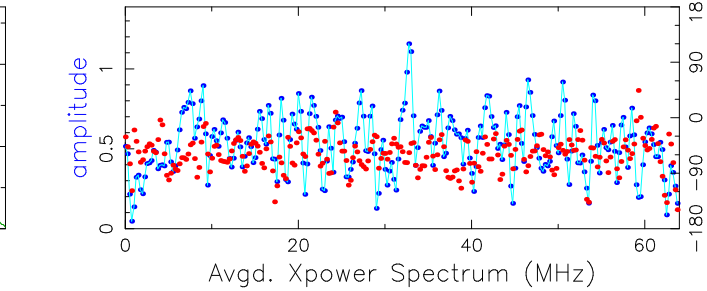
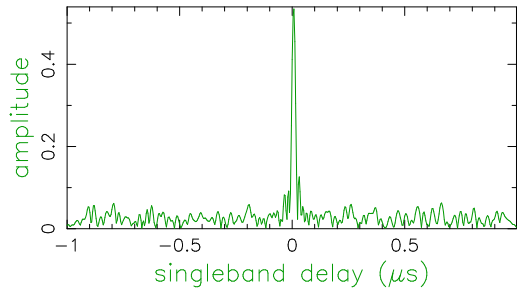


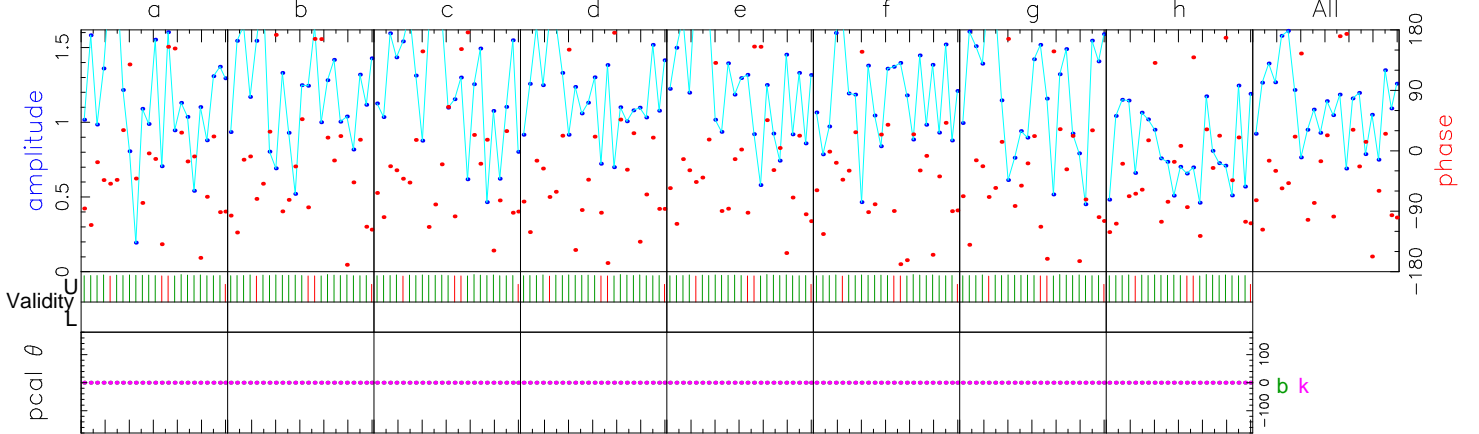
Fringe quality 7

SNR 27.5  
Int time 347.804  
Amp 0.540  
Phase -49.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.006517  
MBD 0.005861  
Fringe rate (Hz)  
-0.004236  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122444  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

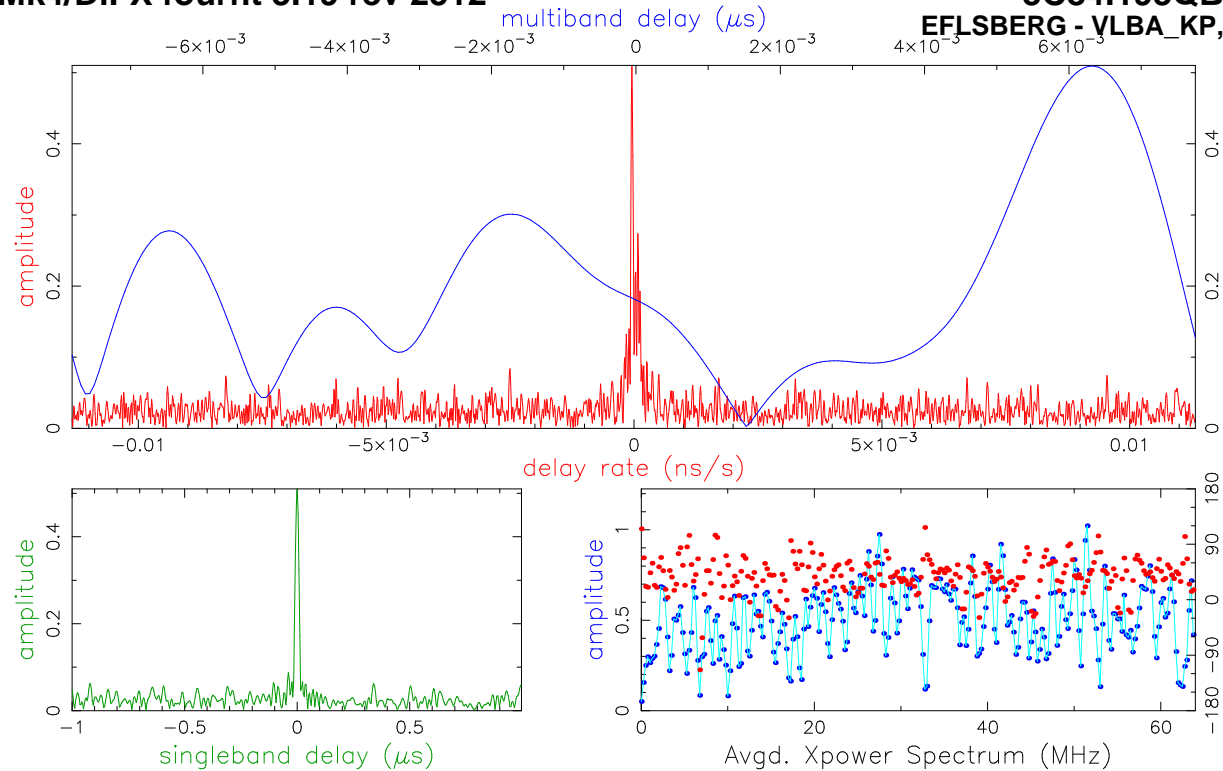


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	2.98401901248E+01	Apriori delay (usec)	2.98343286785E+01	Resid mbdelay (usec)	5.86145E-03	+/-	3.9E-05
Sband delay (usec)	2.98408459285E+01	Apriori clock (usec)	-1.0740956E+00	Resid sbdelay (usec)	6.51725E-03	+/-	3.1E-04
Phase delay (usec)	2.98343270785E+01	Apriori clockrate (us/s)	-4.7400004E-08	Resid phdelay (usec)	-1.59998E-06	+/-	1.3E-07
Delay rate (us/s)	-1.06262292162E-01	Apriori rate (us/s)	-1.06262242987E-01	Resid rate (us/s)	-4.91753E-08	+/-	6.5E-10
Total phase (deg)	-23.6	Apriori accel (us/s/s)	1.59572956347E-05	Resid phase (deg)	-49.6	+/-	4.2

ph/seg (deg)	RMS 73.5	Theor. 10.0	Amplitude	0.540 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	115.7	17.4	Search (2048X32)	0.511	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	4.8	5.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	14.9	10.3	Inc. seg. avg.	1.098	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.533	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 75.0 el 47.2 pa -59.5 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 830.589 2533.454 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/bk.W.19.193QBF

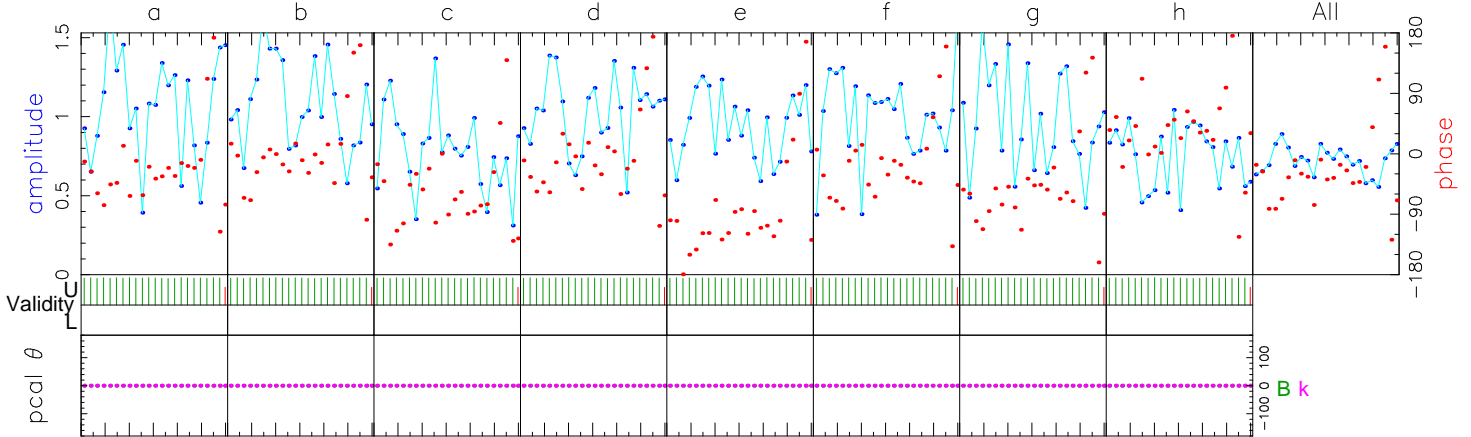


Fringe quality 6

SNR 26.2  
Int time 352.611  
Amp 0.510  
Phase -40.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.000560  
MBD 0.006311  
Fringe rate (Hz)  
-0.003965  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

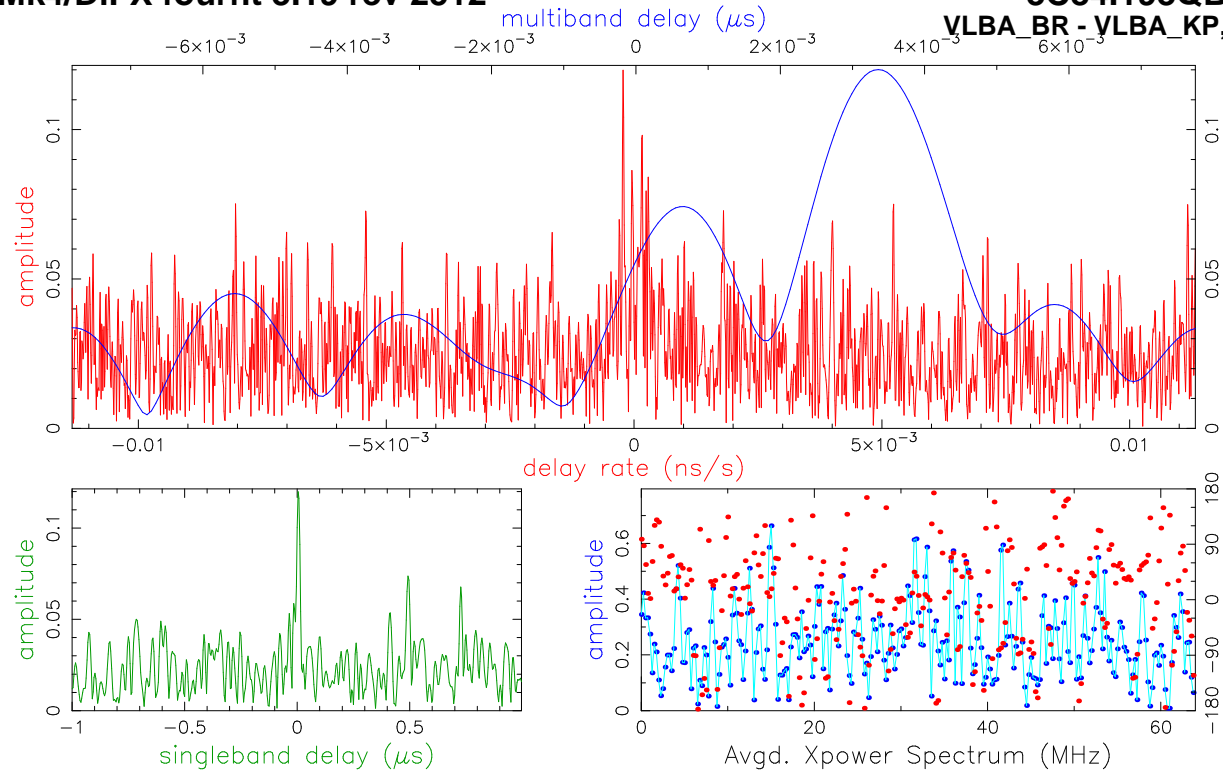
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122445  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.9	-12.8	-73.5	-19.1	-113.8	-32.8	-68.8	35.8	Phase	-40.1
	0.8	0.8	0.5	0.7	0.6	0.7	0.7	0.5	Ampl.	0.6
	256.5	256.7	257.6	257.3	258.3	257.0	257.9	257.0	Sbd box	256.9
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.73603255440E+02		Apriori delay (usec)		-6.73609566480E+02		Resid mbdelay (usec)		6.31104E-03	+/- 4.1E-05
Sband delay (usec)	-6.73610126730E+02		Apriori clock (usec)		1.3365585E+01		Resid sbdelay (usec)		-5.60250E-04	+/- 3.3E-04
Phase delay (usec)	-6.73609567772E+02		Apriori clockrate (us/s)		-2.0540000E-07		Resid phdelay (usec)		-1.29223E-06	+/- 1.4E-07
Delay rate (us/s)	-1.45748218764E+00		Apriori rate (us/s)		-1.45748214161E+00		Resid rate (us/s)		-4.60336E-08	+/- 6.8E-10
Total phase (deg)			Apriori accel (us/s/s)		2.18182697896E-05		Resid phase (deg)		-40.1	+/- 4.4

ph/seg (deg) 56.6 10.5 Search (2048X32) 0.507 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 44.9 18.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.9 6.2 Inc. seg. avg. 0.710 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.9 10.8 Inc. frq. avg. 0.648 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 284.8 el 45.4 pa 55.3 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 11182.537 3052.399 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/Bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/Bk.W.20.193QBF

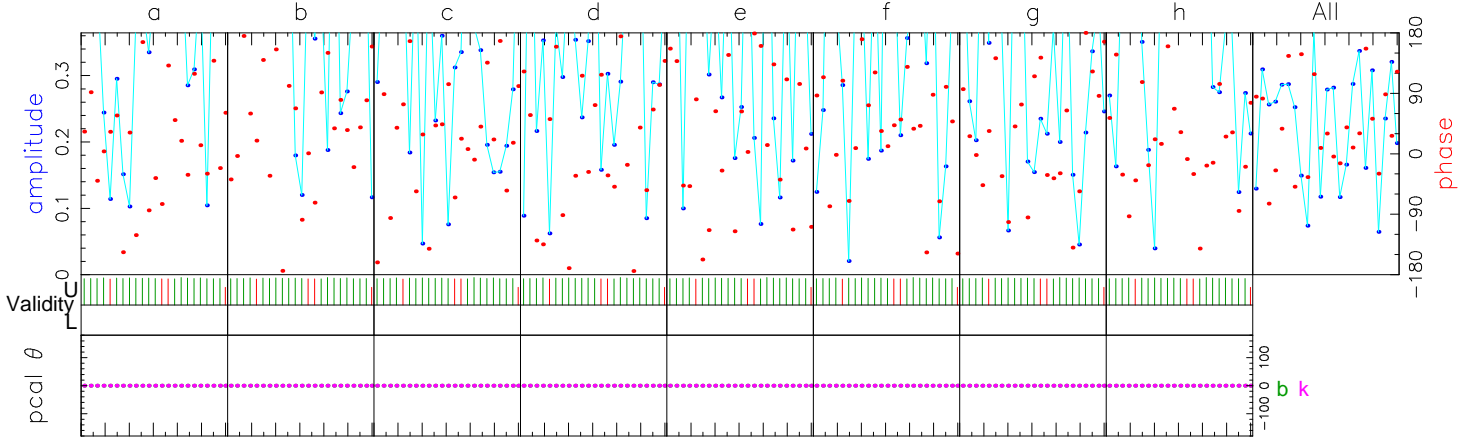


Fringe quality 0

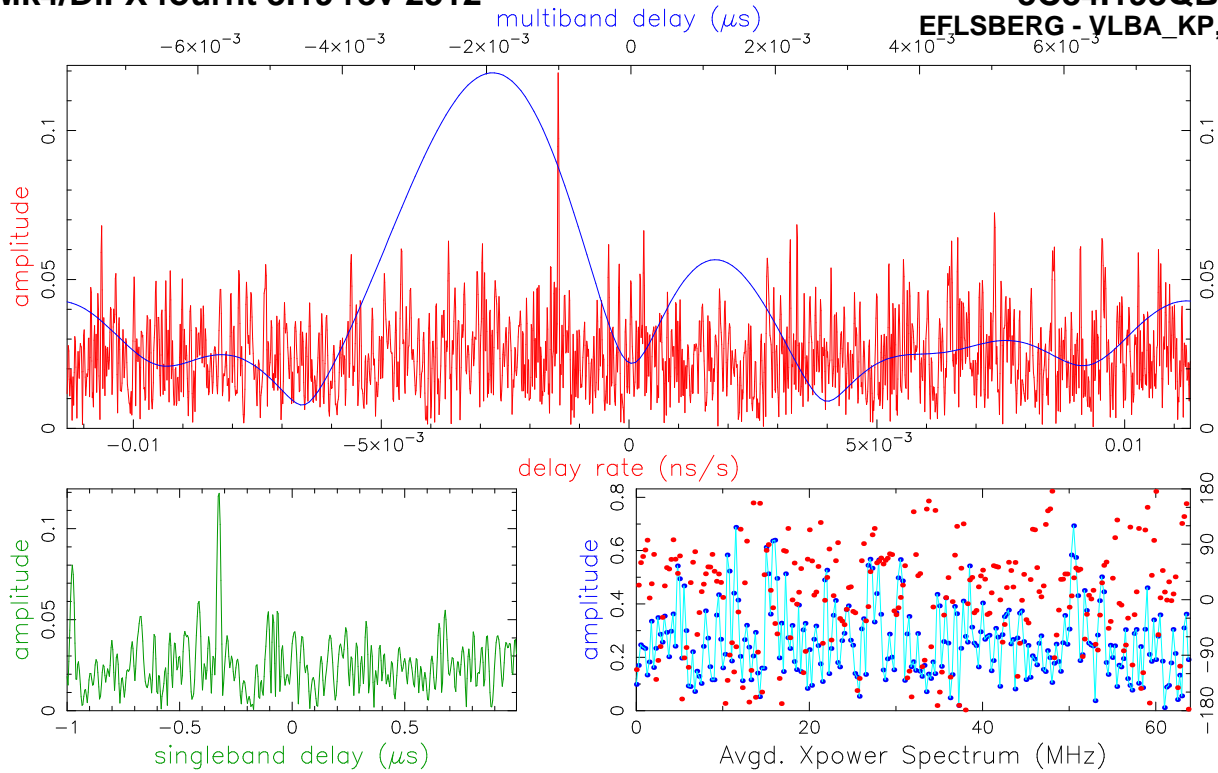
SNR 6.2  
Int time 347.803  
Amp 0.121  
Phase 41.1  
PFD 1.4e-01  
Delays (us)  
SBD 0.005302  
MBD 0.003415  
Fringe rate (Hz)  
-0.019484  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122449  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	41.1
k	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.1
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	258.4
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	2.98377440351E+01				2.98343286785E+01				3.41536E-03	+/- 1.8E-04
Sband delay (usec)	2.98396306785E+01				-1.0740956E+00				5.30200E-03	+/- 1.4E-03
Phase delay (usec)	2.98343300030E+01				-4.7400004E-08				1.32444E-06	+/- 6.0E-07
Delay rate (us/s)	-1.06262469180E-01				-1.06262242987E-01				-2.26193E-07	+/- 2.9E-09
Total phase (deg)			67.1		1.59572956347E-05				41.1	+/- 18.5
	RMS	Theor.	Amplitude	0.121 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	65.2	44.4	Search (2048X32)	0.117	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	113.5	77.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	34.4	26.2	Inc. seg. avg.	0.176	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	37.1	45.7	Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

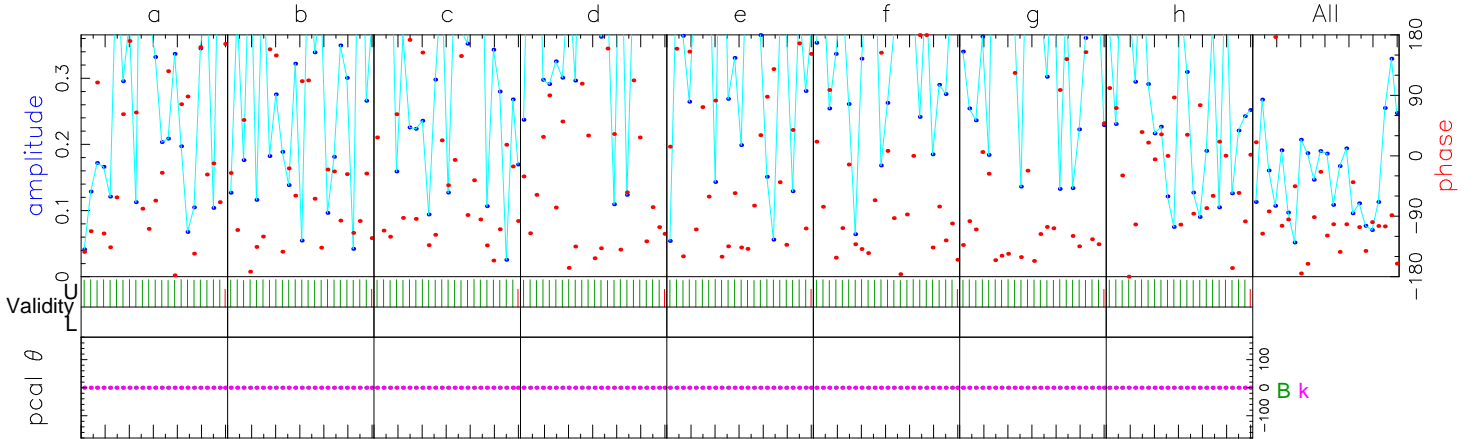


Fringe quality 0

SNR 6.2  
Int time 352.611  
Amp 0.122  
Phase -109.0  
PFD 1.3e-01  
Delays (us)  
SBD -0.325848  
MBD -0.001938  
Fringe rate (Hz)  
-0.123123  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122449  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

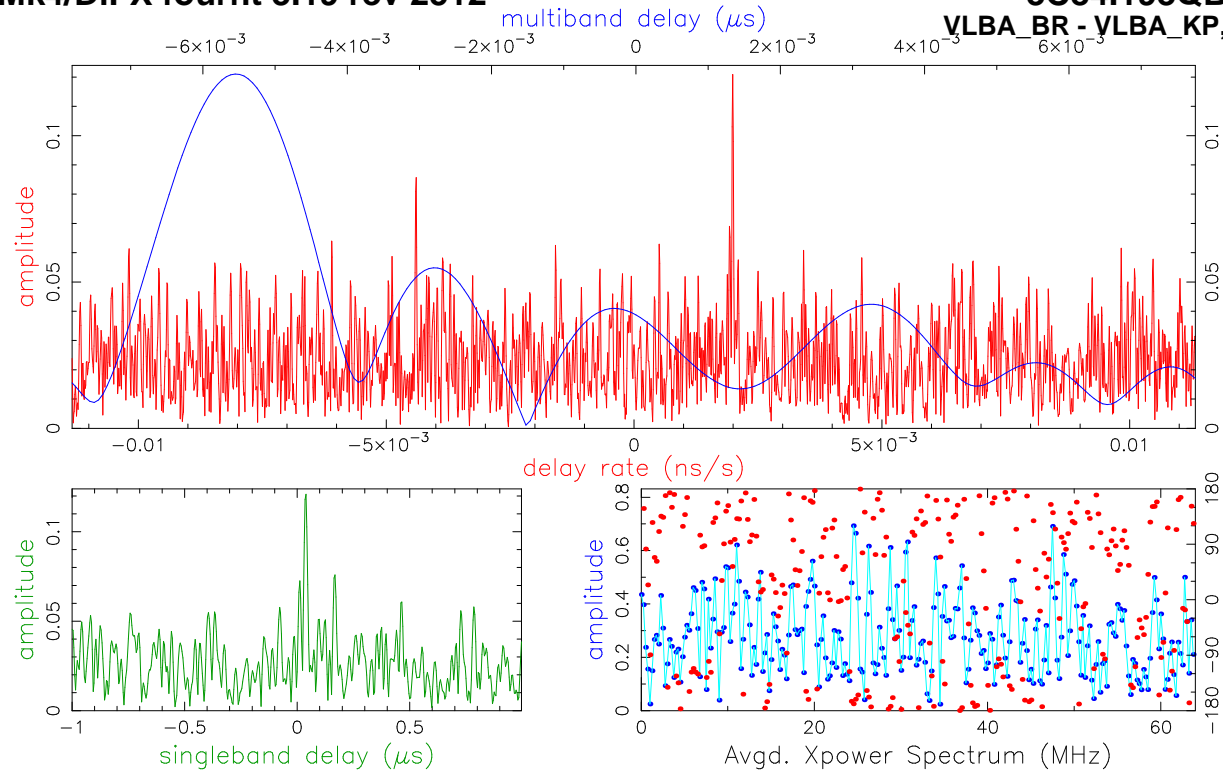


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-107.9	-107.9	-85.7	-119.6	-131.7	-110.4	-135.7	-14.2	Phase	-109.0
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	357.6	86.1	444.3	147.5	248.6	4.3	9.1	485.7	Sbd box	173.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.73939629250E+02		Apriori delay (usec)		-6.73609566480E+02		Resid mbdelay (usec)		-1.93777E-03	+/- 1.7E-04
Sband delay (usec)	-6.73935414980E+02		Apriori clock (usec)		1.3365585E+01		Resid sbdelay (usec)		-3.25848E-01	+/- 1.4E-03
Phase delay (usec)	-6.73609569994E+02		Apriori clockrate (us/s)		-2.0540000E-07		Resid phdelay (usec)		-3.51406E-06	+/- 5.9E-07
Delay rate (us/s)	-1.45748357094E+00		Apriori rate (us/s)		-1.45748214161E+00		Resid rate (us/s)		-1.42933E-06	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		2.18182697896E-05		Resid phase (deg)		-109.0	+/- 18.4

	RMS	Theor.	Amplitude	0.122 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.7	44.2	Search (2048X32)	0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	64.9	77.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	42.5	26.1	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	32.9	45.5	Inc. frq. avg.	0.127	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

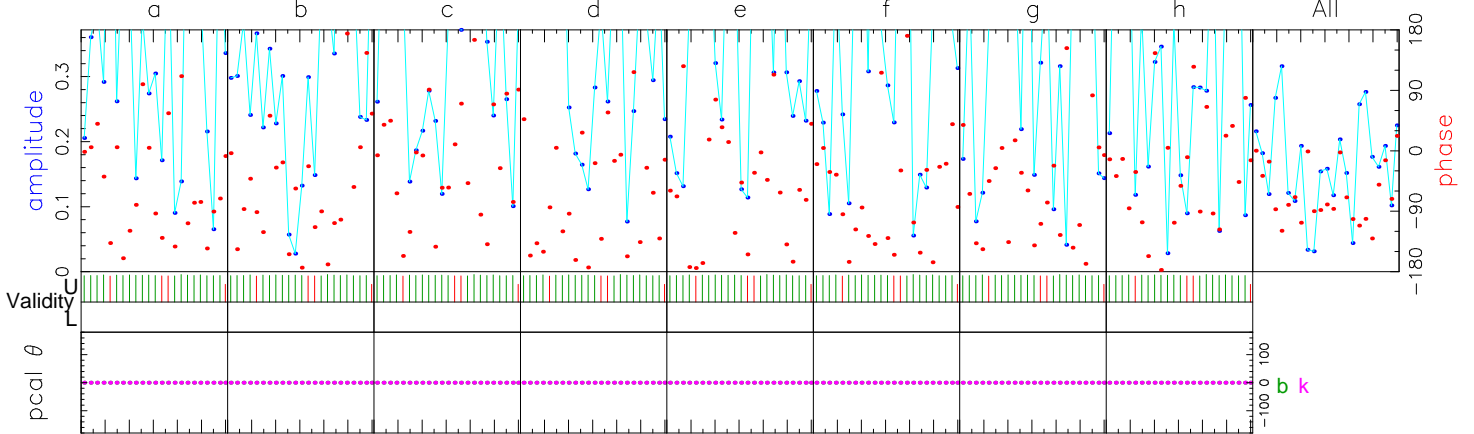
B: az 284.8 el 45.4 pa 55.3 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 11182.537 3052.399 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/Bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/Bk.W.41.193QBF



Fringe quality 0  
SNR 6.2  
Int time 347.804  
Amp 0.124  
Phase -71.9  
PFD 1.1e-01  
Delays (us)  
SBD 0.037627  
MBD -0.005596  
Fringe rate (Hz) 0.171510  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122452  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



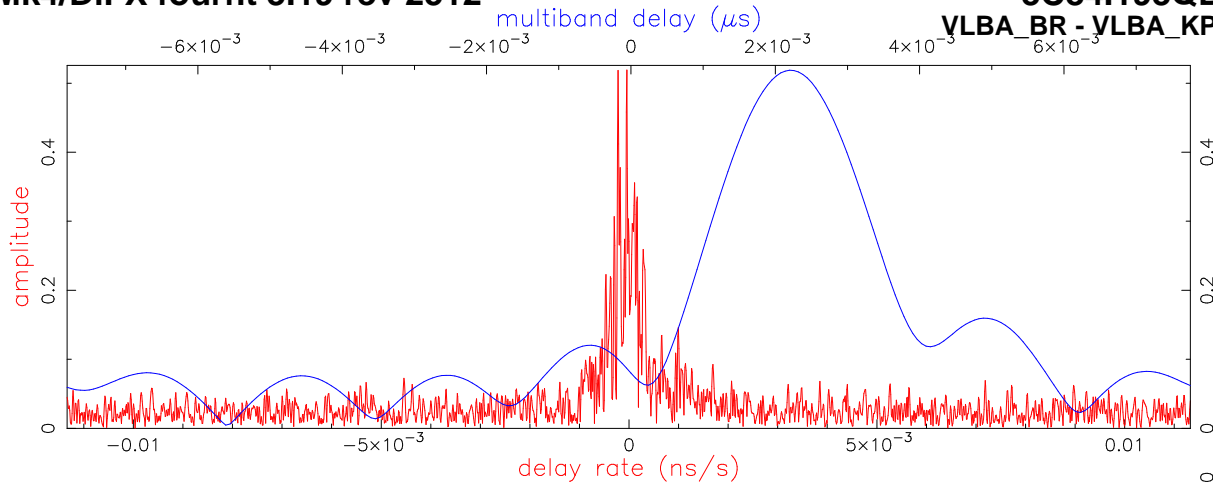
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-79.8	-84.1	-10.8	-95.2	-54.0	-93.8	-77.2	-49.5	Phase	-71.9
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	50.5	150.0	433.7	161.6	11.0	266.1	375.4	104.7	Sbd box	266.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 2.98756072819E+01 Apriori delay (usec) 2.98343286785E+01 Resid mbdelay (usec) -5.59640E-03 +/- 1.7E-04  
Sband delay (usec) 2.98719554285E+01 Apriori clock (usec) -1.0740956E+00 Resid sbdelay (usec) 3.76268E-02 +/- 1.4E-03  
Phase delay (usec) 2.98343263586E+01 Apriori clockrate (us/s) -4.7400004E-08 Resid phdelay (usec) -2.31995E-06 +/- 5.9E-07  
Delay rate (us/s) -1.06260251926E-01 Apriori rate (us/s) -1.06262242987E-01 Resid rate (us/s) 1.99106E-06 +/- 2.8E-09  
Total phase (deg) -45.9 Apriori accel (us/s/s) 1.59572956347E-05 Resid phase (deg) -71.9 +/- 18.4

RMS Theor. Amplitude 0.124 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 42.2 44.0 Search (2048X32) 0.119 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 70.0 76.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
ph/frq (deg) 31.1 26.0 Inc. seg. avg. 0.129 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
amp/frq (%) 18.3 45.3 Inc. frq. avg. 0.122 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 75.0 el 47.2 pa -59.5 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 830.589 2533.454 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/bk.W.59.193QBF

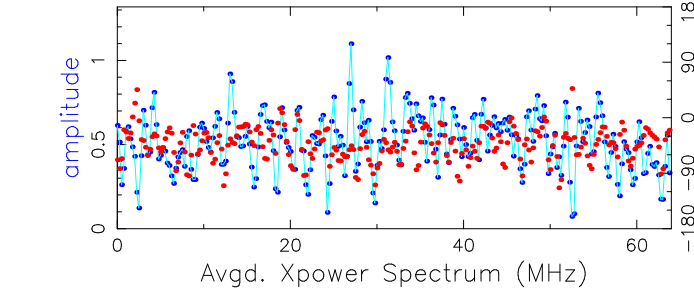
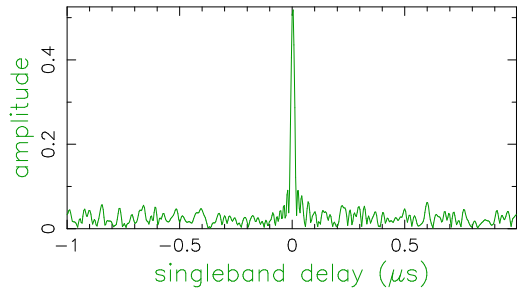




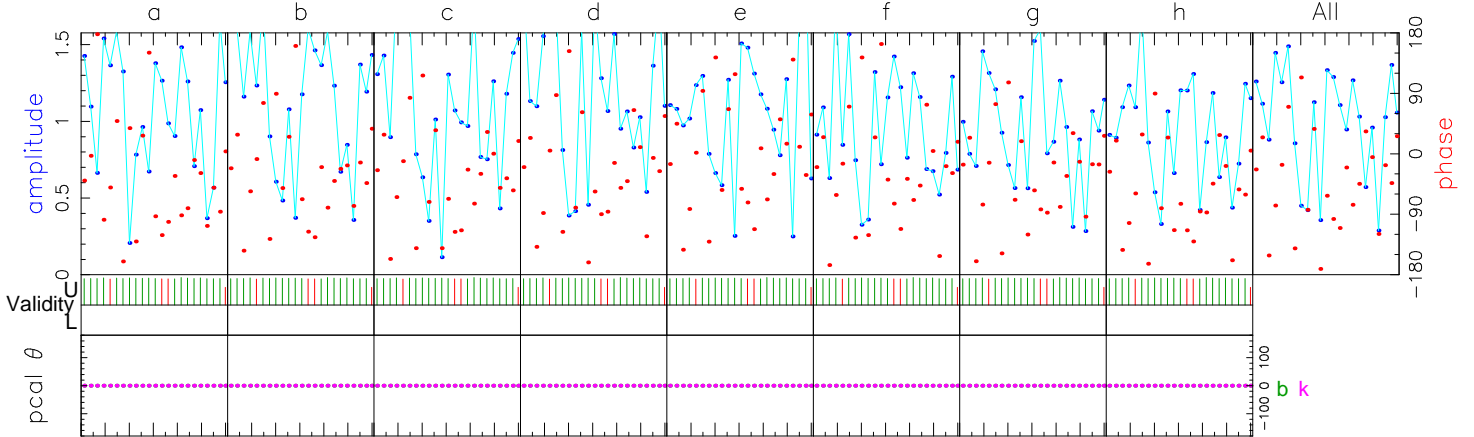
Fringe quality 7

SNR 26.8  
Int time 347.804  
Amp 0.526  
Phase -39.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.002413  
MBD 0.002171  
Fringe rate (Hz)  
-0.019275  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122440  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

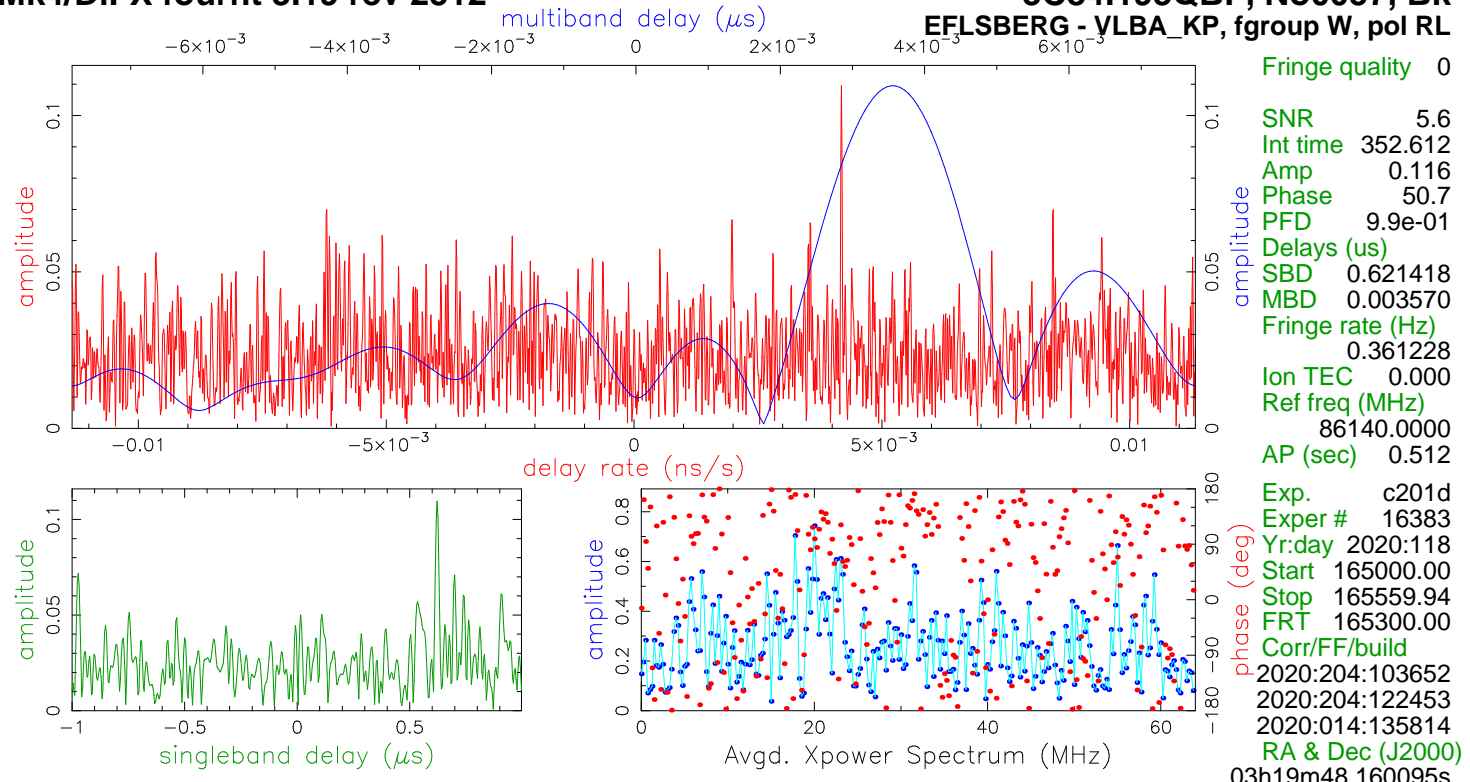


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

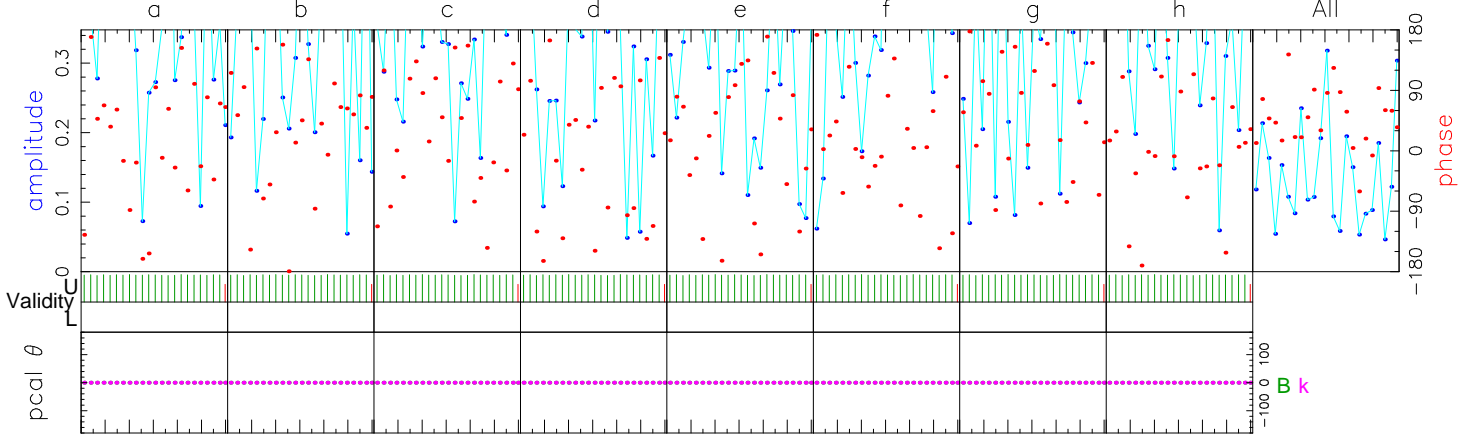


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.6	-36.9	-33.6	-25.0	-18.7	-36.4	-36.7	-60.4	Phase	-39.4
	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	Ampl.	0.5
	257.6	258.0	257.6	257.5	257.6	257.4	257.6	256.8	Sbd box	257.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.98365000663E+01		Apriori delay (usec)		2.98343286785E+01		Resid mbdelay (usec)		2.17139E-03	+/- 4.0E-05
Sband delay (usec)	2.98367414285E+01		Apriori clock (usec)		-1.0740956E+00		Resid sbdelay (usec)		2.41275E-03	+/- 3.2E-04
Phase delay (usec)	2.98343274095E+01		Apriori clockrate (us/s)		-4.7400004E-08		Resid phdelay (usec)		-1.26905E-06	+/- 1.4E-07
Delay rate (us/s)	-1.06262466746E-01		Apriori rate (us/s)		-1.06262242987E-01		Resid rate (us/s)		-2.23759E-07	+/- 6.6E-10
Total phase (deg)			Apriori accel (us/s/s)		1.59572956347E-05		Resid phase (deg)		-39.4	+/- 4.3

ph/seg (deg) 71.8 10.2 Search (2048X32) 0.502 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 111.5 17.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 18.2 6.0 Inc. seg. avg. 0.979 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 9.9 10.6 Inc. frq. avg. 0.535 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 75.0 el 47.2 pa -59.5 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 830.589 2533.454 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/bk.W.6.193QBF



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



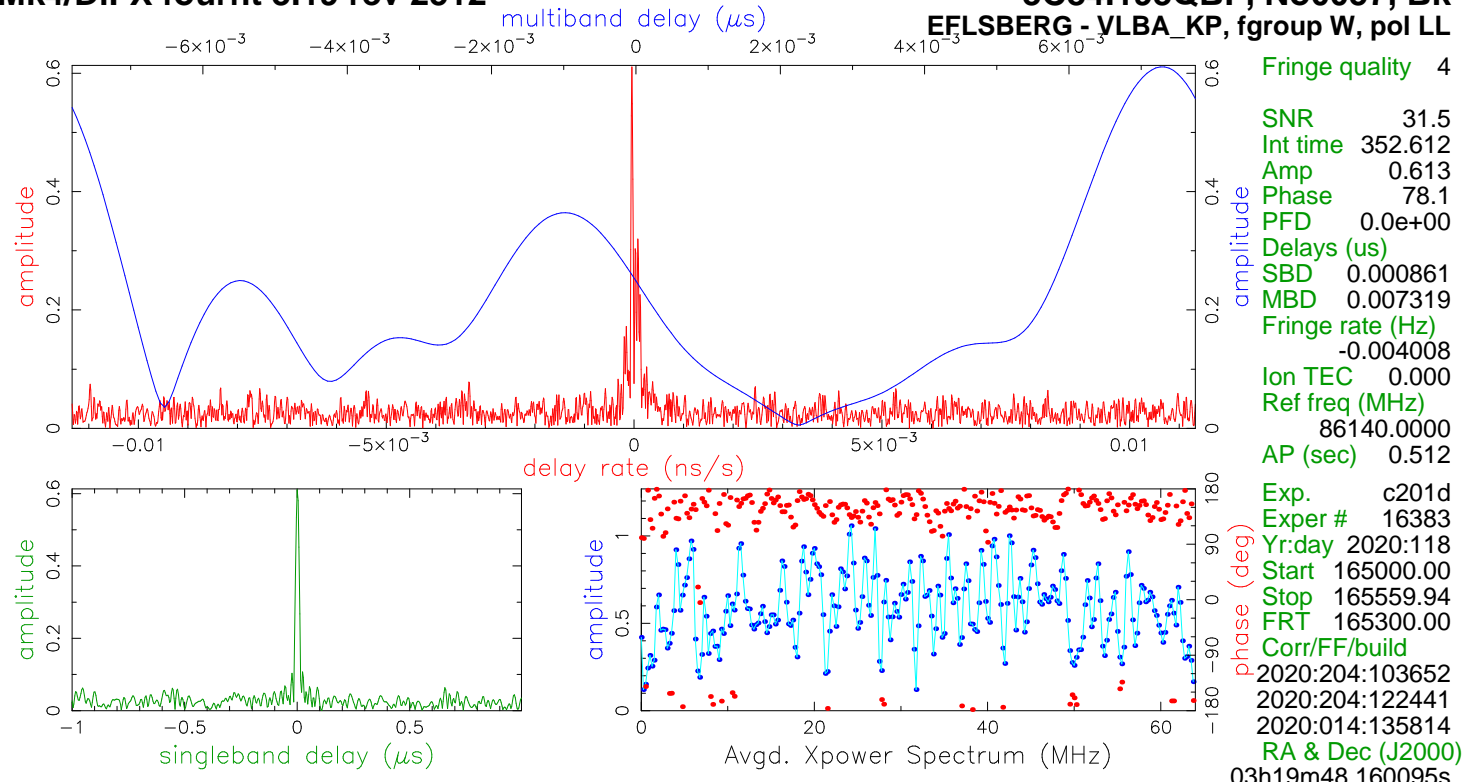
86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
44.0	47.2	75.4	69.3	54.4	18.5	74.2	45.5	Phase	50.7
0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
176.8	383.9	493.0	491.1	489.2	174.3	509.4	152.8	Sbd box	416.1
U/L 703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000		
B W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.72980996182E+02	Apriori delay (usec)	-6.73609566480E+02	Resid mbdelay (usec)	3.57030E-03	+/-	1.9E-04
Sband delay (usec)	-6.72988148730E+02	Apriori clock (usec)	1.3365585E+01	Resid sbdelay (usec)	6.21418E-01	+/-	1.5E-03
Phase delay (usec)	-6.73609564845E+02	Apriori clockrate (us/s)	-2.0540000E-07	Resid phdelay (usec)	1.63501E-06	+/-	6.6E-07
Delay rate (us/s)	-1.45747794812E+00	Apriori rate (us/s)	-1.45748214161E+00	Resid rate (us/s)	4.19349E-06	+/-	3.2E-09
Total phase (deg)		Apriori accel (us/s/s)	2.18182697896E-05	Resid phase (deg)	50.7	+/-	20.4

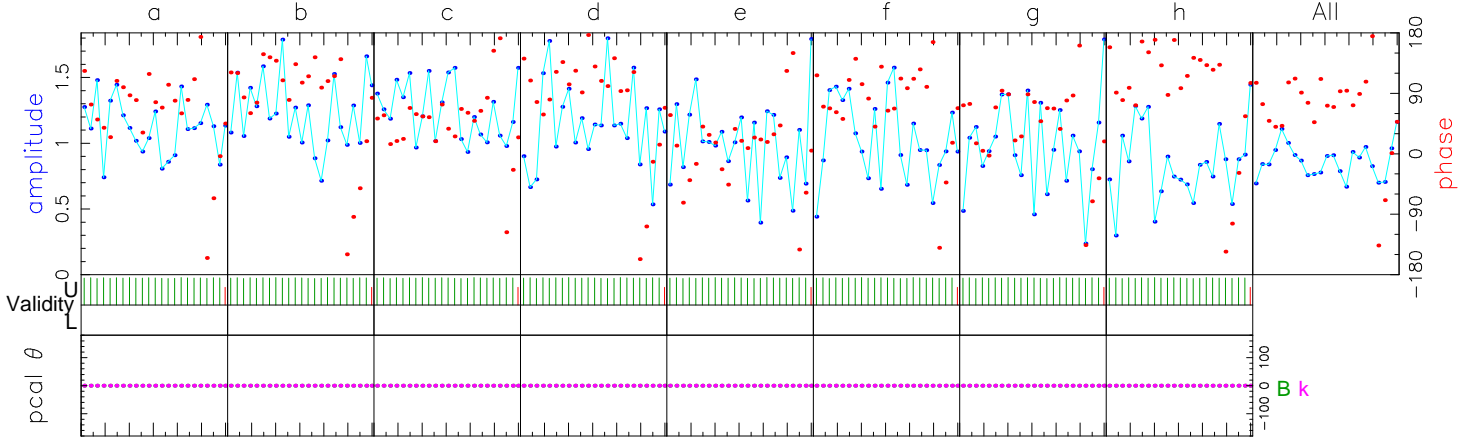
ph/seg (deg)	RMS 44.6	Theor. 48.8	Amplitude Search (2048X32)	0.116 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	70.9	85.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	21.0	28.8	Inc. seg. avg.	0.107	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	28.9	50.3	Inc. frq. avg.	0.108	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 284.8 el 45.4 pa 55.3 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 11182.537 3052.399 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/Bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/Bk.W.62.193QBF



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
80.5	111.8	49.1	107.3	8.8	83.8	52.7	123.6	123.6	Phase	78.1
0.7	0.8	0.9	0.8	0.7	0.7	0.7	0.6	0.6	Ampl.	0.7
257.8	257.1	257.4	257.7	257.7	257.8	257.9	258.5	258.5	Sbd box	257.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.73602247908E+02	Apriori delay (usec)	-6.73609566480E+02	Resid mbdelay (usec)	7.31857E-03	+/-	3.4E-05
Sband delay (usec)	-6.73608705480E+02	Apriori clock (usec)	1.3365585E+01	Resid sbdelay (usec)	8.61000E-04	+/-	2.7E-04
Phase delay (usec)	-6.73609563962E+02	Apriori clockrate (us/s)	-2.0540000E-07	Resid phdelay (usec)	2.51808E-06	+/-	1.2E-07
Delay rate (us/s)	-1.45748218814E+00	Apriori rate (us/s)	-1.45748214161E+00	Resid rate (us/s)	-4.65267E-08	+/-	5.6E-10
Total phase (deg)	57.7	Apriori accel (us/s/s)	2.18182697896E-05	Resid phase (deg)	78.1	+/-	3.6

ph/seg (deg)	55.2	RMS	55.2	Theor.	8.7	Amplitude	0.613 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	45.1	55.2	8.7	Search (2048X32)	0.607	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	41.6	45.1	15.2	Inc. seg. avg.	0.852	Inc. seg. avg.	0.852	Sample rate (MSamp/s):	128	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	26.2	41.6	5.1	Inc. frq. avg.	0.736	Inc. frq. avg.	0.736	Data rate (Mb/s):	2048							

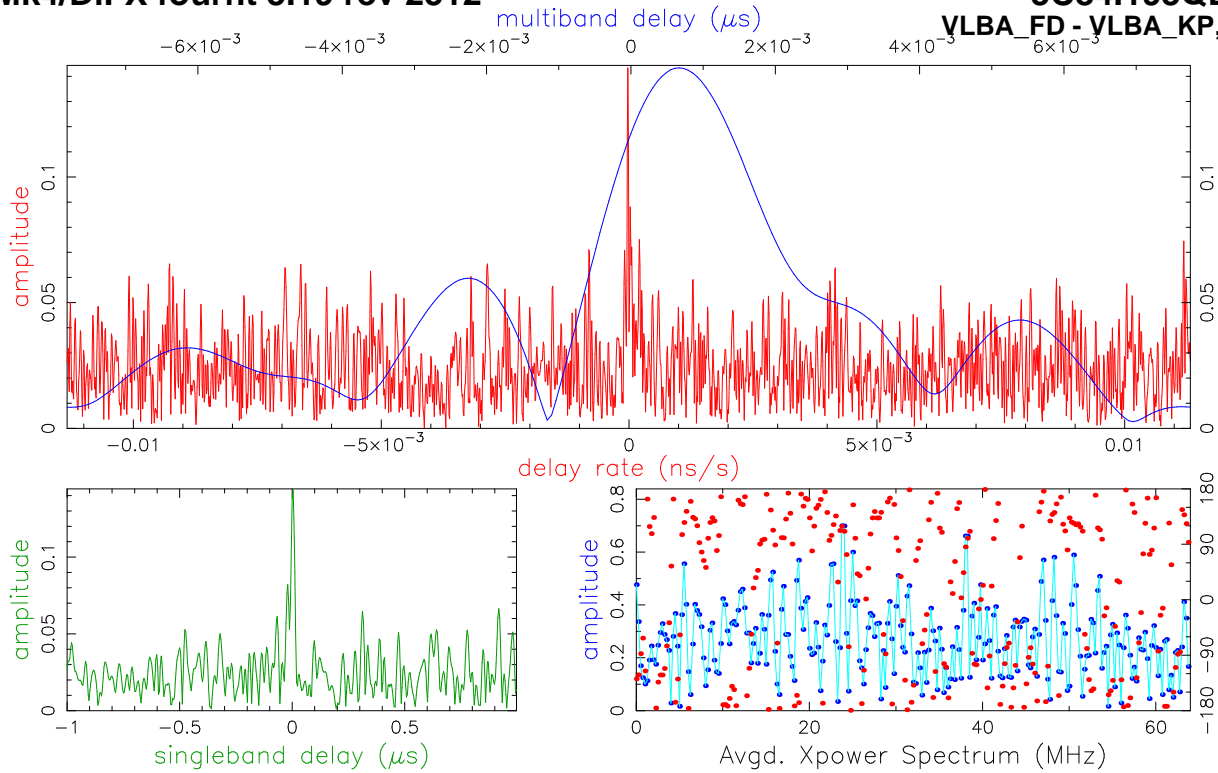
B: az 284.8 el 45.4 pa 55.3 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 11182.537 3052.399 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/Bk..193QBF Output file: /Exps/c201d/v1/1234/No0057/Bk.W.7.193QBF



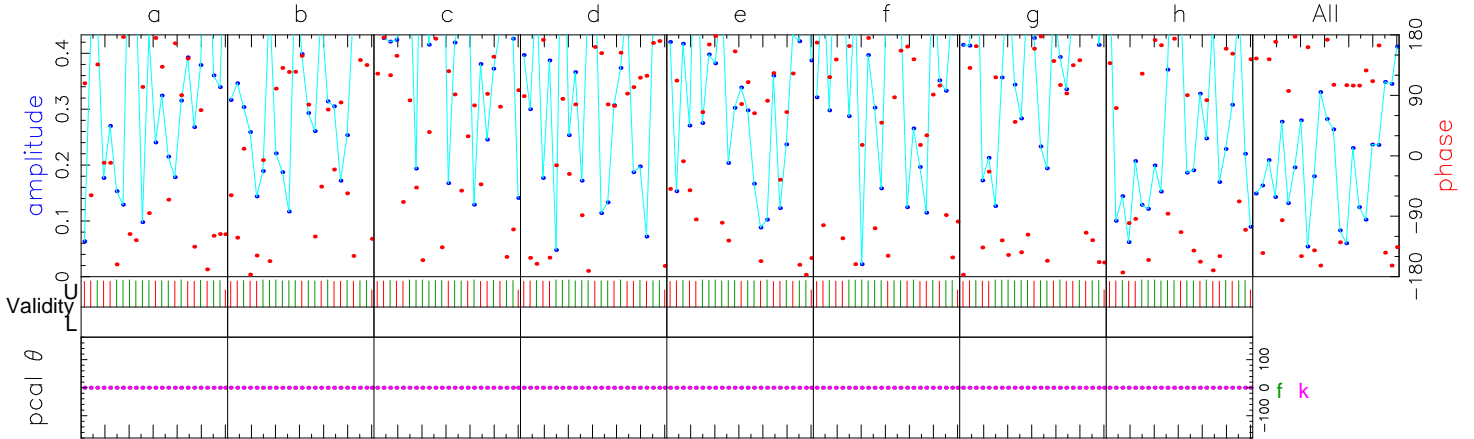
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, fk  
VLBA\_FD - VLBA\_KP, fgroup W, pol LR



Fringe quality 9  
SNR 7.3  
Int time 343.507  
Amp 0.144  
Phase 176.9  
PFD 7.9e-05  
Delays (us)  
SBD 0.002825  
MBD 0.000676  
Fringe rate (Hz)  
-0.001830  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.51  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122506  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-145.9	173.7	160.8	145.5	177.5	175.9	179.2	-166.8	Phase	176.9
	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	213.3	26.7	357.2	257.2	494.2	257.4	258.1	257.1	Sbd box	257.7
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

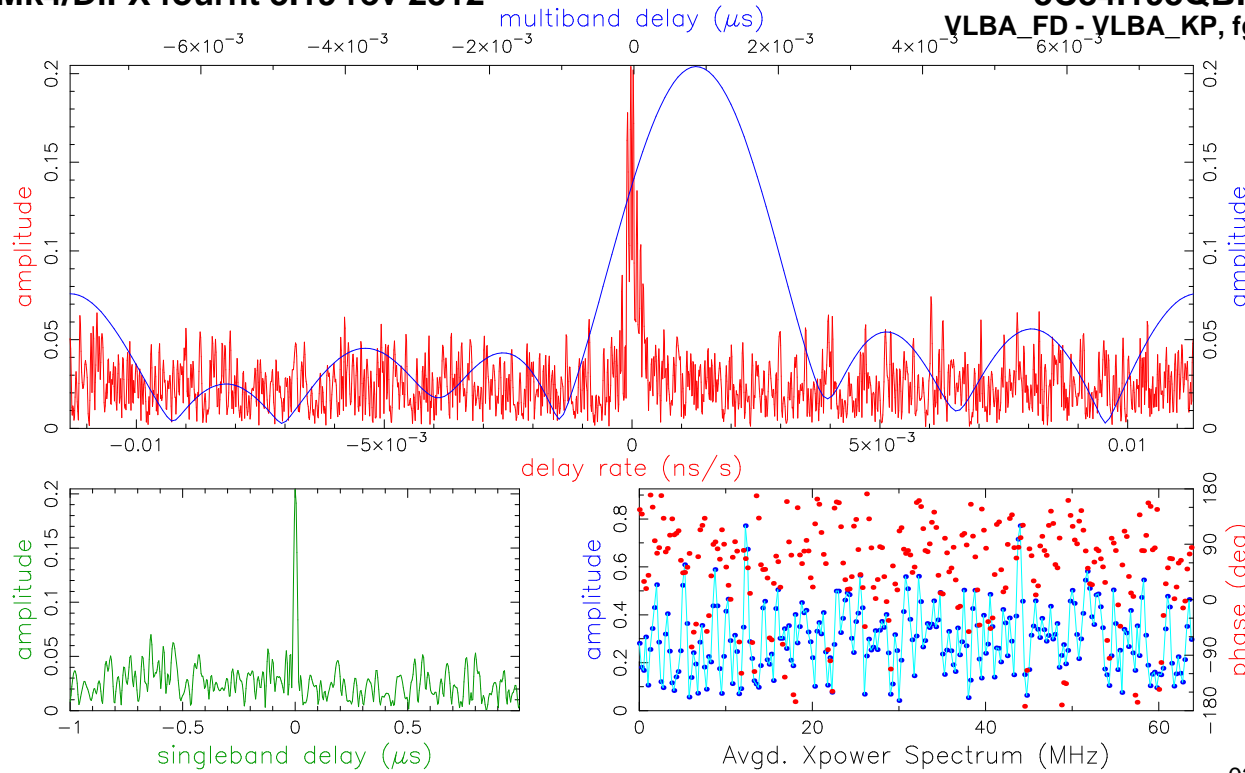
Group delay (usec)(sbd)	1.21853361830E+03	Apriori delay (usec)	1.21853294255E+03	Resid mbdelay (usec)	6.75750E-04	+/-	1.5E-04
Sband delay (usec)	1.21853576780E+03	Apriori clock (usec)	4.2584367E+00	Resid sbdelay (usec)	2.82525E-03	+/-	1.2E-03
Phase delay (usec)	1.21853294826E+03	Apriori clockrate (us/s)	1.0360000E-07	Resid phdelay (usec)	5.70378E-06	+/-	5.1E-07
Delay rate (us/s)	-7.73197083103E-02	Apriori rate (us/s)	-7.73196870685E-02	Resid rate (us/s)	-2.12418E-08	+/-	2.4E-09
Total phase (deg)	58.6	Apriori accel (us/s/s)	-7.93268593819E-06	Resid phase (deg)	176.9	+/-	15.7

ph/seg (deg)	49.5	RMS	37.6	Theor.	Amplitude	0.144 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.0	49.5	37.6	Search (2048X32)	0.141		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	22.0	78.0	65.5	Interp.	0.000		Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	36.4	22.0	22.1	Inc. seg. avg.	0.171		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
		36.4	38.7	Inc. frq. avg.	0.141		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 60.3 el 52.1 pa -91.3 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 582.392 -687.464 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fk..193QBF Output file: /Exps/c201d/v1/1234/No0057/fk.W.114.193QBF

Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, fk  
VLBA\_FD - VLBA\_KP, fgroup W, pol RL

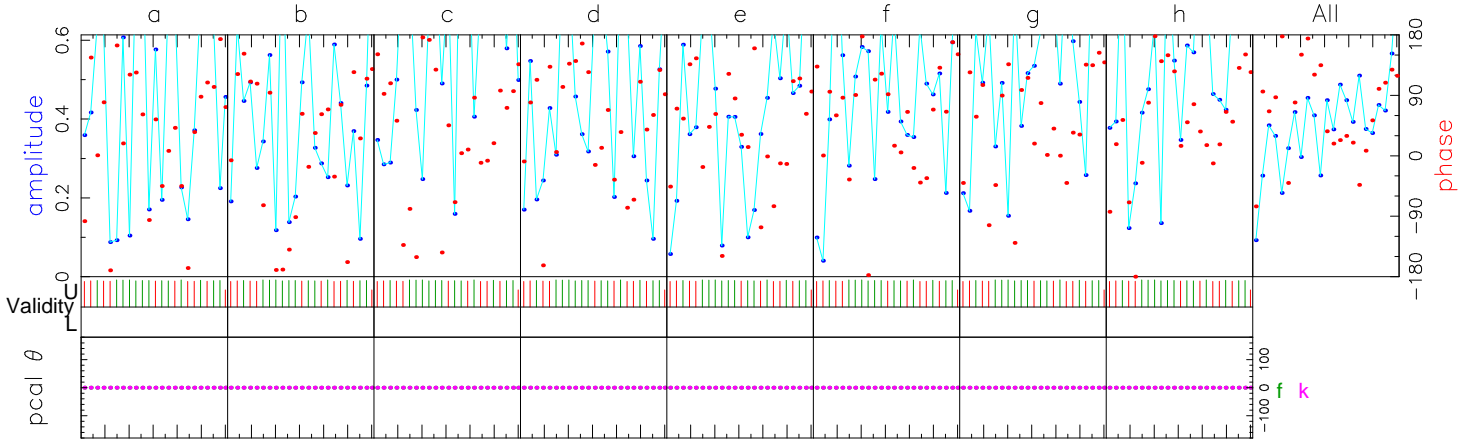


Fringe quality 9

SNR 10.4  
Int time 343.509  
Amp 0.205  
Phase 74.2  
PFD 1.5e-16  
Delays (us)  
SBD 0.000719  
MBD 0.000867  
Fringe rate (Hz)  
-0.001839  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

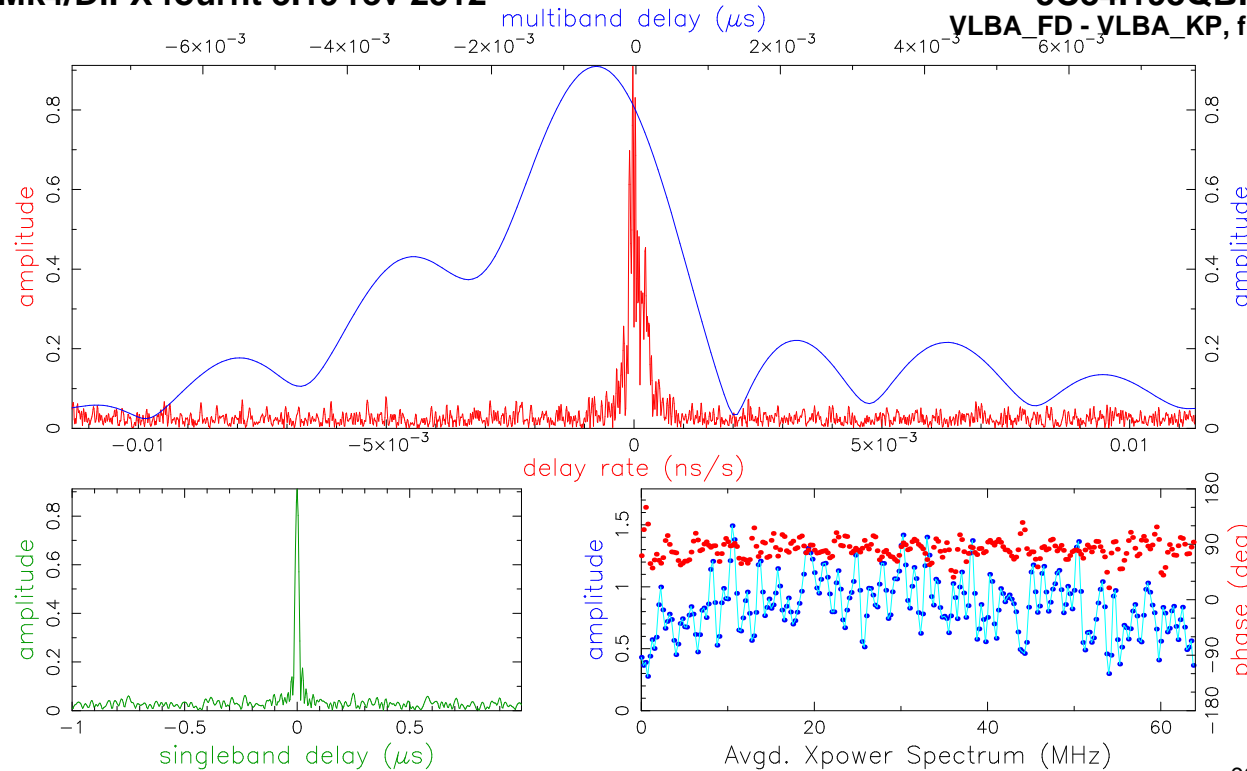
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.51  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122510  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.2
k	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.2
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21853380993E+03					1.21853294255E+03			Resid mbdelay (usec)	8.67375E-04 +/- 1.0E-04
Sband delay (usec)	1.21853366130E+03					4.2584367E+00			Resid sbdelay (usec)	7.18750E-04 +/- 8.3E-04
Phase delay (usec)	1.21853294495E+03					1.0360000E-07			Resid phdelay (usec)	2.39312E-04 +/- 3.6E-07
Delay rate (us/s)	-7.73197084166E-02					-7.73196870685E-02			Resid rate (us/s)	-2.13481E-08 +/- 1.7E-09
Total phase (deg)		316.0				-7.93268593819E-06			Resid phase (deg)	74.2 +/- 11.0
	RMS	Theor.	Amplitude	0.205 +/- 0.020					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.0	26.5	Search (2048X32)	0.202					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	106.6	46.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	16.9	15.6	Inc. seg. avg.	0.350					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	18.8	27.3	Inc. frq. avg.	0.202					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
f: az 60.3 el 52.1 pa -91.3			k: az 61.4 el 47.0 pa -85.5			u, v (fr/asec) 582.392 -687.464			nlags: 256	t_cohere infinite

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fk..193QBF Output file: /Exps/c201d/v1/1234/No0057/fk.W.134.193QBF simultaneous interpolator

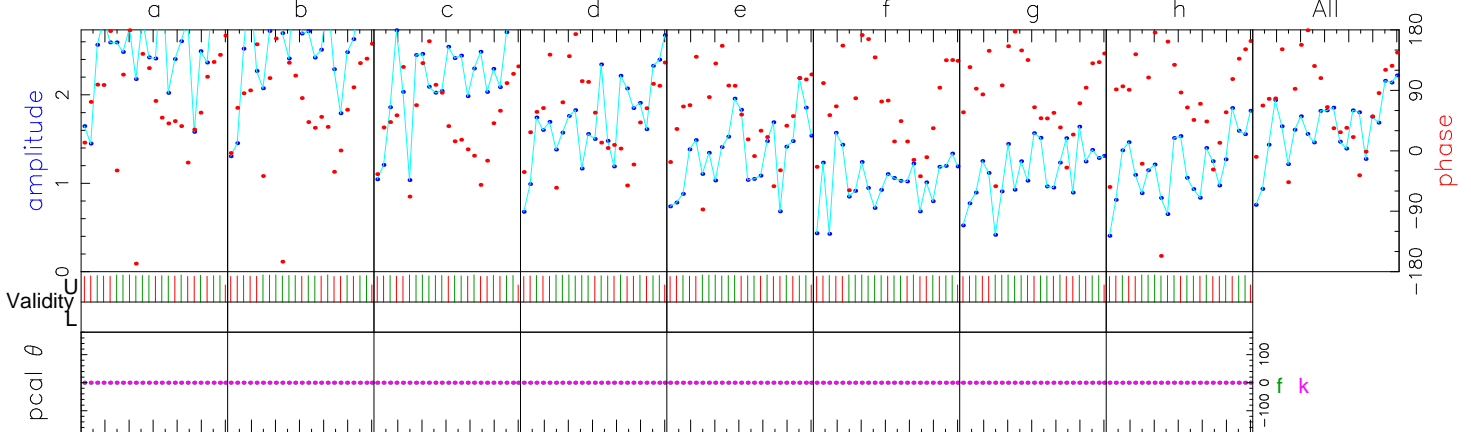


Fringe quality 5

SNR 46.2  
Int time 343.507  
Amp 0.912  
Phase 80.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.000676  
MBD -0.000559  
Fringe rate (Hz)  
-0.001909  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.51  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122457  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

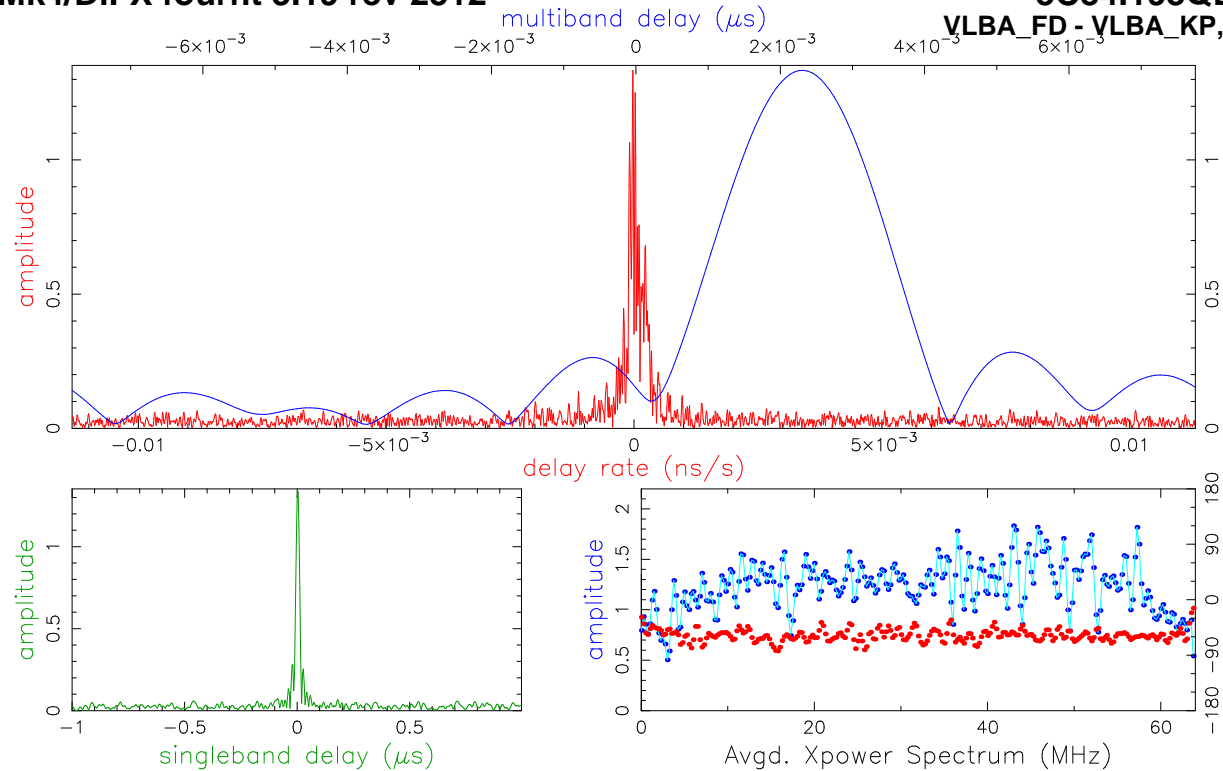


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.21853238384E+03	Apriori delay (usec)	1.21853294255E+03	Resid mbdelay (usec)	-5.58719E-04	+/-	2.3E-05
Sband delay (usec)	1.21853226630E+03	Apriori clock (usec)	4.2584367E+00	Resid sbdelay (usec)	-6.76250E-04	+/-	1.9E-04
Phase delay (usec)	1.21853294516E+03	Apriori clockrate (us/s)	1.0360000E-07	Resid phdelay (usec)	2.60153E-06	+/-	8.0E-08
Delay rate (us/s)	-7.73197092272E-02	Apriori rate (us/s)	-7.73196870685E-02	Resid rate (us/s)	-2.21587E-08	+/-	3.9E-10
Total phase (deg)	322.4	Apriori accel (us/s/s)	-7.93268593819E-06	Resid phase (deg)	80.7	+/-	2.5

ph/seg (deg)	61.9	Theor.	Amplitude	0.912 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	87.0	5.9	Search (2048X32)	0.908	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	18.8	3.5	Inc. seg. avg.	1.616	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	36.7	6.1	Inc. frq. avg.	0.948	Sample rate(MISamp/s): 128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
f: az 60.3 el 52.1 pa -91.3			k: az 61.4 el 47.0 pa -85.5		Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00		

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fk..193QBF Output file: /Exps/c201d/v1/1234/No0057/fk.W.80.193QBF simultaneous interpolator

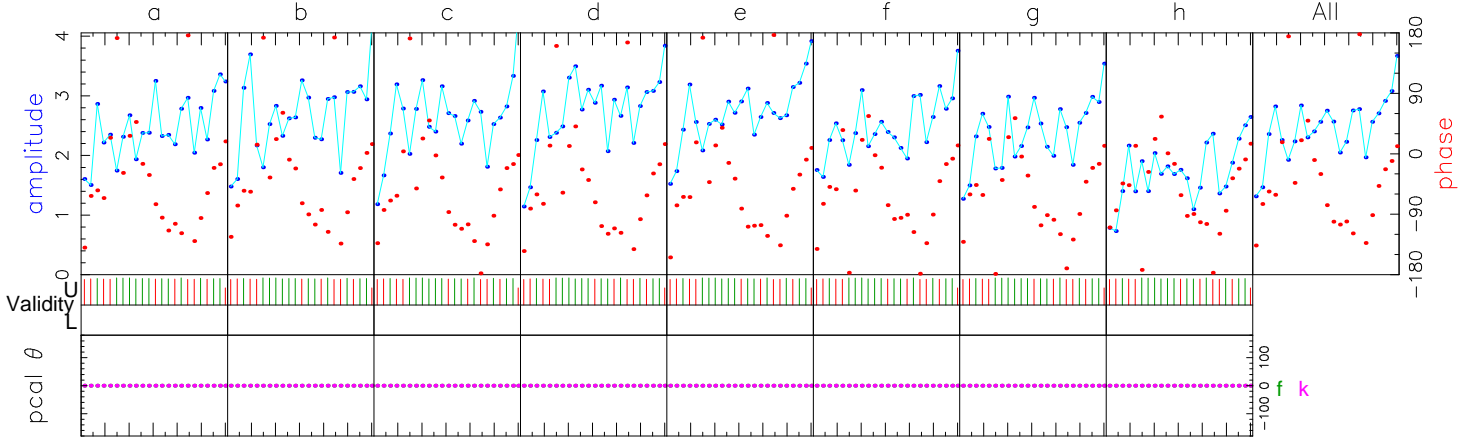


Fringe quality 5

SNR 68.5  
Int time 343.508  
Amp 1.352  
Phase -56.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.002381  
MBD 0.002270  
Fringe rate (Hz)  
-0.001875  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

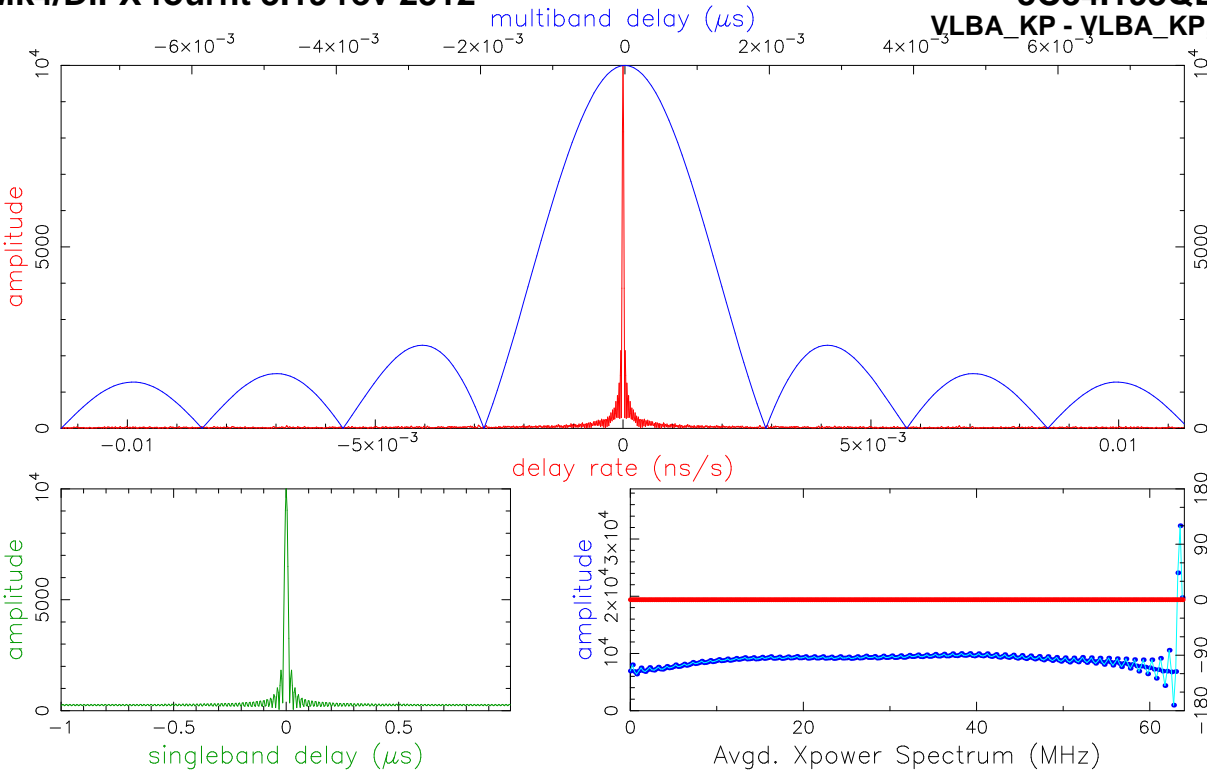
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.51  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122502  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-58.9	-52.0	-60.0	-62.6	-62.0	-54.2	-54.6	-47.2	Phase	-56.9
	1.3	1.5	1.4	1.4	1.5	1.3	1.3	0.9	Ampl.	1.3
	257.8	257.3	257.7	257.6	257.8	257.3	257.8	257.8	Sbd box	257.6
U/L	702/0	702/0	702/0	702/0	702/0	702/0	702/0	702/0	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	PC amp	
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)	1.21853521293E+03		Apriori delay (usec)		1.21853294255E+03		Resid mbdelay (usec)		2.27038E-03	+/- 1.6E-05
Sband delay (usec)	1.21853532330E+03		Apriori clock (usec)		4.2584367E+00		Resid sbdelay (usec)		2.38075E-03	+/- 1.3E-04
Phase delay (usec)	1.21853294072E+03		Apriori clockrate (us/s)		1.0360000E-07		Resid phdelay (usec)		-1.83460E-06	+/- 5.4E-08
Delay rate (us/s)	-7.73197088347E-02		Apriori rate (us/s)		-7.73196870685E-02		Resid rate (us/s)		-2.17662E-08	+/- 2.6E-10
Total phase (deg)	184.9		Apriori accel (us/s/s)		-7.93268593819E-06		Resid phase (deg)		-56.9	+/- 1.7

ph/seg (deg) 62.4 4.0 Search (2048X32) 1.324 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 88.1 7.0 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 2.4 Inc. seg. avg. 2.436 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 12.9 4.1 Inc. frq. avg. 1.337 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 60.3 el 52.1 pa -91.3 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 582.392 -687.464 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fk..193QBF Output file: /Exps/c201d/v1/1234/No0057/fk.W.93.193QBF

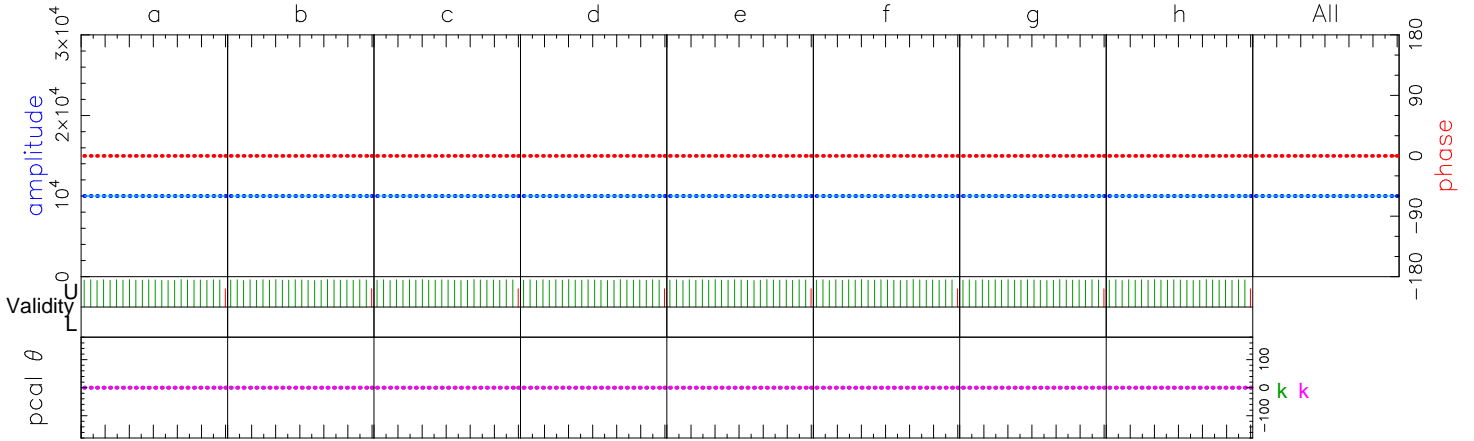


Fringe quality 9

SNR 513772.1  
Int time 352.976  
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. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122505  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.1E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	-1.48495221953E-19	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.48495E-19	+/-	7.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.5E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

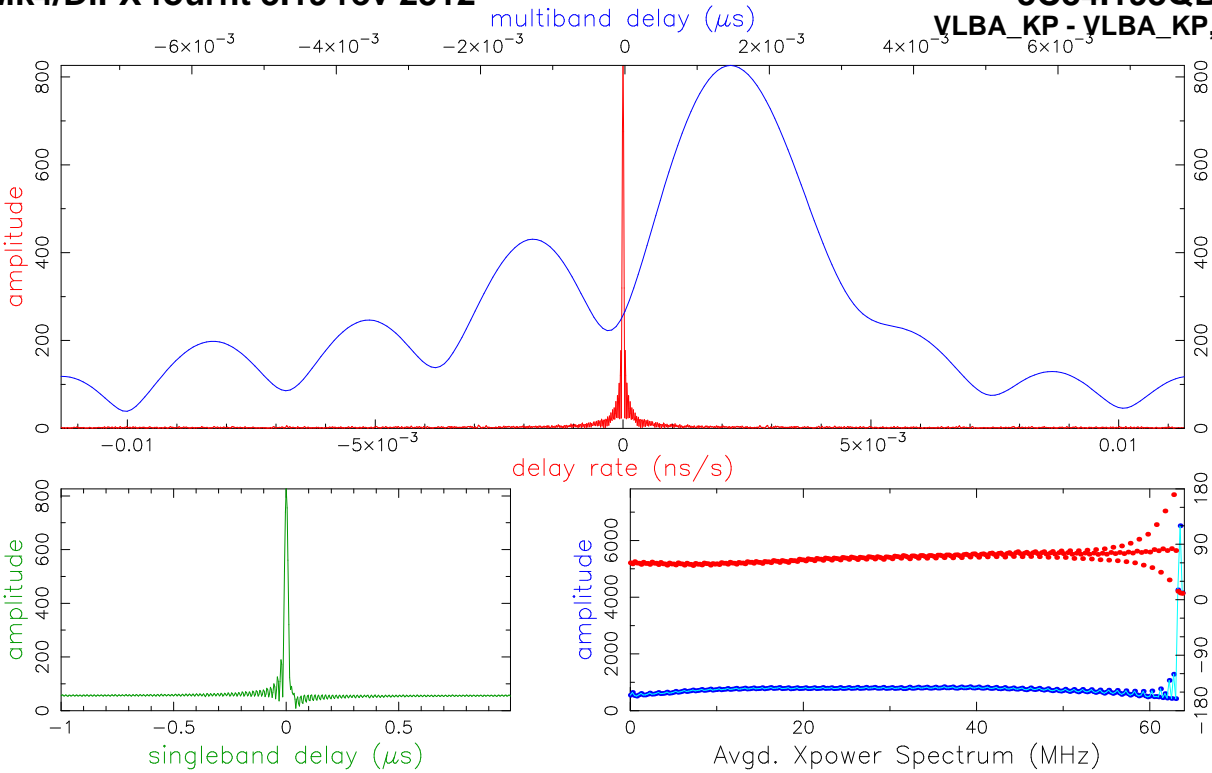
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.007 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.007 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled 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  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.007 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

k: az 61.4 el 47.0 pa -85.5 k: az 61.4 el 47.0 pa -85.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kk  
VLBA\_KP - VLBA\_KP, fgroup W, pol LR

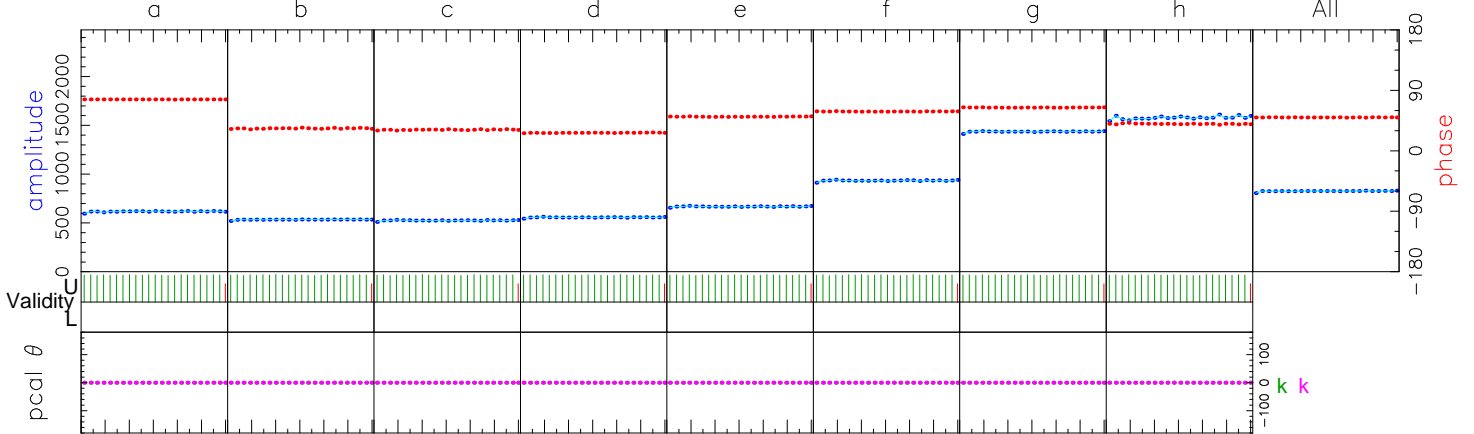


Fringe quality 6

SNR 42460.8  
Int time 352.976  
Amp 826.452  
Phase 49.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.000159  
MBD 0.001464  
Fringe rate (Hz)  
-0.000003  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122509  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

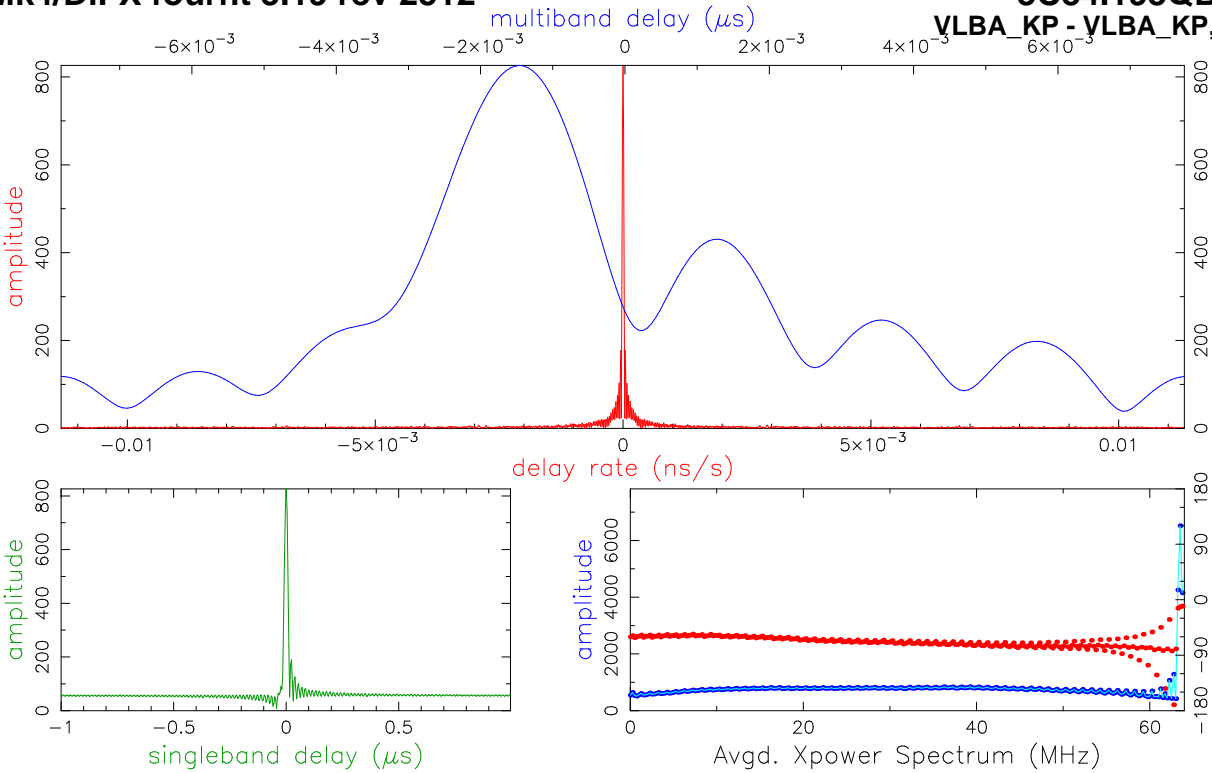
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	1.46431250000E-03								1.46431E-03	+/- 2.6E-08
Sband delay (usec)	1.59250000000E-04								1.59250E-04	+/- 2.0E-07
Phase delay (usec)	1.60195762207E-06								1.60196E-06	+/- 8.7E-11
Delay rate (us/s)	-3.54278809792E-11								-3.54279E-11	+/- 4.2E-13
Total phase (deg)			49.7						49.7	+/- 0.0
	RMS	Theor.	Amplitude	826.452 +/- 0.019						
ph/seg (deg)	0.2	0.0	Search (2048X32)	826.315						
amp/seg (%)	0.5	0.0	Interp.	0.000						
ph/frq (deg)	19.3	0.0	Inc. seg. avg.	826.320						
amp/frq (%)	48.1	0.0	Inc. frq. avg.	856.176						
k: az 61.4 el 47.0 pa -85.5			k: az 61.4 el 47.0 pa -85.5							
			u,v (fr/asec)	0.000 0.000						

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kk..193QBF Output file: /Exps/c201d/v1/1234/No0057/kk.W.133.193QBF

simultaneous interpolator

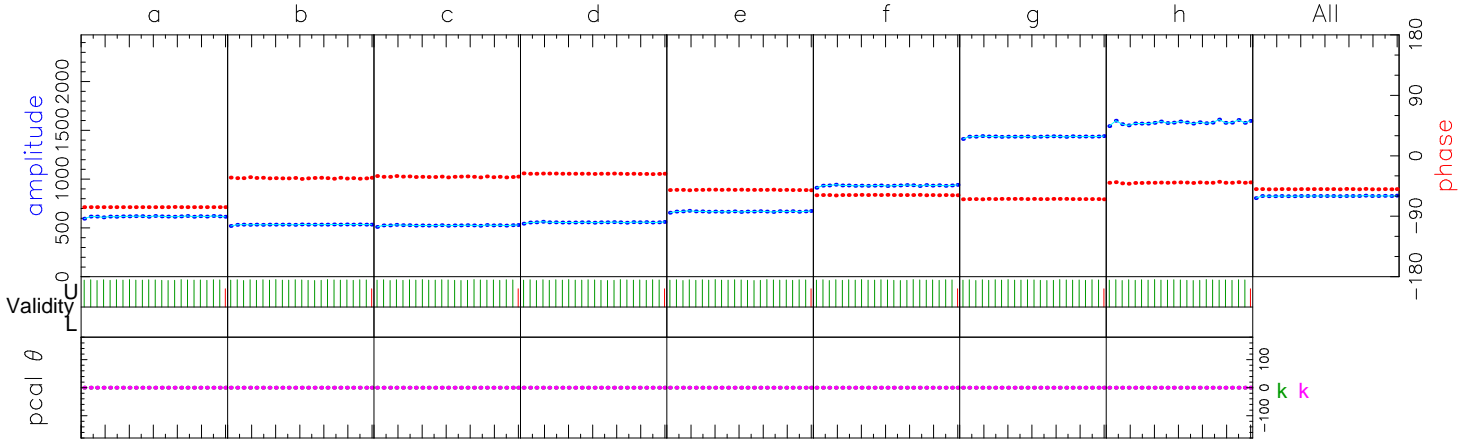


Fringe quality 6

SNR 42460.8  
Int time 352.976  
Amp 826.453  
Phase -49.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.000159  
MBD -0.001464  
Fringe rate (Hz) 0.000003  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

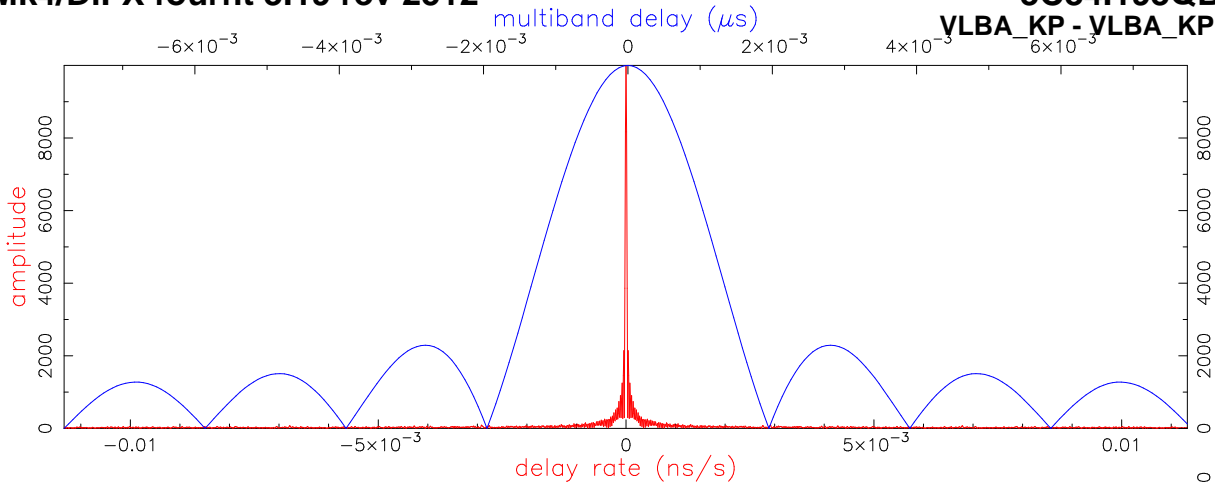
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122512  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

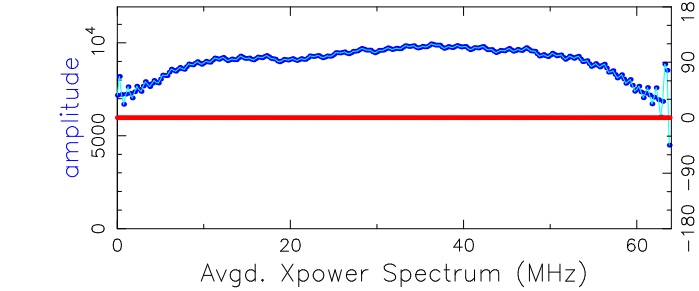
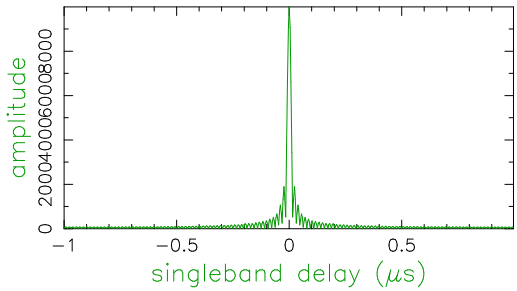


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-76.4	-33.3	-31.3	-26.7	-50.8	-58.5	-64.4	-40.0	Phase	-49.7
	616.6	533.4	525.9	557.1	668.2	934.3	1435.4	1578.5	Ampl.	856.2
	256.9	257.2	256.6	256.6	256.3	256.7	256.4	257.7	Sbd box	257.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
k	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.46431250000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.46431E-03	+/- 2.6E-08
Sband delay (usec)	-1.59250000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.59250E-04	+/- 2.0E-07
Phase delay (usec)	-1.60195762215E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.60196E-06	+/- 8.7E-11
Delay rate (us/s)	3.54278809792E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		3.54279E-11	+/- 4.2E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-49.7	+/- 0.0

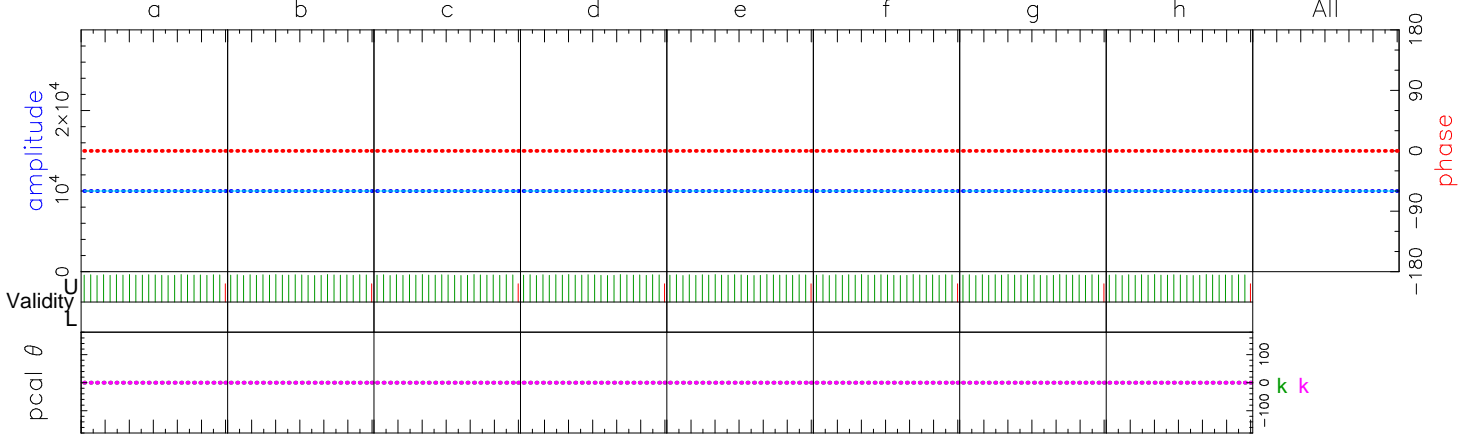
ph/seg (deg) 0.2 0.0 Theor. Amplitude 826.453 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.5 0.0 Search (2048X32) 826.315 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 48.1 0.0 Inc. seg. avg. 826.320 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 k: az 61.4 el 47.0 pa -85.5 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/c201d/v1/1234/No0057/kk..193QBF Output file: /Exps/c201d/v1/1234/No0057/kk.W.147.193QBF simultaneous interpolator



Fringe quality 9  
SNR 513771.8  
Int time 352.976  
Amp 9999.996  
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. c201d  
Yr:day 16383  
Start 2020:118  
Stop 2020:118  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122502  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.1E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	6.19914231262E-21	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	6.19914E-21	+/-	7.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

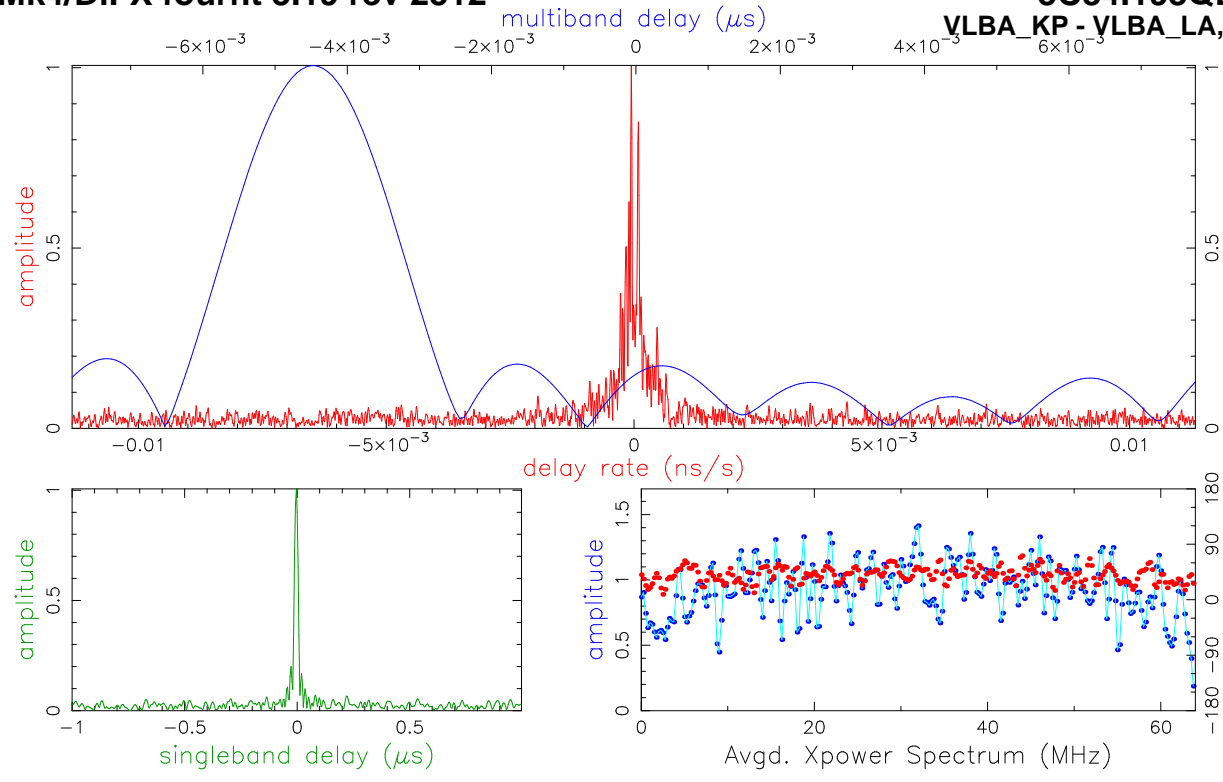
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.996 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.996	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.008 0.008
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	9999.996	Sample rate(MISamp/s): 128	ion window (TEC)	0.00 0.00
						Data rate(Mb/s): 2048		
						nlags: 256		
						t_cohere infinite		

k: az 61.4 el 47.0 pa -85.5      k: az 61.4 el 47.0 pa -85.5      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201d/v1/1234/No0057/kk..193QBF      Output file: /Exps/c201d/v1/1234/No0057/kk.W.92.193QBF

Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol RR

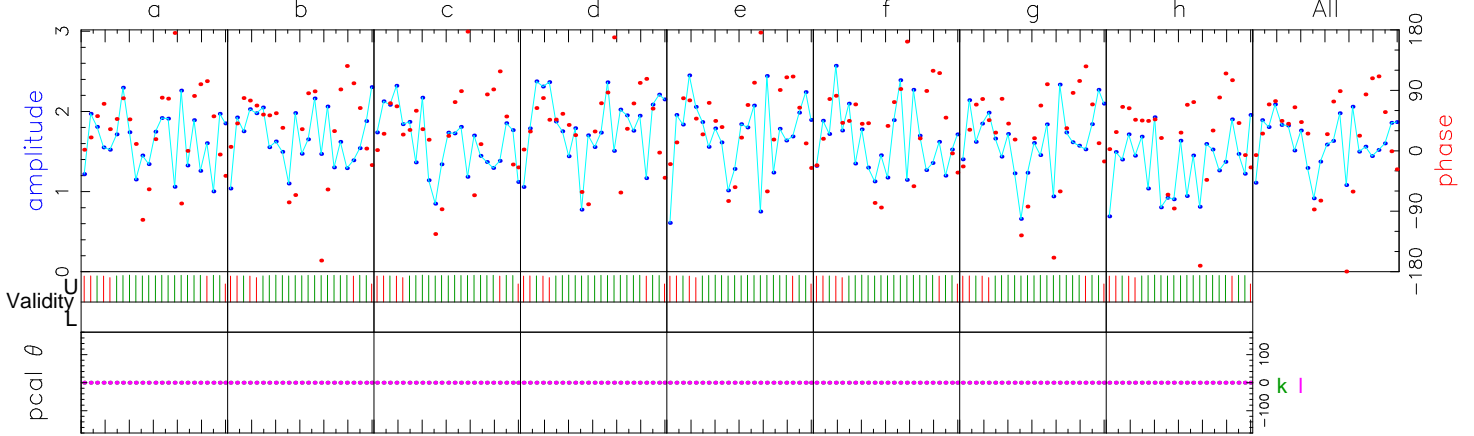


Fringe quality 5

SNR 51.1  
Int time 344.430  
Amp 1.006  
Phase 43.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.004227  
MBD -0.004481  
Fringe rate (Hz)  
-0.004467  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122508  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.34204752360E+03									
Sband delay (usec)	-1.34204726902E+03									
Phase delay (usec)	-1.34204304111E+03									
Delay rate (us/s)	9.10283906085E-02									
Total phase (deg)			-202.2							
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)										
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)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 61.4 5.4  
amp/seg (%) 67.2 9.4  
ph/frq (deg) 3.9 3.2  
amp/frq (%) 7.9 5.5

RMS Theor. Amplitude 1.006 +/- 0.020  
Search (2048X32) 0.981  
Interp. 0.000  
Inc. seg. avg. 1.602  
Inc. frq. avg. 1.006

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

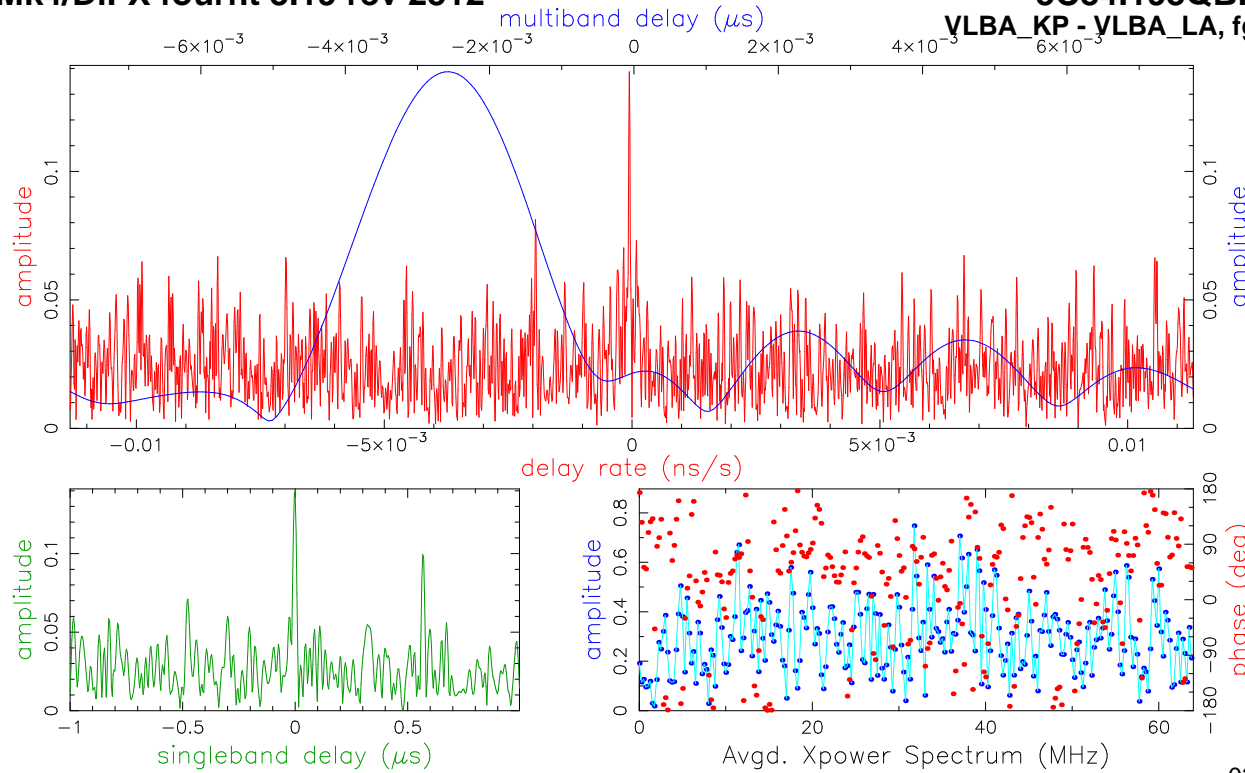
sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

k: az 61.4 el 47.0 pa -85.5 l: az 66.2 el 52.6 pa -83.2 u,v (fr/asec) -692.489 -151.855 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kl..193QBF Output file: /Exps/c201d/v1/1234/No0057/kl.W.123.193QBF

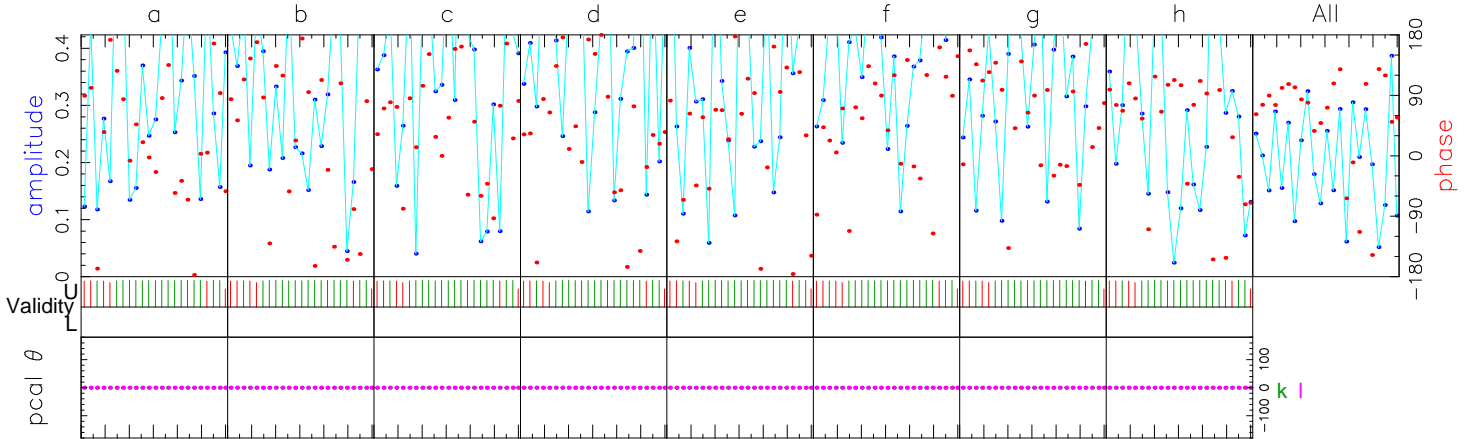
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol LR



Fringe quality 0  
SNR 7.2  
Int time 344.430  
Amp 0.141  
Phase 81.5  
PFD 2.4e-04  
Delays (us)  
SBD -0.002194  
MBD -0.002564  
Fringe rate (Hz)  
-0.004700  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122511  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



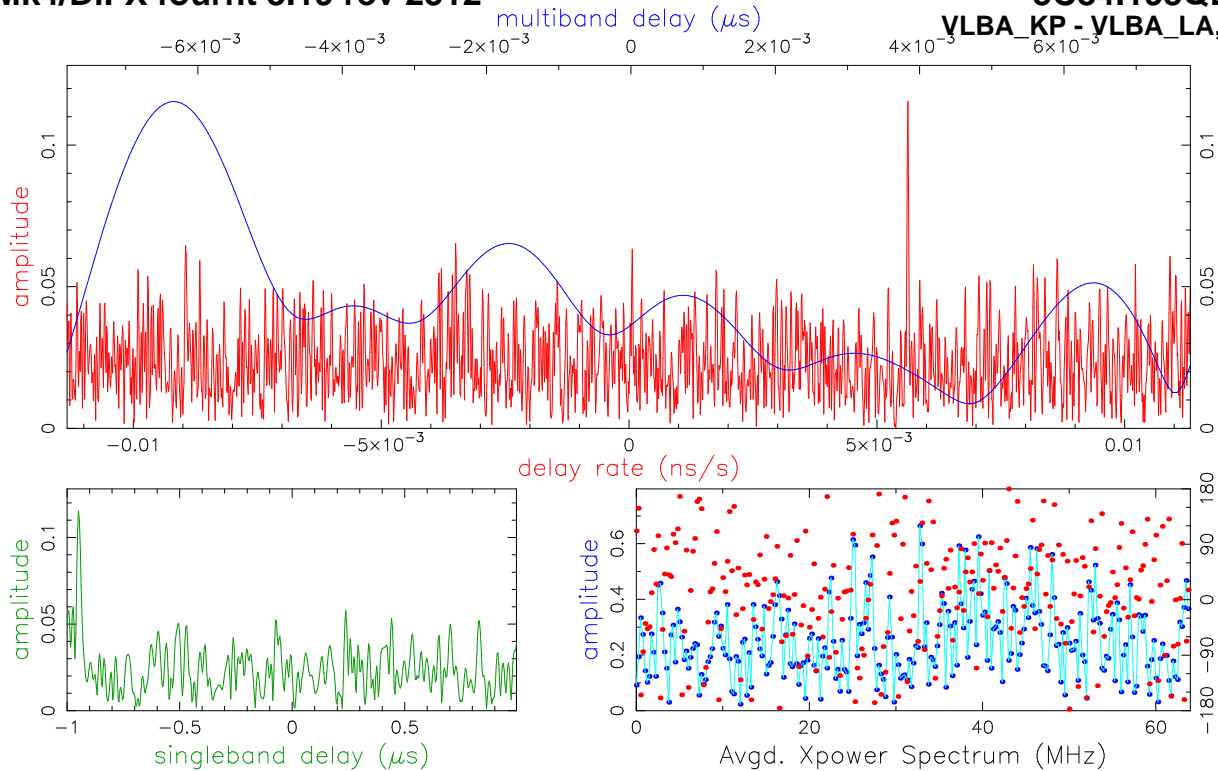
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.34204560663E+03									
Sband delay (usec)	-1.34204523677E+03									
Phase delay (usec)	-1.34204303989E+03									
Delay rate (us/s)	9.10283879067E-02									
Total phase (deg)			-164.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									81.5	+/- 16.0
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-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

ph/seg (deg) 62.4 38.3 Search (2048X32) 0.138 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 77.7 66.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 22.8 22.6 Inc. seg. avg. 0.170 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 24.0 39.5 Inc. frq. avg. 0.135 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 61.4 el 47.0 pa -85.5 l: az 66.2 el 52.6 pa -83.2 u,v (fr/asec) -692.489 -151.855 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kl..193QBF Output file: /Exps/c201d/v1/1234/No0057/kl.W.142.193QBF



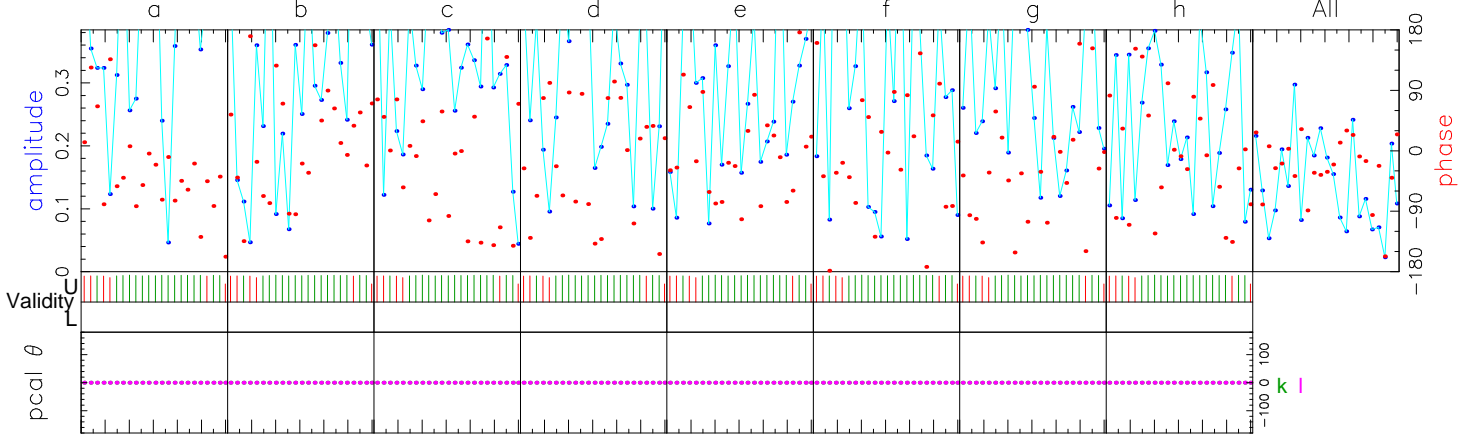
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kl  
VLBA\_KP - VLBA\_LA, fgroup W, pol RL



Fringe quality 0  
SNR 5.9  
Int time 344.430  
Amp 0.128  
Phase -21.3  
PFD 6.8e-01  
Delays (us)  
SBD -0.948713  
MBD -0.006338  
Fringe rate (Hz) 0.484918  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122515  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

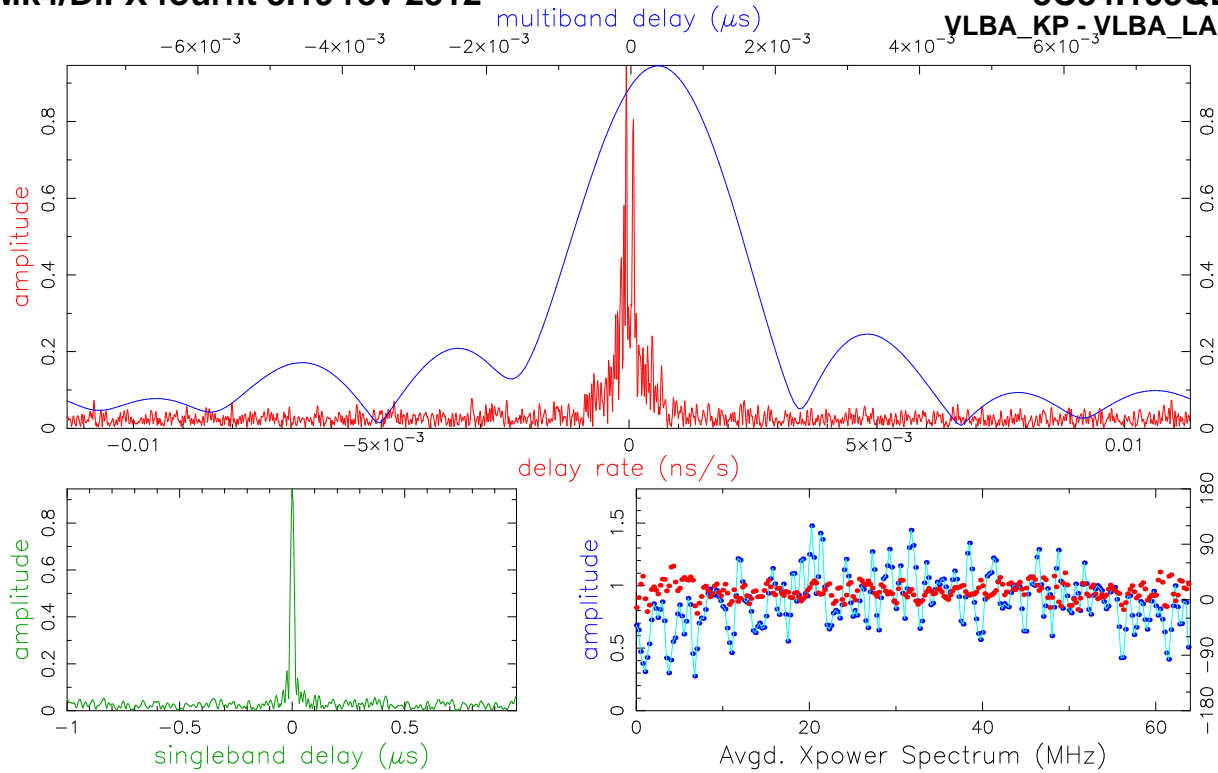


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-44.6	13.4	-25.9	-4.0	3.0	-8.2	-66.3	-39.1	Phase	-21.3
	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	13.9	435.2	509.9	129.8	395.2	159.2	123.1	84.8	Sbd box	14.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.34298688058E+03	Apriori delay (usec)	-1.34204304252E+03	Resid mbdelay (usec)	-6.33806E-03	+/-	1.9E-04
Sband delay (usec)	-1.34299175577E+03	Apriori clock (usec)	3.3899102E+00	Resid sbdelay (usec)	-9.48713E-01	+/-	1.5E-03
Phase delay (usec)	-1.34204304321E+03	Apriori clockrate (us/s)	1.5640000E-07	Resid phdelay (usec)	-6.87329E-07	+/-	6.3E-07
Delay rate (us/s)	9.10340718809E-02	Apriori rate (us/s)	9.10284424678E-02	Resid rate (us/s)	5.62941E-06	+/-	3.0E-09
Total phase (deg)	-267.1	Apriori accel (us/s/s)	3.01293885354E-06	Resid phase (deg)	-21.3	+/-	19.5

	RMS	Theor.	Amplitude	0.128 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	45.8	46.9	Search (2048X32)	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	65.3	81.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.4	27.6	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	62.2	48.2	Inc. frq. avg.	0.127	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 61.4 el 47.0 pa -85.5 l: az 66.2 el 52.6 pa -83.2 u,v (fr/asec) -692.489 -151.855 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kl..193QBF Output file: /Exps/c201d/v1/1234/No0057/kl.W.157.193QBF

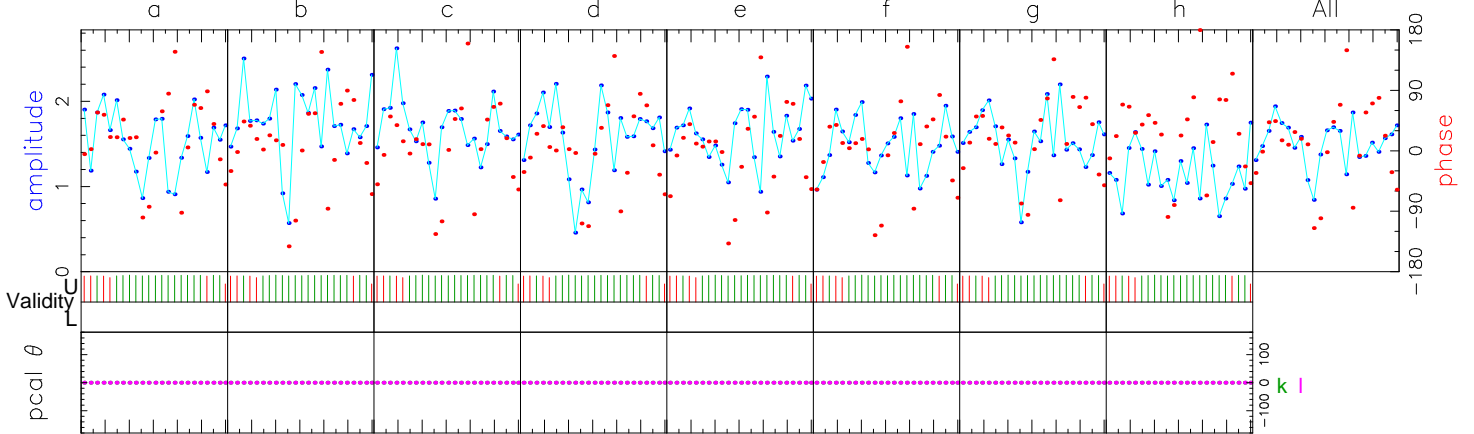


Fringe quality 5

SNR 48.0  
Int time 344.430  
Amp 0.946  
Phase 14.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.000450  
MBD 0.000380  
Fringe rate (Hz) -0.004485  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122503  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



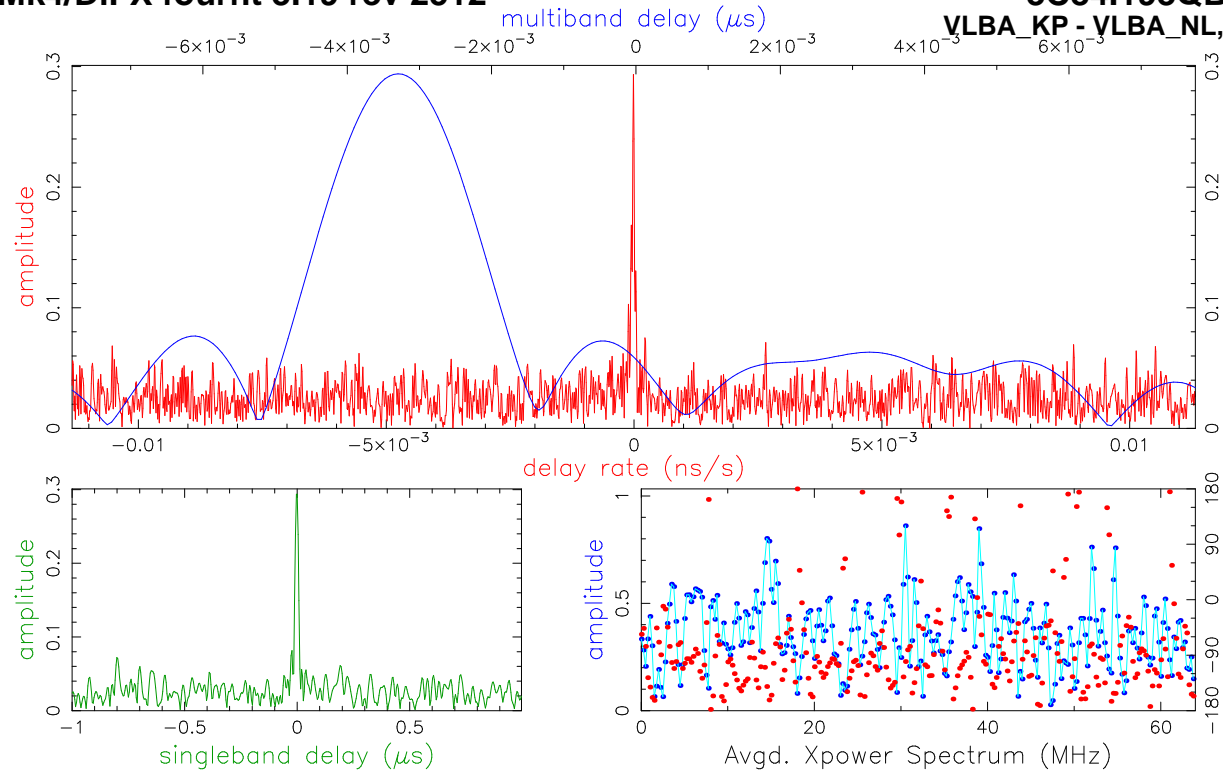
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.34204266244E+03	Apriori delay (usec)	-1.34204304252E+03	Resid mbdelay (usec)	3.80081E-04	+/-	2.3E-05
Sband delay (usec)	-1.34204259202E+03	Apriori clock (usec)	3.3899102E+00	Resid sbdelay (usec)	4.50500E-04	+/-	1.8E-04
Phase delay (usec)	-1.34204304204E+03	Apriori clockrate (us/s)	1.5640000E-07	Resid phdelay (usec)	4.81846E-07	+/-	7.7E-08
Delay rate (us/s)	9.10283903959E-02	Apriori rate (us/s)	9.10284424678E-02	Resid rate (us/s)	-5.20719E-08	+/-	3.7E-10
Total phase (deg)	-230.8	Apriori accel (us/s/s)	3.01293885354E-06	Resid phase (deg)	14.9	+/-	2.4

ph/seg (deg)	60.2	RMS	60.2	Theor.	5.7	Amplitude	0.946 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	64.7		64.7		10.0	Search (2048X32)	0.922	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	10.5		10.5		3.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	11.6		11.6		5.9	Inc. seg. avg.	1.497	Sample rate(MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.955	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 61.4 el 47.0 pa -85.5 l: az 66.2 el 52.6 pa -83.2 u,v (fr/asec) -692.489 -151.855 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kl..193QBF Output file: /Exps/c201d/v1/1234/No0057/kl.W.99.193QBF

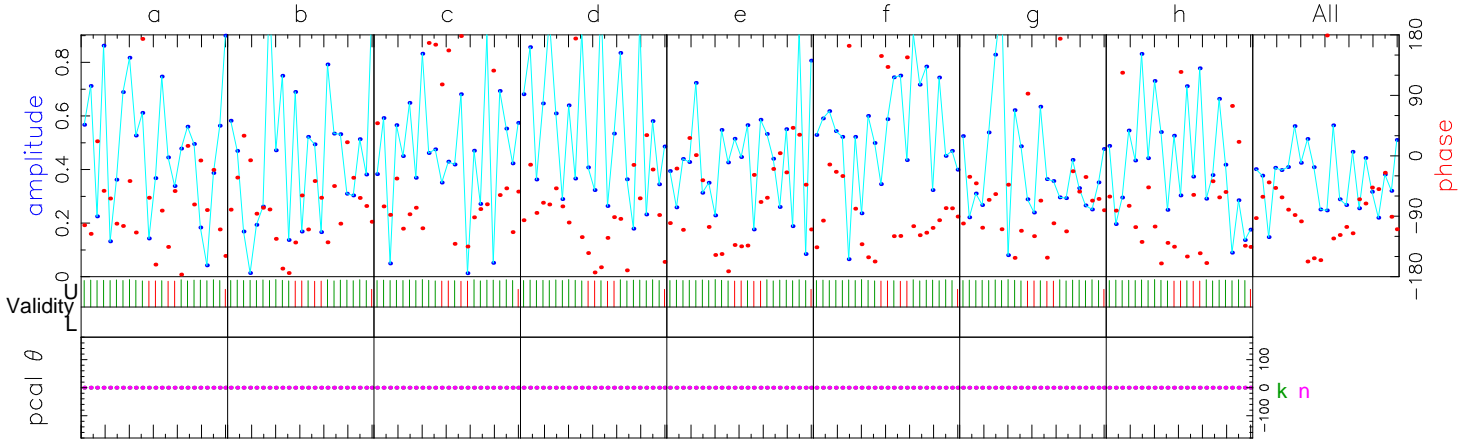


Fringe quality 9

SNR 15.3  
Int time 346.917  
Amp 0.301  
Phase -93.4  
PFD 3.1e-44  
Delays (us)  
SBD -0.001942  
MBD -0.003228  
Fringe rate (Hz)  
-0.000771  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122507  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



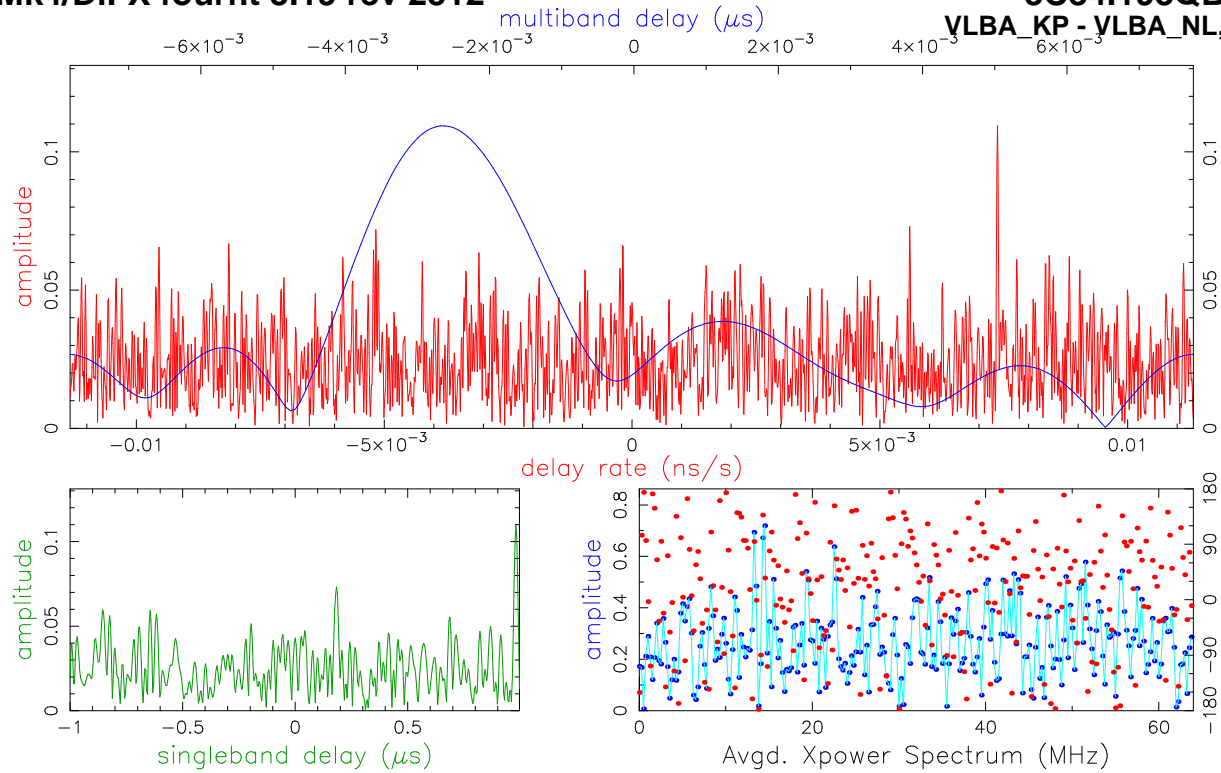
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.75791065830E+03									
Sband delay (usec)	-3.75790937249E+03									
Phase delay (usec)	-3.75790743326E+03									
Delay rate (us/s)	3.16838939210E-01									
Total phase (deg)			-108.2							
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)										
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										
PCal period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude	0.301 +/- 0.020									
Search (2048X32)	0.290									
Interp.	0.000									
Inc. seg. avg.	0.355									
Inc. frq. avg.	0.294									
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								

k: az 61.4 el 47.0 pa -85.5 n: az 79.2 el 65.3 pa -78.1 u,v (fr/asec) -2412.163 -222.408 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kn..193QBF Output file: /Exps/c201d/v1/1234/No0057/kn.W.119.193QBF

Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kn  
VLBA\_KP - VLBA\_NL, fgroup W, pol LR

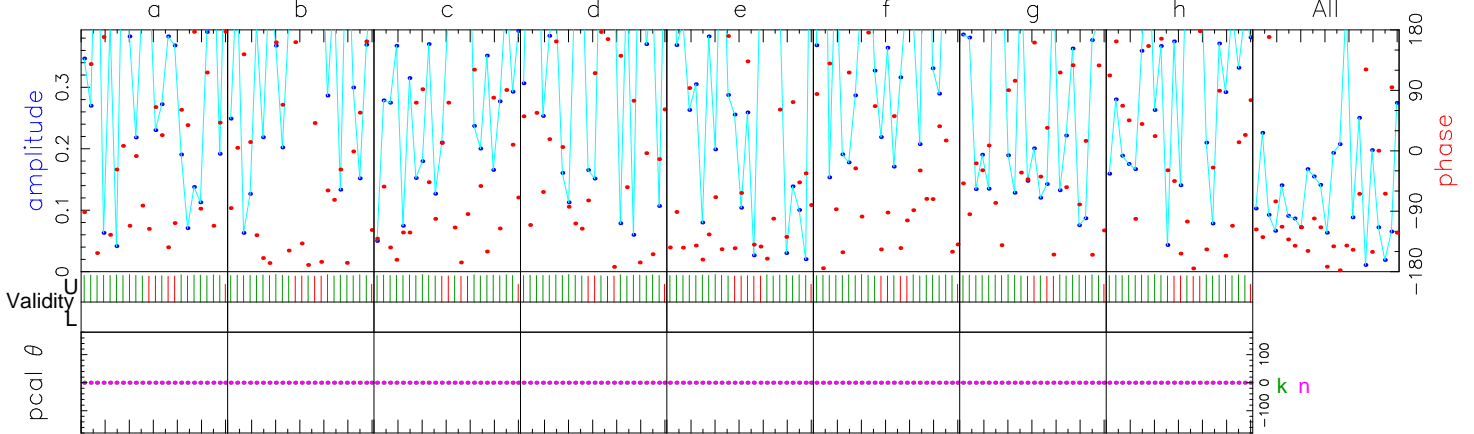


Fringe quality 0

SNR 5.6  
Int time 346.917  
Amp 0.131  
Phase -130.9  
PFD 1.0e+00  
Delays (us)  
SBD 0.980874  
MBD -0.002638  
Fringe rate (Hz)  
0.636314  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

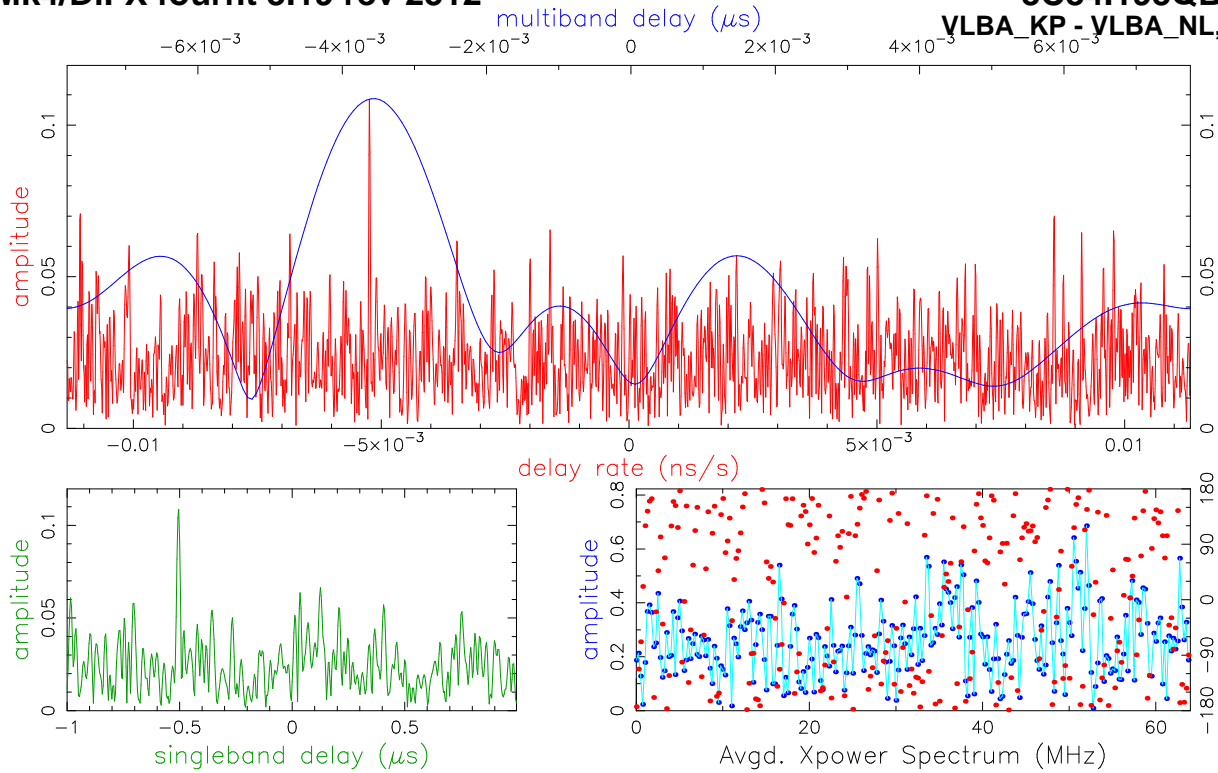
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122511  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



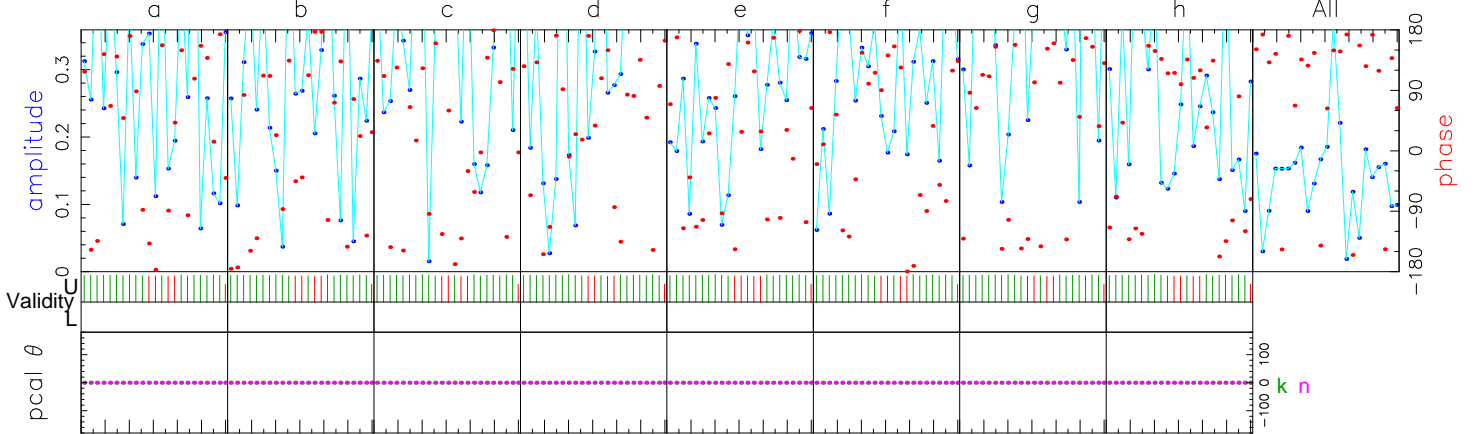
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.6	-149.4	-115.2	-145.9	-136.7	-115.5	-101.4	164.7	Phase	-130.9
	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	291.1	408.2	50.6	233.6	507.6	506.2	431.1	91.7	Sbd box	508.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.75692569358E+03		Apriori delay (usec)		-3.75790743024E+03		Resid mbdelay (usec)		-2.63834E-03	+/- 1.9E-04
Sband delay (usec)	-3.75692655599E+03		Apriori clock (usec)		-3.2665855E+01		Resid sbdelay (usec)		9.80874E-01	+/- 1.5E-03
Phase delay (usec)	-3.75790743447E+03		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		-4.22232E-06	+/- 6.6E-07
Delay rate (us/s)	3.16846335125E-01		Apriori rate (us/s)		3.16838948156E-01		Resid rate (us/s)		7.38697E-06	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		9.57283922229E-06		Resid phase (deg)		-130.9	+/- 20.6

ph/seg (deg) 55.5 49.3 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 89.6 86.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.3 29.1 Inc. seg. avg. 0.120 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.7 50.7 Inc. frq. avg. 0.125 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 n: az 79.2 el 65.3 pa -78.1 u,v (fr/asec) -2412.163 -222.408 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kn..193QBF Output file: /Exps/c201d/v1/1234/No0057/kn.W.139.193QBF



Fringe quality 0  
SNR 5.6  
Int time 346.918  
Amp 0.120  
Phase 148.6  
PFD 1.0e+00  
Delays (us)  
SBD -0.505026  
MBD -0.003632  
Fringe rate (Hz)  
-0.451919  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122515  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

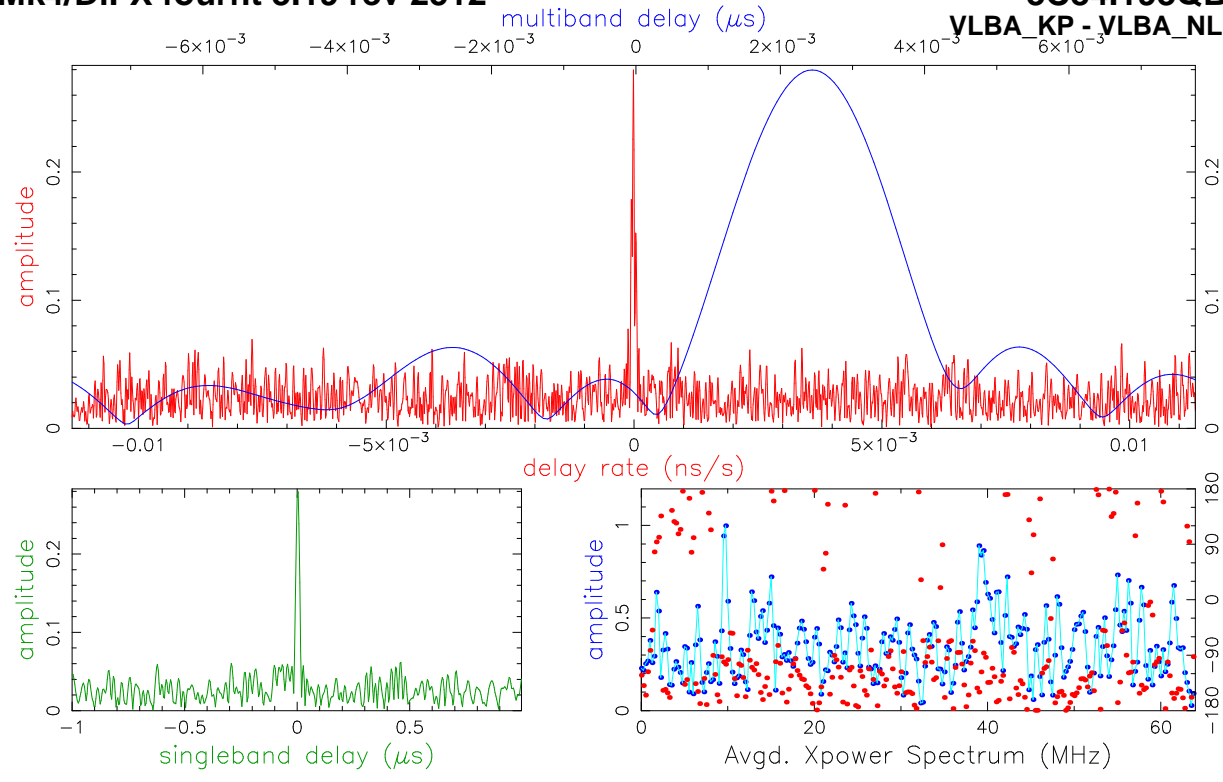
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.75841106196E+03				-3.75790743024E+03				-3.63172E-03	+/- 1.9E-04
Sband delay (usec)	-3.75841245649E+03				-3.2665855E+01				-5.05026E-01	+/- 1.5E-03
Phase delay (usec)	-3.75790742545E+03				-3.2859999E-07				4.79259E-06	+/- 6.6E-07
Delay rate (us/s)	3.16833701829E-01				3.16838948156E-01				-5.24633E-06	+/- 3.2E-09
Total phase (deg)			133.8		9.57283922229E-06				148.6	+/- 20.6
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
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										
nlags: 256										
t_cohere infinite										

ph/seg (deg) 42.1 49.3 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 71.1 86.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 28.7 29.1 Inc. seg. avg. 0.115 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 63.6 50.7 Inc. frq. avg. 0.113 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 61.4 el 47.0 pa -85.5 n: az 79.2 el 65.3 pa -78.1 u,v (fr/asec) -2412.163 -222.408 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kn..193QBF Output file: /Exps/c201d/v1/1234/No0057/kn.W.156.193QBF



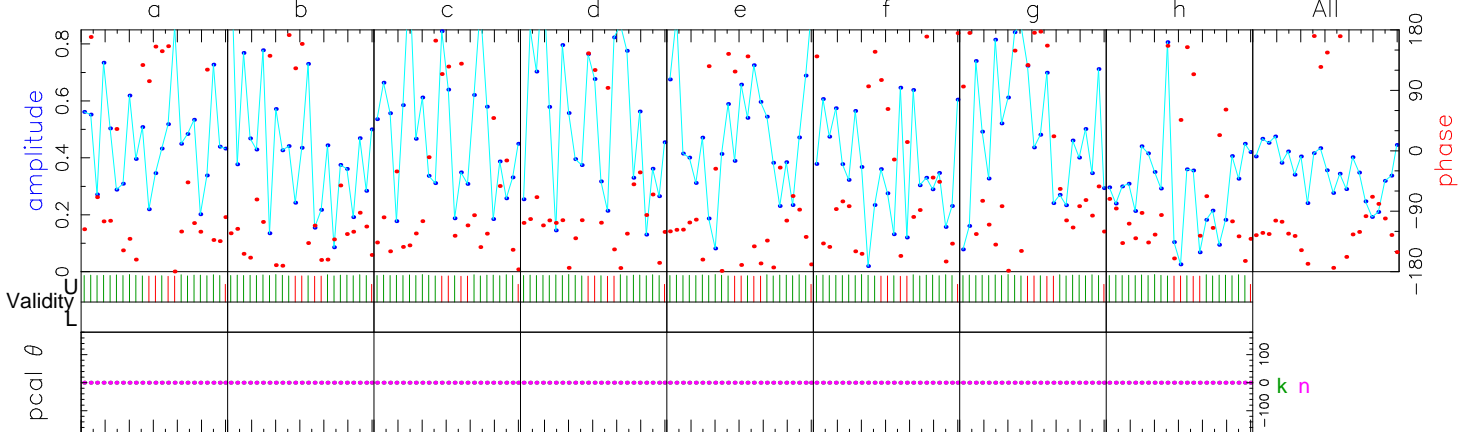


Fringe quality 9

SNR 14.4  
Int time 346.918  
Amp 0.283  
Phase -137.0  
PFD 2.1e-38  
Delays (us)  
SBD 0.002384  
MBD 0.002407  
Fringe rate (Hz) -0.000845  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122503  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

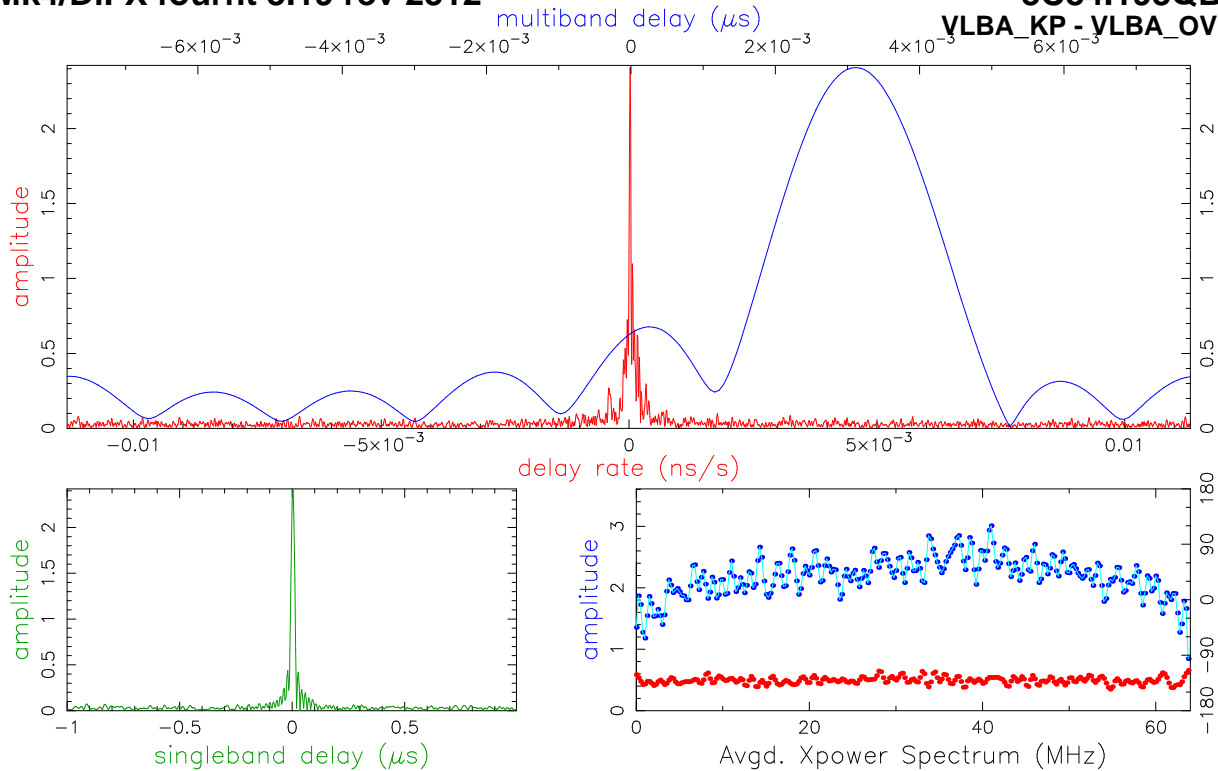
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

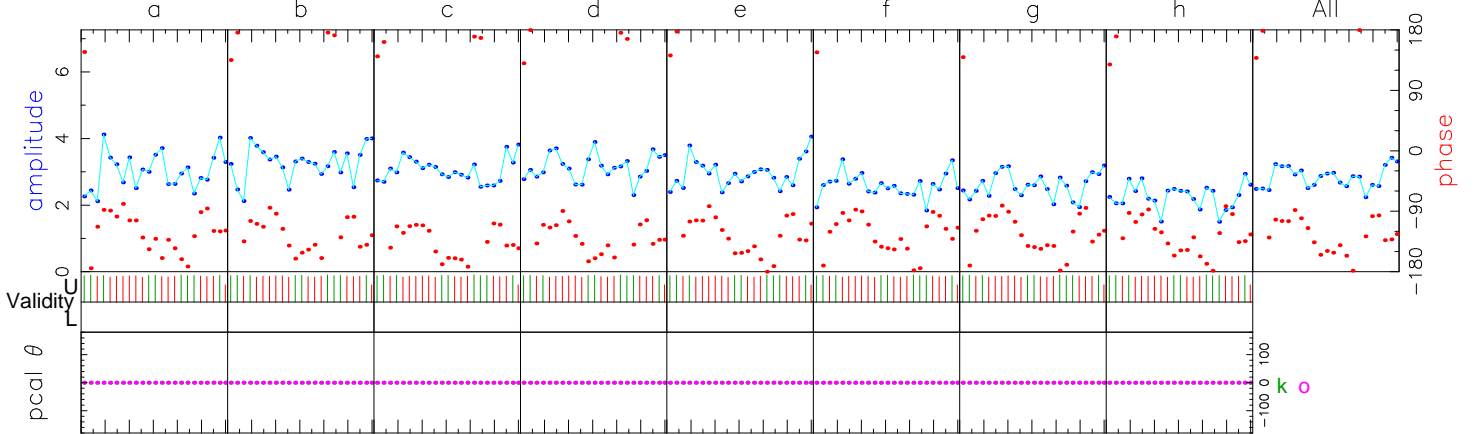
Group delay (usec)(sbd)	-3.75790502373E+03	Apriori delay (usec)	-3.75790743024E+03	Resid mbdelay (usec)	2.40651E-03	+/-	7.5E-05
Sband delay (usec)	-3.75790504649E+03	Apriori clock (usec)	-3.2665855E+01	Resid sbdelay (usec)	2.38375E-03	+/-	6.0E-04
Phase delay (usec)	-3.75790743466E+03	Apriori clockrate (us/s)	-3.2859999E-07	Resid phdelay (usec)	-4.41747E-06	+/-	2.6E-07
Delay rate (us/s)	3.16838938346E-01	Apriori rate (us/s)	3.16838948156E-01	Resid rate (us/s)	-9.80927E-09	+/-	1.2E-09
Total phase (deg)	-151.8	Apriori accel (us/s/s)	9.57283922229E-06	Resid phase (deg)	-137.0	+/-	7.9

ph/seg (deg)	41.0	19.0	Search (2048X32)	0.279	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	38.5	33.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	7.9	11.2	Inc. seg. avg.	0.337	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	21.4	19.6	Inc. frq. avg.	0.277	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00



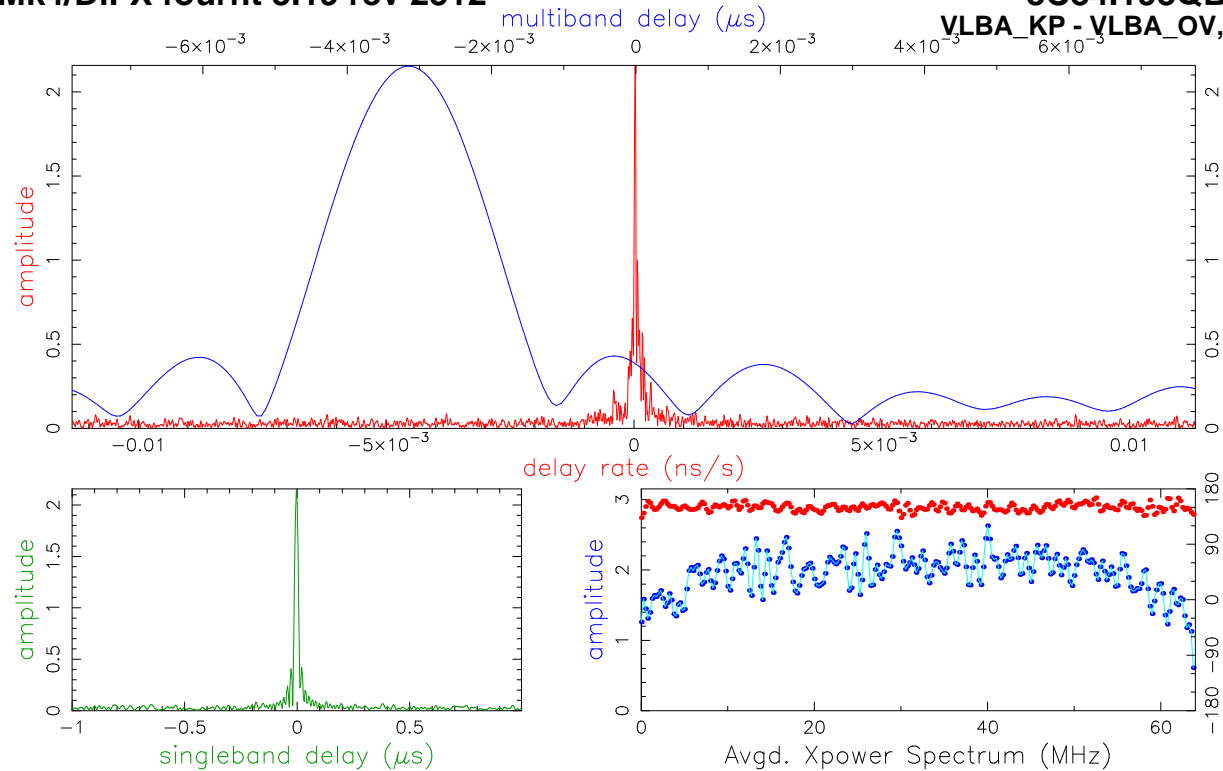
Fringe quality 6  
SNR 121.9  
Int time 339.068  
Amp 2.422  
Phase -133.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.002900  
MBD 0.003087  
Fringe rate (Hz)  
0.002111  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122504  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.8	-135.9	-145.2	-140.4	-131.7	-126.0	-126.1	-133.2	Phase	-133.1
	2.6	2.7	2.6	2.7	2.5	2.2	2.2	1.9	Ampl.	2.4
	257.5	257.7	257.7	258.0	257.7	258.0	257.7	257.7	Sbd box	257.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.40069944273E+02		Apriori delay (usec)		6.40066857199E+02		Resid mbdelay (usec)		3.08707E-03	+/- 8.9E-06
Sband delay (usec)	6.40069757199E+02		Apriori clock (usec)		-2.0449913E+01		Resid sbdelay (usec)		2.90000E-03	+/- 7.1E-05
Phase delay (usec)	6.40066852906E+02		Apriori clockrate (us/s)		-1.9560001E-07		Resid phdelay (usec)		-4.29274E-06	+/- 3.0E-08
Delay rate (us/s)	-1.23560980036E-02		Apriori rate (us/s)		-1.23561225133E-02		Resid rate (us/s)		2.45097E-08	+/- 1.5E-10
Total phase (deg)			Apriori accel (us/s/s)		-9.17803155971E-06		Resid phase (deg)		-133.1	+/- 0.9

ph/seg (deg) 33.3 2.3 Search (2048X32) 2.356 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 21.2 3.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 8.1 1.3 Inc. seg. avg. 2.827 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 11.4 2.3 Inc. frq. avg. 2.425 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 61.4 el 47.0 pa -85.5 o: az 65.0 el 44.4 pa -74.6 u,v (fr/asec) 84.189 -1141.728 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/ko..193QBF Output file: /Exps/c201d/v1/1234/No0057/ko.W.104.193QBF

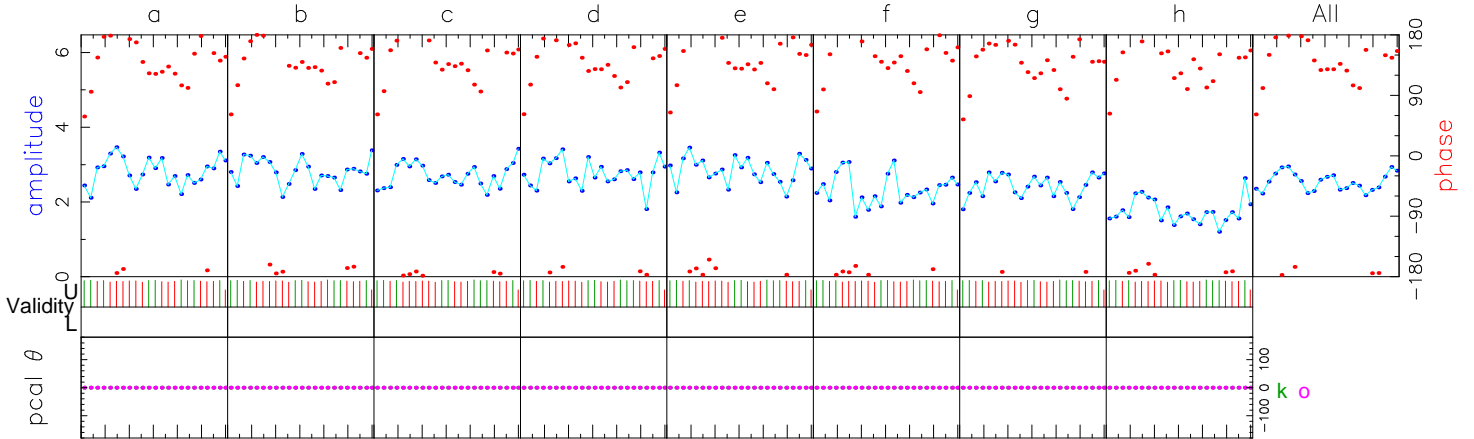


Fringe quality 6

SNR 108.6  
Int time 339.068  
Amp 2.158  
Phase 148.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.003298  
MBD -0.003137  
Fringe rate (Hz) 0.002117  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

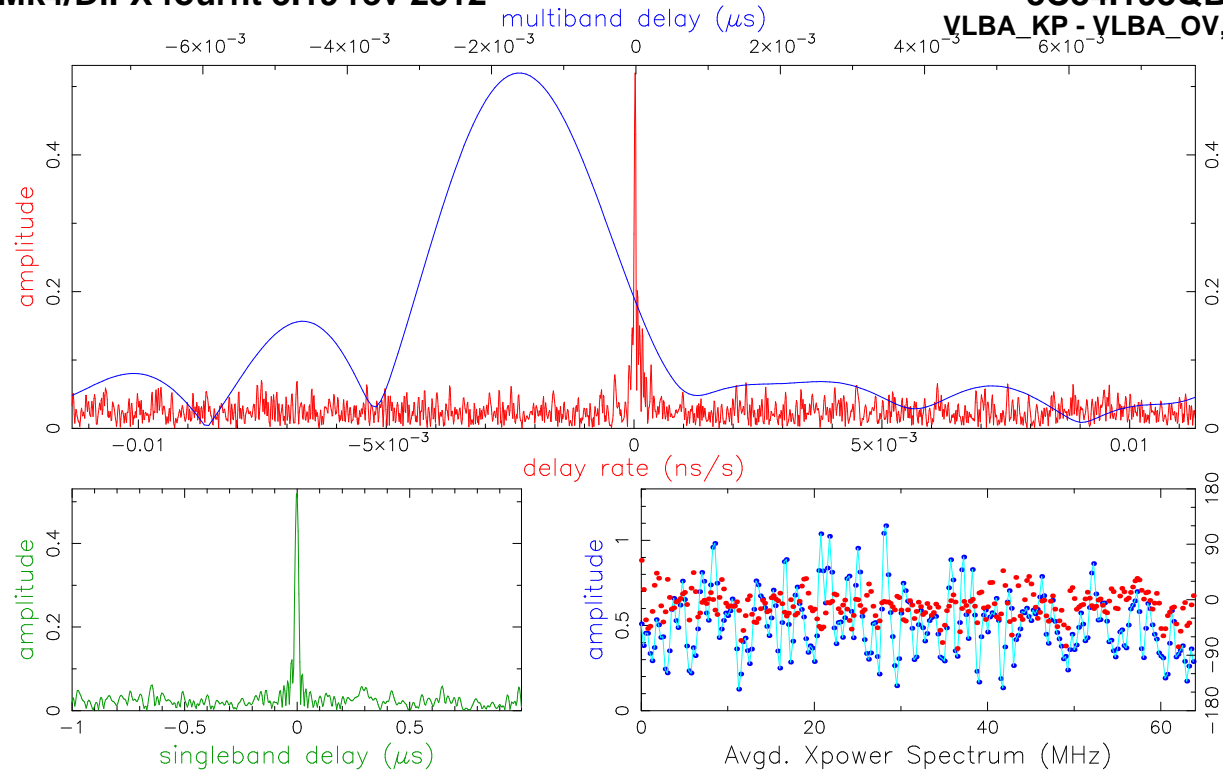
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122508  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	148.2	148.2
o	1000	1000	1000	1000	1000	1000	1000	1000	2.2	2.2
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	256.2	256.2
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	6.40063720366E+02		Apriori delay (usec)		6.40066857199E+02		Resid mbdelay (usec)		-3.13683E-03	+/- 1.0E-05
Sband delay (usec)	6.40063559699E+02		Apriori clock (usec)		-2.0449913E+01		Resid sbdelay (usec)		-3.29750E-03	+/- 7.9E-05
Phase delay (usec)	6.40066861978E+02		Apriori clockrate (us/s)		-1.9560001E-07		Resid phdelay (usec)		4.77938E-06	+/- 3.4E-08
Delay rate (us/s)	-1.23560979355E-02		Apriori rate (us/s)		-1.23561225133E-02		Resid rate (us/s)		2.45777E-08	+/- 1.6E-10
Total phase (deg)	176.7		Apriori accel (us/s/s)		-9.17803155971E-06		Resid phase (deg)		148.2	+/- 1.1

ph/seg (deg) 33.4 2.5 Search (2048X32) 2.090 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 20.9 4.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 3.7 1.5 Inc. seg. avg. 2.539 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 14.0 2.6 Inc. frq. avg. 2.155 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 61.4 el 47.0 pa -85.5 o: az 65.0 el 44.4 pa -74.6 u,v (fr/asec) 84.189 -1141.728 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/ko..193QBF Output file: /Exps/c201d/v1/1234/No0057/ko.W.126.193QBF

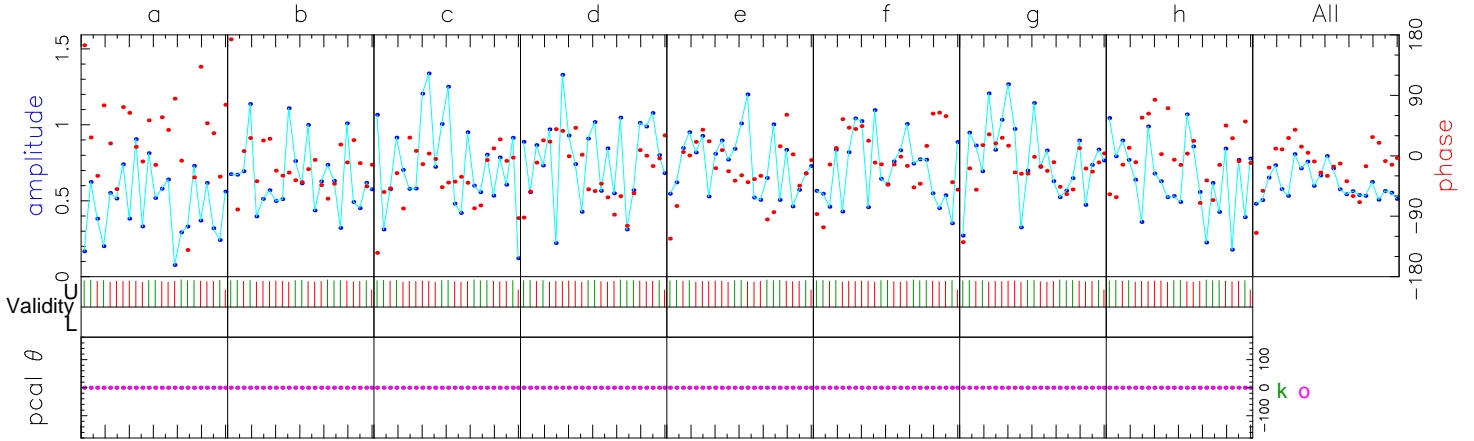


Fringe quality 8

SNR 26.7  
Int time 339.069  
Amp 0.531  
Phase -10.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.001886  
MBD -0.001656  
Fringe rate (Hz) 0.002054  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

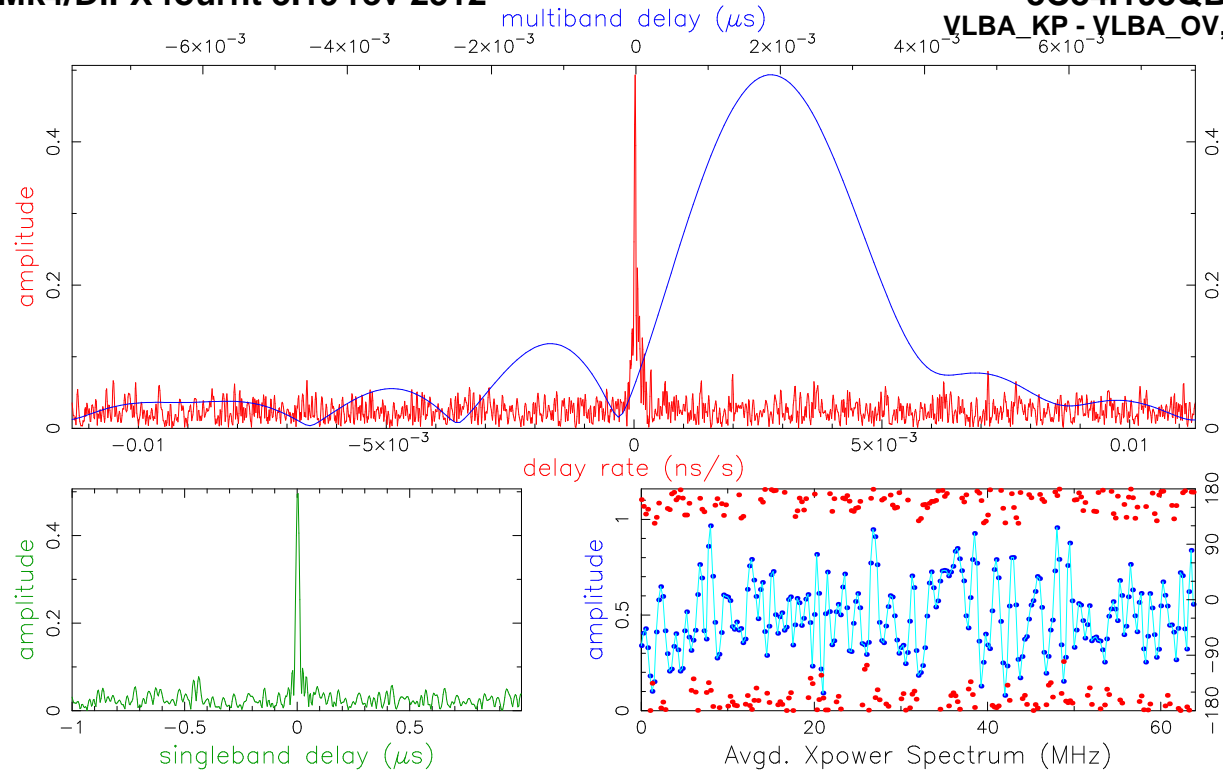
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122512  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	27.1	-19.9	-26.7	-18.6	-19.1	-0.2	-9.6	1.2		
Sband delay (usec)	0.3	0.5	0.6	0.6	0.6	0.5	0.7	0.5		
Phase delay (usec)	256.2	256.1	256.5	256.7	256.5	256.8	257.1	255.9		
Delay rate (us/s)										
Total phase (deg)			17.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

ph/seg (deg) 35.1 10.3 Amplitude 0.531 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 23.9 17.9 Interp. 0.513 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.0 6.1 Inc. seg. avg. 0.603 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 19.1 10.6 Inc. frq. avg. 0.532 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 o: az 65.0 el 44.4 pa -74.6 u,v (fr/asec) 84.189 -1141.728 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

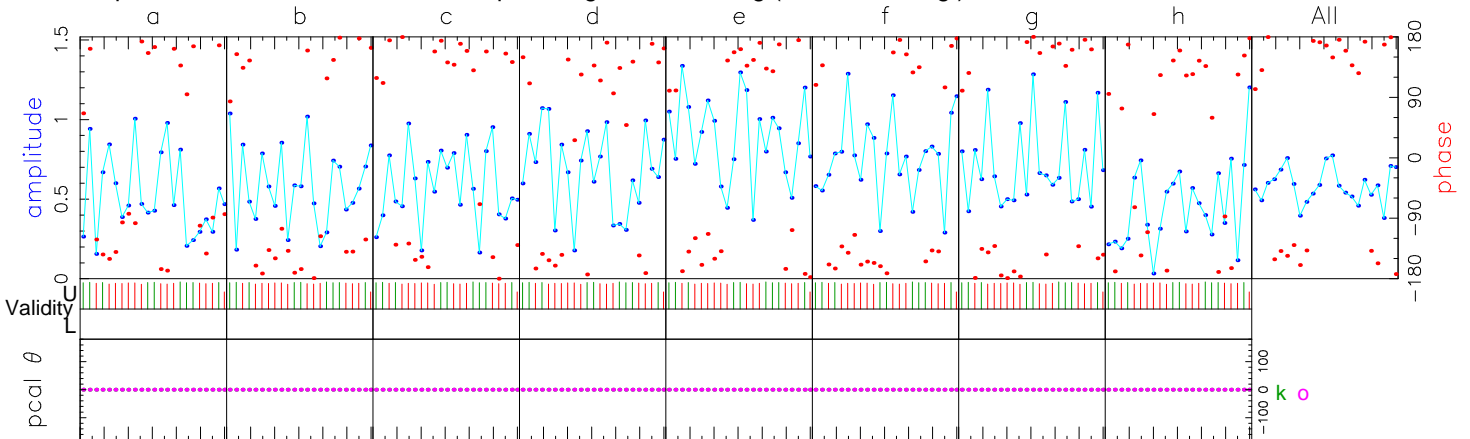


Fringe quality 8

SNR 25.5  
Int time 339.068  
Amp 0.507  
Phase 179.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.002049  
MBD 0.001915  
Fringe rate (Hz) 0.002239  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122515  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-161.3	-178.8	175.3	165.5	176.3	-172.1	-177.6	170.2	Phase	179.6
	0.4	0.4	0.5	0.5	0.7	0.6	0.6	0.3	Ampl.	0.5
	256.9	257.5	257.2	258.0	257.2	258.1	257.3	257.6	Sbd box	257.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

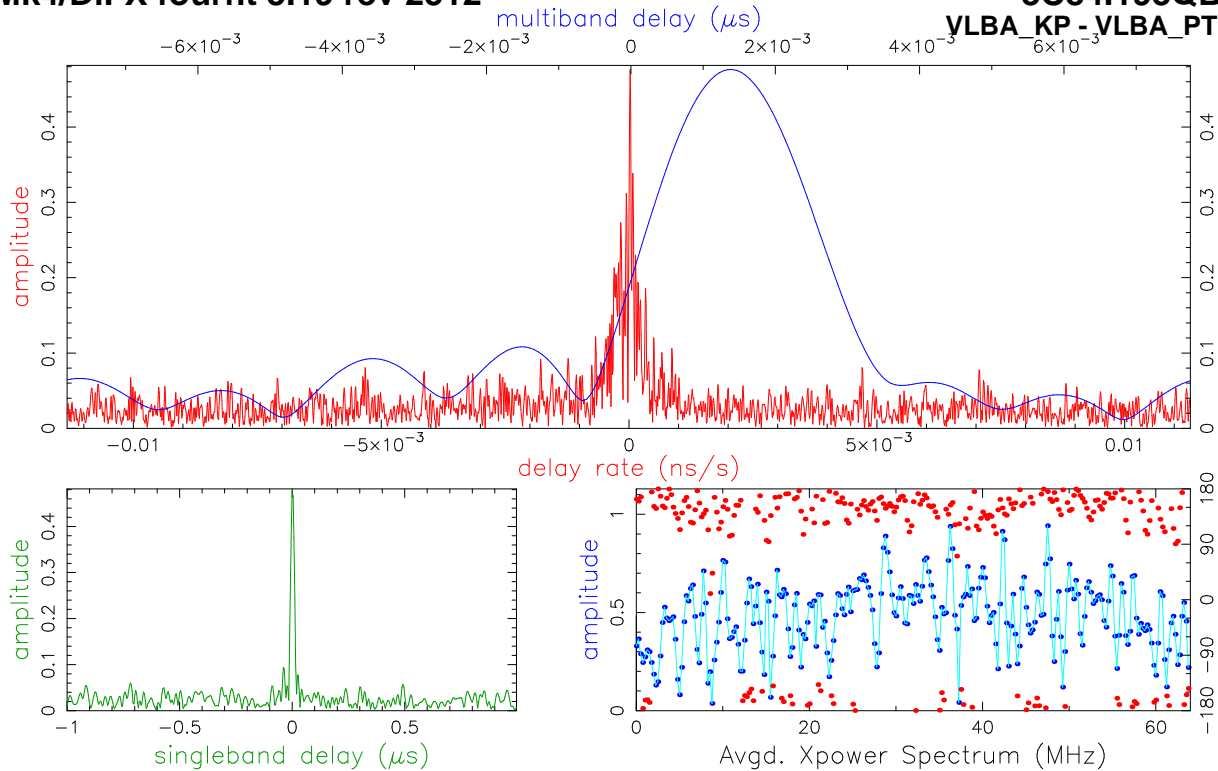
Group delay (usec)(sbd)	6.40068772648E+02	Apriori delay (usec)	6.40066857199E+02	Resid mbdelay (usec)	1.91545E-03	+/-	4.3E-05
Sband delay (usec)	6.40068906699E+02	Apriori clock (usec)	-2.0449913E+01	Resid sbdelay (usec)	2.04950E-03	+/-	3.4E-04
Phase delay (usec)	6.40066862991E+02	Apriori clockrate (us/s)	-1.9560001E-07	Resid phdelay (usec)	5.79220E-06	+/-	1.4E-07
Delay rate (us/s)	-1.23560965234E-02	Apriori rate (us/s)	-1.23561225133E-02	Resid rate (us/s)	2.59899E-08	+/-	7.0E-10
Total phase (deg)	208.1	Apriori accel (us/s/s)	-9.17803155971E-06	Resid phase (deg)	179.6	+/-	4.5

ph/seg (deg)	33.8	Theor.	10.8	Amplitude	0.507 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	26.1		18.8	Search (2048X32)	0.485	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	11.3		6.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	24.6		11.1	Inc. seg. avg.	0.574	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.497	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	



Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kp  
VLBA\_KP - VLBA\_PT, fgroup W, pol LL

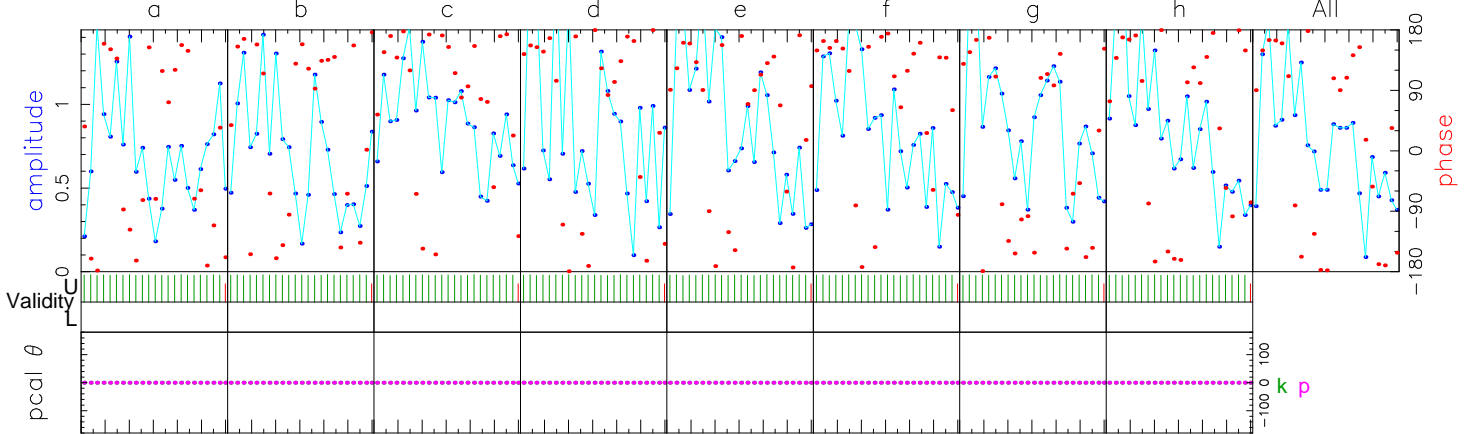


Fringe quality 7

SNR 24.7  
Int time 352.239  
Amp 0.482  
Phase 158.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.001435  
MBD 0.001416  
Fringe rate (Hz) 0.001466  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122504  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-174.8	160.6	151.9	153.7	143.2	156.8	168.6	159.7	Phase	158.2
	0.3	0.4	0.5	0.6	0.6	0.5	0.5	0.5	Ampl.	0.5
	257.8	256.5	257.2	257.6	257.4	257.8	257.2	257.4	Sbd box	257.4
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-9.06712883999E+02	Apriori delay (usec)	-9.06714300229E+02	Resid mbdelay (usec)	1.41623E-03	+/-	4.4E-05
Sband delay (usec)	-9.06712864979E+02	Apriori clock (usec)	-1.7641678E+01	Resid sbdelay (usec)	1.43525E-03	+/-	3.5E-04
Phase delay (usec)	-9.06714295128E+02	Apriori clockrate (us/s)	-1.9859999E-07	Resid phdelay (usec)	5.10064E-06	+/-	1.5E-07
Delay rate (us/s)	5.74844678054E-02	Apriori rate (us/s)	5.74844507887E-02	Resid rate (us/s)	1.70167E-08	+/-	7.2E-10
Total phase (deg)	-137.6	Apriori accel (us/s/s)	2.16031603654E-06	Resid phase (deg)	158.2	+/-	4.6

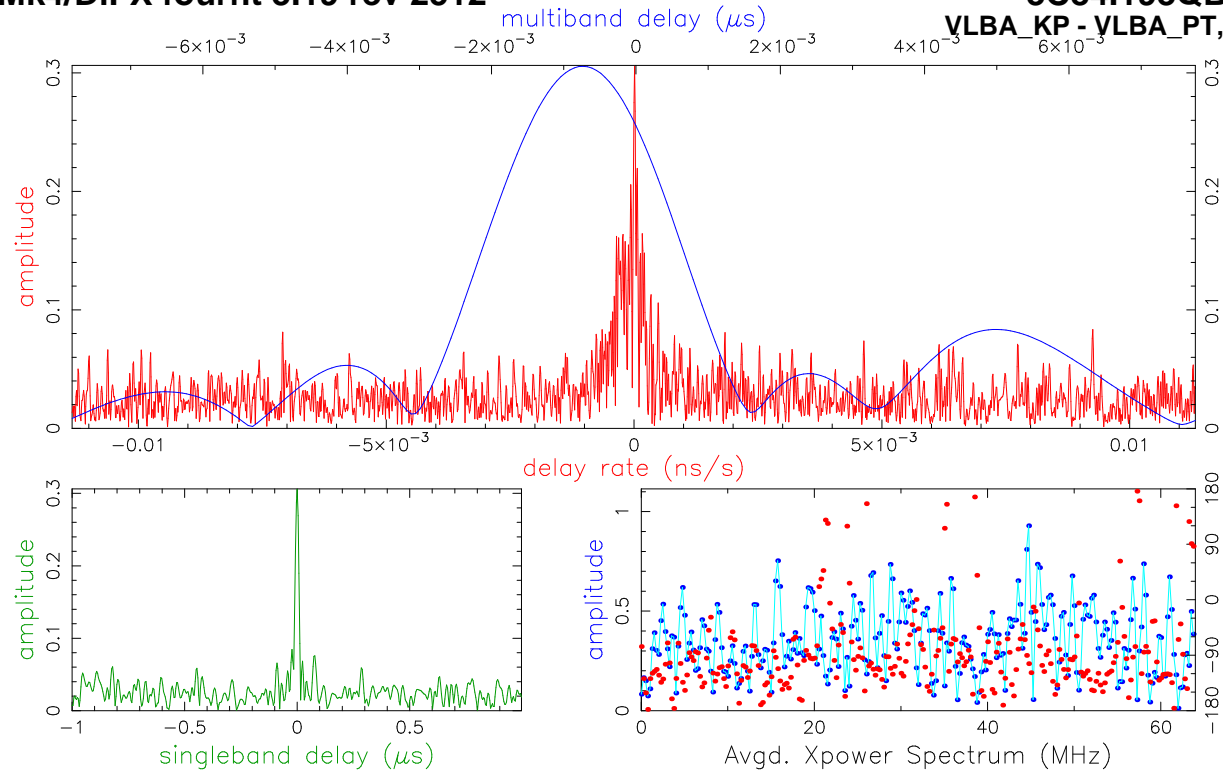
ph/seg (deg)	67.2	Theor.	11.1	Amplitude	0.482 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	95.5	Search (2048X32)	0.461	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	13.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	17.9	Inc. seg. avg.	0.760	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.481	Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	

k: az 61.4 el 47.0 pa -85.5      p: az 64.2 el 50.6 pa -84.3      u,v (fr/asec) -436.998 -73.695      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201d/v1/1234/No0057/kp..193QBF      Output file: /Exps/c201d/v1/1234/No0057/kp.W.105.193QBF

Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kp  
VLBA\_KP - VLBA\_PT, fgroup W, pol RR

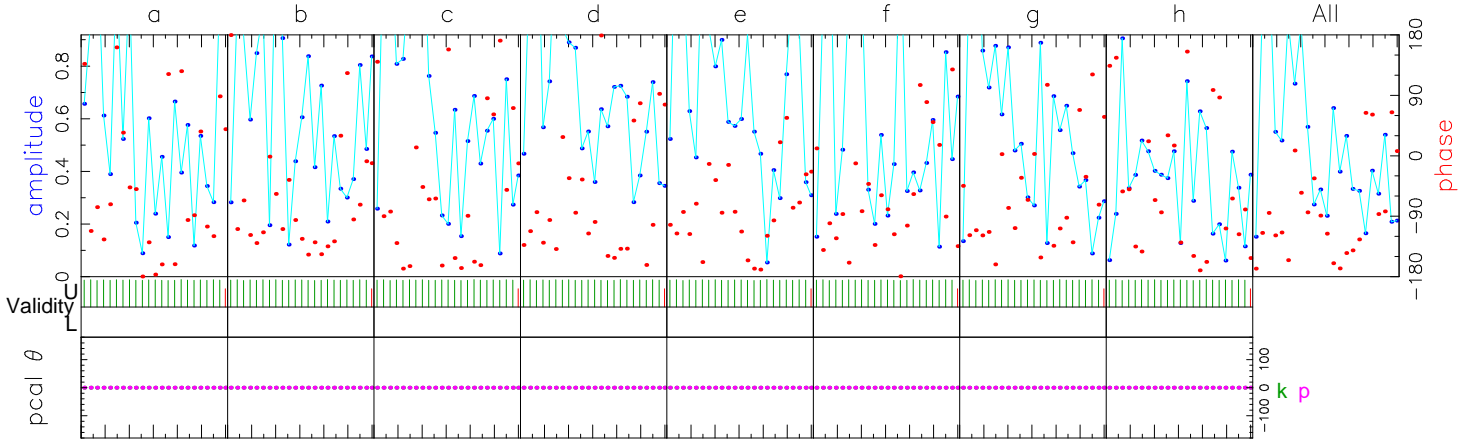


Fringe quality 9

SNR 15.7  
Int time 352.238  
Amp 0.306  
Phase -103.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.000650  
MBD -0.000748  
Fringe rate (Hz) 0.001282  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122507  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

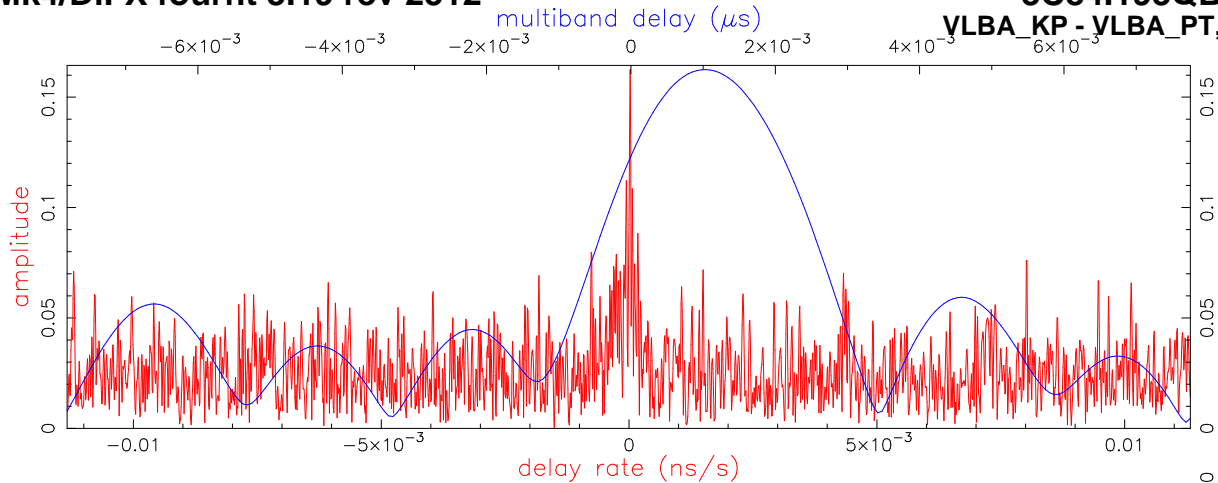


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.6	-100.5	-96.9	-112.4	-90.2	-106.5	-105.3	-112.5	Phase	-103.7
	0.1	0.4	0.3	0.4	0.4	0.3	0.4	0.1	Ampl.	0.3
	179.9	256.9	256.1	257.6	256.3	258.0	256.1	173.0	Sbd box	256.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.06715047770E+02		Apriori delay (usec)		-9.06714300229E+02		Resid mbdelay (usec)		-7.47541E-04	+/- 6.9E-05
Sband delay (usec)	-9.06714950479E+02		Apriori clock (usec)		-1.7641678E+01		Resid sbdelay (usec)		-6.50250E-04	+/- 5.5E-04
Phase delay (usec)	-9.06714303572E+02		Apriori clockrate (us/s)		-1.9859999E-07		Resid phdelay (usec)		-3.34368E-06	+/- 2.4E-07
Delay rate (us/s)	5.74844656720E-02		Apriori rate (us/s)		5.74844507887E-02		Resid rate (us/s)		1.48833E-08	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		2.16031603654E-06		Resid phase (deg)		-103.7	+/- 7.3

ph/seg (deg) 76.1 17.5 Search (2048X32) 0.297 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 116.8 30.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 11.8 10.3 Inc. seg. avg. 0.487 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.0 18.0 Inc. frq. avg. 0.304 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 p: az 64.2 el 50.6 pa -84.3 u,v (fr/asec) -436.998 -73.695 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kp..193QBF Output file: /Exps/c201d/v1/1234/No0057/kp.W.120.193QBF

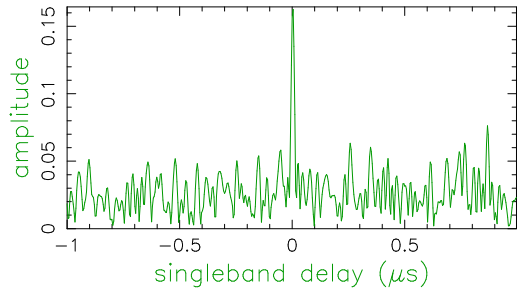
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kp  
VLBA\_KP - VLBA\_PT, fgroup W, pol LR

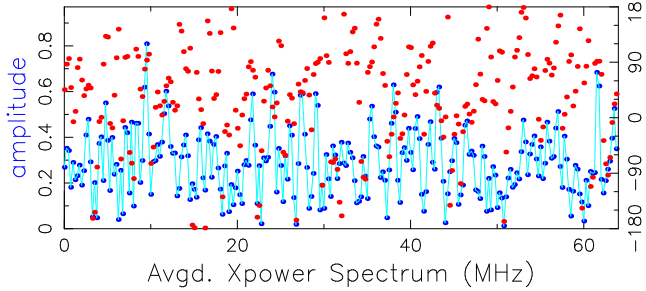


Fringe quality 9

SNR 8.4  
Int time 352.238  
Amp 0.164  
Phase 76.5  
PFD 1.2e-08  
Delays (us)  
SBD 0.002590  
MBD 0.000983  
Fringe rate (Hz)  
0.001852  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

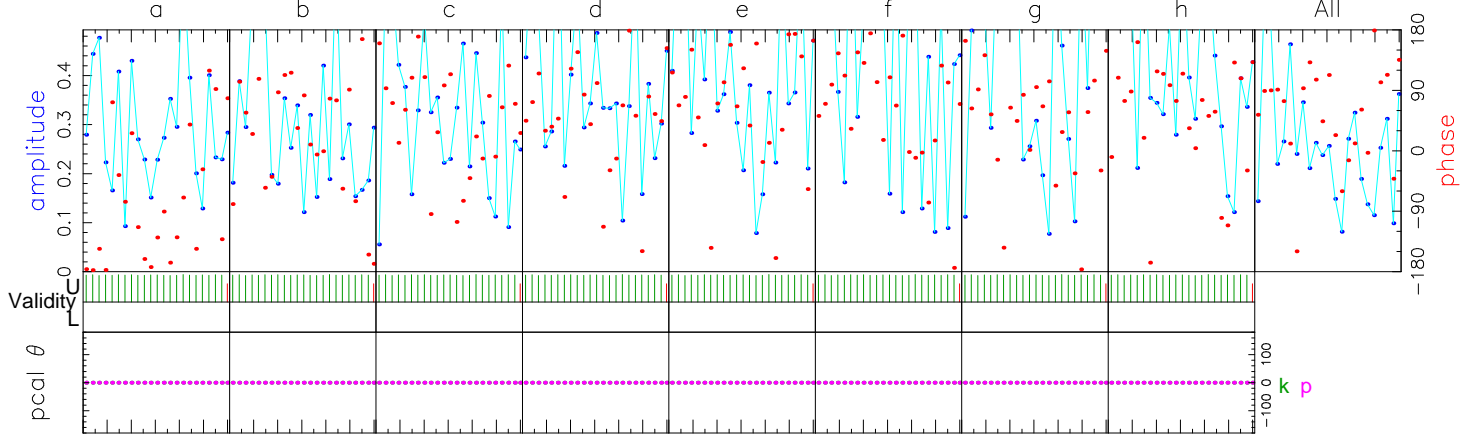


delay rate (ns/s)



Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122511  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

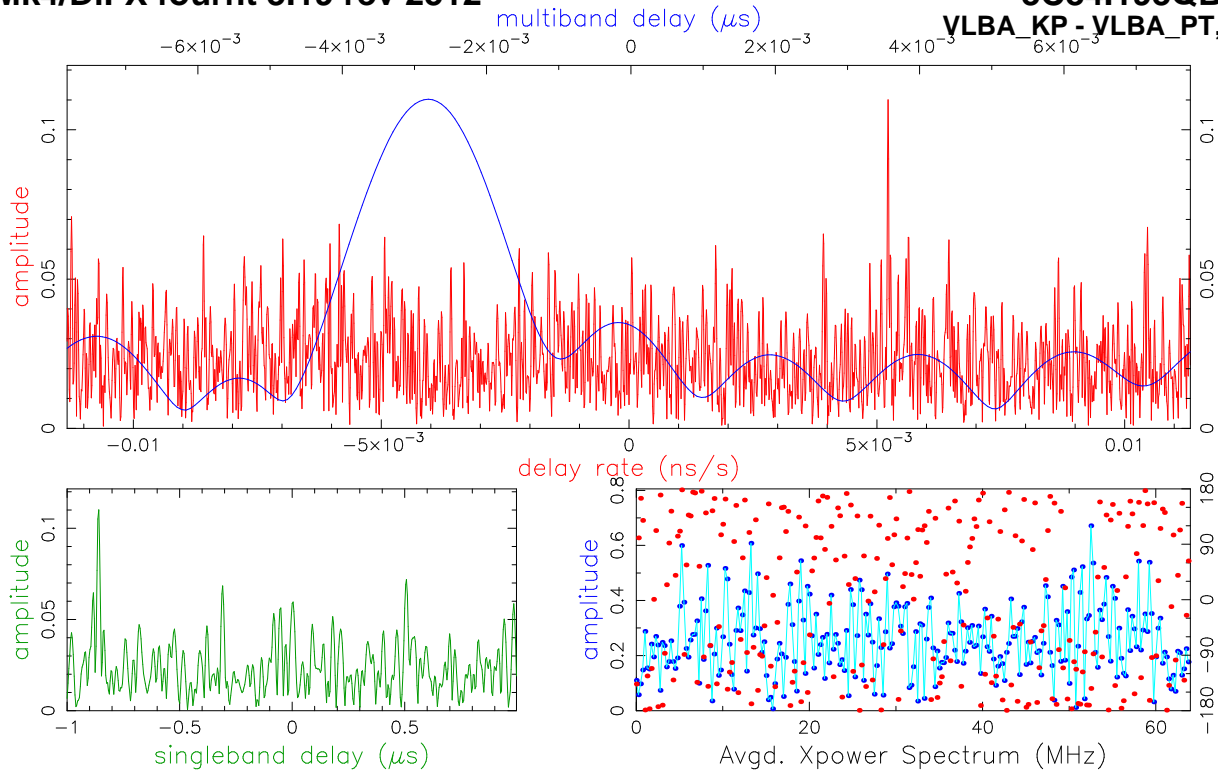
Group delay (usec)(sbd)	-9.06713317155E+02	Apriori delay (usec)	-9.06714300229E+02	Resid mbdelay (usec)	9.83074E-04	+/-	1.3E-04
Sband delay (usec)	-9.06711710479E+02	Apriori clock (usec)	-1.7641678E+01	Resid sbdelay (usec)	2.58975E-03	+/-	1.0E-03
Phase delay (usec)	-9.06714297760E+02	Apriori clockrate (us/s)	-1.9859999E-07	Resid phdelay (usec)	2.46827E-06	+/-	4.4E-07
Delay rate (us/s)	5.74844722935E-02	Apriori rate (us/s)	5.74844507887E-02	Resid rate (us/s)	2.15047E-08	+/-	2.1E-09
Total phase (deg)	-219.3	Apriori accel (us/s/s)	2.16031603654E-06	Resid phase (deg)	76.5	+/-	13.6

ph/seg (deg)	66.1	RMS	32.6	Theor.	Amplitude	0.164 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	95.6	66.1	32.6	Search (2048X32)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	61.1	95.6	56.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	39.0	61.1	19.2	Inc. seg. avg.	0.224	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
		39.0	33.5	Inc. frq. avg.	0.177	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 61.4 el 47.0 pa -85.5 p: az 64.2 el 50.6 pa -84.3 u,v (fr/asec) -436.998 -73.695 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kp..193QBF Output file: /Exps/c201d/v1/1234/No0057/kp.W.138.193QBF

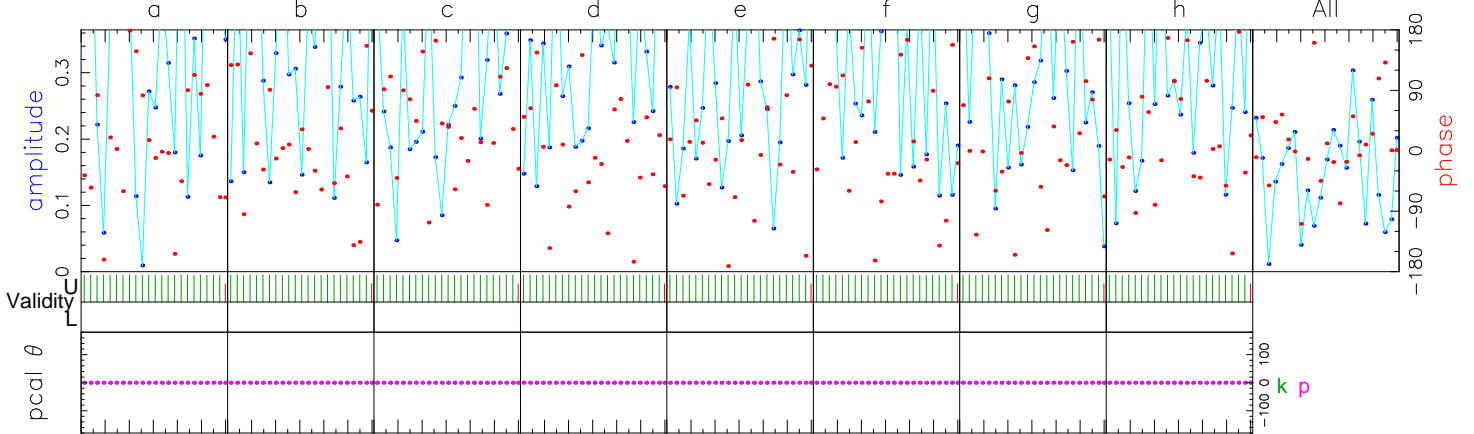
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kp  
VLBA\_KP - VLBA\_PT, fgroup W, pol RL



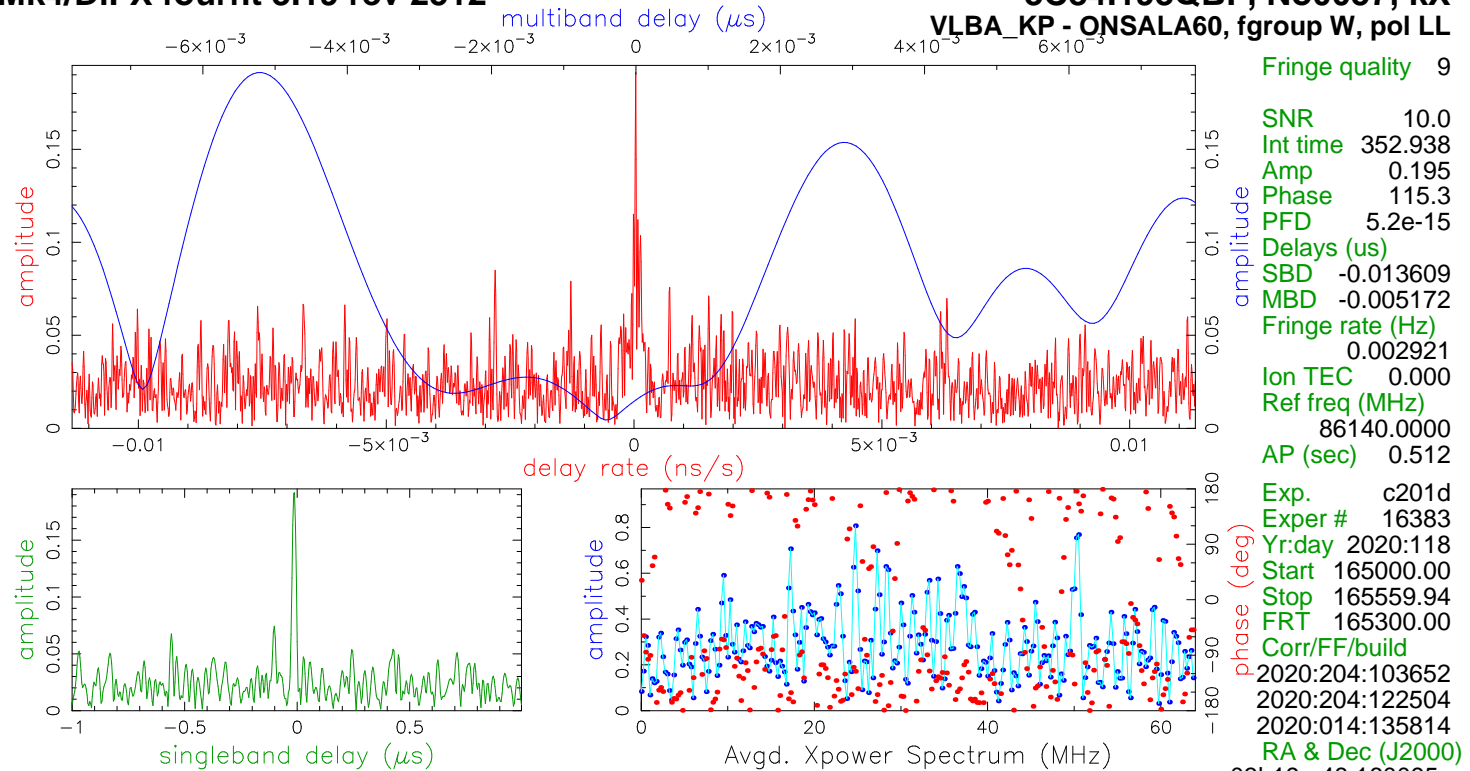
Fringe quality 0  
SNR 5.7  
Int time 352.238  
Amp 0.122  
Phase 11.2  
PFD 9.4e-01  
Delays (us)  
SBD -0.860555  
MBD -0.002876  
Fringe rate (Hz) 0.451090  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122514  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

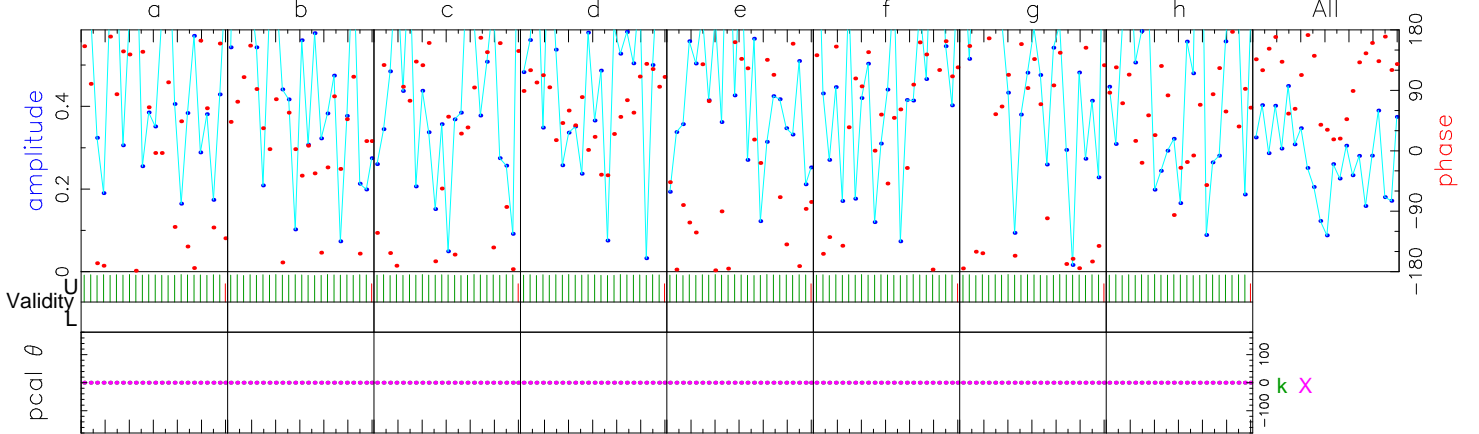


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-9.07576551216E+02									
Sband delay (usec)	-9.07574855479E+02									
Phase delay (usec)	-9.06714299868E+02									
Delay rate (us/s)	5.74896874979E-02									
Total phase (deg)			-284.6							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 61.1 48.2 Search (2048X32) 0.108 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 74.0 84.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 12.0 28.4 Inc. seg. avg. 0.122 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 30.2 49.6 Inc. frq. avg. 0.109 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 61.4 el 47.0 pa -85.5 p: az 64.2 el 50.6 pa -84.3 u,v (fr/asec) -436.998 -73.695 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kp..193QBF Output file: /Exps/c201d/v1/1234/No0057/kp.W.153.193QBF



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
146.8	65.9	146.1	72.3	-175.3	129.6	152.4	61.8		Phase	115.3
0.2	0.2	0.2	0.4	0.2	0.3	0.3	0.3		Ampl.	0.3
251.9	252.1	254.7	253.2	244.2	253.4	252.7	252.3		Sbd box	253.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0		APs used	
k	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
k	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000			
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	9.82296228639E+02		Apriori delay (usec)	9.82317025825E+02	Resid mbdelay (usec)	-5.17219E-03	+/-	1.1E-04		
Sband delay (usec)	9.82303416825E+02		Apriori clock (usec)	-4.1165359E+01	Resid sbdelay (usec)	-1.36090E-02	+/-	8.6E-04		
Phase delay (usec)	9.82317029544E+02		Apriori clockrate (us/s)	-5.2260003E-07	Resid phdelay (usec)	3.71903E-06	+/-	3.7E-07		
Delay rate (us/s)	1.37492811281E+00		Apriori rate (us/s)	1.37492807890E+00	Resid rate (us/s)	3.39080E-08	+/-	1.8E-09		
Total phase (deg)		333.0	Apriori accel (us/s/s)	-2.88980464056E-05	Resid phase (deg)	115.3	+/-	11.4		

	RMS	Theor.	Amplitude	0.195 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.1	27.4	Search (2048X32)	0.189	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	62.7	47.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	50.8	16.2	Inc. seg. avg.	0.246	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.2	28.2	Inc. frq. avg.	0.250	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 61.4 el 47.0 pa -85.5 X: az 281.6 el 44.0 pa 44.9 u,v (fr/asec) -10558.376 -4018.333 simultaneous interpolator

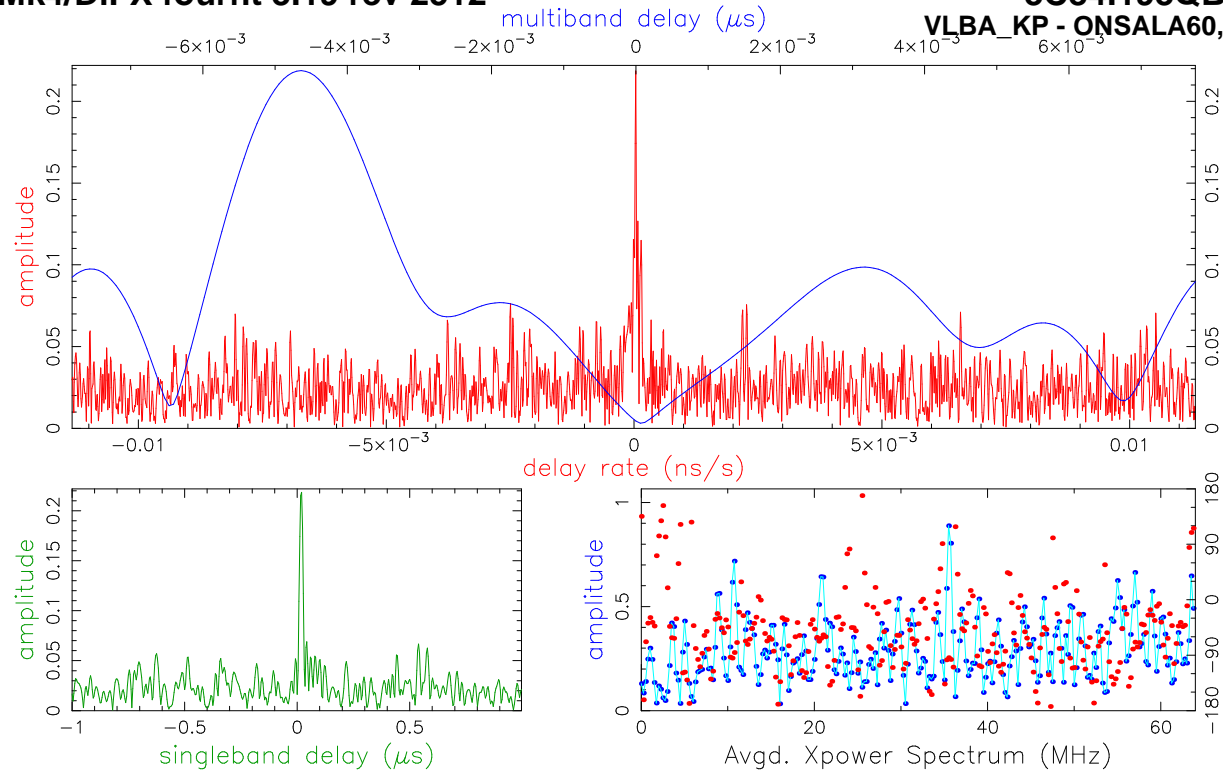
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kX..193QBF Output file: /Exps/c201d/v1/1234/No0057/kX.W.107.193QBF



Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, kX

VLBA\_KP - ONSALA60, fgroup W, pol RR

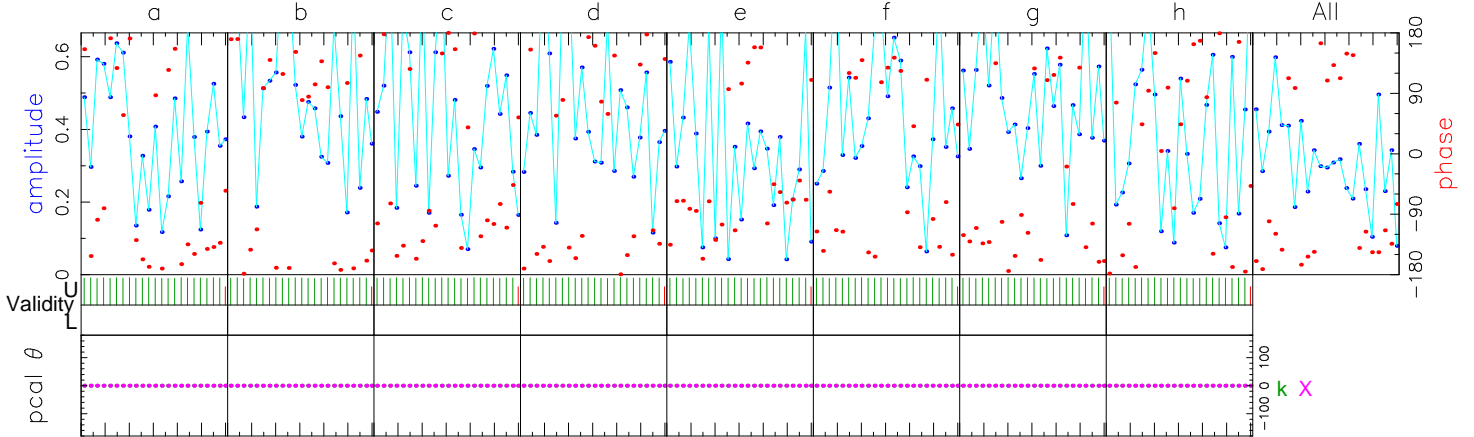


Fringe quality 9

SNR 11.4  
 Int time 352.938  
 Amp 0.222  
 Phase -164.1  
 PFD 1.9e-21  
 Delays (us)  
 SBD 0.017935  
 MBD -0.004689  
 Fringe rate (Hz) 0.002752  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

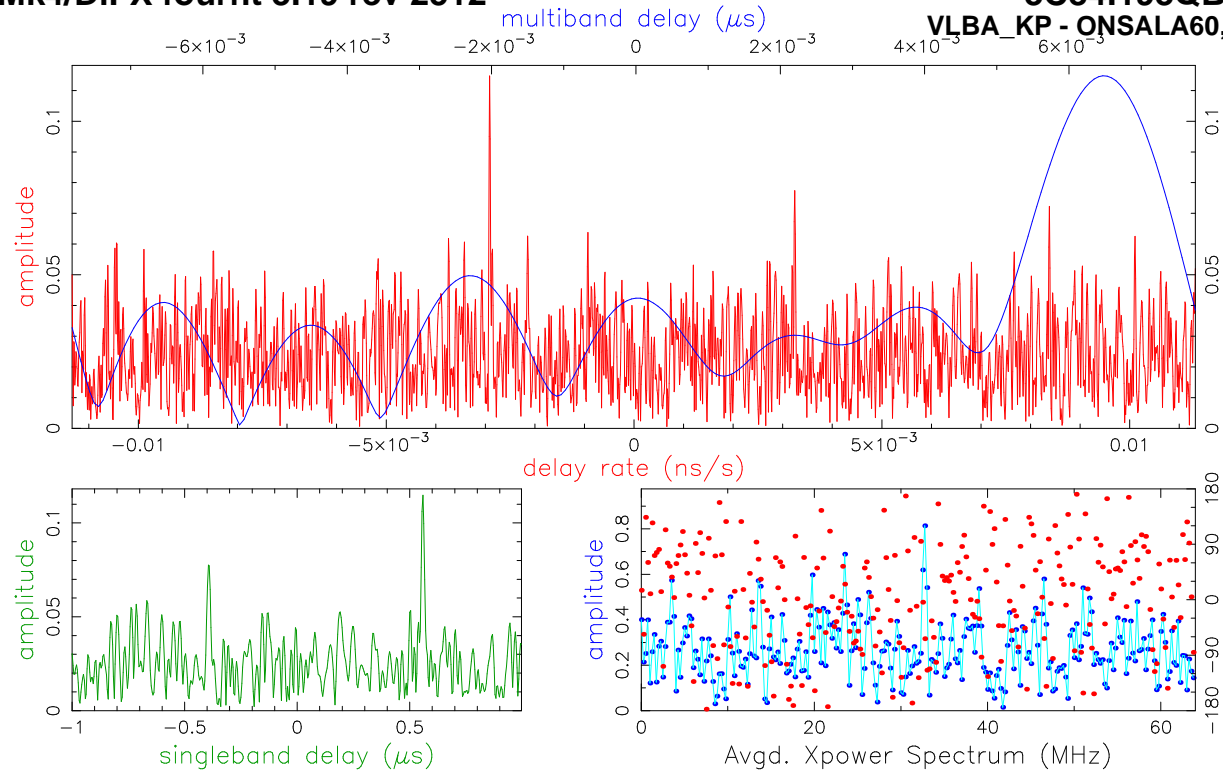
Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165000.00  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122507  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



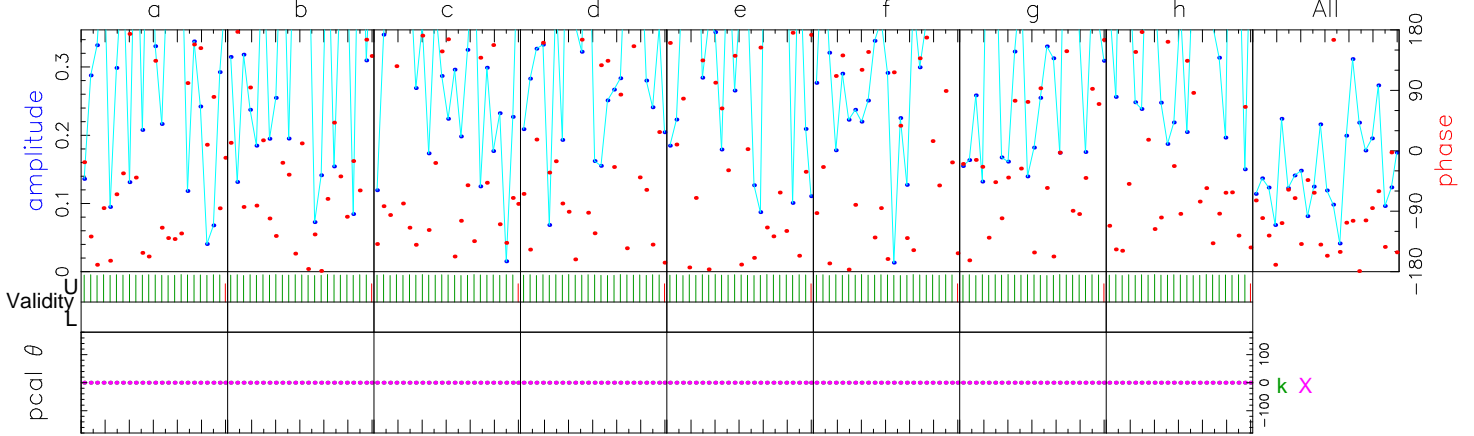
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-163.4	163.3	-134.0	-176.9	-95.1	-167.2	-156.6	152.0	Phase	-164.1
	0.2	0.4	0.3	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2
	261.6	262.2	261.5	260.5	260.5	260.3	260.9	259.8	Sbd box	261.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	9.82327961733E+02		Apriori delay (usec)		9.82317025825E+02		Resid mbdelay (usec)		-4.68909E-03	+/- 9.5E-05
Sband delay (usec)	9.82334960825E+02		Apriori clock (usec)		-4.1165359E+01		Resid sbdelay (usec)		1.79350E-02	+/- 7.6E-04
Phase delay (usec)	9.82317020535E+02		Apriori clockrate (us/s)		-5.2260003E-07		Resid phdelay (usec)		-5.29062E-06	+/- 3.2E-07
Delay rate (us/s)	1.37492811084E+00		Apriori rate (us/s)		1.37492807890E+00		Resid rate (us/s)		3.19425E-08	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.88980464056E-05		Resid phase (deg)		-164.1	+/- 10.0

ph/seg (deg) 51.5 24.1 Search (2048X32) 0.213 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 68.4 42.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.5 14.2 Inc. seg. avg. 0.293 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.8 24.8 Inc. frq. avg. 0.248 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 X: az 281.6 el 44.0 pa 44.9 u,v (fr/asec) -10558.376 -4018.333 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kX..193QBF Output file: /Exps/c201d/v1/1234/No0057/kX.W.122.193QBF



Fringe quality 0  
SNR 5.9  
Int time 352.938  
Amp 0.118  
Phase -107.7  
PFD 5.9e-01  
Delays (us)  
SBD 0.558016  
MBD 0.006448  
Fringe rate (Hz)  
-0.250863  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165000.00  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122511  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

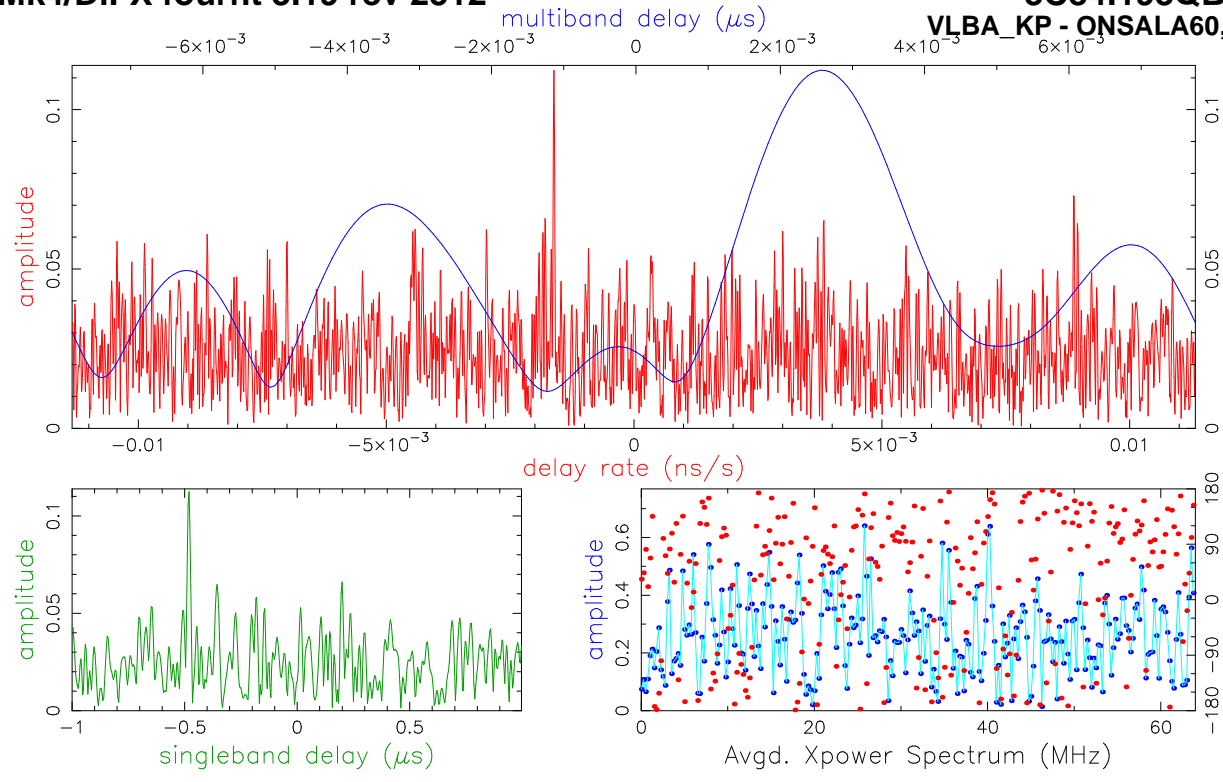


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.6	-69.6	-114.9	-107.9	-131.5	-127.6	-78.8	-100.3	Phase	-107.7
	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	252.4	174.5	340.6	160.9	214.8	86.0	86.6	475.0	Sbd box	399.9
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	9.82870348803E+02	Apriori delay (usec)	9.82317025825E+02	Resid mbdelay (usec)	6.44798E-03	+/-	1.8E-04
Sband delay (usec)	9.82875041825E+02	Apriori clock (usec)	-4.1165359E+01	Resid sbdelay (usec)	5.58016E-01	+/-	1.5E-03
Phase delay (usec)	9.82317022353E+02	Apriori clockrate (us/s)	-5.2260003E-07	Resid phdelay (usec)	-3.47241E-06	+/-	6.3E-07
Delay rate (us/s)	1.37492516663E+00	Apriori rate (us/s)	1.37492807890E+00	Resid rate (us/s)	-2.91227E-06	+/-	3.0E-09
Total phase (deg)	110.0	Apriori accel (us/s/s)	-2.88980464056E-05	Resid phase (deg)	-107.7	+/-	19.4

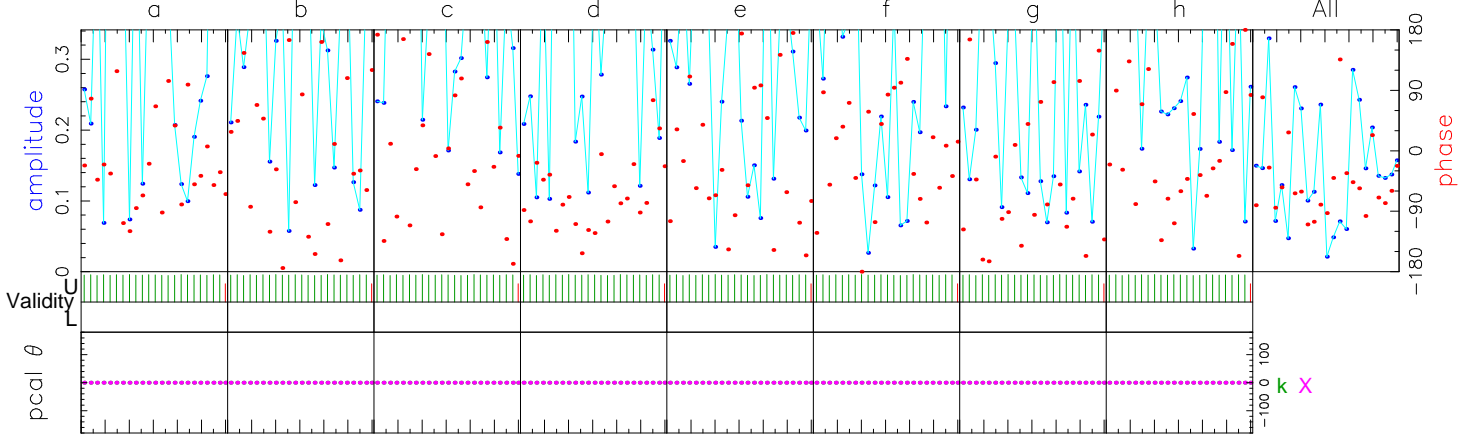
ph/seg (deg)	47.2	Theor.	46.5	Amplitude	0.118 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.5		81.2	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	24.2		27.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	41.5		47.9	Inc. seg. avg.	0.118	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.112	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 61.4 el 47.0 pa -85.5 X: az 281.6 el 44.0 pa 44.9 u,v (fr/asec) -10558.376 -4018.333 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kX..193QBF Output file: /Exps/c201d/v1/1234/No0057/kX.W.141.193QBF



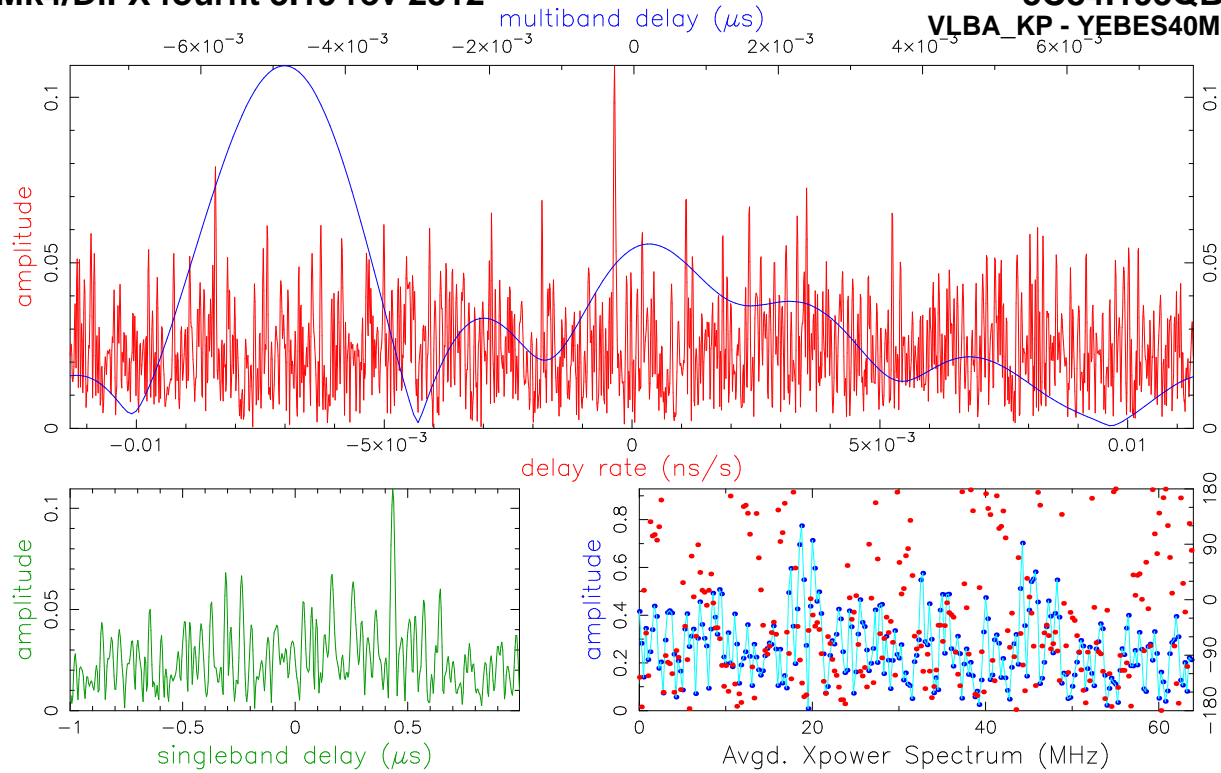
Fringe quality 0  
 SNR 5.8  
 Int time 352.938  
 Amp 0.114  
 Phase -55.1  
 PFD 8.1e-01  
 Delays (us)  
 SBD -0.481355  
 MBD 0.002554  
 Fringe rate (Hz)  
 -0.139138  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165000.00  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122515  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



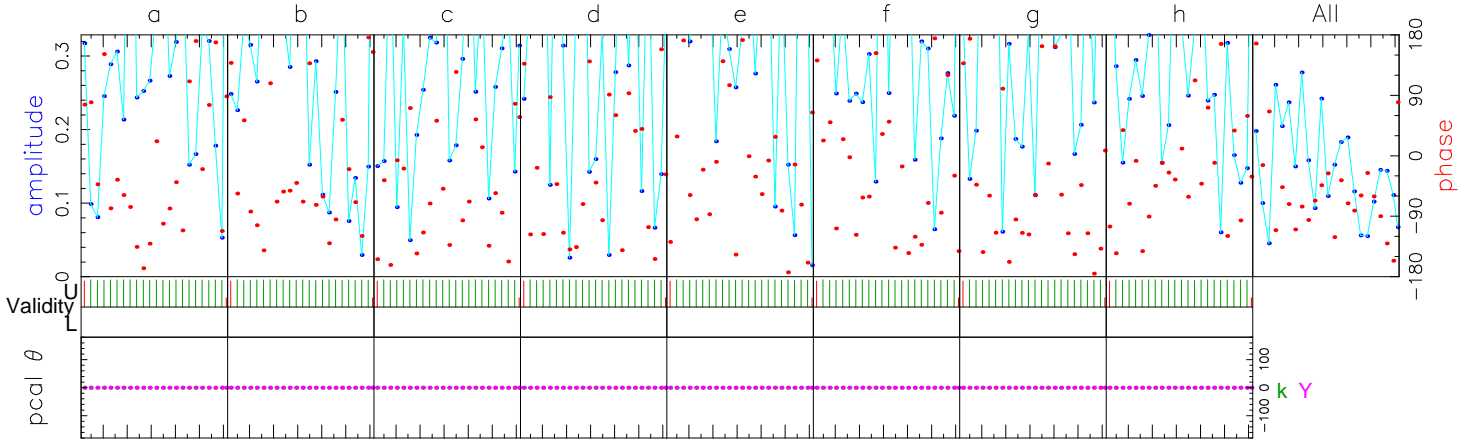
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.6	167.2	-74.6	-73.7	-68.7	-12.6	-99.6	-30.2	Phase	-55.1
	0.2	0.0	0.1	0.3	0.1	0.2	0.1	0.1	Ampl.	0.1
	451.1	313.9	435.8	134.5	496.5	134.2	76.9	308.2	Sbd box	133.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	9.81835204381E+02		Apriori delay (usec)		9.82317025825E+02		Resid mbdelay (usec)		2.55356E-03	+/- 1.9E-04
Sband delay (usec)	9.81835670825E+02		Apriori clock (usec)		-4.1165359E+01		Resid sbdelay (usec)		-4.81355E-01	+/- 1.5E-03
Phase delay (usec)	9.82317024047E+02		Apriori clockrate (us/s)		-5.2260003E-07		Resid phdelay (usec)		-1.77800E-06	+/- 6.4E-07
Delay rate (us/s)	1.37492646365E+00		Apriori rate (us/s)		1.37492807890E+00		Resid rate (us/s)		-1.61525E-06	+/- 3.1E-09
Total phase (deg)	162.5		Apriori accel (us/s/s)		-2.88980464056E-05		Resid phase (deg)		-55.1	+/- 19.7

ph/seg (deg) 57.0 47.4 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 79.5 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 64.0 27.9 Inc. seg. avg. 0.113 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 68.2 48.7 Inc. frq. avg. 0.117 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 X: az 281.6 el 44.0 pa 44.9 u,v (fr/asec) -10558.376 -4018.333 ion window (TEC) 0.00 0.00  
 simultaneous interpolator



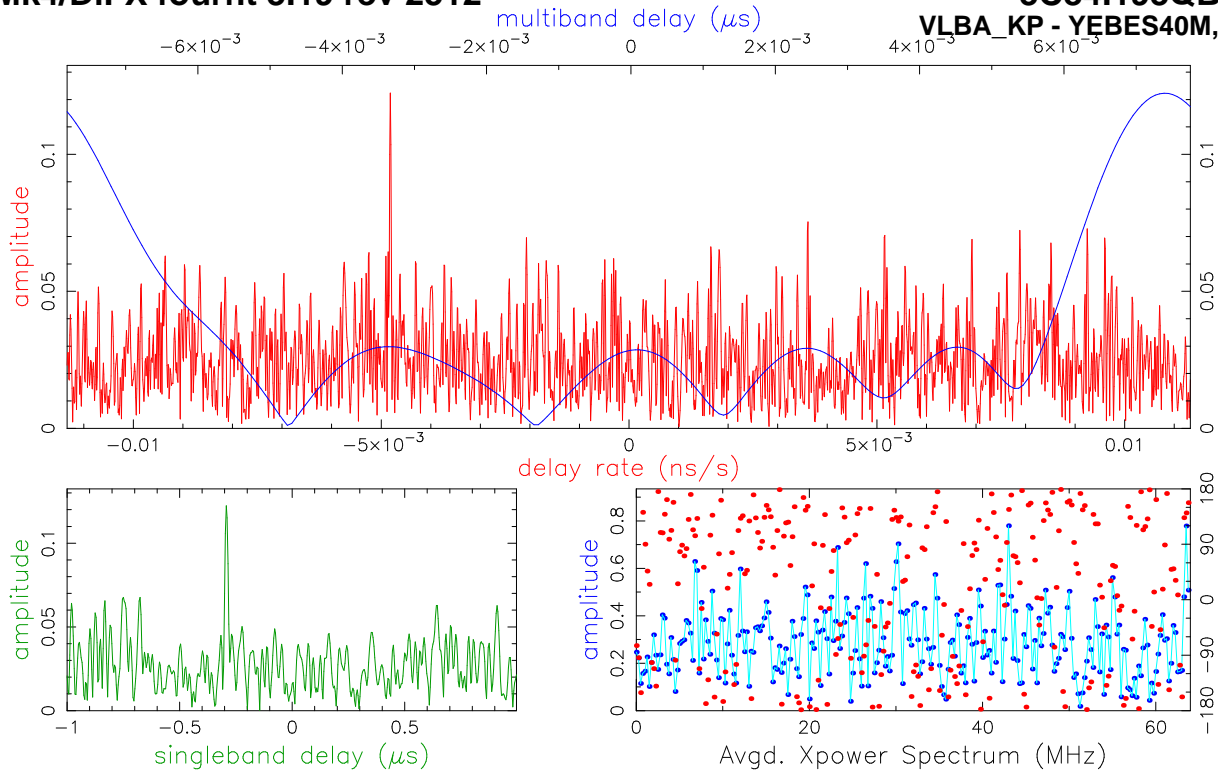
Fringe quality 0  
SNR 5.6  
Int time 347.171  
Amp 0.110  
Phase -79.3  
PFD 1.0e+00  
Delays (us)  
SBD 0.433894  
MBD -0.004833  
Fringe rate (Hz)  
-0.030706  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122504  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-81.0	-72.6	-69.6	-91.5	-75.0	-37.1	-120.6	-46.1	Phase	-79.3
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	332.9	472.8	61.9	444.7	261.1	376.6	367.8	58.7	Sbd box	368.1
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.50416518363E+02		Apriori delay (usec)		-2.50849185842E+02		Resid mbdelay (usec)		-4.83252E-03	+/- 1.9E-04
Sband delay (usec)	-2.50415291592E+02		Apriori clock (usec)		-1.2328761E+01		Resid sbdelay (usec)		4.33894E-01	+/- 1.5E-03
Phase delay (usec)	-2.50849188398E+02		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		-2.55669E-06	+/- 6.6E-07
Delay rate (us/s)	1.51477302547E+00		Apriori rate (us/s)		1.51477338193E+00		Resid rate (us/s)		-3.56467E-07	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.74595190274E-06		Resid phase (deg)		-79.3	+/- 20.5

ph/seg (deg) 55.8 49.2 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.4 85.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.6 29.0 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.5 50.7 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11605.287 -1258.780 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/KY..193QBF Output file: /Exps/c201d/v1/1234/No0057/kY.W.108.193QBF

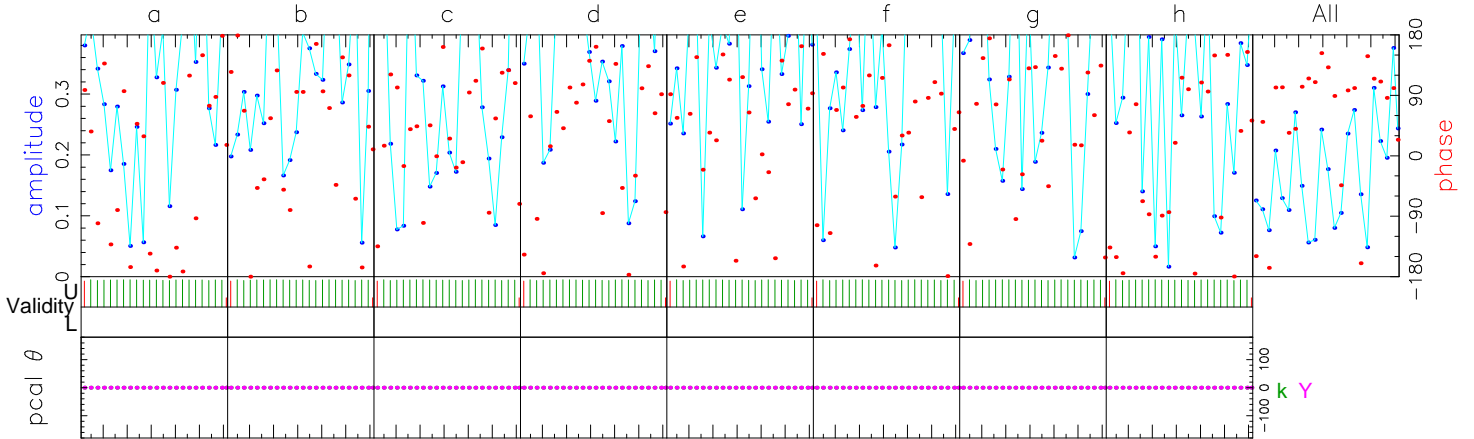


Fringe quality 0

SNR 6.3  
Int time 347.171  
Amp 0.132  
Phase 103.7  
PFD 1.0e-01  
Delays (us)  
SBD -0.292199  
MBD -0.008226  
Fringe rate (Hz)  
-0.415558  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

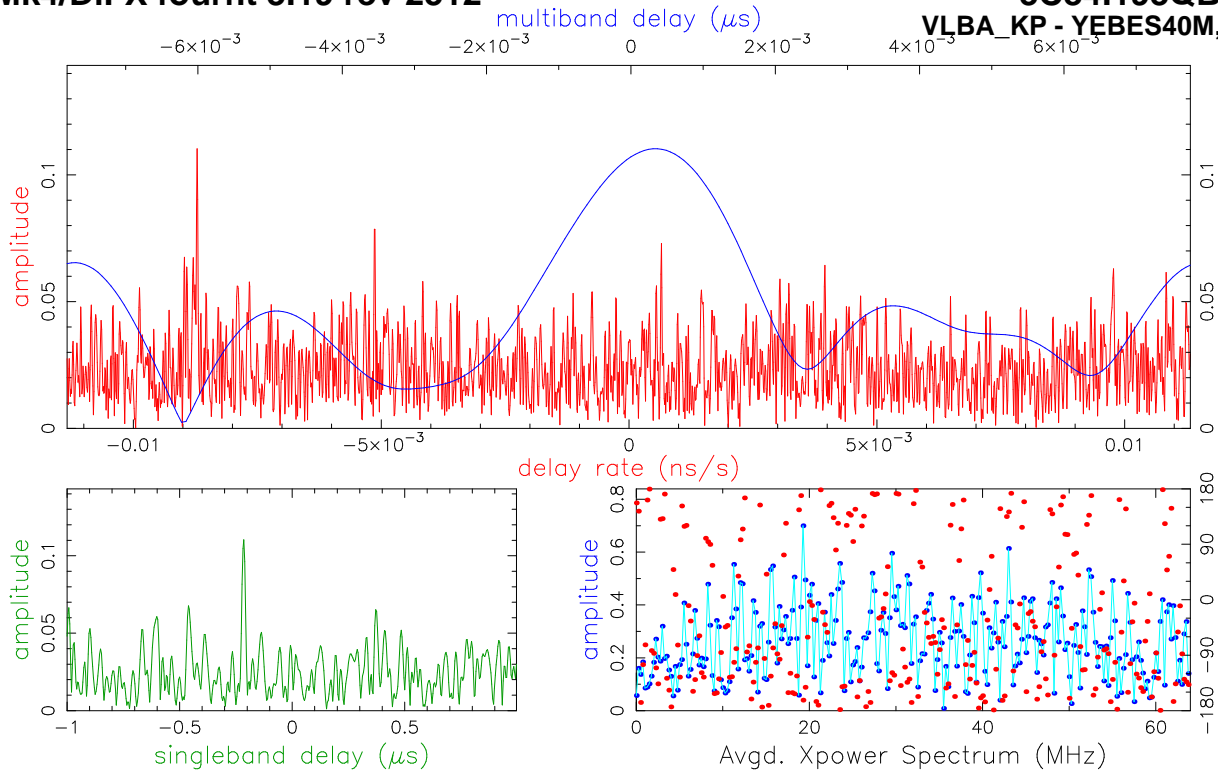
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122509  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



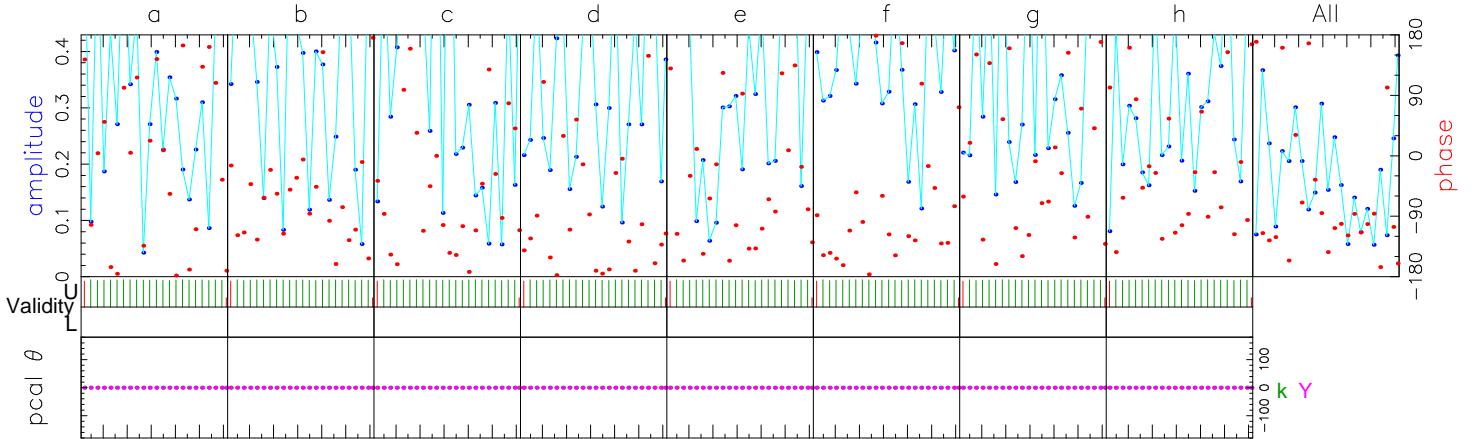
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
Group delay (usec)(sbd)	-2.51138662060E+02									
Sband delay (usec)	-2.51141384842E+02									
Phase delay (usec)	-2.50849182498E+02									
Delay rate (us/s)	1.51476855771E+00									
Total phase (deg)			-208.9							
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(MSamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal $\theta$										
RMS	55.9	43.9								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)	29.1	25.9								
amp/seg (%)	26.2	45.2								
ph/frq (deg)										
amp/frq (%)										
k: az 61.4 el 47.0 pa -85.5										
Y: az 290.3 el 49.0 pa 72.6										
u,v (fr/asec)										
simultaneous interpolator										





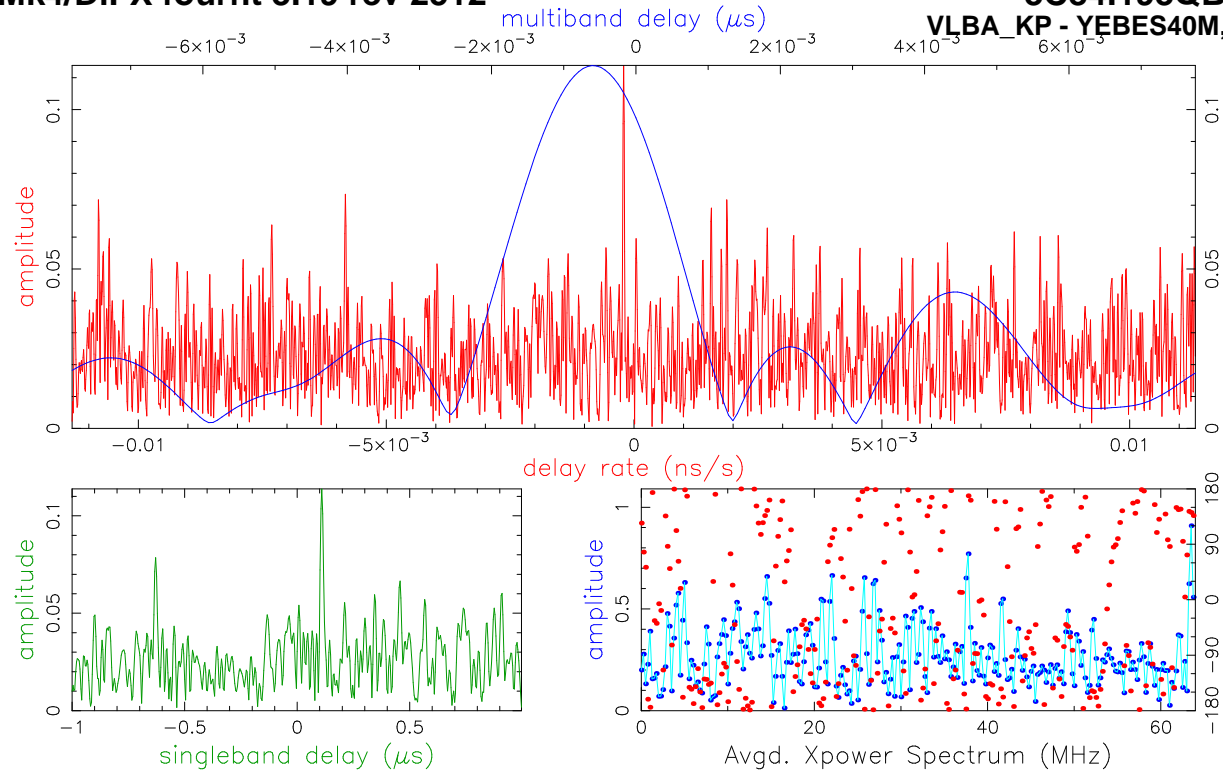
Fringe quality 0  
 SNR 5.6  
 Int time 347.171  
 Amp 0.143  
 Phase -117.6  
 PFD 9.8e-01  
 Delays (us)  
 SBD -0.215673  
 MBD 0.000322  
 Fringe rate (Hz) -0.751768  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122513  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



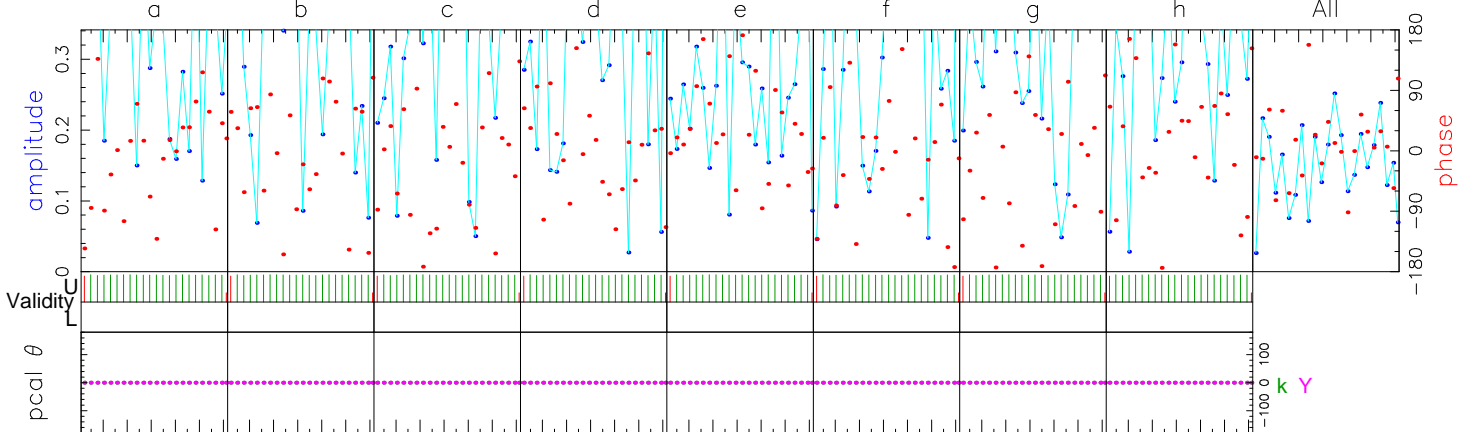
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	124.0	-83.9	-108.2	-132.0	-136.1	-124.2	-125.7	-91.9	Phase	-117.6
	0.1	0.3	0.1	0.2	0.2	0.3	0.1	0.1	Ampl.	0.2
	27.8	202.4	277.1	402.0	3.3	201.6	412.6	128.8	Sbd box	201.8
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.51067613469E+02		Apriori delay (usec)		-2.50849185842E+02		Resid mbdelay (usec)		3.22373E-04	+/- 1.9E-04
Sband delay (usec)	-2.51064859092E+02		Apriori clock (usec)		-1.2328761E+01		Resid sbdelay (usec)		-2.15673E-01	+/- 1.5E-03
Phase delay (usec)	-2.50849189634E+02		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		-3.79238E-06	+/- 6.5E-07
Delay rate (us/s)	1.51476465465E+00		Apriori rate (us/s)		1.51477338193E+00		Resid rate (us/s)		-8.2728E-06	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.74595190274E-06		Resid phase (deg)		-117.6	+/- 20.3

ph/seg (deg) 59.0 48.7 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 100.2 85.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 52.5 28.7 Inc. seg. avg. 0.168 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 64.4 50.1 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11605.287 -1258.780 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/KY..193QBF Output file: /Exps/c201d/v1/1234/No0057/kY.W.150.193QBF



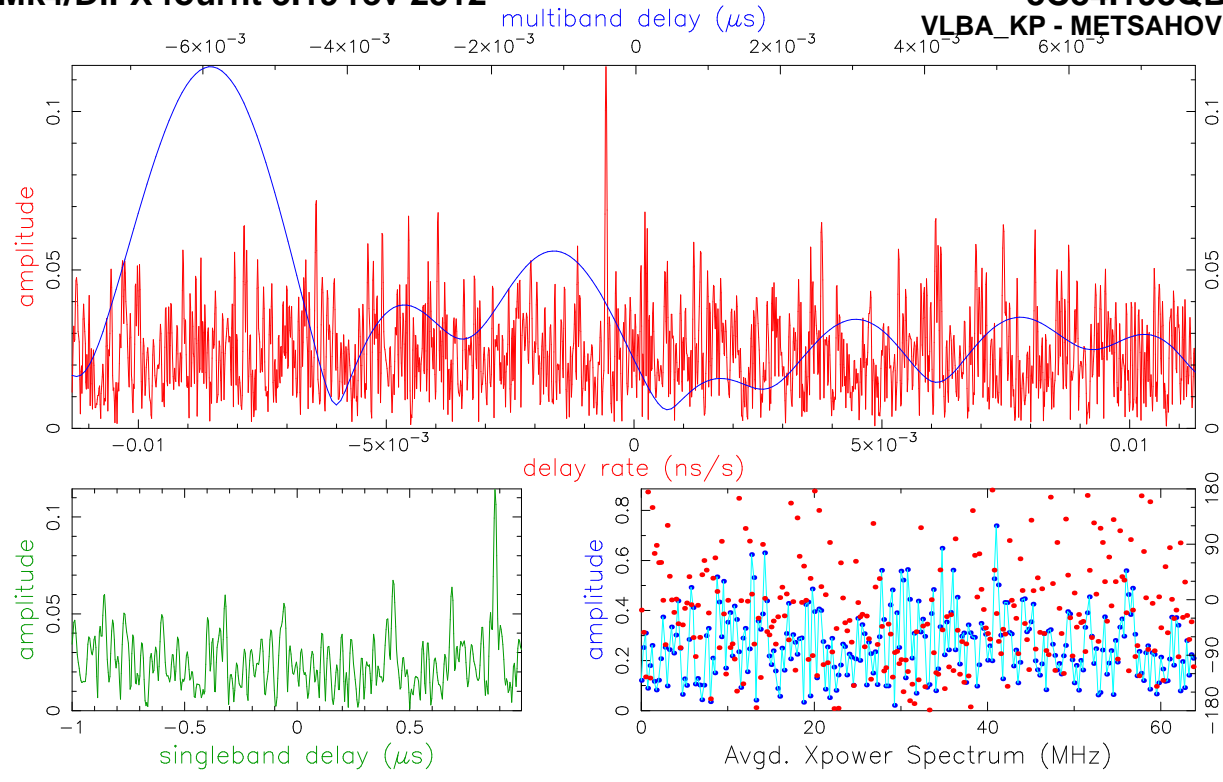
Fringe quality 0  
SNR 5.8  
Int time 347.171  
Amp 0.114  
Phase 8.4  
PFD 8.1e-01  
Delays (us)  
SBD 0.109090  
MBD -0.000602  
Fringe rate (Hz)  
-0.018377  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122518  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-5.4	24.9	18.7	-22.2	24.8	12.4	1.9	11.6	Phase	8.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	38.9	90.1	334.5	499.5	479.6	97.4	501.6	278.9	Sbd box	284.9
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.50740412637E+02		Apriori delay (usec)		-2.50849185842E+02		Resid mbdelay (usec)		-6.01795E-04	+/- 1.9E-04
Sband delay (usec)	-2.50740096342E+02		Apriori clock (usec)		-1.2328761E+01		Resid sbdelay (usec)		1.09090E-01	+/- 1.5E-03
Phase delay (usec)	-2.50849185570E+02		Apriori clockrate (us/s)		-2.1460000E-07		Resid phdelay (usec)		2.71477E-07	+/- 6.4E-07
Delay rate (us/s)	1.51477316859E+00		Apriori rate (us/s)		1.51477338193E+00		Resid rate (us/s)		-2.13338E-07	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.74595190274E-06		Resid phase (deg)		8.4	+/- 19.8

ph/seg (deg) 54.0 47.4 Search (2048X32) 0.112 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 59.9 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 17.5 27.9 Inc. seg. avg. 0.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 18.3 48.8 Inc. frq. avg. 0.106 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 61.4 el 47.0 pa -85.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11605.287 -1258.780 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/KY..193QBF Output file: /Exps/c201d/v1/1234/No0057/kY.W.168.193QBF

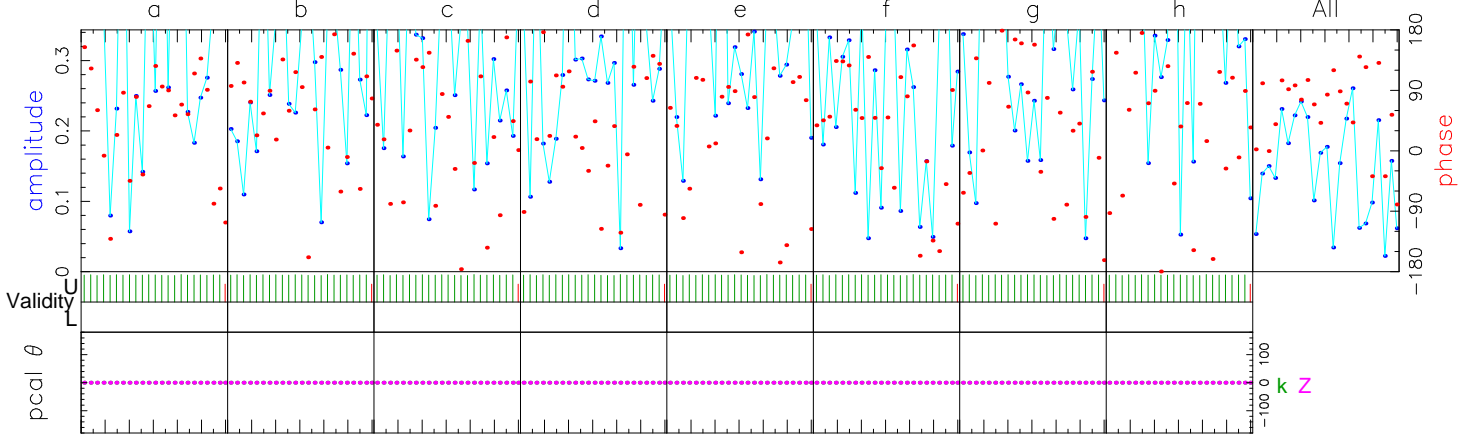


Fringe quality 0

SNR 5.9  
 Int time 352.463  
 Amp 0.115  
 Phase 76.5  
 PFD 6.6e-01  
 Delays (us)  
 SBD 0.879533  
 MBD -0.005898  
 Fringe rate (Hz)  
 -0.048381  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

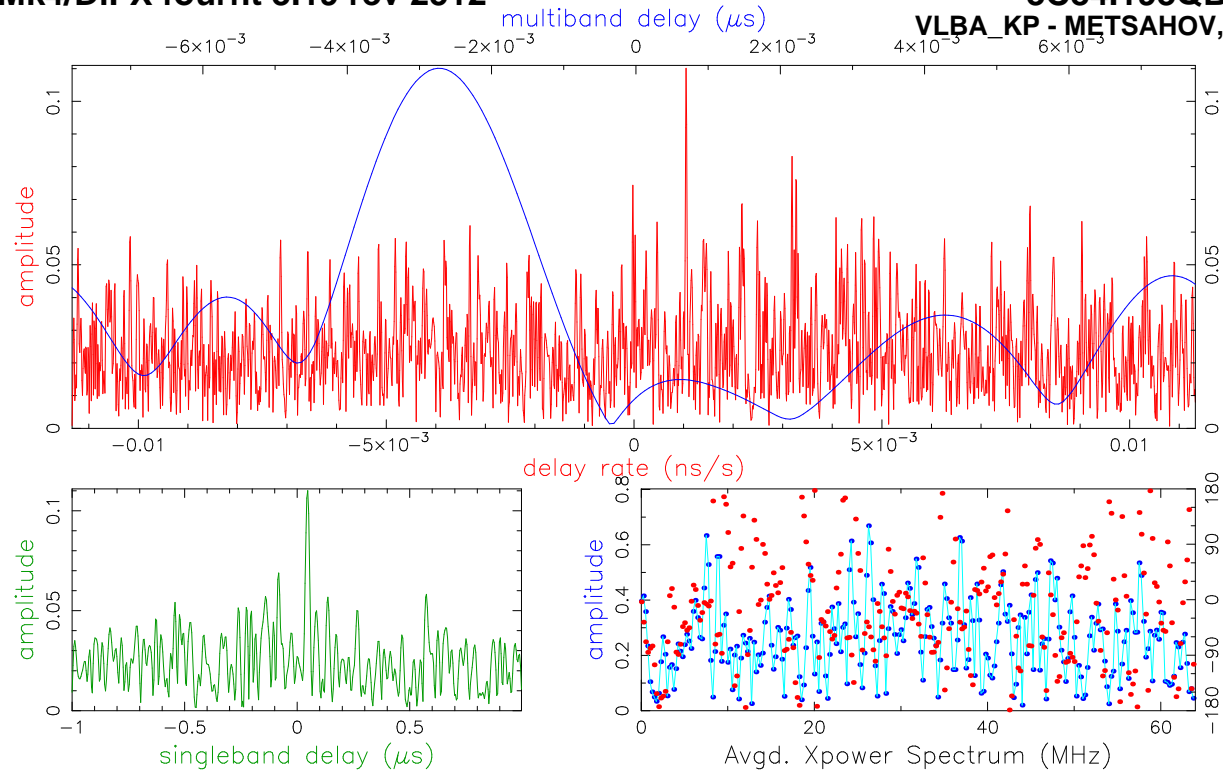
Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165000.00  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122505  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.56032015849E+03		Apriori delay (usec)		2.55943543192E+03		Resid mbdelay (usec)		-5.89843E-03	+/- 1.8E-04
Sband delay (usec)	2.56031496492E+03		Apriori clock (usec)		-2.2270489E-01		Resid sbdelay (usec)		8.79533E-01	+/- 1.5E-03
Phase delay (usec)	2.55943543439E+03		Apriori clockrate (us/s)		-1.0600001E-08		Resid phdelay (usec)		2.46844E-06	+/- 6.3E-07
Delay rate (us/s)	1.35632944924E+00		Apriori rate (us/s)		1.35633001090E+00		Resid rate (us/s)		-5.61660E-07	+/- 3.0E-09
Total phase (deg)	114.5		Apriori accel (us/s/s)		-3.89832518475E-05		Resid phase (deg)		76.5	+/- 19.5

ph/seg (deg) 56.5 46.8 Amplitude 0.115 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 68.2 81.6 Search (2048X32) 0.112 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.6 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 45.5 48.1 Inc. seg. avg. 0.111 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 k: az 61.4 el 47.0 pa -85.5 Z: az 288.5 el 38.5 pa 39.1 u,v (fr/asec) -10428.147 -4891.754 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

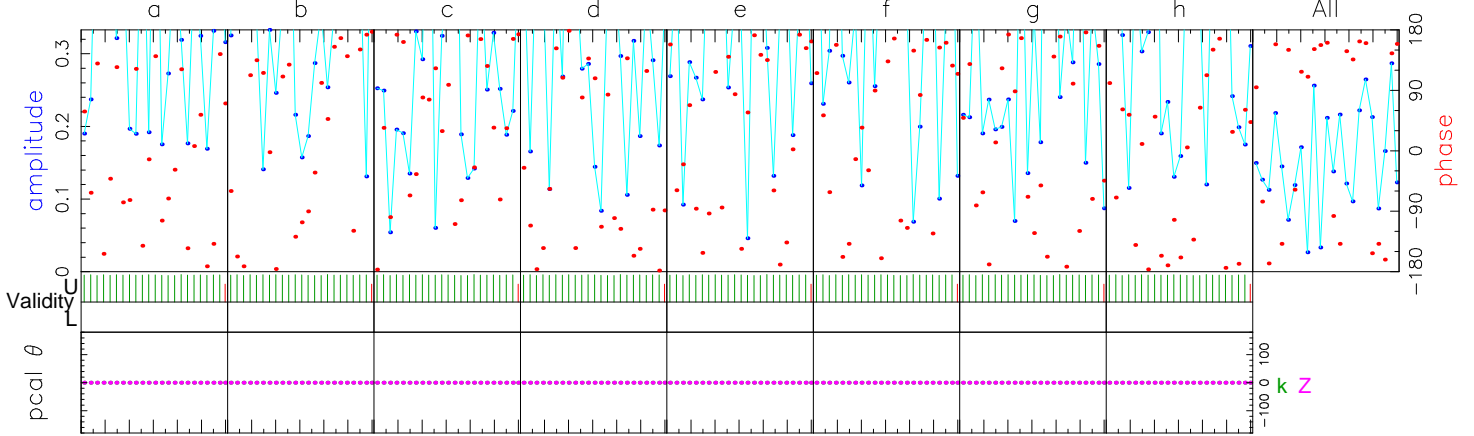


Fringe quality 0

SNR 5.7  
 Int time 352.463  
 Amp 0.111  
 Phase 173.1  
 PFD 9.7e-01  
 Delays (us)  
 SBD 0.045886  
 MBD -0.002729  
 Fringe rate (Hz)  
 0.090714  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165000.00  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122509  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



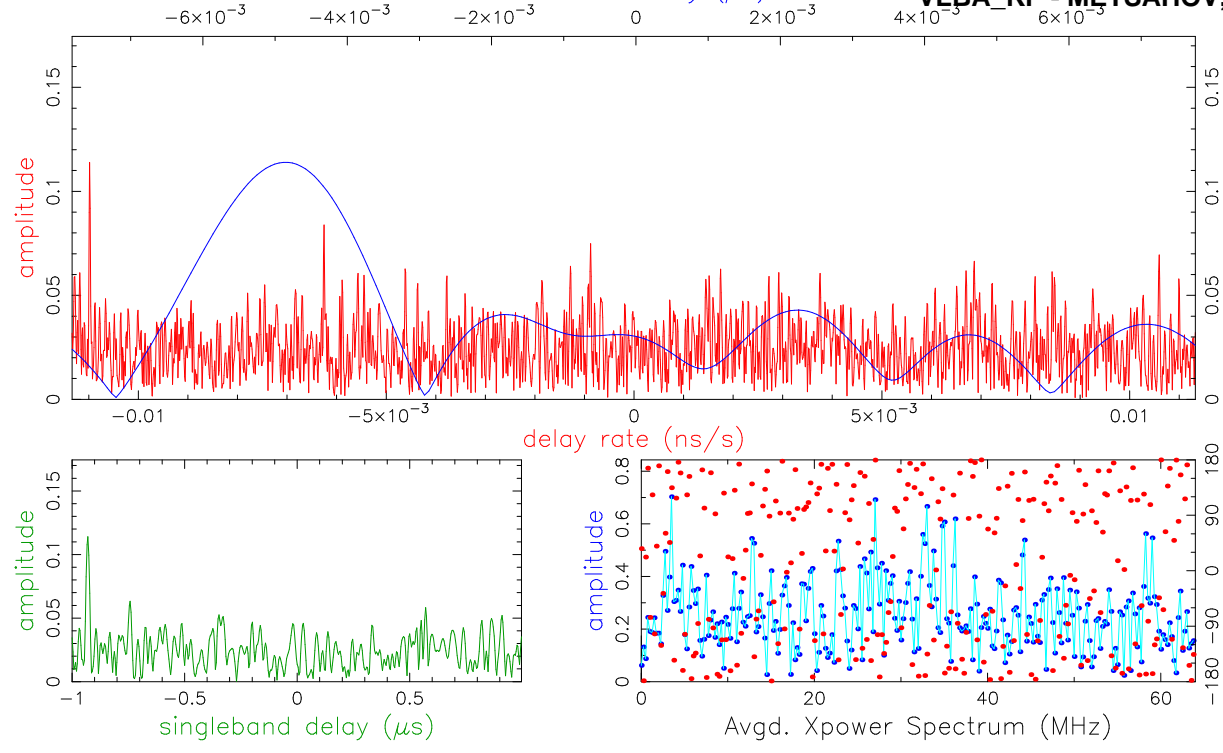
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-175.4	164.8	113.3	-168.9	-175.8	167.8	-165.3	132.4	Phase	173.1
	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	361.1	267.3	349.1	21.1	254.4	326.4	75.2	207.3	Sbd box	268.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.55947957790E+03		Apriori delay (usec)		2.55943543192E+03		Resid mbdelay (usec)		-2.72901E-03	+/- 1.9E-04
Sband delay (usec)	2.55948131817E+03		Apriori clock (usec)		-2.2270489E-01		Resid sbdelay (usec)		4.58862E-02	+/- 1.5E-03
Phase delay (usec)	2.55943543750E+03		Apriori clockrate (us/s)		-1.0600001E-08		Resid phdelay (usec)		5.58075E-06	+/- 6.5E-07
Delay rate (us/s)	1.35633106399E+00		Apriori rate (us/s)		1.35633001090E+00		Resid rate (us/s)		1.05309E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.89832518475E-05		Resid phase (deg)		173.1	+/- 20.2

	RMS	Theor.	Amplitude	0.111 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	53.3	48.4	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	75.5	84.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	32.6	28.5	Inc. seg. avg.	0.115	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	42.7	49.8	Inc. frq. avg.	0.106	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

k: az 61.4 el 47.0 pa -85.5      Z: az 288.5 el 38.5 pa 39.1      u,v (fr/asec) -10428.147 -4891.754      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201d/v1/1234/No0057/kZ..193QBF      Output file: /Exps/c201d/v1/1234/No0057/kZ.W.131.193QBF

multiband delay ( $\mu$ s)

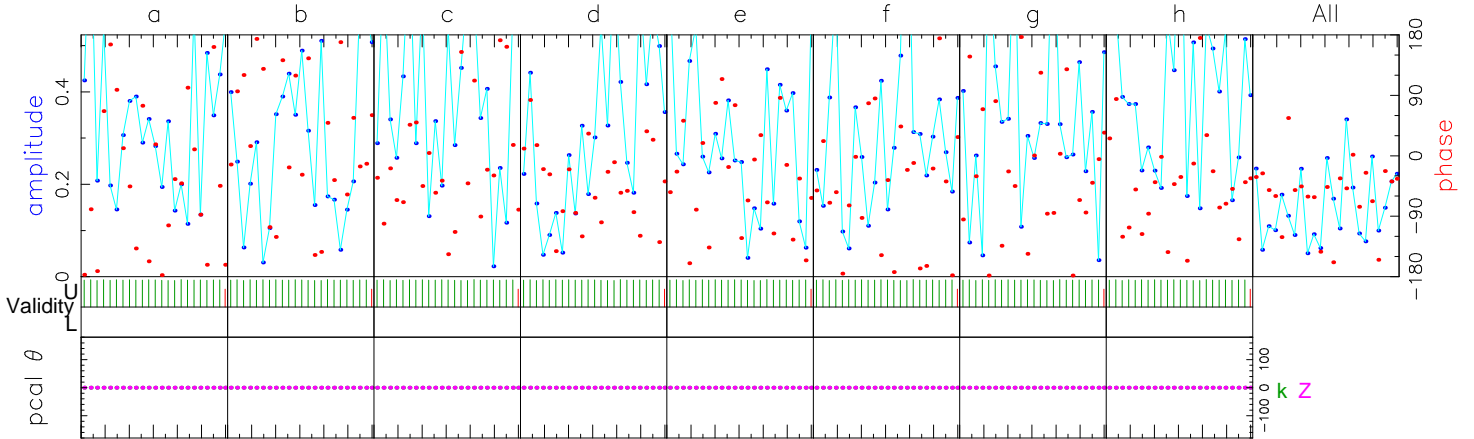


Fringe quality 0

SNR 5.9  
 Int time 352.463  
 Amp 0.174  
 Phase -50.3  
 PFD 6.6e-01  
 Delays (us)  
 SBD -0.930475  
 MBD -0.004877  
 Fringe rate (Hz)  
 -0.947229  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165000.00  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122513  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-108.1	-0.3	-49.4	-43.8	-49.3	-43.5	-75.4	-45.0	Phase	-50.3
	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2
	410.4	69.6	25.7	490.0	479.7	9.5	28.2	508.6	Sbd box	18.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.55850867961E+03		Apriori delay (usec)		2.55943543192E+03		Resid mbdelay (usec)		-4.87730E-03	+/- 1.8E-04
Sband delay (usec)	2.55850495667E+03		Apriori clock (usec)		-2.2270489E-01		Resid sbdelay (usec)		-9.30475E-01	+/- 1.5E-03
Phase delay (usec)	2.55943543029E+03		Apriori clockrate (us/s)		-1.0600001E-08		Resid phdelay (usec)		-1.62332E-06	+/- 6.3E-07
Delay rate (us/s)	1.35631901450E+00		Apriori rate (us/s)		1.35633001090E+00		Resid rate (us/s)		-1.09964E-05	+/- 3.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.89832518475E-05		Resid phase (deg)		-50.3	+/- 19.5

	RMS	Theor.	Amplitude	0.174 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	49.0	46.8	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	74.7	81.7	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	33.1	27.6	Inc. seg. avg.	0.174	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	45.7	48.2	Inc. frq. avg.	0.166					

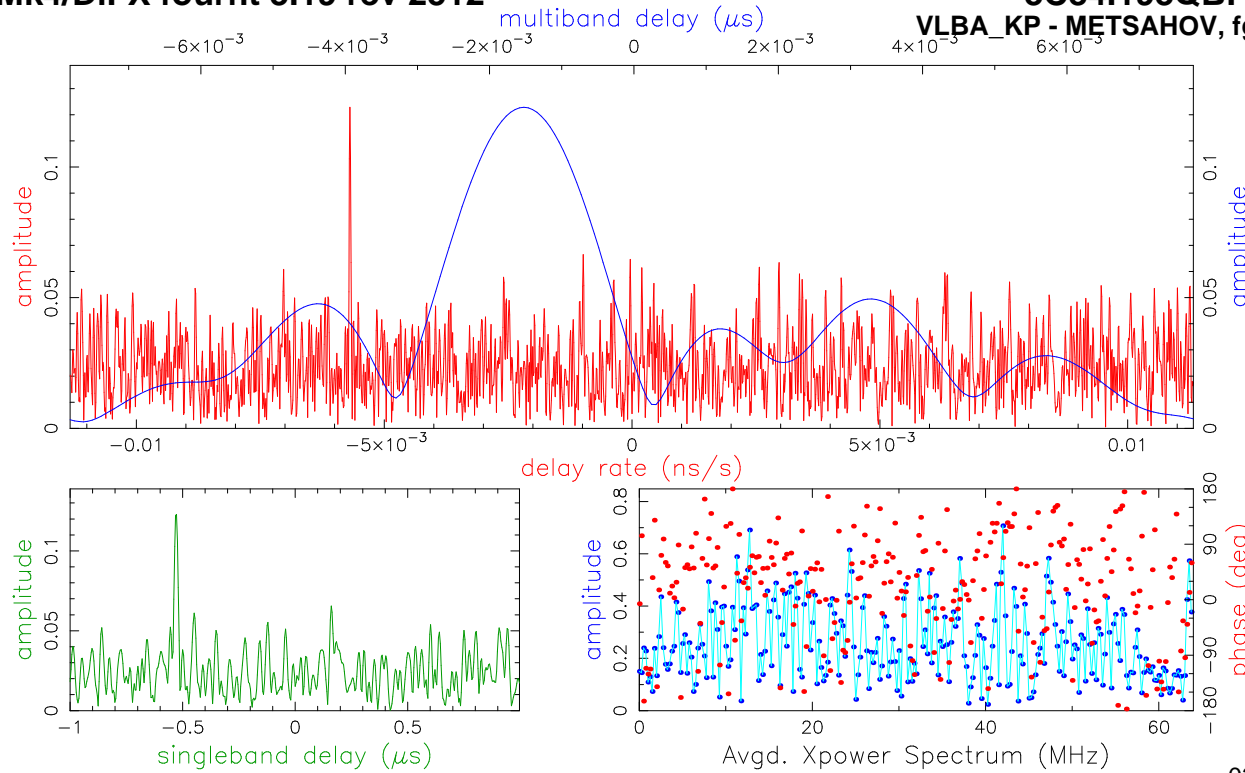
k: az 61.4 el 47.0 pa -85.5      Z: az 288.5 el 38.5 pa 39.1      u,v (fr/asec) -10428.147 -4891.754      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c201d/v1/1234/No0057/kZ..193QBF      Output file: /Exps/c201d/v1/1234/No0057/kZ.W.149.193QBF



Mk4/DiFX fourfit 3.19 rev 2512

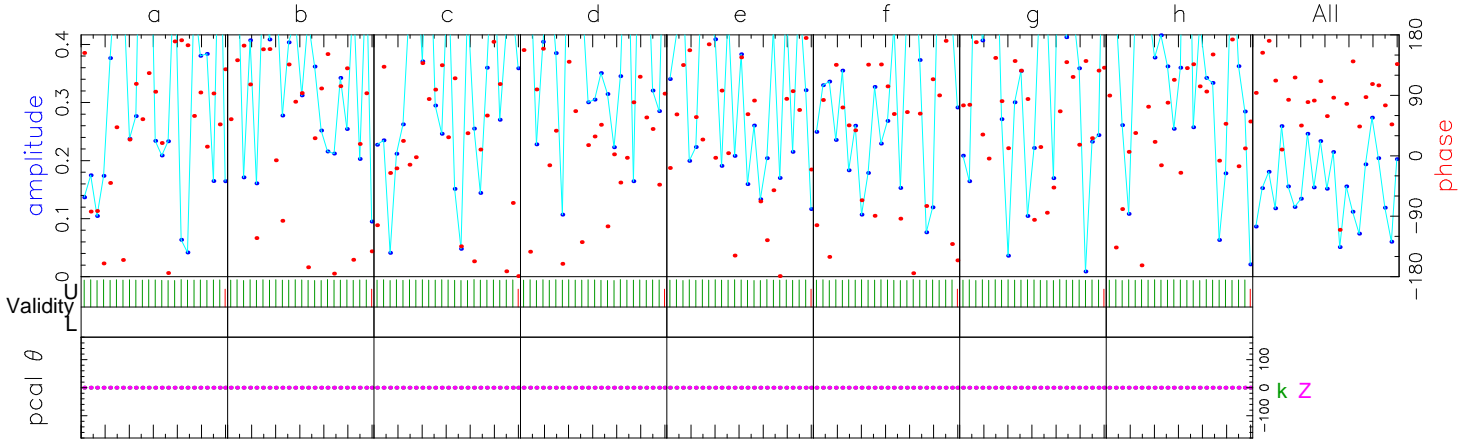
3C84.193QBF, No0057, kZ

VLBA\_KP - METSAHOV, fgroup W, pol RL



Fringe quality 0  
 SNR 6.4  
 Int time 352.463  
 Amp 0.139  
 Phase 92.9  
 PFD 3.9e-02  
 Delays (us)  
 SBD -0.529163  
 MBD -0.001535  
 Fringe rate (Hz)  
 -0.491060  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165000.00  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122516  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	82.7	124.4	74.0	65.0	76.0	124.0	93.4	94.1	Phase	92.9
	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	22.7	121.3	2.4	53.1	55.0	36.4	382.5	237.2	Sbd box	121.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.55890264701E+03		Apriori delay (usec)		2.55943543192E+03		Resid mbdelay (usec)		-1.53490E-03	+/- 1.7E-04
Sband delay (usec)	2.55890626867E+03		Apriori clock (usec)		-2.2270489E-01		Resid sbdelay (usec)		-5.29163E-01	+/- 1.3E-03
Phase delay (usec)	2.55943543491E+03		Apriori clockrate (us/s)		-1.0600001E-08		Resid phdelay (usec)		2.99680E-06	+/- 5.8E-07
Delay rate (us/s)	1.35632431018E+00		Apriori rate (us/s)		1.35633001090E+00		Resid rate (us/s)		-5.70072E-06	+/- 2.8E-09
Total phase (deg)	130.8		Apriori accel (us/s/s)		-3.89832518475E-05		Resid phase (deg)		92.9	+/- 17.9

	RMS	Theor.	Amplitude	0.139 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	49.3	42.9	Search (2048X32)	0.122	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	56.0	74.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	24.1	25.3	Inc. seg. avg.	0.137	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	21.8	44.1	Inc. frq. avg.	0.133	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

k: az 61.4 el 47.0 pa -85.5 Z: az 288.5 el 38.5 pa 39.1 u,v (fr/asec) -10428.147 -4891.754 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/kZ..193QBF Output file: /Exps/c201d/v1/1234/No0057/kZ.W.160.193QBF