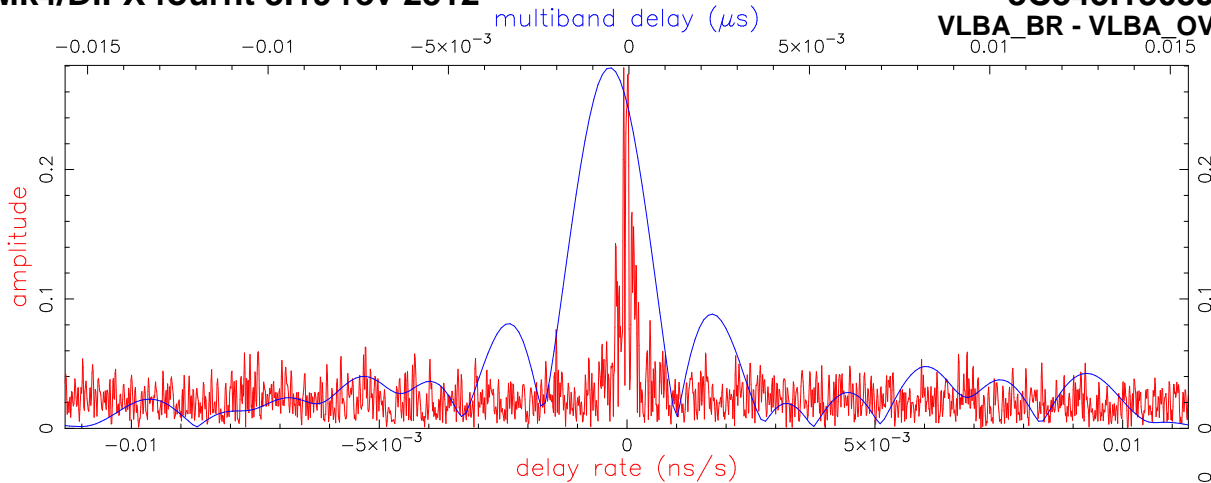


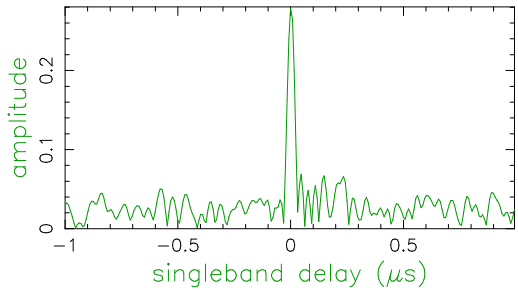
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bo
VLBA_BR - VLBA_OV, fgroup W, pol LL

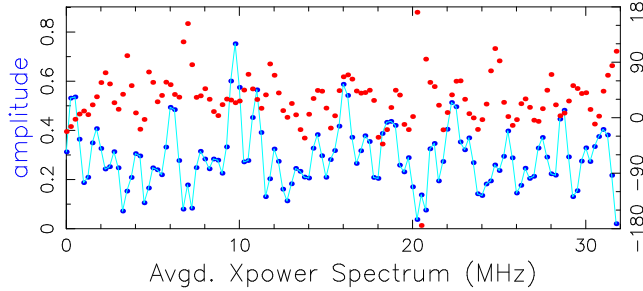


Fringe quality 9

SNR 15.5
Int time 406.536
Amp 0.281
Phase 42.3
PFD 4.2e-45
Delays (us)
SBD 0.001960
MBD -0.000501
Fringe rate (Hz)
-0.005865
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

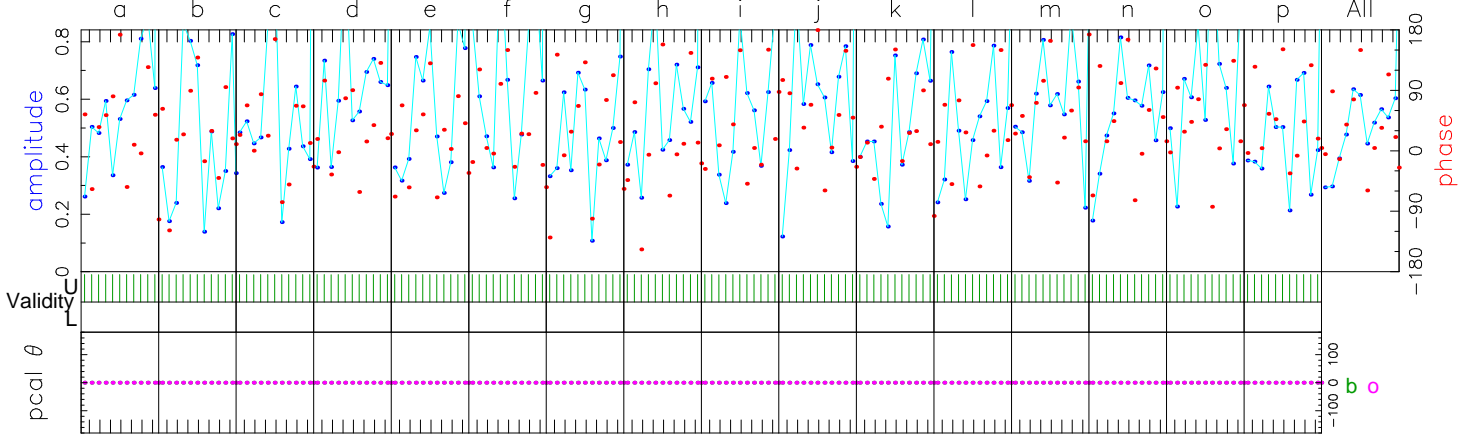


delay rate (ns/s)



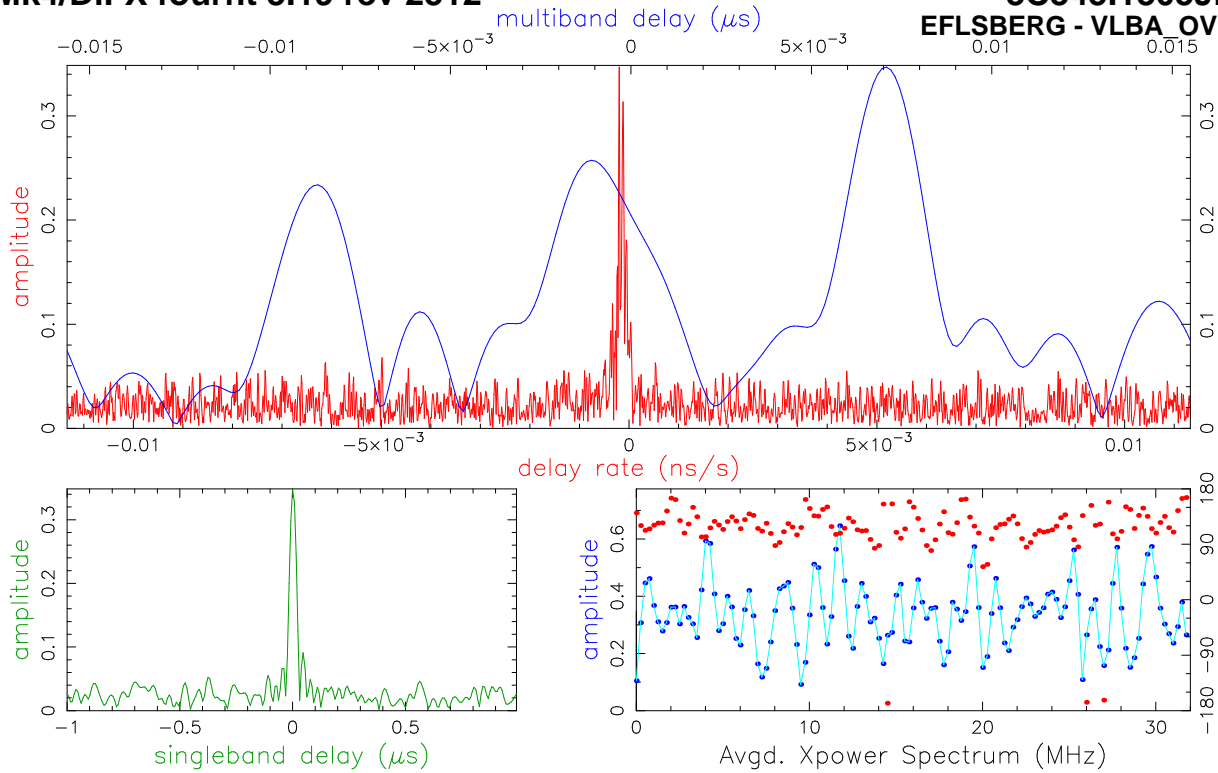
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042726
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	34.5	50.9	47.9	45.5	41.2	46.0	53.1	27.9	38.5	47.0	32.2	17.2	58.2	61.8	29.3	40.6	Phase	42.3
	0.3	0.3	0.3	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.3	Ampl.	0.3
	160.9	130.1	129.0	129.4	129.7	128.9	130.3	73.3	11.3	214.2	128.2	128.2	128.0	129.4	129.1	130.2	Sbd box	129.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	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)	1.20032759195E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-5.01207E-04		+/-		7.0E-05					
Sband delay (usec)	1.20033005316E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		1.96000E-03		+/-		1.1E-03					
Phase delay (usec)	1.20032809452E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		1.36287E-06		+/-		2.4E-07					
Delay rate (us/s)	-1.4673323054E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		-6.80860E-08		+/-		1.0E-09					
Total phase (deg)	22.5		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		42.3		+/-		7.4					
RMS	Theor.		Amplitude		0.281 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5									
ph/seg (deg)	58.4	12.8	Search (2048X64)		0.276		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000					
amp/seg (%)	86.9	22.4	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016		0.016			
ph/frq (deg)	12.2	14.8	Inc. seg. avg.		0.480		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011		0.011					
amp/frq (%)	19.8	25.9	Inc. frq. avg.		0.275		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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/bo.W.11.1305JH

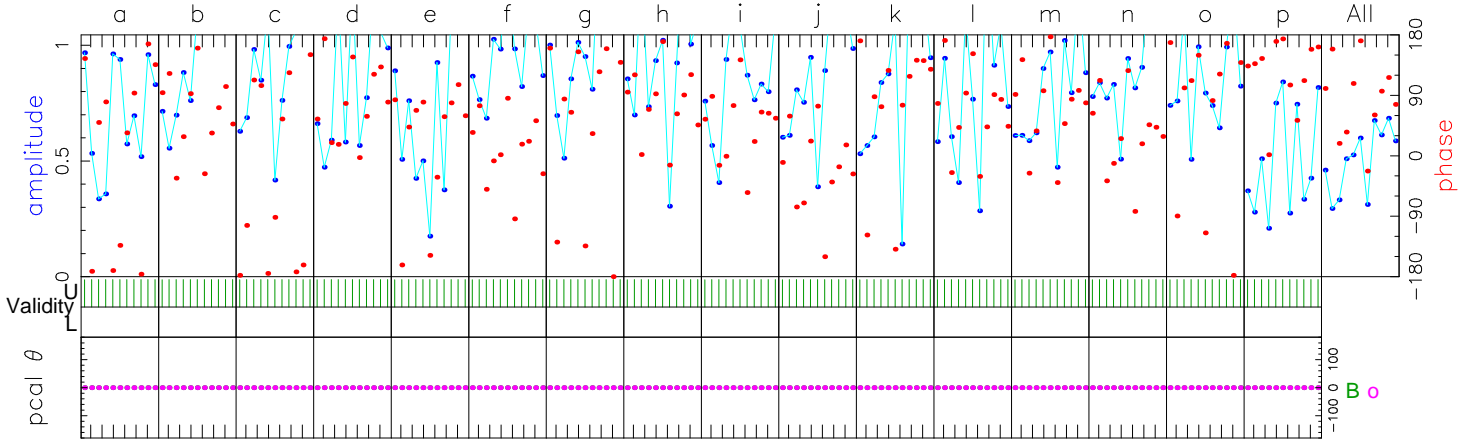


Fringe quality 7

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

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

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

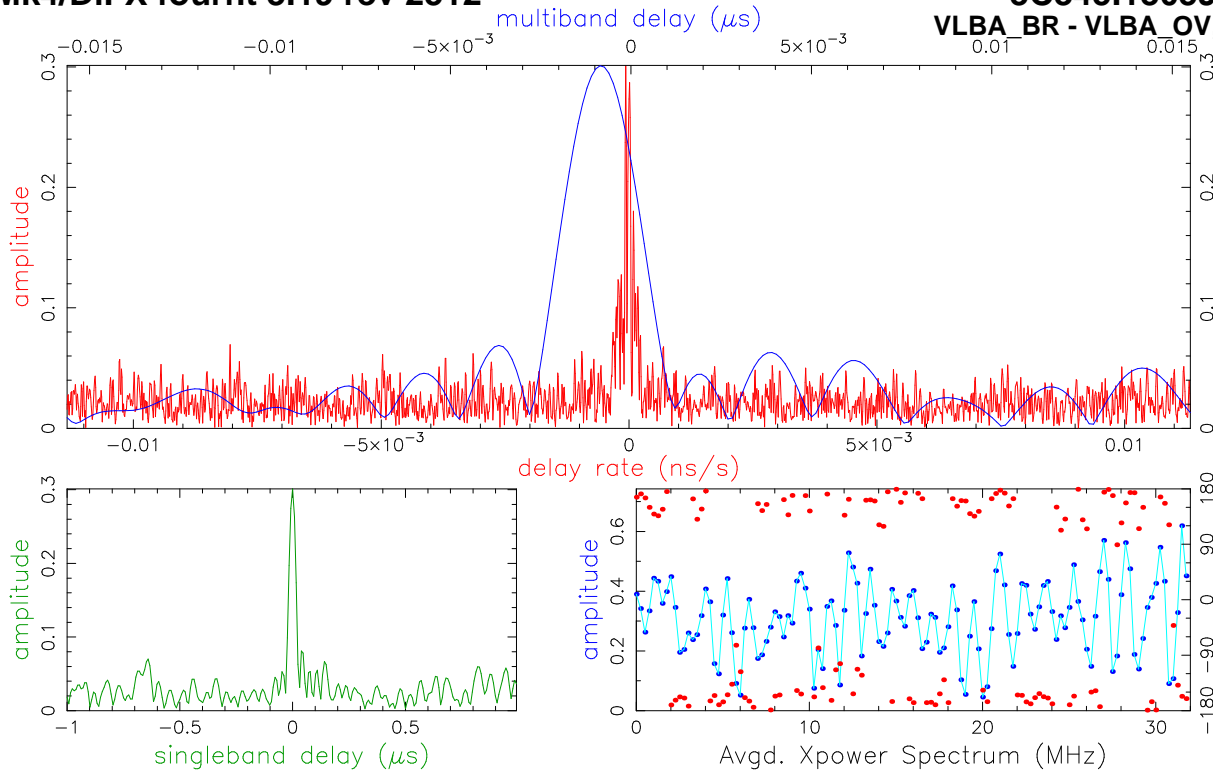


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	6.86453491284E+03			Apriori delay (usec)			6.86452783394E+03			Resid mbdelay (usec)			7.07891E-03			+/-	5.6E-05	
Sband delay (usec)	6.86452944844E+03			Apriori clock (usec)			2.0928383E-01			Resid sbdelay (usec)			1.61450E-03			+/-	8.9E-04	
Phase delay (usec)	6.86452783683E+03			Apriori clockrate (us/s)			-2.0098100E-07			Resid phdelay (usec)			2.89717E-06			+/-	1.9E-07	
Delay rate (us/s)	-1.48316848236E+00			Apriori rate (us/s)			-1.48316828666E+00			Resid rate (us/s)			-1.95694E-07			+/-	8.1E-10	
Total phase (deg)	311.3			Apriori accel (us/s/s)			-2.44504455346E-05			Resid phase (deg)			89.8			+/-	5.9	

ph/seg (deg) 55.8 9.8 Search (2048X64) 0.328 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.3 17.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.4 11.9 Inc. seg. avg. 0.501 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 62.1 20.7 Inc. frq. avg. 0.539 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bo.W.17.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bo
VLBA_BR - VLBA_OV, fgroup W, pol RR

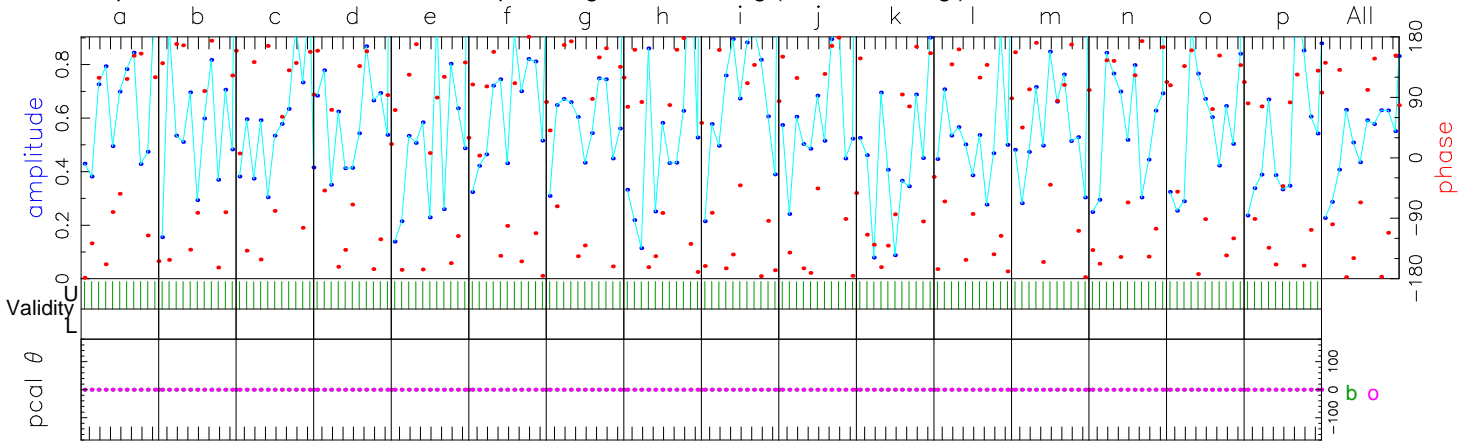


Fringe quality 9

SNR 16.6
Int time 406.536
Amp 0.301
Phase 179.2
PFD 0.0e+00
Delays (us)
SBD -0.000683
MBD -0.000839
Fringe rate (Hz)
-0.005663
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042731
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

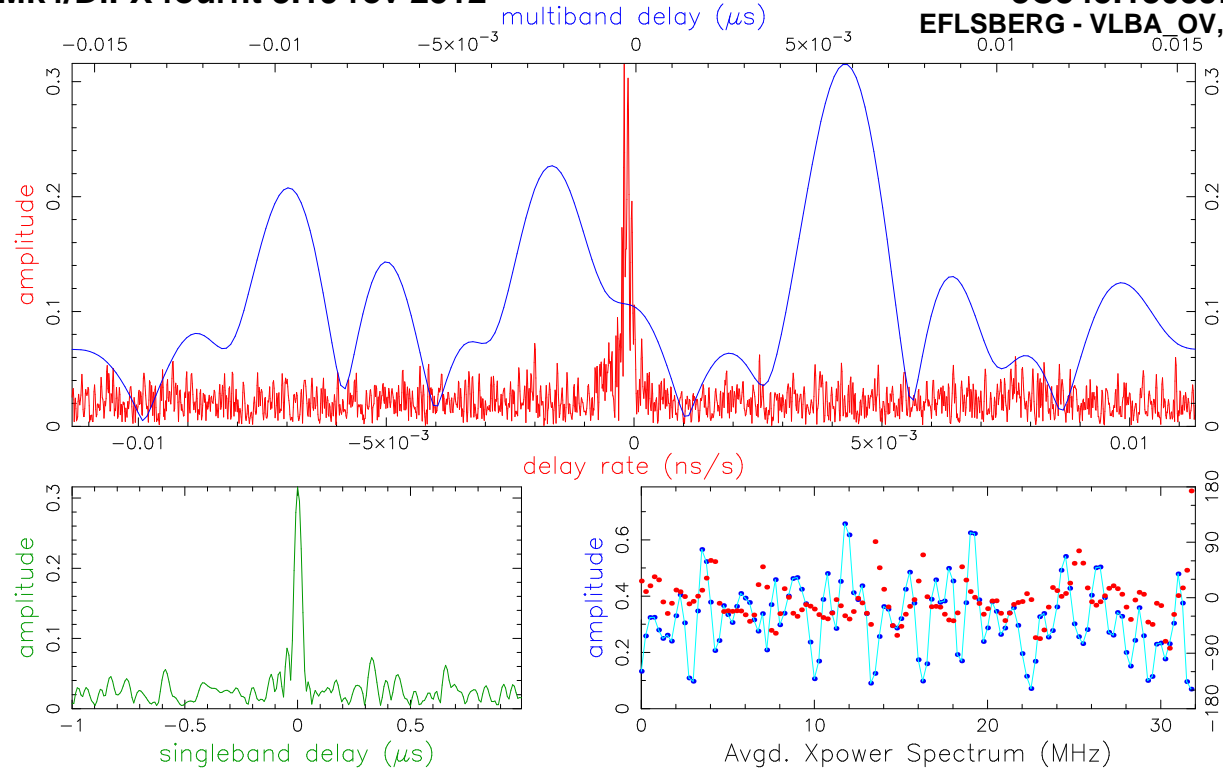


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	168.7	-171.3	171.9	-172.6	157.2	179.9	171.4	-164.4	-166.8	179.1	-178.9	-157.3	148.7	-179.3	172.0	173.6	Phase	179.2
	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.4	0.3	0.2	Ampl.	0.3
	128.8	129.4	128.9	128.4	129.2	130.0	128.7	128.7	129.1	129.3	128.6	128.8	215.5	128.9	128.9	51.6	Sbd box	128.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			1.20032725461E+03					Apriori delay (usec)		1.20032809316E+03				Resid mbdelay (usec)		-8.38551E-04	+/-	6.5E-05
Sband delay (usec)			1.20032741016E+03					Apriori clock (usec)		-1.7242477E+01				Resid sbdelay (usec)		-6.83000E-04	+/-	1.0E-03
Phase delay (usec)			1.20032809894E+03					Apriori clockrate (us/s)		-2.4337607E-07				Resid phdelay (usec)		5.77998E-06	+/-	2.2E-07
Delay rate (us/s)			-1.46733320708E-01					Apriori rate (us/s)		-1.46733254968E-01				Resid rate (us/s)		-6.57400E-08	+/-	9.5E-10
Total phase (deg)					159.4			Apriori accel (us/s/s)		3.60575885645E-06				Resid phase (deg)		179.2	+/-	6.9

ph/seg (deg) 58.4 12.0 Theor. Amplitude 0.301 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.7 20.9 Search (2048X64) 0.297 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.4 13.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.5 24.1 Inc. seg. avg. 0.488 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.300 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/bo.W.33.1305JH

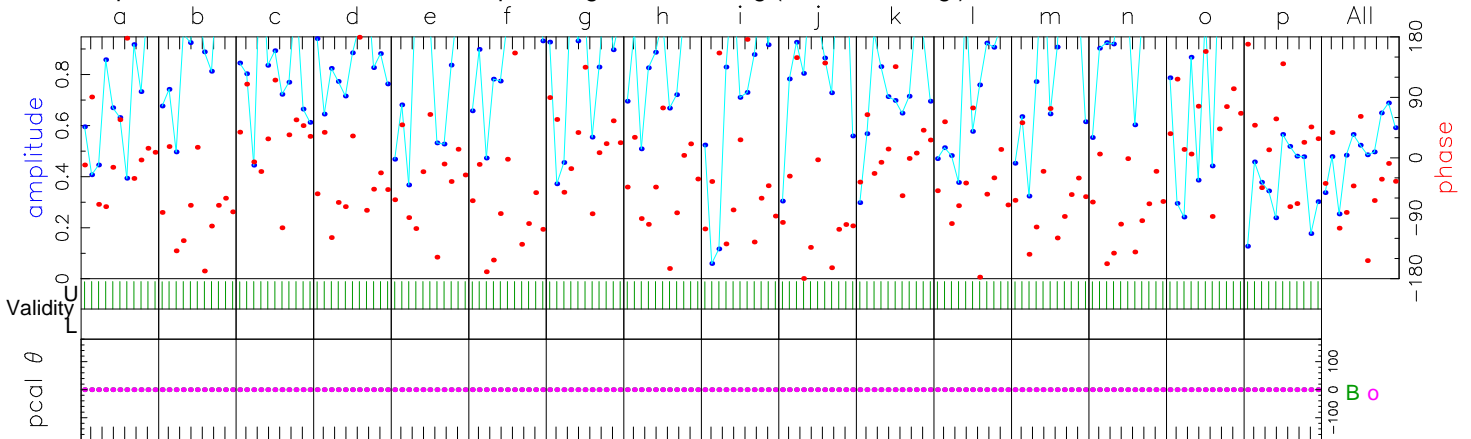


Fringe quality 7

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

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

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



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

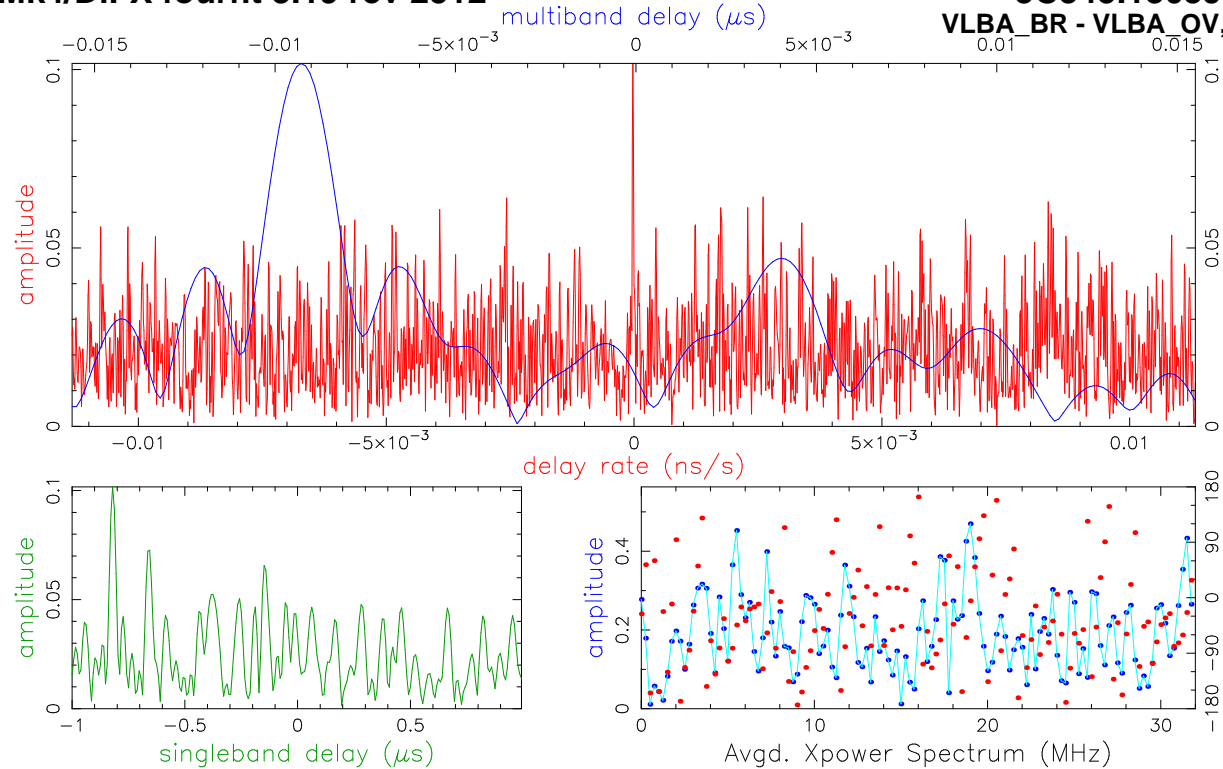
Group delay (usec)(sbd) 6.86453363972E+03 Apriori delay (usec) 6.86452783394E+03 Resid mbdelay (usec) 5.80578E-03 +/- 6.2E-05
 Sband delay (usec) 6.86452892894E+03 Apriori clock (usec) 0.310 Pcal rate: 0.000E+00, 0.000E+00 (us/s) Resid sbdelay (usec) 1.09500E-03 +/- 9.8E-04
 Phase delay (usec) 6.86452783280E+03 Apriori clockrate (us/s) -2.0098100E-07 Resid phdelay (usec) -1.13948E-06 +/- 2.1E-07
 Delay rate (us/s) -1.48316848401E+00 Apriori rate (us/s) -1.48316828666E+00 Resid rate (us/s) -1.97350E-07 +/- 8.9E-10
 Total phase (deg) 186.1 Apriori accel (us/s/s) -2.44504455346E-05 Resid phase (deg) -35.3 +/- 6.5

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

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

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, bo
VLBA_BR - VLBA_OV, fgroup W, pol LR

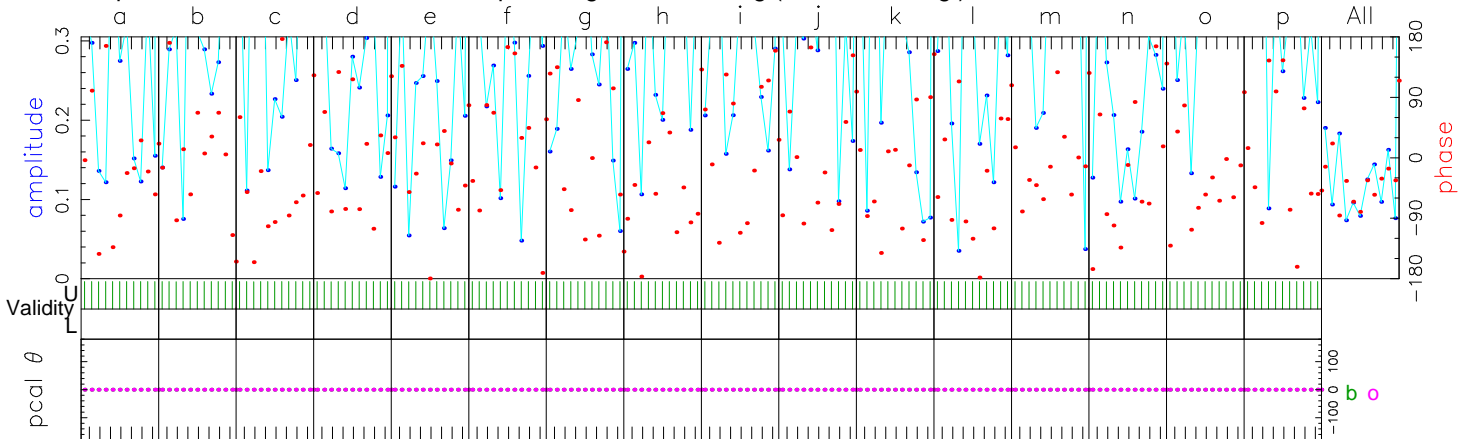


Fringe quality 0

SNR 5.6
Int time 406.536
Amp 0.102
Phase -38.5
PFD 9.9e-01
Delays (us)
SBD -0.819847
MBD -0.009266
Fringe rate (Hz)
-0.002086
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
2020:093:042737
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



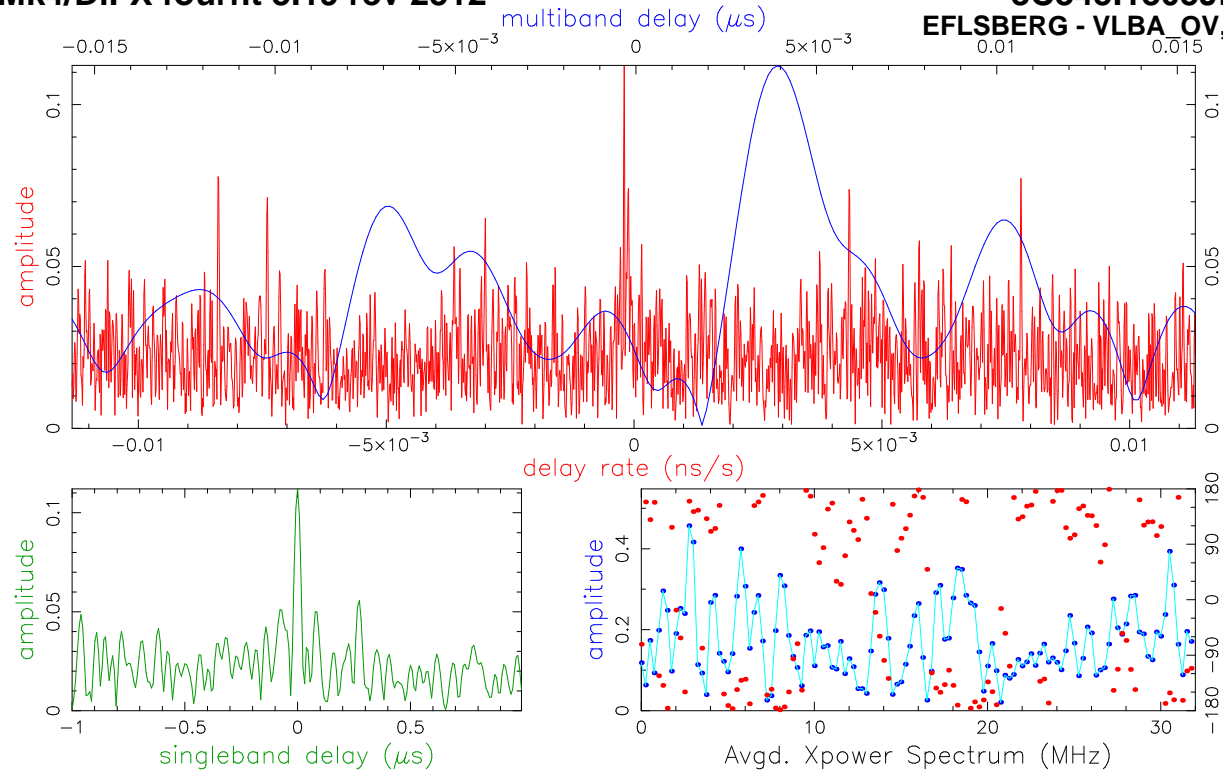
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-42.3	-20.7	-59.2	-18.9	-7.4	34.1	-132.4	-44.9	-116.7	-64.8	-22.6	-42.9	-17.0	-52.7	-41.7	-53.9	Phase	-38.5	
	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.0	0.1	0.2	0.1	0.3	0.0	0.2	0.1	Ampl.	0.1	
	165.9	254.2	85.5	28.4	38.8	152.0	85.1	52.4	82.7	137.1	221.1	109.7	24.3	84.5	227.0	54.3	Sbd box	24.1	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
b	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)			1.19950632705E+03								1.20032809316E+03						Resid mbdelay (usec)	-9.26611E-03	+/- 1.9E-04
Sband delay (usec)			1.19950824616E+03								-1.7242477E+01						Resid sbdelay (usec)	-8.19847E-01	+/- 3.1E-03
Phase delay (usec)			1.20032809192E+03								-2.4337607E-07						Resid phdelay (usec)	-1.24028E-06	+/- 6.6E-07
Delay rate (us/s)			-1.46733279185E-01								-1.46733254968E-01						Resid rate (us/s)	-2.42171E-08	+/- 2.8E-09
Total phase (deg)					301.7						3.60575885645E-06						Resid phase (deg)	-38.5	+/- 20.4

ph/seg (deg) 31.2 35.4
amp/seg (%) 55.8 61.8
ph/frq (deg) 41.6 40.9
amp/frq (%) 66.6 71.3

b: az 66.1 el 33.9 pa -52.6
o: az 60.7 el 29.9 pa -64.6
u,v (fr/asec) 1101.765 1173.303

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/bo.W.56.1305JH

simultaneous interpolator

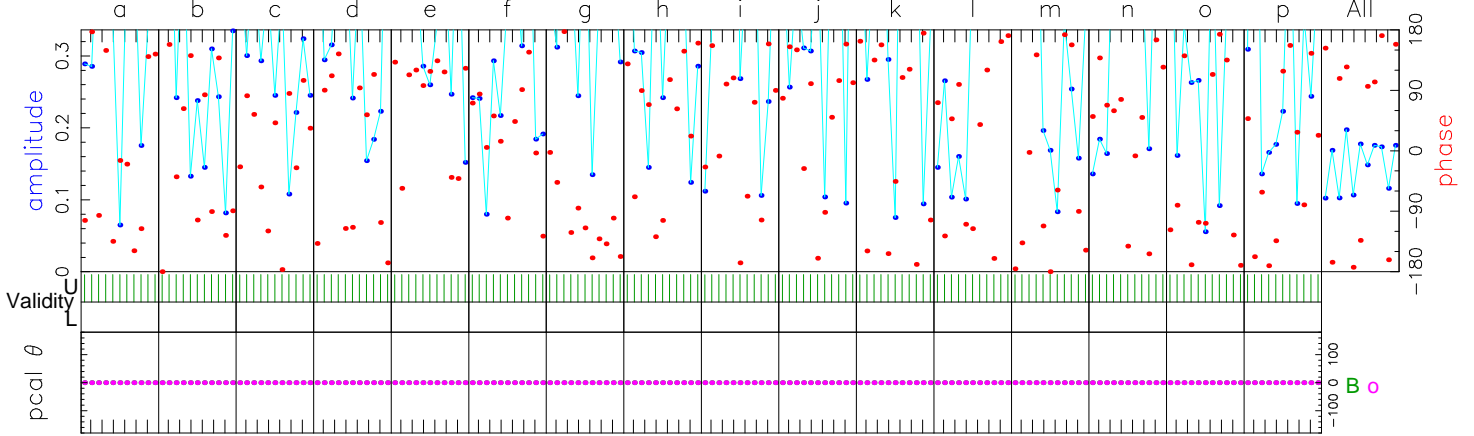


Fringe quality 0

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

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

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



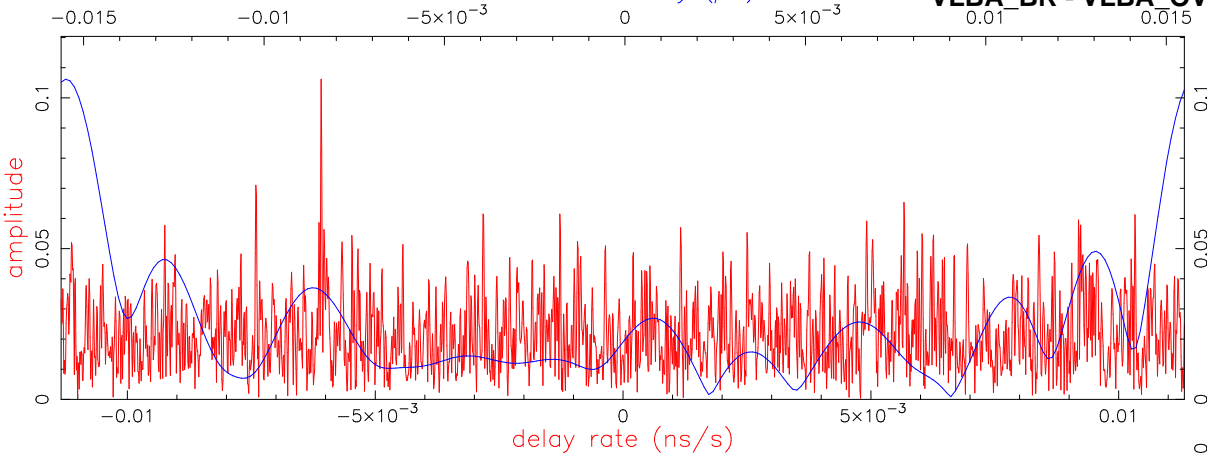
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
Group delay (usec)(sbd)	-156.4	-178.6	31.8	174.3	109.9	70.7	-126.0	131.0	96.3	107.6	158.6	170.1	-164.1	96.2	-163.5	179.2		Phase 156.2
Sband delay (usec)	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.1		Ampl. 0.1
Phase delay (usec)	208.5	158.9	246.4	57.8	40.5	254.7	129.5	199.0	135.7	128.6	128.9	61.1	177.2	238.9	253.8	19.7		Sbd box 128.9
Delay rate (us/s)	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used
U/L	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
B:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
																		Tracks
Group delay (usec)	6.86453176597E+03			Apriori delay (usec)			6.86452783394E+03			Resid mbdelay (usec)			3.93203E-03			+/- 1.7E-04		
Sband delay (usec)	6.86452706894E+03			Apriori clock (usec)			2.0928383E-01			Resid sbdelay (usec)			-7.65000E-04			+/- 2.8E-03		
Phase delay (usec)	6.86452783897E+03			Apriori clockrate (us/s)			-2.0098100E-07			Resid phdelay (usec)			5.03547E-06			+/- 5.9E-07		
Delay rate (us/s)	-1.48316848634E+00			Apriori rate (us/s)			-1.48316828666E+00			Resid rate (us/s)			-1.99677E-07			+/- 2.5E-09		
Total phase (deg)	17.6			Apriori accel (us/s/s)			-2.44504455346E-05			Resid phase (deg)			156.2			+/- 18.4		

ph/seg (deg) 41.7 30.6 Search (2048X64) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.3 53.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.7 36.9 Inc. seg. avg. 0.131 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 75.2 64.4 Inc. frq. avg. 0.142 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 11012.287 -596.290 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Bo.W.57.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

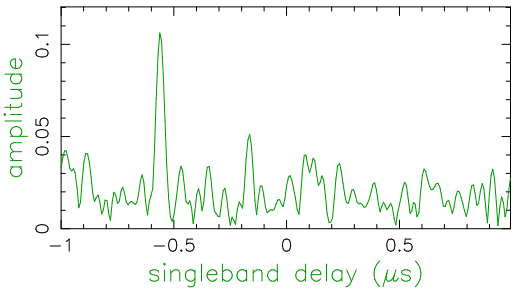
3C345.1305JH, No0001, bo
VLBA_BR - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

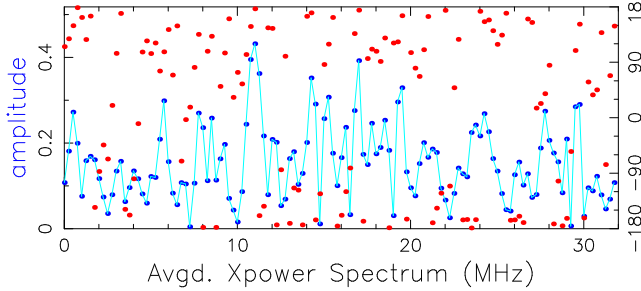


Fringe quality 0

SNR 5.9
Int time 406.536
Amp 0.120
Phase -110.2
PFD 6.6e-01
Delays (us)
SBD -0.560814
MBD -0.015460
Fringe rate (Hz)
-0.525257
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

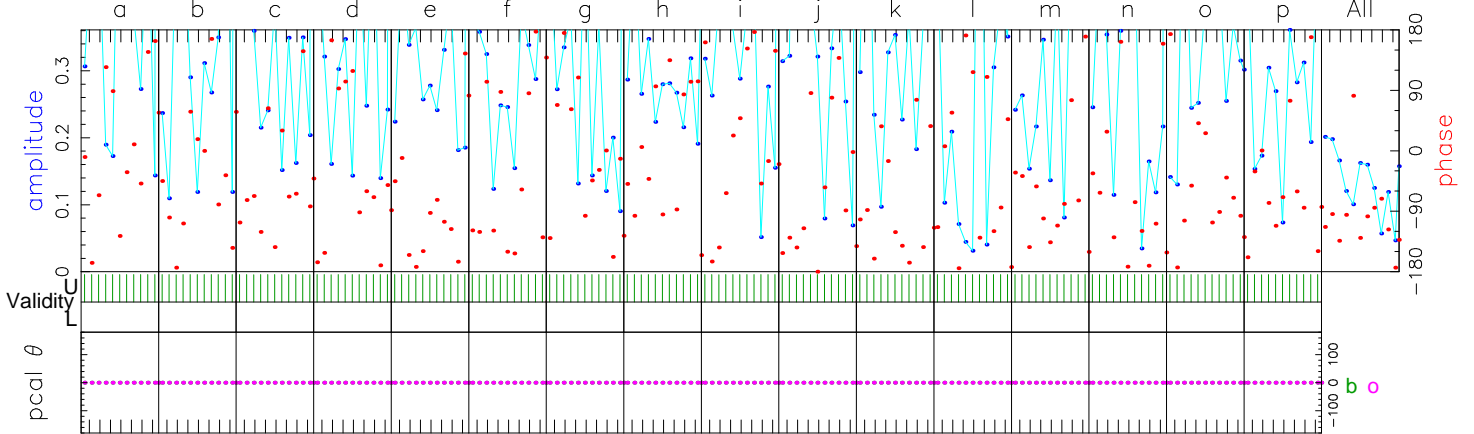


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042742
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

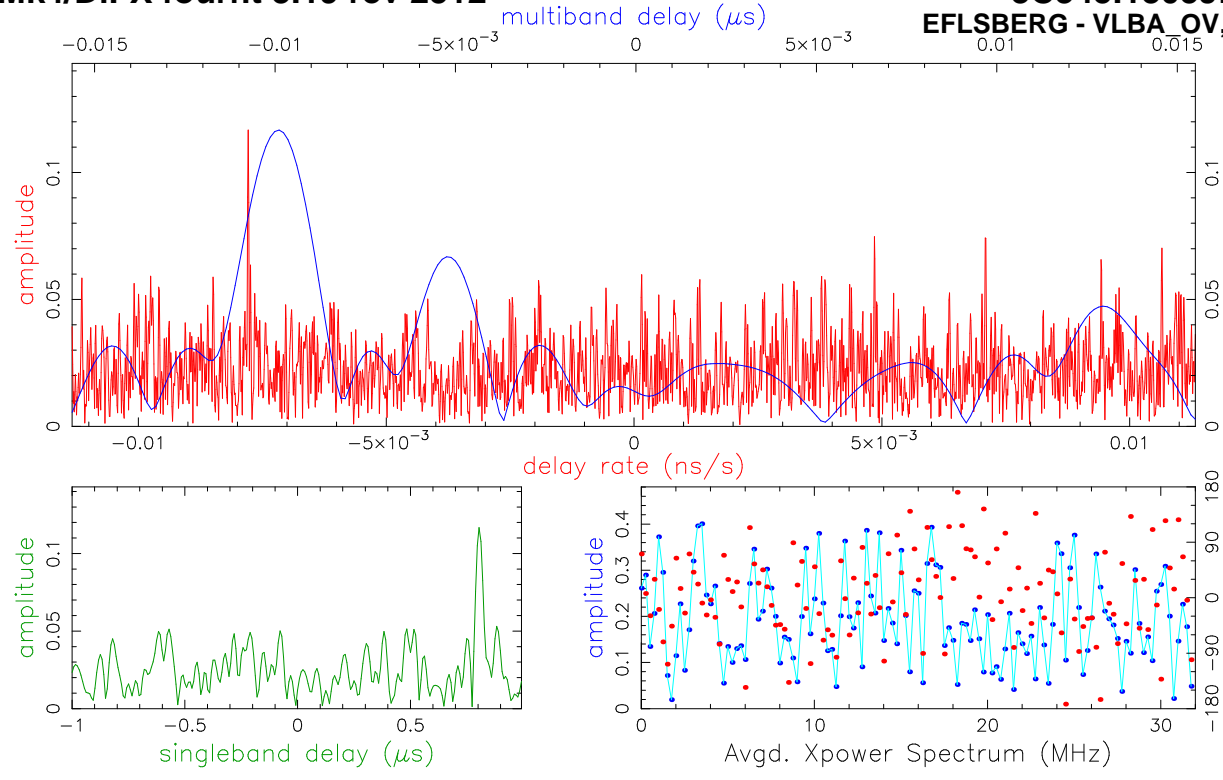
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-89.4	-70.3	-90.6	-127.9	-117.2	-152.7	-94.2	-47.0	-175.7	-157.0	-98.9	-114.2	-95.6	-121.4	-78.3	-109.7	Phase	-110.2	
	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1	
	7.5	191.7	100.4	59.5	66.3	220.1	178.7	66.0	111.9	212.7	185.4	114.5	48.7	153.9	38.5	171.0	Sbd box	57.2	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			1.19978138285E+03						Apriori delay (usec)	1.20032809316E+03							Resid mbdelay (usec)	-1.54603E-02	+/- 1.8E-04
Sband delay (usec)			1.19976727866E+03						Apriori clock (usec)	-1.7242477E+01							Resid sbdelay (usec)	-5.60814E-01	+/- 2.9E-03
Phase delay (usec)			1.20032808961E+03						Apriori clockrate (us/s)	-2.4337607E-07							Resid phdelay (usec)	-3.55248E-06	+/- 6.3E-07
Delay rate (us/s)			-1.46739352685E-01						Apriori rate (us/s)	-1.46733254968E-01							Resid rate (us/s)	-6.09772E-06	+/- 2.7E-09
Total phase (deg)				230.0					Apriori accel (us/s/s)	3.60575885645E-06							Resid phase (deg)	-110.2	+/- 19.5

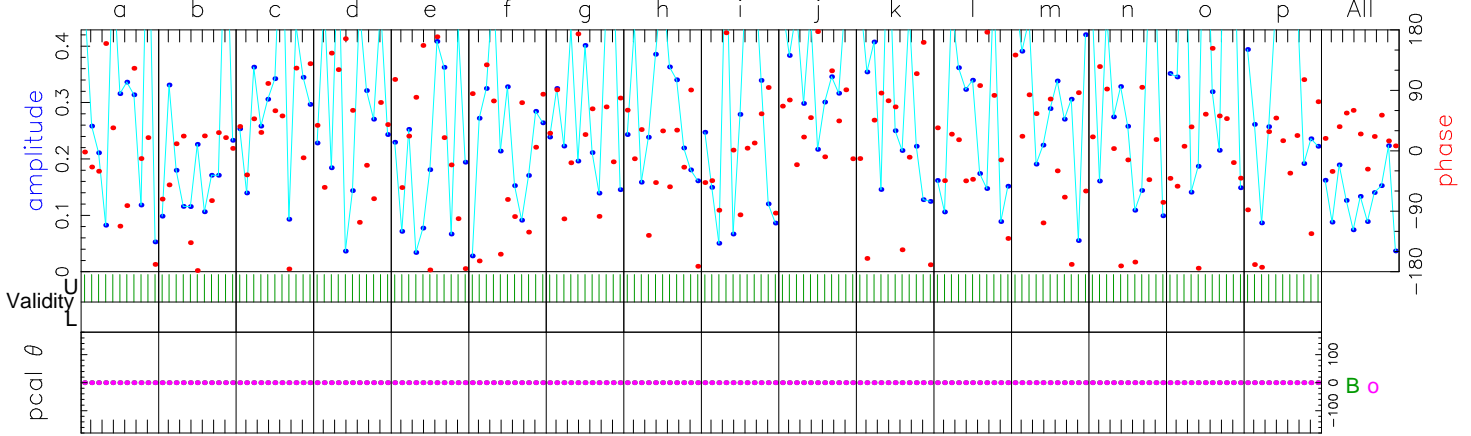
ph/seg (deg) 57.2 33.8 Amplitude 0.120 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 51.8 59.0 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 34.7 39.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 44.2 68.1 Inc. seg. avg. 0.127 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
Inc. frq. avg. 0.112 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/bo..1305JH Output file: /Exps/c192a/v2/1234/No0001/bo.W.76.1305JH



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

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

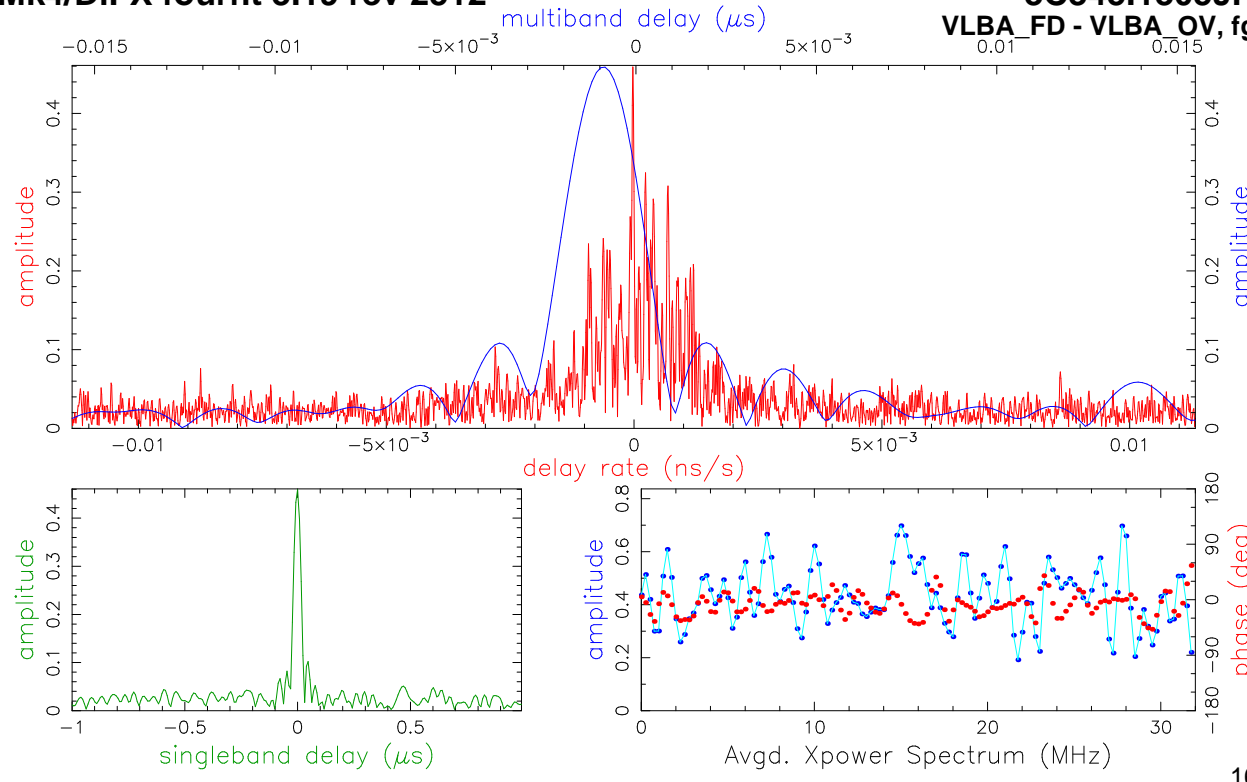


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-1.5	-6.7	61.5	22.8	172.6	115.8	24.6	-2.2	-6.0	45.3	58.8	16.9	36.4	20.8	18.2	12.1		Phase	24.7
	0.2	0.2	0.3	0.1	0.0	0.0	0.2	0.2	0.1	0.3	0.1	0.2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

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

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

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

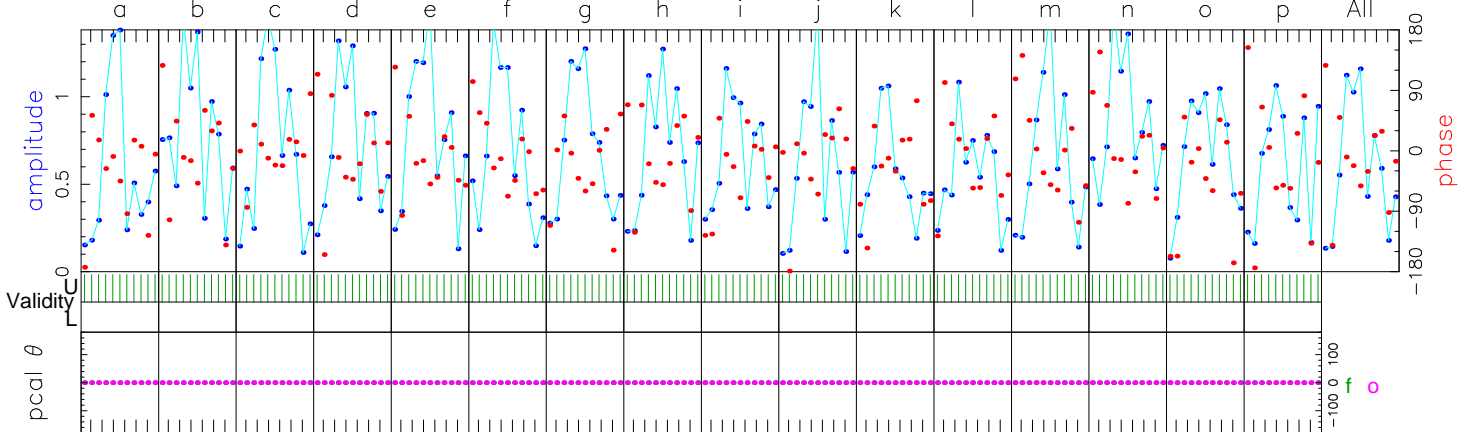


Fringe quality 7

SNR 25.5
Int time 410.455
Amp 0.461
Phase -11.2
PFD 0.0e+00
Delays (us)
SBD -0.001609
MBD -0.000916
Fringe rate (Hz) -0.001459
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

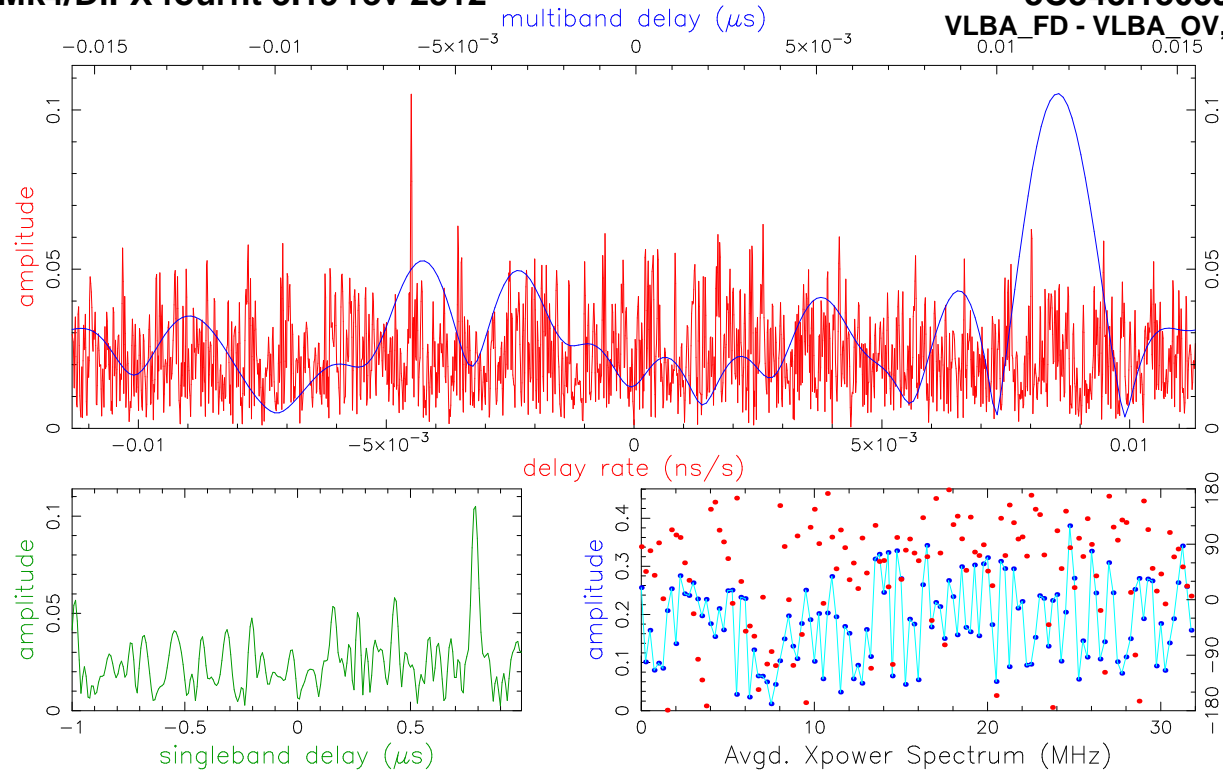
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042755
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-21.9	-5.2	-3.3	-5.5	-16.0	-13.8	-19.4	-6.3	-15.4	-14.8	-20.1	5.0	-20.8	-4.3	-6.9	-8.6	Phase	-11.2
	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.4	0.3	Ampl.	0.5
	128.6	129.4	128.6	129.0	129.5	128.7	128.5	128.7	128.6	128.7	129.3	128.1	128.5	128.8	127.9	130.2	Sbd box	128.8
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
fo	0:0	0:0	0:0	0:0	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	
fo	0:0	0:0	0:0	0:0	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	
o	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	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	2.22717446825E+03		Apriori delay (usec)		2.22717538439E+03		Resid mbdelay (usec)		-9.16139E-04		+/-		4.2E-05					
Sband delay (usec)	2.22717377539E+03		Apriori clock (usec)		-1.6174999E+01		Resid sbdelay (usec)		-1.60900E-03		+/-		6.7E-04					
Phase delay (usec)	2.22717538403E+03		Apriori clockrate (us/s)		-9.1930498E-08		Resid phdelay (usec)		-3.60511E-07		+/-		1.4E-07					
Delay rate (us/s)	-6.53444893426E-03		Apriori rate (us/s)		-6.53443200115E-03		Resid rate (us/s)		-1.69331E-08		+/-		6.1E-10					
Total phase (deg)	208.8		Apriori accel (us/s/s)		-1.88137562833E-05		Resid phase (deg)		-11.2		+/-		4.5					

ph/seg (deg) 68.0 7.4 Search (2048X64) 0.446 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.3 13.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.0 9.0 Inc. seg. avg. 0.591 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 16.6 15.7 Inc. frq. avg. 0.457 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fo..1305JH Output file: /Exps/c192a/v2/1234/No0001/fo.W.118.1305JH

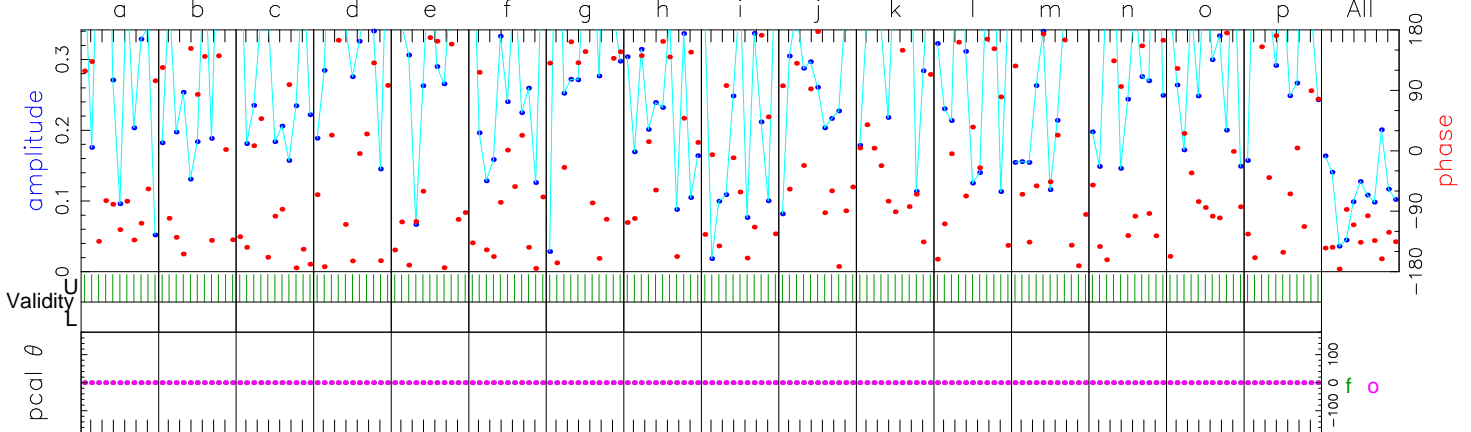


Fringe quality 0

SNR 5.9
Int time 410.455
Amp 0.114
Phase -134.5
PFD 5.8e-01
Delays (us)
SBD 0.785728
MBD 0.011628
Fringe rate (Hz)
-0.388007
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042800
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

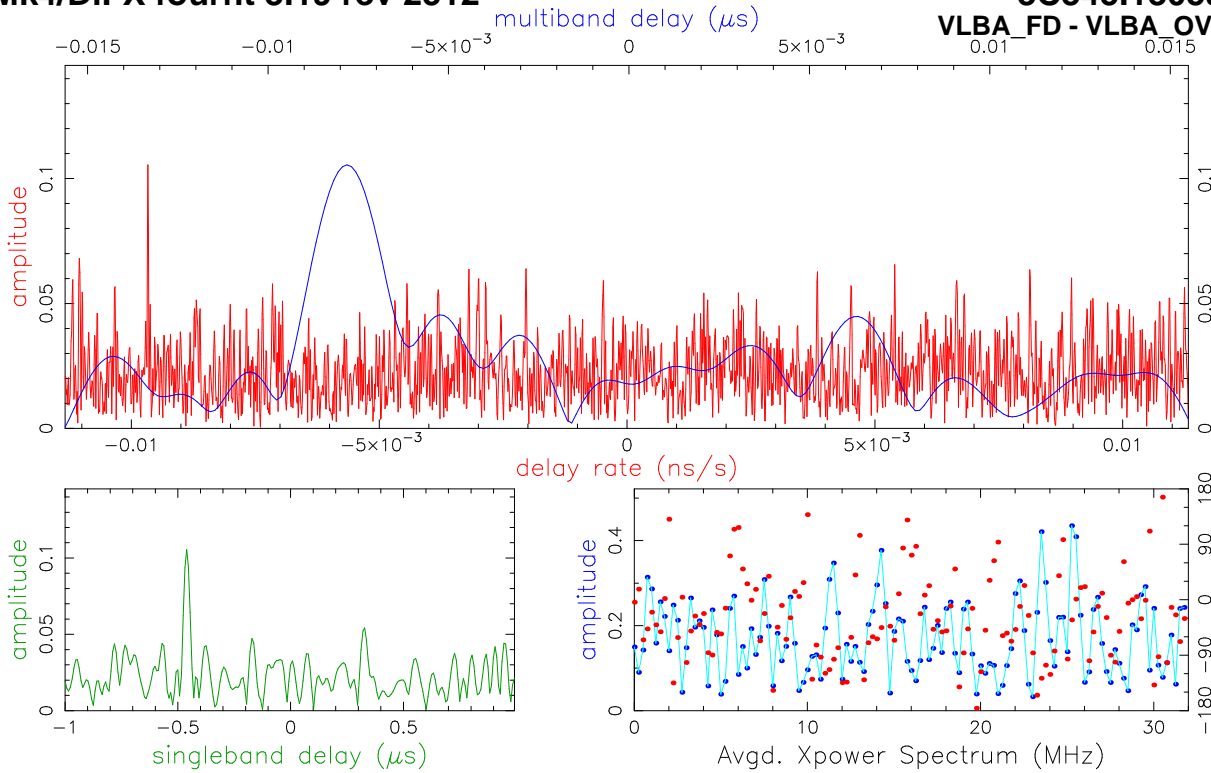


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-101.9	-179.6	-142.9	107.0	-143.3	-93.8	-165.7	148.7	-109.5	-88.9	-54.6	-171.6	-139.2	-148.6	-78.1	-149.1	Phase	-134.5
	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	64.5	168.0	129.0	67.2	231.6	145.3	25.3	133.1	127.0	61.2	116.2	108.1	100.0	252.2	228.1	183.9	Sbd box	229.6
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
fo	0:0	0:0	0:0	0:0	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	
fo	0:0	0:0	0:0	0:0	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	
o	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	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 2.22796826263E+03 Apriori delay (usec) 2.22717538439E+03 Resid mbdelay (usec) 1.16282E-02 +/- 1.8E-04
 Sband delay (usec) 2.22796111189E+03 Apriori clock (usec) -1.6174999E+01 Resid sbdelay (usec) 7.85728E-01 +/- 2.9E-03
 Phase delay (usec) 2.22717538005E+03 Apriori clockrate (us/s) -9.1930498E-08 Resid phdelay (usec) -4.33807E-06 +/- 6.2E-07
 Delay rate (us/s) -6.53893637988E-03 Apriori rate (us/s) -6.53443200115E-03 Resid rate (us/s) -4.50438E-06 +/- 2.6E-09
 Total phase (deg) 85.5 Apriori accel (us/s/s) -1.88137562833E-05 Resid phase (deg) -134.5 +/- 19.4

RMS Theor. Amplitude 0.114 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 25.2 32.1 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 42.5 56.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 53.4 38.8 Inc. seg. avg. 0.104 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 55.7 67.6 Inc. frq. avg. 0.116 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fo...1305JH Output file: /Exps/c192a/v2/1234/No0001/fo.W.136.1305JH

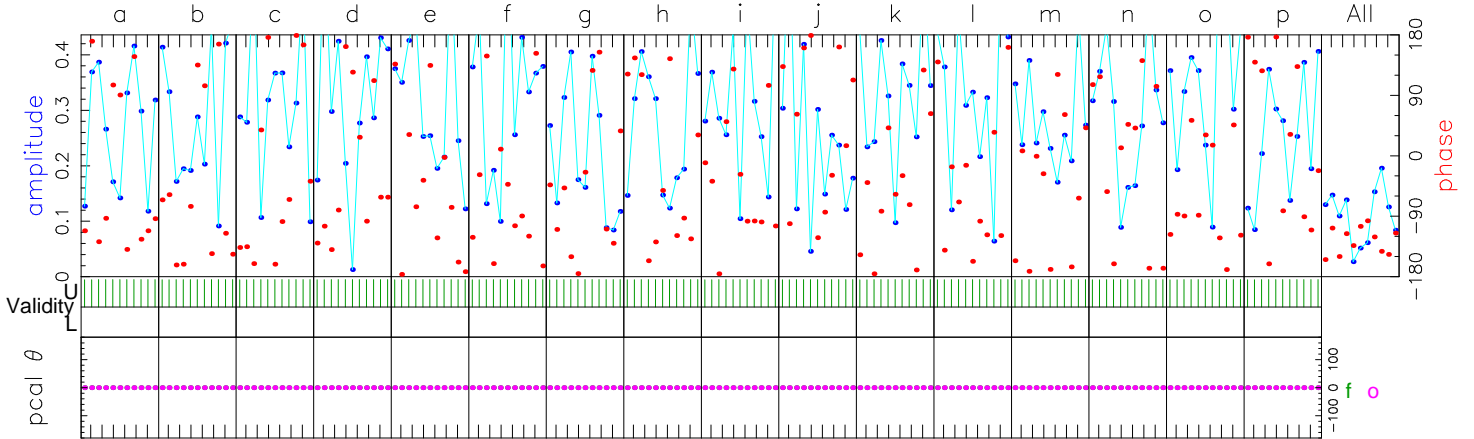


Fringe quality 0

SNR 5.8
Int time 410.455
Amp 0.145
Phase -128.9
PFD 7.2e-01
Delays (us)
SBD -0.460840
MBD -0.007812
Fringe rate (Hz)
-0.833768
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

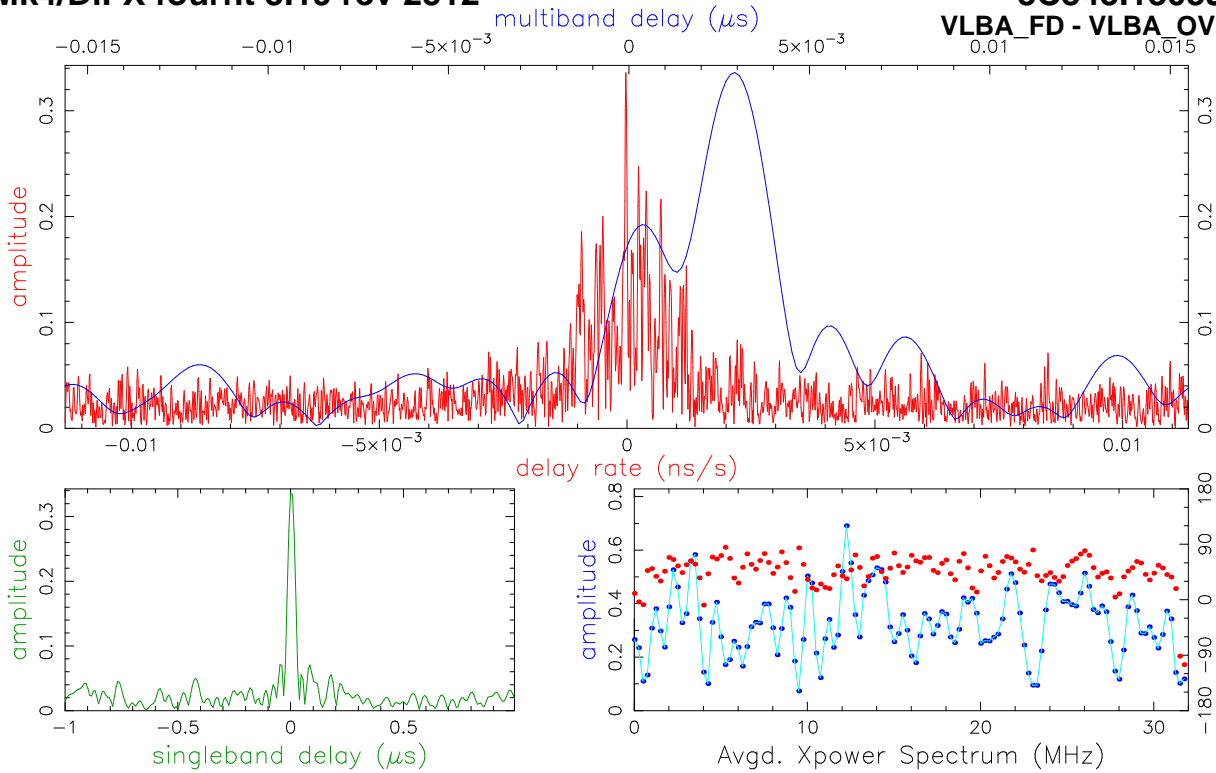
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042805
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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				
	-147.3	-130.8	-153.7	-93.9	-105.3	-102.3	-137.1	-162.0	-92.8	-152.8	-98.9	-127.9	-75.9	145.0	-107.5	-138.5	Phase	-128.9				
	0.2	0.2	0.3	0.3	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.0	0.2	0.2	0.1	Ampl.	0.1				
	177.4	132.2	71.3	38.0	154.1	30.9	144.3	137.3	208.0	231.8	126.7	151.4	81.4	67.5	173.6	156.7	Sbd box	70.0				
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
fo	0:0	0:0	0:0	0:0	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					
o	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					
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Tracks					
Group delay (usec)(sbd)			2.22673007217E+03														Apriori delay (usec)	2.22717538439E+03	Resid mbdelay (usec)	-7.81222E-03	+/-	1.8E-04
Sband delay (usec)			2.22671454389E+03														Apriori clock (usec)	-1.6174999E+01	Resid sbdelay (usec)	-4.60840E-01	+/-	2.9E-03
Phase delay (usec)			2.22717538023E+03														Apriori clockrate (us/s)	-9.1930498E-08	Resid phdelay (usec)	-4.15802E-06	+/-	6.3E-07
Delay rate (us/s)			-6.54411121921E-03														Apriori rate (us/s)	-6.53443200115E-03	Resid rate (us/s)	-9.67922E-06	+/-	2.7E-09
Total phase (deg)				91.0													Apriori accel (us/s/s)	-1.88137562833E-05	Resid phase (deg)	-128.9	+/-	19.6

ph/seg (deg) 19.3 32.5 Search (2048X64) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.8 56.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.0 39.2 Inc. seg. avg. 0.132 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 54.8 68.4 Inc. frq. avg. 0.137 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fo...1305JH Output file: /Exps/c192a/v2/1234/No0001/fo.W.153.1305JH

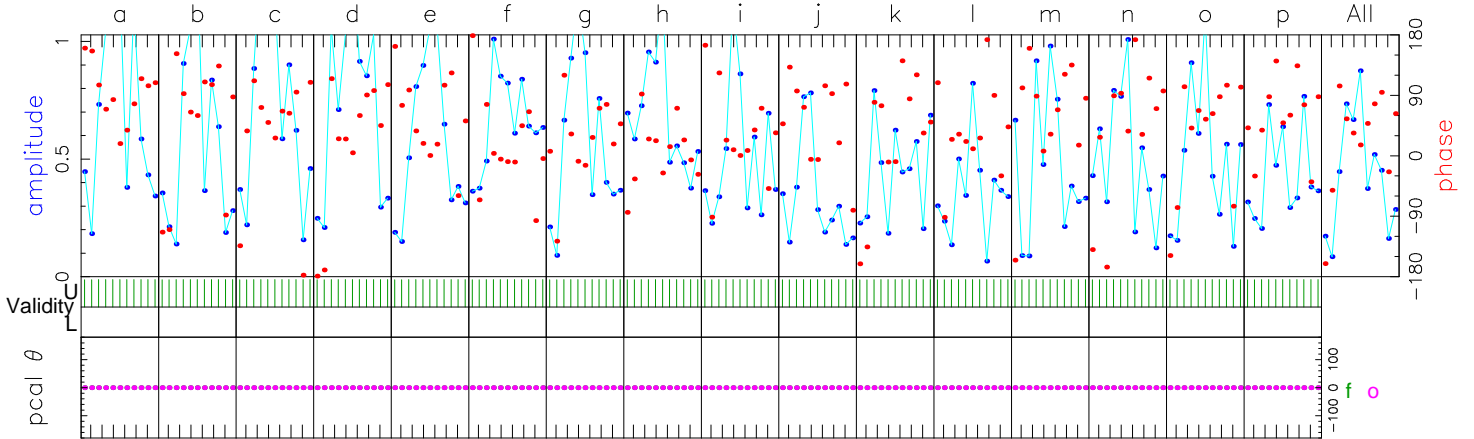


Fringe quality 7

SNR 19.0
Int time 410.455
Amp 0.343
Phase 53.2
PFD 0.0e+00
Delays (us)
SBD 0.003656
MBD 0.002959
Fringe rate (Hz) -0.001443
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042749
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

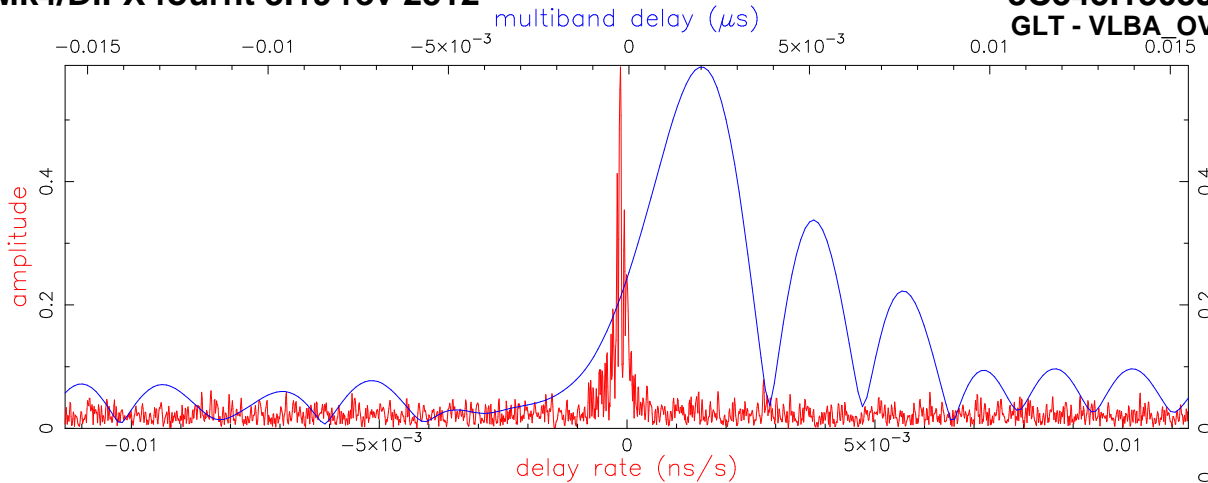


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
fo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	2.22717834375E+03			Apriori delay (usec)			2.22717538439E+03			Resid mbdelay (usec)			2.95937E-03			+/-	5.7E-05	
Sband delay (usec)	2.22717904039E+03			Apriori clock (usec)			-1.6174999E+01			Resid sbdelay (usec)			3.65600E-03			+/-	9.1E-04	
Phase delay (usec)	2.22717538610E+03			Apriori clockrate (us/s)			-9.1930498E-08			Resid phdelay (usec)			1.71464E-06			+/-	1.9E-07	
Delay rate (us/s)	-6.53444874933E-03			Apriori rate (us/s)			-6.53443200115E-03			Resid rate (us/s)			-1.67482E-08			+/-	8.2E-10	
Total phase (deg)	273.2			Apriori accel (us/s/s)			-1.88137562833E-05			Resid phase (deg)			53.2			+/-	6.0	

ph/seg (deg) 63.8 10.0 Search (2048X64) 0.327 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.1 17.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.5 12.1 Inc. seg. avg. 0.428 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 33.2 21.1 Inc. frq. avg. 0.372 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 61.0 el 37.1 pa -78.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 14.933 -1880.128 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/fo..1305JH Output file: /Exps/c192a/v2/1234/No0001/fo.W.96.1305JH

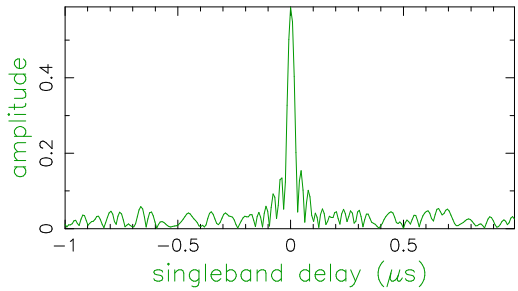
Mk4/DiFX fourfit 3.19 rev 2512

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

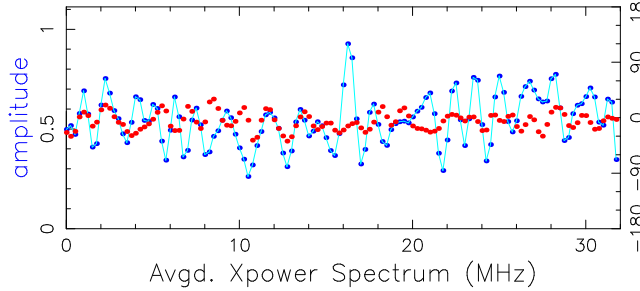


Fringe quality 6

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

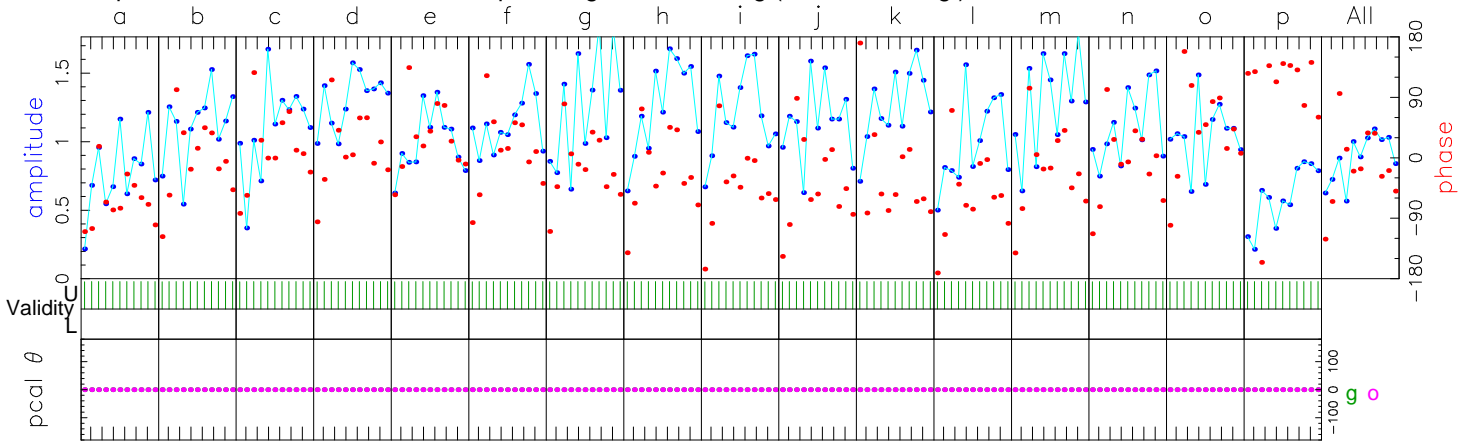


delay rate (ns/s)



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

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

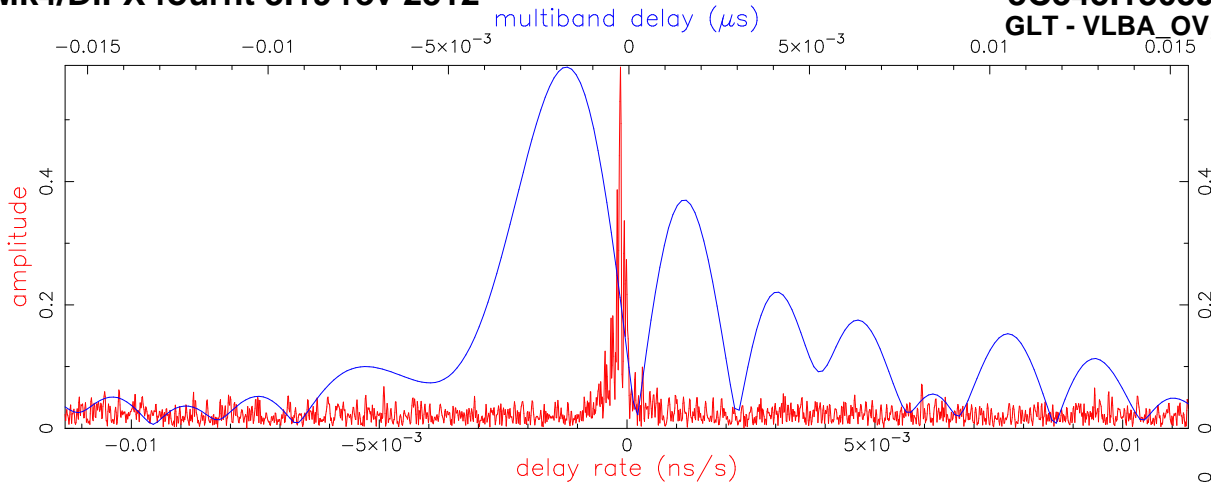


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-62.2	1.1	14.0	14.8	32.1	13.0	-8.0	-12.3	-32.0	-46.2	-46.9	-54.8	-12.9	-3.1	47.0	124.4		Phase	-8.6
	0.6	0.7	0.7	0.9	0.7	0.7	0.9	0.8	0.8	0.7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

ph/seg (deg) 55.1 5.8 Theor. Amplitude 0.588 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.4 10.2 Search (2048X64) 0.581 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 48.2 7.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 30.4 12.3 Inc. seg. avg. 0.877 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.143.1305JH simultaneous interpolator

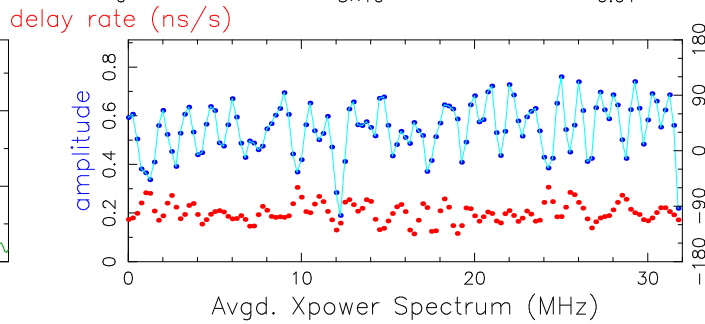
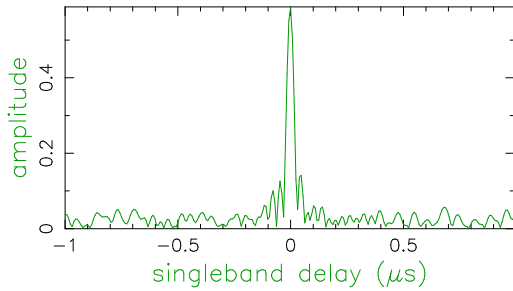
Mk4/DiFX fourfit 3.19 rev 2512

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



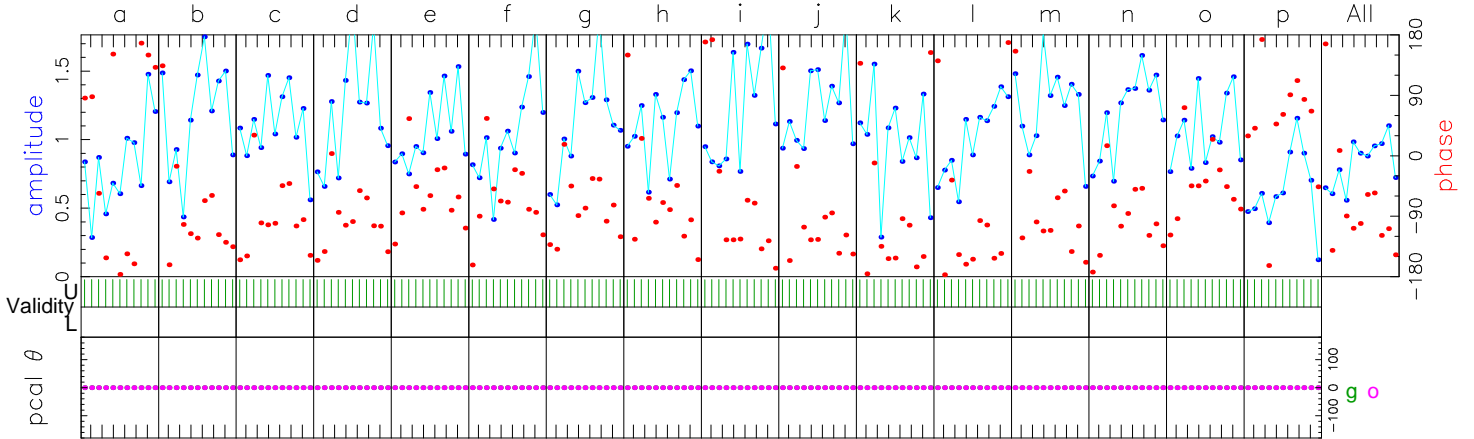
Fringe quality 6

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



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

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

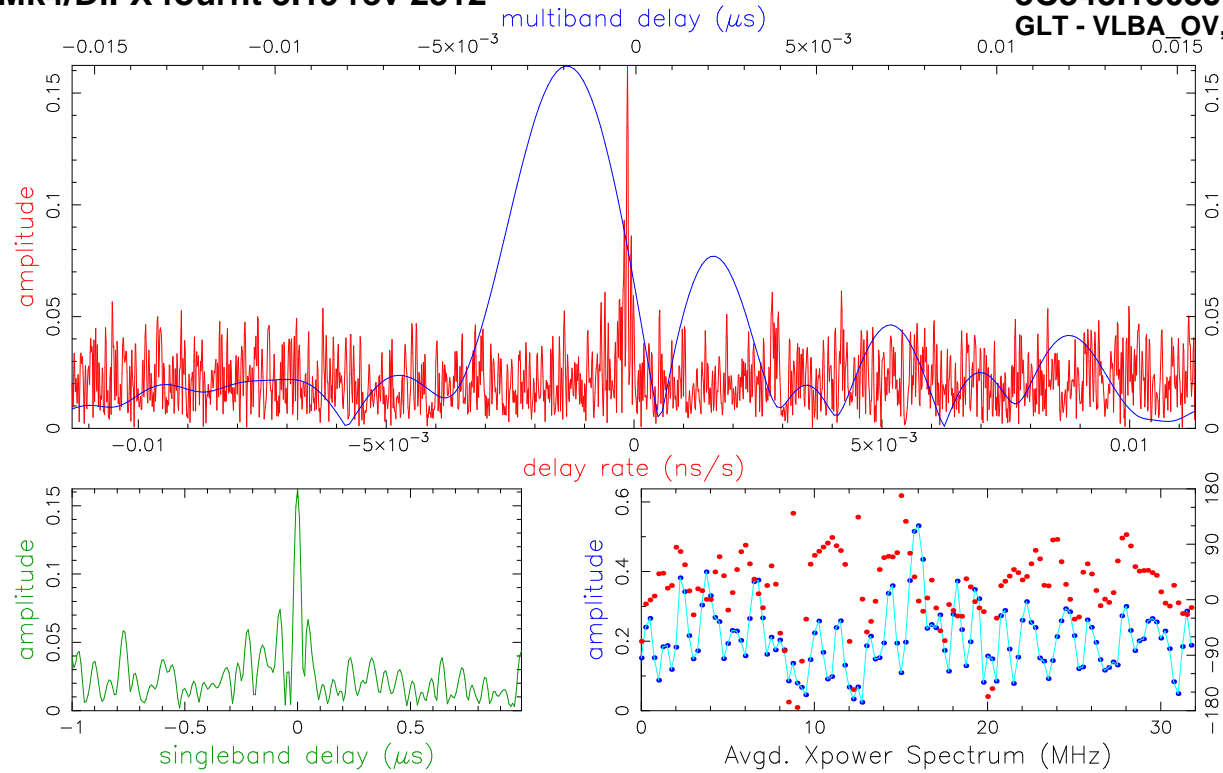


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	166.2	-111.5	-91.6	-93.3	-60.0	-70.6	-69.5	-94.9	-121.9	-120.8	-147.1	-146.4	-108.1	-90.6	-45.0	84.1	Phase	-100.7	
	0.5	0.8	0.7	0.9	0.8	0.7	0.9	0.7	0.9	0.9	0.6	0.7	0.9	0.8	0.7	0.5	Ampl.	0.8	
	130.7	129.0	129.0	128.9	128.5	128.5	129.0	128.7	128.7	128.9	128.9	129.0	128.6	129.3	129.5	130.1	Sbd box	128.8	
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)		5.75425558214E+03								5.75425733910E+03							Resid mbdelay (usec)	-1.75696E-03	+/- 3.3E-05
Sband delay (usec)		5.75425565610E+03								-1.5333658E+01							Resid sbdelay (usec)	-1.68300E-03	+/- 5.3E-04
Phase delay (usec)		5.75425733585E+03								7.4018997E-08							Resid phdelay (usec)	-3.24859E-06	+/- 1.1E-07
Delay rate (us/s)		-7.96777167354E-01								-7.96777036652E-01							Resid rate (us/s)	-1.30703E-07	+/- 4.8E-10
Total phase (deg)					-32.4					-4.09619280062E-06							Resid phase (deg)	-100.7	+/- 3.5

ph/seg (deg) 51.0 5.8 Search (2048X64) 0.570 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 49.8 10.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 60.7 7.0 Inc. seg. avg. 0.824 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 37.6 12.3 Inc. frq. avg. 0.753 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.163.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

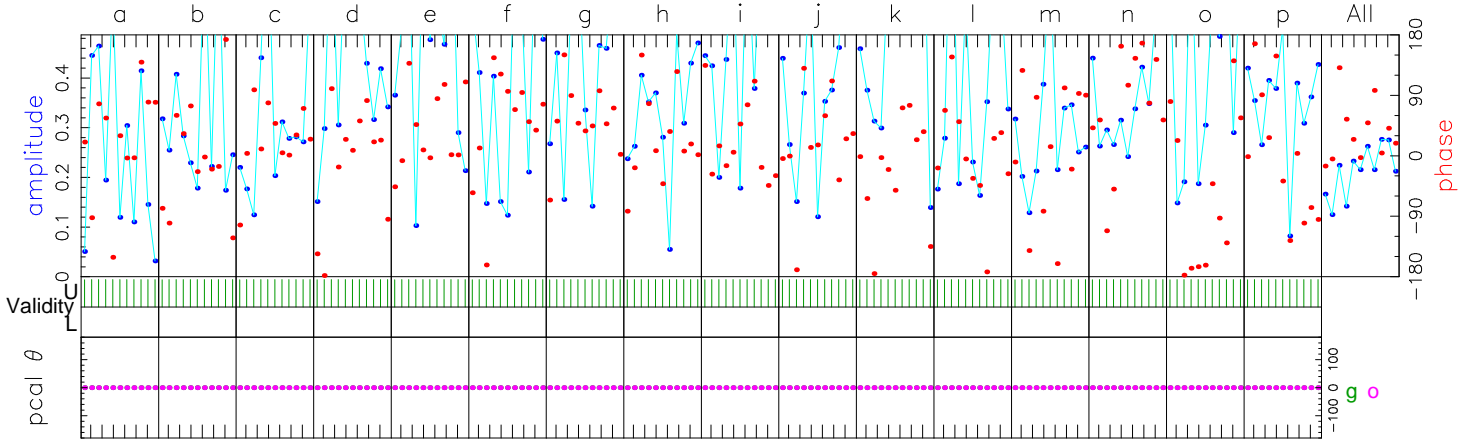


Fringe quality 9

SNR 9.0
Int time 410.693
Amp 0.162
Phase 34.0
PFD 8.9e-11
Delays (us)
SBD -0.001000
MBD -0.001932
Fringe rate (Hz)
-0.011390
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

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

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

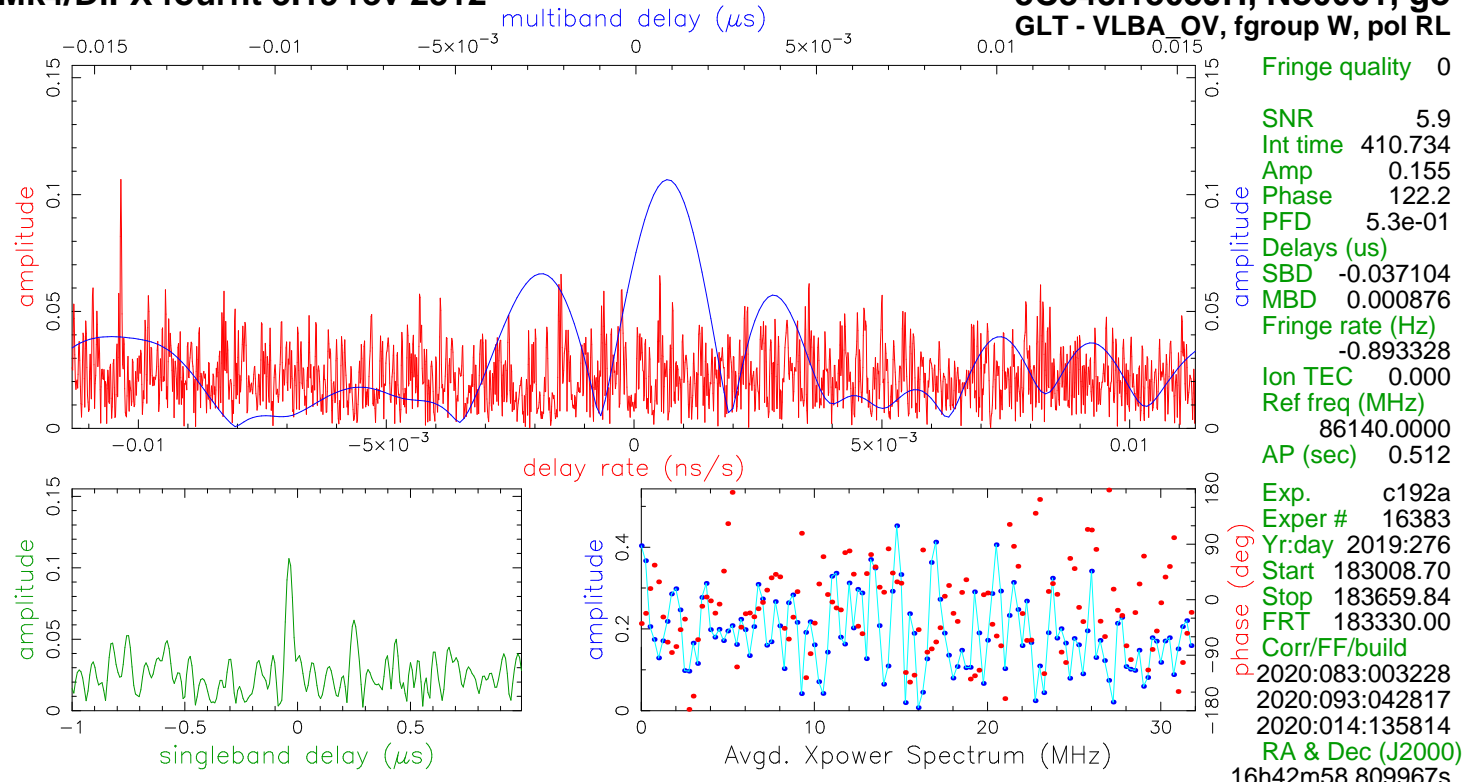


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
94.1	-11.0	34.5	40.3	32.5	63.7	55.2	24.9	9.2	28.3	15.3	31.3	39.4	105.0	-165.1	-40.8		Phase	34.0	
0.0	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.1		Ampl.	0.2	
171.5	176.7	128.0	129.9	129.1	3.8	129.7	227.4	128.9	128.9	128.8	181.0	213.8	130.1	235.2	16.0		Sbd box	128.9	
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	5.75425540667E+03			Apriori delay (usec)			5.75425733910E+03			Resid mbdelay (usec)			-1.93243E-03			+/- 1.2E-04			
Sband delay (usec)	5.75425633960E+03			Apriori clock (usec)			-1.5333658E+01			Resid sbdelay (usec)			-9.99500E-04			+/- 1.9E-03			
Phase delay (usec)	5.75425734019E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			1.09776E-06			+/- 4.1E-07			
Delay rate (us/s)	-7.96777168876E-01			Apriori rate (us/s)			-7.96777036652E-01			Resid rate (us/s)			-1.32224E-07			+/- 1.7E-09			
Total phase (deg)	102.3			Apriori accel (us/s/s)			-4.09619280062E-06			Resid phase (deg)			34.0			+/- 12.7			

ph/seg (deg) 43.3 21.1 Search (2048X64) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.5 36.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.5 25.5 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 54.3 44.5 Inc. frq. avg. 0.179 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/go..1305JH Output file: /Exps/c192a/v2/1234/No0001/go.W.177.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 0

SNR 5.9

Int time 410.734

Amp 0.155

Phase 122.2

PFD 5.3e-01

Delays (us)

SBD -0.037104

MBD 0.000876

Fringe rate (Hz)

-0.893328

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183008.70

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042817

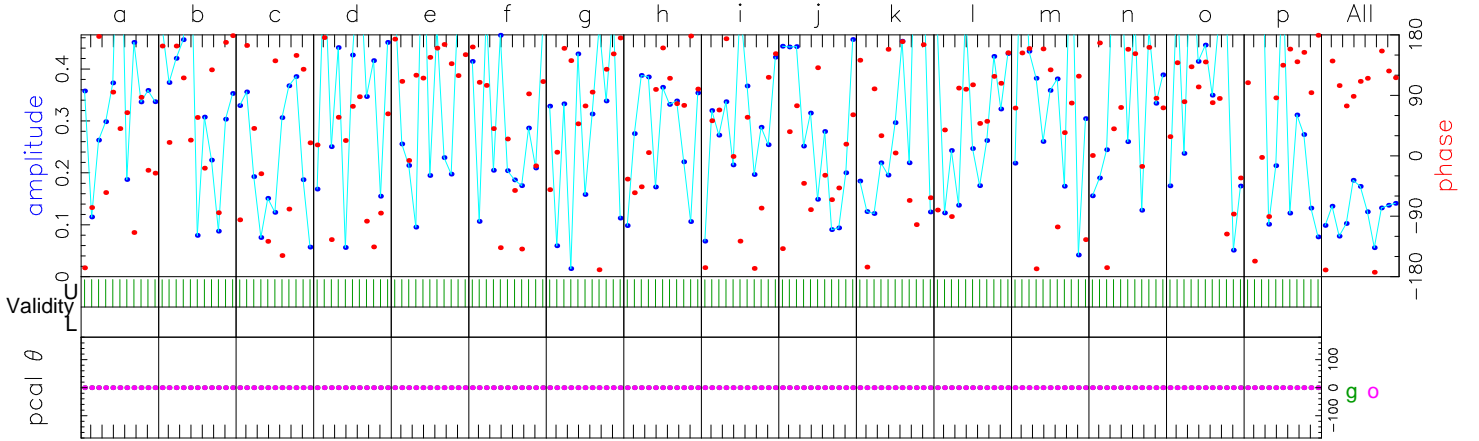
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

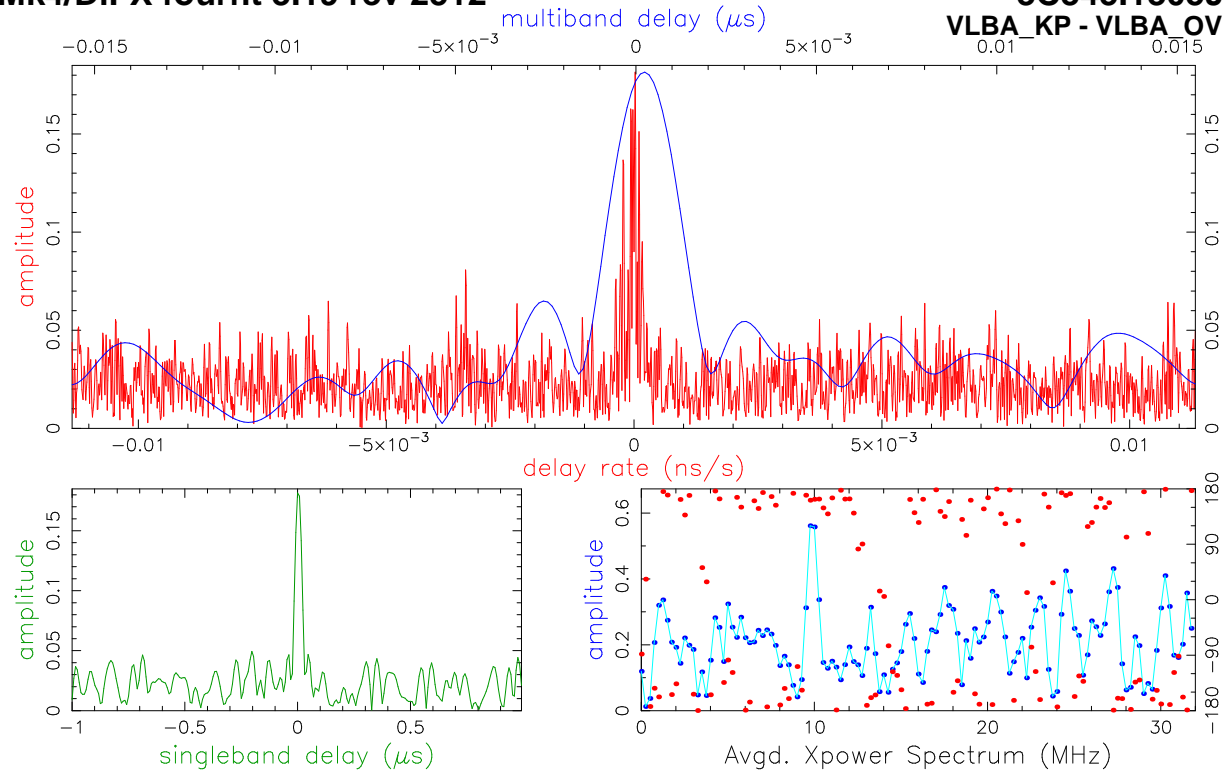
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	21.8	112.5	-160.0	106.7	138.1	117.6	132.7	70.3	140.4	10.9	-158.6	105.5	146.2	102.0	117.0	129.1	Phase	122.2
	0.1	0.2	0.1	0.1	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
	49.3	50.0	188.4	202.3	124.9	212.7	207.1	55.3	145.3	177.0	185.5	163.5	250.2	163.5	22.6	31.0	Sbd box	124.3
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.75422696541E+03			Apriori delay (usec)			5.75425733910E+03			Resid mbdelay (usec)			8.76310E-04			+/- 1.8E-04		
Sband delay (usec)	5.75422023460E+03			Apriori clock (usec)			-1.5333658E+01			Resid sbdelay (usec)			-3.71045E-02			+/- 2.9E-03		
Phase delay (usec)	5.75425734304E+03			Apriori clockrate (us/s)			7.4018997E-08			Resid phdelay (usec)			3.94153E-06			+/- 6.2E-07		
Delay rate (us/s)	-7.96787407309E-01			Apriori rate (us/s)			-7.96777036652E-01			Resid rate (us/s)			-1.03707E-05			+/- 2.6E-09		
Total phase (deg)	190.5			Apriori accel (us/s/s)			-4.09619280062E-06			Resid phase (deg)			122.2			+/- 19.3		
ph/seg (deg)	RMS	Theor.	Amplitude			0.155 +/- 0.026			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5						
amp/seg (%)	36.0	32.0	Search (2048X64)			0.104			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000			
ph/frq (deg)	37.9	55.9	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016	
amp/frq (%)	53.4	38.6	Inc. seg. avg.			0.156			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011			
	62.5	67.4	Inc. frq. avg.			0.160			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00	
g: az 142.5 el 51.0 pa -10.6	o: az 60.7 el 29.9 pa -64.6			u,v (fr/asec) 5935.898 2167.580			simultaneous interpolator											

Mk4/DiFX fourfit 3.19 rev 2512

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

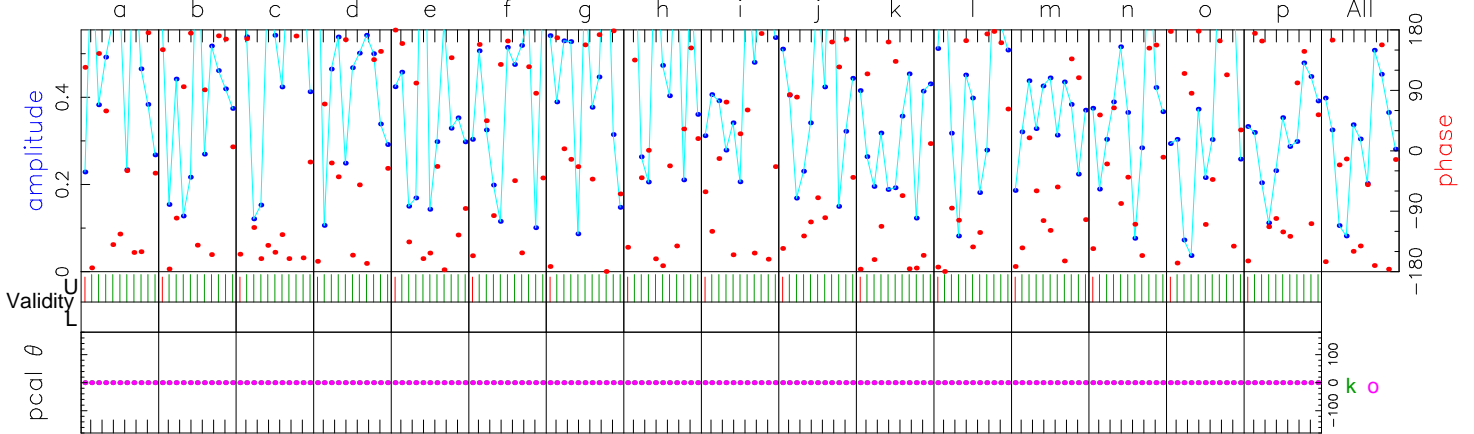


Fringe quality 9

SNR 10.2
Int time 407.733
Amp 0.185
Phase -163.1
PFD 7.5e-16
Delays (us)
SBD 0.003316
MBD 0.000250
Fringe rate (Hz) 0.001984
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042813
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-160.2	-172.6	-158.1	-143.1	-165.6	-177.7	-173.9	-170.6	-143.3	-144.0	-164.8	-179.4	-120.3	-137.9	176.9	-165.4		Phase -163.1
	0.3	0.2	0.5	0.1	0.3	0.1	0.2	0.2	0.1	0.2	0.1	0.3	0.2	0.0	0.2	0.2		Ampl. 0.2
	23.4	215.3	129.1	204.7	198.2	234.0	131.2	152.8	236.9	184.4	239.2	130.0	226.2	87.8	41.7	66.3		Sbd box 129.4
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		APs used
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	6.85758120372E+02			Apriori delay (usec)			6.85757870171E+02			Resid mbdelay (usec)			2.50202E-04			+/- 1.1E-04		
Sband delay (usec)	6.85761186671E+02			Apriori clock (usec)			-1.7031700E+01			Resid sbdelay (usec)			3.31650E-03			+/- 1.7E-03		
Phase delay (usec)	6.85757864910E+02			Apriori clockrate (us/s)			-1.9555999E-07			Resid phdelay (usec)			-5.26043E-06			+/- 3.6E-07		
Delay rate (us/s)	3.11211150756E-02			Apriori rate (us/s)			3.11210920389E-02			Resid rate (us/s)			2.30366E-08			+/- 1.5E-09		
Total phase (deg)	174.0			Apriori accel (us/s/s)			-9.19914500056E-06			Resid phase (deg)			-163.1			+/- 11.2		

ph/seg (deg) 86.5 18.6
amp/seg (%) 94.5 32.5
ph/frq (deg) 18.5 22.4
amp/frq (%) 53.0 39.2

RMS Theor. Amplitude 0.185 +/- 0.018
Search (2048X64) 0.177
Interp. 0.000
Inc. seg. avg. 0.290
Inc. frq. avg. 0.174

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

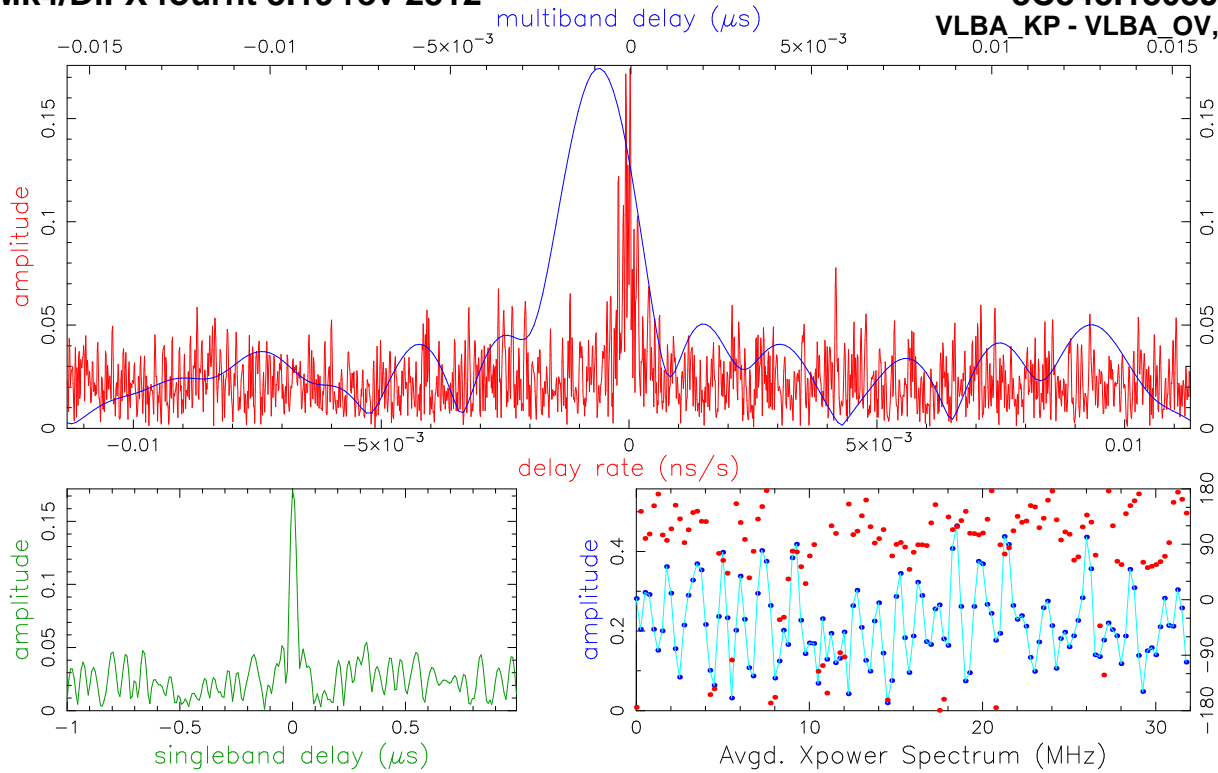
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

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

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ko..1305JH Output file: /Exps/c192a/v2/1234/No0001/ko.W.186.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

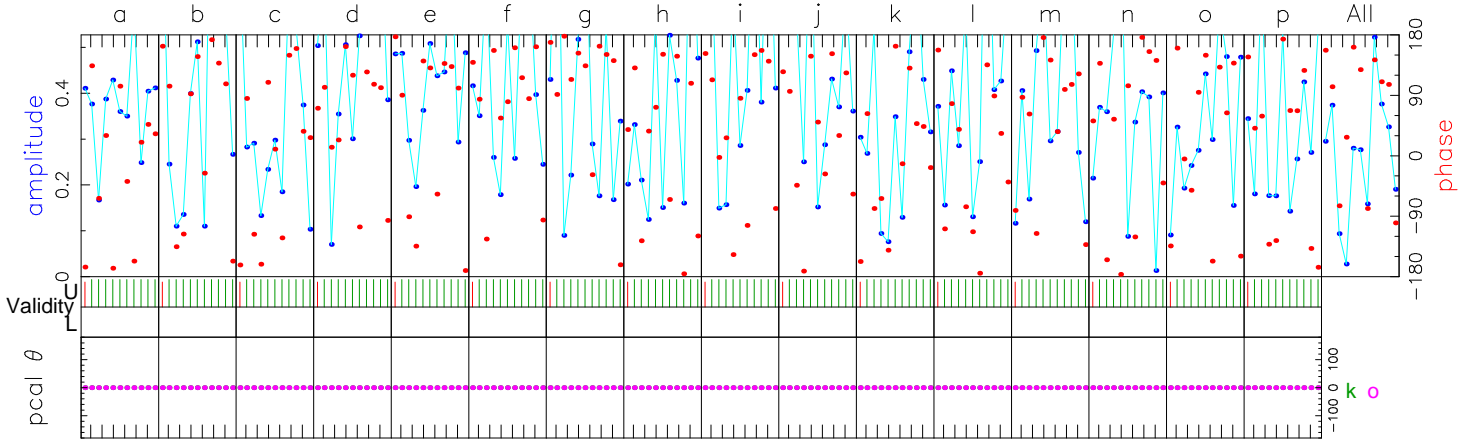


Fringe quality 9

SNR 9.7
Int time 407.733
Amp 0.176
Phase 135.3
PFD 1.2e-13
Delays (us)
SBD 0.002125
MBD -0.000896
Fringe rate (Hz) 0.001908
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042818
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

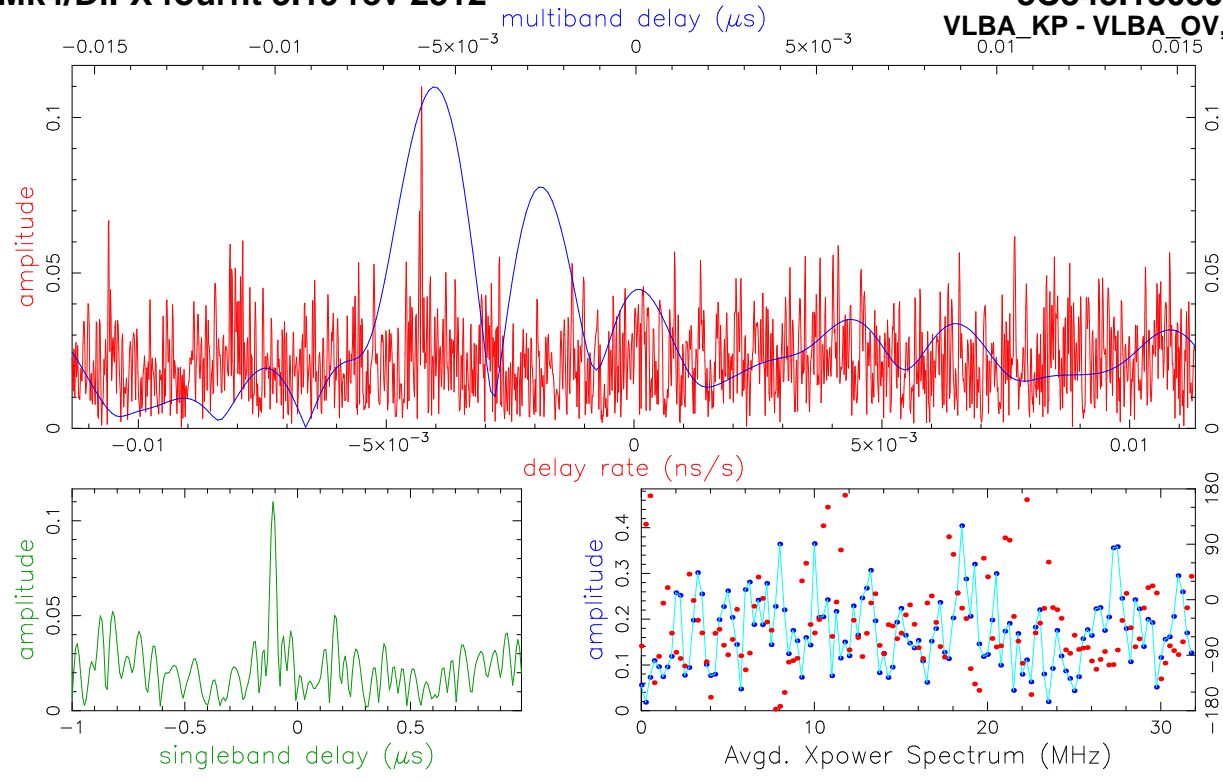


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	802/0	802/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	6.85756974341E+02			Apriori delay (usec)			6.85757870171E+02			Resid mbdelay (usec)			-8.95830E-04			+/- 1.1E-04		
Sband delay (usec)	6.85759995171E+02			Apriori clock (usec)			-1.7031700E+01			Resid sbdelay (usec)			2.12500E-03			+/- 1.8E-03		
Phase delay (usec)	6.85757874535E+02			Apriori clockrate (us/s)			-1.9555999E-07			Resid phdelay (usec)			4.36448E-06			+/- 3.8E-07		
Delay rate (us/s)	3.11211141884E-02			Apriori rate (us/s)			3.11210920389E-02			Resid rate (us/s)			2.21495E-08			+/- 1.6E-09		
Total phase (deg)	112.5			Apriori accel (us/s/s)			-9.19914500056E-06			Resid phase (deg)			135.3			+/- 11.8		

ph/seg (deg) 82.9 19.6 Search (2048X64) 0.174 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 92.0 34.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 31.2 23.6 Inc. seg. avg. 0.251 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 47.0 41.2 Inc. frq. avg. 0.173 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) -248.865 -1113.881 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/ko..1305JH Output file: /Exps/c192a/v2/1234/No0001/ko.W.205.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

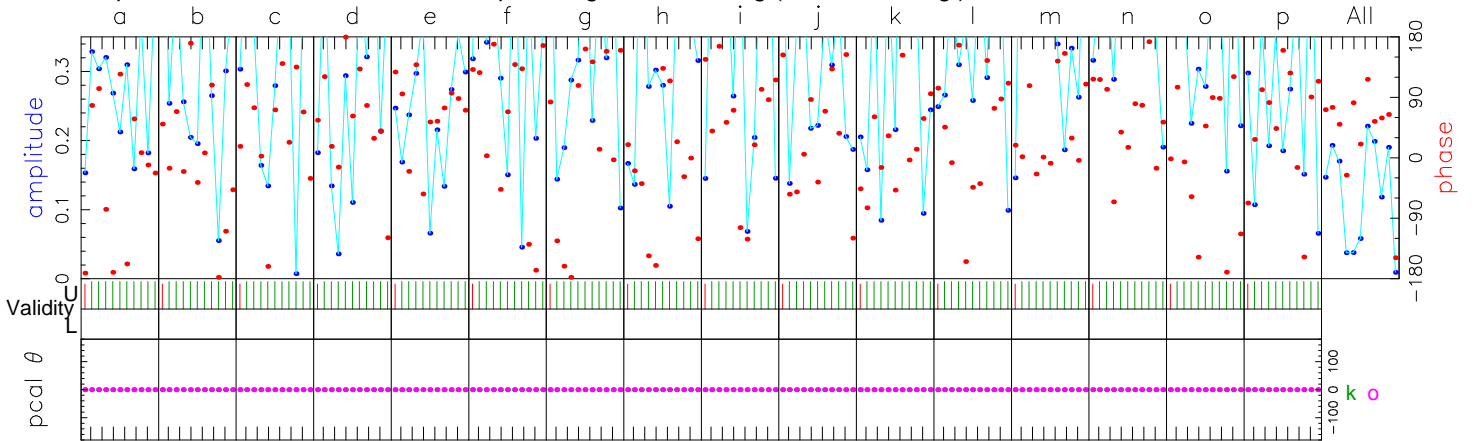


Fringe quality 0

SNR 6.1
Int time 407.733
Amp 0.117
Phase 68.1
PFD 2.8e-01
Delays (us)
SBD -0.108489
MBD -0.005564
Fringe rate (Hz)
-0.369229
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042824
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

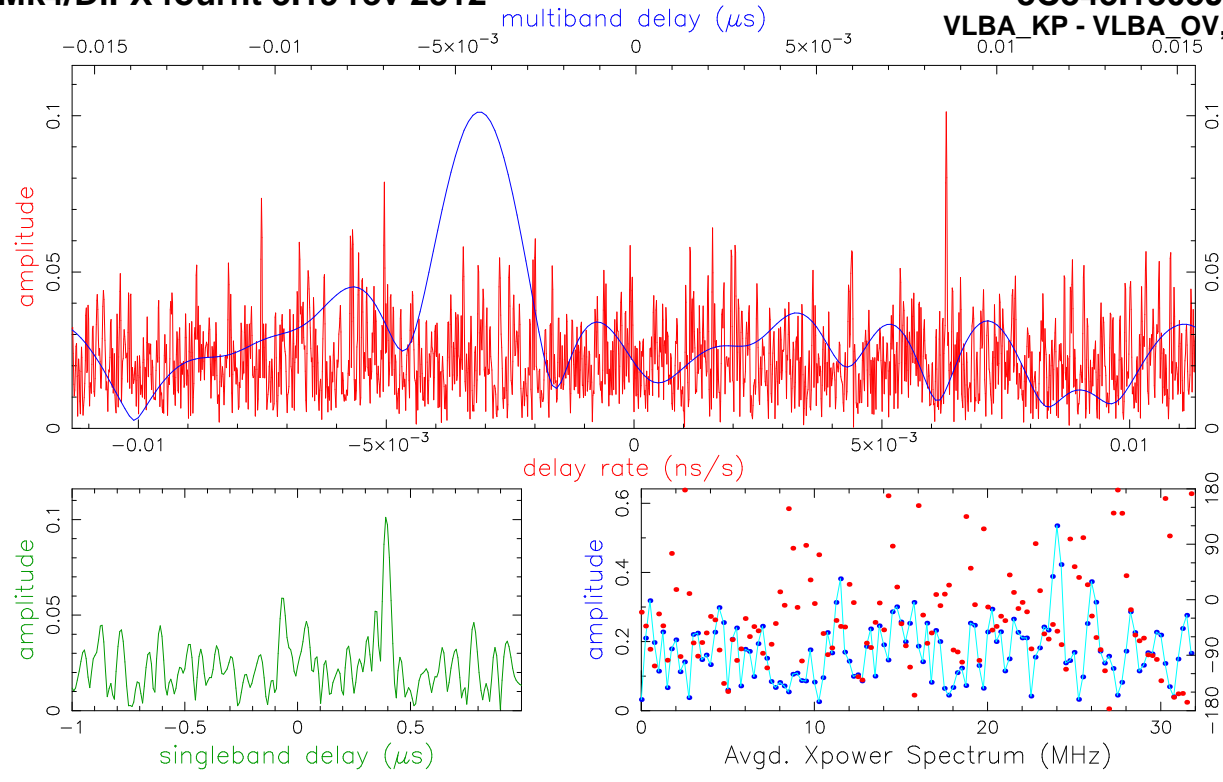


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
k	1000	1000	1000	1000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

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

Mk4/DiFX fourfit 3.19 rev 2512

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

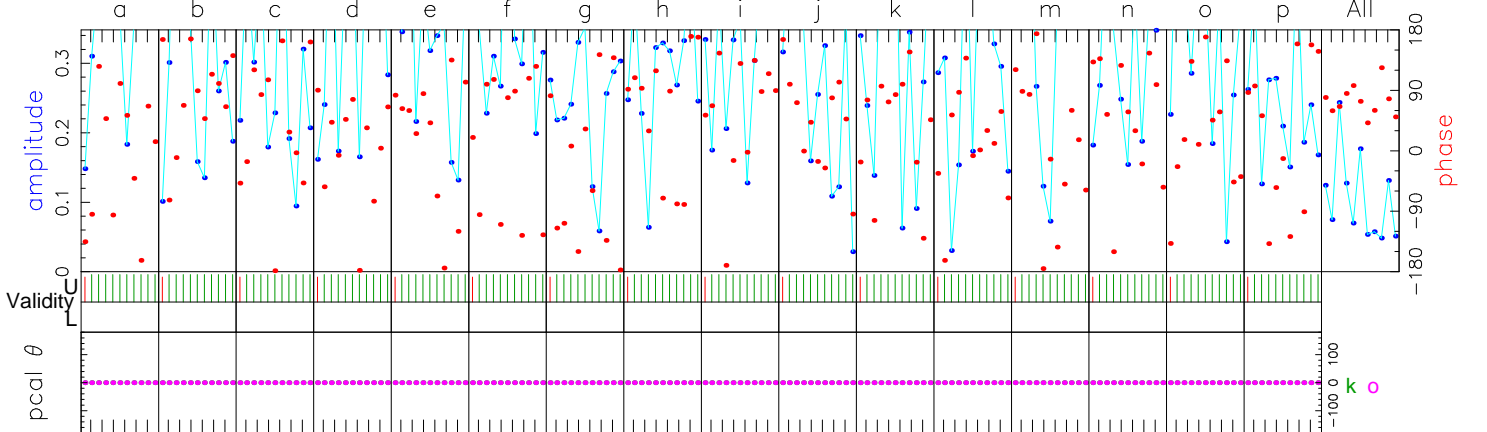


Fringe quality 0

SNR 5.6
Int time 407.733
Amp 0.116
Phase 73.5
PFD 9.9e-01
Delays (us)
SBD 0.392660
MBD -0.004331
Fringe rate (Hz)
0.543519
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042828
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

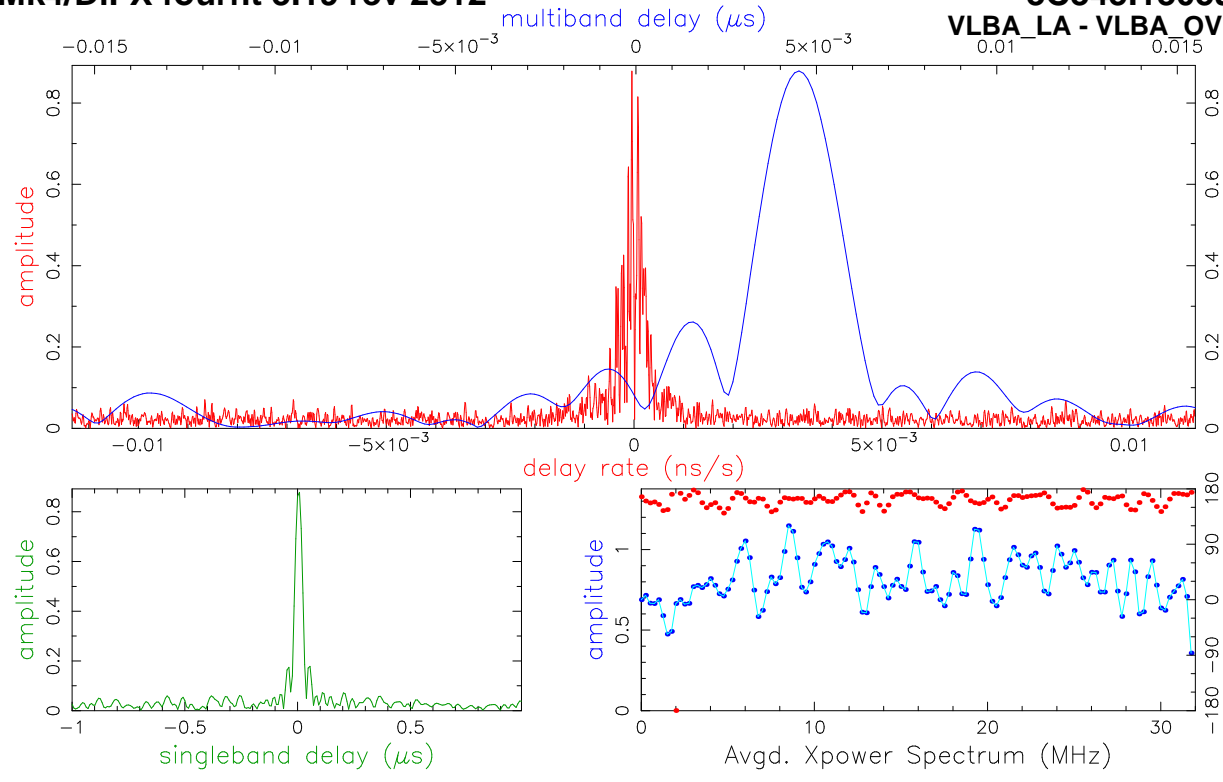
Amp. and Phase vs. time for each freq., 11 segs, 73 APs / seg (37.38 sec / seg.), time ticks 60 sec



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

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

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

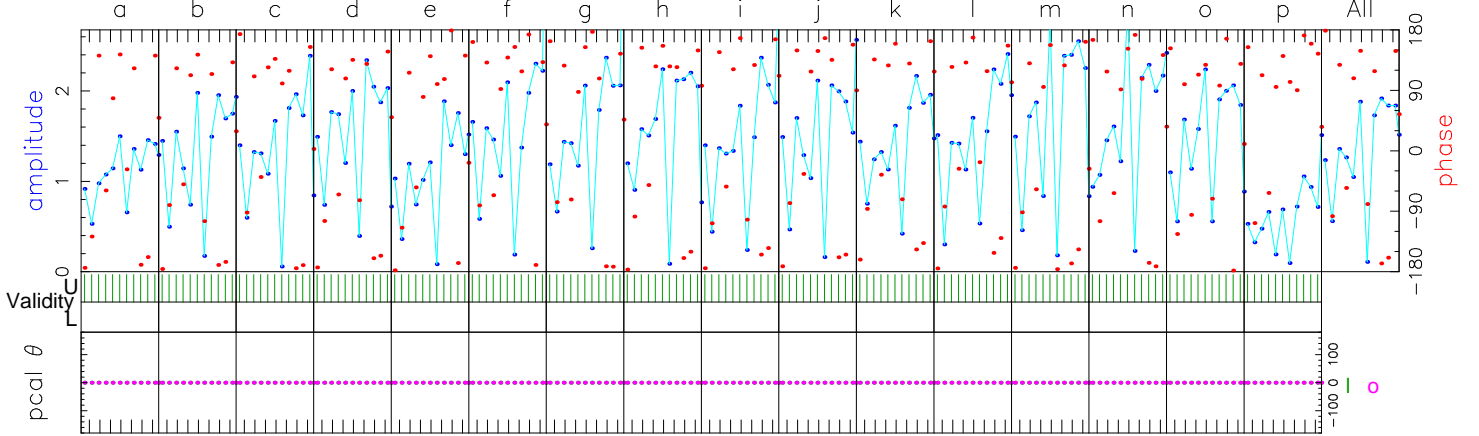


Fringe quality 3

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

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042822
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

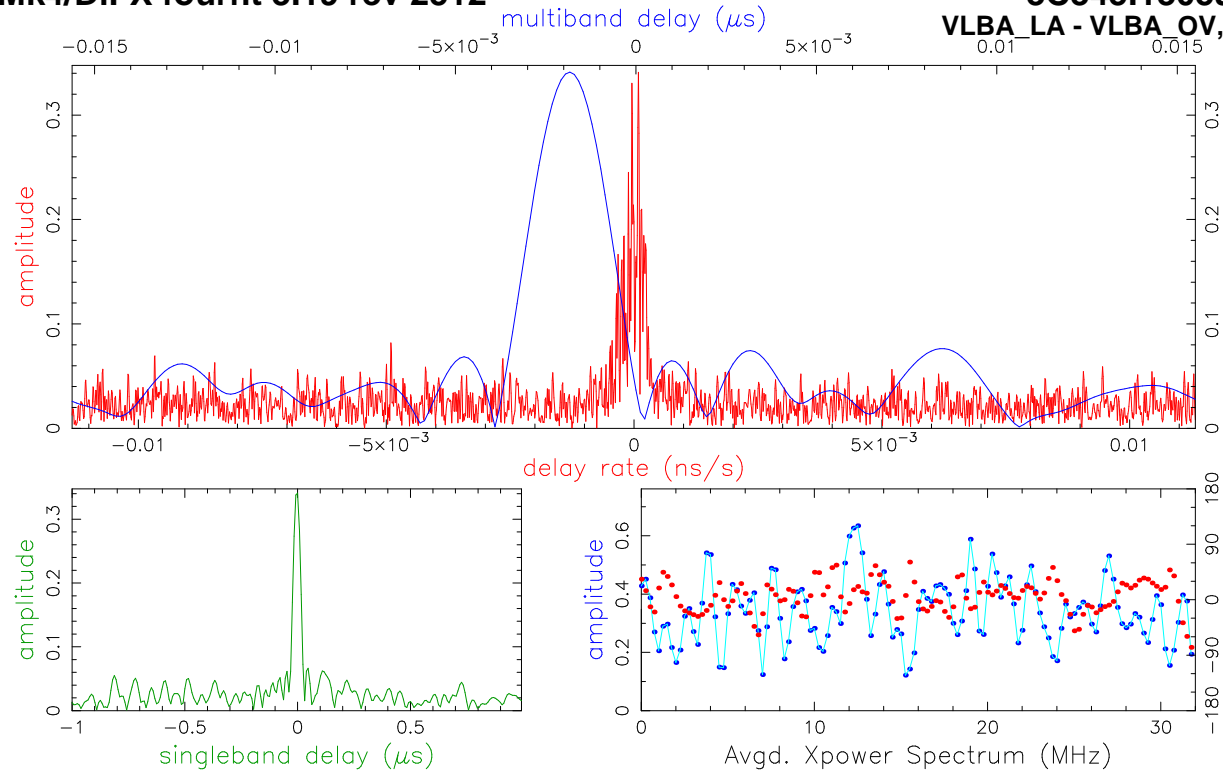
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)	2.41250016585E+03		Apriori delay (usec)		2.41249567319E+03		Resid mbdelay (usec)		4.49265E-03		+/- 2.2E-05							
Sband delay (usec)	2.41250031319E+03		Apriori clock (usec)		-1.7370033E+01		Resid sbdelay (usec)		4.64000E-03		+/- 3.5E-04							
Phase delay (usec)	2.41249567845E+03		Apriori clockrate (us/s)		-3.5245298E-07		Resid phdelay (usec)		5.25410E-06		+/- 7.5E-08							
Delay rate (us/s)	-4.29120559642E-02		Apriori rate (us/s)		-4.29120147566E-02		Resid rate (us/s)		-4.12076E-08		+/- 3.2E-10							
Total phase (deg)	266.9		Apriori accel (us/s/s)		-1.43902509739E-05		Resid phase (deg)		162.9		+/- 2.3							
ph/seg (deg)	RMS	Theor.	Amplitude		0.892 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5									
amp/seg (%)	69.7	4.0	Search (2048X64)		0.854		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000							
ph/frq (deg)	81.0	7.0	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)		-0.016 0.016					
amp/frq (%)	12.4	4.7	Inc. seg. avg.		1.342		Sample rate(MISamp/s): 64		dr window (ns/s)		-0.011 0.011							
	21.4	8.1	Inc. frq. avg.		0.893		Data rate(Mb/s): 2048		nlags: 128		t_cohere infinite		ion window (TEC)		0.00 0.00			

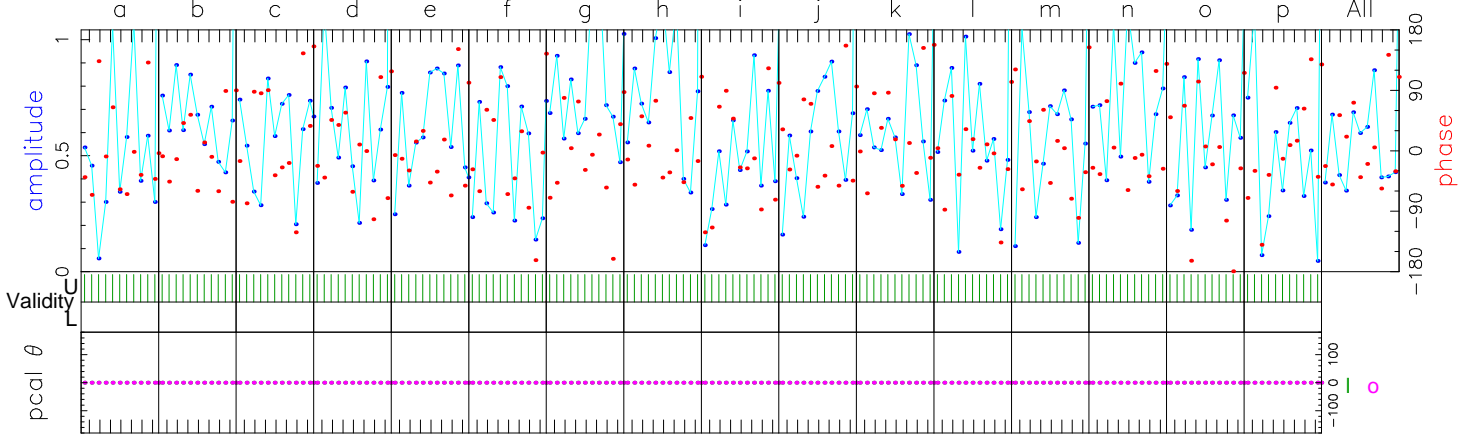
l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.220.1305JH



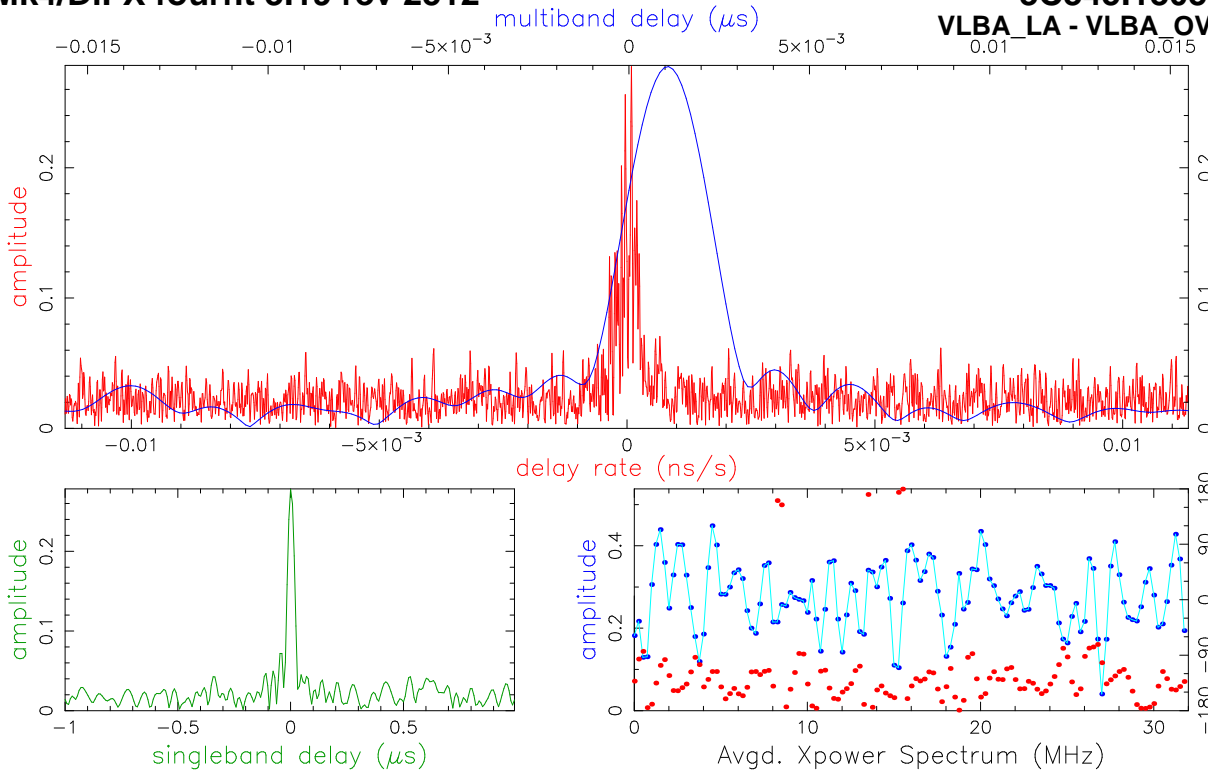
Fringe quality 7
SNR 19.2
Int time 406.934
Amp 0.348
Phase -4.8
PFD 0.0e+00
Delays (us)
SBD -0.003544
MBD -0.001882
Fringe rate (Hz) 0.007516
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042827
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-11.7	-8.4	10.3	-2.9	-15.7	-18.4	-5.3	-4.2	7.7	-16.6	10.6	3.7	-17.9	-9.9	24.8	0.8	Phase	-4.8
	0.3	0.5	0.2	0.3	0.4	0.2	0.5	0.6	0.2	0.4	0.3	0.4	0.4	0.5	0.2	0.2	Ampl.	0.3
	128.0	128.4	127.6	129.3	129.3	176.6	128.9	129.1	68.7	128.7	128.9	129.0	128.6	128.3	127.9	127.4	Sbd box	128.5
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	2.41249379117E+03			Apriori delay (usec)			2.41249567319E+03			Resid mbdelay (usec)			-1.88203E-03			+/- 5.6E-05		
Sband delay (usec)	2.41249212919E+03			Apriori clock (usec)			-1.7370033E+01			Resid sbdelay (usec)			-3.54400E-03			+/- 9.0E-04		
Phase delay (usec)	2.41249567304E+03			Apriori clockrate (us/s)			-3.5245298E-07			Resid phdelay (usec)			-1.54201E-07			+/- 1.9E-07		
Delay rate (us/s)	-4.29119275083E-02			Apriori rate (us/s)			-4.29120147566E-02			Resid rate (us/s)			8.72482E-08			+/- 8.2E-10		
Total phase (deg)	99.2			Apriori accel (us/s/s)			-1.43902509739E-05			Resid phase (deg)			-4.8			+/- 6.0		

RMS Theor. Amplitude 0.348 +/- 0.018
ph/seg (deg) 59.6 10.4 Search (2048X64) 0.338
amp/seg (%) 73.0 18.1 Interp. 0.000
ph/frq (deg) 12.8 12.0 Inc. seg. avg. 0.527
amp/frq (%) 33.1 20.9 Inc. frq. avg. 0.339
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
l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.239.1305JH

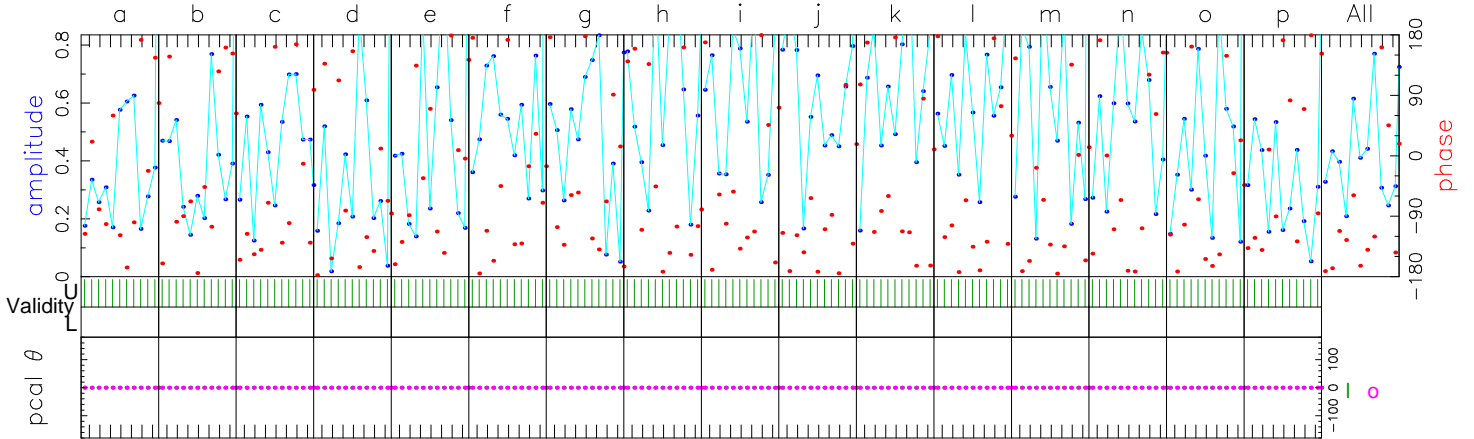


Fringe quality 9

SNR 15.4
Int time 406.934
Amp 0.278
Phase -134.8
PFD 2.0e-44
Delays (us)
SBD 0.001388
MBD 0.001080
Fringe rate (Hz) 0.007244
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042831
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

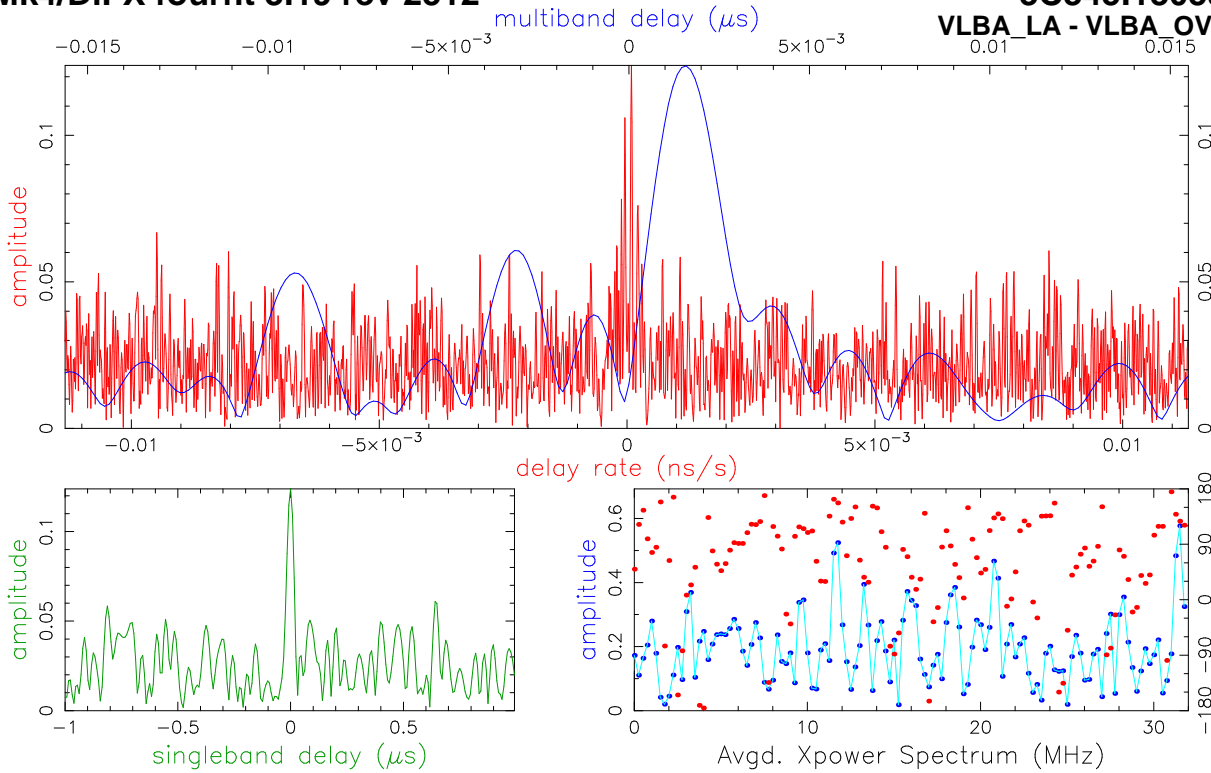
Amp. and Phase vs. time for each freq., 12 segs, 72 APs / seg (36.86 sec / seg.), time ticks 60 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-119.6	-152.4	-127.2	-157.6	-122.5	-125.3	-130.8	-141.6	-130.7	-137.5	-135.1	-136.0	-136.6	-148.3	-128.3	-123.4		Phase	-134.8
	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2		Ampl.	0.3
	233.3	248.5	129.4	68.7	32.0	128.6	128.8	128.8	129.7	129.3	129.4	129.6	129.1	128.8	128.8	129.2		Sbd box	129.2
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		APs used	1000
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	1000
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	1000
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	1000
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	1000
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	1000
																		Tracks	1000
Group delay (usec)(sbd)		2.41249675276E+03		Apriori delay (usec)	2.41249567319E+03		Resid mbdelay (usec)	1.07957E-03		+/-	7.0E-05								
Sband delay (usec)		2.41249706119E+03		Apriori clock (usec)	-1.7370033E+01		Resid sbdelay (usec)	1.38800E-03		+/-	1.1E-03								
Phase delay (usec)		2.41249566885E+03		Apriori clockrate (us/s)	-3.5245298E-07		Resid phdelay (usec)	-4.34586E-06		+/-	2.4E-07								
Delay rate (us/s)		-4.29119306565E-02		Apriori rate (us/s)	-4.29120147566E-02		Resid rate (us/s)	8.41001E-08		+/-	1.0E-09								
Total phase (deg)			-30.8	Apriori accel (us/s/s)	-1.43902509739E-05		Resid phase (deg)	-134.8		+/-	7.5								

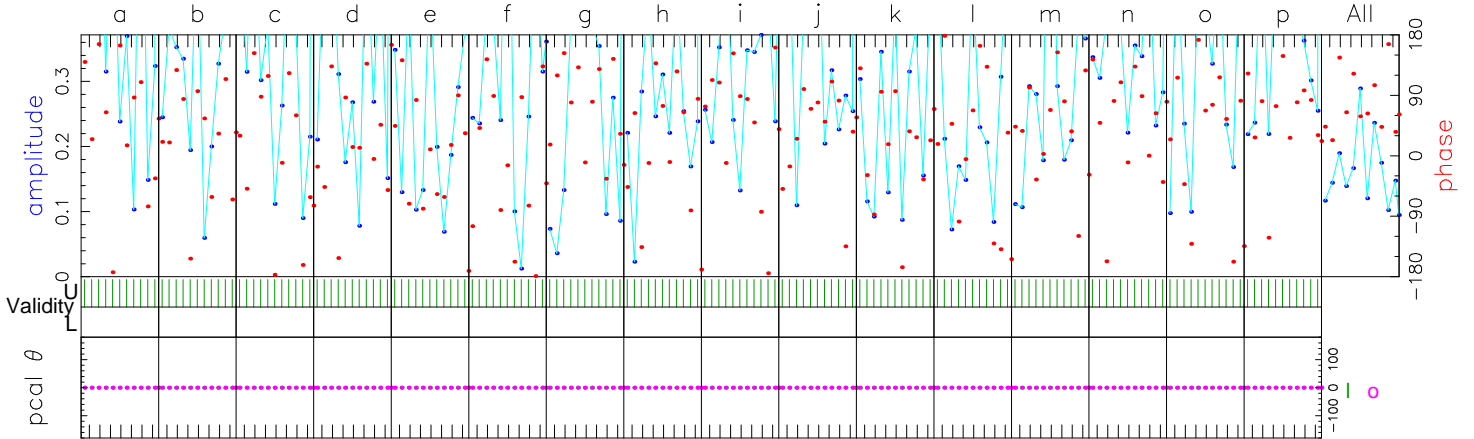
ph/seg (deg) 65.5 12.9 Theor. Amplitude 0.278 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.0 22.5 Search (2048X64) 0.268 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.4 14.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 29.8 26.0 Inc. seg. avg. 0.398 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.272 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.255.1305JH



Fringe quality 0
SNR 6.8
Int time 406.934
Amp 0.124
Phase 76.2
PFD 2.4e-03
Delays (us)
SBD -0.000853
MBD 0.001563
Fringe rate (Hz)
0.007372
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042837
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	115.9	66.3	88.4	56.2	10.5	157.0	90.6	64.9	96.8	58.2	53.5	65.3	73.3	78.3	102.1	77.8	Phase	76.2
	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	Ampl.	0.1
	74.9	1.4	94.1	39.7	82.3	255.6	2.8	233.9	115.8	129.9	59.0	69.9	33.7	29.2	100.4	129.1	Sbd box	128.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

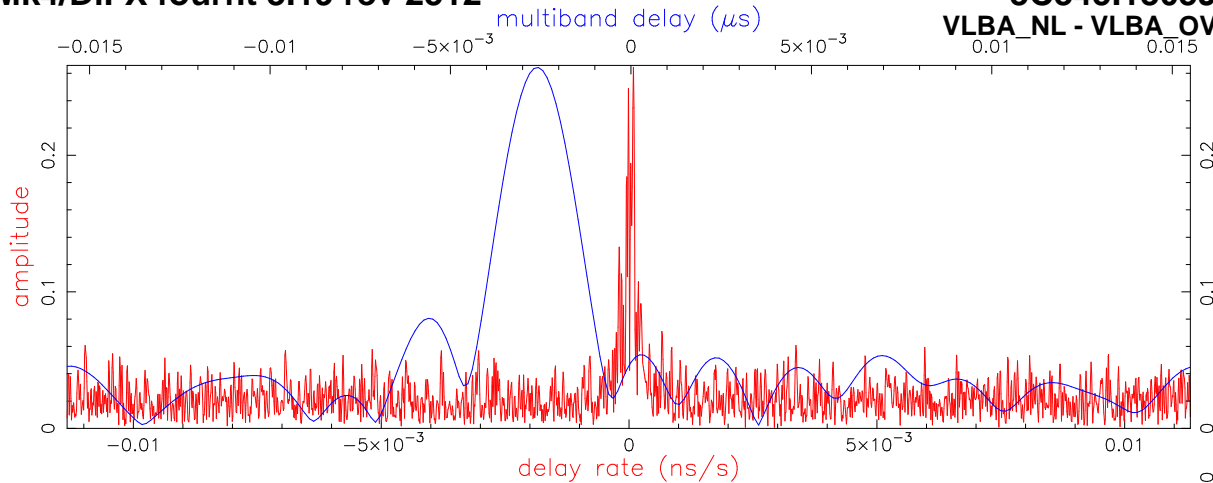
Group delay (usec)(sbd) 2.41249723642E+03 Apriori delay (usec) 2.41249567319E+03 Resid mbdelay (usec) 1.56322E-03 +/- 1.6E-04
 Sband delay (usec) 2.41249482019E+03 Apriori clock (usec) -1.7370033E+01 Resid sbdelay (usec) -8.53000E-04 +/- 2.5E-03
 Phase delay (usec) 2.41249567565E+03 Apriori clockrate (us/s) -3.5245298E-07 Resid phdelay (usec) 2.45835E-06 +/- 5.4E-07
 Delay rate (us/s) -4.29119291770E-02 Apriori rate (us/s) -4.29120147566E-02 Resid rate (us/s) 8.55796E-08 +/- 2.3E-09
 Total phase (deg) 180.2 Apriori accel (us/s/s) -1.43902509739E-05 Resid phase (deg) 76.2 +/- 16.8

RMS Theor. Amplitude 0.124 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 45.8 29.0 Search (2048X64) 0.122 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 54.7 50.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 33.2 33.5 Inc. seg. avg. 0.147 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.6 58.5 Inc. frq. avg. 0.116 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/lo..1305JH Output file: /Exps/c192a/v2/1234/No0001/lo.W.279.1305JH

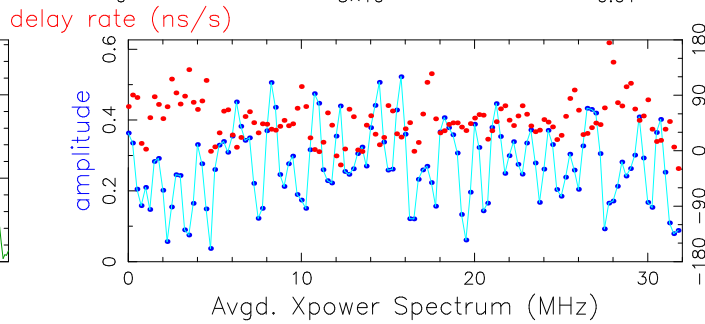
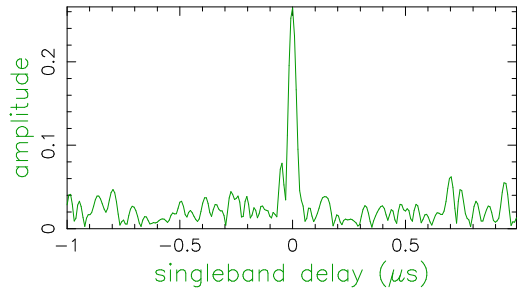
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, no
VLBA_NL - VLBA_OV, fgroup W, pol LL



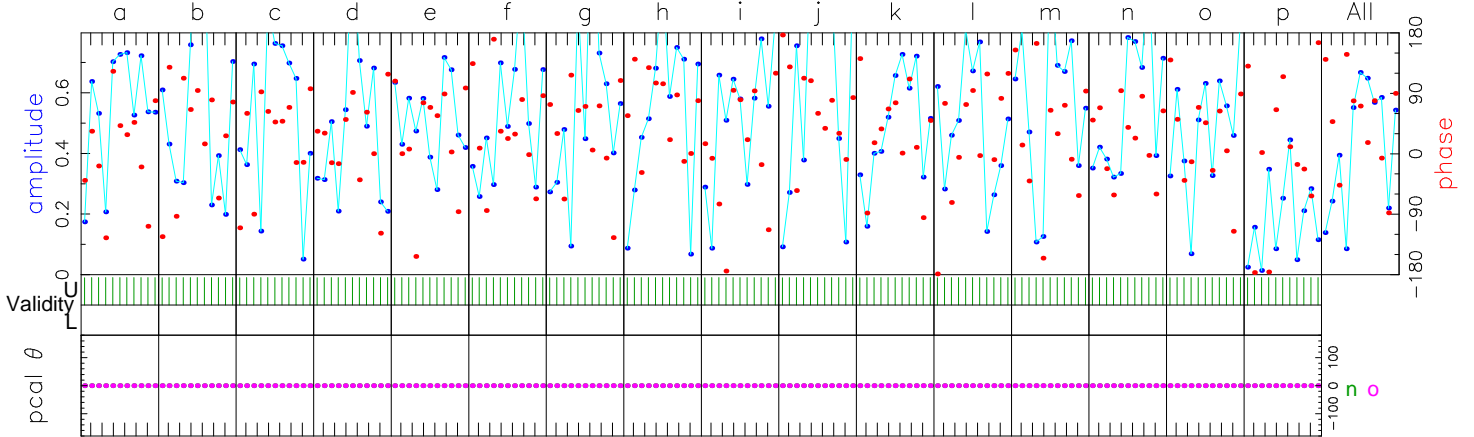
Fringe quality 9

SNR 14.7
Int time 410.824
Amp 0.266
Phase 49.1
PFD 2.4e-40
Delays (us)
SBD -0.001921
MBD -0.002608
Fringe rate (Hz)
0.007171
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
2020:093:042832
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

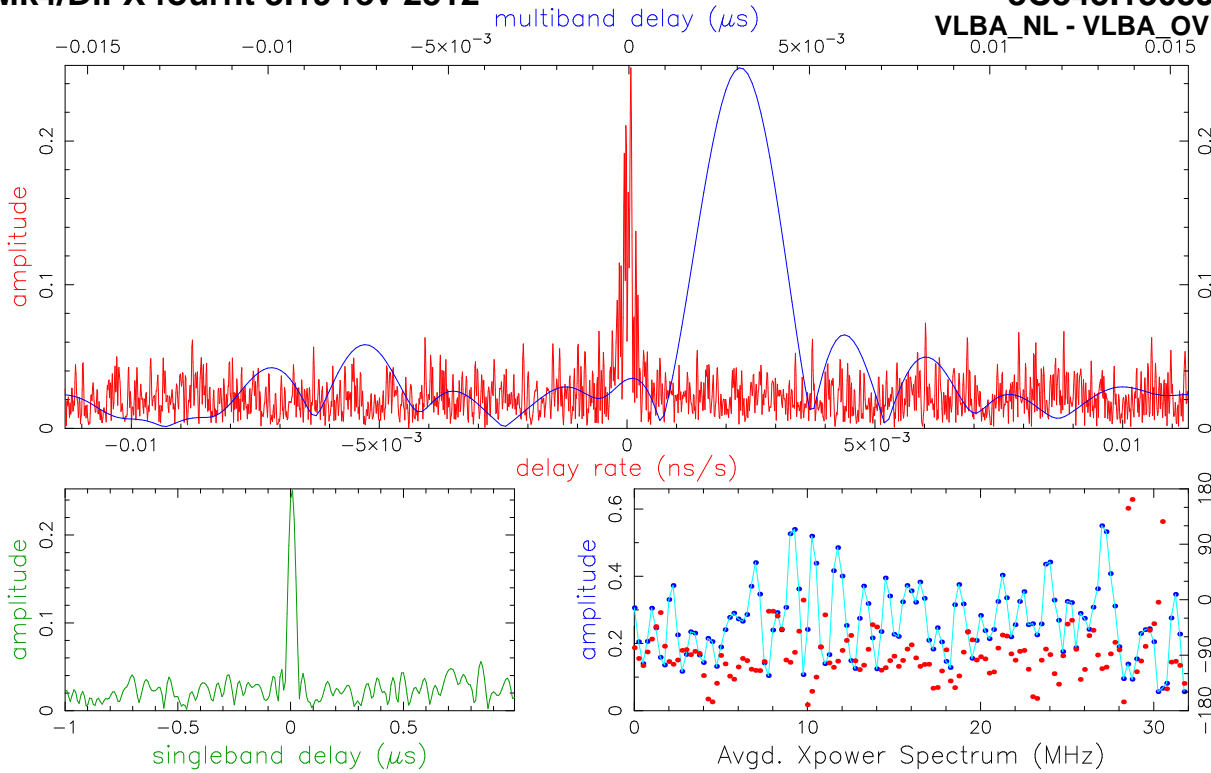


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n: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		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)	5.79987454269E+03			Apriori delay (usec)			5.79987715098E+03			Resid mbdelay (usec)			-2.60829E-03			+/- 7.3E-05		
Sband delay (usec)	5.79987522948E+03			Apriori clock (usec)			9.8455582E+00			Resid sbdelay (usec)			-1.92150E-03			+/- 1.2E-03		
Phase delay (usec)	5.79987715256E+03			Apriori clockrate (us/s)			1.3324251E-07			Resid phdelay (usec)			1.58479E-06			+/- 2.5E-07		
Delay rate (us/s)	-2.30854664492E-01			Apriori rate (us/s)			-2.30854747736E-01			Resid rate (us/s)			8.32442E-08			+/- 1.1E-09		
Total phase (deg)	331.9			Apriori accel (us/s/s)			-2.63821853623E-05			Resid phase (deg)			49.1			+/- 7.8		

ph/seg (deg) RMS Theor. Amplitude 0.266 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 96.6 22.5 Search (2048X64) 0.253 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 17.2 15.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 36.1 27.1 Inc. seg. avg. 0.412 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
n: az 74.7 el 50.6 pa -69.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/no..1305JH Output file: /Exps/c192a/v2/1234/No0001/no.W.258.1305JH simultaneous interpolator

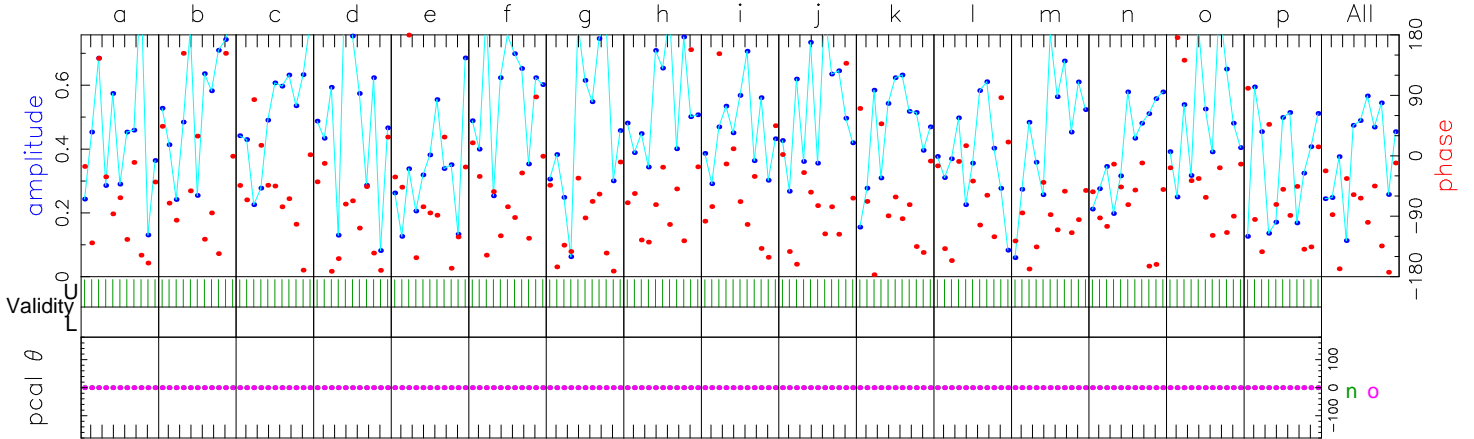
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, no
VLBA_NL - VLBA_OV, fgroup W, pol RR



Fringe quality 9
SNR 14.0
Int time 410.824
Amp 0.253
Phase -79.8
PFD 8.7e-36
Delays (us)
SBD 0.005741
MBD 0.003080
Fringe rate (Hz) 0.006777
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
2020:093:042838
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

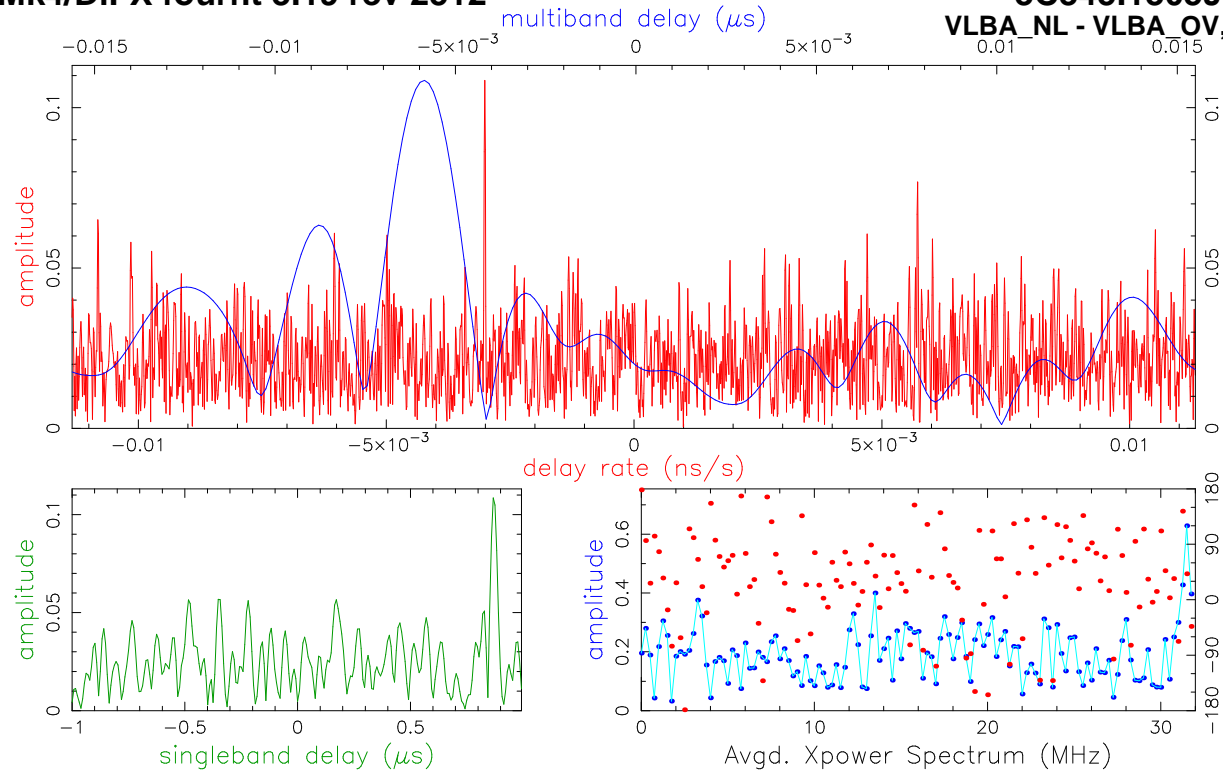


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-105.8	-88.7	-55.0	-79.9	-75.6	-66.7	-83.5	-84.0	-74.6	-93.3	-90.4	-64.7	-93.0	-75.9	-58.3	-86.9	Phase	-79.8
	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.2	0.3	0.3	0.2	0.4	0.3	0.3	0.2	Ampl.	0.2
	128.4	69.6	129.5	129.3	142.8	150.8	129.4	129.0	235.0	130.5	131.5	230.6	130.3	227.2	129.4	130.5	Sbd box	129.7
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
n	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	
n: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	
n: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	
n	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	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	5.79988023078E+03			Apriori delay (usec)			5.79987715098E+03			Resid mbdelay (usec)			3.07980E-03			+/- 7.7E-05		
Sband delay (usec)	5.79988289198E+03			Apriori clock (usec)			9.8455582E+00			Resid sbdelay (usec)			5.74100E-03			+/- 1.2E-03		
Phase delay (usec)	5.79987714841E+03			Apriori clockrate (us/s)			1.3324251E-07			Resid phdelay (usec)			-2.57199E-06			+/- 2.6E-07		
Delay rate (us/s)	-2.30854669062E-01			Apriori rate (us/s)			-2.30854747736E-01			Resid rate (us/s)			7.86740E-08			+/- 1.1E-09		
Total phase (deg)	202.9			Apriori accel (us/s/s)			-2.63821853623E-05			Resid phase (deg)			-79.8			+/- 8.2		

ph/seg (deg) 54.0 13.6 Theor. Amplitude 0.253 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.6 23.7 Search (2048X64) 0.248 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 14.2 16.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 25.8 28.6 Inc. seg. avg. 0.375 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
n: az 74.7 el 50.6 pa -69.4 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/no..1305JH Output file: /Exps/c192a/v2/1234/No0001/no.W.284.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, no
VLBA_NL - VLBA_OV, fgroup W, pol LR

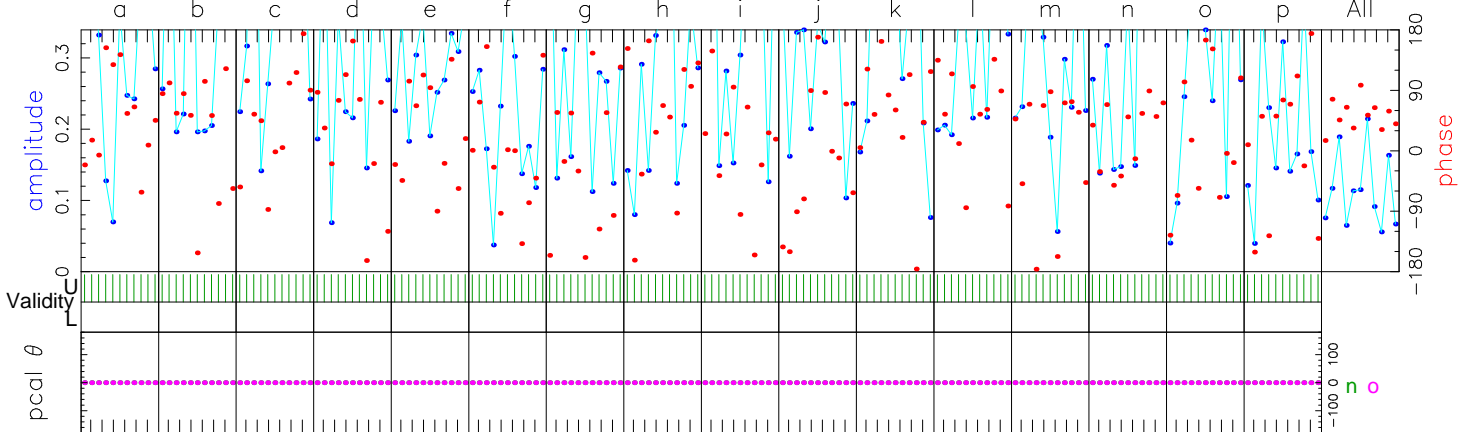


Fringe quality 0

SNR 6.1
Int time 410.824
Amp 0.113
Phase 54.6
PFD 2.5e-01
Delays (us)
SBD 0.869847
MBD -0.005894
Fringe rate (Hz)
-0.260234
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
2020:093:042843
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
16.9	76.5	67.6	66.5	23.7	-4.2	-135.0	74.3	40.3	-65.7	93.0	78.5	64.9	49.4	-19.2	52.2	Phase	54.6	
0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.1	0.1	Ampl.	0.1	
99.7	159.4	248.9	190.7	56.9	174.7	71.4	1.5	38.1	60.0	241.4	185.4	60.2	240.1	146.1	113.7	Sbd box	240.3	
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
n	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	
n: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	
n: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	
n	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	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

Group delay (usec)(sbd) 5.80074625660E+03 Apriori delay (usec) 5.79987715098E+03 Resid mbdelay (usec) -5.89438E-03 +/- 1.8E-04
 Sband delay (usec) 5.80074699848E+03 Apriori clock (usec) 9.8455582E+00 Resid sbdelay (usec) 8.69847E-01 +/- 2.8E-03
 Phase delay (usec) 5.79987715274E+03 Apriori clockrate (us/s) 1.3324251E-07 Resid phdelay (usec) 1.76114E-06 +/- 6.1E-07
 Delay rate (us/s) -2.30857768795E-01 Apriori rate (us/s) -2.30854747736E-01 Resid rate (us/s) -3.02106E-06 +/- 2.6E-09
 Total phase (deg) 337.3 Apriori accel (us/s/s) -2.63821853623E-05 Resid phase (deg) 54.6 +/- 18.8

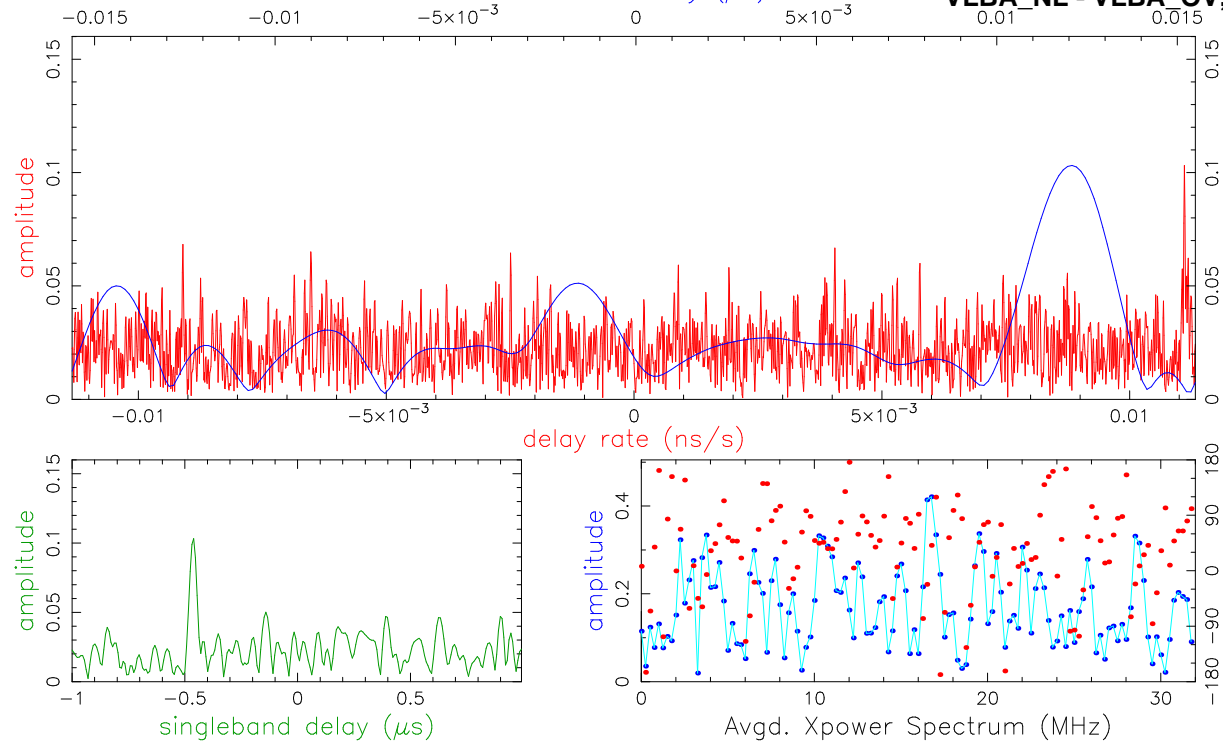
RMS Theor. Amplitude 0.113 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 22.0 31.2 Search (2048X64) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 46.3 54.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.6 37.6 Inc. seg. avg. 0.103 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.6 65.7 Inc. frq. avg. 0.113 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/no..1305JH Output file: /Exps/c192a/v2/1234/No0001/no.W.306.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

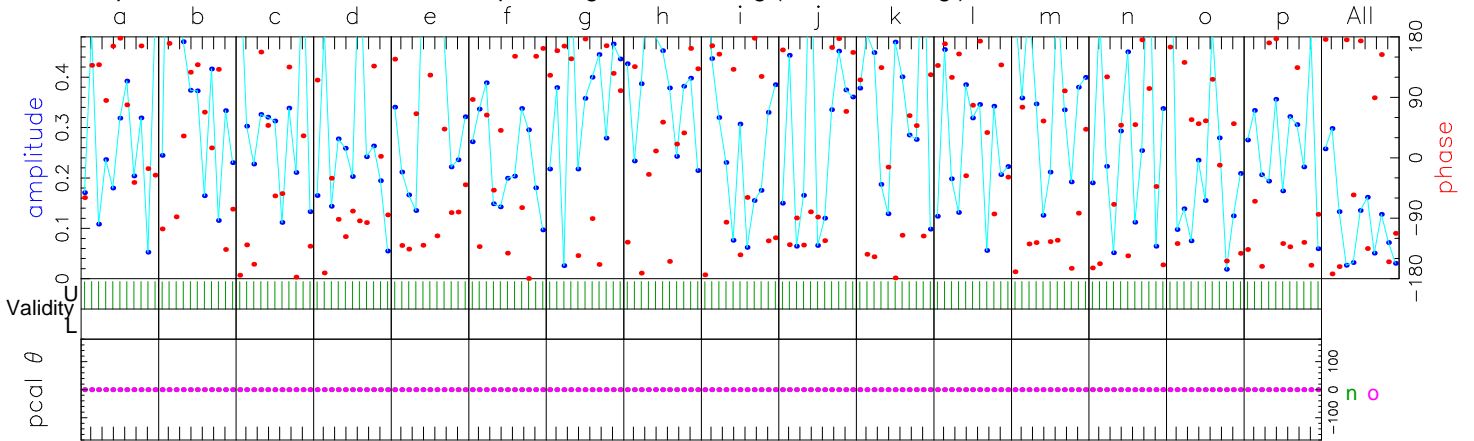
3C345.1305JH, No0001, no
VLBA_NL - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



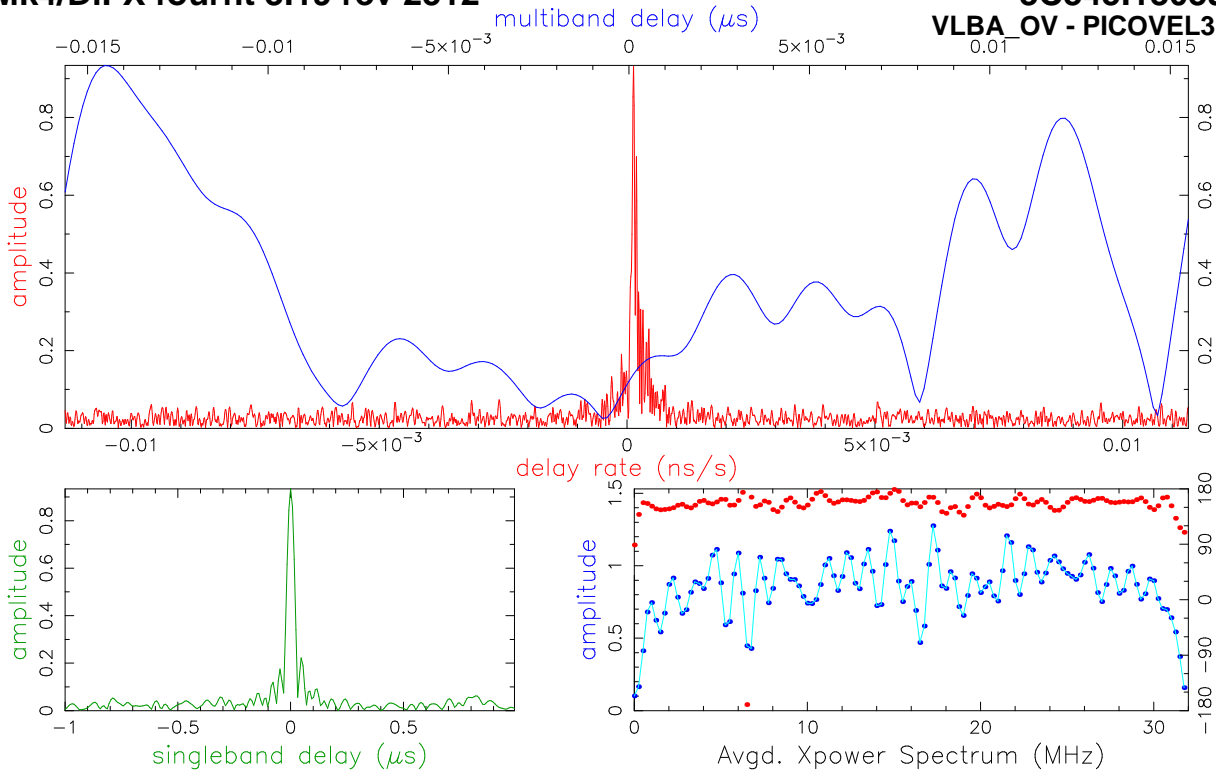
Fringe quality 0
SNR 5.8
Int time 410.824
Amp 0.160
Phase -173.0
PFD 8.9e-01
Delays (us)
SBD -0.463027
MBD 0.012050
Fringe rate (Hz) 0.958371
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042849
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
	120.8	175.2	172.1	-111.7	-139.2	169.4	161.5	65.2	-163.4	-152.0	-160.0	152.3	-145.6	161.9	127.0	-150.8	Phase	-173.0
	0.1	0.1	0.1	0.2	0.2	0.1	0.4	0.1	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.3	Ampl.	0.2
	206.2	26.3	32.6	198.8	111.0	60.9	144.4	19.6	70.4	19.2	221.6	15.9	85.5	245.5	129.7	90.1	Sbd box	69.7
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n: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	
n	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	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	5.79942045074E+03			Apriori delay (usec)			5.79987715098E+03			Resid mbdelay (usec)			1.20498E-02			+/- 1.9E-04		
Sband delay (usec)	5.79941412398E+03			Apriori clock (usec)			9.8455582E+00			Resid sbdelay (usec)			-4.63027E-01			+/- 3.0E-03		
Phase delay (usec)	5.79987714540E+03			Apriori clockrate (us/s)			1.3324251E-07			Resid phdelay (usec)			-5.57891E-06			+/- 6.4E-07		
Delay rate (us/s)	-2.30843622004E-01			Apriori rate (us/s)			-2.30854747736E-01			Resid rate (us/s)			1.11257E-05			+/- 2.7E-09		
Total phase (deg)	109.7			Apriori accel (us/s/s)			-2.63821853623E-05			Resid phase (deg)			-173.0			+/- 19.9		

ph/seg (deg) RMS Theor. Amplitude 0.160 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.7 33.0 Search (2048X64) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 85.9 57.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.4 39.8 Inc. seg. avg. 0.159 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 61.4 69.5 Inc. frq. avg. 0.155 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1675.956 -1330.225 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/no..1305JH Output file: /Exps/c192a/v2/1234/No0001/no.W.330.1305JH



Fringe quality 1

SNR 45.3

Int time 314.116

Amp 0.934

Phase -116.6

PFD 0.0e+00

Delays (us)

SBD 0.000360

MBD -0.014476

Fringe rate (Hz)

0.011070

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

2020:093:042834

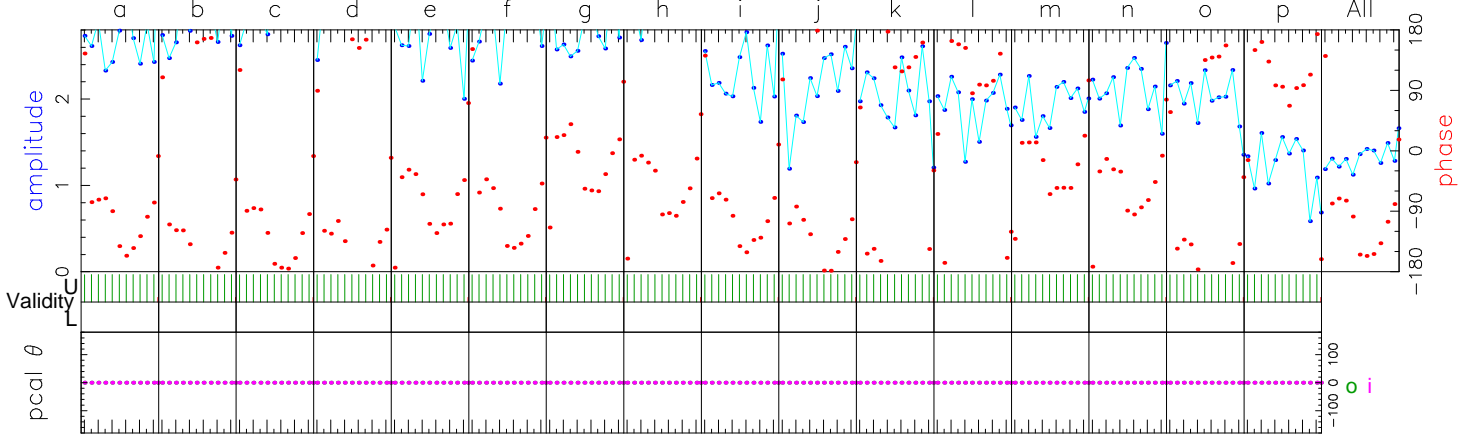
2020:014:135814

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
	-111.7	-158.3	-134.2	-152.7	-80.0	-99.2	-19.7	-55.0	-110.8	-143.7	161.4	133.6	-26.9	-57.8	176.8	109.7	Phase	-116.6
	2.0	2.2	2.2	2.2	1.9	1.9	2.0	2.2	1.6	1.5	1.4	1.3	1.4	1.5	1.4	0.9	Ampl.	1.7
	128.1	128.9	129.0	128.8	128.9	128.7	128.5	128.9	128.5	128.5	128.7	128.3	128.7	128.7	128.7	126.8	Sbd box	129.0
UL	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used	
o	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	
oi	0:0	0:0	0:0	0:0	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	
oi	0:0	0:0	0:0	0:0	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	
o	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	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		-7.92444337591E+03				Apriori delay (usec)		-7.92442890029E+03			Resid mbdelay (usec)		-1.44756E-02				+/-	2.4E-05
Sband delay (usec)		-7.92442854029E+03				Apriori clock (usec)		1.7118748E+01			Resid sbdelay (usec)		3.60000E-04				+/-	3.8E-04
Phase delay (usec)		-7.92442890406E+03				Apriori clockrate (us/s)		3.5398100E-07			Resid phdelay (usec)		-3.76114E-06				+/-	8.2E-08
Delay rate (us/s)		1.49545775433E+00				Apriori rate (us/s)		1.49545762581E+00			Resid rate (us/s)		1.28517E-07				+/-	4.5E-10
Total phase (deg)					-286.3	Apriori accel (us/s/s)		4.23835004818E-05			Resid phase (deg)		-116.6				+/-	2.5

ph/seg (deg) 47.7 4.4 Search (2048X64) 0.912 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

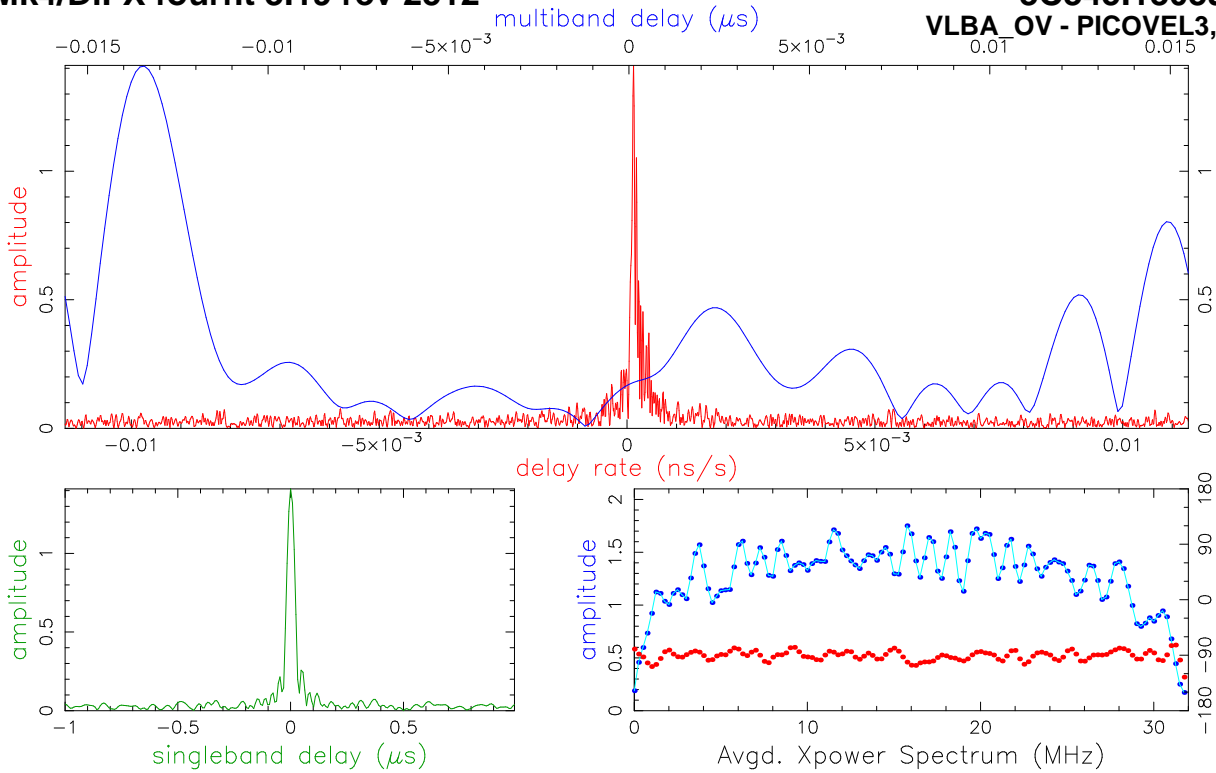
amp/seg (%) 42.2 7.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 71.5 5.1 Inc. seg. avg. 1.308 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 92.5 8.8 Inc. frq. avg. 1.701 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

o: az 60.7 el 29.9 pa -64.6 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11070.428 2921.183 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oi..1305JH Output file: /Exps/c192a/v2/1234/No0001/oi.W.262.1305JH

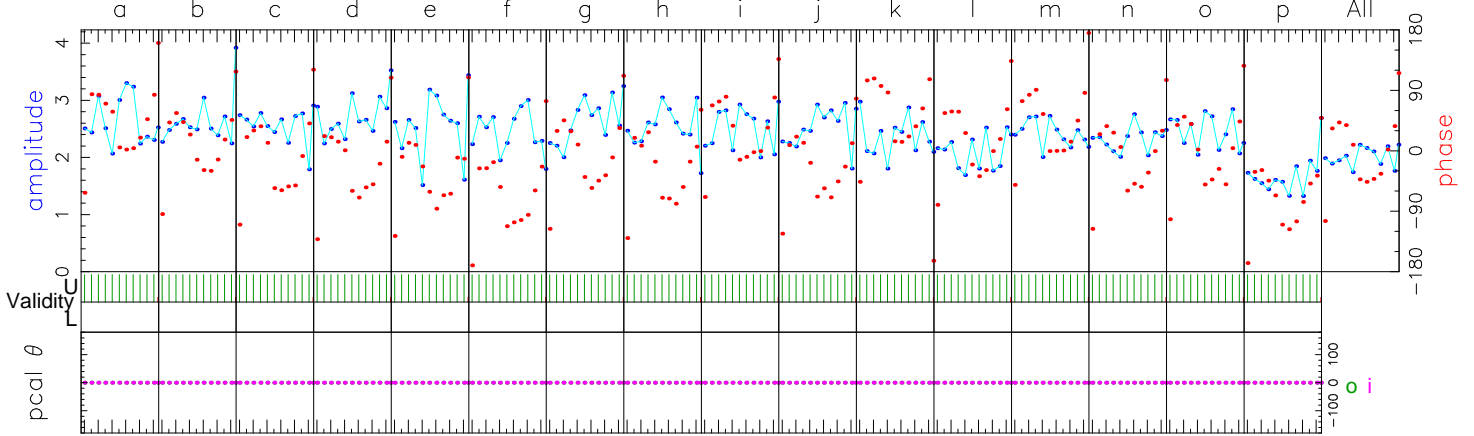


Fringe quality 2

SNR 68.4
Int time 314.116
Amp 1.411
Phase -7.7
PFD 0.0e+00
Delays (us)
SBD 0.000949
MBD -0.013463
Fringe rate (Hz)
0.011125
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

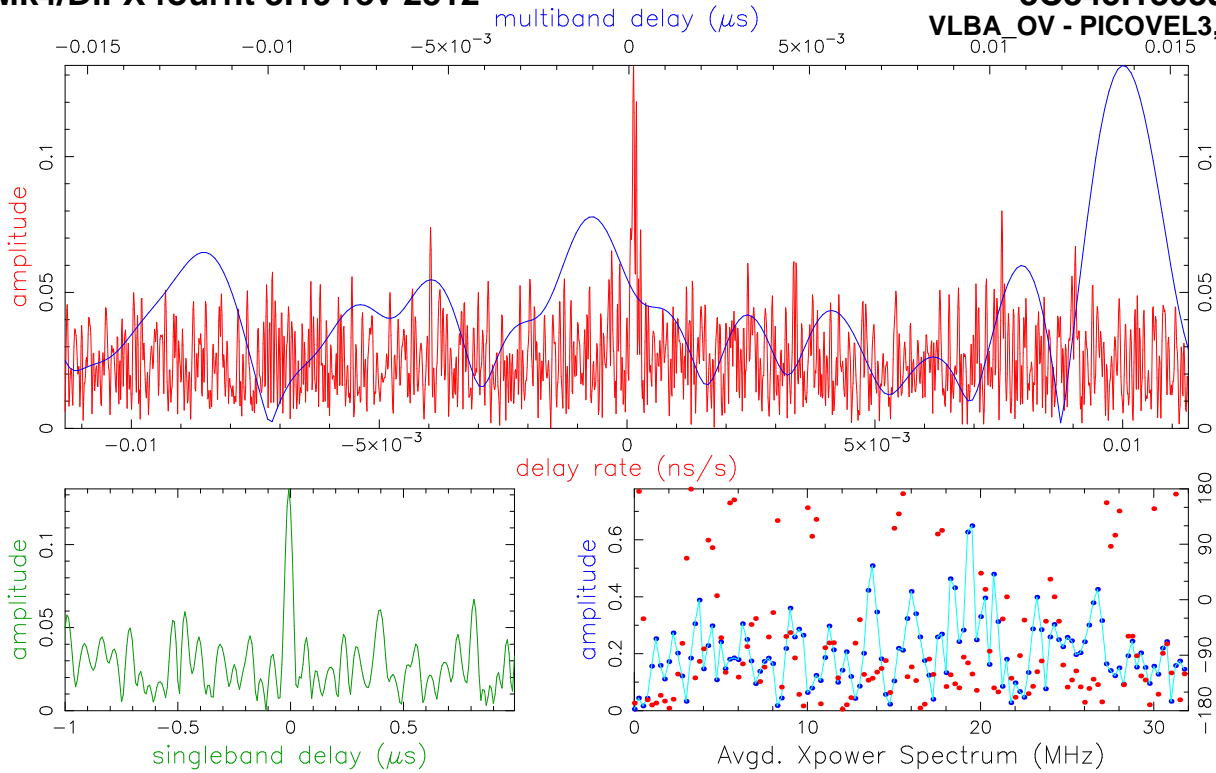
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042839
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



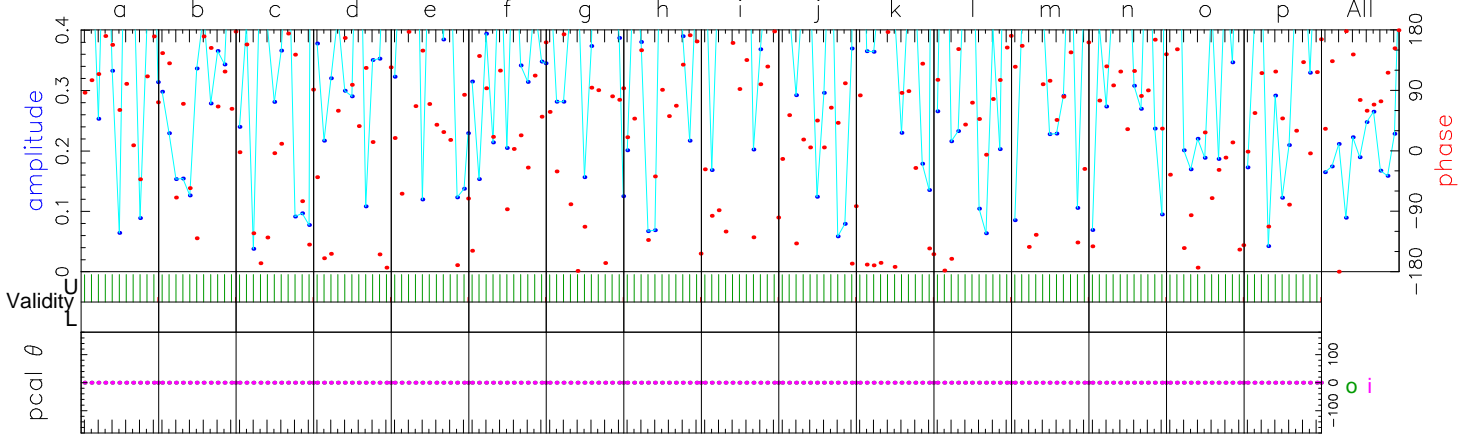
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	37.4	9.8	-16.0	-25.4	-41.1	-68.6	-11.4	-31.7	29.0	-31.4	54.1	13.9	39.4	-13.7	-7.3	-70.3	Phase	-7.7				
o	1.9	1.9	1.7	1.8	1.8	1.7	1.9	1.8	1.7	1.9	1.6	1.4	1.7	1.6	1.7	1.2	Ampl.	1.7				
i	128.8	129.1	129.3	129.2	128.9	128.9	129.0	129.2	128.9	128.9	128.5	128.8	128.9	128.4	129.0	127.2	Sbd box	129.1				
o	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					
o	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					
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					
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-7.92444236341E+03														Apriori delay (usec)	-7.92442890029E+03	Resid mbdelay (usec)	-1.34631E-02	+/-	1.6E-05
Sband delay (usec)			-7.92442795129E+03														Apriori clock (usec)	1.7118748E+01	Resid sbdelay (usec)	9.49000E-04	+/-	2.5E-04
Phase delay (usec)			-7.92442890054E+03														Apriori clockrate (us/s)	3.5398100E-07	Resid phdelay (usec)	-2.48103E-07	+/-	5.4E-08
Delay rate (us/s)			1.49545775496E+00														Apriori rate (us/s)	1.49545762581E+00	Resid rate (us/s)	1.29145E-07	+/-	3.0E-10
Total phase (deg)																	Apriori accel (us/s/s)	4.23835004818E-05	Resid phase (deg)	-7.7	+/-	1.7

ph/seg (deg) 47.3 2.9 Search (2048X64) 1.368 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 43.1 5.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.3 3.4 Inc. seg. avg. 1.996 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 24.6 5.8 Inc. frq. avg. 1.701 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 60.7 el 29.9 pa -64.6 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11070.428 2921.183 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oi..1305JH Output file: /Exps/c192a/v2/1234/No0001/oi.W.291.1305JH



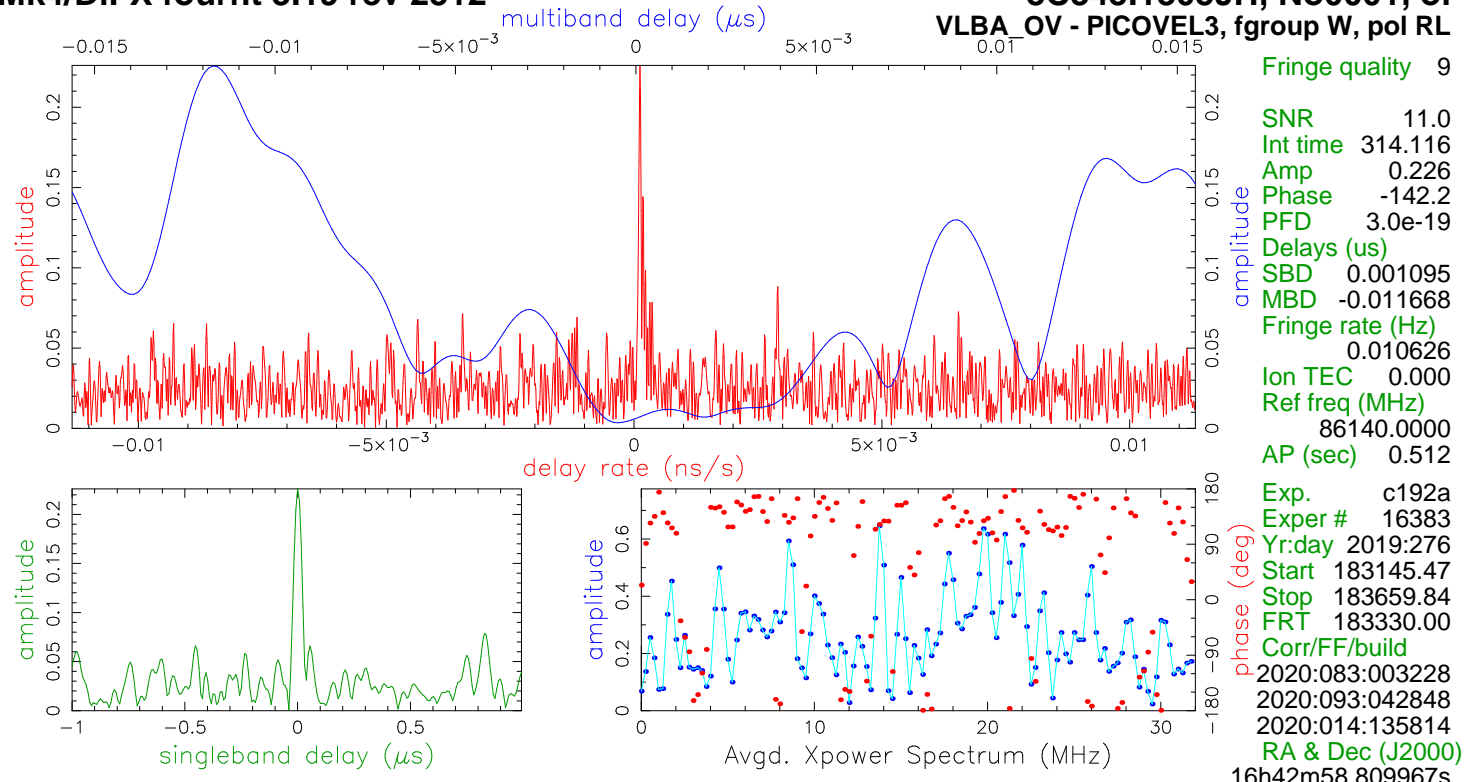
Fringe quality 0
SNR 6.5
Int time 314.116
Amp 0.134
Phase 109.4
PFD 2.6e-02
Delays (us)
SBD -0.007921
MBD 0.013700
Fringe rate (Hz)
0.011275
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183145.47
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042844
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	
116.4	125.4	-177.2	120.3	47.3	62.7	106.1	93.9	178.9	25.9	153.3	121.7	148.6	94.1	-96.3	85.8	85.8	Phase	109.4	
0.3	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.1	0.2	Ampl.	0.2	
45.0	65.2	63.6	218.1	203.3	28.6	12.3	127.1	34.3	132.7	220.1	193.2	16.3	128.0	148.6	48.6	48.6	Sbd box	128.0	
UL	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	614/0	APs used		
o	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		
oi	0:0	0:0	0:0	0:0	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		
oi	0:0	0:0	0:0	0:0	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		
o	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		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)			-7.92444645041E+03					Apriori delay (usec)	-7.92442890029E+03								Resid mbdelay (usec)	1.36999E-02	+/- 1.7E-04
Sband delay (usec)			-7.92443682129E+03					Apriori clock (usec)	1.7118748E+01								Resid sbdelay (usec)	-7.92100E-03	+/- 2.7E-03
Phase delay (usec)			-7.92442889677E+03					Apriori clockrate (us/s)	3.5398100E-07								Resid phdelay (usec)	3.52758E-06	+/- 5.7E-07
Delay rate (us/s)			1.49545775670E+00					Apriori rate (us/s)	1.49545762581E+00								Resid rate (us/s)	1.30886E-07	+/- 3.1E-09
Total phase (deg)								Apriori accel (us/s/s)	4.23835004818E-05								Resid phase (deg)	109.4	+/- 17.7

ph/seg (deg) 48.7 30.7 Search (2048X64) 0.133 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.9 53.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.0 35.4 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.1 61.8 Inc. frq. avg. 0.157 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 60.7 el 29.9 pa -64.6 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11070.428 2921.183 ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oi..1305JH Output file: /Exps/c192a/v2/1234/No0001/oi.W.309.1305JH

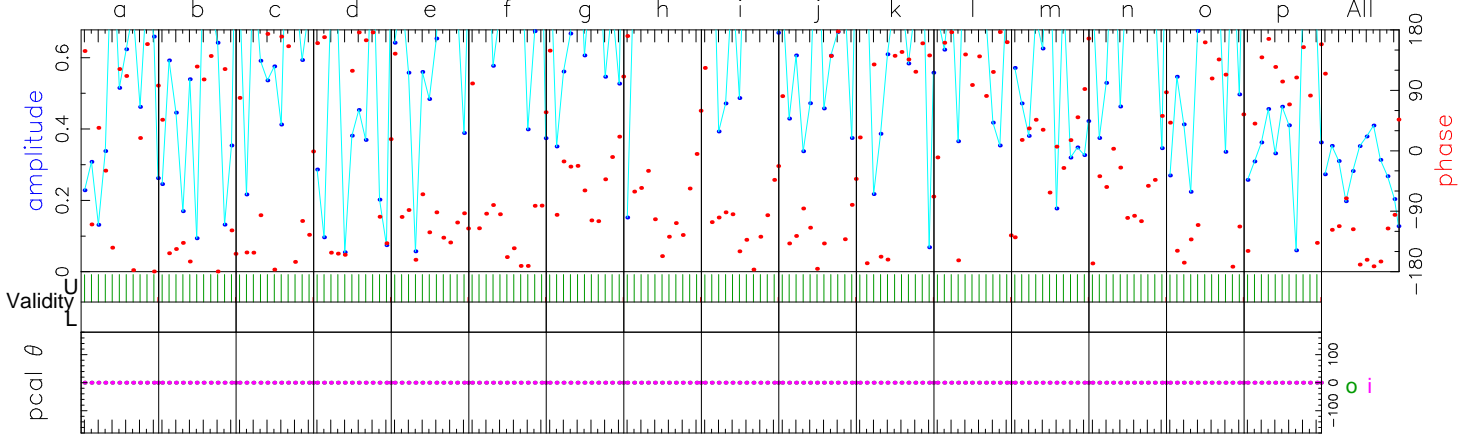


Fringe quality 9

SNR 11.0
Int time 314.116
Amp 0.226
Phase -142.2
PFD 3.0e-19
Delays (us)
SBD 0.001095
MBD -0.011668
Fringe rate (Hz) 0.010626
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
2020:093:042848
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

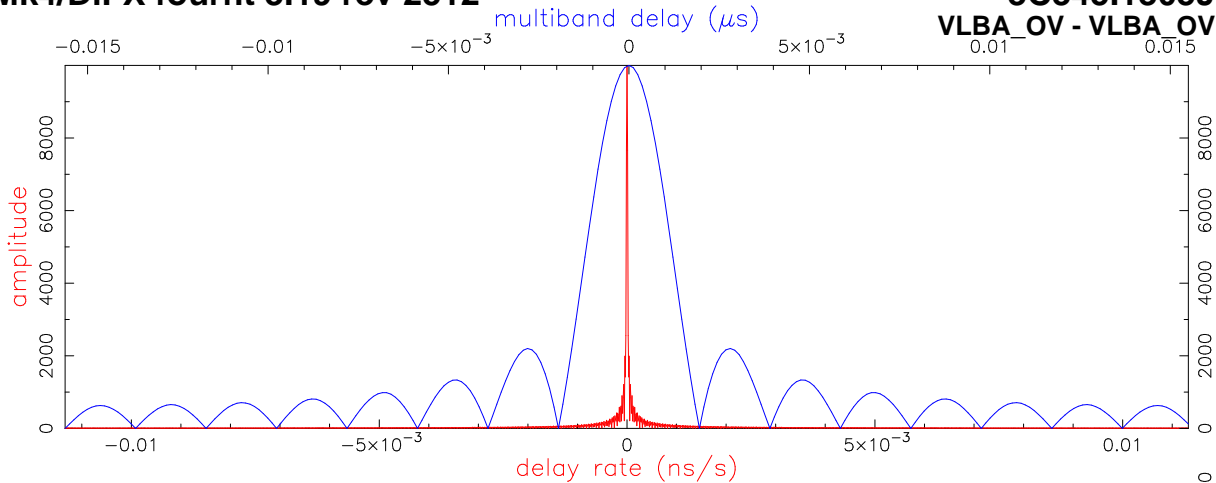


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
UL	167.9	170.3	-166.1	-175.8	-113.2	-125.8	-48.1	-83.2	-114.9	-153.5	152.9	142.1	4.1	-64.9	173.2	131.8		Phase -142.2					
o	0.3	0.3	0.4	0.3	0.5	0.6	0.4	0.6	0.6	0.4	0.4	0.4	0.3	0.4	0.3	0.3		Ampl. 0.4					
i	129.4	130.0	129.3	128.9	129.7	129.2	128.7	128.8	128.9	127.5	129.1	129.0	238.2	129.2	129.6	95.9		Sbd box 129.1					
o	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					
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
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					
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					
o	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							
o	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					
o																		Chan ids					
i																		Tracks					
Group delay (usec)(sbd)			-7.92444056819E+03															Apriori delay (usec)	-7.92442890029E+03	Resid mbdelay (usec)	-1.16679E-02	+/-	9.8E-05
Sband delay (usec)			-7.92442780479E+03															Apriori clock (usec)	1.7118748E+01	Resid sbdelay (usec)	1.09550E-03	+/-	1.6E-03
Phase delay (usec)			-7.92442890488E+03															Apriori clockrate (us/s)	3.5398100E-07	Resid phdelay (usec)	-4.58497E-06	+/-	3.4E-07
Delay rate (us/s)			1.49545774917E+00															Apriori rate (us/s)	1.49545762581E+00	Resid rate (us/s)	1.23361E-07	+/-	1.9E-09
Total phase (deg)																		Apriori accel (us/s/s)	4.23835004818E-05	Resid phase (deg)	-142.2	+/-	10.5

ph/seg (deg) 50.2 18.1 Search (2048X64) 0.225 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.7 31.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 69.4 20.9 Inc. seg. avg. 0.287 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 94.9 36.5 Inc. frq. avg. 0.384 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 60.7 el 29.9 pa -64.6 i: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -11070.428 2921.183 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oi..1305JH Output file: /Exps/c192a/v2/1234/No0001/oi.W.323.1305JH

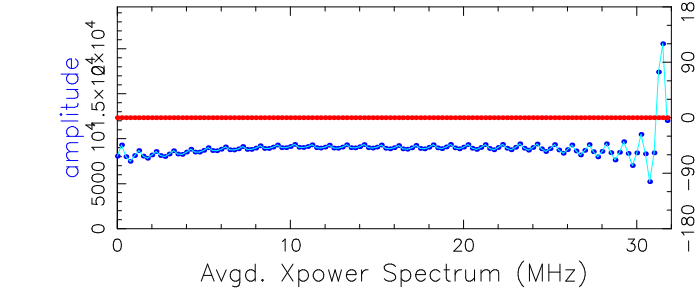
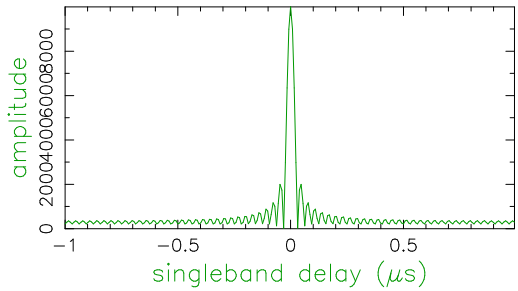
Mk4/DiFX fourfit 3.19 rev 2512

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



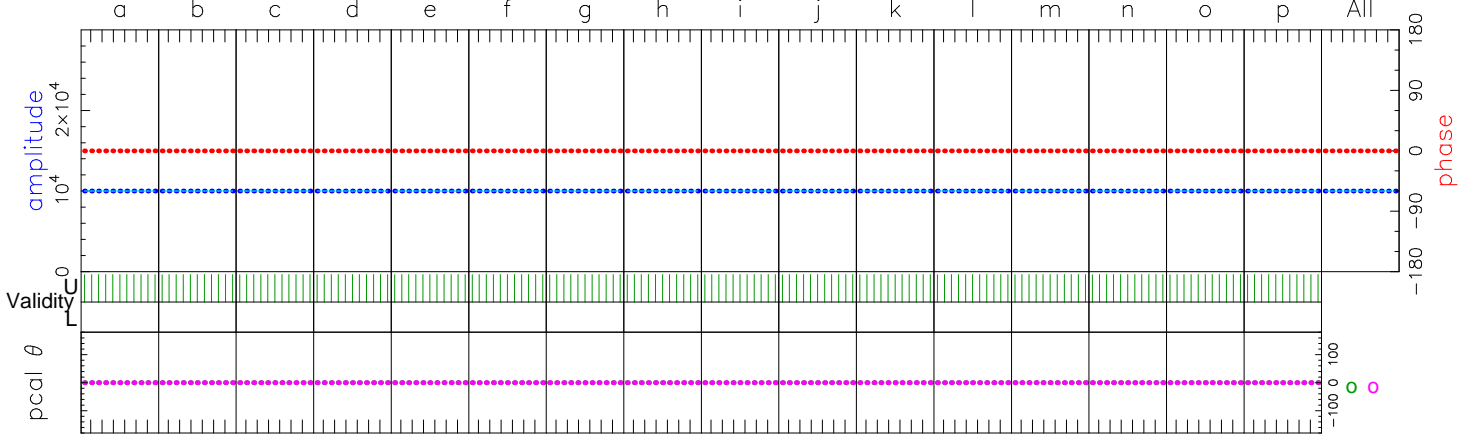
Fringe quality 9

SNR 554278.9
Int time 410.829
Amp 9999.998
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042834
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
-0.0	0.0	-0.0	-0.0	-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
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.
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
UL 803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
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
o 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		
o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

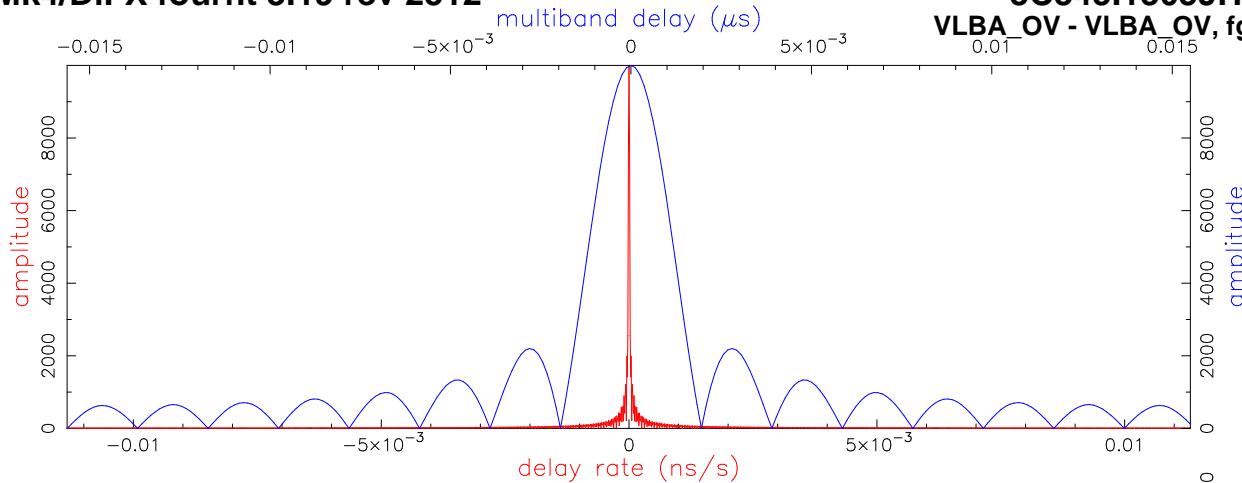
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) -2.47937904508E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.47938E-19 +/- 6.7E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.8E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.998 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 60.7 el 29.9 pa -64.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

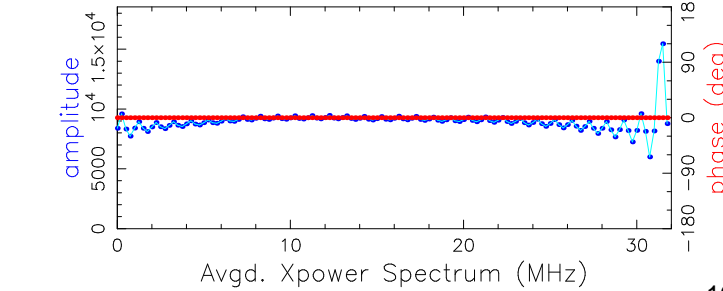
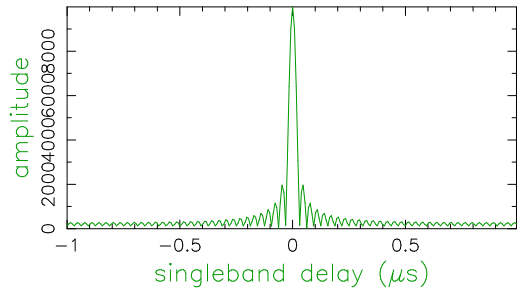
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oo..1305JH Output file: /Exps/c192a/v2/1234/No0001/oo.W.266.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

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

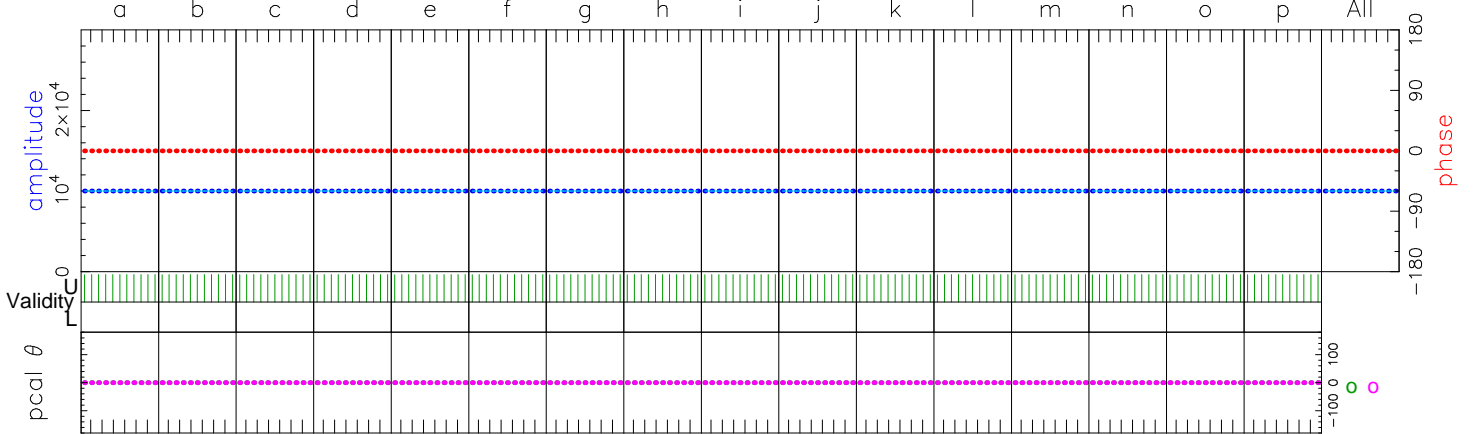


Fringe quality 9
SNR 554278.9
Int time 410.829
Amp 9999.998
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 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

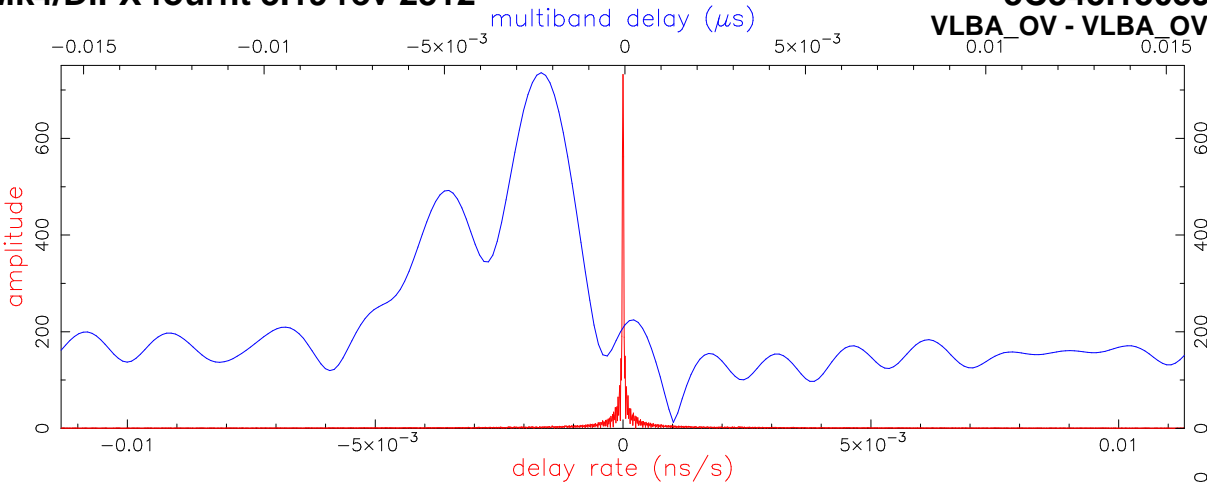


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
-0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	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 803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
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	
o 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		
o W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
o W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	0.00000000000E+00		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		0.000000E+00		+/- 1.9E-09						
Sband delay (usec)	0.00000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.000000E+00		+/- 3.1E-08						
Phase delay (usec)	3.59908430655E-20		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.59908E-20		+/- 6.7E-12						
Delay rate (us/s)	0.00000000000E+00		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		0.000000E+00		+/- 2.8E-14						
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		0.0		+/- 0.0						

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.0 0.0 Search (2048X64) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
o: az 60.7 el 29.9 pa -64.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oo..1305JH Output file: /Exps/c192a/v2/1234/No0001/oo.W.290.1305JH simultaneous interpolator

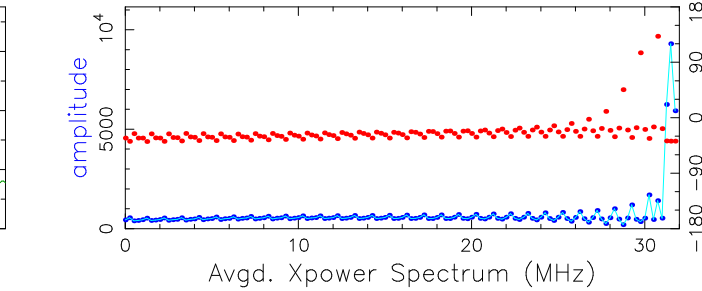
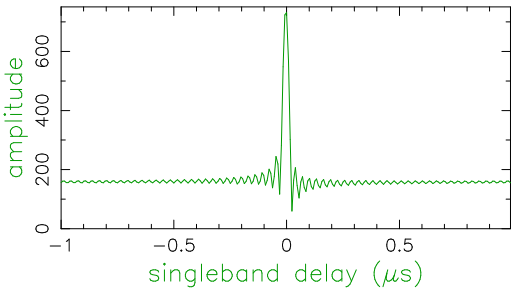
Mk4/DiFX fourfit 3.19 rev 2512

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



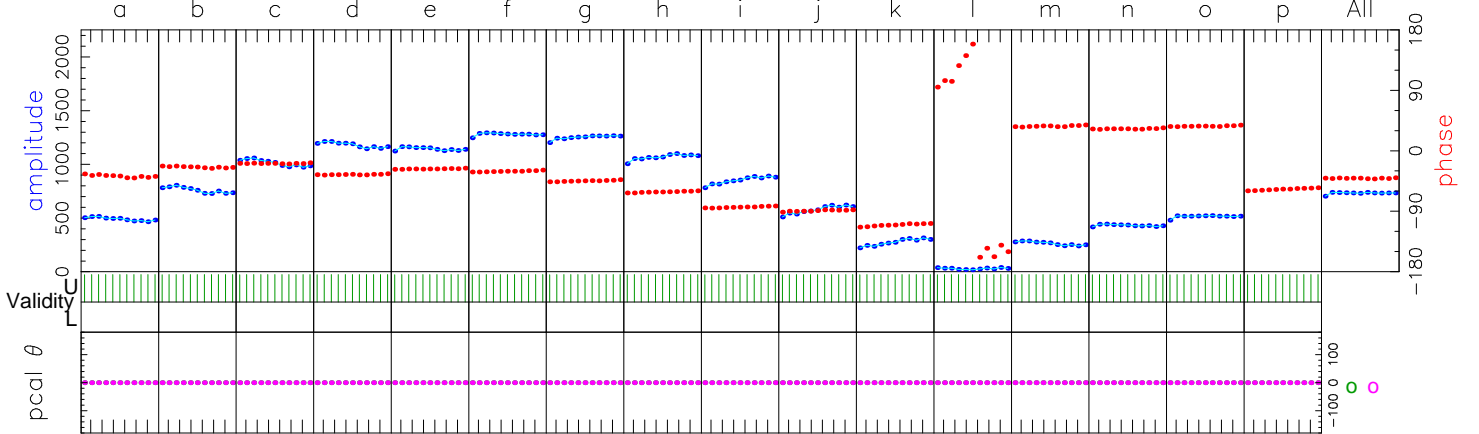
Fringe quality 5

SNR 41628.8
Int time 410.829
Amp 751.044
Phase -40.9
PFD 0.0e+00
Delays (us)
SBD -0.003548
MBD -0.002219
Fringe rate (Hz)
-0.000030
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
2020:093:042843
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

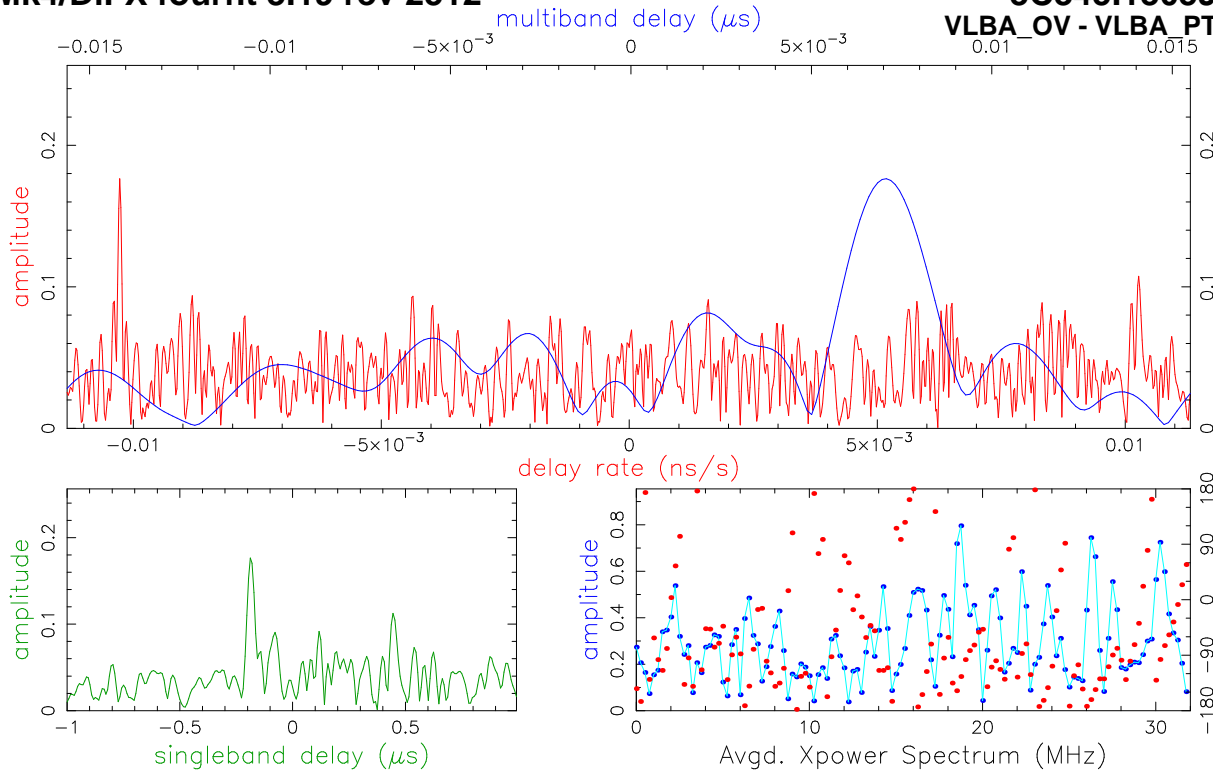


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-37.7	-24.2	-18.8	-35.4	-26.9	-30.5	-44.8	-61.2	-83.8	-89.0	-110.2	163.8	36.6	32.7	36.7	-57.3		Phase	-40.9
	491.4	761.3	1014.4	1181.3	1144.8	1280.4	1251.5	1067.9	851.4	577.7	274.8	18.9	264.3	431.8	515.2	2480.2		Ampl.	850.5
	128.8	129.0	128.5	128.8	128.8	128.5	128.6	128.5	128.5	128.6	128.3	132.8	128.5	128.8	128.5	127.5		Sbd box	128.5
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
o:0	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			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)			-2.21890625000E-03					Apriori delay (usec)	0.00000000000E+00				Resid mbdelay (usec)	-2.21891E-03				+/-	2.6E-08
Sband delay (usec)			-3.54800000000E-03					Apriori clock (usec)	0.0000000E+00				Resid sbdelay (usec)	-3.54800E-03				+/-	4.1E-07
Phase delay (usec)			-1.31911192921E-06					Apriori clockrate (us/s)	0.0000000E+00				Resid phdelay (usec)	-1.31911E-06				+/-	8.9E-11
Delay rate (us/s)			-3.52153136933E-10					Apriori rate (us/s)	0.00000000000E+00				Resid rate (us/s)	-3.52153E-10				+/-	3.7E-13
Total phase (deg)								Apriori accel (us/s/s)	0.00000000000E+00				Resid phase (deg)	-40.9				+/-	0.0

RMS Theor. Amplitude 751.044 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.5 0.0 Search (2048X64) 730.489 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 61.1 0.0 Inc. seg. avg. 732.179 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 76.6 0.0 Inc. frq. avg. 850.461 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 60.7 el 29.9 pa -64.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oo..1305JH Output file: /Exps/c192a/v2/1234/No0001/oo.W.305.1305JH

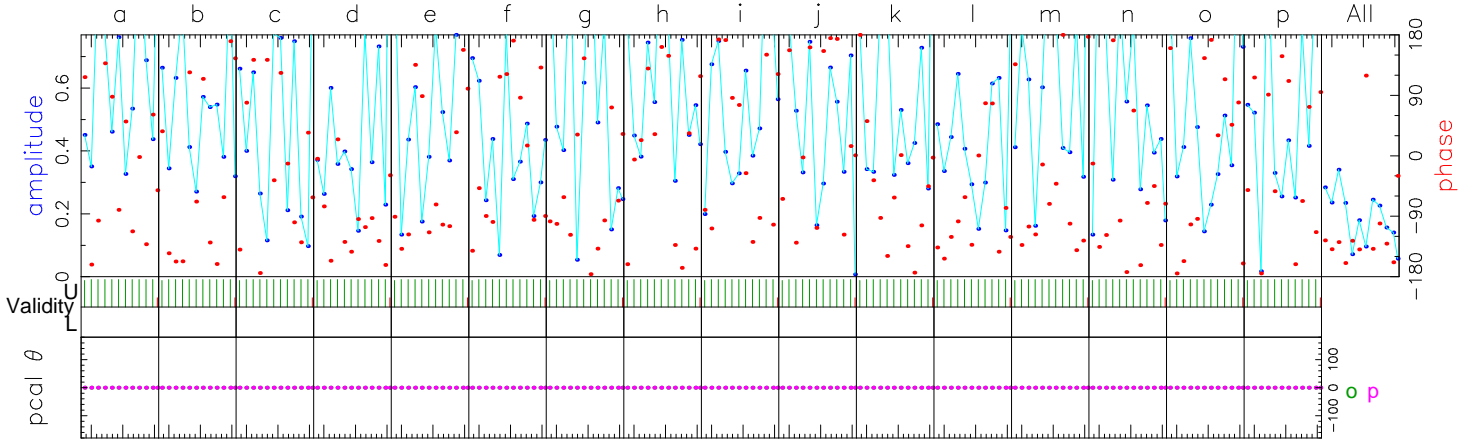
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, op
VLBA_OV - VLBA_PT, fgroup W, pol LL



Fringe quality 0
SNR 5.7
Int time 138.827
Amp 0.256
Phase -136.2
PFD 7.1e-01
Delays (us)
SBD -0.185093
MBD 0.007071
Fringe rate (Hz)
-0.886937
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
2020:093:042831
2020:014:135814
RA & Dec (J2000)
16h42m58.80967s
+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

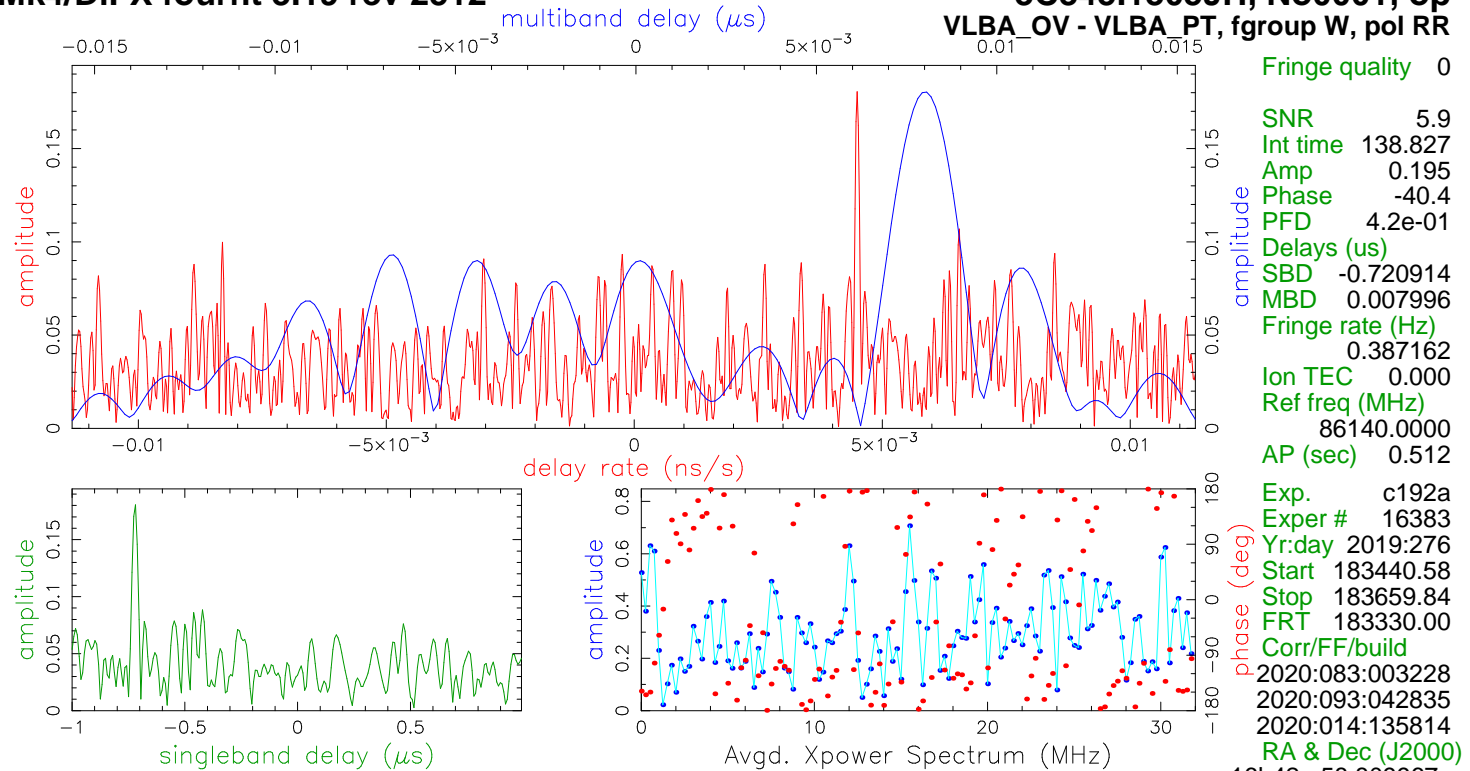


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-90.1	-171.4	-146.2	-103.5	-121.1	-147.3	-122.4	158.4	-151.4	-160.7	-102.1	-122.2	-107.1	-121.8	149.4	127.4	Phase	-136.2				
	0.1	0.4	0.1	0.4	0.3	0.1	0.6	0.4	0.3	0.3	0.4	0.3	0.5	0.5	0.3	0.1	Ampl.	0.3				
	153.8	72.0	40.4	199.1	8.7	109.6	104.7	203.0	71.5	95.1	240.4	14.9	127.6	7.3	32.0	187.7	Sbd box	105.3				
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					
o	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					
o: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					
o: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					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
																	Tracks					
Group delay (usec)(sbd)		-1.82713478965E+03															Apriori delay (usec)	-1.82695436039E+03	Resid mbdelay (usec)	7.07074E-03	+/-	1.9E-04
Sband delay (usec)		-1.82713945339E+03															Apriori clock (usec)	4.7238750E+00	Resid sbdelay (usec)	-1.85093E-01	+/-	3.0E-03
Phase delay (usec)		-1.82695436478E+03															Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-4.39119E-06	+/-	6.4E-07
Delay rate (us/s)		1.44106821503E-02															Apriori rate (us/s)	1.44209786063E-02	Resid rate (us/s)	-1.02965E-05	+/-	8.0E-09
Total phase (deg)																	Apriori accel (us/s/s)	1.27269049504E-05	Resid phase (deg)	-136.2	+/-	20.0

ph/seg (deg) RMS Theor. Amplitude 0.256 +/- 0.045 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.2 34.6 Search (1024X64) 0.176 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.9 60.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 44.3 40.0 Inc. seg. avg. 0.240 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 59.4 69.8 Inc. frq. avg. 0.250 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -84.992 1115.195 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/op..1305JH Output file: /Exps/c192a/v2/1234/No0001/op.W.257.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, op
VLBA_OV - VLBA_PT, fgroup W, pol RR



Fringe quality 0

SNR 5.9

Int time 138.827

Amp 0.195

Phase -40.4

PFD 4.2e-01

Delays (us)

SBD -0.720914

MBD 0.007996

Fringe rate (Hz)

0.387162

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

2020:093:042835

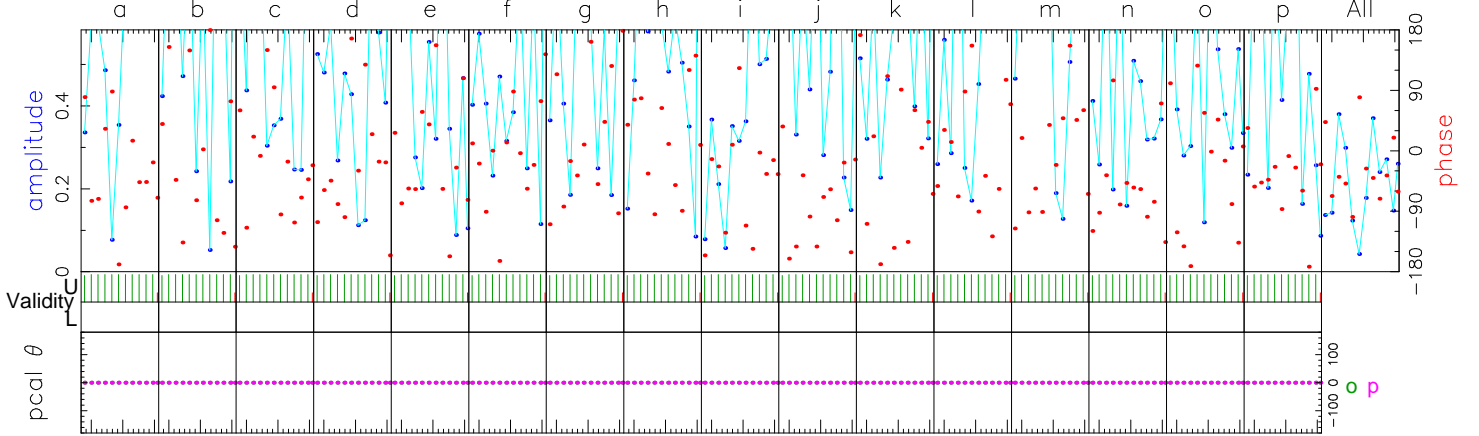
2020:014:135814

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					
	-43.2	-122.6	-12.4	-50.7	-34.1	-9.9	-38.8	11.3	-42.6	-95.6	86.9	-38.4	-19.8	-68.4	71.3	-36.0		Phase	-40.4				
	0.4	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.1	0.2	0.3	0.3	0.1	0.4		Ampl.	0.2				
	237.3	96.4	35.1	92.4	217.2	30.3	49.2	209.6	176.1	75.5	113.6	40.8	151.6	141.3	73.2	228.8		Sbd box	36.7				
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		APs used					
o	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					
o: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					
o: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					
o	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					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
Group delay (usec)(sbd)		-1.82766511409E+03																Apriori delay (usec)	-1.82695436039E+03	Resid mbdelay (usec)	7.99630E-03	+/-	1.8E-04
Sband delay (usec)		-1.82767527439E+03																Apriori clock (usec)	4.7238750E+00	Resid sbdelay (usec)	-7.20914E-01	+/-	2.9E-03
Phase delay (usec)		-1.82695436169E+03																Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	-1.30125E-06	+/-	6.3E-07
Delay rate (us/s)		1.44254731687E-02																Apriori rate (us/s)	1.44209786063E-02	Resid rate (us/s)	4.49456E-06	+/-	7.8E-09
Total phase (deg)					-257.8													Apriori accel (us/s/s)	1.27269049504E-05	Resid phase (deg)	-40.4	+/-	19.5

ph/seg (deg) 51.6 33.8 Search (1024X64) 0.179 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 58.7 59.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 56.2 39.0 Inc. seg. avg. 0.194 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

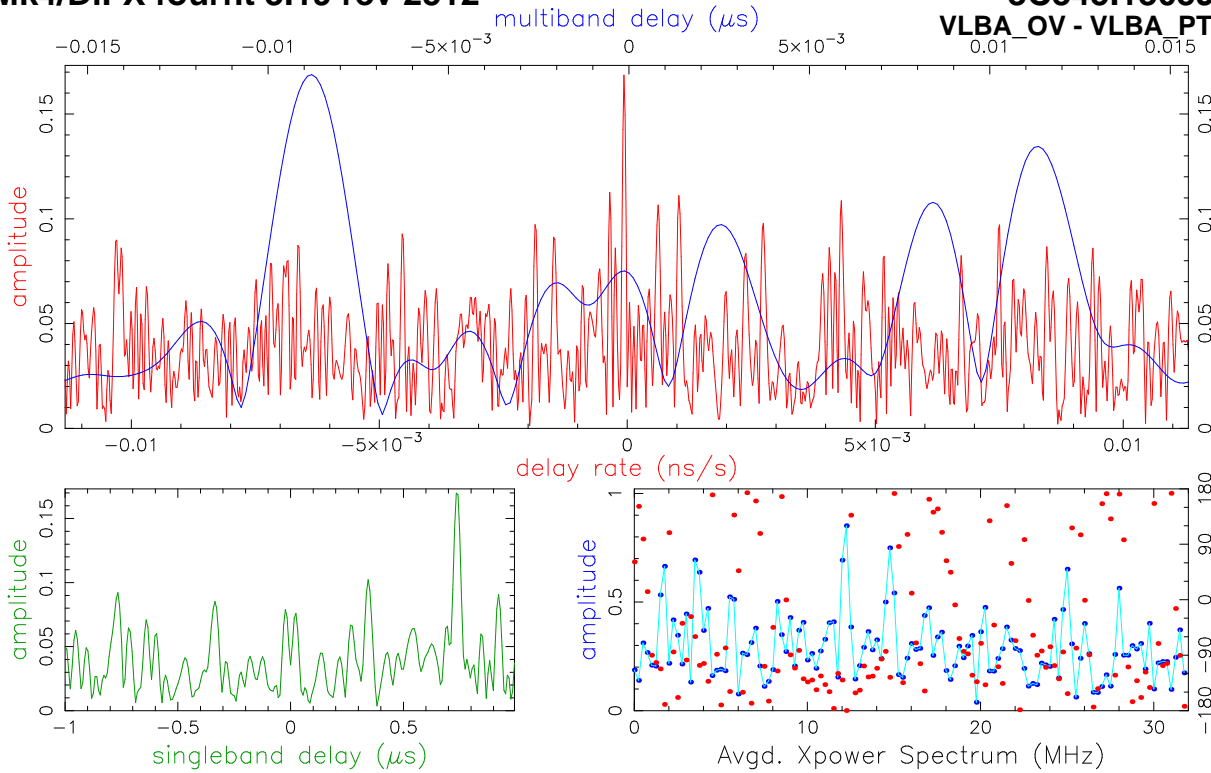
amp/frq (%) 59.5 68.1 Inc. frq. avg. 0.193 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -84.992 1115.195 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/op..1305JH Output file: /Exps/c192a/v2/1234/No0001/op.W.267.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, op VLBA_OV - VLBA_PT, fgroup W, pol LR

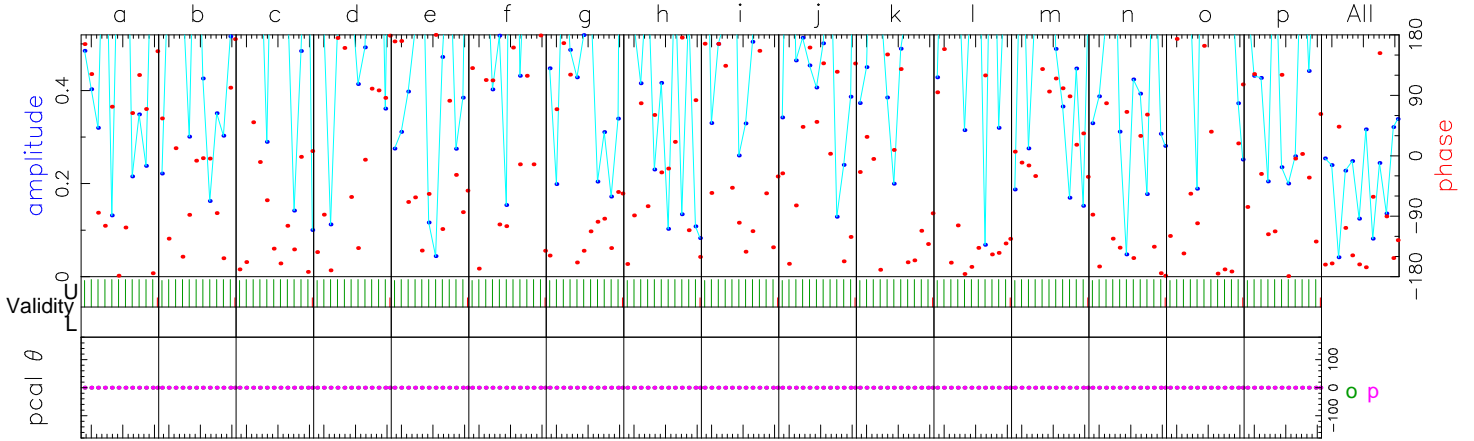


Fringe quality 0

SNR 5.6
 Int time 138.827
 Amp 0.173
 Phase -150.7
 PFD 9.4e-01
 Delays (us)
 SBD 0.737926
 MBD -0.008873
 Fringe rate (Hz)
 -0.006044
 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
	-164.0	-46.5	-139.4	155.9	-100.9	158.3	-137.8	-67.6	-132.4	170.6	-126.9	-153.0	52.6	-145.2	-164.9	-68.0	Phase	-150.7
	0.3	0.1	0.3	0.2	0.2	0.4	0.2	0.1	0.3	0.1	0.2	0.6	0.2	0.2	0.4	0.2	Ampl.	0.2
	83.1	137.7	13.3	250.6	102.8	31.8	202.1	133.9	184.8	129.9	208.8	222.9	218.5	199.4	150.1	127.8	Sbd box	223.5
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	
o	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	
o: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	
o: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	
o	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		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

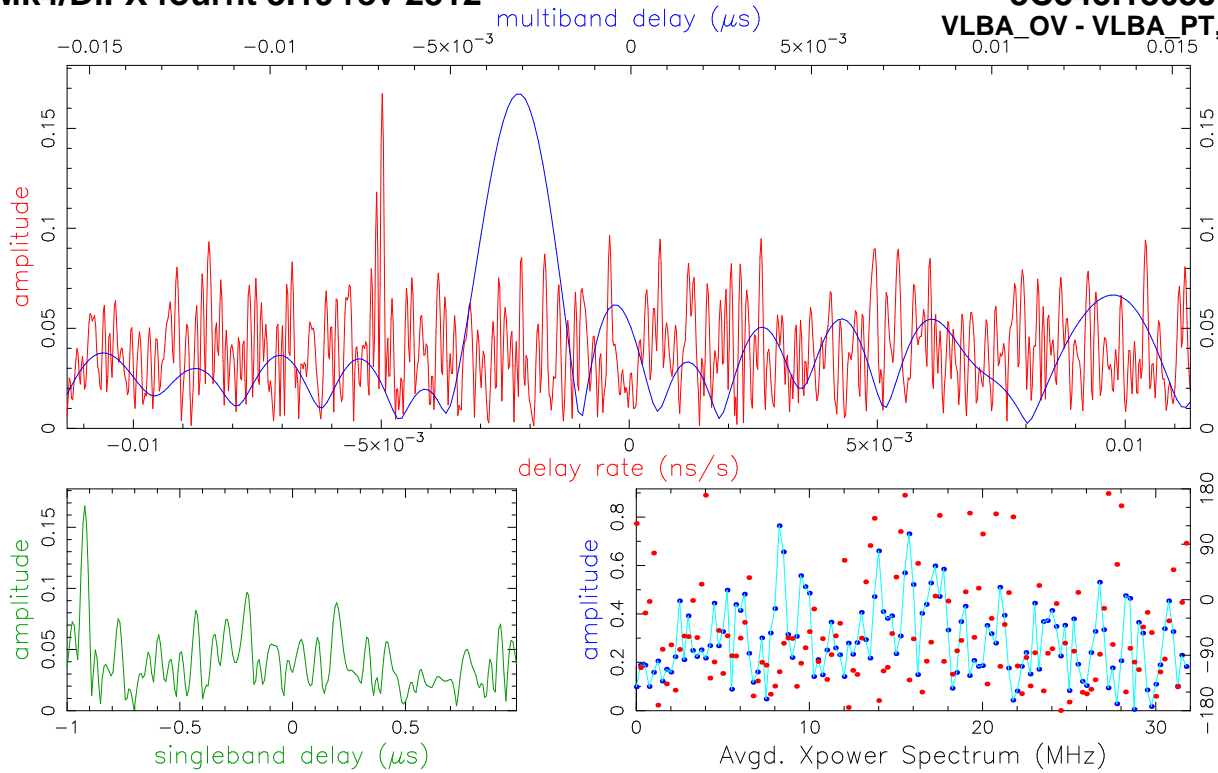
Group delay (usec)(sbd) -1.82621323293E+03 Apriori delay (usec) -1.82695436039E+03 Resid mbdelay (usec) -8.87254E-03 +/- 1.9E-04
 Sband delay (usec) -1.82621643439E+03 Apriori clock (usec) 4.7238750E+00 Resid sbdelay (usec) 7.37926E-01 +/- 3.1E-03
 Phase delay (usec) -1.82695436525E+03 Apriori clockrate (us/s) -2.0290559E-07 Resid phdelay (usec) -4.86048E-06 +/- 6.6E-07
 Delay rate (us/s) 1.44209084379E-02 Apriori rate (us/s) 1.44209786063E-02 Resid rate (us/s) -7.01685E-08 +/- 8.2E-09
 Total phase (deg) -8.2 Apriori accel (us/s/s) 1.27269049504E-05 Resid phase (deg) -150.7 +/- 20.5

RMS Theor. Amplitude 0.173 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.2 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 (%) 55.8 62.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 65.6 41.1 Inc. seg. avg. 0.174 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 80.3 71.7 Inc. frq. avg. 0.195 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -84.992 1115.195 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/op..1305JH Output file: /Exps/c192a/v2/1234/No0001/op.W.276.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, op
VLBA_OV - VLBA_PT, fgroup W, pol RL

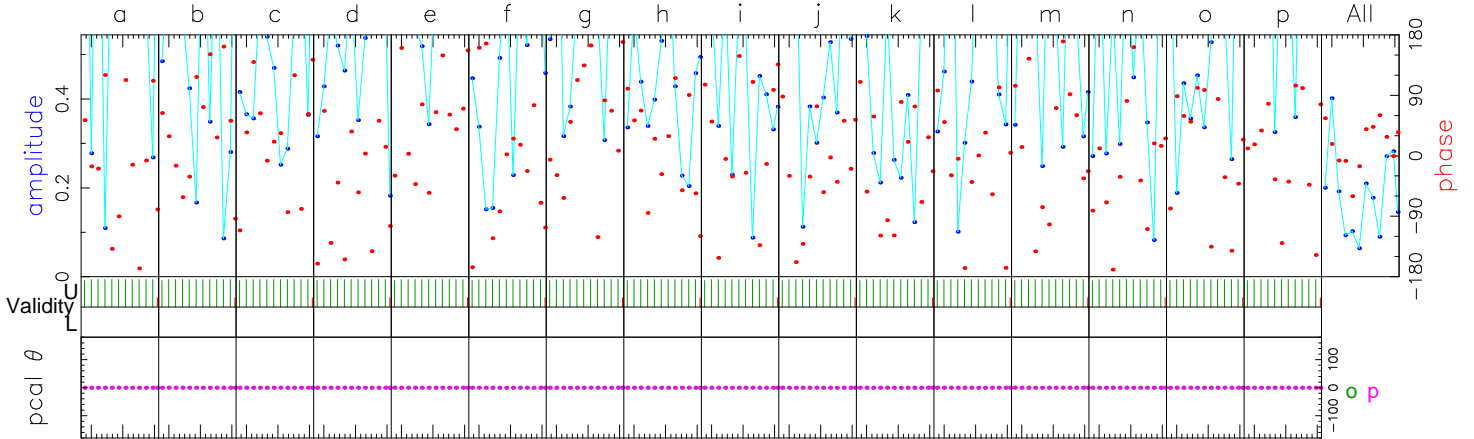


Fringe quality 0

SNR 5.4
Int time 138.827
Amp 0.181
Phase 19.3
PFD 1.0e+00
Delays (us)
SBD -0.921858
MBD -0.003113
Fringe rate (Hz)
-0.429333
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

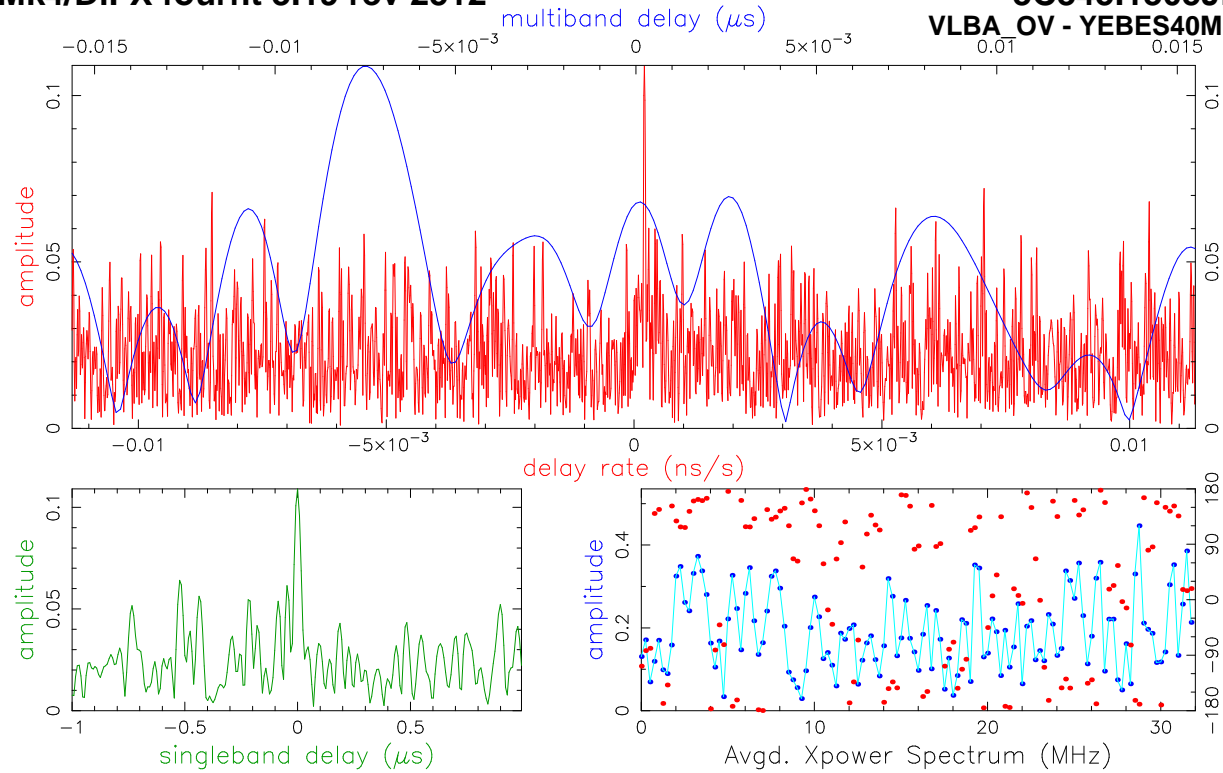
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042838
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



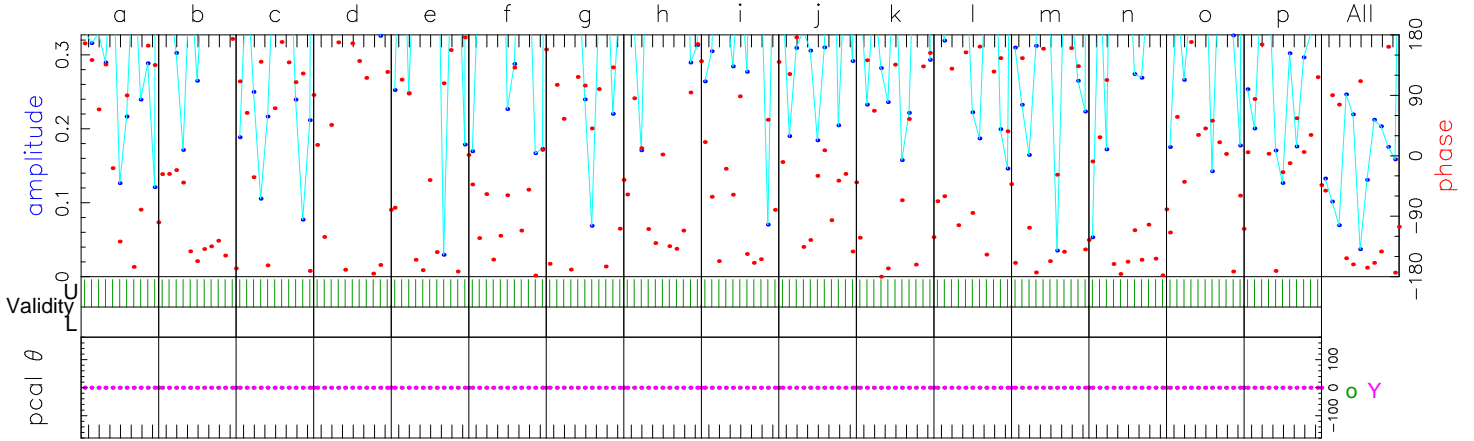
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-16.5	22.8	33.7	-29.1	62.6	-19.3	49.6	26.3	49.7	3.7	1.0	-1.1	83.5	-3.6	11.9	30.7	Phase	19.3				
	0.2	0.3	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.3	0.1	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2				
	234.0	199.1	29.6	137.0	73.9	255.4	209.3	153.9	165.3	86.6	170.3	149.9	51.9	115.8	8.2	167.0	Sbd box	11.0				
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used					
o	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					
o: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					
o: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					
p	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	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Tracks					
Group delay (usec)(sbd)			-1.82786372385E+03														Apriori delay (usec)	-1.82695436039E+03	Resid mbdelay (usec)	-3.11346E-03	+/-	2.0E-04
Sband delay (usec)			-1.82787621889E+03														Apriori clock (usec)	4.7238750E+00	Resid sbdelay (usec)	-9.21858E-01	+/-	3.2E-03
Phase delay (usec)			-1.82695435977E+03														Apriori clockrate (us/s)	-2.0290559E-07	Resid phdelay (usec)	6.23285E-07	+/-	6.9E-07
Delay rate (us/s)			1.44159944717E-02														Apriori rate (us/s)	1.44209786063E-02	Resid rate (us/s)	-4.98413E-06	+/-	8.5E-09
Total phase (deg)					-198.1												Apriori accel (us/s/s)	1.27269049504E-05	Resid phase (deg)	19.3	+/-	21.2

ph/seg (deg) 34.5 36.8 Theor. Amplitude 0.181 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.6 64.2 Search (1024X64) 0.166 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.6 42.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.2 74.2 Inc. seg. avg. 0.169 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 o: az 60.7 el 29.9 pa -64.6 p: az 62.4 el 35.8 pa -72.0 u,v (fr/asec) -84.992 1115.195 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/op..1305JH Output file: /Exps/c192a/v2/1234/No0001/op.W.286.1305JH simultaneous interpolator



Fringe quality 0
SNR 6.0
Int time 401.317
Amp 0.109
Phase -165.4
PFD 4.5e-01
Delays (us)
SBD -0.001080
MBD -0.007512
Fringe rate (Hz) 0.018132
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build 2020:083:003228
2020:093:042835
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
	157.8	-121.0	123.9	151.7	-175.7	-106.4	146.2	-112.8	-120.8	-79.0	157.4	-167.4	-174.8	-155.8	24.8	40.8	Phase	-165.4
	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.3	0.3	0.1	0.1	Ampl.	0.2
	104.4	143.4	127.4	128.6	182.4	128.8	35.1	128.3	196.3	186.3	203.6	29.8	128.7	128.8	62.2	100.9	Sbd box	128.9
UL	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
o	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	
o: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	
o: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	
o	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		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -8.03083165006E+03 Apriori delay (usec) -8.03082413832E+03 Resid mbdelay (usec) -7.51174E-03 +/- 1.8E-04
 Sband delay (usec) -8.03082521882E+03 Apriori clock (usec) 6.9777994E+00 Resid sbdelay (usec) -1.08050E-03 +/- 2.9E-03
 Phase delay (usec) -8.03082414365E+03 Apriori clockrate (us/s) -2.1901900E-07 Resid phdelay (usec) -5.33254E-06 +/- 6.2E-07
 Delay rate (us/s) 1.47259723002E+00 Apriori rate (us/s) 1.47259701952E+00 Resid rate (us/s) 2.10496E-07 +/- 2.7E-09
 Total phase (deg) -264.3 Apriori accel (us/s/s) 3.95125131510E-05 Resid phase (deg) -165.4 +/- 19.2

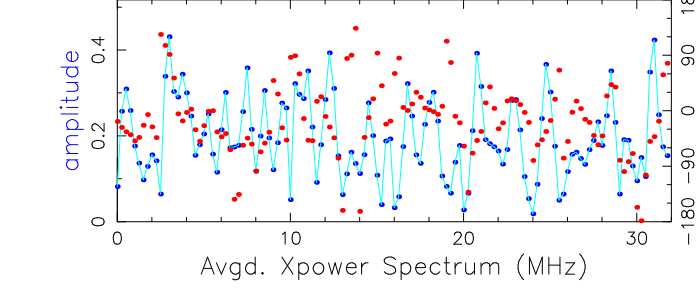
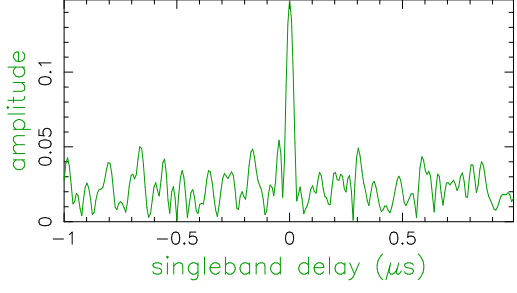
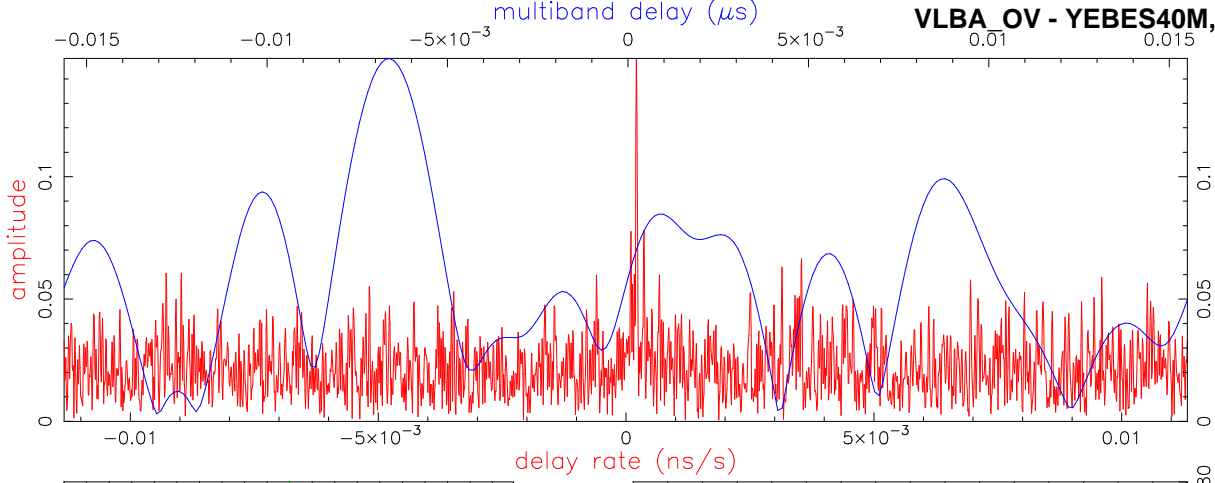
RMS Theor. Amplitude 0.109 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 65.1 33.2 Search (2048X64) 0.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 75.9 58.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 76.7 38.4 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 86.6 67.0 Inc. frq. avg. 0.154 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10905.762 2412.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oY..1305JH Output file: /Exps/c192a/v2/1234/No0001/oY.W.269.1305JH

Fringe quality 9

SNR 8.1
Int time 401.317
Amp 0.148
Phase 25.6
PFD 1.5e-07
Delays (us)
SBD 0.000421
MBD -0.006623
Fringe rate (Hz) 0.017855
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042840
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

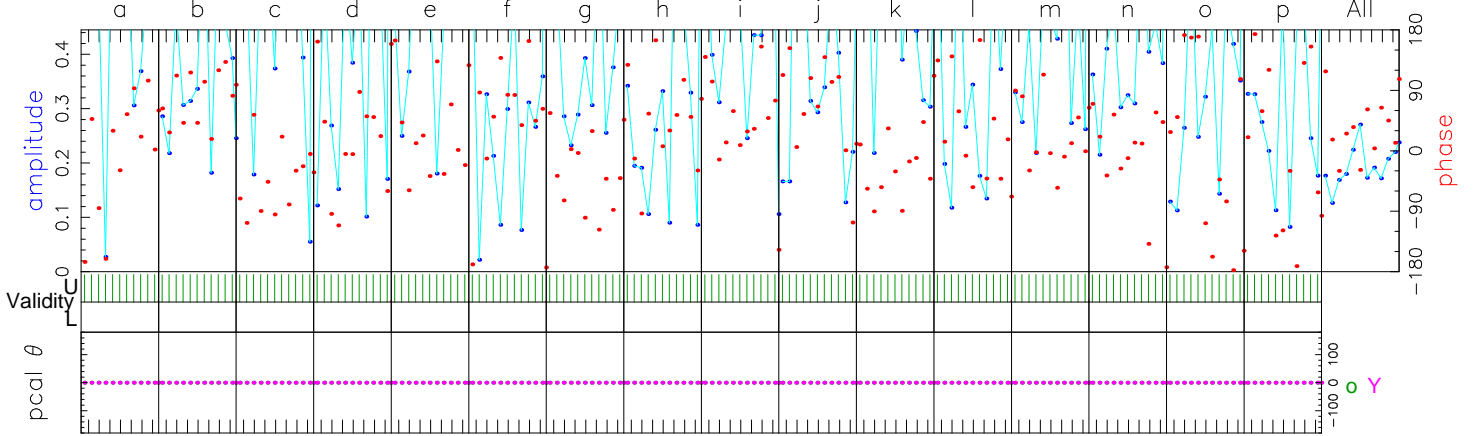


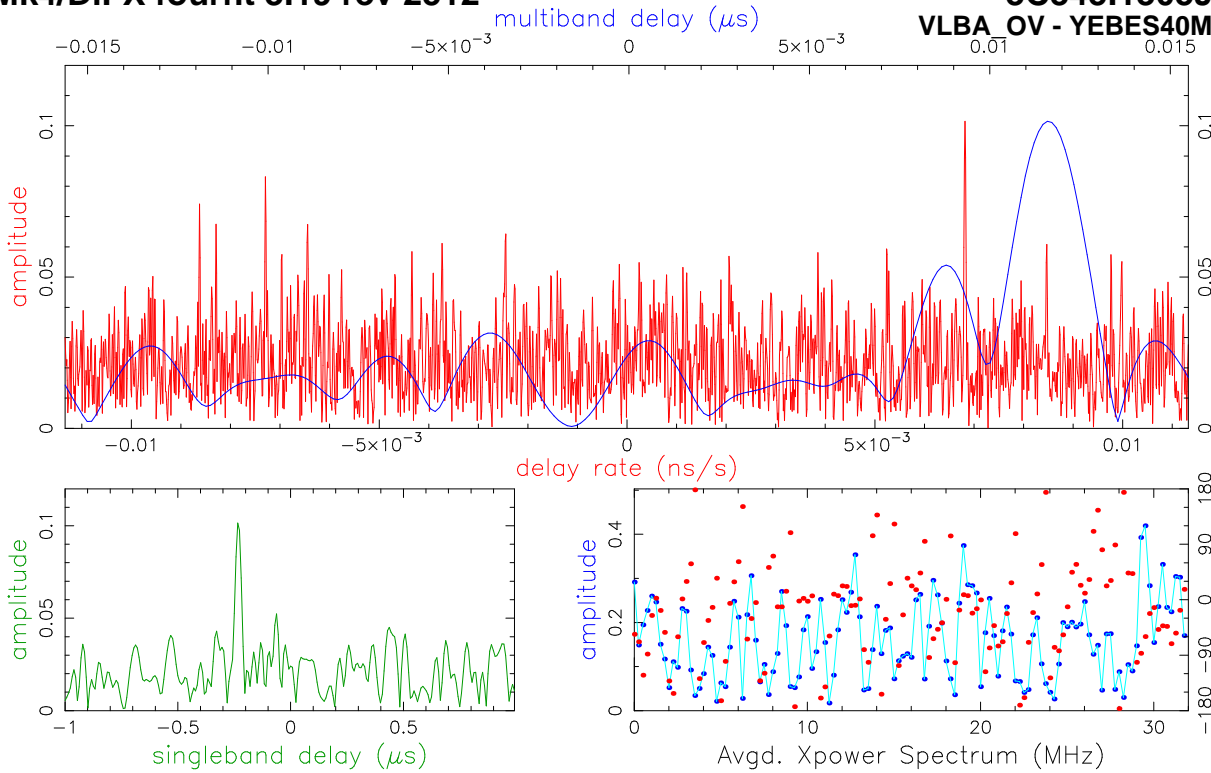
Table with 17 columns for frequency bins (86012.00 to 86492.00) and rows for various parameters: U/L, o:Y, o:Y, Y, o, Y, o, Y, Group delay, Sband delay, Phase delay, Delay rate, Total phase, Apriori delay, Apriori clock, Apriori clockrate, Apriori rate, Apriori accel, Resid mbdelay, Resid sbdelay, Resid phdelay, Resid rate, Resid phase.

Summary statistics table with columns for RMS, Theor., Amplitude, Search, Interp., Inc. seg. avg., Inc. frq. avg., Pcal mode, Pcal rate, Bits/sample, Sample rate, Data rate, nlags, t_cohere, sb window, mb window, dr window, ion window.

o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10905.762 2412.301 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oY..1305JH Output file: /Exps/c192a/v2/1234/No0001/oY.W.297.1305JH

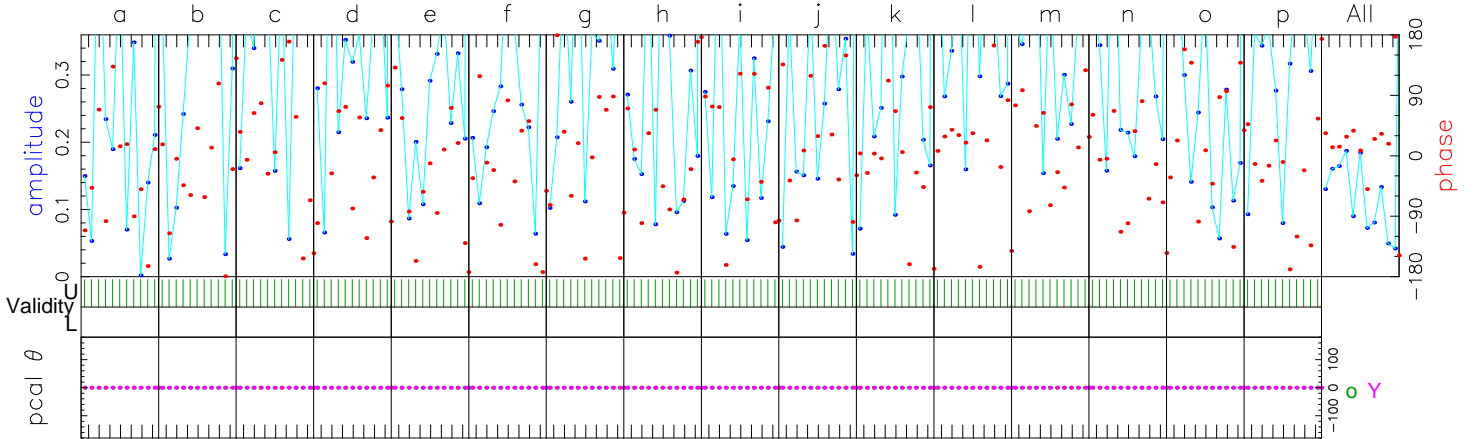
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, oY
VLBA_OV - YEBES40M, fgroup W, pol LR



Fringe quality 0
SNR 5.6
Int time 401.317
Amp 0.120
Phase 19.2
PFD 9.9e-01
Delays (us)
SBD -0.231747
MBD 0.011609
Fringe rate (Hz)
0.588294
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183017.92
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:083:003228
2020:093:042846
2020:014:135814
RA & Dec (J2000)
16h42m58.80967s
+39°48'36.993984"

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

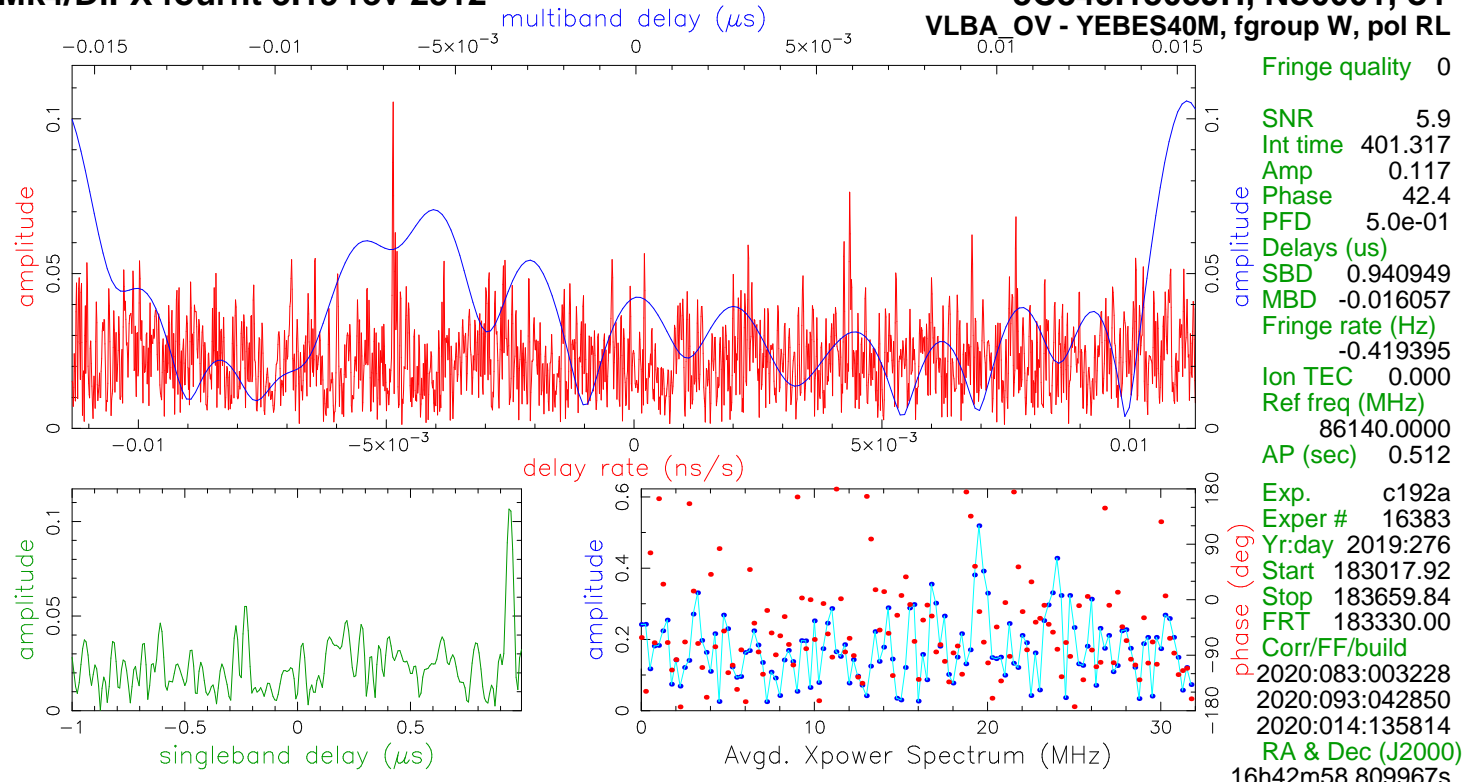


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
UL	12.7	2.0	43.0	0.1	11.9	6.2	41.7	-22.1	94.6	39.4	19.7	34.3	27.1	13.2	28.2	-26.2		Phase	19.2
o	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.1	0.1		Ampl.	0.1
Y	36.9	215.4	137.7	180.0	159.5	69.8	44.4	153.6	210.5	170.6	245.1	99.5	124.1	110.3	72.8	85.5		Sbd box	99.3
o	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o: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	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)			-8.03106252917E+03				Apriori delay (usec)										1.16092E-02	+/-	1.9E-04
Sband delay (usec)			-8.03105588532E+03				Apriori clock (usec)										-2.31747E-01	+/-	3.1E-03
Phase delay (usec)			-8.03082413770E+03				Apriori clockrate (us/s)										6.18483E-07	+/-	6.6E-07
Delay rate (us/s)			1.47260384904E+00				Apriori rate (us/s)										6.82951E-06	+/-	2.8E-09
Total phase (deg)					-79.8		Apriori accel (us/s/s)										19.2	+/-	20.3

ph/seg (deg) RMS Theor. Amplitude 0.120 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.0 35.2 Search (2048X64) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.8 61.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 29.6 40.7 Inc. seg. avg. 0.117 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.3 71.0 Inc. frq. avg. 0.106 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10905.762 2412.301 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oY..1305JH Output file: /Exps/c192a/v2/1234/No0001/oY.W.317.1305JH

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, oY
VLBA_OV - YEBES40M, fgroup W, pol RL



Fringe quality 0

SNR 5.9

Int time 401.317

Amp 0.117

Phase 42.4

PFD 5.0e-01

Delays (us)

SBD 0.940949

MBD -0.016057

Fringe rate (Hz)

-0.419395

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183017.92

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:083:003228

2020:093:042850

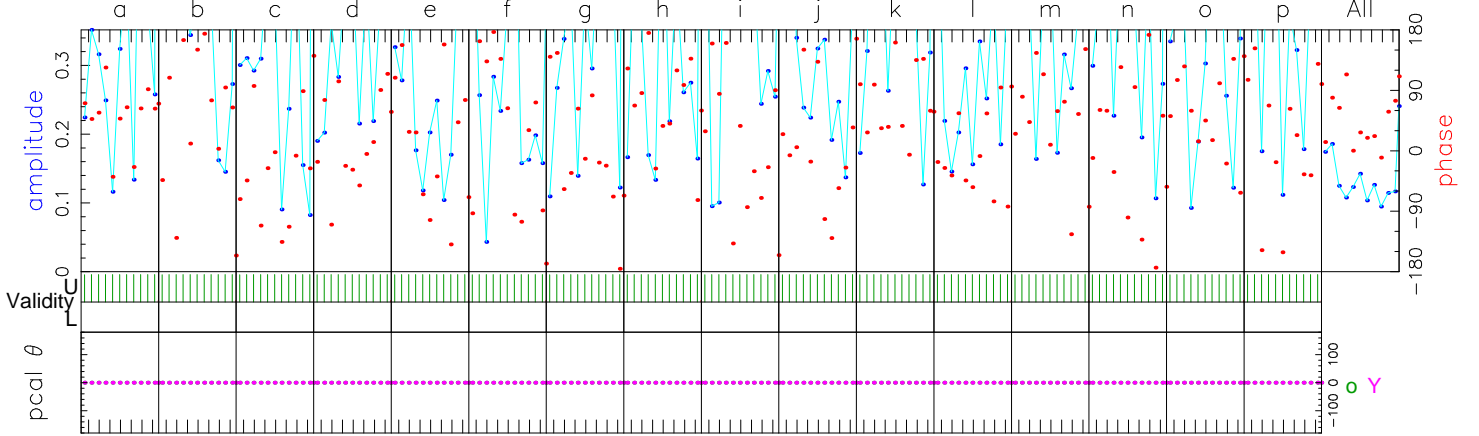
2020:014:135814

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
	63.0	134.5	-32.9	12.7	57.5	-128.3	-23.6	80.8	4.1	-3.7	62.0	-26.9	69.6	82.7	57.5	62.8	Phase	42.4
	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	248.9	194.4	46.0	88.8	204.1	191.0	50.5	247.2	30.6	245.2	249.8	72.7	158.1	126.2	74.7	120.5	Sbd box	249.4
UL	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
o	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	
o: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	
o: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	
o	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	
o	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) -8.02987144568E+03 Apriori delay (usec) -8.03082413832E+03 Resid mbdelay (usec) -1.60574E-02 +/- 1.8E-04

Sband delay (usec) -8.02988318882E+03 Apriori clock (usec) 6.9777994E+00 Resid sbdelay (usec) 9.40949E-01 +/- 2.9E-03

Phase delay (usec) -8.03082413695E+03 Apriori clockrate (us/s) -2.1901900E-07 Resid phdelay (usec) 1.36695E-06 +/- 6.2E-07

Delay rate (us/s) 1.47259215076E+00 Apriori rate (us/s) 1.47259701952E+00 Resid rate (us/s) -4.86876E-06 +/- 2.7E-09

Total phase (deg) -56.6 Apriori accel (us/s/s) 3.95125131510E-05 Resid phase (deg) 42.4 +/- 19.3

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

amp/seg (%) 36.8 33.4 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 32.2 58.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

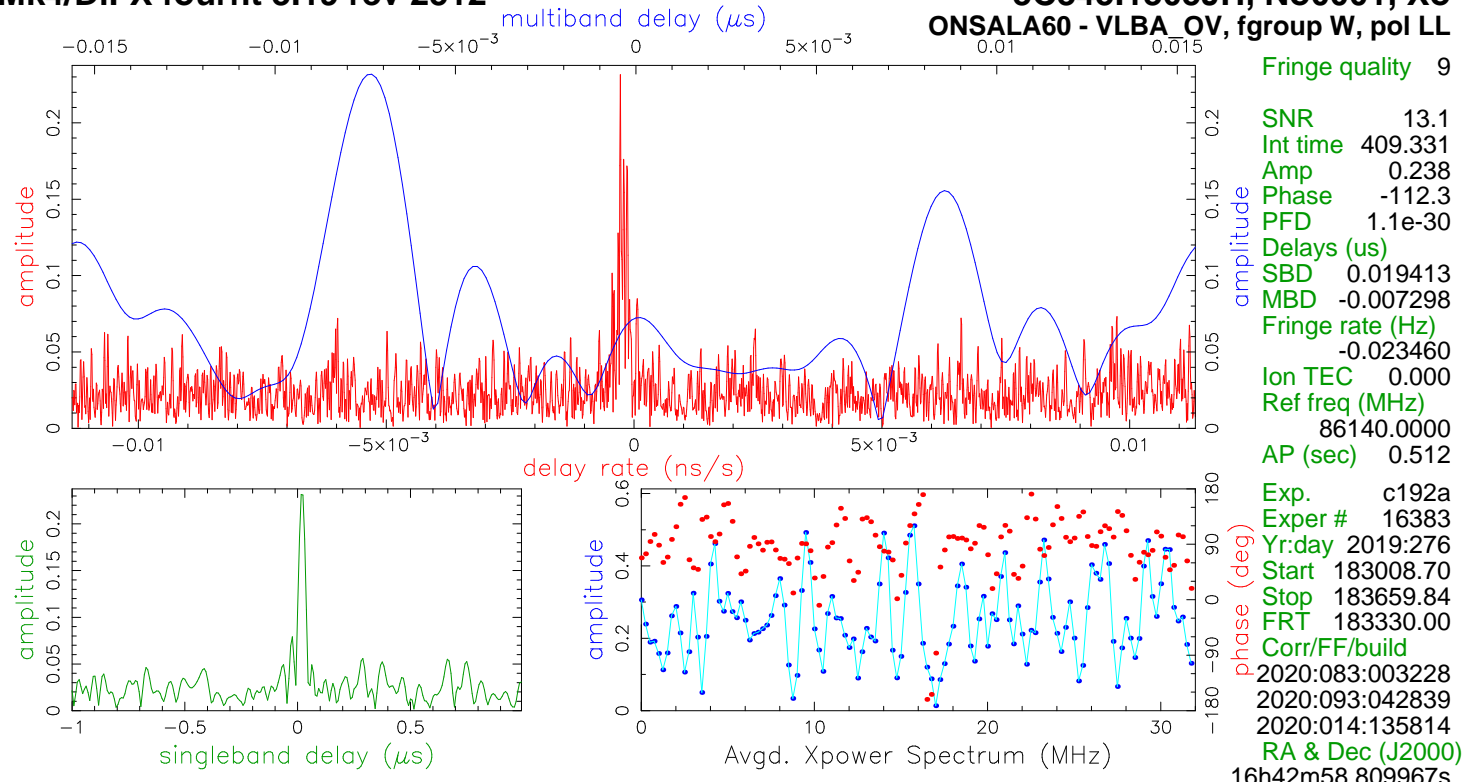
amp/frq (%) 66.8 38.5 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011

o: az 60.7 el 29.9 pa -64.6 Y: az 280.2 el 62.9 pa 77.1 u,v (fr/asec) -10905.762 2412.301 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

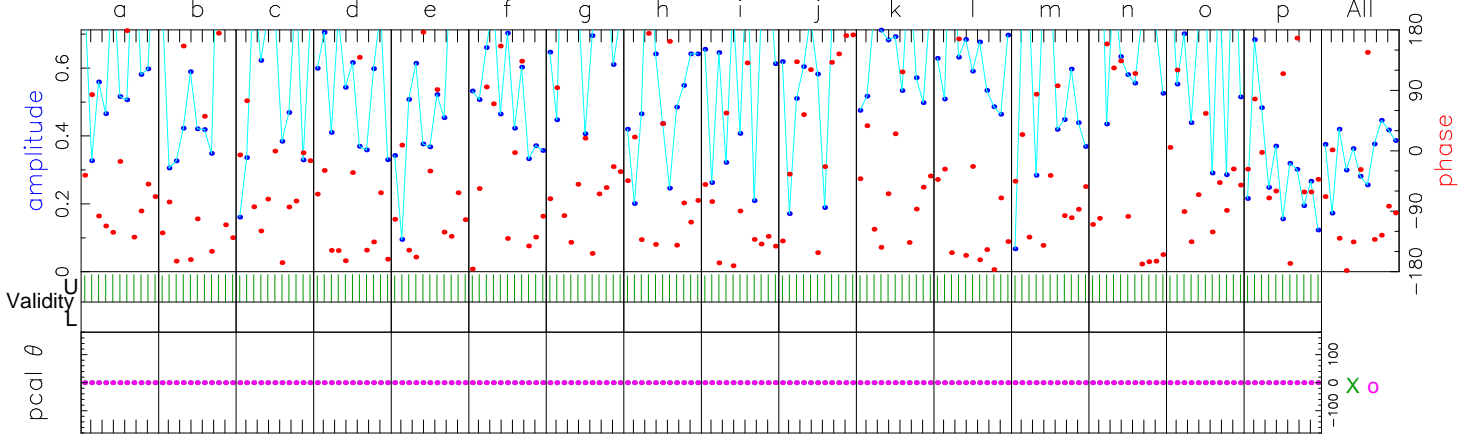
Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/oY..1305JH Output file: /Exps/c192a/v2/1234/No0001/oY.W.335.1305JH simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Xo
 ONSALA60 - VLBA_OV, 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

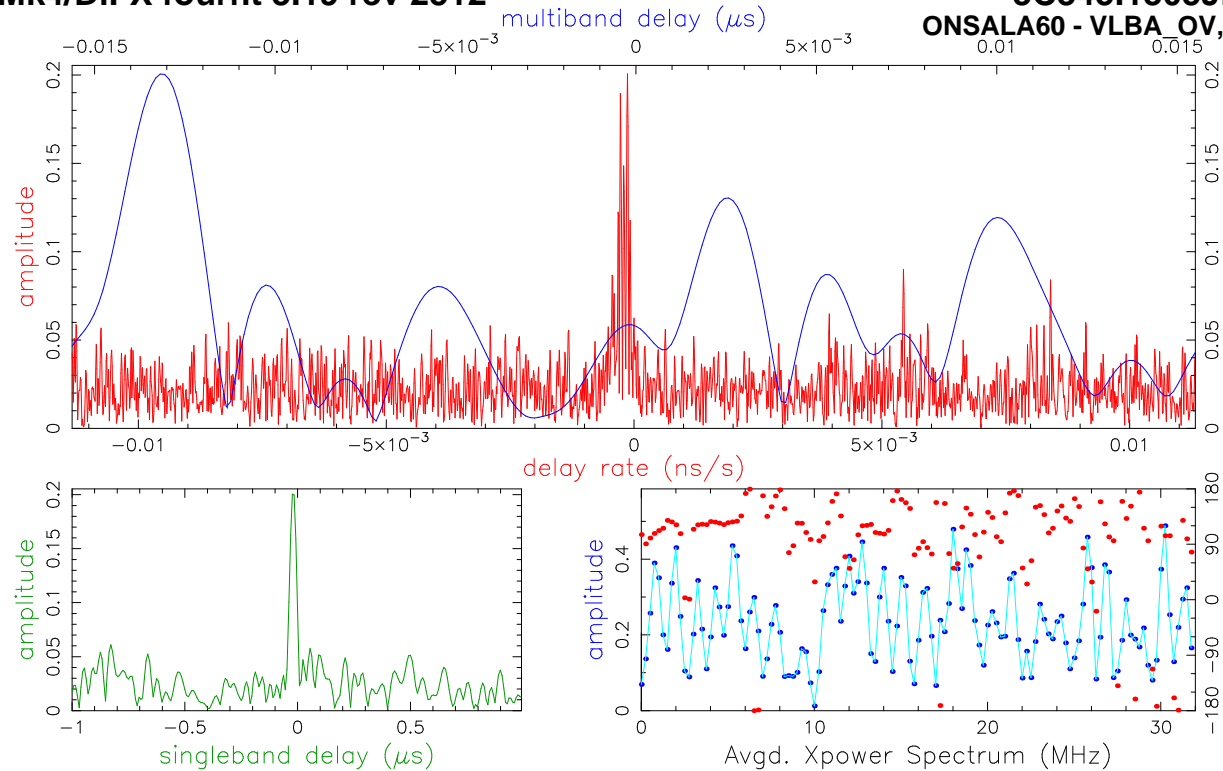


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-89.1	-144.8	-59.9	-109.3	-118.8	173.1	-68.9	-121.7	-144.8	153.6	-75.3	-132.2	-80.7	-162.0	-41.7	-25.7		Phase -112.3
	0.4	0.4	0.4	0.3	0.3	0.1	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
 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 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 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 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

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

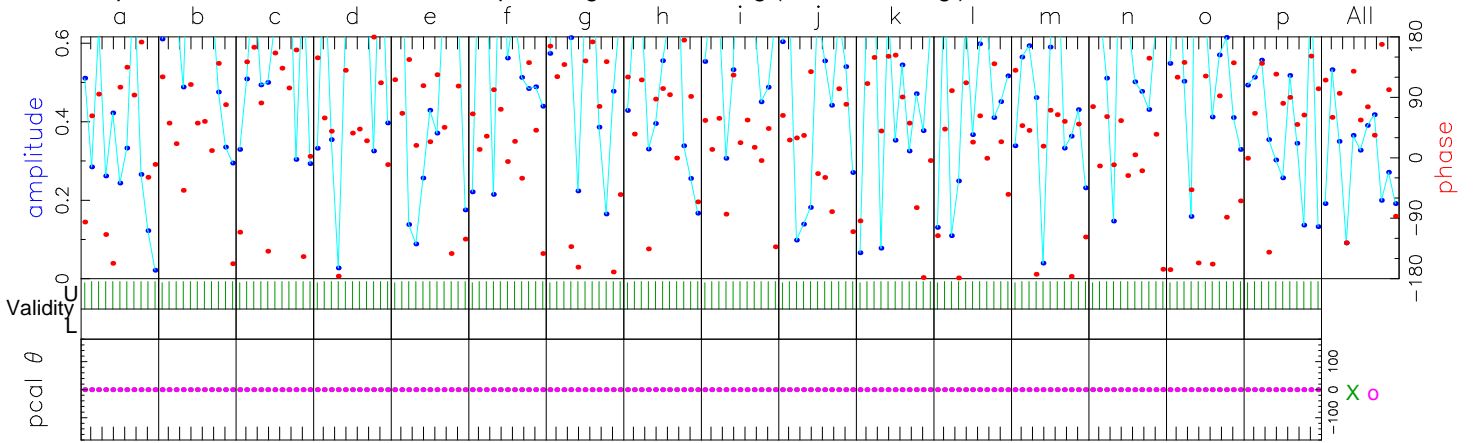


Fringe quality 9

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

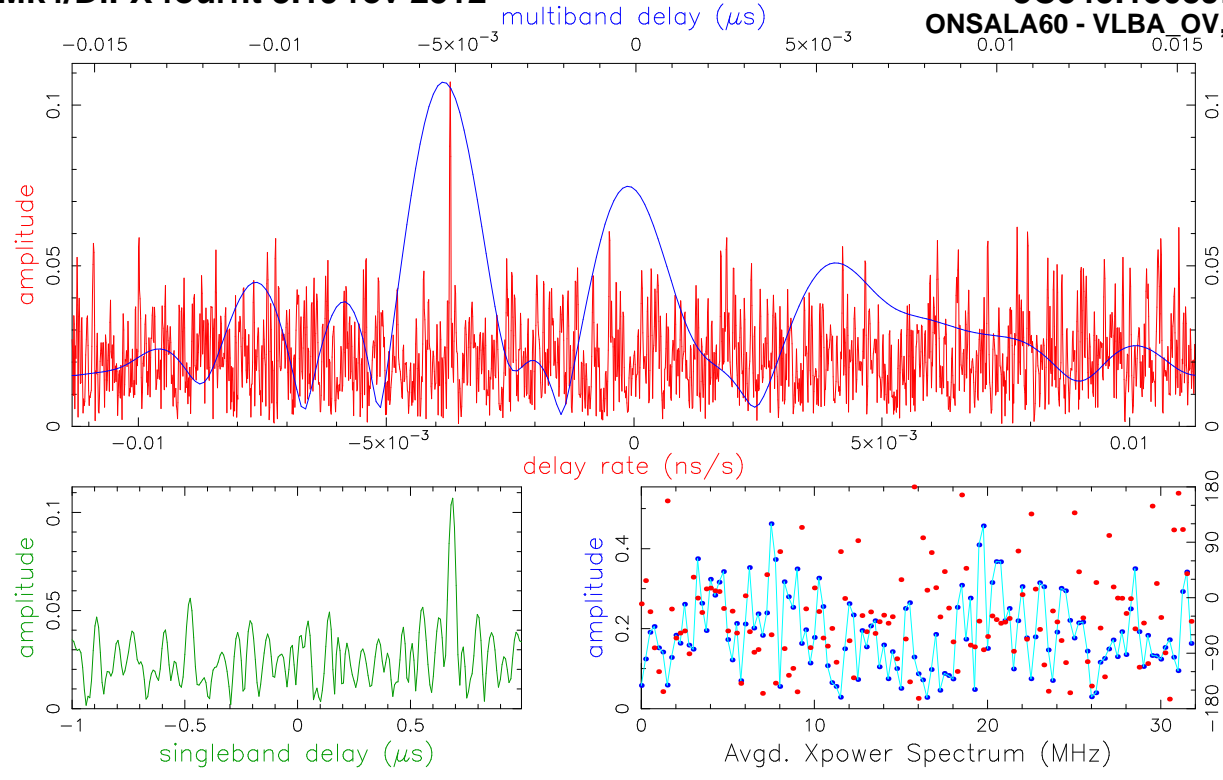
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042844
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



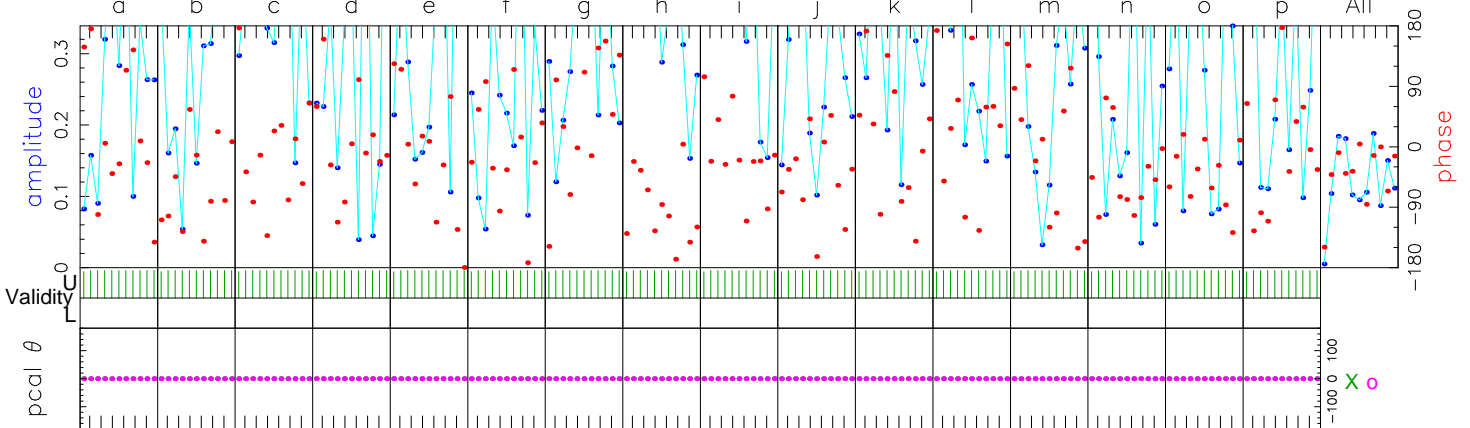
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	127.3	62.9	153.4	66.4	92.7	35.9	160.3	84.0	33.6	27.0	124.0	48.0	74.1	31.4	169.8	103.2	Phase	83.4
	0.1	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.2	0.2	0.2	0.3	0.3	0.2	0.2	Ampl.	0.3
	54.8	126.0	126.8	126.7	126.9	126.6	126.1	126.8	126.1	63.5	127.3	126.7	126.2	126.3	126.8	126.4	Sbd box	126.5
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	6.16182999296E+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



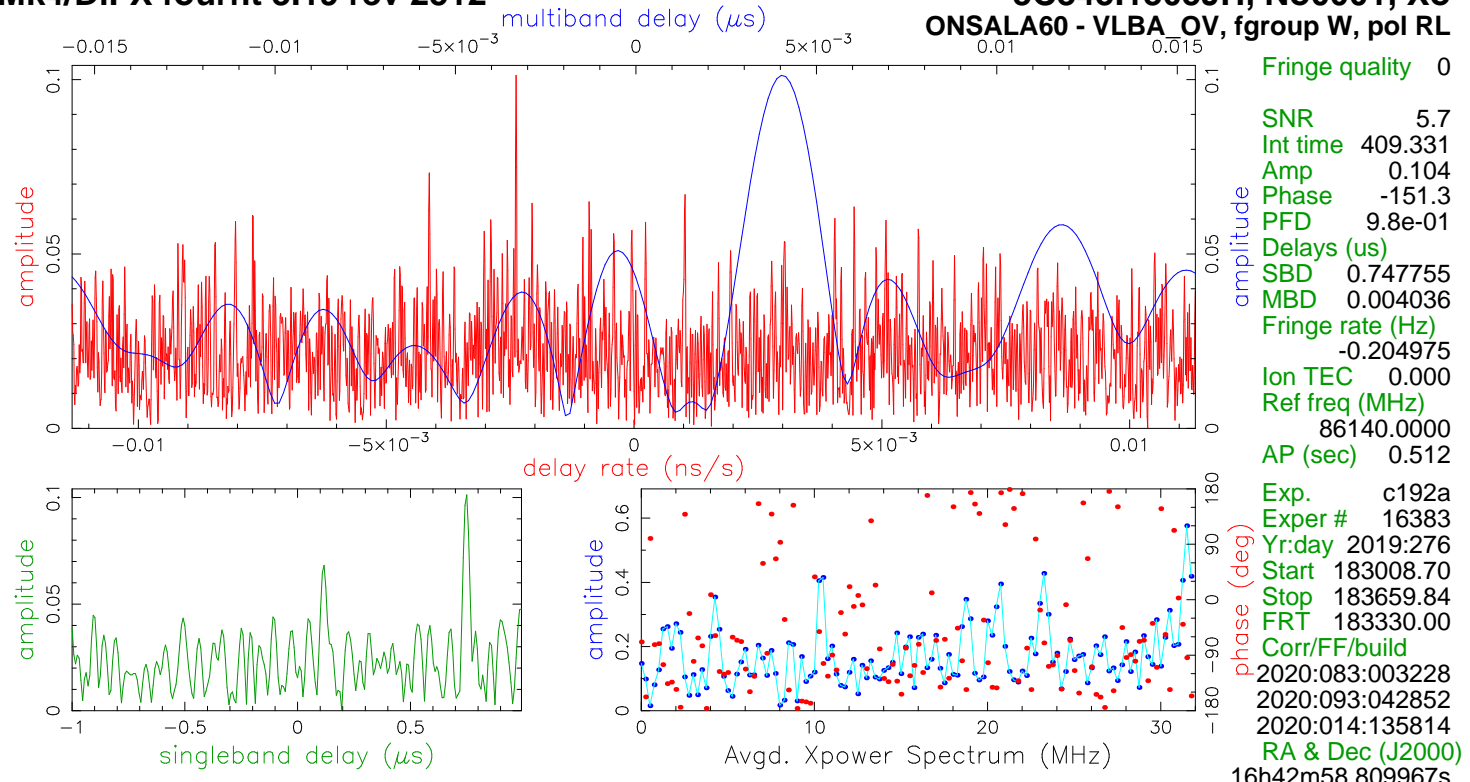
Fringe quality 0
 SNR 6.0
 Int time 409.331
 Amp 0.113
 Phase -29.6
 PFD 4.4e-01
 Delays (us)
 SBD 0.685084
 MBD -0.005350
 Fringe rate (Hz)
 -0.320259
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 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

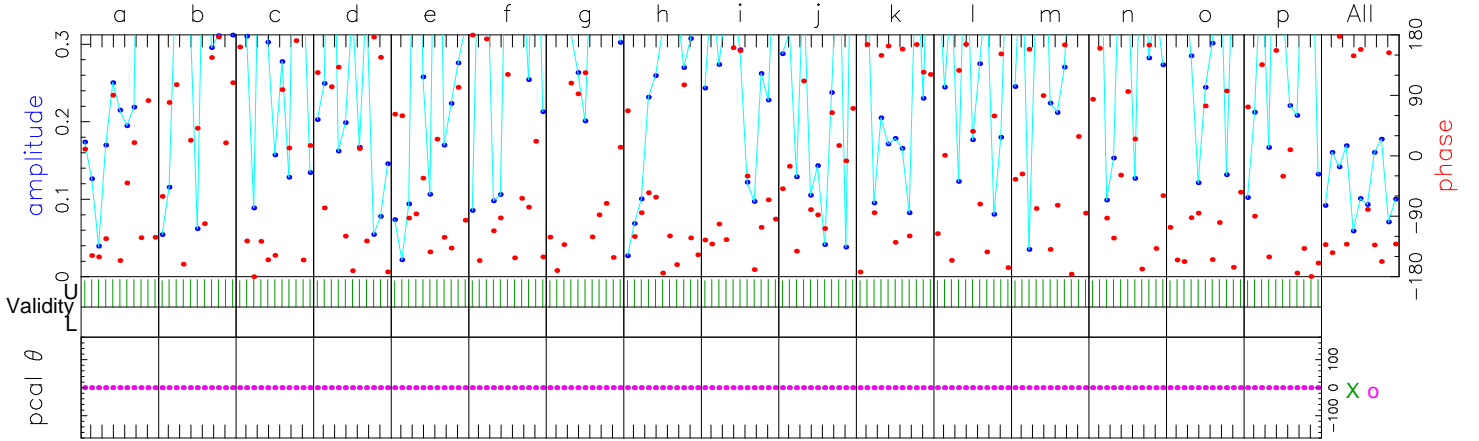


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-7.7	-46.2	-44.0	-15.5	-104.5	-7.5	74.2	-91.4	-5.6	-34.4	26.7	55.9	105.7	-54.0	-47.8	-14.1		Phase	-29.6
	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.3	0.2	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 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			
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)	RMS	Theor.	Amplitude			0.113 +/- 0.019			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5							
amp/seg (%)	44.2	31.8	Search (2048X64)			0.103			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000				
ph/frq (deg)	48.5	55.4	Interp.			0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016		
amp/frq (%)	61.2	38.3	Inc. seg. avg.			0.109			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011				
	71.3	66.9	Inc. frq. avg.			0.122			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.328.1305JH



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

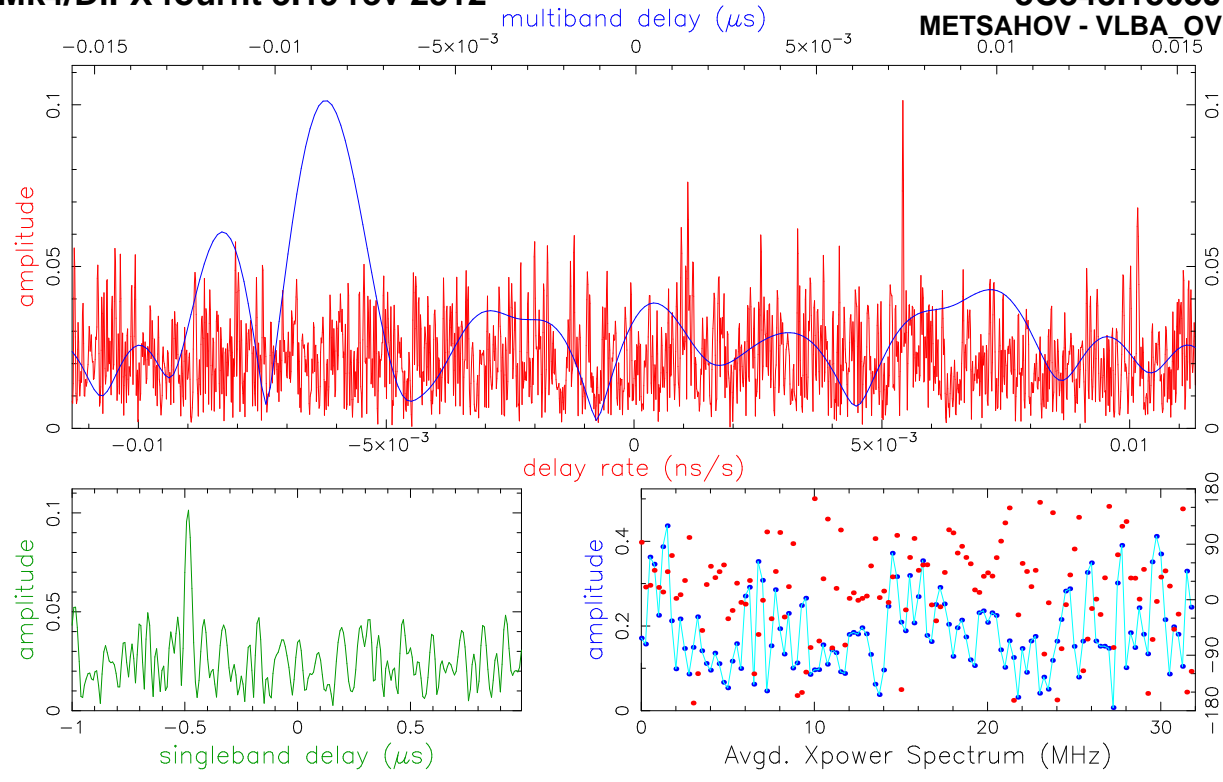


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-128.7	144.5	-166.3	166.9	-59.8	-151.7	-138.1	-134.5	-124.8	29.4	161.4	-156.8	-56.6	-178.6	-128.5	-173.5	Phase	-151.3
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	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	
																	Chan ids	
																	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	

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

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

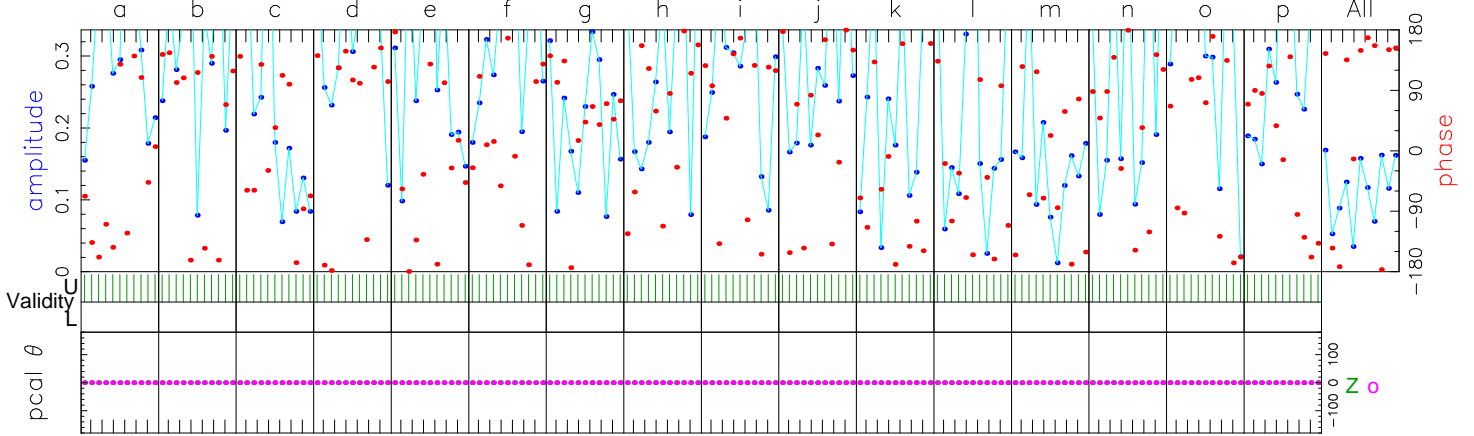


Fringe quality 0

SNR 5.6
 Int time 410.463
 Amp 0.112
 Phase 159.6
 PFD 9.8e-01
 Delays (us)
 SBD -0.486172
 MBD -0.008607
 Fringe rate (Hz)
 0.468198
 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
 2020:093:042847
 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
	-149.5	152.2	-33.3	142.8	155.2	81.0	79.6	-175.5	147.7	-178.7	-175.6	-147.5	-119.4	144.4	138.4	153.2	Phase	159.6
	0.2	0.3	0.0	0.3	0.1	0.0	0.2	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.1	Ampl.	0.1
	105.7	67.3	164.5	66.8	53.5	119.3	39.0	41.4	97.1	126.7	201.8	31.1	63.5	34.1	30.5	192.9	Sbd box	66.8
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z: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	
Z	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		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

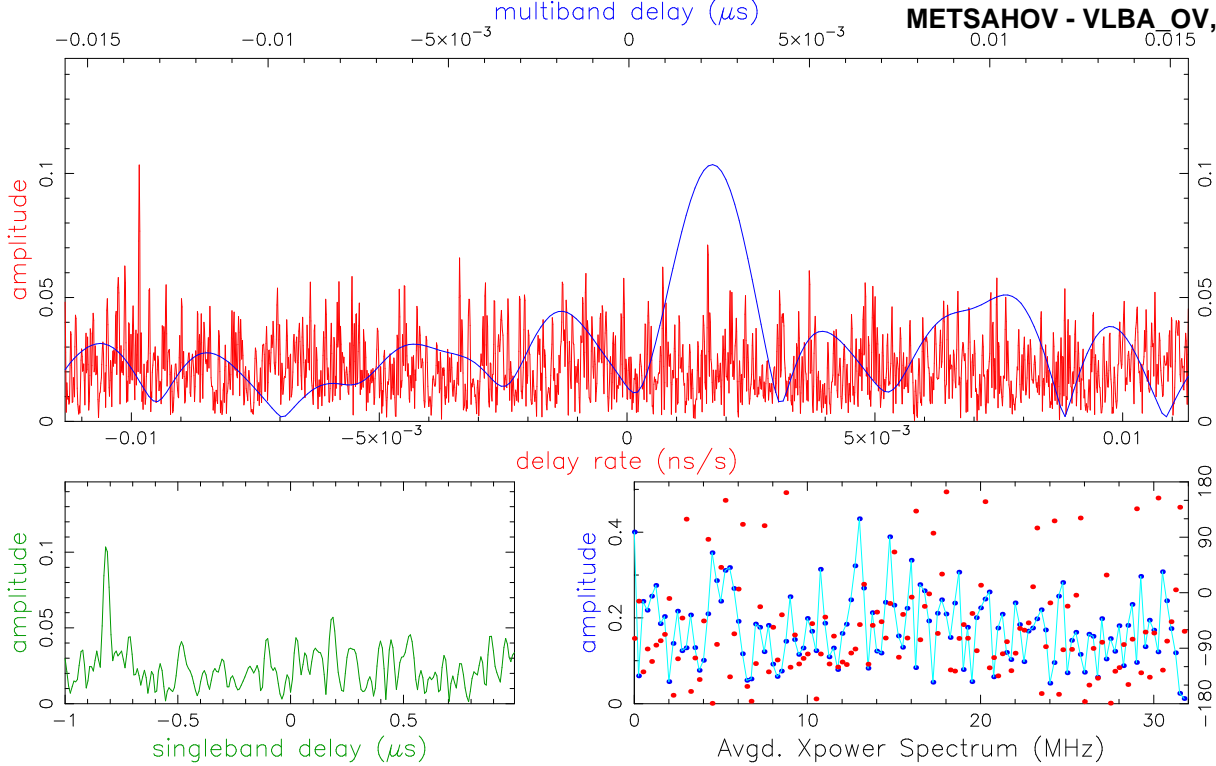
Group delay (usec)(sbd) 4.55214927733E+03 Apriori delay (usec) 4.55262663482E+03 Resid mbdelay (usec) -8.60750E-03 +/- 1.9E-04
 Sband delay (usec) 4.55214046332E+03 Apriori clock (usec) -1.6447569E+01 Resid sbdelay (usec) -4.86172E-01 +/- 3.1E-03
 Phase delay (usec) 4.55262663997E+03 Apriori clockrate (us/s) 1.5311808E-08 Resid phdelay (usec) 5.14566E-06 +/- 6.5E-07
 Delay rate (us/s) -1.46576632269E+00 Apriori rate (us/s) -1.46577175801E+00 Resid rate (us/s) 5.43532E-06 +/- 2.8E-09
 Total phase (deg) 276.1 Apriori accel (us/s/s) -5.29754221444E-06 Resid phase (deg) 159.6 +/- 20.3

RMS Theor. Amplitude 0.112 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.5 33.7 Search (2048X64) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.7 58.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 62.9 40.6 Inc. seg. avg. 0.107 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 69.9 70.9 Inc. frq. avg. 0.114 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10917.010 1312.934 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.319.1305JH

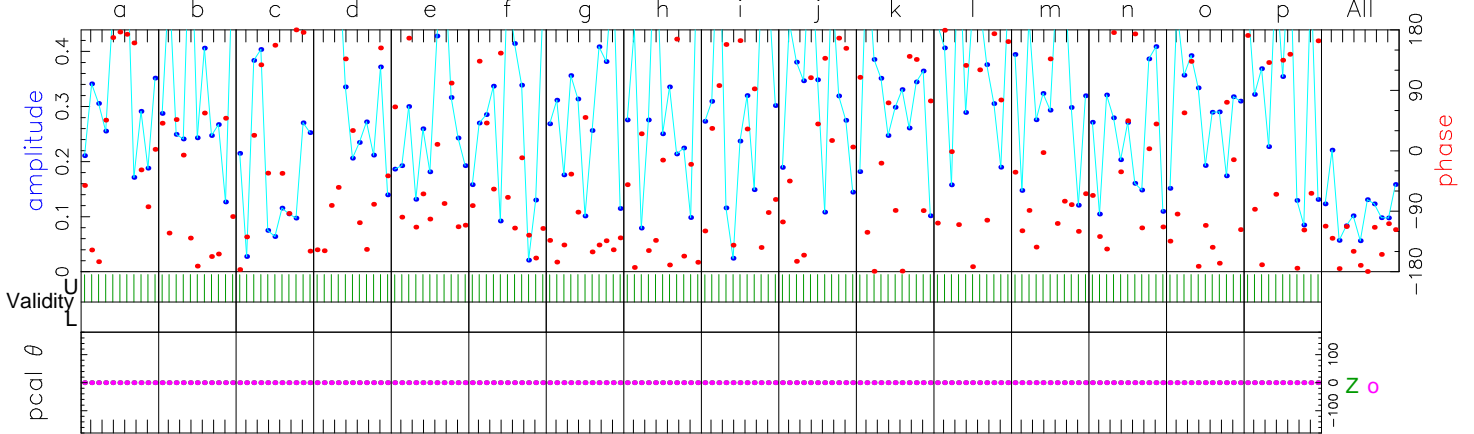
Mk4/DiFX fourfit 3.19 rev 2512

3C345.1305JH, No0001, Zo
 METSAHOV - VLBA_OV, fgroup W, pol RR



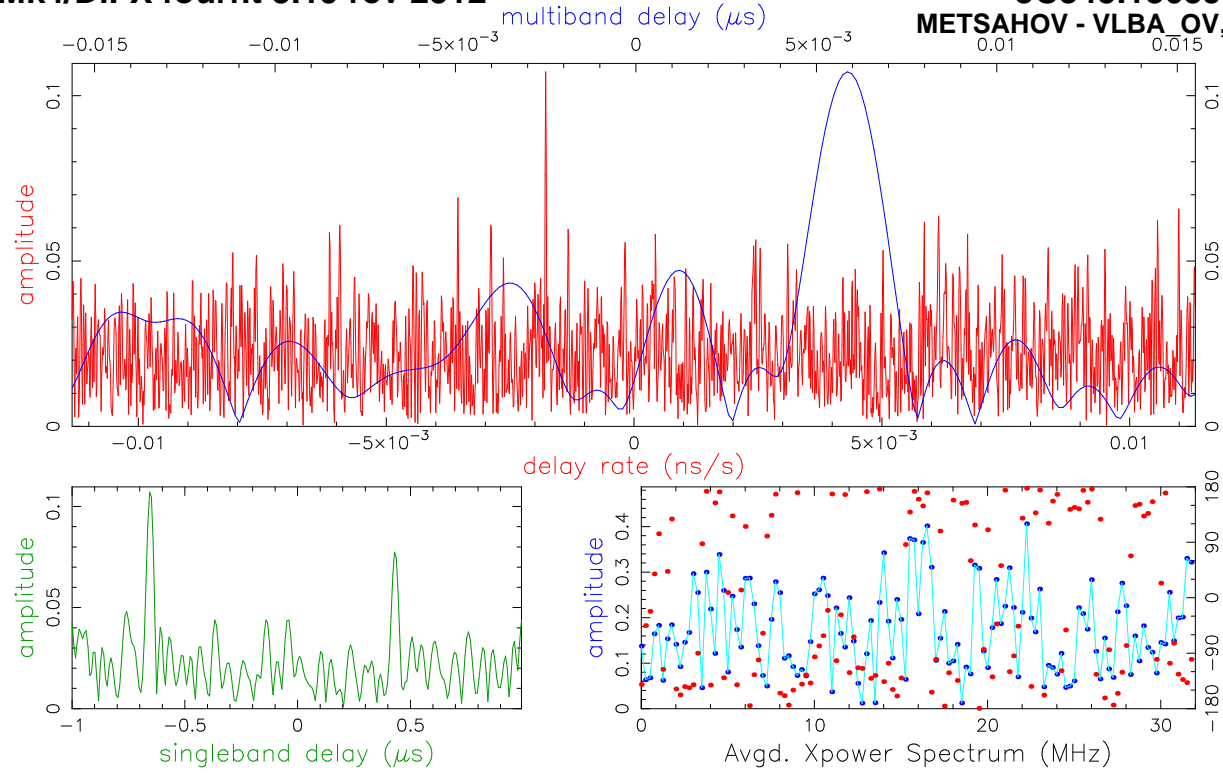
Fringe quality 0
 SNR 5.8
 Int time 410.463
 Amp 0.146
 Phase -134.2
 PFD 7.8e-01
 Delays (us)
 SBD -0.817486
 MBD 0.002368
 Fringe rate (Hz)
 -0.848934
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:083:003228
 2020:093:042851
 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
	-167.1	-119.4	167.2	-117.6	-84.7	-83.1	-130.7	-147.9	-167.6	123.2	-160.4	-169.8	-83.9	-48.6	-144.5	-160.6	Phase	-134.2
	0.2	0.1	0.1	0.3	0.1	0.2	0.3	0.3	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.2	Ampl.	0.1
	60.0	173.2	86.6	25.1	134.0	236.6	208.1	92.9	179.8	18.5	60.4	55.3	78.8	196.5	37.1	219.2	Sbd box	24.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
Z: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	
Z: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	
Z	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	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		4.55181650290E+03								4.55262663482E+03							Resid mbdelay (usec)	2.36808E-03 +/- 1.9E-04
Sband delay (usec)		4.55180914932E+03								-1.6447569E+01							Resid sbdelay (usec)	-8.17486E-01 +/- 3.0E-03
Phase delay (usec)		4.55262663049E+03								1.5311808E-08							Resid phdelay (usec)	-4.32884E-06 +/- 6.4E-07
Delay rate (us/s)		-1.46578161329E+00								-1.46577175801E+00							Resid rate (us/s)	-9.85528E-06 +/- 2.7E-09
Total phase (deg)					-17.7					-5.29754221444E-06							Resid phase (deg)	-134.2 +/- 19.7

ph/seg (deg) 27.0 32.7 Search (2048X64) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.4 57.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.7 39.4 Inc. seg. avg. 0.136 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 65.3 68.8 Inc. frq. avg. 0.145 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10917.010 1312.934 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.336.1305JH

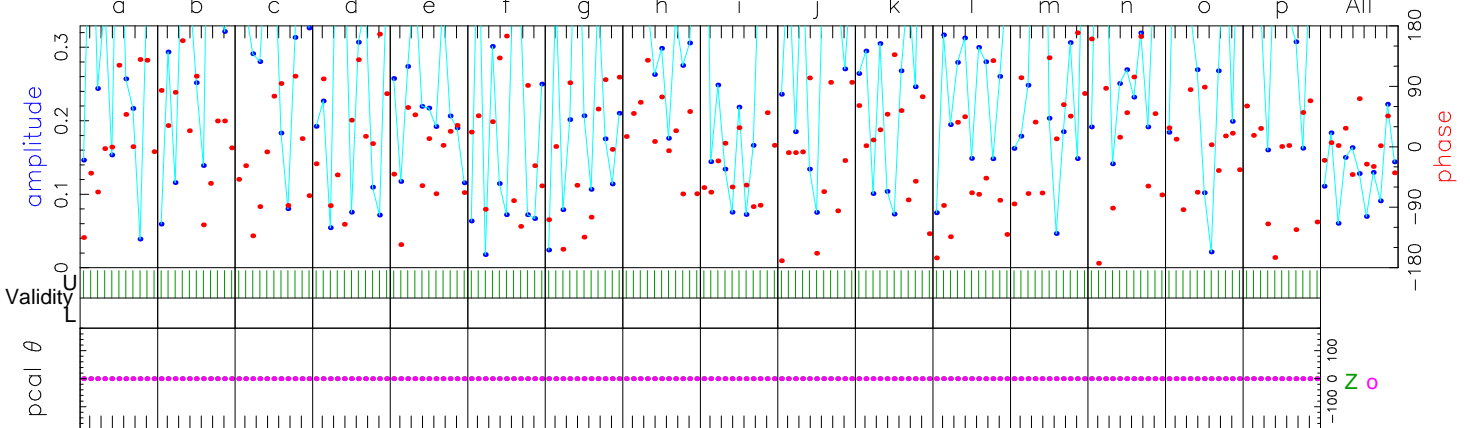


Fringe quality 0

SNR 6.0
 Int time 410.463
 Amp 0.110
 Phase 2.2
 PFD 3.7e-01
 Delays (us)
 SBD -0.653286
 MBD 0.005896
 Fringe rate (Hz)
 -0.153416
 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
 2020:093:042854
 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

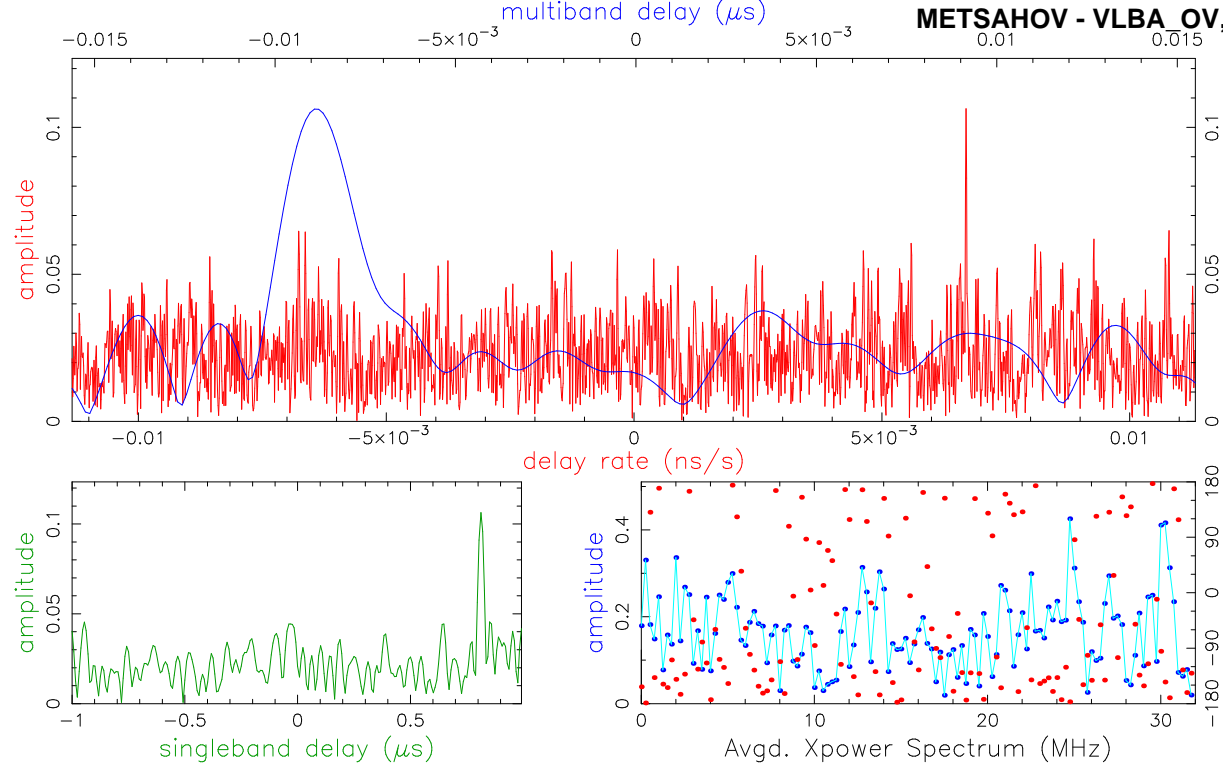


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z: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		
Z: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		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

Group delay (usec)(sbd) 4.55197628095E+03 Apriori delay (usec) 4.55262663482E+03 Resid mbdelay (usec) 5.89612E-03 +/- 1.8E-04
 Sband delay (usec) 4.55197334932E+03 Apriori clock (usec) -1.6447569E+01 Resid sbdelay (usec) -6.53286E-01 +/- 2.9E-03
 Phase delay (usec) 4.55262663489E+03 Apriori clockrate (us/s) 1.5311808E-08 Resid phdelay (usec) 6.97420E-08 +/- 6.1E-07
 Delay rate (us/s) -1.46577353901E+00 Apriori rate (us/s) -1.46577175801E+00 Resid rate (us/s) -1.78100E-06 +/- 2.6E-09
 Total phase (deg) 118.7 Apriori accel (us/s/s) -5.29754221444E-06 Resid phase (deg) 2.2 +/- 19.0

ph/seg (deg) RMS Theor. Amplitude 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 34.7 31.6 Search (2048X64) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.7 55.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.0 38.1 Inc. seg. avg. 0.116 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 48.4 66.5 Inc. frq. avg. 0.102 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10917.010 1312.934 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.347.1305JH

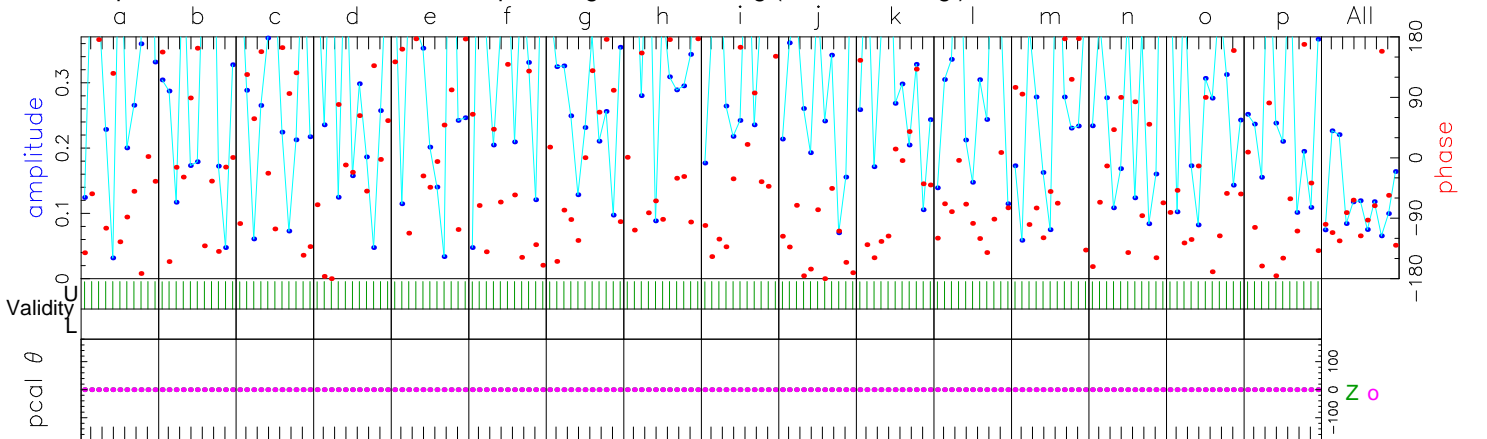


Fringe quality 0

SNR 5.9
 Int time 410.463
 Amp 0.123
 Phase -103.9
 PFD 6.1e-01
 Delays (us)
 SBD 0.813245
 MBD -0.008843
 Fringe rate (Hz)
 0.577716
 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
 2020:093:042858
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-75.5	-70.4	-143.6	4.8	164.3	-135.7	-105.6	-103.1	-91.5	-126.3	-112.0	-67.2	-121.9	-81.4	-103.9	-124.5	Phase	-103.9
	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.1	Ampl.	0.1
	241.2	53.9	96.9	12.3	184.9	180.3	133.7	233.2	198.2	169.1	246.0	196.7	181.3	200.0	111.4	86.5	Sbd box	233.1
UL	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
Z	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	
Z: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	
Z: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	
Z	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	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) 4.55343029148E+03 Apriori delay (usec) 4.55262663482E+03 Resid mbdelay (usec) -8.84335E-03 +/- 1.8E-04
 Sband delay (usec) 4.55343987932E+03 Apriori clock (usec) -1.6447569E+01 Resid sbdelay (usec) 8.13245E-01 +/- 2.9E-03
 Phase delay (usec) 4.55262663147E+03 Apriori clockrate (us/s) 1.5311808E-08 Resid phdelay (usec) -3.35076E-06 +/- 6.3E-07
 Delay rate (us/s) -1.46576505130E+00 Apriori rate (us/s) -1.46577175801E+00 Resid rate (us/s) 6.70671E-06 +/- 2.6E-09
 Total phase (deg) 12.6 Apriori accel (us/s/s) -5.29754221444E-06 Resid phase (deg) -103.9 +/- 19.4

RMS Theor. Amplitude 0.123 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 38.7 32.2 Search (2048X64) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 53.3 56.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 44.8 38.9 Inc. seg. avg. 0.124 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 50.9 67.8 Inc. frq. avg. 0.121 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10917.010 1312.934 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v2/1234/No0001/Zo..1305JH Output file: /Exps/c192a/v2/1234/No0001/Zo.W.356.1305JH