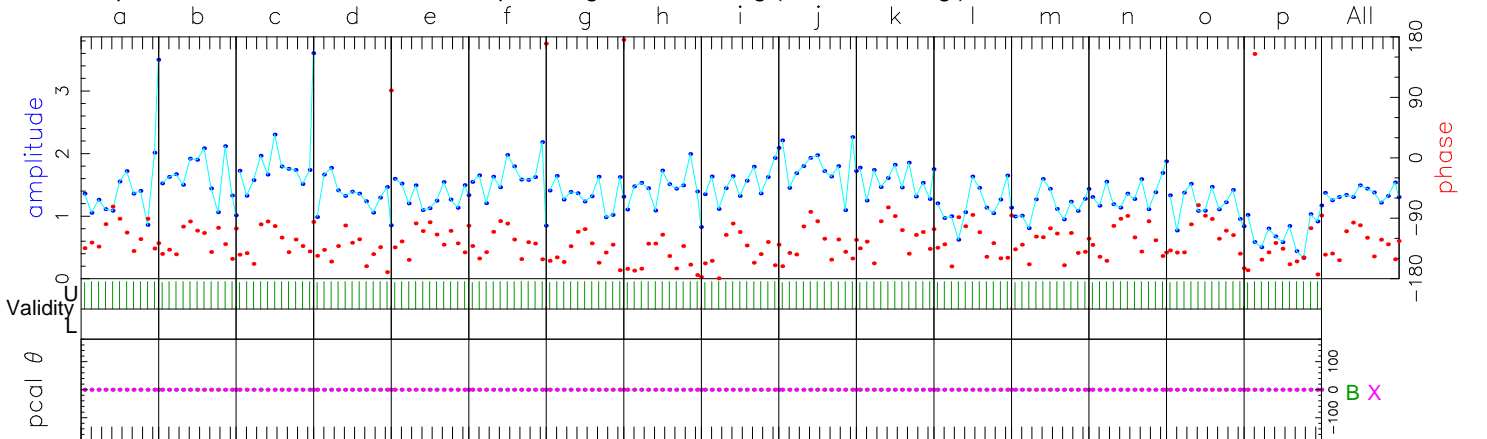


Fringe quality 7

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

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

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

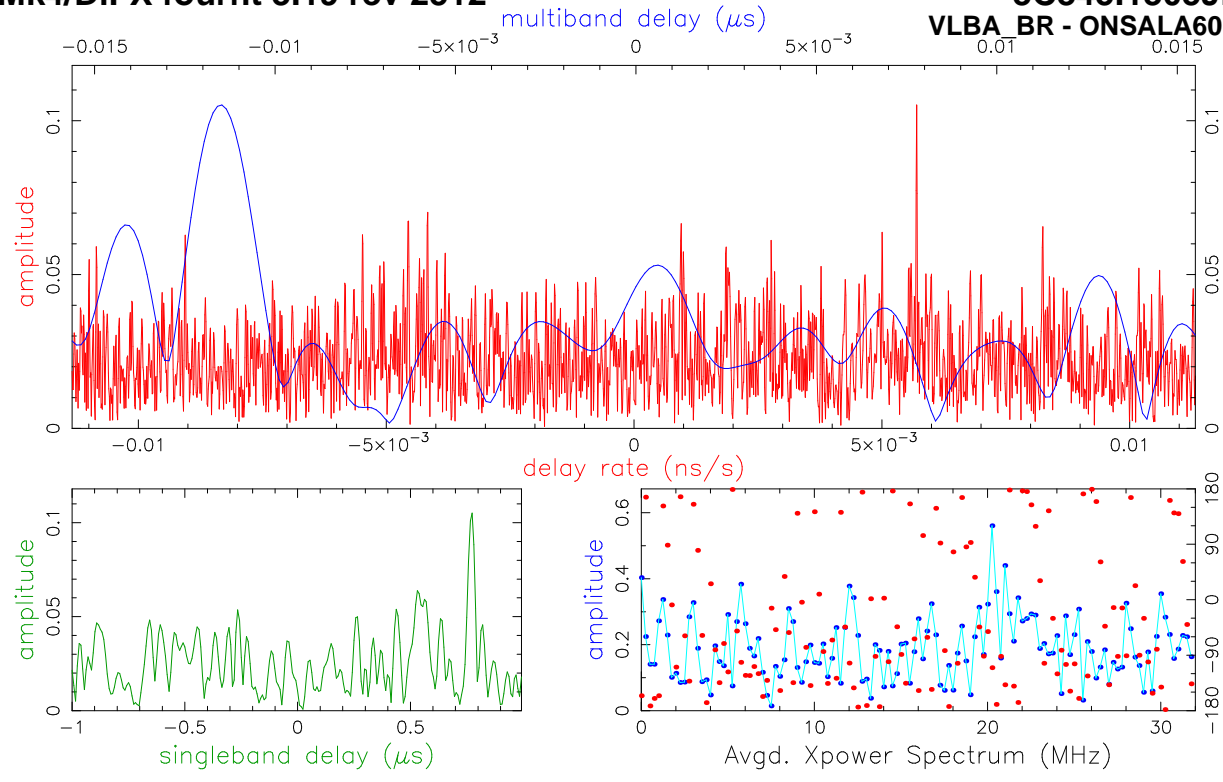


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-116.2	-123.1	-124.3	-139.1	-121.6	-127.7	-140.4	-149.5	-138.7	-127.9	-116.8	-126.1	-127.4	-123.3	-113.1	-149.6	Phase	-128.4
	1.3	1.6	1.6	1.3	1.3	1.6	1.3	1.4	1.4	1.6	1.4	1.1	1.1	1.2	1.1	0.6	Ampl.	1.3
	127.5	127.1	127.2	126.7	127.2	127.1	126.8	127.3	127.3	127.2	127.3	127.3	127.0	127.5	127.1	127.7	Sbd box	127.2
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) 7.02669966335E+02 Apriori delay (usec) 7.02684747362E+02 Resid mbdelay (usec) -1.47810E-02 +/- 1.5E-05
 Sband delay (usec) 7.02670898862E+02 Apriori clock (usec) -1.5486191E+01 Resid sbdelay (usec) -1.38485E-02 +/- 2.4E-04
 Phase delay (usec) 7.02684743219E+02 Apriori clockrate (us/s) -7.2800002E-07 Resid phdelay (usec) -4.14207E-06 +/- 5.1E-08
 Delay rate (us/s) -4.67303081088E-02 Apriori rate (us/s) -4.67303861104E-02 Resid rate (us/s) 7.80016E-08 +/- 2.1E-10
 Total phase (deg) -78.9 Apriori accel (us/s/s) -8.91911020584E-06 Resid phase (deg) -128.4 +/- 1.6

RMS Theor. Amplitude 1.288 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 19.4 2.8 Search (2048X64) 1.265 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 9.2 4.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 11.6 3.2 Inc. seg. avg. 1.359 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 18.9 5.6 Inc. frq. avg. 1.301 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.108.1305JH

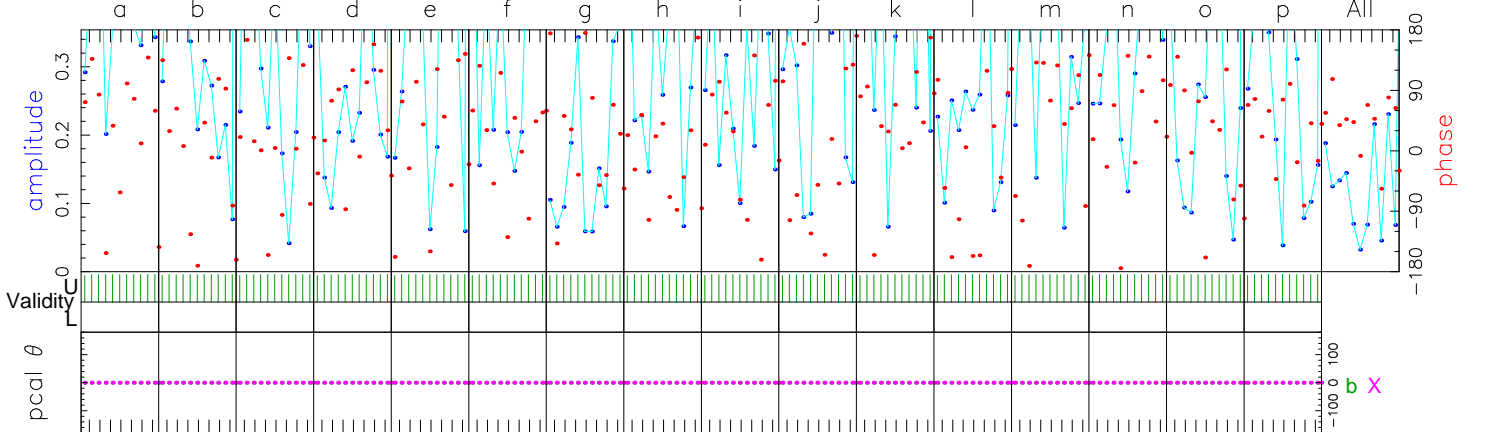


Fringe quality 0

SNR 5.8
Int time 405.038
Amp 0.118
Phase 56.7
PFD 7.4e-01
Delays (us)
SBD 0.771147
MBD -0.011534
Fringe rate (Hz) 0.491845
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
2020:093:042727
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	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used						
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL				Tracks					
																				Tracks					
Group delay (usec)(sbd)			-4.96074527710E+03																	Apriori delay (usec)	-4.96151499341E+03	Resid mbdelay (usec)	-1.15337E-02	+/-	1.8E-04
Sband delay (usec)			-4.96074384641E+03																	Apriori clock (usec)	-3.2937950E+01	Resid sbdelay (usec)	7.71147E-01	+/-	3.0E-03
Phase delay (usec)			-4.96151499158E+03																	Apriori clockrate (us/s)	-7.7039509E-07	Resid phdelay (usec)	1.82923E-06	+/-	6.3E-07
Delay rate (us/s)			1.28971035541E+00																	Apriori rate (us/s)	1.28970464558E+00	Resid rate (us/s)	5.70983E-06	+/-	2.7E-09
Total phase (deg)																				Apriori accel (us/s/s)	1.91370941852E-05	Resid phase (deg)	56.7	+/-	19.6

ph/seg (deg) 43.8 34.0
amp/seg (%) 65.6 59.3
ph/frq (deg) 52.5 39.3
amp/frq (%) 61.8 68.5

RMS Theor. Amplitude 0.118 +/- 0.020
Search (2048X64) 0.102
Interp. 0.000
Inc. seg. avg. 0.114
Inc. frq. avg. 0.125

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

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

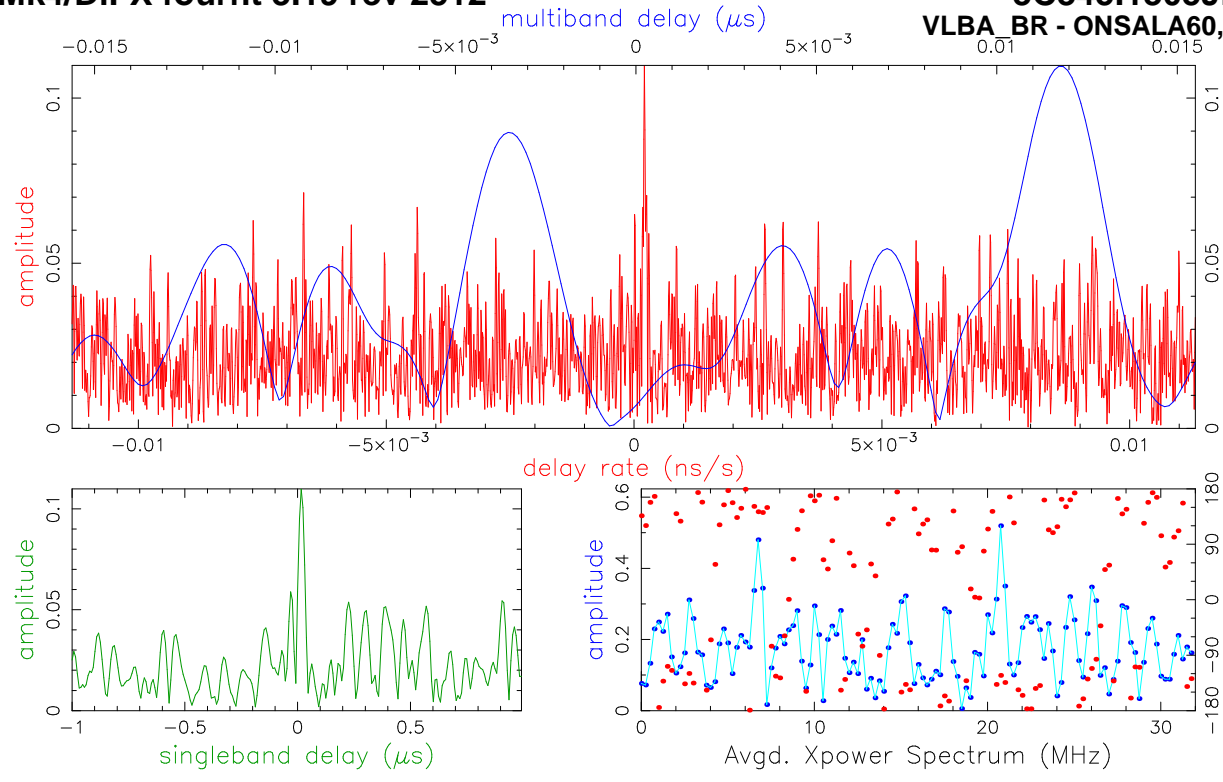
b: az 66.1 el 33.9 pa -52.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bX..1305JH Output file: /Exps/c192a/v2/1234/No0001/bX.W.19.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

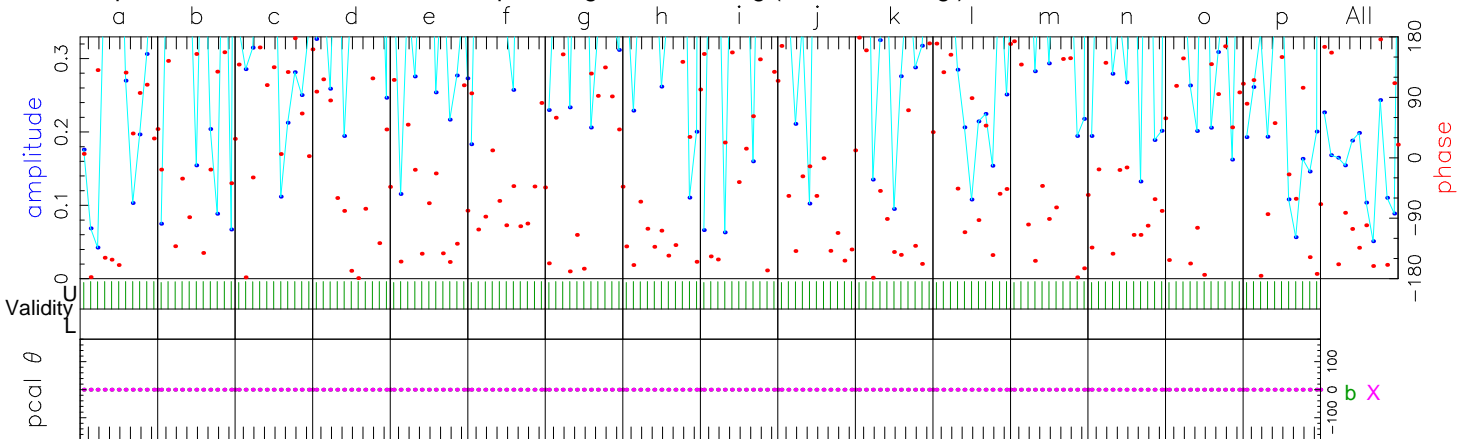
3C345.1305JH, No0001, bX

VLBA BR - ONSALA60, fgroup W, pol RR



Fringe quality 0
 SNR 6.0
 Int time 405.038
 Amp 0.110
 Phase -157.3
 PFD 3.2e-01
 Delays (us)
 SBD 0.016490
 MBD 0.011775
 Fringe rate (Hz) 0.018422
 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
 2020:093:042733
 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

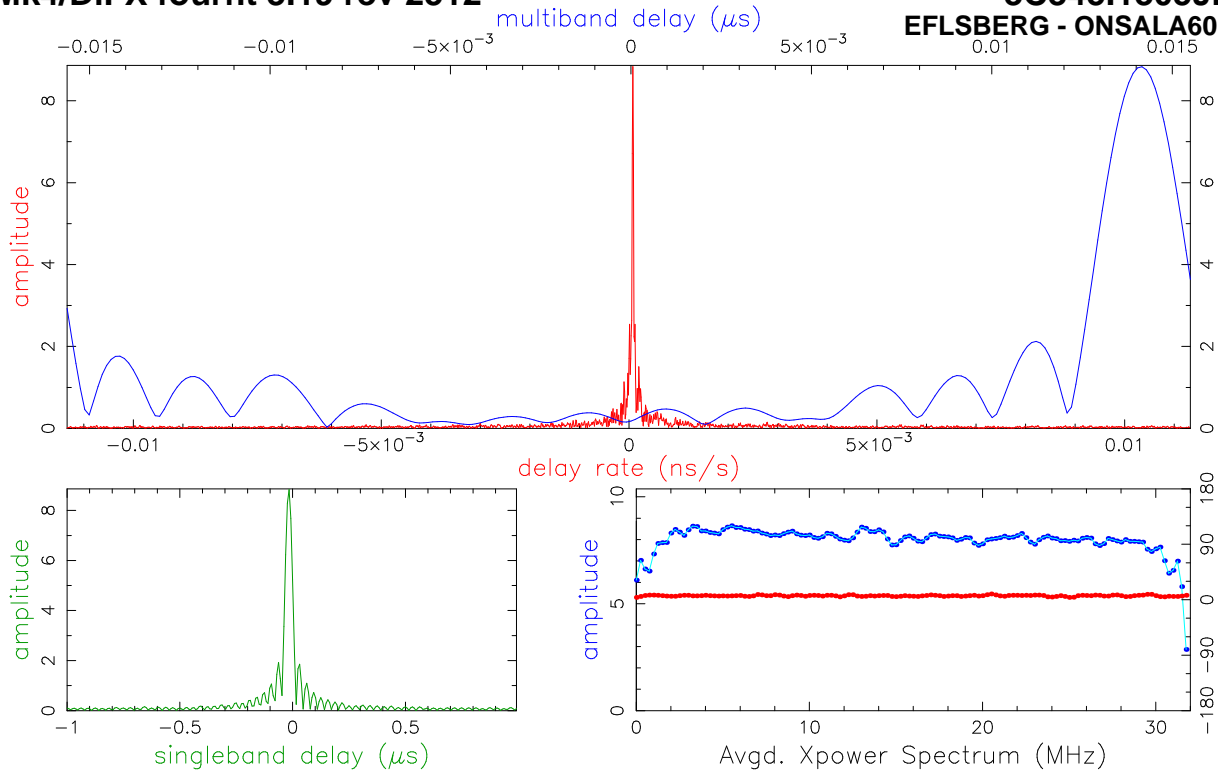


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	155.8	-141.4	130.2	-171.5	-126.0	-76.4	149.6	-140.2	170.2	-99.0	-168.4	-144.0	-149.5	-86.8	147.3	142.6	Phase	-157.3
	0.1	0.1	0.2	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.1	Ampl.	0.1
	168.9	214.0	132.4	6.3	87.8	130.4	131.6	130.2	68.8	21.2	91.1	52.7	149.1	129.7	130.4	225.2	Sbd box	131.1
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
x	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) -4.96150321886E+03 Apriori delay (usec) -4.96151499341E+03 Resid mbdelay (usec) 1.17746E-02 +/- 1.8E-04
 Sband delay (usec) -4.96149850341E+03 Apriori clock (usec) -3.2937950E+01 Resid sbdelay (usec) 1.64900E-02 +/- 2.8E-03
 Phase delay (usec) -4.96151499848E+03 Apriori clockrate (us/s) -7.7039509E-07 Resid phdelay (usec) -5.07138E-06 +/- 6.1E-07
 Delay rate (us/s) 1.28970485944E+00 Apriori rate (us/s) 1.28970464558E+00 Resid rate (us/s) 2.13858E-07 +/- 2.6E-09
 Total phase (deg) -349.0 Apriori accel (us/s/s) 1.91370941852E-05 Resid phase (deg) -157.3 +/- 18.9

ph/seg (deg) 48.6 32.8 Amplitude 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.8 57.2 Search (2048X64) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.0 37.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 83.2 66.1 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.138 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bX..1305JH Output file: /Exps/c192a/v2/1234/No0001/bX.W.43.1305JH

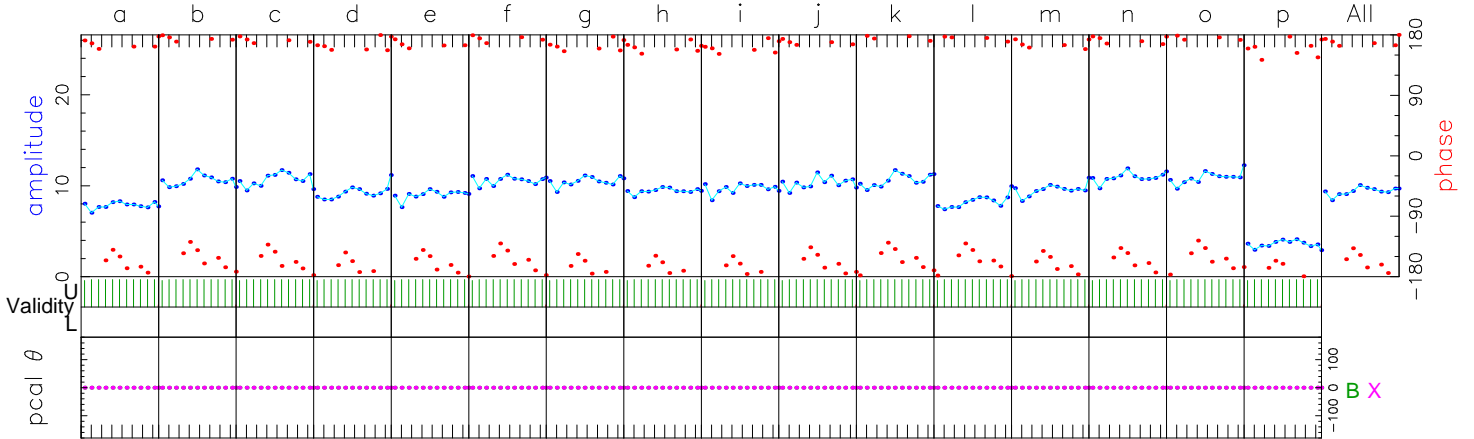


Fringe quality 8

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

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

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-175.2	-165.2	-168.4	179.6	-174.3	-167.0	178.5	177.3	176.3	-172.5	-163.9	-165.2	-175.5	-170.0	-163.7	171.6	Phase	-172.8
	7.4	9.9	10.1	8.6	8.5	9.9	8.9	9.2	9.8	10.0	7.7	8.9	10.3	10.1	3.4	Ampl.	8.9	
	127.3	126.7	126.8	126.5	127.0	126.8	126.6	126.9	126.8	127.0	126.8	126.8	126.9	127.0	126.6	126.6	Sbd box	126.8
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	7.02667618023E+02			Apriori delay (usec)			7.02684747362E+02			Resid mbdelay (usec)			1.41207E-02			+/- 2.2E-06		
Sband delay (usec)	7.02667705362E+02			Apriori clock (usec)			-1.5486191E+01			Resid sbdelay (usec)			-1.70420E-02			+/- 3.5E-05		
Phase delay (usec)	7.02684741789E+02			Apriori clockrate (us/s)			-7.2800002E-07			Resid phdelay (usec)			-5.57228E-06			+/- 7.5E-09		
Delay rate (us/s)	-4.67303081953E-02			Apriori rate (us/s)			-4.67303861104E-02			Resid rate (us/s)			7.79151E-08			+/- 3.1E-11		
Total phase (deg)	-123.2			Apriori accel (us/s/s)			-8.91911020584E-06			Resid phase (deg)			-172.8			+/- 0.2		

ph/seg (deg) 19.8 0.4
amp/seg (%) 7.6 0.7
ph/frq (deg) 8.2 0.5
amp/frq (%) 18.8 0.8

RMS Theor. Amplitude 8.864 +/- 0.018
Search (2048X64) 8.800
Interp. 0.000
Inc. seg. avg. 9.390
Inc. frq. avg. 8.905

Group delay (usec)(sbd) 7.02667618023E+02
Sband delay (usec) 7.02667705362E+02
Phase delay (usec) 7.02684741789E+02
Delay rate (us/s) -4.67303081953E-02
Total phase (deg) -123.2

Apriori delay (usec) 7.02684747362E+02
Apriori clock (usec) -1.5486191E+01
Apriori clockrate (us/s) -7.2800002E-07
Apriori rate (us/s) -4.67303861104E-02
Apriori accel (us/s/s) -8.91911020584E-06

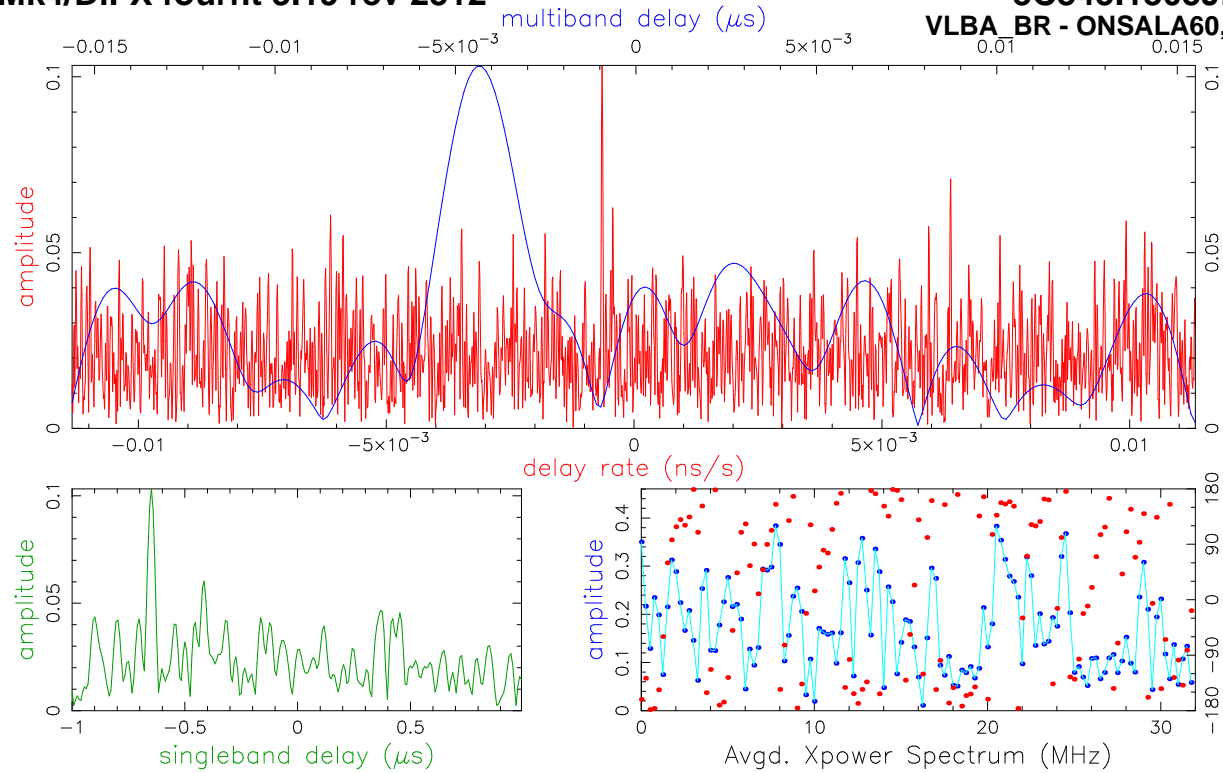
Resid mbdelay (usec) 1.41207E-02
Resid sbdelay (usec) -1.70420E-02
Resid phdelay (usec) -5.57228E-06
Resid rate (us/s) 7.79151E-08
Resid phase (deg) -172.8

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

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

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.58.1305JH

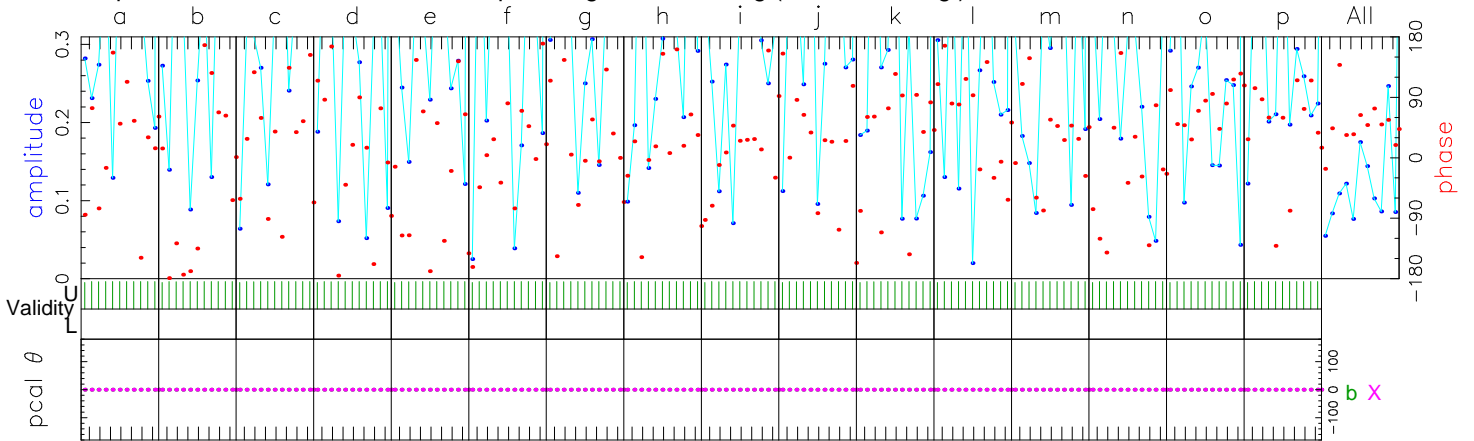


Fringe quality 0

SNR 5.7
Int time 405.038
Amp 0.103
Phase 52.8
PFD 9.7e-01
Delays (us)
SBD -0.648785
MBD -0.004336
Fringe rate (Hz)
-0.054928
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
2020:093:042739
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

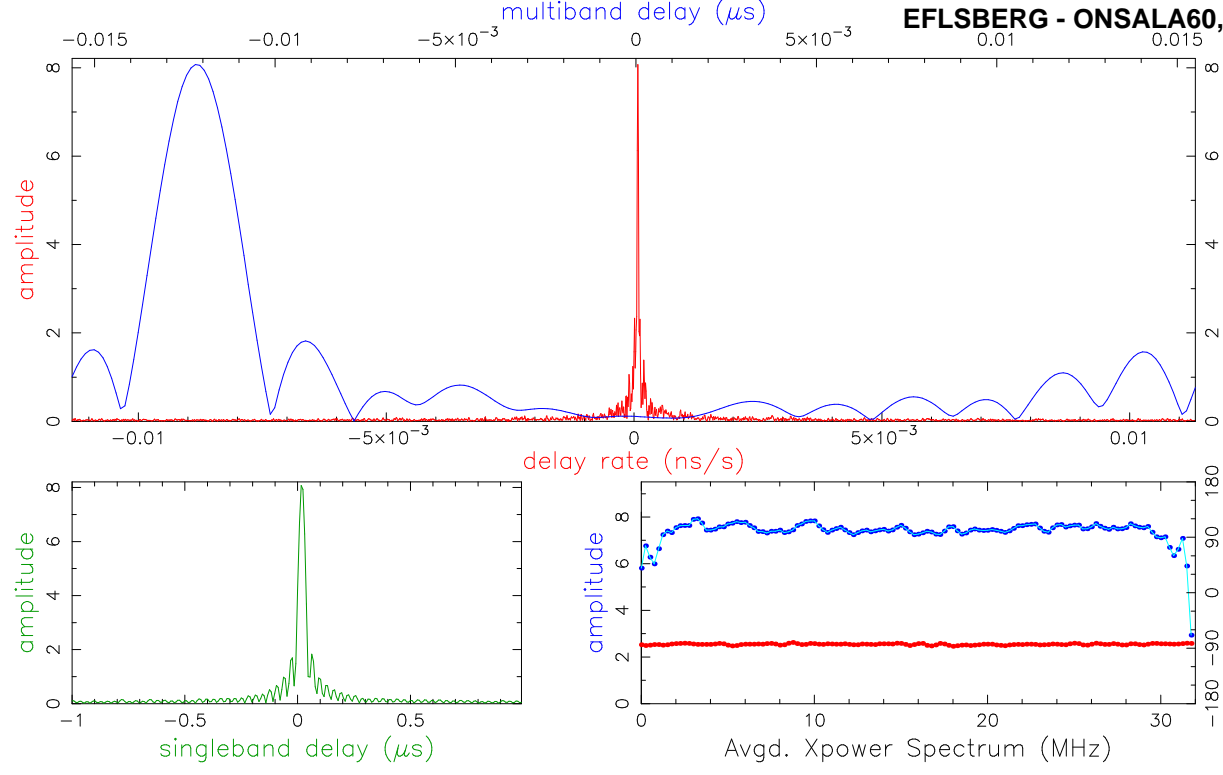
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	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
43.7	177.1	80.6	85.7	119.3	14.5	47.8	53.2	2.7	35.6	92.7	87.4	23.4	-45.2	74.1	79.7	79.7	Phase	52.8
0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
79.0	200.1	177.4	14.0	12.1	97.5	134.4	235.8	165.1	166.6	144.2	67.1	36.0	189.7	217.8	69.4	69.4	Sbd box	46.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
x	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-4.96217557950E+03			Apriori delay (usec)			-4.96151499341E+03			Resid mbdelay (usec)			-4.33609E-03			+/-	1.9E-04	
Sband delay (usec)	-4.96216377791E+03			Apriori clock (usec)			-3.2937950E+01			Resid sbdelay (usec)			-6.48785E-01			+/-	3.0E-03	
Phase delay (usec)	-4.96151499171E+03			Apriori clockrate (us/s)			-7.7039509E-07			Resid phdelay (usec)			1.70414E-06			+/-	6.5E-07	
Delay rate (us/s)	1.28970400792E+00			Apriori rate (us/s)			1.28970464558E+00			Resid rate (us/s)			-6.37659E-07			+/-	2.8E-09	
Total phase (deg)	-138.8			Apriori accel (us/s/s)			1.91370941852E-05			Resid phase (deg)			52.8			+/-	20.2	

ph/seg (deg) RMS Theor. Amplitude 0.103 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.4 61.0 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 53.8 40.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 58.2 70.5 Inc. seg. avg. 0.100 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.107 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bX..1305JH Output file: /Exps/c192a/v2/1234/No0001/bX.W.63.1305JH

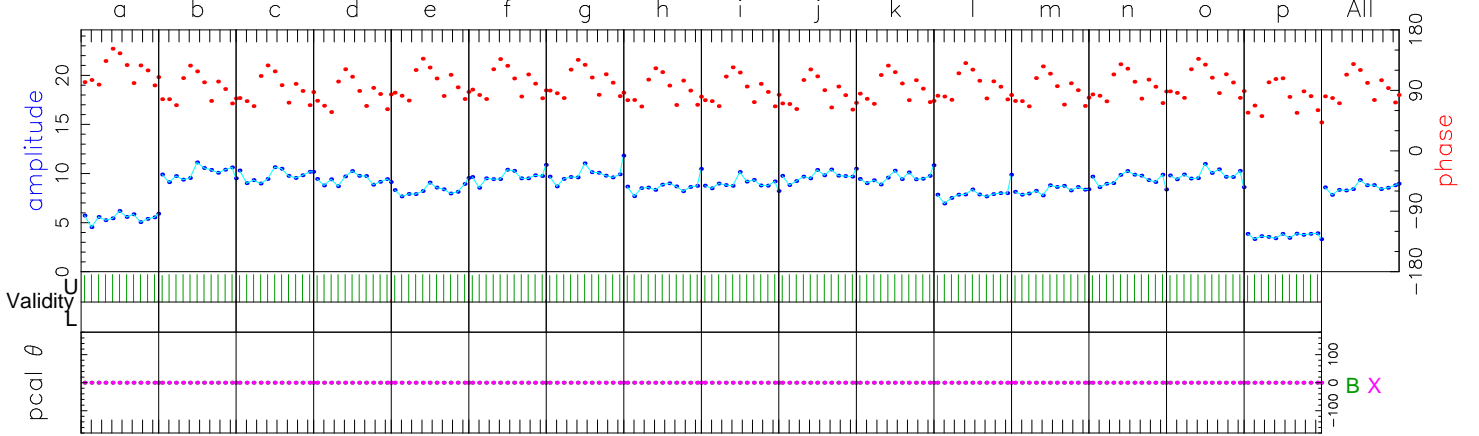


Fringe quality 8

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

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

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

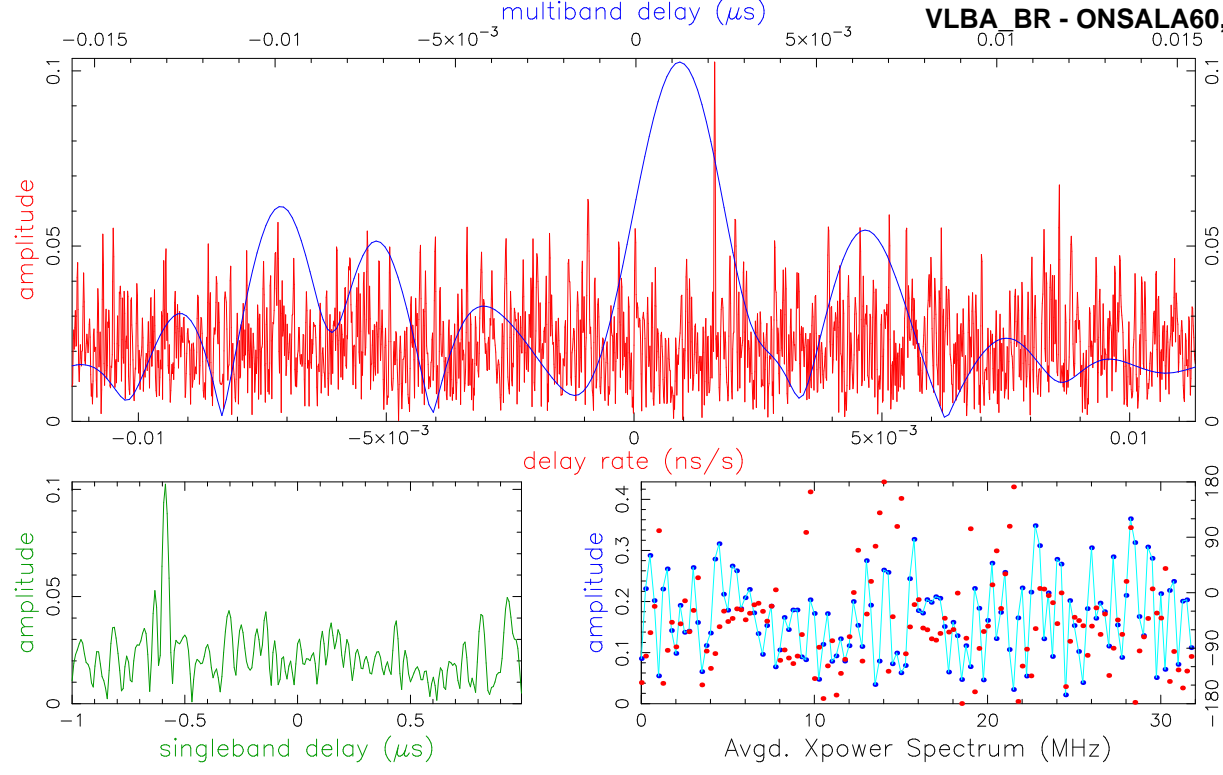


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	119.0	92.3	90.9	84.6	99.7	101.5	102.6	89.9	89.8	84.8	93.8	96.7	89.4	96.3	102.4	77.5		Phase	94.5
	5.2	9.5	9.2	8.8	7.8	9.1	9.3	8.1	8.5	9.1	9.0	7.4	7.8	9.0	9.3	3.5		Ampl.	8.2
	130.5	131.3	131.4	131.3	131.5	131.7	131.3	131.4	131.3	131.4	131.6	131.3	131.3	131.7	131.1	131.6		Sbd box	131.4
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	7.02703855148E+02			Apriori delay (usec)			7.02684747362E+02			Resid mbdelay (usec)			-1.21422E-02			+/- 2.3E-06			
Sband delay (usec)	7.02703586862E+02			Apriori clock (usec)			-1.5486191E+01			Resid sbdelay (usec)			1.88395E-02			+/- 3.8E-05			
Phase delay (usec)	7.02684750408E+02			Apriori clockrate (us/s)			-7.2800002E-07			Resid phdelay (usec)			3.04677E-06			+/- 8.0E-09			
Delay rate (us/s)	-4.67303081761E-02			Apriori rate (us/s)			-4.67303861104E-02			Resid rate (us/s)			7.79343E-08			+/- 3.3E-11			
Total phase (deg)	144.1			Apriori accel (us/s/s)			-8.91911020584E-06			Resid phase (deg)			94.5			+/- 0.2			

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

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/BX..1305JH Output file: /Exps/c192a/v2/1234/No0001/BX.W.74.1305JH

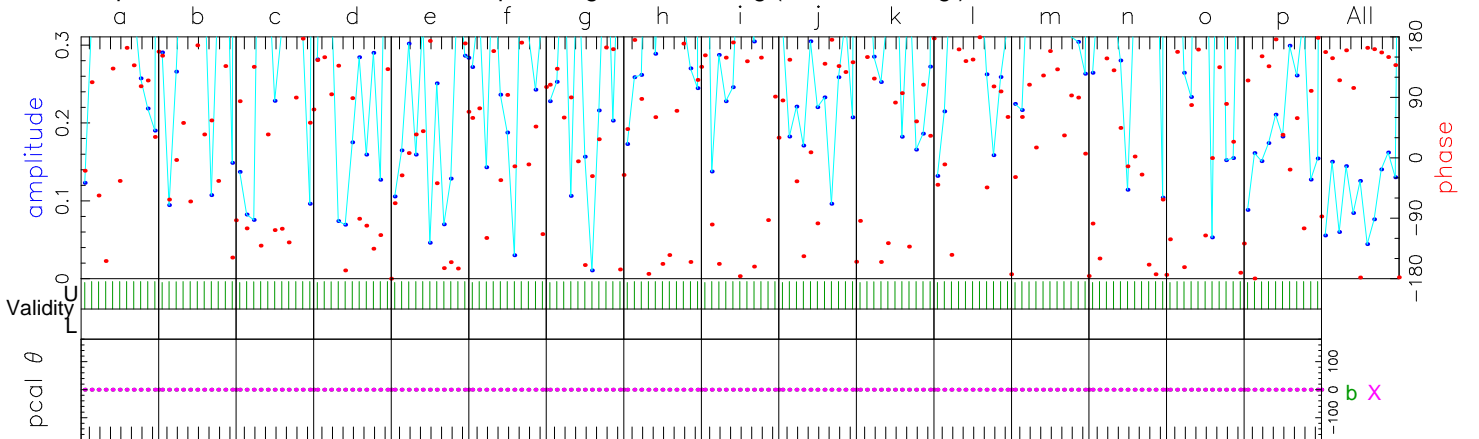


Fringe quality 0

SNR 5.7
 Int time 405.038
 Amp 0.104
 Phase 151.3
 PFD 9.8e-01
 Delays (us)
 SBD -0.586940
 MBD 0.001206
 Fringe rate (Hz)
 0.140321
 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
 2020:093:042743
 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

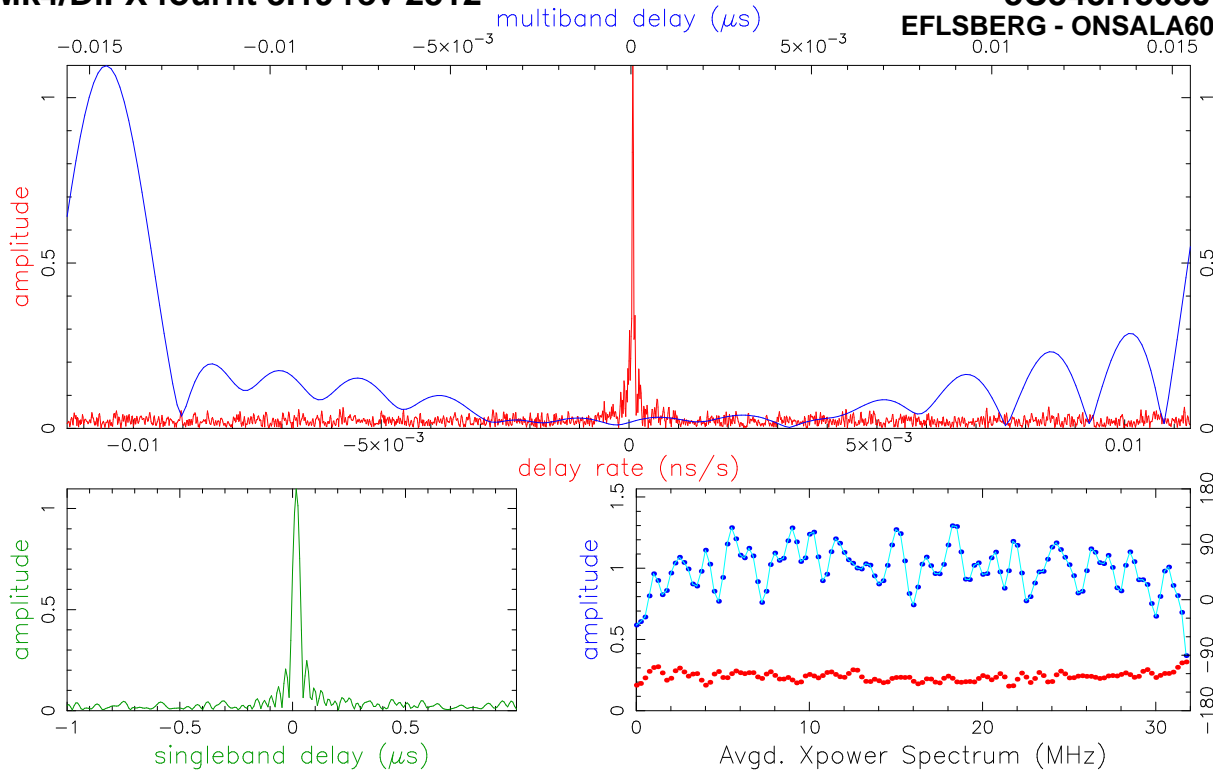


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	142.2	52.6	-141.2	156.0	-25.1	104.7	123.8	161.3	162.1	132.8	146.7	149.2	78.3	-163.1	174.7	141.9	Phase	151.3
b	0.1	0.0	0.1	0.2	0.0	0.1	0.1	0.2	0.3	0.1	0.1	0.2	0.2	0.1	0.3	0.0	Ampl.	0.1
X	68.8	43.0	246.8	55.5	204.0	171.7	63.8	94.1	53.1	57.5	140.0	213.9	54.4	119.8	54.2	171.9	Sbd box	53.9
b:1000	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b:1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -4.96210753780E+03 Apriori delay (usec) -4.96151499341E+03 Resid mbdelay (usec) 1.20561E-03 +/- 1.9E-04
 Sband delay (usec) -4.96210193291E+03 Apriori clock (usec) -3.2937950E+01 Resid sbdelay (usec) -5.86940E-01 +/- 3.0E-03
 Phase delay (usec) -4.96151498853E+03 Apriori clockrate (us/s) -7.7039509E-07 Resid phdelay (usec) 4.87889E-06 +/- 6.5E-07
 Delay rate (us/s) 1.28970627457E+00 Apriori rate (us/s) 1.28970464558E+00 Resid rate (us/s) 1.62899E-06 +/- 2.8E-09
 Total phase (deg) -40.4 Apriori accel (us/s/s) 1.91370941852E-05 Resid phase (deg) 151.3 +/- 20.3

RMS Theor. Amplitude 0.104 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 21.5 35.1 Search (2048X64) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 49.5 61.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 63.8 40.6 Inc. seg. avg. 0.092 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 79.4 70.8 Inc. frq. avg. 0.104 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bX..1305JH Output file: /Exps/c192a/v2/1234/No0001/bX.W.81.1305JH

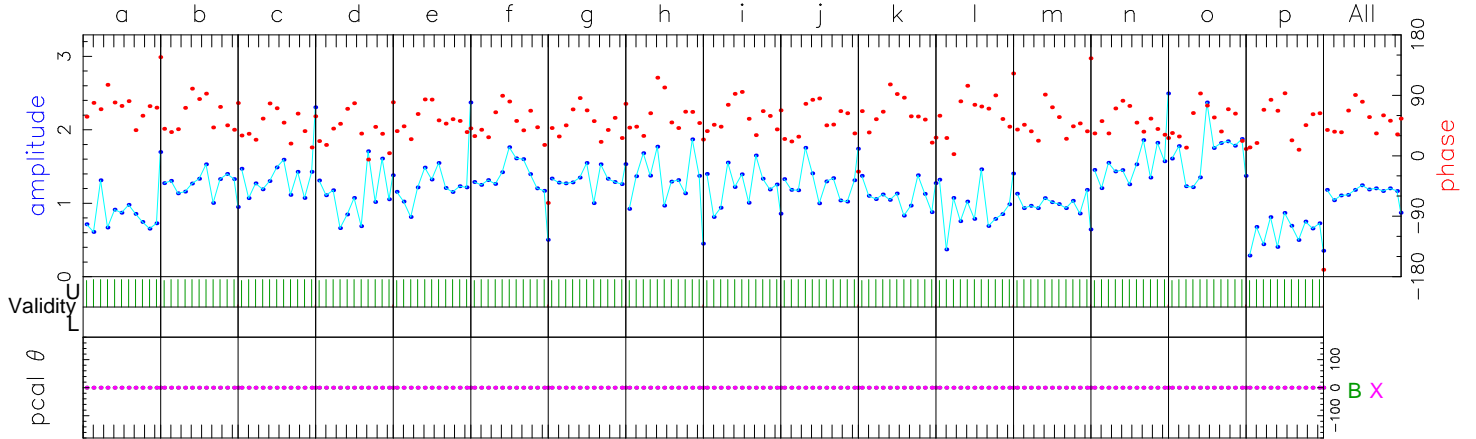


Fringe quality 7

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

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

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

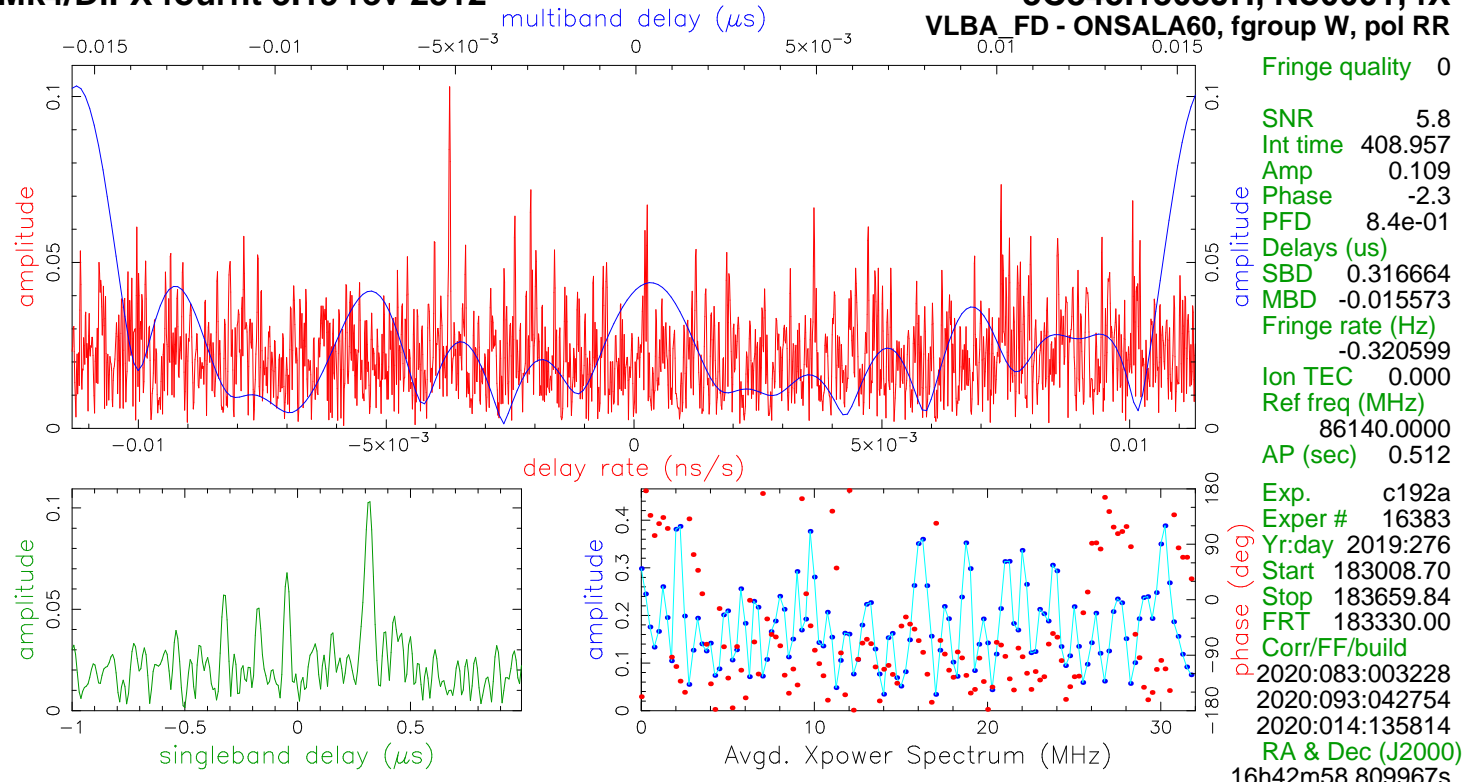


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
B	1000	1000	1000	1000	1000	1000	1000	1000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

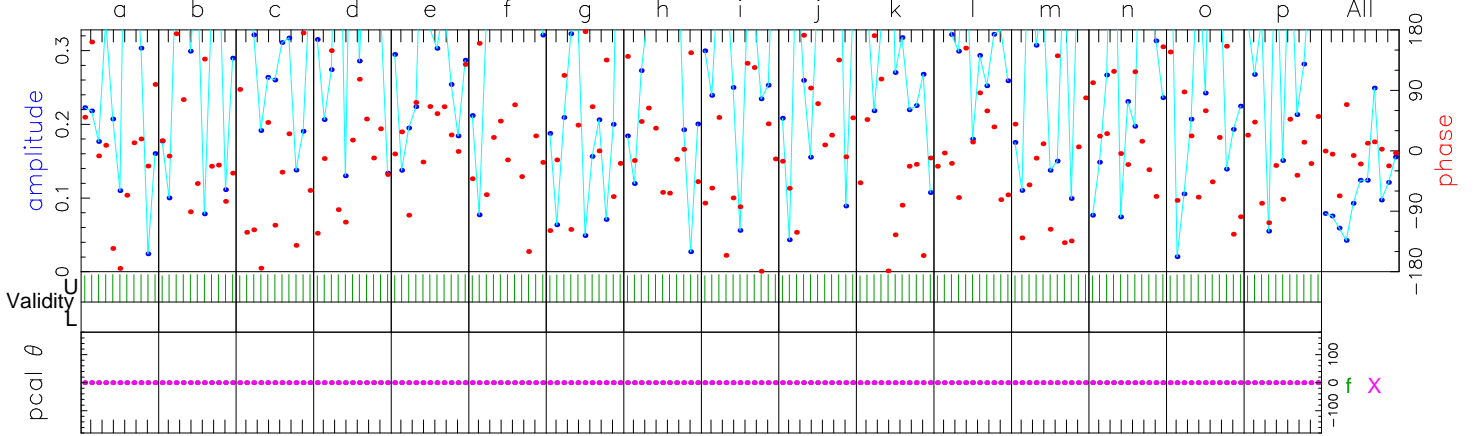
ph/seg (deg) RMS Theor. Amplitude 1.098 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.3 3.2 Search (2048X64) 1.090 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.9 5.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016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

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

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



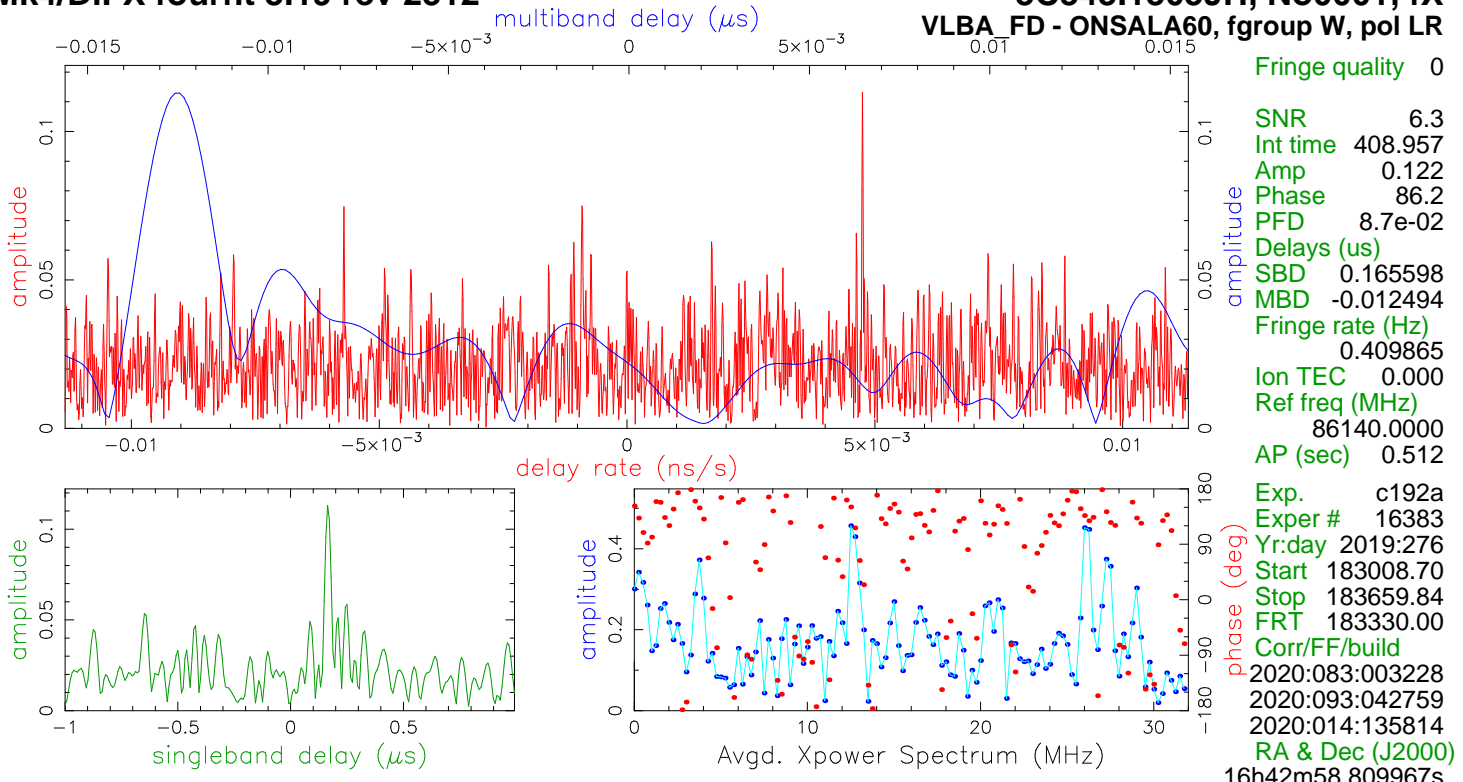
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



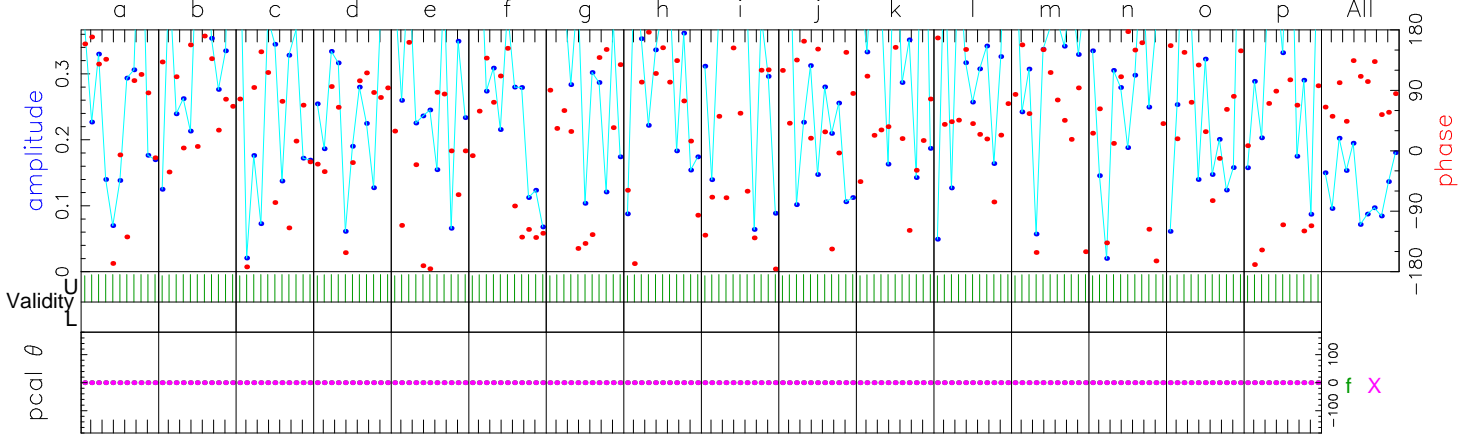
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	-8.1	-25.3	-87.7	-2.7	33.3	-0.7	-16.2	-10.4	0.9	55.0	-119.4	-5.9	-13.1	29.2	-29.6	0.1	Phase	-2.3			
	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1			
	178.4	31.7	15.1	1.4	78.6	32.0	218.7	122.5	190.7	121.8	73.6	117.6	164.4	45.0	149.4	75.1	Sbd box	169.5			
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				
f	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				
f: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				
f: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				
f	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					
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids				
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks				
																	Chan ids				
																	Tracks				
Group delay (usec)(sbd)			-3.93433952517E+03				Apriori delay (usec)										Resid mbdelay (usec)	-1.55730E-02	+/- 1.9E-04		
Sband delay (usec)			-3.93435103819E+03				Apriori clock (usec)										Resid sbdelay (usec)	3.16664E-01	+/- 3.0E-03		
Phase delay (usec)			-3.93466770226E+03				Apriori clockrate (us/s)										Resid phdelay (usec)	-7.41371E-08	+/- 6.4E-07		
Delay rate (us/s)			1.42989974672E+00				Apriori rate (us/s)										Resid rate (us/s)	-3.72183E-06	+/- 2.7E-09		
Total phase (deg)							Apriori accel (us/s/s)										Resid phase (deg)	-2.3	+/- 19.8		
		RMS	Theor.				Amplitude	0.109 +/- 0.019									Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)		30.8	32.8				Search (2048X64)	0.101									Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)		51.7	57.3				Interp.	0.000									Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
ph/frq (deg)		44.9	39.6				Inc. seg. avg.	0.100									Sample rate(MISamp/s): 64	dr window (ns/s)	-0.011 0.011		
amp/frq (%)		53.7	69.1				Inc. frq. avg.	0.101									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							X: az 263.7 el 53.3 pa 44.2										u,v (fr/asec)	-10665.569 -2352.321	simultaneous interpolator		
Control file: cf_1234_gmva							Input file: /Exps/c192a/v2/1234/No0001/fX..1305JH										Output file: /Exps/c192a/v2/1234/No0001/fX.W.112.1305JH				

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, fX
VLBA_FD - ONSALA60, fgroup W, pol LR



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

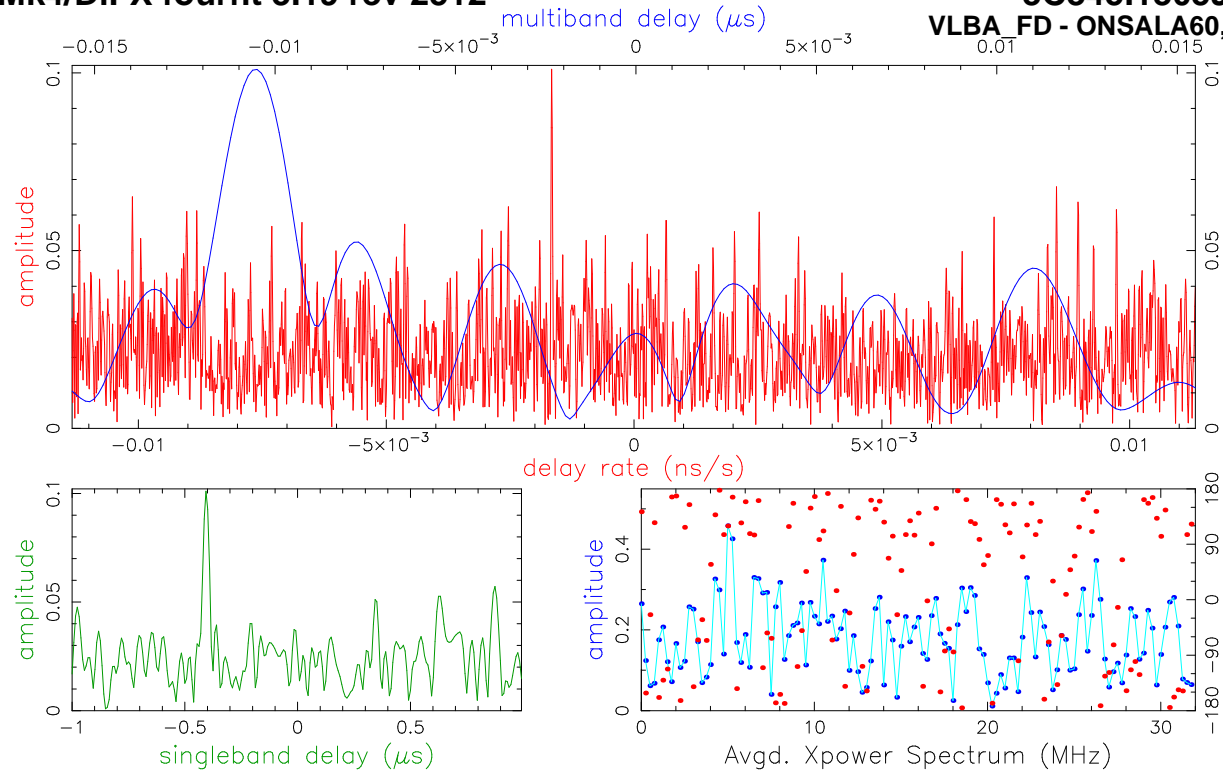


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
131.3	71.5	61.8	73.9	80.2	102.5	85.7	129.2	117.5	80.6	27.0	46.3	93.9	118.8	100.1	113.4	Phase	86.2						
0.2	0.2	0.1	0.2	0.0	0.1	0.1	0.2	0.0	0.1	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.1						
183.6	188.6	170.7	18.9	110.4	213.5	86.2	80.9	101.9	65.2	169.0	150.4	148.9	238.0	125.2	87.7	Sbd box	150.2						
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							
f	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	PC phase							
f: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	ManI PC							
f	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								
f	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)		-3.93449269614E+03															Apriori delay (usec)	-3.93466770219E+03	Resid mbdelay (usec)	-1.24940E-02	+/-	1.7E-04	
Sband delay (usec)		-3.93450210369E+03																Apriori clock (usec)	-3.1870474E+01	Resid sbdelay (usec)	1.65598E-01	+/-	2.7E-03
Phase delay (usec)		-3.93466769941E+03																Apriori clockrate (us/s)	-6.1894950E-07	Resid phdelay (usec)	2.77845E-06	+/-	5.9E-07
Delay rate (us/s)		1.42990822667E+00																Apriori rate (us/s)	1.42990346855E+00	Resid rate (us/s)	4.75812E-06	+/-	2.5E-09
Total phase (deg)			-225.7															Apriori accel (us/s/s)	-3.28242095453E-06	Resid phase (deg)	86.2	+/-	18.2

ph/seg (deg) RMS Theor. Amplitude 0.122 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 31.6 30.2 Search (2048X64) 0.108 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 43.2 52.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 30.8 36.5 Inc. seg. avg. 0.125 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 54.7 63.7 Inc. frq. avg. 0.118 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 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10665.569 -2352.321 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fX..1305JH Output file: /Exps/c192a/v2/1234/No0001/fX.W.133.1305JH

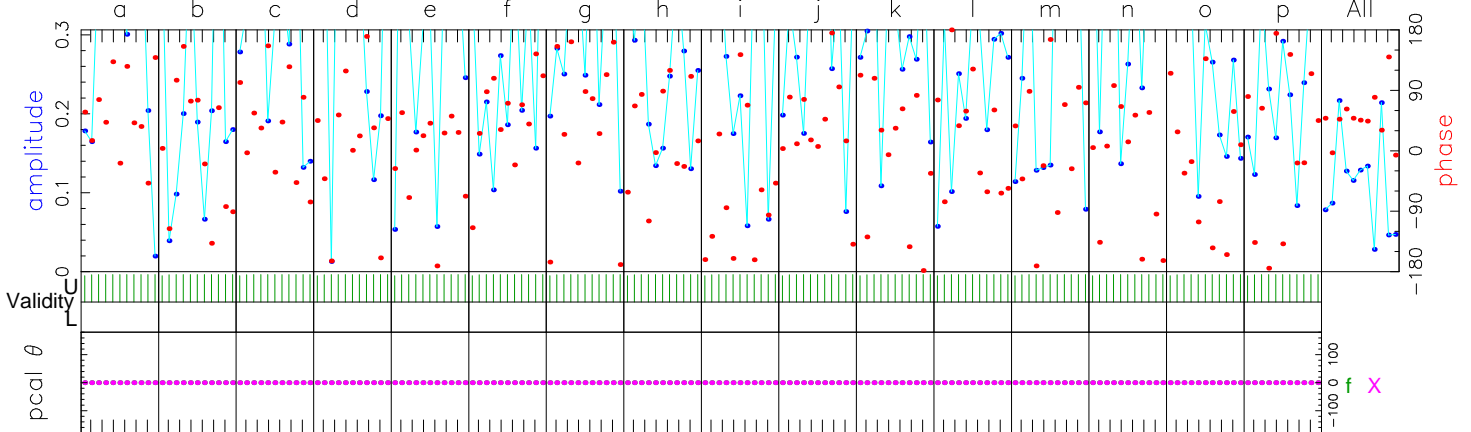


Fringe quality 0

SNR 5.6
Int time 408.957
Amp 0.102
Phase 43.2
PFD 9.9e-01
Delays (us)
SBD -0.405300
MBD -0.010533
Fringe rate (Hz)
-0.143190
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
2020:093:042805
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		APs used					
f	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					
f: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					
f: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					
f	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					
f	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					
																		Tracks					
Group delay (usec)(sbd)			-3.93508448483E+03															Apriori delay (usec)	-3.93466770219E+03	Resid mbdelay (usec)	-1.05326E-02	+/-	1.9E-04
Sband delay (usec)			-3.93507300269E+03															Apriori clock (usec)	-3.1870474E+01	Resid sbdelay (usec)	-4.05300E-01	+/-	3.1E-03
Phase delay (usec)			-3.93466770079E+03															Apriori clockrate (us/s)	-6.1894950E-07	Resid phdelay (usec)	1.39229E-06	+/-	6.6E-07
Delay rate (us/s)			1.42990180625E+00															Apriori rate (us/s)	1.42990346855E+00	Resid rate (us/s)	-1.66230E-06	+/-	2.8E-09
Total phase (deg)																		Apriori accel (us/s/s)	-3.28242095453E-06	Resid phase (deg)	43.2	+/-	20.5

ph/seg (deg) 37.9 33.9
amp/seg (%) 60.3 59.2
ph/frq (deg) 54.3 40.9
amp/frq (%) 58.0 71.5

RMS Theor. Amplitude 0.102 +/- 0.018
Search (2048X64) 0.100
Interp. 0.000
Inc. seg. avg. 0.096
Inc. frq. avg. 0.107

f: az 61.0 el 37.1 pa -78.2
X: az 263.7 el 53.3 pa 44.2
u,v (fr/asec) -10665.569 -2352.321

Group delay (usec)(sbd) -3.93508448483E+03
Sband delay (usec) -3.93507300269E+03
Phase delay (usec) -3.93466770079E+03
Delay rate (us/s) 1.42990180625E+00
Total phase (deg) -268.7

Apriori delay (usec) -3.93466770219E+03
Apriori clock (usec) -3.1870474E+01
Apriori clockrate (us/s) -6.1894950E-07
Apriori rate (us/s) 1.42990346855E+00
Apriori accel (us/s/s) -3.28242095453E-06

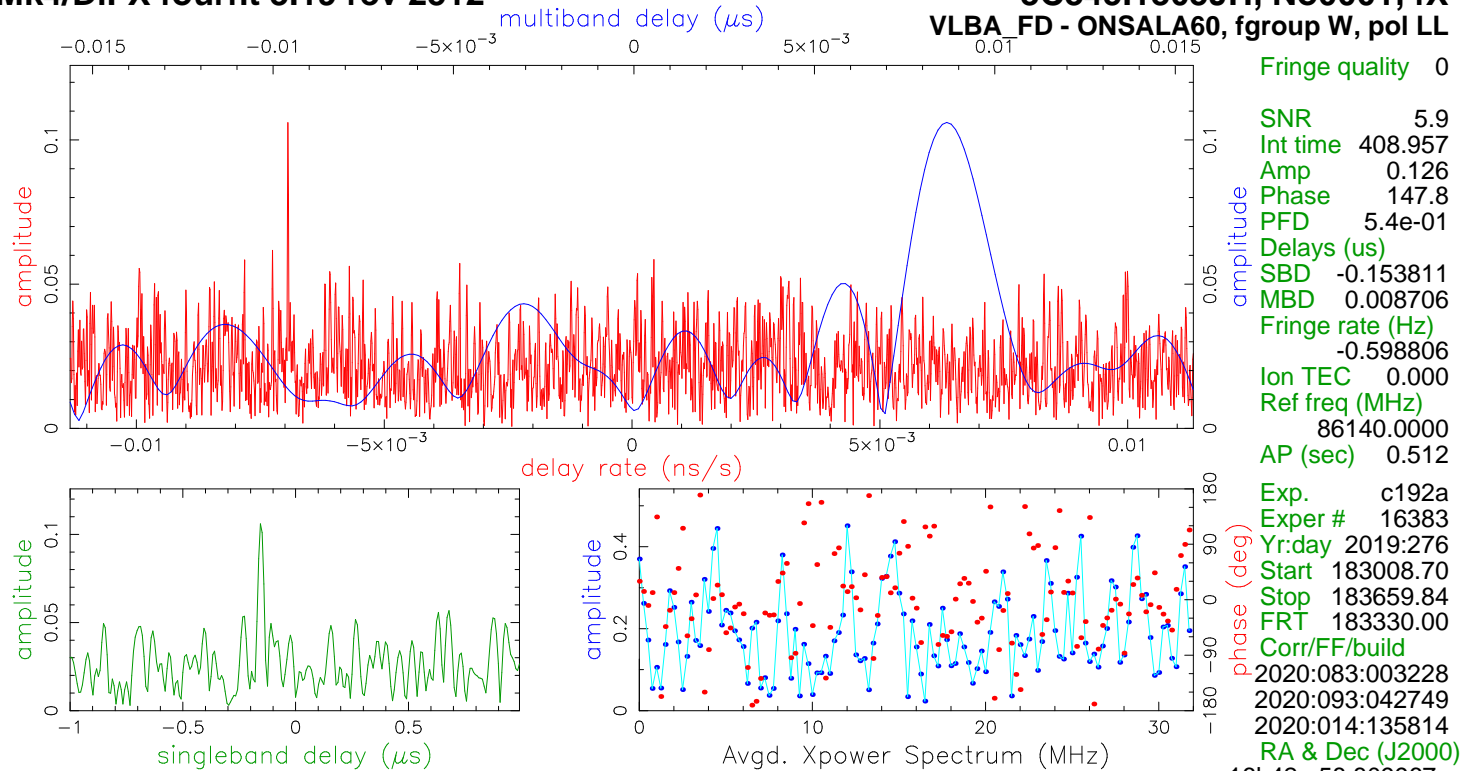
Resid mbdelay (usec) -1.05326E-02
Resid sbdelay (usec) -4.05300E-01
Resid phdelay (usec) 1.39229E-06
Resid rate (us/s) -1.66230E-06
Resid phase (deg) 43.2

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

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

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fX..1305JH Output file: /Exps/c192a/v2/1234/No0001/fX.W.154.1305JH



Fringe quality 0

SNR 5.9

Int time 408.957

Amp 0.126

Phase 147.8

PFD 5.4e-01

Delays (us)

SBD -0.153811

MBD 0.008706

Fringe rate (Hz) -0.598806

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

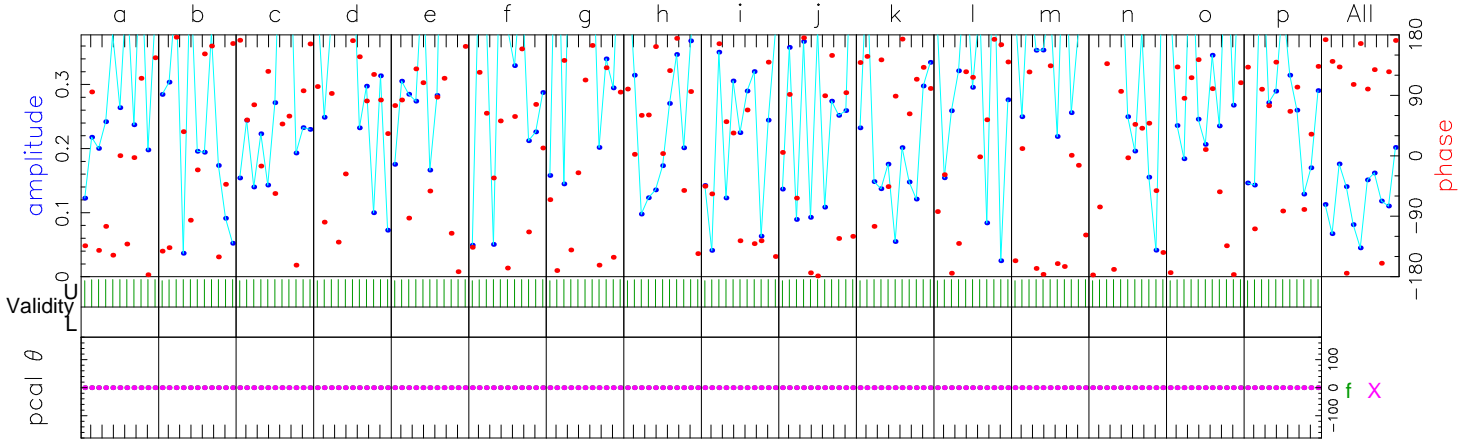
Corr/FF/build 2020:083:003228

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					
	-175.3	-149.9	65.6	128.1	141.6	95.6	167.6	115.7	-178.3	177.6	133.6	165.3	-167.9	146.4	140.2	102.2		Phase 147.8					
	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1		Ampl. 0.1					
	149.3	161.8	126.7	81.4	86.7	144.0	241.7	222.9	246.9	21.1	124.9	150.1	184.2	233.6	211.2	243.3		Sbd box 109.3					
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					
f	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					
f: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					
f: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					
f	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					
f	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)			-3.93481524612E+03															Apriori delay (usec)	-3.93466770219E+03	Resid mbdelay (usec)	8.70607E-03	+/-	1.8E-04
Sband delay (usec)			-3.93482151269E+03															Apriori clock (usec)	-3.1870474E+01	Resid sbdelay (usec)	-1.53811E-01	+/-	2.9E-03
Phase delay (usec)			-3.93466769742E+03															Apriori clockrate (us/s)	-6.1894950E-07	Resid phdelay (usec)	4.76611E-06	+/-	6.2E-07
Delay rate (us/s)			1.42989651701E+00															Apriori rate (us/s)	1.42990346855E+00	Resid rate (us/s)	-6.95154E-06	+/-	2.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	-3.28242095453E-06	Resid phase (deg)	147.8	+/-	19.3

ph/seg (deg) 31.6 32.0 Amplitude 0.126 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 45.4 55.9 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 40.7 38.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

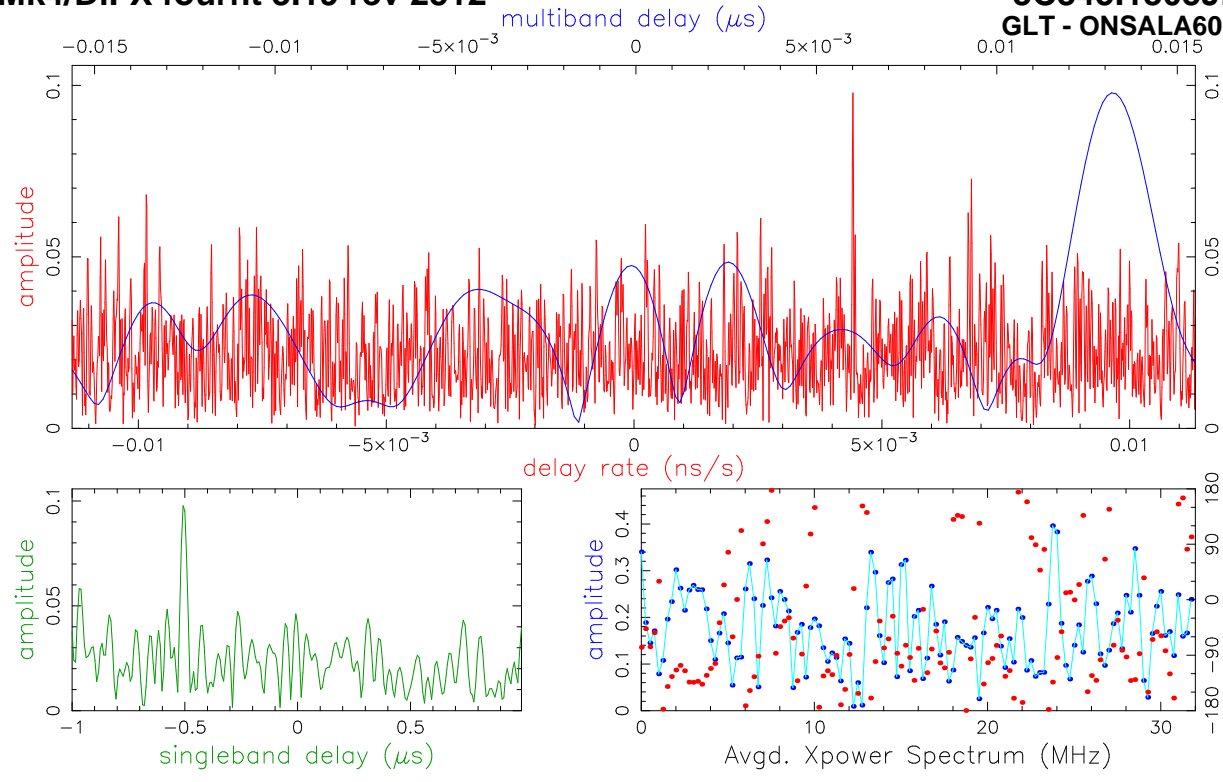
amp/frq (%) 44.2 67.4 Inc. seg. avg. 0.126 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

f: az 61.0 el 37.1 pa -78.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10665.569 -2352.321 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fX..1305JH Output file: /Exps/c192a/v2/1234/No0001/fX.W.95.1305JH simultaneous interpolator

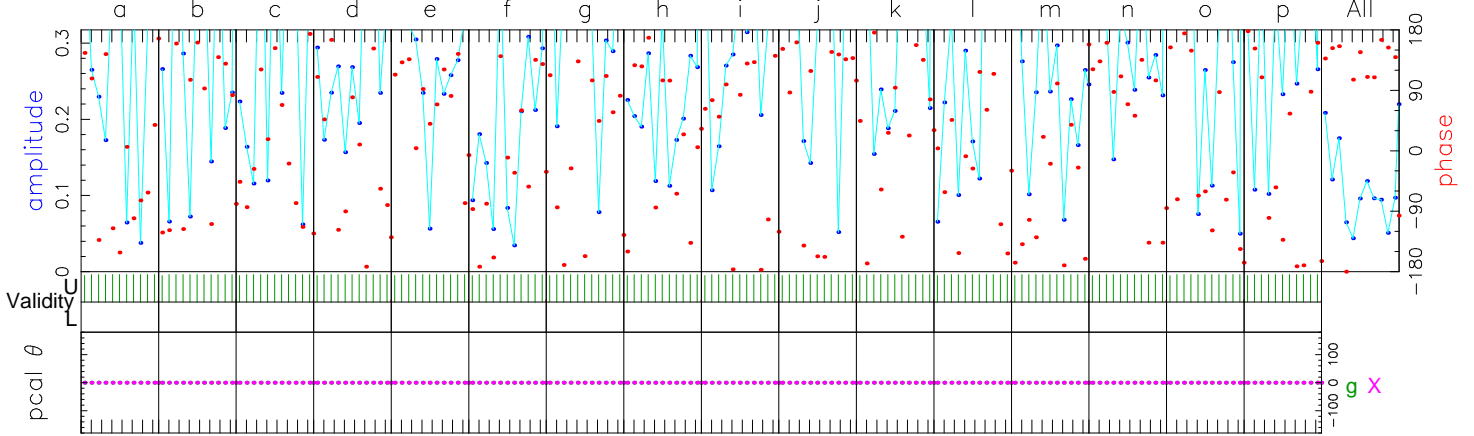
Mk4/DiFX fourfit 3.19 rev 2512

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



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

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

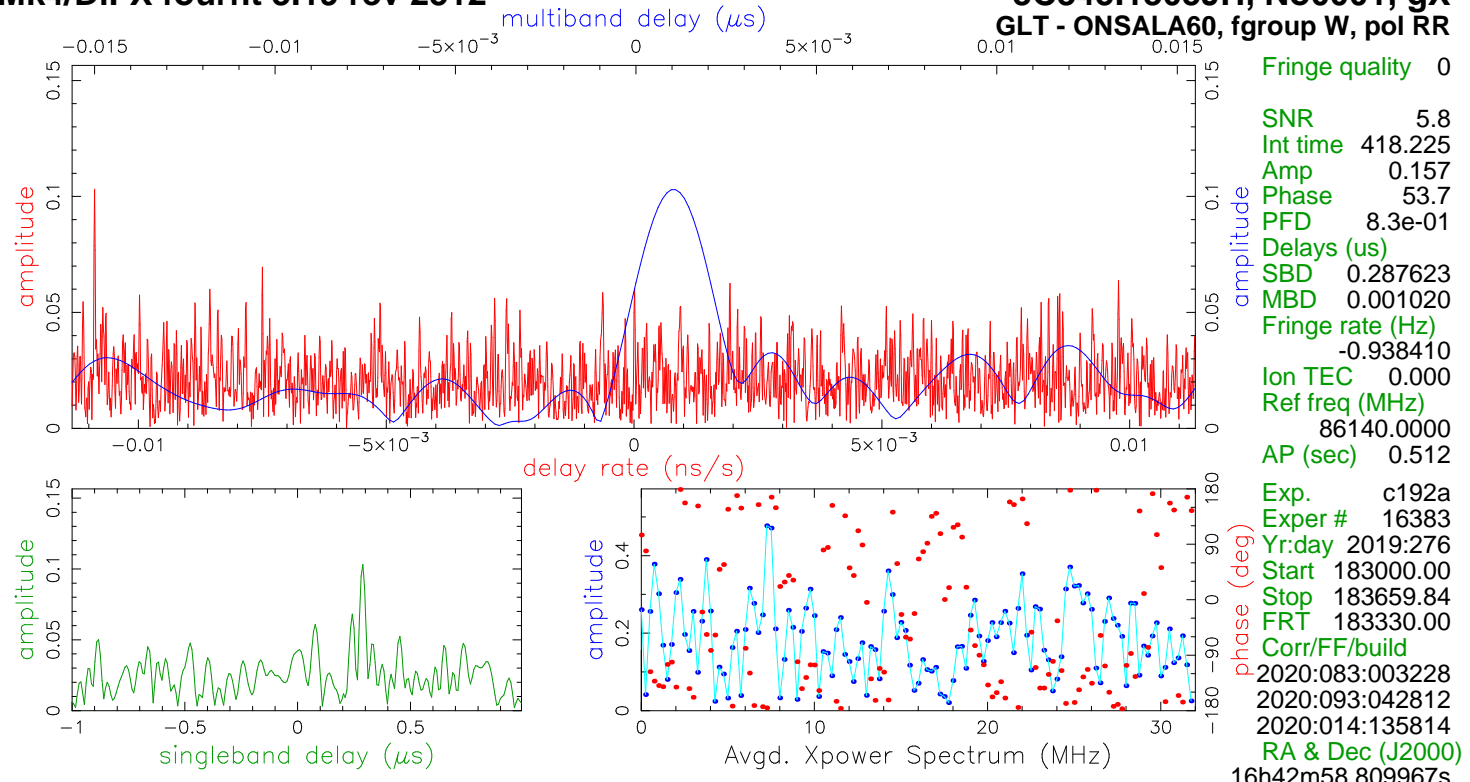


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-146.9	155.4	-174.1	-178.4	104.3	149.3	116.4	136.4	122.1	158.4	114.2	36.8	-141.7	128.0	-142.4	150.9	Phase	142.6
	0.1	0.2	0.0	0.1	0.2	0.0	0.2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

ph/seg (deg) 25.2 35.7 Theor. Amplitude 0.106 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 48.8 62.4 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 50.1 41.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 80.5 72.0 Inc. seg. avg. 0.095 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gX..1305JH Output file: /Exps/c192a/v2/1234/No0001/gX.W.159.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 0

SNR 5.8

Int time 418.225

Amp 0.157

Phase 53.7

PFD 8.3e-01

Delays (us)

SBD 0.287623

MBD 0.001020

Fringe rate (Hz)

-0.938410

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183000.00

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042812

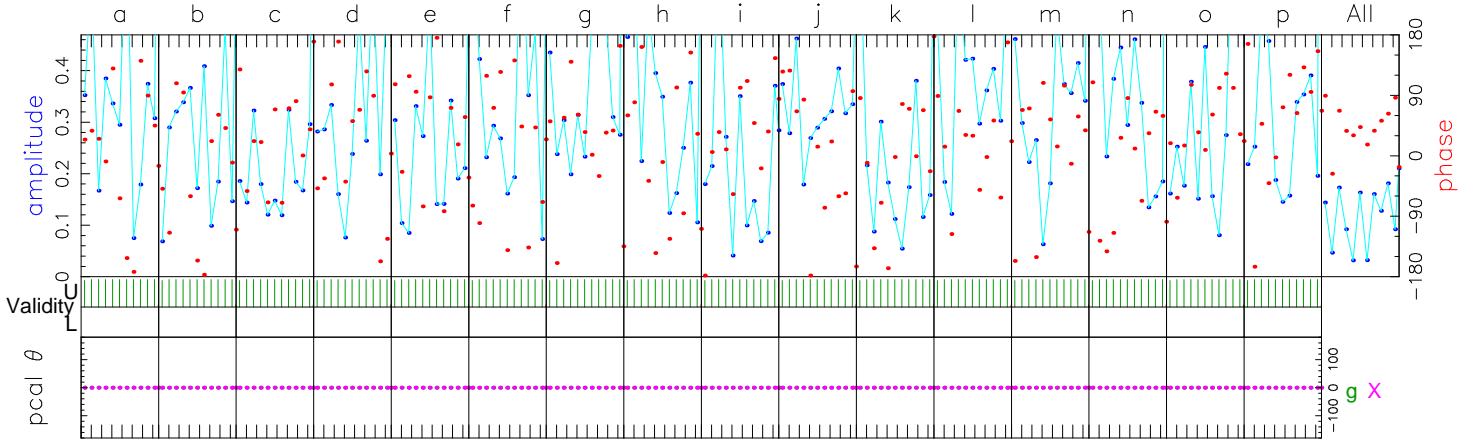
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0				
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000				
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR				
Group delay (usec)(sbd)		-4.07303477788E+02															1.01969E-03	+/- 1.9E-04		
Sband delay (usec)		-4.07298124977E+02															2.87623E-01	+/- 3.0E-03		
Phase delay (usec)		-4.07585745746E+02															1.73130E-06	+/- 6.4E-07		
Delay rate (us/s)		6.39649969896E-01															-1.08940E-05	+/- 2.6E-09		
Total phase (deg)					-49.9												53.7	+/- 19.8		
pcal mode:	MANUAL, MANUAL																PC period (AP's)	5, 5		
pcal rate:	0.000E+00, 0.000E+00 (us/s)																sb window (us)	-1.000 1.000		
Bits/sample:	2x2																SampCntNorm: enabled	mb window (us)	-0.016 0.016	
Sample rate(MSamp/s):	64																dr window (ns/s)	-0.011 0.011		
Data rate(Mb/s):	2048																nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00

ph/seg (deg) 32.9 34.3

amp/seg (%) 54.0 59.8

ph/frq (deg) 21.8 39.6

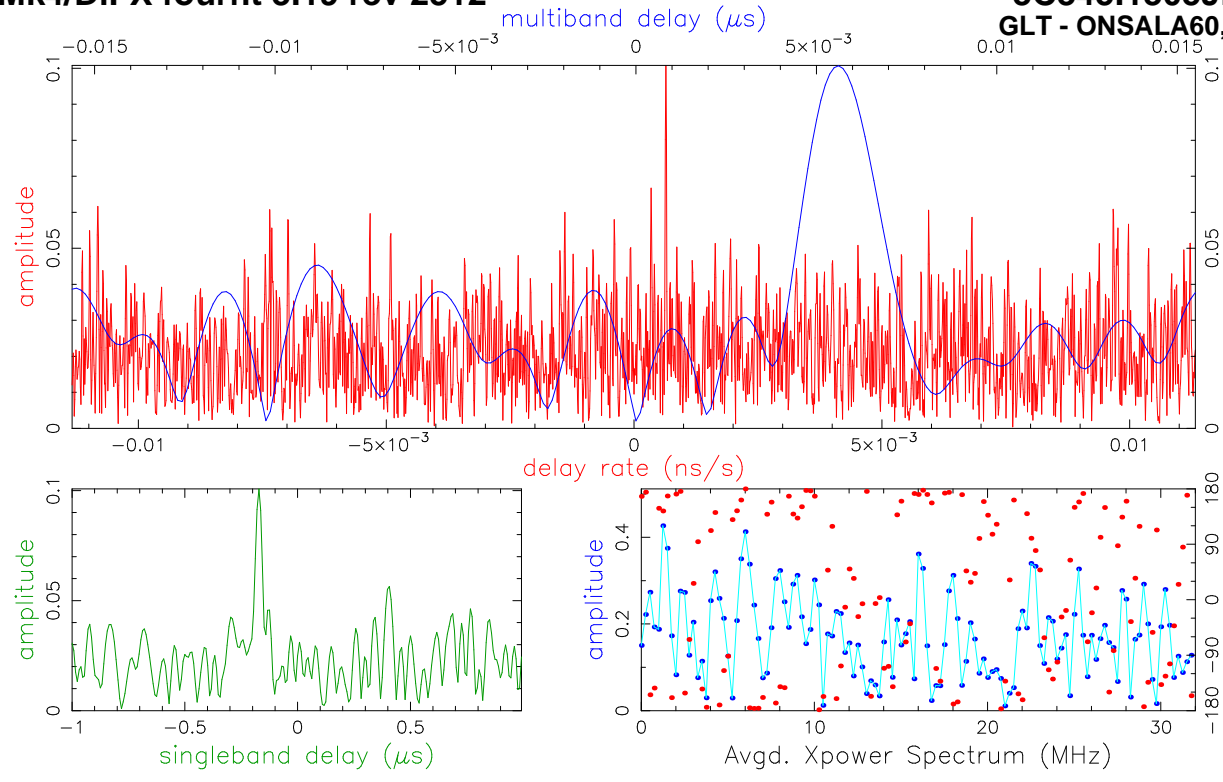
amp/frq (%) 53.6 69.1

g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gX..1305JH Output file: /Exps/c192a/v2/1234/No0001/gX.W.180.1305JH simultaneous interpolator

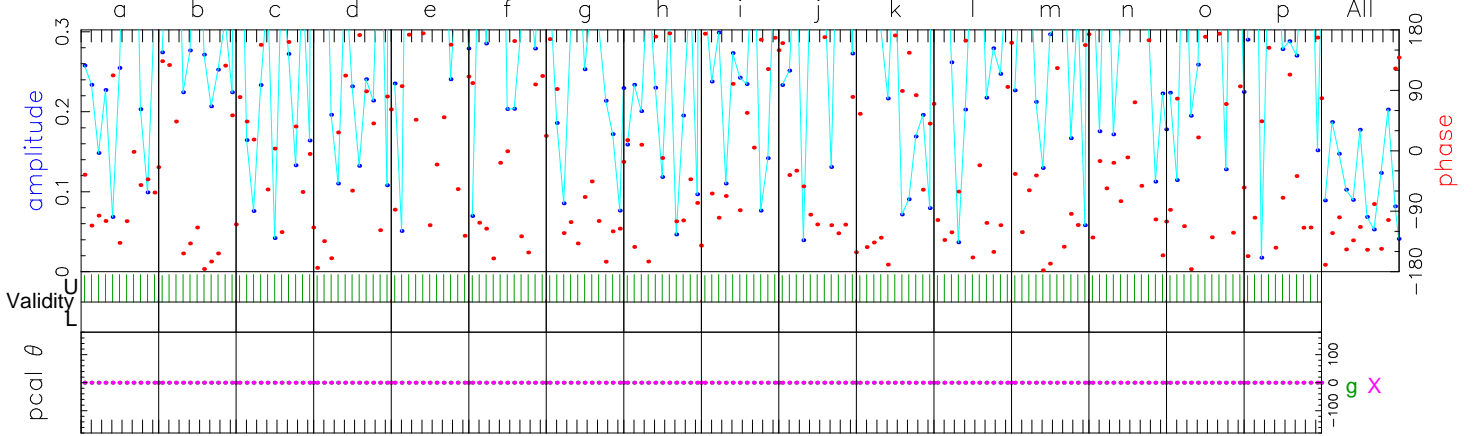
Mk4/DiFX fourfit 3.19 rev 2512

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



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

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

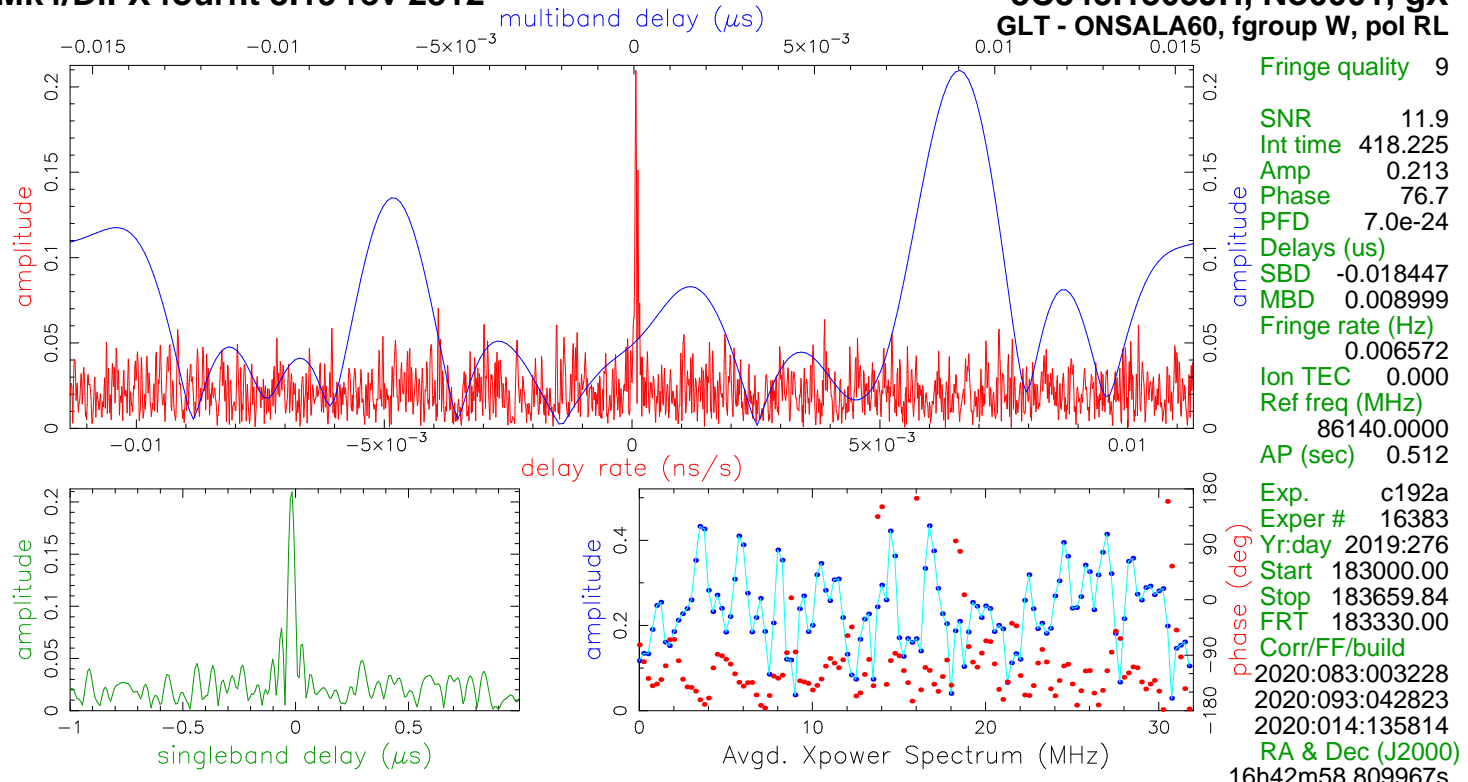


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-69.4	165.8	-17.0	-172.4	-138.6	-135.9	-120.2	-122.8	-164.3	-110.2	-166.2	-127.8	-118.2	-55.6	-157.5	-127.5		Phase -126.9					
	0.2	0.1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

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

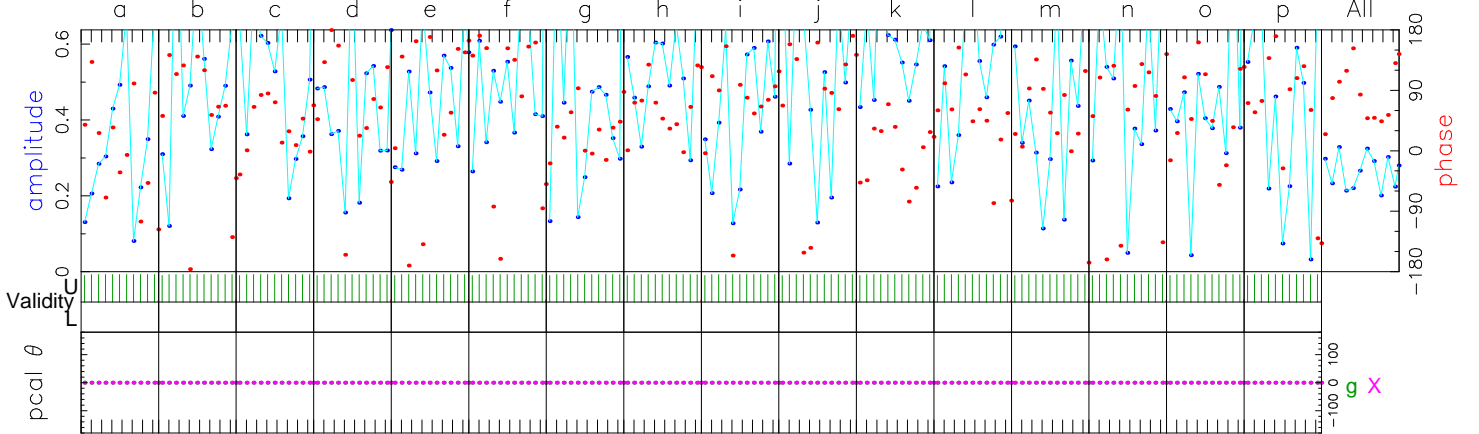
Mk4/DiFX fourfit 3.19 rev 2512

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



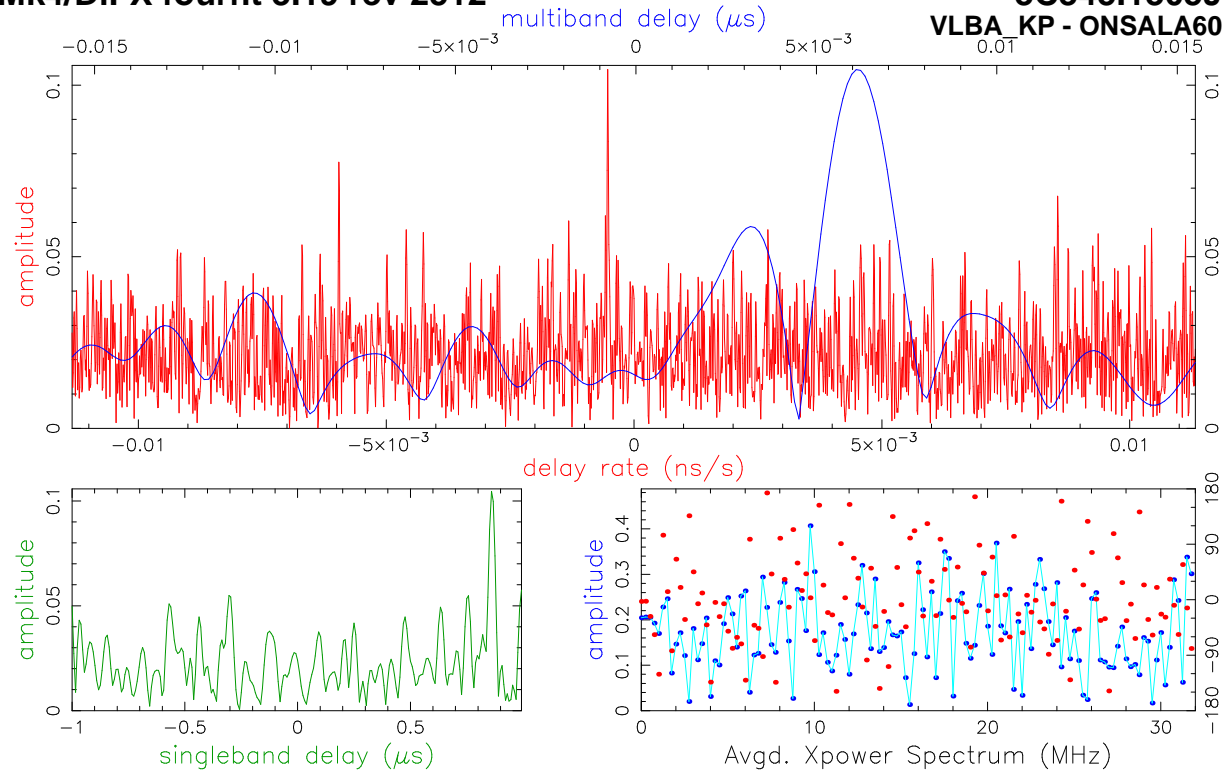
Fringe quality 9
SNR 11.9
Int time 418.225
Amp 0.213
Phase 76.7
PFD 7.0e-24
Delays (us)
SBD -0.018447
MBD 0.008999
Fringe rate (Hz) 0.006572
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042823
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
6.8	119.6	38.0	97.0	146.7	162.9	29.8	62.3	87.3	130.2	1.9	59.9	54.2	146.2	53.0	109.8	Phase	76.7	
0.2	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.5	0.4	0.3	0.3	0.2	0.2	Ampl.	0.3	
229.5	127.6	127.0	126.8	6.5	125.8	126.0	126.2	126.7	126.9	126.4	126.6	127.5	127.3	204.2	193.8	Sbd box	126.6	
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	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	
																	Tracks	
Group delay (usec)(sbd)				-4.07607998504E+02			Apriori delay (usec)			-4.07585747477E+02			Resid mbdelay (usec)			8.99897E-03 +/- 9.1E-05		
Sband delay (usec)				-4.07604194977E+02			Apriori clock (usec)			-3.1029133E+01			Resid sbdelay (usec)			-1.84475E-02 +/- 1.4E-03		
Phase delay (usec)				-4.07585745005E+02			Apriori clockrate (us/s)			-4.5300002E-07			Resid phdelay (usec)			2.47282E-06 +/- 3.1E-07		
Delay rate (us/s)				6.39660940190E-01			Apriori rate (us/s)			6.39660863900E-01			Resid rate (us/s)			7.62897E-08 +/- 1.3E-09		
Total phase (deg)				-26.9			Apriori accel (us/s/s)			1.14351425282E-05			Resid phase (deg)			76.7 +/- 9.6		

ph/seg (deg) 39.6 RMS Theor. 16.7 Amplitude 0.213 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 32.1 29.1 Search (2048X64) 0.205 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 52.9 19.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 58.3 33.7 Inc. seg. avg. 0.253 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/gX..1305JH Output file: /Exps/c192a/v2/1234/No0001/gX.W.222.1305JH simultaneous interpolator

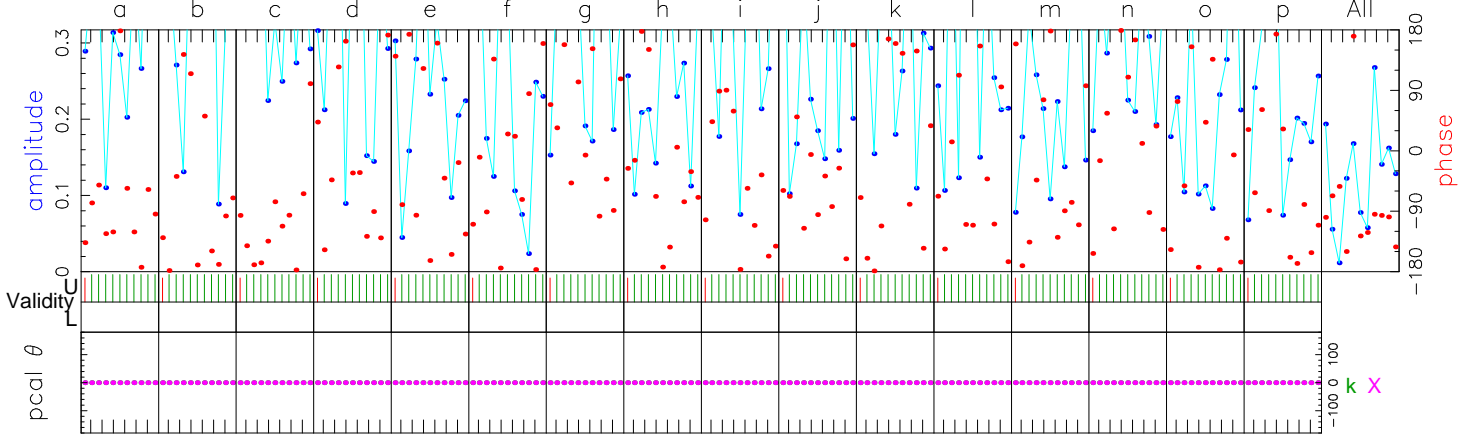


Fringe quality 0

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

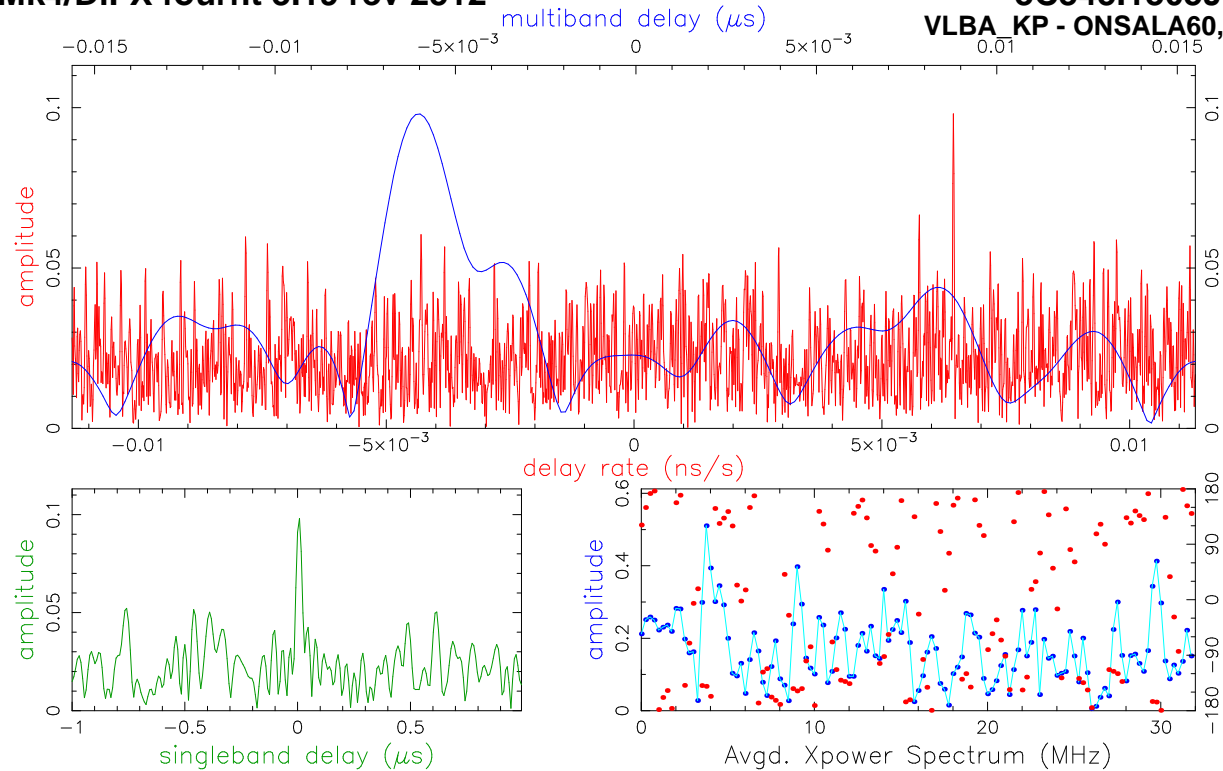


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-99.9	-146.9	-128.8	-77.9	-174.4	-117.6	-43.7	-99.8	-111.9	-87.1	-144.1	-92.8	-115.8	-106.0	-178.9	-124.6		Phase	-116.5				
	0.2	0.2	0.2	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

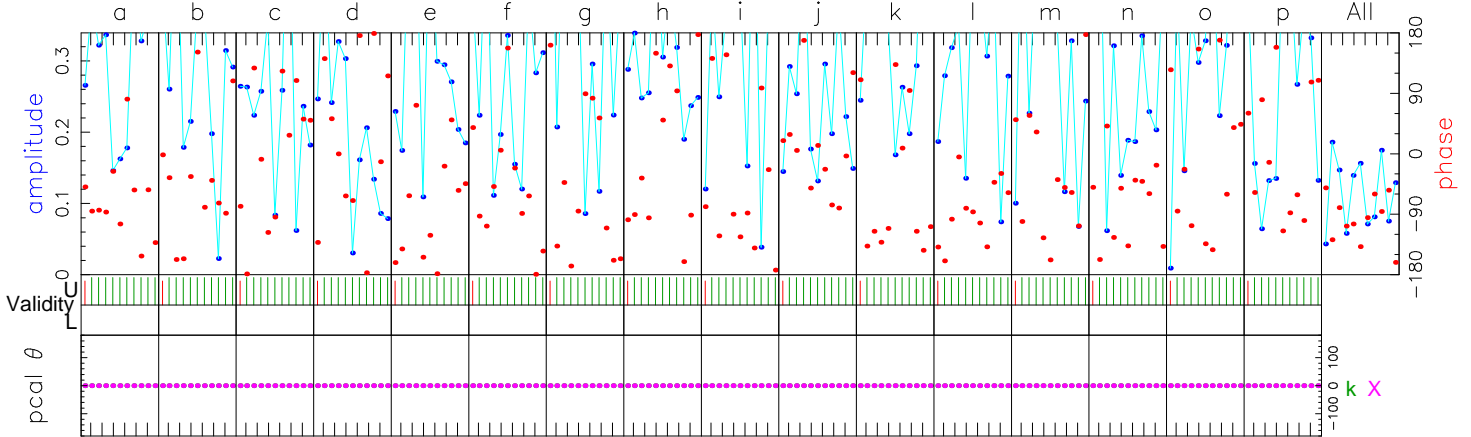
Mk4/DiFX fourfit 3.19 rev 2512

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



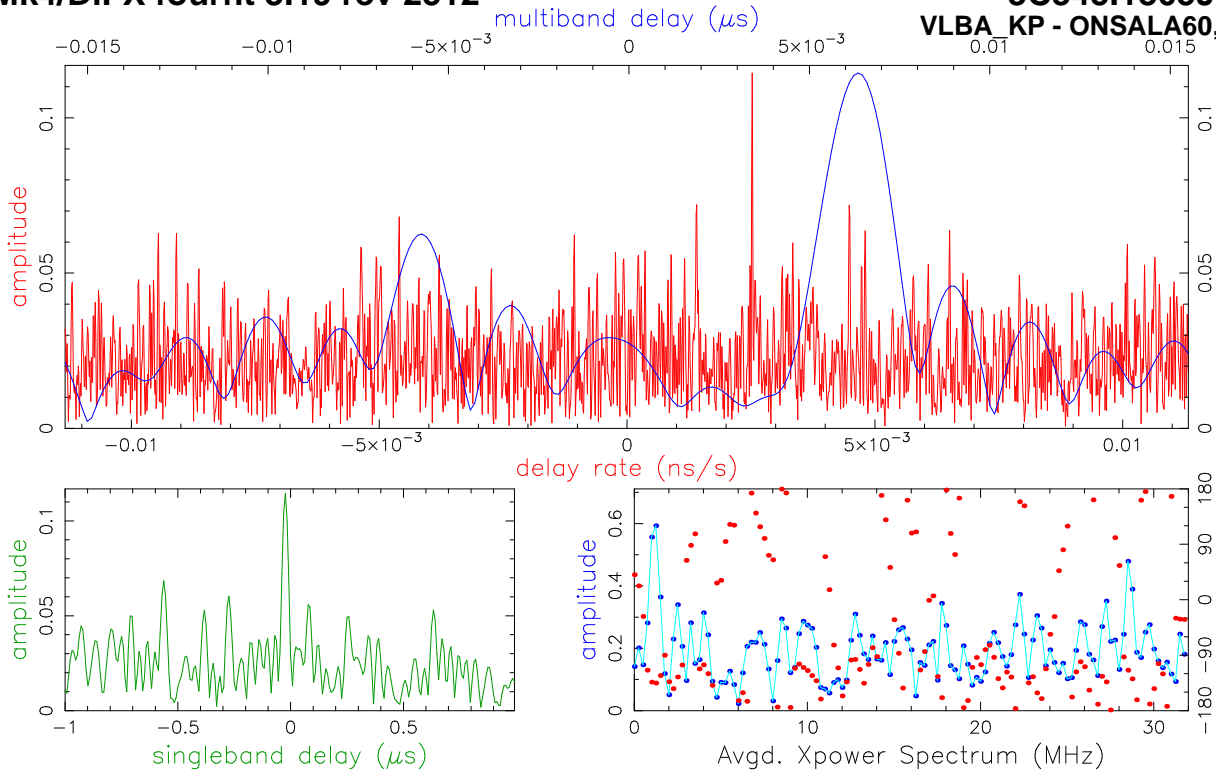
Fringe quality 0
SNR 5.4
Int time 406.235
Amp 0.113
Phase -104.4
PFD 1.0e+00
Delays (us)
SBD 0.006136
MBD -0.006033
Fringe rate (Hz)
0.556014
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
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					
																		Chan ids					
																		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

ph/seg (deg) 34.6 34.9
amp/seg (%) 51.1 60.9
ph/frq (deg) 58.2 42.1
amp/frq (%) 68.3 73.6
RMS Theor. Amplitude 0.113 +/- 0.021
Search (2048X64) 0.097
Interp. 0.000
Inc. seg. avg. 0.112
Inc. frq. avg. 0.111
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 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

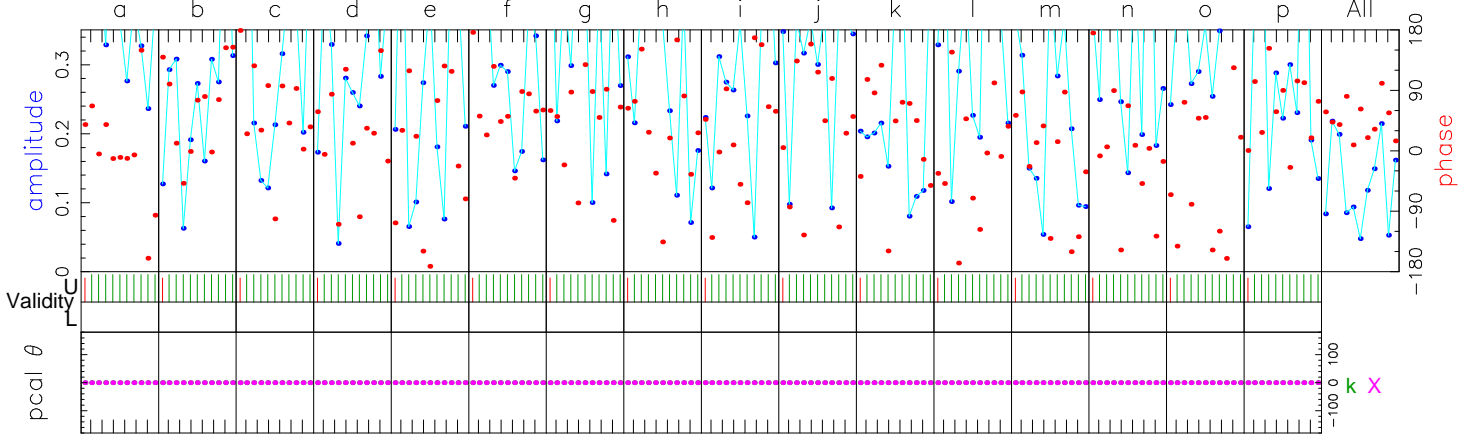


Fringe quality 0

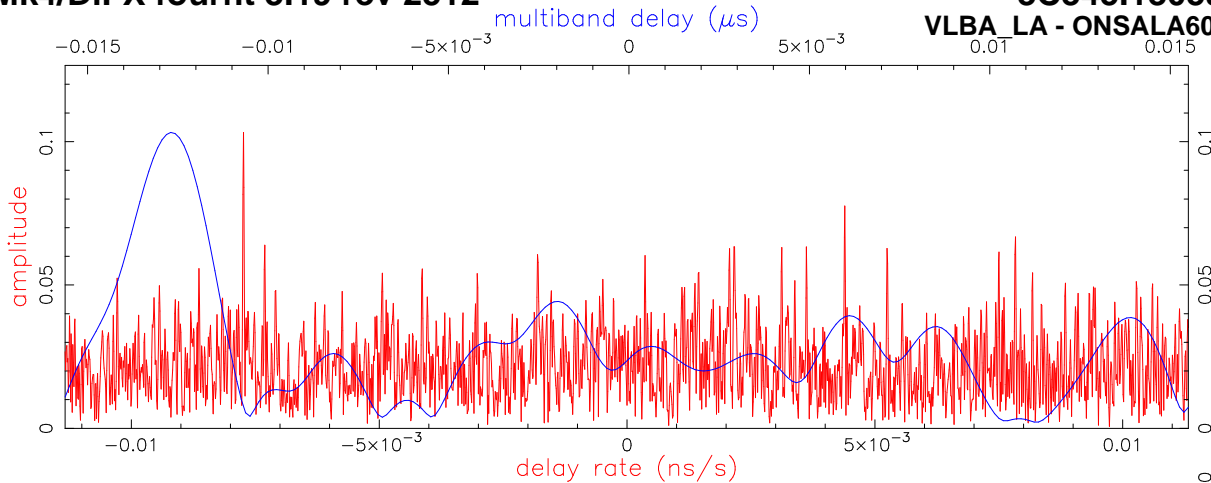
SNR 6.3
Int time 406.235
Amp 0.117
Phase 45.8
PFD 7.2e-02
Delays (us)
SBD -0.024072
MBD 0.006347
Fringe rate (Hz) 0.217398
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

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

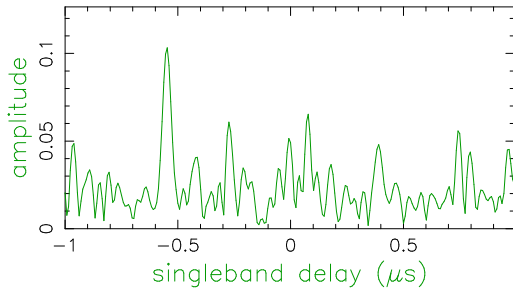


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	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			Apriori delay (usec)			-5.47608521640E+03			Resid mbdelay (usec)			6.34650E-03			+/-	1.7E-04	
Sband delay (usec)	-5.47610928840E+03			Apriori clock (usec)			-3.2727177E+01			Resid sbdelay (usec)			-2.40720E-02			+/-	2.7E-03	
Phase delay (usec)	-5.47608521493E+03			Apriori clockrate (us/s)			-7.2257901E-07			Resid phdelay (usec)			1.47702E-06			+/-	5.9E-07	
Delay rate (us/s)	1.46756151637E+00			Apriori rate (us/s)			1.46755899259E+00			Resid rate (us/s)			2.52378E-06			+/-	2.5E-09	
Total phase (deg)	-148.9			Apriori accel (us/s/s)			6.33219032822E-06			Resid phase (deg)			45.8			+/-	18.2	
ph/seg (deg)	RMS	Theor.	Amplitude			0.117 +/- 0.019			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	27.1	30.1	Search (2048X64)			0.113			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000	1.000		
ph/frq (deg)	54.1	52.5	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)	-0.016	0.016	
amp/frq (%)	44.7	36.3	Inc. seg. avg.			0.117			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011	0.011		
	56.3	63.4	Inc. frq. avg.			0.113			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)	0.00	0.00	

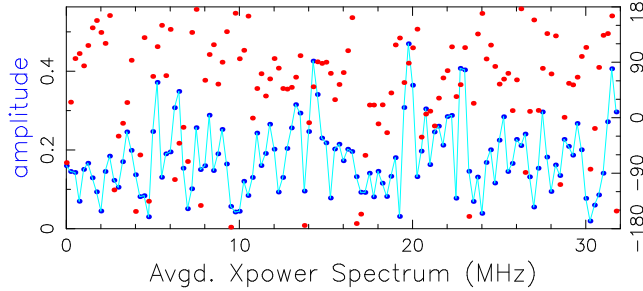


Fringe quality 0

SNR 5.7
 Int time 405.436
 Amp 0.127
 Phase -128.9
 PFD 9.4e-01
 Delays (us)
 SBD -0.548751
 MBD -0.012670
 Fringe rate (Hz)
 -0.667589
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

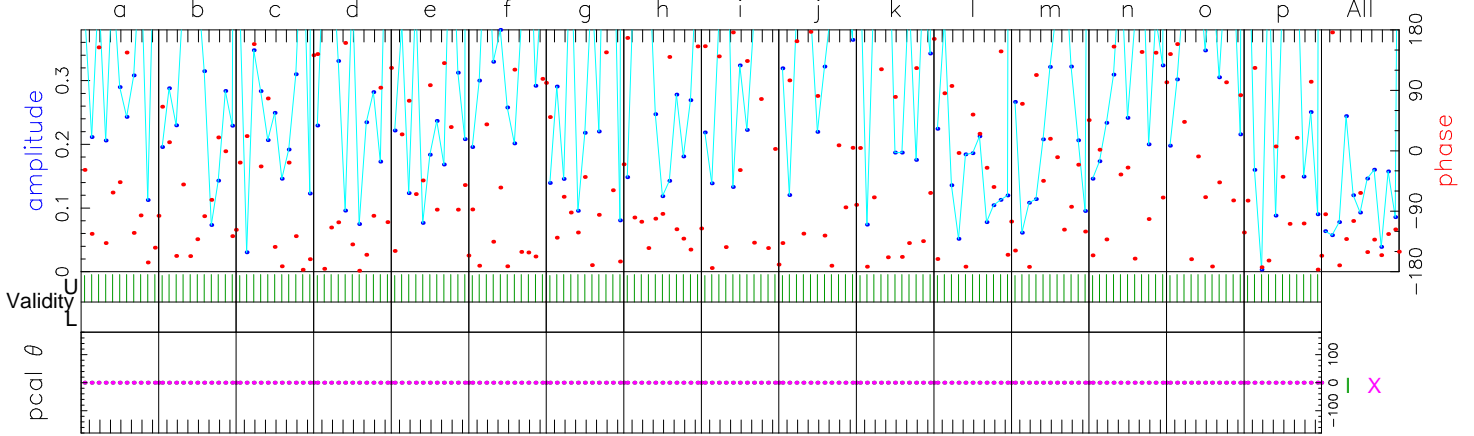


delay rate (ns/s)



Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183012.80
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042825
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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

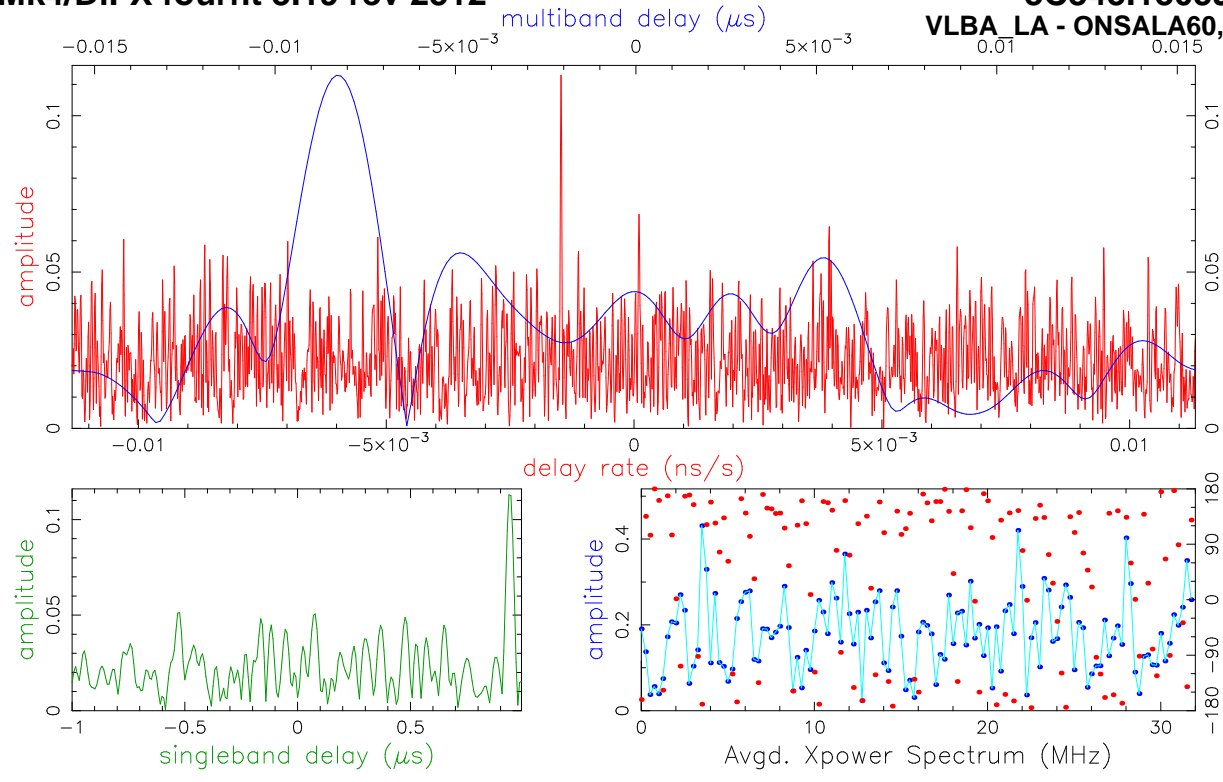


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-114.7	-103.1	-152.2	-137.8	-24.0	-167.2	-114.8	-134.9	-172.1	-138.7	-137.7	103.7	-63.8	-148.3	-146.4	-87.5	Phase	-128.9
	0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	Ampl.	0.1
	138.7	226.6	24.8	59.2	72.1	2.8	4.5	33.3	11.5	247.2	136.5	251.8	179.3	166.1	77.0	219.7	Sbd box	58.8
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -3.74989133298E+03 Apriori delay (usec) -3.74934741338E+03 Resid mbdelay (usec) -1.26696E-02 +/- 1.9E-04
 Sband delay (usec) -3.74989616388E+03 Apriori clock (usec) -3.3065510E+01 Resid sbdelay (usec) -5.48751E-01 +/- 3.0E-03
 Phase delay (usec) -3.74934741754E+03 Apriori clockrate (us/s) -8.7947201E-07 Resid phdelay (usec) -4.15818E-06 +/- 6.5E-07
 Delay rate (us/s) 1.39351813575E+00 Apriori rate (us/s) 1.39352588580E+00 Resid rate (us/s) -7.75005E-06 +/- 2.8E-09
 Total phase (deg) -196.9 Apriori accel (us/s/s) 1.14108435483E-06 Resid phase (deg) -128.9 +/- 20.1

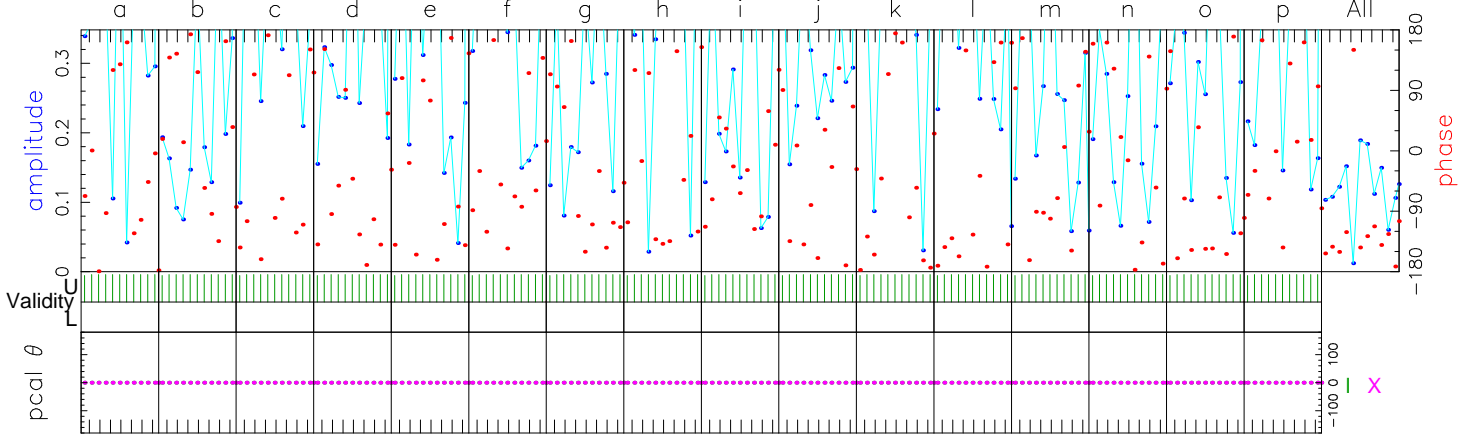
RMS Theor. Amplitude 0.127 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 33.4 34.8 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 71.5 60.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 52.9 40.2 Inc. seg. avg. 0.120 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 61.8 70.1 Inc. frq. avg. 0.124 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.232.1305JH



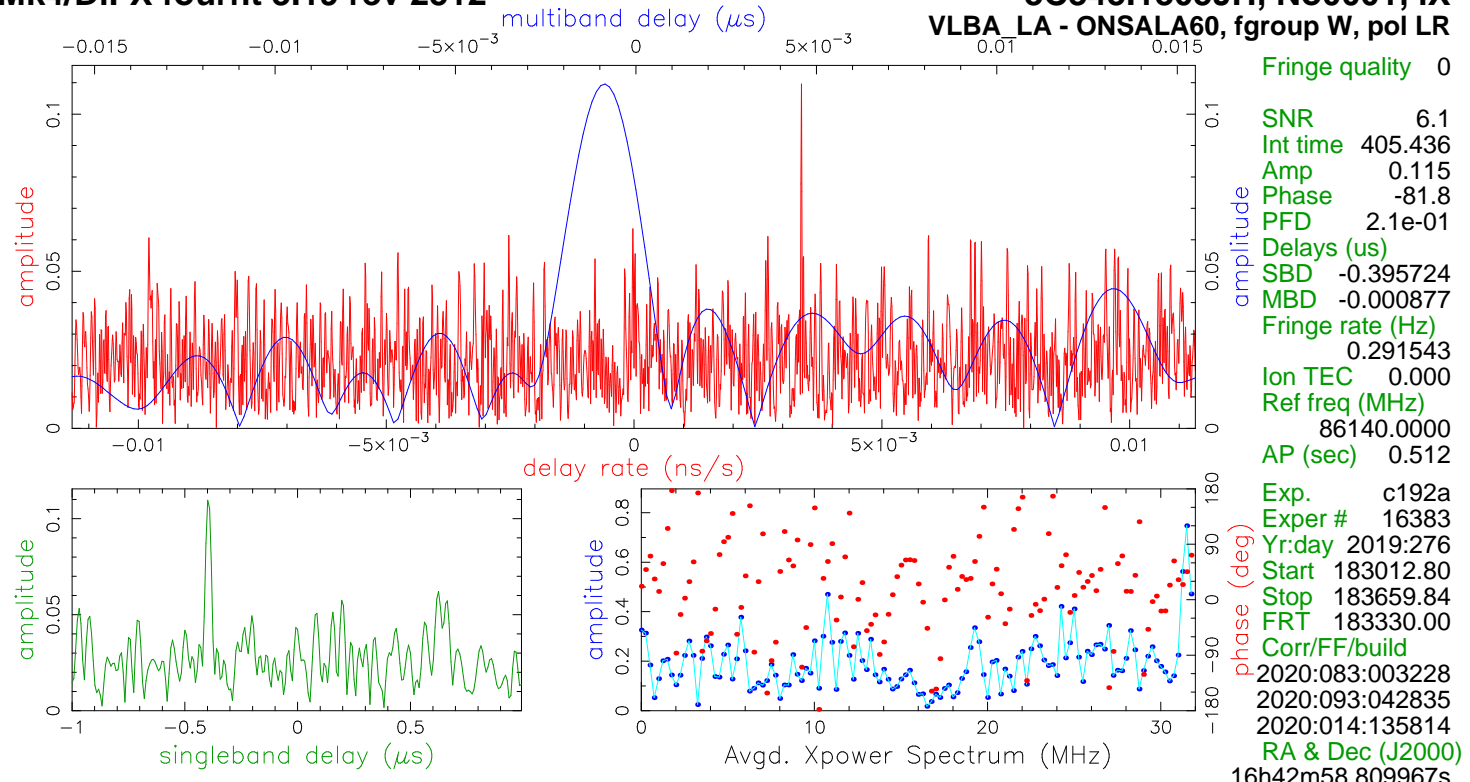
Fringe quality 0
SNR 6.3
Int time 405.436
Amp 0.116
Phase -138.5
PFD 5.8e-02
Delays (us)
SBD 0.941253
MBD -0.008232
Fringe rate (Hz)
-0.127193
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042831
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



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

ph/seg (deg) 26.9 31.2 Amplitude 0.116 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.7 54.5 Search (2048X64) 0.109 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.9 36.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 64.6 63.0 Inc. seg. avg. 0.104 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.121 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.253.1305JH



Fringe quality 0

SNR 6.1

Int time 405.436

Amp 0.115

Phase -81.8

PFD 2.1e-01

Delays (us)

SBD -0.395724

MBD -0.000877

Fringe rate (Hz)

0.291543

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183012.80

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042835

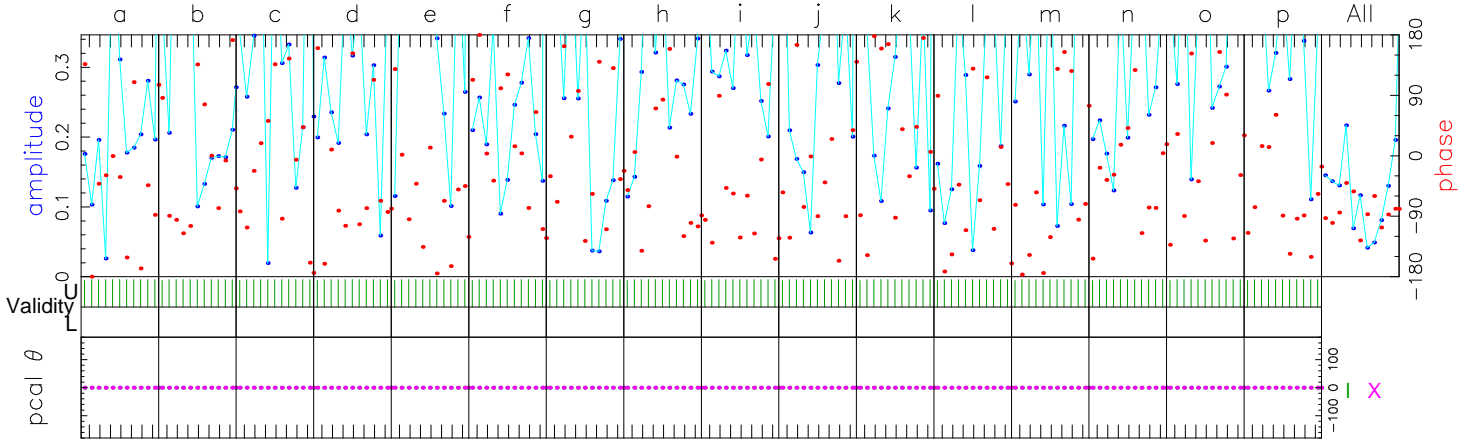
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-45.1	-98.9	-137.4	-116.9	-60.9	-7.2	-45.7	-81.9	-99.7	-57.1	-108.7	-74.9	-112.6	-33.2	-99.6	-72.1	Phase	-81.8				
	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1				
	48.9	83.4	245.7	11.8	170.2	242.2	100.9	64.9	210.4	241.6	194.0	244.5	111.9	3.7	15.5	231.8	Sbd box	78.3				
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
W	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.74975454055E+03														Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	-8.77170E-04	+/-	1.8E-04
Sband delay (usec)			-3.74974313738E+03														Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-3.95724E-01	+/-	2.8E-03
Phase delay (usec)			-3.74934741602E+03														Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-2.63829E-06	+/-	6.0E-07
Delay rate (us/s)			1.39352927032E+00														Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	3.38452E-06	+/-	2.6E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-81.8	+/-	18.7

RMS 23.6 Theor. 32.4 Amplitude 0.115 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 50.7 56.5 Interp. 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

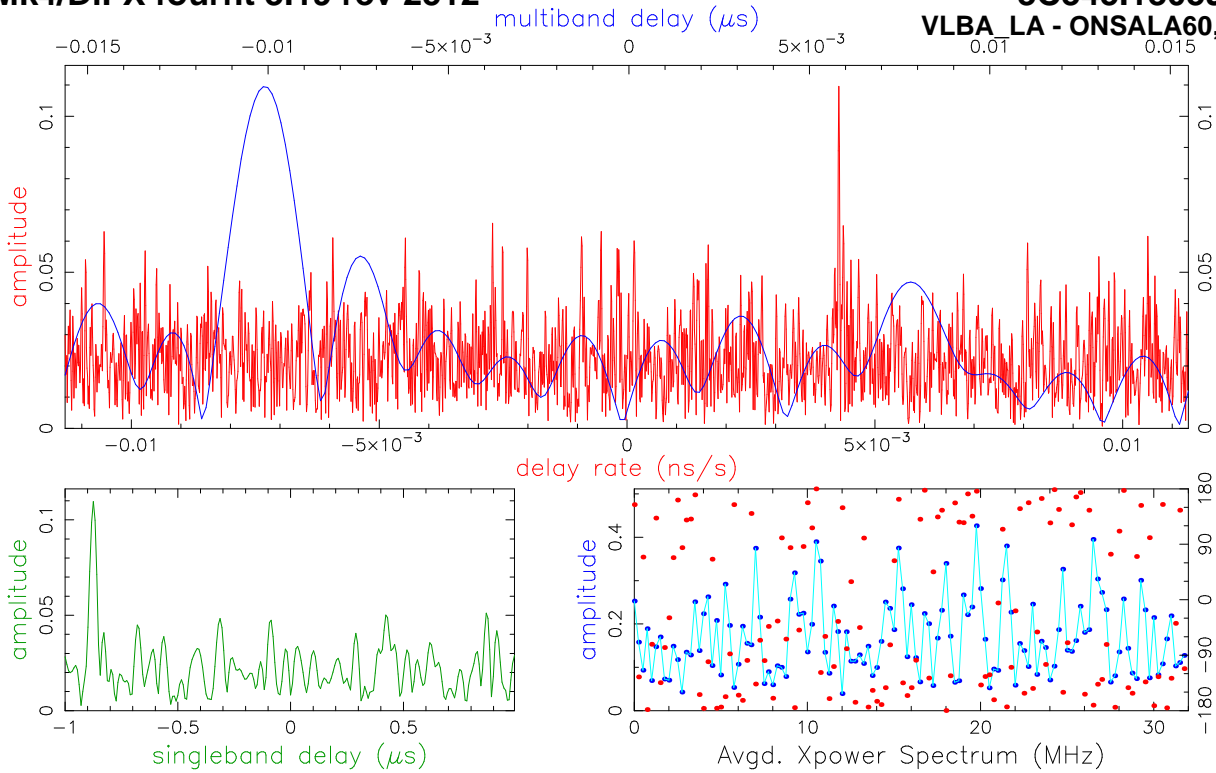
amp/seg (%) 36.5 37.4 Inc. seg. avg. 0.108 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 50.4 65.3 Inc. frq. avg. 0.107 Data rate (MSamp/s): 64 Sample rate (ns/s) -0.011 0.011

amp/frq (%) 50.4 65.3 Inc. frq. avg. 0.107 Data rate (Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.272.1305JH

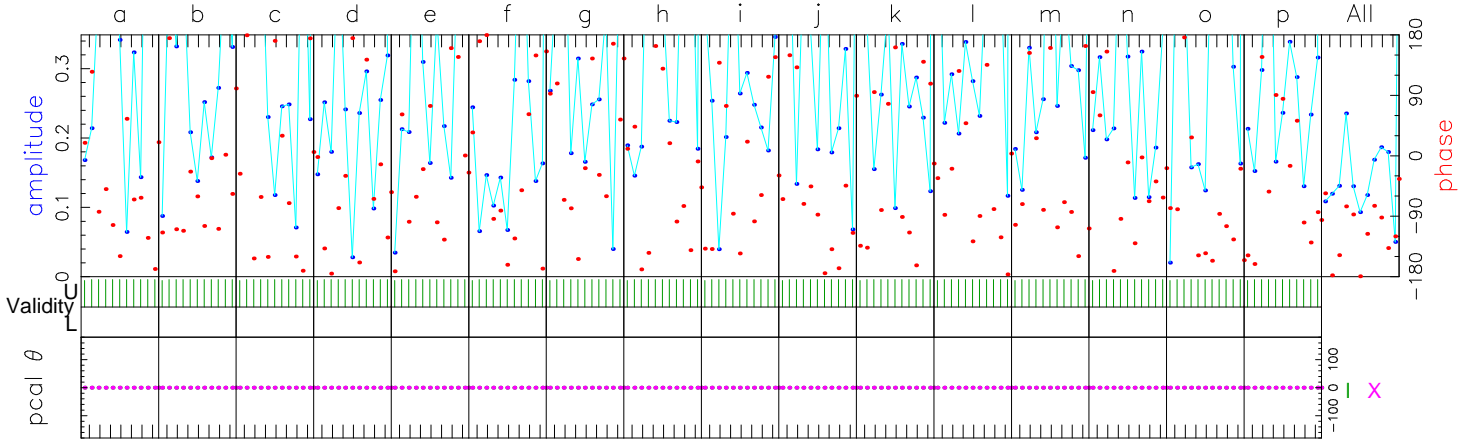


Fringe quality 0

SNR 6.0
Int time 405.436
Amp 0.116
Phase -106.8
PFD 3.4e-01
Delays (us)
SBD -0.874666
MBD -0.010085
Fringe rate (Hz) 0.368722
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042840
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

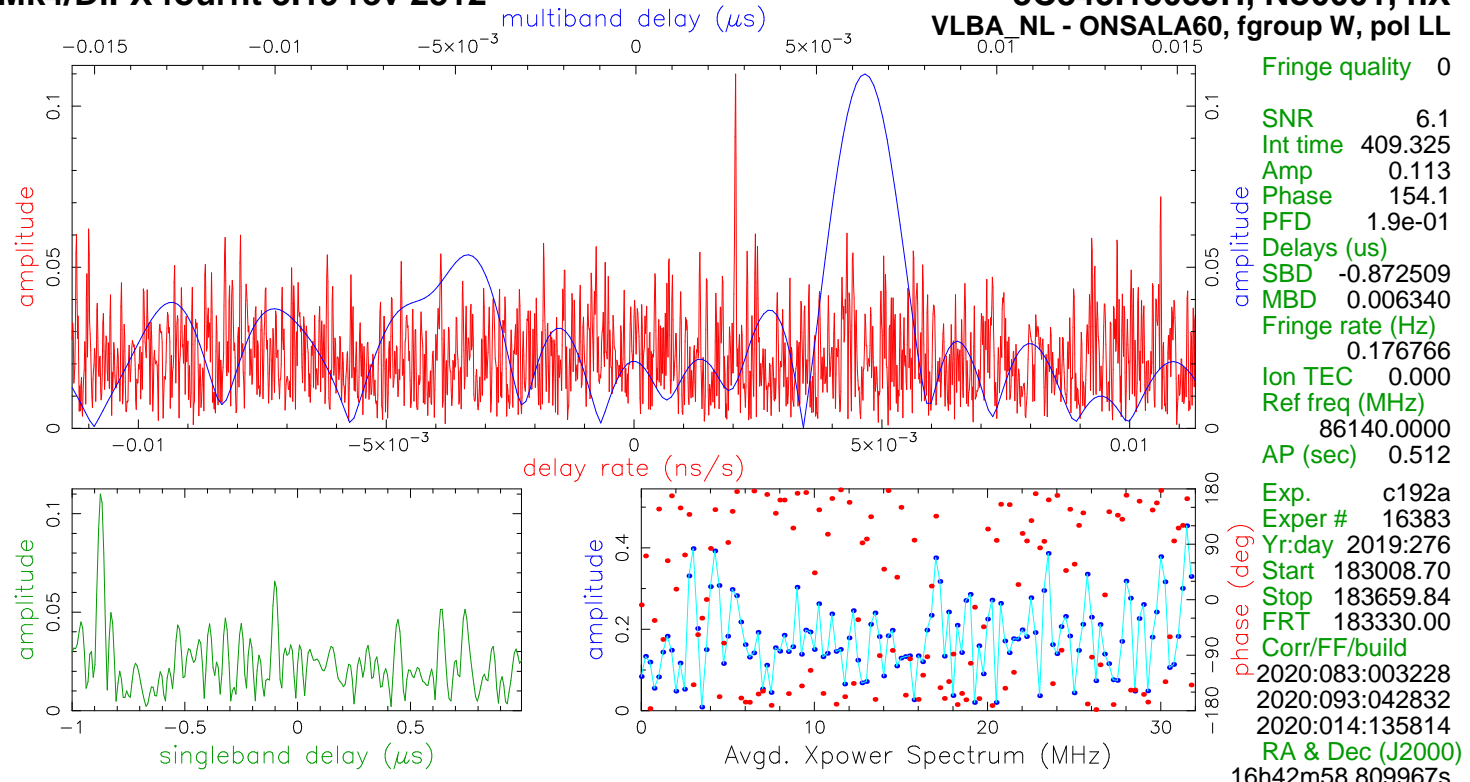


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-111.3	-85.1	-130.8	-101.1	-59.8	-90.0	-11.2	-137.2	-121.8	-107.5	-148.4	-81.6	-135.0	-46.4	-114.5	-73.4	Phase	-106.8				
	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.1	Ampl.	0.1				
	15.0	190.6	22.7	117.1	168.1	225.8	221.3	251.0	1.4	189.9	168.3	48.4	68.1	193.8	16.8	253.2	Sbd box	17.0				
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.75023249828E+03														Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	-1.00849E-02	+/-	1.8E-04
Sband delay (usec)			-3.75022207938E+03														Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-8.74666E-01	+/-	2.9E-03
Phase delay (usec)			-3.74934741682E+03														Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-3.44266E-06	+/-	6.1E-07
Delay rate (us/s)			1.39353016629E+00														Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	4.28050E-06	+/-	2.6E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-106.8	+/-	19.0

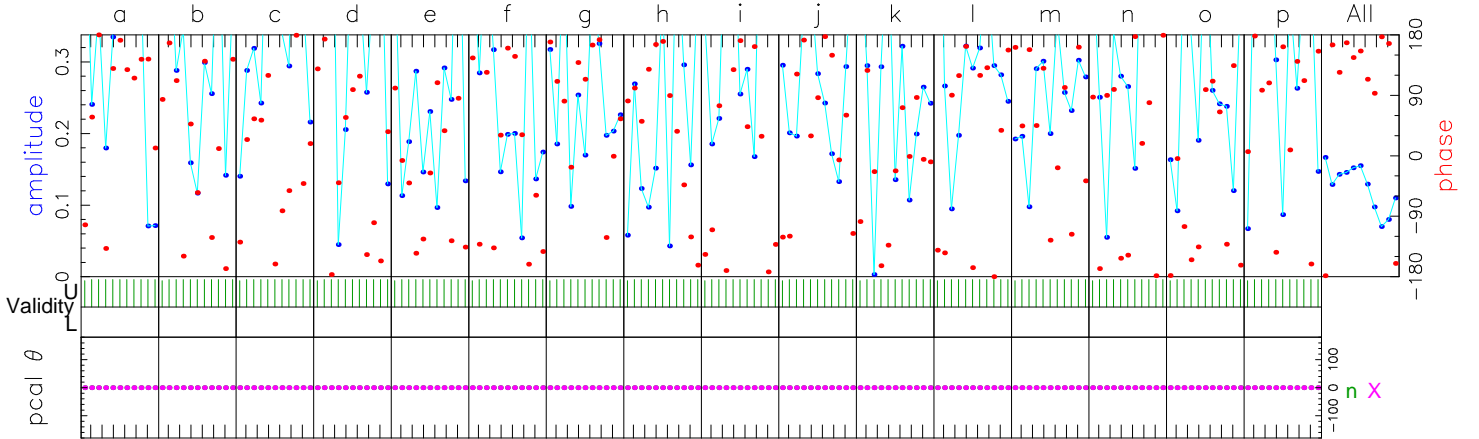
ph/seg (deg) 41.1 32.9 Search (2048X64) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.5 57.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.5 38.0 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 54.2 66.3 Inc. frq. avg. 0.108 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/IX..1305JH Output file: /Exps/c192a/v2/1234/No0001/IX.W.294.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, nX
VLBA_NL - ONSALA60, fgroup W, pol LL



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	
UL	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			
n	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			
n: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			
n: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			
n	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			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)			-3.62834595986E+02																
Sband delay (usec)			-3.62838444595E+02																
Phase delay (usec)			-3.61965930626E+02																
Delay rate (us/s)			1.20558520489E+00																
Total phase (deg)					-95.1														
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)																			
Bits/sample: 2x2																			
Sample rate(MISamp/s): 64																			
Data rate(Mb/s): 2048																			
nlags: 128																			
t_cohere infinite																			
sb window (us)																			
mb window (us)																			
dr window (ns/s)																			
ion window (TEC)																			
simultaneous interpolator																			

ph/seg (deg) 30.4 30.9 Search (2048X64) 0.107 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 30.1 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) 41.4 37.3 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 61.8 65.1 Inc. frq. avg. 0.100 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

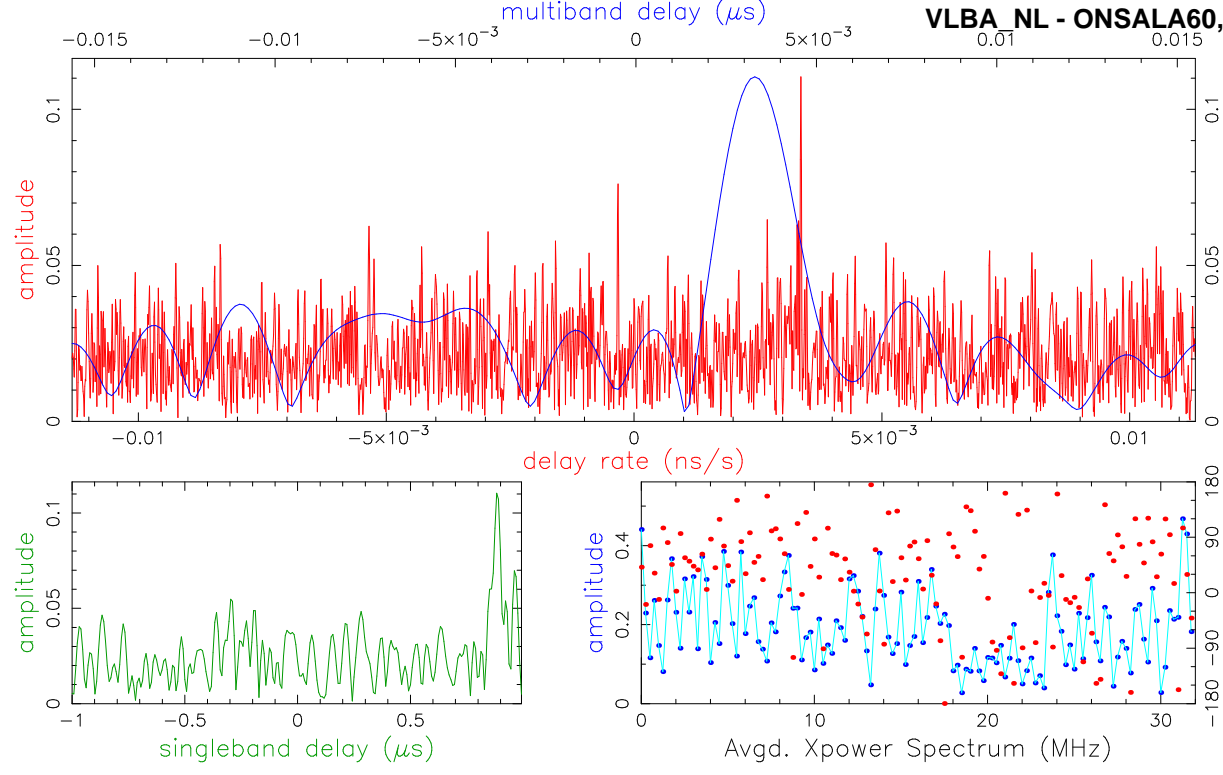
n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/nX..1305JH Output file: /Exps/c192a/v2/1234/No0001/nX.W.259.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, nX

VLBA_NL - ONSALA60, fgroup W, pol RR

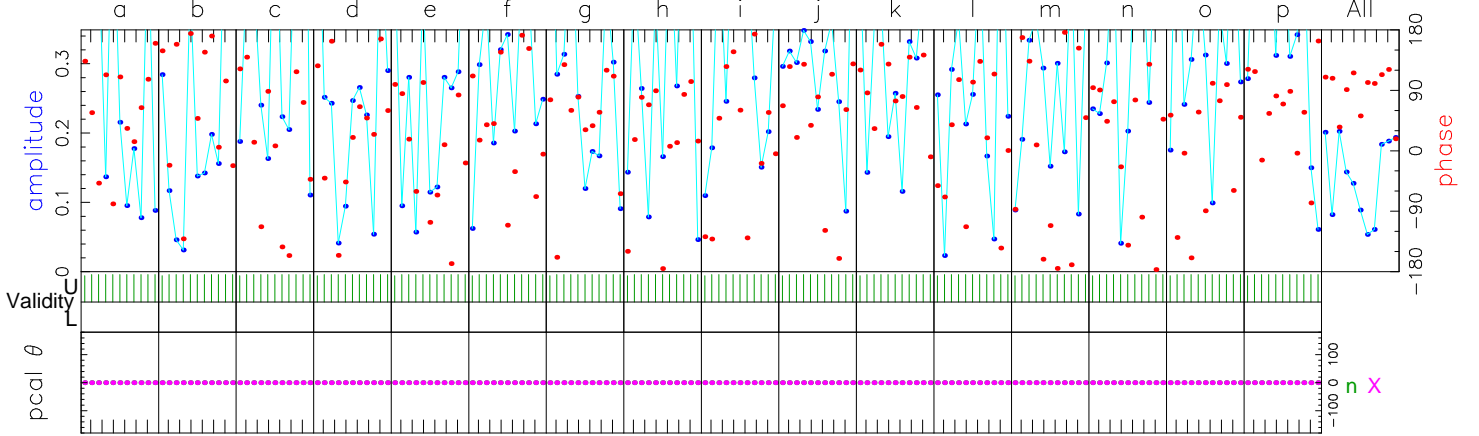


Fringe quality 0

SNR 6.2
 Int time 409.325
 Amp 0.116
 Phase 87.0
 PFD 1.4e-01
 Delays (us)
 SBD 0.885759
 MBD 0.003279
 Fringe rate (Hz)
 0.290267
 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
 2020:093:042837
 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
64.6	120.6	81.0	98.0	47.9	82.2	88.6	63.9	101.4	107.1	92.3	126.0	168.1	94.5	14.1	65.4	65.4	Phase	87.0
0.1	0.1	0.2	0.1	0.1	0.0	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.3	0.3	Ampl.	0.1
157.7	252.3	122.6	170.1	1.4	236.8	31.8	242.0	82.2	104.4	199.5	91.5	41.7	170.7	124.7	237.6	237.6	Sbd box	242.4
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	
n	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	
n: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	
n: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	
n	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		
n	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) -3.61087656277E+02 Apriori delay (usec) -3.61965935595E+02 Resid mbdelay (usec) 3.27932E-03 +/- 1.7E-04
 Sband delay (usec) -3.61080177095E+02 Apriori clock (usec) -5.8499165E+00 Resid sbdelay (usec) 8.85759E-01 +/- 2.8E-03
 Phase delay (usec) -3.61965932790E+02 Apriori clockrate (us/s) -3.9377651E-07 Resid phdelay (usec) 2.80447E-06 +/- 6.0E-07
 Delay rate (us/s) 1.20558652253E+00 Apriori rate (us/s) 1.20558315282E+00 Resid rate (us/s) 3.36971E-06 +/- 2.5E-09
 Total phase (deg) -162.2 Apriori accel (us/s/s) -1.08508500335E-05 Resid phase (deg) 87.0 +/- 18.5

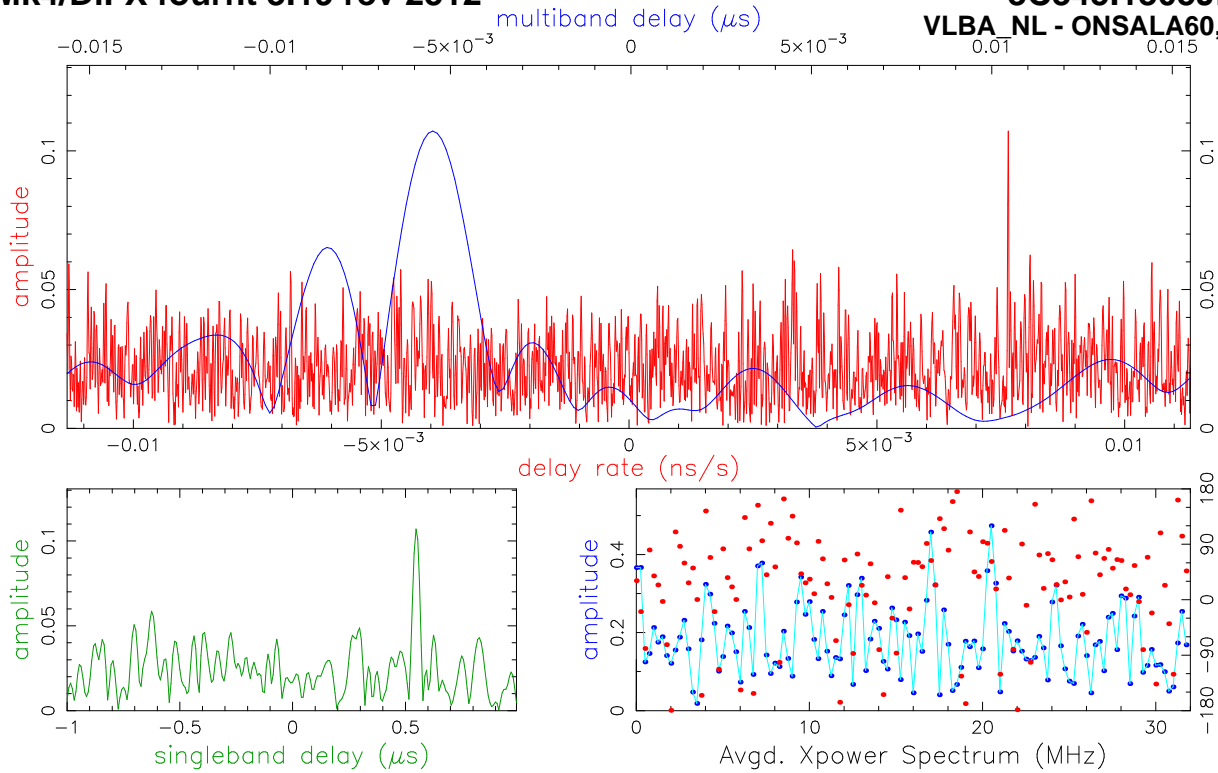
RMS Theor. Amplitude 0.116 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.0 30.6 Search (2048X64) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 55.2 53.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 36.3 36.9 Inc. seg. avg. 0.126 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.4 64.5 Inc. frq. avg. 0.107 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/nX..1305JH Output file: /Exps/c192a/v2/1234/No0001/nX.W.278.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, nX
VLBA_NL - ONSALA60, fgroup W, pol LR

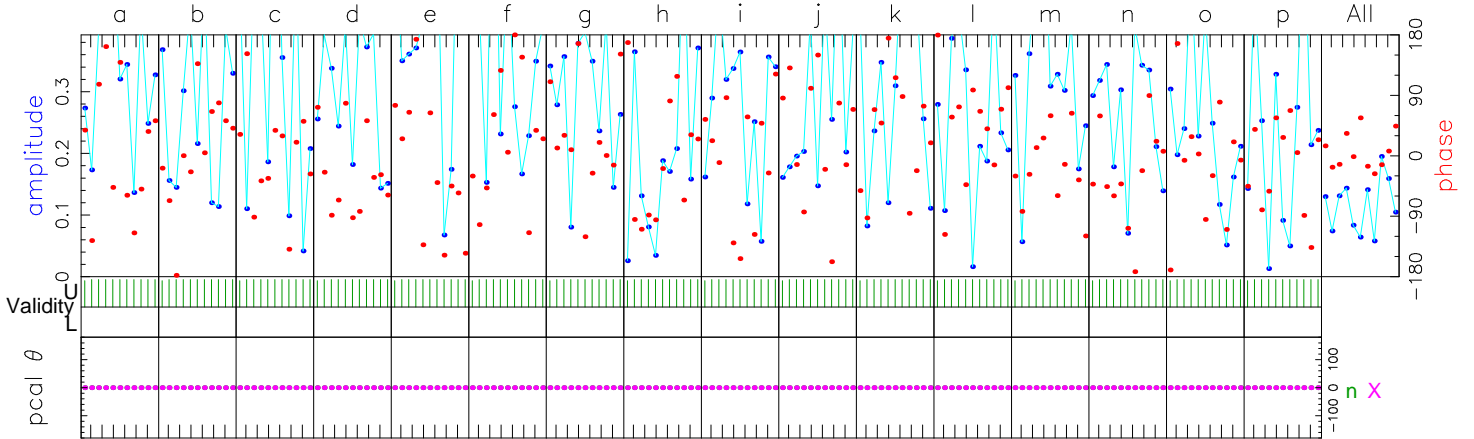


Fringe quality 0

SNR 6.0
Int time 409.325
Amp 0.131
Phase 4.6
PFD 5.0e-01
Delays (us)
SBD 0.548509
MBD -0.005492
Fringe rate (Hz) 0.660041
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
2020:093:042841
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

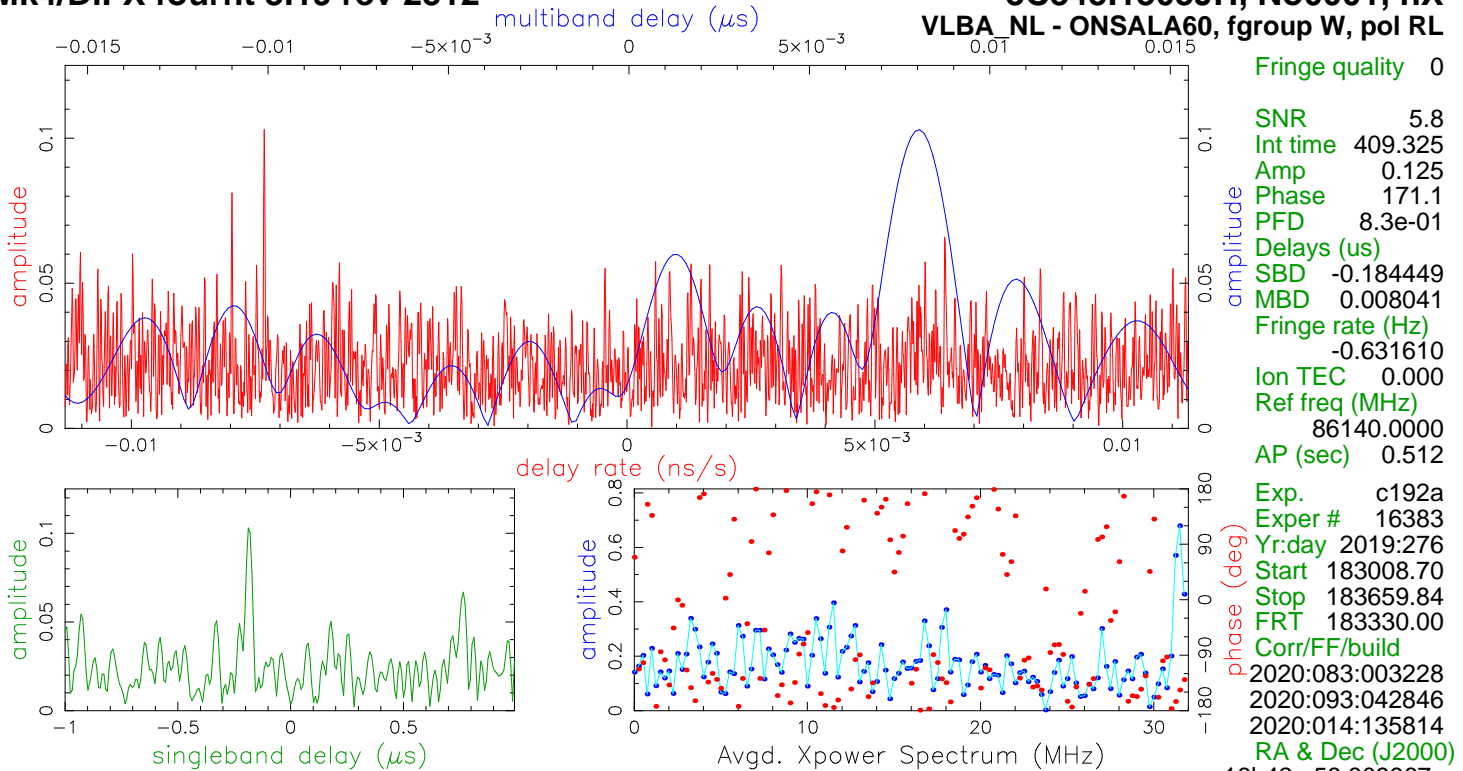


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-2.0	15.2	3.3	-29.0	-12.4	13.2	20.9	-39.6	12.8	64.5	17.8	46.5	0.1	-16.2	-13.4	-15.8		Phase	4.6				
	0.1	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.2	0.3	0.1	0.1	0.1		Ampl.	0.1				
	166.6	35.4	7.2	64.0	173.1	37.7	23.7	87.4	52.4	172.7	223.0	92.1	45.7	182.2	54.1	24.9		Sbd box	199.2				
UL	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					
n	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					
n: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					
n: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					
n	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					
n	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					
																		Tracks					
Group delay (usec)(sbd)			-3.61408927153E+02															Apriori delay (usec)	-3.61965935595E+02	Resid mbdelay (usec)	-5.49156E-03	+/-	1.8E-04
Sband delay (usec)			-3.61417426095E+02															Apriori clock (usec)	-5.8499165E+00	Resid sbdelay (usec)	5.48509E-01	+/-	2.9E-03
Phase delay (usec)			-3.61965935447E+02															Apriori clockrate (us/s)	-3.9377651E-07	Resid phdelay (usec)	1.47872E-07	+/-	6.2E-07
Delay rate (us/s)			1.20559081523E+00															Apriori rate (us/s)	1.20558315282E+00	Resid rate (us/s)	7.66242E-06	+/-	2.6E-09
Total phase (deg)					-244.6													Apriori accel (us/s/s)	-1.08508500335E-05	Resid phase (deg)	4.6	+/-	19.3

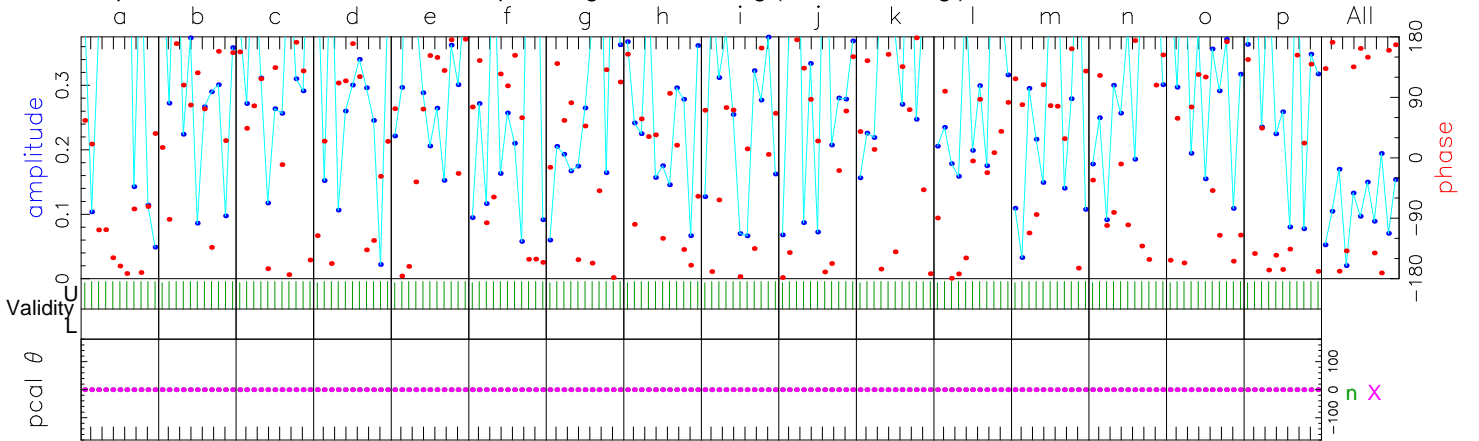
ph/seg (deg) RMS Theor. Amplitude 0.131 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.6 55.7 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.6 38.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 50.3 67.2 Inc. seg. avg. 0.123 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/nX..1305JH Output file: /Exps/c192a/v2/1234/No0001/nX.W.300.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, nX
VLBA_NL - ONSALA60, fgroup W, pol RL



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

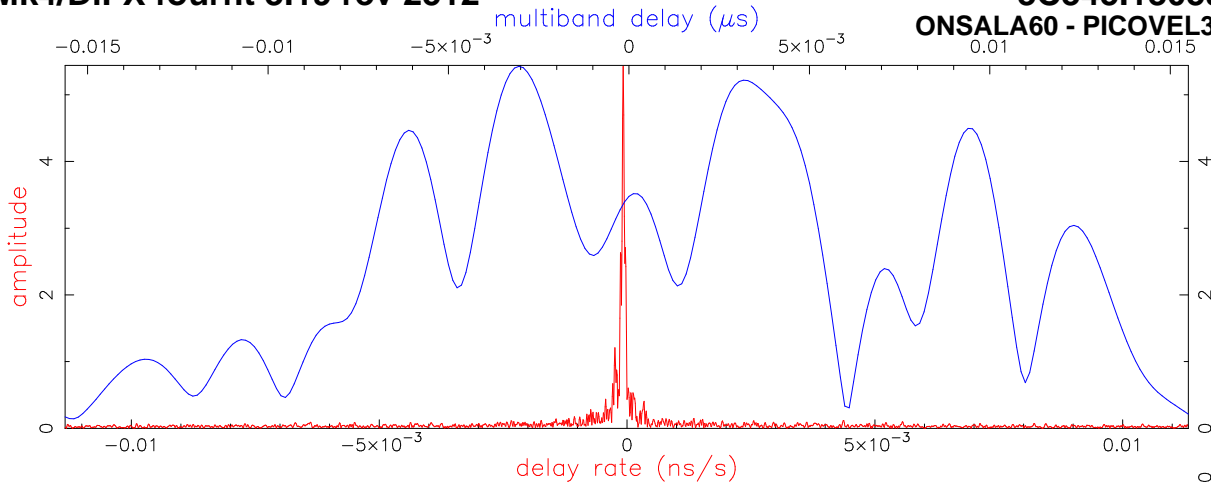


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-148.5	130.6	147.5	-172.8	169.8	-161.0	154.2	1.6	107.5	168.8	158.4	46.4	131.5	-151.0	-166.5	176.9	Phase	171.1				
	0.3	0.1	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.2	0.3	Ampl.	0.1				
	239.7	55.1	106.7	189.9	243.6	59.0	222.3	75.0	236.6	198.8	46.2	172.1	148.4	116.7	167.4	204.9	Sbd box	105.4				
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					
n	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					
n: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					
n: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					
n	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					
n	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					
																	Tracks					
Group delay (usec)(sbd)			-3.62145394702E+02														Apriori delay (usec)	-3.61965935595E+02	Resid mbdelay (usec)	8.04089E-03	+/-	1.9E-04
Sband delay (usec)			-3.62150385095E+02														Apriori clock (usec)	-5.8499165E+00	Resid sbdelay (usec)	-1.84449E-01	+/-	3.0E-03
Phase delay (usec)			-3.61965930076E+02														Apriori clockrate (us/s)	-3.9377651E-07	Resid phdelay (usec)	5.51876E-06	+/-	6.4E-07
Delay rate (us/s)			1.20557582044E+00														Apriori rate (us/s)	1.20558315282E+00	Resid rate (us/s)	-7.33237E-06	+/-	2.7E-09
Total phase (deg)					-78.0												Apriori accel (us/s/s)	-1.08508500335E-05	Resid phase (deg)	171.1	+/-	19.8

	RMS	Theor.	Amplitude	0.125 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	28.5	32.8	Search (2048X64)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	48.9	57.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	63.9	39.6	Inc. seg. avg.	0.116	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	58.1	69.1	Inc. frq. avg.	0.124	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

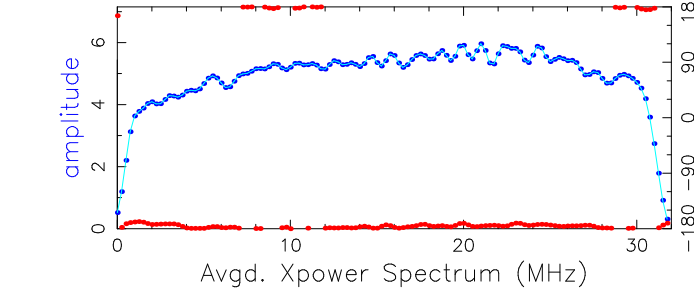
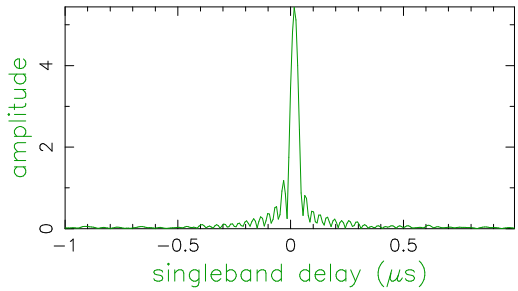
n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/nX..1305JH Output file: /Exps/c192a/v2/1234/No0001/nX.W.316.1305JH



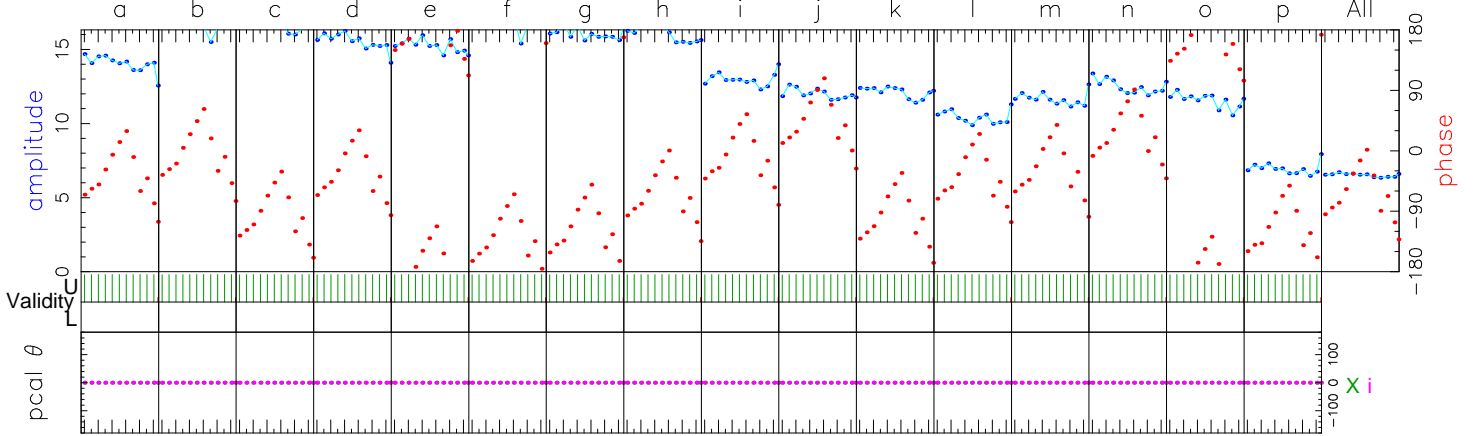
Fringe quality 3

SNR 263.6
 Int time 313.934
 Amp 5.441
 Phase -61.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.016948
 MBD -0.003042
 Fringe rate (Hz)
 -0.006980
 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
 2020:093:042838
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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

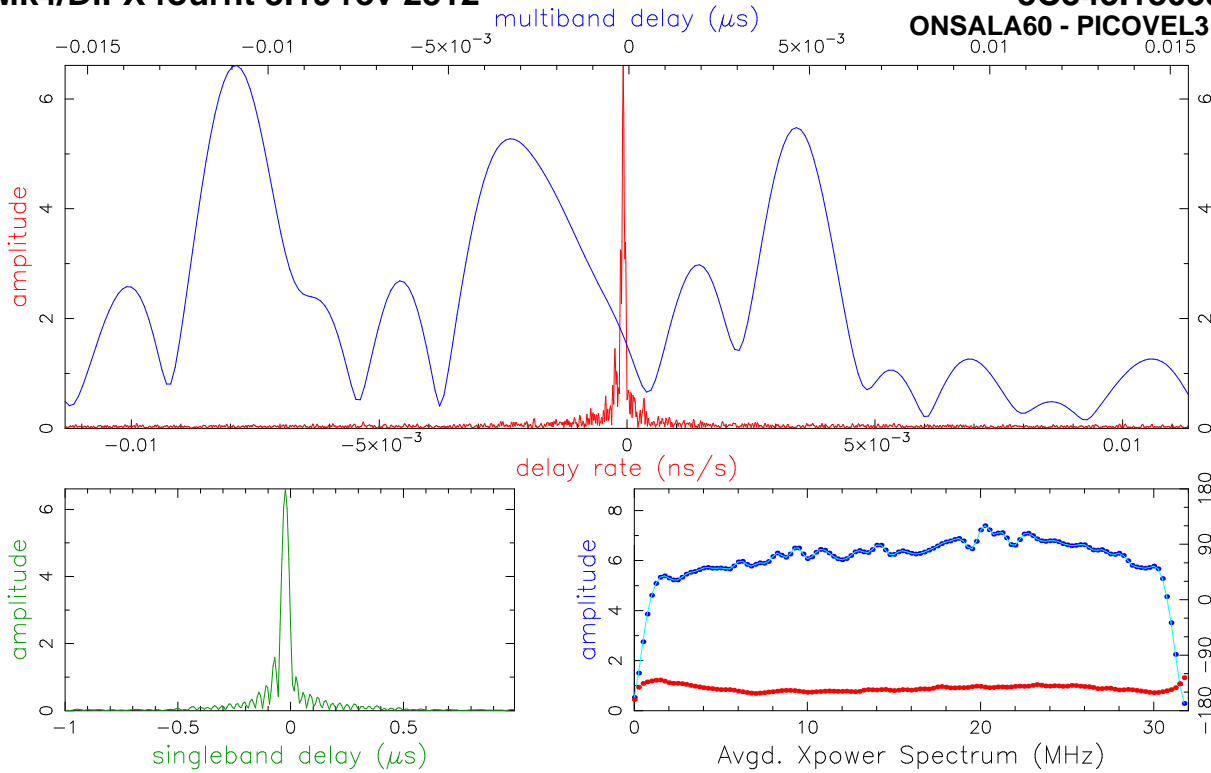


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd) -1.76255760596E+03 Apriori delay (usec) -1.76258581372E+03 Resid mbdelay (usec) -3.04224E-03 +/- 4.1E-06
 Sband delay (usec) -1.76256886622E+03 Apriori clock (usec) 3.2814224E+01 Resid sbdelay (usec) 1.69475E-02 +/- 6.5E-05
 Phase delay (usec) -1.76258581571E+03 Apriori clockrate (us/s) 8.8100003E-07 Resid phdelay (usec) -1.98685E-06 +/- 1.4E-08
 Delay rate (us/s) 5.90196442349E-02 Apriori rate (us/s) 5.90197252620E-02 Resid rate (us/s) -8.10271E-08 +/- 7.7E-11
 Total phase (deg) -59.4 Apriori accel (us/s/s) 2.68521651531E-05 Resid phase (deg) -61.6 +/- 0.4

ph/seg (deg) 34.2 0.8 RMS Theor. Amplitude 5.441 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 20.0 1.3 Search (2048X64) 5.322 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 71.7 0.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 115.5 1.5 Inc. seg. avg. 6.521 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 11.299 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xi.W.280.1305JH

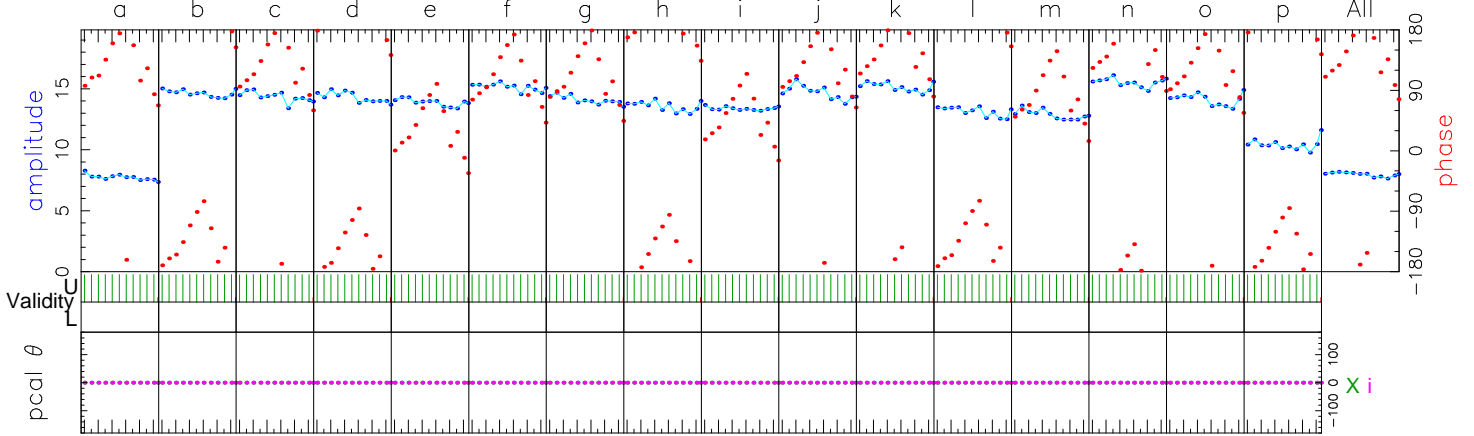


Fringe quality 2

SNR 320.3
Int time 313.934
Amp 6.612
Phase 143.1
PFD 0.0e+00
Delays (us)
SBD -0.023542
MBD -0.010899
Fringe rate (Hz)
-0.006981
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
2020:093:042842
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	
	130.5	-138.7	128.5	-149.8	34.5	109.8	111.6	-158.8	50.1	127.4	150.7	-137.5	84.6	155.6	124.8	-149.3	Phase	143.1	
	6.4	12.2	11.9	12.0	11.5	12.6	11.7	11.3	11.1	12.2	12.5	10.8	10.7	12.9	11.7	8.5	Ampl.	11.3	
	127.5	126.7	126.7	126.6	126.5	126.3	126.7	126.7	126.7	126.6	126.4	126.6	126.7	126.2	127.0	126.1	Sbd box	126.0	
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		
X	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		
Xi	0:0	0:0	0:0	0:0	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		
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			-1.76259671240E+03					Apriori delay (usec)									Resid mbdelay (usec)	-1.08987E-02	+/- 3.4E-06
Sband delay (usec)			-1.76260935572E+03					Apriori clock (usec)									Resid sbdelay (usec)	-2.35420E-02	+/- 5.4E-05
Phase delay (usec)			-1.76258580911E+03					Apriori clockrate (us/s)									Resid phdelay (usec)	4.61519E-06	+/- 1.2E-08
Delay rate (us/s)			5.90196442214E-02					Apriori rate (us/s)									Resid rate (us/s)	-8.10406E-08	+/- 6.4E-11
Total phase (deg)								Apriori accel (us/s/s)									Resid phase (deg)	143.1	+/- 0.4

ph/seg (deg) 34.6 0.6
amp/seg (%) 20.8 1.1
ph/frq (deg) 60.9 0.7
amp/frq (%) 74.2 1.2

RMS Theor. Amplitude 6.612 +/- 0.021
Search (2048X64) 6.442
Interp. 0.000
Inc. seg. avg. 7.975
Inc. frq. avg. 11.253

Group delay (usec)(sbd) -1.76259671240E+03
Sband delay (usec) -1.76260935572E+03
Phase delay (usec) -1.76258580911E+03
Delay rate (us/s) 5.90196442214E-02
Total phase (deg) -214.7

Apriori delay (usec) -1.76258581372E+03
Apriori clock (usec) 3.2814224E+01
Apriori clockrate (us/s) 8.8100003E-07
Apriori rate (us/s) 5.90197252620E-02
Apriori accel (us/s/s) 2.68521651531E-05

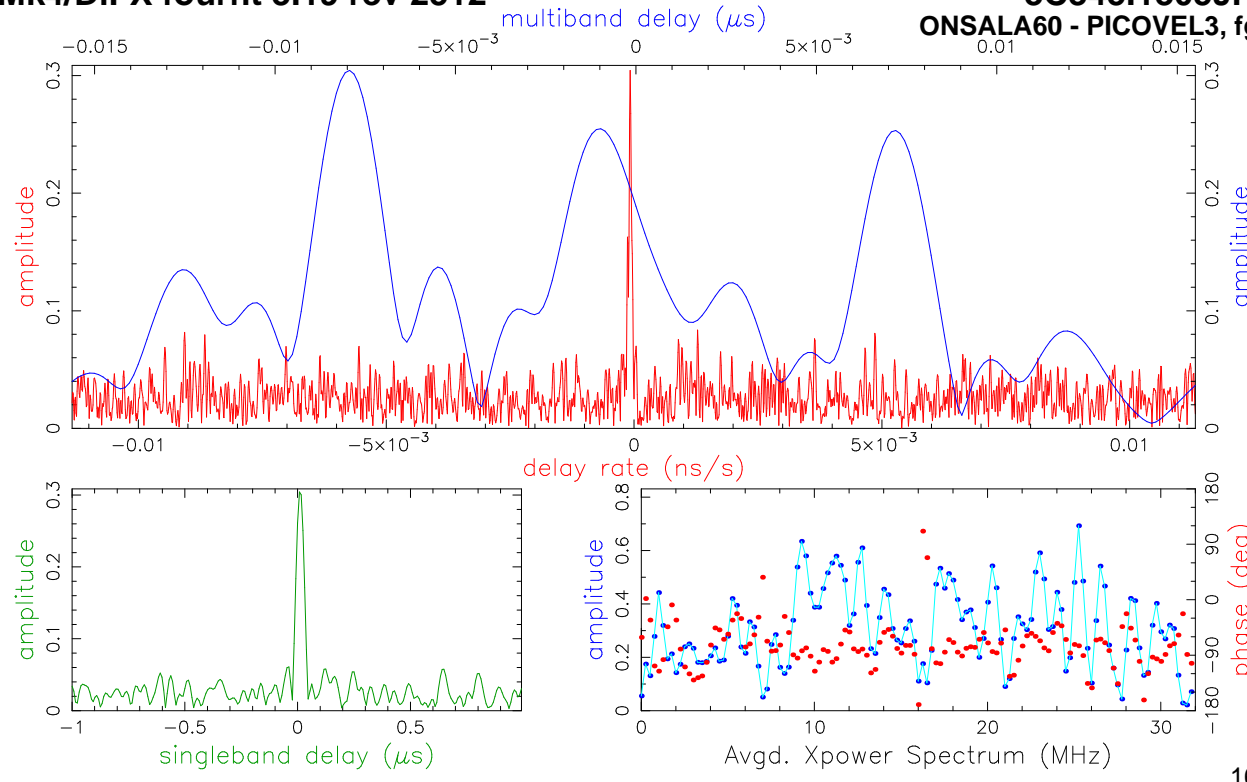
Resid mbdelay (usec) -1.08987E-02
Resid sbdelay (usec) -2.35420E-02
Resid phdelay (usec) 4.61519E-06
Resid rate (us/s) -8.10406E-08
Resid phase (deg) 143.1

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

X: az 263.7 el 53.3 pa 44.2 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xi.W.301.1305JH

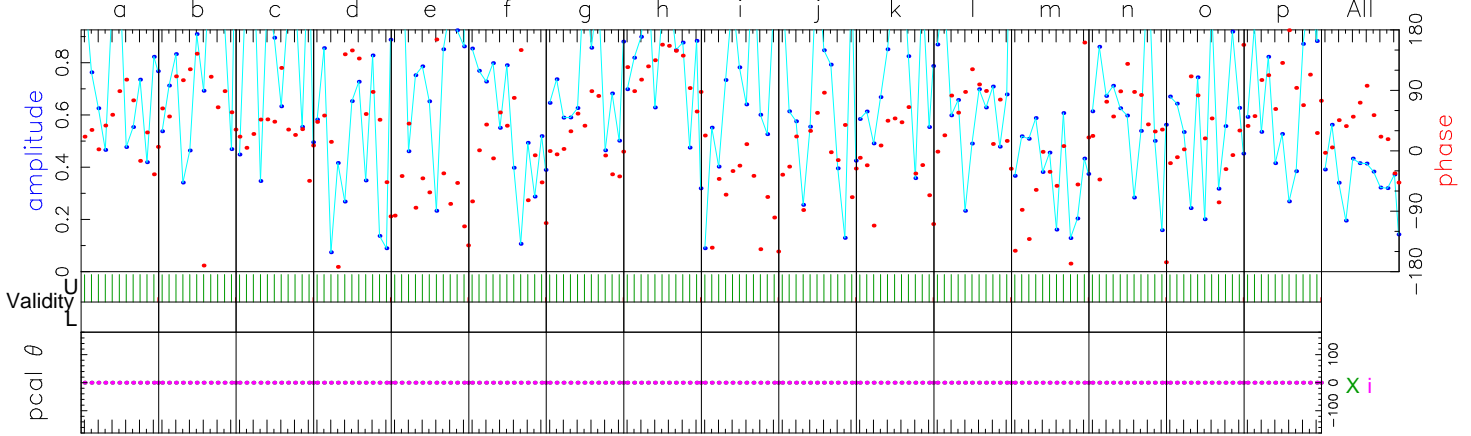


Fringe quality 9

SNR 15.0
Int time 313.934
Amp 0.309
Phase 32.5
PFD 9.0e-42
Delays (us)
SBD 0.011072
MBD -0.007941
Fringe rate (Hz)
-0.006947
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
2020:093:042846
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

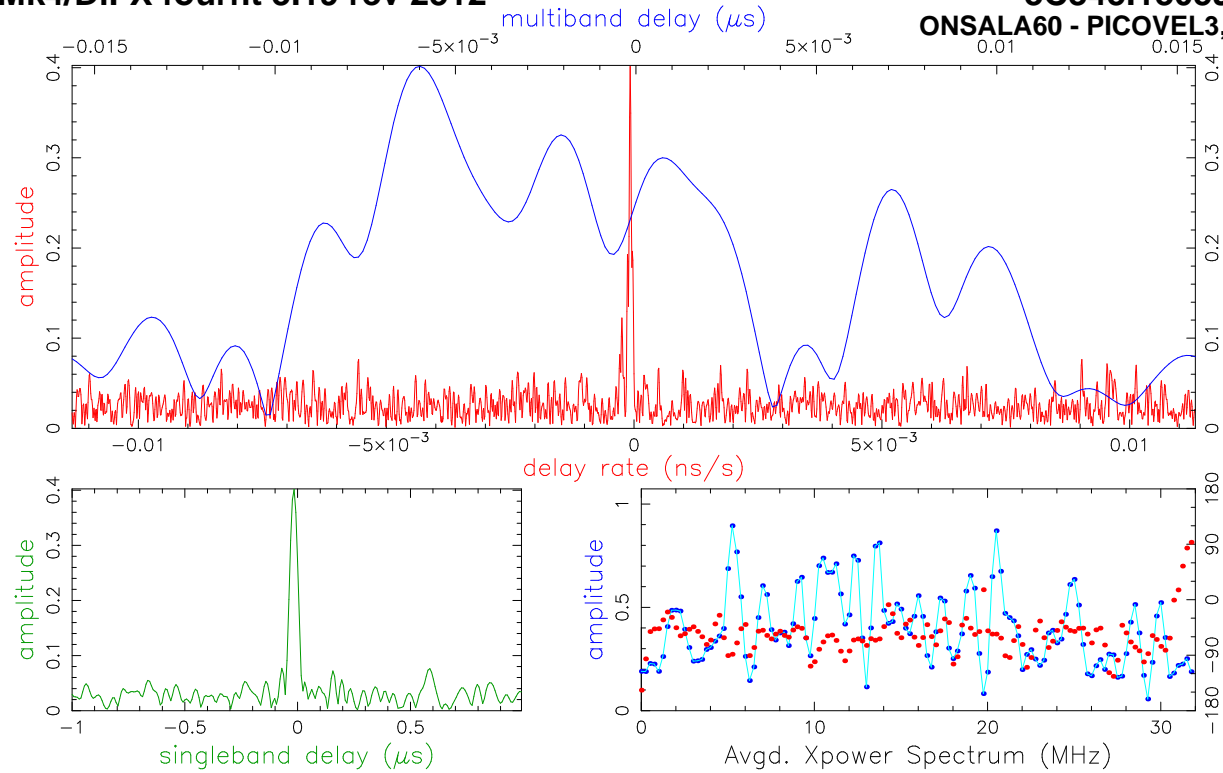


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	35.0	97.7	24.4	96.3	-65.1	-1.0	25.6	124.6	-58.6	0.7	11.3	48.9	-67.1	52.0	14.1	81.2	Phase	32.5
X	0.6	0.6	0.7	0.3	0.6	0.4	0.5	0.7	0.5	0.4	0.5	0.5	0.2	0.4	0.4	0.5	Ampl.	0.5
Xi	129.5	131.6	131.3	133.1	130.9	131.4	131.7	130.9	131.4	130.6	130.2	130.6	151.1	131.4	130.9	130.2	Sbd box	130.4
Xi	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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Xi	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Xi	0:0	0:0	0:0	0:0	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	
Xi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	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) -1.76256250449E+03 Apriori delay (usec) -1.76258581372E+03 Resid mbdelay (usec) -7.94077E-03 +/- 7.2E-05
 Sband delay (usec) -1.76257474172E+03 Apriori clock (usec) 3.2814224E+01 Resid sbdelay (usec) 1.10720E-02 +/- 1.2E-03
 Phase delay (usec) -1.76258581267E+03 Apriori clockrate (us/s) 8.8100003E-07 Resid phdelay (usec) 1.04830E-06 +/- 2.5E-07
 Delay rate (us/s) 5.90196446197E-02 Apriori rate (us/s) 5.90197252620E-02 Resid rate (us/s) -8.06424E-08 +/- 1.4E-09
 Total phase (deg) -325.3 Apriori accel (us/s/s) 2.68521651531E-05 Resid phase (deg) 32.5 +/- 7.7

RMS Theor. Amplitude 0.309 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 35.9 13.3 Search (2048X64) 0.297 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 36.0 23.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 60.1 15.3 Inc. seg. avg. 0.364 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 77.0 26.7 Inc. frq. avg. 0.482 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xi.W.315.1305JH

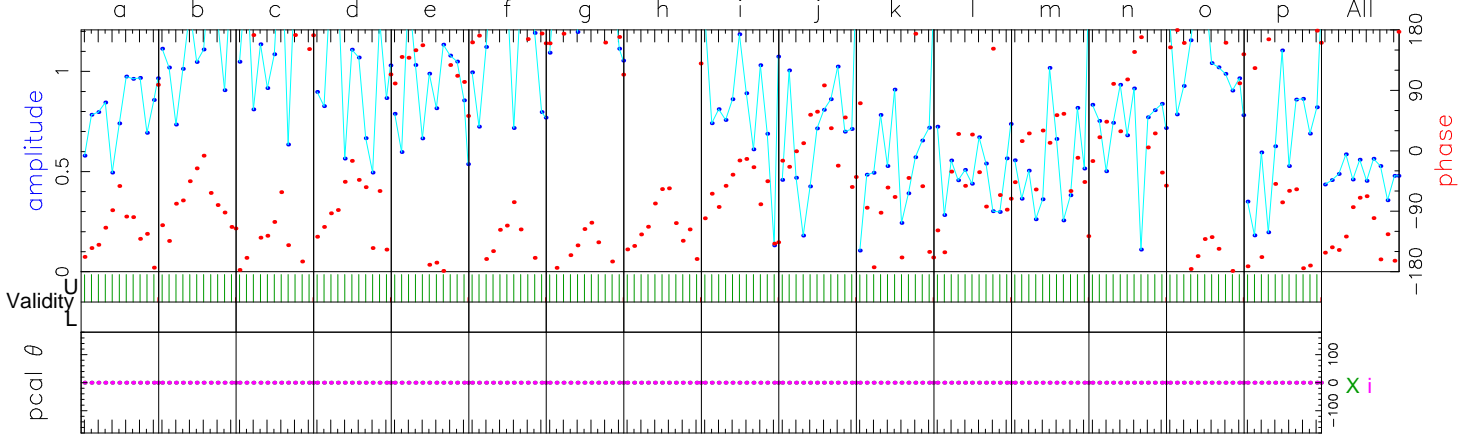


Fringe quality 8

SNR 19.5
 Int time 313.934
 Amp 0.403
 Phase -123.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.017123
 MBD -0.006020
 Fringe rate (Hz)
 -0.006914
 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
 2020:093:042849
 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
	-121.8	-76.1	-152.8	-81.8	144.2	-152.8	-161.3	-114.9	-55.1	12.5	-101.0	-60.6	-2.6	34.9	-174.4	-129.0	Phase	-123.0
	0.7	0.9	0.9	0.7	0.8	1.0	1.3	1.4	0.7	0.5	0.3	0.3	0.4	0.4	0.9	0.3	Ampl.	0.7
	127.3	126.8	127.2	127.4	126.8	127.1	126.6	126.8	126.4	127.4	128.1	127.8	126.6	125.6	127.4	125.0	Sbd box	126.8
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	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		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			-1.76259183390E+03					Apriori delay (usec)		-1.76258581372E+03				Resid mbdelay (usec)		-6.02017E-03	+/-	5.5E-05
Sband delay (usec)			-1.76260293722E+03					Apriori clock (usec)		3.2814224E+01				Resid sbdelay (usec)		-1.71235E-02	+/-	8.8E-04
Phase delay (usec)			-1.76258581769E+03					Apriori clockrate (us/s)		8.8100003E-07				Resid phdelay (usec)		-3.96662E-06	+/-	1.9E-07
Delay rate (us/s)			5.90196450030E-02					Apriori rate (us/s)		5.90197252620E-02				Resid rate (us/s)		-8.02590E-08	+/-	1.0E-09
Total phase (deg)					-120.8			Apriori accel (us/s/s)		2.68521651531E-05				Resid phase (deg)		-123.0	+/-	5.9

ph/seg (deg) 34.8 10.2
 amp/seg (%) 26.4 17.8
 ph/frq (deg) 78.1 11.8
 amp/frq (%) 110.9 20.5

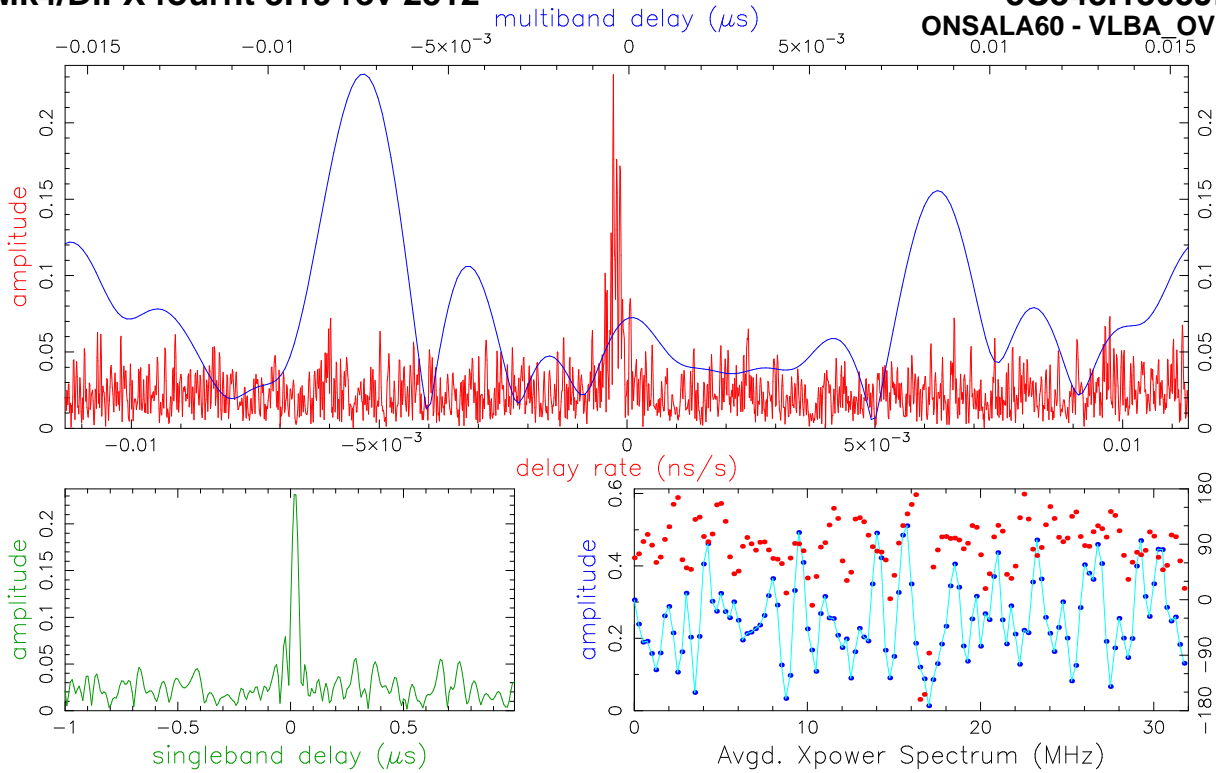
RMS Theor. Amplitude 0.403 +/- 0.021
 Search (2048X64) 0.395
 Interp. 0.000
 Inc. seg. avg. 0.480
 Inc. frq. avg. 0.699

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

X: az 263.7 el 53.3 pa 44.2 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xi..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xi.W.333.1305JH



Fringe quality 9

SNR 13.1

Int time 409.331

Amp 0.238

Phase -112.3

PFD 1.1e-30

Delays (us)

SBD 0.019413

MBD -0.007298

Fringe rate (Hz)

-0.023460

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

2020:093:042839

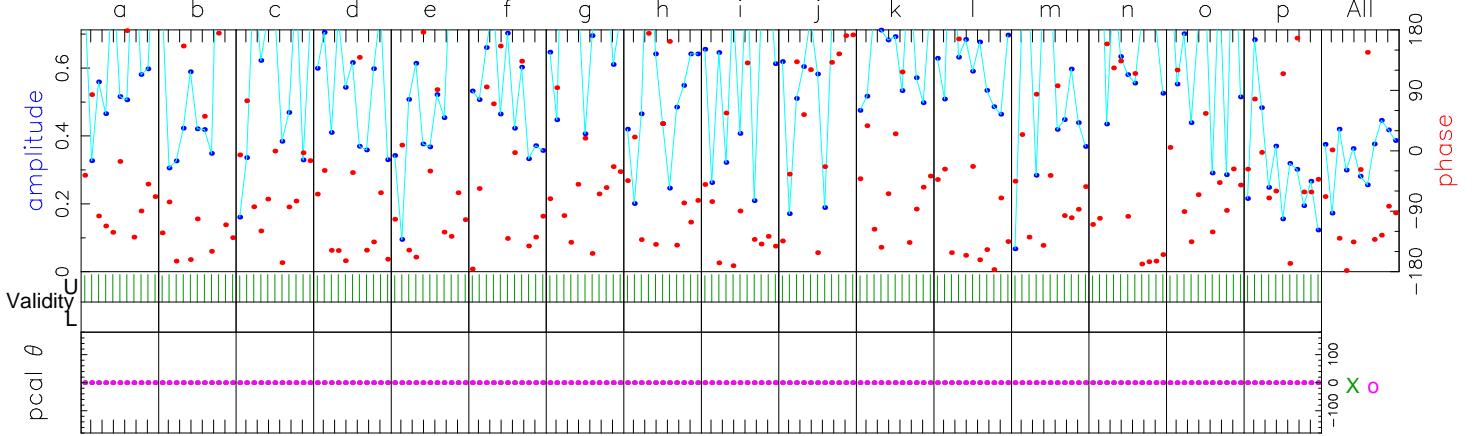
2020:014:135814

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					
	-89.1	-144.8	-59.9	-109.3	-118.8	173.1	-68.9	-121.7	-144.8	153.6	-75.3	-132.2	-80.7	-162.0	-41.7	-25.7		Phase	-112.3				
	0.4	0.4	0.4	0.3	0.3	0.1	0.5	0.3	0.3	0.4	0.3	0.4	0.2	0.5	0.3	0.1		Ampl.	0.3				
	131.5	131.4	130.5	132.3	131.8	107.3	131.7	131.6	131.5	131.2	131.1	131.5	134.2	131.1	131.7	126.7		Sbd box	131.5				
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					
X	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					
X: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					
X: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					
X	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					
X	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)			6.16186703893E+03															Apriori delay (usec)	6.16184308657E+03	Resid mbdelay (usec)	-7.29764E-03	+/-	8.2E-05
Sband delay (usec)			6.16186249957E+03															Apriori clock (usec)	1.5695475E+01	Resid sbdelay (usec)	1.94130E-02	+/-	1.3E-03
Phase delay (usec)			6.16184308295E+03															Apriori clockrate (us/s)	5.2701902E-07	Resid phdelay (usec)	-3.61992E-06	+/-	2.8E-07
Delay rate (us/s)			-1.43643817290E+00															Apriori rate (us/s)	-1.43643790055E+00	Resid rate (us/s)	-2.72343E-07	+/-	1.2E-09
Total phase (deg)				59.6														Apriori accel (us/s/s)	-1.55313353288E-05	Resid phase (deg)	-112.3	+/-	8.7

ph/seg (deg) 59.8 14.5 Theor. Amplitude 0.238 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 56.2 25.2 Search (2048X64) 0.221 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 53.2 17.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 59.6 30.4 Inc. seg. avg. 0.334 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

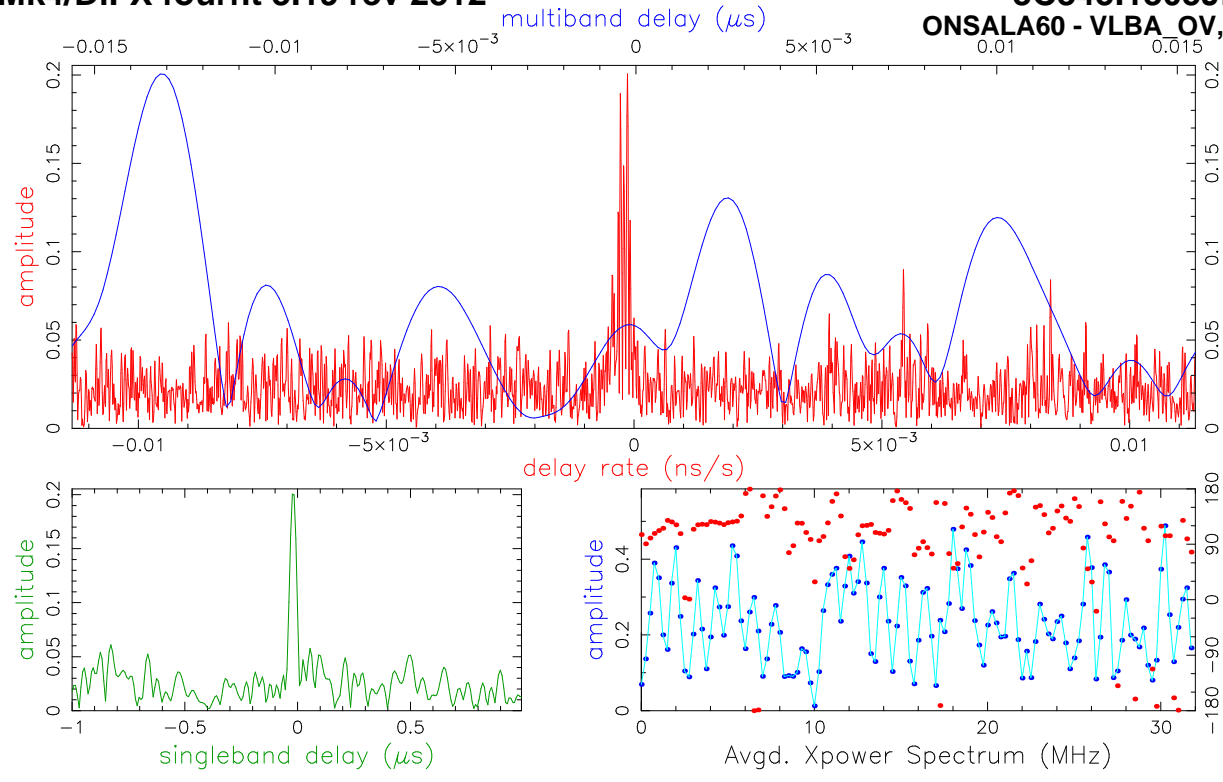
amp/frq (%) 59.6 30.4 Inc. frq. avg. 0.313 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xo.W.288.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Xo
 ONSALA60 - VLBA_OV, fgroup W, pol RR

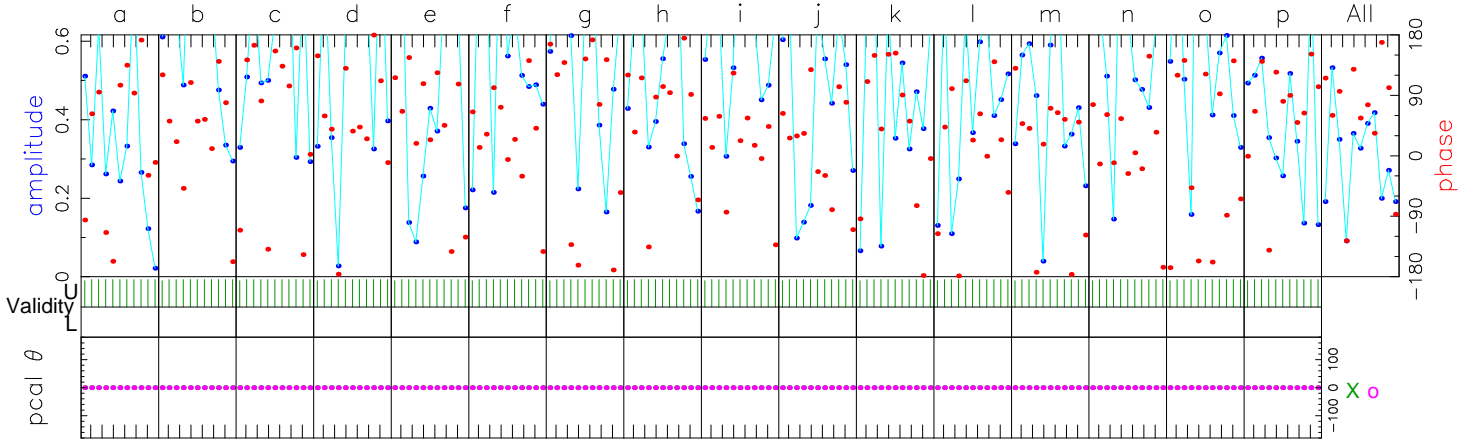


Fringe quality 9

SNR 11.4
 Int time 409.331
 Amp 0.205
 Phase 83.4
 PFD 3.0e-21
 Delays (us)
 SBD -0.019684
 MBD -0.013094
 Fringe rate (Hz)
 -0.011208
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

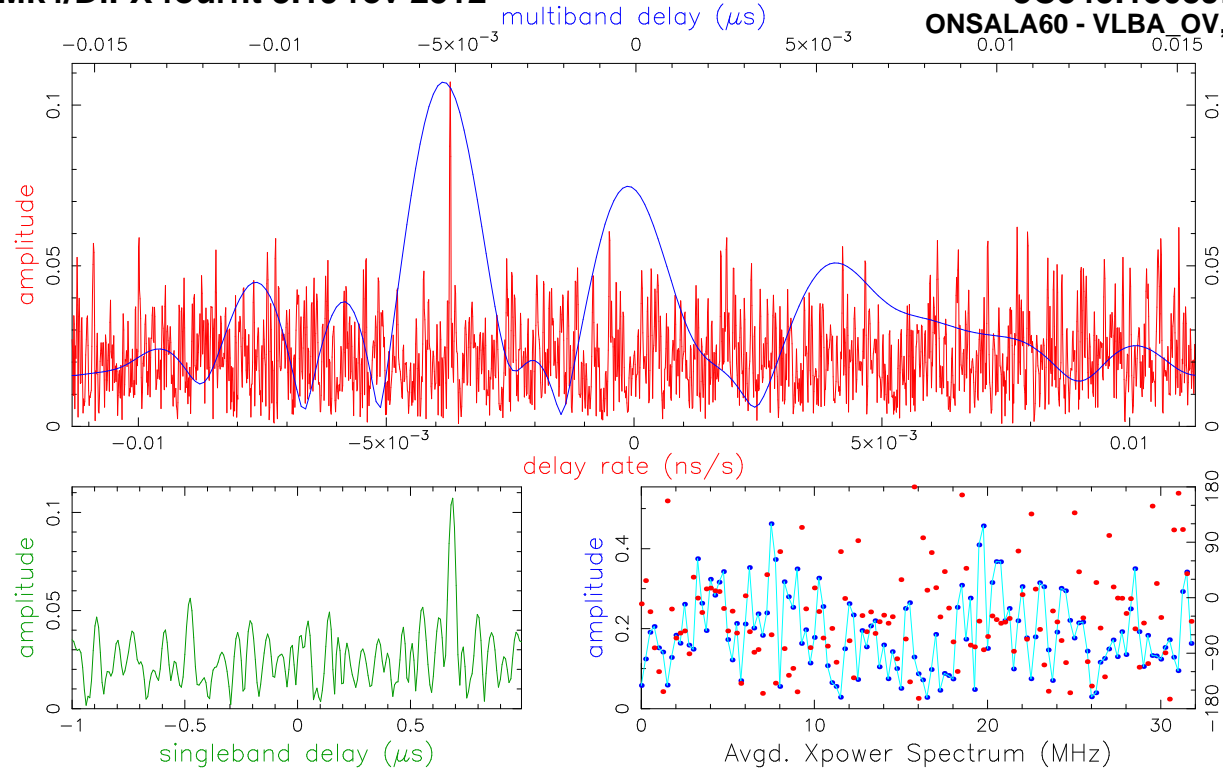
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042844
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



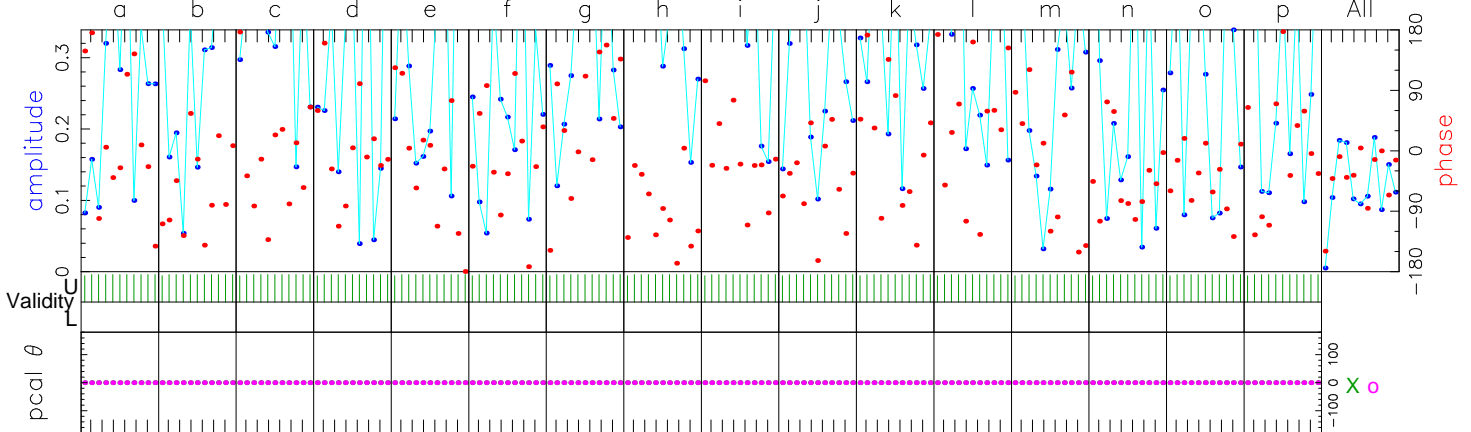
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
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	0:0		
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	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)	6.16182999296E+03			Apriori delay (usec)			6.16184308657E+03			Resid mbdelay (usec)			-1.30936E-02			+/-	9.5E-05	
Sband delay (usec)	6.16182340307E+03			Apriori clock (usec)			1.5695475E+01			Resid sbdelay (usec)			-1.96835E-02			+/-	1.5E-03	
Phase delay (usec)	6.16184308926E+03			Apriori clockrate (us/s)			5.2701902E-07			Resid phdelay (usec)			2.68819E-06			+/-	3.3E-07	
Delay rate (us/s)	-1.43643803067E+00			Apriori rate (us/s)			-1.43643790055E+00			Resid rate (us/s)			-1.30119E-07			+/-	1.4E-09	
Total phase (deg)	255.2			Apriori accel (us/s/s)			-1.55313353288E-05			Resid phase (deg)			83.4			+/-	10.1	

ph/seg (deg) 77.7 16.7 Search (2048X64) 0.199 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.8 29.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.0 20.2 Inc. seg. avg. 0.291 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.8 35.2 Inc. frq. avg. 0.277 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xo.W.310.1305JH



Fringe quality 0
 SNR 6.0
 Int time 409.331
 Amp 0.113
 Phase -29.6
 PFD 4.4e-01
 Delays (us)
 SBD 0.685084
 MBD -0.005350
 Fringe rate (Hz)
 -0.320259
 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
 2020:093:042848
 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

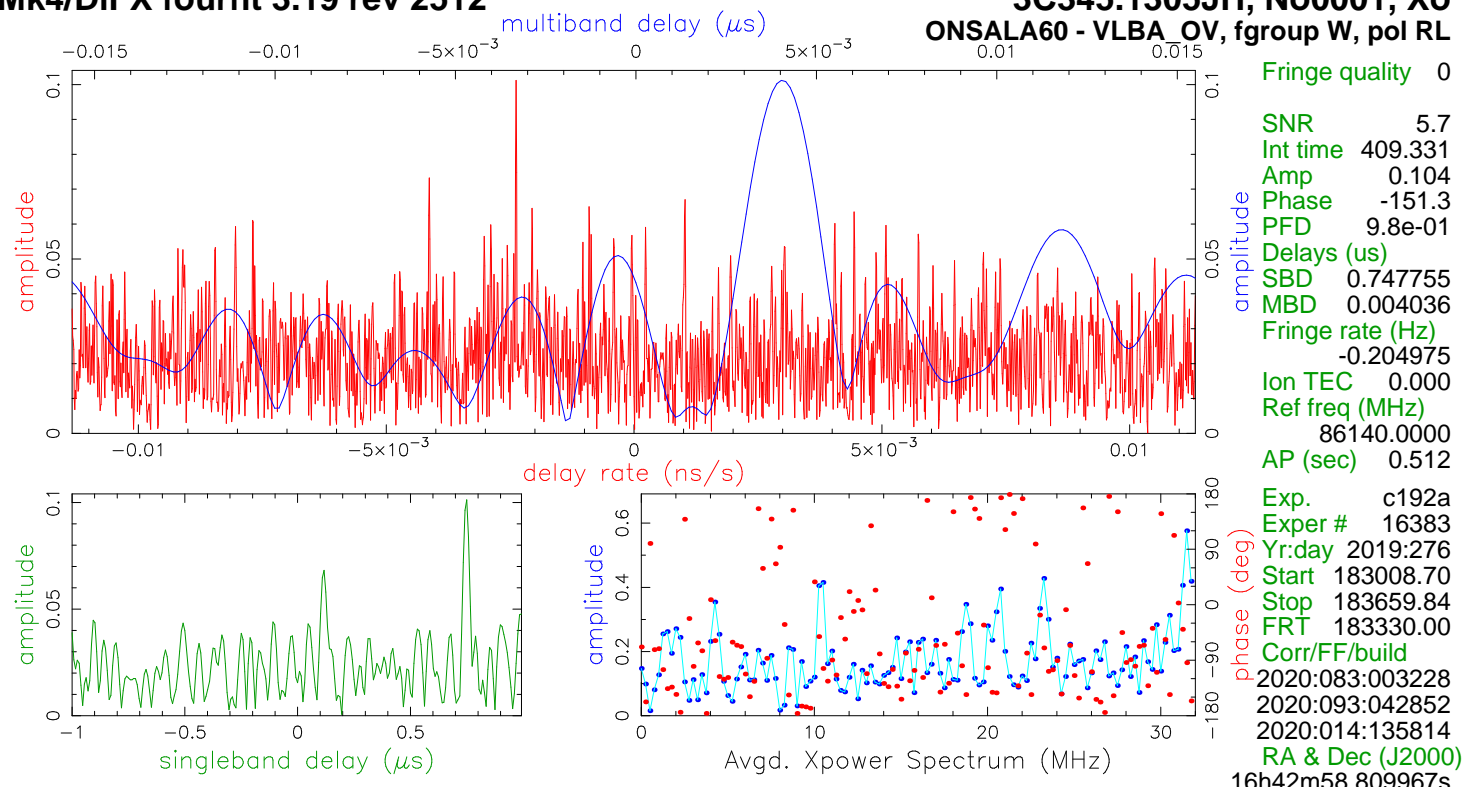


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-7.7	-46.2	-44.0	-15.5	-104.5	-7.5	74.2	-91.4	-5.6	-34.4	26.7	55.9	105.7	-54.0	-47.8	-14.1		Phase	-29.6				
	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1		Ampl.	0.1				
	9.0	92.7	180.9	203.9	254.2	182.6	204.1	110.8	247.6	69.4	169.3	1.3	196.0	215.8	237.8	41.6		Sbd box	216.7				
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					
X	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					
X: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					
X: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					
X	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					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)		6.16252523659E+03																Apriori delay (usec)	6.16184308657E+03	Resid mbdelay (usec)	-5.34998E-03	+/-	1.8E-04
Sband delay (usec)		6.16252817057E+03																Apriori clock (usec)	1.5695475E+01	Resid sbdelay (usec)	6.85084E-01	+/-	2.9E-03
Phase delay (usec)		6.16184308562E+03																Apriori clockrate (us/s)	5.2701902E-07	Resid phdelay (usec)	-9.54265E-07	+/-	6.2E-07
Delay rate (us/s)		-1.43644161844E+00																Apriori rate (us/s)	-1.43643790055E+00	Resid rate (us/s)	-3.71789E-06	+/-	2.6E-09
Total phase (deg)				142.3														Apriori accel (us/s/s)	-1.55313353288E-05	Resid phase (deg)	-29.6	+/-	19.2

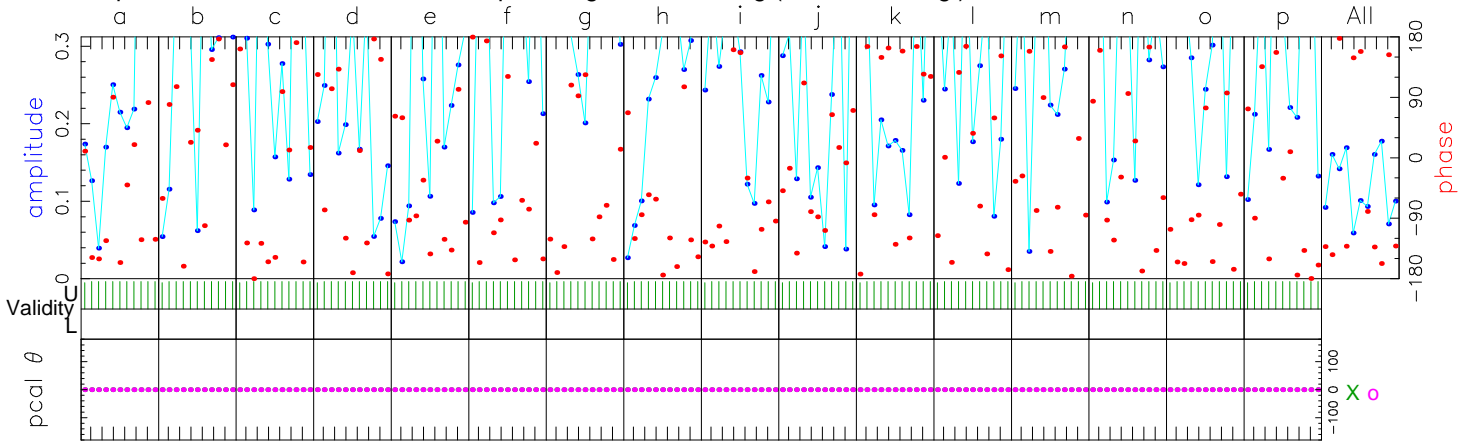
ph/seg (deg) 44.2 31.8 Search (2048X64) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.5 55.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.2 38.3 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 71.3 66.9 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xo.W.328.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Xo
 ONSALA60 - VLBA OV, fgroup W, pol RL



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	
-128.7	144.5	-166.3	166.9	-59.8	-151.7	-138.1	-134.5	-124.8	29.4	161.4	-156.8	-56.6	-178.6	-128.5	-173.5	Phase	-151.3	
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	0.1	0.2	0.2	Ampl.	0.1	
192.2	191.0	65.6	137.3	151.8	94.3	206.4	123.0	9.9	133.0	14.9	180.7	18.3	21.2	223.7	231.6	Sbd box	224.7	
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		
X 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		
X: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		
X: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		
X 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		
X	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)	6.16259712304E+03			Apriori delay (usec)			6.16184308657E+03			Resid mbdelay (usec)			4.03646E-03			+/- 1.9E-04		
Sband delay (usec)	6.16259084107E+03			Apriori clock (usec)			1.5695475E+01			Resid sbdelay (usec)			7.47755E-01			+/- 3.0E-03		
Phase delay (usec)	6.16184308170E+03			Apriori clockrate (us/s)			5.2701902E-07			Resid phdelay (usec)			-4.87844E-06			+/- 6.5E-07		
Delay rate (us/s)	-1.43644028011E+00			Apriori rate (us/s)			-1.43643790055E+00			Resid rate (us/s)			-2.37956E-06			+/- 2.8E-09		
Total phase (deg)	20.6			Apriori accel (us/s/s)			-1.55313353288E-05			Resid phase (deg)			-151.3			+/- 20.3		

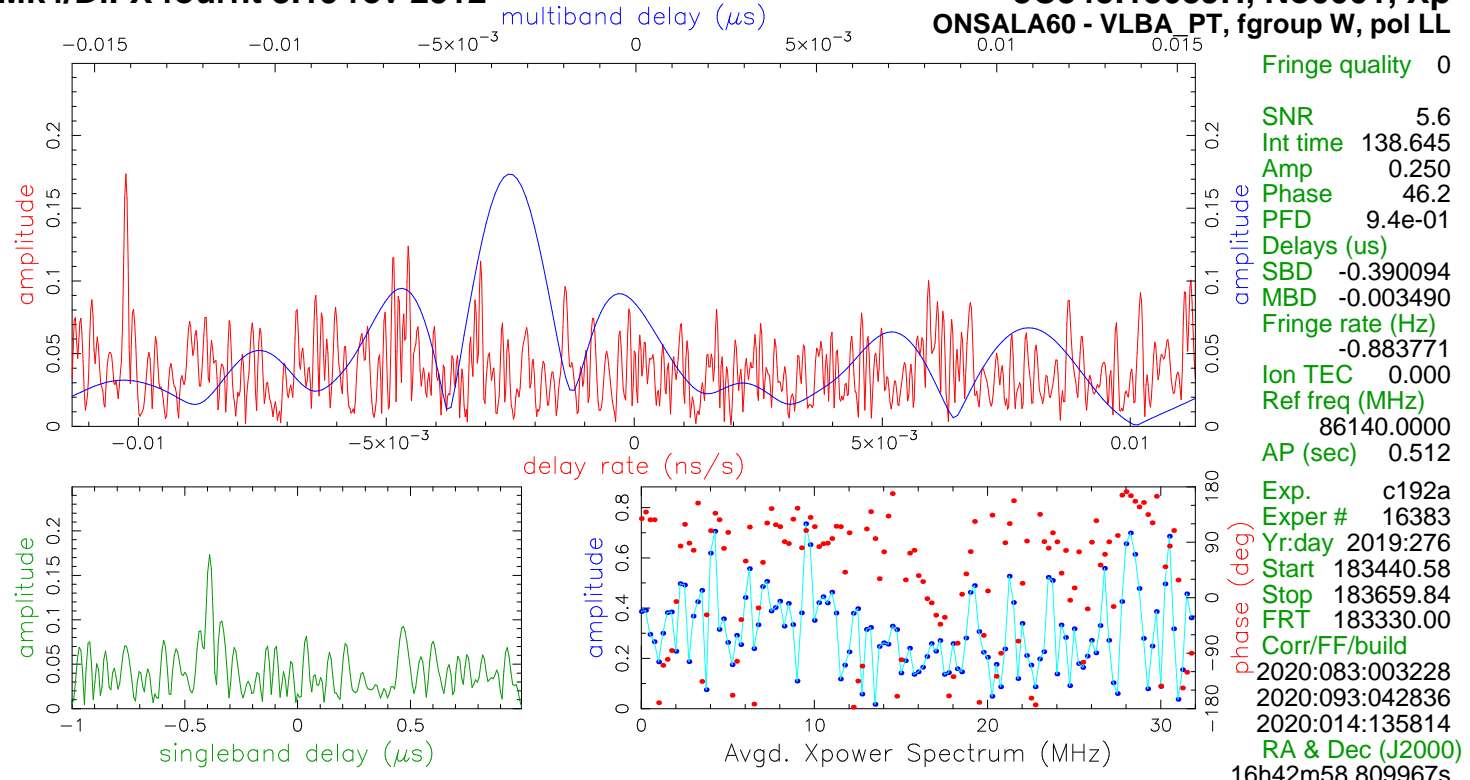
ph/seg (deg)	RMS	Theor.	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	39.2	33.6	Search (2048X64)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	43.4	58.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%)	66.2	40.5	Inc. seg. avg.	0.105	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
	64.4	70.8	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xo.W.345.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol LL



Fringe quality 0

SNR 5.6

Int time 138.645

Amp 0.250

Phase 46.2

PFD 9.4e-01

Delays (us)

SBD -0.390094

MBD -0.003490

Fringe rate (Hz)

-0.883771

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

2020:093:042836

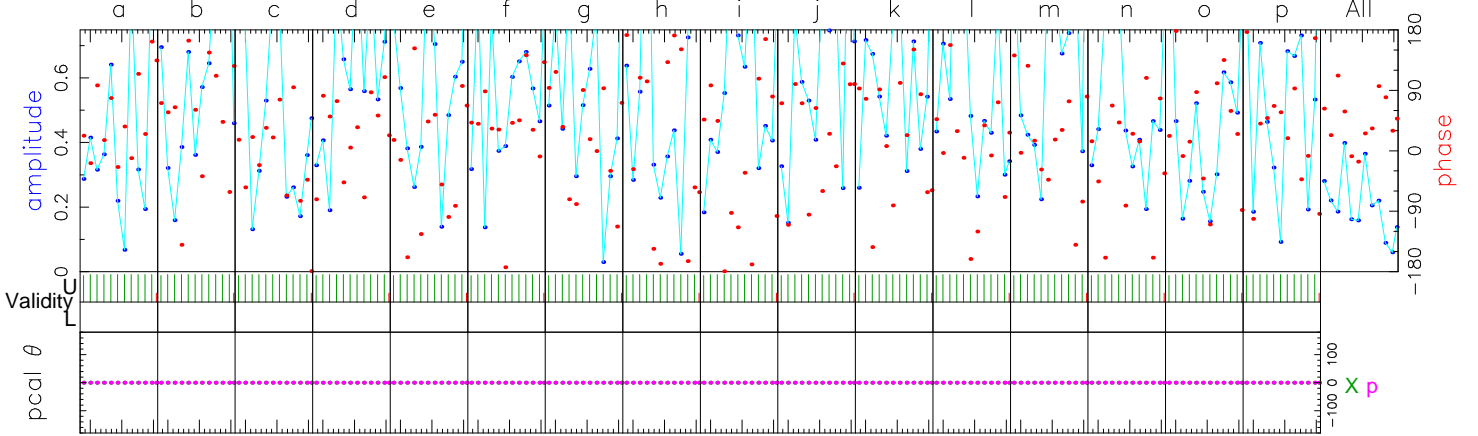
2020:014:135814

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					
	59.9	83.4	10.0	43.7	24.5	50.1	23.3	159.9	-149.8	54.0	85.5	22.9	31.7	41.3	51.6	50.3		Phase	46.2				
	0.3	0.3	0.4	0.5	0.3	0.5	0.3	0.3	0.2	0.4	0.2	0.5	0.3	0.3	0.3	0.2		Ampl.	0.3				
	241.1	133.6	209.2	78.5	41.6	231.1	194.9	203.8	87.3	124.2	240.0	178.1	137.9	65.9	132.9	70.0		Sbd box	79.1				
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					
X	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					
X: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					
X: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					
x	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					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Group delay (usec)(sbd)			4.33451023666E+03															Apriori delay (usec)	4.33488872618E+03	Resid mbdelay (usec)	-3.48952E-03	+/-	1.9E-04
Sband delay (usec)			4.33449863268E+03															Apriori clock (usec)	2.0419350E+01	Resid sbdelay (usec)	-3.90094E-01	+/-	3.1E-03
Phase delay (usec)			4.33488872767E+03															Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	1.49076E-06	+/-	6.6E-07
Delay rate (us/s)			-1.42202718165E+00															Apriori rate (us/s)	-1.42201692195E+00	Resid rate (us/s)	-1.02597E-05	+/-	8.2E-09
Total phase (deg)					0.7													Apriori accel (us/s/s)	-2.80443037835E-06	Resid phase (deg)	46.2	+/-	20.5

ph/seg (deg) 38.3 35.5

amp/seg (%) 60.5 62.0

ph/frq (deg) 57.4 41.0

amp/frq (%) 53.5 71.6

RMS Theor. Amplitude 0.250 +/- 0.045

Search (1024X64) 0.168

Interp. 0.000

Inc. seg. avg. 0.255

Inc. frq. avg. 0.254

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

Pcal rate: 0.000E+00, 0.000E+00 (us/s)

Bits/sample: 2x2 SampCntNorm: enabled

Sample rate(MSamp/s): 64

Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

sb window (us) -1.000 1.000

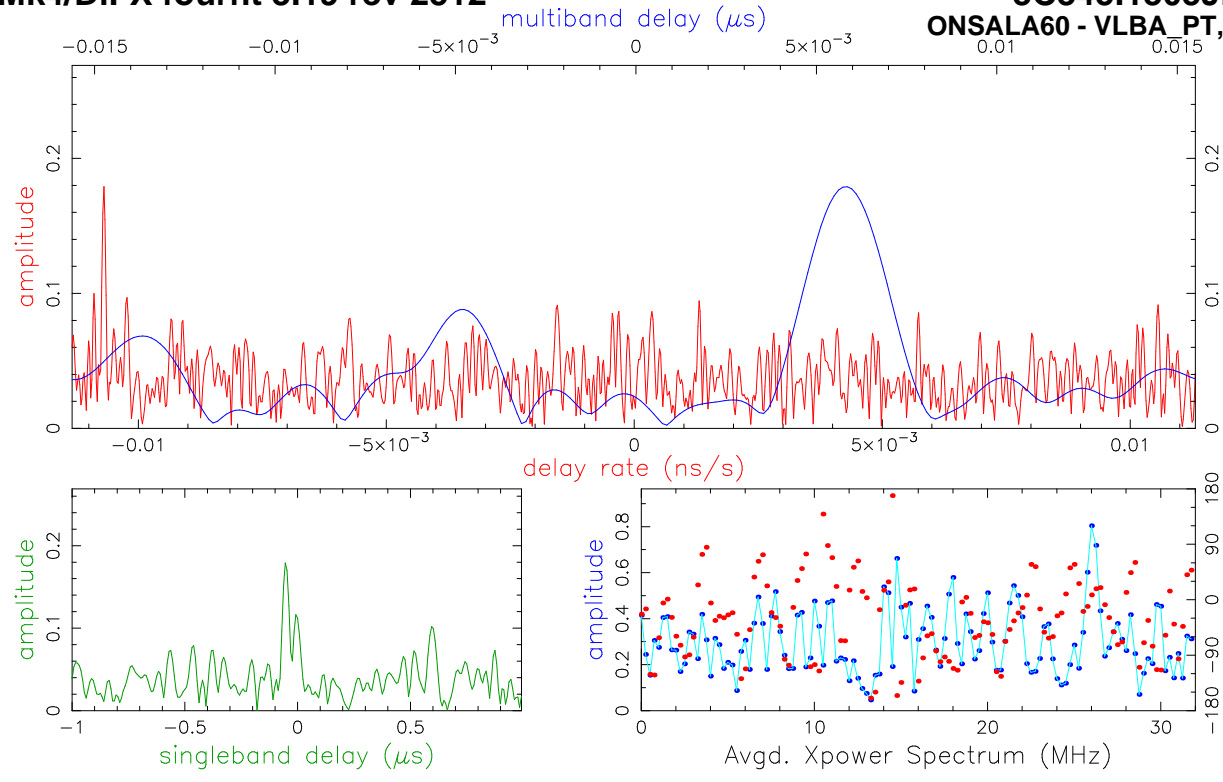
mb window (us) -0.016 0.016

dr window (ns/s) -0.011 0.011

ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10595.510 1587.388 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xp.W.275.1305JH

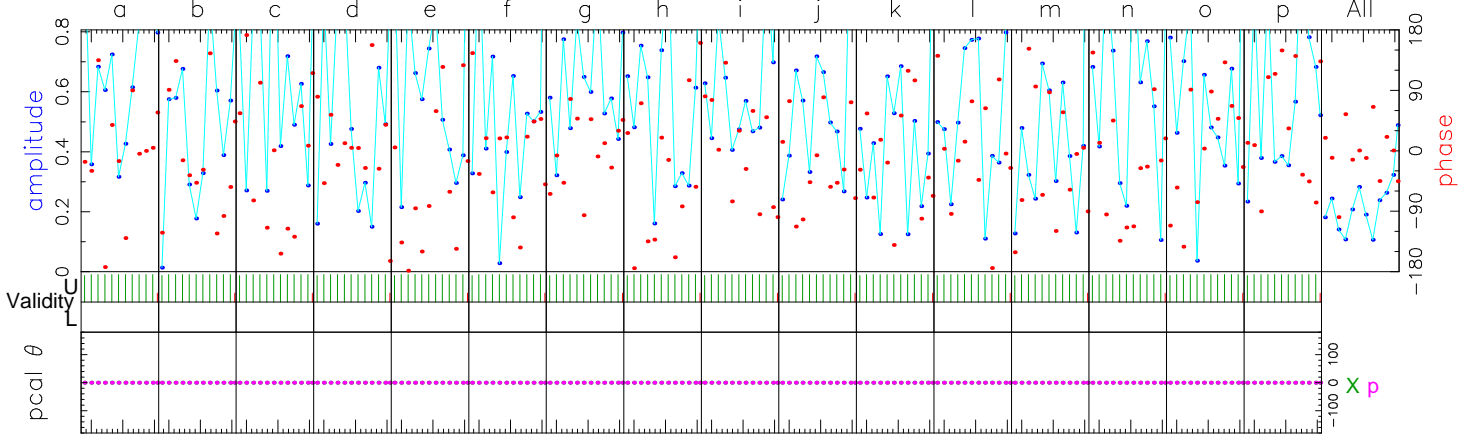


Fringe quality 0

SNR 5.8
 Int time 138.645
 Amp 0.269
 Phase -5.8
 PFD 5.4e-01
 Delays (us)
 SBD -0.052568
 MBD 0.005847
 Fringe rate (Hz)
 -0.922628
 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
 2020:093:042838
 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

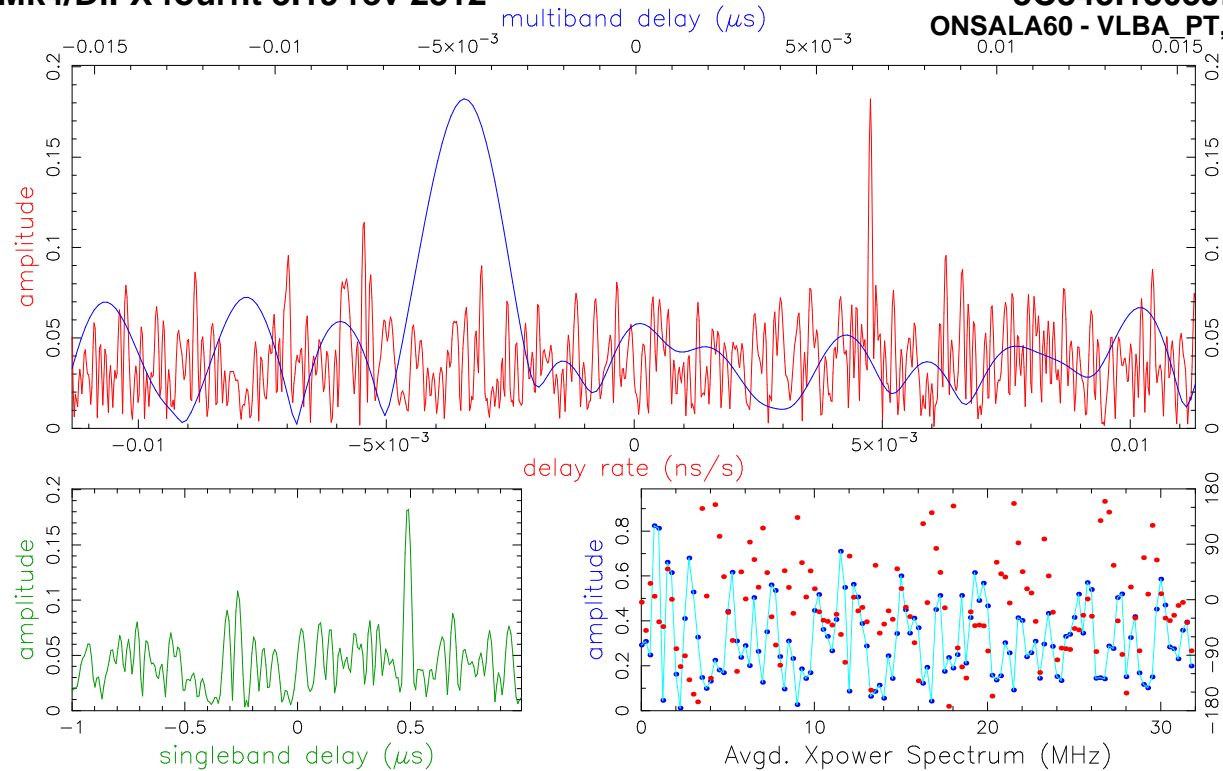


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	12.8	-45.2	8.0	-5.9	-96.7	-19.7	-1.3	-7.7	16.4	-14.1	-18.8	9.9	-44.7	-50.7	48.9	-0.3	Phase	-5.8
	0.5	0.1	0.1	0.6	0.1	0.4	0.6	0.2	0.3	0.3	0.2	0.4	0.2	0.2	0.2	0.2	Ampl.	0.2
	142.6	26.6	195.9	136.7	20.3	128.2	37.9	87.1	80.9	234.9	168.8	194.4	4.8	64.8	242.0	245.1	Sbd box	122.3
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
X	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	
X: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	
X:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
x	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) 4.33483207275E+03 Apriori delay (usec) 4.33488872618E+03 Resid mbdelay (usec) 5.84657E-03 +/- 1.9E-04
 Sband delay (usec) 4.33483615818E+03 Apriori clock (usec) 2.0419350E+01 Resid sbdelay (usec) -5.25680E-02 +/- 3.0E-03
 Phase delay (usec) 4.33488872600E+03 Apriori clockrate (us/s) 3.2411343E-07 Resid phdelay (usec) -1.88399E-07 +/- 6.4E-07
 Delay rate (us/s) -1.42202763275E+00 Apriori rate (us/s) -1.42201692195E+00 Resid rate (us/s) -1.07108E-05 +/- 7.9E-09
 Total phase (deg) 308.6 Apriori accel (us/s/s) -2.80443037835E-06 Resid phase (deg) -5.8 +/- 19.7

RMS Theor. Amplitude 0.269 +/- 0.046 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.0 34.1 Search (1024X64) 0.174 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 49.0 59.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 35.9 39.4 Inc. seg. avg. 0.273 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 60.1 68.8 Inc. frq. avg. 0.237 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10595.510 1587.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xp.W.285.1305JH

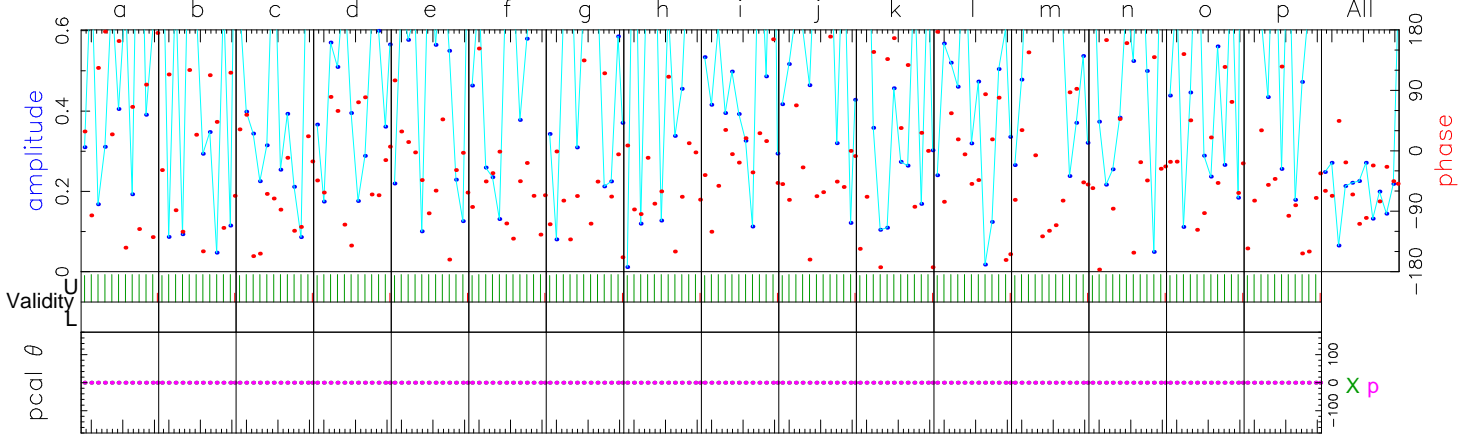


Fringe quality 0

SNR 6.0
 Int time 138.645
 Amp 0.201
 Phase -59.4
 PFD 2.2e-01
 Delays (us)
 SBD 0.488528
 MBD -0.004789
 Fringe rate (Hz)
 0.410080
 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
 2020:093:042840
 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

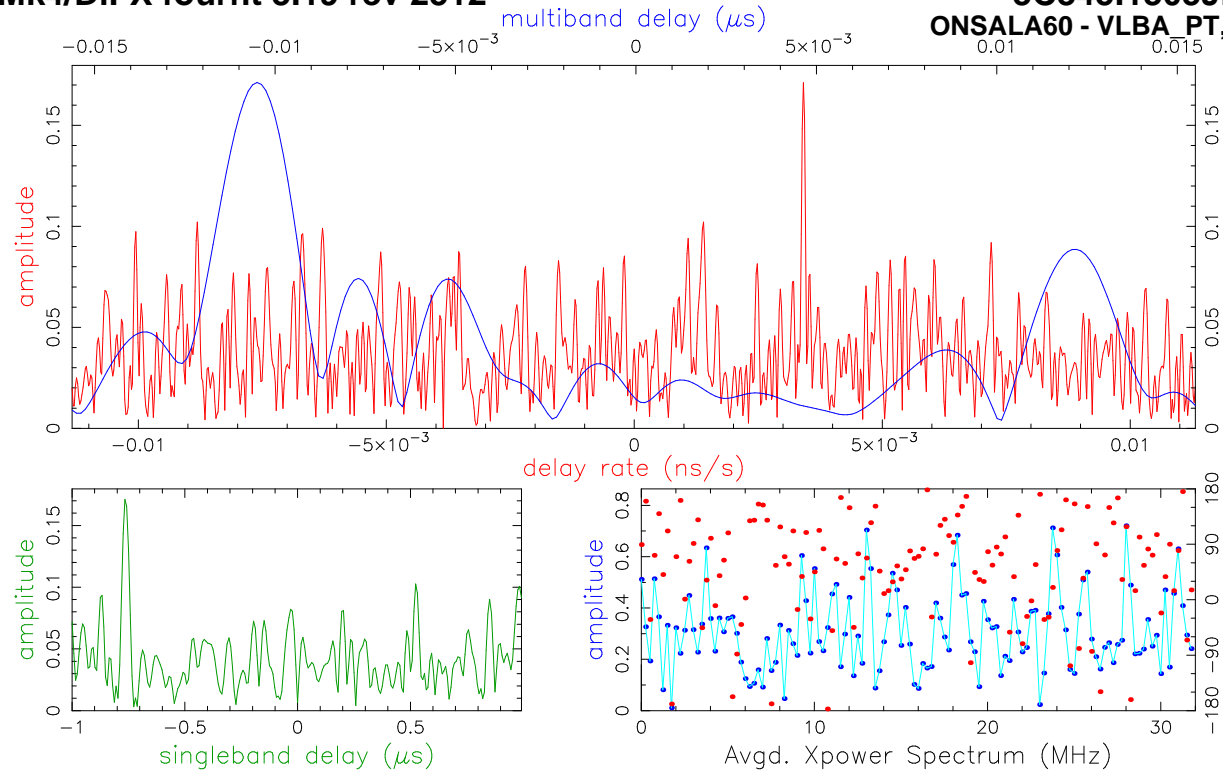


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-140.5	-65.0	-25.3	-40.1	-14.2	-86.9	-91.9	-48.0	-7.1	-61.4	-97.4	-10.7	-90.4	-49.5	-20.1	-82.8		Phase	-59.4				
	0.2	0.1	0.2	0.2	0.3	0.4	0.3	0.3	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.4		Ampl.	0.2				
	195.9	140.3	224.6	176.6	233.2	193.5	159.7	143.1	234.0	3.7	253.4	33.1	98.9	20.3	152.1	75.8		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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
X: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					
X: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					
x	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
x	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			4.33538393679E+03															Apriori delay (usec)	4.33488872618E+03	Resid mbdelay (usec)	-4.78939E-03	+/-	1.8E-04
Sband delay (usec)			4.33537725468E+03															Apriori clock (usec)	2.0419350E+01	Resid sbdelay (usec)	4.88528E-01	+/-	2.9E-03
Phase delay (usec)			4.33488872427E+03															Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	-1.91403E-06	+/-	6.2E-07
Delay rate (us/s)			-1.42201216133E+00															Apriori rate (us/s)	-1.42201692195E+00	Resid rate (us/s)	4.76062E-06	+/-	7.7E-09
Total phase (deg)					255.1													Apriori accel (us/s/s)	-2.80443037835E-06	Resid phase (deg)	-59.4	+/-	19.1

ph/seg (deg) 41.9 33.1 Amplitude 0.201 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.9 57.7 Search (1024X64) 0.181 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.5 38.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.2 66.6 Inc. seg. avg. 0.197 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10595.510 1587.388 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xp.W.296.1305JH simultaneous interpolator

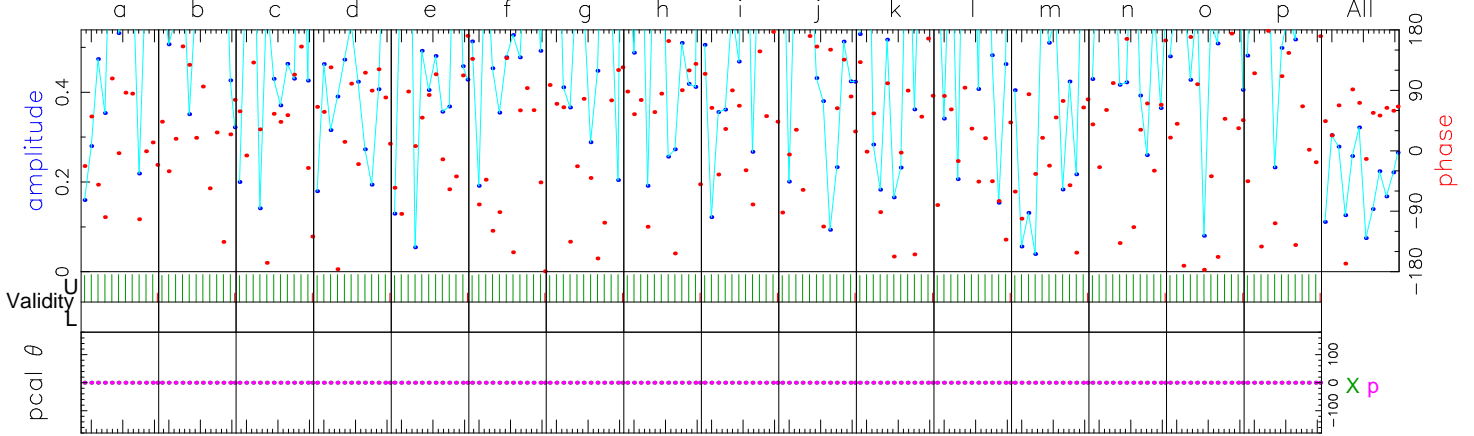
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Xp
 ONSALA60 - VLBA_PT, fgroup W, pol RL



Fringe quality 0
 SNR 5.6
 Int time 138.645
 Amp 0.180
 Phase 60.6
 PFD 9.5e-01
 Delays (us)
 SBD -0.763032
 MBD -0.010519
 Fringe rate (Hz)
 0.293998
 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
 2020:093:042842
 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

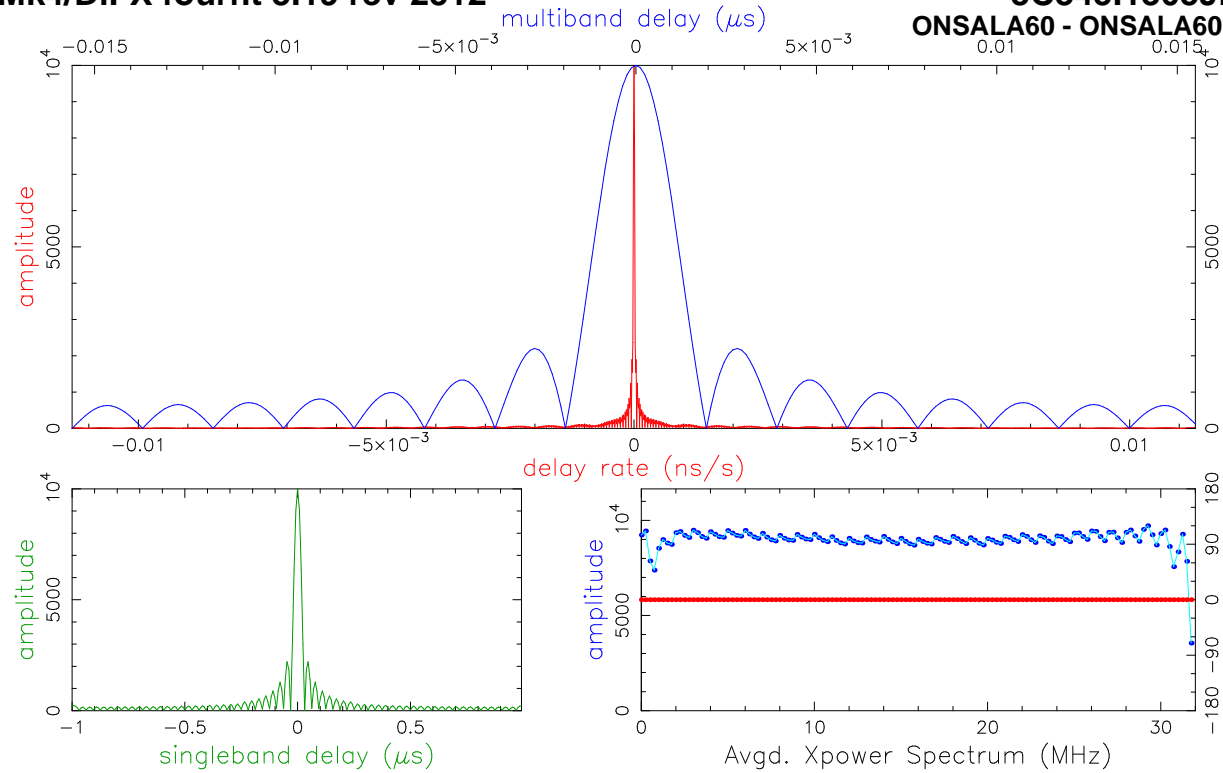


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	30.7	30.3	102.9	76.8	40.8	94.9	82.7	85.9	69.4	172.0	79.9	24.5	23.5	39.1	75.2	124.2		Phase	60.6
	0.3	0.3	0.2	0.3	0.2	0.1	0.2	0.4	0.2	0.0	0.3	0.4	0.2	0.1	0.2	0.1		Ampl.	0.2
	138.2	196.4	237.7	244.7	196.2	227.5	123.5	248.0	156.8	218.0	57.5	15.1	48.4	199.7	48.3	38.6		Sbd box	31.3
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		APs used	
X	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	
X: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	
X:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
p	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	

Group delay (usec)(sbd) 4.33412820696E+03 Apriori delay (usec) 4.33488872618E+03 Resid mbdelay (usec) -1.05192E-02 +/- 1.9E-04
 Sband delay (usec) 4.33412569368E+03 Apriori clock (usec) 2.0419350E+01 Resid sbdelay (usec) -7.63032E-01 +/- 3.1E-03
 Phase delay (usec) 4.33488872814E+03 Apriori clockrate (us/s) 3.2411343E-07 Resid phdelay (usec) 1.95522E-06 +/- 6.6E-07
 Delay rate (us/s) -1.42201350892E+00 Apriori rate (us/s) -1.42201692195E+00 Resid rate (us/s) 3.41302E-06 +/- 8.2E-09
 Total phase (deg) 15.1 Apriori accel (us/s/s) -2.80443037835E-06 Resid phase (deg) 60.6 +/- 20.6

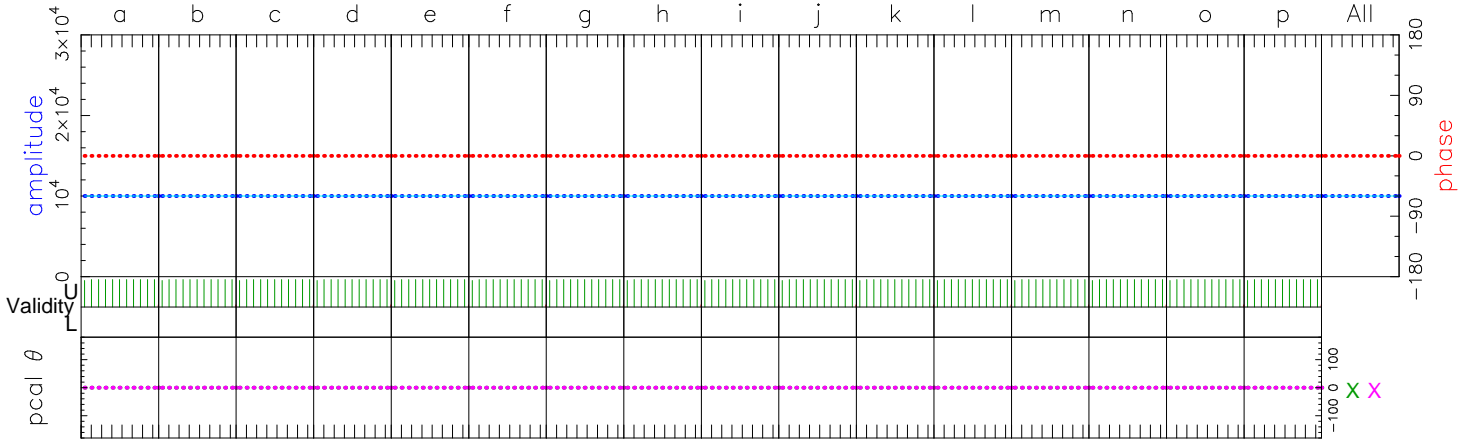
RMS Theor. Amplitude 0.180 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.5 35.6 Search (1024X64) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 49.2 62.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 43.8 41.1 Inc. seg. avg. 0.178 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 57.4 71.8 Inc. frq. avg. 0.163 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) 10595.510 1587.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Xp..1305JH Output file: /Exps/c192a/v2/1234/No0001/Xp.W.304.1305JH



Fringe quality 9
 SNR 559309.3
 Int time 418.320
 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 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042842
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0		Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0		Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0		Sbd box	129.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used	
X	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 phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
X: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 amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	

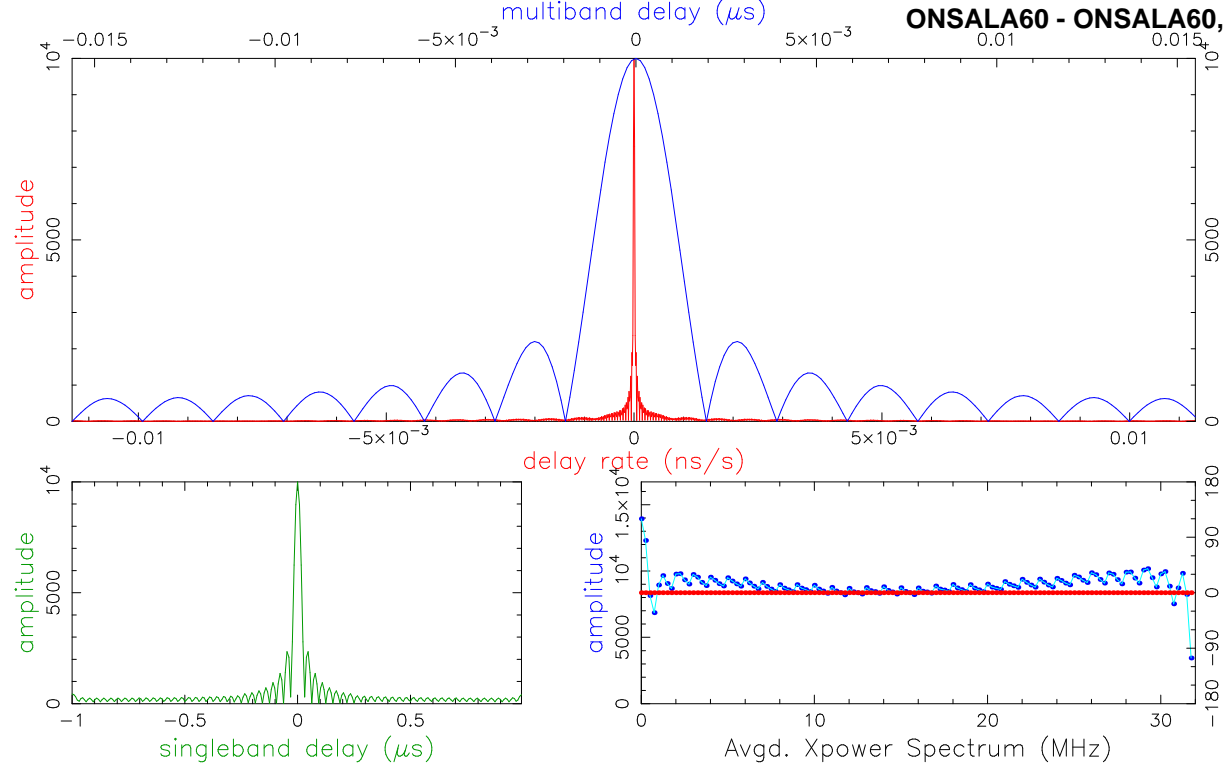
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) -8.54042891382E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -8.54043E-20 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.005 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.004 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. 10000.005 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XX..1305JH Output file: /Exps/c192a/v2/1234/No0001/XX.W.302.1305JH

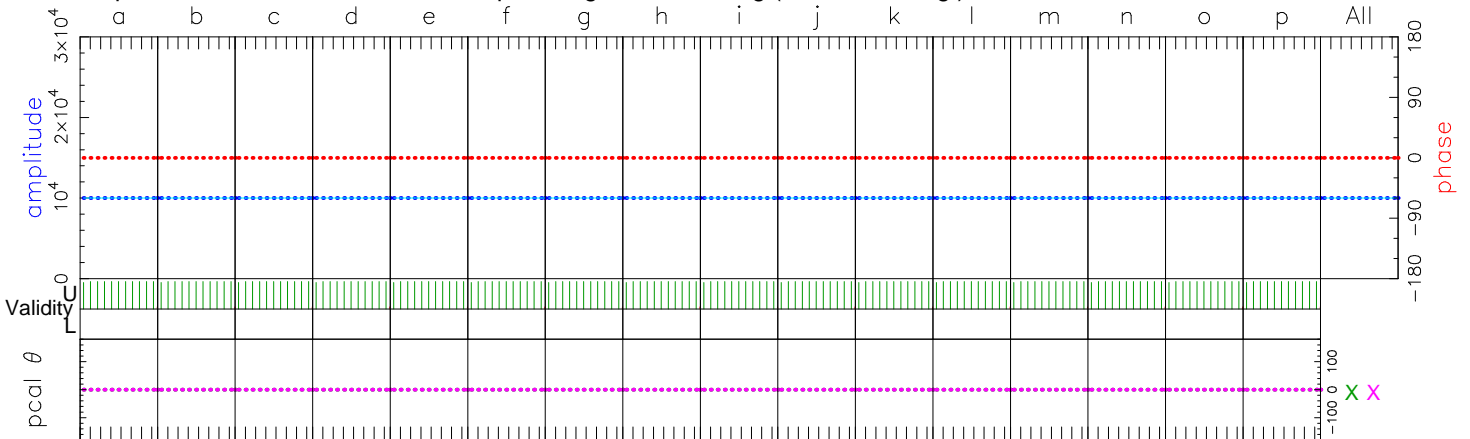
Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 9
 SNR 559309.3
 Int time 418.320
 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 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042847
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
X	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 phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X: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 amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X	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	

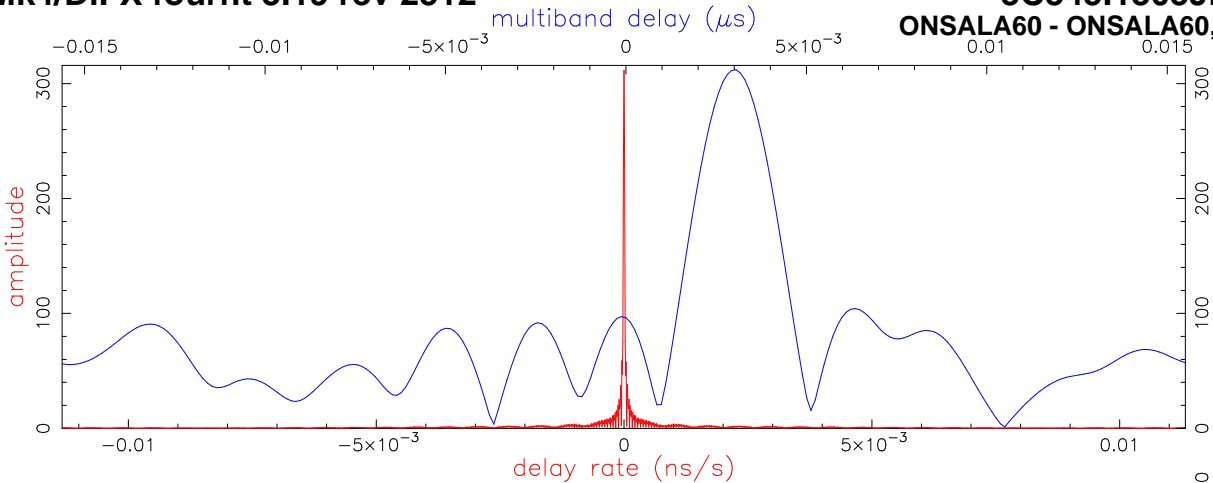
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) -6.64906160798E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -6.64906E-20 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.005 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 10000.004 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. 10000.005 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XX..1305JH Output file: /Exps/c192a/v2/1234/No0001/XX.W.320.1305JH

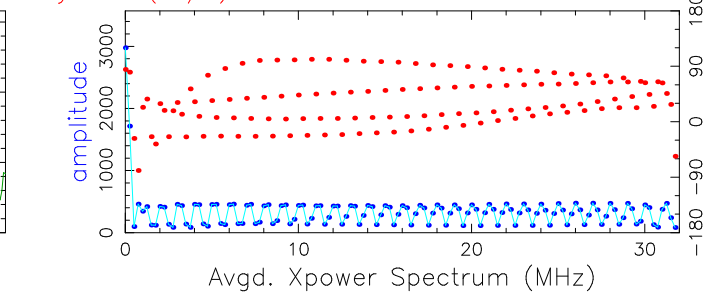
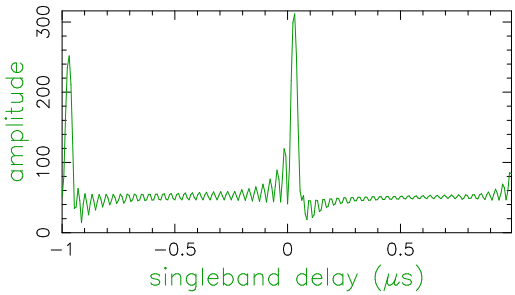
Mk4/DiFX fourfit 3.19 rev 2512

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



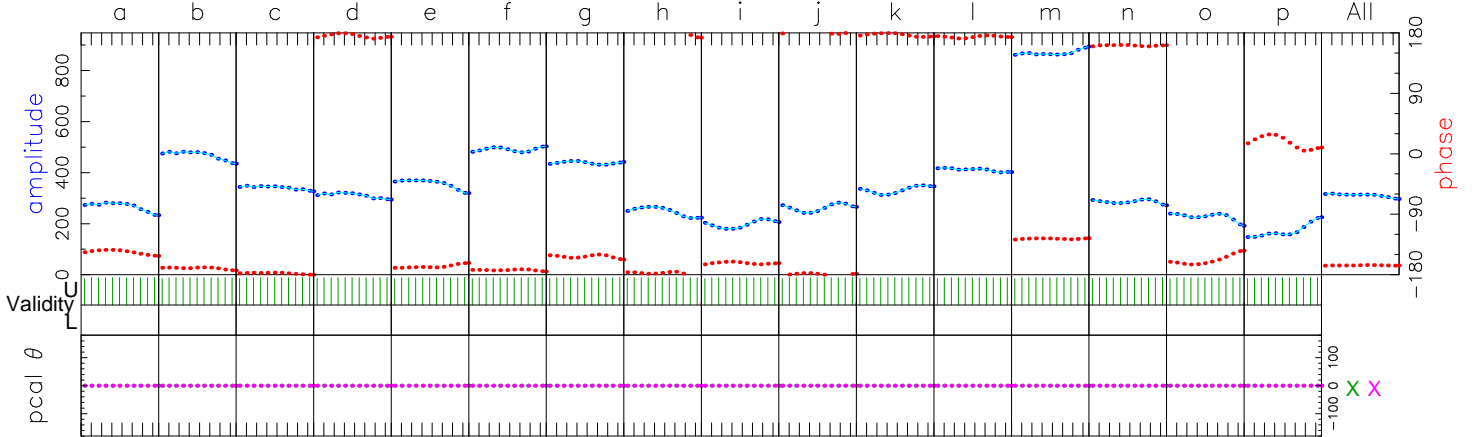
Fringe quality 5

SNR 17665.5
 Int time 418.320
 Amp 315.845
 Phase -166.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.028580
 MBD 0.002924
 Fringe rate (Hz)
 -0.000010
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042851
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

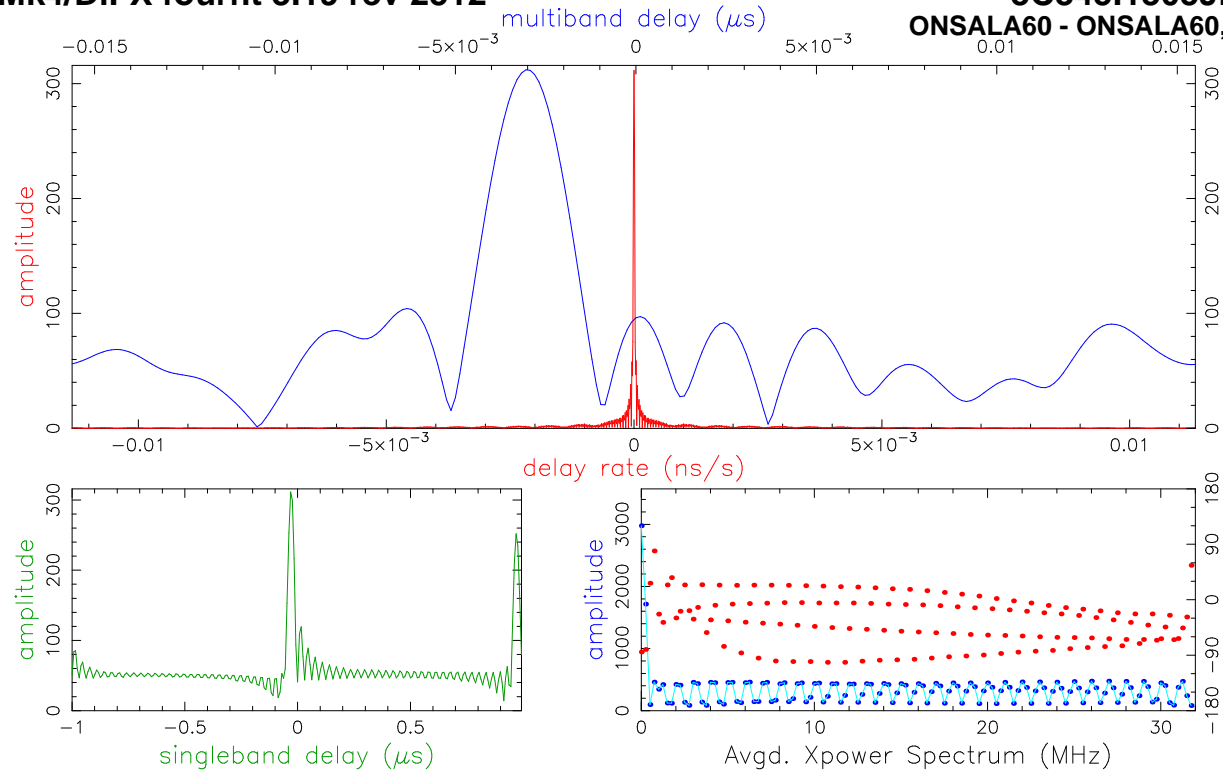
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-146.0	-170.2	-177.8	175.4	-167.7	-173.0	-152.9	-178.4	-162.7	-179.5	176.9	174.0	-126.5	161.1	-158.5	16.2	Phase	-166.1
	267.9	468.6	341.4	311.1	357.1	490.2	437.9	248.0	197.9	262.5	331.9	411.4	868.5	286.4	226.6	168.8	Ampl.	354.8
	131.4	133.5	133.0	133.6	132.8	133.7	133.6	132.9	132.4	134.0	133.5	132.9	131.7	133.8	5.4	135.5	Sbd box	132.7
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
X	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	
X: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	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	3.41739062500E-02			Apriori delay (usec)			0.0000000000E+00			Resid mbdelay (usec)			2.92391E-03			+/- 6.1E-08		
Sband delay (usec)	2.8580000000E-02			Apriori clock (usec)			0.0000000E+00			Resid sbdelay (usec)			2.85800E-02			+/- 9.8E-07		
Phase delay (usec)	-5.35466728684E-06			Apriori clockrate (us/s)			0.0000000E+00			Resid phdelay (usec)			-5.35467E-06			+/- 2.1E-10		
Delay rate (us/s)	-1.10534988655E-10			Apriori rate (us/s)			0.0000000000E+00			Resid rate (us/s)			-1.10535E-10			+/- 8.6E-13		
Total phase (deg)	-166.1			Apriori accel (us/s/s)			0.0000000000E+00			Resid phase (deg)			-166.1			+/- 0.0		

ph/seg (deg) 0.3 0.0 Search (2048X64) 315.845 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.3 0.0 Interp. 311.535 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.0 0.0 Inc. seg. avg. 311.447 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.5 0.0 Inc. frq. avg. 354.766 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XX..1305JH Output file: /Exps/c192a/v2/1234/No0001/XX.W.338.1305JH

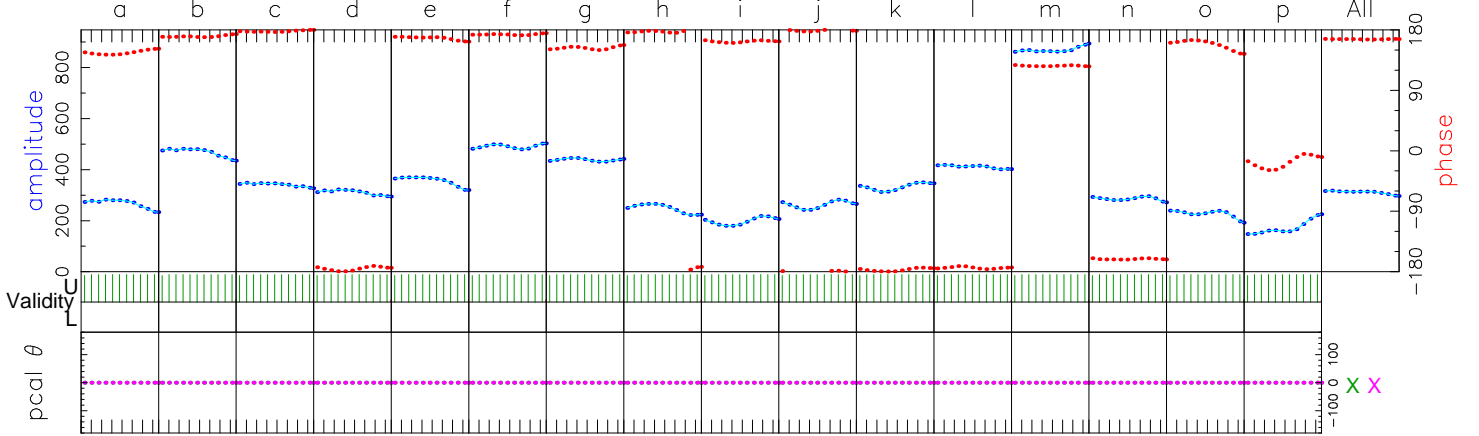


Fringe quality 5

SNR 17665.5
 Int time 418.320
 Amp 315.845
 Phase 166.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.028580
 MBD -0.002924
 Fringe rate (Hz)
 0.000010
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042854
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
X: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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		ManI PC					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.41739062500E-02															Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.92391E-03	+/-	6.1E-08
Sband delay (usec)			-2.85800000000E-02															Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.85800E-02	+/-	9.8E-07
Phase delay (usec)			5.35466728705E-06															Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.35467E-06	+/-	2.1E-10
Delay rate (us/s)			1.10534988655E-10															Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	1.10535E-10	+/-	8.6E-13
Total phase (deg)																		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	166.1	+/-	0.0

ph/seg (deg) 0.3 0.0
 amp/seg (%) 2.3 0.0
 ph/frq (deg) 51.0 0.0
 amp/frq (%) 52.5 0.0

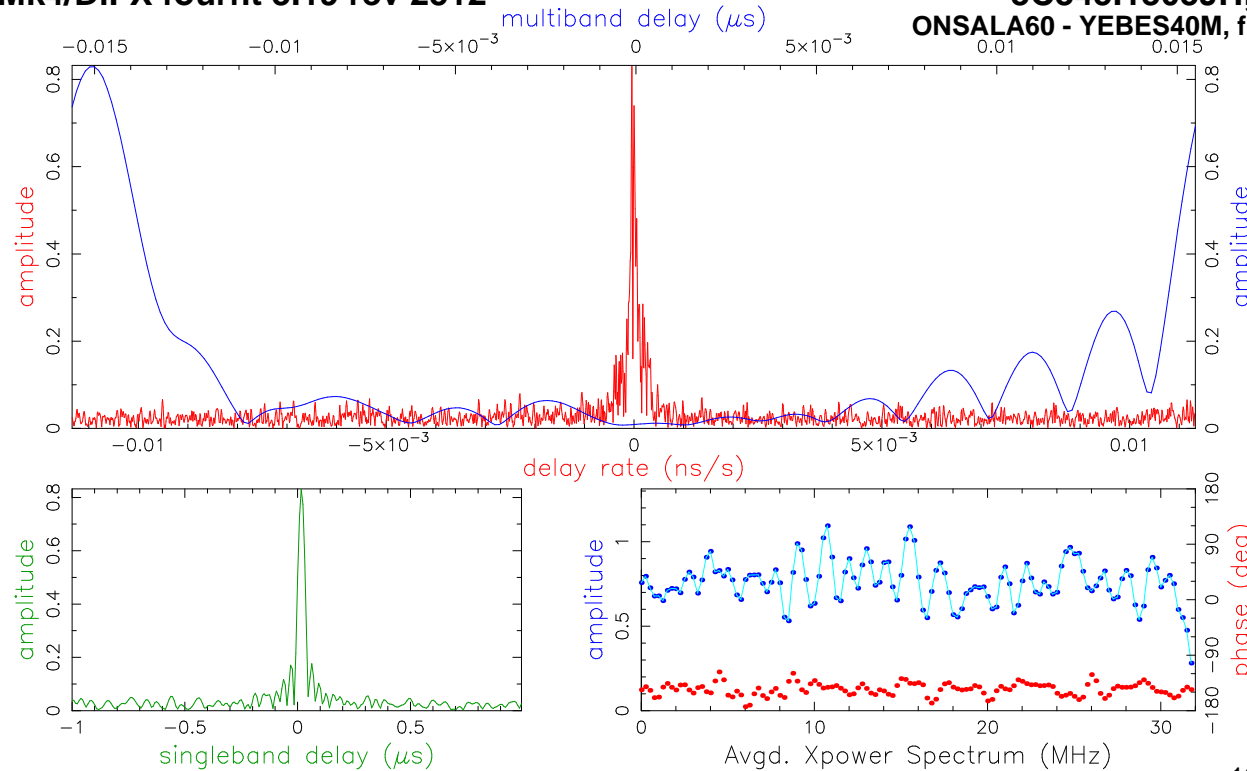
RMS Theor. Amplitude 315.845 +/- 0.018
 Search (2048X64) 311.535
 Interp. 0.000
 Inc. seg. avg. 311.447
 Inc. frq. avg. 354.766

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

X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XX..1305JH Output file: /Exps/c192a/v2/1234/No0001/XX.W.348.1305JH

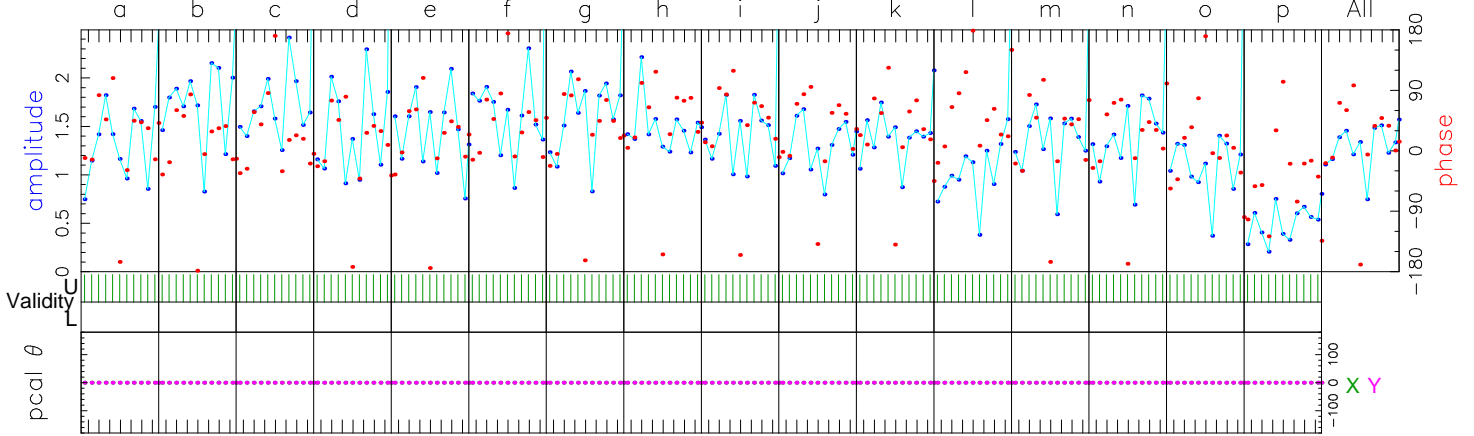


Fringe quality 2

SNR 45.5
 Int time 400.154
 Amp 0.832
 Phase 38.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.016874
 MBD -0.015062
 Fringe rate (Hz)
 -0.003750
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

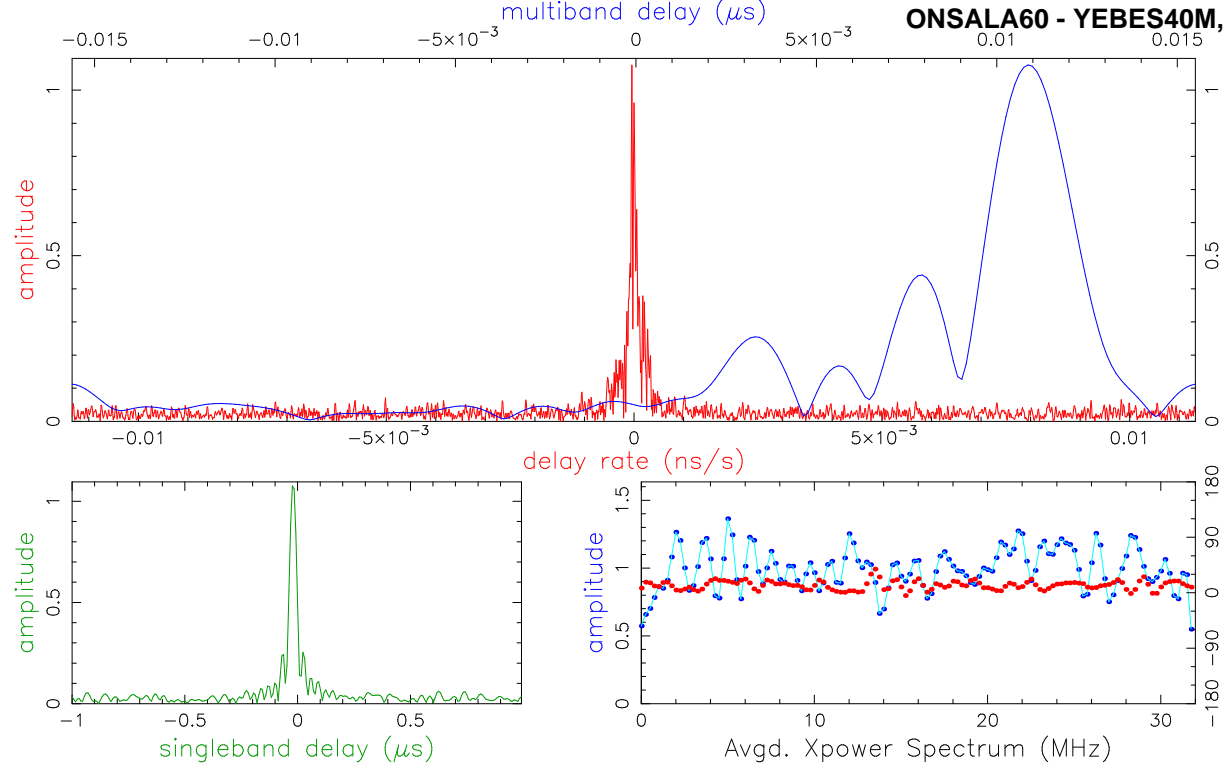
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183018.95
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042845
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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					
	36.0	28.7	19.0	29.0	35.2	37.9	57.7	66.8	62.4	48.5	49.0	50.8	40.0	33.1	-0.8	-31.6		Phase 38.5					
	0.8	1.1	1.1	1.0	0.9	1.1	1.0	1.0	0.9	0.8	0.9	0.7	0.8	0.9	0.7	0.3		Ampl. 0.9					
	130.6	131.2	131.3	131.5	131.1	131.2	131.7	131.2	131.2	131.1	131.3	130.8	130.7	131.1	131.0	131.2		Sbd box 131.2					
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0		APs used					
X	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					
X: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					
X: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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
X	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					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)				-1.86896486404E+03														Apriori delay (usec)	-1.86898105175E+03	Resid mbdelay (usec)	-1.50623E-02	+/-	2.4E-05
Sband delay (usec)				-1.86896417725E+03														Apriori clock (usec)	2.2673275E+01	Resid sbdelay (usec)	1.68745E-02	+/-	3.8E-04
Phase delay (usec)				-1.86898105050E+03														Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	1.24208E-06	+/-	8.1E-08
Delay rate (us/s)				3.61590754314E-02														Apriori rate (us/s)	3.61591189695E-02	Resid rate (us/s)	-4.35380E-08	+/-	3.5E-10
Total phase (deg)																		Apriori accel (us/s/s)	2.39811778223E-05	Resid phase (deg)	38.5	+/-	2.5

ph/seg (deg) 58.2 4.4 Search (2048X64) 0.826 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.3 7.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.6 5.0 Inc. seg. avg. 1.267 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 24.3 8.8 Inc. frq. avg. 0.875 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -225.260 2884.494 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XY..1305JH Output file: /Exps/c192a/v2/1234/No0001/XY.W.313.1305JH

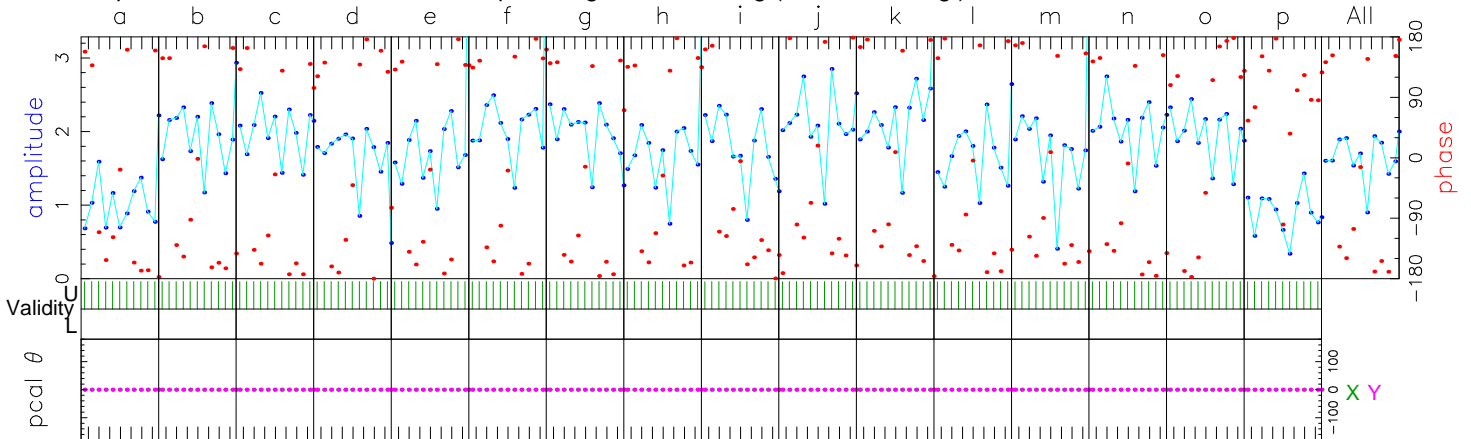


Fringe quality 2

SNR 59.9
 Int time 400.154
 Amp 1.096
 Phase -166.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.020072
 MBD 0.010914
 Fringe rate (Hz)
 -0.003716
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183018.95
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042848
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

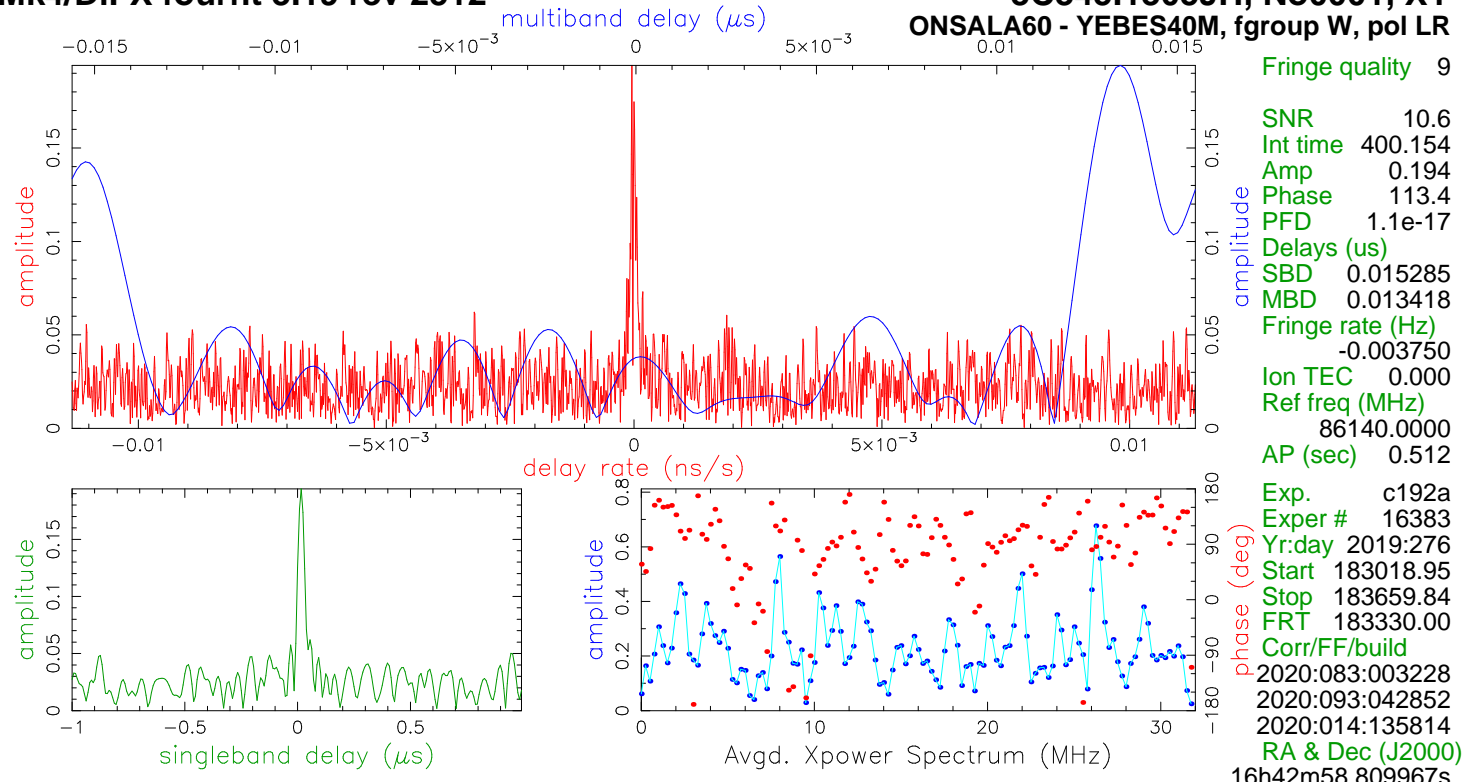
Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



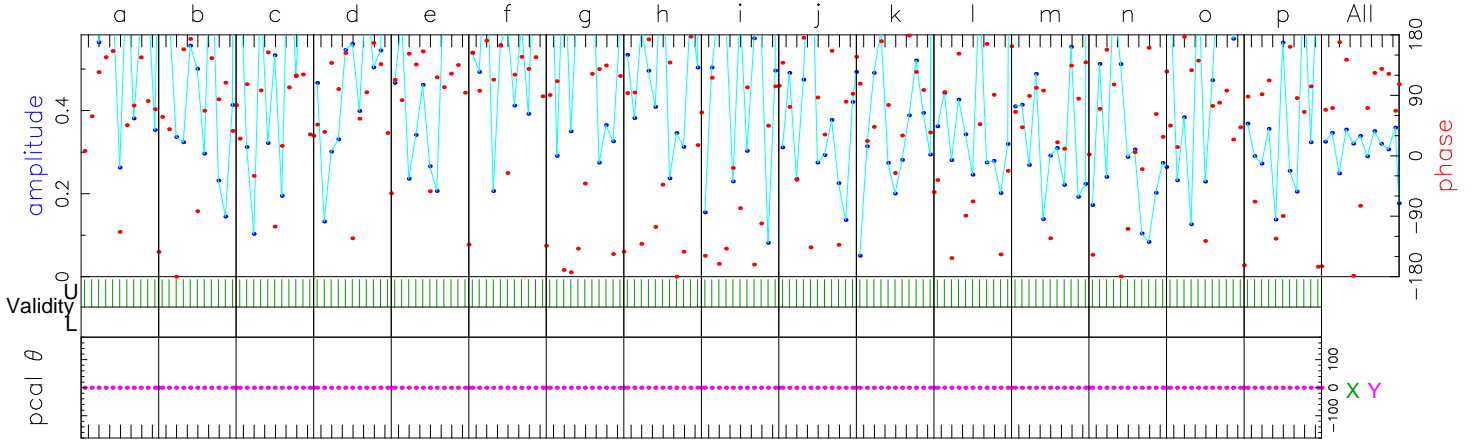
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-161.2	-163.4	-173.3	173.4	-174.7	-170.3	-174.4	-171.5	-136.9	-136.6	-148.4	-153.0	-155.0	-166.9	162.0	111.7	Phase	-166.6
	0.7	1.2	1.3	1.1	1.1	1.3	1.3	1.1	1.2	1.4	1.4	1.1	1.1	1.3	1.3	0.6	Ampl.	1.2
	127.8	126.5	126.4	126.0	127.0	126.2	126.3	126.6	126.8	126.5	126.2	126.4	126.6	125.9	126.3	125.6	Sbd box	126.4
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	APs used	
X	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	
X: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	
X: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	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			-1.86900138779E+03					Apriori delay (usec)									1.09140E-02	+/- 1.8E-05
Sband delay (usec)			-1.86900112375E+03					Apriori clock (usec)									-2.00720E-02	+/- 2.9E-04
Phase delay (usec)			-1.86898105712E+03					Apriori clockrate (us/s)									-5.37199E-06	+/- 6.2E-08
Delay rate (us/s)			3.61590758275E-02					Apriori rate (us/s)									-4.31419E-08	+/- 2.7E-10
Total phase (deg)								Apriori accel (us/s/s)									-166.6	+/- 1.9
ph/seg (deg)		RMS	Theor.					Amplitude									1.096 +/- 0.018	
amp/seg (%)		57.9	3.3					Search (2048X64)									1.062	
ph/frq (deg)		27.7	3.8					Interp.									0.000	
amp/frq (%)		20.4	6.7					Inc. seg. avg.									1.631	
								Inc. frq. avg.									1.154	
X: az 263.7 el 53.3 pa 44.2								Y: az 280.2 el 62.9 pa 77.1									u,v (fr/asec)	-225.260 2884.494
Control file: cf_1234_gmva								Input file: /Exps/c192a/v2/1234/No0001/XY..1305JH									Output file: /Exps/c192a/v2/1234/No0001/XY.W.327.1305JH	

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, XY
 ONSALA60 - YEBES40M, fgroup W, pol LR



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

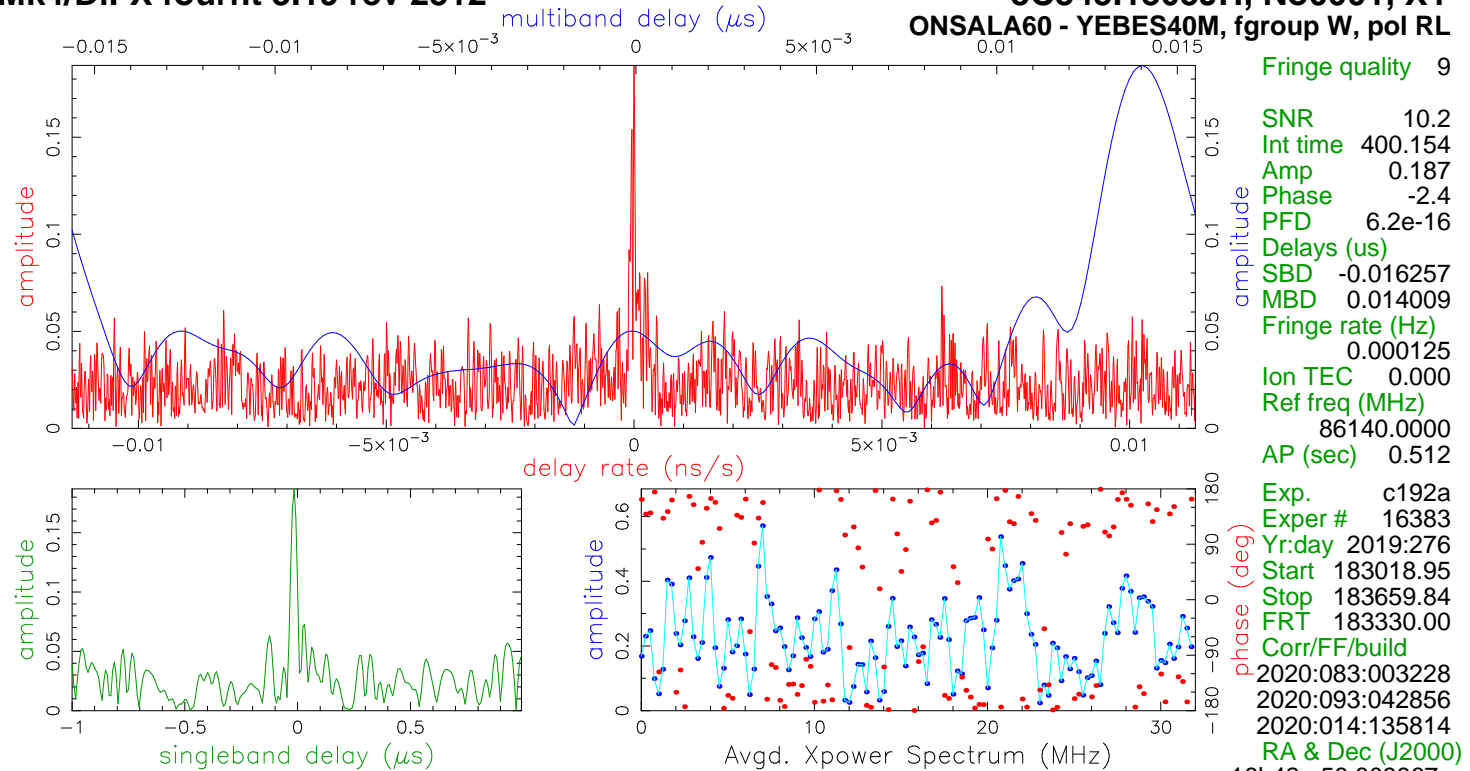


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	92.1	101.0	84.8	103.0	116.1	134.6	148.0	-168.8	-155.4	145.3	87.7	87.8	83.7	105.4	79.4	129.6		Phase 113.4					
	0.4	0.2	0.3	0.2	0.4	0.4	0.3	0.1	0.2	0.1	0.2	0.0	0.2	0.1	0.3	0.1		Ampl. 0.2					
	132.0	89.3	130.3	130.6	131.4	130.2	130.8	66.9	183.1	73.5	93.6	242.4	87.7	118.2	131.3	66.3		Sbd box 131.0					
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0		APs used					
X	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					
X: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					
X: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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-1.86896763385E+03															Apriori delay (usec)	-1.86898105175E+03	Resid mbdelay (usec)	1.34179E-02	+/-	1.0E-04
Sband delay (usec)			-1.86896576675E+03															Apriori clock (usec)	2.2673275E+01	Resid sbdelay (usec)	1.52850E-02	+/-	1.6E-03
Phase delay (usec)			-1.86898104809E+03															Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	3.65632E-06	+/-	3.5E-07
Delay rate (us/s)			3.61590754321E-02															Apriori rate (us/s)	3.61591189695E-02	Resid rate (us/s)	-4.35373E-08	+/-	1.5E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.39811778223E-05	Resid phase (deg)	113.4	+/-	10.8

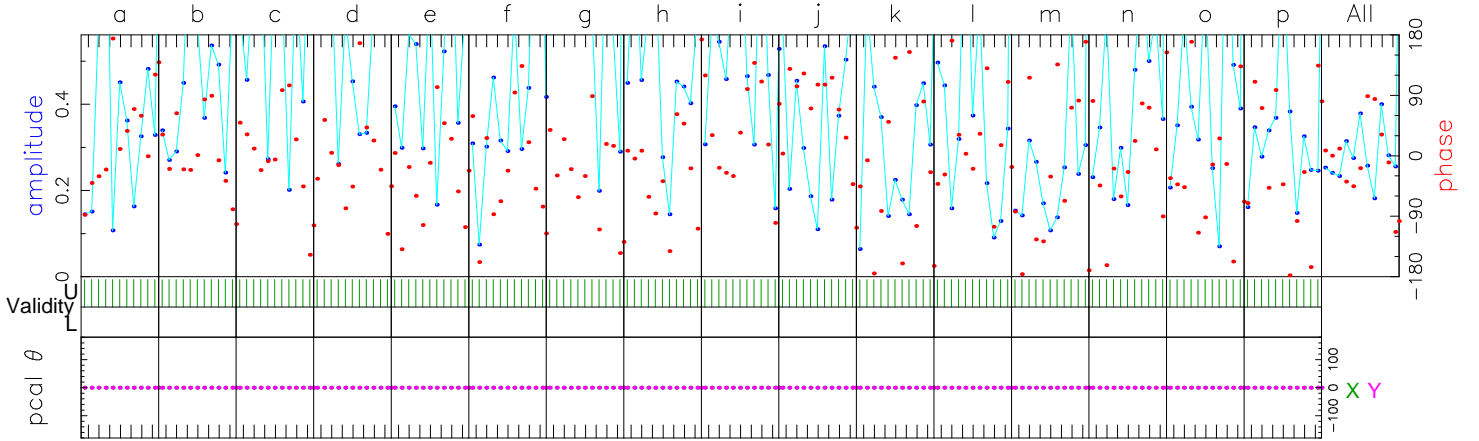
ph/seg (deg) 65.0 18.7 Theor. Amplitude 0.194 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.6 32.6 Search (2048X64) 0.189 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.9 21.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.4 37.7 Inc. seg. avg. 0.307 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -225.260 2884.494 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XY..1305JH Output file: /Exps/c192a/v2/1234/No0001/XY.W.342.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, XY
 ONSALA60 - YEBES40M, fgroup W, pol RL



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

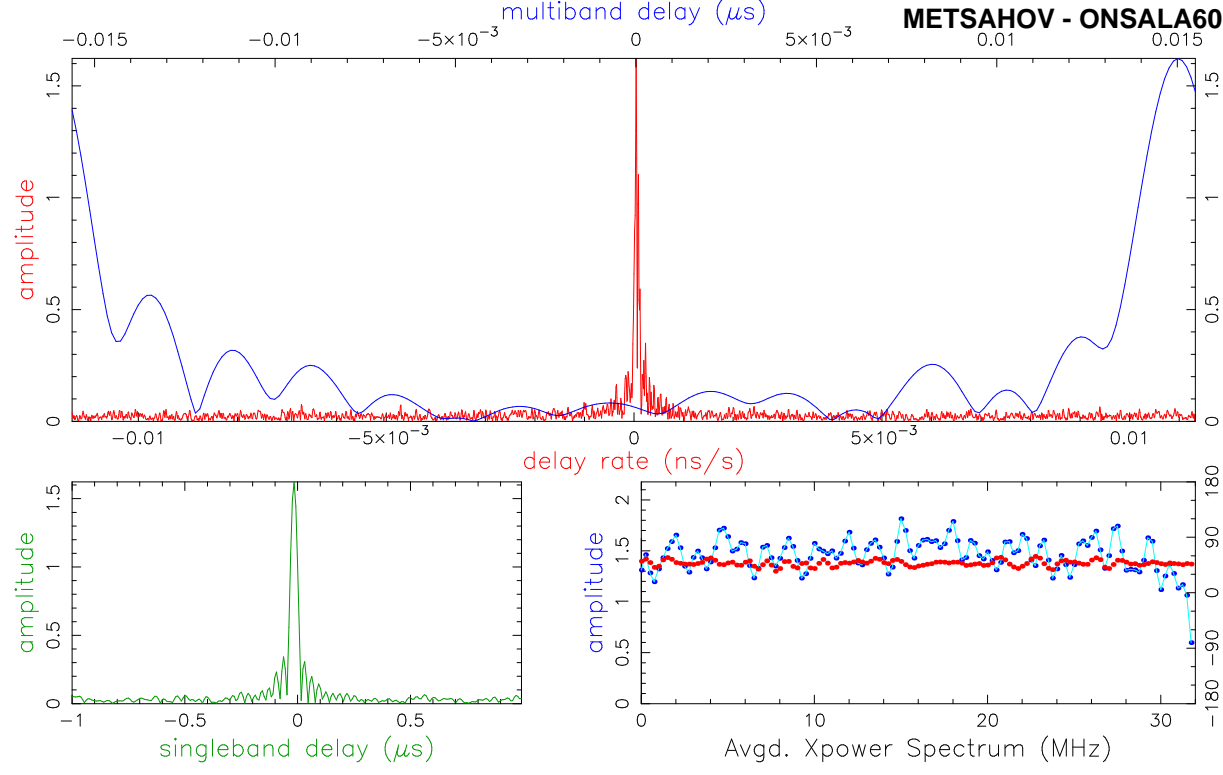


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	3.0	-1.8	13.2	-19.7	-23.0	-29.7	-1.4	-27.2	36.8	60.7	-70.5	7.8	136.8	20.7	-65.7	-27.1		Phase	-2.4				
	0.2	0.3	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.2	0.0	0.2	0.1	0.1	0.2	0.0		Ampl.	0.2				
	127.8	127.3	126.9	126.7	127.2	246.8	126.5	127.1	127.0	126.9	69.0	127.6	20.0	228.8	245.1	234.8		Sbd box	126.9				
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0		APs used					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
X: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					
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Group delay (usec)(sbd)			-1.86899829253E+03															Apriori delay (usec)	-1.86898105175E+03	Resid mbdelay (usec)	1.40092E-02	+/-	1.1E-04
Sband delay (usec)			-1.86899730875E+03															Apriori clock (usec)	2.2673275E+01	Resid sbdelay (usec)	-1.62570E-02	+/-	1.7E-03
Phase delay (usec)			-1.86898105182E+03															Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-7.74000E-08	+/-	3.6E-07
Delay rate (us/s)			3.61591204163E-02															Apriori rate (us/s)	3.61591189695E-02	Resid rate (us/s)	1.44687E-09	+/-	1.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.39811778223E-05	Resid phase (deg)	-2.4	+/-	11.2

	RMS	Theor.	Amplitude	0.187 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.0	19.4	Search (2048X64)	0.185	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	60.9	33.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	51.5	22.4	Inc. seg. avg.	0.265	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	58.6	39.1	Inc. frq. avg.	0.204	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

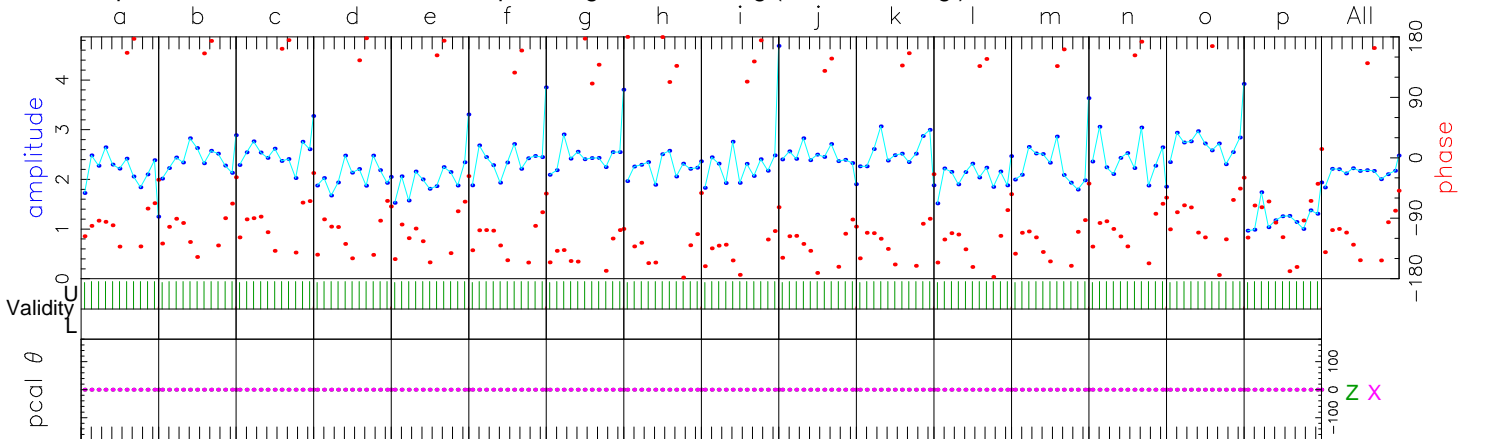
X: az 263.7 el 53.3 pa 44.2 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -225.260 2884.494 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/XY..1305JH Output file: /Exps/c192a/v2/1234/No0001/XY.W.353.1305JH



Fringe quality 5
 SNR 90.7
 Int time 417.864
 Amp 1.623
 Phase -131.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.016212
 MBD 0.015020
 Fringe rate (Hz) 0.003718
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042848
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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

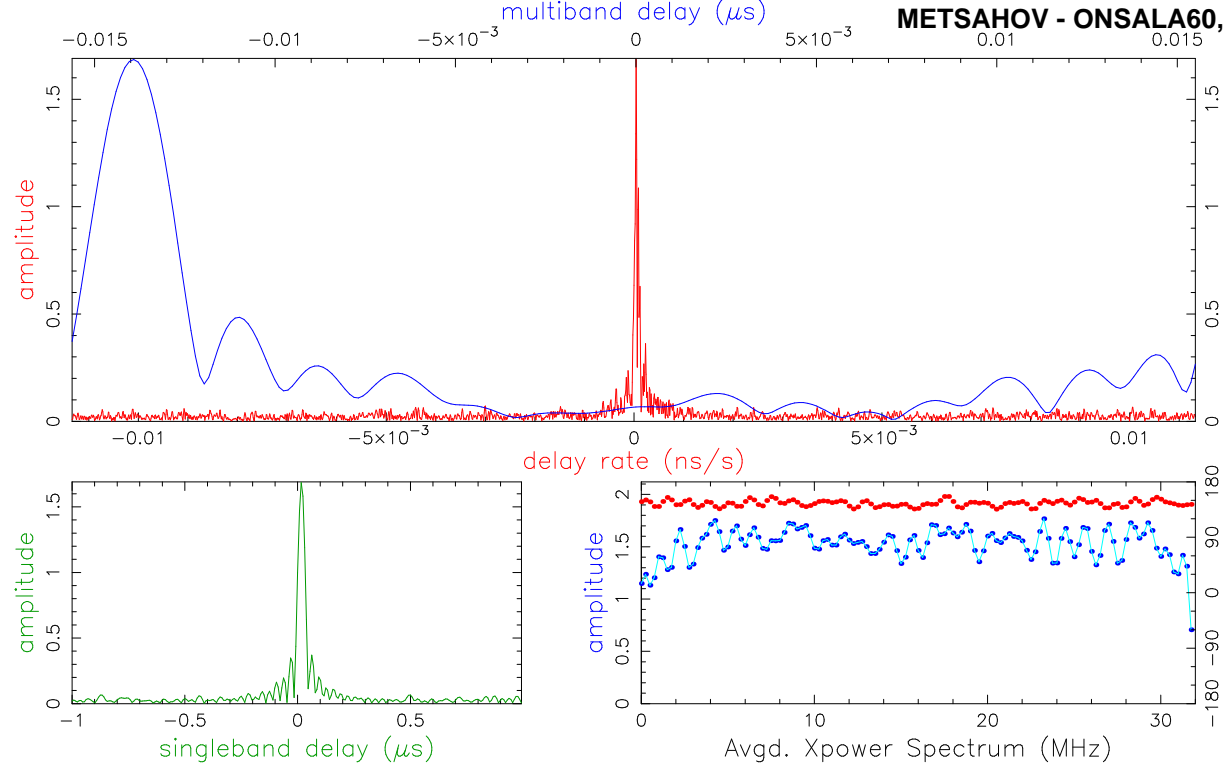


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-113.5	-122.9	-111.7	-127.6	-127.0	-132.5	-158.1	-163.5	-155.2	-145.6	-137.0	-144.0	-140.3	-122.3	-100.2	-93.0	Phase	-131.9
	1.7	1.9	1.9	1.6	1.5	1.7	1.9	1.7	1.7	1.9	2.0	1.5	1.7	1.8	2.0	0.9	Ampl.	1.7
	126.8	126.8	127.1	126.7	126.9	126.7	126.6	127.2	126.9	127.1	126.9	126.7	127.2	127.2	127.1	127.5	Sbd box	126.9
UL	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -1.60923268184E+03 Apriori delay (usec) -1.60921645175E+03 Resid mbdelay (usec) 1.50199E-02 +/- 1.2E-05
 Sband delay (usec) -1.60923266325E+03 Apriori clock (usec) -3.2143044E+01 Resid sbdelay (usec) -1.62115E-02 +/- 1.9E-04
 Phase delay (usec) -1.60921645600E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -4.25202E-06 +/- 4.1E-08
 Delay rate (us/s) -2.93338142889E-02 Apriori rate (us/s) -2.93338574563E-02 Resid rate (us/s) 4.31675E-08 +/- 1.7E-10
 Total phase (deg) -187.2 Apriori accel (us/s/s) 1.02337931143E-05 Resid phase (deg) -131.9 +/- 1.3

RMS Theor. Amplitude 1.623 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 41.6 2.2 Search (2048X64) 1.606 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 32.1 3.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 20.9 2.5 Inc. seg. avg. 2.130 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 16.4 4.4 Inc. frq. avg. 1.712 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.324.1305JH

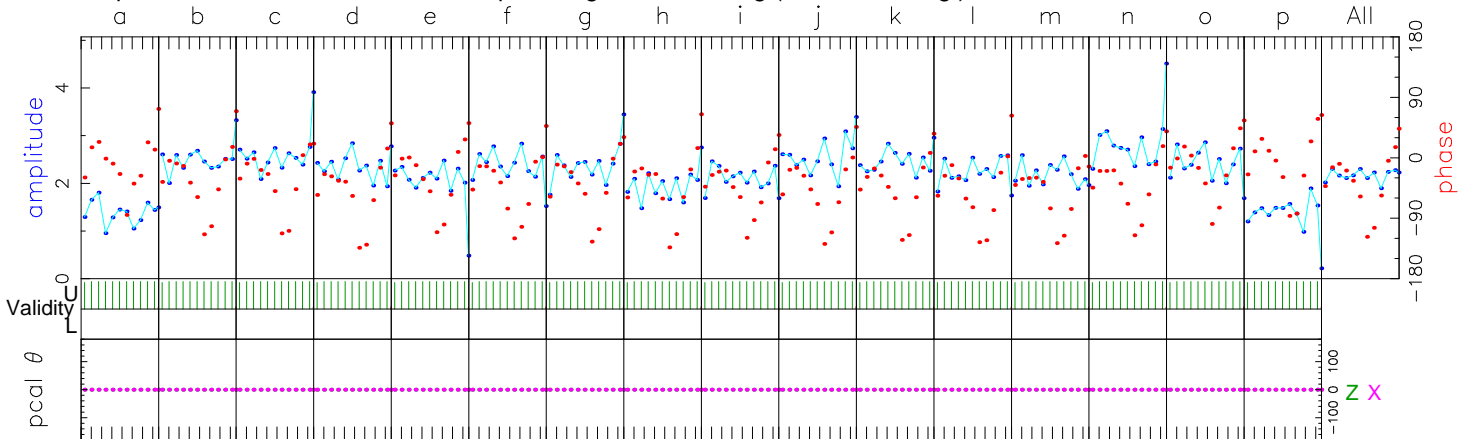


Fringe quality 5

SNR 94.5
 Int time 417.864
 Amp 1.691
 Phase -36.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.017066
 MBD -0.013914
 Fringe rate (Hz) 0.003713
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042851
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



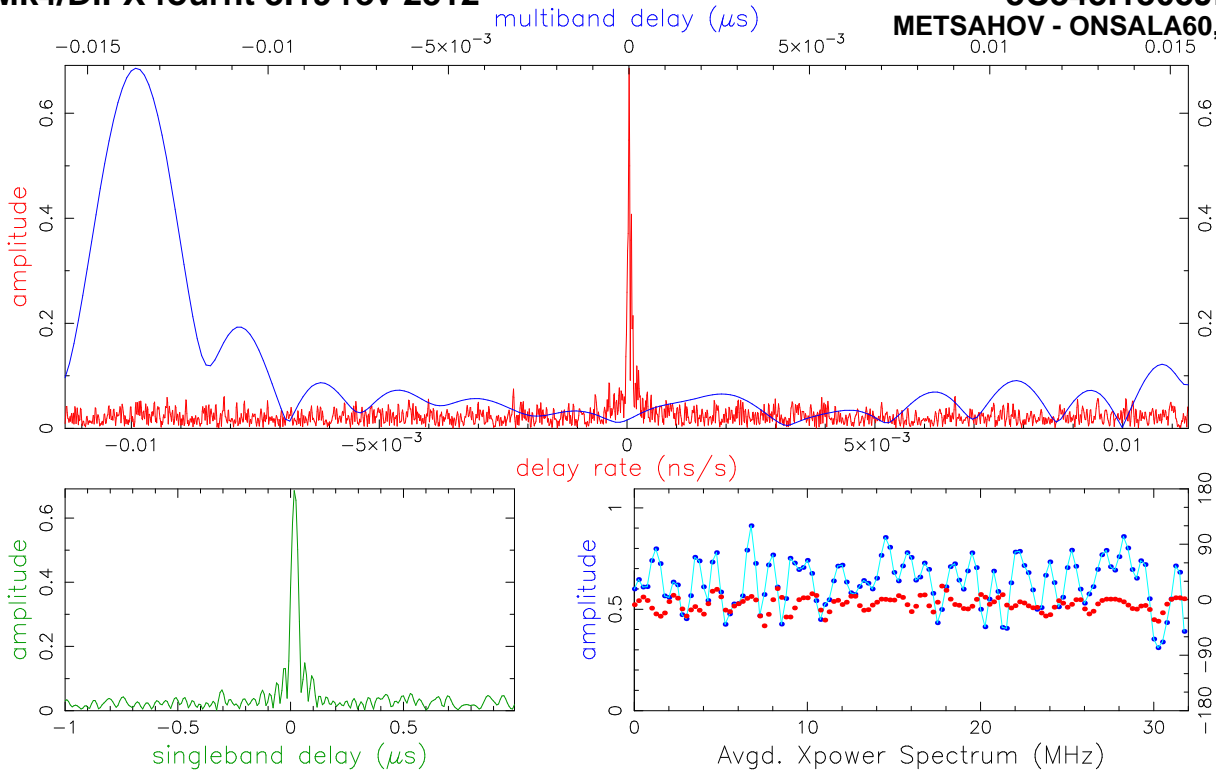
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-8.1	-33.9	-30.1	-47.3	-29.6	-42.9	-35.8	-41.4	-40.9	-46.3	-45.4	-51.5	-51.9	-38.8	-13.5	-6.9		Phase	-36.6
	1.2	1.9	2.0	1.8	1.6	1.9	1.8	1.4	1.7	1.9	1.9	1.7	1.7	2.2	1.9	1.1		Ampl.	1.7
	130.7	131.0	131.0	131.2	130.9	131.1	131.3	131.4	131.0	131.3	131.3	131.1	131.1	131.4	131.5	131.5		Sbd box	131.2
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	

Group delay (usec)(sbd) -1.60919911546E+03 Apriori delay (usec) -1.60921645175E+03 Resid mbdelay (usec) -1.39137E-02 +/- 1.1E-05
 Sband delay (usec) -1.60919938575E+03 Apriori clock (usec) -3.2143044E+01 Resid sbdelay (usec) 1.70660E-02 +/- 1.8E-04
 Phase delay (usec) -1.60921645293E+03 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) -1.18111E-06 +/- 3.9E-08
 Delay rate (us/s) -2.93338143569E-02 Apriori rate (us/s) -2.93338574563E-02 Resid rate (us/s) 4.30994E-08 +/- 1.6E-10
 Total phase (deg) -92.0 Apriori accel (us/s/s) 1.02337931143E-05 Resid phase (deg) -36.6 +/- 1.2

RMS Theor. Amplitude 1.691 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 40.2 2.1 Search (2048X64) 1.643 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 29.0 3.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 15.0 2.4 Inc. seg. avg. 2.165 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 16.9 4.2 Inc. frq. avg. 1.726 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.340.1305JH

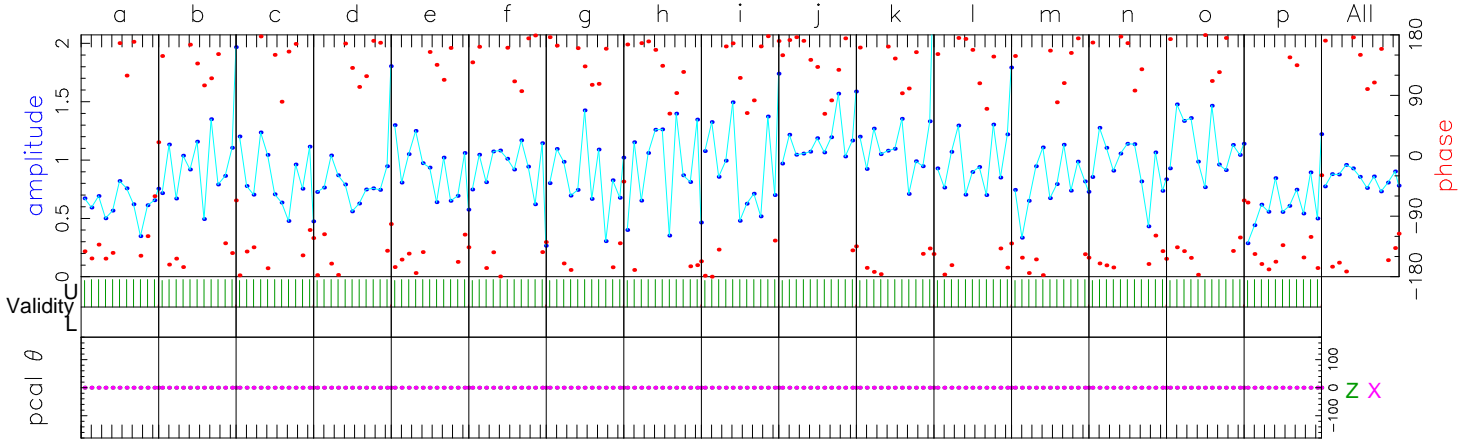


Fringe quality 6

SNR 38.6
 Int time 417.864
 Amp 0.691
 Phase 174.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.017804
 MBD -0.013641
 Fringe rate (Hz) 0.003705
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042856
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-155.1	172.0	-170.5	177.3	-171.9	168.2	162.6	156.3	169.8	148.1	168.8	167.4	165.3	-177.9	-168.7	-159.3		Phase	174.3				
	0.4	0.7	0.7	0.6	0.8	0.8	0.7	0.8	0.7	0.9	0.9	0.8	0.6	0.8	0.9	0.5		Ampl.	0.7				
	129.4	131.4	130.6	131.0	131.2	131.3	131.3	131.1	131.4	131.3	131.6	131.7	130.9	131.7	131.1	131.6		Sbd box	131.3				
UL	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
Z: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 amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
Group delay (usec)(sbd)			-1.60919884268E+03															Apriori delay (usec)	-1.60921645175E+03	Resid mbdelay (usec)	-1.36409E-02	+/-	2.8E-05
Sband delay (usec)			-1.60919864725E+03															Apriori clock (usec)	-3.2143044E+01	Resid sbdelay (usec)	1.78045E-02	+/-	4.5E-04
Phase delay (usec)			-1.60921644613E+03															Apriori clockrate (us/s)	-5.1170721E-07	Resid phdelay (usec)	5.61951E-06	+/-	9.6E-08
Delay rate (us/s)			-2.93338144455E-02															Apriori rate (us/s)	-2.93338574563E-02	Resid rate (us/s)	4.30109E-08	+/-	4.0E-10
Total phase (deg)				118.9														Apriori accel (us/s/s)	1.02337931143E-05	Resid phase (deg)	174.3	+/-	3.0

ph/seg (deg) 37.7 5.1
 amp/seg (%) 24.9 9.0
 ph/frq (deg) 16.4 5.9
 amp/frq (%) 17.4 10.4

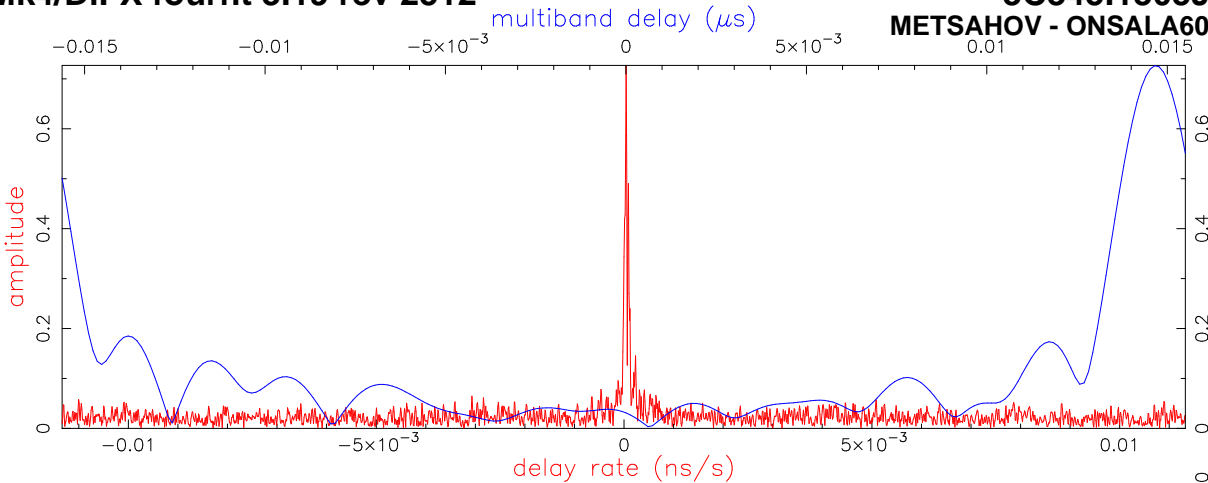
RMS Theor. Amplitude 0.691 +/- 0.018
 Search (2048X64) 0.682
 Interp. 0.000
 Inc. seg. avg. 0.845
 Inc. frq. avg. 0.705

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

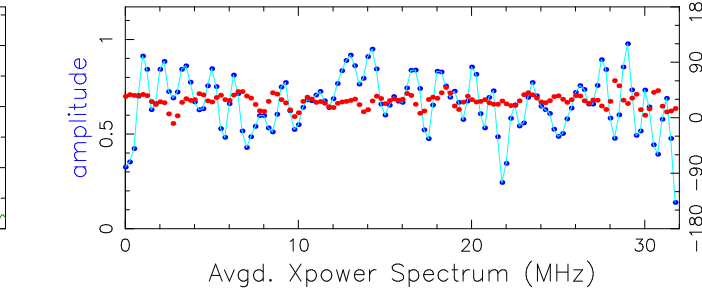
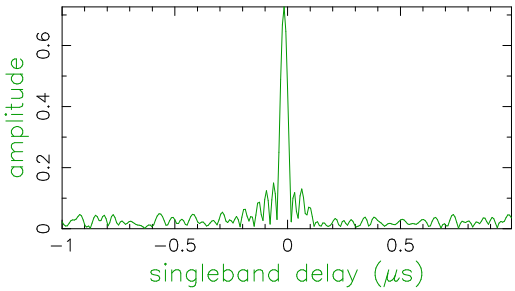
Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.352.1305JH



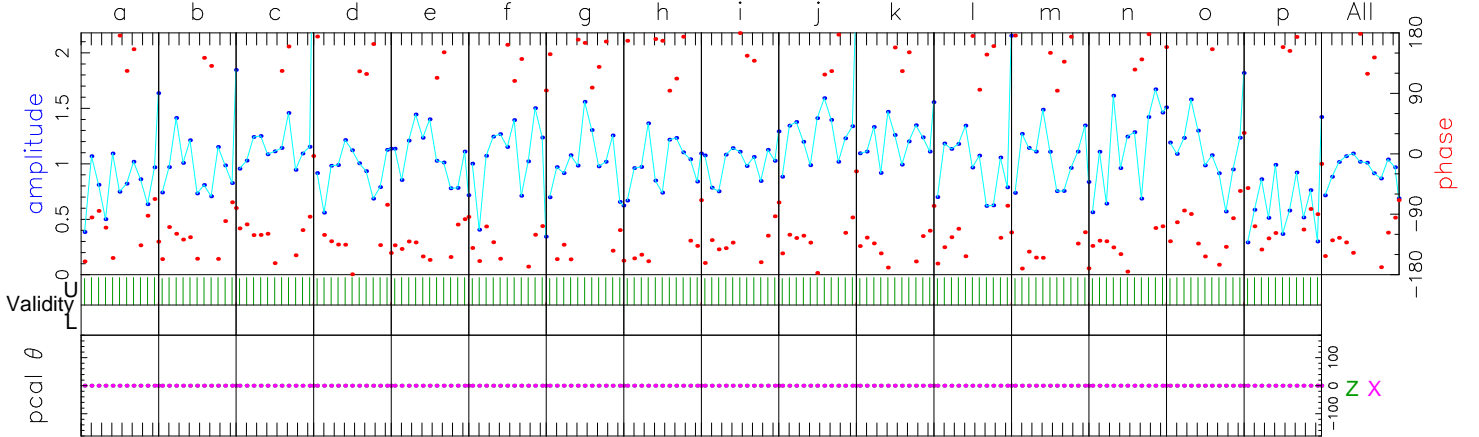
Fringe quality 5

SNR 40.6
 Int time 417.864
 Amp 0.727
 Phase -151.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.016231
 MBD 0.014676
 Fringe rate (Hz)
 0.003646
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042859
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-135.1	-134.1	-135.5	-158.6	-146.8	-153.9	177.4	179.4	-152.8	-150.8	-157.0	-150.2	-167.7	-151.3	-117.0	-131.3		Phase	-151.0				
	0.5	0.7	0.8	0.6	0.9	0.8	0.8	0.7	0.8	0.8	1.0	0.7	0.9	0.9	0.8	0.4		Ampl.	0.8				
	128.0	126.9	126.9	126.7	126.9	126.5	126.9	127.2	127.0	127.2	126.6	127.1	127.0	127.2	127.1	126.4		Sbd box	126.9				
UL	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Group delay (usec)(sbd)			-1.60923302546E+03															Apriori delay (usec)	-1.60921645175E+03	Resid mbdelay (usec)	1.46763E-02	+/-	2.7E-05
Sband delay (usec)			-1.60923268325E+03															Apriori clock (usec)	-3.2143044E+01	Resid sbdelay (usec)	-1.62315E-02	+/-	4.2E-04
Phase delay (usec)			-1.60921645662E+03															Apriori clockrate (us/s)	-5.1170721E-07	Resid phdelay (usec)	-4.86996E-06	+/-	9.1E-08
Delay rate (us/s)			-2.93338151314E-02															Apriori rate (us/s)	-2.93338574563E-02	Resid rate (us/s)	4.23250E-08	+/-	3.8E-10
Total phase (deg)					-206.4													Apriori accel (us/s/s)	1.02337931143E-05	Resid phase (deg)	-151.0	+/-	2.8

ph/seg (deg) 42.5 4.9 Search (2048X64) 0.719 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.5 8.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.1 5.6 Inc. seg. avg. 0.959 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.6 9.8 Inc. frq. avg. 0.755 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ZX..1305JH Output file: /Exps/c192a/v2/1234/No0001/ZX.W.359.1305JH