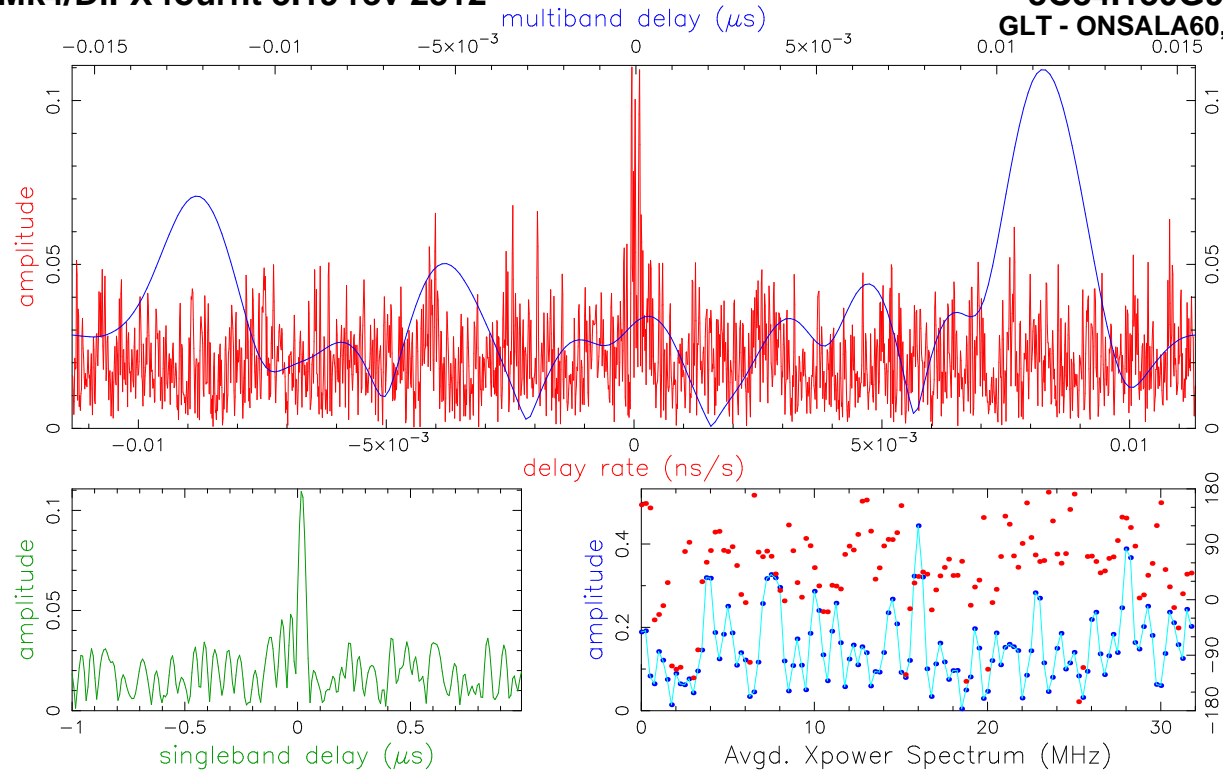
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112345
2020:014:135814
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



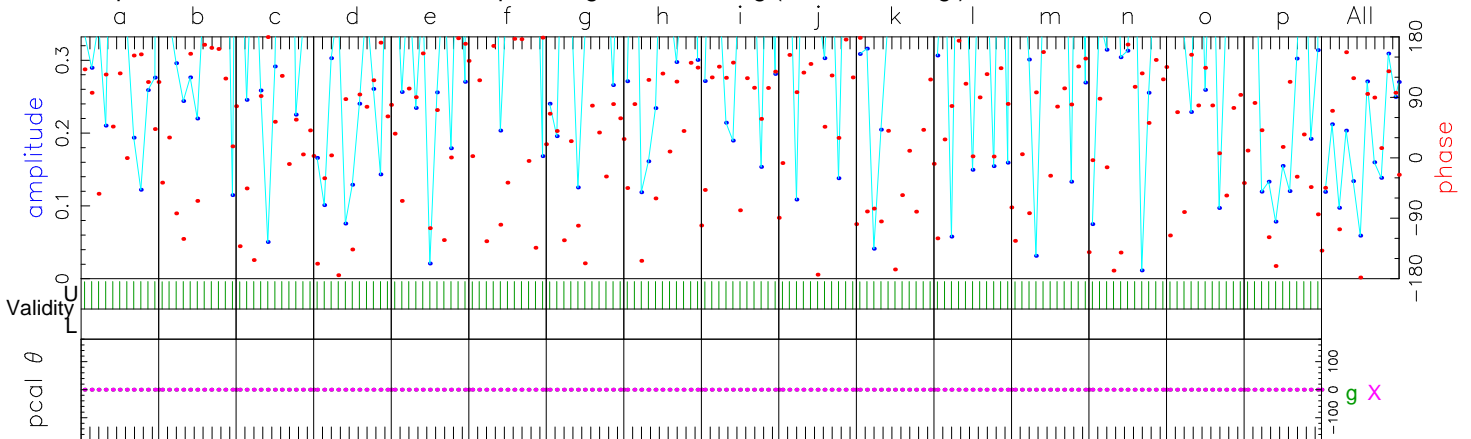
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.3	109.5	18.2	94.6	120.4	174.7	40.9	72.8	89.9	125.3	-6.0	39.2	66.2	124.2	41.2	166.3	166.3	Phase	78.1
0.5	1.0	1.0	1.0	0.9	0.9	1.0	1.1	0.9	1.0	1.1	0.9	1.0	0.9	1.0	0.9	0.5	Ampl.	0.9
132.7	131.6	131.5	131.3	131.0	131.0	131.2	131.0	130.8	130.8	131.0	130.9	131.0	131.0	131.6	131.5	132.7	Sbd box	131.1
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.13881798984E+03			Apriori delay (usec)			8.13880649733E+03			Resid mbdelay (usec)			1.14925E-02			+/- 3.0E-05		
Sband delay (usec)	8.13882298033E+03			Apriori clock (usec)			-3.1086933E+01			Resid sbdelay (usec)			1.64830E-02			+/- 4.8E-04		
Phase delay (usec)	8.13880649985E+03			Apriori clockrate (us/s)			-4.5300002E-07			Resid phdelay (usec)			2.51987E-06			+/- 1.0E-07		
Delay rate (us/s)	4.44841222168E-01			Apriori rate (us/s)			4.44841105105E-01			Resid rate (us/s)			1.17063E-07			+/- 3.7E-10		
Total phase (deg)	323.0			Apriori accel (us/s/s)			-3.36591992965E-05			Resid phase (deg)			78.1			+/- 3.2		

ph/seg (deg) 72.2 5.6 Search (2048X64) 0.533 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.3 9.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 57.2 6.4 Inc. seg. avg. 0.897 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 60.4 11.2 Inc. frq. avg. 0.904 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 217.9 el 52.8 pa 10.1 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3463.723 -1446.406 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/gX..130G9L Output file: /Exps/c192b/v2/1234/No0205/gX.W.187.130G9L simultaneous interpolator



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

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

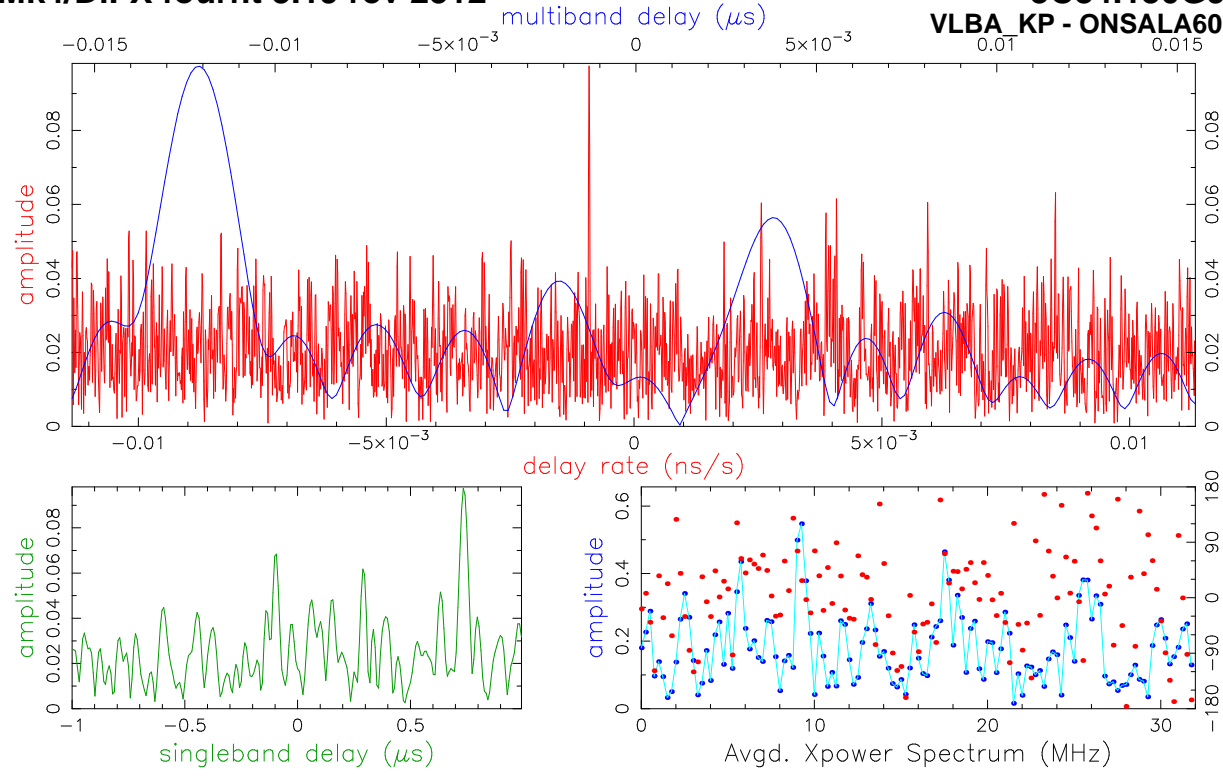


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
85.5	163.1	39.2	96.3	133.3	-156.6	38.7	97.9	117.3	130.1	-31.3	113.1	121.9	134.9	77.7	16.4	103.8	Phase	103.8
0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
227.8	116.2	37.0	156.0	88.3	20.3	213.8	130.3	255.6	131.7	231.6	120.2	199.2	238.1	133.1	174.0	131.4	Sbd box	131.4
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

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

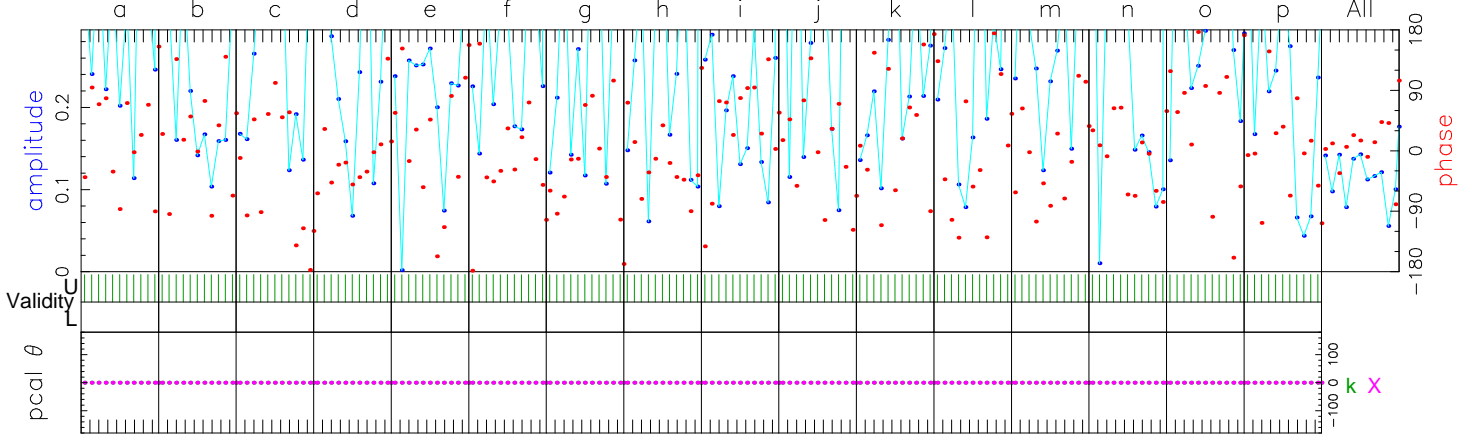
RMS Theor. Amplitude 0.111 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 76.1 30.0 Search (2048X64) 0.108 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 90.4 52.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016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

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



Fringe quality 0
SNR 5.8
Int time 477.005
Amp 0.098
Phase 4.2
PFD 7.2e-01
Delays (us)
SBD 0.736522
MBD -0.012118
Fringe rate (Hz)
-0.078619
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
2020:086:112357
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
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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		1.19103956958E+04								1.19096578137E+04								
Sband delay (usec)		1.19103943357E+04								-3.2796345E+01								
Phase delay (usec)		1.19096578138E+04								-7.2257901E-07								
Delay rate (us/s)		7.90904188308E-01								7.90905100997E-01								
Total phase (deg)				29.4						-8.69586823745E-05								
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

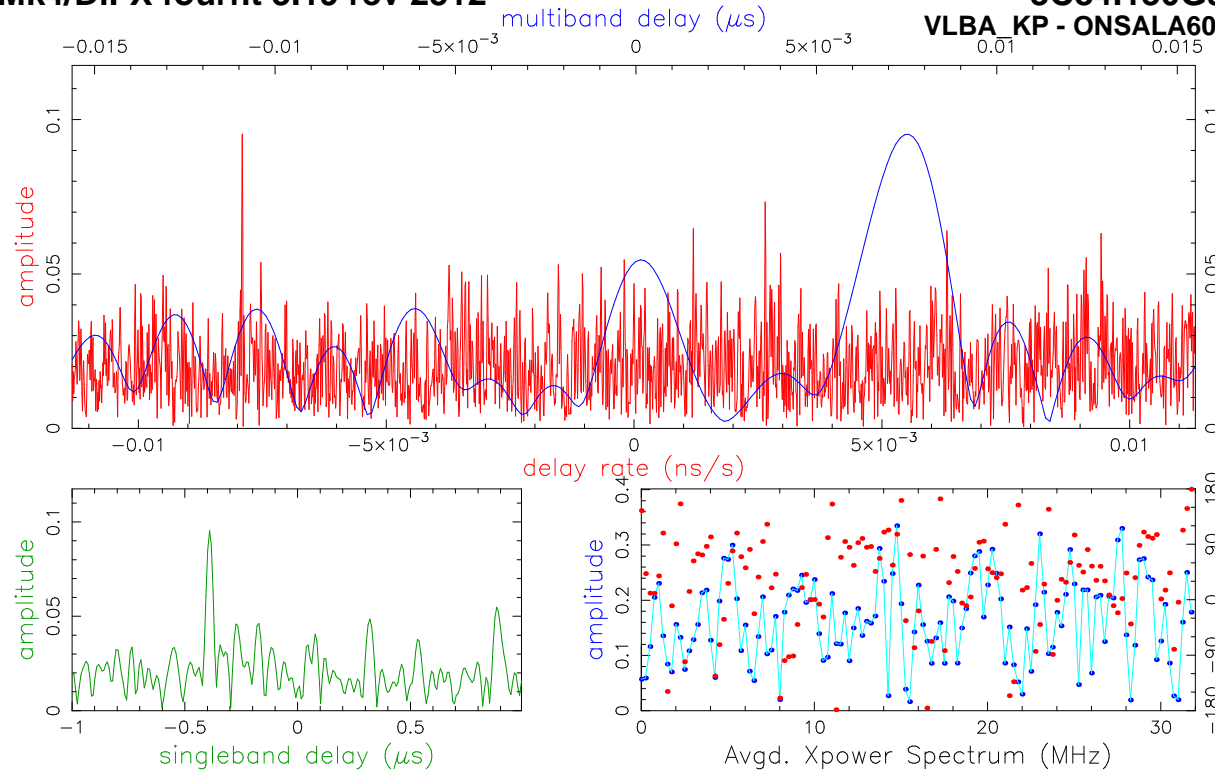
ph/seg (deg) 33.4 34.0
amp/seg (%) 32.0 59.3
ph/frq (deg) 40.4 39.2
amp/frq (%) 51.5 68.4

RMS Theor. Amplitude 0.098 +/- 0.017
Search (2048X64) 0.091
Interp. 0.000
Inc. seg. avg. 0.097
Inc. frq. avg. 0.098

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

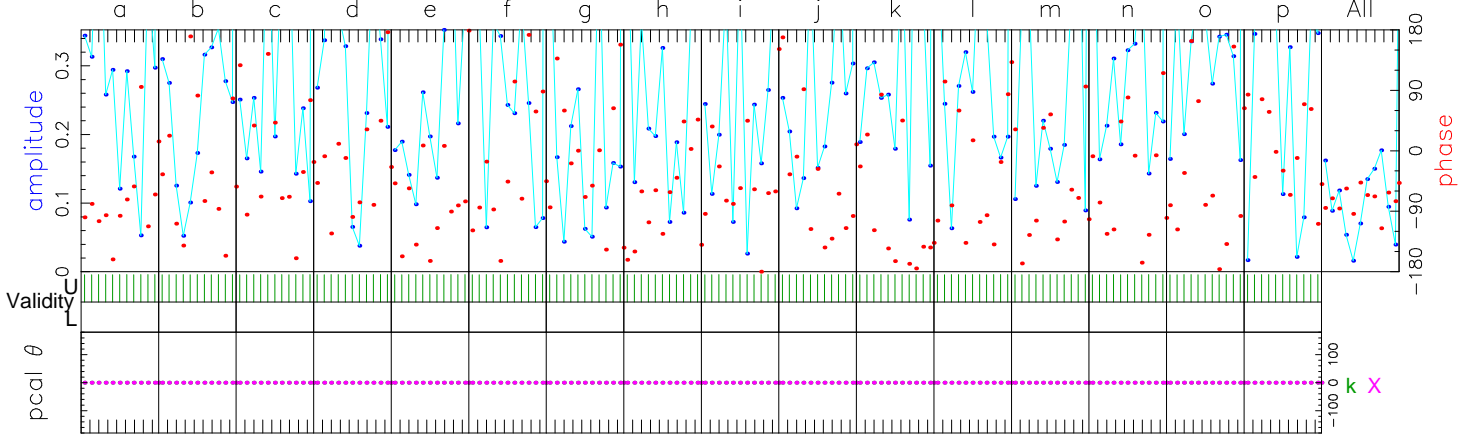
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

k: az 43.8 el 75.8 pa -127.2 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6196.918 -8076.402 simultaneous interpolator



Fringe quality 0
 SNR 5.7
 Int time 477.005
 Amp 0.118
 Phase -77.6
 PFD 9.5e-01
 Delays (us)
 SBD -0.389978
 MBD 0.007529
 Fringe rate (Hz)
 -0.681851
 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
 2020:086:112403
 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

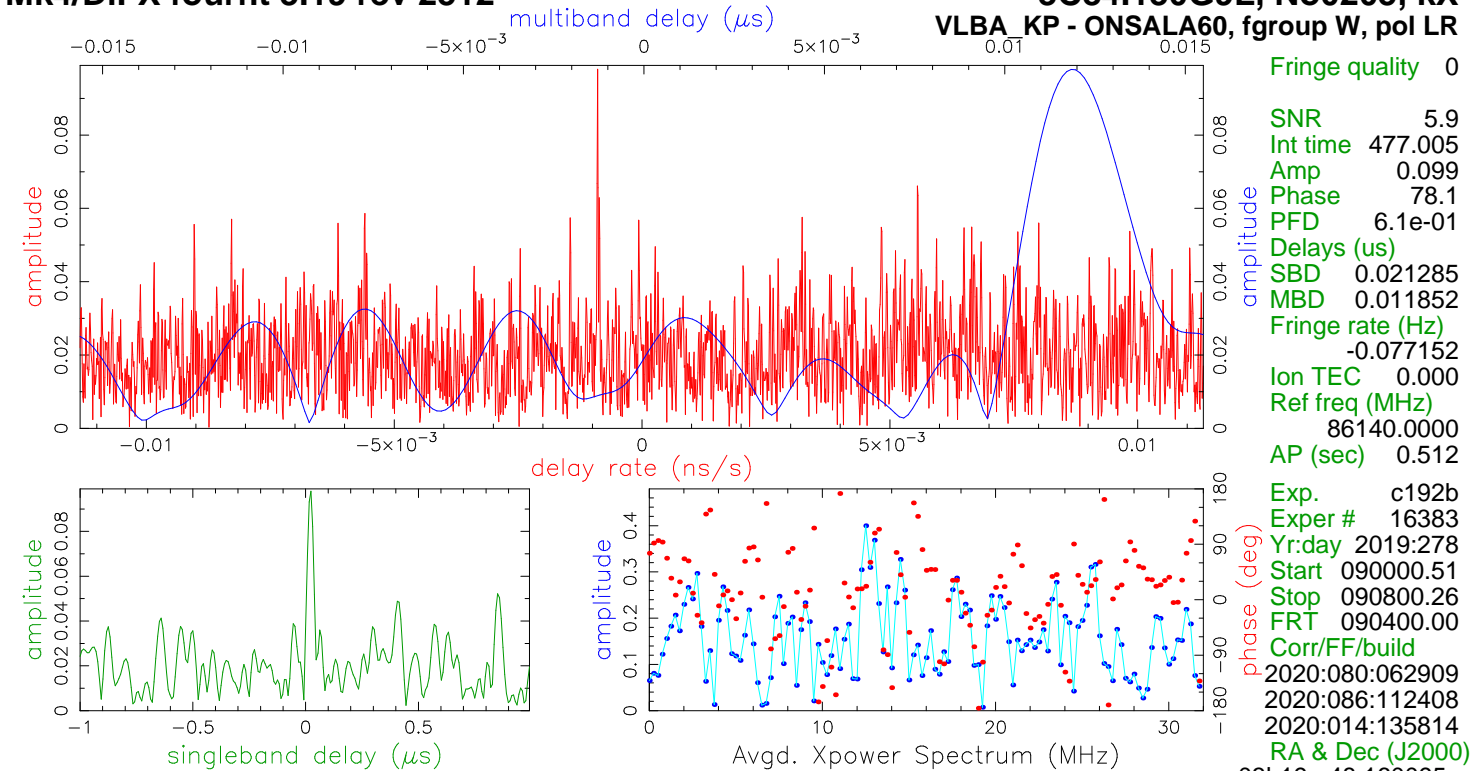


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-95.5	-54.4	-61.7	-37.2	-76.7	-103.8	-24.9	-68.8	-63.2	-99.4	-166.1	-99.3	-89.6	-38.1	-132.3	18.2	Phase	-77.6
	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	78.4	132.1	6.0	221.0	8.8	8.5	108.1	229.0	17.9	97.6	252.6	195.2	214.8	173.8	253.9	153.3	Sbd box	79.1
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

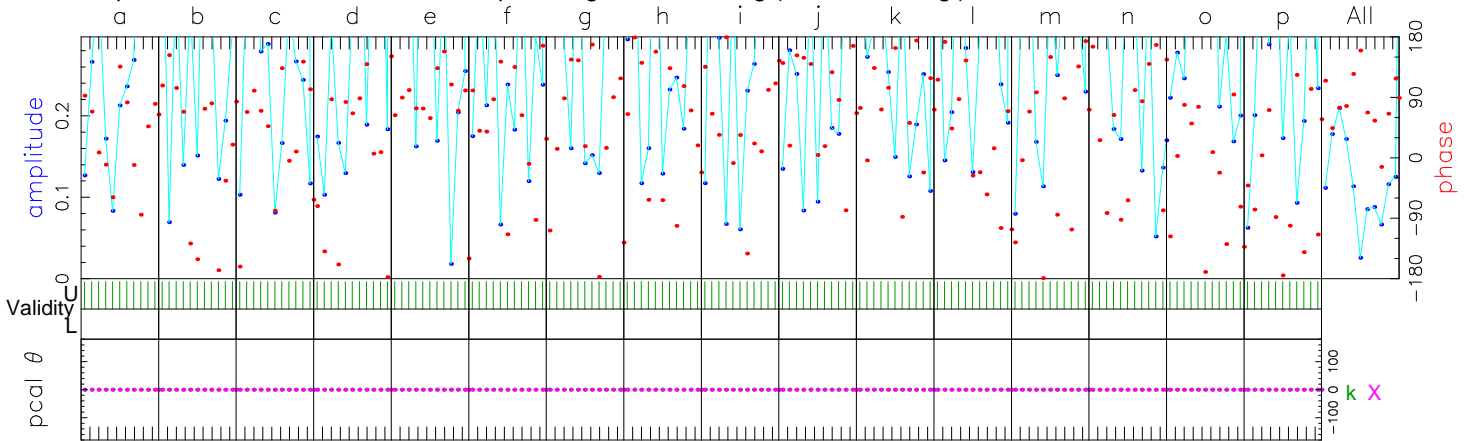
Group delay (usec)(sbd) 1.19092590922E+04 Apriori delay (usec) 1.19096578137E+04 Resid mbdelay (usec) 7.52854E-03 +/- 1.9E-04
 Sband delay (usec) 1.19092678357E+04 Apriori clock (usec) -3.2796345E+01 Resid sbdelay (usec) -3.89978E-01 +/- 3.0E-03
 Phase delay (usec) 1.19096578112E+04 Apriori clockrate (us/s) -7.2257901E-07 Resid phdelay (usec) -2.50384E-06 +/- 6.5E-07
 Delay rate (us/s) 7.90897185385E-01 Apriori rate (us/s) 7.90905100997E-01 Resid rate (us/s) -7.91561E-06 +/- 2.3E-09
 Total phase (deg) -52.5 Apriori accel (us/s/s) -8.69586823745E-05 Resid phase (deg) -77.6 +/- 20.1

ph/seg (deg) RMS Theor. Amplitude 0.118 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 18.5 34.9 Search (2048X64) 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.4 60.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.6 40.2 Inc. seg. avg. 0.105 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.8 70.2 Inc. frq. avg. 0.121 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6196.918 -8076.402 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/kX..130G9L Output file: /Exps/c192b/v2/1234/No0205/kX.W.242.130G9L



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

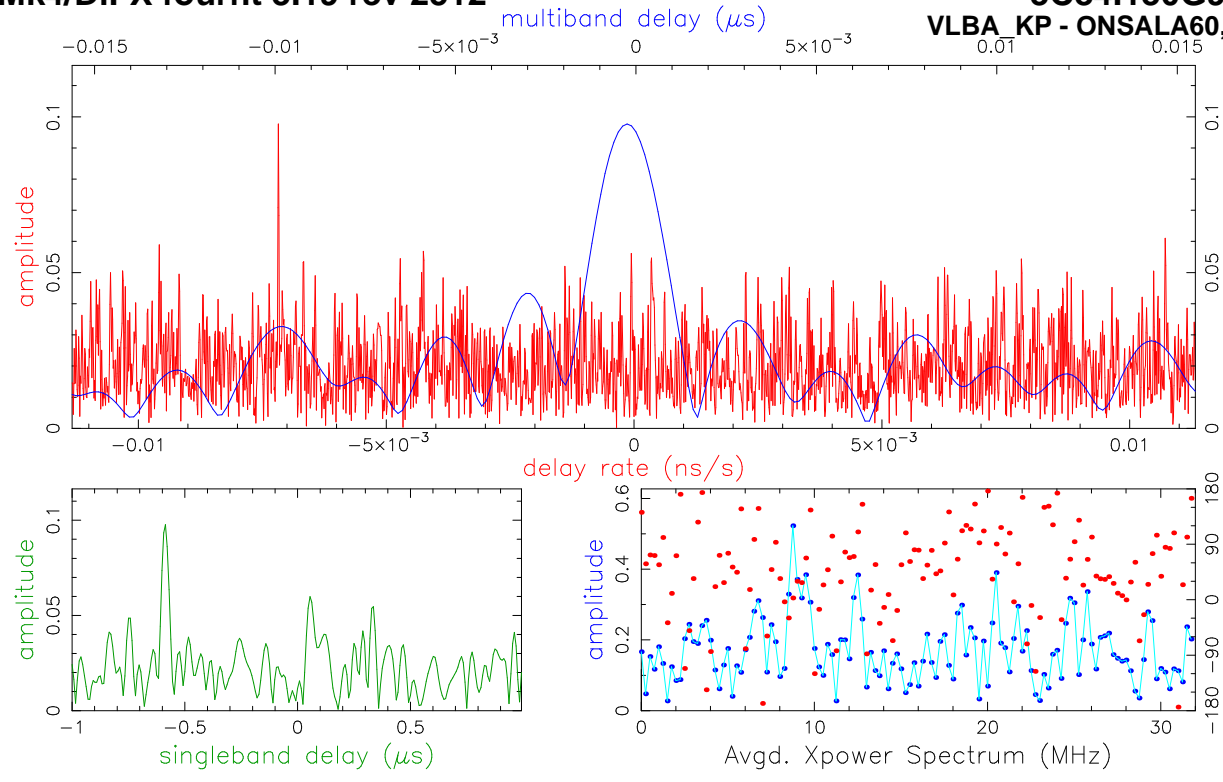


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	36.4	91.7	69.9	62.5	88.8	76.1	101.6	129.5	64.1	122.7	79.8	43.9	120.6	75.9	25.9	-82.9	Phase	78.1				
	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	Ampl.	0.1				
	243.0	12.2	249.3	251.4	132.3	167.0	248.5	96.8	129.2	199.0	61.1	222.5	175.5	97.7	164.7	35.5	Sbd box	131.7				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			1.19096696652E+04														Apriori delay (usec)	1.19096578137E+04	Resid mbdelay (usec)	1.18516E-02	+/-	1.8E-04
Sband delay (usec)			1.19096790982E+04														Apriori clock (usec)	-3.2796345E+01	Resid sbdelay (usec)	2.12845E-02	+/-	2.9E-03
Phase delay (usec)			1.19096578162E+04														Apriori clockrate (us/s)	-7.2257901E-07	Resid phdelay (usec)	2.51769E-06	+/-	6.3E-07
Delay rate (us/s)			7.90904205334E-01														Apriori rate (us/s)	7.90905100997E-01	Resid rate (us/s)	-8.95664E-07	+/-	2.3E-09
Total phase (deg)				103.3													Apriori accel (us/s/s)	-8.69586823745E-05	Resid phase (deg)	78.1	+/-	19.4

	RMS	Theor.	Amplitude	0.099 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	44.8	33.7	Search (2048X64)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	56.2	58.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	53.0	38.9	Inc. seg. avg.	0.101	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	62.4	67.8	Inc. frq. avg.	0.094	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

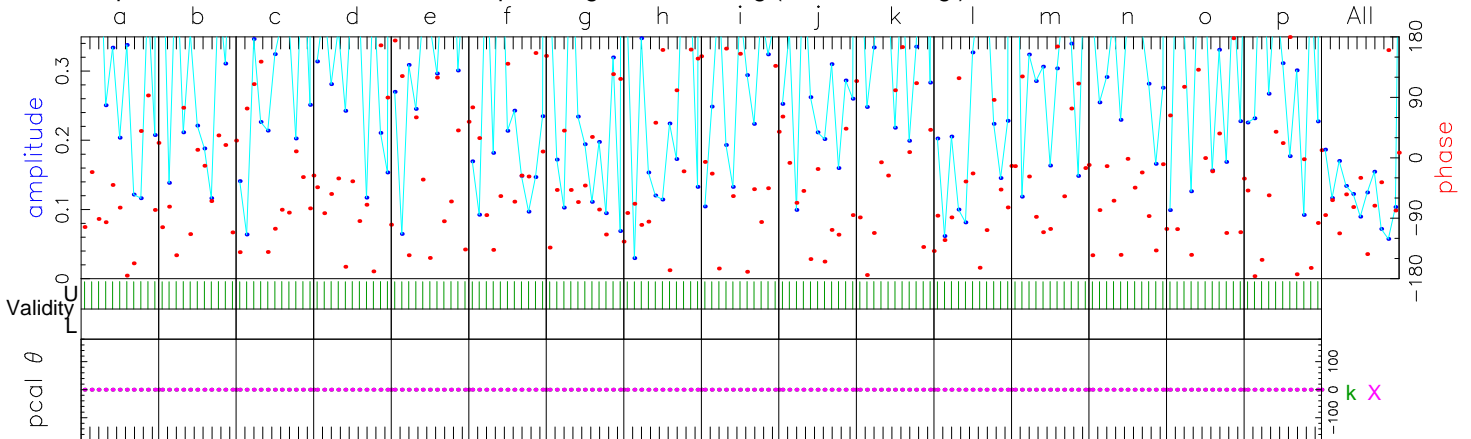
k: az 43.8 el 75.8 pa -127.2 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6196.918 -8076.402 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/kX..130G9L Output file: /Exps/c192b/v2/1234/No0205/kX.W.257.130G9L



Fringe quality 0
SNR 5.9
Int time 477.005
Amp 0.116
Phase -80.5
PFD 6.8e-01
Delays (us)
SBD -0.587825
MBD -0.000251
Fringe rate (Hz)
-0.619162
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
2020:086:112414
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

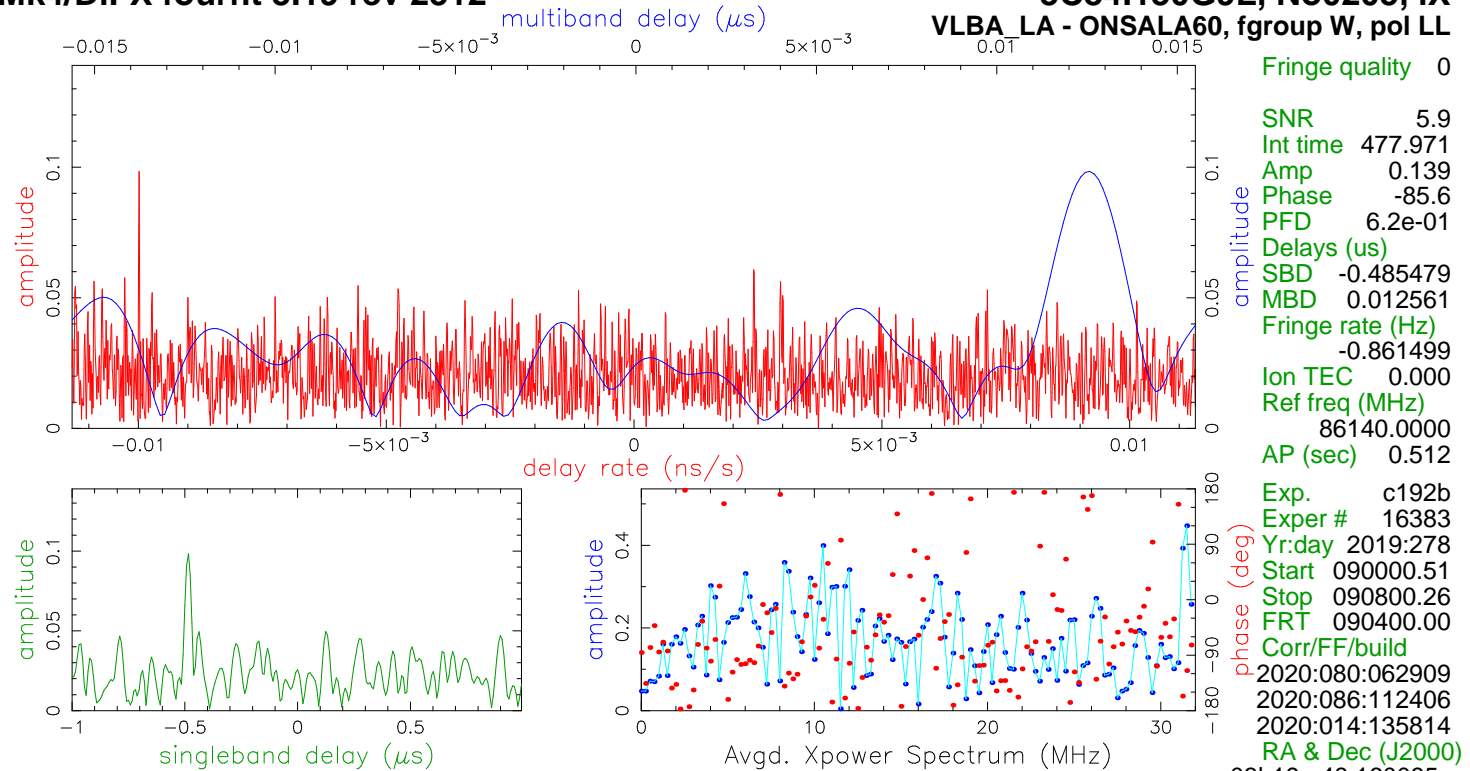


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-76.3	-74.9	-78.8	-81.9	-111.9	-59.5	-70.3	-122.0	-138.2	-56.9	-103.9	-90.3	-34.1	-58.0	-175.5	-131.8	Phase	-80.5
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.1	Ampl.	0.1
	52.5	235.5	35.0	26.2	33.2	73.3	232.5	32.8	64.3	238.7	17.1	15.1	157.8	119.8	22.9	173.2	Sbd box	53.8
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			1.19090638131E+04					Apriori delay (usec)	1.19096578137E+04				Resid mbdelay (usec)	-2.50590E-04			+/-	1.8E-04
Sband delay (usec)			1.19090699882E+04					Apriori clock (usec)	-3.2796345E+01				Resid sbdelay (usec)	-5.87825E-01			+/-	2.9E-03
Phase delay (usec)			1.19096578111E+04					Apriori clockrate (us/s)	-7.2257901E-07				Resid phdelay (usec)	-2.59639E-06			+/-	6.3E-07
Delay rate (us/s)			7.90897913146E-01					Apriori rate (us/s)	7.90905100997E-01				Resid rate (us/s)	-7.18785E-06			+/-	2.3E-09
Total phase (deg)								Apriori accel (us/s/s)	-8.69586823745E-05				Resid phase (deg)	-80.5			+/-	19.5

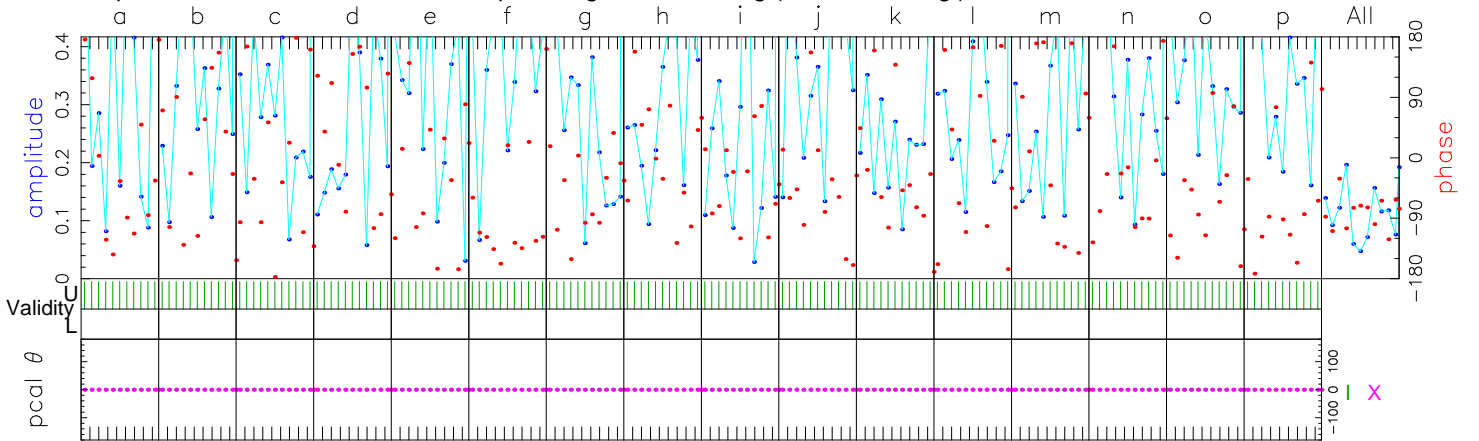
ph/seg (deg) 47.7 33.9 Search (2048X64) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 48.2 59.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 39.8 39.1 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 46.5 68.2 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
k: az 43.8 el 75.8 pa -127.2 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -6196.918 -8076.402 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/kX..130G9L Output file: /Exps/c192b/v2/1234/No0205/kX.W.277.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, IX
VLBA_LA - ONSALA60, fgroup W, pol LL



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					
	-96.7	34.9	-88.5	-170.5	-79.2	-114.7	-54.4	-19.1	-51.7	-67.1	-45.8	173.8	-158.4	-73.8	-84.4	-100.8		Phase	-85.6				
	0.2	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.3		Ampl.	0.1				
	179.4	88.9	97.9	28.4	128.3	67.1	94.5	188.6	240.0	188.3	18.2	128.2	112.2	46.2	206.1	93.5		Sbd box	66.9				
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		APs used					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			1.23107688172E+04															Apriori delay (usec)	1.23112562562E+04	Resid mbdelay (usec)	1.25610E-02	+/-	1.8E-04
Sband delay (usec)			1.23107707772E+04															Apriori clock (usec)	-3.3156429E+01	Resid sbdelay (usec)	-4.85479E-01	+/-	2.9E-03
Phase delay (usec)			1.23112562534E+04															Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-2.76095E-06	+/-	6.3E-07
Delay rate (us/s)			6.94776170095E-01															Apriori rate (us/s)	6.94786171245E-01	Resid rate (us/s)	-1.00012E-05	+/-	2.3E-09
Total phase (deg)				241.7														Apriori accel (us/s/s)	-8.49548459088E-05	Resid phase (deg)	-85.6	+/-	19.4

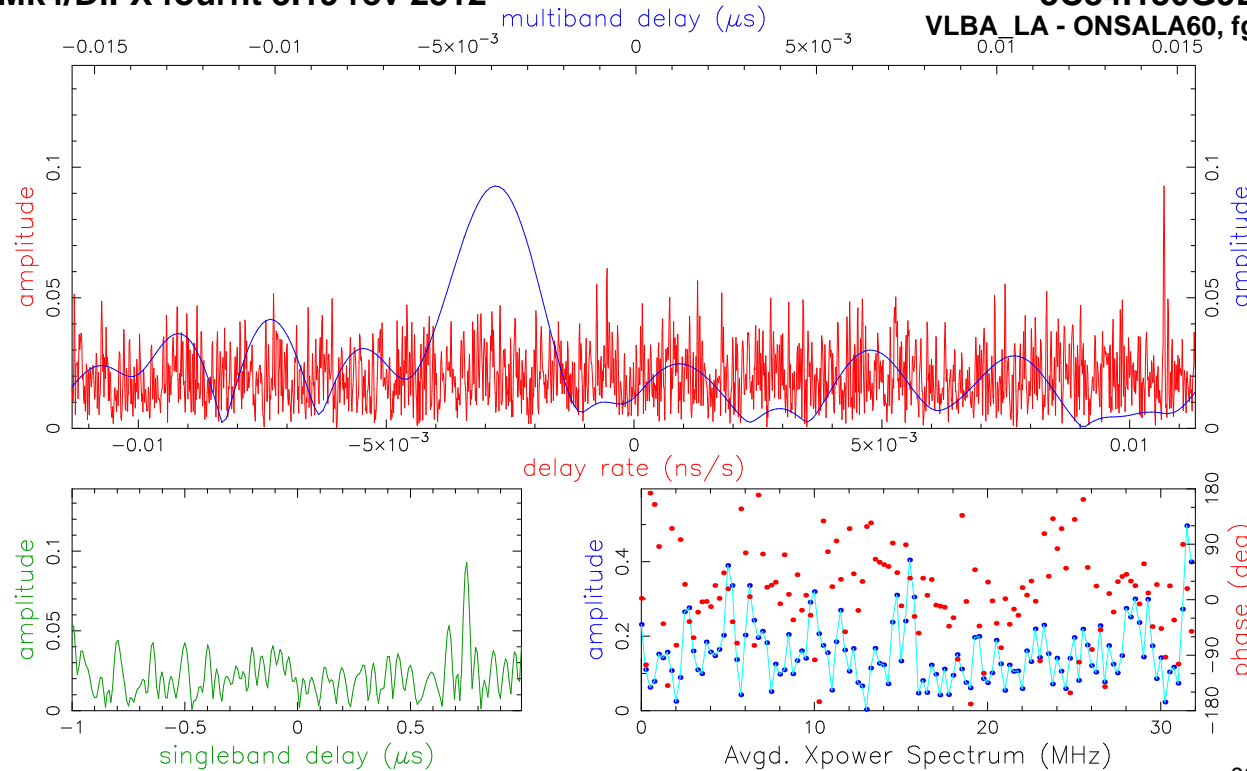
	RMS	Theor.	Amplitude	0.139 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	24.9	33.7	Search (2048X64)	0.092	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.016	0.016
amp/seg (%)	44.6	58.8	Interp.	0.000	Bits/sample: 2x2			SampCntNorm: enabled	-0.011	0.011
ph/frq (deg)	58.0	38.9	Inc. seg. avg.	0.131	Sample rate(MISamp/s): 64			dr window (ns/s)	-0.011	0.011
amp/frq (%)	61.1	67.9	Inc. frq. avg.	0.148	Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00
								nlags: 128		
								t_cohere infinite		

I: az 43.9 el 81.6 pa -134.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5458.513 -7577.326 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/IX..130G9L Output file: /Exps/c192b/v2/1234/No0205/IX.W.252.130G9L

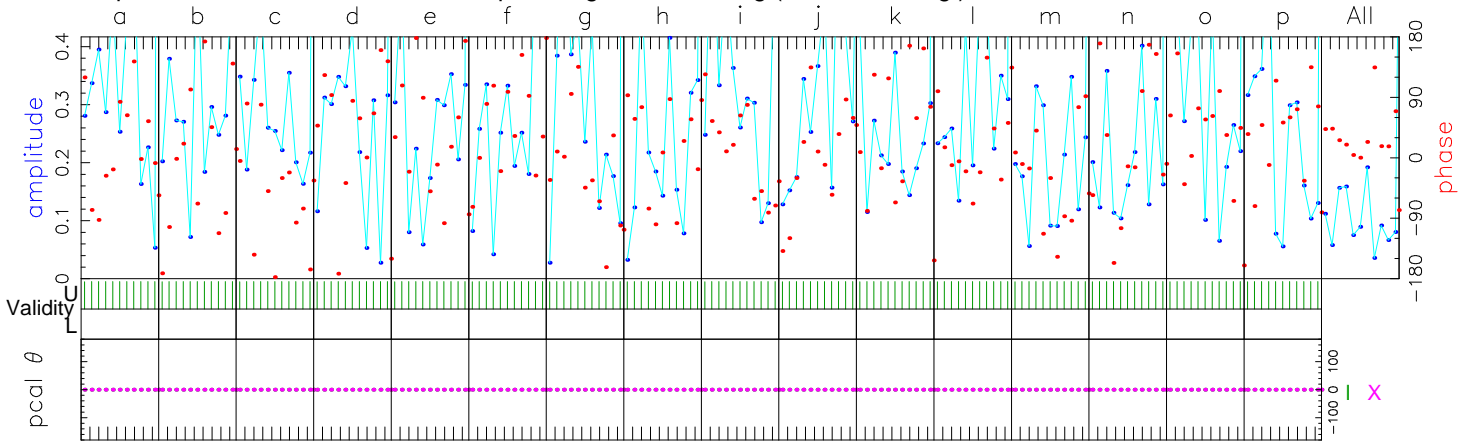
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, IX
VLBA_LA - ONSALA60, fgroup W, pol RR



Fringe quality 0
SNR 5.6
Int time 477.973
Amp 0.139
Phase 26.7
PFD 1.0e+00
Delays (us)
SBD 0.748317
MBD -0.003906
Fringe rate (Hz) 0.922181
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
2020:086:112412
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		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

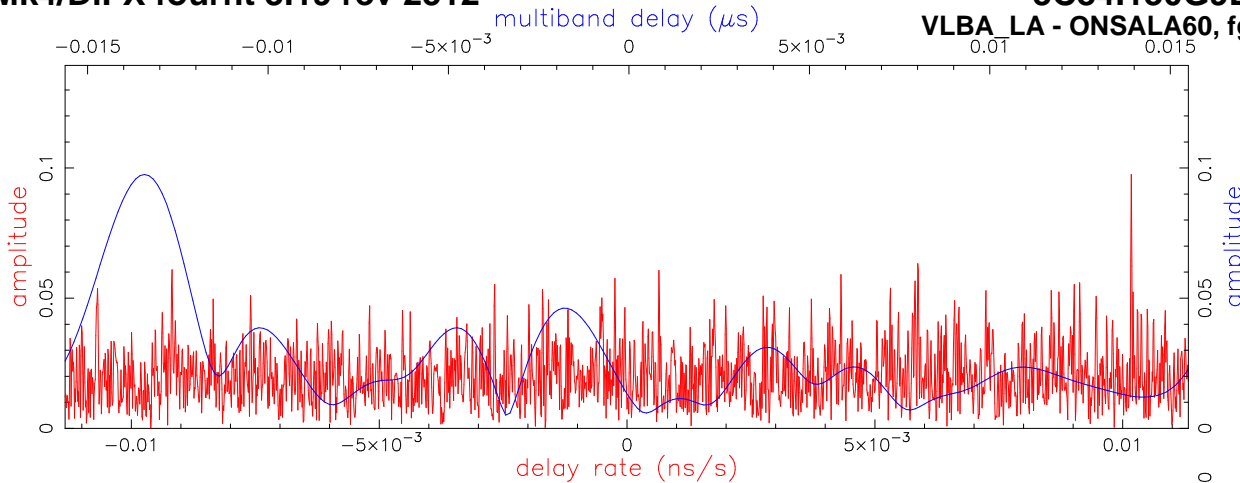
Group delay (usec)(sbd) 1.23120023504E+04 Apriori delay (usec) 1.23112562562E+04 Resid mbdelay (usec) -3.90582E-03 +/- 1.9E-04
 Sband delay (usec) 1.23120045737E+04 Apriori clock (usec) -3.3156429E+01 Resid sbdelay (usec) 7.48317E-01 +/- 3.1E-03
 Phase delay (usec) 1.23112562571E+04 Apriori clockrate (us/s) -8.7947201E-07 Resid phdelay (usec) 8.59648E-07 +/- 6.6E-07
 Delay rate (us/s) 6.94796876849E-01 Apriori rate (us/s) 6.94786171245E-01 Resid rate (us/s) 1.07056E-05 +/- 2.4E-09
 Total phase (deg) 353.9 Apriori accel (us/s/s) -8.49548459088E-05 Resid phase (deg) 26.7 +/- 20.5

RMS Theor. Amplitude 0.139 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 37.6 35.6 Search (2048X64) 0.091 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 54.7 62.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.6 41.1 Inc. seg. avg. 0.128 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.7 71.7 Inc. frq. avg. 0.131 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

I: az 43.9 el 81.6 pa -134.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5458.513 -7577.326 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/IX..130G9L Output file: /Exps/c192b/v2/1234/No0205/IX.W.269.130G9L

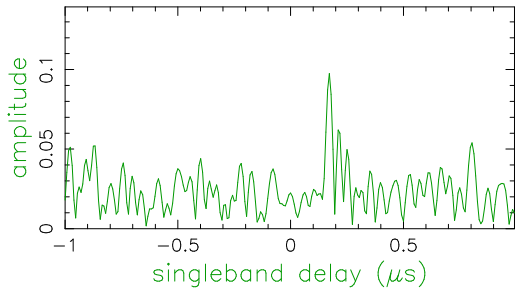
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, IX
VLBA_LA - ONSALA60, fgroup W, pol LR

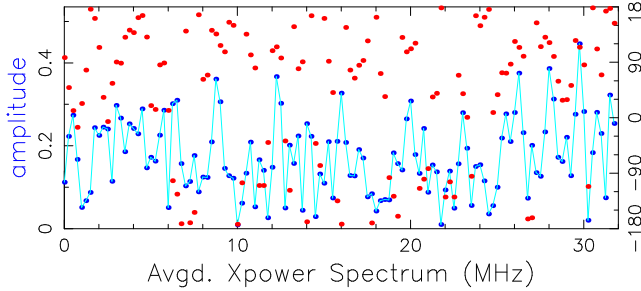


Fringe quality 0

SNR 5.8
Int time 477.971
Amp 0.139
Phase 104.3
PFD 7.5e-01
Delays (us)
SBD 0.171584
MBD -0.013425
Fringe rate (Hz)
0.877352
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

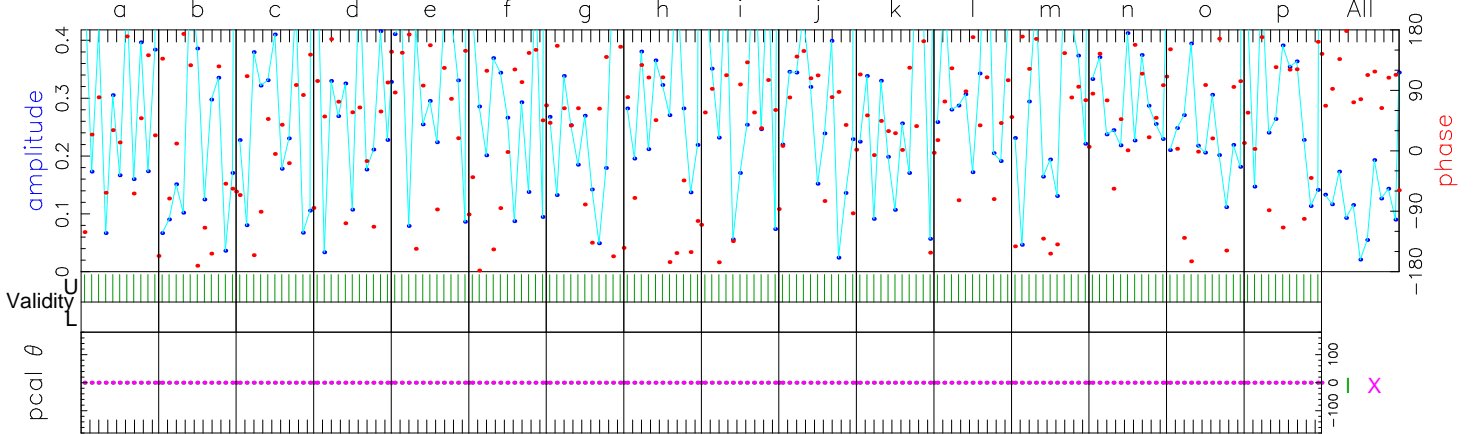


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112419
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		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

Group delay (usec)(sbd)	1.23114303315E+04	Apriori delay (usec)	1.23112562562E+04	Resid mbdelay (usec)	-1.34247E-02	+/-	1.9E-04
Sband delay (usec)	1.23114278402E+04	Apriori clock (usec)	-3.3156429E-01	Resid sbdelay (usec)	1.71584E-01	+/-	3.0E-03
Phase delay (usec)	1.23112562596E+04	Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	3.36340E-06	+/-	6.3E-07
Delay rate (us/s)	6.94796356429E-01	Apriori rate (us/s)	6.94786171245E-01	Resid rate (us/s)	1.01852E-05	+/-	2.3E-09
Total phase (deg)	71.6	Apriori accel (us/s/s)	-8.49548459088E-05	Resid phase (deg)	104.3	+/-	19.7

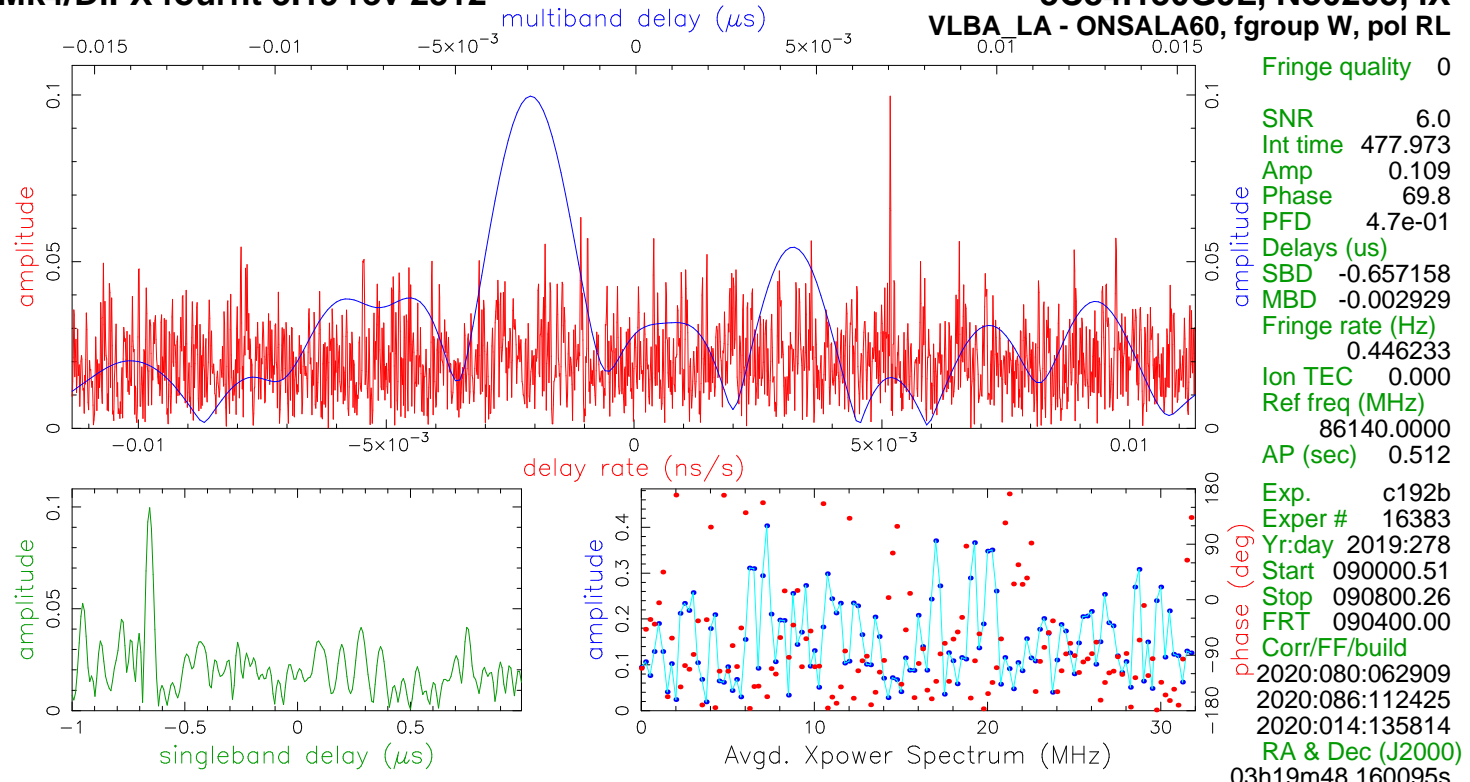
ph/seg (deg)	RMS 33.3	Theor. 34.0	Amplitude Search (2048X64)	0.139 +/- 0.024	0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	52.1	59.4	Interp.	0.000	0.0094	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	46.7	39.3	Inc. seg. avg.	0.140	0.140	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	62.0	68.6	Inc. frq. avg.	0.141	0.141	Sample rate(MISamp/s): 64	mb window (us) -0.016 0.016
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 128	t_cohere infinite
							ion window (TEC) 0.00 0.00

I: az 43.9 el 81.6 pa -134.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5458.513 -7577.326 simultaneous interpolator

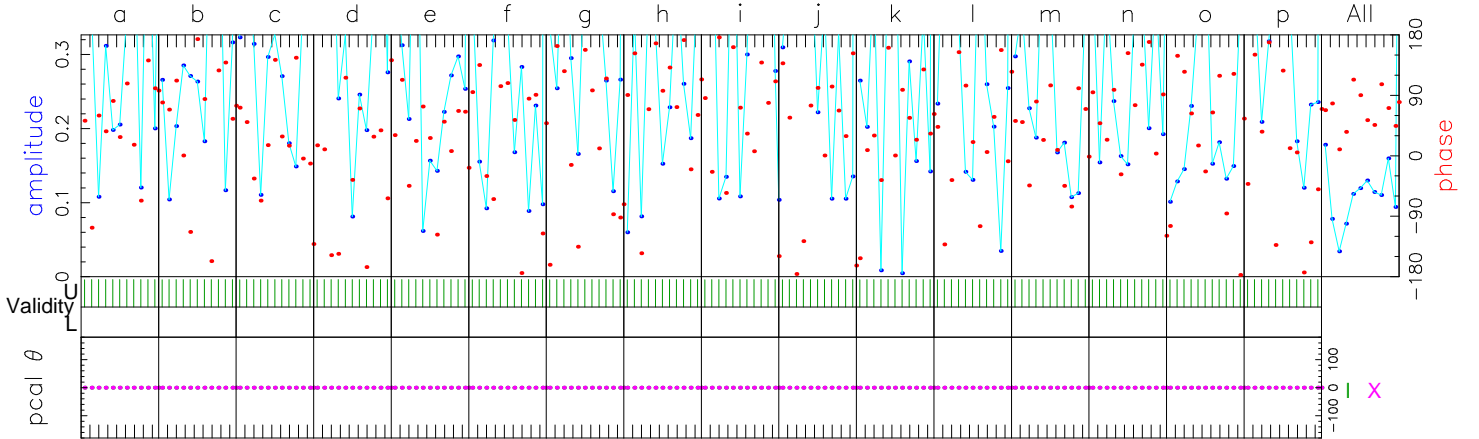
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/IX..130G9L Output file: /Exps/c192b/v2/1234/No0205/IX.W.293.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, IX
VLBA_LA - ONSALA60, fgroup W, pol RL



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				
	67.4	125.9	22.6	29.8	36.6	103.6	143.4	106.3	74.7	91.9	54.7	-50.6	44.8	77.2	64.5	-148.4	Phase	69.8				
	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.0	Ampl.	0.1				
	41.3	77.3	213.9	41.5	44.3	82.0	126.7	73.2	45.5	173.6	209.7	48.5	233.1	17.8	28.6	146.2	Sbd box	44.9				
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					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			1.23105970775E+04														Apriori delay (usec)	1.23112562562E+04	Resid mbdelay (usec)	-2.92868E-03	+/-	1.8E-04
Sband delay (usec)			1.23105990982E+04														Apriori clock (usec)	-3.3156429E+01	Resid sbdelay (usec)	-6.57158E-01	+/-	2.9E-03
Phase delay (usec)			1.23112562585E+04														Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	2.25135E-06	+/-	6.2E-07
Delay rate (us/s)			6.94791351567E-01														Apriori rate (us/s)	6.94786171245E-01	Resid rate (us/s)	5.18032E-06	+/-	2.2E-09
Total phase (deg)					37.1												Apriori accel (us/s/s)	-8.49548459088E-05	Resid phase (deg)	69.8	+/-	19.2

ph/seg (deg) 30.1 33.3 Amplitude 0.109 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 45.4 58.1 Search (2048X64) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

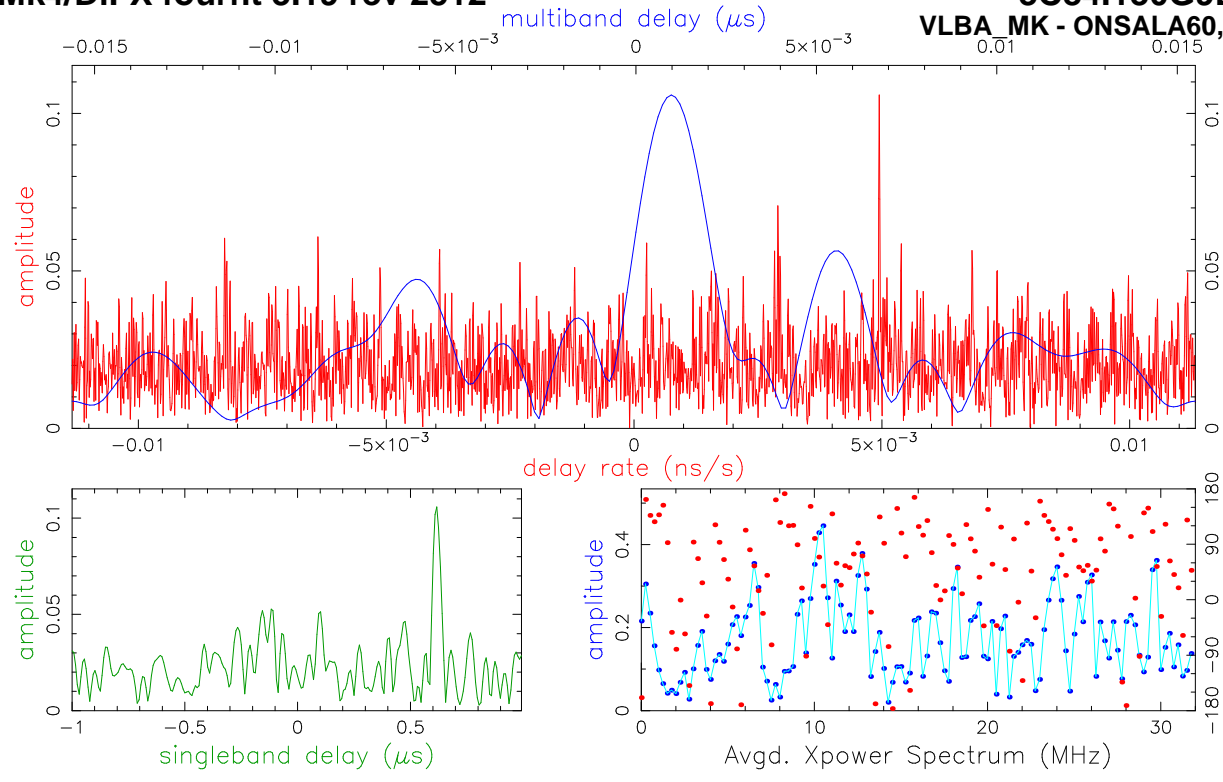
ph/frq (deg) 61.0 38.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 59.1 67.1 Inc. seg. avg. 0.103 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 59.1 67.1 Inc. frq. avg. 0.115 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

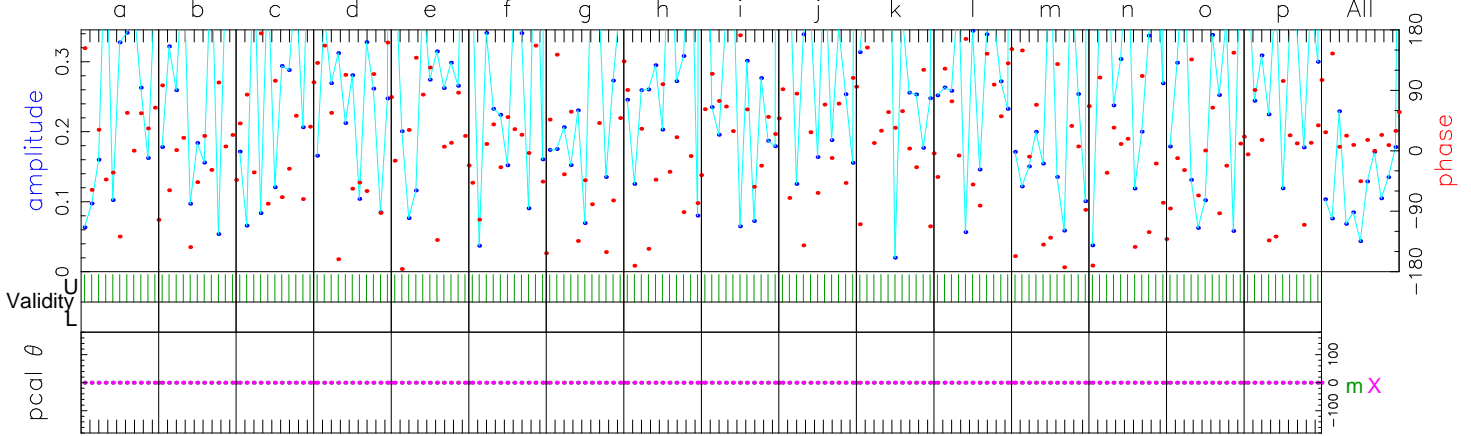
I: az 43.9 el 81.6 pa -134.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -5458.513 -7577.326 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/IX..130G9L Output file: /Exps/c192b/v2/1234/No0205/IX.W.309.130G9L



Fringe quality 0
SNR 6.4
Int time 477.733
Amp 0.115
Phase 15.8
PFD 5.5e-02
Delays (us)
SBD 0.615111
MBD 0.000970
Fringe rate (Hz) 0.427241
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
2020:086:112420
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

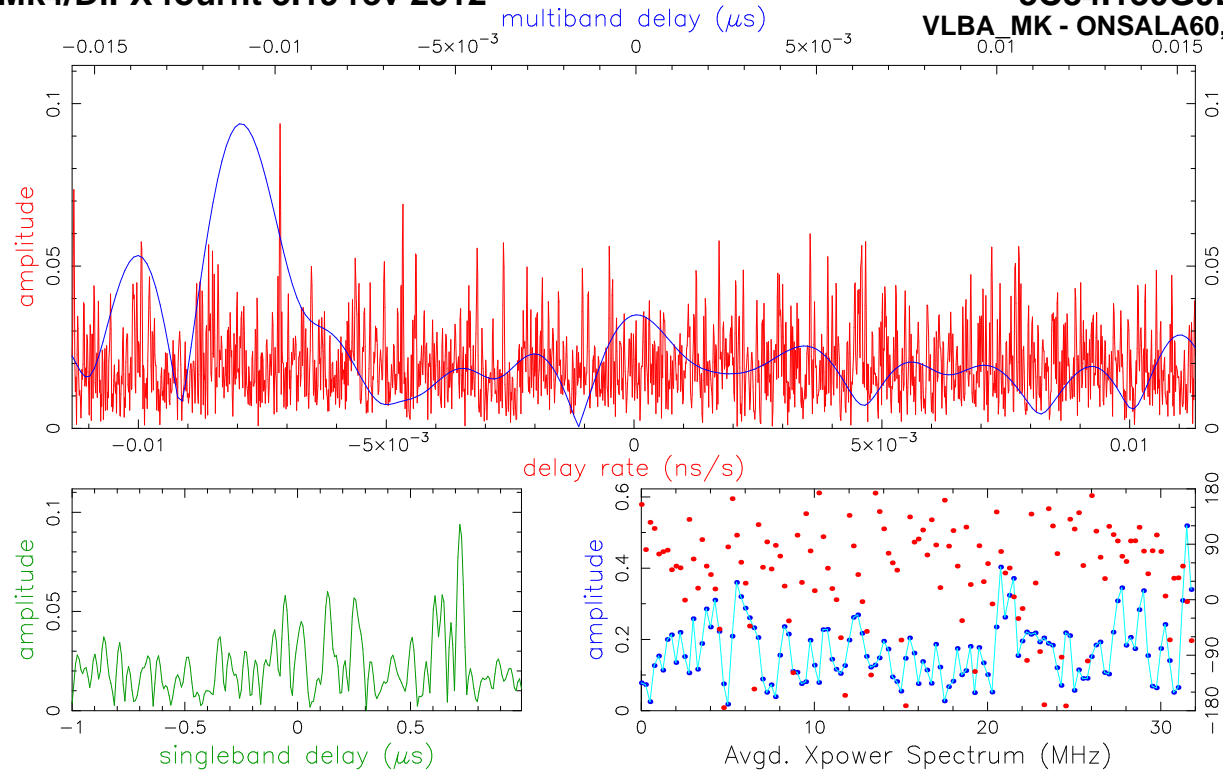


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	12.6	-0.5	-9.9	154.1	40.5	14.0	-16.4	-18.0	52.2	36.7	38.4	65.1	20.2	-9.3	-12.8	9.2	Phase	15.8
m	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
X	233.1	207.2	233.5	238.6	19.5	83.4	227.2	77.0	206.7	210.5	145.7	249.0	188.7	239.8	182.7	214.6	Sbd box	207.7
m:1000	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	1000	PC freqs	
m:X:0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X:1000	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X:1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 4.40479564766E+03 Apriori delay (usec) 4.40416967775E+03 Resid mbdelay (usec) 9.69911E-04 +/- 1.7E-04
 Sband delay (usec) 4.40478478875E+03 Apriori clock (usec) -2.9804617E+01 Resid sbdelay (usec) 6.15111E-01 +/- 2.7E-03
 Phase delay (usec) 4.40416967825E+03 Apriori clockrate (us/s) -5.3669233E-07 Resid phdelay (usec) 5.09129E-07 +/- 5.8E-07
 Delay rate (us/s) 1.48950096293E+00 Apriori rate (us/s) 1.48949600308E+00 Resid rate (us/s) 4.95985E-06 +/- 2.1E-09
 Total phase (deg) 30.5 Apriori accel (us/s/s) -6.12648302547E-05 Resid phase (deg) 15.8 +/- 18.0

RMS Theor. Amplitude 0.115 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.9 31.2 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 54.7 54.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.6 36.0 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 52.7 62.9 Inc. frq. avg. 0.113 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -11498.398 -7494.561 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mX..130G9L Output file: /Exps/c192b/v2/1234/No0205/mX.W.297.130G9L

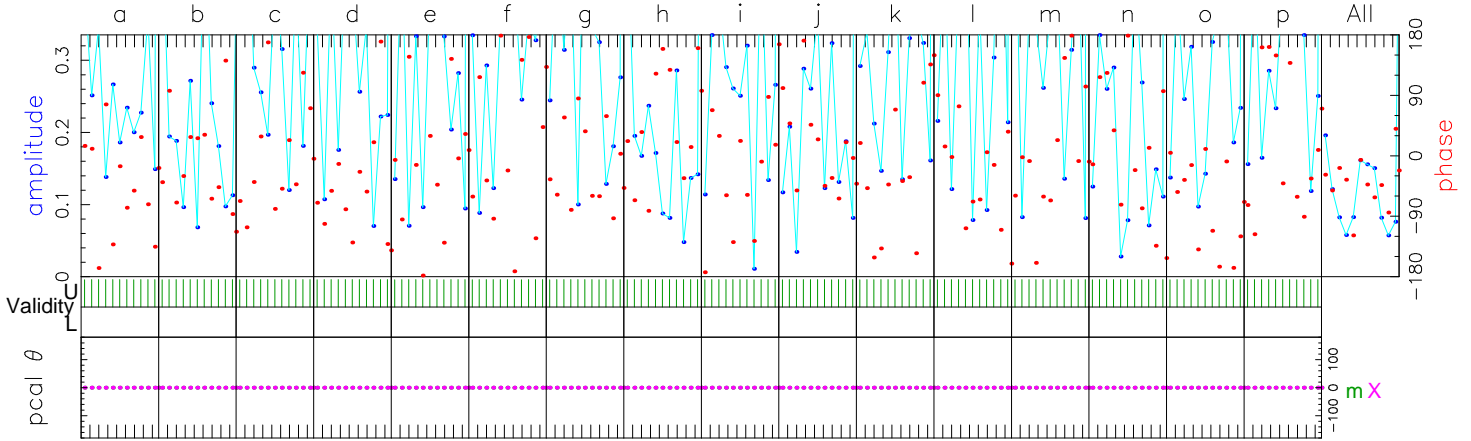


Fringe quality 0

SNR 5.6
Int time 477.733
Amp 0.112
Phase -38.4
PFD 9.8e-01
Delays (us)
SBD 0.720519
MBD -0.010923
Fringe rate (Hz)
-0.615846
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
2020:086:112425
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
	-46.4	-12.9	-51.0	-77.2	-37.6	-129.6	-25.1	19.5	-0.2	15.3	-17.0	-35.5	-39.5	31.5	-66.2	-97.7	Phase	-38.4
	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.0	0.2	0.1	Ampl.	0.1
	158.6	236.2	172.5	24.2	250.3	49.7	82.5	229.8	57.2	51.3	126.4	50.6	6.6	125.1	146.5	138.3	Sbd box	221.2
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	4.40487750448E+03			Apriori delay (usec)			4.40416967775E+03			Resid mbdelay (usec)			-1.09233E-02			+/- 1.9E-04		
Sband delay (usec)	4.40489019625E+03			Apriori clock (usec)			-2.9804617E+01			Resid sbdelay (usec)			7.20519E-01			+/- 3.1E-03		
Phase delay (usec)	4.40416967651E+03			Apriori clockrate (us/s)			-5.3669233E-07			Resid phdelay (usec)			-1.23986E-06			+/- 6.5E-07		
Delay rate (us/s)	1.48948885372E+00			Apriori rate (us/s)			1.48949600308E+00			Resid rate (us/s)			-7.14936E-06			+/- 2.4E-09		
Total phase (deg)				-23.7			Apriori accel (us/s/s)			-6.12648302547E-05			Resid phase (deg)			-38.4 +/- 20.3		

ph/seg (deg) 39.4 35.2
amp/seg (%) 54.2 61.4
ph/frq (deg) 44.9 40.6
amp/frq (%) 51.4 70.9

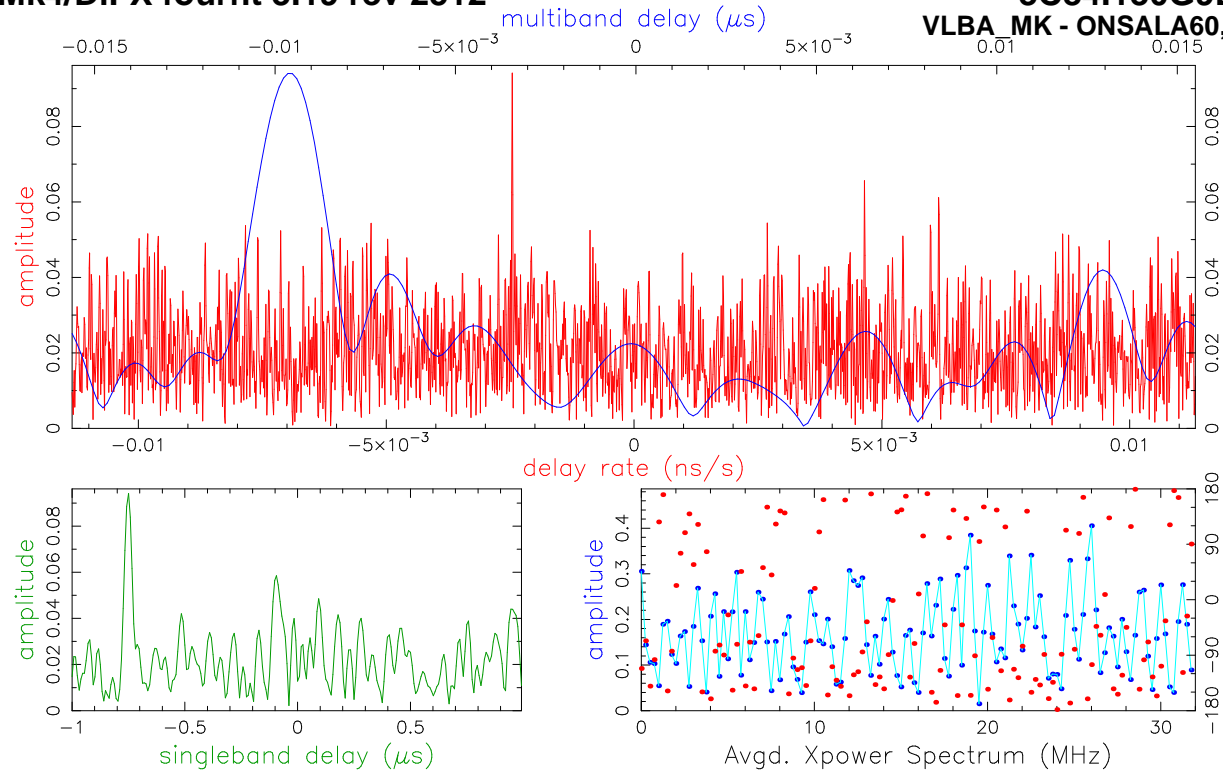
RMS Theor. Amplitude 0.112 +/- 0.020
Search (2048X64) 0.091
Interp. 0.000
Inc. seg. avg. 0.111
Inc. frq. avg. 0.108

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

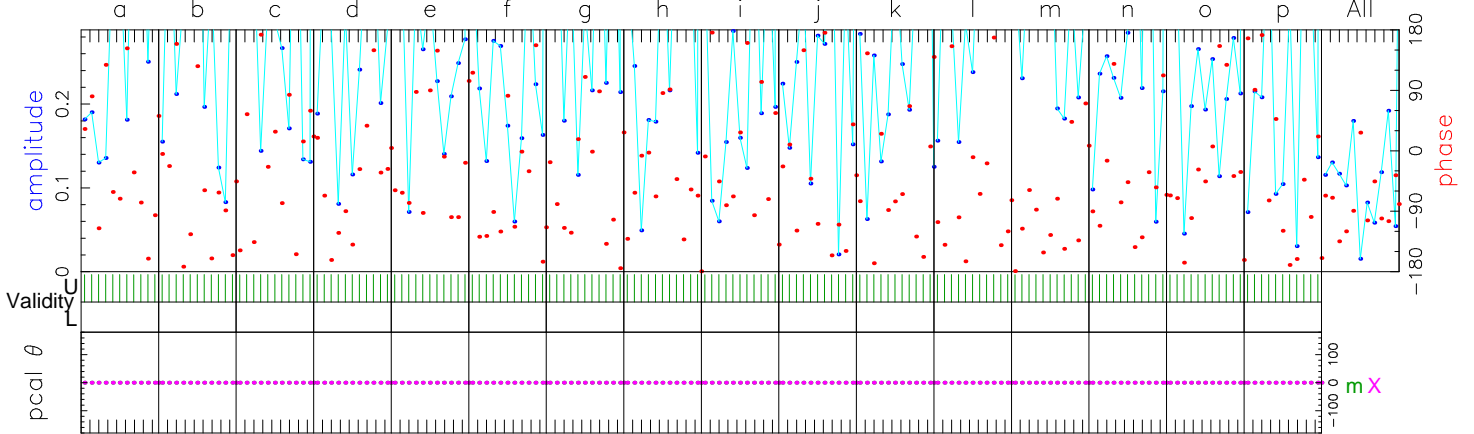
m: az 52.2 el 37.5 pa -95.9 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -11498.398 -7494.561 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mX..130G9L Output file: /Exps/c192b/v2/1234/No0205/mX.W.308.130G9L



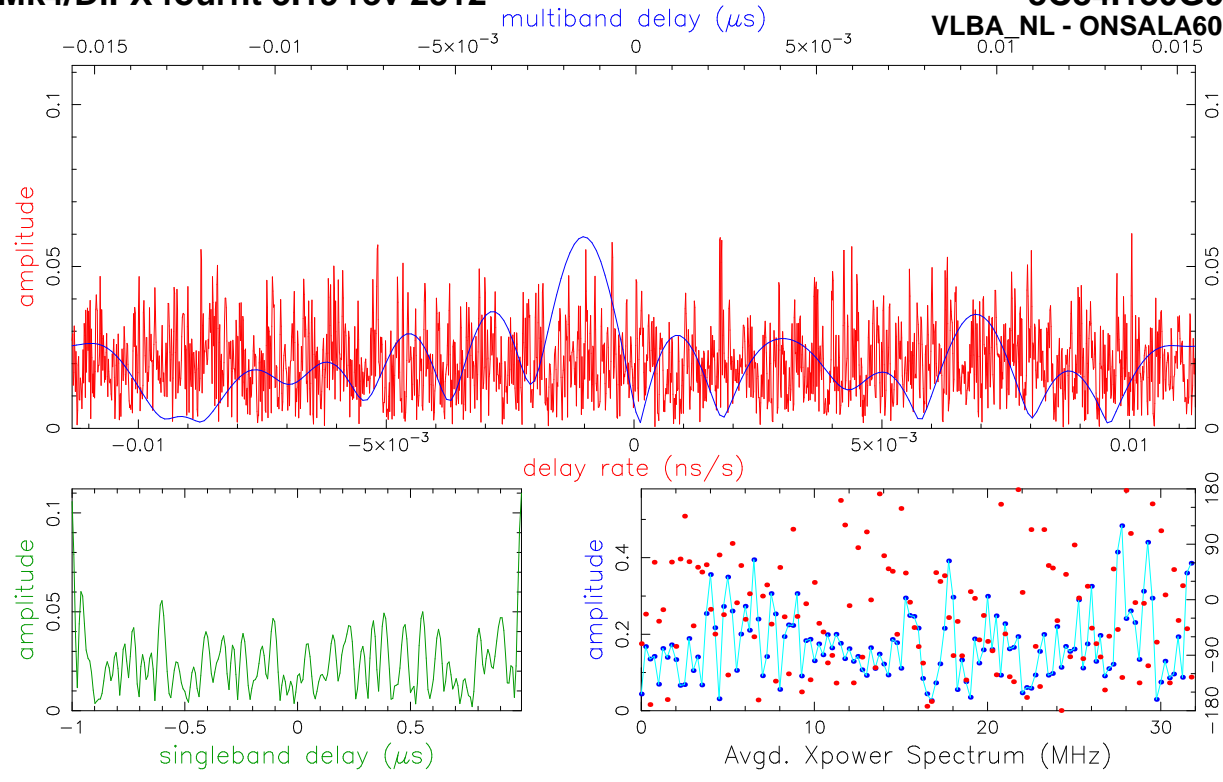
Fringe quality 0
SNR 5.6
Int time 477.733
Amp 0.096
Phase -91.7
PFD 9.8e-01
Delays (us)
SBD -0.751155
MBD -0.009594
Fringe rate (Hz)
-0.211941
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:278
Start 090000.51
Stop 090800.26
FRT 090400.00
Corr/FF/build
2020:080:062909
2020:086:112431
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



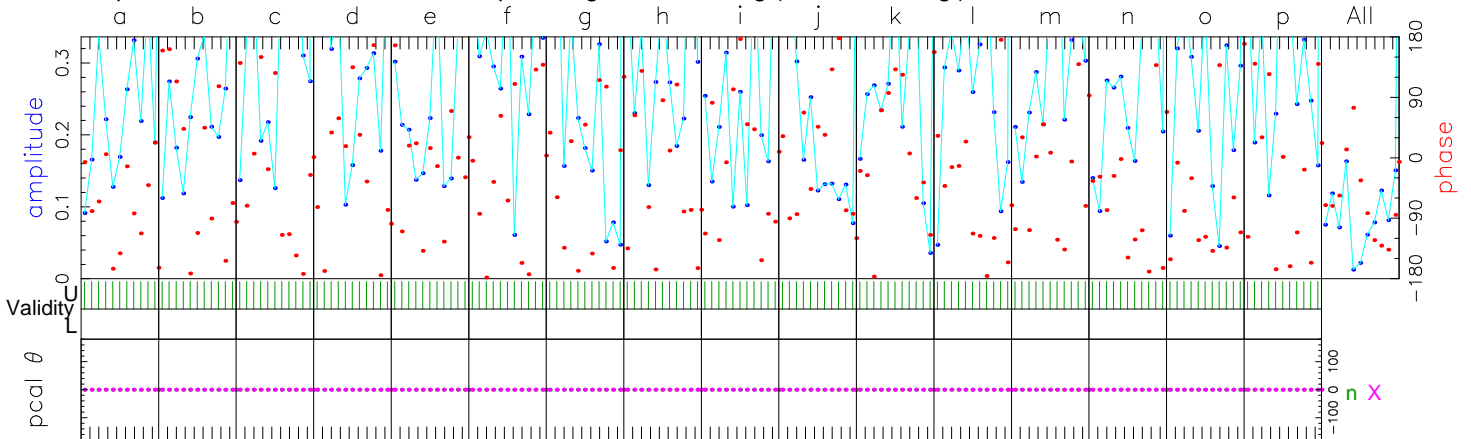
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-73.9	-149.8	-125.5	-52.6	-54.7	-126.6	-92.3	-64.2	-59.1	-143.1	-83.9	-120.1	-114.8	-80.0	-53.6	-98.3	Phase	-91.7	
	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1	
	231.0	142.1	201.4	53.3	191.9	65.6	57.2	111.6	84.2	97.2	199.6	14.0	150.6	73.1	131.7	150.6	Sbd box	32.9	
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		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
																	Tracks		
Group delay (usec)(sbd)			4.40341008373E+03							4.40416967775E+03							Resid mbdelay (usec)	-9.59402E-03	+/- 1.9E-04
Sband delay (usec)			4.40341852225E+03							-2.9804617E+01							Resid sbdelay (usec)	-7.51155E-01	+/- 3.1E-03
Phase delay (usec)			4.40416967479E+03							-5.3669233E-07							Resid phdelay (usec)	-2.95836E-06	+/- 6.6E-07
Delay rate (us/s)			1.48949354266E+00							1.48949600308E+00							Resid rate (us/s)	-2.46042E-06	+/- 2.4E-09
Total phase (deg)					-77.0					-6.12648302547E-05							Resid phase (deg)	-91.7	+/- 20.3

ph/seg (deg) 46.2 35.2 Theor. Amplitude 0.096 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.3 61.4 Search (2048X64) 0.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.3 40.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.7 70.9 Inc. seg. avg. 0.091 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 m: az 52.2 el 37.5 pa -95.9 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -11498.398 -7494.561 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/mX..130G9L Output file: /Exps/c192b/v2/1234/No0205/mX.W.326.130G9L simultaneous interpolator



Fringe quality 0
SNR 6.6
Int time 477.354
Amp 0.112
Phase -78.0
PFD 9.3e-03
Delays (us)
SBD 0.993164
MBD -0.001366
Fringe rate (Hz) 0.149657
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
2020:086:112426
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

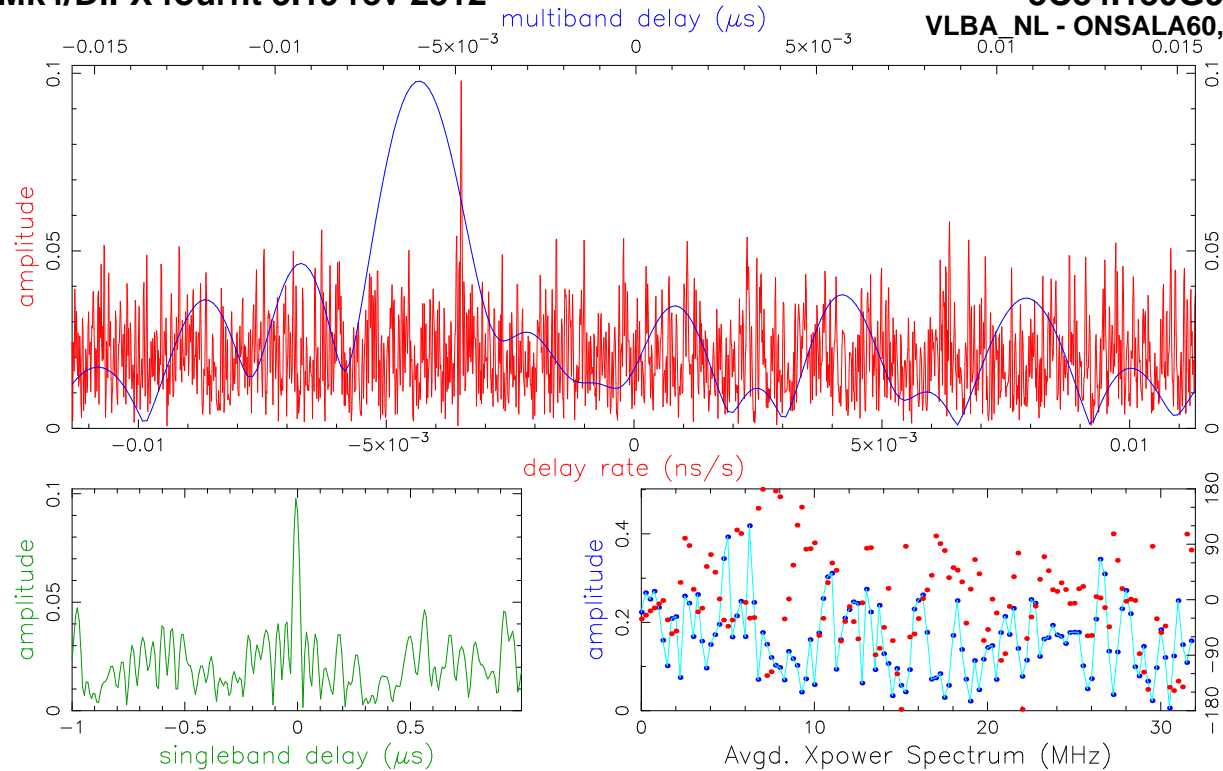


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-56.5	-145.1	-112.0	-57.4	-16.1	-134.4	21.7	-141.0	-78.2	-42.7	51.1	-79.6	-59.3	-113.7	-92.4	-102.0	-78.0	Phase
	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.0	0.0	0.1	Ampl.
	173.9	245.3	251.0	250.1	189.8	74.6	18.9	86.2	157.9	227.8	194.2	114.2	68.2	225.1	178.2	182.8	182.8	Sbd box
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd) 1.24198616480E+04 Apriori delay (usec) 1.24188630136E+04 Resid mbdelay (usec) -1.36558E-03 +/- 1.6E-04
 Sband delay (usec) 1.24198561773E+04 Apriori clock (usec) -5.8735065E+00 Resid sbdelay (usec) 9.93164E-01 +/- 2.6E-03
 Phase delay (usec) 1.24188630111E+04 Apriori clockrate (us/s) -3.9377651E-07 Resid phdelay (usec) -2.51586E-06 +/- 5.6E-07
 Delay rate (us/s) 4.64470708426E-01 Apriori rate (us/s) 4.64468971053E-01 Resid rate (us/s) 1.73737E-06 +/- 2.0E-09
 Total phase (deg) 278.9 Apriori accel (us/s/s) -7.92875979719E-05 Resid phase (deg) -78.0 +/- 17.3

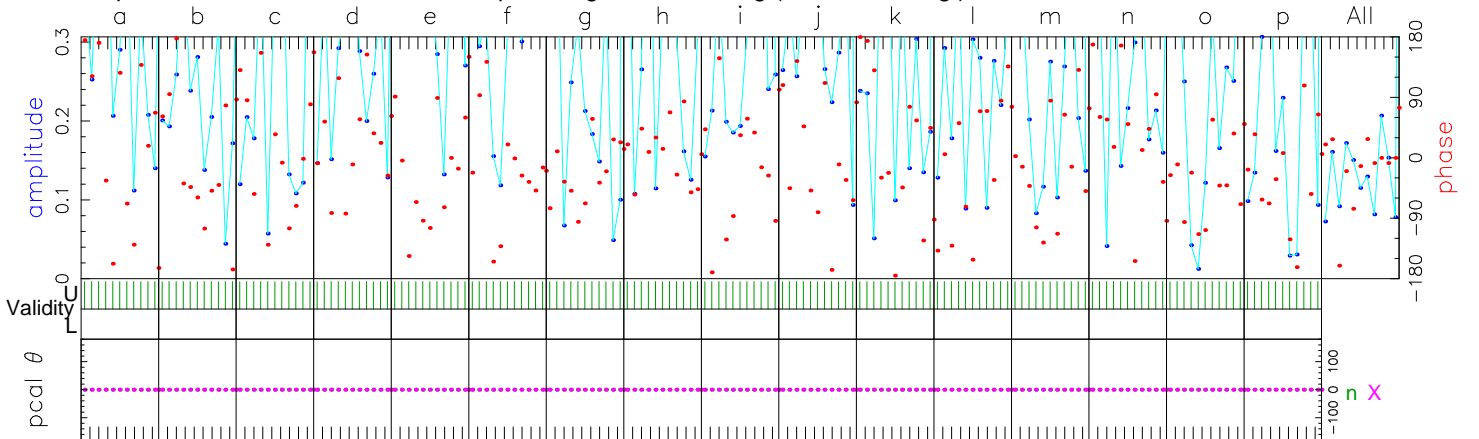
RMS Theor. Amplitude 0.112 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.0 29.9 Search (2048X64) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.1 52.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 58.4 34.5 Inc. seg. avg. 0.078 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.4 60.3 Inc. frq. avg. 0.070 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3687.020 -6659.992 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/nX..130G9L Output file: /Exps/c192b/v2/1234/No0205/nX.W.310.130G9L



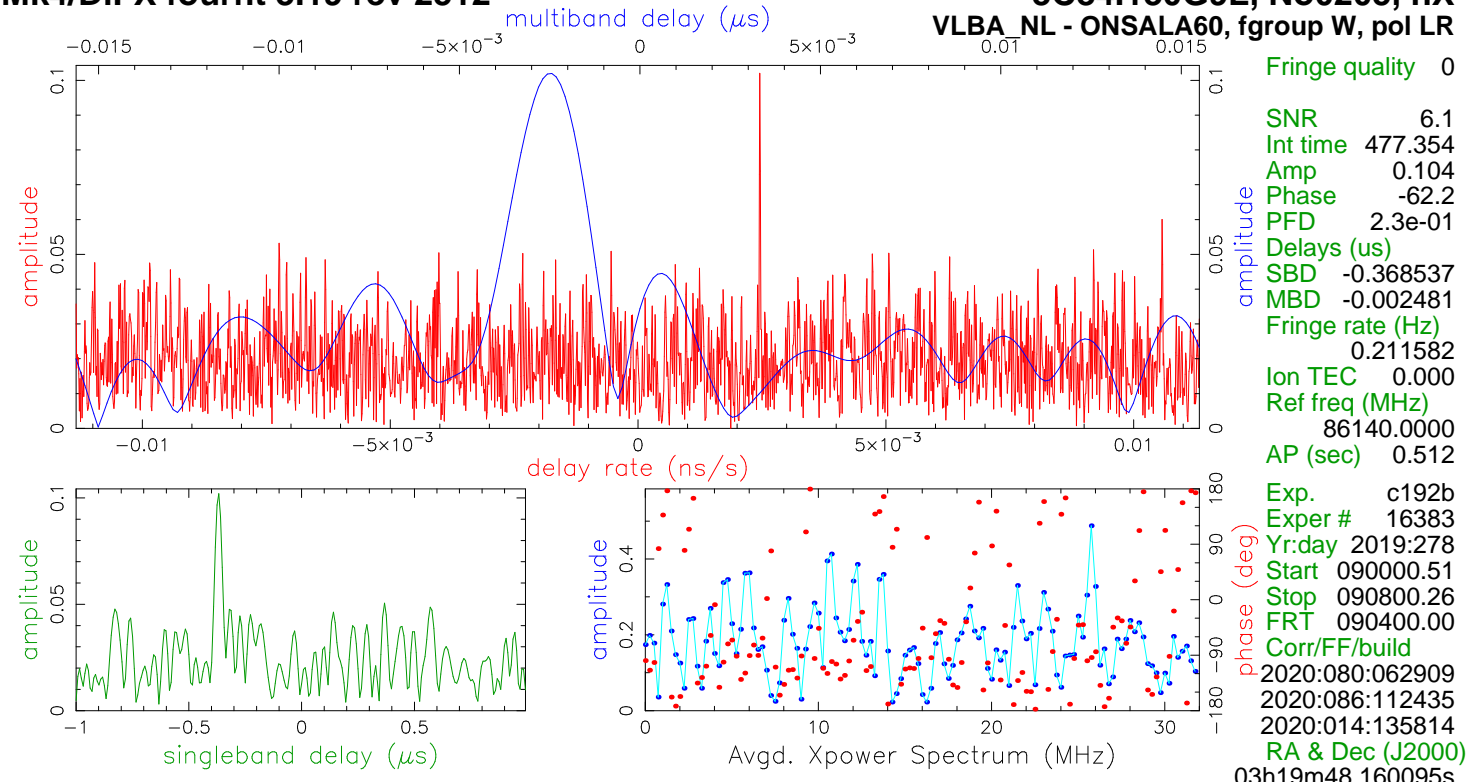
Fringe quality 0
 SNR 5.9
 Int time 477.353
 Amp 0.102
 Phase -6.4
 PFD 6.6e-01
 Delays (us)
 SBD -0.006154
 MBD -0.005998
 Fringe rate (Hz)
 -0.300404
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112430
 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

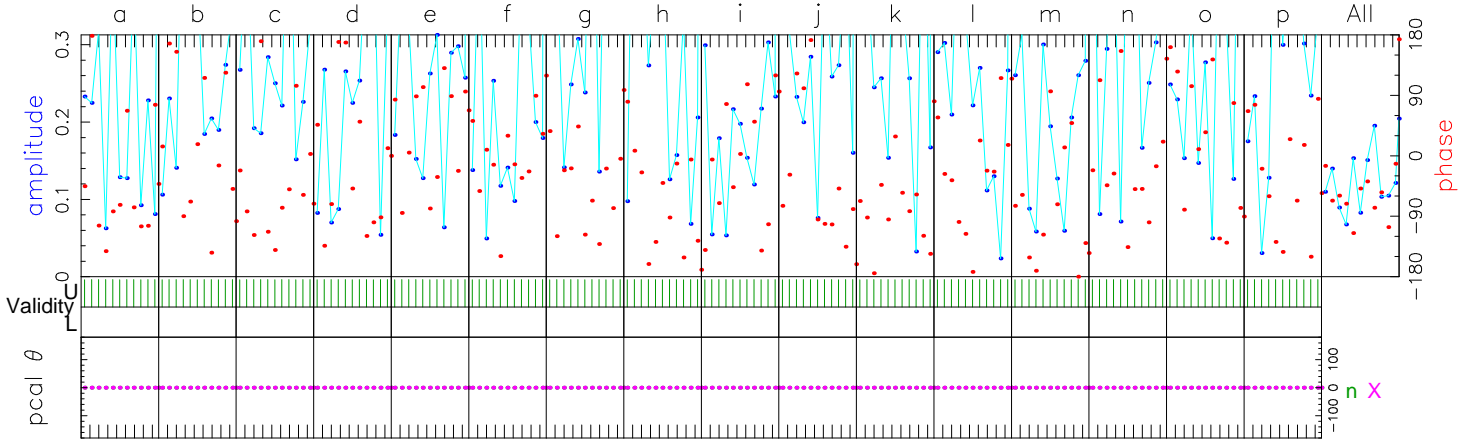


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		1.24188570160E+04																
Sband delay (usec)		1.24188568591E+04																
Phase delay (usec)		1.24188630134E+04																
Delay rate (us/s)		4.64465483663E-01																
Total phase (deg)				350.5														
ph/seg (deg)	53.9	33.8																
amp/seg (%)	59.1	59.0																
ph/frq (deg)	60.2	39.0																
amp/frq (%)	56.3	68.1																
n: az 270.2 el 84.8 pa 84.7																		
X: az 309.5 el 24.7 pa 33.4																		
u,v (fr/asec)																		
Control file: cf_1234_gmva																		
Input file: /Exps/c192b/v2/1234/No0205/nX..130G9L																		
Output file: /Exps/c192b/v2/1234/No0205/nX.W.325.130G9L																		

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



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

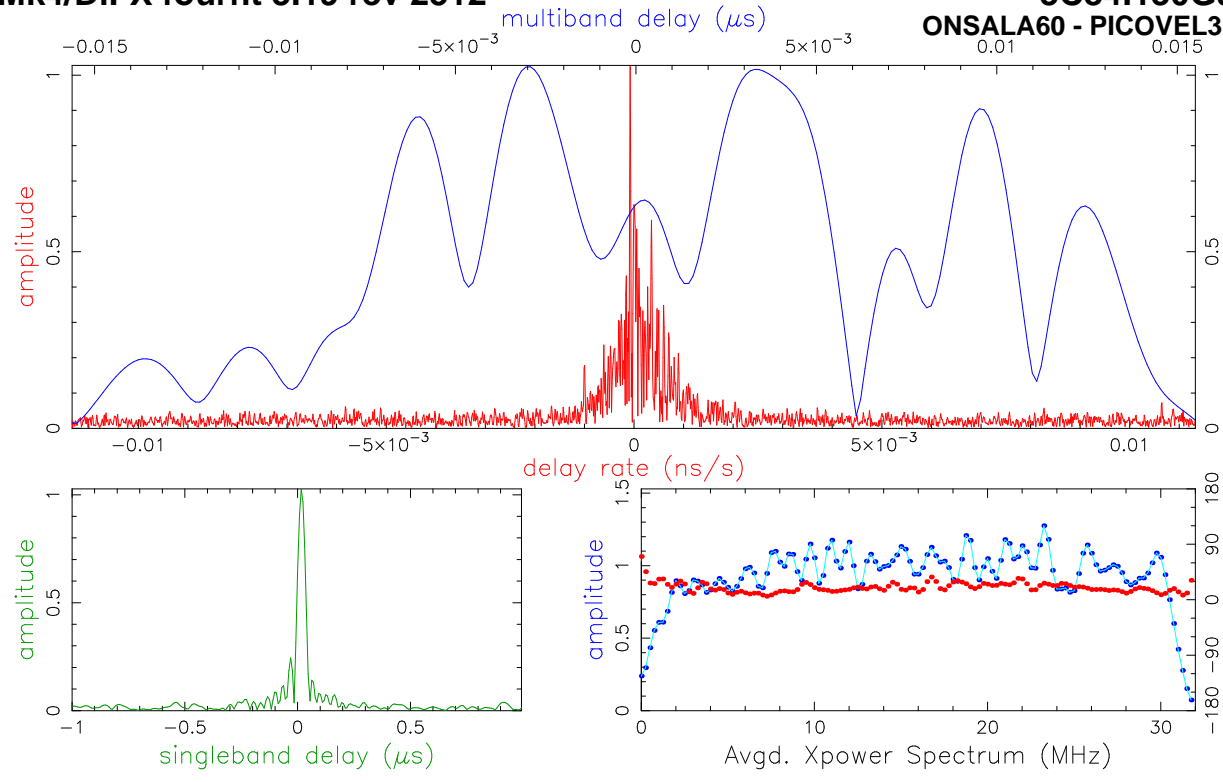


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
-90.3	-69.9	-72.5	-94.9	10.6	-12.7	-36.8	-57.1	-100.7	-102.6	-76.6	-39.6	-109.0	-41.2	-121.4	-43.0	Phase	-62.2	
0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.0	Ampl.	0.1	
104.3	185.3	89.7	147.8	229.2	148.1	81.7	117.8	211.1	129.8	240.4	50.3	150.6	222.3	25.7	23.9	Sbd box	81.8	
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	APs used		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	1.24184855321E+04				Apriori delay (usec)				1.24188630136E+04				Resid mbdelay (usec)				-2.48148E-03 +/- 1.8E-04	
Sband delay (usec)	1.24184944761E+04				Apriori clock (usec)				-5.8735065E+00				Resid sbdelay (usec)				-3.68537E-01 +/- 2.8E-03	
Phase delay (usec)	1.24188630116E+04				Apriori clockrate (us/s)				-3.9377651E-07				Resid phdelay (usec)				-2.00447E-06 +/- 6.0E-07	
Delay rate (us/s)	4.64471427309E-01				Apriori rate (us/s)				4.64468971053E-01				Resid rate (us/s)				2.45626E-06 +/- 2.2E-09	
Total phase (deg)	294.8				Apriori accel (us/s/s)				-7.92875979719E-05				Resid phase (deg)				-62.2 +/- 18.8	

ph/seg (deg)	RMS	Theor.	Amplitude	0.104 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	31.4	32.5	Search (2048X64)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	38.9	56.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016
amp/frq (%)	38.5	37.5	Inc. seg. avg.	0.105	Sample rate(MISamp/s): 64	dr window (ns/s)	-0.011 0.011	
	58.6	65.4	Inc. frq. avg.	0.101	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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -3687.020 -6659.992 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/nX..130G9L Output file: /Exps/c192b/v2/1234/No0205/nX.W.343.130G9L

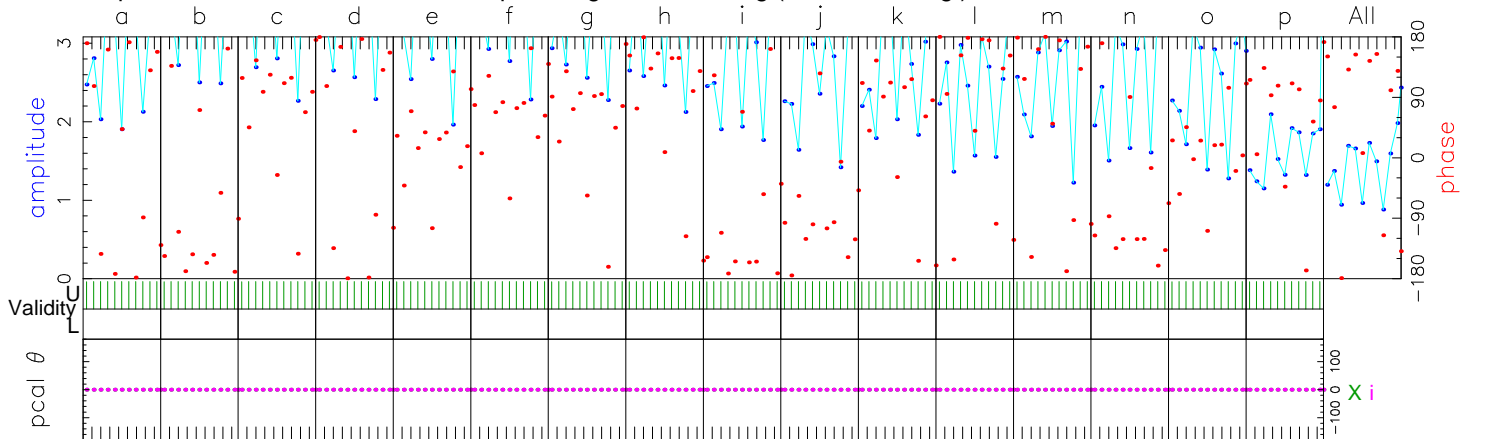


Fringe quality 1

SNR 61.5
 Int time 479.076
 Amp 1.028
 Phase 135.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.017058
 MBD -0.002975
 Fringe rate (Hz)
 -0.006941
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

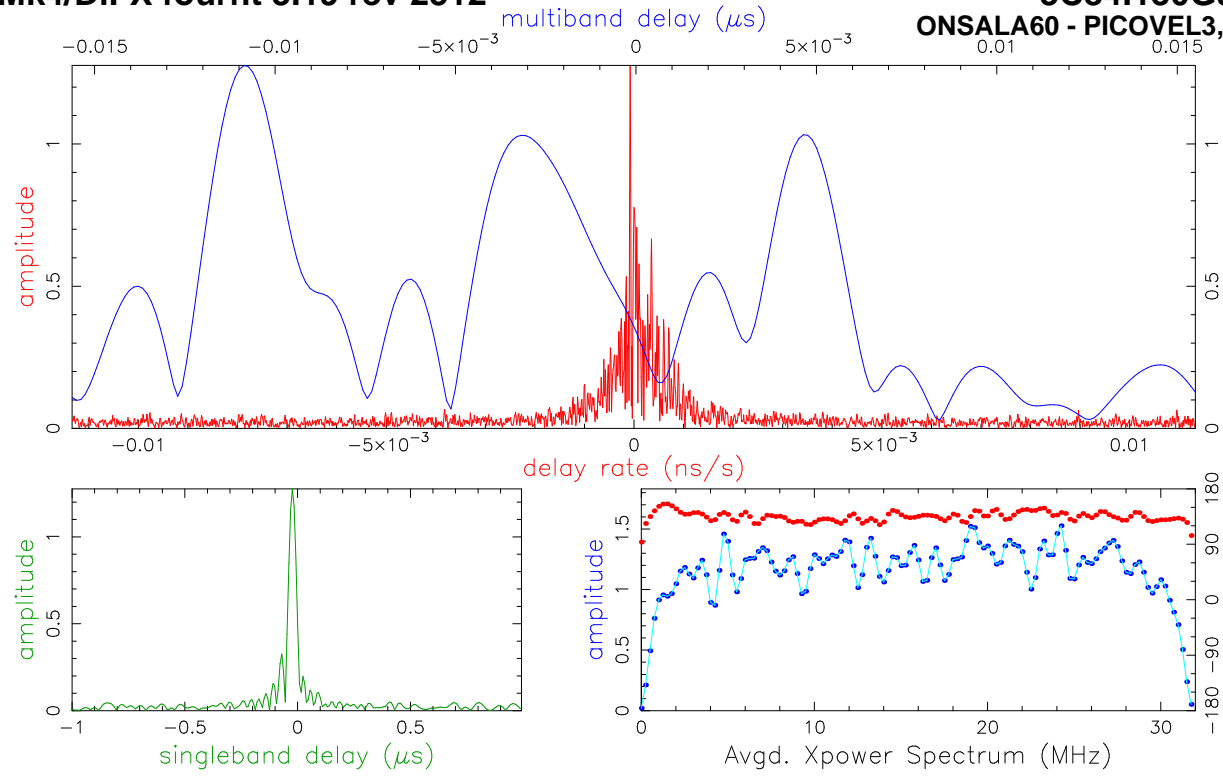
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112431
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



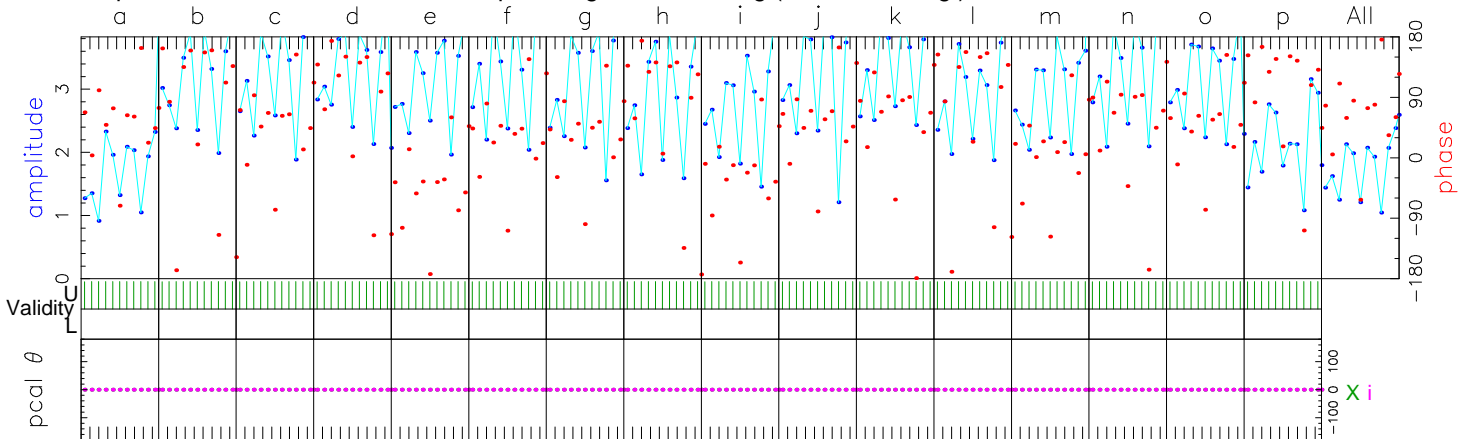
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		1.61961484980E+03																
Sband delay (usec)		1.61960363184E+03																
Phase delay (usec)		1.61958657869E+03																
Delay rate (us/s)		3.38746967883E-01																
Total phase (deg)			320.0															
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

ph/seg (deg) 57.5 3.2 Search (2048X64) 0.990 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.8 5.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.1 3.7 Inc. seg. avg. 1.410 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 122.5 6.5 Inc. frq. avg. 2.200 Sample rate(MSamp/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 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.329.130G9L



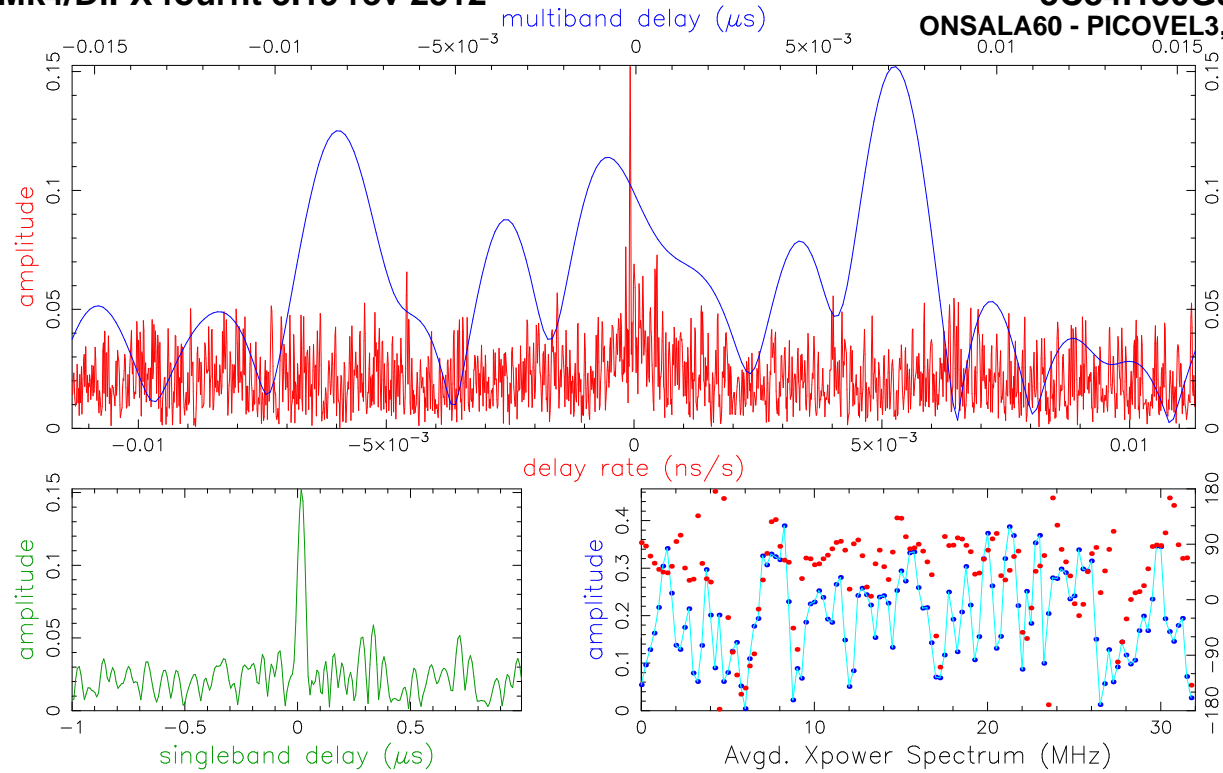
Fringe quality 1
 SNR 76.4
 Int time 479.076
 Amp 1.277
 Phase 64.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.023180
 MBD -0.010828
 Fringe rate (Hz)
 -0.006938
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112437
 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		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	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		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		1.61957574605E+03																
Sband delay (usec)		1.61956339384E+03																
Phase delay (usec)		1.61958657641E+03																
Delay rate (us/s)		3.38746967916E-01																
Total phase (deg)			249.2															
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(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 57.3 2.6 Search (2048X64) 1.230 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.5 4.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.2 3.0 Inc. seg. avg. 1.741 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 74.3 5.2 Inc. frq. avg. 2.172 Sample rate(MSamp/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 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.347.130G9L

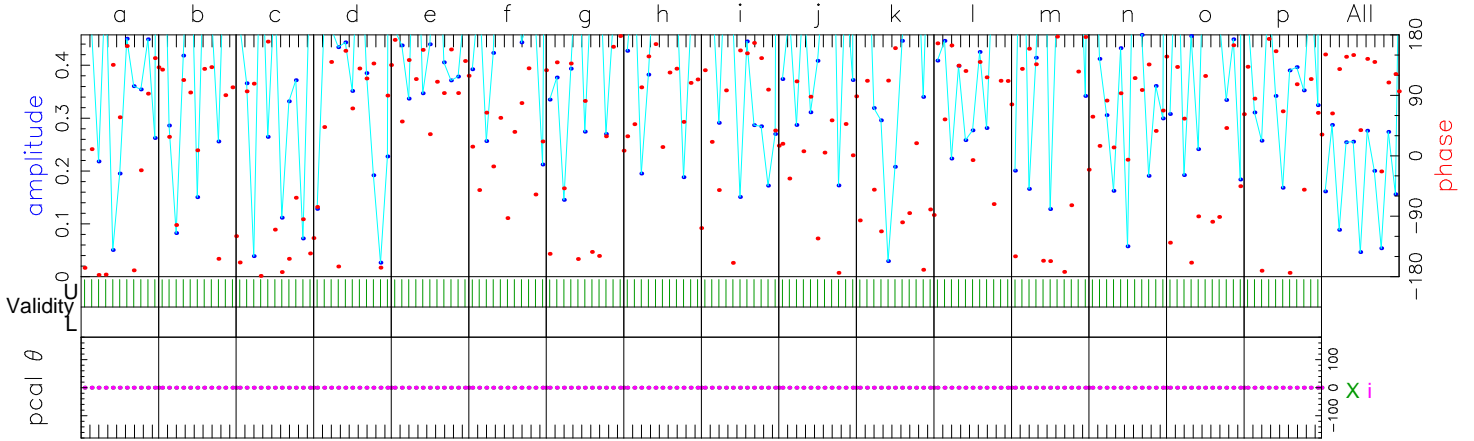


Fringe quality 9

SNR 9.1
 Int time 479.076
 Amp 0.153
 Phase 125.1
 PFD 2.6e-11
 Delays (us)
 SBD 0.017183
 MBD 0.007185
 Fringe rate (Hz)
 -0.006928
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

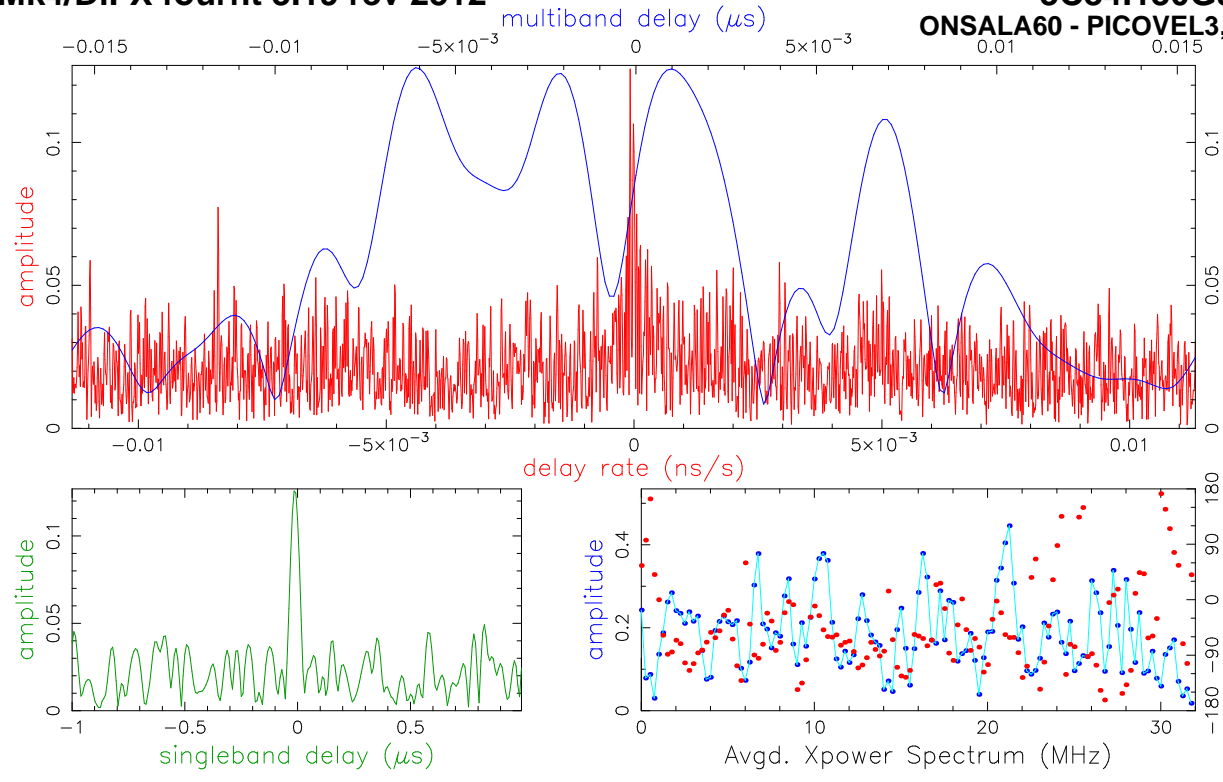
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112443
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



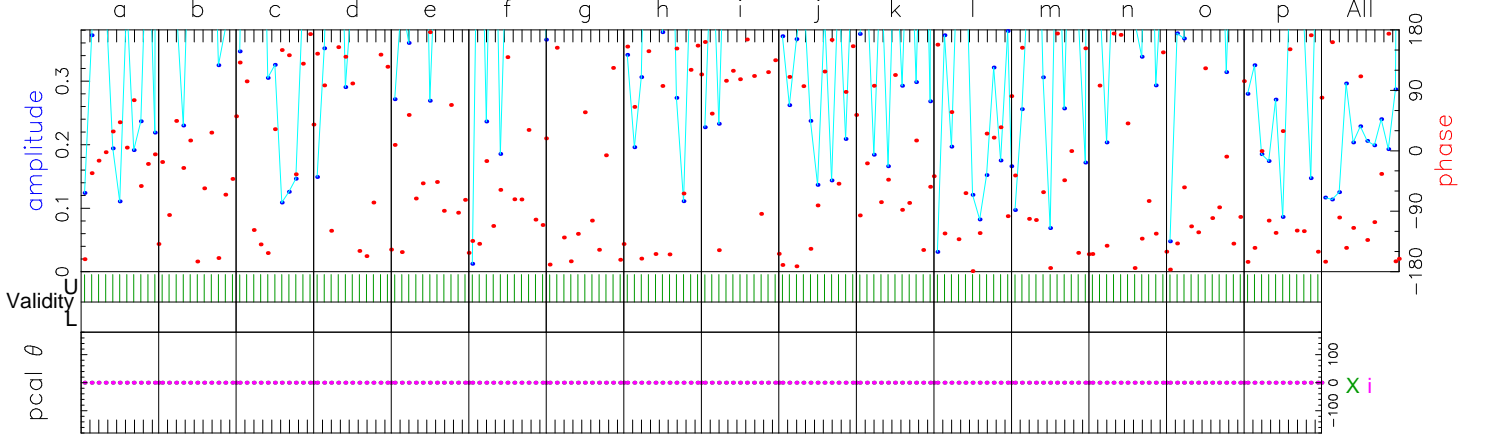
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
158.0	110.9	-153.8	124.4	116.0	16.9	-176.6	100.5	120.0	26.8	-89.4	120.5	171.1	74.9	-166.8	131.7	131.7	Phase	125.1
0.2	0.4	0.2	0.2	0.4	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.1	0.1	0.2	Ampl.	0.2
165.1	131.0	130.9	130.7	131.5	131.5	130.9	131.8	149.0	130.7	197.2	116.2	131.4	130.2	35.4	129.5	129.5	Sbd box	131.2
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	
Xi	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	1.61959375930E+03			Apriori delay (usec)			1.61958657434E+03			Resid mbdelay (usec)			7.18496E-03			+/- 1.2E-04		
Sband delay (usec)	1.61960375784E+03			Apriori clock (usec)			3.2923355E+01			Resid sbdelay (usec)			1.71835E-02			+/- 1.9E-03		
Phase delay (usec)	1.61958657837E+03			Apriori clockrate (us/s)			8.8100003E-07			Resid phdelay (usec)			4.03348E-06			+/- 4.0E-07		
Delay rate (us/s)	3.38746968038E-01			Apriori rate (us/s)			3.38747048460E-01			Resid rate (us/s)			-8.04220E-08			+/- 1.5E-09		
Total phase (deg)	310.0			Apriori accel (us/s/s)			9.51287512789E-06			Resid phase (deg)			125.1			+/- 12.5		

ph/seg (deg) 57.3 21.7 Search (2048X64) 0.147 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.4 37.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 67.5 25.1 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 83.4 43.8 Inc. frq. avg. 0.234 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 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.367.130G9L



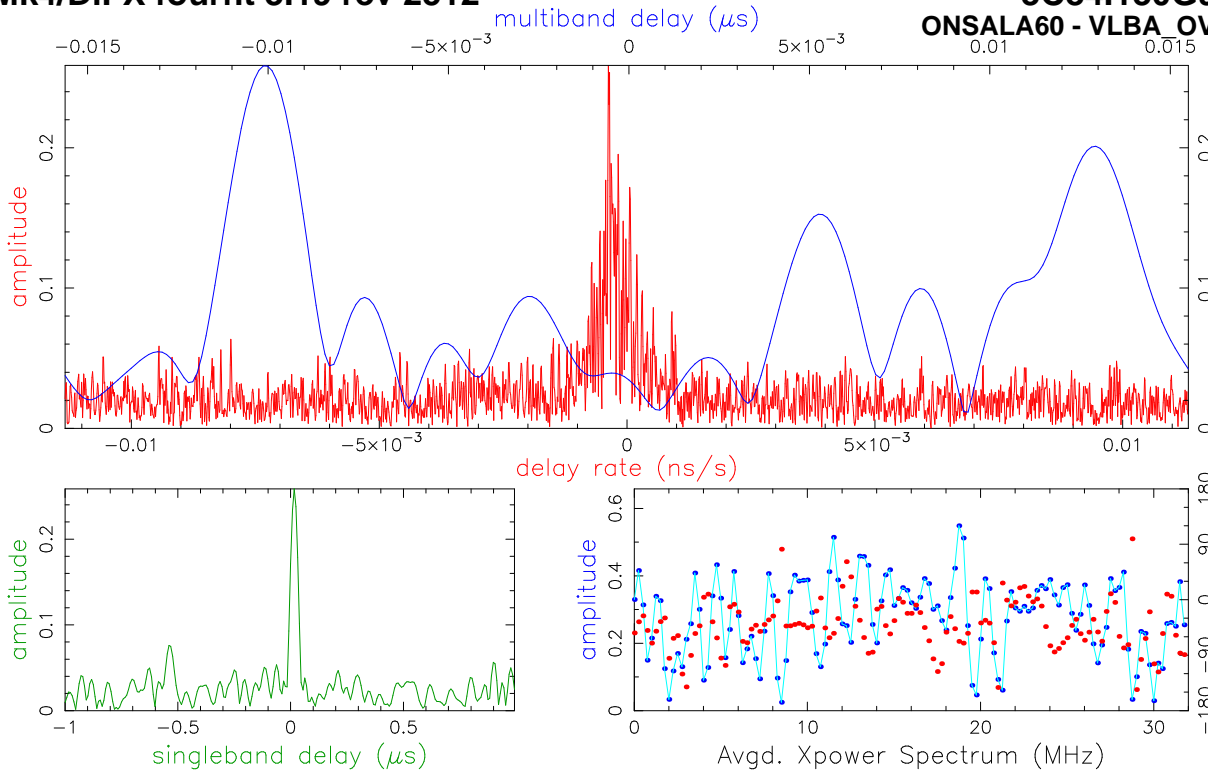
Fringe quality 9
 SNR 7.6
 Int time 479.076
 Amp 0.127
 Phase -144.6
 PFD 9.8e-06
 Delays (us)
 SBD -0.012347
 MBD 0.000982
 Fringe rate (Hz)
 -0.006898
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112448
 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
	-9.2	-28.3	170.0	161.6	-63.4	-98.8	-156.4	165.3	124.6	151.3	-78.4	-84.1	-111.6	-166.4	-111.5	-142.0	Phase	-144.6
	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.2	0.2	0.1	0.2	0.2	0.3	0.2	Ampl.	0.2
	127.2	101.6	138.9	126.8	125.7	127.8	126.6	127.6	126.0	52.7	186.9	109.6	47.1	126.8	126.2	126.0	Sbd box	127.4
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Tracks	
Group delay (usec)(sbd)	1.61958755627E+03			Apriori delay (usec)			1.61958657434E+03			Resid mbdelay (usec)			9.81929E-04			+/-	1.4E-04	
Sband delay (usec)	1.61957422684E+03			Apriori clock (usec)			3.2923355E+01			Resid sbdelay (usec)			-1.23475E-02			+/-	2.3E-03	
Phase delay (usec)	1.61958656968E+03			Apriori clockrate (us/s)			8.8100003E-07			Resid phdelay (usec)			-4.66203E-06			+/-	4.9E-07	
Delay rate (us/s)	3.38746968384E-01			Apriori rate (us/s)			3.38747048460E-01			Resid rate (us/s)			-8.00762E-08			+/-	1.8E-09	
Total phase (deg)	40.3			Apriori accel (us/s/s)			9.51287512789E-06			Resid phase (deg)			-144.6			+/-	15.1	

ph/seg (deg) 54.8 26.1 Amplitude 0.127 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.0 45.6 Interp. 0.123 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 71.3 30.2 Inc. seg. avg. 0.183 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 122.8 52.7 Inc. frq. avg. 0.227 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 i: az 307.4 el 20.3 pa 58.6 u,v (fr/asec) -2580.071 2276.387 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xi..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xi.W.388.130G9L

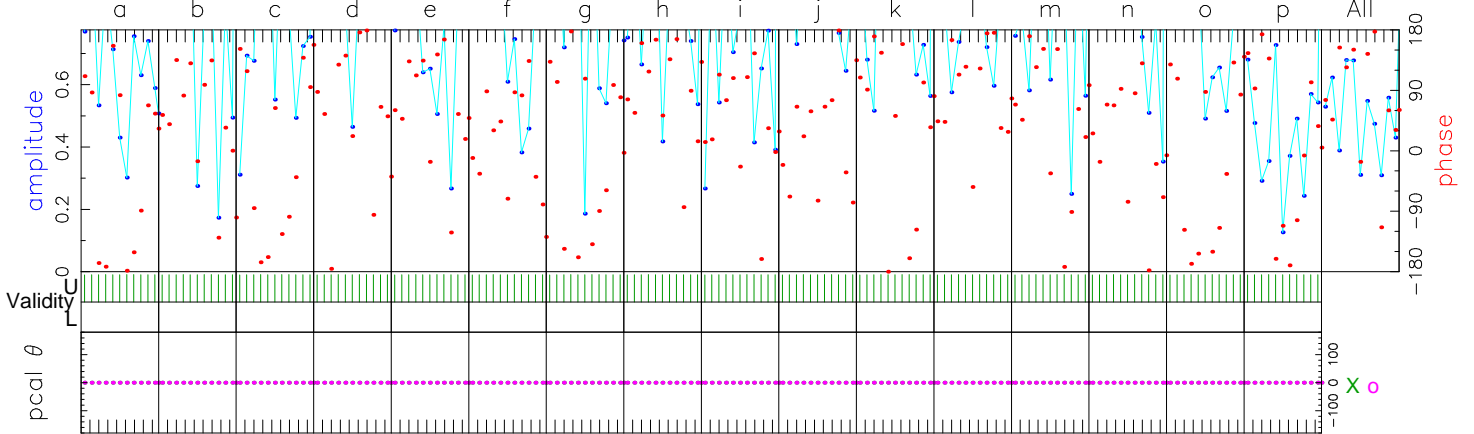


Fringe quality 9

SNR 15.4
 Int time 475.879
 Amp 0.259
 Phase 107.5
 PFD 7.0e-45
 Delays (us)
 SBD 0.015996
 MBD -0.010071
 Fringe rate (Hz)
 -0.032503
 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
 2020:086:112435
 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

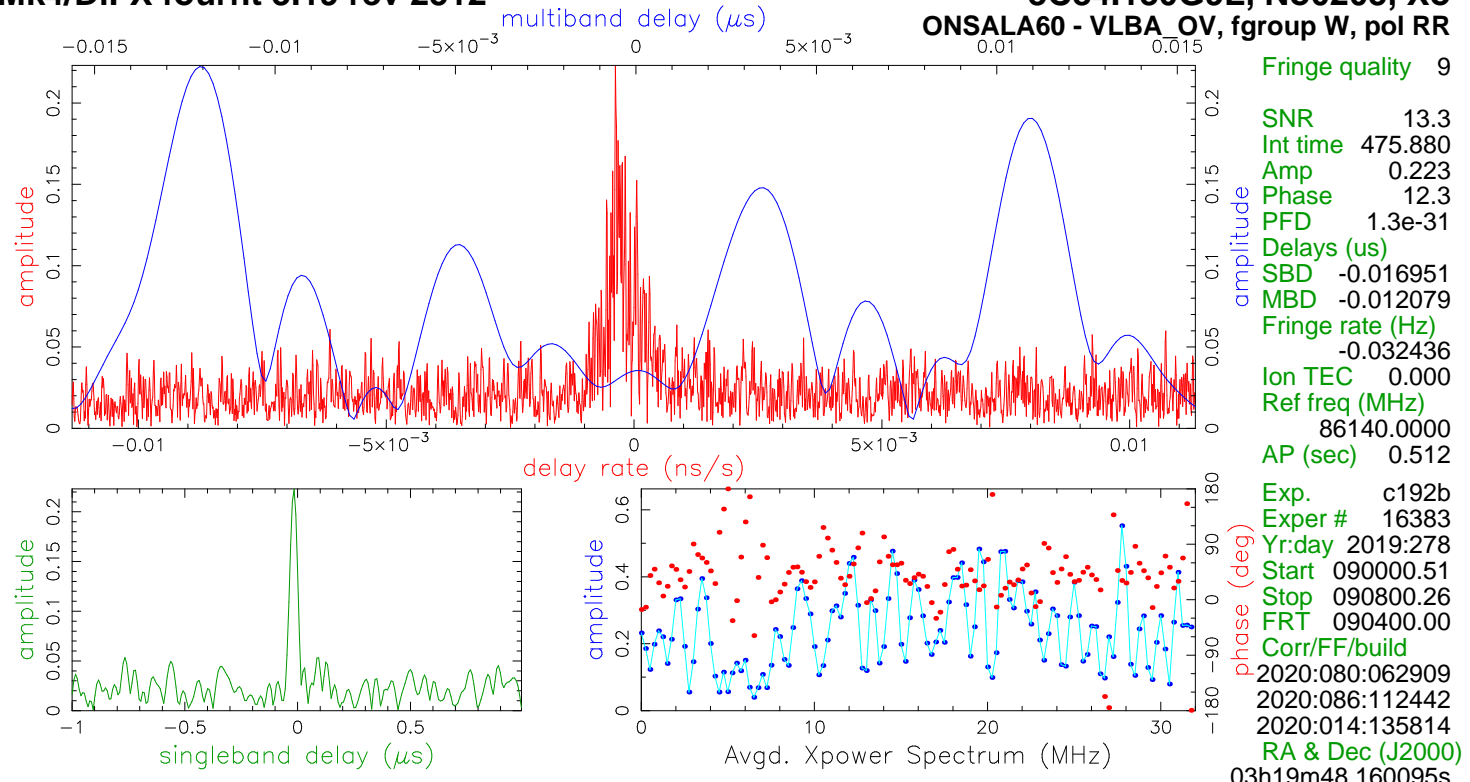


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	137.5	82.0	-163.8	117.0	85.6	13.2	164.9	119.4	66.8	6.6	139.4	87.8	116.4	46.3	165.3	148.2	Phase	107.5				
	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.3	0.4	0.4	0.4	0.2	Ampl.	0.4				
	131.7	131.0	131.0	131.1	130.7	131.0	131.8	131.5	131.0	131.2	130.4	131.9	131.4	131.2	131.8	134.3	Sbd box	131.0				
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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.17868150331E+04														Apriori delay (usec)	-1.17868362124E+04	Resid mbdelay (usec)	-1.00707E-02	+/-	7.0E-05
Sband delay (usec)			-1.17868202169E+04														Apriori clock (usec)	1.5734535E+01	Resid sbdelay (usec)	1.59955E-02	+/-	1.1E-03
Phase delay (usec)			-1.17868362089E+04														Apriori clockrate (us/s)	5.2701902E-07	Resid phdelay (usec)	3.46606E-06	+/-	2.4E-07
Delay rate (us/s)			-8.81843000798E-01														Apriori rate (us/s)	-8.81842623471E-01	Resid rate (us/s)	-3.77327E-07	+/-	8.6E-10
Total phase (deg)					-12.4												Apriori accel (us/s/s)	8.05493348942E-05	Resid phase (deg)	107.5	+/-	7.4

ph/seg (deg) RMS Theor. Amplitude 0.259 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.6 12.9 Search (2048X64) 0.251 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 106.5 22.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.3 14.9 Inc. seg. avg. 0.491 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 61.3 25.9 Inc. frq. avg. 0.384 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 o: az 68.0 el 74.1 pa -98.6 u,v (fr/asec) 6883.179 7121.703 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xo..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xo.W.342.130G9L



Fringe quality 9

SNR 13.3

Int time 475.880

Amp 0.223

Phase 12.3

PFD 1.3e-31

Delays (us)

SBD -0.016951

MBD -0.012079

Fringe rate (Hz)

-0.032436

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

2020:086:112442

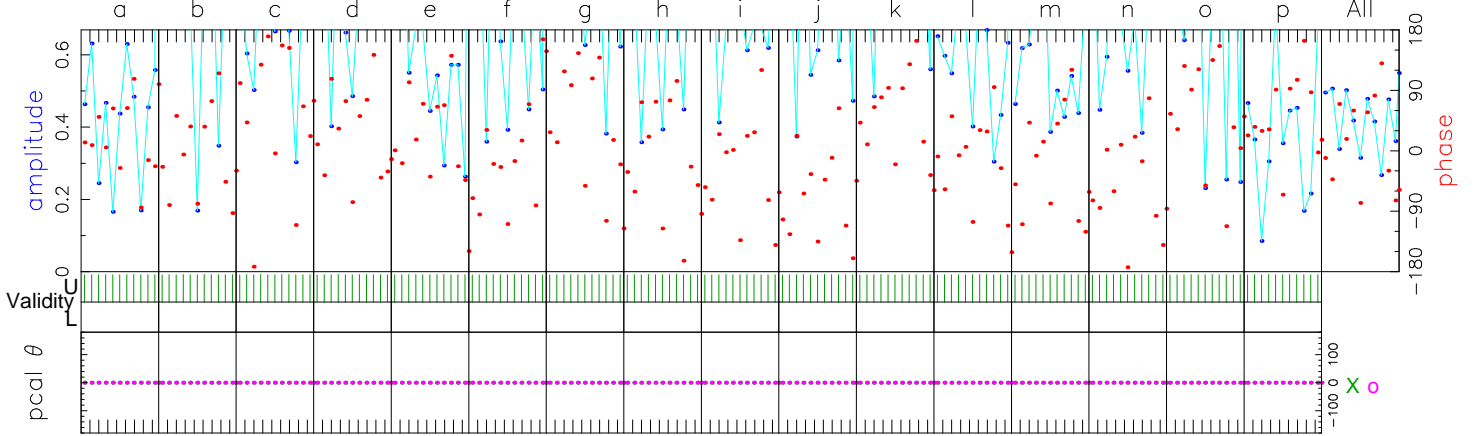
2020:014:135814

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				
	16.3	-11.2	116.3	20.0	21.0	-40.1	73.3	4.4	-40.7	-70.4	59.5	-4.4	-16.1	-54.8	91.8	53.1	Phase	12.3				
	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.5	0.4	0.2	0.3	0.4	0.2	Ampl.	0.3				
	128.3	126.4	126.8	127.4	126.8	126.7	125.8	127.1	126.3	127.2	126.5	127.1	126.7	127.9	126.9	128.3	Sbd box	126.8				
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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.17868482911E+04														Apriori delay (usec)	-1.17868362124E+04	Resid mbdelay (usec)	-1.20787E-02	+/-	8.1E-05
Sband delay (usec)			-1.17868531639E+04														Apriori clock (usec)	1.5734535E+01	Resid sbdelay (usec)	-1.69515E-02	+/-	1.3E-03
Phase delay (usec)			-1.17868362120E+04														Apriori clockrate (us/s)	5.2701902E-07	Resid phdelay (usec)	3.96806E-07	+/-	2.8E-07
Delay rate (us/s)			-8.81843000019E-01														Apriori rate (us/s)	-8.81842623471E-01	Resid rate (us/s)	-3.76547E-07	+/-	1.0E-09
Total phase (deg)																	Apriori accel (us/s/s)	8.05493348942E-05	Resid phase (deg)	12.3	+/-	8.6

ph/seg (deg) 65.5 14.9 Search (2048X64) 0.216 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

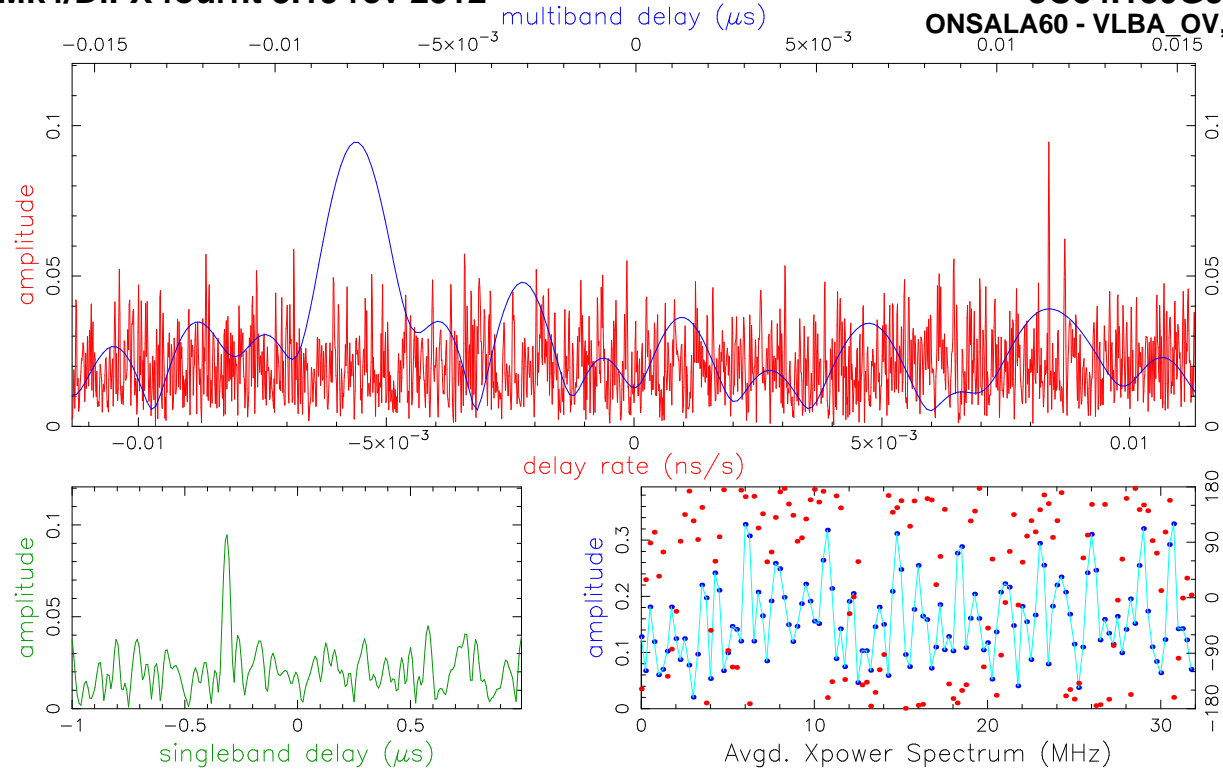
amp/seg (%) 93.8 26.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 55.7 17.2 Inc. seg. avg. 0.403 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 68.2 30.1 Inc. frq. avg. 0.340 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

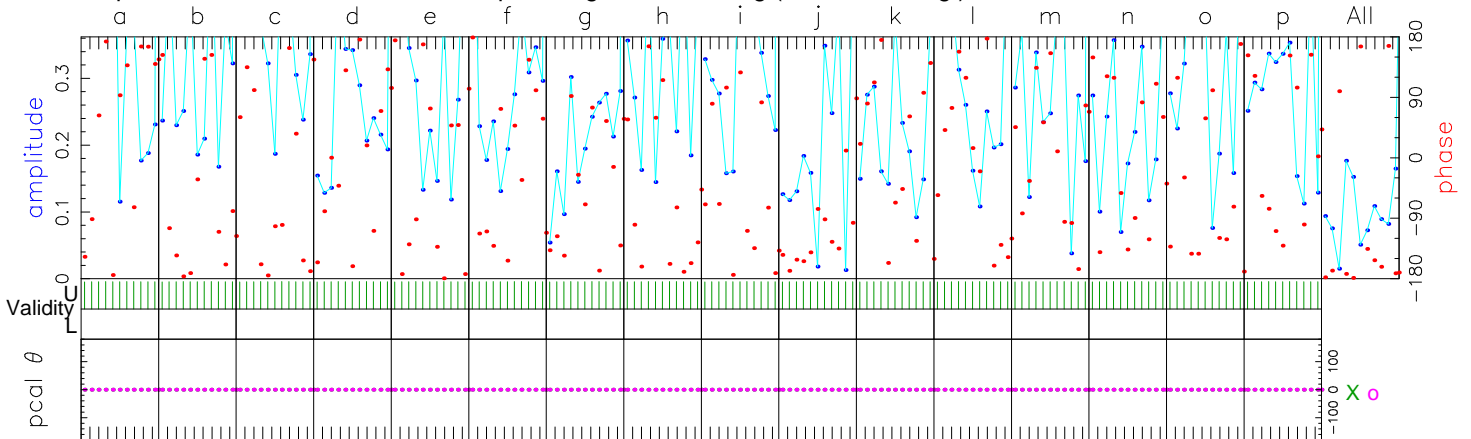
X: az 309.5 el 24.7 pa 33.4 o: az 68.0 el 74.1 pa -98.6 u,v (fr/asec) 6883.179 7121.703 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xo..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xo.W.365.130G9L



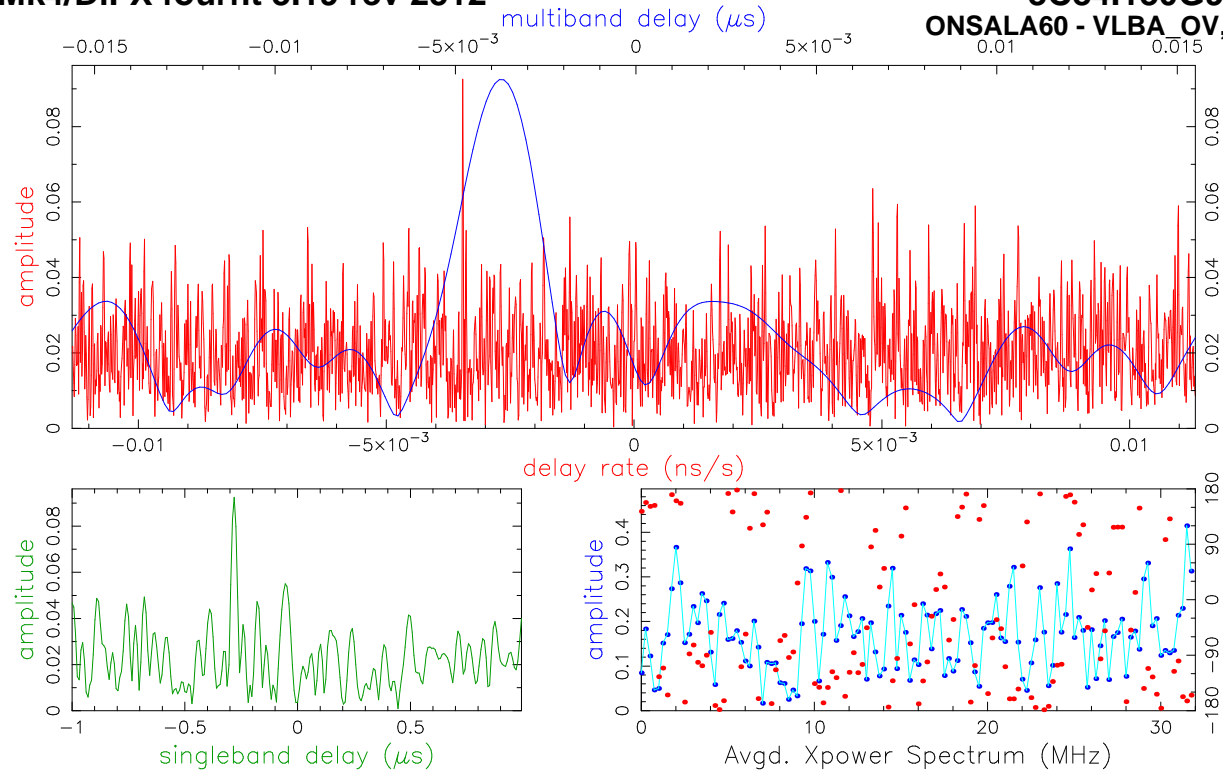
Fringe quality 0
 SNR 5.7
 Int time 475.880
 Amp 0.121
 Phase -171.7
 PFD 9.6e-01
 Delays (us)
 SBD -0.314941
 MBD -0.007796
 Fringe rate (Hz)
 0.722035
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 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					
	-179.5	-155.7	164.5	-160.1	-174.1	164.7	-85.6	-168.6	-157.5	-124.3	112.4	161.1	24.6	120.2	-147.4	-163.0		Phase -171.7					
	0.3	0.3	0.2	0.0	0.2	0.1	0.0	0.2	0.1	0.2	0.1	0.0	0.0	0.1	0.2	0.1		Ampl. 0.1					
	233.7	51.0	209.9	178.5	89.7	73.1	193.0	206.2	1.7	154.2	51.5	112.0	245.8	110.0	166.4	76.3		Sbd box 88.7					
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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.17871565079E+04															Apriori delay (usec)	-1.17868362124E+04	Resid mbdelay (usec)	-7.79555E-03	+/-	1.9E-04
Sband delay (usec)			-1.17871511539E+04															Apriori clock (usec)	1.5734535E+01	Resid sbdelay (usec)	-3.14941E-01	+/-	3.0E-03
Phase delay (usec)			-1.17868362179E+04															Apriori clockrate (us/s)	5.2701902E-07	Resid phdelay (usec)	-5.53598E-06	+/-	6.5E-07
Delay rate (us/s)			-8.81834241358E-01															Apriori rate (us/s)	-8.81842623471E-01	Resid rate (us/s)	8.38211E-06	+/-	2.3E-09
Total phase (deg)					-291.5													Apriori accel (us/s/s)	8.05493348942E-05	Resid phase (deg)	-171.7	+/-	20.1

ph/seg (deg) RMS 31.4 Theor. 34.9 Amplitude 0.121 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.3 60.9 Search (2048X64) 0.092 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.8 40.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 72.9 70.3 Inc. seg. avg. 0.106 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 o: az 68.0 el 74.1 pa -98.6 u,v (fr/asec) 6883.179 7121.703 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xo..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xo.W.381.130G9L simultaneous interpolator

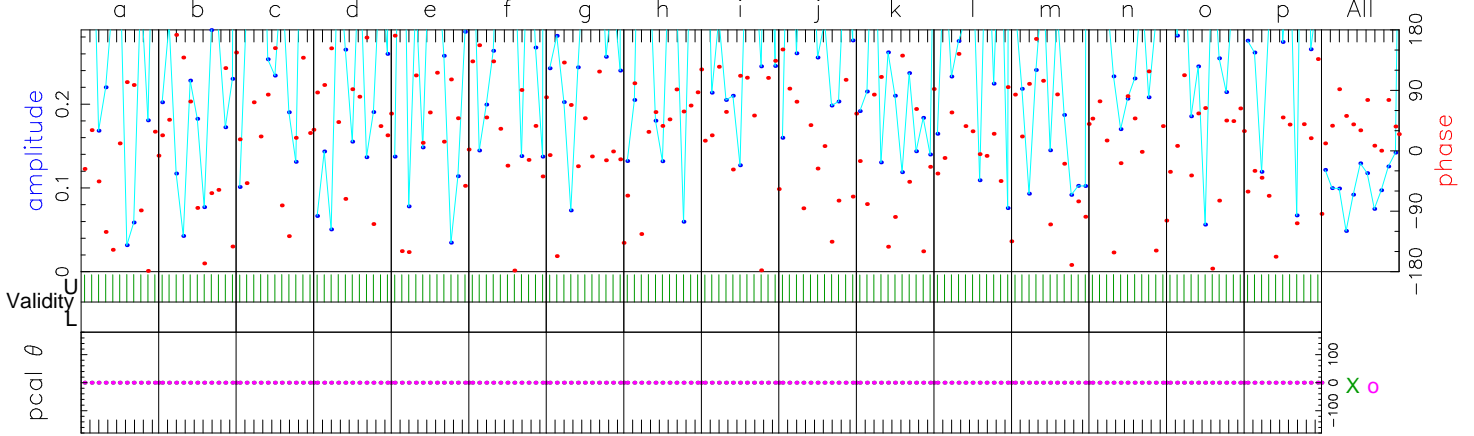


Fringe quality 0

SNR 5.5
 Int time 475.879
 Amp 0.096
 Phase 41.6
 PFD 1.0e+00
 Delays (us)
 SBD -0.281740
 MBD -0.003727
 Fringe rate (Hz)
 -0.297589
 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
 2020:086:112451
 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				
	-15.2	-28.9	43.5	53.4	105.1	57.0	18.3	66.5	81.5	28.6	-56.4	9.1	89.3	47.1	35.7	13.0	Phase	41.6				
	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1				
	135.7	240.5	12.7	199.6	149.5	7.7	221.7	209.4	127.5	189.9	15.0	107.4	171.2	191.7	71.2	37.9	Sbd box	92.9				
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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.17871211891E+04														Apriori delay (usec)	-1.17868362124E+04	Resid mbdelay (usec)	-3.72670E-03	+/-	2.0E-04
Sband delay (usec)			-1.17871179524E+04														Apriori clock (usec)	1.5734535E+01	Resid sbdelay (usec)	-2.81740E-01	+/-	3.1E-03
Phase delay (usec)			-1.17868362110E+04														Apriori clockrate (us/s)	5.2701902E-07	Resid phdelay (usec)	1.34304E-06	+/-	6.7E-07
Delay rate (us/s)			-8.81846078187E-01														Apriori rate (us/s)	-8.81842623471E-01	Resid rate (us/s)	-3.45472E-06	+/-	2.4E-09
Total phase (deg)					-78.2												Apriori accel (us/s/s)	8.05493348942E-05	Resid phase (deg)	41.6	+/-	20.7

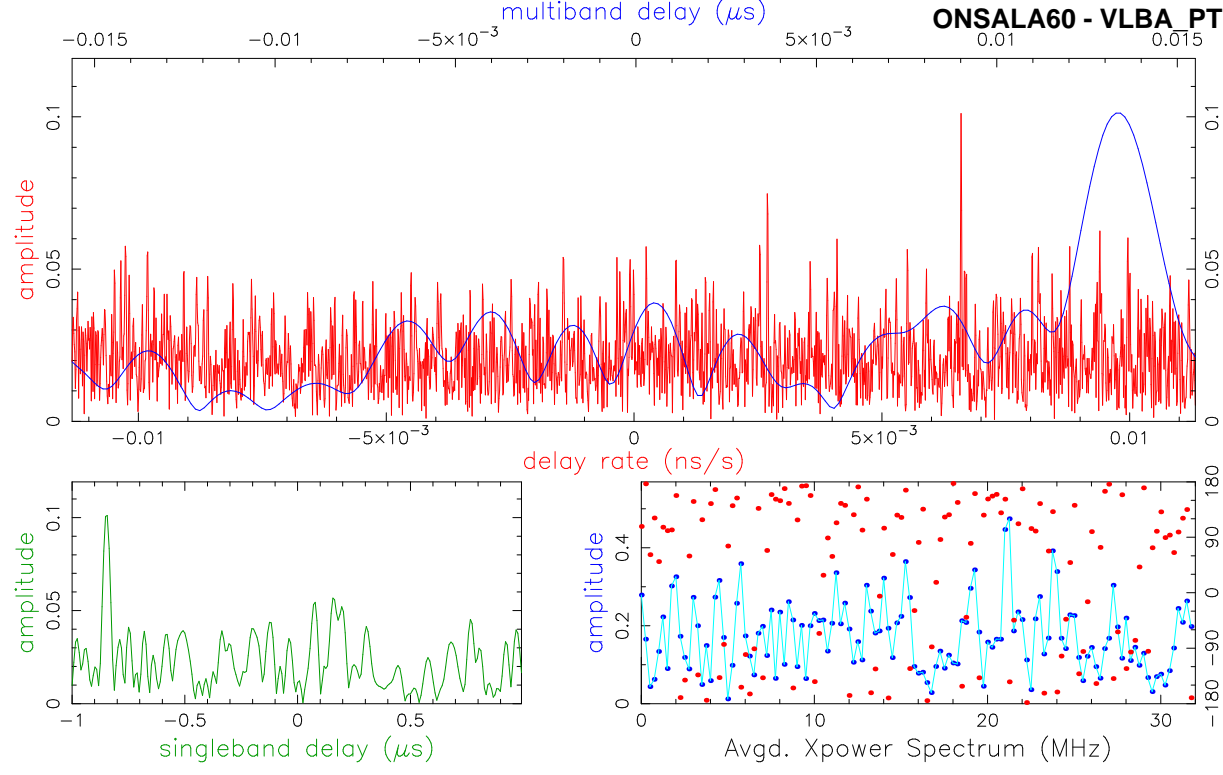
	RMS	Theor.	Amplitude	0.096 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	28.5	35.9	Search (2048X64)	0.091	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	34.0	62.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	45.8	41.5	Inc. seg. avg.	0.091	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	55.7	72.4	Inc. frq. avg.	0.090	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

X: az 309.5 el 24.7 pa 33.4 o: az 68.0 el 74.1 pa -98.6 u,v (fr/asec) 6883.179 7121.703 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/Xo..130G9L Output file: /Exps/c192b/v2/1234/No0205/Xo.W.397.130G9L

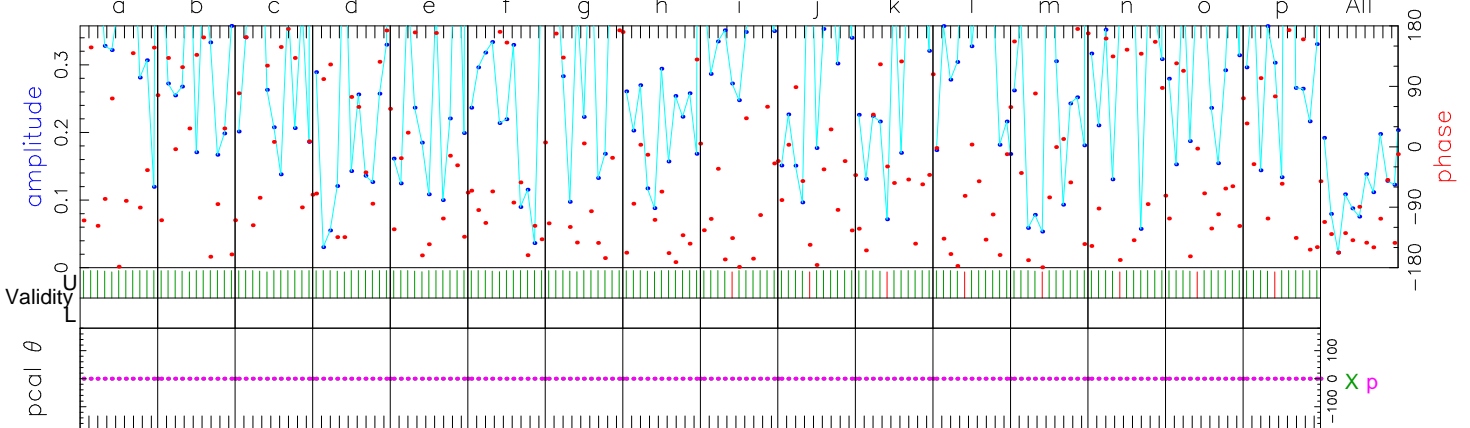
Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol LL



Fringe quality 0
 SNR 6.2
 Int time 475.442
 Amp 0.119
 Phase -119.7
 PFD 1.8e-01
 Delays (us)
 SBD -0.847449
 MBD 0.013280
 Fringe rate (Hz)
 0.569050
 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
 2020:086:112436
 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

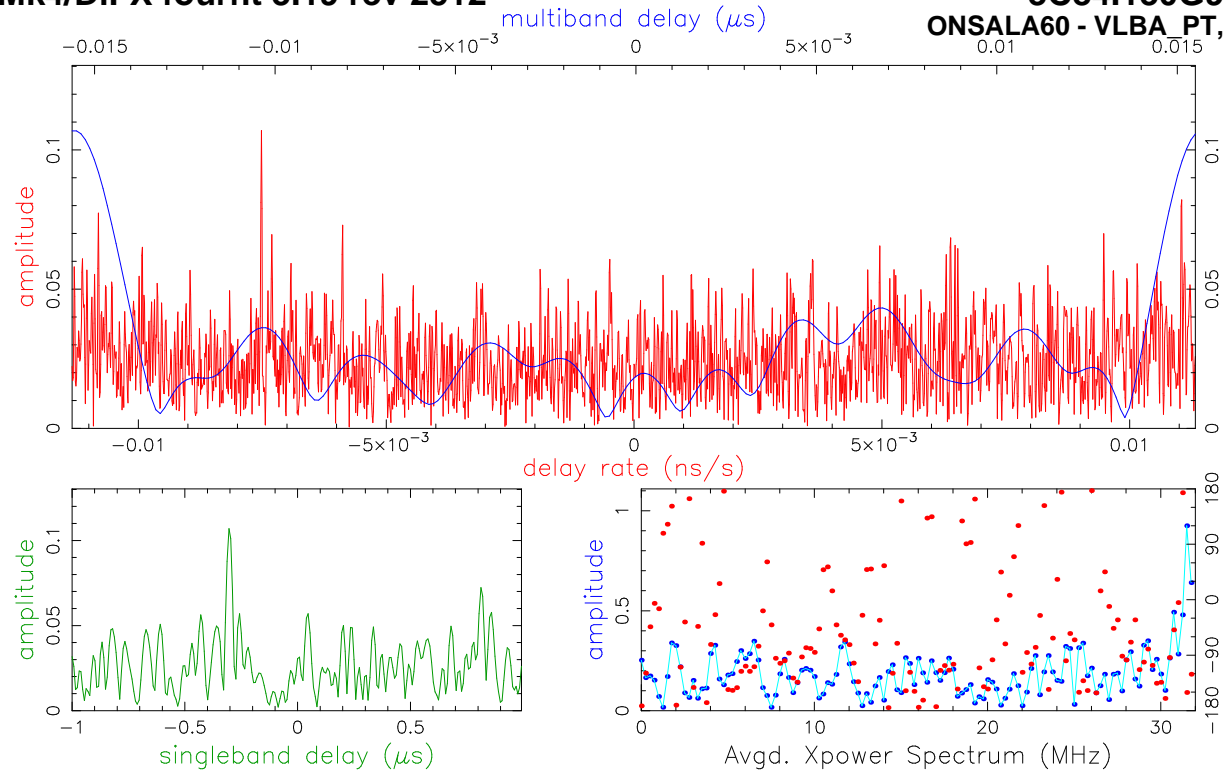


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-131.7	173.5	-137.9	-157.1	-75.5	-110.7	-137.9	-121.2	-113.2	-61.9	-76.0	-96.7	-77.2	-173.8	-82.8	-171.1	Phase	-119.7
	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	111.0	75.7	154.9	192.0	200.6	144.2	212.1	112.9	106.3	136.4	158.6	136.6	79.5	19.3	202.4	24.6	Sbd box	20.5
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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	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) -1.22046130273E+04 Apriori delay (usec) -1.22037513073E+04 Resid mbdelay (usec) 1.32800E-02 +/- 1.8E-04
 Sband delay (usec) -1.22045987558E+04 Apriori clock (usec) 2.0433281E+01 Resid sbdelay (usec) -8.47449E-01 +/- 2.8E-03
 Phase delay (usec) -1.22037513111E+04 Apriori clockrate (us/s) 3.2411343E-07 Resid phdelay (usec) -3.85855E-06 +/- 6.0E-07
 Delay rate (us/s) -7.27911138851E-01 Apriori rate (us/s) -7.27917744957E-01 Resid rate (us/s) 6.60611E-06 +/- 2.2E-09
 Total phase (deg) -338.6 Apriori accel (us/s/s) 8.58895599860E-05 Resid phase (deg) -119.7 +/- 18.6

ph/seg (deg) RMS 30.6 Theor. 32.2 Amplitude 0.119 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.4 56.3 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.8 37.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.6 65.0 Inc. seg. avg. 0.115 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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.345.130G9L

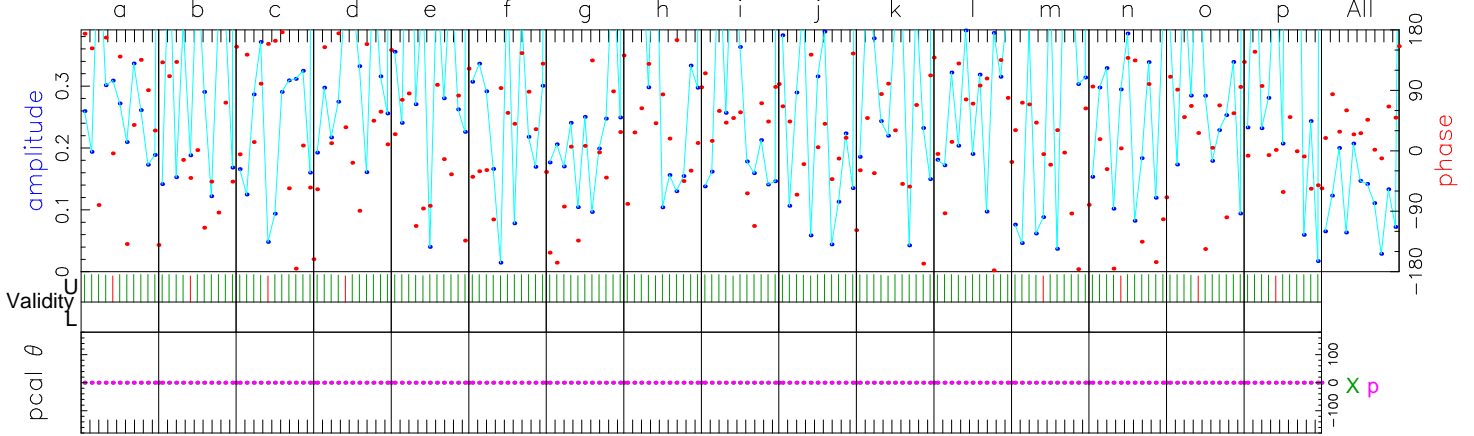


Fringe quality 0

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

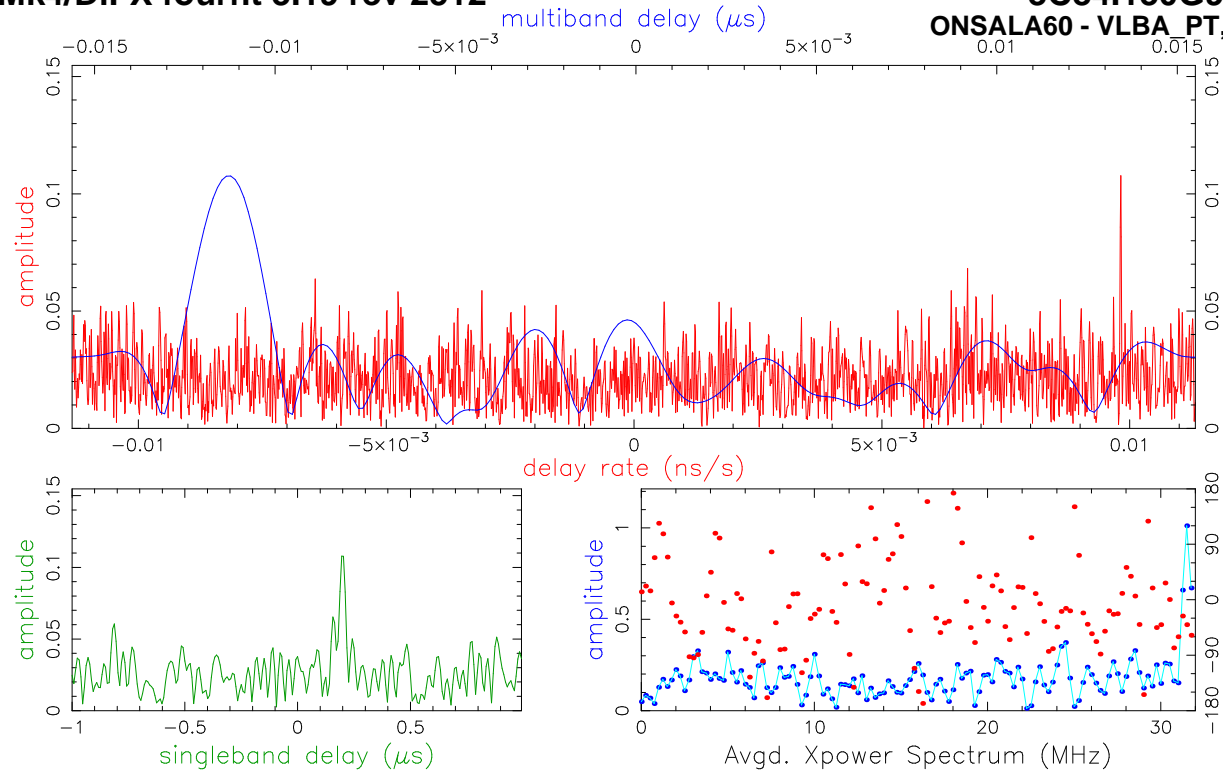
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112441
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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
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		
X	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		
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		
X:p	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		
X	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)			-1.22040481403E+04															
Sband delay (usec)			-1.22040538158E+04															
Phase delay (usec)			-1.22037513060E+04															
Delay rate (us/s)			-7.27925272384E-01															
Total phase (deg)					-181.0													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
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																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 27.6 30.8 Search (2048X64) 0.106 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.2 53.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.3 35.6 Inc. seg. avg. 0.125 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.0 62.1 Inc. frq. avg. 0.122 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.363.130G9L

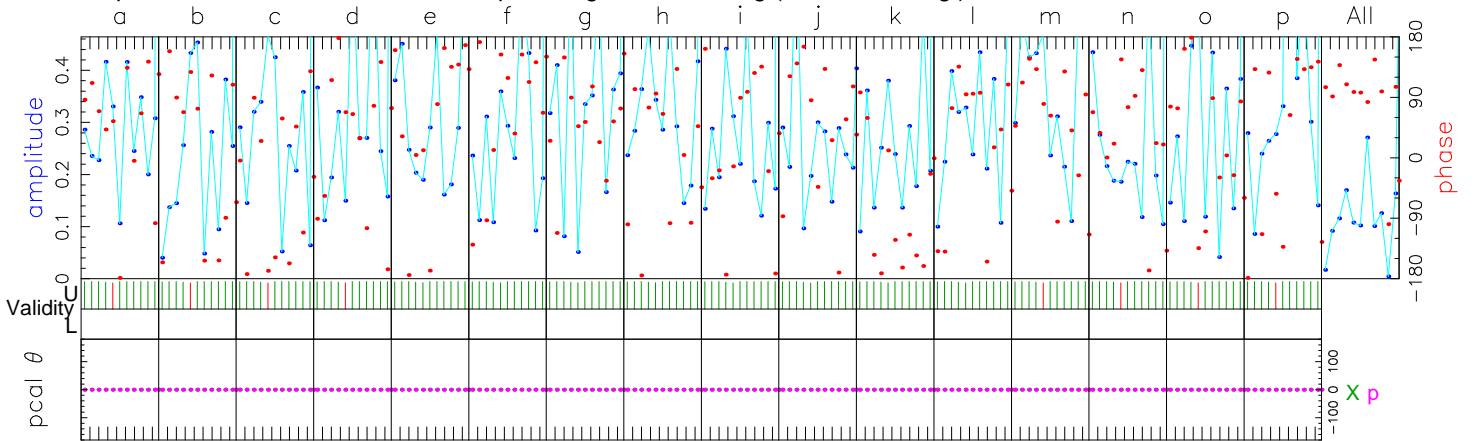


Fringe quality 0

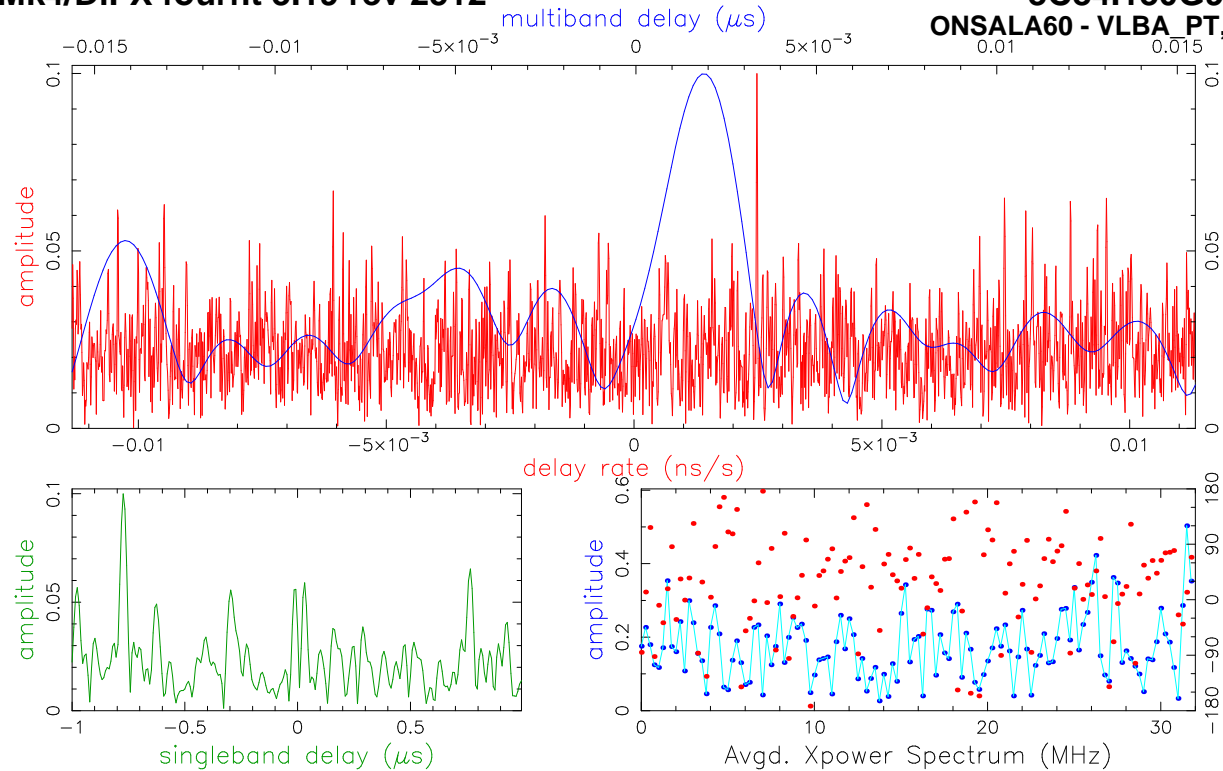
SNR 6.6
 Int time 475.443
 Amp 0.155
 Phase 103.8
 PFD 9.7e-03
 Delays (us)
 SBD 0.199181
 MBD -0.011252
 Fringe rate (Hz)
 0.846946
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

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
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		
X	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		
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		
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		
X	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		
X	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)		-1.22035438094E+04																
Sband delay (usec)		-1.22035521263E+04																
Phase delay (usec)		-1.22037513039E+04																
Delay rate (us/s)		-7.27907912755E-01																
Total phase (deg)					-115.2													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
pcal mode: MANUAL, MANUAL																		
PC period (AP's) 5, 5																		
Search (2048X64)																		
Interp.																		
Inc. seg. avg.																		
Inc. frq. avg.																		
Amplitude																		
0.155 +/- 0.023																		
RMS																		
Theor.																		
51.3																		
64.2																		
44.6																		
50.6																		
Search (2048X64)																		
Interp.																		
Inc. seg. avg.																		
Inc. frq. avg.																		
0.106																		
0.000																		
0.142																		
0.149																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
SampCntNorm: enabled																		
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)																		
-1.000																		
-0.016																		
-0.011																		
0.00																		
0.00																		

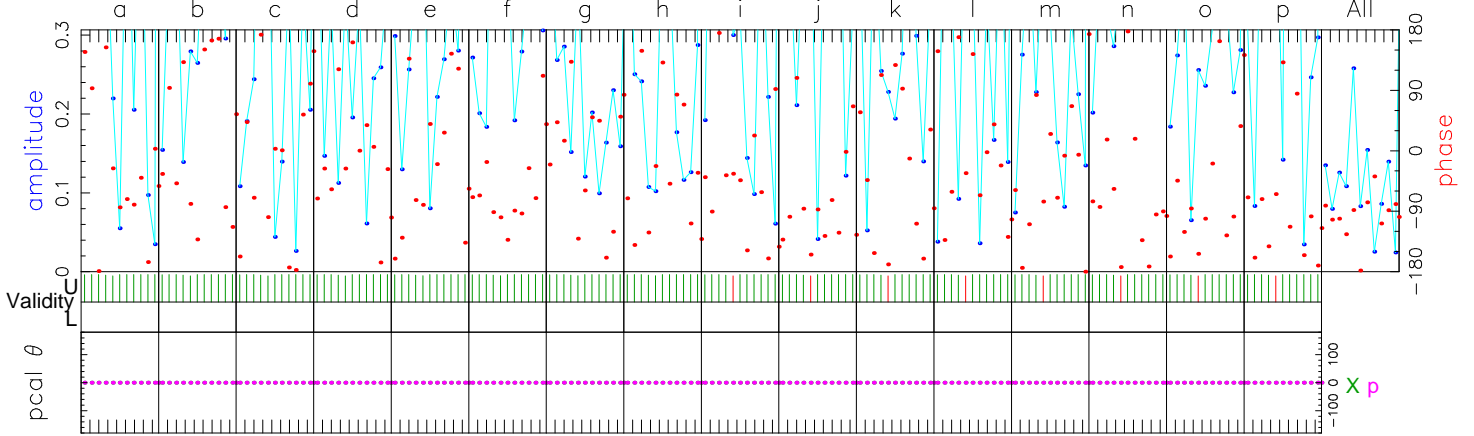


Fringe quality 0

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

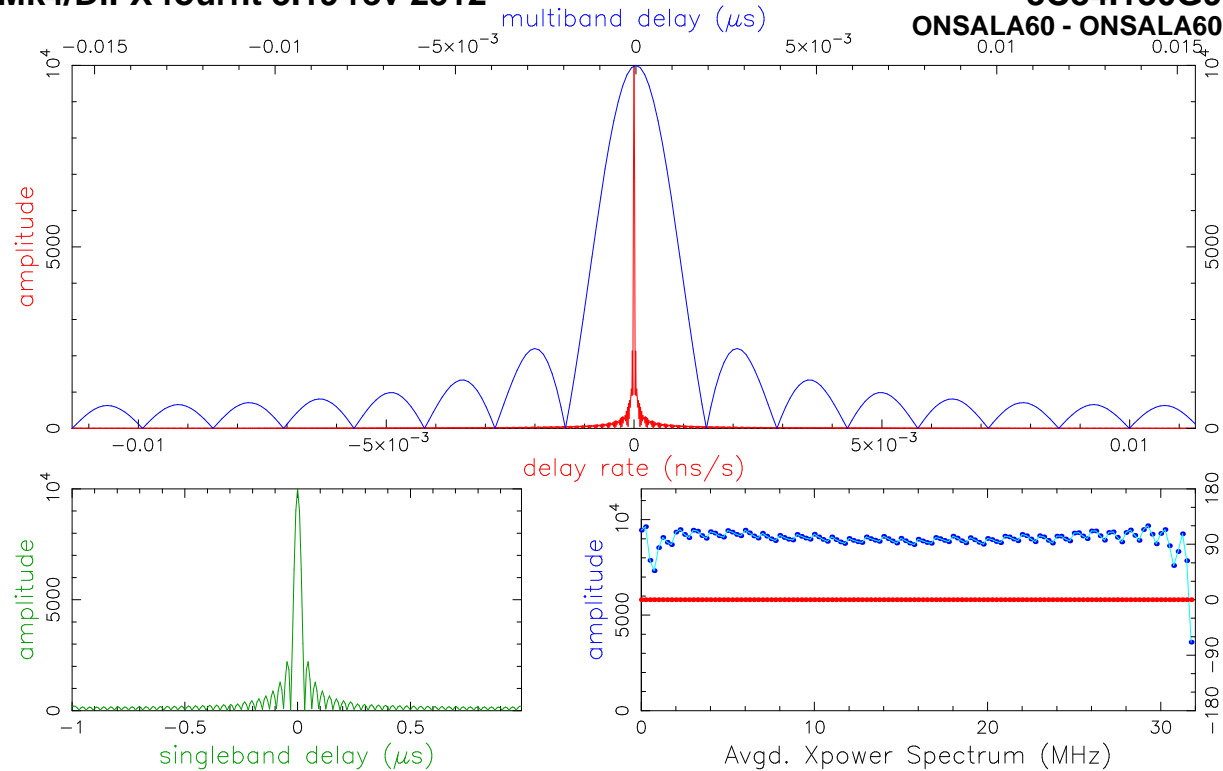
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build 2020:080:062909
 2020:086:112450
 2020:014:135814
 RA & Dec (J2000) 03h19m48.160095s
 +41°30'42.104042"

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	Chan ids					
x	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	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
 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 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 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 simultaneous interpolator

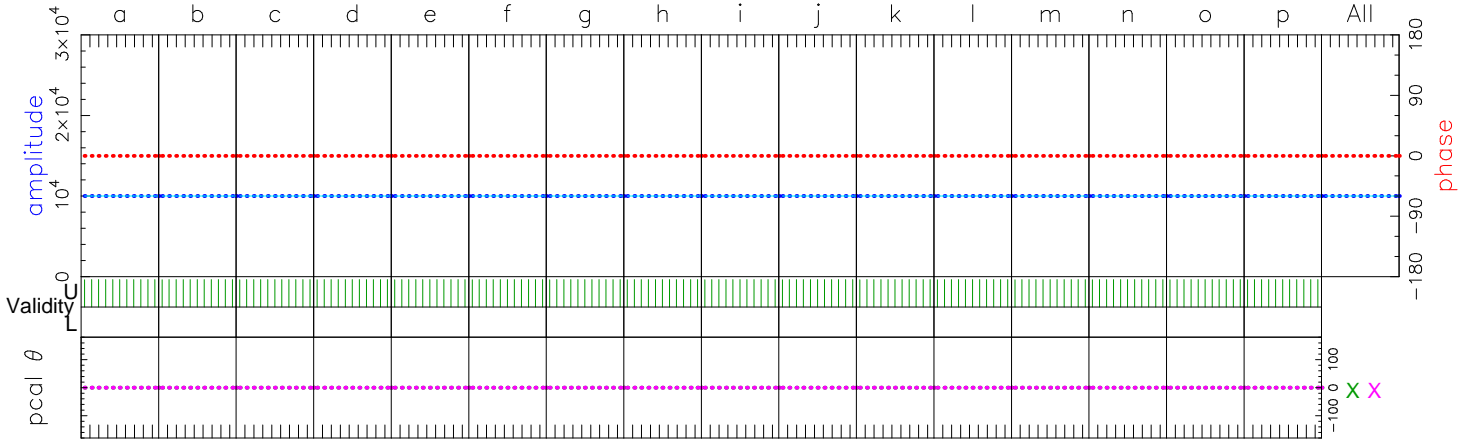


Fringe quality 9

SNR 598549.1
 Int time 479.076
 Amp 10000.002
 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 090000.51
 Stop 090800.26
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112434
 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

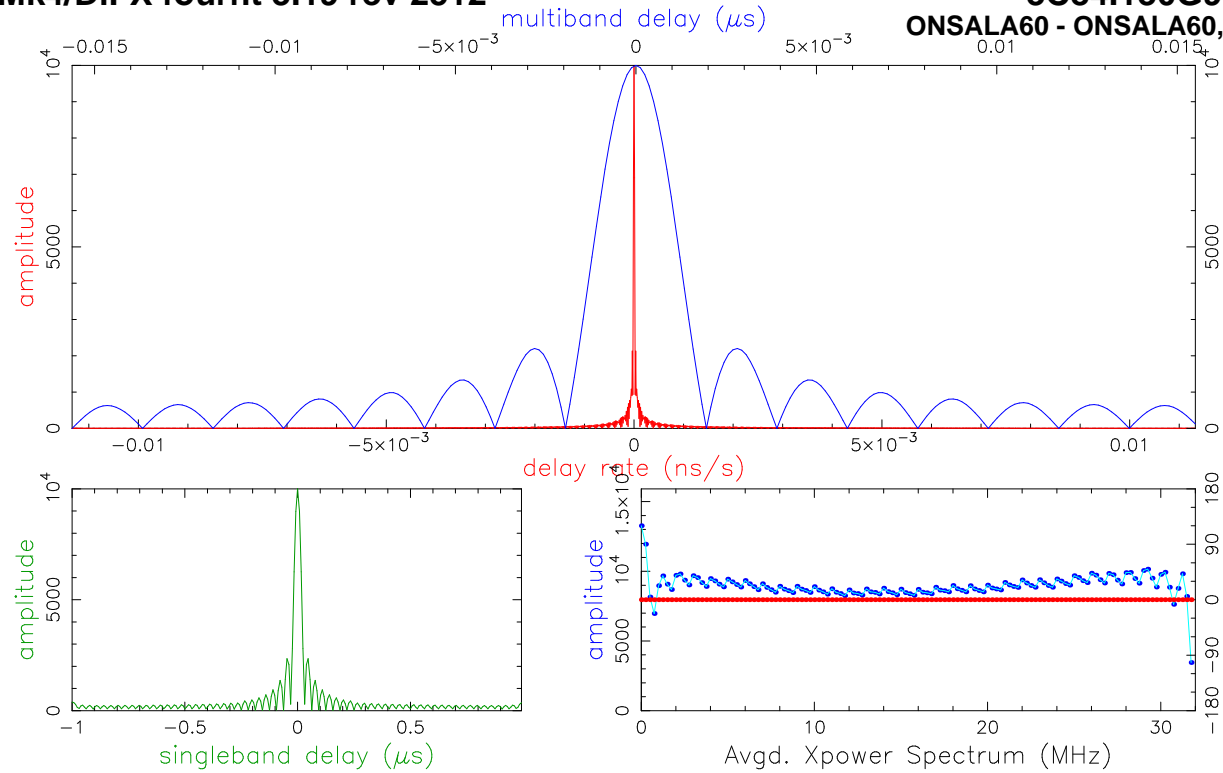


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	-0.0		Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0		Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0		Sbd box	129.0
U/L	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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

Group delay (usec)(sbd) 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) 3.63802228462E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.63802E-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

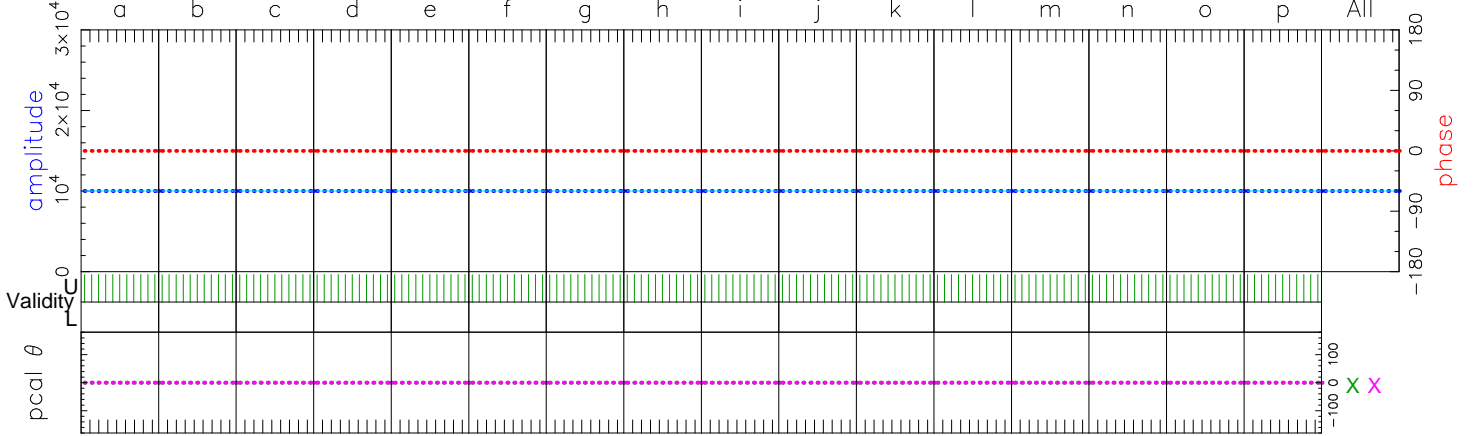
RMS Theor. Amplitude 10000.002 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 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. 10000.003 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XX..130G9L Output file: /Exps/c192b/v2/1234/No0205/XX.W.339.130G9L



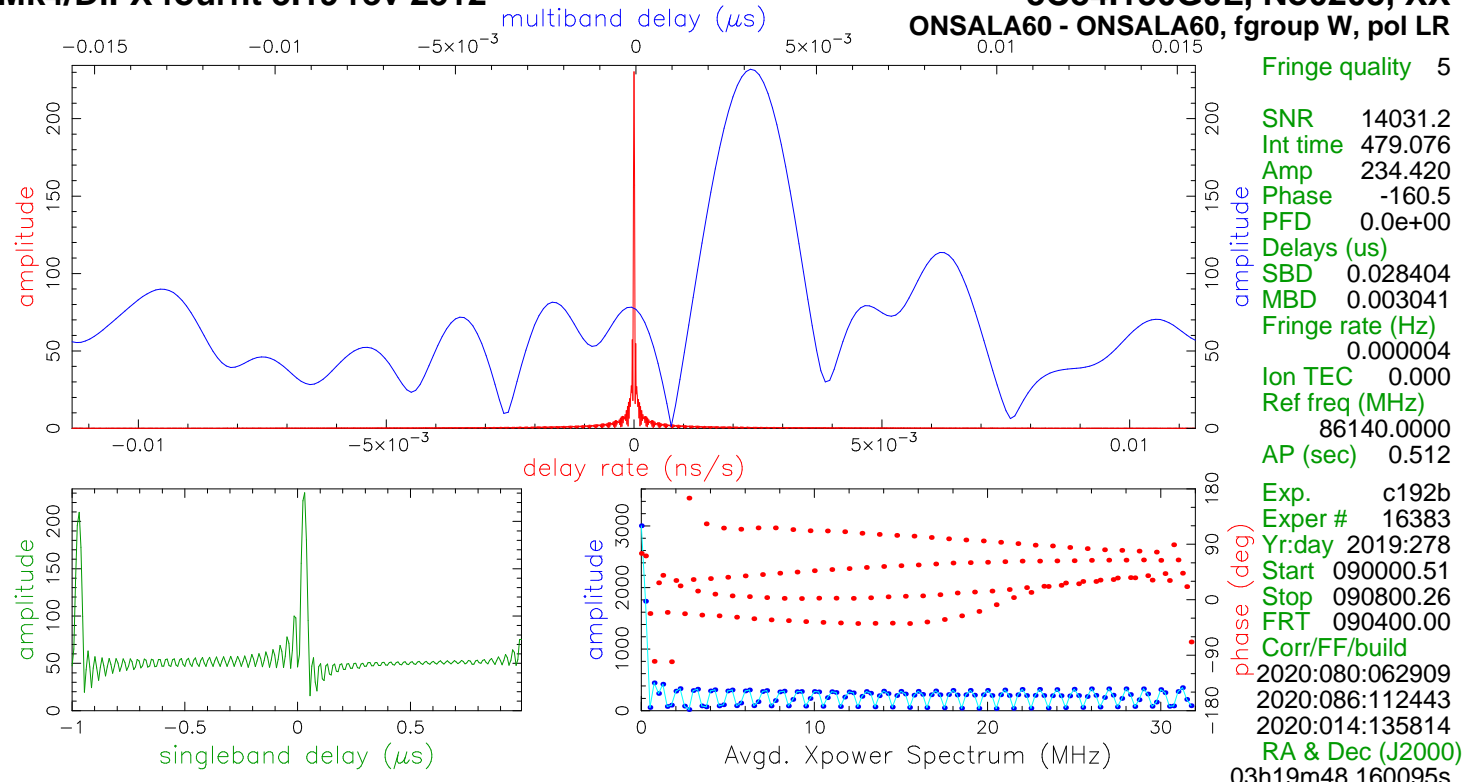
Fringe quality 9
 SNR 598549.1
 Int time 479.076
 Amp 10000.002
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090000.51
 Stop 090800.26
 FRT 090400.00
 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

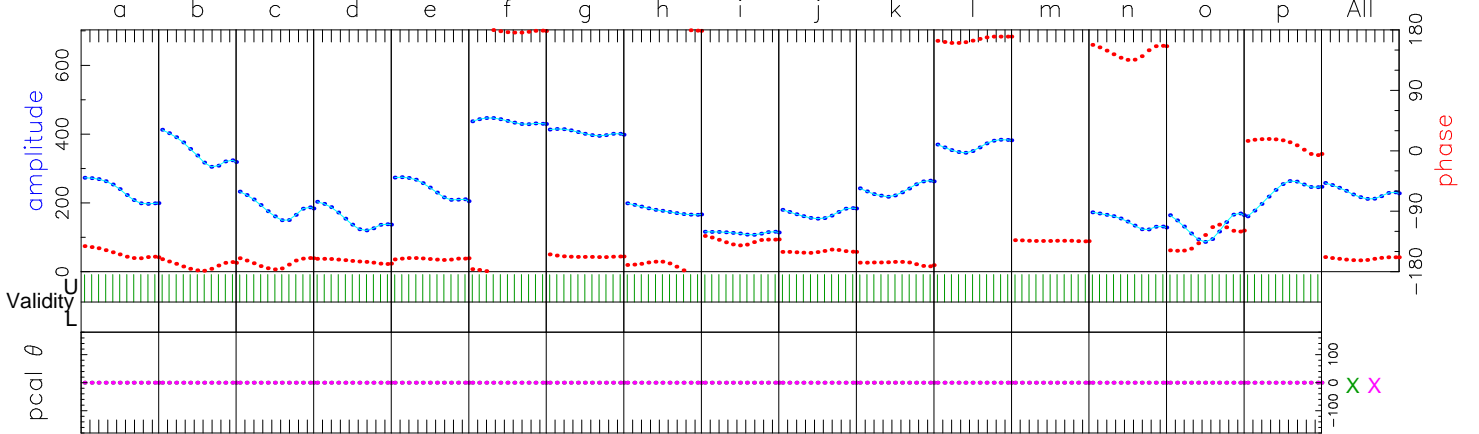


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0		Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0		Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0		Sbd box	129.0
U/L	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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	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)	6.18424458483E-21			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			6.18424E-21			+/- 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 Theor. Amplitude 10000.002 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 10000.002 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
 X: az 309.5 el 24.7 pa 33.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XX..130G9L Output file: /Exps/c192b/v2/1234/No0205/XX.W.355.130G9L simultaneous interpolator

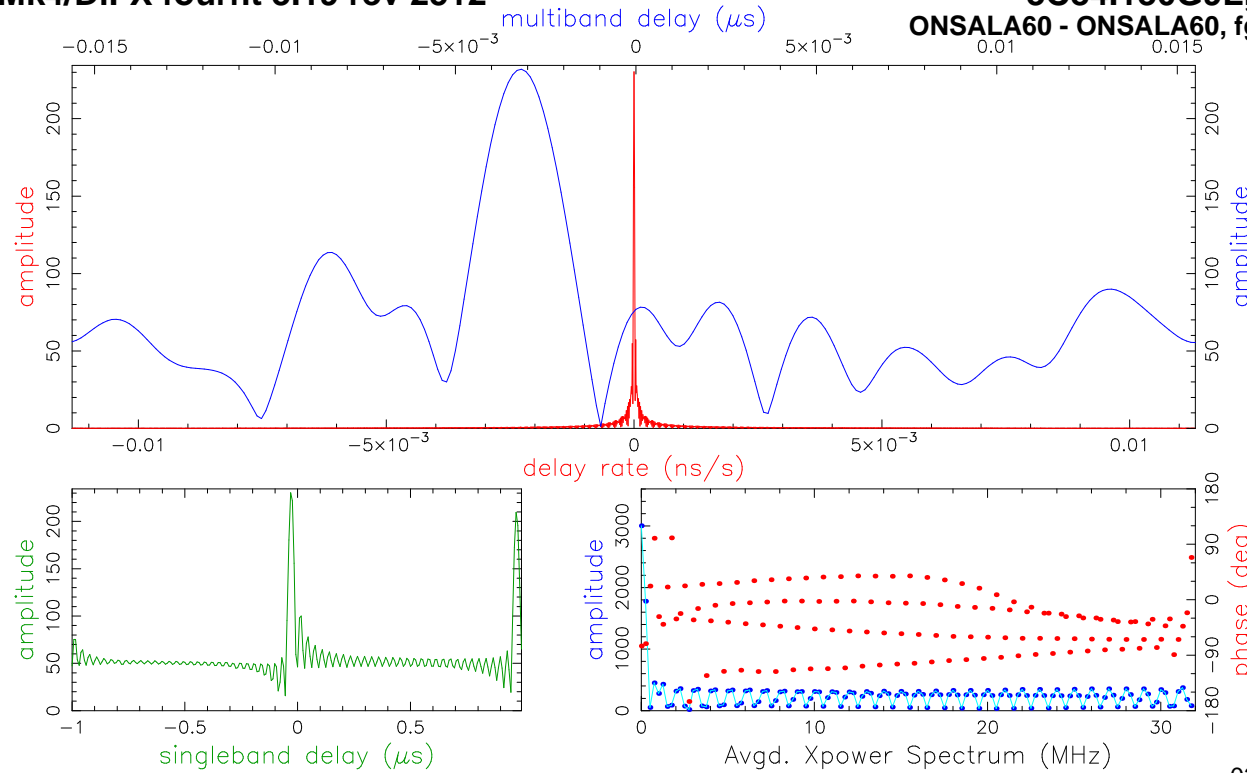


Amp. and Phase vs. time for each freq., 12 segs, 85 APs / seg (43.52 sec / seg.), time ticks 60 sec



	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
	-151.6	-170.3	-166.9	-163.6	-160.8	178.9	-157.2	-171.0	-134.2	-149.9	-167.4	165.2	-133.9	147.1	-130.3	9.4	Phase	-160.5
	234.5	348.5	183.8	154.0	242.3	436.8	404.6	177.9	112.8	168.6	237.8	364.0	855.9	145.1	125.4	226.4	Ampl.	276.2
	131.3	133.6	5.2	5.6	132.3	133.6	133.7	133.0	4.3	134.1	133.4	132.9	131.7	5.5	5.5	135.2	Sbd box	132.6
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	3.42914687500E-02			Apriori delay (usec)			0.00000000000E+00			Resid mbdelay (usec)			3.04147E-03			+/- 7.7E-08		
Sband delay (usec)	2.84040000000E-02			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			2.84040E-02			+/- 1.2E-06		
Phase delay (usec)	-5.17438977461E-06			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-5.17439E-06			+/- 2.6E-10		
Delay rate (us/s)	4.32220147946E-11			Apriori rate (us/s)			0.00000000000E+00			Resid rate (us/s)			4.32220E-11			+/- 9.5E-13		
Total phase (deg)				-160.5			Apriori accel (us/s/s)			0.00000000000E+00			Resid phase (deg)			-160.5 +/- 0.0		

ph/seg (deg) 1.7 0.0 Theor. Amplitude 234.420 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 6.6 0.0 Search (2048X64) 228.294 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 78.2 0.0 Inc. seg. avg. 230.387 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XX..130G9L Output file: /Exps/c192b/v2/1234/No0205/XX.W.370.130G9L simultaneous interpolator

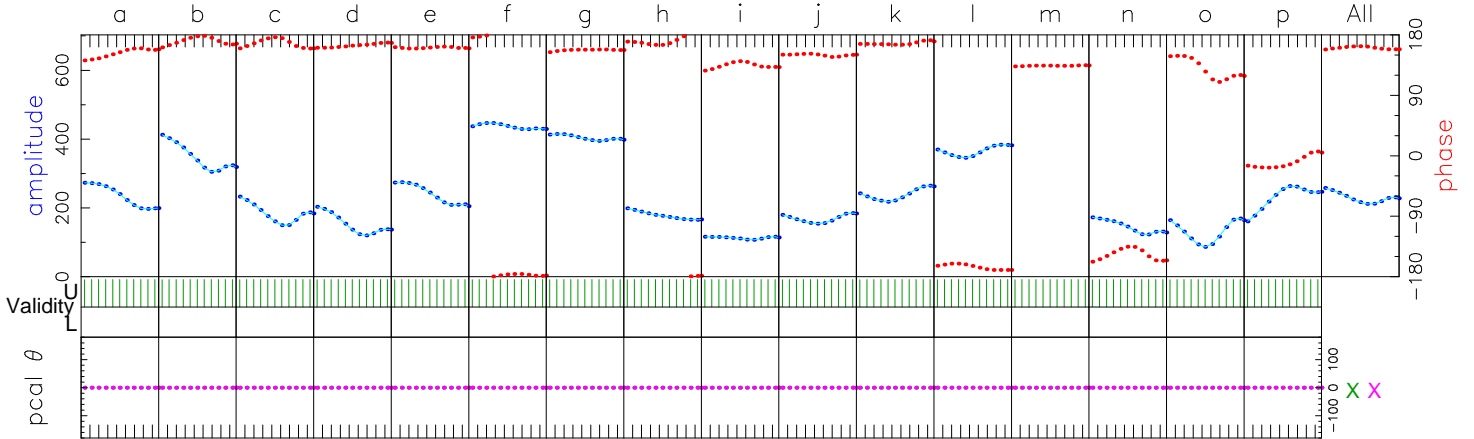


Fringe quality 5

SNR 14031.2
 Int time 479.076
 Amp 234.420
 Phase 160.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.028404
 MBD -0.003041
 Fringe rate (Hz)
 -0.000004
 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
 2020:086:112447
 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				
	151.6	170.3	166.9	163.6	160.8	-178.9	157.2	171.0	134.2	149.9	167.4	-165.2	133.9	-147.1	130.3	-9.4	Phase	160.5				
	234.5	348.5	183.8	154.0	242.3	436.8	404.6	177.9	112.8	168.6	237.8	364.0	855.9	145.1	125.4	226.4	Ampl.	276.2				
	126.7	124.4	252.8	252.4	125.7	124.4	124.3	125.0	253.7	123.9	124.6	125.1	126.3	252.5	252.5	122.8	Sbd box	125.4				
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
Group delay (usec)(sbd)			-3.42914687500E-02														Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.04147E-03	+/-	7.7E-08
Sband delay (usec)			-2.84040000000E-02														Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.84040E-02	+/-	1.2E-06
Phase delay (usec)			5.17438977474E-06														Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.17439E-06	+/-	2.6E-10
Delay rate (us/s)			-4.32220147946E-11														Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-4.32220E-11	+/-	9.5E-13
Total phase (deg)					160.5												Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	160.5	+/-	0.0

ph/seg (deg) 1.7 0.0
 amp/seg (%) 6.6 0.0
 ph/frq (deg) 50.7 0.0
 amp/frq (%) 78.2 0.0

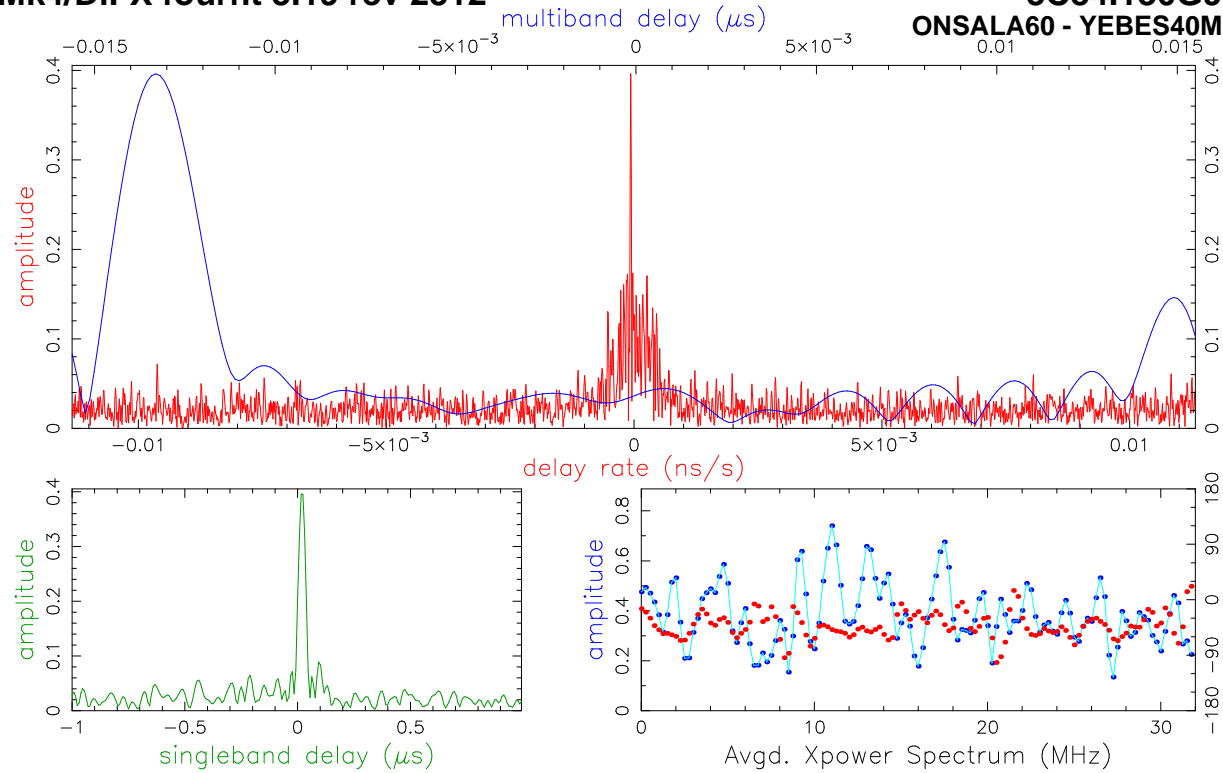
RMS Theor. Amplitude 234.420 +/- 0.017
 Search (2048X64) 228.294
 Interp. 0.000
 Inc. seg. avg. 230.387
 Inc. frq. avg. 276.158

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

X: az 309.5 el 24.7 pa 33.4 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XX..130G9L Output file: /Exps/c192b/v2/1234/No0205/XX.W.384.130G9L

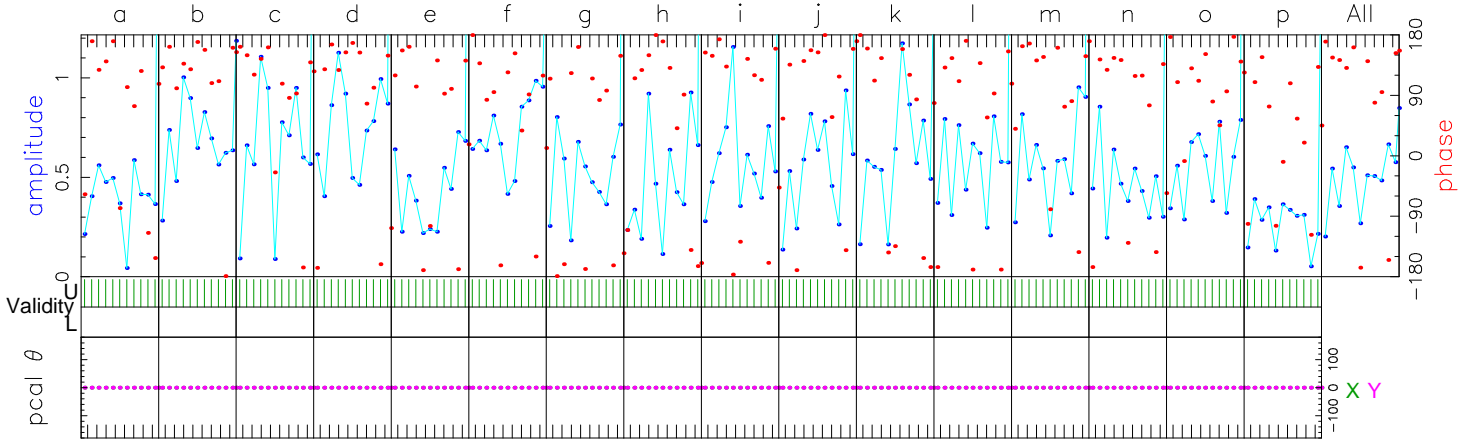


Fringe quality 8

SNR 23.8
 Int time 462.102
 Amp 0.405
 Phase 145.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.019477
 MBD -0.013287
 Fringe rate (Hz)
 -0.006078
 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
 2020:086:112435
 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



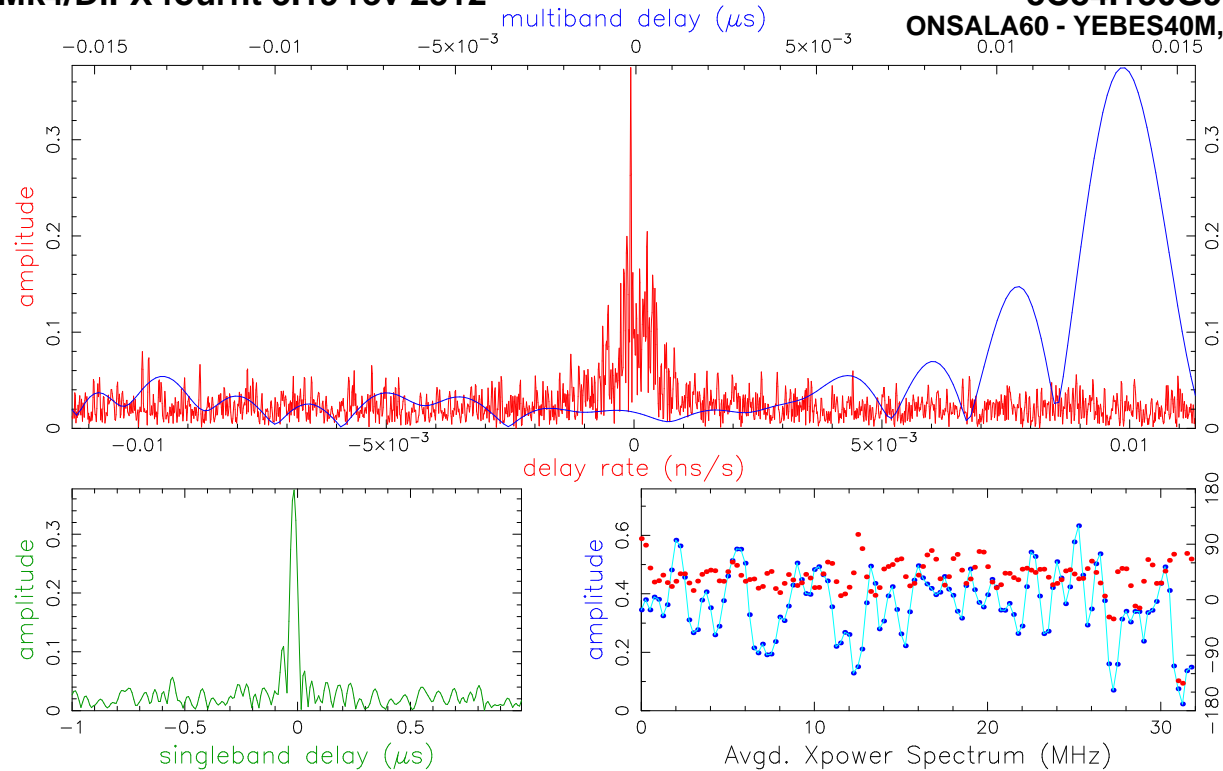
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
158.8	142.3	131.6	148.4	141.0	127.4	158.2	161.7	161.8	158.9	159.2	143.5	151.5	150.2	119.3	79.7		Phase	145.8	
0.2	0.6	0.5	0.6	0.3	0.5	0.4	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.1		Ampl.	0.4
127.2	131.5	131.6	131.2	131.5	131.4	131.8	131.8	131.6	131.4	131.5	131.0	131.3	131.1	131.1	102.8			Sbd box	131.5
UL	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	
X	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	
X: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	
X: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	
X	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	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	9.49815729729E+02			Apriori delay (usec)			9.49797766310E+02			Resid mbdelay (usec)			-1.32866E-02			+/- 4.5E-05			
Sband delay (usec)	9.49817243310E+02			Apriori clock (usec)			2.2714973E+01			Resid sbdelay (usec)			1.94770E-02			+/- 7.2E-04			
Phase delay (usec)	9.49797771011E+02			Apriori clockrate (us/s)			3.0800002E-07			Resid phdelay (usec)			4.70101E-06			+/- 1.6E-07			
Delay rate (us/s)	2.94433226321E-01			Apriori rate (us/s)			2.94433296879E-01			Resid rate (us/s)			-7.05582E-08			+/- 5.8E-10			
Total phase (deg)	358.2			Apriori accel (us/s/s)			9.51132920111E-06			Resid phase (deg)			145.8			+/- 4.8			

ph/seg (deg) RMS Theor. Amplitude 0.405 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.6 8.3 Search (2048X64) 0.377 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.0 14.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 22.2 9.6 Inc. seg. avg. 0.479 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.6 16.8 Inc. frq. avg. 0.405 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 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -2240.250 1962.459 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XY..130G9L Output file: /Exps/c192b/v2/1234/No0205/XY.W.341.130G9L

Mk4/DiFX fourfit 3.19 rev 2512

3C84.130G9L, No0205, XY
 ONSALA60 - YEBES40M, fgroup W, pol RR

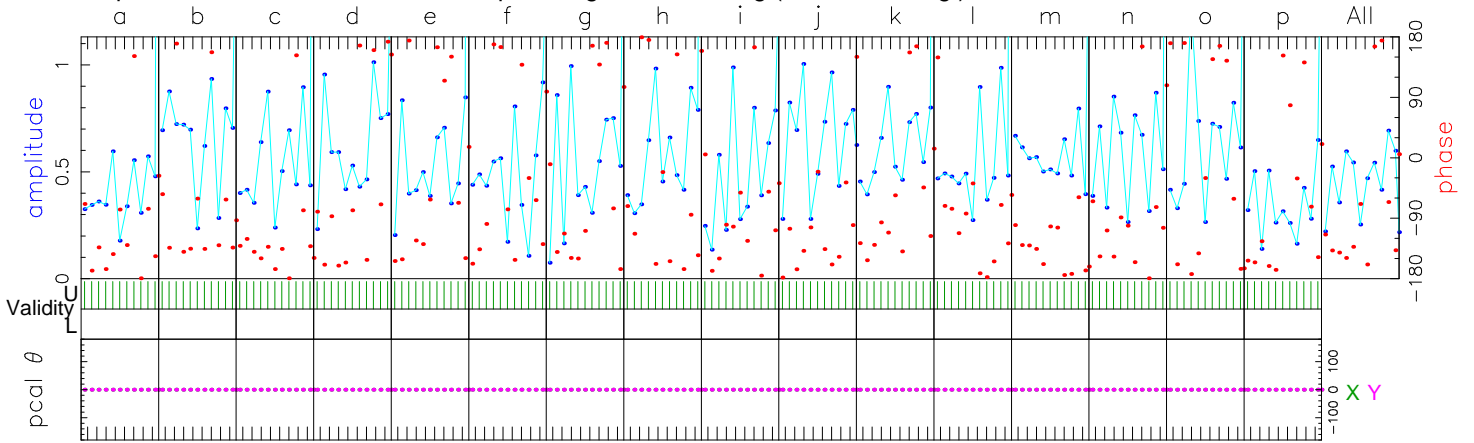


Fringe quality 7

SNR 22.2
 Int time 462.102
 Amp 0.377
 Phase -138.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.017545
 MBD 0.013483
 Fringe rate (Hz)
 -0.006051
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

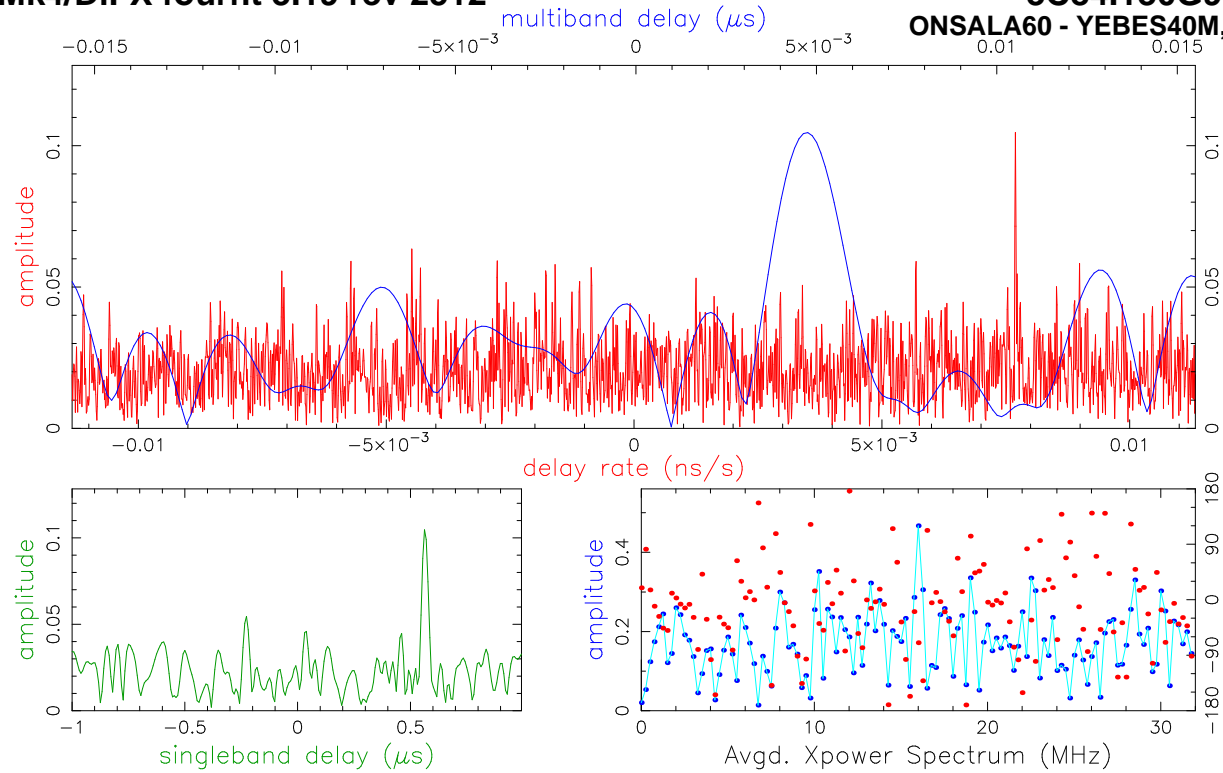
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090017.41
 Stop 090759.74
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112441
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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				
	-139.8	-132.6	-138.3	-148.5	-158.1	-143.4	-150.6	-143.2	-118.2	-123.3	-126.0	-115.1	-127.6	-125.9	-170.7	-163.5	Phase	-138.2				
	0.3	0.5	0.5	0.4	0.3	0.3	0.4	0.4	0.3	0.5	0.4	0.3	0.5	0.4	0.4	0.2	Ampl.	0.4				
	127.2	126.7	127.0	126.4	127.0	126.3	127.2	126.7	126.8	127.2	126.7	126.0	126.5	126.4	126.4	127.2	Sbd box	126.8				
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					
X	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					
X: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					
X: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					
X	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					
X	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)			9.49779998885E+02														Apriori delay (usec)	9.49797766310E+02	Resid mbdelay (usec)	1.34826E-02	+/-	4.9E-05
Sband delay (usec)			9.49780221310E+02														Apriori clock (usec)	2.2714973E+01	Resid sbdelay (usec)	-1.75450E-02	+/-	7.8E-04
Phase delay (usec)			9.49797761854E+02														Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-4.45627E-06	+/-	1.7E-07
Delay rate (us/s)			2.94433226636E-01														Apriori rate (us/s)	2.94433296879E-01	Resid rate (us/s)	-7.02429E-08	+/-	6.2E-10
Total phase (deg)				74.2													Apriori accel (us/s/s)	9.51132920111E-06	Resid phase (deg)	-138.2	+/-	5.2

ph/seg (deg) RMS Theor. Amplitude 0.377 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.5 15.6 Search (2048X64) 0.357 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.9 10.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.5 18.0 Inc. seg. avg. 0.468 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 X: az 309.5 el 24.7 pa 33.4 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -2240.250 1962.459 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XY..130G9L Output file: /Exps/c192b/v2/1234/No0205/XY.W.360.130G9L simultaneous interpolator

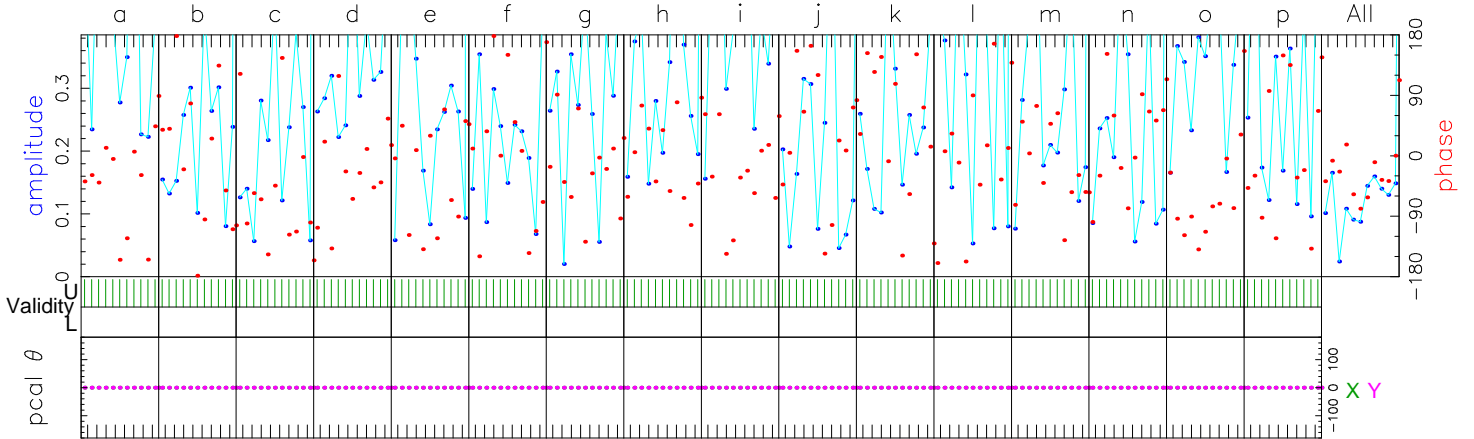


Fringe quality 0

SNR 6.2
 Int time 462.102
 Amp 0.128
 Phase -27.3
 PFD 1.5e-01
 Delays (us)
 SBD 0.564435
 MBD 0.004720
 Fringe rate (Hz)
 0.663833
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

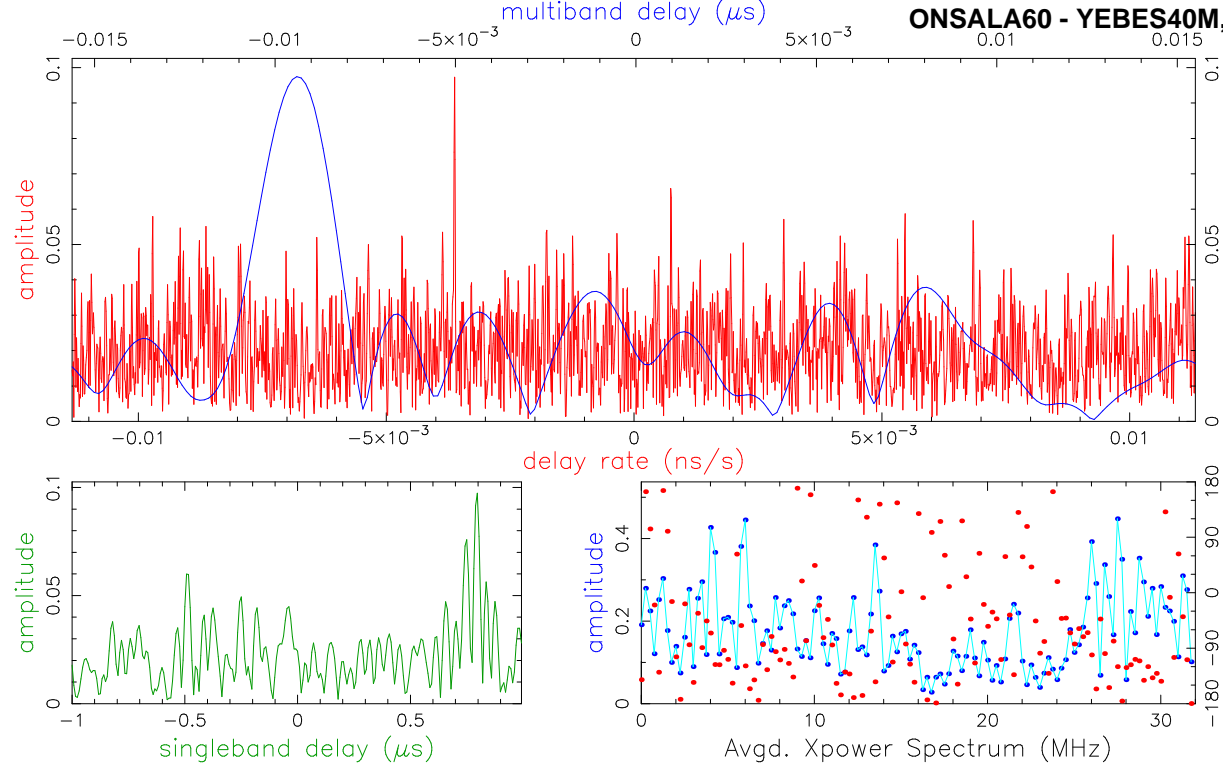
Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090017.41
 Stop 090759.74
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112446
 2020:014:135814
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



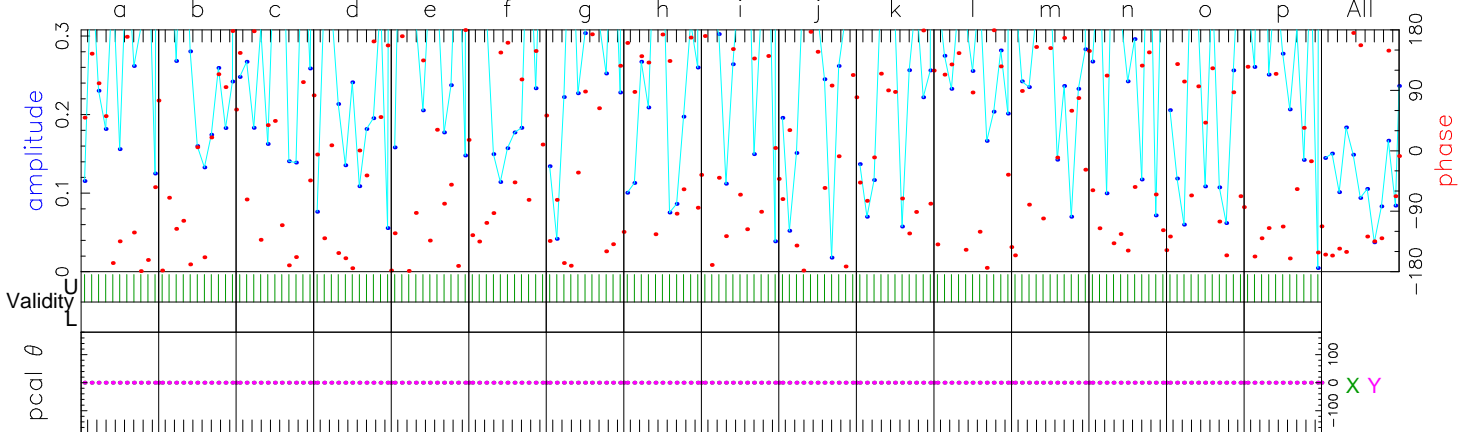
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-19.4	-5.7	-86.4	-25.2	-42.9	-85.7	-35.5	6.0	-21.4	-143.4	47.8	-25.6	3.4	16.9	-80.9	-16.7	Phase	-27.3
	0.3	0.0	0.1	0.2	0.1	0.0	0.2	0.2	0.3	0.0	0.1	0.2	0.2	0.1	0.3	0.1	Ampl.	0.1
	200.4	193.2	91.9	55.2	249.7	43.0	50.3	34.0	199.9	151.4	119.9	209.8	53.0	241.9	25.0	184.4	Sbd box	201.2
UL	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	
X	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	
X: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	
X: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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)			9.50364986597E+02			Apriori delay (usec)			9.49797766310E+02			Resid mbdelay (usec)		4.72029E-03			+/-	1.7E-04
Sband delay (usec)			9.50362200810E+02			Apriori clock (usec)			2.2714973E+01			Resid sbdelay (usec)		5.64435E-01			+/-	2.8E-03
Phase delay (usec)			9.49797765430E+02			Apriori clockrate (us/s)			3.0800002E-07			Resid phdelay (usec)		-8.80412E-07			+/-	6.0E-07
Delay rate (us/s)			2.94441003320E-01			Apriori rate (us/s)			2.94433296879E-01			Resid rate (us/s)		7.70644E-06			+/-	2.2E-09
Total phase (deg)				185.1		Apriori accel (us/s/s)			9.51132920111E-06			Resid phase (deg)		-27.3			+/-	18.5

ph/seg (deg) RMS Theor. Amplitude 0.128 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.3 55.9 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.2 37.0 Inc. seg. avg. 0.126 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 72.5 64.6 Inc. frq. avg. 0.129 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 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -2240.250 1962.459 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XY..130G9L Output file: /Exps/c192b/v2/1234/No0205/XY.W.378.130G9L



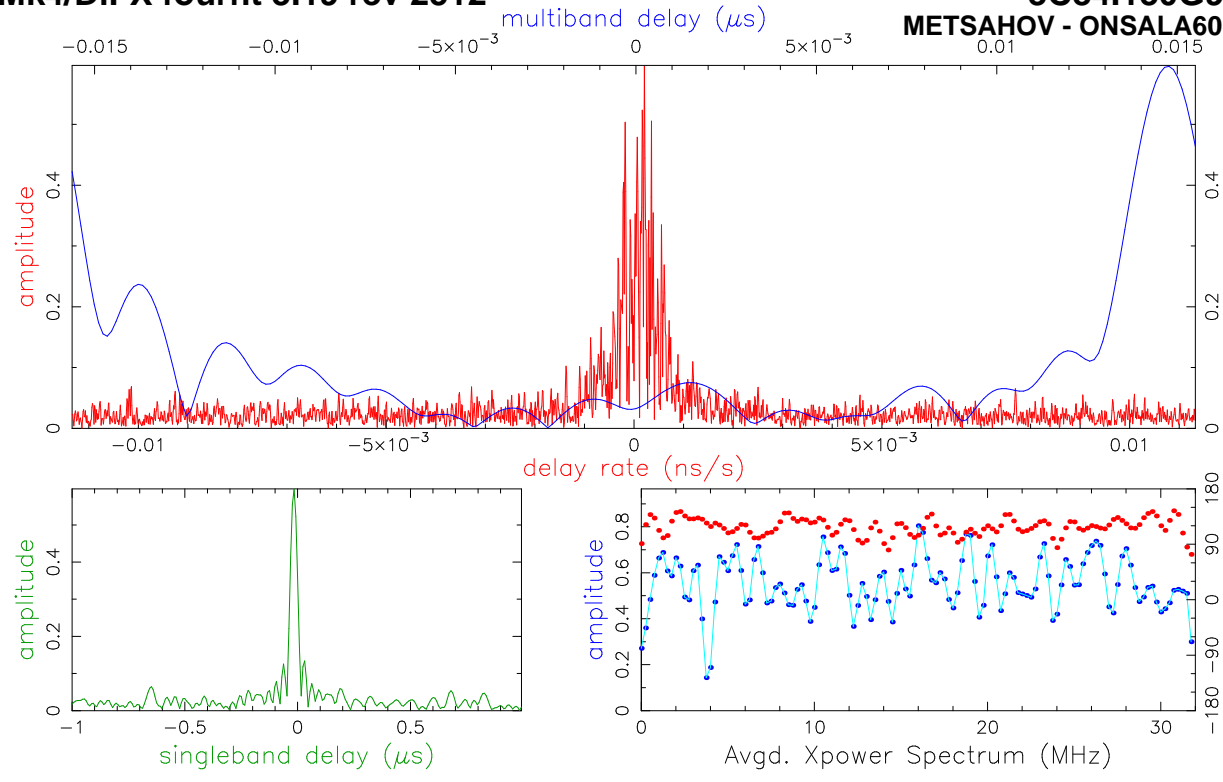
Fringe quality 0
 SNR 5.8
 Int time 462.102
 Amp 0.103
 Phase -158.7
 PFD 8.4e-01
 Delays (us)
 SBD 0.794671
 MBD -0.009445
 Fringe rate (Hz)
 -0.311896
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:278
 Start 090017.41
 Stop 090759.74
 FRT 090400.00
 Corr/FF/build
 2020:080:062909
 2020:086:112450
 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					
UL	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					
X	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					
X: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					
X: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					
X	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					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Tracks					
Group delay (usec)(sbd)			9.50600821609E+02															Apriori delay (usec)	9.49797766310E+02	Resid mbdelay (usec)	-9.44470E-03	+/-	1.9E-04
Sband delay (usec)			9.50592437810E+02															Apriori clock (usec)	2.2714973E+01	Resid sbdelay (usec)	7.94671E-01	+/-	3.0E-03
Phase delay (usec)			9.49797761191E+02															Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-5.11919E-06	+/-	6.4E-07
Delay rate (us/s)			2.94429676073E-01															Apriori rate (us/s)	2.94433296879E-01	Resid rate (us/s)	-3.62081E-06	+/-	2.4E-09
Total phase (deg)					53.6													Apriori accel (us/s/s)	9.51132920111E-06	Resid phase (deg)	-158.7	+/-	19.8

ph/seg (deg) RMS Theor. Amplitude 0.103 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 38.7 34.3 Search (2048X64) 0.095 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.2 59.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.6 39.6 Inc. seg. avg. 0.105 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.3 69.2 Inc. frq. avg. 0.095 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 Y: az 306.5 el 22.2 pa 56.2 u,v (fr/asec) -2240.250 1962.459 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/XY..130G9L Output file: /Exps/c192b/v2/1234/No0205/XY.W.390.130G9L

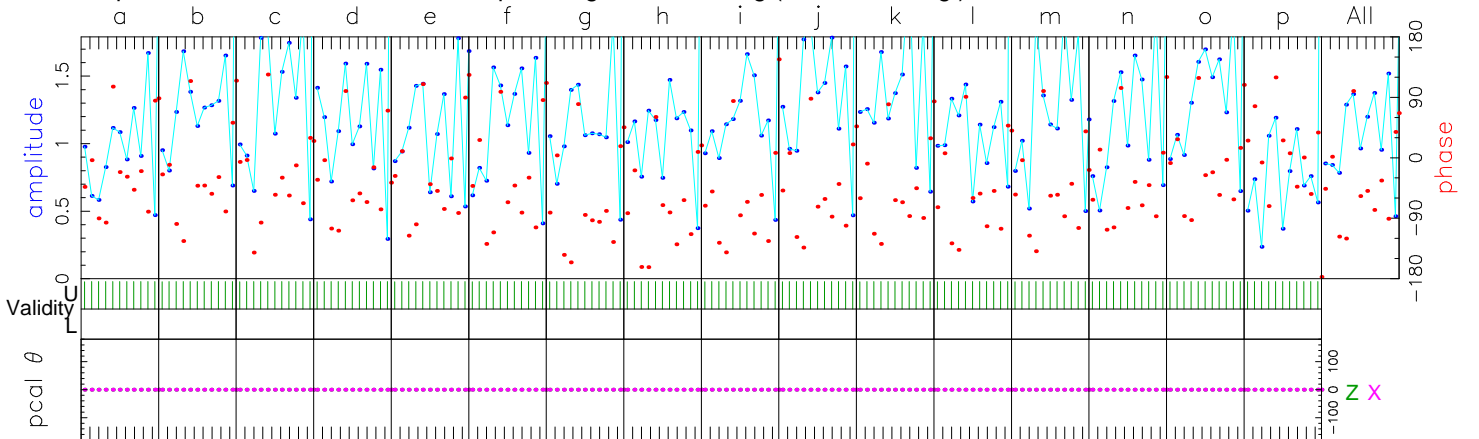


Fringe quality 4

SNR 35.7
 Int time 478.791
 Amp 0.597
 Phase -63.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.016767
 MBD 0.014731
 Fringe rate (Hz) 0.017684
 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
 2020:086:112449
 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

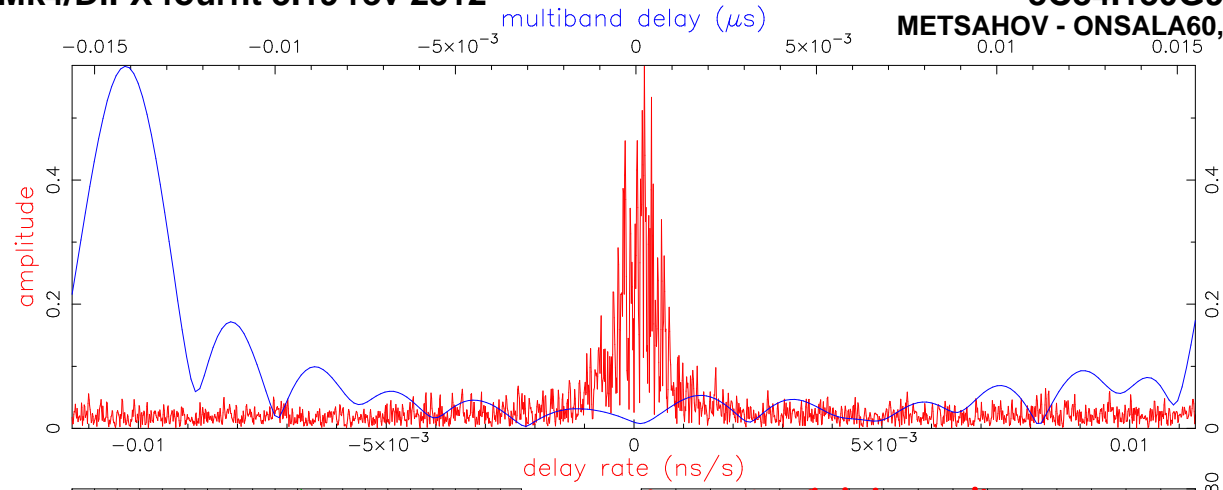


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-41.7	-54.7	-45.8	-50.7	-60.5	-69.6	-103.0	-88.5	-88.1	-72.0	-71.9	-76.2	-75.0	-63.5	-31.4	2.4	Phase	-63.3
	0.6	0.7	0.7	0.7	0.5	0.6	0.6	0.6	0.7	0.7	0.9	0.5	0.7	0.8	0.8	0.4	Ampl.	0.6
	127.0	126.5	126.7	126.6	126.5	126.6	126.8	127.4	127.2	127.5	127.0	126.2	127.0	127.4	126.7	127.6	Sbd box	126.9
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -9.51672868424E+02 Apriori delay (usec) -9.51656349653E+02 Resid mbdelay (usec) 1.47312E-02 +/- 3.0E-05
 Sband delay (usec) -9.51673117153E+02 Apriori clock (usec) -3.2205982E+01 Resid sbdelay (usec) -1.67675E-02 +/- 4.8E-04
 Phase delay (usec) -9.51656351693E+02 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -2.03994E-06 +/- 1.0E-07
 Delay rate (us/s) 1.03751172808E-01 Apriori rate (us/s) 1.03750967513E-01 Resid rate (us/s) 2.05295E-07 +/- 3.7E-10
 Total phase (deg) -48.6 Apriori accel (us/s/s) 6.80571685329E-06 Resid phase (deg) -63.3 +/- 3.2

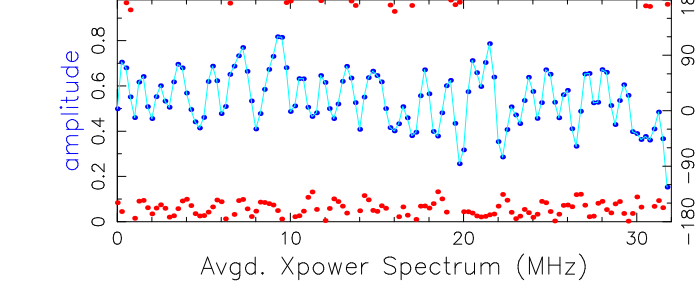
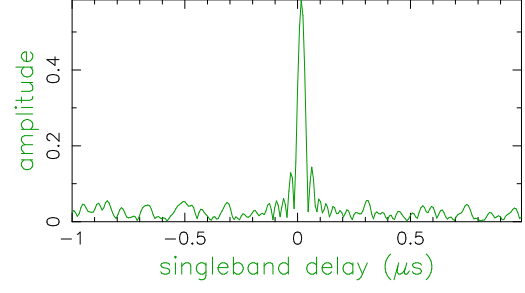
RMS Theor. Amplitude 0.597 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 67.2 5.6 Search (2048X64) 0.552 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 92.5 9.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 26.3 6.4 Inc. seg. avg. 1.052 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 22.9 11.2 Inc. frq. avg. 0.638 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -783.013 651.428 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ZX..130G9L Output file: /Exps/c192b/v2/1234/No0205/ZX.W.389.130G9L



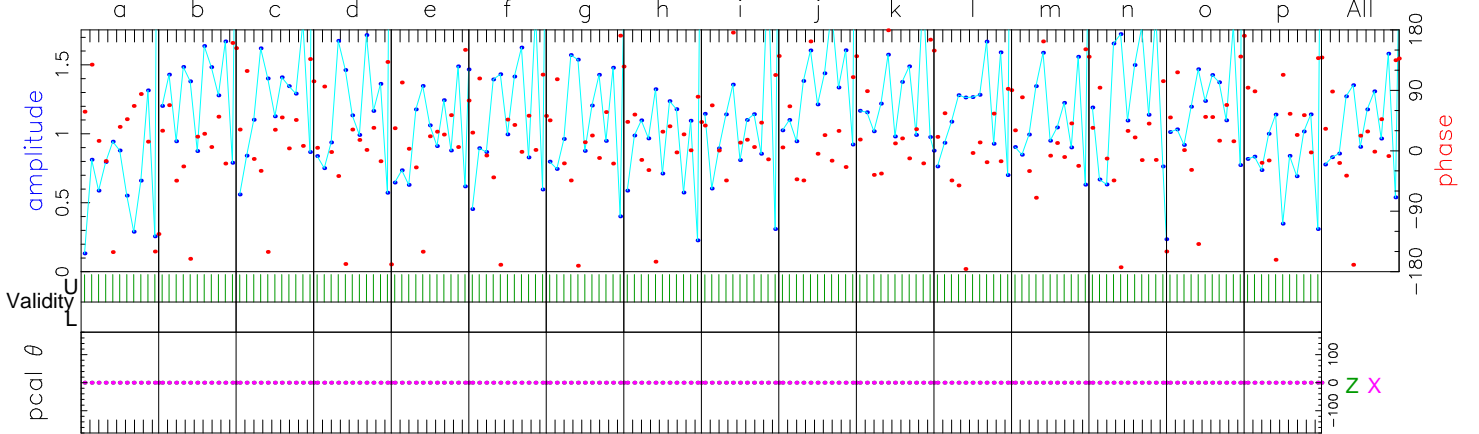
Fringe quality 5

SNR 35.0
 Int time 478.791
 Amp 0.585
 Phase 15.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.016785
 MBD -0.014136
 Fringe rate (Hz)
 0.017712
 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
 2020:086:112453
 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

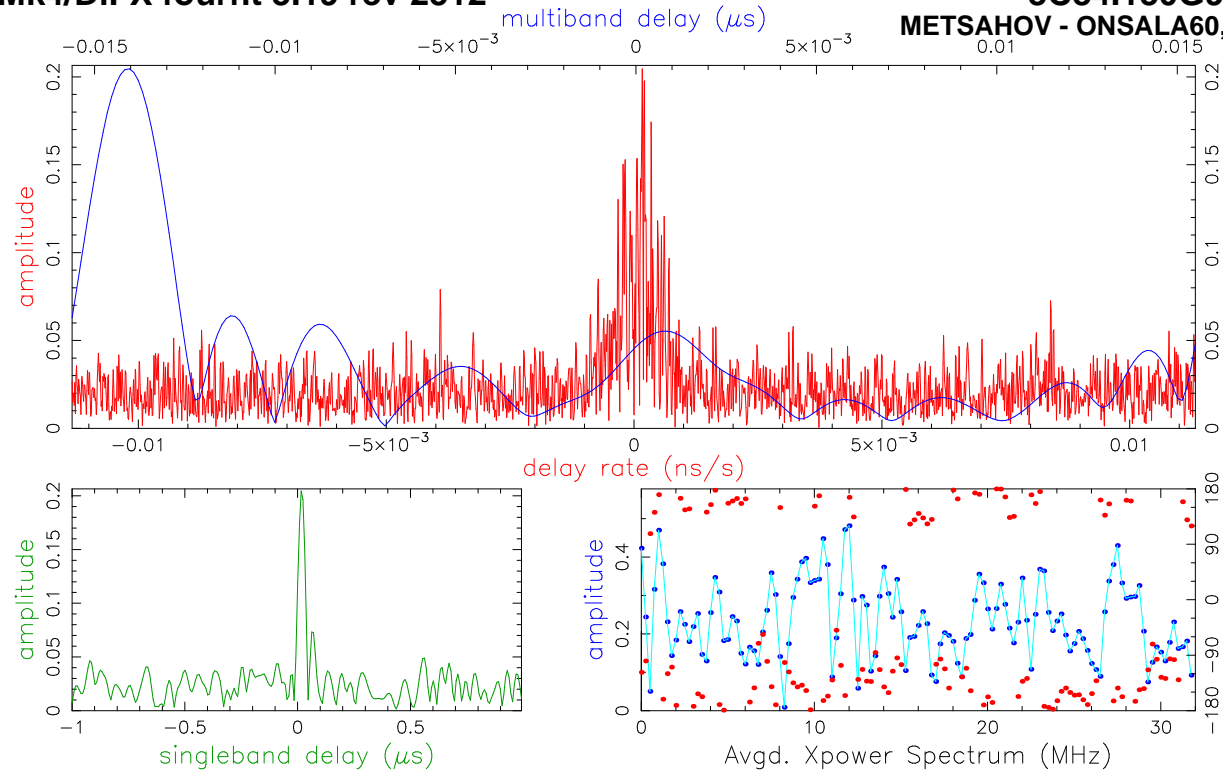


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	42.8	15.2	23.4	8.7	24.7	22.7	4.3	15.2	12.3	6.0	5.6	-0.0	2.2	11.2	39.2	45.8	Phase	15.7
	0.3	0.7	0.7	0.6	0.5	0.6	0.5	0.6	0.7	0.8	0.6	0.7	0.5	0.7	0.7	0.4	Ampl.	0.6
	129.5	130.7	131.1	131.3	131.5	131.5	131.2	131.0	130.7	131.0	131.5	131.2	130.6	131.5	131.1	131.4	Sbd box	131.1
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) -9.51639235643E+02 Apriori delay (usec) -9.51656349653E+02 Resid mbdelay (usec) -1.41360E-02 +/- 3.1E-05
 Sband delay (usec) -9.51639565153E+02 Apriori clock (usec) -3.2205982E+01 Resid sbdelay (usec) 1.67845E-02 +/- 4.9E-04
 Phase delay (usec) -9.51656349146E+02 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) 5.07785E-07 +/- 1.1E-07
 Delay rate (us/s) 1.03751173134E-01 Apriori rate (us/s) 1.03750967513E-01 Resid rate (us/s) 2.05621E-07 +/- 3.8E-10
 Total phase (deg) -329.5 Apriori accel (us/s/s) 6.80571685329E-06 Resid phase (deg) 15.7 +/- 3.3

ph/seg (deg) RMS Theor. Amplitude 0.585 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.6 5.7 Search (2048X64) 0.546 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 94.8 9.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 15.2 6.6 Inc. seg. avg. 1.048 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 20.7 11.4 Inc. frq. avg. 0.594 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -783.013 651.428 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ZX..130G9L Output file: /Exps/c192b/v2/1234/No0205/ZX.W.401.130G9L

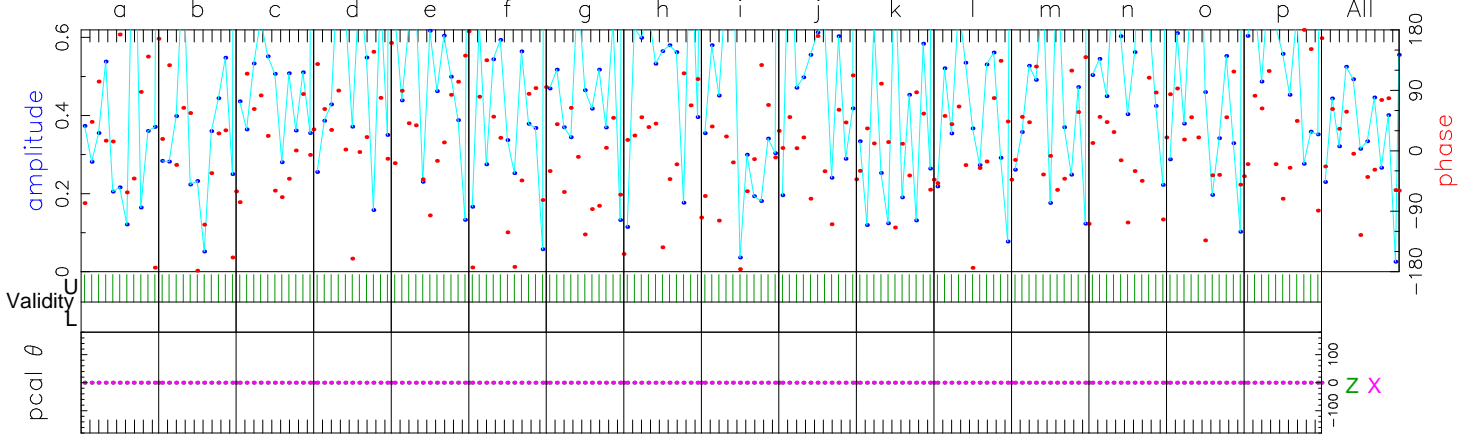


Fringe quality 9

SNR 12.4
 Int time 478.791
 Amp 0.207
 Phase 21.6
 PFD 2.4e-26
 Delays (us)
 SBD 0.018013
 MBD -0.014043
 Fringe rate (Hz) 0.014167
 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
 2020:086:112457
 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



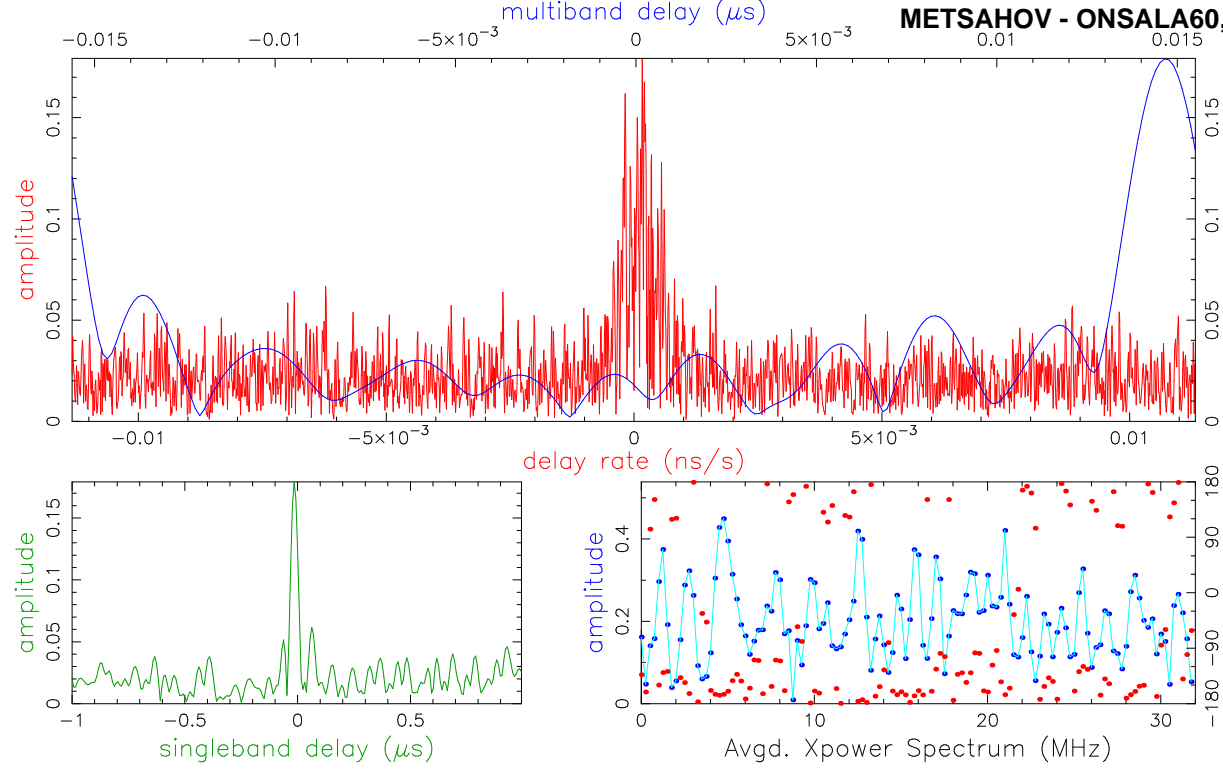
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-3.6	34.8	16.5	45.8	25.7	65.3	-21.0	35.4	-6.3	26.0	-9.9	36.5	6.4	9.1	39.2	30.6	Phase	21.6
	0.1	0.2	0.2	0.3	0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	Ampl.	0.2
	192.0	96.7	130.9	130.5	131.9	98.8	131.3	132.0	129.9	132.1	125.9	129.3	134.7	130.1	131.7	92.9	Sbd box	131.3
UL	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) -9.51639142643E+02 Apriori delay (usec) -9.51656349653E+02 Resid mbdelay (usec) -1.40430E-02 +/- 8.7E-05
 Sband delay (usec) -9.51638336153E+02 Apriori clock (usec) -3.2205982E+01 Resid sbdelay (usec) 1.80135E-02 +/- 1.4E-03
 Phase delay (usec) -9.51656348958E+02 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) 6.95701E-07 +/- 3.0E-07
 Delay rate (us/s) 1.03751131976E-01 Apriori rate (us/s) 1.03750967513E-01 Resid rate (us/s) 1.64463E-07 +/- 1.1E-09
 Total phase (deg) -323.7 Apriori accel (us/s/s) 6.80571685329E-06 Resid phase (deg) 21.6 +/- 9.3

RMS Theor. Amplitude 0.207 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 64.7 16.1 Search (2048X64) 0.201 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 94.0 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 24.1 18.5 Inc. seg. avg. 0.333 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 29.7 32.4 Inc. frq. avg. 0.209 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

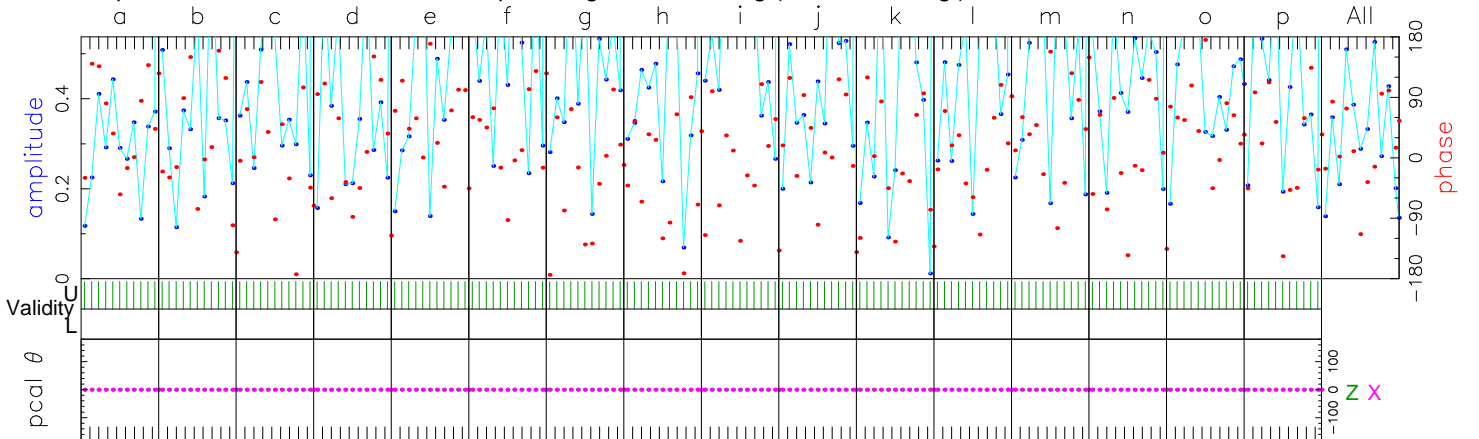
Z: az 317.3 el 22.0 pa 28.8 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -783.013 651.428 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ZX..130G9L Output file: /Exps/c192b/v2/1234/No0205/ZX.W.409.130G9L



Fringe quality 9
 SNR 10.7
 Int time 478.791
 Amp 0.179
 Phase 32.0
 PFD 3.5e-18
 Delays (us)
 SBD -0.014816
 MBD 0.014695
 Fringe rate (Hz) 0.014086
 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
 2020:086:112500
 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	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	937/0	937/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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	1000	1000	PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks

Group delay (usec)(sbd) -9.51672905018E+02 Apriori delay (usec) -9.51656349653E+02 Resid mbdelay (usec) 1.46946E-02 +/- 1.0E-04
 Sband delay (usec) -9.51671165653E+02 Apriori clock (usec) -3.2205982E+01 Resid sbdelay (usec) -1.48160E-02 +/- 1.6E-03
 Phase delay (usec) -9.51656348621E+02 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) 1.03233E-06 +/- 3.4E-07
 Delay rate (us/s) 1.03751131035E-01 Apriori rate (us/s) 1.03750967513E-01 Resid rate (us/s) 1.63522E-07 +/- 1.2E-09
 Total phase (deg) -313.3 Apriori accel (us/s/s) 6.80571685329E-06 Resid phase (deg) 32.0 +/- 10.7

RMS Theor. Amplitude 0.179 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.8 18.5 Search (2048X64) 0.175 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 108.2 32.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 23.1 21.4 Inc. seg. avg. 0.316 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 38.0 37.3 Inc. frq. avg. 0.180 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 X: az 309.5 el 24.7 pa 33.4 u,v (fr/asec) -783.013 651.428 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0205/ZX..130G9L Output file: /Exps/c192b/v2/1234/No0205/ZX.W.414.130G9L