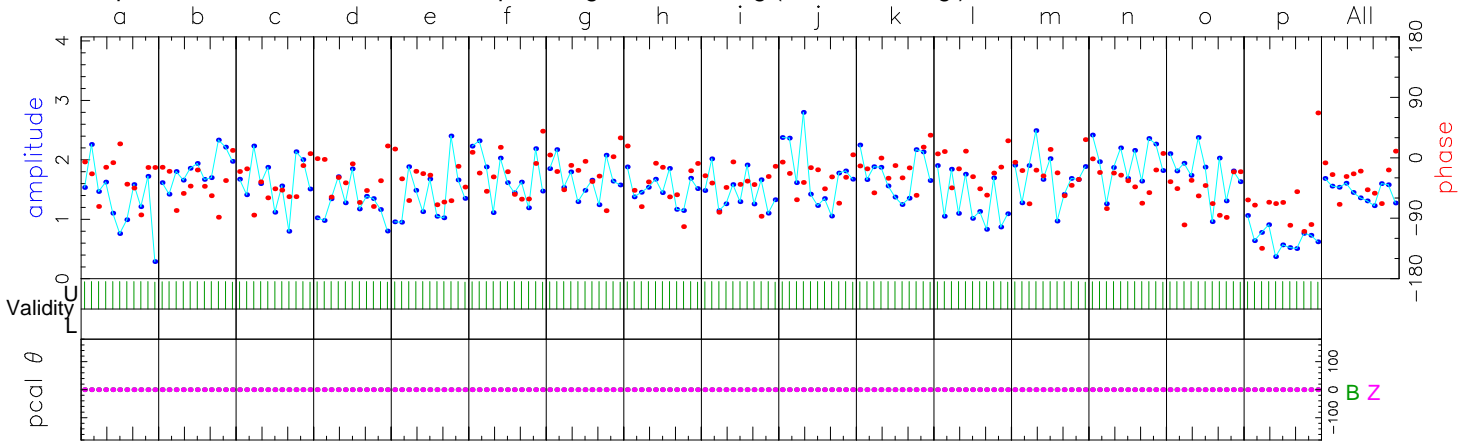


Fringe quality 5

SNR 49.7
Int time 179.579
Amp 1.357
Phase -31.8
PFD 0.0e+00
Delays (us)
SBD 0.001317
MBD 0.001226
Fringe rate (Hz) -0.001846
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043718
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-28.6	-40.8	-40.7	-33.4	-39.5	-20.0	-19.6	-33.2	-38.9	-29.5	-16.2	-14.9	-21.8	-30.1	-53.2	-80.1		Phase	-31.8				
	1.2	1.6	1.5	1.2	1.3	1.5	1.5	1.3	1.3	1.7	1.6	1.2	1.5	1.8	1.6	0.5		Ampl.	1.4				
	128.9	129.2	129.1	129.4	128.8	129.1	129.3	129.2	129.2	128.9	129.3	129.4	129.2	129.2	128.9	126.9		Sbd box	129.2				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
B	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					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.90284180528E+03															Apriori delay (usec)	-1.90284303082E+03	Resid mbdelay (usec)	1.22554E-03	+/-	2.2E-05
Sband delay (usec)			-1.90284171432E+03															Apriori clock (usec)	1.6623230E+01	Resid sbdelay (usec)	1.31650E-03	+/-	3.5E-04
Phase delay (usec)			-1.90284303185E+03															Apriori clockrate (us/s)	-2.1629280E-07	Resid phdelay (usec)	-1.02686E-06	+/-	7.4E-08
Delay rate (us/s)			2.68054776261E-01															Apriori rate (us/s)	2.68054797695E-01	Resid rate (us/s)	-2.14339E-08	+/-	7.1E-10
Total phase (deg)																		Apriori accel (us/s/s)	3.63413276450E-06	Resid phase (deg)	-31.8	+/-	2.3

ph/seg (deg) 23.6 3.8
amp/seg (%) 13.9 6.7
ph/frq (deg) 16.9 4.6
amp/frq (%) 21.5 8.0

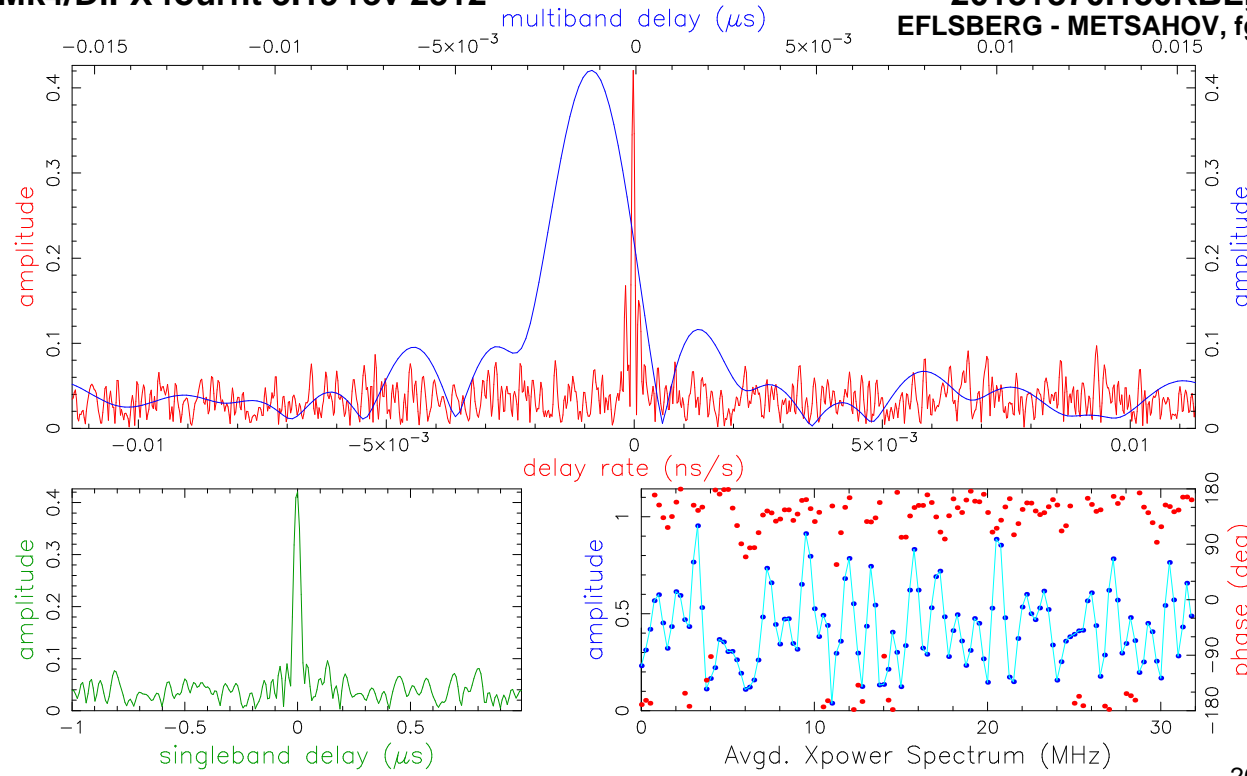
RMS Theor. Amplitude 1.357 +/- 0.027
Search (1024X64) 1.322
Interp. 0.000
Inc. seg. avg. 1.470
Inc. frq. avg. 1.382

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

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

B: az 84.9 el 47.2 pa -52.7 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) -1927.128 -450.431 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/BZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/BZ.W.24.130KBL

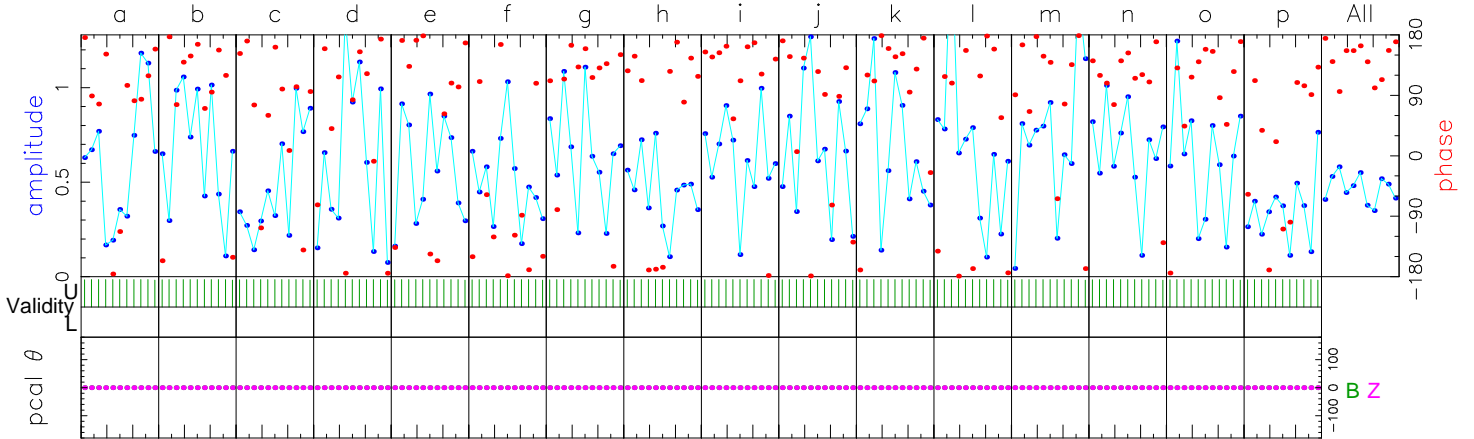


Fringe quality 9

SNR 15.6
Int time 179.579
Amp 0.426
Phase 142.4
PFD 0.0e+00
Delays (us)
SBD -0.002887
MBD -0.001259
Fringe rate (Hz)
-0.001756
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043722
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

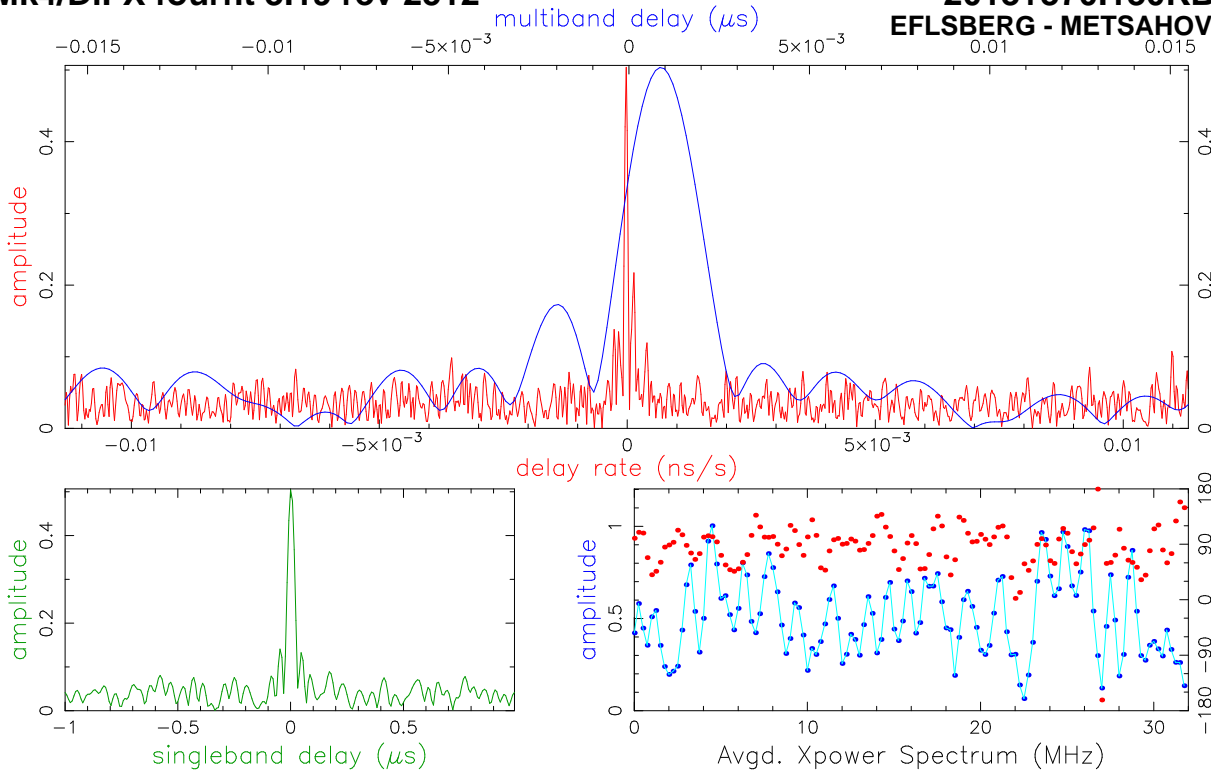


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	114.9	Phase	142.4
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.1	Ampl.	0.4
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.1	Sbd box	128.6
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
B	1000	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	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	-1.90284428993E+03			Apriori delay (usec)			-1.90284303082E+03			Resid mbdelay (usec)			-1.25911E-03			+/- 6.9E-05			
Sband delay (usec)	-1.90284591782E+03			Apriori clock (usec)			1.6623230E+01			Resid sbdelay (usec)			-2.88700E-03			+/- 1.1E-03			
Phase delay (usec)	-1.90284302623E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			4.59340E-06			+/- 2.4E-07			
Delay rate (us/s)	2.68054777313E-01			Apriori rate (us/s)			2.68054797695E-01			Resid rate (us/s)			-2.03824E-08			+/- 2.3E-09			
Total phase (deg)	-100.6			Apriori accel (us/s/s)			3.63413276450E-06			Resid phase (deg)			142.4			+/- 7.3			

ph/seg (deg) 26.2 12.2 Theor. Amplitude 0.426 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.4 21.2 Search (1024X64) 0.412 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.2 14.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 25.9 25.6 Inc. seg. avg. 0.458 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.424 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 84.9 el 47.2 pa -52.7 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) -1927.128 -450.431 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/BZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/BZ.W.50.130KBL

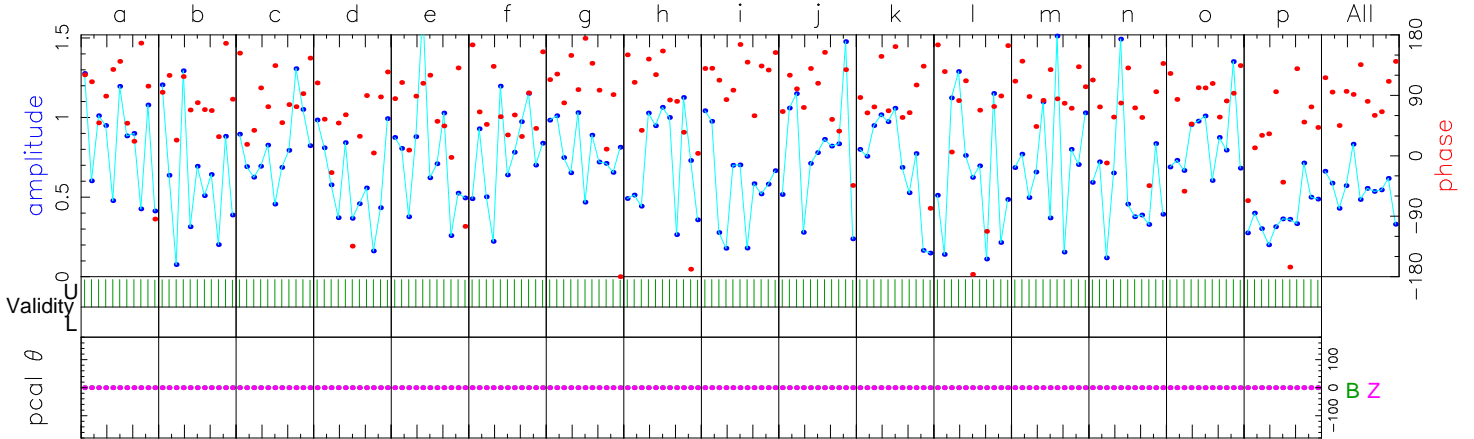


Fringe quality 8

SNR 18.6
Int time 179.579
Amp 0.507
Phase 93.6
PFD 0.0e+00
Delays (us)
SBD 0.001871
MBD 0.000905
Fringe rate (Hz)
-0.002171
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

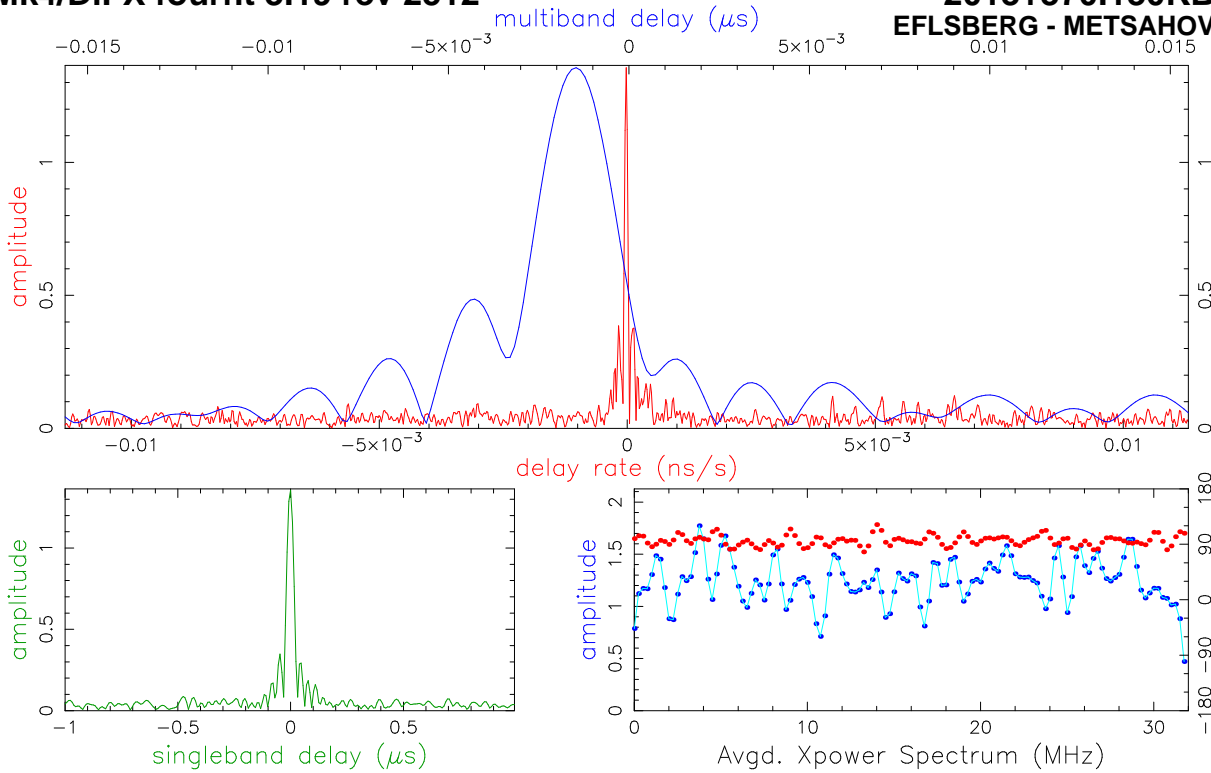
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043724
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	129.2
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	93.6
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	0.5
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	129.2
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	-1.90284212556E+03			Apriori delay (usec)			-1.90284303082E+03			Resid mbdelay (usec)			9.05263E-04			+/-	5.8E-05	
Sband delay (usec)	-1.90284115982E+03			Apriori clock (usec)			1.6623230E+01			Resid sbdelay (usec)			1.87100E-03			+/-	9.3E-04	
Phase delay (usec)	-1.90284302780E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			3.01820E-06			+/-	2.0E-07	
Delay rate (us/s)	2.68054772496E-01			Apriori rate (us/s)			2.68054797695E-01			Resid rate (us/s)			-2.51991E-08			+/-	1.9E-09	
Total phase (deg)	-149.4			Apriori accel (us/s/s)			3.63413276450E-06			Resid phase (deg)			93.6			+/-	6.2	

ph/seg (deg) 28.9 10.2 Search (1024X64) 0.500 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 26.4 17.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.5 12.3 Inc. seg. avg. 0.551 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 23.2 21.5 Inc. frq. avg. 0.511 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 84.9 el 47.2 pa -52.7 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) -1927.128 -450.431 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/BZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/BZ.W.65.130KBL

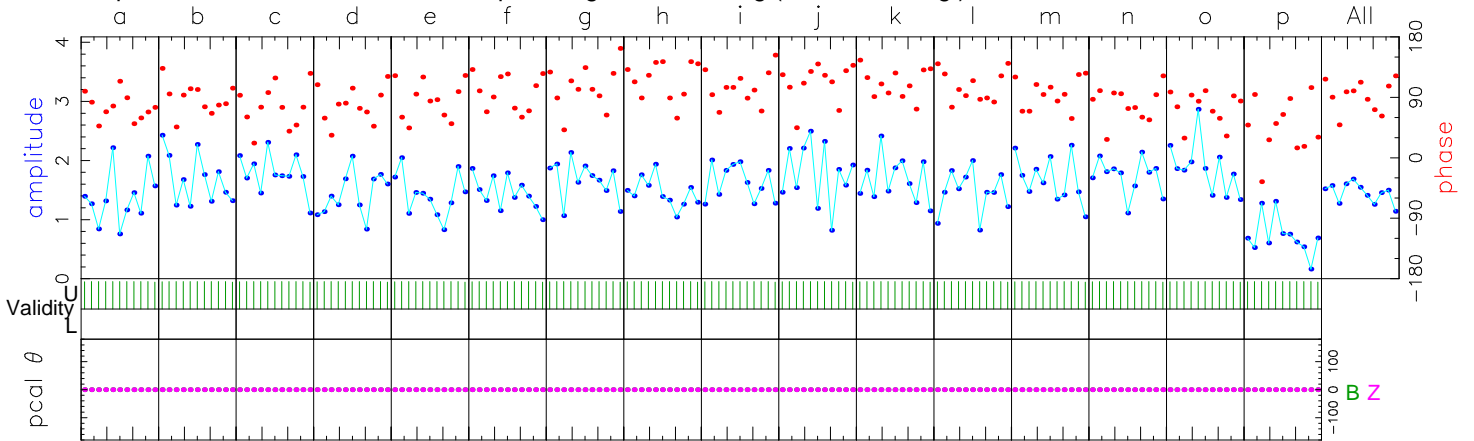


Fringe quality 7

SNR 50.0
Int time 179.579
Amp 1.364
Phase 93.2
PFD 0.0e+00
Delays (us)
SBD -0.001935
MBD -0.001496
Fringe rate (Hz)
-0.001932
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043716
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

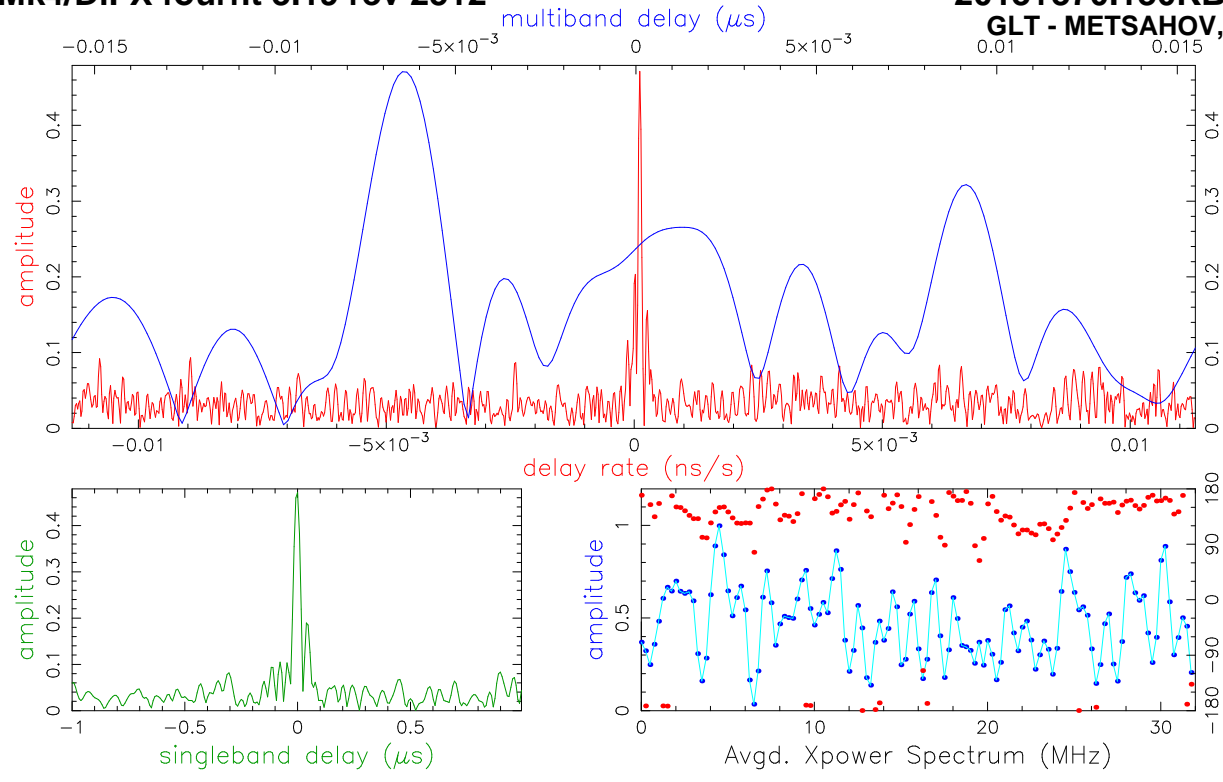
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	128.8	128.8	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			
Group delay (usec)(sbd)			-1.90284452659E+03																
Sband delay (usec)			-1.90284496632E+03																
Phase delay (usec)			-1.90284302782E+03																
Delay rate (us/s)			2.68054775261E-01																
Total phase (deg)																			
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
PCal mode: MANUAL, MANUAL																			
PCal rate: 0.000E+00, 0.000E+00 (us/s)																			
Bits/sample: 2x2																			
Sample rate(MSamp/s): 64																			
Data rate(Mb/s): 2048																			
nlags: 128																			
t_cohere infinite																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
ion window (TEC)																			
simultaneous interpolator																			

B: az 84.9 el 47.2 pa -52.7 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) -1927.128 -450.431

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/BZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/BZ.W.9.130KBL

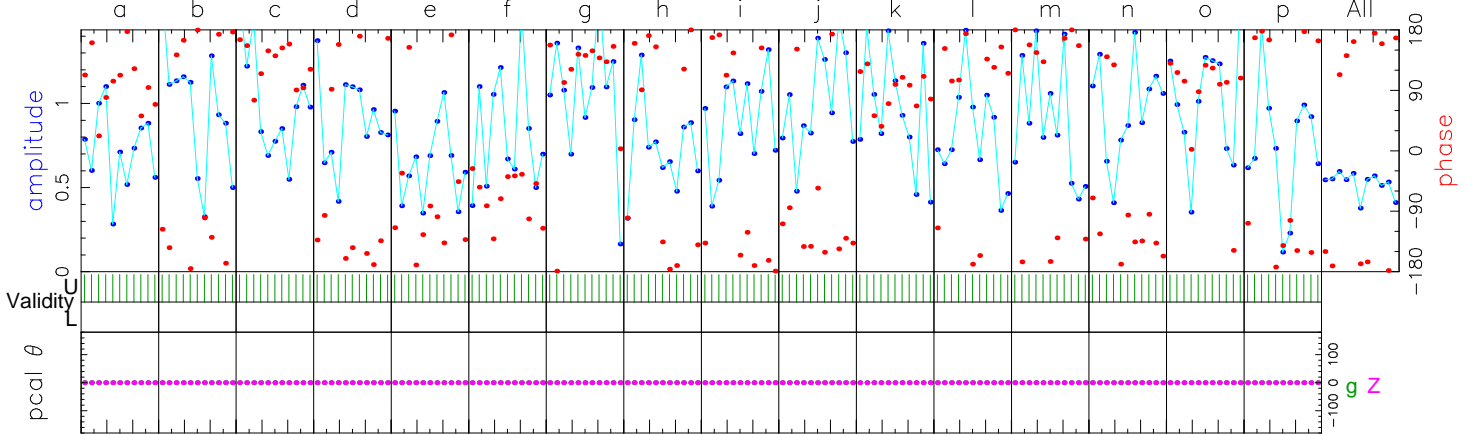


Fringe quality 8

SNR 17.6
Int time 179.624
Amp 0.479
Phase 171.1
PFD 0.0e+00
Delays (us)
SBD -0.003009
MBD -0.006420
Fringe rate (Hz) 0.009904
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043721
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



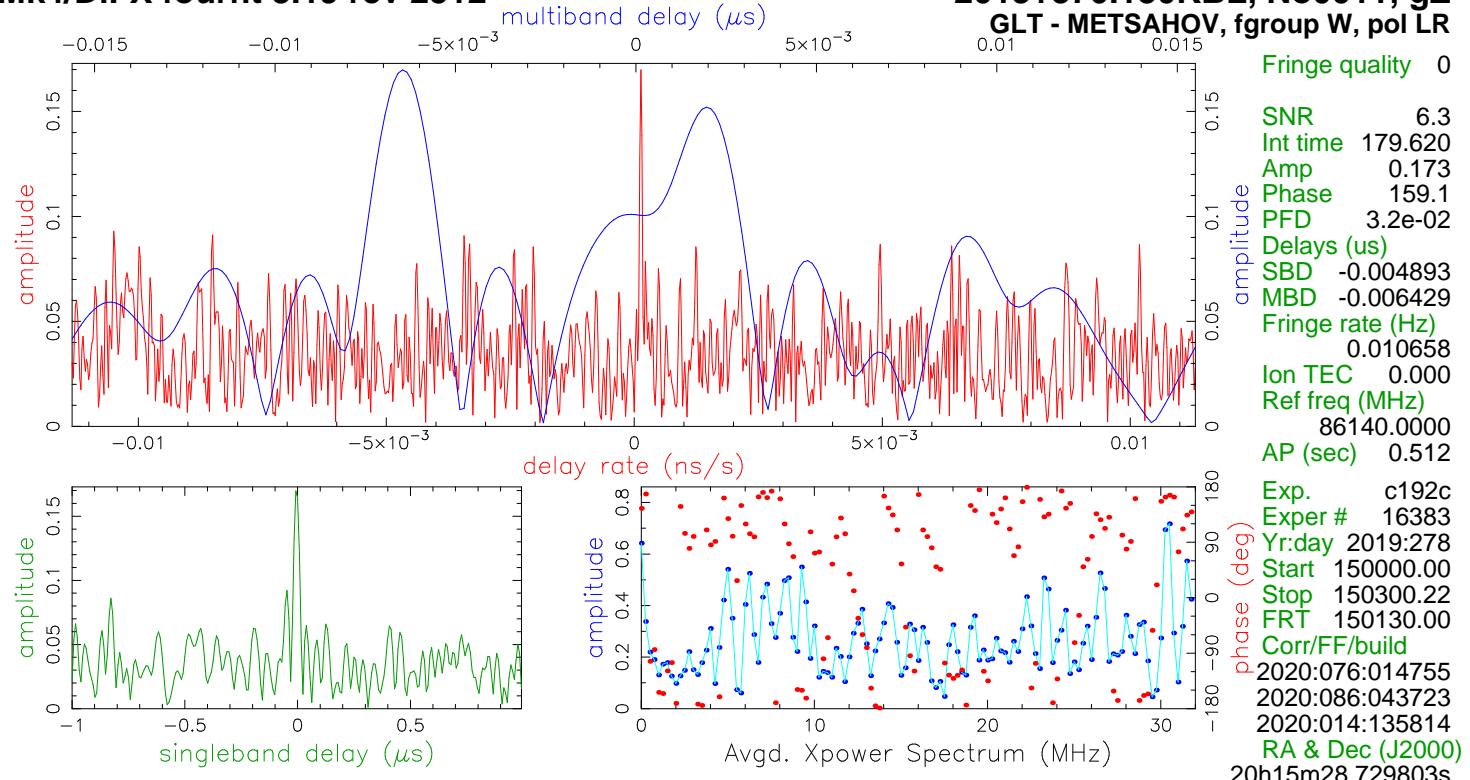
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
93.1	-162.9	127.5	-160.7	-126.8	-67.4	143.3	165.0	-178.8	-131.4	91.7	153.2	176.0	-131.1	113.6	-170.6		Phase	171.1
0.5	0.8	0.9	0.7	0.5	0.7	1.0	0.5	0.7	0.8	0.9	0.6	0.8	0.8	0.9	0.7		Ampl.	0.7
130.0	129.4	129.1	128.6	129.6	129.0	128.4	128.6	128.3	128.3	128.6	128.8	128.4	129.2	129.3	129.2		Sbd box	128.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		-7.79889609147E+03		Apriori delay (usec)		-7.79888967138E+03		Resid mbdelay (usec)		-6.42010E-03		+/-	6.1E-05					
Sband delay (usec)		-7.79889268038E+03		Apriori clock (usec)		1.1183094E-08		Resid sbdelay (usec)		-3.00900E-03		+/-	9.8E-04					
Phase delay (usec)		-7.79888966586E+03		Apriori clockrate (us/s)		5.8707190E-08		Resid phdelay (usec)		5.51864E-06		+/-	2.1E-07					
Delay rate (us/s)		-1.87940106547E-01		Apriori rate (us/s)		-1.87940221519E-01		Resid rate (us/s)		1.14972E-07		+/-	2.0E-09					
Total phase (deg)			65.8	Apriori accel (us/s/s)		4.86517654216E-05		Resid phase (deg)		171.1		+/-	6.5					

RMS Theor. Amplitude 0.479 +/- 0.027
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

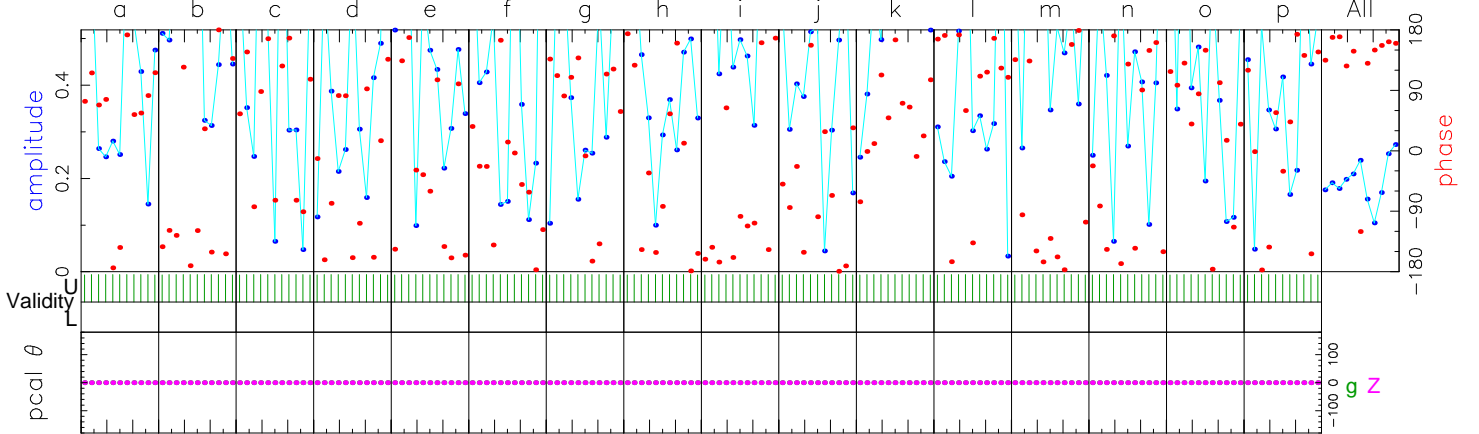
ph/seg (deg) 25.9 10.8 Search (1024X64) 0.466
amp/seg (%) 16.8 18.9 Interp. 0.000
ph/frq (deg) 57.3 13.0 Inc. seg. avg. 0.516
amp/frq (%) 59.6 22.8 Inc. frq. avg. 0.714

g: az 40.4 el 27.4 pa -11.0 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 1390.429 3638.691 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/gZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/gZ.W.44.130KBL

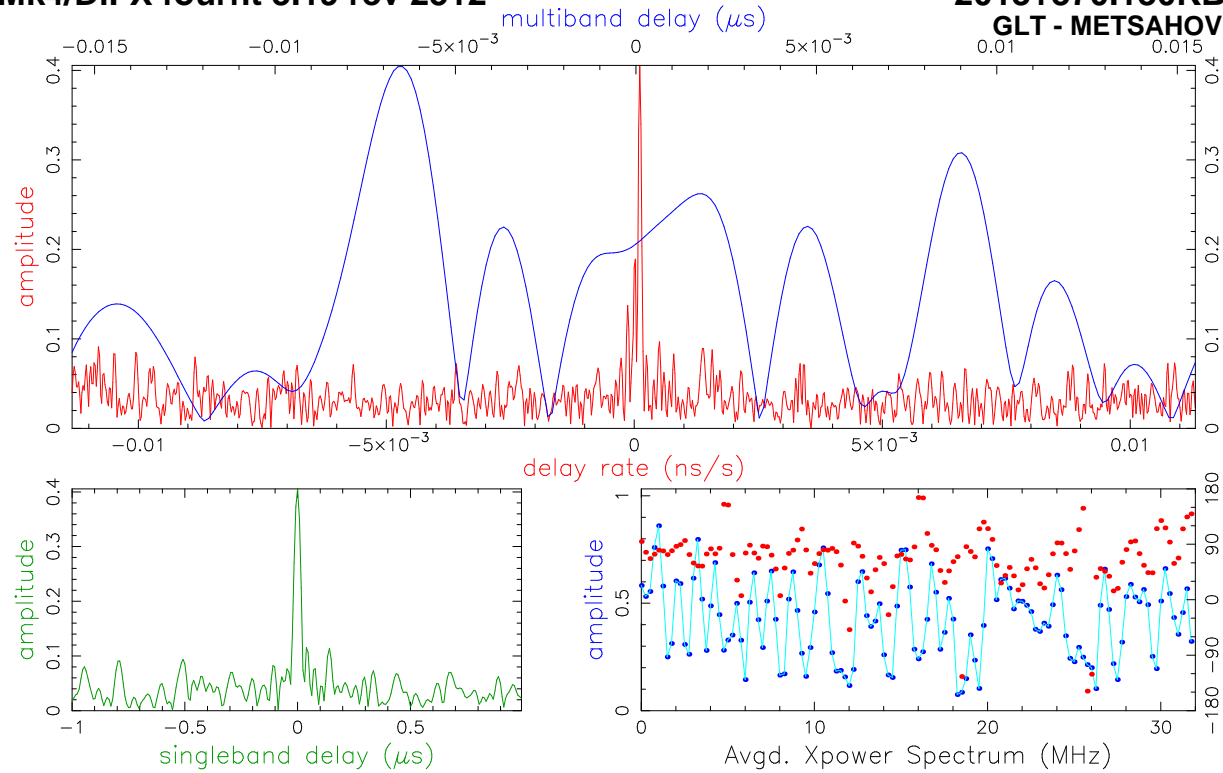


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



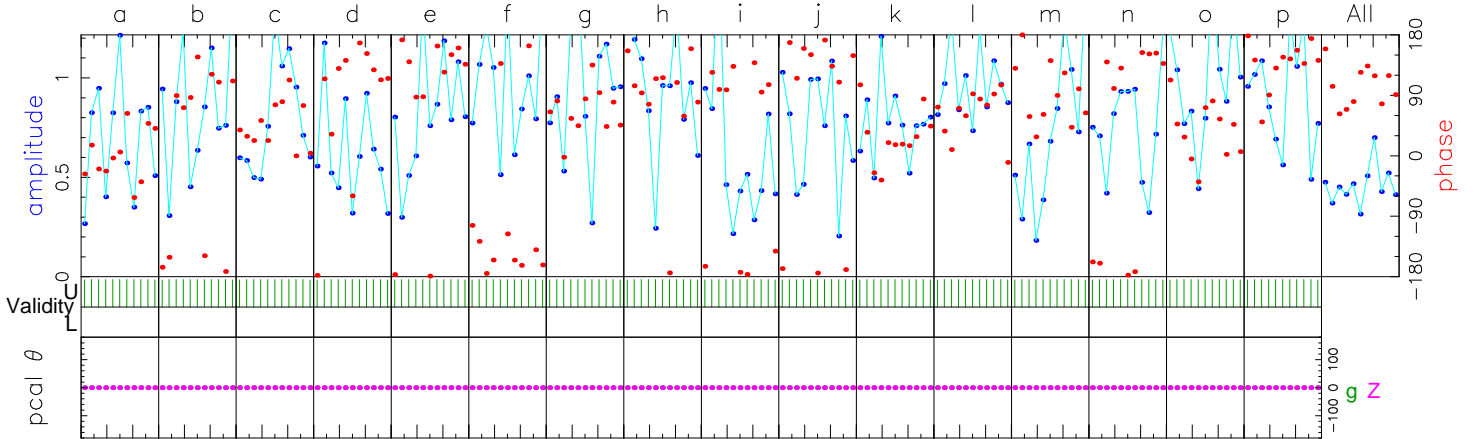
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
104.5	-157.8	116.8	175.3	171.1	-48.7	112.5	173.6	-159.9	-120.4	55.6	133.1	-173.3	-158.9	110.4	155.6	159.1	Phase	159.1
0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.4	0.2	0.4	0.3	0.5	0.3	0.3	0.2	0.2	Ampl.	0.2
90.8	128.1	72.0	241.7	118.8	138.6	22.9	22.8	128.3	200.7	128.9	129.5	127.9	175.4	129.4	247.4	128.4	Sbd box	128.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	-7.79889610083E+03			Apriori delay (usec)			-7.79888967138E+03			Resid mbdelay (usec)			-6.42945E-03			+/- 1.7E-04		
Sband delay (usec)	-7.79889456488E+03			Apriori clock (usec)			1.1183094E+00			Resid sbdelay (usec)			-4.89350E-03			+/- 2.7E-03		
Phase delay (usec)	-7.79888966625E+03			Apriori clockrate (us/s)			5.8707190E-08			Resid phdelay (usec)			5.13001E-06			+/- 5.8E-07		
Delay rate (us/s)	-1.87940097791E-01			Apriori rate (us/s)			-1.87940221519E-01			Resid rate (us/s)			1.23728E-07			+/- 5.6E-09		
Total phase (deg)	53.8			Apriori accel (us/s/s)			4.86517654216E-05			Resid phase (deg)			159.1			+/- 18.1		

	RMS	Theor.	Amplitude	0.173 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	29.4	30.0	Search (1024X64)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	29.1	52.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	63.8	36.2	Inc. seg. avg.	0.172	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	83.8	63.1	Inc. frq. avg.	0.233	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
g: az 40.4 el 27.4 pa -11.0	Z: az 113.3 el 55.6 pa -34.9		u,v (fr/asec) 1390.429 3638.691		simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c192c/v2/1234/No0011/gZ..130KBL		Output file: /Exps/c192c/v2/1234/No0011/gZ.W.63.130KBL			



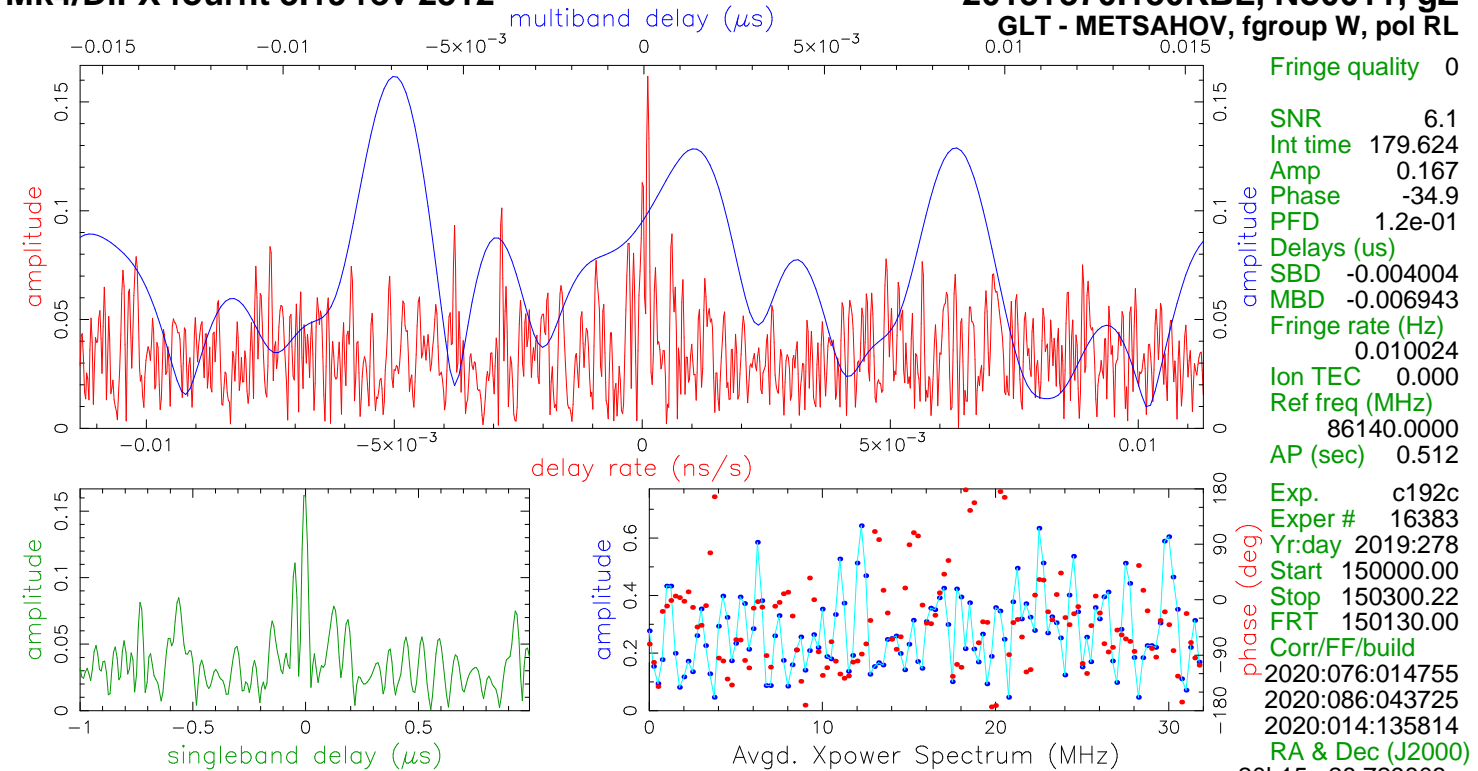
Fringe quality 9
SNR 14.9
Int time 179.620
Amp 0.406
Phase 104.7
PFD 1.8e-41
Delays (us)
SBD -0.001028
MBD -0.006523
Fringe rate (Hz) 0.009747
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043716
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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

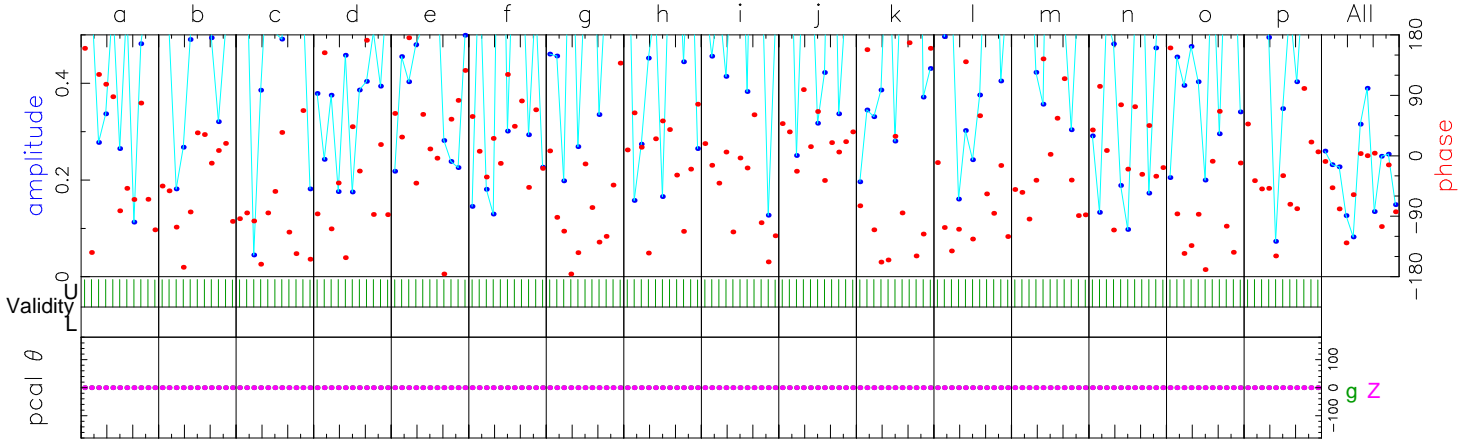


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-7.79889619466E+03																
Sband delay (usec)		-7.79889069888E+03																
Phase delay (usec)		-7.79888966800E+03																
Delay rate (us/s)		-1.87940108361E-01																
Total phase (deg)					-0.6													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
Pcal mode: MANUAL, MANUAL																		
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																		
PC period (AP's) 5, 5																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
nlags: 128																		
t_cohere infinite																		
simultaneous interpolator																		

ph/seg (deg) 28.8 12.8
amp/seg (%) 27.0 22.3
ph/frq (deg) 58.6 15.4
amp/frq (%) 72.4 26.9
g: az 40.4 el 27.4 pa -11.0
Z: az 113.3 el 55.6 pa -34.9
u,v (fr/asec) 1390.429 3638.691
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/gZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/gZ.W.7.130KBL



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

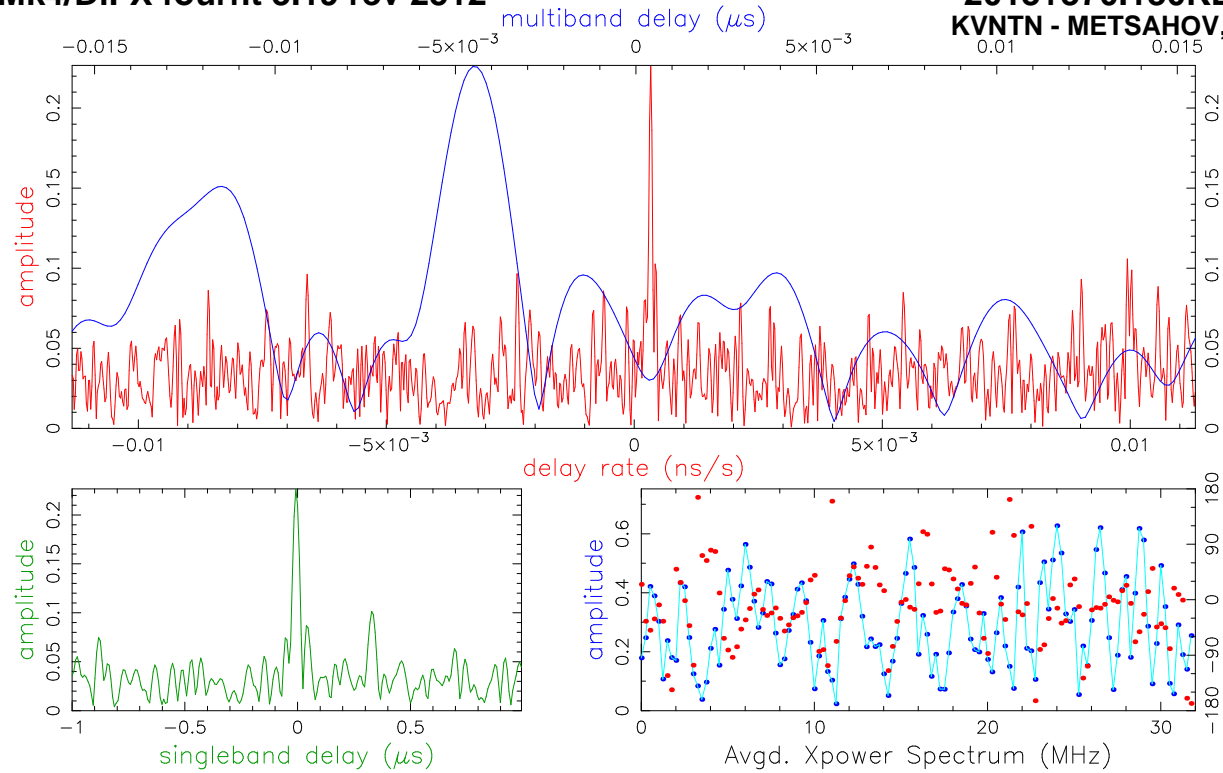


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-131.3	-22.9	-94.9	-92.2	40.8	26.5	-102.2	1.3	-23.5	30.1	-148.8	-83.8	-39.0	-2.2	-105.0	-18.6	Phase	-34.9
	0.1	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.4	Ampl.	0.2
	37.3	50.5	100.1	197.1	221.5	128.4	61.1	21.6	35.0	127.9	129.3	160.6	196.0	58.7	130.9	128.1	Sbd box	128.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	-7.79889661482E+03	Apriori delay (usec)	-7.79888967138E+03	Resid mbdelay (usec)	-6.94344E-03	+/-	1.8E-04
Sband delay (usec)	-7.79889367488E+03	Apriori clock (usec)	1.1183094E+00	Resid sbdelay (usec)	-4.00350E-03	+/-	2.8E-03
Phase delay (usec)	-7.79888967250E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-1.12677E-06	+/-	6.0E-07
Delay rate (us/s)	-1.87940105150E-01	Apriori rate (us/s)	-1.87940221519E-01	Resid rate (us/s)	1.16369E-07	+/-	5.8E-09
Total phase (deg)	-140.2	Apriori accel (us/s/s)	4.86517654216E-05	Resid phase (deg)	-34.9	+/-	18.7

ph/seg (deg)	RMS 46.9	Theor. 31.1	Amplitude Search (1024X64)	0.167 +/- 0.027	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	60.8	54.3	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	64.2	37.5	Inc. seg. avg.	0.192	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	93.8	65.4	Inc. frq. avg.	0.238	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
g: az 40.4 el 27.4 pa -11.0	Z: az 113.3 el 55.6 pa -34.9	u,v (fr/asec) 1390.429 3638.691			Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite
Control file: cf_1234_gmva	Input file: /Exps/c192c/v2/1234/No0011/gZ..130KBL	Output file: /Exps/c192c/v2/1234/No0011/gZ.W.75.130KBL				ion window (TEC) 0.00 0.00

simultaneous interpolator

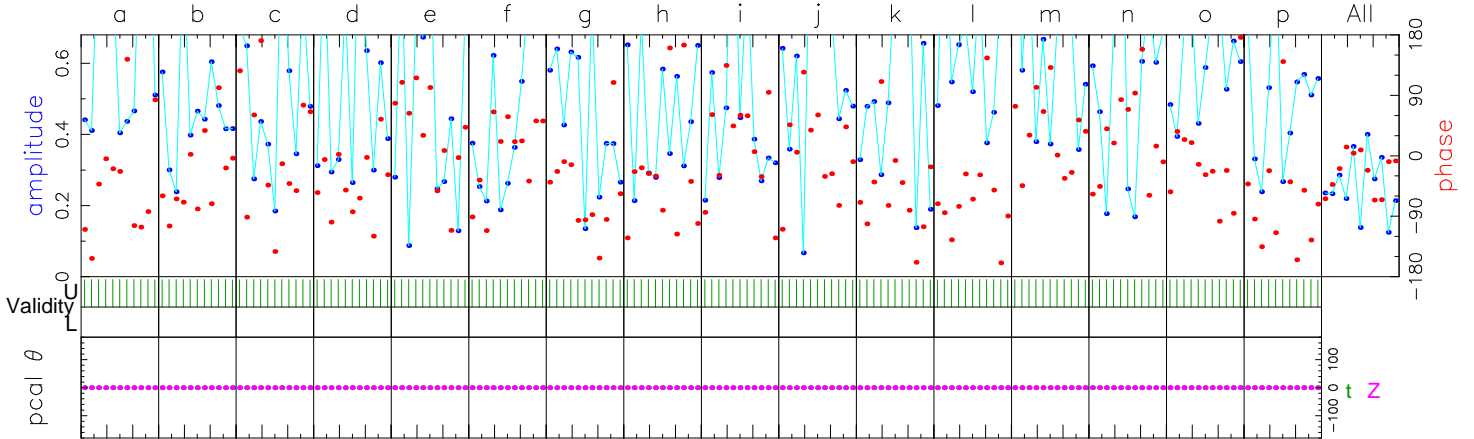


Fringe quality 9

SNR 8.3
Int time 179.730
Amp 0.227
Phase -26.7
PFD 1.7e-08
Delays (us)
SBD -0.006785
MBD -0.004463
Fringe rate (Hz) 0.028478
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

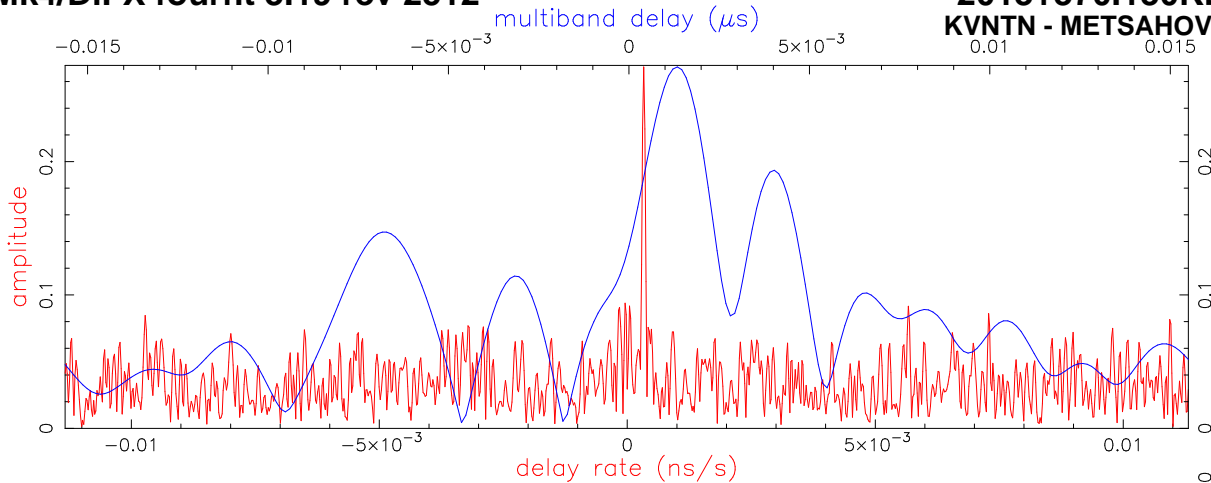
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043732
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



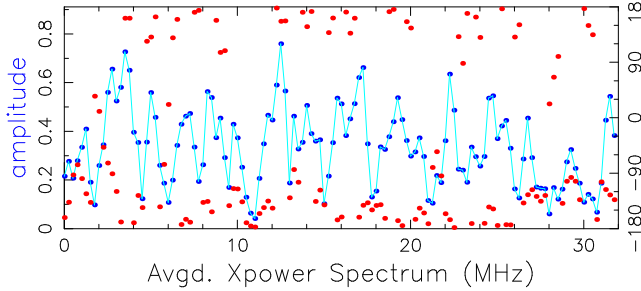
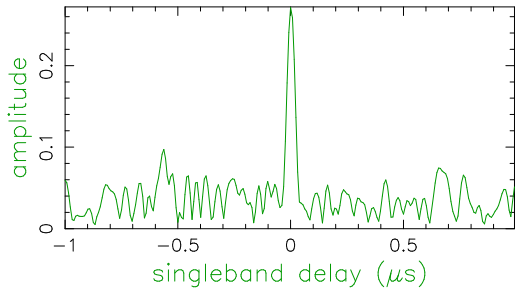
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-65.7	-43.8	7.4	-34.0	75.5	23.6	-55.9	-80.6	48.7	1.6	-61.7	-80.1	30.7	19.7	-28.3	-85.3	Phase	-26.7					
	0.4	0.3	0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.3	0.4	0.3	Ampl.	0.3					
	129.1	146.7	21.6	128.5	208.9	92.1	127.2	129.6	104.5	127.7	148.3	128.8	128.6	129.1	128.8	86.6	Sbd box	128.1					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used						
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase						
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC						
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp						
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids						
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks						
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids						
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks						
Group delay (usec)(sbd)			-3.80558552594E+03														Apriori delay (usec)	-3.80558106287E+03	Resid mbdelay (usec)	-4.46307E-03	+/-	1.3E-04	
Sband delay (usec)			-3.80558784787E+03															Apriori clock (usec)	2.7593346E+01	Resid sbdelay (usec)	-6.78500E-03	+/-	2.1E-03
Phase delay (usec)			-3.80558106373E+03															Apriori clockrate (us/s)	1.8370719E-07	Resid phdelay (usec)	-8.59976E-07	+/-	4.4E-07
Delay rate (us/s)			-1.30823027777E+00															Apriori rate (us/s)	-1.30823060837E+00	Resid rate (us/s)	3.30602E-07	+/-	4.3E-09
Total phase (deg)					-298.7													Apriori accel (us/s/s)	-1.42858636408E-06	Resid phase (deg)	-26.7	+/-	13.8

ph/seg (deg) 28.9 22.9 Search (1024X64) 0.224 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 39.0 39.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 52.9 27.6 Inc. seg. avg. 0.238 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 58.4 48.1 Inc. frq. avg. 0.299 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 293.0 el 40.6 pa 75.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9406.833 -2393.717 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/tZ.W.121.130KBL



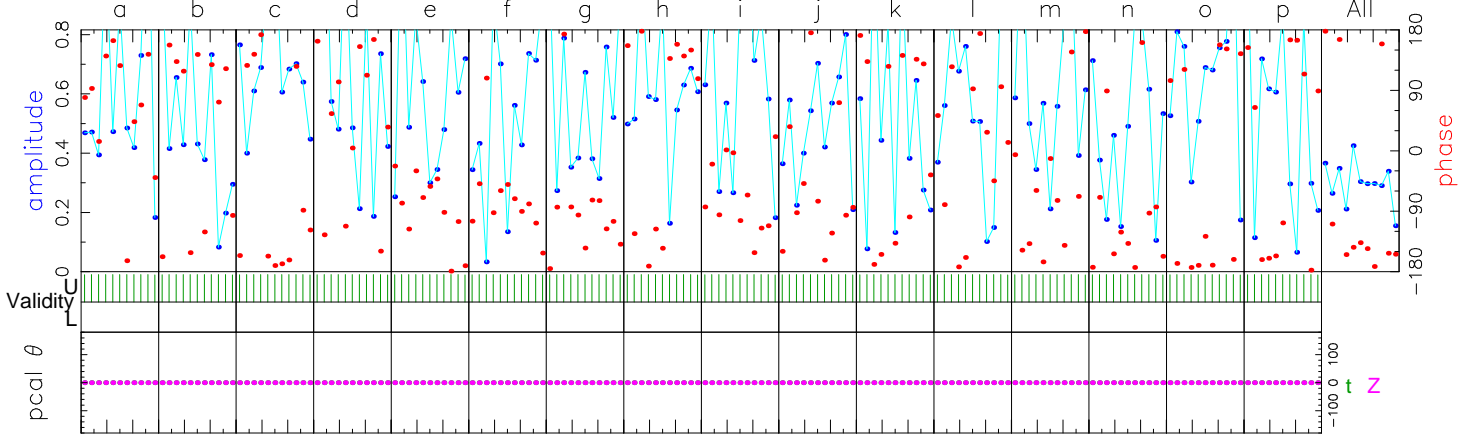
Fringe quality 9

SNR 10.0
Int time 179.730
Amp 0.272
Phase -159.7
PFD 4.3e-15
Delays (us)
SBD 0.001667
MBD 0.001337
Fringe rate (Hz)
0.028776
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



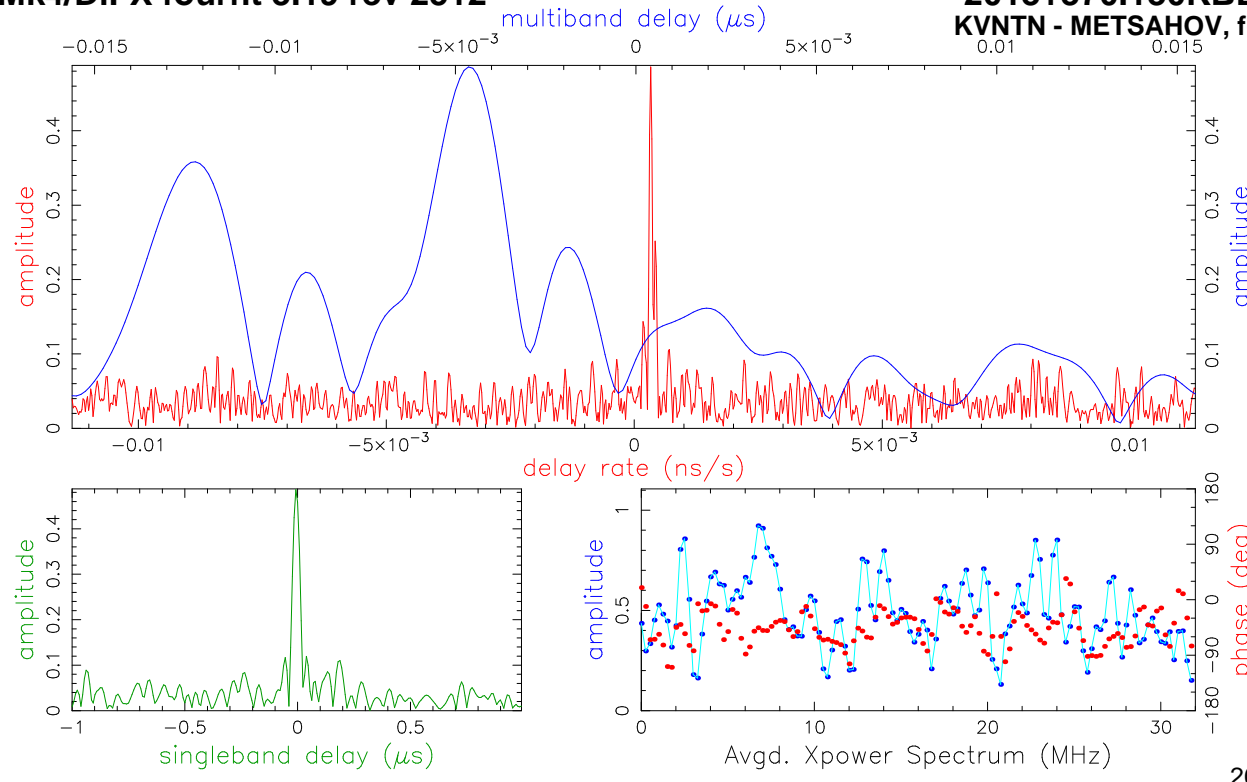
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043734
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)			-3.80557972547E+03																
Sband delay (usec)			-3.80557939637E+03																
Phase delay (usec)			-3.80558106802E+03																
Delay rate (us/s)			-1.30823027431E+00																
Total phase (deg)						-71.8													
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
PCal mode: MANUAL, MANUAL																			
PCal rate: 0.000E+00, 0.000E+00 (us/s)																			
Bits/sample: 2x2																			
Sample rate(MSamp/s): 64																			
Data rate(Mb/s): 2048																			
nlags: 128																			
t_cohere infinite																			
ion window (TEC)																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
simultaneous interpolator																			

ph/seg (deg) 25.7 19.1 Search (1024X64) 0.266 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.7 33.3 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.5 23.0 Inc. seg. avg. 0.284 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.7 40.1 Inc. frq. avg. 0.359 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 293.0 el 40.6 pa 75.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9406.833 -2393.717 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/tZ.W.136.130KBL

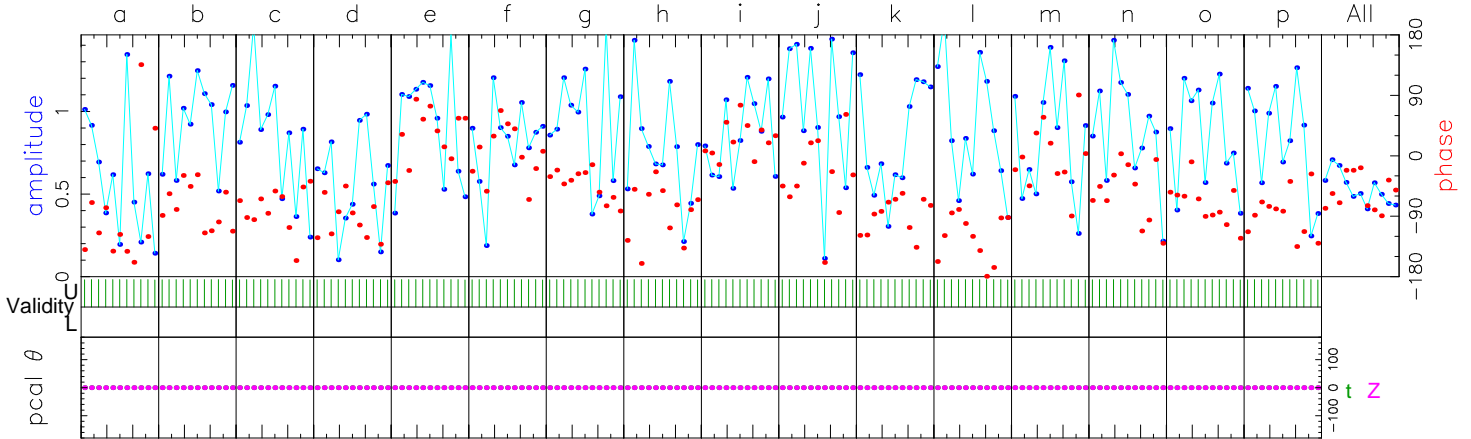


Fringe quality 8

SNR 17.9
Int time 179.730
Amp 0.488
Phase -55.1
PFD 0.0e+00
Delays (us)
SBD -0.006264
MBD -0.004603
Fringe rate (Hz) 0.028261
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043726
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-125.1	-72.2	-77.8	-92.3	34.6	9.5	-44.5	-78.1	26.2	-26.2	-92.9	-129.2	-3.6	-43.3	-67.7	-91.9		Phase	-55.1				
	0.5	0.8	0.8	0.5	0.7	0.7	0.9	0.6	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.7		Ampl.	0.7				
	129.5	128.8	128.8	128.6	128.5	128.5	127.7	126.9	128.0	128.1	127.9	128.6	127.7	128.2	127.6	128.1		Sbd box	128.2				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.80558566597E+03															Apriori delay (usec)	-3.80558106287E+03	Resid mbdelay (usec)	-4.60310E-03	+/-	6.0E-05
Sband delay (usec)			-3.80558732687E+03															Apriori clock (usec)	2.7593346E+01	Resid sbdelay (usec)	-6.26400E-03	+/-	9.6E-04
Phase delay (usec)			-3.80558106465E+03															Apriori clockrate (us/s)	1.8370719E-07	Resid phdelay (usec)	-1.77777E-06	+/-	2.1E-07
Delay rate (us/s)			-1.30823028029E+00															Apriori rate (us/s)	-1.30823060837E+00	Resid rate (us/s)	3.28078E-07	+/-	2.0E-09
Total phase (deg)																		Apriori accel (us/s/s)	-1.42858636408E-06	Resid phase (deg)	-55.1	+/-	6.4

ph/seg (deg) 25.1 10.6
amp/seg (%) 21.1 18.6
ph/frq (deg) 52.5 12.8
amp/frq (%) 50.4 22.4

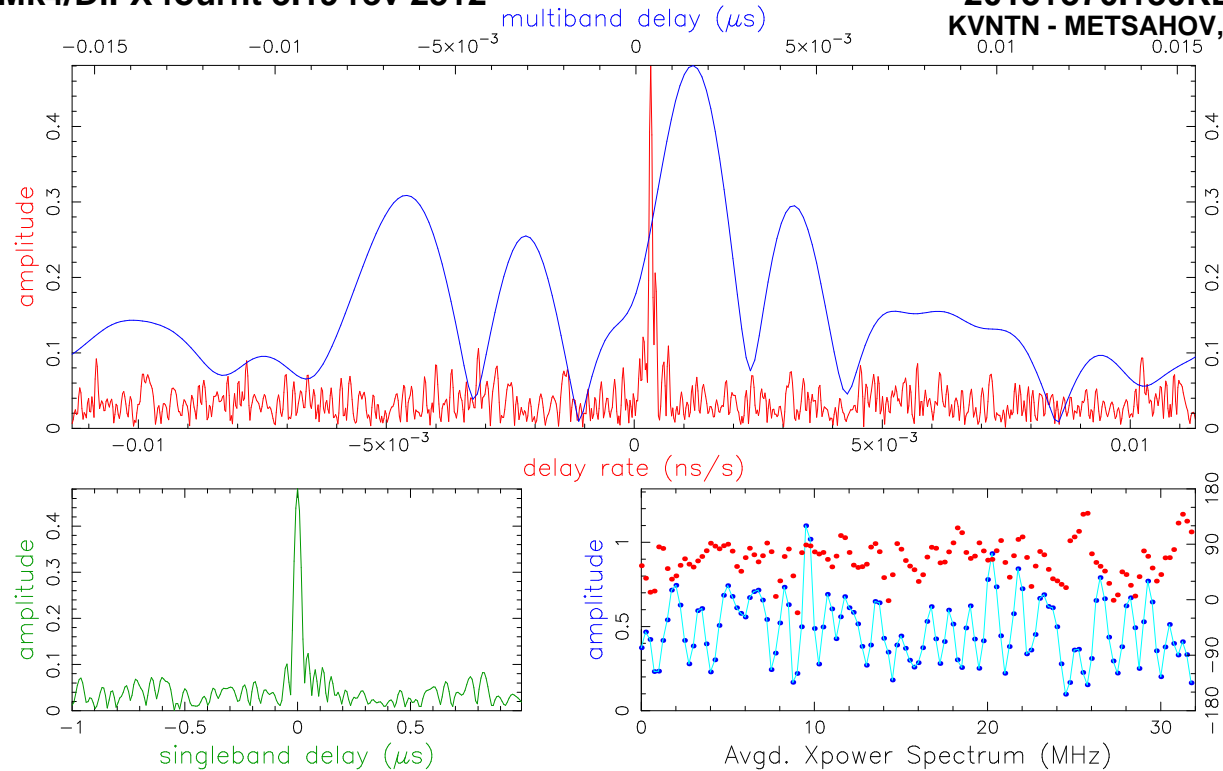
RMS Theor. Amplitude 0.488 +/- 0.027
Search (1024X64) 0.468
Interp. 0.000
Inc. seg. avg. 0.526
Inc. frq. avg. 0.693

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

t: az 293.0 el 40.6 pa 75.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9406.833 -2393.717 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/tZ.W.78.130KBL

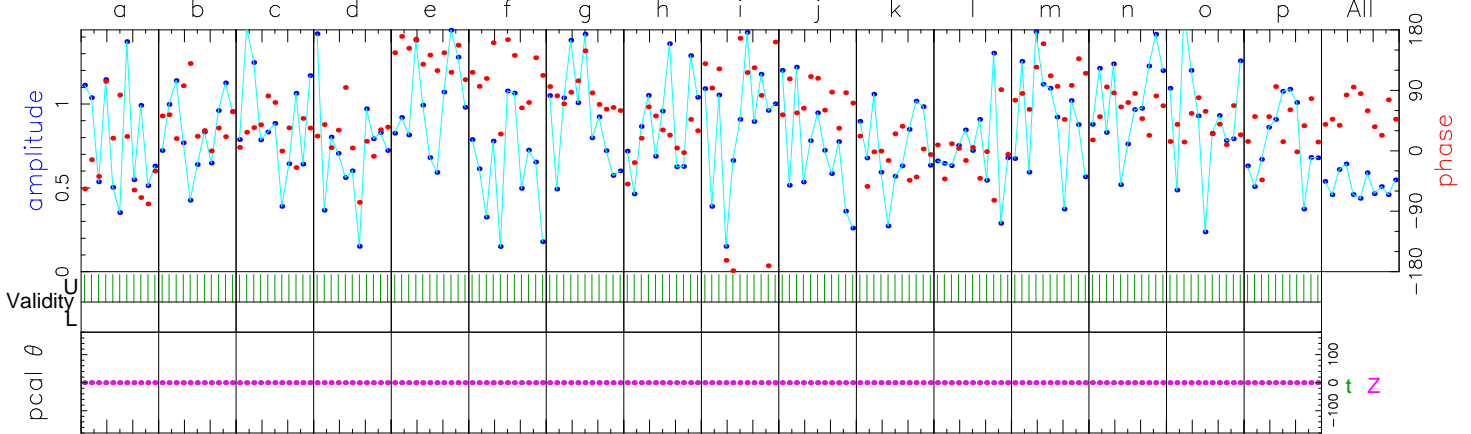


Fringe quality 9

SNR 17.6
Int time 179.730
Amp 0.481
Phase 56.6
PFD 0.0e+00
Delays (us)
SBD -0.000252
MBD 0.001574
Fringe rate (Hz) 0.027956
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043728
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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

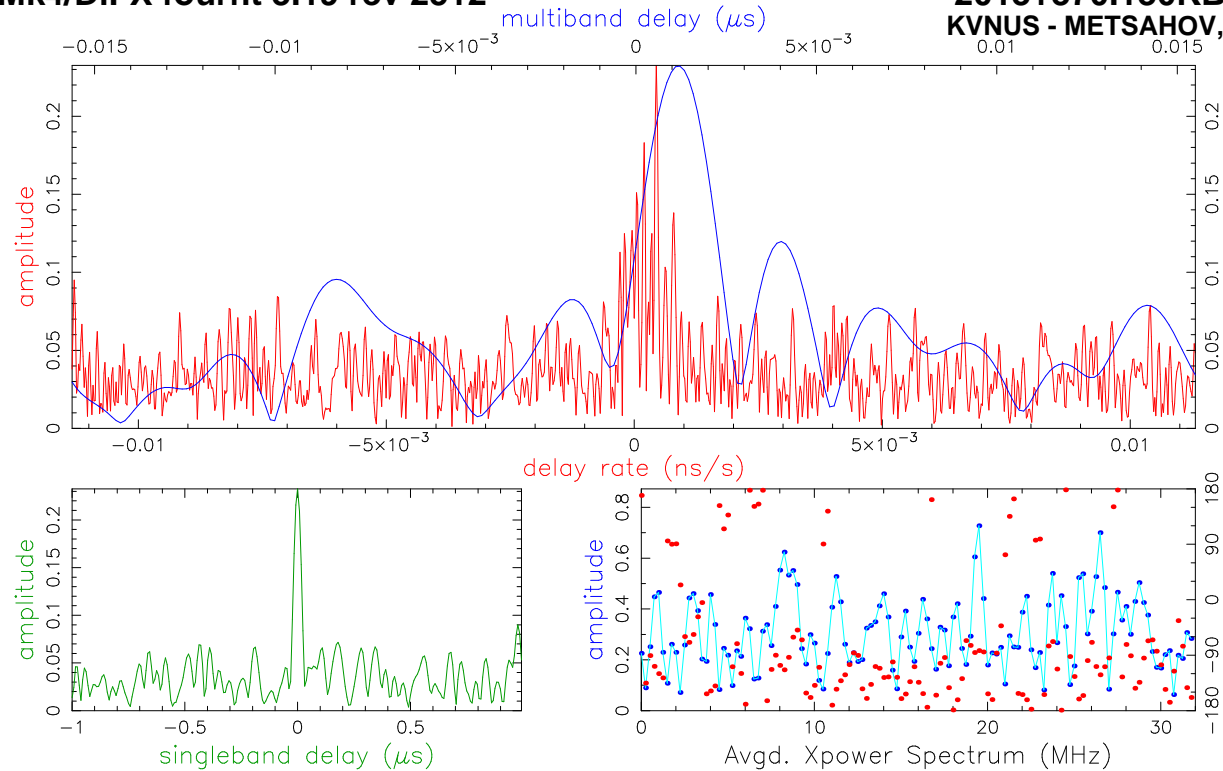


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
-18.1	40.6	32.1	21.5	141.9	124.0	88.6	25.0	136.1	73.4	-7.5	-17.2	107.0	63.2	35.0	34.9		Phase	56.6	
0.5	0.7	0.8	0.6	0.9	0.5	0.8	0.7	0.6	0.7	0.6	0.7	0.6	0.8	0.9	0.8	0.6		Ampl.	0.7
129.2	129.7	128.8	129.0	129.1	129.5	128.6	127.7	128.6	128.4	128.4	128.9	128.7	128.3	128.9	129.7		Sbd box	129.0	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
t:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) -3.80557948875E+03 Apriori delay (usec) -3.80558106287E+03 Resid mbdelay (usec) 1.57412E-03 +/- 6.1E-05
 Sband delay (usec) -3.80558131487E+03 Apriori clock (usec) 2.7593346E+01 Resid sbdelay (usec) -2.52000E-04 +/- 9.8E-04
 Phase delay (usec) -3.80558106105E+03 Apriori clockrate (us/s) 1.8370719E-07 Resid phdelay (usec) 1.82386E-06 +/- 2.1E-07
 Delay rate (us/s) -1.30823028383E+00 Apriori rate (us/s) -1.30823060837E+00 Resid rate (us/s) 3.24539E-07 +/- 2.0E-09
 Total phase (deg) -215.5 Apriori accel (us/s/s) -1.42858636408E-06 Resid phase (deg) 56.6 +/- 6.5

RMS Theor. Amplitude 0.481 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 22.8 10.8 Search (1024X64) 0.466 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 16.2 18.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 54.2 13.0 Inc. seg. avg. 0.511 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.5 22.7 Inc. frq. avg. 0.700 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 293.0 el 40.6 pa 75.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9406.833 -2393.717 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/tZ.W.94.130KBL

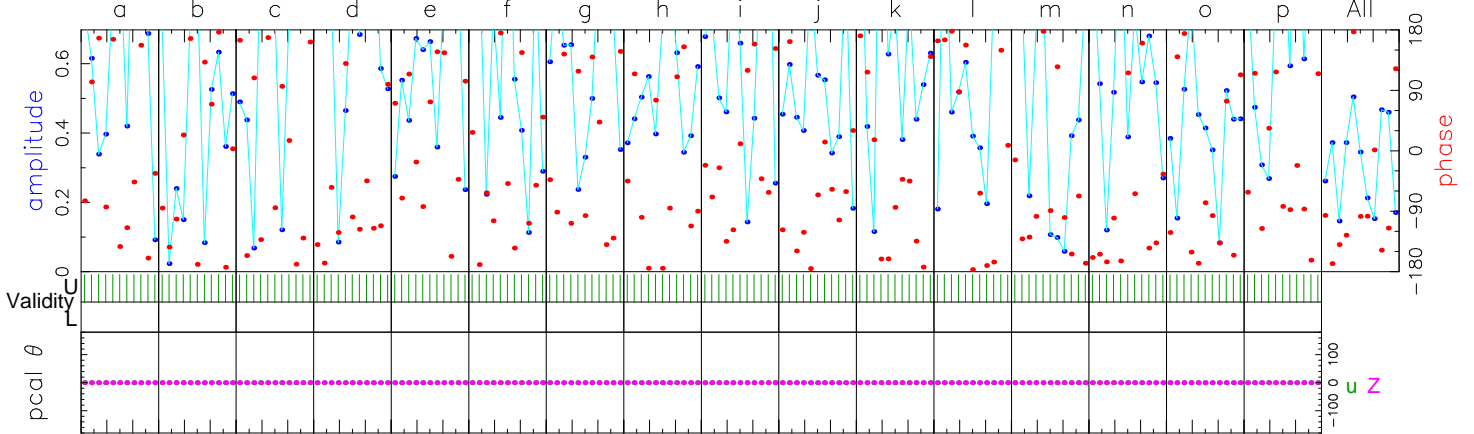


Fringe quality 9

SNR 8.5
 Int time 179.730
 Amp 0.233
 Phase -135.7
 PFD 2.8e-09
 Delays (us)
 SBD -0.000663
 MBD 0.001171
 Fringe rate (Hz)
 0.037370
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043733
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

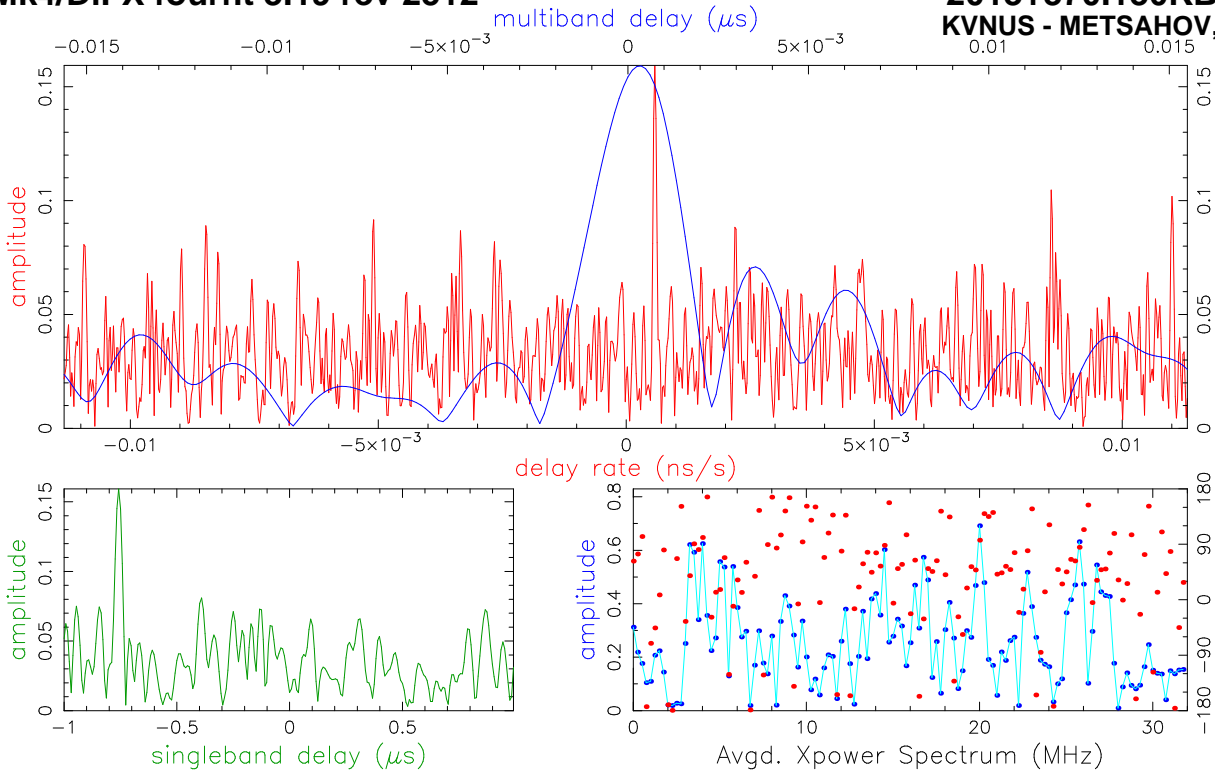


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-143.2	-169.5	-159.5	-120.6	-139.2	-90.9	-134.3	-145.9	-61.9	-106.0	-155.4	162.5	-126.3	-146.0	-162.6	-90.1	Phase	-135.7				
	0.3	0.2	0.4	0.5	0.0	0.2	0.2	0.2	0.4	0.2	0.4	0.3	0.3	0.4	0.2	0.2	Ampl.	0.3				
	222.2	68.3	129.2	128.2	101.0	104.0	16.8	182.6	128.2	44.4	127.9	127.7	137.5	128.8	143.9	101.5	Sbd box	128.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.18563170578E+03														Apriori delay (usec)	-4.18563287718E+03	Resid mbdelay (usec)	1.17140E-03	+/-	1.3E-04
Sband delay (usec)			-4.18563354068E+03														Apriori clock (usec)	8.3304033E+00	Resid sbdelay (usec)	-6.63500E-04	+/-	2.0E-03
Phase delay (usec)			-4.18563288156E+03														Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-4.37434E-06	+/-	4.3E-07
Delay rate (us/s)			-1.30615856908E+00														Apriori rate (us/s)	-1.30615900290E+00	Resid rate (us/s)	4.33824E-07	+/-	4.2E-09
Total phase (deg)				-150.2													Apriori accel (us/s/s)	2.70517219807E-06	Resid phase (deg)	-135.7	+/-	13.4

ph/seg (deg) 58.4 22.3 Search (1024X64) 0.222 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.1 38.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.5 26.9 Inc. seg. avg. 0.293 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.6 46.9 Inc. frq. avg. 0.251 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.125.130KBL

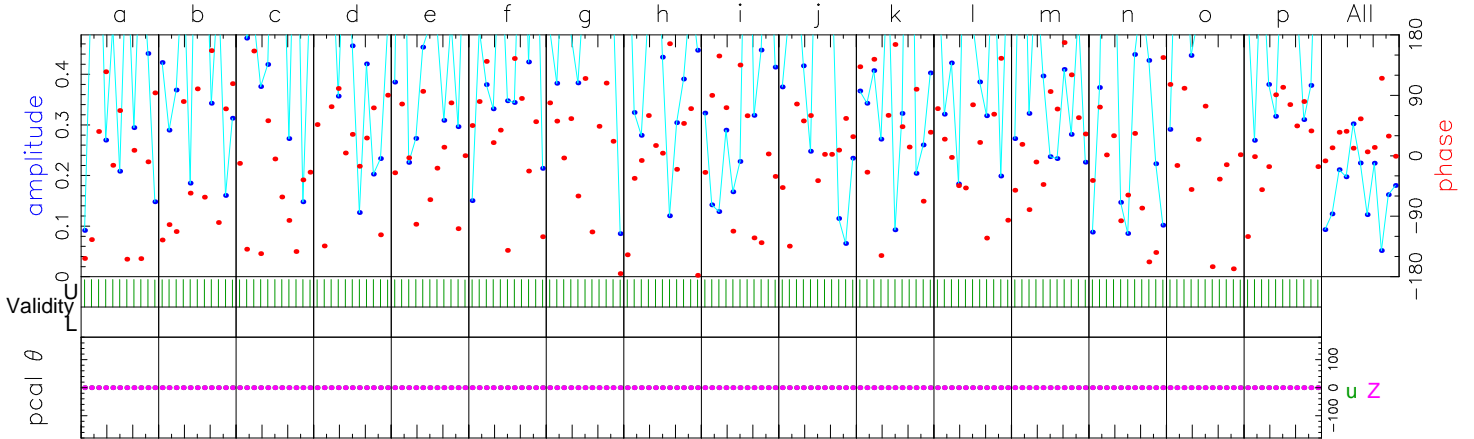
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uZ
KVNU - METSAHOV, fgroup W, pol LR



Fringe quality 0
SNR 5.8
Int time 179.730
Amp 0.159
Phase 22.9
PFD 4.9e-01
Delays (us)
SBD -0.757819
MBD 0.000327
Fringe rate (Hz) 0.049130
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043735
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

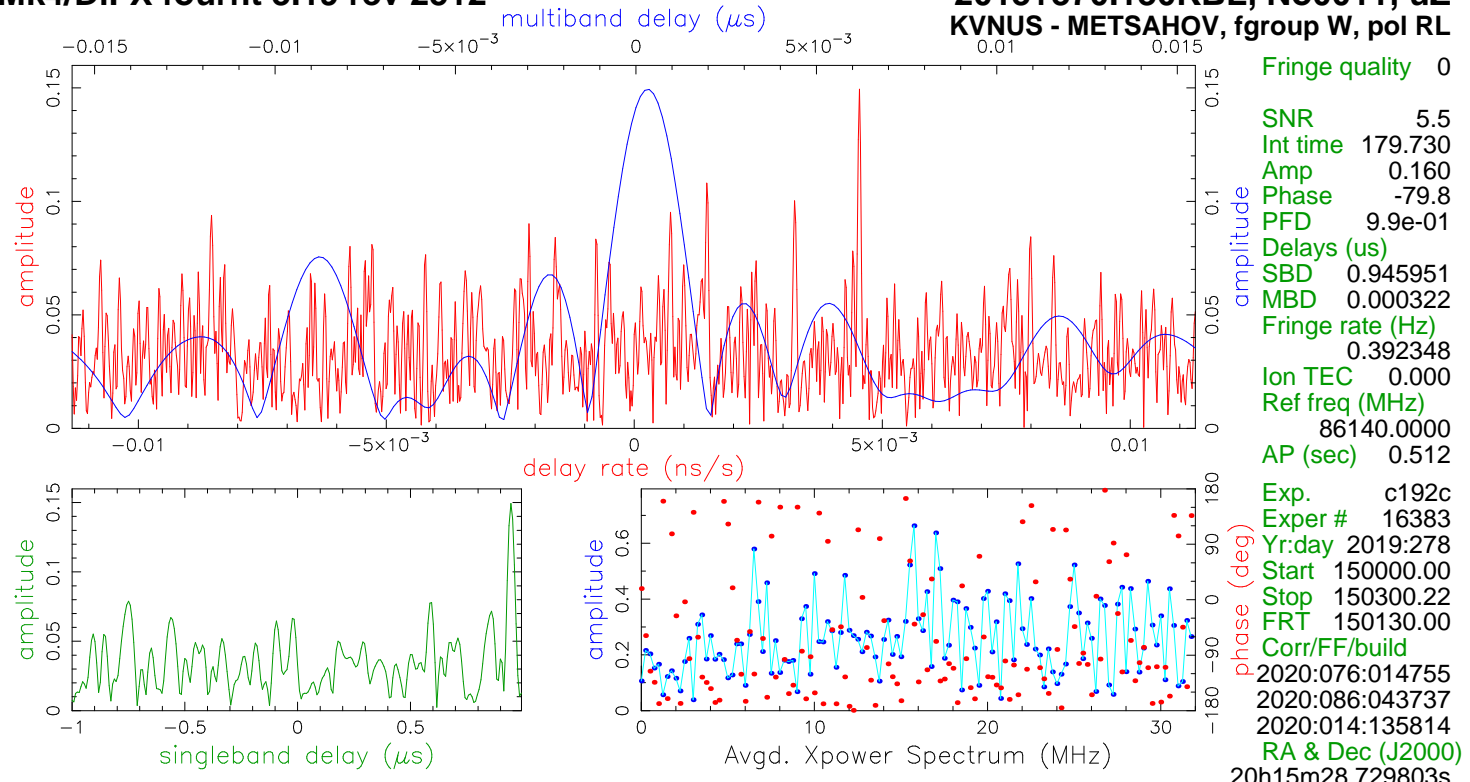
Group delay (usec)(sbd) -4.18638255023E+03 Apriori delay (usec) -4.18563287718E+03 Resid mbdelay (usec) 3.26947E-04 +/- 1.8E-04
Sband delay (usec) -4.18639069618E+03 Apriori clock (usec) 8.3304033E+00 Resid sbdelay (usec) -7.57819E-01 +/- 3.0E-03
Phase delay (usec) -4.18563287644E+03 Apriori clockrate (us/s) 3.8370717E-07 Resid phdelay (usec) 7.39253E-07 +/- 6.3E-07
Delay rate (us/s) -1.30615843256E+00 Apriori rate (us/s) -1.30615900290E+00 Resid rate (us/s) 5.70345E-07 +/- 6.1E-09
Total phase (deg) 8.4 Apriori accel (us/s/s) 2.70517219807E-06 Resid phase (deg) 22.9 +/- 19.6

RMS Theor. Amplitude 0.159 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 33.1 32.6 Search (1024X64) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 43.3 56.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 58.8 39.3 Inc. seg. avg. 0.149 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 46.2 68.5 Inc. frq. avg. 0.153 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

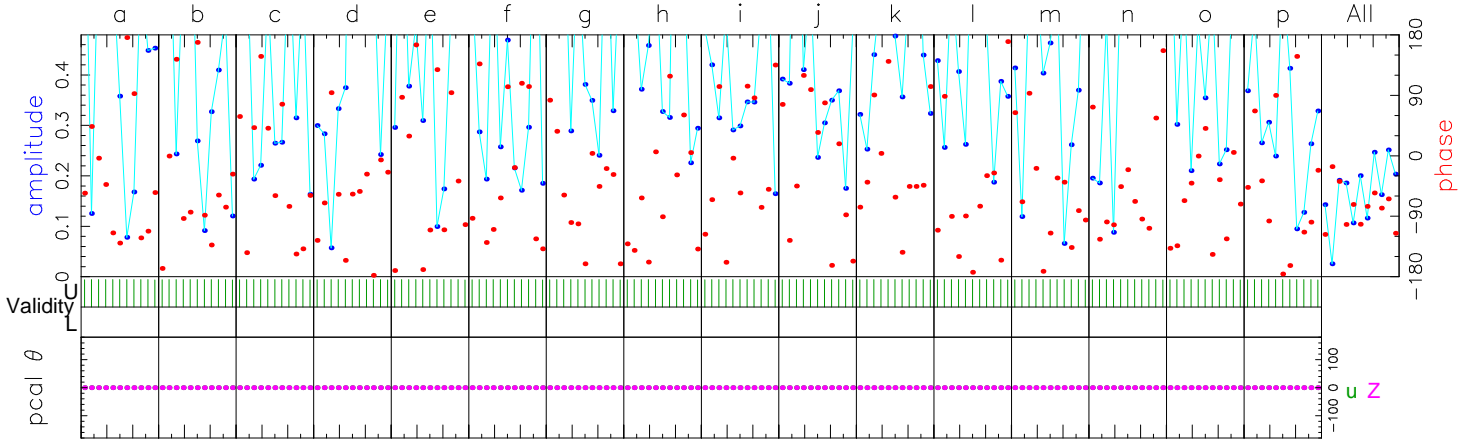
u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.141.130KBL

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uZ
KVNU - METSAHOV, fgroup W, pol RL



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

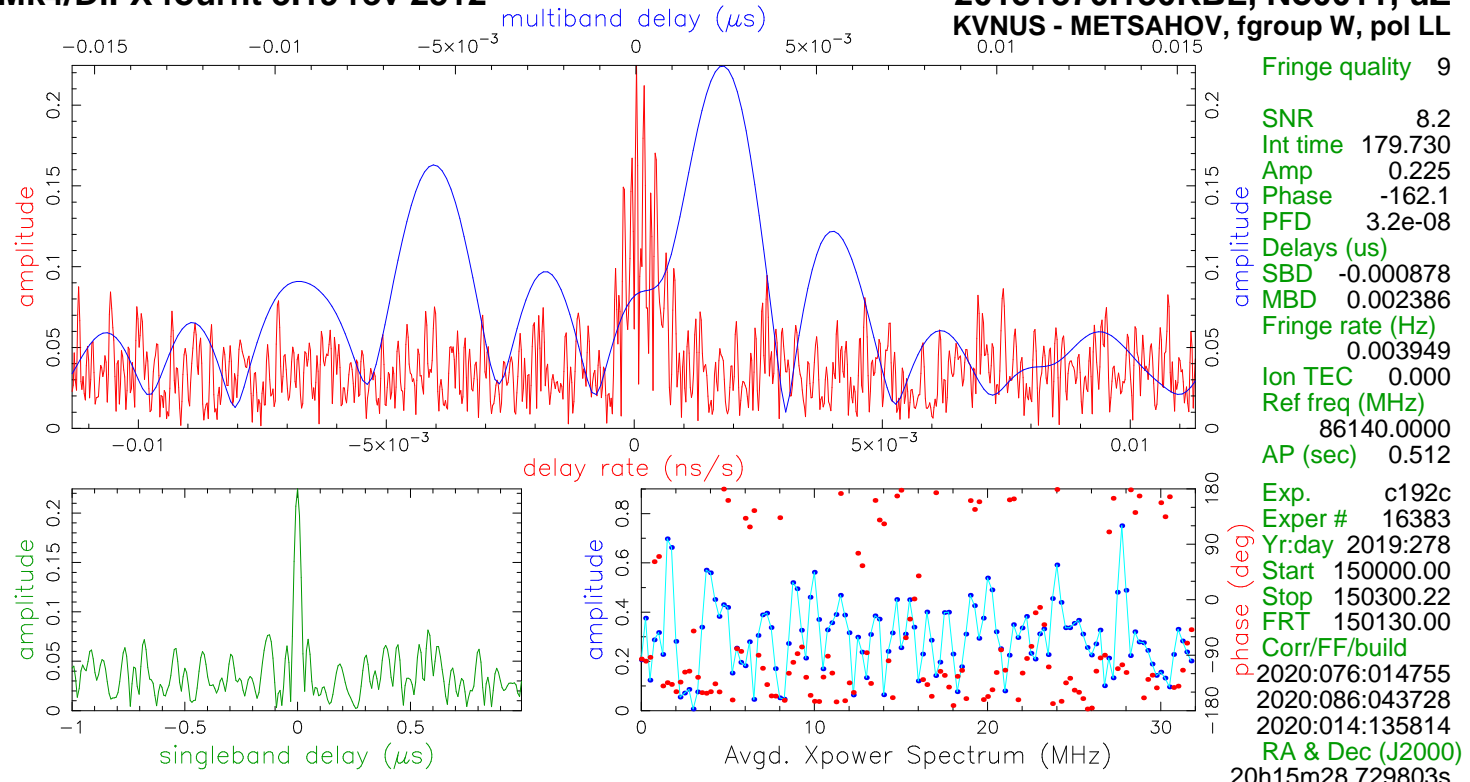


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-74.9	-90.2	-103.3	-62.8	-176.6	-127.9	-44.5	-68.9	-79.4	65.5	-39.0	-112.5	-70.8	-83.3	-71.7	-111.3		Phase -79.8					
	0.3	0.3	0.1	0.3	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.3	0.2	0.2	0.3	0.1		Ampl. 0.1					
	46.7	93.2	135.2	249.1	38.4	162.8	204.1	236.2	174.1	156.0	33.2	206.2	66.4	3.1	166.6	10.8		Sbd box 250.1					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-4.18469505567E+03															Apriori delay (usec)	-4.18563287718E+03	Resid mbdelay (usec)	3.21509E-04	+/-	2.0E-04
Sband delay (usec)			-4.18468692668E+03															Apriori clock (usec)	8.3304033E+00	Resid sbdelay (usec)	9.45951E-01	+/-	3.1E-03
Phase delay (usec)			-4.18563287975E+03															Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-2.57269E-06	+/-	6.7E-07
Delay rate (us/s)			-1.30615444813E+00															Apriori rate (us/s)	-1.30615900290E+00	Resid rate (us/s)	4.55477E-06	+/-	6.5E-09
Total phase (deg)					-94.3													Apriori accel (us/s/s)	2.70517219807E-06	Resid phase (deg)	-79.8	+/-	20.9

	RMS	Theor.	Amplitude	0.160 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	30.6	34.7	Search (1024X64)	0.146	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	43.7	60.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	52.8	41.8	Inc. seg. avg.	0.151	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011
amp/frq (%)	58.2	73.0	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 128	ion window (TEC)	0.00	0.00

u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.158.130KBL



Fringe quality 9

SNR 8.2

Int time 179.730

Amp 0.225

Phase -162.1

PFD 3.2e-08

Delays (us)

SBD -0.000878

MBD 0.002386

Fringe rate (Hz) 0.003949

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 150000.00

Stop 150300.22

FRT 150130.00

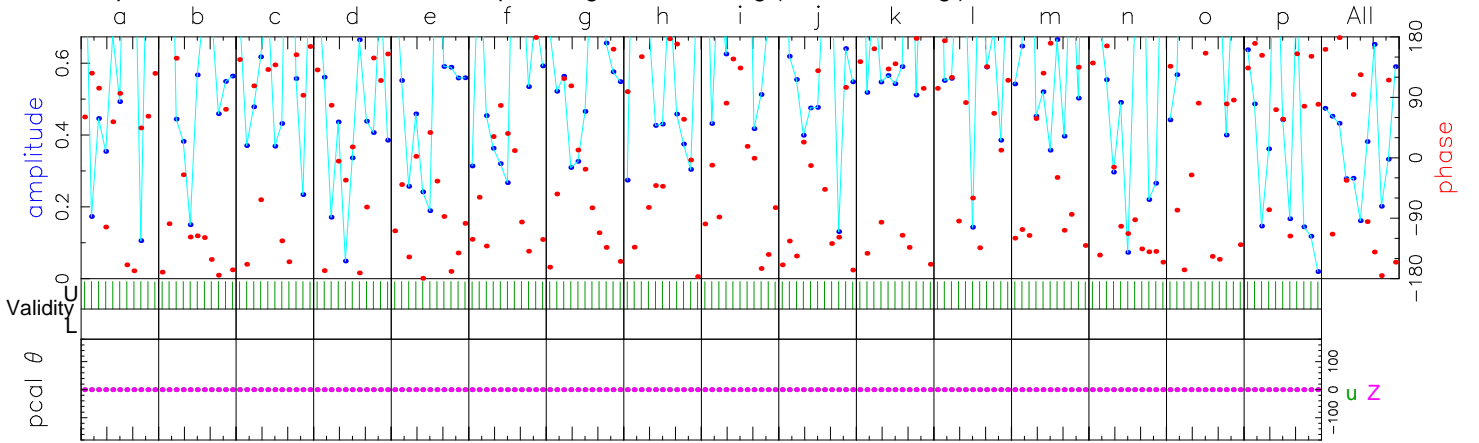
Corr/FF/build 2020:076:014755

2020:086:043728

2020:014:135814

RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
118.1	-136.5	171.8	144.5	-88.3	-81.1	-125.0	-165.6	-95.6	-141.3	177.4	122.0	-119.7	-143.2	-169.3	121.0	Phase	-162.1	
0.3	0.4	0.4	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.6	0.3	0.4	0.4	0.4	0.4	0.2	Ampl.	0.3
130.7	128.7	129.2	23.4	17.5	246.7	176.6	113.5	255.5	83.4	129.3	74.6	128.4	128.4	128.5	107.4	Sbd box	128.9	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Group delay (usec)(sbd)	-4.18563049083E+03			Apriori delay (usec)			-4.18563287718E+03			Resid mbdelay (usec)			2.38635E-03			+/- 1.3E-04		
Sband delay (usec)	-4.18563375518E+03			Apriori clock (usec)			8.3304033E-07			Resid sbdelay (usec)			-8.78000E-04			+/- 2.1E-03		
Phase delay (usec)	-4.18563288241E+03			Apriori clockrate (us/s)			3.8370717E-07			Resid phdelay (usec)			-5.22870E-06			+/- 4.5E-07		
Delay rate (us/s)	-1.30615895706E+00			Apriori rate (us/s)			-1.30615900290E+00			Resid rate (us/s)			4.58394E-08			+/- 4.3E-09		
Total phase (deg)	-176.7			Apriori accel (us/s/s)			2.70517219807E-06			Resid phase (deg)			-162.1			+/- 13.9		

ph/seg (deg) 66.7 23.1 Amplitude 0.225 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

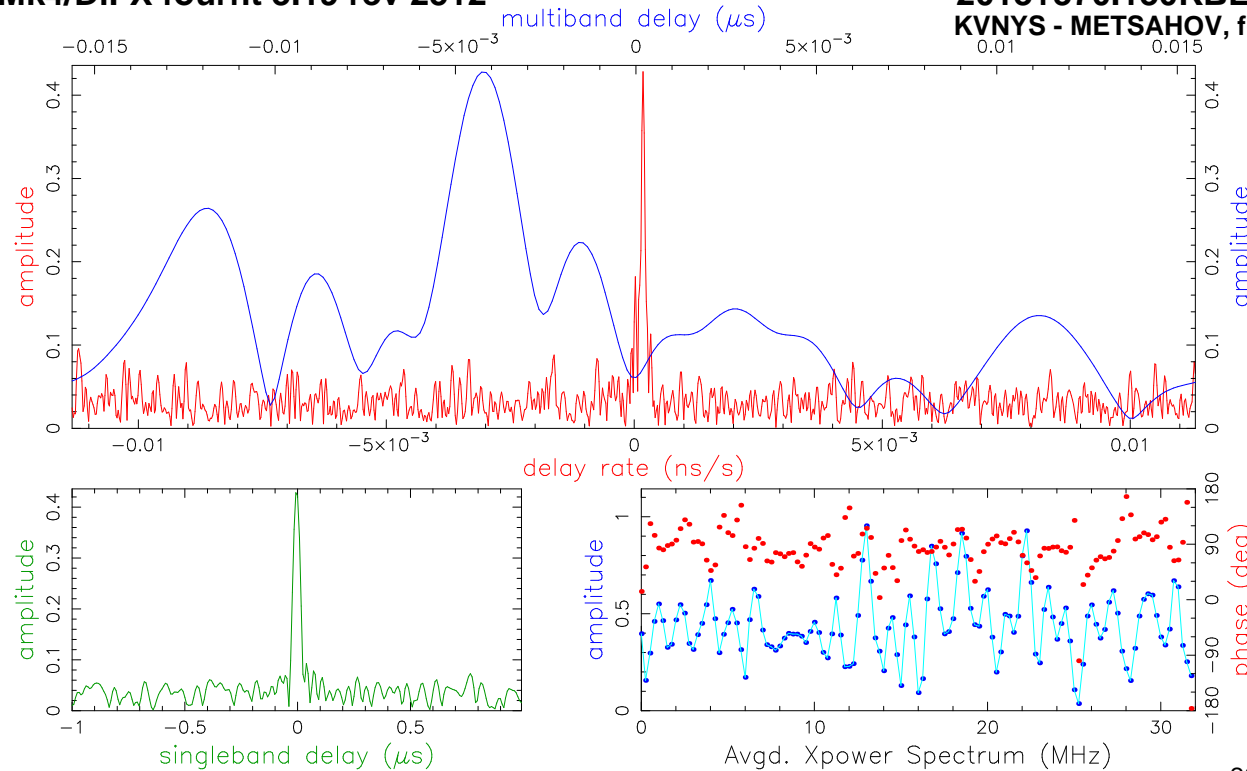
amp/seg (%) 96.9 40.3 Search (1024X64) 0.224 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 55.5 27.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 64.8 48.6 Inc. seg. avg. 0.356 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.91.130KBL simultaneous interpolator

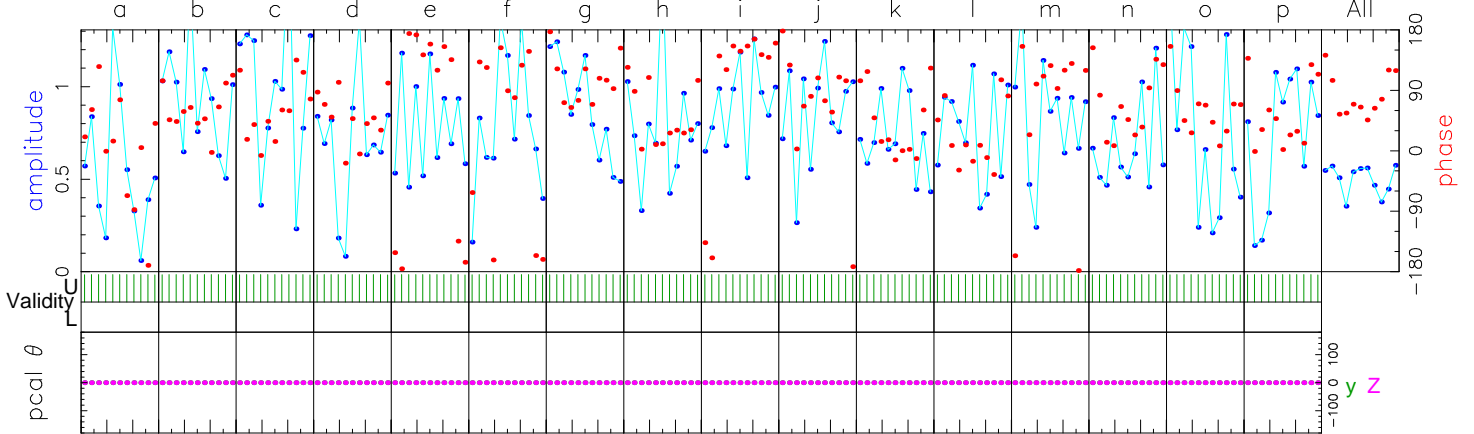


Fringe quality 9

SNR 16.0
Int time 179.730
Amp 0.436
Phase 83.5
PFD 0.0e+00
Delays (us)
SBD -0.004482
MBD -0.004218
Fringe rate (Hz) 0.015828
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

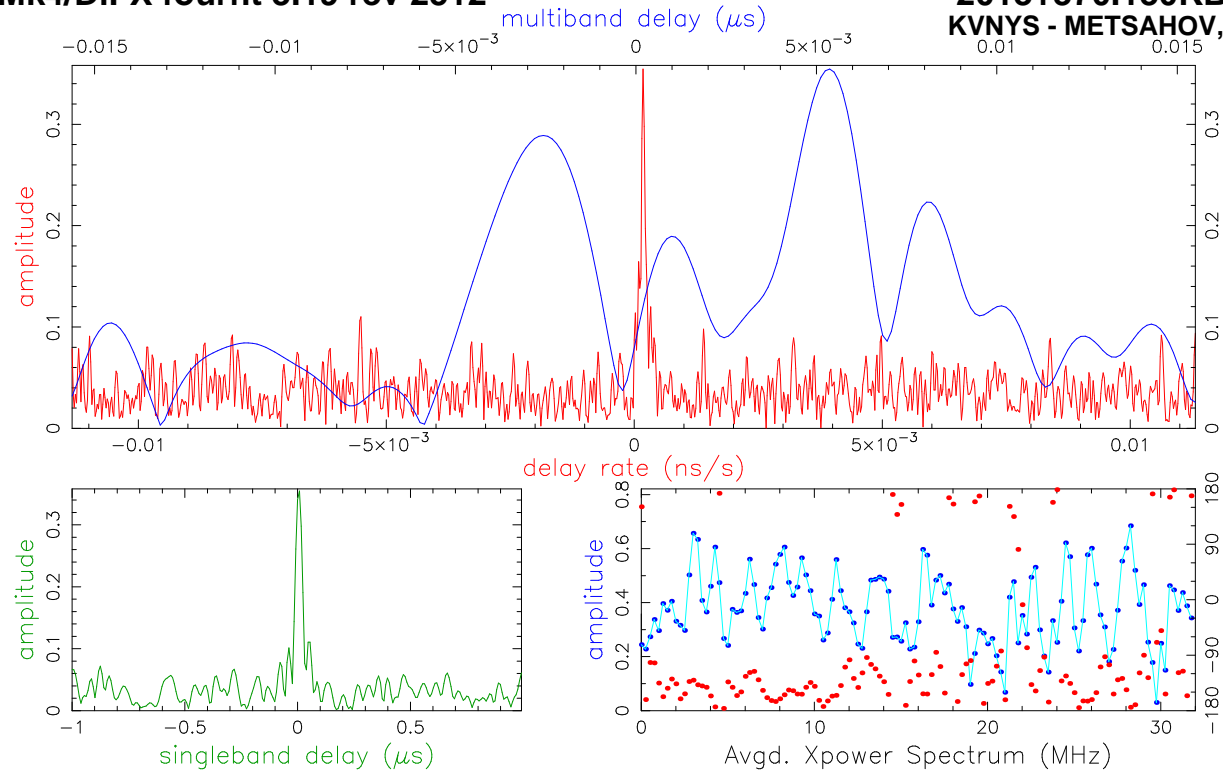
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043734
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0							
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0							
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0							
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.46942742163E+03															Apriori delay (usec)	-3.46942320352E+03	Resid mbdelay (usec)	-4.21810E-03	+/-	6.8E-05
Sband delay (usec)			-3.46942768502E+03															Apriori clock (usec)	2.9053318E+01	Resid sbdelay (usec)	-4.48150E-03	+/-	1.1E-03
Phase delay (usec)			-3.46942320083E+03															Apriori clockrate (us/s)	8.3707184E-08	Resid phdelay (usec)	2.69154E-06	+/-	2.3E-07
Delay rate (us/s)			-1.26513966942E+00															Apriori rate (us/s)	-1.26513985316E+00	Resid rate (us/s)	1.83742E-07	+/-	2.2E-09
Total phase (deg)																		Apriori accel (us/s/s)	9.39358477530E-07	Resid phase (deg)	83.5	+/-	7.2

ph/seg (deg) 30.9 11.9 Theor. Amplitude 0.436 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 22.7 20.8 Search (1024X64) 0.416 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.9 14.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 50.6 25.0 Inc. seg. avg. 0.490 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 y: az 289.7 el 41.8 pa 69.5 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9099.431 -1822.069 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/yZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/yZ.W.139.130KBL simultaneous interpolator

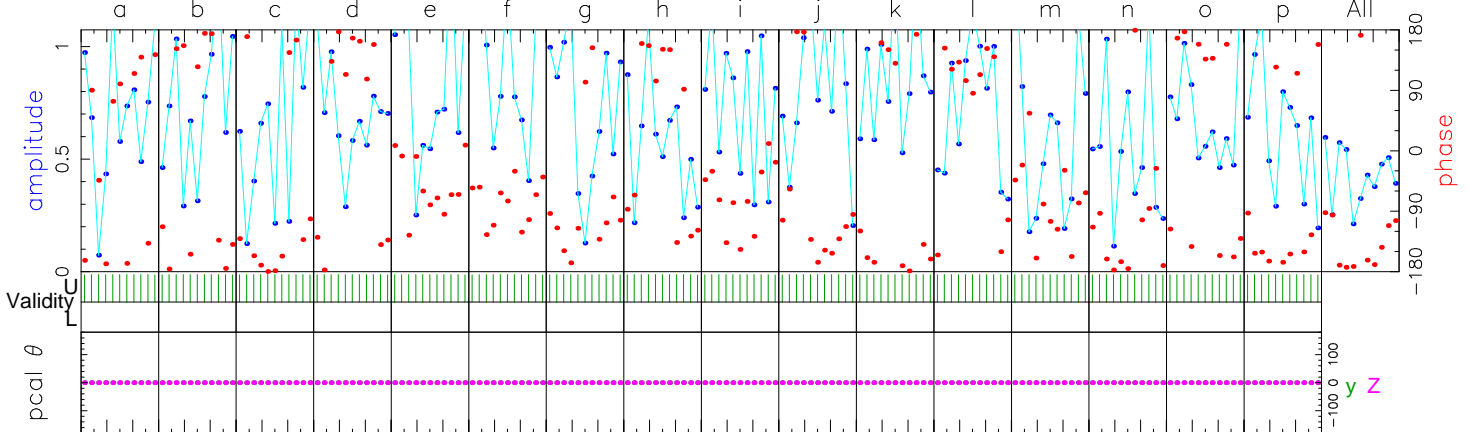


Fringe quality 9

SNR 13.1
Int time 179.730
Amp 0.358
Phase -143.5
PFD 6.4e-31
Delays (us)
SBD 0.005404
MBD 0.005353
Fringe rate (Hz) 0.015541
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

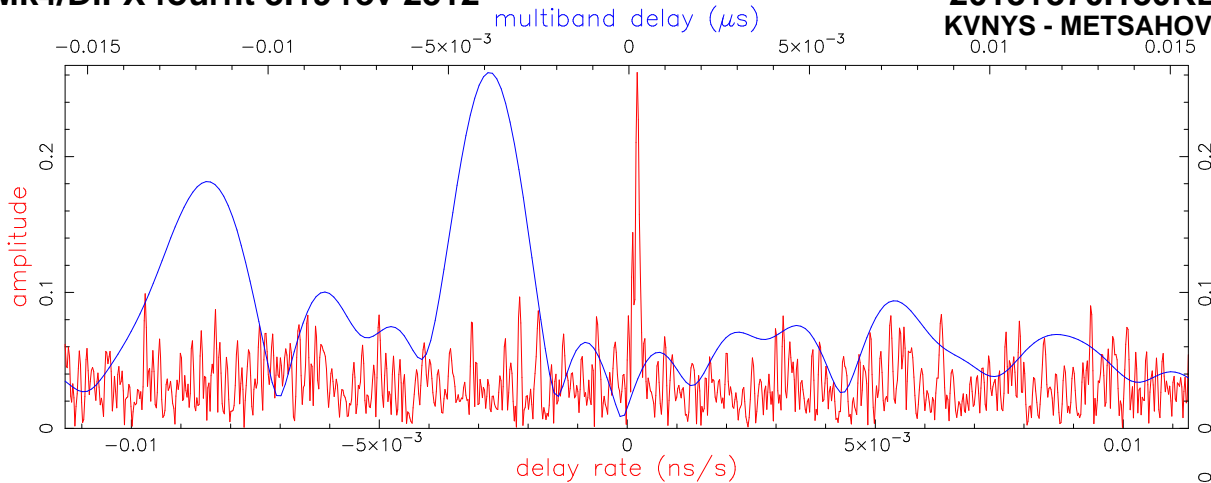
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043736
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



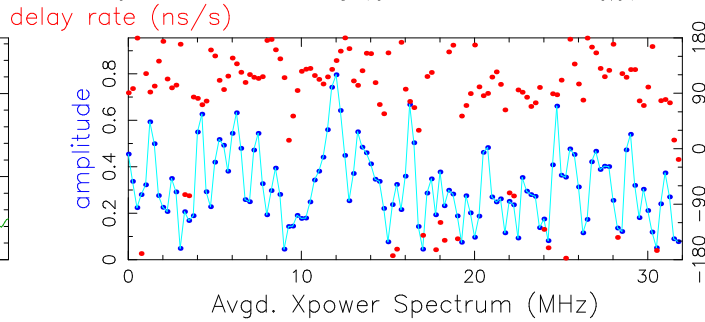
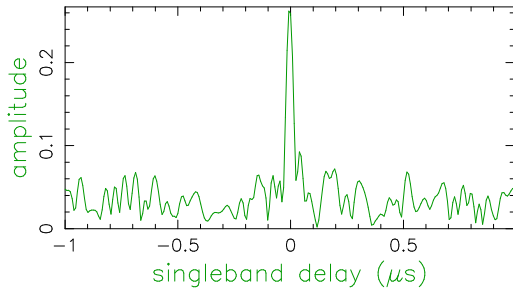
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	142.3	-168.1	-156.3	177.2	-48.1	-70.0	-124.9	-177.9	-61.2	-140.7	-180.0	130.5	-70.5	-131.3	-170.1	-157.0	Phase	-143.5				
	0.5	0.6	0.6	0.5	0.6	0.8	0.6	0.3	0.6	0.7	0.8	0.6	0.5	0.4	0.6	0.5	Ampl.	0.5				
	130.3	130.2	129.6	129.1	130.0	129.9	129.0	23.6	129.7	129.2	129.1	129.2	129.0	128.9	129.2	129.5	Sbd box	129.7				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.46941785028E+03														Apriori delay (usec)	-3.46942320352E+03	Resid mbdelay (usec)	5.35324E-03	+/-	8.2E-05
Sband delay (usec)			-3.46941779902E+03														Apriori clock (usec)	2.9053318E+01	Resid sbdelay (usec)	5.40450E-03	+/-	1.3E-03
Phase delay (usec)			-3.46942320815E+03														Apriori clockrate (us/s)	8.3707184E-08	Resid phdelay (usec)	-4.62739E-06	+/-	2.8E-07
Delay rate (us/s)			-1.26513967275E+00														Apriori rate (us/s)	-1.26513985316E+00	Resid rate (us/s)	1.80410E-07	+/-	2.7E-09
Total phase (deg)																	Apriori accel (us/s/s)	9.39358477530E-07	Resid phase (deg)	-143.5	+/-	8.7

ph/seg (deg) 34.3 14.5 Search (1024X64) 0.351 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 38.9 25.3 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 17.5 Inc. seg. avg. 0.413 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.2 30.5 Inc. frq. avg. 0.547 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 289.7 el 41.8 pa 69.5 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9099.431 -1822.069 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/yZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/yZ.W.153.130KBL



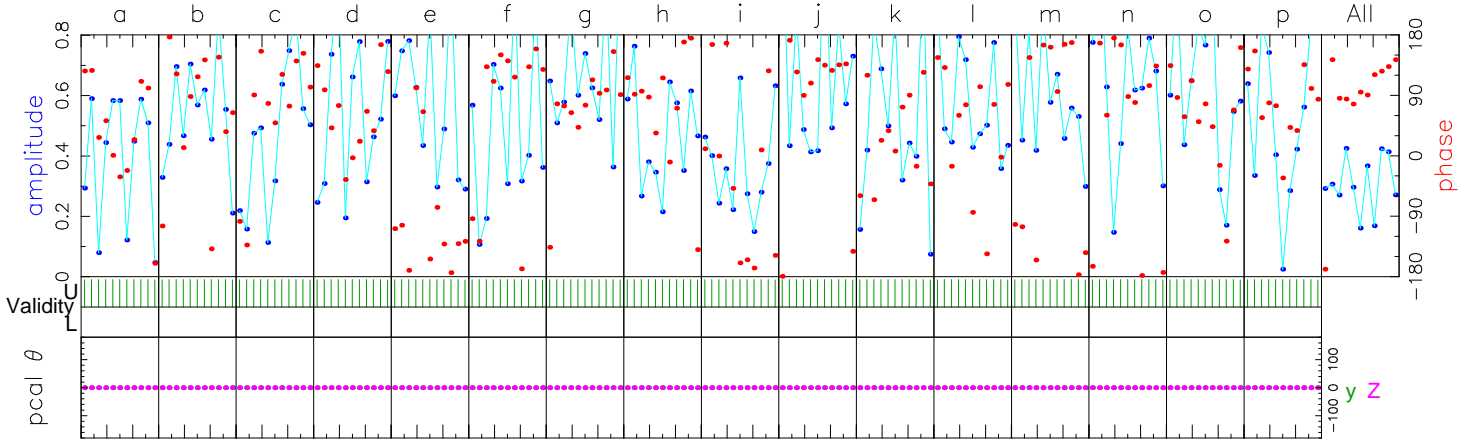
Fringe quality 9

SNR 9.8
Int time 179.730
Amp 0.267
Phase 115.6
PFD 2.5e-14
Delays (us)
SBD -0.004369
MBD -0.003842
Fringe rate (Hz)
0.016350
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



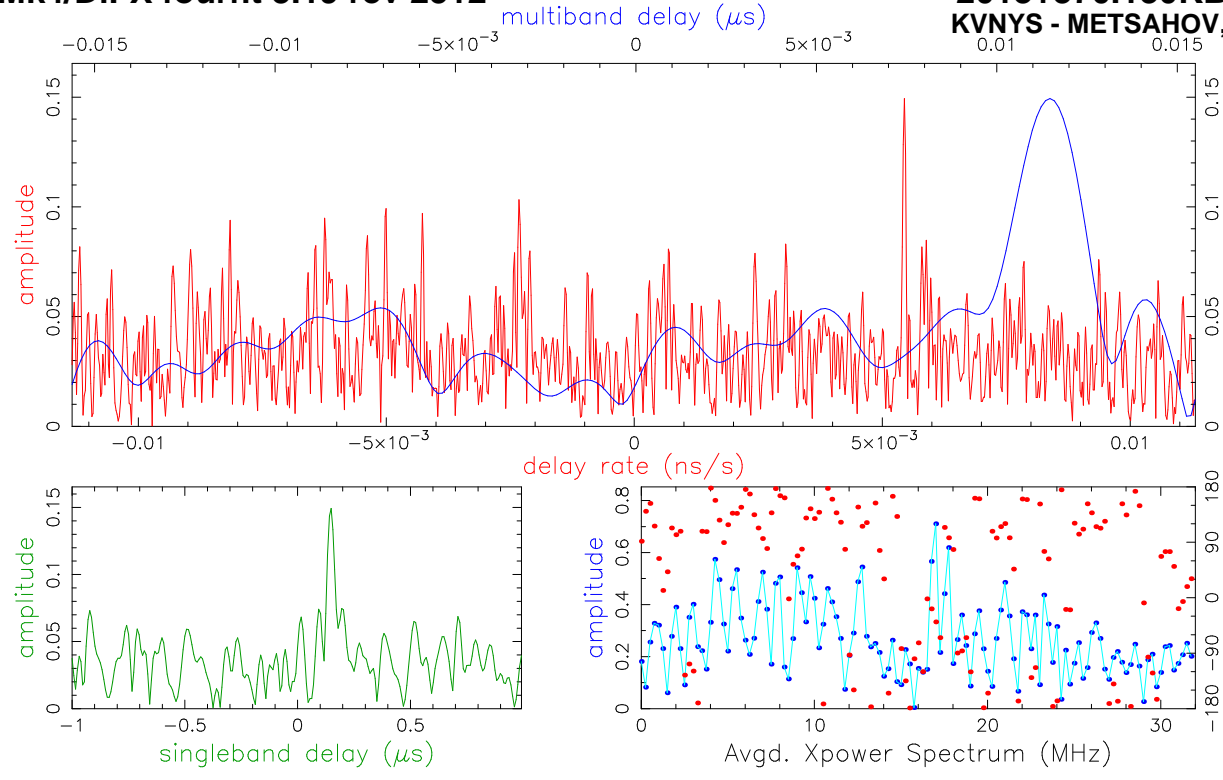
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043738
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	61.4	122.3	118.4	63.5	-149.8	145.0	89.1	102.6	-168.6	145.2	37.6	92.5	179.2	136.6	79.6	88.7	Phase	115.6				
	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.2	0.1	0.6	0.2	0.3	0.4	0.4	0.5	0.5	Ampl.	0.3				
	129.9	129.4	127.5	128.2	127.4	82.4	128.6	193.7	207.2	128.0	76.1	116.8	127.5	128.2	127.8	129.3	Sbd box	128.4				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.46942704564E+03														Apriori delay (usec)	-3.46942320352E+03	Resid mbdelay (usec)	-3.84212E-03	+/-	1.1E-04
Sband delay (usec)			-3.46942757252E+03														Apriori clock (usec)	2.9053318E+01	Resid sbdelay (usec)	-4.36900E-03	+/-	1.8E-03
Phase delay (usec)			-3.46942319979E+03														Apriori clockrate (us/s)	8.3707184E-08	Resid phdelay (usec)	3.72932E-06	+/-	3.8E-07
Delay rate (us/s)			-1.26513966335E+00														Apriori rate (us/s)	-1.26513985316E+00	Resid rate (us/s)	1.89806E-07	+/-	3.6E-09
Total phase (deg)																	Apriori accel (us/s/s)	9.39358477530E-07	Resid phase (deg)	115.6	+/-	11.7

ph/seg (deg) 33.1 19.4 Search (1024X64) 0.255 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 36.7 33.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.8 23.4 Inc. seg. avg. 0.292 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.0 40.9 Inc. frq. avg. 0.329 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 289.7 el 41.8 pa 69.5 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9099.431 -1822.069 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/yZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/yZ.W.163.130KBL

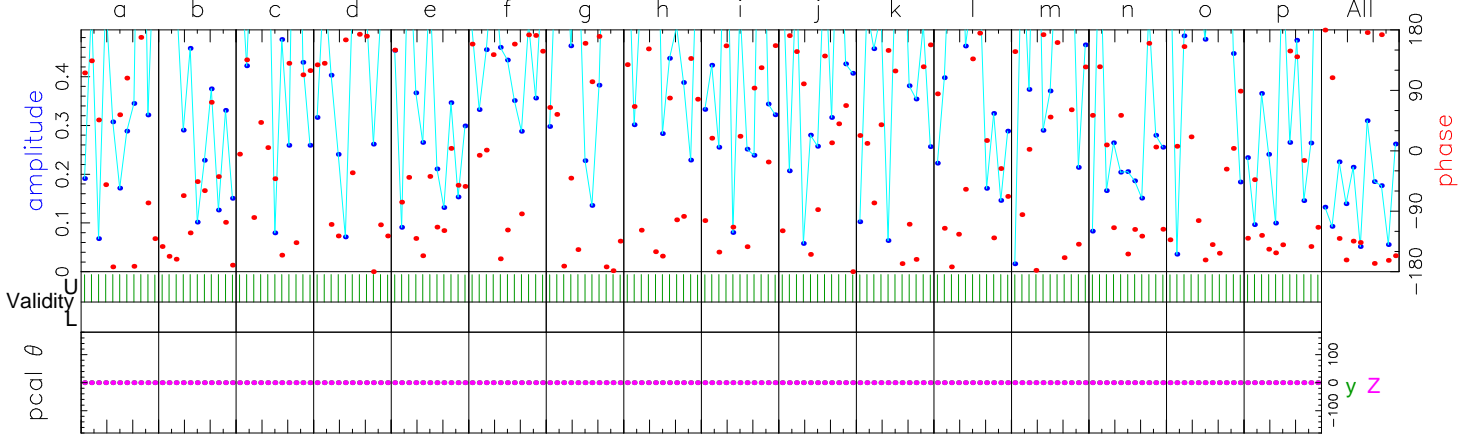


Fringe quality 0

SNR 5.5
Int time 179.730
Amp 0.165
Phase -164.8
PFD 9.9e-01
Delays (us)
SBD 0.146439
MBD 0.011480
Fringe rate (Hz) 0.469524
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

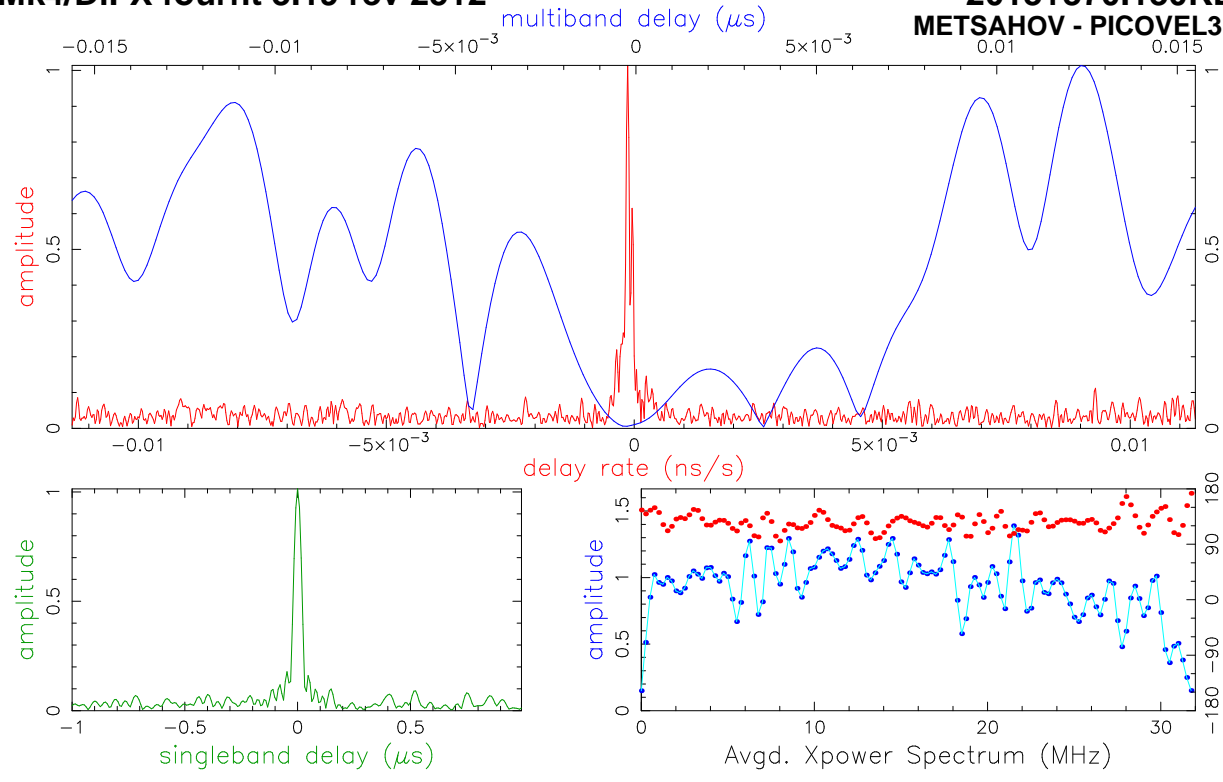
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043740
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-177.1	-129.9	-124.7	-152.8	-69.6	173.9	-172.2	169.0	130.6	141.2	154.8	-142.9	167.6	166.4	-108.2	-141.0		Phase -164.8
	0.2	0.2	0.0	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.3	0.2	0.1	0.2	0.3		Ampl. 0.2
	202.5	94.7	181.5	131.0	215.7	56.6	9.3	163.5	1.4	92.4	16.4	97.1	135.7	237.6	82.7	184.2		Sbd box 147.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			Chan ids
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			Tracks
																		Tracks
Group delay (usec)(sbd)	-3.46928672337E+03			Apriori delay (usec)			-3.46942320352E+03			Resid mbdelay (usec)			1.14802E-02			+/- 2.0E-04		
Sband delay (usec)	-3.46927676452E+03			Apriori clock (usec)			2.9053318E+01			Resid sbdelay (usec)			1.46439E-01			+/- 3.1E-03		
Phase delay (usec)	-3.46942320884E+03			Apriori clockrate (us/s)			8.3707184E-08			Resid phdelay (usec)			-5.31386E-06			+/- 6.7E-07		
Delay rate (us/s)	-1.26513440246E+00			Apriori rate (us/s)			-1.26513985316E+00			Resid rate (us/s)			5.45070E-06			+/- 6.5E-09		
Total phase (deg)	-75.3			Apriori accel (us/s/s)			9.39358477530E-07			Resid phase (deg)			-164.8			+/- 20.8		

ph/seg (deg) RMS Theor. Amplitude 0.165 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.9 60.3 Search (1024X64) 0.145 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.7 41.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.2 72.7 Inc. seg. avg. 0.156 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 y: az 289.7 el 41.8 pa 69.5 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9099.431 -1822.069 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/yZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/yZ.W.170.130KBL simultaneous interpolator

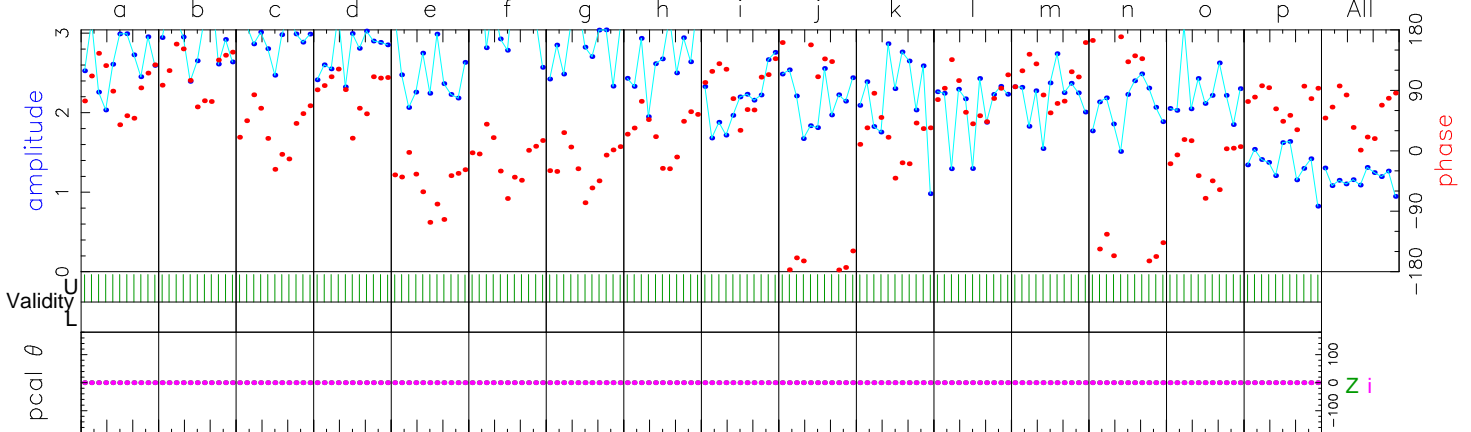


Fringe quality 5

SNR 37.2
Int time 179.730
Amp 1.014
Phase 53.9
PFD 0.0e+00
Delays (us)
SBD 0.000048
MBD 0.012365
Fringe rate (Hz)
-0.011924
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

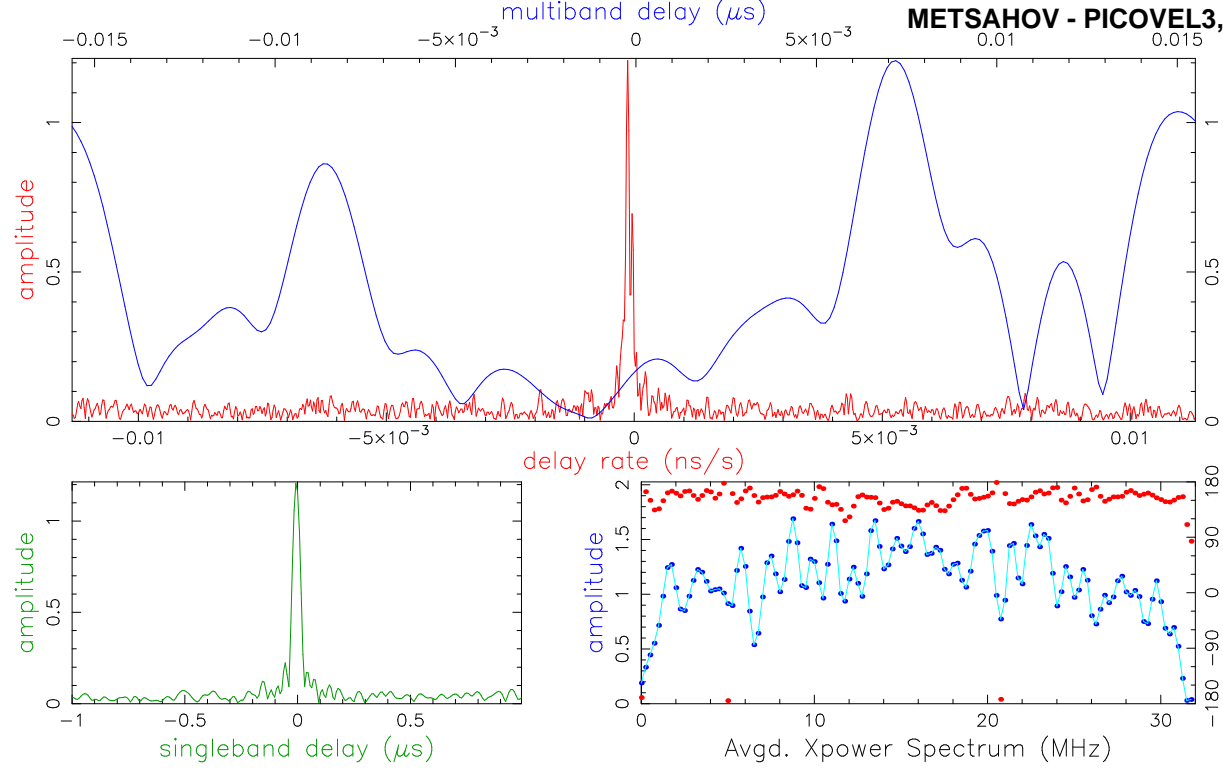
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043736
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	129.4	129.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.4	129.0
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.4	129.0
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	129.4	129.0
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	129.4	129.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.4	129.0
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.4	129.0
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	4.78638598568E+03			Apriori delay (usec)			4.78637362082E+03			Resid mbdelay (usec)			1.23649E-02			+/-	2.9E-05	
Sband delay (usec)	4.78637366832E+03			Apriori clock (usec)			7.2129470E-01			Resid sbdelay (usec)			4.75000E-05			+/-	4.6E-04	
Phase delay (usec)	4.78637362256E+03			Apriori clockrate (us/s)			3.6929281E-07			Resid phdelay (usec)			1.73811E-06			+/-	9.9E-08	
Delay rate (us/s)	-5.18012676462E-01			Apriori rate (us/s)			-5.18012538038E-01			Resid rate (us/s)			-1.38424E-07			+/-	9.6E-10	
Total phase (deg)	305.1			Apriori accel (us/s/s)			-7.32943657118E-06			Resid phase (deg)			53.9			+/-	3.1	

ph/seg (deg) 30.4 5.1 Search (1024X64) 0.987 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 18.5 8.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 70.8 6.2 Inc. seg. avg. 1.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 112.9 10.8 Inc. frq. avg. 2.085 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 113.3 el 55.6 pa -34.9 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 3725.001 1411.618 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Zi..130KBL Output file: /Exps/c192c/v2/1234/No0011/Zi.W.151.130KBL

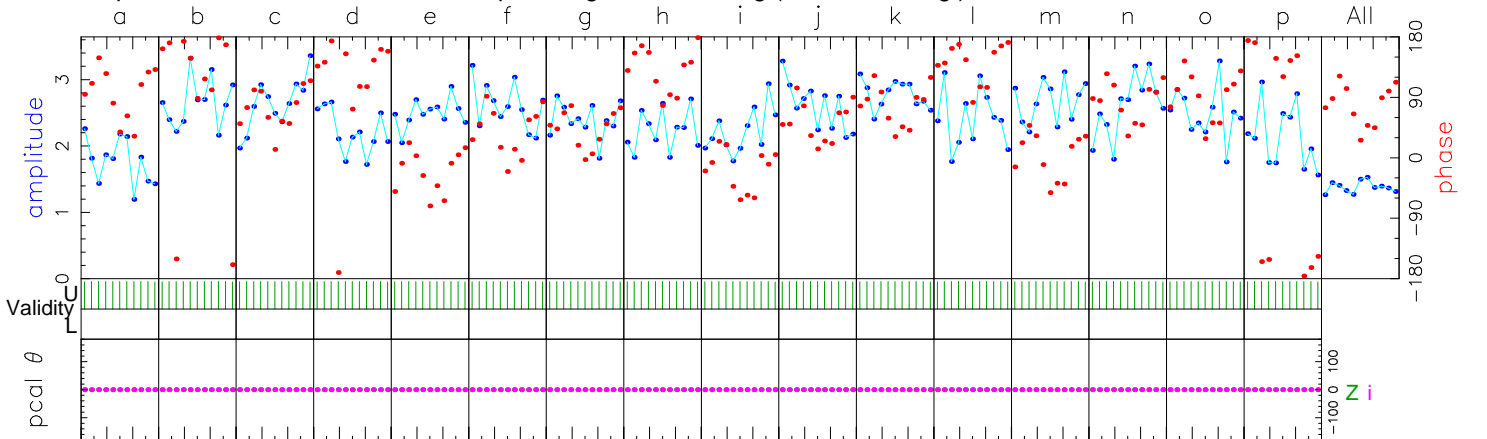


Fringe quality 3

SNR 44.5
 Int time 179.730
 Amp 1.215
 Phase 79.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.005726
 MBD 0.007181
 Fringe rate (Hz)
 -0.012064
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043738
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

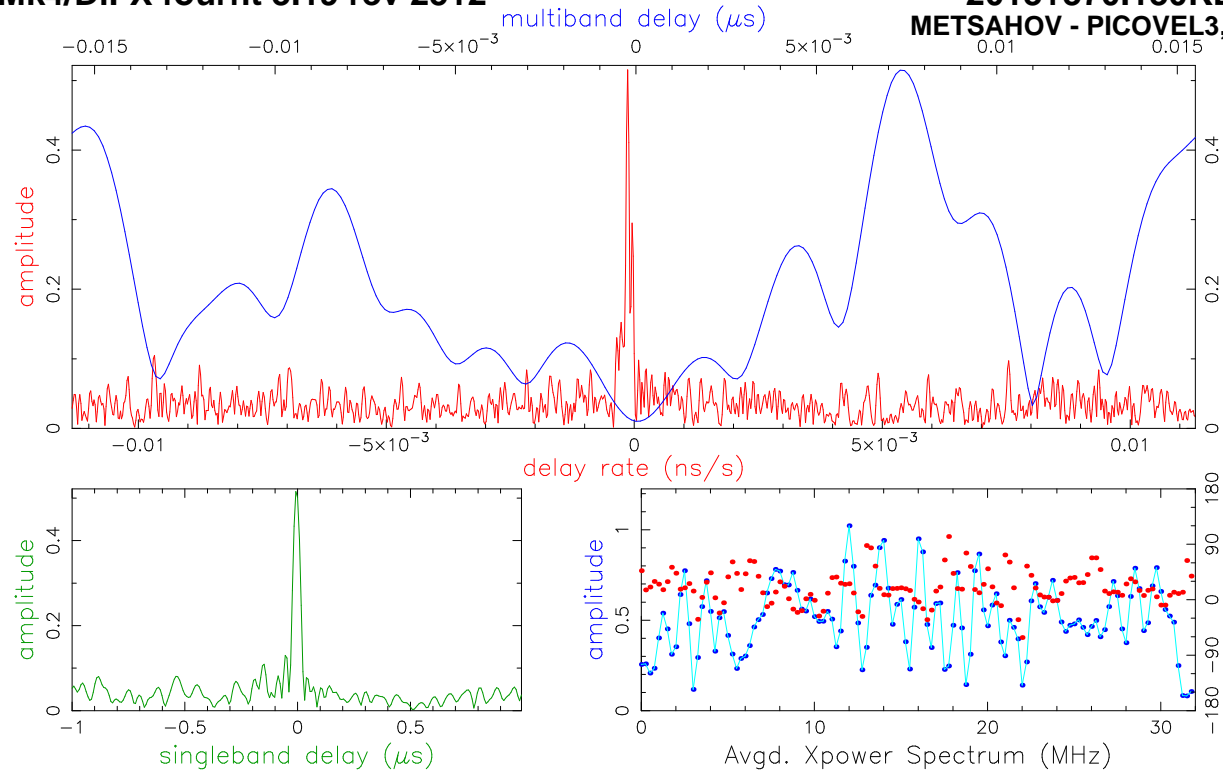


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	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
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Tracks
Group delay (usec)(sbd)	4.78638080171E+03			Apriori delay (usec)			4.78637362082E+03			Resid mbdelay (usec)			7.18089E-03			+/-	2.4E-05	
Sband delay (usec)	4.78636789482E+03			Apriori clock (usec)			7.2129470E-01			Resid sbdelay (usec)			-5.72600E-03			+/-	3.9E-04	
Phase delay (usec)	4.78637362337E+03			Apriori clockrate (us/s)			3.6929281E-07			Resid phdelay (usec)			2.54724E-06			+/-	8.3E-08	
Delay rate (us/s)	-5.18012678088E-01			Apriori rate (us/s)			-5.18012538038E-01			Resid rate (us/s)			-1.40049E-07			+/-	8.0E-10	
Total phase (deg)	330.2			Apriori accel (us/s/s)			-7.32943657118E-06			Resid phase (deg)			79.0			+/-	2.6	

ph/seg (deg) RMS Theor. Amplitude 1.215 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.0 4.3 Search (1024X64) 1.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.3 7.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 62.1 5.1 Inc. seg. avg. 1.378 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 74.4 9.0 Inc. frq. avg. 2.081 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 113.3 el 55.6 pa -34.9 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 3725.001 1411.618 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Zi..130KBL Output file: /Exps/c192c/v2/1234/No0011/Zi.W.162.130KBL

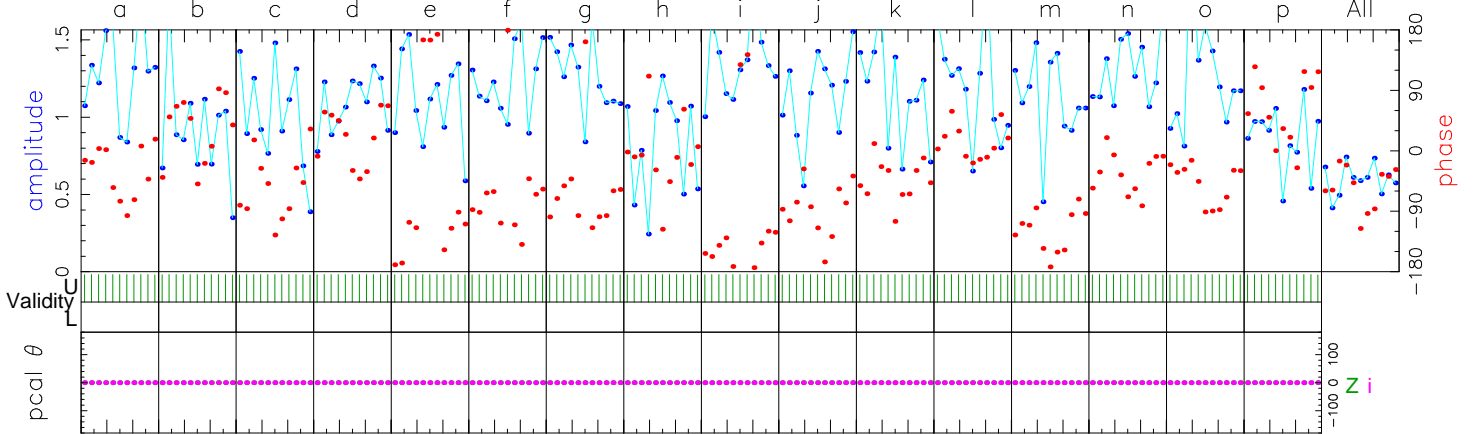


Fringe quality 8

SNR 19.1
 Int time 179.730
 Amp 0.522
 Phase -54.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.005001
 MBD 0.007395
 Fringe rate (Hz)
 -0.012086
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043739
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

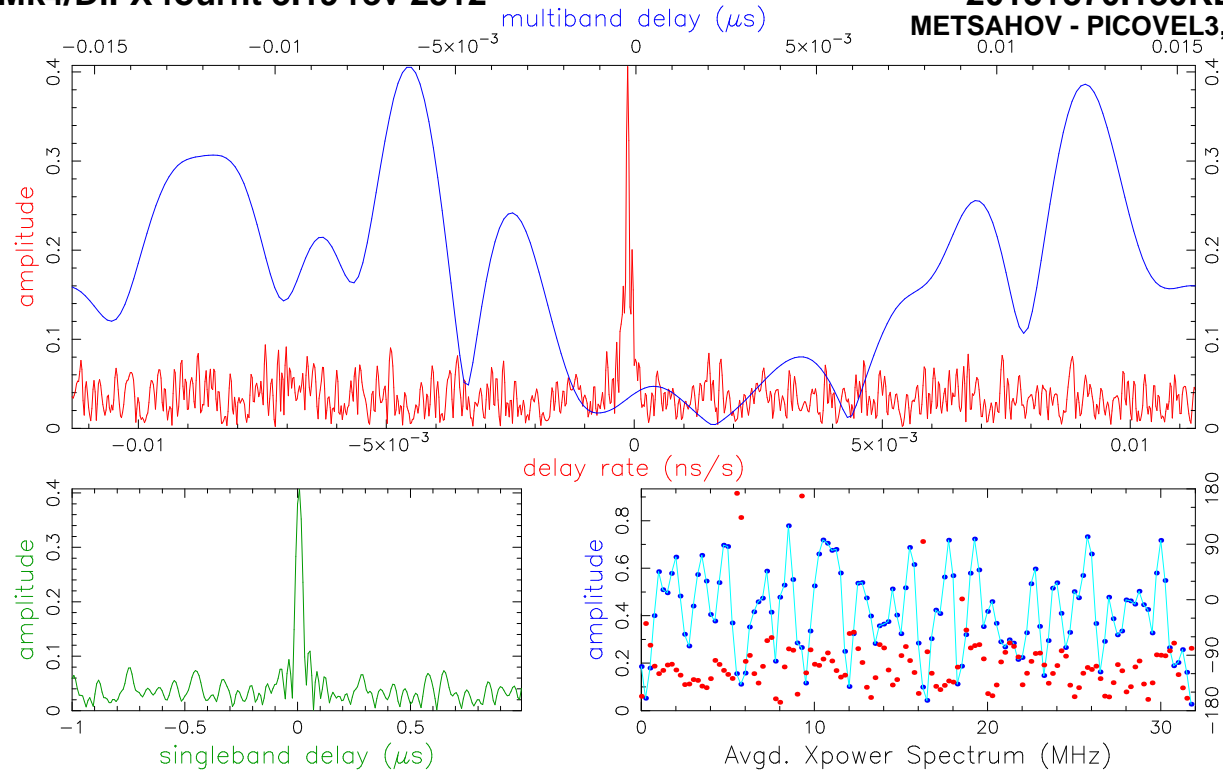


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-25.4	41.3	-61.4	20.4	-143.2	-89.2	-83.4	-21.9	-158.4	-90.3	-41.6	11.0	-118.0	-32.5	-48.3	68.1		Phase -54.3	
	1.1	0.7	0.7	0.8	0.9	1.0	1.1	0.6	1.1	0.9	1.0	1.1	1.0	1.1	1.1	0.6		Ampl. 0.9	
	128.3	129.4	129.1	129.0	128.7	128.6	129.0	129.8	128.8	128.9	129.2	128.9	129.3	128.9	129.3	129.3		Sbd box 128.4	
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
Z	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 phase	
Zi	0:0	0:0	0:0	0:0	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	
i	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	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)		4.78638101584E+03							4.78637362082E+03									Resid mbdelay (usec)	7.39501E-03 +/- 5.6E-05
Sband delay (usec)		4.78636861932E+03							7.2129470E-01									Resid sbdelay (usec)	-5.00150E-03 +/- 9.0E-04
Phase delay (usec)		4.78637361907E+03							3.6929281E-07									Resid phdelay (usec)	-1.75131E-06 +/- 1.9E-07
Delay rate (us/s)		-5.18012678350E-01							-5.18012538038E-01									Resid rate (us/s)	-1.40311E-07 +/- 1.9E-09
Total phase (deg)			196.9						-7.32943657118E-06									Resid phase (deg)	-54.3 +/- 6.0

ph/seg (deg) RMS Theor. Amplitude 0.522 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.7 9.9 Search (1024X64) 0.501 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.5 17.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 66.9 12.0 Inc. seg. avg. 0.589 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 85.0 20.9 Inc. frq. avg. 0.904 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 113.3 el 55.6 pa -34.9 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 3725.001 1411.618 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Zi..130KBL Output file: /Exps/c192c/v2/1234/No0011/Zi.W.168.130KBL

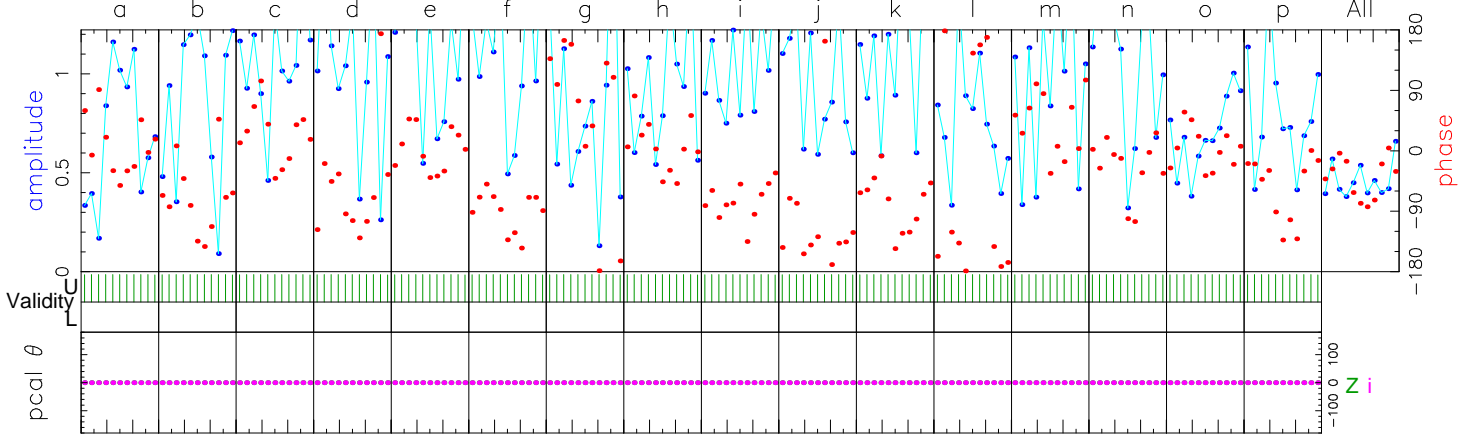


Fringe quality 9

SNR 14.9
Int time 179.730
Amp 0.407
Phase -39.6
PFD 6.0e-42
Delays (us)
SBD 0.006435
MBD -0.006290
Fringe rate (Hz)
-0.011748
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043741
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

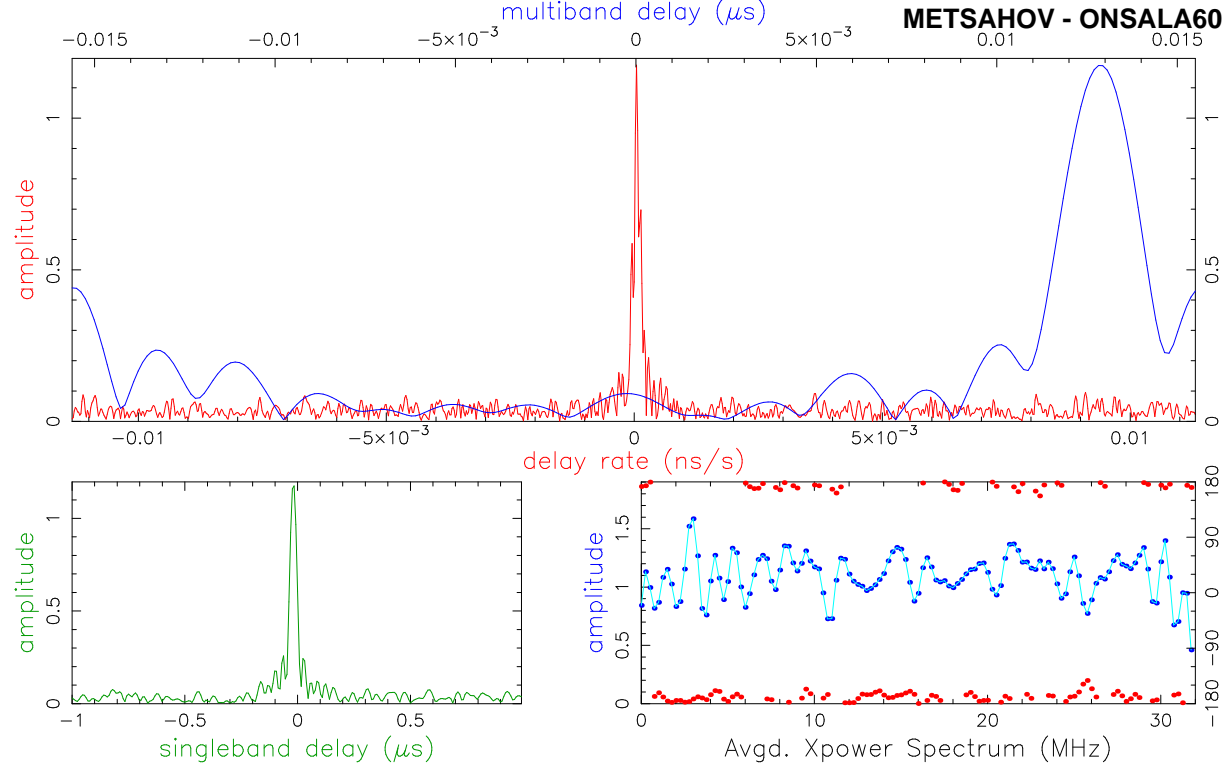


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-10.0	-84.7	23.8	-69.9	7.0	-84.2	115.7	6.8	-74.1	-130.1	-77.6	-171.4	45.6	-13.8	0.6	-45.9	Phase	-39.6	
	0.6	0.7	0.9	0.8	1.0	1.0	0.6	0.7	0.9	0.8	0.9	0.7	0.9	0.7	0.9	0.6	0.6	Ampl.	0.8
	129.4	128.9	129.2	129.1	129.4	129.1	129.0	129.2	129.0	129.6	129.4	128.9	129.0	129.6	129.3	129.7	Sbd box	129.8	
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
Z	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		
Z: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		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
i	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		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		

Group delay (usec)(sbd) 4.78636733103E+03 Apriori delay (usec) 4.78637362082E+03 Resid mbdelay (usec) -6.28980E-03 +/- 7.2E-05
 Sband delay (usec) 4.78638005632E+03 Apriori clock (usec) 7.2129470E-01 Resid sbdelay (usec) 6.43550E-03 +/- 1.2E-03
 Phase delay (usec) 4.78637361955E+03 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) -1.27736E-06 +/- 2.5E-07
 Delay rate (us/s) -5.18012674422E-01 Apriori rate (us/s) -5.18012538038E-01 Resid rate (us/s) -1.36383E-07 +/- 2.4E-09
 Total phase (deg) 211.6 Apriori accel (us/s/s) -7.32943657118E-06 Resid phase (deg) -39.6 +/- 7.7

RMS Theor. Amplitude 0.407 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.4 12.7 Search (1024X64) 0.402 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 24.7 22.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 73.7 15.3 Inc. seg. avg. 0.451 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 98.8 26.8 Inc. frq. avg. 0.755 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 113.3 el 55.6 pa -34.9 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 3725.001 1411.618 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Zi..130KBL Output file: /Exps/c192c/v2/1234/No0011/Zi.W.173.130KBL

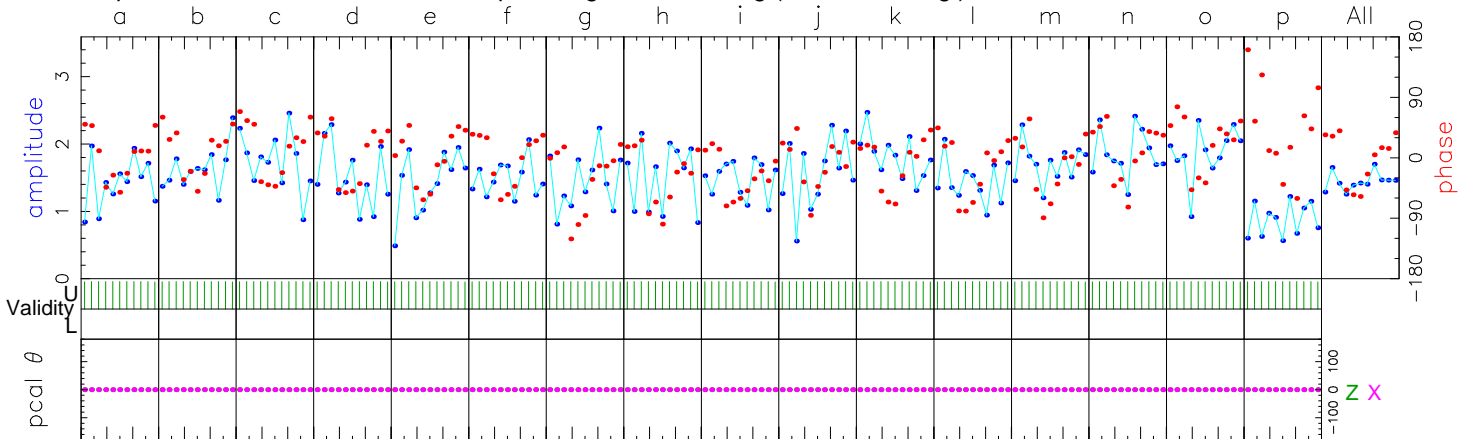


Fringe quality 5

SNR 43.9
 Int time 179.688
 Amp 1.197
 Phase 1.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.018995
 MBD 0.012853
 Fringe rate (Hz) 0.004162
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

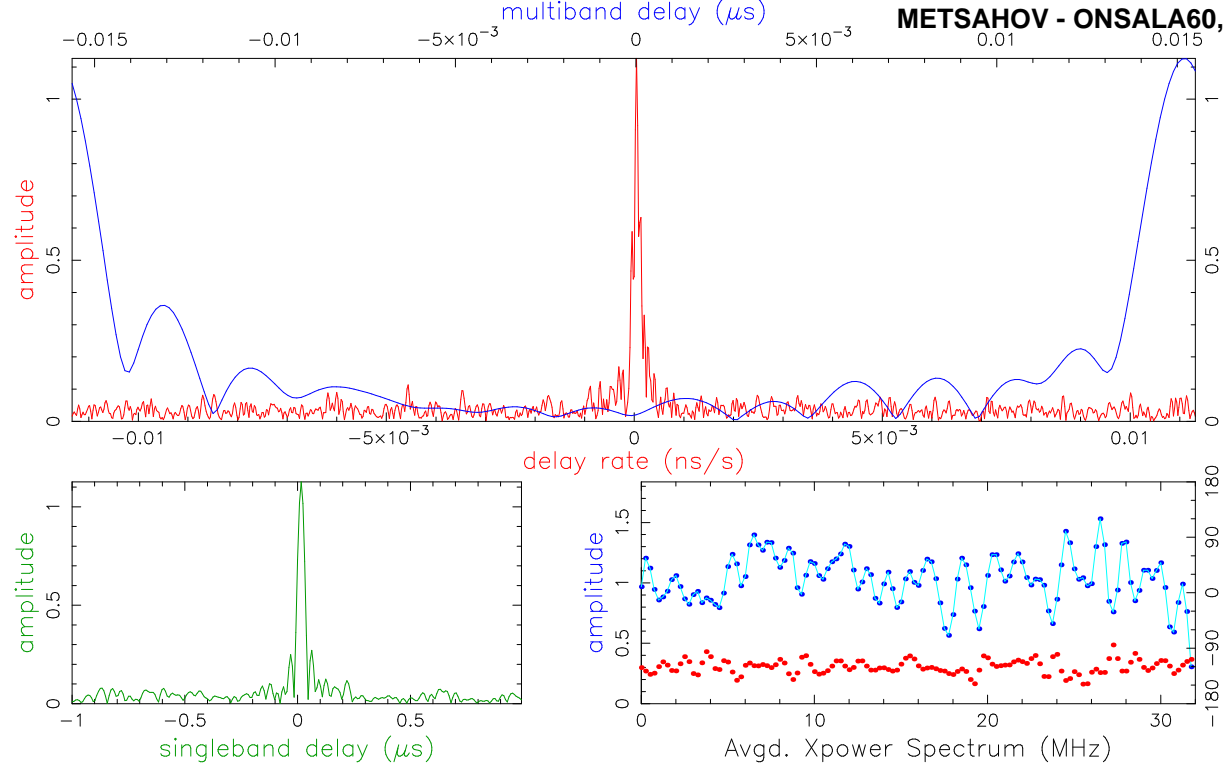
Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043736
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	126.6	126.6
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	126.9	126.9
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	126.8	126.8
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	126.7	126.7
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	126.5	126.5
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	126.3	126.3
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	126.6	126.6
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	126.3	126.3
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	126.6	126.6
Group delay (usec)(sbd)	1.19328427319E+03			Apriori delay (usec)			1.19330267059E+03			Resid mbdelay (usec)			1.28526E-02			+/- 2.5E-05		
Sband delay (usec)	1.19328367509E+03			Apriori clock (usec)			-3.2213955E+01			Resid sbdelay (usec)			-1.89955E-02			+/- 3.9E-04		
Phase delay (usec)	1.19330267065E+03			Apriori clockrate (us/s)			-5.1170721E-07			Resid phdelay (usec)			5.63618E-08			+/- 8.4E-08		
Delay rate (us/s)	-1.33330659605E-01			Apriori rate (us/s)			-1.33330707920E-01			Resid rate (us/s)			4.83151E-08			+/- 8.1E-10		
Total phase (deg)	17.9			Apriori accel (us/s/s)			-4.76877564194E-06			Resid phase (deg)			1.7			+/- 2.6		

ph/seg (deg) 36.8 4.3 Search (1024X64) 1.153 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 23.4 7.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.9 5.2 Inc. seg. avg. 1.443 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.4 9.1 Inc. frq. avg. 1.220 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 113.3 el 55.6 pa -34.9 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 956.005 -109.933 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZX..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZX.W.152.130KBL

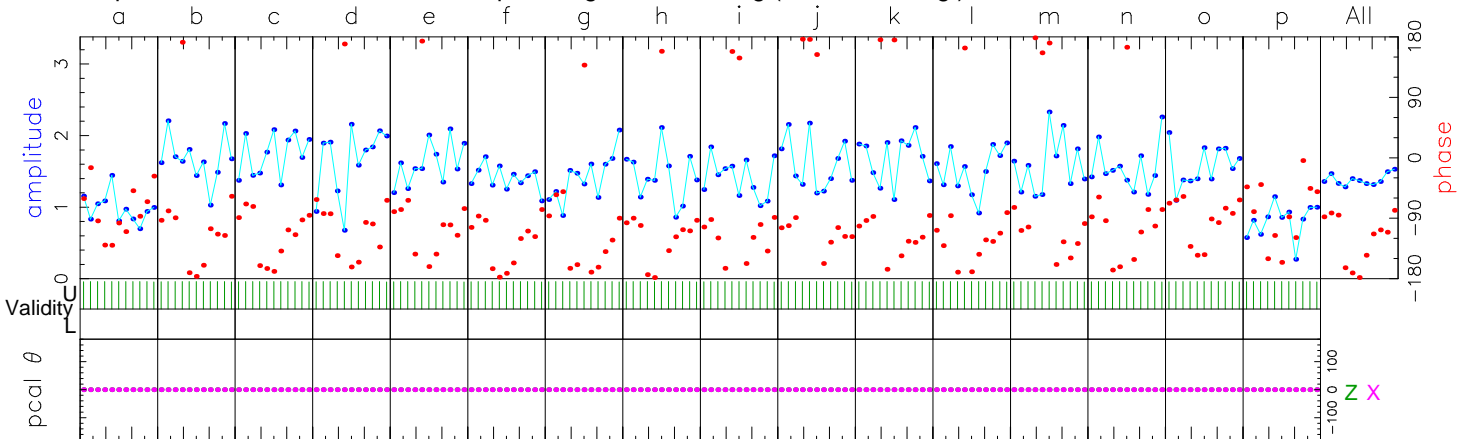


Fringe quality 5

SNR 41.3
 Int time 179.688
 Amp 1.127
 Phase -118.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.015592
 MBD 0.015200
 Fringe rate (Hz) 0.004208
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build 2020:076:014755
 2020:086:043738
 2020:014:135814
 RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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



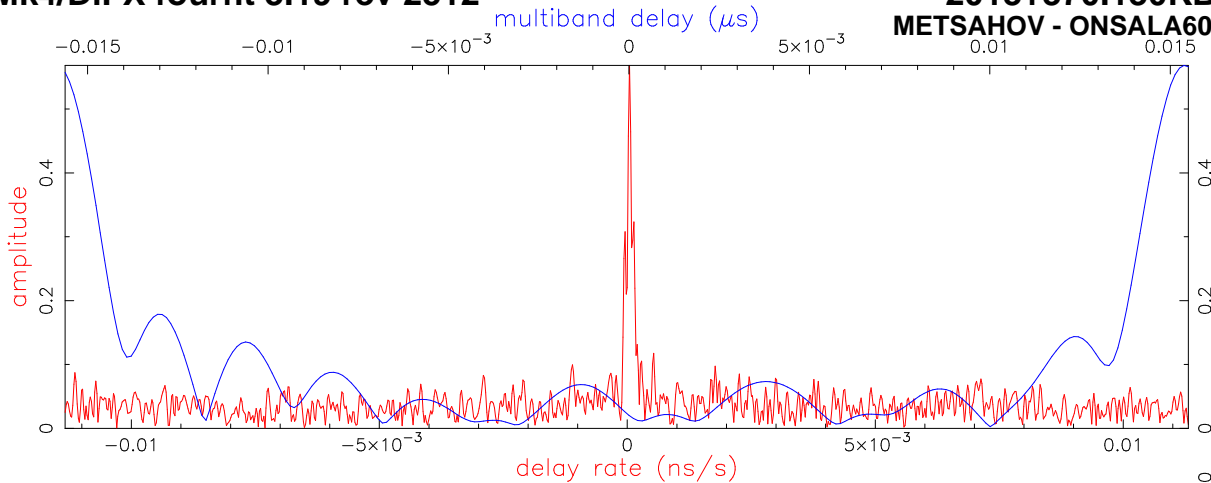
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-82.8	-120.3	-113.9	-111.6	-114.0	-124.7	-132.5	-128.5	-132.9	-130.8	-126.1	-126.1	-137.5	-110.6	-91.3	-80.1	Phase	-118.3
	0.8	1.3	1.4	1.3	1.3	1.2	1.0	1.1	1.1	1.3	1.4	1.3	1.2	1.2	1.4	0.6	Ampl.	1.2
	130.1	131.1	130.6	130.8	130.7	131.0	130.8	131.1	130.5	131.0	131.0	130.8	130.7	131.4	131.3	131.8	Sbd box	131.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
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	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) 1.19331787094E+03 Apriori delay (usec) 1.19330267059E+03 Resid mbdelay (usec) 1.52003E-02 +/- 2.6E-05
 Sband delay (usec) 1.19331826209E+03 Apriori clock (usec) -3.2213955E-01 Resid sbdelay (usec) 1.55915E-02 +/- 4.2E-04
 Phase delay (usec) 1.19330266678E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -3.81527E-06 +/- 8.9E-08
 Delay rate (us/s) -1.33330659074E-01 Apriori rate (us/s) -1.33330707920E-01 Resid rate (us/s) 4.88465E-08 +/- 8.6E-10
 Total phase (deg) -102.2 Apriori accel (us/s/s) -4.76877564194E-06 Resid phase (deg) -118.3 +/- 2.8

RMS Theor. Amplitude 1.127 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 36.0 4.6 Search (1024X64) 1.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 23.9 8.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 18.5 5.5 Inc. seg. avg. 1.381 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 20.0 9.7 Inc. frq. avg. 1.162 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

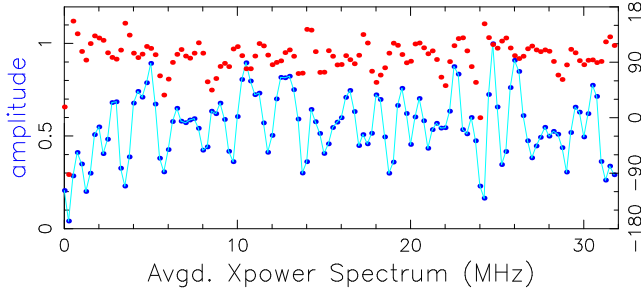
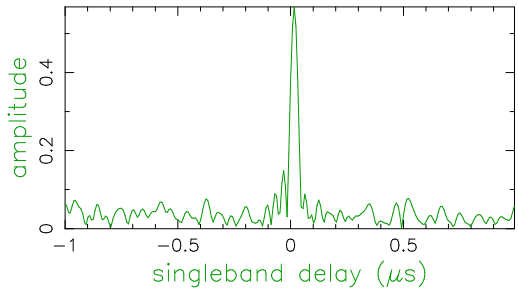
Z: az 113.3 el 55.6 pa -34.9 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 956.005 -109.933 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZX..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZX.W.165.130KBL



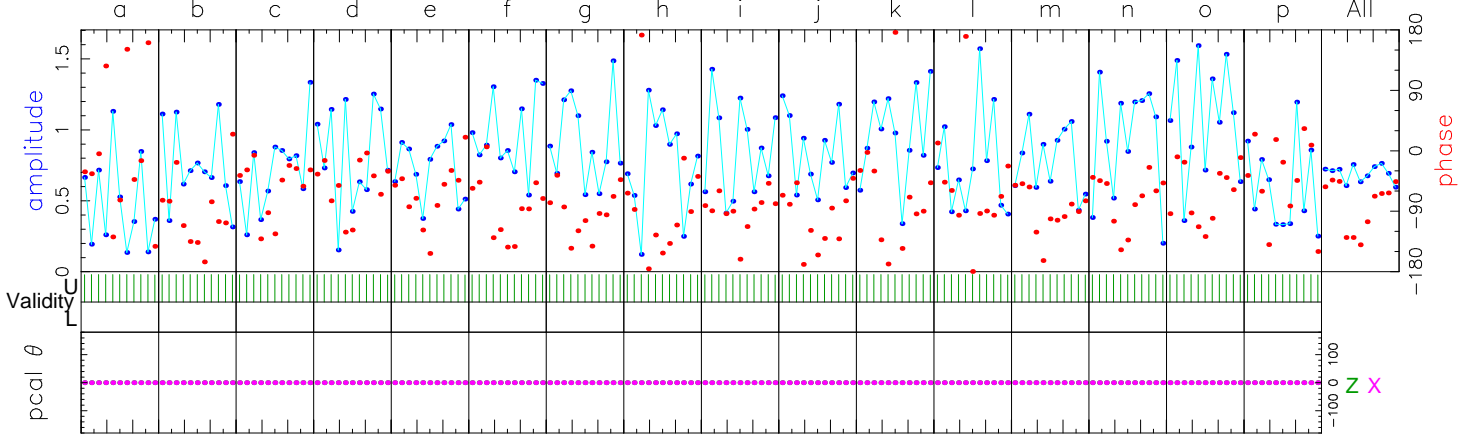
Fringe quality 7

SNR 20.8
 Int time 179.688
 Amp 0.568
 Phase -78.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.015683
 MBD -0.015850
 Fringe rate (Hz)
 0.004210
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043740
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-60.4	-95.3	-45.6	-52.4	-61.9	-82.7	-93.2	-118.0	-90.3	-100.5	-86.0	-82.5	-87.8	-70.4	-66.0	-33.9		Phase -78.2
	0.2	0.5	0.6	0.7	0.6	0.7	0.8	0.5	0.7	0.6	0.5	0.7	0.7	0.7	0.8	0.4		Ampl. 0.6
	128.7	130.7	131.7	131.4	132.1	131.5	131.1	131.0	131.2	131.6	130.7	130.6	131.2	131.3	130.3	130.2		Sbd box 131.0
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	1.19331807085E+03			Apriori delay (usec)			1.19330267059E+03			Resid mbdelay (usec)			-1.58497E-02			+/- 5.2E-05		
Sband delay (usec)	1.19331835359E+03			Apriori clock (usec)			-3.2213955E+01			Resid sbdelay (usec)			1.56830E-02			+/- 8.3E-04		
Phase delay (usec)	1.19330266807E+03			Apriori clockrate (us/s)			-5.1170721E-07			Resid phdelay (usec)			-2.52333E-06			+/- 1.8E-07		
Delay rate (us/s)	-1.33330659042E-01			Apriori rate (us/s)			-1.33330707920E-01			Resid rate (us/s)			4.88777E-08			+/- 1.7E-09		
Total phase (deg)	-62.1			Apriori accel (us/s/s)			-4.76877564194E-06			Resid phase (deg)			-78.2			+/- 5.5		

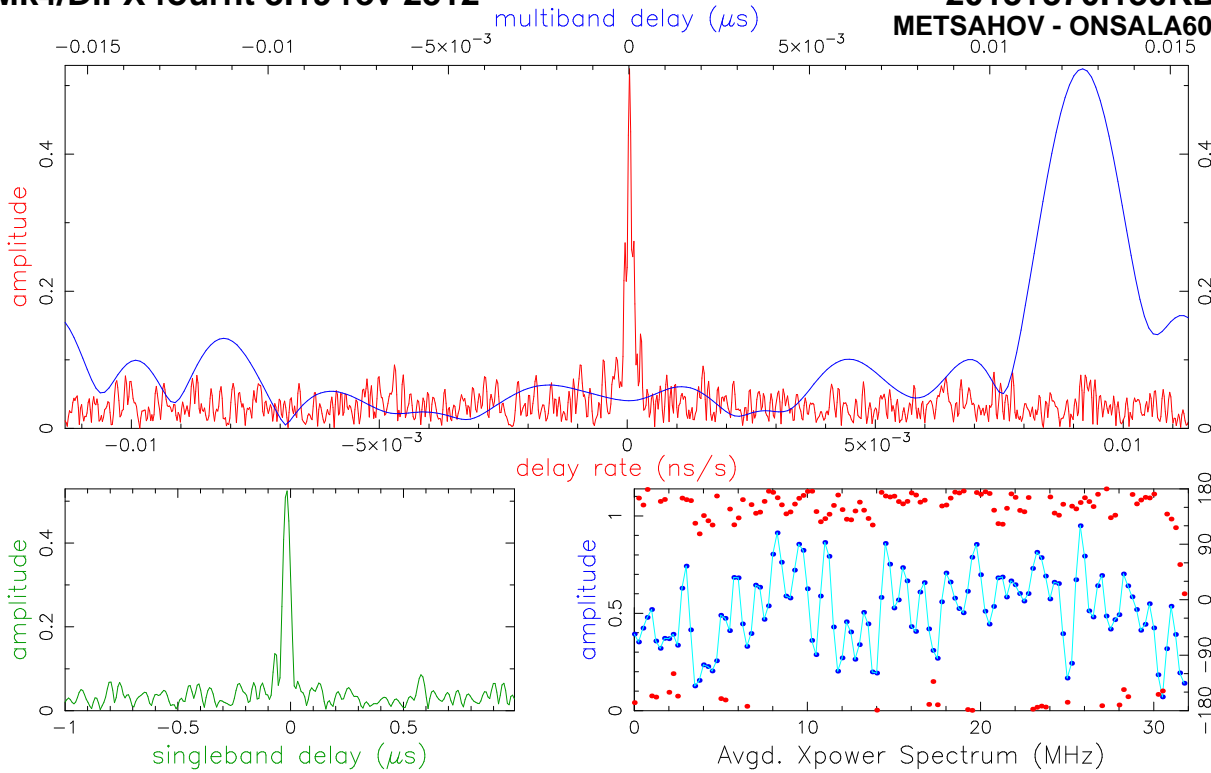
ph/seg (deg) RMS Theor. Amplitude 0.568 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 24.0 15.9 Search (1024X64) 0.552 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.0 11.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 26.3 19.2 Inc. seg. avg. 0.685 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.594 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 113.3 el 55.6 pa -34.9 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 956.005 -109.933 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZX..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZX.W.171.130KBL

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, ZX
 METSAHOV - ONSALA60, fgroup W, pol RL

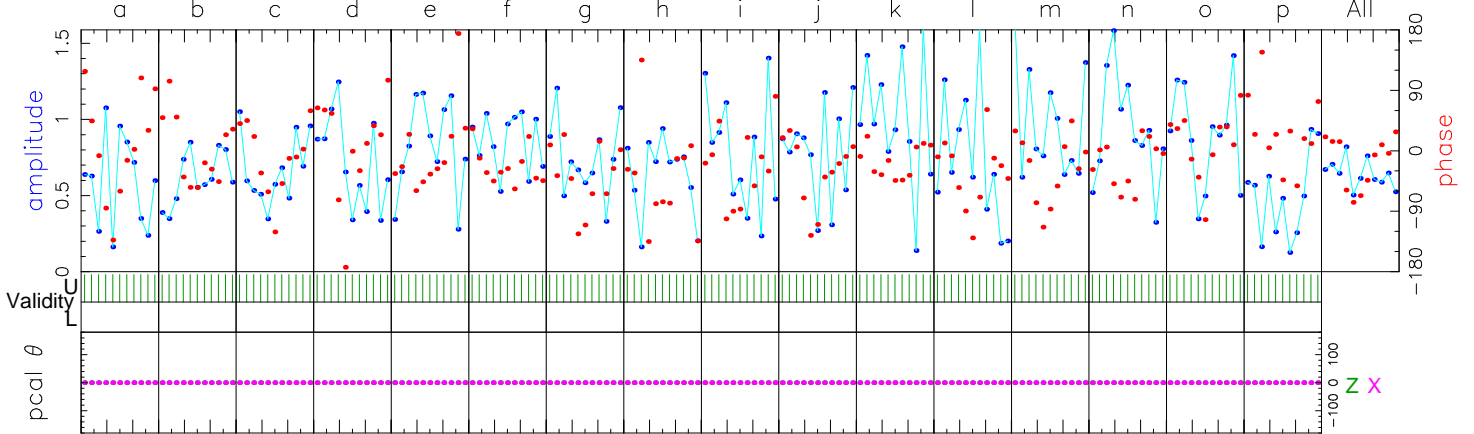


Fringe quality 8

SNR 19.4
 Int time 179.688
 Amp 0.529
 Phase -15.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.018256
 MBD 0.012525
 Fringe rate (Hz)
 0.004192
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043742
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



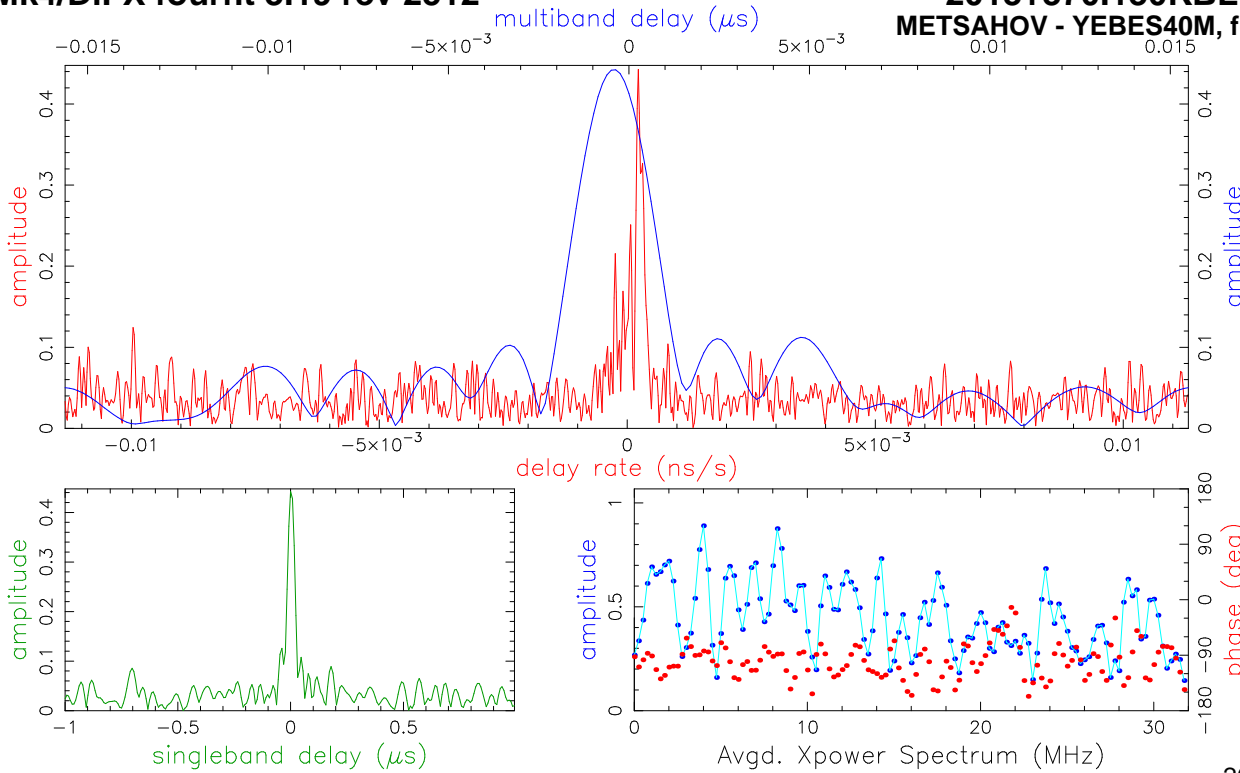
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-4.6	-12.1	3.4	34.4	-18.3	-24.7	-29.3	-53.5	-30.5	-19.4	-16.2	-41.2	-20.5	-22.7	21.2	26.3		Phase	-15.1
	0.2	0.4	0.5	0.4	0.7	0.8	0.5	0.4	0.5	0.6	0.9	0.5	0.7	0.8	0.7	0.4		Ampl.	0.5
	197.2	126.3	126.9	124.8	126.7	126.4	126.1	11.1	126.7	127.4	126.5	126.0	128.0	127.3	126.8	128.4		Sbd box	126.7
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		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	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) 1.19328394600E+03 Apriori delay (usec) 1.19330267059E+03 Resid mbdelay (usec) 1.25254E-02 +/- 5.6E-05
 Sband delay (usec) 1.19328441459E+03 Apriori clock (usec) -3.2213955E+01 Resid sbdelay (usec) -1.82560E-02 +/- 8.9E-04
 Phase delay (usec) 1.19330267011E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -4.86342E-07 +/- 1.9E-07
 Delay rate (us/s) -1.33330659254E-01 Apriori rate (us/s) -1.33330707920E-01 Resid rate (us/s) 4.86666E-08 +/- 1.8E-09
 Total phase (deg) 1.1 Apriori accel (us/s/s) -4.76877564194E-06 Resid phase (deg) -15.1 +/- 5.9

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

Z: az 113.3 el 55.6 pa -34.9 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 956.005 -109.933 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZX..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZX.W.175.130KBL

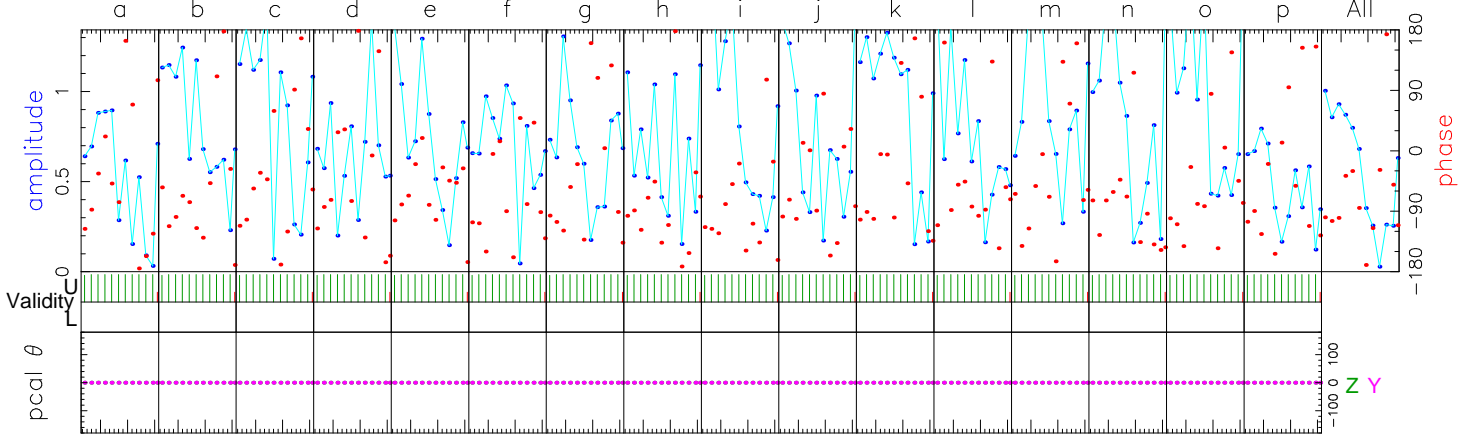


Fringe quality 9

SNR 15.6
 Int time 162.301
 Amp 0.448
 Phase -86.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.002609
 MBD -0.000390
 Fringe rate (Hz)
 0.018676
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150016.89
 Stop 150259.71
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043736
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-68.8	-96.6	-79.9	-85.2	-57.0	-92.2	-100.0	-106.3	-95.9	-83.8	-72.8	-91.4	-80.7	-86.8	-82.1	-99.6		Phase	-86.4				
	0.2	0.6	0.5	0.3	0.5	0.4	0.3	0.5	0.6	0.5	0.4	0.5	0.4	0.7	0.6	0.3		Ampl.	0.4				
	84.7	129.1	129.7	131.6	128.9	130.1	222.2	129.6	128.8	129.0	129.9	129.3	130.1	129.4	128.6	126.9		Sbd box	129.3				
UL	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used					
Z	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					
Z: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					
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Group delay (usec)(sbd)		4.35063363449E+03																Apriori delay (usec)	4.35063402439E+03	Resid mbdelay (usec)	-3.89901E-04	+/-	6.9E-05
Sband delay (usec)		4.35063663339E+03																Apriori clock (usec)	-9.4923792E+00	Resid sbdelay (usec)	2.60900E-03	+/-	1.1E-03
Phase delay (usec)		4.35063402160E+03																Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	-2.78651E-06	+/-	2.4E-07
Delay rate (us/s)		-4.72642780557E-01																Apriori rate (us/s)	-4.72642997370E-01	Resid rate (us/s)	2.16813E-07	+/-	2.5E-09
Total phase (deg)				223.5														Apriori accel (us/s/s)	-8.26677588646E-06	Resid phase (deg)	-86.4	+/-	7.3

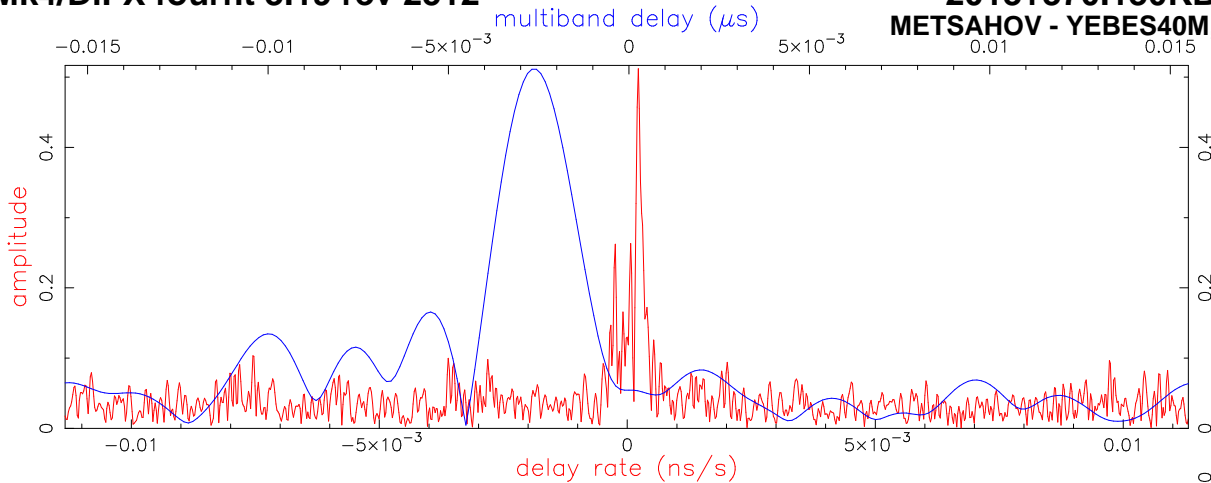
ph/seg (deg) RMS Theor. Amplitude 0.448 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.6 12.7 Search (1024X64) 0.438 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 77.6 22.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 13.3 14.7 Inc. seg. avg. 0.560 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.3 25.7 Inc. frq. avg. 0.438 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 113.3 el 55.6 pa -34.9 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 3397.228 1027.040 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZY..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZY.W.156.130KBL

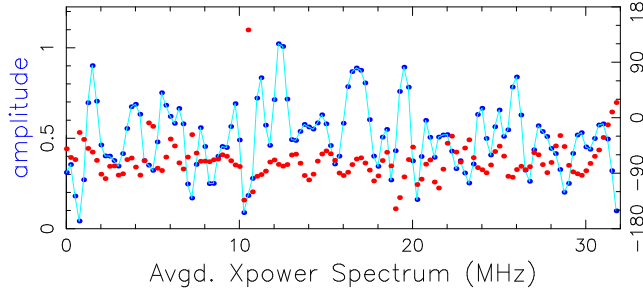
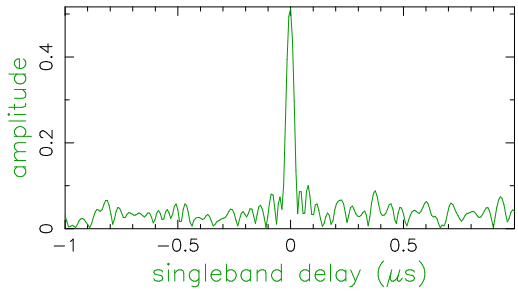
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, ZY
 METSAHOV - YEBES40M, fgroup W, pol RR



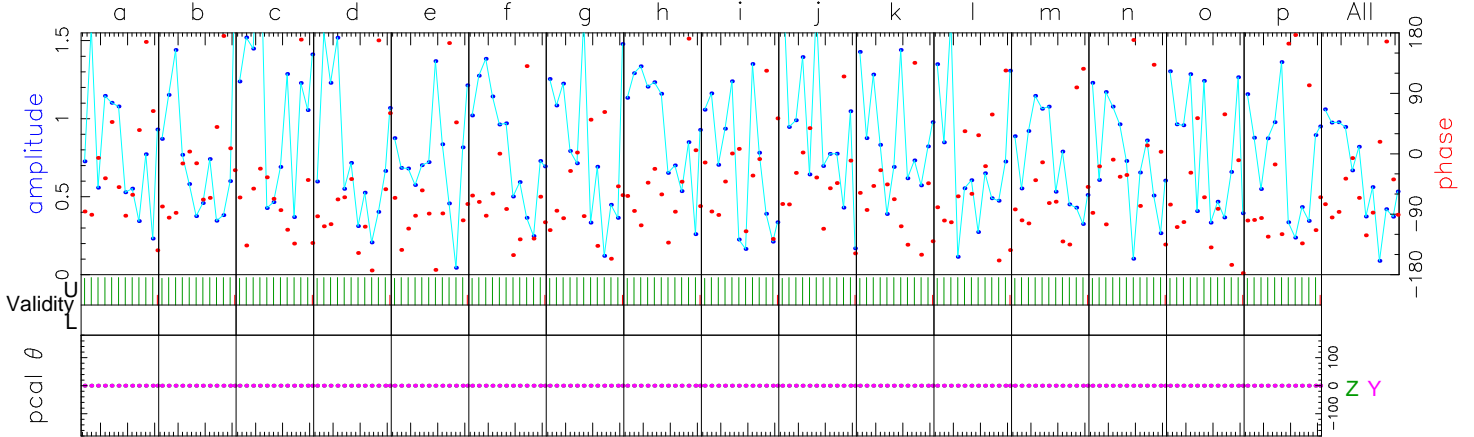
Fringe quality 7

SNR 18.0
 Int time 162.301
 Amp 0.517
 Phase -71.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002450
 MBD -0.002625
 Fringe rate (Hz)
 0.018406
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150016.89
 Stop 150259.71
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043738
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



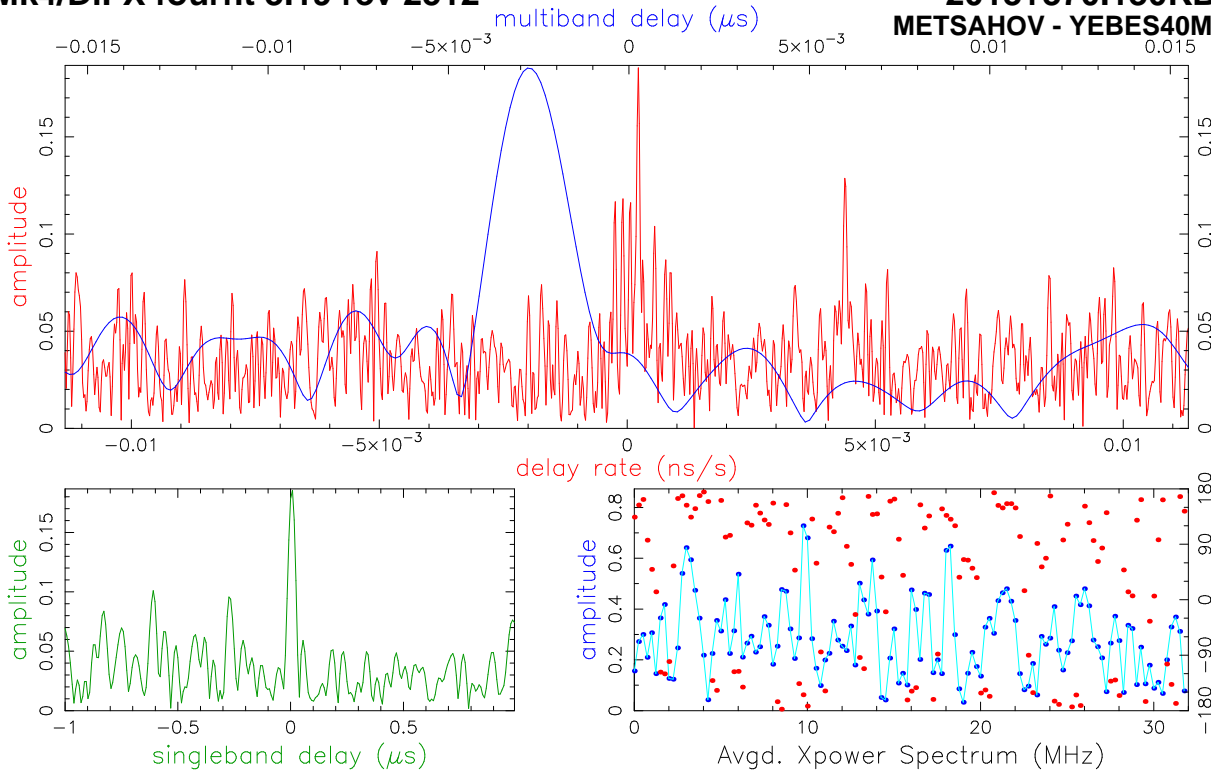
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-54.9	-54.4	-78.3	-89.0	-107.4	-77.2	-84.0	-72.8	-35.3	-39.8	-77.7	-82.4	-76.5	-47.7	-67.3	-106.7		Phase	-71.9				
	0.4	0.5	0.7	0.6	0.5	0.6	0.6	0.7	0.5	0.7	0.6	0.3	0.5	0.5	0.5	0.5		Ampl.	0.5				
	130.9	127.8	128.8	129.0	129.1	128.3	128.7	129.2	127.9	128.8	128.6	244.3	128.5	127.6	128.9	129.1		Sbd box	128.7				
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used					
Z	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					
Z: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					
Z: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					
Z	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					
Z	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)			4.35063139946E+03															Apriori delay (usec)	4.35063402439E+03	Resid mbdelay (usec)	-2.62493E-03	+/-	6.0E-05
Sband delay (usec)			4.35063157389E+03															Apriori clock (usec)	-9.4923792E+00	Resid sbdelay (usec)	-2.45050E-03	+/-	9.6E-04
Phase delay (usec)			4.35063402207E+03															Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	-2.31812E-06	+/-	2.1E-07
Delay rate (us/s)			-4.72642783697E-01															Apriori rate (us/s)	-4.72642997370E-01	Resid rate (us/s)	2.13673E-07	+/-	2.2E-09
Total phase (deg)					238.0													Apriori accel (us/s/s)	-8.26677588646E-06	Resid phase (deg)	-71.9	+/-	6.4

ph/seg (deg) RMS Theor. Amplitude 0.517 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.2 19.2 Search (1024X64) 0.496 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.9 12.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 22.0 22.2 Inc. seg. avg. 0.644 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 113.3 el 55.6 pa -34.9 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 3397.228 1027.040 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZY..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZY.W.167.130KBL

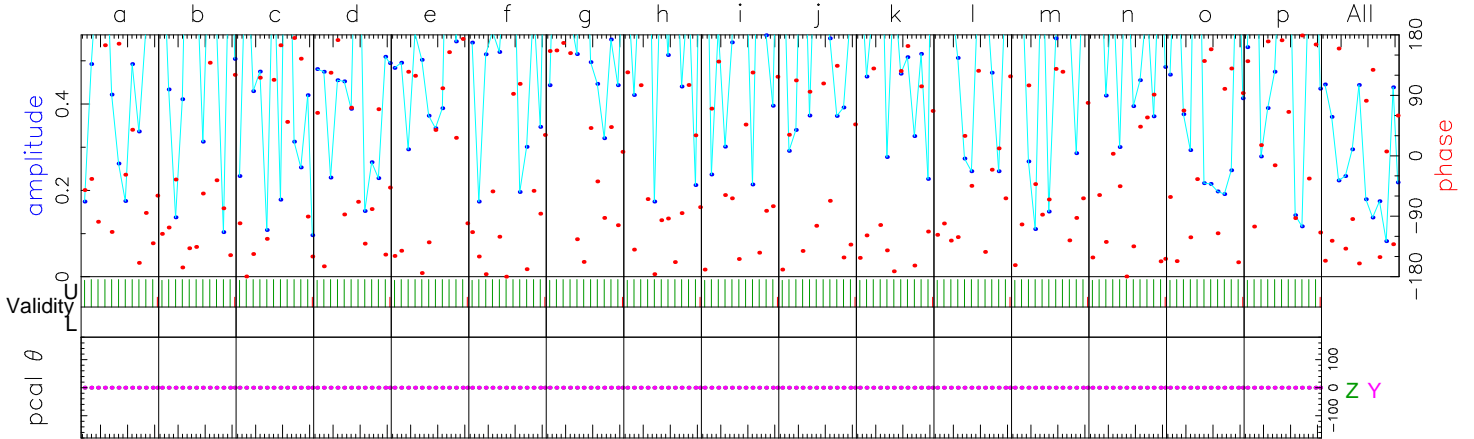
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, ZY
 METSAHOV - YEBES40M, fgroup W, pol LR



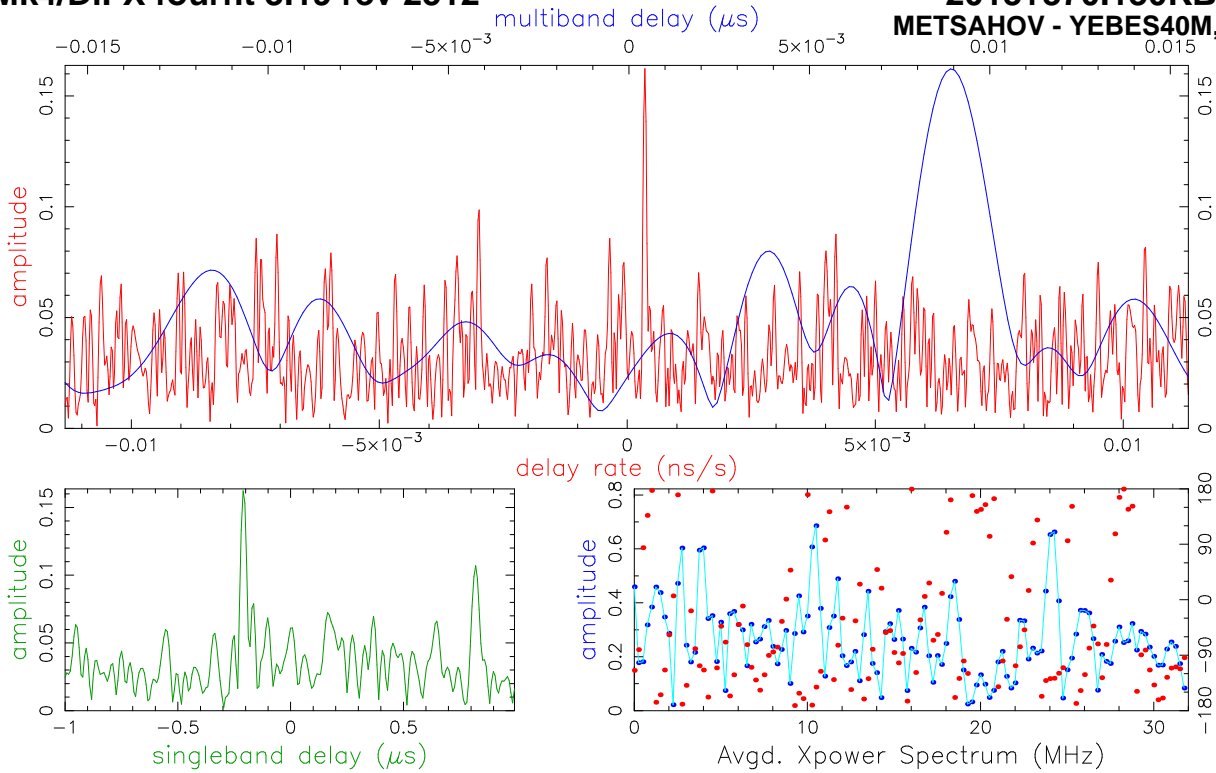
Fringe quality 0
 SNR 6.5
 Int time 162.301
 Amp 0.187
 Phase -150.1
 PFD 1.1e-02
 Delays (us)
 SBD 0.005678
 MBD -0.002756
 Fringe rate (Hz)
 0.019503
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150016.89
 Stop 150259.71
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043740
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



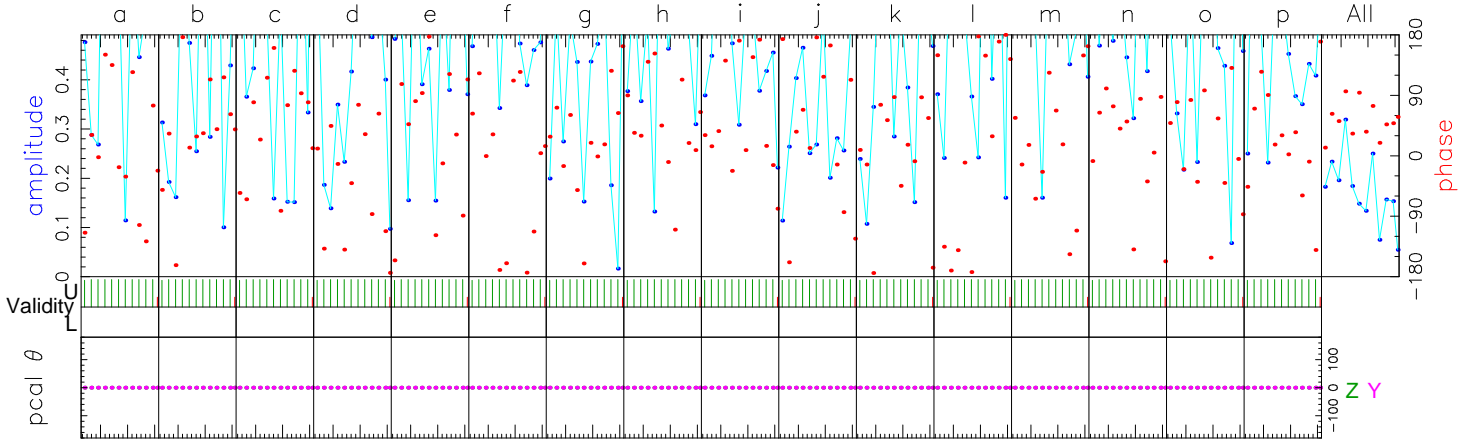
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-107.3	-133.8	143.2	-117.1	162.5	-137.0	-175.9	-132.8	-151.2	-161.7	-174.0	-113.5	-137.8	-132.5	-131.2	-170.0	Phase	-150.1				
	0.3	0.4	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	Ampl.	0.2				
	95.3	130.3	102.8	255.6	93.7	1.9	51.8	123.7	60.9	35.2	72.9	218.8	22.0	255.5	35.1	113.9	Sbd box	129.7				
UL	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000				
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000				
Z: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					
Z: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					
Z	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					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			4.35063126880E+03														Apriori delay (usec)	4.35063402439E+03	Resid mbdelay (usec)	-2.75559E-03	+/-	1.7E-04
Sband delay (usec)			4.35063970239E+03														Apriori clock (usec)	-9.4923792E+00	Resid sbdelay (usec)	5.67800E-03	+/-	2.6E-03
Phase delay (usec)			4.35063401955E+03														Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	-4.83931E-06	+/-	5.7E-07
Delay rate (us/s)			-4.72642770959E-01														Apriori rate (us/s)	-4.72642997370E-01	Resid rate (us/s)	2.26411E-07	+/-	6.0E-09
Total phase (deg)					159.8												Apriori accel (us/s/s)	-8.26677588646E-06	Resid phase (deg)	-150.1	+/-	17.6

ph/seg (deg) 74.2 30.5 Search (1024X64) 0.182 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 80.7 53.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.9 35.2 Inc. seg. avg. 0.239 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 41.8 61.5 Inc. frq. avg. 0.180 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 113.3 el 55.6 pa -34.9 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 3397.228 1027.040 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZY..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZY.W.172.130KBL



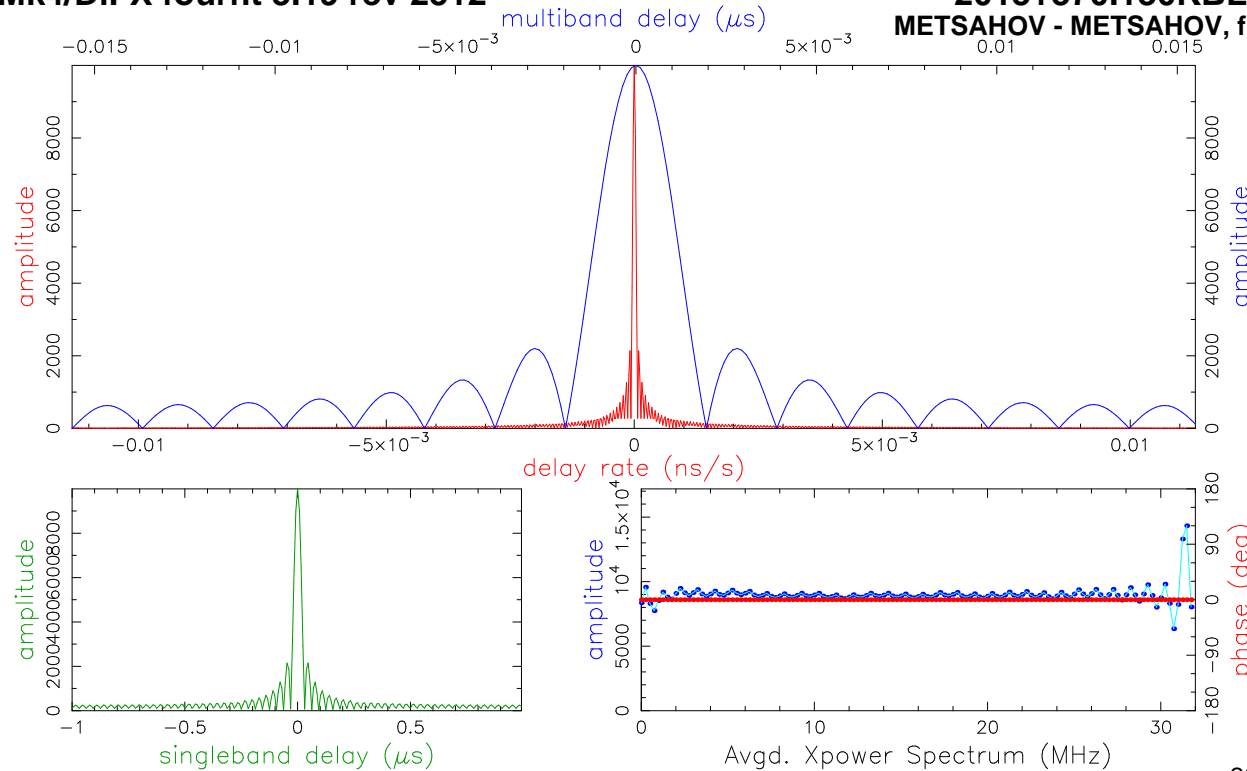
Fringe quality 0
 SNR 5.7
 Int time 162.301
 Amp 0.164
 Phase 57.7
 PFD 7.7e-01
 Delays (us)
 SBD -0.208825
 MBD 0.008926
 Fringe rate (Hz) 0.031028
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150016.89
 Stop 150259.71
 FRT 150130.00
 Corr/FF/build 2020:076:014755
 2020:086:043742
 2020:014:135814
 RA & Dec (J2000) 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	137.1	47.6	42.8	13.3	75.9	97.8	28.0	58.2	49.0	107.9	54.2	172.7	44.6	50.6	39.3	35.8	Phase	57.7
	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.3	0.1	0.4	0.2	0.2	Ampl.	0.2
	200.3	78.6	72.0	149.7	129.8	217.1	246.3	157.9	71.7	224.9	49.8	199.8	33.9	65.1	213.7	198.8	Sbd box	102.3
UL	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Z	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	
Z: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	
Z: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	
Z	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	
Z	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)	4.35042420029E+03			Apriori delay (usec)			4.35063402439E+03			Resid mbdelay (usec)			8.92590E-03			+/- 1.9E-04		
Sband delay (usec)	4.35042519939E+03			Apriori clock (usec)			-9.4923792E+00			Resid sbdelay (usec)			-2.08825E-01			+/- 3.0E-03		
Phase delay (usec)	4.35063402625E+03			Apriori clockrate (us/s)			-2.0370720E-07			Resid phdelay (usec)			1.85988E-06			+/- 6.5E-07		
Delay rate (us/s)	-4.72642637162E-01			Apriori rate (us/s)			-4.72642997370E-01			Resid rate (us/s)			3.60208E-07			+/- 6.9E-09		
Total phase (deg)	7.5			Apriori accel (us/s/s)			-8.26677588646E-06			Resid phase (deg)			57.7			+/- 20.1		

ph/seg (deg) 26.4 34.8 Search (1024X64) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.3 60.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.9 40.2 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.4 70.1 Inc. frq. avg. 0.167 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 113.3 el 55.6 pa -34.9 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 3397.228 1027.040 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZY..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZY.W.176.130KBL

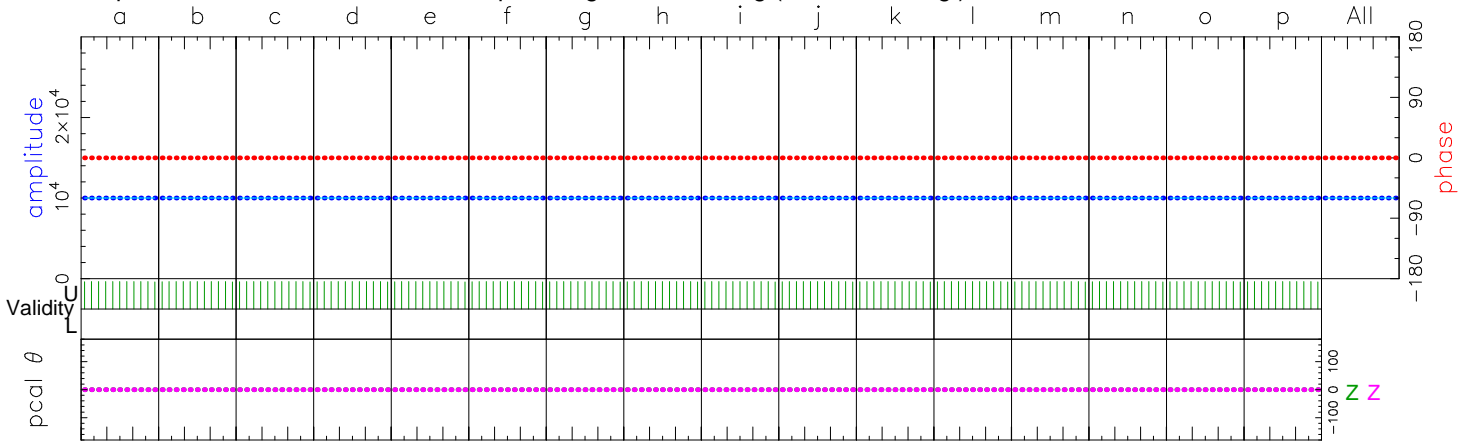


Fringe quality 9

SNR 366612.3
 Int time 179.730
 Amp 9999.992
 Phase -0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043736
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

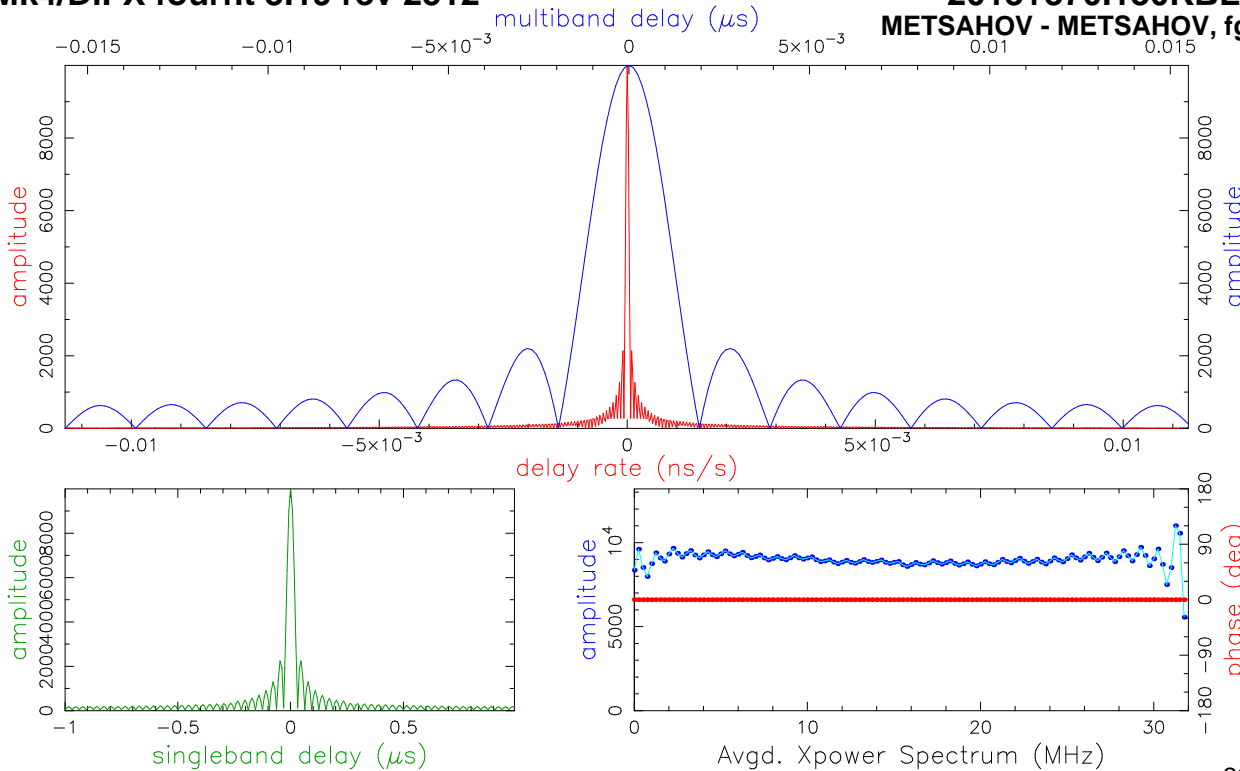


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.7E-08
 Phase delay (usec) -1.56987874480E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.56988E-19 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.992 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 9999.992 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.992 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 113.3 el 55.6 pa -34.9 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZZ.W.154.130KBL

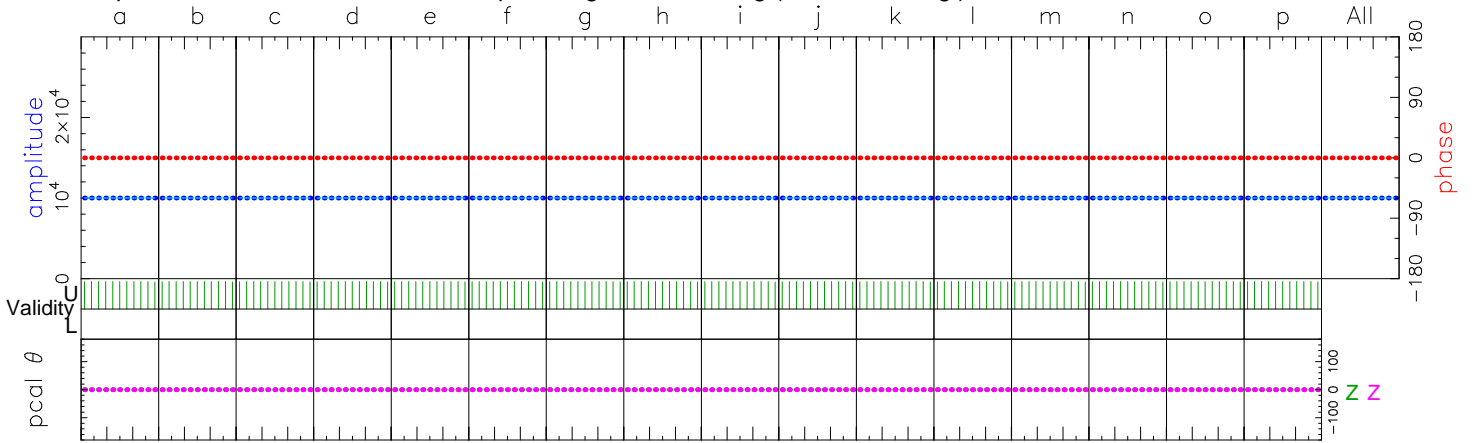


Fringe quality 9

SNR 366612.3
 Int time 179.730
 Amp 9999.992
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Yr:day 16383
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043738
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

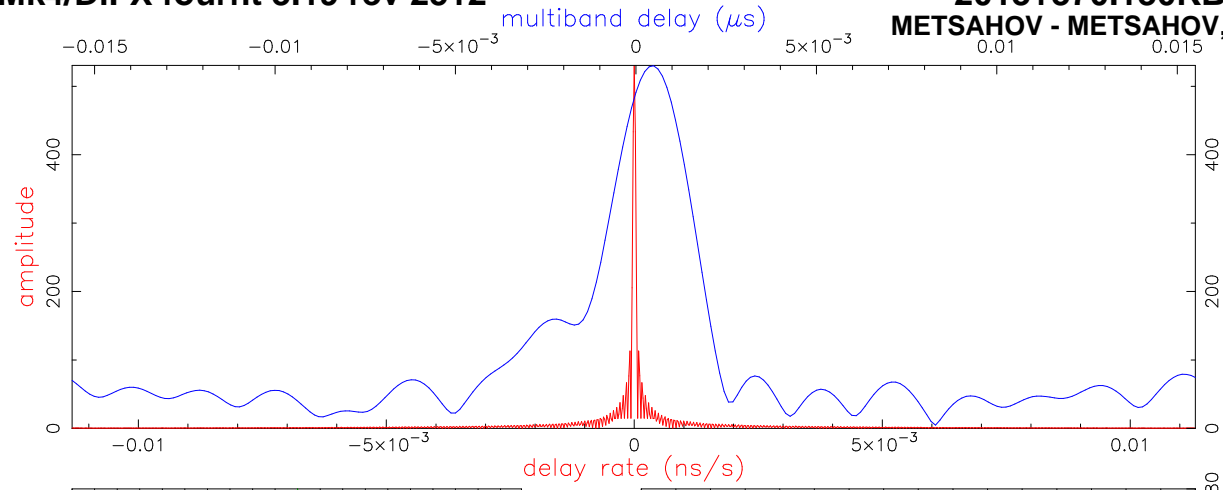


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	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	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			0.00000E+00			+/-	2.9E-09	
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/-	4.7E-08	
Phase delay (usec)	1.70468803123E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			1.70469E-20			+/-	1.0E-11	
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/-	9.7E-14	
Total phase (deg)	0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			0.0			+/-	0.0	

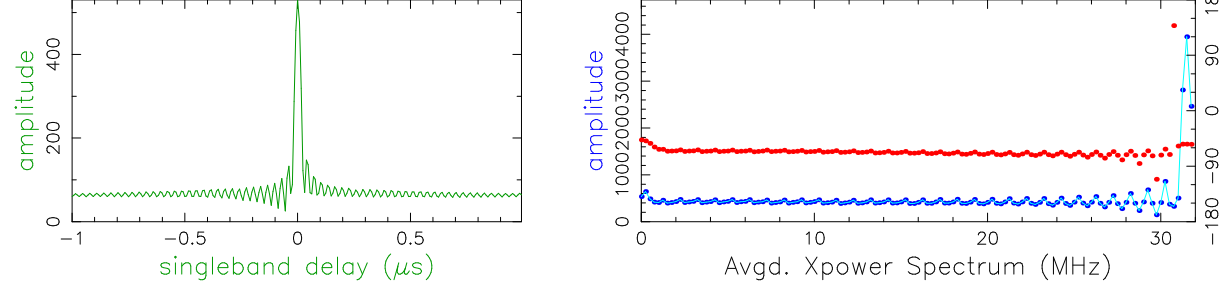
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.992 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X64) 9999.992 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (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
 Z: az 113.3 el 55.6 pa -34.9 Z: az 113.3 el 55.6 pa -34.9 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/c192c/v2/1234/No0011/ZZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZZ.W.164.130KBL simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

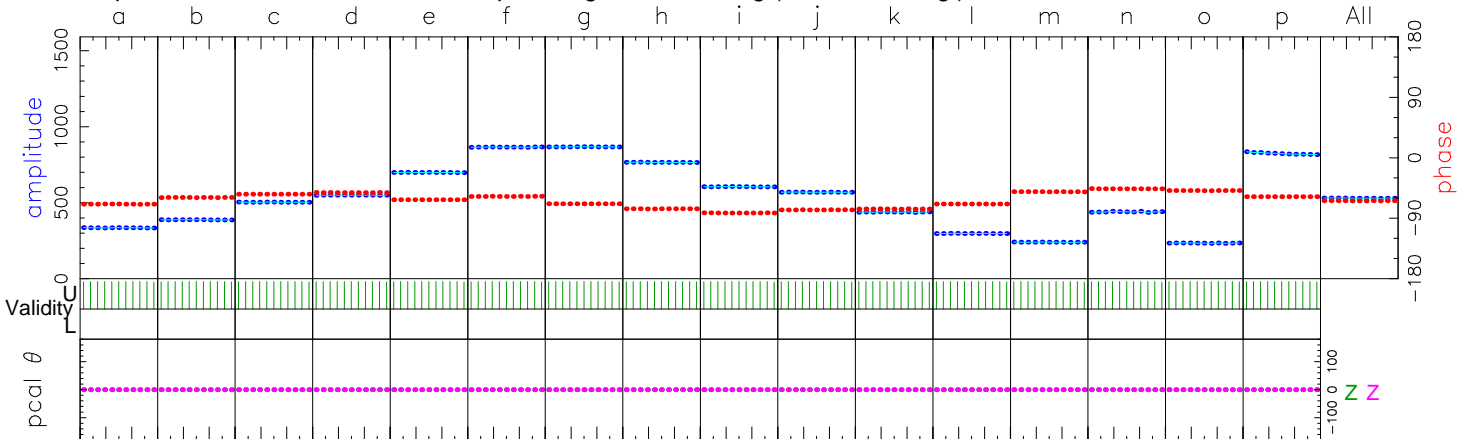
2013+370.130KBL, No0011, ZZ
 METSAHOV - METSAHOV, fgroup W, pol LR



Fringe quality 7
 SNR 19452.0
 Int time 179.730
 Amp 530.588
 Phase -64.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000636
 MBD 0.000443
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043740
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"



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

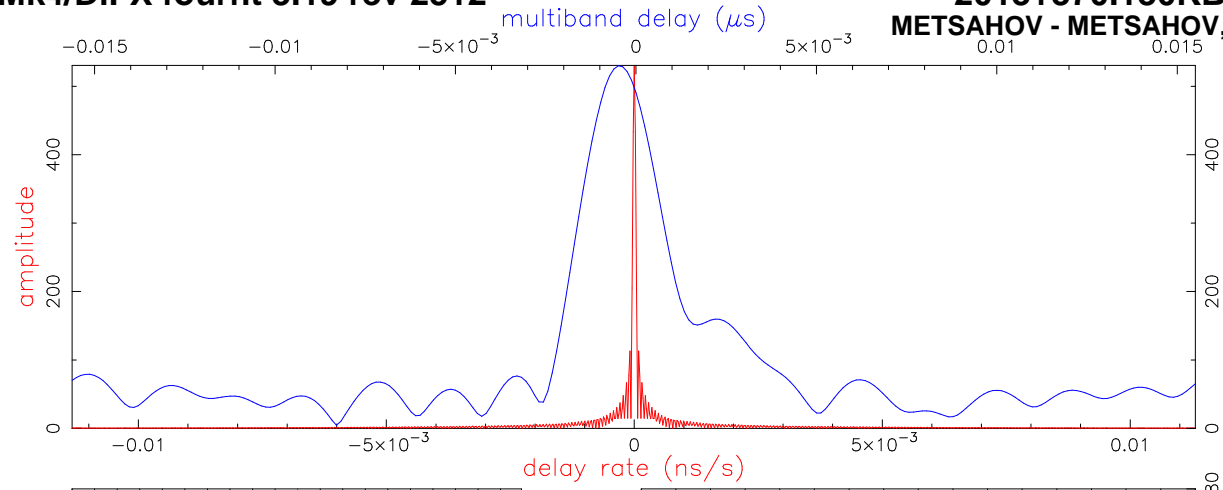


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-69.0	-59.1	-54.2	-51.8	-62.4	-57.5	-68.5	-76.0	-82.1	-77.5	-76.1	-68.8	-50.5	-46.1	-48.8	-57.9	Phase	-64.0
	335.5	387.8	503.9	549.8	699.3	866.2	867.5	765.9	605.3	569.8	439.0	297.8	240.7	440.2	235.0	824.0	Ampl.	539.2
	128.1	129.9	129.0	129.0	129.0	129.4	128.9	128.9	128.9	129.5	128.7	128.8	129.1	129.1	129.0	128.8	Sbd box	129.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	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	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 4.43093750000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 4.43094E-04 +/- 5.5E-08
 Sband delay (usec) 6.35500000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 6.35500E-04 +/- 8.9E-07
 Phase delay (usec) -2.06346617209E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.06347E-06 +/- 1.9E-10
 Delay rate (us/s) -9.91980667418E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -9.91981E-12 +/- 1.8E-12
 Total phase (deg) -64.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -64.0 +/- 0.0

RMS Theor. Amplitude 530.588 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 529.932 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 11.8 0.0 Inc. seg. avg. 530.157 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 39.6 0.0 Inc. frq. avg. 539.228 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

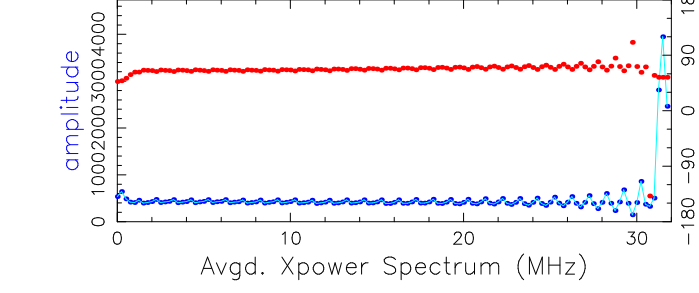
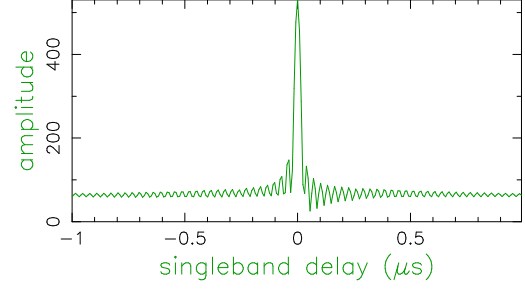
Z: az 113.3 el 55.6 pa -34.9 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZZ.W.169.130KBL



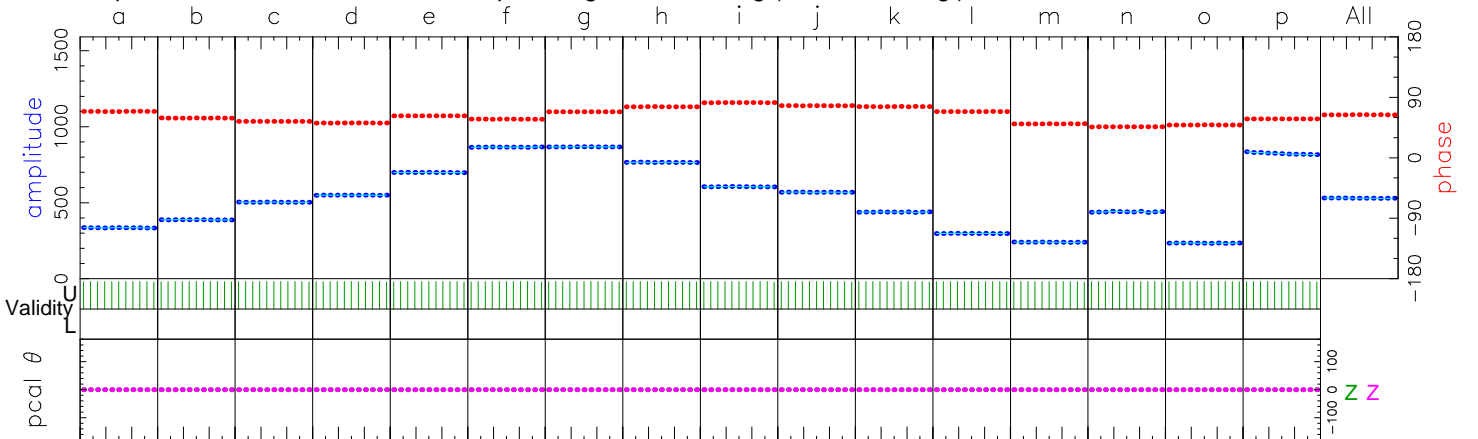
Fringe quality 7

SNR 19452.0
 Int time 179.730
 Amp 530.588
 Phase 64.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.000636
 MBD -0.000443
 Fringe rate (Hz) 0.000001
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043741
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"



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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks		
Group delay (usec)(sbd)			-4.43093750000E-04																	
Sband delay (usec)			-6.35500000000E-04																	
Phase delay (usec)			2.06346617216E-06																	
Delay rate (us/s)			9.91980667418E-12																	
Total phase (deg)					64.0															
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)																				
PC period (AP's) 5, 5																				
sb window (us)																				
mb window (us)																				
dr window (ns/s)																				
ion window (TEC)																				
nlags: 128																				
t_cohere infinite																				

ph/seg (deg) 0.0 0.0 Search (1024X64) 529.932 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.1 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.8 0.0 Inc. seg. avg. 530.157 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.6 0.0 Inc. frq. avg. 539.228 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 113.3 el 55.6 pa -34.9 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ZZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/ZZ.W.174.130KBL simultaneous interpolator