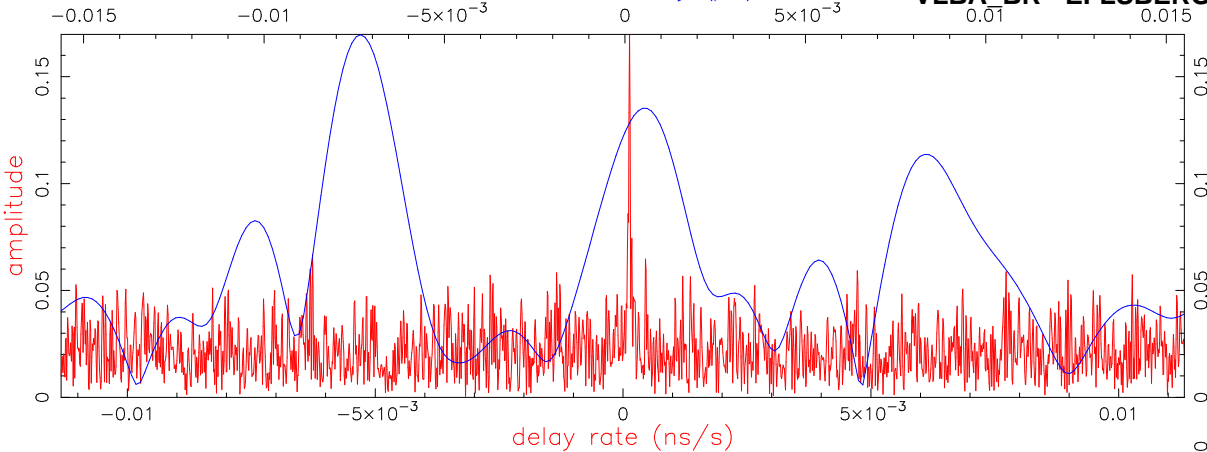
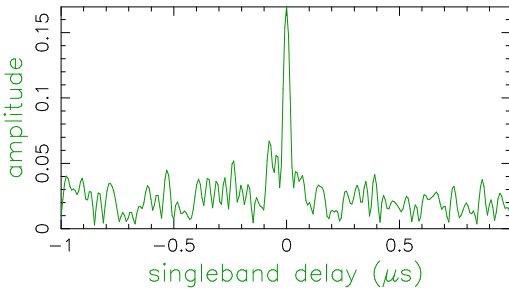


multiband delay (μ s)

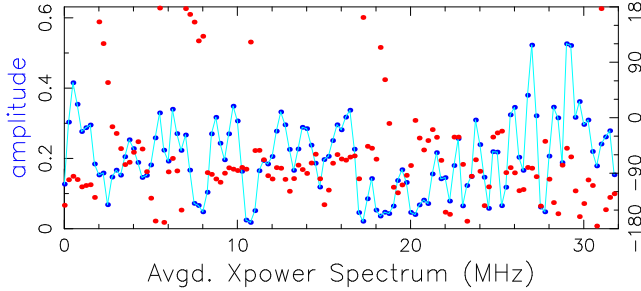


Fringe quality 9

SNR 9.4
 Int time 406.536
 Amp 0.170
 Phase -56.1
 PFD 3.1e-12
 Delays (us)
 SBD -0.000731
 MBD -0.007337
 Fringe rate (Hz)
 0.011154
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

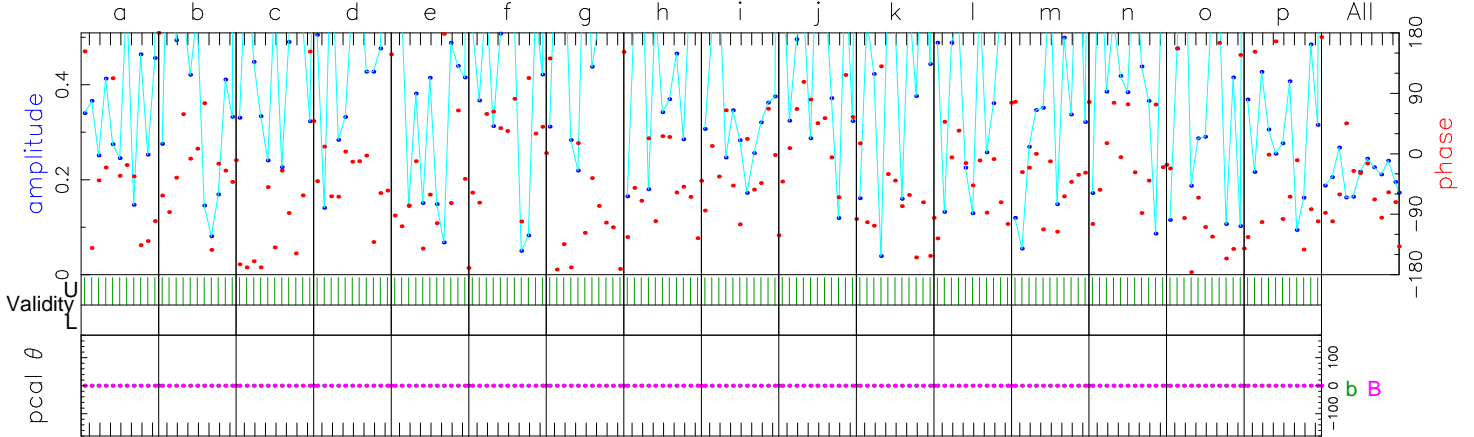


delay rate (ns/s)



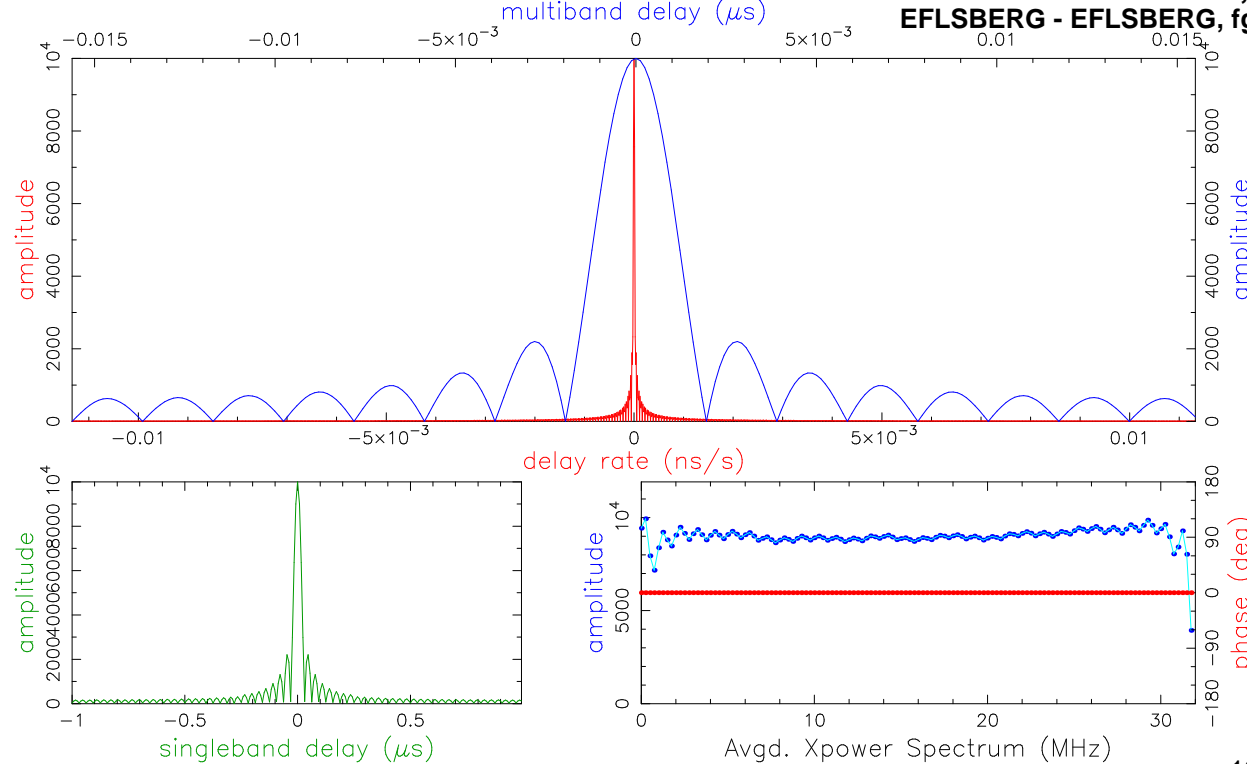
Exp. c192a
 Yr:day 16383
 Yr:day 2019:276
 Start 183012.80
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042726
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



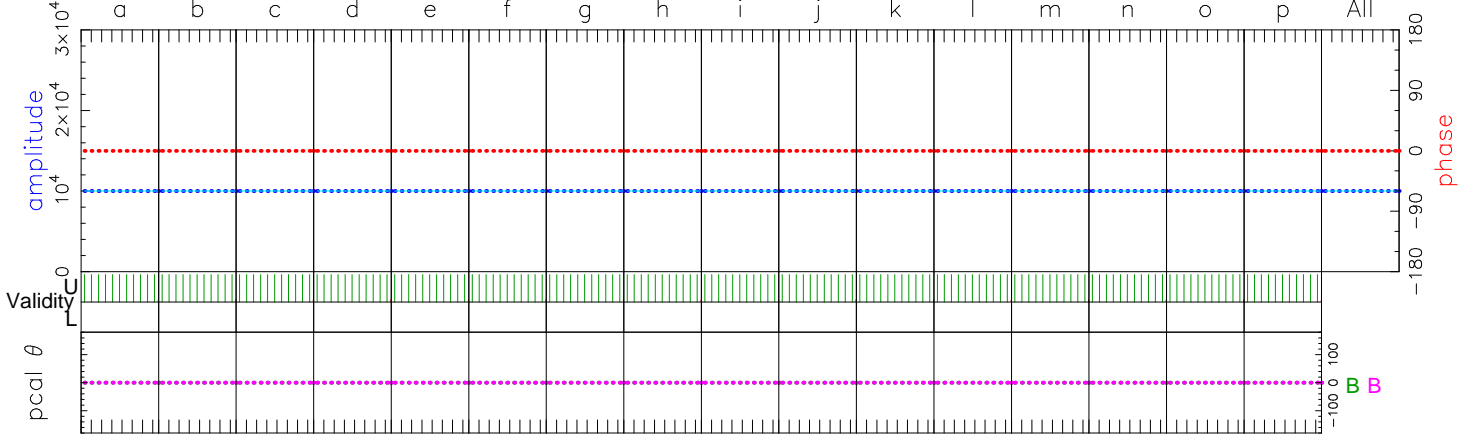
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-84.7	-24.9	-137.5	-40.2	-70.8	33.6	-126.7	-63.3	-22.2	50.2	-79.2	-36.5	-35.0	-17.7	-137.4	-101.2	Phase	-56.1				
	0.1	0.3	0.3	0.4	0.2	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	Ampl.	0.3				
	243.2	128.1	129.0	128.6	128.5	128.3	128.8	129.7	127.9	128.4	129.0	129.1	128.5	128.9	128.3	129.6	Sbd box	128.9				
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
b:B	0:0	0:0	0:0	0:0	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:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Tracks					
Group delay (usec)(sbd)			-5.66420707786E+03														Apriori delay (usec)	-5.66419974077E+03	Resid mbdelay (usec)	-7.33708E-03	+/-	1.2E-04
Sband delay (usec)			-5.66420047177E+03														Apriori clock (usec)	-1.7451761E+01	Resid sbdelay (usec)	-7.31000E-04	+/-	1.8E-03
Phase delay (usec)			-5.66419974258E+03														Apriori clockrate (us/s)	-4.2395080E-08	Resid phdelay (usec)	-1.81000E-06	+/-	3.9E-07
Delay rate (us/s)			1.33643516118E+00														Apriori rate (us/s)	1.33643503169E+00	Resid rate (us/s)	1.29489E-07	+/-	1.7E-09
Total phase (deg)					-297.4												Apriori accel (us/s/s)	2.80562043911E-05	Resid phase (deg)	-56.1	+/-	12.2

ph/seg (deg) 41.3 21.2 Theor. Amplitude 0.170 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.5 37.0 Search (2048X64) 0.165 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.3 24.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 72.2 42.7 Inc. seg. avg. 0.197 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 b: az 66.1 el 33.9 pa -52.6 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bB..1305JH Output file: /Exps/c192a/v2/1234/No0001/bB.W.14.1305JH simultaneous interpolator



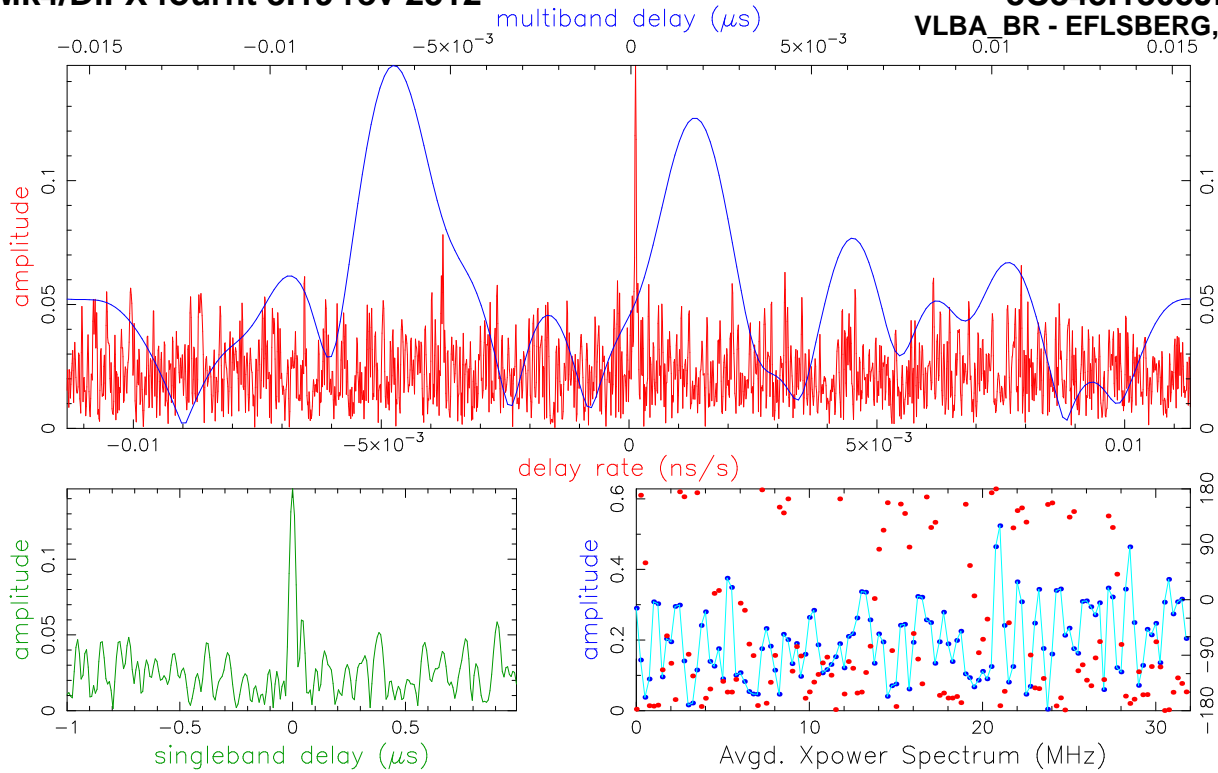
Fringe quality 9
SNR 560300.2
Int time 419.804
Amp 10000.000
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042730
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



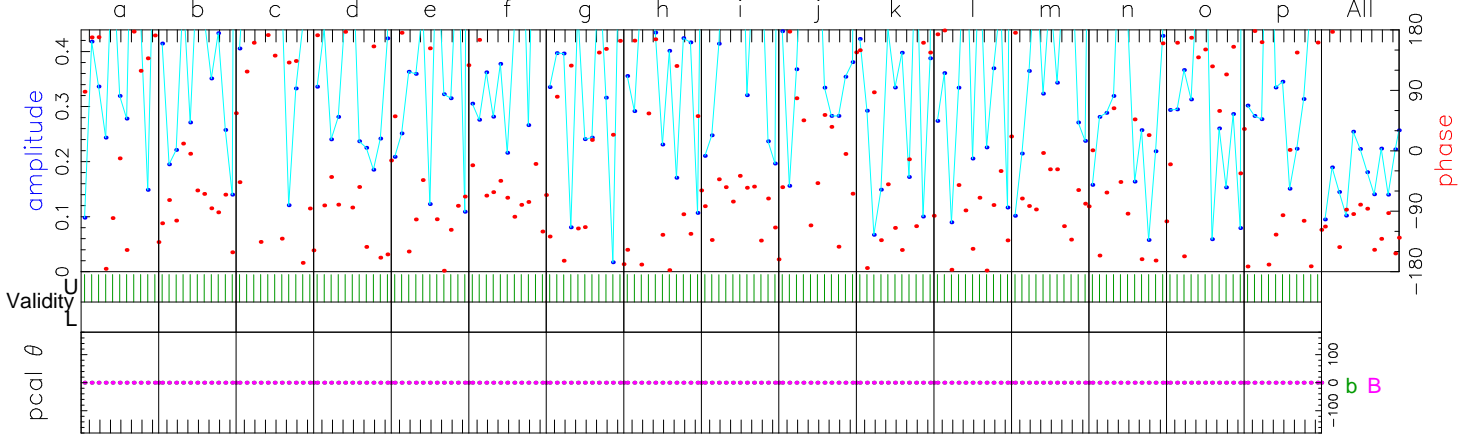
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	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:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	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		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	1.9E-09	
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	3.1E-08	
Phase delay (usec)	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	-7.29055096052E-21	+/-	6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	+/-	2.7E-14	
Total phase (deg)																			+/-	0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 269.2 el 56.7 pa 55.8 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BB..1305JH Output file: /Exps/c192a/v2/1234/No0001/BB.W.31.1305JH



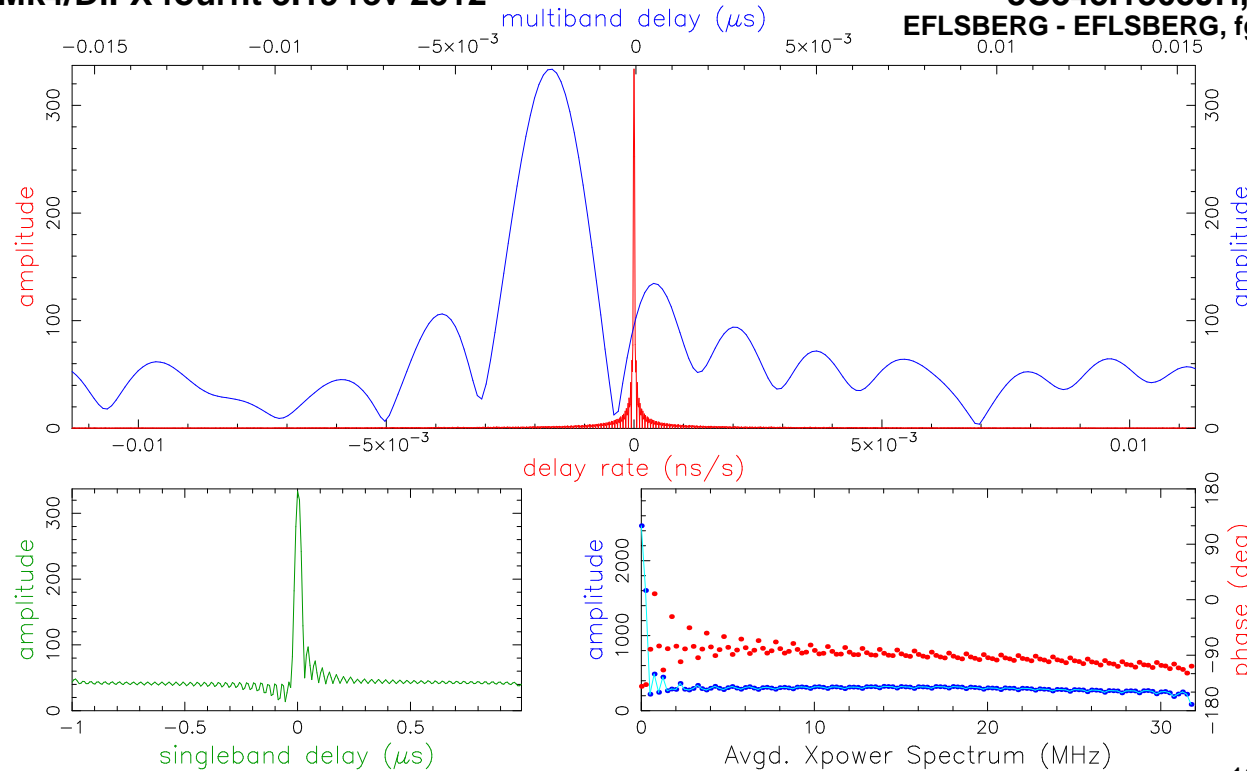
Fringe quality 9
SNR 8.1
Int time 406.536
Amp 0.146
Phase -118.9
PFD 2.3e-07
Delays (us)
SBD -0.000241
MBD -0.006569
Fringe rate (Hz) 0.011127
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042731
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



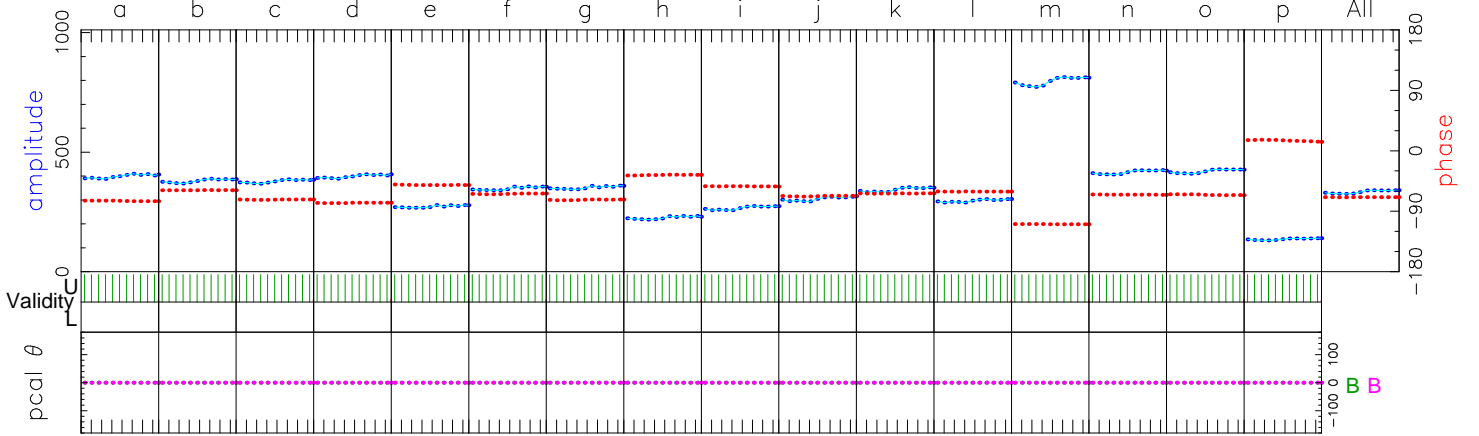
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	179.6	-66.0	-169.3	-121.8	-109.9	-71.7	175.8	-167.3	-70.1	-17.6	-141.5	-95.9	-77.0	-96.7	146.5	-164.4	Phase	-118.9				
b	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.1	0.2	0.3	Ampl.	0.2				
B	129.1	128.7	129.0	177.7	127.5	128.3	71.0	58.6	128.8	144.5	189.7	130.1	128.5	176.7	223.1	128.8	Sbd box	129.0				
b:1000	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used					
b:1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
b:B	0:0	0:0	0:0	0:0	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:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Tracks					
Group delay (usec)(sbd)			-5.66420630995E+03														Apriori delay (usec)	-5.66419974077E+03	Resid mbdelay (usec)	-6.56918E-03	+/-	1.3E-04
Sband delay (usec)			-5.66419998177E+03														Apriori clock (usec)	-1.7451761E+01	Resid sbdelay (usec)	-2.41000E-04	+/-	2.1E-03
Phase delay (usec)			-5.66419974461E+03														Apriori clockrate (us/s)	-4.2395080E-08	Resid phdelay (usec)	-3.83450E-06	+/-	4.6E-07
Delay rate (us/s)			1.33643516087E+00														Apriori rate (us/s)	1.33643503169E+00	Resid rate (us/s)	1.29175E-07	+/-	1.9E-09
Total phase (deg)					-0.2												Apriori accel (us/s/s)	2.80562043911E-05	Resid phase (deg)	-118.9	+/-	14.2

ph/seg (deg) RMS Theor. Amplitude 0.146 +/- 0.018 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.5 24.6 Search (2048X64) 0.140 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.8 42.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.7 28.4 Inc. seg. avg. 0.160 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 75.6 49.5 Inc. frq. avg. 0.205 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 66.1 el 33.9 pa -52.6 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bB..1305JH Output file: /Exps/c192a/v2/1234/No0001/bB.W.34.1305JH



Fringe quality 5
SNR 18892.7
Int time 419.804
Amp 337.188
Phase -69.1
PFD 0.0e+00
Delays (us)
SBD 0.002438
MBD -0.002326
Fringe rate (Hz) 0.000003
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042735
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

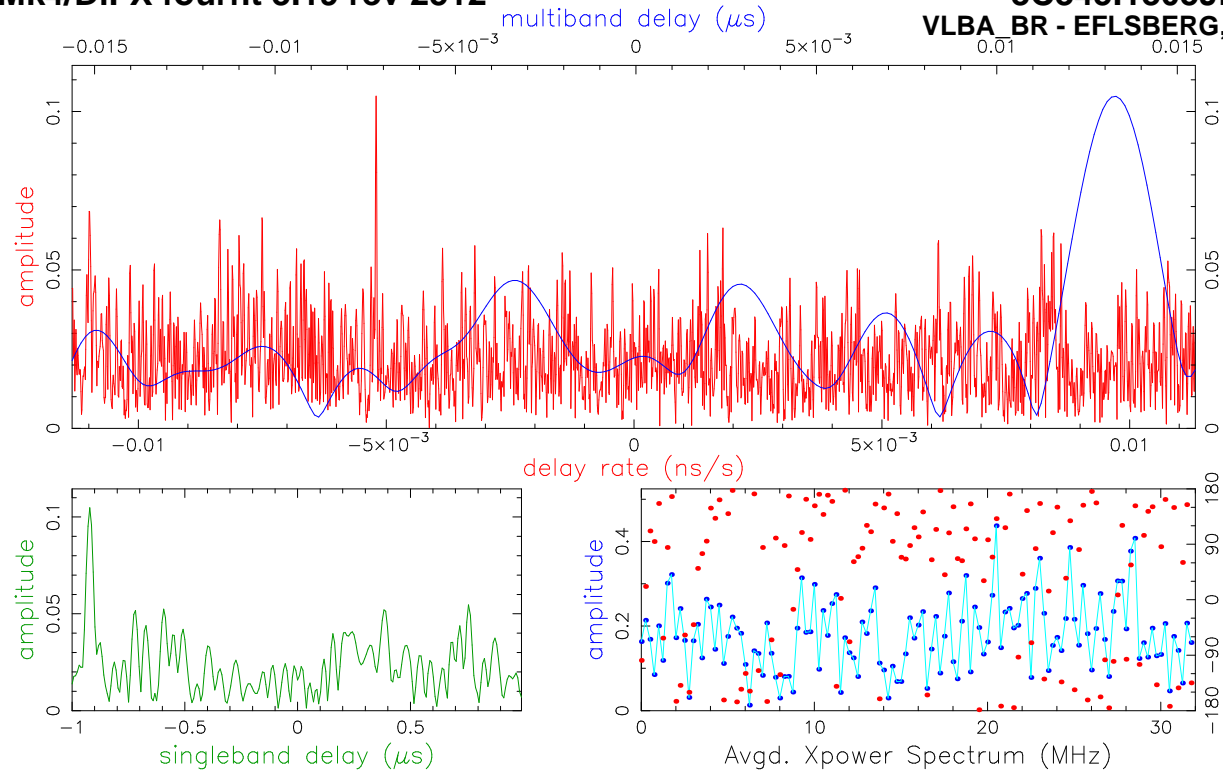


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-74.6	-58.6	-72.6	-77.6	-50.8	-64.1	-72.9	-36.0	-52.9	-67.4	-63.5	-60.7	-109.2	-65.2	-65.4	15.3	Phase	-69.1
	399.1	379.7	377.9	398.7	272.4	348.0	351.6	225.7	266.2	304.4	343.1	296.9	795.9	416.3	419.8	136.1	Ampl.	358.2
	129.3	128.7	128.5	129.1	128.4	128.5	129.1	129.6	128.7	128.6	128.7	129.1	130.1	128.4	128.0	131.3	Sbd box	129.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	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:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	-2.32590625000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.32591E-03		+/- 5.7E-08							
Sband delay (usec)	2.43800000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		2.43800E-03		+/- 9.1E-07							
Phase delay (usec)	-2.22727805471E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.22728E-06		+/- 2.0E-10							
Delay rate (us/s)	3.18850928813E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		3.18851E-11		+/- 8.1E-13							
Total phase (deg)			-69.1		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-69.1		+/- 0.0					

ph/seg (deg) 0.1 0.0 Theor. Amplitude 337.188 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.1 0.0 Search (2048X64) 333.043 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 40.6 0.0 Inc. seg. avg. 333.714 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 B: az 269.2 el 56.7 pa 55.8 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/c192a/v2/1234/No0001/BB..1305JH Output file: /Exps/c192a/v2/1234/No0001/BB.W.48.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bB
VLBA_BR - EFLSBERG, fgroup W, pol LR

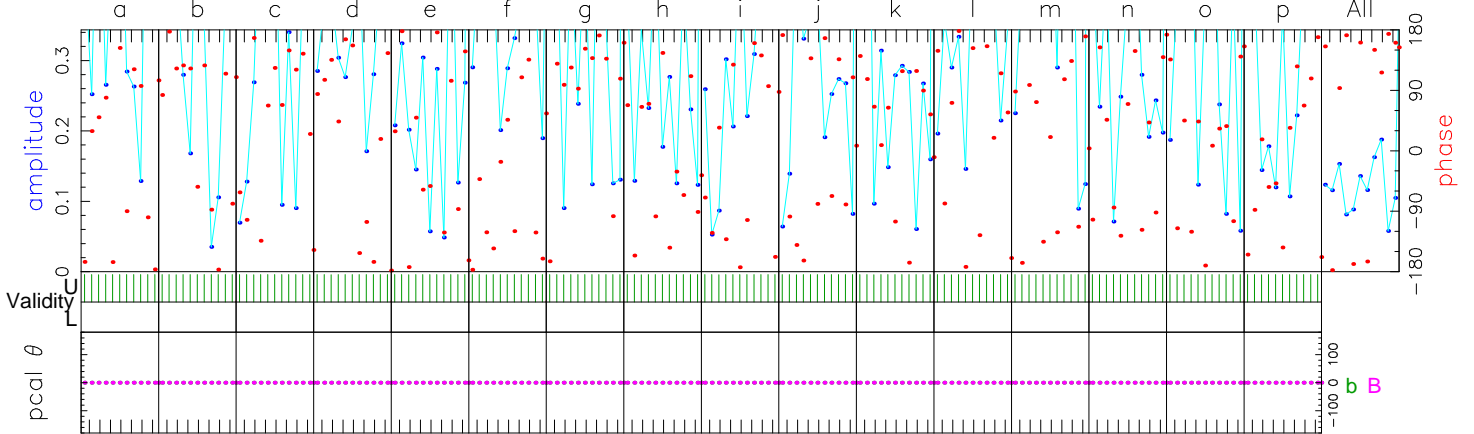


Fringe quality 0

SNR 5.8
Int time 406.536
Amp 0.115
Phase 154.2
PFD 8.4e-01
Delays (us)
SBD -0.921778
MBD 0.013271
Fringe rate (Hz)
-0.449119
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

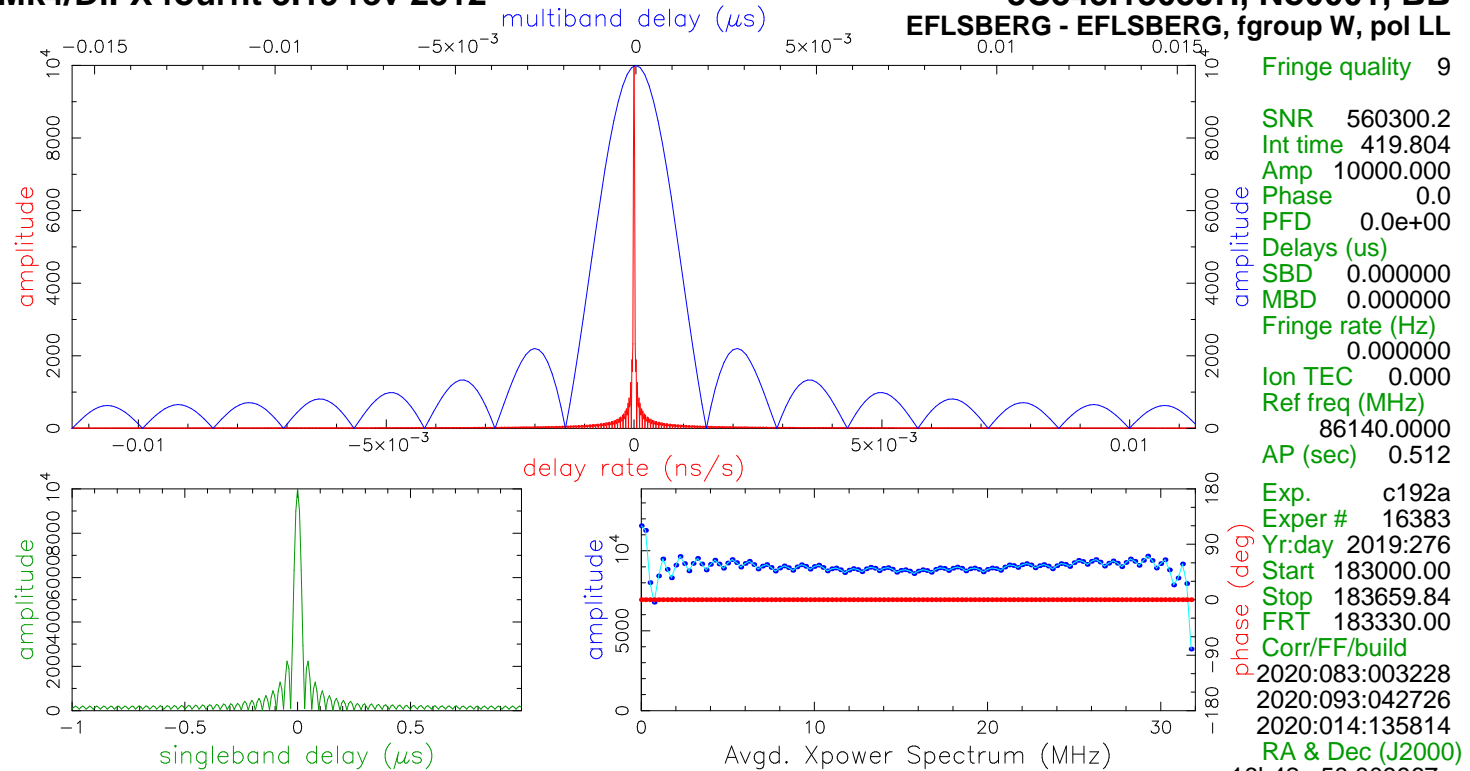
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042736
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec

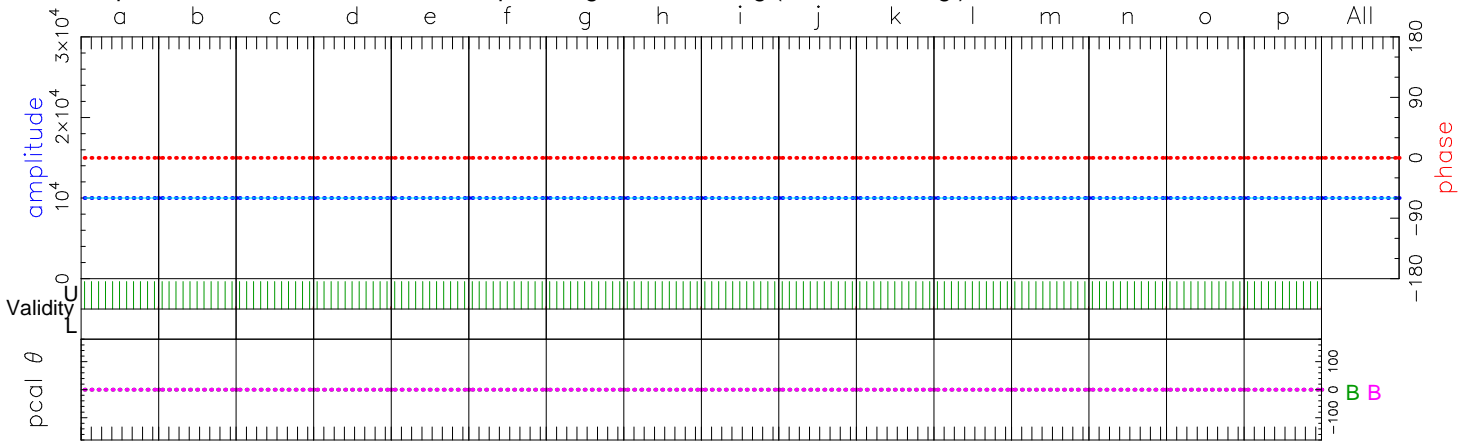


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
169.7	139.8	131.7	139.3	149.9	-142.6	147.5	-54.5	170.6	-143.9	107.4	146.6	128.6	166.5	-52.9	170.0		Phase	154.2	
0.2	0.1	0.2	0.2	0.1	0.1	0.3	0.0	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1		Ampl.	0.1	
211.9	75.3	162.4	215.4	66.9	153.5	11.8	181.8	2.2	49.7	28.0	25.5	251.2	237.0	46.0	52.3		Sbd box	11.0	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	-5.66512396946E+03			Apriori delay (usec)			-5.66419974077E+03			Resid mbdelay (usec)			1.32713E-02			+/- 1.9E-04			
Sband delay (usec)	-5.66512151877E+03			Apriori clock (usec)			-1.7451761E+01			Resid sbdelay (usec)			-9.21778E-01			+/- 3.0E-03			
Phase delay (usec)	-5.66419973580E+03			Apriori clockrate (us/s)			-4.2395080E-08			Resid phdelay (usec)			4.97385E-06			+/- 6.4E-07			
Delay rate (us/s)	1.33642981787E+00			Apriori rate (us/s)			1.33643503169E+00			Resid rate (us/s)			-5.21382E-06			+/- 2.7E-09			
Total phase (deg)	-87.0			Apriori accel (us/s/s)			2.80562043911E-05			Resid phase (deg)			154.2			+/- 19.8			

ph/seg (deg) RMS Theor. Amplitude 0.115 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.6 59.9 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 64.9 39.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.0 69.2 Inc. seg. avg. 0.113 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 b: az 66.1 el 33.9 pa -52.6 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bB..1305JH Output file: /Exps/c192a/v2/1234/No0001/bB.W.54.1305JH simultaneous interpolator



Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
UL	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			0.00000E+00			+/- 1.9E-09		
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/- 3.1E-08		
Phase delay (usec)	4.48716862691E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			4.48717E-20			+/- 6.6E-12		
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/- 2.7E-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 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X64) 10000.001 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

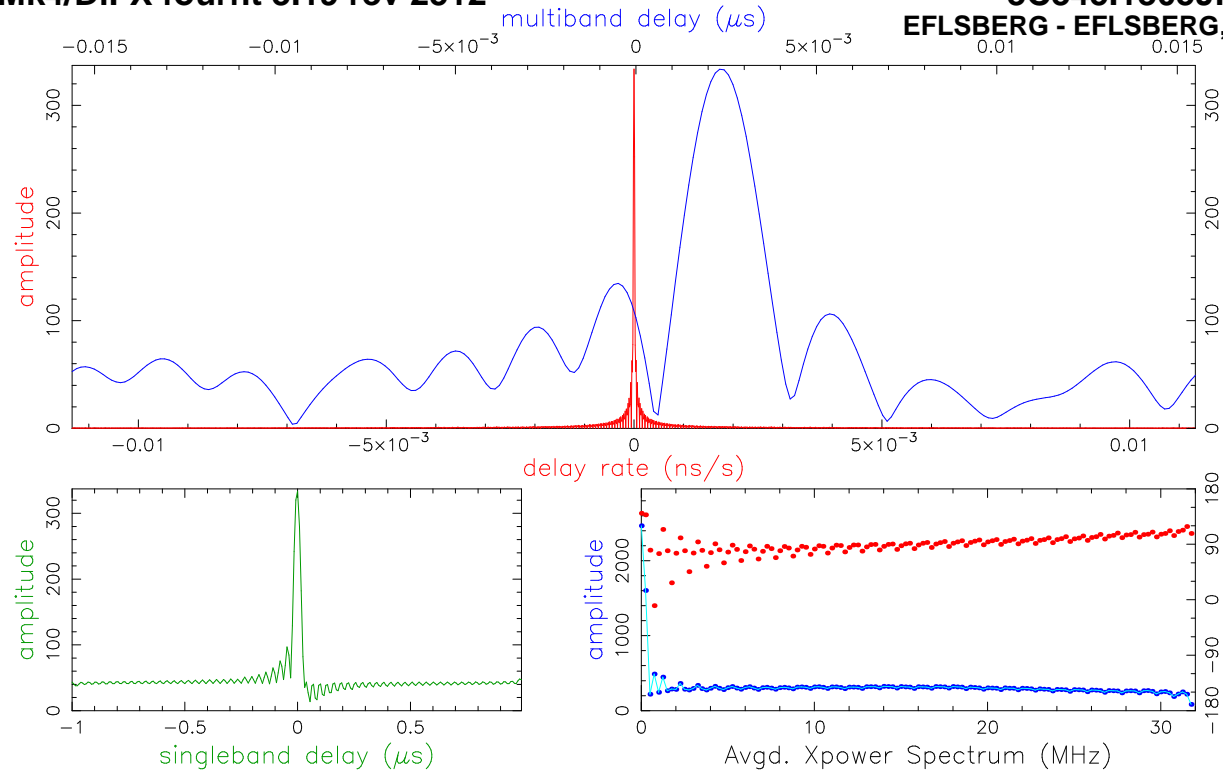
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BB..1305JH Output file: /Exps/c192a/v2/1234/No0001/BB.W.6.1305JH

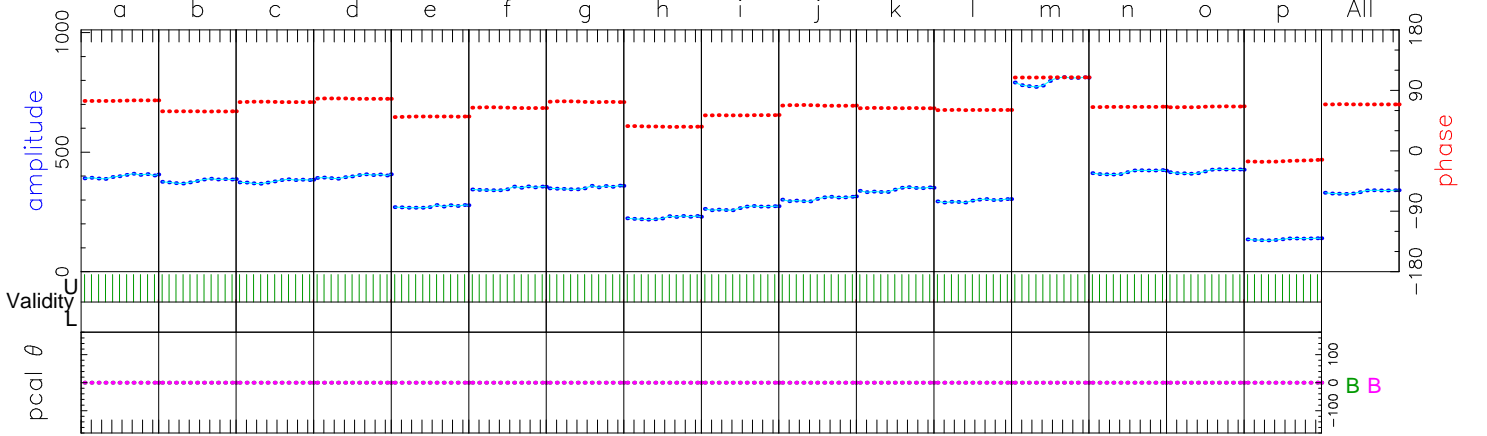
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, BB
EFLSBERG - EFLSBERG, fgroup W, pol RL



Fringe quality 5
 SNR 18892.7
 Int time 419.804
 Amp 337.188
 Phase 69.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.002438
 MBD 0.002326
 Fringe rate (Hz)
 -0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042740
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

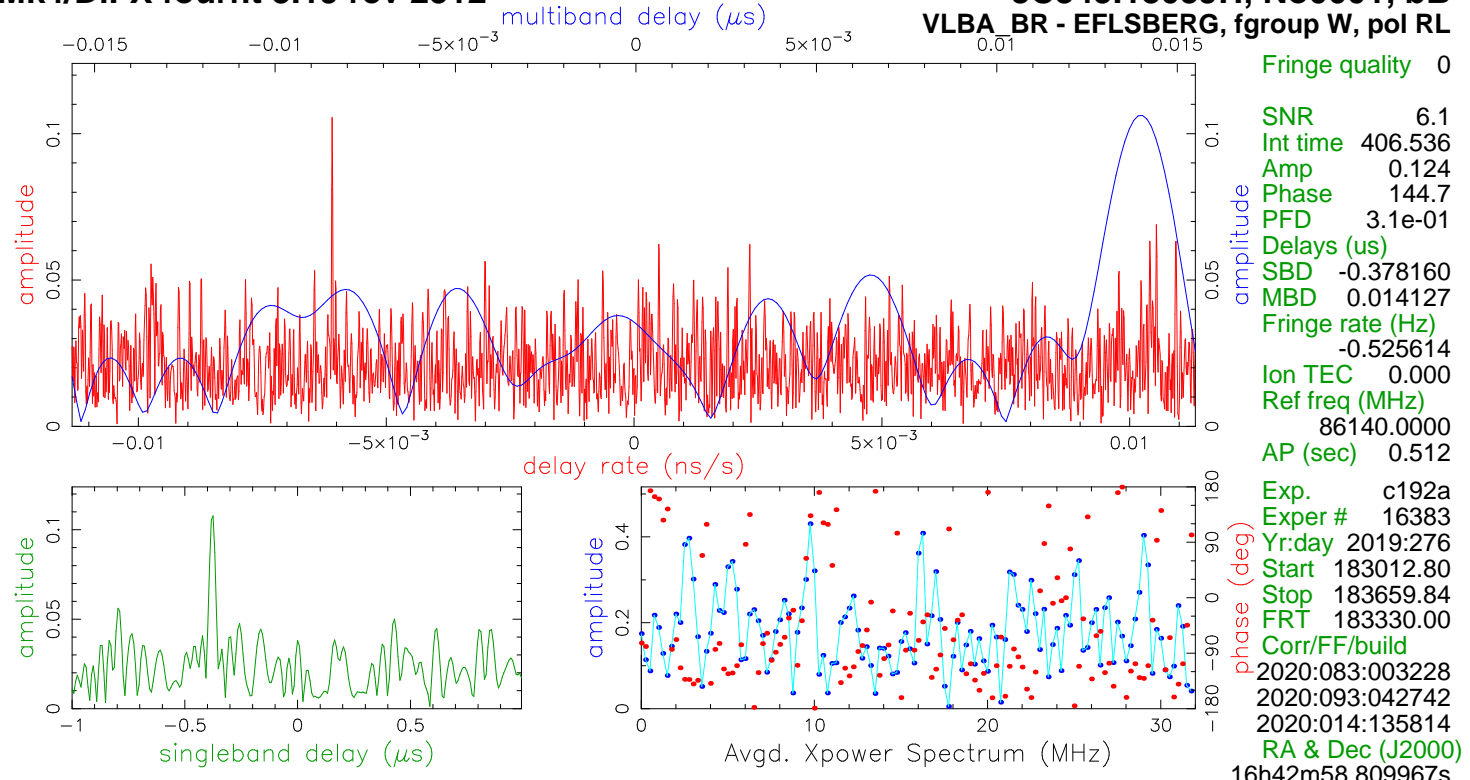


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	74.6	58.6	72.6	77.6	50.8	64.1	72.9	36.0	52.9	67.4	63.5	60.7	109.2	65.2	65.4	-15.3	Phase	69.1
	399.1	379.7	377.9	398.7	272.4	348.0	351.6	225.7	266.2	304.4	343.1	296.9	795.9	416.3	419.8	136.1	Ampl.	358.2
	128.7	129.3	129.5	128.9	129.6	129.5	128.9	128.4	129.3	129.4	129.3	128.9	127.9	129.6	130.0	126.7	Sbd box	128.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	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:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

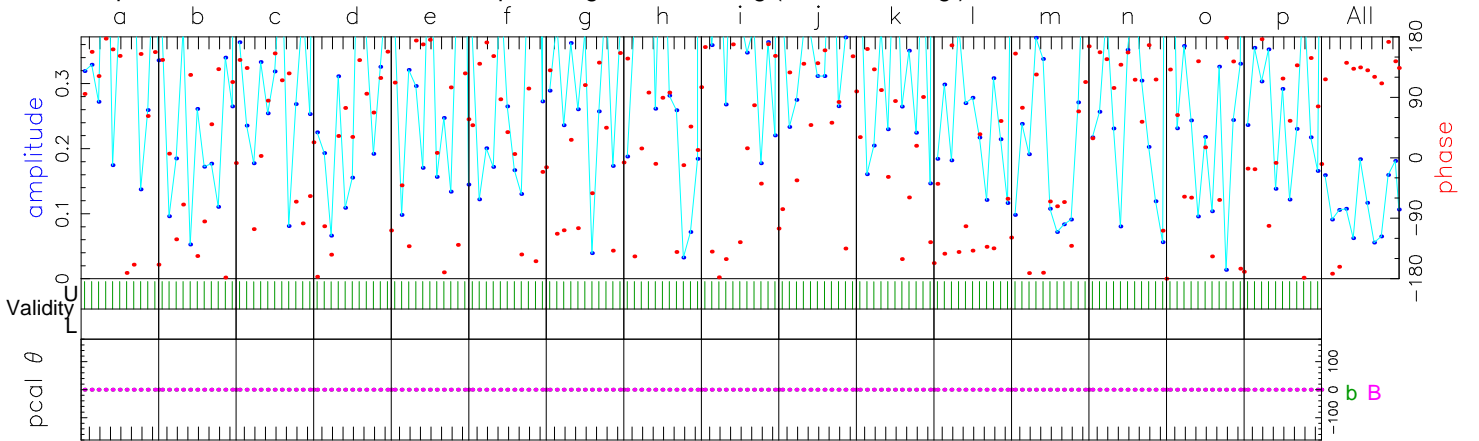
Group delay (usec)(sbd) 2.32590625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.32591E-03 +/- 5.7E-08
 Sband delay (usec) -2.43800000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.43800E-03 +/- 9.1E-07
 Phase delay (usec) 2.22727805466E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 2.22728E-06 +/- 2.0E-10
 Delay rate (us/s) -3.18850928813E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -3.18851E-11 +/- 8.1E-13
 Total phase (deg) 69.1 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 69.1 +/- 0.0

RMS Theor. Amplitude 337.188 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X64) 333.043 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 27.8 0.0 Inc. seg. avg. 333.714 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 40.6 0.0 Inc. frq. avg. 358.249 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BB..1305JH Output file: /Exps/c192a/v2/1234/No0001/BB.W.69.1305JH



Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	160.2	-170.8	151.3	125.1	167.0	119.3	144.8	84.8	179.7	116.3	75.0	-125.8	132.7	126.2	164.5	151.2	Phase	144.7
	0.4	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	79.6	255.6	87.0	7.0	80.0	14.8	206.8	227.9	133.1	20.7	103.4	238.1	63.5	197.6	155.6	187.2	Sbd box	80.6
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	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:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -5.66459186424E+03 Apriori delay (usec) -5.66419974077E+03 Resid mbdelay (usec) 1.41265E-02 +/- 1.8E-04

Sband delay (usec) -5.66457790077E+03 Apriori clock (usec) -1.7451761E+01 Resid sbdelay (usec) -3.78160E-01 +/- 2.8E-03

Phase delay (usec) -5.66419973611E+03 Apriori clockrate (us/s) -4.2395080E-08 Resid phdelay (usec) 4.66660E-06 +/- 6.1E-07

Delay rate (us/s) 1.33642892984E+00 Apriori rate (us/s) 1.33643503169E+00 Resid rate (us/s) -6.10186E-06 +/- 2.6E-09

Total phase (deg) -96.6 Apriori accel (us/s/s) 2.80562043911E-05 Resid phase (deg) 144.7 +/- 18.9

RMS Theor. Amplitude 0.124 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 27.6 32.8 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 41.7 57.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

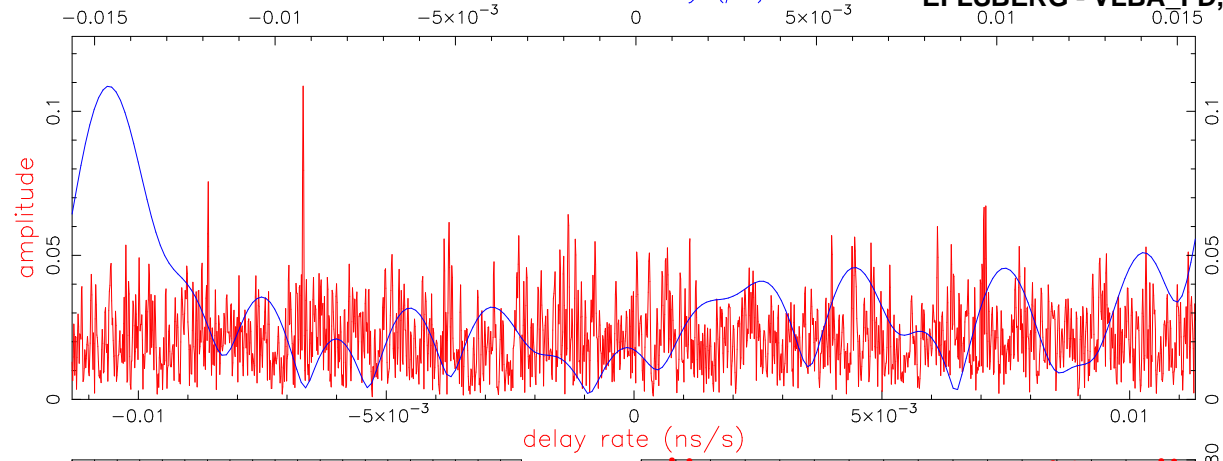
ph/frq (deg) 40.7 37.9 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 68.7 66.1 Inc. frq. avg. 0.122 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

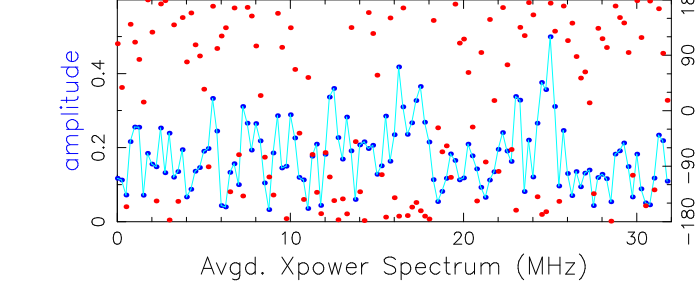
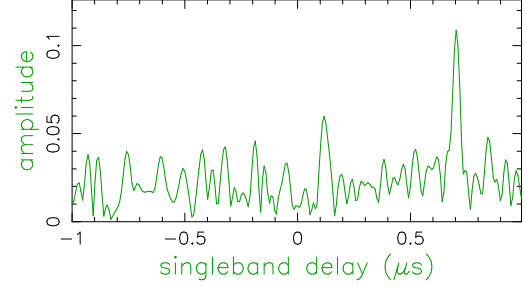
b: az 66.1 el 33.9 pa -52.6 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bB..1305JH Output file: /Exps/c192a/v2/1234/No0001/bB.W.75.1305JH

multiband delay (μ s)

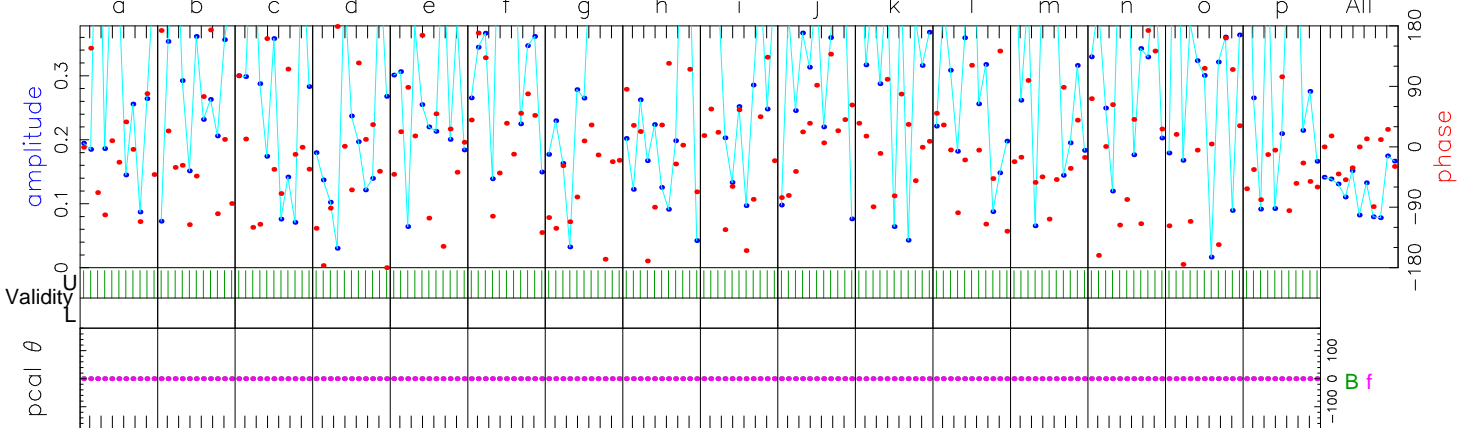


Fringe quality 0
SNR 6.0
Int time 410.455
Amp 0.126
Phase -12.2
PFD 3.5e-01
Delays (us)
SBD 0.703594
MBD -0.014600
Fringe rate (Hz)
-0.575775
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042730
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

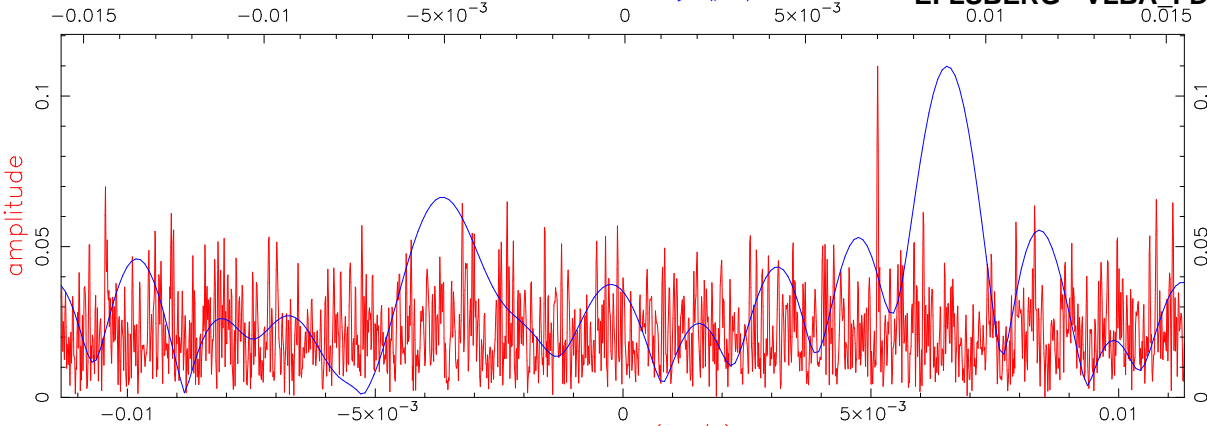
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



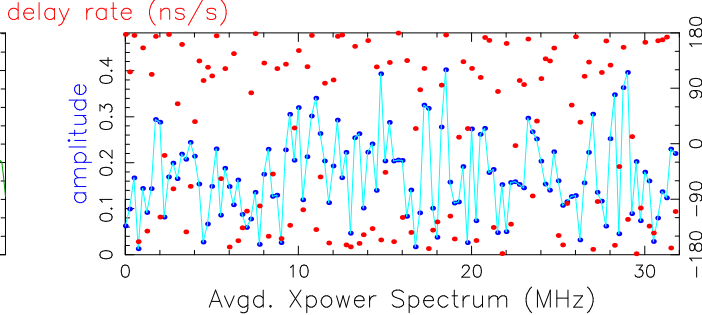
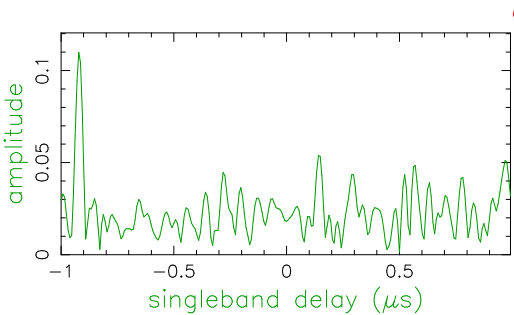
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All							
	-25.8	-35.8	-42.3	-43.0	-17.7	29.1	-34.4	34.2	21.4	29.1	14.6	15.9	-22.7	-139.9	38.9	-50.6		Phase	-12.2						
	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.3		Ampl.	0.1						
	22.3	97.7	37.0	198.8	145.0	48.7	62.4	14.5	216.0	169.3	218.8	102.0	228.8	109.3	232.6	218.7		Sbd box	219.1						
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used							
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs							
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase							
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC							
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp							
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids							
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks							
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids							
																		Tracks							
Group delay (usec)(sbd)			4.63805659991E+03															Apriori delay (usec)	4.63735244955E+03	Resid mbdelay (usec)	-1.45996E-02	+/-	1.8E-04		
Sband delay (usec)			4.63805604355E+03															Apriori clock (usec)	1.6384283E+01	Resid sbdelay (usec)	7.03594E-01	+/-	2.9E-03		
Phase delay (usec)			4.63735244916E+03															Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	-3.92880E-07	+/-	6.1E-07		
Delay rate (us/s)			-1.47664053884E+00															Apriori rate (us/s)	-1.47663385466E+00	Resid rate (us/s)	-6.68418E-06	+/-	2.6E-09		
Total phase (deg)					-10.7													Apriori accel (us/s/s)	-5.63668925130E-06	Resid phase (deg)	-12.2	+/-	19.0		
ph/seg (deg)		RMS	Theor.															Amplitude	0.126 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)		33.5	31.5															Search (2048X64)	0.104	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)		34.0	55.0															Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
amp/frq (%)		47.7	38.0															Inc. seg. avg.	0.127	Sample rate(MISamp/s):	64	dr window (ns/s)	-0.011 0.011		
		62.1	66.4															Inc. frq. avg.	0.128	Data rate(Mb/s):	2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00
B: az 269.2 el 56.7 pa 55.8																		f: az 61.0 el 37.1 pa -78.2		u,v (fr/asec)	10997.354 1283.837			simultaneous interpolator	
Control file: cf_1234_gmva																		Input file: /Exps/c192a/v2/1234/No0001/Bf..1305JH		Output file: /Exps/c192a/v2/1234/No0001/Bf.W.30.1305JH					

multiband delay (μ s)

Fringe quality 0

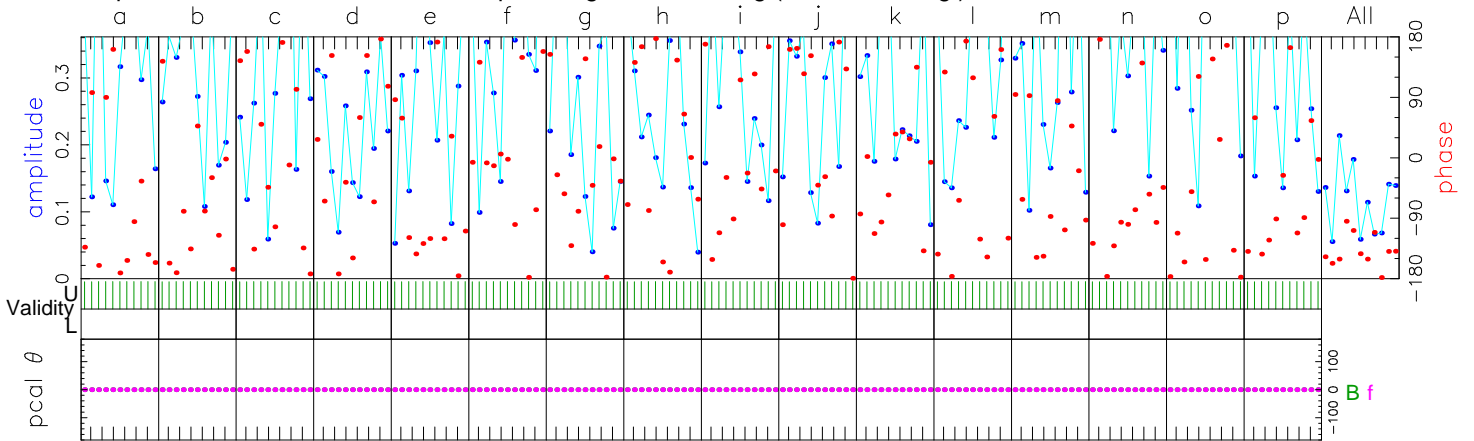


SNR 6.1
Int time 410.455
Amp 0.120
Phase -136.0
PFD 2.1e-01
Delays (us)
SBD -0.919980
MBD 0.008947
Fringe rate (Hz)
0.442693
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042735
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

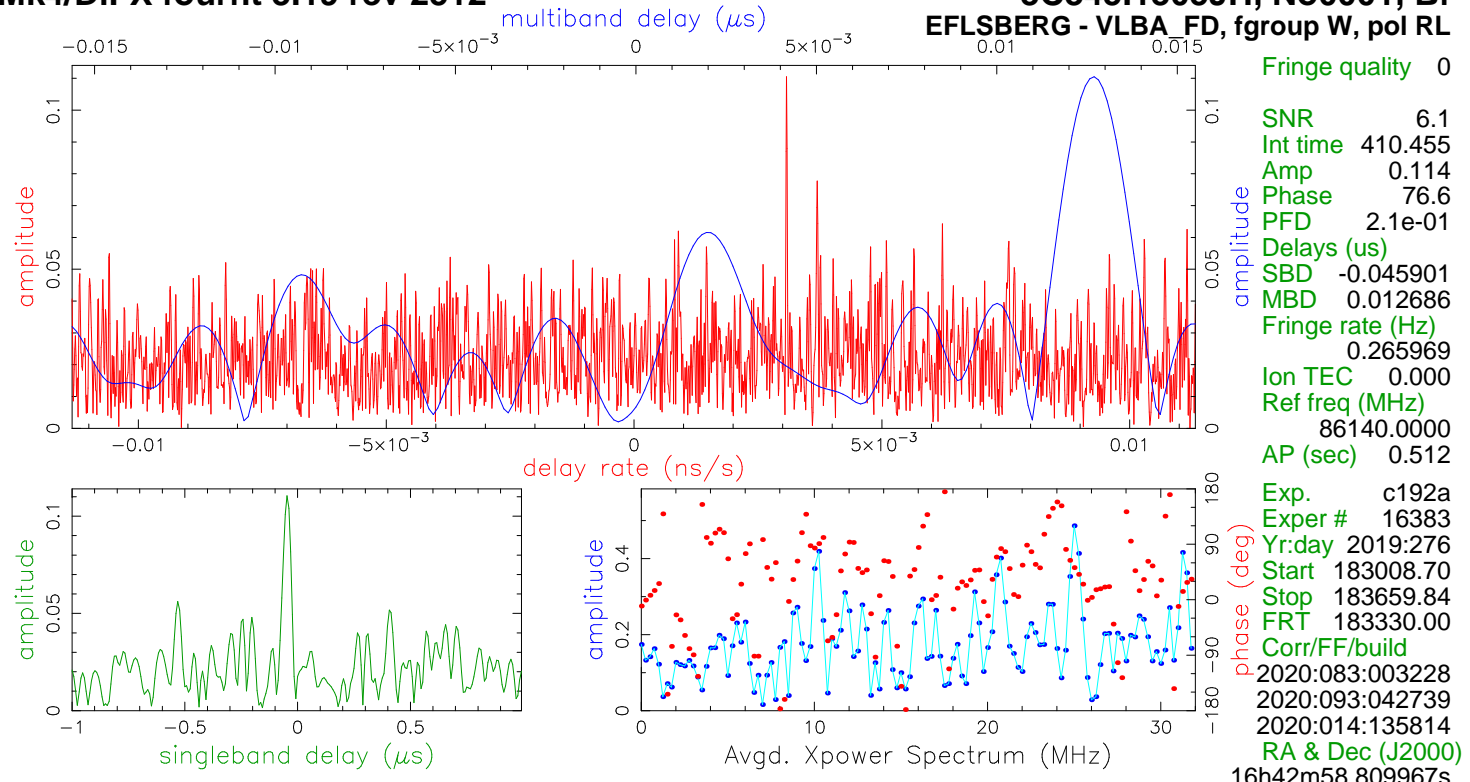


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-145.3	-126.9	-152.8	176.8	-134.1	-43.6	-58.2	-177.6	-90.6	170.0	-60.7	-156.0	-87.5	-123.8	-168.7	-123.7	Phase	-136.0
	0.2	0.1	0.1	0.0	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.3	0.3	0.2	Ampl.	0.1
	172.9	23.5	251.7	55.1	76.3	247.9	208.4	253.6	116.6	145.9	203.5	122.4	124.9	129.8	11.9	213.3	Sbd box	11.2
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

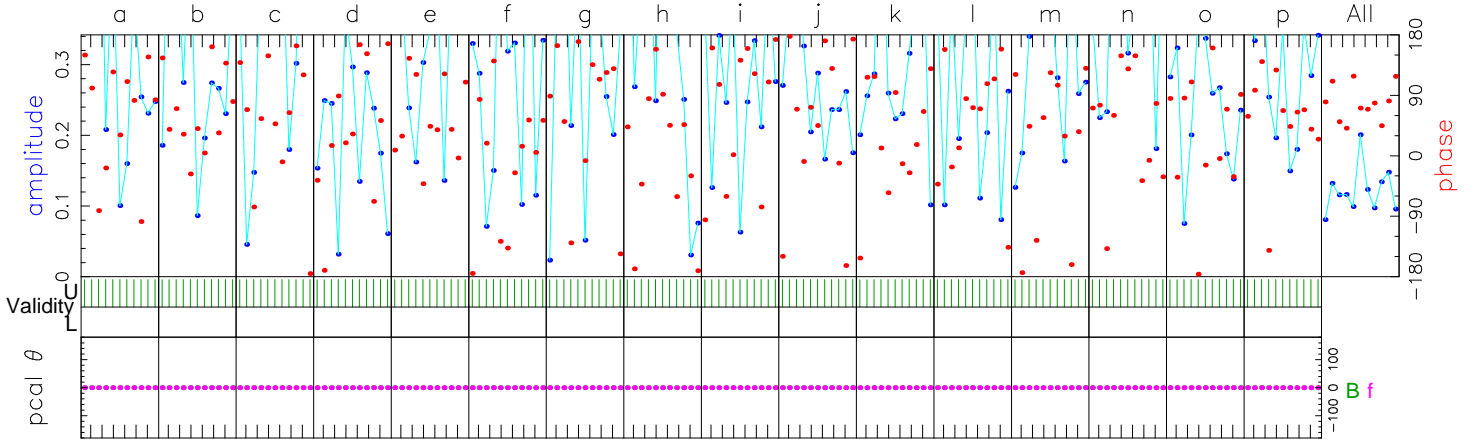
Group delay (usec)(sbd) 4.63642389639E+03 Apriori delay (usec) 4.63735244955E+03 Resid mbdelay (usec) 8.94684E-03 +/- 1.8E-04
 Sband delay (usec) 4.63643246955E+03 Apriori clock (usec) 1.6384283E+01 Resid sbdelay (usec) -9.19980E-01 +/- 2.8E-03
 Phase delay (usec) 4.63735244516E+03 Apriori clockrate (us/s) -1.0905050E-07 Resid phdelay (usec) -4.38604E-06 +/- 6.0E-07
 Delay rate (us/s) -1.47662871543E+00 Apriori rate (us/s) -1.47663385466E+00 Resid rate (us/s) 5.13923E-06 +/- 2.5E-09
 Total phase (deg) -134.5 Apriori accel (us/s/s) -5.63668925130E-06 Resid phase (deg) -136.0 +/- 18.7

ph/seg (deg) RMS Theor. Amplitude 0.120 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 23.3 31.0 Search (2048X64) 0.108 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.3 54.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.1 37.4 Inc. seg. avg. 0.113 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 70.3 65.3 Inc. frq. avg. 0.122 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 10997.354 1283.837 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bf..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bf.W.46.1305JH



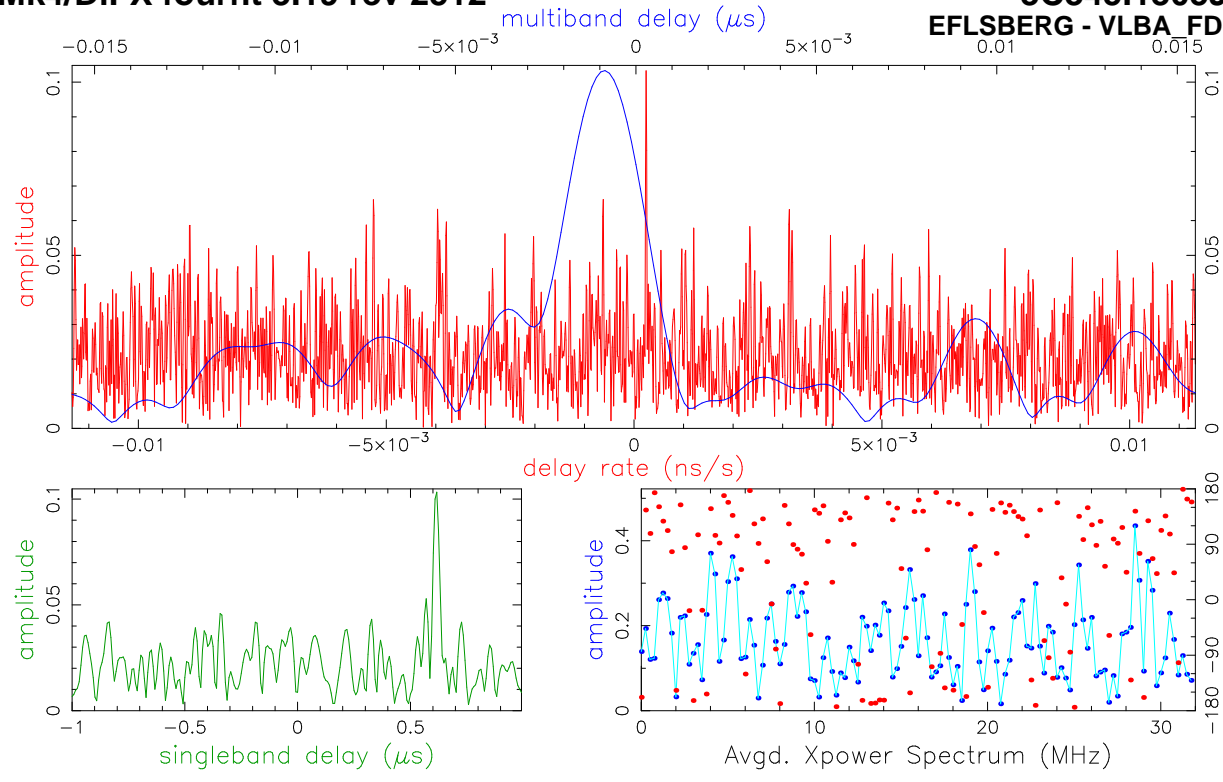
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
118.9	54.0	106.7	36.5	36.0	65.6	140.8	57.0	140.6	112.2	36.0	66.1	109.6	66.3	59.8	77.8	77.8	Phase	76.6
0.1	0.2	0.2	0.1	0.3	0.0	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
69.3	122.3	208.5	197.8	199.1	193.3	192.4	124.0	228.2	20.1	202.1	118.8	120.7	109.4	13.7	122.8	122.8	Sbd box	123.1
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	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:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	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	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	4.63730263553E+03			Apriori delay (usec)			4.63735244955E+03			Resid mbdelay (usec)			1.26860E-02			+/- 1.8E-04		
Sband delay (usec)	4.63730654855E+03			Apriori clock (usec)			1.6384283E+01			Resid sbdelay (usec)			-4.59010E-02			+/- 2.8E-03		
Phase delay (usec)	4.63735245202E+03			Apriori clockrate (us/s)			-1.0905050E-07			Resid phdelay (usec)			2.46890E-06			+/- 6.0E-07		
Delay rate (us/s)	-1.47663076703E+00			Apriori rate (us/s)			-1.47663385466E+00			Resid rate (us/s)			3.08763E-06			+/- 2.5E-09		
Total phase (deg)	78.0			Apriori accel (us/s/s)			-5.63668925130E-06			Resid phase (deg)			76.6			+/- 18.7		
RMS	Theor.	Amplitude	0.114 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5											
ph/seg (deg)	26.5	31.0	Search (2048X64)	0.108		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000						
amp/seg (%)	30.1	54.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016				
ph/frq (deg)	37.5	37.4	Inc. seg. avg.	0.110		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011						
amp/frq (%)	59.3	65.3	Inc. frq. avg.	0.114		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00		

B: az 269.2 el 56.7 pa 55.8 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 10997.354 1283.837 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bf..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bf.W.64.1305JH

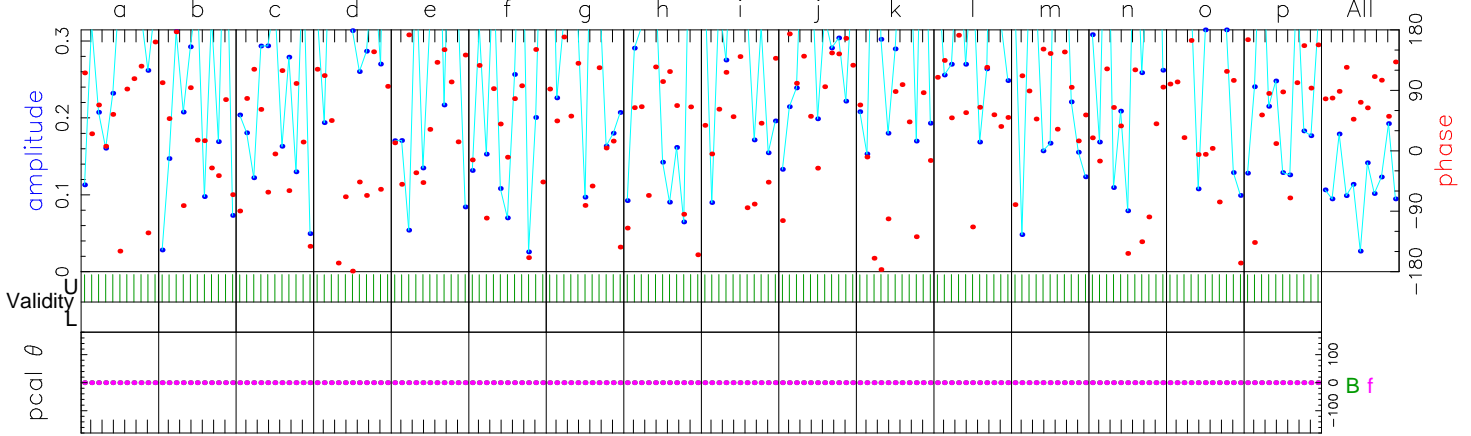


Fringe quality 0

SNR 5.8
Int time 410.455
Amp 0.105
Phase 83.5
PFD 8.0e-01
Delays (us)
SBD 0.614338
MBD -0.000924
Fringe rate (Hz) 0.020877
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042726
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



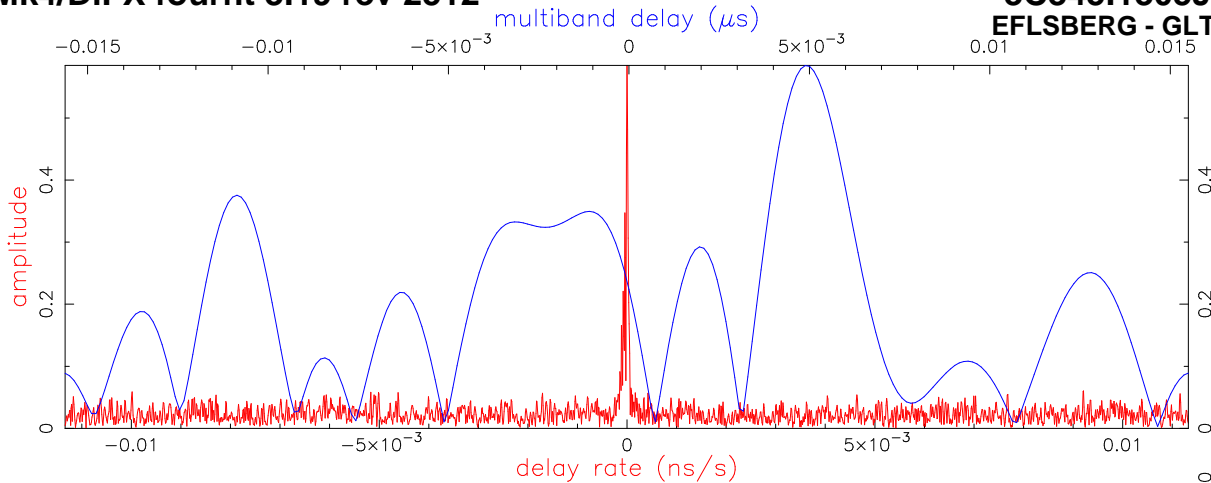
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
f	1000	1000	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
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks

Group delay (usec)(sbd)	4.63797652520E+03	Apriori delay (usec)	4.63735244955E+03	Resid mbdelay (usec)	-9.24346E-04	+/-	1.9E-04
Sband delay (usec)	4.63796678705E+03	Apriori clock (usec)	1.6384283E+01	Resid sbdelay (usec)	6.14338E-01	+/-	3.0E-03
Phase delay (usec)	4.63735245224E+03	Apriori clockrate (us/s)	-1.0905050E-07	Resid phdelay (usec)	2.69148E-06	+/-	6.4E-07
Delay rate (us/s)	-1.47663361230E+00	Apriori rate (us/s)	-1.47663385466E+00	Resid rate (us/s)	2.42360E-07	+/-	2.7E-09
Total phase (deg)	84.9	Apriori accel (us/s/s)	-5.63668925130E-06	Resid phase (deg)	83.5	+/-	19.7

ph/seg (deg) 27.3 32.7 Amplitude 0.105 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.0 57.1 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.2 39.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 31.9 68.9 Inc. seg. avg. 0.100 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 10997.354 1283.837 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bf..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bf.W.9.1305JH simultaneous interpolator

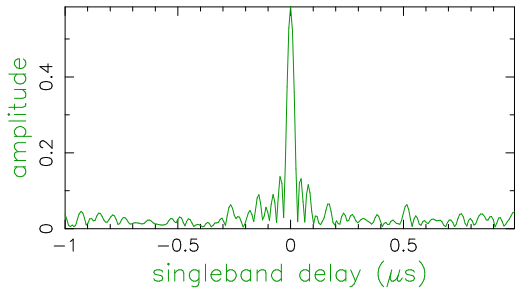
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bg
EFLSBERG - GLT, fgroup W, pol LL

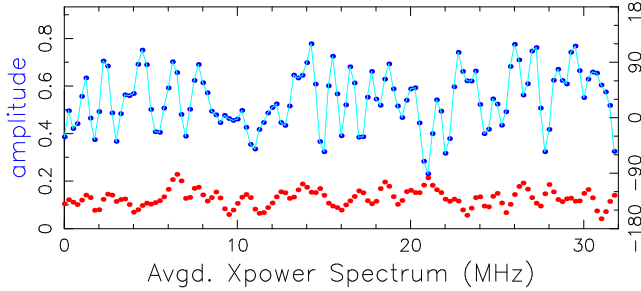


Fringe quality 6

SNR 32.8
Int time 419.665
Amp 0.585
Phase -160.6
PFD 0.0e+00
Delays (us)
SBD -0.000277
MBD 0.004918
Fringe rate (Hz) 0.000089
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

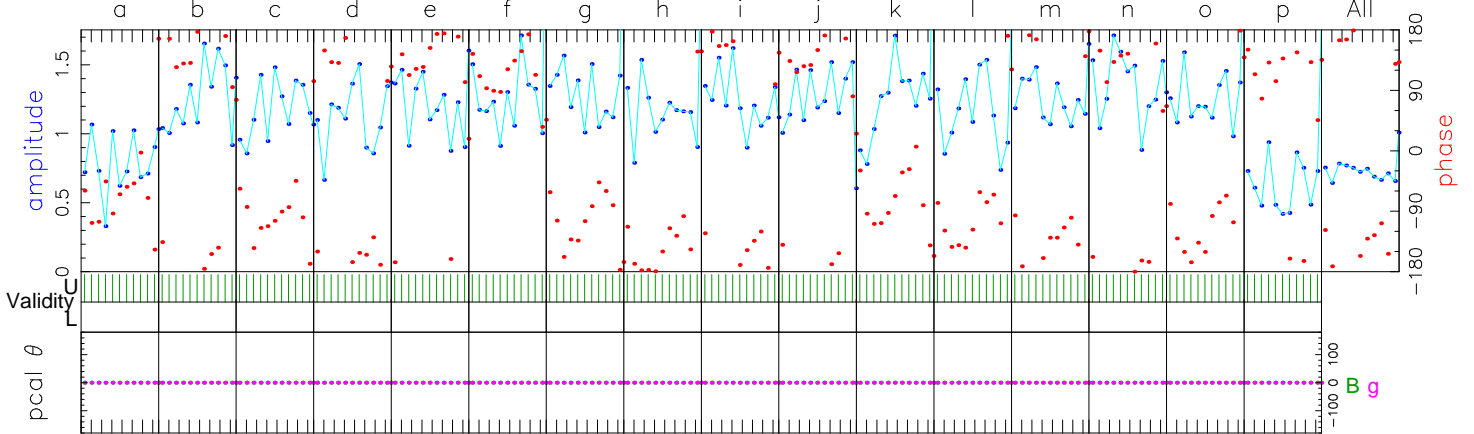


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042727
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-77.4	169.5	-99.9	174.5	151.9	117.9	-106.6	-150.2	-176.2	151.0	-71.7	-108.5	-151.0	150.9	-122.9	132.1	Phase	-160.6
	0.6	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.0	0.5	Ampl.	0.9
	128.0	128.5	128.5	128.9	129.1	129.3	129.5	129.0	129.0	129.4	128.7	129.1	129.0	128.8	128.1	129.1	Sbd box	129.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

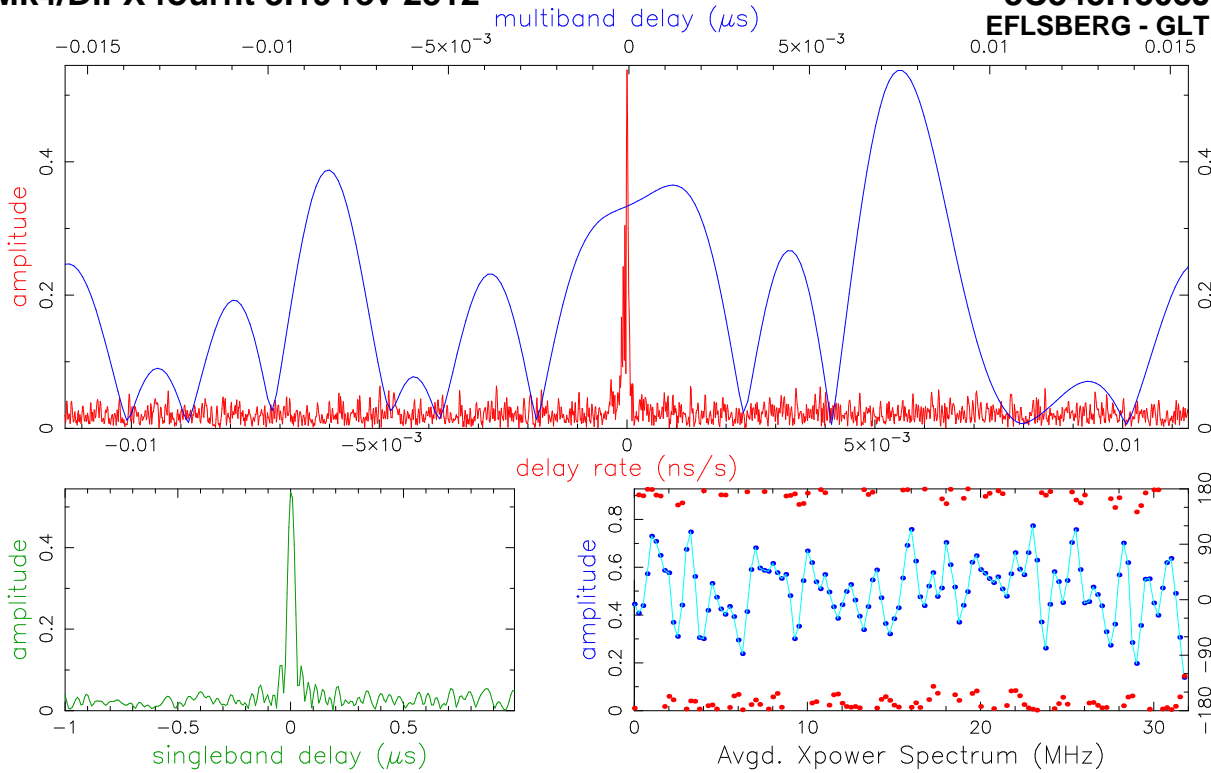
Group delay (usec)(sbd) 1.11027541300E+03 Apriori delay (usec) 1.11027049484E+03 Resid mbdelay (usec) 4.91816E-03 +/- 3.3E-05
 Sband delay (usec) 1.11027021784E+03 Apriori clock (usec) 1.5542942E+01 Resid sbdelay (usec) -2.77000E-04 +/- 5.3E-04
 Phase delay (usec) 1.11027048966E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) -5.17950E-06 +/- 1.1E-07
 Delay rate (us/s) -6.86391248983E-01 Apriori rate (us/s) -6.86391250011E-01 Resid rate (us/s) 1.02741E-09 +/- 4.7E-10
 Total phase (deg) -7.5 Apriori accel (us/s/s) -2.03542527340E-05 Resid phase (deg) -160.6 +/- 3.5

RMS Theor. Amplitude 0.585 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 36.8 6.1 Search (2048X64) 0.583 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 24.9 10.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 57.1 7.0 Inc. seg. avg. 0.717 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 63.0 12.2 Inc. frq. avg. 0.915 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.21.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bg
EFLSBERG - GLT, fgroup W, pol RR

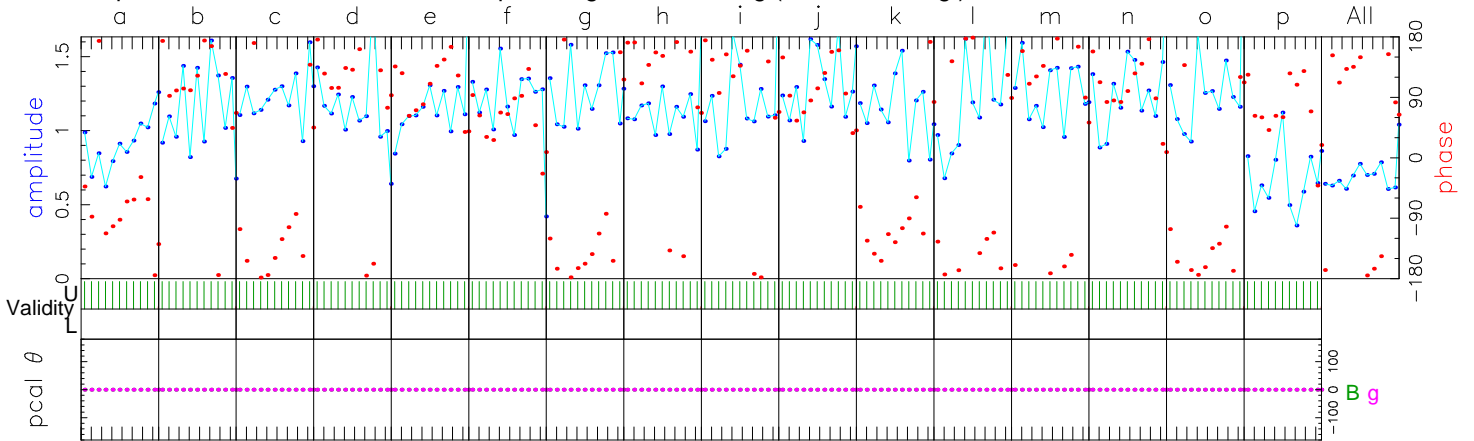


Fringe quality 6

SNR 30.5
Int time 419.708
Amp 0.545
Phase 156.6
PFD 0.0e+00
Delays (us)
SBD 0.002803
MBD 0.007524
Fringe rate (Hz) 0.000099
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042734
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-86.3	126.9	-148.7	143.3	108.2	64.4	-150.2	158.8	143.1	104.0	-115.2	-164.8	163.2	106.6	-156.8	74.3		Phase 156.6
	0.6	0.9	0.9	0.9	0.9	1.0	1.1	0.9	1.0	1.0	1.0	0.9	1.0	0.9	0.9	0.5		Ampl. 0.9
	127.7	128.8	129.1	129.3	129.3	129.6	129.4	129.7	129.3	129.5	129.6	129.4	129.0	129.3	128.6	128.7		Sbd box 129.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

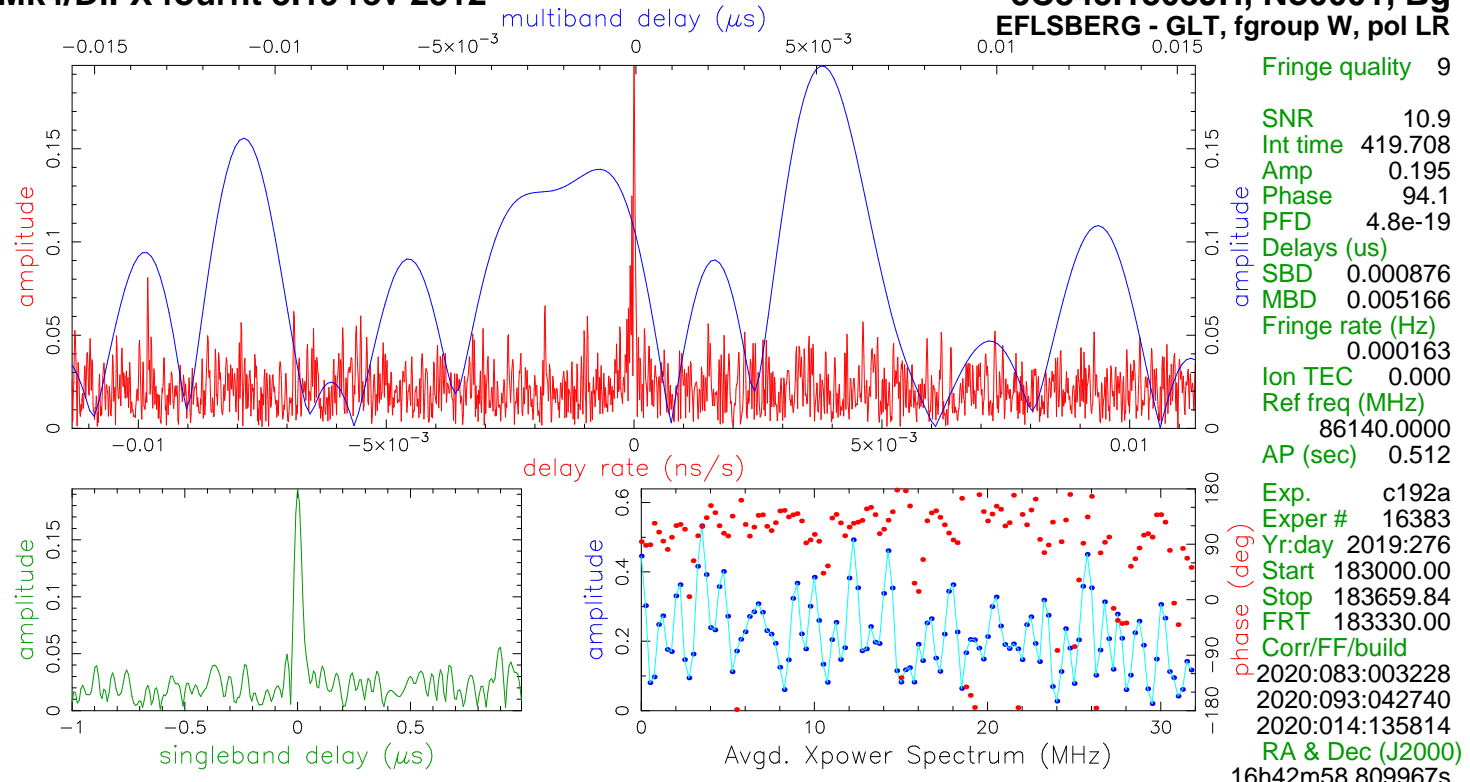
Group delay (usec)(sbd) 1.11027801896E+03 Apriori delay (usec) 1.11027049484E+03 Resid mbdelay (usec) 7.52412E-03 +/- 3.5E-05
 Sband delay (usec) 1.11027329784E+03 Apriori clock (usec) 1.5542942E+01 Resid sbdelay (usec) 2.80300E-03 +/- 5.6E-04
 Phase delay (usec) 1.11027049989E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 5.04987E-06 +/- 1.2E-07
 Delay rate (us/s) -6.86391248867E-01 Apriori rate (us/s) -6.86391250011E-01 Resid rate (us/s) 1.14361E-09 +/- 5.0E-10
 Total phase (deg) 309.8 Apriori accel (us/s/s) -2.03542527340E-05 Resid phase (deg) 156.6 +/- 3.8

RMS Theor. Amplitude 0.545 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 38.2 6.5 Search (2048X64) 0.530 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 27.6 11.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 62.8 7.5 Inc. seg. avg. 0.674 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 69.8 13.1 Inc. frq. avg. 0.890 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.44.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bg
EFLSBERG - GLT, fgroup W, pol LR



Fringe quality 9

SNR 10.9

Int time 419.708

Amp 0.195

Phase 94.1

PFD 4.8e-19

Delays (us)

SBD 0.000876

MBD 0.005166

Fringe rate (Hz)

0.000163

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183000.00

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042740

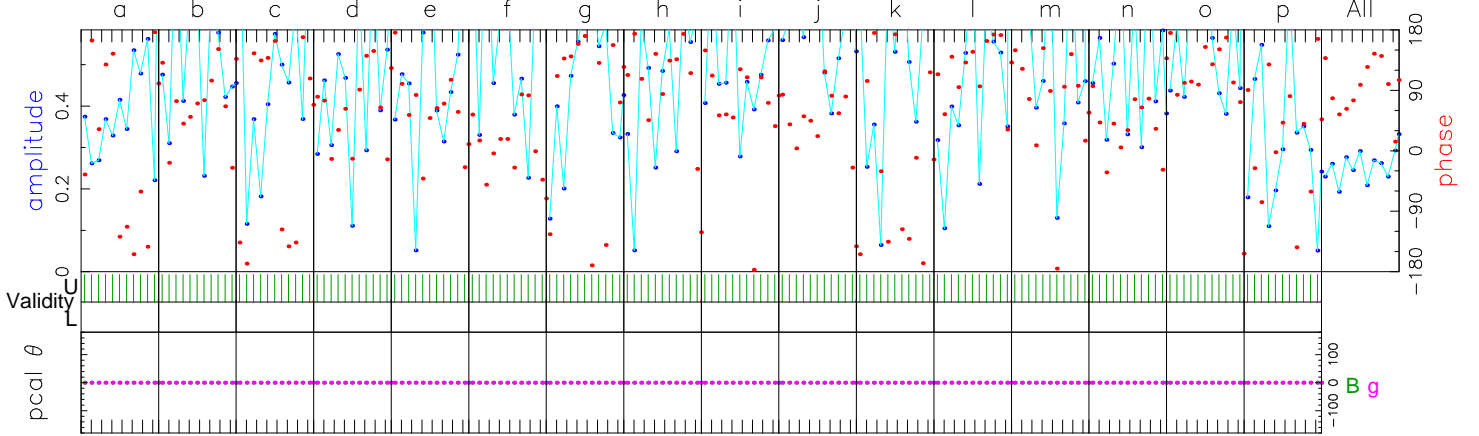
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-145.1	73.8	-179.4	70.9	48.2	5.3	159.0	112.9	86.7	42.8	-163.5	138.1	104.9	41.2	120.3	10.2	Phase	94.1
	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.4	0.5	0.1	Ampl.	0.3
	127.3	128.5	128.5	130.2	128.3	128.8	129.8	129.2	128.8	129.2	129.4	128.5	128.7	128.4	128.9	126.7	Sbd box	129.1
UL	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 1.11027566043E+03 Apriori delay (usec) 1.11027049484E+03 Resid mbdelay (usec) 5.16559E-03 +/- 9.9E-05

Sband delay (usec) 1.11027137084E+03 Apriori clock (usec) 1.5542942E+01 Resid sbdelay (usec) 8.76000E-04 +/- 1.6E-03

Phase delay (usec) 1.11027049787E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 3.03513E-06 +/- 3.4E-07

Delay rate (us/s) -6.86391248115E-01 Apriori rate (us/s) -6.86391250011E-01 Resid rate (us/s) 1.89539E-09 +/- 1.4E-09

Total phase (deg) 247.3 Apriori accel (us/s/s) -2.03542527340E-05 Resid phase (deg) 94.1 +/- 10.5

RMS Theor. Amplitude 0.195 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 39.6 18.2 Search (2048X64) 0.191 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 33.4 31.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 67.2 21.0 Inc. seg. avg. 0.239 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

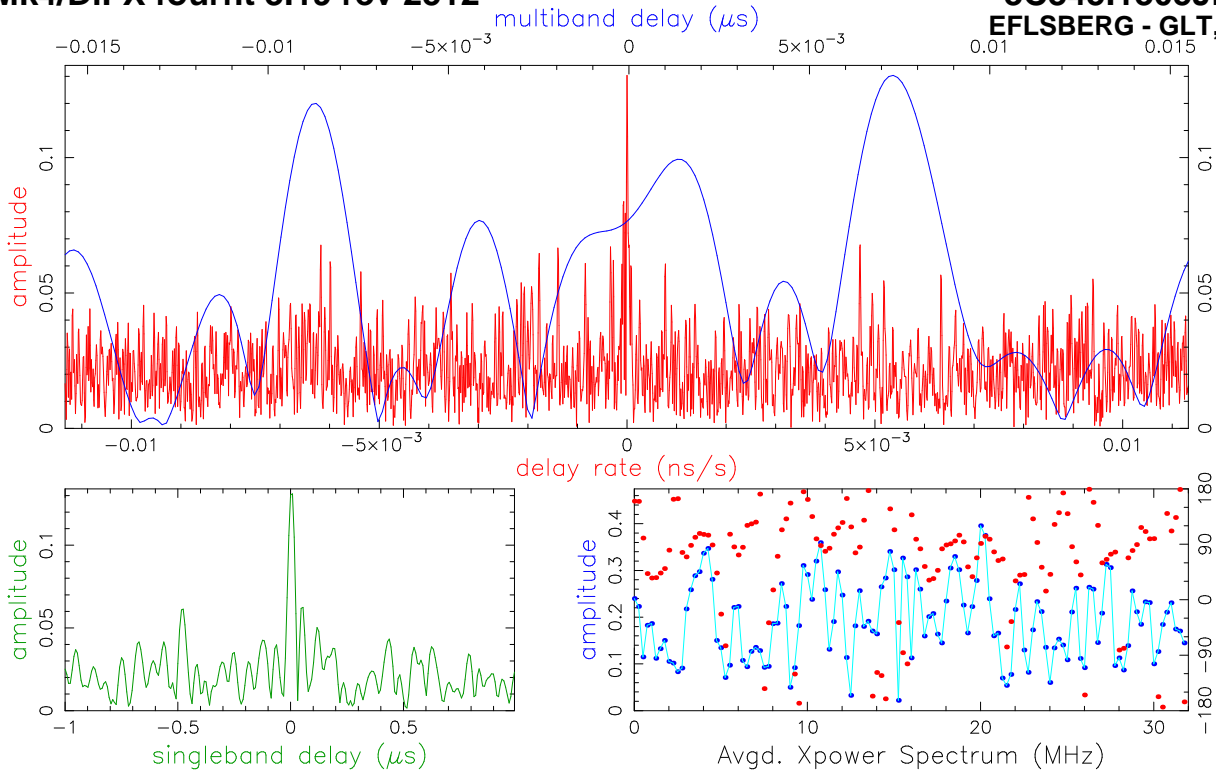
amp/frq (%) 90.6 36.7 Inc. frq. avg. 0.318 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.67.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bg
EFLSBERG - GLT, fgroup W, pol RL

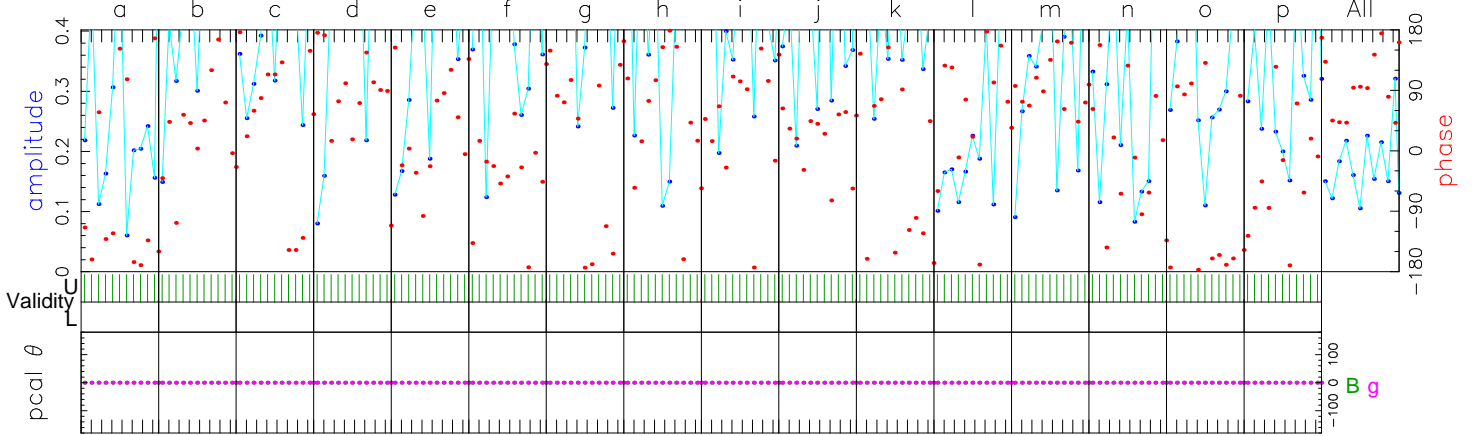


Fringe quality 9

SNR 7.5
Int time 419.665
Amp 0.134
Phase 83.4
PFD 1.9e-05
Delays (us)
SBD 0.004131
MBD 0.007314
Fringe rate (Hz)
-0.000373
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042744
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

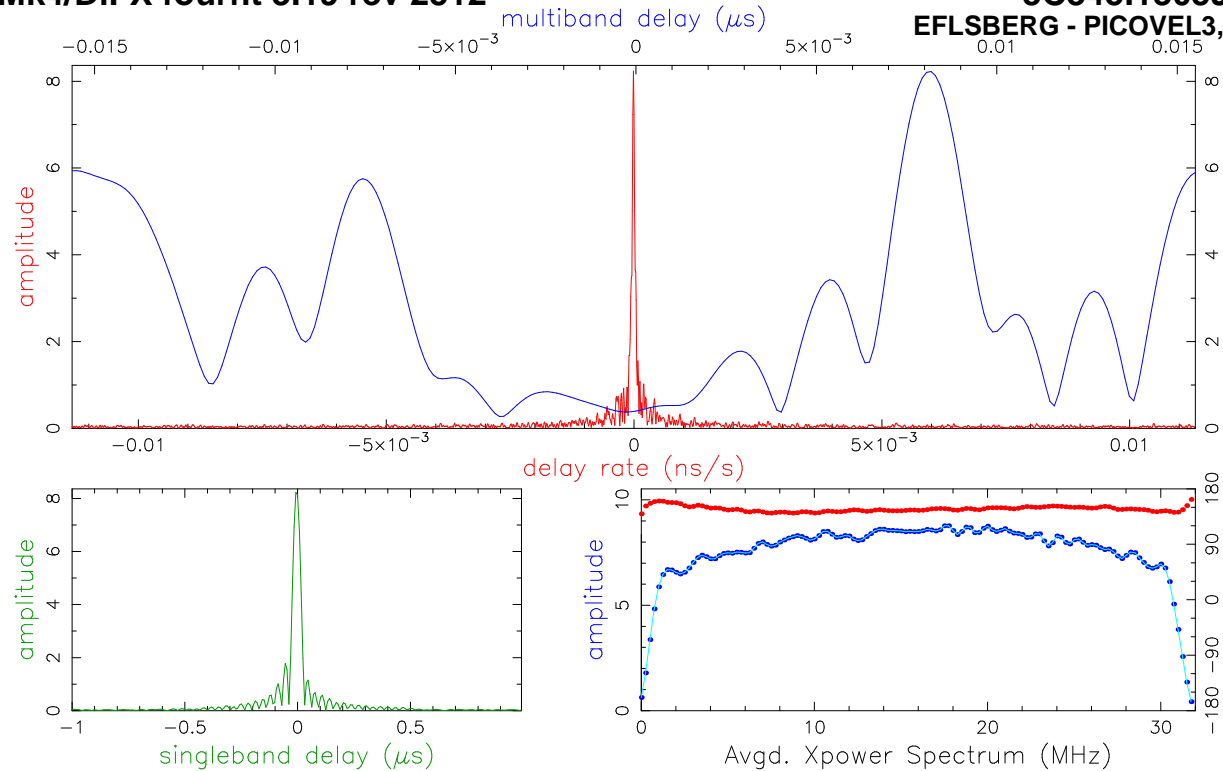


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-165.1	47.8	137.7	76.7	39.0	-22.4	134.0	83.2	76.0	23.9	174.6	107.6	95.9	51.1	130.6	-36.7		Phase	83.4
	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.1	0.3	0.1	0.2	0.1		Ampl.	0.2
	101.2	129.0	128.9	128.5	152.0	169.6	128.8	135.2	129.1	129.0	167.7	70.1	129.0	124.2	127.8	42.9		Sbd box	129.5
UL	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

Group delay (usec)(sbd) 1.11027780893E+03 Apriori delay (usec) 1.11027049484E+03 Resid mbdelay (usec) 7.31409E-03 +/- 1.4E-04
 Sband delay (usec) 1.11027462584E+03 Apriori clock (usec) 1.5542942E+01 Resid sbdelay (usec) 4.13100E-03 +/- 2.3E-03
 Phase delay (usec) 1.11027049753E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 2.68827E-06 +/- 4.9E-07
 Delay rate (us/s) -6.86391254343E-01 Apriori rate (us/s) -6.86391250011E-01 Resid rate (us/s) -4.33283E-09 +/- 2.0E-09
 Total phase (deg) 236.5 Apriori accel (us/s/s) -2.03542527340E-05 Resid phase (deg) 83.4 +/- 15.3

RMS Theor. Amplitude 0.134 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 44.3 26.4 Search (2048X64) 0.127 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 55.9 46.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 67.0 30.5 Inc. seg. avg. 0.165 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 89.5 53.3 Inc. frq. avg. 0.203 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.84.1305JH

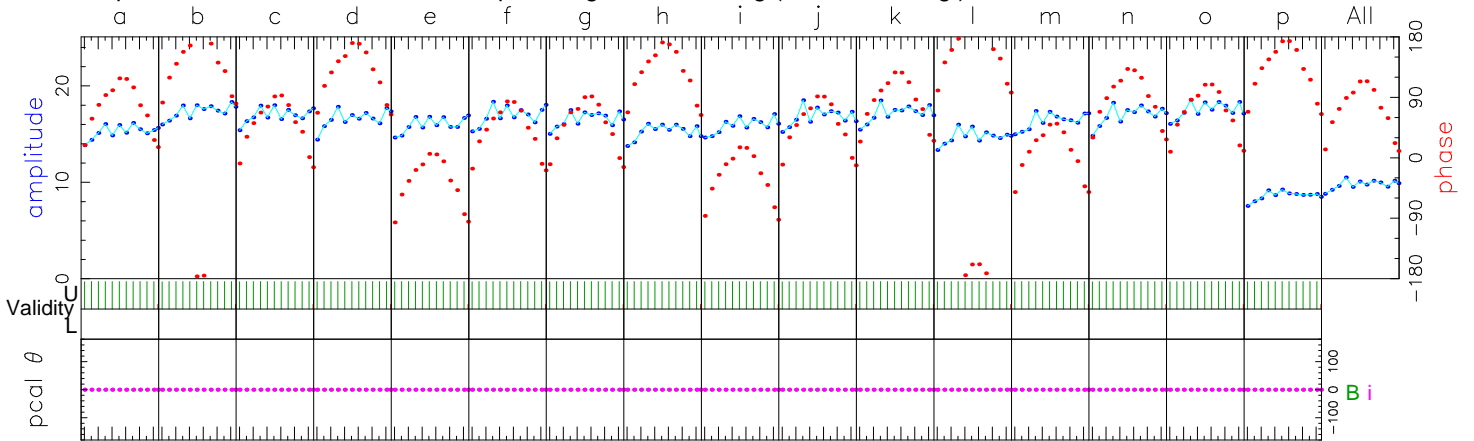


Fringe quality 3

SNR 405.4
Int time 314.116
Amp 8.366
Phase 74.4
PFD 0.0e+00
Delays (us)
SBD -0.004449
MBD 0.008149
Fringe rate (Hz)
-0.000754
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042729
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec

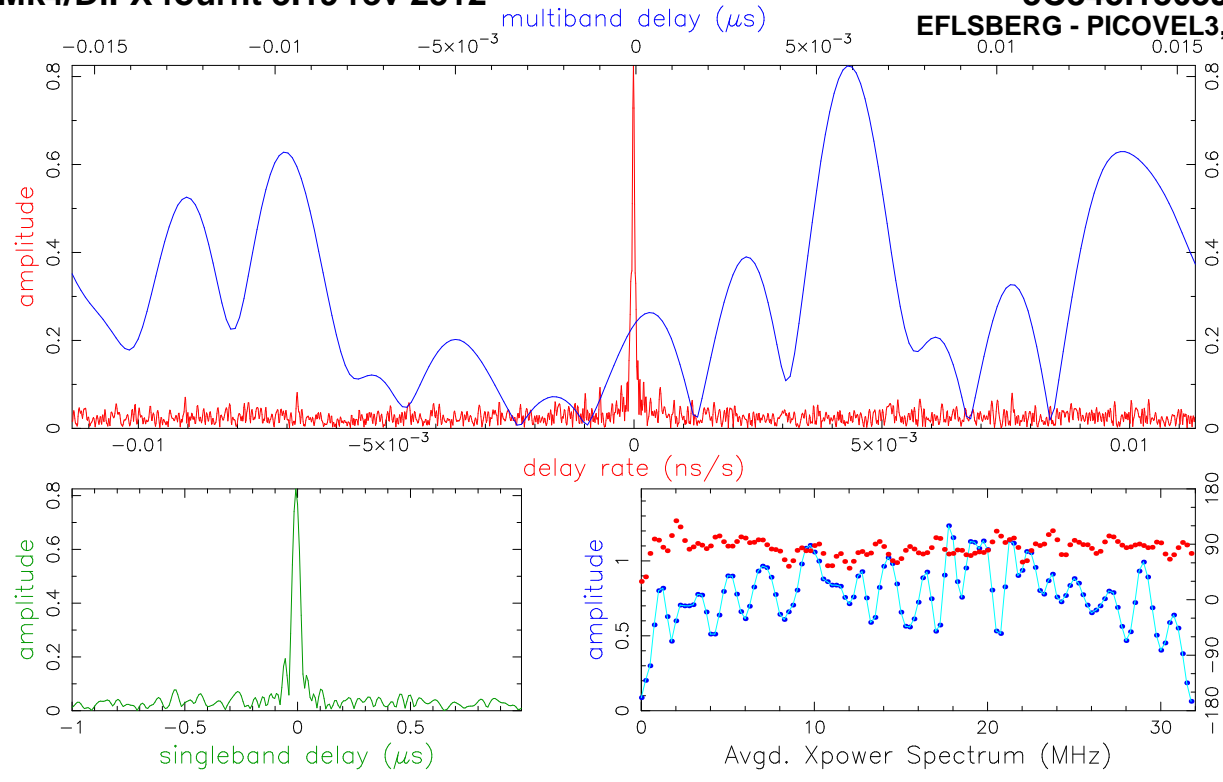


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	79.0	143.0	53.0	129.5	-33.0	44.4	51.6	130.3	-24.1	51.5	87.0	162.5	10.9	91.8	70.5	133.6	Phase	74.4				
B	12.9	14.5	14.3	13.9	13.4	14.2	13.9	12.9	13.4	14.2	14.4	12.5	13.7	14.3	14.8	7.2	Ampl.	13.4				
B:i	129.0	129.0	129.1	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	128.4				
B	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B: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					
B	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	PC amp					
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.05989291786E+03														Apriori delay (usec)	-1.05990106636E+03	Resid mbdelay (usec)	8.14850E-03	+/-	2.7E-06
Sband delay (usec)			-1.05990551536E+03														Apriori clock (usec)	1.7328032E+01	Resid sbdelay (usec)	-4.44900E-03	+/-	4.2E-05
Phase delay (usec)			-1.05990106396E+03														Apriori clockrate (us/s)	1.5299999E-07	Resid phdelay (usec)	2.39938E-06	+/-	9.1E-09
Delay rate (us/s)			1.22893304031E-02														Apriori rate (us/s)	1.22893391516E-02	Resid rate (us/s)	-8.74856E-09	+/-	5.0E-11
Total phase (deg)																	Apriori accel (us/s/s)	1.79330549472E-05	Resid phase (deg)	74.4	+/-	0.3

	RMS	Theor.	Amplitude	8.366 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	33.4	0.5	Search (2048X64)	8.081	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	17.7	0.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	59.9	0.6	Inc. seg. avg.	9.771	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	63.8	1.0	Inc. frq. avg.	13.417	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

B: az 269.2 el 56.7 pa 55.8 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -58.141 2324.892 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bi.W.26.1305JH

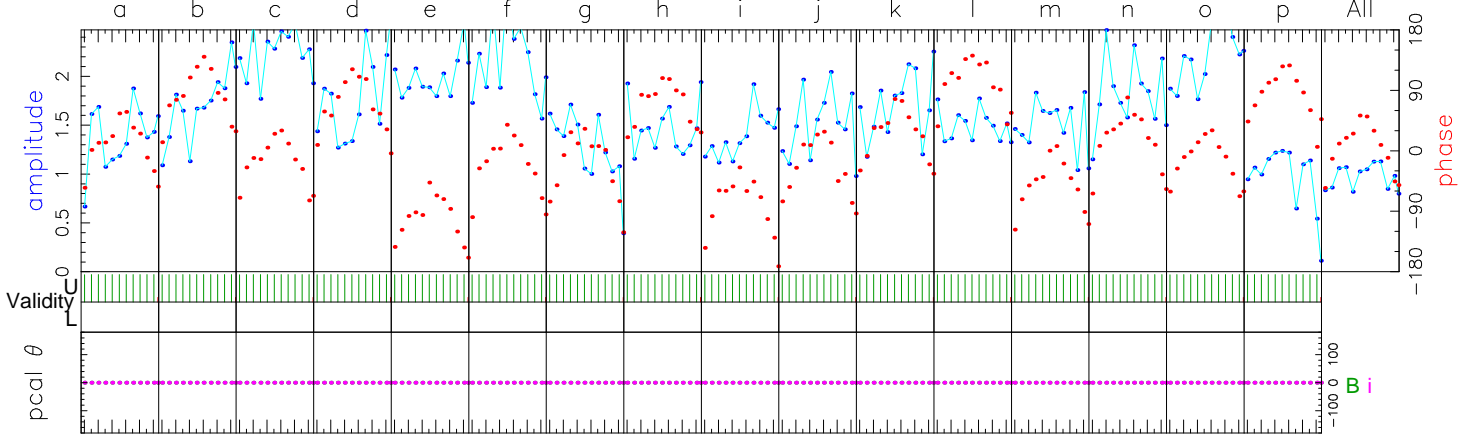


Fringe quality 2

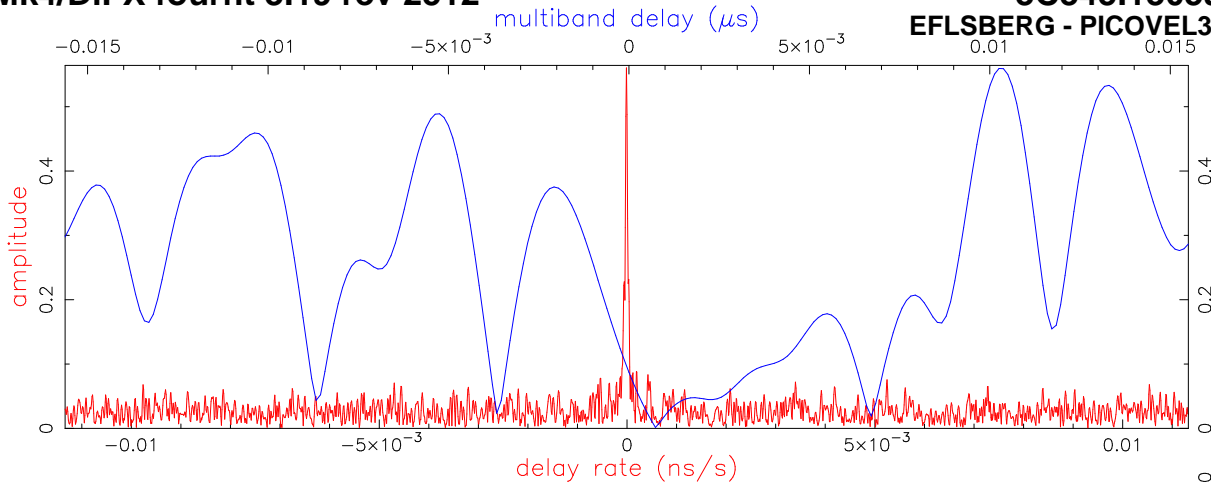
SNR 40.0
Int time 314.116
Amp 0.826
Phase 9.1
PFD 0.0e+00
Delays (us)
SBD -0.007092
MBD 0.005900
Fringe rate (Hz)
-0.000690
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042734
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec

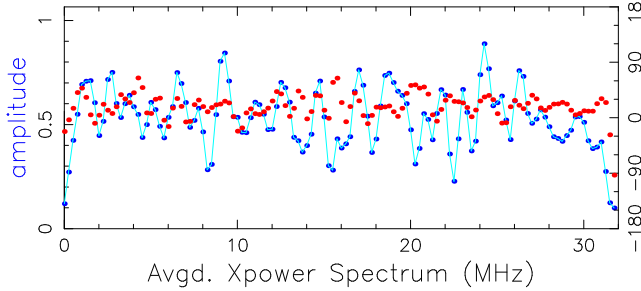
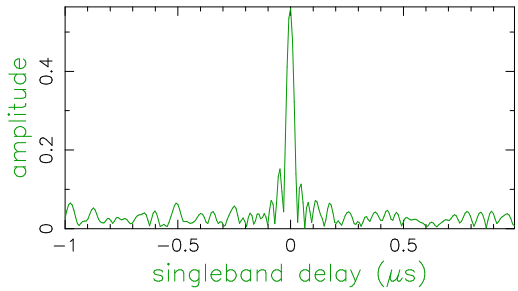


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	13.8	84.3	-13.2	69.4	-101.0	-10.1	-13.3	69.3	-75.8	-17.9	30.0	102.7	-46.7	23.2	-11.3	89.3	Phase	9.1					
B	1.2	1.4	1.9	1.4	1.7	1.7	1.0	1.2	1.1	1.2	1.4	1.2	1.3	1.5	1.9	0.9	Ampl.	1.4					
B:i	129.1	128.7	128.7	128.7	128.7	128.7	128.5	129.1	128.4	129.1	128.5	128.6	128.8	128.8	128.3	128.3	Sbd box	128.1					
B:i	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase						
B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids						
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks						
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids						
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks						
B	Group delay (usec)(sbd)		-1.05989516617E+03				Apriori delay (usec)				-1.05990106636E+03				Resid mbdelay (usec)				5.90019E-03		+/- 2.7E-05		
B	Sband delay (usec)		-1.05990815836E+03				Apriori clock (usec)				1.7328032E+01				Resid sbdelay (usec)				-7.09200E-03		+/- 4.3E-04		
B	Phase delay (usec)		-1.05990106607E+03				Apriori clockrate (us/s)				1.5299999E-07				Resid phdelay (usec)				2.93557E-07		+/- 9.2E-08		
B	Delay rate (us/s)		1.22893311435E-02				Apriori rate (us/s)				1.22893391516E-02				Resid rate (us/s)				-8.00812E-09		+/- 5.1E-10		
B	Total phase (deg)		-299.1				Apriori accel (us/s/s)				1.79330549472E-05				Resid phase (deg)				9.1		+/- 2.9		
B	ph/seg (deg)	RMS	Theor.	Amplitude		0.826 +/- 0.021		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			
B	amp/seg (%)	34.1	5.0	Search (2048X64)		0.816		Pcal rate: 0.000E+00, 0.000E+00 (us/s)				SampCntNorm: enabled				mb window (us)		-0.016 0.016					
B	ph/frq (deg)	23.4	8.7	Interp.		0.000		Sample rate(MSamp/s): 64				Data rate(Mb/s): 2048				nlags: 128		t_cohere infinite		ion window (TEC)		0.00 0.00	
B	amp/frq (%)	61.9	5.7	Inc. seg. avg.		0.976		Data rate(Mb/s): 2048				nlags: 128				t_cohere infinite		ion window (TEC)		0.00 0.00			
B	amp/frq (%)	77.2	10.0	Inc. frq. avg.		1.382		Data rate(Mb/s): 2048				nlags: 128				t_cohere infinite		ion window (TEC)		0.00 0.00			



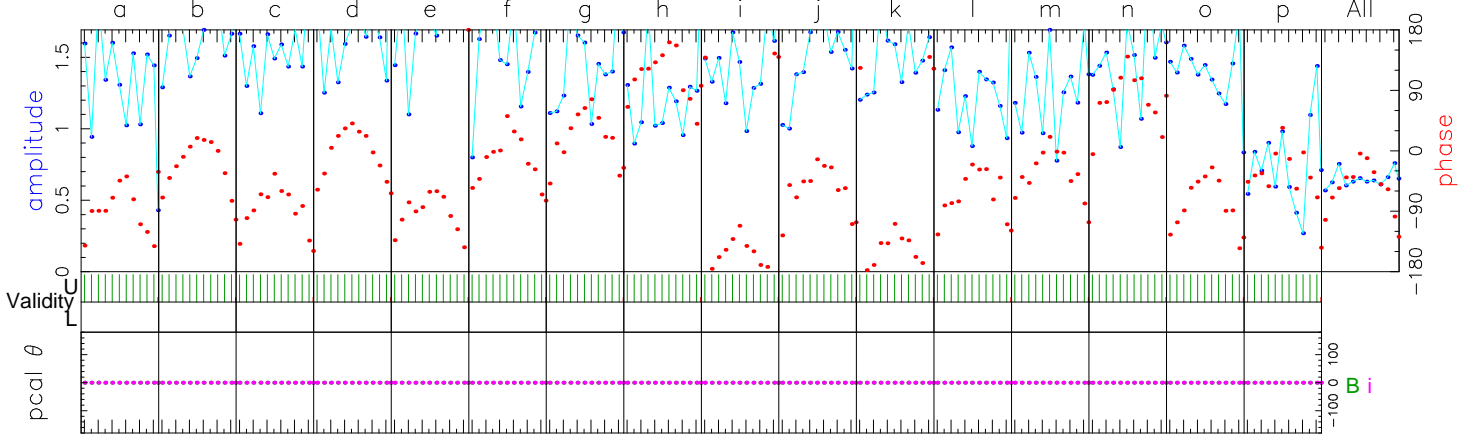
Fringe quality 6

SNR 27.3
Int time 314.116
Amp 0.564
Phase -51.7
PFD 0.0e+00
Delays (us)
SBD -0.002074
MBD 0.010307
Fringe rate (Hz)
-0.000711
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Yr:day 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042738
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 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					
	-92.7	-16.7	-87.6	-0.7	-94.6	-11.3	21.5	110.8	-164.8	-51.9	-158.3	-63.5	-31.8	75.7	-79.3	-34.6		Phase	-51.7				
	1.2	1.4	1.3	1.4	1.6	1.3	1.2	1.0	1.2	1.3	1.2	1.0	1.1	1.2	1.1	0.6		Ampl.	1.2				
	129.4	129.4	129.3	129.3	129.1	129.7	129.3	129.5	129.2	128.9	129.8	129.3	129.2	129.3	129.2	129.6		Sbd box	128.7				
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0		APs used					
B	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					
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
B	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							
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.05989075889E+03															Apriori delay (usec)	-1.05990106636E+03	Resid mbdelay (usec)	1.03075E-02	+/-	3.9E-05
Sband delay (usec)			-1.05990313986E+03															Apriori clock (usec)	1.7328032E+01	Resid sbdelay (usec)	-2.07350E-03	+/-	6.3E-04
Phase delay (usec)			-1.05990106803E+03															Apriori clockrate (us/s)	1.5299999E-07	Resid phdelay (usec)	-1.66601E-06	+/-	1.4E-07
Delay rate (us/s)			1.22893308969E-02															Apriori rate (us/s)	1.22893391516E-02	Resid rate (us/s)	-8.25470E-09	+/-	7.4E-10
Total phase (deg)																		Apriori accel (us/s/s)	1.79330549472E-05	Resid phase (deg)	-51.7	+/-	4.2

ph/seg (deg) 30.9 7.3
amp/seg (%) 18.0 12.7
ph/frq (deg) 77.5 8.4
amp/frq (%) 117.0 14.6

RMS Theor. Amplitude 0.564 +/- 0.021
Search (2048X64) 0.554
Interp. 0.000
Inc. seg. avg. 0.644
Inc. frq. avg. 1.179

Group delay (usec)(sbd) -1.05989075889E+03
Sband delay (usec) -1.05990313986E+03
Phase delay (usec) -1.05990106803E+03
Delay rate (us/s) 1.22893308969E-02
Total phase (deg) -359.9

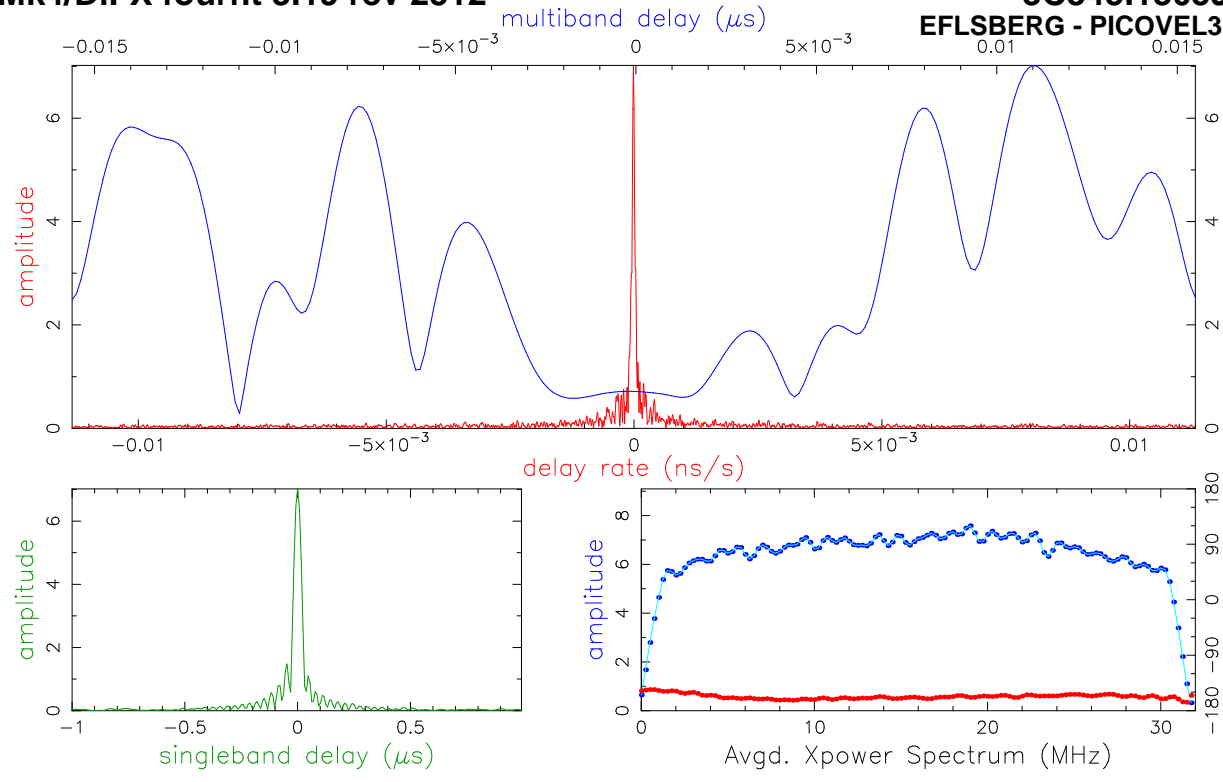
Apriori delay (usec) -1.05990106636E+03
Apriori clock (usec) 1.7328032E+01
Apriori clockrate (us/s) 1.5299999E-07
Apriori rate (us/s) 1.22893391516E-02
Apriori accel (us/s/s) 1.79330549472E-05

Resid mbdelay (usec) 1.03075E-02 +/- 3.9E-05
Resid sbdelay (usec) -2.07350E-03 +/- 6.3E-04
Resid phdelay (usec) -1.66601E-06 +/- 1.4E-07
Resid rate (us/s) -8.25470E-09 +/- 7.4E-10
Resid phase (deg) -51.7 +/- 4.2

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

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

B: az 269.2 el 56.7 pa 55.8 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -58.141 2324.892 simultaneous interpolator

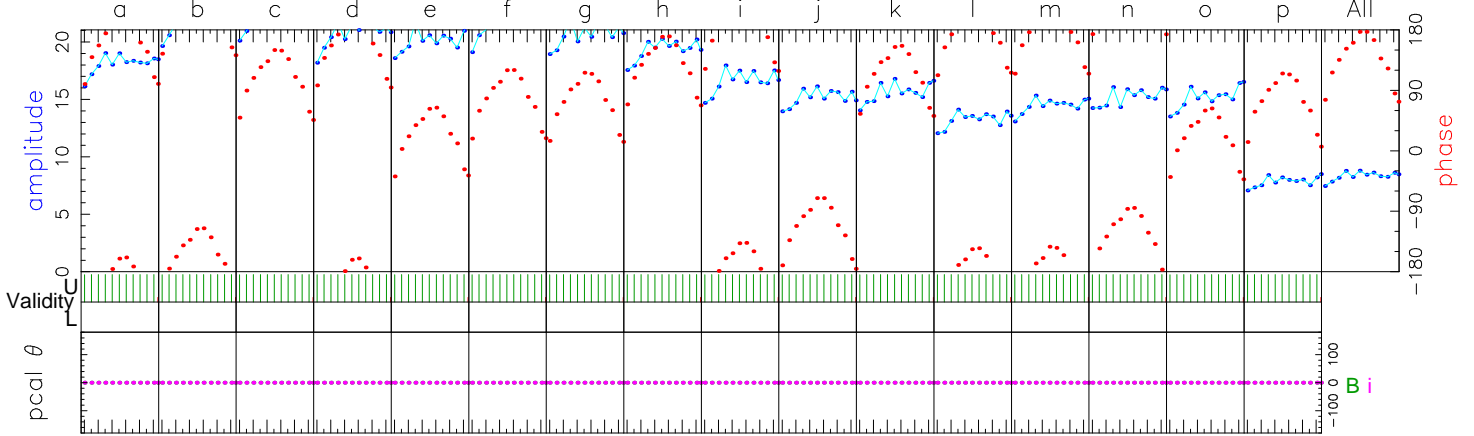


Fringe quality 3

SNR 340.2
Int time 314.116
Amp 7.020
Phase 137.9
PFD 0.0e+00
Delays (us)
SBD -0.000215
MBD 0.011026
Fringe rate (Hz)
-0.000757
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042726
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 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
	161.1	-154.5	110.4	159.2	24.3	80.5	76.0	130.4	-175.5	-110.4	116.5	175.6	177.5	-124.3	21.6	76.1	Phase	137.9
	15.3	18.6	18.7	17.4	17.0	18.2	17.4	16.3	14.0	12.8	13.1	11.2	12.2	12.8	12.7	6.6	Ampl.	14.6
	129.0	129.0	129.0	128.9	129.0	129.1	129.0	129.0	129.0	129.0	129.0	129.1	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used	
B	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	
B: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	
B:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	-1.05989004083E+03			Apriori delay (usec)			-1.05990106636E+03			Resid mbdelay (usec)			1.10255E-02			+/-	3.2E-06	
Sband delay (usec)	-1.05990128086E+03			Apriori clock (usec)			1.7328032E+01			Resid sbdelay (usec)			-2.14500E-04			+/-	5.1E-05	
Phase delay (usec)	-1.05990106191E+03			Apriori clockrate (us/s)			1.5299999E-07			Resid phdelay (usec)			4.44531E-06			+/-	1.1E-08	
Delay rate (us/s)	1.22893303655E-02			Apriori rate (us/s)			1.22893391516E-02			Resid rate (us/s)			-8.78611E-09			+/-	6.0E-11	
Total phase (deg)	-170.4			Apriori accel (us/s/s)			1.79330549472E-05			Resid phase (deg)			137.9			+/-	0.3	

ph/seg (deg) 33.4 0.6
amp/seg (%) 19.5 1.0
ph/frq (deg) 71.4 0.7
amp/frq (%) 117.8 1.2

RMS Theor. Amplitude 7.020 +/- 0.021
Search (2048X64) 6.902
Interp. 0.000
Inc. seg. avg. 8.331
Inc. frq. avg. 14.637

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

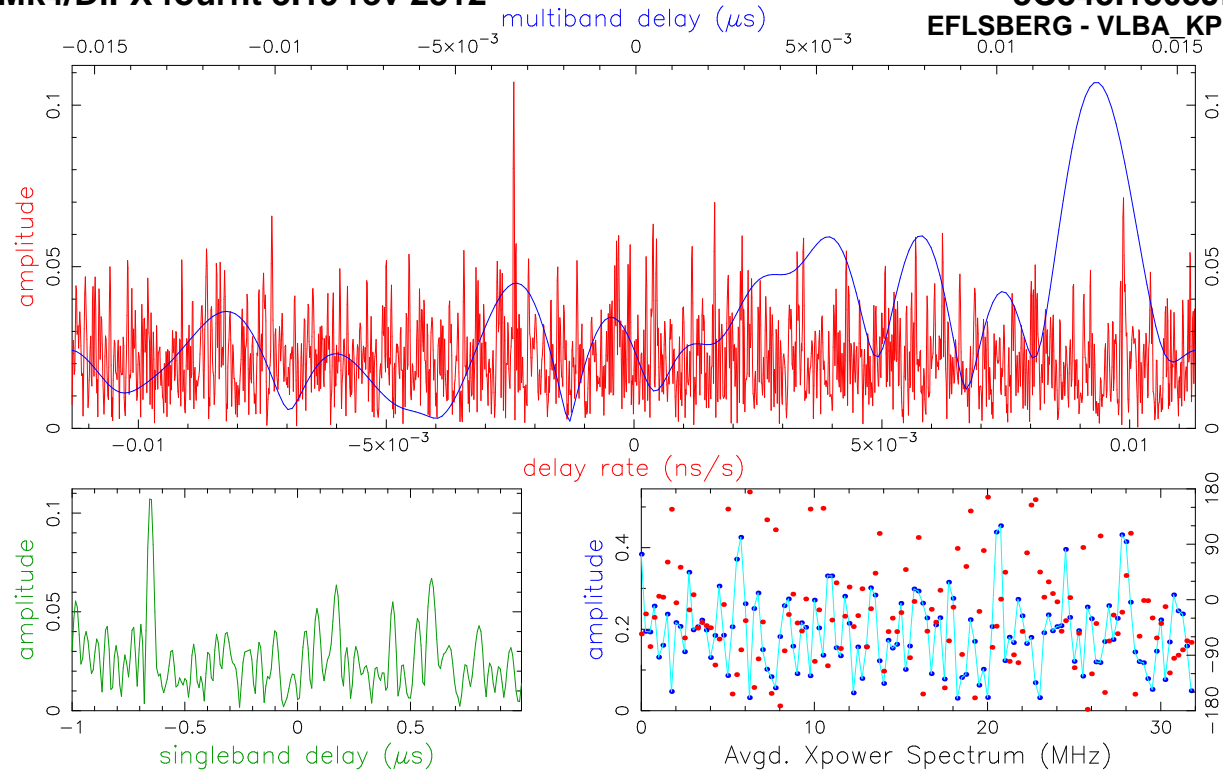
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -58.141 2324.892 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bi.W.7.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bk
EFLSBERG - VLBA_KP, fgroup W, pol LL

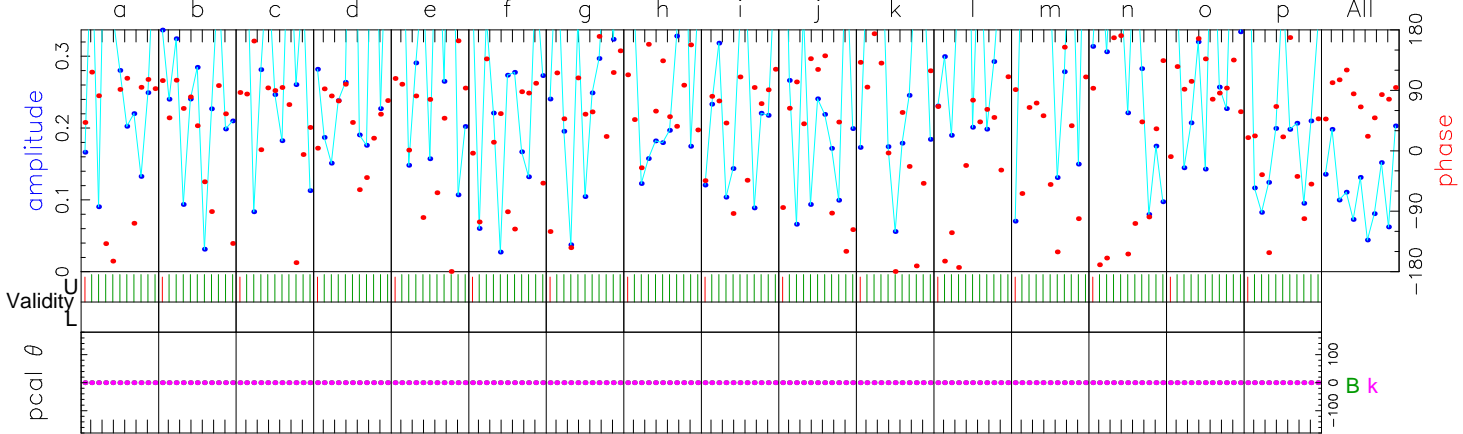


Fringe quality 0

SNR 6.1
Int time 407.733
Amp 0.112
Phase 83.4
PFD 2.6e-01
Delays (us)
SBD -0.652444
MBD 0.012781
Fringe rate (Hz)
-0.208881
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042726
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	132.6	80.9	73.4	45.1	114.2	34.5	107.0	78.0	80.0	-152.1	129.7	31.0	53.4	-179.5	96.8	14.6	Phase	83.4
	0.2	0.1	0.2	0.3	0.1	0.0	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	68.2	204.9	167.3	46.5	1.4	11.9	159.4	46.5	179.0	22.2	155.2	32.1	57.3	134.3	115.4	39.8	Sbd box	45.5
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	

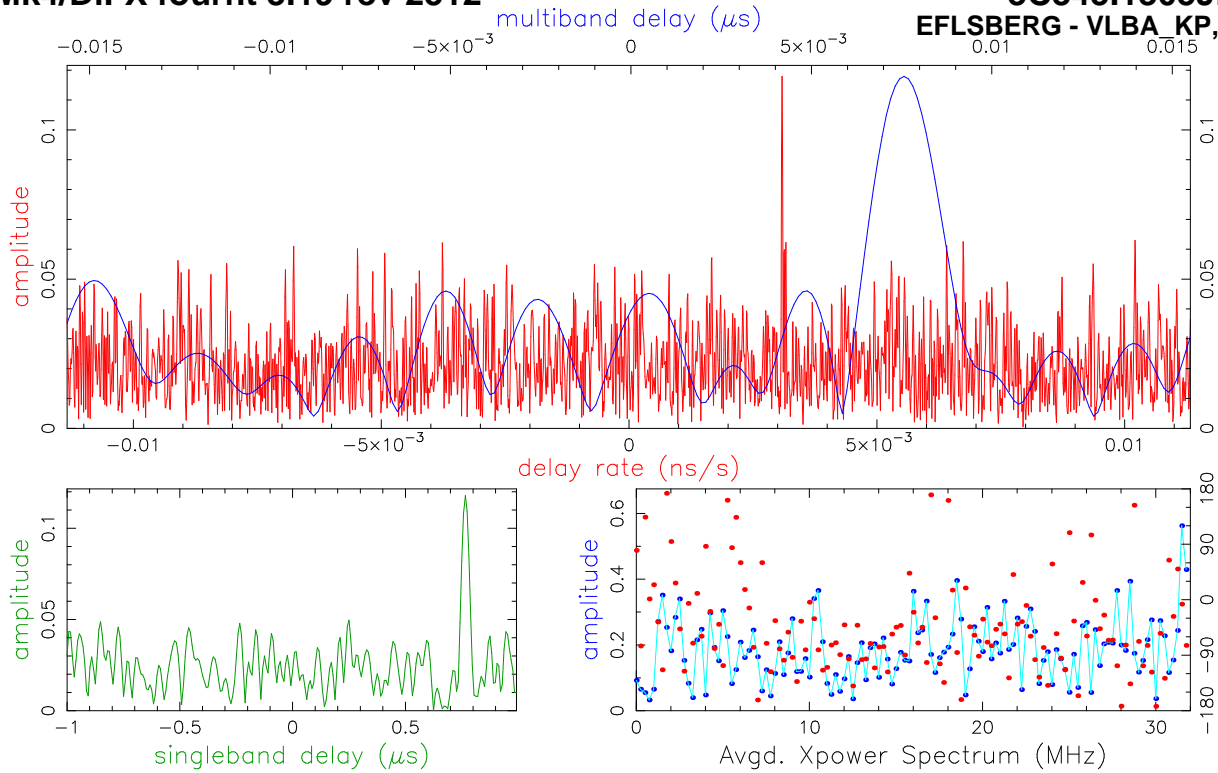
Group delay (usec)(sbd) 6.17812649489E+03 Apriori delay (usec) 6.17876996376E+03 Resid mbdelay (usec) 1.27811E-02 +/- 1.8E-04
 Sband delay (usec) 6.17811751926E+03 Apriori clock (usec) 1.7240984E+01 Resid sbdelay (usec) -6.52444E-01 +/- 2.8E-03
 Phase delay (usec) 6.17876996645E+03 Apriori clockrate (us/s) -5.4210100E-09 Resid phdelay (usec) 2.68996E-06 +/- 6.1E-07
 Delay rate (us/s) -1.51429180361E+00 Apriori rate (us/s) -1.51428937870E+00 Resid rate (us/s) -2.42491E-06 +/- 2.6E-09
 Total phase (deg) 327.7 Apriori accel (us/s/s) -1.52513005341E-05 Resid phase (deg) 83.4 +/- 18.8

RMS Theor. Amplitude 0.112 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 28.5 31.2 Search (2048X64) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 46.1 54.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 55.8 37.7 Inc. seg. avg. 0.104 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 63.5 65.7 Inc. frq. avg. 0.119 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 11261.152 517.591 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.13.1305JH

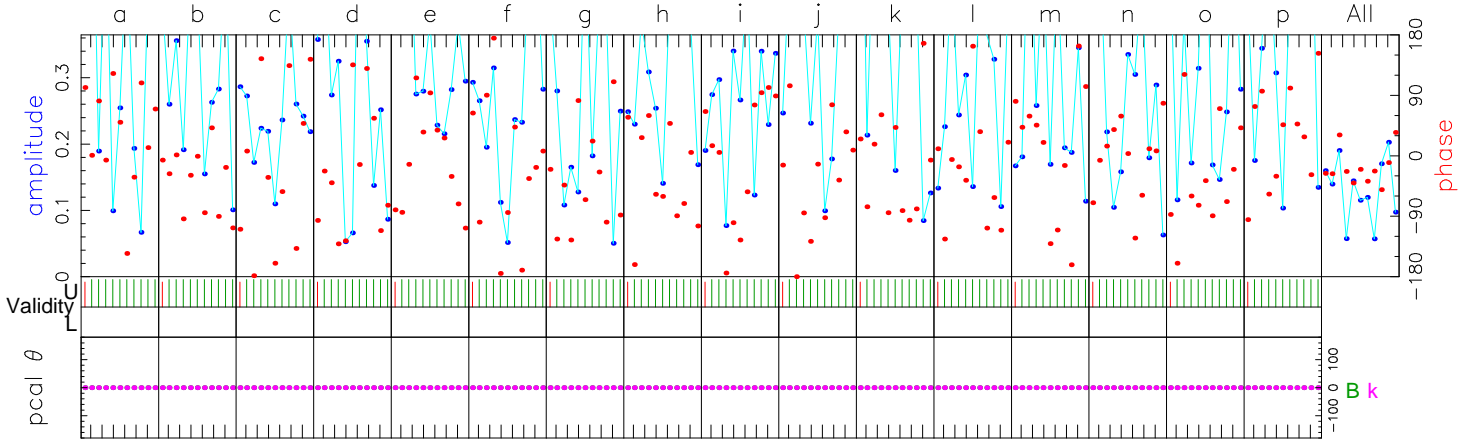
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bk
EFLSBERG - VLBA_KP, fgroup W, pol RR



Fringe quality 0
SNR 6.5
Int time 407.733
Amp 0.122
Phase -17.7
PFD 2.1e-02
Delays (us)
SBD 0.765917
MBD 0.007563
Fringe rate (Hz)
0.266333
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042731
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



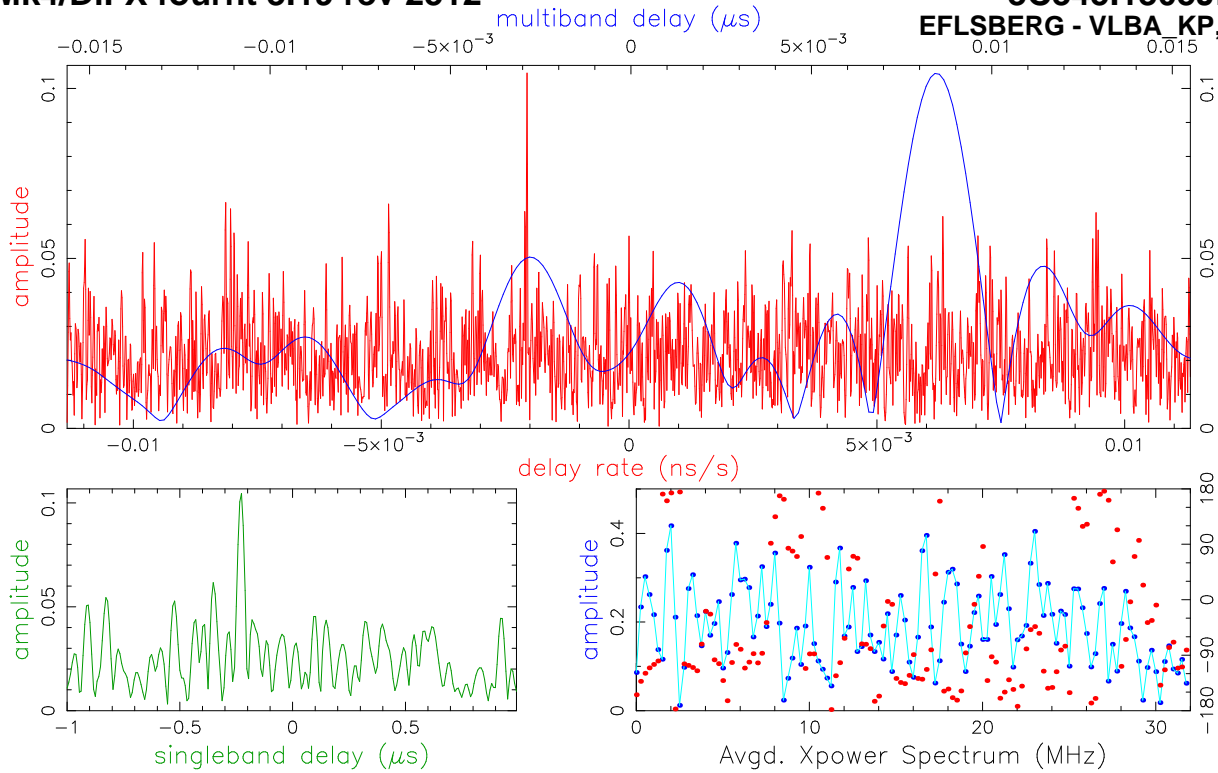
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
35.2	-23.8	177.1	-51.6	-31.7	-9.1	-61.0	-18.4	30.2	-8.6	-25.8	-25.1	53.8	-18.2	-44.0	11.9		Phase	-17.7	
0.2	0.3	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2		Ampl.	0.1	
174.6	207.7	154.6	148.6	6.9	85.6	192.6	60.7	188.4	150.4	97.1	161.1	236.2	145.8	87.7	52.2		Sbd box	227.0	
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	6.17952752659E+03			Apriori delay (usec)			6.17876996376E+03			Resid mbdelay (usec)			7.56283E-03			+/- 1.7E-04			
Sband delay (usec)	6.17953588026E+03			Apriori clock (usec)			1.7240984E+01			Resid sbdelay (usec)			7.65917E-01			+/- 2.6E-03			
Phase delay (usec)	6.17876996319E+03			Apriori clockrate (us/s)			-5.4210100E-09			Resid phdelay (usec)			-5.72058E-07			+/- 5.7E-07			
Delay rate (us/s)	-1.51428628684E+00			Apriori rate (us/s)			-1.51428937870E+00			Resid rate (us/s)			3.09186E-06			+/- 2.4E-09			
Total phase (deg)	226.6			Apriori accel (us/s/s)			-1.52513005341E-05			Resid phase (deg)			-17.7			+/- 17.6			

	RMS	Theor.	Amplitude	0.122 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	26.0	29.2	Search (2048X64)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	41.2	50.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	55.2	35.2	Inc. seg. avg.	0.121	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	49.6	61.4	Inc. frq. avg.	0.121	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 11261.152 517.591 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.37.1305JH

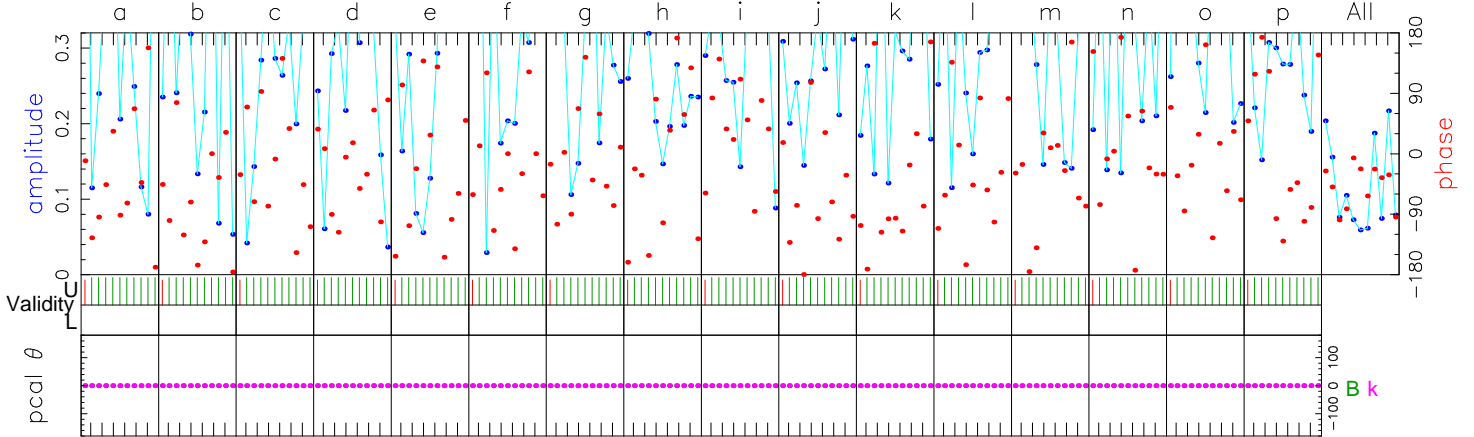
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bk
EFLSBERG - VLBA_KP, fgroup W, pol LR



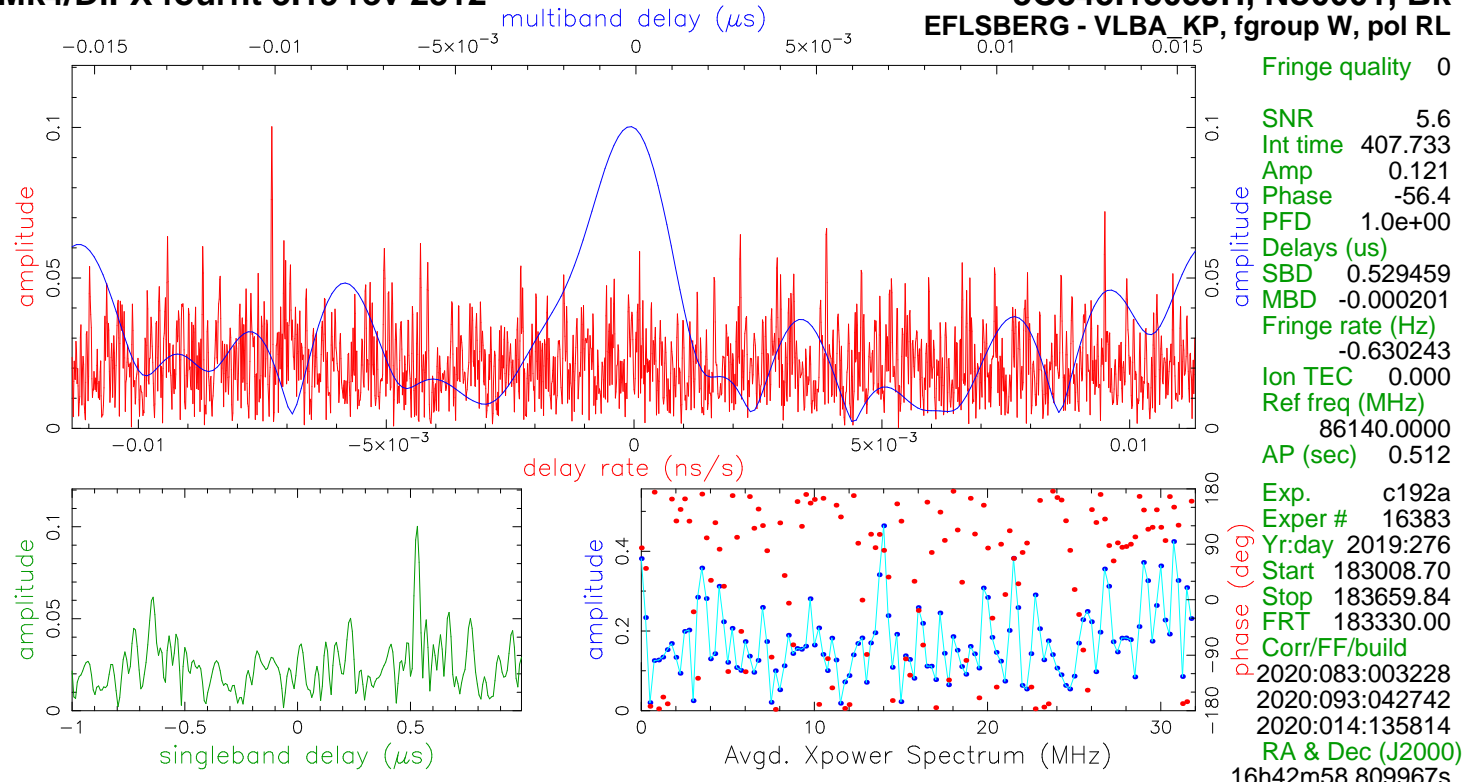
Fringe quality 0
SNR 5.8
Int time 407.733
Amp 0.107
Phase -42.4
PFD 7.8e-01
Delays (us)
SBD -0.228828
MBD 0.008455
Fringe rate (Hz)
-0.177605
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042736
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

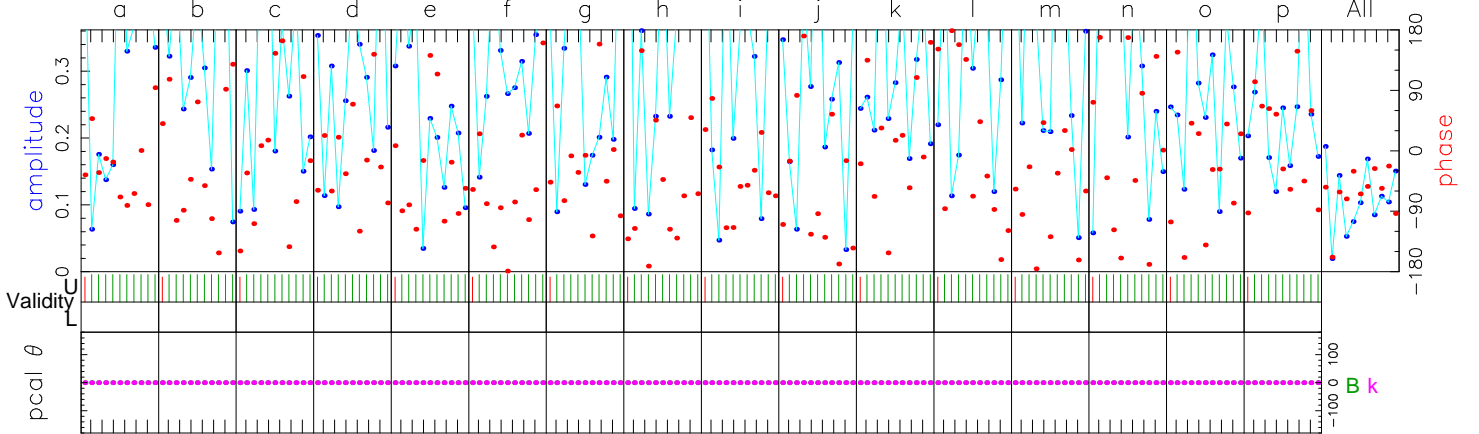


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-43.7	-49.3	-52.2	-23.8	-120.8	-38.0	-30.4	-135.2	51.2	-66.6	-98.6	-41.1	-39.8	-12.9	-32.2	-138.4	Phase	-42.4
	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	208.6	14.7	58.4	133.9	84.8	251.0	129.0	173.2	66.6	107.8	83.3	221.0	139.6	20.6	98.3	160.5	Sbd box	99.7
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 6.17852841859E+03 Apriori delay (usec) 6.17876996376E+03 Resid mbdelay (usec) 8.45482E-03 +/- 1.9E-04
Sband delay (usec) 6.17854113626E+03 Apriori clock (usec) 1.7240984E+01 Resid sbdelay (usec) -2.28828E-01 +/- 3.0E-03
Phase delay (usec) 6.17876996240E+03 Apriori clockrate (us/s) -5.4210100E-09 Resid phdelay (usec) -1.36805E-06 +/- 6.4E-07
Delay rate (us/s) -1.51429144052E+00 Apriori rate (us/s) -1.51428937870E+00 Resid rate (us/s) -2.06182E-06 +/- 2.7E-09
Total phase (deg) 201.9 Apriori accel (us/s/s) -1.52513005341E-05 Resid phase (deg) -42.4 +/- 19.7
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
B: az 269.2 el 56.7 pa 55.8 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 11261.152 517.591 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.55.1305JH



Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
-44.5	54.6	-20.5	-32.0	-82.8	-95.3	-50.3	-92.8	-50.9	-129.5	23.0	-120.6	-36.7	-139.1	4.1	17.1	Phase	-56.4	
0.3	0.0	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.3	0.1	0.1	0.1	Ampl.	0.1	
221.5	152.7	42.9	29.7	241.8	78.1	50.1	158.8	151.9	210.7	227.2	3.0	226.8	117.9	37.5	79.7	Sbd box	196.8	
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Tracks																		

Group delay (usec)(sbd) 6.17930101235E+03 Apriori delay (usec) 6.17876996376E+03 Resid mbdelay (usec) -2.01413E-04 +/- 1.9E-04

Sband delay (usec) 6.17929942226E+03 Apriori clock (usec) 1.7240984E+01 Resid sbdelay (usec) 5.29459E-01 +/- 3.1E-03

Phase delay (usec) 6.17876996195E+03 Apriori clockrate (us/s) -5.4210100E-09 Resid phdelay (usec) -1.81730E-06 +/- 6.6E-07

Delay rate (us/s) -1.51429669520E+00 Apriori rate (us/s) -1.51428937870E+00 Resid rate (us/s) -7.31650E-06 +/- 2.8E-09

Total phase (deg) 188.0 Apriori accel (us/s/s) -1.52513005341E-05 Resid phase (deg) -56.4 +/- 20.5

ph/seg (deg) RMS Theor. Amplitude 0.121 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 36.8 34.0 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

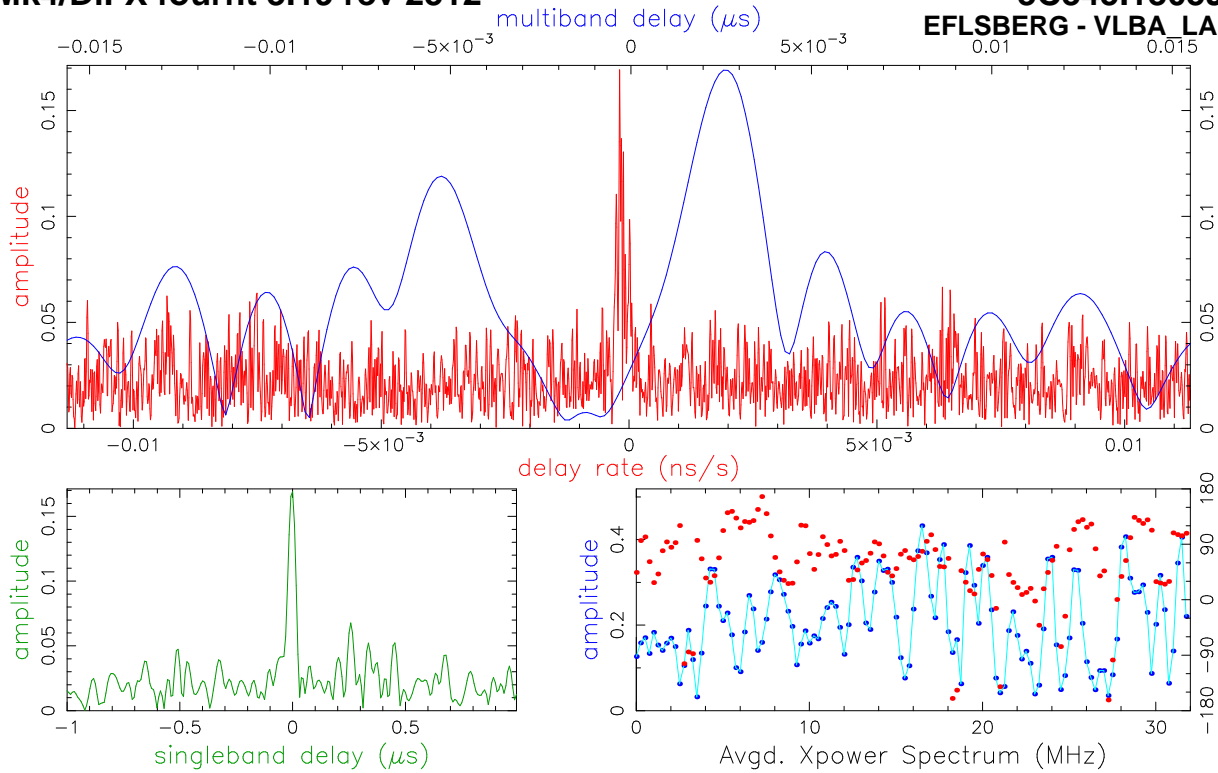
ph/frq (deg) 48.1 59.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 59.8 41.1 Inc. seg. avg. 0.111 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 68.5 71.7 Inc. frq. avg. 0.131 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 11261.152 517.591 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.78.1305JH

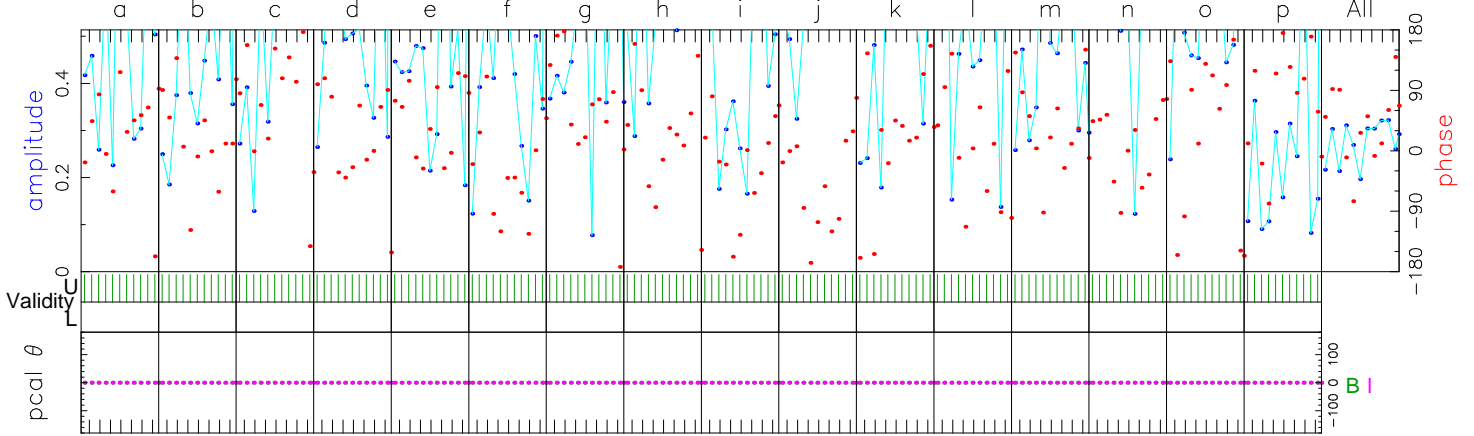


Fringe quality 9

SNR 9.4
Int time 406.934
Amp 0.171
Phase 39.2
PFD 1.4e-12
Delays (us)
SBD -0.002890
MBD 0.002594
Fringe rate (Hz)
-0.016456
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042726
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec

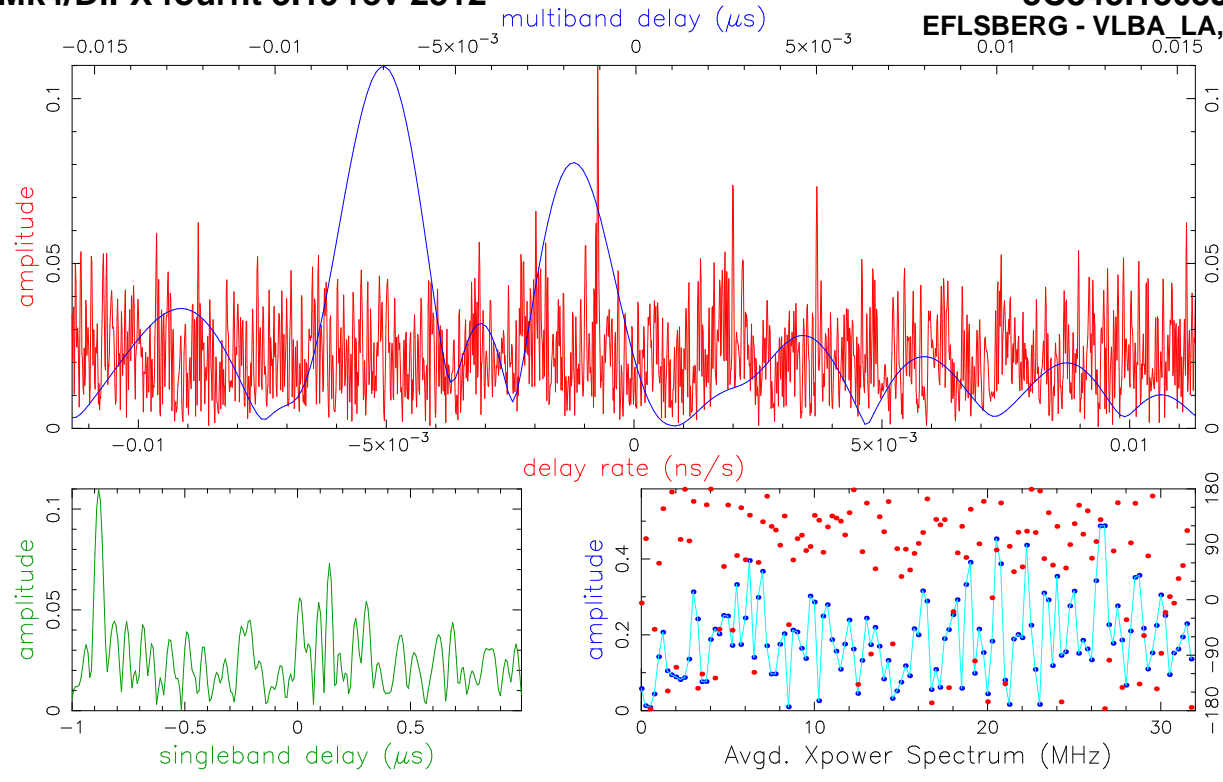


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used		
B	1000	1000	1000	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	1000	1000	1000	PC freqs	
B: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	0:0	0:0	0:0	PC phase	
B: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	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	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	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL					Tracks
																					Tracks

Group delay (usec)(sbd) 4.45203475486E+03 Apriori delay (usec) 4.45203216074E+03 Resid mbdelay (usec) 2.59412E-03 +/- 1.1E-04
 Sband delay (usec) 4.45202927074E+03 Apriori clock (usec) 1.7579317E+01 Resid sbdelay (usec) -2.89000E-03 +/- 1.8E-03
 Phase delay (usec) 4.45203216201E+03 Apriori clockrate (us/s) 1.5147200E-07 Resid phdelay (usec) 1.26280E-06 +/- 3.9E-07
 Delay rate (us/s) -1.44025646295E+00 Apriori rate (us/s) -1.44025627191E+00 Resid rate (us/s) -1.91041E-07 +/- 1.7E-09
 Total phase (deg) 156.7 Apriori accel (us/s/s) -1.00601945607E-05 Resid phase (deg) 39.2 +/- 12.1

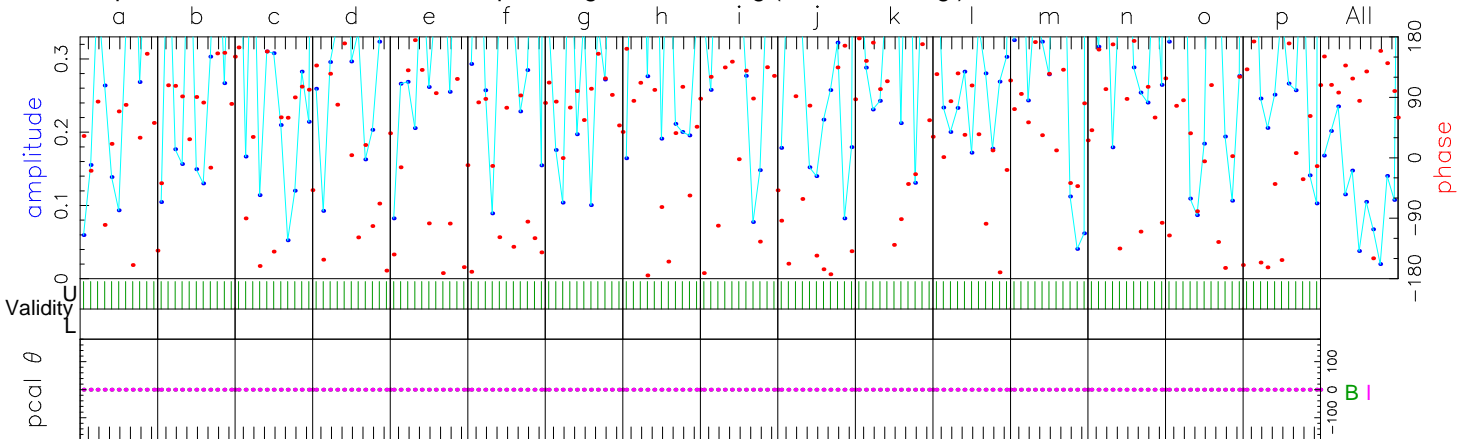
RMS Theor. Amplitude 0.171 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.2 21.0 Search (2048X64) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 65.9 36.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 56.6 24.3 Inc. seg. avg. 0.258 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.9 42.3 Inc. frq. avg. 0.235 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 10717.516 487.096 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BI..1305JH Output file: /Exps/c192a/v2/1234/No0001/BI.W.10.1305JH



Fringe quality 0
SNR 6.1
Int time 406.934
Amp 0.110
Phase 122.1
PFD 3.0e-01
Delays (us)
SBD -0.881741
MBD -0.007001
Fringe rate (Hz)
-0.063130
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042731
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec

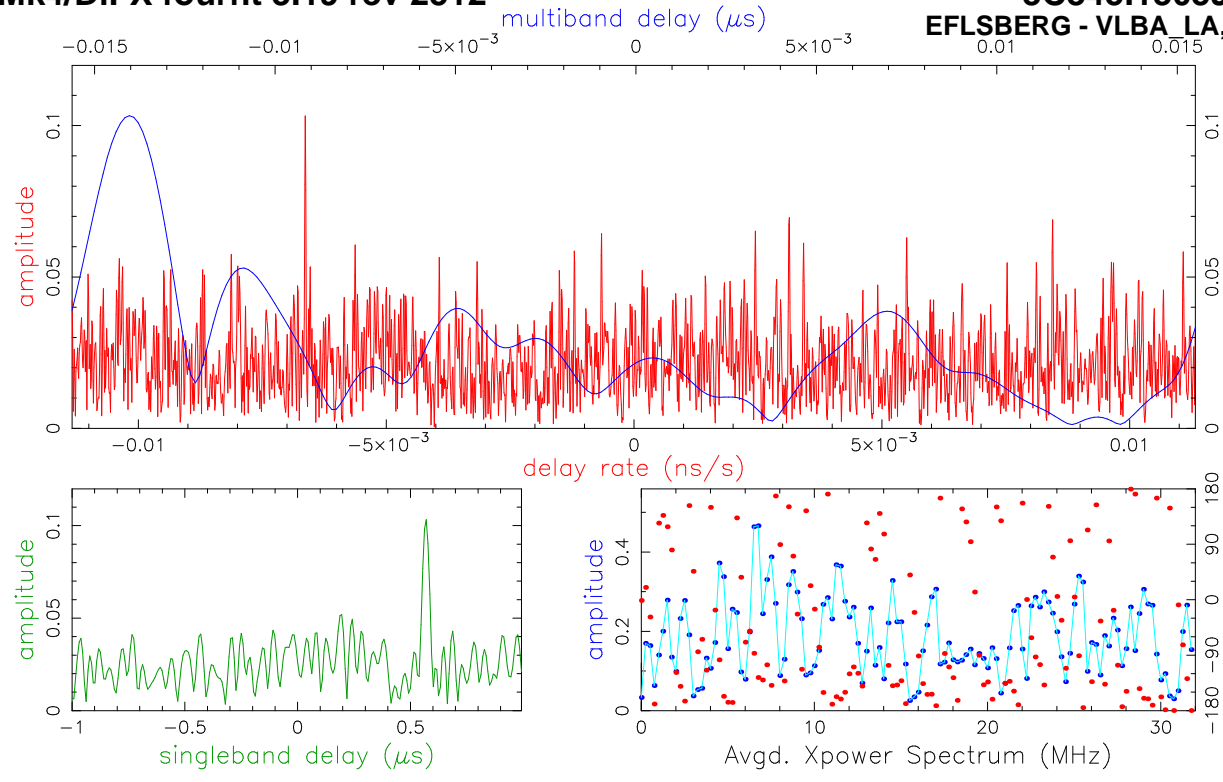


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	122.1	Phase
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.1	Ampl.
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	16.1	Sbd box
B:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.1	APs used
B:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.1	PC freqs
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.1	PC phase
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	0.1	ManI PC
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	0.1	PC amp
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	0.1	Chan ids
																	0.1	Tracks
																	0.1	Tracks

Group delay (usec)(sbd) 4.45115016006E+03 Apriori delay (usec) 4.45203216074E+03 Resid mbdelay (usec) -7.00069E-03 +/- 1.8E-04
 Sband delay (usec) 4.45115042024E+03 Apriori clock (usec) 1.7579317E+01 Resid sbdelay (usec) -8.81741E-01 +/- 2.8E-03
 Phase delay (usec) 4.45203216468E+03 Apriori clockrate (us/s) 1.5147200E-07 Resid phdelay (usec) 3.93810E-06 +/- 6.1E-07
 Delay rate (us/s) -1.44025700478E+00 Apriori rate (us/s) -1.44025627191E+00 Resid rate (us/s) -7.32877E-07 +/- 2.6E-09
 Total phase (deg) 239.6 Apriori accel (us/s/s) -1.00601945607E-05 Resid phase (deg) 122.1 +/- 18.9

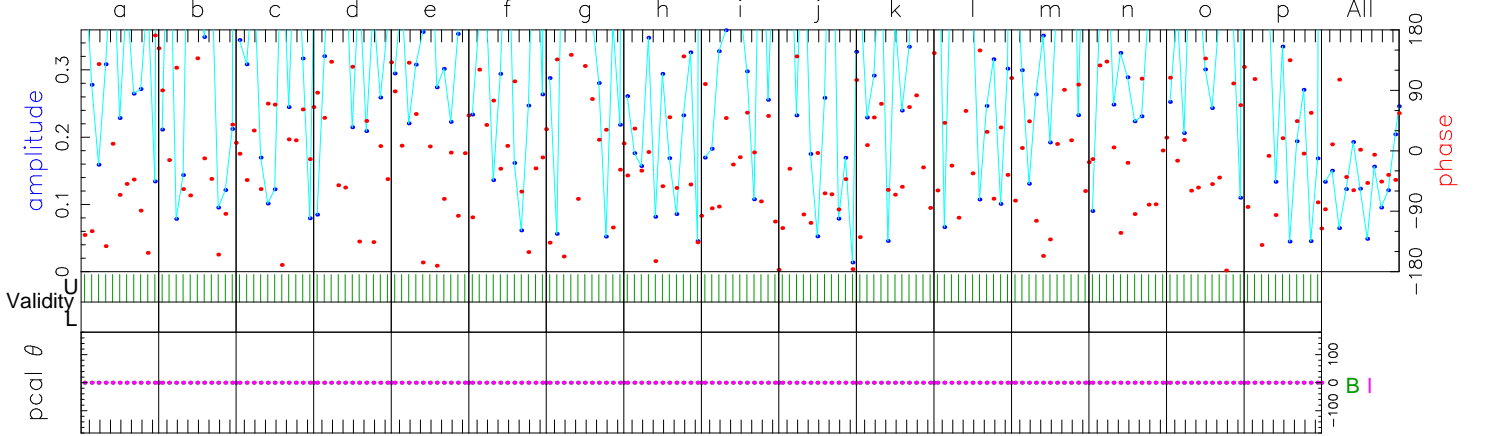
RMS Theor. Amplitude 0.110 +/- 0.018 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.9 32.7 Search (2048X64) 0.108 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 64.9 57.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 43.7 37.8 Inc. seg. avg. 0.107 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 52.2 66.0 Inc. frq. avg. 0.113 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 10717.516 487.096 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BI..1305JH Output file: /Exps/c192a/v2/1234/No0001/BI.W.32.1305JH

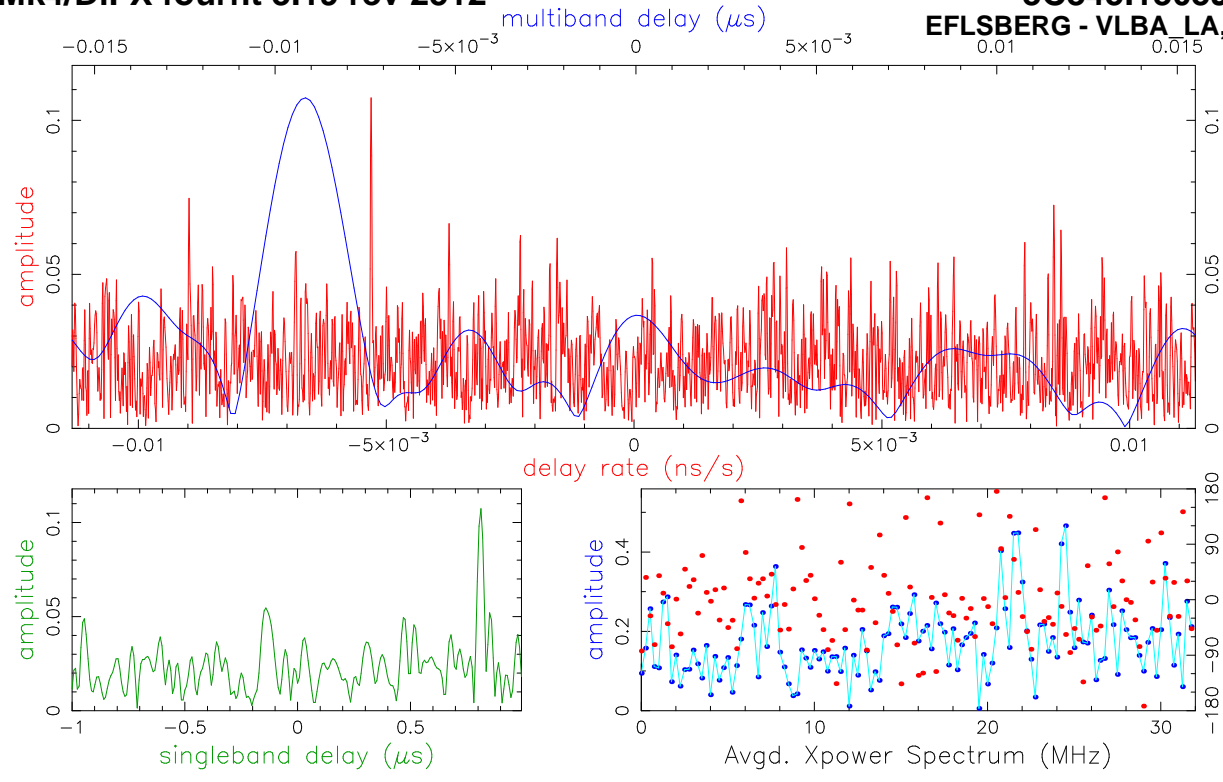


Fringe quality 0
SNR 5.7
Int time 406.934
Amp 0.120
Phase -32.3
PFD 9.3e-01
Delays (us)
SBD 0.568632
MBD -0.014066
Fringe rate (Hz)
-0.572402
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042736
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-98.3	-28.8	15.9	-52.5	3.3	3.9	-156.7	-26.6	-32.9	-73.3	-8.6	-33.7	-17.9	-45.8	-25.4	-29.4	Phase	-32.3
	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	244.0	199.8	68.1	253.7	68.0	181.2	154.4	99.2	155.7	139.2	97.9	16.3	227.2	74.9	24.9	110.5	Sbd box	201.8
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
B	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	
B: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	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	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		
B	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)	4.45261184515E+03			Apriori delay (usec)			4.45203216074E+03			Resid mbdelay (usec)			-1.40656E-02			+/- 1.9E-04		
Sband delay (usec)	4.45260079274E+03			Apriori clock (usec)			1.7579317E+01			Resid sbdelay (usec)			5.68632E-01			+/- 3.0E-03		
Phase delay (usec)	4.45203215970E+03			Apriori clockrate (us/s)			1.5147200E-07			Resid phdelay (usec)			-1.04087E-06			+/- 6.5E-07		
Delay rate (us/s)	-1.44026291692E+00			Apriori rate (us/s)			-1.44025627191E+00			Resid rate (us/s)			-6.64501E-06			+/- 2.8E-09		
Total phase (deg)	85.2			Apriori accel (us/s/s)			-1.00601945607E-05			Resid phase (deg)			-32.3			+/- 20.0		
ph/seg (deg)	RMS	Theor.	Amplitude			0.120 +/- 0.021			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	49.7	34.7	Search (2048X64)			0.101			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
ph/frq (deg)	50.6	60.6	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016	
amp/frq (%)	44.6	40.1	Inc. seg. avg.			0.126			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011			
	51.2	70.0	Inc. frq. avg.			0.119			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00	
B: az 269.2 el 56.7 pa 55.8	I: az 63.9 el 37.8 pa -72.0			u,v (fr/asec)			10717.516 487.096									simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c192a/v2/1234/No0001/BI..1305JH			Output file: /Exps/c192a/v2/1234/No0001/BI.W.53.1305JH														



Fringe quality 0

SNR 5.9

Int time 406.934

Amp 0.118

Phase 39.1

PFD 5.4e-01

Delays (us)

SBD 0.811532

MBD -0.009179

Fringe rate (Hz)

-0.457664

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183012.80

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042741

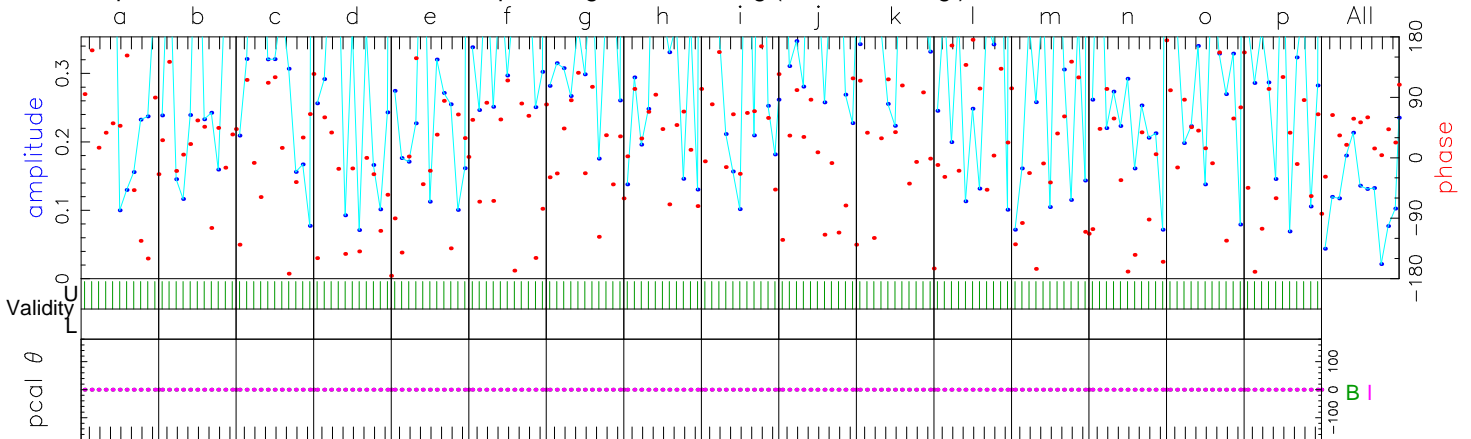
2020:014:135814

RA & Dec (J2000)

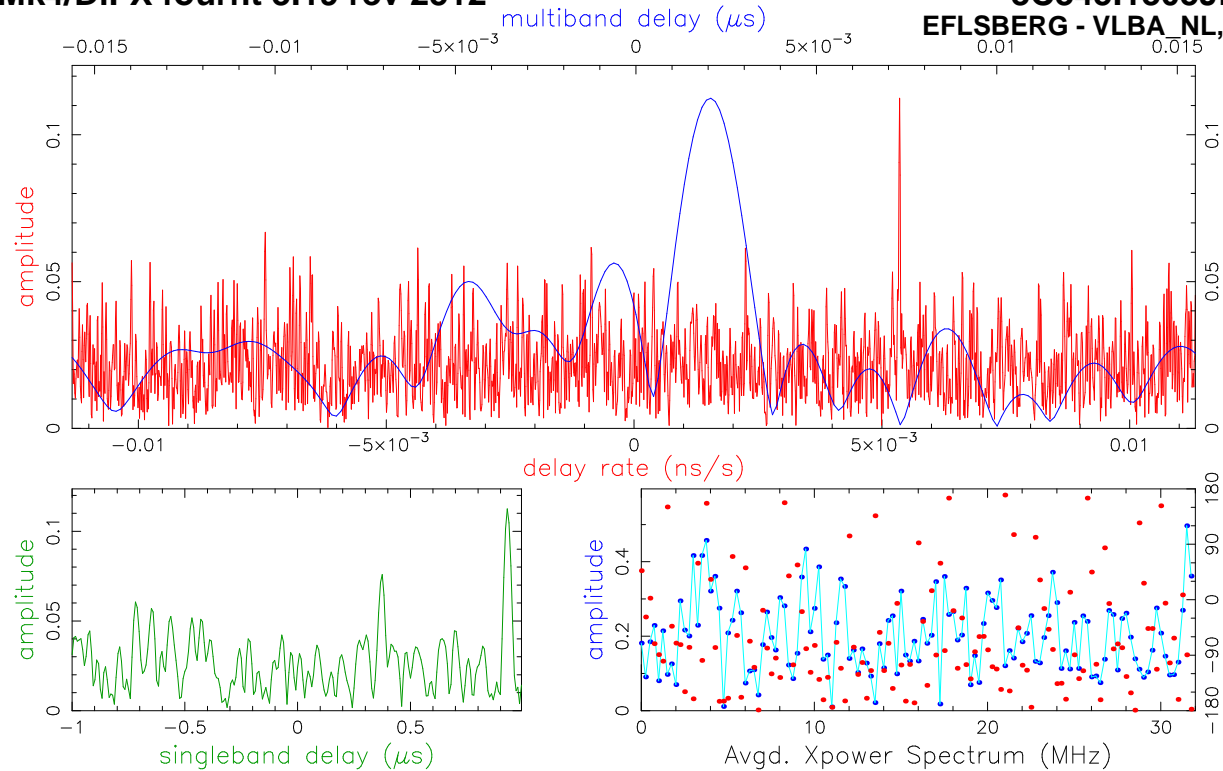
16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	68.5	36.2	18.4	-10.5	-18.3	76.4	25.1	50.9	81.3	-2.1	36.4	15.8	19.2	27.9	48.2	62.8		Phase 39.1
	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0		Ampl. 0.1
	201.2	241.7	164.5	115.7	59.3	28.5	176.3	121.2	218.2	36.8	31.9	206.7	76.1	222.2	247.9	252.6		Sbd box 232.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		APs used
B	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
B: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
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
																		Tracks
Group delay (usec)(sbd)	4.45283548168E+03			Apriori delay (usec)			4.45203216074E+03			Resid mbdelay (usec)			-9.17907E-03			+/- 1.8E-04		
Sband delay (usec)	4.45284369324E+03			Apriori clock (usec)			1.7579317E+01			Resid sbdelay (usec)			8.11532E-01			+/- 2.9E-03		
Phase delay (usec)	4.45203216201E+03			Apriori clockrate (us/s)			1.5147200E-07			Resid phdelay (usec)			1.26236E-06			+/- 6.2E-07		
Delay rate (us/s)	-1.44026158493E+00			Apriori rate (us/s)			-1.44025627191E+00			Resid rate (us/s)			-5.31302E-06			+/- 2.7E-09		
Total phase (deg)	156.7			Apriori accel (us/s/s)			-1.00601945607E-05			Resid phase (deg)			39.1			+/- 19.3		
ph/seg (deg)	RMS	Theor.	Amplitude	0.118 +/- 0.020			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5								
amp/seg (%)	28.4	33.5	Search (2048X64)	0.105			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000					
ph/frq (deg)	49.9	58.4	Interp.	0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
amp/frq (%)	31.6	38.6	Inc. seg. avg.	0.109			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011					
	51.4	67.5	Inc. frq. avg.	0.108			Data rate(Mb/s): 2048			nlags: 128			t_cohere infinite			ion window (TEC) 0.00 0.00		
B: az 269.2 el 56.7 pa 55.8	I: az 63.9 el 37.8 pa -72.0			u,v (fr/asec) 10717.516 487.096												simultaneous interpolator		
Control file: cf_1234_gmva			Input file: /Exps/c192a/v2/1234/No0001/BI..1305JH			Output file: /Exps/c192a/v2/1234/No0001/BI.W.73.1305JH												

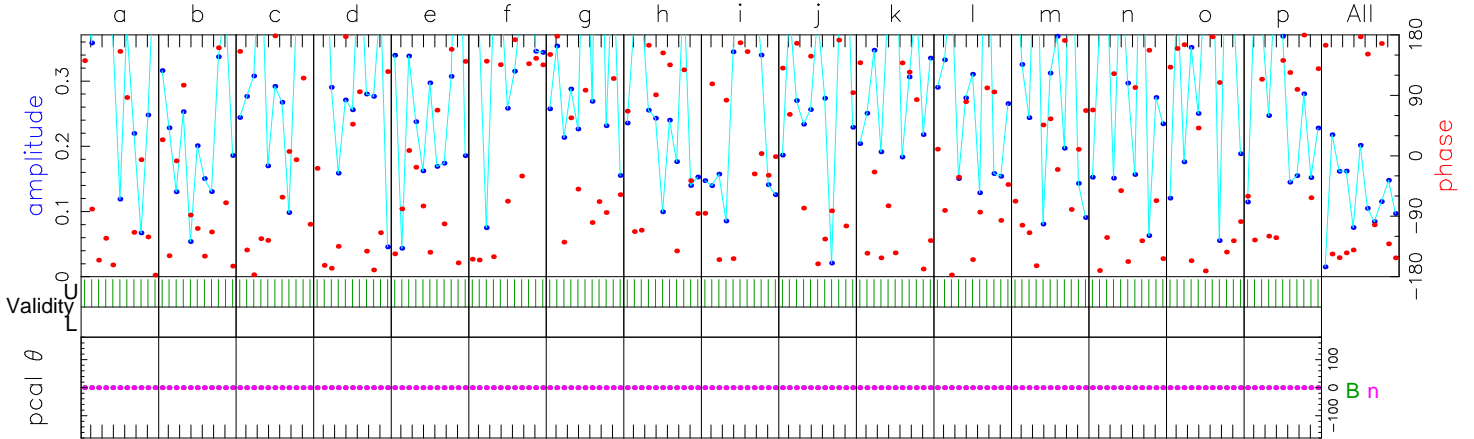


Fringe quality 0

SNR 6.2
Int time 410.824
Amp 0.124
Phase -156.7
PFD 1.1e-01
Delays (us)
SBD 0.930403
MBD 0.002054
Fringe rate (Hz)
0.462338
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042733
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-156.5	-129.4	-136.5	-161.4	-147.1	173.8	-144.3	-179.3	-169.0	-173.0	-157.9	140.2	-86.1	-130.5	-168.2	-173.9	Phase	-156.7
	0.3	0.1	0.2	0.1	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.3	0.1	Ampl.	0.1
	246.0	210.5	48.0	84.3	229.6	135.6	4.3	213.2	233.2	139.0	73.7	169.1	26.9	189.1	190.8	172.7	Sbd box	248.1
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	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	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			1.06559023726E+03					Apriori delay (usec)		1.06465068296E+03				Resid mbdelay (usec)		2.05430E-03	+/-	1.7E-04
Sband delay (usec)			1.06558108546E+03					Apriori clock (usec)		-9.6362743E+00				Resid sbdelay (usec)		9.30403E-01	+/-	2.8E-03
Phase delay (usec)			1.06465067790E+03					Apriori clockrate (us/s)		-3.3422351E-07				Resid phdelay (usec)		-5.05206E-06	+/-	5.9E-07
Delay rate (us/s)			-1.25230817164E+00					Apriori rate (us/s)		-1.25231353893E+00				Resid rate (us/s)		5.36728E-06	+/-	2.5E-09
Total phase (deg)				142.1				Apriori accel (us/s/s)		1.93173982764E-06				Resid phase (deg)		-156.7	+/-	18.4

ph/seg (deg) 30.7 30.5
amp/seg (%) 51.5 53.2
ph/frq (deg) 30.8 36.7
amp/frq (%) 56.9 64.1

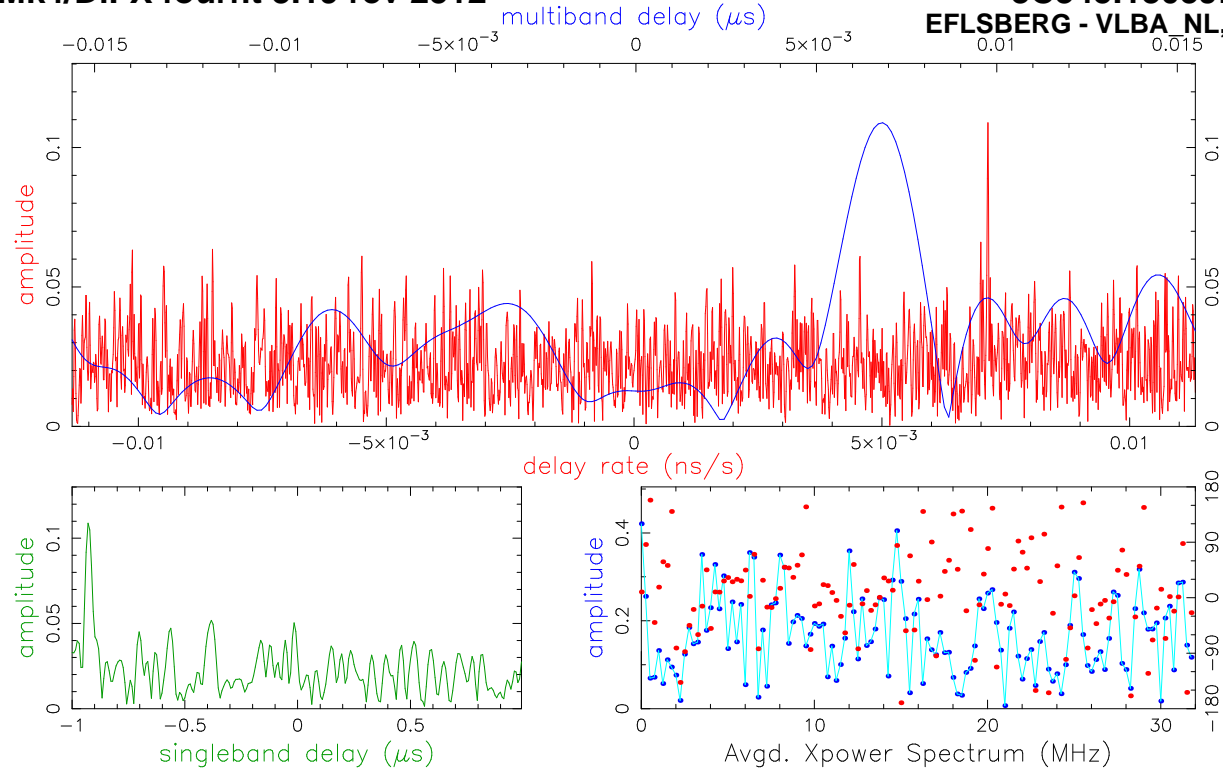
RMS Theor. Amplitude 0.124 +/- 0.020
Search (2048X64) 0.110
Interp. 0.000
Inc. seg. avg. 0.121
Inc. frq. avg. 0.113

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

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

B: az 269.2 el 56.7 pa 55.8 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9336.331 733.935 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bn..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bn.W.42.1305JH

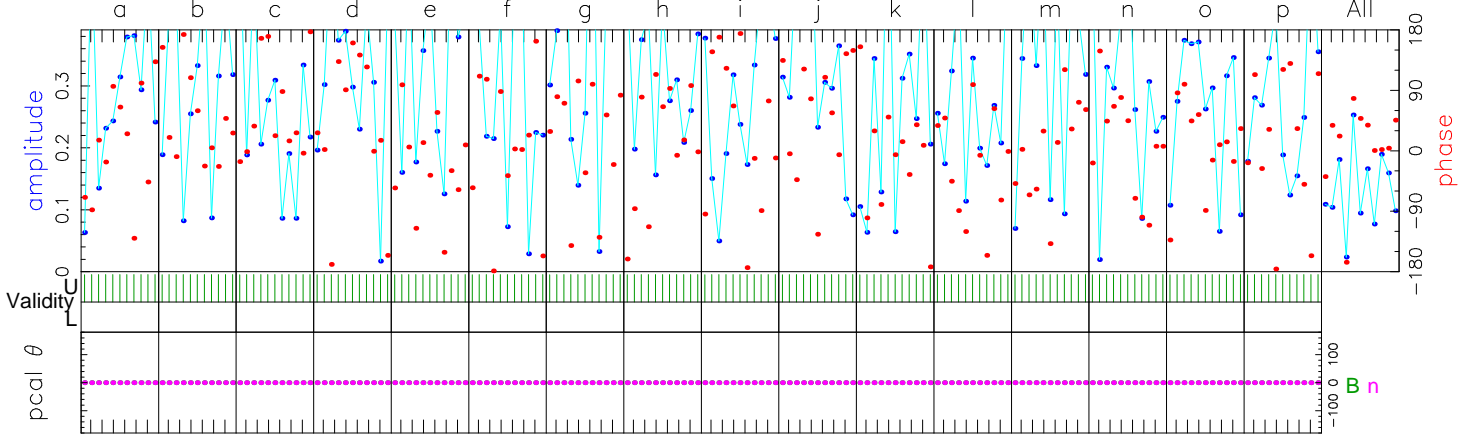


Fringe quality 0

SNR 6.1
Int time 410.824
Amp 0.130
Phase 28.3
PFD 2.5e-01
Delays (us)
SBD -0.927310
MBD 0.006794
Fringe rate (Hz) 0.616045
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042739
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-8.3	22.4	21.8	136.1	-19.7	46.3	55.7	58.2	5.6	68.5	18.6	-11.8	12.2	19.6	29.8	128.6	Phase	28.3				
	0.1	0.2	0.1	0.2	0.3	0.1	0.3	0.1	0.0	0.1	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1				
	224.8	62.7	100.5	5.2	79.2	131.7	10.7	228.8	251.2	20.9	77.2	171.0	79.2	215.9	188.5	169.3	Sbd box	10.3				
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
n	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					
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			1.06371997714E+03														Apriori delay (usec)	1.06465068296E+03	Resid mbdelay (usec)	6.79418E-03	+/-	1.8E-04
Sband delay (usec)			1.06372337296E+03														Apriori clock (usec)	-9.6362743E+00	Resid sbdelay (usec)	-9.27310E-01	+/-	2.8E-03
Phase delay (usec)			1.06465068387E+03														Apriori clockrate (us/s)	-3.3422351E-07	Resid phdelay (usec)	9.11898E-07	+/-	6.1E-07
Delay rate (us/s)			-1.25230638726E+00														Apriori rate (us/s)	-1.25231353893E+00	Resid rate (us/s)	7.15167E-06	+/-	2.6E-09
Total phase (deg)				327.0													Apriori accel (us/s/s)	1.93173982764E-06	Resid phase (deg)	28.3	+/-	18.8

ph/seg (deg) 58.3 31.2 59.2 54.4 47.5 37.6 65.1 65.7
 amp/seg (%) 59.2 54.4 47.5 37.6 65.1 65.7
 ph/frq (deg) 47.5 37.6 65.1 65.7
 amp/frq (%) 59.2 54.4 47.5 37.6 65.1 65.7

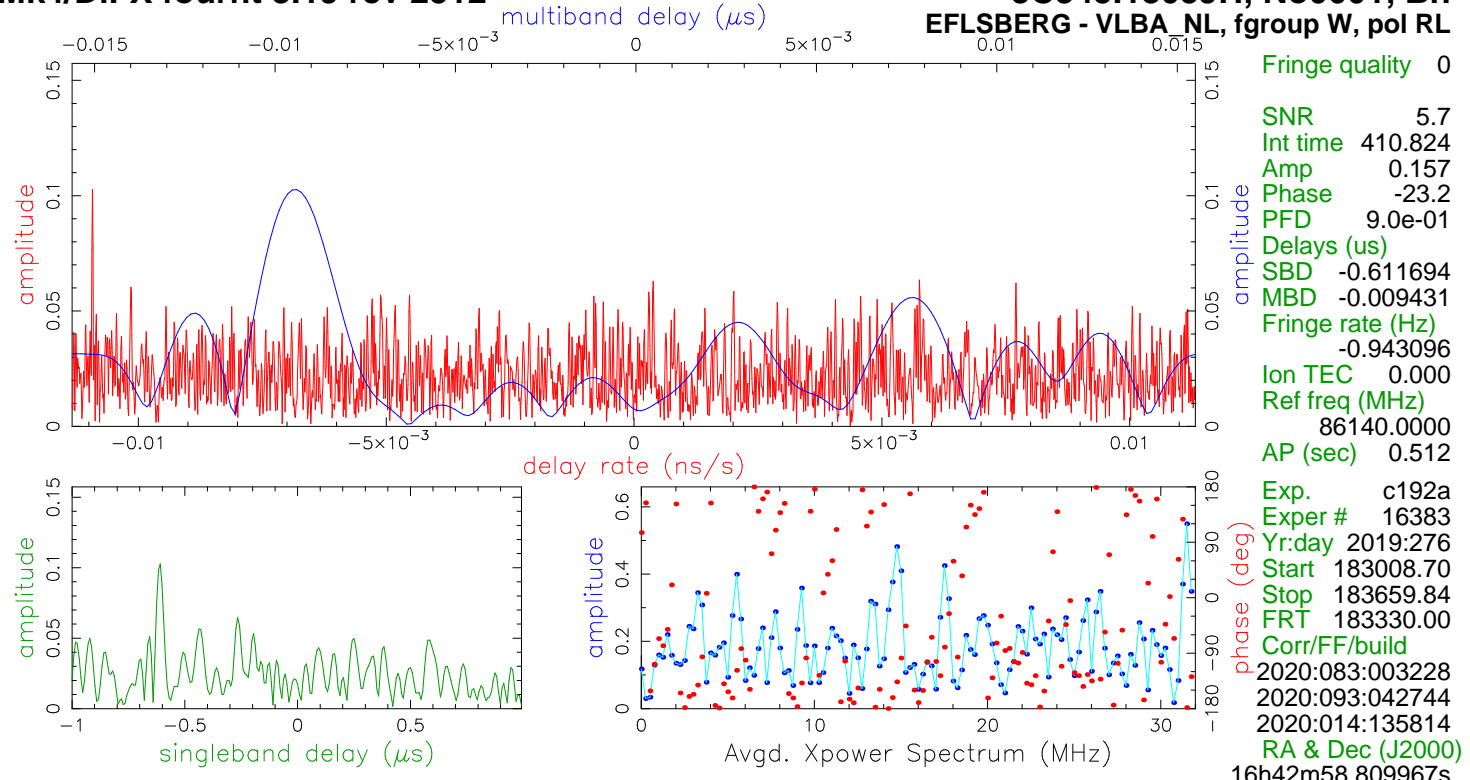
RMS Theor. Amplitude 0.130 +/- 0.021
 Search (2048X64) 0.108
 Interp. 0.000
 Inc. seg. avg. 0.137
 Inc. frq. avg. 0.134

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

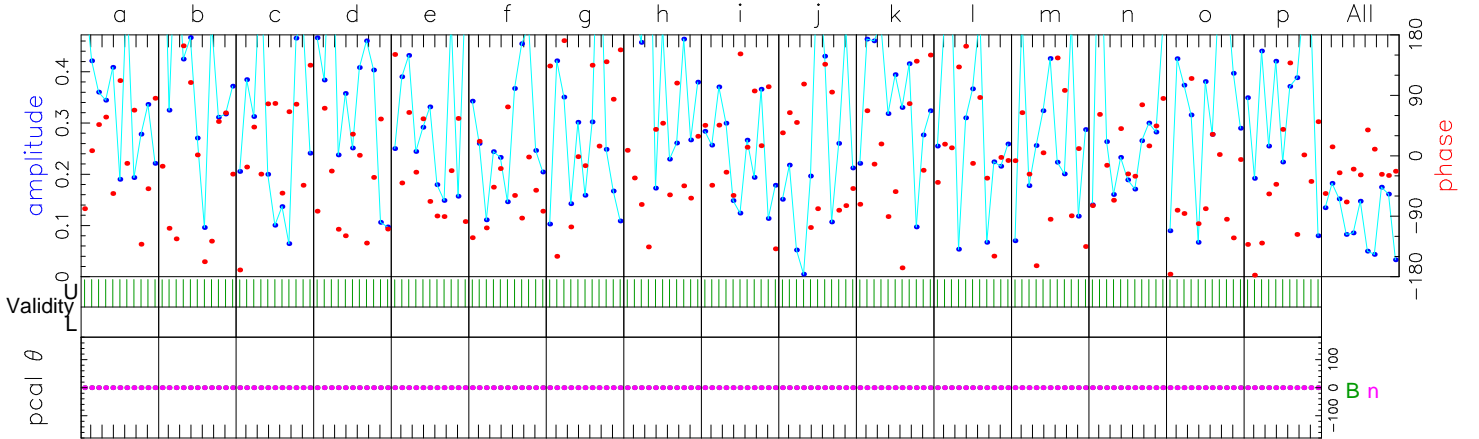
sb window (us) -1.000 1.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9336.331 733.935 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bn..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bn.W.62.1305JH



Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
-9.0	-65.1	12.1	-45.6	-33.4	-50.9	102.5	-33.1	18.2	-72.0	4.5	16.6	-65.8	36.6	-65.7	-70.6	Phase	-23.2	
0.3	0.1	0.2	0.3	0.2	0.3	0.1	0.3	0.2	0.1	0.1	0.2	0.1	0.3	0.3	0.2	Ampl.	0.2	
205.0	11.7	42.3	81.8	73.0	53.2	160.8	194.3	57.0	199.2	197.9	98.9	214.4	127.7	44.6	239.0	Sbd box	50.7	
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
n	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	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.06404750196E+03 Apriori delay (usec) 1.06465068296E+03 Resid mbdelay (usec) -9.43099E-03 +/- 1.9E-04

Sband delay (usec) 1.06403898896E+03 Apriori clock (usec) -9.6362743E+00 Resid sbdelay (usec) -6.11694E-01 +/- 3.0E-03

Phase delay (usec) 1.06465068221E+03 Apriori clockrate (us/s) -3.3422351E-07 Resid phdelay (usec) -7.46740E-07 +/- 6.4E-07

Delay rate (us/s) -1.25232448734E+00 Apriori rate (us/s) -1.25231353893E+00 Resid rate (us/s) -1.09484E-05 +/- 2.7E-09

Total phase (deg) 275.6 Apriori accel (us/s/s) 1.93173982764E-06 Resid phase (deg) -23.2 +/- 20.0

RMS Theor. Amplitude 0.157 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 29.3 33.1 Search (2048X64) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 52.1 57.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 51.0 39.9 Inc. seg. avg. 0.148 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

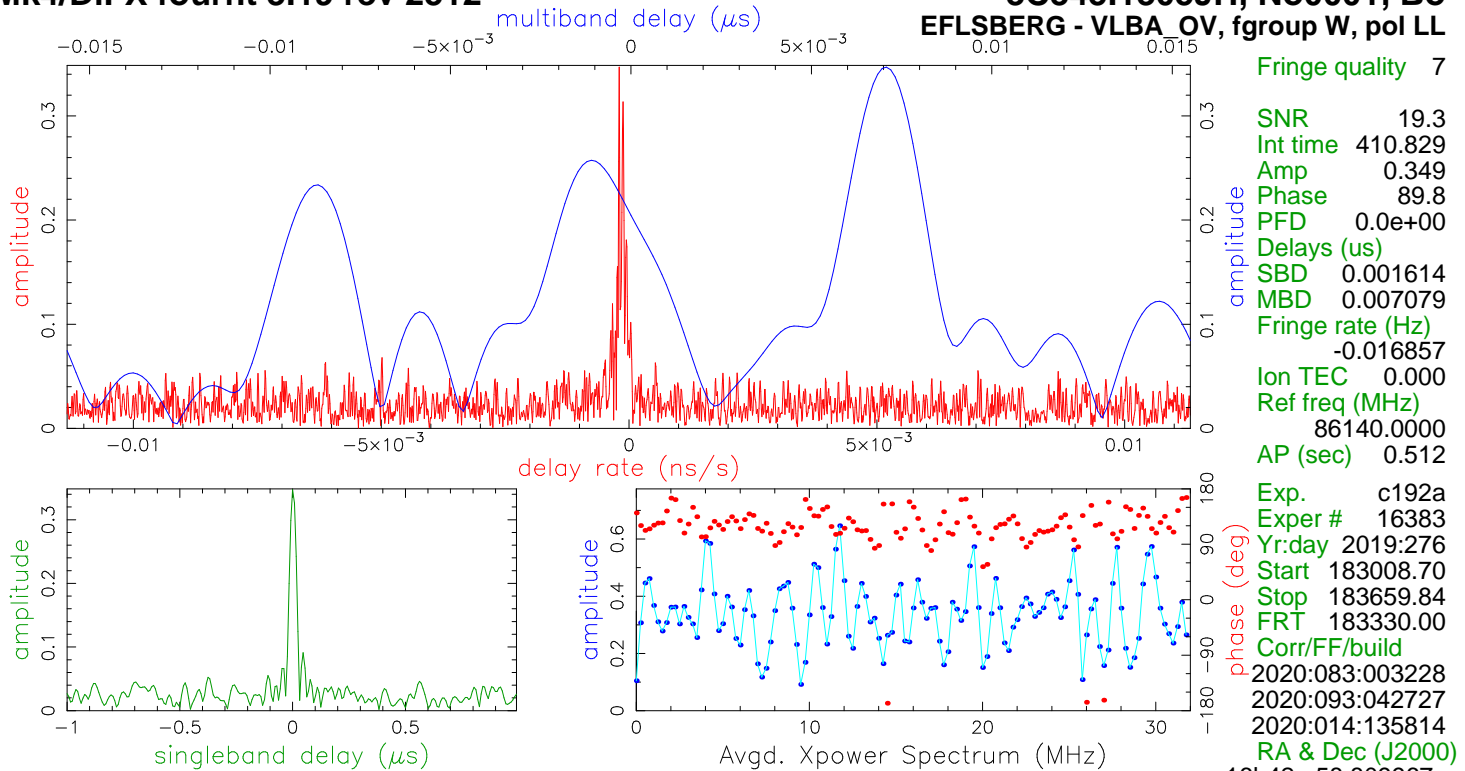
amp/frq (%) 55.1 69.7 Inc. frq. avg. 0.161 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 9336.331 733.935 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bn..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bn.W.82.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bo
EFLSBERG - VLBA OV, fgroup W, pol LL

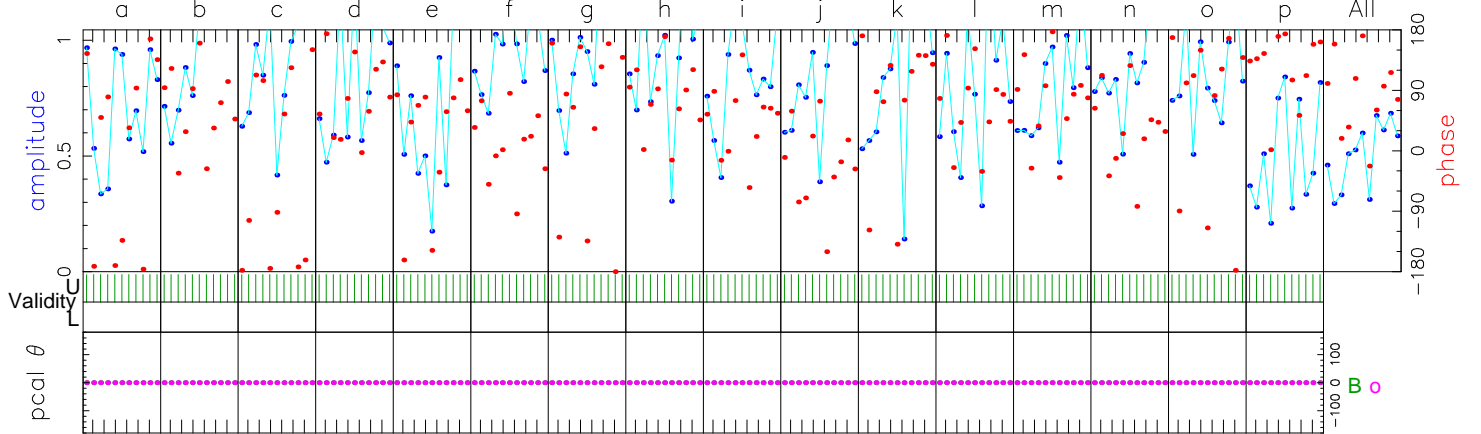


Fringe quality 7

SNR 19.3
Int time 410.829
Amp 0.349
Phase 89.8
PFD 0.0e+00
Delays (us)
SBD 0.001614
MBD 0.007079
Fringe rate (Hz)
-0.016857
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042727
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
154.3	64.5	160.5	85.3	70.6	17.3	149.5	81.3	51.8	-19.5	137.8	77.1	83.8	34.7	152.9	141.0	Phase	89.8
0.4	0.6	0.6	0.5	0.5	0.6	0.6	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.4	Ampl.	0.5
129.2	129.3	129.1	129.3	129.3	129.3	129.6	129.5	128.7	129.1	129.2	129.3	128.9	128.8	129.5	129.5	Sbd box	129.2
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks

Group delay (usec)(sbd) 6.86453491284E+03 Apriori delay (usec) 6.86452783394E+03 Resid mbdelay (usec) 7.07891E-03 +/- 5.6E-05

Sband delay (usec) 6.86452944844E+03 Apriori clock (usec) 2.0928383E-01 Resid sbdelay (usec) 1.61450E-03 +/- 8.9E-04

Phase delay (usec) 6.86452783683E+03 Apriori clockrate (us/s) -2.0098100E-07 Resid phdelay (usec) 2.89717E-06 +/- 1.9E-07

Delay rate (us/s) -1.48316848236E+00 Apriori rate (us/s) -1.48316828666E+00 Resid rate (us/s) -1.95694E-07 +/- 8.1E-10

Total phase (deg) 311.3 Apriori accel (us/s/s) -2.44504455346E-05 Resid phase (deg) 89.8 +/- 5.9

RMS Theor. Amplitude 0.349 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 55.8 9.8 Search (2048X64) 0.328 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

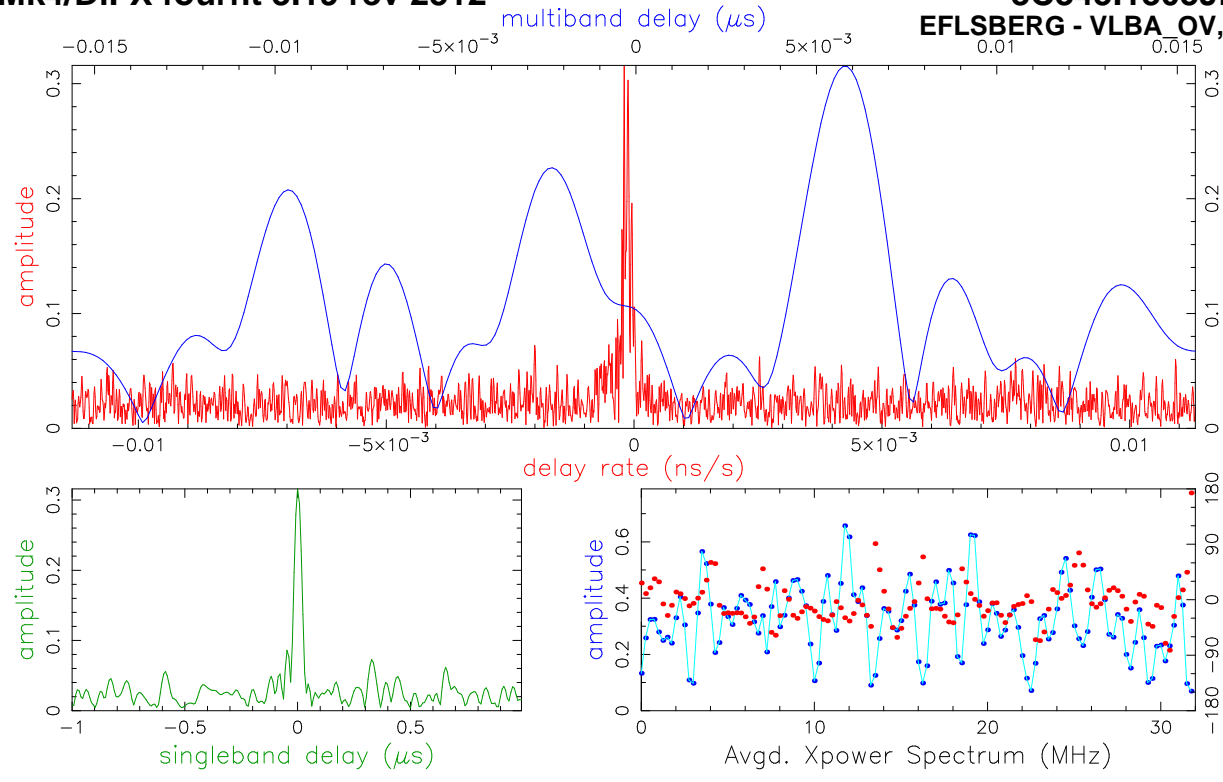
amp/seg (%) 60.3 17.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 56.4 11.9 Inc. seg. avg. 0.501 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 62.1 20.7 Inc. frq. avg. 0.539 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bo.W.17.1305JH

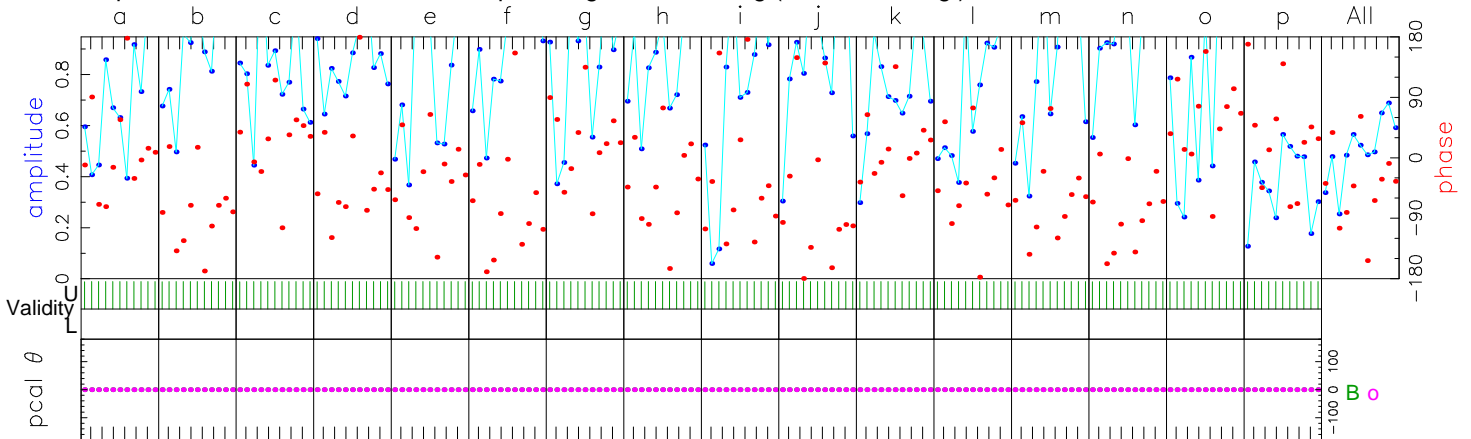


Fringe quality 7

SNR 17.5
Int time 410.829
Amp 0.316
Phase -35.3
PFD 0.0e+00
Delays (us)
SBD 0.001095
MBD 0.005806
Fringe rate (Hz)
-0.017000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042732
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

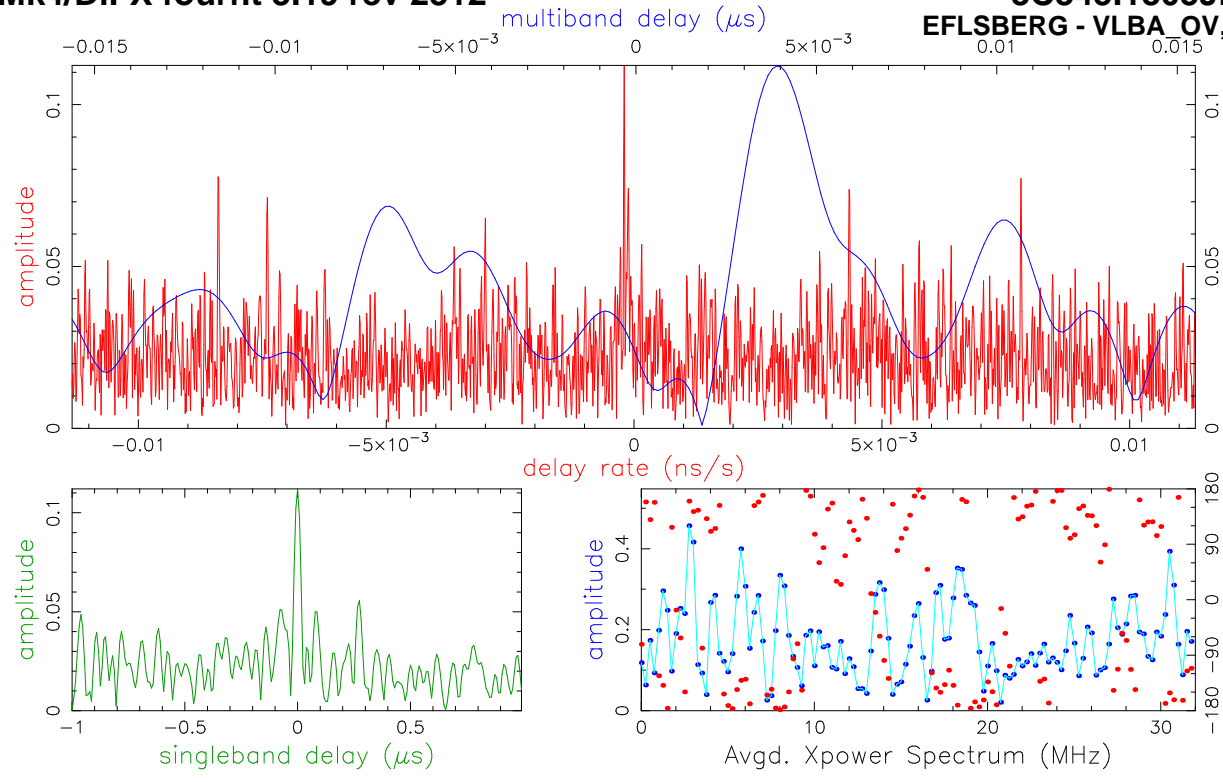


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-6.1	-76.3	37.6	-56.5	-22.5	-89.9	30.7	-22.7	-87.4	-125.6	9.8	-38.6	-57.2	-71.7	66.6	8.8	Phase	-35.3
	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.6	0.5	0.2	Ampl.	0.5
	129.4	129.2	128.6	129.0	129.4	128.8	129.4	129.3	129.7	129.2	129.3	129.0	128.9	129.4	129.0	242.1	Sbd box	129.1
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) 6.86453363972E+03 Apriori delay (usec) 6.86452783394E+03 Resid mbdelay (usec) 5.80578E-03 +/- 6.2E-05
 Sband delay (usec) 6.86452892894E+03 Apriori clock (usec) 2.0928383E-01 Resid sbdelay (usec) 1.09500E-03 +/- 9.8E-04
 Phase delay (usec) 6.86452783280E+03 Apriori clockrate (us/s) -2.0098100E-07 Resid phdelay (usec) -1.13948E-06 +/- 2.1E-07
 Delay rate (us/s) -1.48316848401E+00 Apriori rate (us/s) -1.48316828666E+00 Resid rate (us/s) -1.97350E-07 +/- 8.9E-10
 Total phase (deg) 186.1 Apriori accel (us/s/s) -2.44504455346E-05 Resid phase (deg) -35.3 +/- 6.5

ph/seg (deg) RMS Theor. Amplitude 0.316 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.1 10.9 Search (2048X64) 0.310 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 71.0 18.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.4 13.1 Inc. seg. avg. 0.496 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 63.2 22.8 Inc. frq. avg. 0.474 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bo.W.40.1305JH

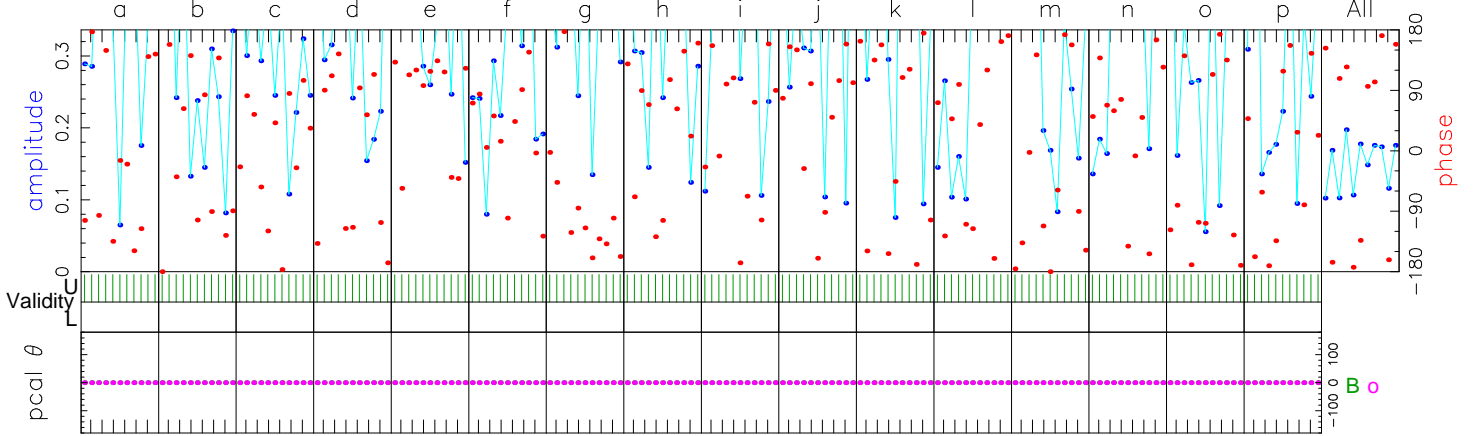


Fringe quality 0

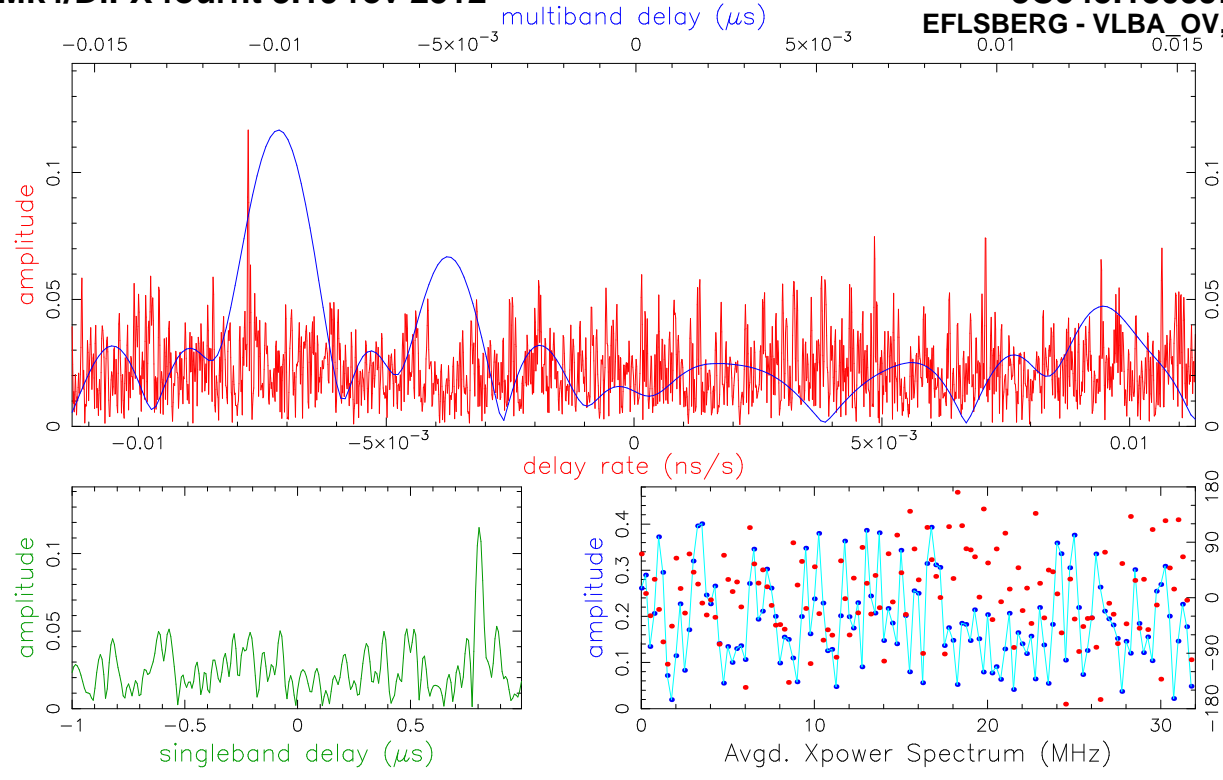
SNR 6.2
Int time 410.829
Amp 0.112
Phase 156.2
PFD 1.3e-01
Delays (us)
SBD -0.000765
MBD 0.003932
Fringe rate (Hz)
-0.017200
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042737
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

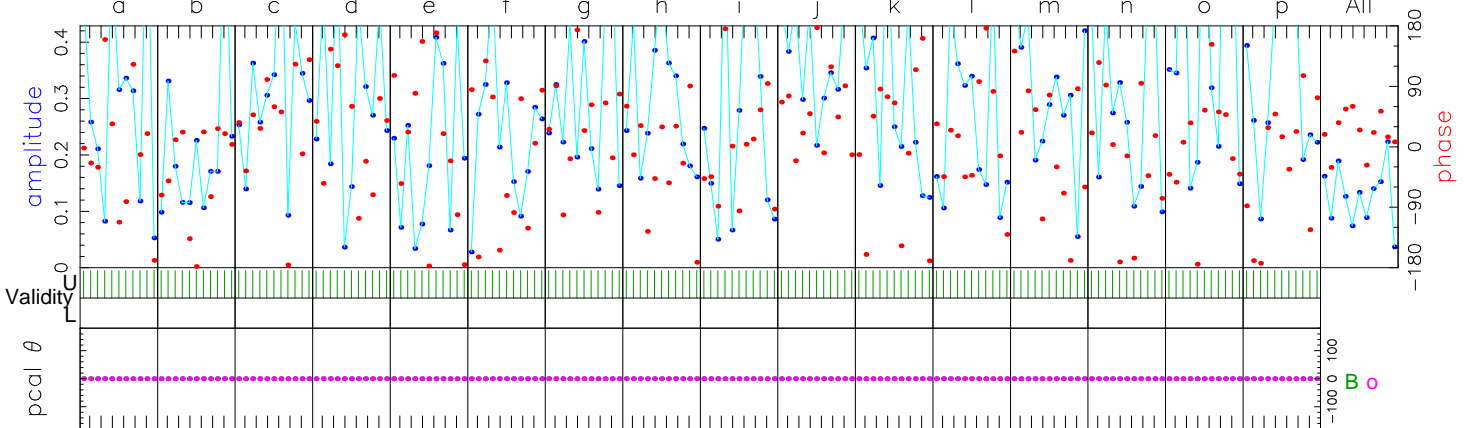


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
Group delay (usec)(sbd)	-156.4	-178.6	31.8	174.3	109.9	70.7	-126.0	131.0	96.3	107.6	158.6	170.1	-164.1	96.2	-163.5	179.2		Phase 156.2
Sband delay (usec)	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.1		Ampl. 0.1
Phase delay (usec)	208.5	158.9	246.4	57.8	40.5	254.7	129.5	199.0	135.7	128.6	128.9	61.1	177.2	238.9	253.8	19.7		Sbd box 128.9
Delay rate (us/s)	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used
U/L	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B	0:0	0:0	0:0	0:0	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:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	6.86453176597E+03			Apriori delay (usec)			6.86452783394E+03			Resid mbdelay (usec)			3.93203E-03			+/- 1.7E-04		
Sband delay (usec)	6.86452706894E+03			Apriori clock (usec)			2.0928383E-01			Resid sbdelay (usec)			-7.65000E-04			+/- 2.8E-03		
Phase delay (usec)	6.86452783897E+03			Apriori clockrate (us/s)			-2.0098100E-07			Resid phdelay (usec)			5.03547E-06			+/- 5.9E-07		
Delay rate (us/s)	-1.48316848634E+00			Apriori rate (us/s)			-1.48316828666E+00			Resid rate (us/s)			-1.99677E-07			+/- 2.5E-09		
Total phase (deg)	17.6			Apriori accel (us/s/s)			-2.44504455346E-05			Resid phase (deg)			156.2			+/- 18.4		
ph/seg (deg)	RMS	Theor.	Amplitude			0.112 +/- 0.018			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	41.7	30.6	Search (2048X64)			0.111			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
ph/frq (deg)	58.7	36.9	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016	
amp/frq (%)	75.2	64.4	Inc. seg. avg.			0.131			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011			
			Inc. frq. avg.			0.142			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00	
B: az 269.2 el 56.7 pa 55.8			o: az 60.7 el 29.9 pa -64.6			u,v (fr/asec) 11012.287 -596.290									simultaneous interpolator			



Fringe quality 0
SNR 6.5
Int time 410.829
Amp 0.143
Phase 24.7
PFD 2.6e-02
Delays (us)
SBD 0.805175
MBD -0.009901
Fringe rate (Hz)
-0.671167
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042742
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

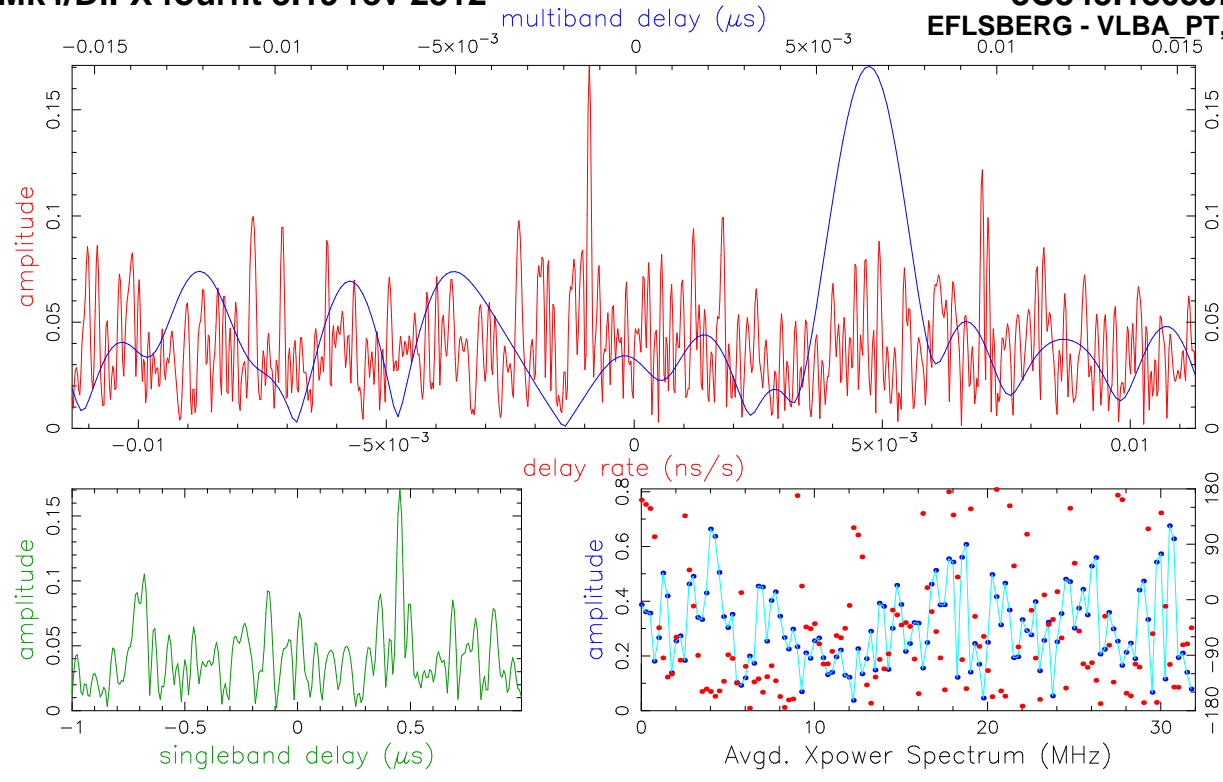


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-1.5	-6.7	61.5	22.8	172.6	115.8	24.6	-2.2	-6.0	45.3	58.8	16.9	36.4	20.8	18.2	12.1		Phase	24.7
	0.2	0.2	0.3	0.1	0.0	0.0	0.2	0.2	0.1	0.3	0.1	0.2	0.1	0.1	0.3	0.2		Ampl.	0.1
	80.4	120.1	231.0	23.9	54.5	178.9	172.4	26.5	53.2	231.9	28.2	160.3	143.9	234.7	57.6	237.0		Sbd box	232.1
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

Group delay (usec)(sbd) 6.86533043285E+03 Apriori delay (usec) 6.86452783394E+03 Resid mbdelay (usec) -9.90109E-03 +/- 1.7E-04
 Sband delay (usec) 6.86533300894E+03 Apriori clock (usec) 2.0928383E-01 Resid sbdelay (usec) 8.05175E-01 +/- 2.7E-03
 Phase delay (usec) 6.86452783473E+03 Apriori clockrate (us/s) -2.0098100E-07 Resid phdelay (usec) 7.97761E-07 +/- 5.7E-07
 Delay rate (us/s) -1.48317607825E+00 Apriori rate (us/s) -1.48316828666E+00 Resid rate (us/s) -7.79158E-06 +/- 2.4E-09
 Total phase (deg) 246.2 Apriori accel (us/s/s) -2.44504455346E-05 Resid phase (deg) 24.7 +/- 17.7

RMS Theor. Amplitude 0.143 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.2 29.4 Search (2048X64) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.3 51.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 51.3 35.4 Inc. seg. avg. 0.139 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 60.2 61.8 Inc. frq. avg. 0.136 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bo.W.77.1305JH

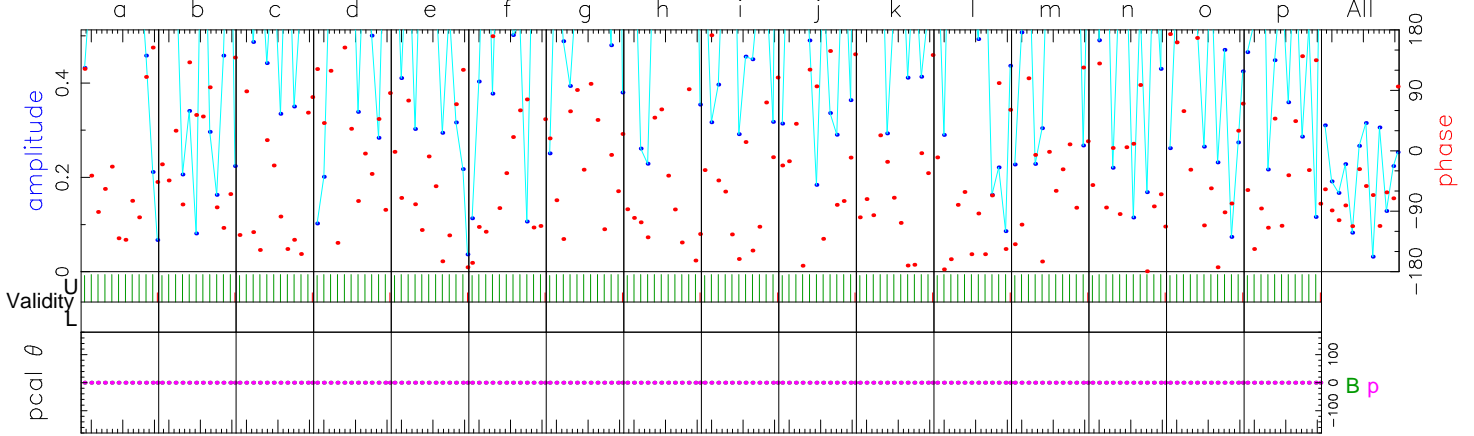


Fringe quality 0

SNR 5.5
Int time 138.827
Amp 0.171
Phase -72.3
PFD 9.9e-01
Delays (us)
SBD 0.452924
MBD 0.006447
Fringe rate (Hz)
-0.078247
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042727
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 sec / seg.), time ticks 10 sec

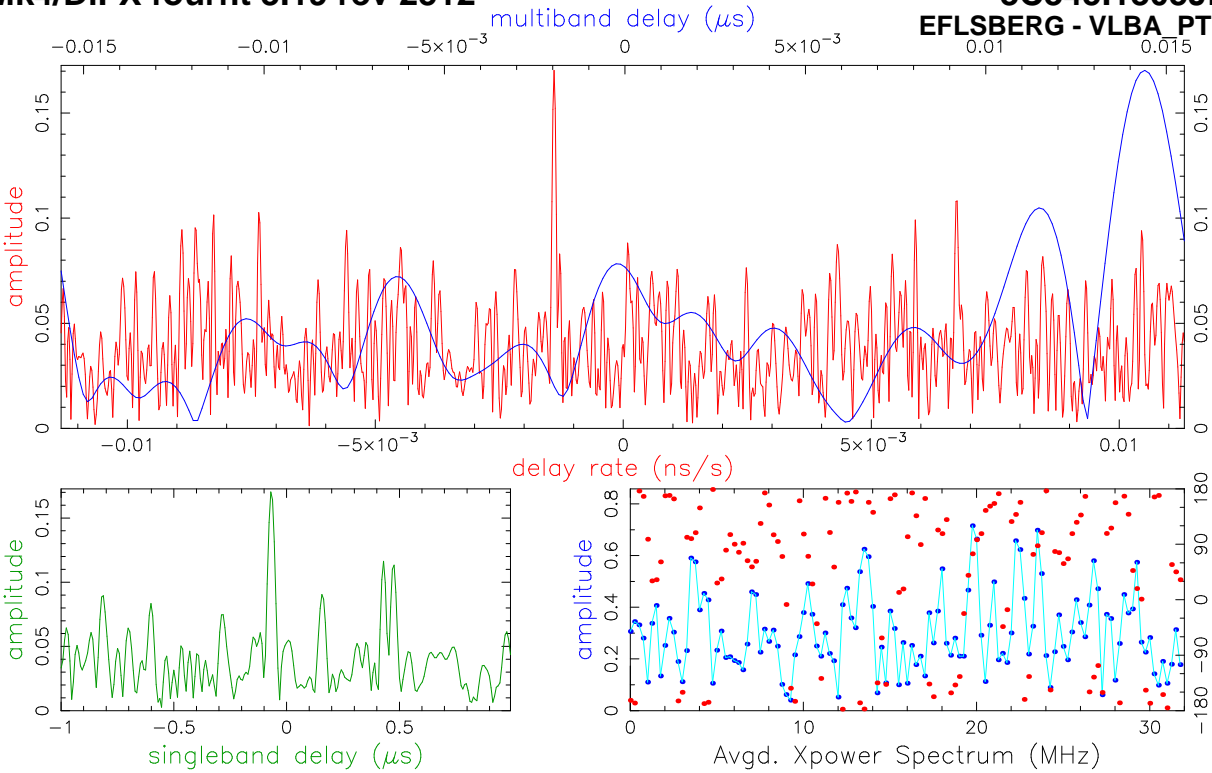


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-85.6	-12.1	-134.8	9.8	-49.5	-87.0	-22.2	-101.9	-81.6	-83.5	-77.9	-120.0	-37.5	-65.4	-78.2	-69.1	Phase	-72.3
	0.3	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.0	0.2	Ampl.	0.2
	112.8	136.9	182.3	146.2	42.4	33.8	18.6	131.9	217.2	121.1	100.5	73.5	181.1	6.1	192.0	86.7	Sbd box	187.0
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	5.03801742094E+03			Apriori delay (usec)			5.03757347355E+03			Resid mbdelay (usec)			6.44740E-03			+/- 2.0E-04		
Sband delay (usec)	5.03802639755E+03			Apriori clock (usec)			4.9331589E+00			Resid sbdelay (usec)			4.52924E-01			+/- 3.1E-03		
Phase delay (usec)	5.03757347121E+03			Apriori clockrate (us/s)			-4.0388659E-07			Resid phdelay (usec)			-2.33077E-06			+/- 6.7E-07		
Delay rate (us/s)	-1.46874821643E+00			Apriori rate (us/s)			-1.46874730806E+00			Resid rate (us/s)			-9.08371E-07			+/- 8.4E-09		
Total phase (deg)	-68.2			Apriori accel (us/s/s)			-1.17235405842E-05			Resid phase (deg)			-72.3			+/- 20.9		

ph/seg (deg) 38.4 36.1 Search (1024X64) 0.171 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.5 63.1 Interp. 0.170 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.0 41.7 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.0 72.8 Inc. frq. avg. 0.162 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10927.295 518.905 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bp.W.20.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Bp
EFLSBERG - VLBA_PT, fgroup W, pol LL

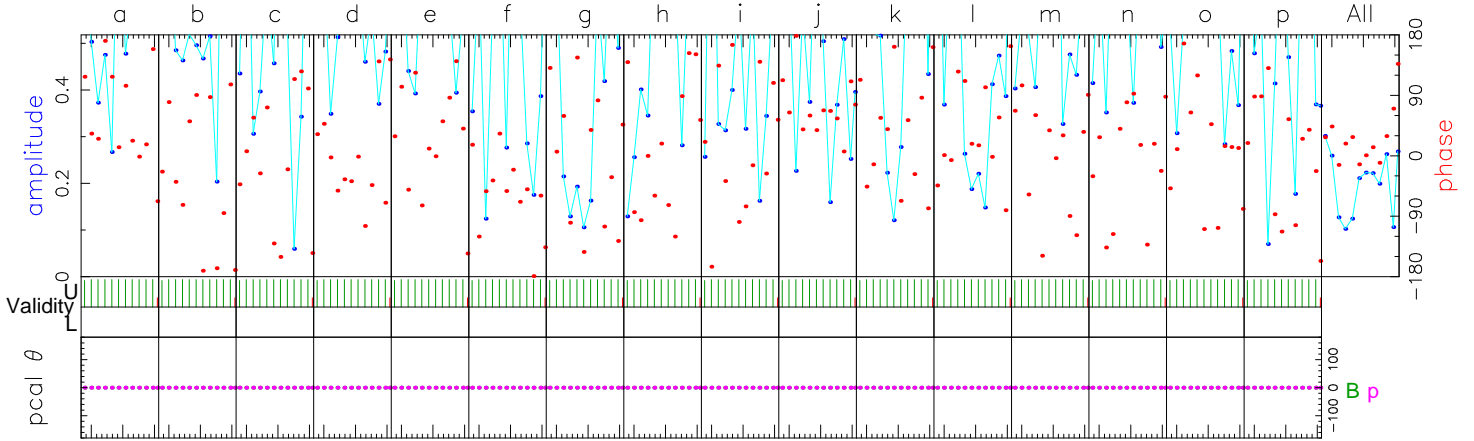


Fringe quality 0

SNR 5.5
Int time 138.827
Amp 0.173
Phase 19.2
PFD 9.8e-01
Delays (us)
SBD -0.068026
MBD 0.014387
Fringe rate (Hz)
-0.120453
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

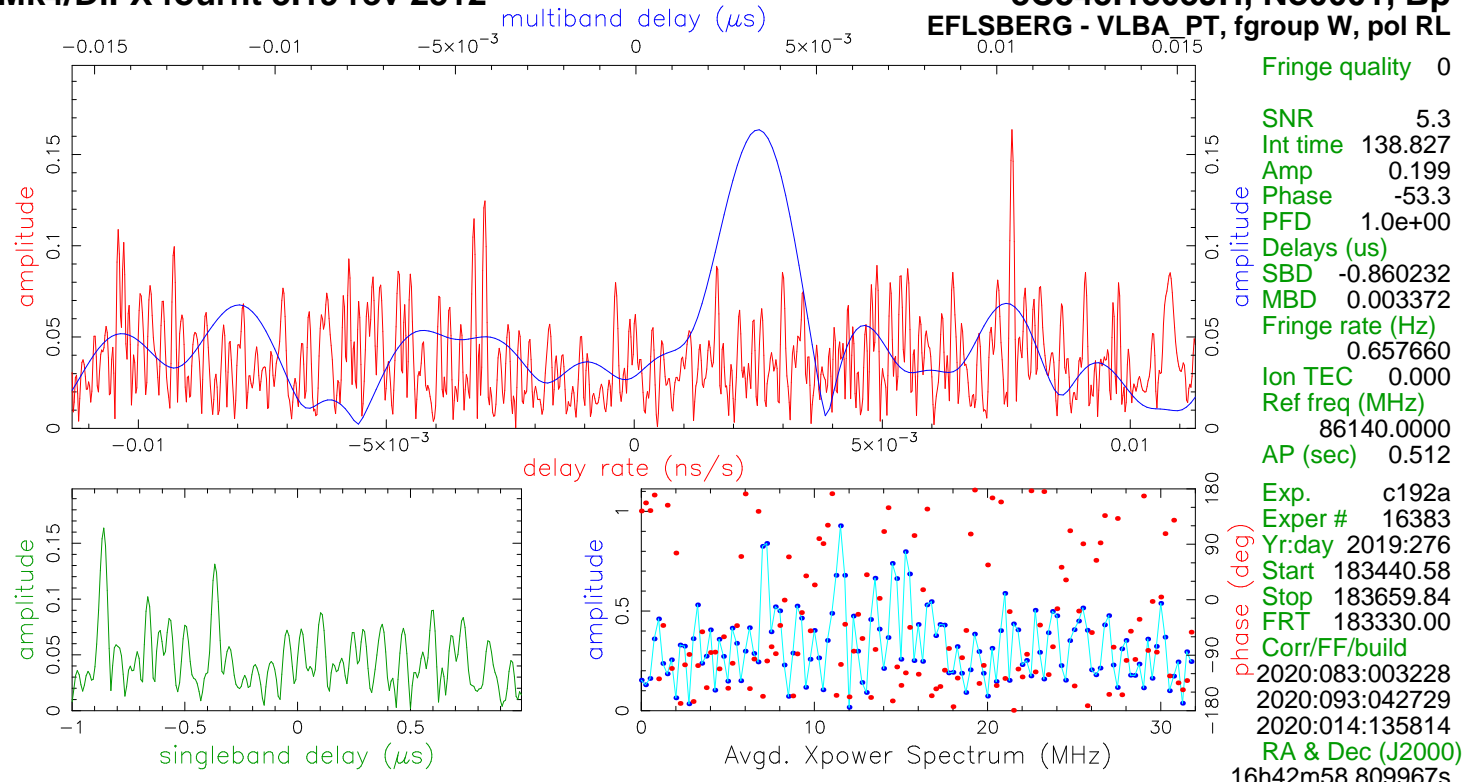
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042723
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 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																		
40.3	55.2	38.9	-22.7	42.0	-43.6	23.9	-51.7	-147.3	61.2	33.9	14.4	20.4	13.7	-5.8	26.0	Phase	19.2																		
0.4	0.1	0.1	0.3	0.3	0.3	0.1	0.1	0.1	0.4	0.2	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2																		
120.7	188.5	93.4	132.7	119.0	9.2	64.8	56.0	203.4	120.9	221.9	184.3	17.0	173.9	125.3	62.5	Sbd box	120.3																		
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used																			
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs																			
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs																			
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase																			
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC																			
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp																			
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp																			
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids																		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks																		
Group delay (usec)(sbd)		5.03749411089E+03					Apriori delay (usec)					5.03757347355E+03					Resid mbdelay (usec)					1.43873E-02					+/- 2.0E-04								
Sband delay (usec)		5.03750544755E+03					Apriori clock (usec)					4.9331589E+00					Resid sbdelay (usec)					-6.80260E-02					+/- 3.1E-03								
Phase delay (usec)		5.03757347416E+03					Apriori clockrate (us/s)					-4.0388659E-07					Resid phdelay (usec)					6.19135E-07					+/- 6.7E-07								
Delay rate (us/s)		-1.46874870639E+00					Apriori rate (us/s)					-1.46874730806E+00					Resid rate (us/s)					-1.39834E-06					+/- 8.3E-09								
Total phase (deg)		23.2					Apriori accel (us/s/s)					-1.17235405842E-05					Resid phase (deg)					19.2					+/- 20.7								
ph/seg (deg)		RMS		Theor.		Amplitude					0.173 +/- 0.031					Pcal mode: MANUAL, MANUAL					PC period (AP's) 5, 5														
amp/seg (%)		31.8		35.9		Search (1024X64)					0.168					Pcal rate: 0.000E+00, 0.000E+00 (us/s)					sb window (us)					-1.000 1.000									
ph/frq (deg)		41.1		62.6		Interp.					0.000					Bits/sample: 2x2					SampCntNorm: enabled					mb window (us)					-0.016 0.016				
amp/frq (%)		56.0		41.4		Inc. seg. avg.					0.165					Sample rate(MISamp/s): 64					dr window (ns/s)					-0.011 0.011									
		65.8		72.3		Inc. frq. avg.					0.166					Data rate(Mb/s): 2048					nlags: 128 t_cohere infinite					ion window (TEC)					0.00 0.00				

B: az 269.2 el 56.7 pa 55.8 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10927.295 518.905 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bp.W.2.1305JH



Fringe quality 0

SNR 5.3

Int time 138.827

Amp 0.199

Phase -53.3

PFD 1.0e+00

Delays (us)

SBD -0.860232

MBD 0.003372

Fringe rate (Hz) 0.657660

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183440.58

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042729

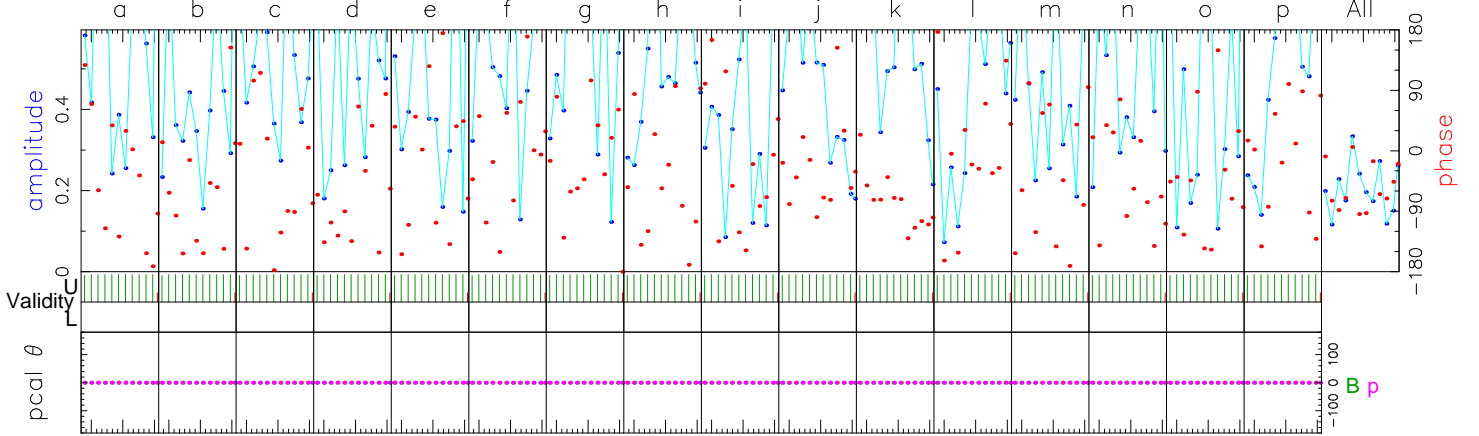
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 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
	-77.1	-74.5	-27.3	-89.2	21.2	-18.2	-22.8	-63.4	-105.4	-41.9	-77.0	-5.9	-112.4	-44.8	-94.6	11.6	Phase	-53.3
	0.2	0.3	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.4	0.5	0.2	0.1	0.3	0.3	0.2	Ampl.	0.2
	85.2	55.8	251.2	70.2	56.8	146.0	240.1	55.1	123.3	1.4	19.4	64.2	189.4	16.5	34.3	142.9	Sbd box	18.9
UL	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 5.03670184517E+03 Apriori delay (usec) 5.03757347355E+03 Resid mbdelay (usec) 3.37162E-03 +/- 2.0E-04

Sband delay (usec) 5.03671324105E+03 Apriori clock (usec) 4.9331589E+00 Resid sbdelay (usec) -8.60232E-01 +/- 3.3E-03

Phase delay (usec) 5.03757347183E+03 Apriori clockrate (us/s) -4.0388659E-07 Resid phdelay (usec) -1.71791E-06 +/- 7.0E-07

Delay rate (us/s) -1.46873967328E+00 Apriori rate (us/s) -1.46874730806E+00 Resid rate (us/s) 7.63478E-06 +/- 8.7E-09

Total phase (deg) -49.2 Apriori accel (us/s/s) -1.17235405842E-05 Resid phase (deg) -53.3 +/- 21.7

RMS Theor. Amplitude 0.199 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 33.7 37.6 Search (1024X64) 0.162 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 45.0 65.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

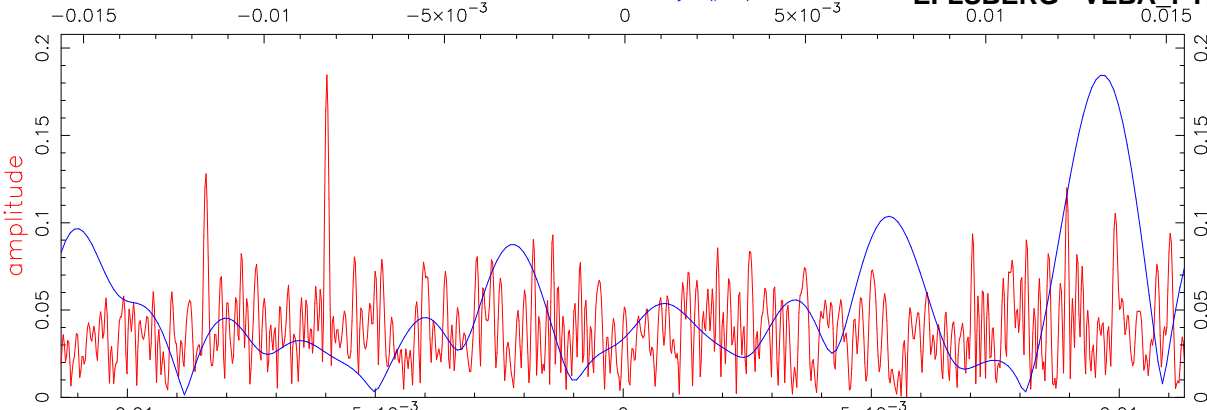
ph/frq (deg) 43.0 43.4 Inc. seg. avg. 0.202 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 59.6 75.8 Inc. frq. avg. 0.190 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10927.295 518.905 simultaneous interpolator

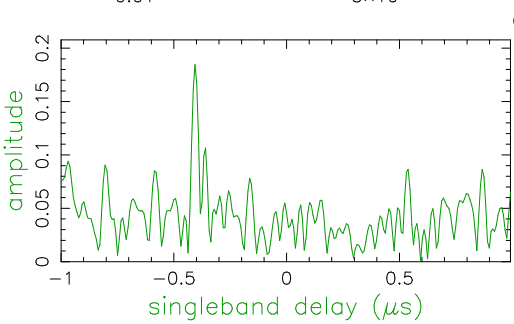
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bp.W.25.1305JH

multiband delay (μ s)

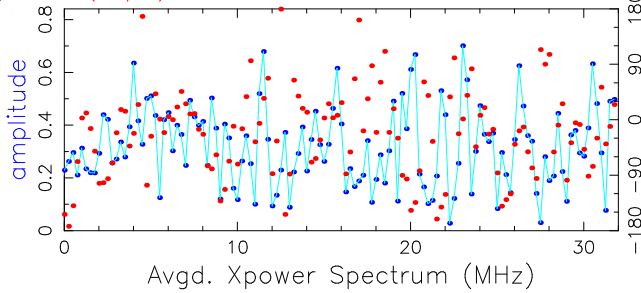


Fringe quality 0

SNR 6.0
Int time 138.827
Amp 0.208
Phase 84.2
PFD 2.8e-01
Delays (us)
SBD -0.405454
MBD 0.013234
Fringe rate (Hz)
-0.515547
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

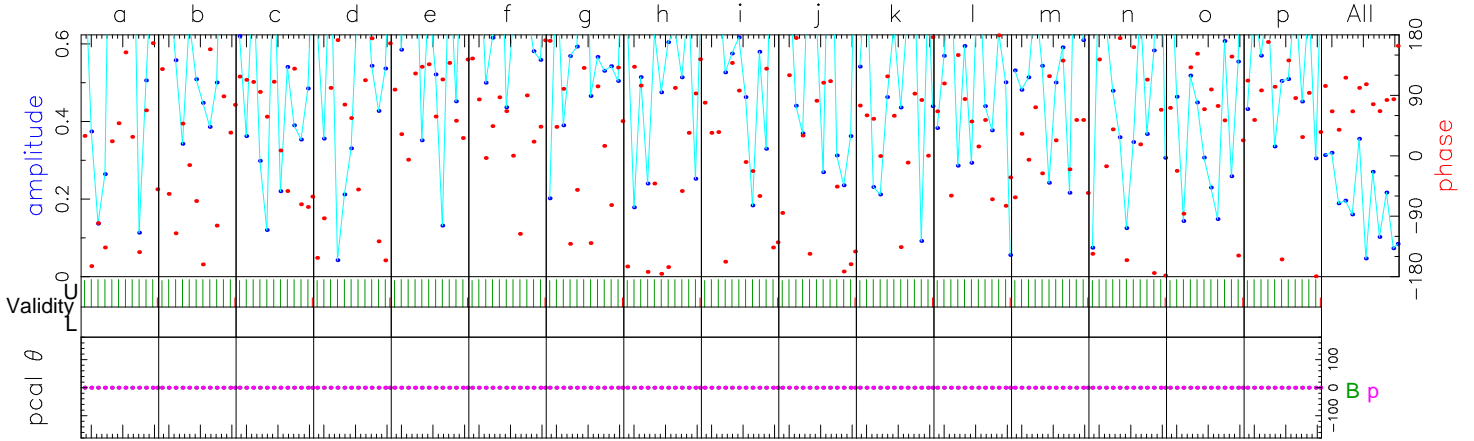


delay rate (ns/s)



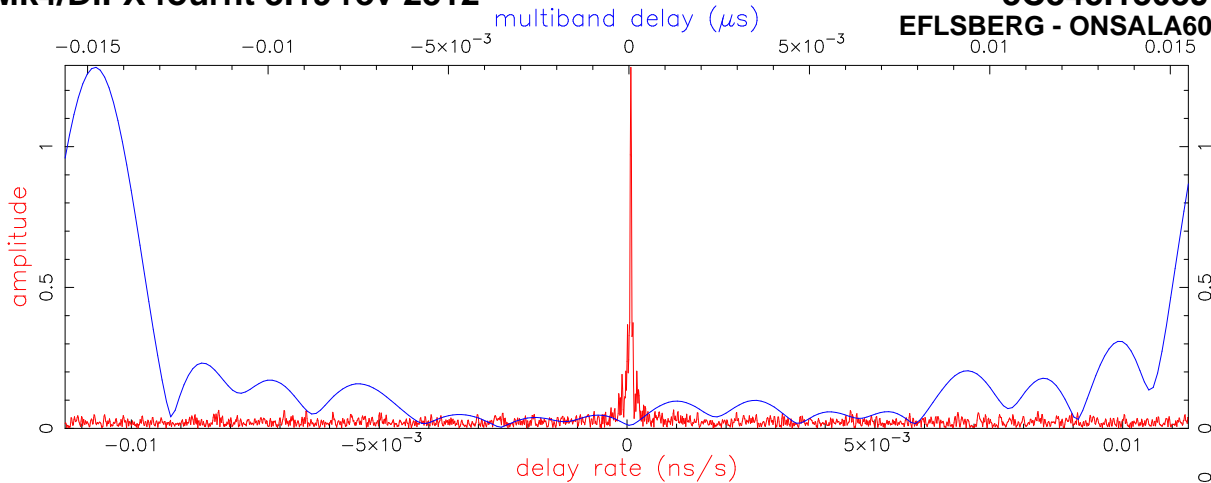
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042725
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 24 APs / seg (12.29 sec / seg.), time ticks 10 sec



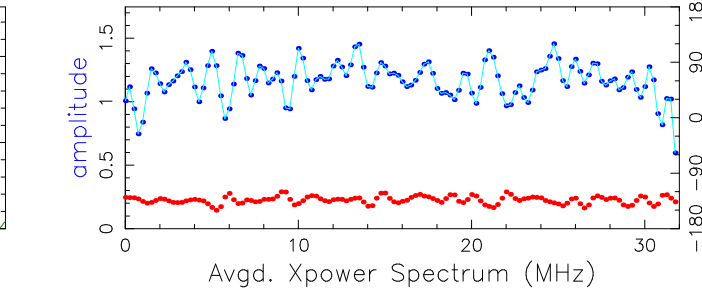
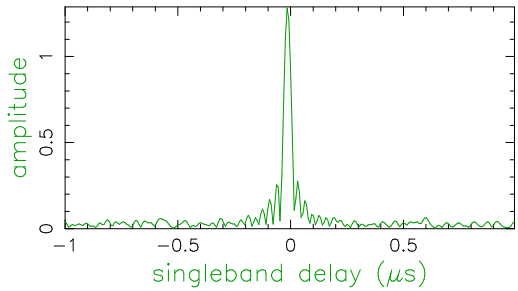
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)		5.03718045782E+03								5.03757347355E+03							1.32343E-02	+/- 1.8E-04	
Sband delay (usec)		5.03716802005E+03								4.9331589E+00							-4.05454E-01	+/- 2.9E-03	
Phase delay (usec)		5.03757347626E+03								-4.0388659E-07							2.71475E-06	+/- 6.2E-07	
Delay rate (us/s)		-1.46875329304E+00								-1.46874730806E+00							-5.98499E-06	+/- 7.7E-09	
Total phase (deg)				88.2													84.2	+/- 19.2	
pcal mode:										MANUAL								MANUAL	
PCal rate:										0.000E+00							0.000E+00	(us/s)	
Bits/sample:										2x2								enabled	
Sample rate(MISamp/s):										64									
Data rate(Mb/s):										2048									
pcal period (AP's)										5								5	
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 269.2 el 56.7 pa 55.8 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10927.295 518.905 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bp.W.4.1305JH



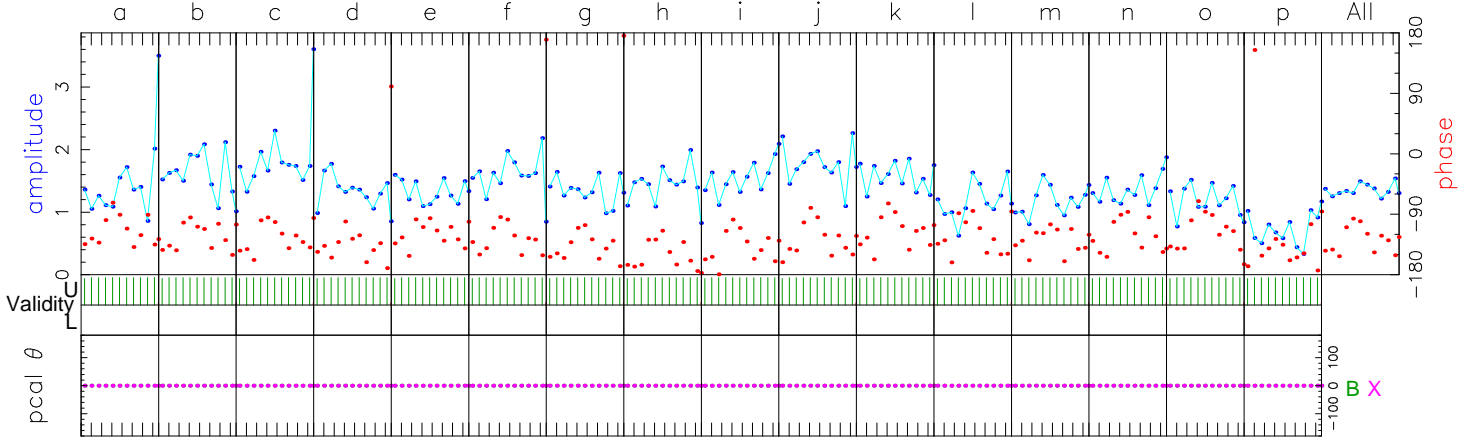
Fringe quality 7

SNR 72.1
Int time 418.305
Amp 1.288
Phase -128.4
PFD 0.0e+00
Delays (us)
SBD -0.013849
MBD -0.014781
Fringe rate (Hz)
0.006719
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042752
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

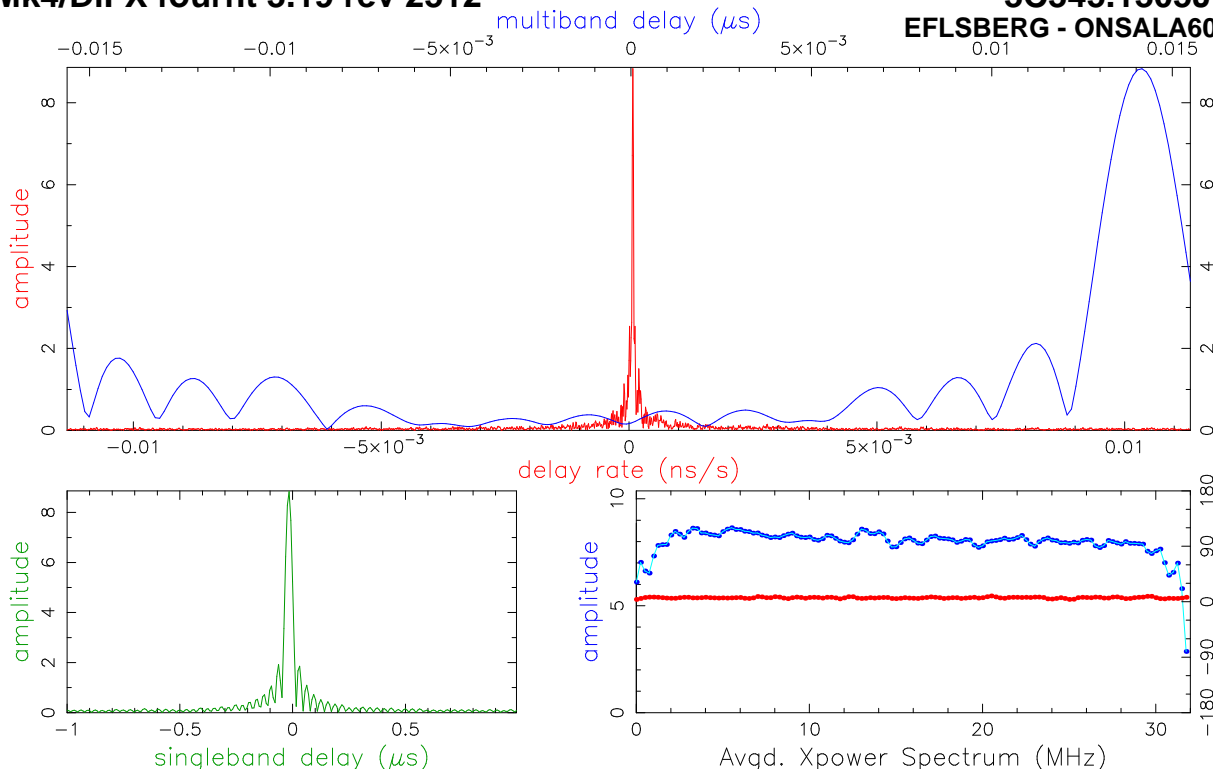
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-116.2	-123.1	-124.3	-139.1	-121.6	-127.7	-140.4	-149.5	-138.7	-127.9	-116.8	-126.1	-127.4	-123.3	-113.1	-149.6	Phase	-128.4
	1.3	1.6	1.6	1.3	1.3	1.6	1.3	1.4	1.4	1.6	1.4	1.1	1.1	1.2	1.1	0.6	Ampl.	1.3
	127.5	127.1	127.2	126.7	127.2	127.1	126.8	127.3	127.3	127.2	127.3	127.3	127.0	127.5	127.1	127.7	Sbd box	127.2
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	7.02669966335E+02			Apriori delay (usec)			7.02684747362E+02			Resid mbdelay (usec)			-1.47810E-02			+/- 1.5E-05		
Sband delay (usec)	7.02670898862E+02			Apriori clock (usec)			-1.5486191E+01			Resid sbdelay (usec)			-1.38485E-02			+/- 2.4E-04		
Phase delay (usec)	7.02684743219E+02			Apriori clockrate (us/s)			-7.2800002E-07			Resid phdelay (usec)			-4.14207E-06			+/- 5.1E-08		
Delay rate (us/s)	-4.67303081088E-02			Apriori rate (us/s)			-4.67303861104E-02			Resid rate (us/s)			7.80016E-08			+/- 2.1E-10		
Total phase (deg)	-78.9			Apriori accel (us/s/s)			-8.91911020584E-06			Resid phase (deg)			-128.4			+/- 1.6		

ph/seg (deg) 19.4 2.8 Theor. Amplitude 1.288 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 9.2 4.8 Interp. 1.265 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.6 3.2 Inc. seg. avg. 1.359 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.9 5.6 Inc. frq. avg. 1.301 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.108.1305JH

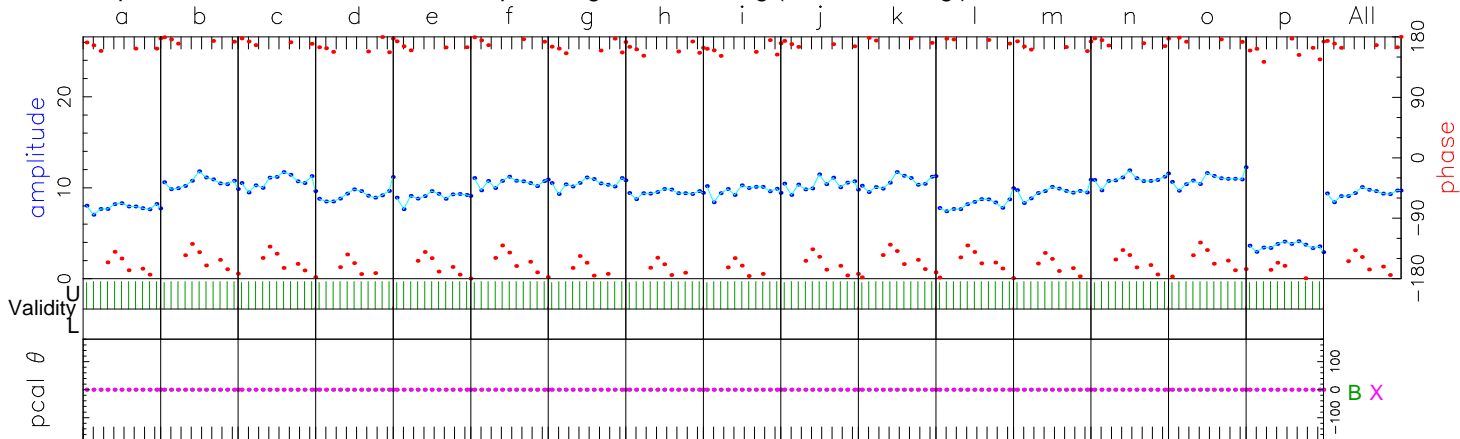


Fringe quality 8

SNR 495.8
Int time 418.305
Amp 8.864
Phase -172.8
PFD 0.0e+00
Delays (us)
SBD -0.017042
MBD 0.014121
Fringe rate (Hz) 0.006712
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042737
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

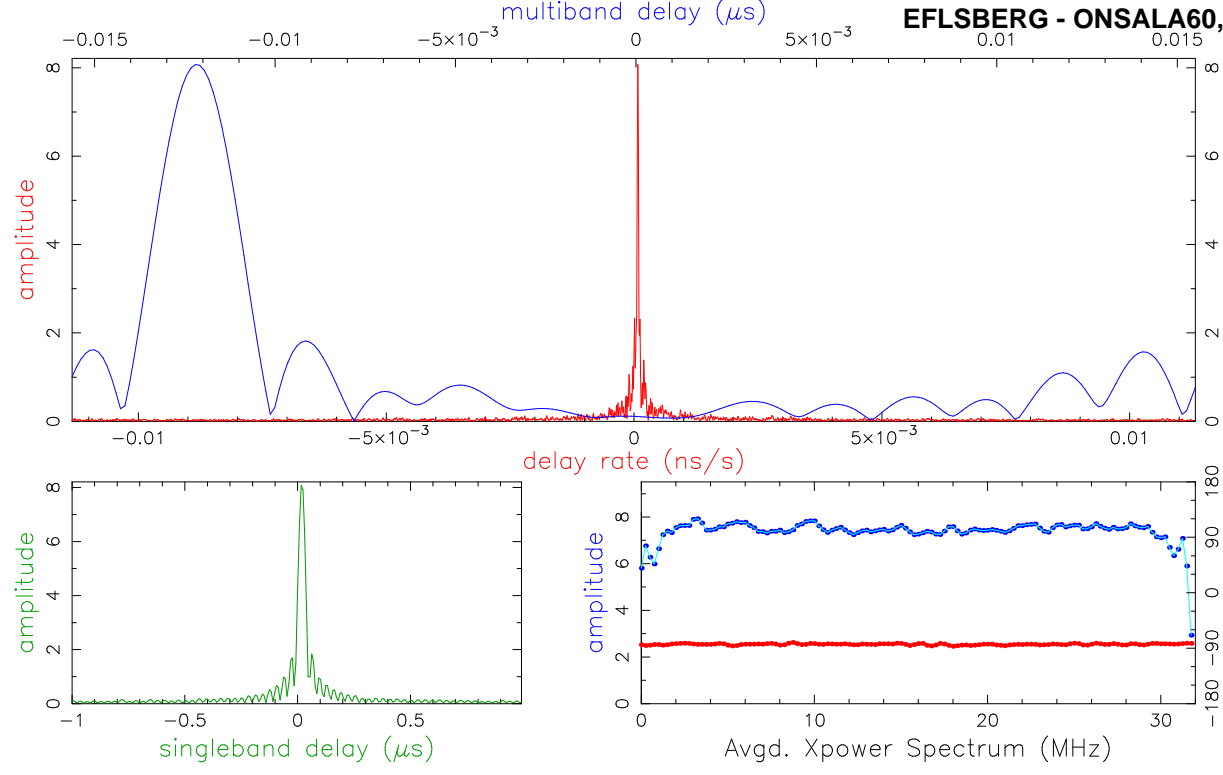


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-175.2	-165.2	-168.4	179.6	-174.3	-167.0	178.5	177.3	176.3	-172.5	-163.9	-165.2	-175.5	-170.0	-163.7	171.6	Phase	-172.8	
	7.4	9.9	10.1	8.6	8.5	9.9	8.9	9.2	9.8	10.0	7.7	8.9	10.3	10.1	3.4		Ampl.	8.9	
	127.3	126.7	126.8	126.5	127.0	126.8	126.6	126.9	126.8	127.0	126.8	126.8	126.9	127.0	126.6	126.6		Sbd box	126.8
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

Group delay (usec)(sbd) 7.02667618023E+02 Apriori delay (usec) 7.02684747362E+02 Resid mbdelay (usec) 1.41207E-02 +/- 2.2E-06
 Sband delay (usec) 7.02667705362E+02 Apriori clock (usec) -1.5486191E+01 Resid sbdelay (usec) -1.70420E-02 +/- 3.5E-05
 Phase delay (usec) 7.02684741789E+02 Apriori clockrate (us/s) -7.2800002E-07 Resid phdelay (usec) -5.57228E-06 +/- 7.5E-09
 Delay rate (us/s) -4.67303081953E-02 Apriori rate (us/s) -4.67303861104E-02 Resid rate (us/s) 7.79151E-08 +/- 3.1E-11
 Total phase (deg) -123.2 Apriori accel (us/s/s) -8.91911020584E-06 Resid phase (deg) -172.8 +/- 0.2

RMS Theor. Amplitude 8.864 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 19.8 0.4 Search (2048X64) 8.800 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 7.6 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 8.2 0.5 Inc. seg. avg. 9.390 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 18.8 0.8 Inc. frq. avg. 8.905 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.58.1305JH

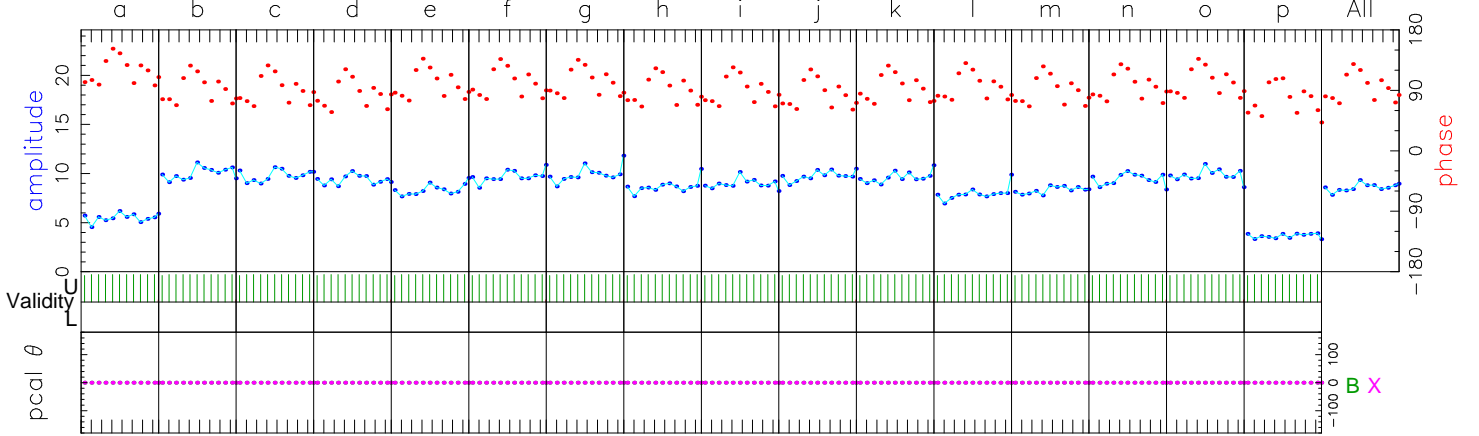


Fringe quality 8

SNR 459.3
Int time 418.305
Amp 8.212
Phase 94.5
PFD 0.0e+00
Delays (us)
SBD 0.018840
MBD -0.012142
Fringe rate (Hz) 0.006713
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042742
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

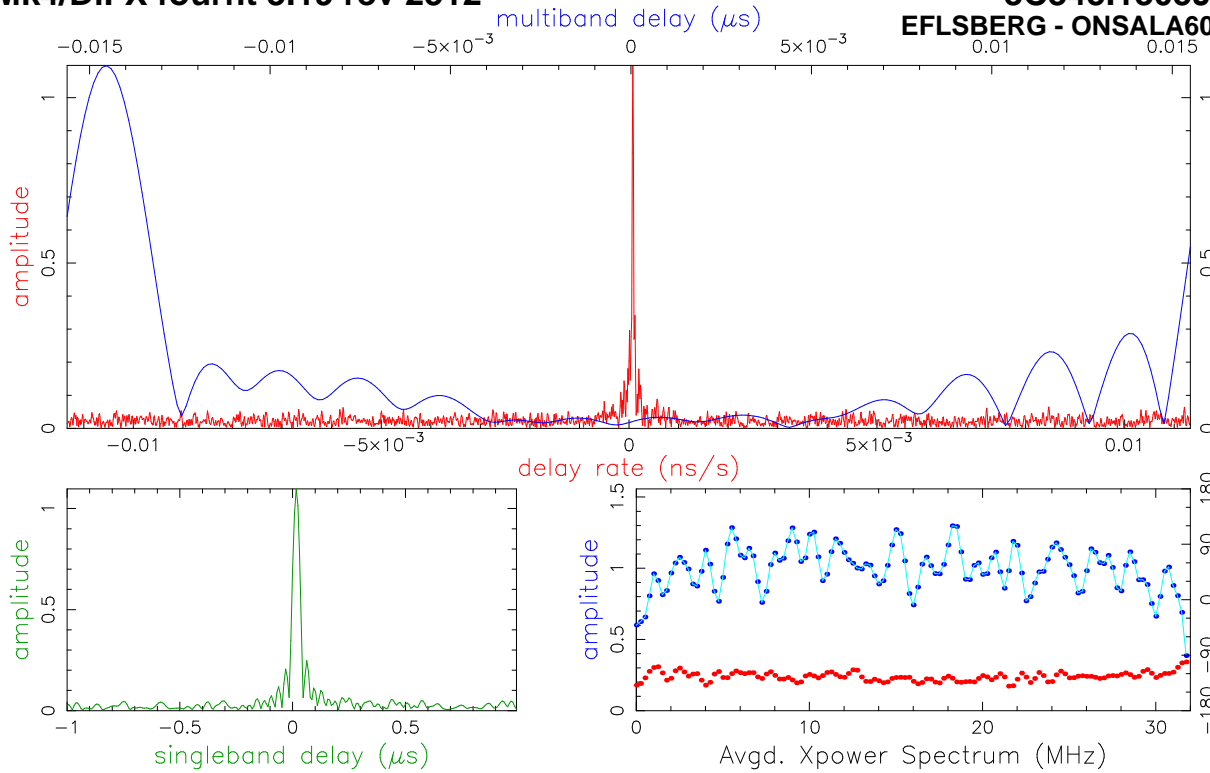


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	119.0	92.3	90.9	84.6	99.7	101.5	102.6	89.9	89.8	84.8	93.8	96.7	89.4	96.3	102.4	77.5		Phase	94.5
	5.2	9.5	9.2	8.8	7.8	9.1	9.3	8.1	8.5	9.1	9.0	7.4	7.8	9.0	9.3	3.5		Ampl.	8.2
	130.5	131.3	131.4	131.3	131.5	131.7	131.3	131.4	131.3	131.4	131.6	131.3	131.3	131.7	131.1	131.6		Sbd box	131.4
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) 7.02703855148E+02 Apriori delay (usec) 7.02684747362E+02 Resid mbdelay (usec) -1.21422E-02 +/- 2.3E-06
 Sband delay (usec) 7.02703586862E+02 Apriori clock (usec) -1.5486191E+01 Resid sbdelay (usec) 1.88395E-02 +/- 3.8E-05
 Phase delay (usec) 7.02684750408E+02 Apriori clockrate (us/s) -7.2800002E-07 Resid phdelay (usec) 3.04677E-06 +/- 8.0E-09
 Delay rate (us/s) -4.67303081761E-02 Apriori rate (us/s) -4.67303861104E-02 Resid rate (us/s) 7.79343E-08 +/- 3.3E-11
 Total phase (deg) 144.1 Apriori accel (us/s/s) -8.91911020584E-06 Resid phase (deg) 94.5 +/- 0.2

RMS Theor. Amplitude 8.212 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 19.6 0.4 Search (2048X64) 8.047 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 6.2 0.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 9.9 0.5 Inc. seg. avg. 8.567 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 19.5 0.9 Inc. frq. avg. 8.153 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.74.1305JH

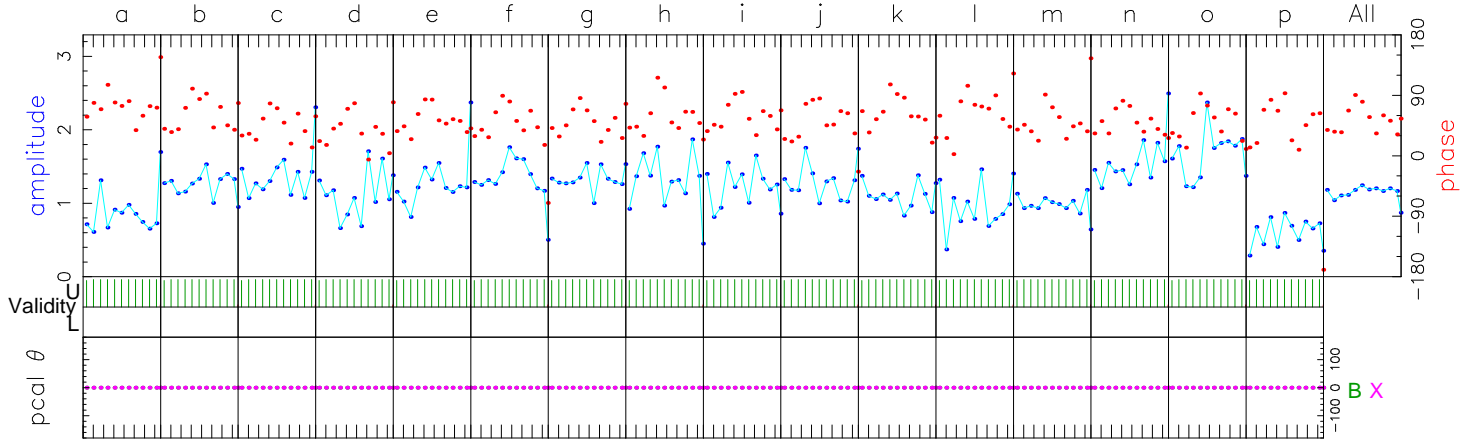


Fringe quality 7

SNR 61.4
Int time 418.305
Amp 1.098
Phase 53.2
PFD 0.0e+00
Delays (us)
SBD 0.016385
MBD -0.014540
Fringe rate (Hz) 0.006713
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042746
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

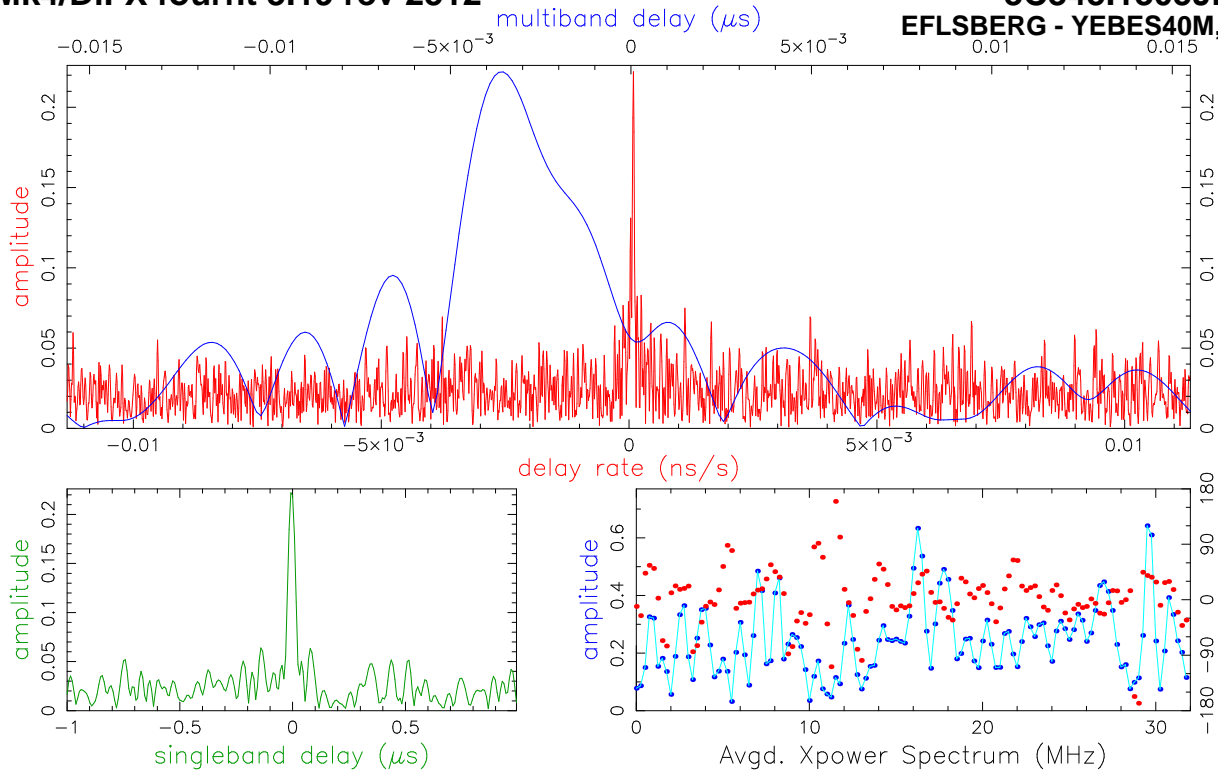


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B: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		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	7.02701456866E+02			Apriori delay (usec)			7.02684747362E+02			Resid mbdelay (usec)			-1.45405E-02			+/- 1.8E-05		
Sband delay (usec)	7.02701132862E+02			Apriori clock (usec)			-1.5486191E+01			Resid sbdelay (usec)			1.63855E-02			+/- 2.8E-04		
Phase delay (usec)	7.02684749076E+02			Apriori clockrate (us/s)			-7.2800002E-07			Resid phdelay (usec)			1.71495E-06			+/- 6.0E-08		
Delay rate (us/s)	-4.67303081754E-02			Apriori rate (us/s)			-4.67303861104E-02			Resid rate (us/s)			7.79350E-08			+/- 2.5E-10		
Total phase (deg)	102.8			Apriori accel (us/s/s)			-8.91911020584E-06			Resid phase (deg)			53.2			+/- 1.9		

ph/seg (deg) RMS Theor. Amplitude 1.098 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.3 3.2 Search (2048X64) 1.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.9 5.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 9.9 3.7 Inc. seg. avg. 1.160 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 22.2 6.5 Inc. frq. avg. 1.107 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.86.1305JH

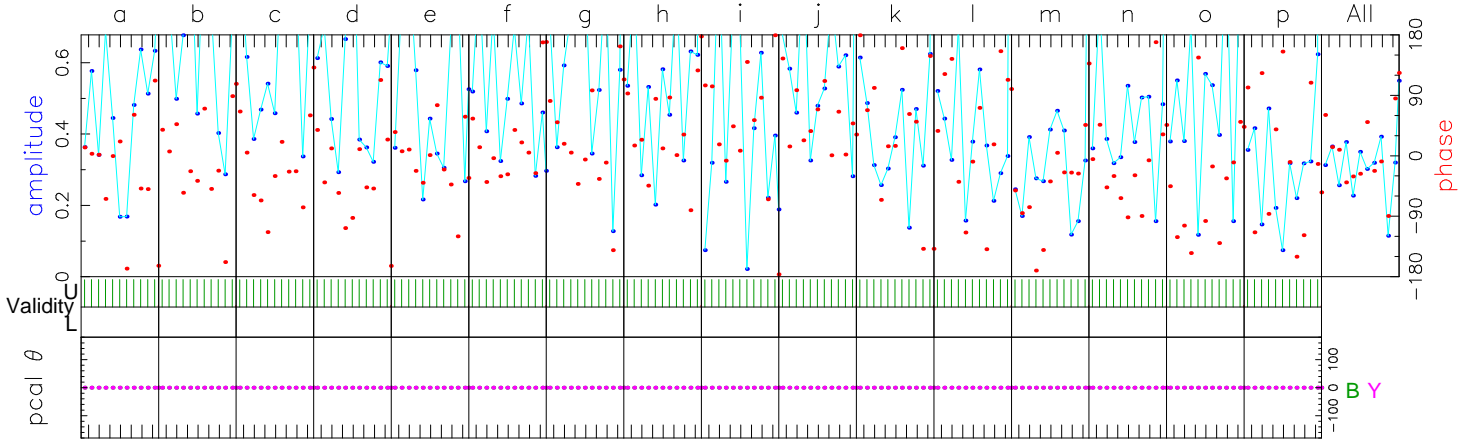


Fringe quality 9

SNR 12.4
Int time 401.317
Amp 0.226
Phase 3.7
PFD 1.6e-26
Delays (us)
SBD -0.004437
MBD -0.003562
Fringe rate (Hz) 0.007979
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042754
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-7.4	8.2	-7.7	-33.8	-9.9	6.9	9.6	25.2	41.5	48.2	116.0	68.3	-41.0	-23.0	-67.4	-60.3		Phase	3.7				
	0.2	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.1	0.1	0.2	0.3	0.2	0.1		Ampl.	0.3				
	129.5	128.7	127.8	127.8	128.9	129.0	129.0	129.1	128.6	128.9	21.9	4.1	51.1	128.0	184.8	1.5		Sbd box	128.4				
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		APs used					
B	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					
B: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					
B	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							
B	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)			-1.16629986668E+03															Apriori delay (usec)	-1.16629630439E+03	Resid mbdelay (usec)	-3.56229E-03	+/-	8.7E-05
Sband delay (usec)			-1.16630074139E+03															Apriori clock (usec)	7.1870832E+00	Resid sbdelay (usec)	-4.43700E-03	+/-	1.4E-03
Phase delay (usec)			-1.16629630427E+03															Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	1.19317E-07	+/-	3.0E-07
Delay rate (us/s)			-1.05711745119E-02															Apriori rate (us/s)	-1.05712671409E-02	Resid rate (us/s)	9.26290E-08	+/-	1.3E-09
Total phase (deg)																		Apriori accel (us/s/s)	1.50620676164E-05	Resid phase (deg)	3.7	+/-	9.3

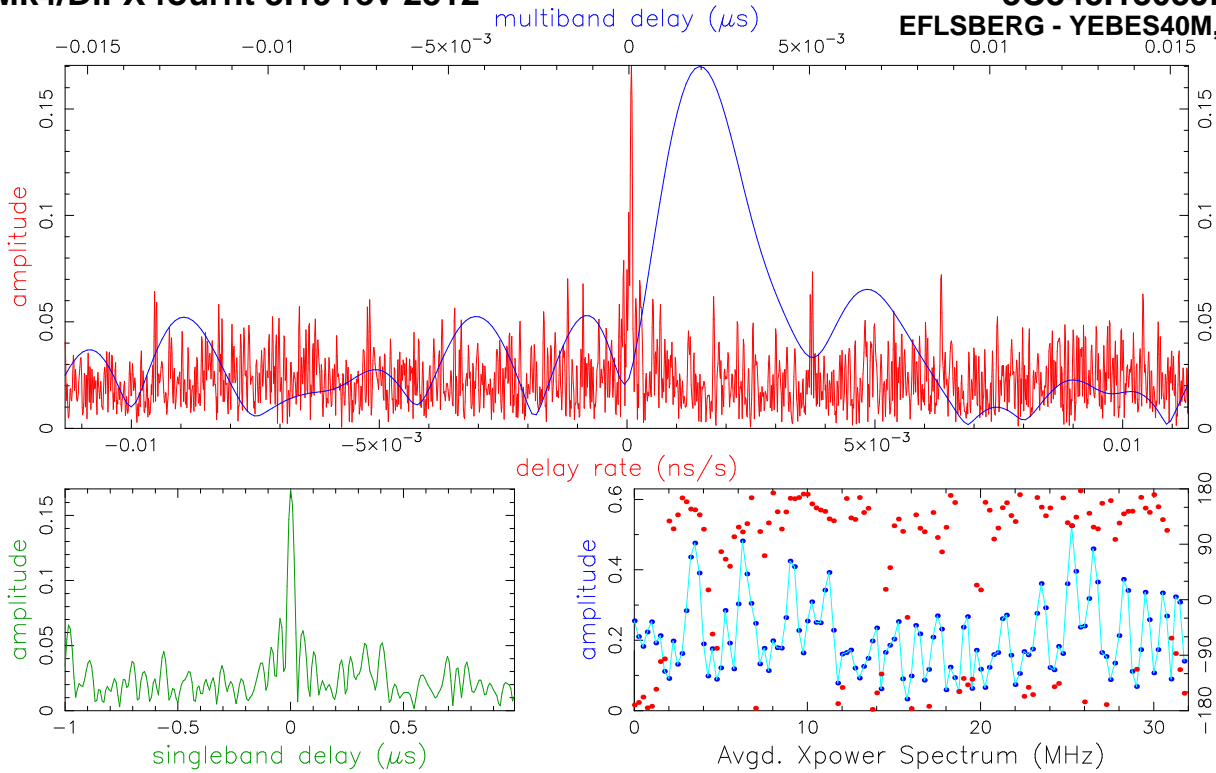
	RMS	Theor.	Amplitude	0.226 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	48.9	16.0	Search (2048X64)	0.217	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	49.0	28.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	49.6	18.5	Inc. seg. avg.	0.293	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.3	32.3	Inc. frq. avg.	0.259	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

B: az 269.2 el 56.7 pa 55.8 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) 106.525 1816.010 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BY..1305JH Output file: /Exps/c192a/v2/1234/No0001/BY.W.116.1305JH

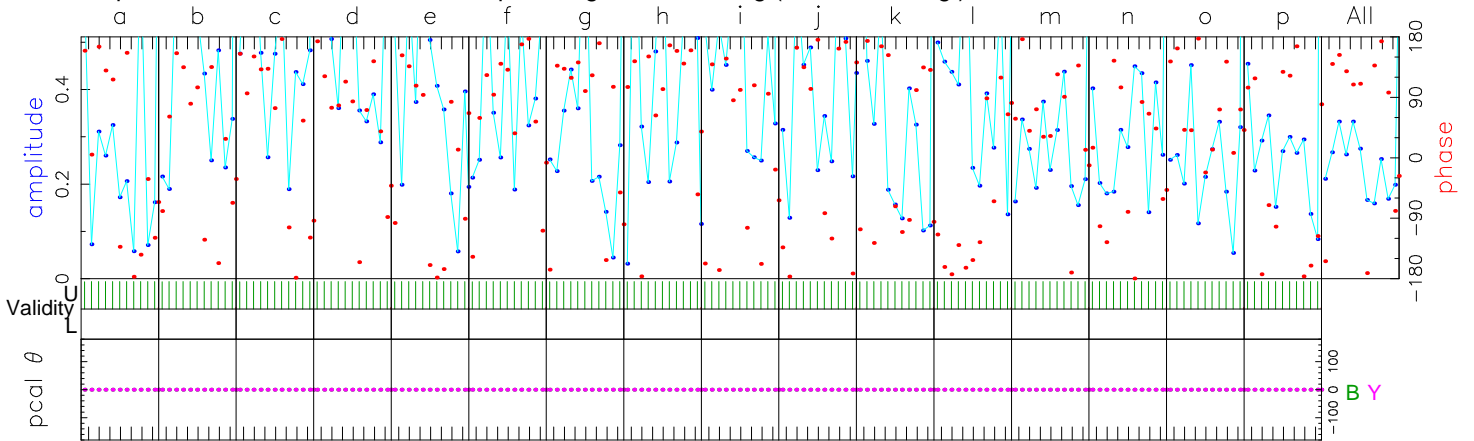
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, BY
EFLSBERG - YEBES40M, fgroup W, pol RL



Fringe quality 9
SNR 9.3
Int time 401.317
Amp 0.170
Phase 145.0
PFD 3.9e-12
Delays (us)
SBD 0.001286
MBD 0.001974
Fringe rate (Hz) 0.007604
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042759
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec

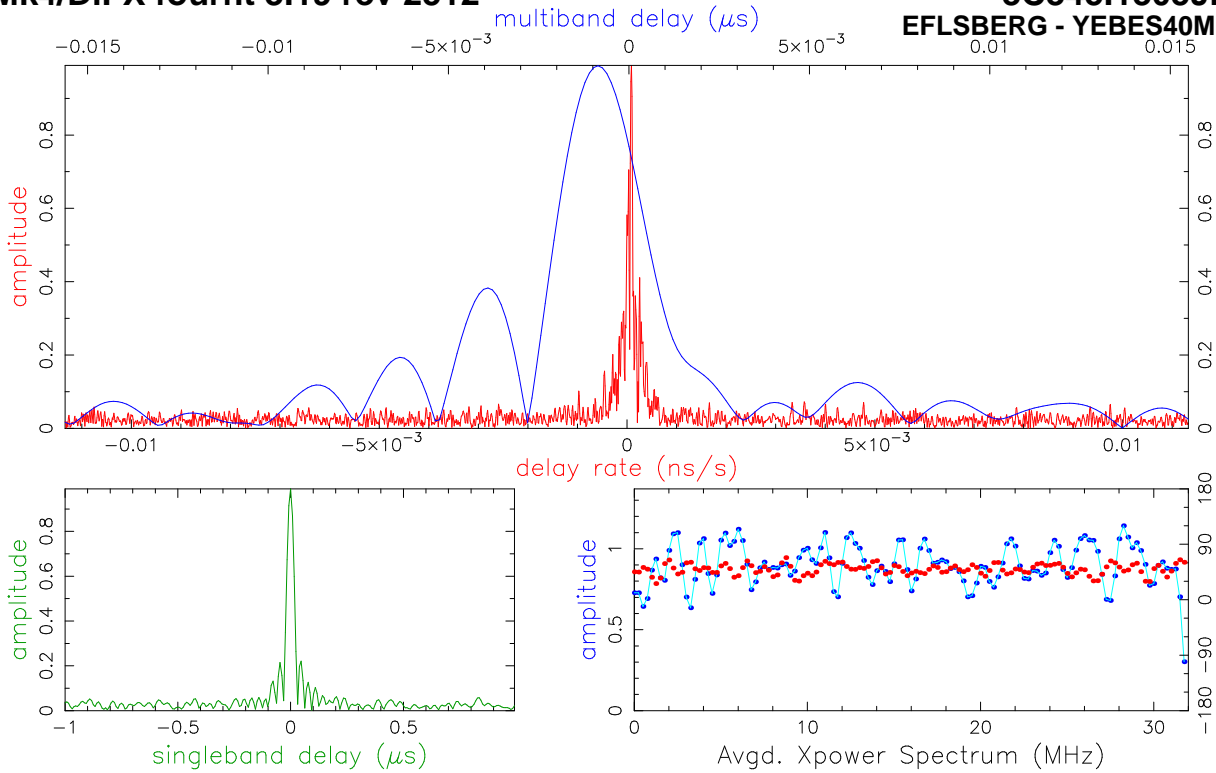


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	177.4	133.4	142.8	113.0	159.3	134.4	132.5	137.3	134.9	171.4	-146.7	-166.2	80.0	68.3	67.5	156.8	Phase	145.0
B	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.1	Ampl.	0.2
Y	43.4	100.6	128.6	129.6	127.7	28.6	139.9	129.7	129.6	128.0	130.5	163.2	217.8	202.5	195.4	123.0	Sbd box	129.2
B	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B: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	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
W	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -1.16629433040E+03 Apriori delay (usec) -1.16629630439E+03 Resid mbdelay (usec) 1.97399E-03 +/- 1.2E-04
Sband delay (usec) -1.16629501889E+03 Apriori clock (usec) 7.1870832E+00 Resid sbdelay (usec) 1.28550E-03 +/- 1.8E-03
Phase delay (usec) -1.16629629971E+03 Apriori clockrate (us/s) -4.2000000E-07 Resid phdelay (usec) 4.67584E-06 +/- 4.0E-07
Delay rate (us/s) -1.05711788709E-02 Apriori rate (us/s) -1.05712671409E-02 Resid rate (us/s) 8.82700E-08 +/- 1.7E-09
Total phase (deg) -92.5 Apriori accel (us/s/s) 1.50620676164E-05 Resid phase (deg) 145.0 +/- 12.3

RMS Theor. Amplitude 0.170 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 53.6 21.3 Search (2048X64) 0.170 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 57.2 37.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 43.8 24.5 Inc. seg. avg. 0.226 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 42.8 42.8 Inc. frq. avg. 0.189 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) 106.525 1816.010 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BY..1305JH Output file: /Exps/c192a/v2/1234/No0001/BY.W.130.1305JH

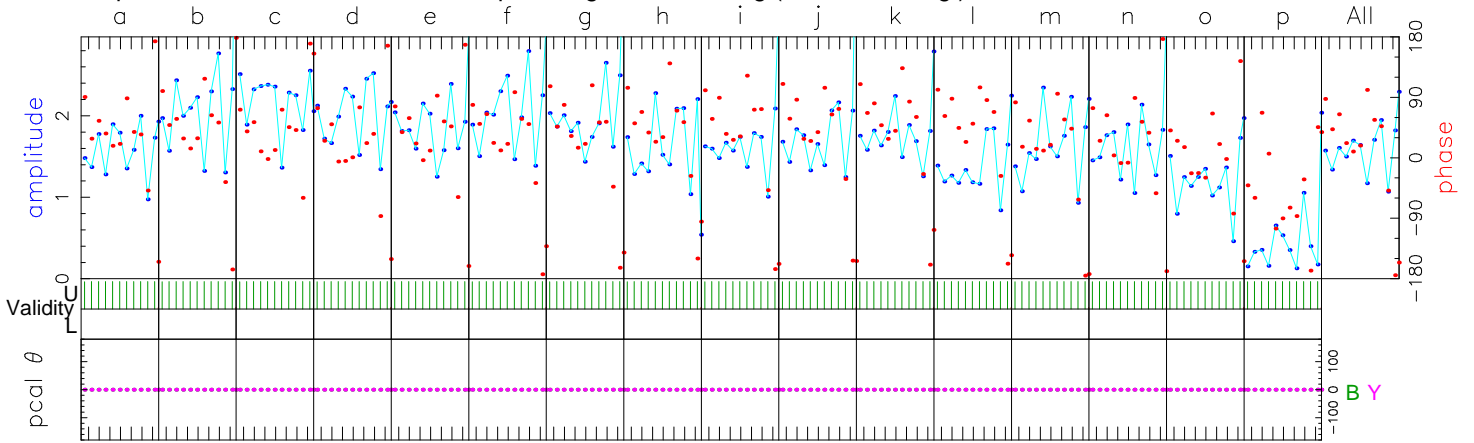


Fringe quality 2

SNR 54.2
Int time 401.317
Amp 0.990
Phase 48.8
PFD 0.0e+00
Delays (us)
SBD -0.000918
MBD -0.000870
Fringe rate (Hz)
0.007829
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042745
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

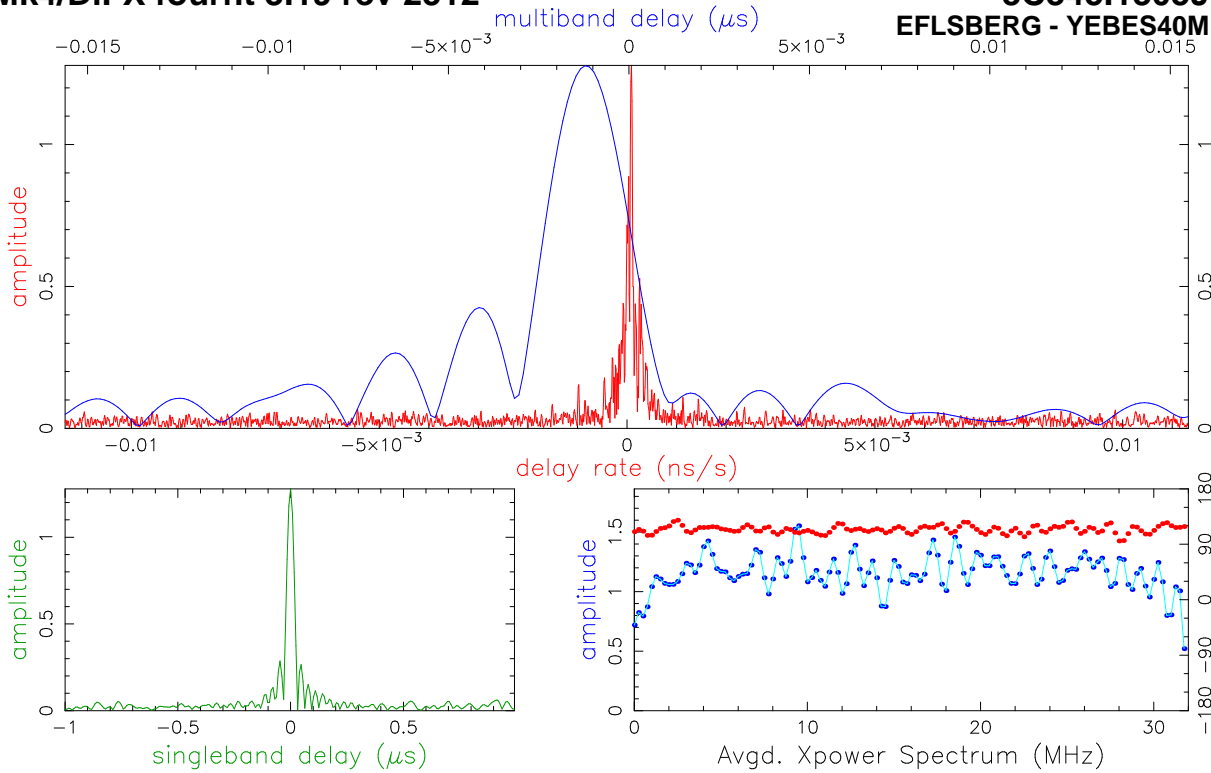
Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	128.9
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1.0
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	0.2
B: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	0:0	ManI PC	6.8E-08
B: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	0:0	PC amp	2.9E-10
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	48.8
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	1.0
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	6.8E-08
																		Tracks	2.9E-10
Group delay (usec)(sbd)	-1.16629717402E+03			Apriori delay (usec)			-1.16629630439E+03			Resid mbdelay (usec)			-8.69635E-04			+/- 2.0E-05			
Sband delay (usec)	-1.16629722189E+03			Apriori clock (usec)			7.1870832E+00			Resid sbdelay (usec)			-9.17500E-04			+/- 3.2E-04			
Phase delay (usec)	-1.16629630281E+03			Apriori clockrate (us/s)			-4.2000000E-07			Resid phdelay (usec)			1.57526E-06			+/- 6.8E-08			
Delay rate (us/s)	-1.05711762486E-02			Apriori rate (us/s)			-1.05712671409E-02			Resid rate (us/s)			9.08924E-08			+/- 2.9E-10			
Total phase (deg)	-188.7			Apriori accel (us/s/s)			1.50620676164E-05			Resid phase (deg)			48.8			+/- 2.1			

ph/seg (deg) 58.1 3.7 Theor. Amplitude 0.990 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.8 6.4 Search (2048X64) 0.982 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.9 4.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 28.4 7.4 Inc. seg. avg. 1.553 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 1.043 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) 106.525 1816.010 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BY..1305JH Output file: /Exps/c192a/v2/1234/No0001/BY.W.85.1305JH

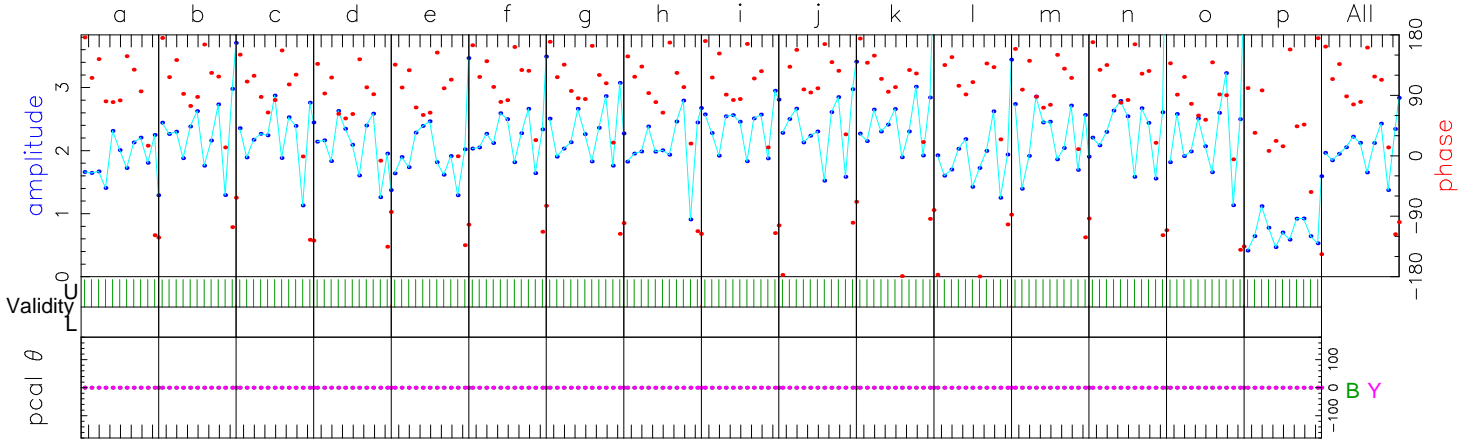


Fringe quality 3

SNR 70.1
Int time 401.317
Amp 1.279
Phase 116.6
PFD 0.0e+00
Delays (us)
SBD -0.000765
MBD -0.001198
Fringe rate (Hz) 0.007961
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042750
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

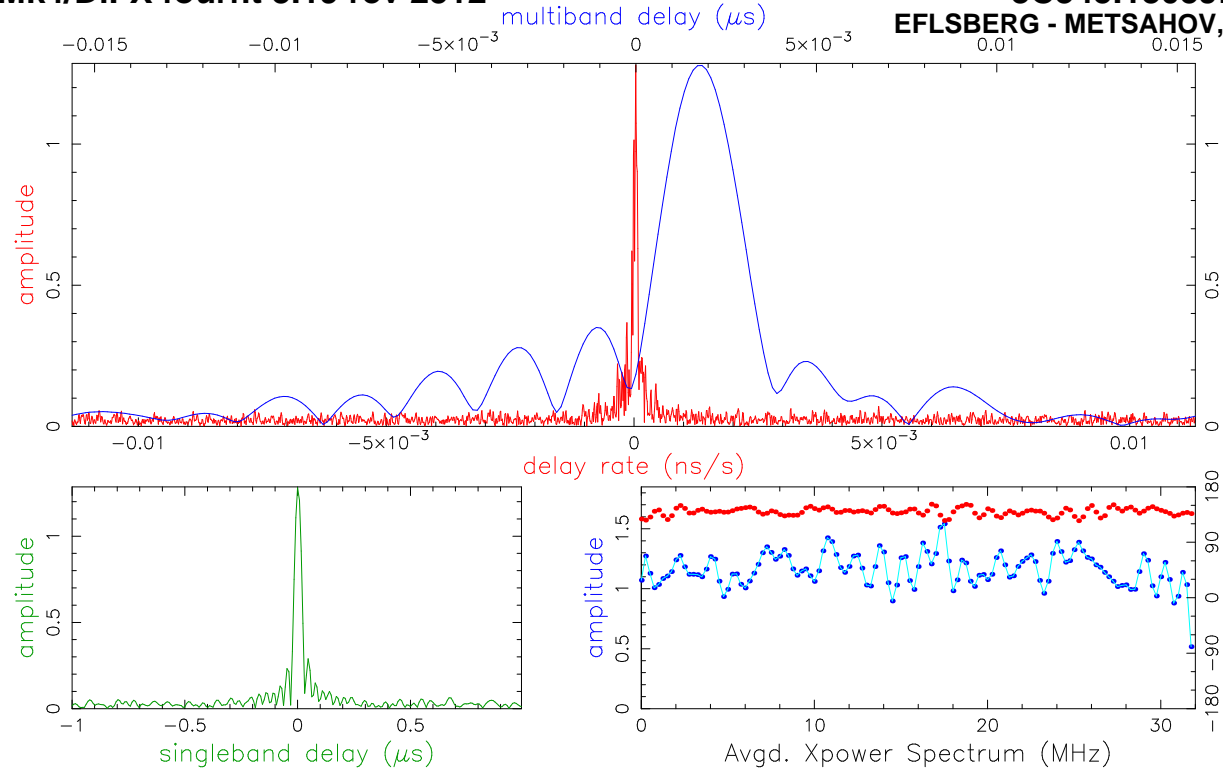
Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	114.3	123.7	113.7	93.4	100.3	121.4	120.8	116.5	122.8	135.3	132.8	136.5	114.9	120.9	95.6	50.6		Phase	116.6	
	1.1	1.3	1.5	1.4	1.2	1.5	1.4	1.4	1.4	1.5	1.5	1.2	1.4	1.5	1.5	0.4		Ampl.	1.3	
	129.4	128.9	128.8	128.6	129.2	128.9	129.0	129.1	128.8	128.9	128.7	128.6	129.1	128.9	128.3	127.1		Sbd box	128.9	
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		APs used		
B	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		
B: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		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks		
																		Chan ids		
																		Tracks		
Group delay (usec)(sbd)	-1.16629750249E+03		Apriori delay (usec)		-1.16629630439E+03		Resid mbdelay (usec)		-1.19810E-03		+/- 1.5E-05									
Sband delay (usec)	-1.16629706889E+03		Apriori clock (usec)		7.1870832E+00		Resid sbdelay (usec)		-7.64500E-04		+/- 2.5E-04									
Phase delay (usec)	-1.16629630063E+03		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		3.76002E-06		+/- 5.3E-08									
Delay rate (us/s)	-1.05711747181E-02		Apriori rate (us/s)		-1.05712671409E-02		Resid rate (us/s)		9.24228E-08		+/- 2.3E-10									
Total phase (deg)			-120.9		Apriori accel (us/s/s)		1.50620676164E-05		Resid phase (deg)		116.6		+/- 1.6							
ph/seg (deg)	RMS	Theor.	Amplitude		1.279 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5											
amp/seg (%)	57.3	2.8	Search (2048X64)		1.243		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000							
ph/frq (deg)	61.8	4.9	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016					
amp/frq (%)	22.0	3.3	Inc. seg. avg.		2.010		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011		0.011							
	20.8	5.7	Inc. frq. avg.		1.322		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00			

B: az 269.2 el 56.7 pa 55.8 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) 106.525 1816.010 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BY..1305JH Output file: /Exps/c192a/v2/1234/No0001/BY.W.97.1305JH

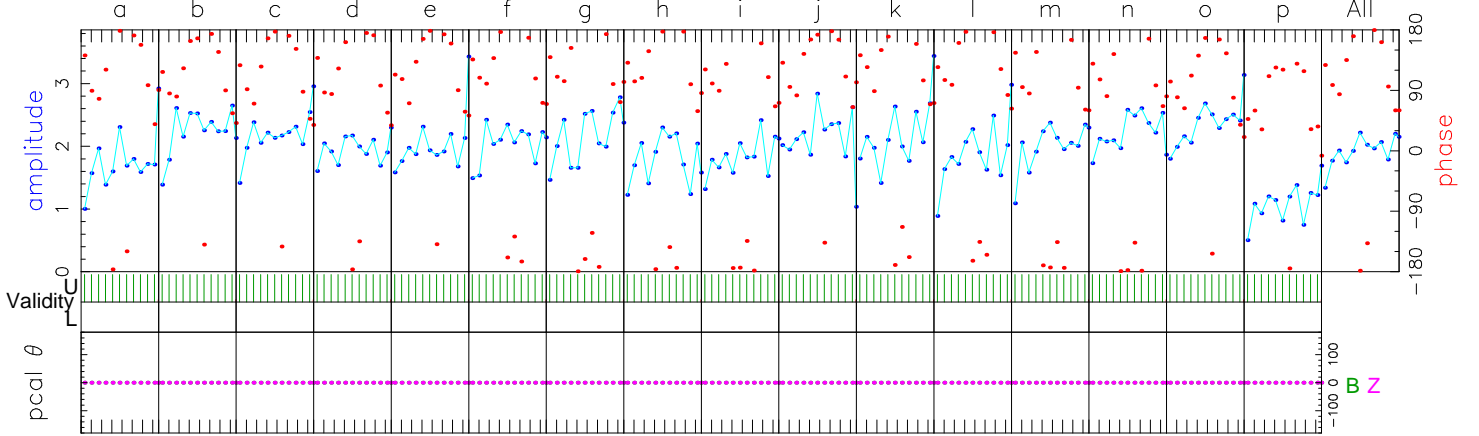


Fringe quality 4

SNR 72.0
Int time 419.362
Amp 1.286
Phase 138.6
PFD 0.0e+00
Delays (us)
SBD 0.001668
MBD 0.001786
Fringe rate (Hz) 0.003031
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

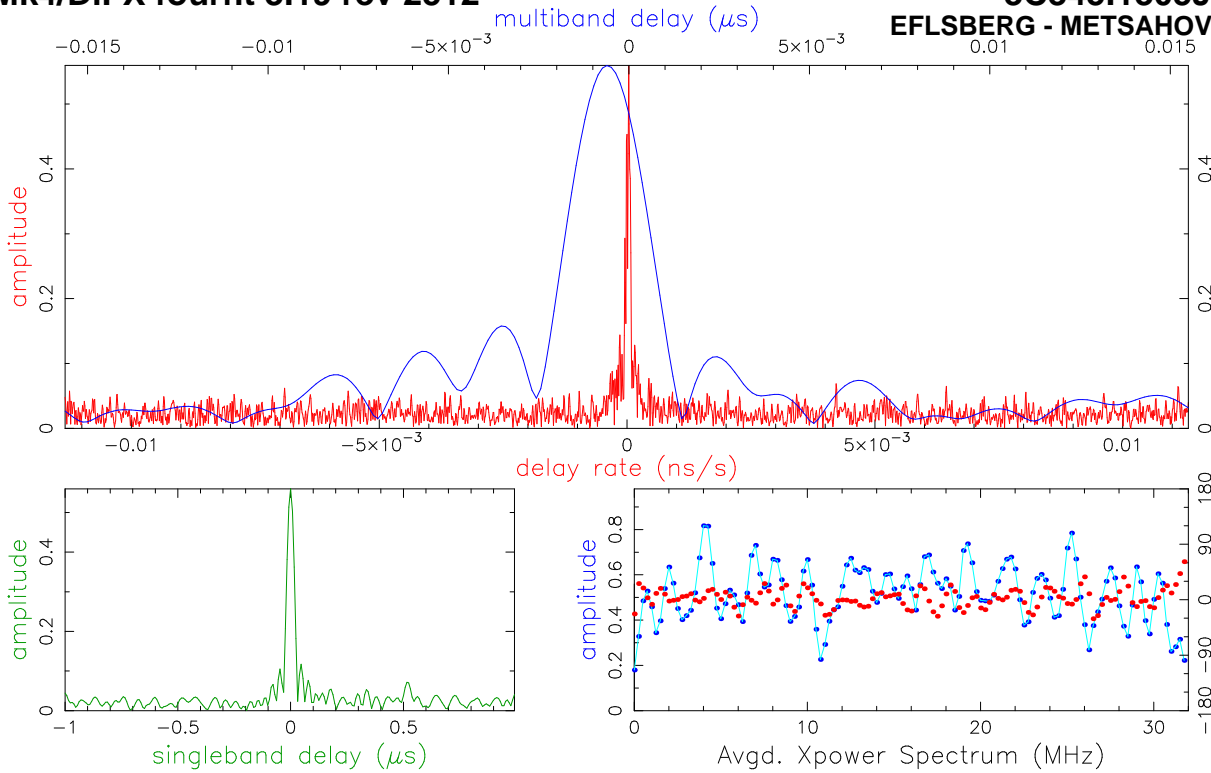
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042755
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
B	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			
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			
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			
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	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	
																			Tracks
Group delay (usec)(sbd)	2.31190298555E+03			Apriori delay (usec)			2.31190119911E+03			Resid mbdelay (usec)			1.78644E-03			+/- 1.5E-05			
Sband delay (usec)	2.31190286661E+03			Apriori clock (usec)			1.6656853E+01			Resid sbdelay (usec)			1.66750E-03			+/- 2.4E-04			
Phase delay (usec)	2.31190120358E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			4.46967E-06			+/- 5.1E-08			
Delay rate (us/s)	-1.73964934621E-02			Apriori rate (us/s)			-1.73965286540E-02			Resid rate (us/s)			3.51919E-08			+/- 2.1E-10			
Total phase (deg)	243.5			Apriori accel (us/s/s)			-1.91529033202E-05			Resid phase (deg)			138.6			+/- 1.6			

ph/seg (deg) 47.8 2.8 Search (2048X64) 1.252 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.9 4.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.2 3.2 Inc. seg. avg. 1.908 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.1 5.6 Inc. frq. avg. 1.310 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.120.1305JH

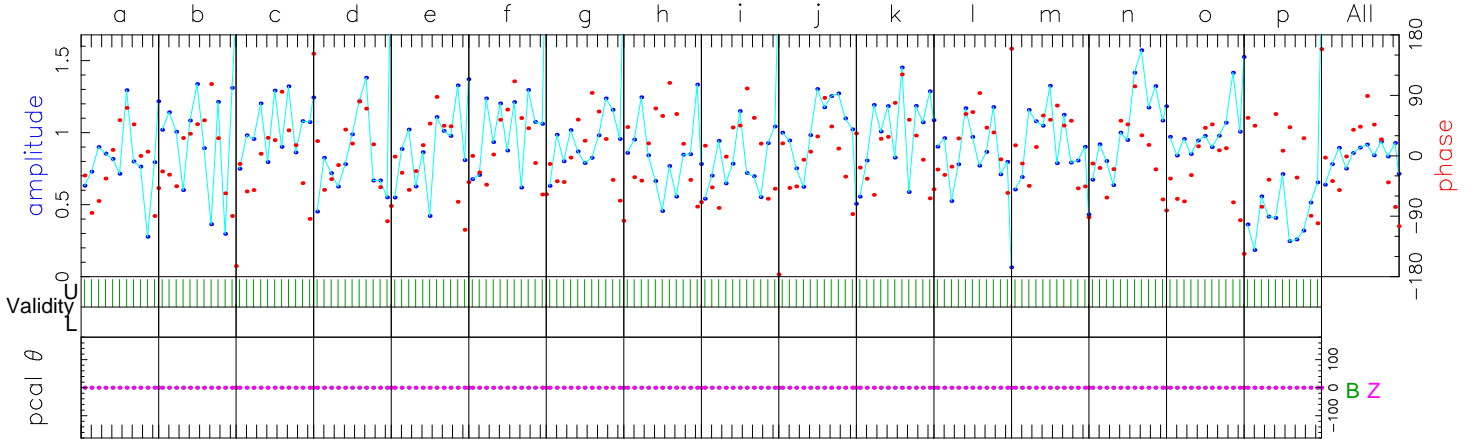


Fringe quality 7

SNR 31.3
Int time 419.362
Amp 0.560
Phase 3.3
PFD 0.0e+00
Delays (us)
SBD -0.000392
MBD -0.000599
Fringe rate (Hz) 0.003048
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042801
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-7.8	1.4	-4.1	13.0	-4.7	15.7	1.9	2.5	-1.6	3.2	10.4	21.8	18.1	8.2	-24.3	-21.3		Phase	3.3				
	0.5	0.6	0.7	0.5	0.5	0.6	0.6	0.5	0.4	0.7	0.6	0.6	0.7	0.7	0.7	0.2		Ampl.	0.6				
	127.8	129.0	128.8	128.8	129.4	129.2	129.3	128.5	129.5	129.0	129.2	128.8	128.7	128.9	128.6	120.2		Sbd box	128.9				
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		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 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					
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 amp					
B	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					
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					
Group delay (usec)(sbd)		2.31190059986E+03																Apriori delay (usec)	2.31190119911E+03	Resid mbdelay (usec)	-5.99252E-04	+/-	3.4E-05
Sband delay (usec)		2.31190080711E+03																Apriori clock (usec)	1.6656853E+01	Resid sbdelay (usec)	-3.92000E-04	+/-	5.5E-04
Phase delay (usec)		2.31190119922E+03																Apriori clockrate (us/s)	-2.1629280E-07	Resid phdelay (usec)	1.06912E-07	+/-	1.2E-07
Delay rate (us/s)		-1.73964932694E-02																Apriori rate (us/s)	-1.73965286540E-02	Resid rate (us/s)	3.53847E-08	+/-	4.9E-10
Total phase (deg)				108.2														Apriori accel (us/s/s)	-1.91529033202E-05	Resid phase (deg)	3.3	+/-	3.7

ph/seg (deg) 48.8 6.3
amp/seg (%) 52.9 11.1
ph/frq (deg) 13.4 7.3
amp/frq (%) 23.2 12.8

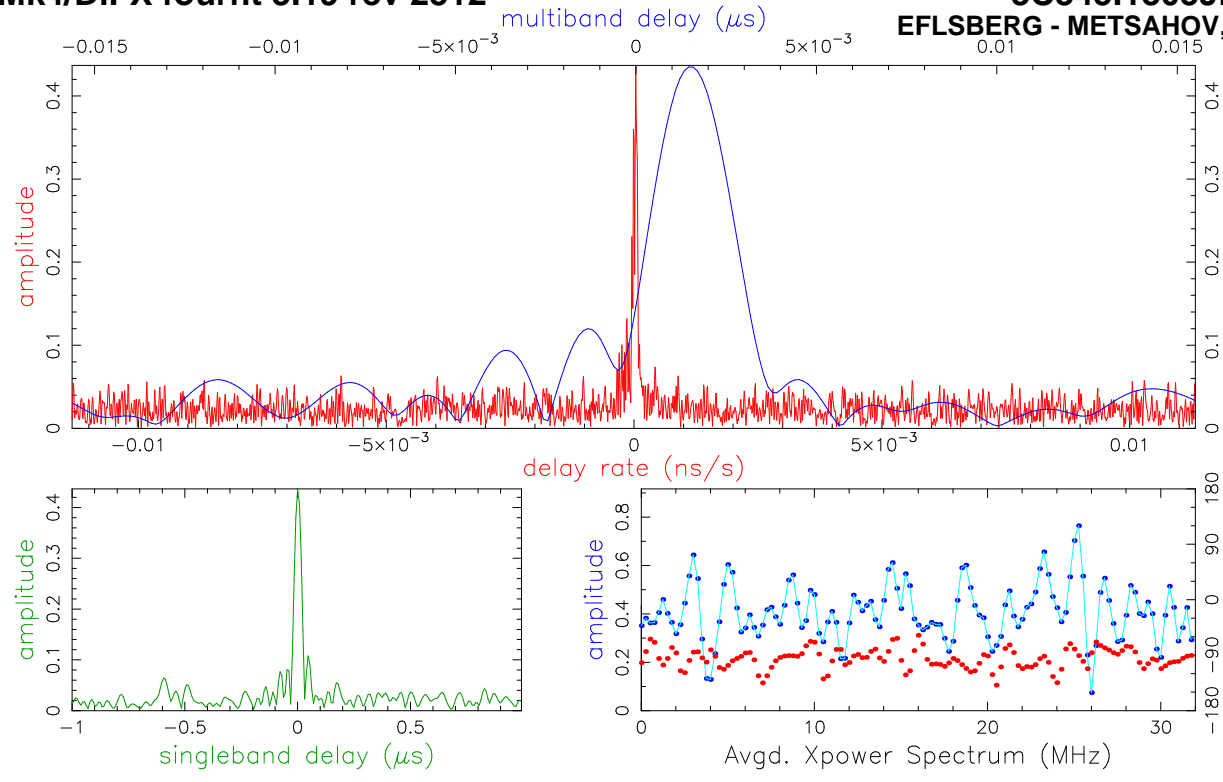
RMS Theor. Amplitude 0.560 +/- 0.018
Search (2048X64) 0.551
Interp. 0.000
Inc. seg. avg. 0.838
Inc. frq. avg. 0.567

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

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

B: az 269.2 el 56.7 pa 55.8 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.140.1305JH

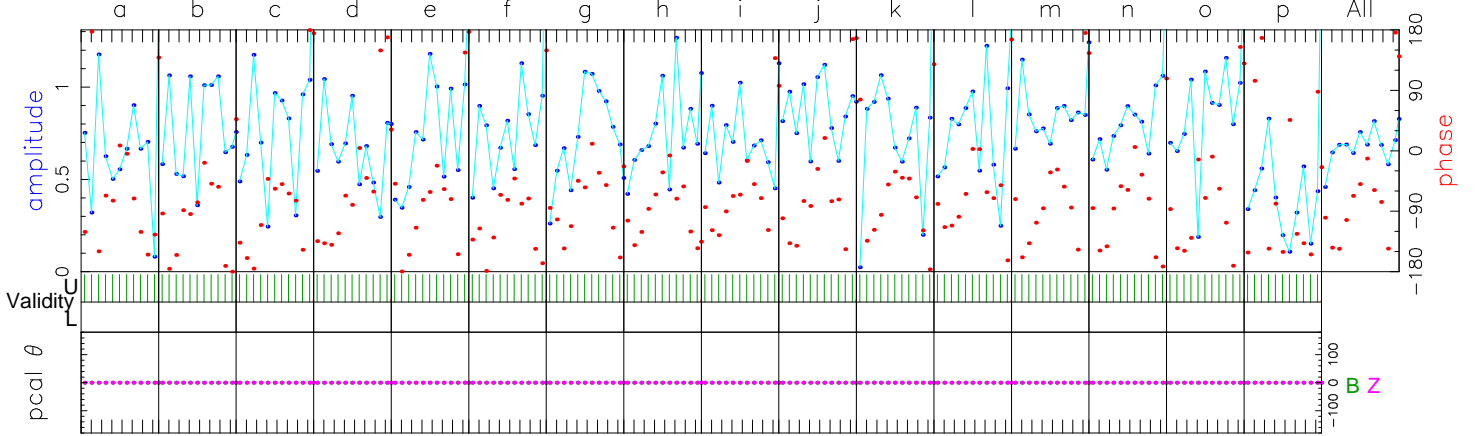


Fringe quality 7

SNR 24.5
Int time 419.362
Amp 0.437
Phase -96.7
PFD 0.0e+00
Delays (us)
SBD 0.001292
MBD 0.001525
Fringe rate (Hz) 0.003093
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042806
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

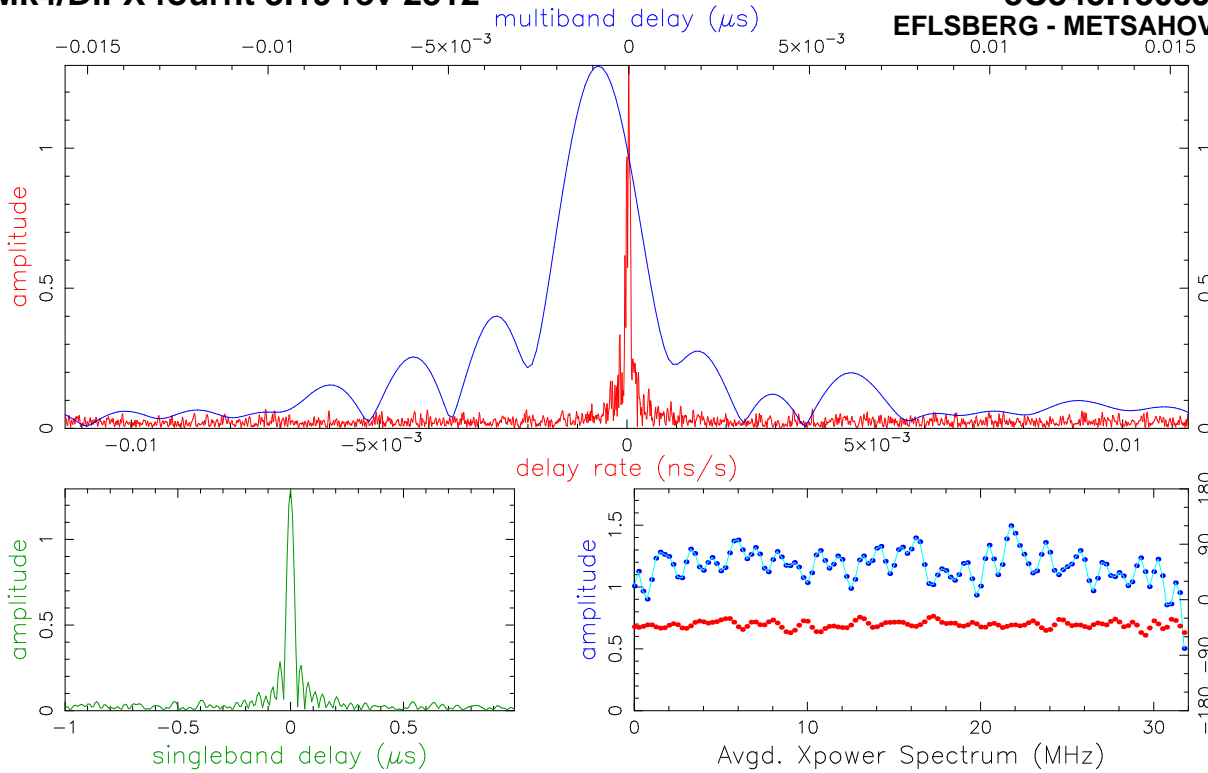


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-103.3	-96.9	-120.0	-108.0	-89.8	-109.0	-69.6	-85.0	-83.0	-94.7	-86.6	-77.1	-102.9	-93.7	-112.0	-159.4	Phase	-96.7
	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.2	Ampl.	0.4
	128.9	129.3	129.4	129.3	129.7	129.1	128.8	129.0	129.9	129.2	129.0	129.1	129.4	129.0	128.9	128.8	Sbd box	129.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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		
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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	2.31190272417E+03			Apriori delay (usec)			2.31190119911E+03			Resid mbdelay (usec)			1.52506E-03			+/- 4.4E-05		
Sband delay (usec)	2.31190249161E+03			Apriori clock (usec)			1.6656853E+01			Resid sbdelay (usec)			1.29250E-03			+/- 7.0E-04		
Phase delay (usec)	2.31190119599E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			-3.11788E-06			+/- 1.5E-07		
Delay rate (us/s)	-1.73964927458E-02			Apriori rate (us/s)			-1.73965286540E-02			Resid rate (us/s)			3.59083E-08			+/- 6.2E-10		
Total phase (deg)	8.2			Apriori accel (us/s/s)			-1.91529033202E-05			Resid phase (deg)			-96.7			+/- 4.7		

ph/seg (deg) RMS Theor. Amplitude 0.437 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.4 8.1 Search (2048X64) 0.429 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.4 14.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 21.9 9.4 Inc. seg. avg. 0.664 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 19.4 16.4 Inc. frq. avg. 0.449 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.158.1305JH

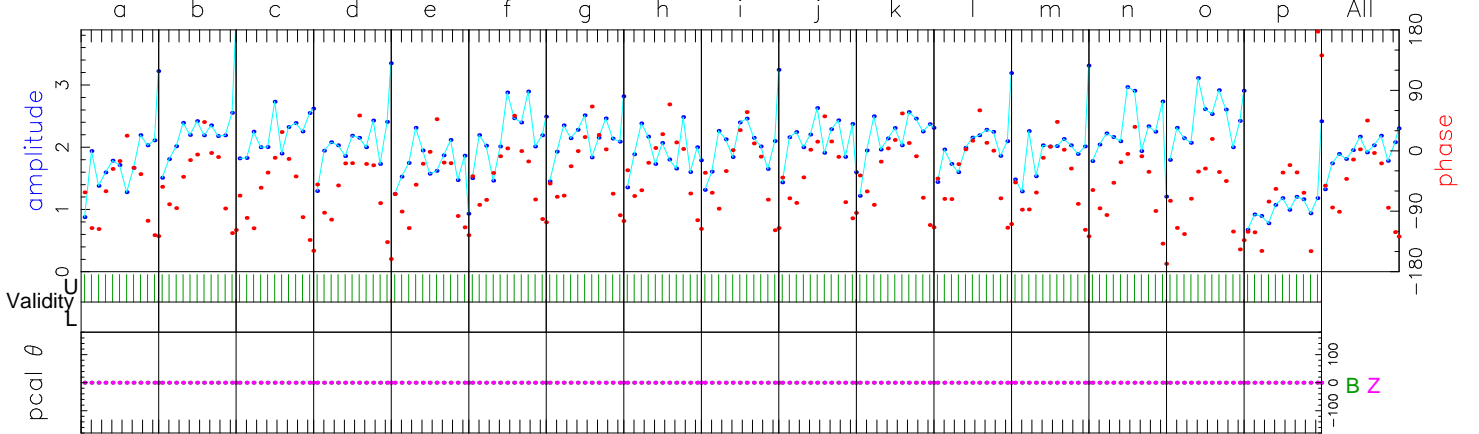


Fringe quality 4

SNR 72.5
Int time 419.362
Amp 1.295
Phase -41.0
PFD 0.0e+00
Delays (us)
SBD -0.000969
MBD -0.000855
Fringe rate (Hz) 0.003055
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042750
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-64.5	-40.9	-58.6	-50.4	-49.3	-31.0	-23.7	-21.7	-24.4	-30.1	-26.7	-24.4	-41.8	-46.6	-65.0	-85.2	Phase	-41.0
	1.2	1.5	1.5	1.3	1.2	1.6	1.5	1.3	1.2	1.5	1.5	1.3	1.3	1.5	1.6	0.6	Ampl.	1.3
	129.6	128.9	128.9	128.9	129.1	128.7	129.0	129.0	128.8	128.8	129.0	128.9	128.8	128.7	128.4	129.1	Sbd box	128.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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		
B	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	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	2.31190034405E+03			Apriori delay (usec)			2.31190119911E+03			Resid mbdelay (usec)			-8.55065E-04			+/- 1.5E-05		
Sband delay (usec)	2.31190023011E+03			Apriori clock (usec)			1.6656853E+01			Resid sbdelay (usec)			-9.69000E-04			+/- 2.4E-04		
Phase delay (usec)	2.31190119779E+03			Apriori clockrate (us/s)			-2.1629280E-07			Resid phdelay (usec)			-1.32201E-06			+/- 5.1E-08		
Delay rate (us/s)	-1.73964931836E-02			Apriori rate (us/s)			-1.73965286540E-02			Resid rate (us/s)			3.54704E-08			+/- 2.1E-10		
Total phase (deg)	63.9			Apriori accel (us/s/s)			-1.91529033202E-05			Resid phase (deg)			-41.0			+/- 1.6		

ph/seg (deg) 47.8 2.7 Search (2048X64) 1.273 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.1 4.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.3 3.2 Inc. seg. avg. 1.900 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.8 5.5 Inc. frq. avg. 1.345 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) 95.277 -1909.224 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/BZ.W.98.1305JH