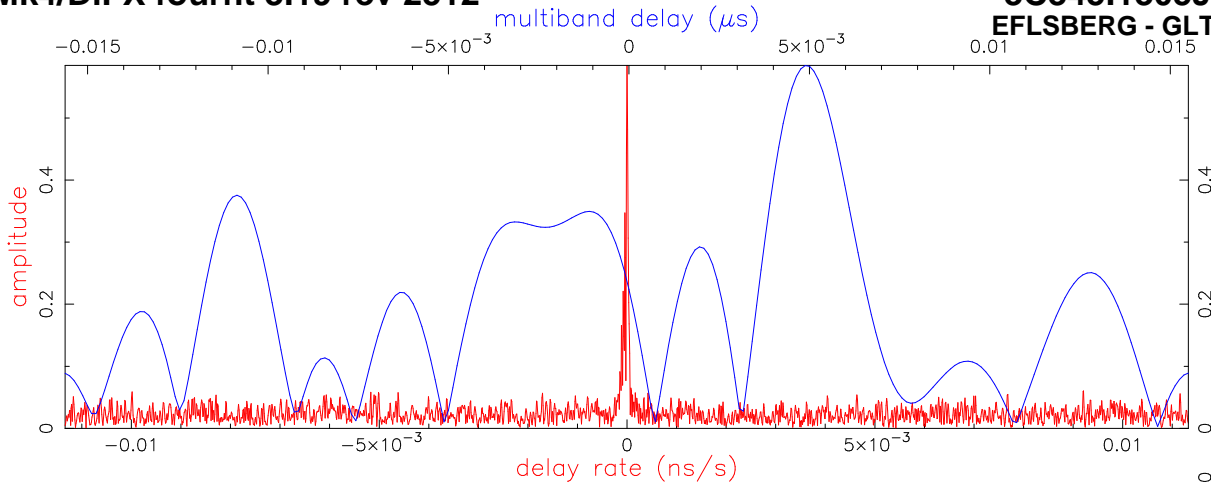


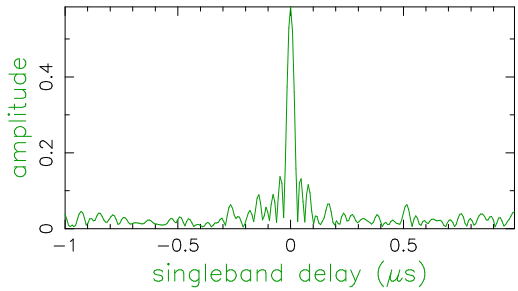
Mk4/DiFX fourfit 3.19 rev 2512

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

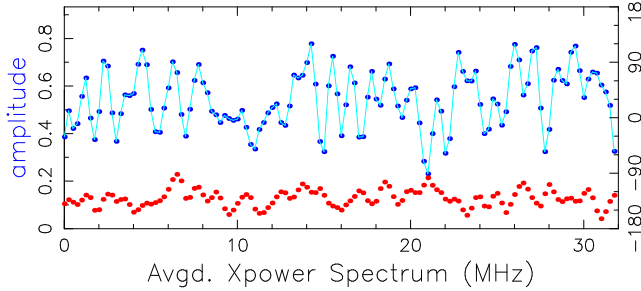


Fringe quality 6

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

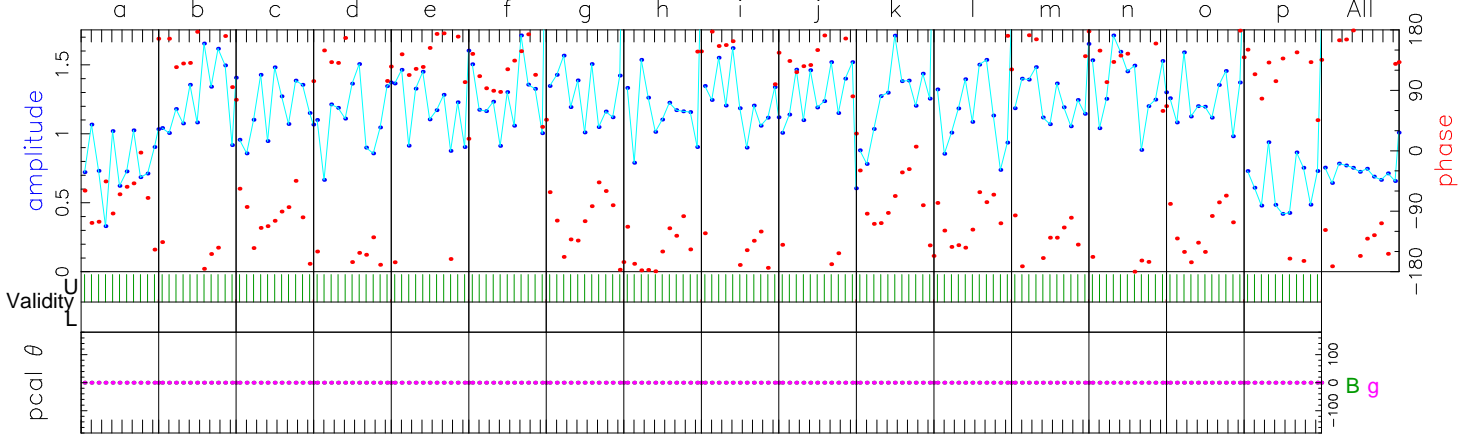


delay rate (ns/s)



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

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-77.4	169.5	-99.9	174.5	151.9	117.9	-106.6	-150.2	-176.2	151.0	-71.7	-108.5	-151.0	150.9	-122.9	132.1		Phase	-160.6
	0.6	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.0	0.5		Ampl.	0.9
	128.0	128.5	128.5	128.9	129.1	129.3	129.5	129.0	129.0	129.4	128.7	129.1	129.0	128.8	128.1	129.1		Sbd box	129.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)		1.11027541300E+03		Apriori delay (usec)	1.11027049484E+03		Resid mbdelay (usec)	4.91816E-03		+/-	3.3E-05								
Sband delay (usec)		1.11027021784E+03		Apriori clock (usec)	1.5542942E+01		Resid sbdelay (usec)	-2.77000E-04		+/-	5.3E-04								
Phase delay (usec)		1.11027048966E+03		Apriori clockrate (us/s)	-2.7499999E-07		Resid phdelay (usec)	-5.17950E-06		+/-	1.1E-07								
Delay rate (us/s)		-6.86391248983E-01		Apriori rate (us/s)	-6.86391250011E-01		Resid rate (us/s)	1.02741E-09		+/-	4.7E-10								
Total phase (deg)			-7.5	Apriori accel (us/s/s)	-2.03542527340E-05		Resid phase (deg)	-160.6		+/-	3.5								

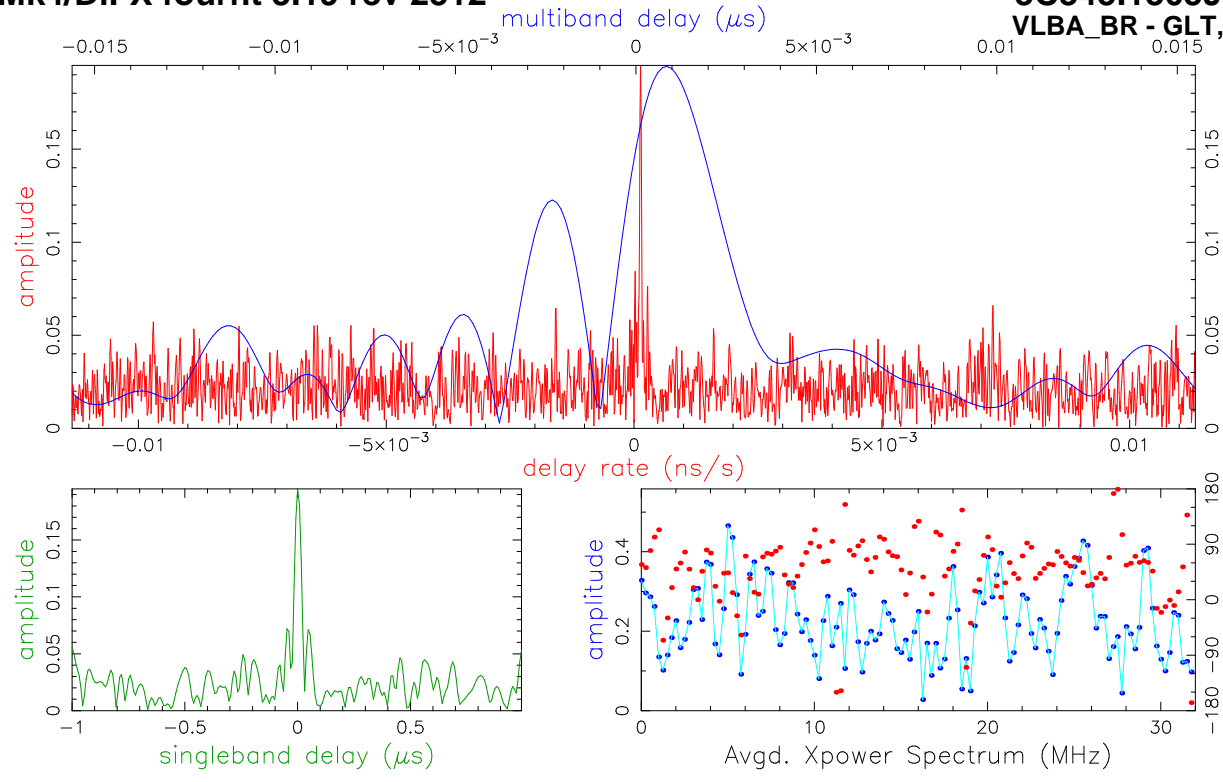
ph/seg (deg) 36.8 RMS Theor. 6.1 Amplitude 0.585 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 24.9 10.6 Search (2048X64) 0.583 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.1 7.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window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

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.21.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bg
VLBA_BR - GLT, fgroup W, pol RR

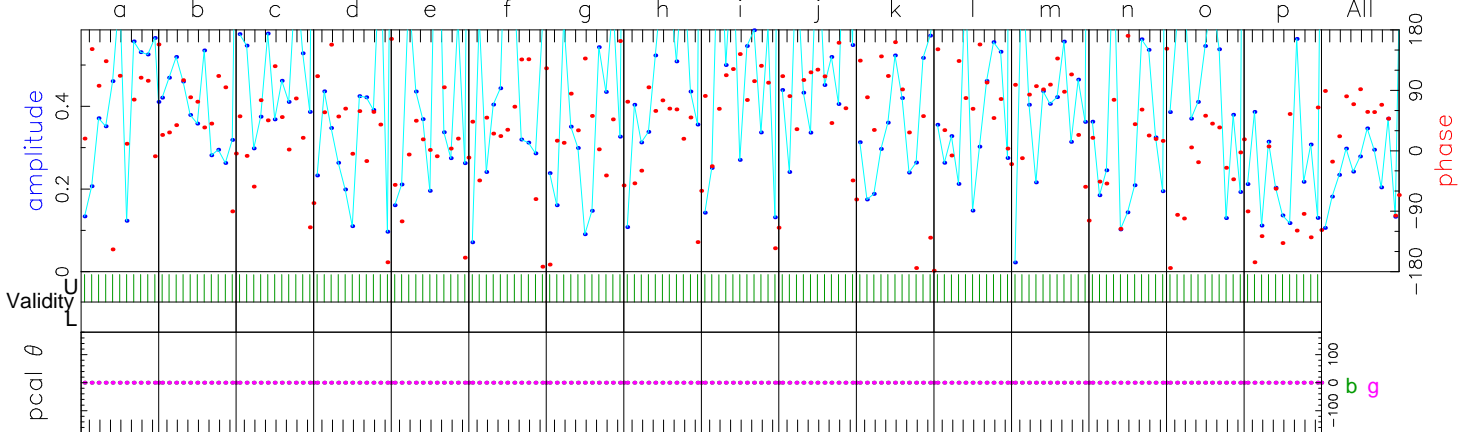


Fringe quality 9

SNR 10.8
Int time 406.440
Amp 0.195
Phase 56.7
PFD 2.7e-18
Delays (us)
SBD 0.001251
MBD 0.000868
Fringe rate (Hz) 0.011793
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
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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.55392837833E+03																
Sband delay (usec)		-4.55392799443E+03																
Phase delay (usec)		-4.55392924411E+03																
Delay rate (us/s)		6.50043918588E-01																
Total phase (deg)					-31.4													
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																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 55.4 18.5
amp/seg (%) 49.8 32.2
ph/frq (deg) 57.2 21.3
amp/frq (%) 42.3 37.2

RMS Theor. Amplitude 0.195 +/- 0.018
Search (2048X64) 0.189
Interp. 0.000
Inc. seg. avg. 0.234
Inc. frq. avg. 0.233

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
SampCntNorm: enabled
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

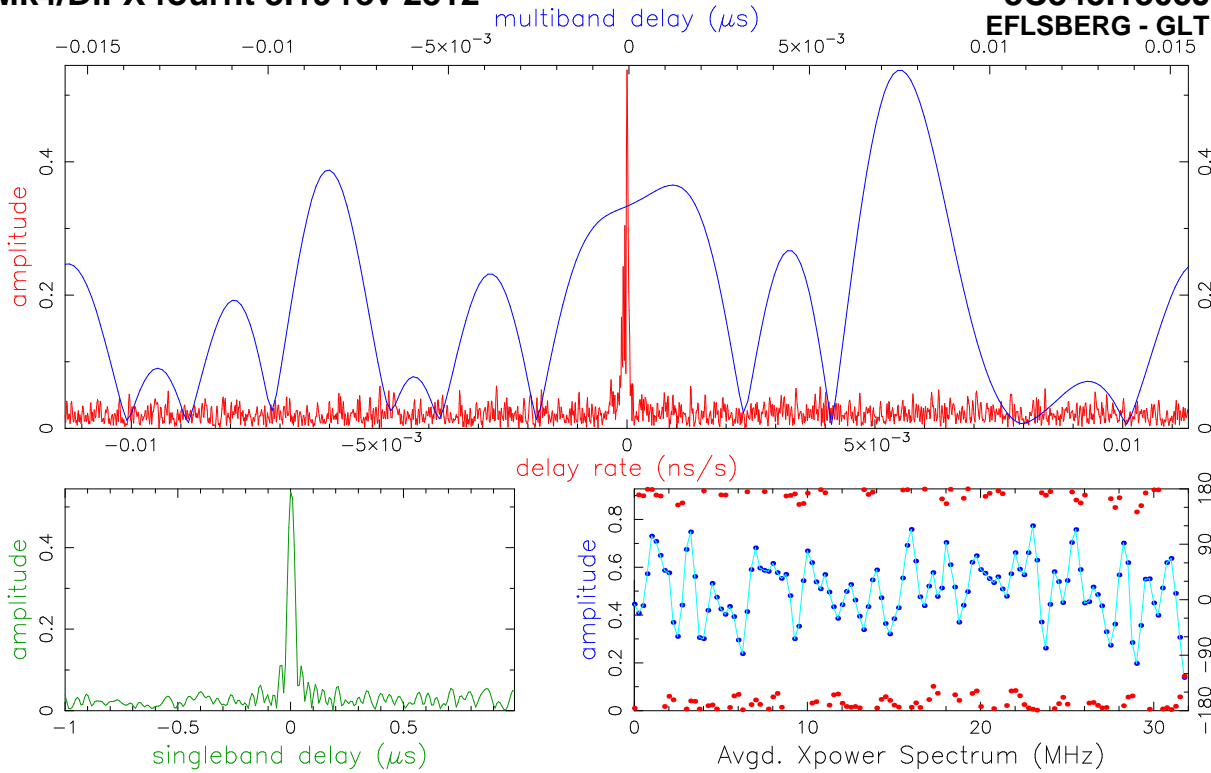
b: az 66.1 el 33.9 pa -52.6
g: az 142.5 el 51.0 pa -10.6
u,v (fr/asec) -4834.133 -994.278

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/bg.W.29.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

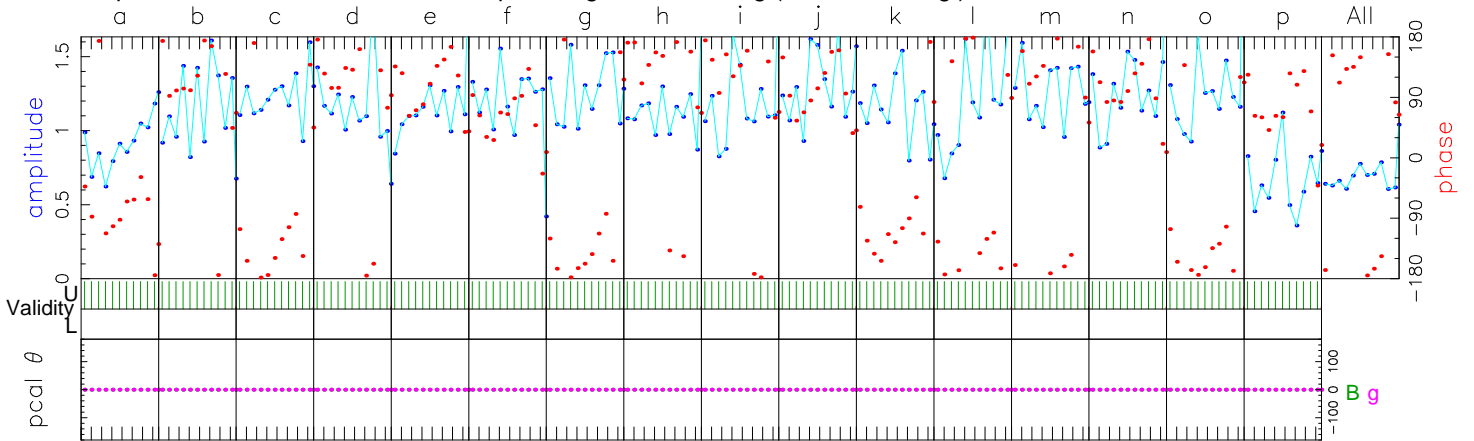


Fringe quality 6

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

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

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



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

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

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

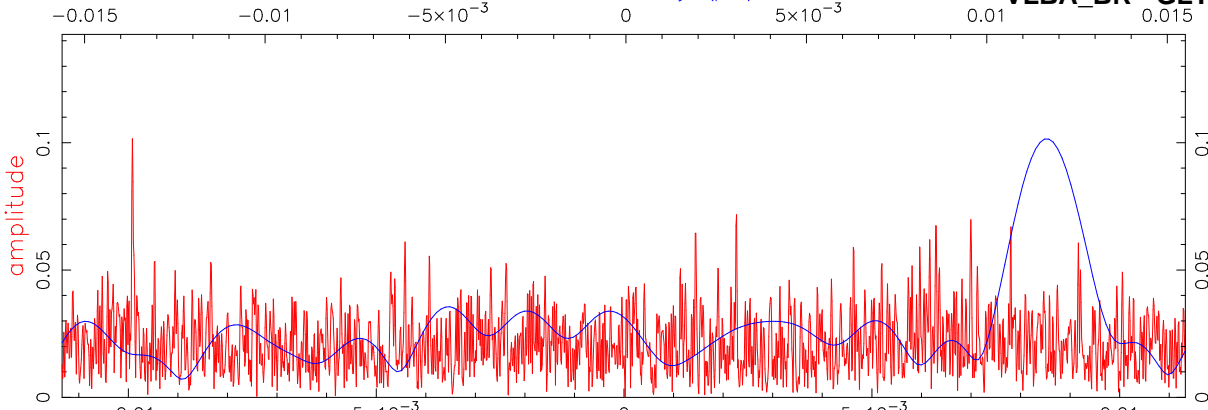
B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.44.1305JH

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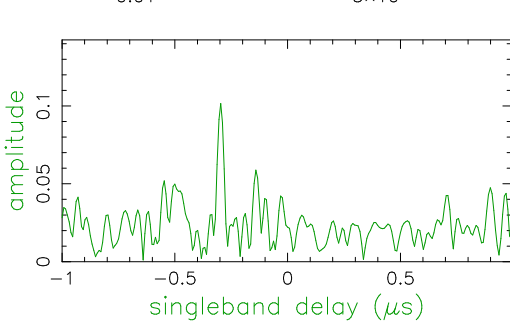
3C345.1305JH, No0001, bg
VLBA_BR - GLT, fgroup W, pol LR

multiband delay (μ s)

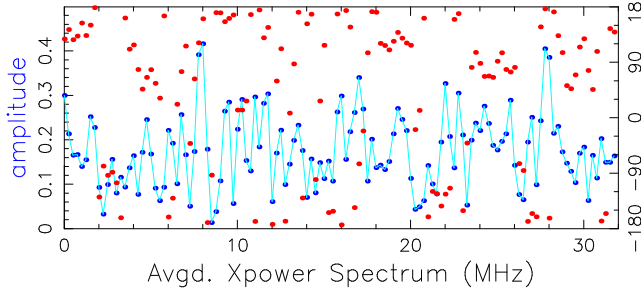
Fringe quality 0



SNR 5.6
Int time 406.440
Amp 0.143
Phase 163.0
PFD 9.9e-01
Delays (us)
SBD -0.297259
MBD 0.011652
Fringe rate (Hz)
-0.855469
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

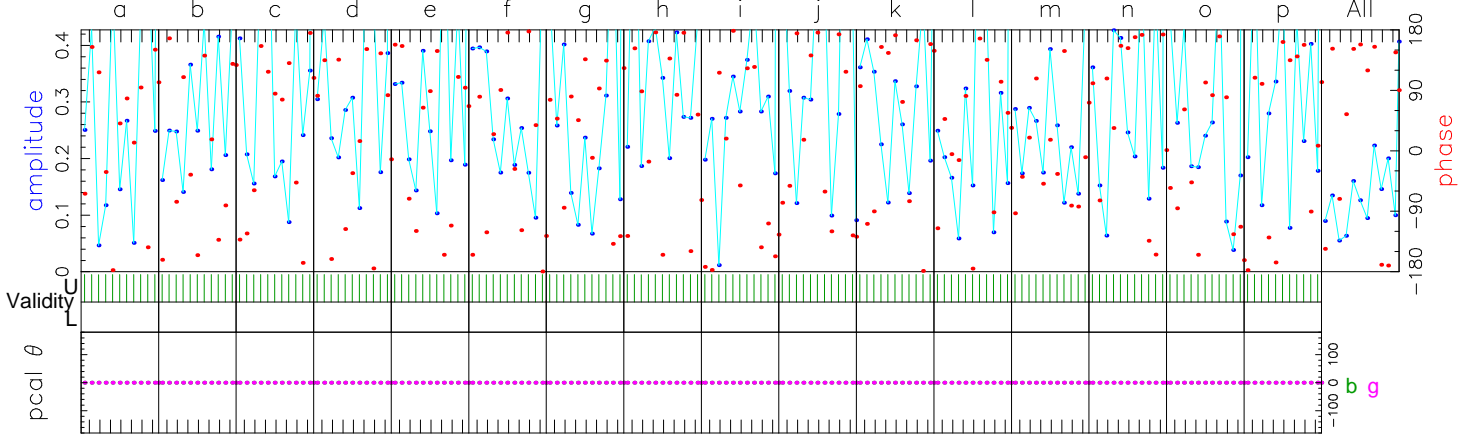


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042735
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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.55423009417E+03																
Sband delay (usec)		-4.55422650493E+03																
Phase delay (usec)		-4.55392924068E+03																
Delay rate (us/s)		6.50033850542E-01																
Total phase (deg)					74.9													
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																		
lags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
simultaneous interpolator																		

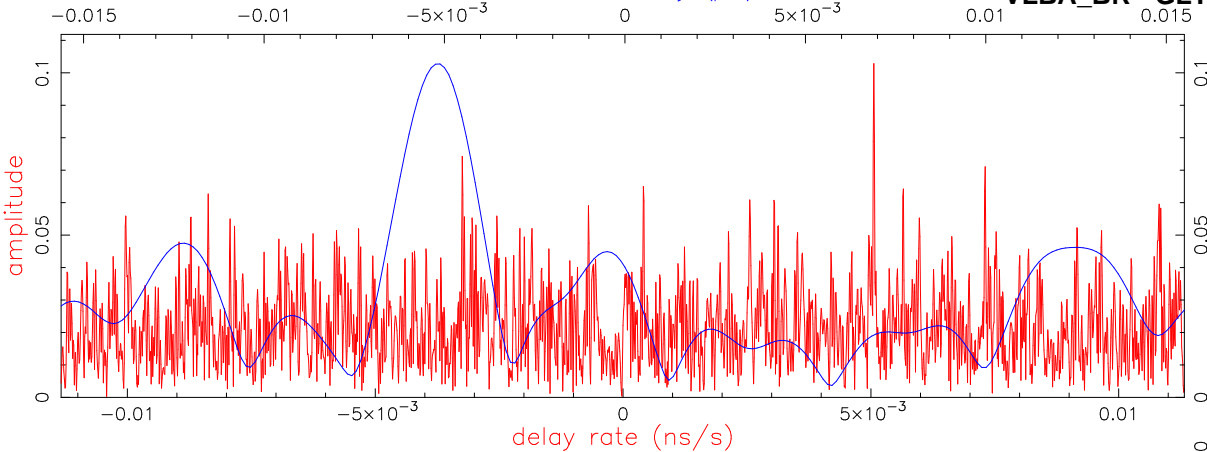
b: az 66.1 el 33.9 pa -52.6 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/bg.W.47.1305JH

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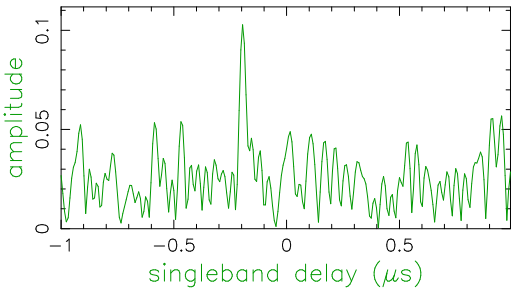
3C345.1305JH, No0001, bg
VLBA_BR - GLT, fgroup W, pol RL

multiband delay (μ s)

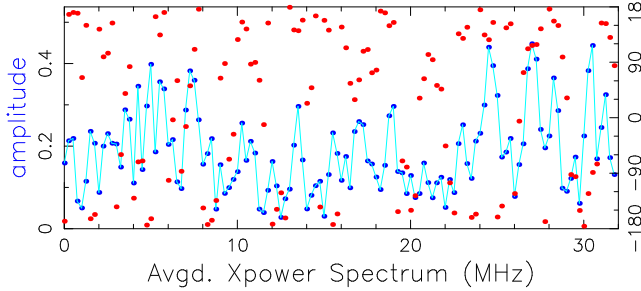
Fringe quality 0



SNR 5.7
Int time 406.400
Amp 0.112
Phase 141.5
PFD 9.7e-01
Delays (us)
SBD -0.194761
MBD -0.005183
Fringe rate (Hz)
0.436024
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

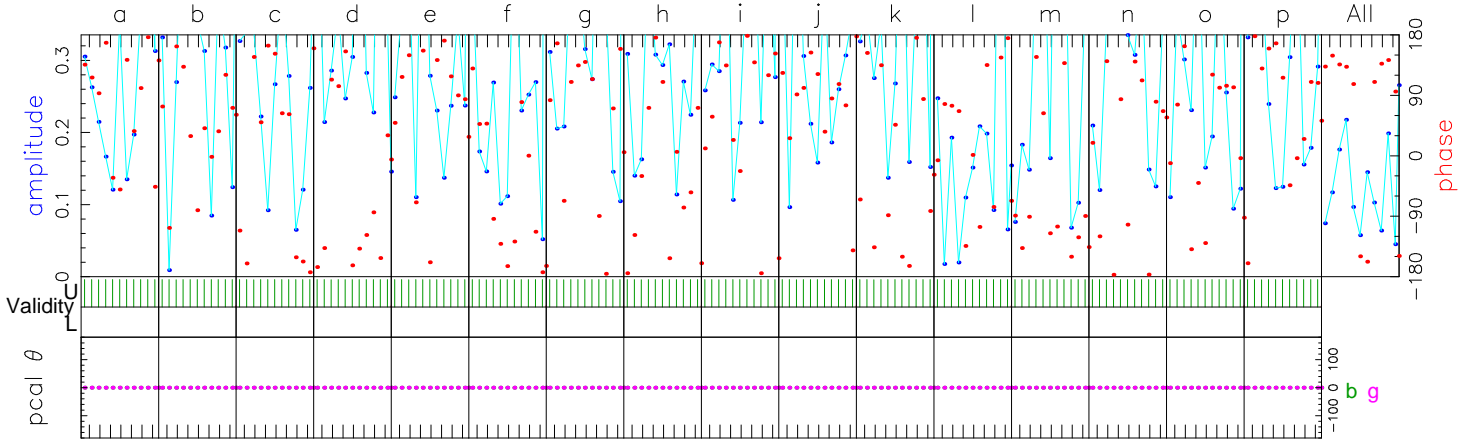


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042739
2020:014:135814
RA & Dec (J2000)
16h42m58.80967s
+39°48'36.993984"

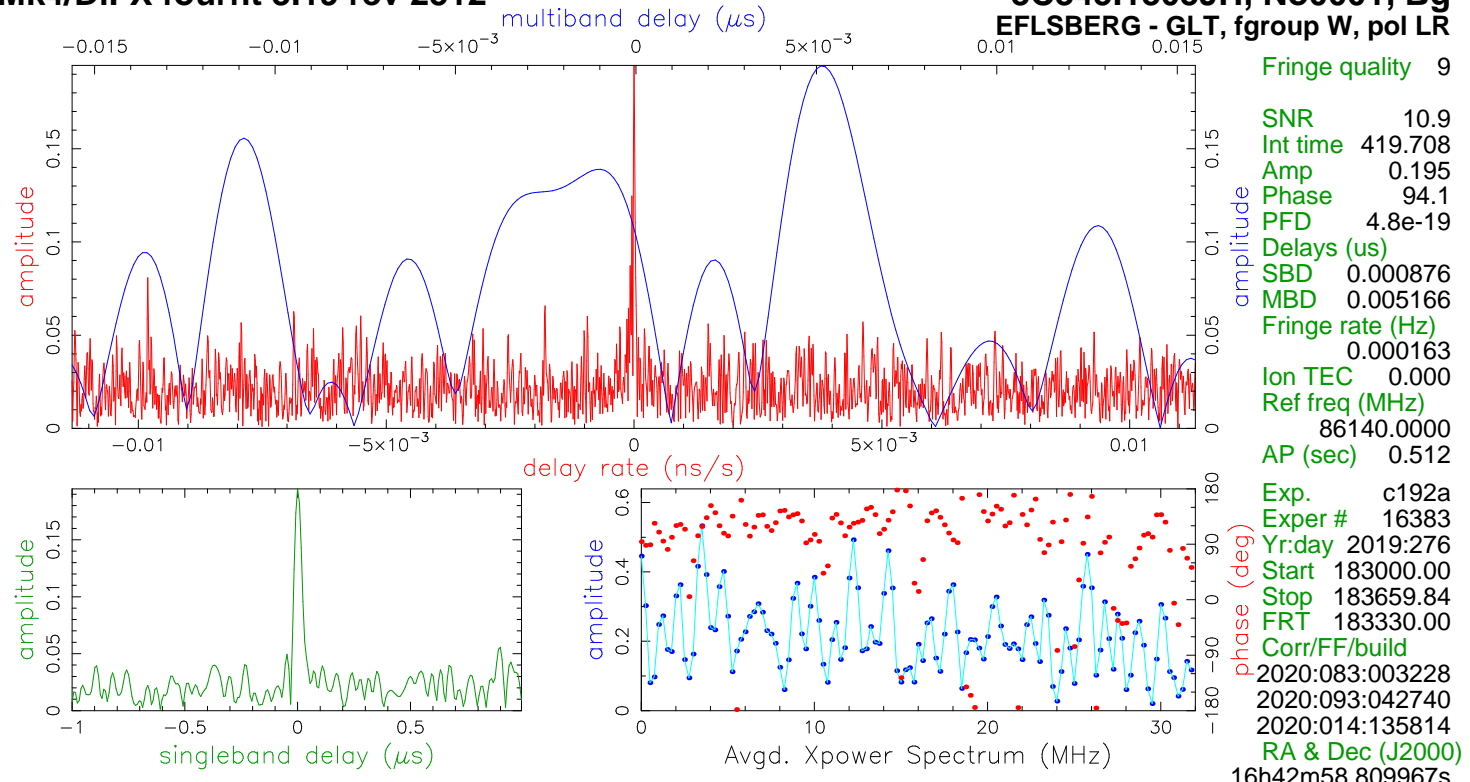
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	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
130.3	66.8	149.9	-161.2	131.9	-151.8	147.1	137.0	134.9	101.9	179.0	141.9	-149.4	126.5	98.4	135.4	141.5	Phase	141.5
0.1	0.2	0.1	0.3	0.2	0.1	0.1	0.0	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
250.5	120.0	17.0	104.1	103.7	192.9	117.8	68.8	173.8	103.6	252.1	224.7	40.4	203.1	152.2	11.2	104.1	Sbd box	104.1
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd) -4.55412192877E+03 Apriori delay (usec) -4.55392924593E+03 Resid mbdelay (usec) -5.18283E-03 +/- 1.9E-04 Sband delay (usec) -4.55412400743E+03 Apriori clock (usec) -1.9088186E+00 Resid sbdelay (usec) -1.94761E-01 +/- 3.0E-03 Phase delay (usec) -4.55392924137E+03 Apriori clockrate (us/s) -3.1739506E-07 Resid phdelay (usec) 4.56186E-06 +/- 6.5E-07 Delay rate (us/s) 6.50048843486E-01 Apriori rate (us/s) 6.50043781683E-01 Resid rate (us/s) 5.06180E-06 +/- 2.8E-09 Total phase (deg) 53.4 Apriori accel (us/s/s) 7.70195165707E-06 Resid phase (deg) 141.5 +/- 20.2																		
ph/seg (deg)	RMS	Theor.	Amplitude		0.112 +/- 0.020		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000	1.000				
amp/seg (%)	34.7	35.0	Search (2048X64)		0.099		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016	0.016				
ph/frq (deg)	57.5	61.1	Interp.		0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011	0.011				
amp/frq (%)	41.0	40.4	Inc. seg. avg.		0.108		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		0.00	0.00				
	65.8	70.5	Inc. frq. avg.		0.114													
b: az 66.1 el 33.9 pa -52.6 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278 simultaneous interpolator Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/bg.W.66.1305JH																		

Mk4/DiFX fourfit 3.19 rev 2512

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

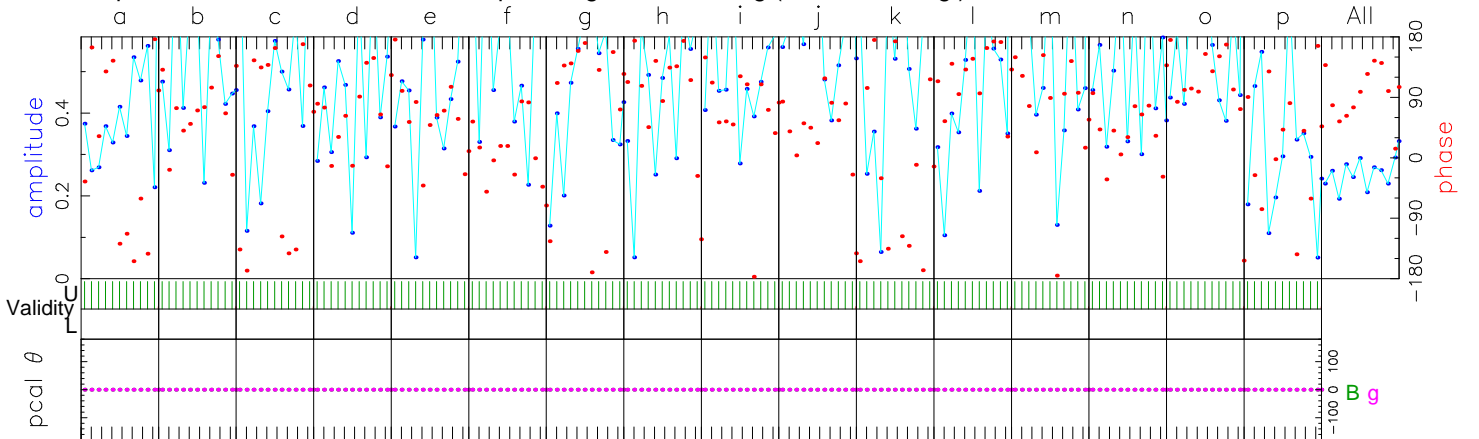


Fringe quality 9

SNR 10.9
Int time 419.708
Amp 0.195
Phase 94.1
PFD 4.8e-19
Delays (us)
SBD 0.000876
MBD 0.005166
Fringe rate (Hz) 0.000163
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042740
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



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

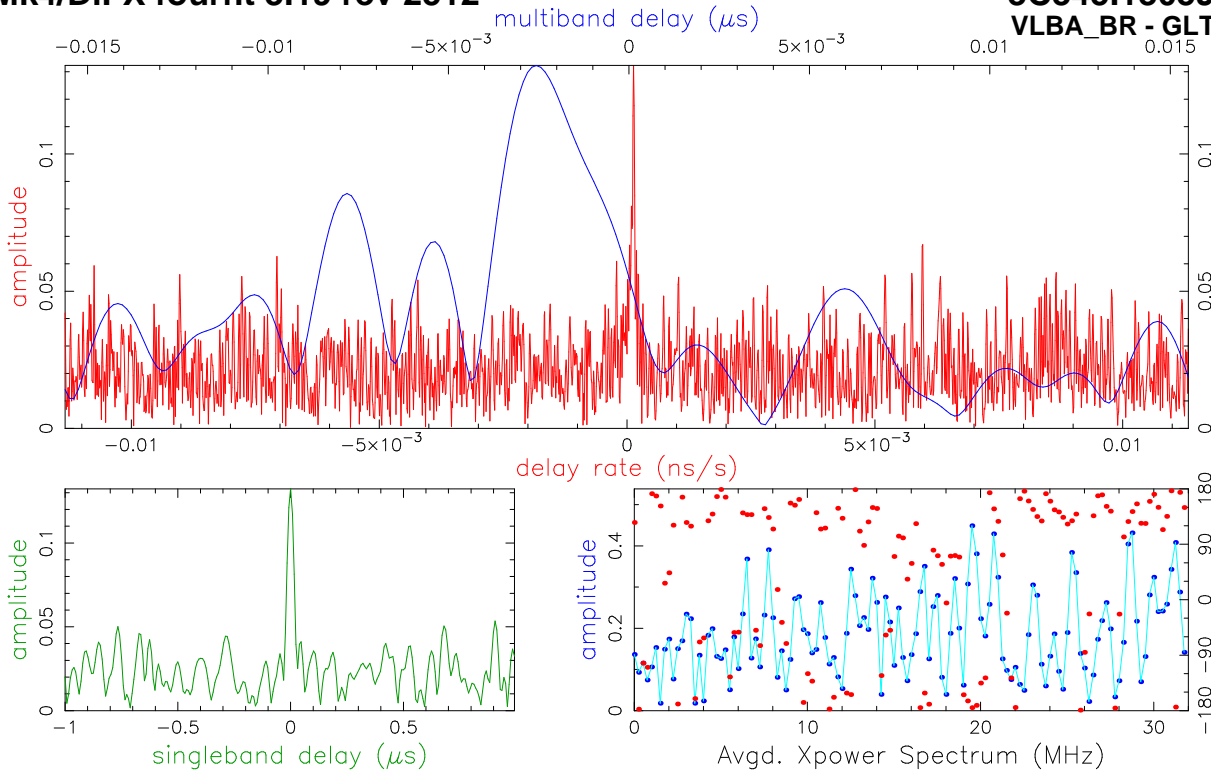
Group delay (usec)(sbd) 1.11027566043E+03 Apriori delay (usec) 1.11027049484E+03 Resid mbdelay (usec) 5.16559E-03 +/- 9.9E-05
 Sband delay (usec) 1.11027137084E+03 Apriori clock (usec) 1.5542942E+01 Resid sbdelay (usec) 8.76000E-04 +/- 1.6E-03
 Phase delay (usec) 1.11027049787E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 3.03513E-06 +/- 3.4E-07
 Delay rate (us/s) -6.86391248115E-01 Apriori rate (us/s) -6.86391250011E-01 Resid rate (us/s) 1.89539E-09 +/- 1.4E-09
 Total phase (deg) 247.3 Apriori accel (us/s/s) -2.03542527340E-05 Resid phase (deg) 94.1 +/- 10.5

RMS Theor. Amplitude 0.195 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.6 18.2 Search (2048X64) 0.191 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 33.4 31.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 67.2 21.0 Inc. seg. avg. 0.239 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 90.6 36.7 Inc. frq. avg. 0.318 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.67.1305JH

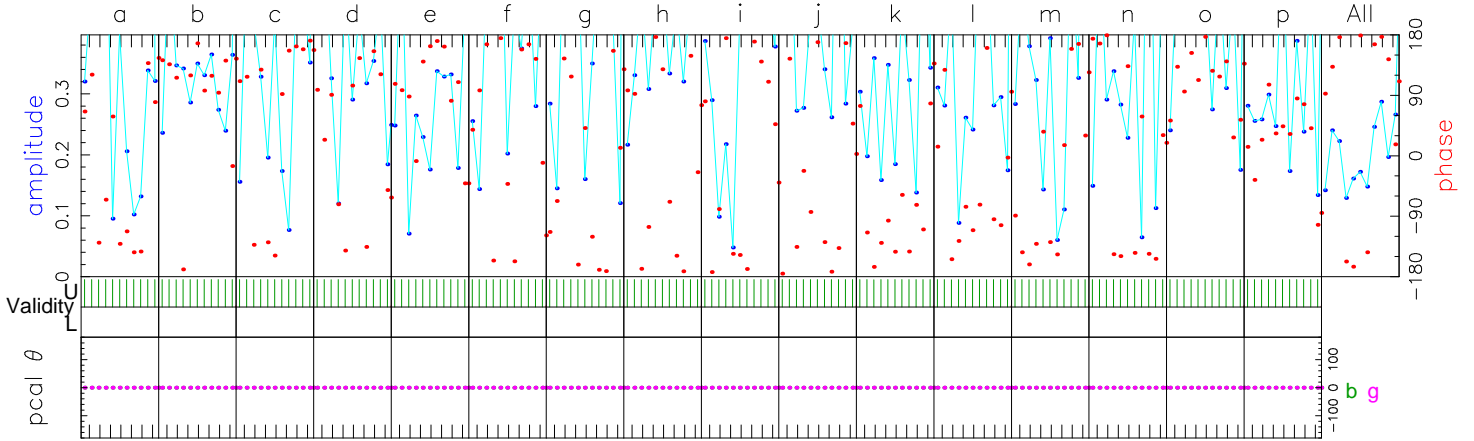
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bg
VLBA_BR - GLT, fgroup W, pol LL



Fringe quality 9
SNR 7.3
Int time 406.400
Amp 0.132
Phase 162.3
PFD 9.4e-05
Delays (us)
SBD -0.000567
MBD -0.002580
Fringe rate (Hz)
0.011902
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)
16h42m58.80967s
+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

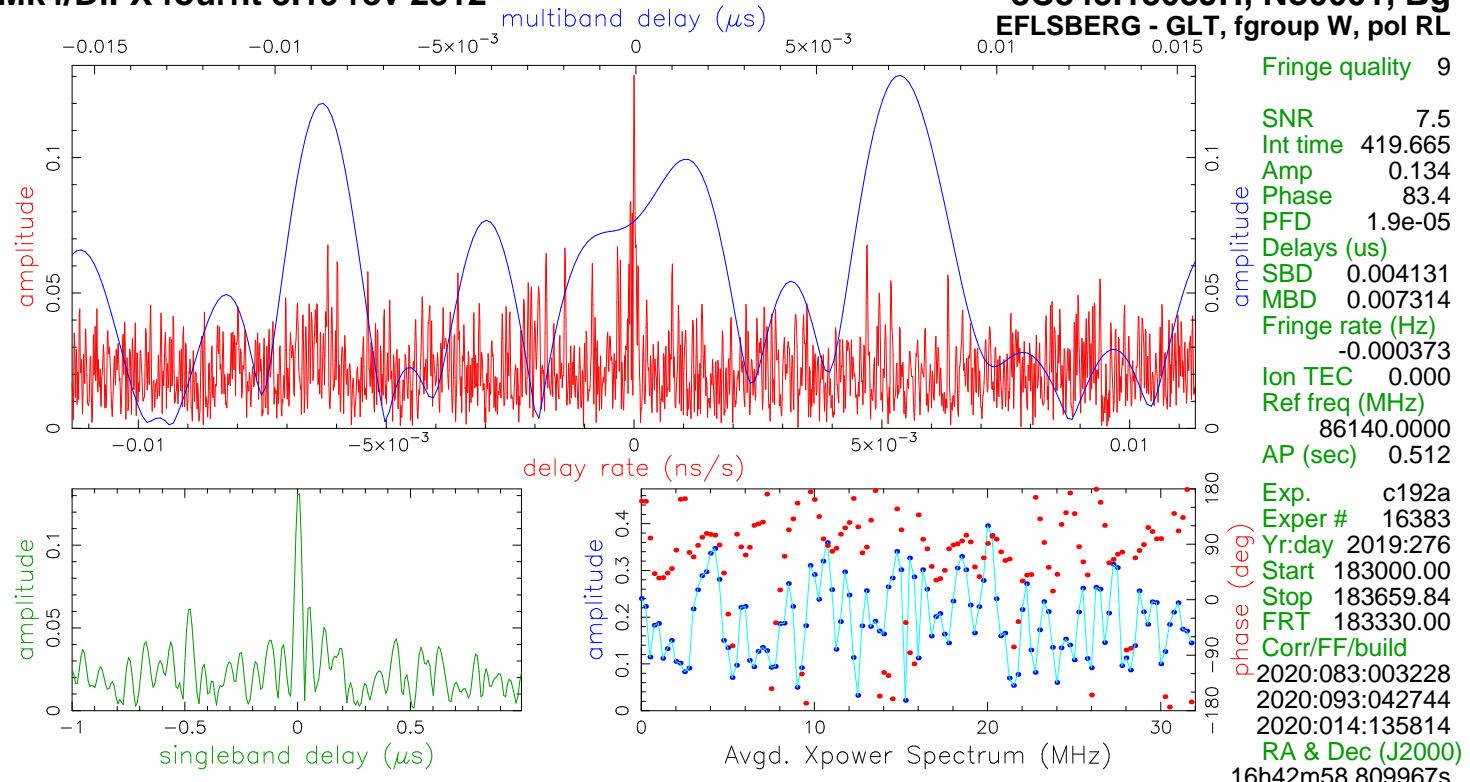


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
Group delay (usec)(sbd)	-163.7	128.7	163.5	125.5	111.0	173.0	178.8	179.0	154.1	-161.7	-117.8	-115.1	-163.0	-168.8	118.5	43.2	162.3	Phase	
Sband delay (usec)	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.2	Ampl.	
Phase delay (usec)	208.2	127.3	11.5	66.4	93.3	82.3	227.0	219.7	152.8	129.1	187.5	232.5	168.7	181.9	127.8	127.1	128.9	Sbd box	
Delay rate (us/s)	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	
Total phase (deg)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	PC freqs
	b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
	b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC
	g	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	PC amp
	g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	W15UL	Chan ids
	g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	W15UL	Tracks
																			Tracks
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) 55.3 27.2 Search (2048X64) 0.128 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 66.8 47.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 53.2 31.4 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 62.6 54.8 Inc. frq. avg. 0.165 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 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/bg.W.8.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 9

SNR 7.5

Int time 419.665

Amp 0.134

Phase 83.4

PFD 1.9e-05

Delays (us)

SBD 0.004131

MBD 0.007314

Fringe rate (Hz)

-0.000373

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183000.00

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042744

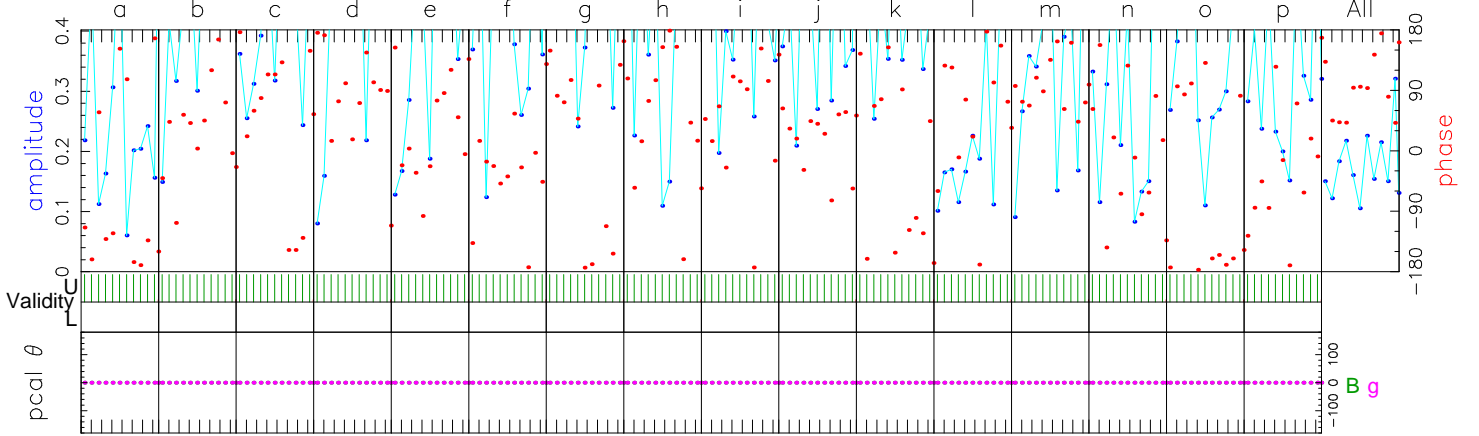
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

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



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

Group delay (usec)(sbd) 1.11027780893E+03 Apriori delay (usec) 1.11027049484E+03 Resid mbdelay (usec) 7.31409E-03 +/- 1.4E-04

Sband delay (usec) 1.11027462584E+03 Apriori clock (usec) 1.5542942E+01 Resid sbdelay (usec) 4.13100E-03 +/- 2.3E-03

Phase delay (usec) 1.11027049753E+03 Apriori clockrate (us/s) -2.7499999E-07 Resid phdelay (usec) 2.68827E-06 +/- 4.9E-07

Delay rate (us/s) -6.86391254343E-01 Apriori rate (us/s) -6.86391250011E-01 Resid rate (us/s) -4.33283E-09 +/- 2.0E-09

Total phase (deg) 236.5 Apriori accel (us/s/s) -2.03542527340E-05 Resid phase (deg) 83.4 +/- 15.3

RMS Theor. Amplitude 0.134 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 44.3 26.4 Search (2048X64) 0.127 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

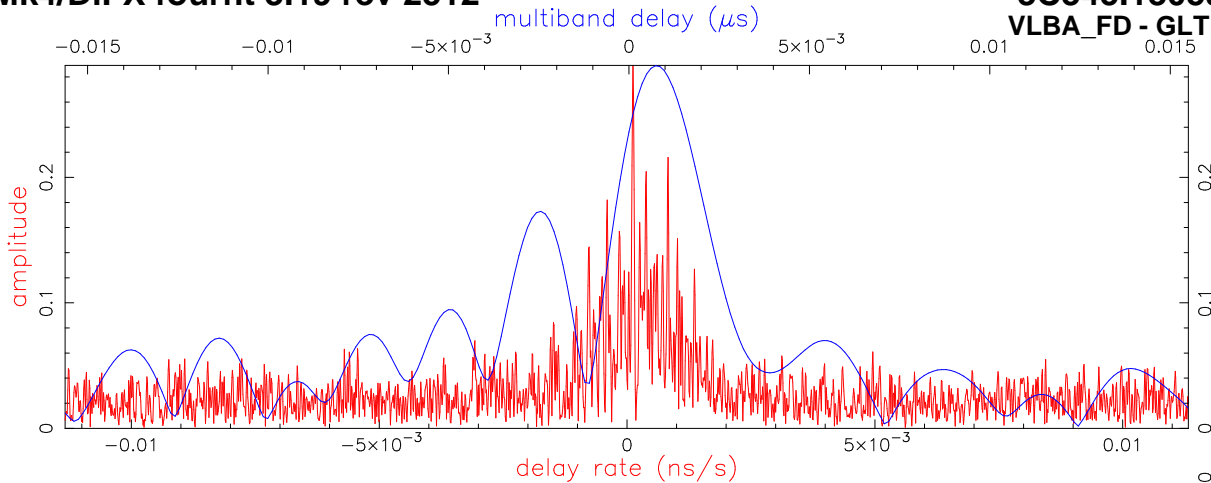
amp/seg (%) 55.9 46.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 67.0 30.5 Inc. seg. avg. 0.165 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 89.5 53.3 Inc. frq. avg. 0.203 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

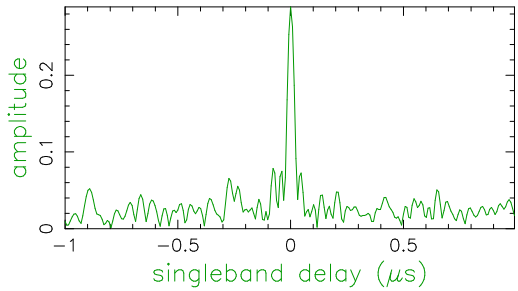
B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bg..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bg.W.84.1305JH

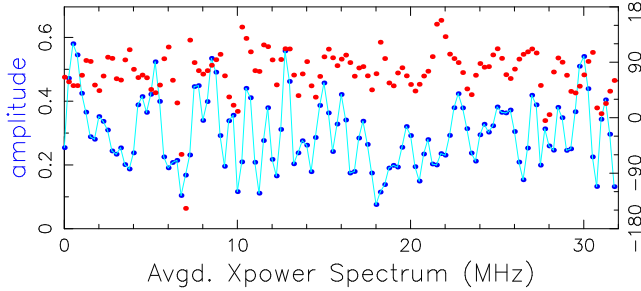


Fringe quality 9

SNR 16.0
Int time 410.360
Amp 0.289
Phase 76.0
PFD 0.0e+00
Delays (us)
SBD 0.000640
MBD 0.000762
Fringe rate (Hz)
0.010541
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

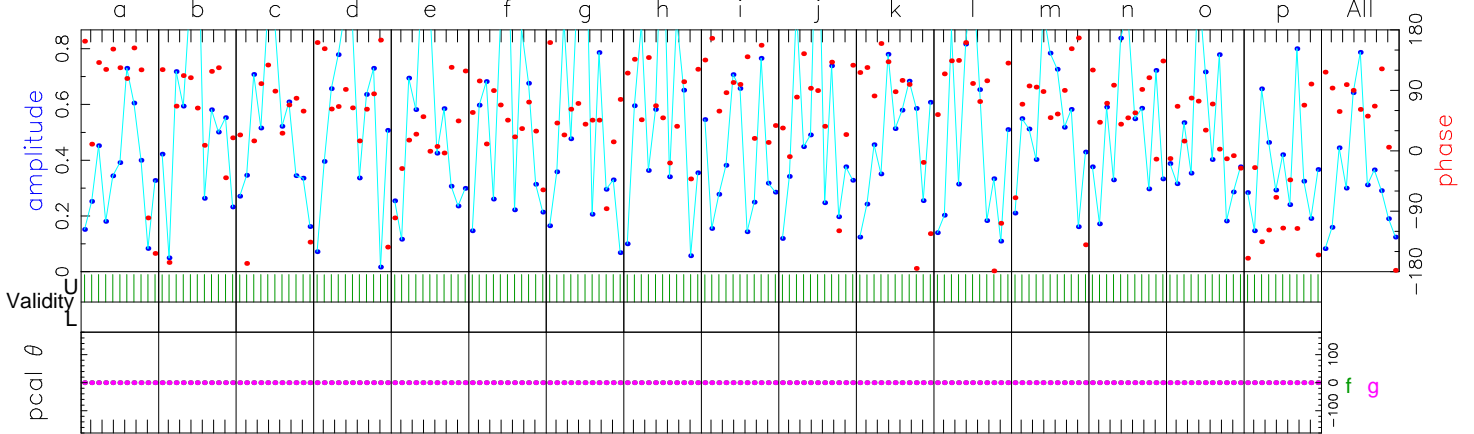


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
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., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
fg	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fg	0:0	0:0	0:0	0:0	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		
g	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		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

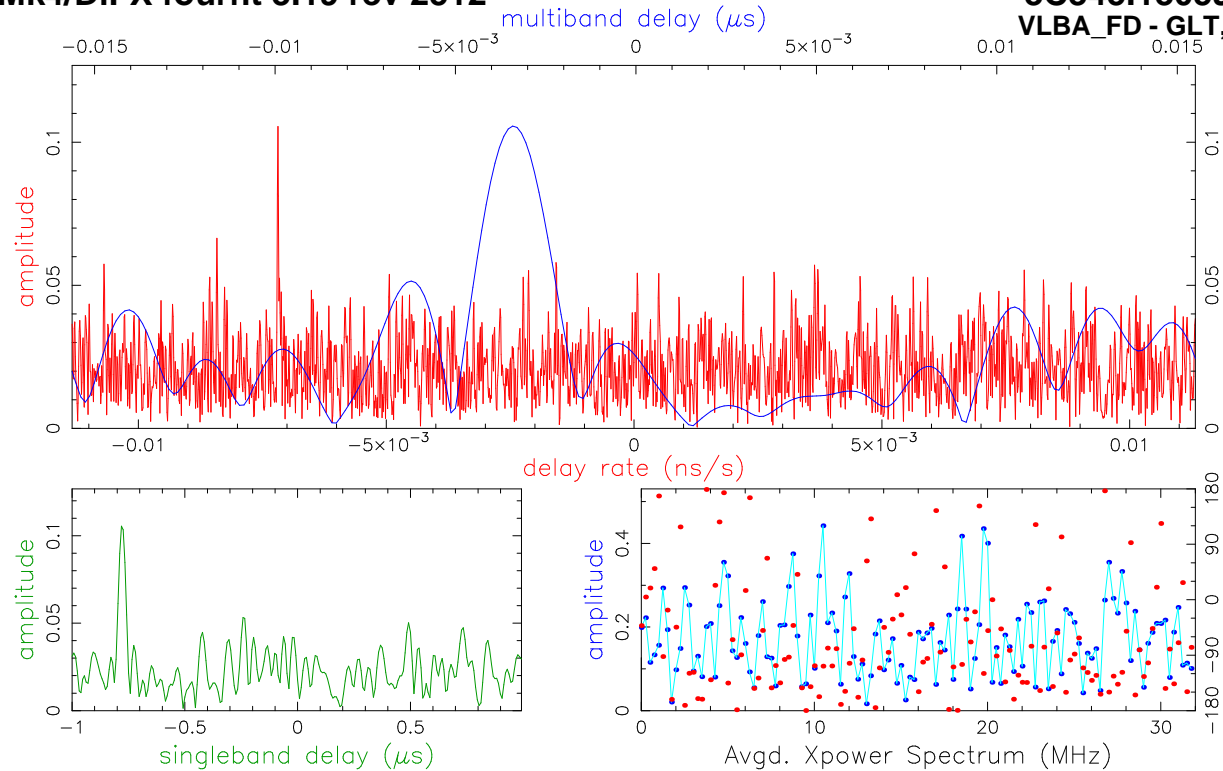
Group delay (usec)(sbd) -3.52708119232E+03 Apriori delay (usec) -3.52708195471E+03 Resid mbdelay (usec) 7.62390E-04 +/- 6.7E-05
 Sband delay (usec) -3.52708131471E+03 Apriori clock (usec) -8.4134048E-01 Resid sbdelay (usec) 6.40000E-04 +/- 1.1E-03
 Phase delay (usec) -3.52708195226E+03 Apriori clockrate (us/s) -1.6594950E-07 Resid phdelay (usec) 2.44993E-06 +/- 2.3E-07
 Delay rate (us/s) 7.90242727019E-01 Apriori rate (us/s) 7.90242604651E-01 Resid rate (us/s) 1.22369E-07 +/- 9.7E-10
 Total phase (deg) -132.3 Apriori accel (us/s/s) -1.47175634827E-05 Resid phase (deg) 76.0 +/- 7.2

RMS Theor. Amplitude 0.289 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 45.0 11.9 Search (2048X64) 0.283 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 73.7 20.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 55.2 14.3 Inc. seg. avg. 0.329 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 35.5 25.0 Inc. frq. avg. 0.357 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 61.0 el 37.1 pa -78.2 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -5920.965 -4047.708 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fg..1305JH Output file: /Exps/c192a/v2/1234/No0001/fg.W.109.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, fg
VLBA_FD - GLT, fgroup W, pol LR

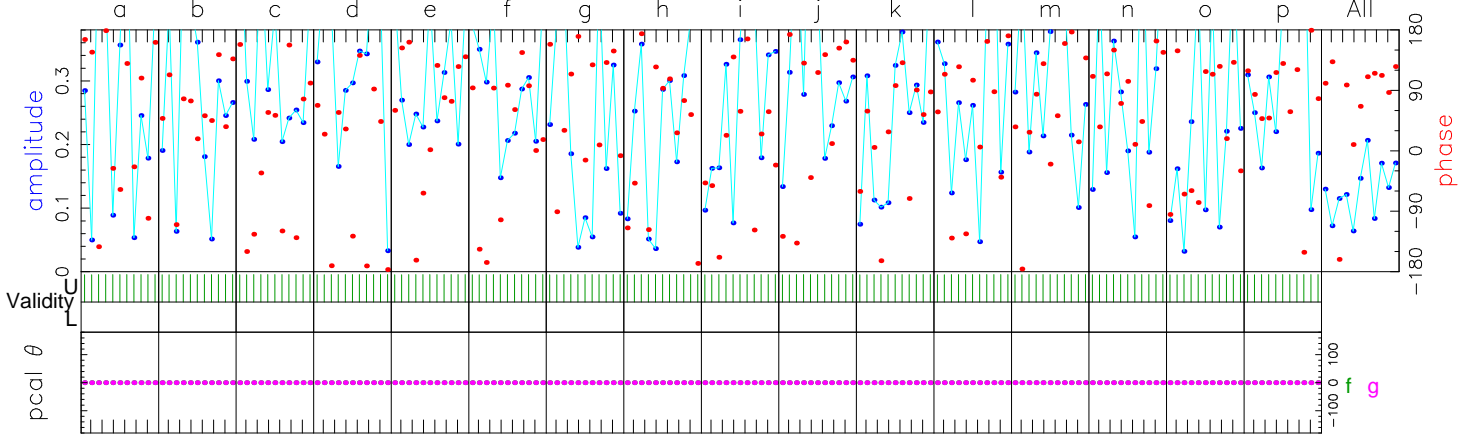


Fringe quality 0

SNR 5.9
Int time 410.360
Amp 0.127
Phase 107.0
PFD 5.7e-01
Delays (us)
SBD -0.778225
MBD -0.003341
Fringe rate (Hz)
-0.619837
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042759
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

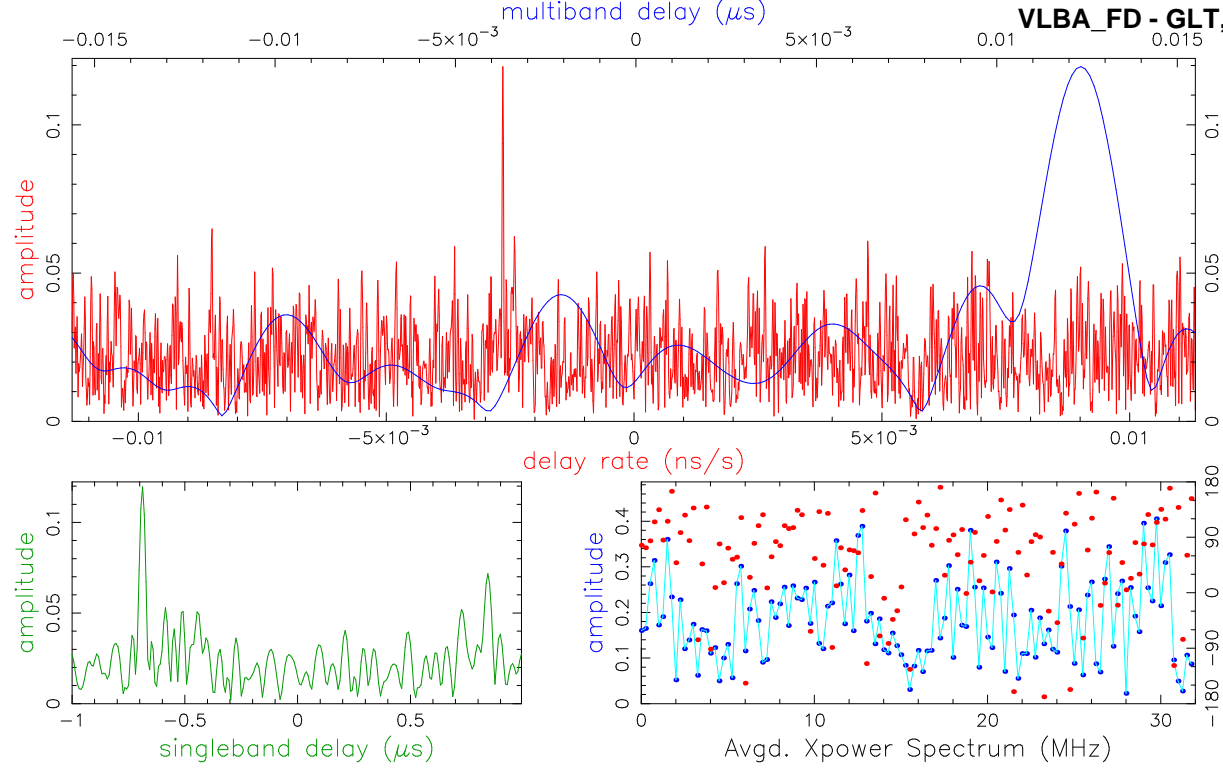


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0				
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				
Group delay (usec)(sbd)			-3.52786654523E+03																	
Sband delay (usec)			-3.52786018021E+03																	
Phase delay (usec)			-3.52708195126E+03																	
Delay rate (us/s)			7.90235408955E-01																	
Total phase (deg)					-101.3															
Apriori delay (usec)																				
Apriori clock (usec)																				
Apriori clockrate (us/s)																				
Apriori rate (us/s)																				
Apriori accel (us/s/s)																				
Resid mbdelay (usec)																				
Resid sbdelay (usec)																				
Resid phdelay (usec)																				
Resid rate (us/s)																				
Resid phase (deg)																				
PCal mode: MANUAL, MANUAL																				
PCal rate: 0.000E+00, 0.000E+00 (us/s)																				
PCal period (AP's) 5, 5																				
sb window (us)																				
mb window (us)																				
dr window (ns/s)																				
ion window (TEC)																				
simultaneous interpolator																				

ph/seg (deg) 43.9 32.1 Search (2048X64) 0.105 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.5 56.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.4 38.7 Inc. seg. avg. 0.132 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 50.8 67.6 Inc. frq. avg. 0.119 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 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -5920.965 -4047.708 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fg..1305JH Output file: /Exps/c192a/v2/1234/No0001/fg.W.131.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, fg
VLBA_FD - GLT, fgroup W, pol RL

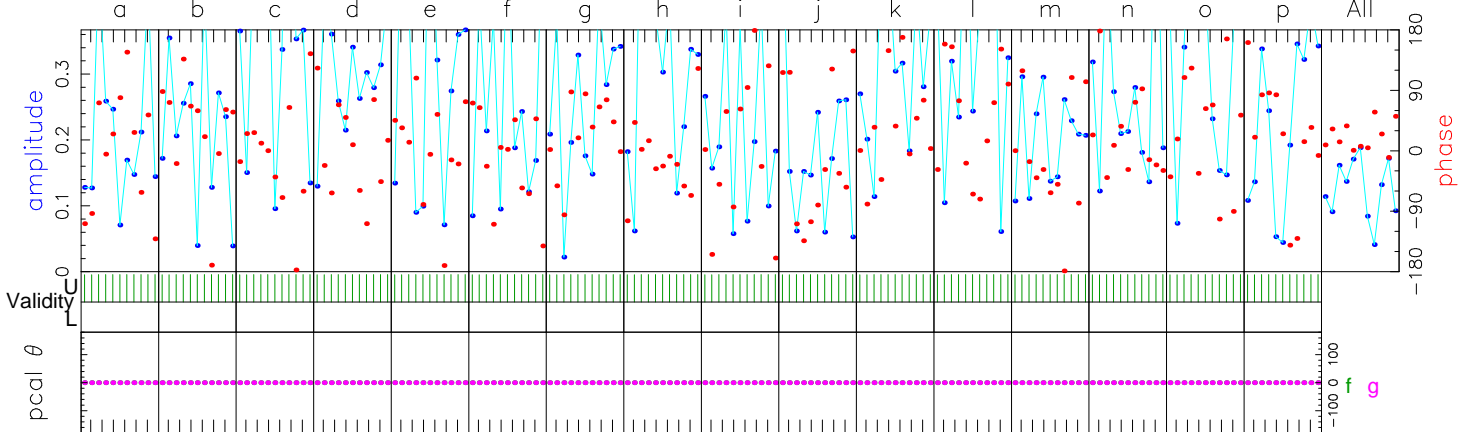


Fringe quality 0

SNR 6.6
Int time 410.319
Amp 0.122
Phase 15.5
PFD 9.7e-03
Delays (us)
SBD -0.688020
MBD 0.012317
Fringe rate (Hz)
-0.228472
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042804
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

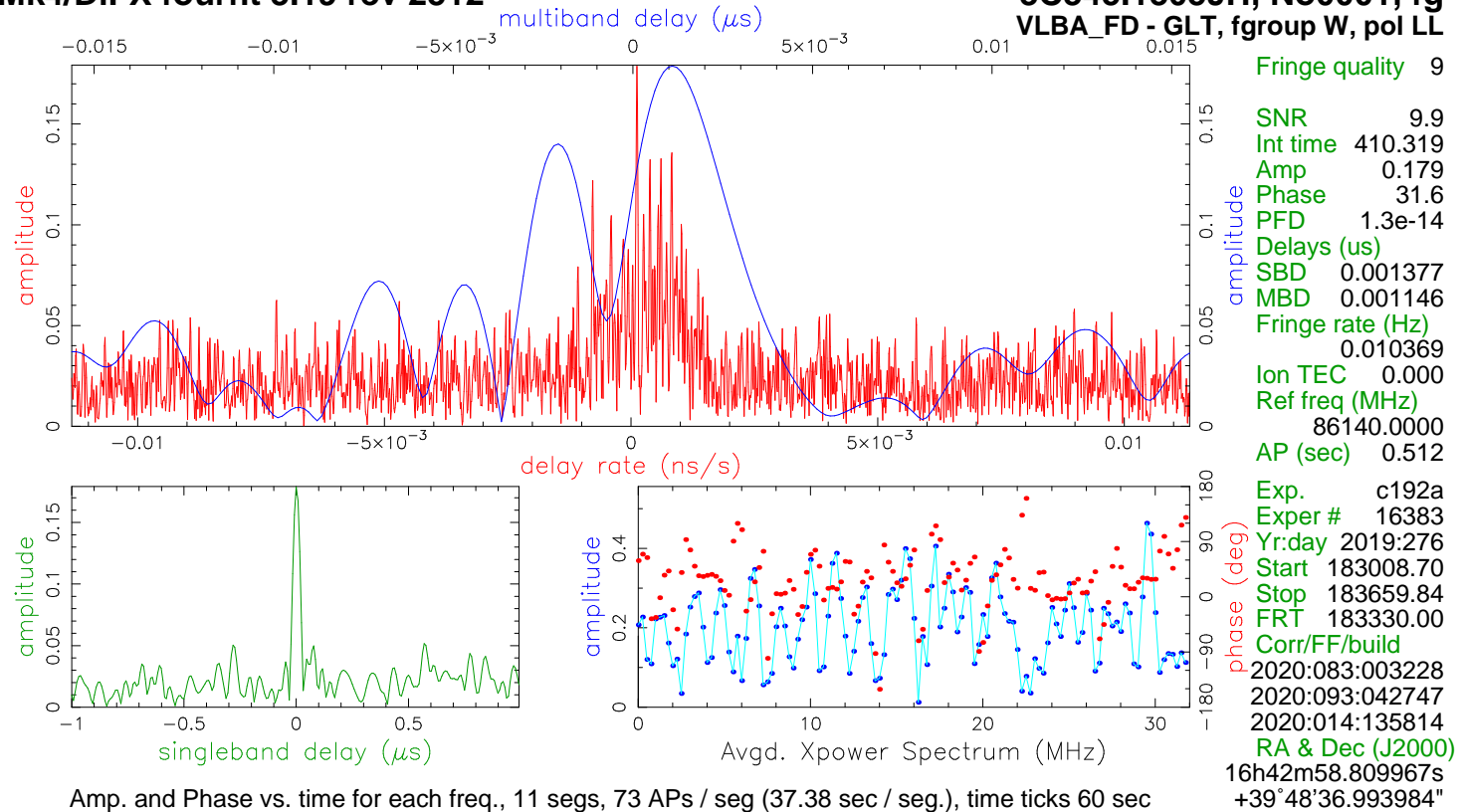


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	33.3	53.4	8.5	-8.4	19.0	-21.2	33.0	-13.0	31.0	-136.1	27.9	19.2	-15.2	-0.9	51.1	39.4	Phase	15.5
	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.0	0.2	0.1	0.1	Ampl.	0.1
	135.1	230.7	75.0	96.3	39.5	163.6	191.8	40.1	243.0	95.3	54.0	94.6	237.9	148.1	71.9	199.0	Sbd box	40.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fg	0:0	0:0	0:0	0:0	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	
g	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	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

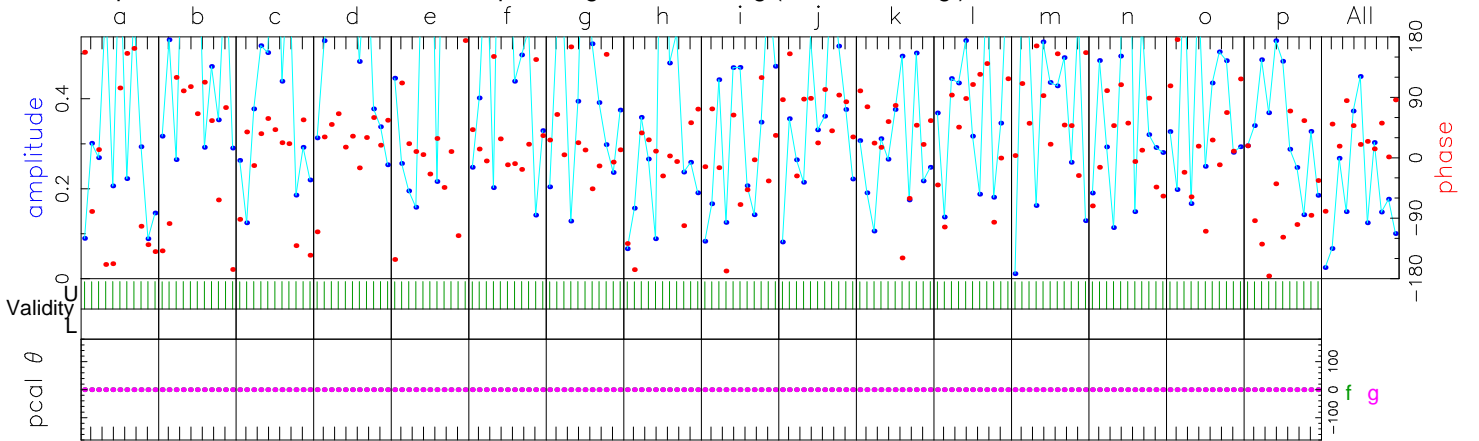
Group delay (usec)(sbd) -3.52775713780E+03 Apriori delay (usec) -3.52708195471E+03 Resid mbdelay (usec) 1.23169E-02 +/- 1.6E-04
 Sband delay (usec) -3.52776997421E+03 Apriori clock (usec) -8.4134048E-01 Resid sbdelay (usec) -6.88020E-01 +/- 2.6E-03
 Phase delay (usec) -3.52708195421E+03 Apriori clockrate (us/s) -1.6594950E-07 Resid phdelay (usec) 4.98446E-07 +/- 5.6E-07
 Delay rate (us/s) 7.90239952314E-01 Apriori rate (us/s) 7.90242604651E-01 Resid rate (us/s) -2.65234E-06 +/- 2.3E-09
 Total phase (deg) -192.9 Apriori accel (us/s/s) -1.47175634827E-05 Resid phase (deg) 15.5 +/- 17.3

RMS Theor. Amplitude 0.122 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 21.3 28.7 Search (2048X64) 0.111 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 36.8 50.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 47.3 34.6 Inc. seg. avg. 0.115 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 55.3 60.3 Inc. frq. avg. 0.113 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 61.0 el 37.1 pa -78.2 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -5920.965 -4047.708 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fg..1305JH Output file: /Exps/c192a/v2/1234/No0001/fg.W.152.1305JH



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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	178.8	93.6	28.9	32.3	-27.9	11.0	12.7	-3.0	0.3	71.9	55.9	95.1	68.6	33.1	18.4	-86.9		Phase 31.6					
	0.2	0.2	0.3	0.4	0.2	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2		Ampl. 0.2					
	126.9	129.0	129.0	128.6	130.5	129.3	129.0	128.9	92.2	129.8	75.5	39.3	143.6	129.7	128.2	126.2		Sbd box 129.2					
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
fg	0:0	0:0	0:0	0:0	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					
fg	0:0	0:0	0:0	0:0	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					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.52708080904E+03															Apriori delay (usec)	-3.52708195471E+03	Resid mbdelay (usec)	1.14567E-03	+/-	1.1E-04
Sband delay (usec)			-3.52708057821E+03															Apriori clock (usec)	-8.4134048E-01	Resid sbdelay (usec)	1.37650E-03	+/-	1.7E-03
Phase delay (usec)			-3.52708195369E+03															Apriori clockrate (us/s)	-1.6594950E-07	Resid phdelay (usec)	1.01785E-06	+/-	3.7E-07
Delay rate (us/s)			7.90242725021E-01															Apriori rate (us/s)	7.90242604651E-01	Resid rate (us/s)	1.20370E-07	+/-	1.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	-1.47175634827E-05	Resid phase (deg)	31.6	+/-	11.5

ph/seg (deg) 43.4 19.1 Search (2048X64) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 71.6 33.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 62.0 23.1 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

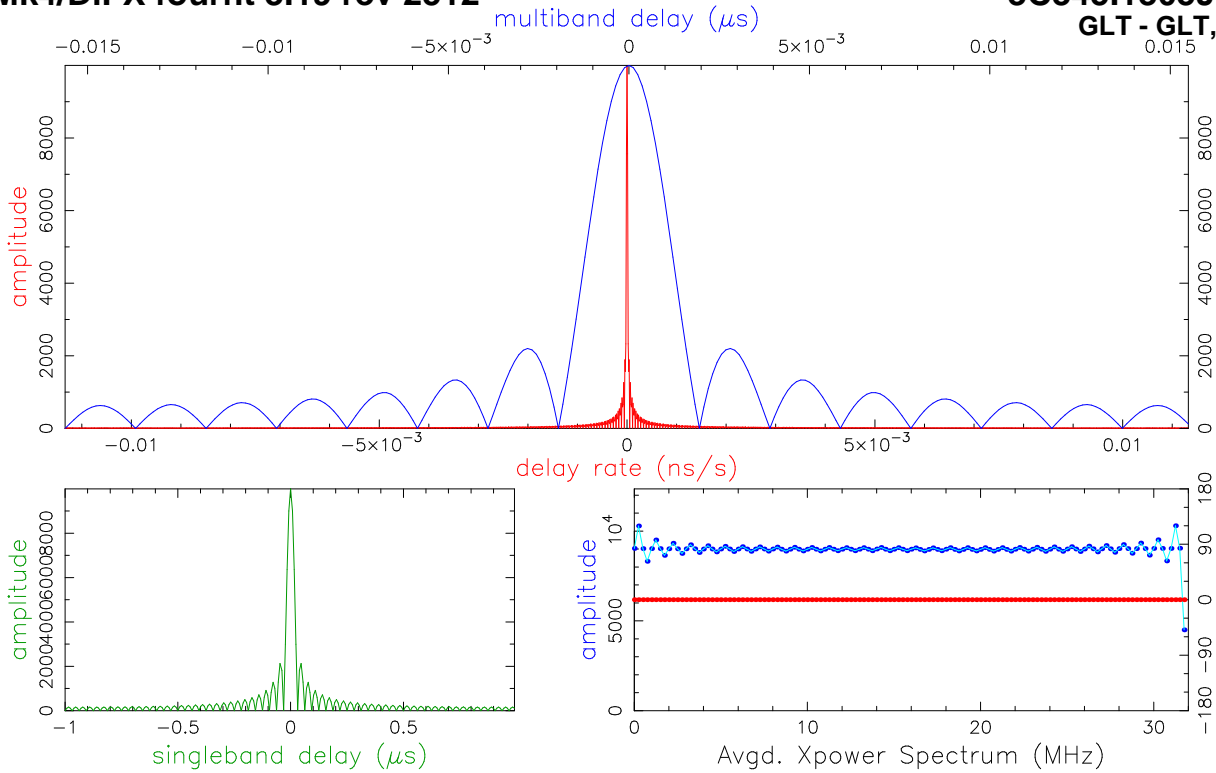
amp/frq (%) 60.2 40.3 Inc. frq. avg. 0.229 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

f: az 61.0 el 37.1 pa -78.2 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -5920.965 -4047.708 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fg..1305JH Output file: /Exps/c192a/v2/1234/No0001/fg.W.89.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

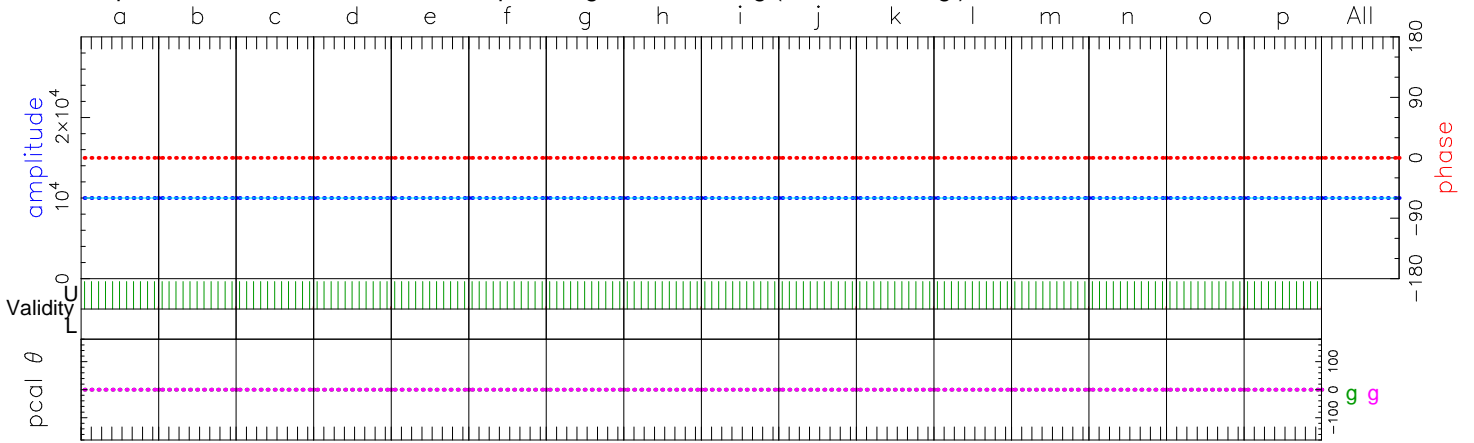


Fringe quality 9

SNR 560240.9
Int time 419.728
Amp 9999.845
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
Yr:day 16383
Start 2019:276
Stop 2019:276
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042755
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

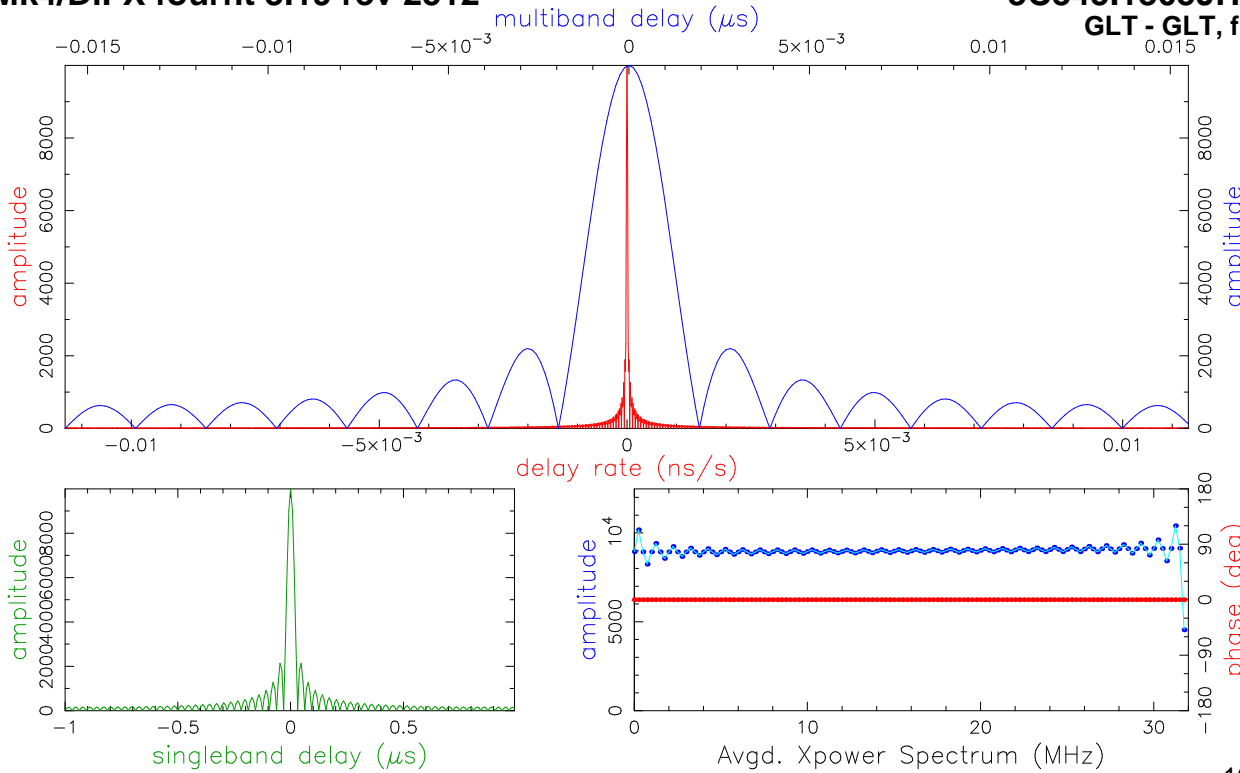


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)	0.0000000000E+00			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			0.00000E+00			+/-	1.9E-09	
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/-	3.1E-08	
Phase delay (usec)	-7.60160857581E-20			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-7.60161E-20			+/-	6.6E-12	
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/-	2.7E-14	
Total phase (deg)	-0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			-0.0			+/-	0.0	

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.845 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 9999.845 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
 g: az 142.5 el 51.0 pa -10.6 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gg..1305JH Output file: /Exps/c192a/v2/1234/No0001/gg.W.119.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

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

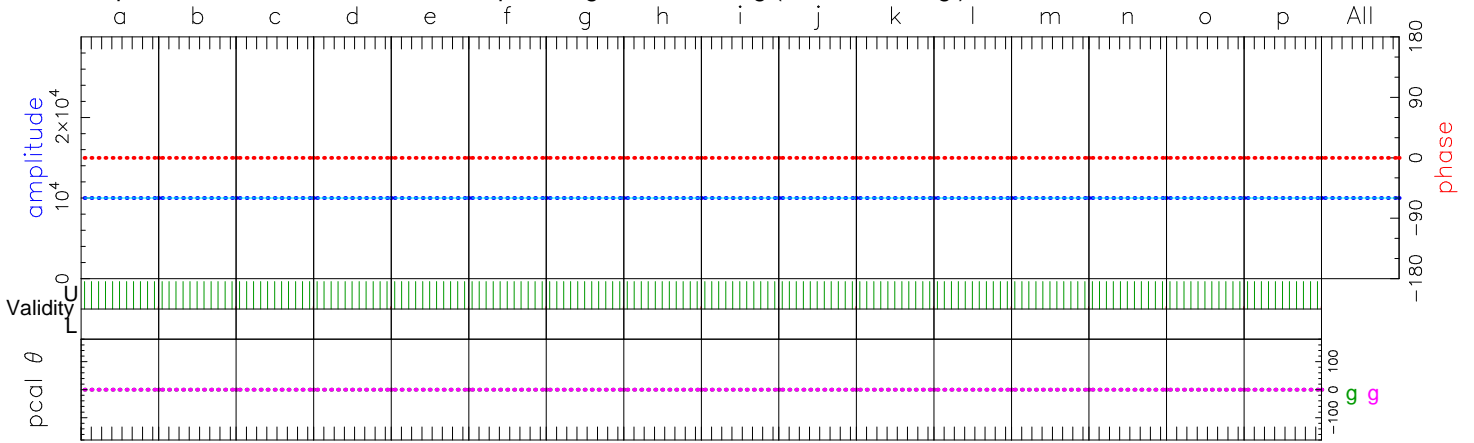


Fringe quality 9

SNR 560212.6
Int time 419.685
Amp 9999.855
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
Yr:day 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042750
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	9999.9
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

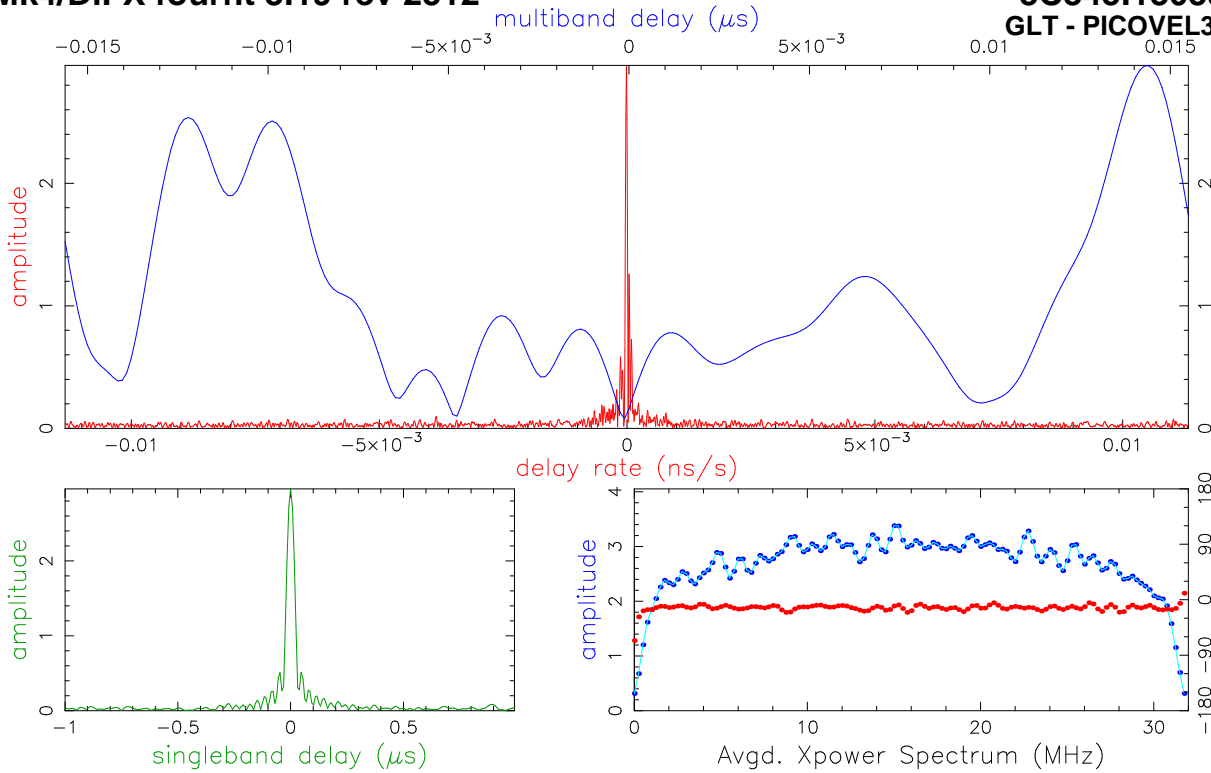
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) 8.8113625571E-21 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 8.81114E-21 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.855 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.855 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.855 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 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gg..1305JH Output file: /Exps/c192a/v2/1234/No0001/gg.W.99.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gi
GLT - PICOVEL3, fgroup W, pol LL

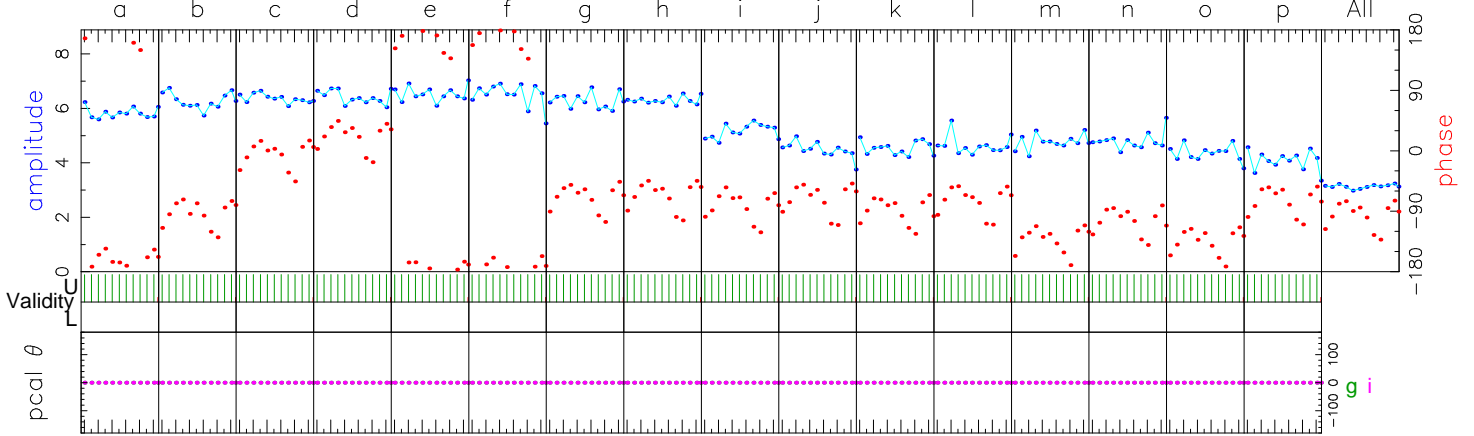


Fringe quality 4

SNR 143.5
Int time 313.982
Amp 2.962
Phase -95.8
PFD 0.0e+00
Delays (us)
SBD -0.000067
MBD 0.014353
Fringe rate (Hz)
-0.000776
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
2020:093:042752
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

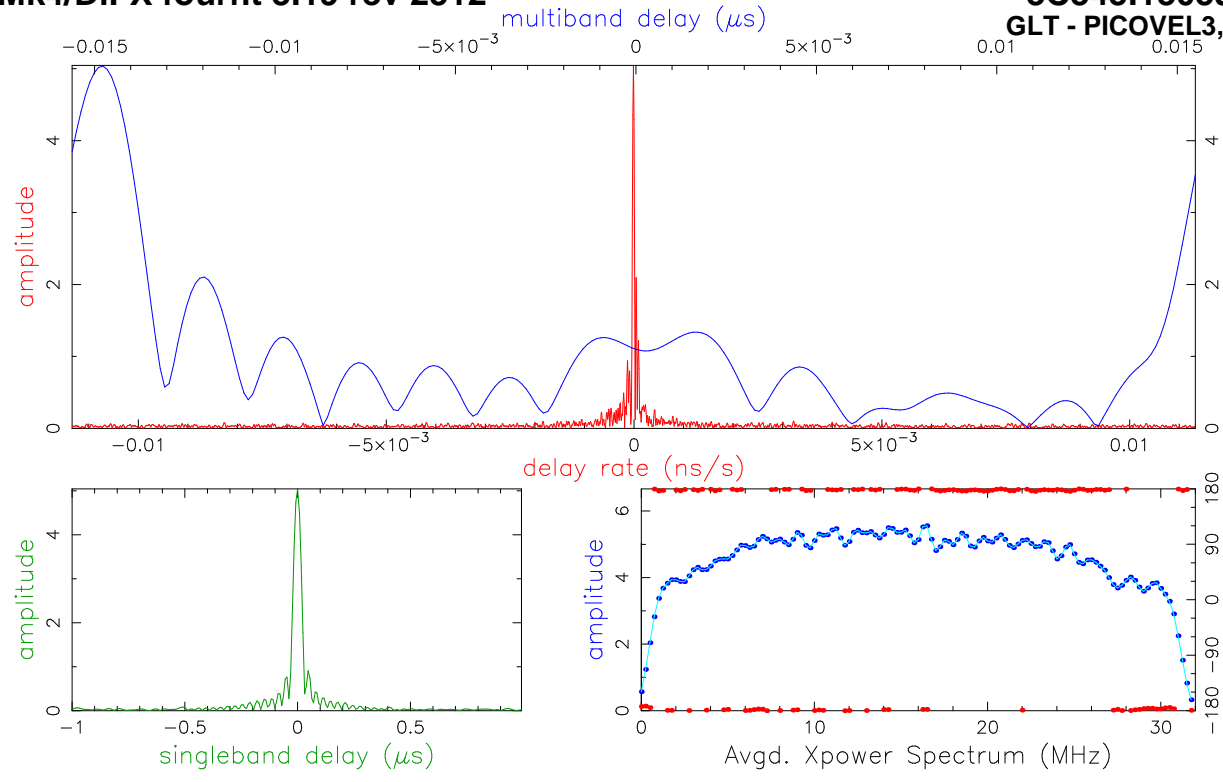


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-171.0	-93.7	-6.3	21.3	173.9	177.8	-69.0	-66.9	-82.0	-71.8	-88.7	-74.1	-131.9	-104.3	-135.7	-74.5	Phase	-95.8
	5.5	6.0	6.0	6.0	6.1	6.2	6.0	5.9	4.9	4.2	4.3	4.4	4.5	4.5	4.2	3.9	Ampl.	5.2
	130.0	129.4	129.3	129.0	128.8	128.9	128.8	128.9	128.9	128.5	129.0	129.0	129.0	129.1	129.6	129.3	Sbd box	129.0
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g: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	
g	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	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-2.17015720773E+03			Apriori delay (usec)			-2.17017156120E+03			Resid mbdelay (usec)			1.43535E-02			+/- 7.5E-06		
Sband delay (usec)	-2.17017162820E+03			Apriori clock (usec)			1.7850900E+00			Resid sbdelay (usec)			-6.70000E-05			+/- 1.2E-04		
Phase delay (usec)	-2.17017156429E+03			Apriori clockrate (us/s)			4.2799997E-07			Resid phdelay (usec)			-3.09047E-06			+/- 2.6E-08		
Delay rate (us/s)	6.98680580149E-01			Apriori rate (us/s)			6.98680589162E-01			Resid rate (us/s)			-9.01285E-09			+/- 1.4E-10		
Total phase (deg)	-197.2			Apriori accel (us/s/s)			3.82873076812E-05			Resid phase (deg)			-95.8			+/- 0.8		

ph/seg (deg) 19.1 1.4 Search (2048X64) 2.909 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 6.3 2.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.3 1.6 Inc. seg. avg. 3.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 79.5 2.8 Inc. frq. avg. 5.161 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 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gi..1305JH Output file: /Exps/c192a/v2/1234/No0001/gi.W.107.1305JH

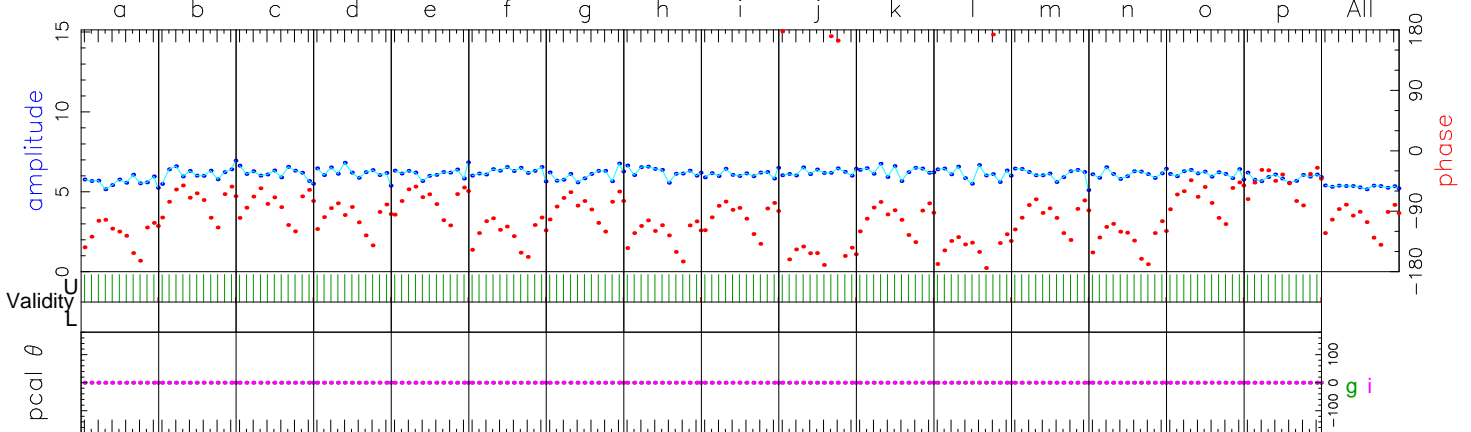
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gi
GLT - PICOVEL3, fgroup W, pol RR



Fringe quality 6
SNR 244.5
Int time 314.024
Amp 5.046
Phase -101.9
PFD 0.0e+00
Delays (us)
SBD -0.001162
MBD -0.014802
Fringe rate (Hz)
-0.000773
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
2020:093:042757
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

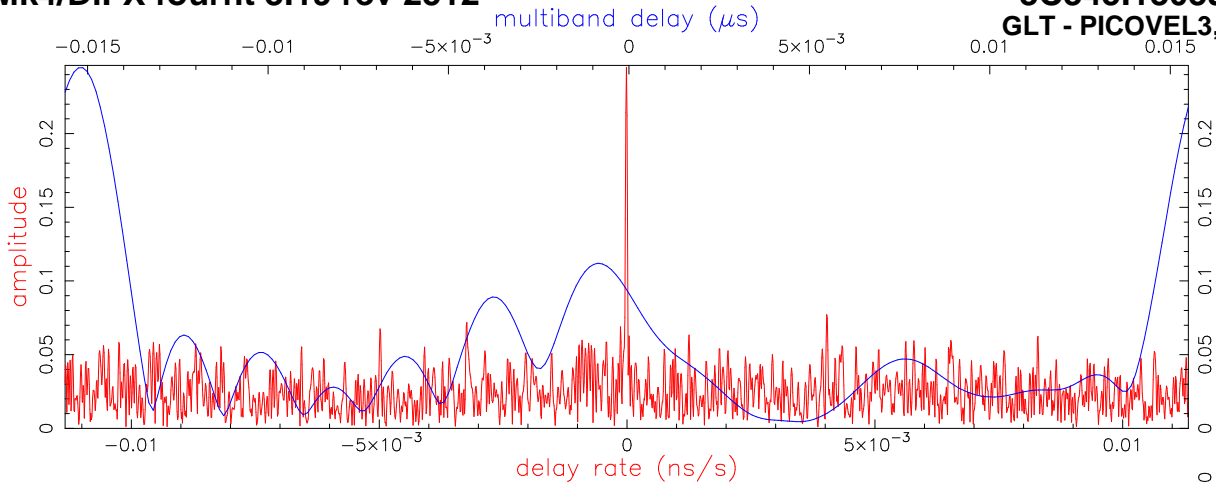


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-125.1	-73.8	-81.7	-99.9	-74.8	-122.3	-83.9	-123.9	-97.1	-162.8	-99.2	-147.6	-96.3	-130.0	-69.0	-47.1		Phase	-101.9
	5.3	5.8	5.8	5.9	5.8	5.9	5.7	5.9	5.7	5.9	6.0	5.8	5.8	5.7	5.8	5.6		Ampl.	5.8
	130.0	129.3	128.9	128.8	128.7	128.3	128.8	128.5	128.4	128.4	128.4	128.6	128.7	128.7	129.5	129.3		Sbd box	128.9
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g: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	
g: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	
g	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	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) -2.17018636285E+03 Apriori delay (usec) -2.17017156120E+03 Resid mbdelay (usec) -1.48017E-02 +/- 4.4E-06
 Sband delay (usec) -2.17017272320E+03 Apriori clock (usec) 1.7850900E+00 Resid sbdelay (usec) -1.16200E-03 +/- 7.0E-05
 Phase delay (usec) -2.17017156449E+03 Apriori clockrate (us/s) 4.2799997E-07 Resid phdelay (usec) -3.28698E-06 +/- 1.5E-08
 Delay rate (us/s) 6.98680580187E-01 Apriori rate (us/s) 6.98680589162E-01 Resid rate (us/s) -8.97530E-09 +/- 8.3E-11
 Total phase (deg) -203.3 Apriori accel (us/s/s) 3.82873076812E-05 Resid phase (deg) -101.9 +/- 0.5

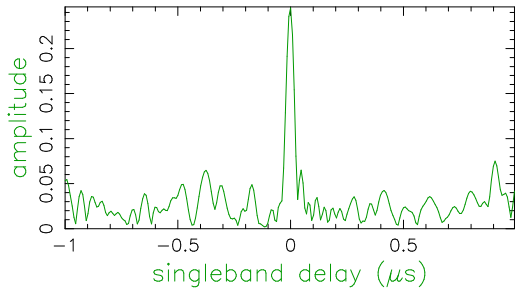
RMS Theor. Amplitude 5.046 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 19.1 0.8 Search (2048X64) 4.963 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 5.8 1.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 32.1 0.9 Inc. seg. avg. 5.329 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 15.0 1.6 Inc. frq. avg. 5.786 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 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gi..1305JH Output file: /Exps/c192a/v2/1234/No0001/gi.W.126.1305JH

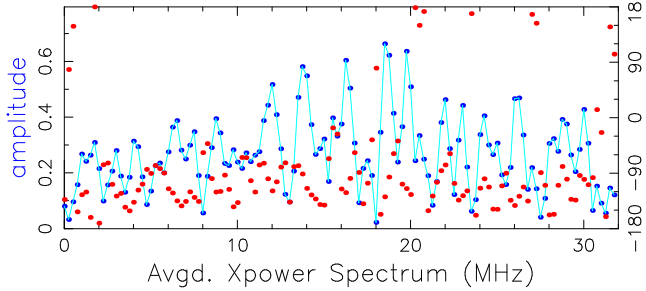


Fringe quality 9

SNR 11.9
Int time 313.982
Amp 0.246
Phase -37.4
PFD 4.0e-24
Delays (us)
SBD -0.001990
MBD -0.015205
Fringe rate (Hz)
-0.001044
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

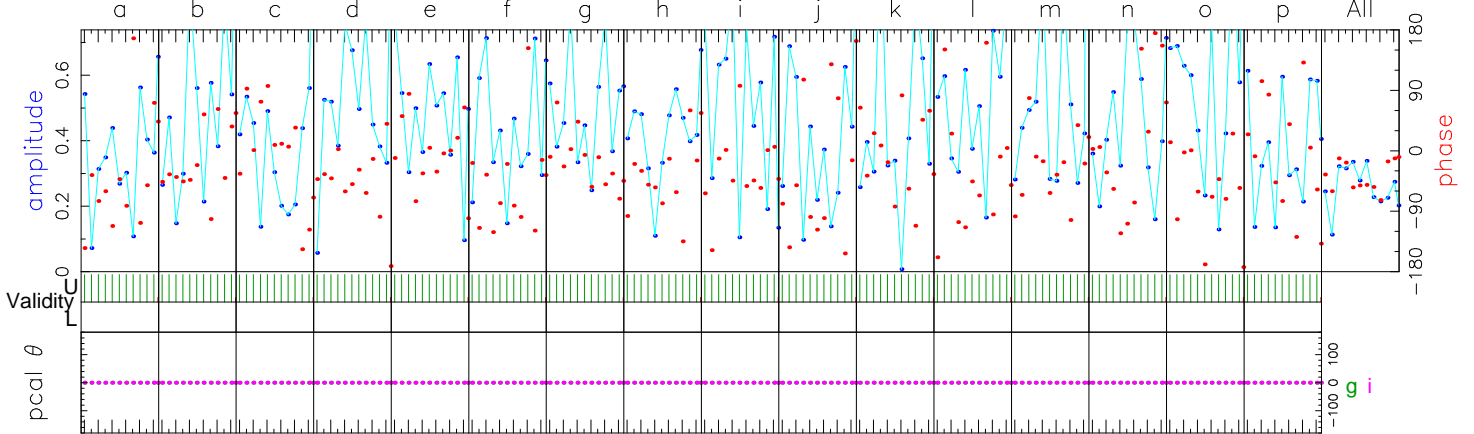


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
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, 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	
	-86.7	-26.2	12.7	-42.4	-1.7	-84.1	-17.5	-42.6	-34.7	-109.0	-12.7	-70.9	-22.7	-82.0	-33.7	-4.2		Phase	-37.4
	0.2	0.3	0.1	0.4	0.4	0.3	0.4	0.3	0.4	0.2	0.3	0.2	0.4	0.2	0.4	0.1		Ampl.	0.3
	130.5	129.3	236.7	129.6	127.8	127.8	129.9	128.2	128.0	122.9	127.3	137.7	128.6	220.8	129.4	202.7		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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g: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	
g: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	
g	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	
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)			-2.17018676598E+03					Apriori delay (usec)		-2.17017156120E+03				Resid mbdelay (usec)		-1.52048E-02		+/-	9.0E-05
Sband delay (usec)			-2.17017355170E+03					Apriori clock (usec)		1.7850900E+00				Resid sbdelay (usec)		-1.99050E-03		+/-	1.4E-03
Phase delay (usec)			-2.17017156241E+03					Apriori clockrate (us/s)		4.2799997E-07				Resid phdelay (usec)		-1.20713E-06		+/-	3.1E-07
Delay rate (us/s)			6.98680577046E-01					Apriori rate (us/s)		6.98680589162E-01				Resid rate (us/s)		-1.21163E-08		+/-	1.7E-09
Total phase (deg)								Apriori accel (us/s/s)		3.82873076812E-05				Resid phase (deg)		-37.4		+/-	9.6

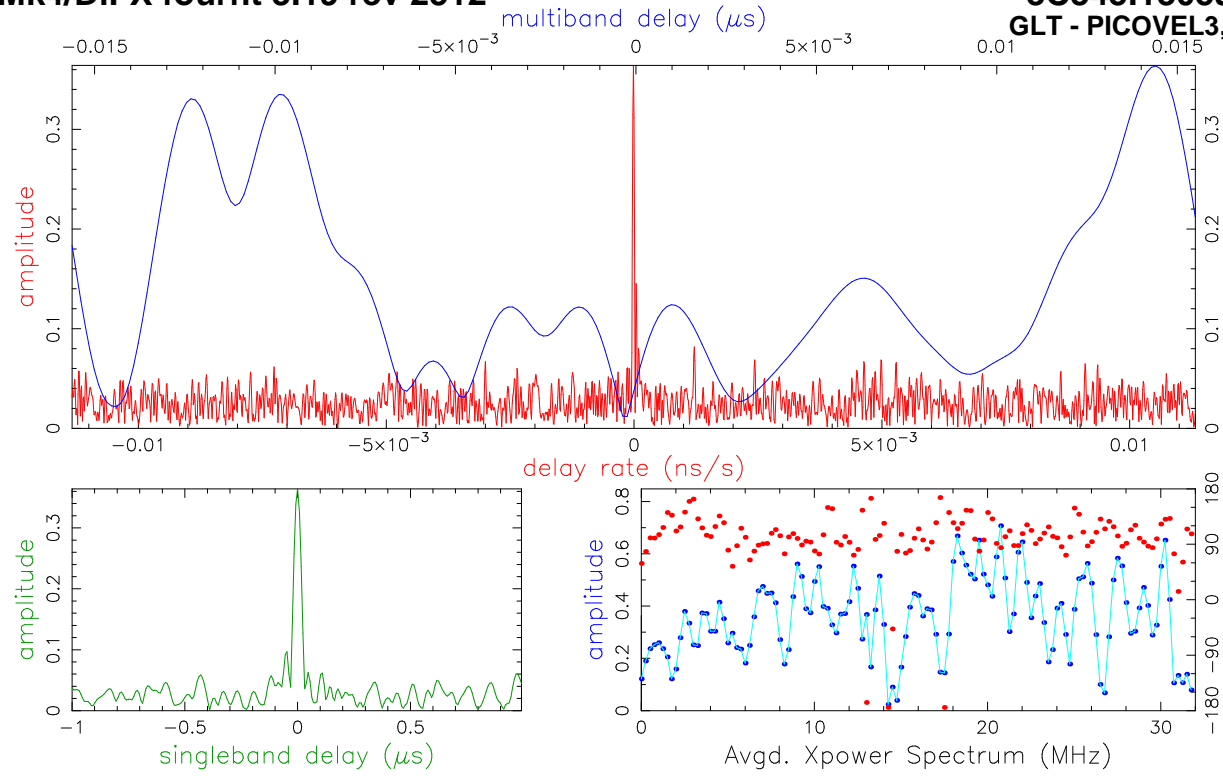
ph/seg (deg) 21.4 16.6
amp/seg (%) 26.9 29.0
ph/frq (deg) 37.0 19.2
amp/frq (%) 44.1 33.5

RMS Theor. Amplitude 0.246 +/- 0.021
Search (2048X64) 0.244
Interp. 0.000
Inc. seg. avg. 0.251
Inc. frq. avg. 0.266

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

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

g: az 142.5 el 51.0 pa -10.6 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 simultaneous interpolator

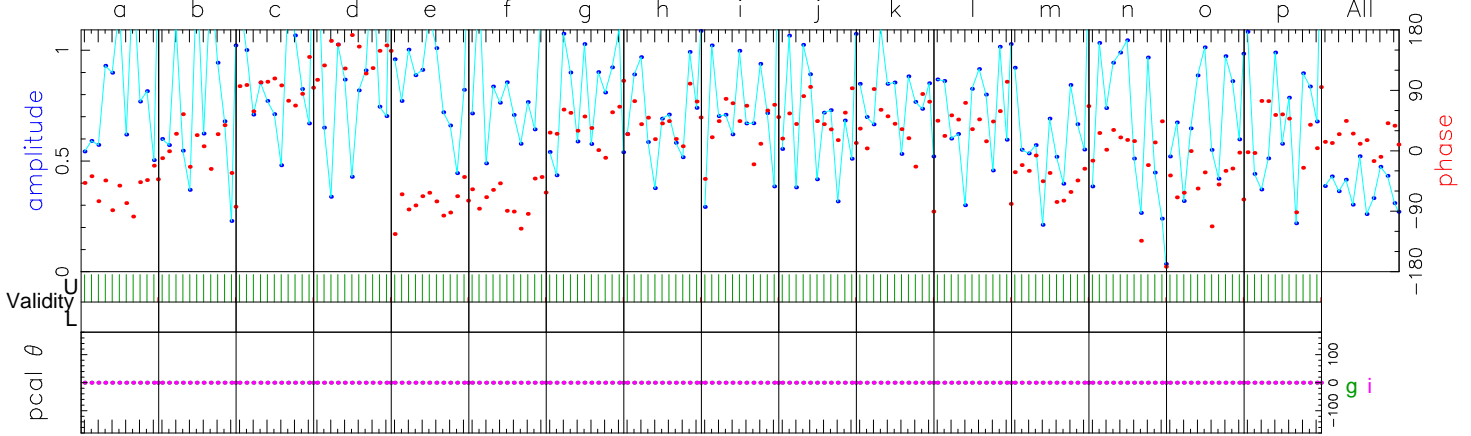


Fringe quality 9

SNR 17.6
Int time 314.024
Amp 0.364
Phase 17.7
PFD 0.0e+00
Delays (us)
SBD -0.000929
MBD 0.014386
Fringe rate (Hz)
-0.000854
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
2020:093:042807
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				
	-60.2	9.1	91.4	134.8	-77.8	-70.1	40.6	49.3	39.7	55.5	43.2	44.5	-37.7	11.5	-40.6	28.0	Phase	17.7				
	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.7	0.6	0.5	0.6	0.6	0.5	Ampl.	0.7				
	130.1	129.9	129.0	129.0	129.0	128.2	128.8	129.1	128.6	128.9	127.9	128.4	129.0	129.2	130.1	129.4	Sbd box	128.9				
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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g: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					
g: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					
g	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					
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.17015717507E+03														Apriori delay (usec)	-2.17017156120E+03	Resid mbdelay (usec)	1.43861E-02	+/-	6.1E-05
Sband delay (usec)			-2.17017248970E+03														Apriori clock (usec)	1.7850900E+00	Resid sbdelay (usec)	-9.28500E-04	+/-	9.8E-04
Phase delay (usec)			-2.17017156063E+03														Apriori clockrate (us/s)	4.2799997E-07	Resid phdelay (usec)	5.70024E-07	+/-	2.1E-07
Delay rate (us/s)			6.98680579252E-01														Apriori rate (us/s)	6.98680589162E-01	Resid rate (us/s)	-9.90989E-09	+/-	1.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	3.82873076812E-05	Resid phase (deg)	17.7	+/-	6.5

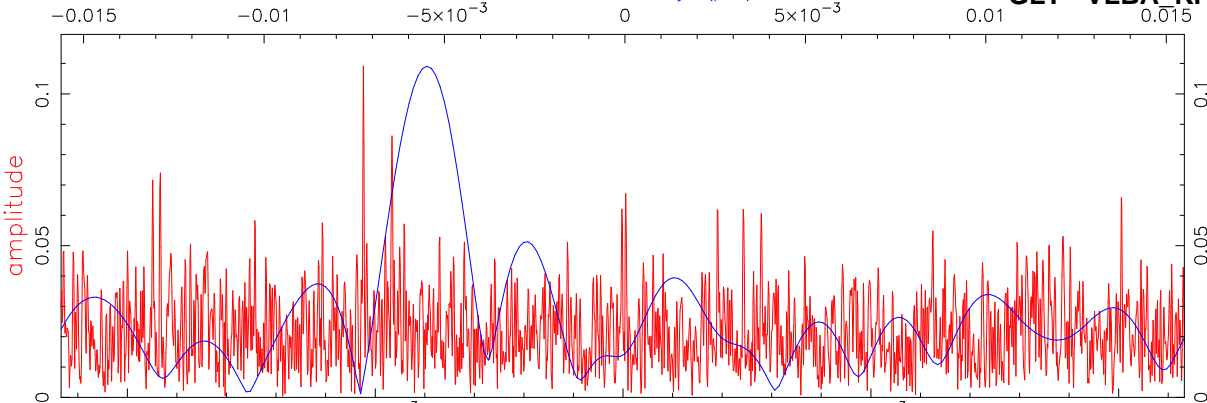
ph/seg (deg) 18.2 11.2 Theor. Amplitude 0.364 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 21.6 19.6 Search (2048X64) 0.357 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.8 13.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 88.6 22.7 Inc. seg. avg. 0.376 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gi..1305JH Output file: /Exps/c192a/v2/1234/No0001/gi.W.164.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

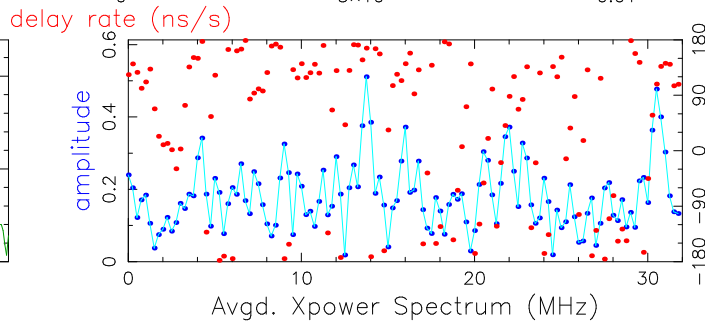
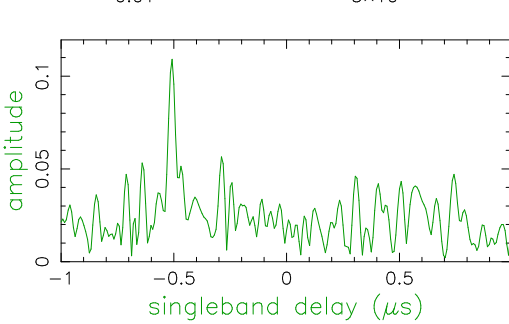
3C345.1305JH, No0001, gk
GLT - VLBA KP, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 0

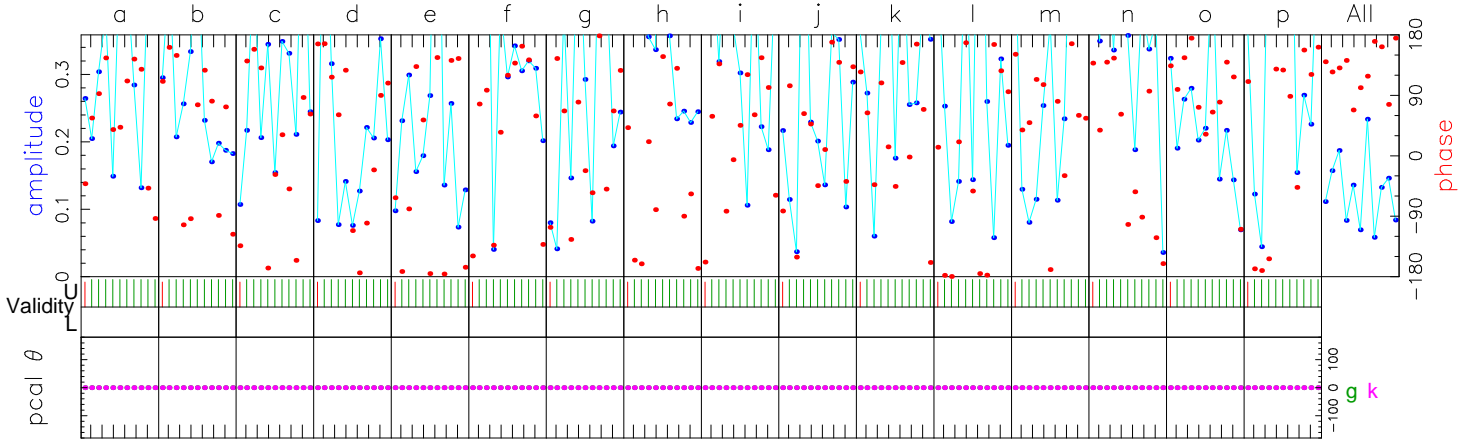


SNR 6.0
Int time 407.597
Amp 0.120
Phase 123.9
PFD 3.4e-01
Delays (us)
SBD -0.508977
MBD -0.005505
Fringe rate (Hz)
-0.452013
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042754
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

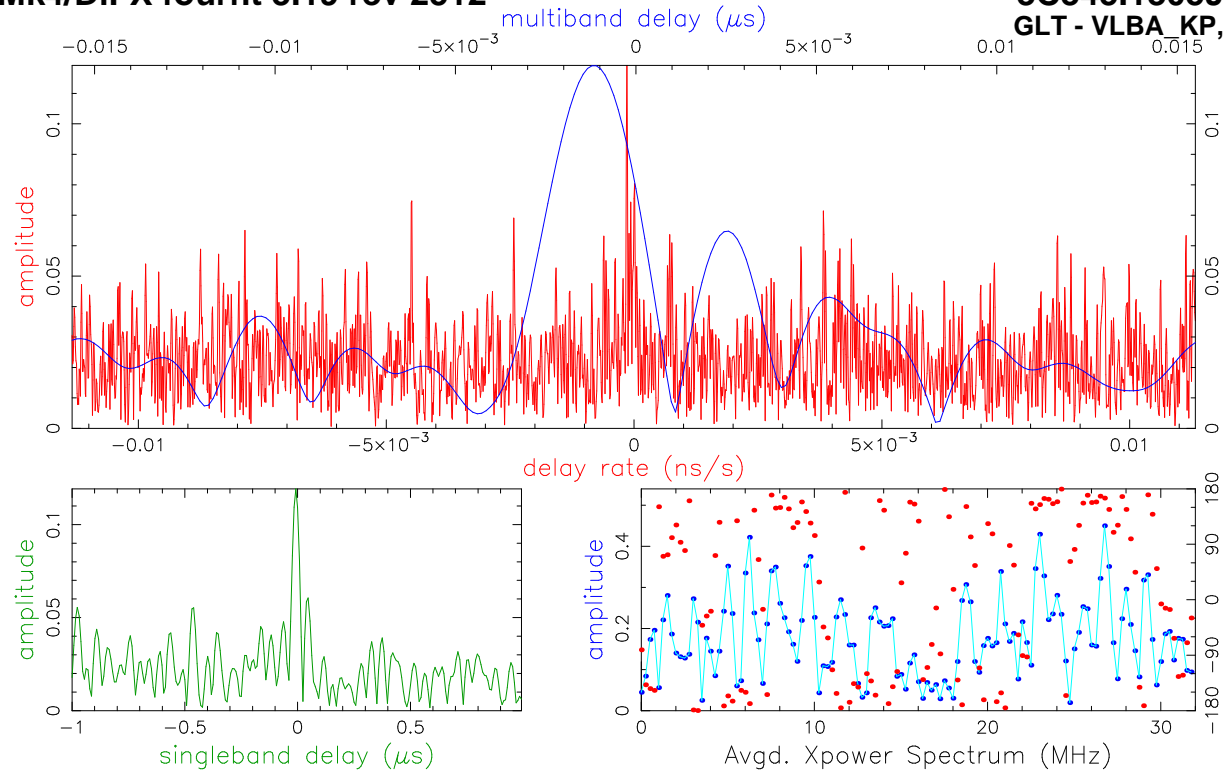
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
75.5	144.1	120.3	139.9	164.0	114.1	78.7	170.3	46.4	90.9	91.2	162.3	112.7	139.3	106.8	139.3	139.3	Phase	123.9
0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.3	0.3	Ampl.	0.1
232.0	87.4	208.1	225.2	141.8	141.3	45.3	52.2	6.4	177.3	55.5	4.4	61.3	235.2	239.2	64.6	64.6	Sbd box	63.9
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	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	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	5.0679939637E+03			Apriori delay (usec)			5.06849946893E+03			Resid mbdelay (usec)			-5.50526E-03			+/- 1.8E-04		
Sband delay (usec)	5.06799049143E+03			Apriori clock (usec)			1.6980423E+00			Resid sbdelay (usec)			-5.08977E-01			+/- 2.9E-03		
Phase delay (usec)	5.06849947292E+03			Apriori clockrate (us/s)			2.6957898E-07			Resid phdelay (usec)			3.99413E-06			+/- 6.1E-07		
Delay rate (us/s)	-8.27903376117E-01			Apriori rate (us/s)			-8.27898128691E-01			Resid rate (us/s)			-5.24743E-06			+/- 2.6E-09		
Total phase (deg)	215.0			Apriori accel (us/s/s)			5.10295219994E-06			Resid phase (deg)			123.9			+/- 19.0		

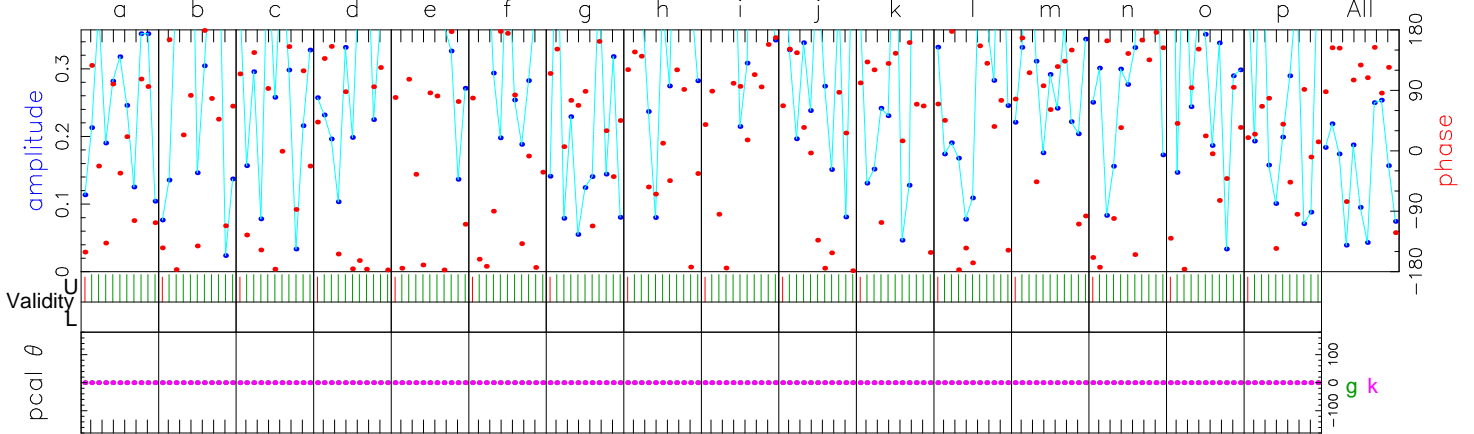
ph/seg (deg) 34.1 31.5 Search (2048X64) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.5 54.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.3 38.0 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.7 66.3 Inc. frq. avg. 0.114 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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 6184.763 3281.461 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gk..1305JH Output file: /Exps/c192a/v2/1234/No0001/gk.W.115.1305JH



Fringe quality 0
SNR 6.6
Int time 407.638
Amp 0.119
Phase 127.3
PFD 1.3e-02
Delays (us)
SBD -0.007794
MBD -0.001165
Fringe rate (Hz)
-0.012438
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042800
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

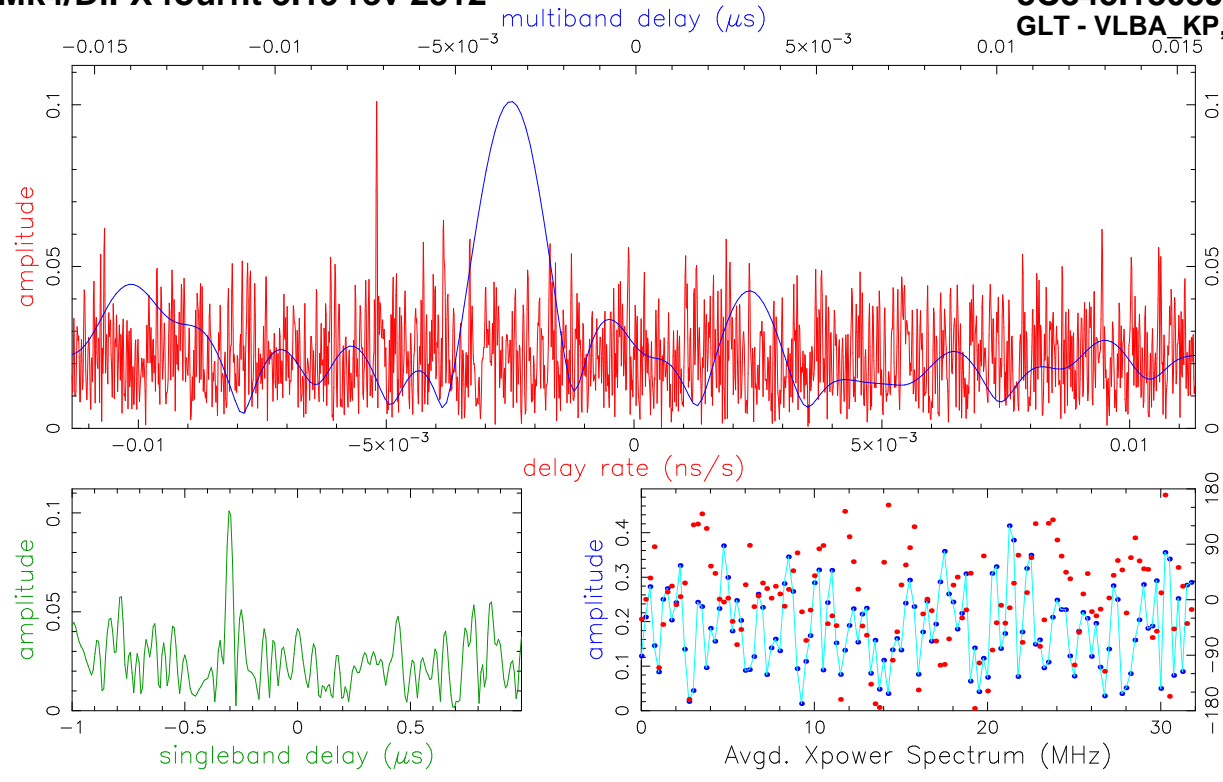
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
62.9	91.0	115.4	154.1	134.8	-169.1	120.6	117.5	114.5	135.7	115.5	118.2	131.3	166.8	166.3	18.0	18.0	Phase	127.3
0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.3	0.1	0.2	0.2	0.1	0.2	0.0	0.2	0.2	Ampl.	0.1
206.8	53.6	56.2	6.5	128.0	198.2	45.7	17.1	128.4	108.0	194.5	31.4	130.0	128.5	25.4	18.8	18.8	Sbd box	128.0
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	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	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.06849830371E+03			Apriori delay (usec)			5.06849946893E+03			Resid mbdelay (usec)			-1.16522E-03			+/- 1.6E-04		
Sband delay (usec)	5.06849167543E+03			Apriori clock (usec)			1.6980423E+00			Resid sbdelay (usec)			-7.79350E-03			+/- 2.6E-03		
Phase delay (usec)	5.06849947303E+03			Apriori clockrate (us/s)			2.6957898E-07			Resid phdelay (usec)			4.10586E-06			+/- 5.6E-07		
Delay rate (us/s)	-8.27898273083E-01			Apriori rate (us/s)			-8.27898128691E-01			Resid rate (us/s)			-1.44392E-07			+/- 2.4E-09		
Total phase (deg)	218.5			Apriori accel (us/s/s)			5.10295219994E-06			Resid phase (deg)			127.3			+/- 17.4		
ph/seg (deg)	RMS	Theor.	Amplitude		0.119 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000		1.000			
amp/seg (%)	62.7	28.8	Search (2048X64)		0.118		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016		0.016			
ph/frq (deg)	68.5	50.3	Interp.		0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011			
amp/frq (%)	43.1	34.8	Inc. seg. avg.		0.135		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00		0.00			
	58.5	60.8	Inc. frq. avg.		0.125													
g: az 142.5 el 51.0 pa -10.6	k: az 60.1 el 32.1 pa -73.4			u, v (fr/asec) 6184.763 3281.461									simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c192a/v2/1234/No0001/gk..1305JH			Output file: /Exps/c192a/v2/1234/No0001/gk.W.137.1305JH														

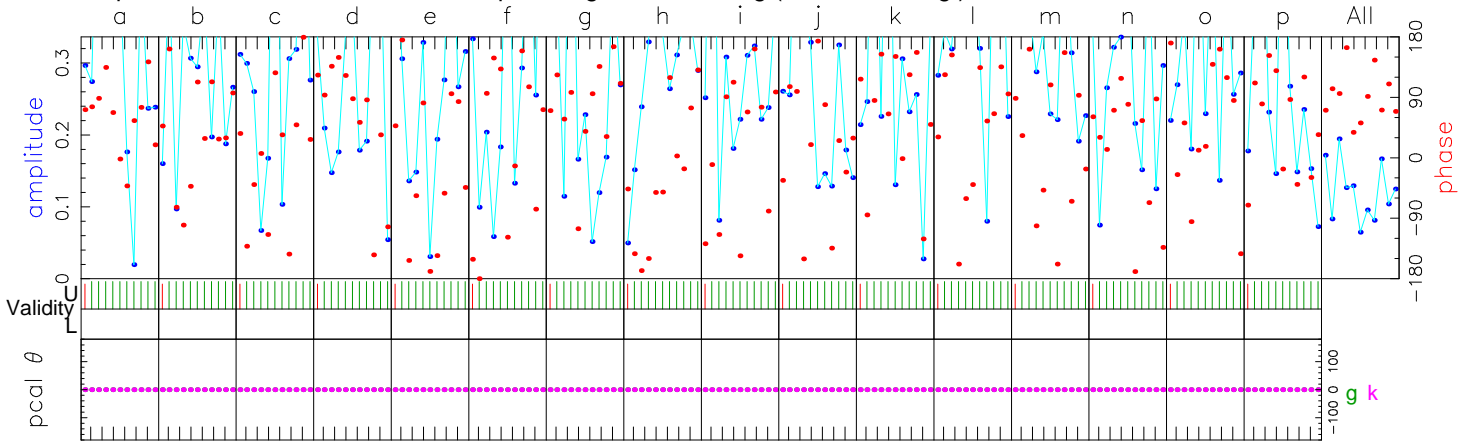
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gk
GLT - VLBA_KP, fgroup W, pol LR



Fringe quality 0
SNR 5.7
Int time 407.597
Amp 0.112
Phase 88.4
PFD 9.7e-01
Delays (us)
SBD -0.301603
MBD -0.003434
Fringe rate (Hz)
-0.448317
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042806
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

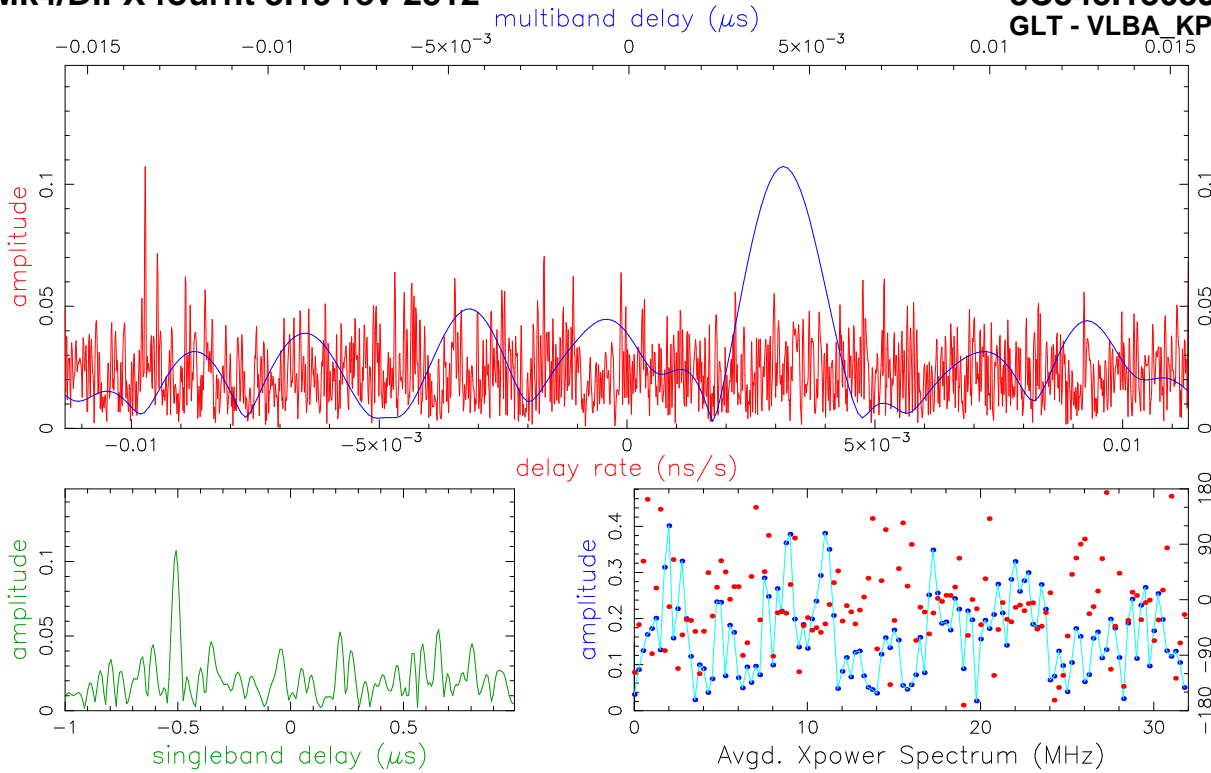


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
73.4	56.5	136.5	107.2	75.5	142.6	97.3	-38.1	71.3	63.8	86.1	113.6	126.3	69.6	84.8	67.3	88.4	Phase	88.4
0.3	0.1	0.1	0.2	0.1	0.1	0.3	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
90.4	5.1	246.0	150.5	177.4	149.6	90.9	94.3	223.9	185.7	96.8	84.2	54.0	200.6	66.8	57.6	88.4	Sbd box	90.4
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.06818353507E+03			Apriori delay (usec)			5.06849946893E+03			Resid mbdelay (usec)			-3.43386E-03			+/-	1.9E-04	
Sband delay (usec)	5.06819786593E+03			Apriori clock (usec)			1.6980423E+00			Resid sbdelay (usec)			-3.01603E-01			+/-	3.0E-03	
Phase delay (usec)	5.06849947178E+03			Apriori clockrate (us/s)			2.6957898E-07			Resid phdelay (usec)			2.85069E-06			+/-	6.5E-07	
Delay rate (us/s)	-8.2790333209E-01			Apriori rate (us/s)			-8.27898128691E-01			Resid rate (us/s)			-5.20452E-06			+/-	2.8E-09	
Total phase (deg)	179.6			Apriori accel (us/s/s)			5.10295219994E-06			Resid phase (deg)			88.4			+/-	20.2	
ph/seg (deg)	RMS	Theor.	Amplitude		0.112 +/- 0.020		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 (%)	36.5	33.5	Search (2048X64)		0.100		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016	0.016				
ph/frq (deg)	42.7	58.4	Interp.		0.000		Sample rate(MISamp/s): 64		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite	ion window (TEC)	0.00	0.00		
amp/frq (%)	43.8	40.4	Inc. seg. avg.		0.113		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)	0.00	0.00			
amp/frq (%)	58.6	70.6	Inc. frq. avg.		0.099		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	k: az 60.1 el 32.1 pa -73.4			u, v (fr/asec) 6184.763 3281.461			simultaneous interpolator											

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gk..1305JH Output file: /Exps/c192a/v2/1234/No0001/gk.W.160.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gk
GLT - VLBA_KP, fgroup W, pol RL

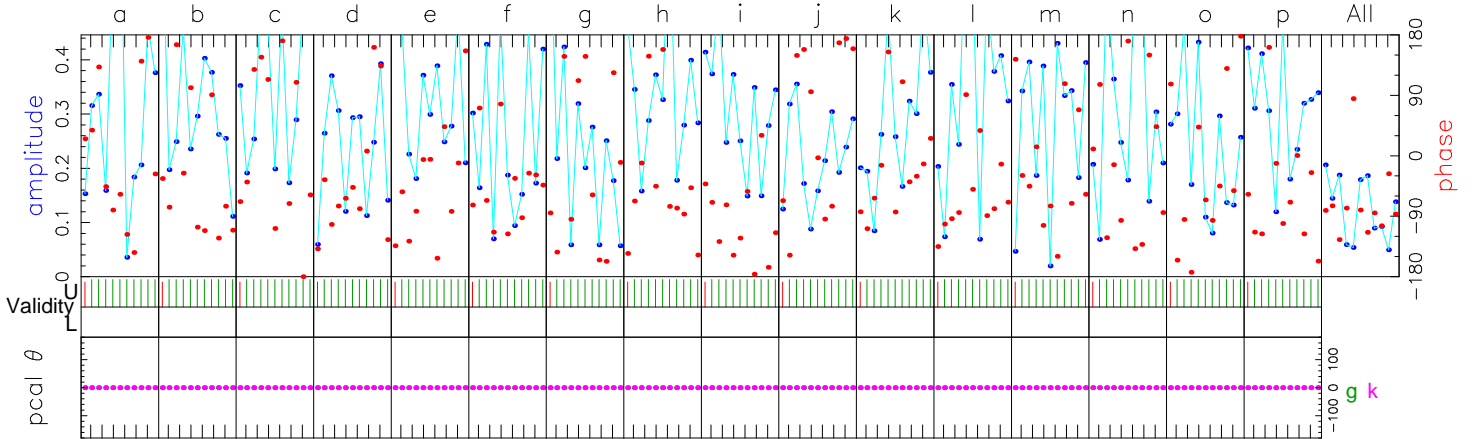


Fringe quality 0

SNR 5.9
Int time 407.638
Amp 0.149
Phase -91.6
PFD 5.3e-01
Delays (us)
SBD -0.509082
MBD 0.004291
Fringe rate (Hz)
-0.839019
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

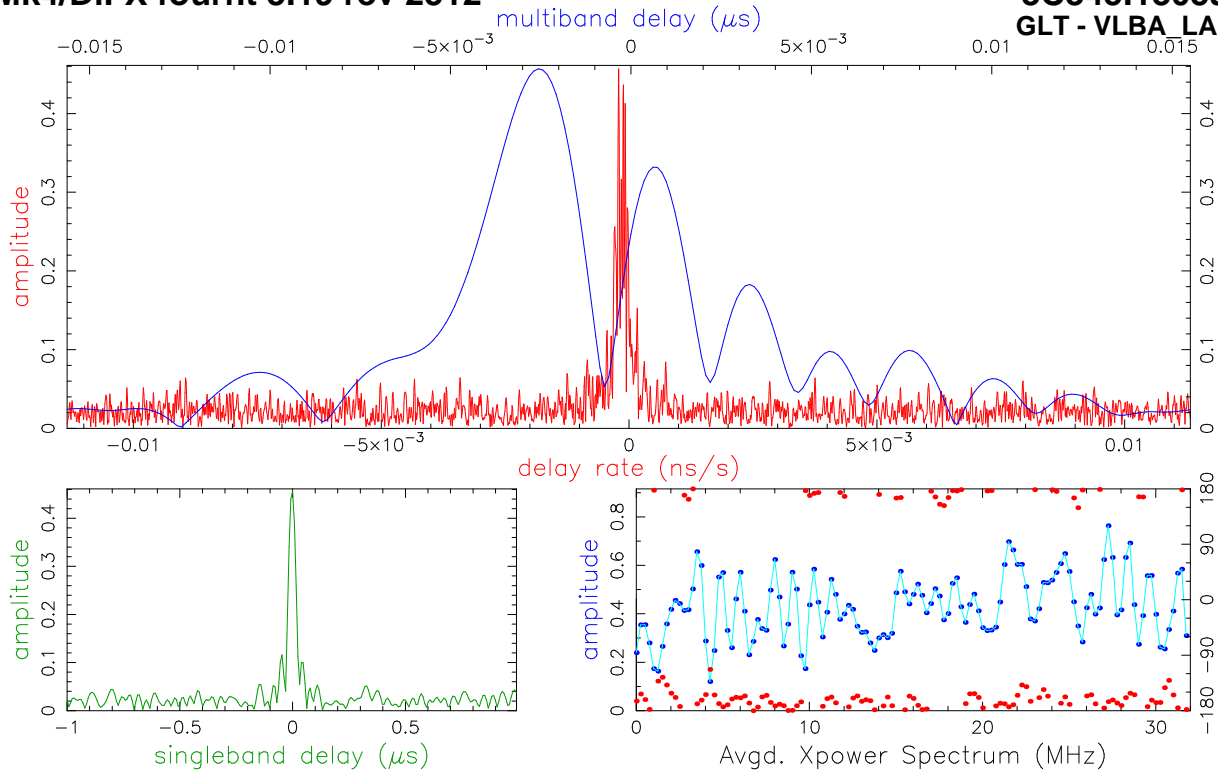
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042811
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-71.3	-76.4	177.9	-89.2	-73.8	-39.9	-156.5	-92.4	-111.4	-166.2	-31.3	-64.5	-64.1	-115.2	-119.4	-95.9		Phase	-91.6				
	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.3		Ampl.	0.2				
	92.7	236.3	164.2	35.5	109.1	70.2	52.6	64.1	59.2	203.0	80.2	135.3	16.8	243.3	9.3	1.4		Sbd box	63.8				
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Tracks					
Group delay (usec)(sbd)			5.06800375982E+03															Apriori delay (usec)	5.06849946893E+03	Resid mbdelay (usec)	4.29090E-03	+/-	1.8E-04
Sband delay (usec)			5.06799038693E+03															Apriori clock (usec)	1.6980423E+00	Resid sbdelay (usec)	-5.09082E-01	+/-	2.9E-03
Phase delay (usec)			5.06849946597E+03															Apriori clockrate (us/s)	2.6957898E-07	Resid phdelay (usec)	-2.95393E-06	+/-	6.2E-07
Delay rate (us/s)			-8.27907868870E-01															Apriori rate (us/s)	-8.27898128691E-01	Resid rate (us/s)	-9.74018E-06	+/-	2.6E-09
Total phase (deg)					-0.4													Apriori accel (us/s/s)	5.10295219994E-06	Resid phase (deg)	-91.6	+/-	19.3

ph/seg (deg) 59.0 32.0 Search (2048X64) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.9 55.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.1 38.6 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.0 67.4 Inc. frq. avg. 0.153 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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 6184.763 3281.461 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gk..1305JH Output file: /Exps/c192a/v2/1234/No0001/gk.W.179.1305JH

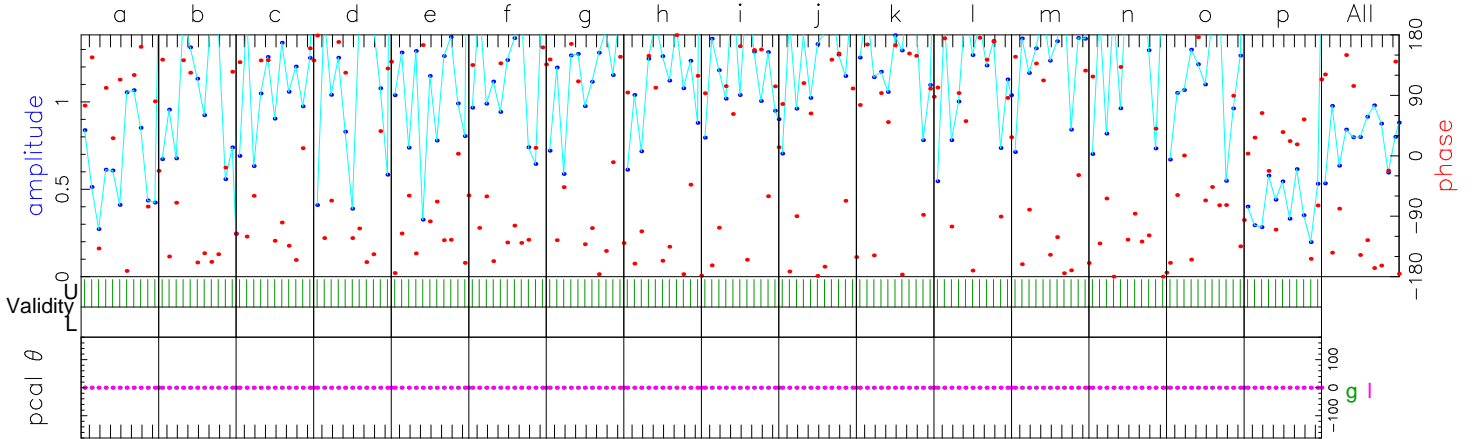


Fringe quality 5

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



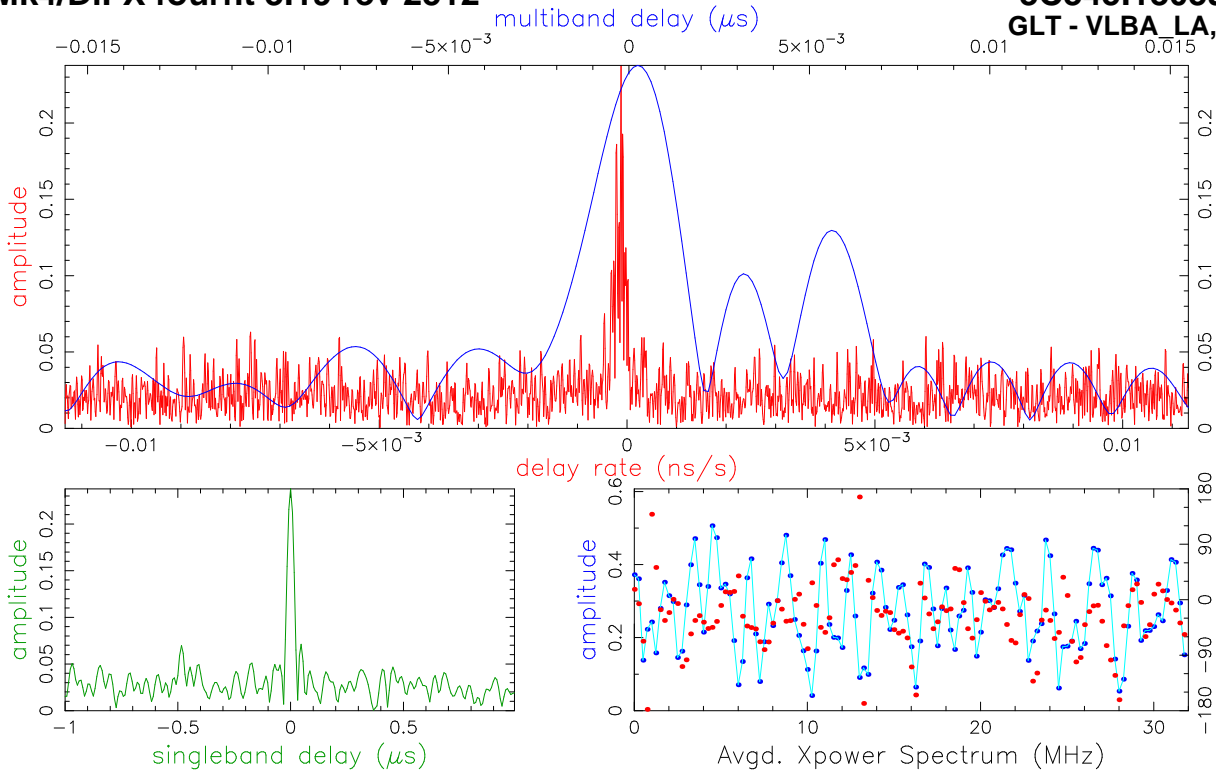
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
126.1	-175.5	-155.0	-149.2	-118.0	-140.7	-164.8	177.9	158.9	151.3	143.7	149.2	-174.9	-141.0	-91.9	3.1		Phase	-169.7	
0.4	0.7	0.6	0.6	0.7	0.7	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
 Inc. frq. avg. 0.590 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_110.1305JH

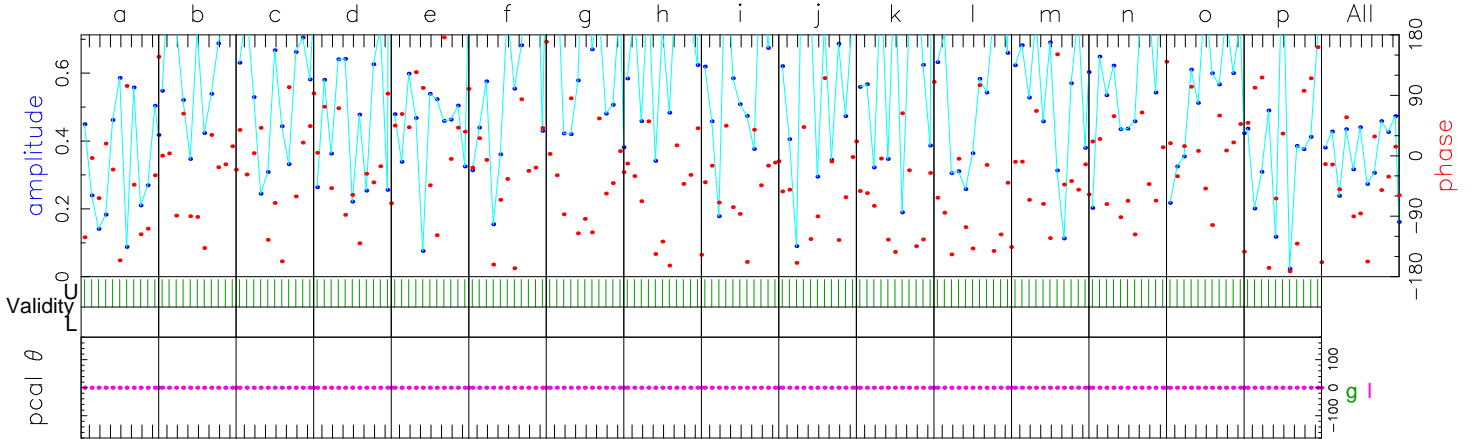
Mk4/DiFX fourfit 3.19 rev 2512

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

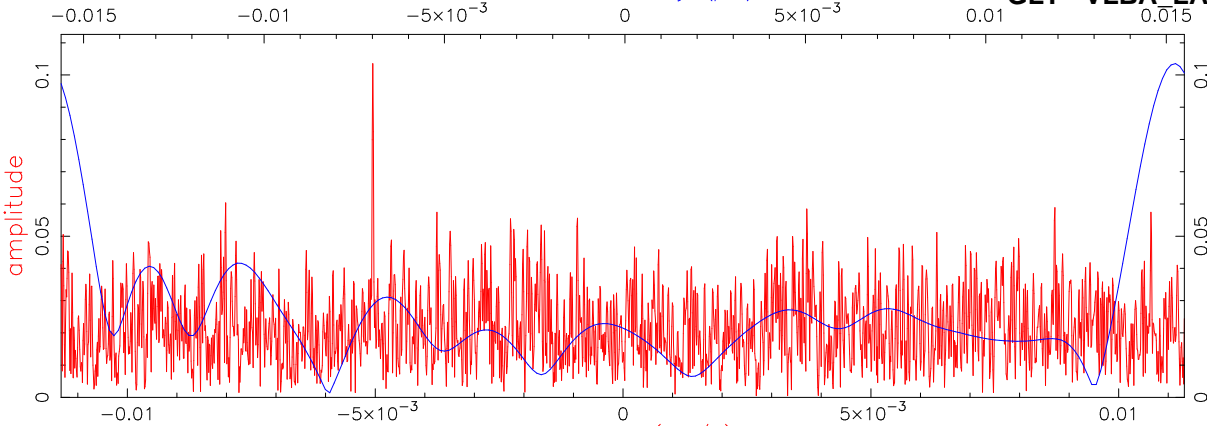


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-67.1	-19.0	-8.2	-21.4	40.3	-10.2	-41.1	-24.9	-25.9	-39.4	-77.8	-91.9	-35.9	-15.7	11.9	110.9	Phase	-26.7
	0.2	0.4	0.3	0.2	0.2	0.4	0.4	0.3	0.4	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	
																	Chan ids	
																	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	

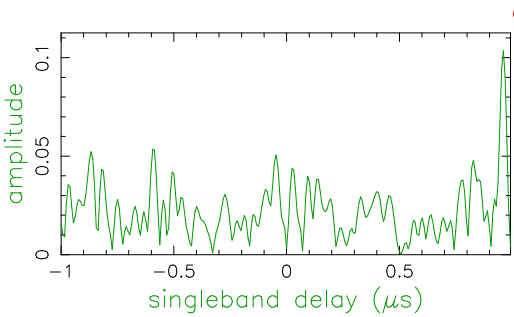
ph/seg (deg) 58.6 15.1 Search (2048X64) 0.217 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 68.1 26.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 49.8 17.5 Inc. seg. avg. 0.366 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 41.2 30.5 Inc. frq. avg. 0.279 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 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 (μ s)

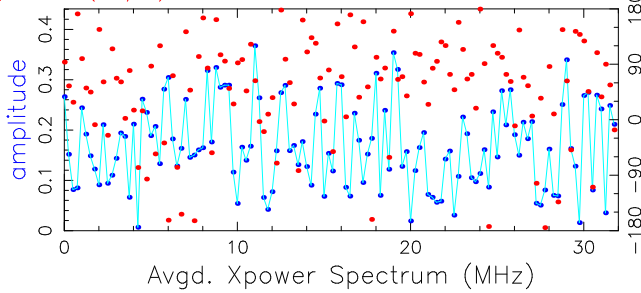
Fringe quality 0



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

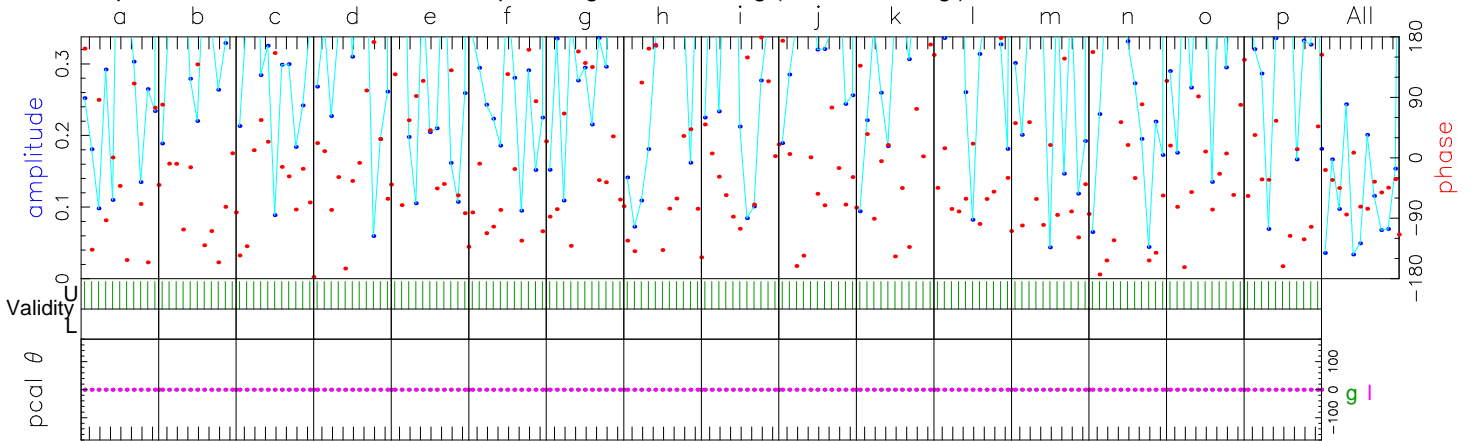


delay rate (ns/s)



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



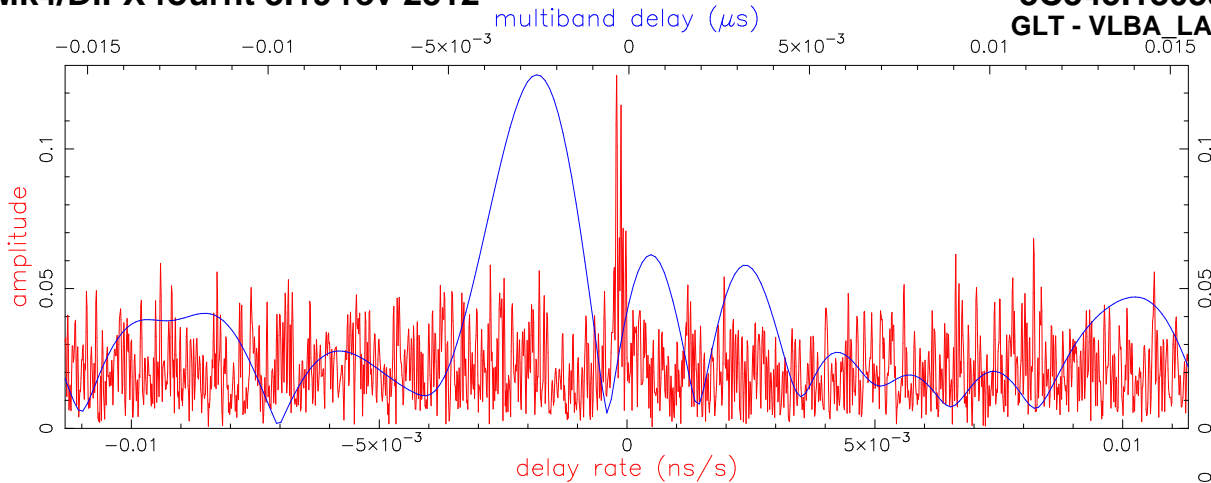
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-110.7	-61.5	-20.1	-15.0	-29.0	-93.2	-62.5	-96.5	-42.6	-42.9	-46.2	-63.3	-64.7	-124.8	-3.6	-49.7	Phase	-54.2
	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	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

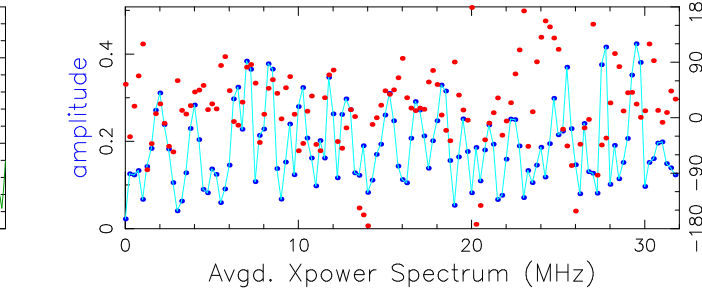
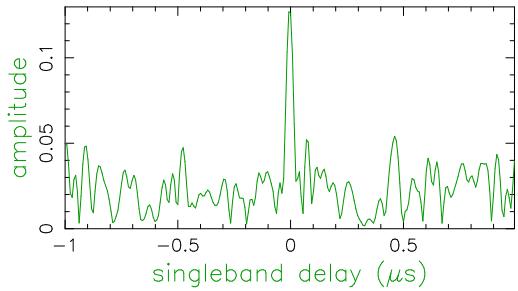
Mk4/DiFX fourfit 3.19 rev 2512

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



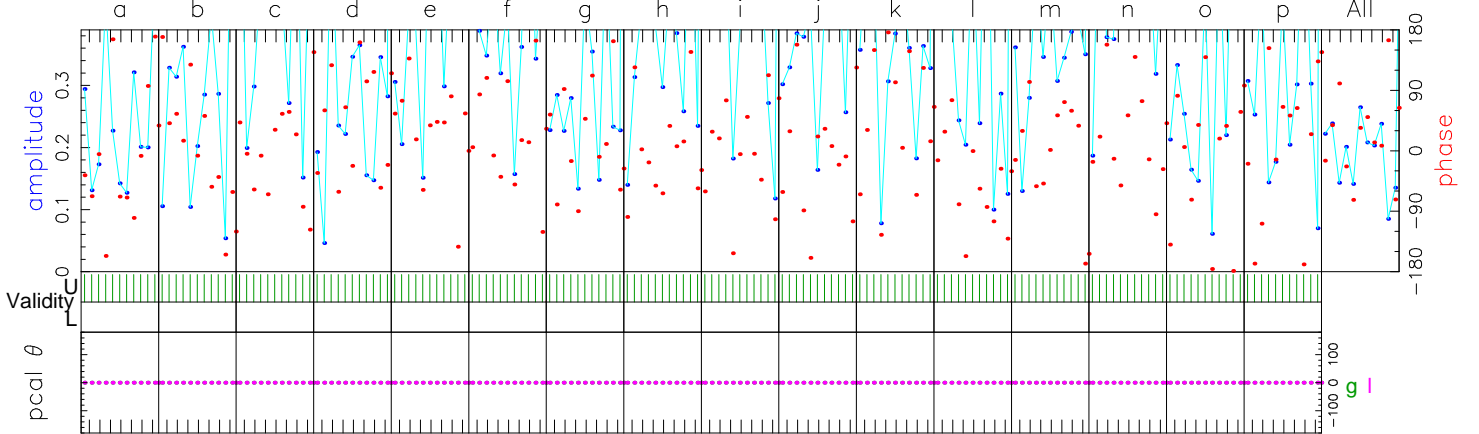
Fringe quality 0

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

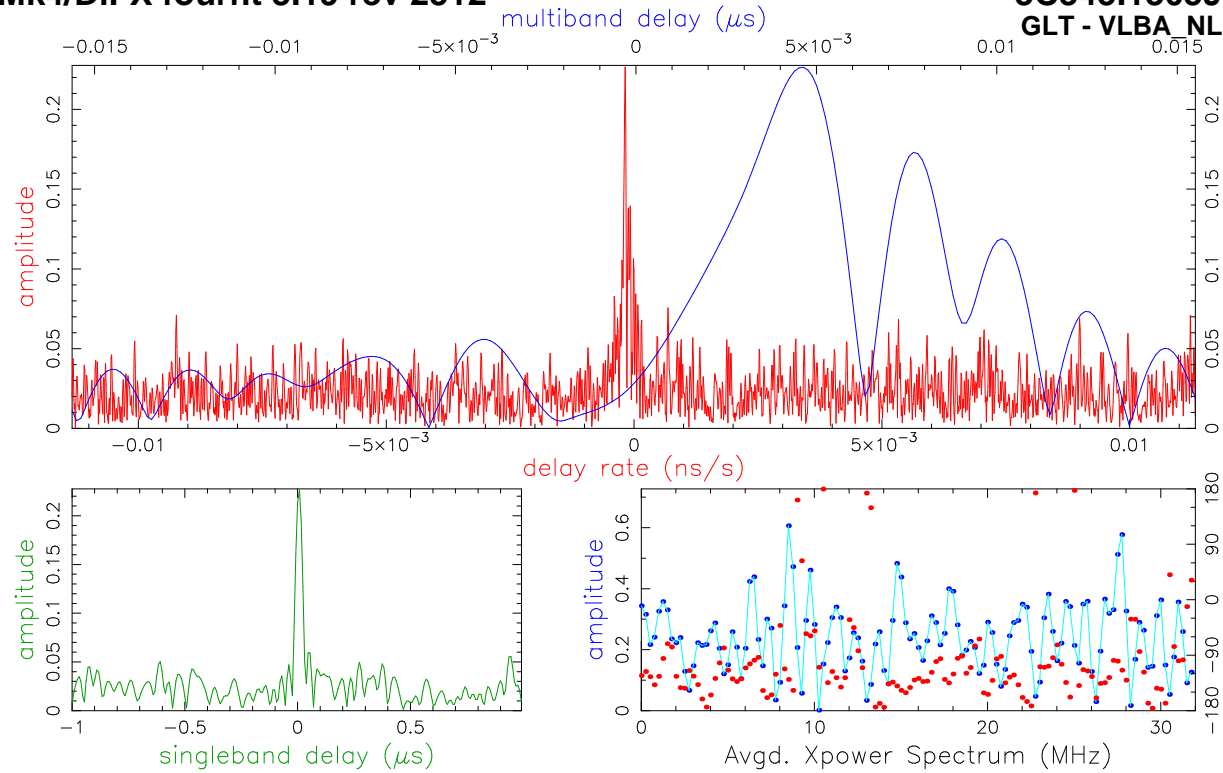


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
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		
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		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)		3.34175903523E+03																
Sband delay (usec)		3.34175757890E+03																
Phase delay (usec)		3.34176166632E+03																
Delay rate (us/s)		-7.53865229052E-01																
Total phase (deg)					337.3													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
simultaneous interpolator																		

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
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

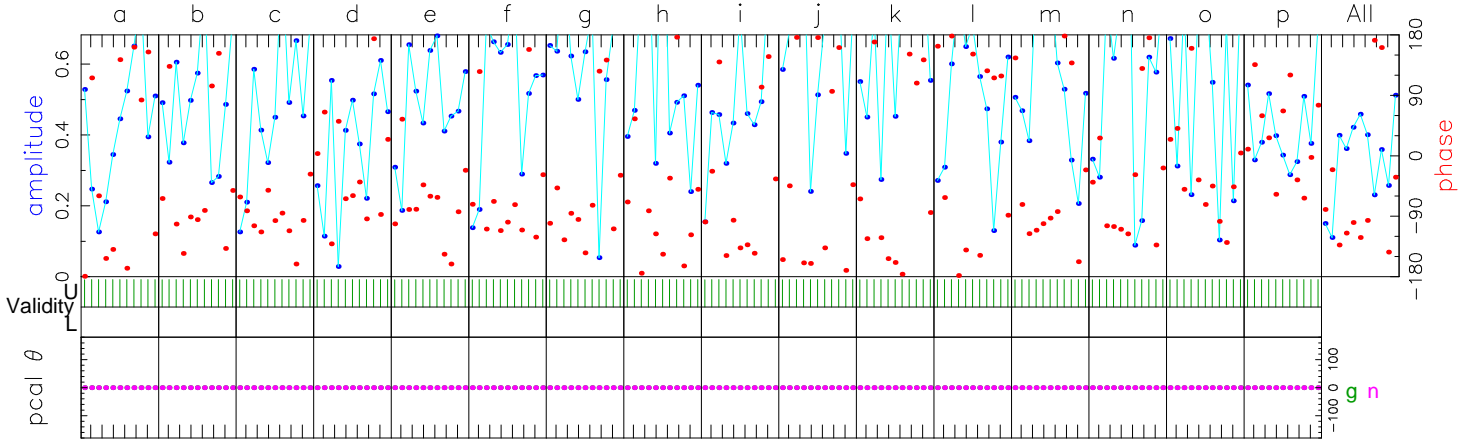
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gn
GLT - VLBA_NL, fgroup W, pol LL



Fringe quality 9
SNR 12.6
Int time 410.687
Amp 0.228
Phase -113.3
PFD 9.5e-28
Delays (us)
SBD 0.006098
MBD 0.004569
Fringe rate (Hz)
-0.015235
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042759
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

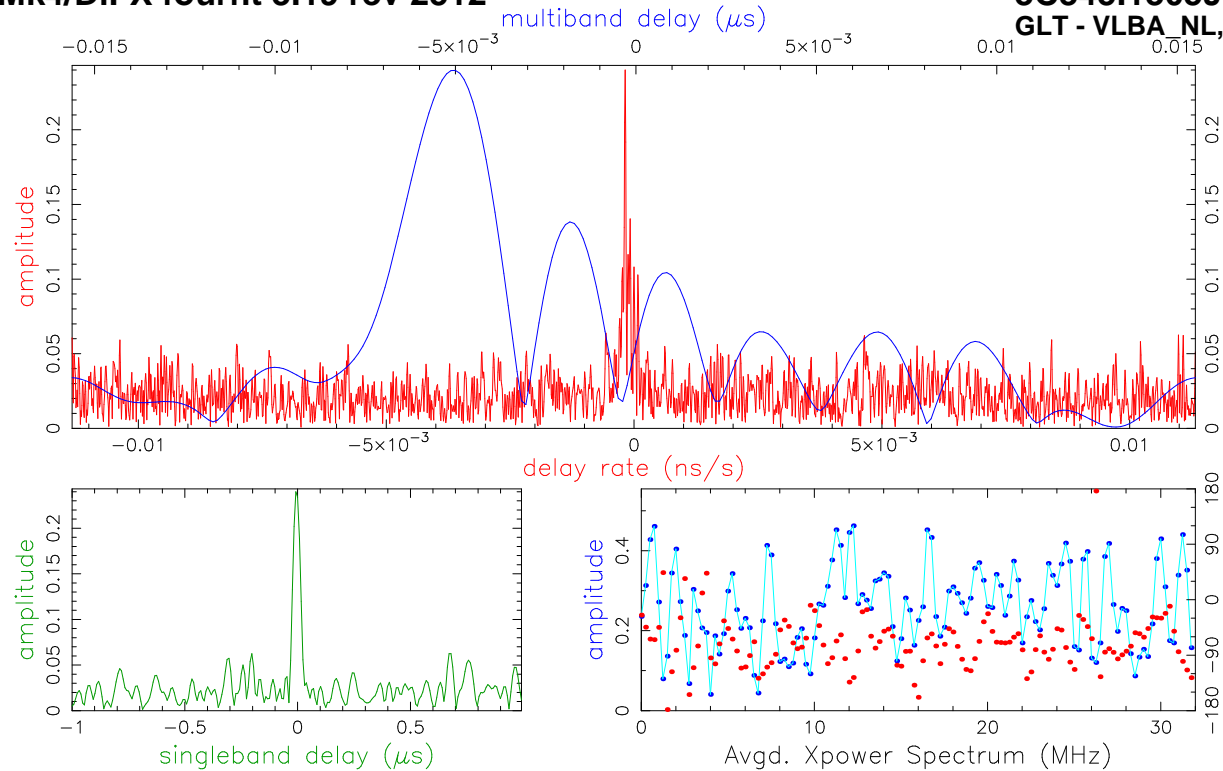


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g: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		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-4.56152432446E+01																
Sband delay (usec)		-4.56137133825E+01																
Phase delay (usec)		-4.56198155348E+01																
Delay rate (us/s)		-5.65922465780E-01																
Total phase (deg)					-327.7													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
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) 53.2 15.1 Search (2048X64) 0.222 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.1 26.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 57.7 18.2 Inc. seg. avg. 0.322 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.2 31.7 Inc. frq. avg. 0.311 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gn..1305JH Output file: /Exps/c192a/v2/1234/No0001/gn.W.135.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gn
GLT - VLBA_NL, fgroup W, pol RR

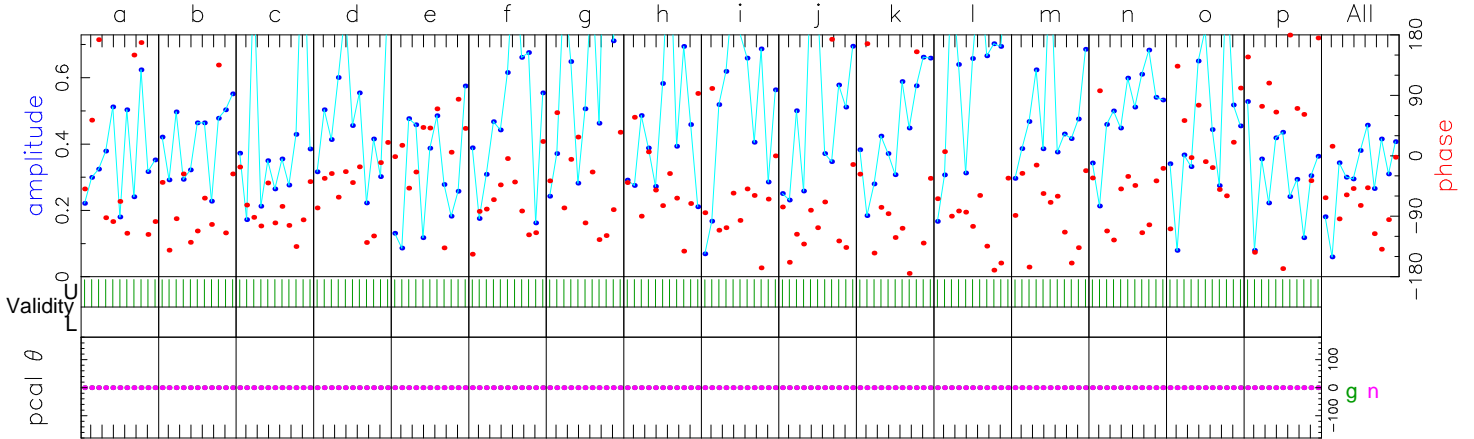


Fringe quality 9

SNR 13.5
Int time 410.728
Amp 0.243
Phase -71.6
PFD 1.3e-32
Delays (us)
SBD -0.004941
MBD -0.005063
Fringe rate (Hz)
-0.015294
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042804
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

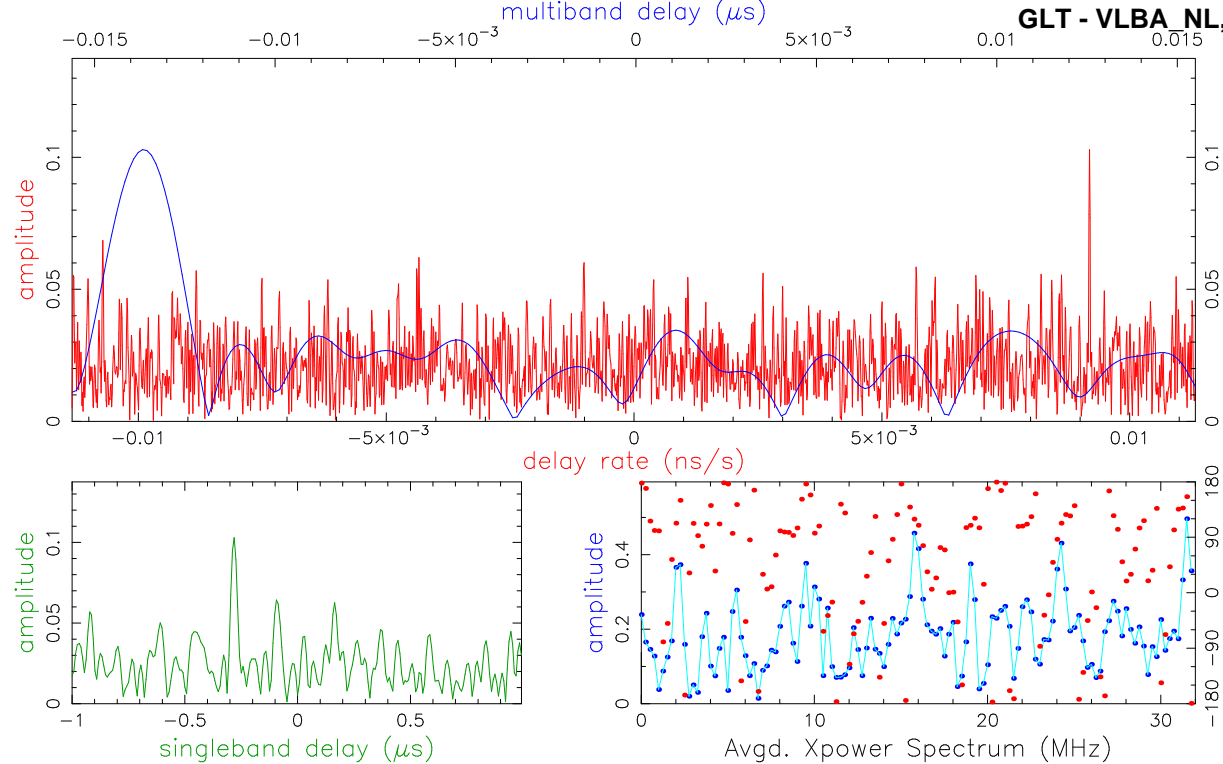


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-124.9	-88.8	-83.5	-34.1	20.5	-60.1	-56.1	-55.8	-79.5	-103.0	-113.9	-92.2	-74.0	-66.9	0.4	125.4	Phase	-71.6				
	0.2	0.3	0.4	0.4	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.1	Ampl.	0.3				
	130.7	130.0	127.4	127.9	250.3	128.2	128.4	128.7	128.2	128.1	128.9	128.5	128.2	129.1	128.7	130.4	Sbd box	128.4				
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
n	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					
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.56248752759E+01														Apriori delay (usec)	-4.56198118825E+01	Resid mbdelay (usec)	-5.06339E-03	+/-	8.0E-05
Sband delay (usec)			-4.56247533825E+01														Apriori clock (usec)	-2.5179216E+01	Resid sbdelay (usec)	-4.94150E-03	+/-	1.3E-03
Phase delay (usec)			-4.56198141907E+01														Apriori clockrate (us/s)	-5.9223514E-08	Resid phdelay (usec)	-2.30819E-06	+/-	2.7E-07
Delay rate (us/s)			-5.65922466466E-01														Apriori rate (us/s)	-5.65922288916E-01	Resid rate (us/s)	-1.77550E-07	+/-	1.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	2.22859925616E-05	Resid phase (deg)	-71.6	+/-	8.5

ph/seg (deg) 43.8 14.1 Search (2048X64) 0.237 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 52.6 24.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.1 17.0 Inc. seg. avg. 0.301 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 40.8 29.7 Inc. frq. avg. 0.291 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gn..1305JH Output file: /Exps/c192a/v2/1234/No0001/gn.W.151.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gn
GLT - VLBA_NL, fgroup W, pol LR

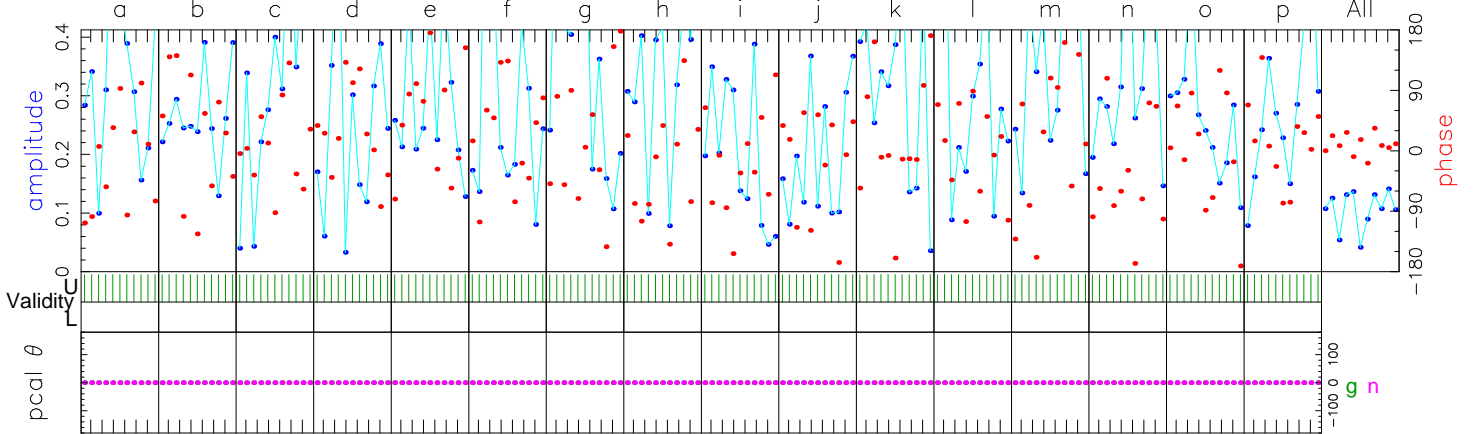


Fringe quality 0

SNR 5.7
Int time 410.687
Amp 0.137
Phase 9.9
PFD 9.3e-01
Delays (us)
SBD -0.282342
MBD -0.013652
Fringe rate (Hz) 0.792393
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042809
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



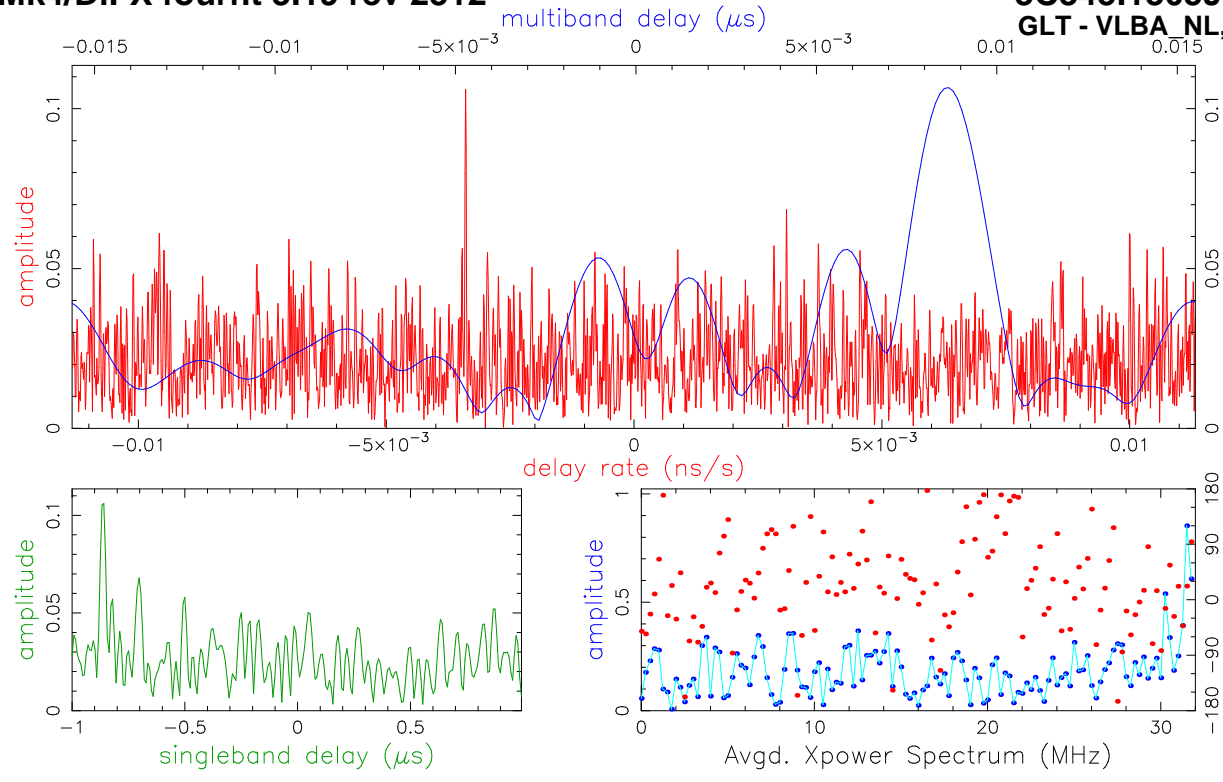
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-19.4	47.1	8.9	3.3	71.6	37.4	-3.6	-6.8	-49.0	-2.5	13.8	29.1	170.6	-29.2	29.1	12.3	Phase	9.9
	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.2	0.3	Ampl.	0.1
	115.8	155.0	245.8	129.7	149.8	61.6	46.4	203.7	68.3	250.0	97.5	151.1	151.2	50.5	248.0	94.0	Sbd box	92.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	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	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-4.59147134975E+01			Apriori delay (usec)			-4.56198118825E+01			Resid mbdelay (usec)			-1.36516E-02			+/- 1.9E-04		
Sband delay (usec)	-4.59021533825E+01			Apriori clock (usec)			-2.5179216E+01			Resid sbdelay (usec)			-2.82342E-01			+/- 3.0E-03		
Phase delay (usec)	-4.56198115620E+01			Apriori clockrate (us/s)			-5.9223514E-08			Resid phdelay (usec)			3.20549E-07			+/- 6.5E-07		
Delay rate (us/s)	-5.65913090017E-01			Apriori rate (us/s)			-5.65922288916E-01			Resid rate (us/s)			9.19890E-06			+/- 2.7E-09		
Total phase (deg)	-204.5			Apriori accel (us/s/s)			2.22859925616E-05			Resid phase (deg)			9.9			+/- 20.0		

ph/seg (deg) 14.6 33.2 Search (2048X64) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 30.8 58.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 52.8 40.1 Inc. seg. avg. 0.122 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 43.8 70.0 Inc. frq. avg. 0.129 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gn..1305JH Output file: /Exps/c192a/v2/1234/No0001/gn.W.171.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gn
GLT - VLBA_NL, fgroup W, pol RL

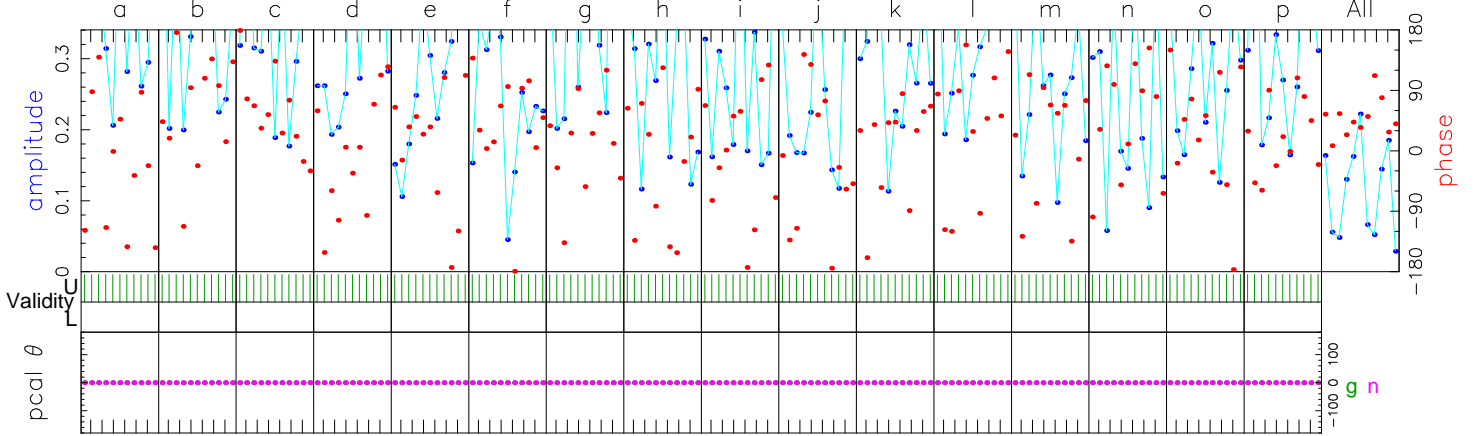


Fringe quality 0

SNR 6.1
Int time 410.728
Amp 0.114
Phase 44.4
PFD 3.0e-01
Delays (us)
SBD -0.863057
MBD 0.008742
Fringe rate (Hz)
-0.293592
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042815
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

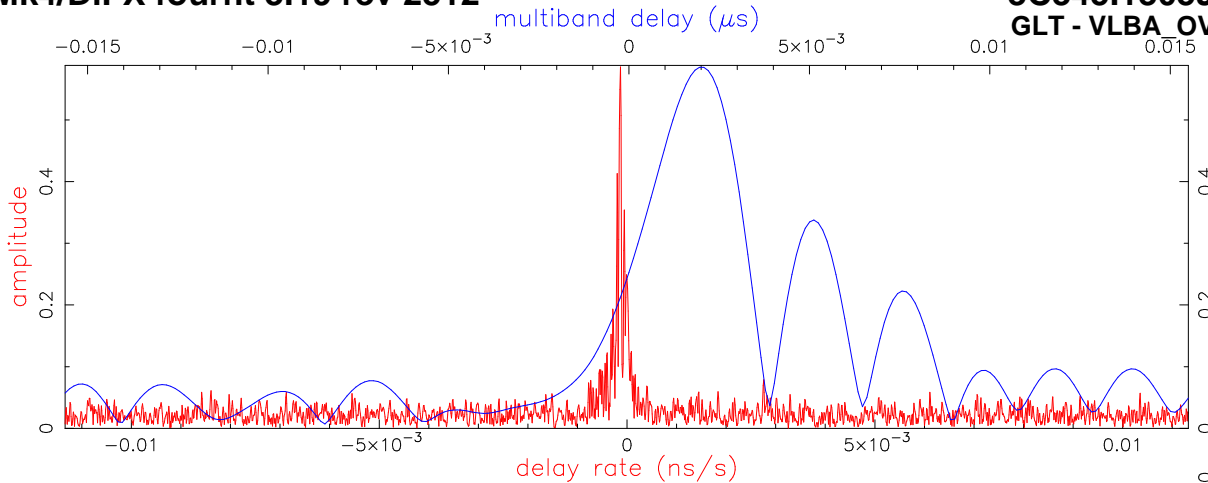


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g: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		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)		-4.64860698531E+01								-4.56198118825E+01							8.74203E-03	+/- 1.8E-04
Sband delay (usec)		-4.64828688825E+01								-2.5179216E+01							-8.63057E-01	+/- 2.8E-03
Phase delay (usec)		-4.56198104499E+01								-5.9223514E-08							1.43259E-06	+/- 6.1E-07
Delay rate (us/s)		-5.65925697227E-01								-5.65922288916E-01							-3.40831E-06	+/- 2.6E-09
Total phase (deg)					-170.0					2.22859925616E-05							44.4	+/- 18.9
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								
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

ph/seg (deg) 27.3 31.4 Search (2048X64) 0.104 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.9 54.7 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 41.5 37.8 Inc. seg. avg. 0.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 67.1 66.0 Inc. frq. avg. 0.106 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gn..1305JH Output file: /Exps/c192a/v2/1234/No0001/gn.W.194.1305JH

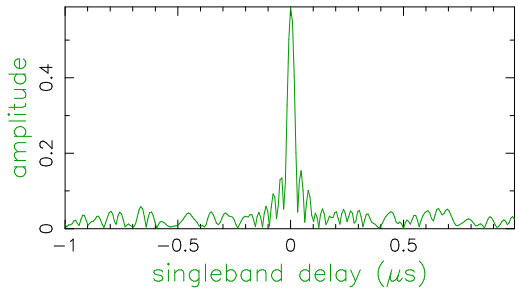
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, go
GLT - VLBA_OV, fgroup W, pol LL

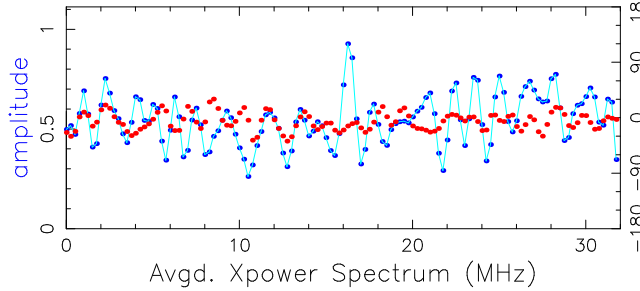


Fringe quality 6

SNR 32.6
Int time 410.693
Amp 0.588
Phase -8.6
PFD 0.0e+00
Delays (us)
SBD 0.001549
MBD 0.002031
Fringe rate (Hz)
-0.011359
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

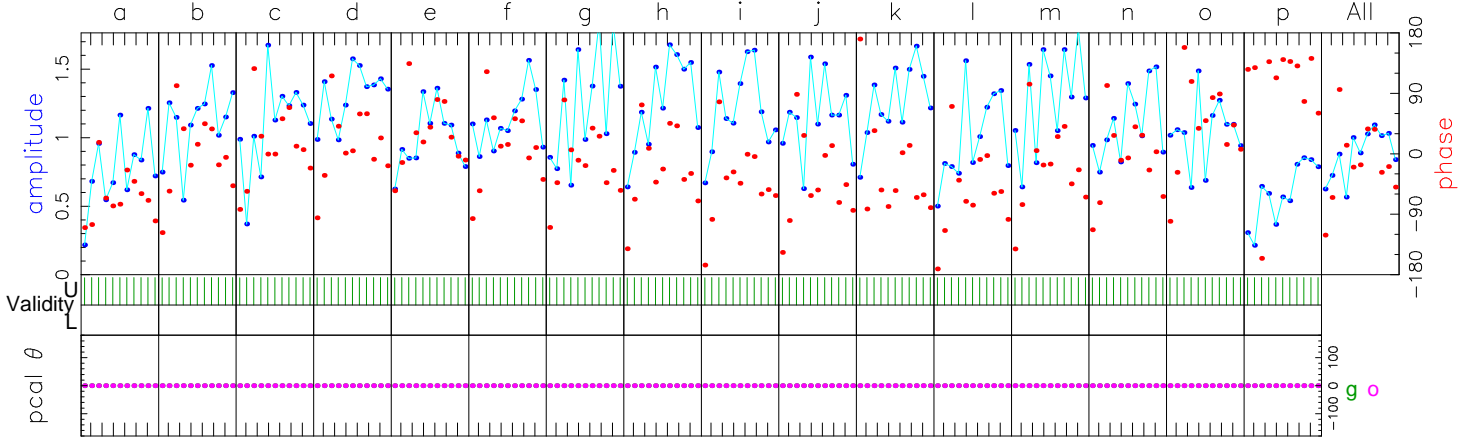


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042801
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



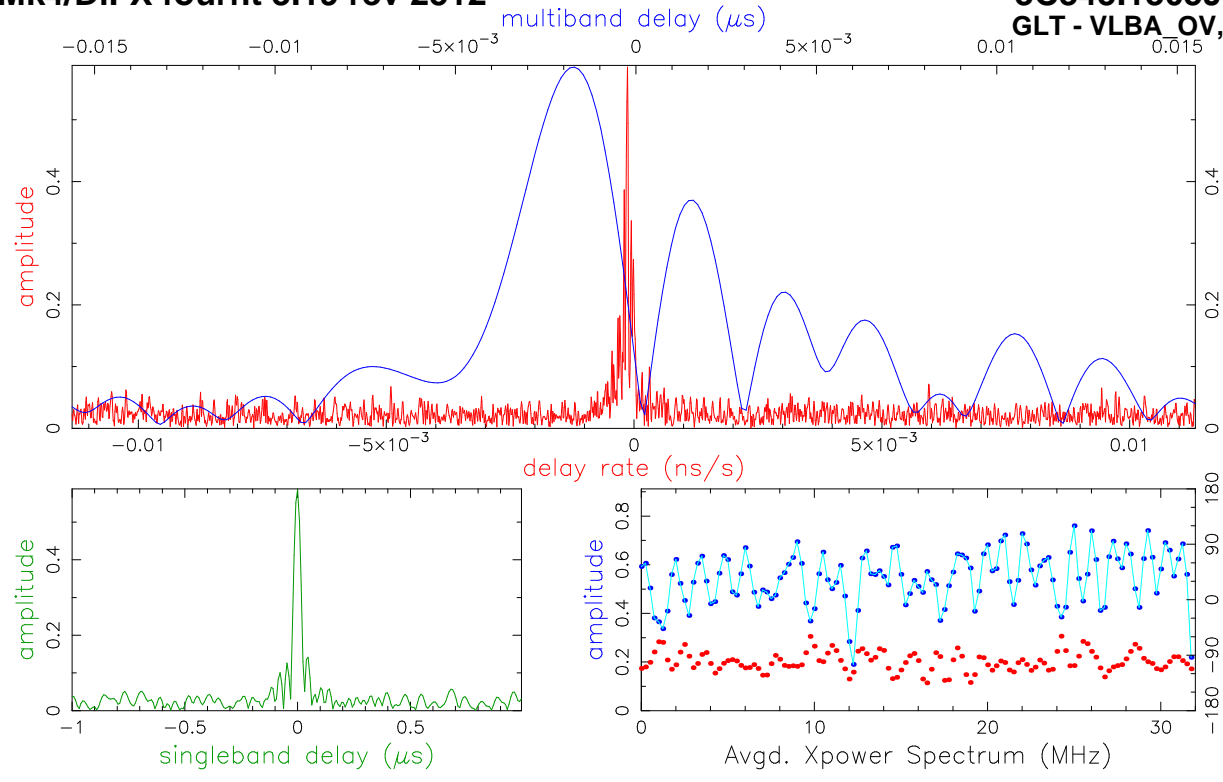
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-62.2	1.1	14.0	14.8	32.1	13.0	-8.0	-12.3	-32.0	-46.2	-46.9	-54.8	-12.9	-3.1	47.0	124.4		Phase	-8.6
	0.6	0.7	0.7	0.9	0.7	0.7	0.9	0.8	0.8	0.7	0.9	0.7	0.8	0.7	0.6	0.5		Ampl.	0.7
	130.8	129.6	129.4	129.2	129.1	129.1	129.0	129.2	129.1	129.3	129.0	129.2	129.6	129.2	130.3	131.0		Sbd box	129.2
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
g: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	
g	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	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	5.75425936964E+03			Apriori delay (usec)			5.75425733910E+03			Resid mbdelay (usec)			2.03054E-03			+/-	3.3E-05		
Sband delay (usec)	5.75425888810E+03			Apriori clock (usec)			-1.5333658E+01			Resid sbdelay (usec)			1.54900E-03			+/-	5.3E-04		
Phase delay (usec)	5.75425733882E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			-2.76314E-07			+/-	1.1E-07		
Delay rate (us/s)	-7.96777168523E-01			Apriori rate (us/s)			-7.96777036652E-01			Resid rate (us/s)			-1.31871E-07			+/-	4.8E-10		
Total phase (deg)	59.7			Apriori accel (us/s/s)			-4.09619280062E-06			Resid phase (deg)			-8.6			+/-	3.5		

ph/seg (deg) RMS Theor. Amplitude 0.588 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 55.1 5.8 Search (2048X64) 0.581 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.4 10.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.2 7.0 Inc. seg. avg. 0.877 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 30.4 12.3 Inc. frq. avg. 0.722 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.143.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, go
GLT - VLBA_OV, fgroup W, pol RR

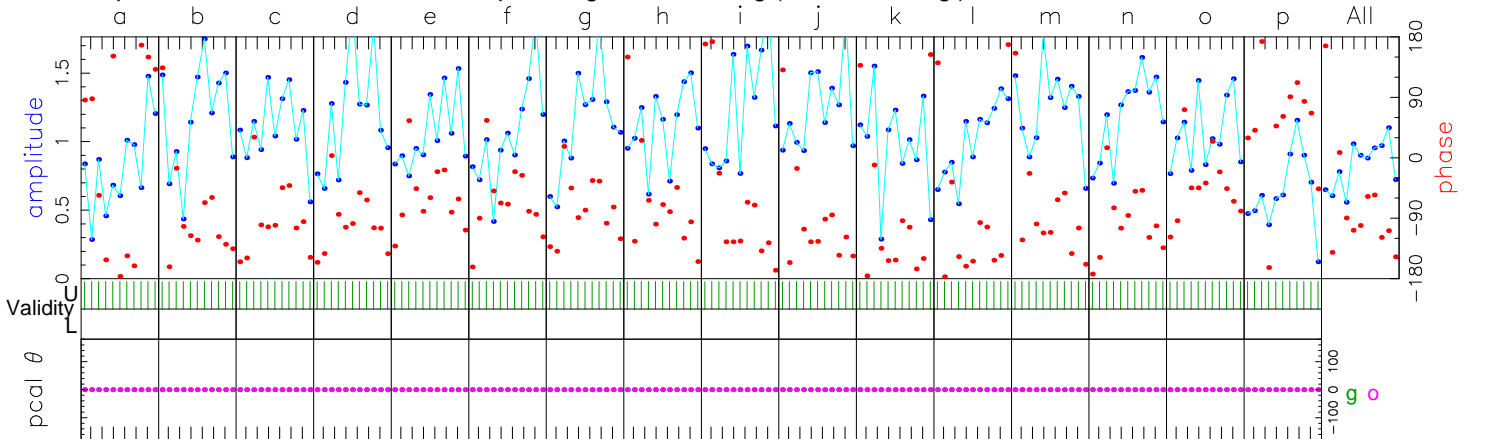


Fringe quality 6

SNR 32.6
Int time 410.734
Amp 0.588
Phase -100.7
PFD 0.0e+00
Delays (us)
SBD -0.001683
MBD -0.001757
Fringe rate (Hz)
-0.011259
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042807
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

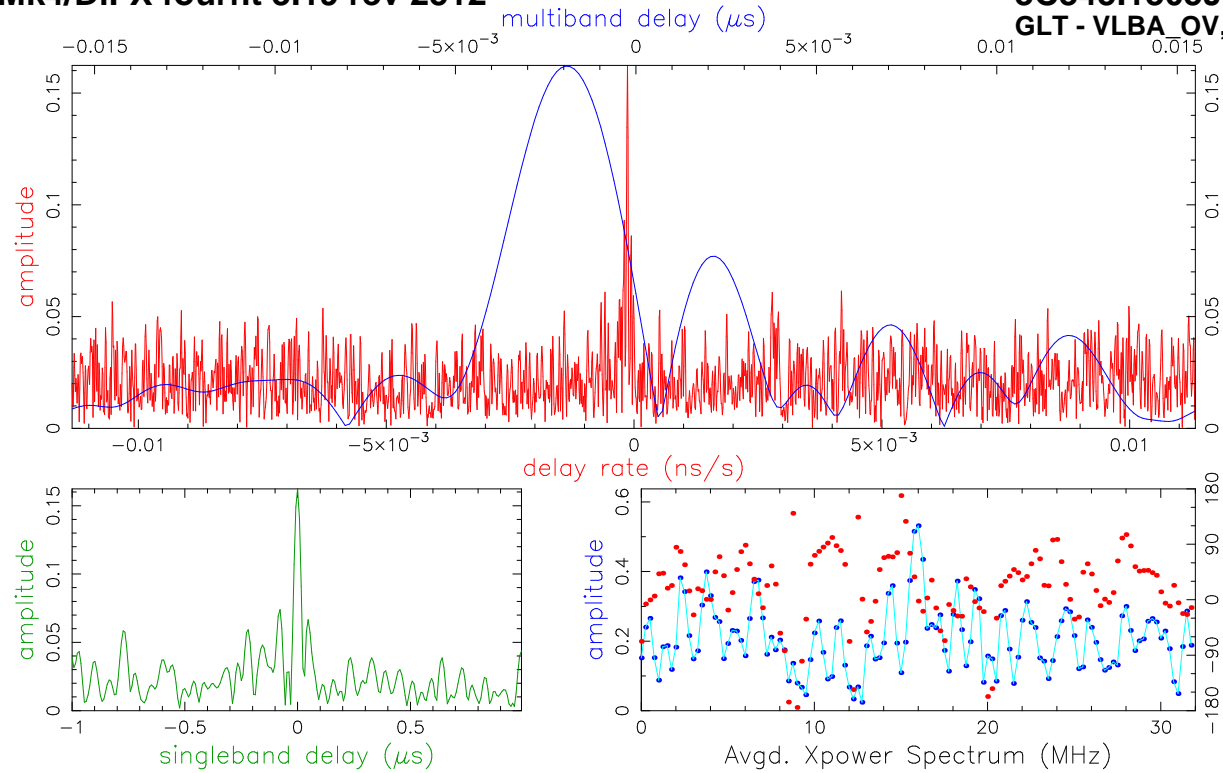


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g: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		
g: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		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	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	
Group delay (usec)(sbd)		5.75425558214E+03																
Sband delay (usec)		5.75425565610E+03																
Phase delay (usec)		5.75425733585E+03																
Delay rate (us/s)		-7.96777167354E-01																
Total phase (deg)					-32.4													
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																		
ion window (TEC)																		
simultaneous interpolator																		

g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.163.1305JH

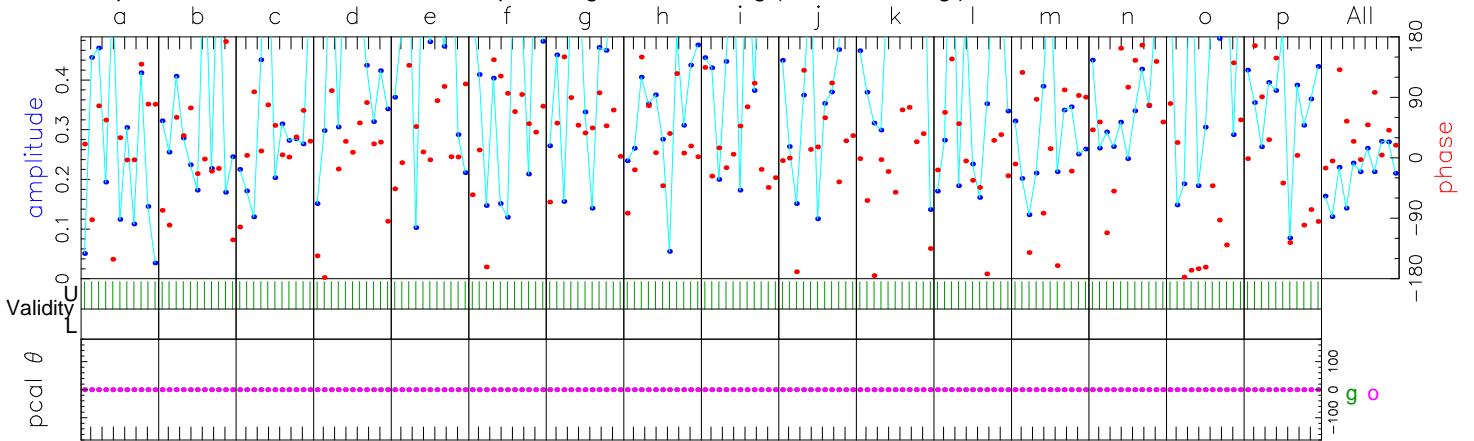
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, go
GLT - VLBA OV, fgroup W, pol LR



Fringe quality 9
SNR 9.0
Int time 410.693
Amp 0.162
Phase 34.0
PFD 8.9e-11
Delays (us)
SBD -0.001000
MBD -0.001932
Fringe rate (Hz)
-0.011390
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042811
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

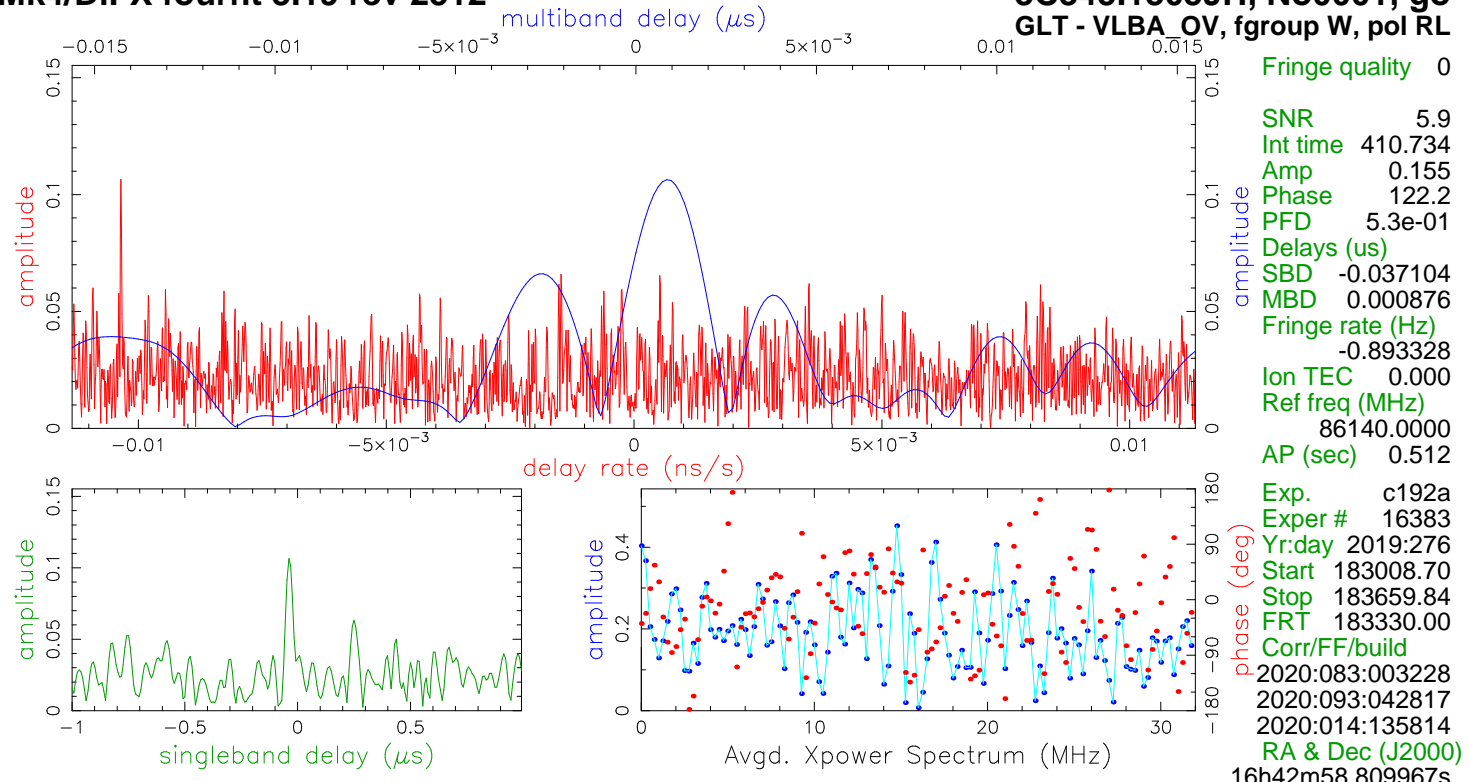


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
94.1	-11.0	34.5	40.3	32.5	63.7	55.2	24.9	9.2	28.3	15.3	31.3	39.4	105.0	-165.1	-40.8		Phase	34.0	
0.0	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.2	
171.5	176.7	128.0	129.9	129.1	3.8	129.7	227.4	128.9	128.9	128.8	181.0	213.8	130.1	235.2	16.0		Sbd box	128.9	
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g: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		
g	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		
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)		5.75425540667E+03								5.75425733910E+03							Resid mbdelay (usec)	-1.93243E-03	+/- 1.2E-04
Sband delay (usec)		5.75425633960E+03								-1.5333658E+01							Resid sbdelay (usec)	-9.99500E-04	+/- 1.9E-03
Phase delay (usec)		5.75425734019E+03								7.4018997E-08							Resid phdelay (usec)	1.09776E-06	+/- 4.1E-07
Delay rate (us/s)		-7.96777168876E-01								-7.96777036652E-01							Resid rate (us/s)	-1.32224E-07	+/- 1.7E-09
Total phase (deg)			102.3							-4.09619280062E-06							Resid phase (deg)	34.0	+/- 12.7

ph/seg (deg) 43.3 21.1 Search (2048X64) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 43.5 36.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 56.5 25.5 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.3 44.5 Inc. frq. avg. 0.179 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.177.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, go
GLT - VLBA OV, fgroup W, pol RL



Fringe quality 0

SNR 5.9

Int time 410.734

Amp 0.155

Phase 122.2

PFD 5.3e-01

Delays (us)

SBD -0.037104

MBD 0.000876

Fringe rate (Hz)

-0.893328

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183008.70

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042817

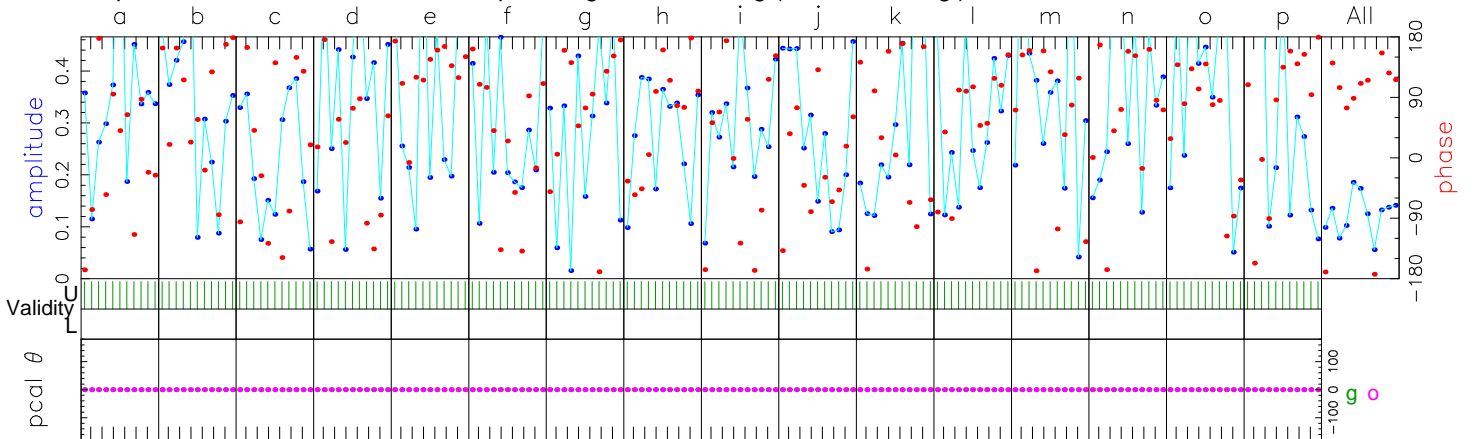
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	21.8	112.5	-160.0	106.7	138.1	117.6	132.7	70.3	140.4	10.9	-158.6	105.5	146.2	102.0	117.0	129.1	Phase	122.2
	0.1	0.2	0.1	0.1	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
	49.3	50.0	188.4	202.3	124.9	212.7	207.1	55.3	145.3	177.0	185.5	163.5	250.2	163.5	22.6	31.0	Sbd box	124.3
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g: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	
g	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	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.75422696541E+03			Apriori delay (usec)			5.75425733910E+03			Resid mbdelay (usec)			8.76310E-04			+/- 1.8E-04		
Sband delay (usec)	5.75422023460E+03			Apriori clock (usec)			-1.5333658E+01			Resid sbdelay (usec)			-3.71045E-02			+/- 2.9E-03		
Phase delay (usec)	5.75425734304E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			3.94153E-06			+/- 6.2E-07		
Delay rate (us/s)	-7.96787407309E-01			Apriori rate (us/s)			-7.96777036652E-01			Resid rate (us/s)			-1.03707E-05			+/- 2.6E-09		
Total phase (deg)	190.5			Apriori accel (us/s/s)			-4.09619280062E-06			Resid phase (deg)			122.2			+/- 19.3		

ph/seg (deg) 36.0 32.0 Search (2048X64) 0.155 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 37.9 55.9 Interp. 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 53.4 38.6 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 62.5 67.4 Inc. frq. avg. 0.160 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

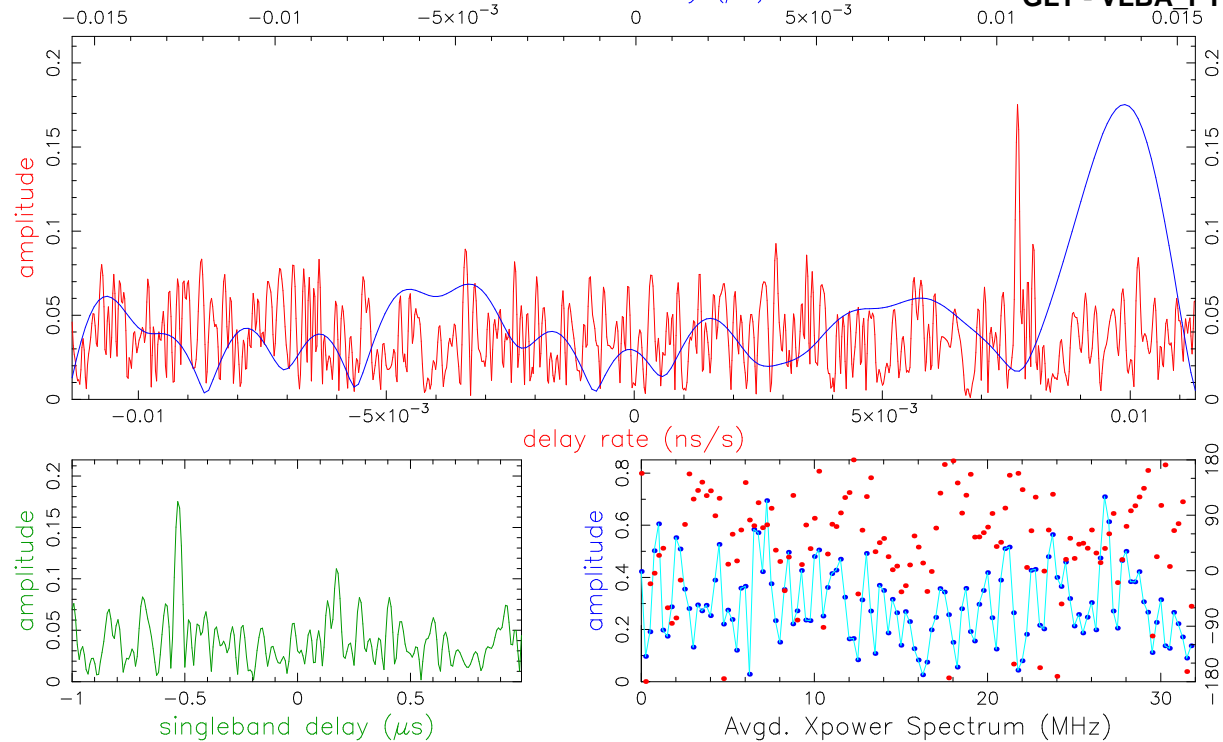
g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.202.1305JH

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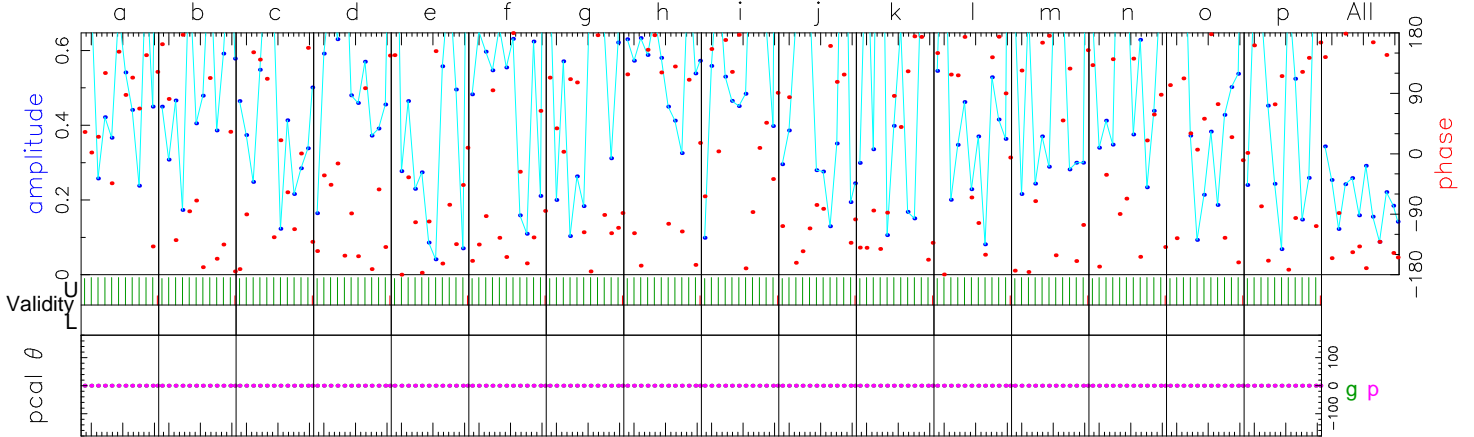
3C345.1305JH, No0001, gp
GLT - VLBA PT, fgroup W, pol LL

multiband delay (μ s)



Fringe quality 0
SNR 5.7
Int time 138.698
Amp 0.216
Phase -169.7
PFD 7.9e-01
Delays (us)
SBD -0.528897
MBD 0.013527
Fringe rate (Hz) 0.666471
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
2020:093:042759
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

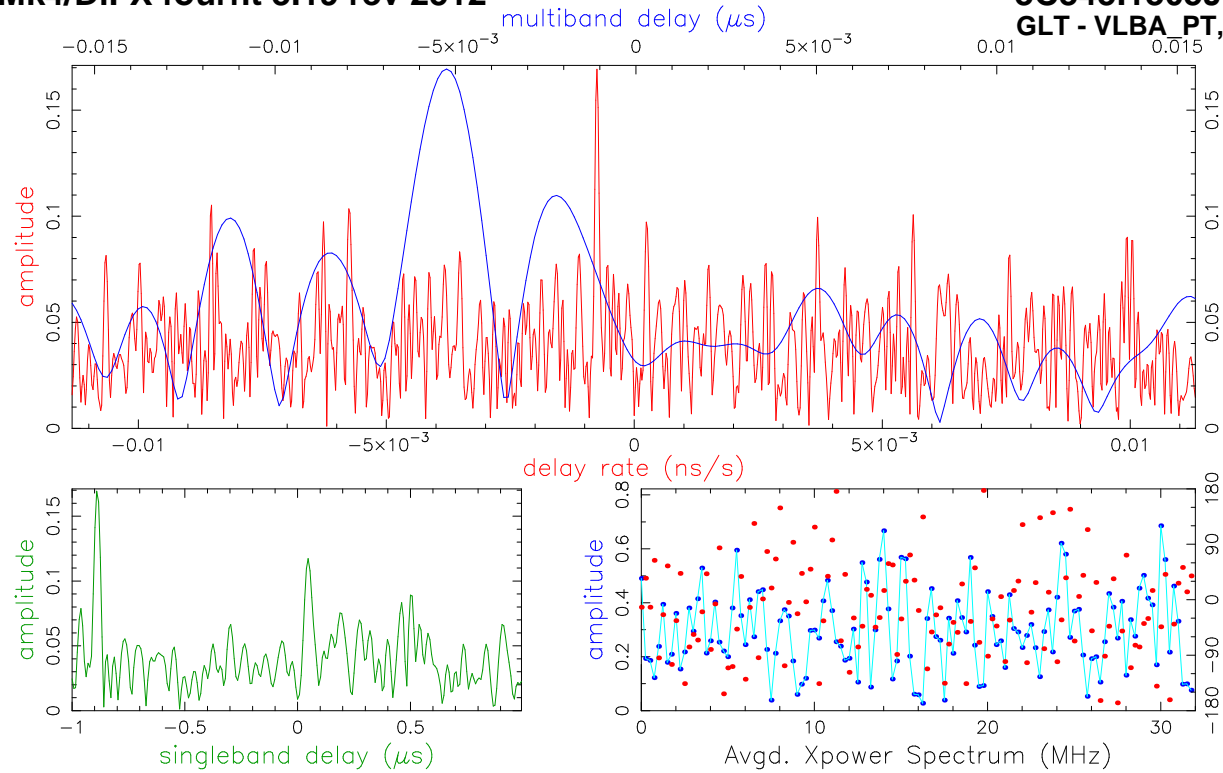


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
93.6	-163.1	-171.3	-106.4	-149.0	-137.2	-154.6	165.8	66.2	-172.3	-153.1	161.8	177.9	-147.2	129.5	-150.4	-150.4	Phase	-169.7
0.3	0.2	0.2	0.2	0.2	0.4	0.2	0.4	0.1	0.3	0.5	0.3	0.4	0.1	0.1	0.3	0.3	Ampl.	0.2
40.9	182.7	163.2	41.3	191.1	209.8	145.7	178.8	205.7	58.5	60.1	134.5	240.8	131.8	104.4	186.3	186.3	Sbd box	61.3
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		3.92678525561E+03								3.92730297871E+03							Resid mbdelay (usec)	1.35269E-02 +/- 1.9E-04
Sband delay (usec)		3.92677408221E+03								-1.0609783E+01							Resid sbdelay (usec)	-5.28897E-01 +/- 3.0E-03
Phase delay (usec)		3.92730297323E+03								-1.2888659E-07							Resid phdelay (usec)	-5.47233E-06 +/- 6.5E-07
Delay rate (us/s)		-7.82348320982E-01								-7.82356058045E-01							Resid rate (us/s)	7.73706E-06 +/- 8.1E-09
Total phase (deg)			41.2							8.63071214981E-06							Resid phase (deg)	-169.7 +/- 20.1

ph/seg (deg) 36.7 34.9 Search (1024X64) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 44.8 60.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 51.4 40.3 Inc. seg. avg. 0.215 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 57.8 70.3 Inc. frq. avg. 0.215 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 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 5850.907 3282.776 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gp..1305JH Output file: /Exps/c192a/v2/1234/No0001/gp.W.132.1305JH

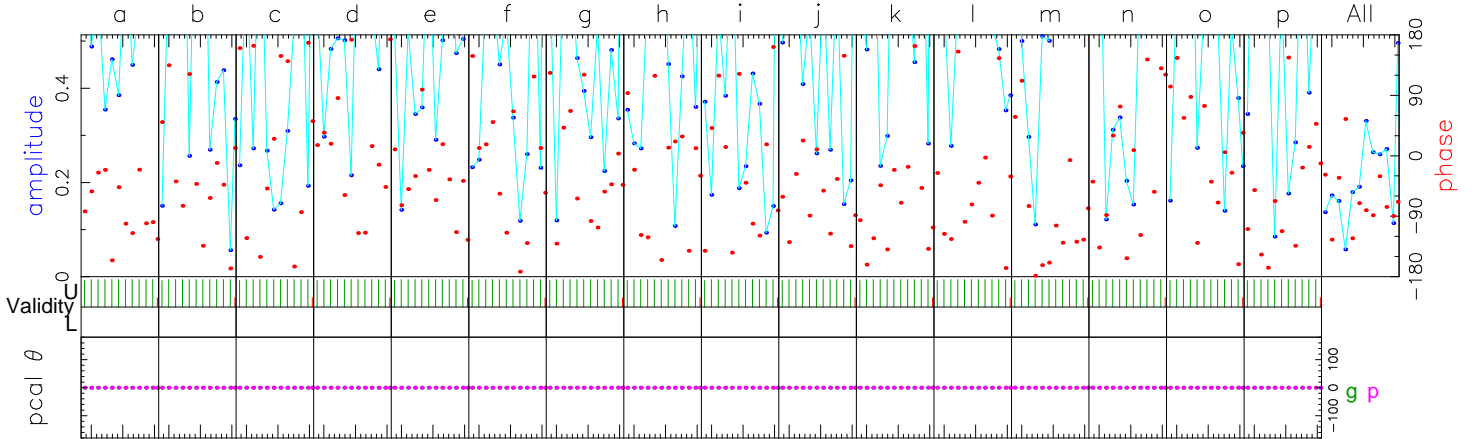
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gp
GLT - VLBA_PT, fgroup W, pol RR



Fringe quality 0
SNR 5.5
Int time 138.805
Amp 0.171
Phase -72.9
PFD 9.9e-01
Delays (us)
SBD -0.888406
MBD -0.005209
Fringe rate (Hz)
-0.064485
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
2020:093:042802
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

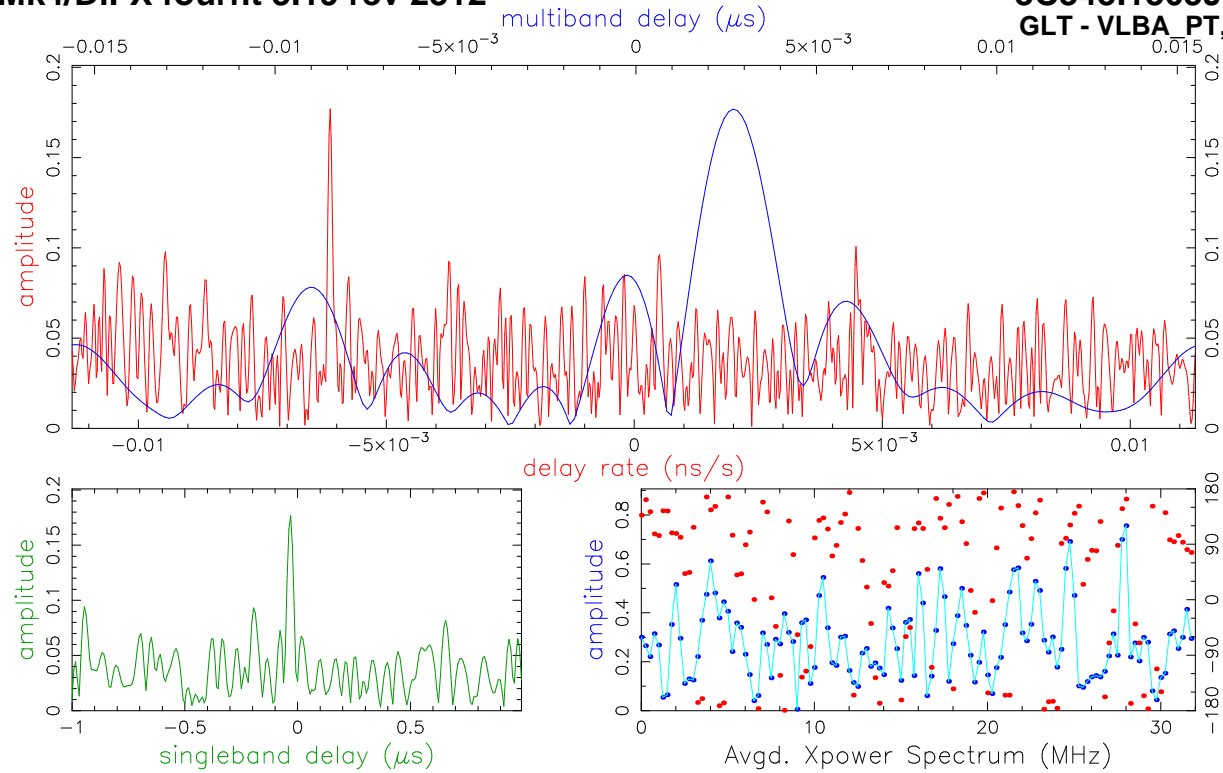


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-80.9	-68.2	-146.4	-39.4	-32.3	23.3	-6.7	-141.6	-128.1	-62.6	-82.2	-81.7	-112.5	-121.2	59.9	-62.9		Phase	-72.9				
	0.5	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.3	0.4	0.3	0.2	0.2	0.1	0.1	0.2		Ampl.	0.2				
	14.4	59.8	12.7	133.3	4.2	149.3	223.2	135.7	238.5	14.1	14.7	36.5	58.6	4.0	134.1	246.0		Sbd box	15.3				
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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	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					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			3.92642276956E+03															Apriori delay (usec)	3.92730297871E+03	Resid mbdelay (usec)	-5.20914E-03	+/-	2.0E-04
Sband delay (usec)			3.92641457321E+03															Apriori clock (usec)	-1.0609783E+01	Resid sbdelay (usec)	-8.88406E-01	+/-	3.1E-03
Phase delay (usec)			3.92730297636E+03															Apriori clockrate (us/s)	-1.2888659E-07	Resid phdelay (usec)	-2.35079E-06	+/-	6.7E-07
Delay rate (us/s)			-7.82356806654E-01															Apriori rate (us/s)	-7.82356058045E-01	Resid rate (us/s)	-7.48608E-07	+/-	8.4E-09
Total phase (deg)				138.0														Apriori accel (us/s/s)	8.63071214981E-06	Resid phase (deg)	-72.9	+/-	20.8

ph/seg (deg) RMS Theor. Amplitude 0.171 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.5 62.9 Search (1024X64) 0.168 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 60.7 41.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 76.4 72.7 Inc. seg. avg. 0.170 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 5850.907 3282.776 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gp..1305JH Output file: /Exps/c192a/v2/1234/No0001/gp.W.147.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gp
GLT - VLBA PT, fgroup W, pol LR

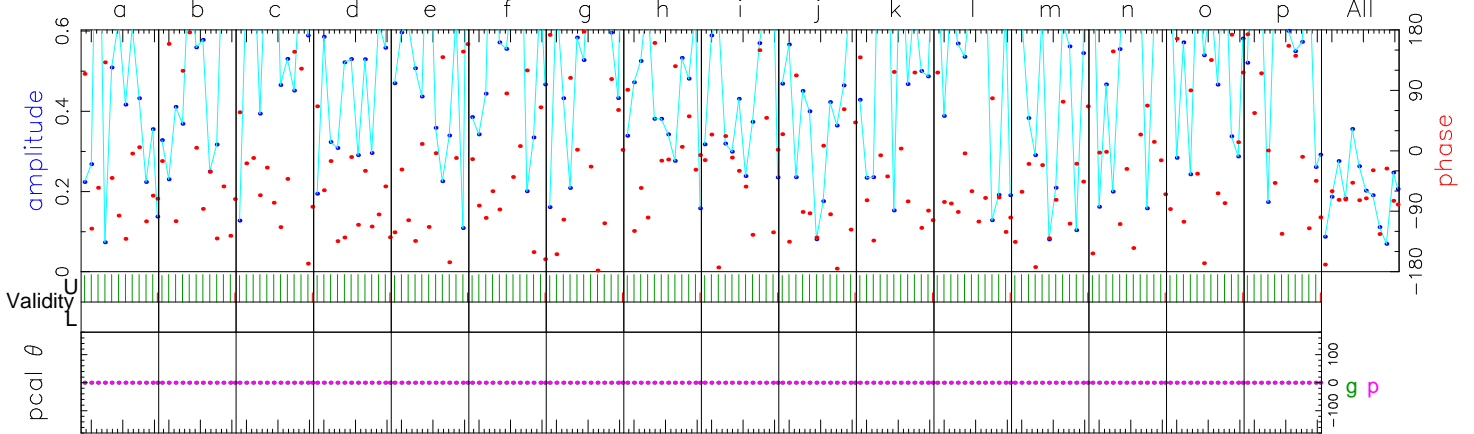


Fringe quality 0

SNR 5.7
Int time 138.698
Amp 0.201
Phase -67.3
PFD 7.3e-01
Delays (us)
SBD -0.032762
MBD 0.002699
Fringe rate (Hz)
-0.529598
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
2020:093:042805
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
	-60.3	-94.0	-57.5	-77.1	-92.8	-33.4	-125.4	-29.8	-32.5	-98.8	-42.9	-80.2	-53.1	-38.2	-103.7	170.3	Phase	-67.3
	0.3	0.2	0.3	0.4	0.2	0.3	0.1	0.2	0.1	0.1	0.3	0.4	0.2	0.3	0.2	0.0	Ampl.	0.2
	117.6	89.7	41.1	7.3	97.1	230.2	8.2	1.5	96.6	249.4	131.8	57.4	177.1	115.3	201.0	100.9	Sbd box	124.8
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		3.92727442806E+03								3.92730297871E+03							Resid mbdelay (usec)	2.69936E-03 +/- 1.9E-04
Sband delay (usec)		3.92727021671E+03								-1.0609783E+01							Resid sbdelay (usec)	-3.27620E-02 +/- 3.0E-03
Phase delay (usec)		3.92730297654E+03								-1.2888659E-07							Resid phdelay (usec)	-2.16914E-06 +/- 6.5E-07
Delay rate (us/s)		-7.82362206150E-01								-7.82356058045E-01							Resid rate (us/s)	-6.14811E-06 +/- 8.0E-09
Total phase (deg)				143.6						8.63071214981E-06							Resid phase (deg)	-67.3 +/- 20.0

ph/seg (deg) RMS Theor. Amplitude 0.201 +/- 0.035 Pcdl mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 38.9 34.7 Search (1024X64) 0.173 Pcdl rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.0 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. 0.190 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.3 69.9 Inc. frq. avg. 0.182 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

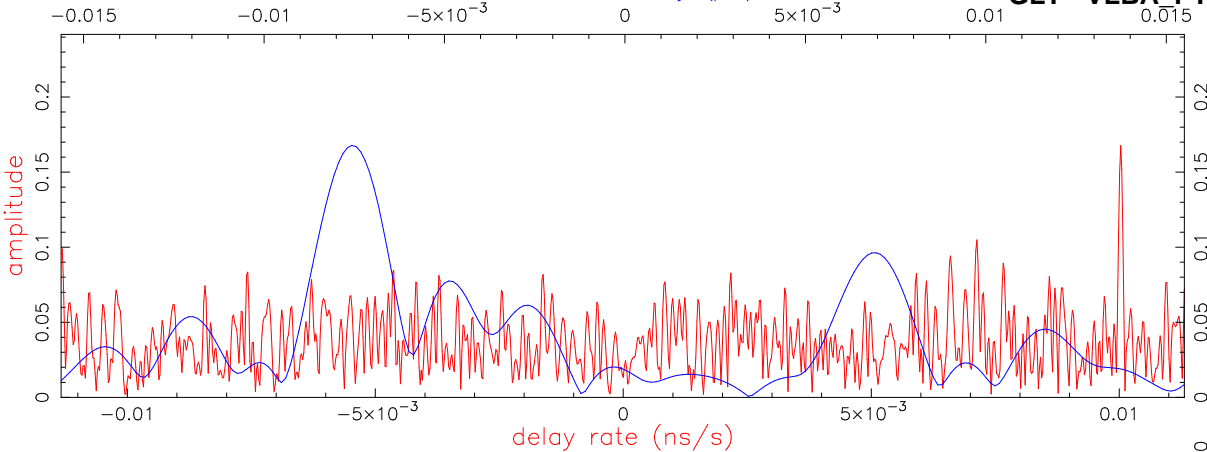
g: az 142.5 el 51.0 pa -10.6 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 5850.907 3282.776 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gp..1305JH Output file: /Exps/c192a/v2/1234/No0001/gp.W.156.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

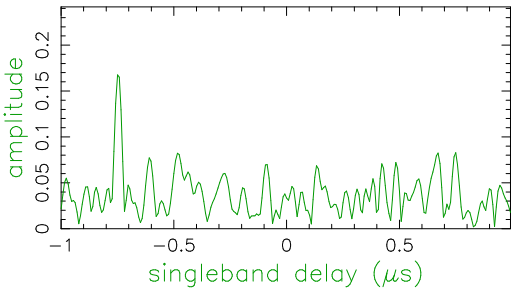
3C345.1305JH, No0001, gp
GLT - VLBA PT, fgroup W, pol RL

multiband delay (μ s)

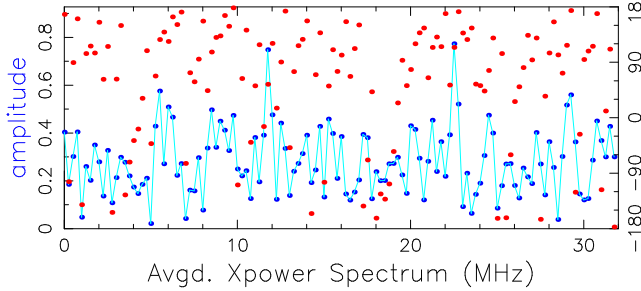


Fringe quality 0

SNR 5.5
Int time 138.805
Amp 0.242
Phase -178.7
PFD 9.9e-01
Delays (us)
SBD -0.746651
MBD -0.007509
Fringe rate (Hz)
0.865473
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

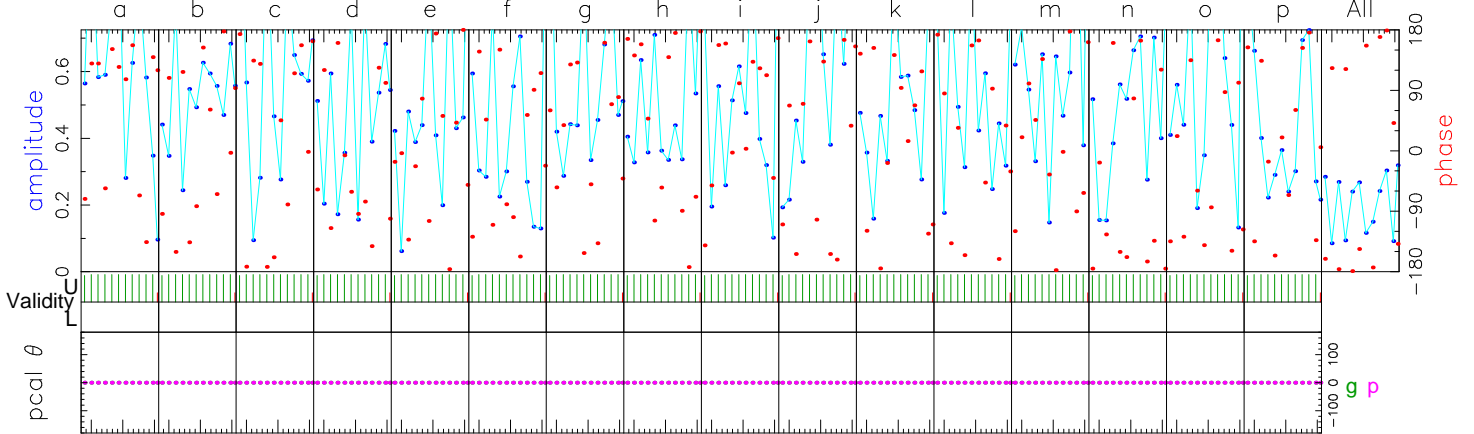


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042808
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

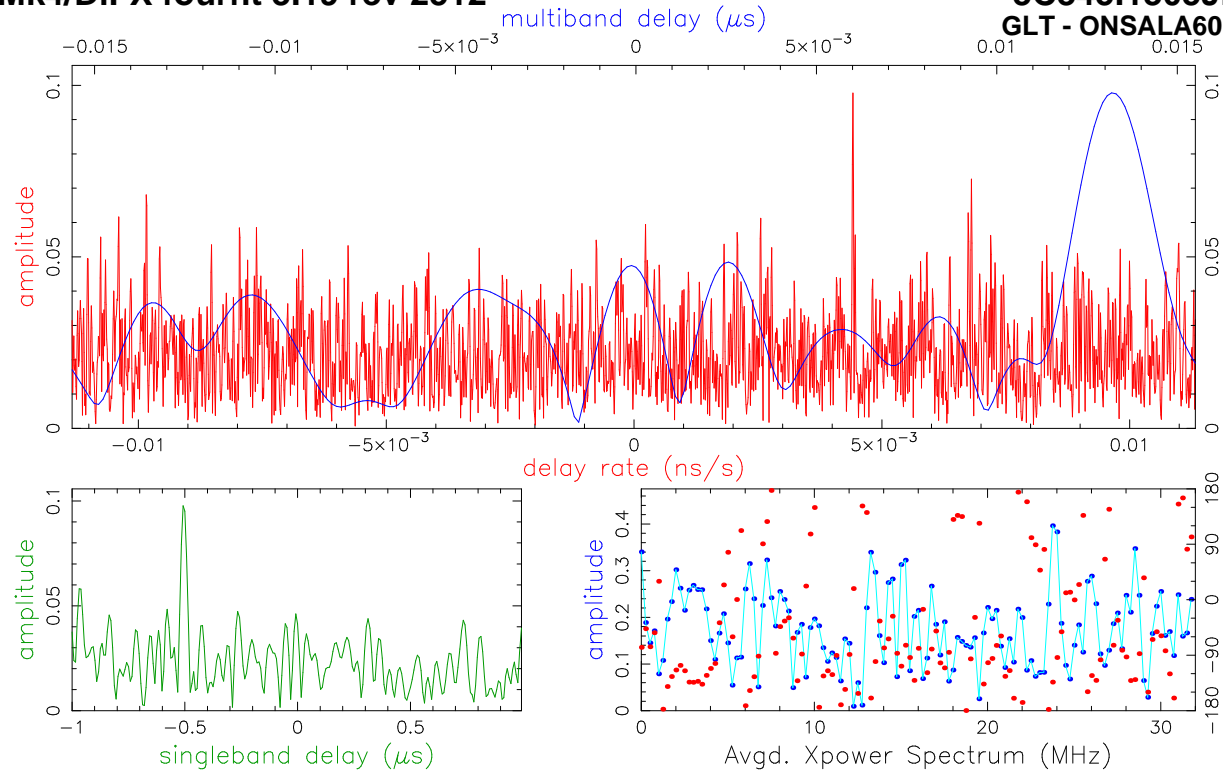


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
159.8	-148.6	176.3	-93.1	-130.8	-127.5	106.5	-161.8	133.7	175.3	155.8	178.5	-141.8	179.4	-163.5	171.8	171.8	Phase	-178.7	
0.4	0.2	0.5	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.3	0.1	0.4	0.3	0.3	0.3	Ampl.	0.2	
4.1	24.1	225.2	136.6	204.3	244.0	164.2	104.8	47.5	146.6	172.9	137.8	121.4	34.1	95.8	31.0	31.0	Sbd box	33.4	
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		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
g	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		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
																	Tracks		
Group delay (usec)(sbd)		3.92654546991E+03								3.92730297871E+03							Resid mbdelay (usec)	-7.50880E-03	+/- 2.0E-04
Sband delay (usec)		3.92655632721E+03								-1.0609783E+01							Resid sbdelay (usec)	-7.46651E-01	+/- 3.1E-03
Phase delay (usec)		3.92730297294E+03								-1.2888659E-07							Resid phdelay (usec)	-5.76373E-06	+/- 6.7E-07
Delay rate (us/s)		-7.82346010758E-01								-7.82356058045E-01							Resid rate (us/s)	1.00473E-05	+/- 8.3E-09
Total phase (deg)			32.1							8.63071214981E-06							Resid phase (deg)	-178.7	+/- 20.8

ph/seg (deg) 50.9 36.0 Search (1024X64) 0.167 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 52.0 62.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 41.5 41.6 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 43.9 72.7 Inc. frq. avg. 0.225 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 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 5850.907 3282.776 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gp..1305JH Output file: /Exps/c192a/v2/1234/No0001/gp.W.168.1305JH

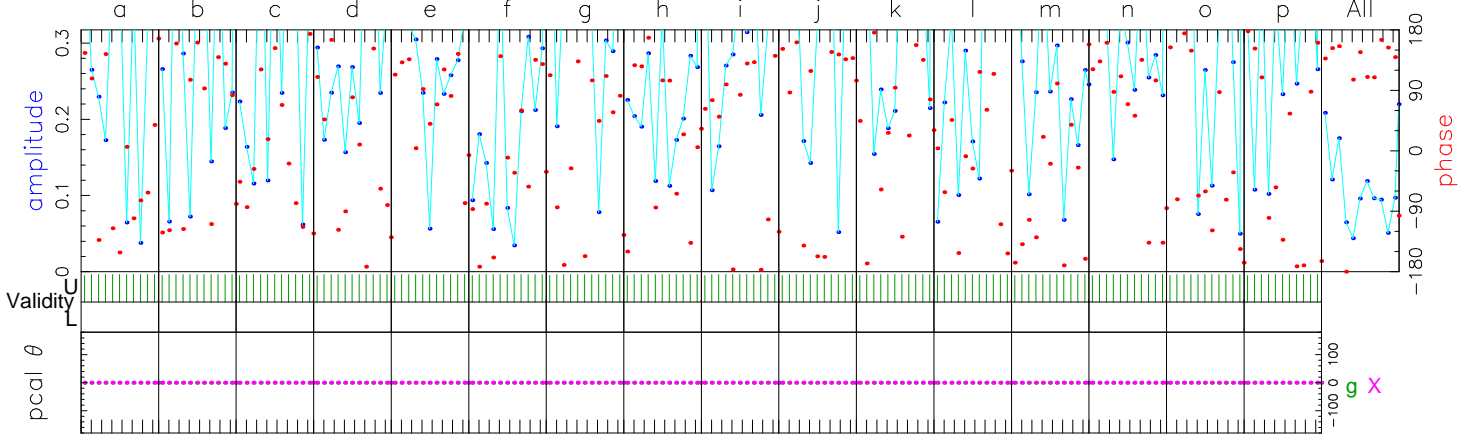
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gX
GLT - ONSALA60, fgroup W, pol LL



Fringe quality 0
SNR 5.6
Int time 418.181
Amp 0.106
Phase 142.6
PFD 1.0e+00
Delays (us)
SBD -0.504856
MBD 0.013266
Fringe rate (Hz)
0.381550
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042806
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



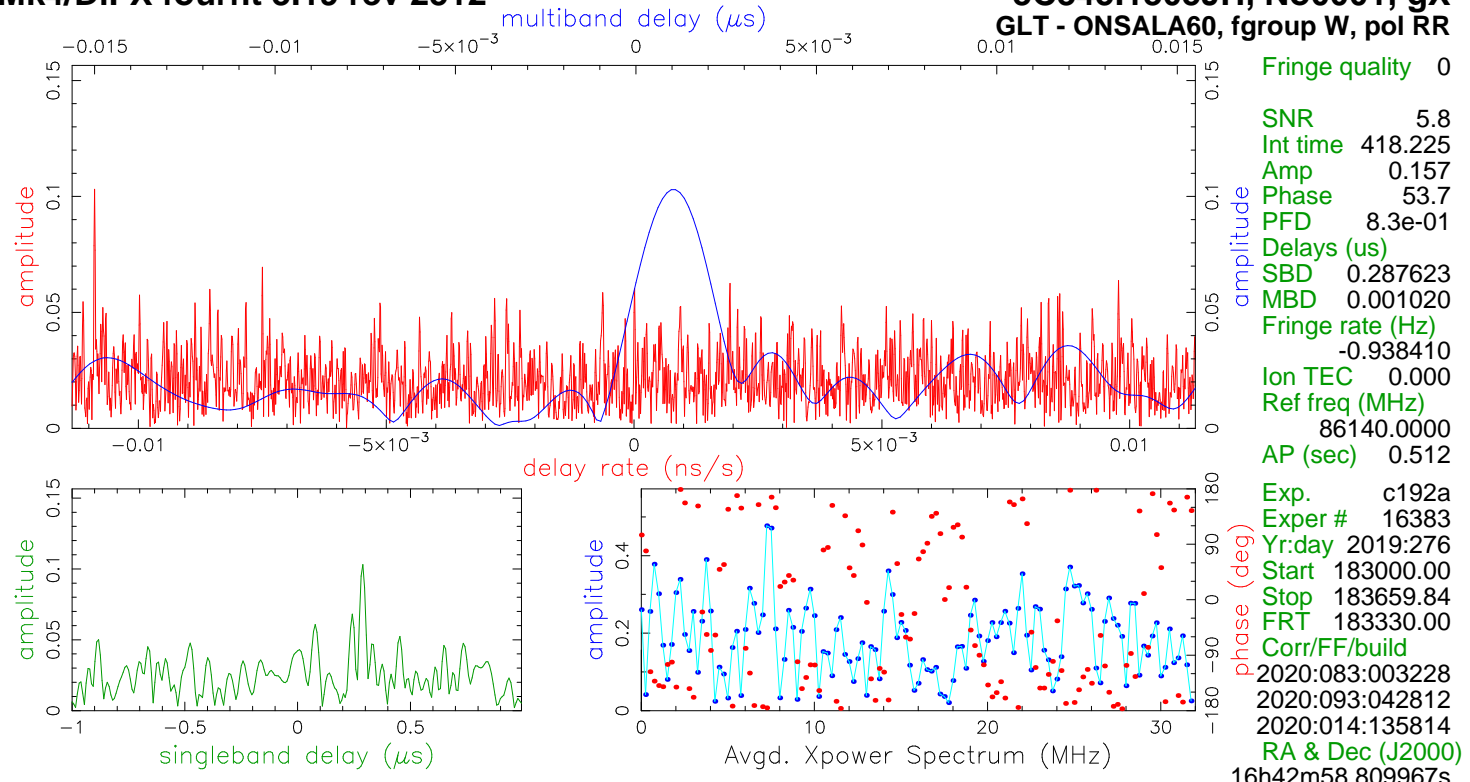
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-146.9	155.4	-174.1	-178.4	104.3	149.3	116.4	136.4	122.1	158.4	114.2	36.8	-141.7	128.0	-142.4	150.9	Phase	142.6				
	0.1	0.2	0.0	0.1	0.2	0.0	0.2	0.1	0.2	0.3	0.1	0.1	0.0	0.3	0.1	0.1	Ampl.	0.1				
	115.1	65.5	144.9	174.0	45.0	224.4	124.8	224.3	114.0	63.8	4.1	76.1	230.6	64.2	26.2	11.0	Sbd box	64.4				
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.08103731504E+02														Apriori delay (usec)	-4.07585747477E+02	Resid mbdelay (usec)	1.32660E-02	+/-	1.9E-04
Sband delay (usec)			-4.08090602977E+02														Apriori clock (usec)	-3.1029133E+01	Resid sbdelay (usec)	-5.04856E-01	+/-	3.1E-03
Phase delay (usec)			-4.07585742878E+02														Apriori clockrate (us/s)	-4.5300002E-07	Resid phdelay (usec)	4.59913E-06	+/-	6.7E-07
Delay rate (us/s)			6.39665293322E-01														Apriori rate (us/s)	6.39660863900E-01	Resid rate (us/s)	4.42942E-06	+/-	2.7E-09
Total phase (deg)				39.0													Apriori accel (us/s/s)	1.14351425282E-05	Resid phase (deg)	142.6	+/-	20.6

ph/seg (deg) 25.2 35.7 Theor. Amplitude 0.106 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.8 62.4 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.1 41.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 80.5 72.0 Inc. seg. avg. 0.095 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 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/gX..1305JH Output file: /Exps/c192a/v2/1234/No0001/gX.W.159.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gX
GLT - ONSALA60, fgroup W, pol RR



Fringe quality 0

SNR 5.8

Int time 418.225

Amp 0.157

Phase 53.7

PFD 8.3e-01

Delays (us)

SBD 0.287623

MBD 0.001020

Fringe rate (Hz)

-0.938410

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183000.00

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042812

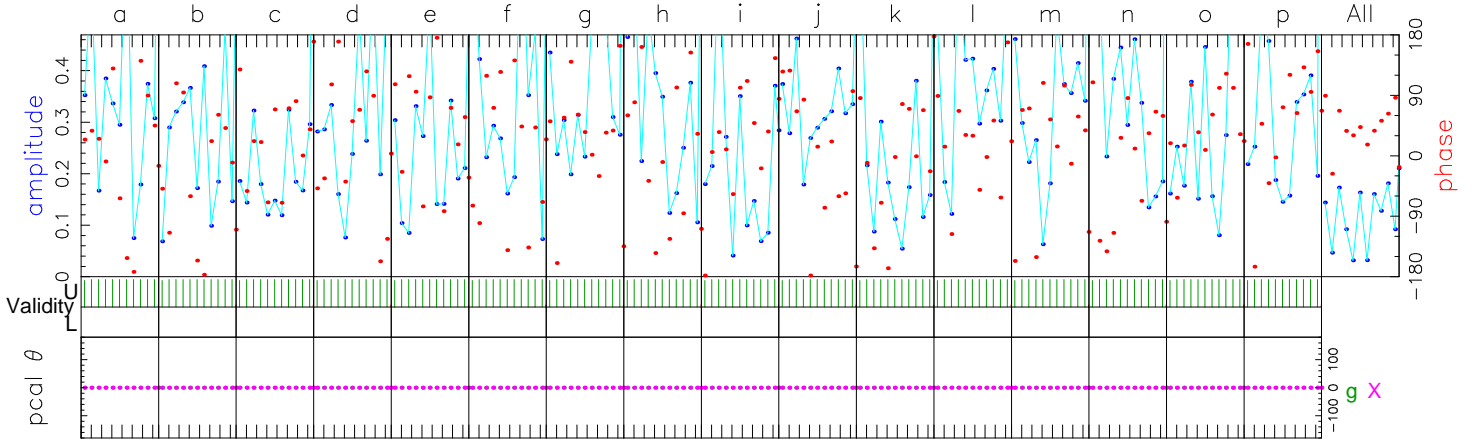
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	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		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-4.07303477788E+02															1.01969E-03	+/- 1.9E-04
Sband delay (usec)		-4.07298124977E+02															2.87623E-01	+/- 3.0E-03
Phase delay (usec)		-4.07585745746E+02															1.73130E-06	+/- 6.4E-07
Delay rate (us/s)		6.39649969896E-01															-1.08940E-05	+/- 2.6E-09
Total phase (deg)					-49.9												53.7	+/- 19.8
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															
Sample rate(MSamp/s):	64		dr window (ns/s) -0.016 0.016															
Data rate(Mb/s):	2048		ion window (TEC) 0.00 0.00															
nlags:	128		t_cohere infinite															

ph/seg (deg) 32.9 34.3 Search (2048X64) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 54.0 59.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 21.8 39.6 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

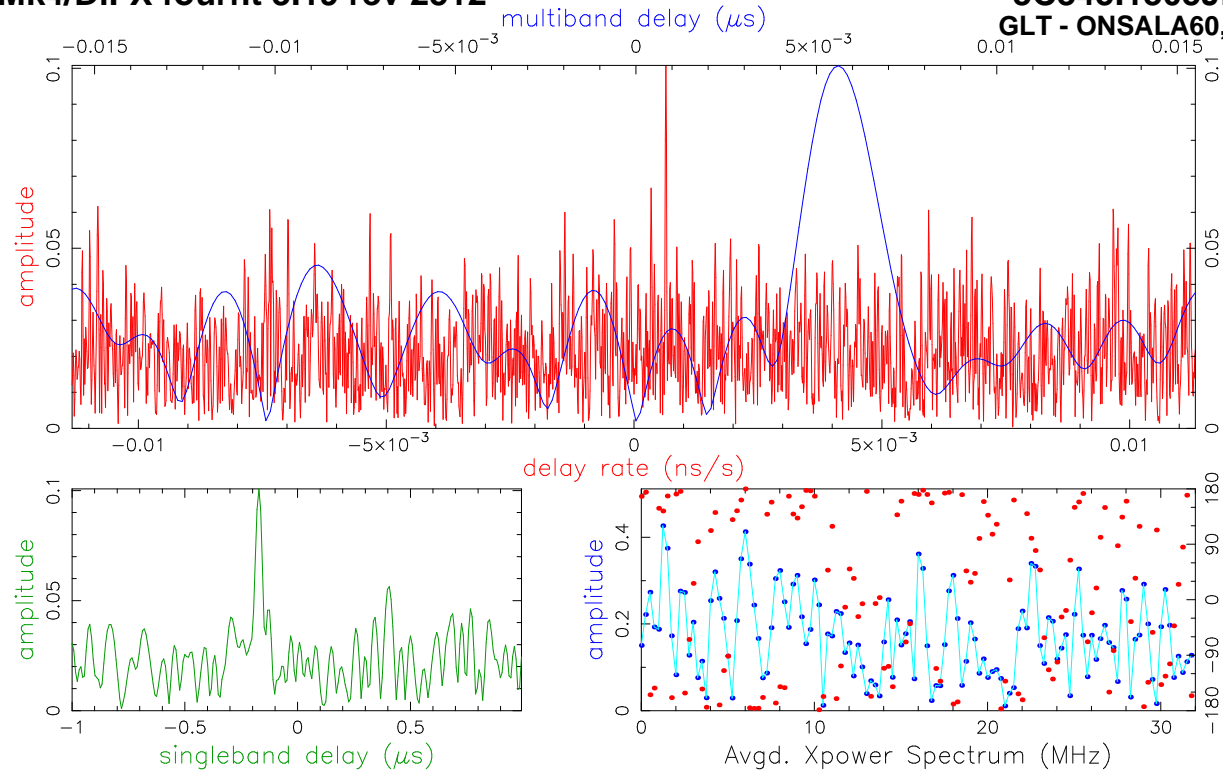
amp/frq (%) 53.6 69.1 Inc. frq. avg. 0.132 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 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/gX..1305JH Output file: /Exps/c192a/v2/1234/No0001/gX.W.180.1305JH

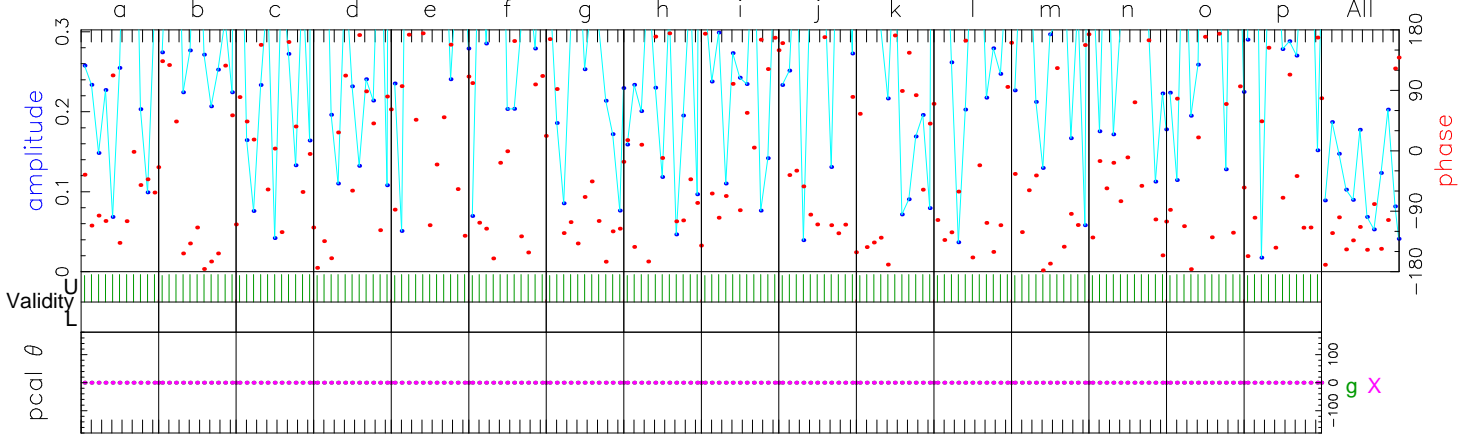
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gX
GLT - ONSALA60, fgroup W, pol LR



Fringe quality 0
SNR 5.6
Int time 418.181
Amp 0.101
Phase -126.9
PFD 9.9e-01
Delays (us)
SBD -0.171881
MBD 0.005605
Fringe rate (Hz) 0.055226
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042816
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

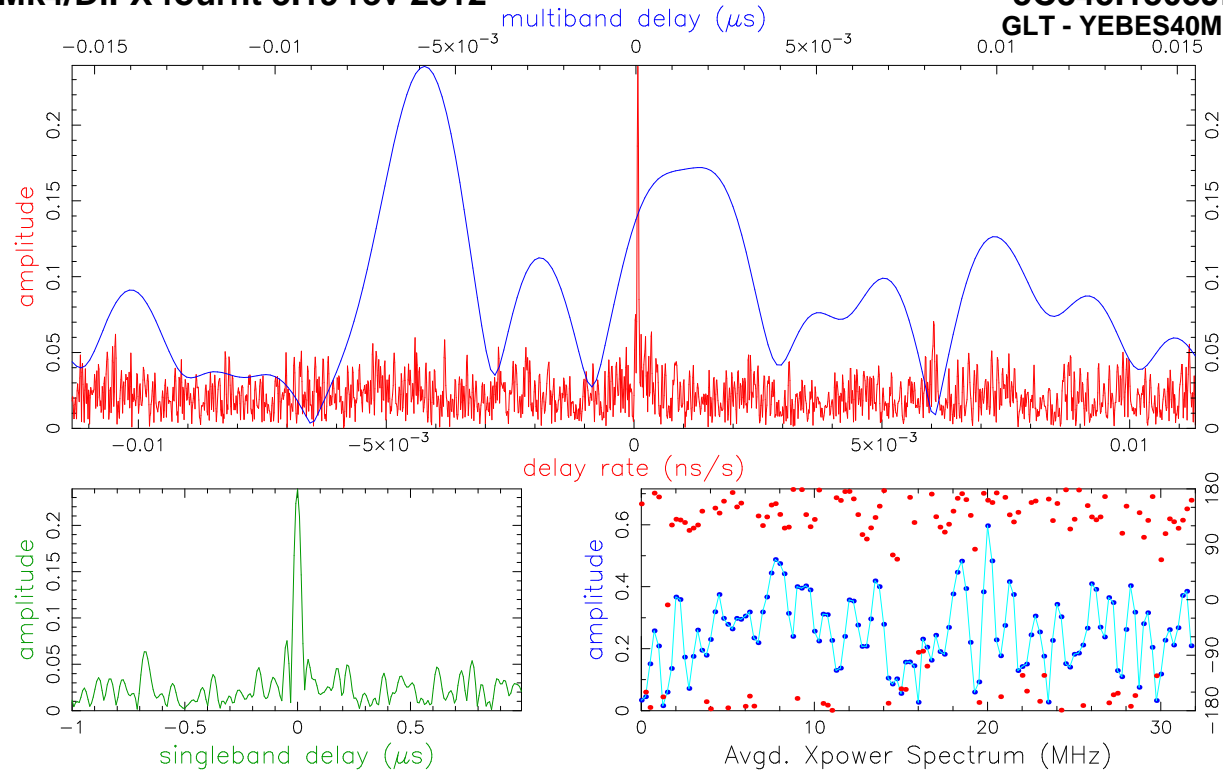


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-69.4	165.8	-17.0	-172.4	-138.6	-135.9	-120.2	-122.8	-164.3	-110.2	-166.2	-127.8	-118.2	-55.6	-157.5	-127.5	Phase	-126.9				
	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.2	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1				
	106.9	230.1	55.8	76.1	193.9	66.4	96.1	236.1	78.4	77.0	146.8	225.8	121.5	139.7	236.3	7.9	Sbd box	107.0				
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.07767642763E+02														Apriori delay (usec)	-4.07585747477E+02	Resid mbdelay (usec)	5.60471E-03	+/-	1.9E-04
Sband delay (usec)			-4.07757628477E+02														Apriori clock (usec)	-3.1029133E+01	Resid sbdelay (usec)	-1.71881E-01	+/-	3.1E-03
Phase delay (usec)			-4.07585751570E+02														Apriori clockrate (us/s)	-4.5300002E-07	Resid phdelay (usec)	-4.09215E-06	+/-	6.6E-07
Delay rate (us/s)			6.39661505022E-01														Apriori rate (us/s)	6.39660863900E-01	Resid rate (us/s)	6.41121E-07	+/-	2.7E-09
Total phase (deg)					-230.5												Apriori accel (us/s/s)	1.14351425282E-05	Resid phase (deg)	-126.9	+/-	20.4

ph/seg (deg) 42.3 35.2 Theor. Amplitude 0.101 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.4 61.5 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.5 40.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.2 71.1 Inc. seg. avg. 0.101 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gX..1305JH Output file: /Exps/c192a/v2/1234/No0001/gX.W.198.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gY
GLT - YEBES40M, fgroup W, pol LL

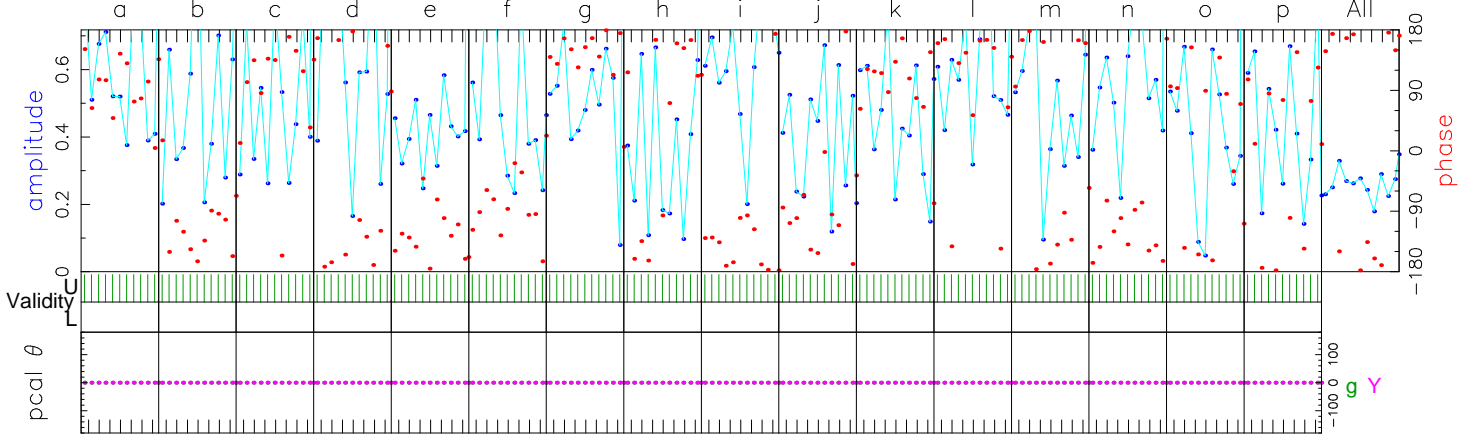


Fringe quality 9

SNR 13.1
Int time 401.182
Amp 0.239
Phase -178.6
PFD 1.6e-30
Delays (us)
SBD -0.001318
MBD -0.005868
Fringe rate (Hz) 0.006737
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
2020:093:042806
2020:014:135814
RA & Dec (J2000) 16h42m58.80967s +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	
95.5	-132.7	121.8	-166.9	-127.5	-79.0	148.3	162.1	-151.9	-114.6	102.8	158.1	-177.9	-120.8	142.1	115.9		Phase	-178.6	
0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.3	0.6	0.3	0.4	0.5	0.4	0.5	0.2	0.2		Ampl.	0.4	
130.0	129.3	129.6	128.7	128.3	128.7	127.9	128.6	129.6	127.2	129.3	129.4	129.3	129.9	235.8	88.5		Sbd box	128.8	
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g: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	
g: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	
g	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			
g	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	

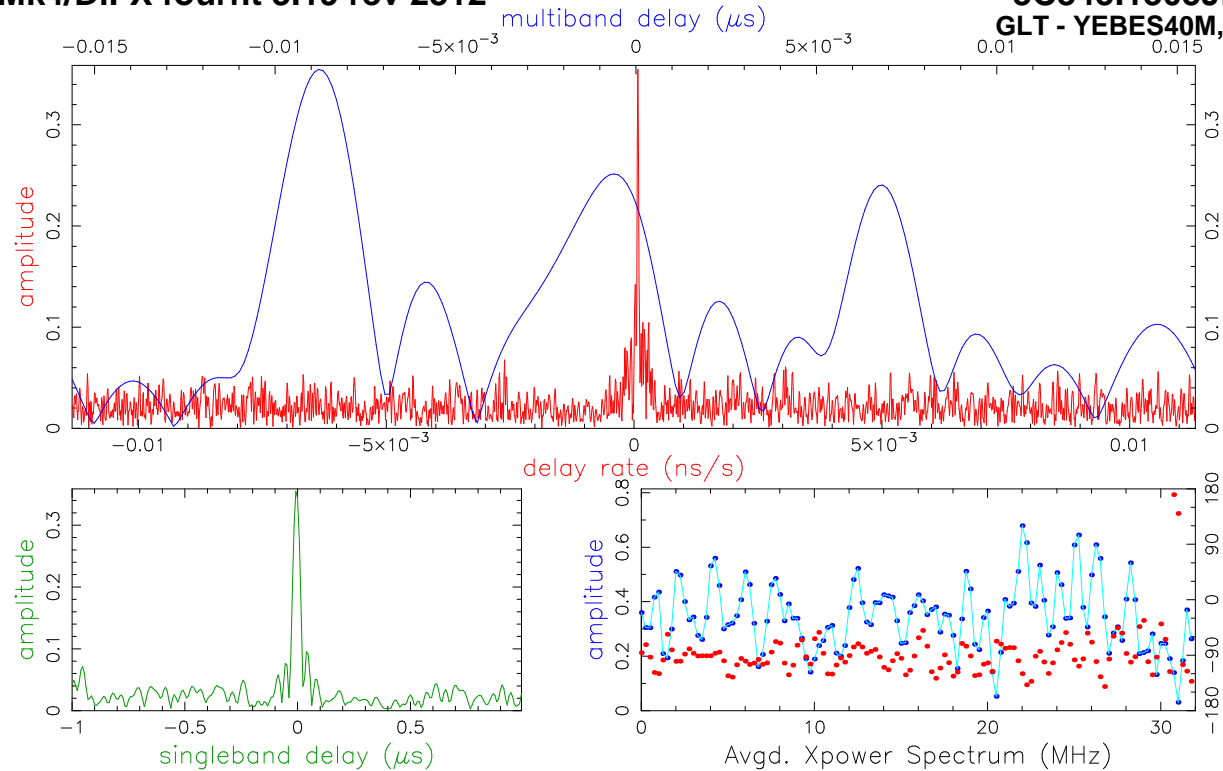
Group delay (usec)(sbd) -2.27657266767E+03 Apriori delay (usec) -2.27656679922E+03 Resid mbdelay (usec) -5.86845E-03 +/- 8.2E-05
 Sband delay (usec) -2.27656811672E+03 Apriori clock (usec) -8.3558588E+00 Resid sbdelay (usec) -1.31750E-03 +/- 1.3E-03
 Phase delay (usec) -2.27656680498E+03 Apriori clockrate (us/s) -1.4500001E-07 Resid phdelay (usec) -5.75981E-06 +/- 2.8E-07
 Delay rate (us/s) 6.75820061079E-01 Apriori rate (us/s) 6.75819982870E-01 Resid rate (us/s) 7.82092E-08 +/- 1.2E-09
 Total phase (deg) -209.3 Apriori accel (us/s/s) 3.54163203504E-05 Resid phase (deg) -178.6 +/- 8.7

RMS Theor. Amplitude 0.239 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 22.4 15.1 Search (2048X64) 0.238 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 17.5 26.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 58.5 17.5 Inc. seg. avg. 0.249 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 77.4 30.5 Inc. frq. avg. 0.371 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 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -4969.863 4579.881 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gY..1305JH Output file: /Exps/c192a/v2/1234/No0001/gY.W.161.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gY
GLT - YEBES40M, fgroup W, pol RR

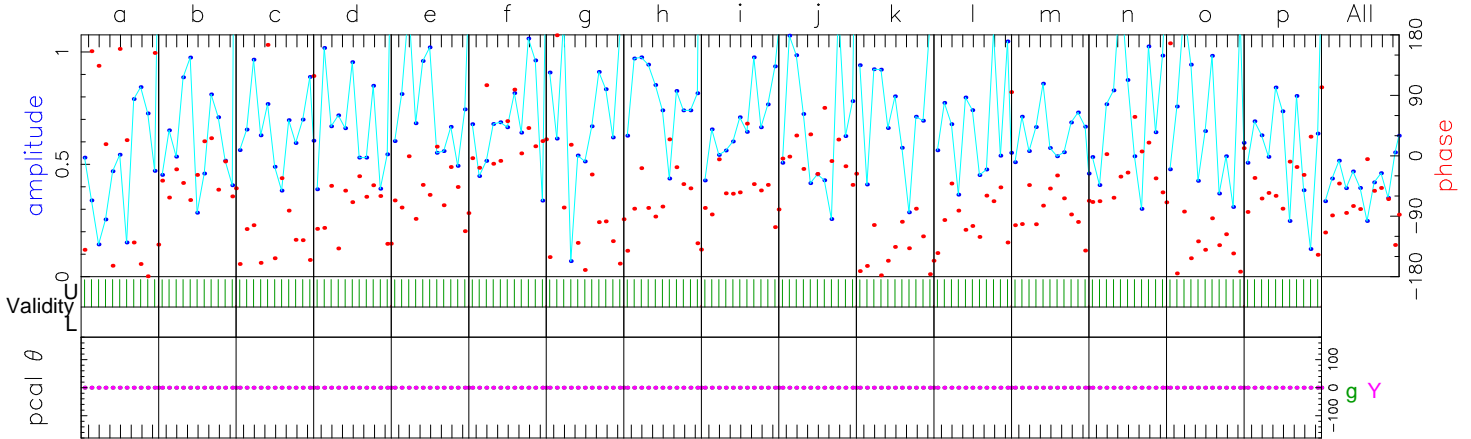


Fringe quality 8

SNR 19.7
Int time 401.222
Amp 0.359
Phase -74.0
PFD 0.0e+00
Delays (us)
SBD -0.005172
MBD -0.008774
Fringe rate (Hz) 0.006512
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
2020:093:042811
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

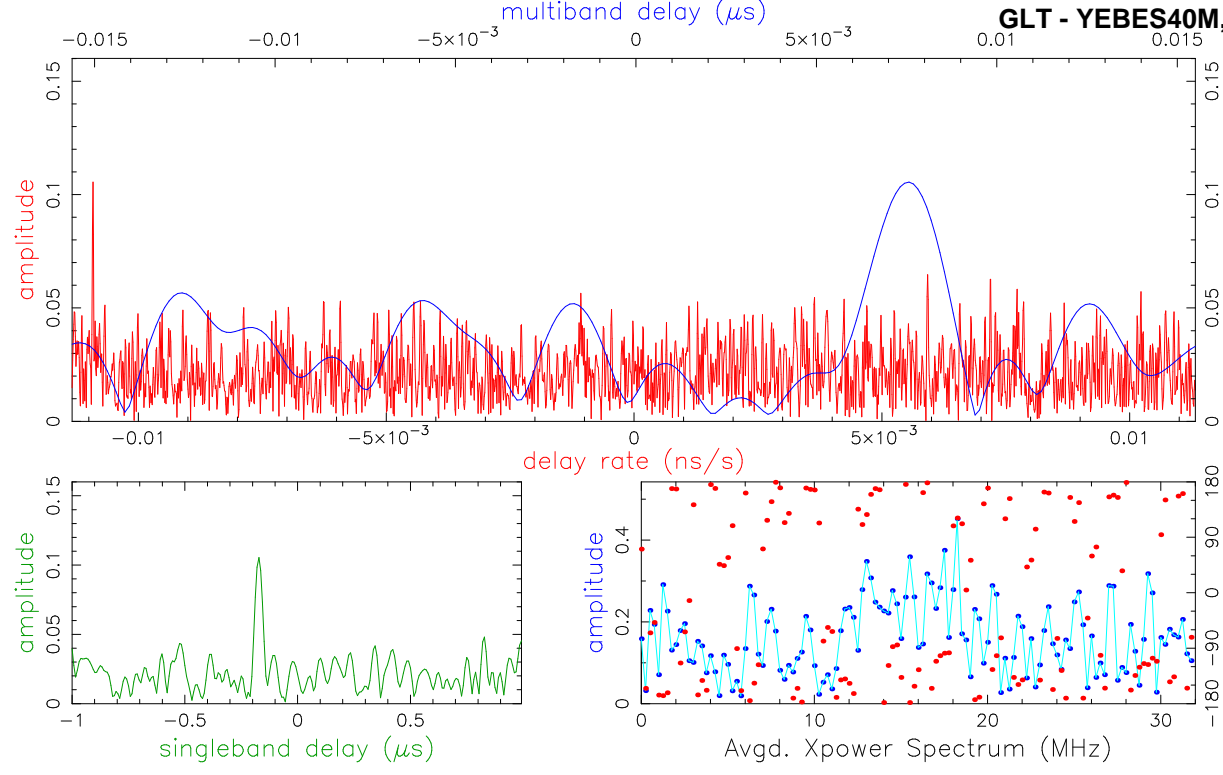


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-170.5	-33.1	-132.1	-76.7	-51.4	25.4	-120.7	-66.5	-53.4	2.7	-141.8	-92.6	-83.0	-26.2	-136.2	-55.9		Phase	-74.0				
	0.4	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.4		Ampl.	0.5				
	129.3	129.4	128.9	128.7	128.1	128.0	128.8	128.2	128.6	128.4	128.6	128.7	128.7	128.5	128.3	128.2		Sbd box	128.3				
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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g: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					
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
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					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																			Tracks				
Group delay (usec)(sbd)			-2.27657557345E+03															Apriori delay (usec)	-2.27656679922E+03	Resid mbdelay (usec)	-8.77423E-03	+/-	5.5E-05
Sband delay (usec)			-2.27657197122E+03															Apriori clock (usec)	-8.3558588E+00	Resid sbdelay (usec)	-5.17200E-03	+/-	8.8E-04
Phase delay (usec)			-2.27656680161E+03															Apriori clockrate (us/s)	-1.4500001E-07	Resid phdelay (usec)	-2.38493E-06	+/-	1.9E-07
Delay rate (us/s)			6.75820058469E-01															Apriori rate (us/s)	6.75819982870E-01	Resid rate (us/s)	7.55996E-08	+/-	8.1E-10
Total phase (deg)																		Apriori accel (us/s/s)	3.54163203504E-05	Resid phase (deg)	-74.0	+/-	5.8

ph/seg (deg) 33.6 10.1 Search (2048X64) 0.351 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 28.3 17.6 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 11.7 Inc. seg. avg. 0.411 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 55.3 20.4 Inc. frq. avg. 0.535 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 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -4969.863 4579.881 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gY..1305JH Output file: /Exps/c192a/v2/1234/No0001/gY.W.176.1305JH

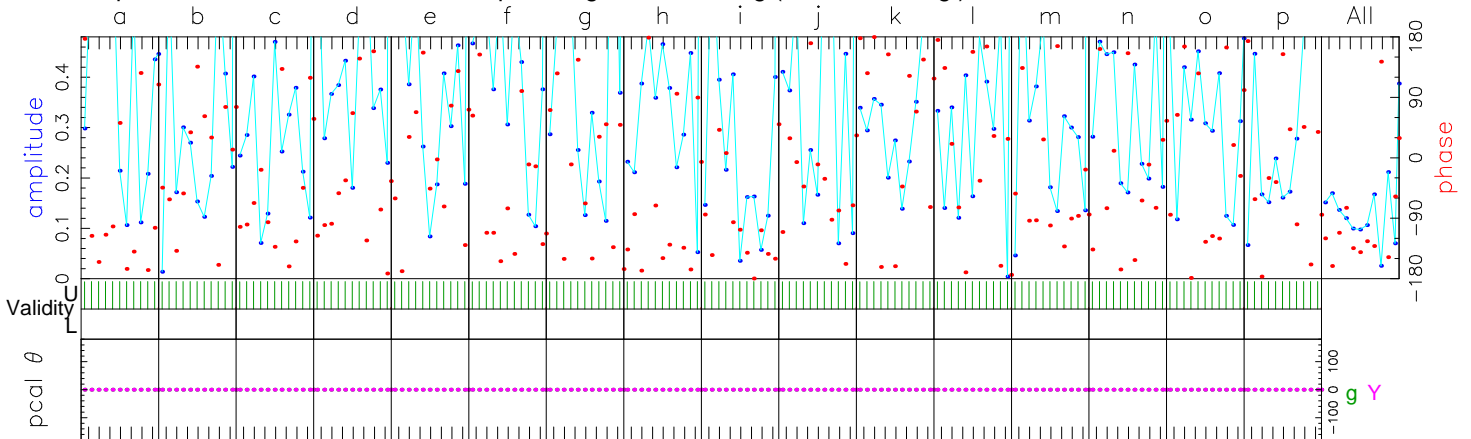
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gY
GLT - YEBES40M, fgroup W, pol LR



Fringe quality 0
SNR 5.8
Int time 401.182
Amp 0.160
Phase -127.7
PFD 8.4e-01
Delays (us)
SBD -0.172514
MBD 0.007551
Fringe rate (Hz)
-0.941303
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
2020:093:042816
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					
	-129.5	-5.7	-115.7	-111.0	74.9	-145.6	-169.9	-147.2	-126.6	-57.8	168.1	-176.1	-103.4	-98.1	-144.3	-18.8		Phase -127.7					
	0.5	0.1	0.2	0.3	0.0	0.3	0.1	0.3	0.2	0.3	0.3	0.1	0.2	0.2	0.2	0.1		Ampl. 0.2					
	106.3	156.0	60.0	1.6	46.1	193.6	136.9	52.3	148.5	200.1	7.9	76.9	167.7	9.3	62.6	61.6		Sbd box 106.9					
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g: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					
g: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					
g	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							
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-2.27674674856E+03															Apriori delay (usec)	-2.27656679922E+03	Resid mbdelay (usec)	7.55067E-03	+/-	1.9E-04
Sband delay (usec)			-2.27673931372E+03															Apriori clock (usec)	-8.3558588E+00	Resid sbdelay (usec)	-1.72514E-01	+/-	3.0E-03
Phase delay (usec)			-2.27656680334E+03															Apriori clockrate (us/s)	-1.4500001E-07	Resid phdelay (usec)	-4.11797E-06	+/-	6.4E-07
Delay rate (us/s)			6.75809055279E-01															Apriori rate (us/s)	6.75819982870E-01	Resid rate (us/s)	-1.09276E-05	+/-	2.8E-09
Total phase (deg)																		Apriori accel (us/s/s)	3.54163203504E-05	Resid phase (deg)	-127.7	+/-	19.8

ph/seg (deg) 41.6 34.3
amp/seg (%) 53.0 59.9
ph/frq (deg) 69.4 39.6
amp/frq (%) 78.3 69.2

RMS Theor. Amplitude 0.160 +/- 0.028
Search (2048X64) 0.104
Interp. 0.000
Inc. seg. avg. 0.160
Inc. frq. avg. 0.169

g: az 142.5 el 51.0 pa -10.6 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -4969.863 4579.881

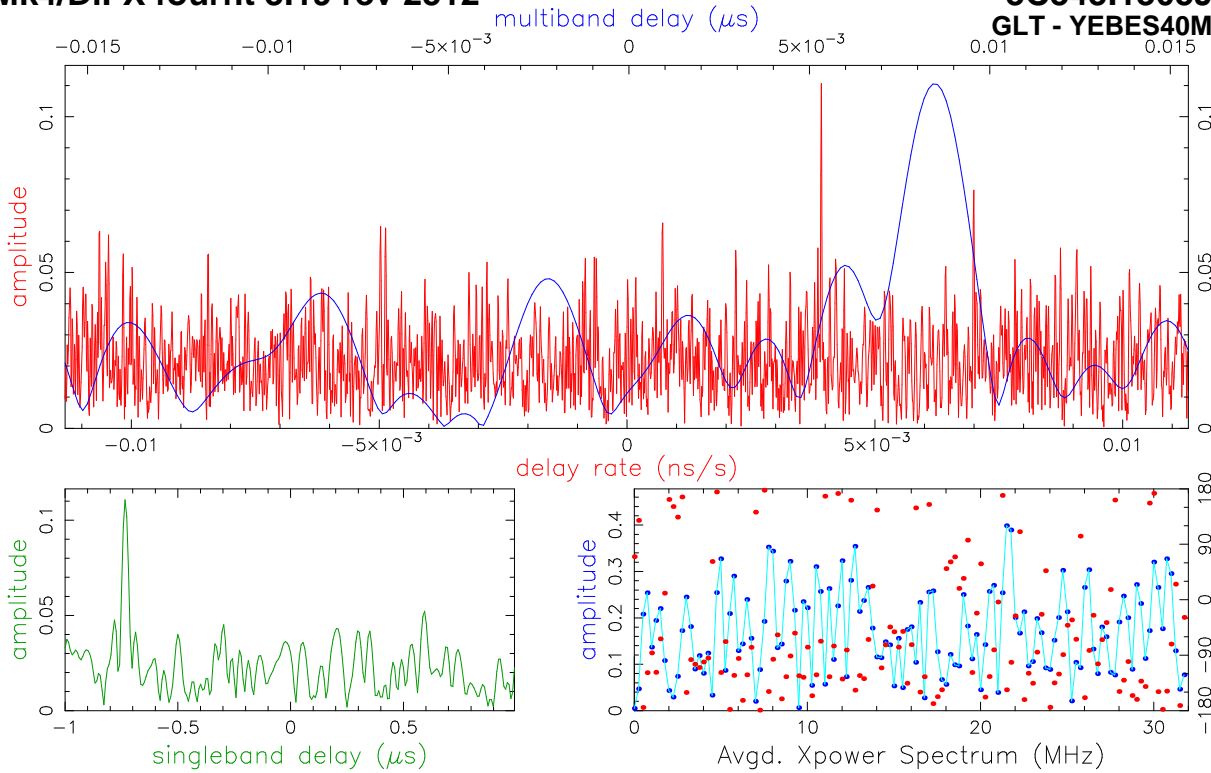
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gY..1305JH Output file: /Exps/c192a/v2/1234/No0001/gY.W.196.1305JH

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

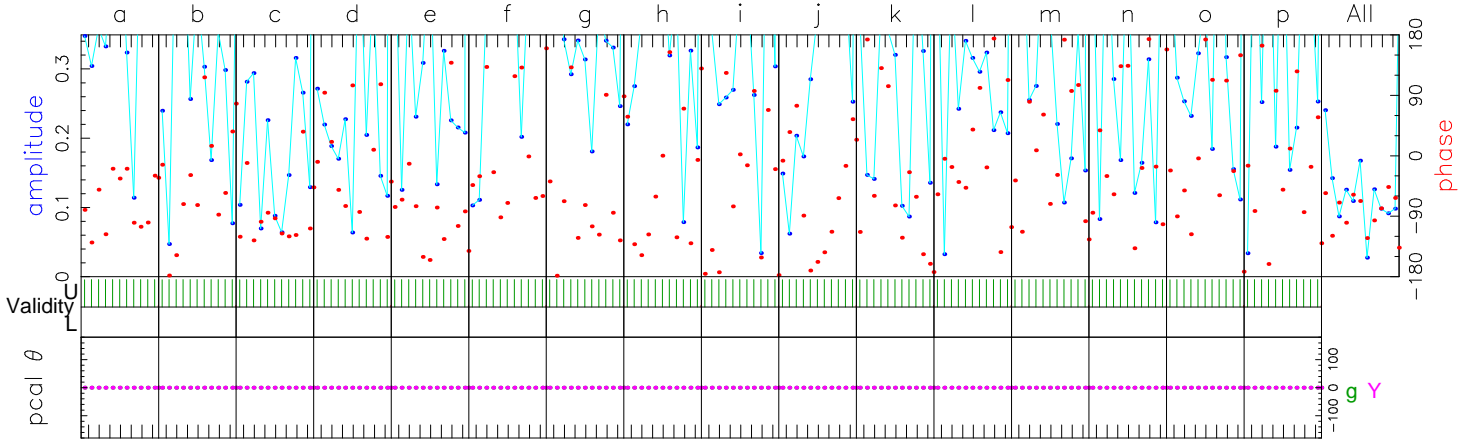
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gY
GLT - YEBES40M, fgroup W, pol RL



Fringe quality 0
SNR 6.1
Int time 401.222
Amp 0.116
Phase -76.7
PFD 2.9e-01
Delays (us)
SBD -0.733428
MBD 0.008470
Fringe rate (Hz)
0.337768
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
2020:093:042821
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

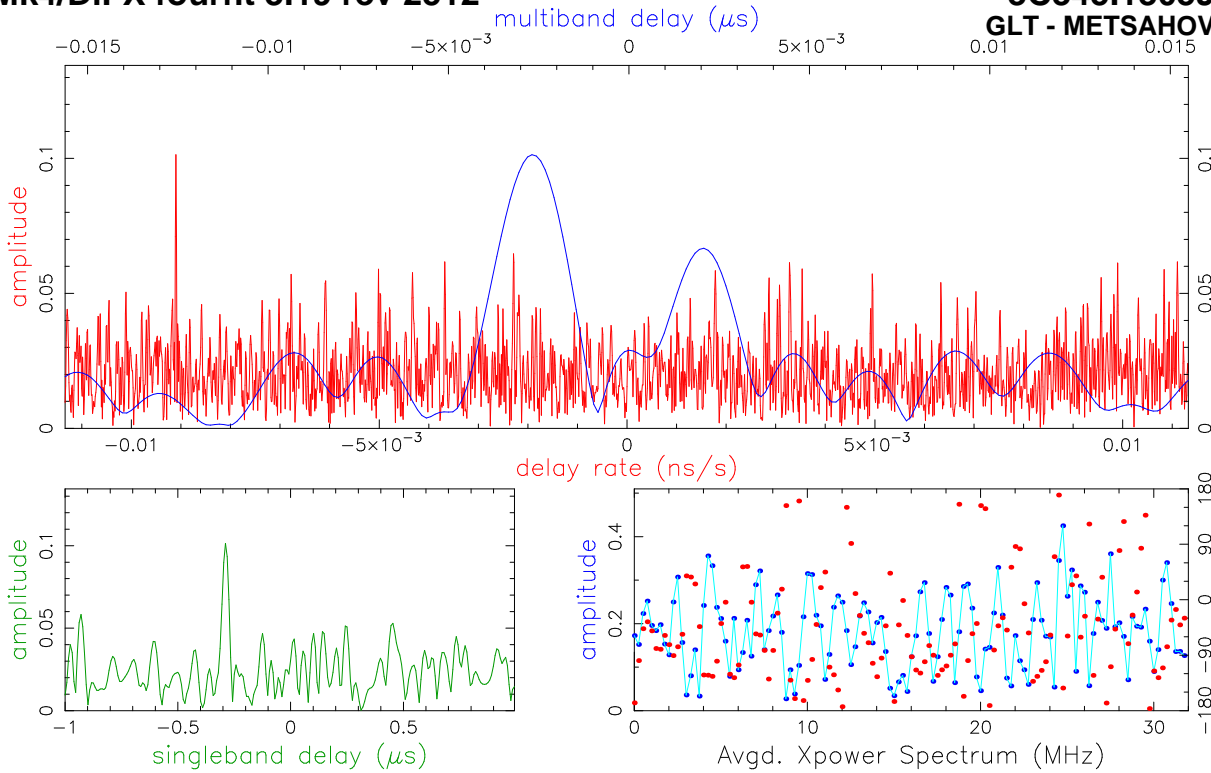


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-64.7	-73.1	-89.2	-36.8	-104.6	-51.3	-111.1	-105.2	58.1	-94.0	-125.7	-25.0	-20.0	-93.1	-59.5	-80.0	Phase	-76.7
	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	35.2	19.0	228.1	106.5	156.3	111.4	8.2	84.4	135.9	226.9	193.1	90.6	82.8	218.8	46.7	54.3	Sbd box	35.1
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	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-2.27730832961E+03			Apriori delay (usec)			-2.27656679922E+03			Resid mbdelay (usec)			8.46961E-03			+/- 1.8E-04		
Sband delay (usec)	-2.27730022722E+03			Apriori clock (usec)			-8.3558588E+00			Resid sbdelay (usec)			-7.33428E-01			+/- 2.8E-03		
Phase delay (usec)	-2.27656680170E+03			Apriori clockrate (us/s)			-1.4500001E-07			Resid phdelay (usec)			-2.47380E-06			+/- 6.1E-07		
Delay rate (us/s)	6.75823904020E-01			Apriori rate (us/s)			6.75819982870E-01			Resid rate (us/s)			3.92115E-06			+/- 2.6E-09		
Total phase (deg)	-107.4			Apriori accel (us/s/s)			3.54163203504E-05			Resid phase (deg)			-76.7			+/- 18.9		

ph/seg (deg) 25.2 32.7 Search (2048X64) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 50.8 57.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 48.3 37.8 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 51.9 65.9 Inc. frq. avg. 0.112 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 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -4969.863 4579.881 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gY..1305JH Output file: /Exps/c192a/v2/1234/No0001/gY.W.215.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol LL

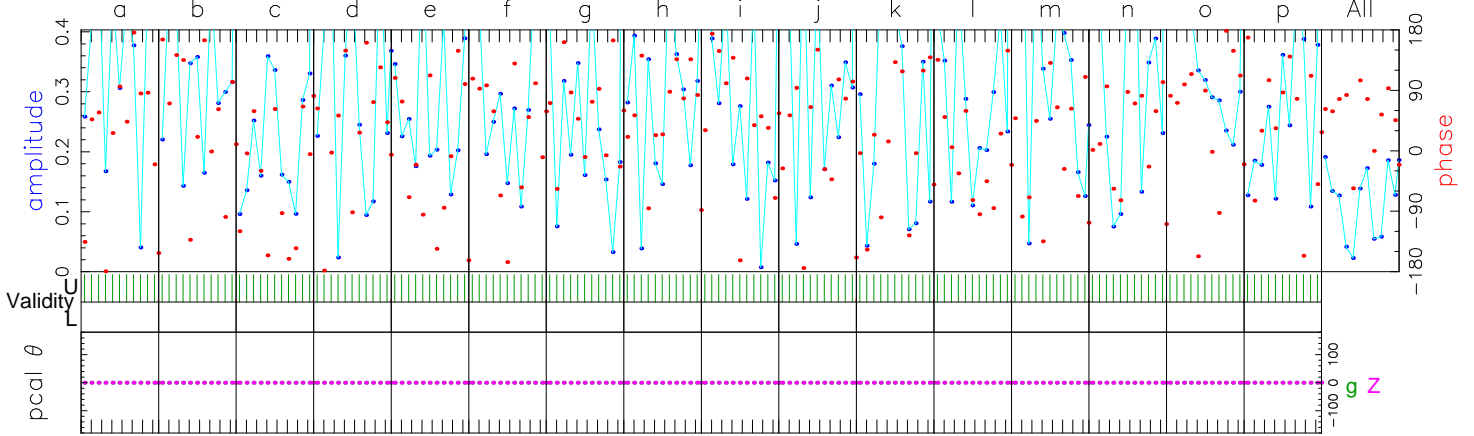


Fringe quality 0

SNR 5.7
Int time 419.223
Amp 0.134
Phase 69.5
PFD 9.6e-01
Delays (us)
SBD -0.288238
MBD -0.002662
Fringe rate (Hz)
-0.784788
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042808
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

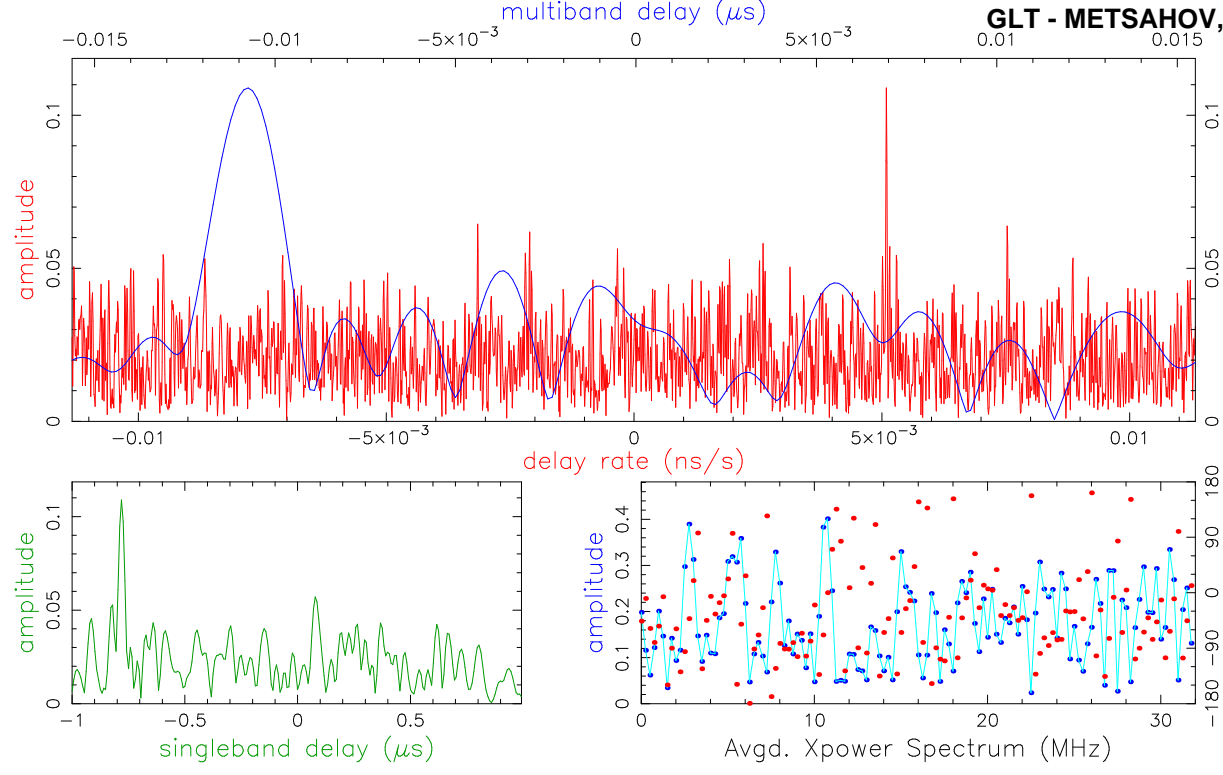


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
59.9	90.5	33.2	90.3	-134.7	72.3	64.2	72.5	93.0	95.7	67.0	3.2	22.6	45.7	103.6	92.2	92.2	Phase	69.5
0.2	0.1	0.1	0.1	0.0	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	Ampl.	0.1
116.4	73.3	201.1	88.1	83.8	104.6	202.7	81.0	182.9	200.4	9.9	168.7	146.7	25.7	223.4	52.4	52.4	Sbd box	92.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)		1.20134679267E+03			Apriori delay (usec)		1.20163070427E+03		Resid mbdelay (usec)		-2.66161E-03		+/-	1.9E-04				
Sband delay (usec)		1.20134246577E+03			Apriori clock (usec)		1.1139116E+00		Resid sbdelay (usec)		-2.88238E-01		+/-	3.0E-03				
Phase delay (usec)		1.20163070652E+03			Apriori clockrate (us/s)		5.8707190E-08		Resid phdelay (usec)		2.24242E-06		+/-	6.5E-07				
Delay rate (us/s)		6.68985610751E-01			Apriori rate (us/s)		6.68994721357E-01		Resid rate (us/s)		-9.11061E-06		+/-	2.7E-09				
Total phase (deg)			21.3		Apriori accel (us/s/s)		1.20134941382E-06		Resid phase (deg)		69.5		+/-	20.2				

ph/seg (deg) 46.8 34.9 Search (2048X64) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.1 61.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.2 40.3 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.4 70.4 Inc. frq. avg. 0.124 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.170.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol RR

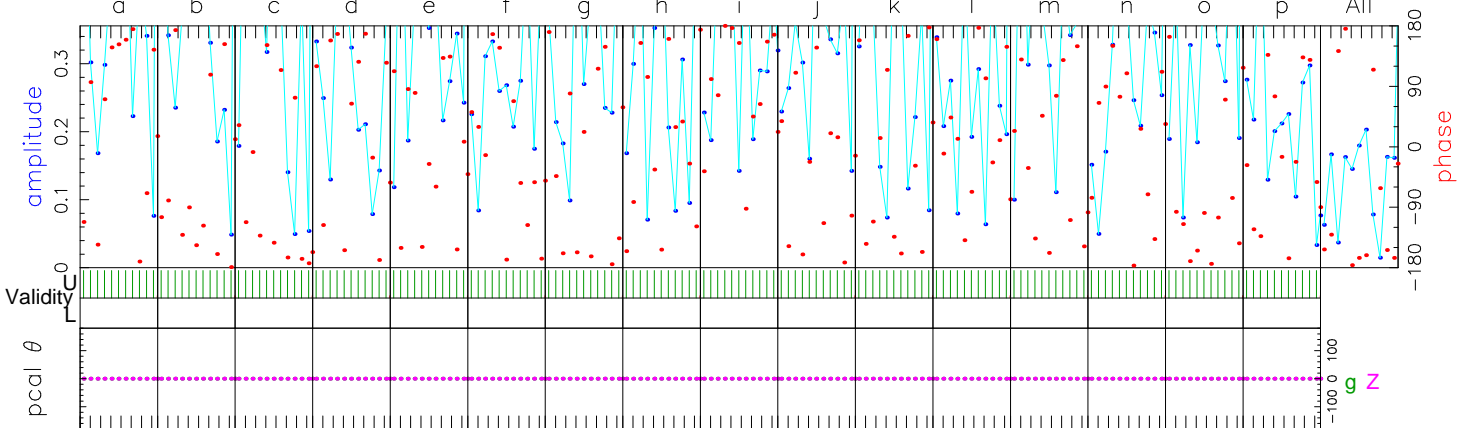


Fringe quality 0

SNR 6.1
Int time 419.266
Amp 0.119
Phase -165.1
PFD 2.4e-01
Delays (us)
SBD -0.780820
MBD -0.010762
Fringe rate (Hz)
0.439399
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042814
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
170.6	-127.9	-148.5	158.2	-161.5	-143.1	-176.2	-140.1	148.8	169.9	-147.4	-69.7	173.0	-126.3	-161.6			Phase	-165.1
0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
28.7	28.1	245.9	159.9	242.9	177.5	30.3	78.8	177.4	195.9	248.5	104.0	73.0	209.2	91.0	58.6		Sbd box	29.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	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	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) 1.20083869224E+03 Apriori delay (usec) 1.20163070427E+03 Resid mbdelay (usec) -1.07620E-02 +/- 1.8E-04
 Sband delay (usec) 1.20084988377E+03 Apriori clock (usec) 1.1139116E+00 Resid sbdelay (usec) -7.80820E-01 +/- 2.8E-03
 Phase delay (usec) 1.20163069895E+03 Apriori clockrate (us/s) 5.8707190E-08 Resid phdelay (usec) -5.32301E-06 +/- 6.1E-07
 Delay rate (us/s) 6.68999822348E-01 Apriori rate (us/s) 6.68994721357E-01 Resid rate (us/s) 5.10099E-06 +/- 2.5E-09
 Total phase (deg) 146.7 Apriori accel (us/s/s) 1.20134941382E-06 Resid phase (deg) -165.1 +/- 18.8

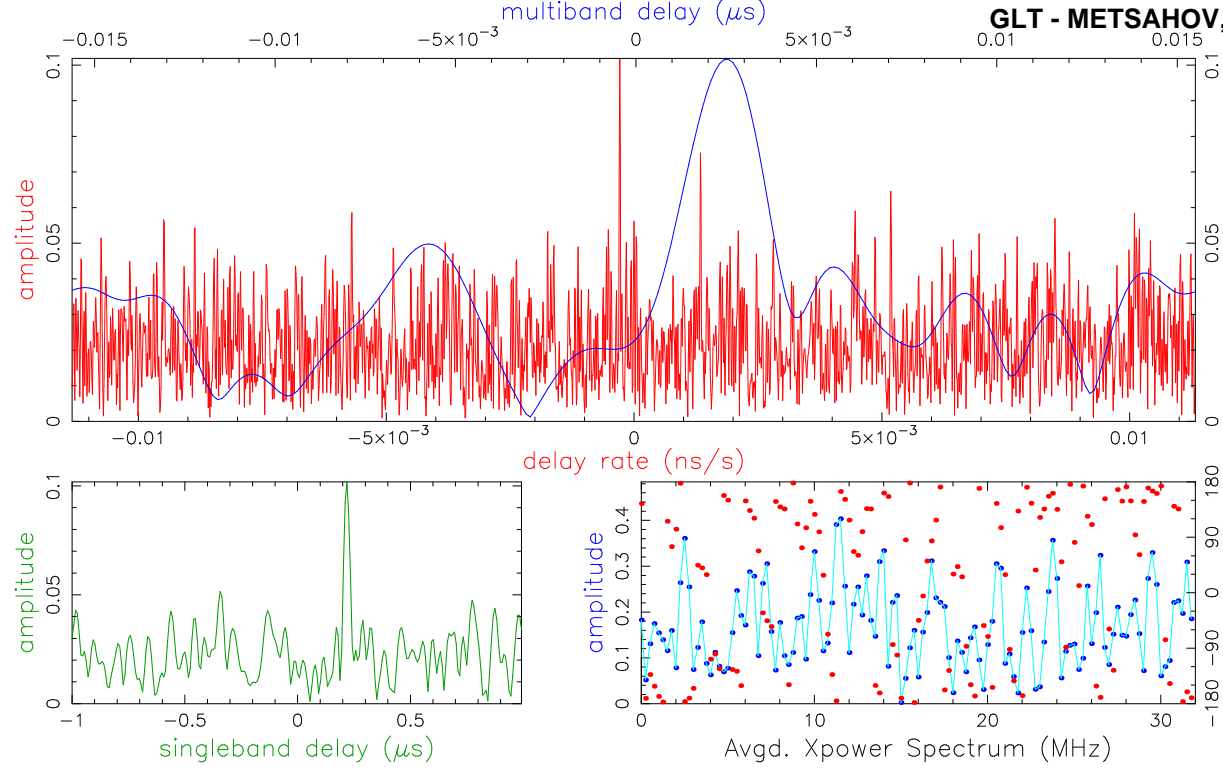
ph/seg (deg) RMS Theor. Amplitude 0.119 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.0 32.5 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.4 56.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 42.9 37.6 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 63.2 65.6 Inc. frq. avg. 0.117 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.187.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol LR

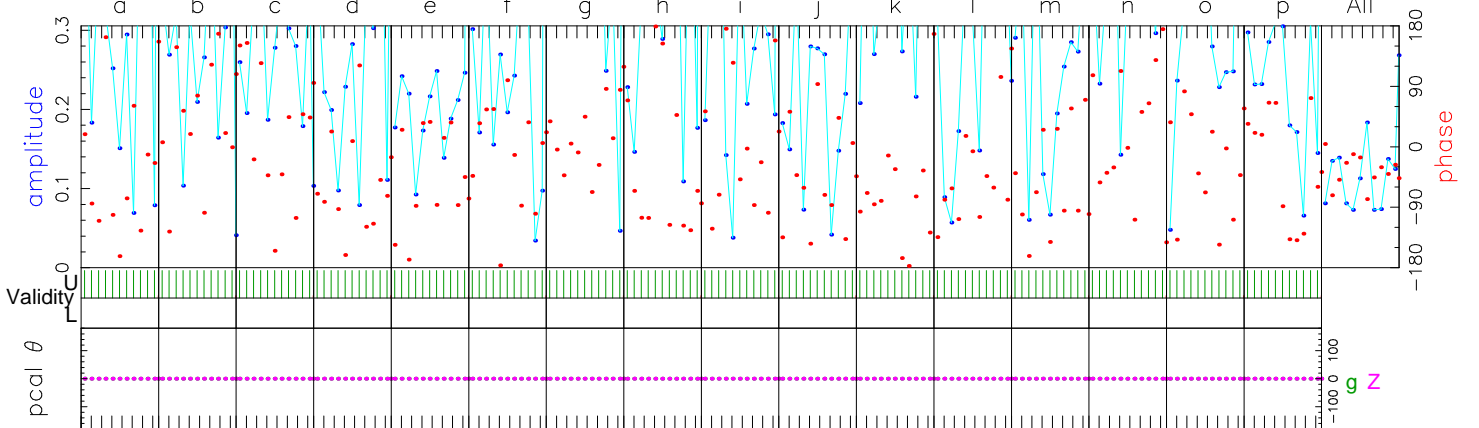


Fringe quality 0

SNR 5.7
Int time 419.223
Amp 0.102
Phase -40.8
PFD 9.5e-01
Delays (us)
SBD 0.217808
MBD 0.002496
Fringe rate (Hz)
-0.024782
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042819
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	-73.0	40.3	37.9	-72.6	-34.4	15.3	-4.0	-119.8	-69.8	-46.6	-70.3	-53.8	-52.6	8.2	-26.5	25.5		Phase	-40.8	
	0.1	0.1	0.0	0.2	0.1	0.1	0.3	0.1	0.2	0.1	0.3	0.2	0.1	0.1	0.2	0.1		Ampl.	0.1	
	97.9	154.3	165.6	147.4	13.0	2.3	157.6	228.3	80.8	205.9	157.4	155.1	171.1	85.4	253.9	229.1		Sbd box	156.9	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp		
g	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		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks		
																		Chan ids		
																		Tracks		
Group delay (usec)(sbd)			1.20185195074E+03								1.20163070427E+03							Resid mbdelay (usec)	2.49647E-03	+/- 1.9E-04
Sband delay (usec)			1.20184851277E+03								1.1139116E+00							Resid sbdelay (usec)	2.17808E-01	+/- 3.0E-03
Phase delay (usec)			1.20163070296E+03								5.8707190E-08							Resid phdelay (usec)	-1.31432E-06	+/- 6.5E-07
Delay rate (us/s)			6.68994433658E-01								6.68994721357E-01							Resid rate (us/s)	-2.87698E-07	+/- 2.7E-09
Total phase (deg)				271.0							1.20134941382E-06							Resid phase (deg)	-40.8	+/- 20.1

ph/seg (deg) 24.3 34.8
amp/seg (%) 38.0 60.7
ph/frq (deg) 49.7 40.2
amp/frq (%) 75.8 70.1

RMS Theor. Amplitude 0.102 +/- 0.018
Search (2048X64) 0.100
Interp. 0.000
Inc. seg. avg. 0.094
Inc. frq. avg. 0.107

g: az 142.5 el 51.0 pa -10.6
Z: az 271.4 el 46.7 pa 40.3
u,v (fr/asec) -4981.112 854.646

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

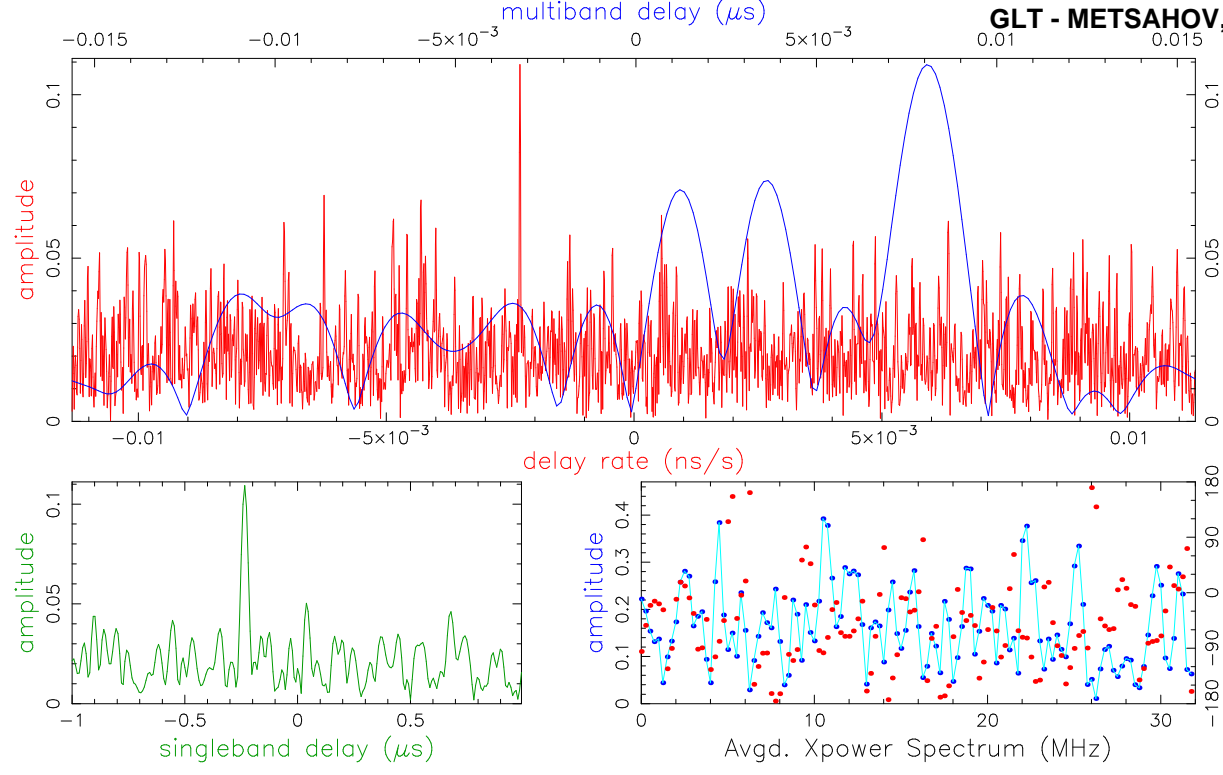
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.206.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, gZ
GLT - METSAHOV, fgroup W, pol RL

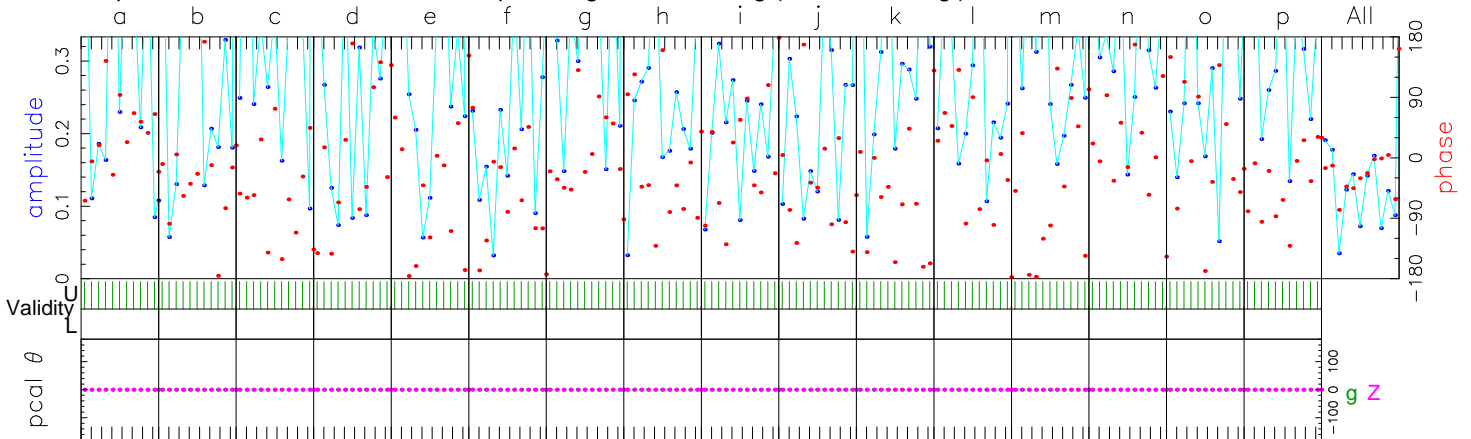


Fringe quality 0

SNR 6.1
Int time 419.266
Amp 0.111
Phase -22.5
PFD 2.2e-01
Delays (us)
SBD -0.234673
MBD 0.008079
Fringe rate (Hz)
-0.198202
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042825
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	17.1	-34.1	-61.8	-18.2	20.1	-14.0	3.2	-76.5	-16.2	-74.0	-58.1	-4.0	-131.9	31.7	6.0	-30.2	Phase	-22.5
	0.2	0.2	0.2	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	7.1	98.1	97.8	152.2	106.5	129.8	99.0	17.9	5.4	118.0	107.9	215.6	179.7	129.5	32.6	99.0	Sbd box	99.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	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	
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) 1.20138878377E+03 Apriori delay (usec) 1.20163070427E+03 Resid mbdelay (usec) 8.07950E-03 +/- 1.8E-04
 Sband delay (usec) 1.20139603127E+03 Apriori clock (usec) 1.1139116E+00 Resid sbdelay (usec) -2.34673E-01 +/- 2.8E-03
 Phase delay (usec) 1.20163070355E+03 Apriori clockrate (us/s) 5.8707190E-08 Resid phdelay (usec) -7.24101E-07 +/- 6.0E-07
 Delay rate (us/s) 6.68992420431E-01 Apriori rate (us/s) 6.68994721357E-01 Resid rate (us/s) -2.30093E-06 +/- 2.5E-09
 Total phase (deg) 289.3 Apriori accel (us/s/s) 1.20134941382E-06 Resid phase (deg) -22.5 +/- 18.7

RMS Theor. Amplitude 0.111 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 29.7 32.4 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.1 56.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 45.4 37.5 Inc. seg. avg. 0.108 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.2 65.4 Inc. frq. avg. 0.117 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/gZ.W.227.1305JH