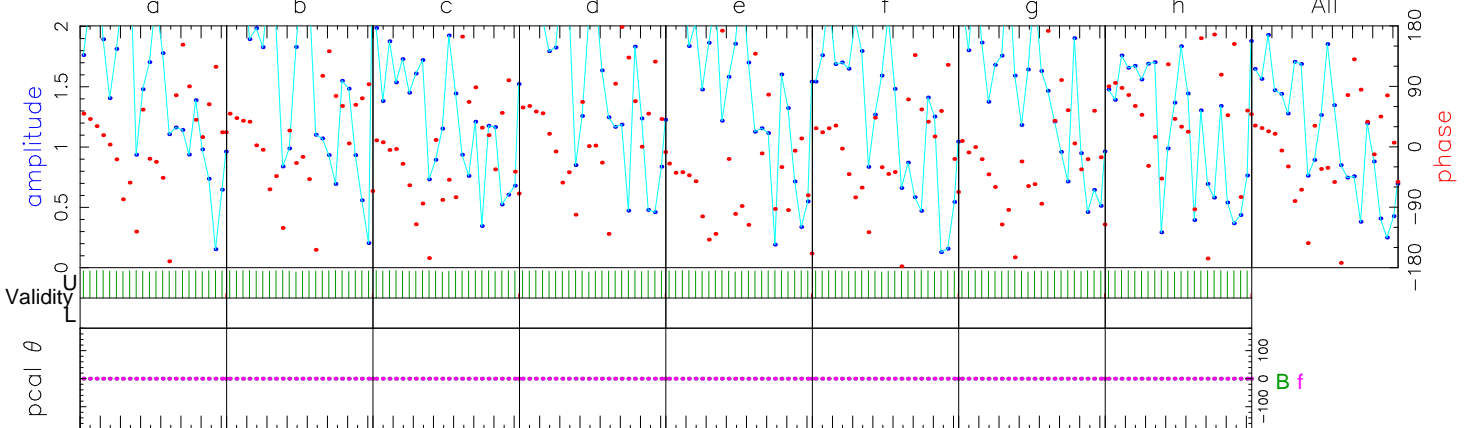


Fringe quality 4

SNR 37.2  
Int time 412.819  
Amp 0.669  
Phase -4.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.002709  
MBD 0.003584  
Fringe rate (Hz) 0.003676  
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  
2020:199:143529  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

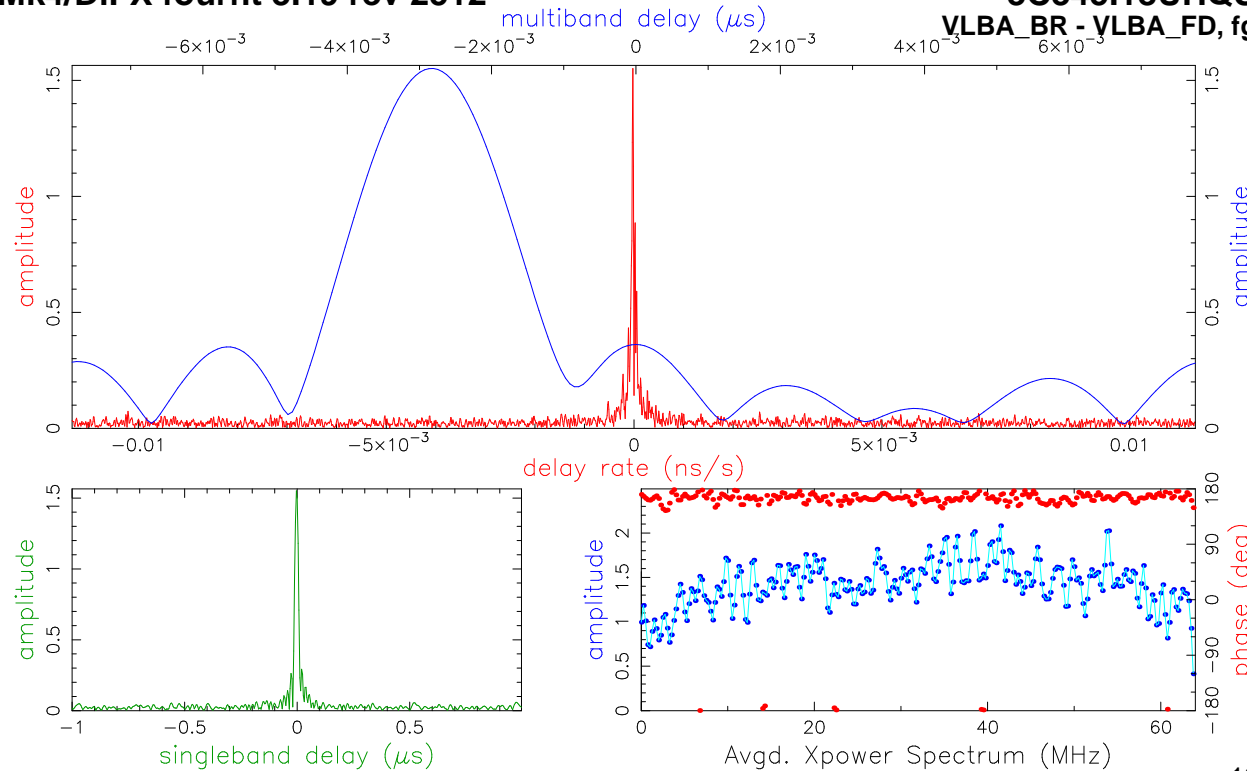
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.24938214017E+04				-1.24938249857E+04				3.58398E-03	+/- 2.9E-05
Sband delay (usec)	-1.24938276947E+04				9.1499033E+00				-2.70900E-03	+/- 2.3E-04
Phase delay (usec)	-1.24938249858E+04				-3.0900000E-07				-1.43337E-07	+/- 9.9E-08
Delay rate (us/s)	-9.02746957213E-01				-9.02746999891E-01				4.26786E-08	+/- 4.1E-10
Total phase (deg)			-100.1		8.54157438837E-05				-4.4	+/- 3.1
	RMS	Theor.	Amplitude	0.669 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	70.6	7.4	Search (2048X32)	0.655	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	101.2	12.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	43.3	4.4	Inc. seg. avg.	1.112	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	26.4	7.6	Inc. frq. avg.	0.817	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, bf  
VLBA\_BR - VLBA\_FD, fgroup W, pol RR

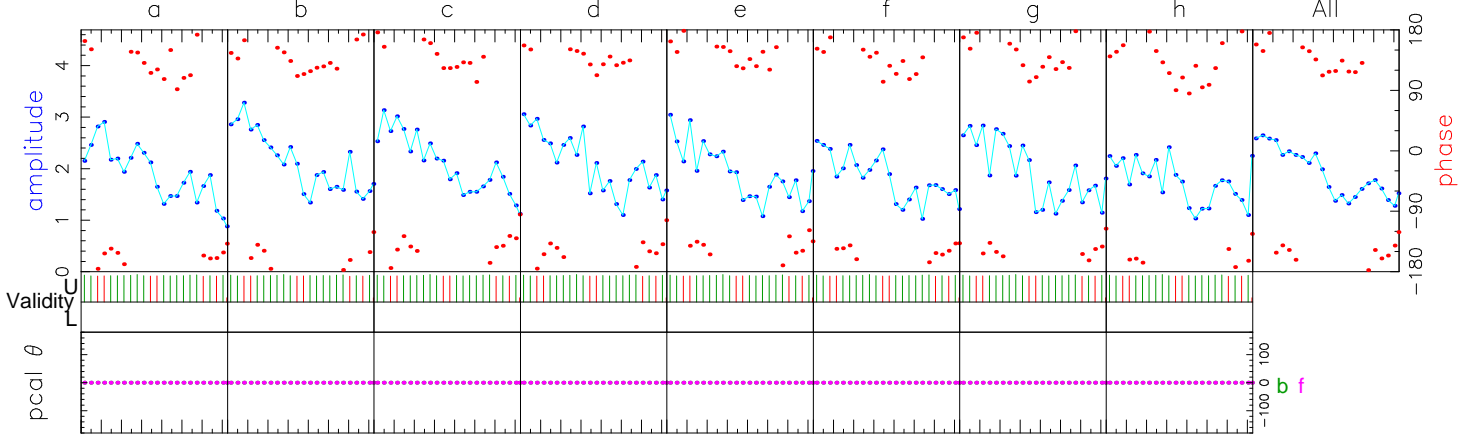


Fringe quality 6

SNR 85.9  
Int time 402.987  
Amp 1.565  
Phase 166.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.002715  
MBD -0.002804  
Fringe rate (Hz)  
-0.002153  
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  
2020:199:143530  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

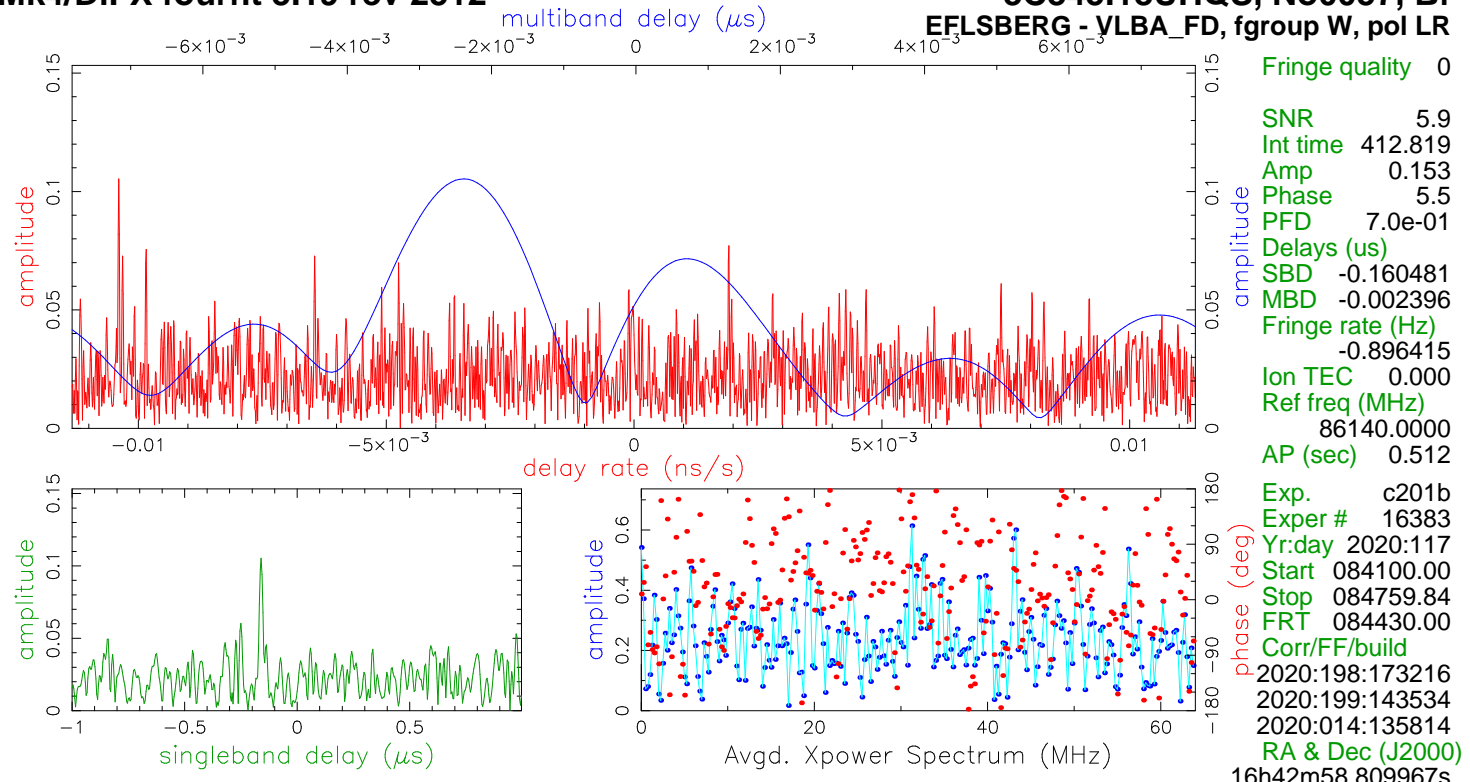
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



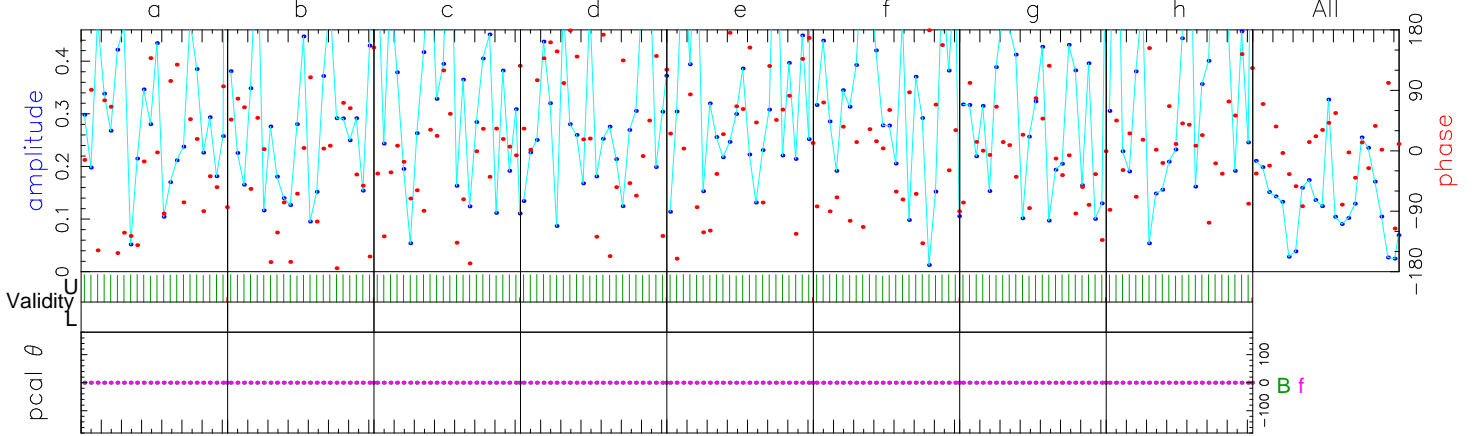
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-7.93774567297E+02									
Sband delay (usec)	-7.93774478340E+02									
Phase delay (usec)	-7.93771757709E+02									
Delay rate (us/s)	1.73360253144E-01									
Total phase (deg)			-75.2							
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)									166.9	+/- 1.3
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate (MSamp/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 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) -1242.080 3002.149 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bf..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bf.W.23.18UHQS

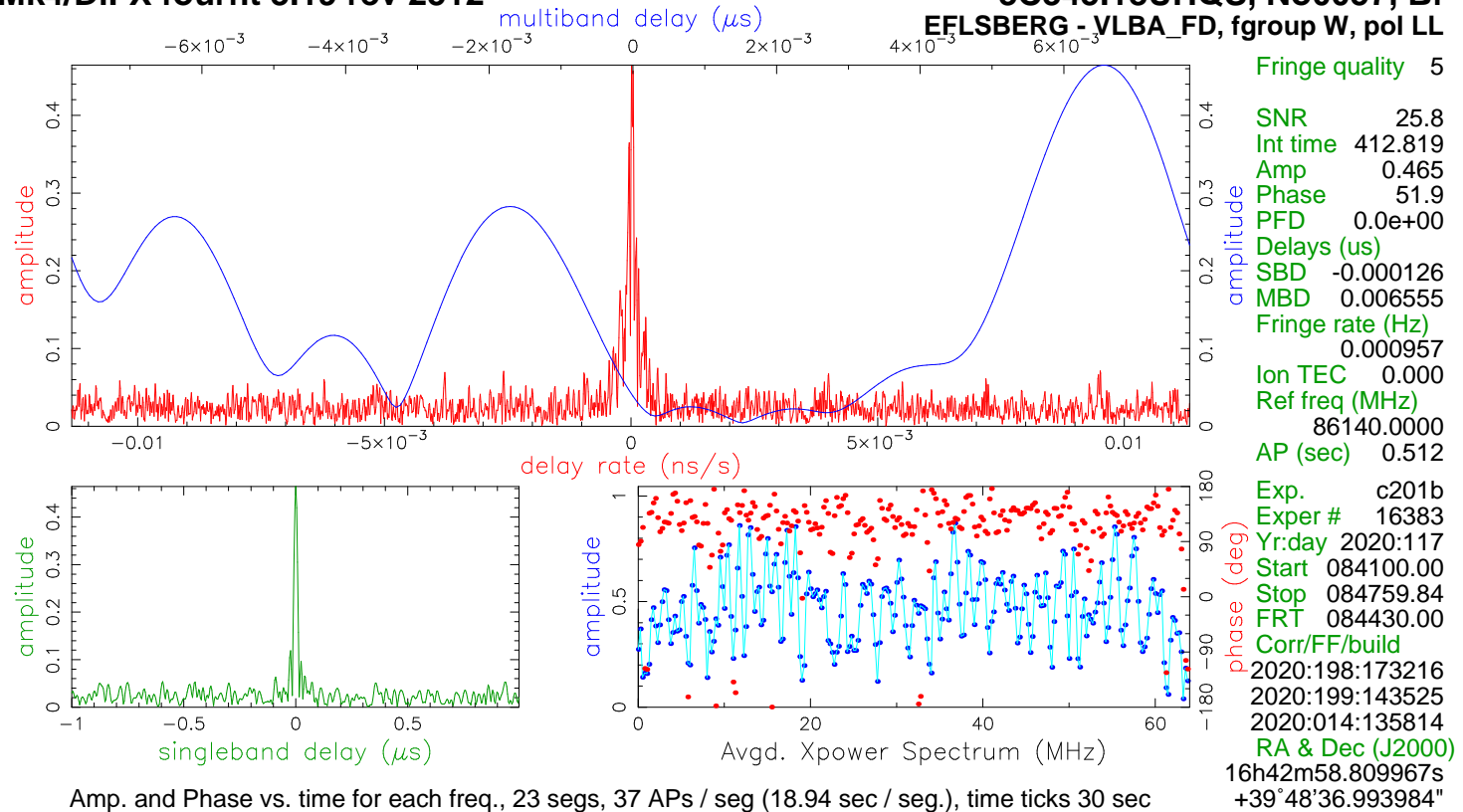


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

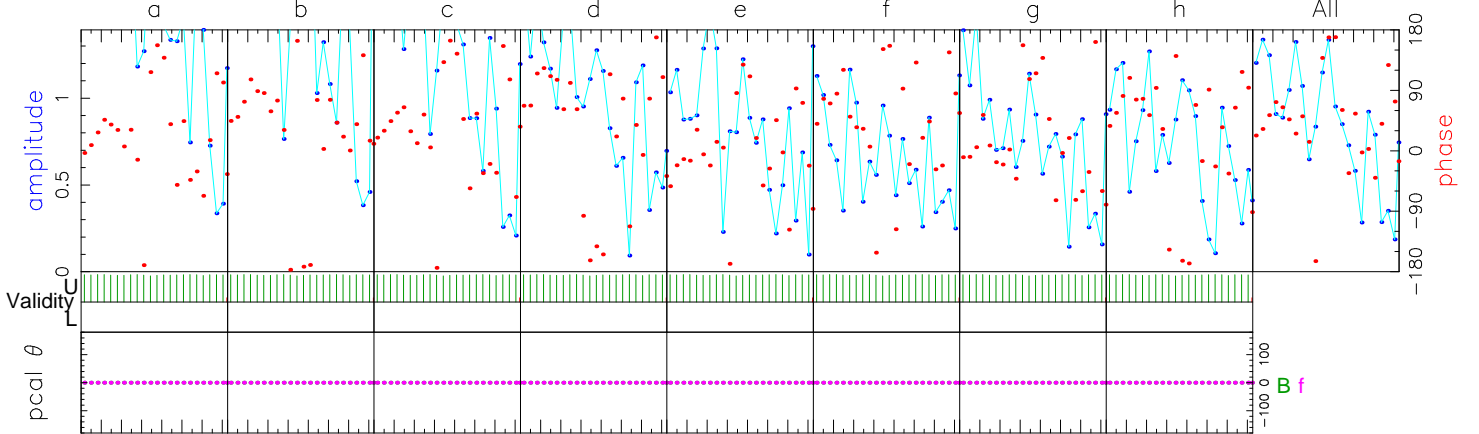


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.5	11.4	-5.8	90.9	60.6	-20.7	-7.5	11.2	Phase	5.5
	0.1	0.1	0.3	0.1	0.1	0.2	0.2	0.3	Ampl.	0.2
	475.7	45.3	216.6	456.2	421.7	342.6	216.1	215.8	Sbd box	215.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.24939836313E+04		Apriori delay (usec)		-1.24938249857E+04		Resid mbdelay (usec)		-2.39561E-03	+/- 1.9E-04
Sband delay (usec)	-1.24939854669E+04		Apriori clock (usec)		9.1499033E+00		Resid sbdelay (usec)		-1.60481E-01	+/- 1.5E-03
Phase delay (usec)	-1.24938249855E+04		Apriori clockrate (us/s)		-3.0900000E-07		Resid phdelay (usec)		1.75773E-07	+/- 6.3E-07
Delay rate (us/s)	-9.02757406375E-01		Apriori rate (us/s)		-9.02746999891E-01		Resid rate (us/s)		-1.04065E-05	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		8.54157438837E-05		Resid phase (deg)		5.5	+/- 19.6

	RMS	Theor.	Amplitude	0.153 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.2	46.9	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	78.0	81.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	45.3	27.7	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	63.0	48.3	Inc. frq. avg.	0.155	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

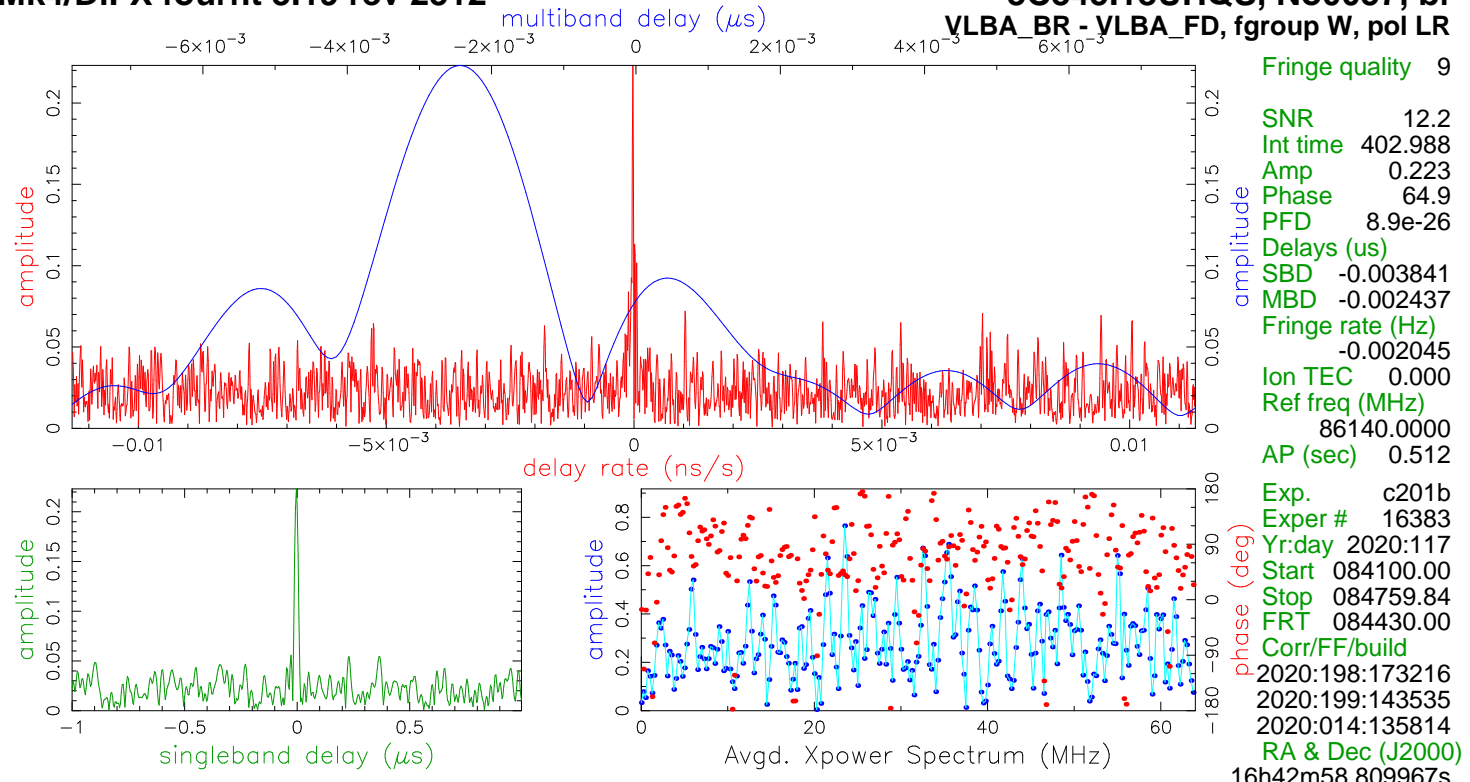


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
25.5	77.7	46.2	97.4	1.3	68.5	1.6	75.8	75.8	Phase	51.9
0.8	0.9	0.7	0.5	0.4	0.4	0.4	0.4	0.4	Ampl.	0.5
257.4	257.4	257.4	257.2	257.6	256.5	258.2	257.9	257.9	Sbd box	257.0
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.24938184309E+04		Apriori delay (usec)		-1.24938249857E+04		Resid mbdelay (usec)		6.55473E-03	+/- 4.2E-05
Sband delay (usec)	-1.24938251119E+04		Apriori clock (usec)		9.1499033E+00		Resid sbdelay (usec)		-1.26250E-04	+/- 3.3E-04
Phase delay (usec)	-1.24938249840E+04		Apriori clockrate (us/s)		-3.0900000E-07		Resid phdelay (usec)		1.67299E-06	+/- 1.4E-07
Delay rate (us/s)	-9.02746988777E-01		Apriori rate (us/s)		-9.02746999891E-01		Resid rate (us/s)		1.11144E-08	+/- 5.9E-10
Total phase (deg)			Apriori accel (us/s/s)		8.54157438837E-05		Resid phase (deg)		51.9	+/- 4.4

ph/seg (deg)	RMS	Theor.	Amplitude	0.465 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	62.7	10.6	Search (2048X32)	0.456	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	112.7	18.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	39.6	6.3	Inc. seg. avg.	0.843	Sample rate (MSamp/s):	128		dr window (ns/s)	-0.011	0.011	
	44.0	11.0	Inc. frq. avg.	0.544	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

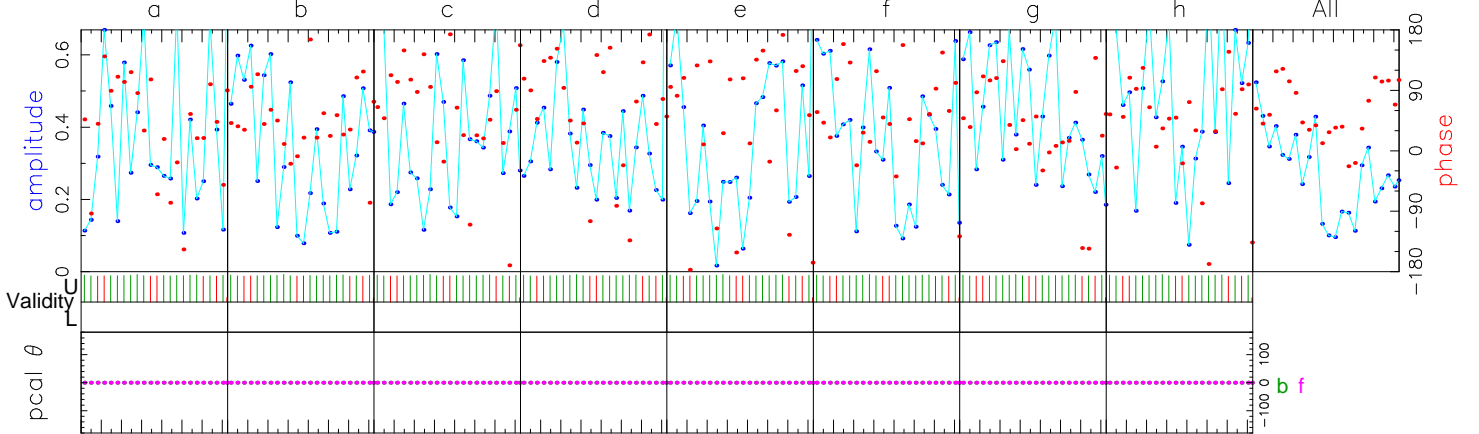


Fringe quality 9

SNR 12.2  
Int time 402.988  
Amp 0.223  
Phase 64.9  
PFD 8.9e-26  
Delays (us)  
SBD -0.003841  
MBD -0.002437  
Fringe rate (Hz)  
-0.002045  
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  
2020:199:143535  
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

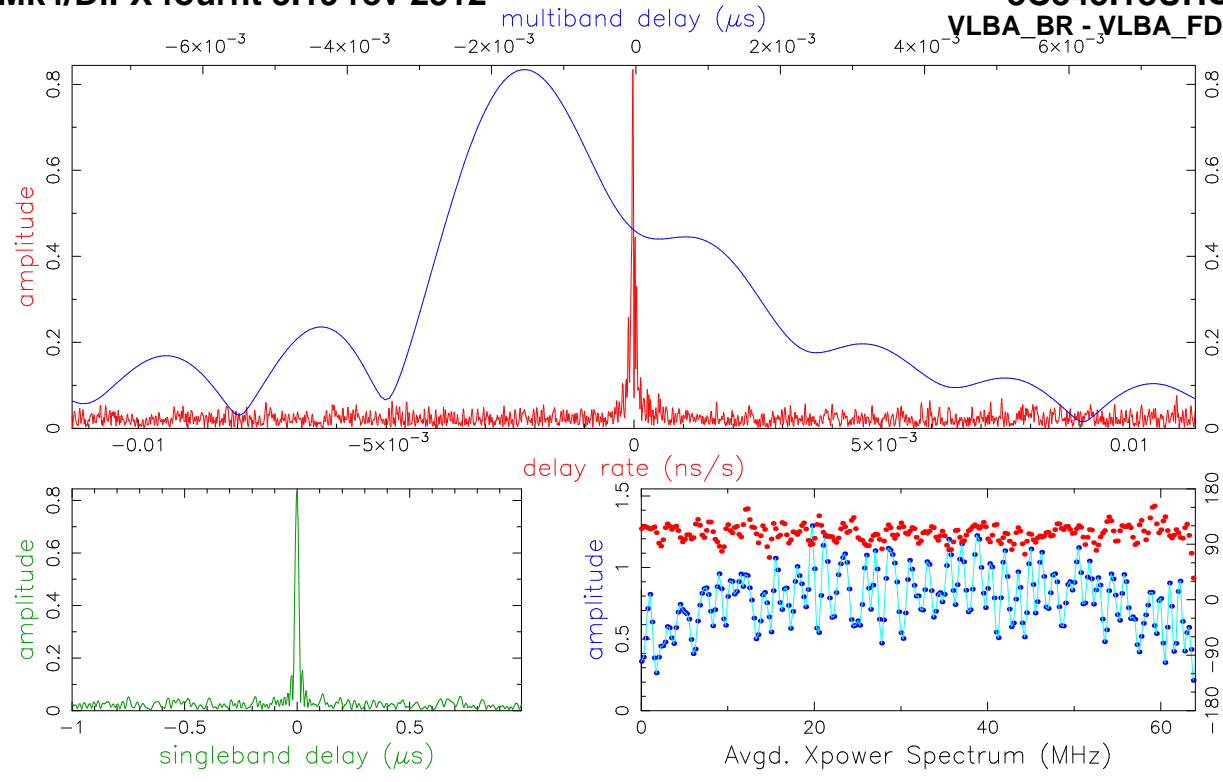


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-7.93774199609E+02				-7.93771763090E+02				Resid mbdelay (usec)	-2.43652E-03 +/- 8.9E-05
Sband delay (usec)	-7.93775603590E+02				-5.3080602E+00				Resid sbdelay (usec)	-3.84050E-03 +/- 7.0E-04
Phase delay (usec)	-7.93771760998E+02				-1.5100001E-07				Resid phdelay (usec)	2.09168E-06 +/- 3.0E-07
Delay rate (us/s)	1.73360254400E-01				1.73360278137E-01				Resid rate (us/s)	-2.37367E-08 +/- 1.2E-09
Total phase (deg)		-177.3			2.11543063136E-05				Resid phase (deg)	64.9 +/- 9.4

	RMS	Theor.	Amplitude	0.223 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	41.4	22.4	Search (2048X32)	0.221	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	56.9	39.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	23.6	13.2	Inc. seg. avg.	0.256	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	18.6	23.1	Inc. frq. avg.	0.229	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 104.8 el 69.8 pa -57.1 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) -1242.080 3002.149 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bf..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bf.W.44.18UHQS

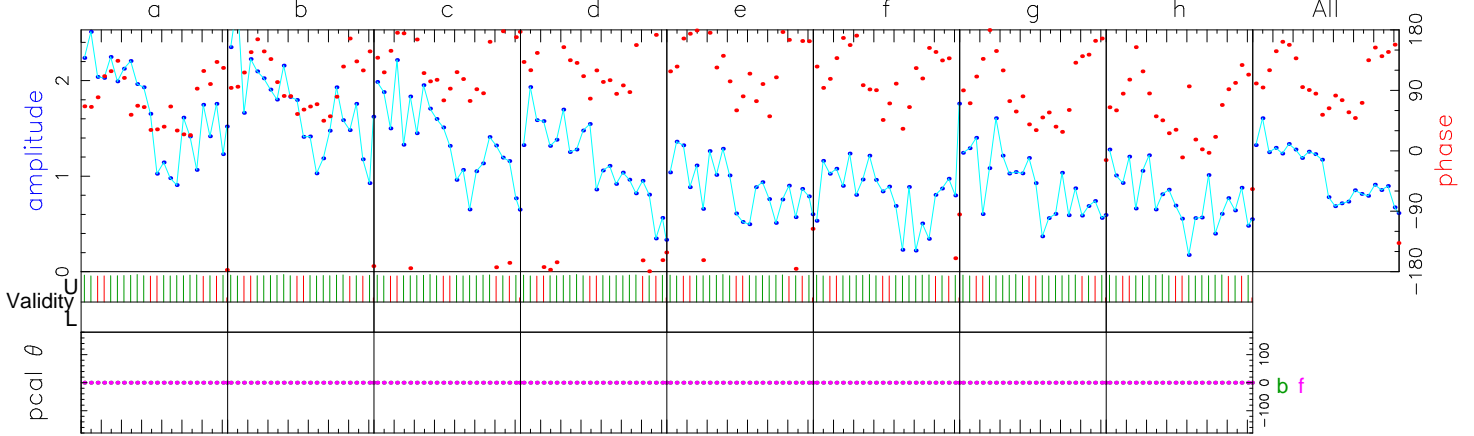


Fringe quality 5

SNR 46.3  
Int time 402.988  
Amp 0.844  
Phase 110.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.001399  
MBD -0.001569  
Fringe rate (Hz) -0.002046  
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  
2020:199:143525  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

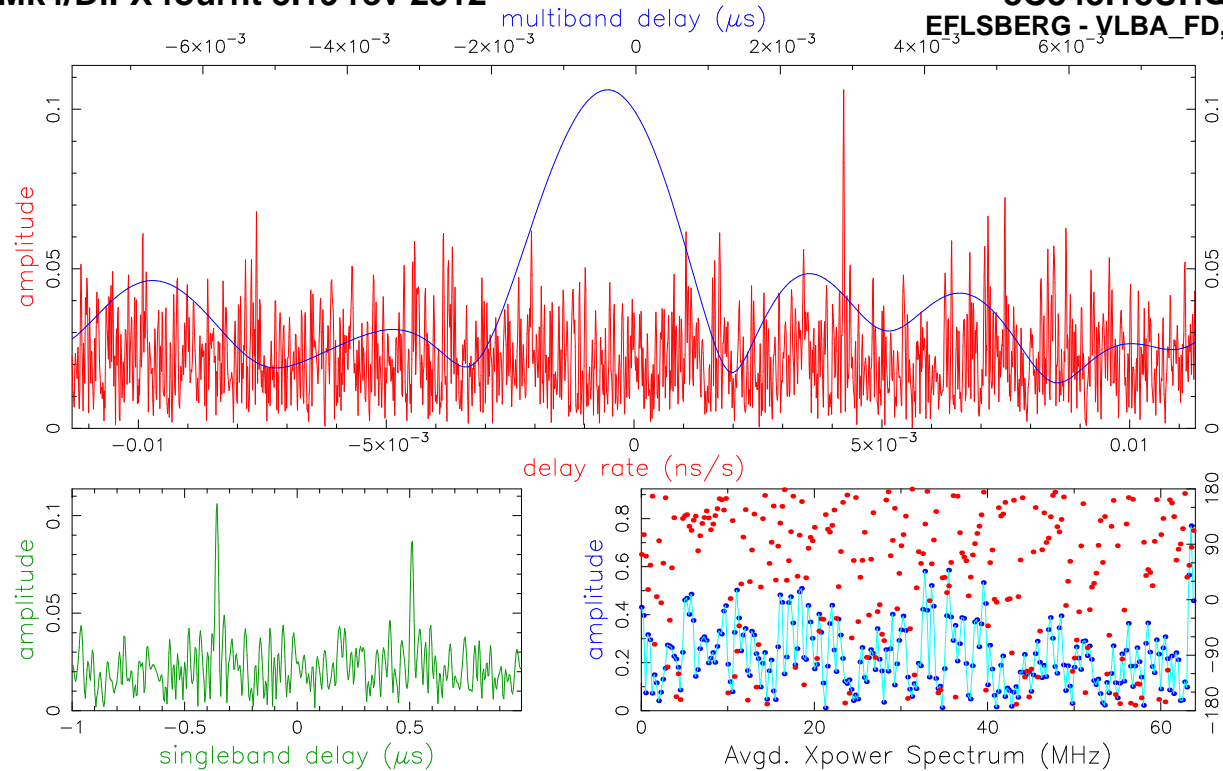
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.93773331922E+02									
Sband delay (usec)	-7.93773162340E+02									
Phase delay (usec)	-7.93771759539E+02									
Delay rate (us/s)	1.73360254387E-01									
Total phase (deg)			-132.0							
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								
Bits/sample:	2x2									
Sample rate (MSamp/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								

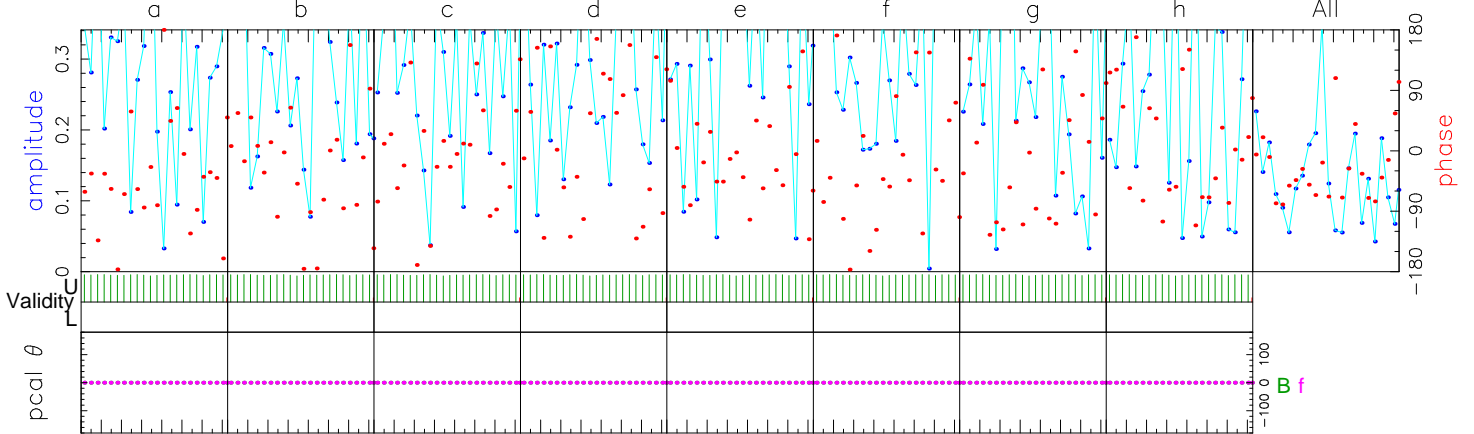
b: az 104.8 el 69.8 pa -57.1 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) -1242.080 3002.149 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bf..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bf.W.5.18UHQS



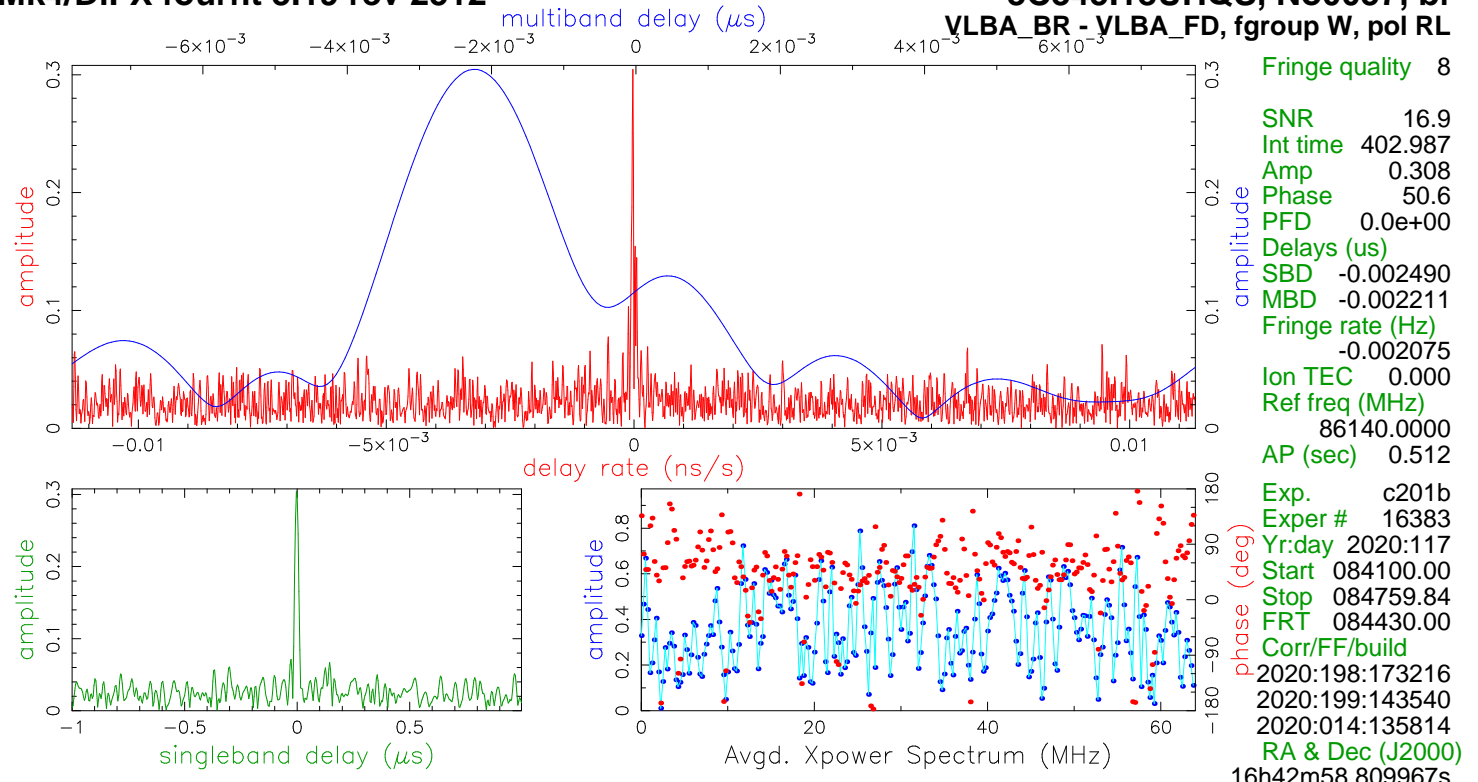
Fringe quality 0  
SNR 6.0  
Int time 412.819  
Amp 0.114  
Phase -28.8  
PFD 4.7e-01  
Delays (us)  
SBD -0.356763  
MBD -0.000423  
Fringe rate (Hz) 0.364994  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143538  
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

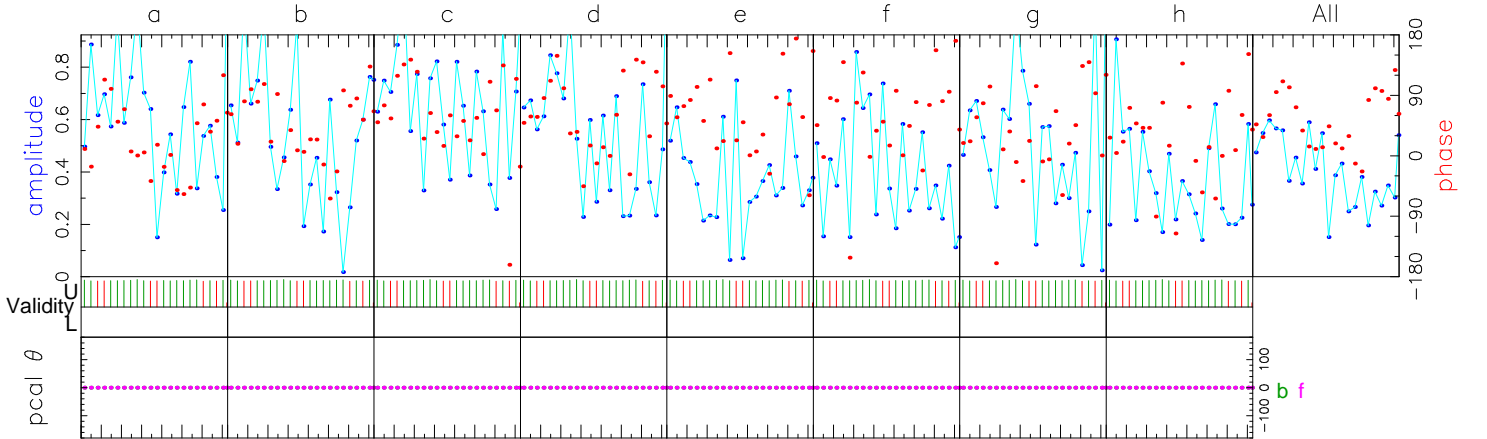


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-60.9	-11.4	-7.7	133.8	-12.5	-38.8	-64.8	-19.9	Phase	-28.8
	0.2	0.1	0.1	0.0	0.2	0.1	0.1	0.1	Ampl.	0.1
	190.5	7.9	246.7	139.2	167.0	409.0	67.4	88.9	Sbd box	165.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.24941847832E+04		Apriori delay (usec)		-1.24938249857E+04		Resid mbdelay (usec)		-4.22565E-04	+/- 1.8E-04
Sband delay (usec)	-1.24941817484E+04		Apriori clock (usec)		9.1499033E+00		Resid sbdelay (usec)		-3.56763E-01	+/- 1.4E-03
Phase delay (usec)	-1.24938249866E+04		Apriori clockrate (us/s)		-3.0900000E-07		Resid phdelay (usec)		-9.27834E-07	+/- 6.2E-07
Delay rate (us/s)	-9.02742762678E-01		Apriori rate (us/s)		-9.02746999891E-01		Resid rate (us/s)		4.23721E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		8.54157438837E-05		Resid phase (deg)		-28.8	+/- 19.2

ph/seg (deg) 48.4 46.1 Amplitude 0.114 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 69.5 80.4 Search (2048X32) 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 70.7 27.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.2 47.4 Inc. seg. avg. 0.108 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 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) 6913.125 7268.045 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/Bf..18UHQS Output file: /Exps/c201b/v1/1234/No0057/Bf.W.56.18UHQS simultaneous interpolator



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



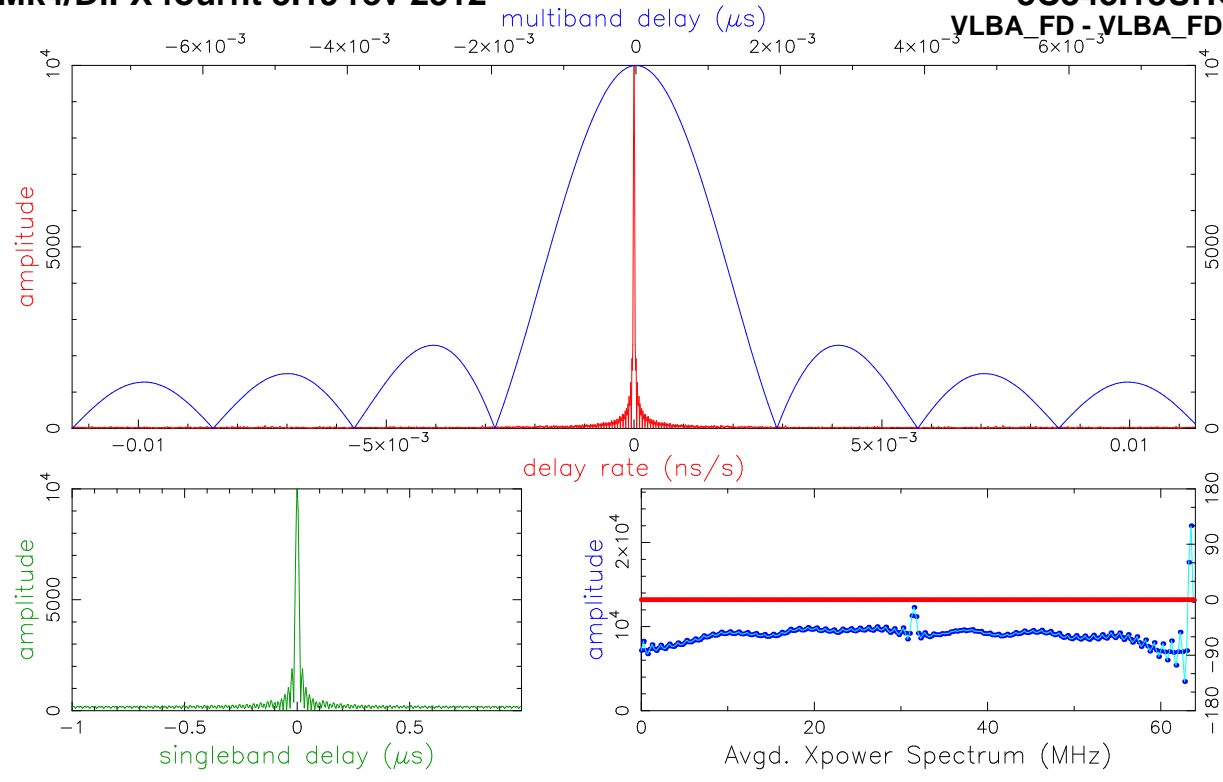
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
18.9	54.5	76.5	67.2	57.1	64.5	29.3	27.6	27.6	Phase	50.6
0.4	0.4	0.4	0.4	0.2	0.3	0.3	0.2	0.2	Ampl.	0.3
256.4	257.4	256.3	256.2	257.3	256.1	255.8	255.2	255.2	Sbd box	256.4
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-7.93773973641E+02		Apriori delay (usec)	-7.93771763090E+02		Resid mbdelay (usec)	-2.21055E-03	+/-	6.4E-05	
Sband delay (usec)	-7.93774253340E+02		Apriori clock (usec)	-5.3080602E+00		Resid sbdelay (usec)	-2.49025E-03	+/-	5.1E-04	
Phase delay (usec)	-7.93771761459E+02		Apriori clockrate (us/s)	-1.5100001E-07		Resid phdelay (usec)	1.63125E-06	+/-	2.2E-07	
Delay rate (us/s)	1.73360254044E-01		Apriori rate (us/s)	1.73360278137E-01		Resid rate (us/s)	-2.40924E-08	+/-	9.0E-10	
Total phase (deg)		-191.5	Apriori accel (us/s/s)	2.11543063136E-05		Resid phase (deg)	50.6	+/-	6.8	

	RMS	Theor.	Amplitude	0.308 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	42.0	16.3	Search (2048X32)	0.296	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	51.4	28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.1	9.6	Inc. seg. avg.	0.385	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	26.1	16.7	Inc. frq. avg.	0.321	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 104.8 el 69.8 pa -57.1 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) -1242.080 3002.149 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/bf..18UHQS Output file: /Exps/c201b/v1/1234/No0057/bf.W.66.18UHQS



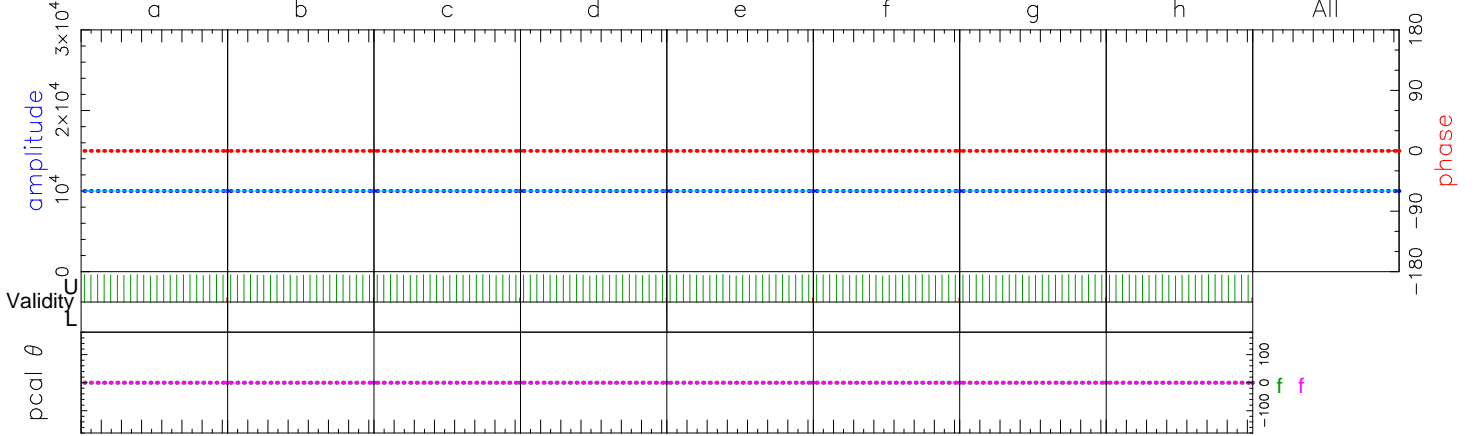


Fringe quality 9

SNR 555624.4  
Int time 412.826  
Amp 10000.007  
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

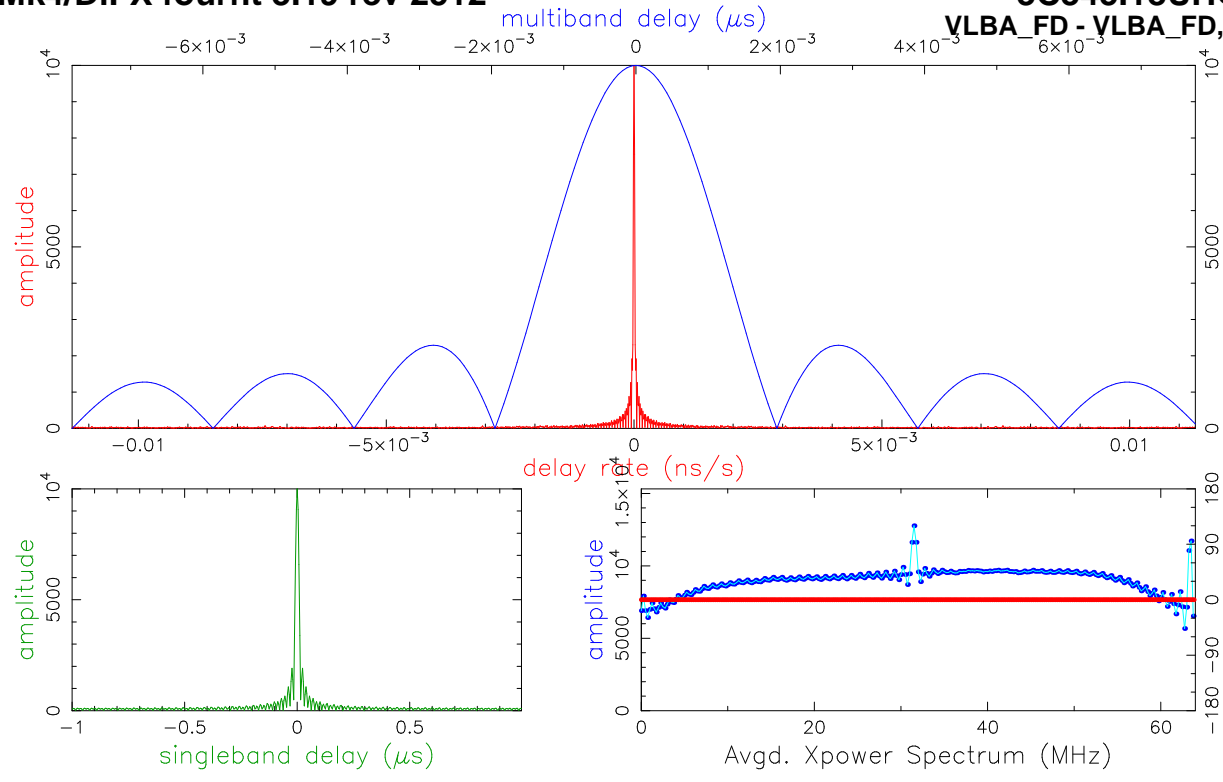
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143531  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



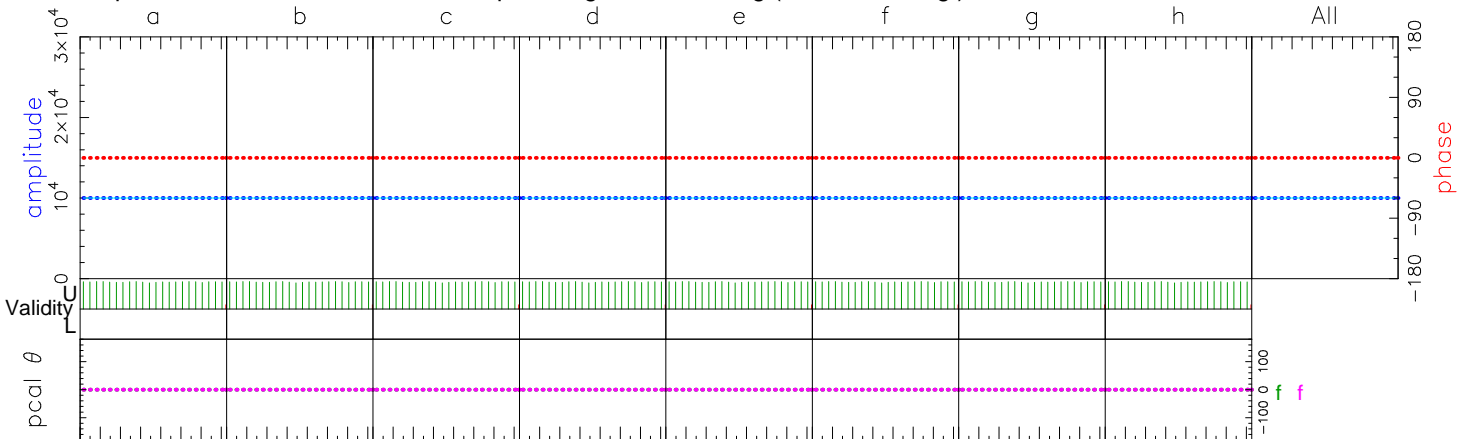
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Ampl.	10000.0
f	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
f	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0	Resid mbdelay (usec)	0.00000E+00 +/- 2.0E-09
Sband delay (usec)	0.0	0.0	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.6E-08
Phase delay (usec)	-1.59598357104E-20	-1.59598357104E-20	-1.59598357104E-20	-1.59598357104E-20	-1.59598357104E-20	-1.59598357104E-20	-1.59598357104E-20	-1.59598357104E-20	Resid phdelay (usec)	-1.59598E-20 +/- 6.7E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 2.7E-14
Total phase (deg)			-0.0						Resid phase (deg)	-0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.007 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.007 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 f: az 39.2 el 77.7 pa -133.6 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/ff..18UHQS Output file: /Exps/c201b/v1/1234/No0057/ff.W.28.18UHQS simultaneous interpolator



Fringe quality 9  
 SNR 555623.9  
 Int time 412.825  
 Amp 10000.004  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084100.00  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143535  
 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		
f:f	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		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Phase delay (usec)	8.75985049689E-20	8.75985049689E-20	8.75985049689E-20	8.75985049689E-20	8.75985049689E-20	8.75985049689E-20	8.75985049689E-20	8.75985049689E-20		
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Total phase (deg)			0.0							
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)										

ph/seg (deg) 0.0 0.0  
 amp/seg (%) 0.0 0.0  
 ph/frq (deg) 0.0 0.0  
 amp/frq (%) 0.0 0.0  
 f: az 39.2 el 77.7 pa -133.6  
 Control file: cf\_1234\_gmva

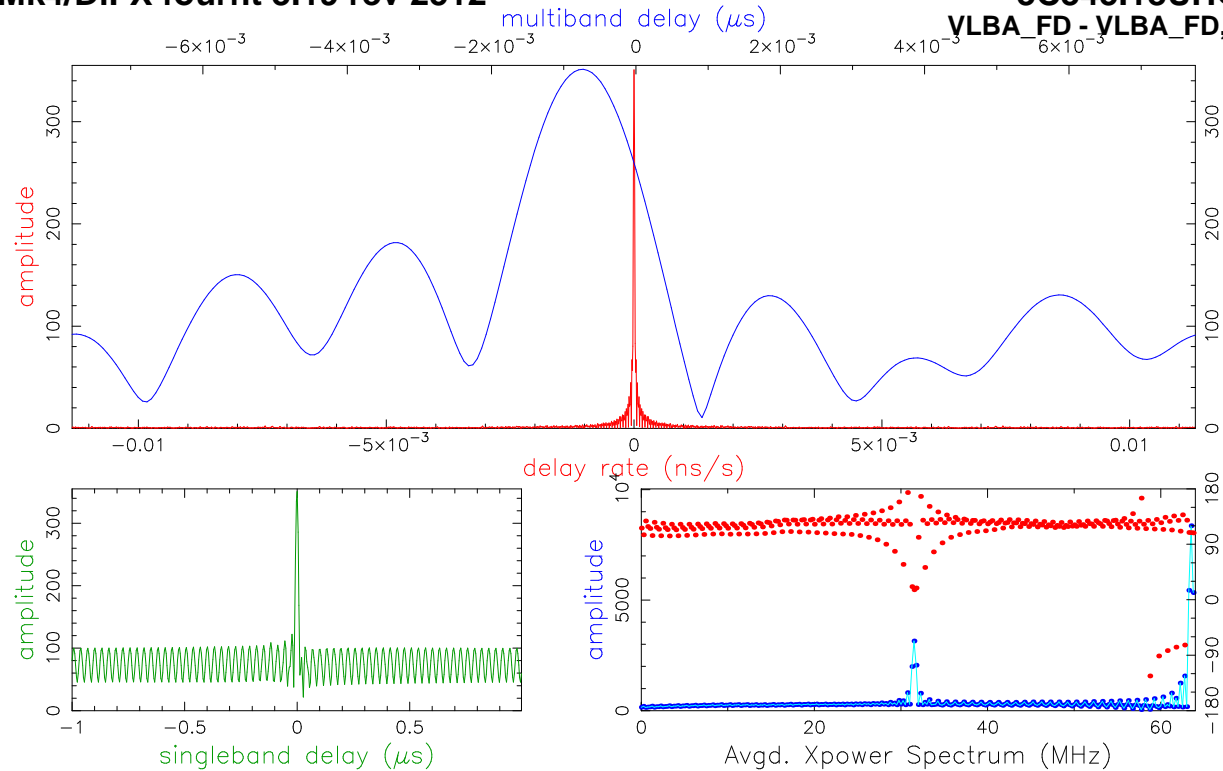
Amplitude 10000.004 +/- 0.018  
 Search (2048X32) 10000.003  
 Interp. 0.000  
 Inc. seg. avg. 10000.000  
 Inc. frq. avg. 10000.003  
 u,v (fr/asec) 0.000 0.000

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

PC period (AP's) 5, 5  
 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

simultaneous interpolator

Input file: /Exps/c201b/v1/1234/No0057/ff..18UHQs  
 Output file: /Exps/c201b/v1/1234/No0057/ff.W.45.18UHQs

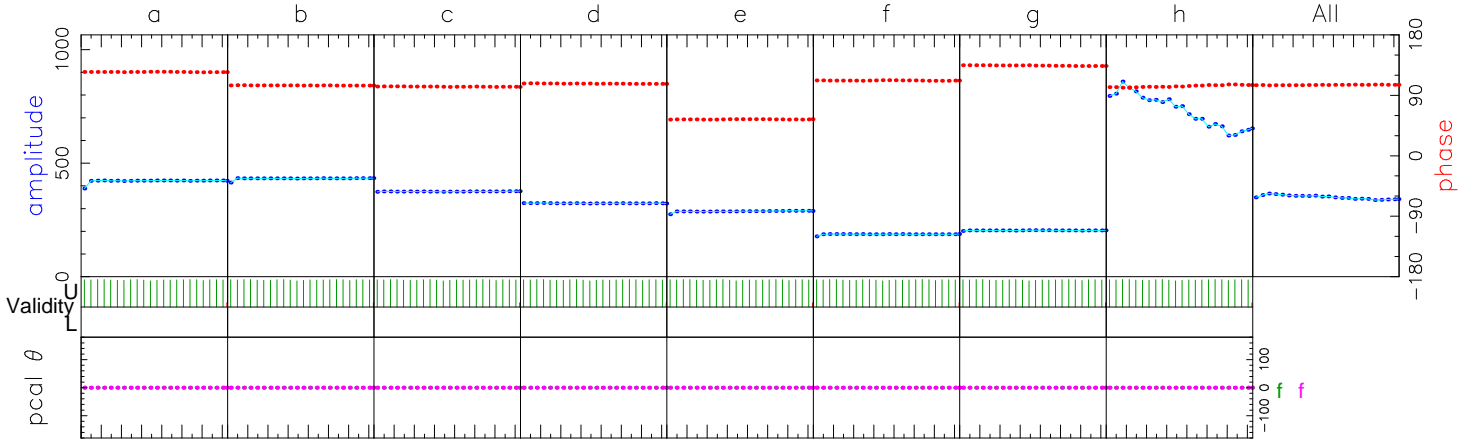


Fringe quality 5

SNR 19729.8  
Int time 412.826  
Amp 355.093  
Phase 105.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.001241  
MBD -0.000695  
Fringe rate (Hz) 0.000004  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

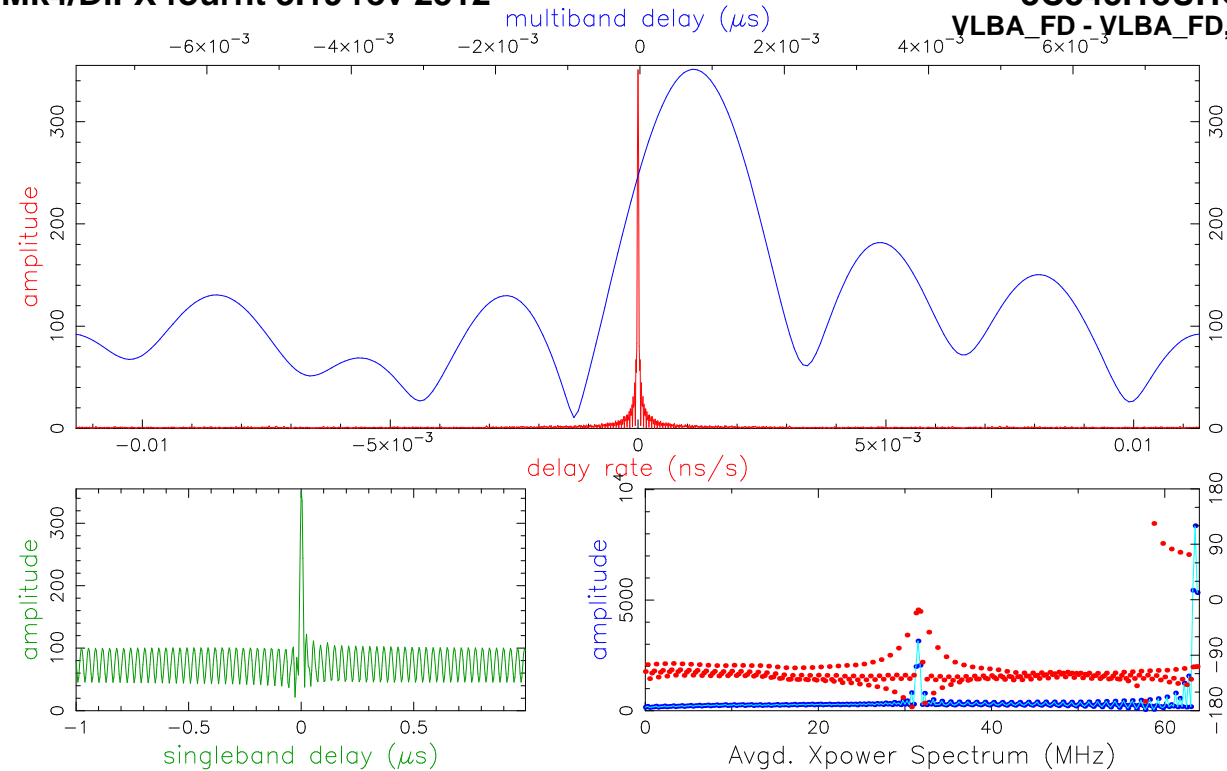
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143539  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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	APs used	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-6.94812500000E-04		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-6.94813E-04	+/- 5.5E-08
Sband delay (usec)	-1.24050000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.24050E-03	+/- 4.4E-07
Phase delay (usec)	3.39808247392E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.39808E-06	+/- 1.9E-10
Delay rate (us/s)	5.10161486101E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		5.10161E-11	+/- 7.7E-13
Total phase (deg)	105.4		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		105.4	+/- 0.0

ph/seg (deg) 0.3 0.0 Theor. Amplitude 355.093 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 2.7 0.0 Search (2048X32) 340.820 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 45.6 0.0 Inc. seg. avg. 350.814 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 f: az 39.2 el 77.7 pa -133.6 f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

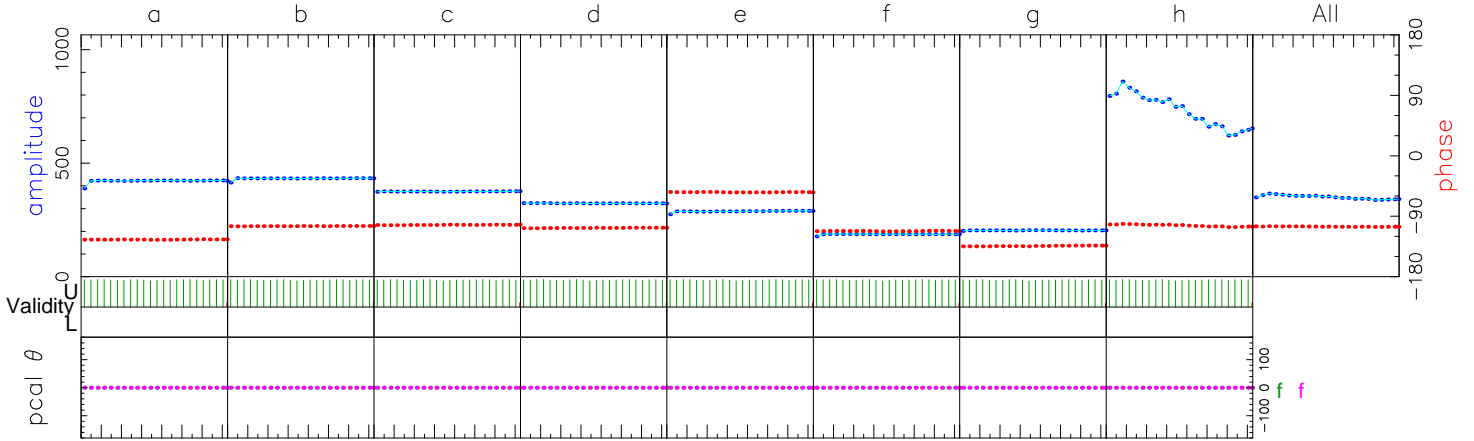


Fringe quality 5

SNR 19729.9  
Int time 412.825  
Amp 355.094  
Phase -105.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.001241  
MBD 0.000695  
Fringe rate (Hz)  
-0.000004  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

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

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.7	-104.6	-102.9	-107.3	-54.2	-112.0	-134.2	-103.5	Phase	-105.4
	421.6	432.5	375.4	323.7	288.1	187.2	204.0	732.9	Ampl.	370.7
	257.3	257.5	257.1	257.3	256.8	257.0	257.2	257.9	Sbd box	257.3
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	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.94812500000E-04		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		6.94813E-04	+/- 5.5E-08
Sband delay (usec)	1.24050000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.24050E-03	+/- 4.4E-07
Phase delay (usec)	-3.39808247394E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.39808E-06	+/- 1.9E-10
Delay rate (us/s)	-5.10161486101E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.10161E-11	+/- 7.7E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-105.4	+/- 0.0

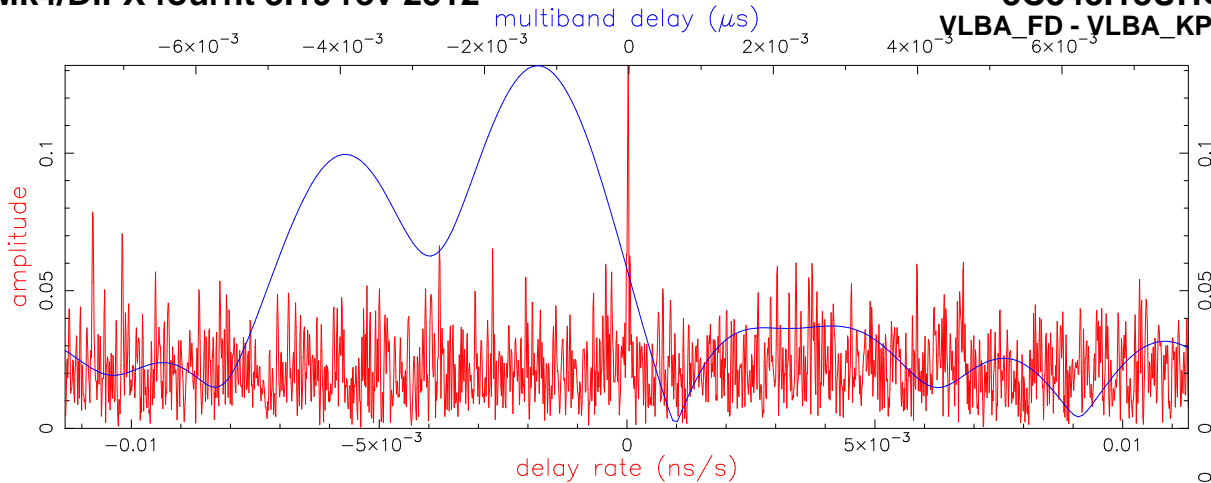
ph/seg (deg) 0.3 0.0  
amp/seg (%) 2.7 0.0  
ph/frq (deg) 25.5 0.0  
amp/frq (%) 45.6 0.0

RMS Theor. Amplitude 355.094 +/- 0.018  
Search (2048X32) 340.820  
Interp. 0.000  
Inc. seg. avg. 350.815  
Inc. frq. avg. 370.672

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

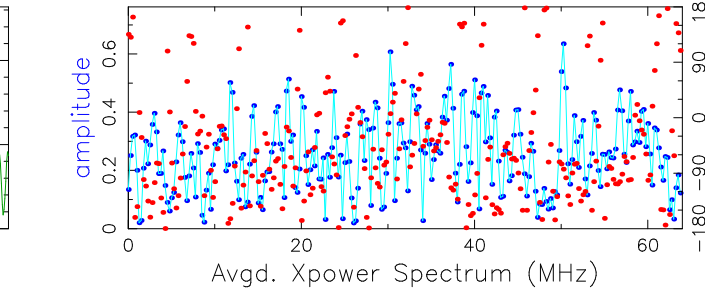
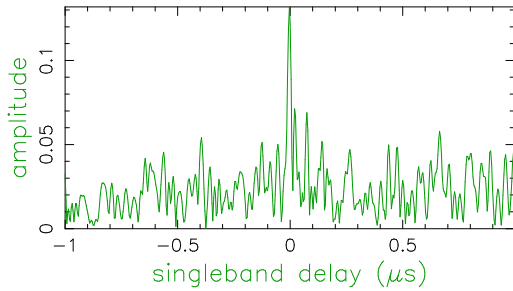
sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

f: az 39.2 el 77.7 pa -133.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



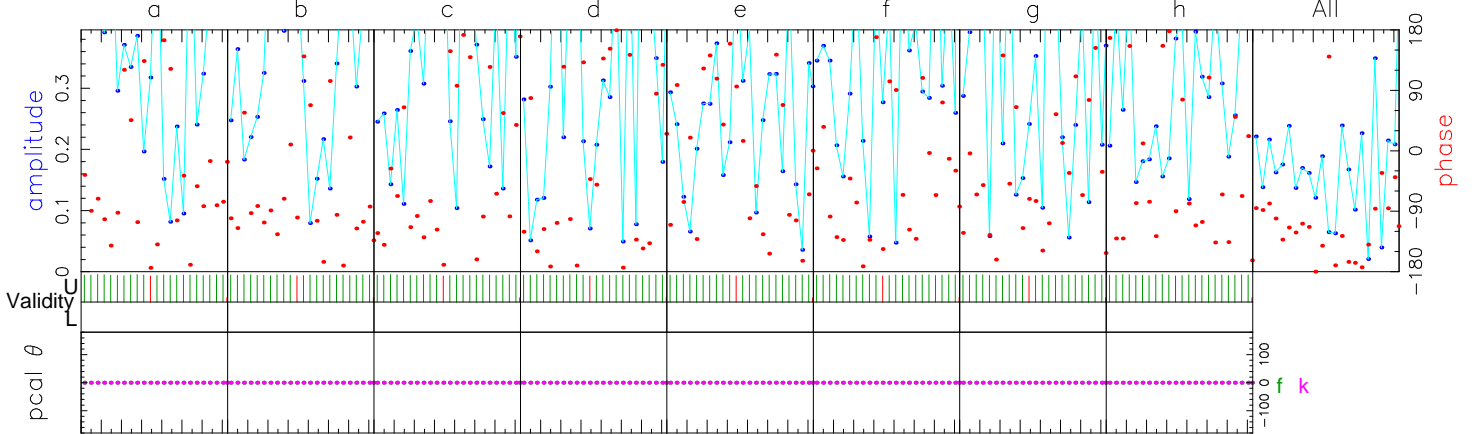
Fringe quality 9

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



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

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

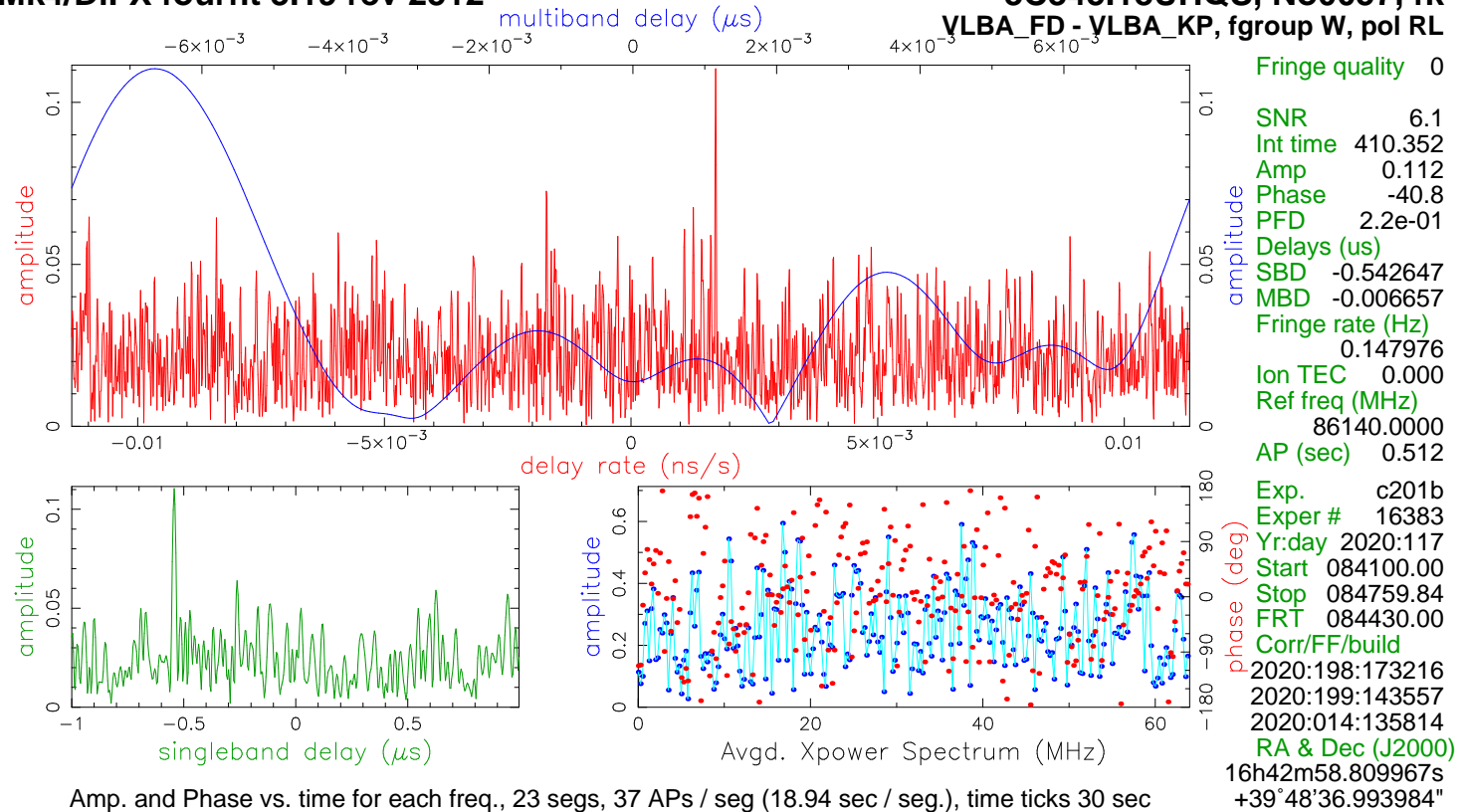


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-95.1	-101.0	-132.7	-163.3	-169.9	-74.5	-77.2	-122.6	Phase	-113.8
	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.1	Ampl.	0.1
	256.4	256.6	255.8	256.3	326.2	463.8	261.5	458.7	Sbd box	256.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0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

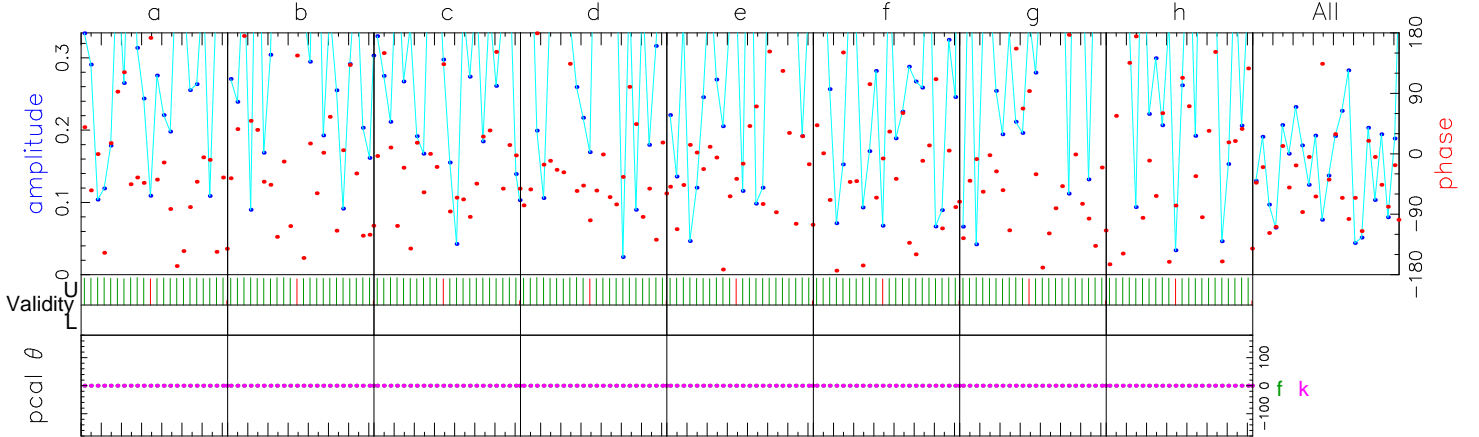
ph/seg (deg) 45.7 37.6 Search (2048X32) 0.121 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.3 65.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 39.7 22.2 Inc. seg. avg. 0.137 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008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

Mk4/DiFX fourfit 3.19 rev 2512

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



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



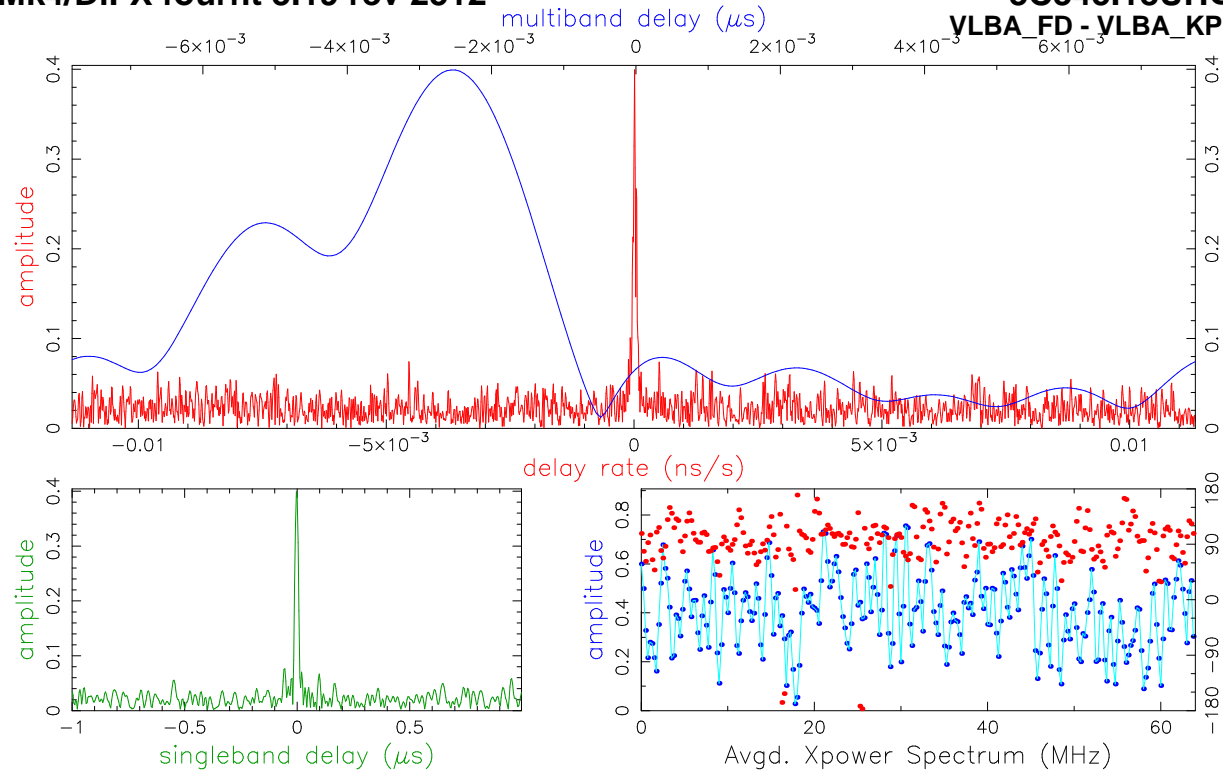
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)		3.38713469579E+02				3.39251376338E+02			Resid mbdelay (usec)	-6.65676E-03 +/- 1.8E-04
Sband delay (usec)		3.38708729338E+02				4.2444491E+00			Resid sbdelay (usec)	-5.42647E-01 +/- 1.4E-03
Phase delay (usec)		3.39251375022E+02				1.0360000E-07			Resid phdelay (usec)	-1.31650E-06 +/- 6.0E-07
Delay rate (us/s)		-1.29909909221E-01				-1.29911627077E-01			Resid rate (us/s)	1.71786E-06 +/- 2.5E-09
Total phase (deg)			160.0			-3.20385572564E-06			Resid phase (deg)	-40.8 +/- 18.7

	RMS	Theor.	Amplitude	0.112 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	56.4	44.9	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.2	78.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	69.8	26.5	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
amp/frq (%)	45.5	46.2	Inc. frq. avg.	0.112	Data rate(Mb/s): 2048	nlags: 256
f: az 39.2 el 77.7 pa -133.6			k: az 56.4 el 73.7 pa -114.9		u,v (fr/asec) 960.527 -358.031	dr window (ns/s) -0.011 0.011
Control file: cf_1234_gmva			Input file: /Exps/c201b/v1/1234/No0057/fk..18UHQS		Output file: /Exps/c201b/v1/1234/No0057/fk.W.126.18UHQS	ion window (TEC) 0.00 0.00

simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

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

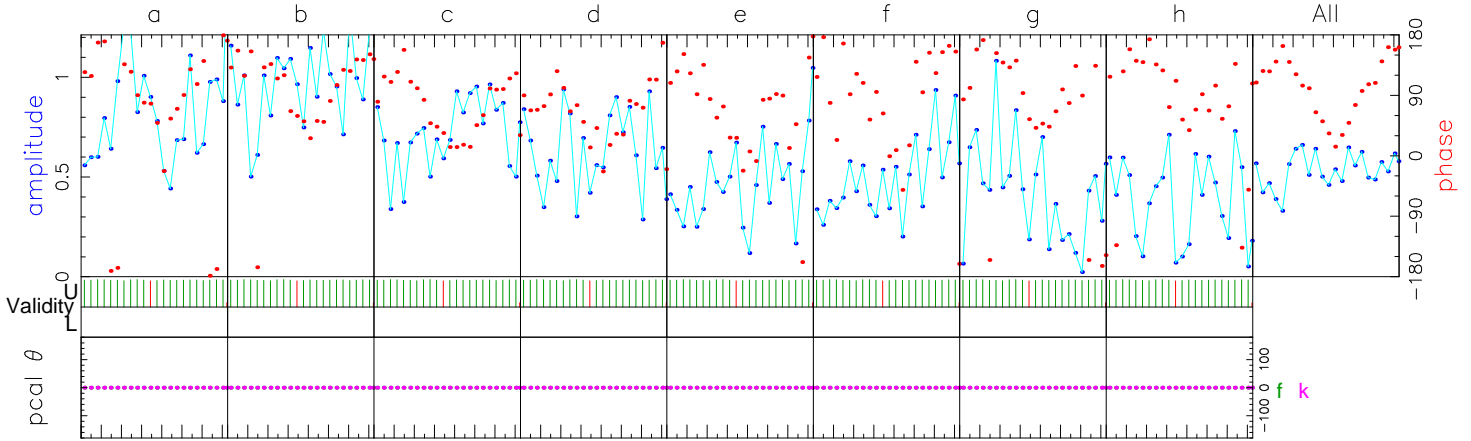


Fringe quality 7

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

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

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



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

Group delay (usec)(sbd)	3.39248847254E+02	Apriori delay (usec)	3.39251376338E+02	Resid mbdelay (usec)	-2.52908E-03	+/-	4.8E-05
Sband delay (usec)	3.39248866088E+02	Apriori clock (usec)	4.2444491E+00	Resid sbdelay (usec)	-2.51025E-03	+/-	3.8E-04
Phase delay (usec)	3.39251379635E+02	Apriori clockrate (us/s)	1.0360000E-07	Resid phdelay (usec)	3.29730E-06	+/-	1.6E-07
Delay rate (us/s)	-1.29911612342E-01	Apriori rate (us/s)	-1.29911627077E-01	Resid rate (us/s)	1.47359E-08	+/-	6.8E-10
Total phase (deg)	303.0	Apriori accel (us/s/s)	-3.20385572564E-06	Resid phase (deg)	102.3	+/-	5.1

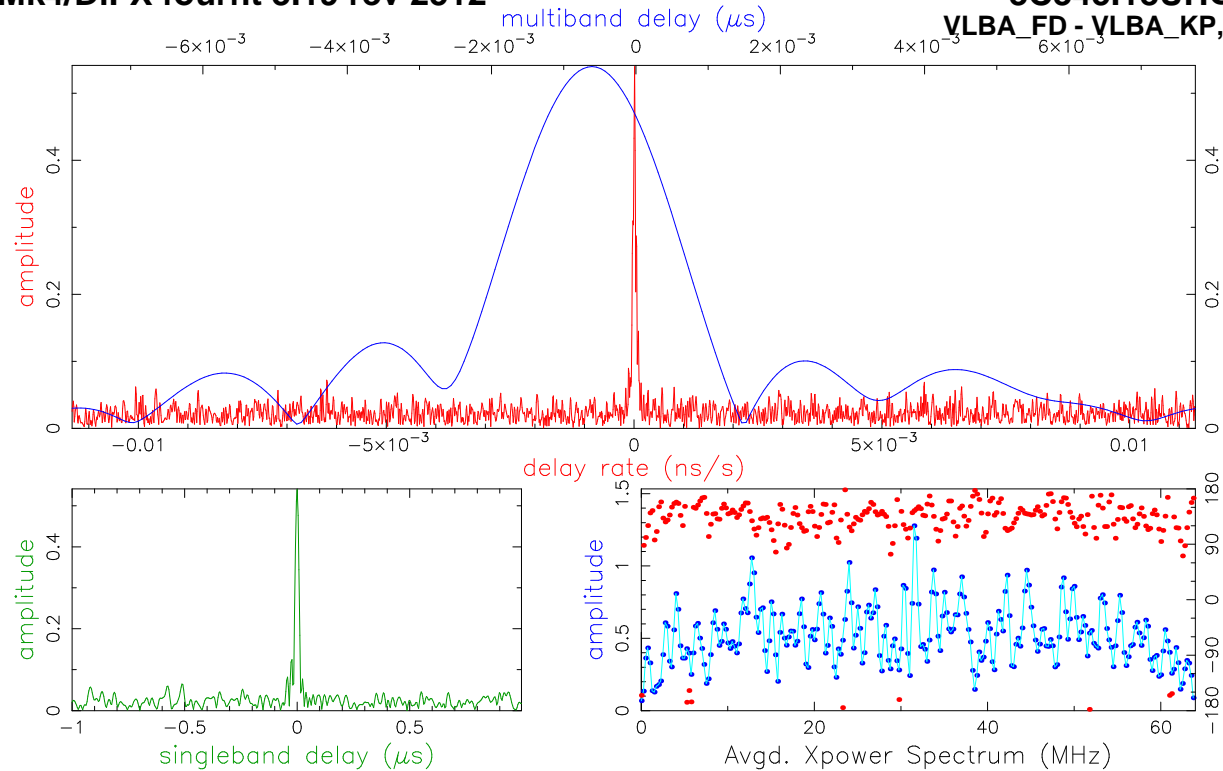
ph/seg (deg)	43.5	Theor.	12.3	Amplitude	0.404 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	38.4	Search (2048X32)	0.387	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	25.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	41.1	Inc. seg. avg.	0.521	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	0.429	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

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

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fk..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fk.W.81.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

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

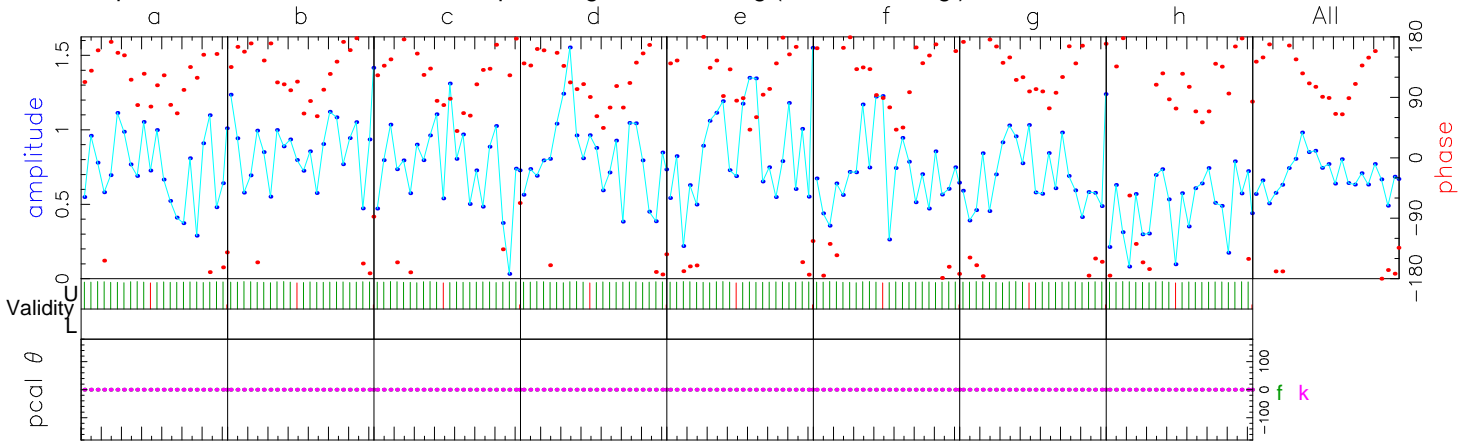


Fringe quality 8

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

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

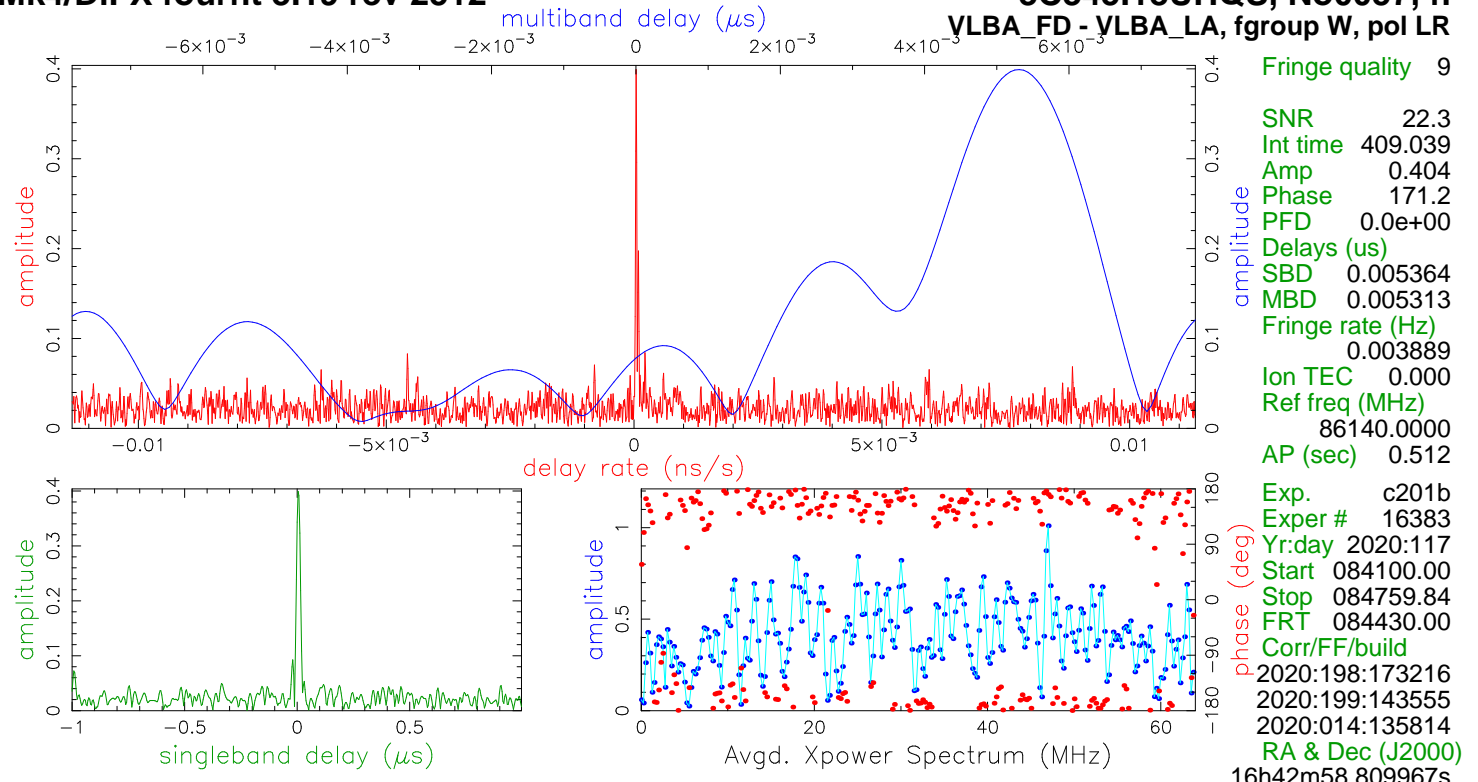
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



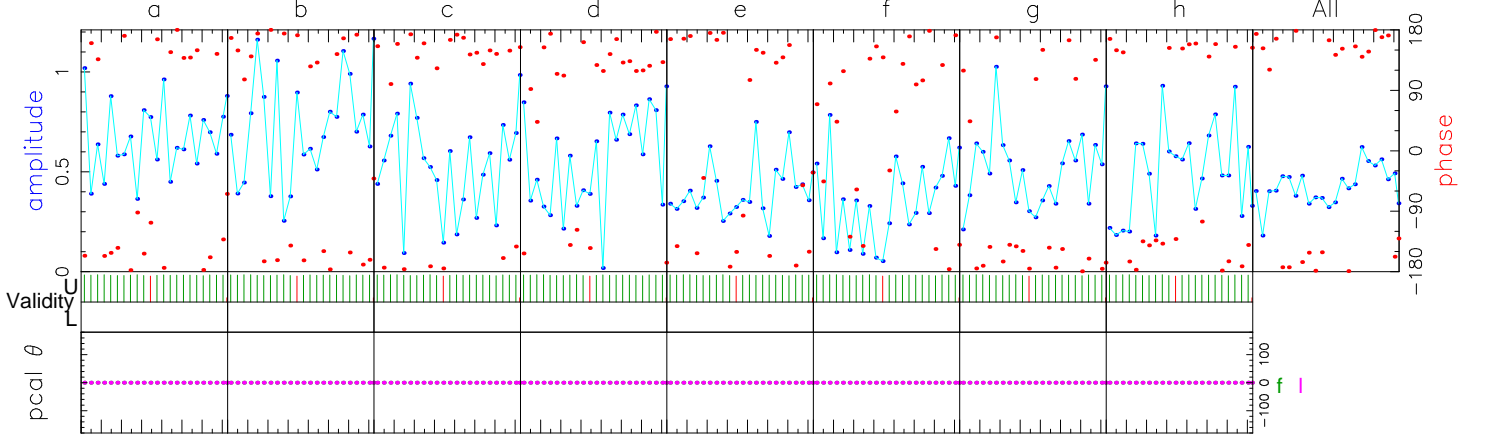
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0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

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



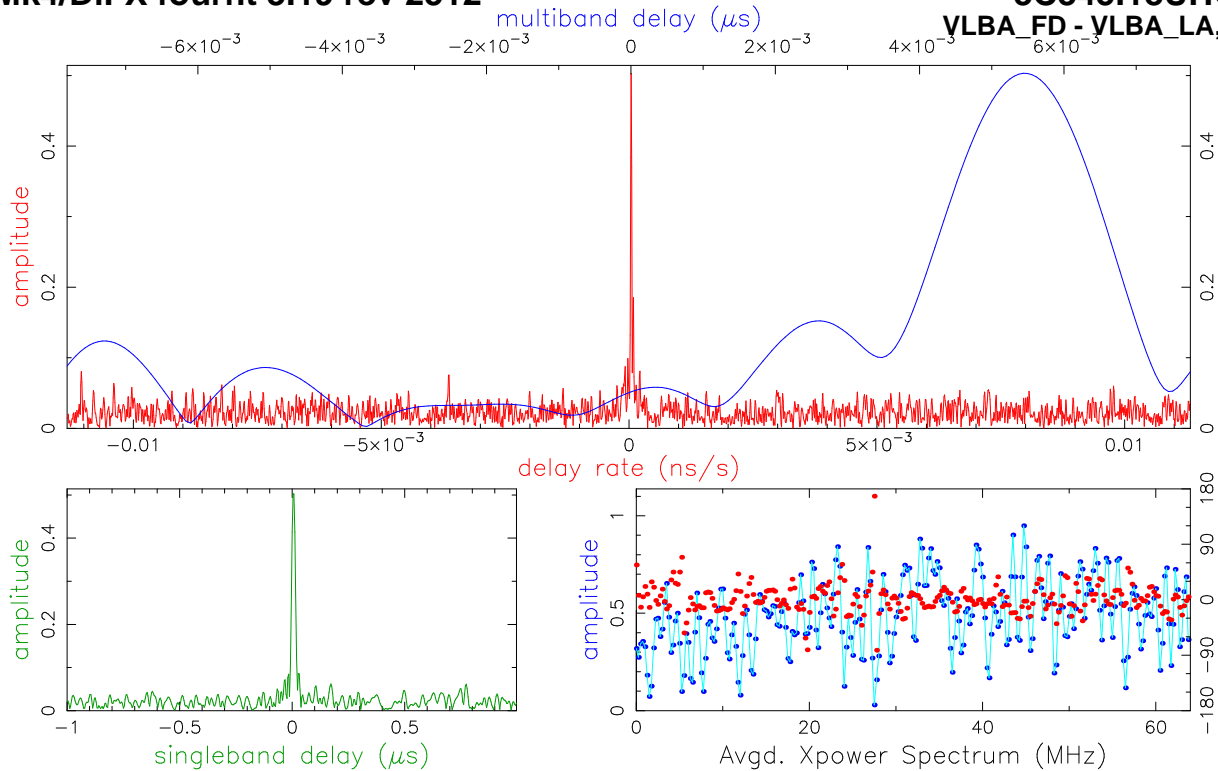


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-173.7	176.0	160.1	147.4	176.0	129.0	-179.9	-175.2	Phase	171.2
	0.5	0.6	0.5	0.4	0.3	0.2	0.4	0.4	Ampl.	0.4
	258.9	257.9	258.3	258.2	258.4	260.3	257.9	258.1	Sbd box	258.4
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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.27288791593E+02		Apriori delay (usec)		-1.27294105069E+02		Resid mbdelay (usec)		5.31348E-03	+/- 4.9E-05
Sband delay (usec)	-1.27288740819E+02		Apriori clock (usec)		7.6062622E+00		Resid sbdelay (usec)		5.36425E-03	+/- 3.9E-04
Phase delay (usec)	-1.27294099548E+02		Apriori clockrate (us/s)		2.6000000E-07		Resid phdelay (usec)		5.52106E-06	+/- 1.7E-07
Delay rate (us/s)	-2.92518400319E-02		Apriori rate (us/s)		-2.92518851805E-02		Resid rate (us/s)		4.51486E-08	+/- 6.8E-10
Total phase (deg)	95.4		Apriori accel (us/s/s)		-4.69686302207E-06		Resid phase (deg)		171.2	+/- 5.1

ph/seg (deg) 22.9 12.3 Search (2048X32) 0.397 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 24.2 21.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 22.4 7.3 Inc. seg. avg. 0.422 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 32.3 12.7 Inc. frq. avg. 0.412 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 l: az 64.0 el 79.5 pa -110.3 u,v (fr/asec) 206.594 -821.060 ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fl..18UHQ5 Output file: /Exps/c201b/v1/1234/No0057/fl.W.118.18UHQ5 simultaneous interpolator

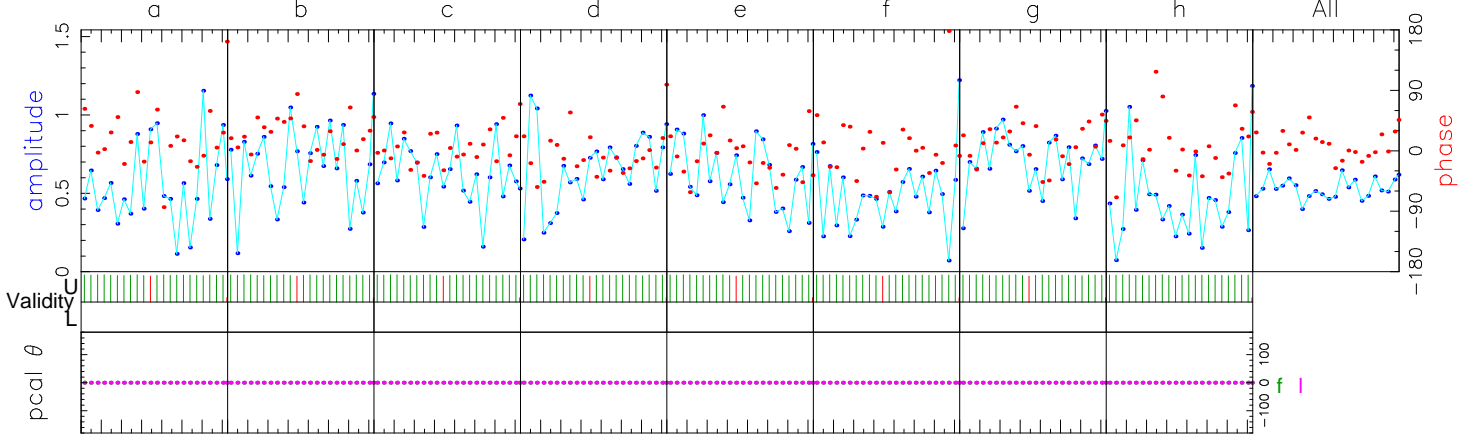


Fringe quality 8

SNR 28.4  
Int time 409.037  
Amp 0.514  
Phase 6.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.005831  
MBD 0.005498  
Fringe rate (Hz) 0.003992  
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



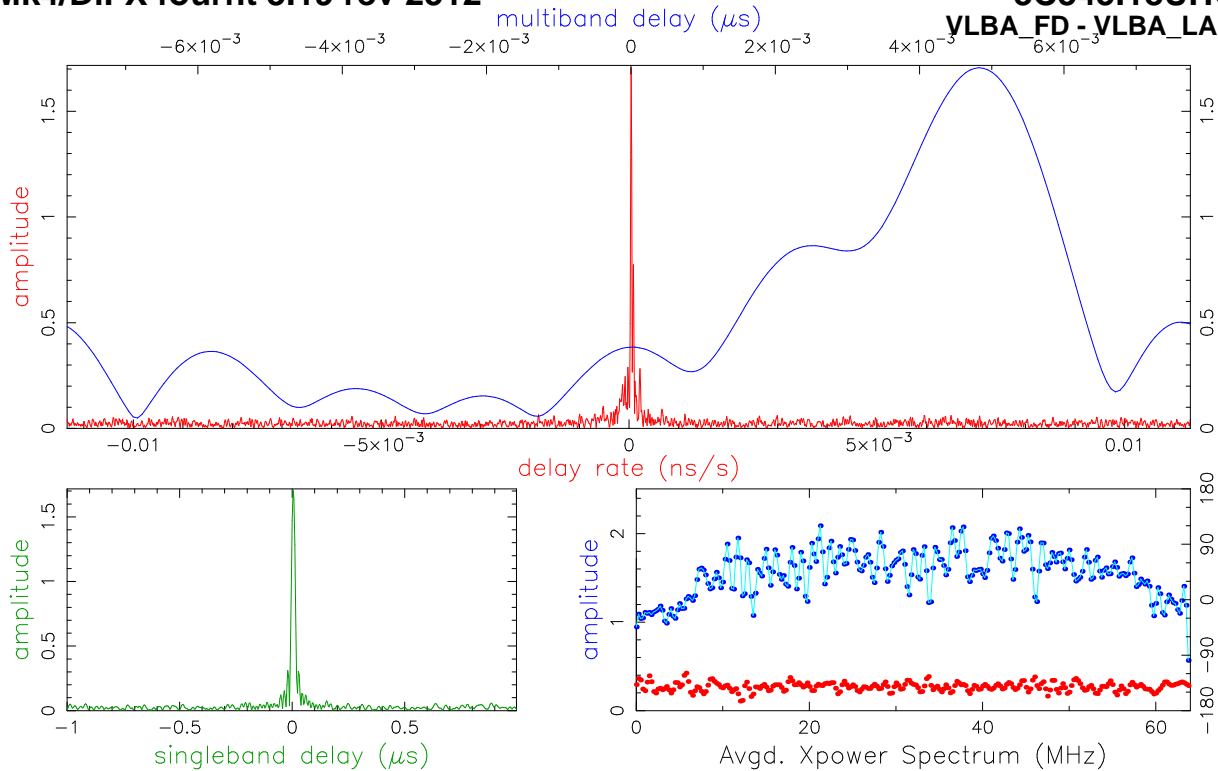
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0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

Group delay (usec)(sbd)	-1.27288607187E+02	Apriori delay (usec)	-1.27294105069E+02	Resid mbdelay (usec)	5.49788E-03	+/-	3.8E-05
Sband delay (usec)	-1.27288273819E+02	Apriori clock (usec)	7.6062622E+00	Resid sbdelay (usec)	5.83125E-03	+/-	3.0E-04
Phase delay (usec)	-1.27294104871E+02	Apriori clockrate (us/s)	2.6000000E-07	Resid phdelay (usec)	1.97522E-07	+/-	1.3E-07
Delay rate (us/s)	-2.92518388373E-02	Apriori rate (us/s)	-2.92518851805E-02	Resid rate (us/s)	4.63432E-08	+/-	5.4E-10
Total phase (deg)	-69.7	Apriori accel (us/s/s)	-4.69686302207E-06	Resid phase (deg)	6.1	+/-	4.0

ph/seg (deg)	18.9	Theor.	9.7	Amplitude	0.514 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	12.6		16.9	Search (2048X32)	0.498	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	14.7		5.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	18.3		9.9	Inc. seg. avg.	0.523	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.514	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

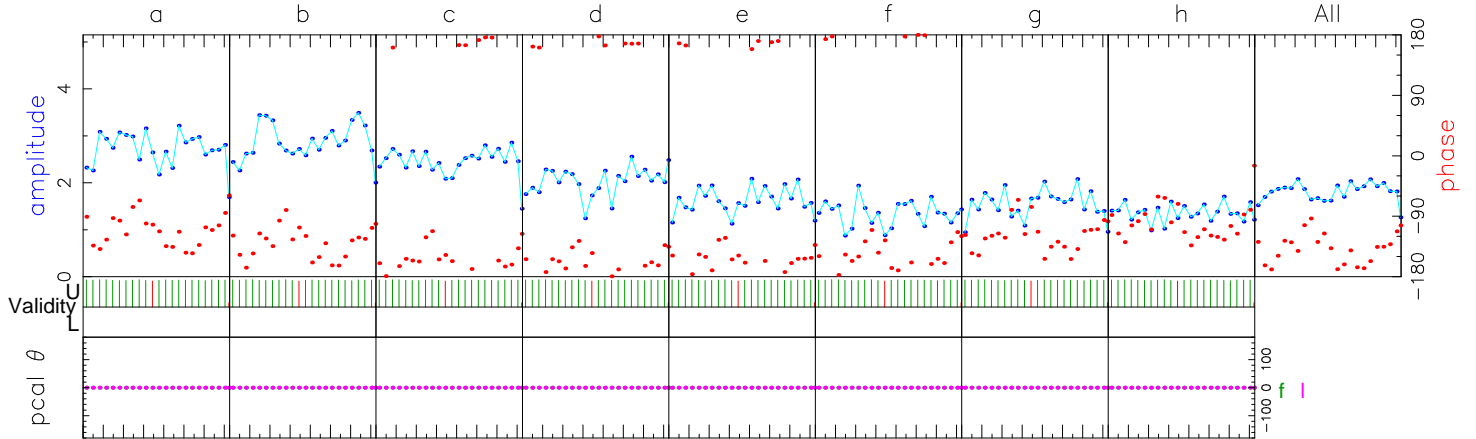
f: az 39.2 el 77.7 pa -133.6      l: az 64.0 el 79.5 pa -110.3      u,v (fr/asec) 206.594 -821.060      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0057/fl..18UHQS      Output file: /Exps/c201b/v1/1234/No0057/fl.W.145.18UHQS



Fringe quality 5  
SNR 95.0  
Int time 409.038  
Amp 1.717  
Phase -139.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.004960  
MBD 0.004841  
Fringe rate (Hz)  
0.003961  
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

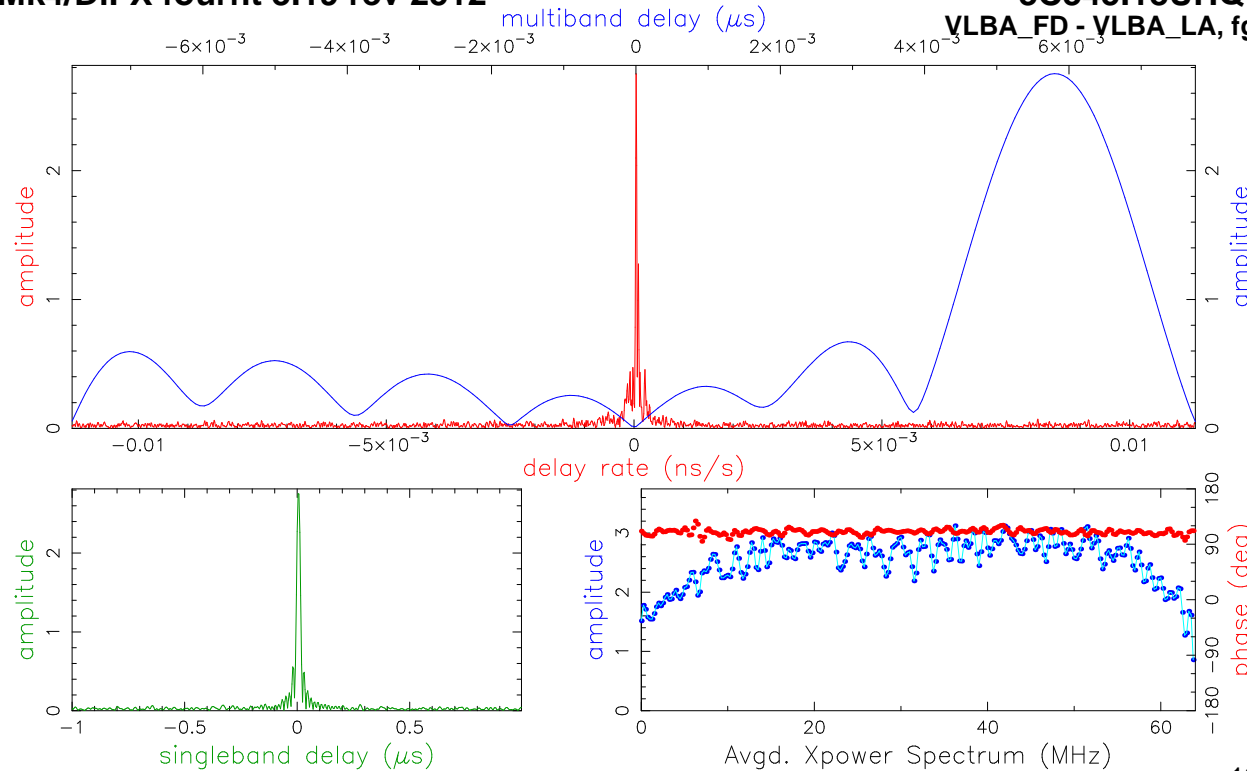


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.0	-130.4	-164.0	-168.2	-164.5	-156.5	-120.7	-102.9	Phase	-139.6
	2.6	2.7	2.3	1.9	1.5	1.3	1.4	1.3	Ampl.	1.9
	258.5	257.8	258.3	258.0	258.5	258.6	258.3	258.6	Sbd box	258.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.27289264468E+02	Apriori delay (usec)	-1.27294105069E+02	Resid mbdelay (usec)	4.84060E-03	+/-	1.1E-05
Sband delay (usec)	-1.27289145069E+02	Apriori clock (usec)	7.6062622E+00	Resid sbdelay (usec)	4.96000E-03	+/-	9.1E-05
Phase delay (usec)	-1.27294109572E+02	Apriori clockrate (us/s)	2.6000000E-07	Resid phdelay (usec)	-4.50312E-06	+/-	3.9E-08
Delay rate (us/s)	-2.92518392029E-02	Apriori rate (us/s)	-2.92518851805E-02	Resid rate (us/s)	4.59776E-08	+/-	1.6E-10
Total phase (deg)	-215.5	Apriori accel (us/s/s)	-4.69686302207E-06	Resid phase (deg)	-139.6	+/-	1.2

ph/seg (deg)	21.5	Theor.	2.9	Amplitude	1.717 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	11.3		5.0	Search (2048X32)	1.690	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.5		1.7	Inc. seg. avg.	1.826	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.7		3.0	Inc. frq. avg.	1.866	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	

f: az 39.2 el 77.7 pa -133.6 l: az 64.0 el 79.5 pa -110.3 u,v (fr/asec) 206.594 -821.060 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fl..18UHQs Output file: /Exps/c201b/v1/1234/No0057/fl.W.82.18UHQs

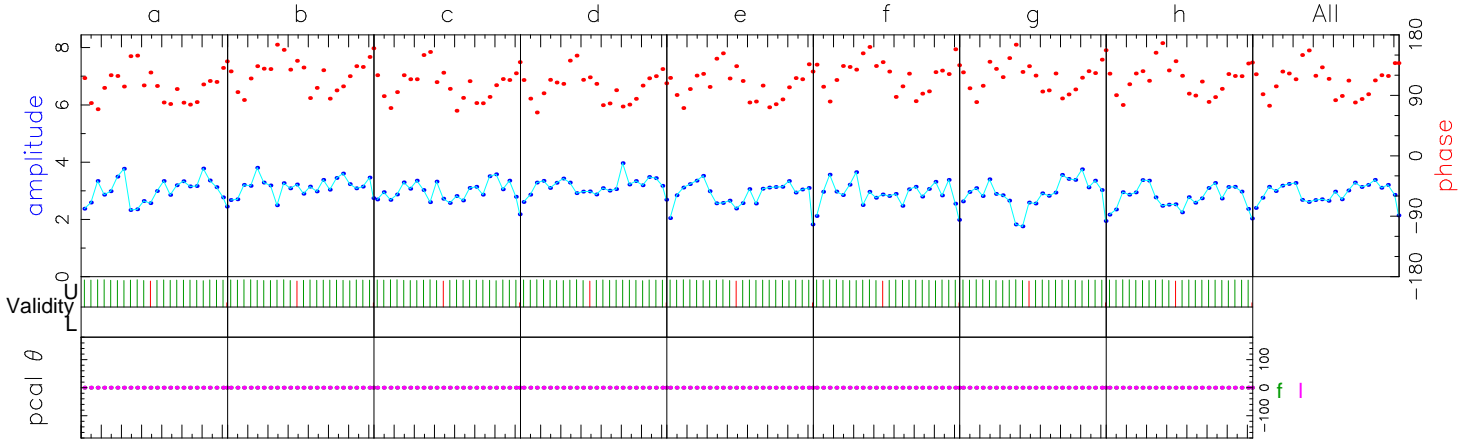


Fringe quality 8

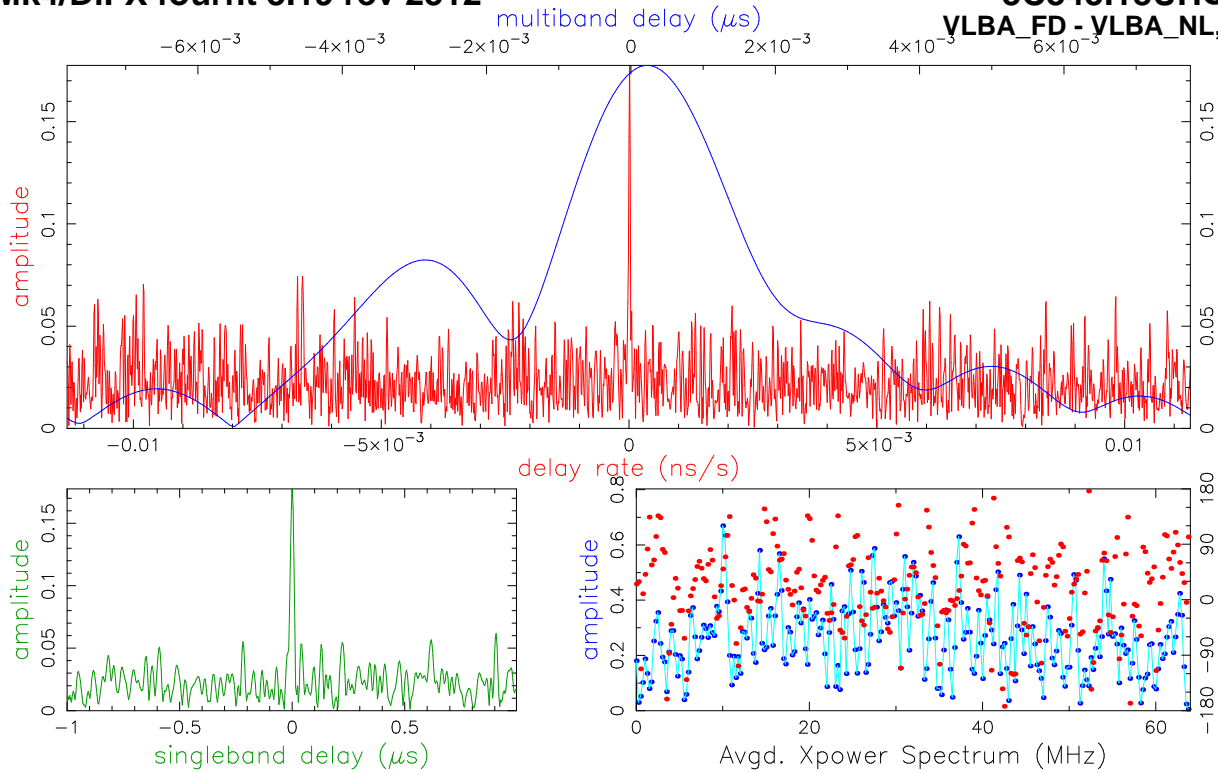
SNR 155.7  
Int time 409.038  
Amp 2.816  
Phase 110.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.005821  
MBD 0.005758  
Fringe rate (Hz)  
0.003996  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

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		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-1.27288346749E+02								Resid mbdelay (usec)	5.75832E-03 +/- 7.0E-06
Sband delay (usec)	-1.27288284319E+02								Resid sbdelay (usec)	5.82075E-03 +/- 5.5E-05
Phase delay (usec)	-1.27294101498E+02								Resid phdelay (usec)	3.57058E-06 +/- 2.4E-08
Delay rate (us/s)	-2.92518387905E-02								Resid rate (us/s)	4.63900E-08 +/- 9.8E-11
Total phase (deg)			34.9						Resid phase (deg)	110.7 +/- 0.7
	RMS	Theor.	Amplitude	2.816 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	22.0	1.8	Search (2048X32)	2.717					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	11.0	3.1	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	8.3	1.0	Inc. seg. avg.	2.955					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	4.4	1.8	Inc. frq. avg.	2.772					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
f: az 39.2 el 77.7 pa -133.6			l: az 64.0 el 79.5 pa -110.3						u,v (fr/asec) 206.594 -821.060	simultaneous interpolator

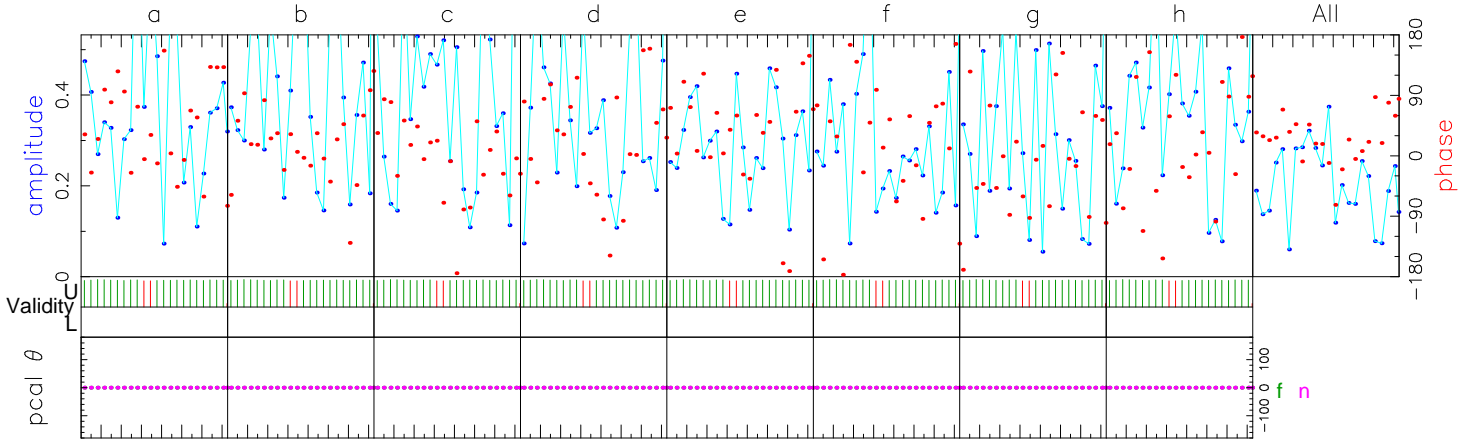


Fringe quality 9

SNR 9.8  
Int time 408.274  
Amp 0.178  
Phase 24.5  
PFD 4.3e-14  
Delays (us)  
SBD -0.000031  
MBD 0.000225  
Fringe rate (Hz) 0.000784  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

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

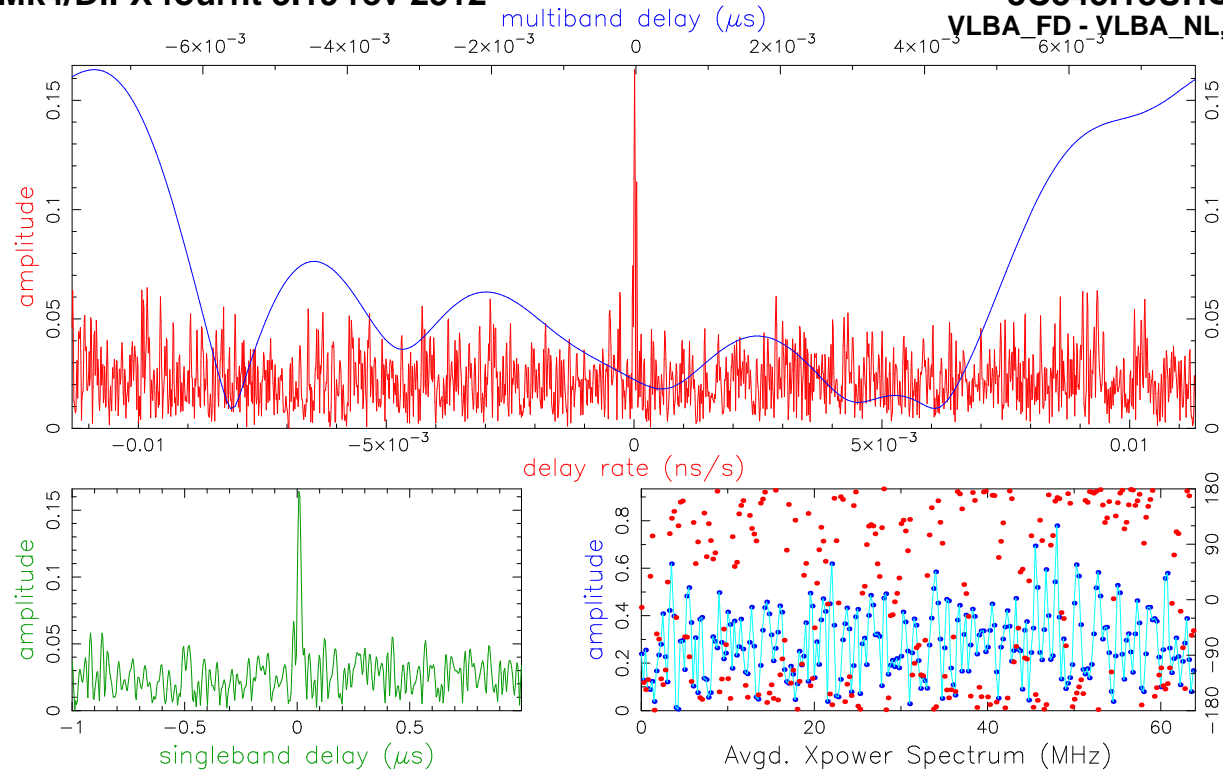
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-4.28443889367E+02			-4.28444114027E+02				2.24660E-04	+/- 1.1E-04
Sband delay (usec)		-4.28444144777E+02			-2.8390385E+01				-3.07500E-05	+/- 8.8E-04
Phase delay (usec)		-4.28444113236E+02			-2.2499998E-07				7.91469E-07	+/- 3.8E-07
Delay rate (us/s)		2.12894003586E-01			2.12893994483E-01				9.10284E-09	+/- 1.6E-09
Total phase (deg)			-329.1		-9.16151493967E-06				24.5	+/- 11.7
	RMS	Theor.	Amplitude	0.178 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	34.9	28.0	Search (2048X32)	0.173	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	49.0	48.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	24.5	16.5	Inc. seg. avg.	0.185	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	41.8	28.8	Inc. frq. avg.	0.181	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 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fn...18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.109.18UHQS

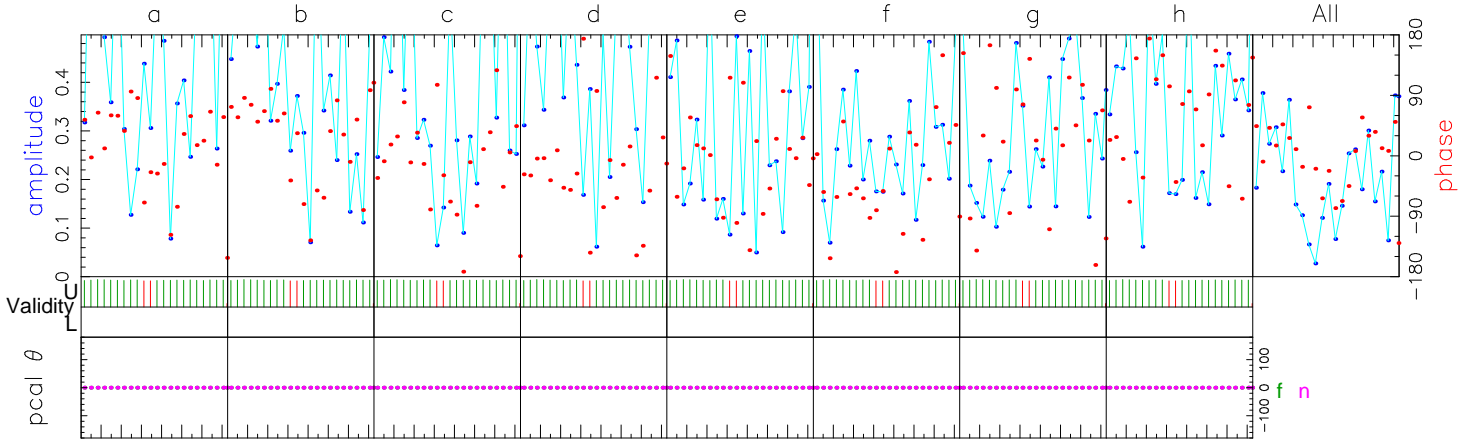


Fringe quality 9

SNR 9.2  
Int time 408.273  
Amp 0.166  
Phase 13.7  
PFD 1.9e-11  
Delays (us)  
SBD 0.009234  
MBD -0.007478  
Fringe rate (Hz) 0.001007  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

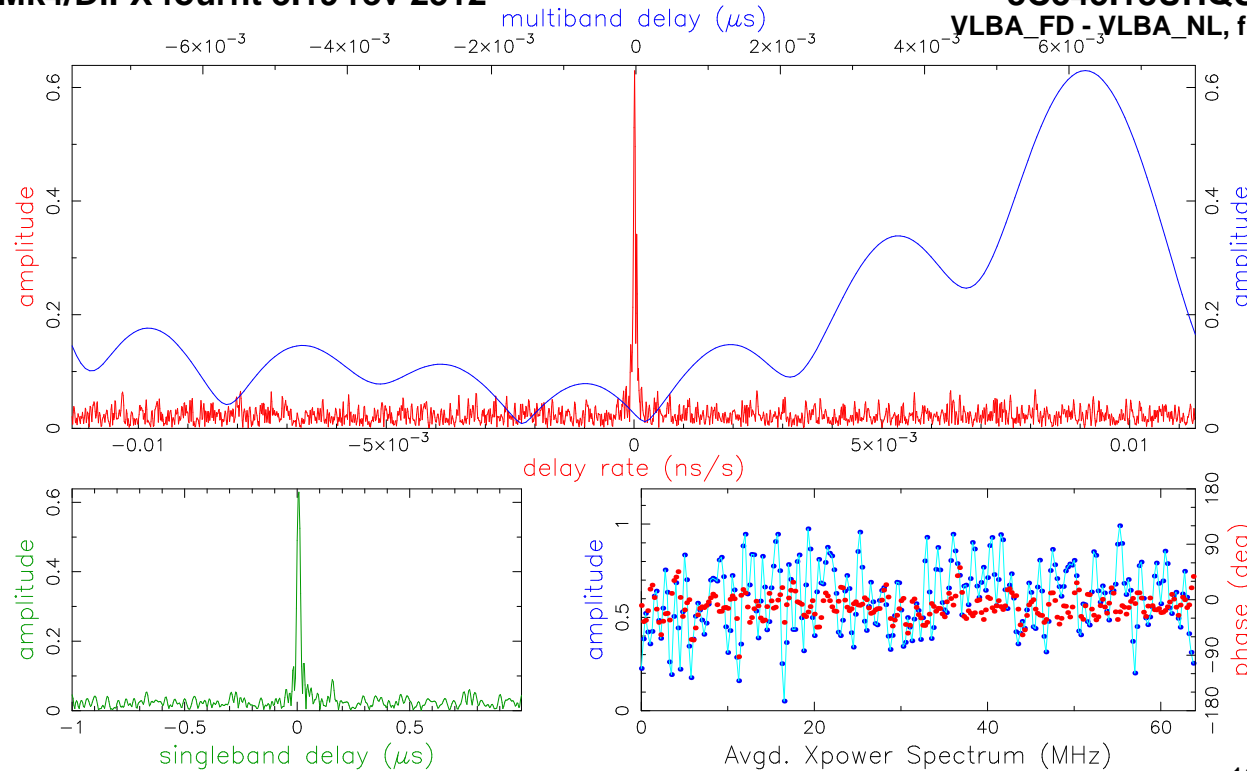
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.51  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143557  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.28435966961E+02				-4.28444114027E+02				-7.47793E-03	+/- 1.2E-04
Sband delay (usec)	-4.28434880277E+02				-2.8390385E+01				9.23375E-03	+/- 9.4E-04
Phase delay (usec)	-4.28444113585E+02				-2.2499998E-07				4.42322E-07	+/- 4.0E-07
Delay rate (us/s)	2.12894006172E-01				2.12893994483E-01				1.16898E-08	+/- 1.7E-09
Total phase (deg)			-339.9		-9.16151493967E-06				13.7	+/- 12.5
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										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
SampCntNorm: enabled									-0.008	0.008
mb window (us)									-0.011	0.011
dr window (ns/s)									0.00	0.00
ion window (TEC)									0.00	0.00

ph/seg (deg) 43.1 30.0 Search (2048X32) 0.162 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.8 52.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 53.7 17.7 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 60.5 30.8 Inc. frq. avg. 0.199 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 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fn...18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.127.18UHQS simultaneous interpolator

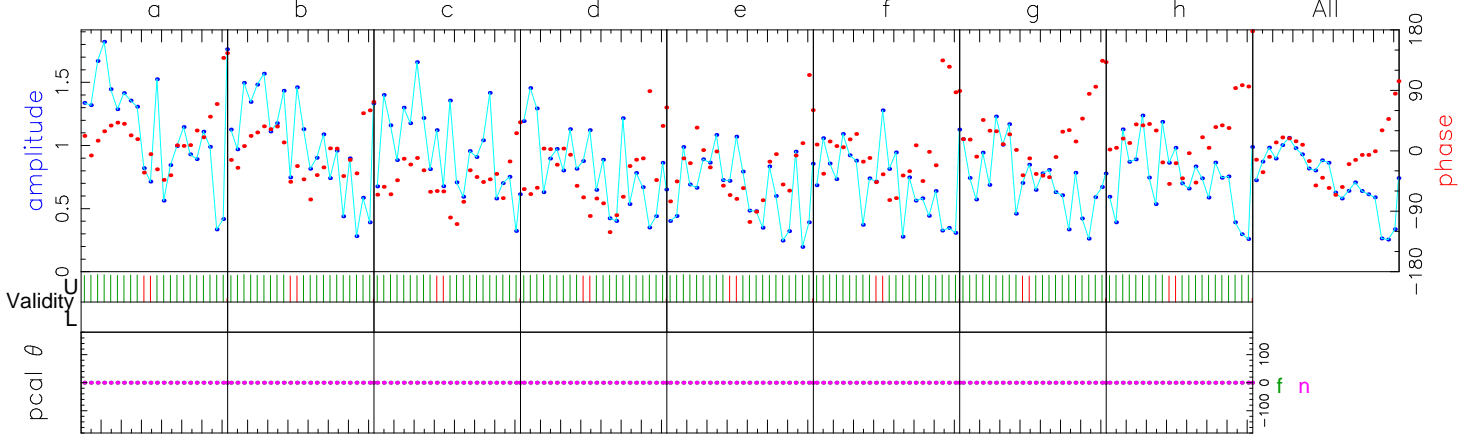


Fringe quality 5

SNR 35.3  
Int time 408.274  
Amp 0.639  
Phase -10.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.006290  
MBD 0.006197  
Fringe rate (Hz) 0.000494  
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  
2020:199:143546  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

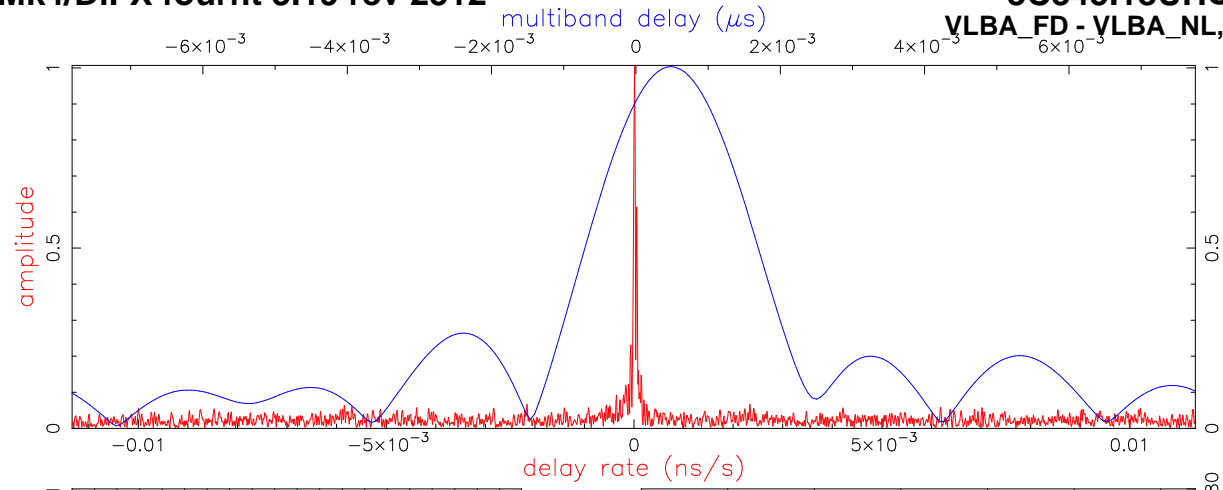
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.28437916555E+02				-4.28444114027E+02				6.19747E-03	+/- 3.1E-05
Sband delay (usec)	-4.28437823777E+02				-2.8390385E+01				6.29025E-03	+/- 2.4E-04
Phase delay (usec)	-4.28444114351E+02				-2.2499998E-07				-3.23516E-07	+/- 1.0E-07
Delay rate (us/s)	2.12894000218E-01				2.12893994483E-01				5.73577E-09	+/- 4.3E-10
Total phase (deg)			-3.7		-9.16151493967E-06				-10.0	+/- 3.2
	RMS	Theor.	Amplitude	0.639 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	36.3	7.8	Search (2048X32)	0.595	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	38.3	13.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	27.6	4.6	Inc. seg. avg.	0.724	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	26.9	8.0	Inc. frq. avg.	0.689	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 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 simultaneous interpolator

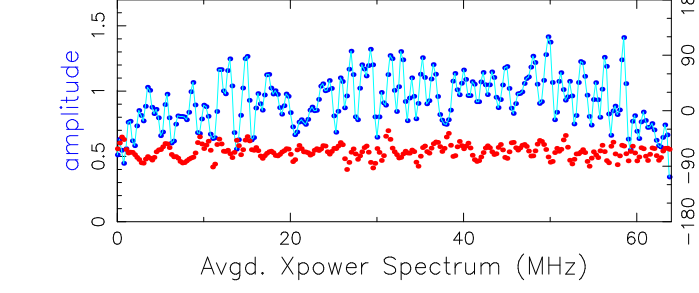
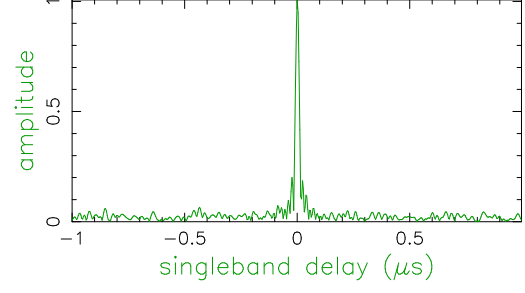
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.83.18UHQS



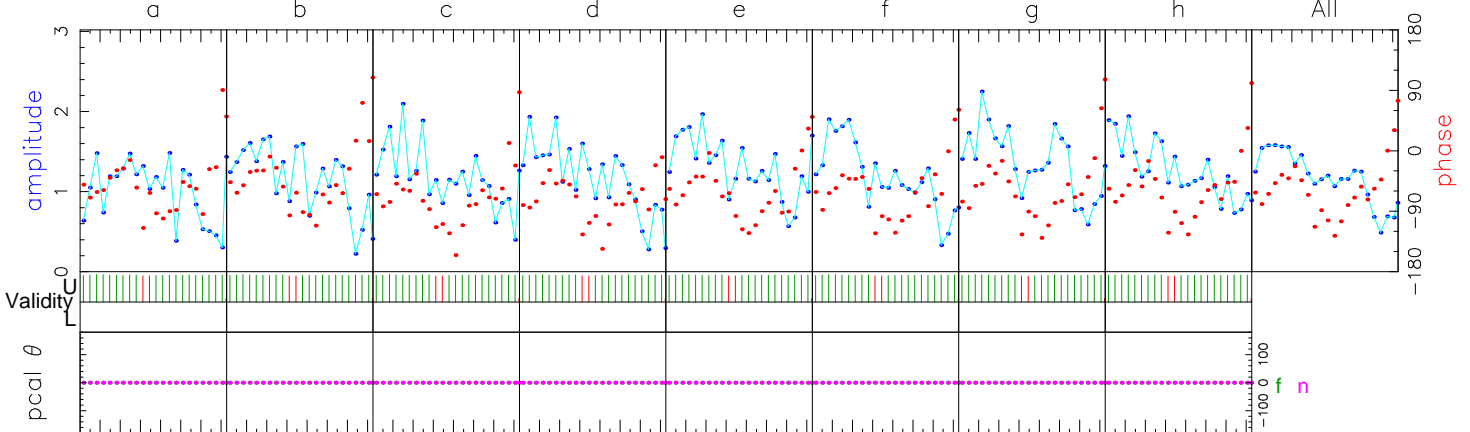
Fringe quality 6

SNR 55.6  
Int time 408.273  
Amp 1.007  
Phase -63.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.000750  
MBD 0.000502  
Fringe rate (Hz) 0.000806  
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  
2020:199:143550  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



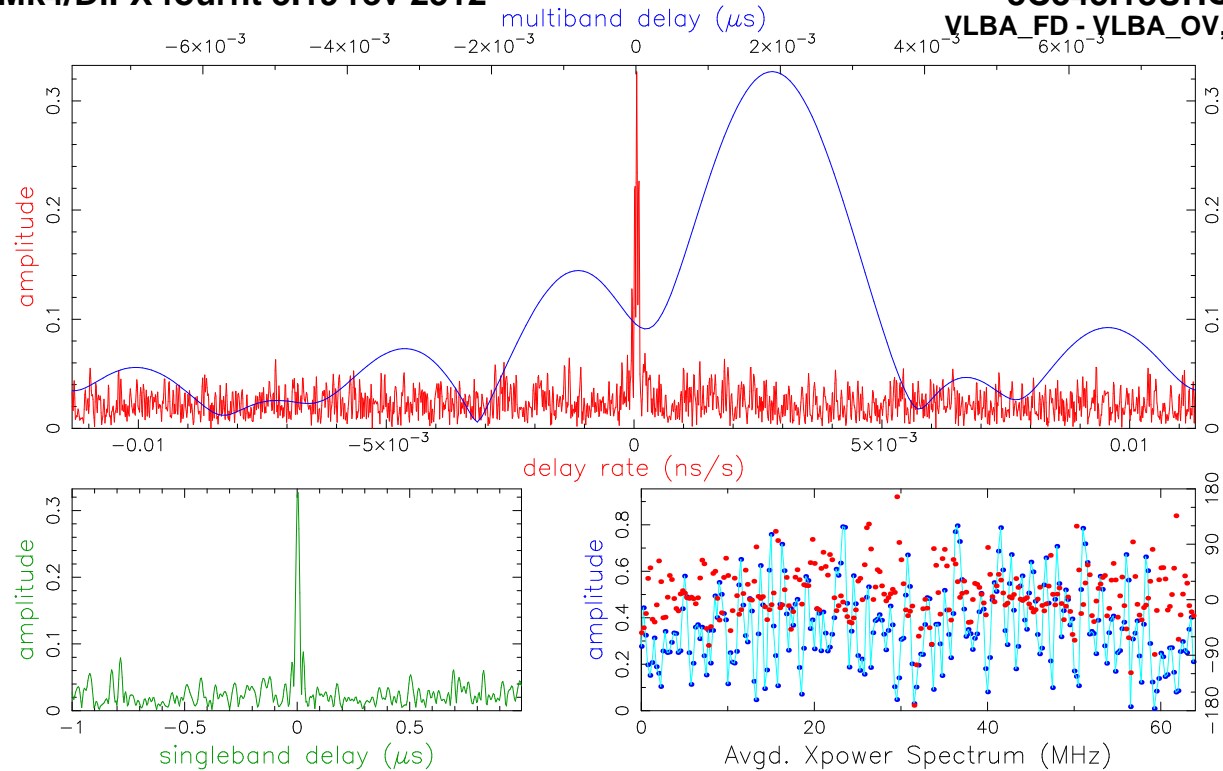
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-58.2	-49.7	-74.8	-72.6	-61.9	-64.7	-62.0	-61.2	Phase	-63.2
	0.8	1.0	1.0	1.0	1.0	1.0	1.1	1.1	Ampl.	1.0
	257.6	256.9	256.7	257.2	257.3	257.4	257.3	257.3	Sbd box	257.2
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.28443611961E+02		Apriori delay (usec)		-4.28444114027E+02		Resid mbdelay (usec)		5.02066E-04	+/- 2.0E-05
Sband delay (usec)	-4.28443363777E+02		Apriori clock (usec)		-2.8390385E+01		Resid sbdelay (usec)		7.50250E-04	+/- 1.5E-04
Phase delay (usec)	-4.28444116066E+02		Apriori clockrate (us/s)		-2.2499998E-07		Resid phdelay (usec)		-2.03839E-06	+/- 6.6E-08
Delay rate (us/s)	2.12894003837E-01		Apriori rate (us/s)		2.12893994483E-01		Resid rate (us/s)		9.35438E-09	+/- 2.7E-10
Total phase (deg)			Apriori accel (us/s/s)		-9.16151493967E-06		Resid phase (deg)		-63.2	+/- 2.1

ph/seg (deg) 37.1 4.9 Search (2048X32) 0.998 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 35.5 8.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 8.6 2.9 Inc. seg. avg. 1.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 7.2 5.1 Inc. frq. avg. 1.010 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 n: az 222.0 el 87.3 pa 44.3 u,v (fr/asec) -1608.131 -1640.211 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fn..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fn.W.96.18UHQS



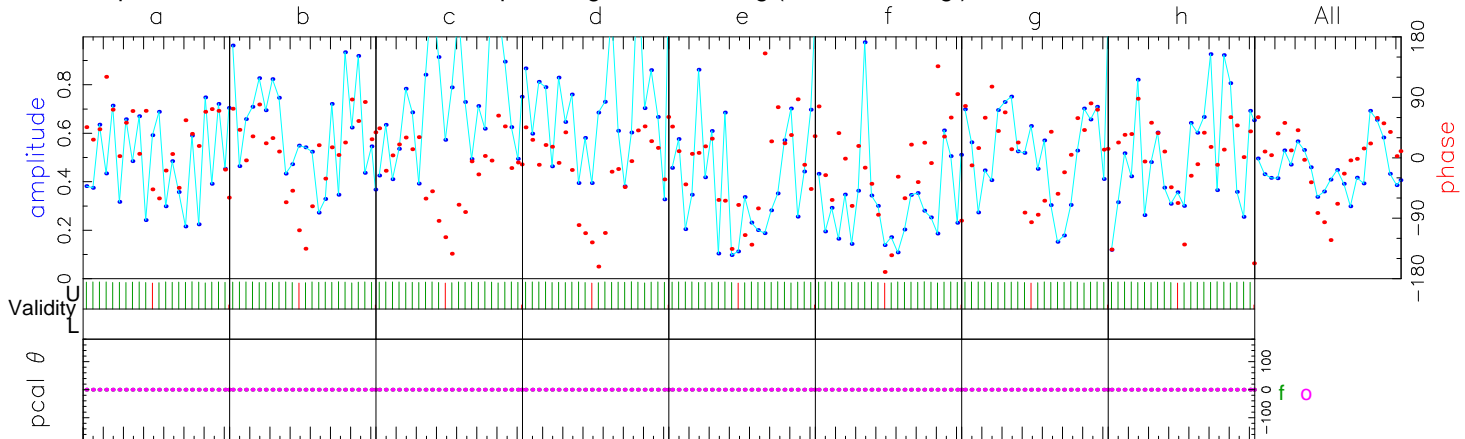


Fringe quality 9

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

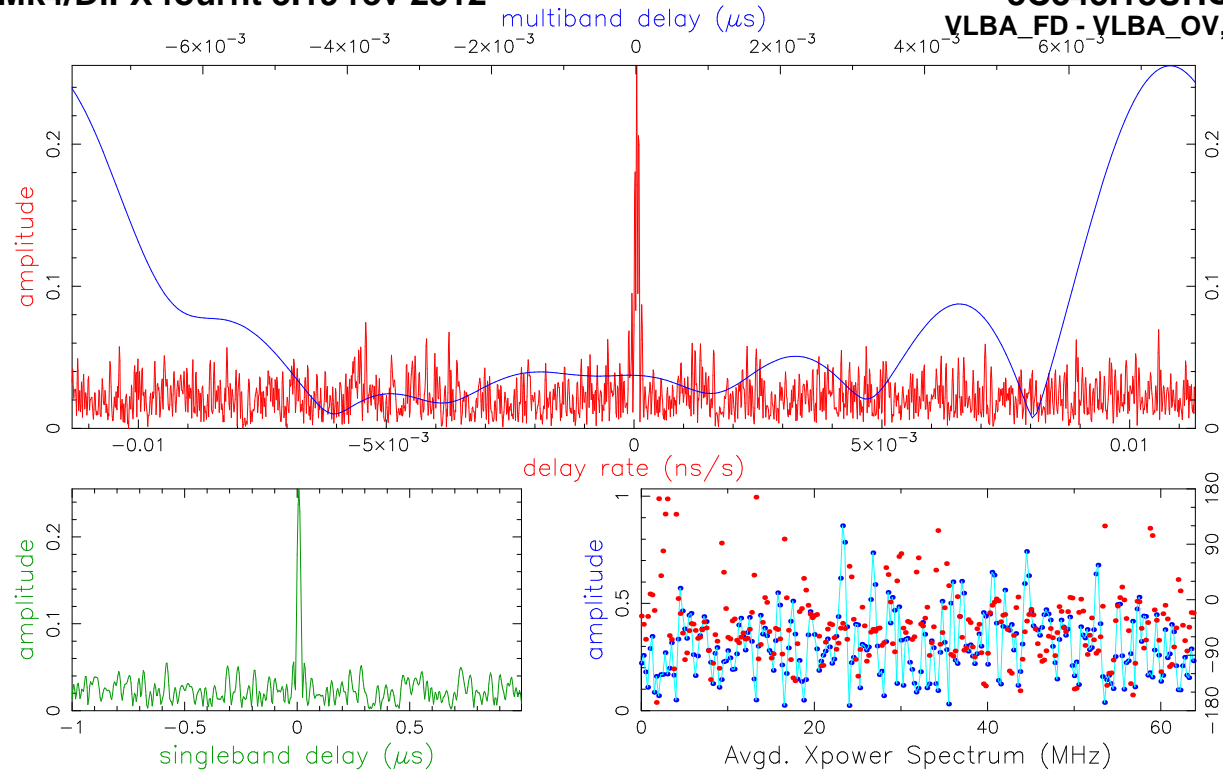
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143555  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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 ion window (TEC) 0.00 0.00  
 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 simultaneous interpolator

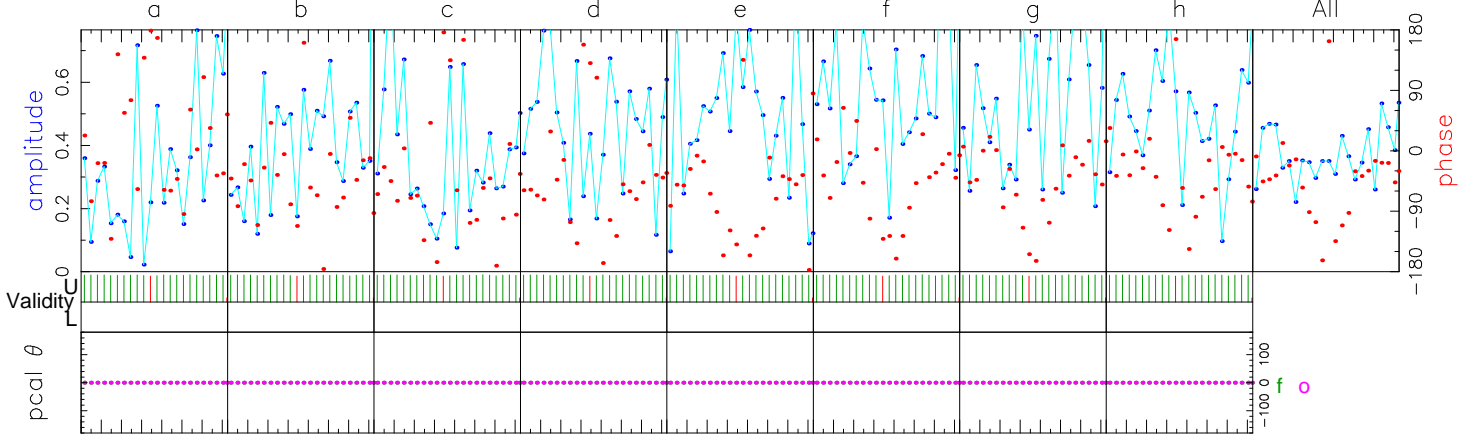


Fringe quality 9

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

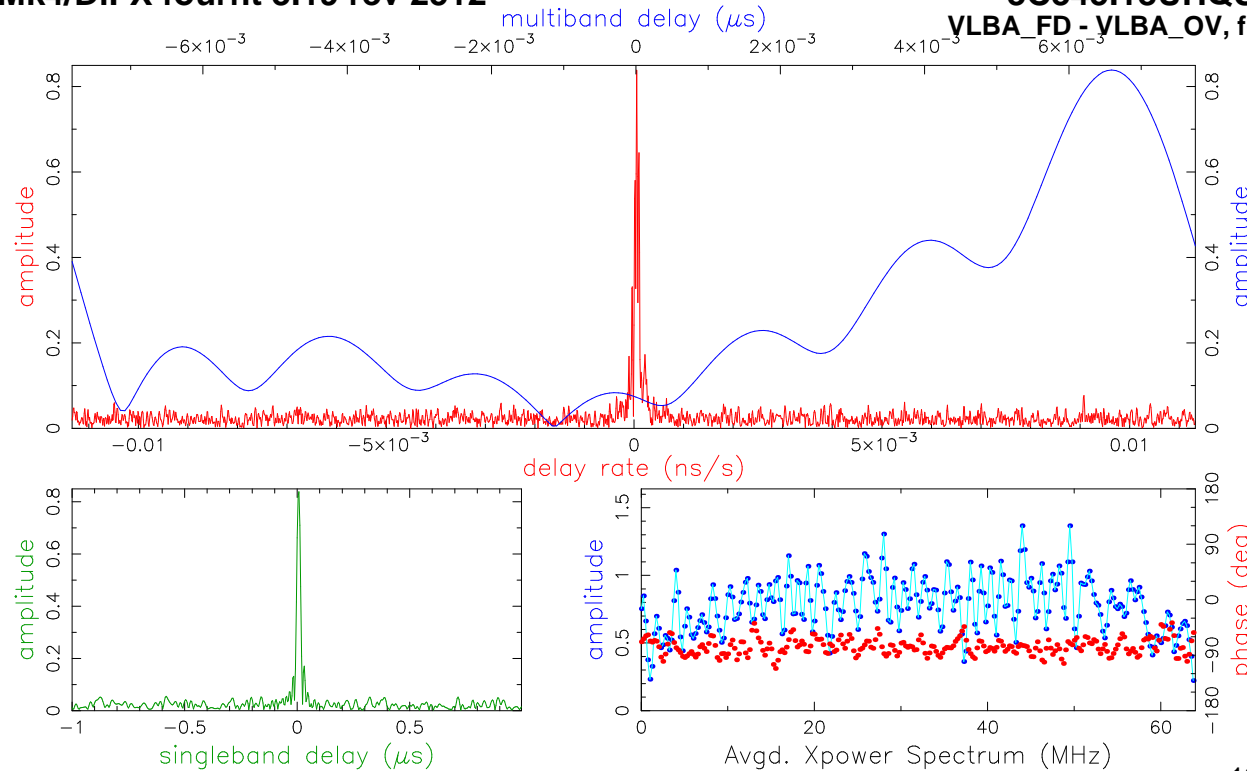
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143600  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



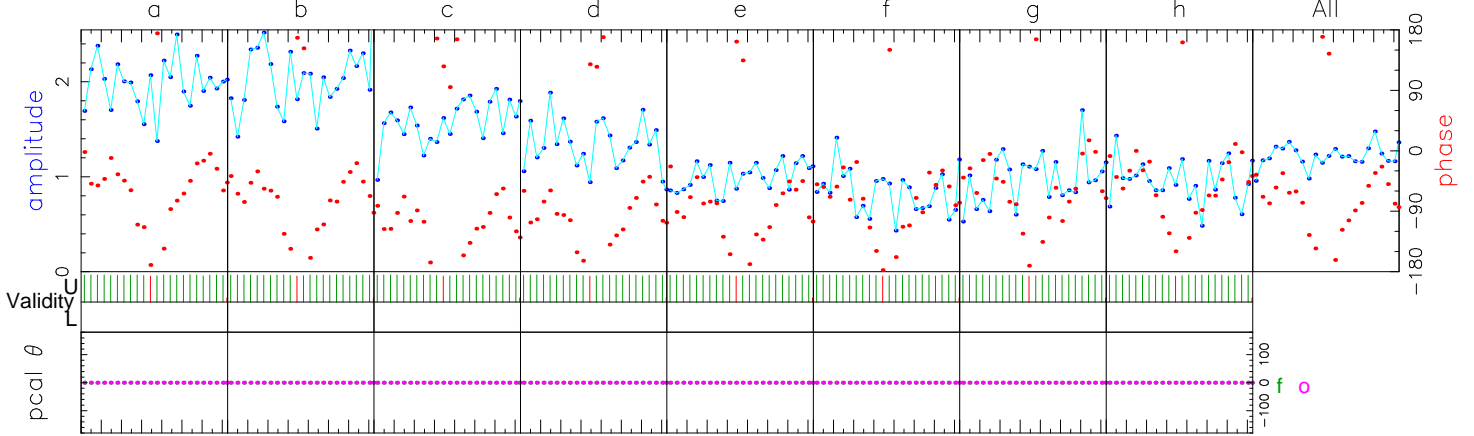
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.0	-44.3	-65.8	-64.3	-80.7	-35.0	-41.4	-44.6	Phase	-49.2
	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	Ampl.	0.3
	259.2	259.1	437.0	258.6	259.4	258.8	258.5	259.1	Sbd box	258.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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

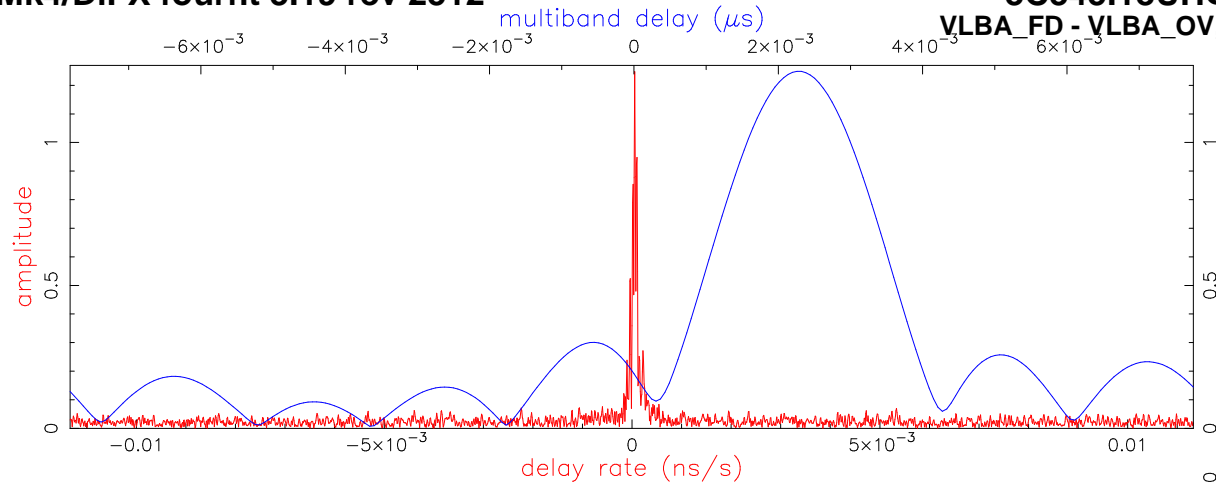


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	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

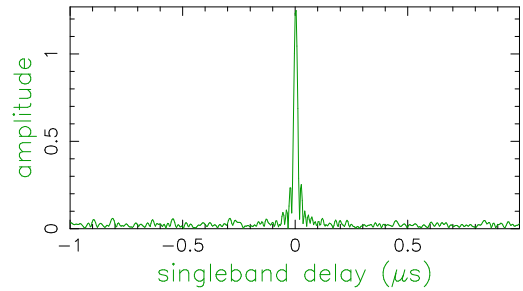
ph/seg (deg)	51.2	Theor. 5.9	Amplitude	0.849 +/- 0.018	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	45.1	10.2	Search (2048X32)	0.766	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	25.0	3.5	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.1	6.0	Inc. seg. avg.	1.209	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.904	Data rate(Mb/s): 2048		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

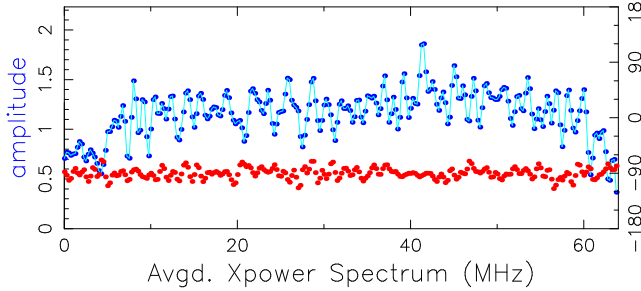


Fringe quality 5

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

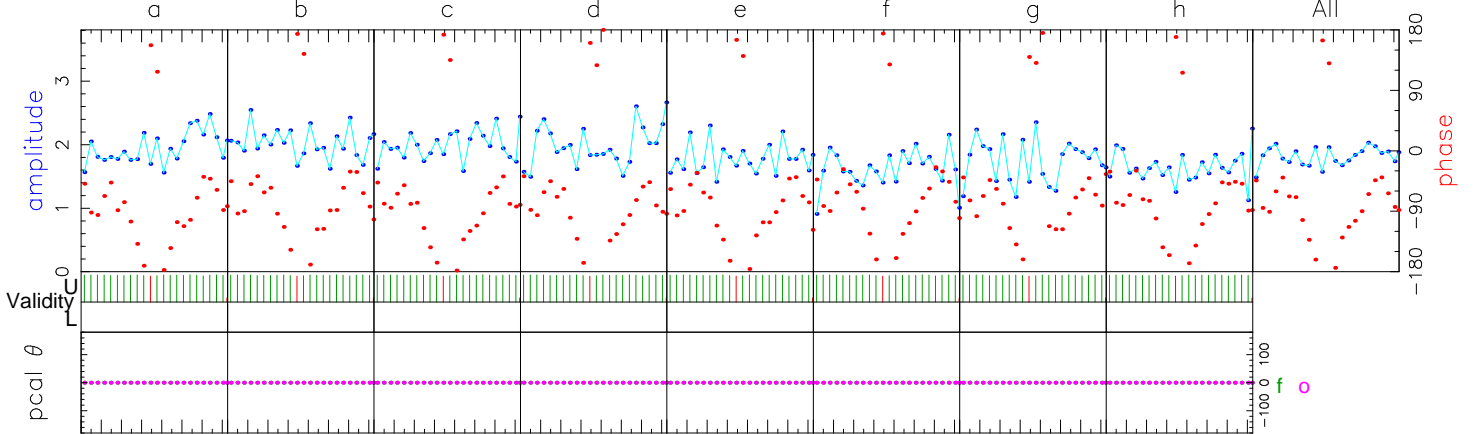


delay rate (ns/s)



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

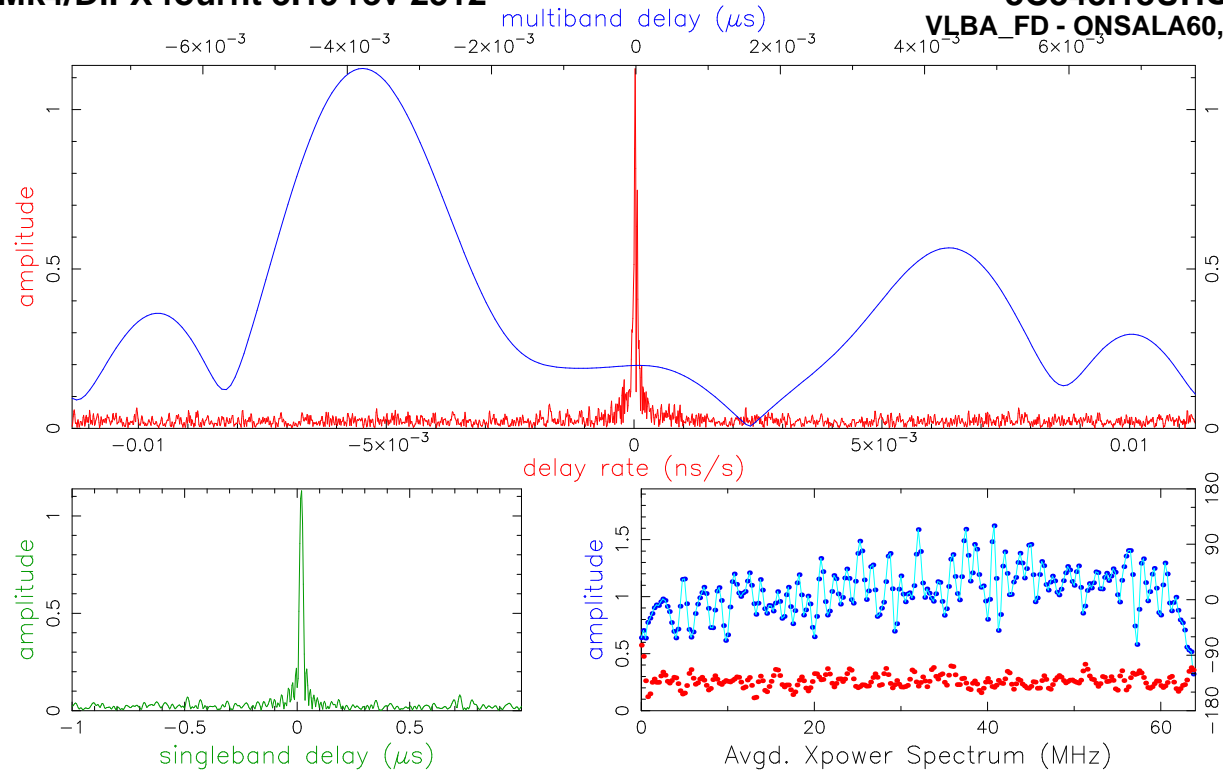


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-95.2	-85.4	-97.3	-93.8	-92.2	-82.2	-91.8	-86.0	Phase	-90.7
	1.3	1.4	1.4	1.4	1.2	1.1	1.1	1.1	Ampl.	1.3
	257.6	257.2	257.6	257.7	257.7	257.5	257.8	257.6	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fX  
VLBA\_FD - ONSALA60, fgroup W, pol RR

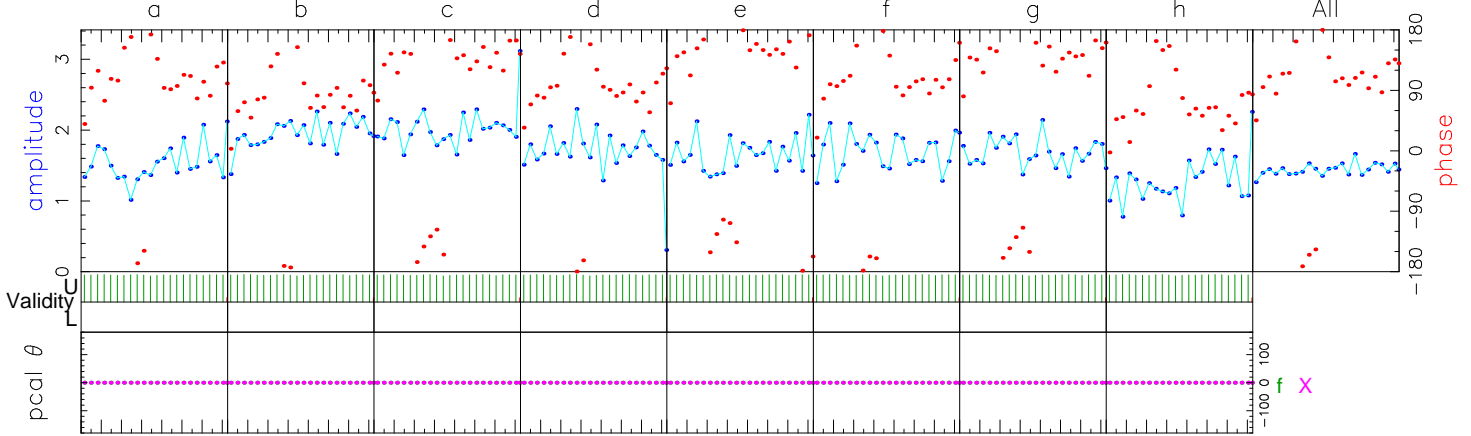


Fringe quality 3

SNR 63.3  
Int time 412.793  
Amp 1.139  
Phase 122.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.018312  
MBD -0.003828  
Fringe rate (Hz) 0.001826  
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  
2020:199:143551  
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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.19329313383E+04			1.19329195416E+04				-3.82832E-03	+/- 1.7E-05
Sband delay (usec)		1.19329378533E+04			-3.6865437E+01				1.83118E-02	+/- 1.4E-04
Phase delay (usec)		1.19329195455E+04			-4.1900001E-07				3.94357E-06	+/- 5.8E-08
Delay rate (us/s)		7.75528055115E-01			7.75528033917E-01				2.11979E-08	+/- 2.4E-10
Total phase (deg)			234.5		-8.76798660827E-05				122.3	+/- 1.8
ph/seg (deg)	RMS 40.8	Theor. 4.3	Amplitude 1.139 +/- 0.018		1.120				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	27.8	7.6	Search (2048X32) 0.000		1.120				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	37.0	2.6	Interp. 1.440		1.440				Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	21.1	4.5	Inc. seg. avg. 1.312		1.312				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
			Inc. frq. avg. 1.312		1.312				Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

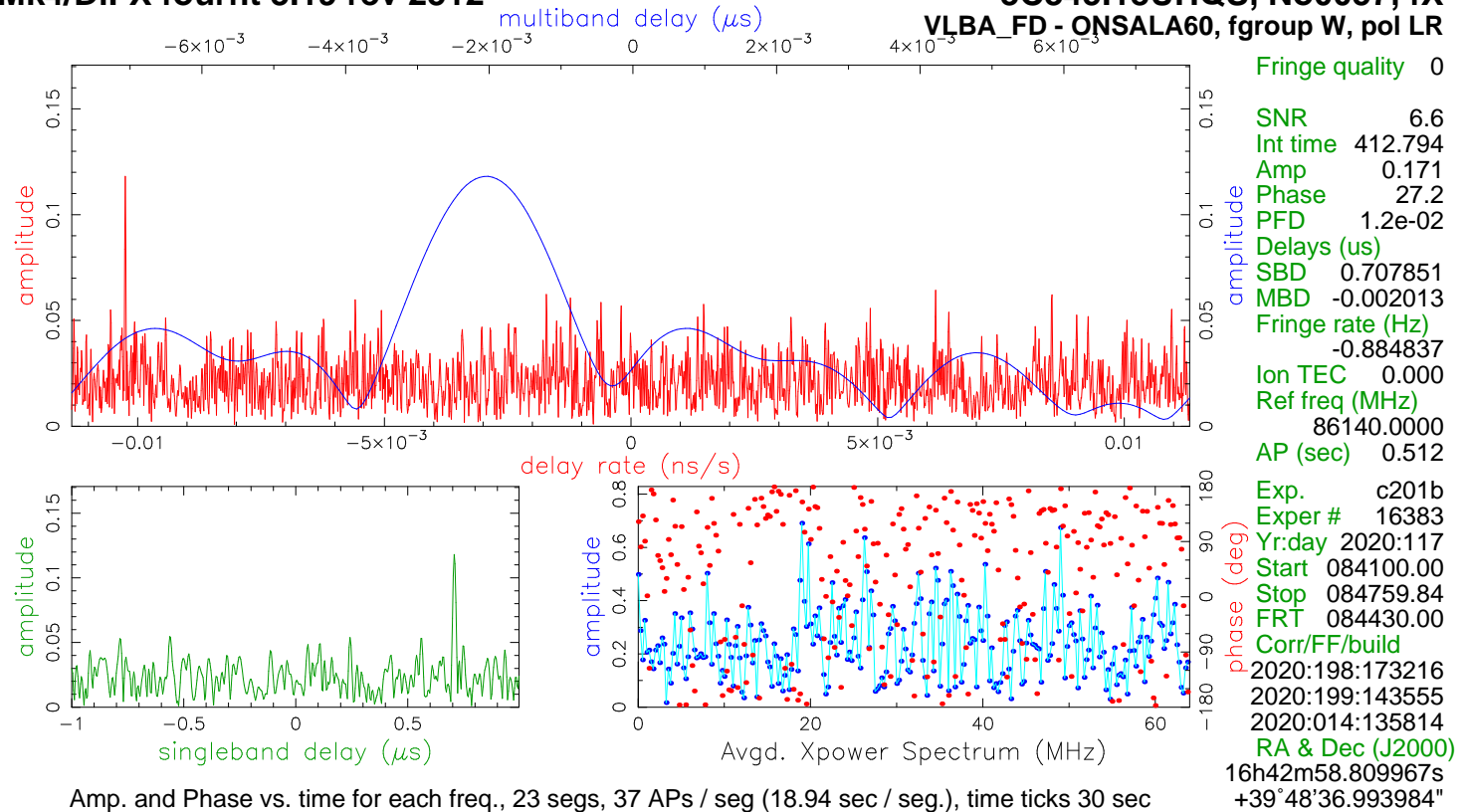
f: az 39.2 el 77.7 pa -133.6 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -5971.443 -7911.275 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fX.W.101.18UHQS

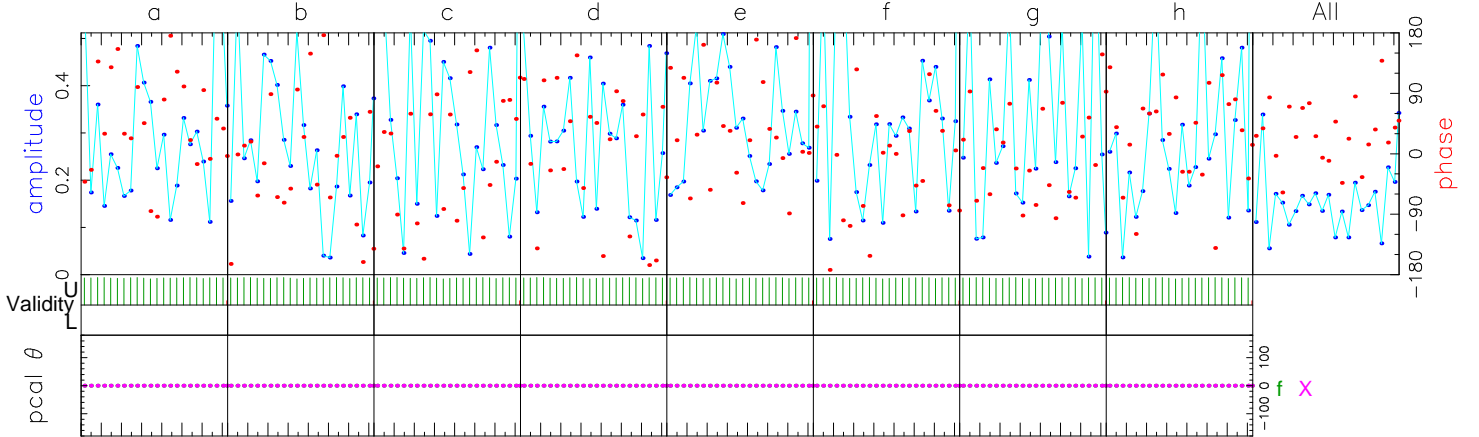
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fX

VLBA\_FD - ONSALA60, 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
50.9	-0.0	10.7	78.1	25.0	0.5	12.3	47.2	27.2		
0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Phase	27.2
270.7	399.7	134.9	172.4	433.2	109.7	438.2	236.8	0.2	Ampl.	0.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Sbd box	438.2
f	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.19336206531E+04		Apriori delay (usec)	1.19329195416E+04	Resid mbdelay (usec)	-2.01346E-03	+/-	1.6E-04		
Sband delay (usec)	1.19336273921E+04		Apriori clock (usec)	-3.6865437E+01	Resid sbdelay (usec)	7.07851E-01	+/-	1.3E-03		
Phase delay (usec)	1.19329195425E+04		Apriori clockrate (us/s)	-4.1900001E-07	Resid phdelay (usec)	8.76153E-07	+/-	5.6E-07		
Delay rate (us/s)	7.75517761835E-01		Apriori rate (us/s)	7.75528033917E-01	Resid rate (us/s)	-1.02721E-05	+/-	2.3E-09		
Total phase (deg)		139.4	Apriori accel (us/s/s)	-8.76798660827E-05	Resid phase (deg)	27.2	+/-	17.4		

ph/seg (deg) 45.4 41.7 Search (2048X32) 0.115 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 59.0 72.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 30.3 24.6 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

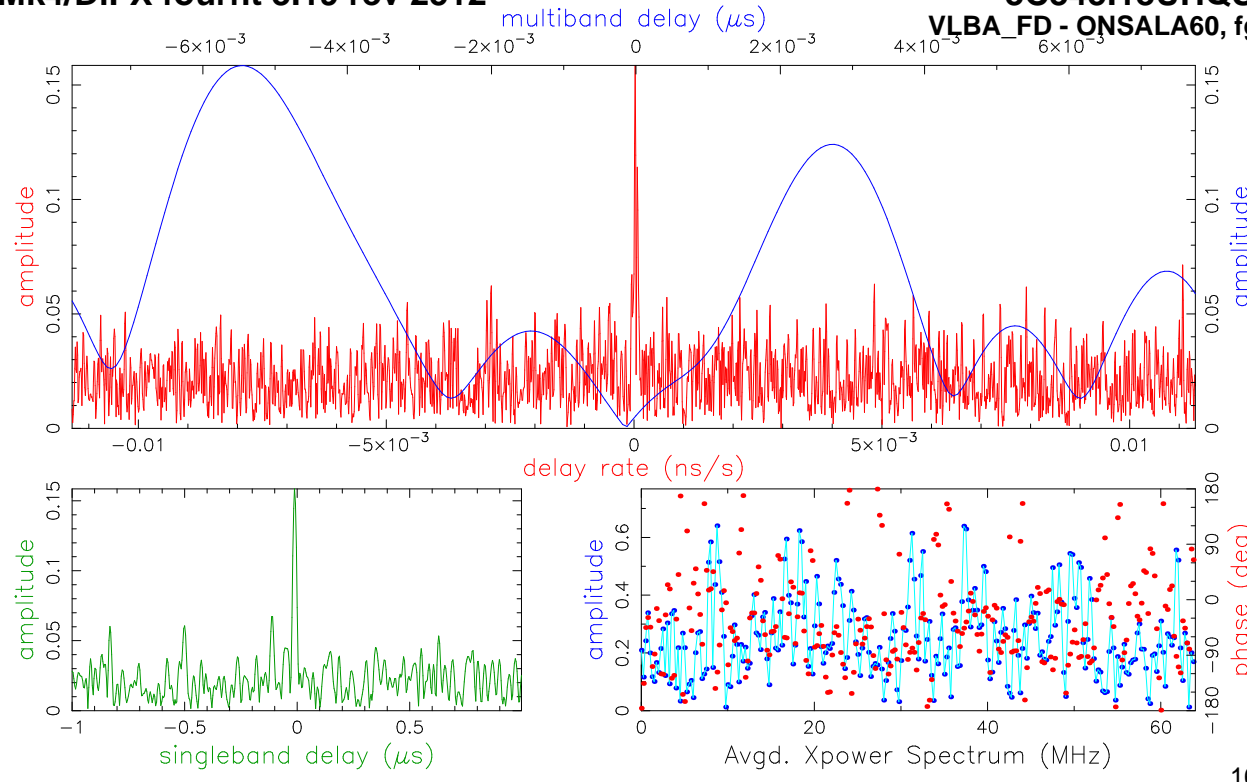
amp/frq (%) 23.0 42.9 Inc. frq. avg. 0.171 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

f: az 39.2 el 77.7 pa -133.6 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -5971.443 -7911.275 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fX.W.119.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fX  
VLBA\_FD - ONSALA60, fgroup W, pol RL

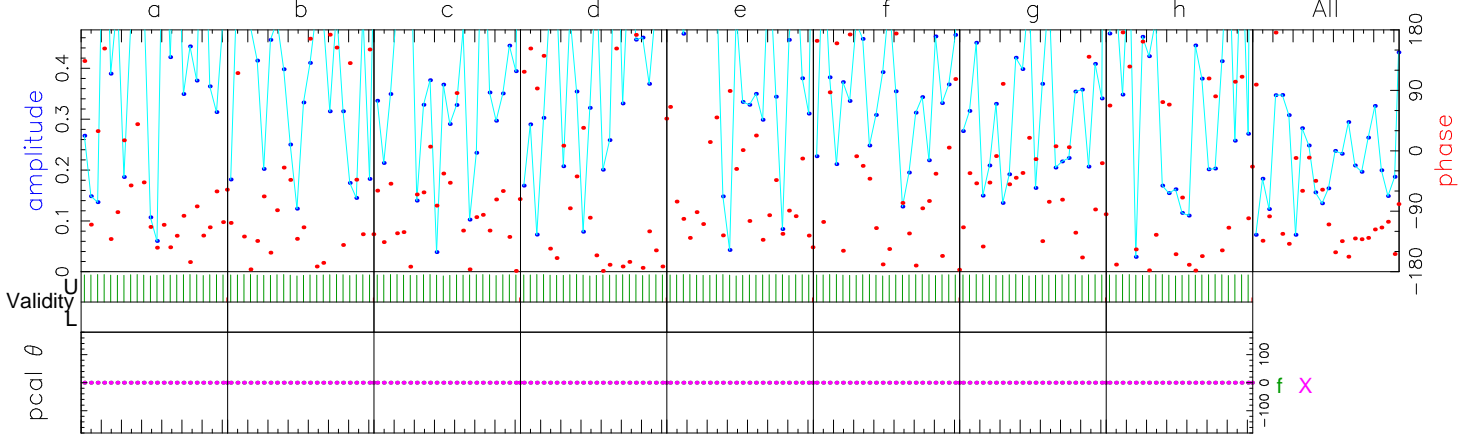


Fringe quality 9

SNR 8.8  
Int time 412.793  
Amp 0.159  
Phase -121.6  
PFD 4.7e-10  
Delays (us)  
SBD -0.011405  
MBD -0.005452  
Fringe rate (Hz) 0.001764  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

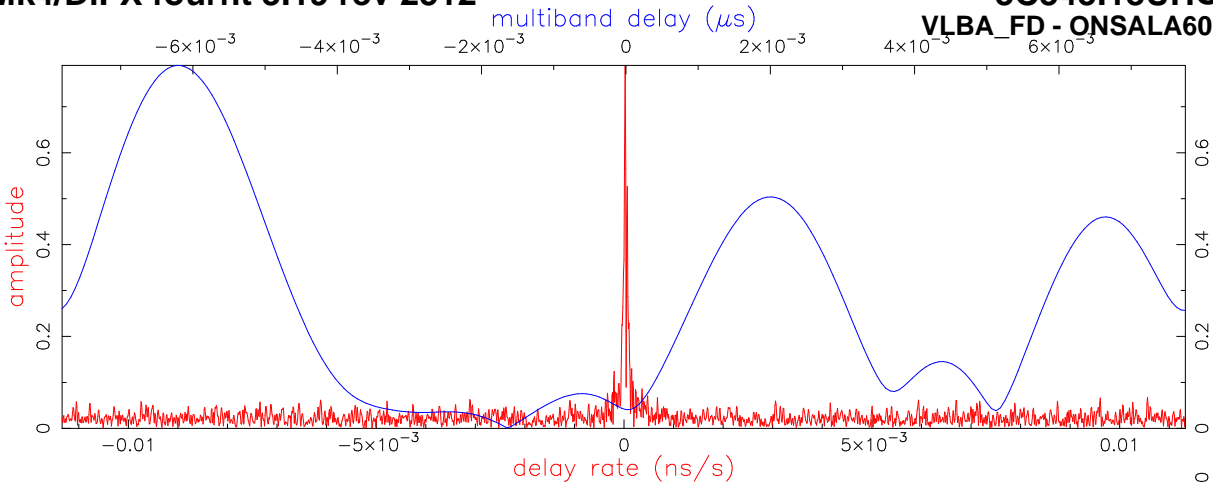
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143559  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



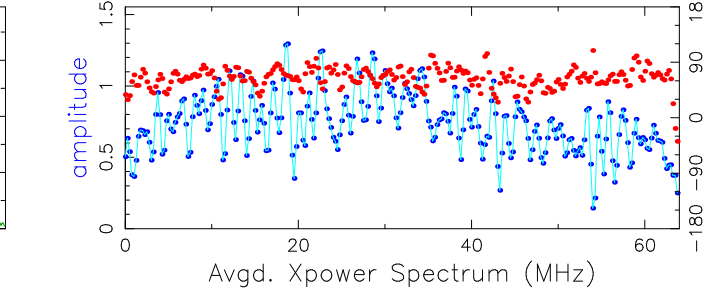
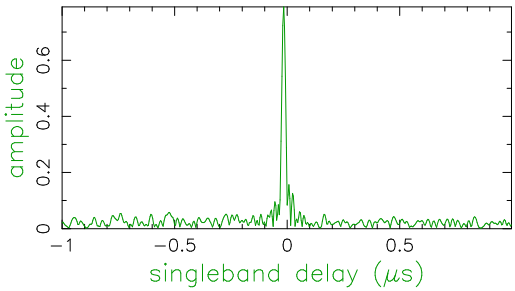
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.4	-150.4	-100.0	-164.2	-74.2	-126.7	-56.6	170.8	Phase	-121.6
	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	Ampl.	0.2
	253.5	253.4	254.2	253.2	252.9	251.2	253.3	449.3	Sbd box	254.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.19329140899E+04		Apriori delay (usec)		1.19329195416E+04		Resid mbdelay (usec)		-5.45164E-03	+/- 1.2E-04
Sband delay (usec)	1.19329081361E+04		Apriori clock (usec)		-3.6865437E+01		Resid sbdelay (usec)		-1.14055E-02	+/- 9.8E-04
Phase delay (usec)	1.19329195377E+04		Apriori clockrate (us/s)		-4.1900001E-07		Resid phdelay (usec)		-3.92146E-06	+/- 4.2E-07
Delay rate (us/s)	7.75528054395E-01		Apriori rate (us/s)		7.75528033917E-01		Resid rate (us/s)		2.04780E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.76798660827E-05		Resid phase (deg)		-121.6	+/- 13.0

ph/seg (deg) 55.2 31.2 Search (2048X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 63.0 54.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 48.8 18.4 Inc. seg. avg. 0.189 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 42.5 32.1 Inc. frq. avg. 0.199 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 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -5971.443 -7911.275 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fX.W.135.18UHQS



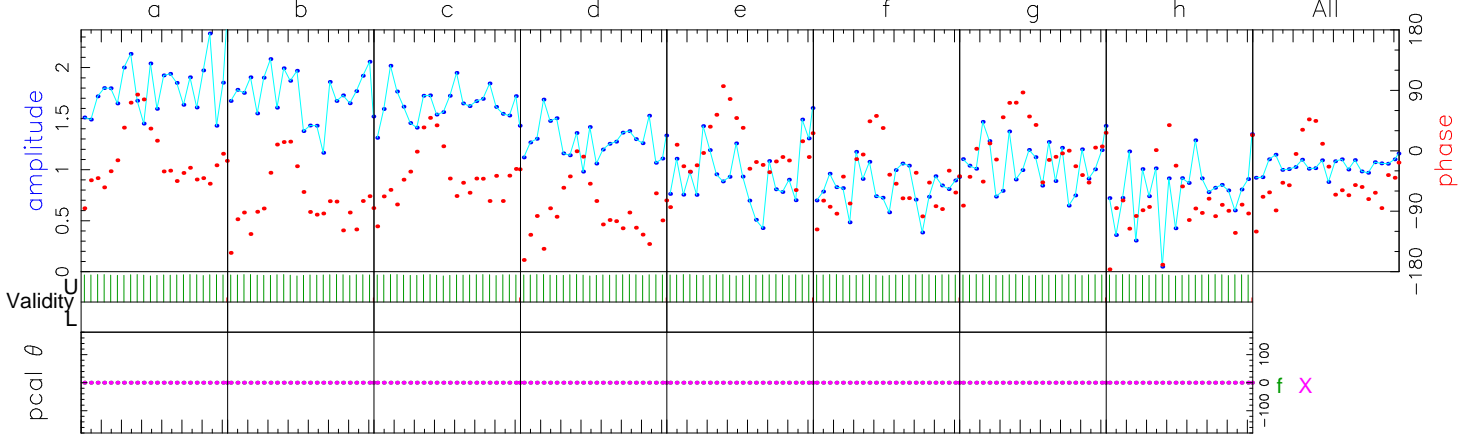
Fringe quality 4

SNR 43.9  
Int time 412.794  
Amp 0.790  
Phase -44.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.015677  
MBD -0.006205  
Fringe rate (Hz)  
0.001839  
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
	-17.0	-75.8	-39.9	-95.6	3.0	-49.1	0.6	-82.1	Phase	-44.9
	1.3	1.3	1.3	1.0	0.7	0.6	0.8	0.6	Ampl.	1.0
	252.6	252.1	253.2	252.5	252.7	253.1	252.6	251.6	Sbd box	253.0
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.19328977113E+04	Apriori delay (usec)	1.19329195416E+04	Resid mbdelay (usec)	-6.20526E-03	+/-	2.5E-05
Sband delay (usec)	1.19329038643E+04	Apriori clock (usec)	-3.6865437E+01	Resid sbdelay (usec)	-1.56773E-02	+/-	2.0E-04
Phase delay (usec)	1.19329195401E+04	Apriori clockrate (us/s)	-4.1900001E-07	Resid phdelay (usec)	-1.44778E-06	+/-	8.4E-08
Delay rate (us/s)	7.75528055262E-01	Apriori rate (us/s)	7.75528033917E-01	Resid rate (us/s)	2.13453E-08	+/-	3.5E-10
Total phase (deg)	67.3	Apriori accel (us/s/s)	-8.76798660827E-05	Resid phase (deg)	-44.9	+/-	2.6

ph/seg (deg)	42.4	Theor.	6.3	Amplitude	0.790 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	32.2		10.9	Search (2048X32)	0.782	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.0		3.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.0		6.4	Inc. seg. avg.	1.029	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.951	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

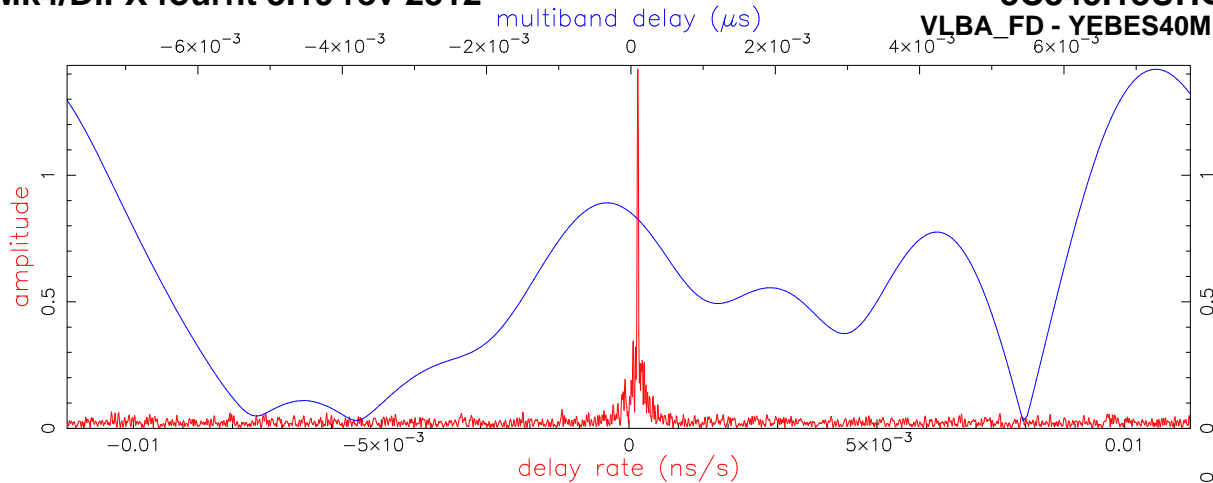
f: az 39.2 el 77.7 pa -133.6 X: az 305.2 el 25.2 pa 32.9 u,v (fr/asec) -5971.443 -7911.275 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fX..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fX.W.85.18UHQS



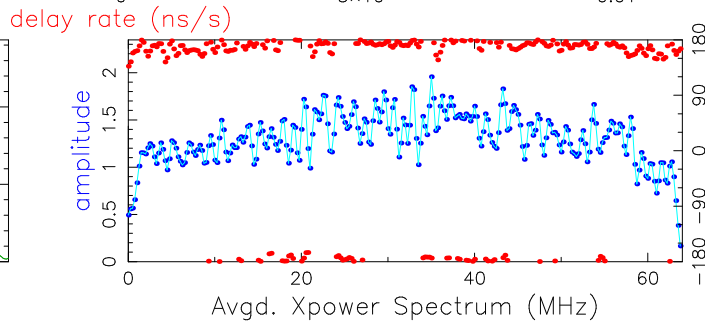
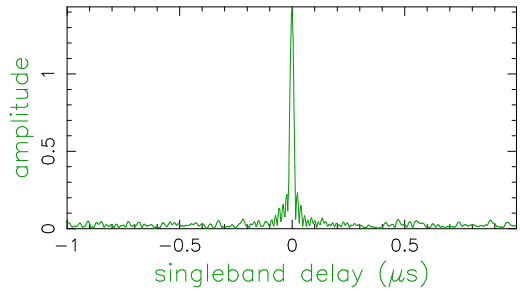
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fY  
VLBA\_FD - YEBES40M, fgroup W, pol RR



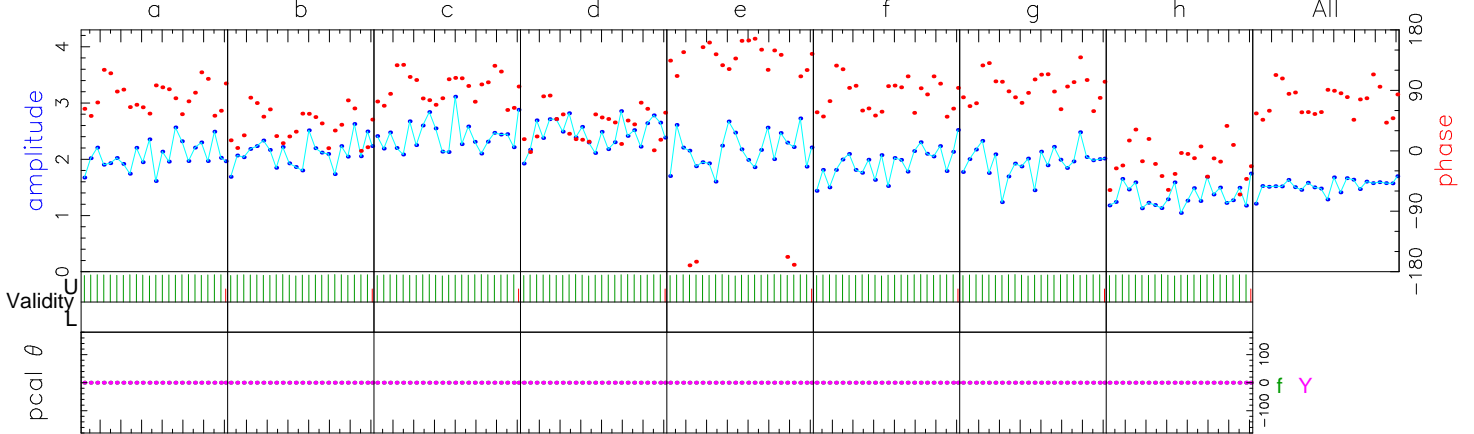
Fringe quality 5

SNR 79.1  
Int time 406.745  
Amp 1.434  
Phase 74.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.001351  
MBD 0.007247  
Fringe rate (Hz)  
0.014973  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201b  
Yr:day 2020:117  
Start 084105.12  
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, 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
	79.9	37.4	93.3	36.9	148.1	83.1	94.4	-16.2	Phase	74.0
	1.9	1.9	2.3	2.3	1.9	1.8	1.8	1.2	Ampl.	1.9
	256.7	255.9	256.6	256.3	256.1	256.0	255.7	254.3	Sbd box	256.7
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.24246786379E+04	Apriori delay (usec)	1.24246870162E+04	Resid mbdelay (usec)	7.24675E-03	+/-	1.4E-05
Sband delay (usec)	1.24246856654E+04	Apriori clock (usec)	-8.0724812E+00	Resid sbdelay (usec)	-1.35075E-03	+/-	1.1E-04
Phase delay (usec)	1.24246870186E+04	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	2.38764E-06	+/-	4.7E-08
Delay rate (us/s)	1.06673339102E+00	Apriori rate (us/s)	1.06673321720E+00	Resid rate (us/s)	1.73820E-07	+/-	2.0E-10
Total phase (deg)	280.3	Apriori accel (us/s/s)	-7.62218995847E-05	Resid phase (deg)	74.0	+/-	1.4

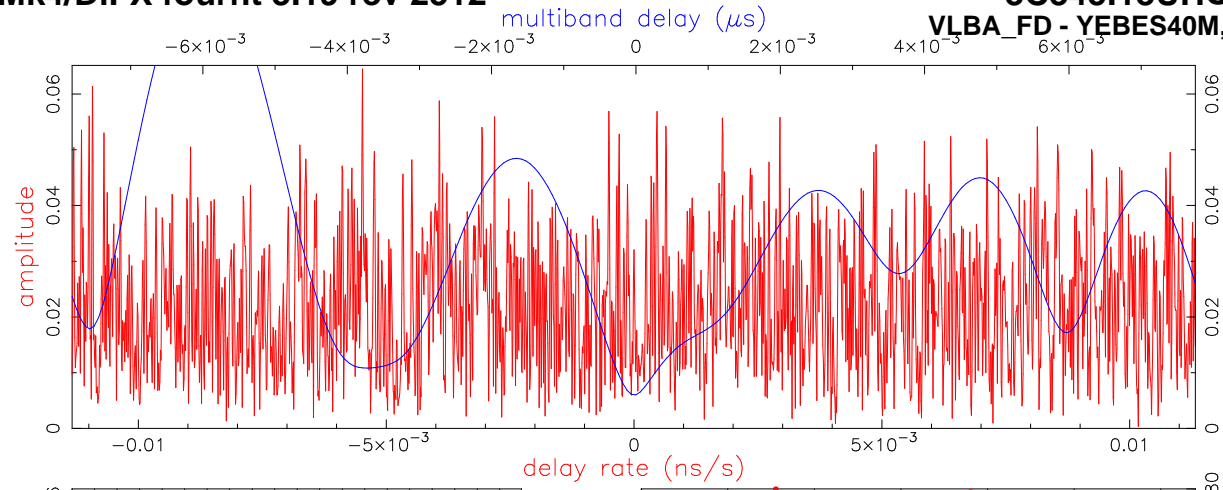
ph/seg (deg)	21.7	RMS	3.5	Theor.	Amplitude	1.434 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	10.1	21.7	3.5	Search (2048X32)	1.377	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	53.6	10.1	6.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.1	53.6	2.0	Inc. seg. avg.	1.524	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011	
		38.1	3.6	Inc. frq. avg.	1.883	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00	

f: az 39.2 el 77.7 pa -133.6 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -8112.950 -5816.757 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fY...18UHQS Output file: /Exps/c201b/v1/1234/No0057/fY.W.104.18UHQS

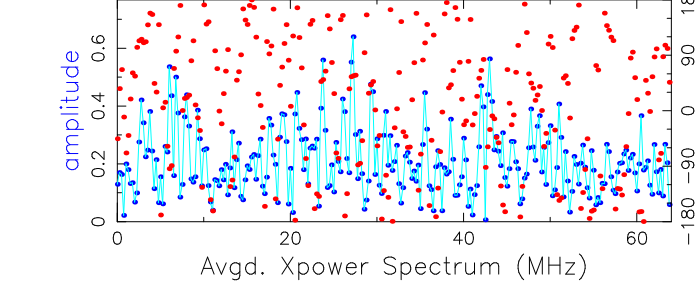
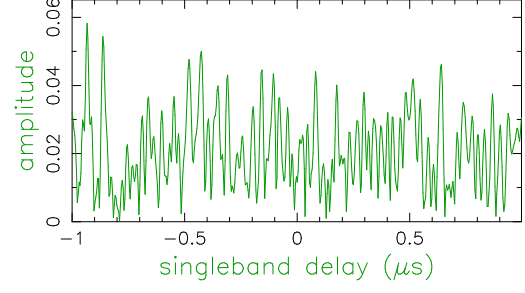
Mk4/DiFX fourfit 3.19 rev 2512

3C345.18UHQS, No0057, fY

VLBA\_FD - YEYES40M, fgroup W, pol LR

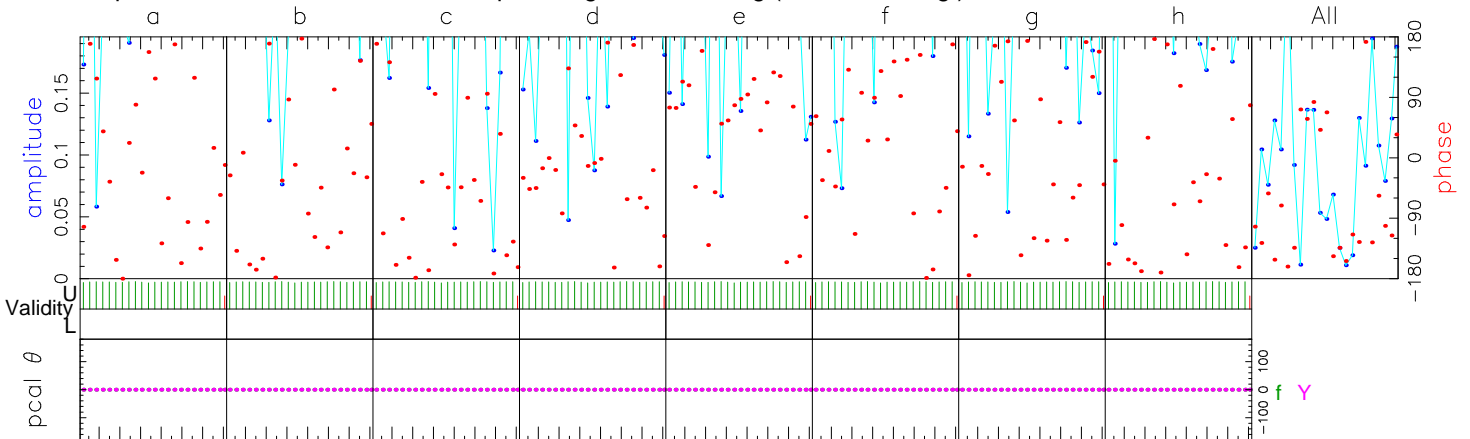


Fringe quality 0  
 SNR 2.4  
 Int time 406.745  
 Amp 0.065  
 Phase -129.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.105005  
 MBD 0.007324  
 Fringe rate (Hz) 0.928879  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 084105.12  
 Stop 084759.84  
 FRT 084430.00  
 Corr/FF/build  
 2020:198:173216  
 2020:199:143556  
 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, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

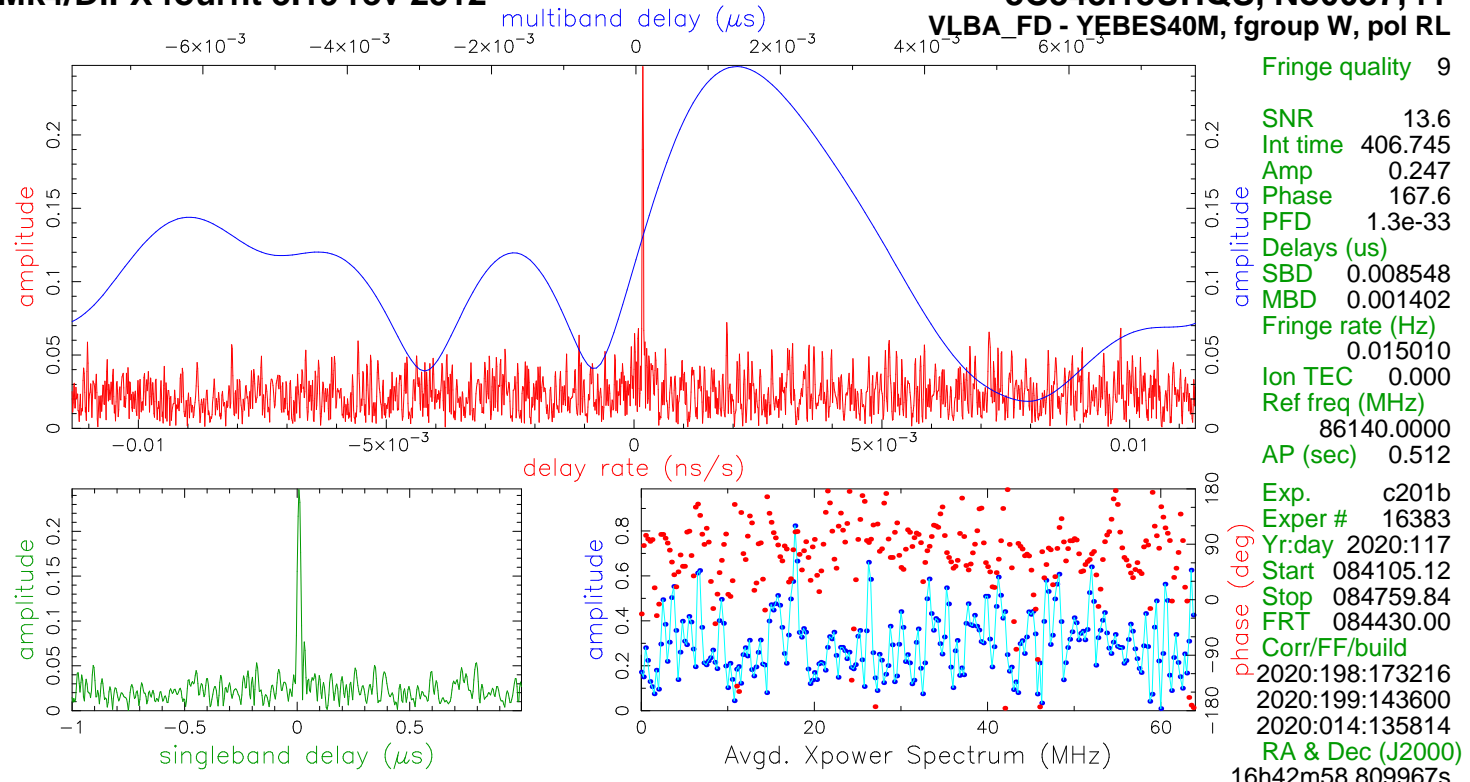


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.1	-109.8	-108.4	-29.0	98.3	74.6	-92.4	-153.3	Phase	-129.1
	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	327.1	229.7	477.1	233.0	165.5	164.1	364.6	276.6	Sbd box	230.1
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.24245849654E+04	Apriori delay (usec)	1.24246870162E+04	Resid mbdelay (usec)	7.32422E-03	+/-	4.5E-04
Sband delay (usec)	1.24245820112E+04	Apriori clock (usec)	-8.0724812E+00	Resid sbdelay (usec)	-1.05005E-01	+/-	3.6E-03
Phase delay (usec)	1.24246870120E+04	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	-4.16331E-06	+/-	1.5E-06
Delay rate (us/s)	1.06674400056E+00	Apriori rate (us/s)	1.06673321720E+00	Resid rate (us/s)	1.07834E-05	+/-	6.4E-09
Total phase (deg)	77.1	Apriori accel (us/s/s)	-7.62218995847E-05	Resid phase (deg)	-129.1	+/-	47.8

ph/seg (deg)	86.4	Theor.	114.6	Amplitude	0.065 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	182.3	Search (2048X32)	0.106	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	95.6	Inc. seg. avg.	0.047	Inc. frq. avg.	0.092	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	166.4	Inc. frq. avg.	0.092			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	

f: az 39.2 el 77.7 pa -133.6 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -8112.950 -5816.757 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fY..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fY.W.124.18UHQS



Fringe quality 9

SNR 13.6

Int time 406.745

Amp 0.247

Phase 167.6

PFD 1.3e-33

Delays (us)

SBD 0.008548

MBD 0.001402

Fringe rate (Hz)

0.015010

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 084105.12

Stop 084759.84

FRT 084430.00

Corr/FF/build

2020:198:173216

2020:199:143600

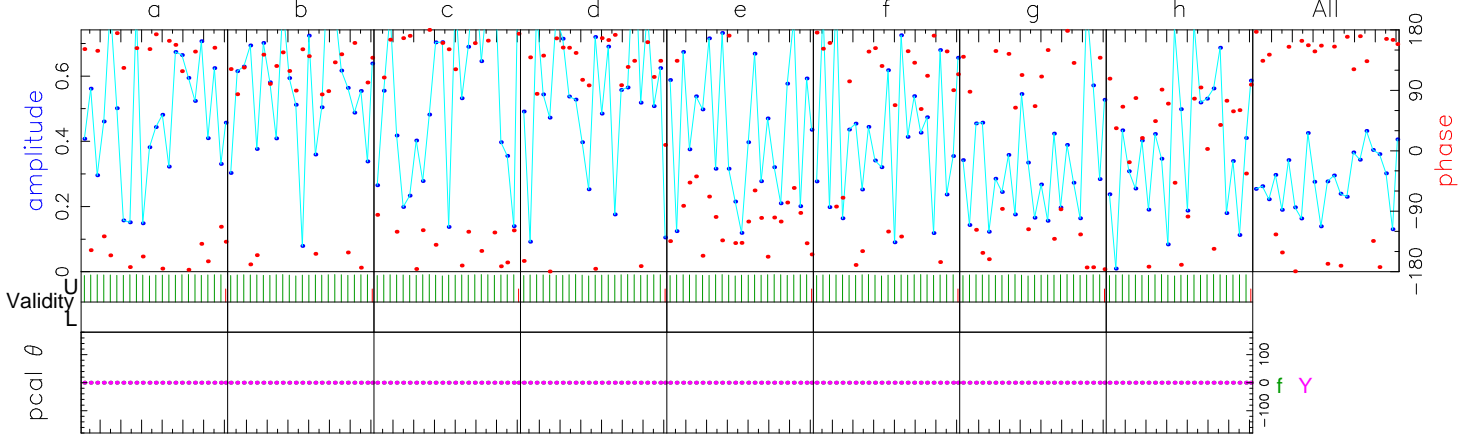
2020:014:135814

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



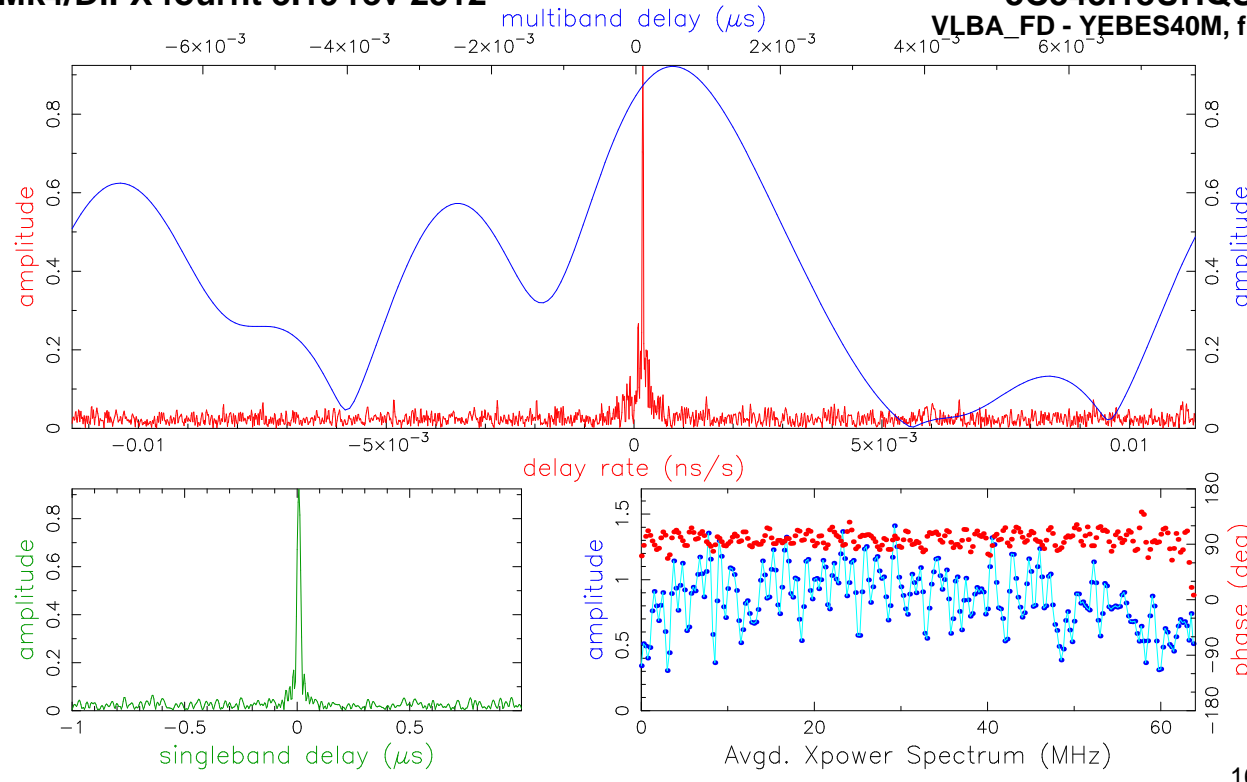
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	177.2	134.9	-173.8	146.2	-101.0	165.1	177.0	51.1	Phase	167.6
	0.4	0.4	0.4	0.5	0.3	0.2	0.2	0.2	Ampl.	0.3
	259.3	258.6	258.9	258.6	258.3	258.4	257.7	256.9	Sbd box	259.2
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.24246884186E+04	Apriori delay (usec)	1.24246870162E+04	Resid mbdelay (usec)	1.40247E-03	+/-	8.0E-05
Sband delay (usec)	1.24246955639E+04	Apriori clock (usec)	-8.0724812E+00	Resid sbdelay (usec)	8.54775E-03	+/-	6.3E-04
Phase delay (usec)	1.24246870216E+04	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	5.40494E-06	+/-	2.7E-07
Delay rate (us/s)	1.06673339145E+00	Apriori rate (us/s)	1.06673321720E+00	Resid rate (us/s)	1.74253E-07	+/-	1.1E-09
Total phase (deg)	13.8	Apriori accel (us/s/s)	-7.62218995847E-05	Resid phase (deg)	167.6	+/-	8.4

ph/seg (deg)	RMS 27.9	Theor. 20.1	Amplitude Search (2048X32)	0.247 +/- 0.018	0.240	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	37.0	35.2	Interp.	0.000	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	63.2	11.9	Inc. seg. avg.	0.265	0.265	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	57.0	20.7	Inc. frq. avg.	0.328	0.328	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 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -8112.950 -5816.757 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fY...18UHQS Output file: /Exps/c201b/v1/1234/No0057/fY.W.142.18UHQS

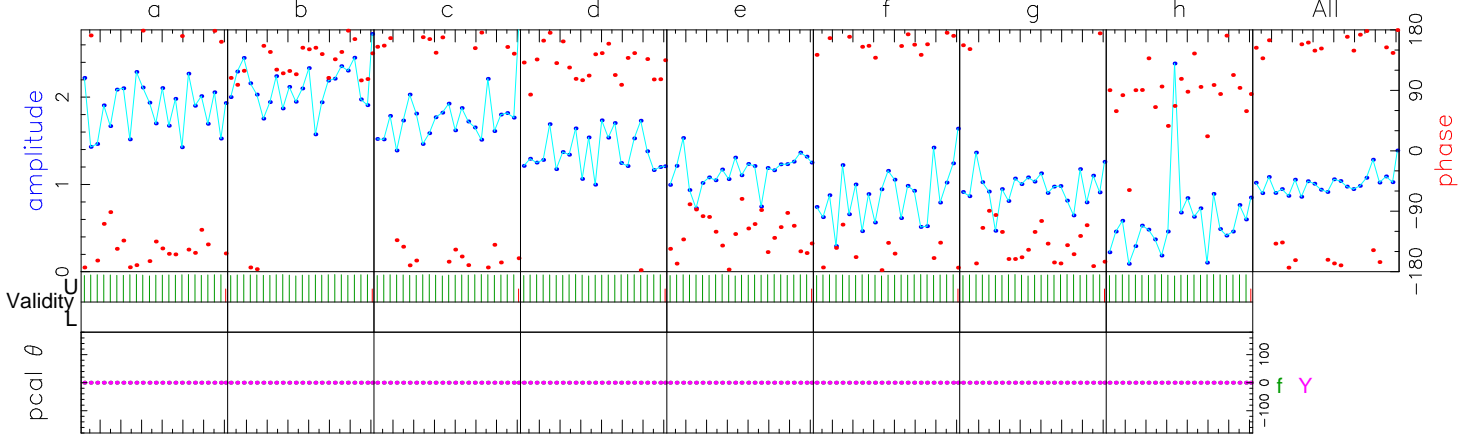


Fringe quality 3

SNR 51.0  
Int time 406.745  
Amp 0.924  
Phase 175.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.007142  
MBD 0.000491  
Fringe rate (Hz) 0.014896  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084105.12  
Stop 084759.84  
FRT 084430.00  
Corr/FF/build  
2020:198:173216  
2020:199:143547  
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
	-154.5	137.2	-178.2	133.4	-123.0	-176.6	-147.6	87.9	Phase	175.6
	1.7	1.9	1.6	1.2	1.0	0.8	0.8	0.5	Ampl.	1.2
	258.7	258.3	258.7	258.2	258.8	258.5	258.0	256.5	Sbd box	258.8
U/L	810/0	810/0	810/0	810/0	810/0	810/0	810/0	810/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.24246875074E+04	Apriori delay (usec)	1.24246870162E+04	Resid mbdelay (usec)	4.91278E-04	+/-	2.1E-05
Sband delay (usec)	1.24246941584E+04	Apriori clock (usec)	-8.0724812E+00	Resid sbdelay (usec)	7.14225E-03	+/-	1.7E-04
Phase delay (usec)	1.24246870218E+04	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	5.66223E-06	+/-	7.3E-08
Delay rate (us/s)	1.06673339012E+00	Apriori rate (us/s)	1.06673321720E+00	Resid rate (us/s)	1.72923E-07	+/-	3.0E-10
Total phase (deg)	21.8	Apriori accel (us/s/s)	-7.62218995847E-05	Resid phase (deg)	175.6	+/-	2.2

ph/seg (deg)	24.6	Theor.	5.4	Amplitude	0.924 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	14.9		9.4	Search (2048X32)	0.883	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	53.3		3.2	Inc. seg. avg.	1.006	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	58.1		5.6	Inc. frq. avg.	1.189	Sample rate (MSamp/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

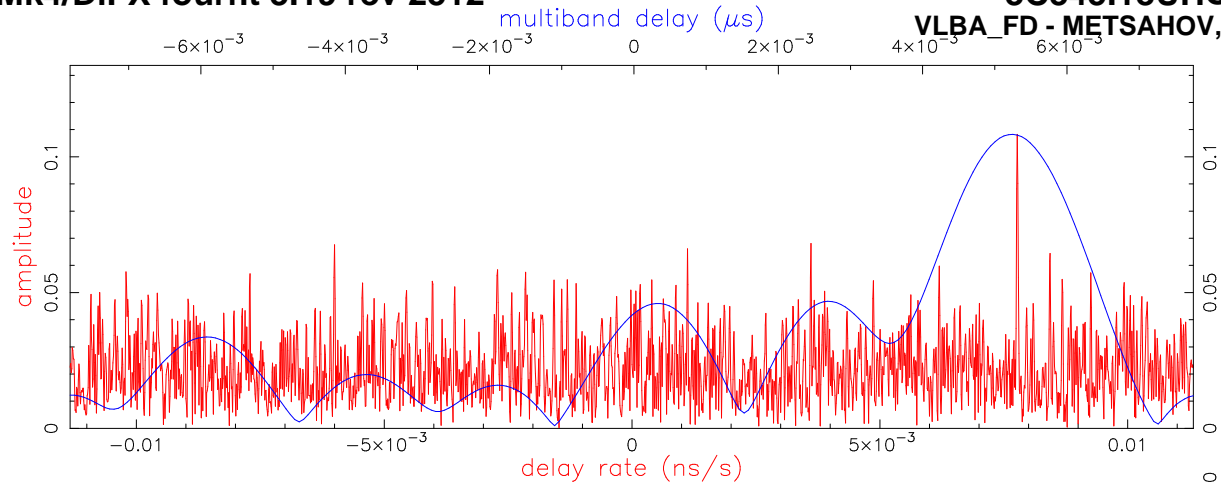
f: az 39.2 el 77.7 pa -133.6 Y: az 302.7 el 24.0 pa 56.8 u,v (fr/asec) -8112.950 -5816.757 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fY...18UHQS Output file: /Exps/c201b/v1/1234/No0057/fY.W.86.18UHQS

Mk4/DiFX fourfit 3.19 rev 2512

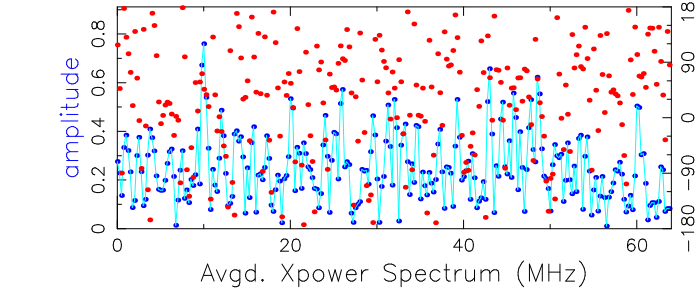
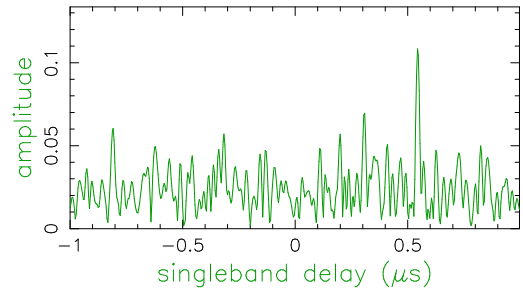
3C345.18UHQS, No0057, fZ

VLBA\_FD - METSAHOV, fgroup W, pol RR



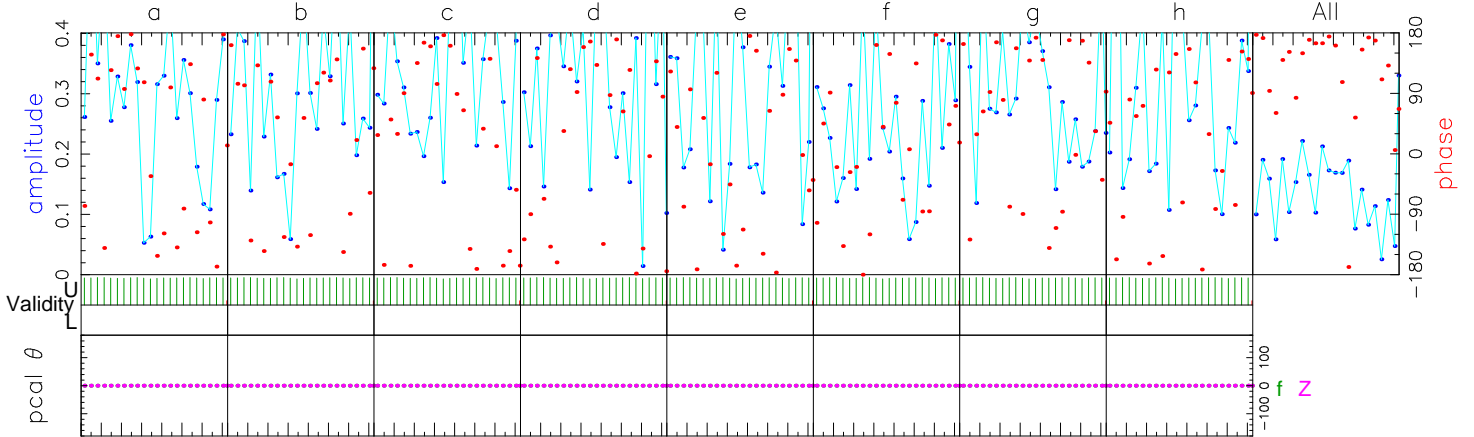
Fringe quality 0

SNR 6.1  
 Int time 412.450  
 Amp 0.134  
 Phase 146.8  
 PFD 2.9e-01  
 Delays (us)  
 SBD 0.544185  
 MBD 0.005248  
 Fringe rate (Hz)  
 0.670215  
 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  
 2020:199:143553  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

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



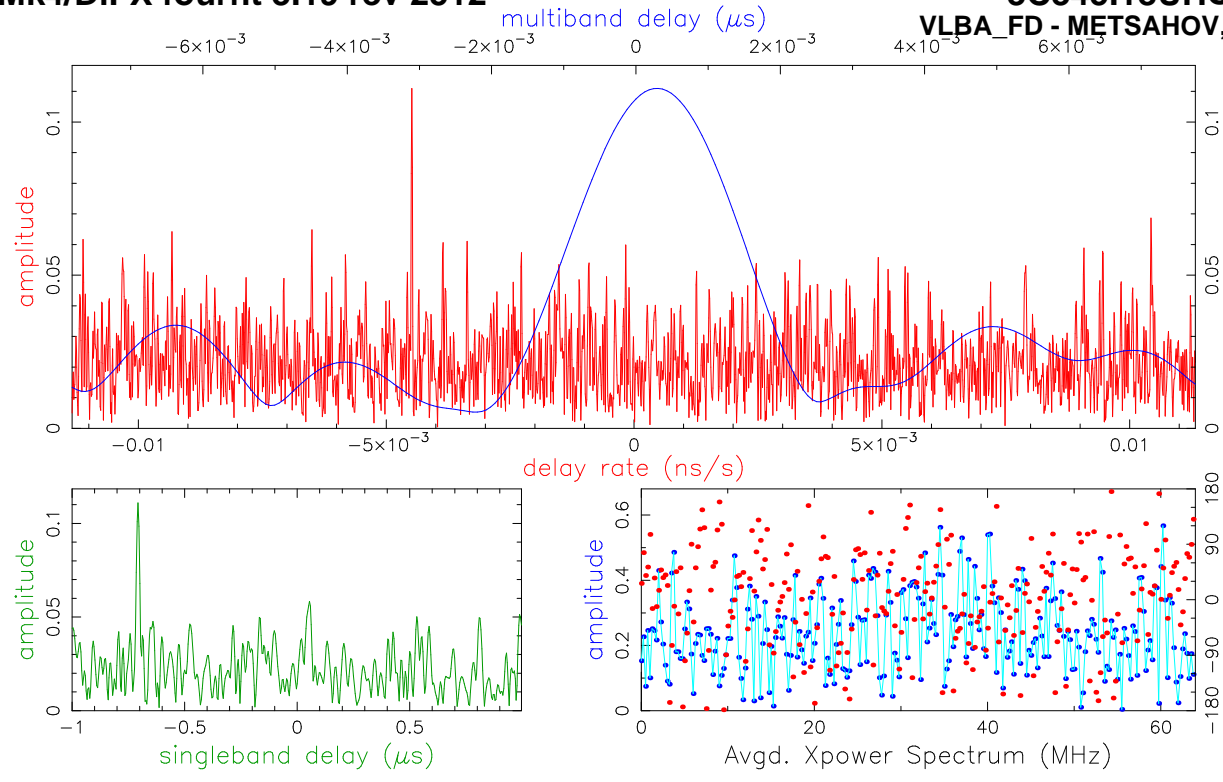
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	0:0	0:0	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.30516588080E+04	Apriori delay (usec)	1.30511223097E+04	Resid mbdelay (usec)	5.24826E-03	+/-	1.8E-04
Sband delay (usec)	1.30516664942E+04	Apriori clock (usec)	4.0179710E+00	Resid sbdelay (usec)	5.44185E-01	+/-	1.4E-03
Phase delay (usec)	1.30511223145E+04	Apriori clockrate (us/s)	9.3000003E-08	Resid phdelay (usec)	4.73245E-06	+/-	6.1E-07
Delay rate (us/s)	6.76704960098E-01	Apriori rate (us/s)	6.76697179568E-01	Resid rate (us/s)	7.78053E-06	+/-	2.5E-09
Total phase (deg)	60.5	Apriori accel (us/s/s)	-9.52558667606E-05	Resid phase (deg)	146.8	+/-	18.9

ph/seg (deg)	49.5	Theor.	45.3	Amplitude	0.134 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	57.1	Search (2048X32)	0.105	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	19.1	Inc. seg. avg.	0.127	Inc. frq. avg.	0.125	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	35.0	Inc. frq. avg.	0.125			Sample rate (MSamp/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

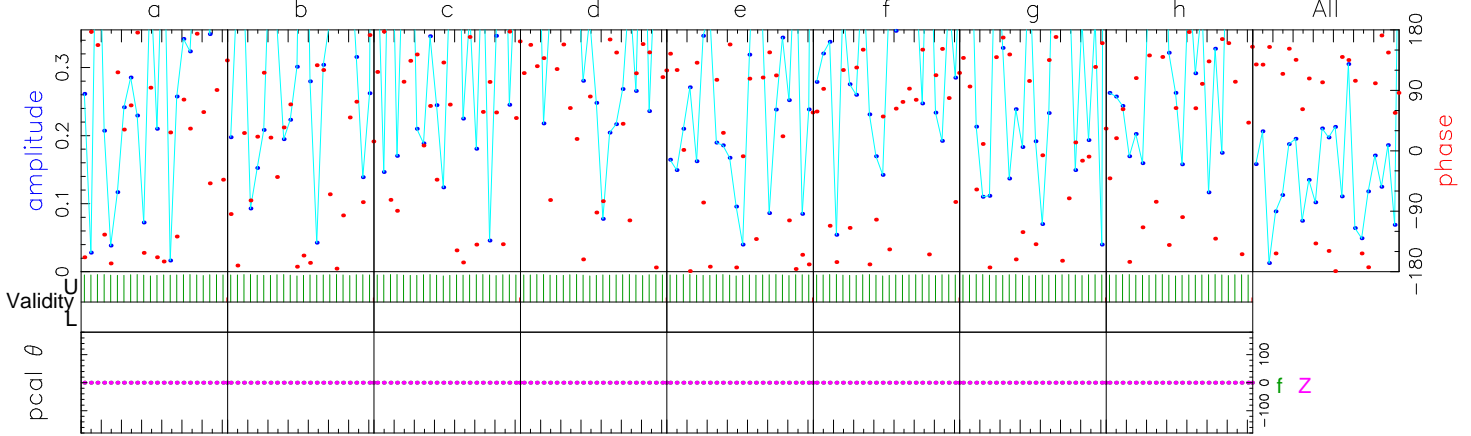
f: az 39.2 el 77.7 pa -133.6      Z: az 313.1 el 22.0 pa 29.0      u,v (fr/asec) -5251.962 -8591.662      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0057/fZ..18UHQS      Output file: /Exps/c201b/v1/1234/No0057/fZ.W.108.18UHQS



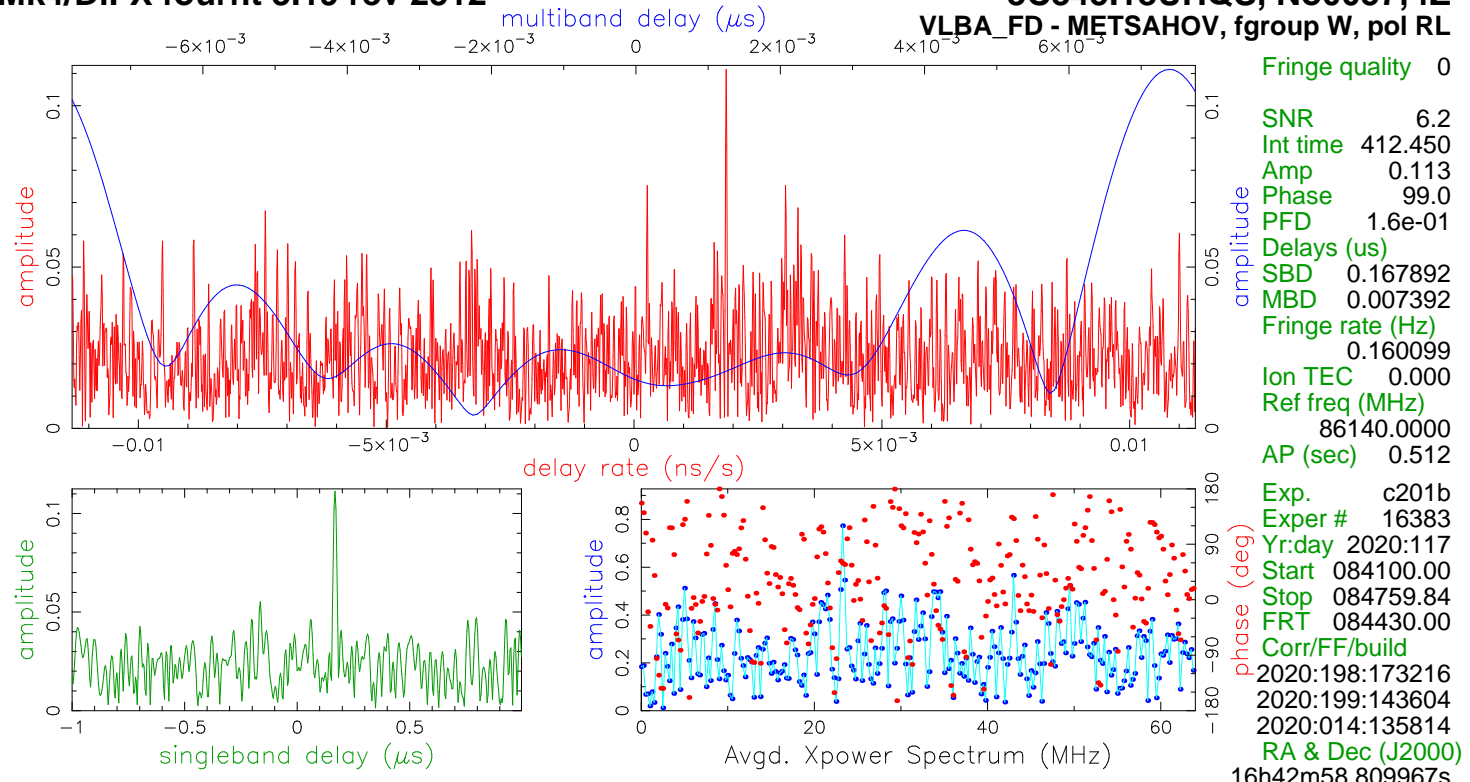
Fringe quality 0  
SNR 6.2  
Int time 412.451  
Amp 0.118  
Phase 141.1  
PFD 1.7e-01  
Delays (us)  
SBD -0.707203  
MBD 0.000287  
Fringe rate (Hz)  
-0.386447  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 084100.00  
Stop 084759.84  
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

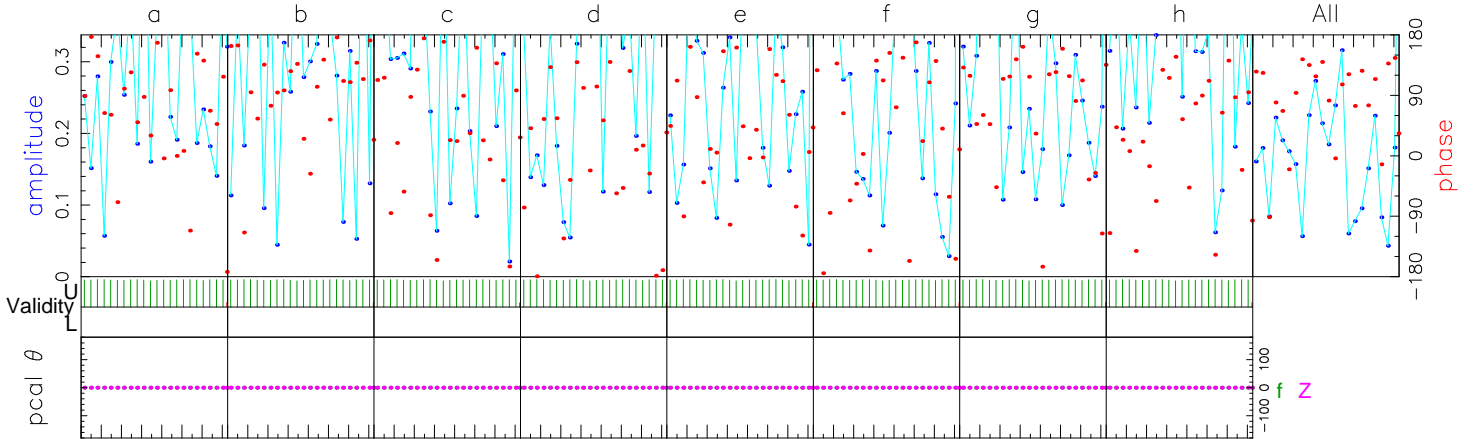


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.30504194720E+04				1.30511223097E+04			2.87260E-04	+/- 1.8E-04
Sband delay (usec)		1.30504151067E+04				4.0179710E+00			-7.07203E-01	+/- 1.4E-03
Phase delay (usec)		1.30511223143E+04				9.3000003E-08			4.55089E-06	+/- 6.0E-07
Delay rate (us/s)		6.76692693300E-01				6.76697179568E-01			-4.48627E-06	+/- 2.5E-09
Total phase (deg)			54.9			-9.52558667606E-05			141.1	+/- 18.6
	RMS	Theor.	Amplitude	0.118 +/- 0.019		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5	
ph/seg (deg)	45.5	44.6	Search (2048X32)	0.107		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	73.4	77.8	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	18.2	26.3	Inc. seg. avg.	0.117		Sample rate(MISamp/s): 128				dr window (ns/s) -0.011 0.011
amp/frq (%)	41.1	45.9	Inc. frq. avg.	0.109		Data rate(Mb/s): 2048				ion window (TEC) 0.00 0.00

f: az 39.2 el 77.7 pa -133.6      Z: az 313.1 el 22.0 pa 29.0      u,v (fr/asec) -5251.962 -8591.662      simultaneous interpolator  
Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0057/fZ..18UHQS    Output file: /Exps/c201b/v1/1234/No0057/fZ.W.133.18UHQS



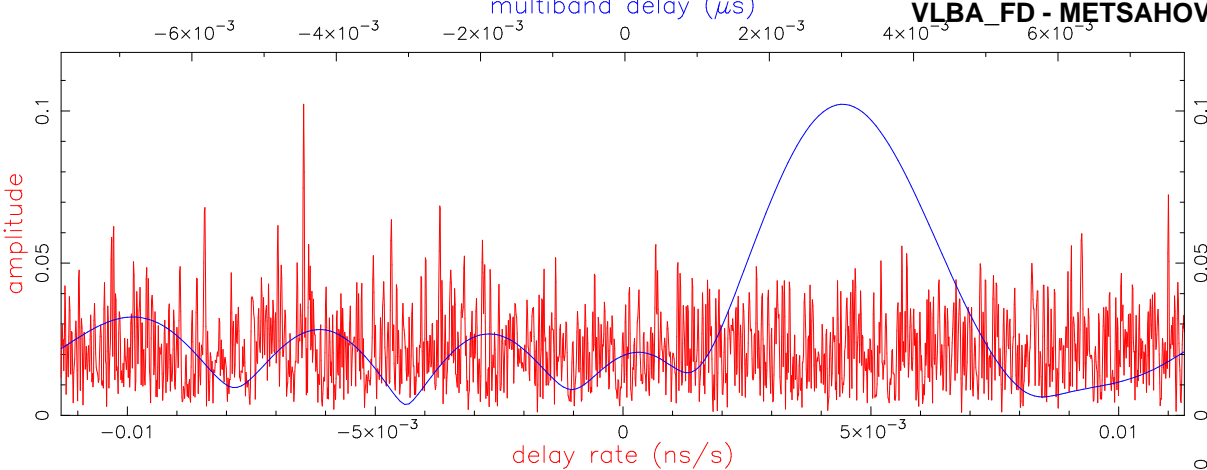
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
87.8	108.3	92.0	102.2	59.1	149.0	99.7	83.7	87.8	Phase	99.0
0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
454.8	299.6	67.0	494.0	24.3	459.9	25.7	50.8	50.8	Sbd box	300.0
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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.30512859516E+04		Apriori delay (usec)	1.30511223097E+04	Resid mbdelay (usec)	7.39190E-03	+/-	1.8E-04		
Sband delay (usec)	1.30512902015E+04		Apriori clock (usec)	4.0179710E+00	Resid sbdelay (usec)	1.67892E-01	+/-	1.4E-03		
Phase delay (usec)	1.30511223129E+04		Apriori clockrate (us/s)	9.3000003E-08	Resid phdelay (usec)	3.19183E-06	+/-	6.0E-07		
Delay rate (us/s)	6.76699038156E-01		Apriori rate (us/s)	6.76697179568E-01	Resid rate (us/s)	1.85859E-06	+/-	2.5E-09		
Total phase (deg)		12.7	Apriori accel (us/s/s)	-9.52558667606E-05	Resid phase (deg)	99.0	+/-	18.5		

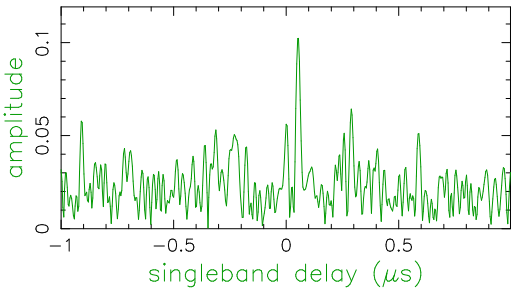
	RMS	Theor.	Amplitude	0.113 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	60.8	44.5	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	87.0	77.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	27.7	26.2	Inc. seg. avg.	0.129	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	37.2	45.8	Inc. frq. avg.	0.109	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

multiband delay ( $\mu$ s)

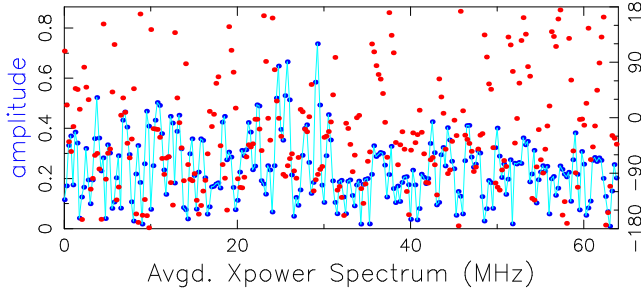


Fringe quality 0

SNR 5.8  
 Int time 412.451  
 Amp 0.119  
 Phase 155.4  
 PFD 8.6e-01  
 Delays (us)  
 SBD 0.052754  
 MBD 0.003035  
 Fringe rate (Hz)  
 -0.555994  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

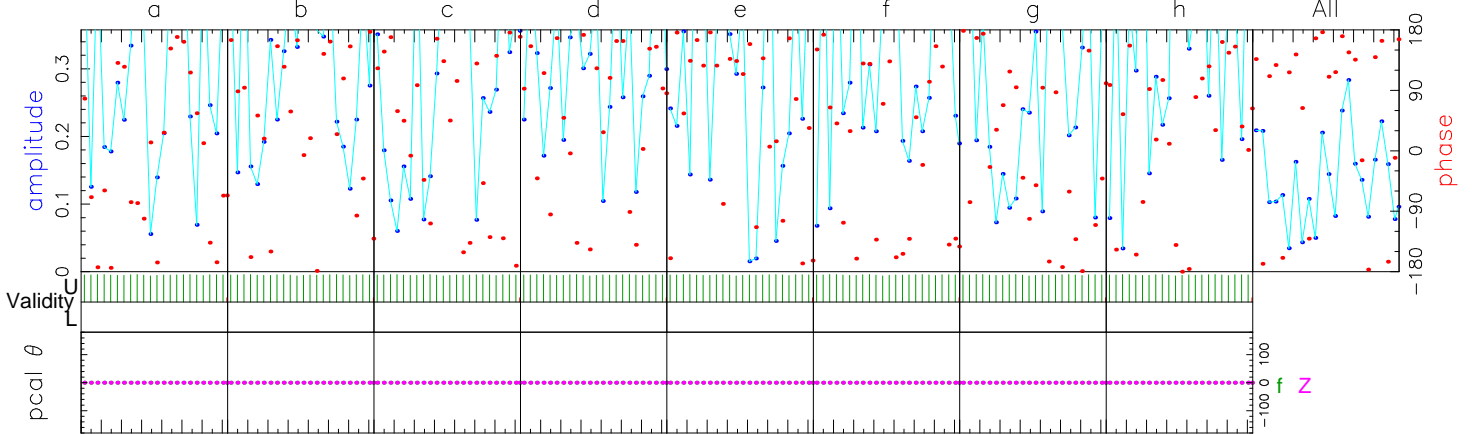


delay rate (ns/s)



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

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
	-160.6	128.0	160.4	155.8	127.4	156.1	-155.6	144.4	Phase	155.4
	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	297.1	328.8	105.8	177.3	44.5	271.9	503.6	504.8	Sbd box	270.5
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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.30511722201E+04	Apriori delay (usec)	1.30511223097E+04	Resid mbdelay (usec)	3.03533E-03	+/-	1.9E-04
Sband delay (usec)	1.30511750640E+04	Apriori clock (usec)	4.0179710E+00	Resid sbdelay (usec)	5.27542E-02	+/-	1.5E-03
Phase delay (usec)	1.30511223147E+04	Apriori clockrate (us/s)	9.3000003E-08	Resid phdelay (usec)	5.00977E-06	+/-	6.4E-07
Delay rate (us/s)	6.76690725027E-01	Apriori rate (us/s)	6.76697179568E-01	Resid rate (us/s)	-6.45454E-06	+/-	2.6E-09
Total phase (deg)	69.1	Apriori accel (us/s/s)	-9.52558667606E-05	Resid phase (deg)	155.4	+/-	19.8

ph/seg (deg)	62.4	RMS	Theor.	Amplitude	0.119 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.4	62.4	47.6	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	31.7	72.4	83.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	25.7	31.7	28.1	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
		25.7	49.0	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 39.2 el 77.7 pa -133.6 Z: az 313.1 el 22.0 pa 29.0 u,v (fr/asec) -5251.962 -8591.662 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0057/fZ..18UHQS Output file: /Exps/c201b/v1/1234/No0057/fZ.W.88.18UHQS