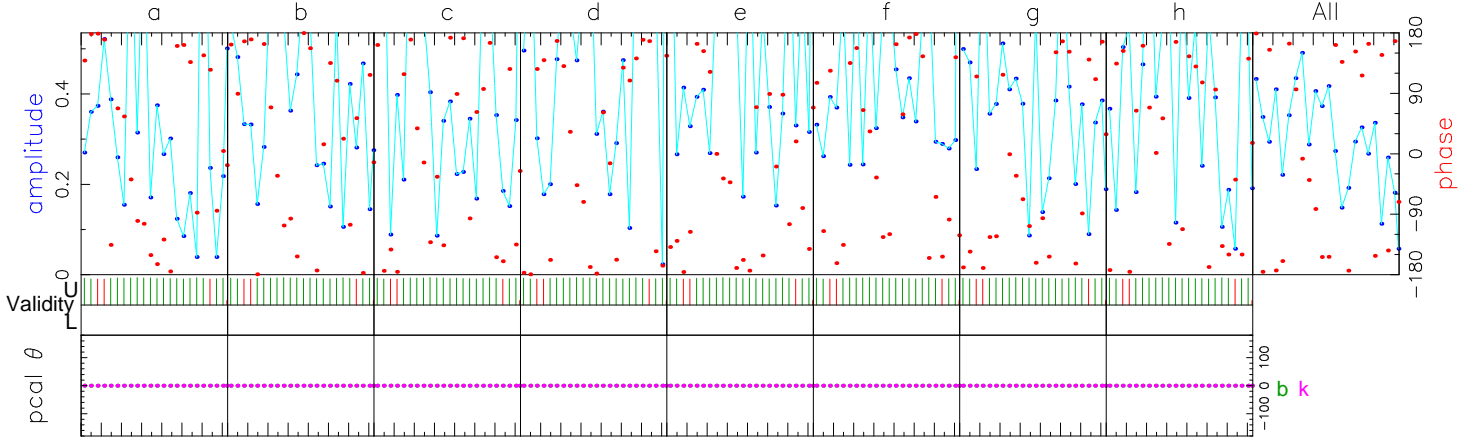


Fringe quality 9

SNR 9.8  
Int time 407.129  
Amp 0.178  
Phase -179.4  
PFD 3.0e-14  
Delays (us)  
SBD -0.003592  
MBD -0.003730  
Fringe rate (Hz) 0.002341  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143531  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

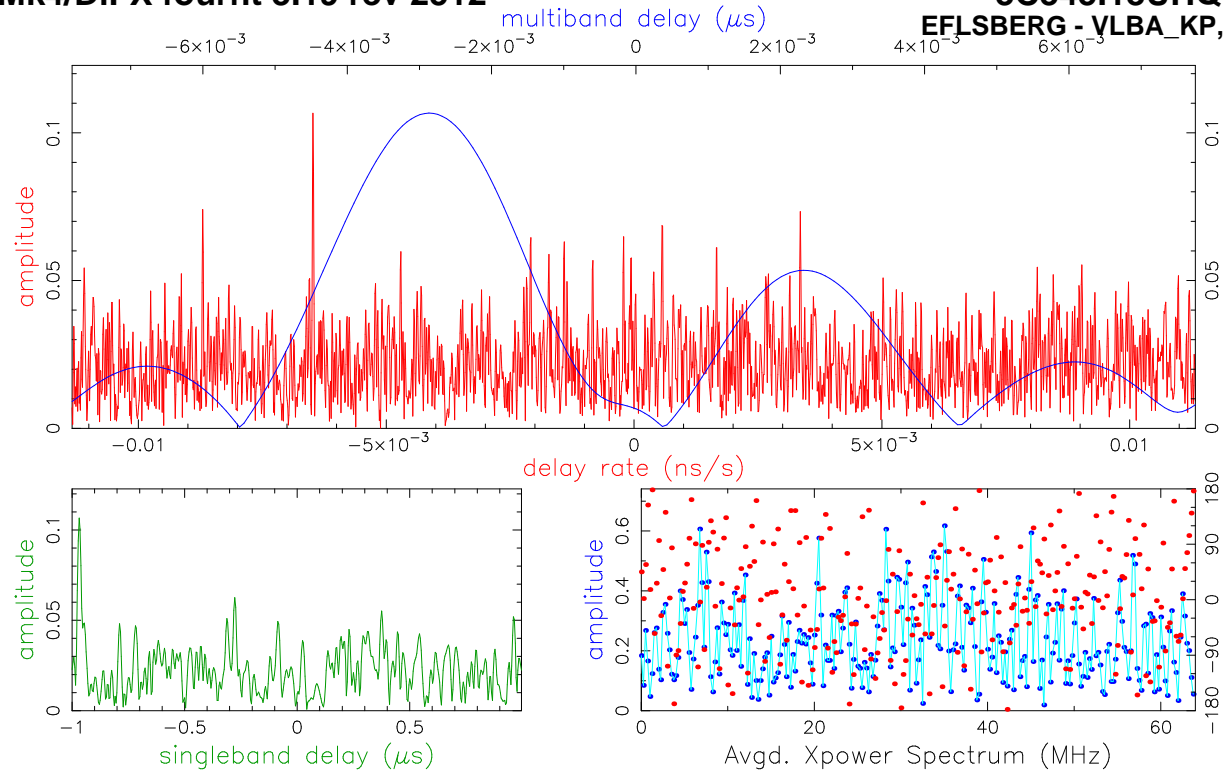
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.6	165.3	172.4	168.1	-132.2	-172.6	-167.8	155.7		-179.4
	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2		0.2
	169.1	254.7	257.0	255.1	213.7	256.8	256.0	254.9		256.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	-4.54524116889E+02		Apriori delay (usec)		-4.54520386752E+02		Resid mbdelay (usec)		-3.73014E-03	+/- 1.1E-04
Sband delay (usec)	-4.54523978502E+02		Apriori clock (usec)		-1.0636109E+00		Resid sbdelay (usec)		-3.59175E-03	+/- 8.7E-04
Phase delay (usec)	-4.54520392537E+02		Apriori clockrate (us/s)		-4.7400004E-08		Resid phdelay (usec)		-5.78551E-06	+/- 3.8E-07
Delay rate (us/s)	4.34486782375E-02		Apriori rate (us/s)		4.34486510593E-02		Resid rate (us/s)		2.71781E-08	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.79504505880E-05		Resid phase (deg)		-179.4	+/- 11.6

ph/seg (deg) 61.1 27.9 Amplitude 0.178 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 92.9 48.7 Search (2048X32) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.5 16.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 21.4 28.7 Inc. seg. avg. 0.278 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 21.4 28.7 Inc. frq. avg. 0.182 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 104.8 el 69.8 pa -57.1 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) -281.553 2644.118 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bk.W.29.18UHQS

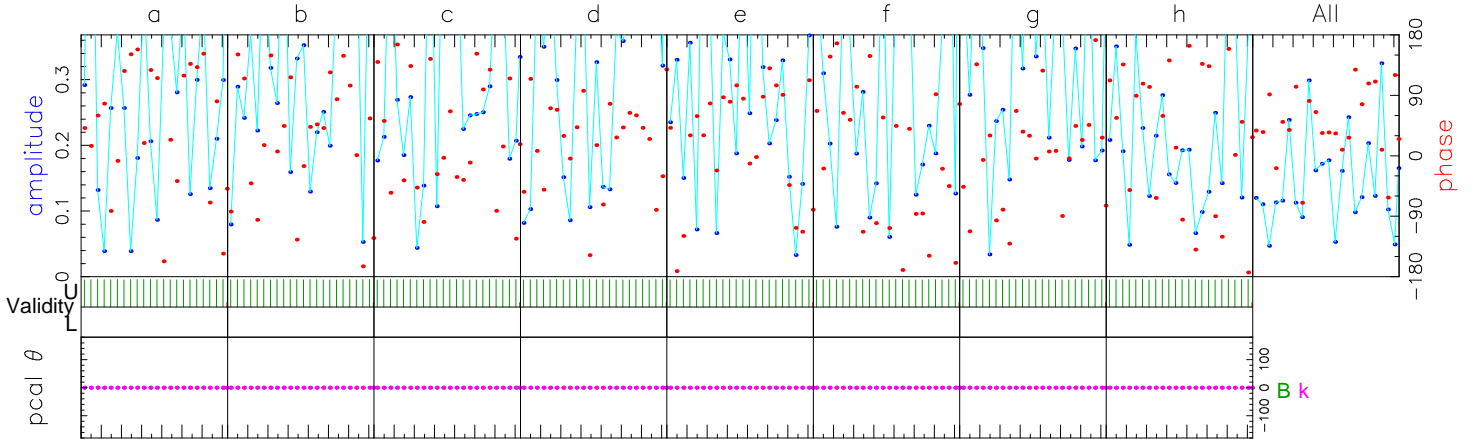


Fringe quality 0

SNR 6.0  
Int time 417.307  
Amp 0.123  
Phase 47.1  
PFD 4.5e-01  
Delays (us)  
SBD -0.968062  
MBD -0.002840  
Fringe rate (Hz)  
-0.558567  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

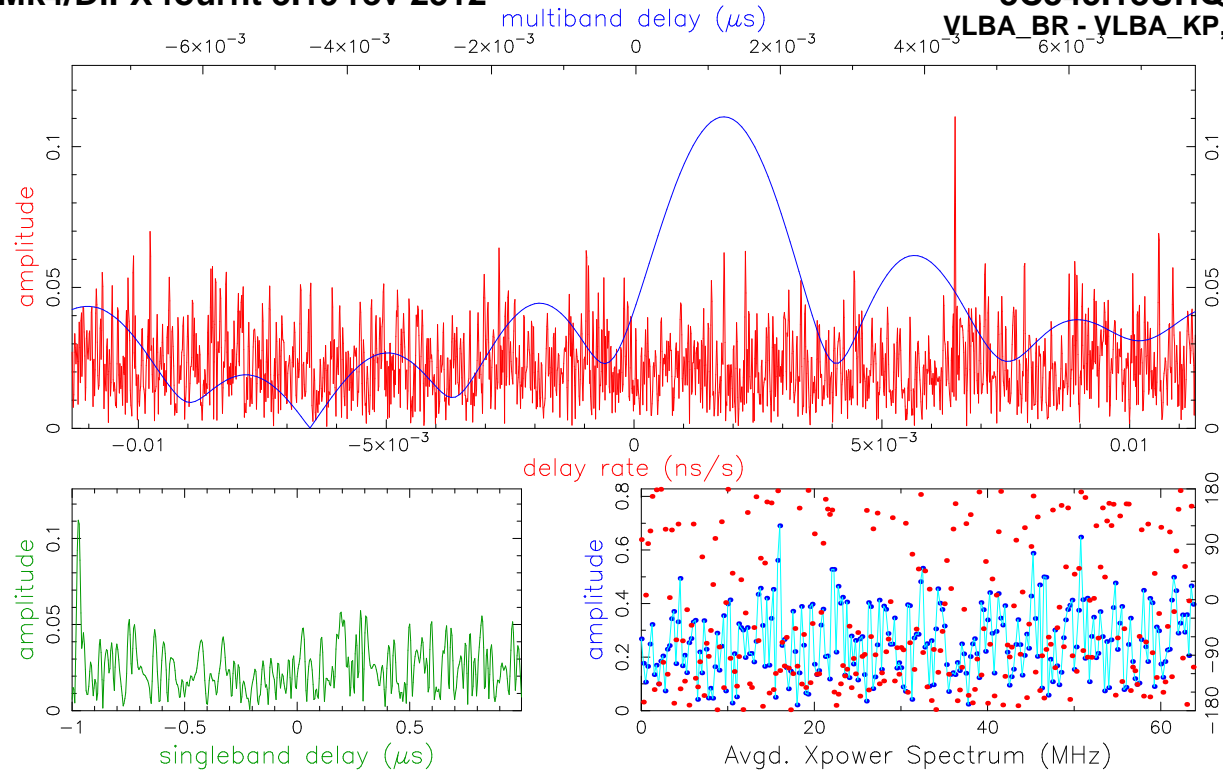
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143532  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



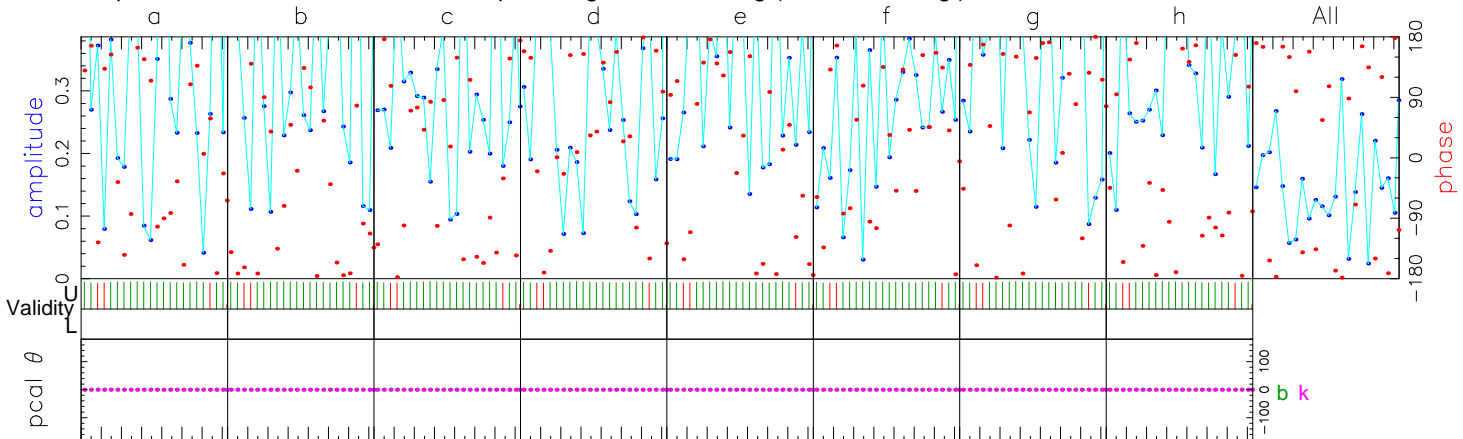
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.21555451997E+04									
Sband delay (usec)	-1.21555416716E+04									
Phase delay (usec)	-1.21545736078E+04									
Delay rate (us/s)	-1.03266511138E+00									
Total phase (deg)			-207.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									47.1	+/- 19.2

ph/seg (deg) 52.6 46.0 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.5 80.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.4 27.1 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 46.0 47.4 Inc. frq. avg. 0.120 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 304.4 el 23.7 pa 42.9 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 7873.652 6910.014 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Bk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bk.W.31.18UHQS



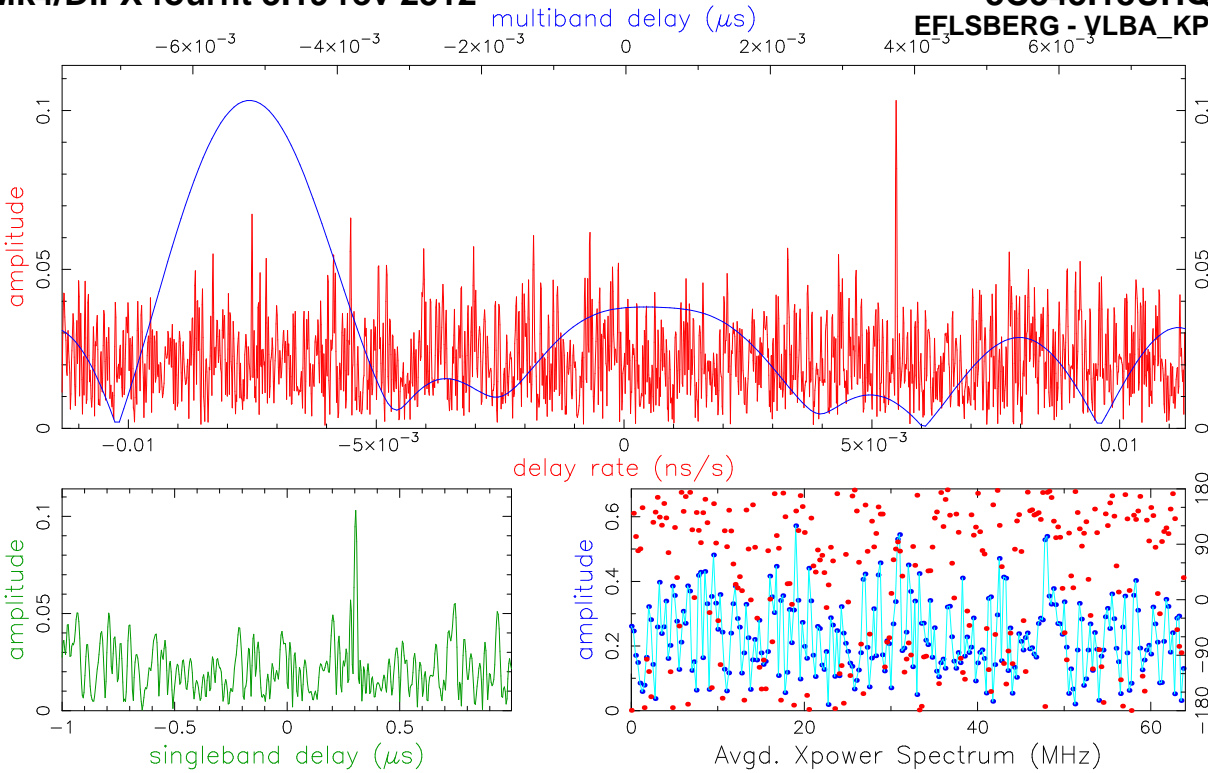
Fringe quality 0  
SNR 6.2  
Int time 407.130  
Amp 0.129  
Phase 179.1  
PFD 1.5e-01  
Delays (us)  
SBD -0.971110  
MBD 0.001237  
Fringe rate (Hz)  
0.558609  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143536  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



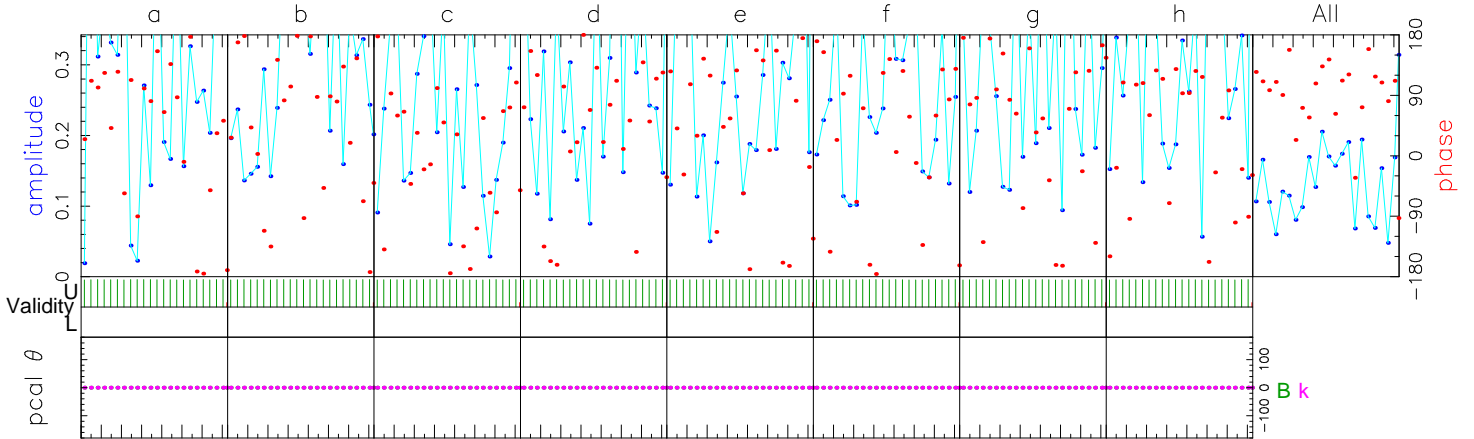
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-162.1	-178.9	-169.0	145.2	151.9	118.8	164.3	-153.3	Phase	179.1
	0.2	0.1	0.2	0.1	0.1	0.0	0.2	0.2	Ampl.	0.1
	67.0	161.9	310.4	50.4	310.4	144.0	351.5	7.9	Sbd box	8.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.55487899739E+02		Apriori delay (usec)		-4.54520386752E+02		Resid mbdelay (usec)		1.23701E-03	+/- 1.8E-04
Sband delay (usec)	-4.55491496252E+02		Apriori clock (usec)		-1.0636109E+00		Resid sbdelay (usec)		-9.71110E-01	+/- 1.4E-03
Phase delay (usec)	-4.54520380976E+02		Apriori clockrate (us/s)		-4.7400004E-08		Resid phdelay (usec)		5.77608E-06	+/- 6.0E-07
Delay rate (us/s)	4.34551359593E-02		Apriori rate (us/s)		4.34486510593E-02		Resid rate (us/s)		6.48490E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.79504505880E-05		Resid phase (deg)		179.1	+/- 18.5

ph/seg (deg) 52.7 44.4 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 73.3 77.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 34.2 26.2 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 42.8 45.7 Inc. frq. avg. 0.126 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
b: az 104.8 el 69.8 pa -57.1 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) -281.553 2644.118 simultaneous interpolator

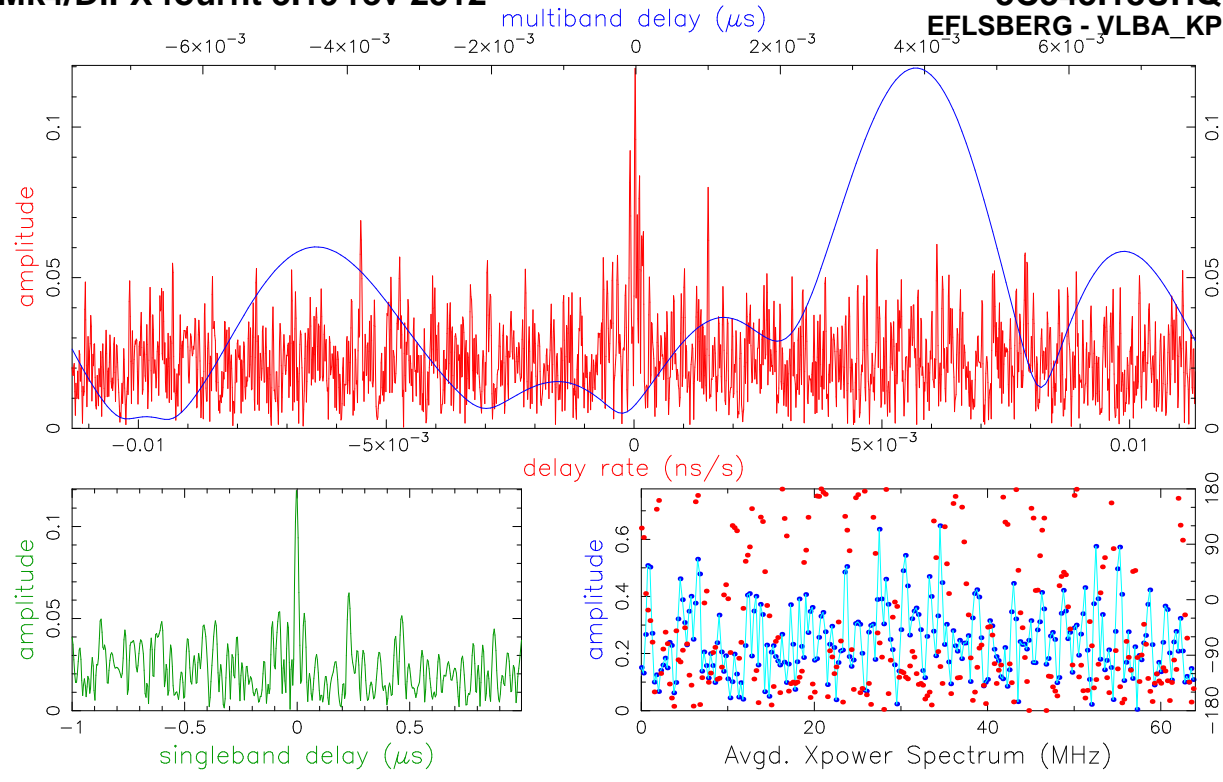


Fringe quality 0  
SNR 5.8  
Int time 417.307  
Amp 0.114  
Phase 104.5  
PFD 8.5e-01  
Delays (us)  
SBD 0.304033  
MBD -0.005259  
Fringe rate (Hz) 0.473786  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143536  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

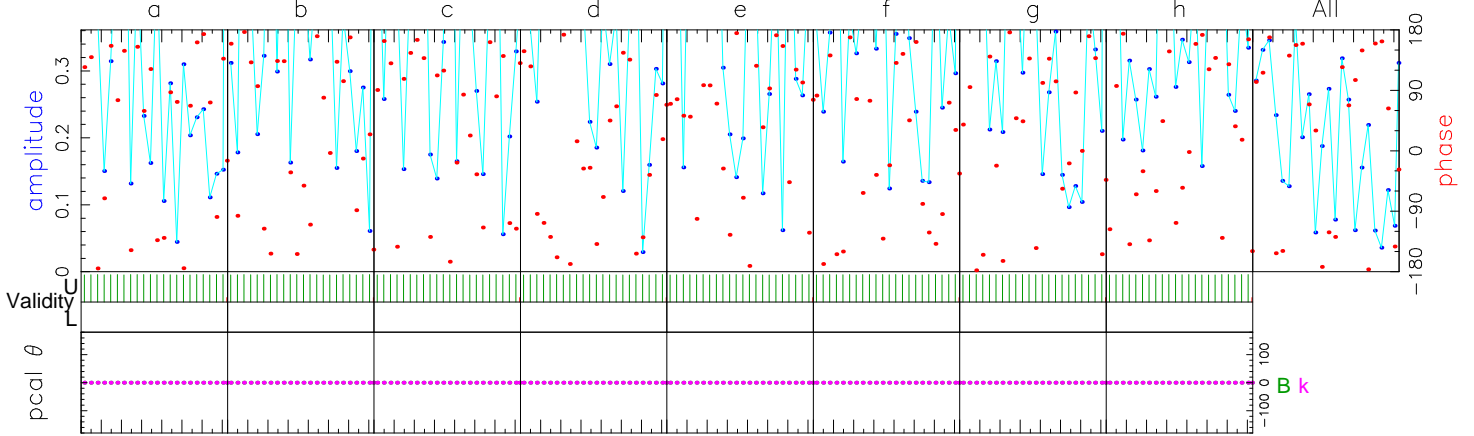


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.21542663682E+04									
Sband delay (usec)	-1.21542695761E+04									
Phase delay (usec)	-1.21545736060E+04									
Delay rate (us/s)	-1.03265312678E+00									
Total phase (deg)			-150.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal mode										
PC period (AP's)										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										



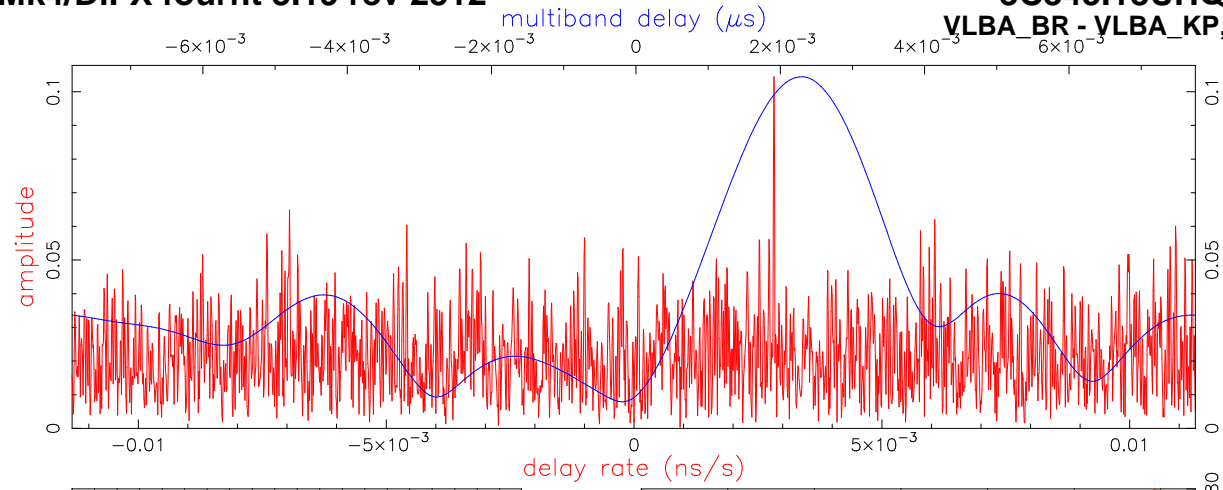
Fringe quality 0  
SNR 6.7  
Int time 417.307  
Amp 0.120  
Phase 147.6  
PFD 4.9e-03  
Delays (us)  
SBD -0.002747  
MBD 0.003927  
Fringe rate (Hz) 0.001533  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143526  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

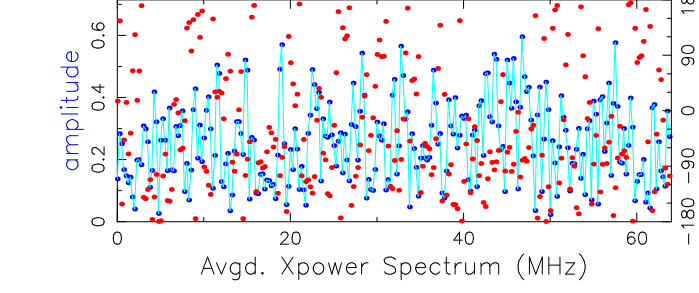
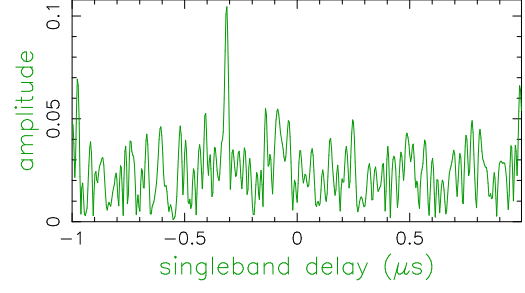


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.21545696825E+04									
Sband delay (usec)	-1.21545763558E+04									
Phase delay (usec)	-1.21545736046E+04									
Delay rate (us/s)	-1.03265860917E+00									
Total phase (deg)			-107.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

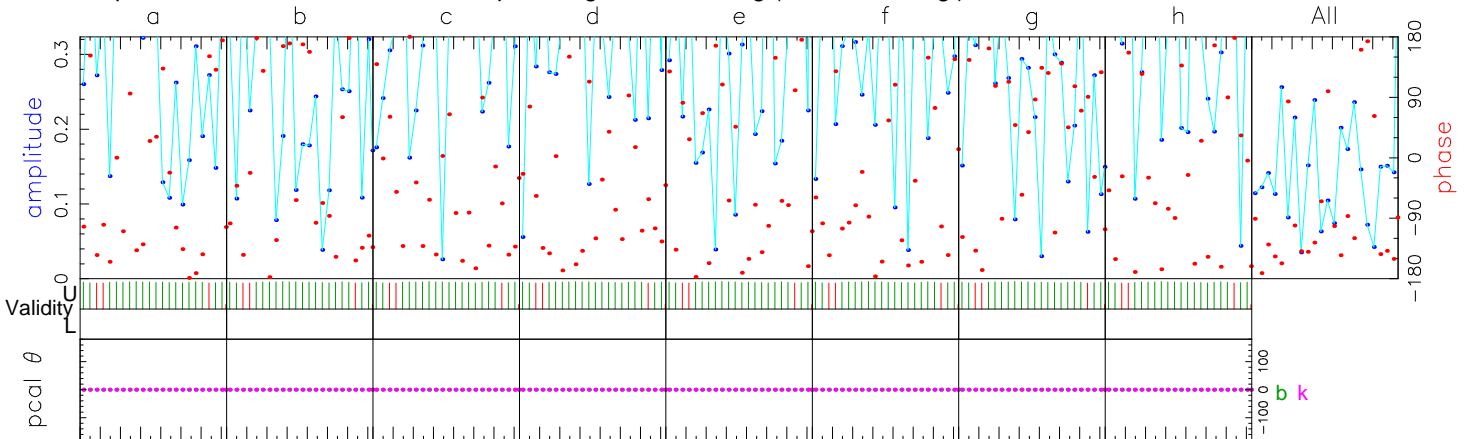
B: az 304.4 el 23.7 pa 42.9 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 7873.652 6910.014  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Bk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bk.W.6.18UHQS



Fringe quality 0  
SNR 5.8  
Int time 407.129  
Amp 0.108  
Phase -136.3  
PFD 8.1e-01  
Delays (us)  
SBD -0.313576  
MBD 0.002279  
Fringe rate (Hz)  
0.243120  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143540  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

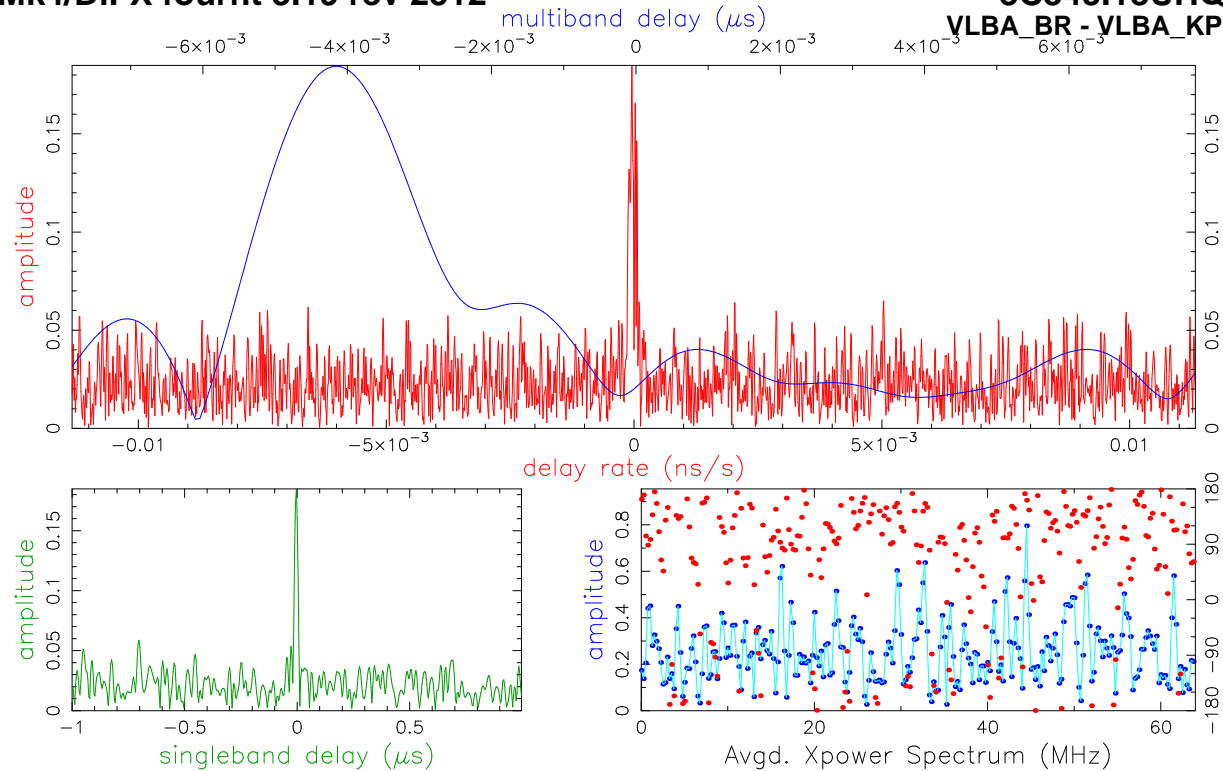


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-151.6	-157.8	-102.3	-115.3	-153.3	-123.4	139.5	-117.9	Phase	-136.3
	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	153.8	233.0	1.5	369.7	8.0	159.8	241.8	259.8	Sbd box	176.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.54830607986E+02		Apriori delay (usec)		-4.54520386752E+02		Resid mbdelay (usec)		2.27877E-03	+/- 1.9E-04
Sband delay (usec)	-4.54833962252E+02		Apriori clock (usec)		-1.0636109E+00		Resid sbdelay (usec)		-3.13576E-01	+/- 1.5E-03
Phase delay (usec)	-4.54520391146E+02		Apriori clockrate (us/s)		-4.7400004E-08		Resid phdelay (usec)		-4.39386E-06	+/- 6.4E-07
Delay rate (us/s)	4.34514734449E-02		Apriori rate (us/s)		4.34486510593E-02		Resid rate (us/s)		2.82239E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.79504505880E-05		Resid phase (deg)		-136.3	+/- 19.8

ph/seg (deg) 61.3 47.4 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 71.4 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 41.2 27.9 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 28.9 48.8 Inc. frq. avg. 0.112 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
b: az 104.8 el 69.8 pa -57.1 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) -281.553 2644.118 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bk.W.69.18UHQS

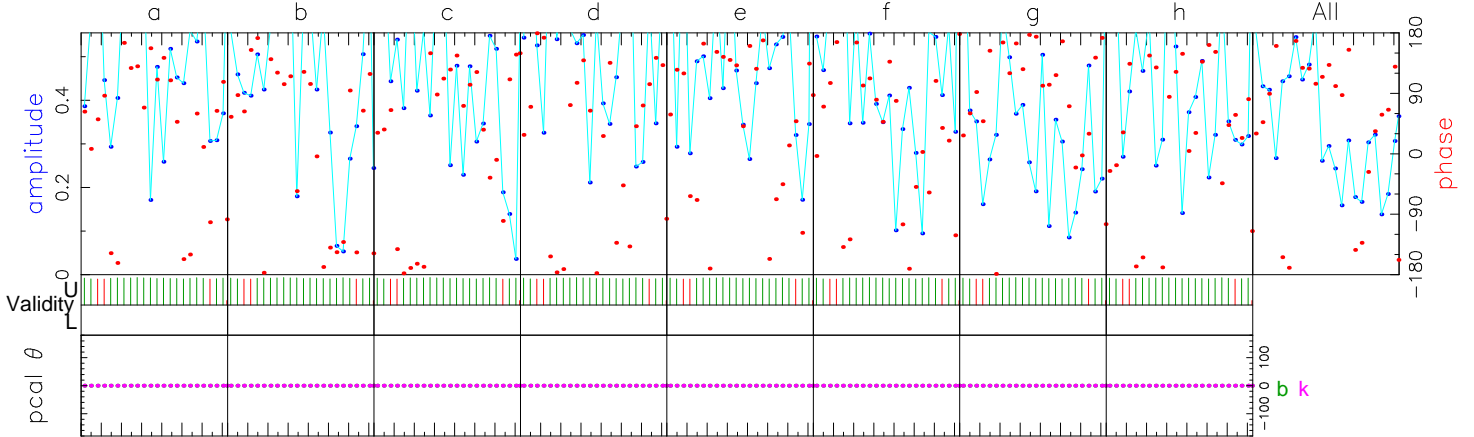


Fringe quality 9

SNR 10.2  
Int time 407.130  
Amp 0.185  
Phase 119.6  
PFD 8.5e-16  
Delays (us)  
SBD -0.004518  
MBD -0.004162  
Fringe rate (Hz)  
-0.003379  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143526  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

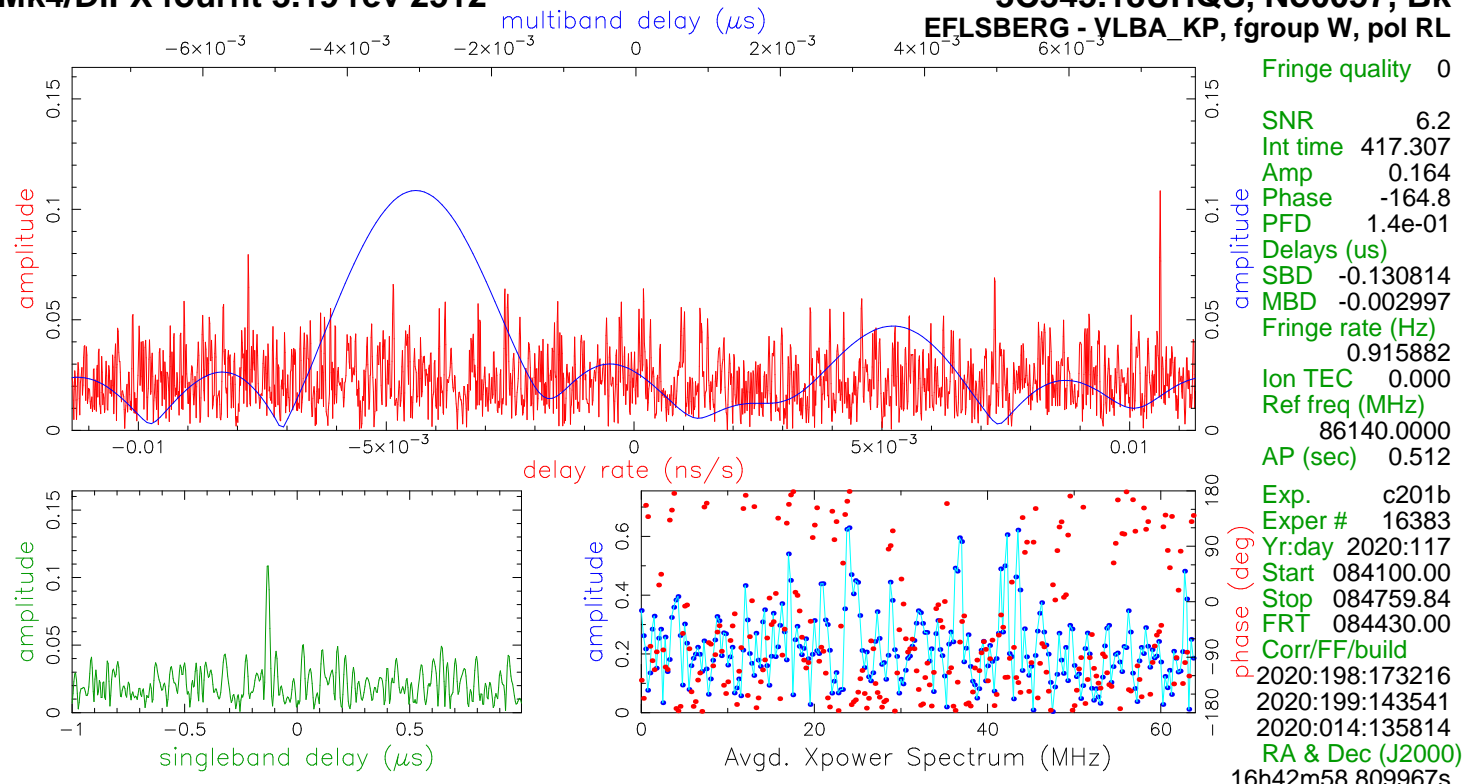


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.54524548822E+02		Apriori delay (usec)		-4.54520386752E+02		Resid mbdelay (usec)		-4.16207E-03	+/- 1.1E-04
Sband delay (usec)	-4.54524905002E+02		Apriori clock (usec)		-1.0636109E+00		Resid sbdelay (usec)		-4.51825E-03	+/- 8.4E-04
Phase delay (usec)	-4.54520382896E+02		Apriori clockrate (us/s)		-4.7400004E-08		Resid phdelay (usec)		3.85599E-06	+/- 3.6E-07
Delay rate (us/s)	4.34486118329E-02		Apriori rate (us/s)		4.34486510593E-02		Resid rate (us/s)		-3.92265E-08	+/- 1.5E-09
Total phase (deg)	78.2		Apriori accel (us/s/s)		1.79504505880E-05		Resid phase (deg)		119.6	+/- 11.2

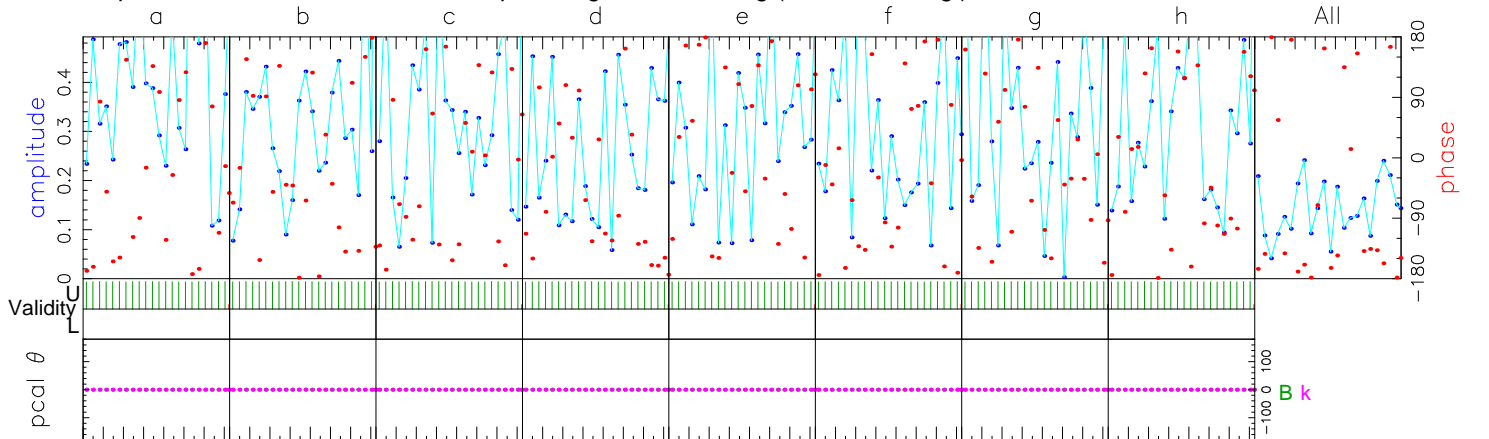
	RMS	Theor.	Amplitude	0.185 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	64.4	26.9	Search (2048X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	112.3	47.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.1	15.9	Inc. seg. avg.	0.308	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.2	27.7	Inc. frq. avg.	0.185	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 104.8 el 69.8 pa -57.1 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) -281.553 2644.118 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bk.W.7.18UHQS



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-162.5	179.0	-156.5	-135.9	171.9	-147.9	175.1	-174.4	Phase	-164.8
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	429.3	301.7	224.6	173.2	328.8	459.9	128.3	307.3	Sbd box	223.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.21547016060E+04		Apriori delay (usec)		-1.21545736093E+04		Resid mbdelay (usec)		-2.99670E-03	+/- 1.8E-04
Sband delay (usec)	-1.21547044231E+04		Apriori clock (usec)		1.3394353E+01		Resid sbdelay (usec)		-1.30814E-01	+/- 1.4E-03
Phase delay (usec)	-1.21545736146E+04		Apriori clockrate (us/s)		-2.0540000E-07		Resid phdelay (usec)		-5.31580E-06	+/- 6.0E-07
Delay rate (us/s)	-1.03264799448E+00		Apriori rate (us/s)		-1.03265862697E+00		Resid rate (us/s)		1.06325E-05	+/- 2.5E-09
Total phase (deg)	-59.7		Apriori accel (us/s/s)		8.22118881580E-05		Resid phase (deg)		-164.8	+/- 18.5

ph/seg (deg) 56.9 44.3 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 59.9 77.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

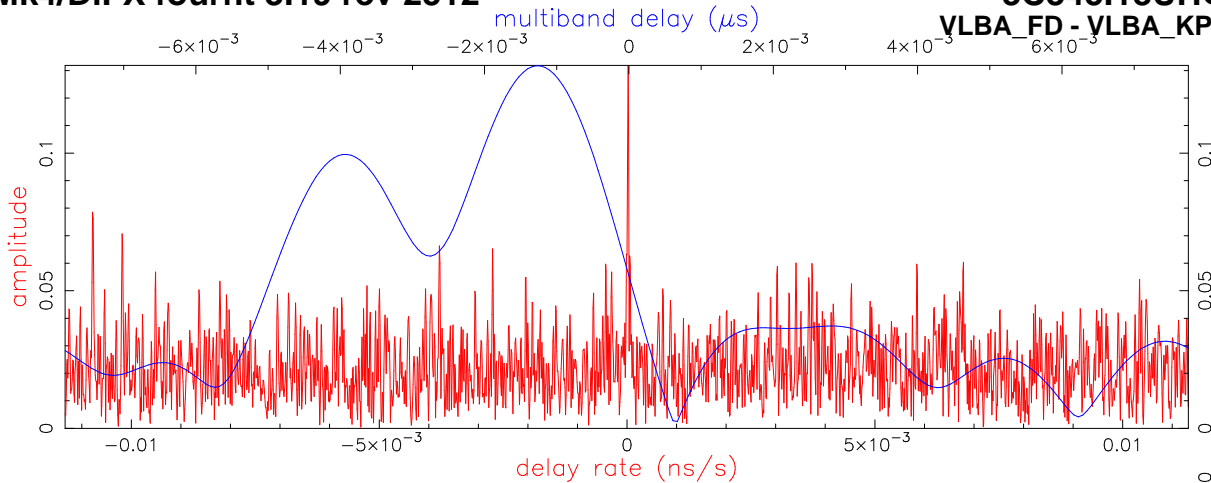
ph/frq (deg) 20.4 26.1 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 25.6 45.6 Inc. frq. avg. 0.151 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

B: az 304.4 el 23.7 pa 42.9 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 7873.652 6910.014 simultaneous interpolator

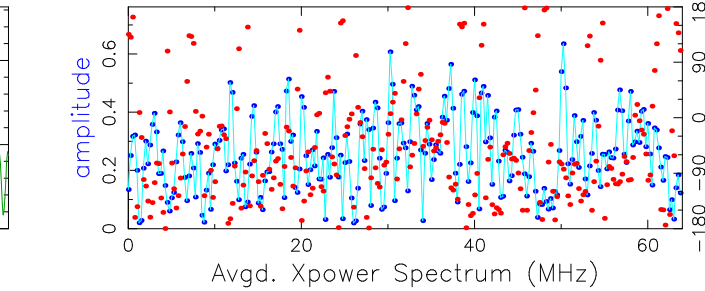
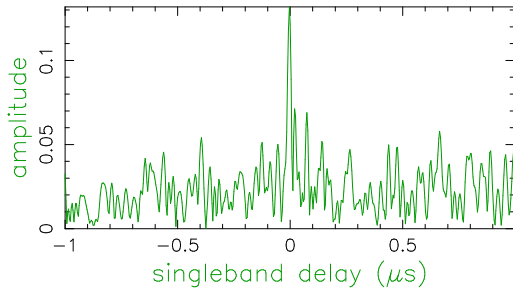
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Bk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bk.W.73.18UHQS





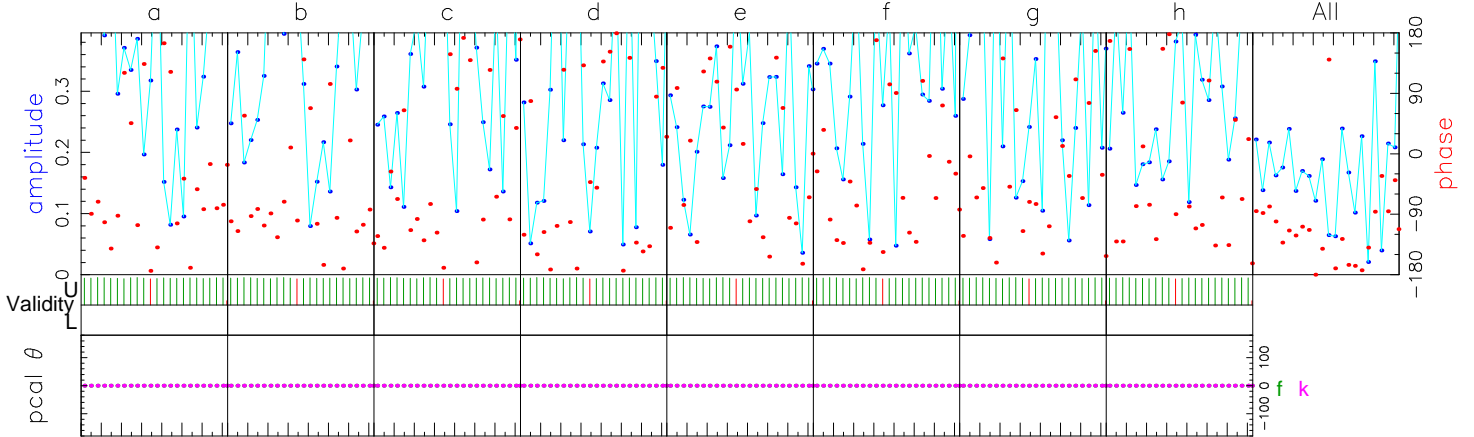
Fringe quality 9

SNR 7.3  
Int time 410.353  
Amp 0.132  
Phase -113.8  
PFD 8.7e-05  
Delays (us)  
SBD -0.003531  
MBD -0.001263  
Fringe rate (Hz) 0.001476  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143552  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

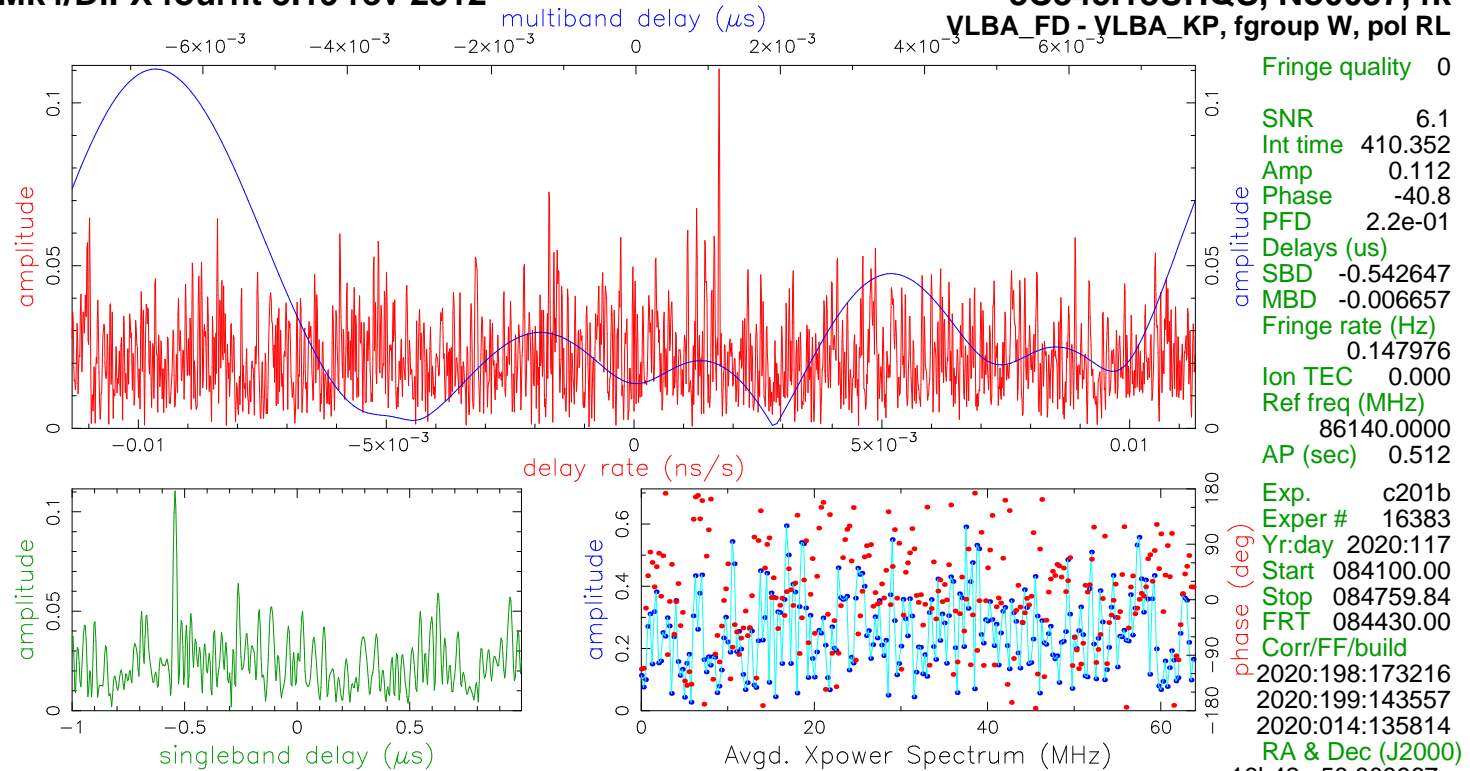


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-95.1	-101.0	-132.7	-163.3	-169.9	-74.5	-77.2	-122.6	Phase	-113.8
	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.1	Ampl.	0.1
	256.4	256.6	255.8	256.3	326.2	463.8	261.5	458.7	Sbd box	256.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.39250113514E+02		Apriori delay (usec)		3.39251376338E+02		Resid mbdelay (usec)		-1.26282E-03	+/- 1.5E-04
Sband delay (usec)	3.39247845338E+02		Apriori clock (usec)		4.2444491E+00		Resid sbdelay (usec)		-3.53100E-03	+/- 1.2E-03
Phase delay (usec)	3.39251372669E+02		Apriori clockrate (us/s)		1.0360000E-07		Resid phdelay (usec)		-3.66926E-06	+/- 5.1E-07
Delay rate (us/s)	-1.29911609938E-01		Apriori rate (us/s)		-1.29911627077E-01		Resid rate (us/s)		1.71393E-08	+/- 2.1E-09
Total phase (deg)	87.0		Apriori accel (us/s/s)		-3.20385572564E-06		Resid phase (deg)		-113.8	+/- 15.7

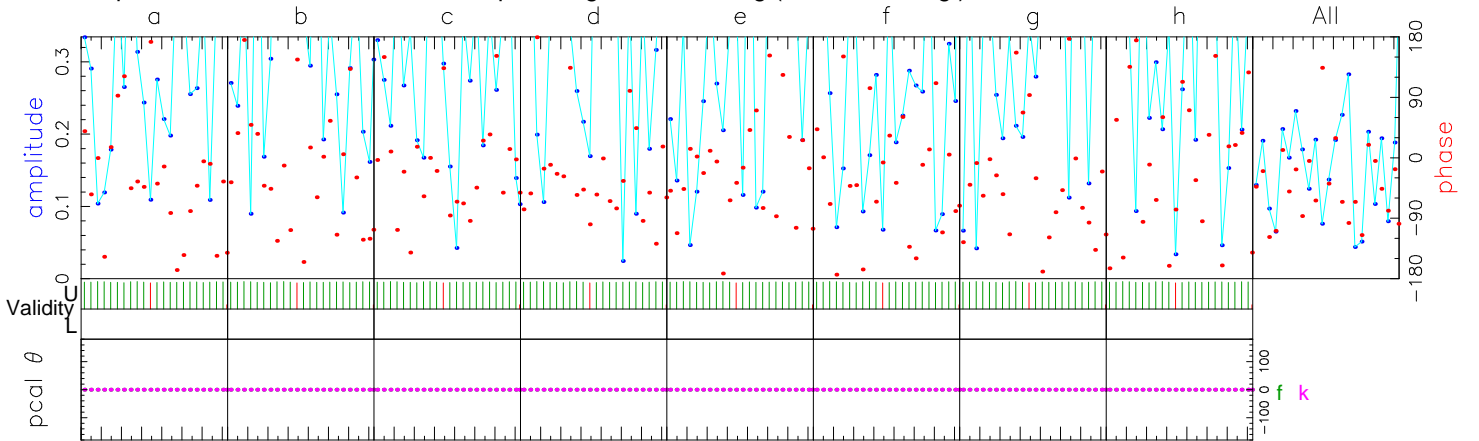
ph/seg (deg) 45.7 37.6 Search (2048X32) 0.121 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.3 65.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 39.7 22.2 Inc. seg. avg. 0.137 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 48.6 38.7 Inc. frq. avg. 0.143 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 39.2 el 77.7 pa -133.6 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 960.527 -358.031 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fk.W.105.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fk  
VLBA\_FD - VLBA\_KP, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-49.4	-54.1	-29.5	-48.5	-15.7	-18.8	-61.4	154.1	Phase	-40.8
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.0	Ampl.	0.1
	228.6	331.8	188.9	116.6	262.1	475.8	117.8	214.2	Sbd box	118.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)		3.38713469579E+02		Apriori delay (usec)	3.39251376338E+02		Resid mbdelay (usec)	-6.65676E-03	+/-	1.8E-04
Sband delay (usec)		3.38708729338E+02		Apriori clock (usec)	4.2444491E+00		Resid sbdelay (usec)	-5.42647E-01	+/-	1.4E-03
Phase delay (usec)		3.39251375022E+02		Apriori clockrate (us/s)	1.0360000E-07		Resid phdelay (usec)	-1.31650E-06	+/-	6.0E-07
Delay rate (us/s)		-1.29909909221E-01		Apriori rate (us/s)	-1.29911627077E-01		Resid rate (us/s)	1.71786E-06	+/-	2.5E-09
Total phase (deg)		160.0		Apriori accel (us/s/s)	-3.20385572564E-06		Resid phase (deg)	-40.8	+/-	18.7

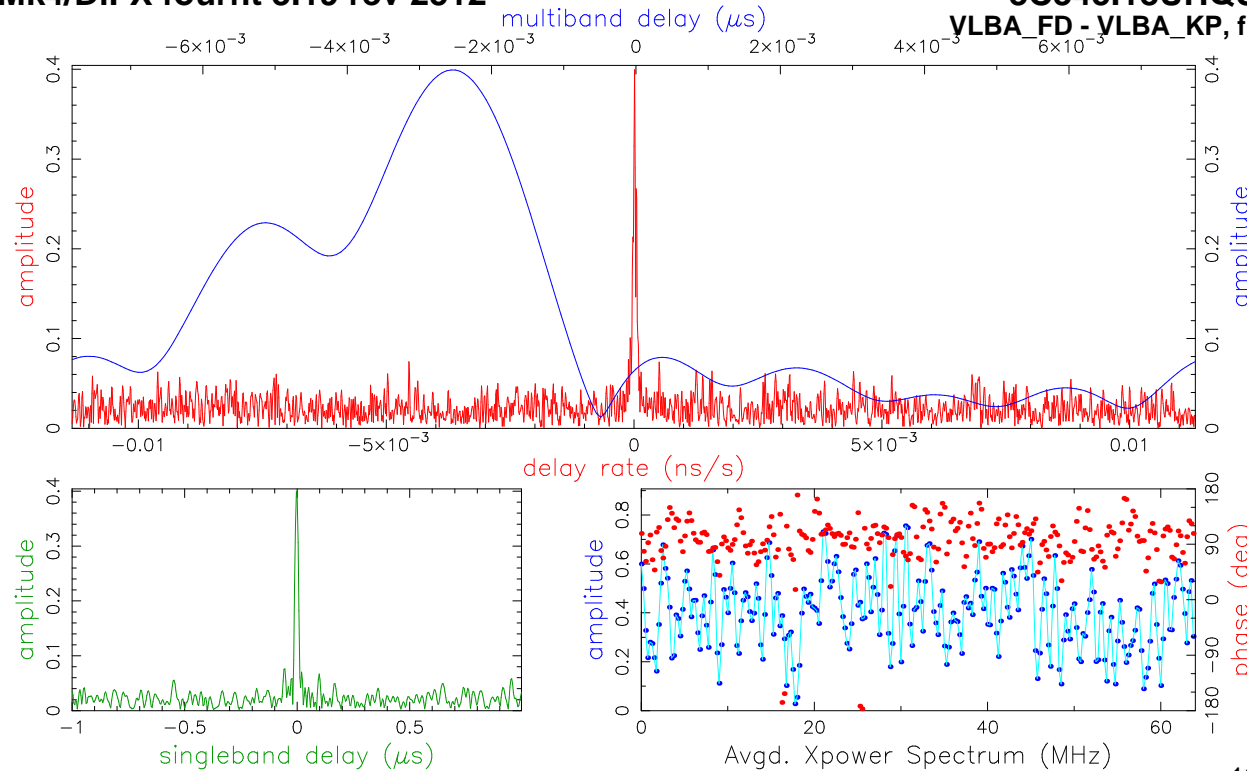
	RMS	Theor.	Amplitude	0.112 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	56.4	44.9	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	72.2	78.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	69.8	26.5	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	45.5	46.2	Inc. frq. avg.	0.112	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

f: az 39.2 el 77.7 pa -133.6 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 960.527 -358.031 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fk.W.126.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fk  
VLBA\_FD - VLBA\_KP, fgroup W, pol LL

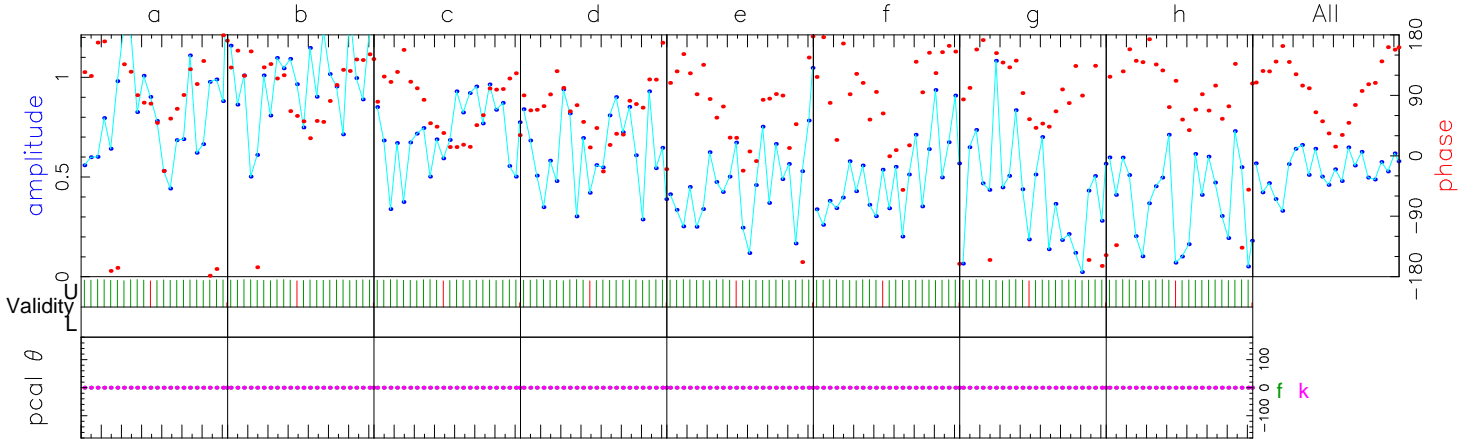


Fringe quality 7

SNR 22.4  
Int time 410.353  
Amp 0.404  
Phase 102.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.002510  
MBD -0.002529  
Fringe rate (Hz) 0.001269  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143543  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

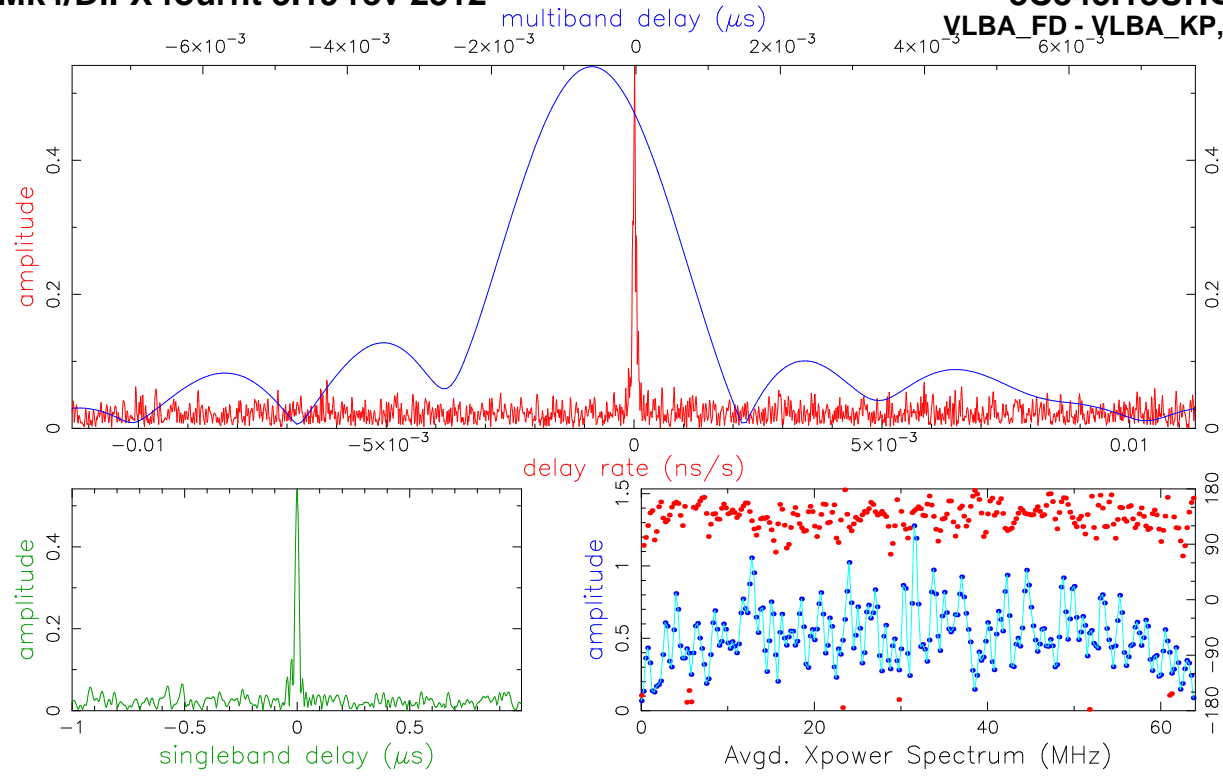


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.39248847254E+02		Apriori delay (usec)		3.39251376338E+02		Resid mbdelay (usec)		-2.52908E-03	+/- 4.8E-05
Sband delay (usec)	3.39248866088E+02		Apriori clock (usec)		4.2444491E+00		Resid sbdelay (usec)		-2.51025E-03	+/- 3.8E-04
Phase delay (usec)	3.39251379635E+02		Apriori clockrate (us/s)		1.0360000E-07		Resid phdelay (usec)		3.29730E-06	+/- 1.6E-07
Delay rate (us/s)	-1.29911612342E-01		Apriori rate (us/s)		-1.29911627077E-01		Resid rate (us/s)		1.47359E-08	+/- 6.8E-10
Total phase (deg)	303.0		Apriori accel (us/s/s)		-3.20385572564E-06		Resid phase (deg)		102.3	+/- 5.1

ph/seg (deg) 43.5 12.3 Search (2048X32) 0.387 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 38.4 21.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.8 7.2 Inc. seg. avg. 0.521 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.1 12.6 Inc. frq. avg. 0.429 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 39.2 el 77.7 pa -133.6 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 960.527 -358.031 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fk.W.81.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fk  
VLBA\_FD - VLBA\_KP, fgroup W, pol RR

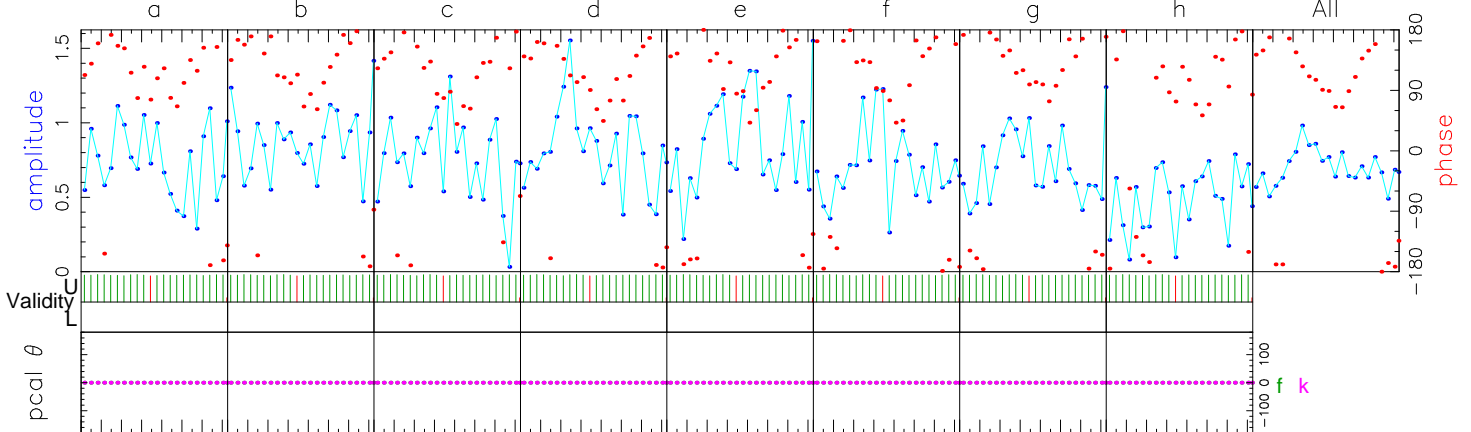


Fringe quality 8

SNR 30.0  
Int time 410.352  
Amp 0.542  
Phase 135.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.000773  
MBD -0.000626  
Fringe rate (Hz) 0.001085  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

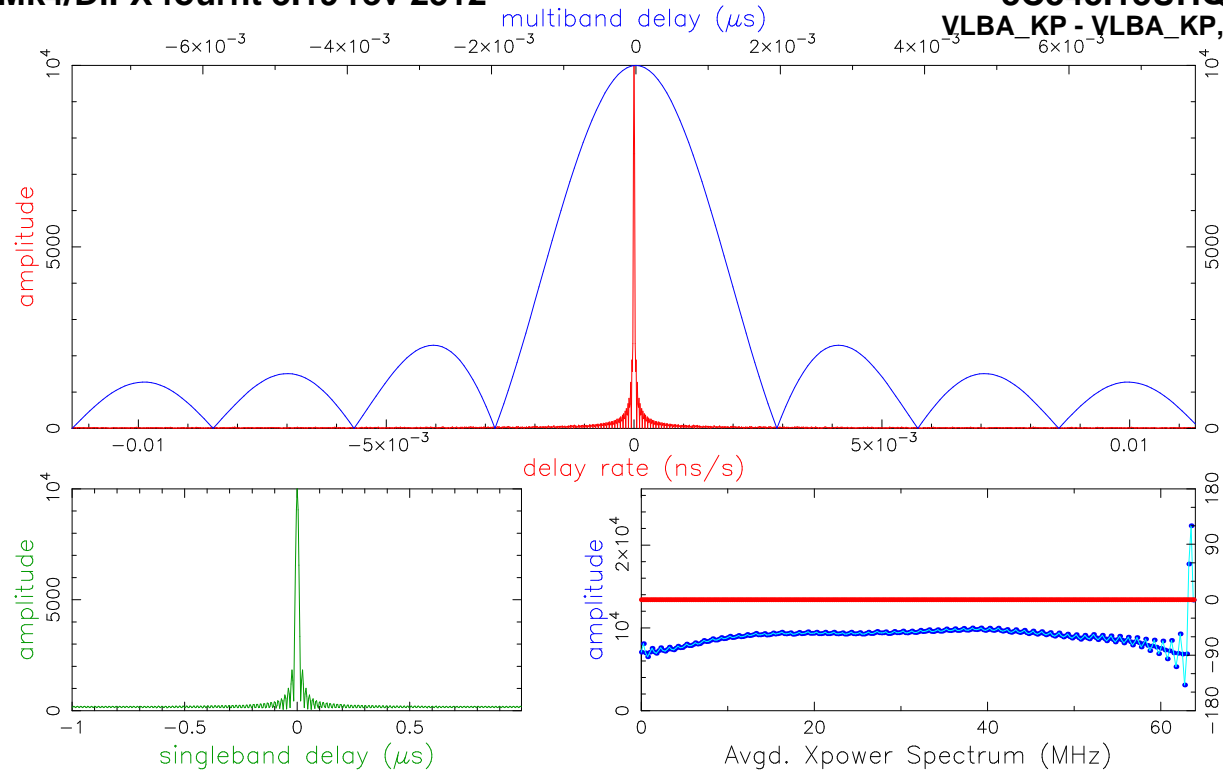
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143547  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	3.39250750723E+02		Apriori delay (usec)		3.39251376338E+02		Resid mbdelay (usec)		-6.25615E-04	+/- 3.6E-05
Sband delay (usec)	3.39250603338E+02		Apriori clock (usec)		4.2444491E+00		Resid sbdelay (usec)		-7.73000E-04	+/- 2.9E-04
Phase delay (usec)	3.39251380699E+02		Apriori clockrate (us/s)		1.0360000E-07		Resid phdelay (usec)		4.36125E-06	+/- 1.2E-07
Delay rate (us/s)	-1.29911614485E-01		Apriori rate (us/s)		-1.29911627077E-01		Resid rate (us/s)		1.25925E-08	+/- 5.1E-10
Total phase (deg)	336.0		Apriori accel (us/s/s)		-3.20385572564E-06		Resid phase (deg)		135.2	+/- 3.8

ph/seg (deg) 41.0 9.2 Search (2048X32) 0.534 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 36.1 16.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 6.2 5.4 Inc. seg. avg. 0.689 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 19.3 9.4 Inc. frq. avg. 0.540 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
f: az 39.2 el 77.7 pa -133.6 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 960.527 -358.031 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fk.W.87.18UHQS

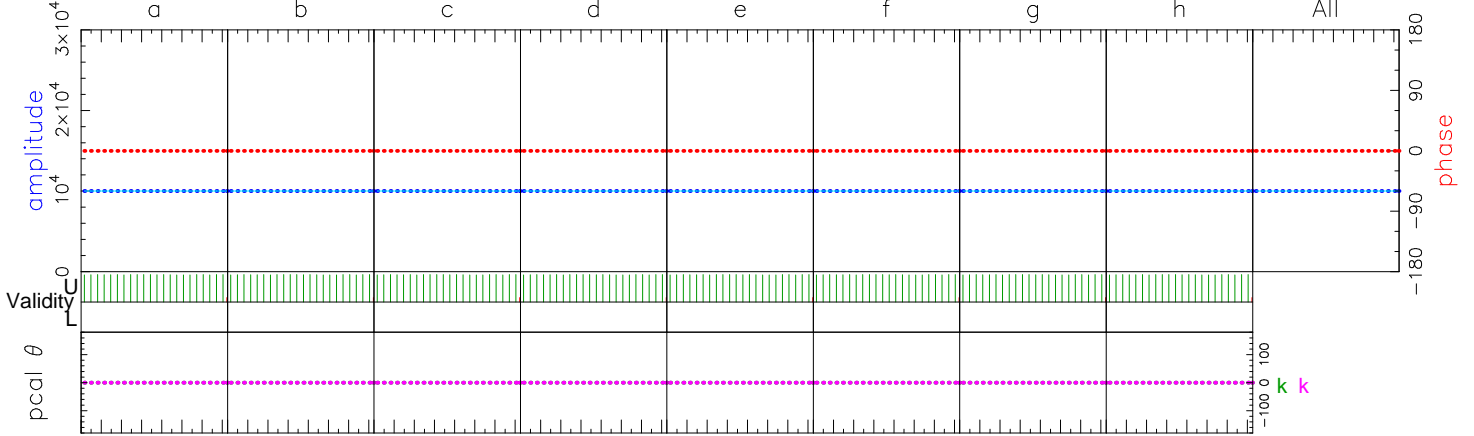


Fringe quality 9

SNR 558636.1  
Int time 417.313  
Amp 10000.005  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

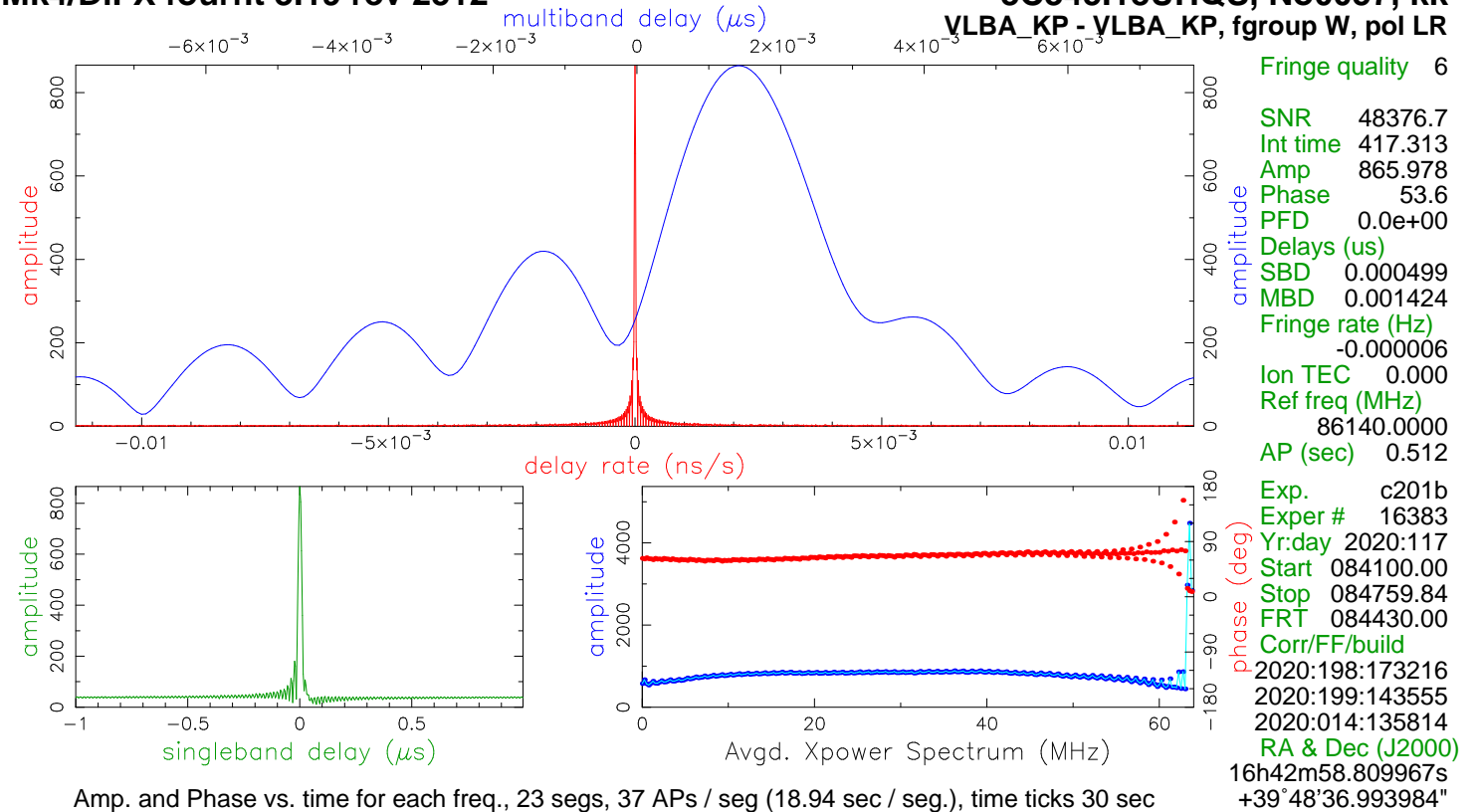
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143552  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

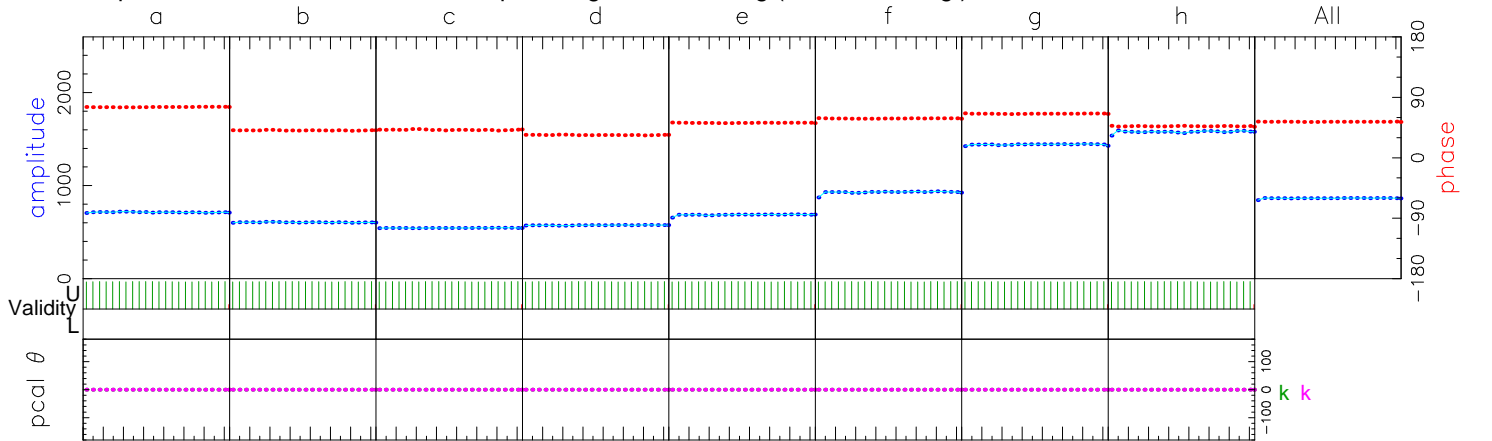


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Ampl.	10000.0
k	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 1.9E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.5E-08
Phase delay (usec)	8.16268457648E-20	8.16268457648E-20	8.16268457648E-20	8.16268457648E-20	8.16268457648E-20	8.16268457648E-20	8.16268457648E-20	8.16268457648E-20	Resid phdelay (usec)	8.16268E-20 +/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 2.7E-14
Total phase (deg)		0.0							Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.005 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.005 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 k: az 56.4 el 73.7 pa -114.9 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kk.W.103.18UHQS simultaneous interpolator



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
75.5	40.8	41.6	33.9	52.0	58.5	65.6	47.0	Phase	53.6
713.9	605.7	545.5	575.0	686.6	929.0	1441.8	1577.4	Ampl.	884.4
257.2	256.9	257.3	257.3	257.7	257.3	257.6	256.5	Sbd box	257.1
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k 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	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000		
k W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)		1.42409375000E-03	Apriori delay (usec)		0.00000000000E+00	Resid mbdelay (usec)		1.42409E-03	+/- 2.2E-08
Sband delay (usec)		4.98750000000E-04	Apriori clock (usec)		0.0000000E+00	Resid sbdelay (usec)		4.98750E-04	+/- 1.8E-07
Phase delay (usec)		1.72863554661E-06	Apriori clockrate (us/s)		0.0000000E+00	Resid phdelay (usec)		1.72864E-06	+/- 7.6E-11
Delay rate (us/s)		-7.15643195780E-11	Apriori rate (us/s)		0.00000000000E+00	Resid rate (us/s)		-7.15643E-11	+/- 3.2E-13
Total phase (deg)		53.6	Apriori accel (us/s/s)		0.00000000000E+00	Resid phase (deg)		53.6	+/- 0.0

ph/seg (deg) 0.1 0.0      Search (2048X32) 863.758      Pcal mode: MANUAL, MANUAL      PC period (AP's) 5, 5

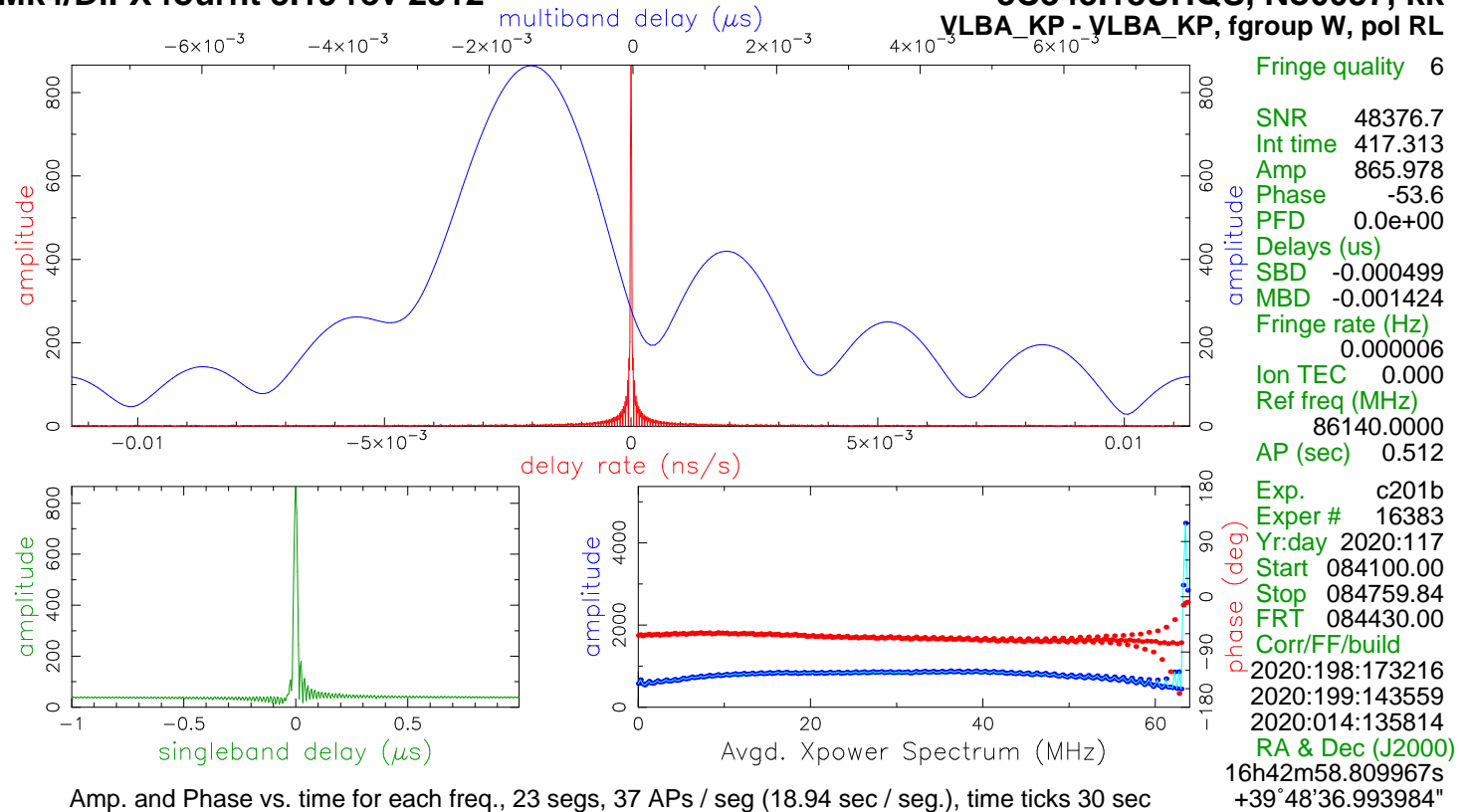
amp/seg (%) 0.5 0.0      Interp. 0.000      Pcal rate: 0.000E+00, 0.000E+00 (us/s)      sb window (us) -1.000 1.000

ph/frq (deg) 15.2 0.0      Inc. seg. avg. 864.640      Bits/sample: 2x2      SampCntNorm: enabled      mb window (us) -0.008 0.008

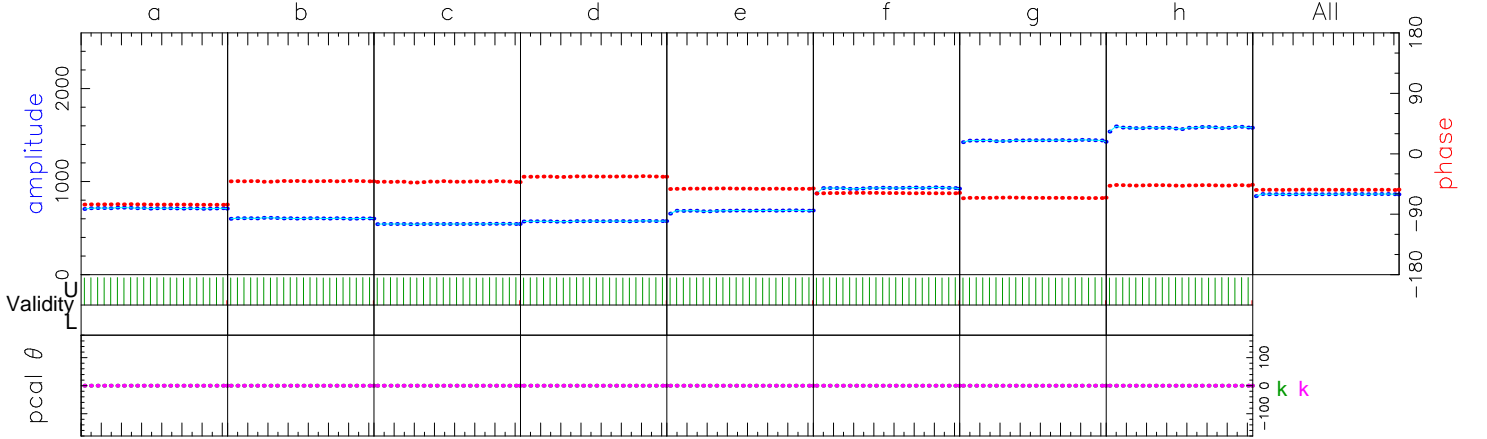
amp/frq (%) 43.8 0.0      Inc. frq. avg. 884.364      Sample rate(MISamp/s): 128      Data rate(Mb/s): 2048      nlags: 256      t\_cohere infinite      dr window (ns/s) -0.011 0.011

k: az 56.4 el 73.7 pa -114.9      k: az 56.4 el 73.7 pa -114.9      u,v (fr/asec) 0.000 0.000      ion window (TEC) 0.00 0.00

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0057/kk..18UHQS      Output file: /Exps/c201b/v1/1234/No0057/kk.W.122.18UHQS      simultaneous interpolator



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.5	-40.8	-41.6	-33.9	-52.0	-58.5	-65.6	-47.0	Phase	-53.6
	713.9	605.7	545.5	575.0	686.6	929.0	1441.8	1577.3	Ampl.	884.4
	256.8	257.1	256.7	256.7	256.3	256.7	256.4	257.5	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k	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	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.42409375000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.42409E-03	+/- 2.2E-08
Sband delay (usec)	-4.98750000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-4.98750E-04	+/- 1.8E-07
Phase delay (usec)	-1.72863554651E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.72864E-06	+/- 7.6E-11
Delay rate (us/s)	7.15643195780E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		7.15643E-11	+/- 3.2E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-53.6	+/- 0.0

ph/seg (deg) 0.1 0.0      Search (2048X32) 863.758      Pcal mode: MANUAL, MANUAL      PC period (AP's) 5, 5

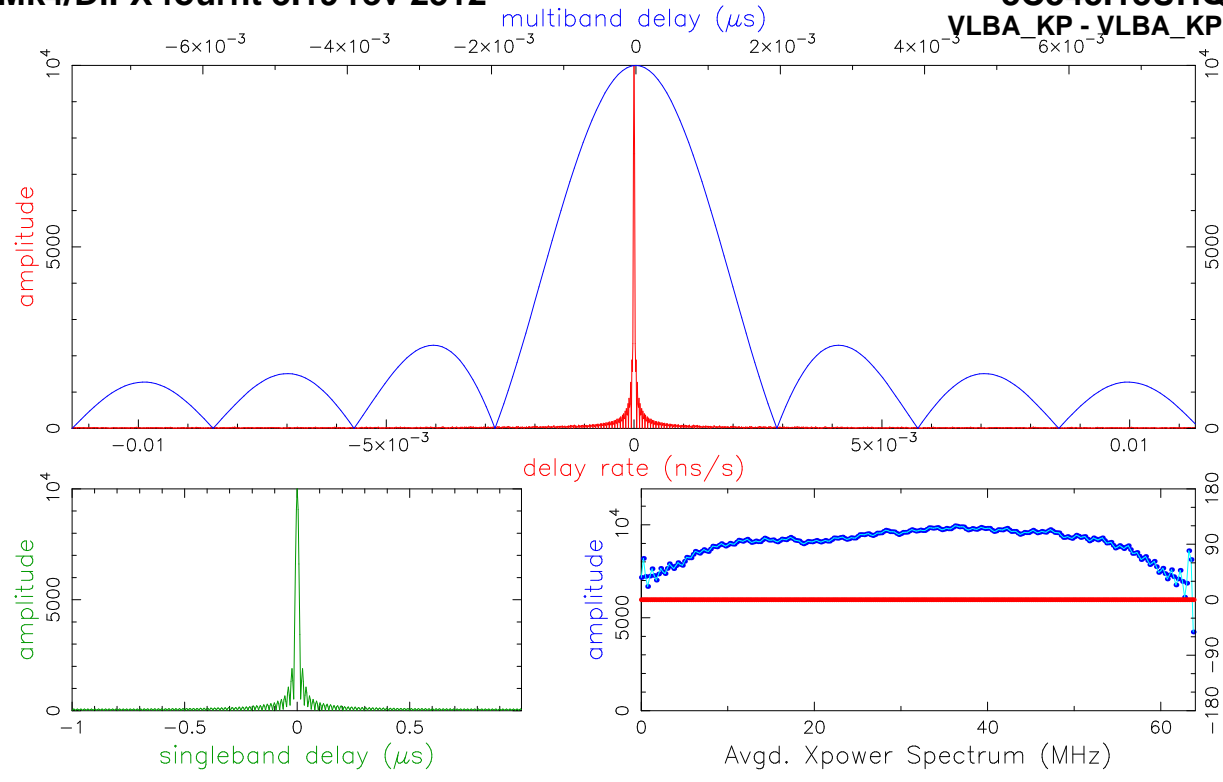
amp/seg (%) 0.5 0.0      Interp. 0.000      Pcal rate: 0.000E+00, 0.000E+00 (us/s)      sb window (us) -1.000 1.000

ph/frq (deg) 15.2 0.0      Inc. seg. avg. 864.639      Bits/sample: 2x2      SampCntNorm: enabled      mb window (us) -0.008 0.008

amp/frq (%) 43.8 0.0      Inc. frq. avg. 884.364      Sample rate(MISamp/s): 128      Data rate(Mb/s): 2048      nlags: 256      t\_cohere infinite      dr window (ns/s) -0.011 0.011

k: az 56.4 el 73.7 pa -114.9      k: az 56.4 el 73.7 pa -114.9      u,v (fr/asec) 0.000 0.000      ion window (TEC) 0.00 0.00

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0057/kk..18UHQS      Output file: /Exps/c201b/v1/1234/No0057/kk.W.136.18UHQS      simultaneous interpolator

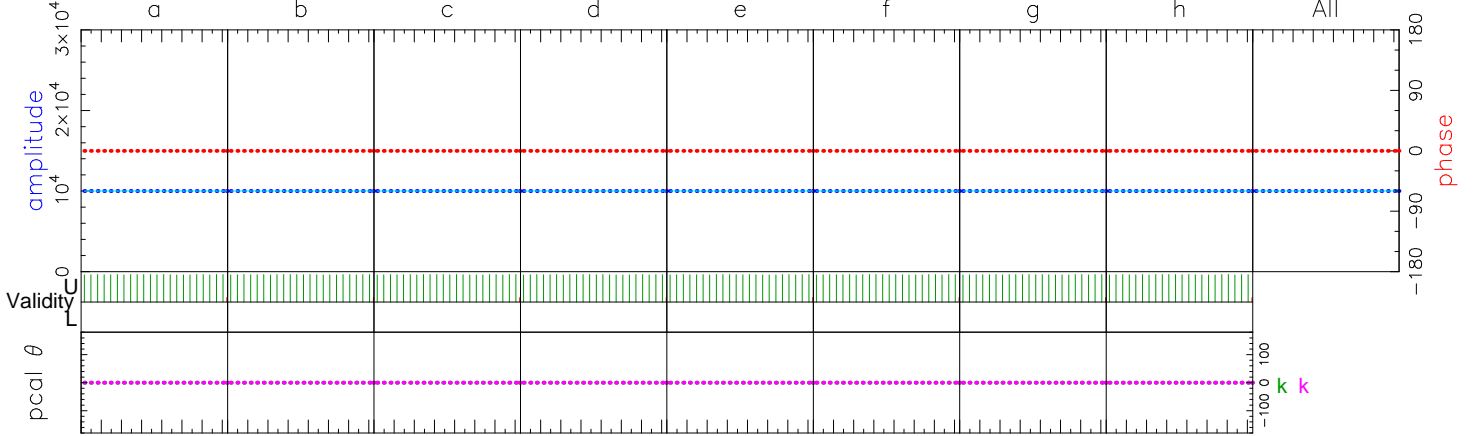


Fringe quality 9

SNR 558635.9  
Int time 417.313  
Amp 10000.001  
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. c201b  
Yr:day 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143548  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
k:k	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
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

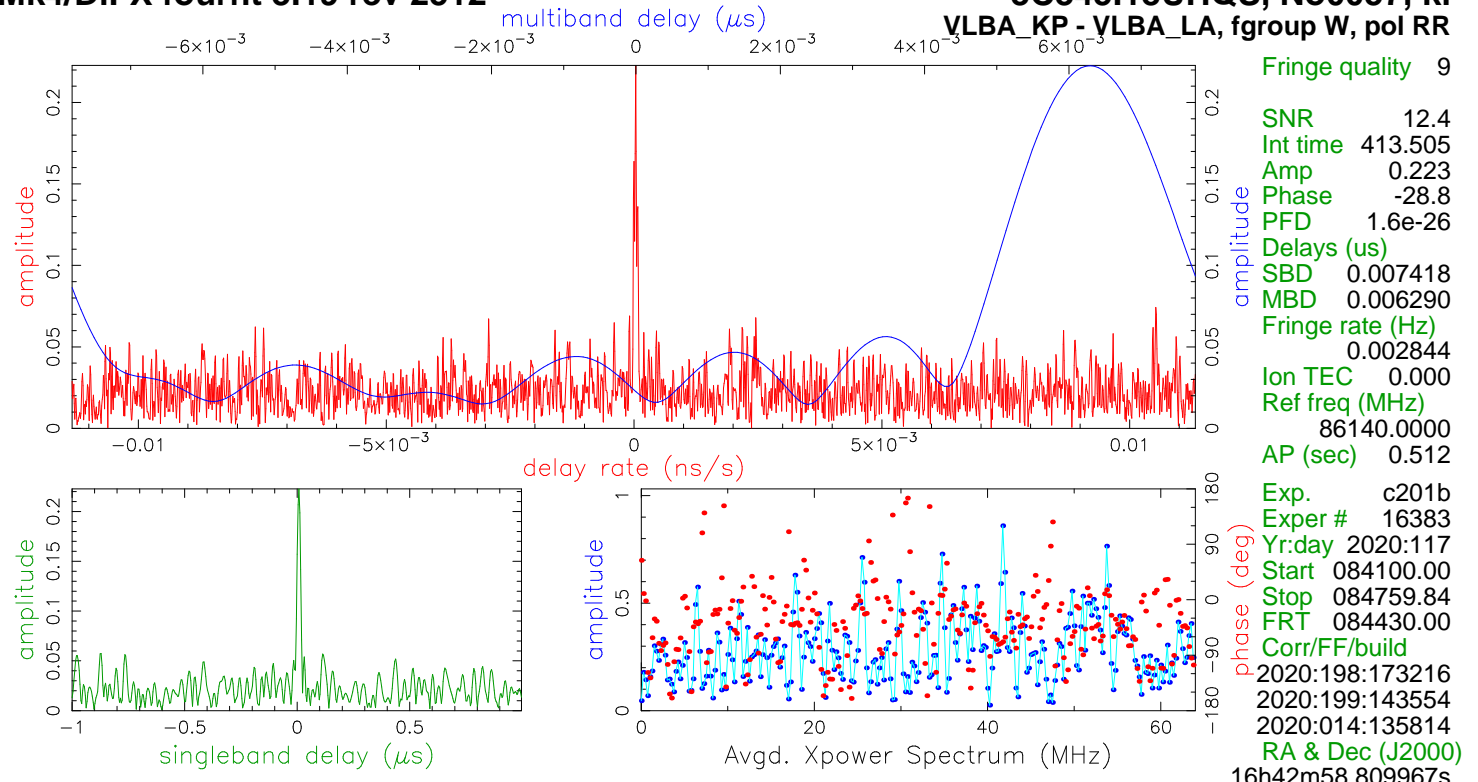
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	-6.53037618741E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-6.53038E-20	+/-	6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.7E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 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) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00



Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol RR



Fringe quality 9

SNR 12.4

Int time 413.505

Amp 0.223

Phase -28.8

PFD 1.6e-26

Delays (us)

SBD 0.007418

MBD 0.006290

Fringe rate (Hz)

0.002844

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 084100.00

Stop 084759.84

FRT 084430.00

Corr/FF/build

2020:198:173216

2020:199:143554

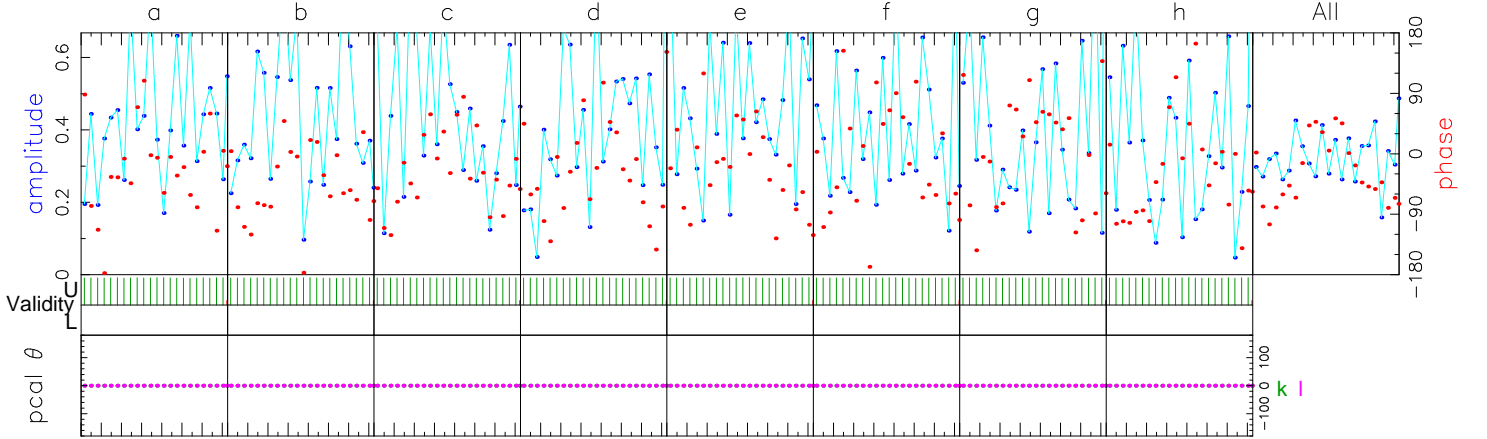
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.8	-37.5	-27.6	-33.4	-23.4	-20.1	-10.6	-48.0	Phase	-28.8
	0.2	0.3	0.3	0.2	0.3	0.2	0.1	0.2	Ampl.	0.2
	259.2	258.2	258.9	259.2	258.4	103.5	257.6	13.8	Sbd box	258.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	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	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.66539191784E+02		Apriori delay (usec)		-4.66545481407E+02		Resid mbdelay (usec)		6.28962E-03	+/- 8.8E-05
Sband delay (usec)	-4.66538063907E+02		Apriori clock (usec)		3.3618133E+00		Resid sbdelay (usec)		7.41750E-03	+/- 7.0E-04
Phase delay (usec)	-4.66545482336E+02		Apriori clockrate (us/s)		1.5640000E-07		Resid phdelay (usec)		-9.29028E-07	+/- 3.0E-07
Delay rate (us/s)	1.00659774910E-01		Apriori rate (us/s)		1.00659741897E-01		Resid rate (us/s)		3.30131E-08	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.49300729643E-06		Resid phase (deg)		-28.8	+/- 9.3

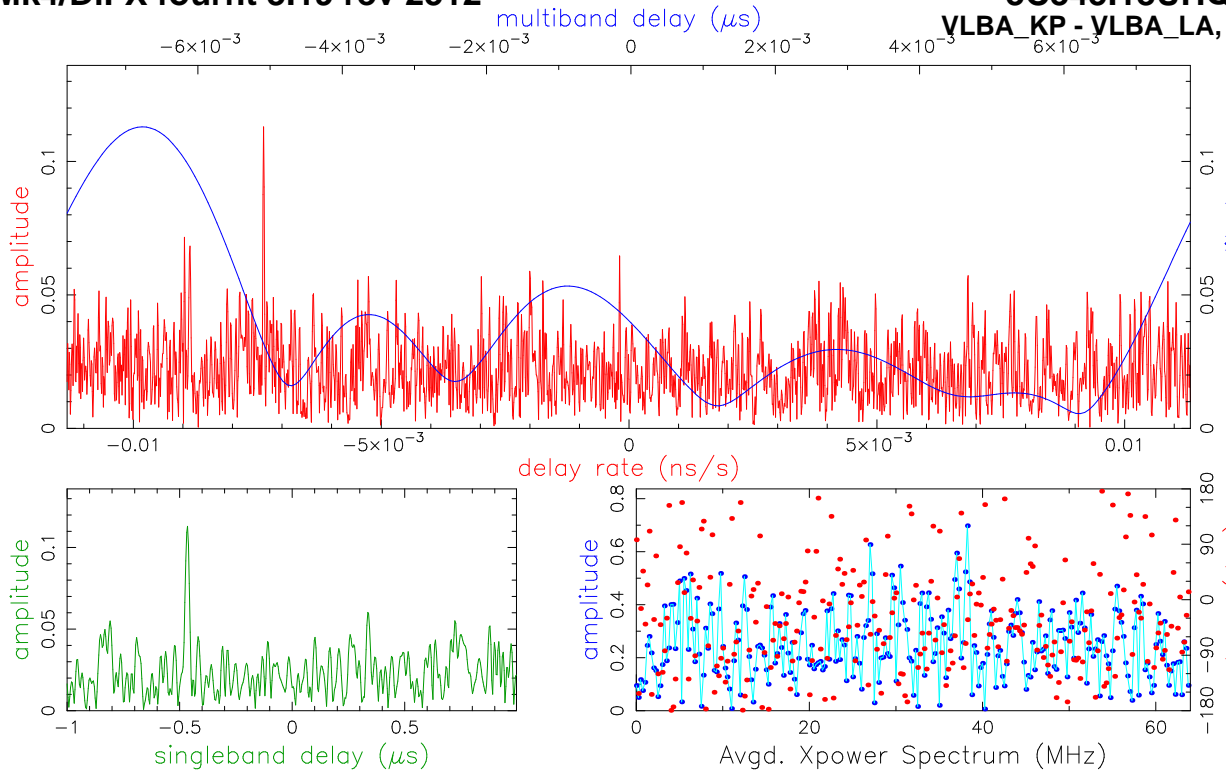
	RMS	Theor.	Amplitude	0.223 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.2	22.2	Search (2048X32)	0.222	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	52.7	38.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	12.4	13.1	Inc. seg. avg.	0.299	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	28.1	22.8	Inc. frq. avg.	0.220	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 56.4 el 73.7 pa -114.9 l: az 64.0 el 79.5 pa -110.3 u,v (fr/asec) -753.933 -463.029 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kl.18UHQS Output file: /Exps/c201b/v1/1234/No0057/kl.W.111.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQs, No0057, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol LR

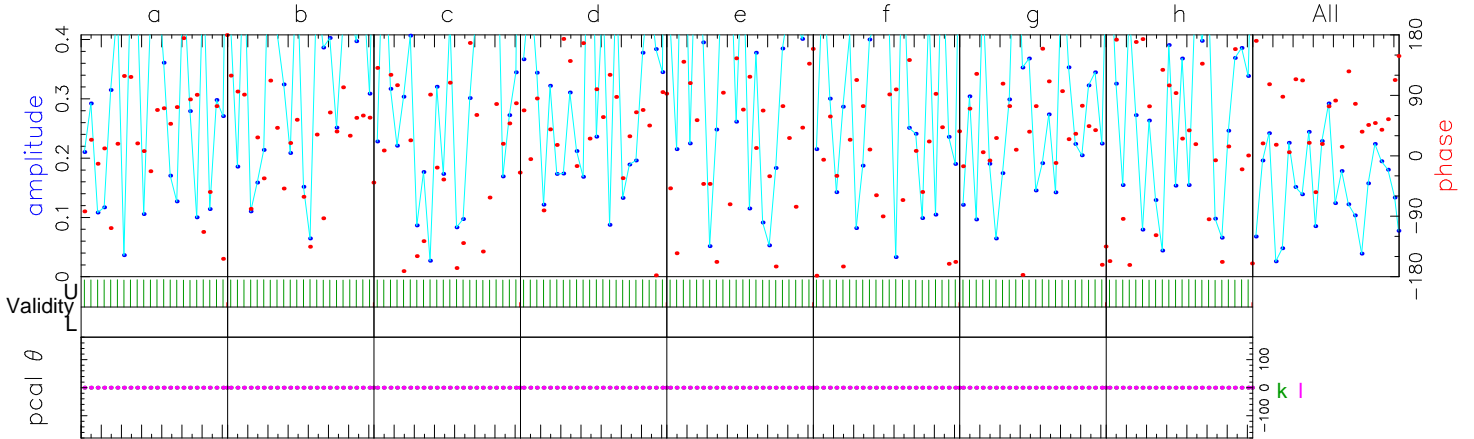


Fringe quality 0

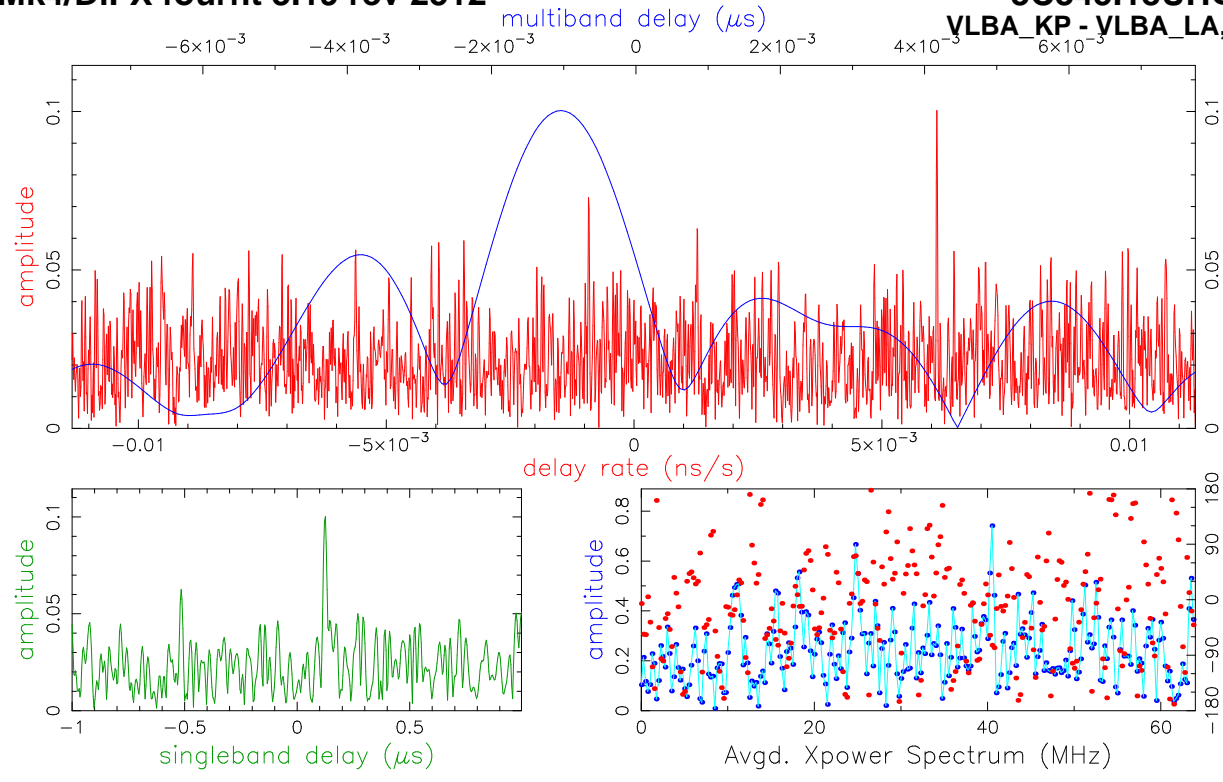
SNR 6.3  
Int time 413.505  
Amp 0.136  
Phase 56.0  
PFD 7.3e-02  
Delays (us)  
SBD -0.465831  
MBD -0.006776  
Fringe rate (Hz)  
-0.636471  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143559  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

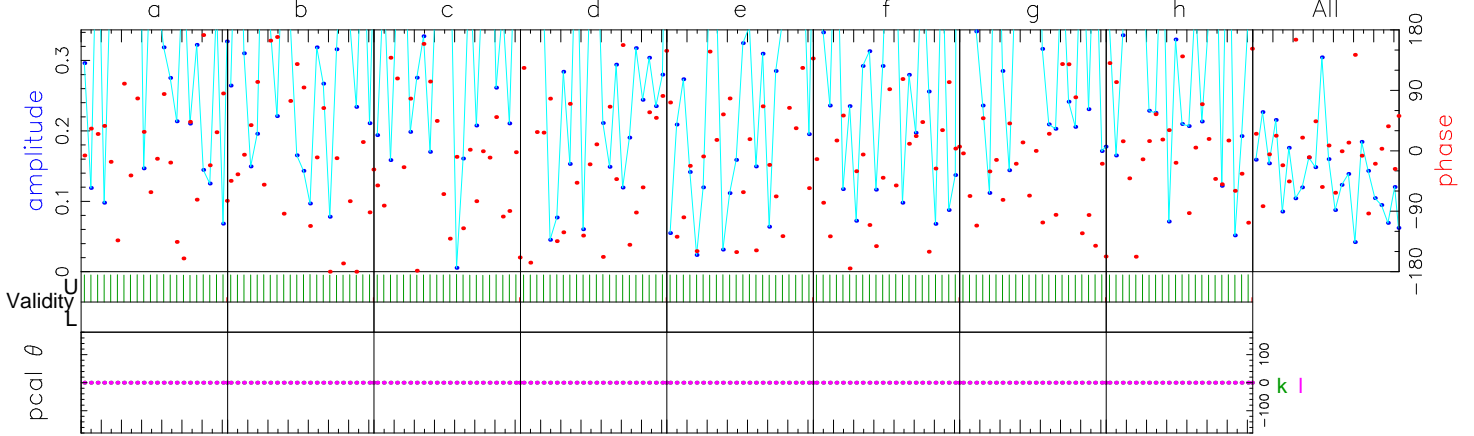


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.67005382418E+02									
Sband delay (usec)	-4.67011312157E+02									
Phase delay (usec)	-4.66545479601E+02									
Delay rate (us/s)	1.00652353094E-01									
Total phase (deg)			-220.6							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal $\theta$										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
amplitude	50.9	43.6								
amp/seg (%)	72.9	76.0								
ph/frq (deg)	41.8	25.7								
amp/frq (%)	53.8	44.8								
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.136 +/- 0.022										
0.109										
0.000										
0.144										
0.133										
PCal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										



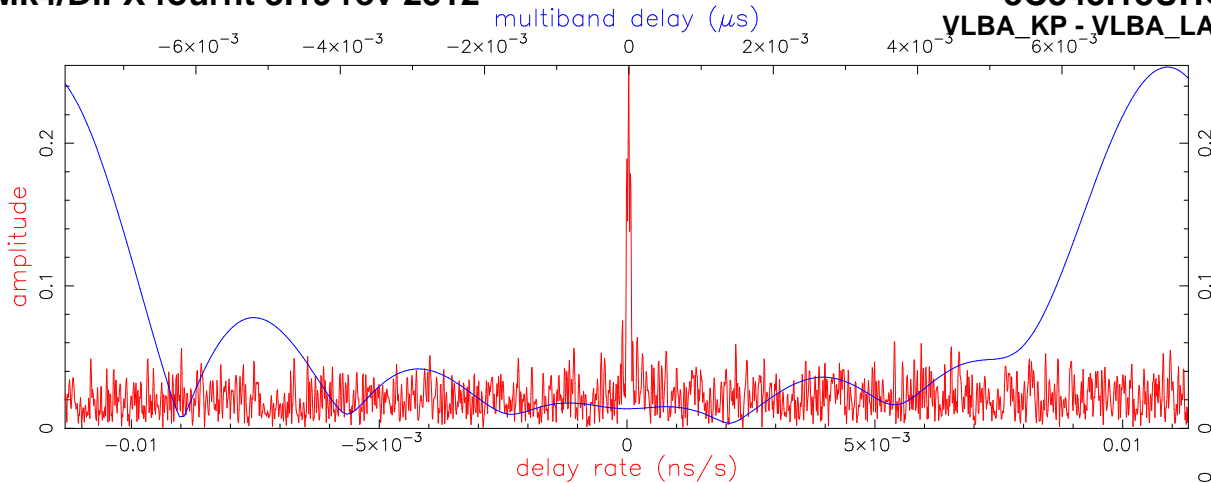
Fringe quality 0  
SNR 5.6  
Int time 413.504  
Amp 0.115  
Phase -14.5  
PFD 9.9e-01  
Delays (us)  
SBD 0.123668  
MBD -0.001022  
Fringe rate (Hz) 0.527582  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143602  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.1
l	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	288.7
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
l	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.66421502962E+02								Resid mbdelay (usec)	-1.02155E-03 +/- 1.9E-04
Sband delay (usec)	-4.66421813657E+02								Resid sbdelay (usec)	1.23668E-01 +/- 1.5E-03
Phase delay (usec)	-4.66545481873E+02								Resid phdelay (usec)	-4.66005E-07 +/- 6.6E-07
Delay rate (us/s)	1.00665866597E-01								Resid rate (us/s)	6.12470E-06 +/- 2.7E-09
Total phase (deg)		-291.1							Resid phase (deg)	-14.5 +/- 20.3
	RMS	Theor.	Amplitude	0.115 +/- 0.020					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.9	48.8	Search (2048X32)	0.098					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	68.8	85.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	28.5	28.8	Inc. seg. avg.	0.117					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	43.9	50.2	Inc. frq. avg.	0.108					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

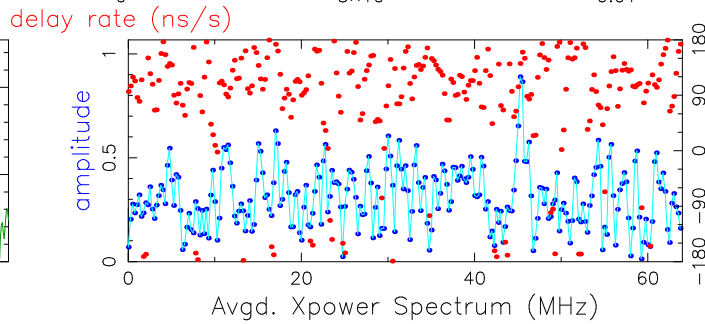
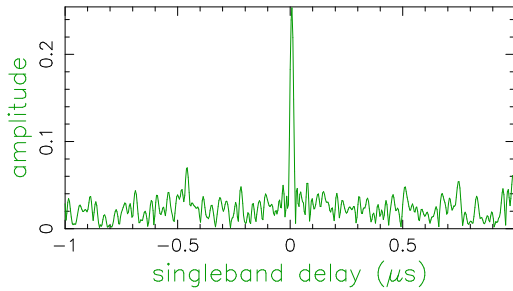
k: az 56.4 el 73.7 pa -114.9 l: az 64.0 el 79.5 pa -110.3 u,v (fr/asec) -753.933 -463.029 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kl.18UHQS Output file: /Exps/c201b/v1/1234/No0057/kl.W.151.18UHQS



Fringe quality 9

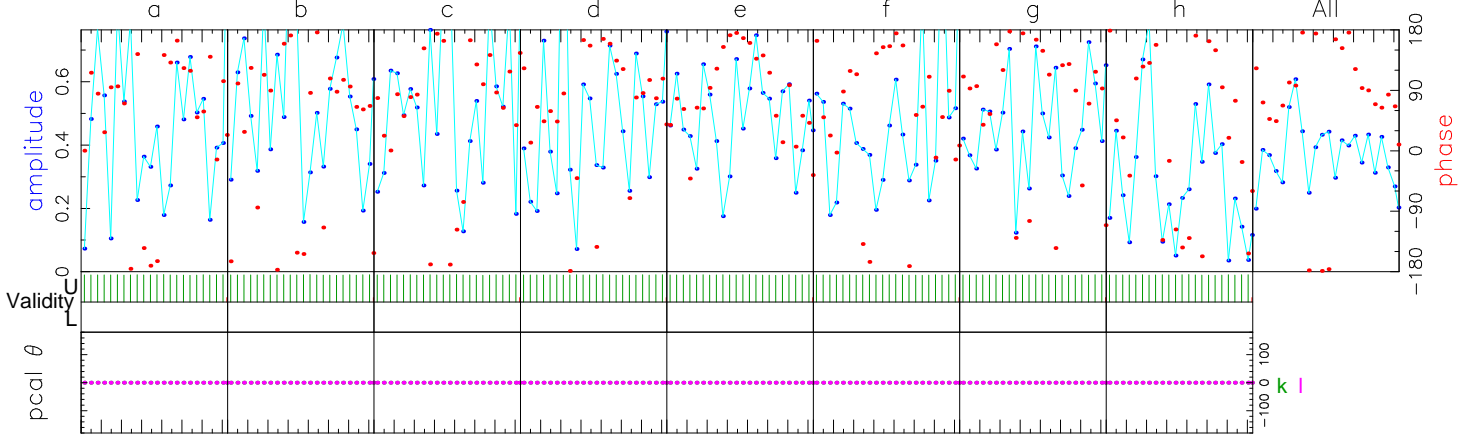
SNR 14.2  
Int time 413.504  
Amp 0.255  
Phase 114.9  
PFD 9.9e-37  
Delays (us)  
SBD 0.006976  
MBD 0.007445  
Fringe rate (Hz) 0.002875  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143548  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



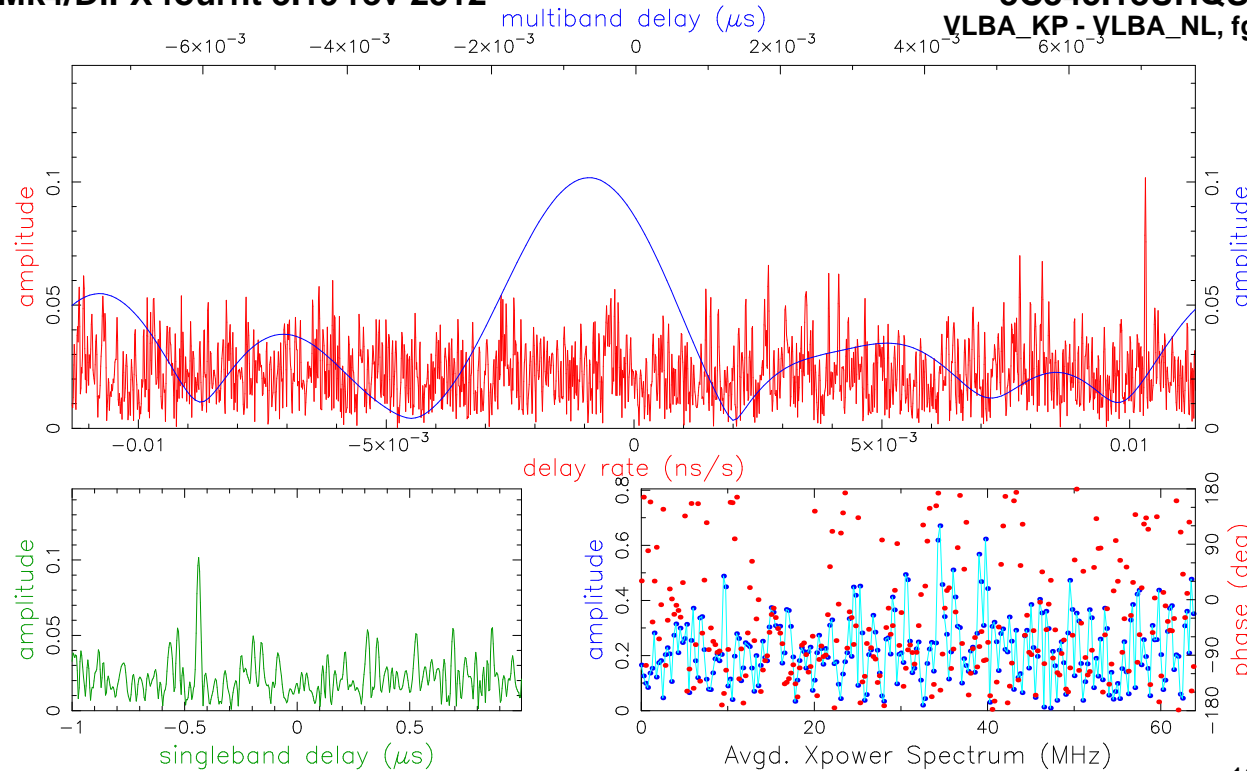
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.66538036659E+02	Apriori delay (usec)	-4.66545481407E+02	Resid mbdelay (usec)	7.44475E-03	+/-	7.7E-05
Sband delay (usec)	-4.66538505657E+02	Apriori clock (usec)	3.3618133E+00	Resid sbdelay (usec)	6.97575E-03	+/-	6.1E-04
Phase delay (usec)	-4.66545477702E+02	Apriori clockrate (us/s)	1.5640000E-07	Resid phdelay (usec)	3.70472E-06	+/-	2.6E-07
Delay rate (us/s)	1.00659775277E-01	Apriori rate (us/s)	1.00659741897E-01	Resid rate (us/s)	3.33802E-08	+/-	1.1E-09
Total phase (deg)	-161.7	Apriori accel (us/s/s)	-1.49300729643E-06	Resid phase (deg)	114.9	+/-	8.1

	RMS	Theor.	Amplitude	0.255 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	49.4	19.4	Search (2048X32)	0.252	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	59.6	33.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	16.6	11.4	Inc. seg. avg.	0.355	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	19.4	20.0	Inc. frq. avg.	0.256	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 56.4 el 73.7 pa -114.9 l: az 64.0 el 79.5 pa -110.3 u,v (fr/asec) -753.933 -463.029 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kl.18UHQS Output file: /Exps/c201b/v1/1234/No0057/kl.W.91.18UHQS

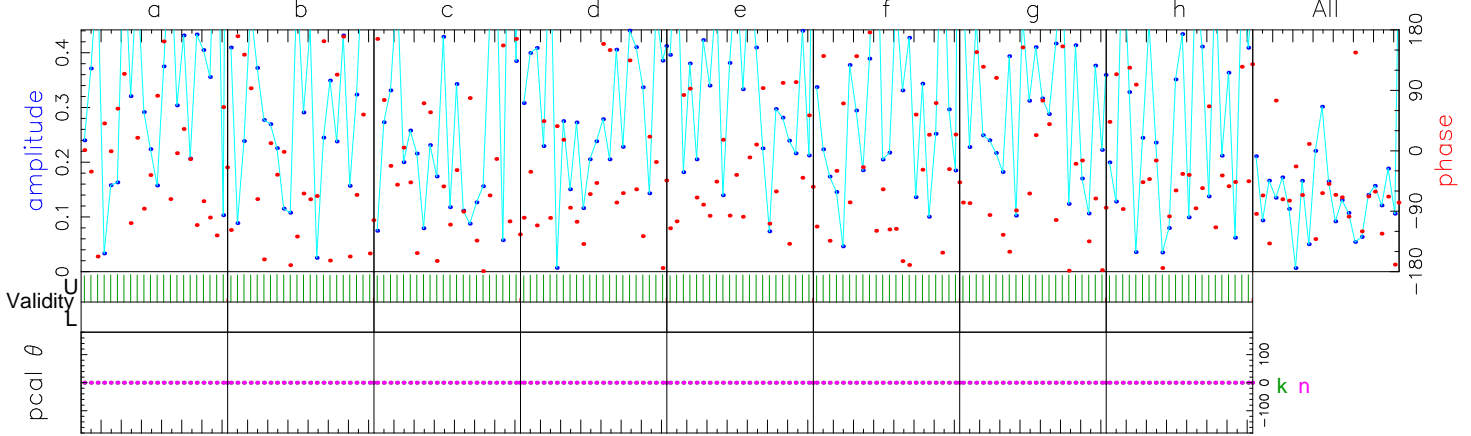


Fringe quality 0

SNR 5.7  
Int time 412.690  
Amp 0.147  
Phase -82.8  
PFD 9.8e-01  
Delays (us)  
SBD -0.438039  
MBD -0.000676  
Fringe rate (Hz)  
0.890593  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

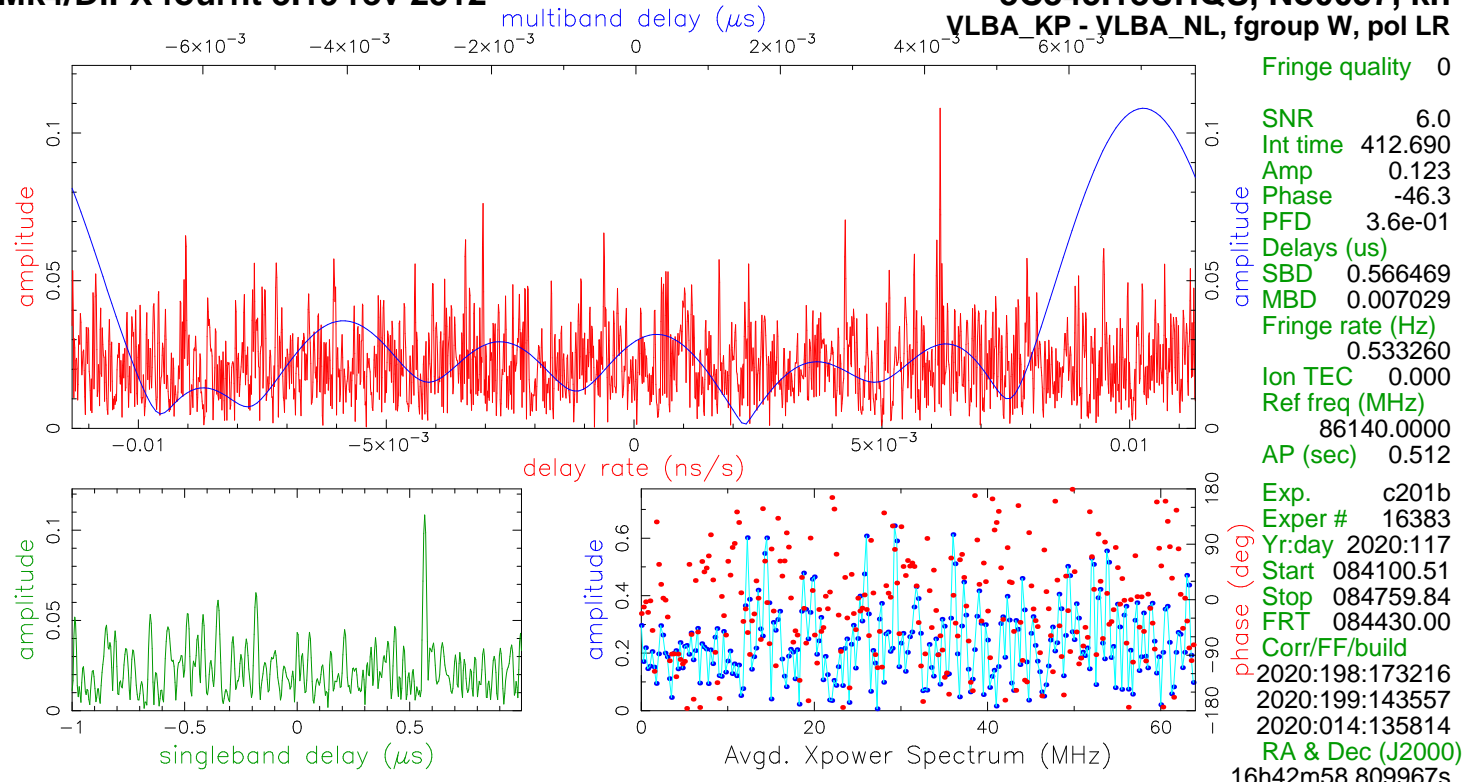
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.51  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143553  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

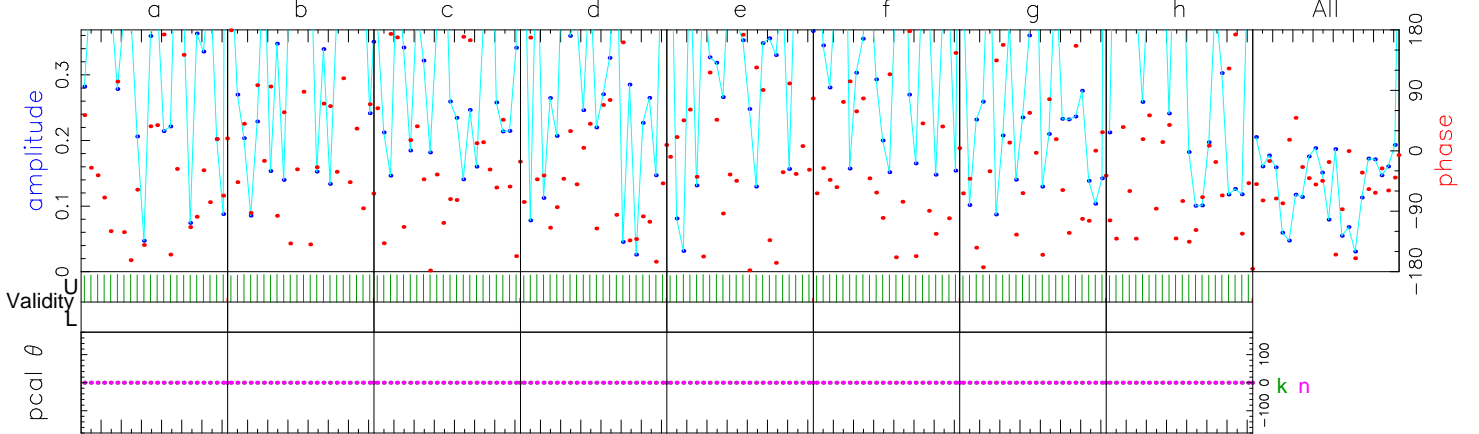


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-64.2	-138.5	-66.9	-84.8	-54.2	-120.7	-130.8	-58.4	Phase	-82.8
	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	440.7	390.2	143.4	146.7	284.9	379.8	392.3	81.0	Sbd box	144.9
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.68133666049E+02		Apriori delay (usec)		-7.67695490366E+02		Resid mbdelay (usec)		-6.75684E-04	+/- 1.9E-04
Sband delay (usec)	-7.68133529616E+02		Apriori clock (usec)		-3.2634834E+01		Resid sbdelay (usec)		-4.38039E-01	+/- 1.5E-03
Phase delay (usec)	-7.67695493036E+02		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		-2.66989E-06	+/- 6.5E-07
Delay rate (us/s)	3.42815960467E-01		Apriori rate (us/s)		3.42805621560E-01		Resid rate (us/s)		1.03389E-05	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.95765921403E-06		Resid phase (deg)		-82.8	+/- 20.3

ph/seg (deg) 57.8 48.6 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.9 84.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.4 28.6 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.7 50.0 Inc. frq. avg. 0.151 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kn.18UHQs Output file: /Exps/c201b/v1/1234/No0057/kn.W.110.18UHQs



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

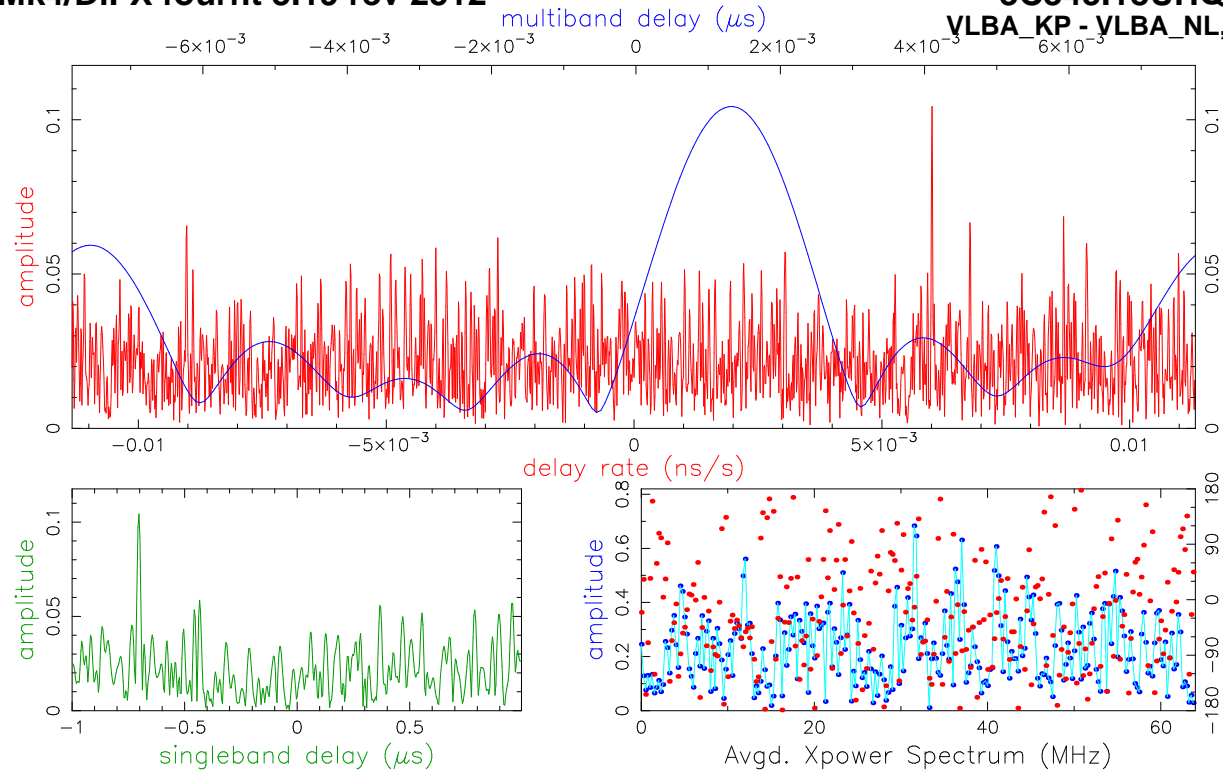


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-55.6	-24.1	-57.1	-55.1	-16.6	-41.7	-36.2	-59.8	Phase	-46.3
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	29.1	35.8	184.2	307.8	211.8	468.2	354.5	489.2	Sbd box	402.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.67125961156E+02		Apriori delay (usec)	-7.67695490366E+02	Resid mbdelay (usec)	7.02921E-03	+/-	1.8E-04		
Sband delay (usec)	-7.67129021116E+02		Apriori clock (usec)	-3.2634834E+01	Resid sbdelay (usec)	5.66469E-01	+/-	1.4E-03		
Phase delay (usec)	-7.67695491858E+02		Apriori clockrate (us/s)	-3.2859999E-07	Resid phdelay (usec)	-1.49272E-06	+/-	6.1E-07		
Delay rate (us/s)	3.42811812180E-01		Apriori rate (us/s)	3.42805621560E-01	Resid rate (us/s)	6.19062E-06	+/-	2.5E-09		
Total phase (deg)		-240.7	Apriori accel (us/s/s)	-5.95765921403E-06	Resid phase (deg)	-46.3	+/-	19.0		

	RMS	Theor.	Amplitude	0.123 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.3	45.6	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	62.2	79.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	18.1	26.9	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	27.9	47.0	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

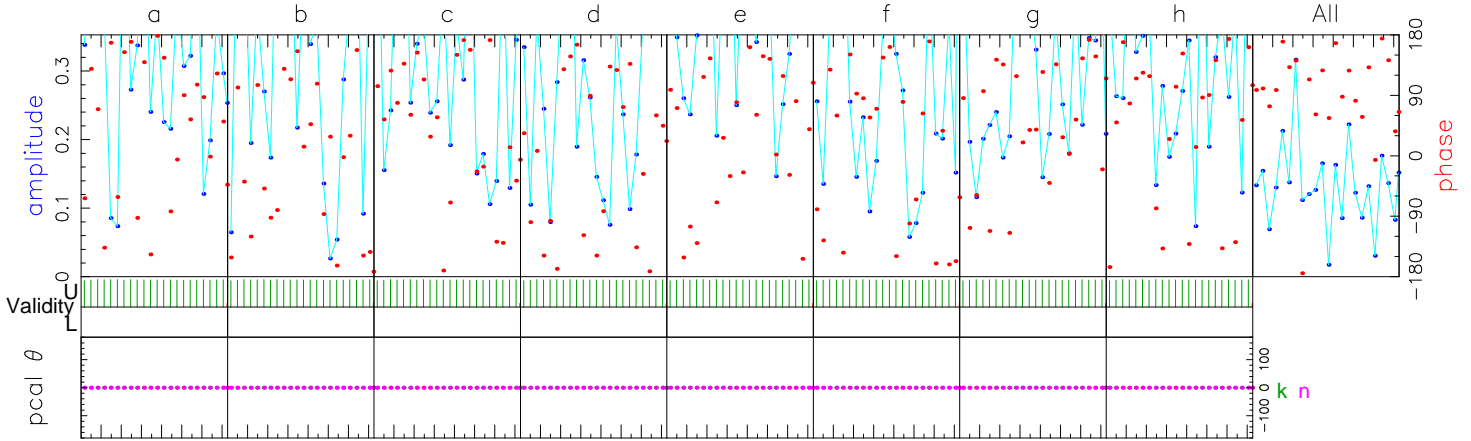
k: az 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kn..18UHQ5 Output file: /Exps/c201b/v1/1234/No0057/kn.W.128.18UHQ5



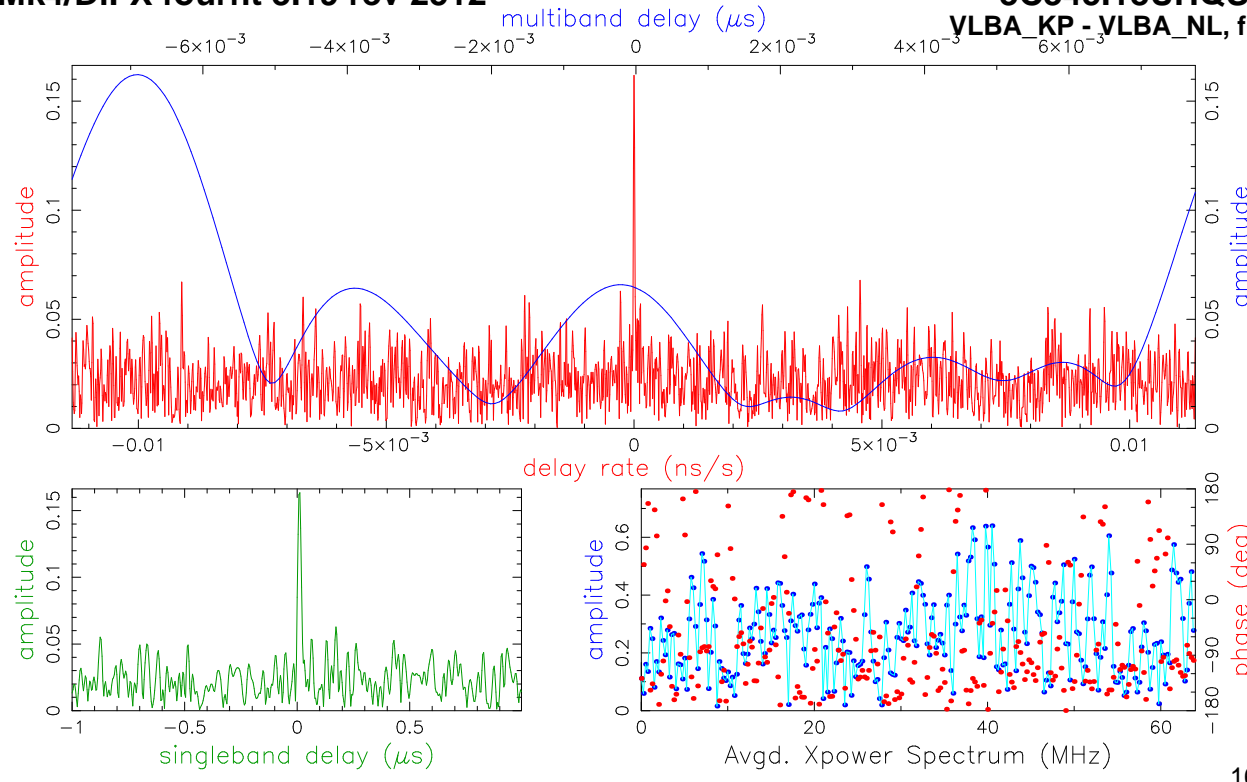
Fringe quality 0  
SNR 5.8  
Int time 412.690  
Amp 0.118  
Phase 123.5  
PFD 8.1e-01  
Delays (us)  
SBD -0.703593  
MBD 0.001296  
Fringe rate (Hz) 0.519039  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Yr:day 16383  
2020:198:173216  
2020:199:143602  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	129.0	109.8	126.8	128.1	93.1	155.3	81.0	141.2	Phase	123.5
k	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
n	398.4	51.9	469.0	308.7	500.9	303.6	355.5	433.7	Sbd box	76.9
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.68397319685E+02		Apriori delay (usec)		-7.67695490366E+02		Resid mbdelay (usec)		1.29568E-03	+/- 1.9E-04
Sband delay (usec)	-7.68399083366E+02		Apriori clock (usec)		-3.2634834E+01		Resid sbdelay (usec)		-7.03593E-01	+/- 1.5E-03
Phase delay (usec)	-7.67695486384E+02		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		3.98178E-06	+/- 6.4E-07
Delay rate (us/s)	3.42811647094E-01		Apriori rate (us/s)		3.42805621560E-01		Resid rate (us/s)		6.02553E-06	+/- 2.6E-09
Total phase (deg)	-71.0		Apriori accel (us/s/s)		-5.95765921403E-06		Resid phase (deg)		123.5	+/- 19.8

ph/seg (deg) 50.5 47.4 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.4 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.8 27.9 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 31.6 48.8 Inc. frq. avg. 0.114 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -2568.658 -1282.180 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kn.W.147.18UHQS

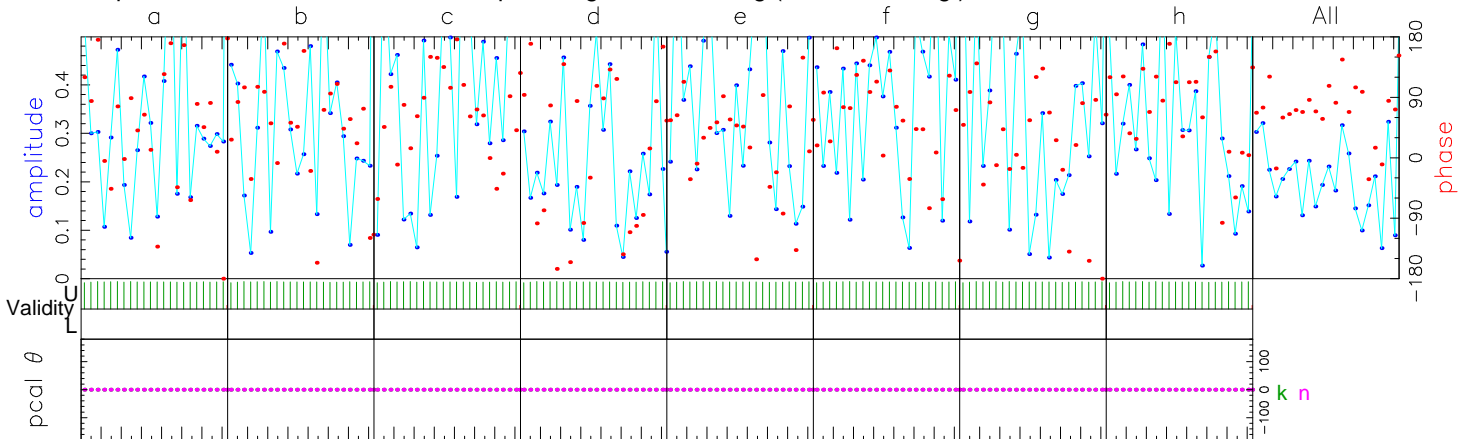


Fringe quality 9

SNR 9.2  
Int time 412.690  
Amp 0.166  
Phase 75.8  
PFD 9.6e-12  
Delays (us)  
SBD 0.009980  
MBD -0.006840  
Fringe rate (Hz)  
-0.000264  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.51  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143548  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.67686705741E+02				-7.67695490366E+02				-6.84037E-03	+/- 1.2E-04
Sband delay (usec)	-7.67685509866E+02				-3.2634834E+01				9.98050E-03	+/- 9.3E-04
Phase delay (usec)	-7.67695487922E+02				-3.2859999E-07				2.44334E-06	+/- 4.0E-07
Delay rate (us/s)	3.42805618496E-01				3.42805621560E-01				-3.06451E-09	+/- 1.7E-09
Total phase (deg)			-118.7		-5.95765921403E-06				75.8	+/- 12.4
	RMS	Theor.	Amplitude	0.166 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	43.7	29.7	Search (2048X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	51.9	51.9	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	29.4	17.5	Inc. seg. avg.	0.181	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	27.9	30.6	Inc. frq. avg.	0.167	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00

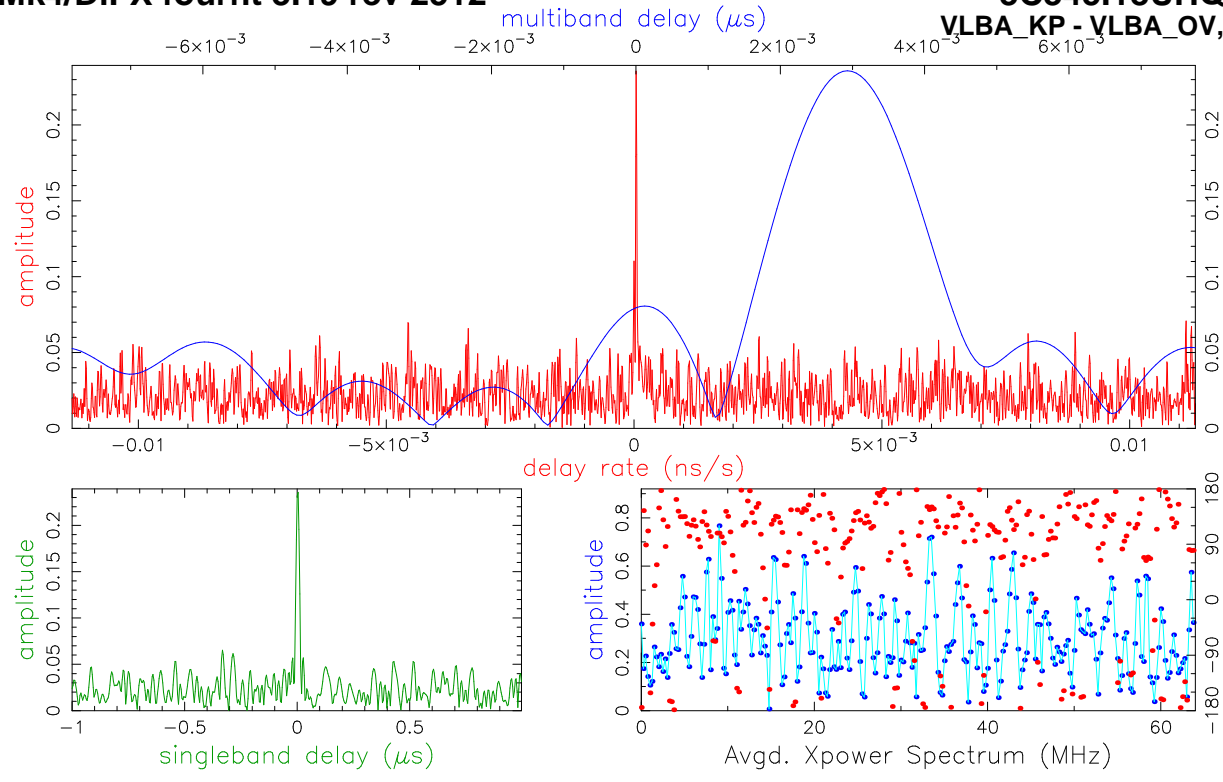
k: az 56.4 el 73.7 pa -114.9      n: az 222.0 el 87.3 pa 44.3      u,v (fr/asec) -2568.658 -1282.180      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0057/kn.18UHQS    Output file: /Exps/c201b/v1/1234/No0057/kn.W.89.18UHQS



Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, ko  
VLBA\_KP - VLBA\_OV, fgroup W, pol RR

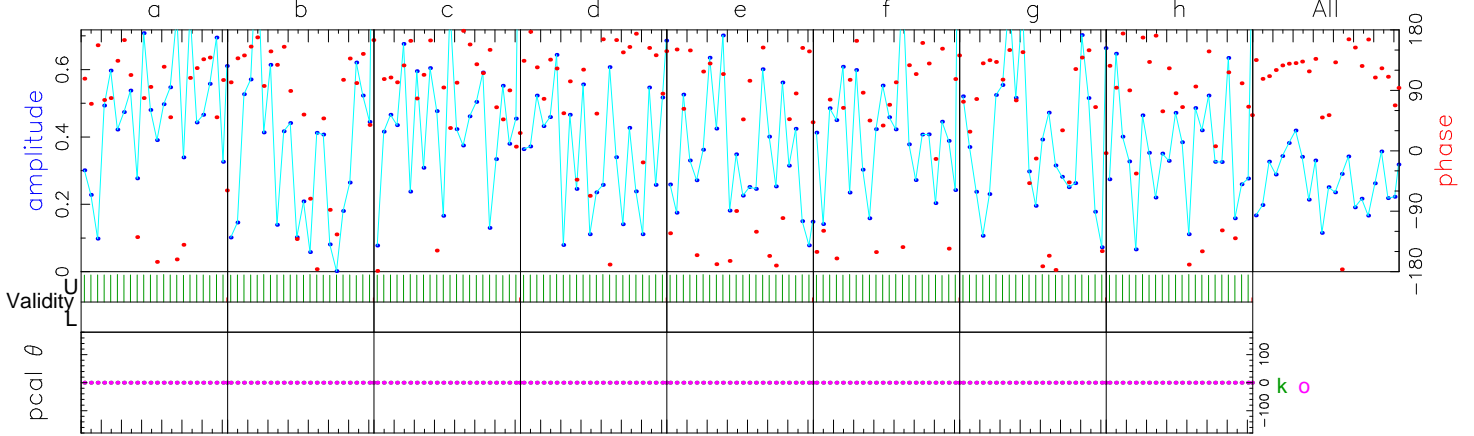


Fringe quality 9

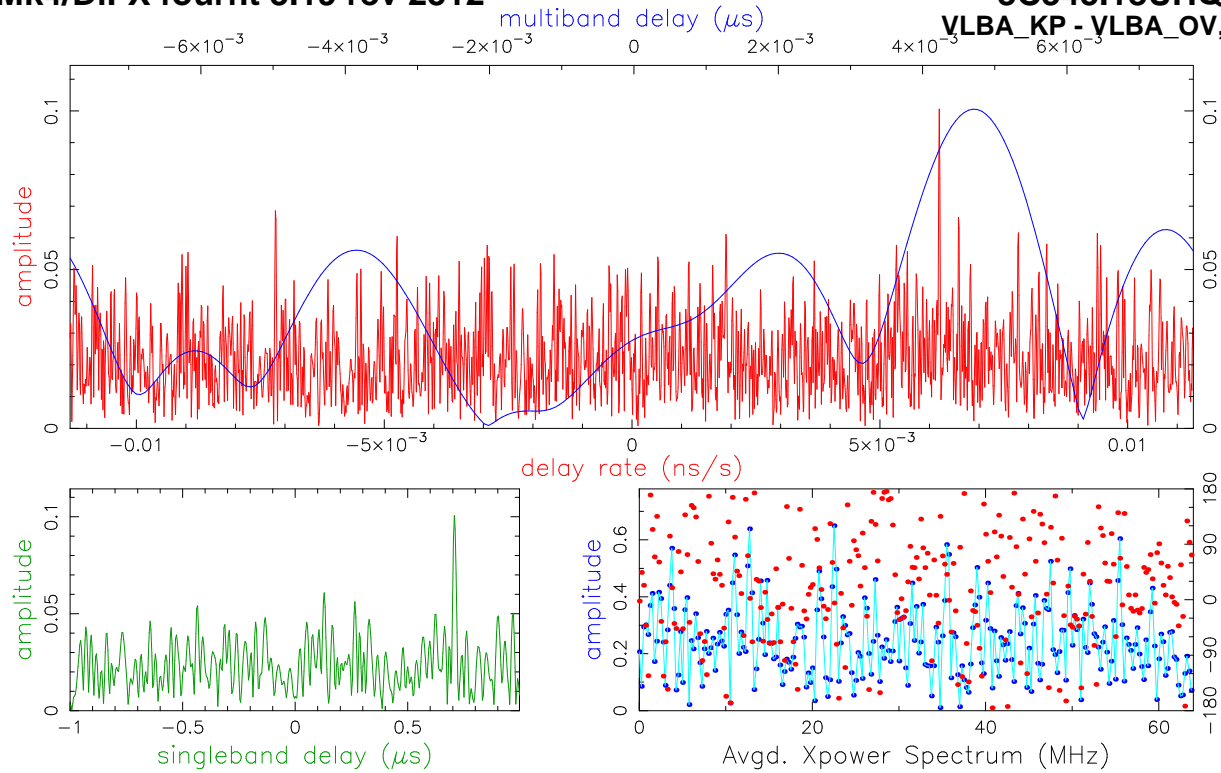
SNR 13.3  
Int time 412.549  
Amp 0.239  
Phase 125.3  
PFD 1.4e-31  
Delays (us)  
SBD 0.002303  
MBD 0.002876  
Fringe rate (Hz) 0.003479  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143554  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
o	1000	1000	1000	1000	1000	1000	1000	1000		1000
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.86915706095E+02								Resid mbdelay (usec)	2.87623E-03 +/- 8.2E-05
Sband delay (usec)	2.86915132869E+02								Resid sbdelay (usec)	2.30300E-03 +/- 6.5E-04
Phase delay (usec)	2.86912833910E+02								Resid phdelay (usec)	4.04142E-06 +/- 2.8E-07
Delay rate (us/s)	-8.61386248479E-02								Resid rate (us/s)	4.03850E-08 +/- 1.1E-09
Total phase (deg)		184.7							Resid phase (deg)	125.3 +/- 8.6
	RMS	Theor.	Amplitude	0.239 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	32.5	20.7	Search (2048X32)	0.227					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	34.7	36.1	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	15.0	12.2	Inc. seg. avg.	0.251					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	18.6	21.3	Inc. frq. avg.	0.236					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

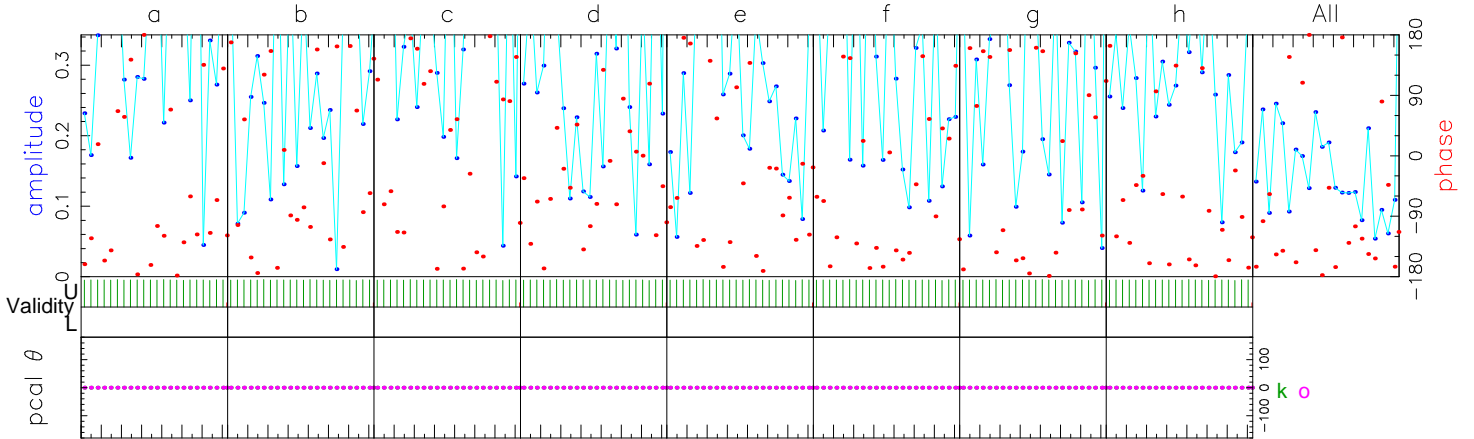


Fringe quality 0

SNR 5.6  
Int time 412.549  
Amp 0.114  
Phase -145.7  
PFD 1.0e+00  
Delays (us)  
SBD 0.707603  
MBD 0.004730  
Fringe rate (Hz)  
0.534934  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

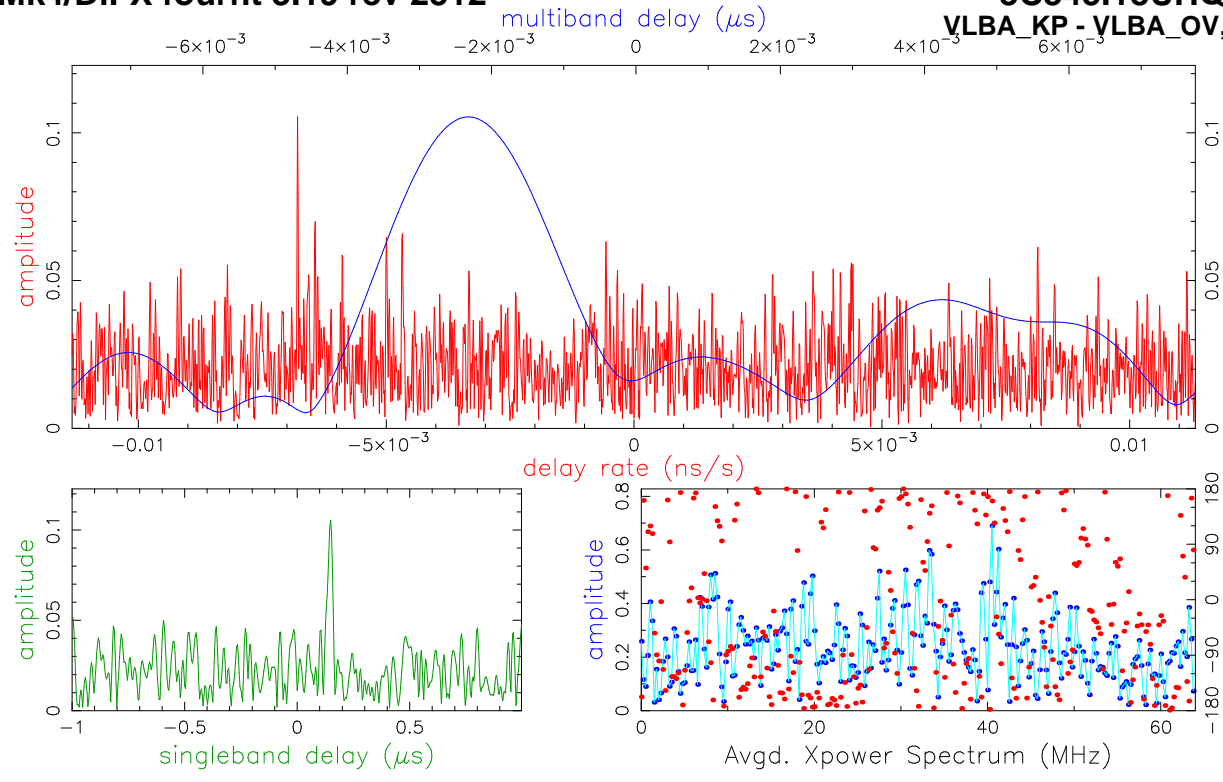
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143558  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



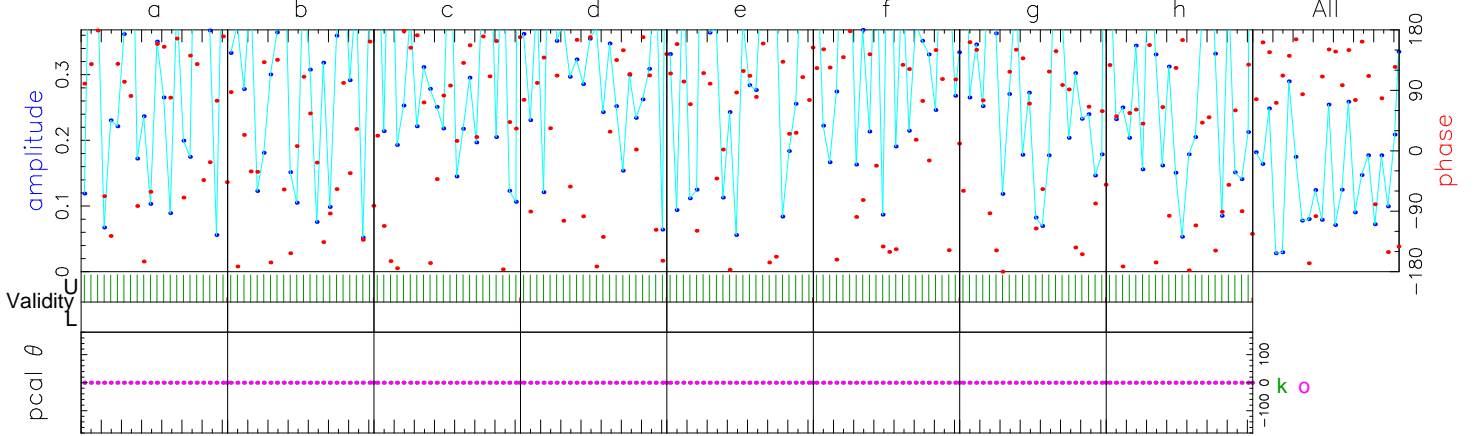
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-150.6	-147.0	-174.9	-43.9	-146.2	-138.7	175.5	-133.1		-145.7
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2		0.1
	172.2	400.5	310.7	386.1	323.9	334.0	398.7	437.2		438.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o	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		PC phase
k:o	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		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	2.87620685141E+02		Apriori delay (usec)		2.86912829869E+02		Resid mbdelay (usec)		4.73027E-03	+/- 1.9E-04
Sband delay (usec)	2.87620432619E+02		Apriori clock (usec)		-2.0434280E+01		Resid sbdelay (usec)		7.07603E-01	+/- 1.5E-03
Phase delay (usec)	2.86912825169E+02		Apriori clockrate (us/s)		-1.9560001E-07		Resid phdelay (usec)		-4.69992E-06	+/- 6.6E-07
Delay rate (us/s)	-8.61324551773E-02		Apriori rate (us/s)		-8.61386652328E-02		Resid rate (us/s)		6.21006E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.09536968251E-06		Resid phase (deg)		-145.7	+/- 20.5

ph/seg (deg) 56.8 49.1 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 79.3 85.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 46.5 29.0 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 37.5 50.5 Inc. frq. avg. 0.124 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 56.4 el 73.7 pa -114.9 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 625.173 -988.543 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/ko..18UHQS Output file: /Exps/c201b/v1/1234/No0057/ko.W.132.18UHQS

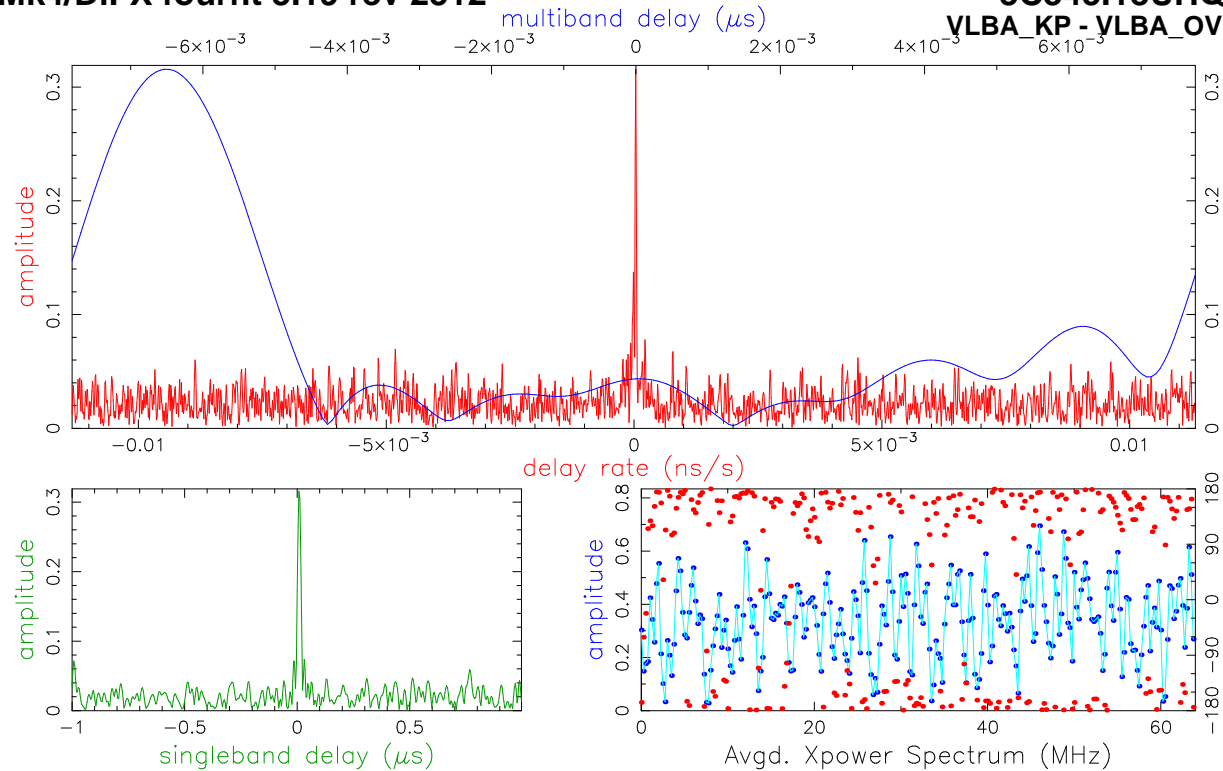


Fringe quality 0  
SNR 5.9  
Int time 412.551  
Amp 0.123  
Phase 138.1  
PFD 7.0e-01  
Delays (us)  
SBD 0.148161  
MBD -0.002323  
Fringe rate (Hz)  
-0.585624  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143602  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	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		
k:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.87066757243E+02									
Sband delay (usec)	2.87060990369E+02									
Phase delay (usec)	2.86912834323E+02									
Delay rate (us/s)	-8.61454637489E-02									
Total phase (deg)			197.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.123 +/- 0.021										
0.104										
0.000										
0.126										
0.115										
2.86912829869E+02										
-2.0434280E+01										
-1.9560001E-07										
-8.61386652328E-02										
-7.09536968251E-06										
-2.32263E-03										
1.48161E-01										
4.45471E-06										
-6.79852E-06										
138.1										
+/- 1.9E-04										
+/- 1.5E-03										
+/- 6.3E-07										
+/- 2.6E-09										
+/- 19.6										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000										
1.000										
-0.008										
0.008										
-0.011										
0.011										
0.00										
0.00										

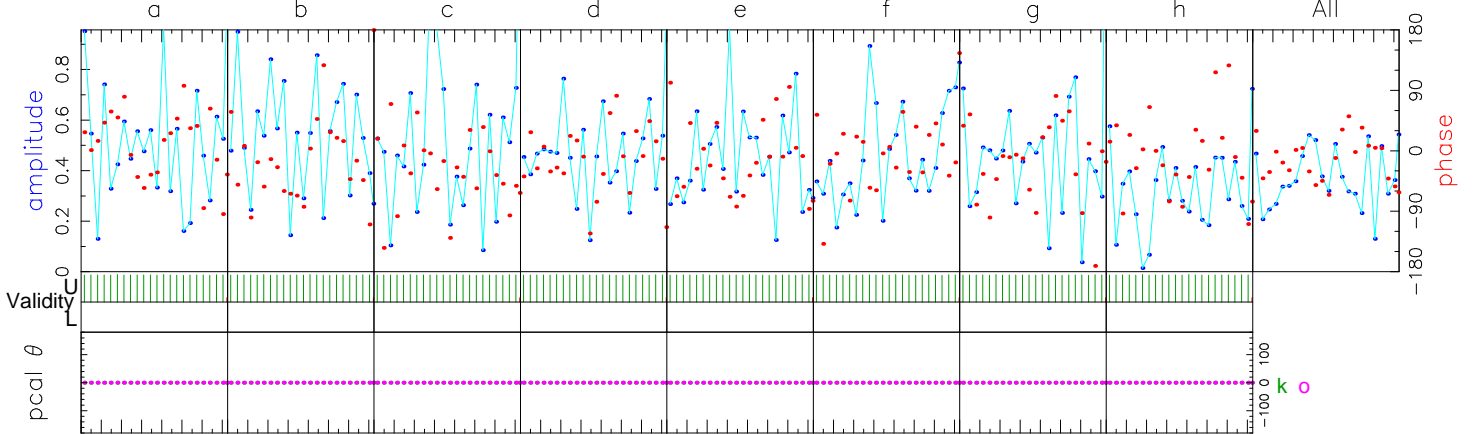


Fringe quality 9

SNR 17.7  
Int time 412.551  
Amp 0.319  
Phase -12.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.009090  
MBD -0.006478  
Fringe rate (Hz) 0.003276  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143549  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



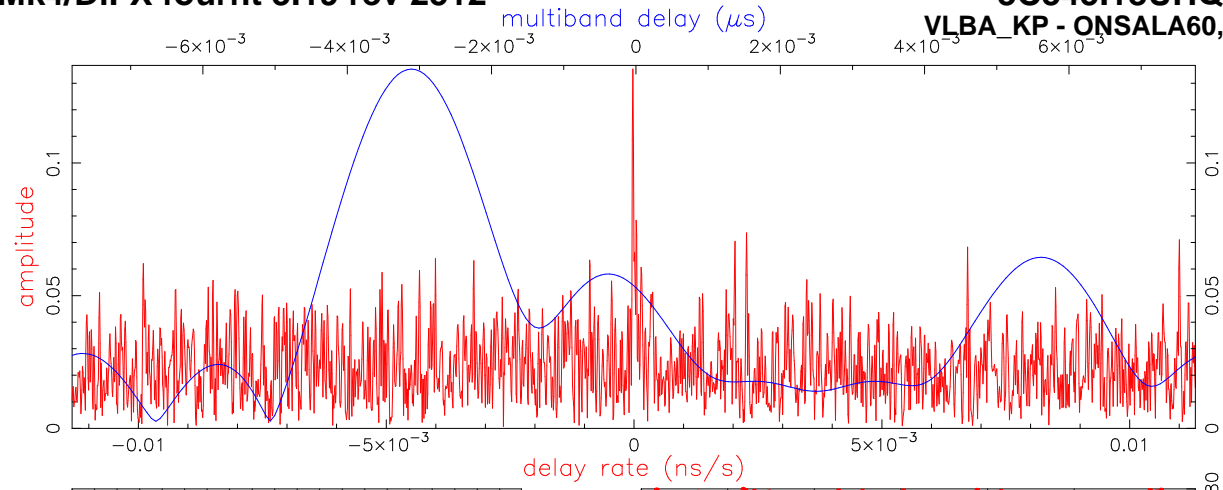
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.86921976710E+02	Apriori delay (usec)		2.86912829869E+02	Resid mbdelay (usec)		-6.47816E-03	+/-	6.1E-05	
Sband delay (usec)	2.86921919869E+02	Apriori clock (usec)		-2.0434280E+01	Resid sbdelay (usec)		9.09000E-03	+/-	4.9E-04	
Phase delay (usec)	2.86912829470E+02	Apriori clockrate (us/s)		-1.9560001E-07	Resid phdelay (usec)		-3.98787E-07	+/-	2.1E-07	
Delay rate (us/s)	-8.61386272045E-02	Apriori rate (us/s)		-8.61386652328E-02	Resid rate (us/s)		3.80283E-08	+/-	8.6E-10	
Total phase (deg)		47.0	Apriori accel (us/s/s)		-7.09536968251E-06	Resid phase (deg)		-12.4	+/-	6.5

ph/seg (deg)	31.2	15.5	Search (2048X32)		0.298	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	38.1	27.1	Interp.		0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	13.1	9.1	Inc. seg. avg.		0.353	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	19.8	16.0	Inc. frq. avg.		0.319	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011		
						Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 56.4 el 73.7 pa -114.9      o: az 74.9 el 70.8 pa -89.6      u,v (fr/asec) 625.173 -988.543      simultaneous interpolator

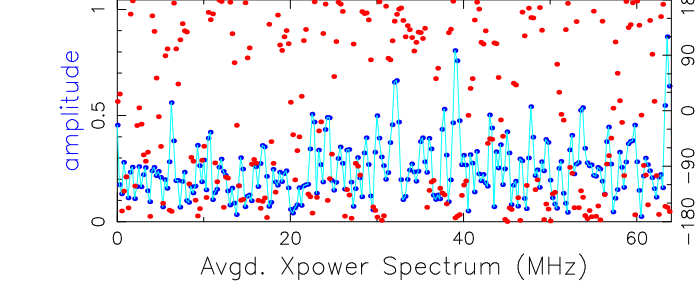
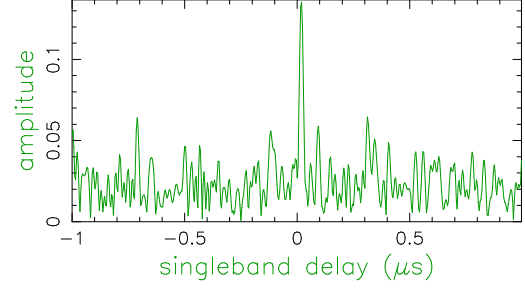
Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0057/ko..18UHQS    Output file: /Exps/c201b/v1/1234/No0057/ko.W.92.18UHQS



Fringe quality 9

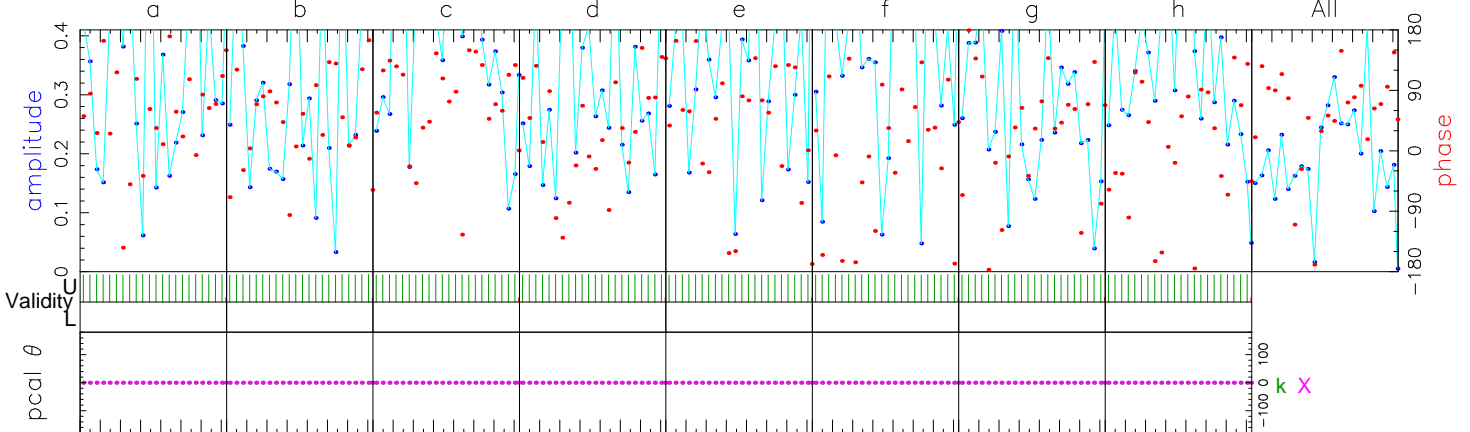
SNR 7.6  
 Int time 417.281  
 Amp 0.137  
 Phase 69.9  
 PFD 7.2e-06  
 Delays (us)  
 SBD 0.018130  
 MBD -0.003102  
 Fringe rate (Hz)  
 -0.002375  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143554  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"



Avgd. Xpower Spectrum (MHz)

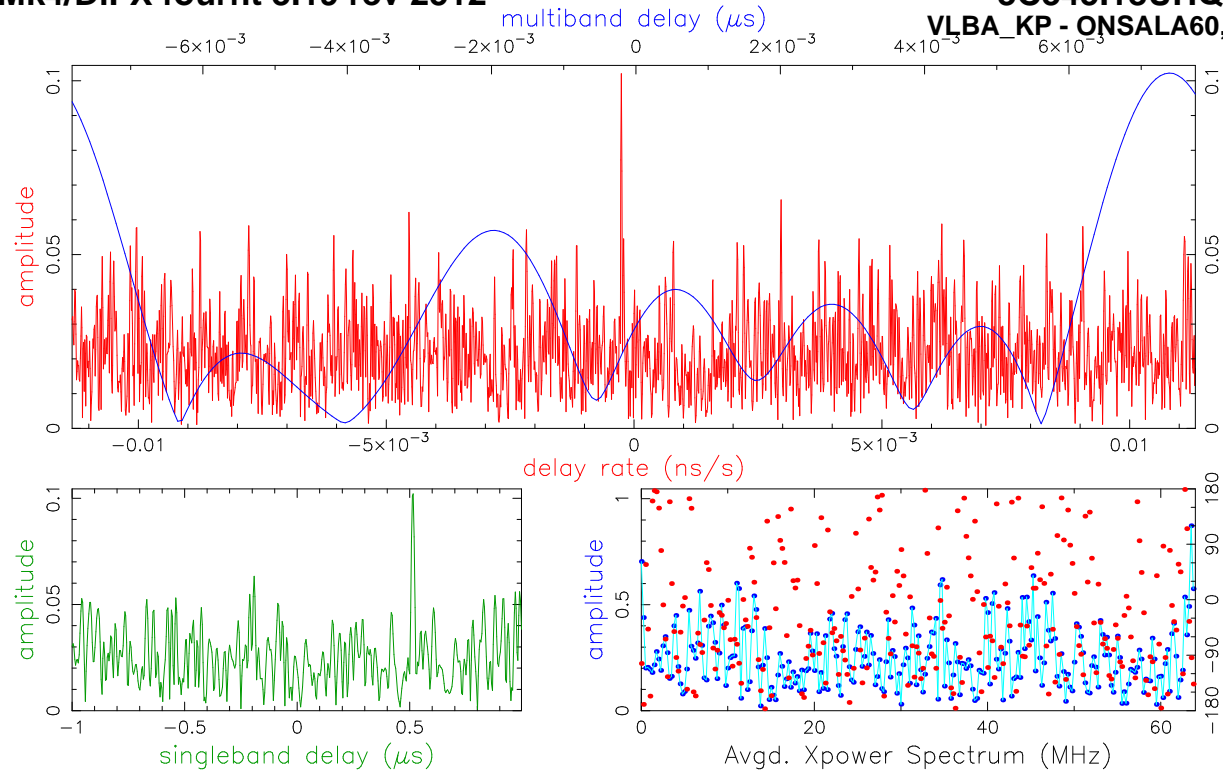
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All			
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0					
k	1000	1000	1000	1000	1000	1000	1000	1000					
X	1000	1000	1000	1000	1000	1000	1000	1000					
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
k:X	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					
X	1000	1000	1000	1000	1000	1000	1000	1000					
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
Group delay (usec)(sbd)		1.15936806885E+04				1.15936681652E+04			Resid mbdelay (usec)	-3.10172E-03	+/- 1.4E-04		
Sband delay (usec)		1.15936862957E+04				-4.1109886E+01			Resid sbdelay (usec)	1.81305E-02	+/- 1.1E-03		
Phase delay (usec)		1.15936681675E+04				-5.2260003E-07			Resid phdelay (usec)	2.25284E-06	+/- 4.8E-07		
Delay rate (us/s)		9.05439633425E-01				9.05439660995E-01			Resid rate (us/s)	-2.75700E-08	+/- 2.0E-09		
Total phase (deg)			341.2			-8.44760103570E-05			Resid phase (deg)	69.9	+/- 15.0		
	RMS	Theor.	Amplitude	0.137 +/- 0.018		PCal mode: MANUAL, MANUAL			PC period (AP's)	5, 5			
ph/seg (deg)	61.7	36.0	Search (2048X32)	0.128		PCal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000	1.000		
amp/seg (%)	76.2	62.8	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	20.9	21.2	Inc. seg. avg.	0.167		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011		
amp/frq (%)	40.3	37.0	Inc. frq. avg.	0.135		Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

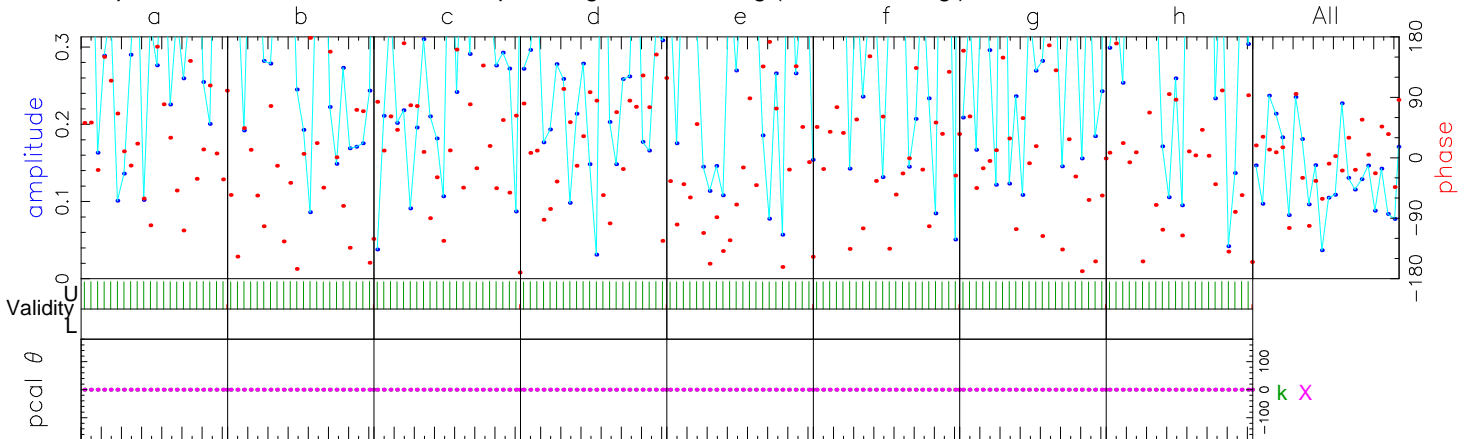
k: az 56.4 el 73.7 pa -114.9 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -6931.970 -7553.244 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kX.W.116.18UHQS



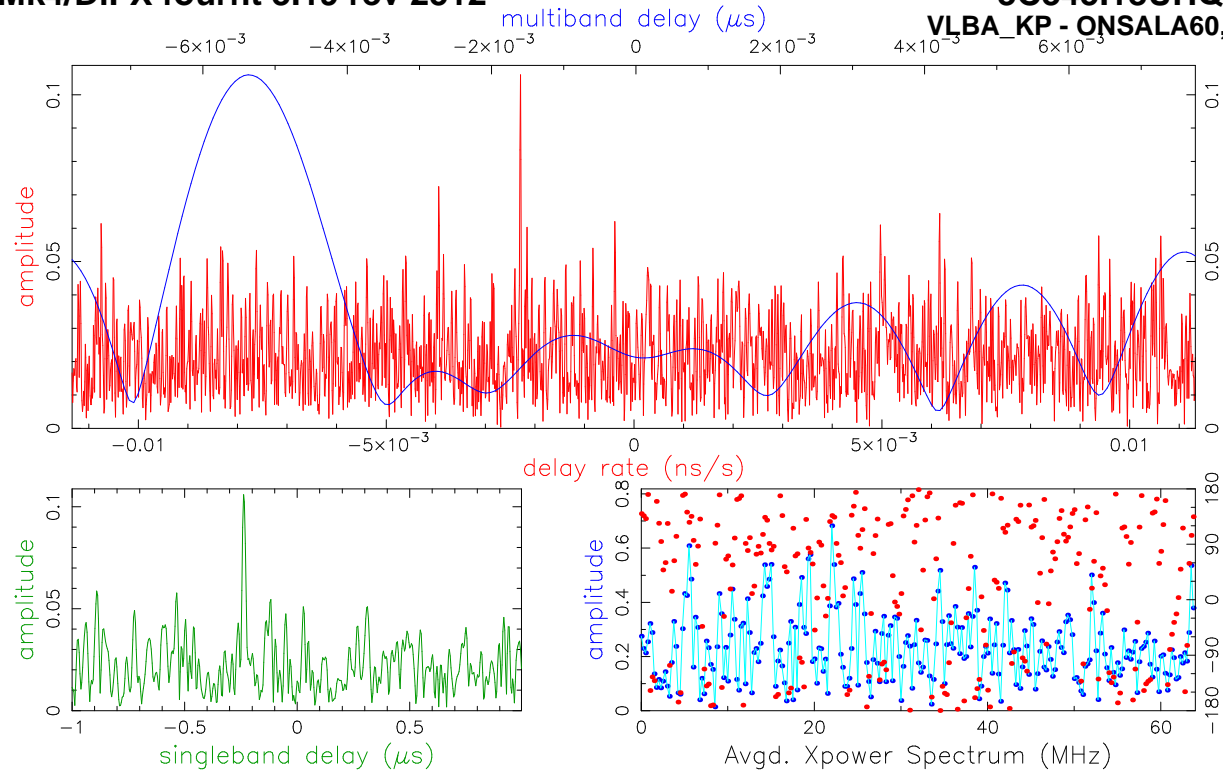
Fringe quality 0  
 SNR 5.8  
 Int time 417.281  
 Amp 0.104  
 Phase 5.8  
 PFD 7.5e-01  
 Delays (us)  
 SBD 0.513849  
 MBD 0.007334  
 Fringe rate (Hz)  
 -0.021717  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143600  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



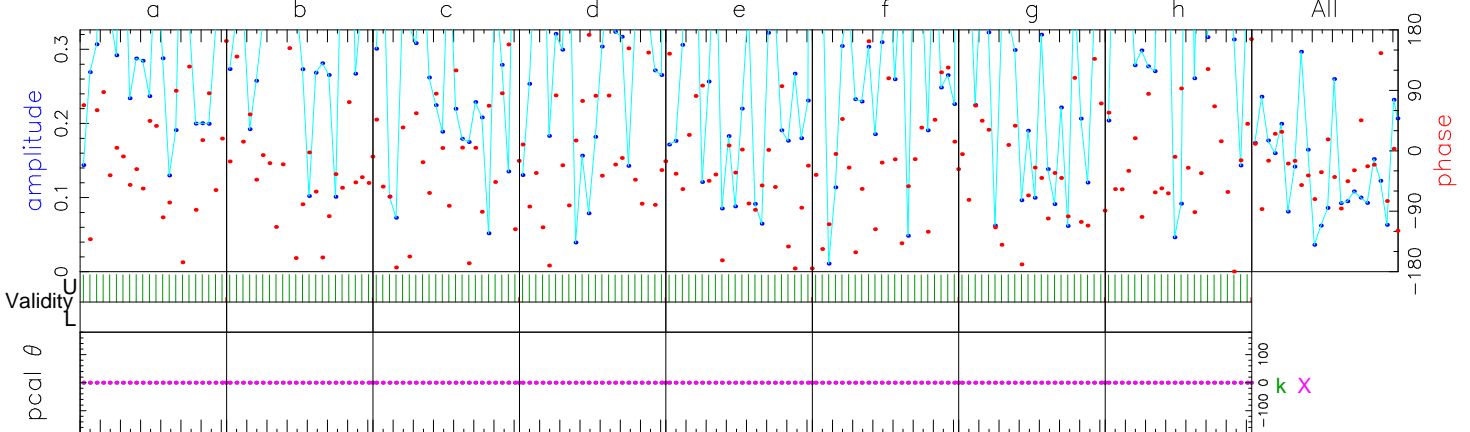
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.15941754992E+04			1.15936681652E+04				7.33393E-03	+/- 1.9E-04
Sband delay (usec)		1.15941820147E+04			-4.1109886E+01				5.13849E-01	+/- 1.5E-03
Phase delay (usec)		1.15936681654E+04			-5.2260003E-07				1.88205E-07	+/- 6.3E-07
Delay rate (us/s)		9.05439408886E-01			9.05439660995E-01				-2.52108E-07	+/- 2.6E-09
Total phase (deg)			277.2		-8.44760103570E-05				5.8	+/- 19.6
	RMS	Theor.	Amplitude	0.104 +/- 0.018						
ph/seg (deg)	48.2	47.1	Search (2048X32)	0.100						
amp/seg (%)	60.8	82.2	Interp.	0.000						
ph/frq (deg)	29.9	27.8	Inc. seg. avg.	0.102						
amp/frq (%)	34.2	48.5	Inc. frq. avg.	0.101						

k: az 56.4 el 73.7 pa -114.9 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -6931.970 -7553.244 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kX.W.141.18UHQS



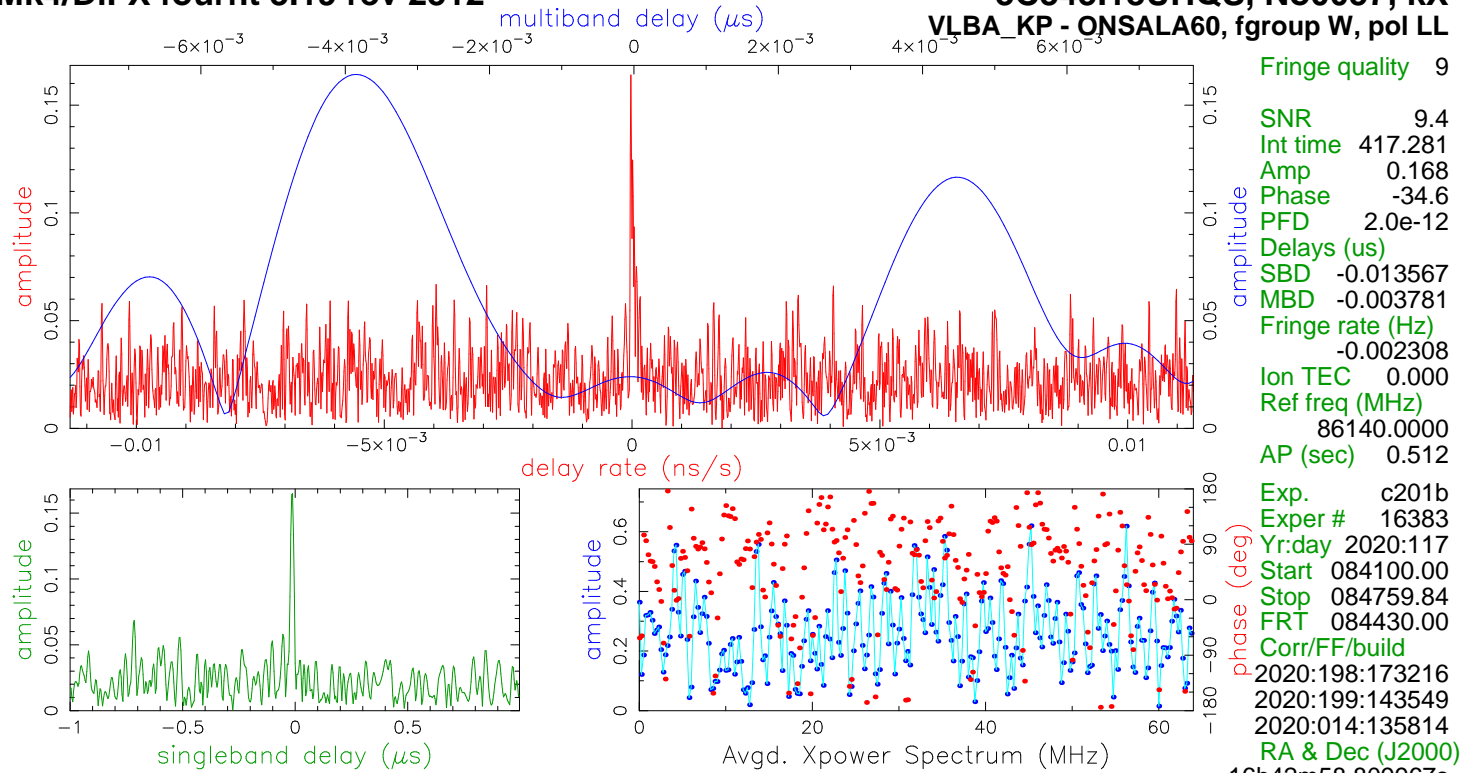
Fringe quality 0  
 SNR 6.0  
 Int time 417.281  
 Amp 0.109  
 Phase -23.3  
 PFD 4.5e-01  
 Delays (us)  
 SBD -0.237043  
 MBD -0.005350  
 Fringe rate (Hz)  
 -0.197416  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143604  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	9.0	-39.5	-32.1	-44.4	-26.7	-6.7	2.0	-27.9	Phase	-23.3
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	41.7	349.8	296.7	369.3	29.7	21.5	199.6	196.3	Sbd box	196.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	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	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.15934284402E+04		Apriori delay (usec)		1.15936681652E+04		Resid mbdelay (usec)		-5.35002E-03	+/- 1.8E-04
Sband delay (usec)	1.15934311217E+04		Apriori clock (usec)		-4.1109886E+01		Resid sbdelay (usec)		-2.37043E-01	+/- 1.4E-03
Phase delay (usec)	1.15936681645E+04		Apriori clockrate (us/s)		-5.2260003E-07		Resid phdelay (usec)		-7.50188E-07	+/- 6.2E-07
Delay rate (us/s)	9.05437369192E-01		Apriori rate (us/s)		9.05439660995E-01		Resid rate (us/s)		-2.29180E-06	+/- 2.6E-09
Total phase (deg)	248.1		Apriori accel (us/s/s)		-8.44760103570E-05		Resid phase (deg)		-23.3	+/- 19.2

ph/seg (deg) 51.0 46.0 Search (2048X32) 0.105 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 72.1 80.3 Interp. 0.005 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.5 27.1 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.5 47.3 Inc. frq. avg. 0.102 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -6931.970 -7553.244 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kX.W.157.18UHQS



Fringe quality 9

SNR 9.4

Int time 417.281

Amp 0.168

Phase -34.6

PFD 2.0e-12

Delays (us)

SBD -0.013567

MBD -0.003781

Fringe rate (Hz)

-0.002308

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 084100.00

Stop 084759.84

FRT 084430.00

Corr/FF/build

2020:198:173216

2020:199:143549

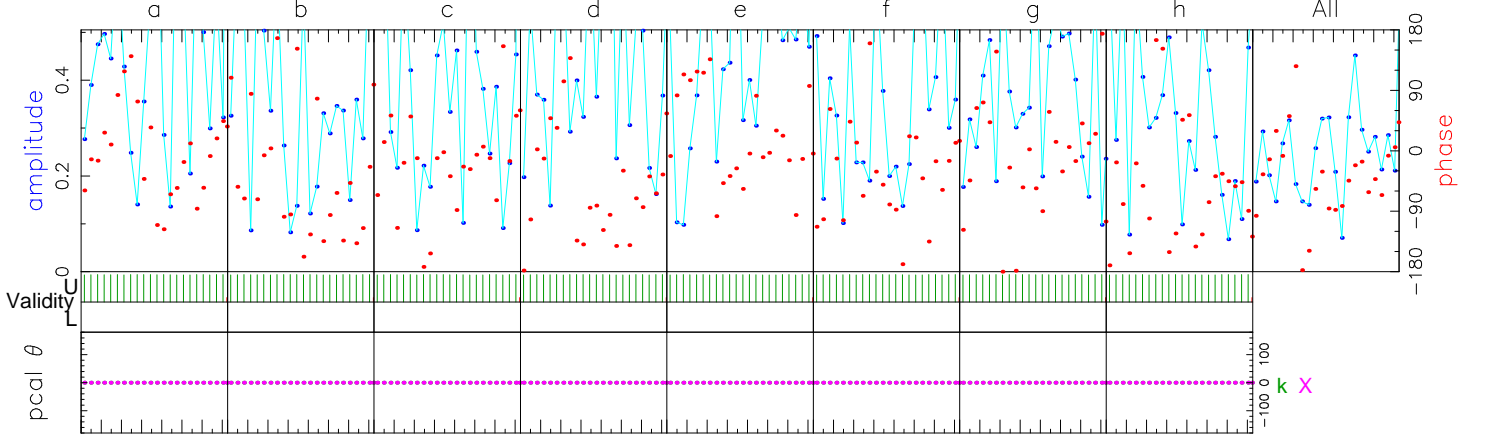
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



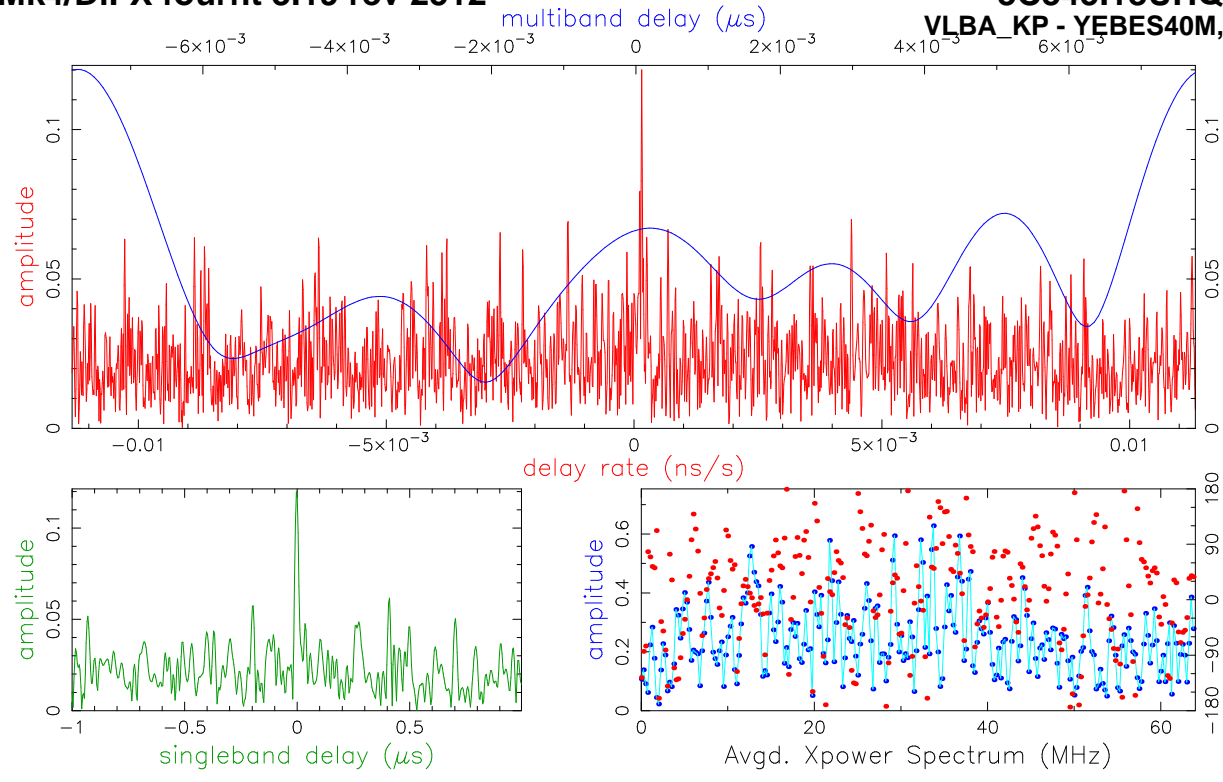
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-15.0	-87.3	-16.2	-80.2	6.3	-29.2	0.9	-95.2	Phase	-34.6
	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	252.6	193.3	253.3	253.4	252.9	253.9	251.0	295.5	Sbd box	253.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	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	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.15936487590E+04		Apriori delay (usec)		1.15936681652E+04		Resid mbdelay (usec)		-3.78124E-03	+/- 1.2E-04
Sband delay (usec)	1.15936545985E+04		Apriori clock (usec)		-4.1109886E+01		Resid sbdelay (usec)		-1.35668E-02	+/- 9.2E-04
Phase delay (usec)	1.15936681641E+04		Apriori clockrate (us/s)		-5.2260003E-07		Resid phdelay (usec)		-1.11498E-06	+/- 3.9E-07
Delay rate (us/s)	9.05439634198E-01		Apriori rate (us/s)		9.05439660995E-01		Resid rate (us/s)		-2.67962E-08	+/- 1.6E-09
Total phase (deg)	236.8		Apriori accel (us/s/s)		-8.44760103570E-05		Resid phase (deg)		-34.6	+/- 12.2

	RMS	Theor.	Amplitude	0.168 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.6	29.2	Search (2048X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	68.2	51.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	45.1	17.2	Inc. seg. avg.	0.218	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	29.9	30.1	Inc. frq. avg.	0.196	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 56.4 el 73.7 pa -114.9 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -6931.970 -7553.244 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kX.W.93.18UHQS



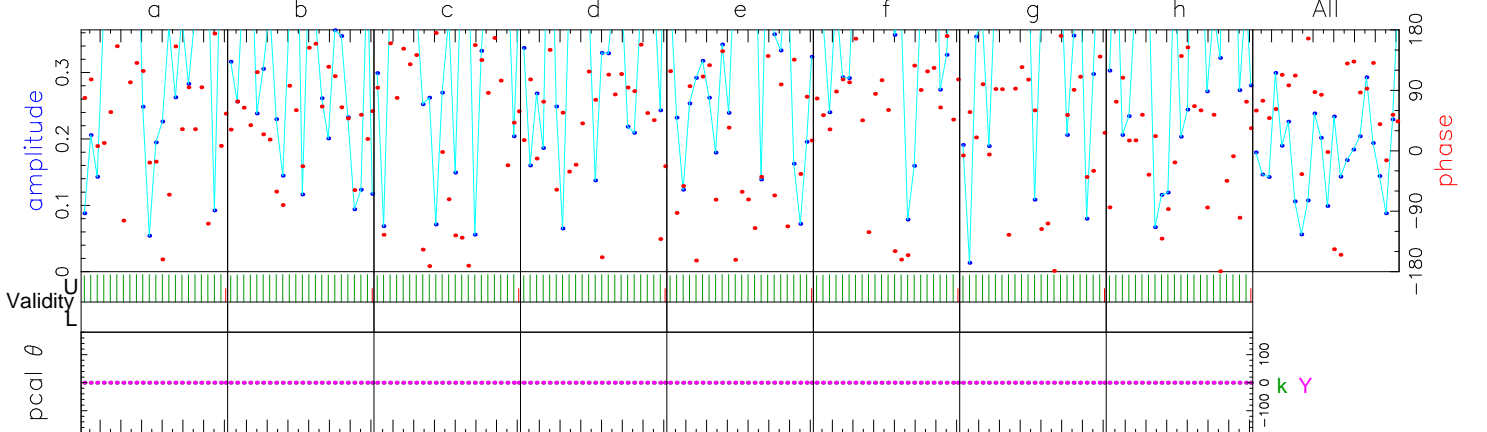


Fringe quality 0

SNR 6.7  
 Int time 411.194  
 Amp 0.121  
 Phase 88.3  
 PFD 4.7e-03  
 Delays (us)  
 SBD -0.002434  
 MBD -0.007685  
 Fringe rate (Hz)  
 0.013805  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

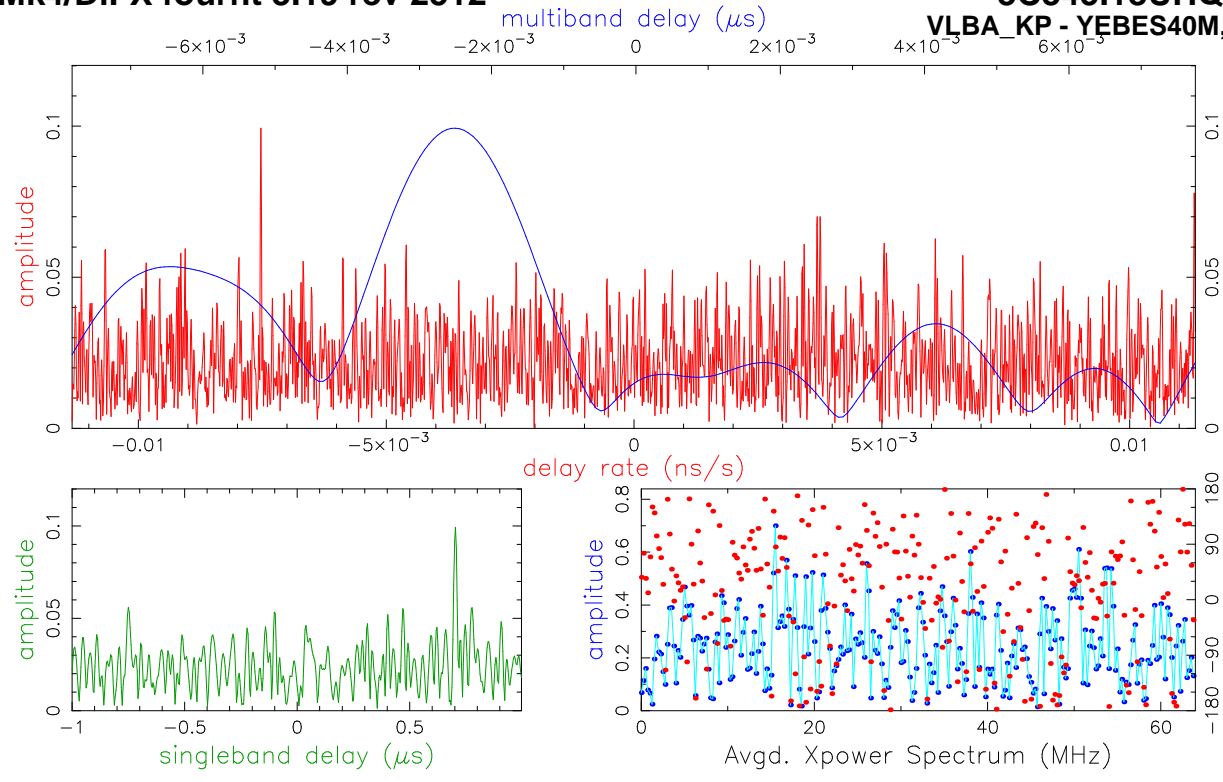
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084105.12  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143554  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



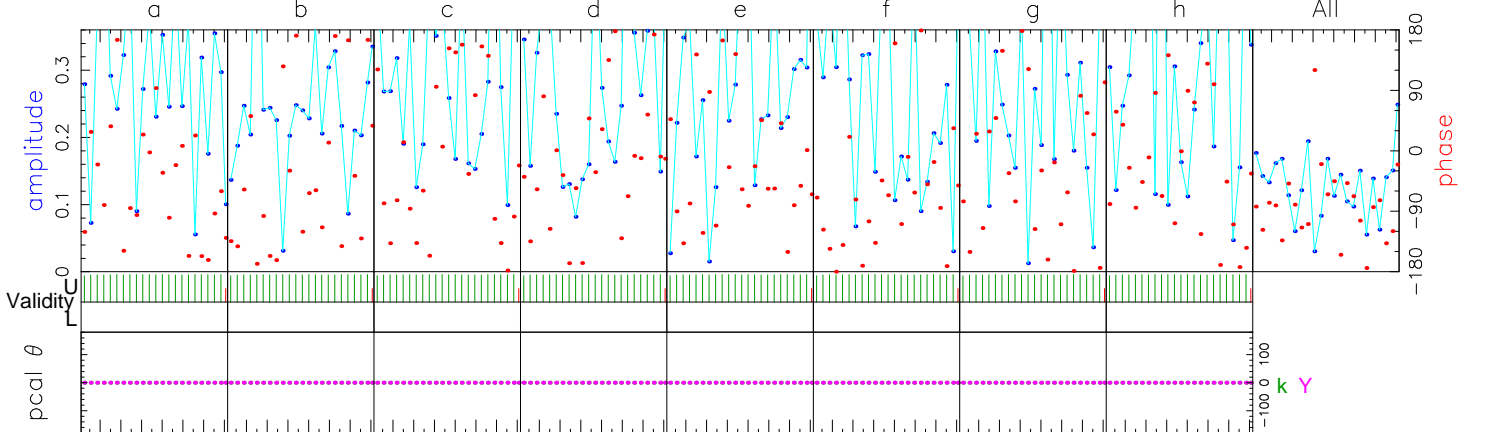
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0			
k	1000	1000	1000	1000	1000	1000	1000	1000			
Y	1000	1000	1000	1000	1000	1000	1000	1000			
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k	1000	1000	1000	1000	1000	1000	1000	1000			
Y	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		1.20854279550E+04				1.20854356398E+04			Resid mbdelay (usec)	-7.68488E-03	+/- 1.6E-04
Sband delay (usec)		1.20854332063E+04				-1.2316931E+01			Resid sbdelay (usec)	-2.43350E-03	+/- 1.3E-03
Phase delay (usec)		1.20854356427E+04				-2.1460000E-07			Resid phdelay (usec)	2.84841E-06	+/- 5.5E-07
Delay rate (us/s)		1.19664500454E+00				1.19664484428E+00			Resid rate (us/s)	1.60263E-07	+/- 2.3E-09
Total phase (deg)			93.7			-7.30180438590E-05			Resid phase (deg)	88.3	+/- 17.0

ph/seg (deg) 61.2 40.8 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.1 71.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 60.0 24.1 Inc. seg. avg. 0.144 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 52.6 42.0 Inc. frq. avg. 0.143 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9073.476 -5458.726 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/KY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kY.W.114.18UHQS



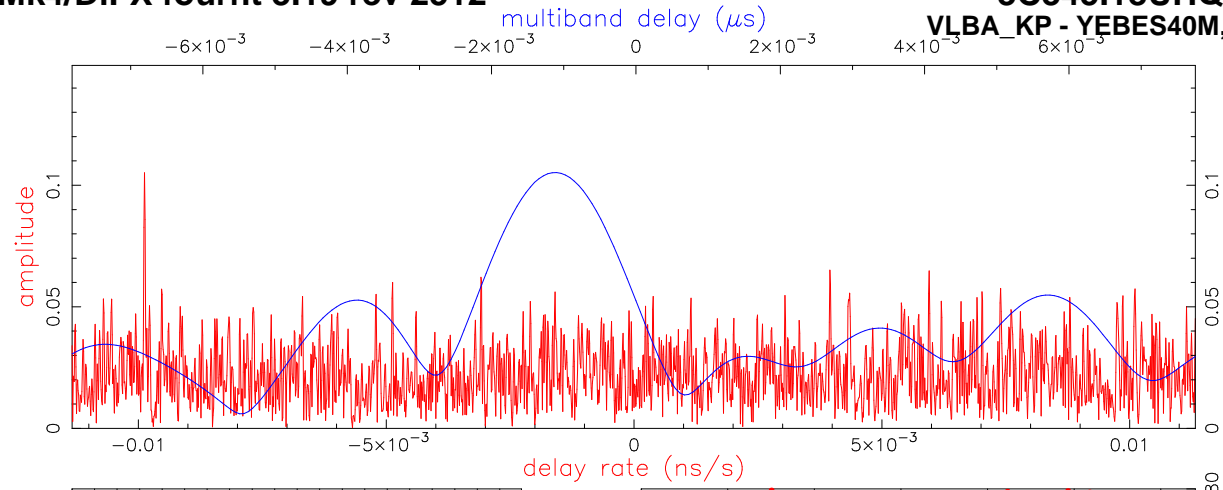
Fringe quality 0  
 SNR 5.5  
 Int time 411.194  
 Amp 0.120  
 Phase -91.7  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.702766  
 MBD -0.002527  
 Fringe rate (Hz)  
 -0.649655  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084105.12  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143558  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.7	-129.3	-132.1	-37.3	-76.6	-99.4	-131.9	-69.8	Phase	-91.7
	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	162.7	19.7	474.7	383.5	321.7	202.6	212.9	495.1	Sbd box	436.9
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	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	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.20861362378E+04		Apriori delay (usec)		1.20854356398E+04		Resid mbdelay (usec)		-2.52704E-03	+/- 2.0E-04
Sband delay (usec)	1.20861384063E+04		Apriori clock (usec)		-1.2316931E+01		Resid sbdelay (usec)		7.02766E-01	+/- 1.6E-03
Phase delay (usec)	1.20854356369E+04		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		-2.95616E-06	+/- 6.7E-07
Delay rate (us/s)	1.19663730243E+00		Apriori rate (us/s)		1.19664484428E+00		Resid rate (us/s)		-7.54185E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.30180438590E-05		Resid phase (deg)		-91.7	+/- 20.8

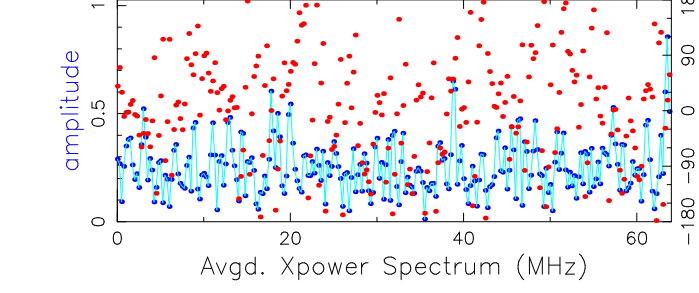
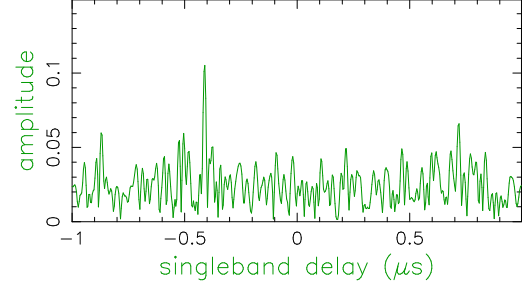
ph/seg (deg) 49.5 49.8 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 53.5 87.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.5 29.4 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 27.8 51.3 Inc. frq. avg. 0.124 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9073.476 -5458.726 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/KY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kY.W.131.18UHQS



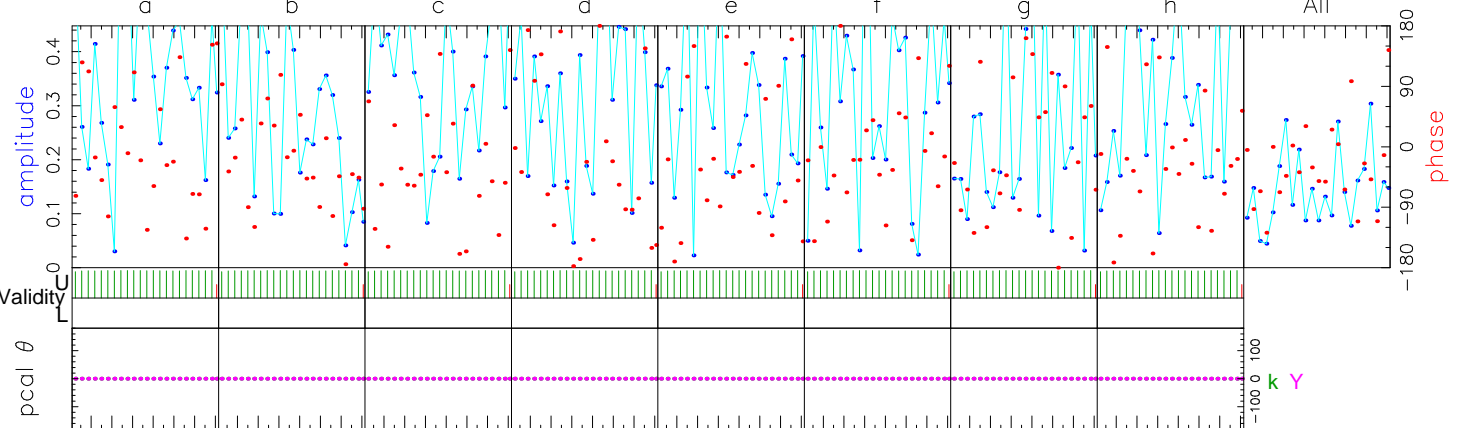
Fringe quality 0

SNR 5.9  
 Int time 411.194  
 Amp 0.149  
 Phase -38.3  
 PFD 5.6e-01  
 Delays (us)  
 SBD -0.411509  
 MBD -0.001162  
 Fringe rate (Hz)  
 -0.851577  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084105.12  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143602  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

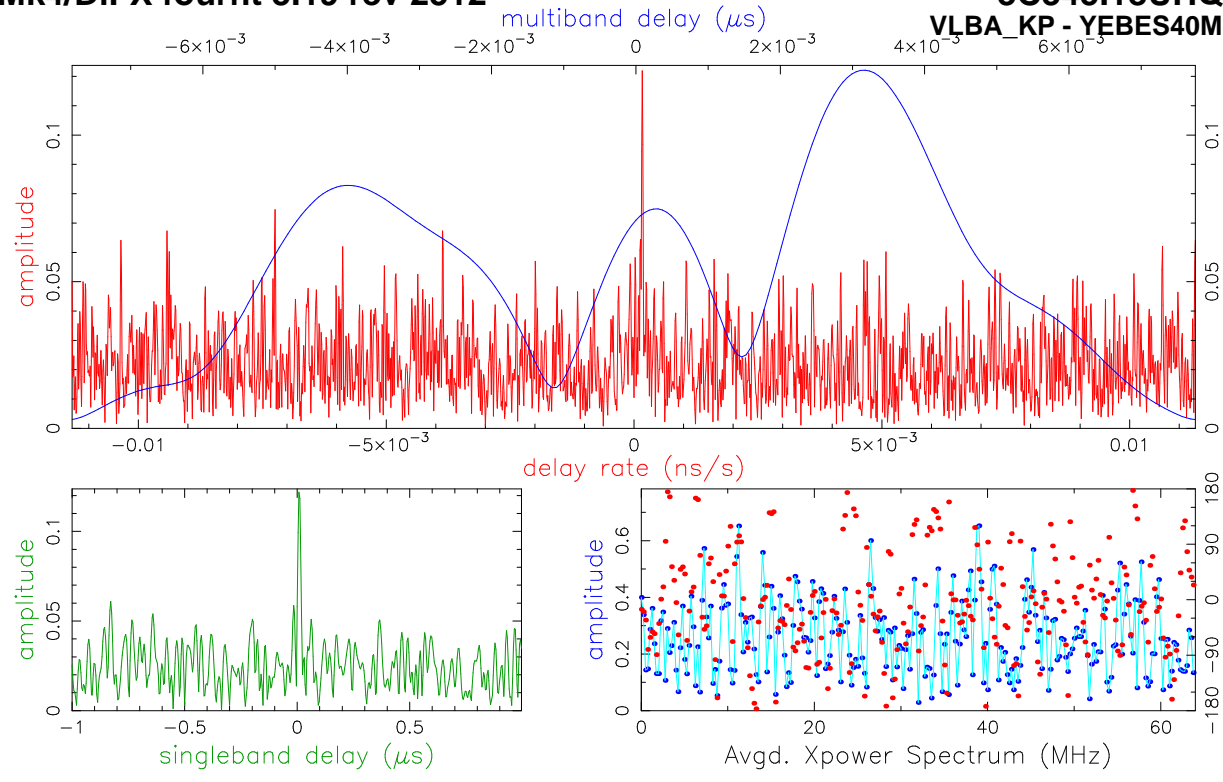


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.4	-8.8	-54.1	-96.0	-75.0	-15.3	48.2	-31.4	Phase	-38.3
	0.2	0.2	0.2	0.1	0.1	0.2	0.0	0.3	Ampl.	0.1
	73.3	237.1	280.2	209.7	282.9	153.1	51.3	126.8	Sbd box	151.7
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	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	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.20850282278E+04		Apriori delay (usec)		1.20854356398E+04		Resid mbdelay (usec)		-1.16207E-03	+/- 1.8E-04
Sband delay (usec)	1.20850241311E+04		Apriori clock (usec)		-1.2316931E+01		Resid sbdelay (usec)		-4.11509E-01	+/- 1.5E-03
Phase delay (usec)	1.20854356386E+04		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		-1.23459E-06	+/- 6.2E-07
Delay rate (us/s)	1.19663495831E+00		Apriori rate (us/s)		1.19664484428E+00		Resid rate (us/s)		-9.88597E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.30180438590E-05		Resid phase (deg)		-38.3	+/- 19.3

ph/seg (deg) 57.3 46.4 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.6 81.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.0 27.4 Inc. seg. avg. 0.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.6 47.8 Inc. frq. avg. 0.149 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9073.476 -5458.726 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kY.W.149.18UHQS

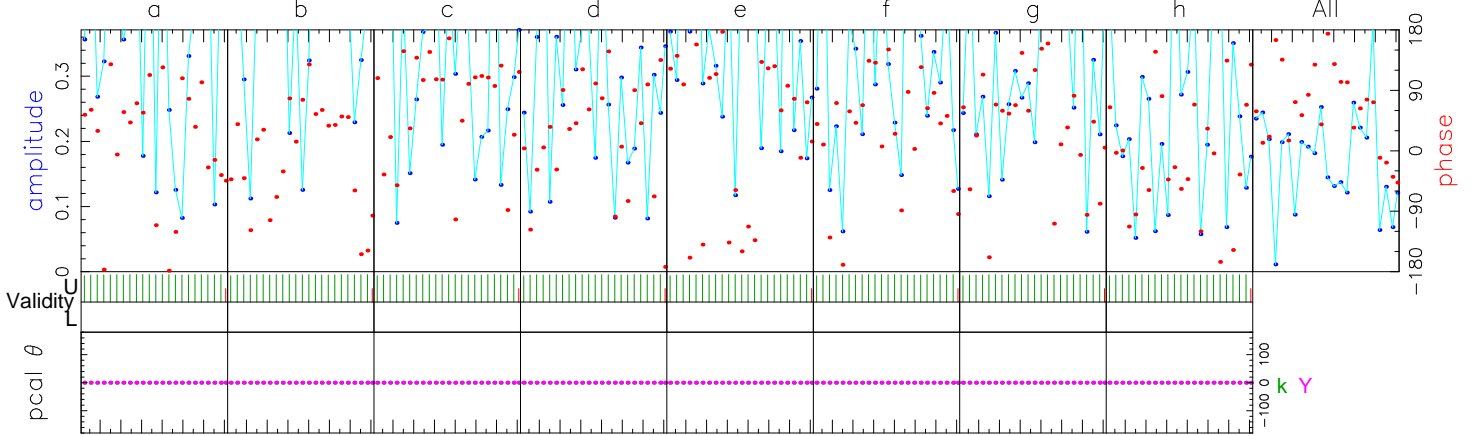


Fringe quality 0

SNR 6.9  
 Int time 411.194  
 Amp 0.124  
 Phase 60.9  
 PFD 2.0e-03  
 Delays (us)  
 SBD 0.009241  
 MBD 0.003226  
 Fringe rate (Hz)  
 0.014149  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084105.12  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143549  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

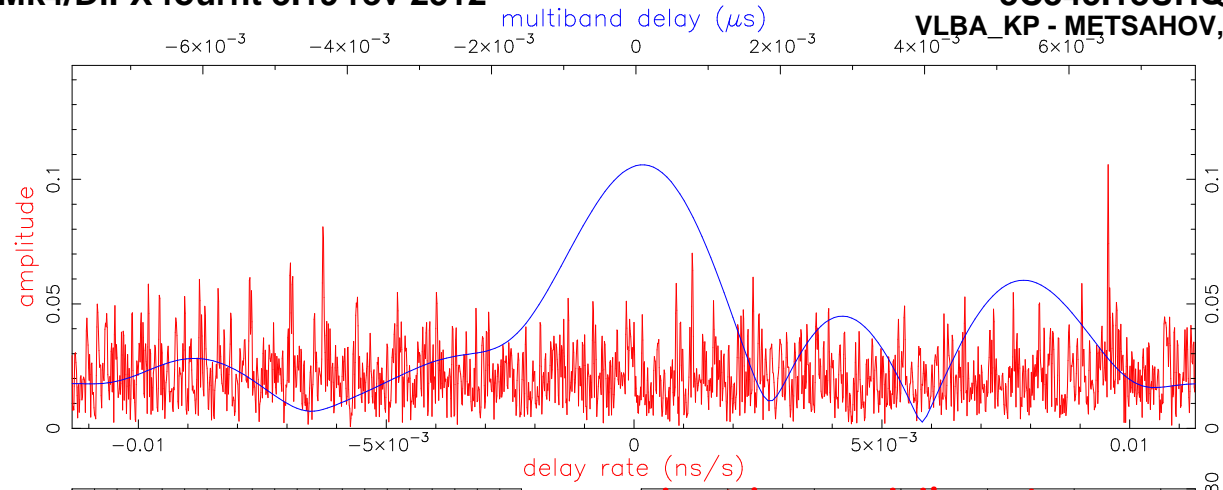
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Y	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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.20854388661E+04				1.20854356398E+04			3.22623E-03	+/- 1.6E-04
Sband delay (usec)		1.20854448808E+04				-1.2316931E+01			9.24100E-03	+/- 1.3E-03
Phase delay (usec)		1.20854356418E+04				-2.1460000E-07			1.96494E-06	+/- 5.4E-07
Delay rate (us/s)		1.19664500853E+00				1.19664484428E+00			1.64251E-07	+/- 2.2E-09
Total phase (deg)			66.3						60.9	+/- 16.7
ph/seg (deg)	58.5	40.0		Search (2048X32)	0.119				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	76.2	69.9		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	53.0	23.6		Inc. seg. avg.	0.141				Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	46.4	41.2		Inc. frq. avg.	0.154				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

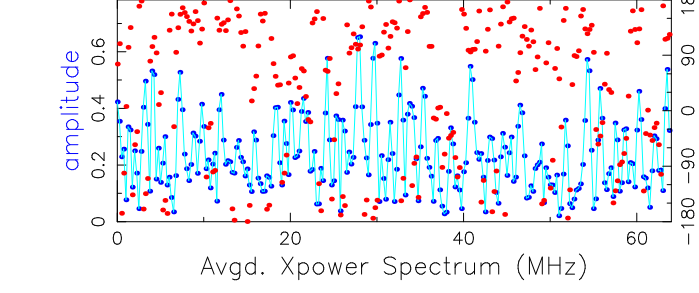
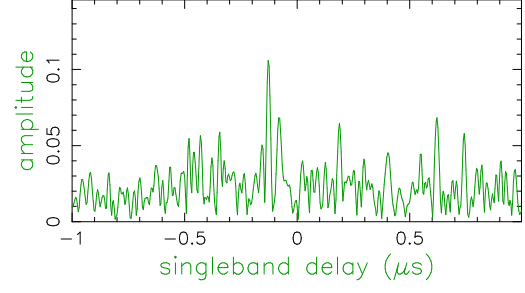
k: az 56.4 el 73.7 pa -114.9 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9073.476 -5458.726 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/KY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/kY.W.95.18UHQS



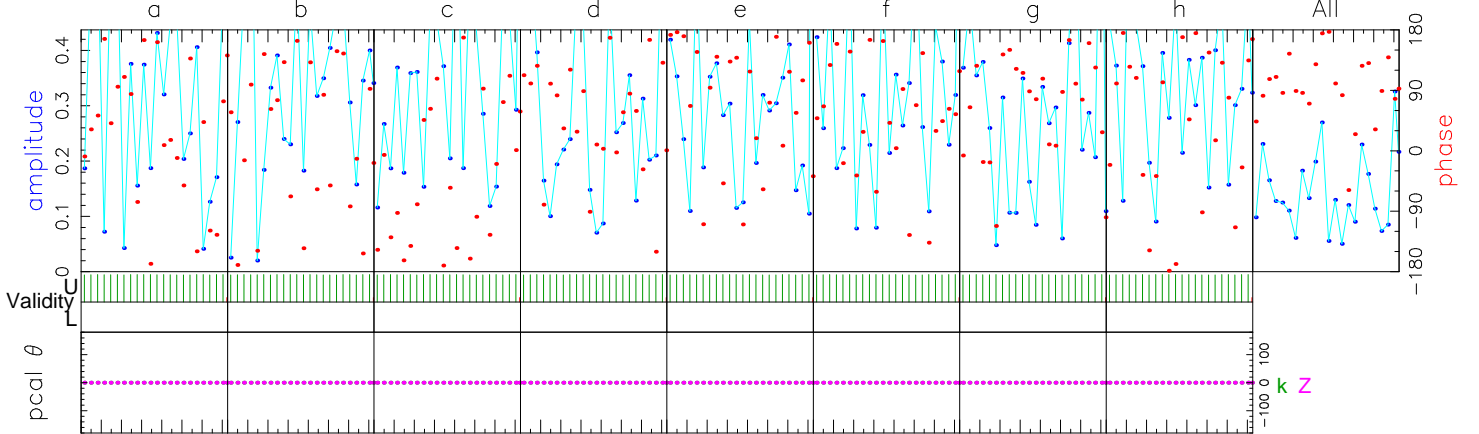
Fringe quality 0

SNR 6.0  
 Int time 416.926  
 Amp 0.146  
 Phase 101.9  
 PFD 4.9e-01  
 Delays (us)  
 SBD -0.127785  
 MBD 0.000094  
 Fringe rate (Hz)  
 0.824925  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143554  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

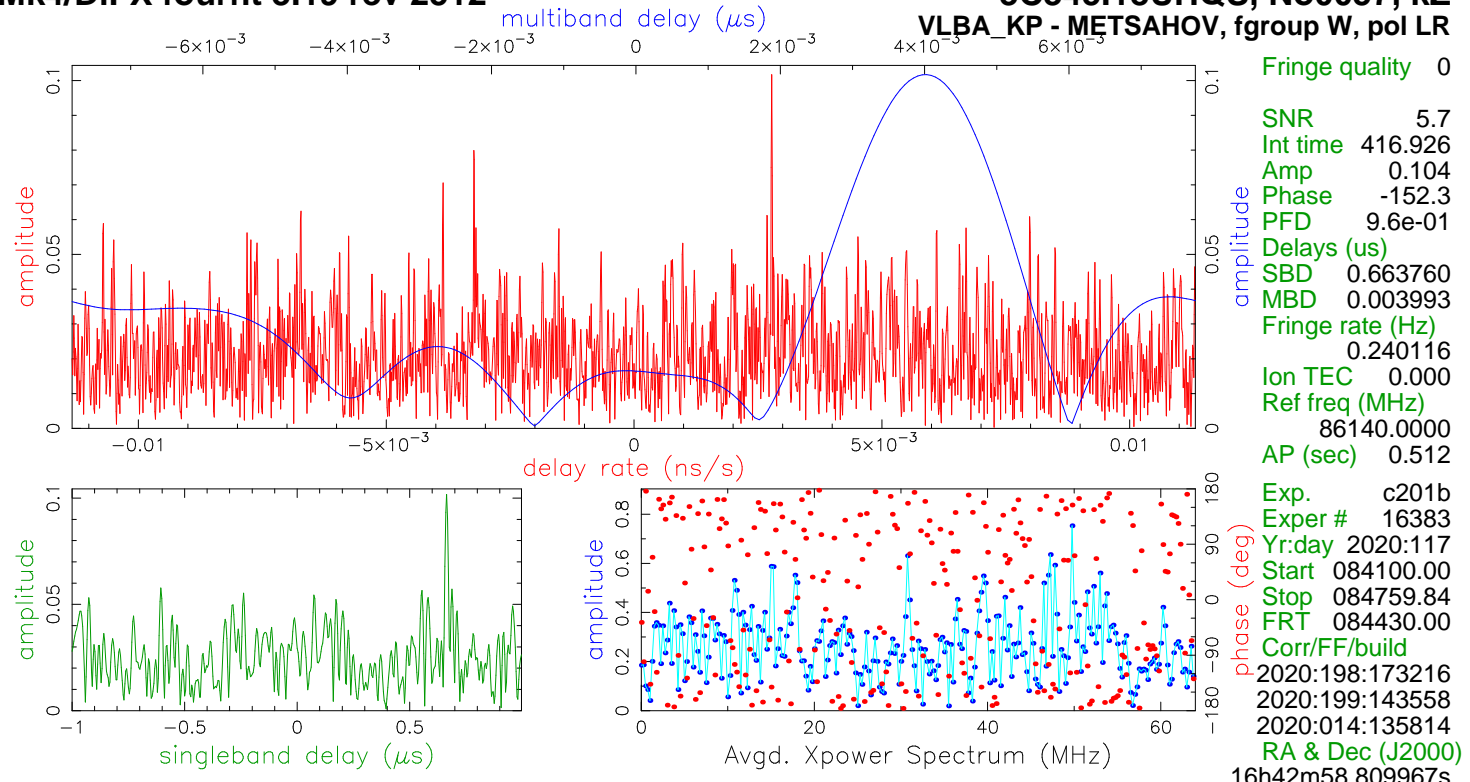
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



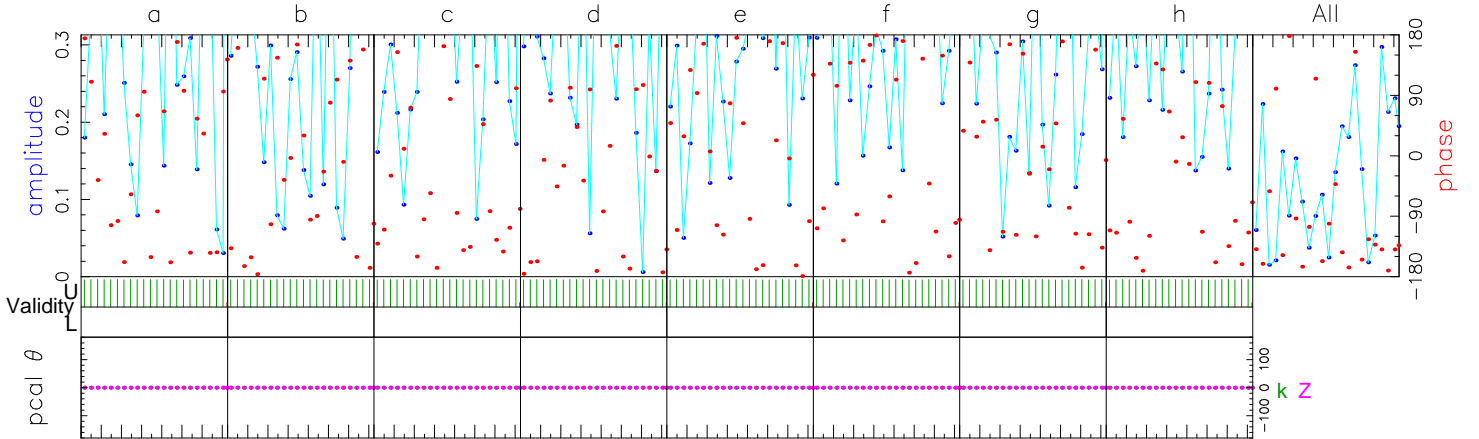
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.27117460269E+04				1.27118709334E+04			9.35404E-05	+/- 1.8E-04
Sband delay (usec)		1.27117431484E+04				-2.2647840E-01			-1.27785E-01	+/- 1.4E-03
Phase delay (usec)		1.27118709367E+04				-1.0600001E-08			3.28463E-06	+/- 6.2E-07
Delay rate (us/s)		8.06618383211E-01				8.06608806646E-01			9.57657E-06	+/- 2.6E-09
Total phase (deg)			174.8						101.9	+/- 19.2
	RMS	Theor.	Amplitude	0.146 +/- 0.024		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	51.7	46.2	Search (2048X32)	0.105		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000
amp/seg (%)	75.2	80.6	Interp.	0.000		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	45.9	27.2	Inc. seg. avg.	0.149		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.4	47.5	Inc. frq. avg.	0.152		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00

k: az 56.4 el 73.7 pa -114.9      Z: az 313.1 el 22.0 pa 29.0      u,v (fr/asec) -6212.489 -8233.631      simultaneous interpolator

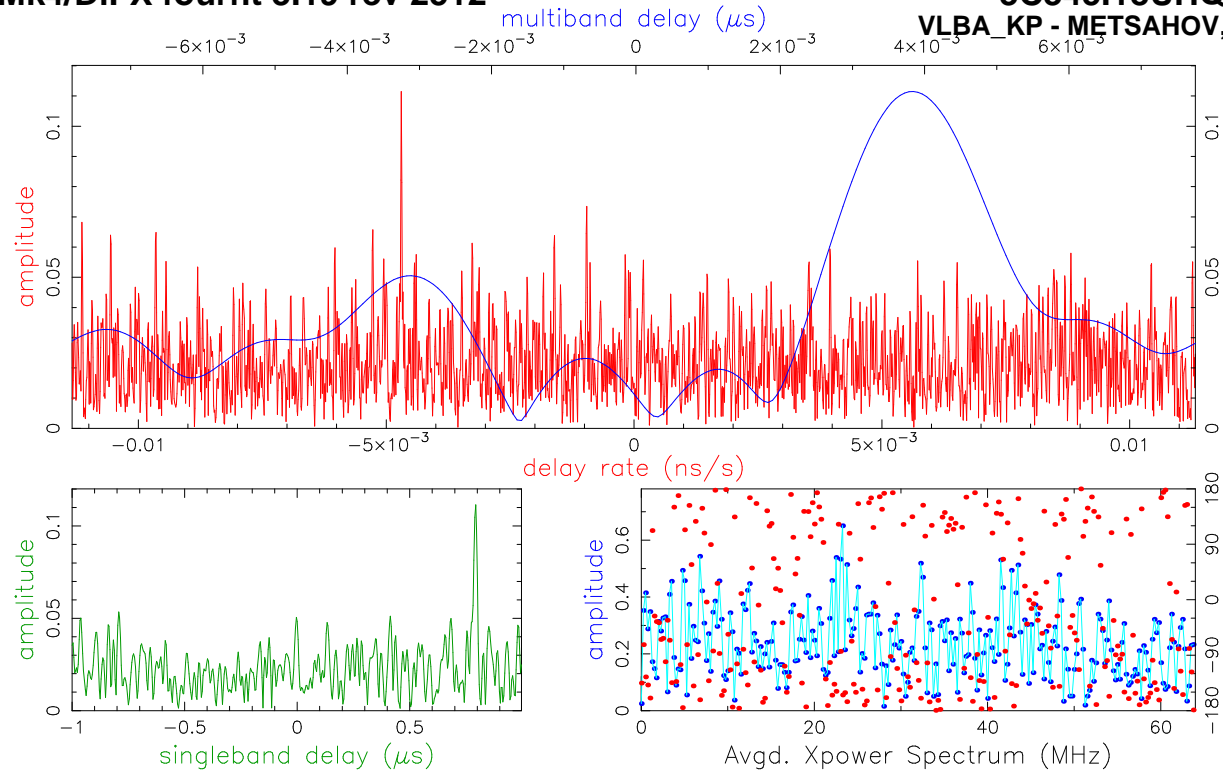
Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0057/kZ..18UHQs    Output file: /Exps/c201b/v1/1234/No0057/kZ.W.115.18UHQs



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-151.0	-171.2	-127.4	-129.6	-177.7	-148.7	-167.4	-139.9	Phase	-152.3
	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	Ampl.	0.1
	310.3	147.1	284.3	37.7	453.3	324.3	147.8	408.2	Sbd box	426.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	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	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)		1.27125311767E+04				1.27118709334E+04			Resid mbdelay (usec)	3.99333E-03 +/- 1.9E-04
Sband delay (usec)		1.27125346929E+04				-2.2647840E-01			Resid sbdelay (usec)	6.63760E-01 +/- 1.5E-03
Phase delay (usec)		1.27118709285E+04				-1.0600001E-08			Resid phdelay (usec)	-4.91285E-06 +/- 6.5E-07
Delay rate (us/s)		8.06611594157E-01				8.06608806646E-01			Resid rate (us/s)	2.78751E-06 +/- 2.7E-09
Total phase (deg)			-79.4			-9.20520110350E-05			Resid phase (deg)	-152.3 +/- 20.2
RMS		Theor.	Amplitude	0.104 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.7	48.4	Search (2048X32)	0.099					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	86.7	84.4	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	20.5	28.5	Inc. seg. avg.	0.096					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	44.7	49.8	Inc. frq. avg.	0.098					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

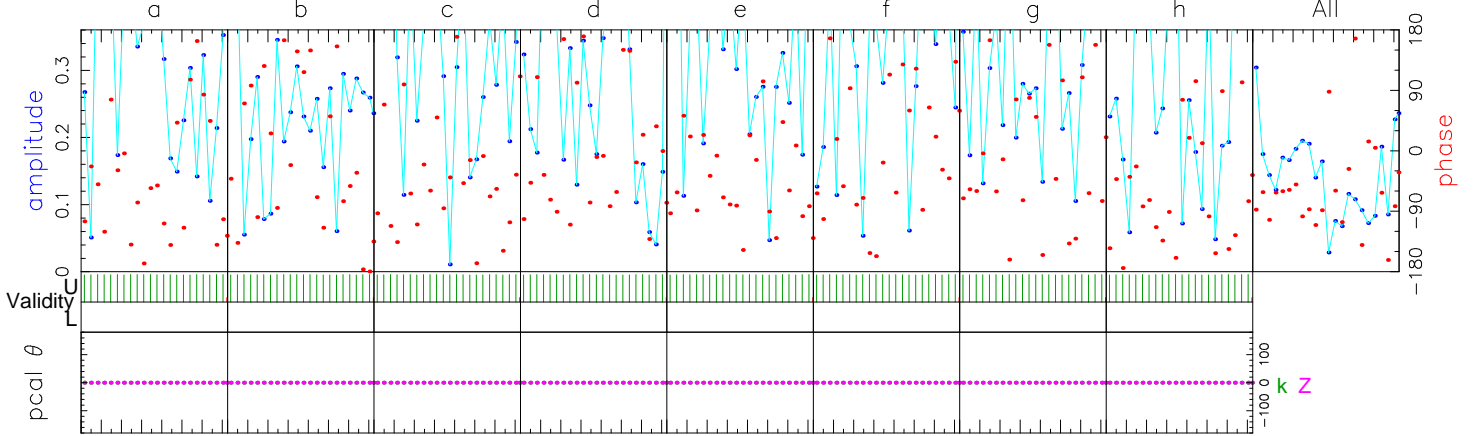


Fringe quality 0

SNR 6.2  
 Int time 416.926  
 Amp 0.120  
 Phase -77.8  
 PFD 1.1e-01  
 Delays (us)  
 SBD 0.792292  
 MBD 0.003825  
 Fringe rate (Hz)  
 -0.404651  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

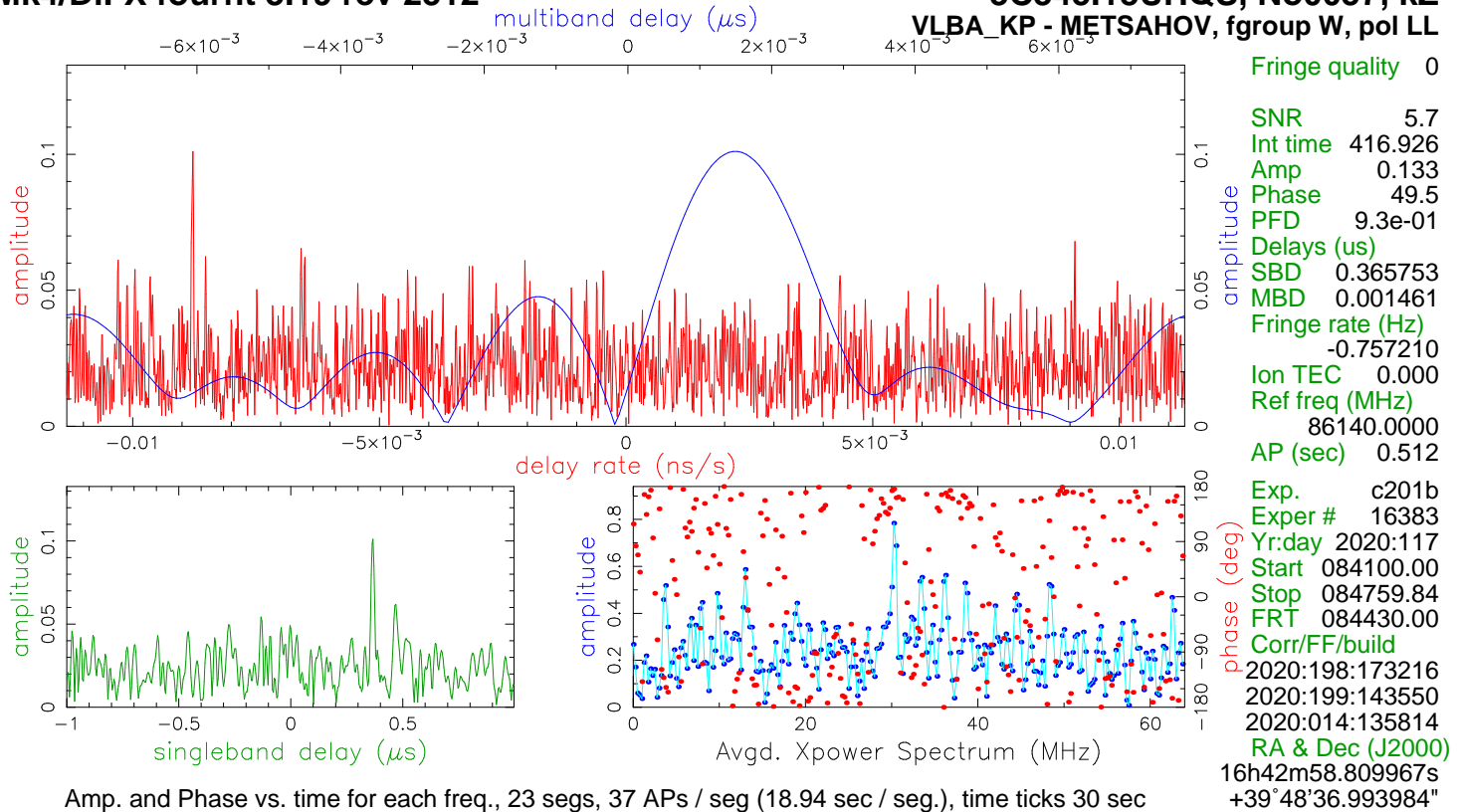
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143602  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

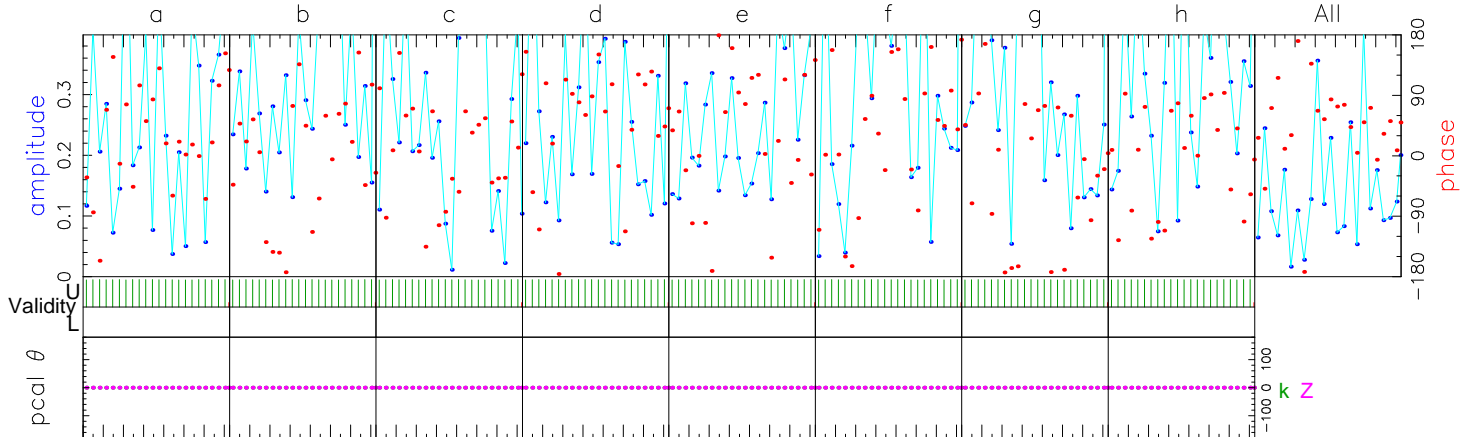


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-88.0	-111.1	-71.7	-79.5	-53.9	-44.0	-89.5	-97.9	Phase	-77.8
	0.1	0.1	0.2	0.1	0.2	0.0	0.1	0.1	Ampl.	0.1
	189.4	333.7	429.8	280.8	30.2	495.0	80.1	474.0	Sbd box	459.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	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	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.27126560087E+04		Apriori delay (usec)		1.27118709334E+04		Resid mbdelay (usec)		3.82533E-03	+/- 1.7E-04
Sband delay (usec)	1.27126632256E+04		Apriori clock (usec)		-2.2647840E-01		Resid sbdelay (usec)		7.92292E-01	+/- 1.4E-03
Phase delay (usec)	1.27118709309E+04		Apriori clockrate (us/s)		-1.0600001E-08		Resid phdelay (usec)		-2.50975E-06	+/- 5.9E-07
Delay rate (us/s)	8.06604109052E-01		Apriori rate (us/s)		8.06608806646E-01		Resid rate (us/s)		-4.69759E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-9.20520110350E-05		Resid phase (deg)		-77.8	+/- 18.4

ph/seg (deg) 58.4 44.0 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 61.6 76.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.2 26.0 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 50.2 45.3 Inc. frq. avg. 0.114 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 56.4 el 73.7 pa -114.9 Z: az 313.1 el 22.0 pa 29.0 u,v (fr/asec) -6212.489 -8233.631 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/kZ..18UHQ5 Output file: /Exps/c201b/v1/1234/No0057/kZ.W.146.18UHQ5



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.27122317697E+04				1.27118709334E+04			1.46130E-03	+/- 1.9E-04
Sband delay (usec)		1.27122366861E+04				-2.2647840E-01			3.65753E-01	+/- 1.5E-03
Phase delay (usec)		1.27118709350E+04				-1.0600001E-08			1.59538E-06	+/- 6.5E-07
Delay rate (us/s)		8.06600016184E-01				8.06608806646E-01			-8.79046E-06	+/- 2.7E-09
Total phase (deg)			122.4			-9.20520110350E-05			49.5	+/- 20.1
	RMS	Theor.	Amplitude	0.133 +/- 0.023		PCal mode: MANUAL, MANUAL			PC period (AP's) 5, 5	
ph/seg (deg)	55.7	48.1	Search (2048X32)	0.100		PCal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	104.2	83.9	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	21.8	28.4	Inc. seg. avg.	0.137		Sample rate(MISamp/s): 128				dr window (ns/s) -0.011 0.011
amp/frq (%)	29.0	49.5	Inc. frq. avg.	0.123		Data rate(Mb/s): 2048				ion window (TEC) 0.00 0.00