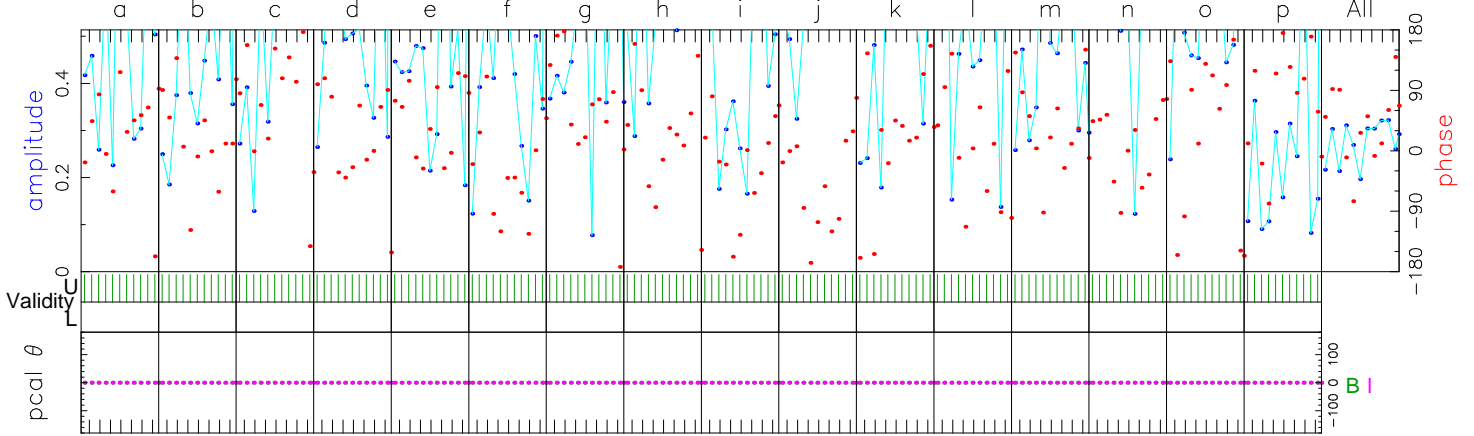


Fringe quality 9

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

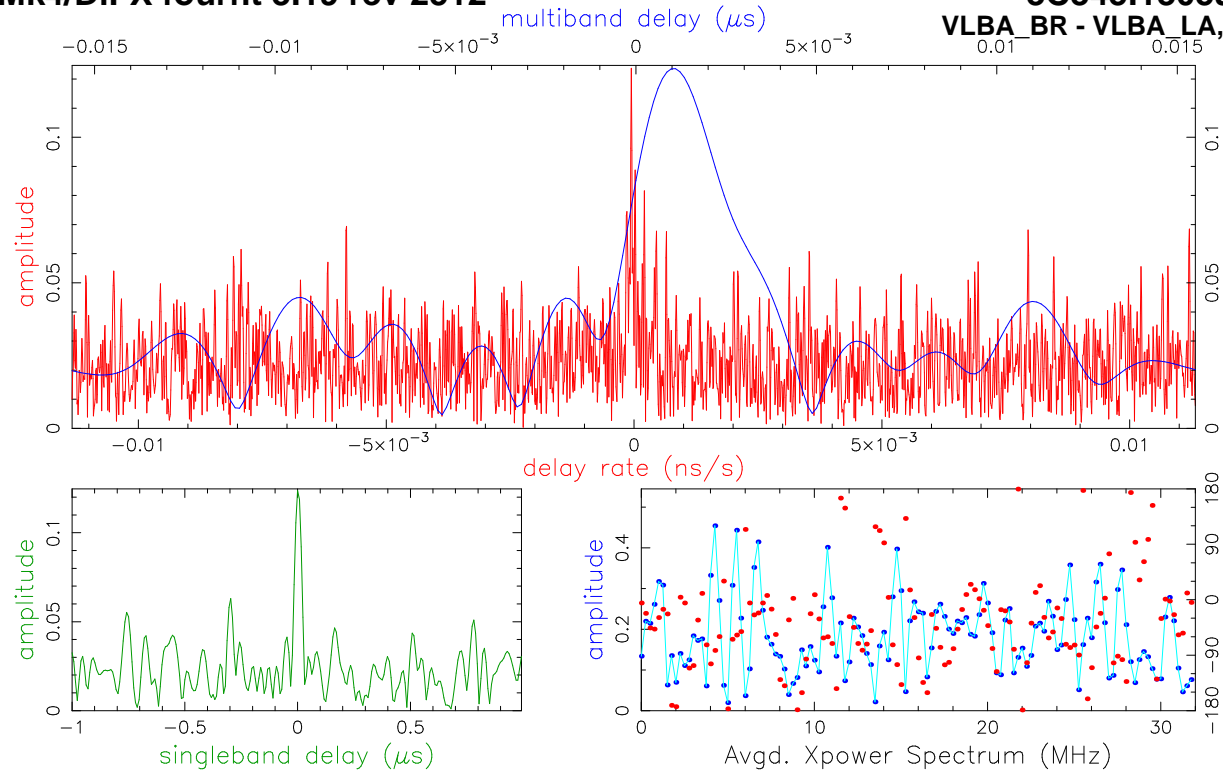
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042726  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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									4.45203216074E+03						2.59412E-03	+/-	1.1E-04		
Sband delay (usec)		4.45202927074E+03									1.7579317E+01						-2.89000E-03	+/-	1.8E-03		
Phase delay (usec)		4.45203216201E+03									1.5147200E-07						1.26280E-06	+/-	3.9E-07		
Delay rate (us/s)		-1.44025646295E+00									-1.44025627191E+00						-1.91041E-07	+/-	1.7E-09		
Total phase (deg)					156.7												39.2	+/-	12.1		

ph/seg (deg) 56.2 21.0 Search (2048X64) 0.163 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.9 36.7 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 56.6 24.3 Inc. seg. avg. 0.258 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 58.9 42.3 Inc. frq. avg. 0.235 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 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

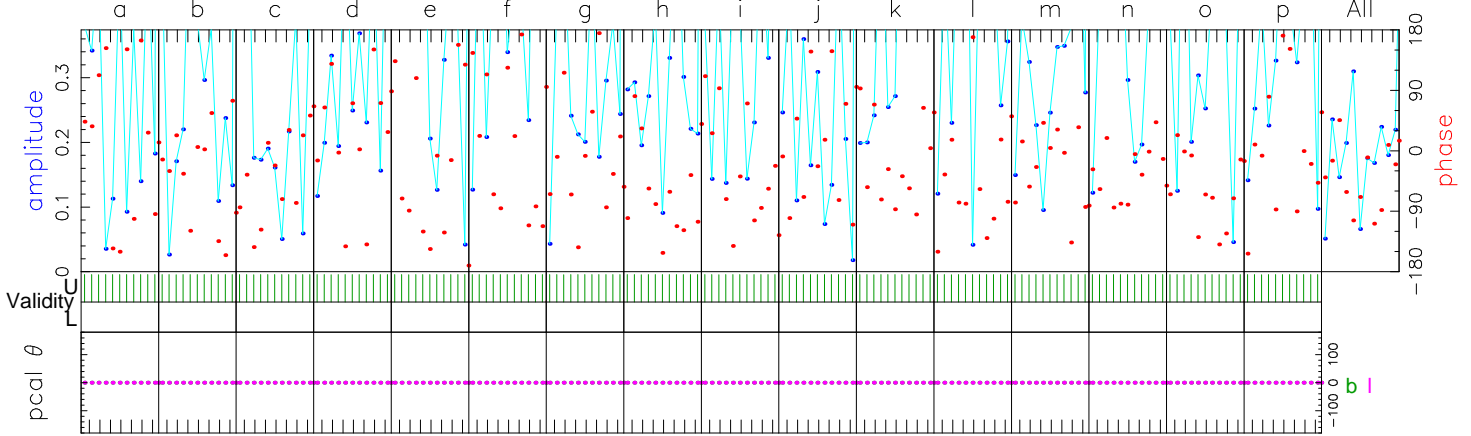


Fringe quality 0

SNR 6.9  
Int time 406.536  
Amp 0.125  
Phase -46.1  
PFD 1.8e-03  
Delays (us)  
SBD 0.002275  
MBD 0.001042  
Fringe rate (Hz) -0.004996  
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  
2020:093:042730  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

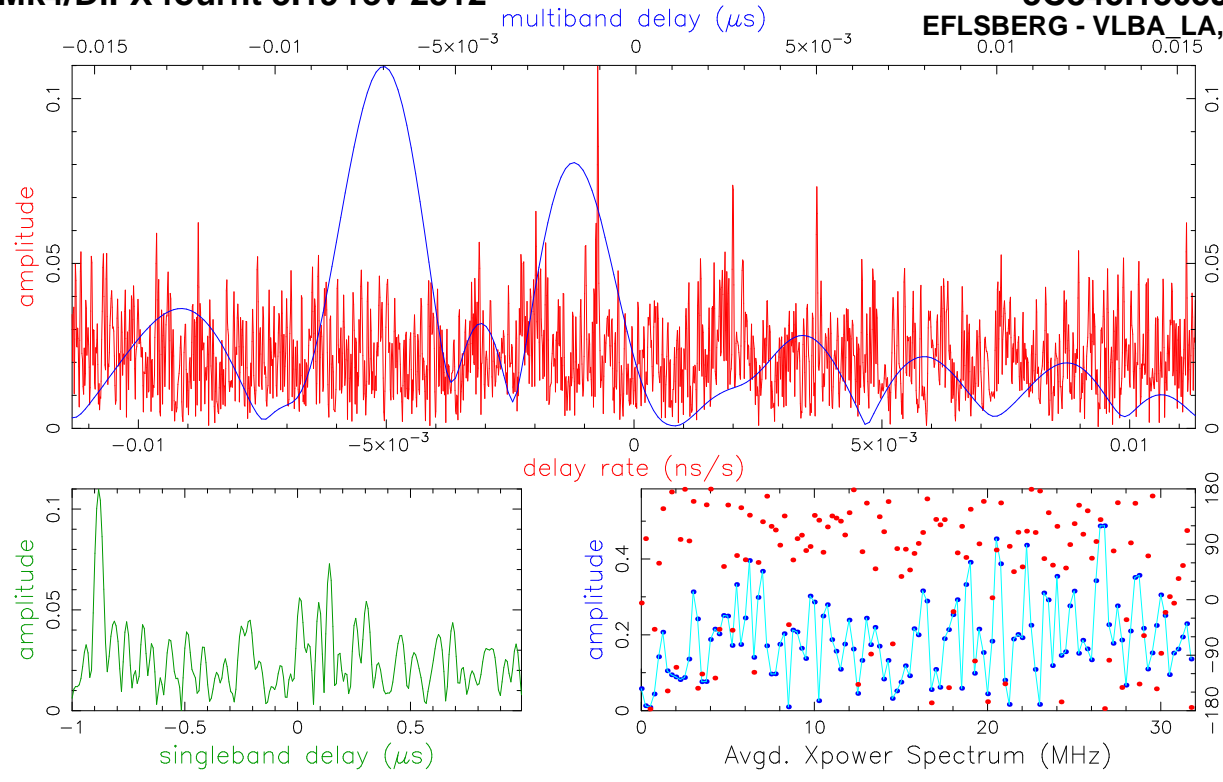
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	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	
81.2	-22.1	-40.2	77.4	-137.9	-80.7	-4.4	-82.9	-49.5	-54.2	-29.3	-70.9	-9.3	-35.3	-56.8	-31.8		Phase	-46.1	
0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.3	0.2	0.1		Ampl.	0.1	
186.6	210.8	90.0	234.3	131.7	64.4	118.8	87.9	198.0	149.0	129.0	127.8	197.0	129.0	129.7	217.6		Sbd box	129.3	
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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
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		ManI PC	
l	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	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	-1.21216653790E+03			Apriori delay (usec)			-1.21216758003E+03			Resid mbdelay (usec)			1.04213E-03			+/- 1.6E-04			
Sband delay (usec)	-1.21216530453E+03			Apriori clock (usec)			1.2755744E-01			Resid sbdelay (usec)			2.27550E-03			+/- 2.5E-03			
Phase delay (usec)	-1.21216758152E+03			Apriori clockrate (us/s)			1.0907692E-07			Resid phdelay (usec)			-1.48532E-06			+/- 5.4E-07			
Delay rate (us/s)	-1.03821298214E-01			Apriori rate (us/s)			-1.03821240212E-01			Resid rate (us/s)			-5.80018E-08			+/- 2.3E-09			
Total phase (deg)	-169.8			Apriori accel (us/s/s)			1.79960098304E-05			Resid phase (deg)			-46.1			+/- 16.7			
ph/seg (deg)	RMS	Theor.	Amplitude	0.125 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000					
amp/seg (%)	46.9	28.9	Search (2048X64)	0.121		SampCntNorm: enabled		mb window (us)		-0.016 0.016		dr window (ns/s)		-0.011 0.011					
ph/frq (deg)	73.6	50.4	Interp.	0.000		Sample rate(MISamp/s): 64		ion window (TEC)		0.00 0.00									
amp/frq (%)	58.3	33.3	Inc. seg. avg.	0.160		Data rate(Mb/s): 2048													
	63.7	58.2	Inc. frq. avg.	0.132															

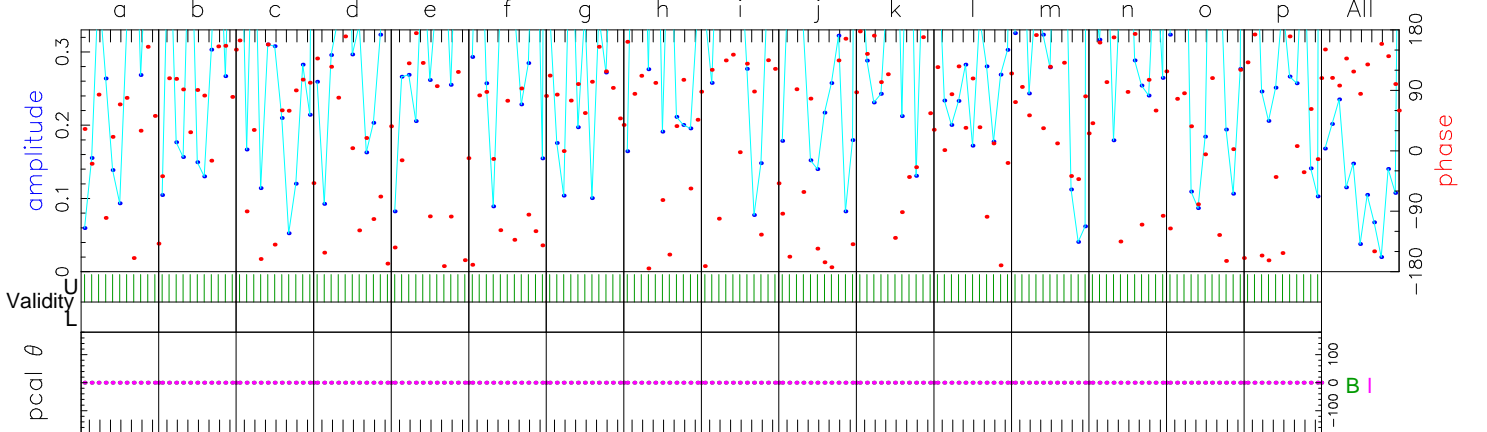
b: az 66.1 el 33.9 pa -52.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 806.994 2256.689 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/bl..1305JH Output file: /Exps/c192a/v2/1234/No0001/bl.W.27.1305JH



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	0.1	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	16.1	APs used
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	0.1	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

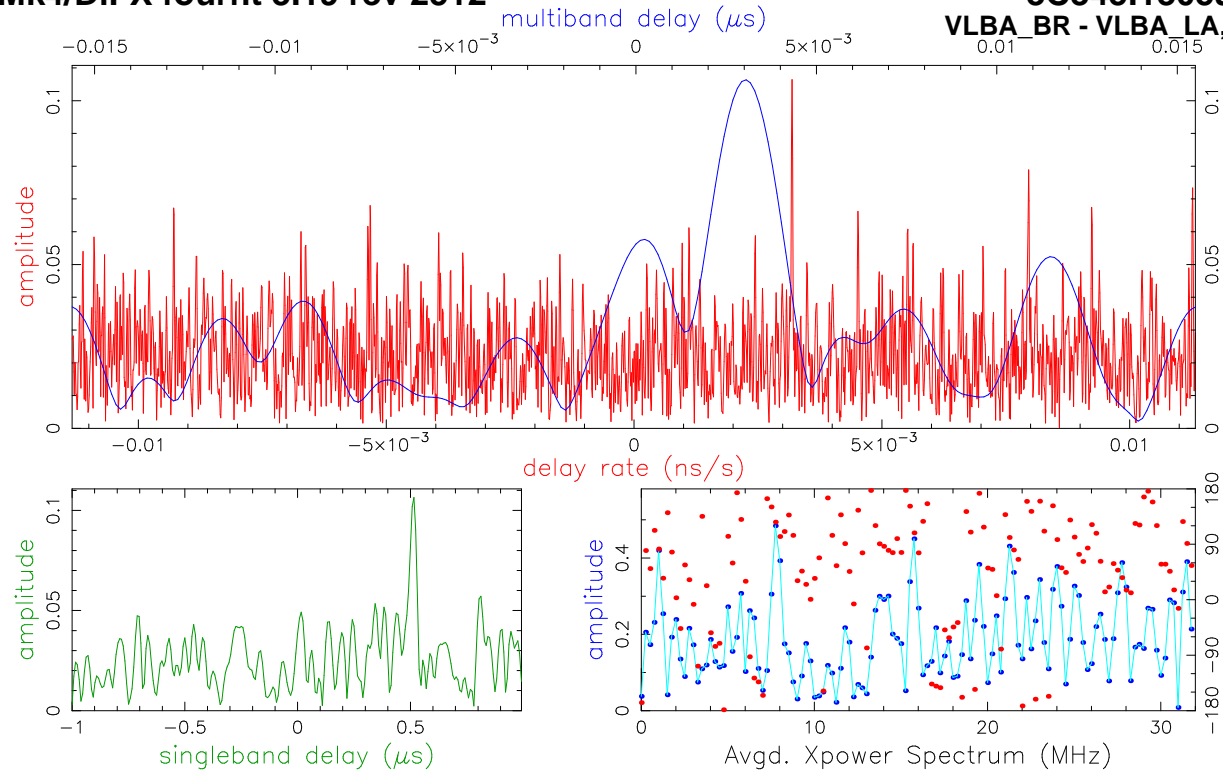
Group delay (usec)(sbd) 4.45115016006E+03 Apriori delay (usec) 4.45203216074E+03 Resid mbdelay (usec) -7.00069E-03 +/- 1.8E-04  
 Sband delay (usec) 4.45115042024E+03 Apriori clock (usec) 1.7579317E+01 Resid sbdelay (usec) -8.81741E-01 +/- 2.8E-03  
 Phase delay (usec) 4.45203216468E+03 Apriori clockrate (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

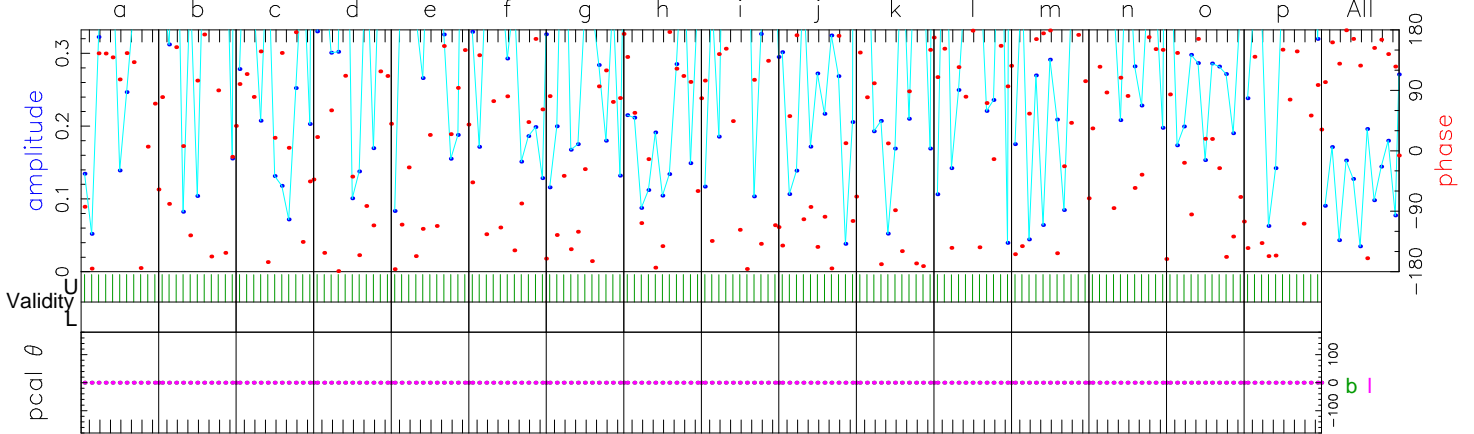
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bl  
VLBA\_BR - VLBA\_LA, fgroup W, pol LR



Fringe quality 0  
SNR 5.9  
Int time 406.536  
Amp 0.111  
Phase 159.1  
PFD 5.8e-01  
Delays (us)  
SBD 0.513499  
MBD 0.003024  
Fringe rate (Hz)  
0.275390  
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  
2020:093:042735  
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

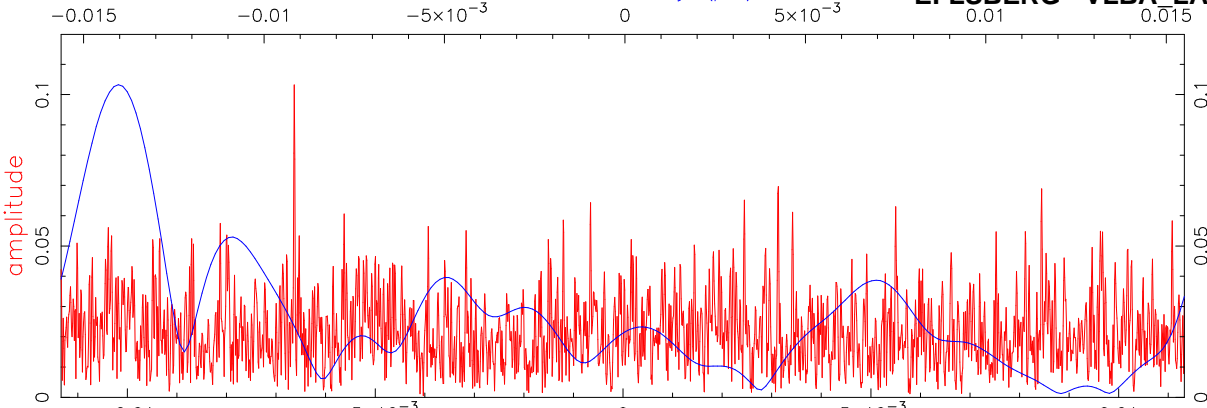


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		-1.21166455636E+03																
Sband delay (usec)		-1.21165408053E+03																
Phase delay (usec)		-1.21216757490E+03																
Delay rate (us/s)		-1.03818043208E-01																
Total phase (deg)				35.4														
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
pcal mode: MANUAL, MANUAL																		
PC period (AP's) 5, 5																		
simultaneous interpolator																		

b: az 66.1 el 33.9 pa -52.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 806.994 2256.689 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/bl..1305JH Output file: /Exps/c192a/v2/1234/No0001/bl.W.51.1305JH

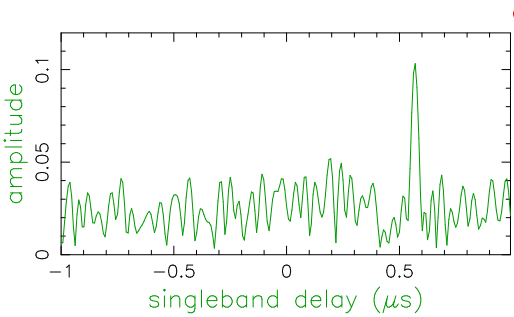


multiband delay ( $\mu$ s)

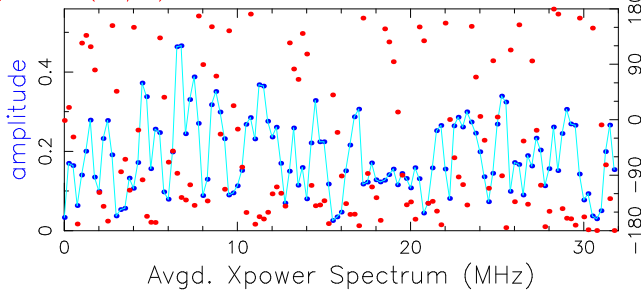


Fringe quality 0

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

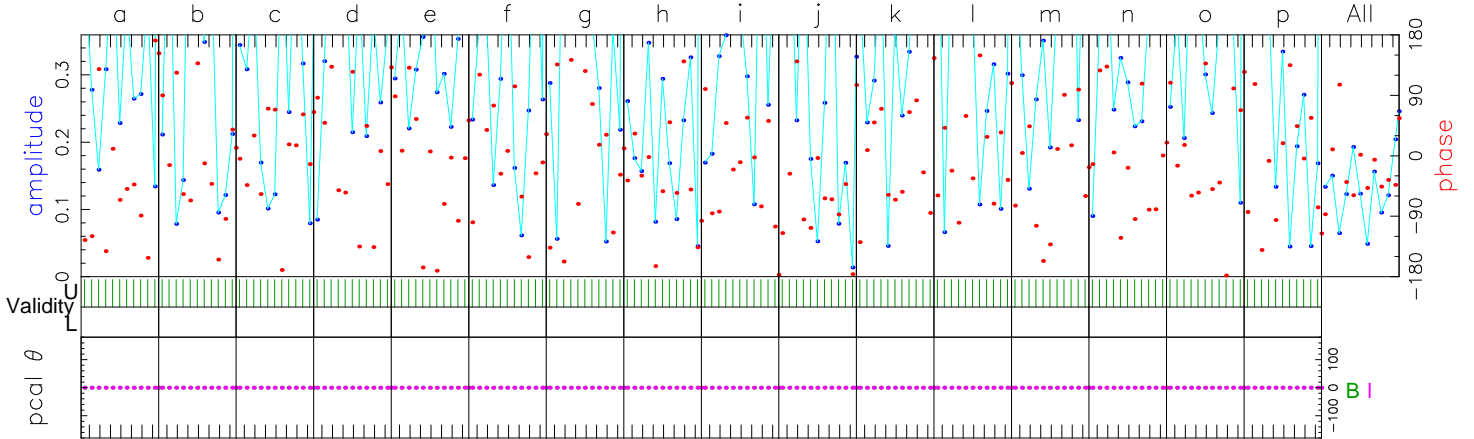


delay rate (ns/s)



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"

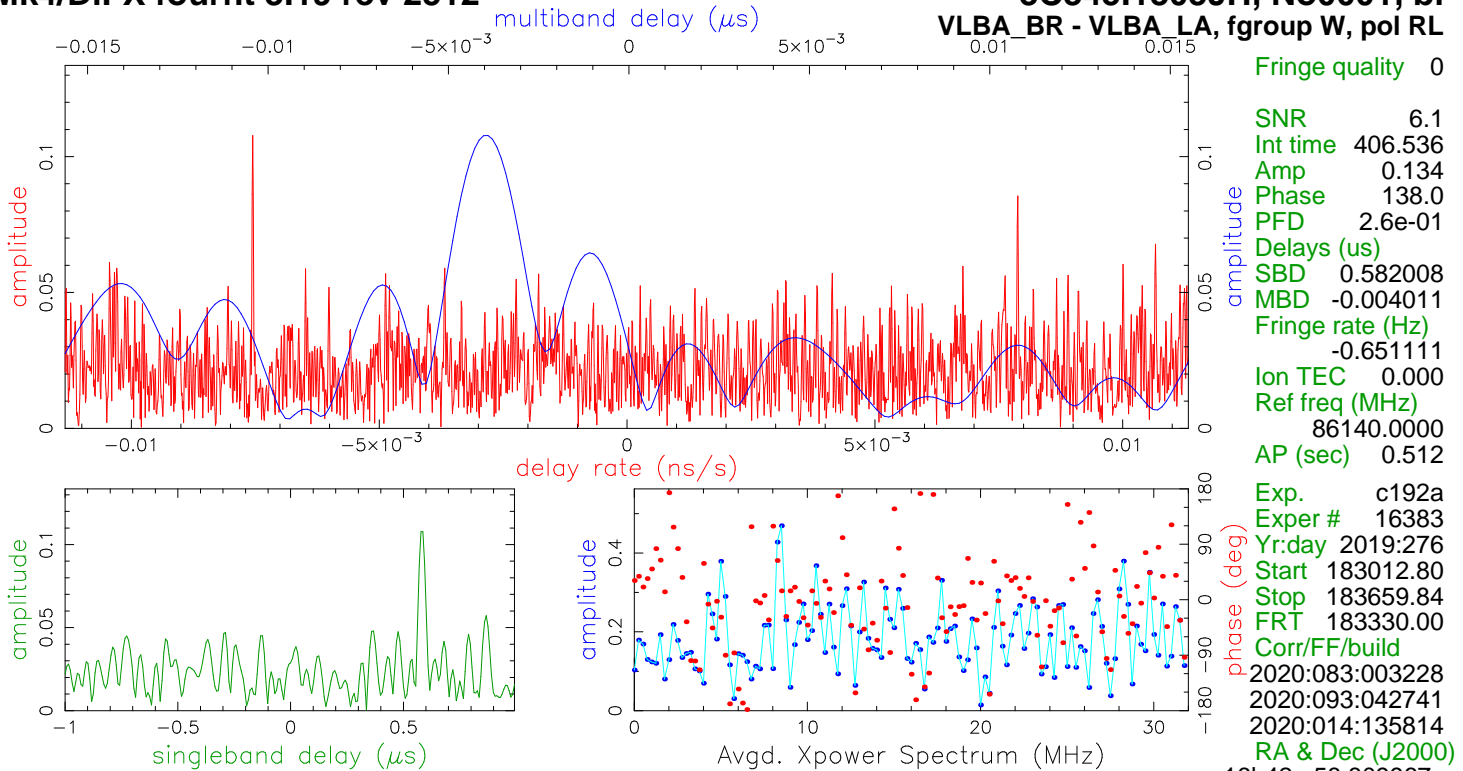
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	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														

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bl  
VLBA\_BR - VLBA\_LA, fgroup W, pol RL



Fringe quality 0

SNR 6.1

Int time 406.536

Amp 0.134

Phase 138.0

PFD 2.6e-01

Delays (us)

SBD 0.582008

MBD -0.004011

Fringe rate (Hz)

-0.651111

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

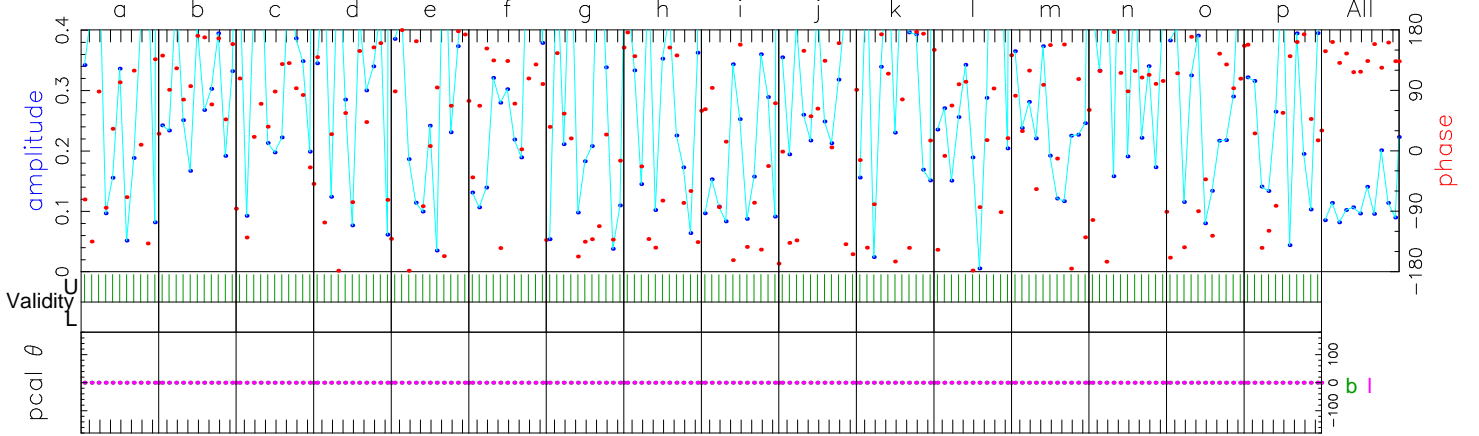
2020:014:135814

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				
	138.5	128.6	82.5	161.0	165.5	118.0	-61.3	-157.4	-151.4	172.1	164.5	79.1	111.5	131.4	152.1	88.1	Phase	138.0				
	0.0	0.3	0.3	0.2	0.2	0.3	0.0	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.1	Ampl.	0.1			
	228.8	26.3	146.7	214.3	184.5	37.5	215.3	241.1	151.8	185.8	216.9	173.4	77.0	201.8	183.4	15.4	Sbd box	203.5				
UL	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					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
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	PC phase					
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	ManI PC					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
l	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					
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.21157784144E+03														Apriori delay (usec)	-1.21216758003E+03	Resid mbdelay (usec)	-4.01141E-03	+/-	1.8E-04
Sband delay (usec)			-1.21158557153E+03														Apriori clock (usec)	1.2755744E-01	Resid sbdelay (usec)	5.82008E-01	+/-	2.8E-03
Phase delay (usec)			-1.21216757558E+03														Apriori clockrate (us/s)	1.0907692E-07	Resid phdelay (usec)	4.45105E-06	+/-	6.1E-07
Delay rate (us/s)			-1.03828798968E-01														Apriori rate (us/s)	-1.03821240212E-01	Resid rate (us/s)	-7.55876E-06	+/-	2.6E-09
Total phase (deg)				14.3													Apriori accel (us/s/s)	1.79960098304E-05	Resid phase (deg)	138.0	+/-	18.8

ph/seg (deg) 16.1 32.6 Search (2048X64) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 30.0 56.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

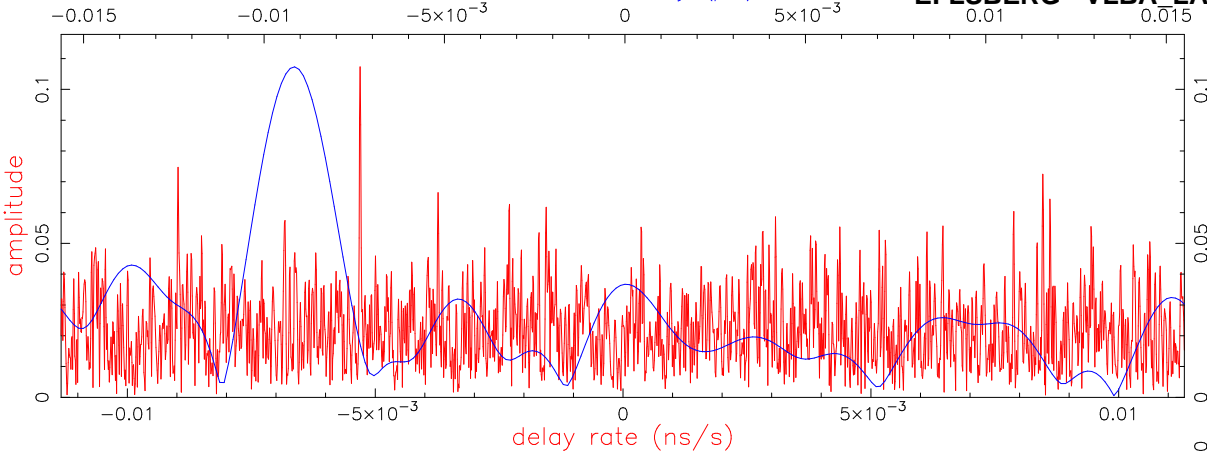
ph/frq (deg) 58.9 37.6 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 69.8 65.7 Inc. frq. avg. 0.133 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011

b: az 66.1 el 33.9 pa -52.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 806.994 2256.689 ion window (TEC) 0.00 0.00 simultaneous interpolator

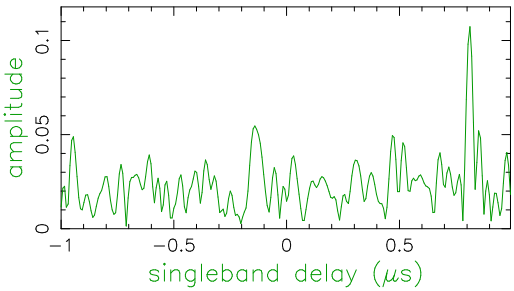
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/bl..1305JH Output file: /Exps/c192a/v2/1234/No0001/bl.W.71.1305JH

multiband delay ( $\mu$ s)

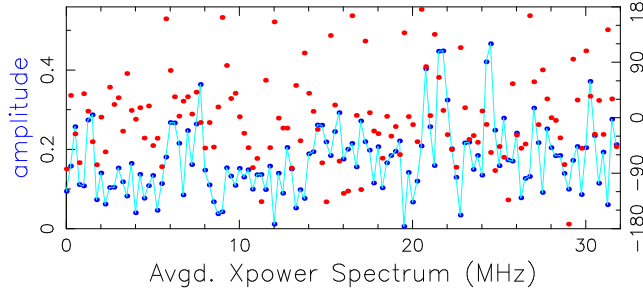


Fringe quality 0

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

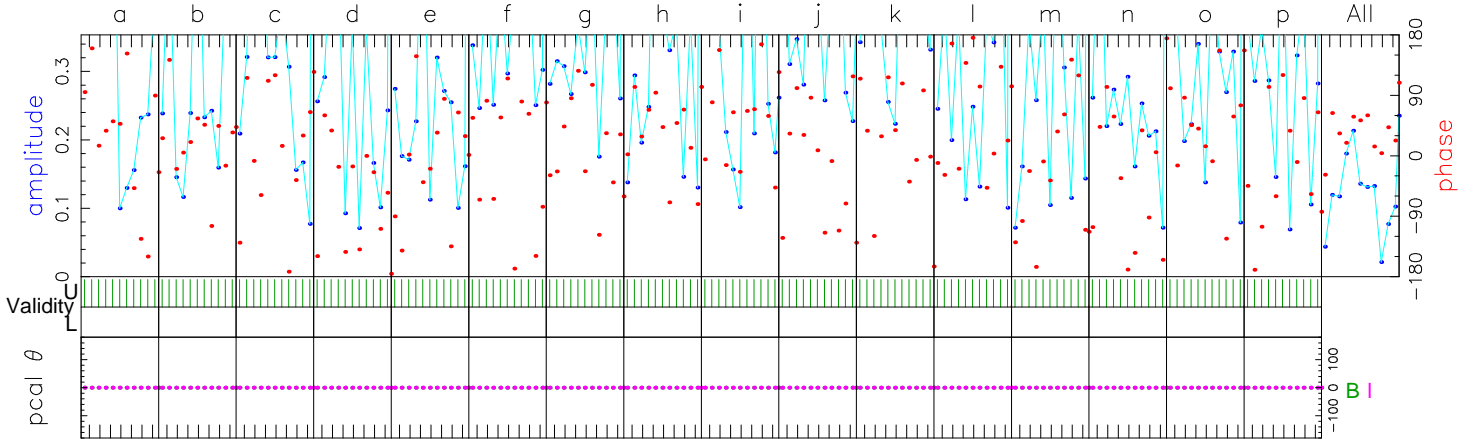


delay rate (ns/s)



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						
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				
B	1000	1000	1000	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	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									4.45203216074E+03									Resid mbdelay (usec)	-9.17907E-03	+/-	1.8E-04	
Sband delay (usec)		4.45284369324E+03									1.7579317E+01										Resid sbdelay (usec)	8.11532E-01	+/-	2.9E-03
Phase delay (usec)		4.45203216201E+03									1.5147200E-07										Resid phdelay (usec)	1.26236E-06	+/-	6.2E-07
Delay rate (us/s)		-1.44026158493E+00									-1.44025627191E+00										Resid rate (us/s)	-5.31302E-06	+/-	2.7E-09
Total phase (deg)					156.7																Resid phase (deg)	39.1	+/-	19.3

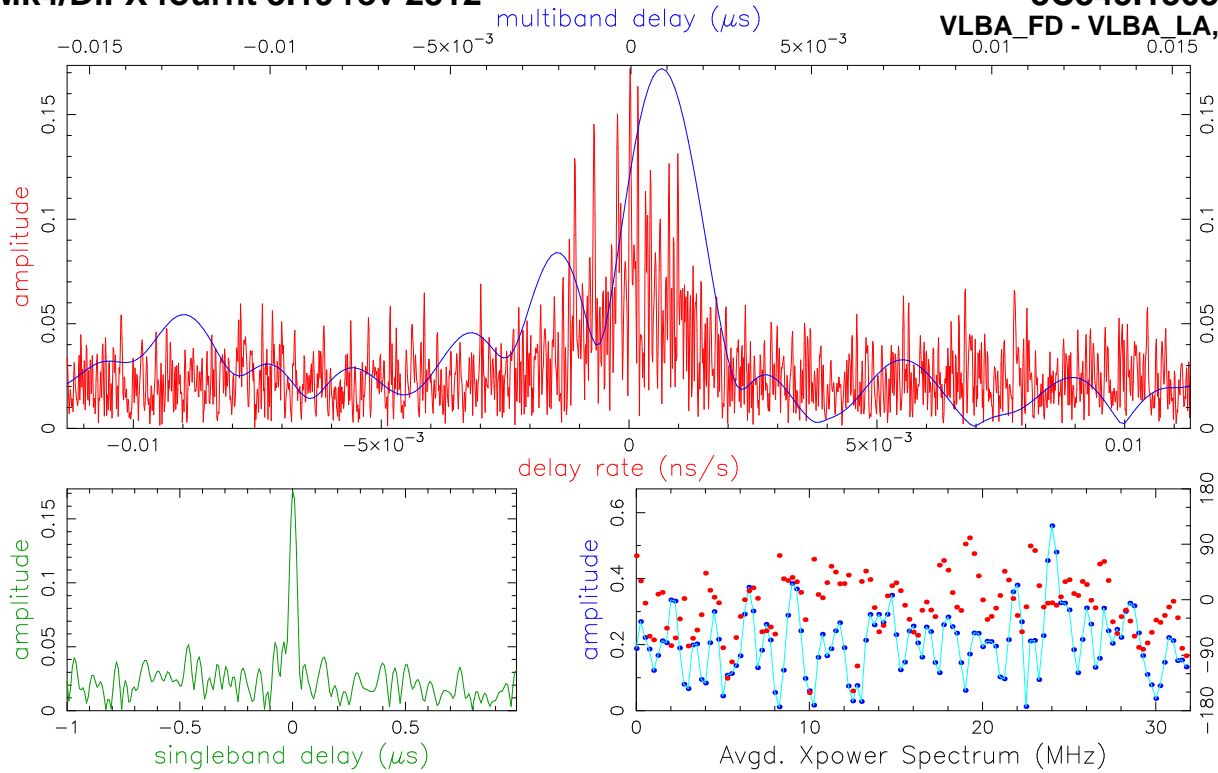
ph/seg (deg) 28.4 33.5 Search (2048X64) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 49.9 58.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 31.6 38.6 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 51.4 67.5 Inc. frq. avg. 0.108 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 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





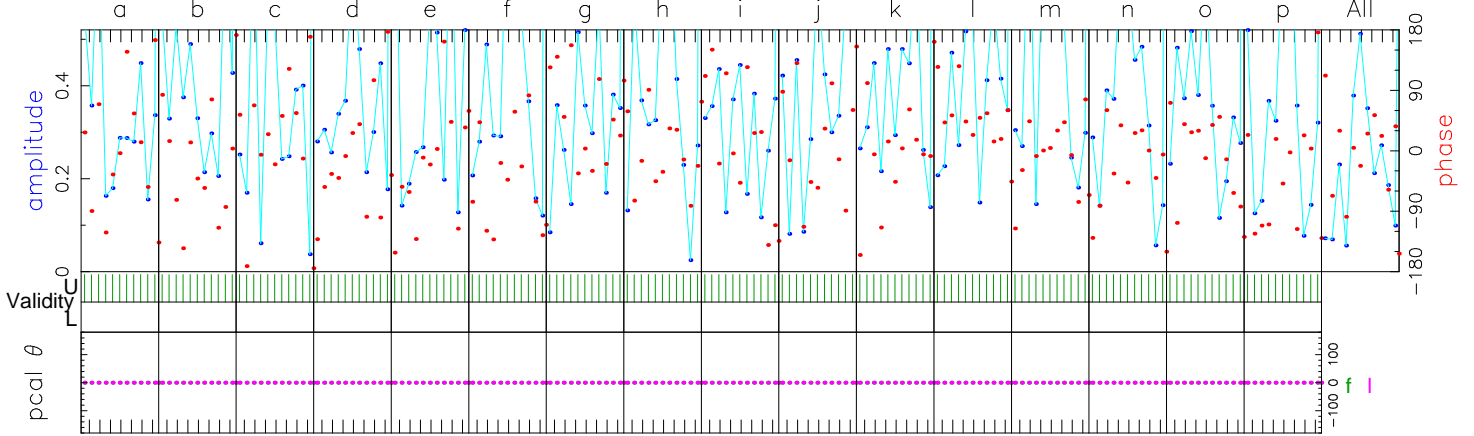
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, fl  
VLBA\_FD - VLBA\_LA, fgroup W, pol RR



Fringe quality 9  
SNR 9.6  
Int time 406.562  
Amp 0.174  
Phase 6.2  
PFD 4.5e-13  
Delays (us)  
SBD 0.002390  
MBD 0.000854  
Fringe rate (Hz) 0.001739  
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  
2020:093:042756  
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	129.3						
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	0.2					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	0.2					
f: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	0:0	0:0	0:0	ManI PC	0.2					
f: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	0:0	0:0	0:0	PC amp	0.2					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	0.2					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	0.2					
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	W15UR	W15UR	W15UR	Chan ids	0.2					
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	W15UR	W15UR	W15UR	Tracks	0.2					
Group delay (usec)(sbd)		-1.85319434319E+02																		Apriori delay (usec)	-1.85320288805E+02	Resid mbdelay (usec)	8.54486E-04	+/-	1.1E-04	
Sband delay (usec)		-1.85317898805E+02																			Apriori clock (usec)	1.1950355E+00	Resid sbdelay (usec)	2.39000E-03	+/-	1.8E-03
Phase delay (usec)		-1.85320288604E+02																			Apriori clockrate (us/s)	2.6052251E-07	Resid phdelay (usec)	2.01171E-07	+/-	3.9E-07
Delay rate (us/s)		3.63776029451E-02																			Apriori rate (us/s)	3.63775827554E-02	Resid rate (us/s)	2.01896E-08	+/-	1.6E-09
Total phase (deg)					-237.7																Apriori accel (us/s/s)	-4.42350530936E-06	Resid phase (deg)	6.2	+/-	12.0

ph/seg (deg) 58.4 20.7  
amp/seg (%) 89.4 36.2  
ph/frq (deg) 28.6 24.0  
amp/frq (%) 44.6 41.8  
f: az 61.0 el 37.1 pa -78.2  
Control file: cf\_1234\_gmva

Amplitude 0.174 +/- 0.018  
Search (2048X64) 0.170  
Inc. seg. avg. 0.211  
Inc. frq. avg. 0.176  
Apriori delay (usec) -1.85320288805E+02  
Apriori clock (usec) 1.1950355E+00  
Apriori clockrate (us/s) 2.6052251E-07  
Apriori rate (us/s) 3.63775827554E-02  
Apriori accel (us/s/s) -4.42350530936E-06

PCal mode: MANUAL, MANUAL  
PCal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2  
Sample rate(MISamp/s): 64  
Data rate(Mb/s): 2048  
PC period (AP's) 5, 5  
SampCntNorm: enabled  
nlags: 128 t\_cohere infinite

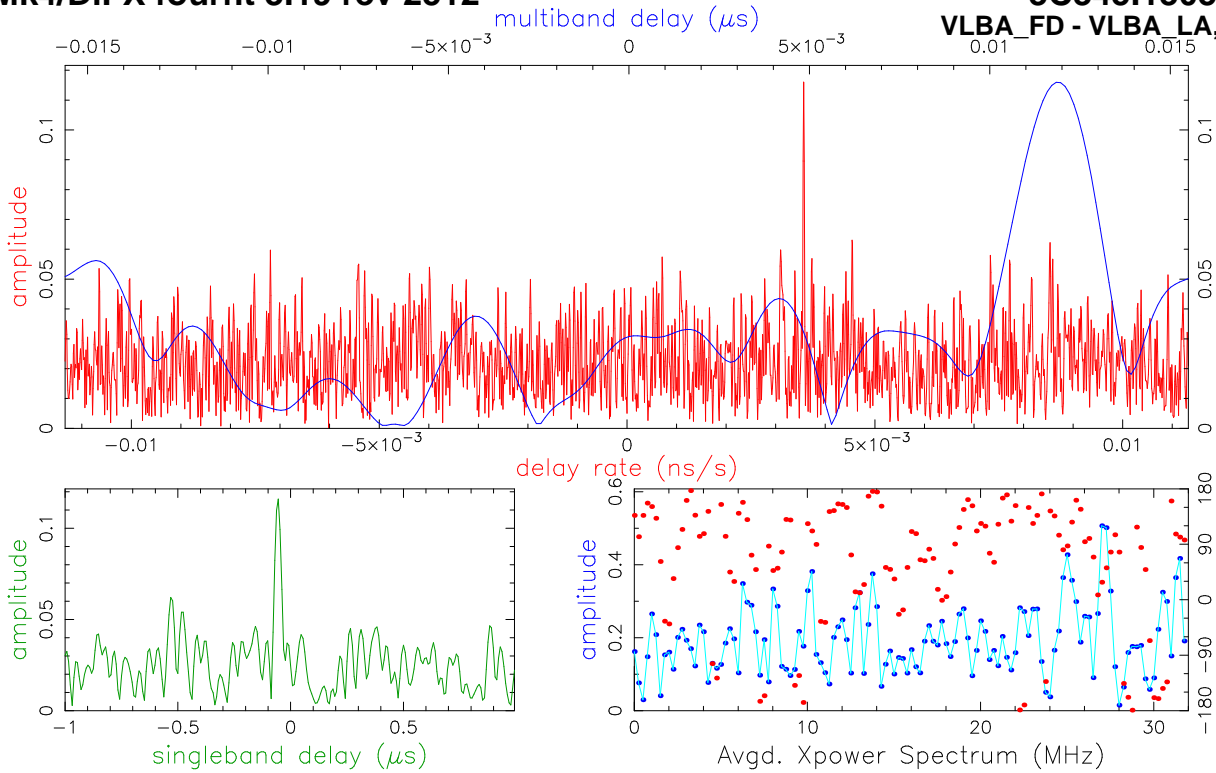
sb window (us) -1.000 1.000  
mb window (us) -0.016 0.016  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

u,v (fr/asec) -279.838 -796.742  
simultaneous interpolator

Input file: /Exps/c192a/v2/1234/No0001/fl..1305JH  
Output file: /Exps/c192a/v2/1234/No0001/fl.W.125.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, fl  
VLBA\_FD - VLBA\_LA, fgroup W, pol LR

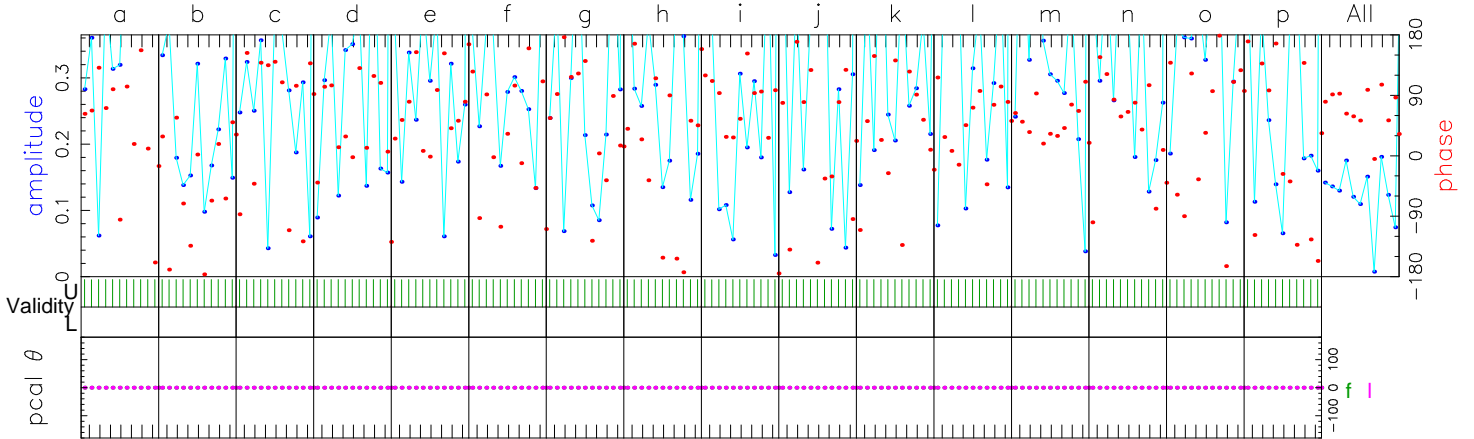


Fringe quality 0

SNR 6.4  
Int time 406.562  
Amp 0.122  
Phase 78.5  
PFD 3.3e-02  
Delays (us)  
SBD -0.056547  
MBD 0.011893  
Fringe rate (Hz)  
0.307480  
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  
2020:093:042802  
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

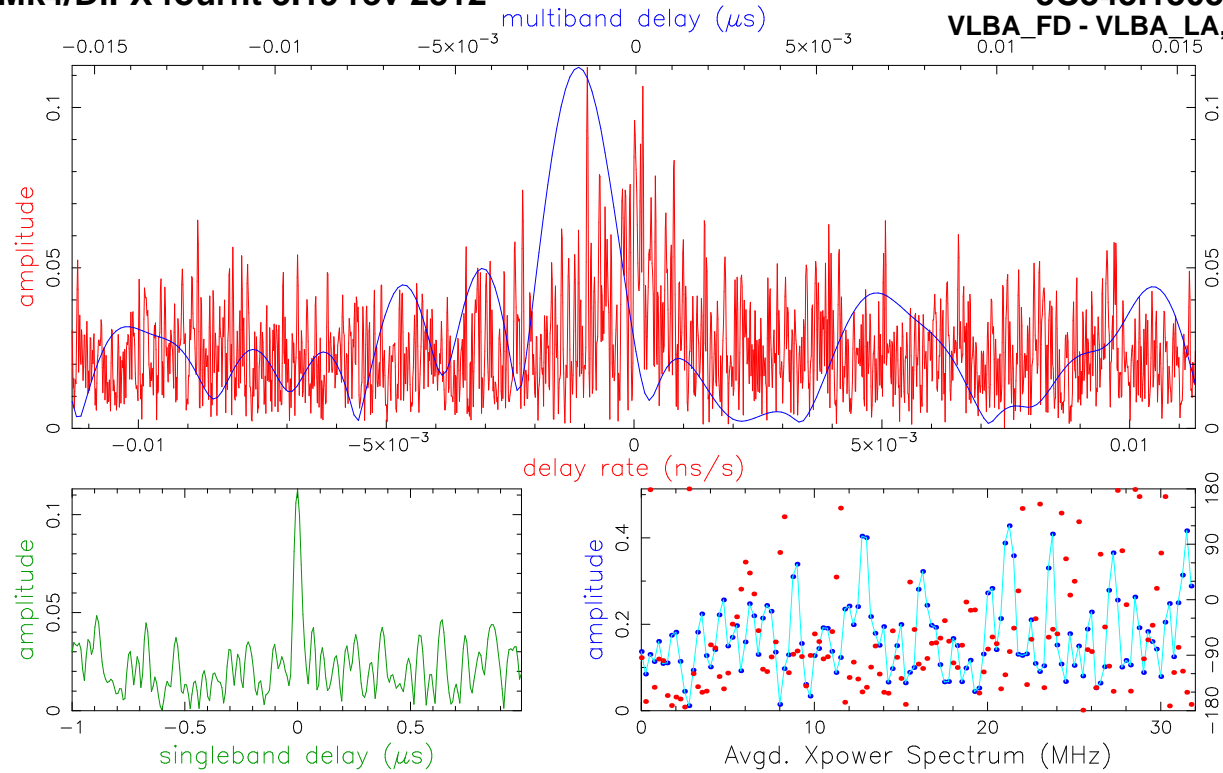


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	84.2	-18.2	162.1	80.4	56.5	80.5	91.1	96.9	88.6	127.8	57.5	49.4	54.4	67.4	122.6	-173.1	Phase	78.5				
	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.1	0.1	Ampl.	0.1				
	211.2	108.6	85.3	120.1	192.5	49.0	19.6	169.3	125.5	38.3	28.7	252.8	122.1	166.8	109.6	134.8	Sbd box	121.8				
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					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.85370896151E+02														Apriori delay (usec)	-1.85320288805E+02	Resid mbdelay (usec)	1.18927E-02	+/-	1.7E-04
Sband delay (usec)			-1.85376835805E+02														Apriori clock (usec)	1.1950355E+00	Resid sbdelay (usec)	-5.65470E-02	+/-	2.7E-03
Phase delay (usec)			-1.85320286272E+02														Apriori clockrate (us/s)	2.6052251E-07	Resid phdelay (usec)	2.53285E-06	+/-	5.7E-07
Delay rate (us/s)			3.63811522895E-02														Apriori rate (us/s)	3.63775827554E-02	Resid rate (us/s)	3.56953E-06	+/-	2.4E-09
Total phase (deg)																	Apriori accel (us/s/s)	-4.42350530936E-06	Resid phase (deg)	78.5	+/-	17.8

ph/seg (deg) RMS Theor. Amplitude 0.122 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 42.5 53.8 Search (2048X64) 0.111 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 50.4 35.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 61.4 62.1 Inc. seg. avg. 0.113 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 f: az 61.0 el 37.1 pa -78.2 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -279.838 -796.742 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/fl..1305JH Output file: /Exps/c192a/v2/1234/No0001/fl.W.144.1305JH simultaneous interpolator

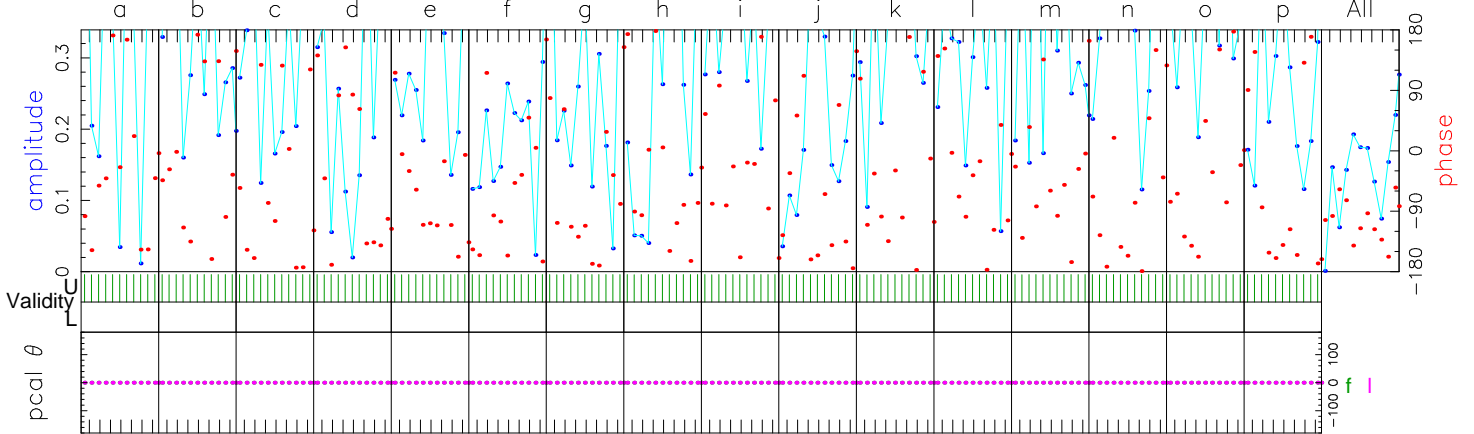
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, fl  
VLBA\_FD - VLBA\_LA, fgroup W, pol RL



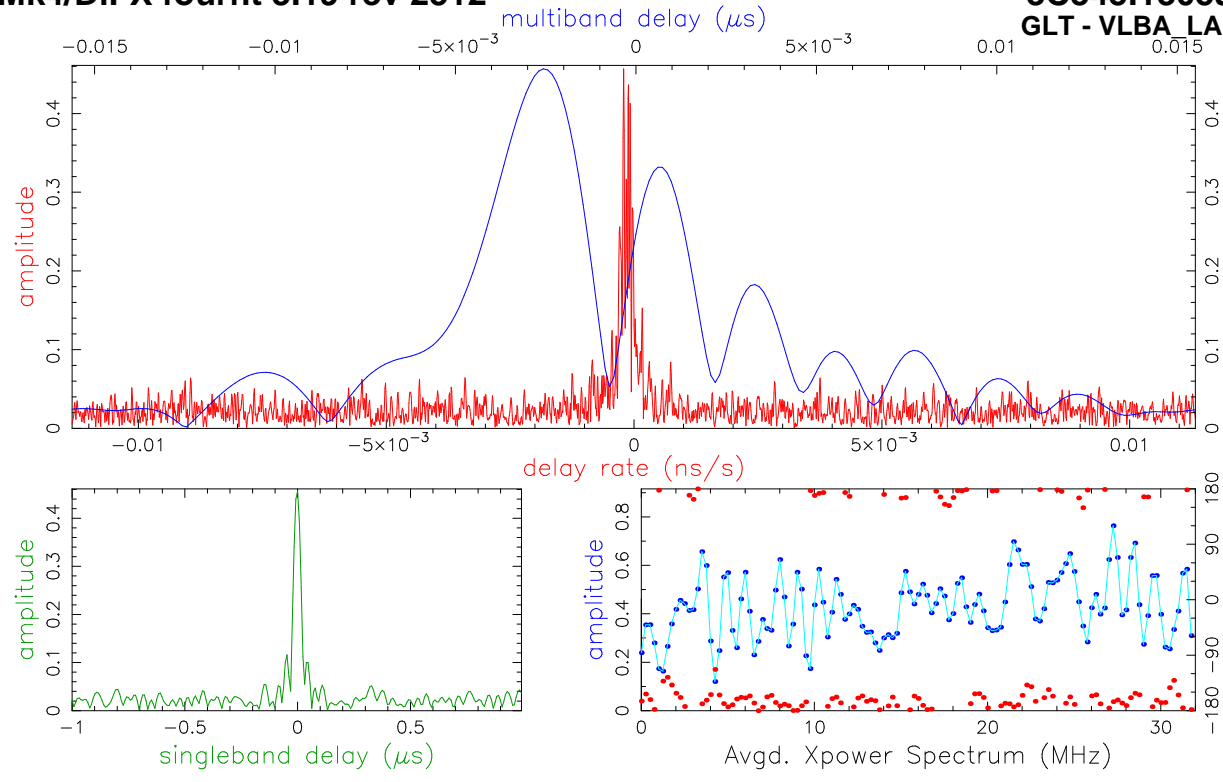
Fringe quality 0  
SNR 6.2  
Int time 406.562  
Amp 0.113  
Phase -103.9  
PFD 1.3e-01  
Delays (us)  
SBD -0.001349  
MBD -0.001604  
Fringe rate (Hz)  
-0.081110  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042807  
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



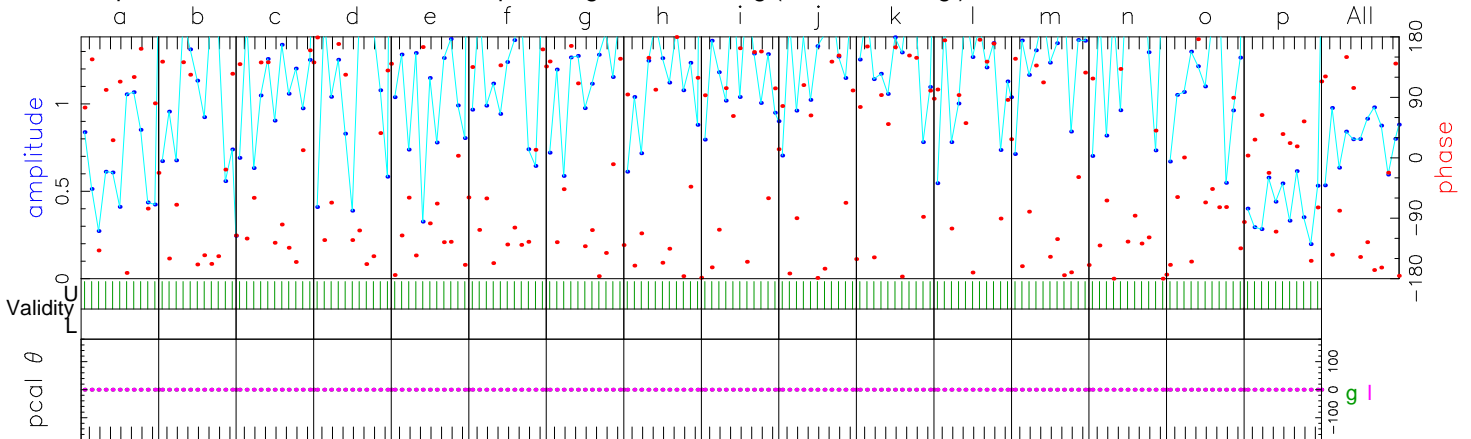
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f: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		
f: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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-1.85321892577E+02																
Sband delay (usec)		-1.85321637805E+02																
Phase delay (usec)		-1.85320292156E+02																
Delay rate (us/s)		3.63766411475E-02																
Total phase (deg)																		
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

ph/seg (deg) 31.7 31.9 Search (2048X64) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 57.8 55.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 33.9 36.8 Inc. seg. avg. 0.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 46.9 64.3 Inc. frq. avg. 0.110 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
f: az 61.0 el 37.1 pa -78.2 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -279.838 -796.742 ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/fl..1305JH Output file: /Exps/c192a/v2/1234/No0001/fl.W.162.1305JH simultaneous interpolator



Fringe quality 5  
SNR 25.4  
Int time 406.798  
Amp 0.461  
Phase -169.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.002416  
MBD -0.002557  
Fringe rate (Hz)  
-0.018214  
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  
2020:093:042753  
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

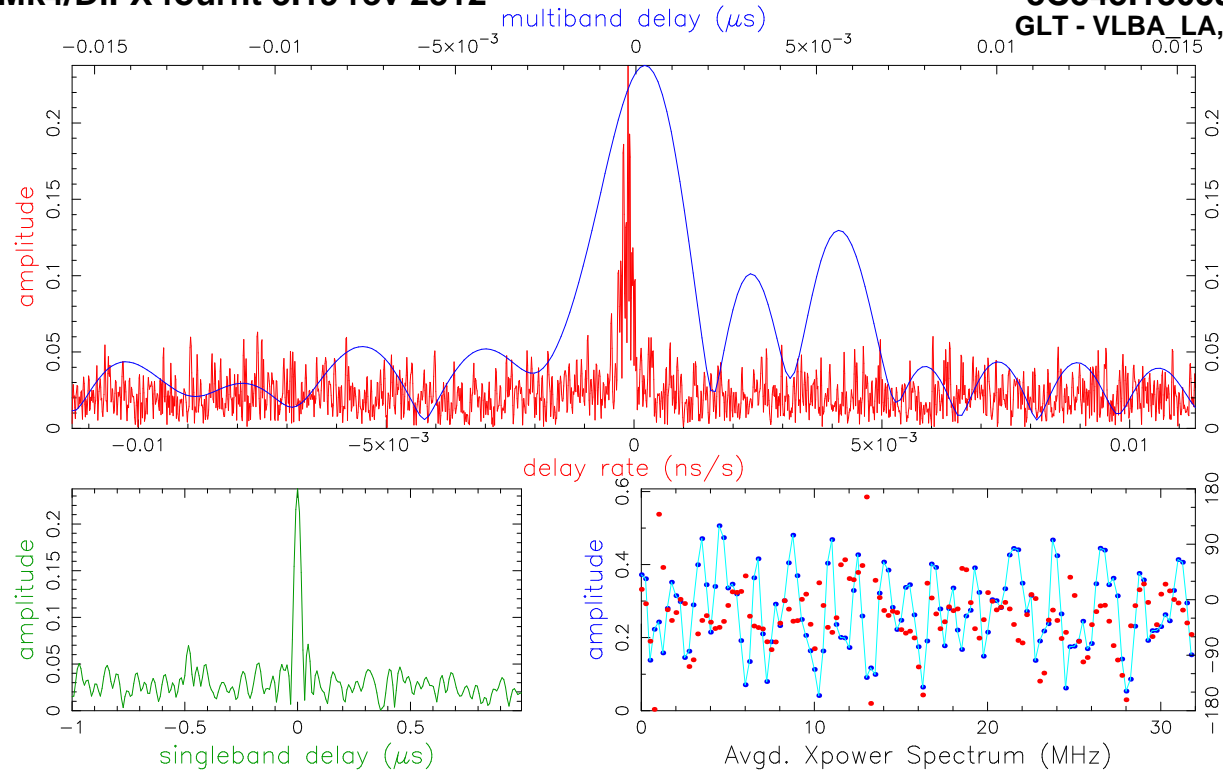


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
126.1	-175.5	-155.0	-149.2	-118.0	-140.7	-164.8	177.9	158.9	151.3	143.7	149.2	-174.9	-141.0	-91.9	3.1		Phase	-169.7					
0.4	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.5	0.6	0.8	0.6	0.7	0.8	0.5	0.2		Ampl.	0.6					
130.4	128.7	128.6	128.6	128.6	128.8	128.5	128.4	128.6	128.8	128.8	128.8	128.8	129.2	128.7	129.6	131.2		Sbd box	128.7				
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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)		3.34175910901E+03																Apriori delay (usec)	3.34176166590E+03	Resid mbdelay (usec)	-2.55690E-03	+/-	4.2E-05
Sband delay (usec)		3.34175925040E+03																Apriori clock (usec)	2.0363760E+00	Resid sbdelay (usec)	-2.41550E-03	+/-	6.8E-04
Phase delay (usec)		3.34176166043E+03																Apriori clockrate (us/s)	4.2647201E-07	Resid phdelay (usec)	-5.47103E-06	+/-	1.5E-07
Delay rate (us/s)		-7.53865233341E-01																Apriori rate (us/s)	-7.53865021895E-01	Resid rate (us/s)	-2.11446E-07	+/-	6.2E-10
Total phase (deg)			154.7															Apriori accel (us/s/s)	1.02940581733E-05	Resid phase (deg)	-169.7	+/-	4.5

ph/seg (deg) 67.0 7.8 Theor. Amplitude 0.461 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.9 13.6 Search (2048X64) 0.453 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 60.7 9.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 42.8 15.7 Inc. seg. avg. 0.789 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/gl..1305JH Output file: /Exps/c192a/v2/1234/No0001/gl.W\_110.1305JH simultaneous interpolator

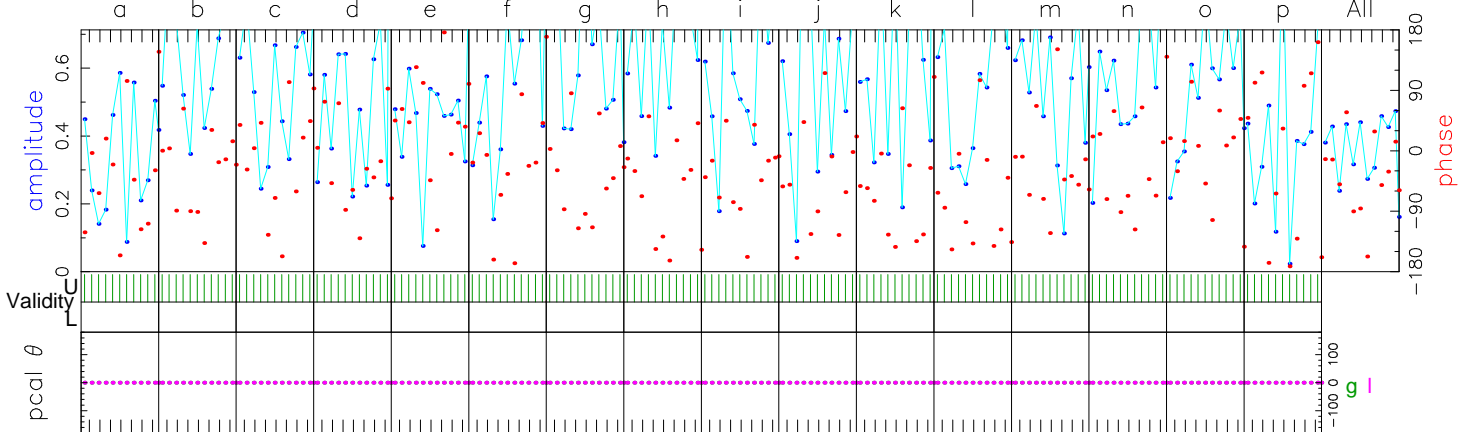
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gl  
GLT - VLBA LA, fgroup W, pol RR



Fringe quality 9  
SNR 13.1  
Int time 406.839  
Amp 0.238  
Phase -26.7  
PFD 1.6e-30  
Delays (us)  
SBD -0.000244  
MBD 0.000241  
Fringe rate (Hz)  
-0.010076  
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  
2020:093:042757  
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
	-67.1	-19.0	-8.2	-21.4	40.3	-10.2	-41.1	-24.9	-25.9	-39.4	-77.8	-91.9	-35.9	-15.7	11.9	110.9		Phase -26.7
	0.2	0.4	0.3	0.2	0.2	0.4	0.4	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.2		Ampl. 0.3
	140.0	129.5	130.1	73.4	126.7	128.5	129.0	128.8	129.1	101.8	128.7	128.2	128.6	129.1	130.1	27.3		Sbd box 129.0
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
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks

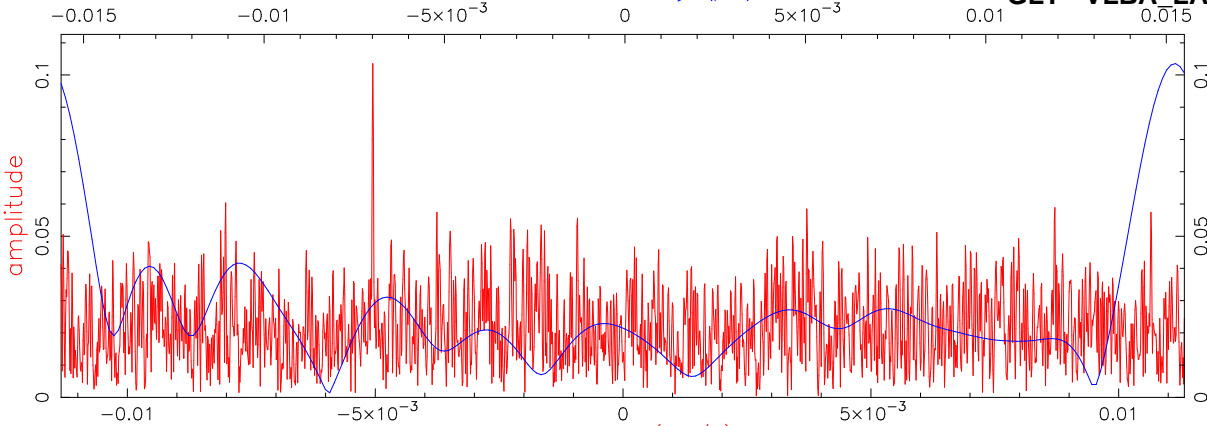
Group delay (usec)(sbd) 3.34176190658E+03 Apriori delay (usec) 3.34176166590E+03 Resid mbdelay (usec) 2.40672E-04 +/- 8.2E-05  
 Sband delay (usec) 3.34176142240E+03 Apriori clock (usec) 2.0363760E+00 Resid sbdelay (usec) -2.43500E-04 +/- 1.3E-03  
 Phase delay (usec) 3.34176166504E+03 Apriori clockrate (us/s) 4.2647201E-07 Resid phdelay (usec) -8.60728E-07 +/- 2.8E-07  
 Delay rate (us/s) -7.53865138867E-01 Apriori rate (us/s) -7.53865021895E-01 Resid rate (us/s) -1.16972E-07 +/- 1.2E-09  
 Total phase (deg) 297.7 Apriori accel (us/s/s) 1.02940581733E-05 Resid phase (deg) -26.7 +/- 8.7

RMS Theor. Amplitude 0.238 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 58.6 15.1 Search (2048X64) 0.217 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 68.1 26.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 49.8 17.5 Inc. seg. avg. 0.366 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 41.2 30.5 Inc. frq. avg. 0.279 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

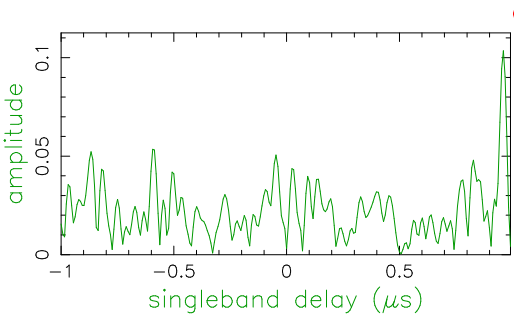
g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/gl..1305JH Output file: /Exps/c192a/v2/1234/No0001/gl.W.128.1305JH

multiband delay ( $\mu$ s)

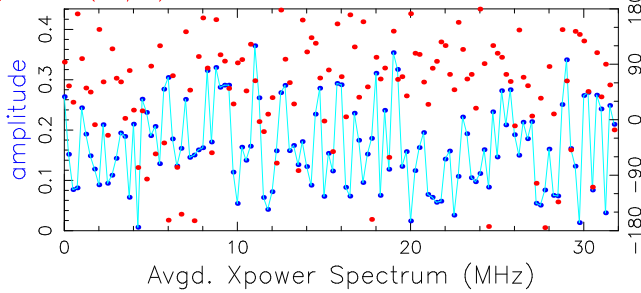
Fringe quality 0



SNR 5.7  
Int time 406.798  
Amp 0.113  
Phase -54.2  
PFD 9.3e-01  
Delays (us)  
SBD 0.960233  
MBD -0.016018  
Fringe rate (Hz)  
-0.435054  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

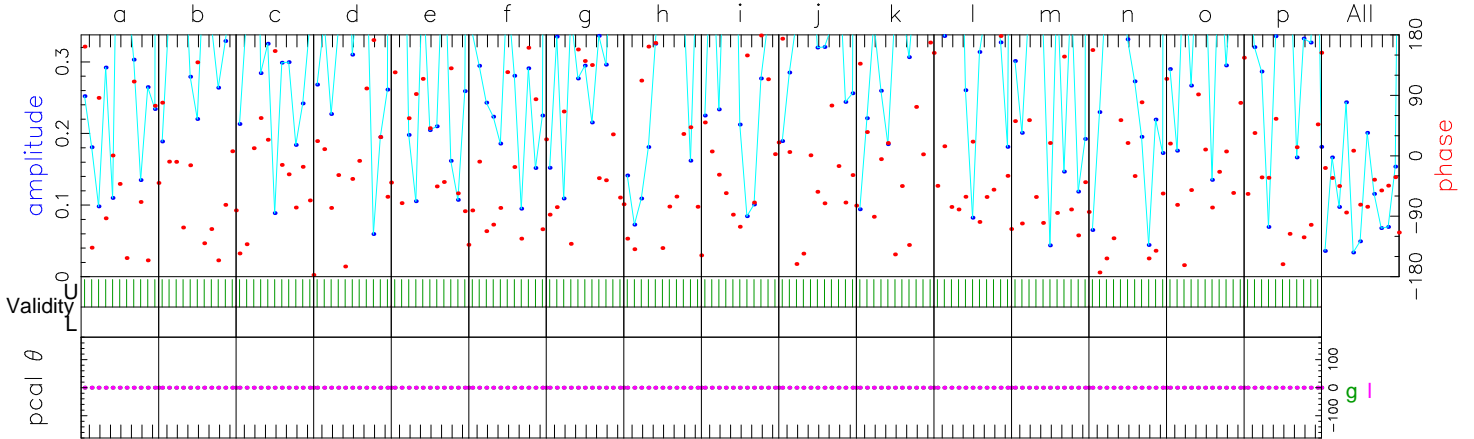


delay rate (ns/s)



Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042802  
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



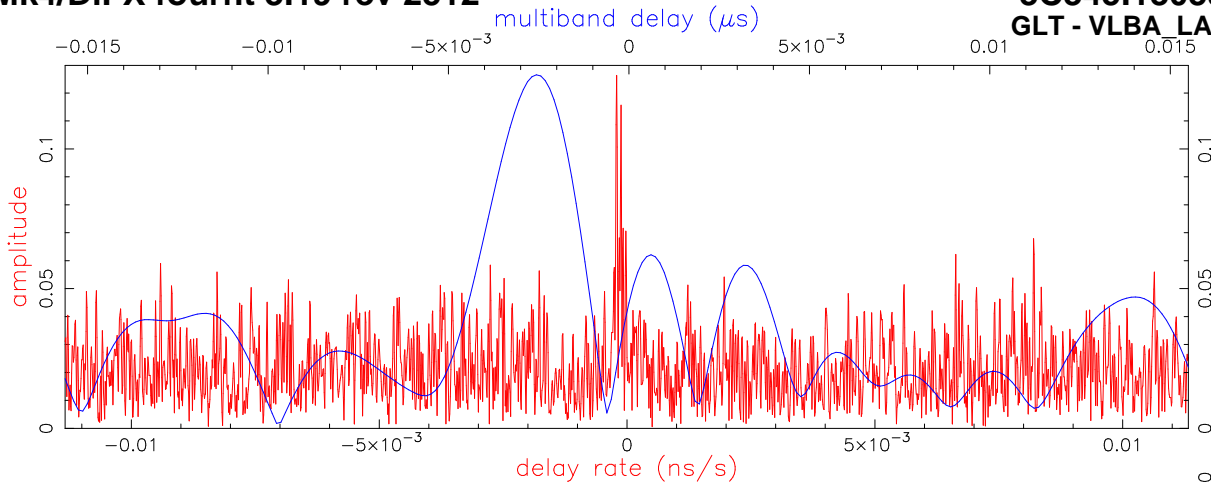
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-110.7	-61.5	-20.1	-15.0	-29.0	-93.2	-62.5	-96.5	-42.6	-42.9	-46.2	-63.3	-64.7	-124.8	-3.6	-49.7	Phase	-54.2
	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.3	0.2	0.1	0.2	0.1	Ampl.	0.1
	227.8	33.0	189.1	30.7	223.7	132.9	155.2	90.9	87.5	72.1	40.9	250.1	63.8	229.4	189.0	239.1	Sbd box	251.9
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		3.34271439825E+03				Apriori delay (usec)		3.34176166590E+03				Resid mbdelay (usec)		-1.60177E-02			+/-	1.9E-04
Sband delay (usec)		3.34272189890E+03				Apriori clock (usec)		2.0363760E+00				Resid sbdelay (usec)		9.60233E-01			+/-	3.0E-03
Phase delay (usec)		3.34176166416E+03				Apriori clockrate (us/s)		4.2647201E-07				Resid phdelay (usec)		-1.74793E-06			+/-	6.5E-07
Delay rate (us/s)		-7.53870072445E-01				Apriori rate (us/s)		-7.53865021895E-01				Resid rate (us/s)		-5.05055E-06			+/-	2.8E-09
Total phase (deg)				270.2		Apriori accel (us/s/s)		1.02940581733E-05				Resid phase (deg)		-54.2			+/-	20.0

ph/seg (deg) 27.7 34.7 Search (2048X64) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.4 60.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 35.9 40.1 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 56.3 70.0 Inc. frq. avg. 0.104 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/gl..1305JH Output file: /Exps/c192a/v2/1234/No0001/gl.W.148.1305JH

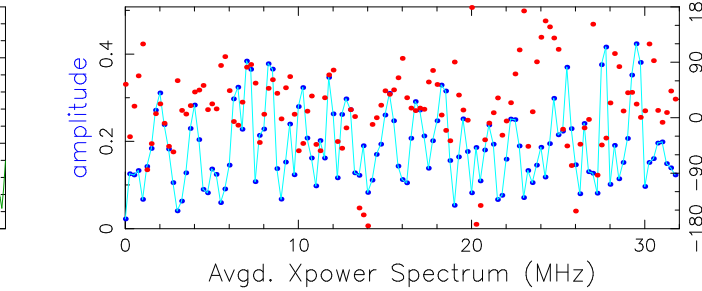
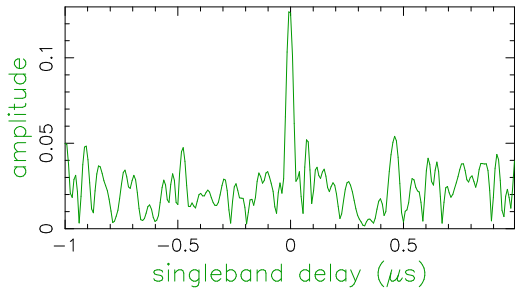
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gl  
GLT - VLBA LA, fgroup W, pol RL



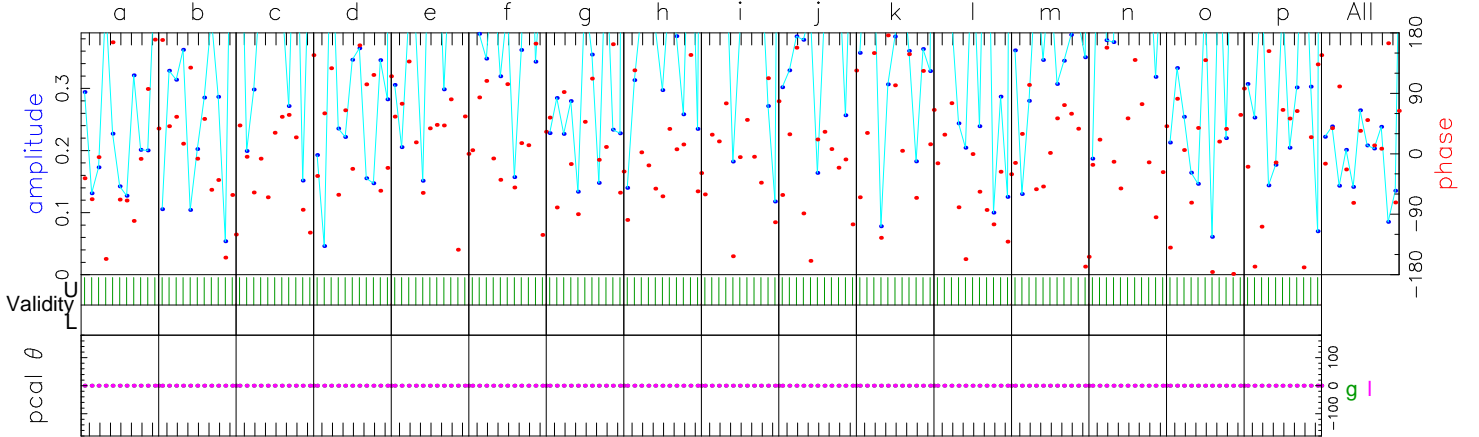
Fringe quality 0

SNR 7.2  
Int time 406.839  
Amp 0.130  
Phase 13.0  
PFD 2.4e-04  
Delays (us)  
SBD -0.004087  
MBD -0.002631  
Fringe rate (Hz)  
-0.017844  
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  
2020:093:042807  
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				
	-119.5	-13.2	3.8	49.9	56.6	22.9	21.8	-2.6	12.0	-36.0	80.7	-26.5	20.1	-0.9	82.9	106.1	Phase	13.0				
	0.1	0.2	0.3	0.0	0.3	0.2	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.0	Ampl.	0.1				
	53.1	13.7	128.3	231.7	128.3	209.7	70.0	135.3	129.4	225.8	20.7	103.7	226.3	127.4	44.8	33.6	Sbd box	128.5				
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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			3.34175903523E+03														Apriori delay (usec)	3.34176166590E+03	Resid mbdelay (usec)	-2.63068E-03	+/-	1.5E-04
Sband delay (usec)			3.34175757890E+03														Apriori clock (usec)	2.0363760E+00	Resid sbdelay (usec)	-4.08700E-03	+/-	2.4E-03
Phase delay (usec)			3.34176166632E+03														Apriori clockrate (us/s)	4.2647201E-07	Resid phdelay (usec)	4.17882E-07	+/-	5.2E-07
Delay rate (us/s)			-7.53865229052E-01														Apriori rate (us/s)	-7.53865021895E-01	Resid rate (us/s)	-2.07157E-07	+/-	2.2E-09
Total phase (deg)					337.3												Apriori accel (us/s/s)	1.02940581733E-05	Resid phase (deg)	13.0	+/-	16.0

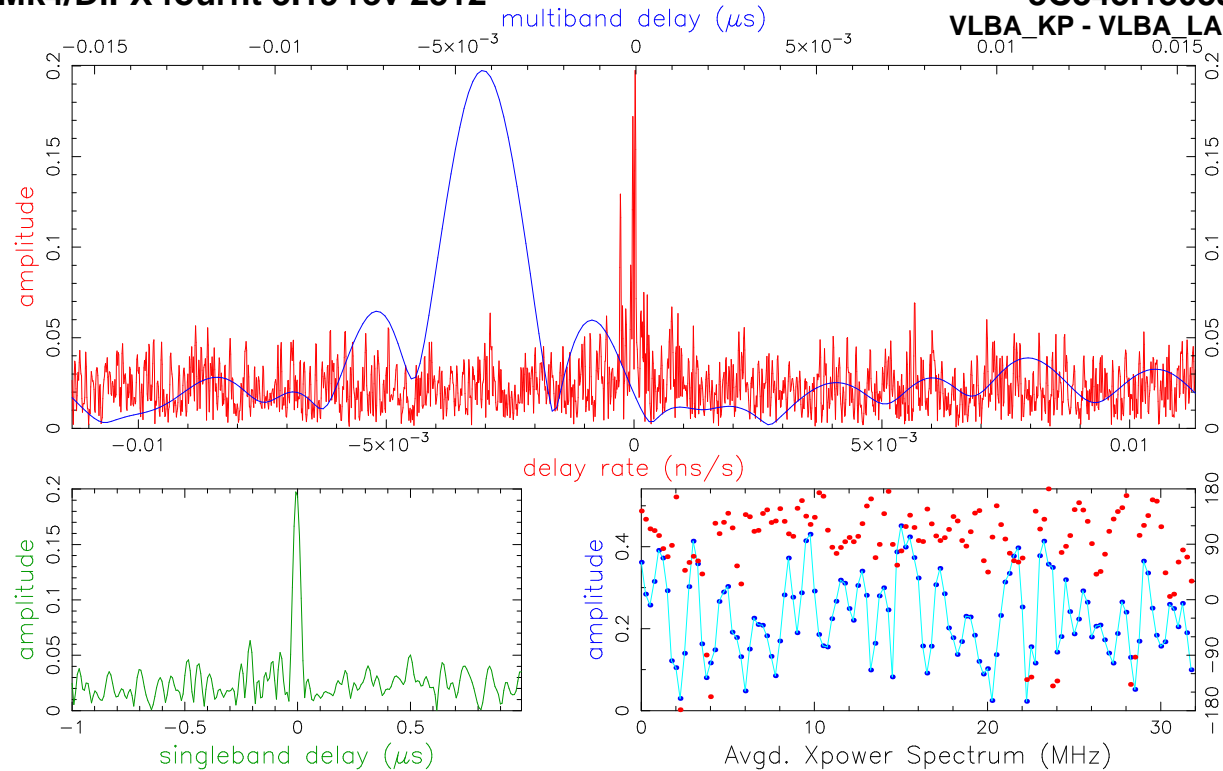
ph/seg (deg) 67.3 27.7 Search (2048X64) 0.126 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 63.4 48.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 56.3 32.0 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 60.0 55.8 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/gl..1305JH Output file: /Exps/c192a/v2/1234/No0001/gl.W.167.1305JH



Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol LL

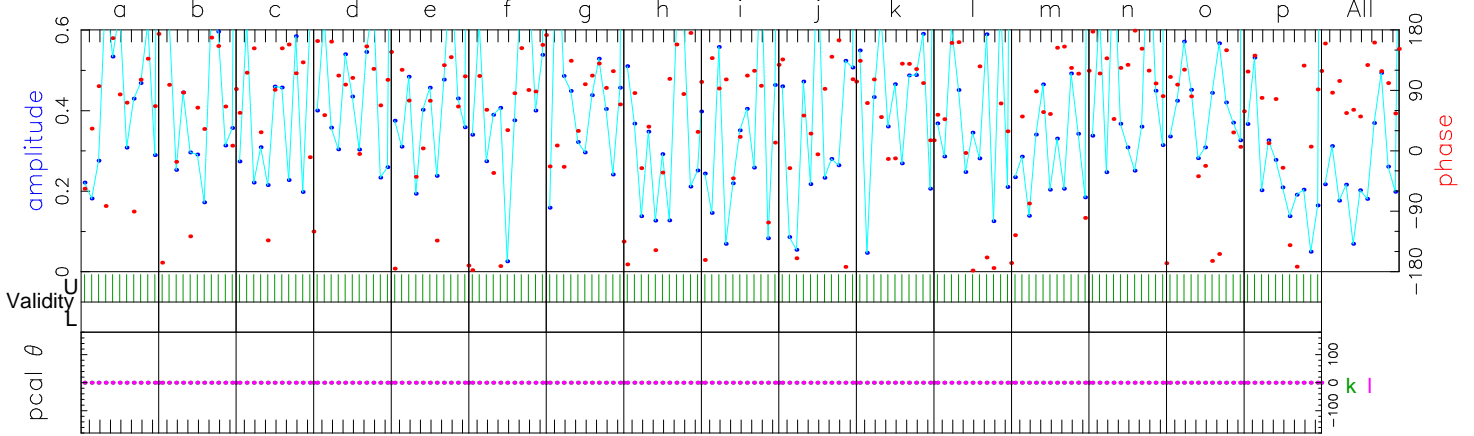


Fringe quality 9

SNR 11.0  
Int time 406.934  
Amp 0.200  
Phase 106.3  
PFD 1.0e-19  
Delays (us)  
SBD -0.004769  
MBD -0.004224  
Fringe rate (Hz) 0.002225  
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  
2020:093:042812  
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

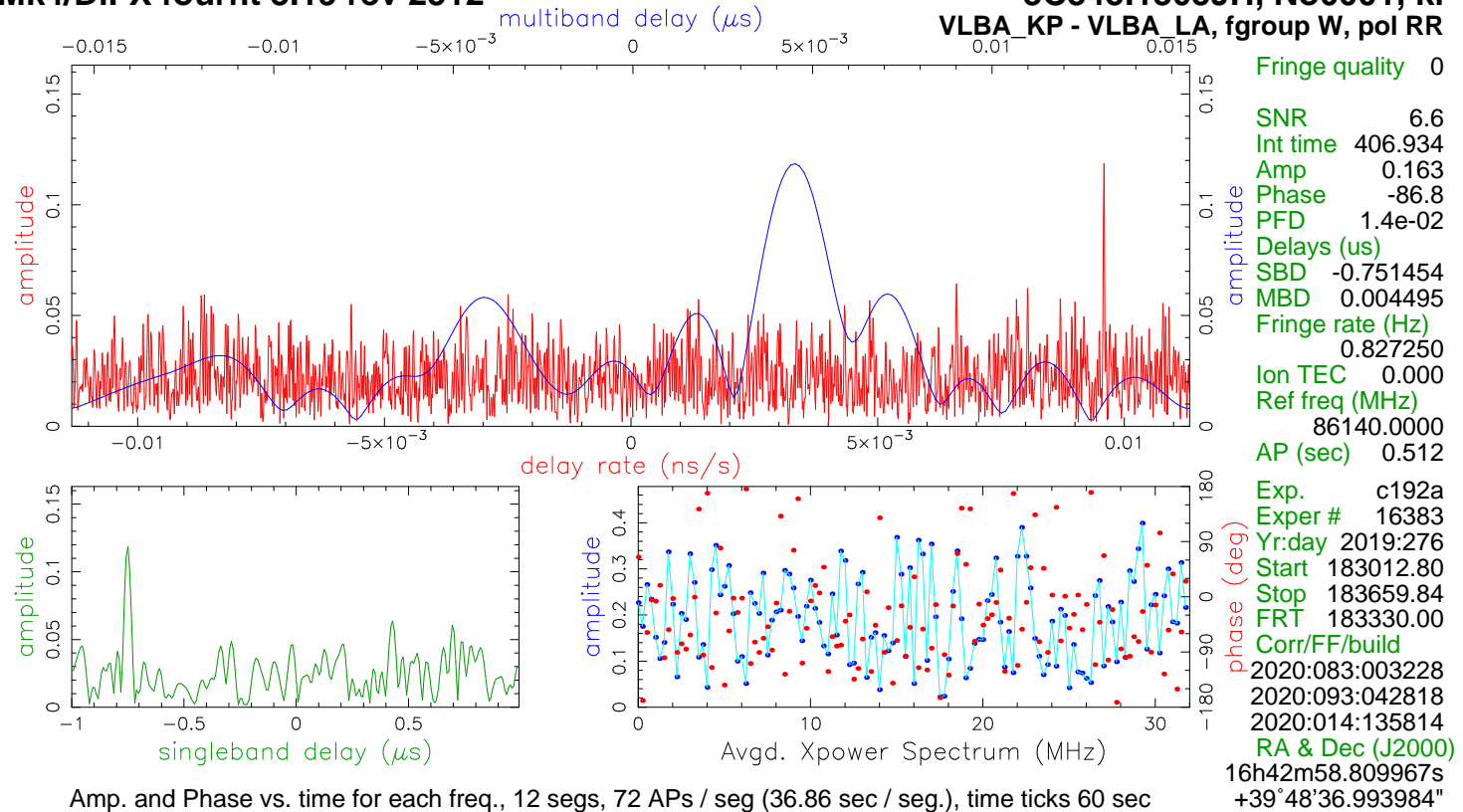


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
k: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	0:0	0:0	0:0	PC phase
k: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	0:0	0:0	0:0	ManI PC
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Chan ids
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks
																				Tracks
Group delay (usec)(sbd)	-1.72674202729E+03			Apriori delay (usec)			-1.72673780302E+03			Resid mbdelay (usec)			-4.22426E-03			+/- 9.8E-05				
Sband delay (usec)	-1.72674257152E+03			Apriori clock (usec)			3.3833367E-01			Resid sbdelay (usec)			-4.76850E-03			+/- 1.6E-03				
Phase delay (usec)	-1.72673779959E+03			Apriori clockrate (us/s)			1.5689301E-07			Resid phdelay (usec)			3.42686E-06			+/- 3.3E-07				
Delay rate (us/s)	7.40331326295E-02			Apriori rate (us/s)			7.40331067955E-02			Resid rate (us/s)			2.58340E-08			+/- 1.4E-09				
Total phase (deg)	-20.5			Apriori accel (us/s/s)			5.19110597338E-06			Resid phase (deg)			106.3			+/- 10.4				

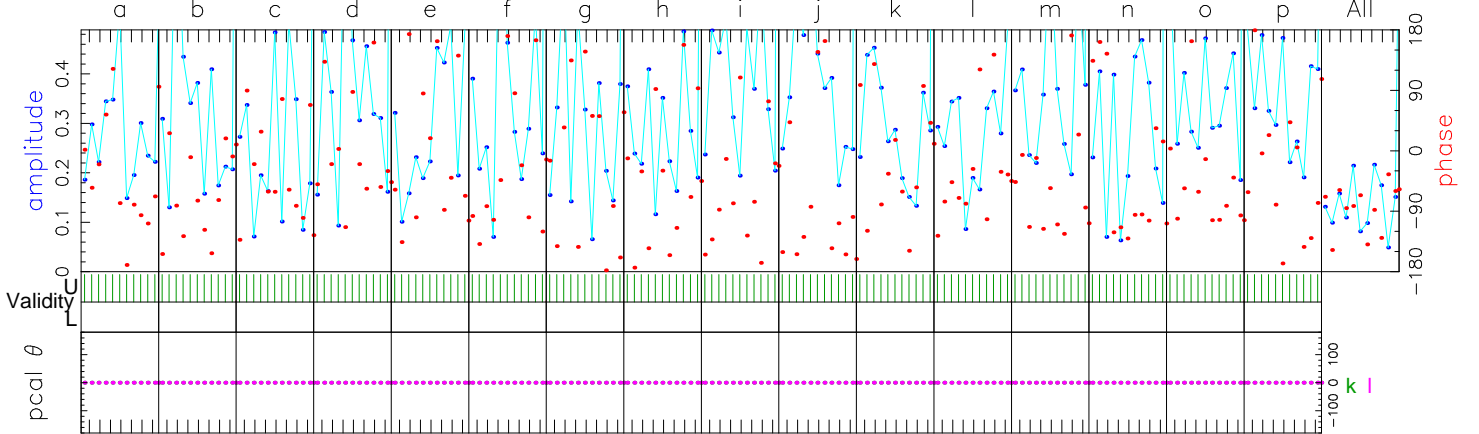
ph/seg (deg) 39.4 18.0 Search (2048X64) 0.190 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 62.6 31.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 15.1 20.7 Inc. seg. avg. 0.236 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 34.5 36.2 Inc. frq. avg. 0.192 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 ion window (TEC) 0.00 0.00 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/kl..1305JH Output file: /Exps/c192a/v2/1234/No0001/kl.W.181.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol RR



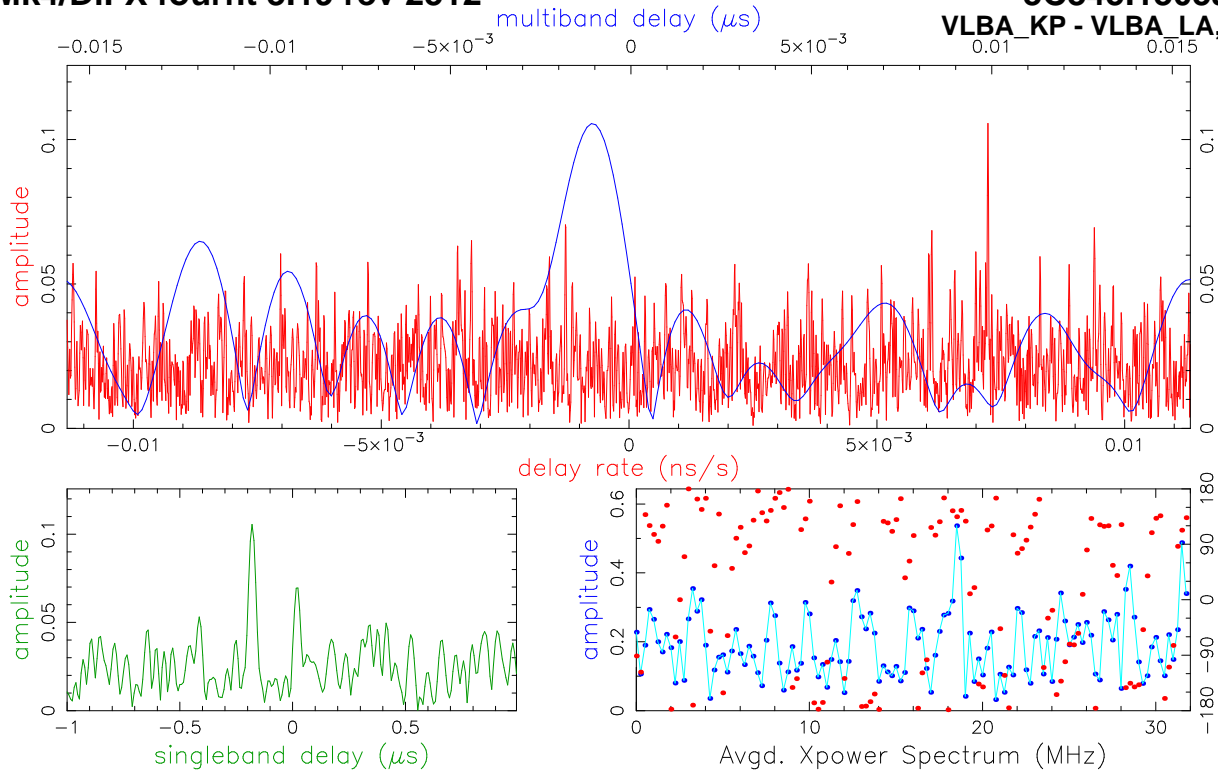
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	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
	-64.8	-84.0	-52.6	-62.8	-84.4	-105.6	164.4	-114.8	-103.4	-142.6	-4.6	-67.9	-63.3	-120.7	-59.4	-75.3	Phase	-86.8
	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.0	0.2	0.3	0.2	0.3	0.2	Ampl.	0.2
	182.9	6.8	136.5	232.8	223.3	70.8	104.3	217.8	85.8	33.0	146.8	140.0	33.8	116.3	33.2	177.9	Sbd box	32.8
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.72748330851E+03		Apriori delay (usec)		-1.72673780302E+03		Resid mbdelay (usec)		4.49451E-03		+/-		1.6E-04					
Sband delay (usec)	-1.72748925652E+03		Apriori clock (usec)		3.3833367E-01		Resid sbdelay (usec)		-7.51454E-01		+/-		2.6E-03					
Phase delay (usec)	-1.72673780582E+03		Apriori clockrate (us/s)		1.5689301E-07		Resid phdelay (usec)		-2.79850E-06		+/-		5.6E-07					
Delay rate (us/s)	7.40427103446E-02		Apriori rate (us/s)		7.40331067955E-02		Resid rate (us/s)		9.60355E-06		+/-		2.4E-09					
Total phase (deg)			-213.6		Apriori accel (us/s/s)		5.19110597338E-06		Resid phase (deg)				-86.8		+/-		17.4	

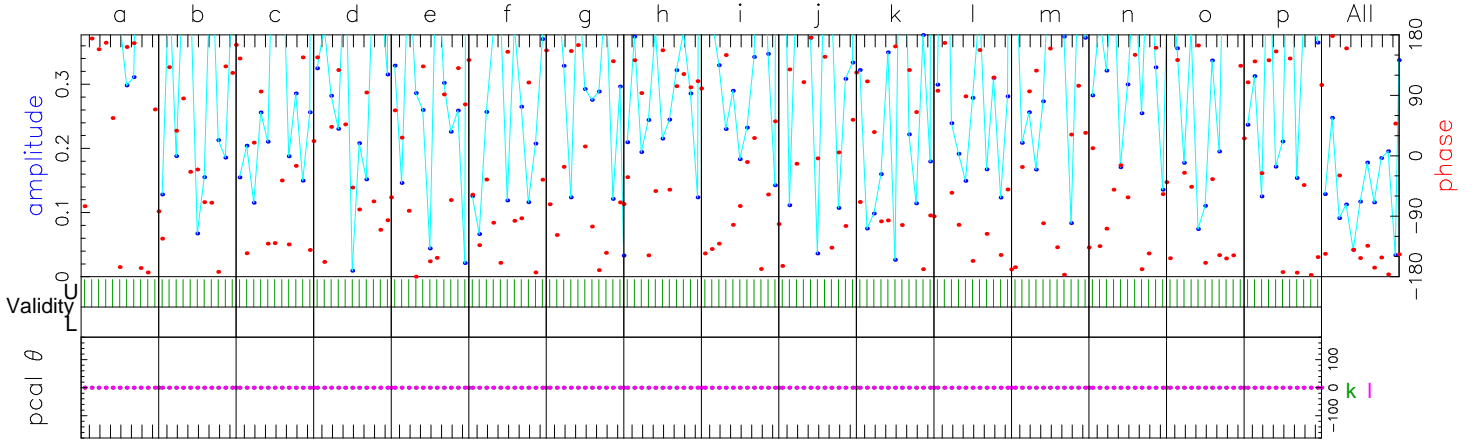
ph/seg (deg) 34.7 30.2 Search (2048X64) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 55.4 52.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 45.0 34.9 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 54.2 60.9 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  
 k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/kl..1305JH Output file: /Exps/c192a/v2/1234/No0001/kl.W.204.1305JH



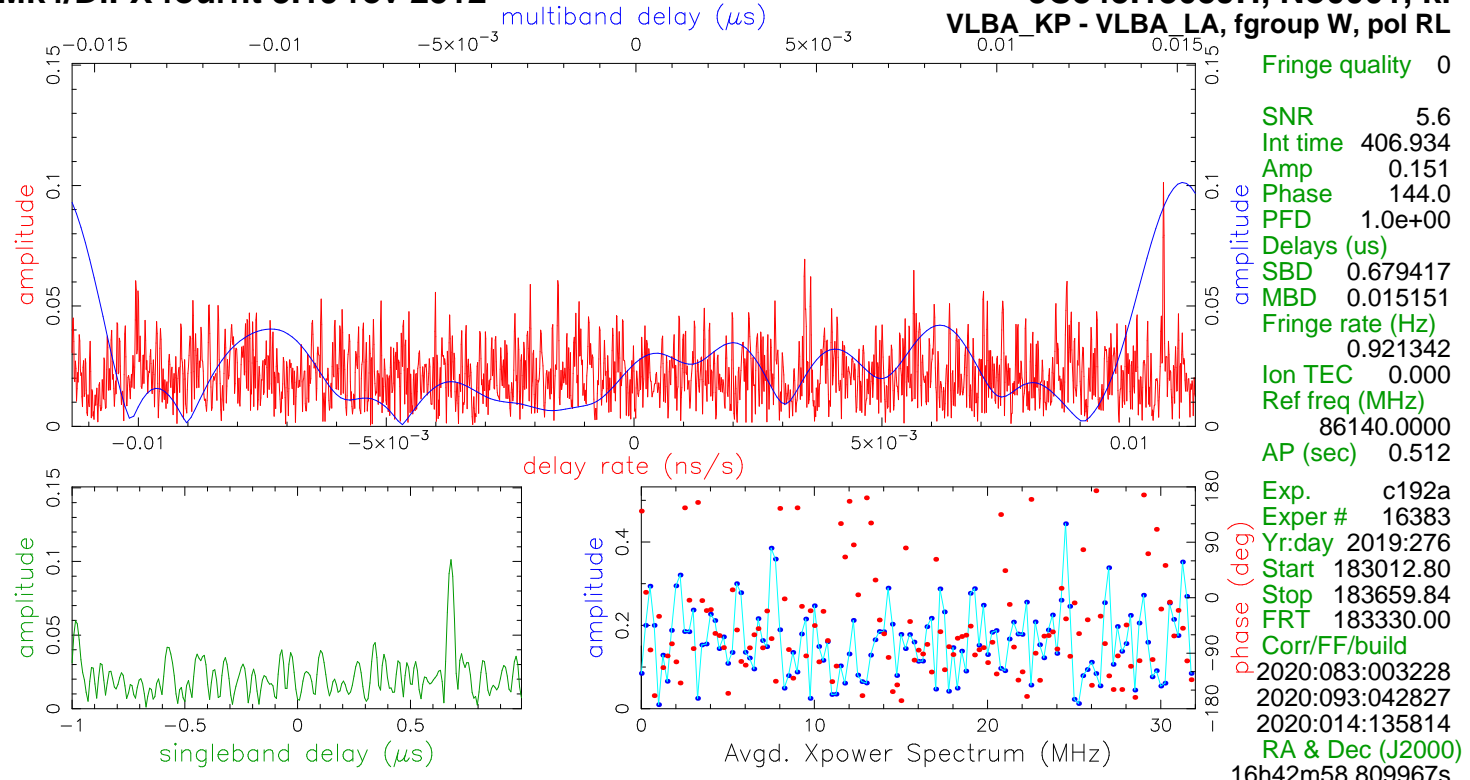
Fringe quality 0  
SNR 5.8  
Int time 406.934  
Amp 0.126  
Phase -160.4  
PFD 7.6e-01  
Delays (us)  
SBD -0.179624  
MBD -0.001063  
Fringe rate (Hz) 0.624774  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:083:003228  
2020:093:042822  
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

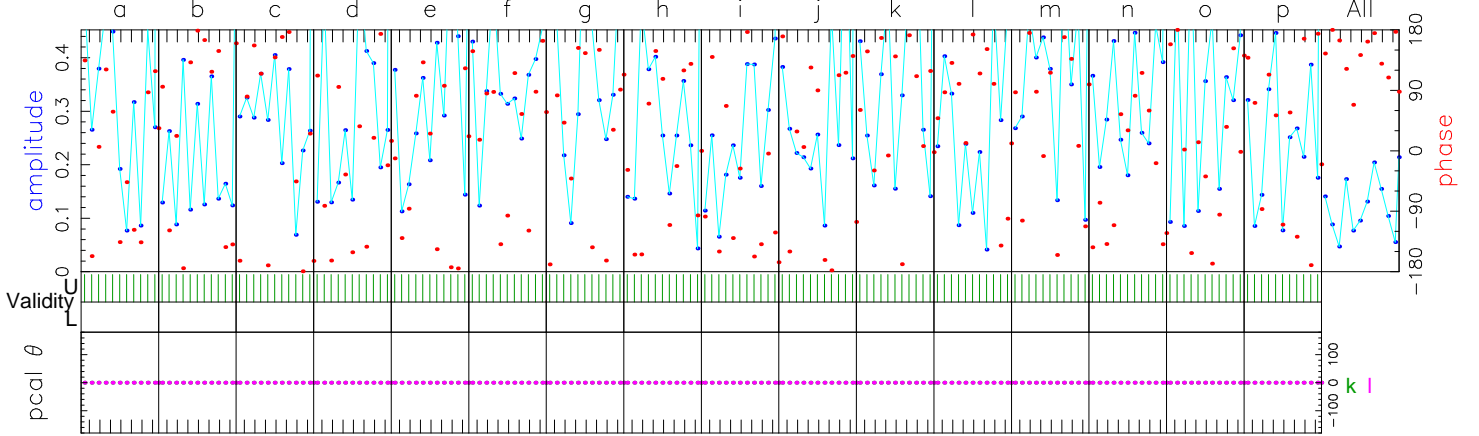


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	170.3	99.4	-112.2	-103.4	167.0	-104.8	-118.5	121.3	-126.7	169.2	-109.3	175.1	165.4	-120.8	-151.0	161.6	Phase	-160.4				
k	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1				
l	105.6	130.6	125.0	167.1	141.1	103.9	214.6	115.0	229.0	188.0	239.0	29.5	145.6	207.2	75.9	58.3	Sbd box	106.0				
k: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	1000				
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	1000				
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	1000				
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	1000				
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000				
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.72692636579E+03														Apriori delay (usec)	-1.72673780302E+03	Resid mbdelay (usec)	-1.06277E-03	+/-	1.9E-04
Sband delay (usec)			-1.72691742752E+03														Apriori clock (usec)	3.3833367E-01	Resid sbdelay (usec)	-1.79624E-01	+/-	3.0E-03
Phase delay (usec)			-1.72673780819E+03														Apriori clockrate (us/s)	1.5689301E-07	Resid phdelay (usec)	-5.17235E-06	+/-	6.3E-07
Delay rate (us/s)			7.40403598074E-02														Apriori rate (us/s)	7.40331067955E-02	Resid rate (us/s)	7.25301E-06	+/-	2.7E-09
Total phase (deg)																	Apriori accel (us/s/s)	5.19110597338E-06	Resid phase (deg)	-160.4	+/-	19.7

ph/seg (deg) 63.2 34.1 Search (2048X64) 0.126 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 65.2 59.5 Interp. 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 52.1 39.4 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 67.9 68.7 Inc. frq. avg. 0.135 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/kl..1305JH Output file: /Exps/c192a/v2/1234/No0001/kl.W.221.1305JH simultaneous interpolator



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
	113.1	170.6	151.3	-28.0	163.4	128.2	138.3	141.2	-145.3	138.5	117.8	109.7	127.8	-116.1	-164.4	138.9	Phase	144.0
	0.2	0.2	0.3	0.1	0.2	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.1	Ampl.	0.1
	80.5	177.7	215.1	135.6	61.2	5.0	127.3	194.9	2.7	18.5	67.2	88.4	27.0	249.5	193.6	5.6	Sbd box	216.0
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.72606640159E+03			Apriori delay (usec)			-1.72673780302E+03			Resid mbdelay (usec)			1.51514E-02			+/- 1.9E-04		
Sband delay (usec)	-1.72605838602E+03			Apriori clock (usec)			3.3833367E-01			Resid sbdelay (usec)			6.79417E-01			+/- 3.1E-03		
Phase delay (usec)	-1.72673779838E+03			Apriori clockrate (us/s)			1.5689301E-07			Resid phdelay (usec)			4.64284E-06			+/- 6.6E-07		
Delay rate (us/s)	7.40438026669E-02			Apriori rate (us/s)			7.40331067955E-02			Resid rate (us/s)			1.06959E-05			+/- 2.8E-09		
Total phase (deg)	17.2			Apriori accel (us/s/s)			5.19110597338E-06			Resid phase (deg)			144.0			+/- 20.5		

ph/seg (deg) 32.8 35.5  
amp/seg (%) 49.3 62.0  
ph/frq (deg) 60.8 41.0  
amp/frq (%) 51.4 71.6

RMS Theor. Amplitude 0.151 +/- 0.027  
Search (2048X64) 0.099  
Interp. 0.000  
Inc. seg. avg. 0.145  
Inc. frq. avg. 0.146

Group delay (usec)(sbd) -1.72606640159E+03  
Sband delay (usec) -1.72605838602E+03  
Phase delay (usec) -1.72673779838E+03  
Delay rate (us/s) 7.40438026669E-02  
Total phase (deg) 17.2

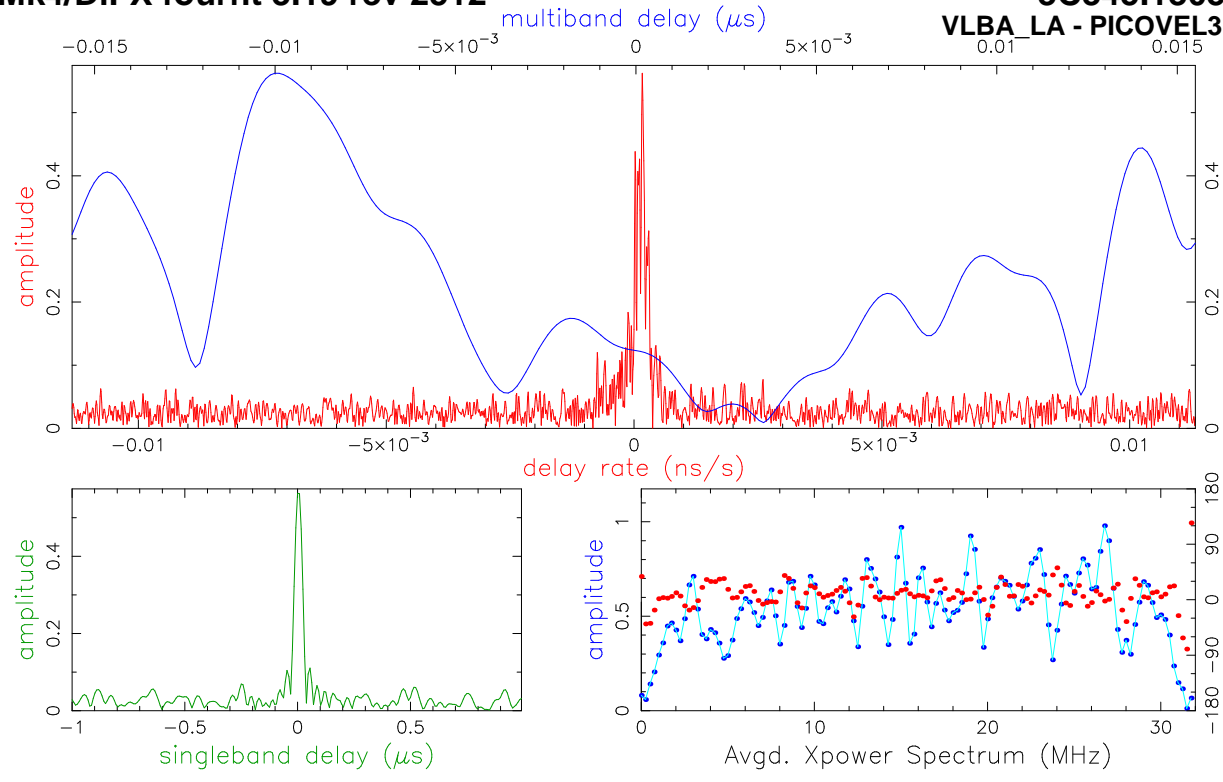
Apriori delay (usec) -1.72673780302E+03  
Apriori clock (usec) 3.3833367E-01  
Apriori clockrate (us/s) 1.5689301E-07  
Apriori rate (us/s) 7.40331067955E-02  
Apriori accel (us/s/s) 5.19110597338E-06

Resid mbdelay (usec) 1.51514E-02 +/- 1.9E-04  
Resid sbdelay (usec) 6.79417E-01 +/- 3.1E-03  
Resid phdelay (usec) 4.64284E-06 +/- 6.6E-07  
Resid rate (us/s) 1.06959E-05 +/- 2.8E-09  
Resid phase (deg) 144.0 +/- 20.5

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
PCal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2 SampCntNorm: enabled  
Sample rate(MISamp/s): 64  
Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite

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

k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 simultaneous interpolator

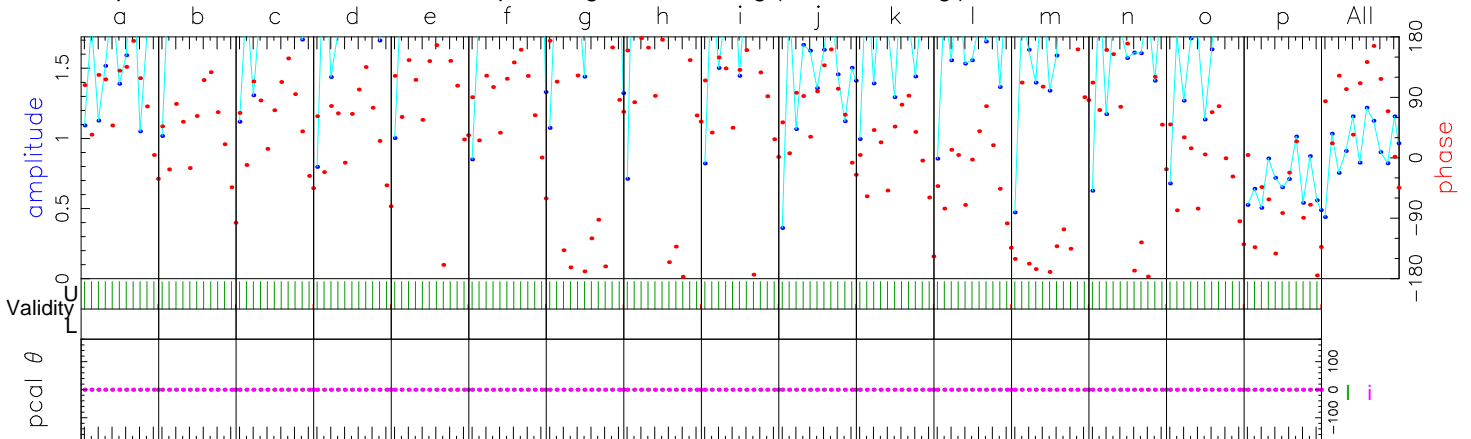


Fringe quality 5

SNR 27.9  
Int time 314.116  
Amp 0.575  
Phase 88.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.003839  
MBD -0.009993  
Fringe rate (Hz) 0.014054  
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  
2020:093:042815  
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
UL	94.1	43.8	64.6	48.8	117.5	94.6	-176.2	150.2	105.6	78.1	11.4	-17.3	176.6	135.6	-7.0	-67.2	Phase	88.5
	1.0	1.2	1.2	1.2	1.3	1.4	1.2	1.4	1.1	0.9	1.0	1.0	1.0	0.9	0.4	0.4	Ampl.	1.1
	128.1	129.6	129.6	129.2	129.5	129.5	129.6	129.4	129.4	129.0	129.2	129.7	129.2	129.1	129.0	128.0	Sbd box	129.5
	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	
	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
	0:0	0:0	0:0	0:0	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	
	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	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	
	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	

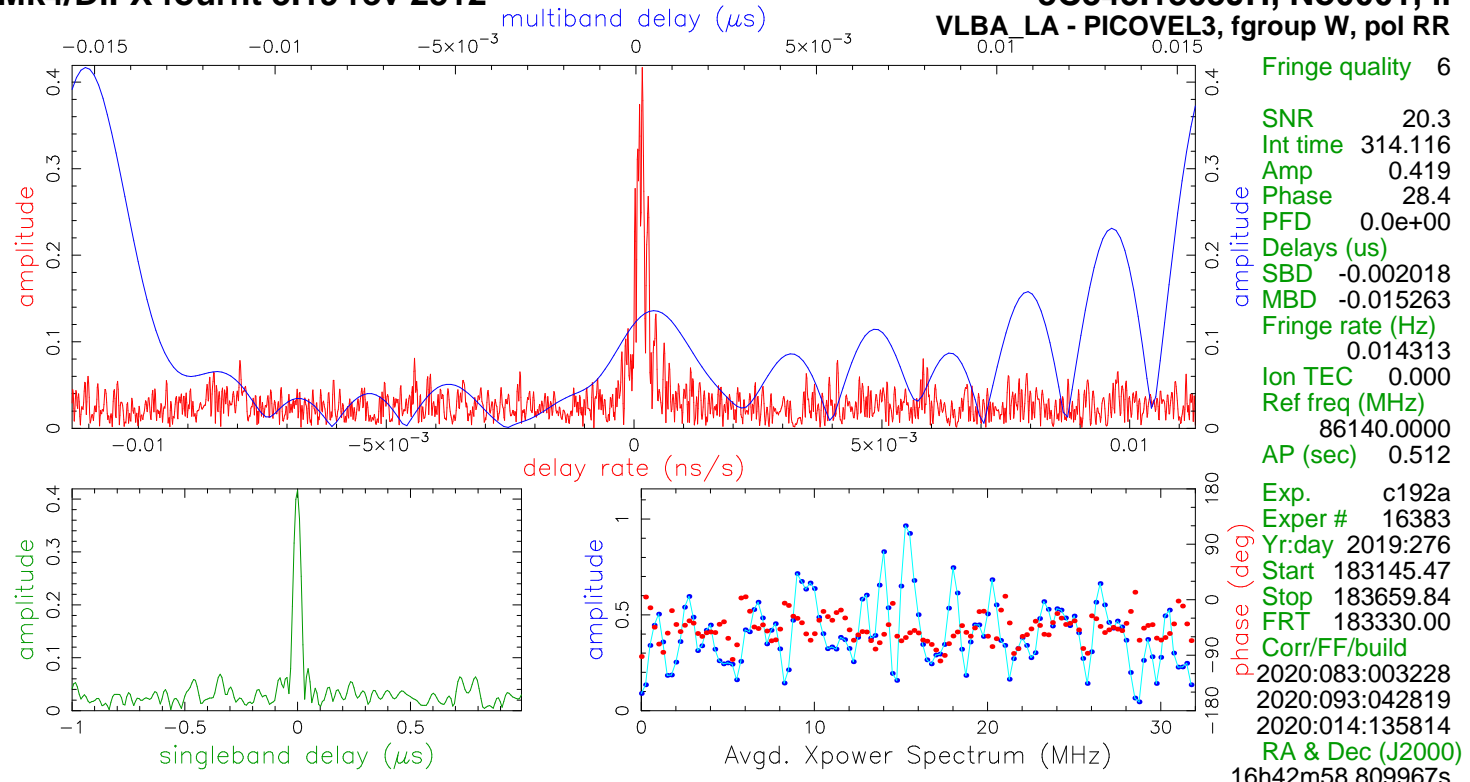
Group delay (usec)(sbd) -5.51194321969E+03 Apriori delay (usec) -5.51193322710E+03 Resid mbdelay (usec) -9.99259E-03 +/- 3.9E-05  
 Sband delay (usec) -5.51192938860E+03 Apriori clock (usec) -2.5128606E-01 Resid sbdelay (usec) 3.83850E-03 +/- 6.2E-04  
 Phase delay (usec) -5.51193322425E+03 Apriori clockrate (us/s) 1.5279932E-09 Resid phdelay (usec) 2.85440E-06 +/- 1.3E-07  
 Delay rate (us/s) 1.45254577421E+00 Apriori rate (us/s) 1.45254561106E+00 Resid rate (us/s) 1.63150E-07 +/- 7.3E-10  
 Total phase (deg) 22.8 Apriori accel (us/s/s) 2.79932495079E-05 Resid phase (deg) 88.5 +/- 4.1

ph/seg (deg) RMS Theor. Amplitude 0.575 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 51.8 7.1 Search (2048X64) 0.556 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 74.2 12.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 75.0 8.2 Inc. seg. avg. 0.935 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 95.9 14.4 Inc. frq. avg. 1.055 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/li.1305JH Output file: /Exps/c192a/v2/1234/No0001/li.W.191.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, li  
VLBA\_LA - PICOVEL3, fgroup W, pol RR



Fringe quality 6

SNR 20.3

Int time 314.116

Amp 0.419

Phase 28.4

PFD 0.0e+00

Delays (us)

SBD -0.002018

MBD -0.015263

Fringe rate (Hz) 0.014313

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

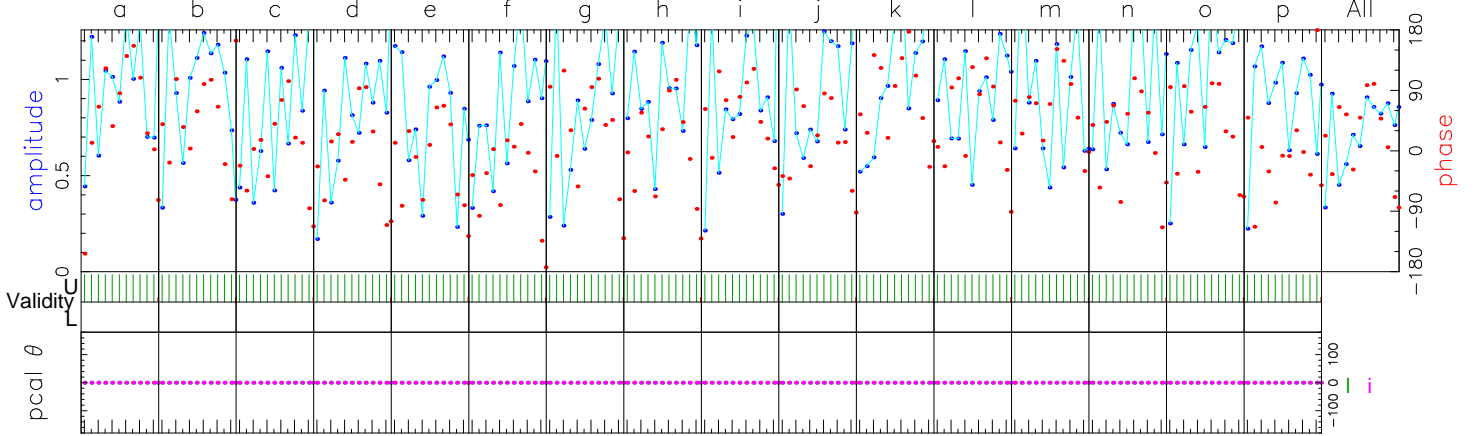
Corr/FF/build 2020:083:003228

2020:093:042819

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					
	86.2	44.8	-7.3	-12.1	5.6	-26.5	28.8	10.0	53.6	16.2	84.8	38.8	65.6	35.8	33.1	-24.3		Phase	28.4				
	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.6	0.6		Ampl.	0.5				
	128.1	129.2	128.7	128.1	129.1	128.8	128.8	127.8	127.9	128.1	128.7	128.8	128.7	128.1	128.7	128.0		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					
l	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					
li	0:0	0:0	0:0	0:0	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					
li	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
Group delay (usec)(sbd)			-5.51194848976E+03															Apriori delay (usec)	-5.51193322710E+03	Resid mbdelay (usec)	-1.52627E-02	+/-	5.3E-05
Sband delay (usec)			-5.51193524460E+03															Apriori clock (usec)	-2.5128606E-01	Resid sbdelay (usec)	-2.01750E-03	+/-	8.5E-04
Phase delay (usec)			-5.51193322619E+03															Apriori clockrate (us/s)	1.5279932E-09	Resid phdelay (usec)	9.15335E-07	+/-	1.8E-07
Delay rate (us/s)			1.45254577722E+00															Apriori rate (us/s)	1.45254561106E+00	Resid rate (us/s)	1.66162E-07	+/-	1.0E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.79932495079E-05	Resid phase (deg)	28.4	+/-	5.6

ph/seg (deg) 53.5 9.8 Theor. Amplitude 0.419 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

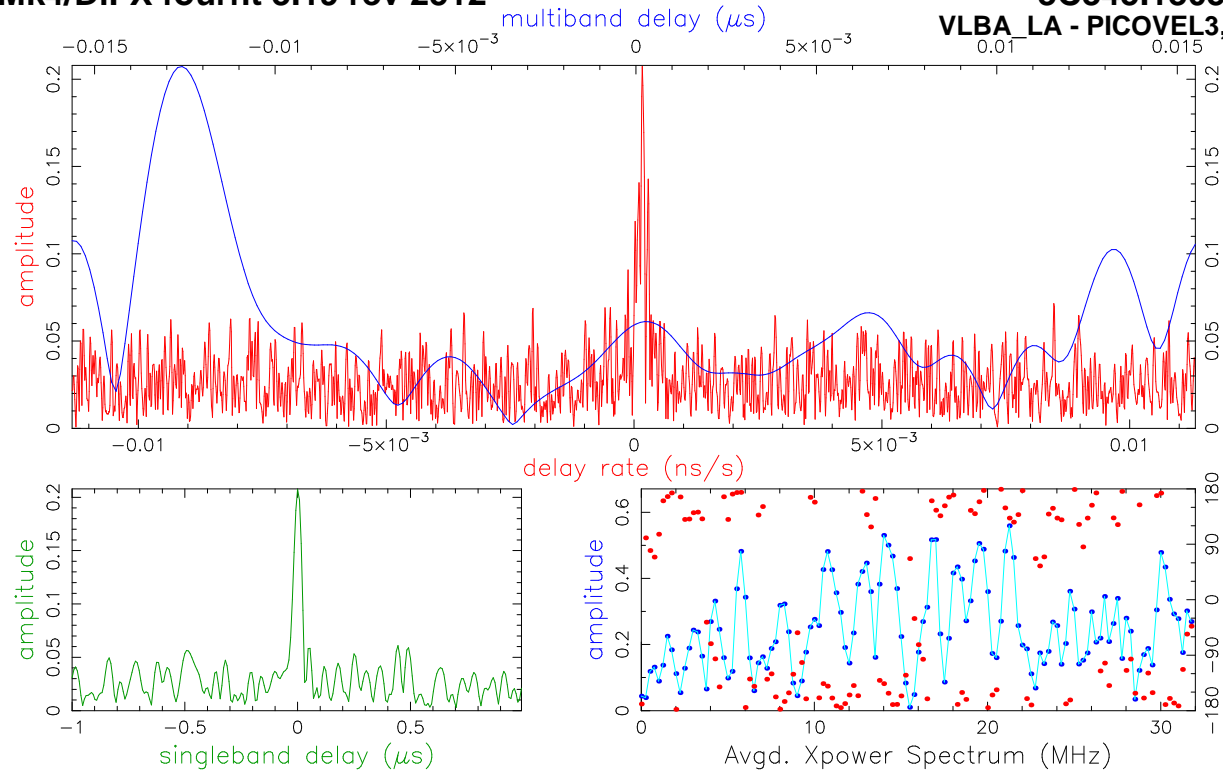
amp/seg (%) 83.8 17.0 Search (2048X64) 0.413 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 36.5 11.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 25.6 19.7 Inc. seg. avg. 0.707 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

l: az 63.9 el 37.8 pa -72.0 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/li..1305JH Output file: /Exps/c192a/v2/1234/No0001/li.W.209.1305JH simultaneous interpolator

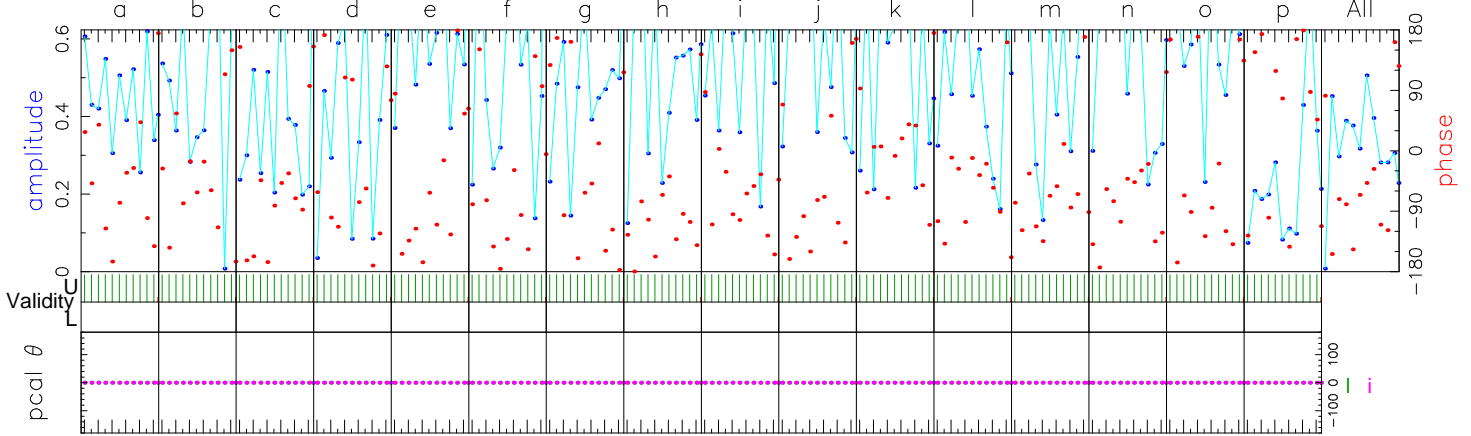


Fringe quality 9

SNR 10.1  
Int time 314.116  
Amp 0.208  
Phase -96.8  
PFD 3.1e-15  
Delays (us)  
SBD 0.001481  
MBD -0.012597  
Fringe rate (Hz) 0.014356  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192a  
Yr:day 2019:276  
Exp# 16383  
Start 183145.47  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:083:003228  
2020:093:042824  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

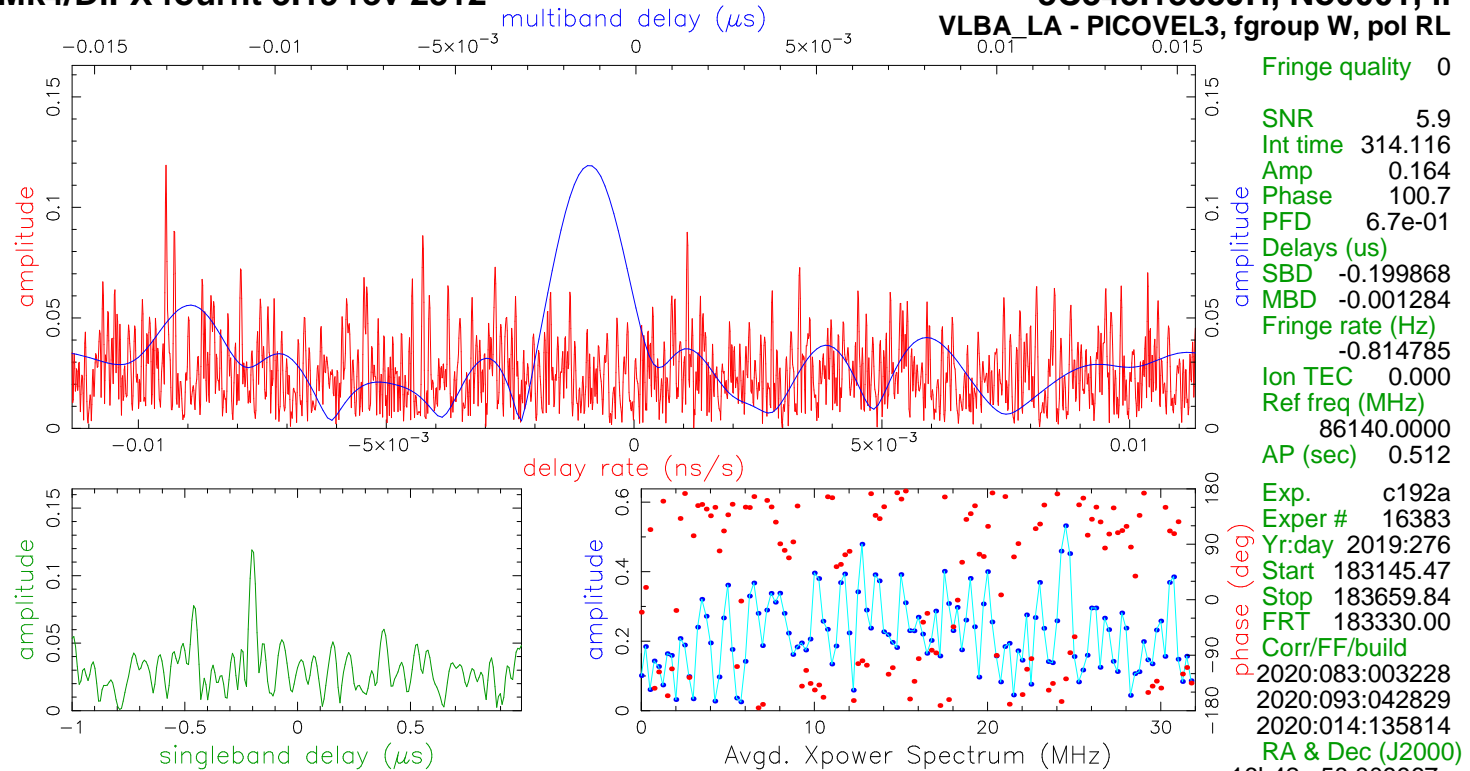
Amp. and Phase vs. time for each freq., 12 segs, 55 APs / seg (28.16 sec / seg.), time ticks 30 sec



	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	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			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
li	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
li	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
i	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		
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks		
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	-5.51194582444E+03			Apriori delay (usec)			-5.51193322710E+03			Resid mbdelay (usec)			-1.25973E-02			+/- 1.1E-04			
Sband delay (usec)	-5.51193174560E+03			Apriori clock (usec)			-2.5128606E-01			Resid sbdelay (usec)			1.48150E-03			+/- 1.7E-03			
Phase delay (usec)	-5.51193323023E+03			Apriori clockrate (us/s)			1.5279932E-09			Resid phdelay (usec)			-3.12269E-06			+/- 3.7E-07			
Delay rate (us/s)	1.45254577772E+00			Apriori rate (us/s)			1.45254561106E+00			Resid rate (us/s)			1.66664E-07			+/- 2.0E-09			
Total phase (deg)	-162.6			Apriori accel (us/s/s)			2.79932495079E-05			Resid phase (deg)			-96.8			+/- 11.4			
ph/seg (deg)	RMS	Theor.	Amplitude			0.208 +/- 0.021			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5							
amp/seg (%)	73.7	19.7	Search (2048X64)			0.206			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000				
ph/frq (deg)	82.2	34.4	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us) -0.016 0.016				
amp/frq (%)	51.4	22.7	Inc. seg. avg.			0.309			Sample rate(MSamp/s): 64			dr window (ns/s)			-0.011 0.011				
	52.9	39.7	Inc. frq. avg.			0.249			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC) 0.00 0.00				

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, li  
VLBA\_LA - PICOVEL3, fgroup W, pol RL



Fringe quality 0

SNR 5.9

Int time 314.116

Amp 0.164

Phase 100.7

PFD 6.7e-01

Delays (us)

SBD -0.199868

MBD -0.001284

Fringe rate (Hz)

-0.814785

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

2020:093:042829

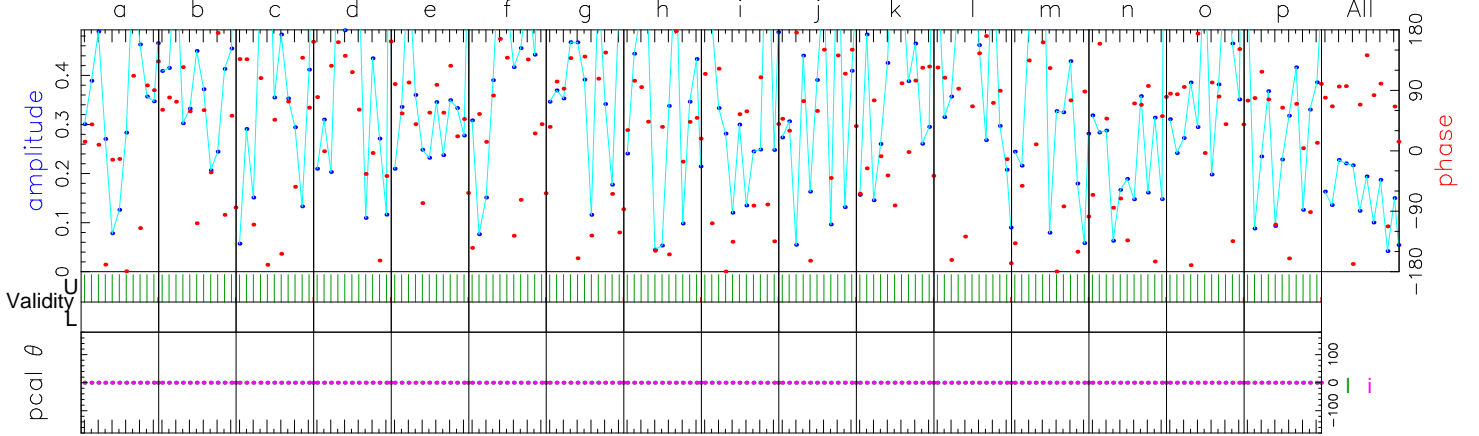
2020:014:135814

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	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			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
li	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
li	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
i	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	
U	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)		-5.51212201119E+03																	
Sband delay (usec)		-5.51213309460E+03																	
Phase delay (usec)		-5.51193322385E+03																	
Delay rate (us/s)		1.45253615221E+00																	
Total phase (deg)			35.0																
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
PCal mode: MANUAL, MANUAL																			
PCal rate: 0.000E+00, 0.000E+00 (us/s)																			
Bits/sample: 2x2																			
Sample rate(MSamp/s): 64																			
Data rate(Mb/s): 2048																			
PCal period (AP's) 5, 5																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
ion window (TEC)																			

ph/seg (deg) 57.6 33.8 Search (2048X64) 0.116 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 55.6 59.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 46.7 39.0 Inc. seg. avg. 0.183 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 49.4 68.1 Inc. frq. avg. 0.161 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011

l: az 63.9 el 37.8 pa -72.0 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 simultaneous interpolator

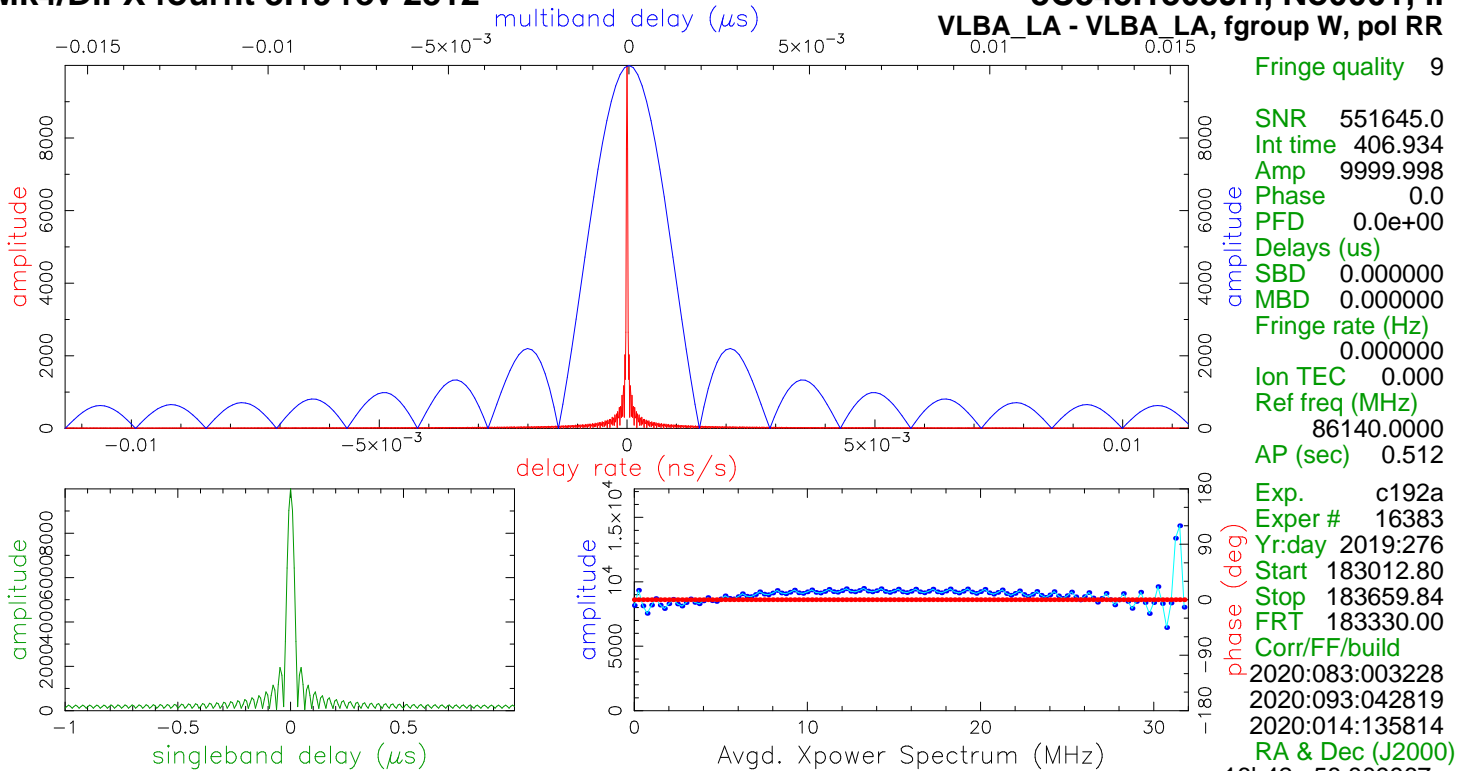
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/li..1305JH Output file: /Exps/c192a/v2/1234/No0001/li.W.246.1305JH





Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, II  
VLBA\_LA - VLBA\_LA, fgroup W, pol RR

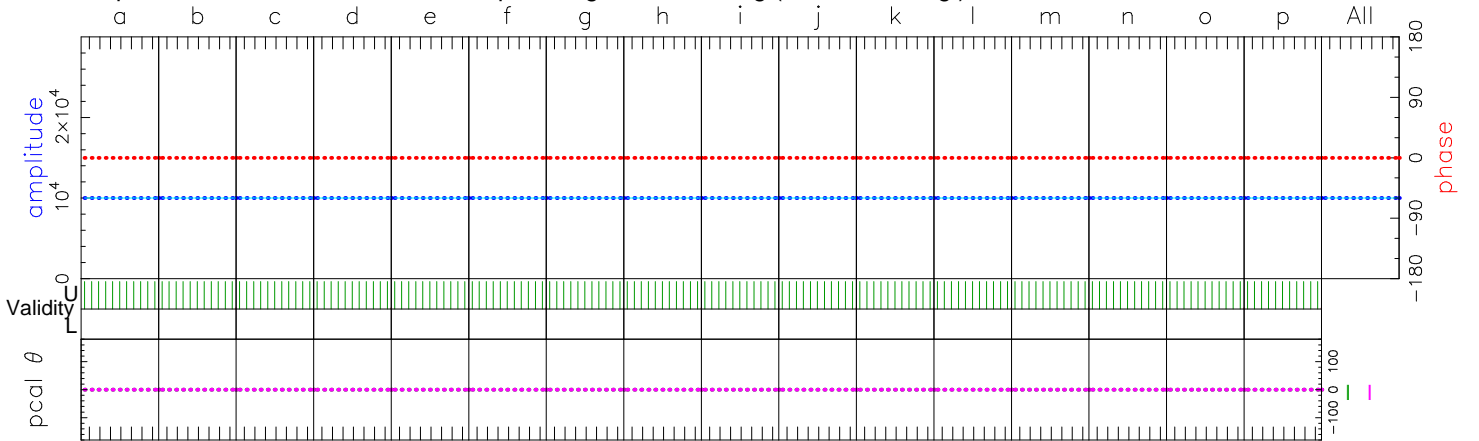


Fringe quality 9

SNR 551645.0  
Int time 406.934  
Amp 9999.998  
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 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042819  
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



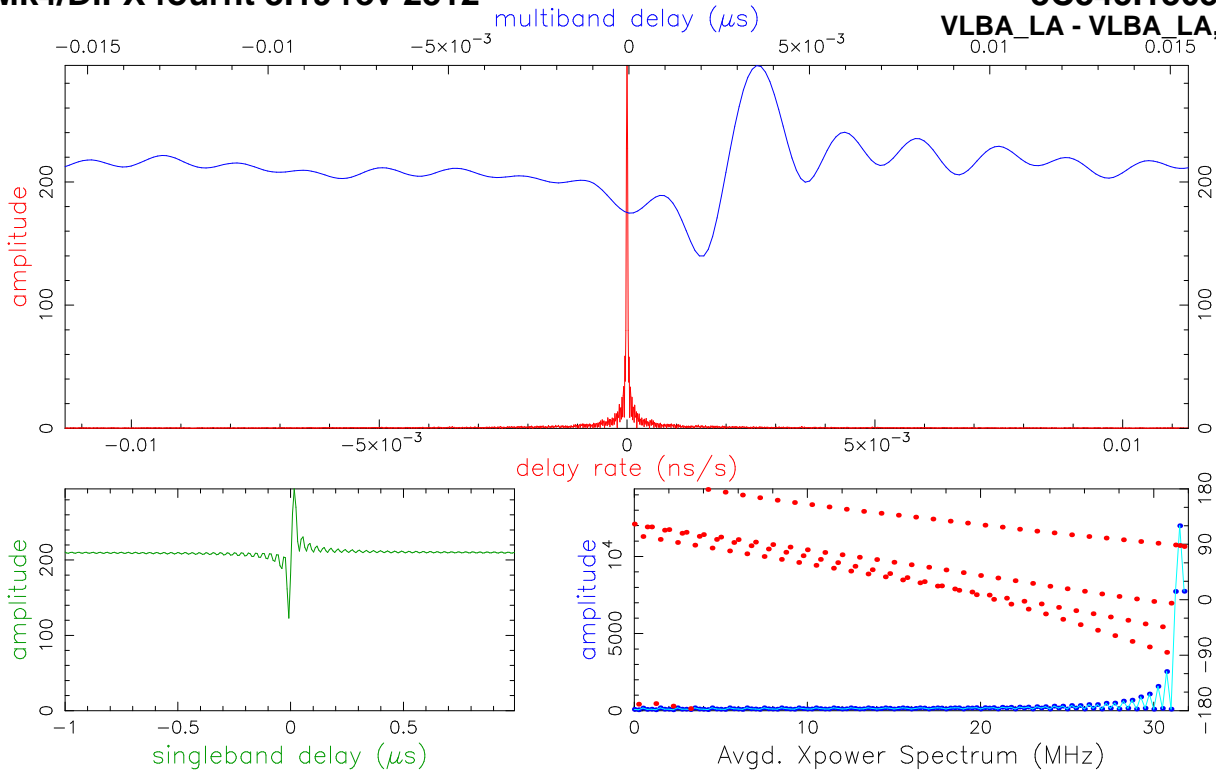
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Q	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
W	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00		+/- 2.0E-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)	2.51783350801E-20		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.51783E-20		+/- 6.7E-12							
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00		+/- 2.9E-14							
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		0.0		+/- 0.0							

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X64) 9999.998 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. 9999.998 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

I: az 63.9 el 37.8 pa -72.0 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IL.1305JH Output file: /Exps/c192a/v2/1234/No0001/IL.W.207.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, II  
VLBA\_LA - VLBA\_LA, fgroup W, pol LR

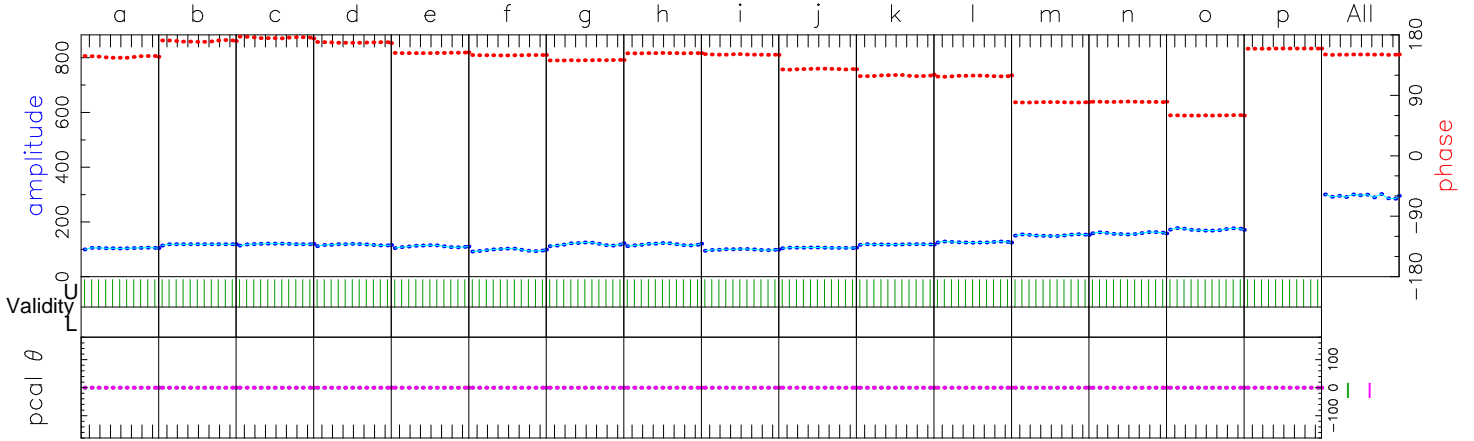


Fringe quality 5

SNR 16249.1  
Int time 406.934  
Amp 294.557  
Phase 150.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.015907  
MBD 0.003562  
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 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042826  
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		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l: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		
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

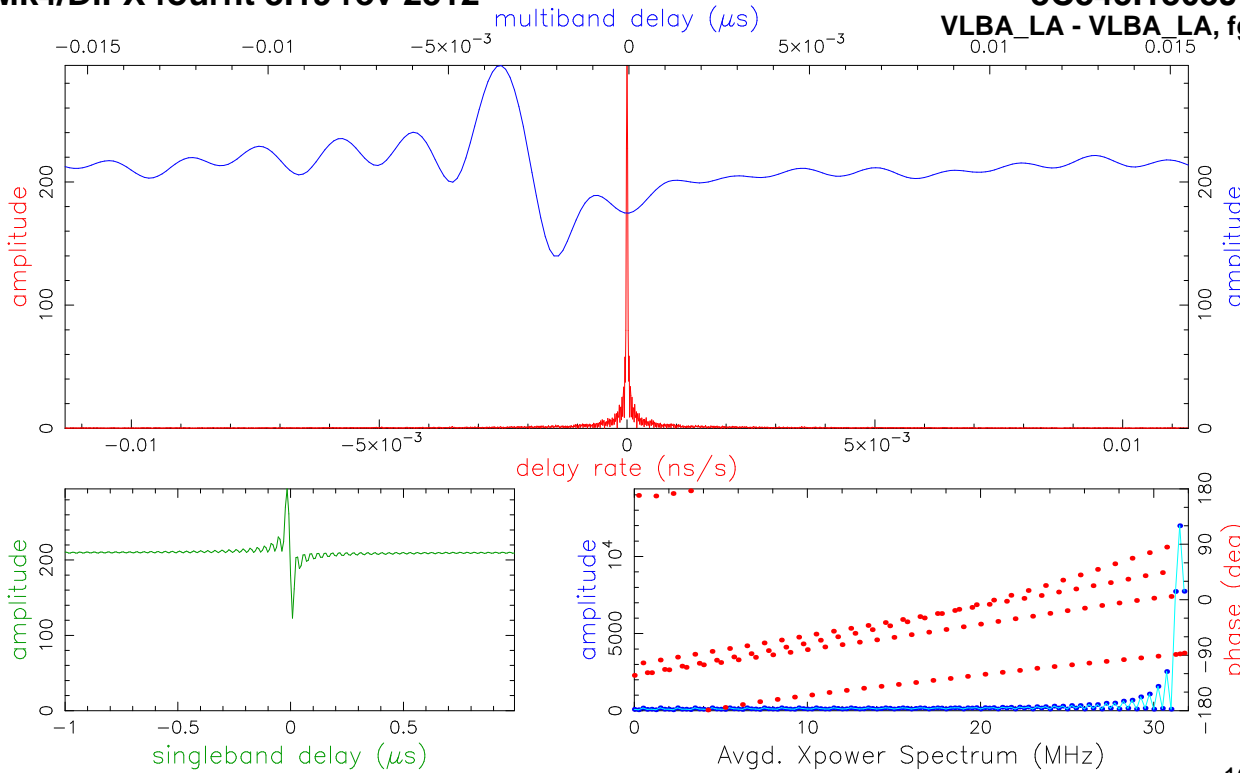
Group delay (usec)(sbd) 3.56243750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 3.56244E-03 +/- 6.6E-08  
 Sband delay (usec) 1.59075000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.59075E-02 +/- 1.1E-06  
 Phase delay (usec) 4.85437514570E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 4.85438E-06 +/- 2.3E-10  
 Delay rate (us/s) -3.25936505009E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -3.25937E-11 +/- 9.7E-13  
 Total phase (deg) 150.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 150.5 +/- 0.0

RMS Theor. Amplitude 294.557 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.0 Search (2048X64) 291.493 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.9 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 39.8 0.0 Inc. seg. avg. 294.520 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 267.0 0.0 Inc. frq. avg. 325.296 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IL.1305JH Output file: /Exps/c192a/v2/1234/No0001/IL.W.234.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, II  
VLBA\_LA - VLBA\_LA, fgroup W, pol RL

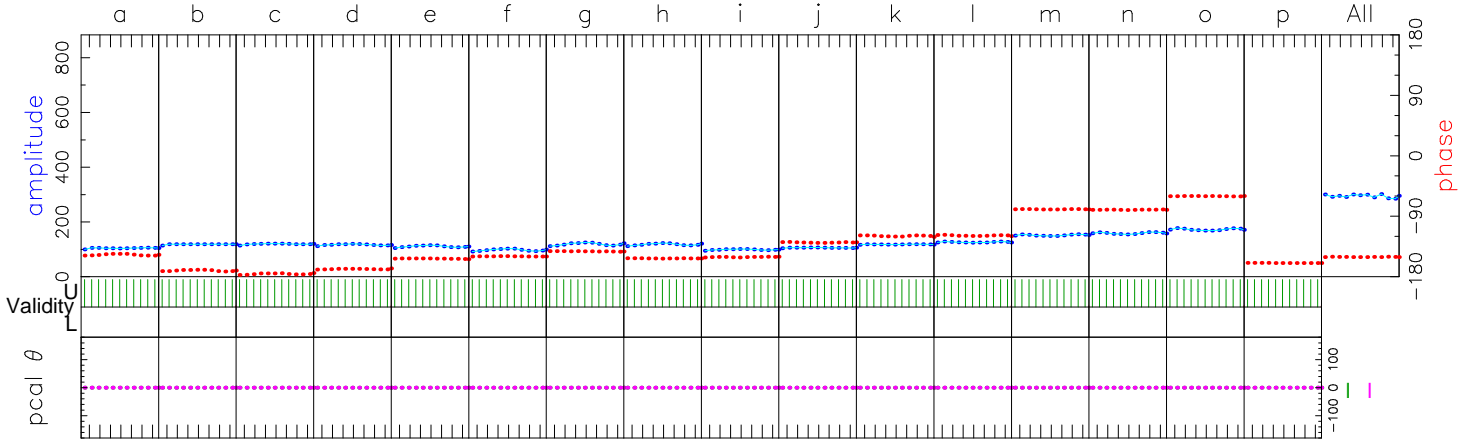


Fringe quality 5

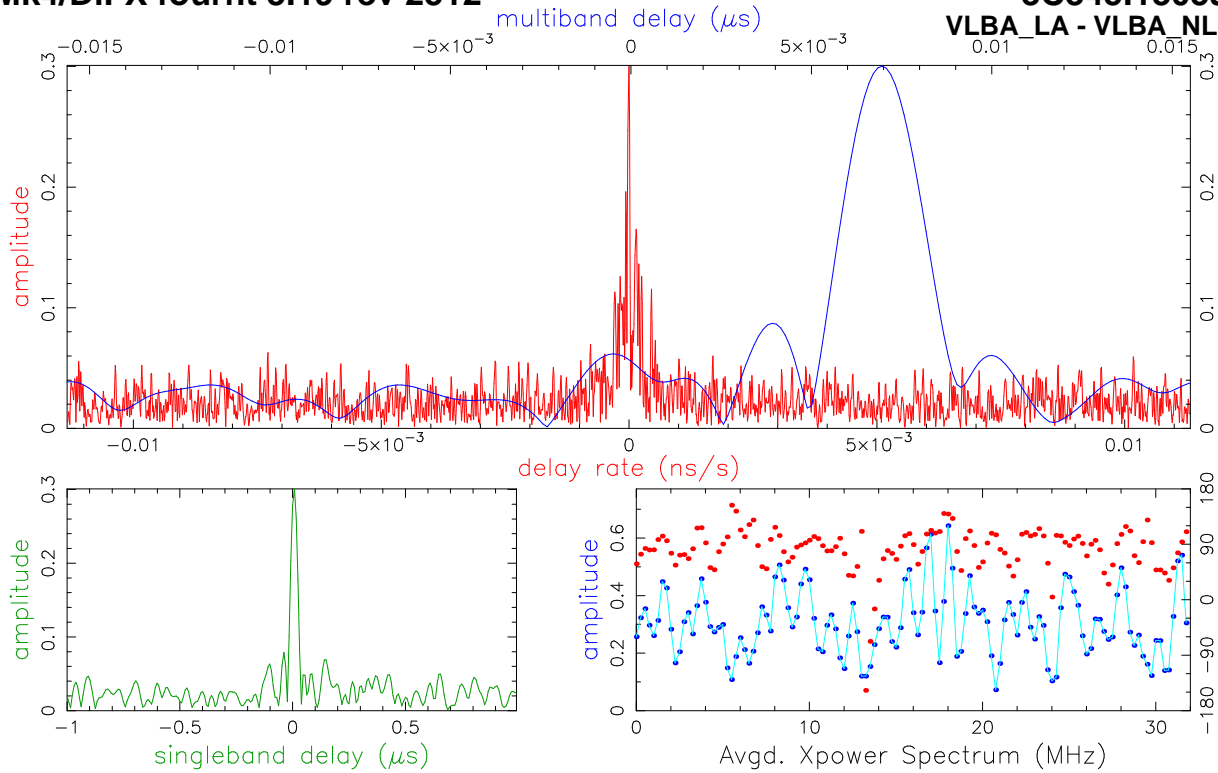
SNR 16249.1  
Int time 406.934  
Amp 294.557  
Phase -150.5  
PFD 0.0e+00  
Delays (us)  
SBD -0.015907  
MBD -0.003562  
Fringe rate (Hz) 0.000003  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:083:003228  
2020:093:042830  
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			
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l: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			
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
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)		-3.56243750000E-03				Apriori delay (usec)				0.00000000000E+00				Resid mbdelay (usec)				-3.56244E-03 +/- 6.6E-08	
Sband delay (usec)		-1.59075000000E-02				Apriori clock (usec)				0.0000000E+00				Resid sbdelay (usec)				-1.59075E-02 +/- 1.1E-06	
Phase delay (usec)		-4.85437514567E-06				Apriori clockrate (us/s)				0.0000000E+00				Resid phdelay (usec)				-4.85438E-06 +/- 2.3E-10	
Delay rate (us/s)		3.25936505009E-11				Apriori rate (us/s)				0.00000000000E+00				Resid rate (us/s)				3.25937E-11 +/- 9.7E-13	
Total phase (deg)		-150.5				Apriori accel (us/s/s)				0.00000000000E+00				Resid phase (deg)				-150.5 +/- 0.0	
ph/seg (deg)	RMS	Theor.	Amplitude		294.557 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000				
amp/seg (%)	0.2	0.0	Search (2048X64)		291.493		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016 0.016						
ph/frq (deg)	1.9	0.0	Interp.		0.000		Sample rate(MISamp/s): 64		Data rate(Mb/s): 2048		nlags: 128 t_cohere infinite		dr window (ns/s)		-0.011 0.011				
amp/frq (%)	39.8	0.0	Inc. seg. avg.		294.520		ion window (TEC)		0.00 0.00		simultaneous interpolator								
amp/frq (%)	267.0	0.0	Inc. frq. avg.		325.296														

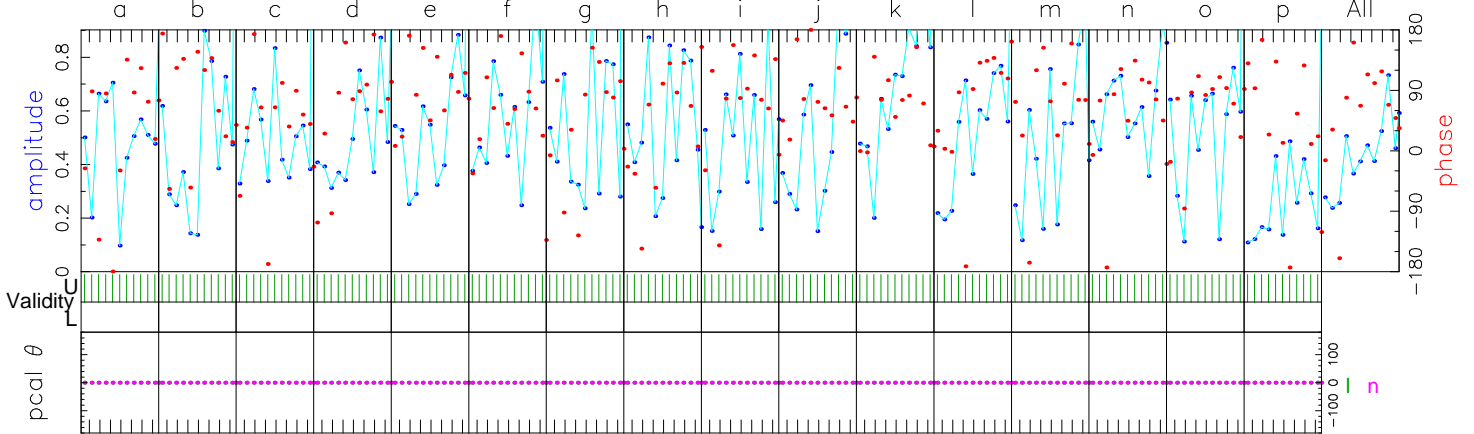


Fringe quality 9

SNR 16.6  
Int time 406.934  
Amp 0.301  
Phase 86.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.006688  
MBD 0.006947  
Fringe rate (Hz) 0.000136  
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  
2020:093:042820  
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			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
l: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			
l: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			
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)		-3.38737453097E+03																	
Sband delay (usec)		-3.38737479029E+03																	
Phase delay (usec)		-3.38738147501E+03																	
Delay rate (us/s)		1.87942734555E-01																	
Total phase (deg)					-92.6														
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
Pcal mode: MANUAL, MANUAL																			
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																			
Bits/sample: 2x2																			
Sample rate(MISamp/s): 64																			
Data rate(Mb/s): 2048																			
nlags: 128																			
t_cohere infinite																			
ion window (TEC)																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
ion window (TEC)																			

ph/seg (deg) 56.9 12.0  
amp/seg (%) 61.1 20.9  
ph/frq (deg) 16.7 13.8  
amp/frq (%) 32.1 24.1

RMS Theor. Amplitude 0.301 +/- 0.018  
Search (2048X64) 0.298  
Interp. 0.000  
Inc. seg. avg. 0.415  
Inc. frq. avg. 0.303

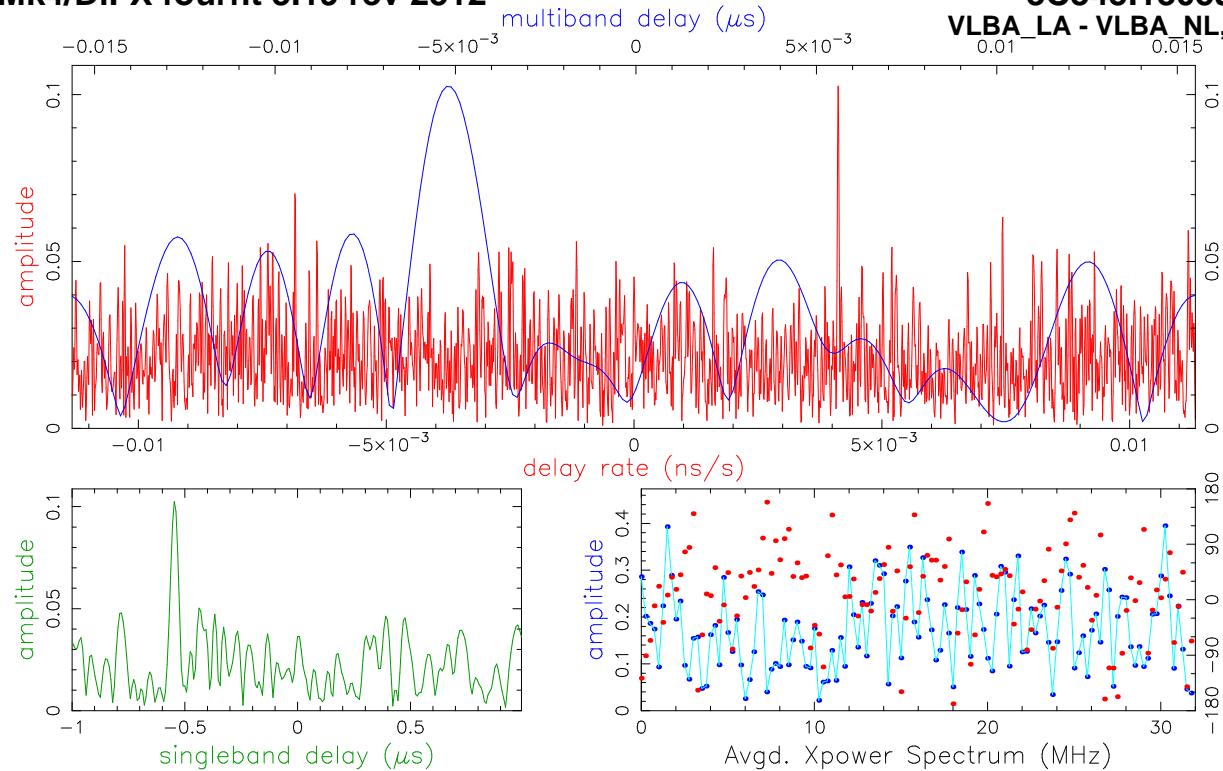
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
SampCntNorm: enabled  
Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite

l: az 63.9 el 37.8 pa -72.0 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1381.185 246.839 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/in..1305JH Output file: /Exps/c192a/v2/1234/No0001/in.W.213.1305JH

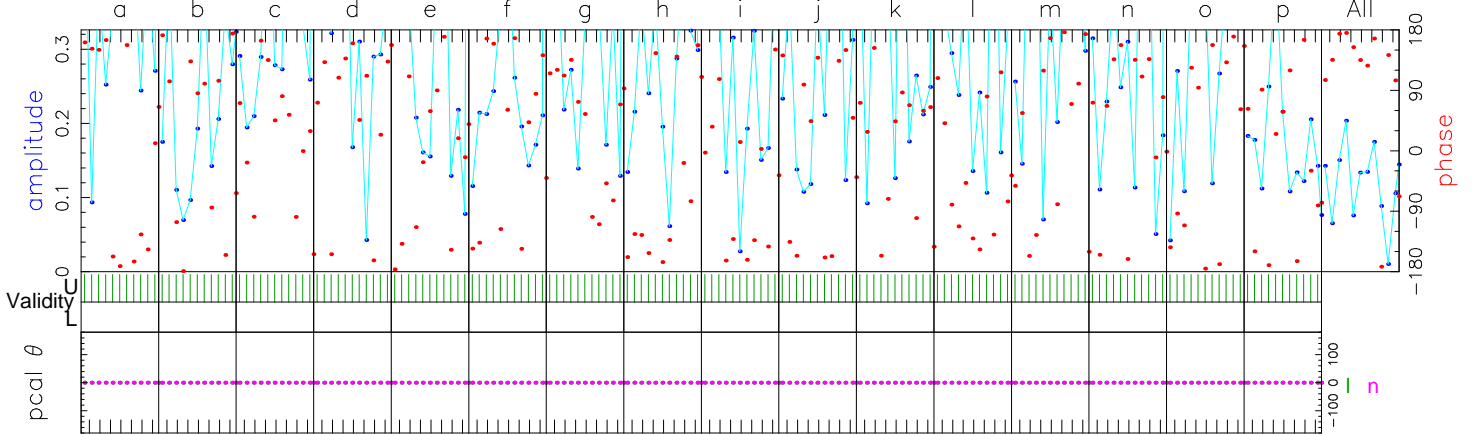






Fringe quality 0  
SNR 5.7  
Int time 406.934  
Amp 0.109  
Phase 149.1  
PFD 9.7e-01  
Delays (us)  
SBD -0.545259  
MBD -0.005178  
Fringe rate (Hz)  
0.355643  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042837  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

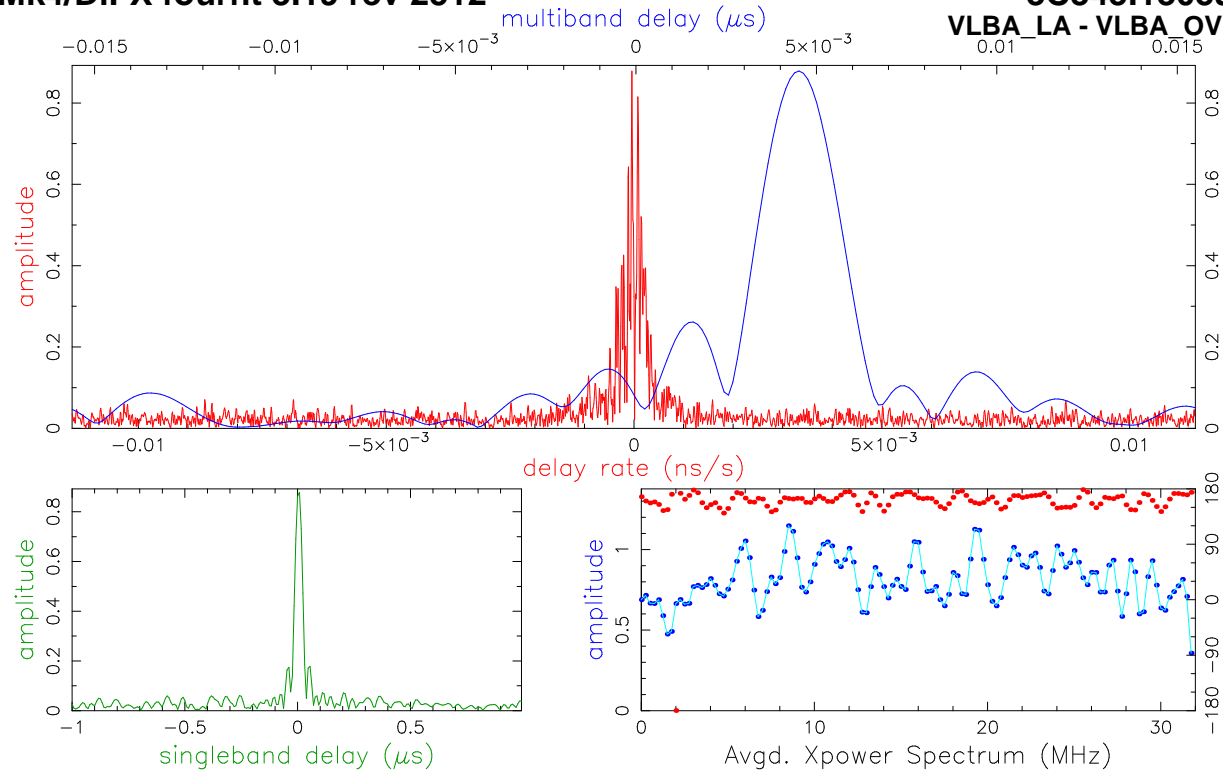
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	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	795/0	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				
Group delay (usec)(sbd)			-3.38791790596E+03																	
Sband delay (usec)			-3.38792673729E+03																	
Phase delay (usec)			-3.38738147298E+03																	
Delay rate (us/s)			1.87946861639E-01																	
Total phase (deg)																				
Apriori delay (usec)																				
Apriori clock (usec)																				
Apriori clockrate (us/s)																				
Apriori rate (us/s)																				
Apriori accel (us/s/s)																				
Resid mbdelay (usec)																				
Resid sbdelay (usec)																				
Resid phdelay (usec)																				
Resid rate (us/s)																				
Resid phase (deg)																				
Pcal mode: MANUAL, MANUAL																				
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																				
Bits/sample: 2x2																				
Sample rate(MISamp/s): 64																				
Data rate(Mb/s): 2048																				
nlags: 128																				
t_cohere infinite																				
sb window (us)																				
mb window (us)																				
dr window (ns/s)																				
ion window (TEC)																				

ph/seg (deg) 28.3 35.0  
amp/seg (%) 52.5 61.0  
ph/frq (deg) 51.3 40.4  
amp/frq (%) 72.4 70.5  
RMS Theor. Amplitude 0.109 +/- 0.019  
Search (2048X64) 0.100  
Interp. 0.000  
Inc. seg. avg. 0.104  
Inc. frq. avg. 0.115  
Pcal mode: MANUAL, MANUAL PC 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  
l: az 63.9 el 37.8 pa -72.0 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1381.185 246.839 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/In..1305JH Output file: /Exps/c192a/v2/1234/No0001/In.W.277.1305JH



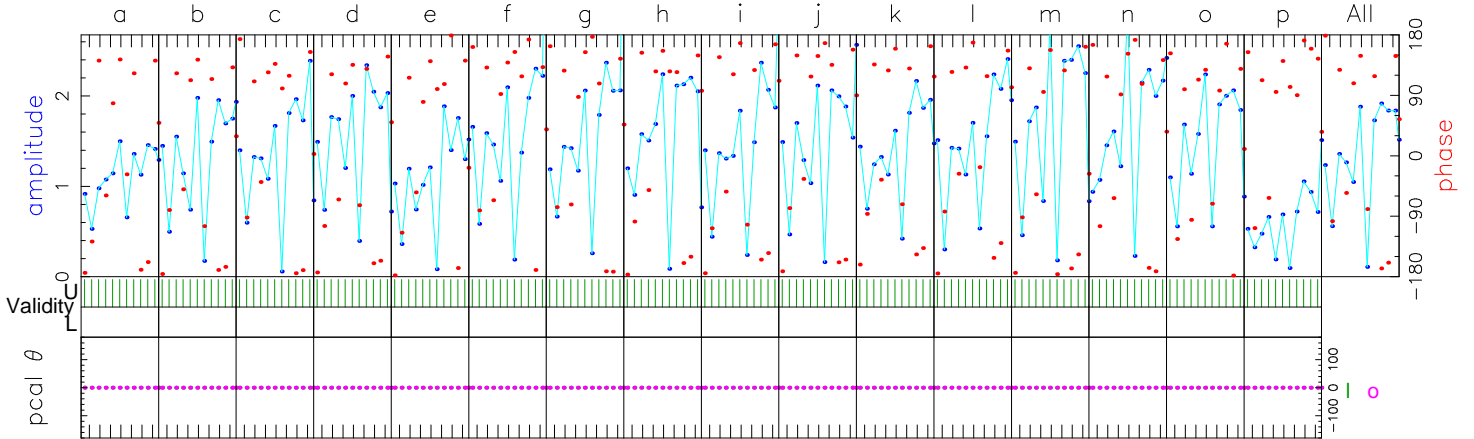


Fringe quality 3

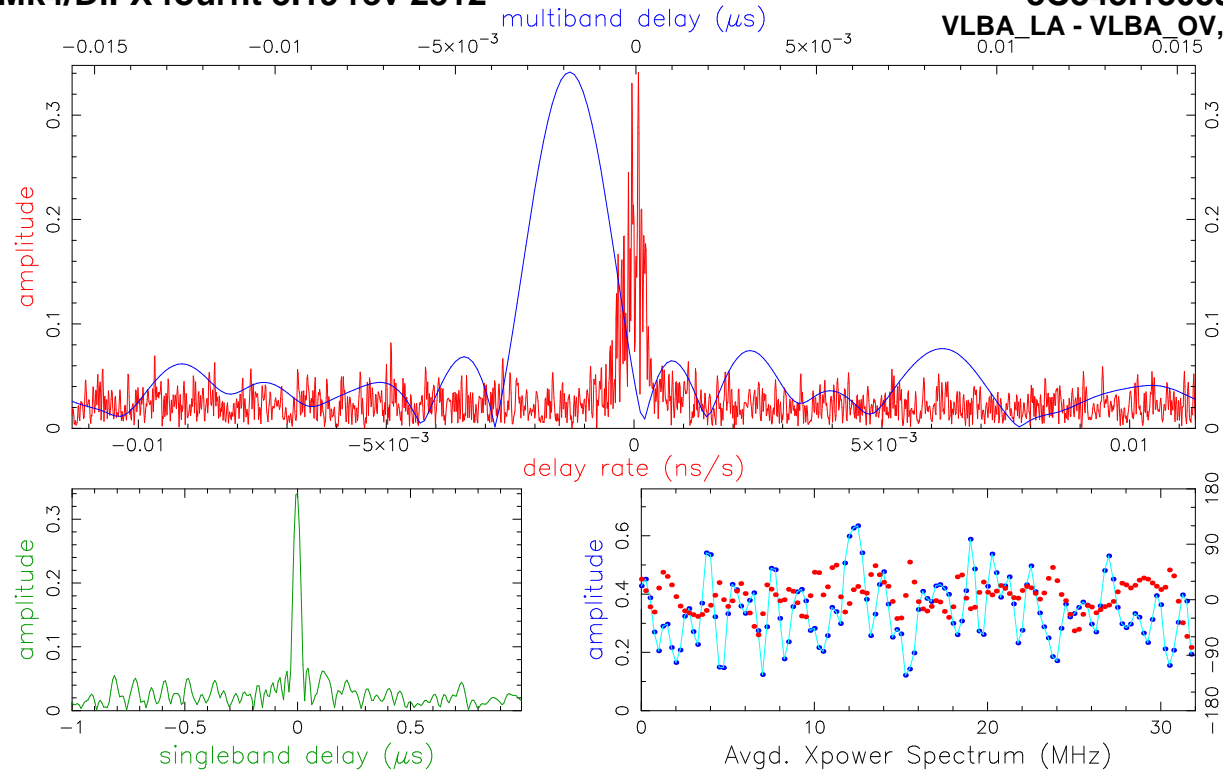
SNR 49.2  
Int time 406.934  
Amp 0.892  
Phase 162.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.004640  
MBD 0.004493  
Fringe rate (Hz)  
-0.003550  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042822  
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	795/0
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			
Group delay (usec)(sbd)	2.41250016585E+03			Apriori delay (usec)			2.41249567319E+03			Resid mbdelay (usec)			4.49265E-03			+/- 2.2E-05			
Sband delay (usec)	2.41250031319E+03			Apriori clock (usec)			-1.7370033E+01			Resid sbdelay (usec)			4.64000E-03			+/- 3.5E-04			
Phase delay (usec)	2.41249567845E+03			Apriori clockrate (us/s)			-3.5245298E-07			Resid phdelay (usec)			5.25410E-06			+/- 7.5E-08			
Delay rate (us/s)	-4.29120559642E-02			Apriori rate (us/s)			-4.29120147566E-02			Resid rate (us/s)			-4.12076E-08			+/- 3.2E-10			
Total phase (deg)	266.9			Apriori accel (us/s/s)			-1.43902509739E-05			Resid phase (deg)			162.9			+/- 2.3			
ph/seg (deg)	RMS	Theor.	Amplitude			0.892 +/- 0.018			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5							
amp/seg (%)	69.7	4.0	Search (2048X64)			0.854			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000				
ph/frq (deg)	81.0	7.0	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016		
amp/frq (%)	12.4	4.7	Inc. seg. avg.			1.342			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011				
	21.4	8.1	Inc. frq. avg.			0.893			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00		

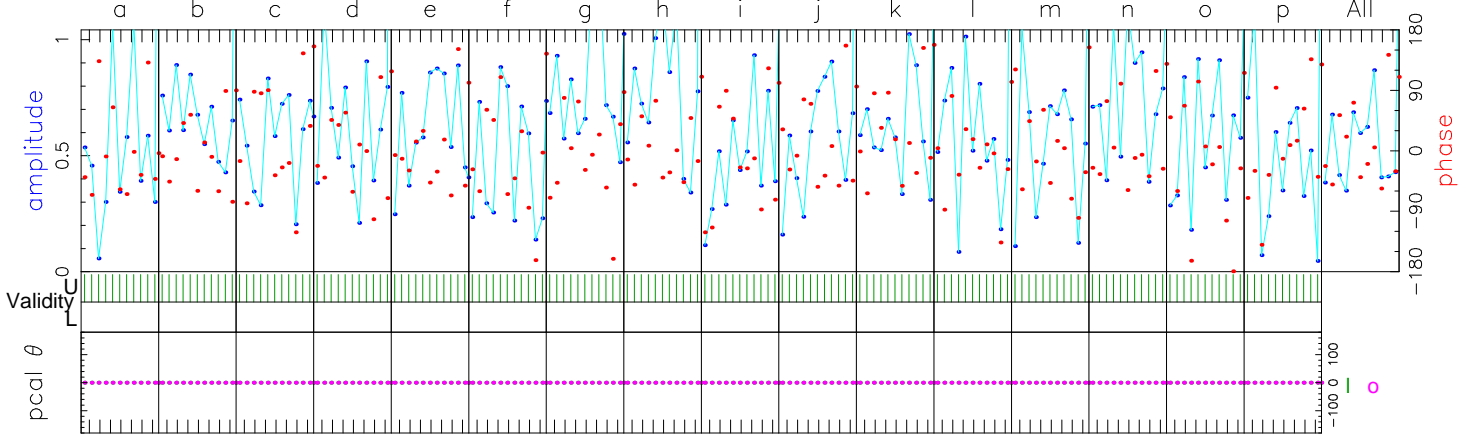


Fringe quality 7

SNR 19.2  
Int time 406.934  
Amp 0.348  
Phase -4.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.003544  
MBD -0.001882  
Fringe rate (Hz) 0.007516  
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  
2020:093:042827  
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
	-11.7	-8.4	10.3	-2.9	-15.7	-18.4	-5.3	-4.2	7.7	-16.6	10.6	3.7	-17.9	-9.9	24.8	0.8	Phase	-4.8
	0.3	0.5	0.2	0.3	0.4	0.2	0.5	0.6	0.2	0.4	0.3	0.4	0.4	0.5	0.2	0.2	Ampl.	0.3
	128.0	128.4	127.6	129.3	129.3	176.6	128.9	129.1	68.7	128.7	128.9	129.0	128.6	128.3	127.9	127.4	Sbd box	128.5
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	
l	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	
lo	0:0	0:0	0:0	0:0	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	
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
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)	2.41249379117E+03			Apriori delay (usec)			2.41249567319E+03			Resid mbdelay (usec)			-1.88203E-03			+/- 5.6E-05		
Sband delay (usec)	2.41249212919E+03			Apriori clock (usec)			-1.7370033E+01			Resid sbdelay (usec)			-3.54400E-03			+/- 9.0E-04		
Phase delay (usec)	2.41249567304E+03			Apriori clockrate (us/s)			-3.5245298E-07			Resid phdelay (usec)			-1.54201E-07			+/- 1.9E-07		
Delay rate (us/s)	-4.29119275083E-02			Apriori rate (us/s)			-4.29120147566E-02			Resid rate (us/s)			8.72482E-08			+/- 8.2E-10		
Total phase (deg)	99.2			Apriori accel (us/s/s)			-1.43902509739E-05			Resid phase (deg)			-4.8			+/- 6.0		

ph/seg (deg) 59.6 10.4  
amp/seg (%) 73.0 18.1  
ph/frq (deg) 12.8 12.0  
amp/frq (%) 33.1 20.9

RMS Theor. Amplitude 0.348 +/- 0.018  
Search (2048X64) 0.338  
Interp. 0.000  
Inc. seg. avg. 0.527  
Inc. frq. avg. 0.339

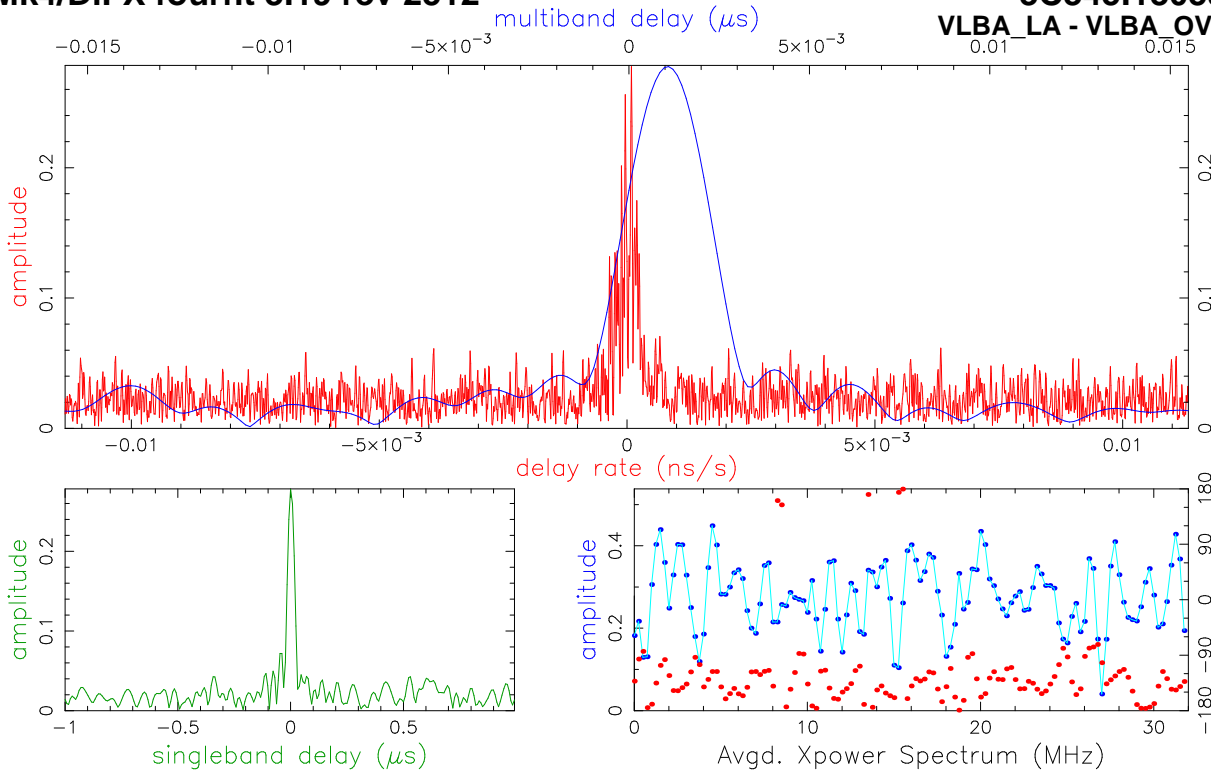
l: az 63.9 el 37.8 pa -72.0  
o: az 60.7 el 29.9 pa -64.6  
u,v (fr/asec) 294.771 -1083.386

Group delay (usec)(sbd) 2.41249379117E+03 Apriori delay (usec) 2.41249567319E+03 Resid mbdelay (usec) -1.88203E-03 +/- 5.6E-05  
Sband delay (usec) 2.41249212919E+03 Apriori clock (usec) -1.7370033E+01 Resid sbdelay (usec) -3.54400E-03 +/- 9.0E-04  
Phase delay (usec) 2.41249567304E+03 Apriori clockrate (us/s) -3.5245298E-07 Resid phdelay (usec) -1.54201E-07 +/- 1.9E-07  
Delay rate (us/s) -4.29119275083E-02 Apriori rate (us/s) -4.29120147566E-02 Resid rate (us/s) 8.72482E-08 +/- 8.2E-10  
Total phase (deg) 99.2 Apriori accel (us/s/s) -1.43902509739E-05 Resid phase (deg) -4.8 +/- 6.0

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

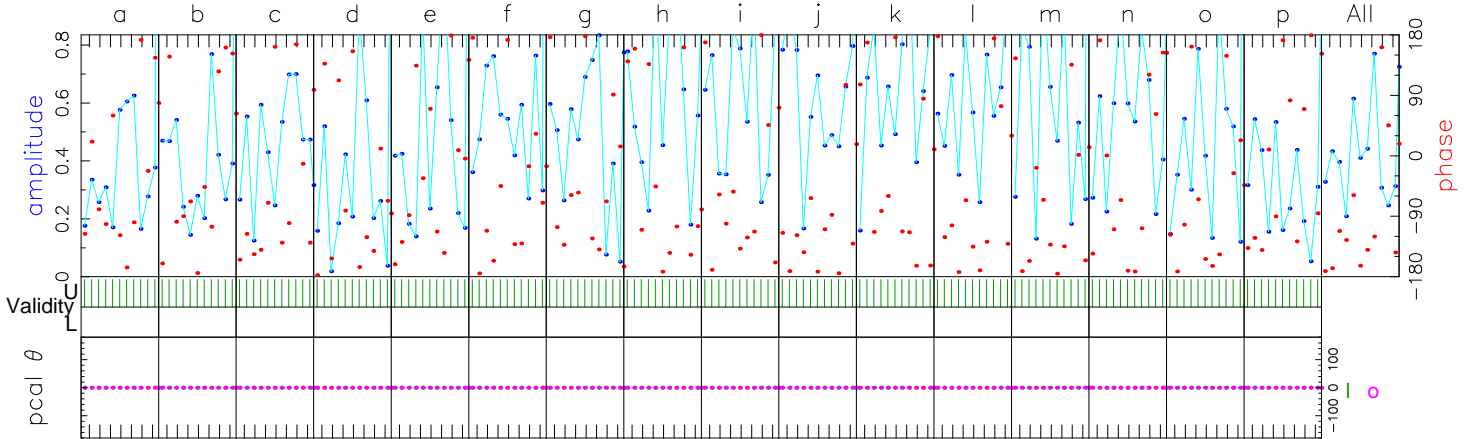
simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.239.1305JH



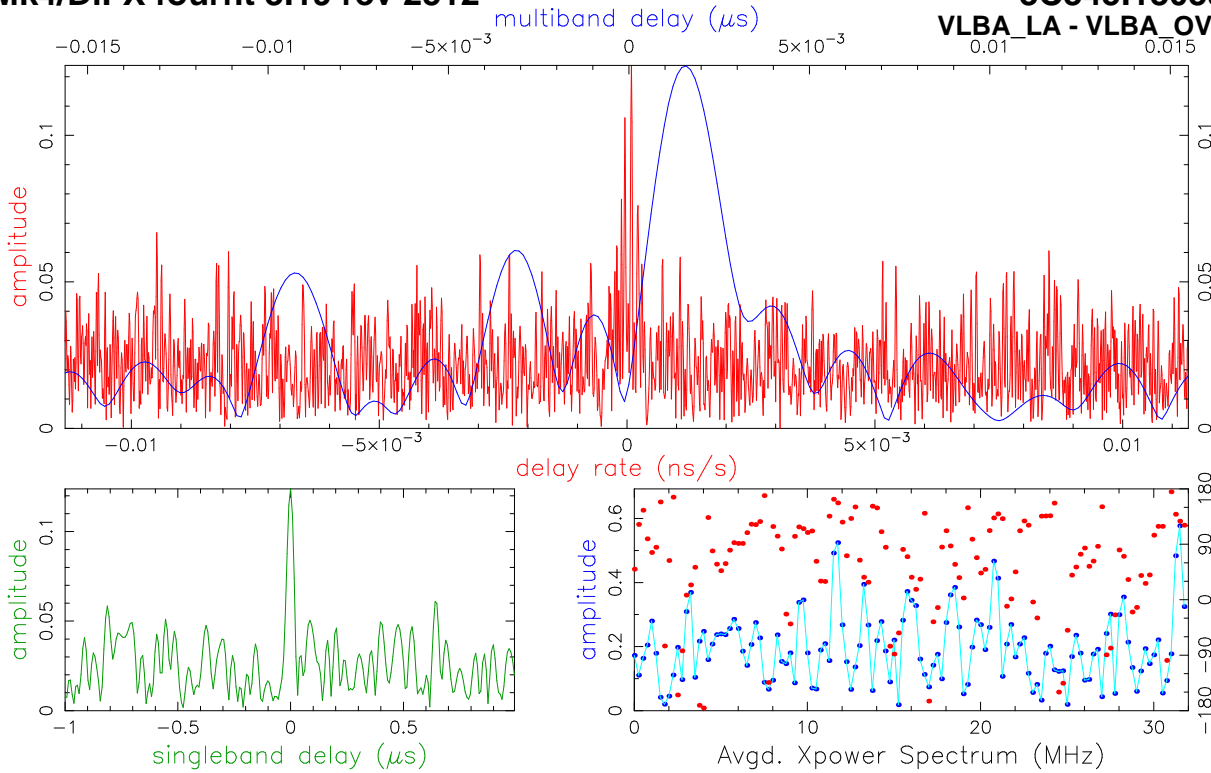
Fringe quality 9  
SNR 15.4  
Int time 406.934  
Amp 0.278  
Phase -134.8  
PFD 2.0e-44  
Delays (us)  
SBD 0.001388  
MBD 0.001080  
Fringe rate (Hz) 0.007244  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:083:003228  
2020:093:042831  
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
	-119.6	-152.4	-127.2	-157.6	-122.5	-125.3	-130.8	-141.6	-130.7	-137.5	-135.1	-136.0	-136.6	-148.3	-128.3	-123.4		Phase -134.8
	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2		Ampl. 0.3
	233.3	248.5	129.4	68.7	32.0	128.6	128.8	128.8	129.7	129.3	129.4	129.6	129.1	128.8	128.8	129.2		Sbd box 129.2
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
l	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 phase
l: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
l: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 amp
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)			2.41249675276E+03					Apriori delay (usec)		2.41249567319E+03				Resid mbdelay (usec)		1.07957E-03		+/- 7.0E-05
Sband delay (usec)			2.41249706119E+03					Apriori clock (usec)		-1.7370033E+01				Resid sbdelay (usec)		1.38800E-03		+/- 1.1E-03
Phase delay (usec)			2.41249566885E+03					Apriori clockrate (us/s)		-3.5245298E-07				Resid phdelay (usec)		-4.34586E-06		+/- 2.4E-07
Delay rate (us/s)			-4.29119306565E-02					Apriori rate (us/s)		-4.29120147566E-02				Resid rate (us/s)		8.41001E-08		+/- 1.0E-09
Total phase (deg)					-30.8			Apriori accel (us/s/s)		-1.43902509739E-05				Resid phase (deg)		-134.8		+/- 7.5

ph/seg (deg) 65.5 12.9 Theor. Amplitude 0.278 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 73.0 22.5 Search (2048X64) 0.268 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 11.4 14.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 29.8 26.0 Inc. seg. avg. 0.398 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.255.1305JH simultaneous interpolator

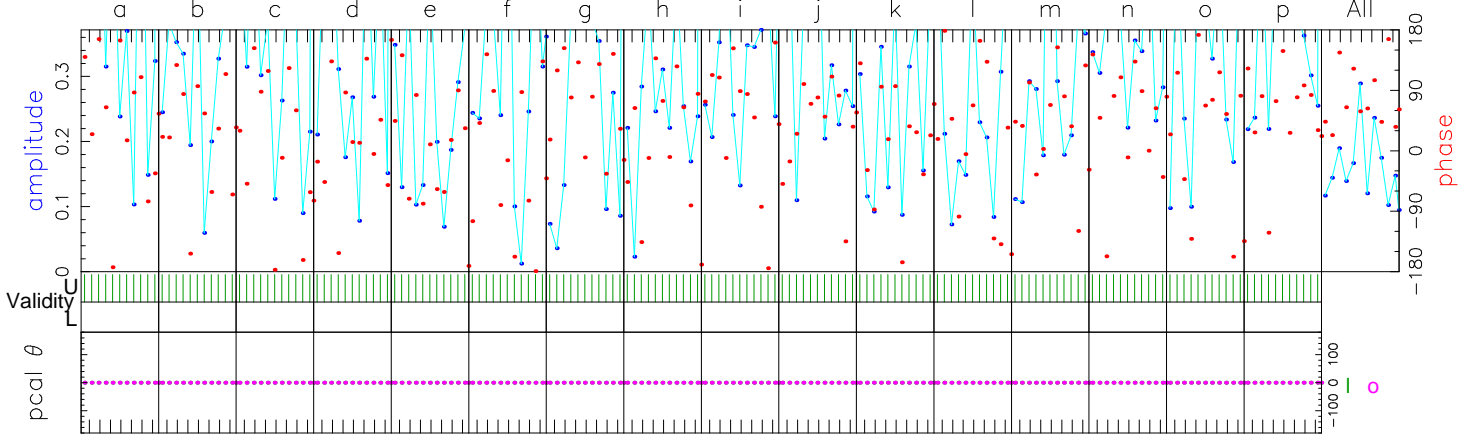


Fringe quality 0

SNR 6.8  
Int time 406.934  
Amp 0.124  
Phase 76.2  
PFD 2.4e-03  
Delays (us)  
SBD -0.000853  
MBD 0.001563  
Fringe rate (Hz)  
0.007372  
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  
2020:093:042837  
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



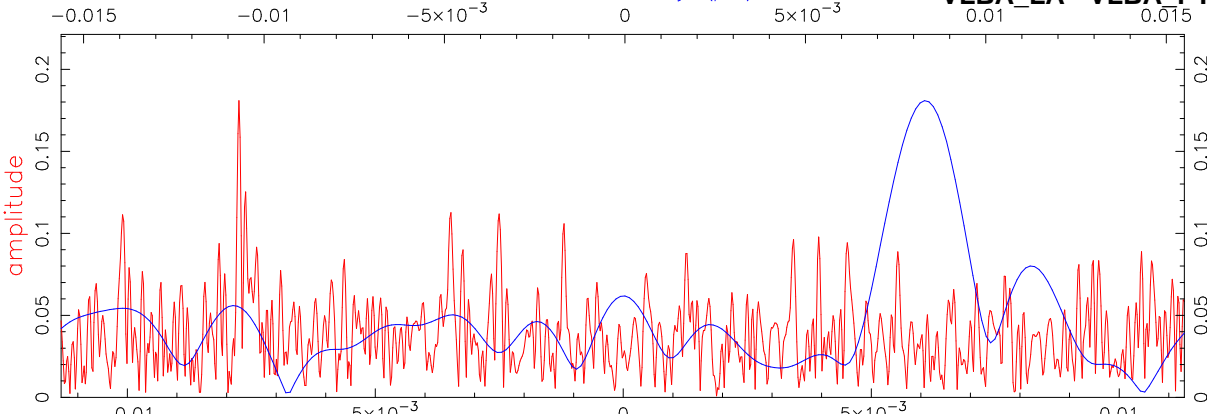
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	115.9	66.3	88.4	56.2	10.5	157.0	90.6	64.9	96.8	58.2	53.5	65.3	73.3	78.3	102.1	77.8	Phase	76.2
	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	Ampl.	0.1
	74.9	1.4	94.1	39.7	82.3	255.6	2.8	233.9	115.8	129.9	59.0	69.9	33.7	29.2	100.4	129.1	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	
l	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	
lo	0:0	0:0	0:0	0:0	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	
lo	0:0	0:0	0:0	0:0	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	
l	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	
l	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) 2.41249723642E+03 Apriori delay (usec) 2.41249567319E+03 Resid mbdelay (usec) 1.56322E-03 +/- 1.6E-04  
 Sband delay (usec) 2.41249482019E+03 Apriori clock (usec) -1.7370033E+01 Resid sbdelay (usec) -8.53000E-04 +/- 2.5E-03  
 Phase delay (usec) 2.41249567565E+03 Apriori clockrate (us/s) -3.5245298E-07 Resid phdelay (usec) 2.45835E-06 +/- 5.4E-07  
 Delay rate (us/s) -4.29119291770E-02 Apriori rate (us/s) -4.29120147566E-02 Resid rate (us/s) 8.55796E-08 +/- 2.3E-09  
 Total phase (deg) 180.2 Apriori accel (us/s/s) -1.43902509739E-05 Resid phase (deg) 76.2 +/- 16.8

RMS Theor. Amplitude 0.124 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 45.8 29.0 Search (2048X64) 0.122 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 54.7 50.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 33.2 33.5 Inc. seg. avg. 0.147 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 48.6 58.5 Inc. frq. avg. 0.116 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

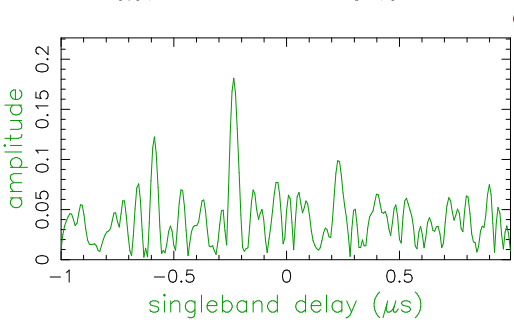
l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.279.1305JH

multiband delay ( $\mu$ s)

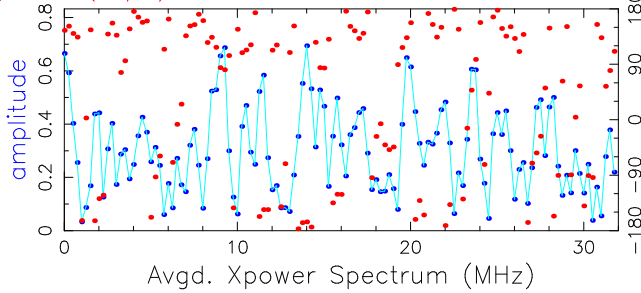


Fringe quality 0

SNR 5.8  
Int time 138.827  
Amp 0.221  
Phase -166.1  
PFD 5.0e-01  
Delays (us)  
SBD -0.234734  
MBD 0.008316  
Fringe rate (Hz)  
-0.669283  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

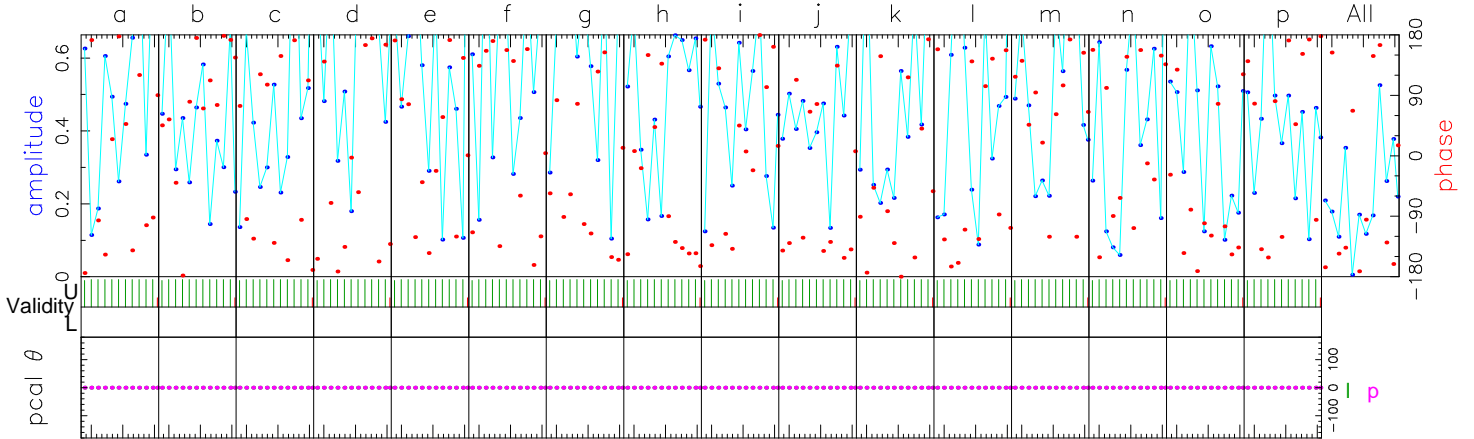


delay rate (ns/s)



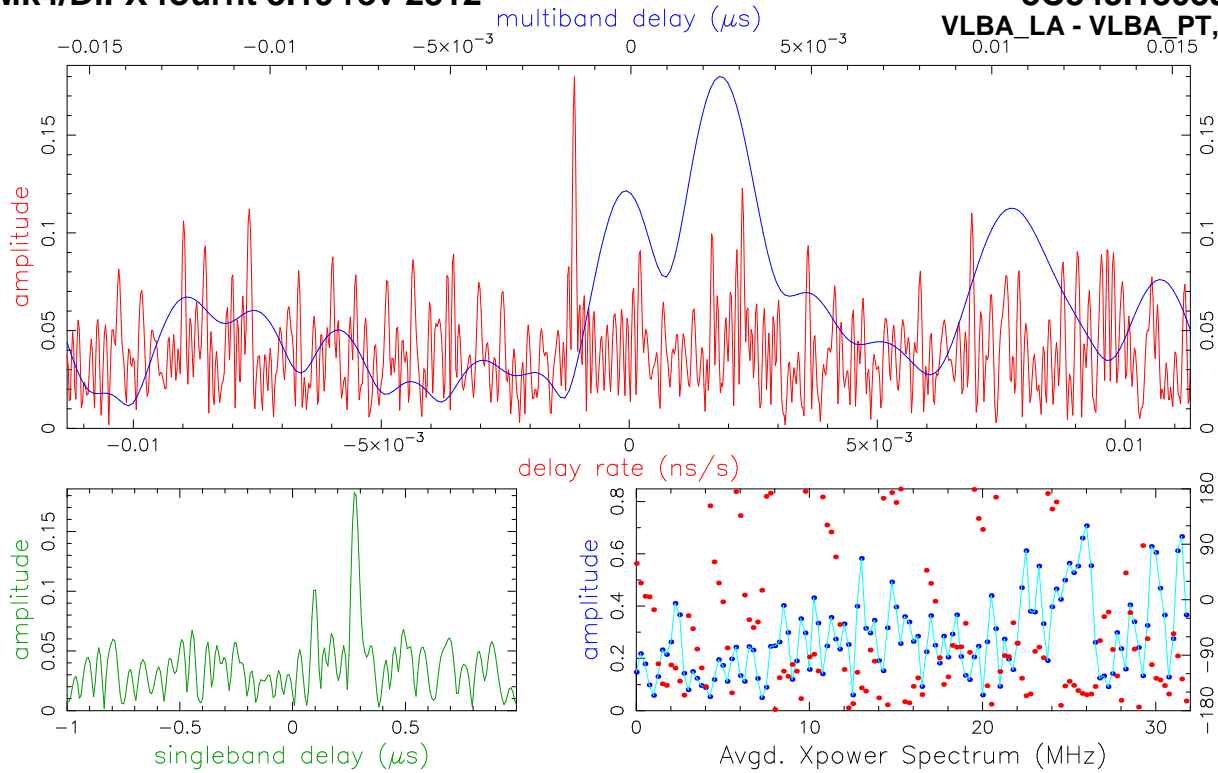
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183440.58  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042819  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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	
	-171.3	105.8	-167.4	-151.7	-127.4	-168.3	-122.9	-122.2	-175.0	-165.4	-162.7	-164.4	129.9	-154.7	-130.0	-179.2		Phase	-166.1
	0.2	0.3	0.3	0.5	0.1	0.4	0.2	0.3	0.1	0.2	0.3	0.4	0.3	0.2	0.2	0.3		Ampl.	0.2
	226.4	204.1	228.4	124.2	146.1	255.5	93.9	76.9	177.1	70.6	104.7	155.2	1.4	219.9	13.4	156.0		Sbd box	99.0
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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
lp	0:0	0:0	0:0	0:0	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	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)	5.85299629245E+02			Apriori delay (usec)			5.85541312802E+02			Resid mbdelay (usec)			8.31644E-03			+/- 1.9E-04			
Sband delay (usec)	5.85306578802E+02			Apriori clock (usec)			-1.2646159E+01			Resid sbdelay (usec)			-2.34734E-01			+/- 3.0E-03			
Phase delay (usec)	5.85541307447E+02			Apriori clockrate (us/s)			-5.5535860E-07			Resid phdelay (usec)			-5.35471E-06			+/- 6.3E-07			
Delay rate (us/s)	-2.84988058615E-02			Apriori rate (us/s)			-2.84910361502E-02			Resid rate (us/s)			-7.76971E-06			+/- 7.9E-09			
Total phase (deg)	80.5			Apriori accel (us/s/s)			-1.66334602352E-06			Resid phase (deg)			-166.1			+/- 19.7			
ph/seg (deg)	RMS	Theor.	Amplitude		0.221 +/- 0.038		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000		1.000				
amp/seg (%)	58.8	34.0	Search (1024X64)		0.179		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016		0.016				
ph/frq (deg)	79.8	59.4	Interp.		0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011				
amp/frq (%)	36.9	39.3	Inc. seg. avg.		0.234		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00		
	52.0	68.6	Inc. frq. avg.		0.211														

l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 209.779 31.809 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lp..1305JH Output file: /Exps/c192a/v2/1234/No0001/lp.W.210.1305JH

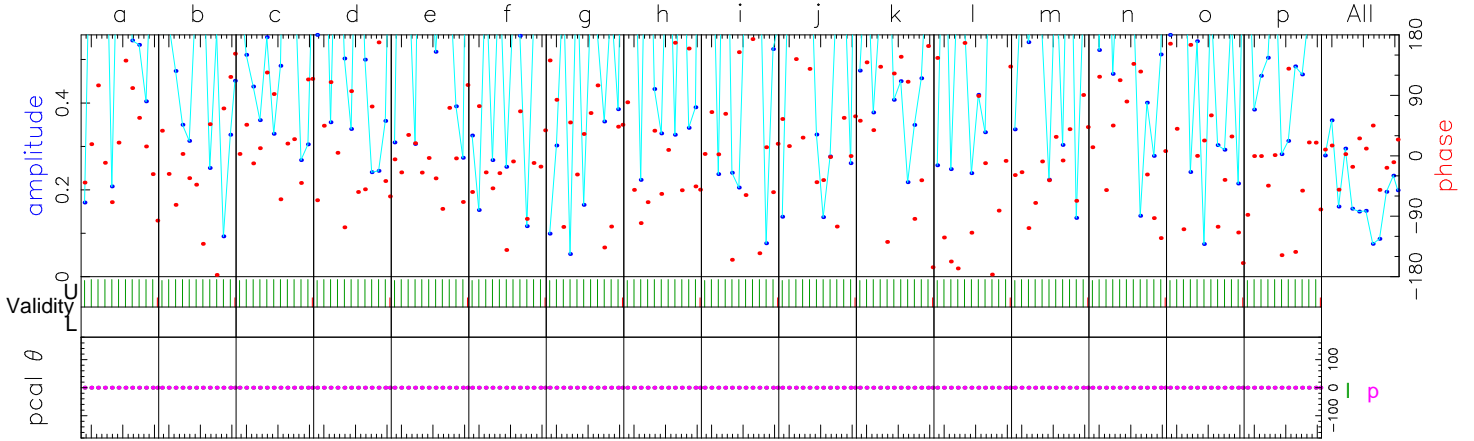


Fringe quality 0

SNR 6.0  
Int time 138.827  
Amp 0.186  
Phase -0.3  
PFD 2.8e-01  
Delays (us)  
SBD 0.276533  
MBD 0.002539  
Fringe rate (Hz)  
-0.096416  
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  
2020:093:042822  
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

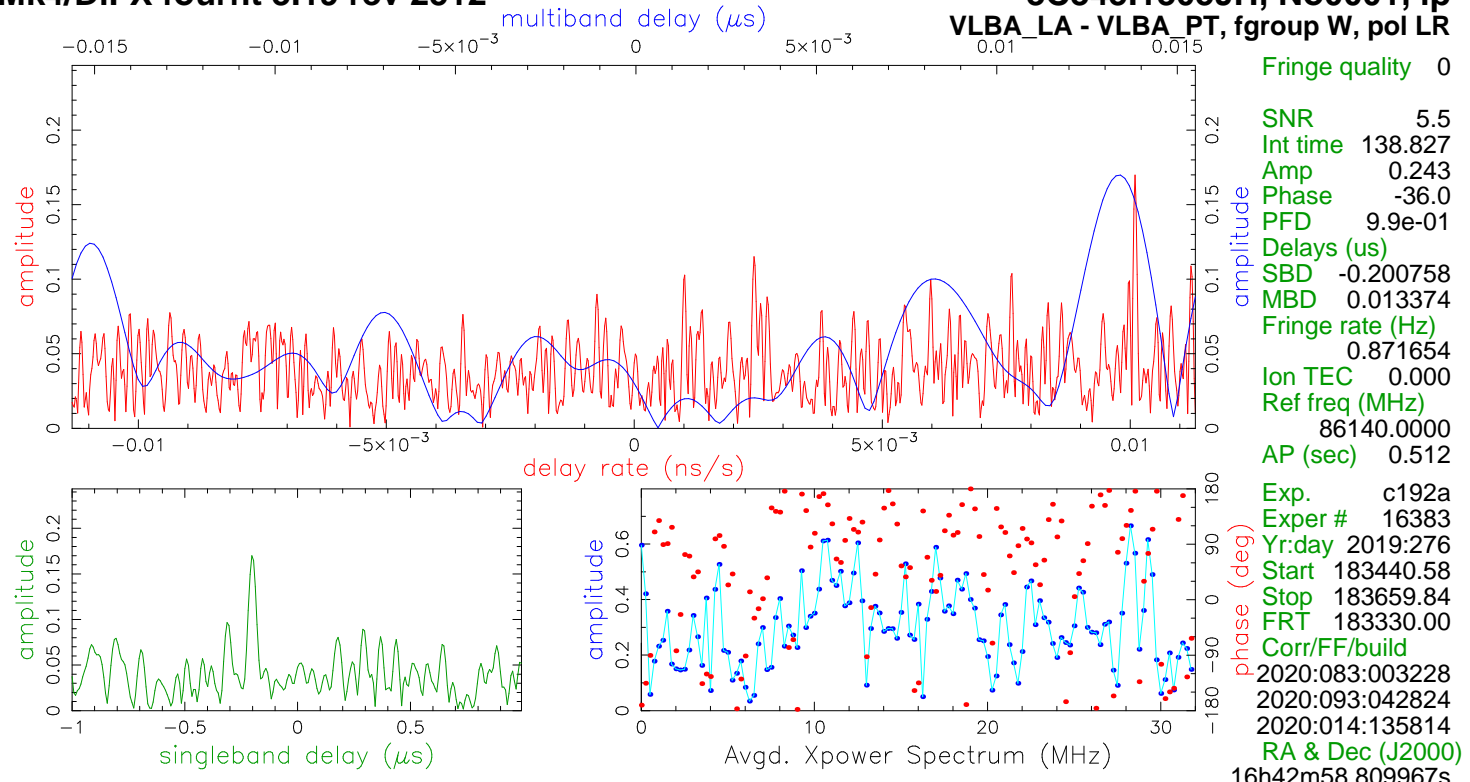


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		5.85825101696E+02																
Sband delay (usec)		5.85817845802E+02																
Phase delay (usec)		5.85541312792E+02																
Delay rate (us/s)		-2.84921554403E-02																
Total phase (deg)				246.2														
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
sb window (us)																		
Bits/sample: 2x2																		
SampCntNorm: enabled																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		

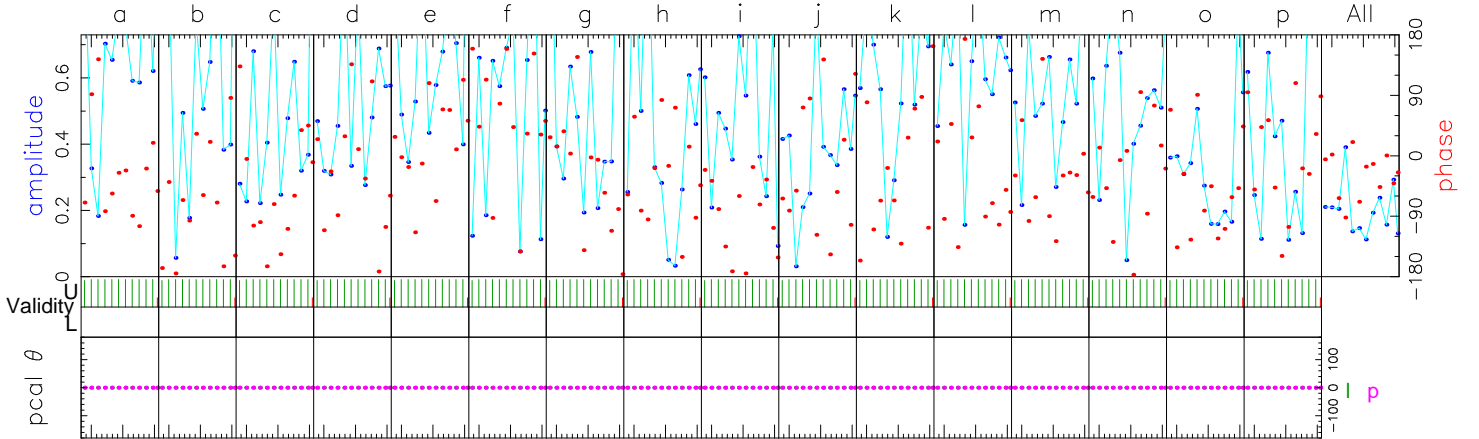
ph/seg (deg) 28.4 33.3 Search (1024X64) 0.178 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 45.2 58.1 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 62.3 38.5 Inc. seg. avg. 0.167 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 73.5 67.1 Inc. frq. avg. 0.208 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 209.779 31.809 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lp..1305JH Output file: /Exps/c192a/v2/1234/No0001/lp.W.219.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, lp  
VLBA\_LA - VLBA\_PT, fgroup W, pol LR



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
	-46.2	-58.7	-74.4	-13.6	25.1	91.4	-16.2	-42.3	-72.7	-95.5	-11.2	-58.0	-45.7	-37.1	-58.9	21.0	Phase	-36.0
	0.7	0.3	0.3	0.2	0.6	0.3	0.3	0.3	0.4	0.2	0.0	0.3	0.5	0.3	0.2	0.3	Ampl.	0.3
	102.2	15.4	149.6	129.4	104.6	66.1	153.0	90.7	218.3	239.3	24.9	143.2	104.8	41.5	222.9	224.9	Sbd box	103.3
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	272/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
lp	0:0	0:0	0:0	0:0	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	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	5.85335937172E+02			Apriori delay (usec)			5.85541312802E+02			Resid mbdelay (usec)			1.33744E-02			+/- 2.0E-04		
Sband delay (usec)	5.85340554802E+02			Apriori clock (usec)			-1.2646159E+01			Resid sbdelay (usec)			-2.00758E-01			+/- 3.1E-03		
Phase delay (usec)	5.85541311642E+02			Apriori clockrate (us/s)			-5.5535860E-07			Resid phdelay (usec)			-1.16016E-06			+/- 6.7E-07		
Delay rate (us/s)	-2.84809171128E-02			Apriori rate (us/s)			-2.84910361502E-02			Resid rate (us/s)			1.01190E-05			+/- 8.3E-09		
Total phase (deg)	210.5			Apriori accel (us/s/s)			-1.66334602352E-06			Resid phase (deg)			-36.0			+/- 20.8		

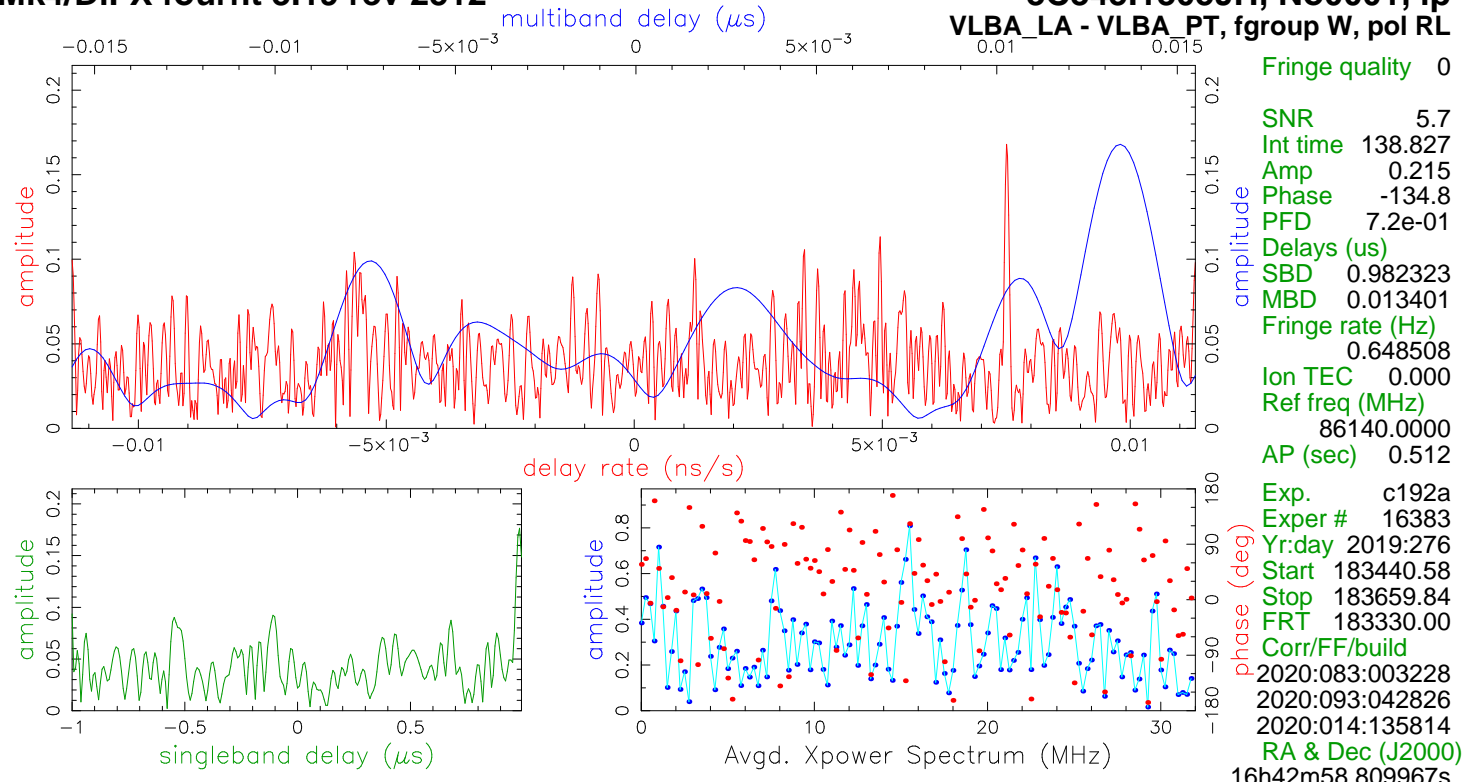
ph/seg (deg) 33.8 36.0 Theor. Amplitude 0.243 +/- 0.044 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 48.6 62.8 Search (1024X64) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.4 41.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 72.0 72.6 Inc. seg. avg. 0.245 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.254 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 209.779 31.809 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lp..1305JH Output file: /Exps/c192a/v2/1234/No0001/lp.W.223.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, lp  
VLBA\_LA - VLBA\_PT, fgroup W, pol RL



Fringe quality 0

SNR 5.7

Int time 138.827

Amp 0.215

Phase -134.8

PFD 7.2e-01

Delays (us)

SBD 0.982323

MBD 0.013401

Fringe rate (Hz) 0.648508

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

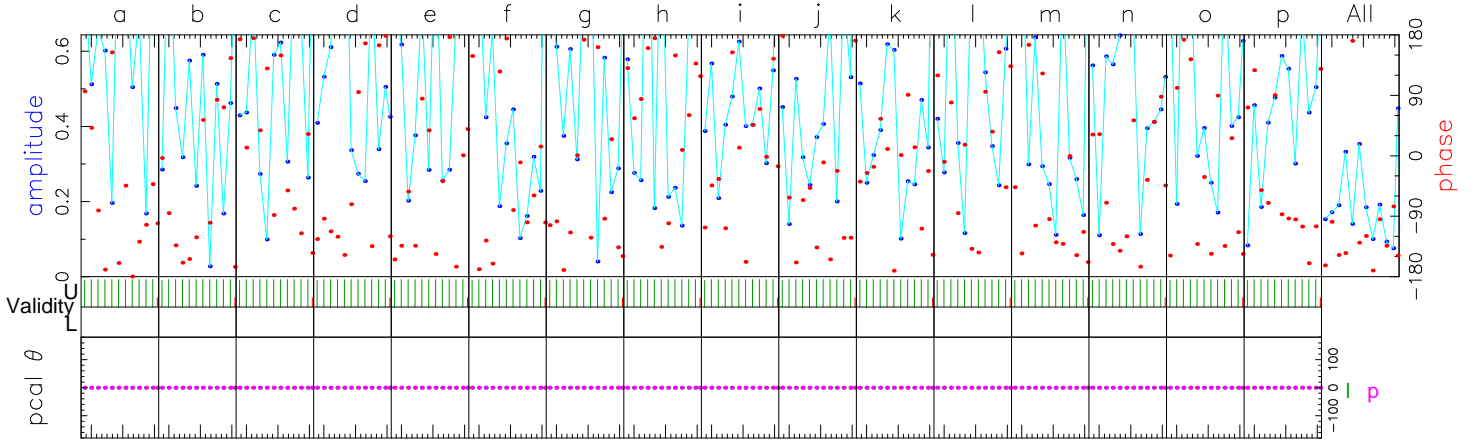
Corr/FF/build 2020:083:003228

2020:093:042826

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
	-113.7	-150.8	-123.7	-136.6	-141.2	-148.2	-122.4	145.6	-7.2	-130.2	-27.8	145.9	-123.2	-55.0	-163.7	-112.8	Phase	-134.8
	0.3	0.1	0.2	0.5	0.2	0.3	0.4	0.4	0.1	0.3	0.2	0.1	0.4	0.1	0.4	0.3	Ampl.	0.2
	17.8	15.2	205.5	254.4	94.7	138.3	255.1	158.9	40.0	201.7	76.2	194.6	190.5	20.8	15.6	235.1	Sbd box	254.7
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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.86523464017E+02			Apriori delay (usec)			5.85541312802E+02			Resid mbdelay (usec)			1.34012E-02			+/- 1.9E-04		
Sband delay (usec)	5.86523635802E+02			Apriori clock (usec)			-1.2646159E+01			Resid sbdelay (usec)			9.82323E-01			+/- 3.0E-03		
Phase delay (usec)	5.85541308454E+02			Apriori clockrate (us/s)			-5.5535860E-07			Resid phdelay (usec)			-4.34808E-06			+/- 6.5E-07		
Delay rate (us/s)	-2.84835076108E-02			Apriori rate (us/s)			-2.84910361502E-02			Resid rate (us/s)			7.52854E-06			+/- 8.0E-09		
Total phase (deg)	111.7			Apriori accel (us/s/s)			-1.66334602352E-06			Resid phase (deg)			-134.8			+/- 20.0		

ph/seg (deg) 32.8 34.7 Search (1024X64) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 54.2 60.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

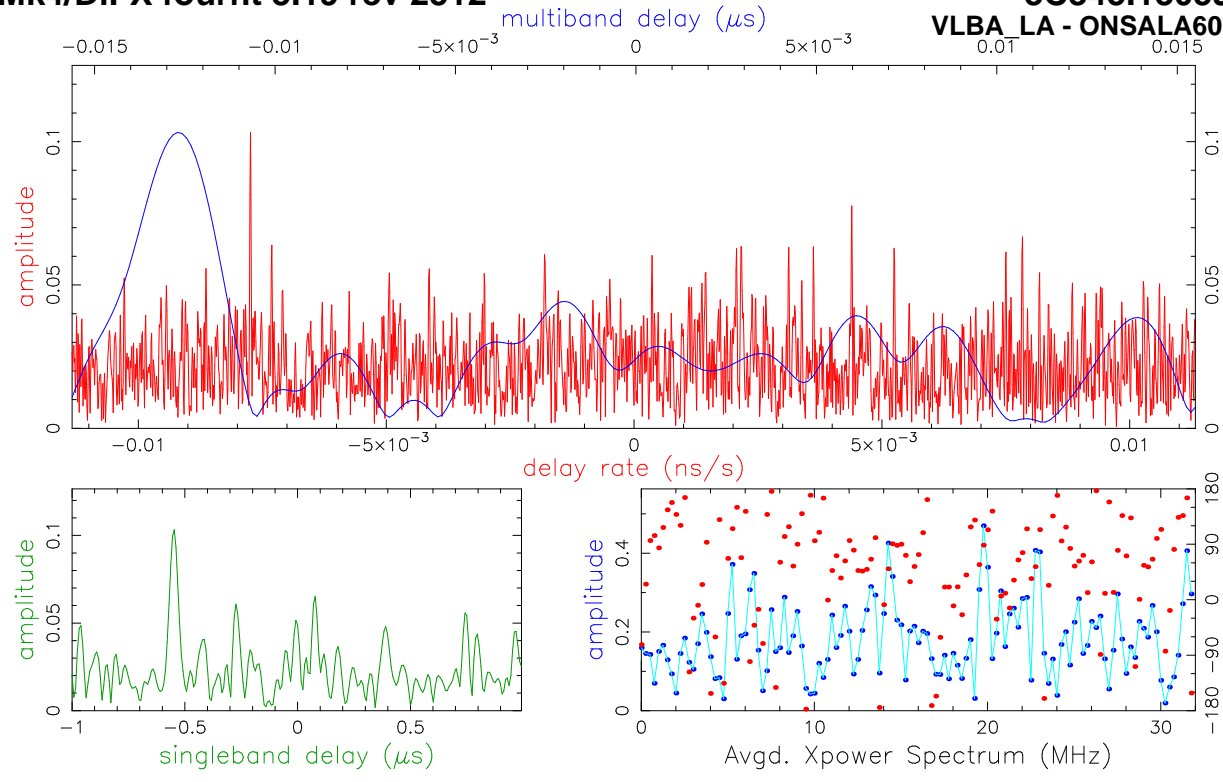
ph/frq (deg) 59.4 40.0 Inc. seg. avg. 0.193 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 64.3 69.8 Inc. frq. avg. 0.210 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011

l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 209.779 31.809 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/lp..1305JH Output file: /Exps/c192a/v2/1234/No0001/lp.W.236.1305JH



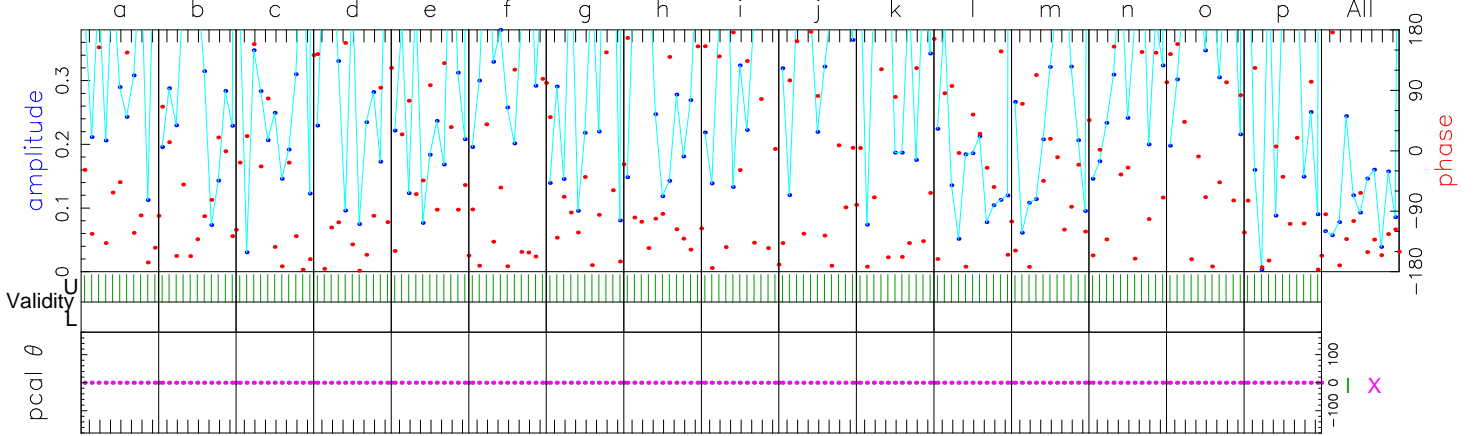


Fringe quality 0

SNR 5.7  
Int time 405.436  
Amp 0.127  
Phase -128.9  
PFD 9.4e-01  
Delays (us)  
SBD -0.548751  
MBD -0.012670  
Fringe rate (Hz)  
-0.667589  
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  
2020:093:042825  
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					
	-114.7	-103.1	-152.2	-137.8	-24.0	-167.2	-114.8	-134.9	-172.1	-138.7	-137.7	103.7	-63.8	-148.3	-146.4	-87.5	Phase	-128.9					
	0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	Ampl.	0.1					
	138.7	226.6	24.8	59.2	72.1	2.8	4.5	33.3	11.5	247.2	136.5	251.8	179.3	166.1	77.0	219.7	Sbd box	58.8					
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used						
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC						
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
	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						
	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)			-3.74989133298E+03														Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	-1.26696E-02	+/-	1.9E-04	
Sband delay (usec)			-3.74989616388E+03															Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-5.48751E-01	+/-	3.0E-03
Phase delay (usec)			-3.74934741754E+03															Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-4.15818E-06	+/-	6.5E-07
Delay rate (us/s)			1.39351813575E+00															Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	-7.75005E-06	+/-	2.8E-09
Total phase (deg)																		Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-128.9	+/-	20.1

ph/seg (deg) 33.4 34.8  
amp/seg (%) 71.5 60.7  
ph/frq (deg) 52.9 40.2  
amp/frq (%) 61.8 70.1

RMS Theor. Amplitude 0.127 +/- 0.022  
Search (2048X64) 0.102  
Interp. 0.000  
Inc. seg. avg. 0.120  
Inc. frq. avg. 0.124

Group delay (usec)(sbd) -3.74989133298E+03  
Sband delay (usec) -3.74989616388E+03  
Phase delay (usec) -3.74934741754E+03  
Delay rate (us/s) 1.39351813575E+00  
Total phase (deg) -196.9

Apriori delay (usec) -3.74934741338E+03  
Apriori clock (usec) -3.3065510E+01  
Apriori clockrate (us/s) -8.7947201E-07  
Apriori rate (us/s) 1.39352588580E+00  
Apriori accel (us/s/s) 1.14108435483E-06

Resid mbdelay (usec) -1.26696E-02  
Resid sbdelay (usec) -5.48751E-01  
Resid phdelay (usec) -4.15818E-06  
Resid rate (us/s) -7.75005E-06  
Resid phase (deg) -128.9

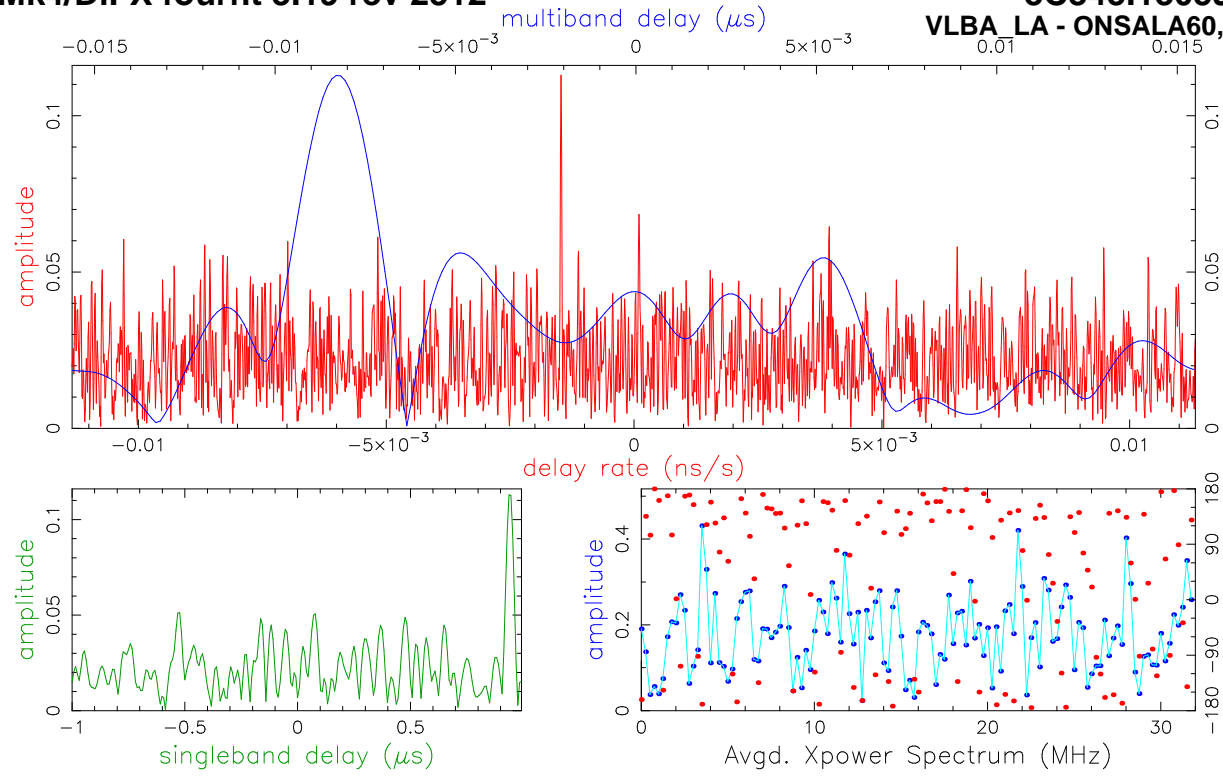
PCal mode: MANUAL, MANUAL  
PCal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2  
Sample rate(MISamp/s): 64  
Data rate(Mb/s): 2048  
nlags: 128 t\_cohere infinite

PC 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

simultaneous interpolator

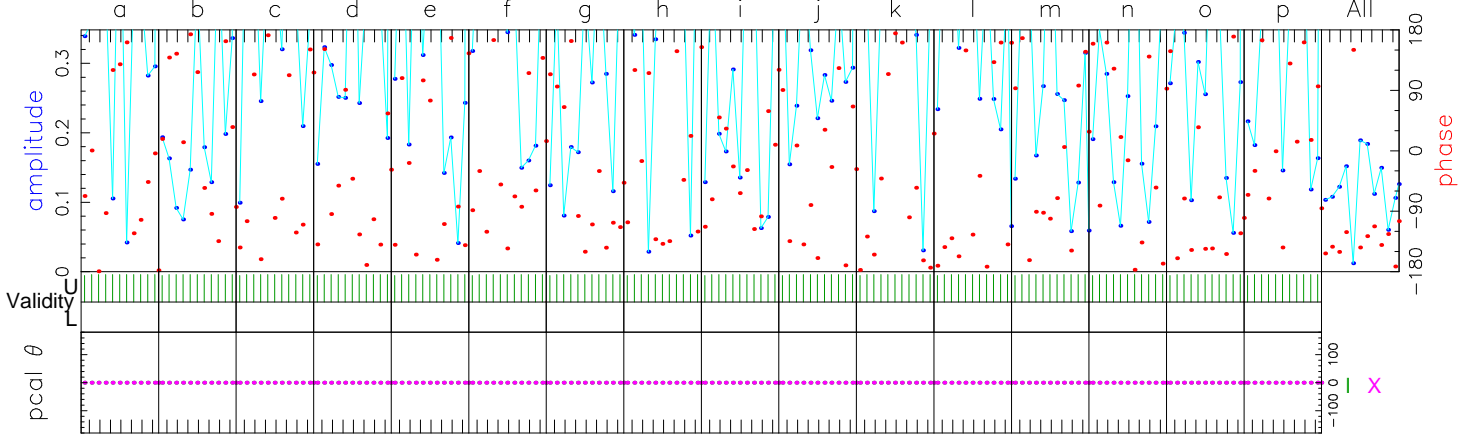
I: az 63.9 el 37.8 pa -72.0  
X: az 263.7 el 53.3 pa 44.2  
u,v (fr/asec) -10385.731 -1555.579

Control file: cf\_1234\_gmva  
Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH  
Output file: /Exps/c192a/v2/1234/No0001/IX.W.232.1305JH



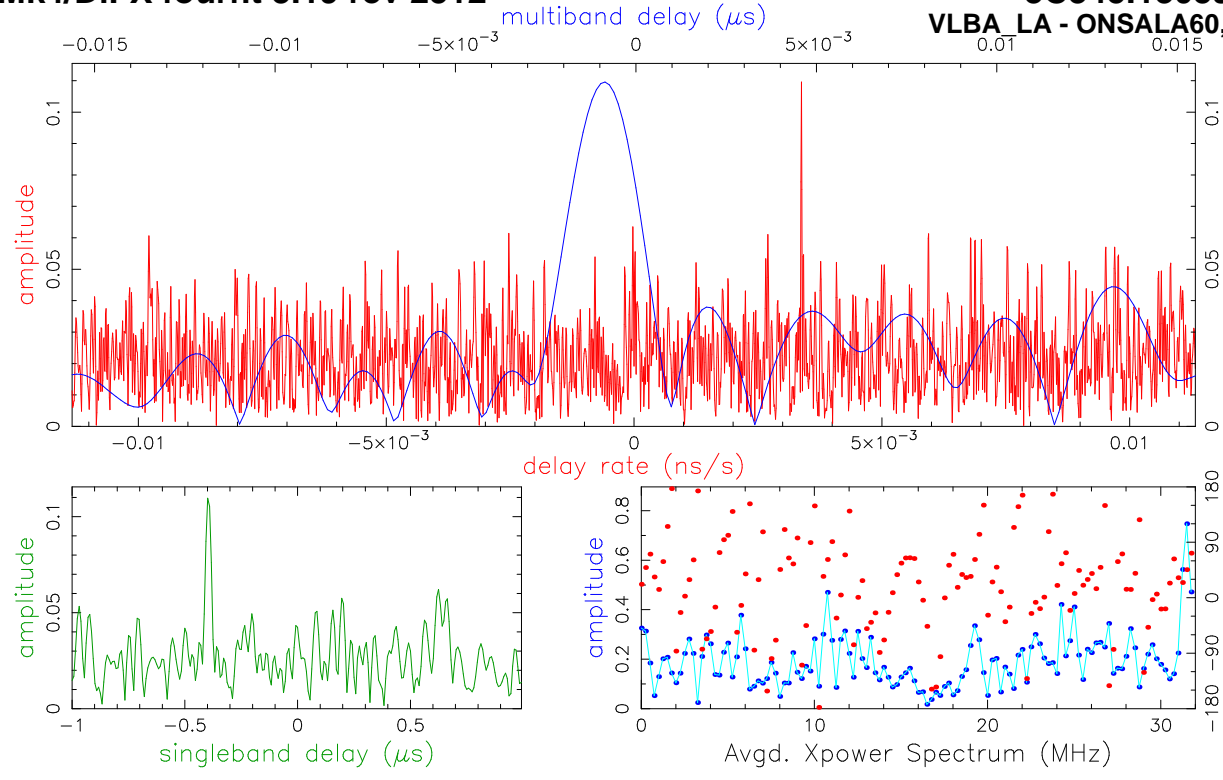
Fringe quality 0  
SNR 6.3  
Int time 405.436  
Amp 0.116  
Phase -138.5  
PFD 5.8e-02  
Delays (us)  
SBD 0.941253  
MBD -0.008232  
Fringe rate (Hz)  
-0.127193  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:083:003228  
2020:093:042831  
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



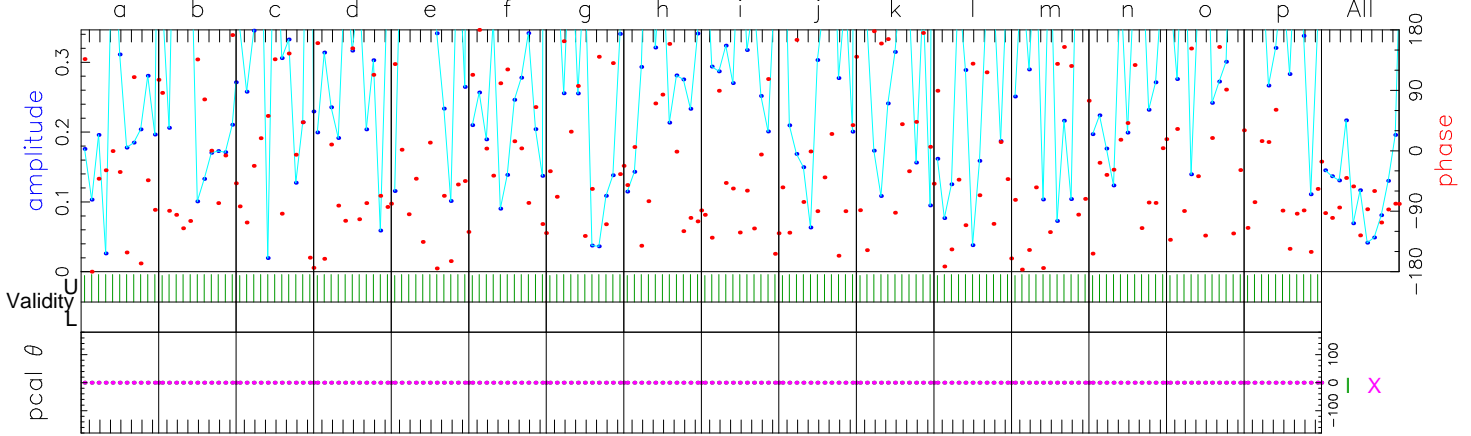
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-117.8	161.1	-161.6	-107.9	164.9	-102.0	-125.6	-126.1	-38.5	130.6	-160.0	-155.7	-137.2	-162.9	-129.9	-28.5	Phase	-138.5				
	0.1	0.0	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.0	0.2	0.3	0.1	0.1	0.2	0.0	Ampl.	0.1				
	194.5	109.8	48.4	159.6	243.4	53.8	54.8	249.8	239.7	44.4	250.3	248.4	132.1	203.9	128.3	190.8	Sbd box	249.5				
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.74841814494E+03														Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	-8.23156E-03	+/-	1.7E-04
Sband delay (usec)			-3.74840616038E+03														Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	9.41253E-01	+/-	2.7E-03
Phase delay (usec)			-3.74934741785E+03														Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-4.46617E-06	+/-	5.8E-07
Delay rate (us/s)			1.39352440921E+00														Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	-1.47659E-06	+/-	2.5E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-138.5	+/-	18.1

ph/seg (deg) 26.9 31.2 Amplitude 0.116 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 42.7 54.5 Search (2048X64) 0.109 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 54.9 36.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 64.6 63.0 Inc. seg. avg. 0.104 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.253.1305JH simultaneous interpolator



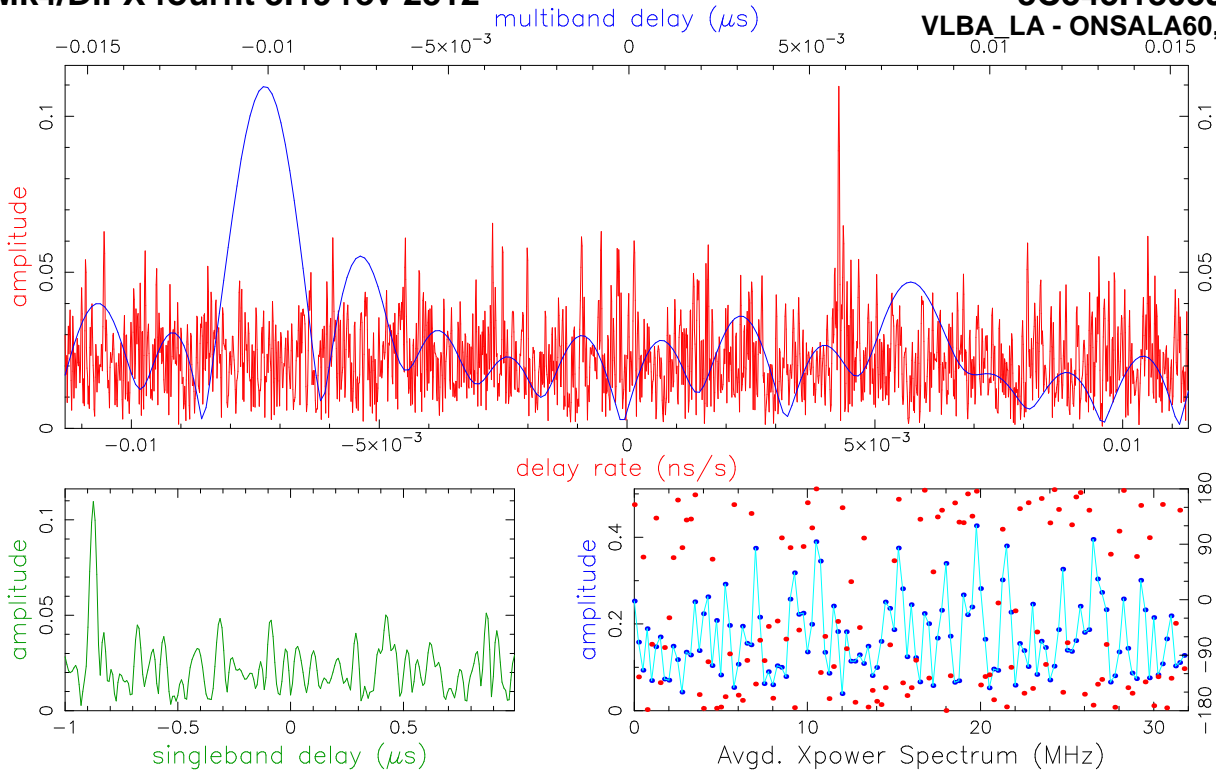
Fringe quality 0  
SNR 6.1  
Int time 405.436  
Amp 0.115  
Phase -81.8  
PFD 2.1e-01  
Delays (us)  
SBD -0.395724  
MBD -0.000877  
Fringe rate (Hz) 0.291543  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:083:003228  
2020:093:042835  
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				
	-45.1	-98.9	-137.4	-116.9	-60.9	-7.2	-45.7	-81.9	-99.7	-57.1	-108.7	-74.9	-112.6	-33.2	-99.6	-72.1	Phase	-81.8				
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1				
	48.9	83.4	245.7	11.8	170.2	242.2	100.9	64.9	210.4	241.6	194.0	244.5	111.9	3.7	15.5	231.8	Sbd box	78.3				
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
W	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)			-3.74975454055E+03														Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	-8.77170E-04	+/-	1.8E-04
Sband delay (usec)			-3.74974313738E+03														Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-3.95724E-01	+/-	2.8E-03
Phase delay (usec)			-3.74934741602E+03														Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-2.63829E-06	+/-	6.0E-07
Delay rate (us/s)			1.39352927032E+00														Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	3.38452E-06	+/-	2.6E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-81.8	+/-	18.7

RMS 23.6 Theor. 32.4 Amplitude 0.115 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 50.7 56.5 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 36.5 37.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 50.4 65.3 Inc. seg. avg. 0.108 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 amp/frq (%) 50.4 65.3 Inc. frq. avg. 0.107 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.272.1305JH

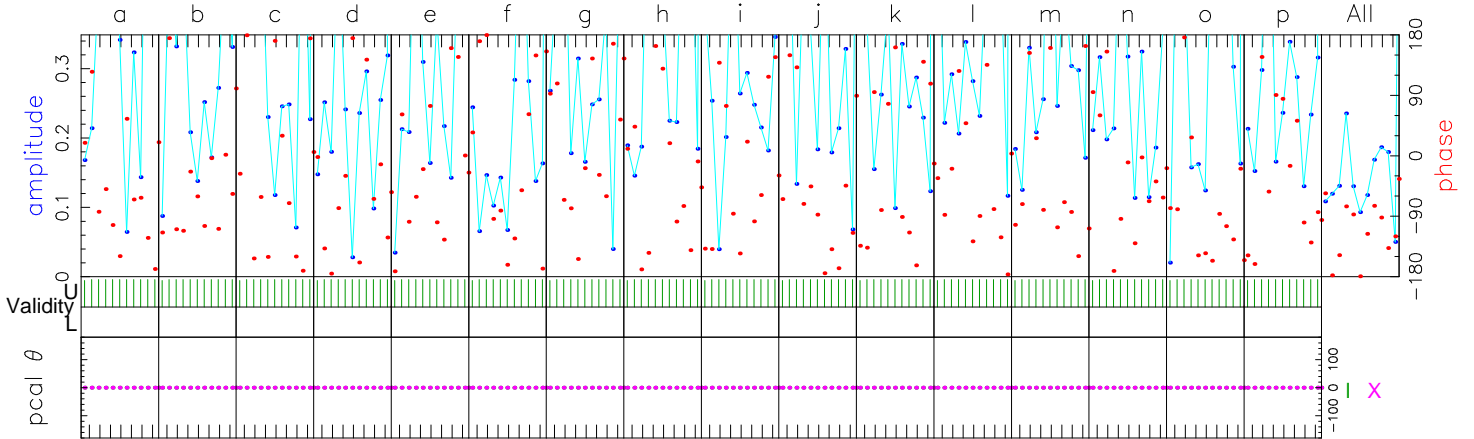


Fringe quality 0

SNR 6.0  
Int time 405.436  
Amp 0.116  
Phase -106.8  
PFD 3.4e-01  
Delays (us)  
SBD -0.874666  
MBD -0.010085  
Fringe rate (Hz)  
0.368722  
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  
2020:093:042840  
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

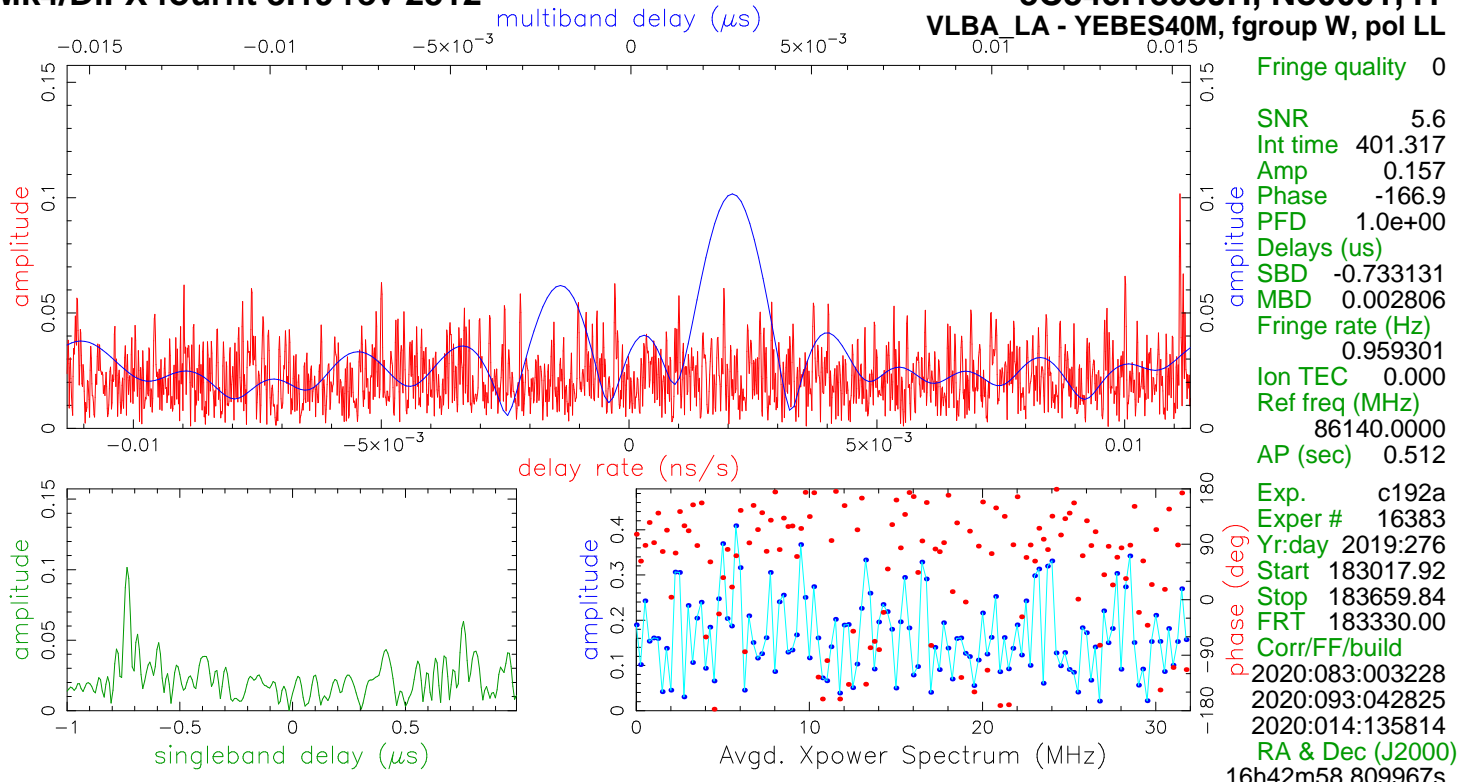


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-111.3	-85.1	-130.8	-101.1	-59.8	-90.0	-11.2	-137.2	-121.8	-107.5	-148.4	-81.6	-135.0	-46.4	-114.5	-73.4	Phase	-106.8
	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.1	Ampl.	0.1
	15.0	190.6	22.7	117.1	168.1	225.8	221.3	251.0	1.4	189.9	168.3	48.4	68.1	193.8	16.8	253.2	Sbd box	17.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	1000
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	0:0
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -3.75023249828E+03 Apriori delay (usec) -3.74934741338E+03 Resid mbdelay (usec) -1.00849E-02 +/- 1.8E-04  
 Sband delay (usec) -3.75022207938E+03 Apriori clock (usec) -3.3065510E+01 Resid sbdelay (usec) -8.74666E-01 +/- 2.9E-03  
 Phase delay (usec) -3.74934741682E+03 Apriori clockrate (us/s) -8.7947201E-07 Resid phdelay (usec) -3.44266E-06 +/- 6.1E-07  
 Delay rate (us/s) 1.39353016629E+00 Apriori rate (us/s) 1.39352588580E+00 Resid rate (us/s) 4.28050E-06 +/- 2.6E-09  
 Total phase (deg) -174.7 Apriori accel (us/s/s) 1.14108435483E-06 Resid phase (deg) -106.8 +/- 19.0

RMS Theor. Amplitude 0.116 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 41.1 32.9 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 59.5 57.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 39.5 38.0 Inc. seg. avg. 0.128 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 54.2 66.3 Inc. frq. avg. 0.108 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.294.1305JH



Fringe quality 0

SNR 5.6

Int time 401.317

Amp 0.157

Phase -166.9

PFD 1.0e+00

Delays (us)

SBD -0.733131

MBD 0.002806

Fringe rate (Hz)

0.959301

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

2020:093:042825

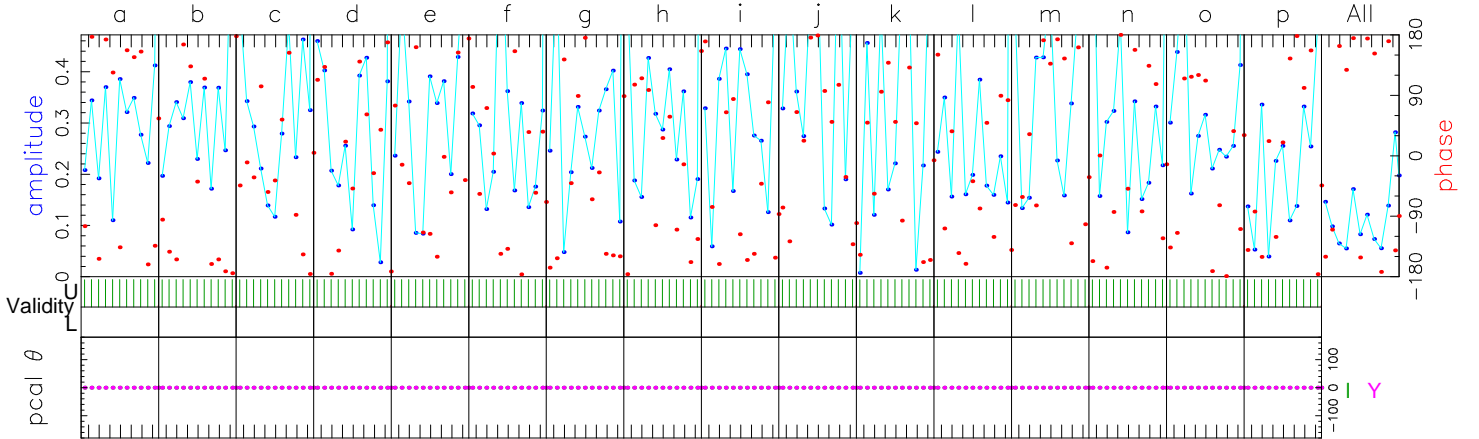
2020:014:135814

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				
	-173.8	-173.6	-70.0	127.2	-52.4	-144.4	-147.3	131.2	-155.3	179.4	148.7	-130.1	-142.4	-164.2	169.3	178.9	Phase	-166.9				
	0.4	0.4	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.3	0.3	0.2	0.2	Ampl.	0.2				
	164.0	35.5	124.4	252.3	209.4	155.9	95.1	208.4	249.6	207.2	42.3	225.3	146.3	147.9	205.5	1.5	Sbd box	35.2				
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					
I	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					
I: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					
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
Group delay (usec)(sbd)			-5.61907565901E+03														Apriori delay (usec)	-5.61832846513E+03	Resid mbdelay (usec)	2.80612E-03	+/-	1.9E-04
Sband delay (usec)			-5.61906159563E+03														Apriori clock (usec)	-1.0392235E+01	Resid sbdelay (usec)	-7.33131E-01	+/-	3.1E-03
Phase delay (usec)			-5.61832847051E+03														Apriori clockrate (us/s)	-5.7147201E-07	Resid phdelay (usec)	-5.38170E-06	+/-	6.6E-07
Delay rate (us/s)			1.42969614130E+00														Apriori rate (us/s)	1.42968500476E+00	Resid rate (us/s)	1.11365E-05	+/-	2.9E-09
Total phase (deg)																	Apriori accel (us/s/s)	2.51222621771E-05	Resid phase (deg)	-166.9	+/-	20.5

ph/seg (deg) 34.1 35.5 Search (2048X64) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

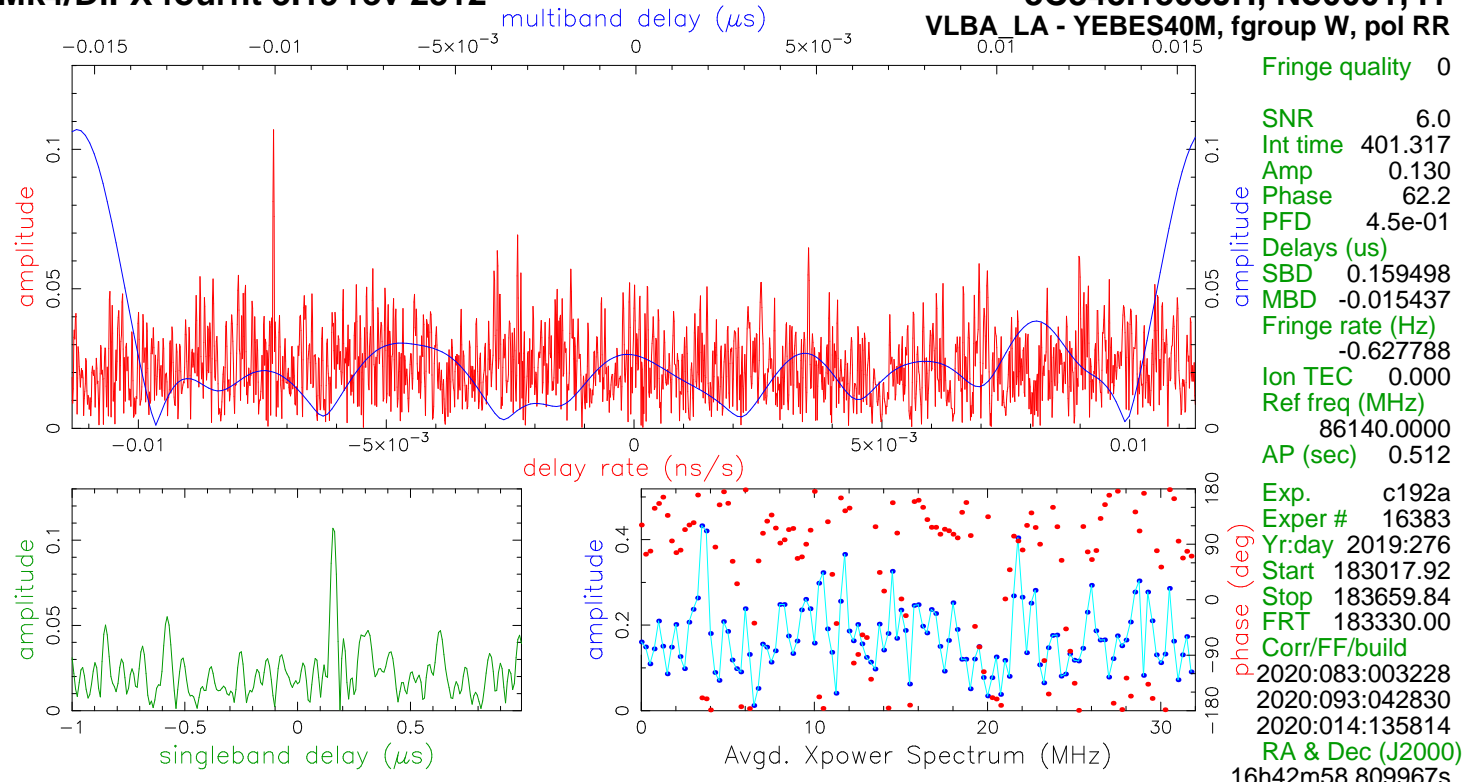
amp/seg (%) 64.8 62.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 51.2 41.0 Inc. seg. avg. 0.152 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

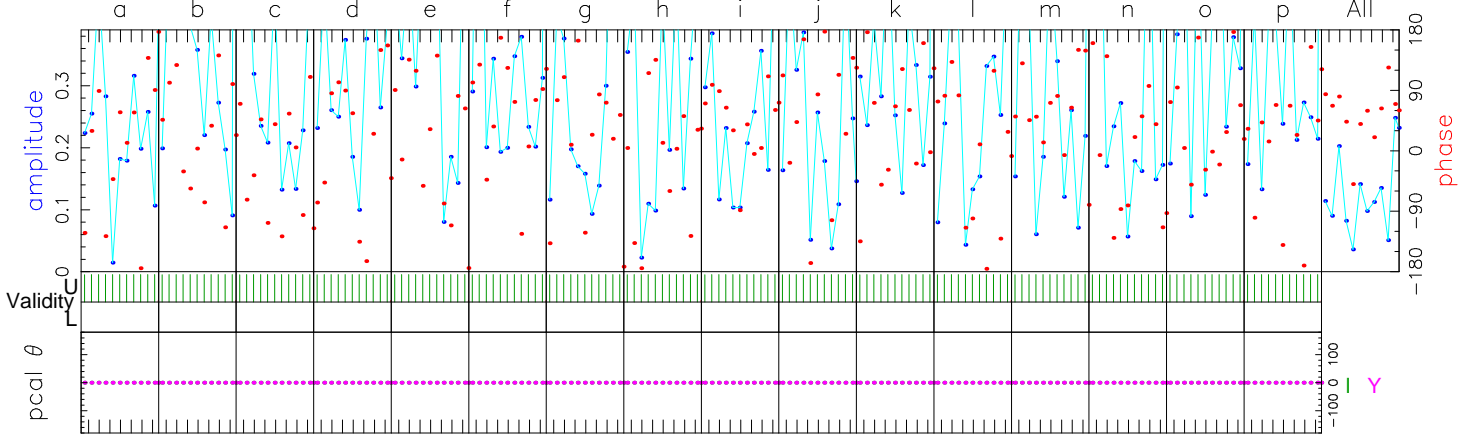
amp/frq (%) 60.5 71.6 Inc. frq. avg. 0.159 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011

I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10610.991 1328.915 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IY..1305JH Output file: /Exps/c192a/v2/1234/No0001/IY.W.230.1305JH

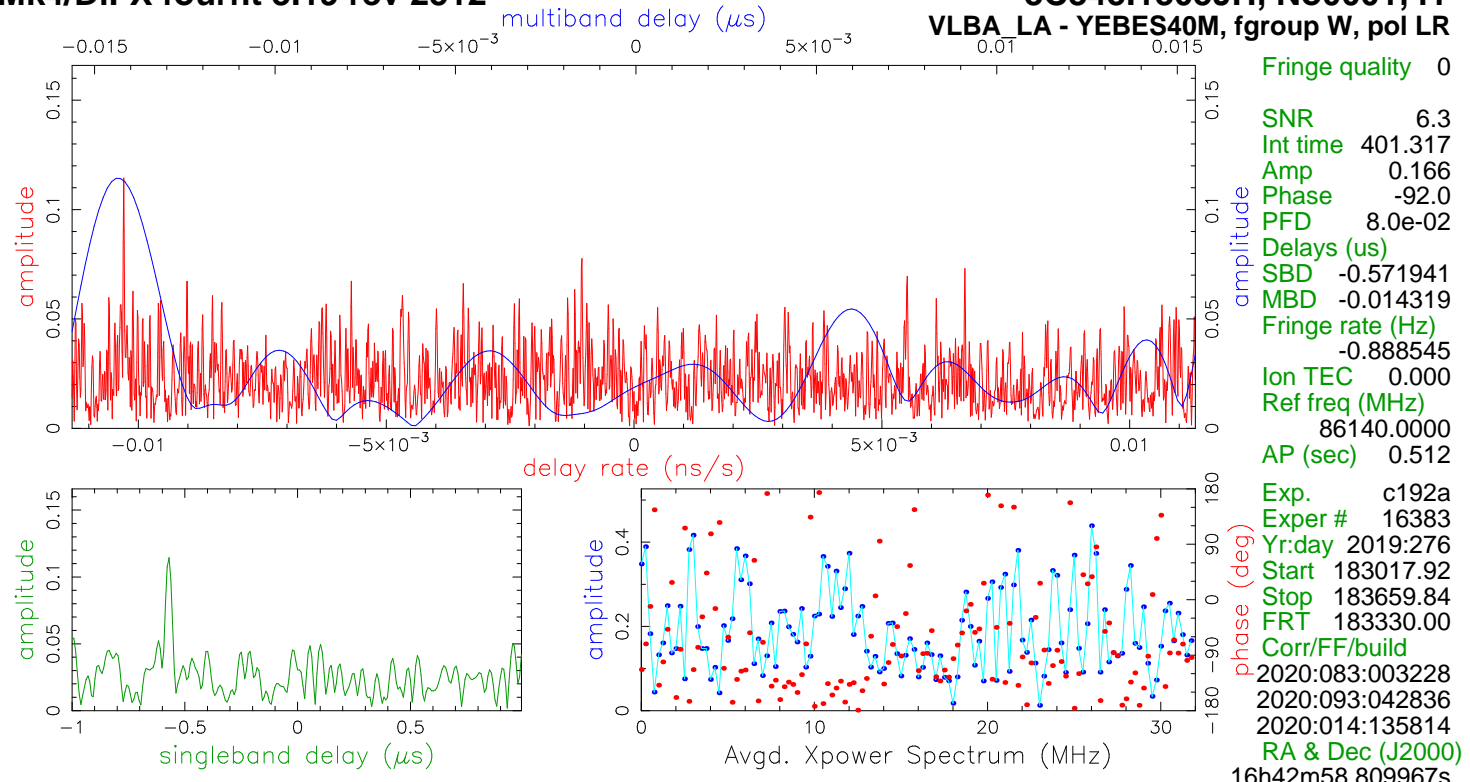


Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec

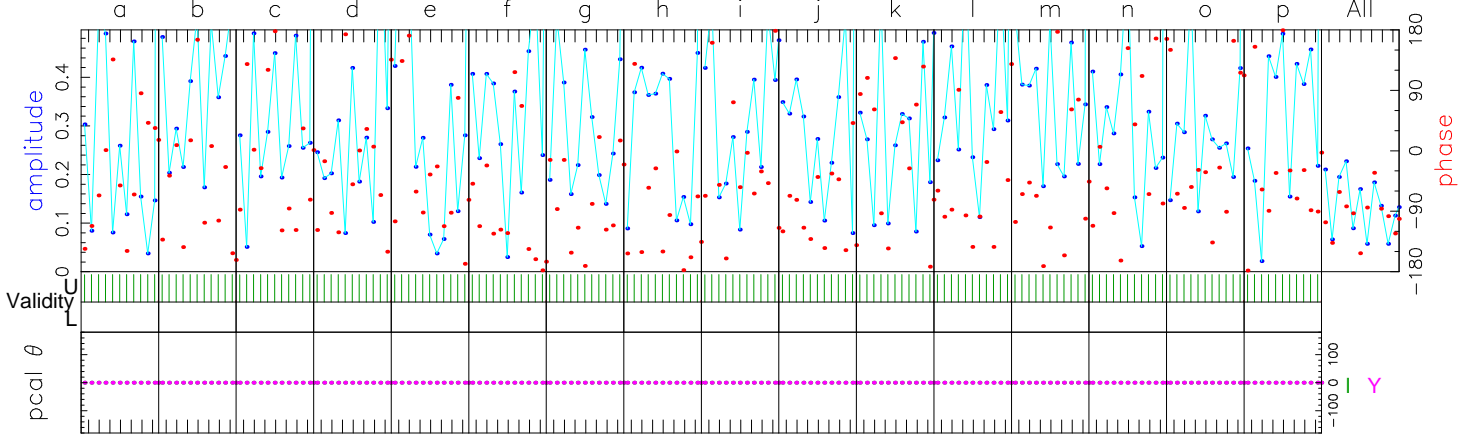


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	91.0	39.0	18.3	95.2	78.8	101.2	61.5	-0.9	54.8	74.3	24.3	98.9	78.7	57.3	33.1	58.9	Phase	62.2				
	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1				
	104.4	252.3	182.4	35.2	47.9	39.5	33.5	131.3	249.8	68.2	71.5	233.9	43.1	234.1	74.8	113.6	Sbd box	149.4				
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					
I	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					
I: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					
I: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					
I	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					
I	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)			-5.61815640185E+03														Apriori delay (usec)	-5.61832846513E+03	Resid mbdelay (usec)	-1.54367E-02	+/-	1.8E-04
Sband delay (usec)			-5.61816896713E+03														Apriori clock (usec)	-1.0392235E+01	Resid sbdelay (usec)	1.59498E-01	+/-	2.9E-03
Phase delay (usec)			-5.61832846312E+03														Apriori clockrate (us/s)	-5.7147201E-07	Resid phdelay (usec)	2.00427E-06	+/-	6.2E-07
Delay rate (us/s)			1.42967771677E+00														Apriori rate (us/s)	1.42968500476E+00	Resid rate (us/s)	-7.28800E-06	+/-	2.7E-09
Total phase (deg)					-292.9												Apriori accel (us/s/s)	2.51222621771E-05	Resid phase (deg)	62.2	+/-	19.2

ph/seg (deg) 42.3 33.2 Search (2048X64) 0.130 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 55.6 58.0 Interp. 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.0 38.4 Inc. seg. avg. 0.122 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 42.1 66.9 Inc. frq. avg. 0.119 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10610.991 1328.915 ion window (TEC) 0.00 0.00 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IY..1305JH Output file: /Exps/c192a/v2/1234/No0001/IY.W.249.1305JH



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				
	-49.8	-87.3	-83.1	-70.9	-156.1	-132.3	-72.2	-110.0	-74.3	-90.5	106.4	-73.2	-91.1	-127.6	-72.8	-85.2	Phase	-92.0				
	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2				
	97.9	136.6	202.7	77.6	205.3	19.9	3.1	218.8	127.8	224.0	202.9	86.5	196.6	77.0	255.6	1.4	Sbd box	55.8				
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					
I	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					
I: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					
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-5.61890528400E+03														Apriori delay (usec)	-5.61832846513E+03	Resid mbdelay (usec)	-1.43189E-02	+/-	1.7E-04
Sband delay (usec)			-5.61890040663E+03														Apriori clock (usec)	-1.0392235E+01	Resid sbdelay (usec)	-5.71941E-01	+/-	2.7E-03
Phase delay (usec)			-5.61832846809E+03														Apriori clockrate (us/s)	-5.7147201E-07	Resid phdelay (usec)	-2.96580E-06	+/-	5.9E-07
Delay rate (us/s)			1.42967468964E+00														Apriori rate (us/s)	1.42968500476E+00	Resid rate (us/s)	-1.03151E-05	+/-	2.5E-09
Total phase (deg)																	Apriori accel (us/s/s)	2.51222621771E-05	Resid phase (deg)	-92.0	+/-	18.2

ph/seg (deg) RMS Theor. Amplitude 0.166 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.1 55.0 Search (2048X64) 0.109 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 51.6 36.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 34.5 63.5 Inc. seg. avg. 0.172 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10610.991 1328.915 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IY..1305JH Output file: /Exps/c192a/v2/1234/No0001/IY.W.273.1305JH simultaneous interpolator

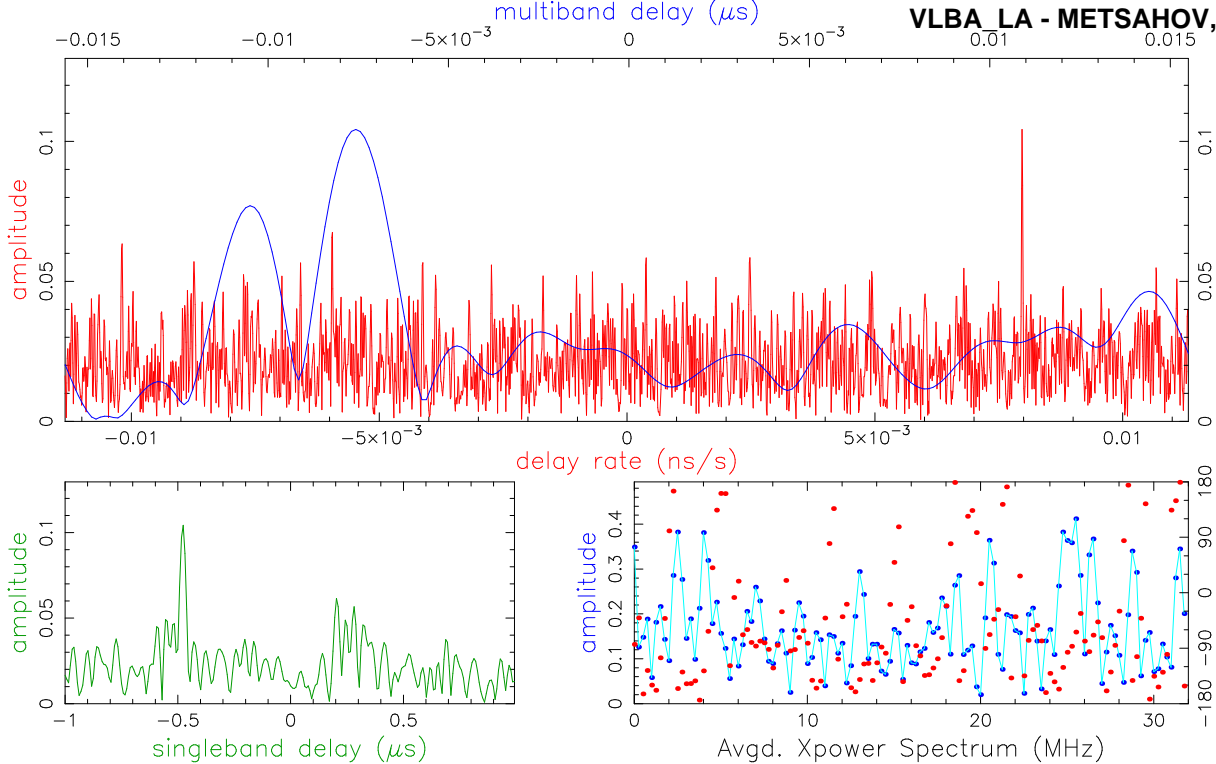






Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, IZ  
VLBA\_LA - METSAHOV, fgroup W, pol RR

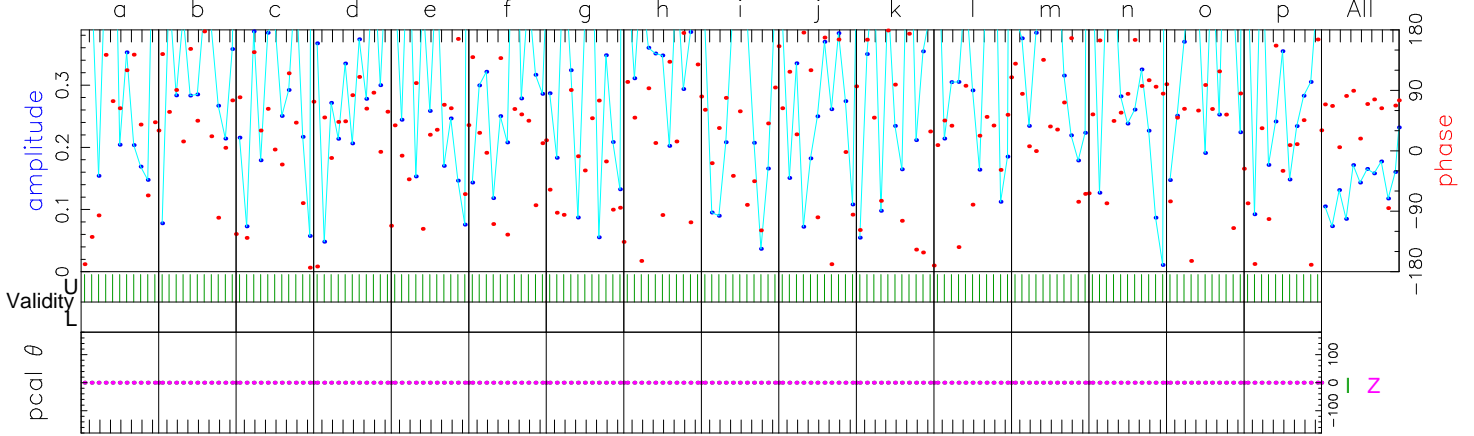


Fringe quality 0

SNR 5.8  
Int time 406.568  
Amp 0.130  
Phase 58.8  
PFD 8.5e-01  
Delays (us)  
SBD -0.478170  
MBD -0.007589  
Fringe rate (Hz) 0.687717  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

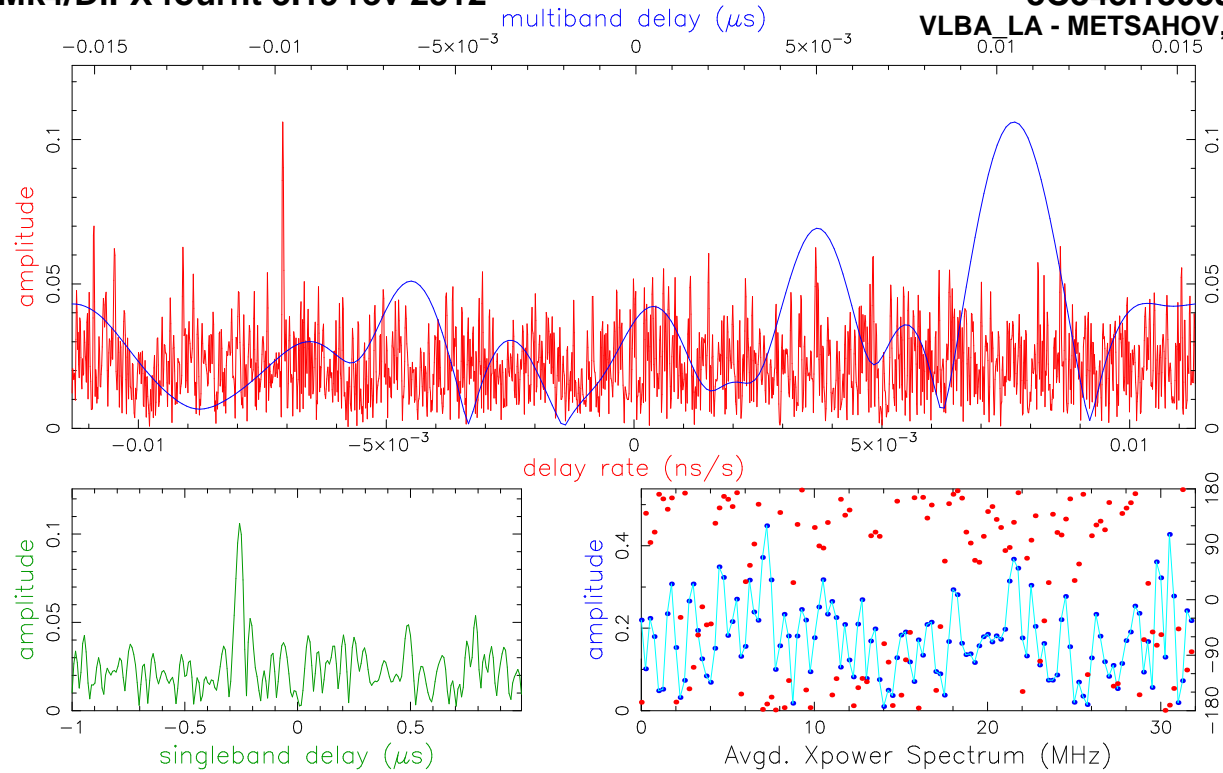
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:083:003228  
2020:093:042830  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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				
	101.9	62.6	52.8	64.8	12.8	38.5	-33.5	113.6	29.4	132.0	165.3	36.9	56.6	74.4	75.6	-14.7	Phase	58.8				
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.0	Ampl.	0.1				
	20.3	15.4	97.3	86.4	58.6	110.3	228.9	193.7	136.4	52.8	171.4	69.0	70.1	201.0	137.3	179.6	Sbd box	67.8				
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					
I	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					
I: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					
I: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					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.14060730049E+03														Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-7.58886E-03	+/-	1.9E-04
Sband delay (usec)			-2.14060913113E+03														Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-4.78170E-01	+/-	3.0E-03
Phase delay (usec)			-2.14013095974E+03														Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	1.89581E-06	+/-	6.4E-07
Delay rate (us/s)			1.42286772696E+00														Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	7.98371E-06	+/-	2.7E-09
Total phase (deg)				46.2													Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	58.8	+/-	19.8

ph/seg (deg) 49.8 34.4 Search (2048X64) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 44.2 60.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 53.4 39.7 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 53.0 69.2 Inc. frq. avg. 0.140 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
I: az 63.9 el 37.8 pa -72.0 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10622.239 -2396.320 ion window (TEC) 0.00 0.00 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/IZ.W.251.1305JH

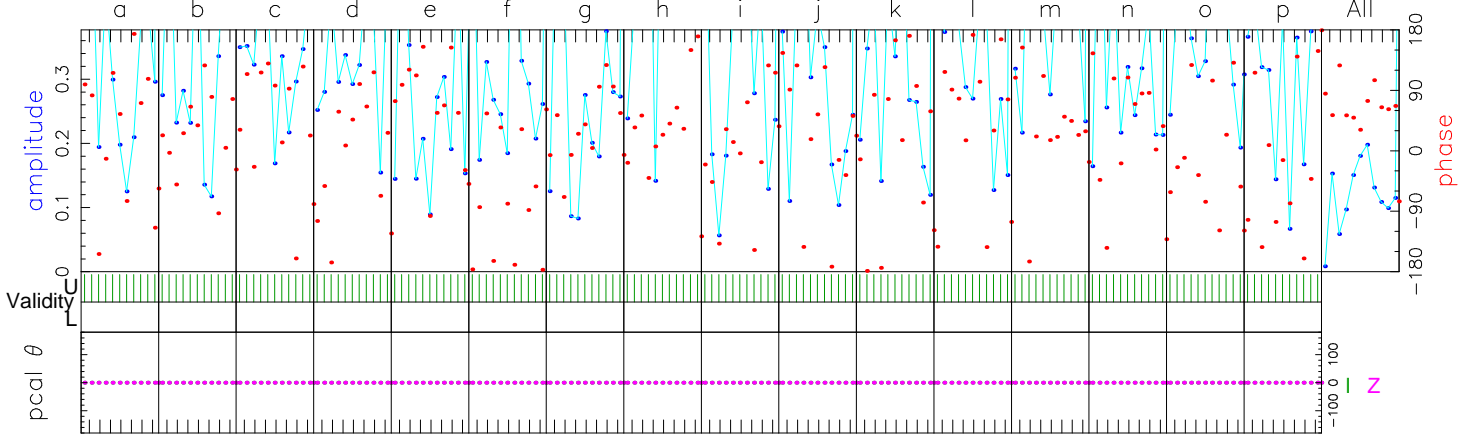


Fringe quality 0

SNR 5.9  
Int time 406.568  
Amp 0.126  
Phase 62.8  
PFD 6.8e-01  
Delays (us)  
SBD -0.256409  
MBD 0.010450  
Fringe rate (Hz)  
-0.611335  
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  
2020:093:042835  
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

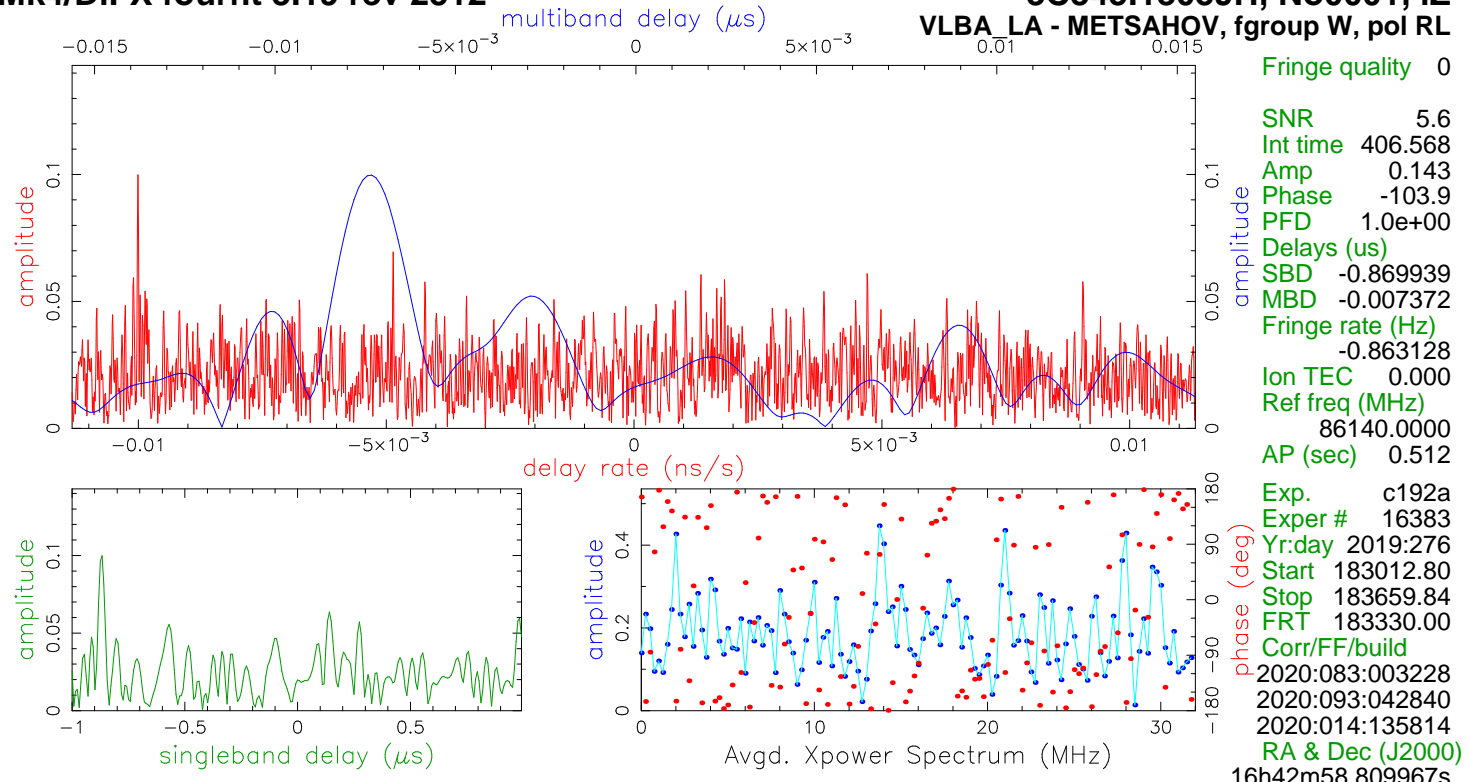


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	89.5	20.7	83.1	53.4	89.2	-156.7	45.6	34.2	10.3	114.0	97.1	124.8	56.6	63.6	-13.4	-148.8	Phase	62.8
	0.2	0.3	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.1	Ampl.	0.1
	8.1	94.7	62.1	132.1	166.3	179.0	94.5	96.4	17.1	121.2	55.7	78.4	96.7	59.6	109.1	207.0	Sbd box	96.2
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	
I	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	
I: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	
I: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	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	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	

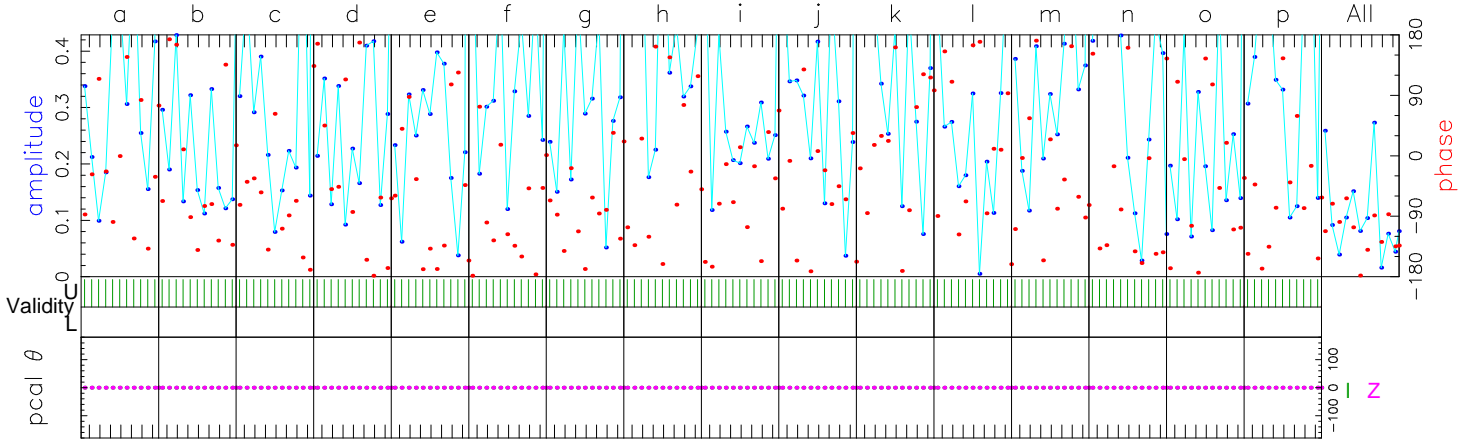
Group delay (usec)(sbd) -2.14040176190E+03 Apriori delay (usec) -2.14013096163E+03 Resid mbdelay (usec) 1.04497E-02 +/- 1.8E-04  
 Sband delay (usec) -2.14038737113E+03 Apriori clock (usec) -9.2246437E-01 Resid sbdelay (usec) -2.56409E-01 +/- 2.9E-03  
 Phase delay (usec) -2.14013095961E+03 Apriori clockrate (us/s) -3.6776479E-07 Resid phdelay (usec) 2.02489E-06 +/- 6.3E-07  
 Delay rate (us/s) 1.42285264625E+00 Apriori rate (us/s) 1.42285974325E+00 Resid rate (us/s) -7.09700E-06 +/- 2.7E-09  
 Total phase (deg) 50.2 Apriori accel (us/s/s) -9.09270875951E-06 Resid phase (deg) 62.8 +/- 19.5

RMS Theor. Amplitude 0.126 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 28.1 33.8 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 61.7 59.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 67.0 39.1 Inc. seg. avg. 0.121 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 64.5 68.2 Inc. frq. avg. 0.144 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

I: az 63.9 el 37.8 pa -72.0 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10622.239 -2396.320 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/IZ.W.268.1305JH



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				
	-70.4	-118.7	-88.9	-146.5	-143.9	-131.2	-97.0	-141.4	-80.4	-55.6	12.7	163.7	-99.4	-131.2	-85.5	-98.5	Phase	-103.9				
	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.0	0.2	0.3	0.1	0.2	Ampl.	0.1				
	230.7	110.4	187.1	65.1	92.4	99.1	153.1	236.1	139.5	116.1	57.5	223.7	1.8	141.7	253.4	72.1	Sbd box	17.6				
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					
I	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					
I: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					
I: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					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
I	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)		-2.14101333365E+03															Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-7.37202E-03	+/-	1.9E-04
Sband delay (usec)		-2.14100090063E+03															Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-8.69939E-01	+/-	3.1E-03
Phase delay (usec)		-2.14013096498E+03															Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	-3.34901E-06	+/-	6.6E-07
Delay rate (us/s)		1.42284972319E+00															Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	-1.00201E-05	+/-	2.8E-09
Total phase (deg)																	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	-103.9	+/-	20.5

ph/seg (deg) 32.6 35.5 Search (2048X64) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 79.9 62.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.8 41.0 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 50.3 71.6 Inc. frq. avg. 0.136 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10622.239 -2396.320 ion window (TEC) 0.00 0.00 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v2/1234/No0001/IZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/IZ.W.292.1305JH