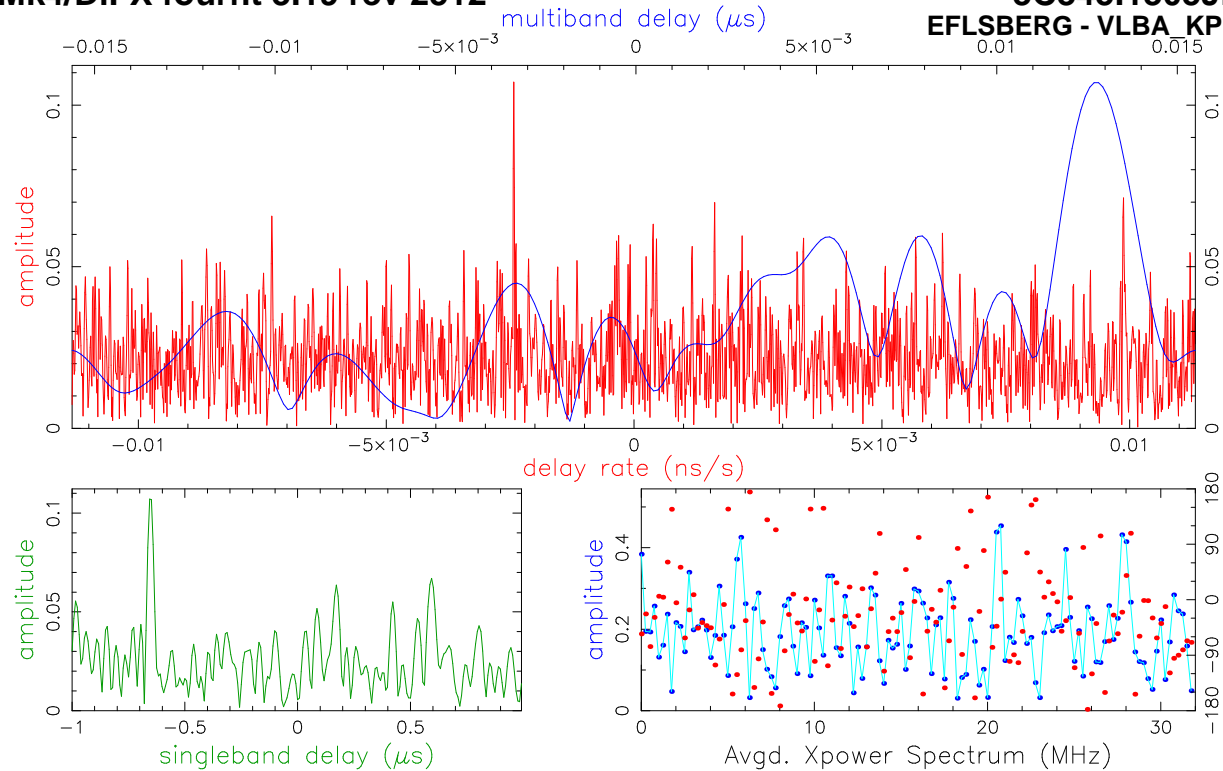


Mk4/DiFX fourfit 3.19 rev 2512

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

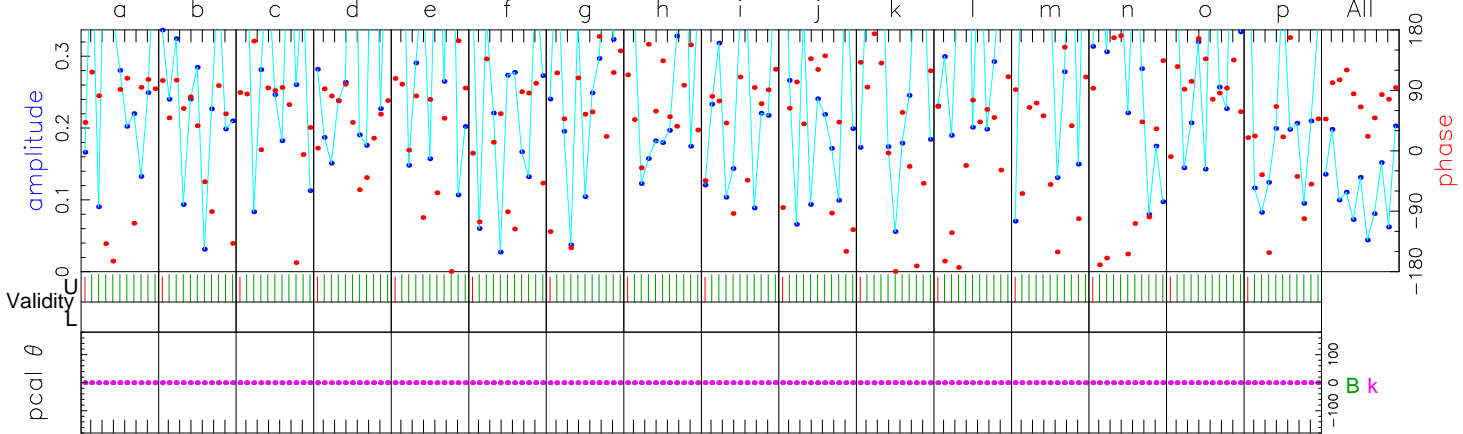


Fringe quality 0

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

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

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



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

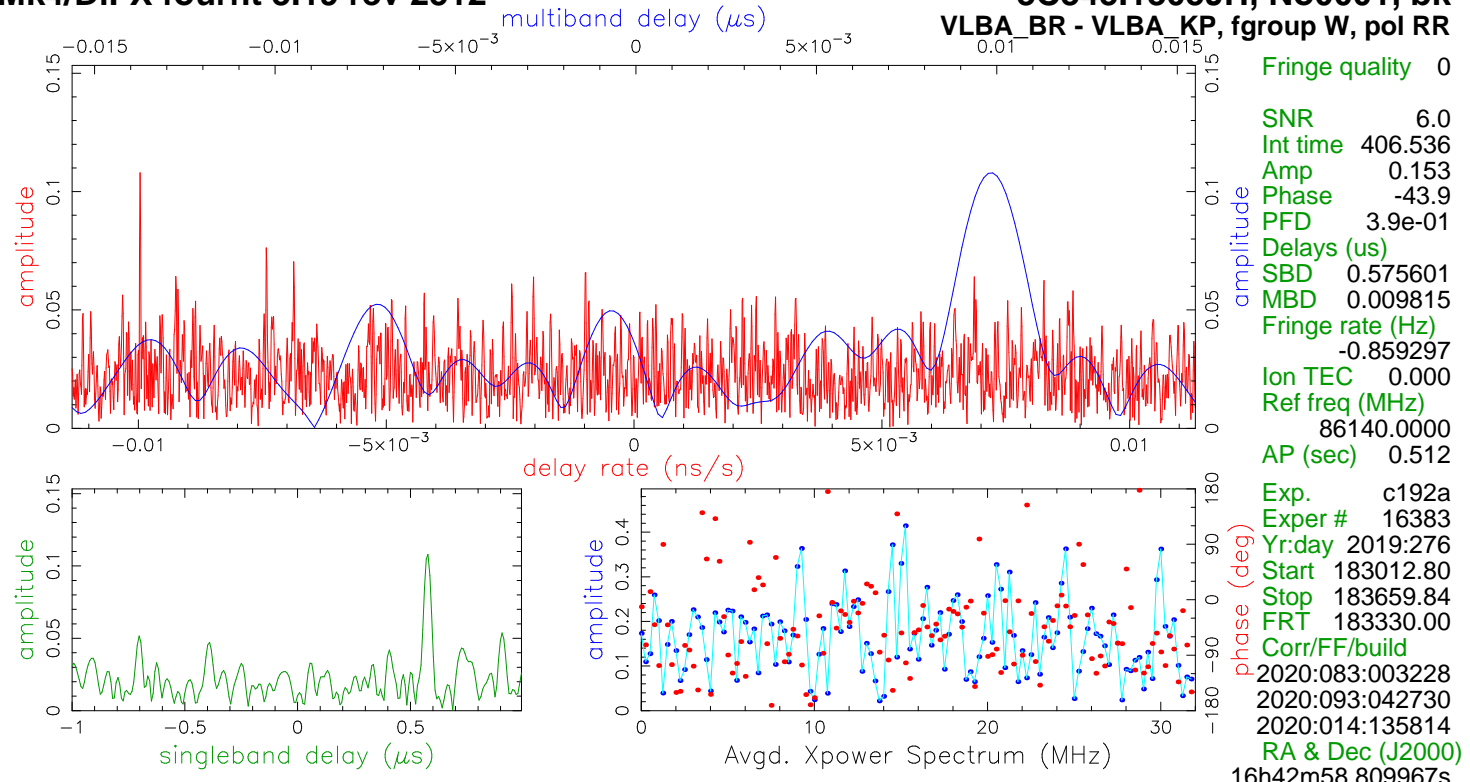
Group delay (usec)(sbd) 6.17812649489E+03 Apriori delay (usec) 6.17876996376E+03 Resid mbdelay (usec) 1.27811E-02 +/- 1.8E-04
 Sband delay (usec) 6.17811751926E+03 Apriori clock (usec) 1.7240984E+01 Resid sbdelay (usec) -6.52444E-01 +/- 2.8E-03
 Phase delay (usec) 6.17876996645E+03 Apriori clockrate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

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

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

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bk
VLBA_BR - VLBA_KP, fgroup W, pol RR



Fringe quality 0

SNR 6.0

Int time 406.536

Amplitude 0.153

Phase -43.9

PFD 3.9e-01

Delays (us)

SBD 0.575601

MBD 0.009815

Fringe rate (Hz)

-0.859297

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

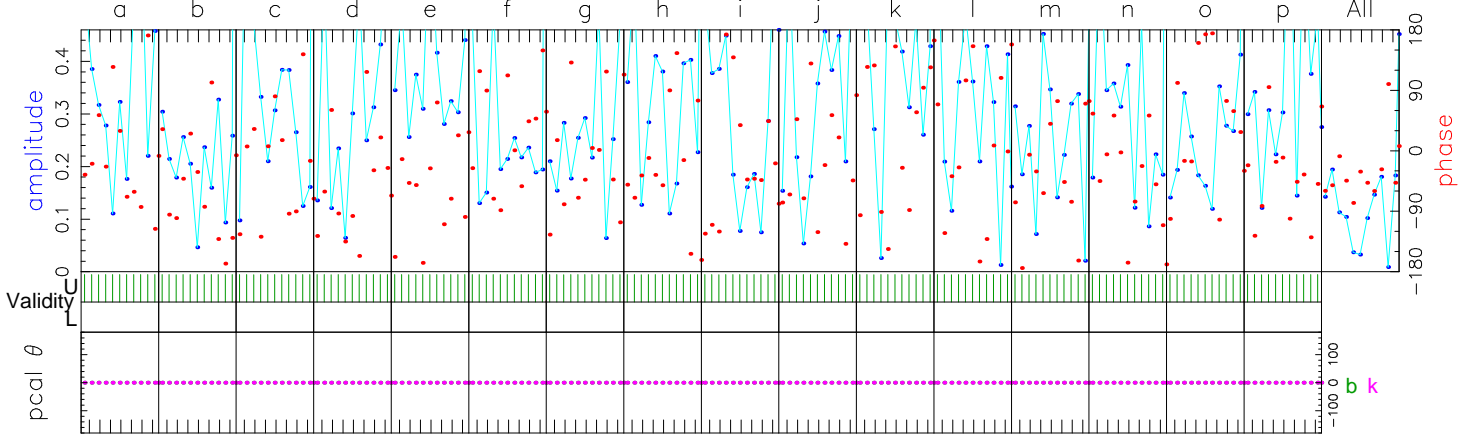
2020:014:135814

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



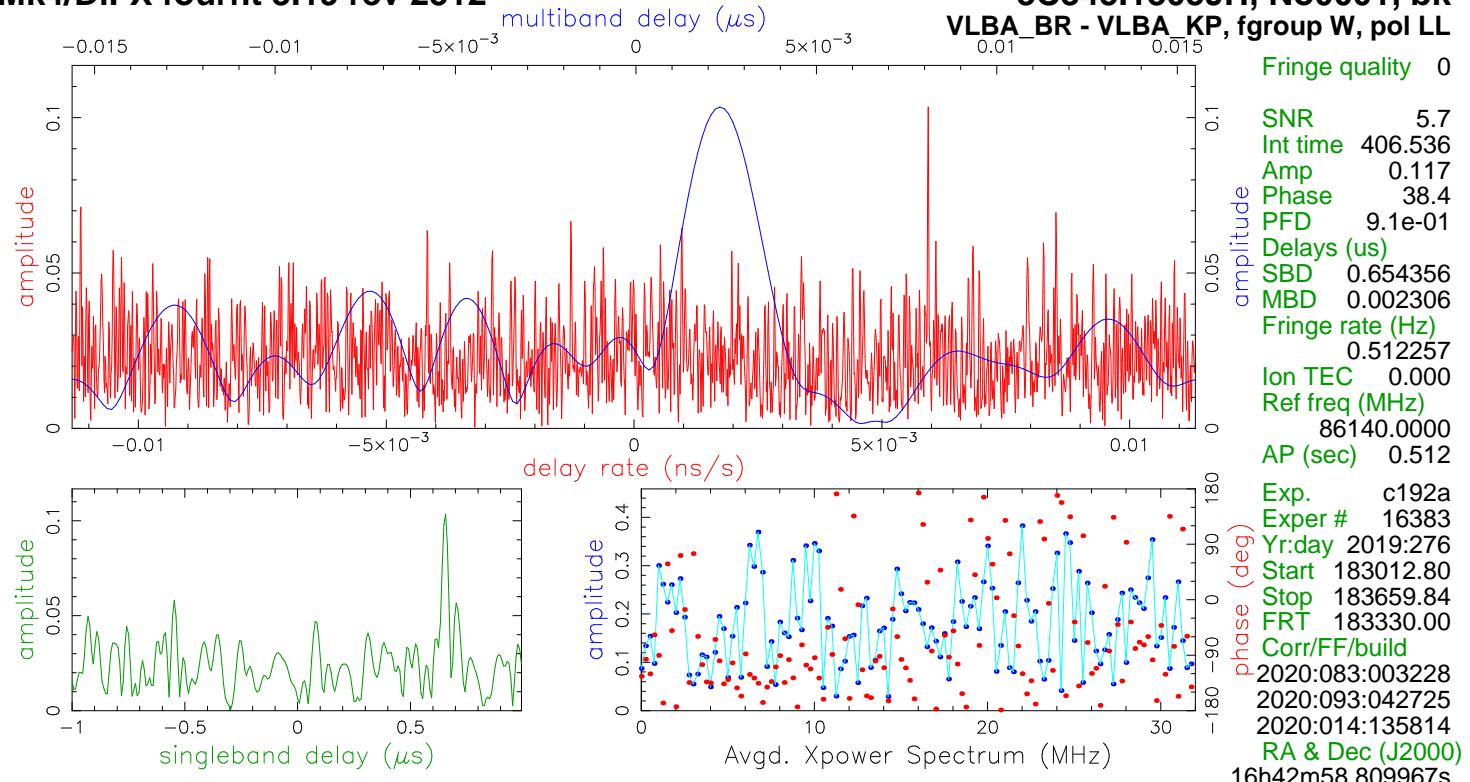
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-47.8	-73.6	-8.9	-59.1	-50.2	-7.7	-50.9	-46.0	-88.3	-32.2	151.1	57.7	-55.8	-25.0	26.9	-62.2	Phase	-43.9
	0.3	0.1	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.3	Ampl.	0.2
	162.8	217.4	117.7	188.7	114.9	75.9	152.1	114.0	134.5	244.8	218.9	2.5	240.3	7.4	69.5	185.3	Sbd box	202.7
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	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.15142537536E+02			Apriori delay (usec)			5.14570222991E+02			Resid mbdelay (usec)			9.81455E-03			+/- 1.8E-04		
Sband delay (usec)	5.15145823491E+02			Apriori clock (usec)			-2.1077624E-01			Resid sbdelay (usec)			5.75601E-01			+/- 2.9E-03		
Phase delay (usec)	5.14570221576E+02			Apriori clockrate (us/s)			-4.7816091E-08			Resid phdelay (usec)			-1.41546E-06			+/- 6.2E-07		
Delay rate (us/s)	-1.77864322598E-01			Apriori rate (us/s)			-1.77854347007E-01			Resid rate (us/s)			-9.97559E-06			+/- 2.6E-09		
Total phase (deg)	-40.8			Apriori accel (us/s/s)			1.28049038570E-05			Resid phase (deg)			-43.9			+/- 19.1		
ph/seg (deg)	RMS	Theor.	Amplitude			0.153 +/- 0.026			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	46.7	33.0	Search (2048X64)			0.106			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
ph/frq (deg)	59.6	57.7	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us) -0.016 0.016			
amp/frq (%)	59.3	38.2	Inc. seg. avg.			0.138			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011			
	51.1	66.6	Inc. frq. avg.			0.156			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC) 0.00 0.00			

b: az 66.1 el 33.9 pa -52.6 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/bk.W.28.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bk
VLBA_BR - VLBA_KP, fgroup W, pol LL



Fringe quality 0

SNR 5.7

Int time 406.536

Amp 0.117

Phase 38.4

PFD 9.1e-01

Delays (us)

SBD 0.654356

MBD 0.002306

Fringe rate (Hz)

0.512257

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

2020:093:042725

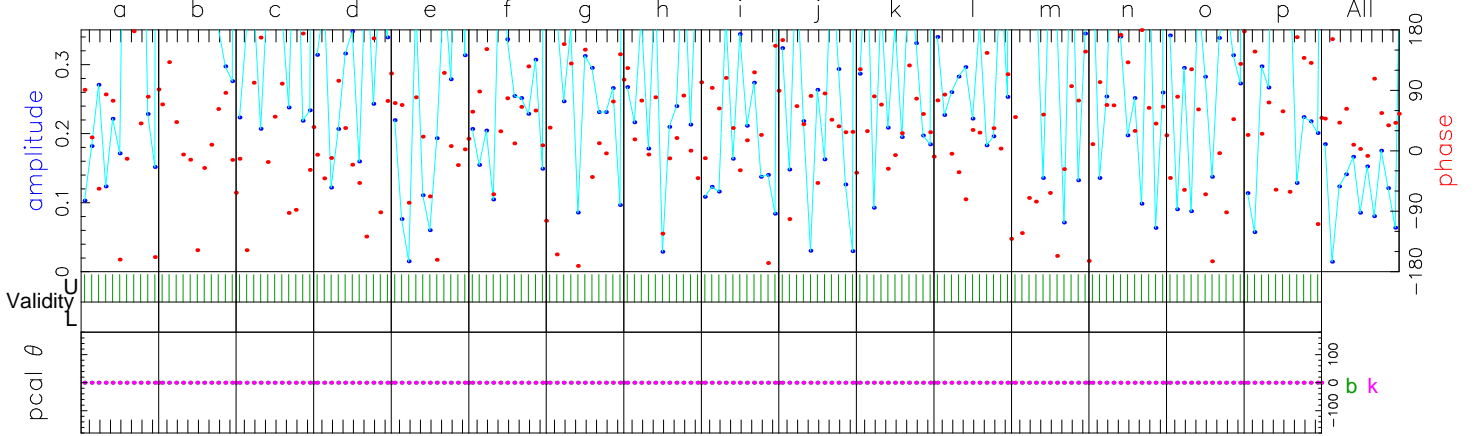
2020:014:135814

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
53.6	23.5	-20.2	-30.1	34.3	57.6	93.2	41.4	62.2	46.2	53.8	26.9	-104.2	67.1	-13.6	8.4	Phase	38.4	
0.1	0.2	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
21.8	2.0	39.8	24.9	218.4	220.7	244.4	211.3	126.2	144.9	124.0	228.9	10.8	143.2	57.6	168.1	Sbd box	212.8	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 5.15228778527E+02 Apriori delay (usec) 5.14570222991E+02 Resid mbdelay (usec) 2.30554E-03 +/- 1.9E-04

Sband delay (usec) 5.15224579491E+02 Apriori clock (usec) -2.1077624E-01 Resid sbdelay (usec) 6.54356E-01 +/- 3.0E-03

Phase delay (usec) 5.14570224230E+02 Apriori clockrate (us/s) -4.7816091E-08 Resid phdelay (usec) 1.23933E-06 +/- 6.4E-07

Delay rate (us/s) -1.77848400211E-01 Apriori rate (us/s) -1.77854347007E-01 Resid rate (us/s) 5.94680E-06 +/- 2.7E-09

Total phase (deg) 41.5 Apriori accel (us/s/s) 1.28049038570E-05 Resid phase (deg) 38.4 +/- 20.0

RMS Theor. Amplitude 0.117 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 48.9 34.6 Search (2048X64) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

amp/seg (%) 53.1 60.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 51.9 40.0 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

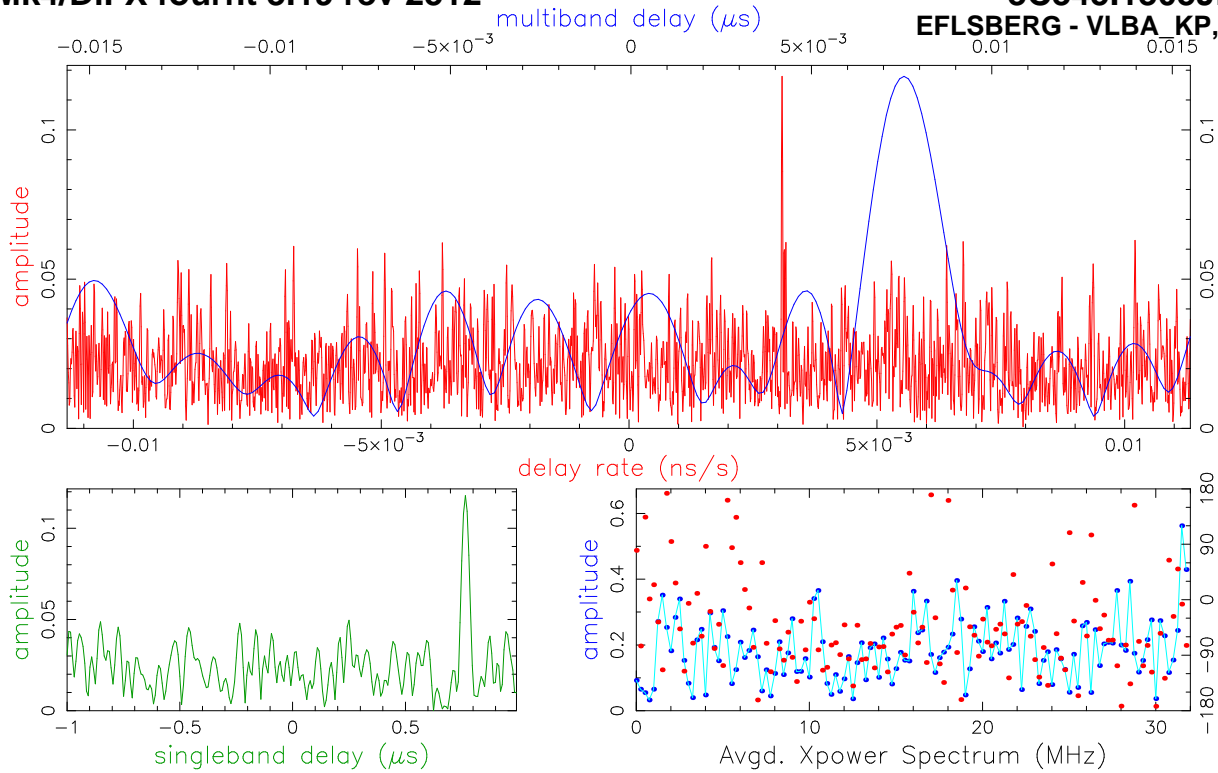
amp/frq (%) 55.2 69.7 Inc. frq. avg. 0.113 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 66.1 el 33.9 pa -52.6 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/bk.W.3.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

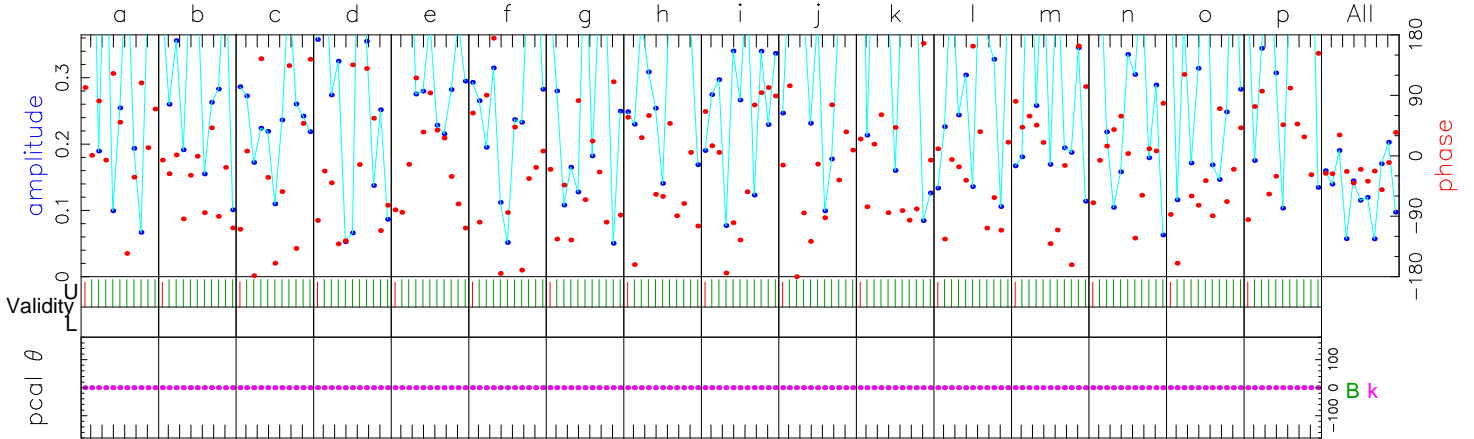


Fringe quality 0

SNR 6.5
Int time 407.733
Amp 0.122
Phase -17.7
PFD 2.1e-02
Delays (us)
SBD 0.765917
MBD 0.007563
Fringe rate (Hz)
0.266333
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042731
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
35.2	-23.8	177.1	-51.6	-31.7	-9.1	-61.0	-18.4	30.2	-8.6	-25.8	-25.1	53.8	-18.2	-44.0	11.9		Phase	-17.7	
0.2	0.3	0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2		Ampl.	0.1	
174.6	207.7	154.6	148.6	6.9	85.6	192.6	60.7	188.4	150.4	97.1	161.1	236.2	145.8	87.7	52.2		Sbd box	227.0	
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd)	6.17952752659E+03	Apriori delay (usec)	6.17876996376E+03	Resid mbdelay (usec)	7.56283E-03	+/-	1.7E-04
Sband delay (usec)	6.17953588026E+03	Apriori clock (usec)	1.7240984E+01	Resid sbdelay (usec)	7.65917E-01	+/-	2.6E-03
Phase delay (usec)	6.17876996319E+03	Apriori clockrate (us/s)	-5.4210100E-09	Resid phdelay (usec)	-5.72058E-07	+/-	5.7E-07
Delay rate (us/s)	-1.51428628684E+00	Apriori rate (us/s)	-1.51428937870E+00	Resid rate (us/s)	3.09186E-06	+/-	2.4E-09
Total phase (deg)	226.6	Apriori accel (us/s/s)	-1.52513005341E-05	Resid phase (deg)	-17.7	+/-	17.6

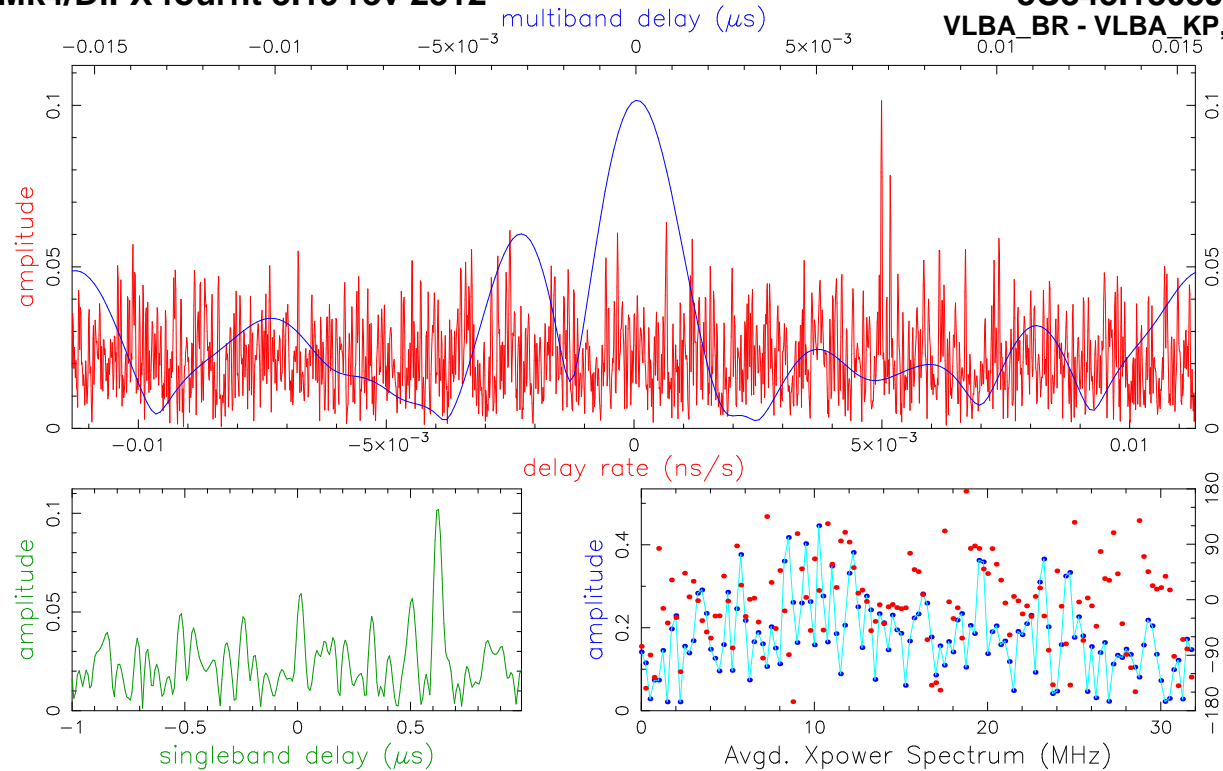
	RMS	Theor.	Amplitude	0.122 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	26.0	29.2	Search (2048X64)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	41.2	50.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	55.2	35.2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

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.37.1305JH

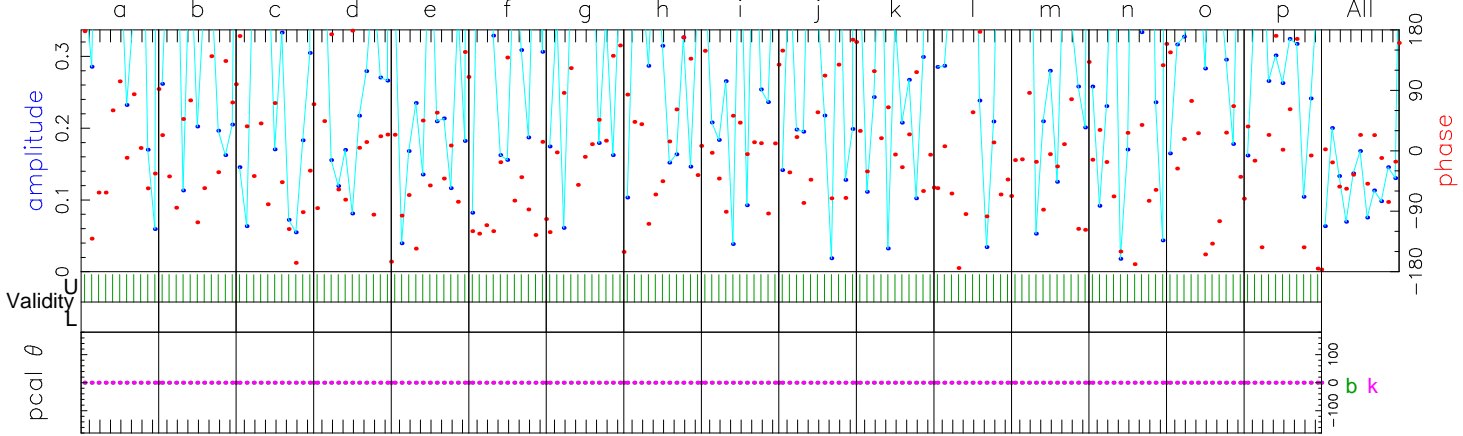
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bk
VLBA_BR - VLBA_KP, fgroup W, pol LR

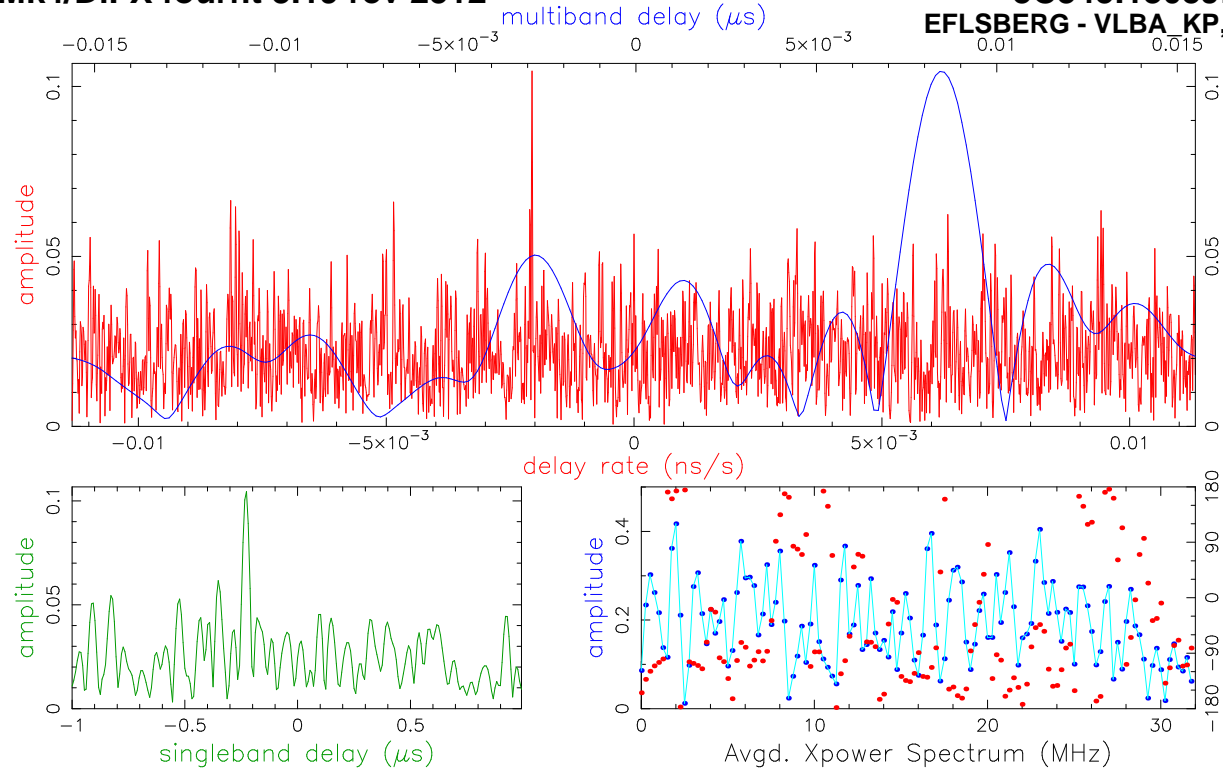


Fringe quality 0
SNR 5.7
Int time 406.536
Amp 0.112
Phase -22.9
PFD 9.4e-01
Delays (us)
SBD 0.621338
MBD -0.000032
Fringe rate (Hz) 0.431114
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042735
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

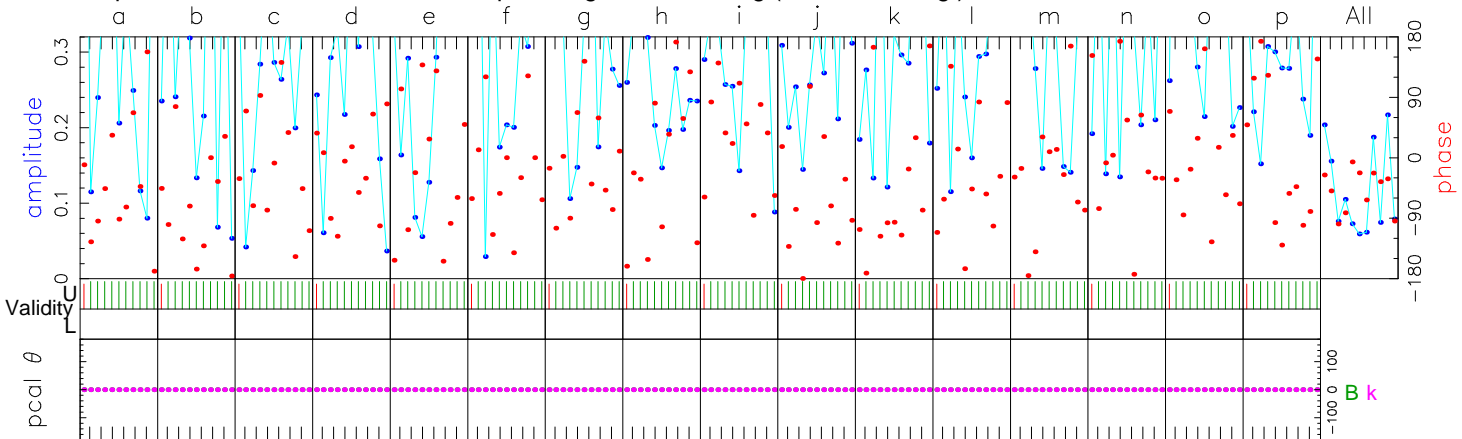


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-3.1	-17.8	-38.5	-18.9	-31.9	-98.7	17.3	-6.9	8.7	23.3	6.3	-49.1	7.2	-66.0	-23.8	144.2	Phase	-22.9
	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.0	0.2	0.2	0.2	0.2	0.1	0.0	Ampl.	0.1
	103.3	52.6	47.6	6.5	162.0	208.3	183.9	144.3	205.7	28.8	182.8	108.9	255.2	190.7	164.2	125.8	Sbd box	208.5
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	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	
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)	5.15195191130E+02			Apriori delay (usec)			5.14570222991E+02			Resid mbdelay (usec)			-3.18614E-05			+/- 1.9E-04		
Sband delay (usec)	5.15191561491E+02			Apriori clock (usec)			-2.1077624E-01			Resid sbdelay (usec)			6.21338E-01			+/- 3.0E-03		
Phase delay (usec)	5.14570222252E+02			Apriori clockrate (us/s)			-4.7816091E-08			Resid phdelay (usec)			-7.39119E-07			+/- 6.5E-07		
Delay rate (us/s)	-1.77849342201E-01			Apriori rate (us/s)			-1.77854347007E-01			Resid rate (us/s)			5.00481E-06			+/- 2.8E-09		
Total phase (deg)				-19.9			Apriori accel (us/s/s)			1.28049038570E-05			Resid phase (deg)			-22.9 +/- 20.1		
ph/seg (deg)	RMS	Theor.	Amplitude		0.112 +/- 0.020		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5									
amp/seg (%)	33.2	34.8	Search (2048X64)		0.101		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000					
ph/frq (deg)	47.4	60.7	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016			
amp/frq (%)	55.9	40.1	Inc. seg. avg.		0.112		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011					
	62.1	70.1	Inc. frq. avg.		0.111		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00		0.00	
b: az 66.1 el 33.9 pa -52.6	k: az 60.1 el 32.1 pa -73.4			u,v (fr/asec) 1350.630 2287.184			simultaneous interpolator											



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

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	86492.00	Freq (MHz)	All
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	802/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			

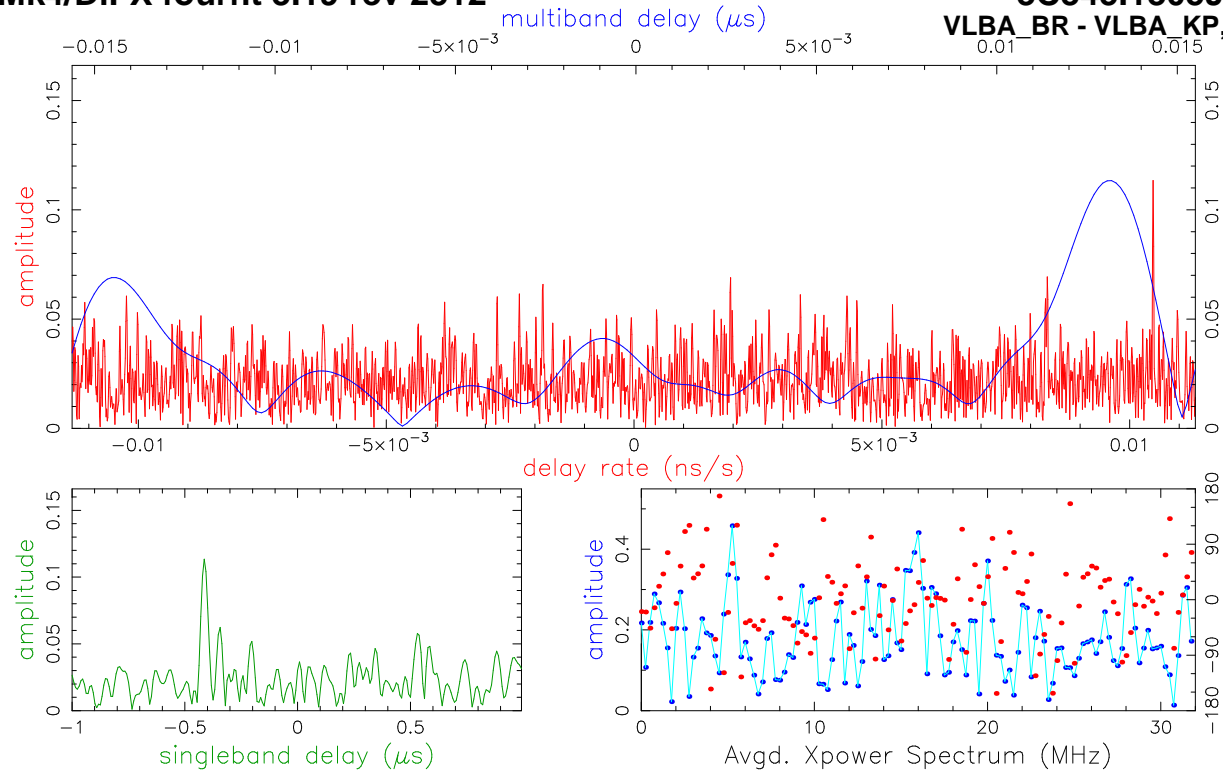
Group delay (usec)(sbd) 6.17852841859E+03 Apriori delay (usec) 6.17876996376E+03 Resid mbdelay (usec) 8.45482E-03 +/- 1.9E-04
 Sband delay (usec) 6.17854113626E+03 Apriori clock (usec) 1.7240984E+01 Resid sbdelay (usec) -2.28828E-01 +/- 3.0E-03
 Phase delay (usec) 6.17876996240E+03 Apriori clockrate (us/s) -5.4210100E-09 Resid phdelay (usec) -1.36805E-06 +/- 6.4E-07
 Delay rate (us/s) -1.51429144052E+00 Apriori rate (us/s) -1.51428937870E+00 Resid rate (us/s) -2.06182E-06 +/- 2.7E-09
 Total phase (deg) 201.9 Apriori accel (us/s/s) -1.52513005341E-05 Resid phase (deg) -42.4 +/- 19.7

ph/seg (deg) RMS Theor. Amplitude 0.107 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.9 32.6 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.1 57.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.2 39.4 Inc. seg. avg. 0.102 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 50.7 68.8 Inc. frq. avg. 0.106 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 11261.152 517.591 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.55.1305JH

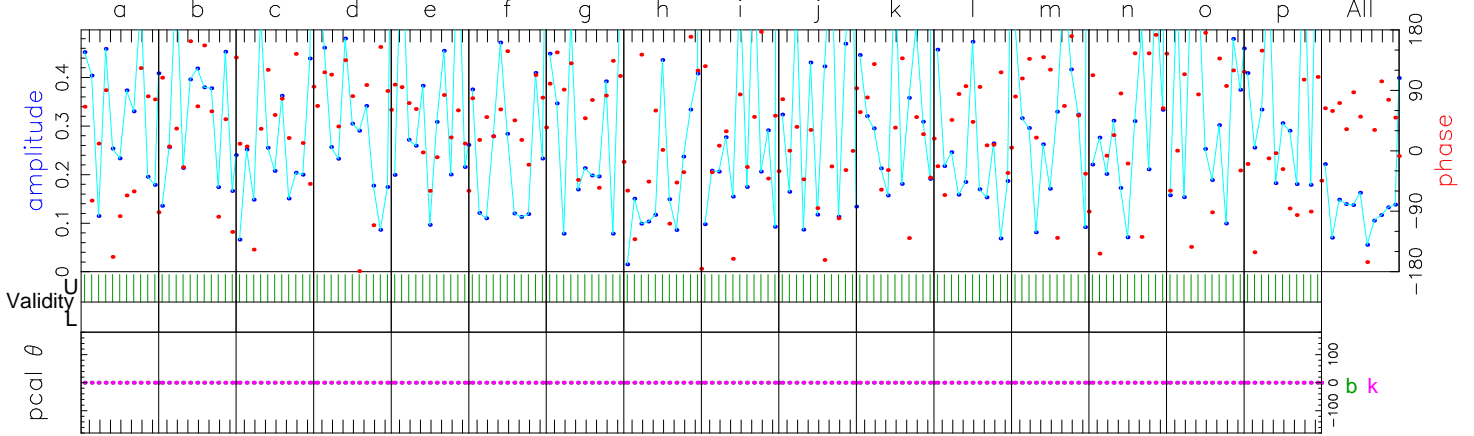
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bk
VLBA_BR - VLBA_KP, fgroup W, pol RL



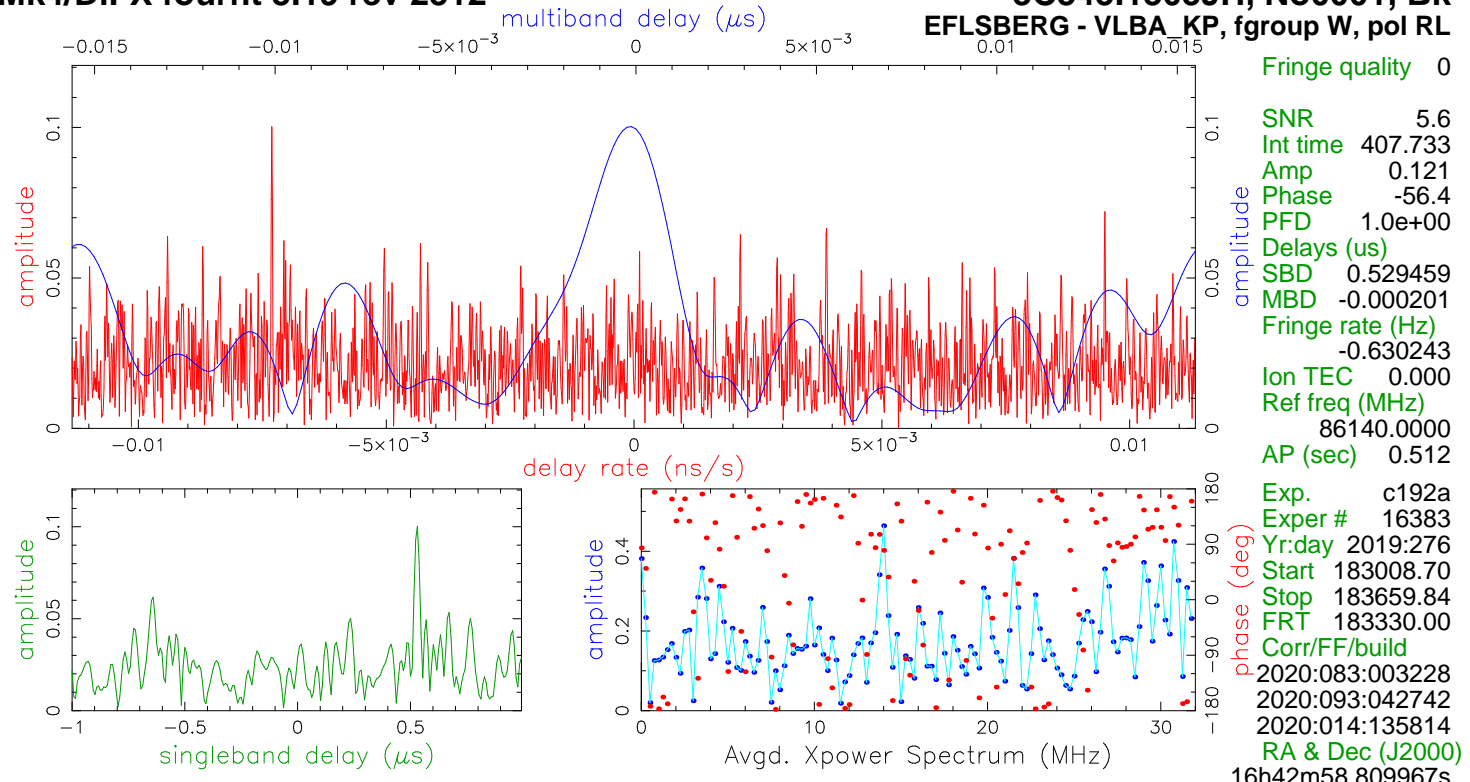
Fringe quality 0
SNR 6.3
Int time 406.536
Amp 0.166
Phase 63.5
PFD 9.9e-02
Delays (us)
SBD -0.413484
MBD 0.013137
Fringe rate (Hz) 0.903377
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042740
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

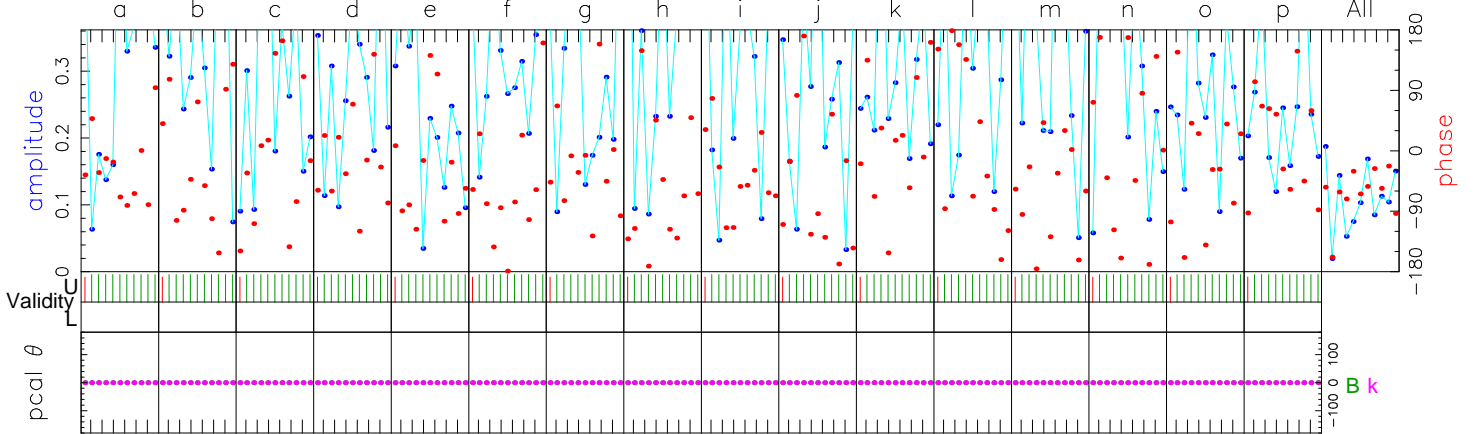


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
58.5	61.9	38.0	104.2	55.2	68.6	101.5	84.0	37.4	-0.8	42.7	22.7	106.5	147.3	108.3	35.7		Phase	63.5	
0.1	0.2	0.2	0.3	0.4	0.3	0.3	0.0	0.2	0.3	0.3	0.2	0.3	0.2	0.1	0.1		Ampl.	0.2	
129.1	252.3	152.3	75.3	76.1	145.0	13.0	251.7	26.9	75.3	250.8	254.4	81.7	221.0	237.6	144.4		Sbd box	76.1	
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)	5.14145859651E+02				Apriori delay (usec)				5.14570222991E+02				Resid mbdelay (usec)				1.31367E-02 +/- 1.7E-04		
Sband delay (usec)	5.14156738991E+02				Apriori clock (usec)				-2.1077624E-01				Resid sbdelay (usec)				-4.13484E-01 +/- 2.8E-03		
Phase delay (usec)	5.14570225038E+02				Apriori clockrate (us/s)				-4.7816091E-08				Resid phdelay (usec)				2.04663E-06 +/- 5.9E-07		
Delay rate (us/s)	-1.77843859696E-01				Apriori rate (us/s)				-1.77854347007E-01				Resid rate (us/s)				1.04873E-05 +/- 2.5E-09		
Total phase (deg)	66.5				Apriori accel (us/s/s)				1.28049038570E-05				Resid phase (deg)				63.5 +/- 18.3		
ph/seg (deg)	RMS	Theor.	Amplitude		0.166 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000				
amp/seg (%)	44.8	31.7	Search (2048X64)		0.110		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016 0.016						
ph/frq (deg)	42.9	55.3	Interp.		0.000		Bits/sample: 2x2		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011 0.011						
amp/frq (%)	40.4	36.6	Inc. seg. avg.		0.166		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00						
amp/frq (%)	67.3	63.9	Inc. frq. avg.		0.173														

b: az 66.1 el 33.9 pa -52.6 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/bk.W.68.1305JH



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

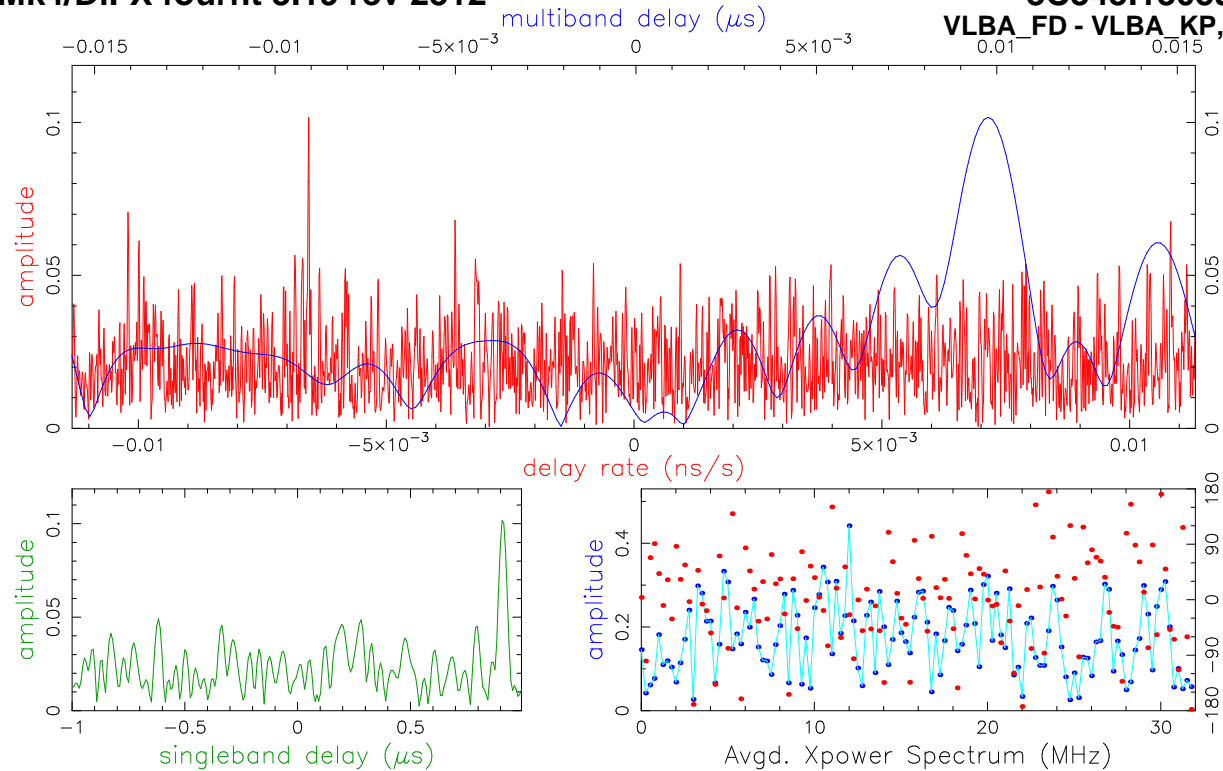


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
-44.5	54.6	-20.5	-32.0	-82.8	-95.3	-50.3	-92.8	-50.9	-129.5	23.0	-120.6	-36.7	-139.1	4.1	17.1	Phase	-56.4	
0.3	0.0	0.1	0.2	0.1	0.2	0.2	0.2	0.3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

Group delay (usec)(sbd) 6.17930101235E+03 Apriori delay (usec) 6.17876996376E+03 Resid mbdelay (usec) -2.01413E-04 +/- 1.9E-04
 Sband delay (usec) 6.17929942226E+03 Apriori clock (usec) 1.7240984E+01 Resid sbdelay (usec) 5.29459E-01 +/- 3.1E-03
 Phase delay (usec) 6.17876996195E+03 Apriori clockrate (us/s) -5.4210100E-09 Resid phdelay (usec) -1.81730E-06 +/- 6.6E-07
 Delay rate (us/s) -1.51429669520E+00 Apriori rate (us/s) -1.51428937870E+00 Resid rate (us/s) -7.31650E-06 +/- 2.8E-09
 Total phase (deg) 188.0 Apriori accel (us/s/s) -1.52513005341E-05 Resid phase (deg) -56.4 +/- 20.5

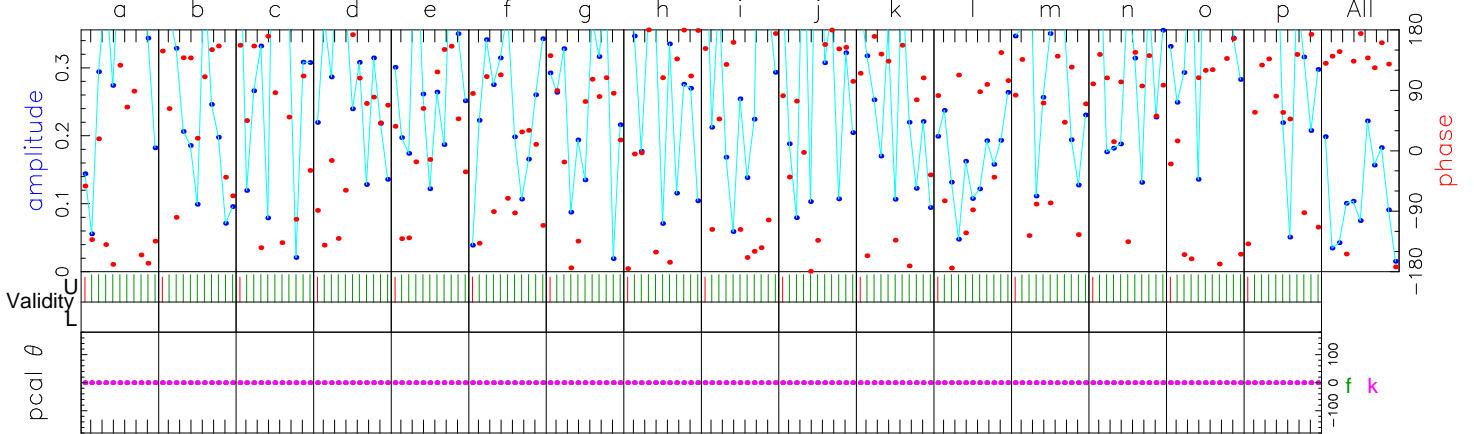
RMS Theor. Amplitude 0.121 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 36.8 34.0 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 48.1 59.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 59.8 41.1 Inc. seg. avg. 0.111 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 68.5 71.7 Inc. frq. avg. 0.131 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 11261.152 517.591 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bk..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bk.W.78.1305JH

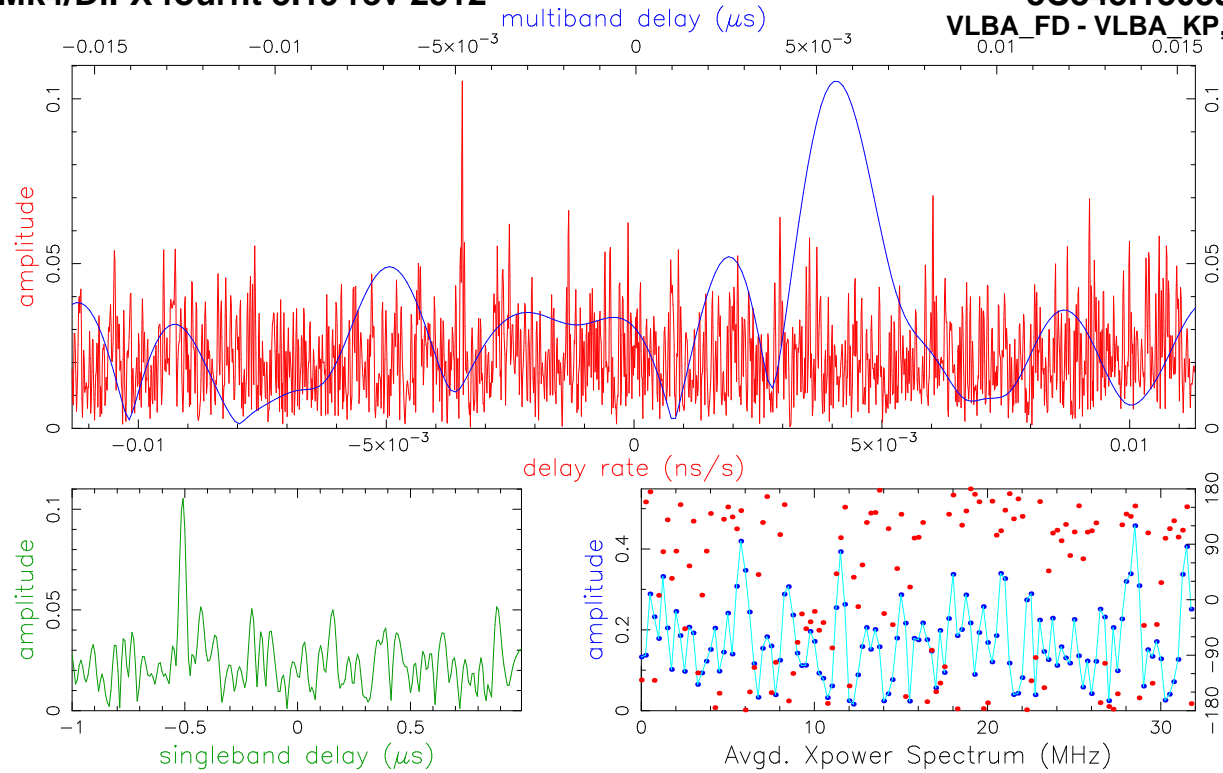


Fringe quality 0
SNR 5.7
Int time 407.360
Amp 0.119
Phase 145.4
PFD 9.6e-01
Delays (us)
SBD 0.909406
MBD 0.009781
Fringe rate (Hz)
-0.566462
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
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
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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f: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		
f: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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	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
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		1.54233354534E+03								1.54141751422E+03							9.78112E-03	+/- 1.9E-04
Sband delay (usec)		1.54232692022E+03								8.5670185E-01							9.09406E-01	+/- 3.0E-03
Phase delay (usec)		1.54141751891E+03								1.0362949E-07							4.68976E-06	+/- 6.5E-07
Delay rate (us/s)		-3.76621001081E-02								-3.76555240401E-02							-6.57607E-06	+/- 2.7E-09
Total phase (deg)				28.3						-9.61461128275E-06							145.4	+/- 20.2
ph/seg (deg)	RMS	Theor.	Amplitude	0.119 +/- 0.021						Pcal mode: MANUAL, MANUAL								PC period (AP's) 5, 5
amp/seg (%)	26.7	33.4	Search (2048X64)	0.099						Pcal rate: 0.000E+00, 0.000E+00 (us/s)							sb window (us)	-1.000 1.000
ph/frq (deg)	64.9	58.3	Interp.	0.000						Bits/sample: 2x2							mb window (us)	-0.016 0.016
amp/frq (%)	56.1	40.4	Inc. seg. avg.	0.109						Sample rate(MISamp/s): 64							dr window (ns/s)	-0.011 0.011
	63.3	70.4	Inc. frq. avg.	0.115						Data rate(Mb/s): 2048							ion window (TEC)	0.00 0.00
f: az 61.0 el 37.1 pa -78.2			k: az 60.1 el 32.1 pa -73.4							u,v (fr/asec) 263.798 -766.247								simultaneous interpolator

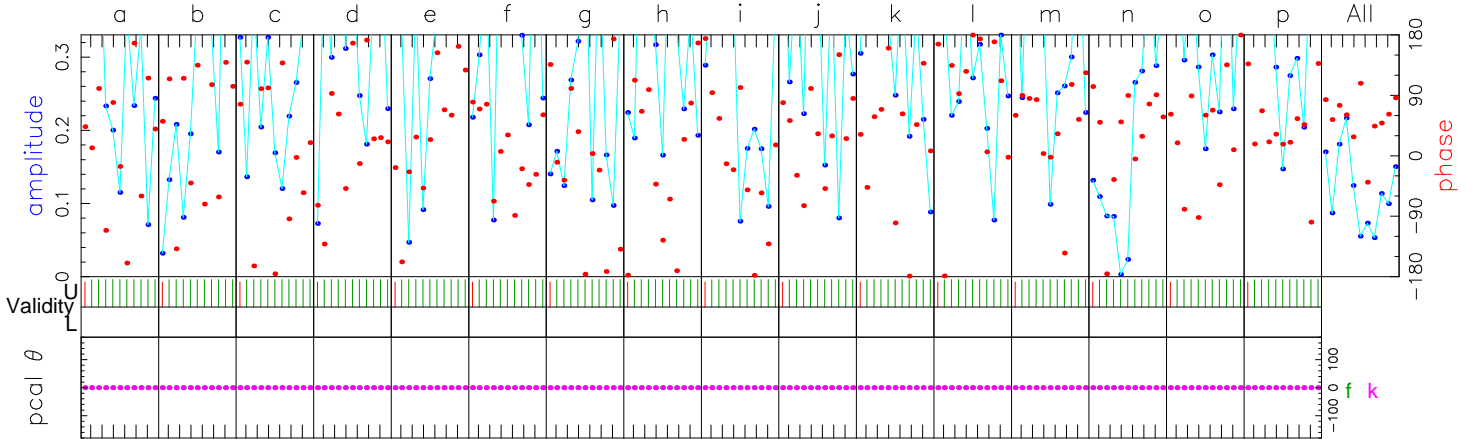


Fringe quality 0

SNR 5.8
Int time 407.360
Amp 0.110
Phase 61.9
PFD 7.1e-01
Delays (us)
SBD -0.509564
MBD 0.005524
Fringe rate (Hz)
-0.299088
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

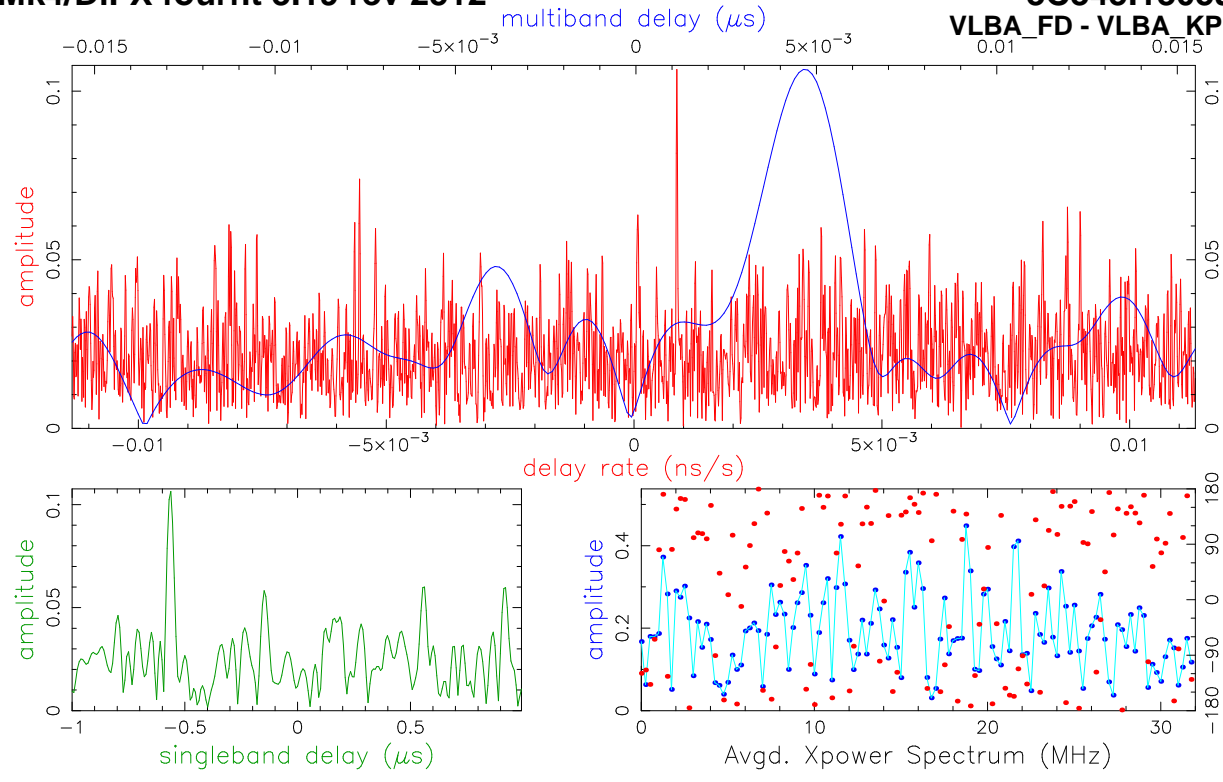
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042759
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



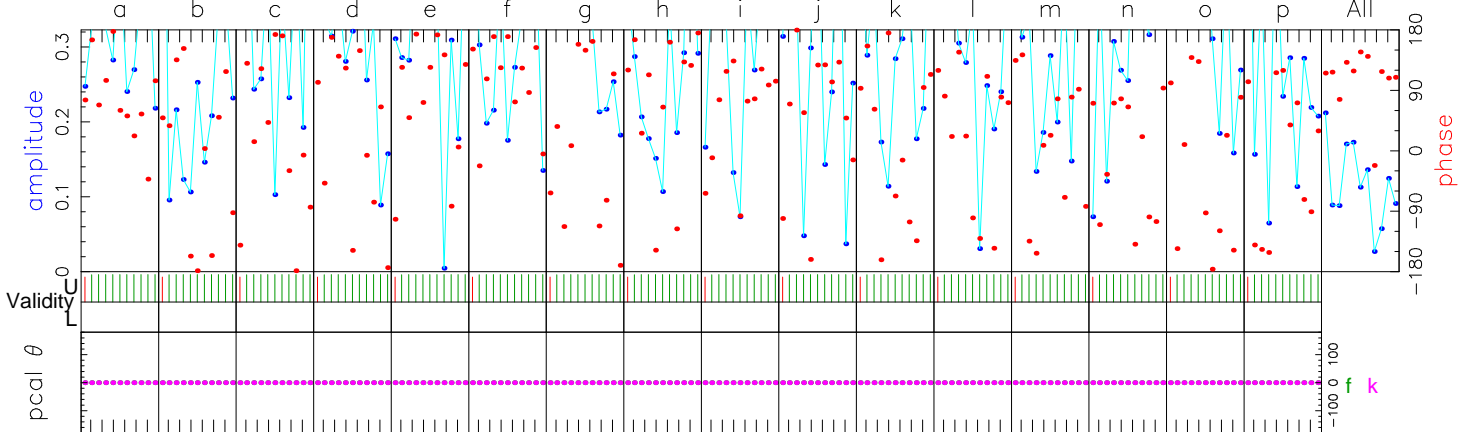
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		APs used
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
f: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
f	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		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		1.54092303786E+03								1.54141751422E+03							5.52364E-03	+/- 1.8E-04
Sband delay (usec)		1.54090795072E+03								8.5670185E-01							-5.09564E-01	+/- 2.9E-03
Phase delay (usec)		1.54141751621E+03								1.0362949E-07							1.99767E-06	+/- 6.3E-07
Delay rate (us/s)		-3.76589961510E-02								-3.76555240401E-02							-3.47211E-06	+/- 2.7E-09
Total phase (deg)					304.8					-9.61461128275E-06							61.9	+/- 19.6
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								mb window (us) -0.016 0.016
Sample rate(MSamp/s):										64								dr window (ns/s) -0.011 0.011
Data rate(Mb/s):										2048								ion window (TEC) 0.00 0.00
nlags:										128								
t_cohere										infinite								

ph/seg (deg) 37.4 32.5 Search (2048X64) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.2 56.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.7 39.2 Inc. seg. avg. 0.108 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.6 68.4 Inc. frq. avg. 0.110 Sample rate(MSamp/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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 263.798 -766.247 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fk..1305JH Output file: /Exps/c192a/v2/1234/No0001/fk.W.134.1305JH



Fringe quality 0
SNR 5.9
Int time 407.360
Amp 0.108
Phase 119.3
PFD 5.4e-01
Delays (us)
SBD -0.564877
MBD 0.004647
Fringe rate (Hz) 0.074286
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
2020:093:042749
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	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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f: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		
f: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		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	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		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd) 1.54085966101E+03 Apriori delay (usec) 1.54141751422E+03 Resid mbdelay (usec) 4.64680E-03 +/- 1.8E-04
 Sband delay (usec) 1.54085263722E+03 Apriori clock (usec) 8.5670185E-01 Resid sbdelay (usec) -5.64877E-01 +/- 2.9E-03
 Phase delay (usec) 1.54141751806E+03 Apriori clockrate (us/s) 1.0362949E-07 Resid phdelay (usec) 3.84813E-06 +/- 6.2E-07
 Delay rate (us/s) -3.76546616532E-02 Apriori rate (us/s) -3.76555240401E-02 Resid rate (us/s) 8.62387E-07 +/- 2.6E-09
 Total phase (deg) 2.2 Apriori accel (us/s/s) -9.61461128275E-06 Resid phase (deg) 119.3 +/- 19.3

ph/seg (deg) RMS Theor. Amplitude 0.108 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.4 32.0 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.3 55.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 51.0 38.7 Inc. seg. avg. 0.100 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.7 67.5 Inc. frq. avg. 0.104 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

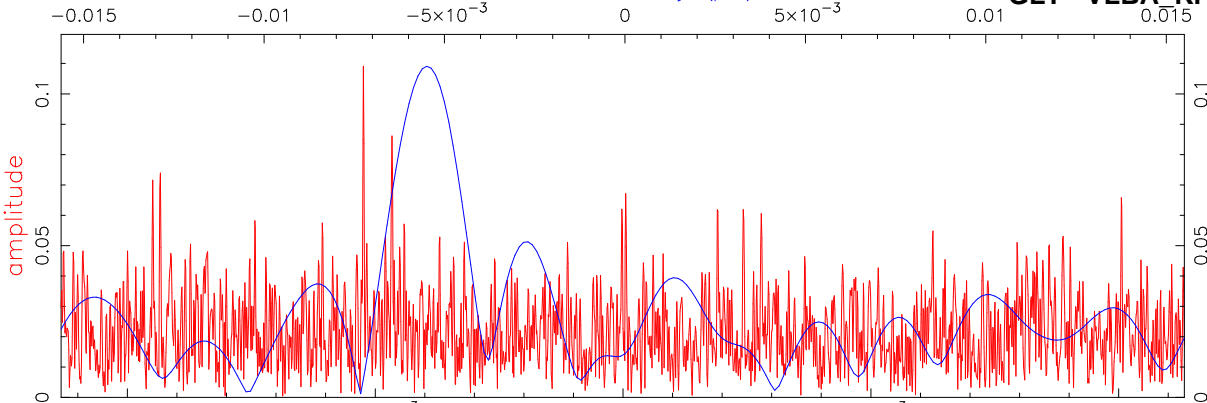
f: az 61.0 el 37.1 pa -78.2 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 263.798 -766.247 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fk..1305JH Output file: /Exps/c192a/v2/1234/No0001/fk.W.93.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

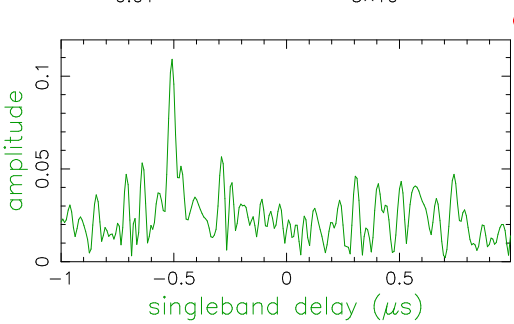
3C345.1305JH, No0001, gk
GLT - VLBA KP, fgroup W, pol LL

multiband delay (μ s)

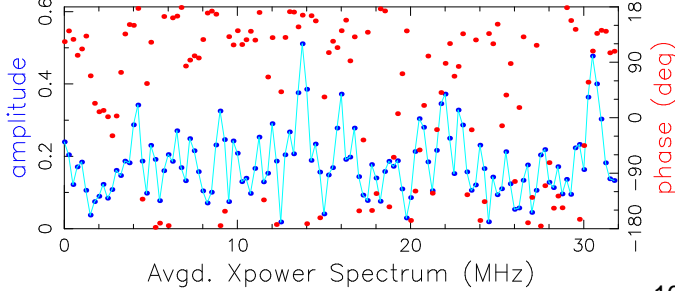
Fringe quality 0



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

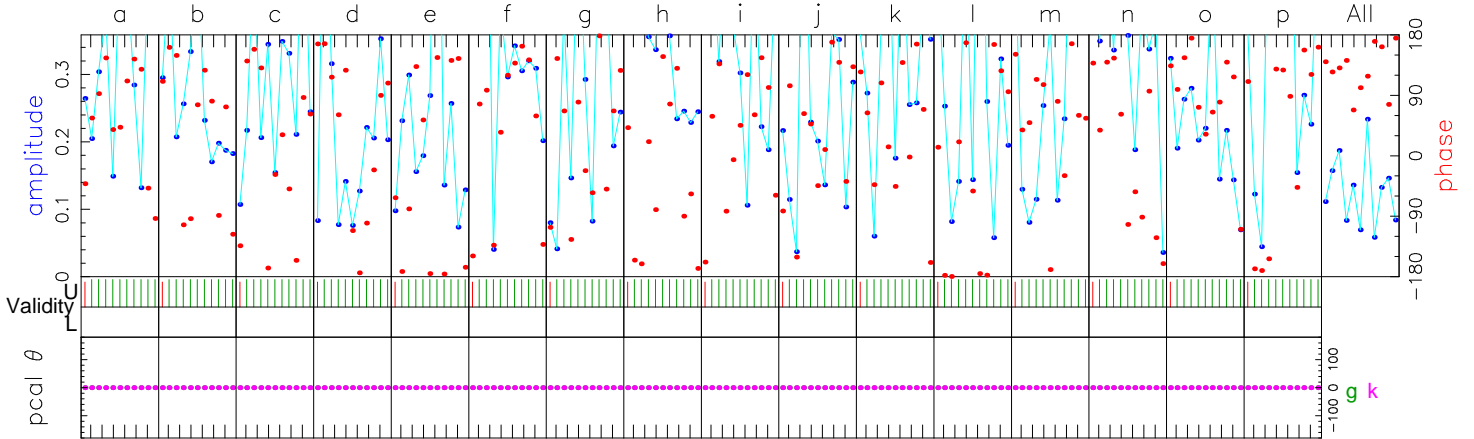


delay rate (ns/s)



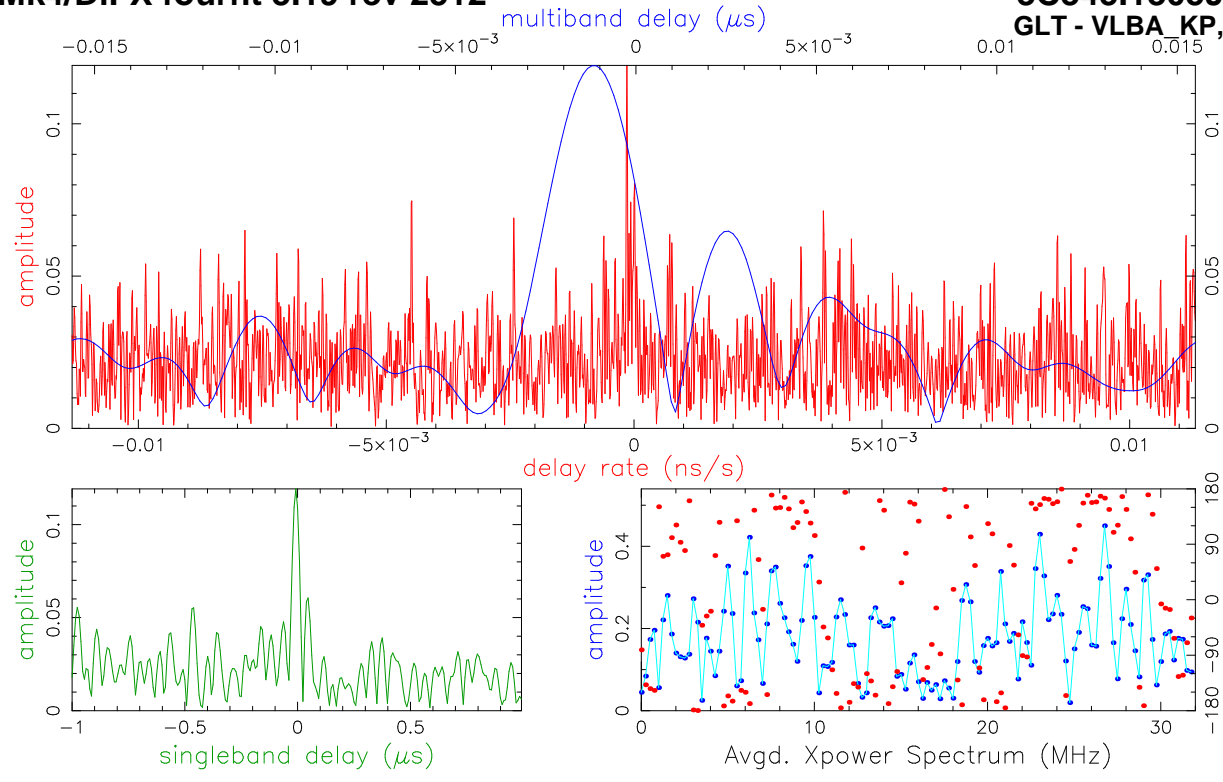
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042754
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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	
																	Chan ids	
																	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 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

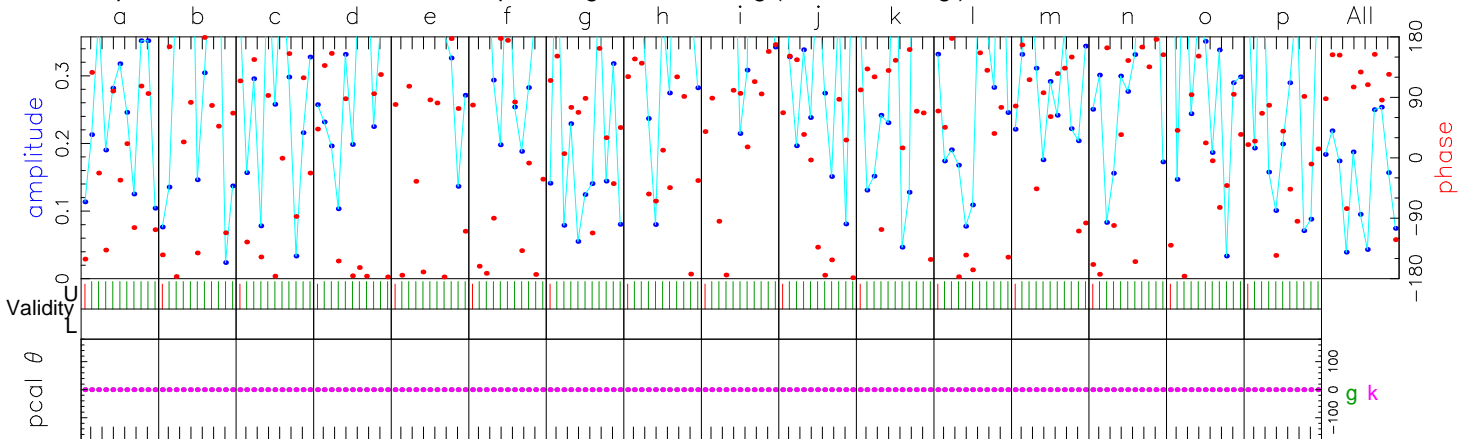


Fringe quality 0

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
Yr:day 16383
2020:083:003228
2020:093:042800
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

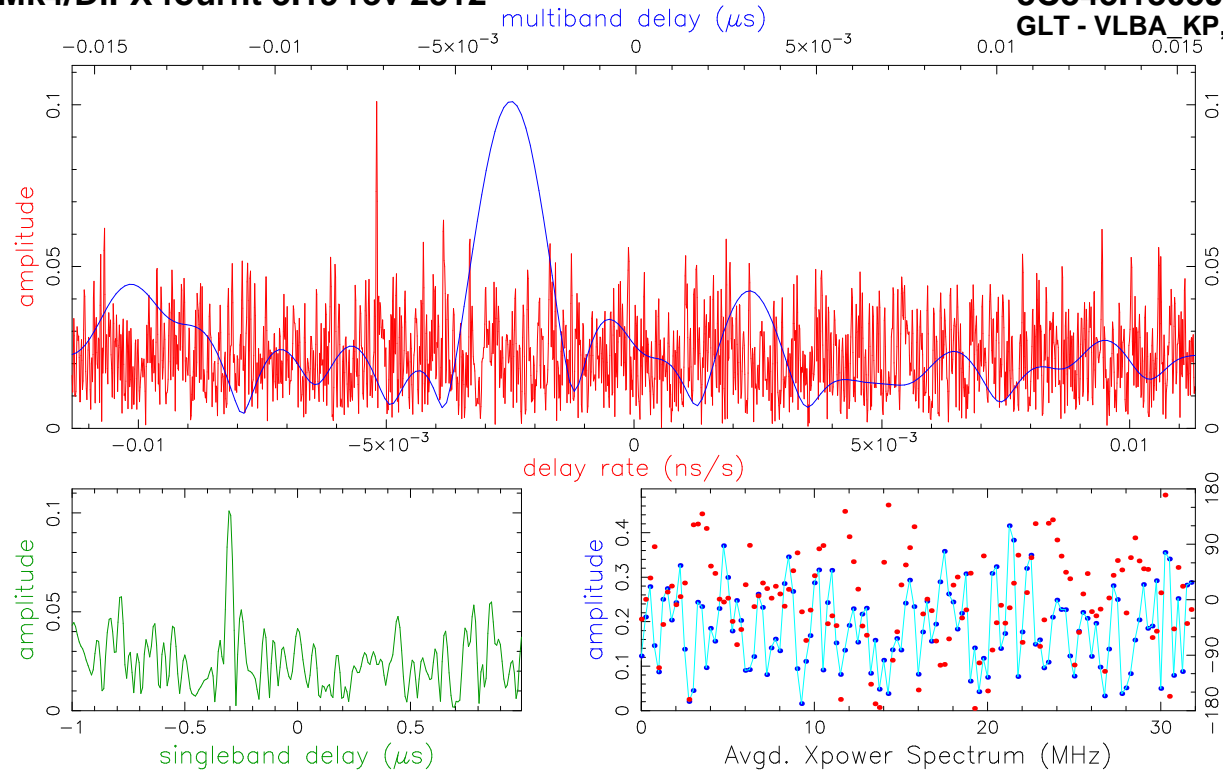
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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	
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														

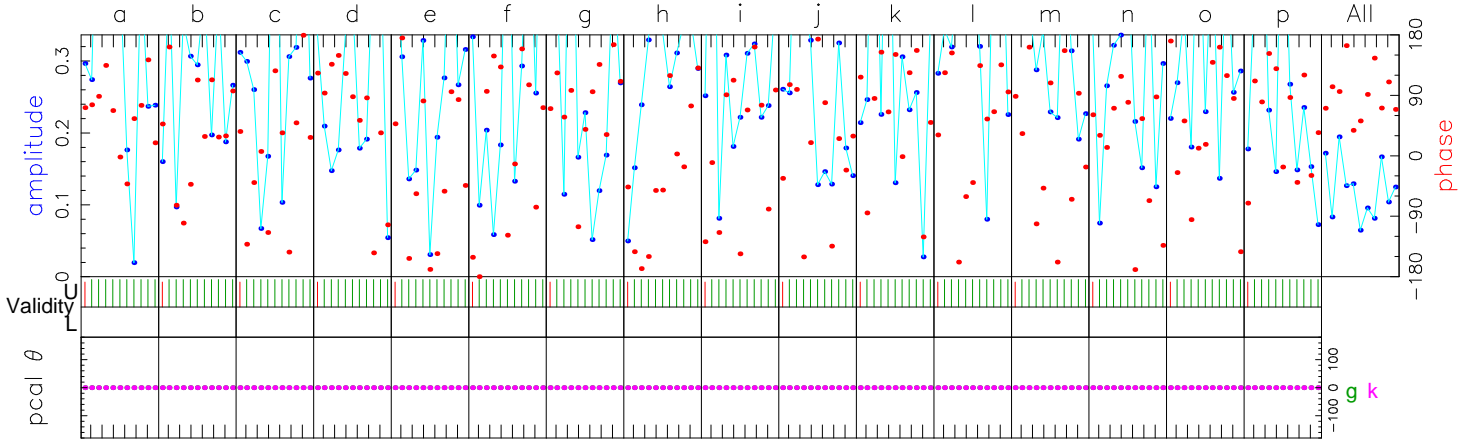
Mk4/DiFX fourfit 3.19 rev 2512

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"

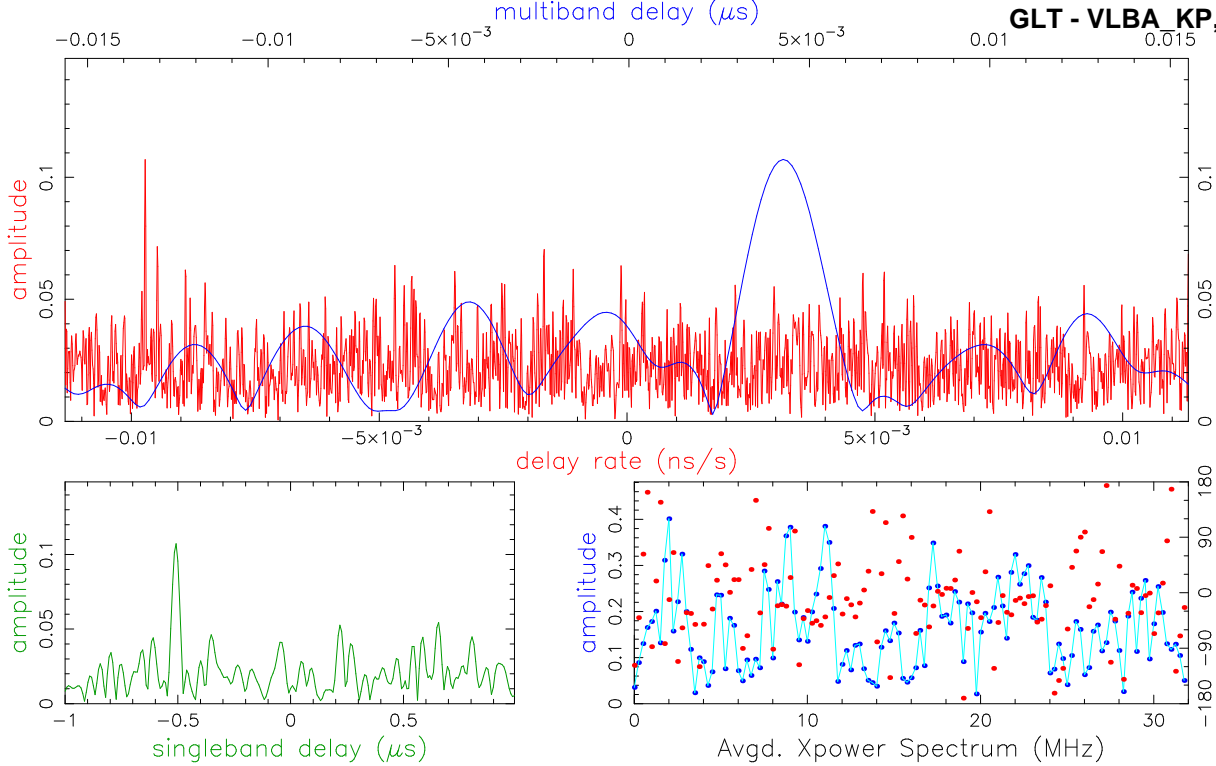
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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	90.4	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		
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								
amp/seg (%)	36.5	33.5	Search (2048X64)		0.100		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000					
ph/frq (deg)	42.7	58.4	Interp.		0.000		Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
amp/frq (%)	43.8	40.4	Inc. seg. avg.		0.113		Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011					
	58.6	70.6	Inc. frq. avg.		0.099		Data rate(Mb/s): 2048			nlags: 128			t_cohere infinite			ion window (TEC)		
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														

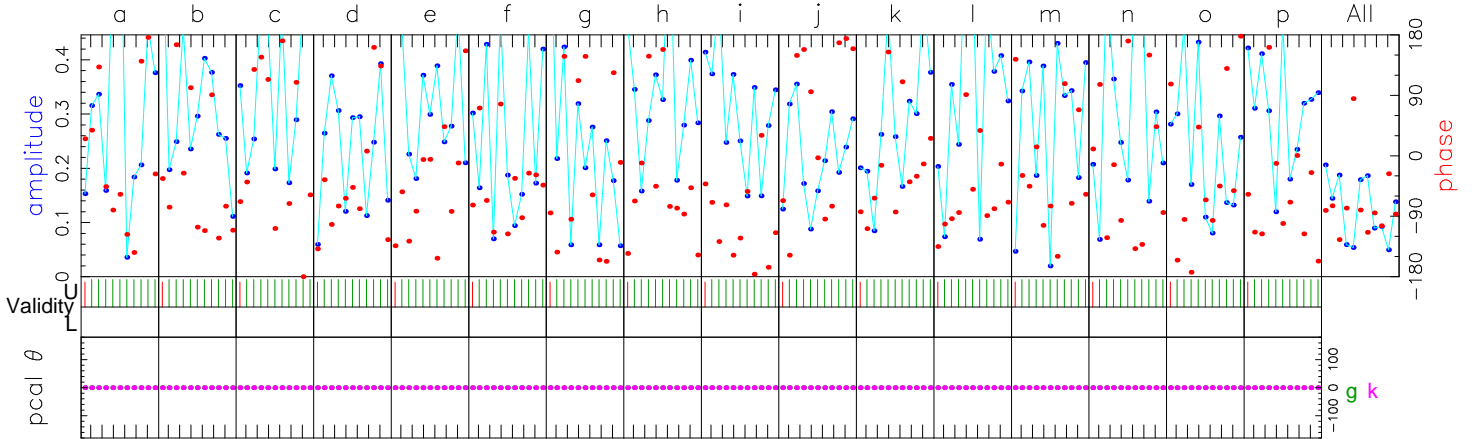
Mk4/DiFX fourfit 3.19 rev 2512

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



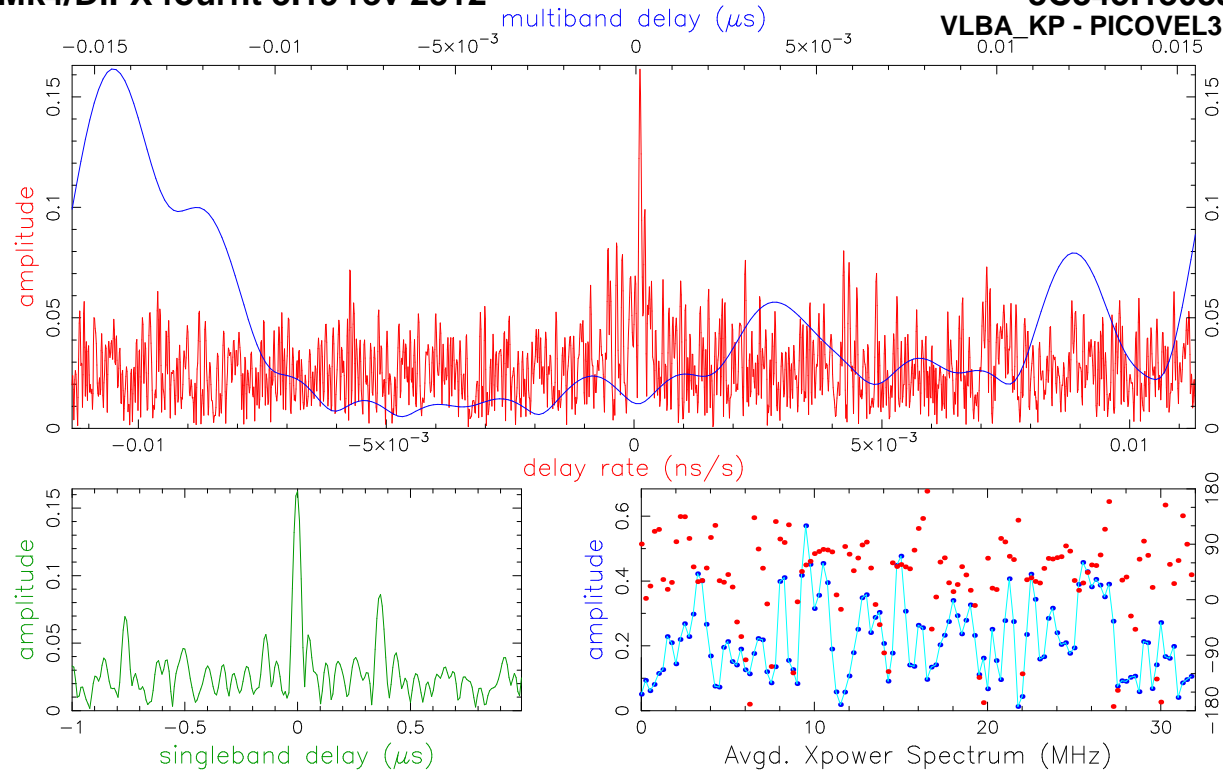
Fringe quality 0
SNR 5.9
Int time 407.638
Amp 0.149
Phase -91.6
PFD 5.3e-01
Delays (us)
SBD -0.509082
MBD 0.004291
Fringe rate (Hz)
-0.839019
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
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



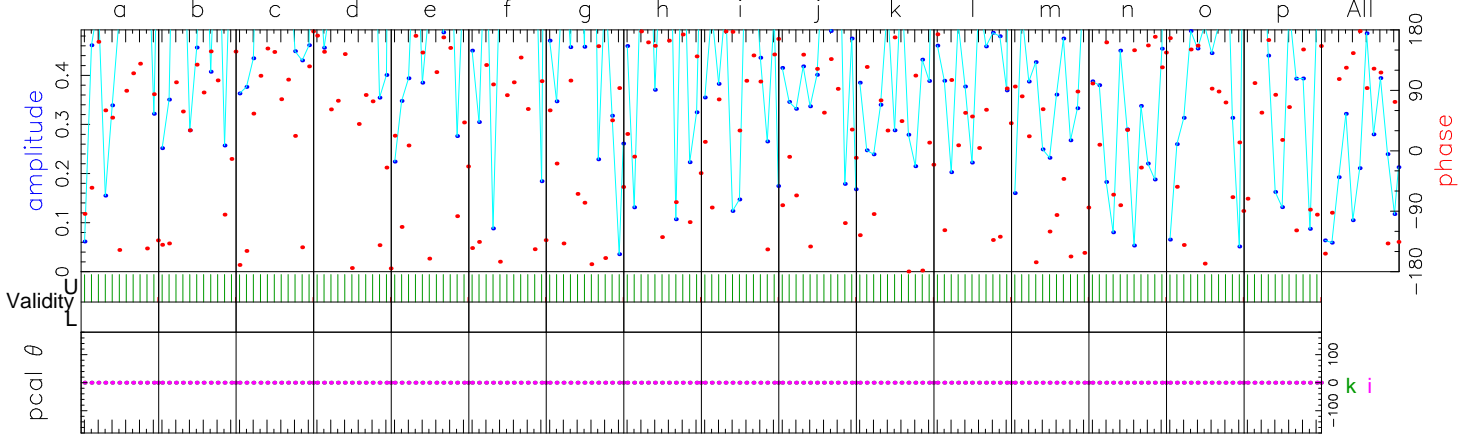
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-71.3	-76.4	177.9	-89.2	-73.8	-39.9	-156.5	-92.4	-111.4	-166.2	-31.3	-64.5	-64.1	-115.2	-119.4	-95.9		Phase	-91.6
	0.1	0.2	0.2	0.2	0.2	0.2	0.1	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	
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 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



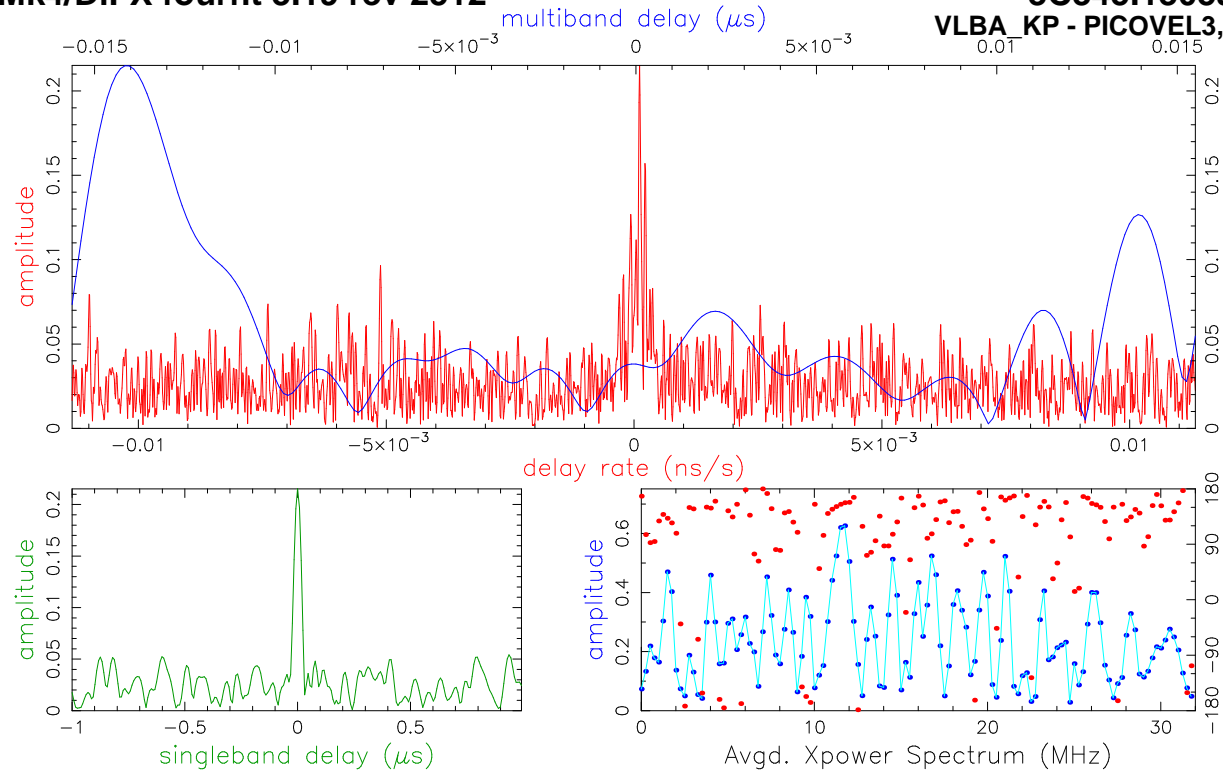
Fringe quality 9
SNR 8.0
Int time 314.116
Amp 0.164
Phase 127.7
PFD 5.8e-07
Delays (us)
SBD -0.002795
MBD -0.014534
Fringe rate (Hz) 0.010789
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042810
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	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	128.8	127.7
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	106.0	127.7
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	106.0	127.7
k:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.1	0.2
k:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.1	0.2
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	106.0	128.6
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	106.0	128.6
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)		-7.23868556405E+03																
Sband delay (usec)		-7.23867382562E+03																
Phase delay (usec)		-7.23867102600E+03																
Delay rate (us/s)		1.52657884310E+00																
Total phase (deg)					-64.8													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 62.7 24.9 Search (2048X64) 0.160 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 87.4 43.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 44.9 28.8 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 70.9 50.2 Inc. frq. avg. 0.173 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11319.294 1807.302 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ki..1305JH Output file: /Exps/c192a/v2/1234/No0001/ki.W.173.1305JH

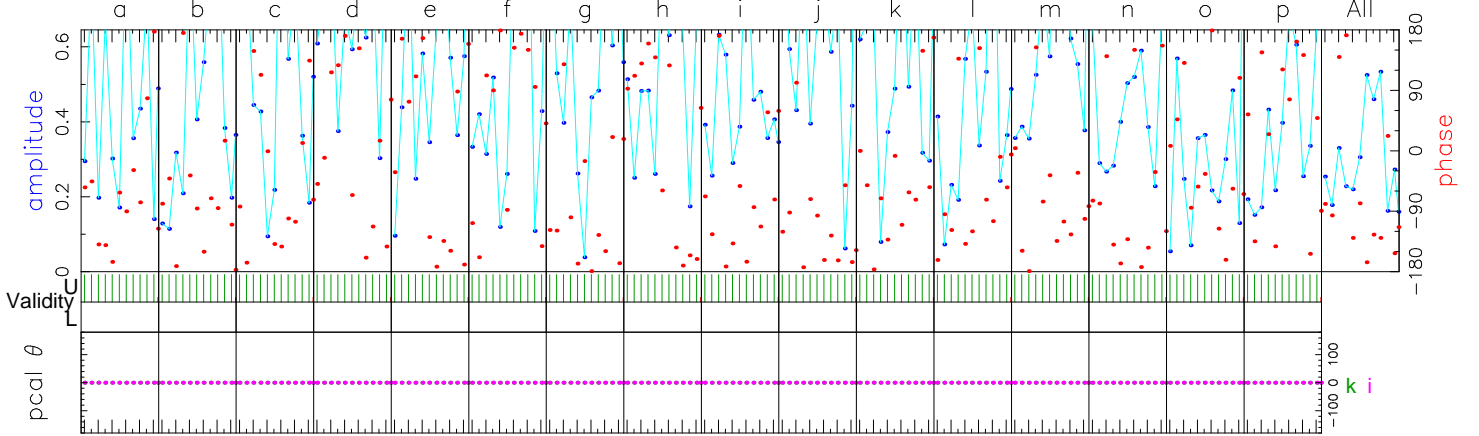


Fringe quality 9

SNR 10.4
Int time 314.116
Amp 0.215
Phase -136.4
PFD 8.1e-17
Delays (us)
SBD 0.000156
MBD -0.014105
Fringe rate (Hz)
0.009151
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042815
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



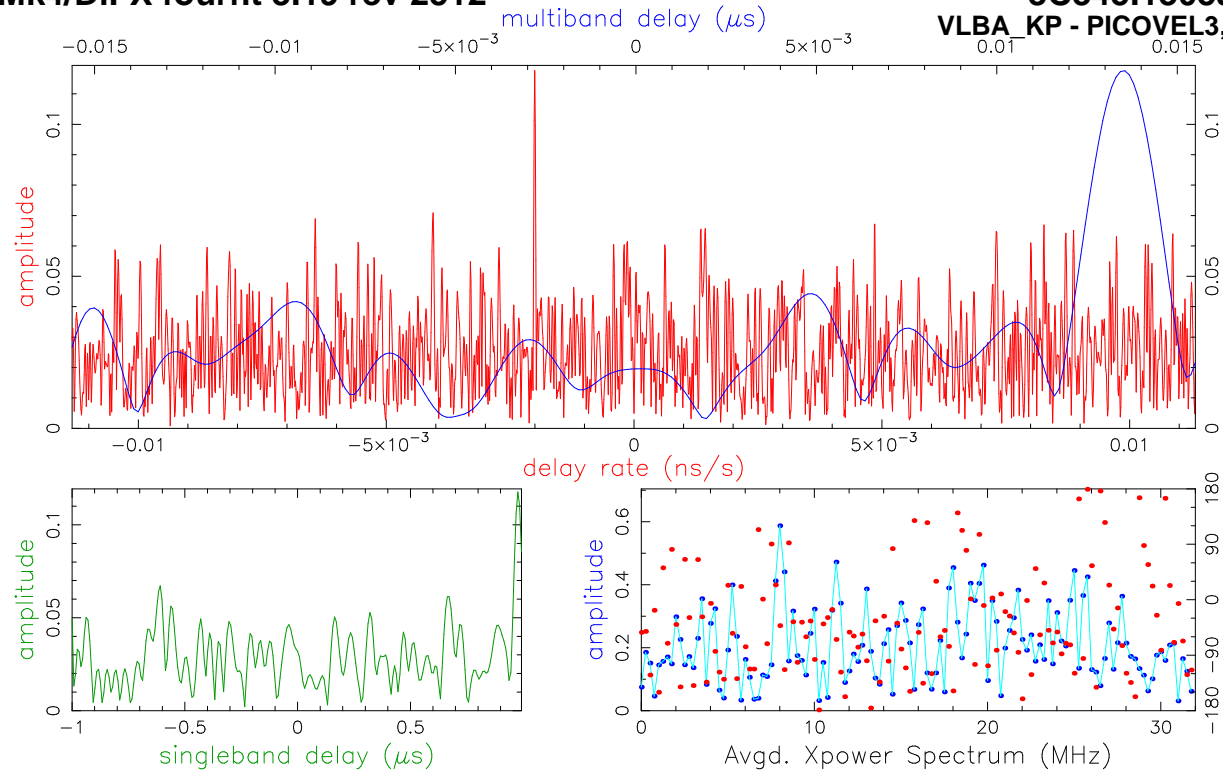
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-84.6	-82.5	-136.0	-154.2	174.2	163.3	-139.0	174.8	-130.4	-138.5	-80.8	-113.2	-106.2	-152.2	-51.5	109.1	Phase	-136.4				
	0.2	0.3	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.1	0.2	Ampl.	0.3				
	214.9	129.7	128.6	61.3	128.4	127.9	128.9	128.2	129.0	129.2	128.9	130.3	128.1	128.9	63.6	153.2	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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
ki	0:0	0:0	0:0	0:0	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					
ki	0:0	0:0	0:0	0:0	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					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
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)			-7.23868513477E+03														Apriori delay (usec)	-7.23867103012E+03	Resid mbdelay (usec)	-1.41046E-02	+/-	1.0E-04
Sband delay (usec)			-7.23867087412E+03														Apriori clock (usec)	8.7047599E-02	Resid sbdelay (usec)	1.56000E-04	+/-	1.7E-03
Phase delay (usec)			-7.23867103452E+03														Apriori clockrate (us/s)	1.5842101E-07	Resid phdelay (usec)	-4.39834E-06	+/-	3.5E-07
Delay rate (us/s)			1.52657882409E+00														Apriori rate (us/s)	1.52657871785E+00	Resid rate (us/s)	1.06235E-07	+/-	2.0E-09
Total phase (deg)																	Apriori accel (us/s/s)	3.31843554813E-05	Resid phase (deg)	-136.4	+/-	11.0

RMS Theor. Amplitude 0.215 +/- 0.021
ph/seg (deg) 63.2 19.0 Search (2048X64) 0.211
amp/seg (%) 74.7 33.2 Interp. 0.000
ph/frq (deg) 53.1 22.0 Inc. seg. avg. 0.297
amp/frq (%) 51.8 38.4 Inc. frq. avg. 0.266

Group delay (usec)(sbd) -7.23868513477E+03 Apriori delay (usec) -7.23867103012E+03 Resid mbdelay (usec) -1.41046E-02 +/- 1.0E-04
Sband delay (usec) -7.23867087412E+03 Apriori clock (usec) 8.7047599E-02 Resid sbdelay (usec) 1.56000E-04 +/- 1.7E-03
Phase delay (usec) -7.23867103452E+03 Apriori clockrate (us/s) 1.5842101E-07 Resid phdelay (usec) -4.39834E-06 +/- 3.5E-07
Delay rate (us/s) 1.52657882409E+00 Apriori rate (us/s) 1.52657871785E+00 Resid rate (us/s) 1.06235E-07 +/- 2.0E-09
Total phase (deg) -328.9 Apriori accel (us/s/s) 3.31843554813E-05 Resid phase (deg) -136.4 +/- 11.0

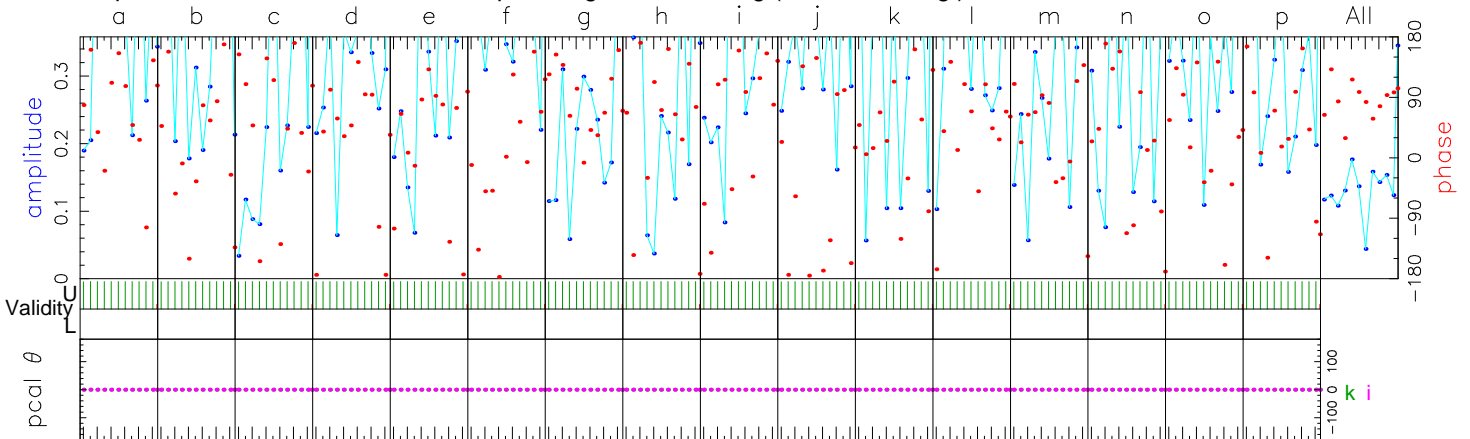
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC)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

k: az 60.1 el 32.1 pa -73.4 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11319.294 1807.302 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ki..1305JH Output file: /Exps/c192a/v2/1234/No0001/ki.W.192.1305JH



Fringe quality 0
SNR 5.7
Int time 314.116
Amp 0.119
Phase 86.5
PFD 9.4e-01
Delays (us)
SBD 0.977557
MBD 0.013506
Fringe rate (Hz)
-0.172667
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042819
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

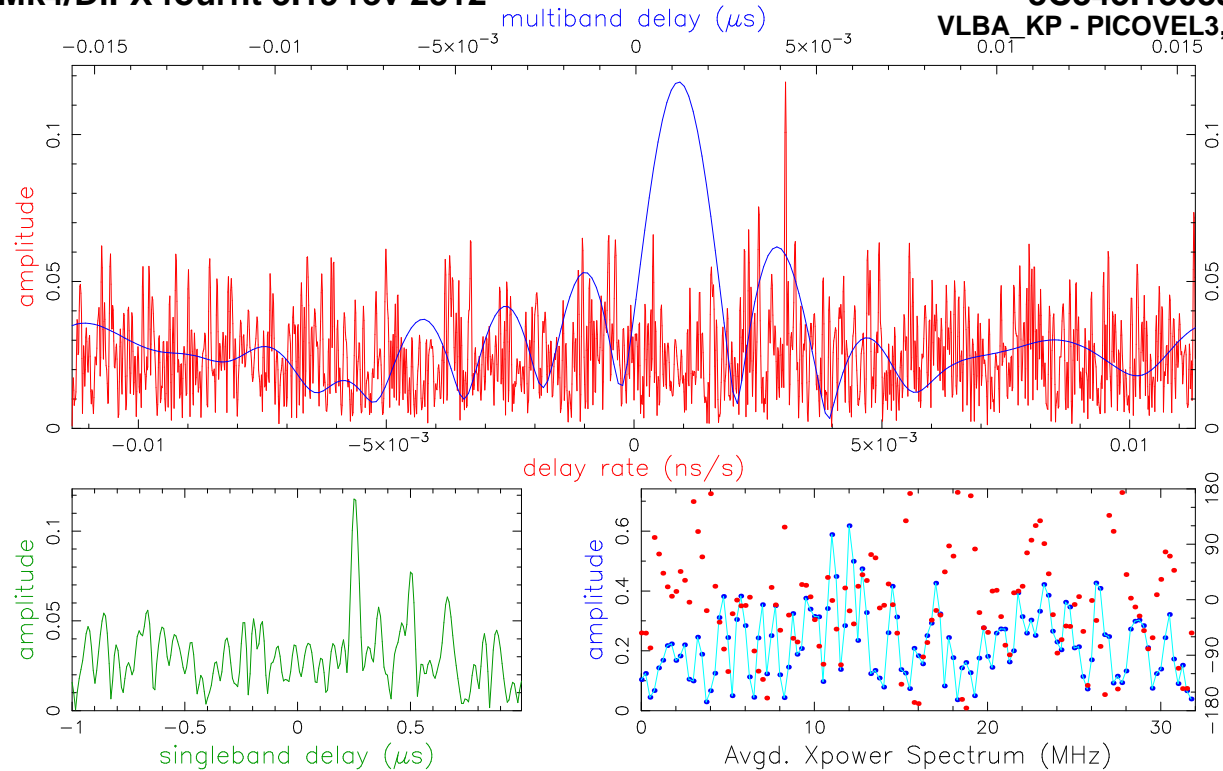


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	80.0	41.4	100.2	94.0	97.3	7.9	98.1	96.5	126.8	167.9	65.2	66.9	67.4	59.6	69.8	101.3	Phase	86.5	
k	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.1	0.1	Ampl.	0.1	
i	38.2	207.4	112.7	168.0	167.4	79.3	169.3	30.0	238.8	82.9	25.6	255.0	185.5	124.7	86.5	211.7	Sbd box	254.1	
k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
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		
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		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids		
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)			-7.23768877435E+03						Apriori delay (usec)		-7.23867103012E+03						Resid mbdelay (usec)	1.35058E-02	+/- 1.9E-04
Sband delay (usec)			-7.23769347262E+03						Apriori clock (usec)		8.7047599E-02						Resid sbdelay (usec)	9.77557E-01	+/- 3.0E-03
Phase delay (usec)			-7.23867102734E+03						Apriori clockrate (us/s)		1.5842101E-07						Resid phdelay (usec)	2.78788E-06	+/- 6.5E-07
Delay rate (us/s)			1.52657671336E+00						Apriori rate (us/s)		1.52657871785E+00						Resid rate (us/s)	-2.00450E-06	+/- 3.6E-09
Total phase (deg)			-106.1						Apriori accel (us/s/s)		3.31843554813E-05						Resid phase (deg)	86.5	+/- 20.1

ph/seg (deg) RMS Theor. Amplitude 0.119 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 26.7 34.8 Search (2048X64) 0.117 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.3 60.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 37.3 40.1 Inc. seg. avg. 0.113 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 43.9 70.0 Inc. frq. avg. 0.111 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
k: az 60.1 el 32.1 pa -73.4 i: az 286.6 el 62.3 pa 84.7 u, v (fr/asec) -11319.294 1807.302 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ki..1305JH Output file: /Exps/c192a/v2/1234/No0001/ki.W.211.1305JH

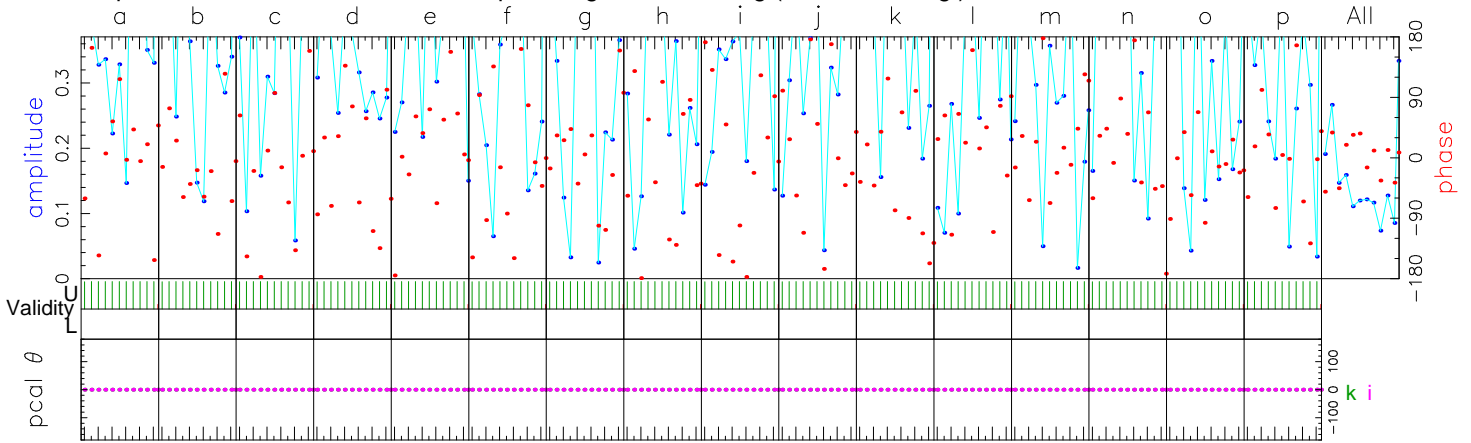
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ki
VLBA_KP - PICOVEL3, fgroup W, pol RL



Fringe quality 0
SNR 5.8
Int time 314.116
Amp 0.124
Phase 1.3
PFD 7.9e-01
Delays (us)
SBD 0.253636
MBD 0.001226
Fringe rate (Hz) 0.263534
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
2020:093:042825
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
20.3	-25.0	-0.8	7.2	48.8	-123.2	4.6	-1.8	138.1	-18.7	-4.1	18.3	-6.9	11.2	-2.8	-17.7	Phase	1.3
0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
228.1	162.9	33.0	41.0	142.1	111.9	134.0	238.6	172.0	120.1	177.5	201.3	34.0	43.8	253.0	5.7	Sbd box	161.5
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	
k 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
ki 0:0	0:0	0:0	0:0	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	
ki 0:0	0:0	0:0	0:0	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	
i 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
i W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

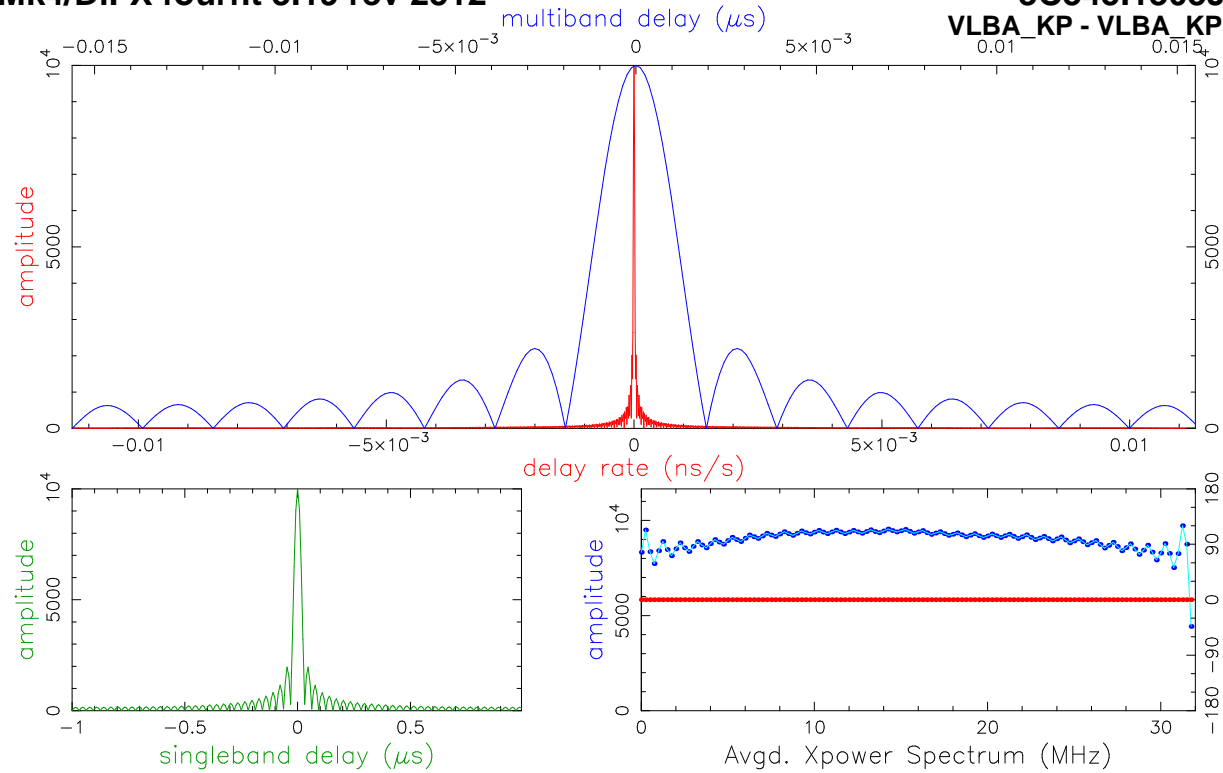
Group delay (usec)(sbd) -7.23841980444E+03 Apriori delay (usec) -7.23867103012E+03 Resid mbdelay (usec) 1.22568E-03 +/- 1.9E-04
 Sband delay (usec) -7.23841739412E+03 Apriori clock (usec) 8.7047599E-02 Resid sbdelay (usec) 2.53636E-01 +/- 3.0E-03
 Phase delay (usec) -7.23867103008E+03 Apriori clockrate (us/s) 1.5842101E-07 Resid phdelay (usec) 4.32904E-08 +/- 6.4E-07
 Delay rate (us/s) 1.52658177722E+00 Apriori rate (us/s) 1.52657871785E+00 Resid rate (us/s) 3.05937E-06 +/- 3.5E-09
 Total phase (deg) -191.2 Apriori accel (us/s/s) 3.31843554813E-05 Resid phase (deg) 1.3 +/- 19.7

RMS Theor. Amplitude 0.124 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 32.7 34.2 Search (2048X64) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 49.8 59.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 52.7 39.4 Inc. seg. avg. 0.123 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.4 68.8 Inc. frq. avg. 0.114 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11319.294 1807.302 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ki..1305JH Output file: /Exps/c192a/v2/1234/No0001/ki.W.228.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

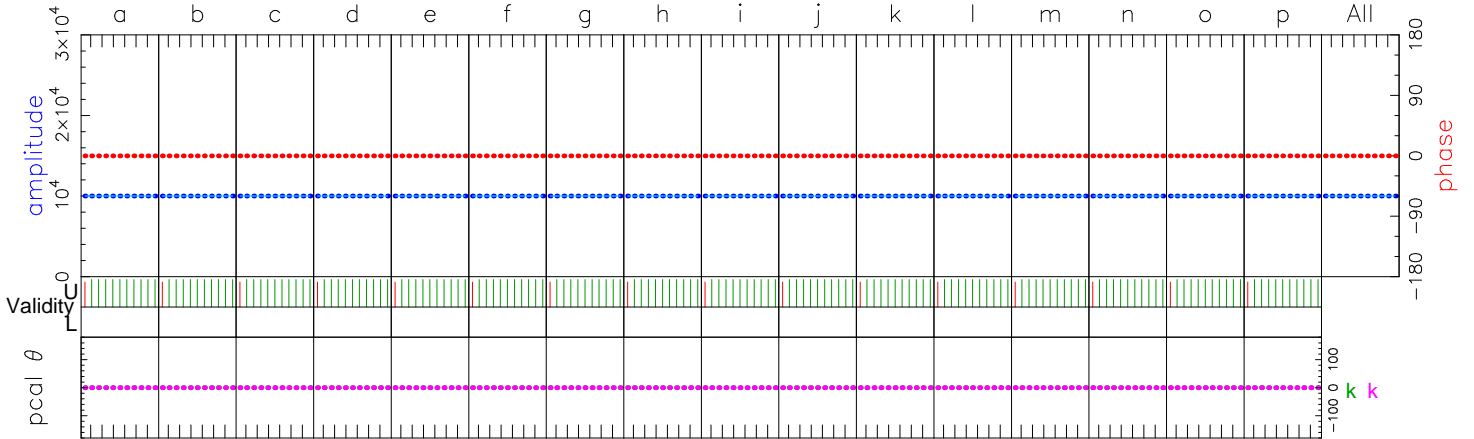


Fringe quality 9

SNR 552186.5
Int time 407.733
Amp 10000.004
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
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., 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	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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k:k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

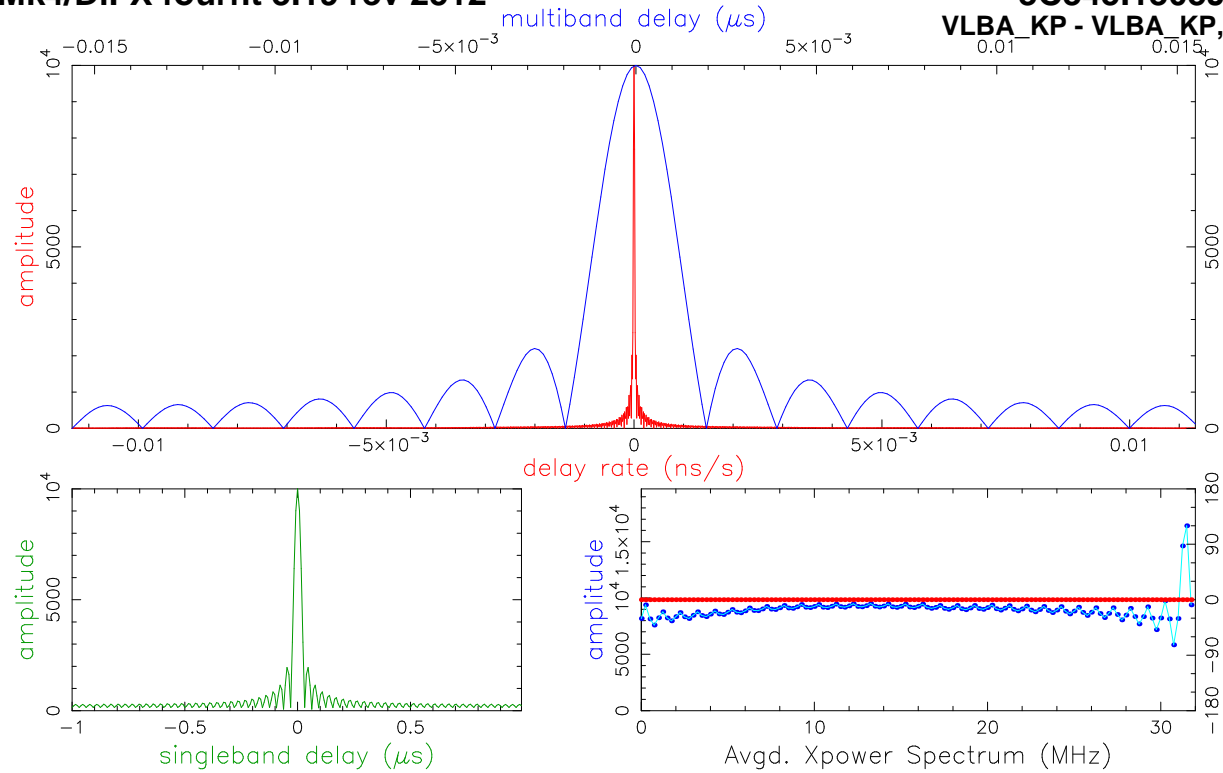
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) 6.00725117498E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 6.00725E-20 +/- 6.7E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.8E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.004 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.003 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.003 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kk..1305JH Output file: /Exps/c192a/v2/1234/No0001/kk.W.183.1305JH

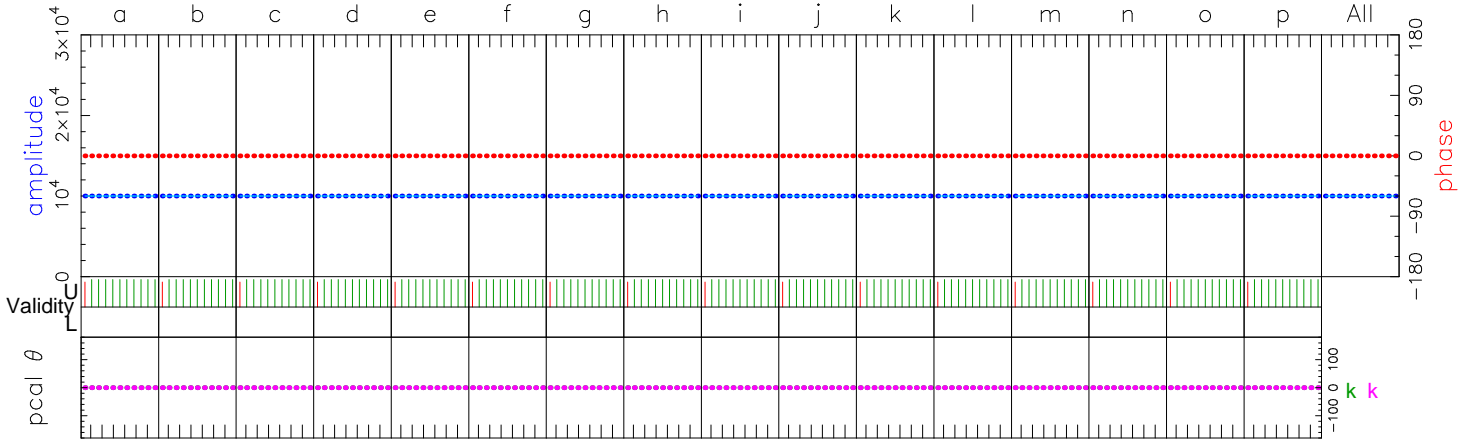
Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 9
SNR 552186.6
Int time 407.733
Amp 10000.005
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 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

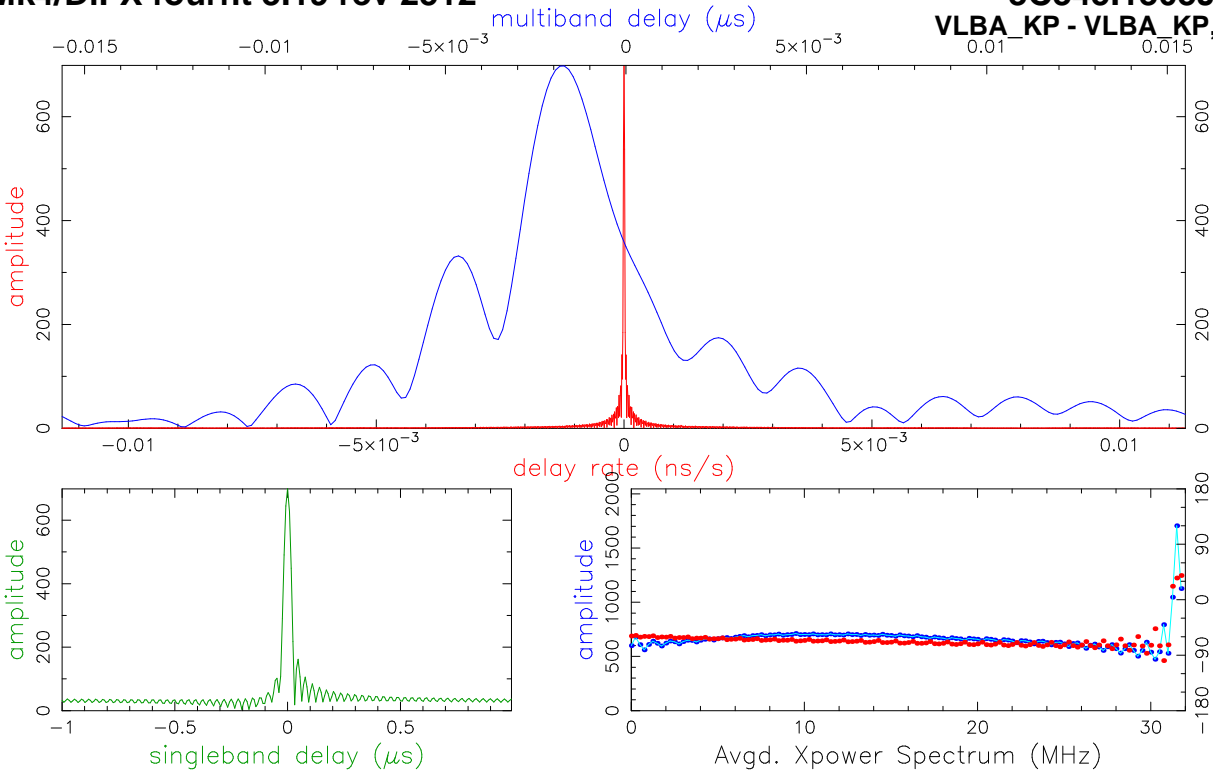


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k:k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
k	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			+/-	2.0E-09	
Sband delay (usec)	0.0000000000E+00			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			0.00000E+00			+/-	3.1E-08	
Phase delay (usec)	1.05639093970E-19			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			1.05639E-19			+/-	6.7E-12	
Delay rate (us/s)	0.0000000000E+00			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			0.00000E+00			+/-	2.8E-14	
Total phase (deg)	0.0			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			0.0			+/-	0.0	

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.005 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 10000.005 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
 k: az 60.1 el 32.1 pa -73.4 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kk..1305JH Output file: /Exps/c192a/v2/1234/No0001/kk.W.201.1305JH simultaneous interpolator

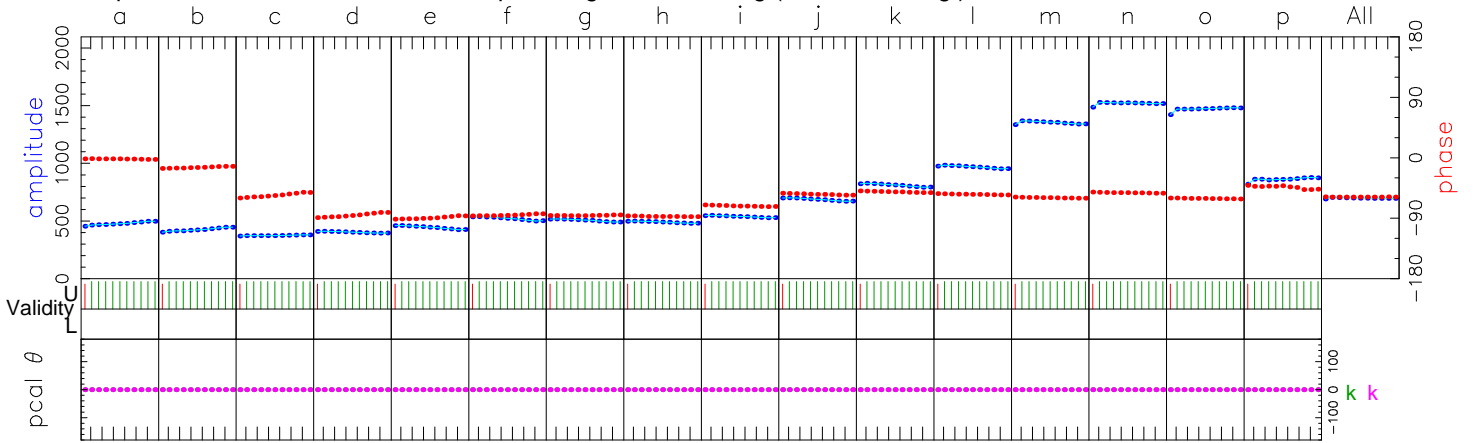
Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 5
SNR 38587.2
Int time 407.733
Amp 698.807
Phase -58.4
PFD 0.0e+00
Delays (us)
SBD -0.000496
MBD -0.001772
Fringe rate (Hz) 0.000003
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
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., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec

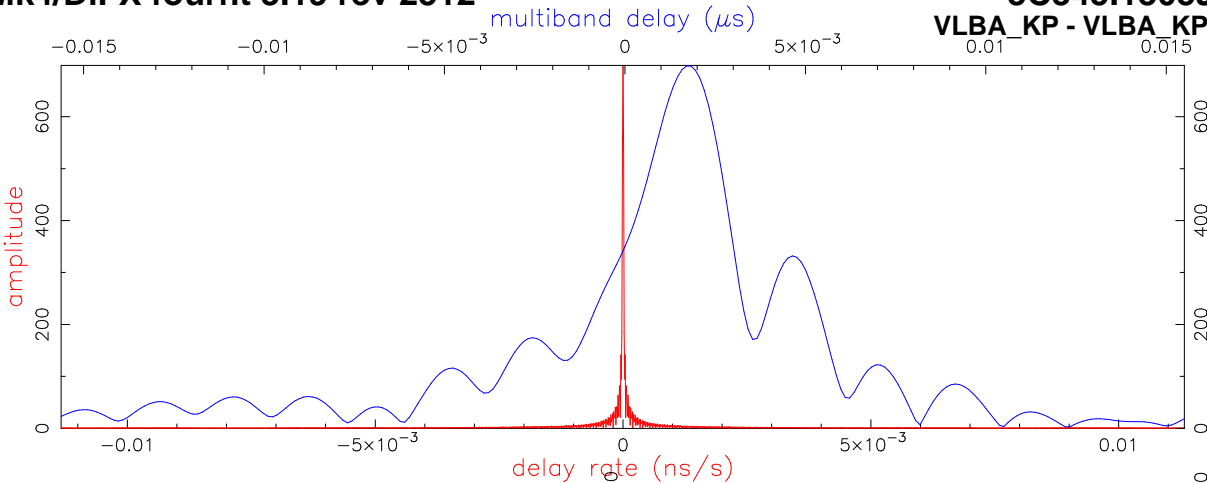


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-1.8	-14.3	-55.7	-85.4	-89.2	-85.2	-85.7	-87.1	-71.6	-54.2	-50.7	-54.4	-59.4	-52.0	-60.6	-43.8	Phase	-58.4				
	478.6	425.7	374.7	403.1	445.2	521.2	506.5	490.7	539.1	687.0	810.9	968.9	1353.0	1519.8	1470.7	861.4	Ampl.	741.0				
	128.6	128.5	128.3	128.6	129.1	128.7	128.8	128.8	129.0	128.9	128.8	128.7	128.8	128.8	128.5	130.5	Sbd box	128.9				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
k: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:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-1.77190625000E-03														Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.77191E-03	+/-	2.8E-08
Sband delay (usec)			-4.96500000000E-04														Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-4.96500E-04	+/-	4.5E-07
Phase delay (usec)			-1.88185887537E-06														Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.88186E-06	+/-	9.6E-11
Delay rate (us/s)			3.89706690771E-11														Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.89707E-11	+/-	4.0E-13
Total phase (deg)																	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-58.4	+/-	0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 698.807 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.5 0.0 Search (2048X64) 689.689 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 26.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.6 0.0 Inc. seg. avg. 698.547 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kk..1305JH Output file: /Exps/c192a/v2/1234/No0001/kk.W.217.1305JH simultaneous interpolator

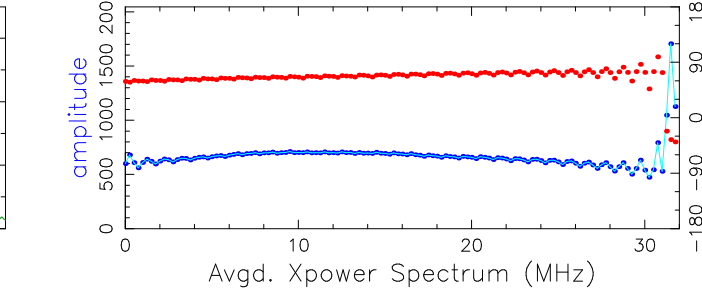
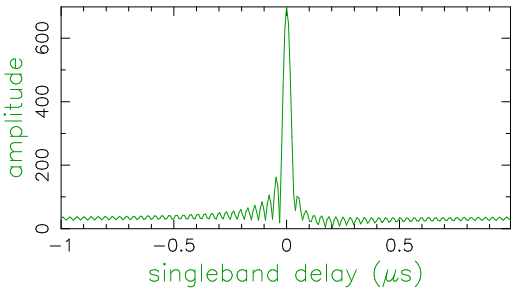
Mk4/DiFX fourfit 3.19 rev 2512

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



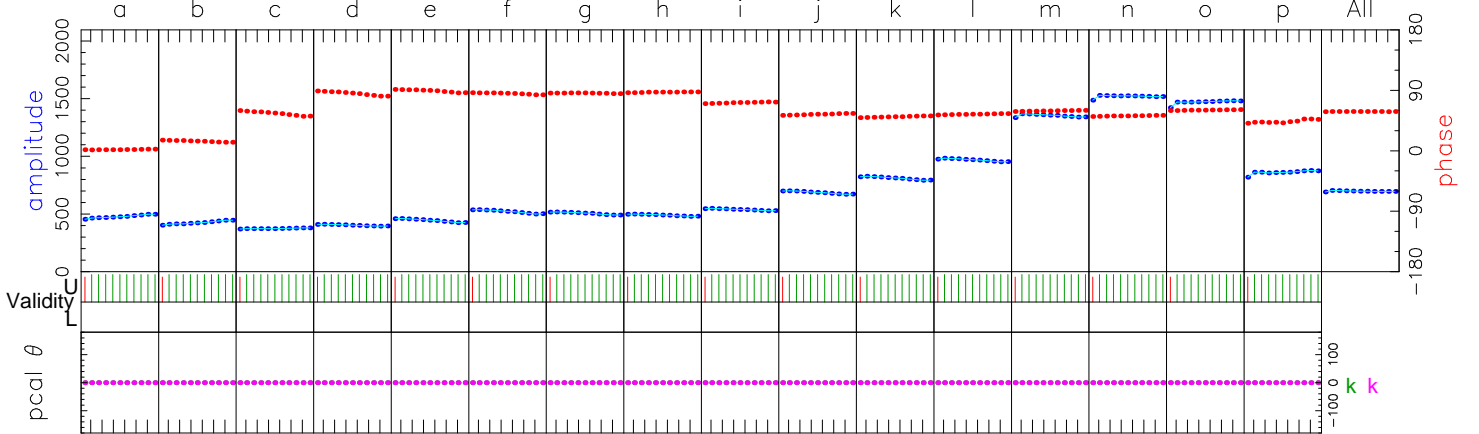
Fringe quality 5

SNR 38587.2
Int time 407.733
Amp 698.807
Phase 58.4
PFD 0.0e+00
Delays (us)
SBD 0.000496
MBD 0.001772
Fringe rate (Hz)
-0.000003
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Yr:day 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042827
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

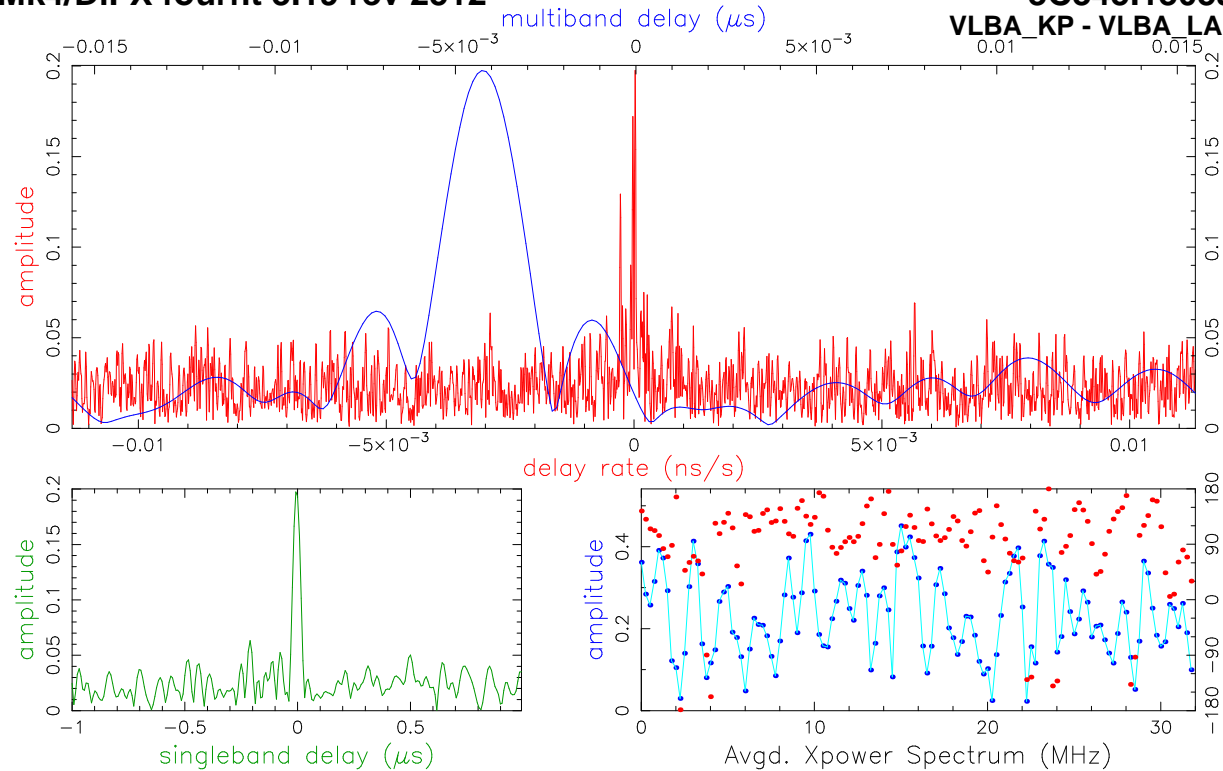


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		APs used
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
k: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
k: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		
k	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
Group delay (usec)(sbd)	1.77190625000E-03			Apriori delay (usec)			0.00000000000E+00			Resid mbdelay (usec)			1.77191E-03			+/-	2.8E-08	
Sband delay (usec)	4.96500000000E-04			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			4.96500E-04			+/-	4.5E-07	
Phase delay (usec)	1.88185887538E-06			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			1.88186E-06			+/-	9.6E-11	
Delay rate (us/s)	-3.89706690771E-11			Apriori rate (us/s)			0.00000000000E+00			Resid rate (us/s)			-3.89707E-11			+/-	4.0E-13	
Total phase (deg)	58.4			Apriori accel (us/s/s)			0.00000000000E+00			Resid phase (deg)			58.4			+/-	0.0	

ph/seg (deg) 0.1 0.0 Theor. Amplitude 698.807 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.5 0.0 Search (2048X64) 689.689 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 26.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.6 0.0 Inc. seg. avg. 698.546 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kk..1305JH Output file: /Exps/c192a/v2/1234/No0001/kk.W.241.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kl
VLBA_KP - VLBA_LA, fgroup W, pol LL

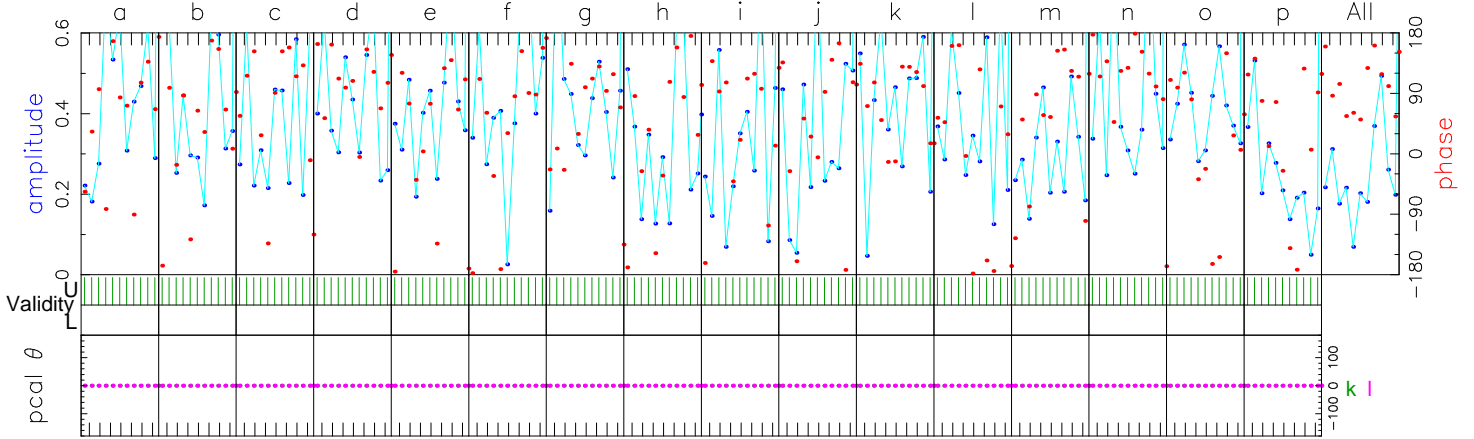


Fringe quality 9

SNR 11.0
Int time 406.934
Amp 0.200
Phase 106.3
PFD 1.0e-19
Delays (us)
SBD -0.004769
MBD -0.004224
Fringe rate (Hz) 0.002225
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042812
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



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

ph/seg (deg) 39.4 18.0
amp/seg (%) 62.6 31.4
ph/frq (deg) 15.1 20.7
amp/frq (%) 34.5 36.2

RMS Theor. Amplitude 0.200 +/- 0.018
Search (2048X64) 0.190
Interp. 0.000
Inc. seg. avg. 0.236
Inc. frq. avg. 0.192

Group delay (usec)(sbd) -1.72674202729E+03
Sband delay (usec) -1.72674257152E+03
Phase delay (usec) -1.72673779959E+03
Delay rate (us/s) 7.40331326295E-02
Total phase (deg) -20.5

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

Resid mbdelay (usec) -4.22426E-03
Resid sbdelay (usec) -4.76850E-03
Resid phdelay (usec) 3.42686E-06
Resid rate (us/s) 2.58340E-08
Resid phase (deg) 106.3

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

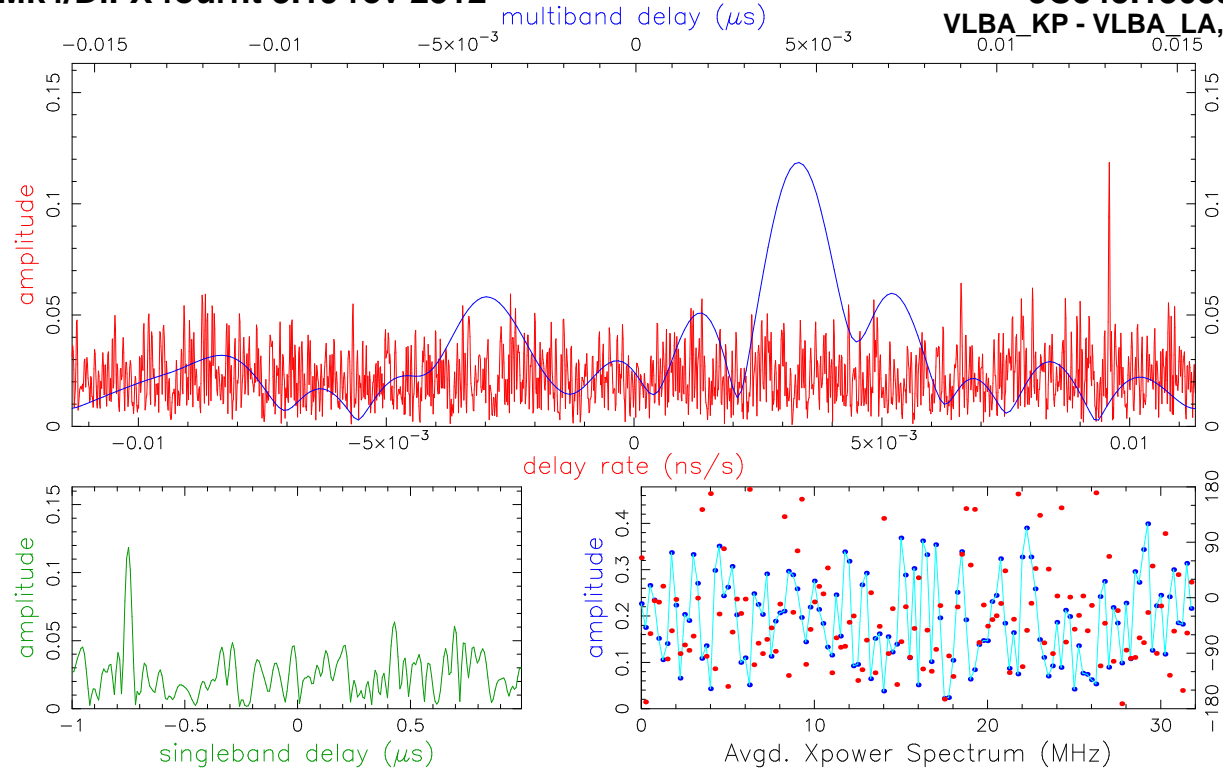
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kl..1305JH Output file: /Exps/c192a/v2/1234/No0001/kl.W.181.1305JH

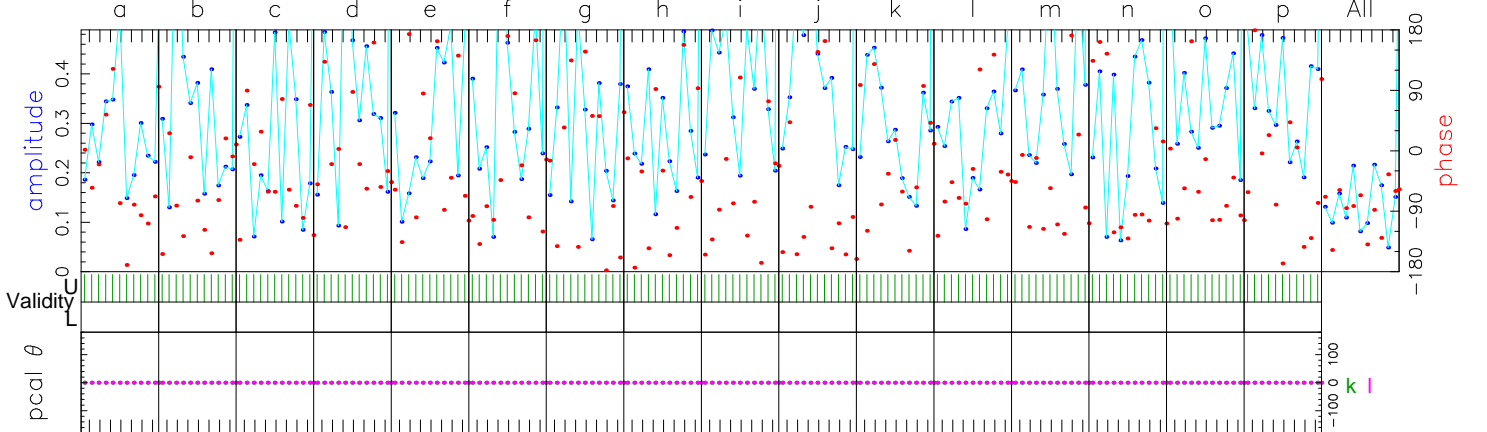
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kl
VLBA_KP - VLBA_LA, fgroup W, pol RR



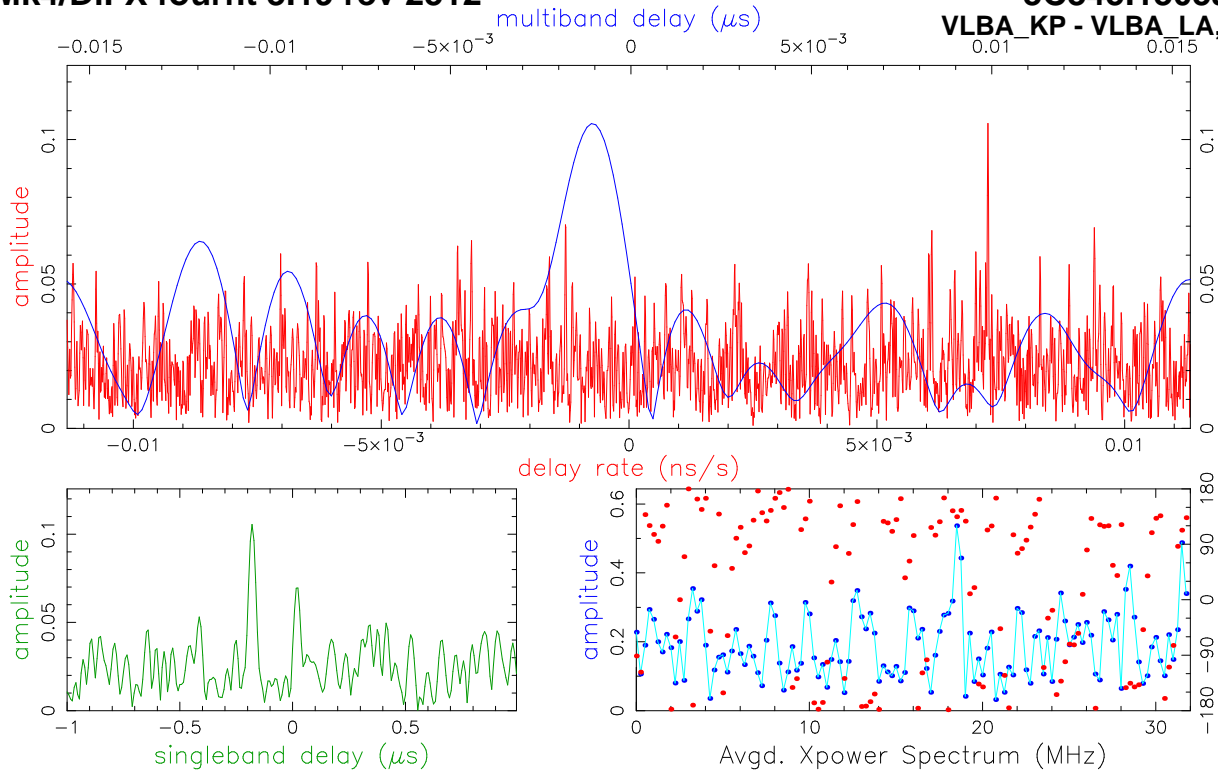
Fringe quality 0
SNR 6.6
Int time 406.934
Amp 0.163
Phase -86.8
PFD 1.4e-02
Delays (us)
SBD -0.751454
MBD 0.004495
Fringe rate (Hz) 0.827250
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042818
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



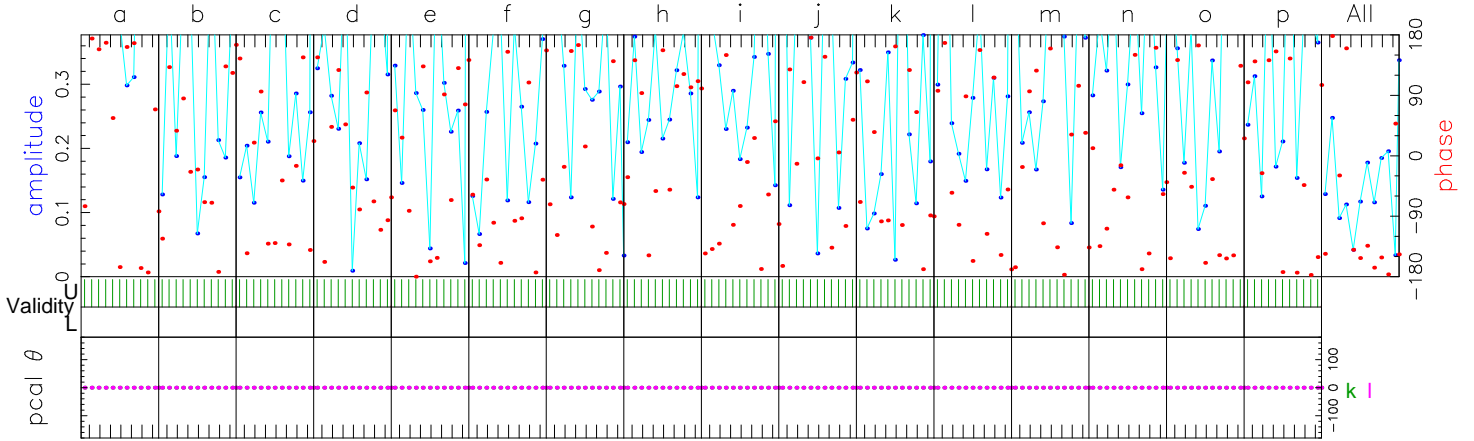
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-64.8	-84.0	-52.6	-62.8	-84.4	-105.6	164.4	-114.8	-103.4	-142.6	-4.6	-67.9	-63.3	-120.7	-59.4	-75.3		Phase	-86.8
	0.2	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.0	0.2	0.3	0.2	0.3	0.2		Ampl.	0.2
	182.9	6.8	136.5	232.8	223.3	70.8	104.3	217.8	85.8	33.0	146.8	140.0	33.8	116.3	33.2	177.9		Sbd box	32.8
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	-1.72748330851E+03			Apriori delay (usec)			-1.72673780302E+03			Resid mbdelay (usec)			4.49451E-03			+/- 1.6E-04			
Sband delay (usec)	-1.72748925652E+03			Apriori clock (usec)			3.3833367E-01			Resid sbdelay (usec)			-7.51454E-01			+/- 2.6E-03			
Phase delay (usec)	-1.72673780582E+03			Apriori clockrate (us/s)			1.5689301E-07			Resid phdelay (usec)			-2.79850E-06			+/- 5.6E-07			
Delay rate (us/s)	7.40427103446E-02			Apriori rate (us/s)			7.40331067955E-02			Resid rate (us/s)			9.60355E-06			+/- 2.4E-09			
Total phase (deg)	-213.6			Apriori accel (us/s/s)			5.19110597338E-06			Resid phase (deg)			-86.8			+/- 17.4			

ph/seg (deg) 34.7 30.2 Search (2048X64) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 55.4 52.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 45.0 34.9 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.2 60.9 Inc. frq. avg. 0.162 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kl..1305JH Output file: /Exps/c192a/v2/1234/No0001/kl.W.204.1305JH



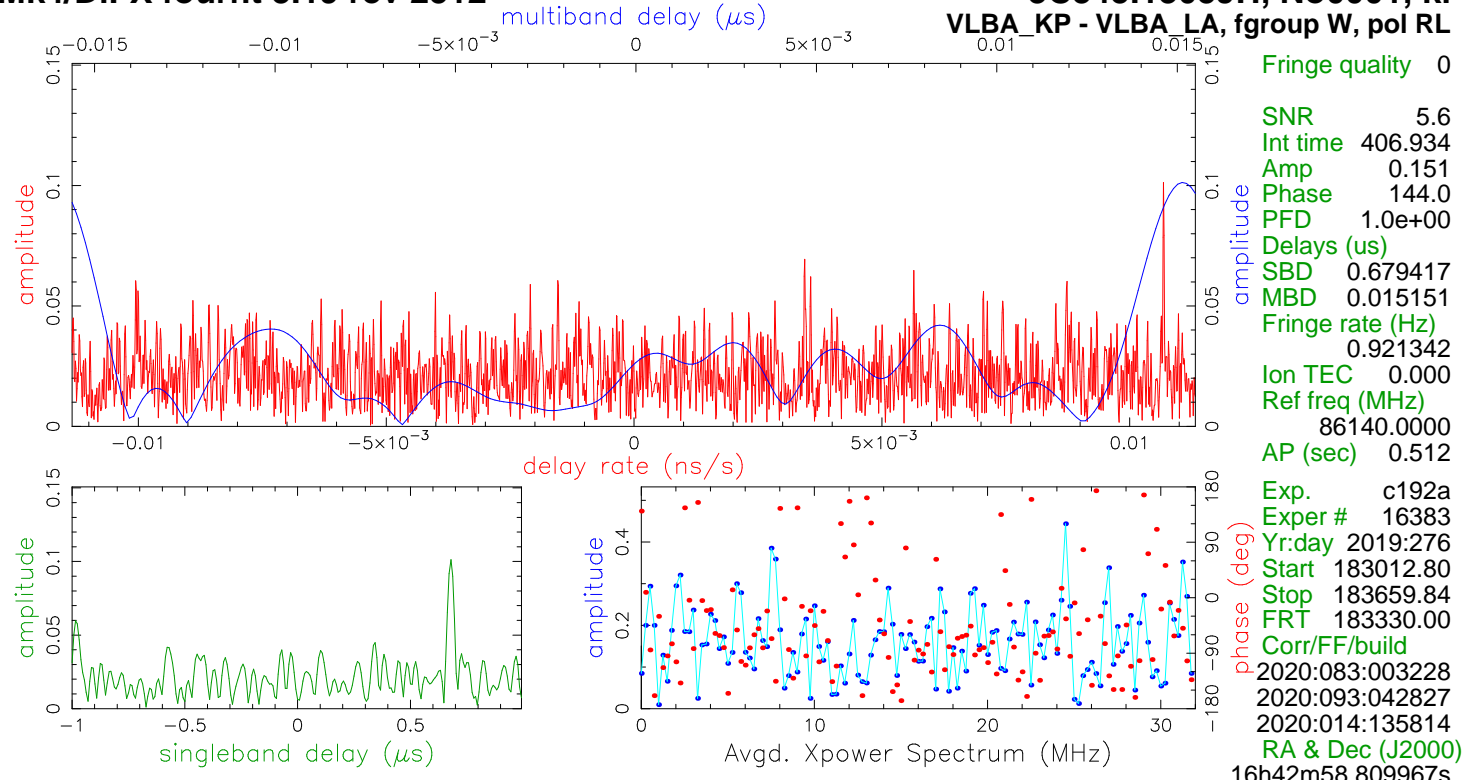
Fringe quality 0
SNR 5.8
Int time 406.934
Amp 0.126
Phase -160.4
PFD 7.6e-01
Delays (us)
SBD -0.179624
MBD -0.001063
Fringe rate (Hz) 0.624774
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042822
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

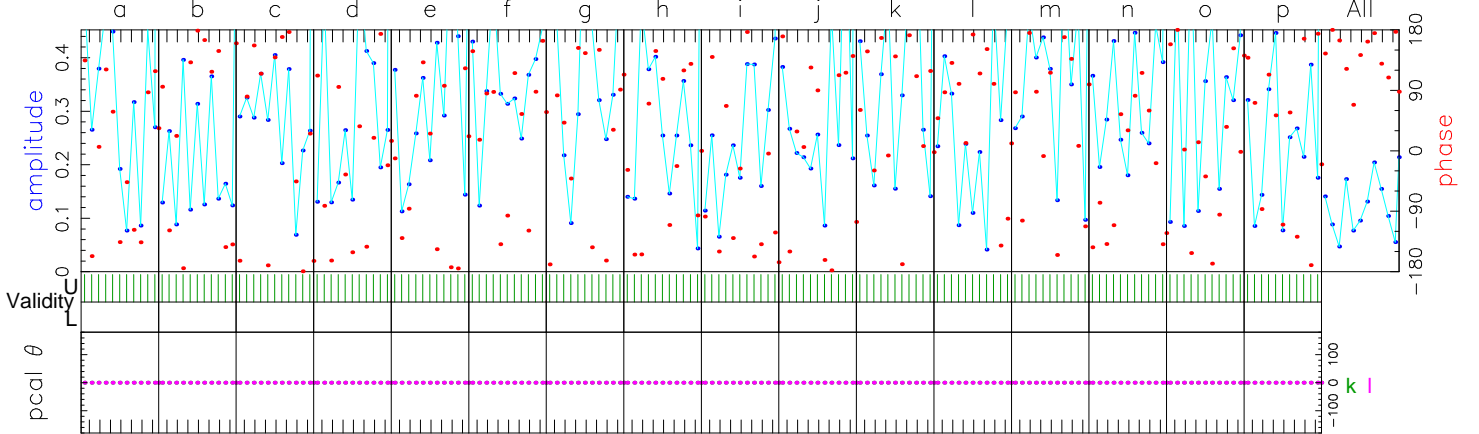


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	170.3	99.4	-112.2	-103.4	167.0	-104.8	-118.5	121.3	-126.7	169.2	-109.3	175.1	165.4	-120.8	-151.0	161.6	Phase	-160.4				
k	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1				
l	105.6	130.6	125.0	167.1	141.1	103.9	214.6	115.0	229.0	188.0	239.0	29.5	145.6	207.2	75.9	58.3	Sbd box	106.0				
k:l	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used					
k:l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-1.72692636579E+03														Apriori delay (usec)	-1.72673780302E+03	Resid mbdelay (usec)	-1.06277E-03	+/-	1.9E-04
Sband delay (usec)			-1.72691742752E+03														Apriori clock (usec)	3.3833367E-01	Resid sbdelay (usec)	-1.79624E-01	+/-	3.0E-03
Phase delay (usec)			-1.72673780819E+03														Apriori clockrate (us/s)	1.5689301E-07	Resid phdelay (usec)	-5.17235E-06	+/-	6.3E-07
Delay rate (us/s)			7.40403598074E-02														Apriori rate (us/s)	7.40331067955E-02	Resid rate (us/s)	7.25301E-06	+/-	2.7E-09
Total phase (deg)					-287.2												Apriori accel (us/s/s)	5.19110597338E-06	Resid phase (deg)	-160.4	+/-	19.7

ph/seg (deg) 63.2 34.1 Search (2048X64) 0.126 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.2 59.5 Interp. 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.1 39.4 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 67.9 68.7 Inc. frq. avg. 0.135 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kl..1305JH Output file: /Exps/c192a/v2/1234/No0001/kl.W.221.1305JH simultaneous interpolator



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

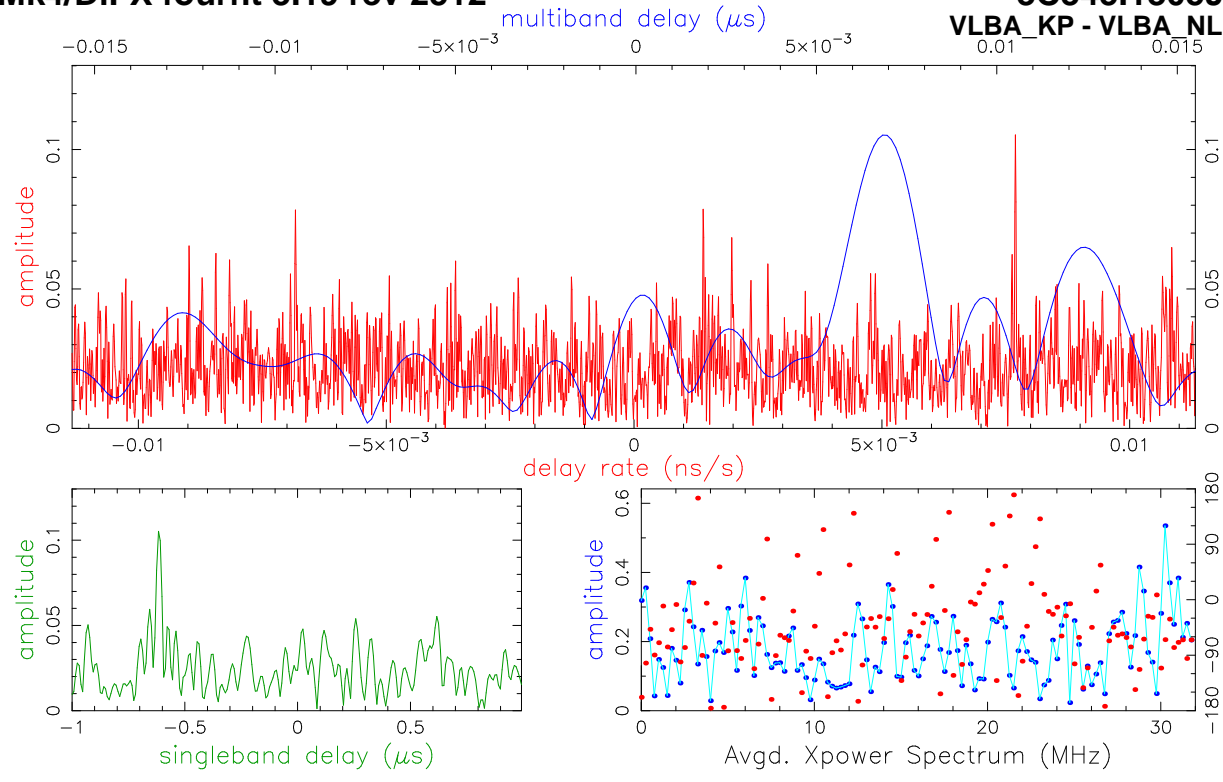


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	113.1	170.6	151.3	-28.0	163.4	128.2	138.3	141.2	-145.3	138.5	117.8	109.7	127.8	-116.1	-164.4	138.9	Phase	144.0
	0.2	0.2	0.3	0.1	0.2	0.2	0.3	0.1	0.2	0.3	0.2	0.2	0.2	0.0	0.1	0.1	Ampl.	0.1
	80.5	177.7	215.1	135.6	61.2	5.0	127.3	194.9	2.7	18.5	67.2	88.4	27.0	249.5	193.6	5.6	Sbd box	216.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-1.72606640159E+03			Apriori delay (usec)			-1.72673780302E+03			Resid mbdelay (usec)			1.51514E-02			+/- 1.9E-04		
Sband delay (usec)	-1.72605838602E+03			Apriori clock (usec)			3.3833367E-01			Resid sbdelay (usec)			6.79417E-01			+/- 3.1E-03		
Phase delay (usec)	-1.72673779838E+03			Apriori clockrate (us/s)			1.5689301E-07			Resid phdelay (usec)			4.64284E-06			+/- 6.6E-07		
Delay rate (us/s)	7.40438026669E-02			Apriori rate (us/s)			7.40331067955E-02			Resid rate (us/s)			1.06959E-05			+/- 2.8E-09		
Total phase (deg)	17.2			Apriori accel (us/s/s)			5.19110597338E-06			Resid phase (deg)			144.0			+/- 20.5		

	RMS	Theor.	Amplitude	0.151 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	32.8	35.5	Search (2048X64)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	49.3	62.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	60.8	41.0	Inc. seg. avg.	0.145	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.4	71.6	Inc. frq. avg.	0.146	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

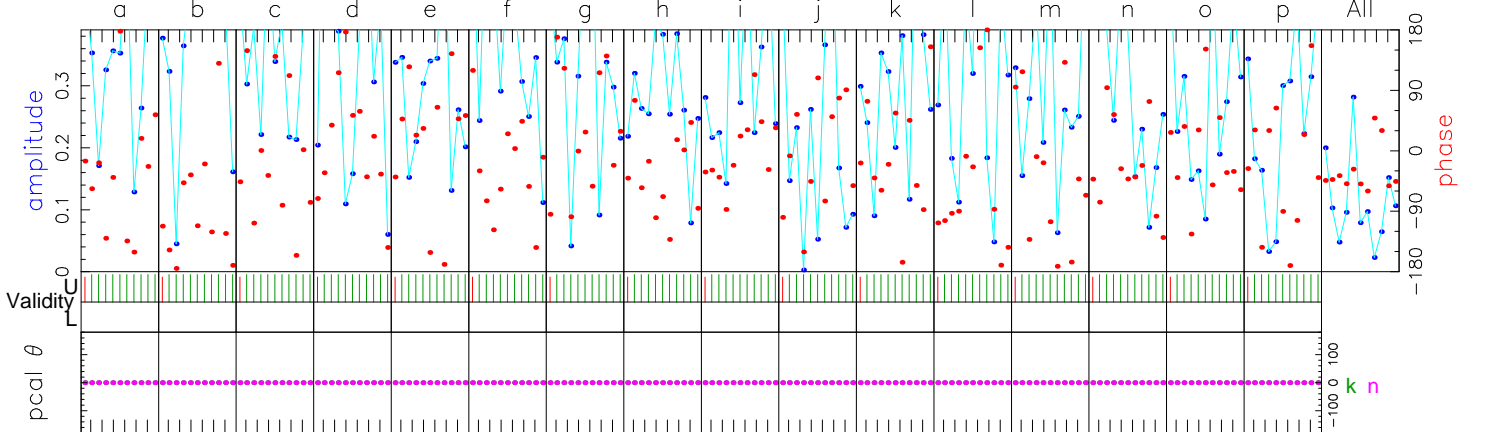
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kn
VLBA_KP - VLBA_NL, fgroup W, pol LL



Fringe quality 0
SNR 5.9
Int time 407.728
Amp 0.130
Phase -38.6
PFD 6.1e-01
Delays (us)
SBD -0.614708
MBD 0.006913
Fringe rate (Hz) 0.664243
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
2020:093:042812
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

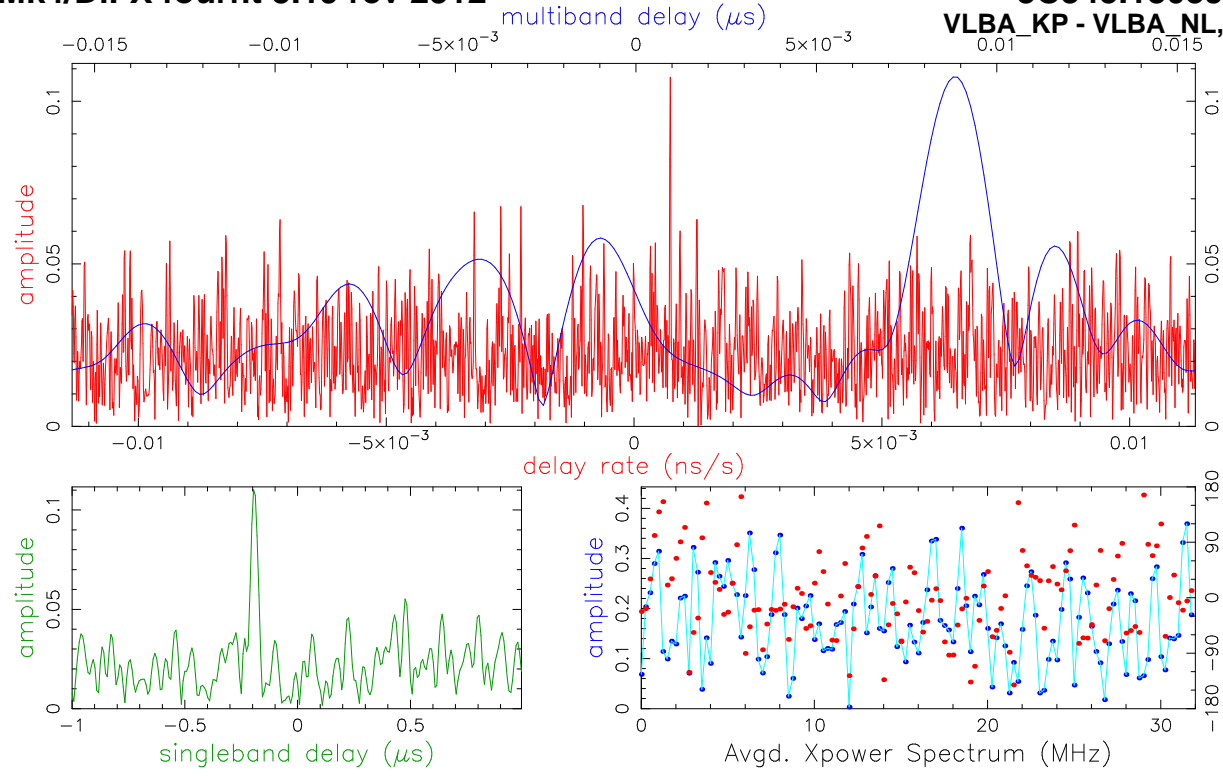


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-34.3	-104.5	-67.2	-2.4	74.2	-38.3	-0.7	-42.2	-1.1	-6.1	-46.7	-131.8	-80.9	-40.0	-17.8	-77.7		Phase -38.6					
	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.2	0.2	0.1		Ampl. 0.1					
	41.8	184.2	90.1	99.0	148.8	89.6	3.9	1.4	134.1	236.2	220.9	78.4	246.4	137.3	50.9	106.7		Sbd box 50.3					
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
k: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					
k: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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-5.11473736746E+03															Apriori delay (usec)	-5.11411928081E+03	Resid mbdelay (usec)	6.91335E-03	+/-	1.8E-04
Sband delay (usec)			-5.11473398931E+03															Apriori clock (usec)	-2.6877258E+01	Resid sbdelay (usec)	-6.14708E-01	+/-	2.9E-03
Phase delay (usec)			-5.11411928205E+03															Apriori clockrate (us/s)	-3.2880250E-07	Resid phdelay (usec)	-1.24520E-06	+/-	6.3E-07
Delay rate (us/s)			2.61983550981E-01															Apriori rate (us/s)	2.61975839775E-01	Resid rate (us/s)	7.71121E-06	+/-	2.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	1.71830403617E-05	Resid phase (deg)	-38.6	+/-	19.4

ph/seg (deg) 35.1 32.2 Amplitude 0.130 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 65.8 56.2 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 50.4 38.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 56.3 67.8 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1924.821 216.344 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kn..1305JH Output file: /Exps/c192a/v2/1234/No0001/kn.W.182.1305JH simultaneous interpolator

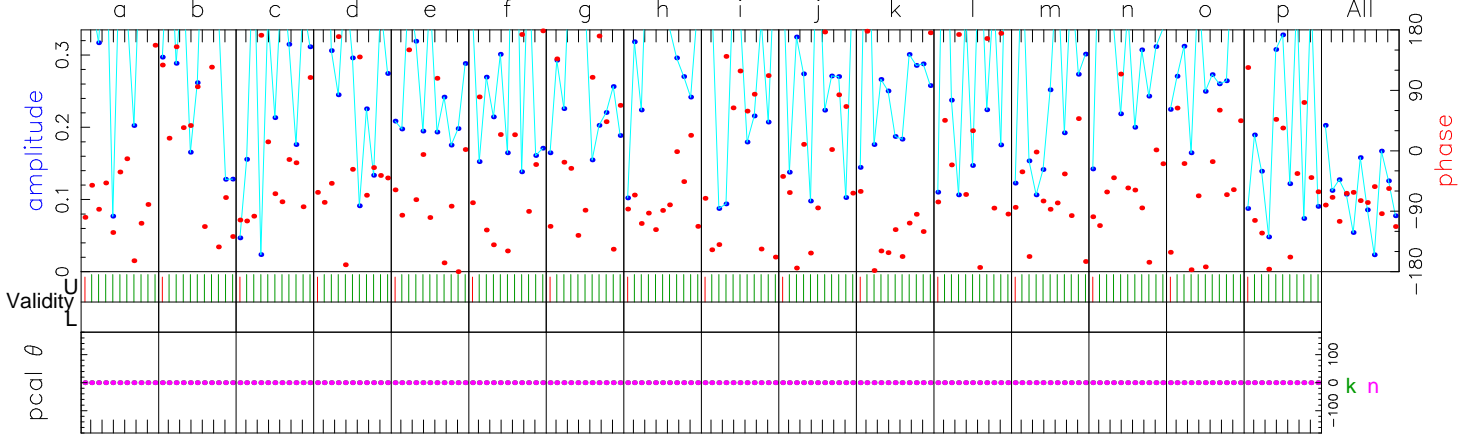
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kn
VLBA_KP - VLBA_NL, fgroup W, pol RR



Fringe quality 0
SNR 6.2
Int time 407.728
Amp 0.112
Phase -79.3
PFD 1.8e-01
Delays (us)
SBD -0.192530
MBD 0.008774
Fringe rate (Hz)
0.063265
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
2020:093:042816
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					
	-78.0	121.1	-58.8	-68.0	-103.7	-60.4	-100.3	-79.9	171.1	-56.6	-144.4	-89.4	-72.3	-64.9	-32.4	-22.5		Phase	-79.3				
	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1		Ampl.	0.1				
	105.5	20.0	227.3	106.8	151.1	177.9	170.0	6.2	1.4	250.2	215.6	42.2	8.0	149.1	178.0	187.0		Sbd box	104.4				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
k: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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
k	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					
																		Tracks					
Group delay (usec)(sbd)			-5.11429800728E+03															Apriori delay (usec)	-5.11411928081E+03	Resid mbdelay (usec)	8.77353E-03	+/-	1.8E-04
Sband delay (usec)			-5.11431181131E+03															Apriori clock (usec)	-2.6877258E+01	Resid sbdelay (usec)	-1.92530E-01	+/-	2.8E-03
Phase delay (usec)			-5.11411928337E+03															Apriori clockrate (us/s)	-3.2880250E-07	Resid phdelay (usec)	-2.55807E-06	+/-	6.0E-07
Delay rate (us/s)			2.61976574216E-01															Apriori rate (us/s)	2.61975839775E-01	Resid rate (us/s)	7.34441E-07	+/-	2.5E-09
Total phase (deg)																		Apriori accel (us/s/s)	1.71830403617E-05	Resid phase (deg)	-79.3	+/-	18.6

ph/seg (deg) 18.9 30.8
amp/seg (%) 43.9 53.8
ph/frq (deg) 59.7 37.2
amp/frq (%) 67.4 65.0

RMS Theor. Amplitude 0.112 +/- 0.018
Search (2048X64) 0.104
Interp. 0.000
Inc. seg. avg. 0.098
Inc. frq. avg. 0.114

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

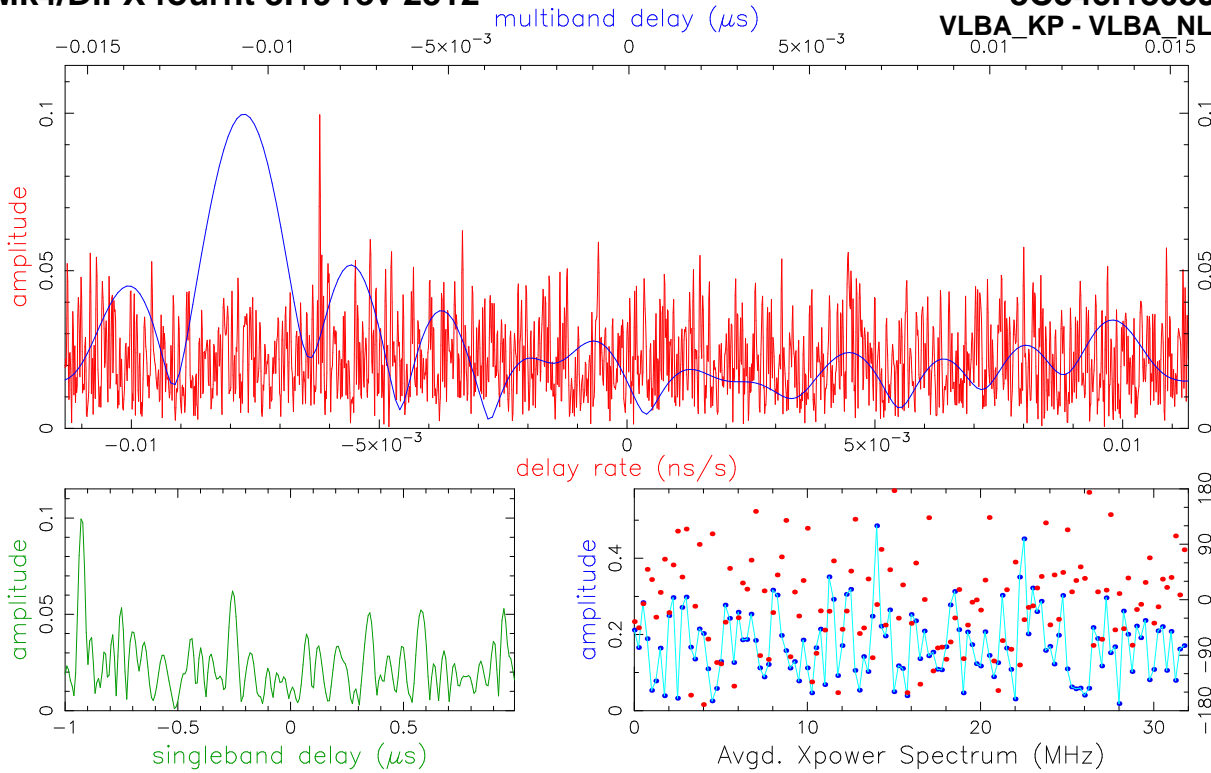
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1924.821 216.344 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kn..1305JH Output file: /Exps/c192a/v2/1234/No0001/kn.W.200.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kn
VLBA_KP - VLBA_NL, fgroup W, pol LR

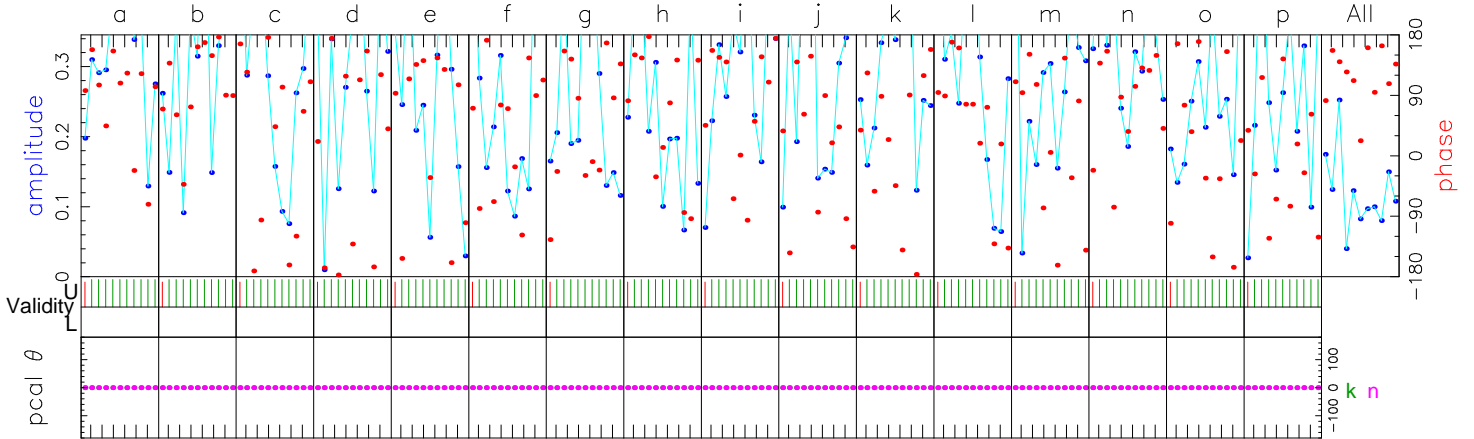


Fringe quality 0

SNR 5.6
Int time 407.728
Amp 0.115
Phase 122.1
PFD 9.9e-01
Delays (us)
SBD -0.926453
MBD -0.010602
Fringe rate (Hz)
-0.535175
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
2020:093:042822
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

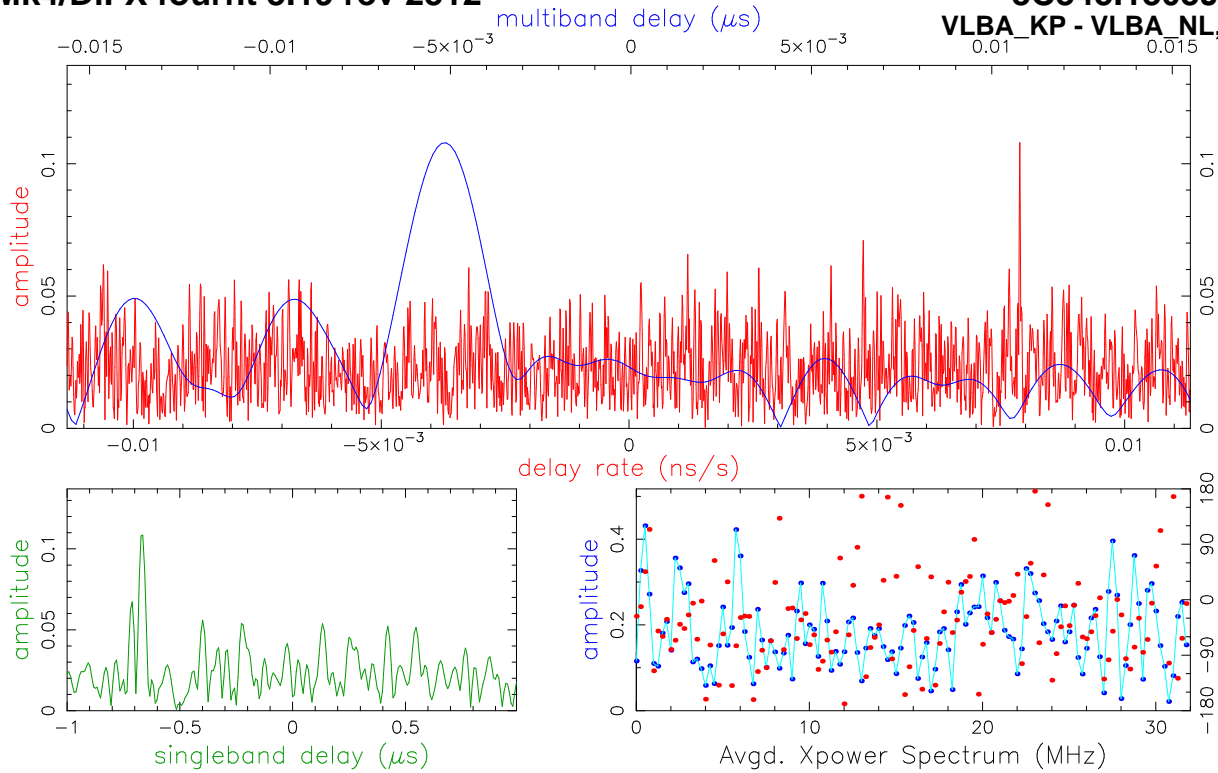


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-5.11503613252E+03															
Sband delay (usec)			-5.11504573381E+03															
Phase delay (usec)			-5.11411927687E+03															
Delay rate (us/s)			2.61969626922E-01															
Total phase (deg)				-183.4														
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)																		
SampCntNorm: enabled																		
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 TEC																		

ph/seg (deg) 40.0 33.9 Search (2048X64) 0.098 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 56.4 59.2 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 58.5 40.9 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 65.1 71.4 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
k: az 60.1 el 32.1 pa -73.4 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1924.821 216.344 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kn..1305JH Output file: /Exps/c192a/v2/1234/No0001/kn.W.218.1305JH

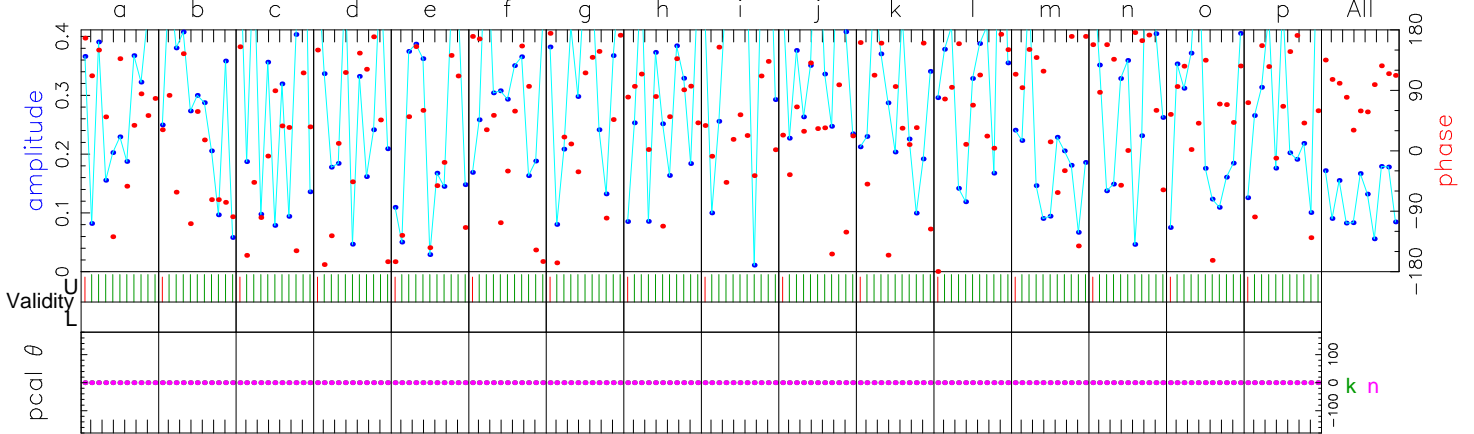
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kn
VLBA_KP - VLBA_NL, fgroup W, pol RL



Fringe quality 0
SNR 6.2
Int time 407.728
Amp 0.137
Phase 97.0
PFD 1.8e-01
Delays (us)
SBD -0.667835
MBD -0.005158
Fringe rate (Hz) 0.679751
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
2020:093:042826
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

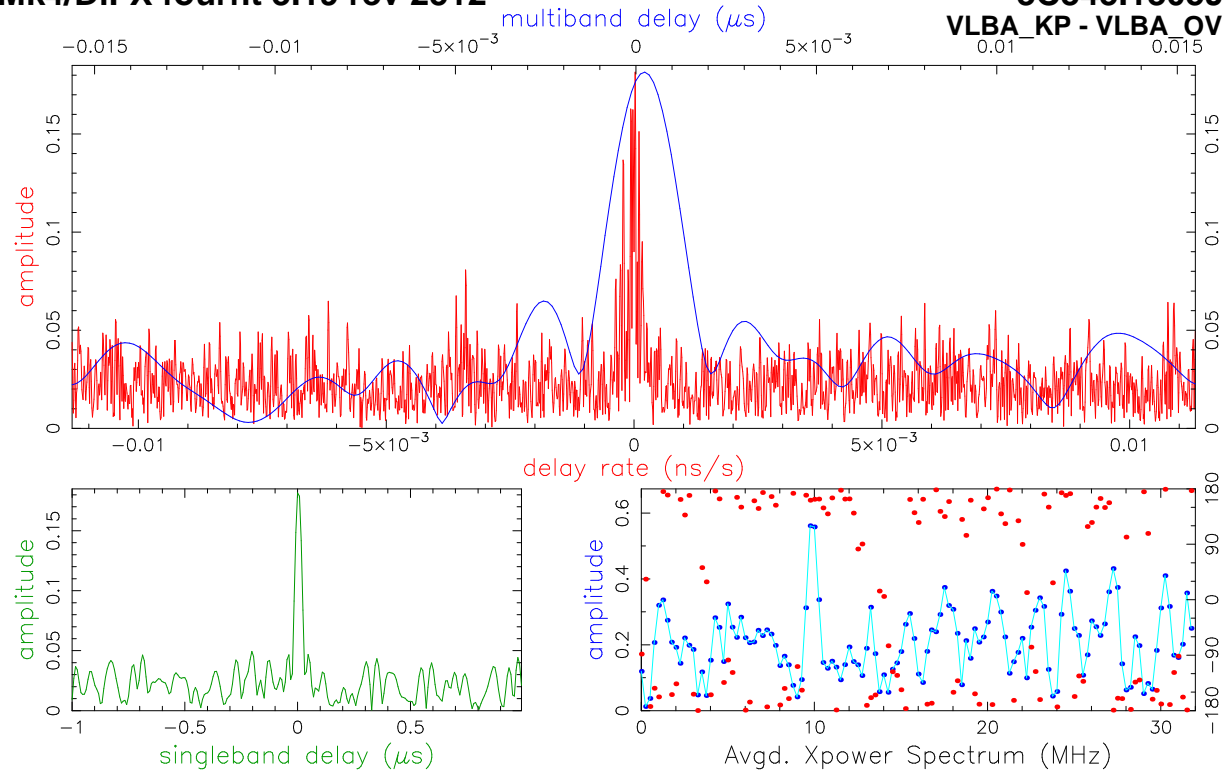


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	92.8	-9.7	108.5	137.7	111.1	113.9	119.7	90.1	52.2	51.2	128.5	112.5	141.3	138.3	78.1	94.3	Phase	97.0				
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1				
	72.9	253.5	8.8	140.5	59.0	16.4	50.2	43.1	37.3	98.0	182.7	126.4	111.6	200.4	198.8	117.2	Sbd box	43.5				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k: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					
k: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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
k	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					
																	Tracks					
Group delay (usec)(sbd)			-5.11478068831E+03														Apriori delay (usec)	-5.11411928081E+03	Resid mbdelay (usec)	-5.15750E-03	+/-	1.8E-04
Sband delay (usec)			-5.11478711581E+03														Apriori clock (usec)	-2.6877258E+01	Resid sbdelay (usec)	-6.67835E-01	+/-	2.8E-03
Phase delay (usec)			-5.11411927768E+03														Apriori clockrate (us/s)	-3.2880250E-07	Resid phdelay (usec)	3.12762E-06	+/-	6.0E-07
Delay rate (us/s)			2.61983731009E-01														Apriori rate (us/s)	2.61975839775E-01	Resid rate (us/s)	7.89123E-06	+/-	2.5E-09
Total phase (deg)					-208.6												Apriori accel (us/s/s)	1.71830403617E-05	Resid phase (deg)	97.0	+/-	18.6

ph/seg (deg) 31.0 30.9 Search (2048X64) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 41.8 53.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 41.0 37.3 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 48.1 65.0 Inc. frq. avg. 0.130 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1924.821 216.344 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kn..1305JH Output file: /Exps/c192a/v2/1234/No0001/kn.W.238.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ko
VLBA_KP - VLBA_OV, fgroup W, pol LL

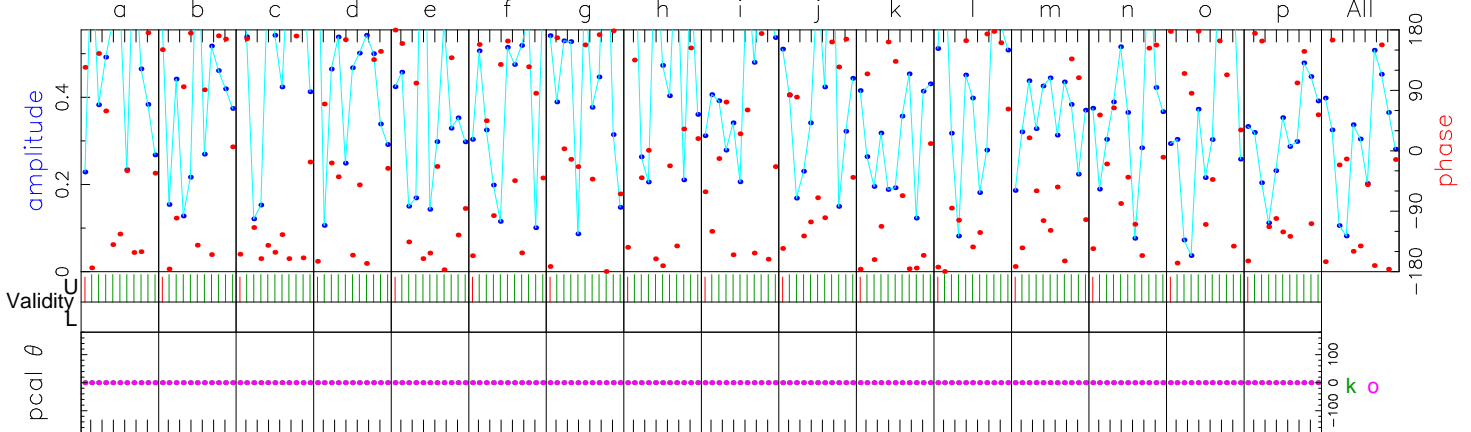


Fringe quality 9

SNR 10.2
Int time 407.733
Amp 0.185
Phase -163.1
PFD 7.5e-16
Delays (us)
SBD 0.003316
MBD 0.000250
Fringe rate (Hz) 0.001984
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
2020:093:042813
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

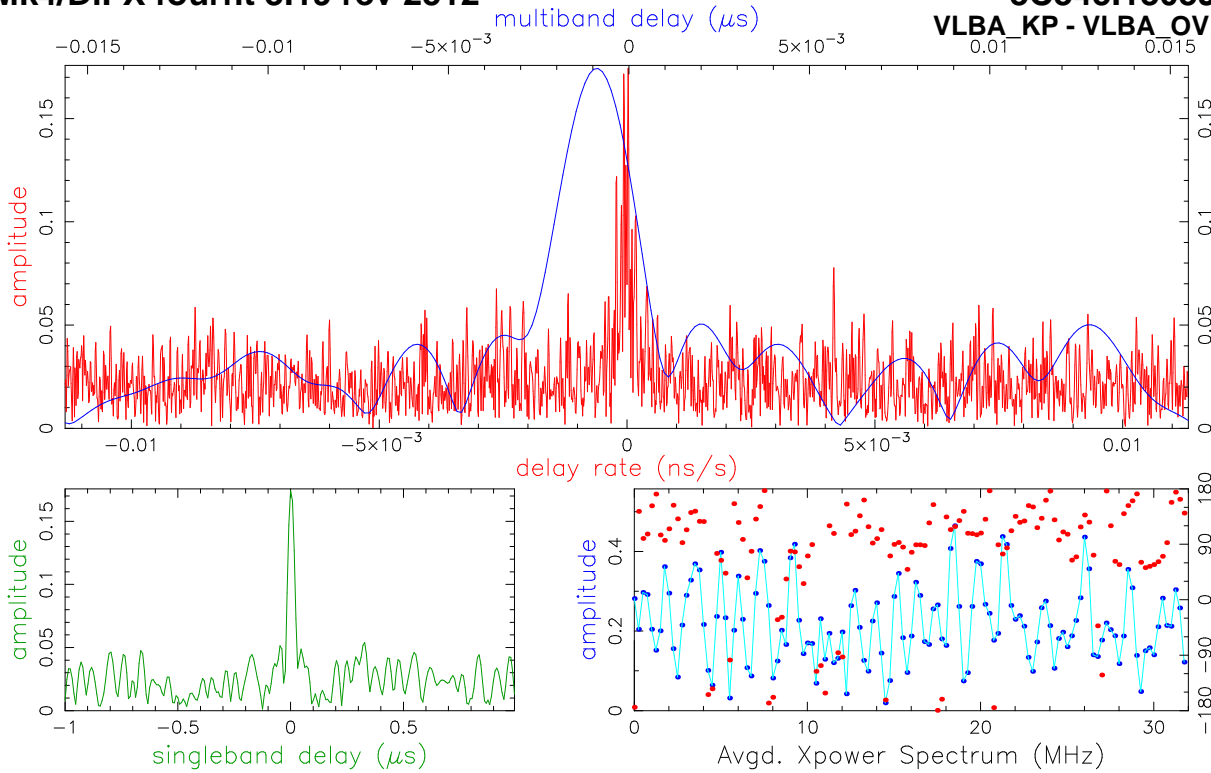
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	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
	-160.2	-172.6	-158.1	-143.1	-165.6	-177.7	-173.9	-170.6	-143.3	-144.0	-164.8	-179.4	-120.3	-137.9	176.9	-165.4	Phase	-163.1
	0.3	0.2	0.5	0.1	0.3	0.1	0.2	0.2	0.1	0.2	0.1	0.3	0.2	0.0	0.2	0.2	Ampl.	0.2
	23.4	215.3	129.1	204.7	198.2	234.0	131.2	152.8	236.9	184.4	239.2	130.0	226.2	87.8	41.7	66.3	Sbd box	129.4
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k: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	
k: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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	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)	6.85758120372E+02			Apriori delay (usec)			6.85757870171E+02			Resid mbdelay (usec)			2.50202E-04			+/- 1.1E-04		
Sband delay (usec)	6.85761186671E+02			Apriori clock (usec)			-1.7031700E+01			Resid sbdelay (usec)			3.31650E-03			+/- 1.7E-03		
Phase delay (usec)	6.85757864910E+02			Apriori clockrate (us/s)			-1.9555999E-07			Resid phdelay (usec)			-5.26043E-06			+/- 3.6E-07		
Delay rate (us/s)	3.11211150756E-02			Apriori rate (us/s)			3.11210920389E-02			Resid rate (us/s)			2.30366E-08			+/- 1.5E-09		
Total phase (deg)	174.0			Apriori accel (us/s/s)			-9.19914500056E-06			Resid phase (deg)			-163.1			+/- 11.2		
ph/seg (deg)	RMS	Theor.	Amplitude		0.185 +/- 0.018		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5								
amp/seg (%)	86.5	18.6	Search (2048X64)		0.177		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000					
ph/frq (deg)	94.5	32.5	Interp.		0.000		Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
amp/frq (%)	18.5	22.4	Inc. seg. avg.		0.290		Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011					
	53.0	39.2	Inc. frq. avg.		0.174		Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00			
k: az 60.1 el 32.1 pa -73.4	o: az 60.7 el 29.9 pa -64.6			u,v (fr/asec) -248.865 -1113.881									simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c192a/v2/1234/No0001/ko..1305JH			Output file: /Exps/c192a/v2/1234/No0001/ko.W.186.1305JH														

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ko
VLBA_KP - VLBA_OV, fgroup W, pol RR

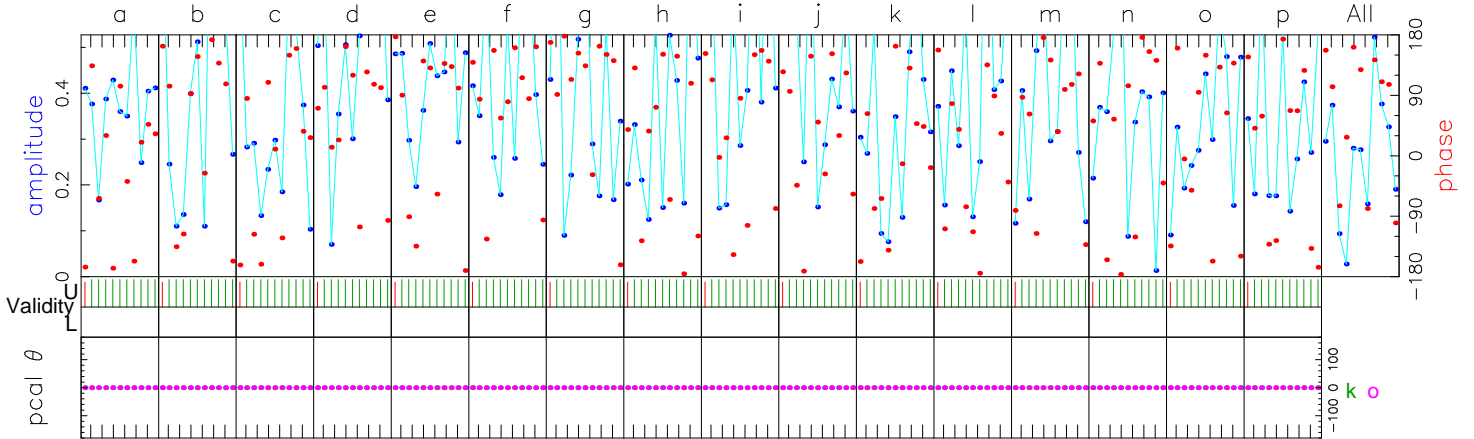


Fringe quality 9

SNR 9.7
Int time 407.733
Amp 0.176
Phase 135.3
PFD 1.2e-13
Delays (us)
SBD 0.002125
MBD -0.000896
Fringe rate (Hz) 0.001908
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
2020:093:042818
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



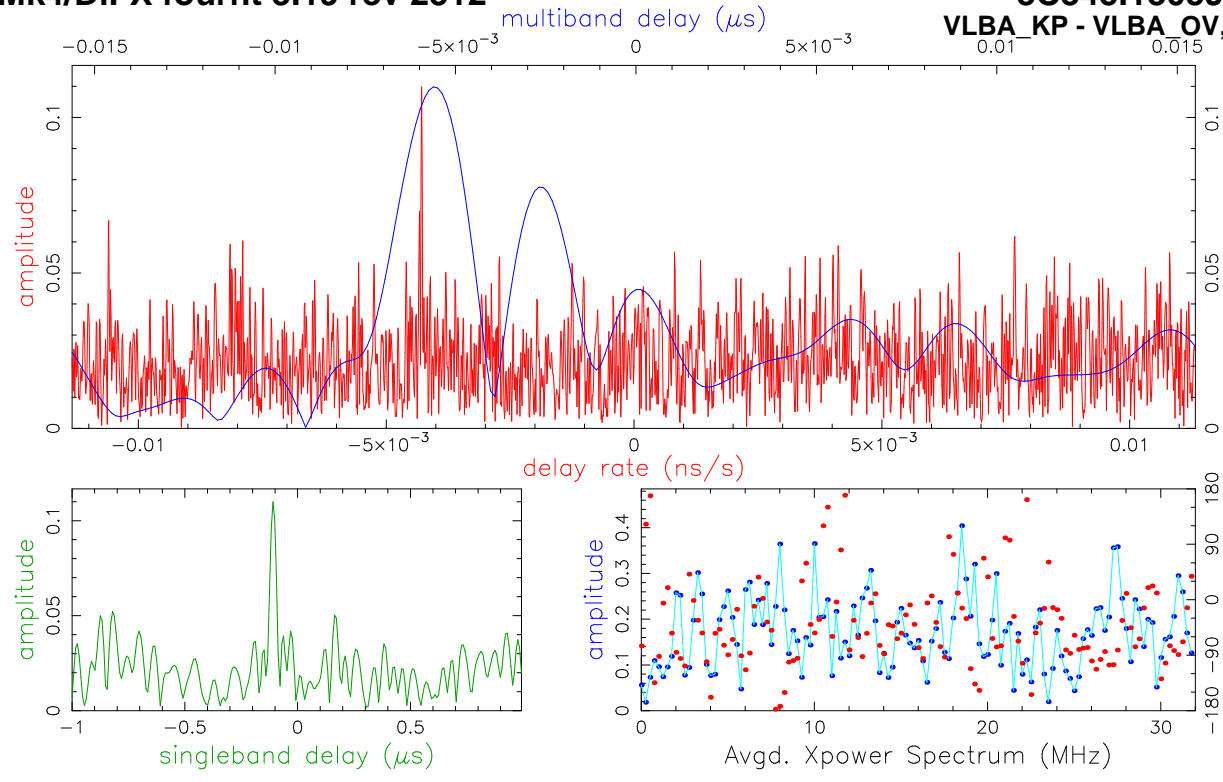
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	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)	6.85756974341E+02			Apriori delay (usec)			6.85757870171E+02			Resid mbdelay (usec)			-8.95830E-04			+/- 1.1E-04		
Sband delay (usec)	6.85759995171E+02			Apriori clock (usec)			-1.7031700E+01			Resid sbdelay (usec)			2.12500E-03			+/- 1.8E-03		
Phase delay (usec)	6.85757874535E+02			Apriori clockrate (us/s)			-1.9555999E-07			Resid phdelay (usec)			4.36448E-06			+/- 3.8E-07		
Delay rate (us/s)	3.11211141884E-02			Apriori rate (us/s)			3.11210920389E-02			Resid rate (us/s)			2.21495E-08			+/- 1.6E-09		
Total phase (deg)	112.5			Apriori accel (us/s/s)			-9.19914500056E-06			Resid phase (deg)			135.3			+/- 11.8		
ph/seg (deg)	RMS	Theor.	Amplitude		0.176 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000			
amp/seg (%)	82.9	19.6	Search (2048X64)		0.174		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016 0.016					
ph/frq (deg)	92.0	34.1	Interp.		0.000		Sample rate(MISamp/s): 64				dr window (ns/s)		-0.011 0.011					
amp/frq (%)	31.2	23.6	Inc. seg. avg.		0.251		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00 0.00					
	47.0	41.2	Inc. frq. avg.		0.173													

k: az 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ko..1305JH Output file: /Exps/c192a/v2/1234/No0001/ko.W.205.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ko
VLBA_KP - VLBA_OV, fgroup W, pol LR

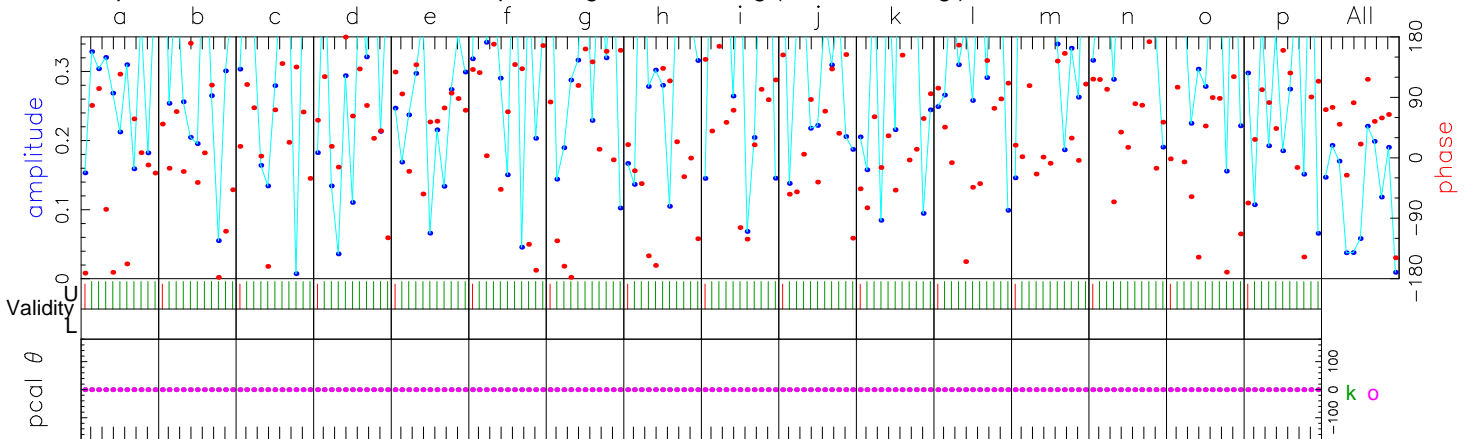


Fringe quality 0

SNR 6.1
Int time 407.733
Amp 0.117
Phase 68.1
PFD 2.8e-01
Delays (us)
SBD -0.108489
MBD -0.005564
Fringe rate (Hz)
-0.369229
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
2020:093:042824
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

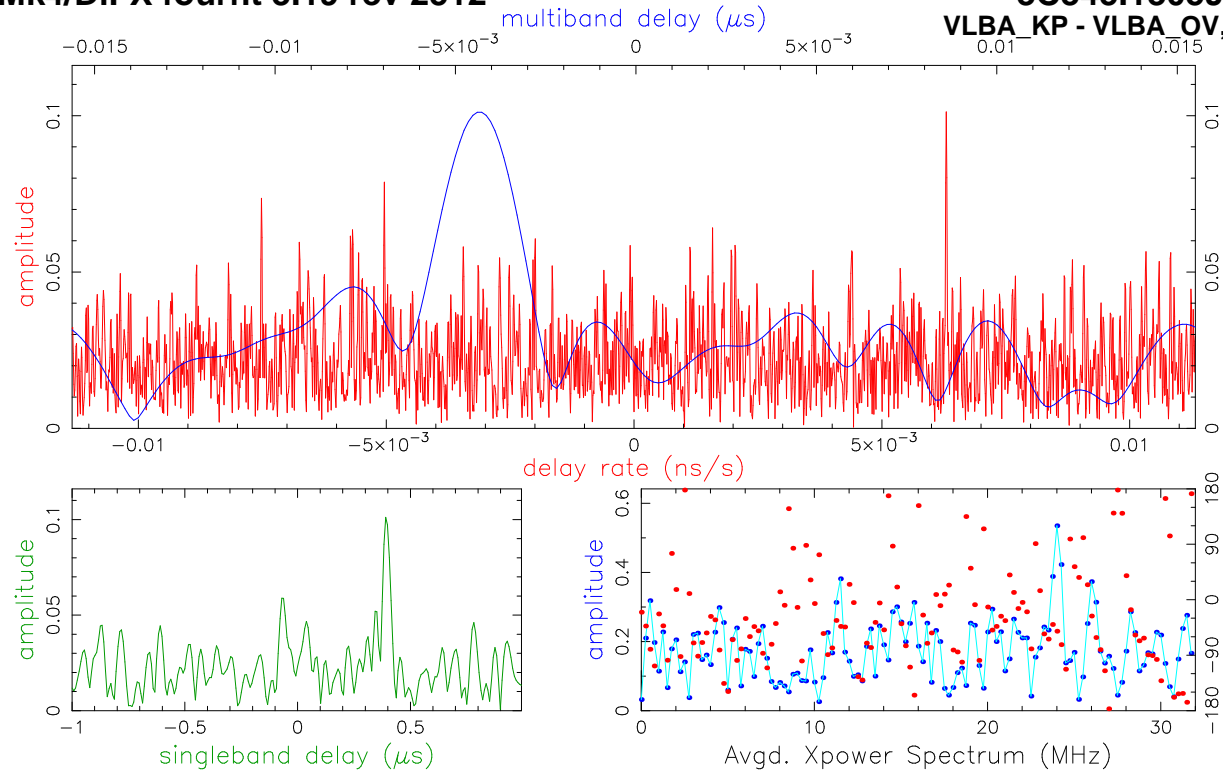


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs
k: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	0:0	0:0	0:0	PC phase
k: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	0:0	0:0	0:0	ManI PC
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				Tracks
																				Tracks
Group delay (usec)(sbd)	6.85658555928E+02			Apriori delay (usec)			6.85757870171E+02			Resid mbdelay (usec)			-5.56424E-03			+/- 1.8E-04				
Sband delay (usec)	6.85649381671E+02			Apriori clock (usec)			-1.7031700E+01			Resid sbdelay (usec)			-1.08489E-01			+/- 2.8E-03				
Phase delay (usec)	6.85757872366E+02			Apriori clockrate (us/s)			-1.9555999E-07			Resid phdelay (usec)			2.19504E-06			+/- 6.1E-07				
Delay rate (us/s)	3.11168056550E-02			Apriori rate (us/s)			3.11210920389E-02			Resid rate (us/s)			-4.28638E-06			+/- 2.6E-09				
Total phase (deg)	45.2			Apriori accel (us/s/s)			-9.19914500056E-06			Resid phase (deg)			68.1			+/- 18.9				

ph/seg (deg) RMS Theor. Amplitude 0.117 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.4 54.6 Search (2048X64) 0.108 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.8 37.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 50.1 65.8 Inc. seg. avg. 0.116 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ko..1305JH Output file: /Exps/c192a/v2/1234/No0001/ko.W.224.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, ko
VLBA_KP - VLBA_OV, fgroup W, pol RL

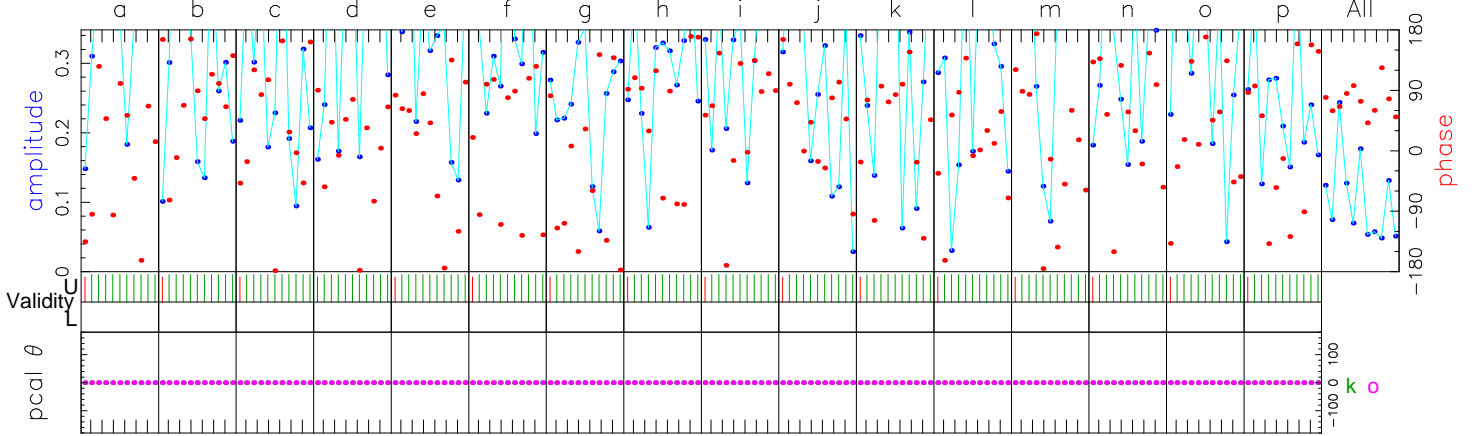


Fringe quality 0

SNR 5.6
Int time 407.733
Amp 0.116
Phase 73.5
PFD 9.9e-01
Delays (us)
SBD 0.392660
MBD -0.004331
Fringe rate (Hz)
0.543519
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
2020:093:042828
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



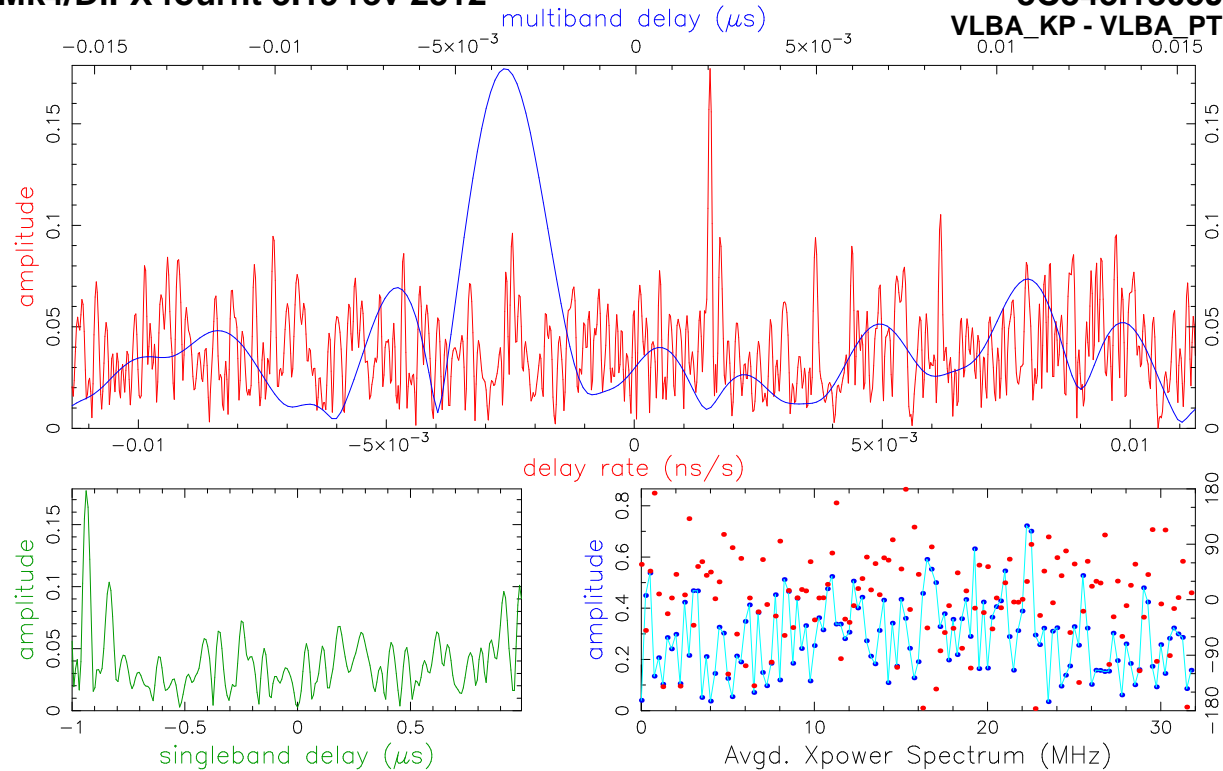
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)	6.86159789133E+02			Apriori delay (usec)			6.85757870171E+02			Resid mbdelay (usec)			-4.33104E-03			+/- 1.9E-04		
Sband delay (usec)	6.86150530171E+02			Apriori clock (usec)			-1.7031700E+01			Resid sbdelay (usec)			3.92660E-01			+/- 3.1E-03		
Phase delay (usec)	6.85757872541E+02			Apriori clockrate (us/s)			-1.9555999E-07			Resid phdelay (usec)			2.36990E-06			+/- 6.6E-07		
Delay rate (us/s)	3.11274017601E-02			Apriori rate (us/s)			3.11210920389E-02			Resid rate (us/s)			6.30972E-06			+/- 2.8E-09		
Total phase (deg)	50.6			Apriori accel (us/s/s)			-9.19914500056E-06			Resid phase (deg)			73.5			+/- 20.4		
ph/seg (deg)	RMS	Theor.	Amplitude			0.116 +/- 0.021			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	21.9	33.8	Search (2048X64)			0.099			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
ph/frq (deg)	58.8	58.9	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016	
amp/frq (%)	52.5	40.8	Inc. seg. avg.			0.102			Sample rate(MSamp/s): 64			dr window (ns/s)			-0.011 0.011			
	63.6	71.1	Inc. frq. avg.			0.118			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00	

k: az 60.1 el 32.1 pa -73.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ko..1305JH Output file: /Exps/c192a/v2/1234/No0001/ko.W.242.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kp
VLBA_KP - VLBA_PT, fgroup W, pol LL

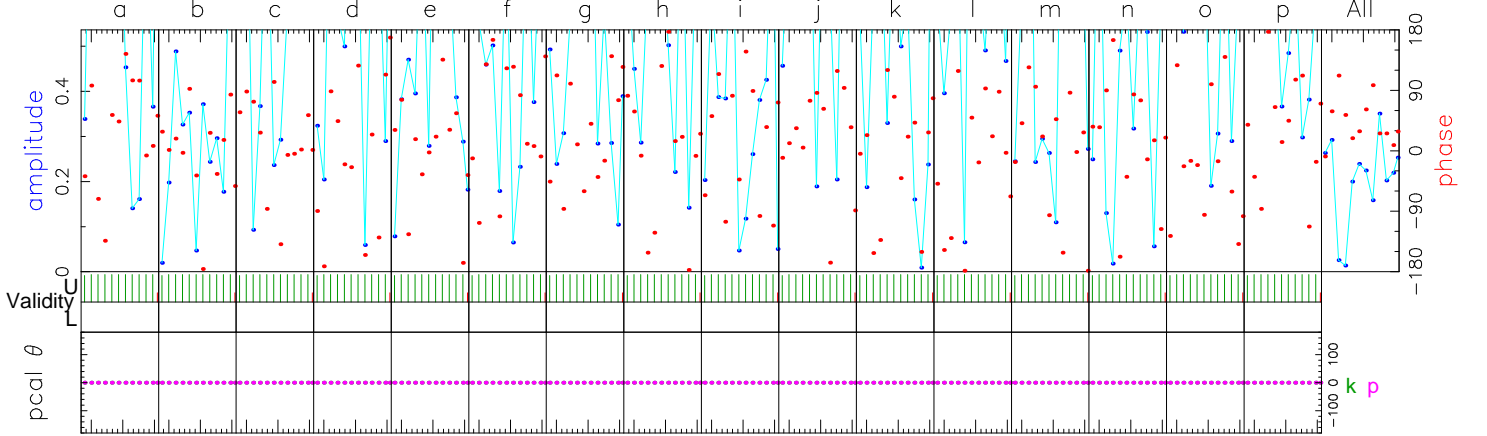


Fringe quality 0

SNR 5.7
Int time 138.827
Amp 0.179
Phase 33.2
PFD 7.4e-01
Delays (us)
SBD -0.936483
MBD -0.003598
Fringe rate (Hz) 0.131921
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
2020:093:042811
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)			-1.14213758841E+03															
Sband delay (usec)			-1.14213297322E+03															
Phase delay (usec)			-1.14119648915E+03															
Delay rate (us/s)			4.55436021189E-02															
Total phase (deg)				-207.1														
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)																		
simultaneous interpolator																		

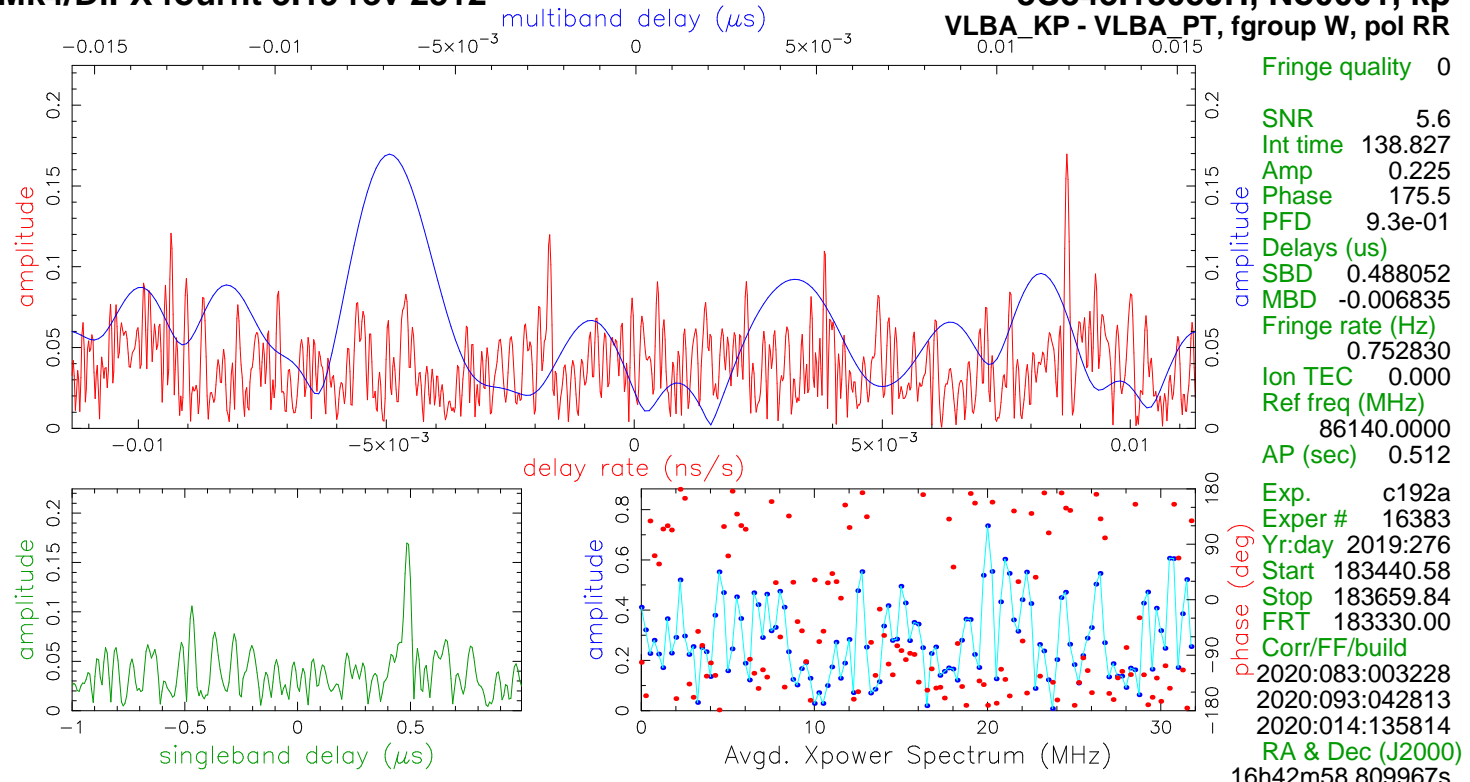
ph/seg (deg) 36.2 34.7
amp/seg (%) 55.9 60.6
ph/frq (deg) 32.5 40.1
amp/frq (%) 53.8 70.0

k: az 60.1 el 32.1 pa -73.4
p: az 62.4 el 35.8 pa -72.0
u,v (fr/asec) -333.857 1.314

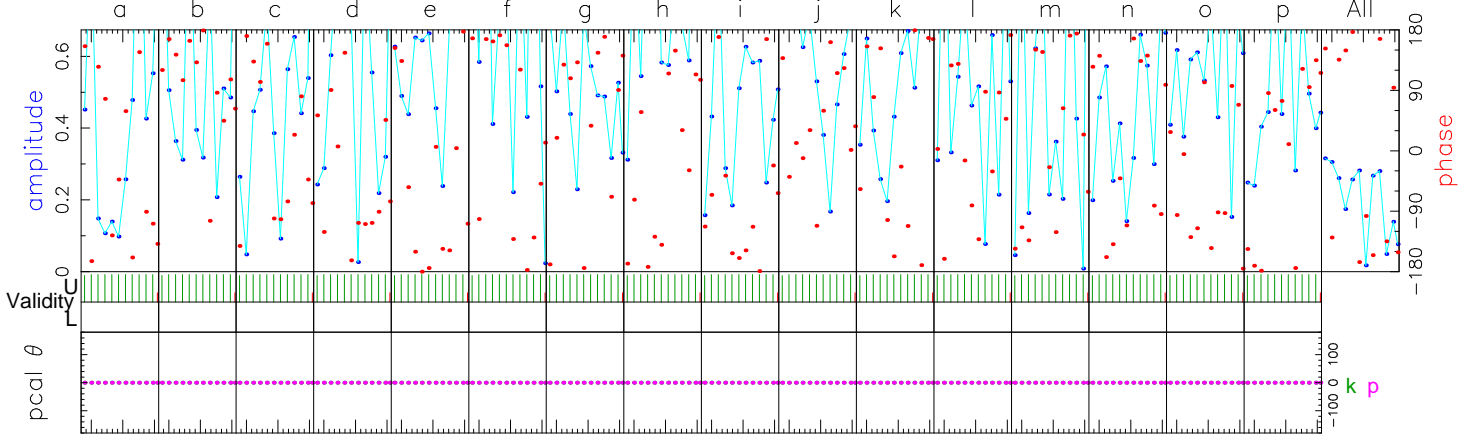
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kp..1305JH Output file: /Exps/c192a/v2/1234/No0001/kp.W.175.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kp
VLBA_KP - VLBA_PT, fgroup W, pol RR



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					
	-172.2	134.9	-122.2	-131.7	-167.3	-176.2	134.0	173.0	-140.3	43.4	-168.9	-12.8	-167.6	-174.3	-109.7	97.7	Phase	175.5					
	0.4	0.4	0.0	0.1	0.3	0.7	0.3	0.3	0.3	0.3	0.4	0.0	0.4	0.3	0.2	0.4	Ampl.	0.2					
	205.2	140.6	66.1	110.0	183.8	191.5	2.2	79.4	37.1	26.8	198.6	27.0	106.1	4.8	231.8	102.1	Sbd box	191.5					
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						
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase						
k: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						
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp						
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids						
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks						
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids						
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks						
Group delay (usec)(sbd)			-1.14070332502E+03														Apriori delay (usec)	-1.14119649022E+03	Resid mbdelay (usec)	-6.83480E-03	+/-	1.9E-04	
Sband delay (usec)			-1.14070843872E+03															Apriori clock (usec)	-1.2307825E+01	Resid sbdelay (usec)	4.88052E-01	+/-	3.1E-03
Phase delay (usec)			-1.14119648456E+03															Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	5.66034E-06	+/-	6.6E-07
Delay rate (us/s)			4.55508102500E-02															Apriori rate (us/s)	4.55420706453E-02	Resid rate (us/s)	8.73960E-06	+/-	8.2E-09
Total phase (deg)					-64.8													Apriori accel (us/s/s)	3.52775994987E-06	Resid phase (deg)	175.5	+/-	20.5

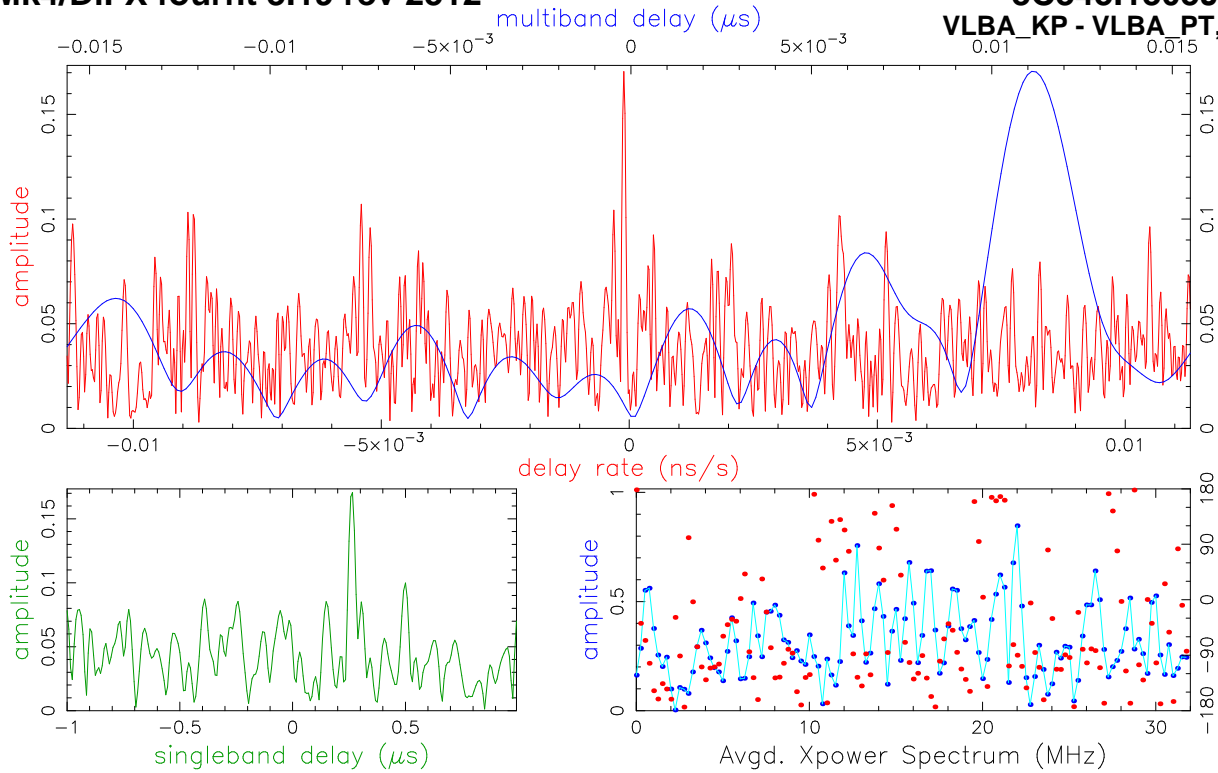
	RMS	Theor.	Amplitude	0.225 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.5	35.5	Search (1024X64)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	61.1	61.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	71.6	41.0	Inc. seg. avg.	0.227	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	80.5	71.5	Inc. frq. avg.	0.247	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

k: az 60.1 el 32.1 pa -73.4 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -333.857 1.314 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kp..1305JH Output file: /Exps/c192a/v2/1234/No0001/kp.W.185.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kp
VLBA_KP - VLBA_PT, fgroup W, pol LR

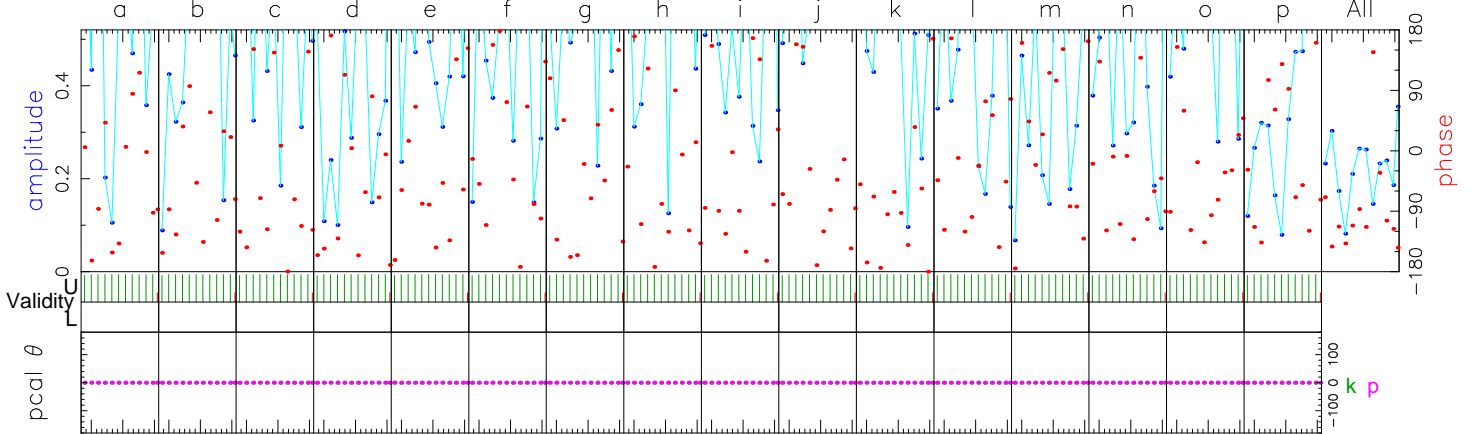


Fringe quality 0

SNR 5.6
Int time 138.827
Amp 0.173
Phase -108.6
PFD 9.4e-01
Delays (us)
SBD 0.262442
MBD 0.011100
Fringe rate (Hz)
-0.009906
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
2020:093:042816
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				
	-59.0	-56.0	-140.2	-141.1	-119.0	174.7	-108.1	-88.5	-119.3	-109.0	-98.0	-96.0	152.3	-119.2	-67.6	-119.3	Phase	-108.6				
	0.1	0.1	0.3	0.1	0.2	0.1	0.0	0.1	0.3	0.4	0.3	0.3	0.1	0.2	0.3	0.2	Ampl.	0.2				
	218.4	131.1	195.4	255.6	207.7	121.2	127.3	206.9	153.2	234.9	124.9	24.7	21.2	105.5	90.7	67.6	Sbd box	162.6				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
k: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					
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-1.14093539028E+03														Apriori delay (usec)	-1.14119649022E+03	Resid mbdelay (usec)	1.10999E-02	+/-	1.9E-04
Sband delay (usec)			-1.14093404822E+03														Apriori clock (usec)	-1.2307825E+01	Resid sbdelay (usec)	2.62442E-01	+/-	3.1E-03
Phase delay (usec)			-1.14119649372E+03														Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	-3.50136E-06	+/-	6.6E-07
Delay rate (us/s)			4.55419556435E-02														Apriori rate (us/s)	4.55420706453E-02	Resid rate (us/s)	-1.15002E-07	+/-	8.2E-09
Total phase (deg)					-348.9												Apriori accel (us/s/s)	3.52775994987E-06	Resid phase (deg)	-108.6	+/-	20.5

ph/seg (deg) 43.4 35.5
amp/seg (%) 44.1 62.0
ph/frq (deg) 42.9 41.0
amp/frq (%) 61.5 71.6

RMS Theor. Amplitude 0.173 +/- 0.031
Search (1024X64) 0.169
Interp. 0.000
Inc. seg. avg. 0.181
Inc. frq. avg. 0.157

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

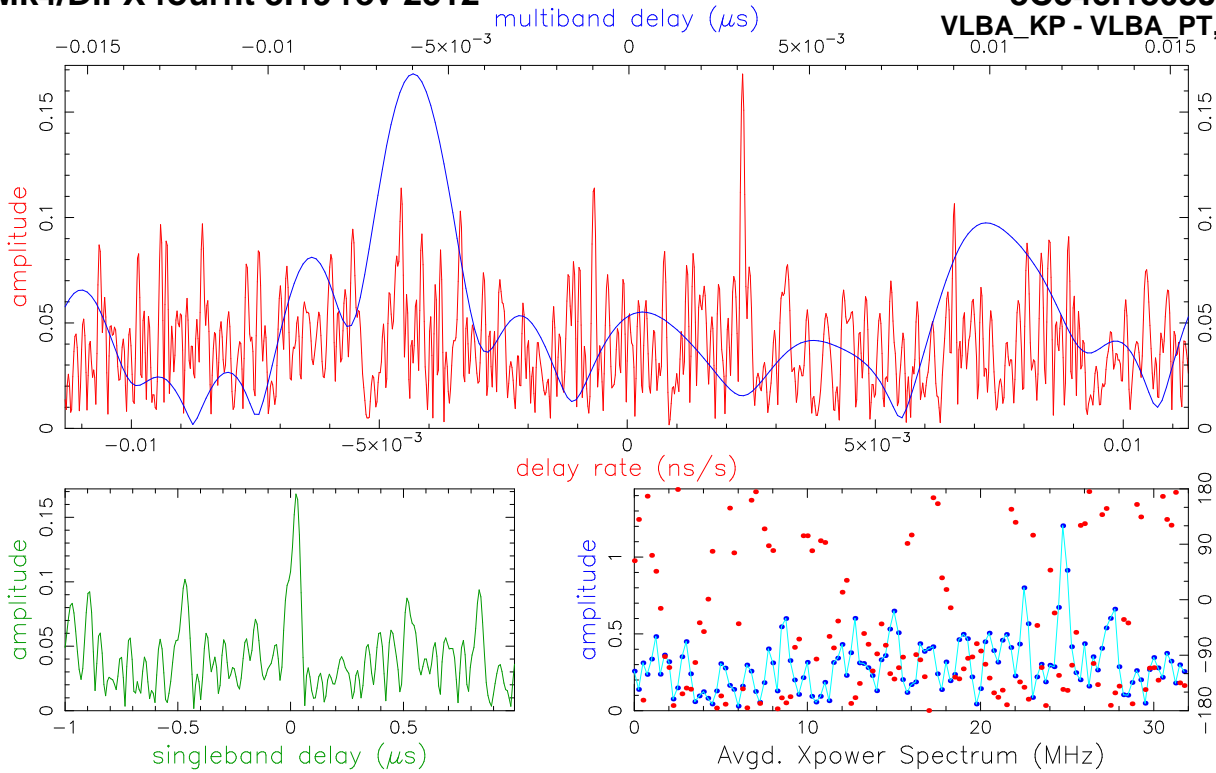
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -333.857 1.314 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kp..1305JH Output file: /Exps/c192a/v2/1234/No0001/kp.W.195.1305JH

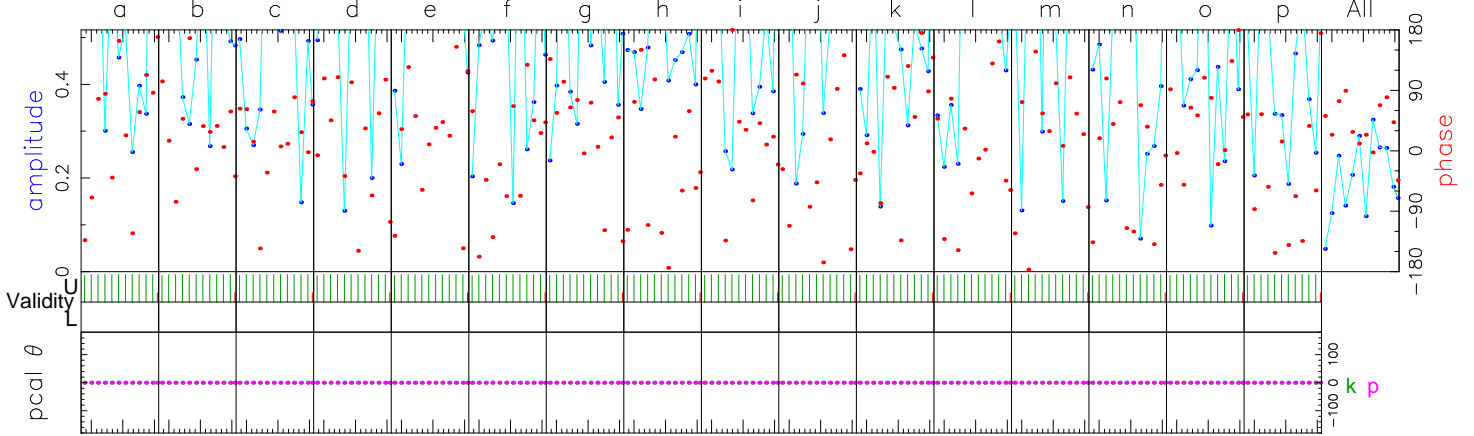
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kp
VLBA_KP - VLBA_PT, fgroup W, pol RL



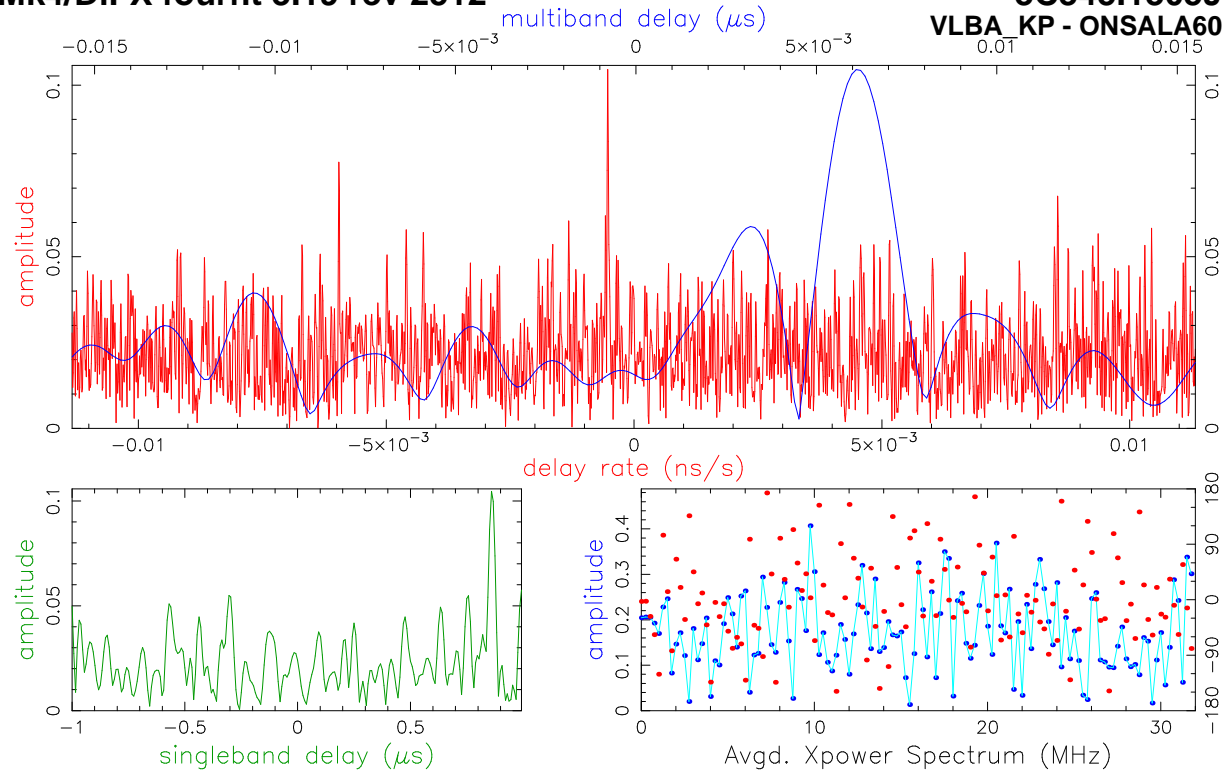
Fringe quality 0
SNR 5.4
Int time 138.827
Amp 0.172
Phase 40.9
PFD 1.0e+00
Delays (us)
SBD 0.025944
MBD -0.006024
Fringe rate (Hz)
0.201193
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042818
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	79.9	24.8	24.4	72.2	46.8	-36.6	43.4	-114.3	58.8	-87.9	83.9	10.9	81.3	-18.0	70.0	-37.9		Phase	40.9				
k	0.1	0.4	0.3	0.3	0.3	0.2	0.4	0.0	0.3	0.1	0.2	0.2	0.3	0.1	0.2	0.1		Ampl.	0.2				
p	122.0	238.7	15.8	124.7	193.6	149.9	127.8	198.0	47.2	116.9	5.8	95.9	84.5	124.6	70.4	180.6		Sbd box	132.3				
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		APs used					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
k: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					
k: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					
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							
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)				-1.14117126459E+03														Apriori delay (usec)	-1.14119649022E+03	Resid mbdelay (usec)	-6.02437E-03	+/-	2.0E-04
Sband delay (usec)				-1.14117054672E+03														Apriori clock (usec)	-1.2307825E+01	Resid sbdelay (usec)	2.59435E-02	+/-	3.2E-03
Phase delay (usec)				-1.14119648890E+03														Apriori clockrate (us/s)	-3.9846558E-07	Resid phdelay (usec)	1.32012E-06	+/-	6.8E-07
Delay rate (us/s)				4.55444062992E-02														Apriori rate (us/s)	4.55420706453E-02	Resid rate (us/s)	2.33565E-06	+/-	8.4E-09
Total phase (deg)					-199.3													Apriori accel (us/s/s)	3.52775994987E-06	Resid phase (deg)	40.9	+/-	21.0

ph/seg (deg) RMS Theor. Amplitude 0.172 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.9 63.6 Search (1024X64) 0.164 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 68.1 42.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 67.6 73.4 Inc. seg. avg. 0.170 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -333.857 1.314 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kp..1305JH Output file: /Exps/c192a/v2/1234/No0001/kp.W.203.1305JH simultaneous interpolator

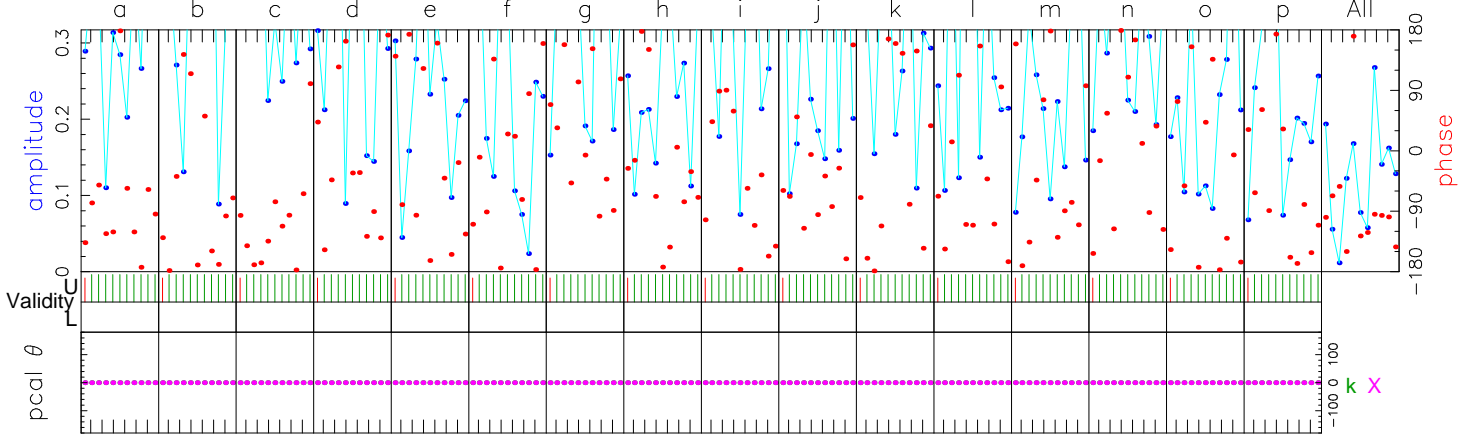


Fringe quality 0

SNR 5.8
Int time 406.235
Amp 0.106
Phase -116.5
PFD 7.7e-01
Delays (us)
SBD 0.861727
MBD 0.006117
Fringe rate (Hz)
-0.045655
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
2020:093:042814
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

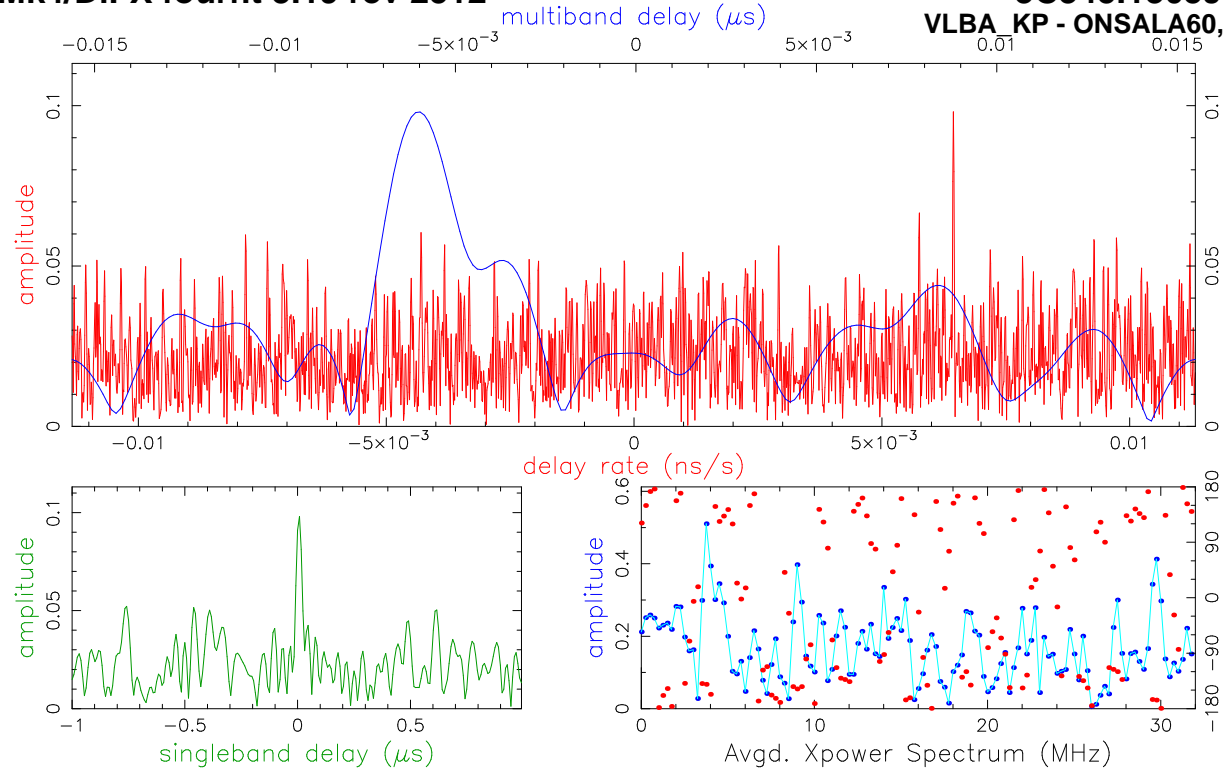


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-99.9	-146.9	-128.8	-77.9	-174.4	-117.6	-43.7	-99.8	-111.9	-87.1	-144.1	-92.8	-115.8	-106.0	-178.9	-124.6	Phase	-116.5				
	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.1	0.0	0.0	0.1	Ampl.	0.1				
	237.5	60.1	113.7	73.0	168.0	90.9	226.0	103.7	165.4	56.9	255.6	99.2	192.3	145.9	11.3	189.9	Sbd box	239.3				
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	801/0	801/0	801/0	801/0	APs used					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
k	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)			-5.47523534943E+03														Apriori delay (usec)	-5.47608521640E+03	Resid mbdelay (usec)	6.11698E-03	+/-	1.9E-04
Sband delay (usec)			-5.47522348890E+03														Apriori clock (usec)	-3.2727177E+01	Resid sbdelay (usec)	8.61727E-01	+/-	3.0E-03
Phase delay (usec)			-5.47608522016E+03														Apriori clockrate (us/s)	-7.2257901E-07	Resid phdelay (usec)	-3.75806E-06	+/-	6.3E-07
Delay rate (us/s)			1.46755846258E+00														Apriori rate (us/s)	1.46755899259E+00	Resid rate (us/s)	-5.30007E-07	+/-	2.7E-09
Total phase (deg)																	Apriori accel (us/s/s)	6.33219032822E-06	Resid phase (deg)	-116.5	+/-	19.7

ph/seg (deg) 37.5 32.6 Search (2048X64) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.3 56.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.9 39.4 Inc. seg. avg. 0.108 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.5 68.7 Inc. frq. avg. 0.095 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kX..1305JH Output file: /Exps/c192a/v2/1234/No0001/kX.W.188.1305JH

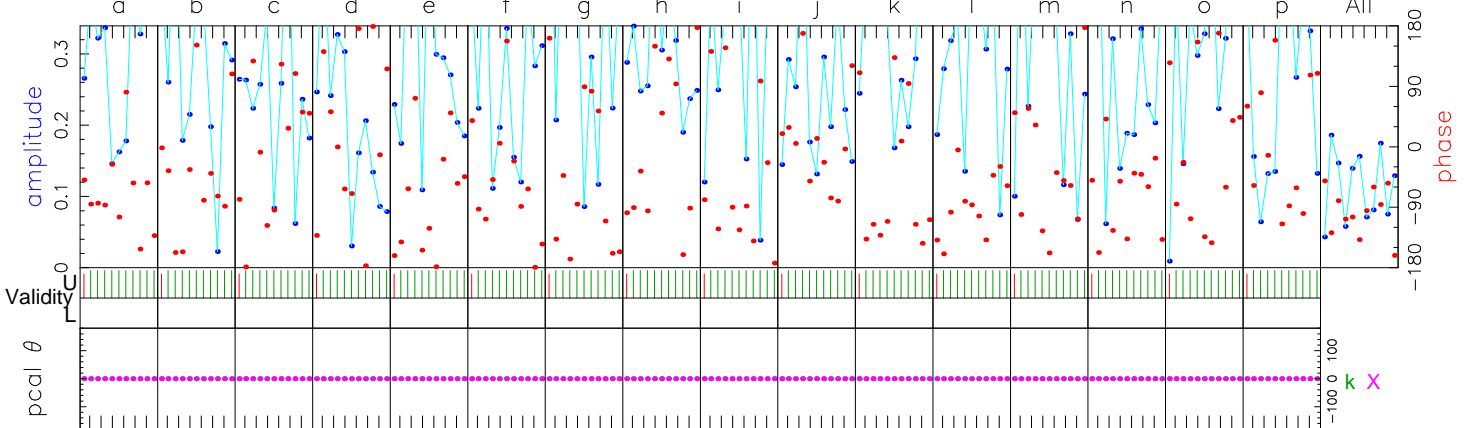
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kX
VLBA_KP - ONSALA60, fgroup W, pol RR



Fringe quality 0
SNR 5.4
Int time 406.235
Amp 0.113
Phase -104.4
PFD 1.0e+00
Delays (us)
SBD 0.006136
MBD -0.006033
Fringe rate (Hz)
0.556014
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
2020:093:042819
2020:014:135814
RA & Dec (J2000)
16h42m58.80967s
+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

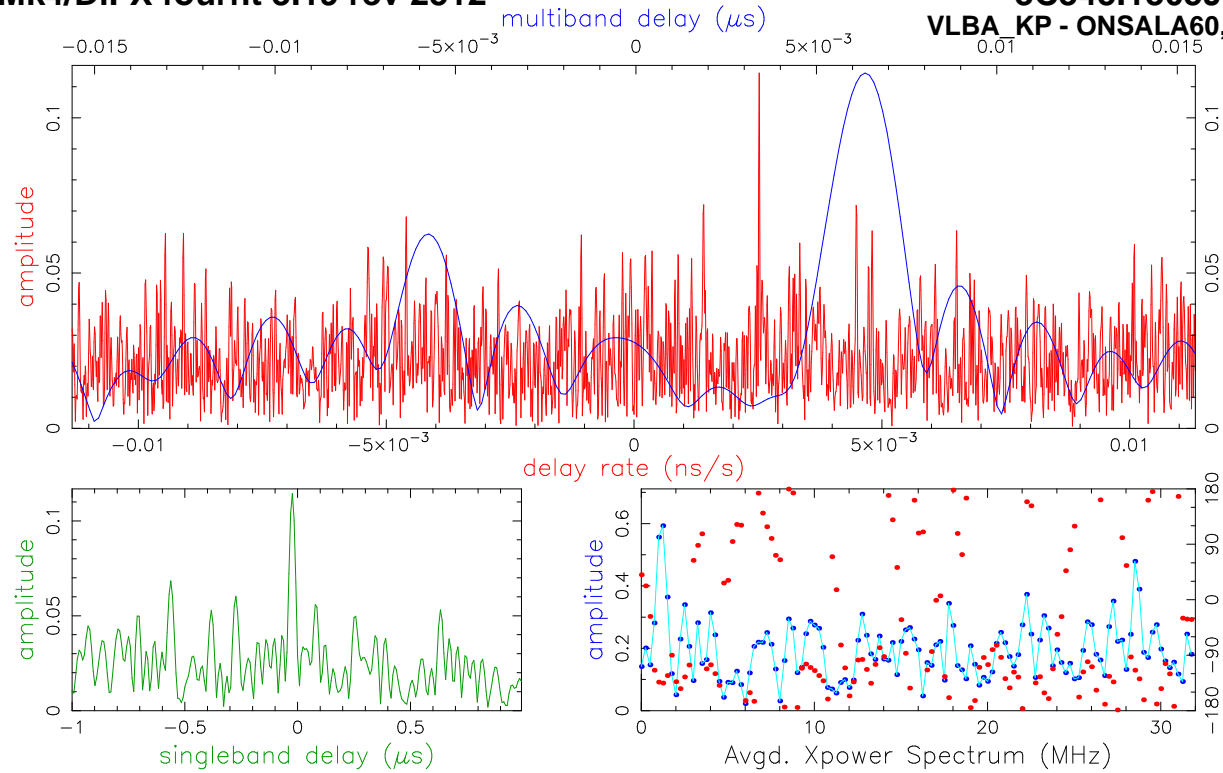


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-83.6	-97.7	45.7	166.2	-83.5	-97.1	-139.8	-170.7	-142.6	-23.0	-131.8	-85.7	-82.1	-88.1	-102.9	-87.6	Phase	-104.4
	0.3	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	193.2	71.2	93.0	200.1	240.9	94.1	170.8	241.3	49.2	192.3	129.8	129.7	90.3	205.2	187.1	225.1	Sbd box	129.8
U/L	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	801/0	801/0	801/0	801/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) -5.47609124966E+03 Apriori delay (usec) -5.47608521640E+03 Resid mbdelay (usec) -6.03326E-03 +/- 2.0E-04
 Sband delay (usec) -5.47607907990E+03 Apriori clock (usec) -3.2727177E+01 Resid sbdelay (usec) 6.13650E-03 +/- 3.2E-03
 Phase delay (usec) -5.47608521977E+03 Apriori clockrate (us/s) -7.2257901E-07 Resid phdelay (usec) -3.36540E-06 +/- 6.8E-07
 Delay rate (us/s) 1.46756544736E+00 Apriori rate (us/s) 1.46755899259E+00 Resid rate (us/s) 6.45477E-06 +/- 2.9E-09
 Total phase (deg) -299.1 Apriori accel (us/s/s) 6.33219032822E-06 Resid phase (deg) -104.4 +/- 21.1

RMS Theor. Amplitude 0.113 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.6 34.9 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.1 60.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 58.2 42.1 Inc. seg. avg. 0.112 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 68.3 73.6 Inc. frq. avg. 0.111 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kX..1305JH Output file: /Exps/c192a/v2/1234/No0001/kX.W.208.1305JH

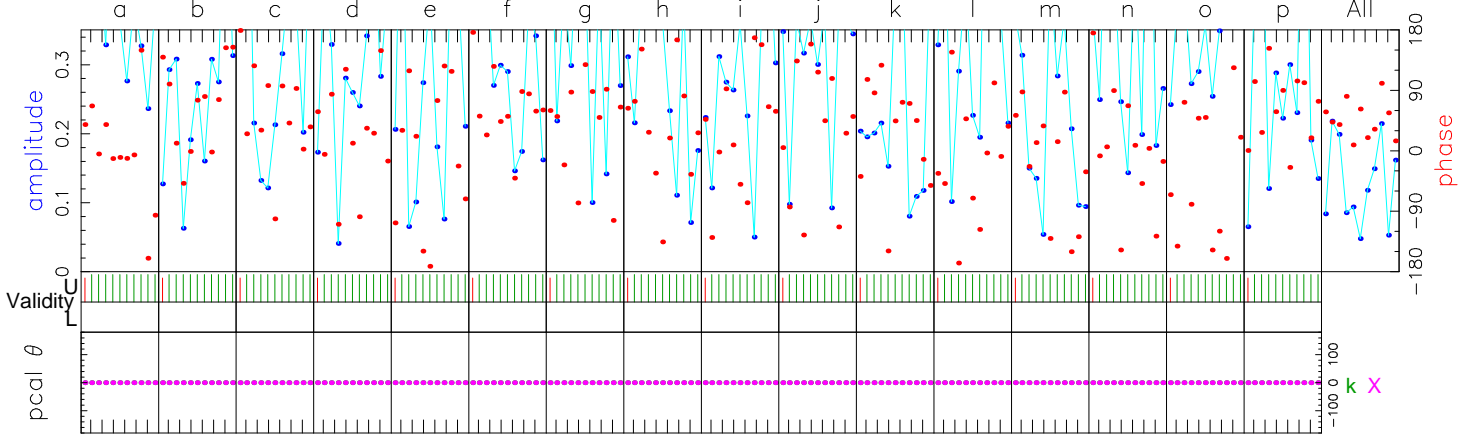


Fringe quality 0

SNR 6.3
Int time 406.235
Amp 0.117
Phase 45.8
PFD 7.2e-02
Delays (us)
SBD -0.024072
MBD 0.006347
Fringe rate (Hz) 0.217398
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
2020:093:042824
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



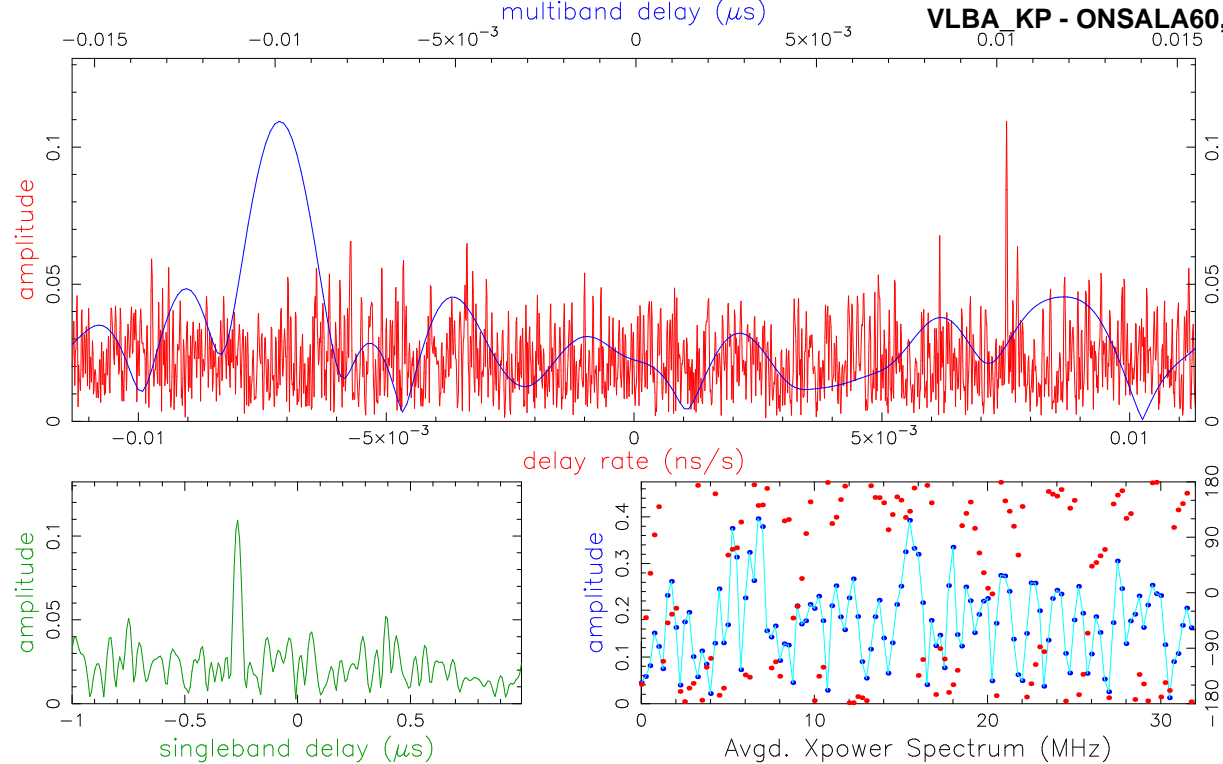
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0			
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)			-5.47611011990E+03																
Sband delay (usec)			-5.47610928840E+03																
Phase delay (usec)			-5.47608521493E+03																
Delay rate (us/s)			1.46756151637E+00																
Total phase (deg)					-148.9														
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)																			
SampCntNorm: enabled																			
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) 27.1 30.1 Search (2048X64) 0.113 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.1 52.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.7 36.3 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.3 63.4 Inc. frq. avg. 0.113 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kX..1305JH Output file: /Exps/c192a/v2/1234/No0001/kX.W.225.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

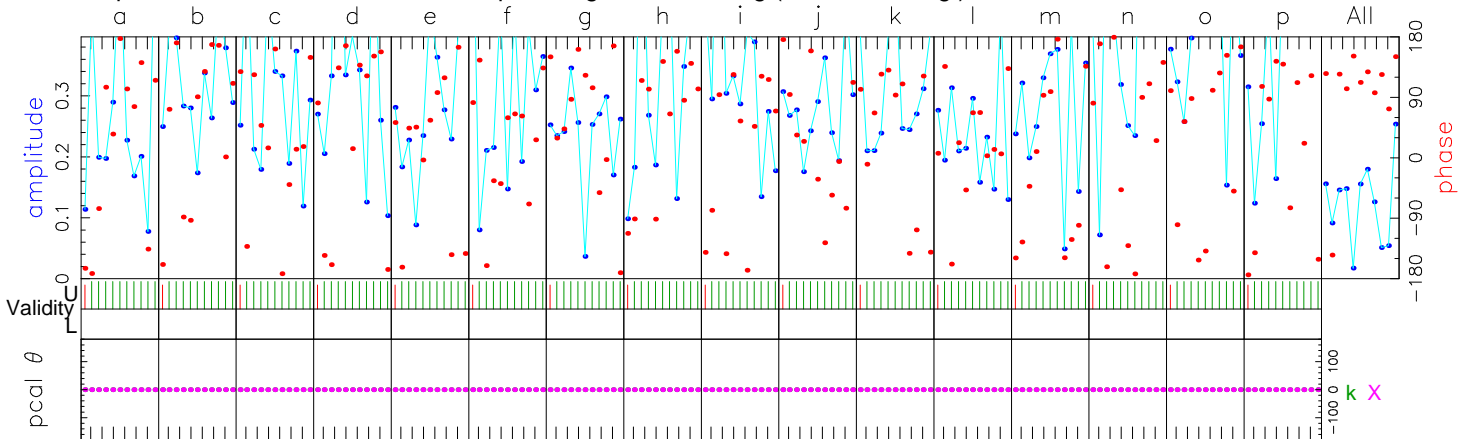
3C345.1305JH, No0001, kX

VLBA_KP - ONSALA60, fgroup W, pol RL



Fringe quality 0
 SNR 6.0
 Int time 406.235
 Amp 0.132
 Phase 126.1
 PFD 3.3e-01
 Delays (us)
 SBD -0.266894
 MBD -0.009873
 Fringe rate (Hz)
 0.648291
 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
 2020:093:042830
 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



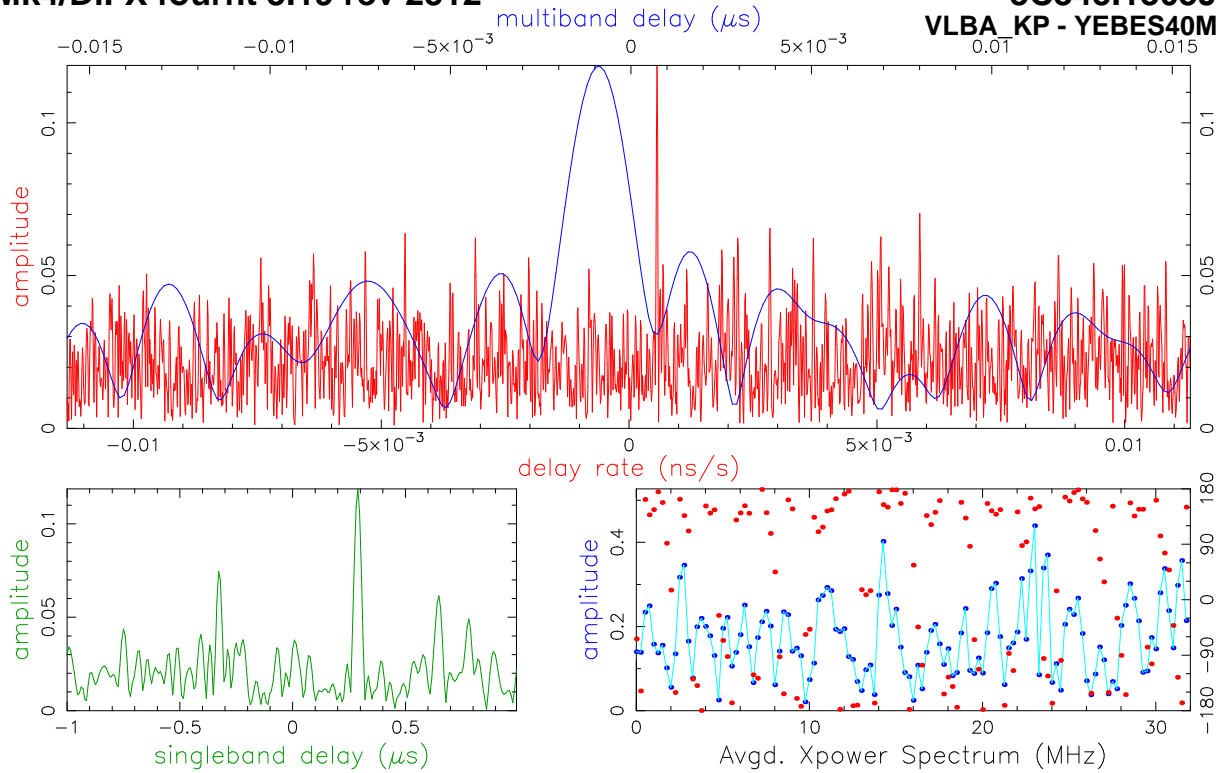
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	800/0	801/0	801/0	801/0	801/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd)	-5.47634508936E+03	Apriori delay (usec)	-5.47608521640E+03	Resid mbdelay (usec)	-9.87295E-03	+/-	1.8E-04
Sband delay (usec)	-5.47635211040E+03	Apriori clock (usec)	-3.2727177E+01	Resid sbdelay (usec)	-2.66894E-01	+/-	2.9E-03
Phase delay (usec)	-5.47608521234E+03	Apriori clockrate (us/s)	-7.2257901E-07	Resid phdelay (usec)	4.06561E-06	+/-	6.1E-07
Delay rate (us/s)	1.46756651860E+00	Apriori rate (us/s)	1.46755899259E+00	Resid rate (us/s)	7.52601E-06	+/-	2.6E-09
Total phase (deg)	-68.7	Apriori accel (us/s/s)	6.33219032822E-06	Resid phase (deg)	126.1	+/-	19.0

ph/seg (deg)	RMS 35.4	Theor. 31.4	Amplitude Search (2048X64)	0.132 +/- 0.022	0.107	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	60.6	54.8	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	60.5	37.9	Inc. seg. avg.	0.131	0.131	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	57.2	66.2	Inc. frq. avg.	0.132	0.132	Sample rate(MISamp/s): 64	mb window (us) -0.016 0.016
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 128	t_cohere infinite
							ion window (TEC) 0.00 0.00

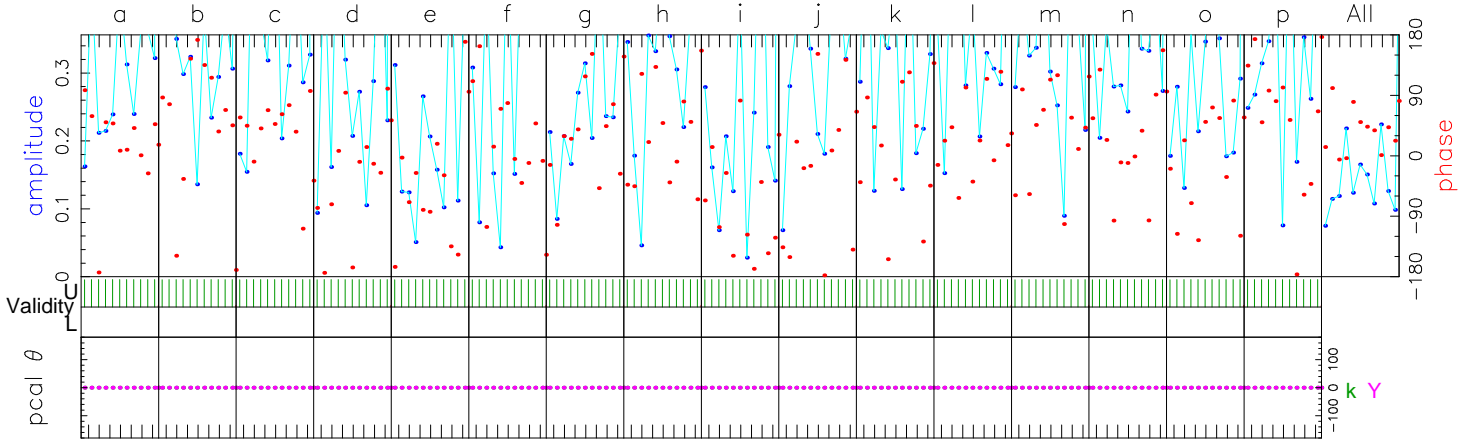
k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kX..1305JH Output file: /Exps/c192a/v2/1234/No0001/kX.W.247.1305JH



Fringe quality 0
SNR 6.5
Int time 401.317
Amp 0.119
Phase 31.1
PFD 2.2e-02
Delays (us)
SBD 0.288473
MBD -0.000901
Fringe rate (Hz) 0.048629
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
2020:093:042815
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

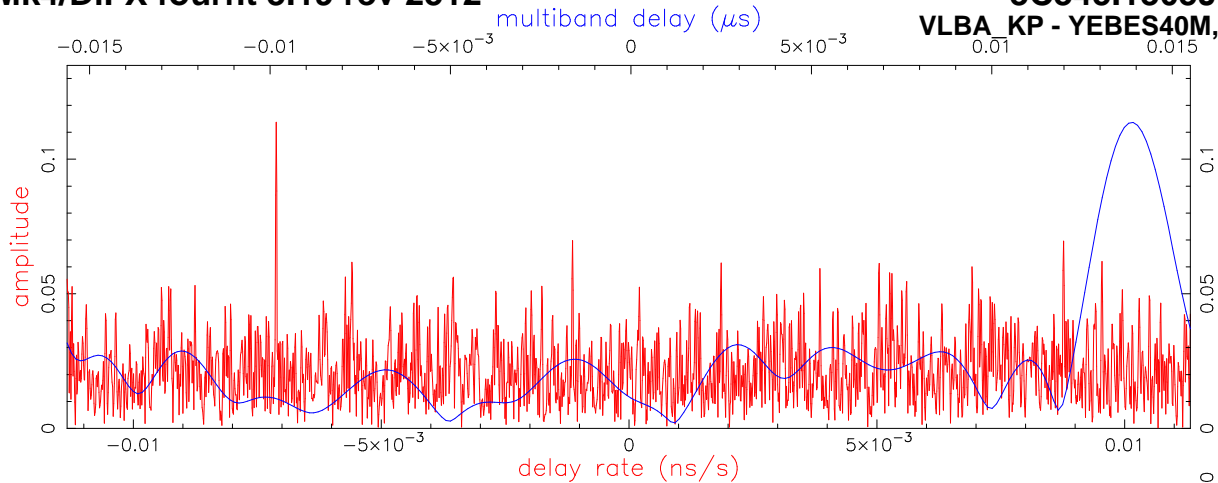


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	Phase	31.1
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.1
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	165.9
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)	-7.34478591956E+03			Apriori delay (usec)			-7.34506626815E+03			Resid mbdelay (usec)			-9.01409E-04			+/- 1.7E-04			
Sband delay (usec)	-7.3447779515E+03			Apriori clock (usec)			-1.0053901E+01			Resid sbdelay (usec)			2.88473E-01			+/- 2.7E-03			
Phase delay (usec)	-7.34506626715E+03			Apriori clockrate (us/s)			-4.1457899E-07			Resid phdelay (usec)			1.00195E-06			+/- 5.7E-07			
Delay rate (us/s)	1.50371867609E+00			Apriori rate (us/s)			1.50371811156E+00			Resid rate (us/s)			5.64534E-07			+/- 2.4E-09			
Total phase (deg)	-90.7			Apriori accel (us/s/s)			3.03133681505E-05			Resid phase (deg)			31.1			+/- 17.6			

ph/seg (deg) 32.9 30.5 Search (2048X64) 0.117 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 46.8 53.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 54.3 35.3 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 58.6 61.5 Inc. frq. avg. 0.127 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -11154.627 1298.420 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/KY..1305JH Output file: /Exps/c192a/v2/1234/No0001/KY.W.190.1305JH

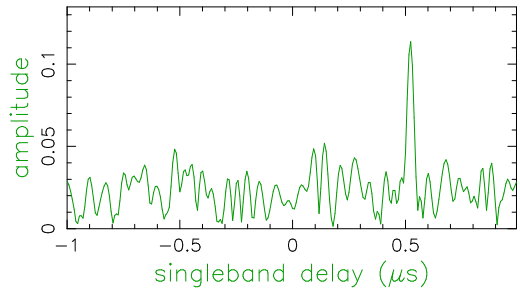
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kY
VLBA_KP - YEBES40M, fgroup W, pol RR

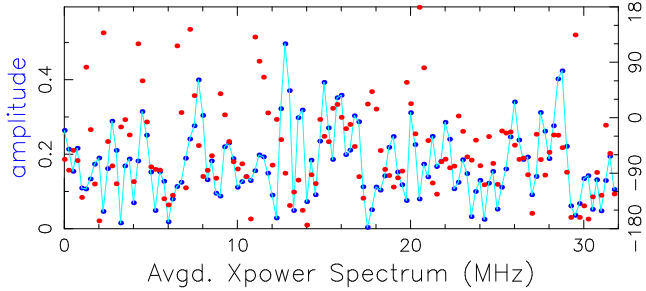


Fringe quality 0

SNR 6.2
Int time 401.317
Amp 0.135
Phase -11.9
PFD 1.1e-01
Delays (us)
SBD 0.522298
MBD 0.013870
Fringe rate (Hz)
-0.614358
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

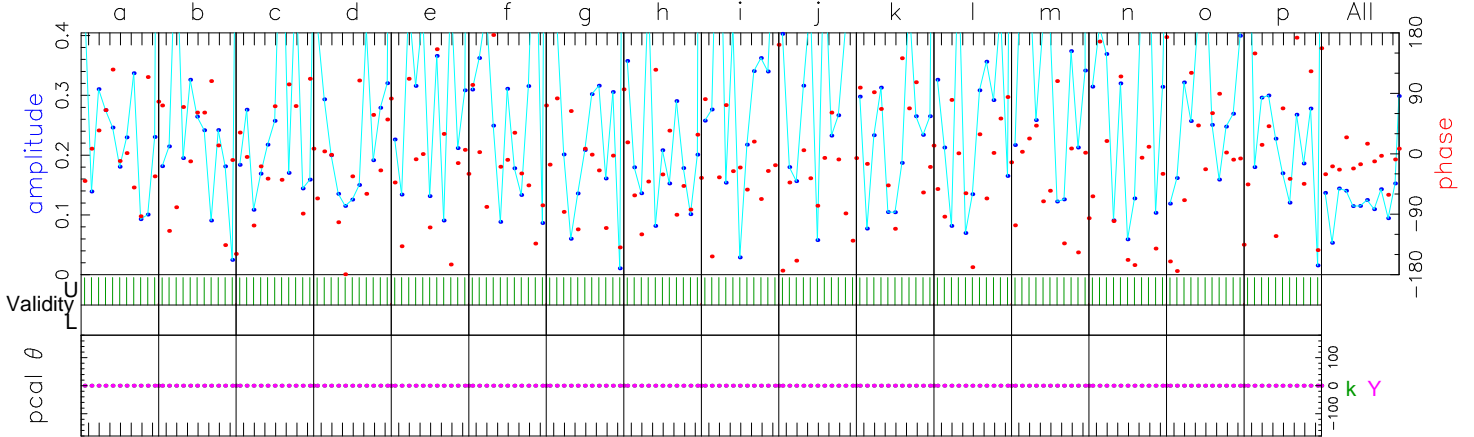


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042820
2020:014:135814
RA & Dec (J2000)
16h42m58.80967s
+39°48'36.993984"

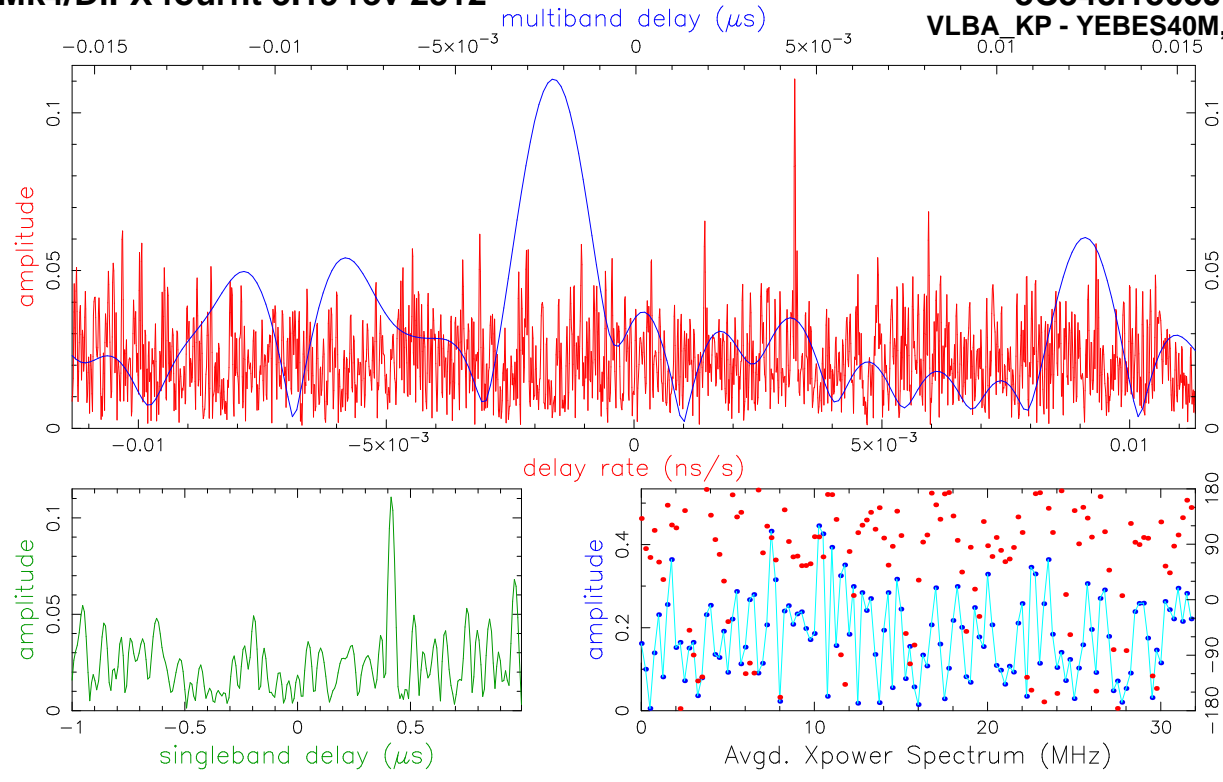
Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



	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								
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used							
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase						
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC						
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
k	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						
Group delay (usec)(sbd)		-7.34455239827E+03																		Apriori delay (usec)	-7.34506626815E+03	Resid mbdelay (usec)	1.38699E-02	+/-	1.7E-04	
Sband delay (usec)		-7.34454397065E+03																			Apriori clock (usec)	-1.0053901E+01	Resid sbdelay (usec)	5.22298E-01	+/-	2.8E-03
Phase delay (usec)		-7.34506626853E+03																			Apriori clockrate (us/s)	-4.1457899E-07	Resid phdelay (usec)	-3.82678E-07	+/-	5.9E-07
Delay rate (us/s)		1.50371097948E+00																			Apriori rate (us/s)	1.50371811156E+00	Resid rate (us/s)	-7.13208E-06	+/-	2.6E-09
Total phase (deg)																					Apriori accel (us/s/s)	3.03133681505E-05	Resid phase (deg)	-11.9	+/-	18.4

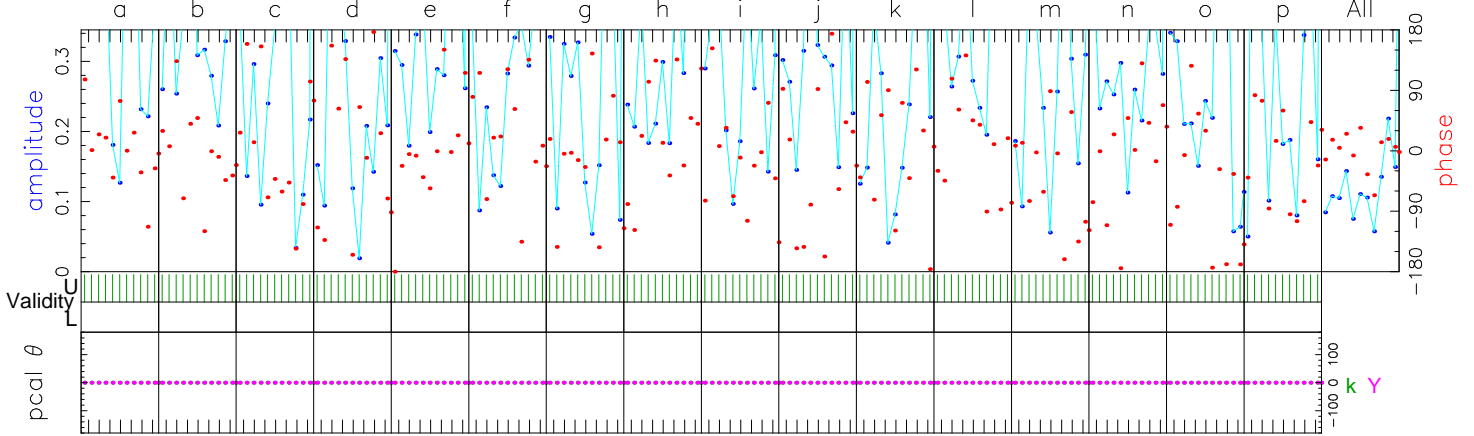
	RMS	Theor.	Amplitude	0.135 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	21.7	31.8	Search (2048X64)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	27.1	55.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	28.1	36.7	Inc. seg. avg.	0.125	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.6	64.1	Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -11154.627 1298.420 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/KY..1305JH Output file: /Exps/c192a/v2/1234/No0001/KY.W.212.1305JH



Fringe quality 0
SNR 6.1
Int time 401.317
Amp 0.115
Phase 6.1
PFD 2.6e-01
Delays (us)
SBD 0.415668
MBD -0.002277
Fringe rate (Hz)
0.279582
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042825
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



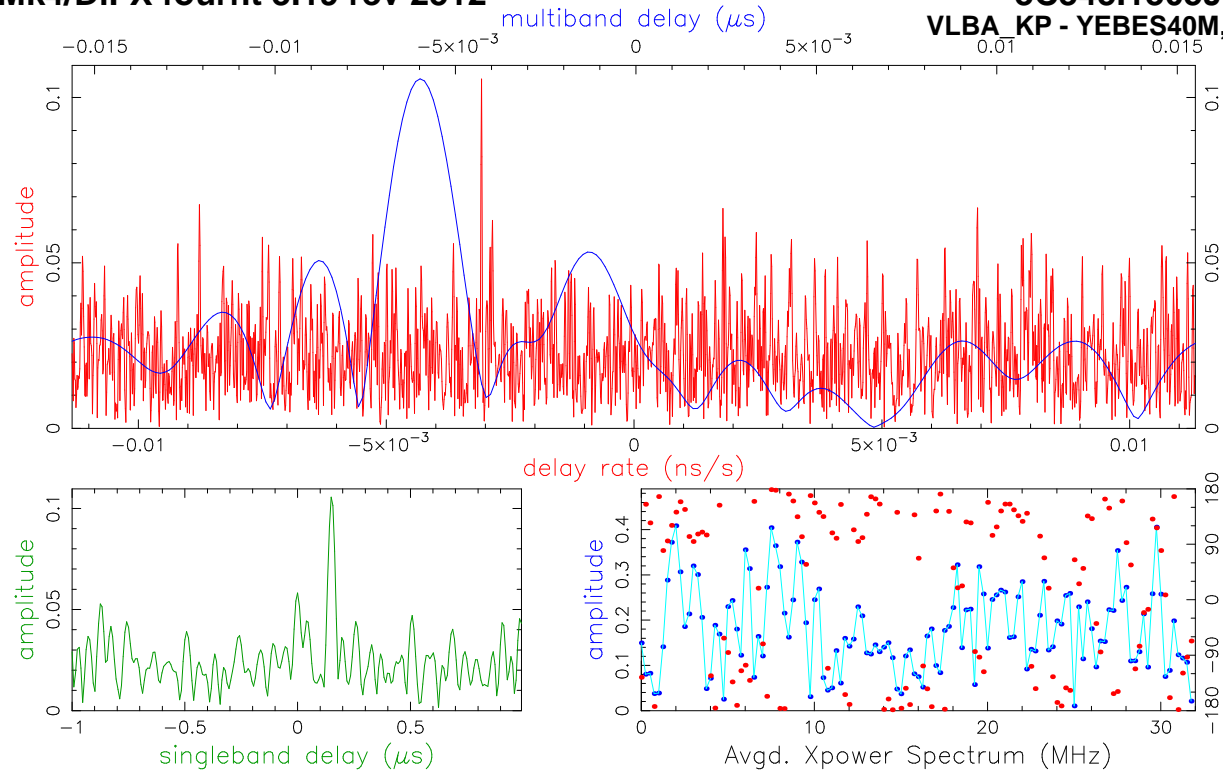
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All								
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used							
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC						
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Chan ids						
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				Tracks						
																				Tracks						
Group delay (usec)(sbd)		-7.34466229518E+03																		Apriori delay (usec)	-7.34506626815E+03	Resid mbdelay (usec)	-2.27703E-03	+/-	1.8E-04	
Sband delay (usec)		-7.34465060065E+03																			Apriori clock (usec)	-1.0053901E+01	Resid sbdelay (usec)	4.15668E-01	+/-	2.8E-03
Phase delay (usec)		-7.34506626795E+03																			Apriori clockrate (us/s)	-4.1457899E-07	Resid phdelay (usec)	1.96714E-07	+/-	6.1E-07
Delay rate (us/s)		1.50372135722E+00																			Apriori rate (us/s)	1.50371811156E+00	Resid rate (us/s)	3.24566E-06	+/-	2.6E-09
Total phase (deg)																					Apriori accel (us/s/s)	3.03133681505E-05	Resid phase (deg)	6.1	+/-	18.8

ph/seg (deg) 28.4 32.6 28.4 32.6
amp/seg (%) 47.0 56.9 47.0 56.9
ph/frq (deg) 51.8 37.6 51.8 37.6
amp/frq (%) 66.9 65.7 66.9 65.7

RMS Theor. Amplitude 0.115 +/- 0.019
Search (2048X64) 0.109
Interp. 0.000
Inc. seg. avg. 0.107
Inc. frq. avg. 0.114

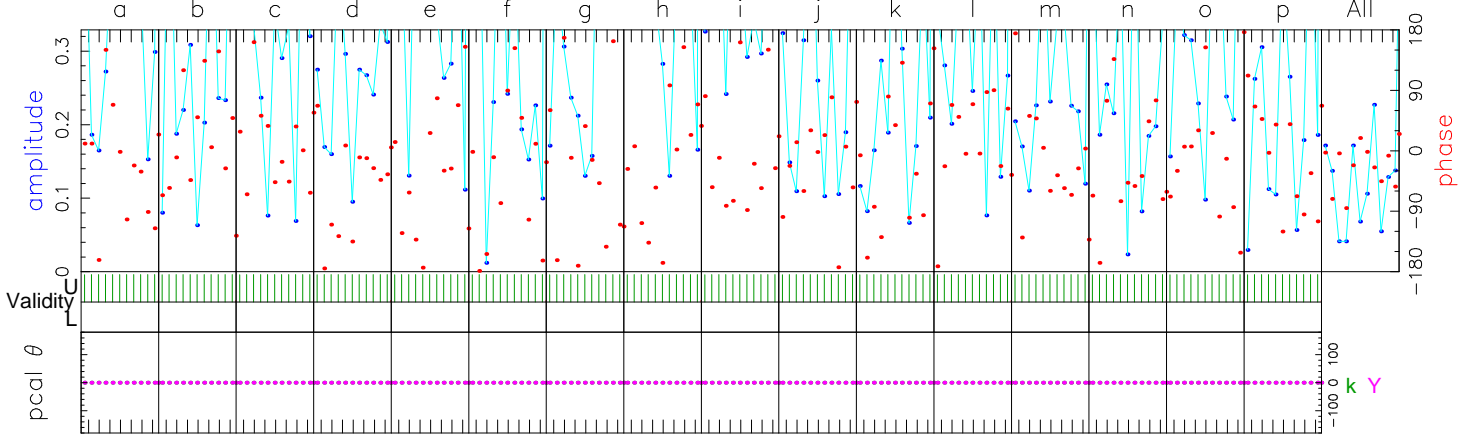
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC)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

k: az 60.1 el 32.1 pa -73.4 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -11154.627 1298.420 simultaneous interpolator



Fringe quality 0
SNR 5.8
Int time 401.317
Amp 0.110
Phase -24.1
PFD 7.6e-01
Delays (us)
SBD 0.150680
MBD -0.005933
Fringe rate (Hz)
-0.265856
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
2020:093:042831
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

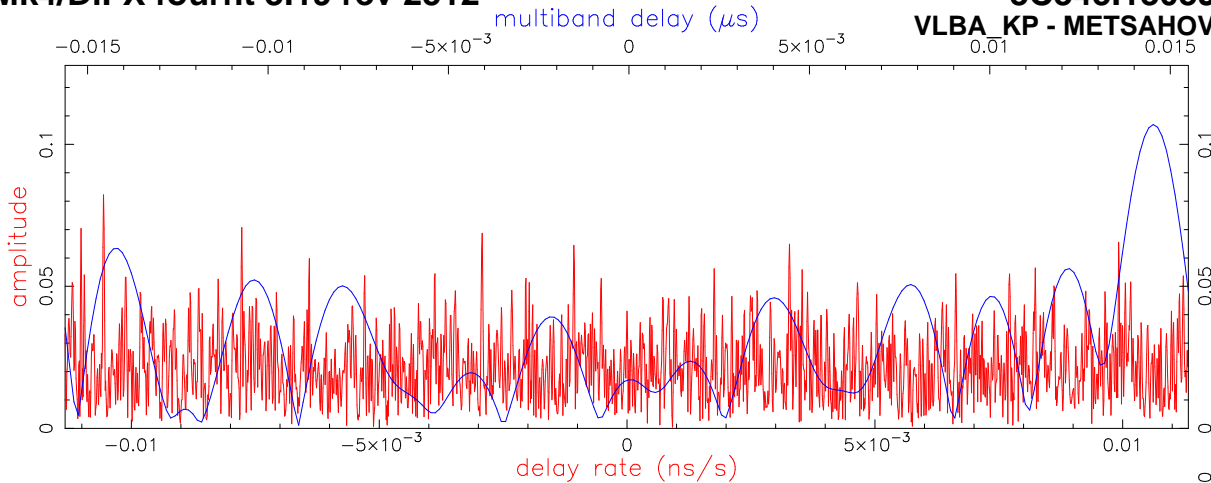


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-19.1	5.1	-18.9	-37.1	-1.3	-55.6	-123.0	-22.2	-46.4	-10.6	6.8	39.0	-31.5	-54.2	-39.6	-16.8	Phase	-24.1
	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.2	0.2	0.0	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	22.9	124.8	30.6	228.9	143.2	35.0	237.7	23.9	11.7	149.7	123.5	165.4	26.8	252.7	56.3	128.5	Sbd box	148.3
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k: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	
k: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	
k	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		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	-7.34491595142E+03	Apriori delay (usec)	-7.34506626815E+03	Resid mbdelay (usec)	-5.93327E-03	+/-	1.9E-04
Sband delay (usec)	-7.34491558815E+03	Apriori clock (usec)	-1.0053901E+01	Resid sbdelay (usec)	1.50680E-01	+/-	3.0E-03
Phase delay (usec)	-7.34506626893E+03	Apriori clockrate (us/s)	-4.1457899E-07	Resid phdelay (usec)	-7.78497E-07	+/-	6.3E-07
Delay rate (us/s)	1.50371502523E+00	Apriori rate (us/s)	1.50371811156E+00	Resid rate (us/s)	-3.08633E-06	+/-	2.7E-09
Total phase (deg)	-146.0	Apriori accel (us/s/s)	3.03133681505E-05	Resid phase (deg)	-24.1	+/-	19.7

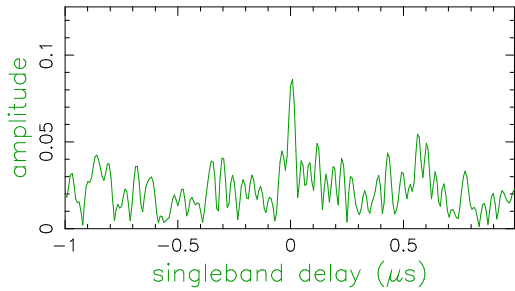
k: az 60.1 el 32.1 pa -73.4 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -11154.627 1298.420 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/KY..1305JH Output file: /Exps/c192a/v2/1234/No0001/KY.W.252.1305JH

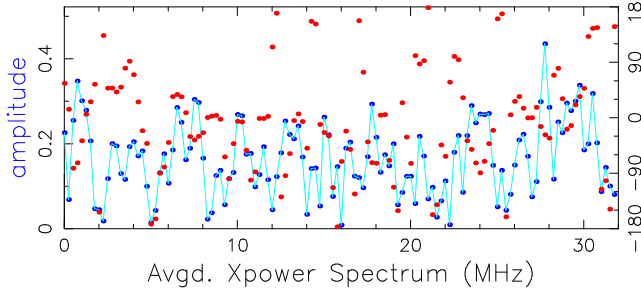


Fringe quality 0

SNR 4.8
 Int time 407.367
 Amp 0.128
 Phase 106.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.005627
 MBD -0.016113
 Fringe rate (Hz)
 -0.910927
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

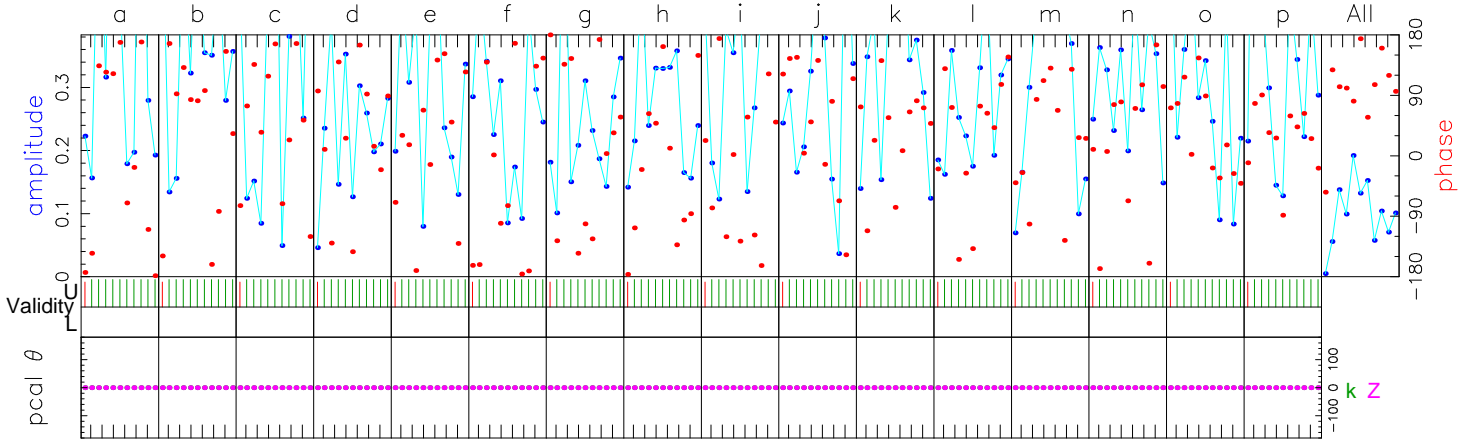


delay rate (ns/s)



Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042816
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.80967s
 +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	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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	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

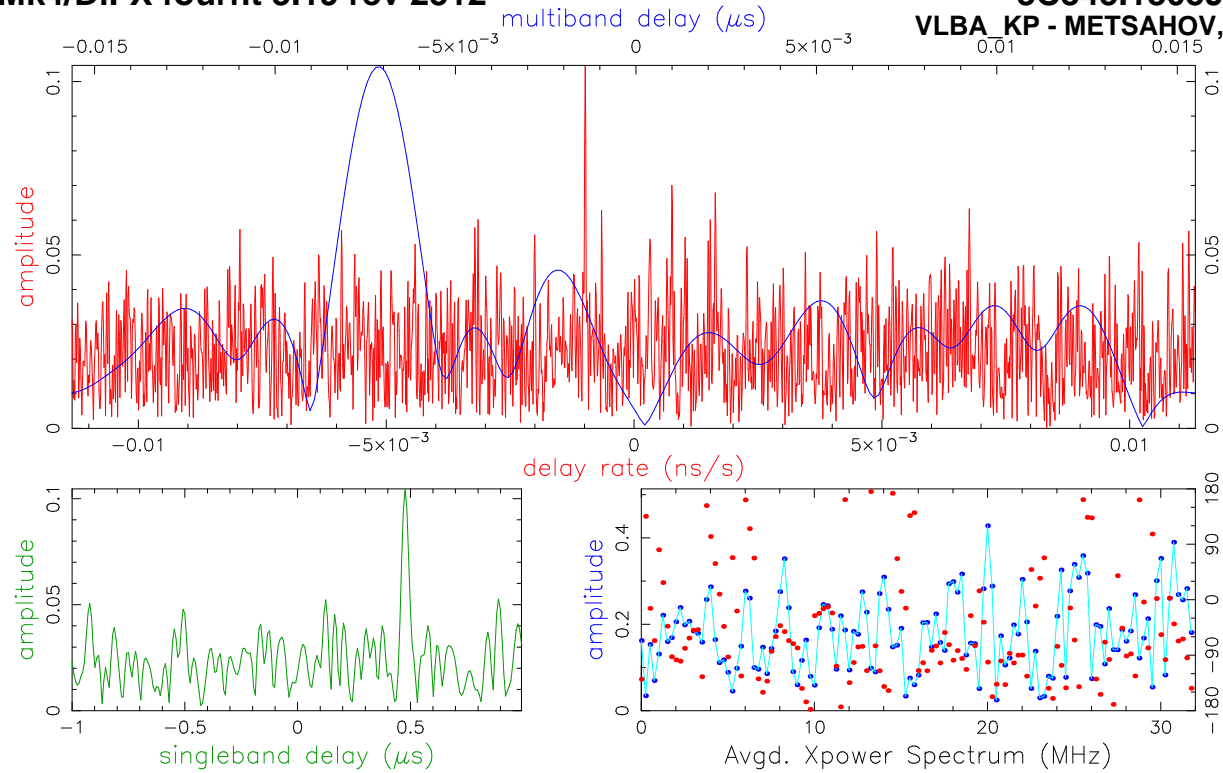
Group delay (usec)(sbd) -3.86685362793E+03 Apriori delay (usec) -3.86686876465E+03 Resid mbdelay (usec) -1.61133E-02 +/- 2.3E-04
 Sband delay (usec) -3.86686313815E+03 Apriori clock (usec) -5.8413070E-01 Resid sbdelay (usec) 5.62650E-03 +/- 3.6E-03
 Phase delay (usec) -3.86686876121E+03 Apriori clockrate (us/s) -2.1087179E-07 Resid phdelay (usec) 3.44653E-06 +/- 7.7E-07
 Delay rate (us/s) 1.49688227509E+00 Apriori rate (us/s) 1.49689285005E+00 Resid rate (us/s) -1.05750E-05 +/- 3.3E-09
 Total phase (deg) -32.5 Apriori accel (us/s/s) -3.90160278613E-06 Resid phase (deg) 106.9 +/- 23.9

RMS Theor. Amplitude 0.128 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.5 39.7 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 59.5 69.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 70.8 47.9 Inc. seg. avg. 0.121 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 97.5 83.6 Inc. frq. avg. 0.143 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.199.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kZ
VLBA_KP - METSAHOV, fgroup W, pol RR

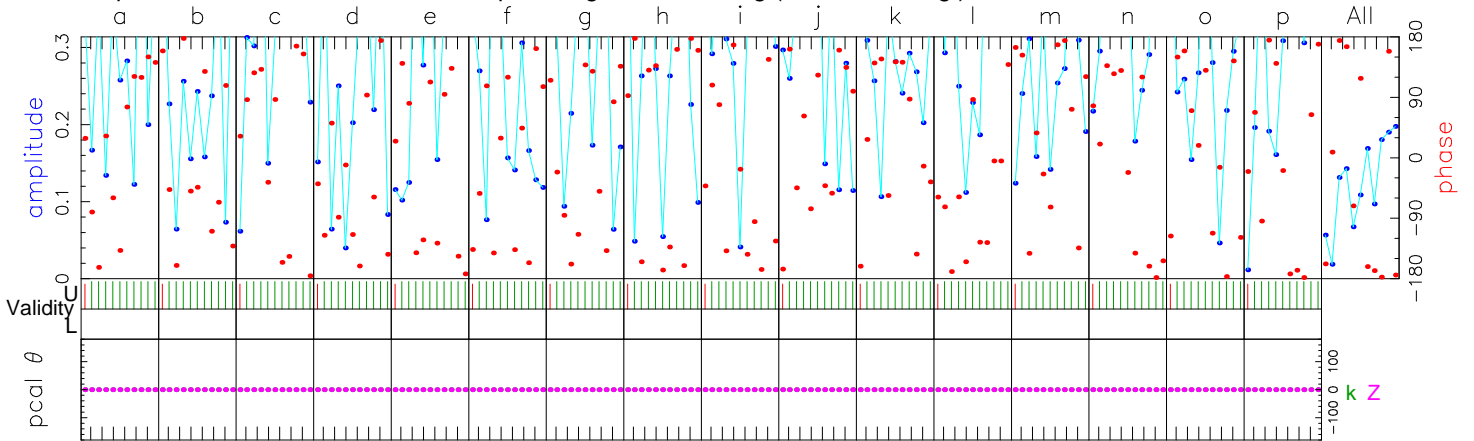


Fringe quality 0

SNR 5.8
Int time 407.367
Amp 0.105
Phase 178.3
PFD 8.8e-01
Delays (us)
SBD 0.476662
MBD -0.007131
Fringe rate (Hz)
-0.085450
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
2020:093:042821
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

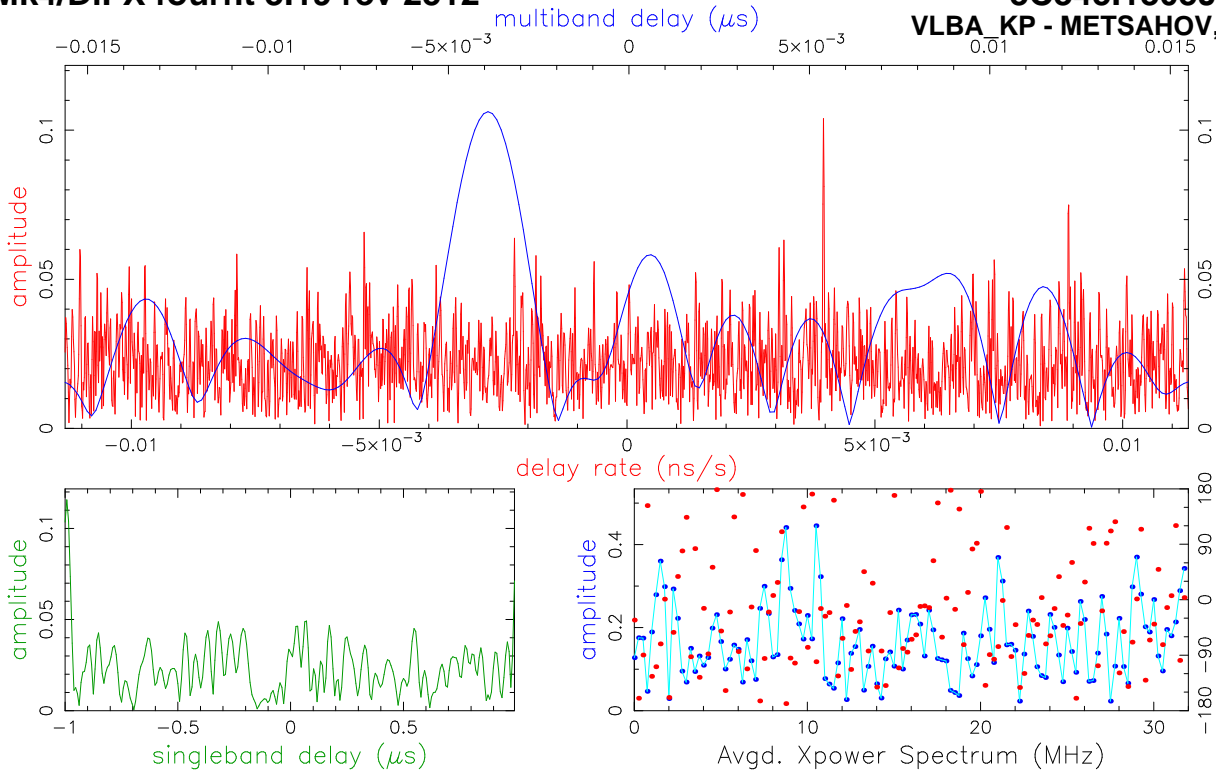


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		APs used
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
k: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
k	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		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	-3.86640714519E+03			Apriori delay (usec)			-3.86686876465E+03			Resid mbdelay (usec)			-7.13054E-03			+/- 1.9E-04		
Sband delay (usec)	-3.86639210265E+03			Apriori clock (usec)			-5.8413070E-01			Resid sbdelay (usec)			4.76662E-01			+/- 3.0E-03		
Phase delay (usec)	-3.86686875890E+03			Apriori clockrate (us/s)			-2.1087179E-07			Resid phdelay (usec)			5.74809E-06			+/- 6.4E-07		
Delay rate (us/s)	1.49689185806E+00			Apriori rate (us/s)			1.49689285005E+00			Resid rate (us/s)			-9.91988E-07			+/- 2.7E-09		
Total phase (deg)	38.9			Apriori accel (us/s/s)			-3.90160278613E-06			Resid phase (deg)			178.3			+/- 19.9		

ph/seg (deg) 65.2 33.0 Search (2048X64) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.4 57.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.3 39.8 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 61.3 69.5 Inc. frq. avg. 0.099 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.216.1305JH

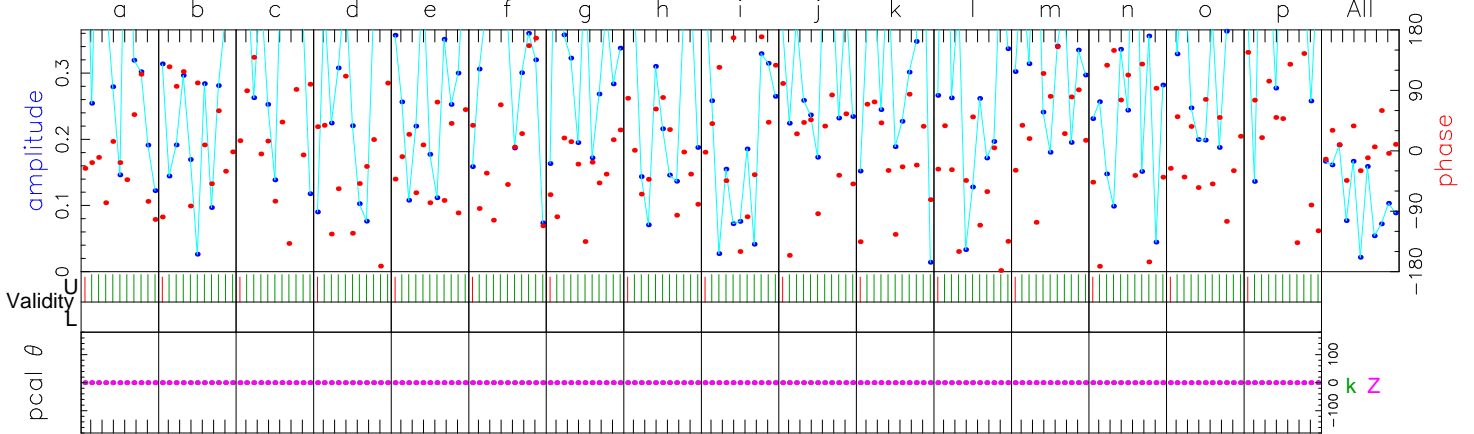
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kZ
VLBA_KP - METSAHOV, fgroup W, pol LR



Fringe quality 0
SNR 6.4
Int time 407.367
Amp 0.122
Phase 8.2
PFD 4.6e-02
Delays (us)
SBD -0.992235
MBD -0.004128
Fringe rate (Hz) 0.342277
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
2020:093:042826
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

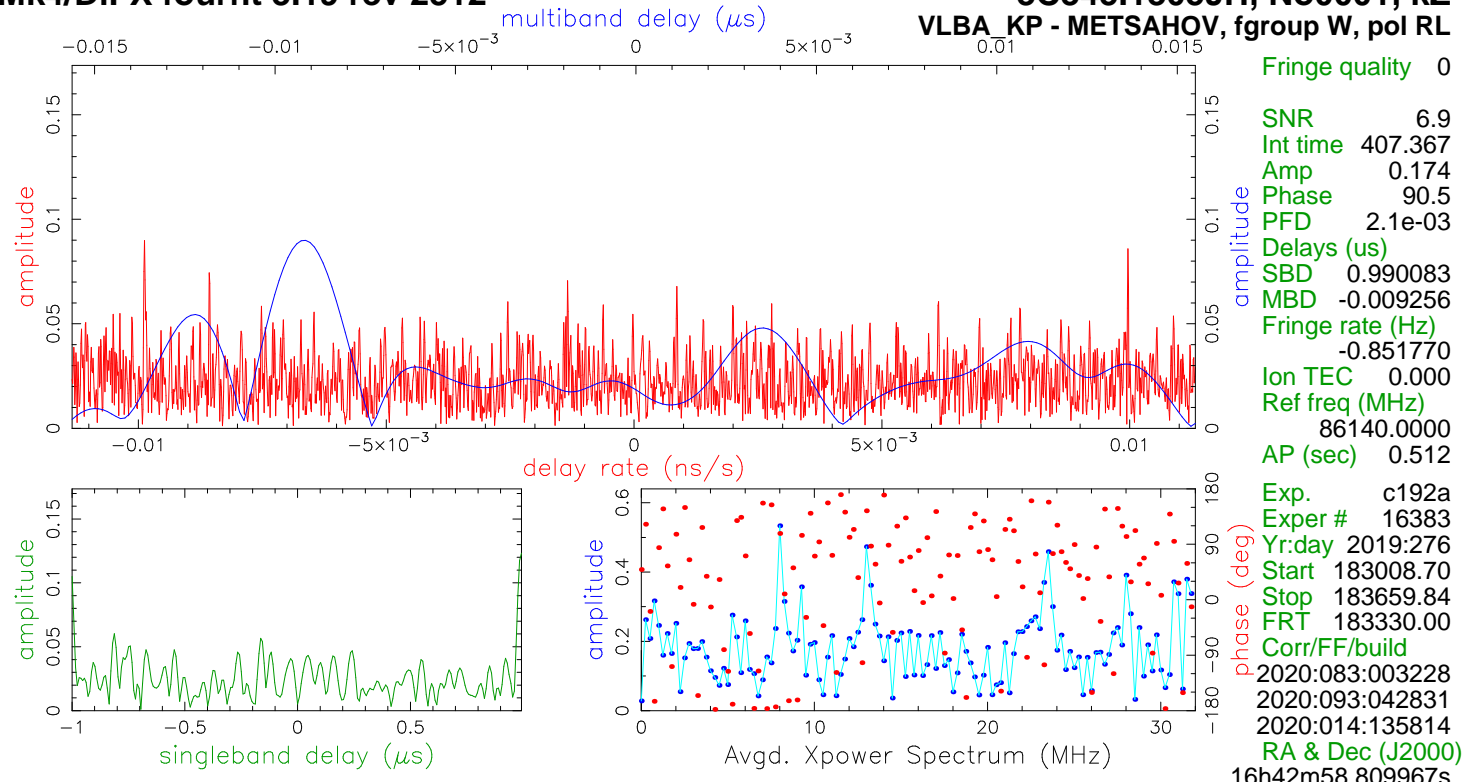


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-23.5	8.1	44.6	64.6	-14.7	-31.9	-36.4	5.9	46.0	42.7	27.6	-56.2	43.6	-15.8	-14.5	105.4	Phase	8.2				
	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.0	0.2	0.2	0.1	0.1	0.0	0.3	0.1	Ampl.	0.1				
	1.5	231.3	167.4	37.4	133.0	254.5	89.4	188.1	69.4	136.7	135.4	196.8	162.3	214.1	2.2	227.8	Sbd box	2.0				
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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
k: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					
k: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						
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-3.86787289273E+03														Apriori delay (usec)	-3.86686876465E+03	Resid mbdelay (usec)	-4.12808E-03	+/-	1.7E-04
Sband delay (usec)			-3.86786099915E+03														Apriori clock (usec)	-5.8413070E-01	Resid sbdelay (usec)	-9.92235E-01	+/-	2.7E-03
Phase delay (usec)			-3.86686876439E+03														Apriori clockrate (us/s)	-2.1087179E-07	Resid phdelay (usec)	2.64832E-07	+/-	5.8E-07
Delay rate (us/s)			1.49689682354E+00														Apriori rate (us/s)	1.49689285005E+00	Resid rate (us/s)	3.97349E-06	+/-	2.4E-09
Total phase (deg)																	Apriori accel (us/s/s)	-3.90160278613E-06	Resid phase (deg)	8.2	+/-	17.9

ph/seg (deg) 28.8 29.7 RMS Theor. Amplitude 0.122 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.5 51.9 Search (2048X64) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.2 35.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.4 62.6 Inc. seg. avg. 0.106 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.237.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, kZ
VLBA_KP - METSAHOV, fgroup W, pol RL



Fringe quality 0

SNR 6.9

Int time 407.367

Amp 0.174

Phase 90.5

PFD 2.1e-03

Delays (us)

SBD 0.990083

MBD -0.009256

Fringe rate (Hz)

-0.851770

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

2020:093:042831

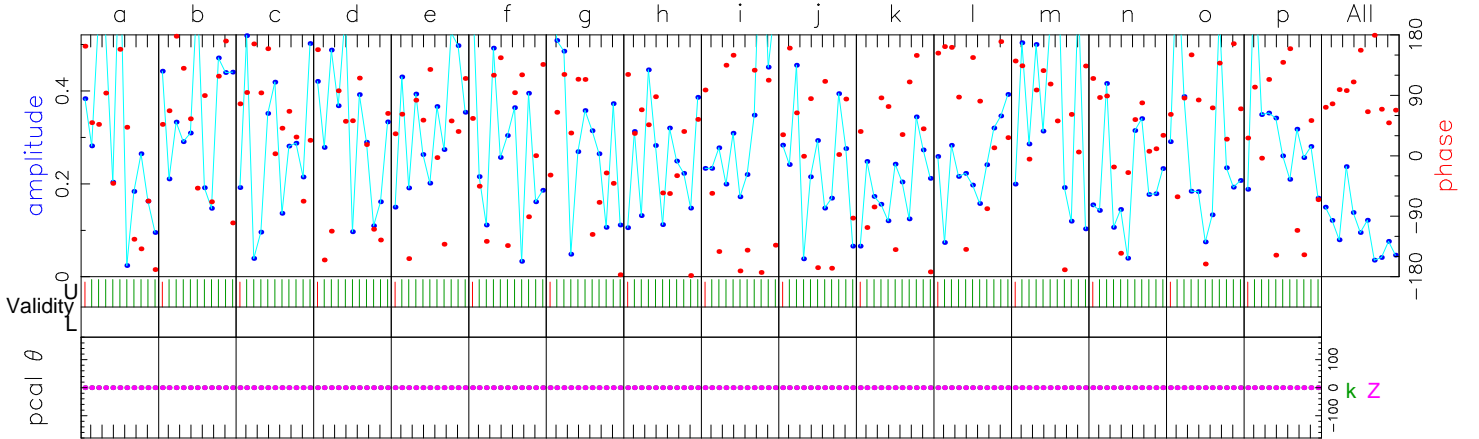
2020:014:135814

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	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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k: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		
k: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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)	-3.86587802053E+03			Apriori delay (usec)			-3.86686876465E+03			Resid mbdelay (usec)			-9.25588E-03			+/- 1.6E-04		
Sband delay (usec)	-3.86587868215E+03			Apriori clock (usec)			-5.8413070E-01			Resid sbdelay (usec)			9.90083E-01			+/- 2.5E-03		
Phase delay (usec)	-3.86686876173E+03			Apriori clockrate (us/s)			-2.1087179E-07			Resid phdelay (usec)			2.91996E-06			+/- 5.4E-07		
Delay rate (us/s)	1.49688296184E+00			Apriori rate (us/s)			1.49689285005E+00			Resid rate (us/s)			-9.88820E-06			+/- 2.3E-09		
Total phase (deg)	-48.8			Apriori accel (us/s/s)			-3.90160278613E-06			Resid phase (deg)			90.5			+/- 16.7		

ph/seg (deg) 38.9 27.7 Search (2048X64) 0.121 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 48.3 48.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 41.2 33.4 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 47.4 58.4 Inc. frq. avg. 0.141 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

k: az 60.1 el 32.1 pa -73.4 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -11165.875 -2426.815 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/kZ..1305JH Output file: /Exps/c192a/v2/1234/No0001/kZ.W.256.1305JH