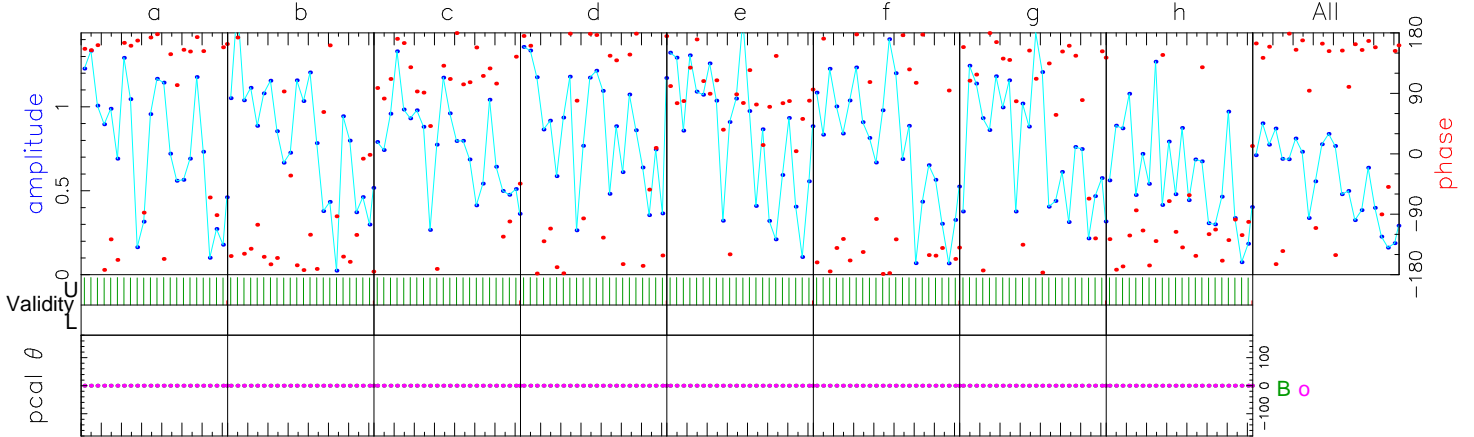


Fringe quality 6

SNR 26.8  
Int time 415.050  
Amp 0.480  
Phase 169.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.006320  
MBD -0.002432  
Fringe rate (Hz)  
0.004962  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

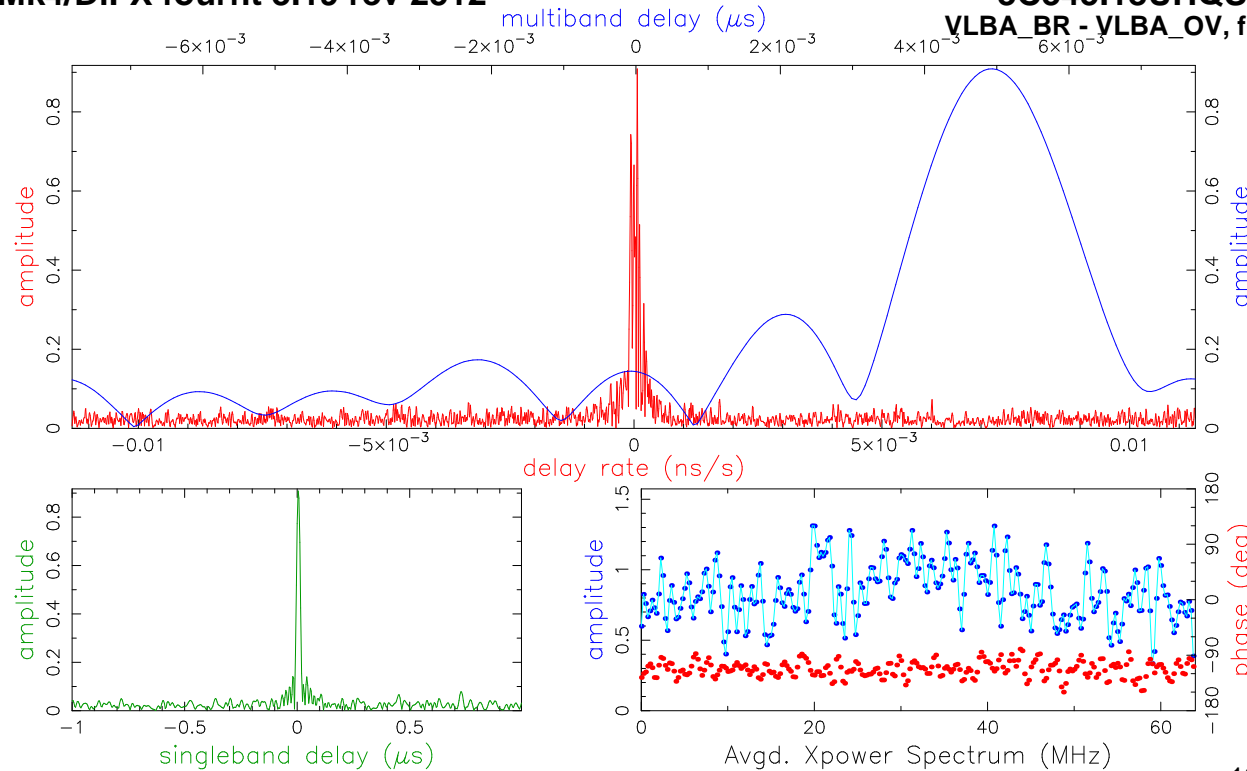
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143528  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.18676475863E+04									
Sband delay (usec)	-1.18676544595E+04									
Phase delay (usec)	-1.18676607740E+04									
Delay rate (us/s)	-1.11879723459E+00									
Total phase (deg)			-26.0							
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)										

ph/seg (deg) 49.3 10.3 Search (2048X32) 0.470 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 51.9 17.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 46.7 6.1 Inc. seg. avg. 0.569 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 29.1 10.6 Inc. frq. avg. 0.604 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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 8498.825 5921.471 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Bo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bo.W.12.18UHQS

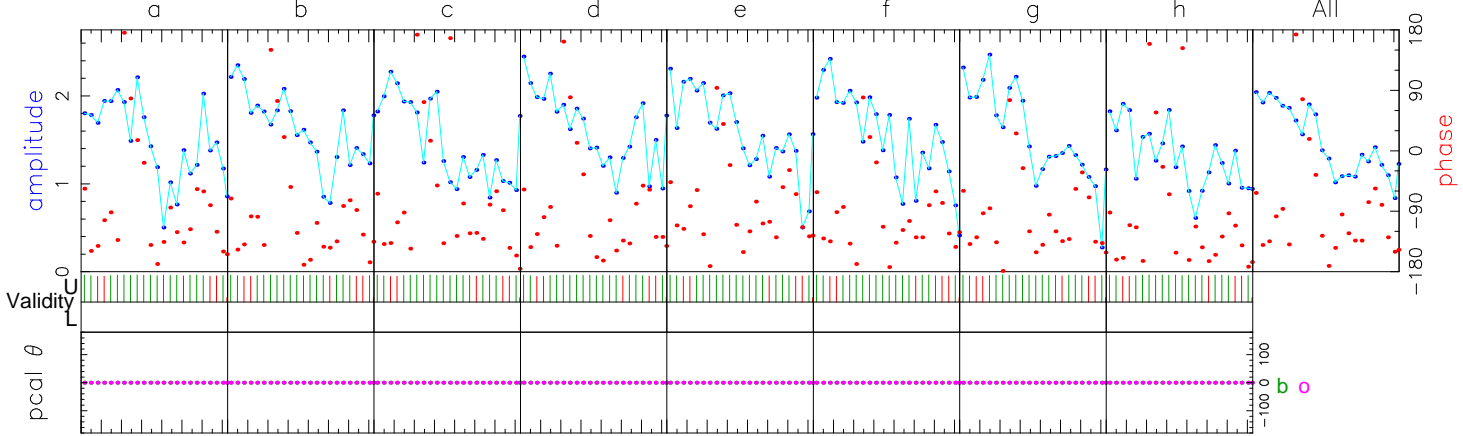


Fringe quality 4

SNR 50.5  
Int time 404.880  
Amp 0.917  
Phase -110.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.005172  
MBD 0.004964  
Fringe rate (Hz) 0.005600  
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  
2020:199:143528  
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
	-108.0	-119.3	-113.8	-109.4	-89.6	-107.9	-102.0	-137.6	Phase	-110.7
	0.9	1.0	0.9	1.0	1.0	1.0	0.9	0.9	Ampl.	0.9
	258.0	258.3	258.6	258.4	258.3	258.2	258.1	258.0	Sbd box	258.3
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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.67602593357E+02		Apriori delay (usec)		-1.67607556883E+02		Resid mbdelay (usec)		4.96353E-03	+/- 2.2E-05
Sband delay (usec)	-1.67602384883E+02		Apriori clock (usec)		-2.1497892E+01		Resid sbdelay (usec)		5.17200E-03	+/- 1.7E-04
Phase delay (usec)	-1.67607560453E+02		Apriori clockrate (us/s)		-2.4300001E-07		Resid phdelay (usec)		-3.56931E-06	+/- 7.3E-08
Delay rate (us/s)	-4.26899491647E-02		Apriori rate (us/s)		-4.26900141735E-02		Resid rate (us/s)		6.50087E-08	+/- 3.0E-10
Total phase (deg)			Apriori accel (us/s/s)		1.08550809055E-05		Resid phase (deg)		-110.7	+/- 2.3

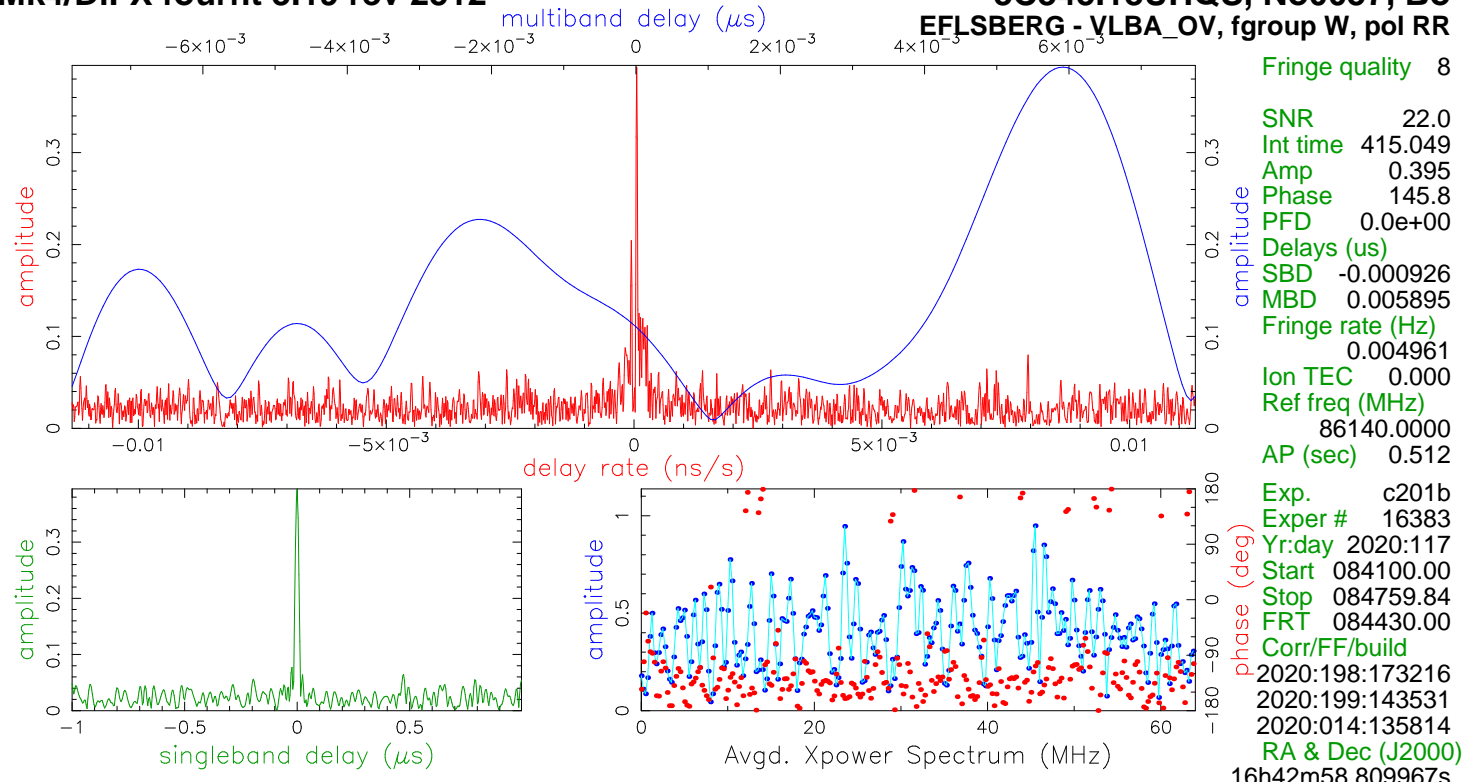
ph/seg (deg) 59.1 5.4  
amp/seg (%) 74.7 9.5  
ph/frq (deg) 15.0 3.2  
amp/frq (%) 5.6 5.6

RMS Theor. Amplitude 0.917 +/- 0.018  
Search (2048X32) 0.901  
Interp. 0.000  
Inc. seg. avg. 1.483  
Inc. frq. avg. 0.930

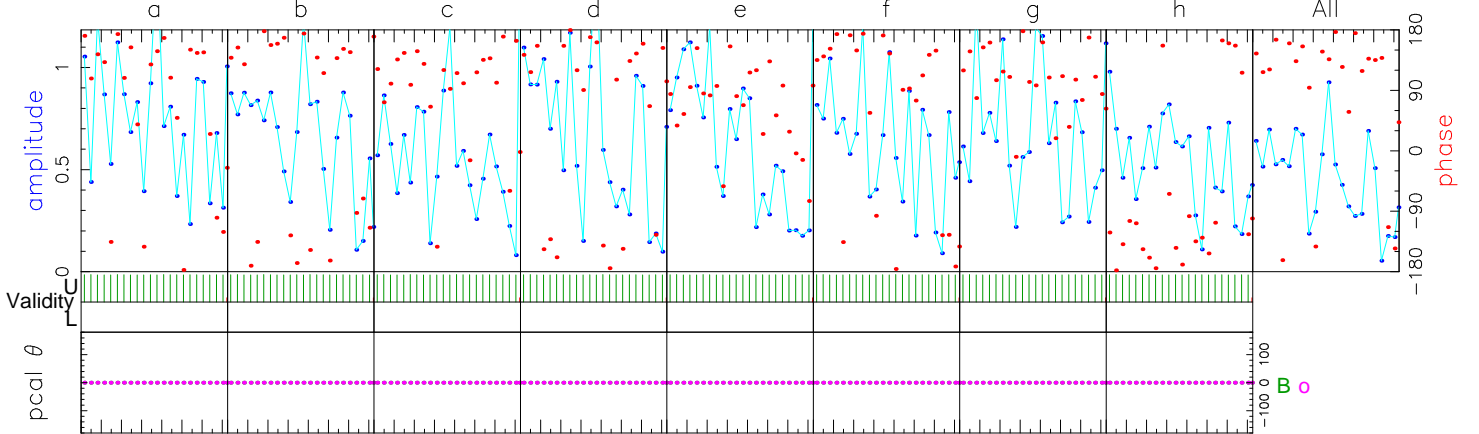
pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Pcal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2 SampCntNorm: enabled  
Sample rate(MISamp/s): 128  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite

sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

b: az 104.8 el 69.8 pa -57.1 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 343.620 1655.575 simultaneous interpolator

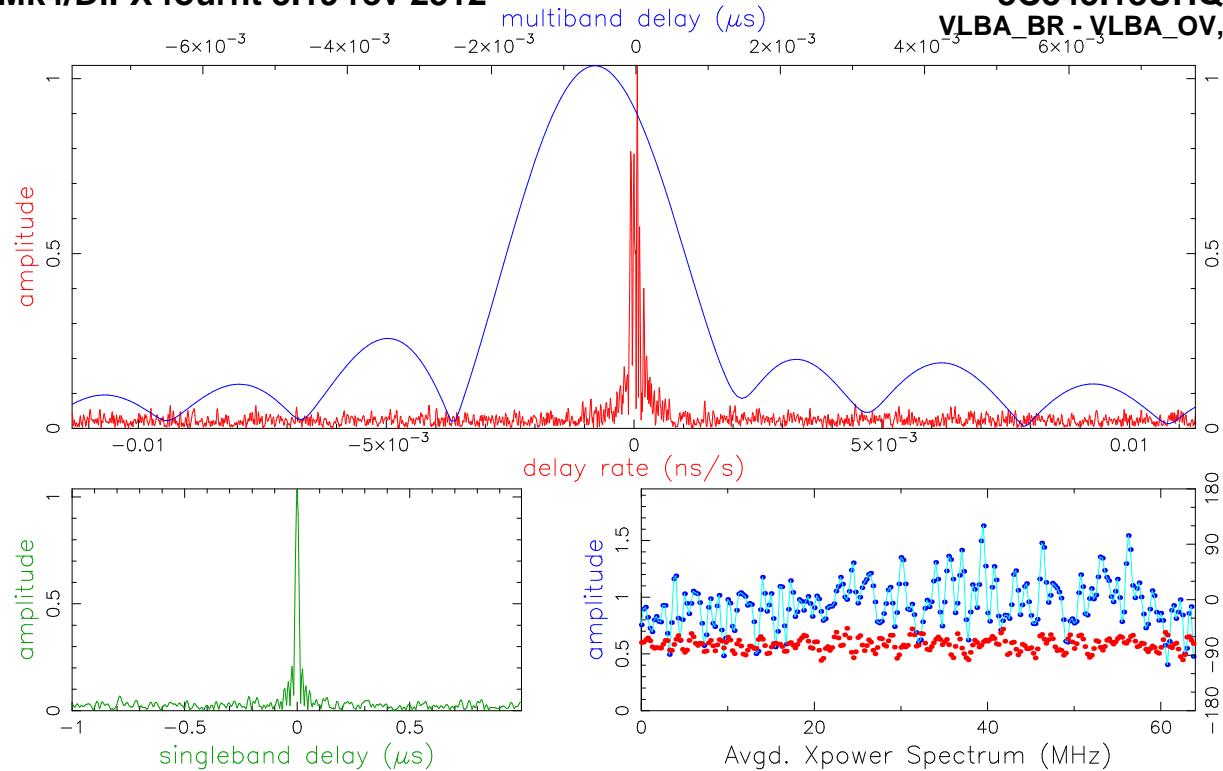


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
147.5	168.9	116.5	166.9	83.4	157.1	110.5	-146.3		Phase	145.8
0.5	0.5	0.4	0.6	0.5	0.5	0.5	0.4		Ampl.	0.5
257.0	256.5	257.4	257.1	257.8	257.0	257.5	257.7		Sbd box	256.8
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	
o 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:o 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	
o 1000	1000	1000	1000	1000	1000	1000	1000			
B 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)	-1.18676548847E+04		Apriori delay (usec)	-1.18676607795E+04		Resid mbdelay (usec)	5.89474E-03	+/-	4.9E-05	
Sband delay (usec)	-1.18676617050E+04		Apriori clock (usec)	-7.0399284E+00		Resid sbdelay (usec)	-9.25500E-04	+/-	3.9E-04	
Phase delay (usec)	-1.18676607748E+04		Apriori clockrate (us/s)	-4.0100001E-07		Resid phdelay (usec)	4.70256E-06	+/-	1.7E-07	
Delay rate (us/s)	-1.11879723461E+00		Apriori rate (us/s)	-1.11879729220E+00		Resid rate (us/s)	5.75909E-08	+/-	6.9E-10	
Total phase (deg)		-49.7	Apriori accel (us/s/s)	7.51165184755E-05		Resid phase (deg)	145.8	+/-	5.2	

	RMS	Theor.	Amplitude	0.395 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	42.7	12.5	Search (2048X32)	0.388	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	57.0	21.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.2	7.4	Inc. seg. avg.	0.453	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	26.5	12.9	Inc. frq. avg.	0.481	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

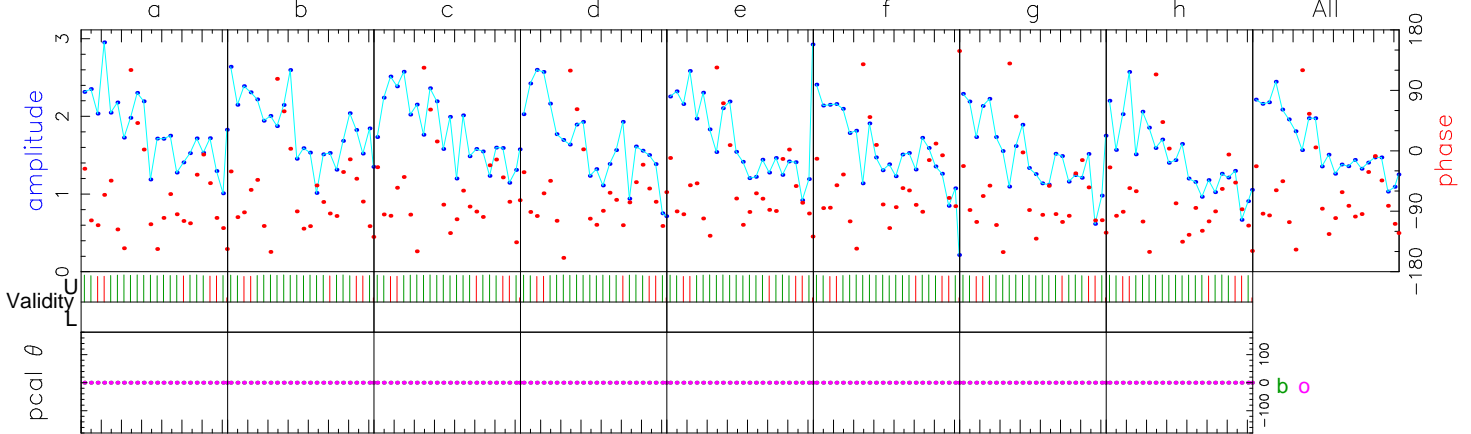


Fringe quality 5

SNR 57.1  
Int time 404.877  
Amp 1.038  
Phase -70.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.000411  
MBD -0.000578  
Fringe rate (Hz) 0.005592  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

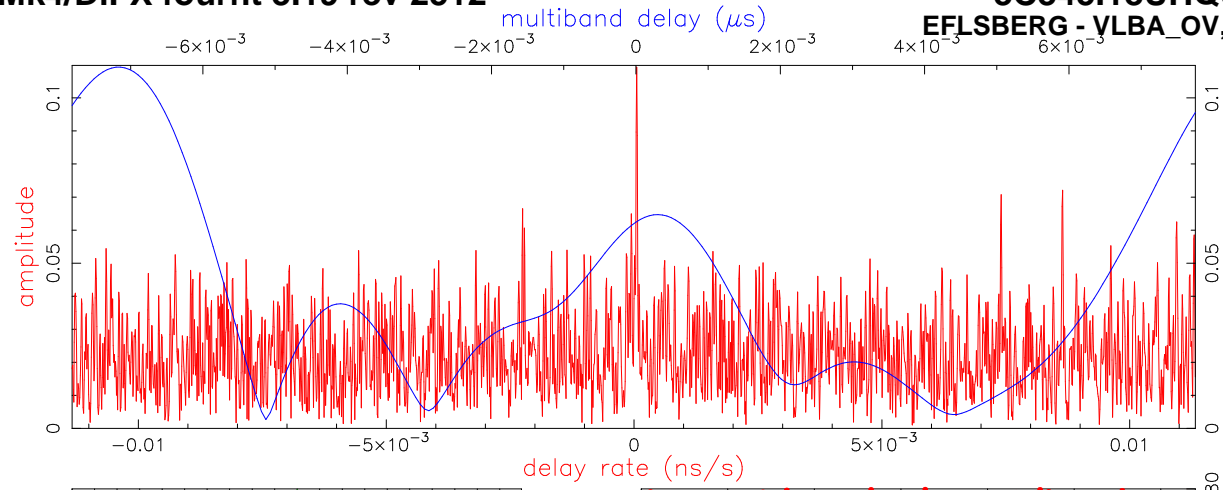
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143533  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

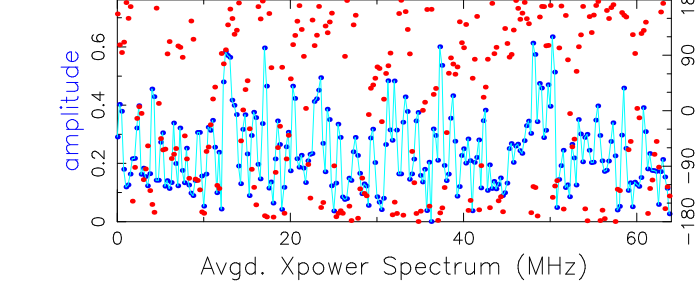
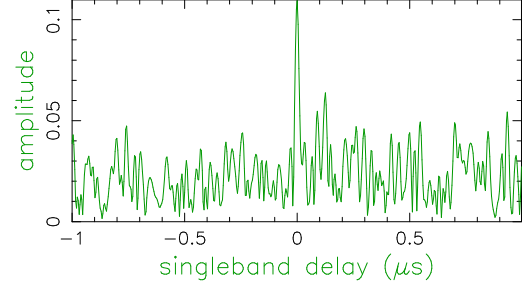


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.0	-68.7	-70.6	-71.8	-65.3	-58.2	-74.4	-78.6	Phase	-70.6
	1.1	1.1	1.1	1.1	1.1	1.0	1.0	0.9	Ampl.	1.0
	256.8	256.8	256.9	256.9	257.2	256.8	256.9	256.9	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.67608134888E+02		Apriori delay (usec)		-1.67607556883E+02		Resid mbdelay (usec)		-5.78005E-04	+/- 1.9E-05
Sband delay (usec)	-1.67607968133E+02		Apriori clock (usec)		-2.1497892E+01		Resid sbdelay (usec)		-4.11250E-04	+/- 1.5E-04
Phase delay (usec)	-1.67607559159E+02		Apriori clockrate (us/s)		-2.4300001E-07		Resid phdelay (usec)		-2.27555E-06	+/- 6.5E-08
Delay rate (us/s)	-4.26899492505E-02		Apriori rate (us/s)		-4.26900141735E-02		Resid rate (us/s)		6.49230E-08	+/- 2.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.08550809055E-05		Resid phase (deg)		-70.6	+/- 2.0

ph/seg (deg) 58.5 4.8 Search (2048X32) 1.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.4 8.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 7.3 2.8 Inc. seg. avg. 1.649 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 6.8 5.0 Inc. frq. avg. 1.042 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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 343.620 1655.575 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bo.W.35.18UHQS

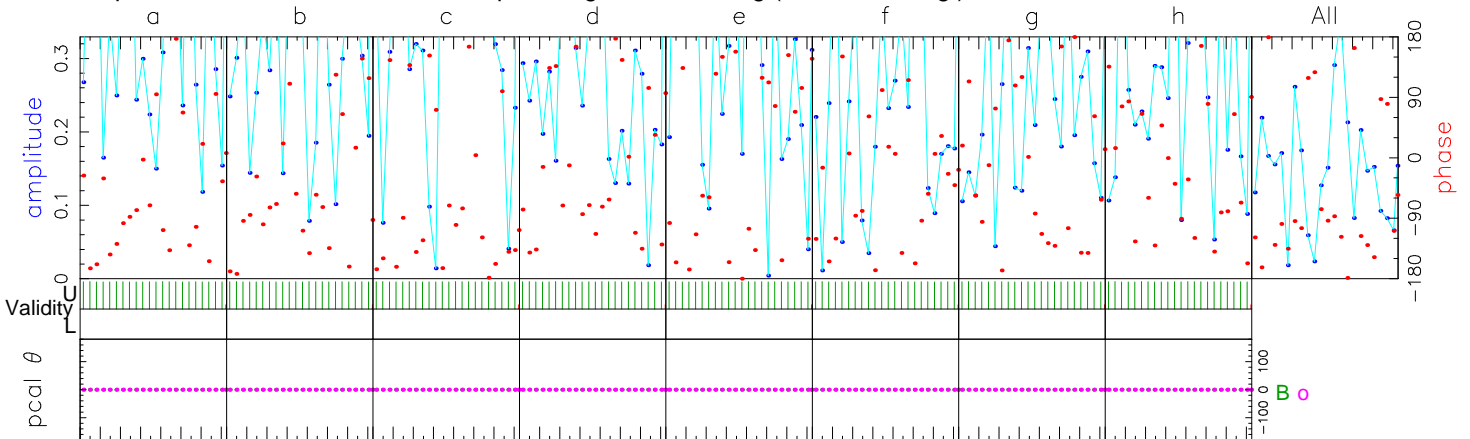


Fringe quality 0  
SNR 6.1  
Int time 415.049  
Amp 0.110  
Phase -125.3  
PFD 2.2e-01  
Delays (us)  
SBD -0.000977  
MBD -0.007185  
Fringe rate (Hz)  
0.005145  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143536  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



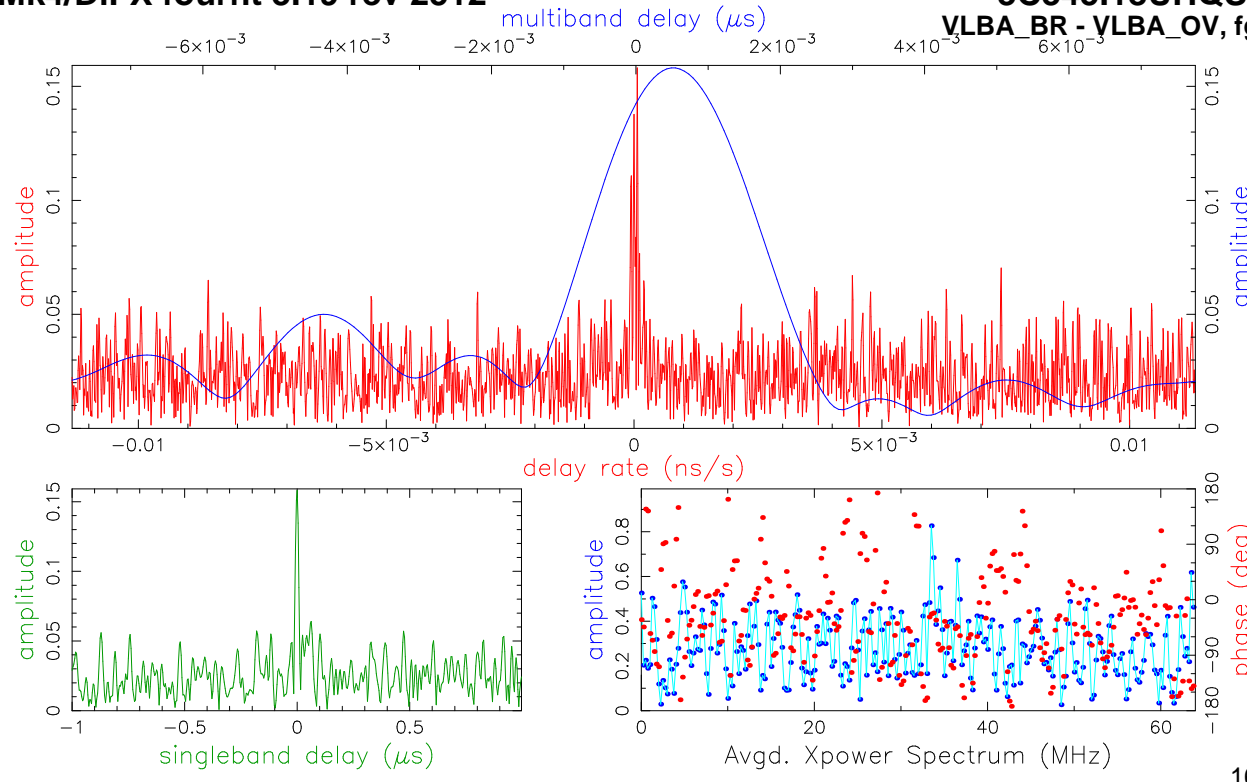
Avgd. Xpower Spectrum (MHz)

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
	-123.6	-95.9	-142.7	-97.7	-174.2	-105.1	-125.9	-16.7	Phase	-125.3
	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.0	Ampl.	0.1
	256.8	217.4	256.7	487.8	258.1	56.8	511.6	289.1	Sbd box	256.7
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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.18676679644E+04		Apriori delay (usec)		-1.18676607795E+04		Resid mbdelay (usec)		-7.18492E-03	+/- 1.8E-04
Sband delay (usec)	-1.18676617567E+04		Apriori clock (usec)		-7.0399284E+00		Resid sbdelay (usec)		-9.77250E-04	+/- 1.4E-03
Phase delay (usec)	-1.18676607835E+04		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-4.04177E-06	+/- 6.0E-07
Delay rate (us/s)	-1.11879723248E+00		Apriori rate (us/s)		-1.11879729220E+00		Resid rate (us/s)		5.97243E-08	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		7.51165184755E-05		Resid phase (deg)		-125.3	+/- 18.7

ph/seg (deg) 64.3 44.9 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 84.0 78.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 52.5 26.5 Inc. seg. avg. 0.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.8 46.2 Inc. frq. avg. 0.117 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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 8498.825 5921.471 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

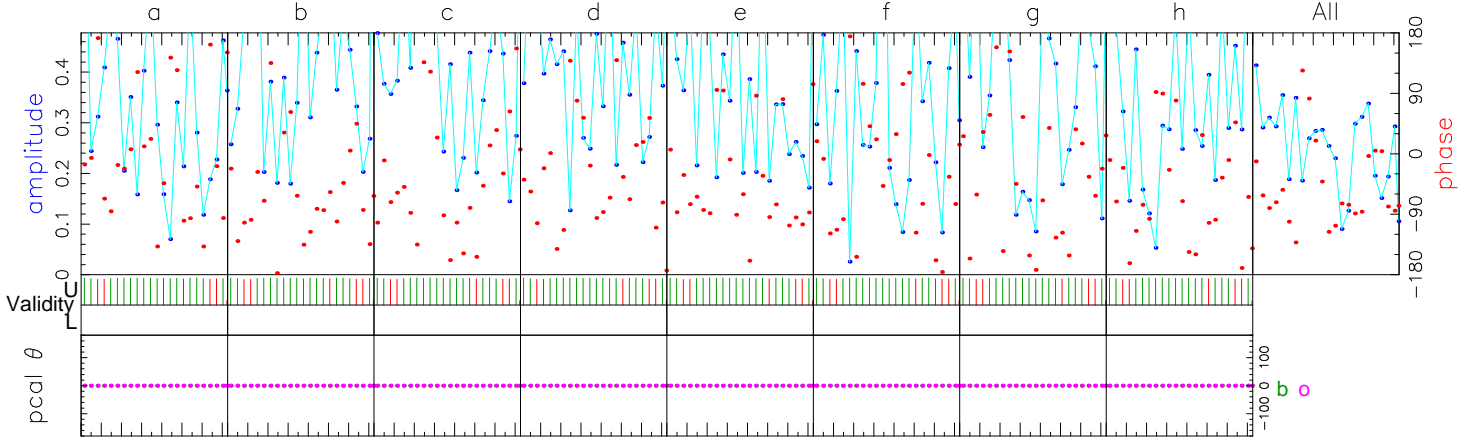


Fringe quality 9

SNR 8.8  
Int time 404.878  
Amp 0.159  
Phase -61.0  
PFD 7.3e-10  
Delays (us)  
SBD -0.001054  
MBD 0.000484  
Fringe rate (Hz) 0.005435  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

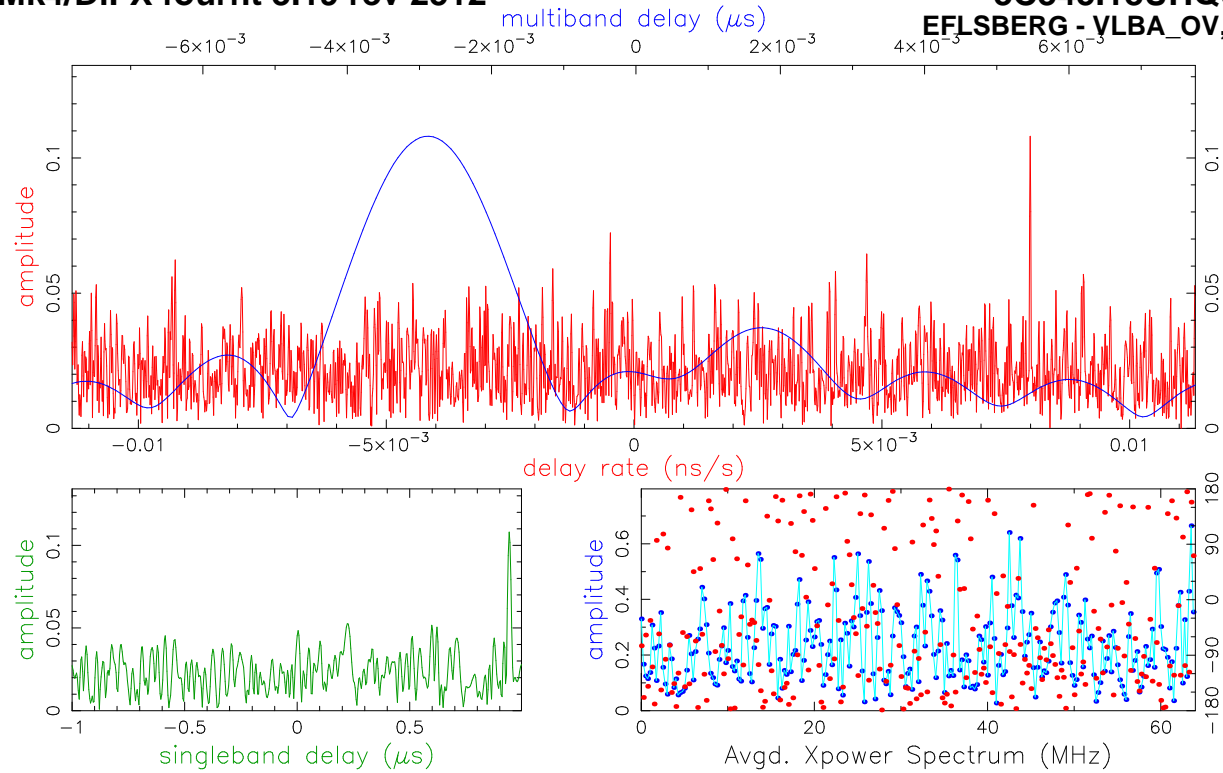
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143537  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
	-44.6	-73.9	-75.1	-55.5	-64.9	-56.2	-47.2	-60.1	Phase	-61.0
	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2
	66.1	257.3	303.9	256.8	256.9	131.4	84.6	283.7	Sbd box	256.7
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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	-1.67607073138E+02		Apriori delay (usec)		-1.67607556883E+02		Resid mbdelay (usec)		4.83745E-04	+/- 1.2E-04
Sband delay (usec)	-1.67608610883E+02		Apriori clock (usec)		-2.1497892E+01		Resid sbdelay (usec)		-1.05400E-03	+/- 9.8E-04
Phase delay (usec)	-1.67607558852E+02		Apriori clockrate (us/s)		-2.4300001E-07		Resid phdelay (usec)		-1.96844E-06	+/- 4.2E-07
Delay rate (us/s)	-4.26899510729E-02		Apriori rate (us/s)		-4.26900141735E-02		Resid rate (us/s)		6.31006E-08	+/- 1.7E-09
Total phase (deg)	-43.0		Apriori accel (us/s/s)		1.08550809055E-05		Resid phase (deg)		-61.0	+/- 13.1

ph/seg (deg) 63.1 31.4 Search (2048X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.0 54.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.2 18.5 Inc. seg. avg. 0.225 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 30.8 32.3 Inc. frq. avg. 0.153 Sample rate(MSamp/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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 343.620 1655.575 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bo.W.55.18UHQS

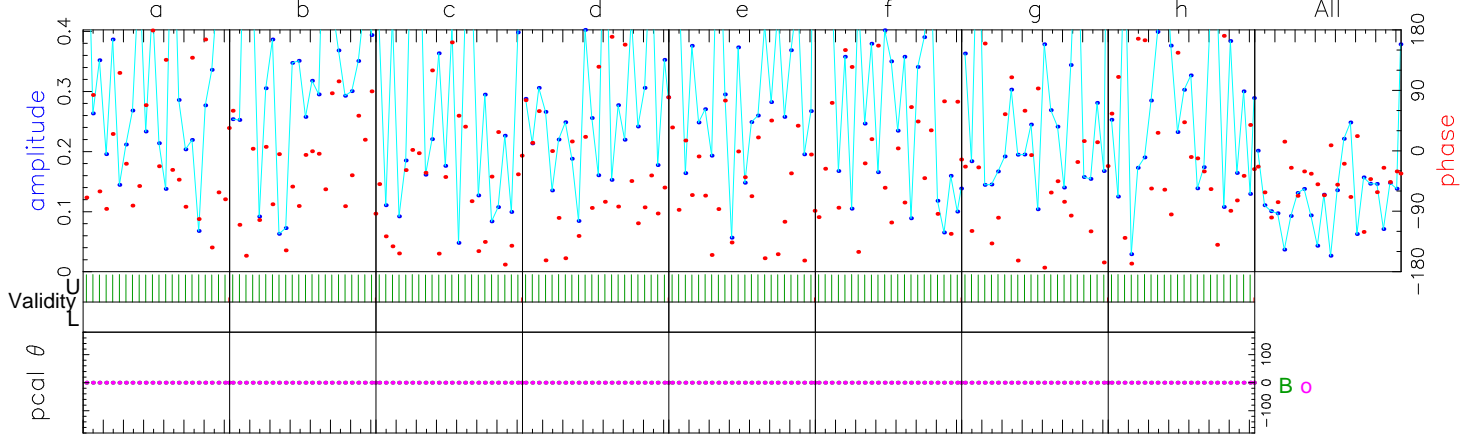


Fringe quality 0

SNR 6.0  
Int time 415.050  
Amp 0.134  
Phase -48.3  
PFD 3.4e-01  
Delays (us)  
SBD 0.942099  
MBD -0.002853  
Fringe rate (Hz) 0.690033  
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"

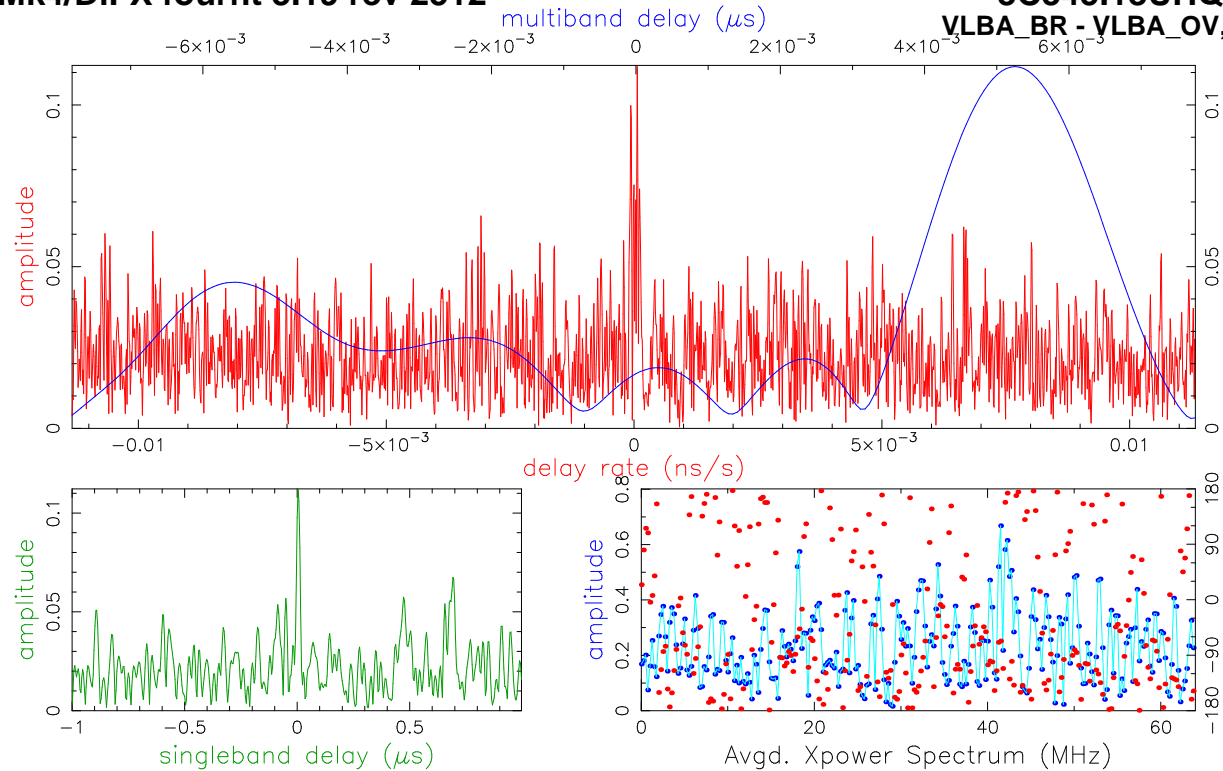
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-59.1	-22.2	-54.0	-60.9	-48.1	-32.6	-42.4	-64.2	Phase	-48.3
	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	499.4	47.9	57.4	411.2	499.7	52.7	293.3	51.2	Sbd box	498.2
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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.18667261321E+04		Apriori delay (usec)		-1.18676607795E+04		Resid mbdelay (usec)		-2.85260E-03	+/- 1.8E-04
Sband delay (usec)	-1.18667186805E+04		Apriori clock (usec)		-7.0399284E-07		Resid sbdelay (usec)		9.42099E-01	+/- 1.4E-03
Phase delay (usec)	-1.18676607810E+04		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-1.55645E-06	+/- 6.1E-07
Delay rate (us/s)	-1.11878928161E+00		Apriori rate (us/s)		-1.11879729220E+00		Resid rate (us/s)		8.01059E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		7.51165184755E-05		Resid phase (deg)		-48.3	+/- 19.0

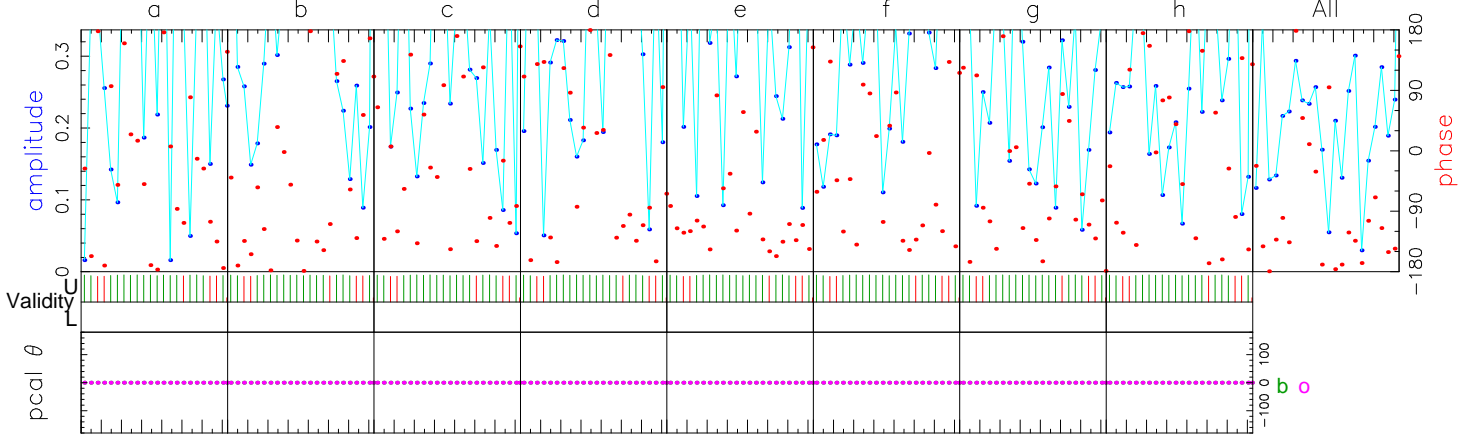
ph/seg (deg) 33.9 45.5 Amplitude 0.134 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.5 79.5 Search (2048X32) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 15.9 26.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 18.1 46.9 Inc. seg. avg. 0.116 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.124 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 304.4 el 23.7 pa 42.9 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 8498.825 5921.471 simultaneous interpolator



Fringe quality 0  
SNR 6.2  
Int time 404.879  
Amp 0.112  
Phase -131.9  
PFD 1.6e-01  
Delays (us)  
SBD 0.004690  
MBD 0.005282  
Fringe rate (Hz) 0.005822  
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  
2020:199:143542  
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

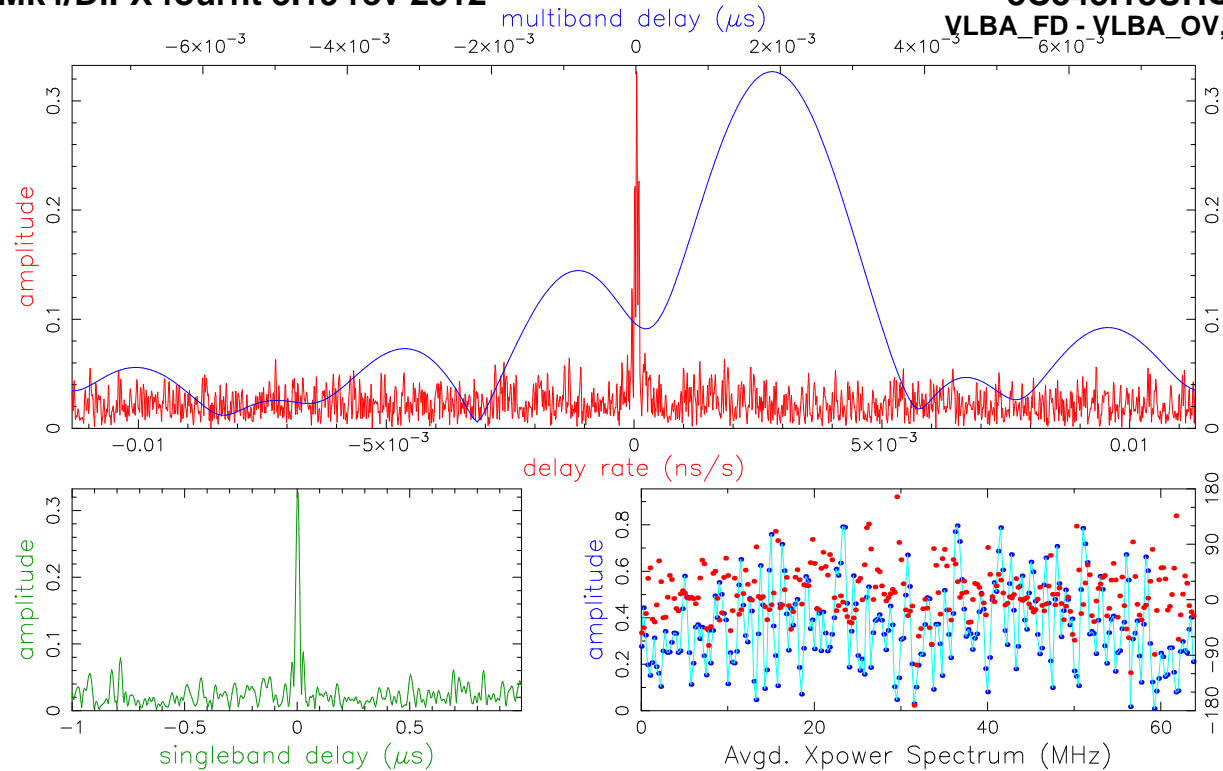


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-135.4	-131.7	-98.7	-162.9	-114.7	-128.1	-121.8	-157.8	Phase	-131.9
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	232.8	430.3	53.9	411.7	258.0	124.6	210.6	243.7	Sbd box	258.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.67602274482E+02		Apriori delay (usec)		-1.67607556883E+02		Resid mbdelay (usec)		5.28240E-03	+/- 1.8E-04
Sband delay (usec)	-1.67602867133E+02		Apriori clock (usec)		-2.1497892E+01		Resid sbdelay (usec)		4.68975E-03	+/- 1.4E-03
Phase delay (usec)	-1.67607561138E+02		Apriori clockrate (us/s)		-2.4300001E-07		Resid phdelay (usec)		-4.25472E-06	+/- 6.0E-07
Delay rate (us/s)	-4.26899465849E-02		Apriori rate (us/s)		-4.26900141735E-02		Resid rate (us/s)		6.75886E-08	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.08550809055E-05		Resid phase (deg)		-131.9	+/- 18.6

	RMS	Theor.	Amplitude	0.112 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	71.0	44.5	Search (2048X32)	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	109.6	77.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	23.0	26.2	Inc. seg. avg.	0.156	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	39.7	45.8	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

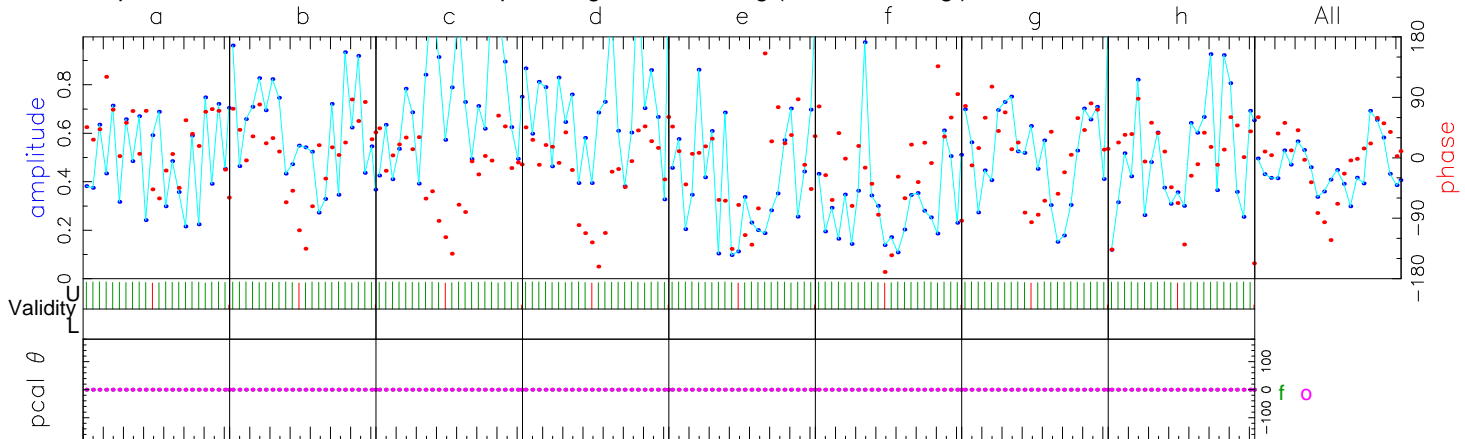
b: az 104.8 el 69.8 pa -57.1 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 343.620 1655.575 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bo.W.74.18UHQS





Fringe quality 9  
SNR 18.4  
Int time 408.214  
Amp 0.333  
Phase 10.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.002212  
MBD 0.001864  
Fringe rate (Hz) 0.004372  
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  
2020:199:143555  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

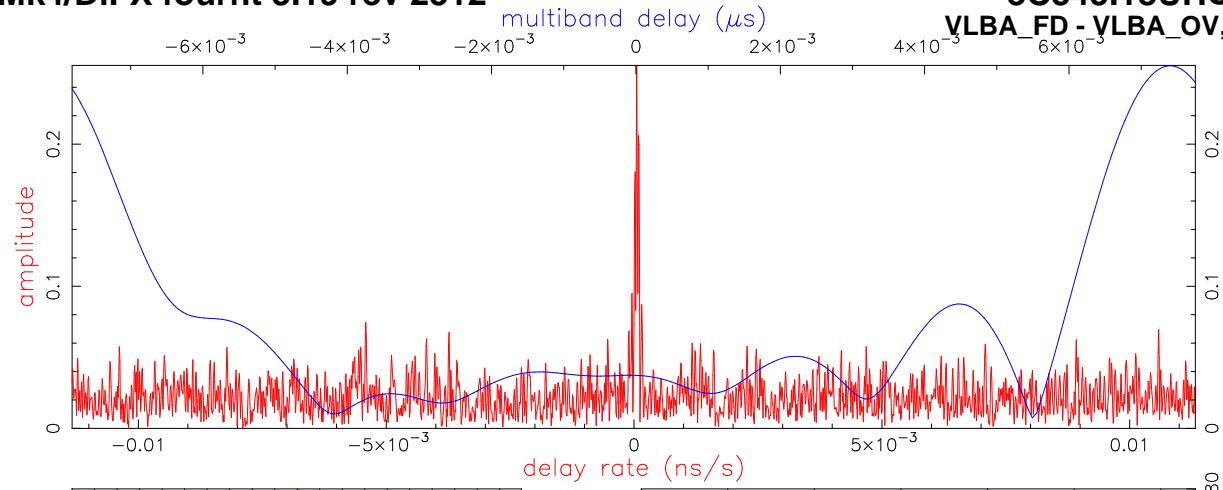
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 6.26166069786E+02 Apriori delay (usec) 6.26164206207E+02 Resid mbdelay (usec) 1.86358E-03 +/- 5.9E-05  
 Sband delay (usec) 6.26166417957E+02 Apriori clock (usec) -1.6189831E+01 Resid sbdelay (usec) 2.21175E-03 +/- 4.7E-04  
 Phase delay (usec) 6.26164206559E+02 Apriori clockrate (us/s) -9.2000002E-08 Resid phdelay (usec) 3.52675E-07 +/- 2.0E-07  
 Delay rate (us/s) -2.16050241553E-01 Apriori rate (us/s) -2.16050292310E-01 Resid rate (us/s) 5.07575E-08 +/- 8.3E-10  
 Total phase (deg) 271.1 Apriori accel (us/s/s) -1.02992254082E-05 Resid phase (deg) 10.9 +/- 6.2

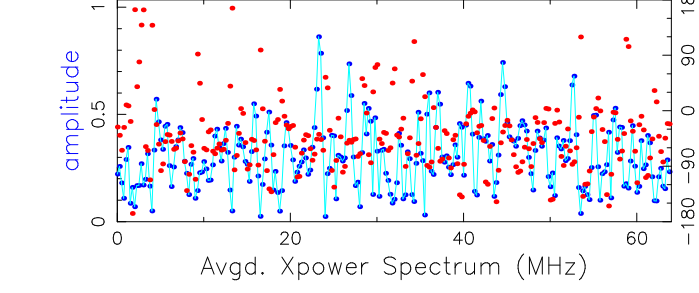
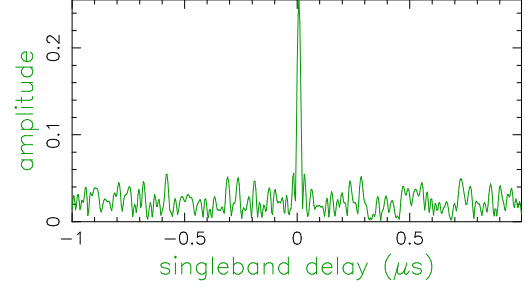
ph/seg (deg) 51.2 15.0 Search (2048X32) 0.308 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 47.9 26.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.4 8.8 Inc. seg. avg. 0.444 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.5 15.4 Inc. frq. avg. 0.339 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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1585.700 -1346.574 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fo.W.120.18UHQS



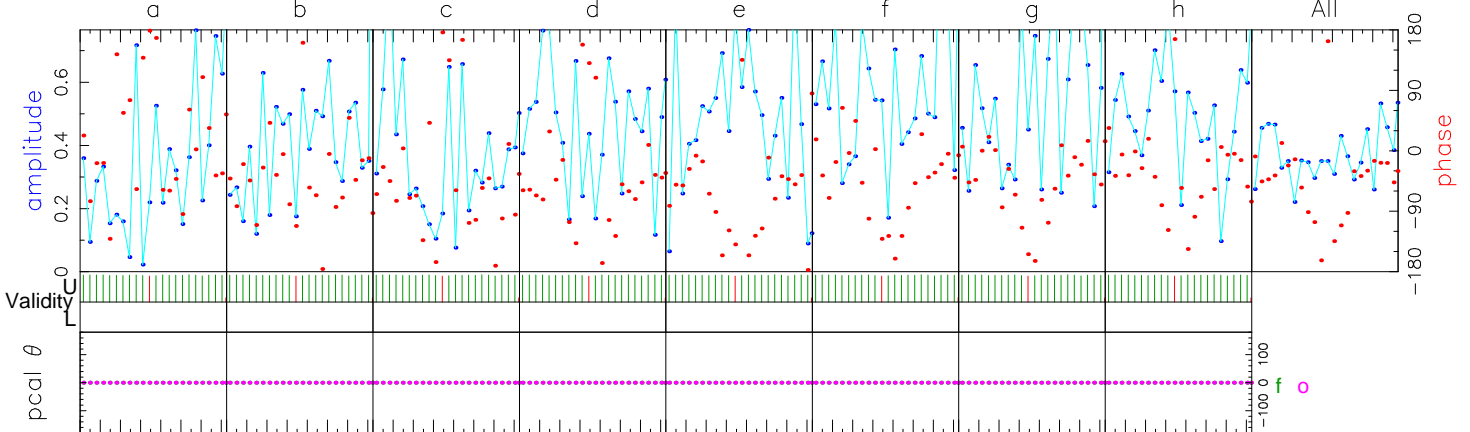
Fringe quality 9

SNR 14.1  
Int time 408.215  
Amp 0.255  
Phase -49.2  
PFD 1.9e-36  
Delays (us)  
SBD 0.007438  
MBD 0.007391  
Fringe rate (Hz) 0.004589  
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"

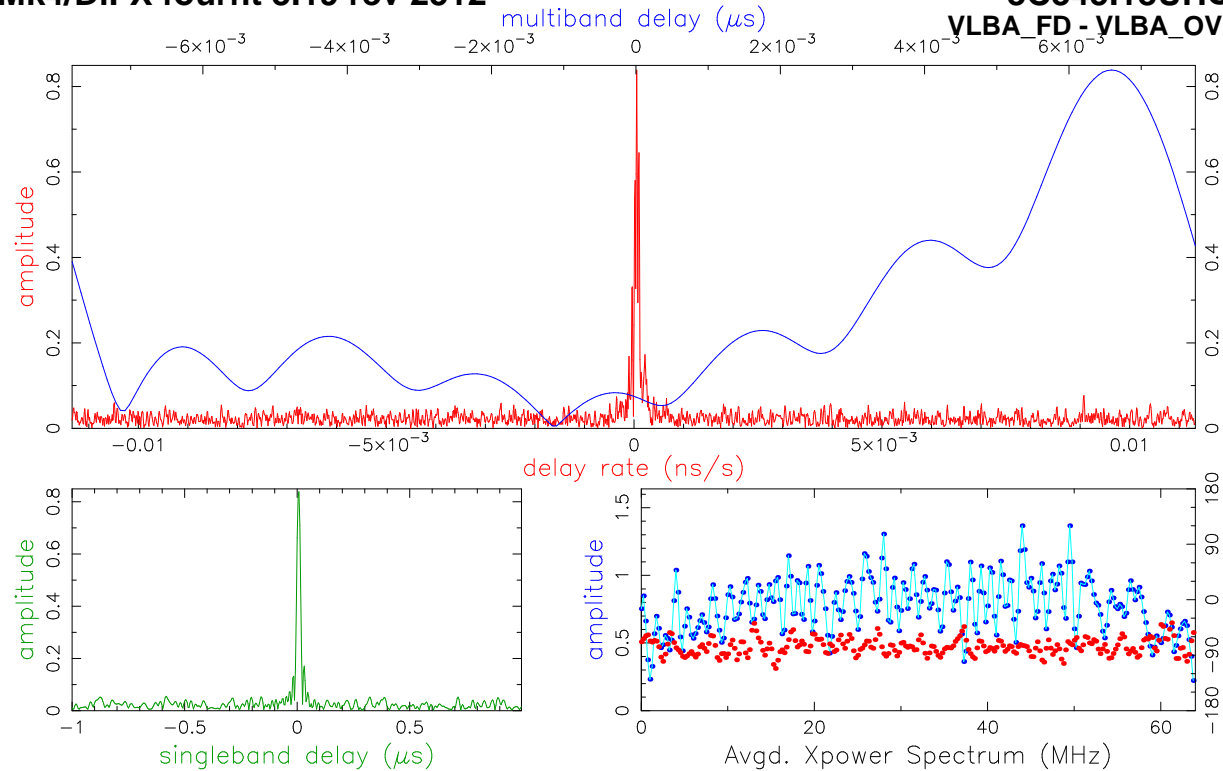


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



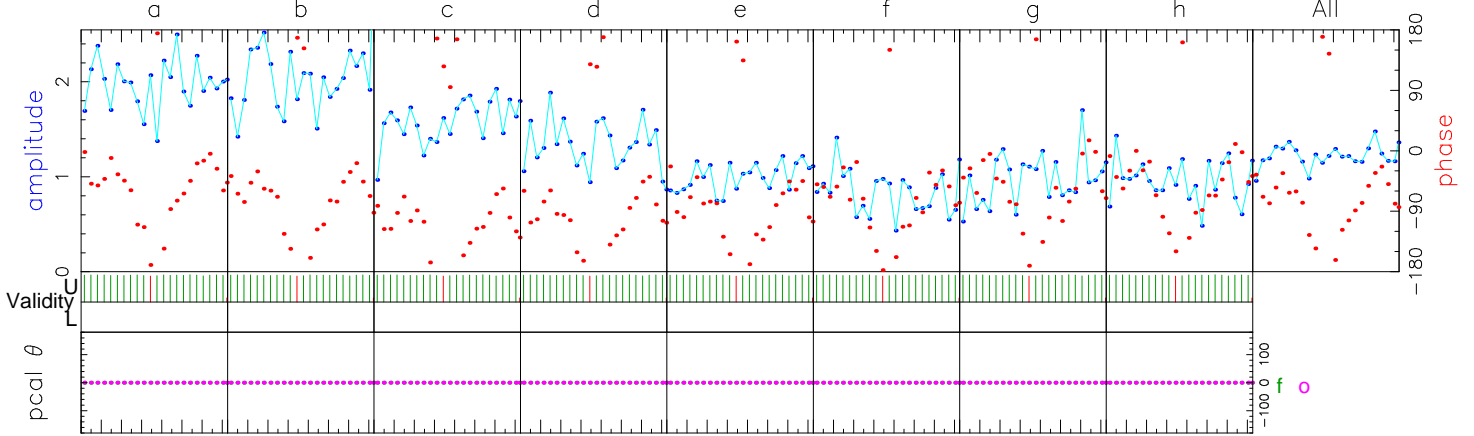
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.0	-44.3	-65.8	-64.3	-80.7	-35.0	-41.4	-44.6	Phase	-49.2
	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	Ampl.	0.3
	259.2	259.1	437.0	258.6	259.4	258.8	258.5	259.1	Sbd box	258.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.26171597599E+02		Apriori delay (usec)		6.26164206207E+02		Resid mbdelay (usec)		7.39139E-03	+/- 7.7E-05
Sband delay (usec)	6.26171644207E+02		Apriori clock (usec)		-1.6189831E+01		Resid sbdelay (usec)		7.43800E-03	+/- 6.1E-04
Phase delay (usec)	6.26164204619E+02		Apriori clockrate (us/s)		-9.2000002E-08		Resid phdelay (usec)		-1.58747E-06	+/- 2.6E-07
Delay rate (us/s)	-2.16050239040E-01		Apriori rate (us/s)		-2.16050292310E-01		Resid rate (us/s)		5.32708E-08	+/- 1.1E-09
Total phase (deg)	210.9		Apriori accel (us/s/s)		-1.02992254082E-05		Resid phase (deg)		-49.2	+/- 8.1

ph/seg (deg) 53.6 19.5 Search (2048X32) 0.251 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.3 34.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.0 11.5 Inc. seg. avg. 0.349 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 28.1 20.0 Inc. frq. avg. 0.262 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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1585.700 -1346.574 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fo.W.140.18UHQS



Fringe quality 4  
 SNR 46.9  
 Int time 408.215  
 Amp 0.849  
 Phase -79.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.006335  
 MBD 0.006566  
 Fringe rate (Hz)  
 0.004349  
 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  
 2020:199:143546  
 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

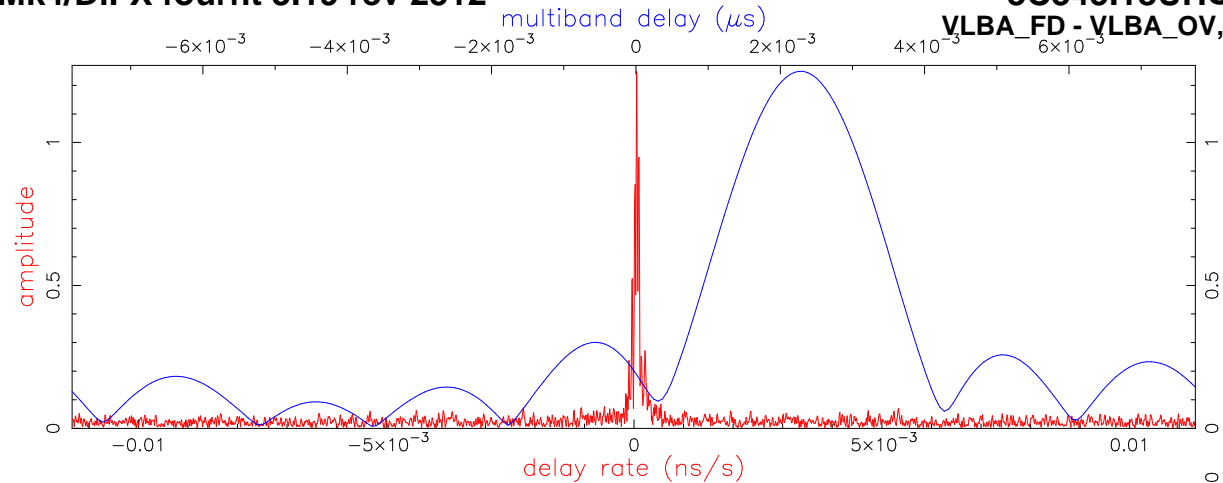


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-55.8	-73.9	-117.5	-102.1	-92.3	-75.7	-60.4	-53.8	Phase	-79.0
	1.4	1.4	1.1	0.9	0.7	0.6	0.6	0.6	Ampl.	0.9
	258.8	258.3	258.5	258.6	259.0	258.8	258.3	258.7	Sbd box	258.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	6.26170772067E+02	Apriori delay (usec)	6.26164206207E+02	Resid mbdelay (usec)	6.56586E-03	+/-	2.3E-05
Sband delay (usec)	6.26170540957E+02	Apriori clock (usec)	-1.6189831E+01	Resid sbdelay (usec)	6.33475E-03	+/-	1.8E-04
Phase delay (usec)	6.26164203658E+02	Apriori clockrate (us/s)	-9.2000002E-08	Resid phdelay (usec)	-2.54863E-06	+/-	7.9E-08
Delay rate (us/s)	-2.16050241821E-01	Apriori rate (us/s)	-2.16050292310E-01	Resid rate (us/s)	5.04897E-08	+/-	3.2E-10
Total phase (deg)	181.1	Apriori accel (us/s/s)	-1.02992254082E-05	Resid phase (deg)	-79.0	+/-	2.4

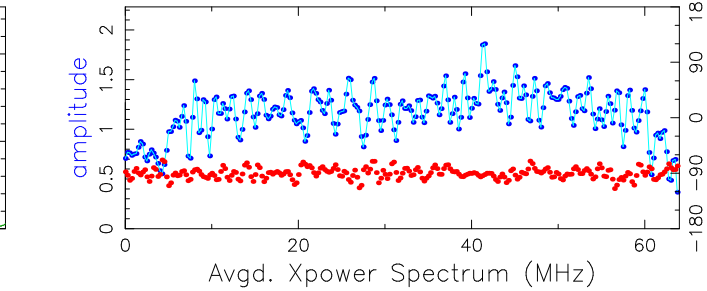
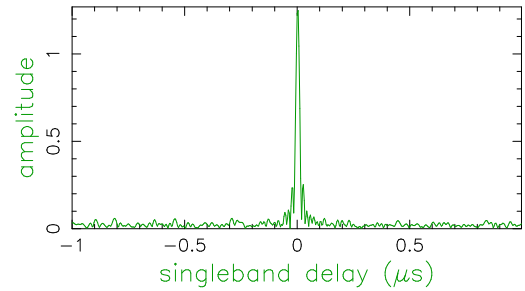
ph/seg (deg)	51.2	Theor.	5.9	Search (2048X32)	0.766	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	45.1		10.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	25.0		3.5	Inc. seg. avg.	1.209	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.1		6.0	Inc. frq. avg.	0.904	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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1585.700 -1346.574 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fo.W.84.18UHQS



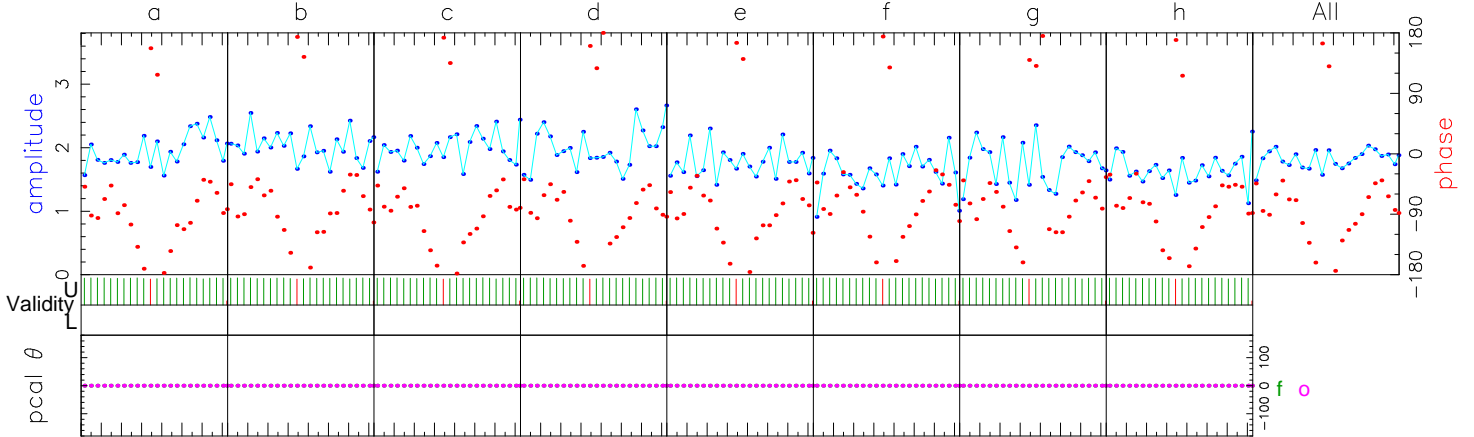
Fringe quality 5

SNR 70.2  
Int time 408.213  
Amp 1.270  
Phase -90.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.002235  
MBD 0.002245  
Fringe rate (Hz)  
0.004465  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



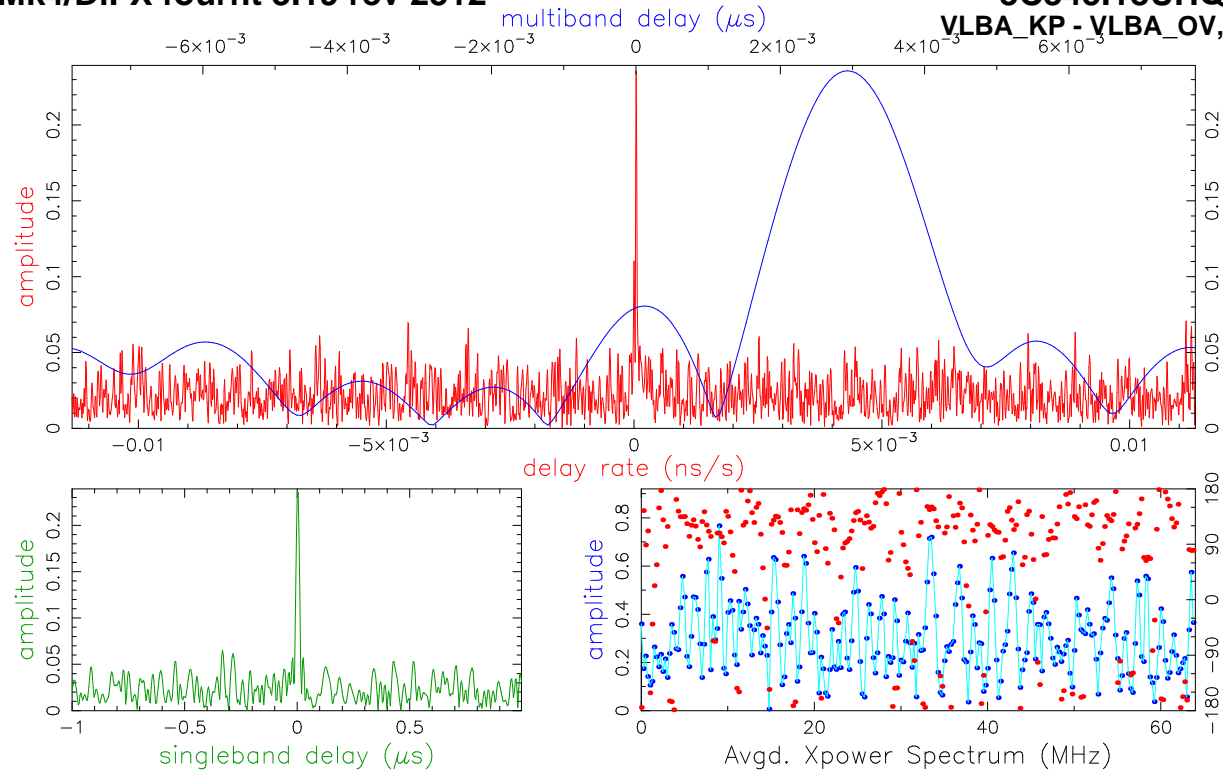
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143550  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
	-95.2	-85.4	-97.3	-93.8	-92.2	-82.2	-91.8	-86.0	Phase	-90.7
	1.3	1.4	1.4	1.4	1.2	1.1	1.1	1.1	Ampl.	1.3
	257.6	257.2	257.6	257.7	257.7	257.5	257.8	257.6	Sbd box	257.6
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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)	6.26166451411E+02		Apriori delay (usec)		6.26164206207E+02		Resid mbdelay (usec)		2.24520E-03	+/- 1.5E-05
Sband delay (usec)	6.26166441457E+02		Apriori clock (usec)		-1.6189831E+01		Resid sbdelay (usec)		2.23525E-03	+/- 1.2E-04
Phase delay (usec)	6.26164203282E+02		Apriori clockrate (us/s)		-9.2000002E-08		Resid phdelay (usec)		-2.92520E-06	+/- 5.3E-08
Delay rate (us/s)	-2.16050240481E-01		Apriori rate (us/s)		-2.16050292310E-01		Resid rate (us/s)		5.18296E-08	+/- 2.2E-10
Total phase (deg)	169.4		Apriori accel (us/s/s)		-1.02992254082E-05		Resid phase (deg)		-90.7	+/- 1.6

ph/seg (deg) 51.5 3.9 Search (2048X32) 1.192 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 44.6 6.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 5.8 2.3 Inc. seg. avg. 1.813 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 9.7 4.0 Inc. frq. avg. 1.252 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 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1585.700 -1346.574 simultaneous interpolator

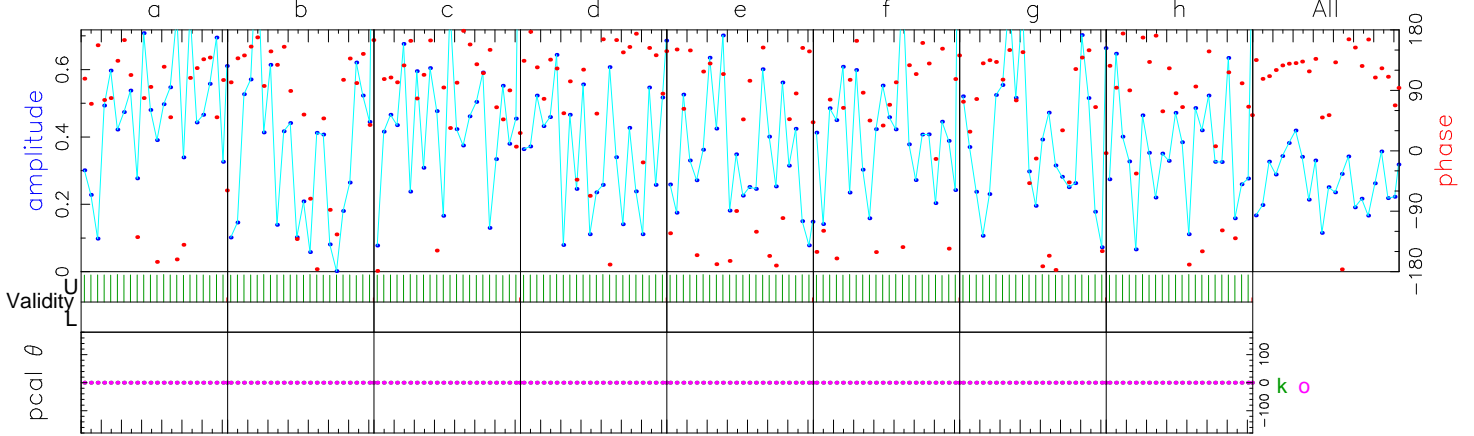


Fringe quality 9

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"

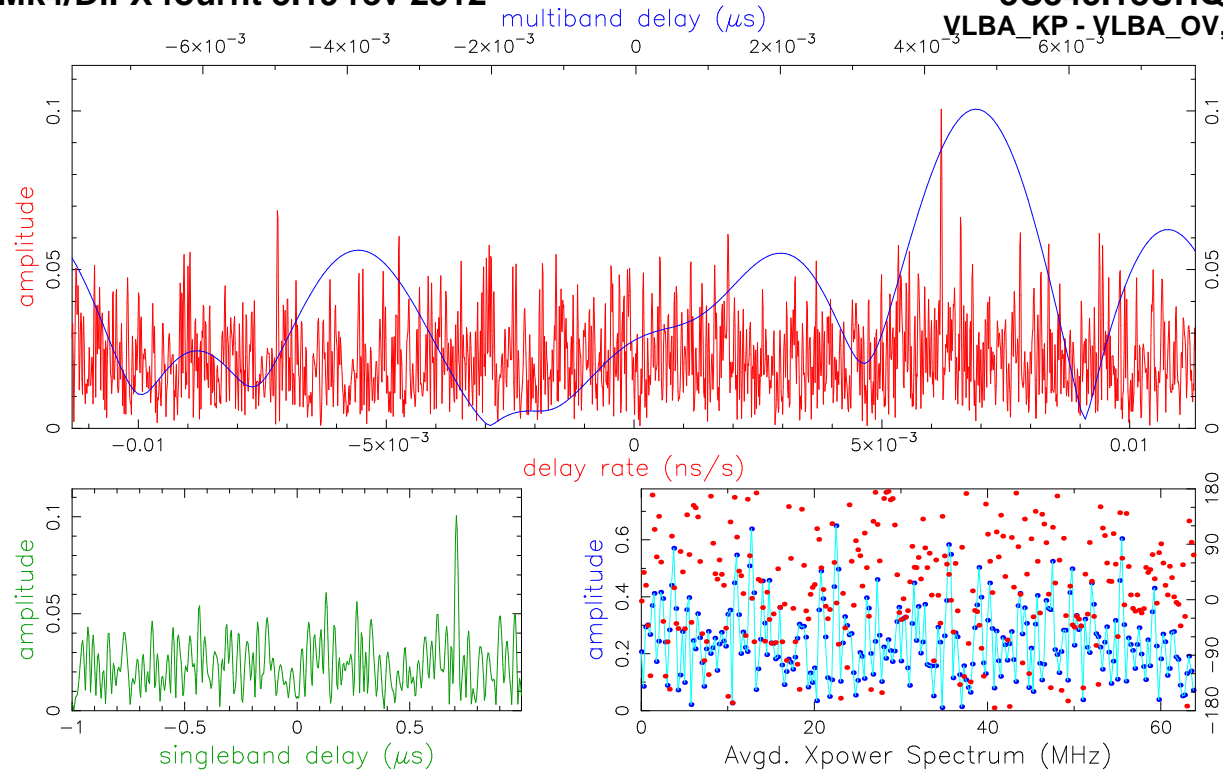
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	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

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.112.18UHQS

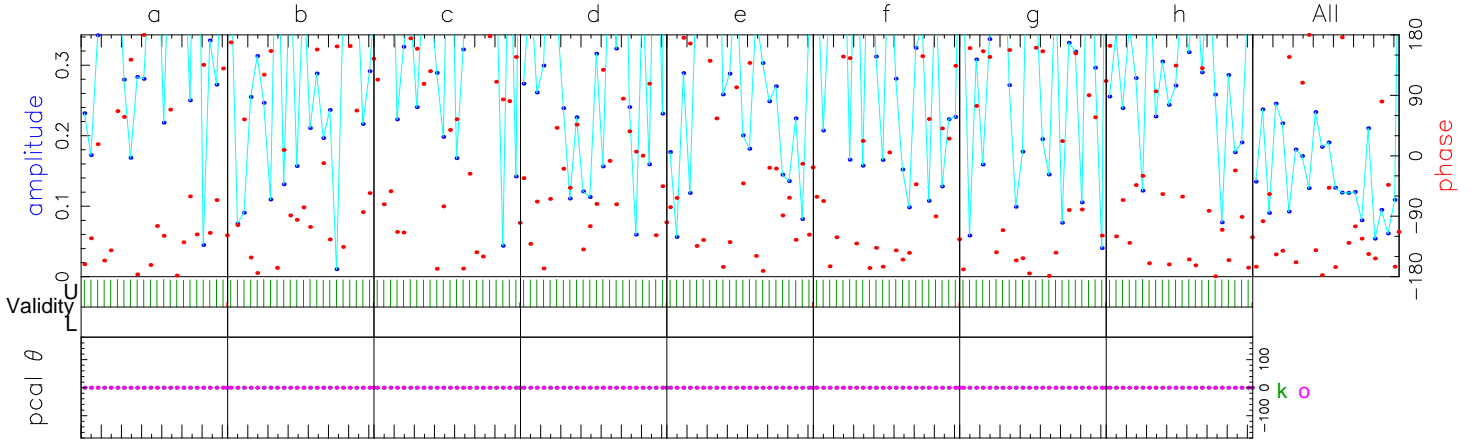


Fringe quality 0

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

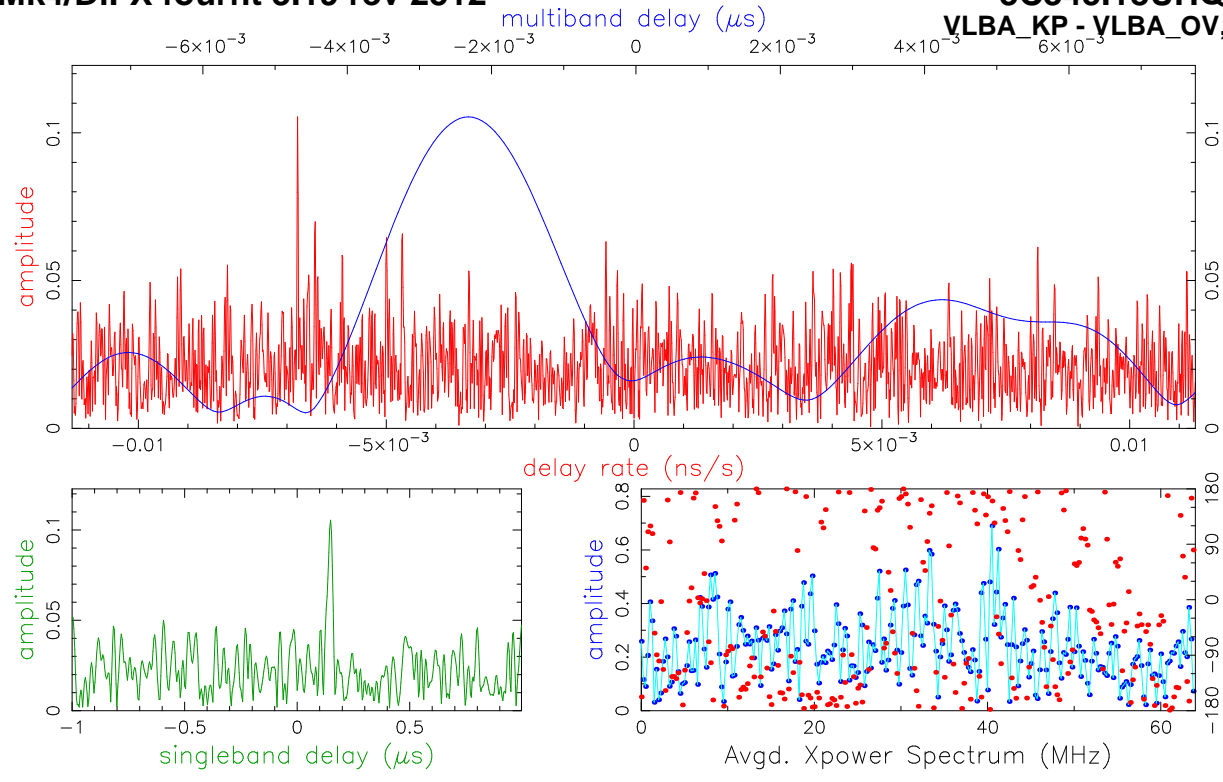
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143558  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



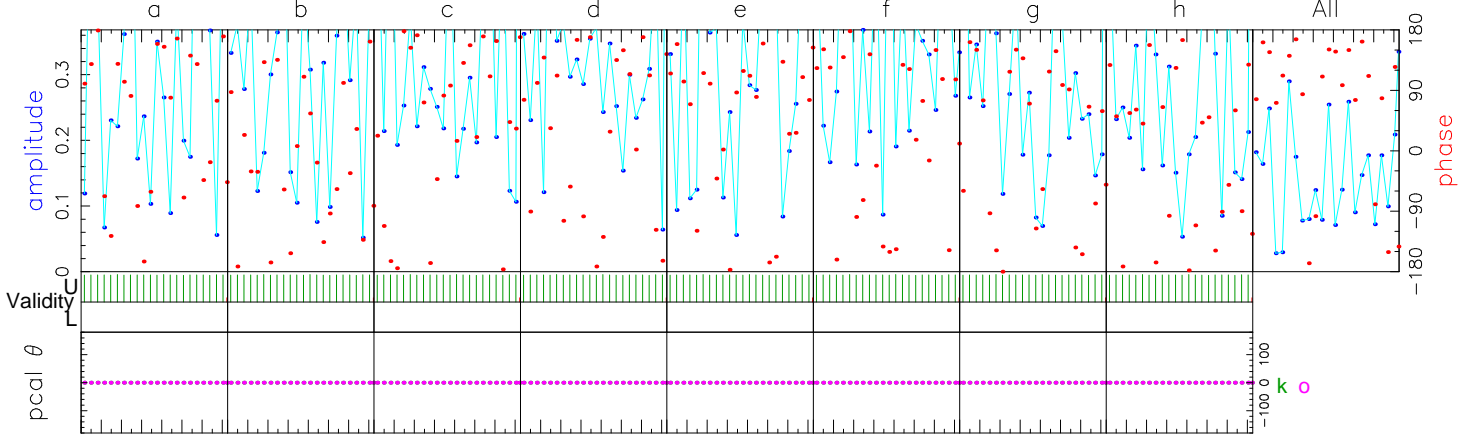
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-150.6	-147.0	-174.9	-43.9	-146.2	-138.7	175.5	-133.1		-145.7
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2		0.1
	172.2	400.5	310.7	386.1	323.9	334.0	398.7	437.2		438.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	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(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 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

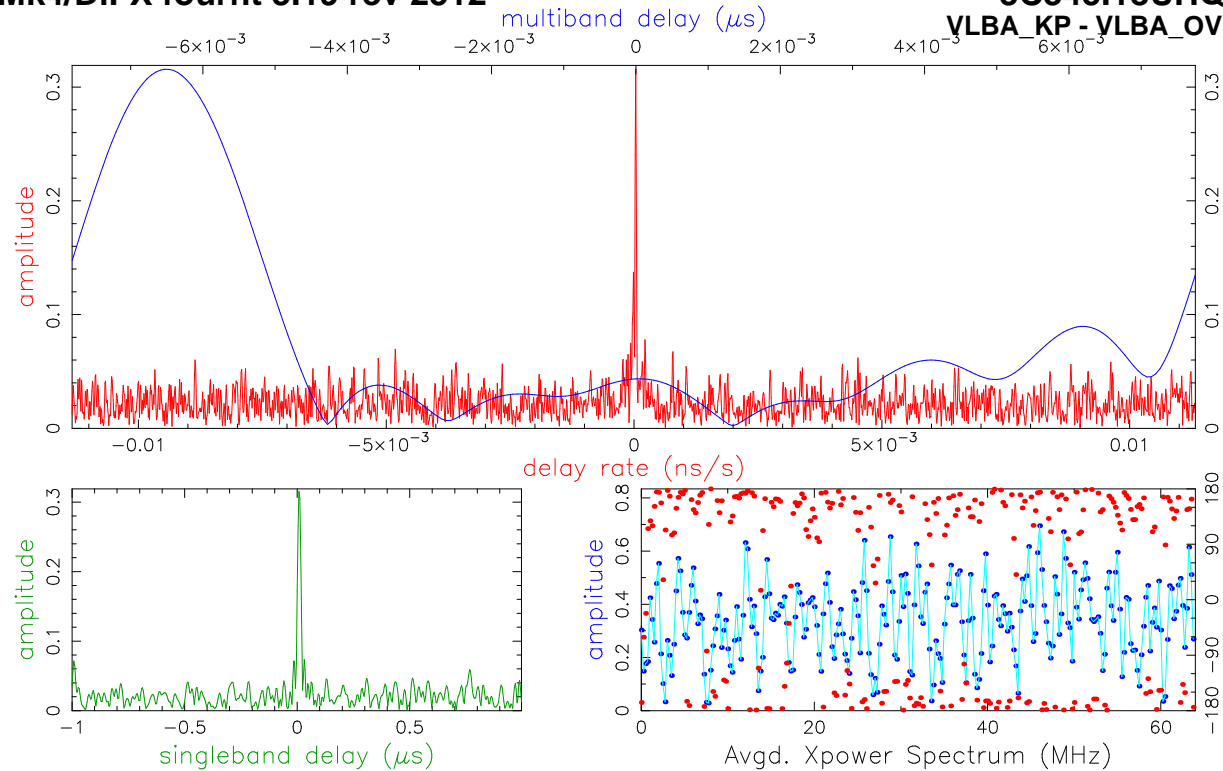


Fringe quality 0  
SNR 5.9  
Int time 412.551  
Amp 0.123  
Phase 138.1  
PFD 7.0e-01  
Delays (us)  
SBD 0.148161  
MBD -0.002323  
Fringe rate (Hz)  
-0.585624  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
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:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k: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		
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										
-1.9560001E-07										
-8.61386652328E-02										
-7.09536968251E-06										
2.86912829869E+02										
-2.0434280E+01										
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										

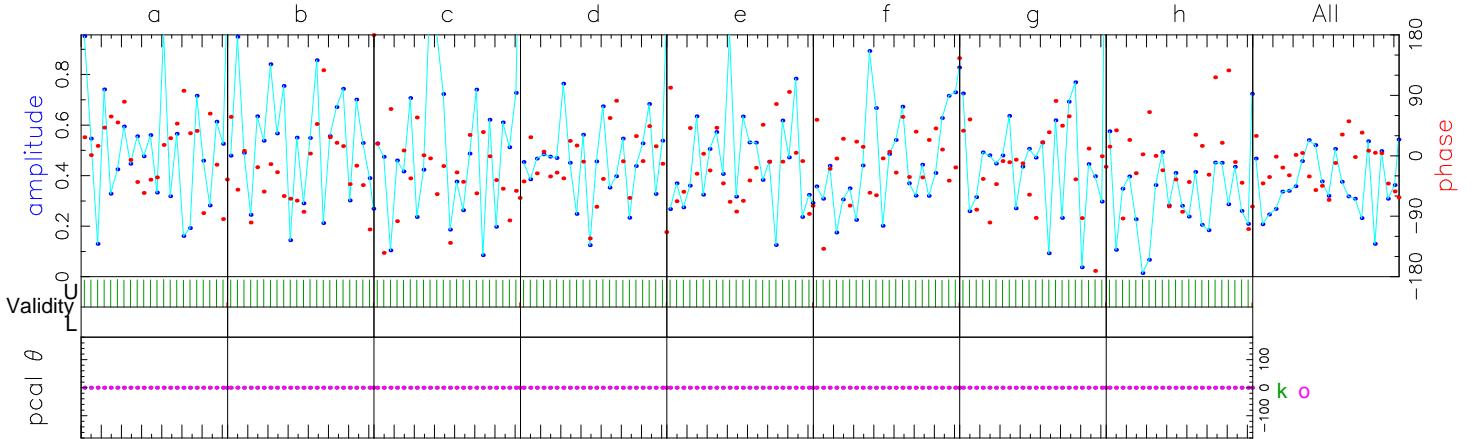


Fringe quality 9

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"

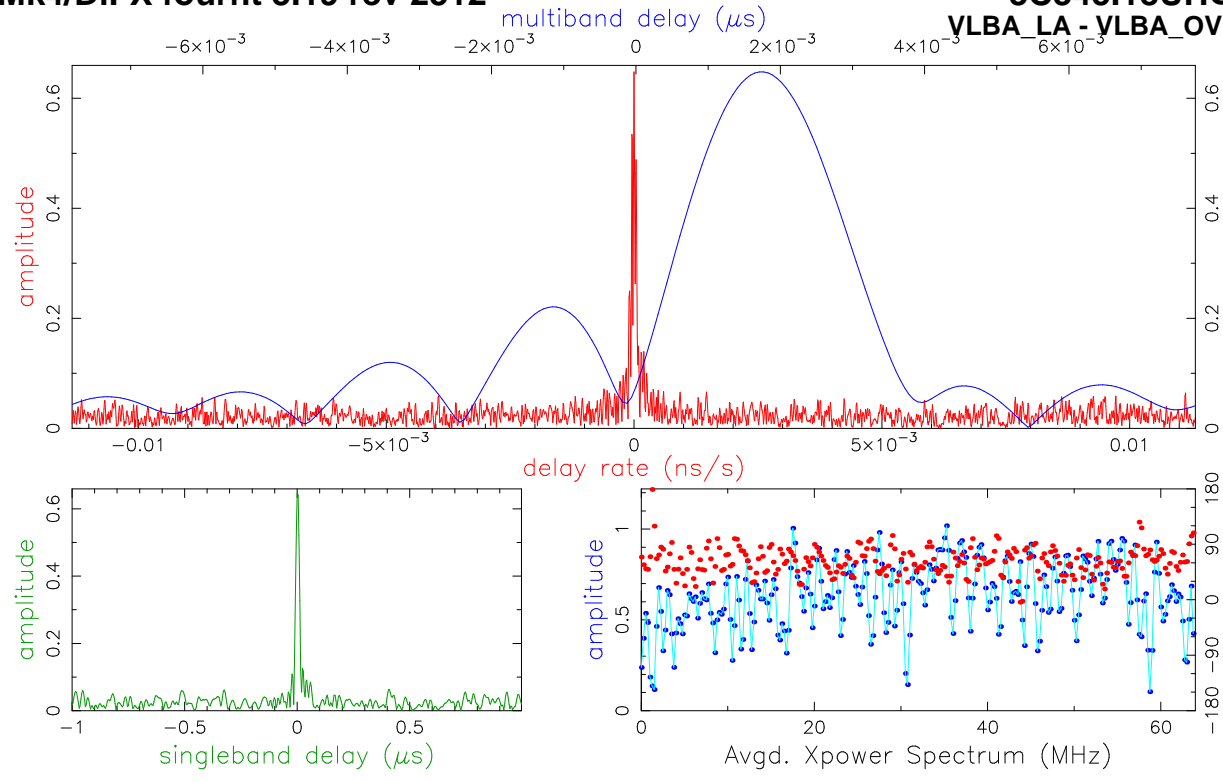
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.86921976710E+02				2.86912829869E+02					
Sband delay (usec)	2.86921919869E+02				-2.0434280E+01					
Phase delay (usec)	2.86912829470E+02				-1.9560001E-07					
Delay rate (us/s)	-8.61386272045E-02				-8.61386652328E-02					
Total phase (deg)			47.0		-7.09536968251E-06					
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 $\theta$										
amplitude										
phase										
Validity										
pcal $\theta$										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

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 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.92.18UHQS



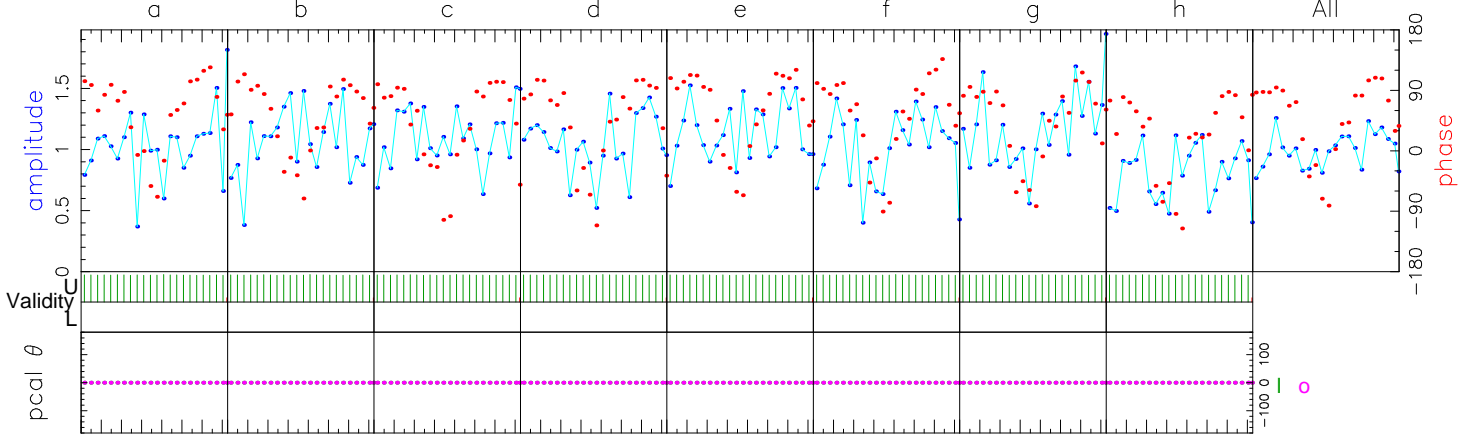


Fringe quality 6

SNR 36.6  
Int time 411.485  
Amp 0.660  
Phase 61.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.001741  
MBD 0.001781  
Fringe rate (Hz) 0.000411  
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

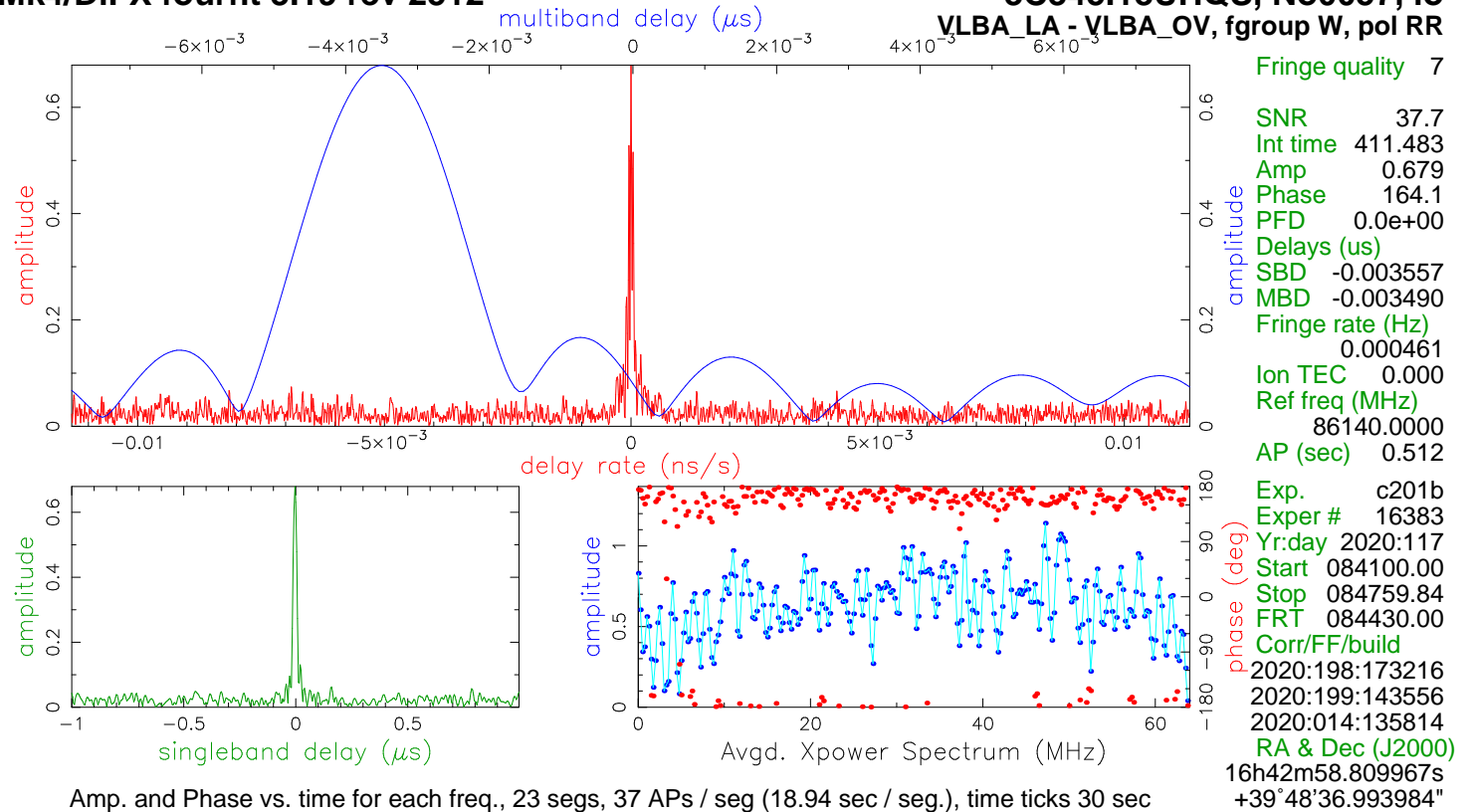


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.53460092244E+02		Apriori delay (usec)		7.53458311276E+02		Resid mbdelay (usec)		1.78097E-03	+/- 3.0E-05
Sband delay (usec)	7.53460052026E+02		Apriori clock (usec)		-2.3796095E+01		Resid sbdelay (usec)		1.74075E-03	+/- 2.4E-04
Phase delay (usec)	7.53458313273E+02		Apriori clockrate (us/s)		-3.5200000E-07		Resid phdelay (usec)		1.99719E-06	+/- 1.0E-07
Delay rate (us/s)	-1.86798402356E-01		Apriori rate (us/s)		-1.86798407130E-01		Resid rate (us/s)		4.77426E-09	+/- 4.2E-10
Total phase (deg)	37.9		Apriori accel (us/s/s)		-5.60236238609E-06		Resid phase (deg)		61.9	+/- 3.1

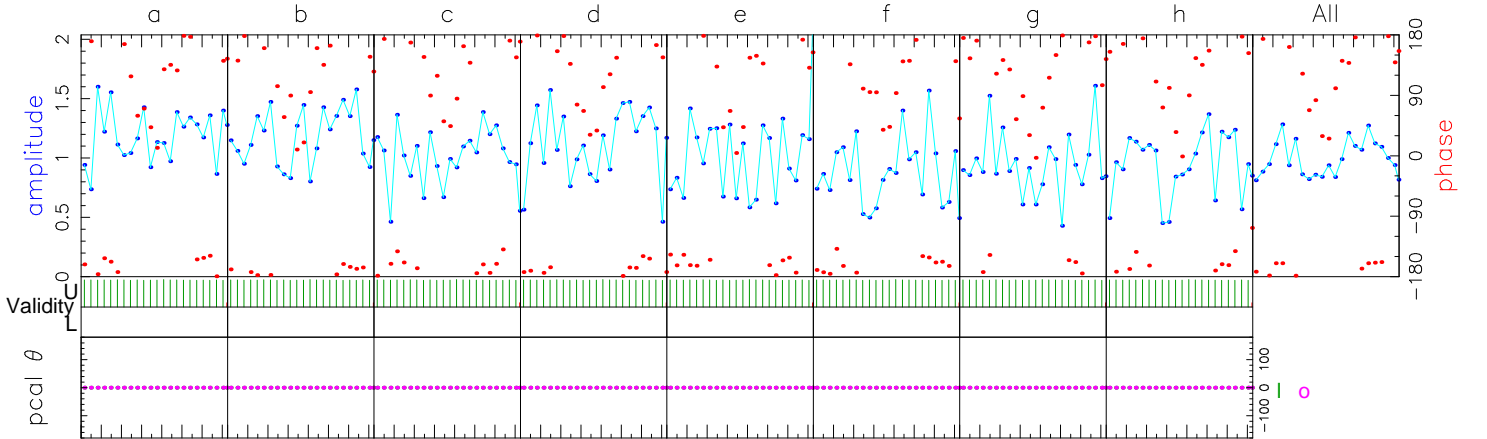
ph/seg (deg) 57.7 7.5 Search (2048X32) 0.596 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 55.6 13.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 14.2 4.4 Inc. seg. avg. 0.993 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 10.0 7.7 Inc. frq. avg. 0.659 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 l: az 64.0 el 79.5 pa -110.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1379.106 -525.514 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, lo  
VLBA\_LA - VLBA\_OV, fgroup W, pol RR



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
	163.3	161.0	168.6	164.8	170.2	165.5	152.2	166.9	Phase	164.1
	0.7	0.8	0.7	0.8	0.6	0.6	0.6	0.6	Ampl.	0.7
	255.9	255.9	256.5	255.9	256.2	256.2	256.3	255.8	Sbd box	256.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	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)	7.53454820932E+02		Apriori delay (usec)		7.53458311276E+02		Resid mbdelay (usec)		-3.49034E-03	+/- 2.9E-05
Sband delay (usec)	7.53454754026E+02		Apriori clock (usec)		-2.3796095E+01		Resid sbdelay (usec)		-3.55725E-03	+/- 2.3E-04
Phase delay (usec)	7.53458316567E+02		Apriori clockrate (us/s)		-3.5200000E-07		Resid phdelay (usec)		5.29184E-06	+/- 9.8E-08
Delay rate (us/s)	-1.86798401779E-01		Apriori rate (us/s)		-1.86798407130E-01		Resid rate (us/s)		5.35103E-09	+/- 4.0E-10
Total phase (deg)	140.1		Apriori accel (us/s/s)		-5.60236238609E-06		Resid phase (deg)		164.1	+/- 3.0

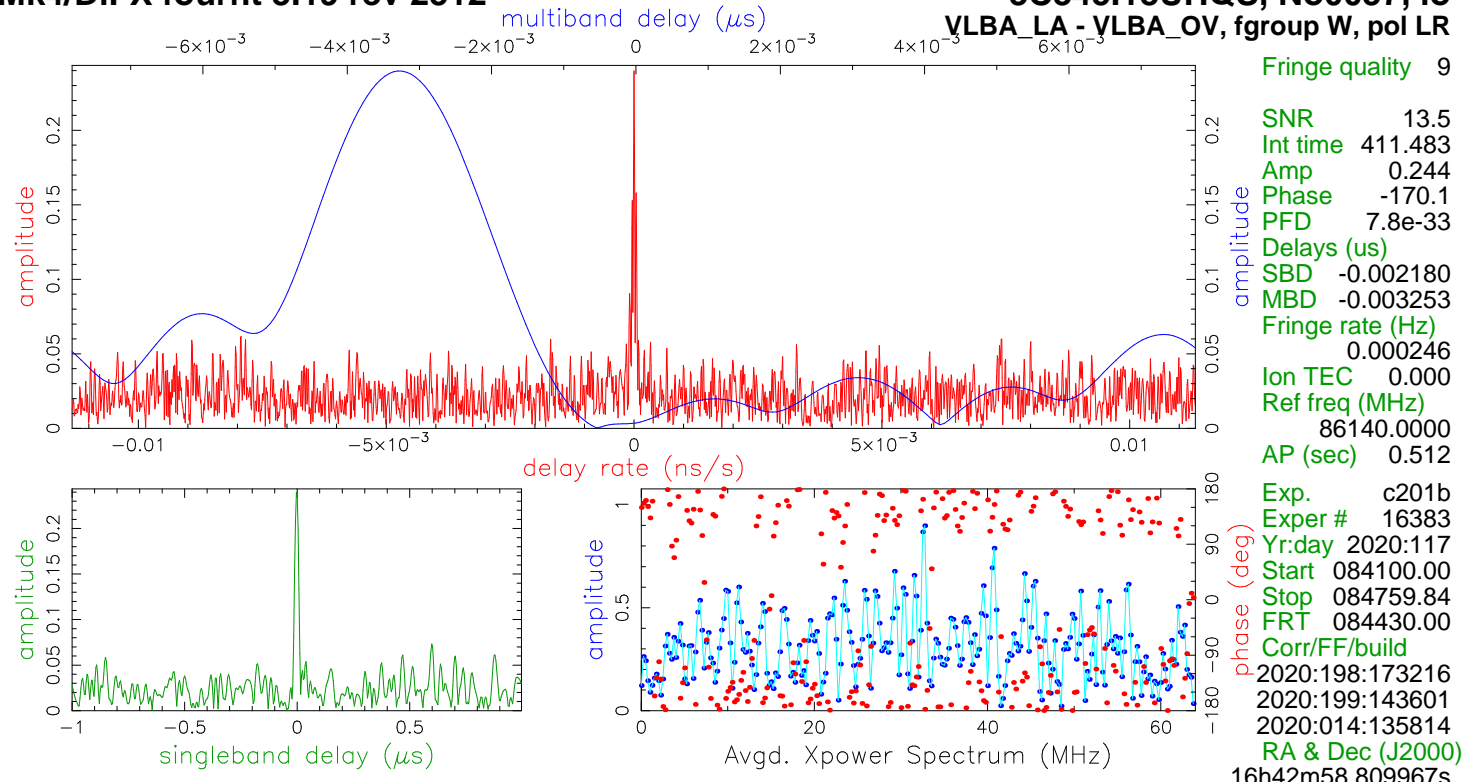
	RMS	Theor.	Amplitude	0.679 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	56.1	7.3	Search (2048X32)	0.623	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	52.3	12.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	6.1	4.3	Inc. seg. avg.	0.996	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	10.4	7.5	Inc. frq. avg.	0.680	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

l: az 64.0 el 79.5 pa -110.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1379.106 -525.514 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/lo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/lo.W.125.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, lo  
VLBA\_LA - VLBA\_OV, fgroup W, pol LR



Fringe quality 9

SNR 13.5

Int time 411.483

Amp 0.244

Phase -170.1

PFD 7.8e-33

Delays (us)

SBD -0.002180

MBD -0.003253

Fringe rate (Hz)

0.000246

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

2020:199:143601

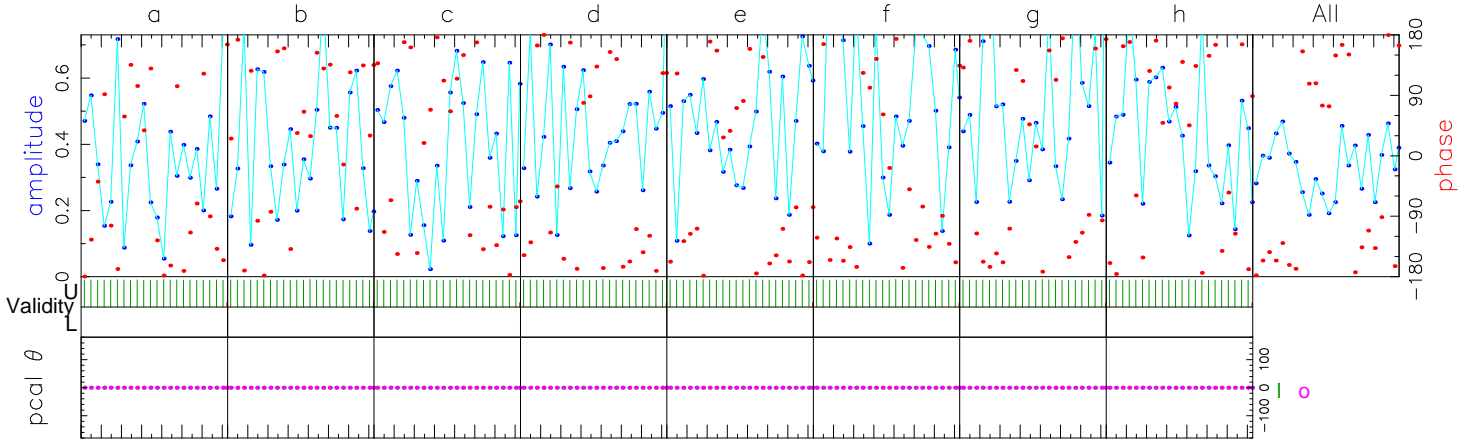
2020:014:135814

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
	-162.5	157.2	-167.7	-168.7	-165.3	-147.5	-169.3	161.4	Phase	-170.1
	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	Ampl.	0.2
	257.3	256.7	410.5	256.0	256.7	255.9	256.1	256.3	Sbd box	256.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.53455058276E+02		Apriori delay (usec)		7.53458311276E+02		Resid mbdelay (usec)		-3.25300E-03	+/- 8.0E-05
Sband delay (usec)	7.53456131026E+02		Apriori clock (usec)		-2.3796095E+01		Resid sbdelay (usec)		-2.18025E-03	+/- 6.4E-04
Phase delay (usec)	7.53458305791E+02		Apriori clockrate (us/s)		-3.5200000E-07		Resid phdelay (usec)		-5.48513E-06	+/- 2.7E-07
Delay rate (us/s)	-1.86798404276E-01		Apriori rate (us/s)		-1.86798407130E-01		Resid rate (us/s)		2.85336E-09	+/- 1.1E-09
Total phase (deg)	165.9		Apriori accel (us/s/s)		-5.60236238609E-06		Resid phase (deg)		-170.1	+/- 8.5

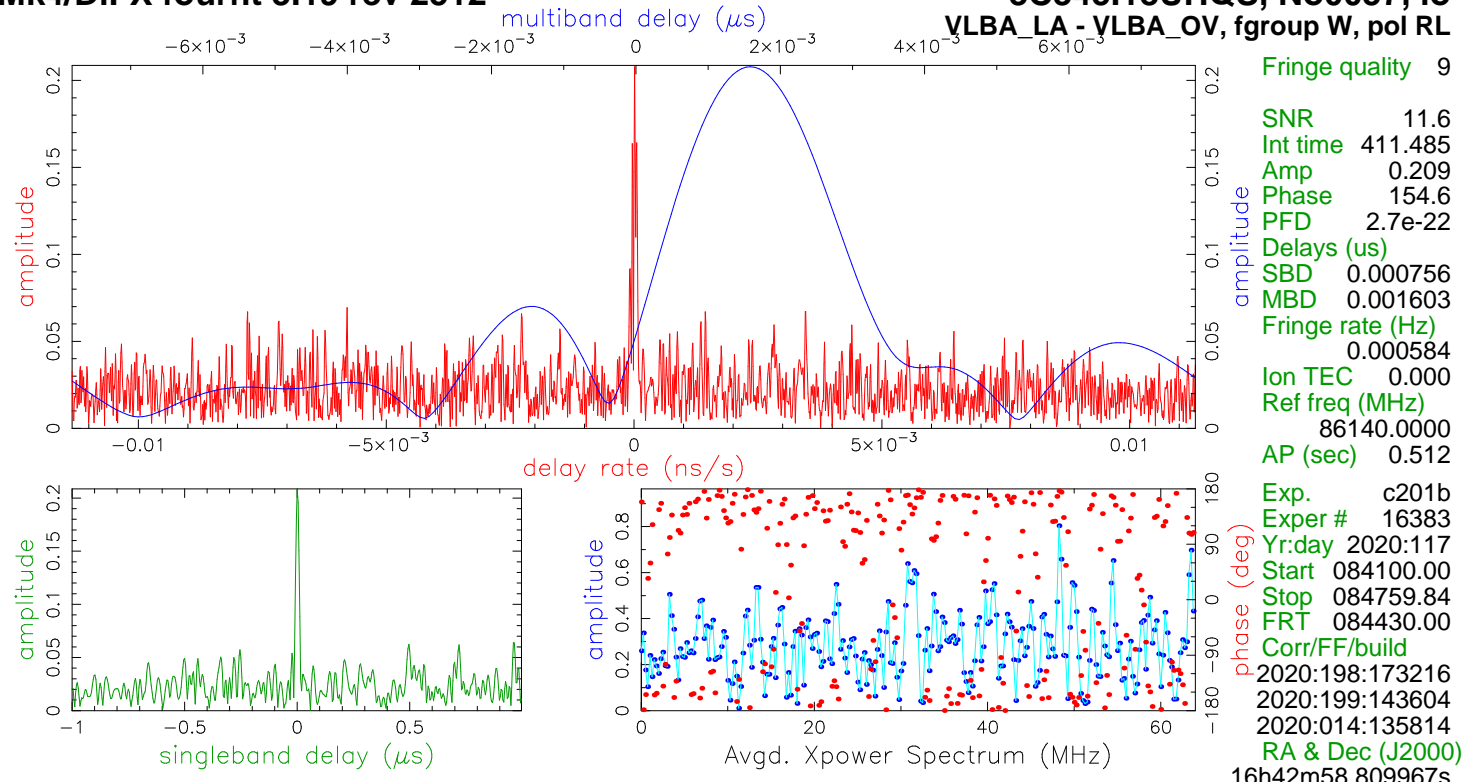
	RMS	Theor.	Amplitude	0.244 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.2	20.3	Search (2048X32)	0.231	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	50.7	35.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	20.3	12.0	Inc. seg. avg.	0.312	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	28.4	20.9	Inc. frq. avg.	0.245	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 64.0 el 79.5 pa -110.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1379.106 -525.514 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/lo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/lo.W.143.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, lo  
VLBA\_LA - VLBA\_OV, fgroup W, pol RL



Fringe quality 9

SNR 11.6

Int time 411.485

Amp 0.209

Phase 154.6

PFD 2.7e-22

Delays (us)

SBD 0.000756

MBD 0.001603

Fringe rate (Hz) 0.000584

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

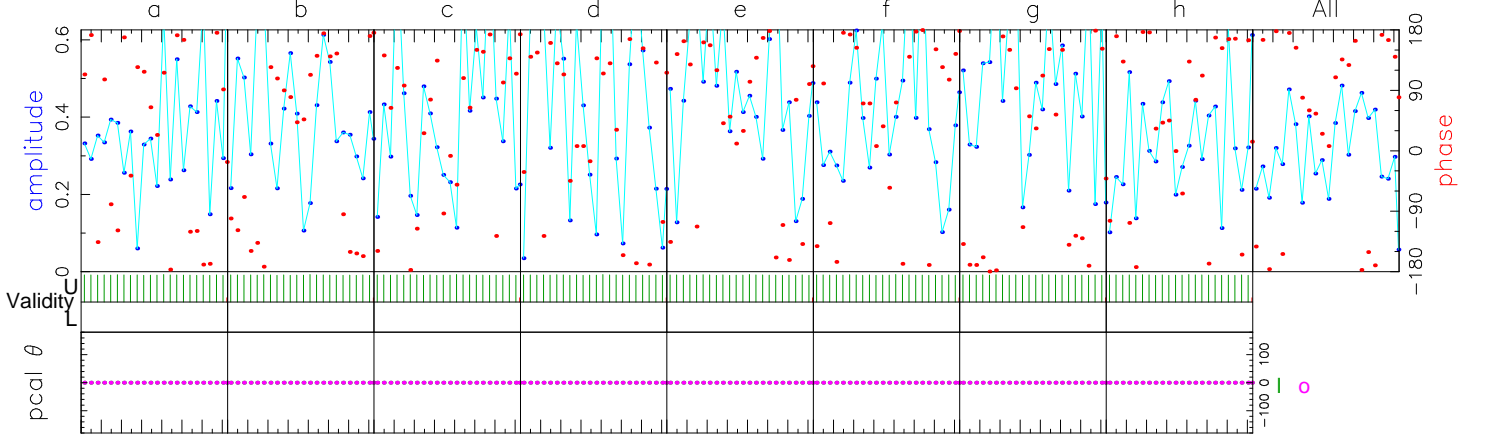
2020:198:173216

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



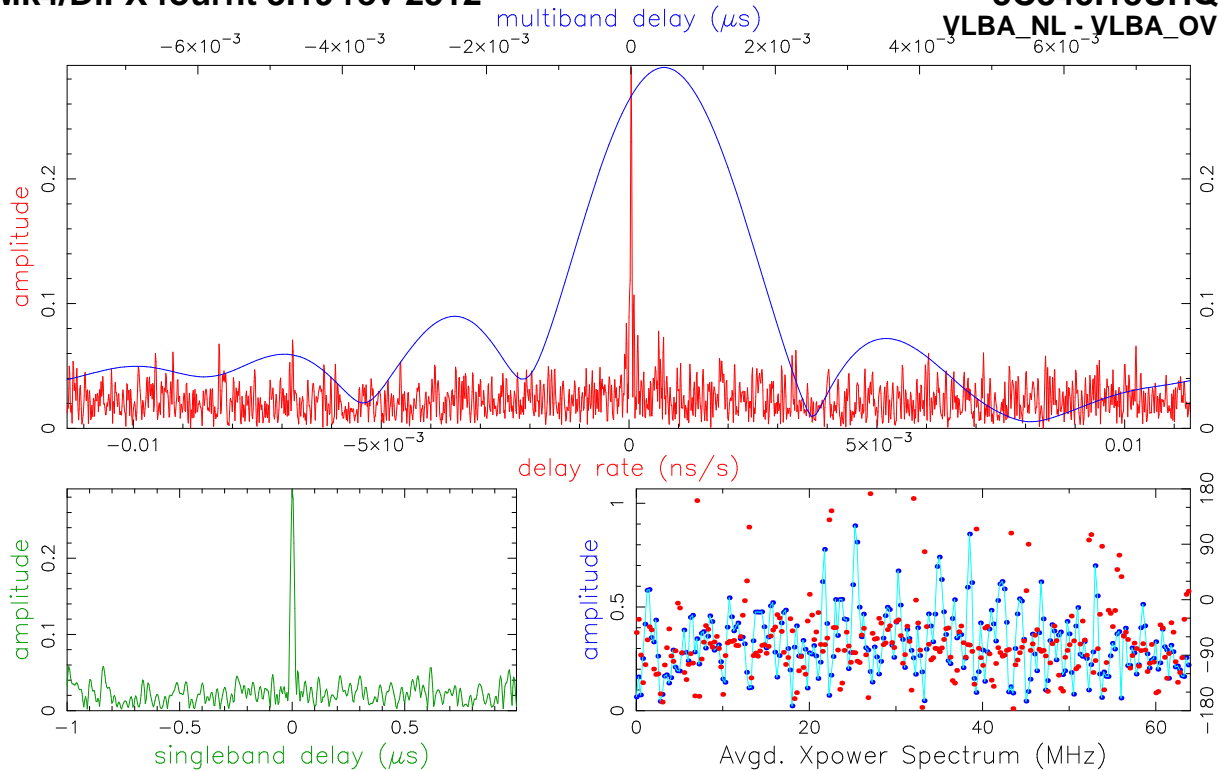
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	7.53459914129E+02	Apriori delay (usec)	7.53458311276E+02	Resid mbdelay (usec)	1.60285E-03	+/-	9.4E-05
Sband delay (usec)	7.53459067776E+02	Apriori clock (usec)	-2.3796095E+01	Resid sbdelay (usec)	7.56500E-04	+/-	7.4E-04
Phase delay (usec)	7.53458316261E+02	Apriori clockrate (us/s)	-3.5200000E-07	Resid phdelay (usec)	4.98515E-06	+/-	3.2E-07
Delay rate (us/s)	-1.86798400350E-01	Apriori rate (us/s)	-1.86798407130E-01	Resid rate (us/s)	6.78019E-09	+/-	1.3E-09
Total phase (deg)	130.6	Apriori accel (us/s/s)	-5.60236238609E-06	Resid phase (deg)	154.6	+/-	9.9

ph/seg (deg)	60.6	RMS	23.7	Theor.	Amplitude	0.209 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	70.9	Search (2048X32)	0.197	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	17.8	Inc. seg. avg.	0.295	Inc. frq. avg.	0.210	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	24.9	Inc. frq. avg.	0.210			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

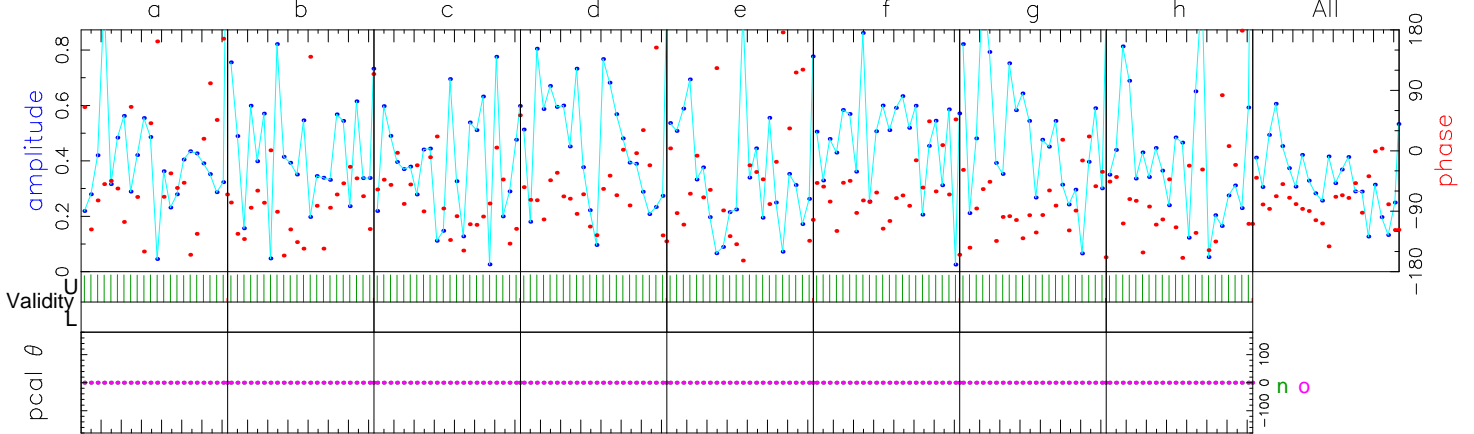
l: az 64.0 el 79.5 pa -110.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 1379.106 -525.514 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/lo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/lo.W.158.18UHQS



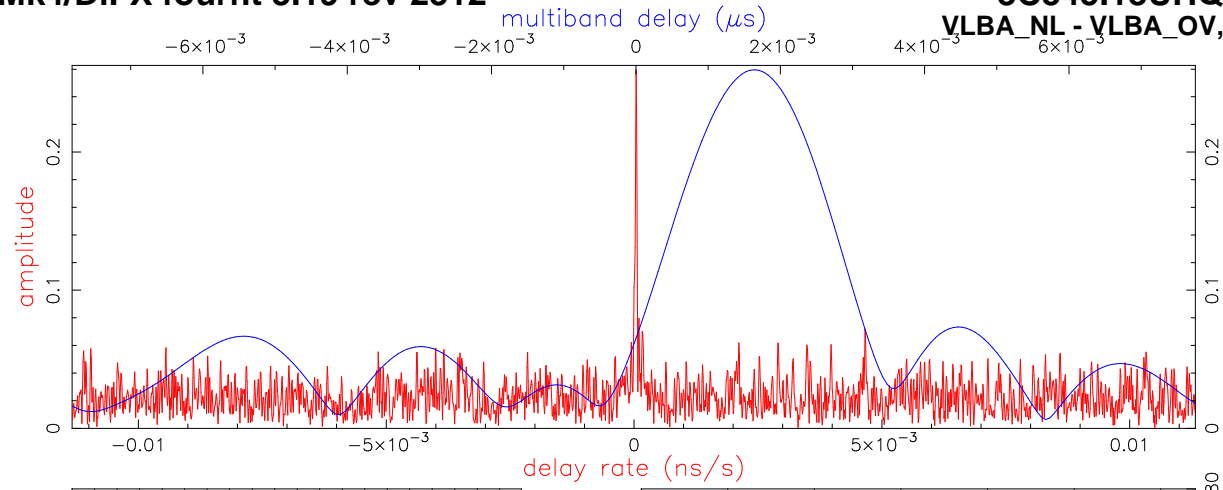
Fringe quality 9  
 SNR 16.1  
 Int time 410.443  
 Amp 0.291  
 Phase -74.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.001011  
 MBD 0.000480  
 Fringe rate (Hz) 0.003432  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.51  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143604  
 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
	-65.1	-91.4	-71.3	-61.5	-75.8	-64.8	-76.5	-88.3	Phase	-74.3
	0.2	0.3	0.3	0.4	0.2	0.4	0.4	0.3	Ampl.	0.3
	256.0	257.3	256.7	257.4	394.3	257.1	257.1	257.9	Sbd box	257.3
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.05460879975E+03		Apriori delay (usec)		1.05460832023E+03		Resid mbdelay (usec)		4.79516E-04	+/- 6.7E-05
Sband delay (usec)	1.05460933148E+03		Apriori clock (usec)		1.2200552E+01		Resid sbdelay (usec)		1.01125E-03	+/- 5.3E-04
Phase delay (usec)	1.05460831784E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-2.39456E-06	+/- 2.3E-07
Delay rate (us/s)	-4.28944246951E-01		Apriori rate (us/s)		-4.28944286793E-01		Resid rate (us/s)		3.98422E-08	+/- 9.5E-10
Total phase (deg)	179.5		Apriori accel (us/s/s)		-1.13771046849E-06		Resid phase (deg)		-74.3	+/- 7.1

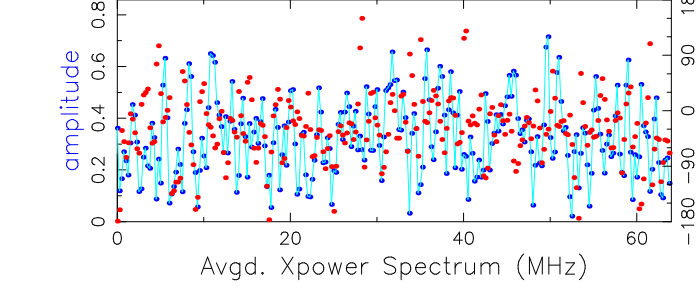
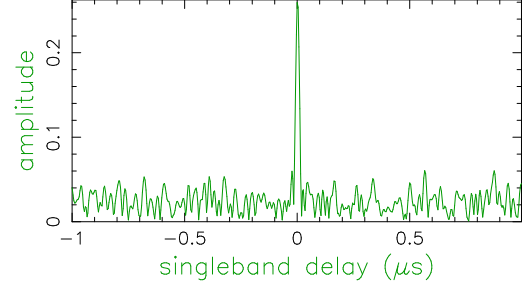
	RMS	Theor.	Amplitude	0.291 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	33.6	17.0	Search (2048X32)	0.278	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	41.1	29.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	11.8	10.1	Inc. seg. avg.	0.322	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	28.4	17.5	Inc. frq. avg.	0.290	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			



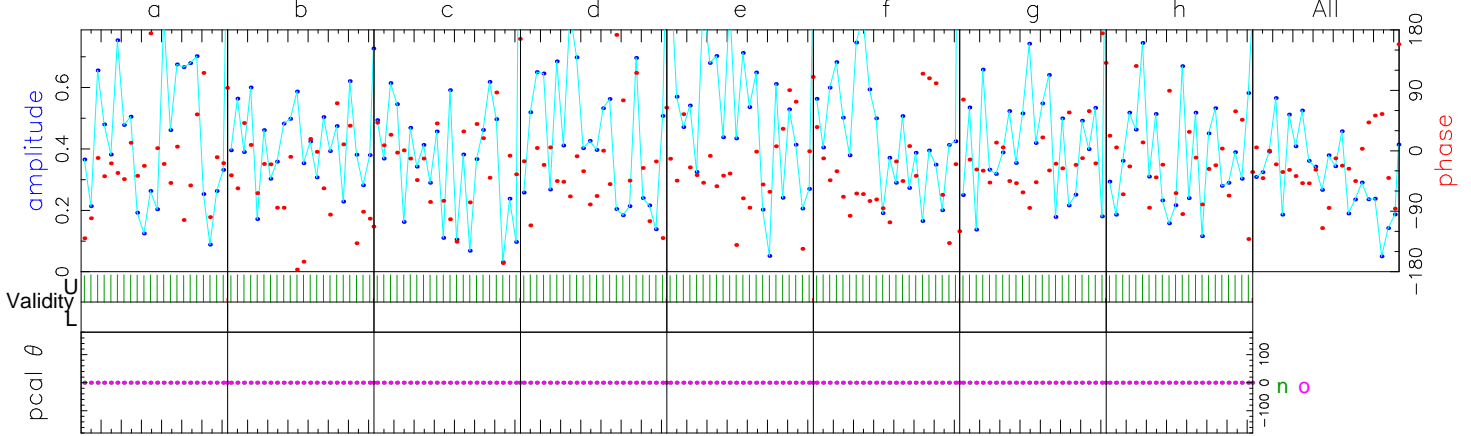
Fringe quality 9

SNR 14.6  
 Int time 410.441  
 Amp 0.263  
 Phase -28.8  
 PFD 3.3e-39  
 Delays (us)  
 SBD 0.001471  
 MBD 0.001670  
 Fringe rate (Hz) 0.003378  
 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  
 2020:199:143607  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

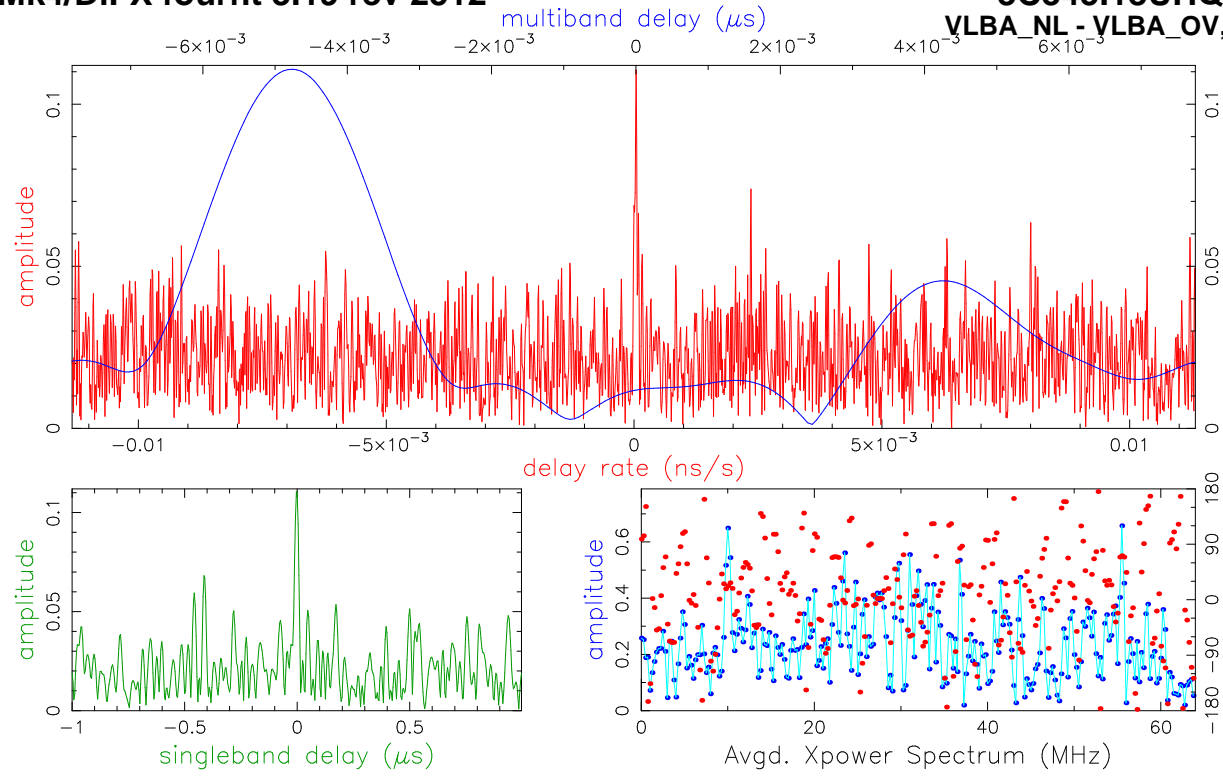


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
o	1000	1000	1000	1000	1000	1000	1000	1000		1000
n	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)	1.05460999044E+03				1.05460832023E+03				Resid mbdelay (usec)	1.67020E-03 +/- 7.5E-05
Sband delay (usec)	1.05460979073E+03				1.2200552E+01				Resid sbdelay (usec)	1.47050E-03 +/- 5.9E-04
Phase delay (usec)	1.05460831931E+03				1.3299997E-07				Resid phdelay (usec)	-9.28198E-07 +/- 2.5E-07
Delay rate (us/s)	-4.28944247574E-01				-4.28944286793E-01				Resid rate (us/s)	3.92194E-08 +/- 1.0E-09
Total phase (deg)		225.0			-1.13771046849E-06				Resid phase (deg)	-28.8 +/- 7.9

ph/seg (deg) 43.1 18.9 Search (2048X32) 0.263 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 52.7 32.9 Interp. 0.249 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.5 11.1 Inc. seg. avg. 0.300 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 18.3 19.4 Inc. frq. avg. 0.262 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 222.0 el 87.3 pa 44.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 3193.831 293.637 simultaneous interpolator

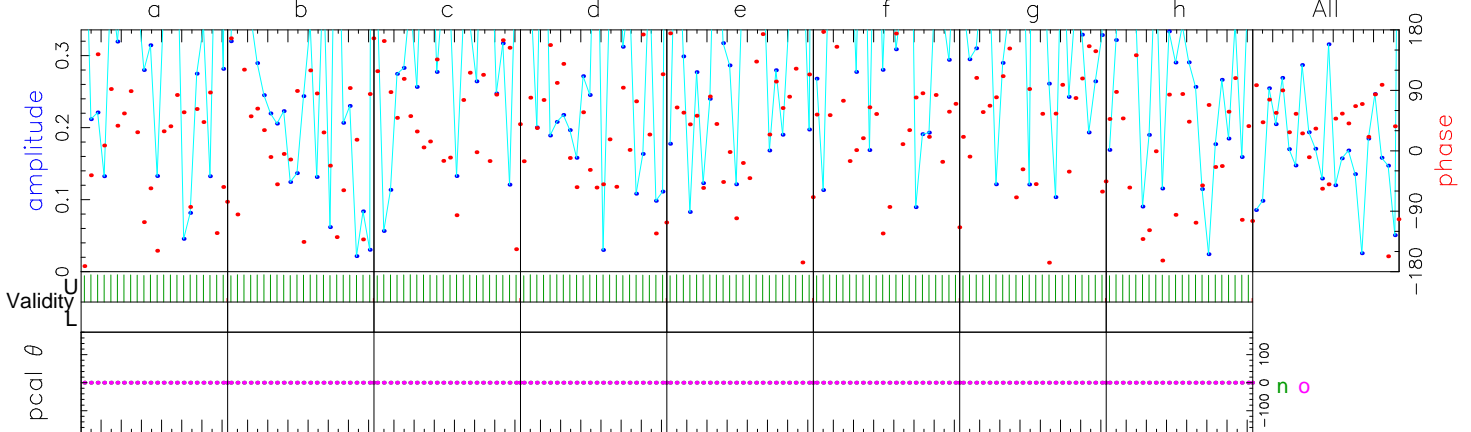


Fringe quality 0

SNR 6.2  
 Int time 410.441  
 Amp 0.112  
 Phase 43.9  
 PFD 1.4e-01  
 Delays (us)  
 SBD -0.002214  
 MBD -0.004688  
 Fringe rate (Hz) 0.003654  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

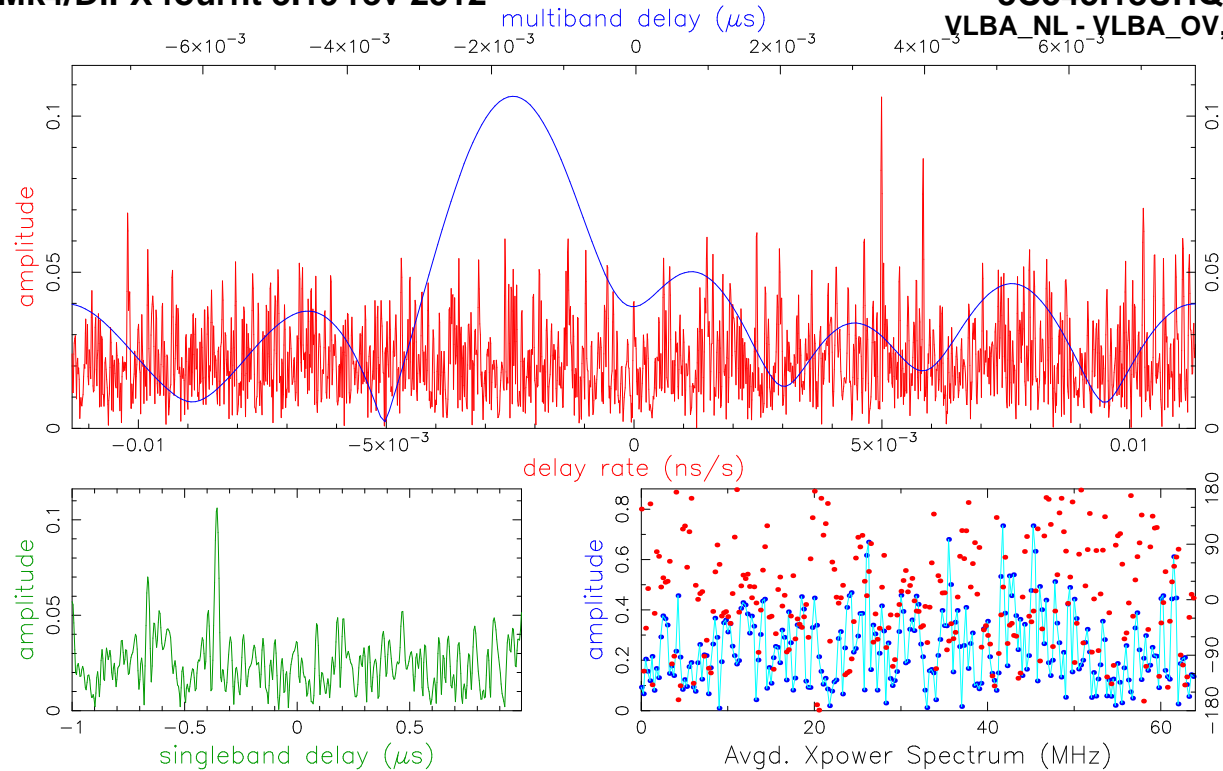
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.51  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143611  
 2020:014:135814  
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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
45.4	60.2	56.4	19.3	72.1	39.0	42.9	27.6	27.6	Phase	43.9
0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
8.0	140.0	229.2	310.8	46.9	254.7	180.2	127.1	127.1	Sbd box	256.4
U/L 819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000		
n 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)	1.05460363203E+03		Apriori delay (usec)	1.05460832023E+03		Resid mbdelay (usec)	-4.68820E-03	+/-	1.7E-04	
Sband delay (usec)	1.05460610623E+03		Apriori clock (usec)	1.2200552E+01		Resid sbdelay (usec)	-2.21400E-03	+/-	1.4E-03	
Phase delay (usec)	1.05460832165E+03		Apriori clockrate (us/s)	1.3299997E-07		Resid phdelay (usec)	1.41463E-06	+/-	6.0E-07	
Delay rate (us/s)	-4.28944244372E-01		Apriori rate (us/s)	-4.28944286793E-01		Resid rate (us/s)	4.24206E-08	+/-	2.5E-09	
Total phase (deg)		297.7	Apriori accel (us/s/s)	-1.13771046849E-06		Resid phase (deg)	43.9	+/-	18.5	

ph/seg (deg) 53.5 44.3 Search (2048X32) 0.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 92.9 77.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 18.8 26.1 Inc. seg. avg. 0.133 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.0 45.6 Inc. frq. avg. 0.104 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 222.0 el 87.3 pa 44.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 3193.831 293.637 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/no..18UHQS Output file: /Exps/c201b/v1/1234/No0057/no.W.178.18UHQS

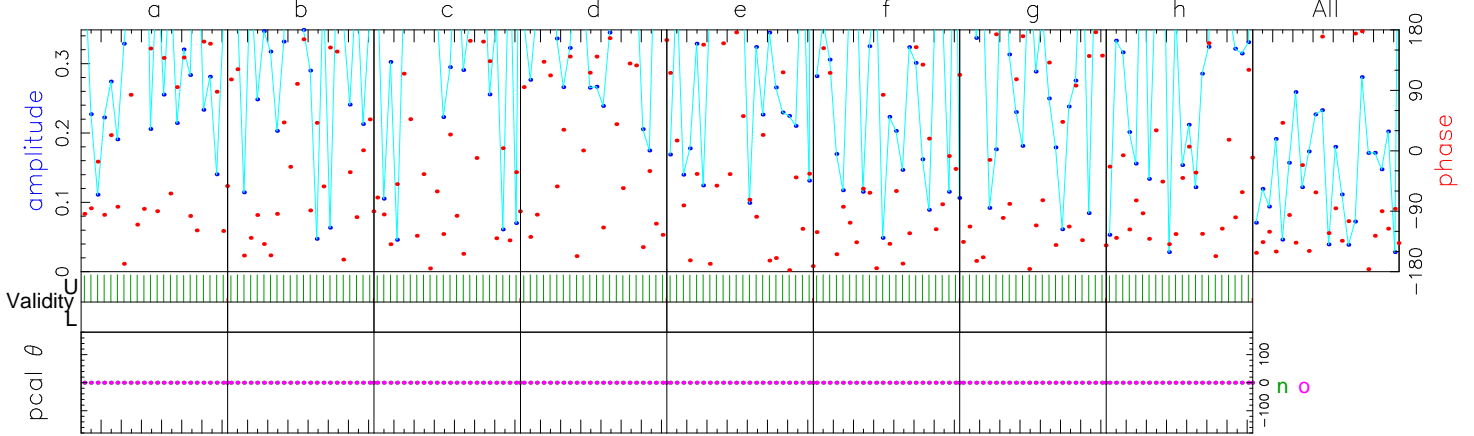


Fringe quality 0

SNR 5.9  
 Int time 410.442  
 Amp 0.116  
 Phase -131.4  
 PFD 5.3e-01  
 Delays (us)  
 SBD -0.356921  
 MBD -0.001774  
 Fringe rate (Hz) 0.431187  
 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  
 2020:199:143615  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

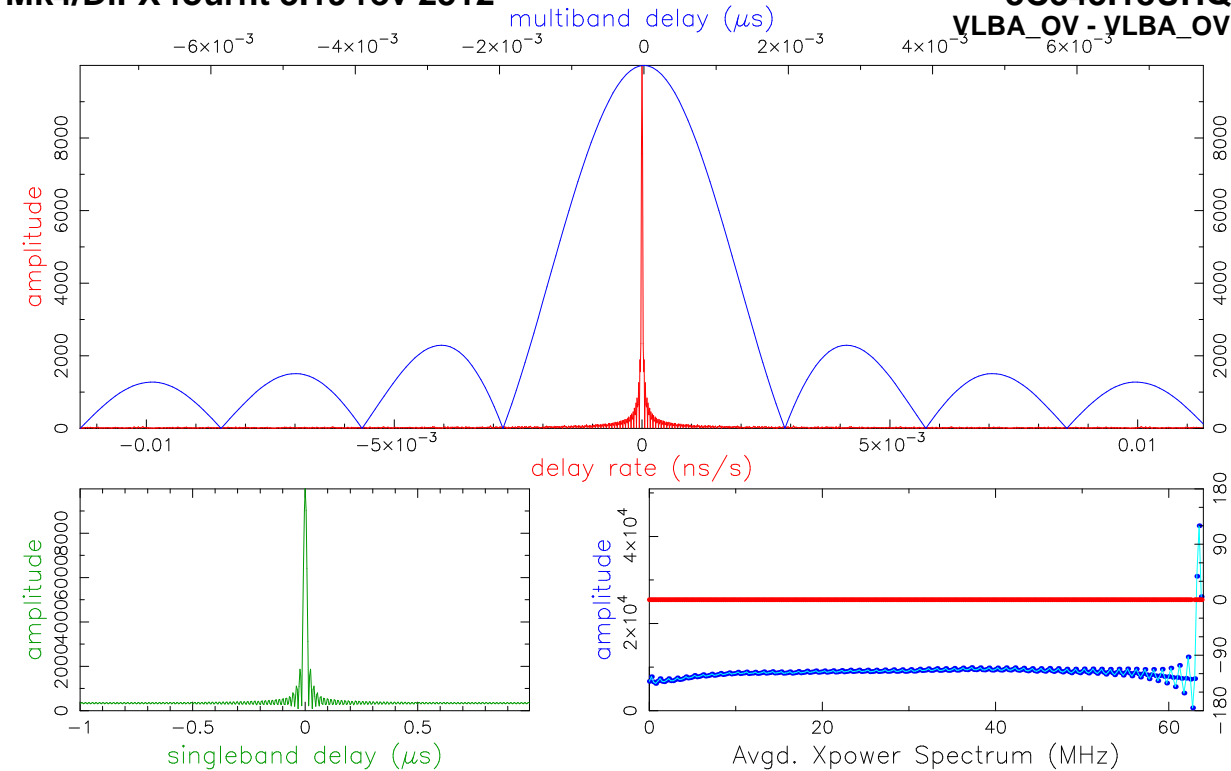
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-116.0	-146.4	-126.3	170.2	-140.9	-121.0	-149.8	-88.7	Phase	-131.4
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	443.5	297.1	415.2	263.8	163.1	302.8	165.8	255.1	Sbd box	165.6
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.05424717121E+03		Apriori delay (usec)		1.05460832023E+03		Resid mbdelay (usec)		-1.77403E-03	+/- 1.8E-04
Sband delay (usec)	1.05425139873E+03		Apriori clock (usec)		1.2200552E+01		Resid sbdelay (usec)		-3.56921E-01	+/- 1.5E-03
Phase delay (usec)	1.05460831600E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-4.23629E-06	+/- 6.2E-07
Delay rate (us/s)	-4.28939281142E-01		Apriori rate (us/s)		-4.28944286793E-01		Resid rate (us/s)		5.00565E-06	+/- 2.6E-09
Total phase (deg)	122.4		Apriori accel (us/s/s)		-1.13771046849E-06		Resid phase (deg)		-131.4	+/- 19.3

ph/seg (deg) 55.1 46.3 Amplitude 0.116 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 82.5 80.8 Search (2048X32) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.3 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 42.3 47.6 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 n: az 222.0 el 87.3 pa 44.3 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 3193.831 293.637 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/no..18UHQS Output file: /Exps/c201b/v1/1234/No0057/no.W.193.18UHQS simultaneous interpolator



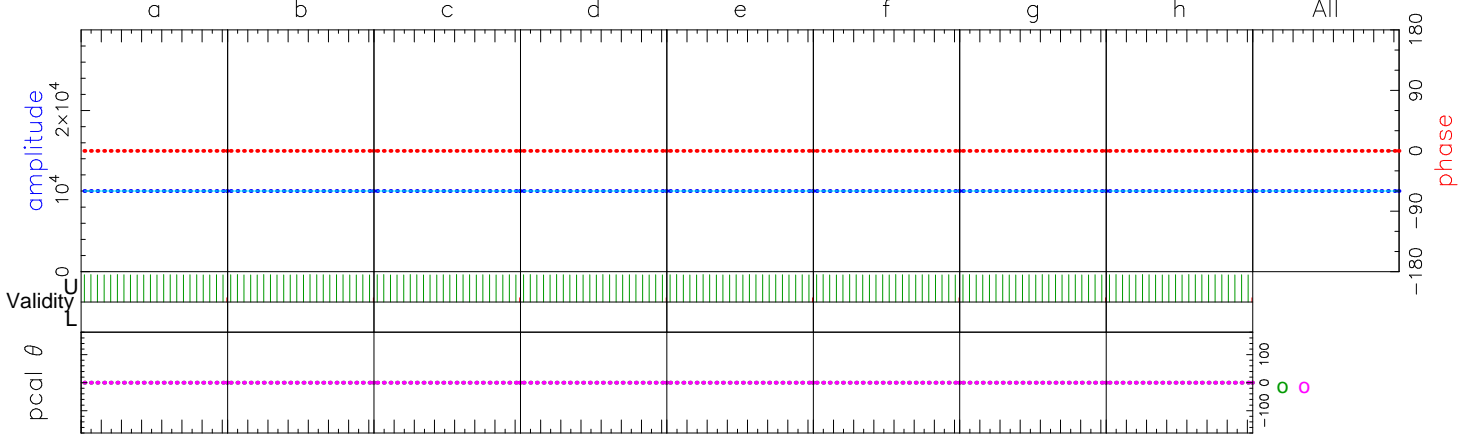


Fringe quality 9

SNR 557123.5  
Int time 415.057  
Amp 9999.998  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143607  
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



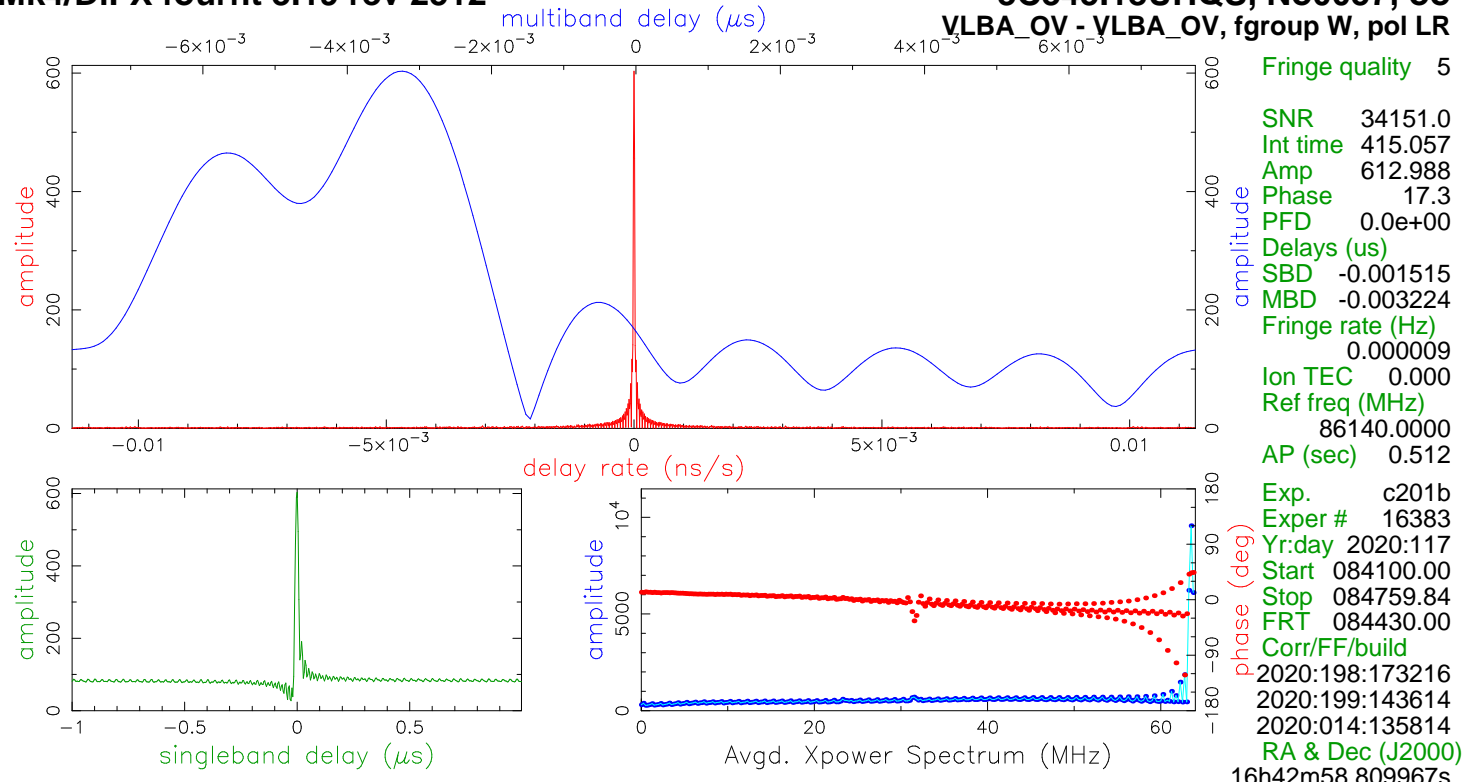
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
o	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
o	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	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	+/- 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	+/- 1.5E-08	
Phase delay (usec)	1.83201044708E-19	1.83201044708E-19	1.83201044708E-19	1.83201044708E-19	1.83201044708E-19	1.83201044708E-19	1.83201044708E-19	1.83201044708E-19	+/- 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	+/- 2.7E-14	
Total phase (deg)			0.0						0.0	+/- 0.0

RMS Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 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. 9999.998 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/oo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/oo.W.165.18UHQS

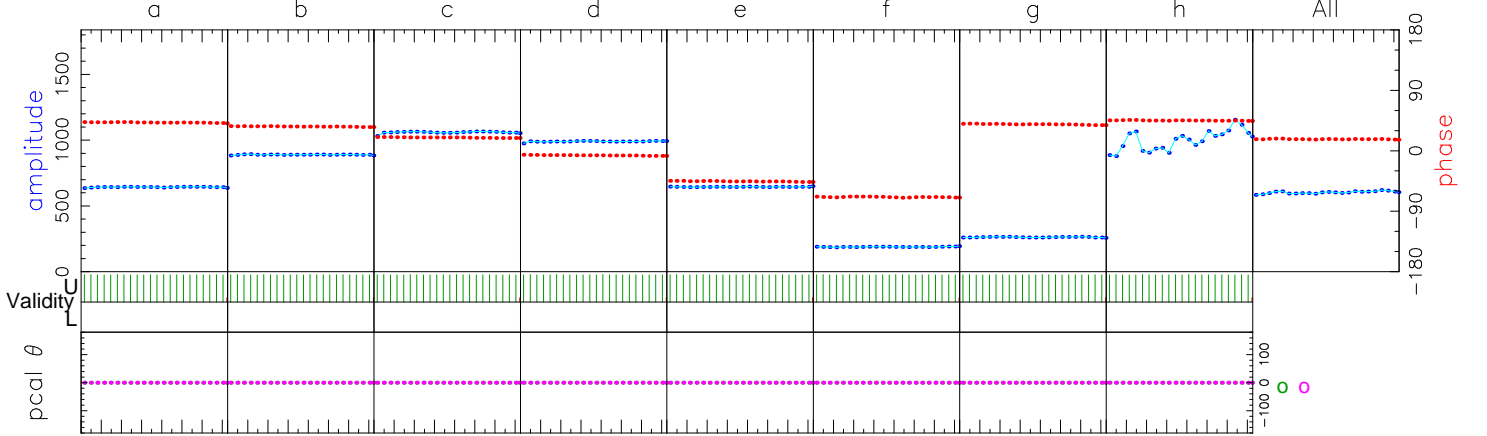


Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, oo  
VLBA\_OV - VLBA\_OV, fgroup W, pol LR



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
42.1	36.1	19.7	-6.8	-45.5	-68.8	39.4	45.1		Phase	17.3
643.5	889.6	1059.8	990.6	645.1	189.4	263.0	1000.0		Ampl.	710.1
256.4	255.6	255.9	255.7	255.8	255.0	255.9	256.9		Sbd box	256.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
o	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
o	1000	1000	1000	1000	1000	1000	1000		PC amp	
o	1000	1000	1000	1000	1000	1000	1000			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.22403125000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)	-3.22403E-03	+/-	3.2E-08
Sband delay (usec)	-1.51525000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)	-1.51525E-03	+/-	2.5E-07
Phase delay (usec)	5.57570701291E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)	5.57571E-07	+/-	1.1E-10
Delay rate (us/s)	1.07700758177E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)	1.07701E-10	+/-	4.5E-13
Total phase (deg)		17.3	Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)	17.3	+/-	0.0

ph/seg (deg) 0.4 0.0      Search (2048X32) 595.590      Pcal mode: MANUAL, MANUAL      PC period (AP's) 5, 5

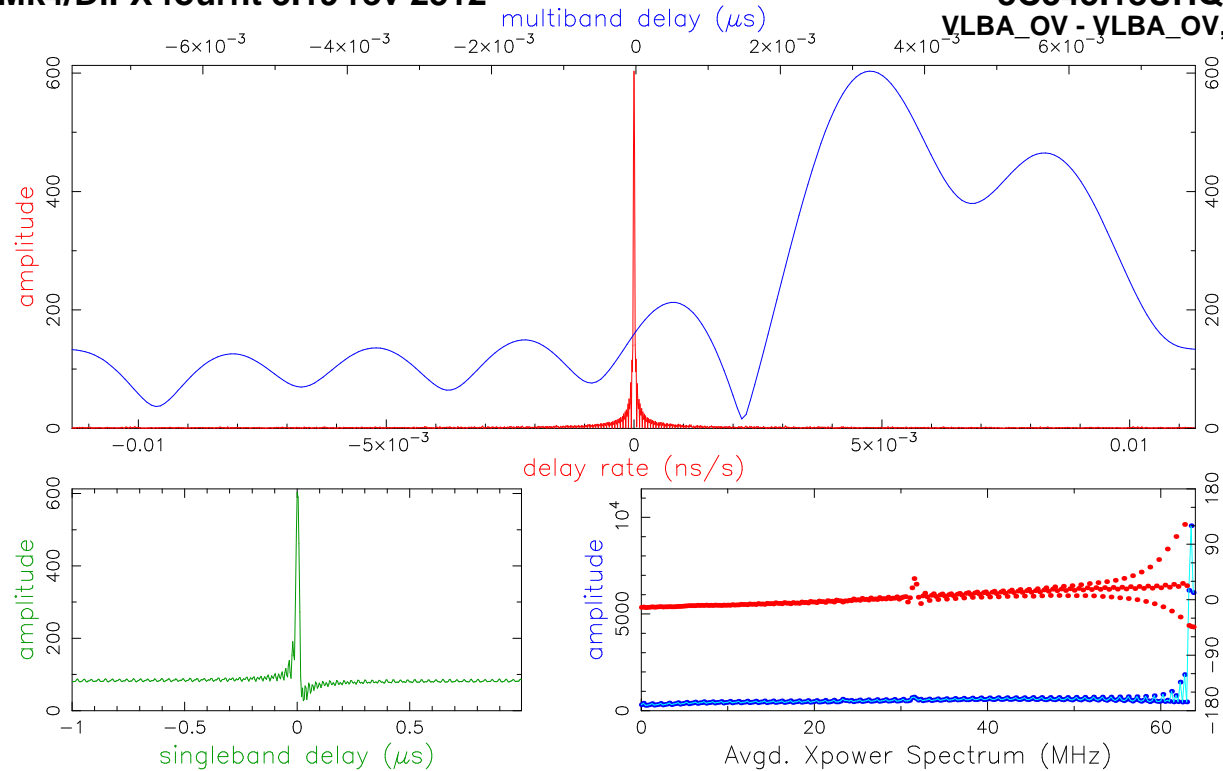
amp/seg (%) 2.1 0.0      Interp. 0.000      Pcal rate: 0.000E+00, 0.000E+00 (us/s)      sb window (us) -1.000 1.000

ph/frq (deg) 48.6 0.0      Inc. seg. avg. 603.276      Bits/sample: 2x2      SampCntNorm: enabled      mb window (us) -0.008 0.008

amp/frq (%) 53.9 0.0      Inc. frq. avg. 710.139      Sample rate(MISamp/s): 128      Data rate(Mb/s): 2048      nlags: 256      t\_cohere infinite      dr window (ns/s) -0.011 0.011

o: az 74.9 el 70.8 pa -89.6      o: az 74.9 el 70.8 pa -89.6      u,v (fr/asec) 0.000 0.000      ion window (TEC) 0.00 0.00      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0057/oo..18UHQS      Output file: /Exps/c201b/v1/1234/No0057/oo.W.189.18UHQS

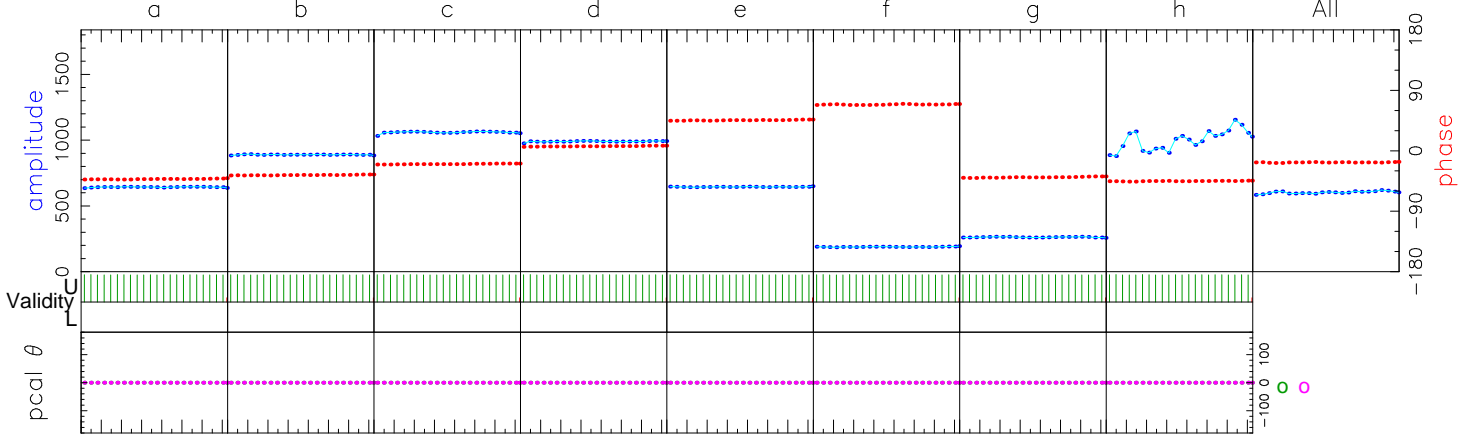


Fringe quality 5

SNR 34151.1  
Int time 415.056  
Amp 612.990  
Phase -17.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.001515  
MBD 0.003224  
Fringe rate (Hz)  
-0.000009  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

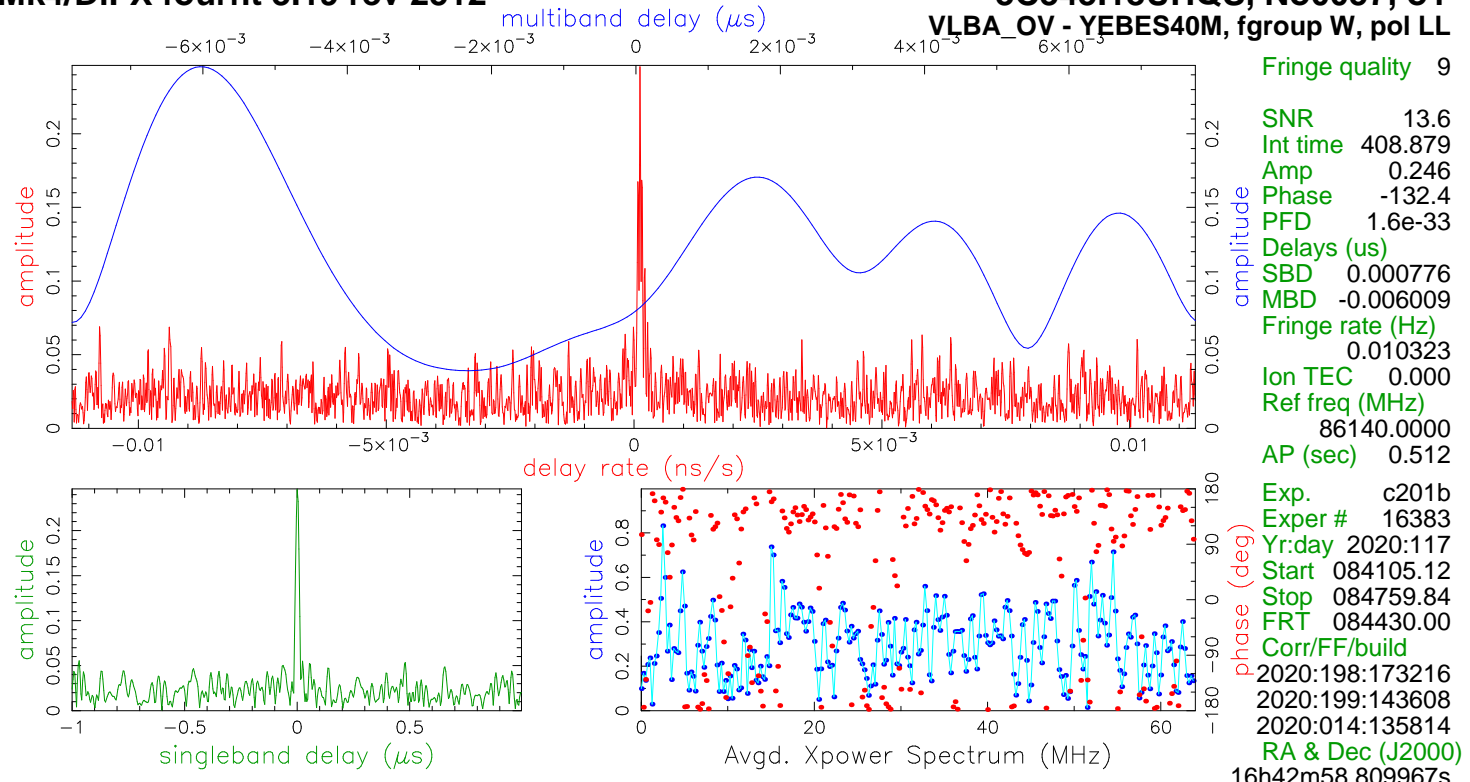
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143617  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

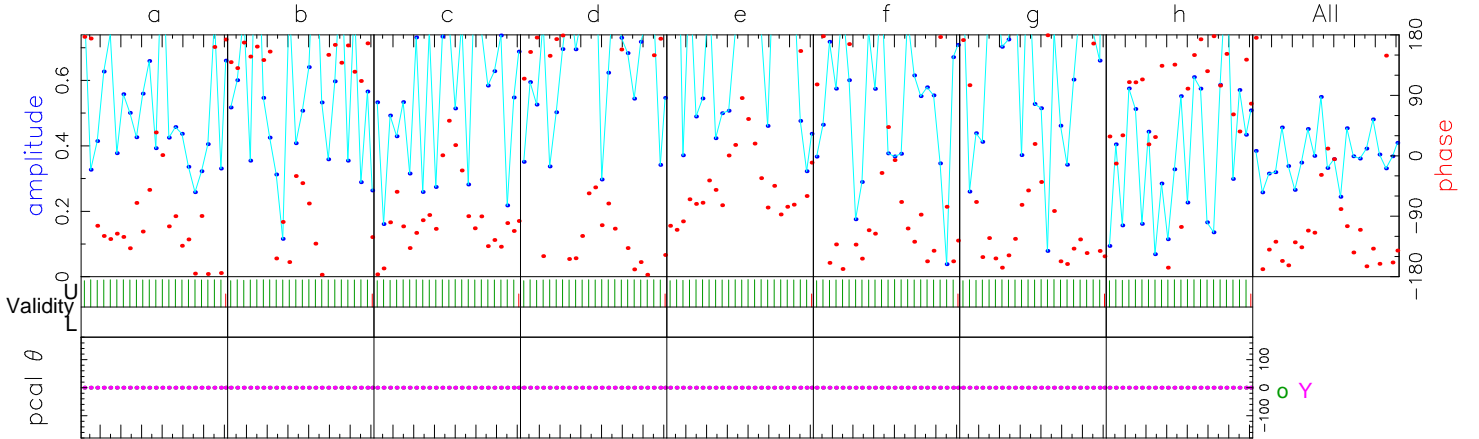


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.1	-36.1	-19.7	6.8	45.5	68.8	-39.4	-45.1	Phase	-17.3
	643.5	889.6	1059.8	990.6	645.1	189.4	263.0	1000.0	Ampl.	710.1
	257.6	258.4	258.1	258.3	258.2	259.0	258.1	257.1	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.22403125000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.22403E-03	+/- 3.2E-08
Sband delay (usec)	1.51525000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.51525E-03	+/- 2.5E-07
Phase delay (usec)	-5.57570701164E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.57571E-07	+/- 1.1E-10
Delay rate (us/s)	-1.07700758177E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.07701E-10	+/- 4.5E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-17.3	+/- 0.0

ph/seg (deg) 0.4 0.0 Search (2048X32) 595.592 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 2.1 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) 48.6 0.0 Inc. seg. avg. 603.278 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.9 0.0 Inc. frq. avg. 710.142 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 o: az 74.9 el 70.8 pa -89.6 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/oo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/oo.W.203.18UHQS



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
	-124.2	169.8	-95.2	-152.4	-56.2	-133.7	-133.2	116.7	Phase	-132.4
	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.2	Ampl.	0.3
	256.5	257.3	256.7	257.0	256.3	256.6	256.2	254.8	Sbd box	257.2
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

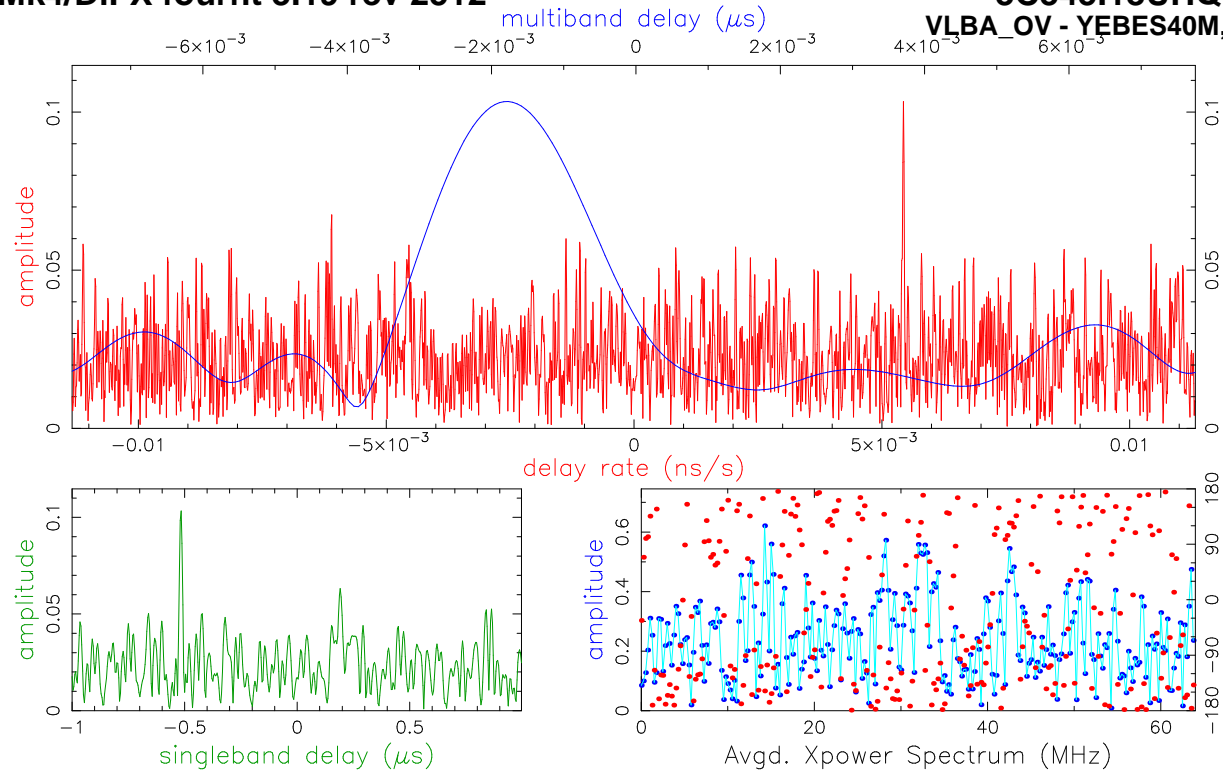
Group delay (usec)(sbd)	1.17985168014E+04	Apriori delay (usec)	1.17985228100E+04	Resid mbdelay (usec)	-6.00861E-03	+/-	8.0E-05
Sband delay (usec)	1.17985235862E+04	Apriori clock (usec)	8.1173506E+00	Resid sbdelay (usec)	7.76250E-04	+/-	6.3E-04
Phase delay (usec)	1.17985228057E+04	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	-4.27075E-06	+/-	2.7E-07
Delay rate (us/s)	1.28278362935E+00	Apriori rate (us/s)	1.28278350951E+00	Resid rate (us/s)	1.19845E-07	+/-	1.1E-09
Total phase (deg)	173.6	Apriori accel (us/s/s)	-6.59226741765E-05	Resid phase (deg)	-132.4	+/-	8.4

ph/seg (deg)	54.6	RMS	20.2	Theor.	0.246 +/- 0.018	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	58.0	Search (2048X32)	0.239	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	62.3	Inc. seg. avg.	0.348	Inc. frq. avg.	0.349	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.0	Inc. frq. avg.	0.349			Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

o: az 74.9 el 70.8 pa -89.6 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9698.650 -4470.183 simultaneous interpolator

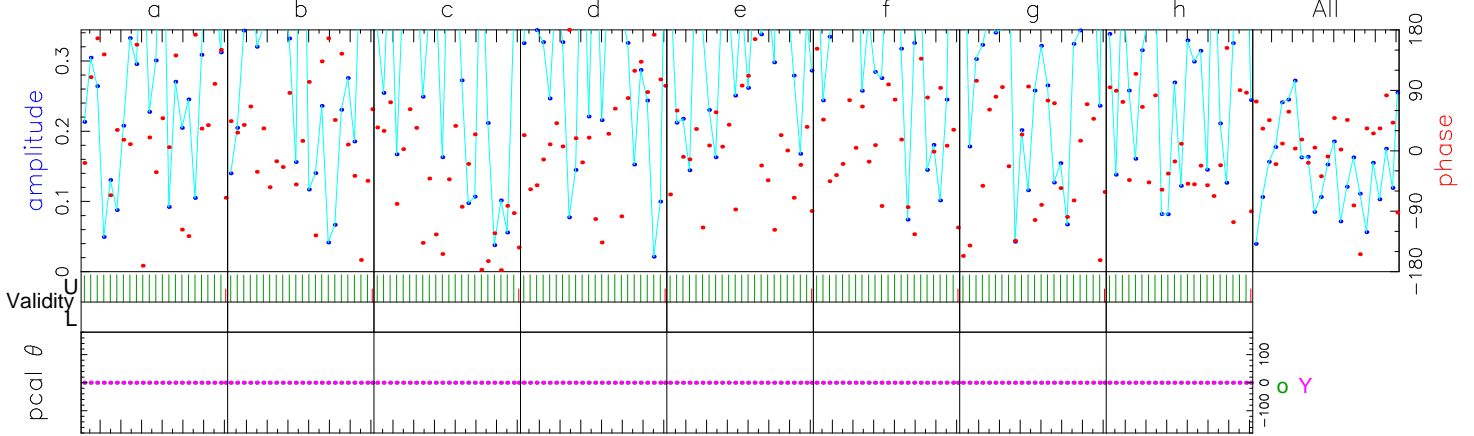
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/oY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/oY.W.168.18UHQS





Fringe quality 0  
 SNR 5.8  
 Int time 408.879  
 Amp 0.115  
 Phase 16.0  
 PFD 8.8e-01  
 Delays (us)  
 SBD -0.516702  
 MBD -0.001809  
 Fringe rate (Hz)  
 0.469137  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Yr:day 16383  
 Start 2020:117  
 Stop 2020:117  
 FRT 084105.12  
 FRT 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143616  
 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

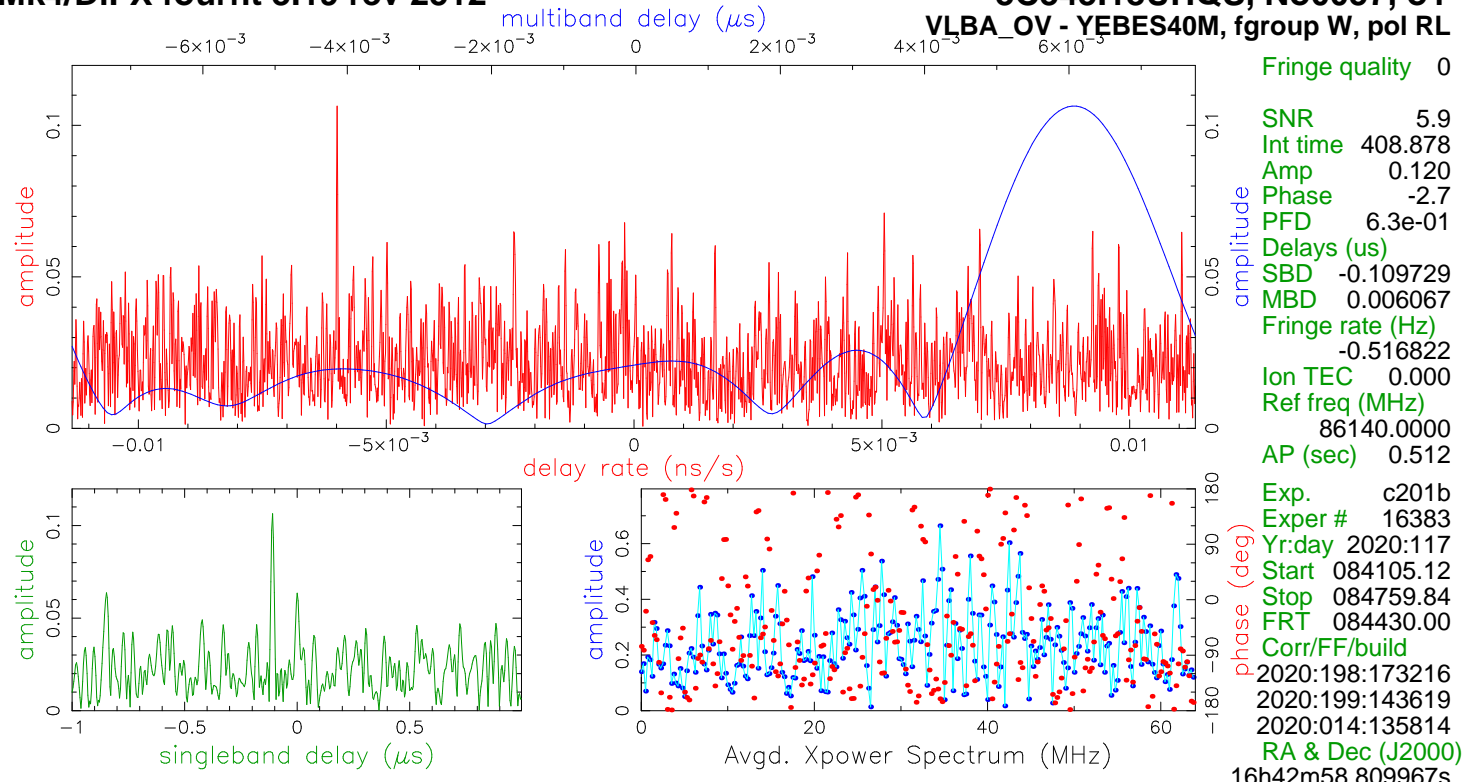


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

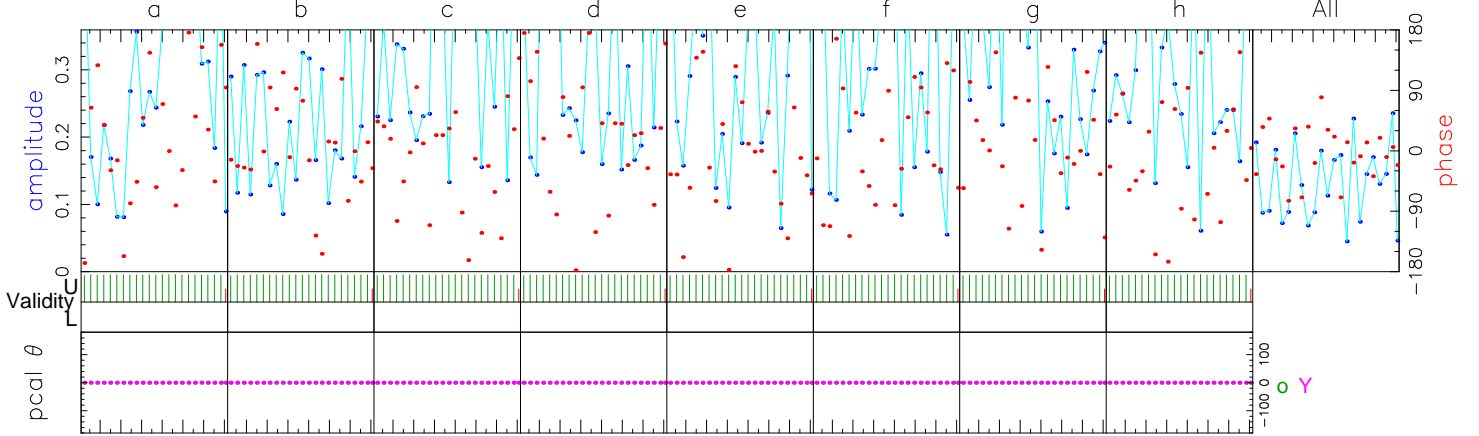
Group delay (usec)(sbd)	1.17980053762E+04	Apriori delay (usec)	1.17985228100E+04	Resid mbdelay (usec)	-1.80878E-03	+/-	1.9E-04
Sband delay (usec)	1.17980061080E+04	Apriori clock (usec)	8.1173506E+08	Resid sbdelay (usec)	-5.16702E-01	+/-	1.5E-03
Phase delay (usec)	1.17985228105E+04	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	5.14746E-07	+/-	6.4E-07
Delay rate (us/s)	1.28278895572E+00	Apriori rate (us/s)	1.28278350951E+00	Resid rate (us/s)	5.44621E-06	+/-	2.7E-09
Total phase (deg)	322.0	Apriori accel (us/s/s)	-6.59226741765E-05	Resid phase (deg)	16.0	+/-	19.9

ph/seg (deg)	53.5	Theor.	47.7	Amplitude	0.115 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	70.6		83.3	Search (2048X32)	0.102	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.1		28.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.4		49.1	Inc. seg. avg.	0.120	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.108	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

o: az 74.9 el 70.8 pa -89.6 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9698.650 -4470.183 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/oY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/oY.W.196.18UHQS



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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

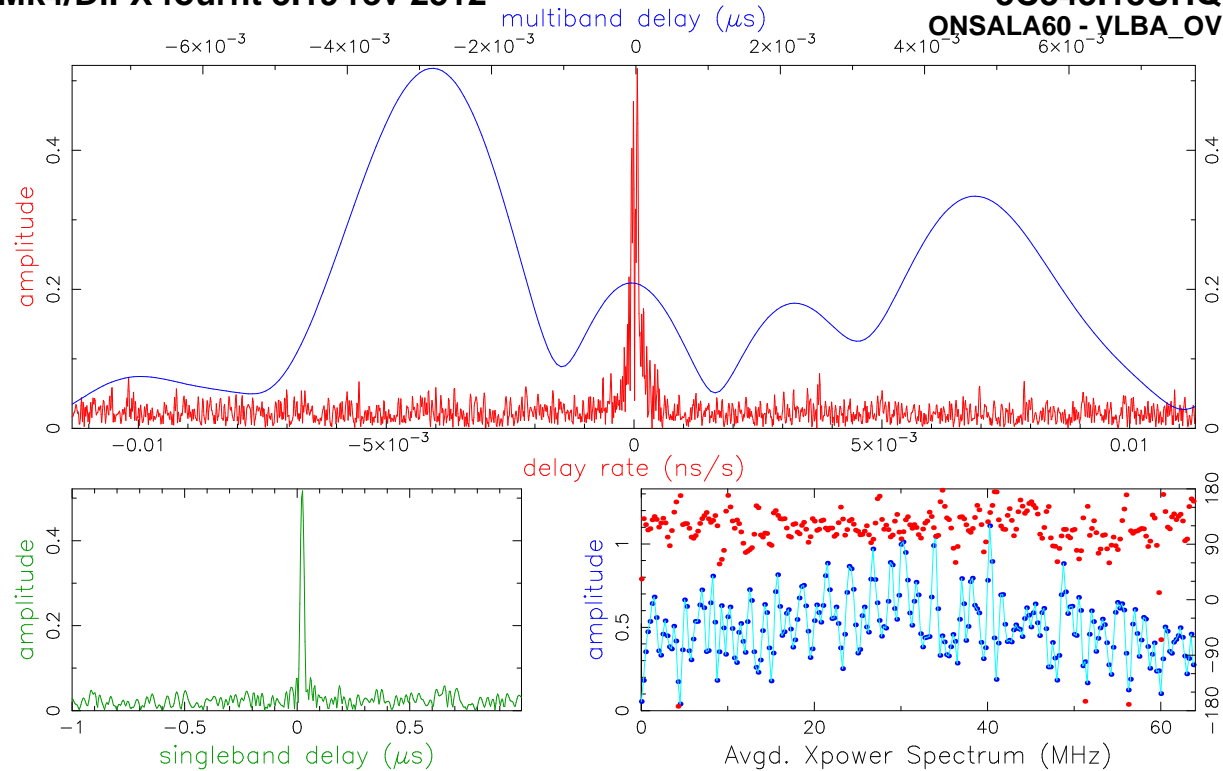
Group delay (usec)(sbd)	1.17984195019E+04	Apriori delay (usec)	1.17985228100E+04	Resid mbdelay (usec)	6.06695E-03	+/-	1.8E-04
Sband delay (usec)	1.17984130807E+04	Apriori clock (usec)	8.1173506E+00	Resid sbdelay (usec)	-1.09729E-01	+/-	1.5E-03
Phase delay (usec)	1.17985228099E+04	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	-8.66986E-08	+/-	6.3E-07
Delay rate (us/s)	1.28277750972E+00	Apriori rate (us/s)	1.28278350951E+00	Resid rate (us/s)	-5.99979E-06	+/-	2.6E-09
Total phase (deg)	303.4	Apriori accel (us/s/s)	-6.59226741765E-05	Resid phase (deg)	-2.7	+/-	19.5

ph/seg (deg)	38.8	Theor.	46.7	Amplitude	0.120 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	58.0		81.4	Search (2048X32)	0.105	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	10.0		27.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.8		48.0	Inc. seg. avg.	0.114	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.109	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

o: az 74.9 el 70.8 pa -89.6 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -9698.650 -4470.183 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/oY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/oY.W.209.18UHQS



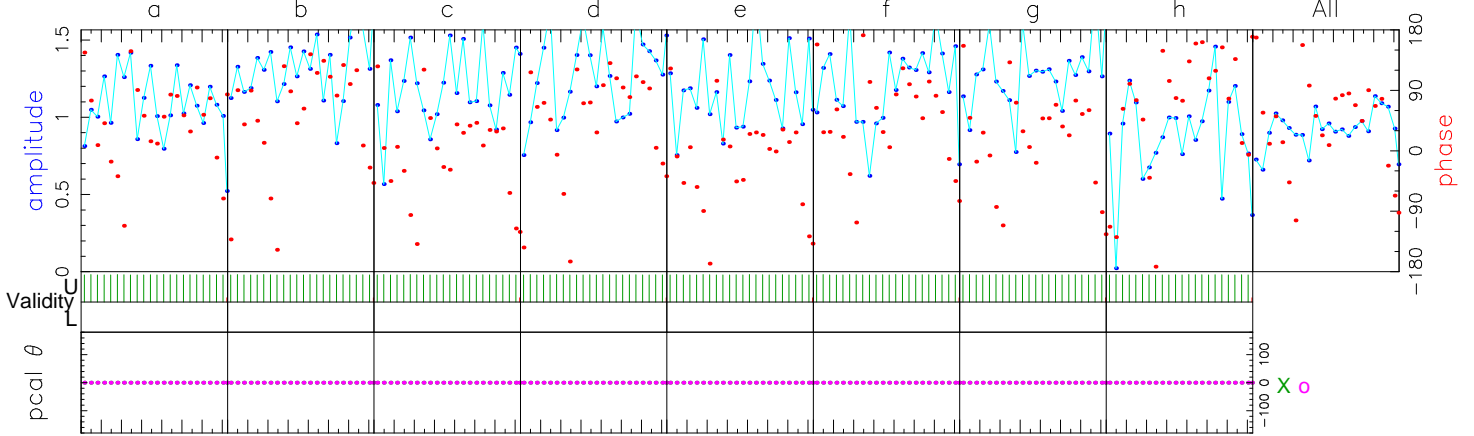


Fringe quality 4

SNR 29.1  
Int time 415.025  
Amp 0.522  
Phase 48.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.022224  
MBD -0.002856  
Fringe rate (Hz) 0.005870  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

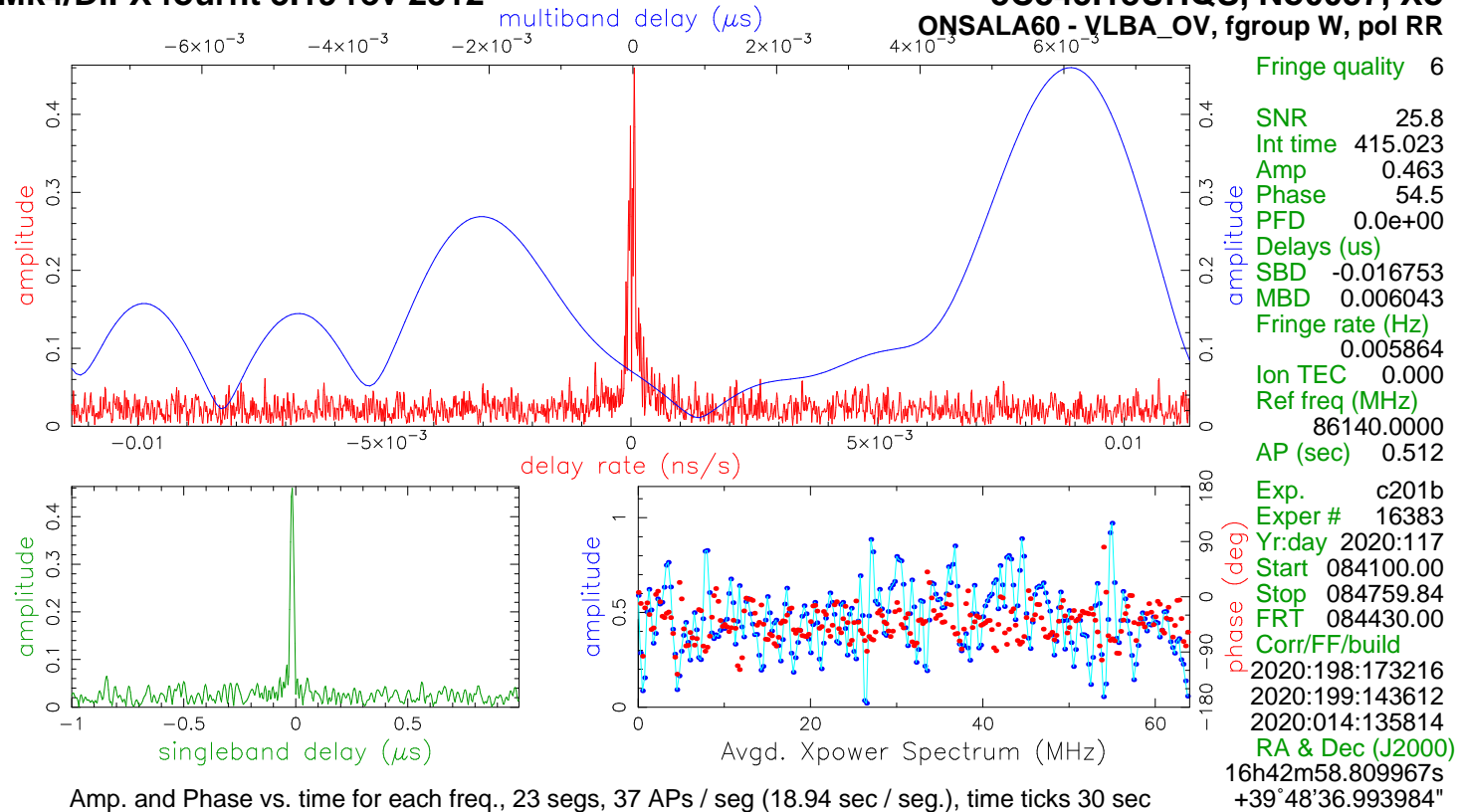
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143609  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

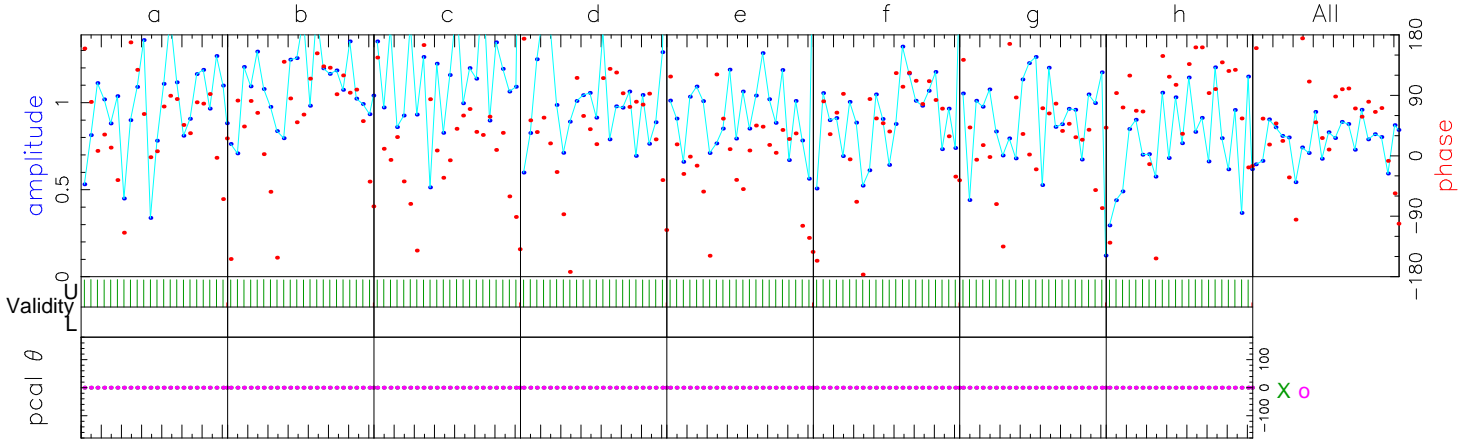


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	44.7	85.5	-1.2	79.3	-4.6	53.4	23.0	106.0	Phase	48.6
	0.6	0.7	0.6	0.8	0.6	0.7	0.7	0.5	Ampl.	0.6
	262.7	262.8	262.4	263.2	263.0	263.4	263.1	263.9	Sbd box	262.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.13067269411E+04		Apriori delay (usec)		-1.13067553354E+04		Resid mbdelay (usec)		-2.85572E-03	+/- 3.7E-05
Sband delay (usec)	-1.13067331116E+04		Apriori clock (usec)		2.0675604E+01		Resid sbdelay (usec)		2.22238E-02	+/- 3.0E-04
Phase delay (usec)	-1.13067553338E+04		Apriori clockrate (us/s)		3.2700001E-07		Resid phdelay (usec)		1.56763E-06	+/- 1.3E-07
Delay rate (us/s)	-9.91578258078E-01		Apriori rate (us/s)		-9.91578326227E-01		Resid rate (us/s)		6.81491E-08	+/- 5.2E-10
Total phase (deg)			Apriori accel (us/s/s)		7.73806406745E-05		Resid phase (deg)		48.6	+/- 3.9

ph/seg (deg) 65.1 9.4 Search (2048X32) 0.512 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 80.5 16.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 44.0 5.6 Inc. seg. avg. 0.914 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 26.9 9.7 Inc. frq. avg. 0.642 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
X: az 305.2 el 25.2 pa 32.9 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 7557.143 6564.701 simultaneous interpolator

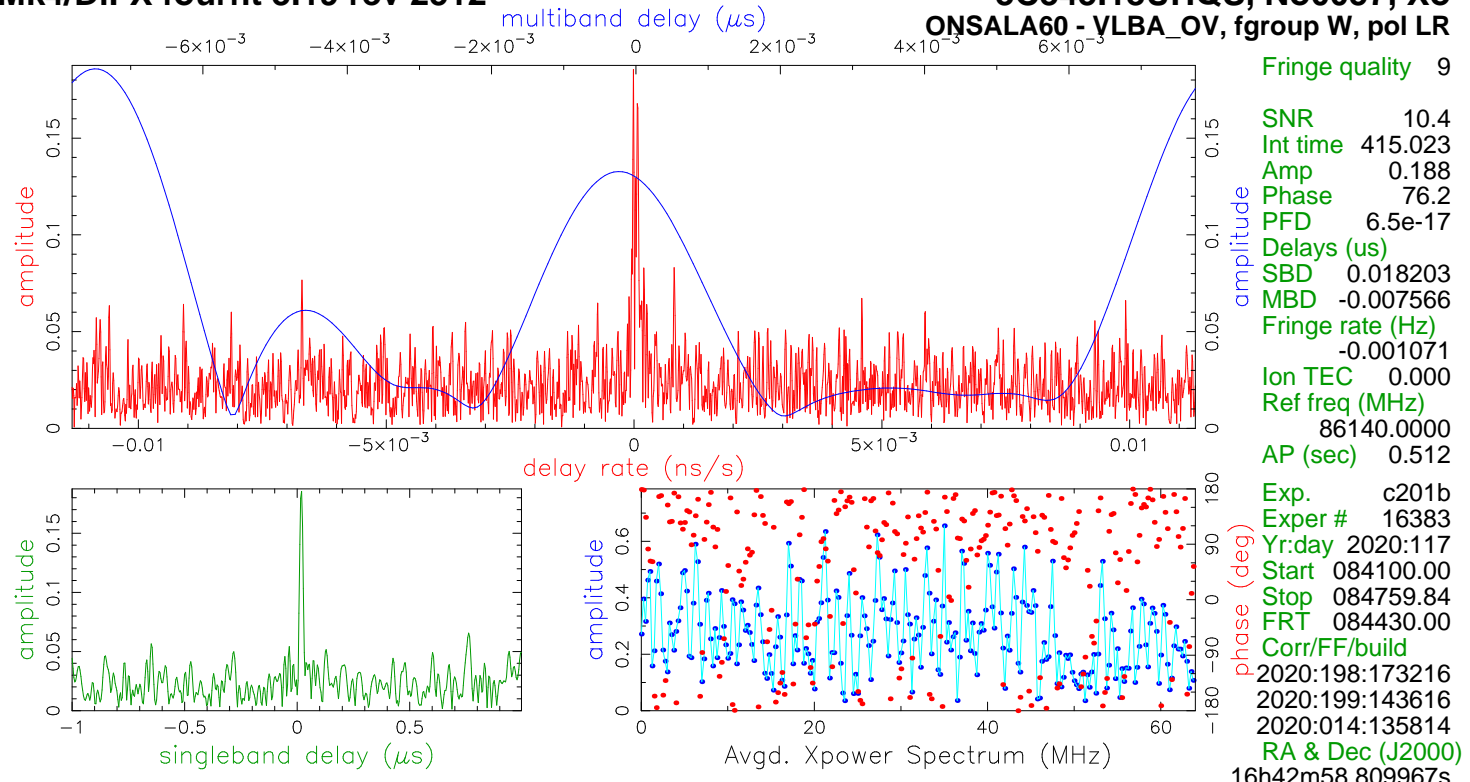


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

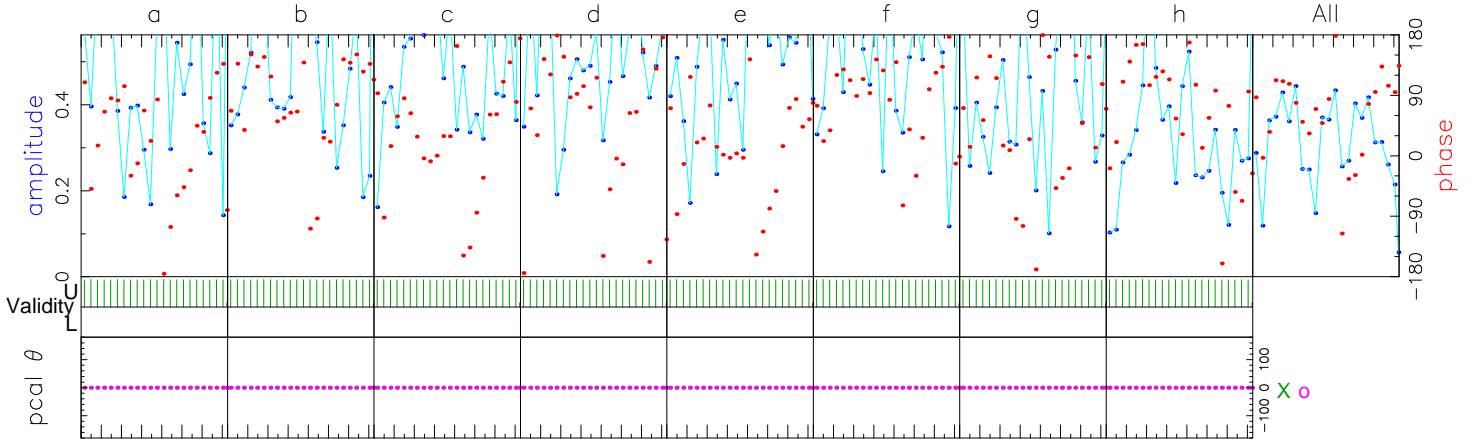


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	54.0	89.2	13.9	63.2	9.3	73.7	21.0	108.7	Phase	54.5
	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	Ampl.	0.5
	253.4	252.8	252.9	253.4	253.6	252.6	253.5	254.5	Sbd box	252.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-1.13067649171E+04			Apriori delay (usec)	-1.13067553354E+04			Resid mbdelay (usec)	6.04325E-03	+/- 4.2E-05
Sband delay (usec)	-1.13067720884E+04			Apriori clock (usec)	2.0675604E+01			Resid sbdelay (usec)	-1.67530E-02	+/- 3.3E-04
Phase delay (usec)	-1.13067553336E+04			Apriori clockrate (us/s)	3.2700001E-07			Resid phdelay (usec)	1.75875E-06	+/- 1.4E-07
Delay rate (us/s)	-9.91578258157E-01			Apriori rate (us/s)	-9.91578326227E-01			Resid rate (us/s)	6.80704E-08	+/- 5.9E-10
Total phase (deg)		-157.5		Apriori accel (us/s/s)	7.73806406745E-05			Resid phase (deg)	54.5	+/- 4.4

	RMS	Theor.	Amplitude	0.463 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	63.9	10.6	Search (2048X32)	0.448	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	73.3	18.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	39.6	6.3	Inc. seg. avg.	0.772	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	21.3	11.0	Inc. frq. avg.	0.547	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

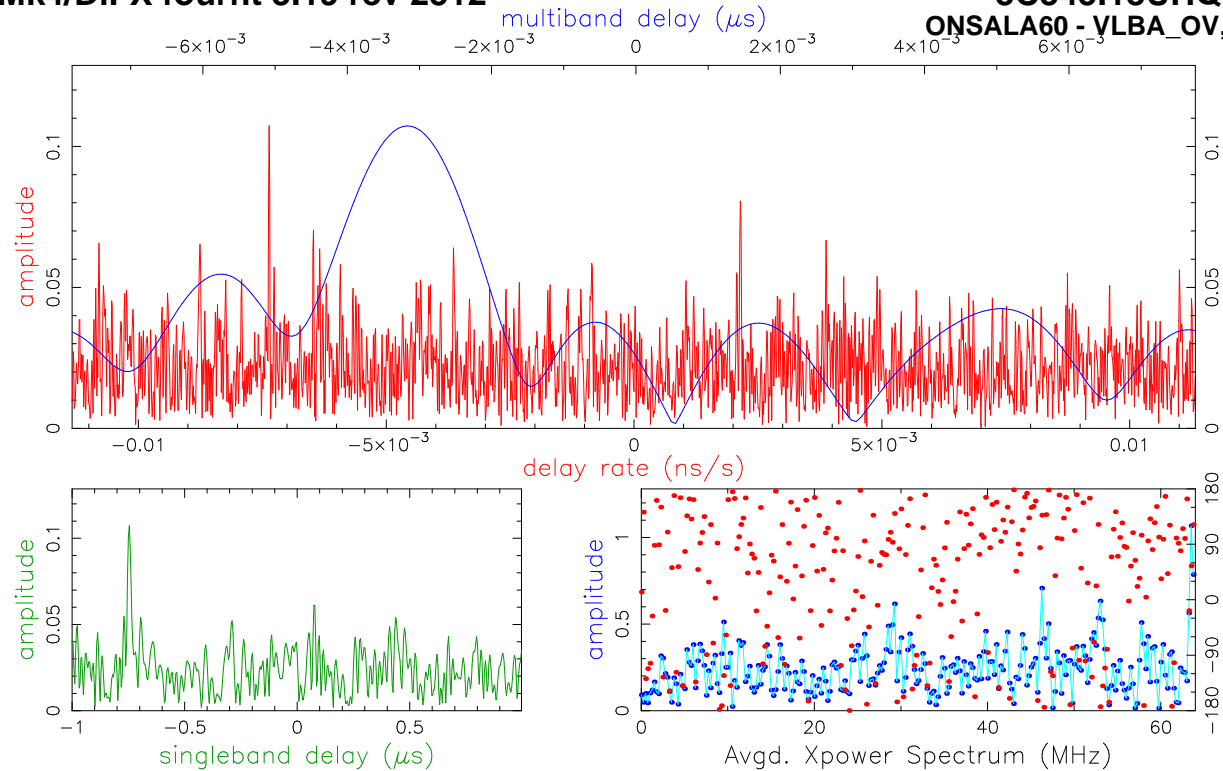


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



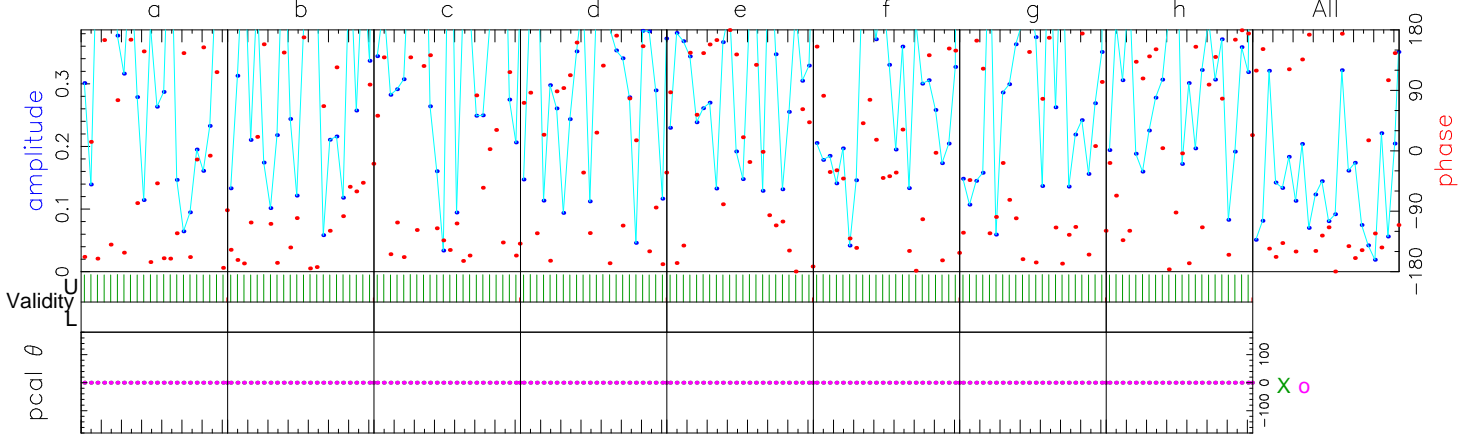
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	51.4	109.4	40.5	106.1	24.1	89.9	33.5	108.7		76.2
	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2		0.2
	262.9	261.7	261.0	261.7	262.2	262.2	236.1	376.8	Sbd box	261.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		-1.13067316517E+04		Apriori delay (usec)		-1.13067553354E+04		Resid mbdelay (usec)		-7.56632E-03 +/- 1.0E-04
Sband delay (usec)		-1.13067371321E+04		Apriori clock (usec)		2.0675604E+01		Resid sbdelay (usec)		1.82032E-02 +/- 8.2E-04
Phase delay (usec)		-1.13067553329E+04		Apriori clockrate (us/s)		3.2700001E-07		Resid phdelay (usec)		2.45853E-06 +/- 3.5E-07
Delay rate (us/s)		-9.91578338656E-01		Apriori rate (us/s)		-9.91578326227E-01		Resid rate (us/s)		-1.24281E-08 +/- 1.5E-09
Total phase (deg)			-135.8	Apriori accel (us/s/s)		7.73806406745E-05		Resid phase (deg)		76.2 +/- 11.0

	RMS	Theor.	Amplitude	0.188 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.0	26.3	Search (2048X32)	0.183	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	84.3	45.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	40.2	15.5	Inc. seg. avg.	0.287	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.6	27.1	Inc. frq. avg.	0.213	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			



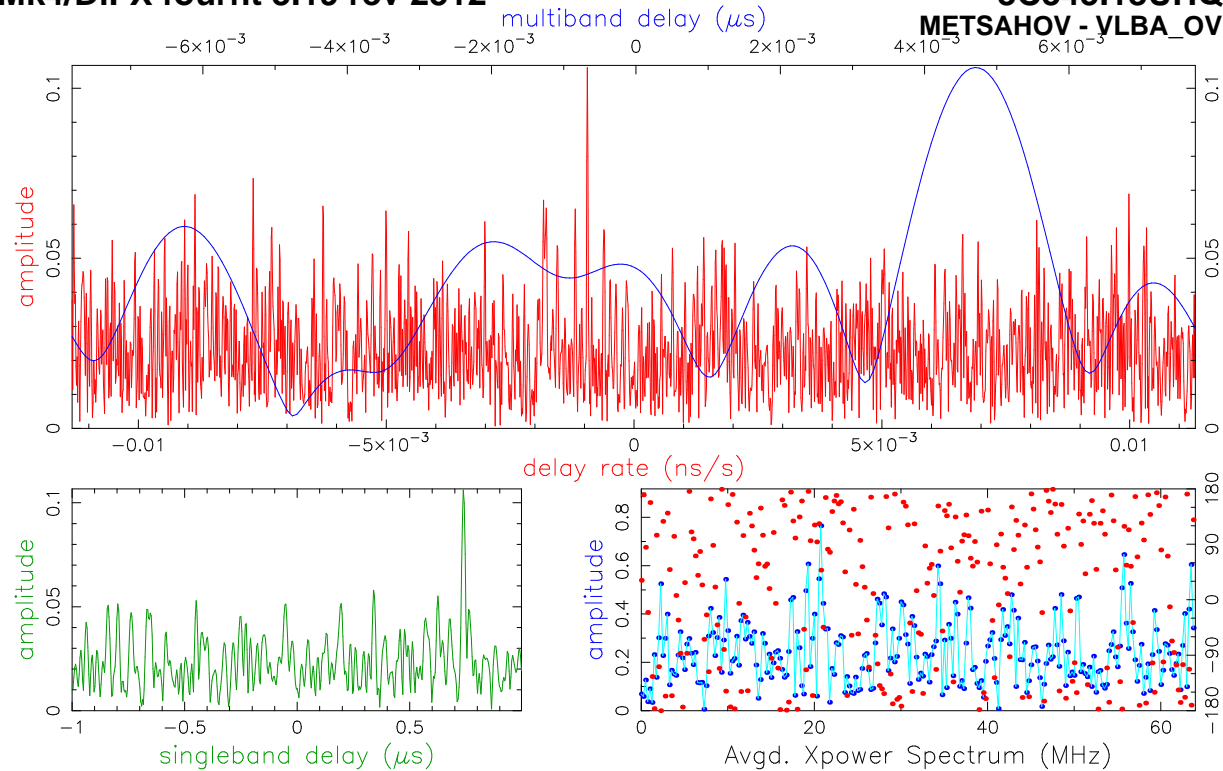
Fringe quality 0  
SNR 6.0  
Int time 415.025  
Amp 0.129  
Phase -169.6  
PFD 4.2e-01  
Delays (us)  
SBD -0.746701  
MBD -0.003185  
Fringe rate (Hz)  
-0.634844  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Yr:day 16383  
Start 2020:117  
Stop 2020:117  
FRT 084100.00  
084759.84  
084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143620  
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



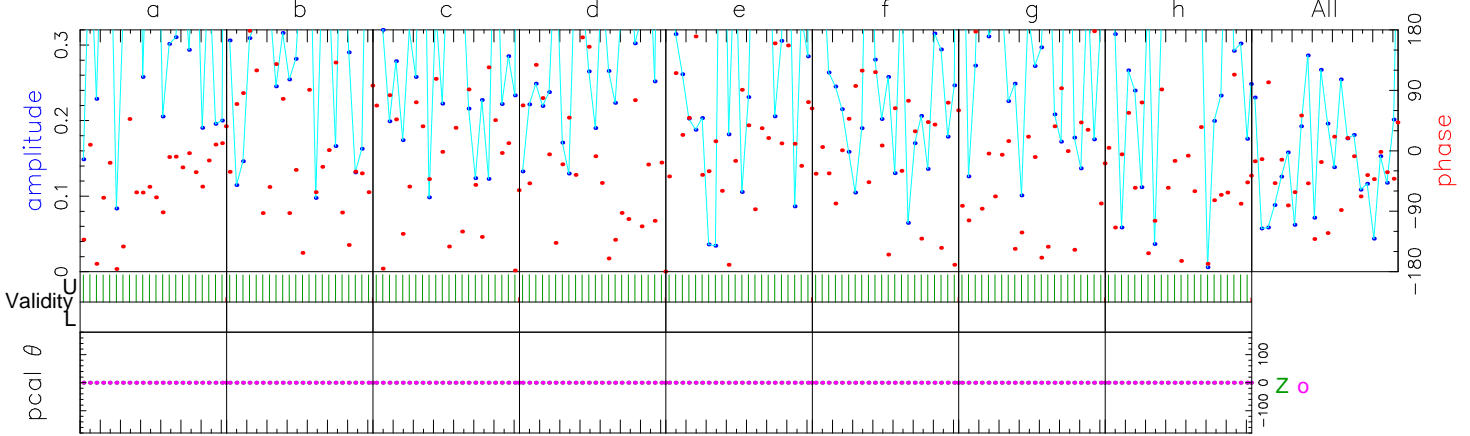
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.9	-154.5	-175.7	164.5	-179.0	17.0	-153.2	-170.7	Phase	-169.6
	0.2	0.1	0.2	0.1	0.1	0.0	0.2	0.1	Ampl.	0.1
	65.3	143.0	511.5	381.4	20.6	35.5	473.2	223.2	Sbd box	65.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.13075085201E+04		Apriori delay (usec)		-1.13067553354E+04		Resid mbdelay (usec)		-3.18475E-03	+/- 1.8E-04
Sband delay (usec)	-1.13075020359E+04		Apriori clock (usec)		2.0675604E+01		Resid sbdelay (usec)		-7.46701E-01	+/- 1.4E-03
Phase delay (usec)	-1.13067553408E+04		Apriori clockrate (us/s)		3.2700001E-07		Resid phdelay (usec)		-5.47066E-06	+/- 6.2E-07
Delay rate (us/s)	-9.91585696132E-01		Apriori rate (us/s)		-9.91578326227E-01		Resid rate (us/s)		-7.36990E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		7.73806406745E-05		Resid phase (deg)		-169.6	+/- 19.1

ph/seg (deg) 55.1 45.9 Search (2048X32) 0.129 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 81.7 80.1 Interp. 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 72.3 27.1 Inc. seg. avg. 0.126 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 45.1 47.2 Inc. frq. avg. 0.127 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
X: az 305.2 el 25.2 pa 32.9 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 7557.143 6564.701 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Xo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Xo.W.211.18UHQS



Fringe quality 0  
 SNR 5.9  
 Int time 414.670  
 Amp 0.107  
 Phase -30.8  
 PFD 5.5e-01  
 Delays (us)  
 SBD 0.738983  
 MBD 0.004726  
 Fringe rate (Hz)  
 -0.081650  
 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  
 2020:199:143611  
 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

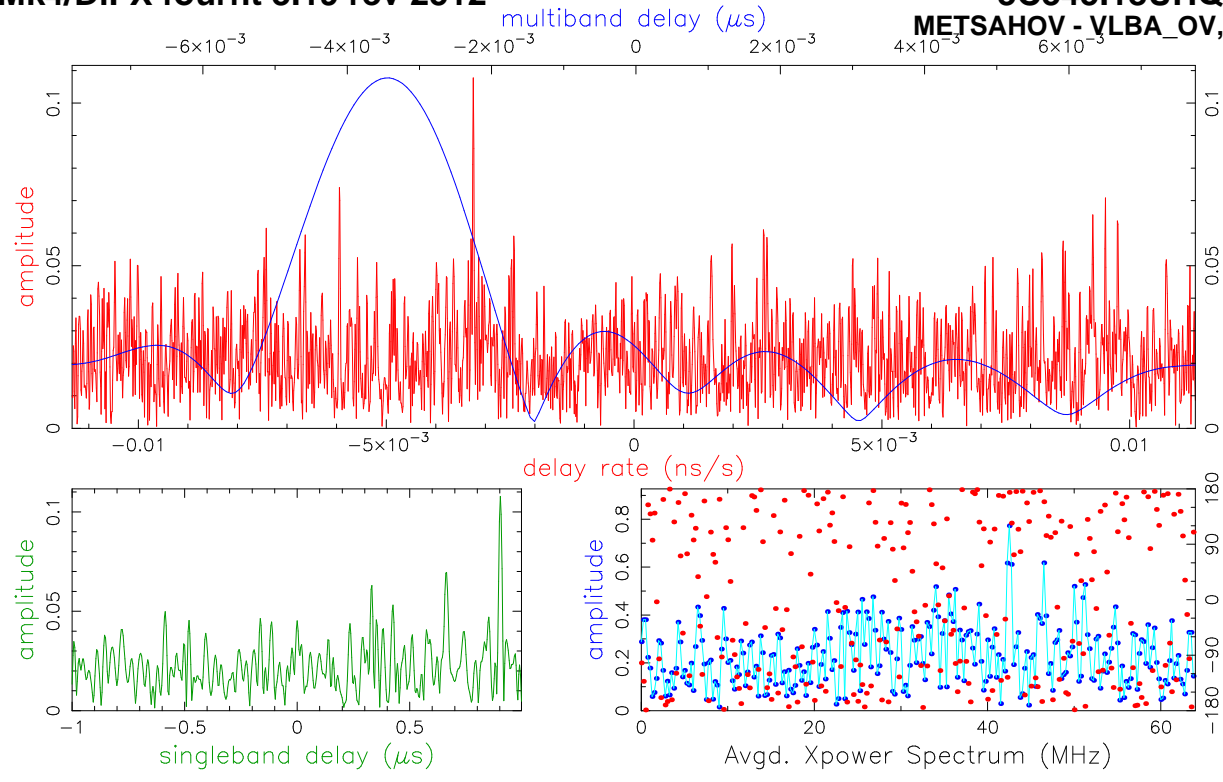


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.3	-60.7	44.0	-65.2	3.7	-6.6	-52.4	-43.4	Phase	-30.8
	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	445.4	111.2	21.3	29.6	343.2	370.1	264.8	155.1	Sbd box	446.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.24242190030E+04	Apriori delay (usec)	-1.24249581035E+04	Resid mbdelay (usec)	4.72555E-03	+/-	1.8E-04
Sband delay (usec)	-1.24242191208E+04	Apriori clock (usec)	-2.0207802E+01	Resid sbdelay (usec)	7.38983E-01	+/-	1.5E-03
Phase delay (usec)	-1.24249581045E+04	Apriori clockrate (us/s)	-1.8500001E-07	Resid phdelay (usec)	-9.93626E-07	+/-	6.2E-07
Delay rate (us/s)	-8.92748419759E-01	Apriori rate (us/s)	-8.92747471878E-01	Resid rate (us/s)	-9.47881E-07	+/-	2.6E-09
Total phase (deg)	-44.4	Apriori accel (us/s/s)	8.49566413525E-05	Resid phase (deg)	-30.8	+/-	19.3

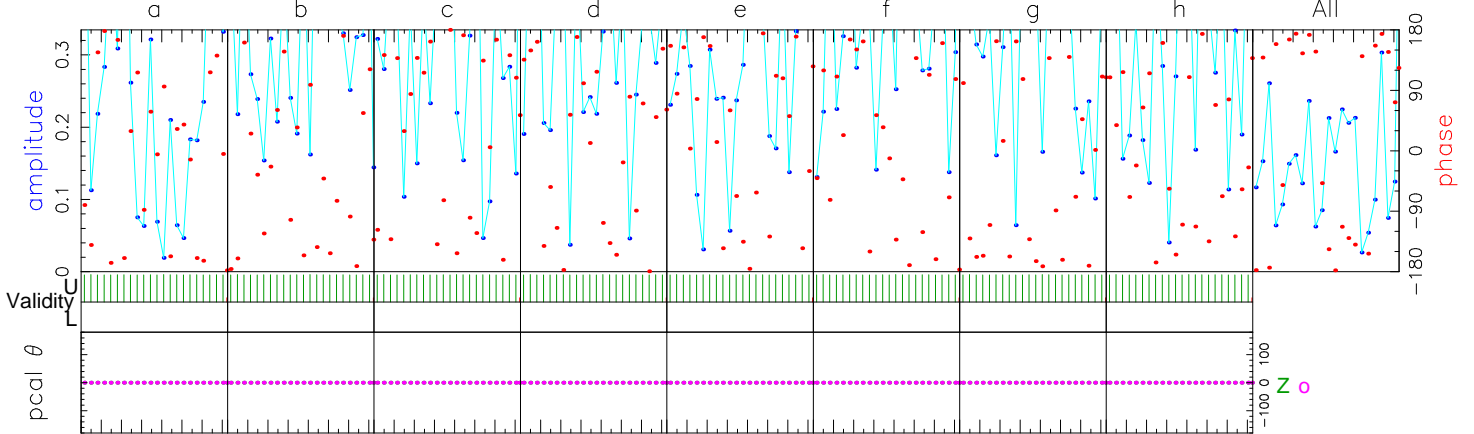
	RMS	Theor.	Amplitude	0.107 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	52.2	46.4	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	81.9	80.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	41.1	27.3	Inc. seg. avg.	0.114	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	53.9	47.7	Inc. frq. avg.	0.111	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00

Z: az 313.1 el 22.0 pa 29.0 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 6837.662 7245.088 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Zo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Zo.W.179.18UHQS



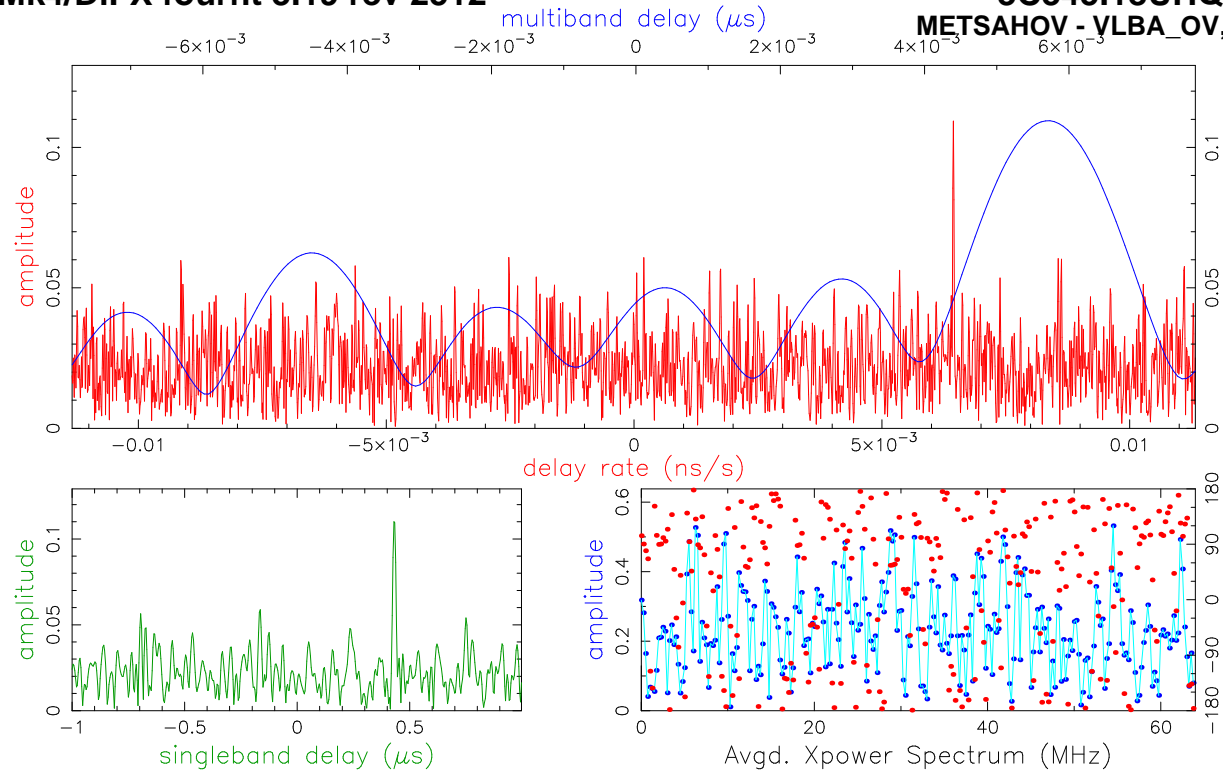
Fringe quality 0  
 SNR 6.0  
 Int time 414.668  
 Amp 0.112  
 Phase -175.3  
 PFD 3.9e-01  
 Delays (us)  
 SBD 0.902704  
 MBD -0.003442  
 Fringe rate (Hz)  
 -0.280316  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143615  
 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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.24240552953E+04				-1.24249581035E+04					
Sband delay (usec)	-1.24240554000E+04				-2.0207802E+01					
Phase delay (usec)	-1.24249581092E+04				-1.8500001E-07					
Delay rate (us/s)	-8.92750726066E-01				-8.92747471878E-01					
Total phase (deg)			-188.9		8.49566413525E-05					
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)										

ph/seg (deg) 53.8 45.8  
 amp/seg (%) 81.4 79.9  
 ph/frq (deg) 11.6 27.0  
 amp/frq (%) 35.1 47.1  
 Z: az 313.1 el 22.0 pa 29.0  
 o: az 74.9 el 70.8 pa -89.6  
 u,v (fr/asec) 6837.662 7245.088  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Zo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Zo.W.194.18UHQS  
 simultaneous interpolator

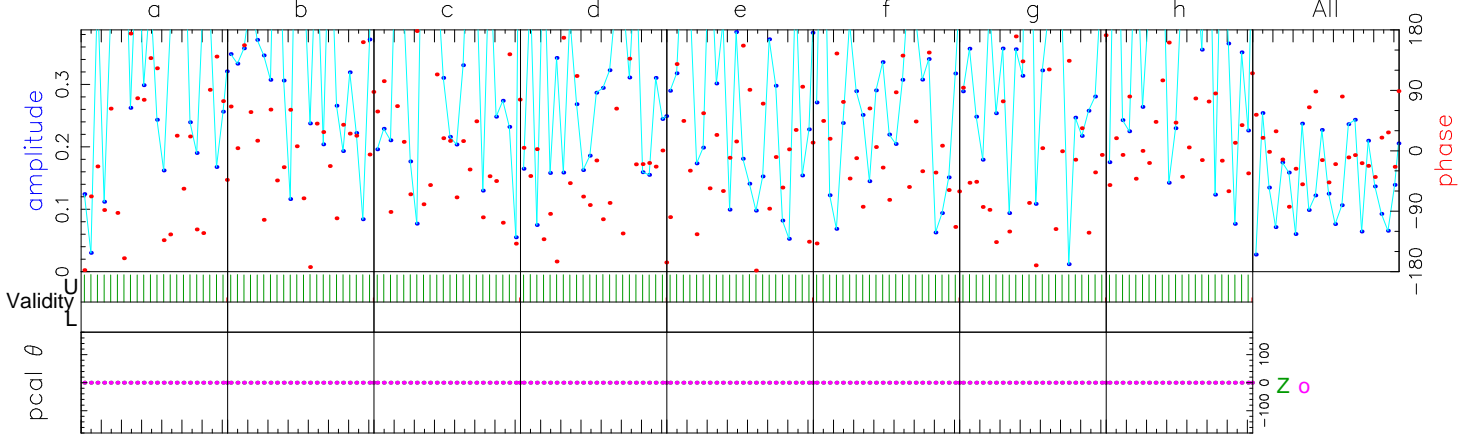


Fringe quality 0

SNR 6.3  
 Int time 414.668  
 Amp 0.129  
 Phase -8.1  
 PFD 9.0e-02  
 Delays (us)  
 SBD 0.431538  
 MBD 0.005657  
 Fringe rate (Hz)  
 0.555480  
 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  
 2020:199:143618  
 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



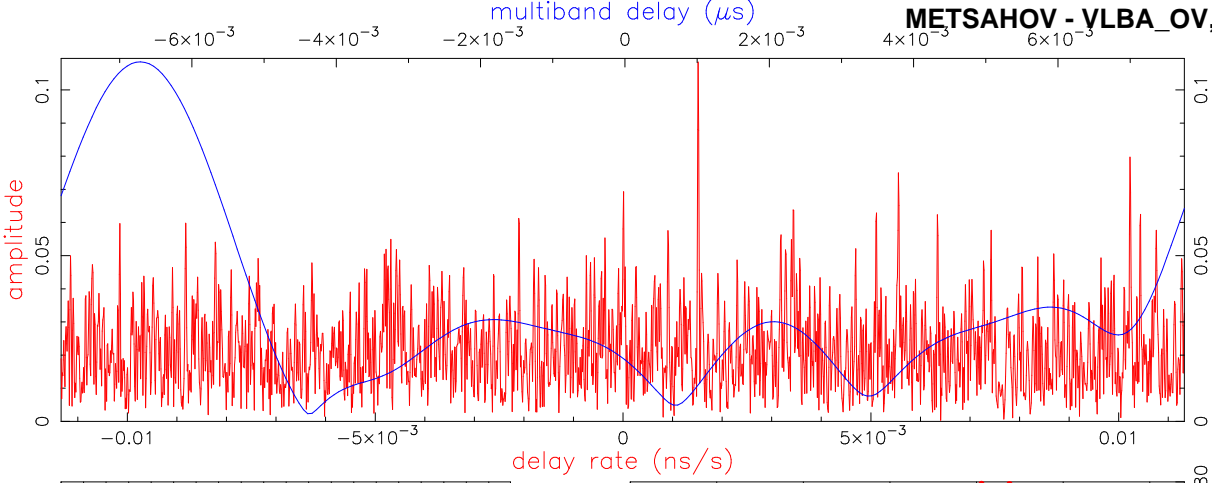
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.24245305717E+04	Apriori delay (usec)	-1.24249581035E+04	Resid mbdelay (usec)	5.65682E-03	+/-	1.7E-04
Sband delay (usec)	-1.24245265653E+04	Apriori clock (usec)	-2.0207802E+01	Resid sbdelay (usec)	4.31538E-01	+/-	1.4E-03
Phase delay (usec)	-1.24249581038E+04	Apriori clockrate (us/s)	-1.8500001E-07	Resid phdelay (usec)	-2.60449E-07	+/-	5.9E-07
Delay rate (us/s)	-8.92741023305E-01	Apriori rate (us/s)	-8.92747471878E-01	Resid rate (us/s)	6.44857E-06	+/-	2.4E-09
Total phase (deg)	-21.7	Apriori accel (us/s/s)	8.49566413525E-05	Resid phase (deg)	-8.1	+/-	18.3

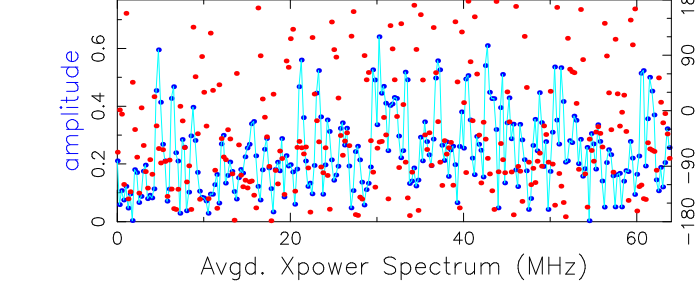
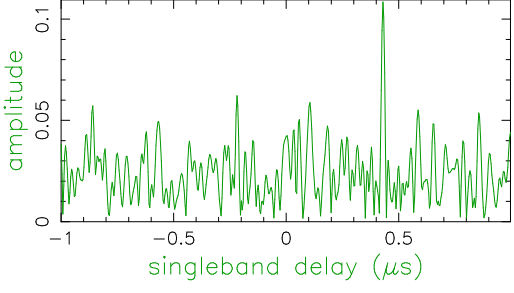
ph/seg (deg)	44.0	Theor.	43.8	Amplitude	0.129 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	64.8	Search (2048X32)	0.104	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	66.9	Inc. seg. avg.	0.124	Inc. frq. avg.	0.131	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	59.4	Inc. frq. avg.	0.131			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 313.1 el 22.0 pa 29.0 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 6837.662 7245.088 simultaneous interpolator

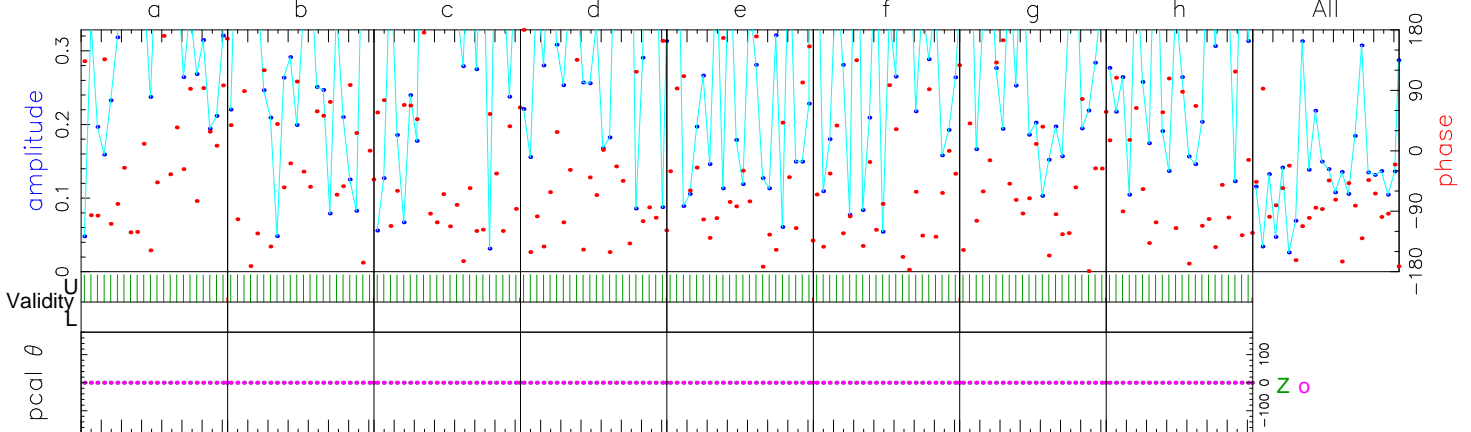
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Zo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Zo.W.207.18UHQS



Fringe quality 0  
 SNR 6.1  
 Int time 414.670  
 Amp 0.110  
 Phase -87.5  
 PFD 3.1e-01  
 Delays (us)  
 SBD 0.430317  
 MBD -0.006678  
 Fringe rate (Hz)  
 0.130682  
 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  
 2020:199:143622  
 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
	-79.0	-48.2	-96.1	-91.5	-93.9	-125.2	-58.9	-94.0	Phase	-87.5
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	148.2	271.9	365.4	29.5	439.6	424.5	38.0	266.6	Sbd box	367.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.24245272819E+04		Apriori delay (usec)		-1.24249581035E+04		Resid mbdelay (usec)		-6.67837E-03	+/- 1.8E-04
Sband delay (usec)	-1.24245277870E+04		Apriori clock (usec)		-2.0207802E+01		Resid sbdelay (usec)		4.30317E-01	+/- 1.4E-03
Phase delay (usec)	-1.24249581063E+04		Apriori clockrate (us/s)		-1.8500001E-07		Resid phdelay (usec)		-2.82267E-06	+/- 6.1E-07
Delay rate (us/s)	-8.92745954785E-01		Apriori rate (us/s)		-8.92747471878E-01		Resid rate (us/s)		1.51709E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		8.49566413525E-05		Resid phase (deg)		-87.5	+/- 18.9

ph/seg (deg) RMS Theor. Amplitude 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.6 45.4 Search (2048X32) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 70.6 79.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.9 26.8 Inc. seg. avg. 0.106 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 41.5 46.7 Inc. frq. avg. 0.104 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 313.1 el 22.0 pa 29.0 o: az 74.9 el 70.8 pa -89.6 u,v (fr/asec) 6837.662 7245.088 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Zo..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Zo.W.217.18UHQS