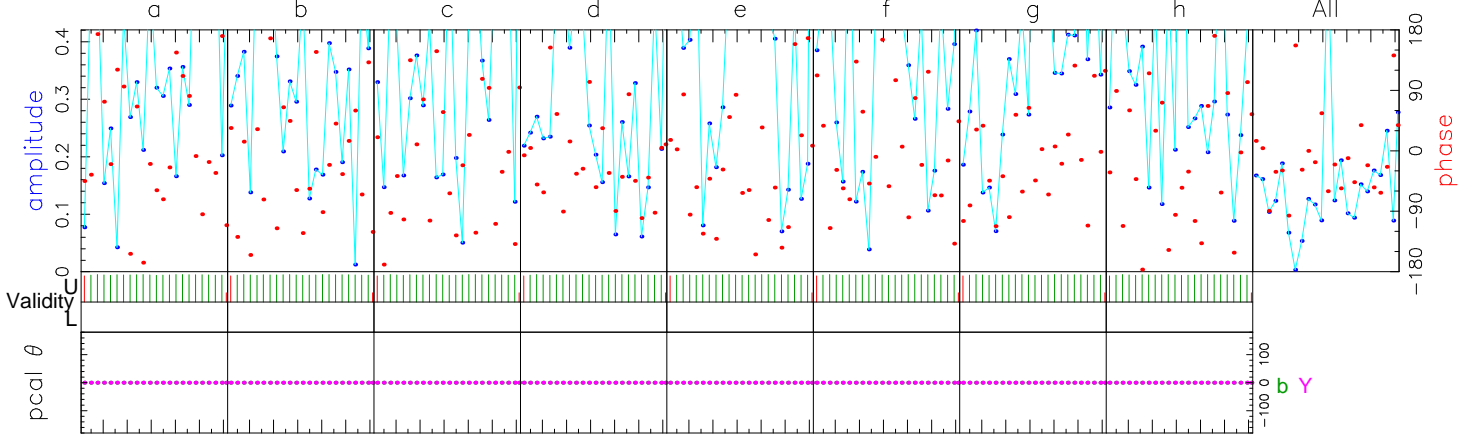


Fringe quality 0  
SNR 5.9  
Int time 348.973  
Amp 0.140  
Phase -29.6  
PFD 5.6e-01  
Delays (us)  
SBD -0.094998  
MBD -0.007164  
Fringe rate (Hz)  
-0.651896  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122445  
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

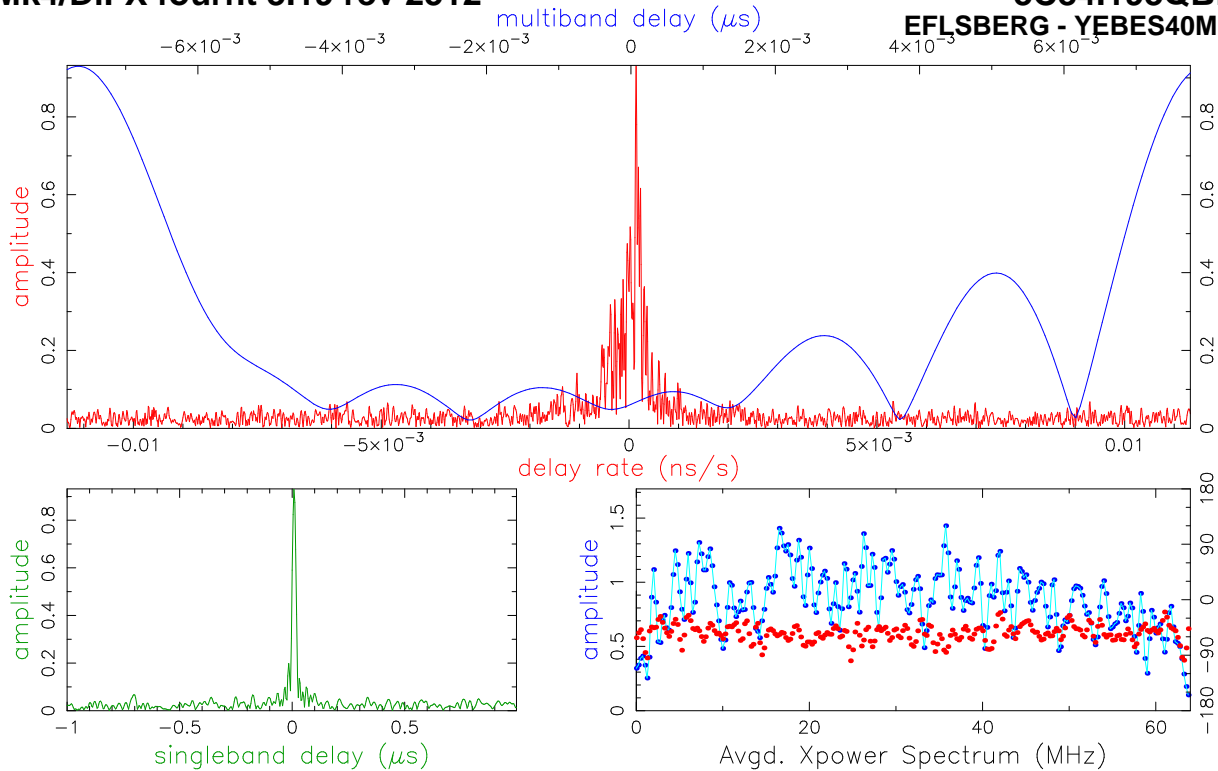


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.5	-39.7	-45.7	-26.6	-28.9	-31.2	-16.8	-47.0	Phase	-29.6
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	88.1	506.5	382.7	26.2	464.3	266.6	234.4	256.2	Sbd box	232.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.21115770977E+02	Apriori delay (usec)	-2.21014857163E+02	Resid mbdelay (usec)	-7.16381E-03	+/-	1.8E-04
Sband delay (usec)	-2.21109854663E+02	Apriori clock (usec)	-1.3402857E+01	Resid sbdelay (usec)	-9.49975E-02	+/-	1.5E-03
Phase delay (usec)	-2.21014858118E+02	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	-9.54848E-07	+/-	6.2E-07
Delay rate (us/s)	1.40850357108E+00	Apriori rate (us/s)	1.40851113895E+00	Resid rate (us/s)	-7.56787E-06	+/-	3.0E-09
Total phase (deg)	-316.2	Apriori accel (us/s/s)	8.21134373191E-06	Resid phase (deg)	-29.6	+/-	19.3

ph/seg (deg)	63.3	Theor.	46.4	Amplitude	0.140 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	93.7		81.0	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	12.0		27.4	Inc. seg. avg.	0.136	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.9		47.8	Inc. frq. avg.	0.127	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 75.0 el 47.2 pa -59.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10774.698 1274.674 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bY..193QBF Output file: /Exps/c201d/v1/1234/No0057/bY.W.22.193QBF

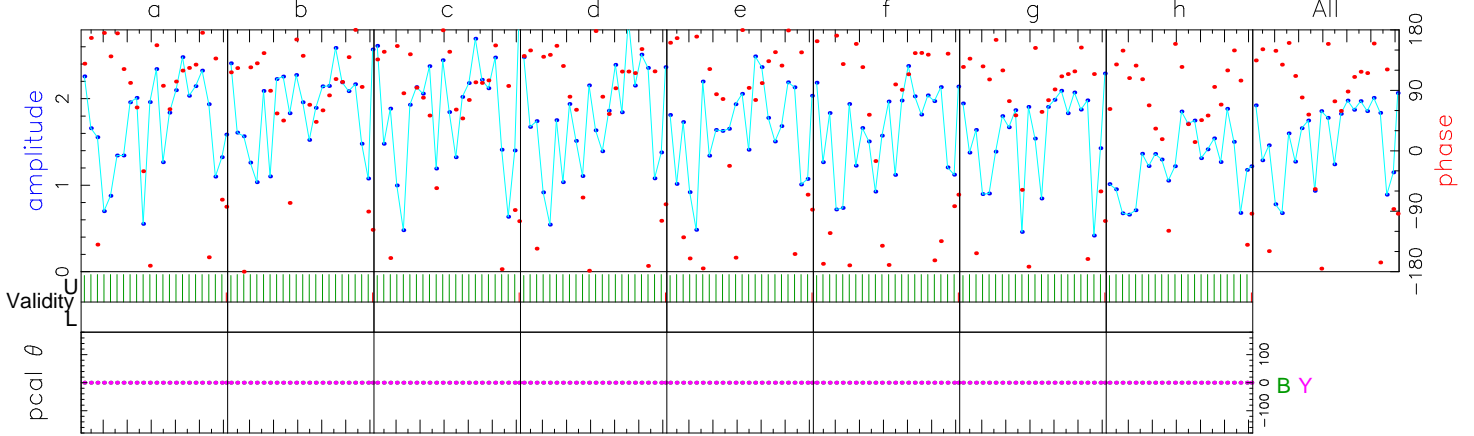


Fringe quality 5

SNR 48.0  
Int time 353.908  
Amp 0.932  
Phase 130.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.008434  
MBD -0.007639  
Fringe rate (Hz) 0.012091  
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  
2020:204:122446  
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



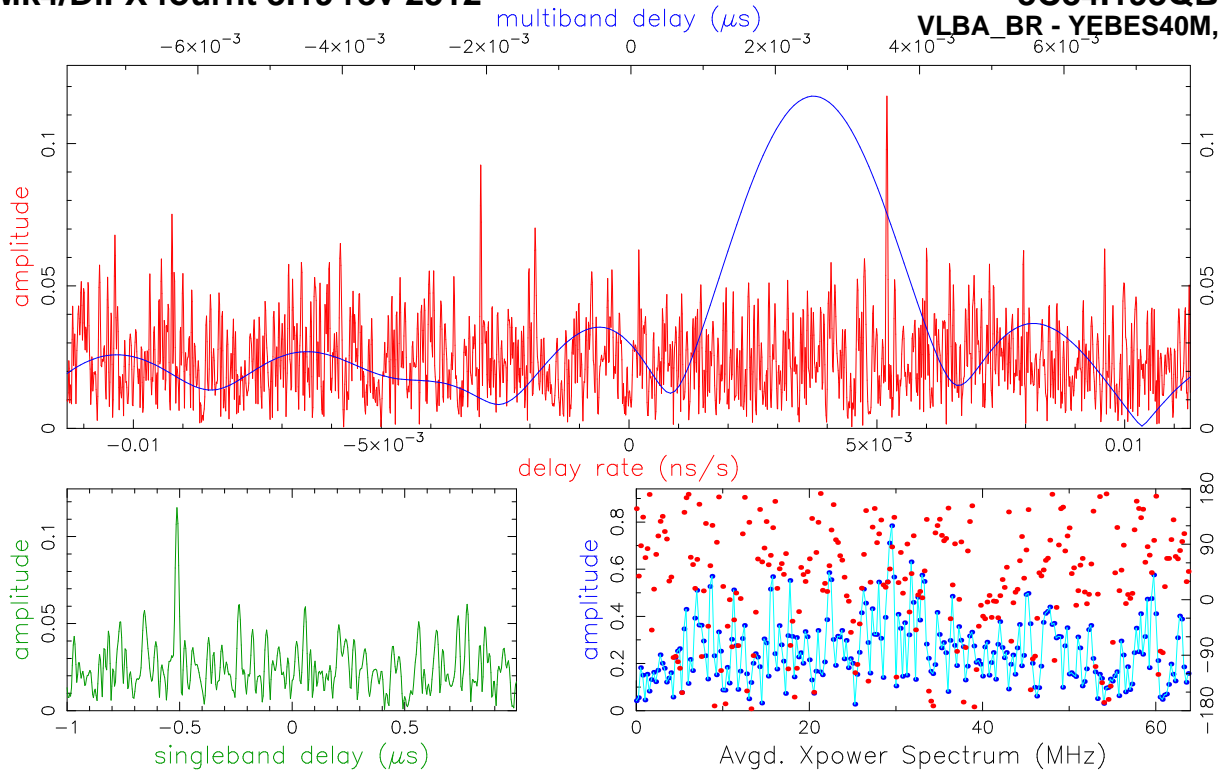
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-9.24450765876E+02	Apriori delay (usec)	-9.24458752321E+02	Resid mbdelay (usec)	-7.63855E-03	+/-	2.3E-05
Sband delay (usec)	-9.24450318321E+02	Apriori clock (usec)	1.0368242E+00	Resid sbdelay (usec)	8.43400E-03	+/-	1.8E-04
Phase delay (usec)	-9.24458748107E+02	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	4.21402E-06	+/-	7.7E-08
Delay rate (us/s)	5.72913806814E-02	Apriori rate (us/s)	5.72912403211E-02	Resid rate (us/s)	1.40360E-07	+/-	3.8E-10
Total phase (deg)	-202.3	Apriori accel (us/s/s)	1.40723178868E-05	Resid phase (deg)	130.7	+/-	2.4

ph/seg (deg)	64.5	Theor.	5.7	Amplitude	0.932 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.8		10.0	Search (2048X32)	0.905	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.2		3.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	15.3		5.9	Inc. seg. avg.	1.528	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.990	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

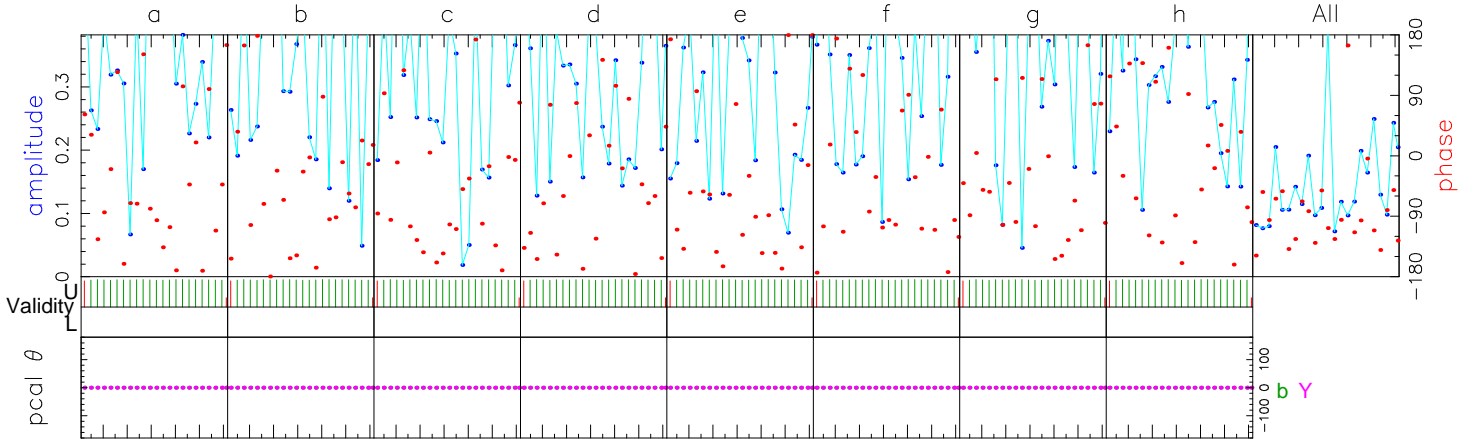
B: az 284.8 el 45.4 pa 55.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -422.750 1793.620 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/BY..193QBF Output file: /Exps/c201d/v1/1234/No0057/BY.W.26.193QBF



Fringe quality 0  
SNR 6.0  
Int time 348.973  
Amp 0.127  
Phase -94.2  
PFD 4.8e-01  
Delays (us)  
SBD -0.511704  
MBD 0.002528  
Fringe rate (Hz) 0.449030  
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  
2020:204:122448  
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

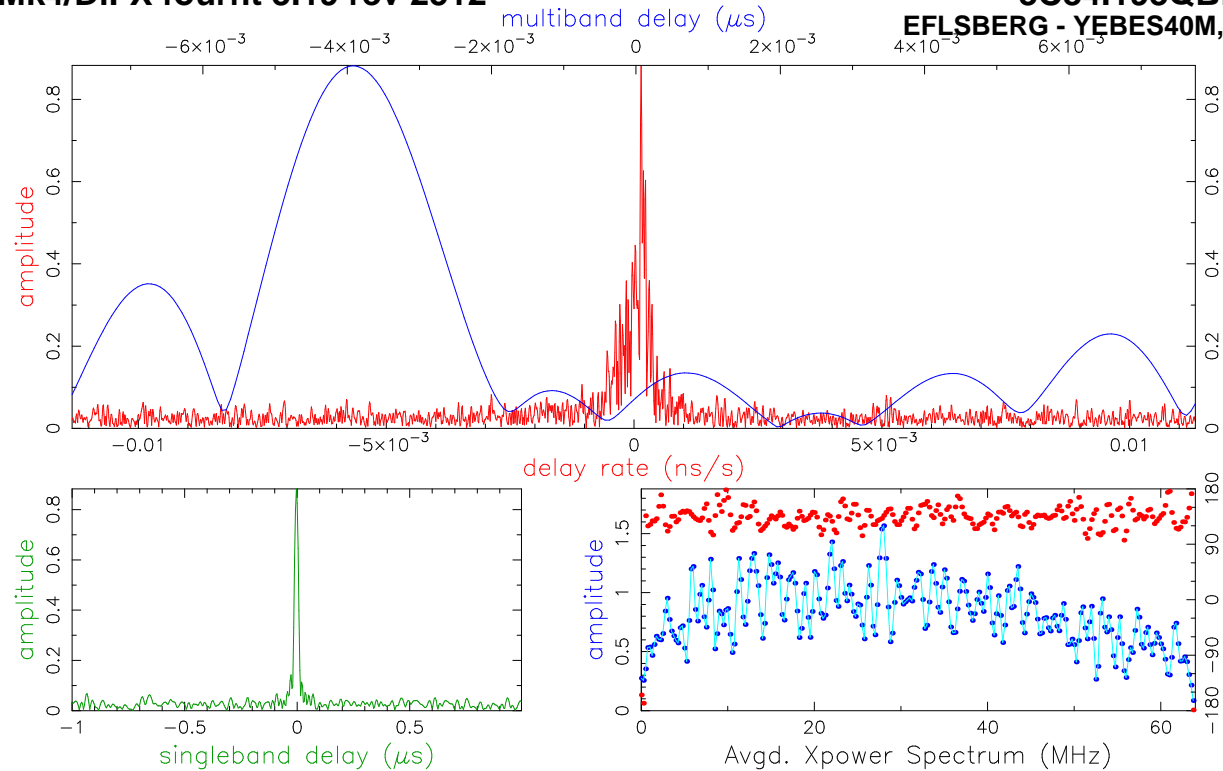


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-104.6	-70.3	-115.3	-80.5	-106.3	-92.5	-80.4	-125.1	Phase	-94.2
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	395.2	56.7	22.6	119.1	328.4	149.6	126.1	429.0	Sbd box	126.0
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.21527954204E+02	Apriori delay (usec)	-2.21014857163E+02	Resid mbdelay (usec)	2.52796E-03	+/-	1.8E-04
Sband delay (usec)	-2.21526560913E+02	Apriori clock (usec)	-1.3402857E+01	Resid sbdelay (usec)	-5.11704E-01	+/-	1.4E-03
Phase delay (usec)	-2.21014860202E+02	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	-3.03893E-06	+/-	6.2E-07
Delay rate (us/s)	1.40851635174E+00	Apriori rate (us/s)	1.40851113895E+00	Resid rate (us/s)	5.21279E-06	+/-	3.0E-09
Total phase (deg)	-20.8	Apriori accel (us/s/s)	8.21134373191E-06	Resid phase (deg)	-94.2	+/-	19.2

ph/seg (deg)	41.7	Theor.	46.1	Amplitude	0.127 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	68.9		80.5	Search (2048X32)	0.114	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	20.8		27.2	Inc. seg. avg.	0.121	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.3		47.5	Inc. frq. avg.	0.119	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
						Data rate (Mb/s):	2048			ion window (TEC)	0.00 0.00

b: az 75.0 el 47.2 pa -59.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10774.698 1274.674 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bY..193QBF Output file: /Exps/c201d/v1/1234/No0057/bY.W.38.193QBF

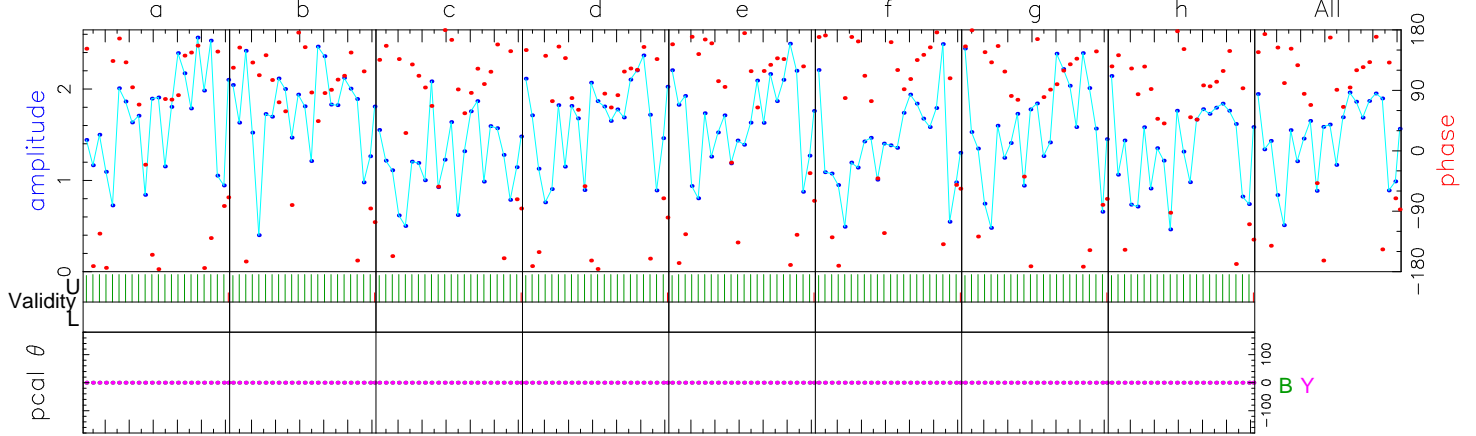


Fringe quality 6

SNR 45.4  
Int time 353.908  
Amp 0.883  
Phase 140.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.003449  
MBD -0.003906  
Fringe rate (Hz) 0.012094  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

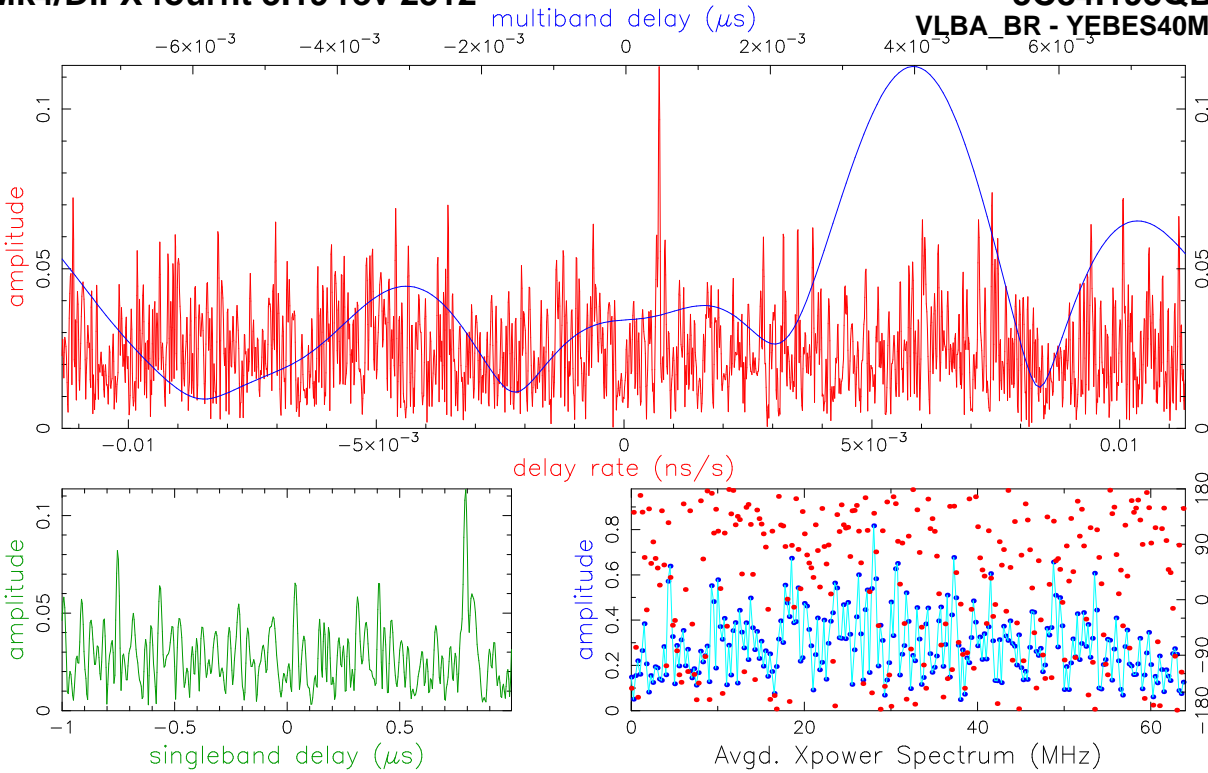
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122451  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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
	154.8	123.2	127.6	137.4	155.6	155.5	144.7	119.6	Phase	140.0
	0.9	1.0	0.7	0.9	0.9	0.8	1.0	0.8	Ampl.	0.9
	255.8	255.5	256.5	256.0	256.1	256.0	256.1	254.8	Sbd box	256.1
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.24462657845E+02		Apriori delay (usec)		-9.24458752321E+02		Resid mbdelay (usec)		-3.90552E-03	+/- 2.4E-05
Sband delay (usec)	-9.24462201321E+02		Apriori clock (usec)		1.0368242E+00		Resid sbdelay (usec)		-3.44900E-03	+/- 1.9E-04
Phase delay (usec)	-9.24458747807E+02		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		4.51482E-06	+/- 8.1E-08
Delay rate (us/s)	5.72913807246E-02		Apriori rate (us/s)		5.72912403211E-02		Resid rate (us/s)		1.40404E-07	+/- 4.0E-10
Total phase (deg)			Apriori accel (us/s/s)		1.40723178868E-05		Resid phase (deg)		140.0	+/- 2.5

ph/seg (deg) 65.7 6.1 Search (2048X32) 0.863 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 79.8 10.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.2 3.6 Inc. seg. avg. 1.447 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 11.7 6.2 Inc. frq. avg. 0.907 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 284.8 el 45.4 pa 55.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -422.750 1793.620 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/BY..193QBF Output file: /Exps/c201d/v1/1234/No0057/BY.W.49.193QBF

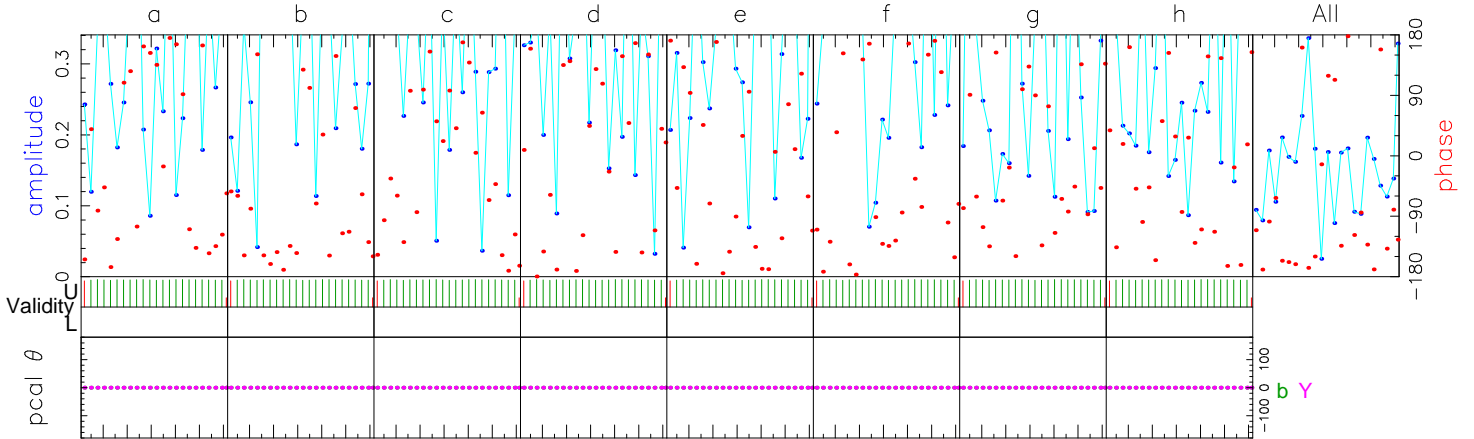


Fringe quality 0

SNR 5.8  
 Int time 348.973  
 Amp 0.114  
 Phase -152.5  
 PFD 8.1e-01  
 Delays (us)  
 SBD 0.792302  
 MBD 0.003939  
 Fringe rate (Hz)  
 0.060989  
 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  
 2020:204:122452  
 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

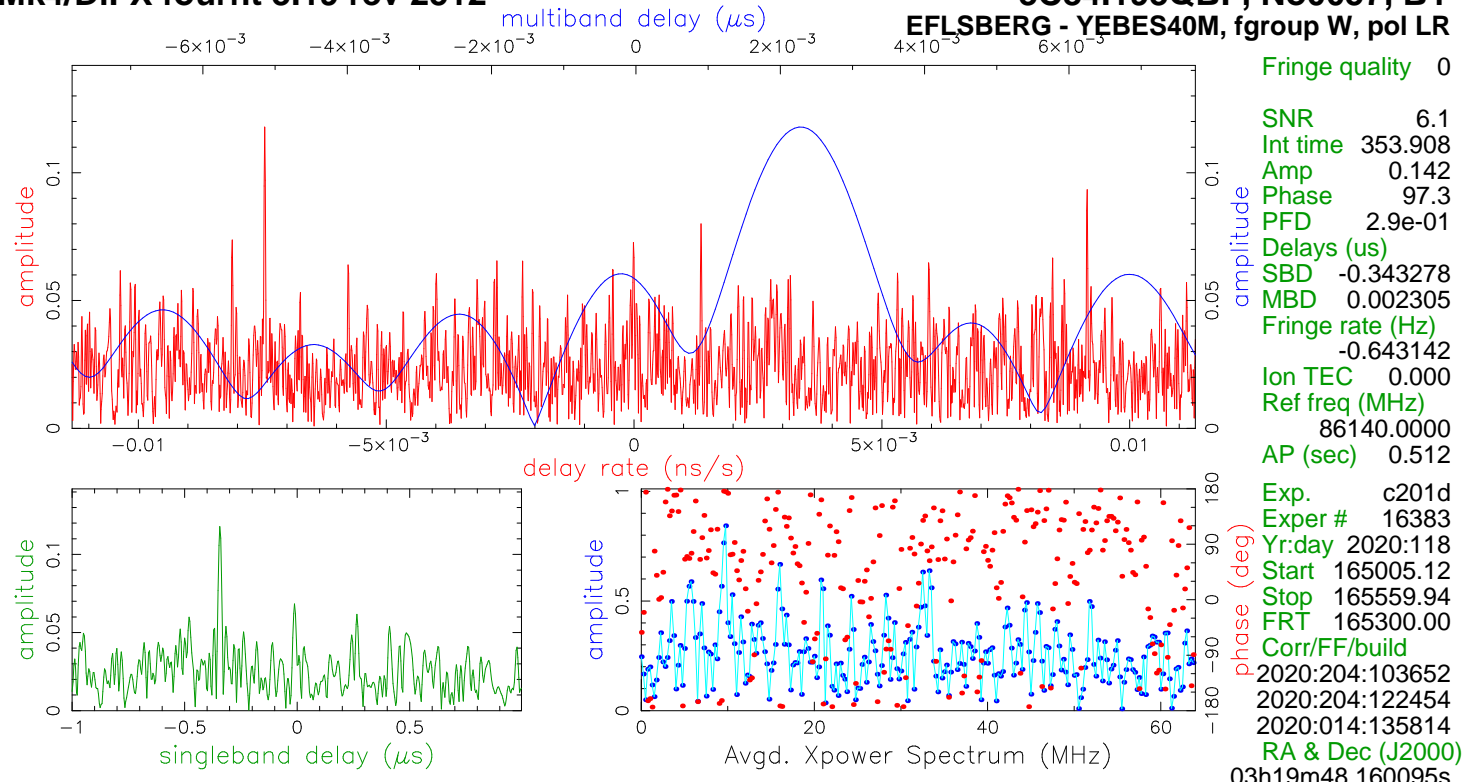


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.0	-150.1	-126.6	142.3	-152.8	-162.7	-104.1	-129.3	Phase	-152.5
	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	471.1	458.4	498.2	485.6	114.4	344.1	402.0	268.8	Sbd box	459.8
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.20229667682E+02		Apriori delay (usec)		-2.21014857163E+02		Resid mbdelay (usec)		3.93948E-03	+/- 1.9E-04
Sband delay (usec)	-2.20222554913E+02		Apriori clock (usec)		-1.3402857E+01		Resid sbdelay (usec)		7.92302E-01	+/- 1.5E-03
Phase delay (usec)	-2.21014862079E+02		Apriori clockrate (us/s)		-2.6200000E-07		Resid phdelay (usec)		-4.91640E-06	+/- 6.4E-07
Delay rate (us/s)	1.40851184697E+00		Apriori rate (us/s)		1.40851113895E+00		Resid rate (us/s)		7.08020E-07	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		8.21134373191E-06		Resid phase (deg)		-152.5	+/- 19.8

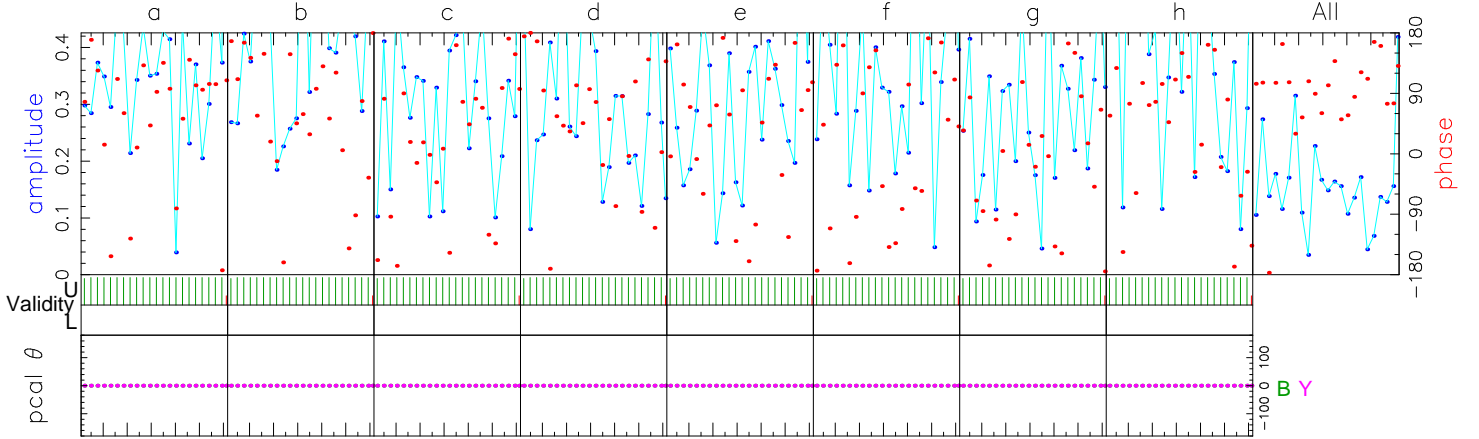
	RMS	Theor.	Amplitude	0.114 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.0	47.4	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	68.2	82.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.4	27.9	Inc. seg. avg.	0.114	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	52.5	48.8	Inc. frq. avg.	0.113	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 75.0 el 47.2 pa -59.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10774.698 1274.674 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bY..193QBF Output file: /Exps/c201d/v1/1234/No0057/bY.W.57.193QBF



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



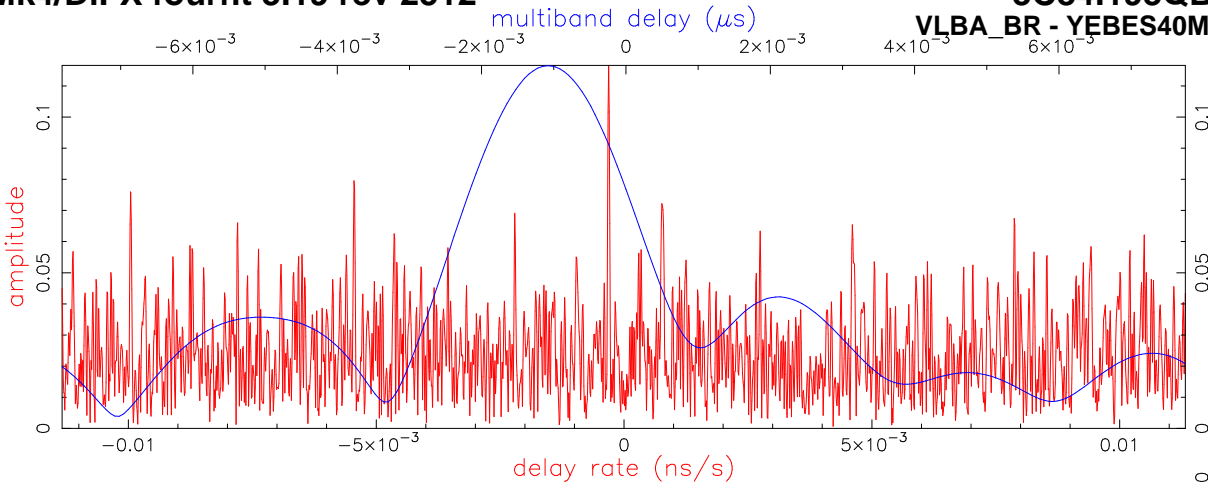
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
103.1	95.5	96.6	83.3	78.7	160.4	48.0	93.9		Phase	97.3
0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.2		Ampl.	0.1
170.2	195.9	33.4	276.9	105.0	455.7	255.9	170.8		Sbd box	169.1
U/L 693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		APs used	
B 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:Y 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	
Y 1000	1000	1000	1000	1000	1000	1000	1000			
B W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	

Group delay (usec)(sbd)	-9.24800196959E+02	Apriori delay (usec)	-9.24458752321E+02	Resid mbdelay (usec)	2.30536E-03	+/-	1.8E-04
Sband delay (usec)	-9.24802030571E+02	Apriori clock (usec)	1.0368242E+00	Resid sbdelay (usec)	-3.43278E-01	+/-	1.4E-03
Phase delay (usec)	-9.24458749182E+02	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	3.13886E-06	+/-	6.1E-07
Delay rate (us/s)	5.72837740843E-02	Apriori rate (us/s)	5.72912403211E-02	Resid rate (us/s)	-7.46624E-06	+/-	3.0E-09
Total phase (deg)	-235.6	Apriori accel (us/s/s)	1.40723178868E-05	Resid phase (deg)	97.3	+/-	18.9

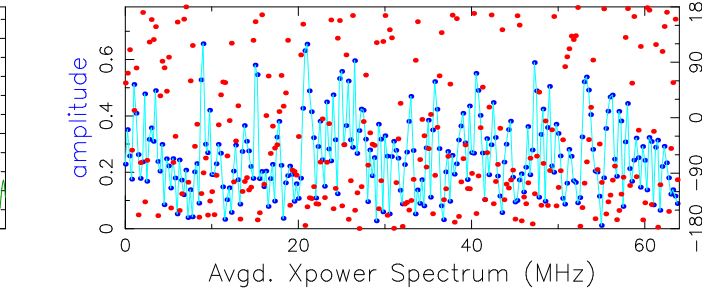
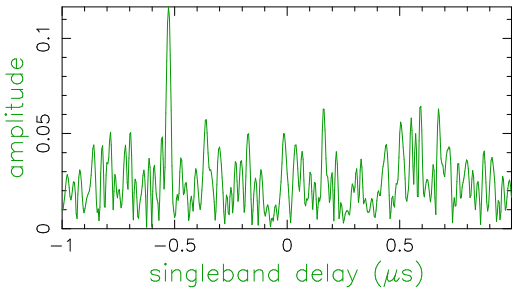
ph/seg (deg)	40.4	Theor.	45.3	Amplitude	0.142 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.9		79.0	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	34.1		26.7	Inc. seg. avg.	0.139	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	52.4		46.6	Inc. frq. avg.	0.138	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

B: az 284.8 el 45.4 pa 55.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -422.750 1793.620 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/BY..193QBF Output file: /Exps/c201d/v1/1234/No0057/BY.W.68.193QBF

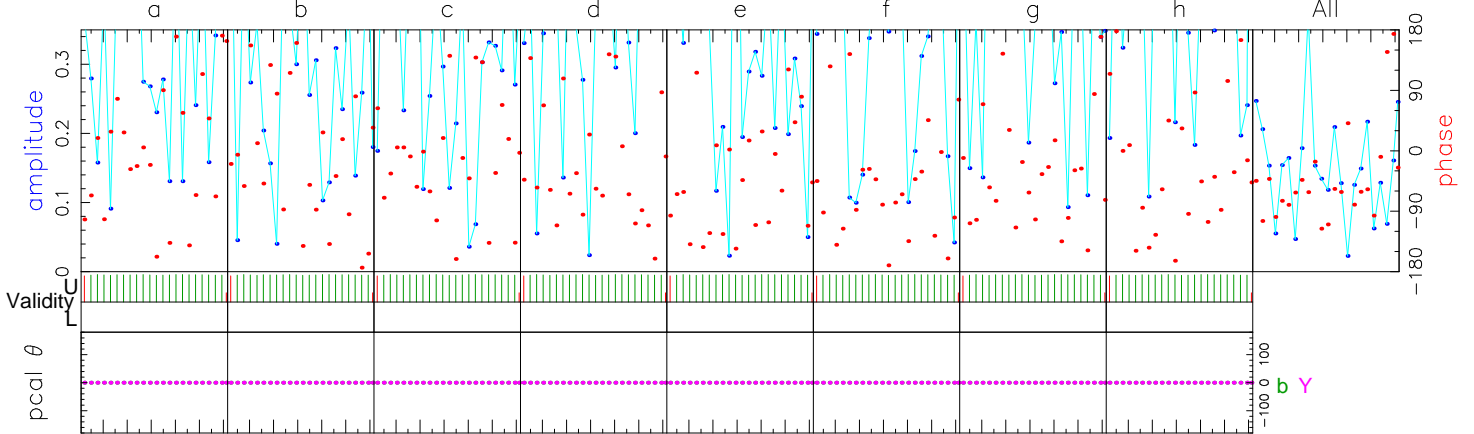


Fringe quality 0  
SNR 6.0  
Int time 348.973  
Amp 0.117  
Phase -66.0  
PFD 4.9e-01  
Delays (us)  
SBD -0.526959  
MBD -0.001066  
Fringe rate (Hz)  
-0.026688  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122456  
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

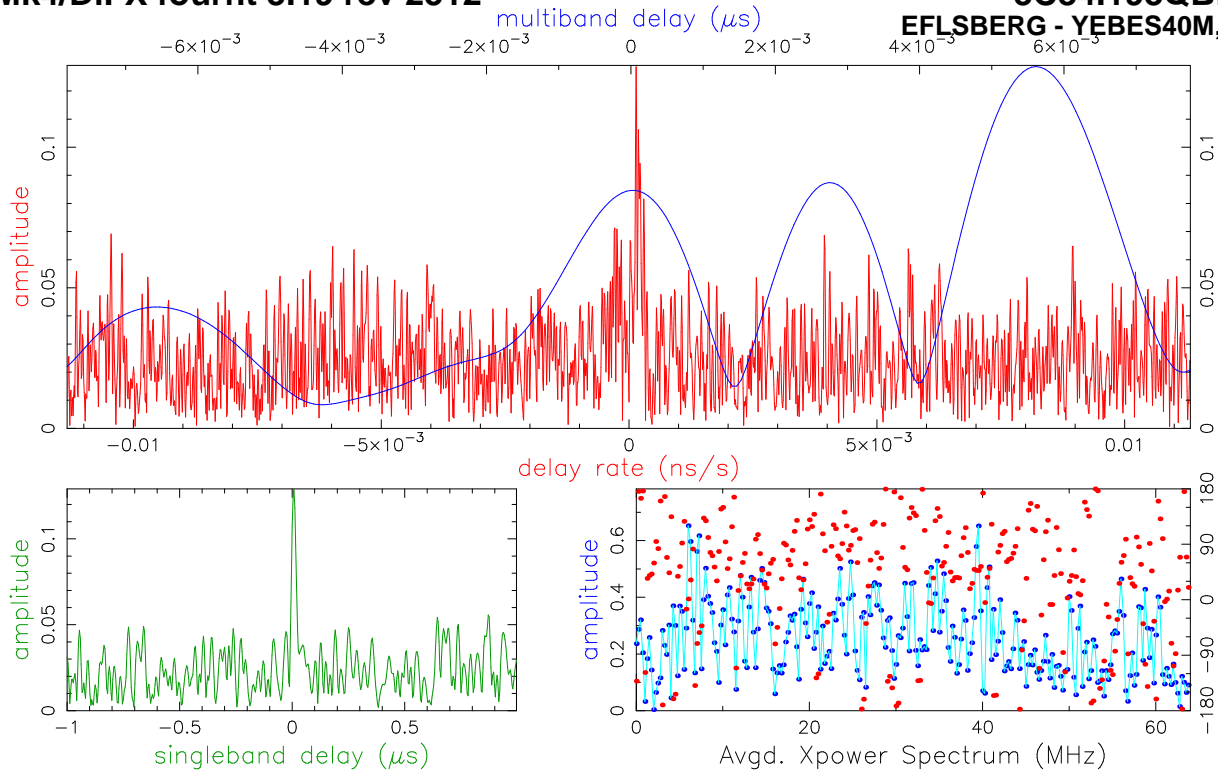


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.21547172952E+02	Apriori delay (usec)	-2.21014857163E+02	Resid mbdelay (usec)	-1.06579E-03	+/-	1.8E-04
Sband delay (usec)	-2.21541815663E+02	Apriori clock (usec)	-1.3402857E+01	Resid sbdelay (usec)	-5.26959E-01	+/-	1.4E-03
Phase delay (usec)	-2.21014859291E+02	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	-2.12812E-06	+/-	6.2E-07
Delay rate (us/s)	1.40851082912E+00	Apriori rate (us/s)	1.40851113895E+00	Resid rate (us/s)	-3.09826E-07	+/-	3.0E-09
Total phase (deg)	-352.6	Apriori accel (us/s/s)	8.21134373191E-06	Resid phase (deg)	-66.0	+/-	19.2

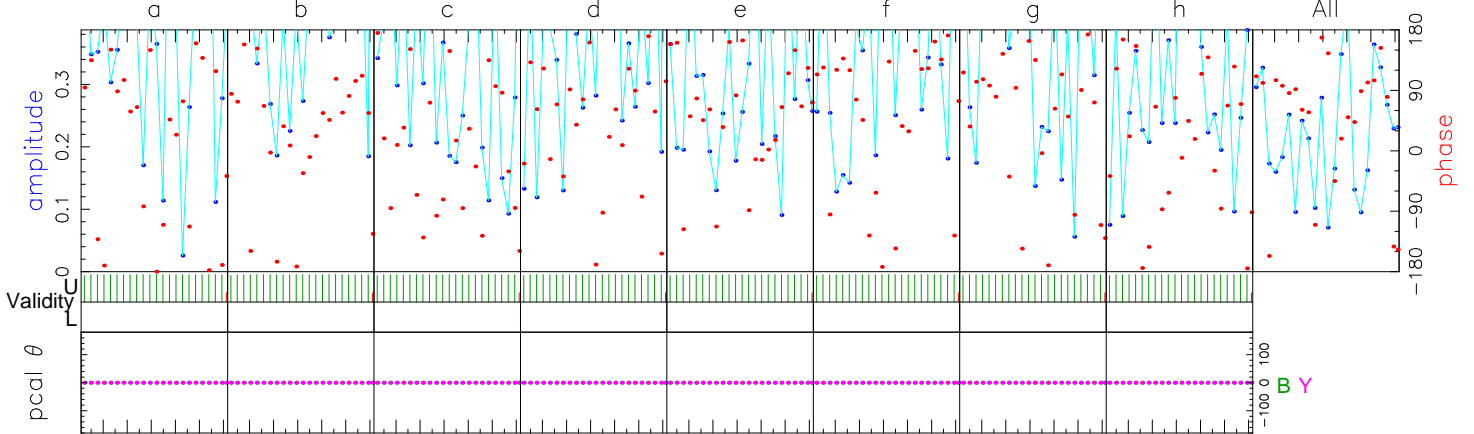
ph/seg (deg)	53.4	Theor.	46.1	Amplitude	0.117 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.3		80.5	Search (2048X32)	0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	24.4		27.2	Inc. seg. avg.	0.113	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.0		47.5	Inc. frq. avg.	0.113	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 75.0 el 47.2 pa -59.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10774.698 1274.674 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/bY..193QBF Output file: /Exps/c201d/v1/1234/No0057/bY.W.74.193QBF



Fringe quality 0  
SNR 6.6  
Int time 353.908  
Amp 0.129  
Phase 95.7  
PFD 8.8e-03  
Delays (us)  
SBD 0.006820  
MBD 0.005586  
Fringe rate (Hz) 0.012172  
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  
2020:204:122458  
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

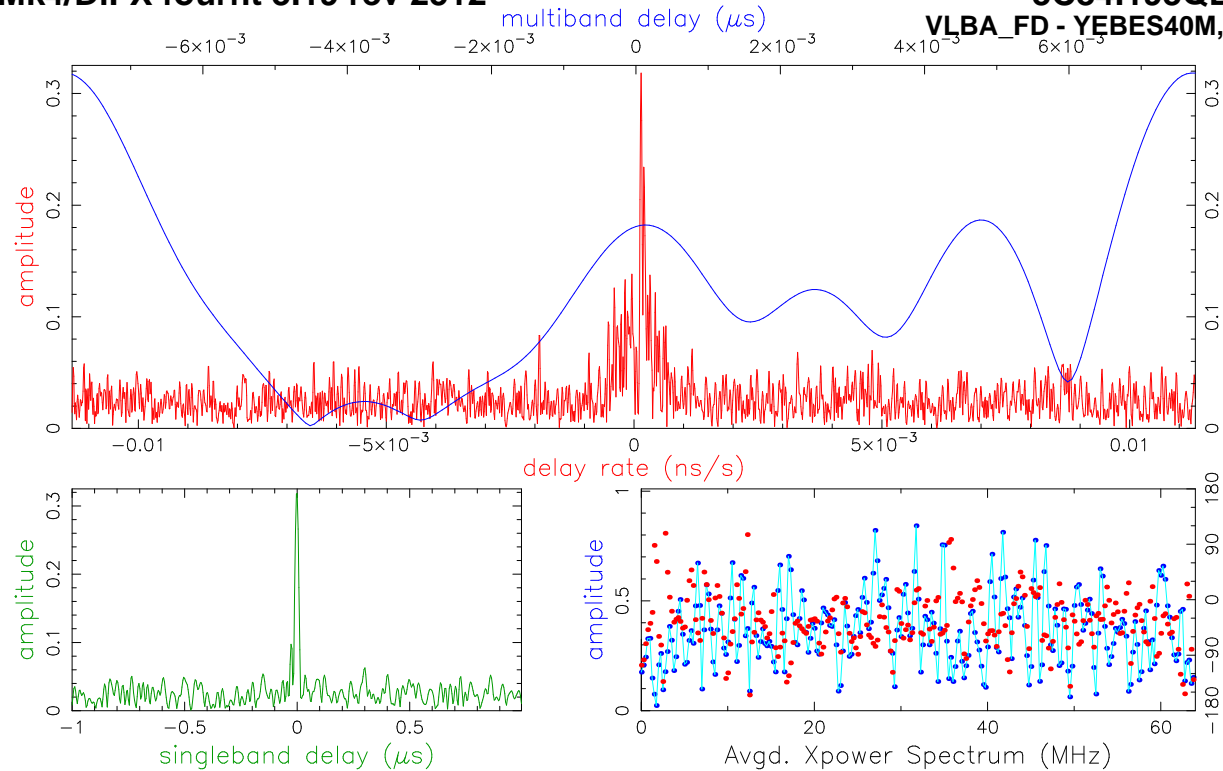


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	124.9	80.8	-19.4	79.8	72.8	139.5	115.6	51.5	Phase	95.7
	0.2	0.3	0.1	0.2	0.1	0.2	0.2	0.1	Ampl.	0.1
	257.5	259.3	88.4	231.7	71.7	259.9	256.8	431.5	Sbd box	258.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	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)	-9.2445316688E+02		Apriori delay (usec)		-9.24458752321E+02		Resid mbdelay (usec)		5.58563E-03	+/- 1.6E-04
Sband delay (usec)	-9.24451932321E+02		Apriori clock (usec)		1.0368242E+00		Resid sbdelay (usec)		6.82000E-03	+/- 1.3E-03
Phase delay (usec)	-9.24458749234E+02		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		3.08694E-06	+/- 5.6E-07
Delay rate (us/s)	5.72913816216E-02		Apriori rate (us/s)		5.72912403211E-02		Resid rate (us/s)		1.41301E-07	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.40723178868E-05		Resid phase (deg)		95.7	+/- 17.3

	RMS	Theor.	Amplitude	0.129 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	67.0	41.4	Search (2048X32)	0.124	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	105.6	72.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	56.8	24.4	Inc. seg. avg.	0.178	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.7	42.6	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 284.8 el 45.4 pa 55.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -422.750 1793.620 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/BY..193QBF Output file: /Exps/c201d/v1/1234/No0057/BY.W.81.193QBF



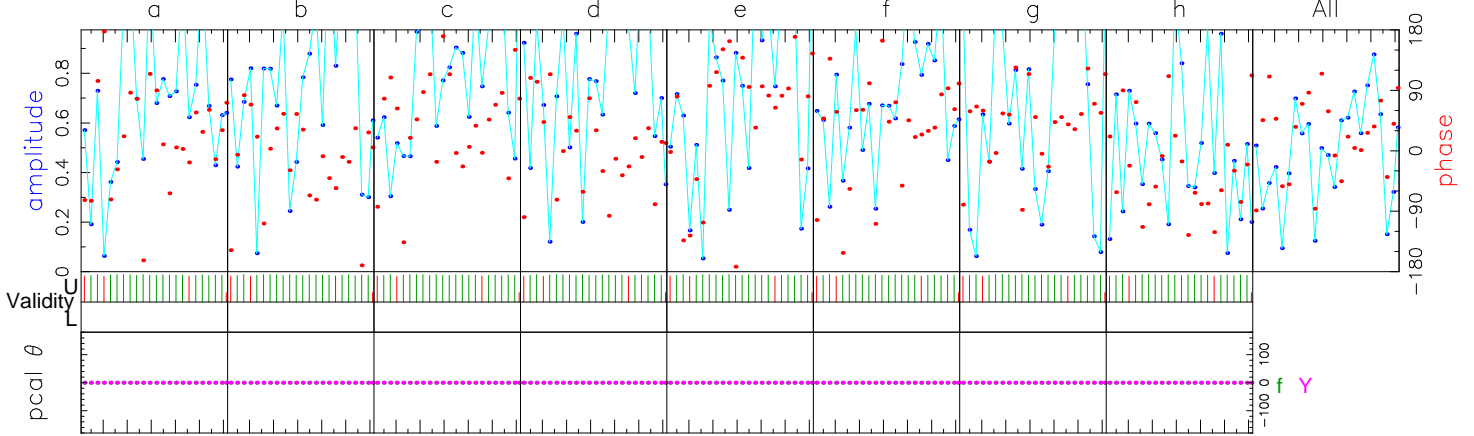


Fringe quality 8

SNR 16.5  
 Int time 345.694  
 Amp 0.325  
 Phase 32.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001908  
 MBD -0.007927  
 Fringe rate (Hz)  
 0.012841  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

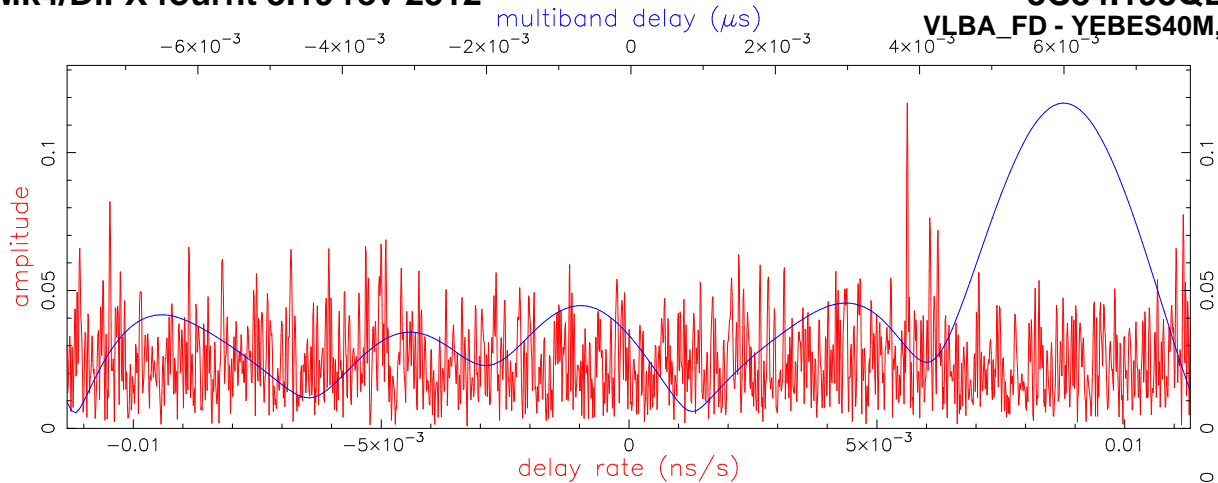
Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122503  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



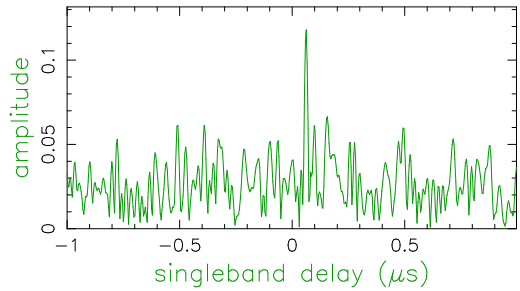
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	PC freqs
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	PC phase
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	Mani PC
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	Chan ids
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	Tracks
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	Tracks
Group delay (usec)(sbd)		9.67675829564E+02		Apriori delay (usec)	9.67683756712E+02		Resid mbdelay (usec)	-7.92715E-03	+/-	6.6E-05
Sband delay (usec)		9.67681848462E+02		Apriori clock (usec)	-8.0703249E+00		Resid sbdelay (usec)	-1.90825E-03	+/-	5.2E-04
Phase delay (usec)		9.67683757745E+02		Apriori clockrate (us/s)	-1.1100000E-07		Resid phdelay (usec)	1.03256E-06	+/-	2.2E-07
Delay rate (us/s)		1.43745384393E+00		Apriori rate (us/s)	1.43745369486E+00		Resid rate (us/s)	1.49070E-07	+/-	1.1E-09
Total phase (deg)			321.2	Apriori accel (us/s/s)	-1.56786378409E-05		Resid phase (deg)	32.0	+/-	6.9

ph/seg (deg) 59.4 16.6 Search (2048X32) 0.307 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 79.4 29.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.7 9.8 Inc. seg. avg. 0.462 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 30.1 17.1 Inc. frq. avg. 0.408 Data rate (Mbit/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 Y: az 290.3 el 49.0 pa 72.6 u, v (fr/asec) -11022.895 -1946.244 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fY..193QBF Output file: /Exps/c201d/v1/1234/No0057/fY.W.101.193QBF

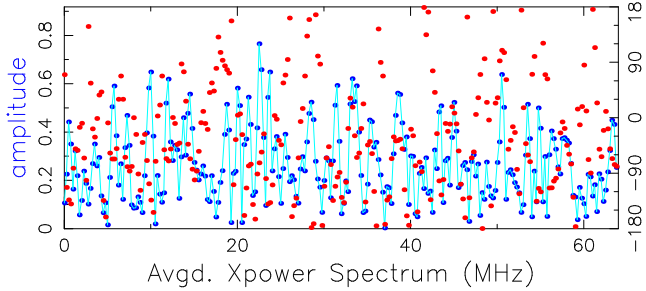


Fringe quality 0

SNR 6.0  
 Int time 345.693  
 Amp 0.132  
 Phase -136.1  
 PFD 3.4e-01  
 Delays (us)  
 SBD 0.061577  
 MBD 0.005973  
 Fringe rate (Hz)  
 0.484316  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

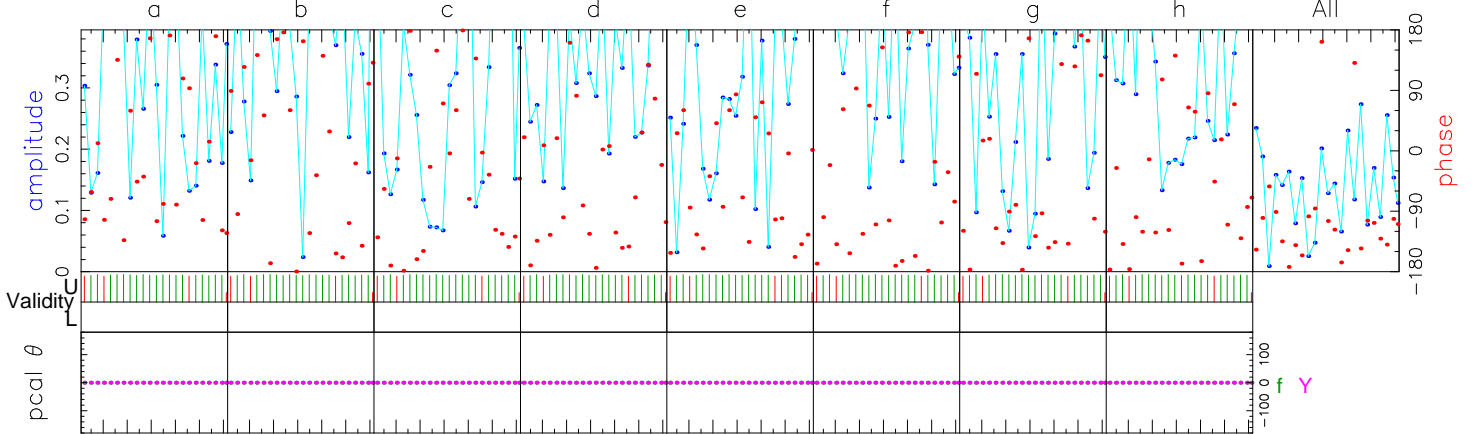


delay rate (ns/s)



Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 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



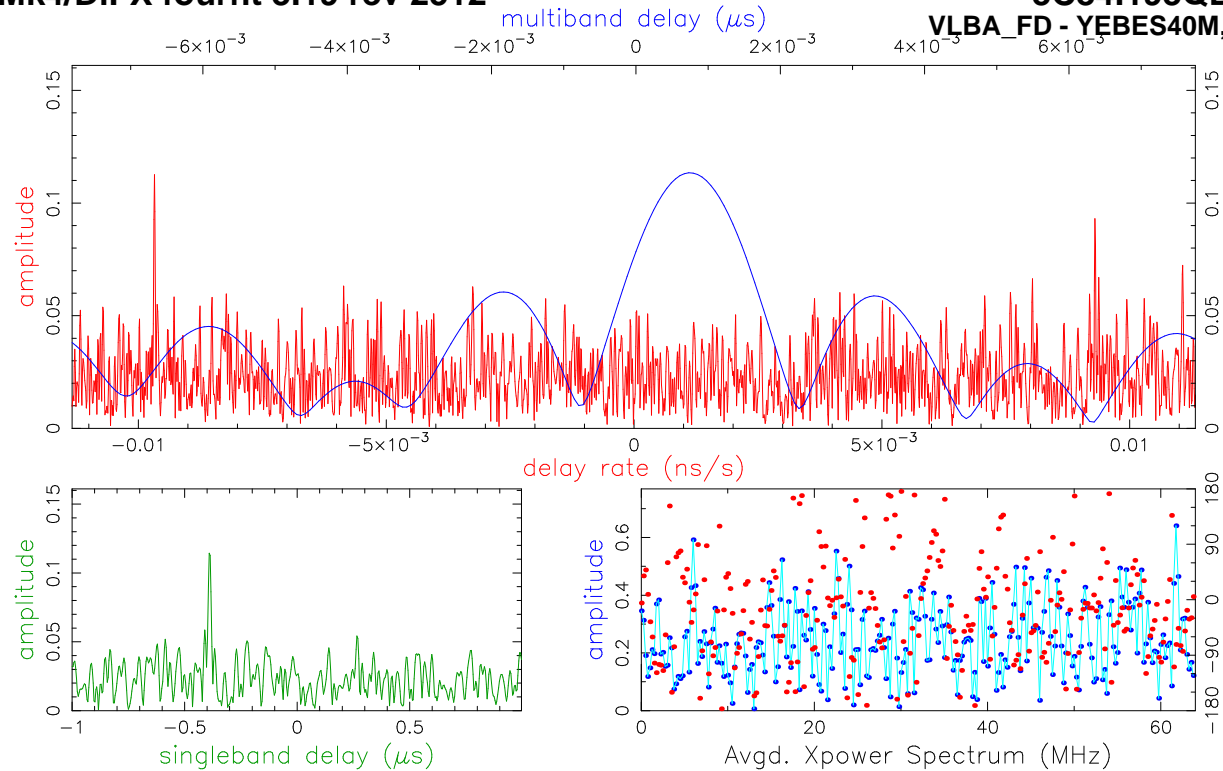
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-121.1	168.4	-125.2	-98.6	-108.4	-147.4	-155.8	-118.6	Phase	-136.1
	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	409.5	16.0	95.3	413.1	303.6	272.9	259.4	383.7	Sbd box	272.8
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	9.67752230172E+02	Apriori delay (usec)	9.67683756712E+02	Resid mbdelay (usec)	5.97346E-03	+/-	1.8E-04
Sband delay (usec)	9.67745333462E+02	Apriori clock (usec)	-8.0703249E+00	Resid sbdelay (usec)	6.15768E-02	+/-	1.4E-03
Phase delay (usec)	9.67683752323E+02	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	-4.38913E-06	+/-	6.1E-07
Delay rate (us/s)	1.43745931730E+00	Apriori rate (us/s)	1.43745369486E+00	Resid rate (us/s)	5.62243E-06	+/-	3.0E-09
Total phase (deg)	153.0	Apriori accel (us/s/s)	-1.56786378409E-05	Resid phase (deg)	-136.1	+/-	19.0

ph/seg (deg)	RMS 39.4	Theor. 45.5	Amplitude Search (2048X32)	0.132 +/- 0.022	0.116	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	62.3	79.4	Interp.	0.000	0.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	32.7	26.8	Inc. seg. avg.	0.118	0.118	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	36.4	46.9	Inc. frq. avg.	0.131	0.131	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

f: az 60.3 el 52.1 pa -91.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11022.895 -1946.244 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fY..193QBF Output file: /Exps/c201d/v1/1234/No0057/fY.W.118.193QBF

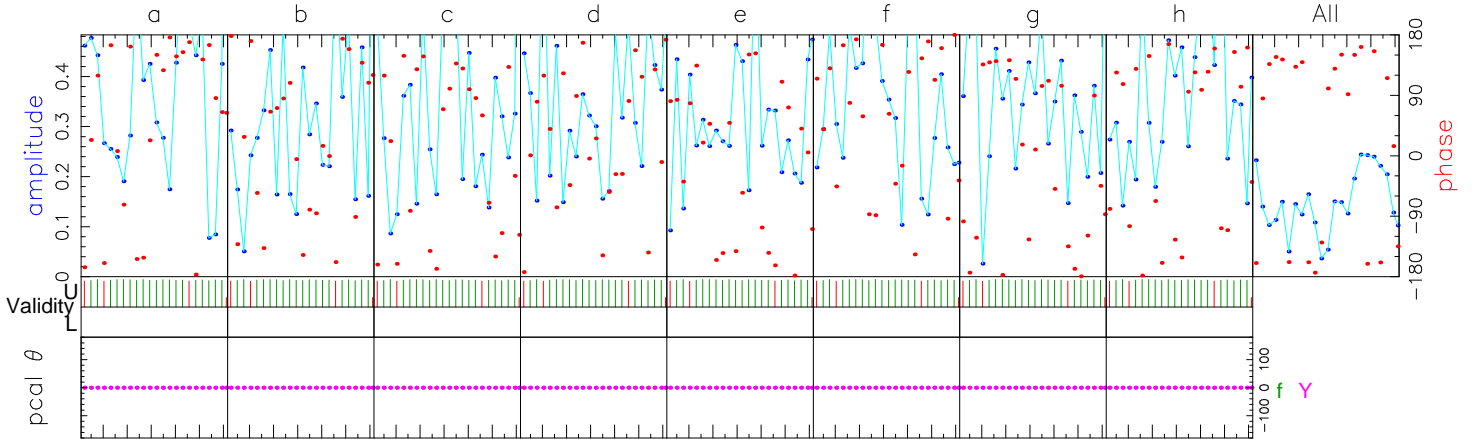


Fringe quality 0

SNR 5.9  
 Int time 345.694  
 Amp 0.161  
 Phase 155.8  
 PFD 5.1e-01  
 Delays (us)  
 SBD -0.388930  
 MBD 0.000638  
 Fringe rate (Hz)  
 -0.834446  
 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  
 2020:204:122510  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

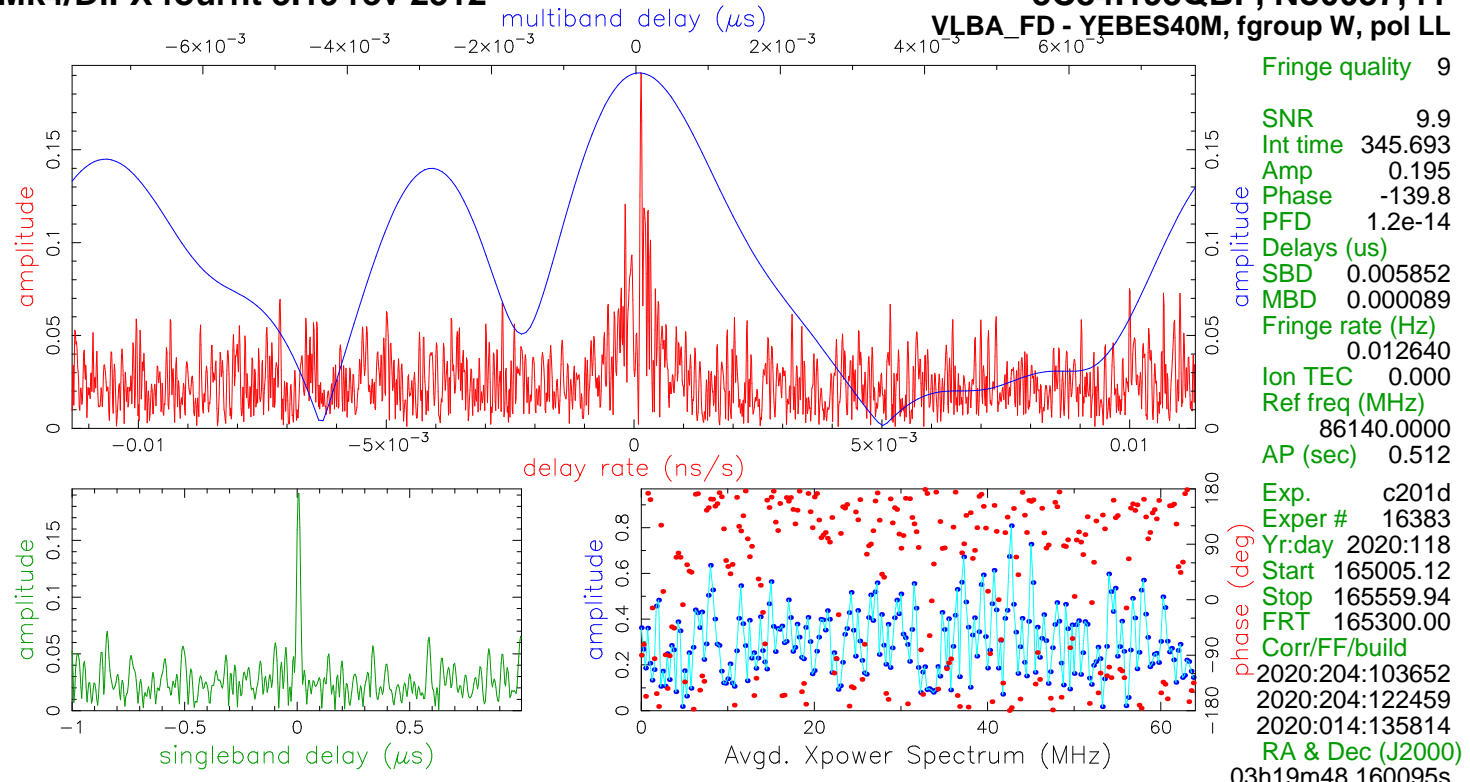
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



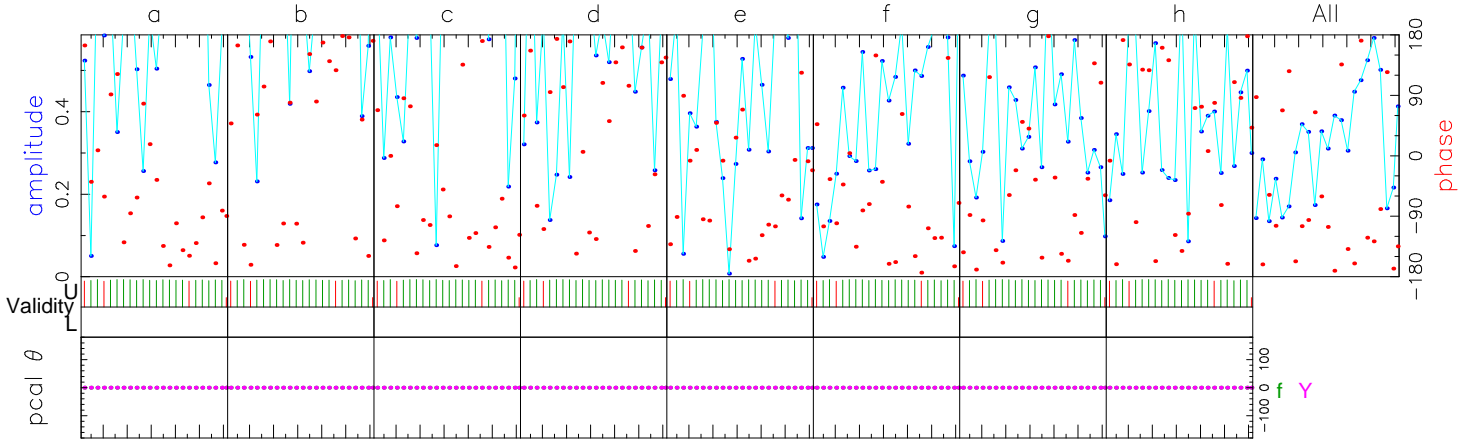
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		9.67293769794E+02			9.67683756712E+02				6.38082E-04	+/- 1.8E-04
Sband delay (usec)		9.67294826462E+02			-8.0703249E+00				-3.88930E-01	+/- 1.4E-03
Phase delay (usec)		9.67683761736E+02			-1.1100000E-07				5.02351E-06	+/- 6.2E-07
Delay rate (us/s)		1.43744400777E+00			1.43745369486E+00				-9.68709E-06	+/- 3.0E-09
Total phase (deg)			84.9						155.8	+/- 19.3
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
RMS	49.3	46.2			0.161 +/- 0.027					
Theor.	46.2									
Amplitude										
Search (2048X32)					0.113					
Interp.					0.000					
Inc. seg. avg.					0.156					
Inc. frq. avg.					0.146					
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					
PC period (AP's)					5, 5					
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

f: az 60.3 el 52.1 pa -91.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11022.895 -1946.244 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fY...193QBF Output file: /Exps/c201d/v1/1234/No0057/fY.W.136.193QBF



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



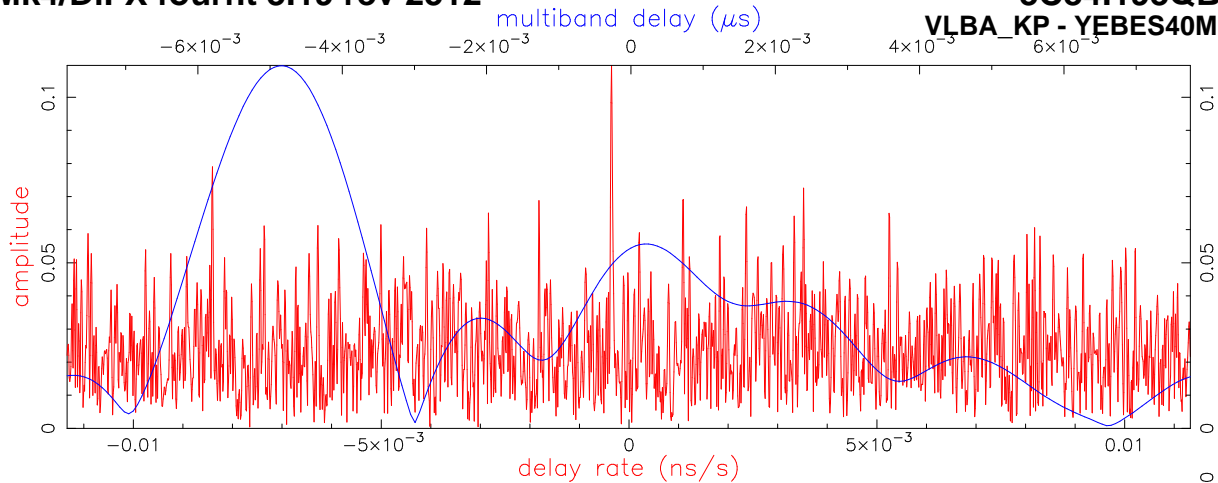
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.2	178.6	-117.9	164.8	-67.1	-116.4	-121.1	157.6	Phase	-139.8
	0.4	0.4	0.3	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2
	258.4	258.3	258.4	258.3	258.7	256.8	184.2	255.2	Sbd box	258.5
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	9.67683846001E+02	Apriori delay (usec)	9.67683756712E+02	Resid mbdelay (usec)	8.92891E-05	+/-	1.1E-04
Sband delay (usec)	9.67689609212E+02	Apriori clock (usec)	-8.0703249E+00	Resid sbdelay (usec)	5.85250E-03	+/-	8.7E-04
Phase delay (usec)	9.67683752205E+02	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	-4.50717E-06	+/-	3.7E-07
Delay rate (us/s)	1.43745384160E+00	Apriori rate (us/s)	1.43745369486E+00	Resid rate (us/s)	1.46737E-07	+/-	1.8E-09
Total phase (deg)	149.4	Apriori accel (us/s/s)	-1.56786378409E-05	Resid phase (deg)	-139.8	+/-	11.5

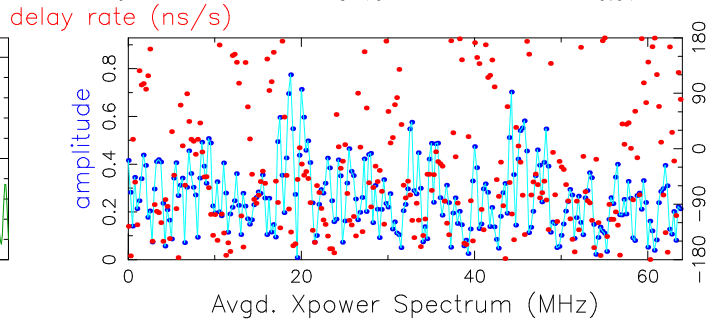
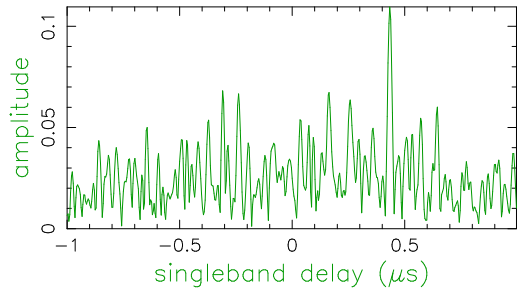
ph/seg (deg)	RMS 72.9	Theor. 27.7	Amplitude Search (2048X32)	0.195 +/- 0.020	0.190	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.9	27.7	Interp.	0.000	0.190	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	91.5	48.3	Inc. seg. avg.	0.284	0.284	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	51.9	16.3	Inc. frq. avg.	0.249	0.249	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
	60.5	28.5								

f: az 60.3 el 52.1 pa -91.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11022.895 -1946.244 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/fY..193QBF Output file: /Exps/c201d/v1/1234/No0057/fY.W.88.193QBF

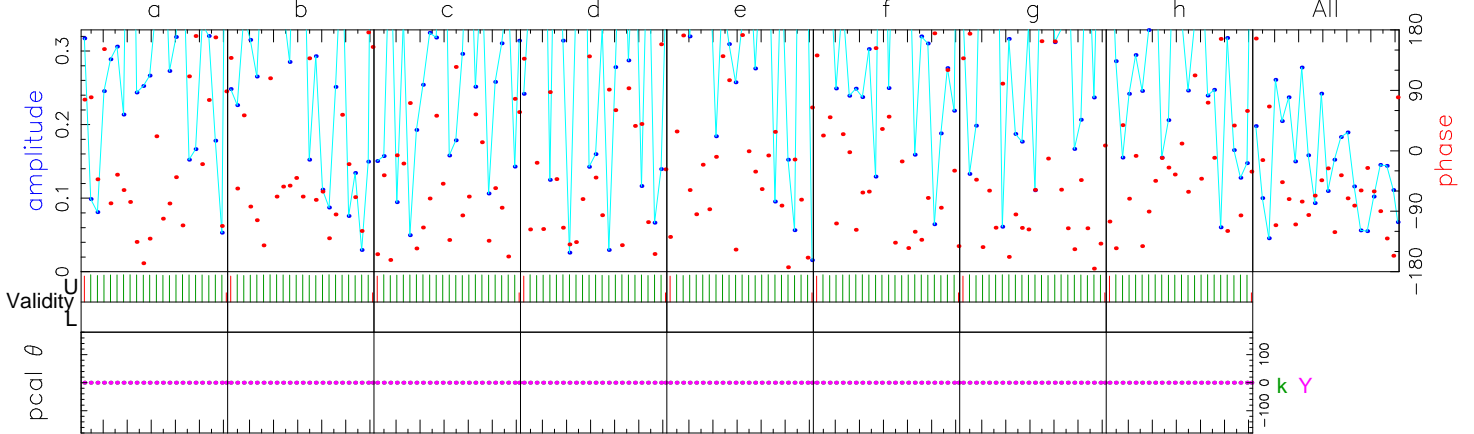


Fringe quality 0  
SNR 5.6  
Int time 347.171  
Amp 0.110  
Phase -79.3  
PFD 1.0e+00  
Delays (us)  
SBD 0.433894  
MBD -0.004833  
Fringe rate (Hz)  
-0.030706  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



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

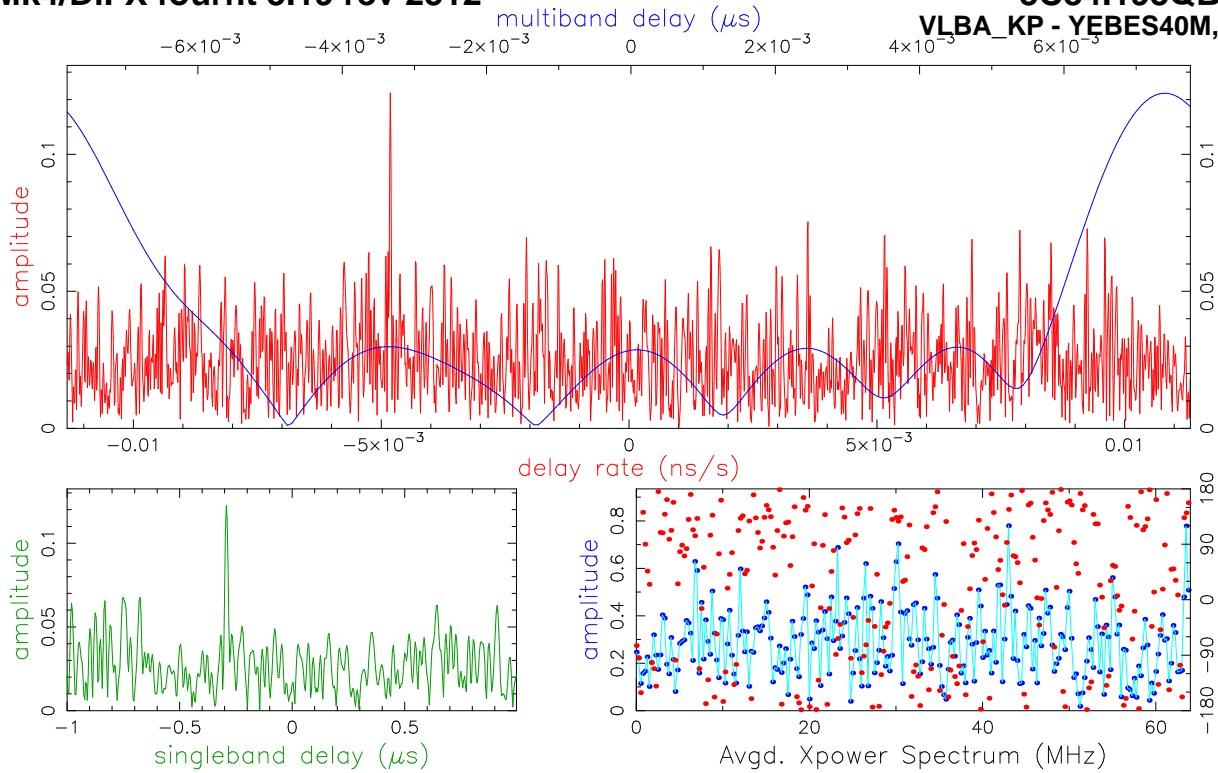


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-81.0	-72.6	-69.6	-91.5	-75.0	-37.1	-120.6	-46.1	Phase	-79.3
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	332.9	472.8	61.9	444.7	261.1	376.6	367.8	58.7	Sbd box	368.1
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	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	

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	Theor.	49.2	Amplitude	0.110 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.4		85.9	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	28.6		29.0	Inc. seg. avg.	0.110	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.5		50.7	Inc. frq. avg.	0.107	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 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

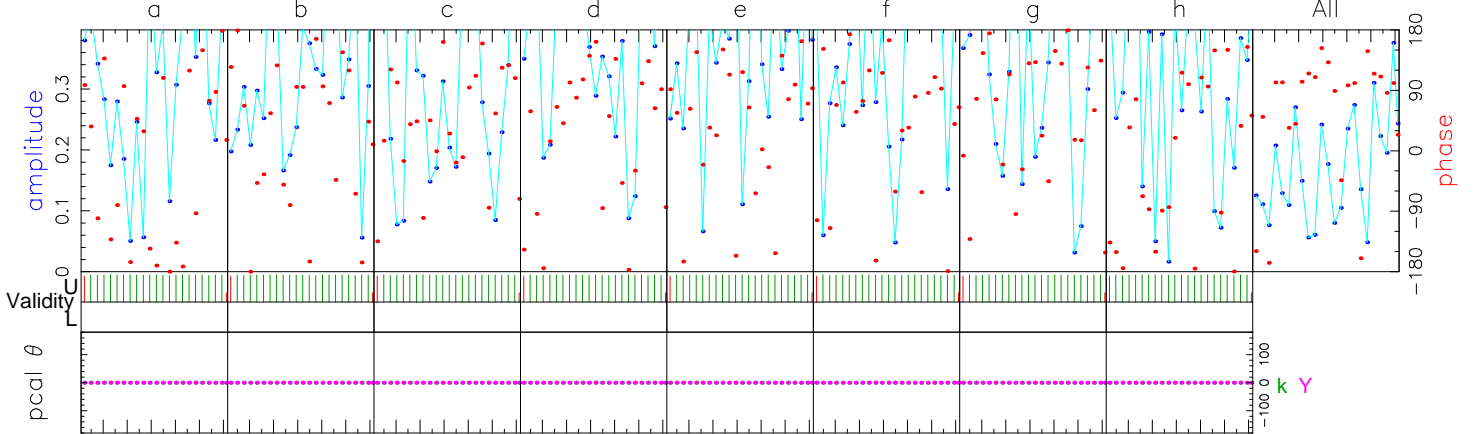


Fringe quality 0

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

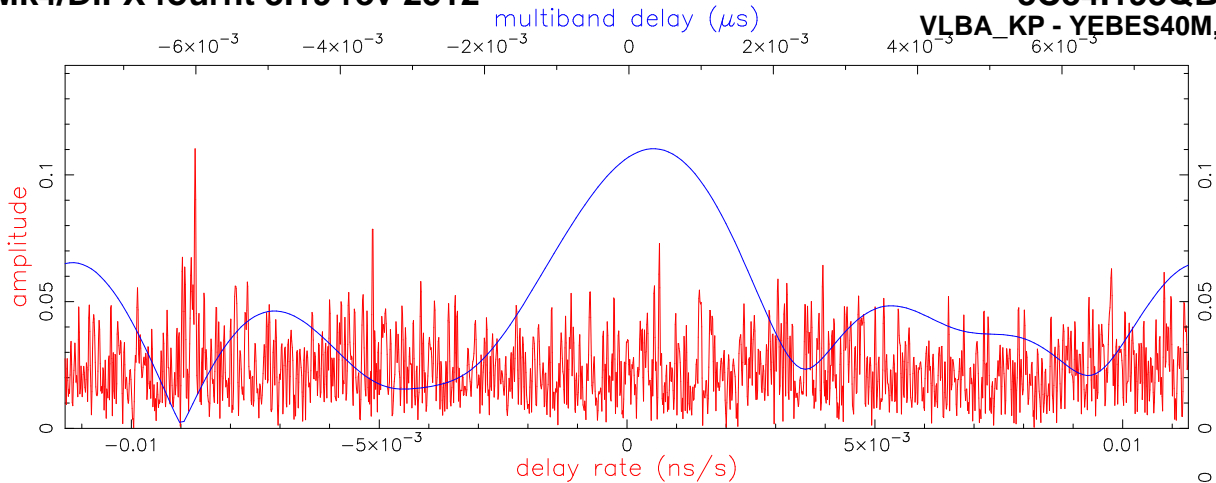
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122509  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



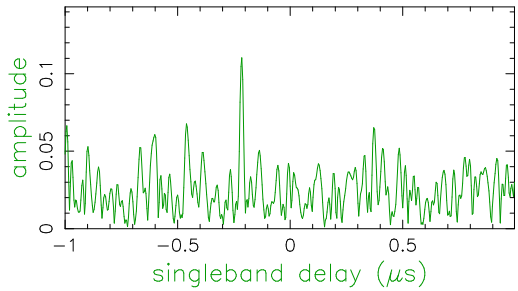
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
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)					-2.50849185842E+02					
Apriori clock (usec)					-1.2328761E+01					
Apriori clockrate (us/s)					-2.1460000E-07					
Apriori rate (us/s)					1.51477338193E+00					
Apriori accel (us/s/s)					-7.74595190274E-06					
Resid mbdelay (usec)									-8.22622E-03	+/- 1.7E-04
Resid sbdelay (usec)									-2.92199E-01	+/- 1.4E-03
Resid phdelay (usec)									3.34337E-06	+/- 5.9E-07
Resid rate (us/s)									-4.82422E-06	+/- 2.9E-09
Resid phase (deg)									103.7	+/- 18.3

ph/seg (deg) 55.9 43.9 Search (2048X32) 0.119 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.9 76.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.1 25.9 Inc. seg. avg. 0.141 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 26.2 45.2 Inc. frq. avg. 0.131 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 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/KY..193QBF Output file: /Exps/c201d/v1/1234/No0057/kY.W.132.193QBF simultaneous interpolator

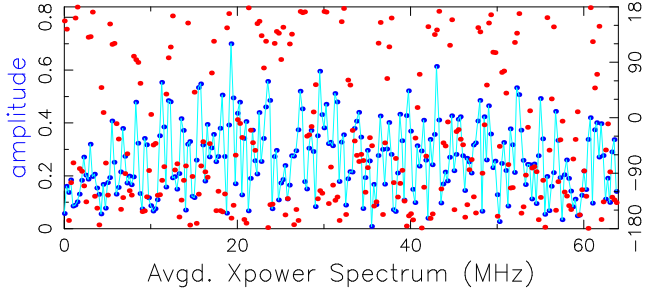


Fringe quality 0

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

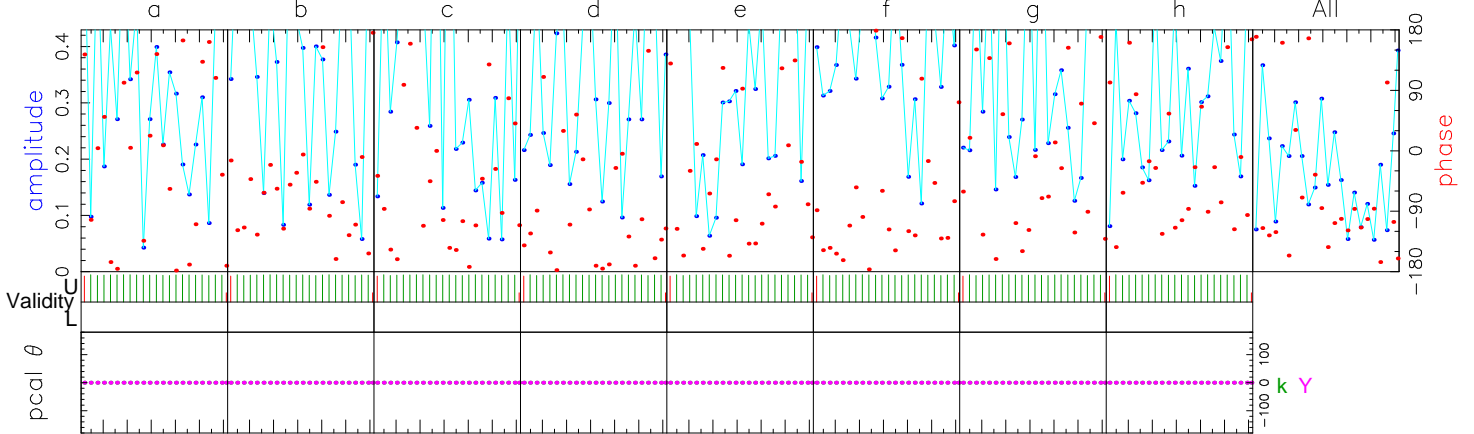


delay rate (ns/s)



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

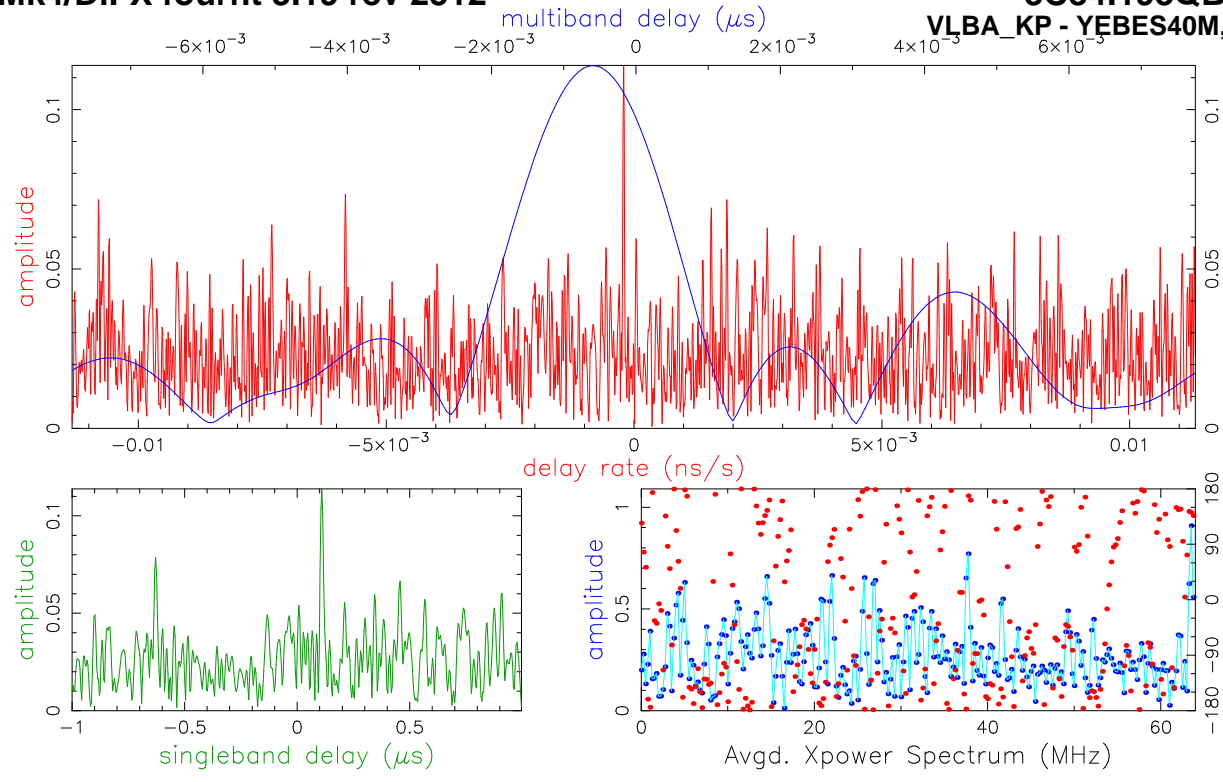


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	124.0	-83.9	-108.2	-132.0	-136.1	-124.2	-125.7	-91.9	Phase	-117.6
	0.1	0.3	0.1	0.2	0.2	0.3	0.1	0.1	Ampl.	0.2
	27.8	202.4	277.1	402.0	3.3	201.6	412.6	128.8	Sbd box	201.8
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	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

	RMS	Theor.	Amplitude	0.143 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	59.0	48.7	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	100.2	85.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	52.5	28.7	Inc. seg. avg.	0.168	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	64.4	50.1	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

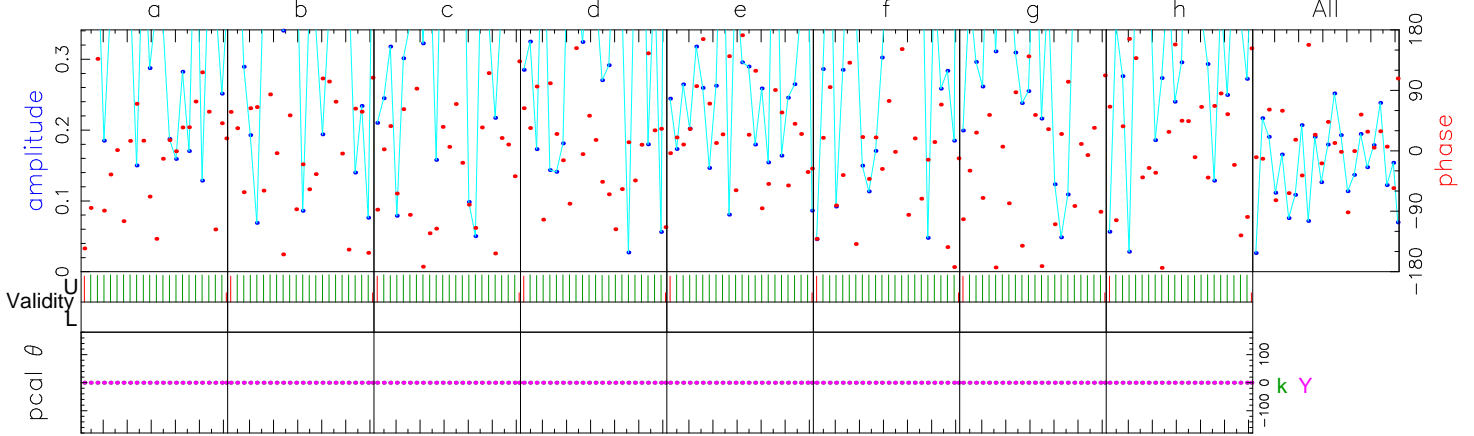
k: az 61.4 el 47.0 pa -85.5 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11605.287 -1258.780 simultaneous interpolator

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"

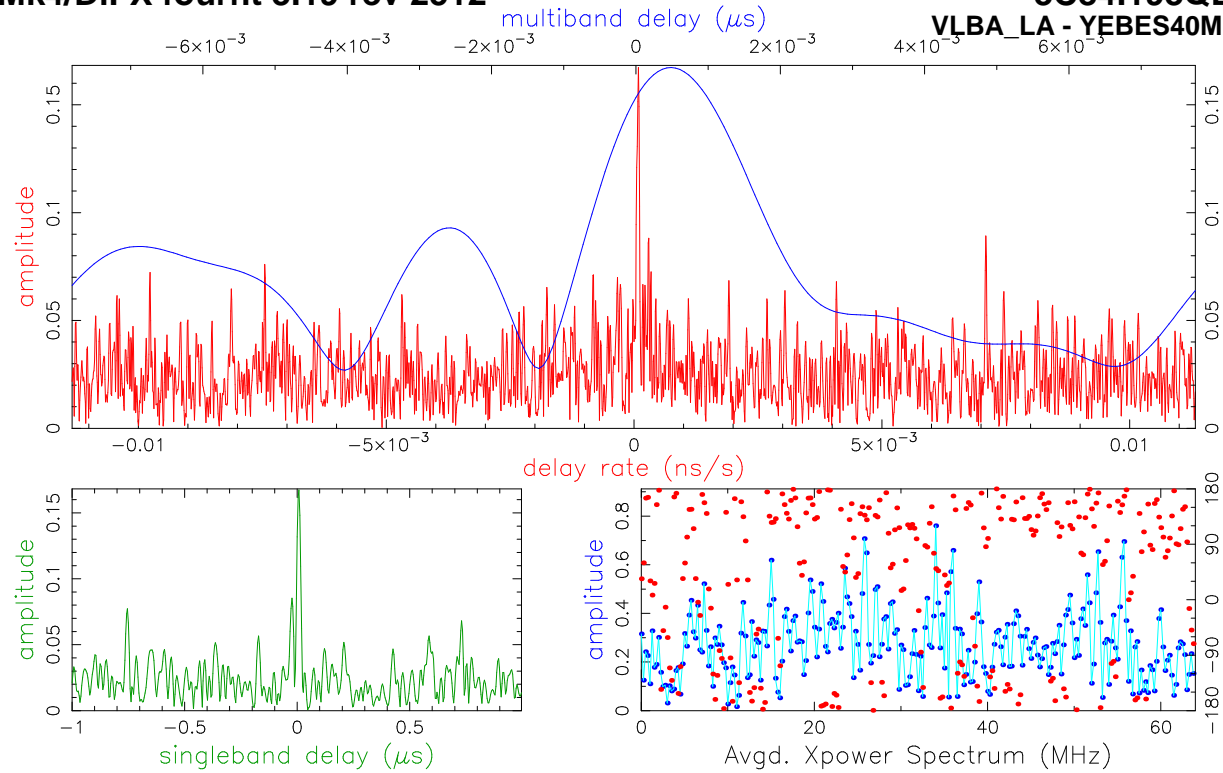
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	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

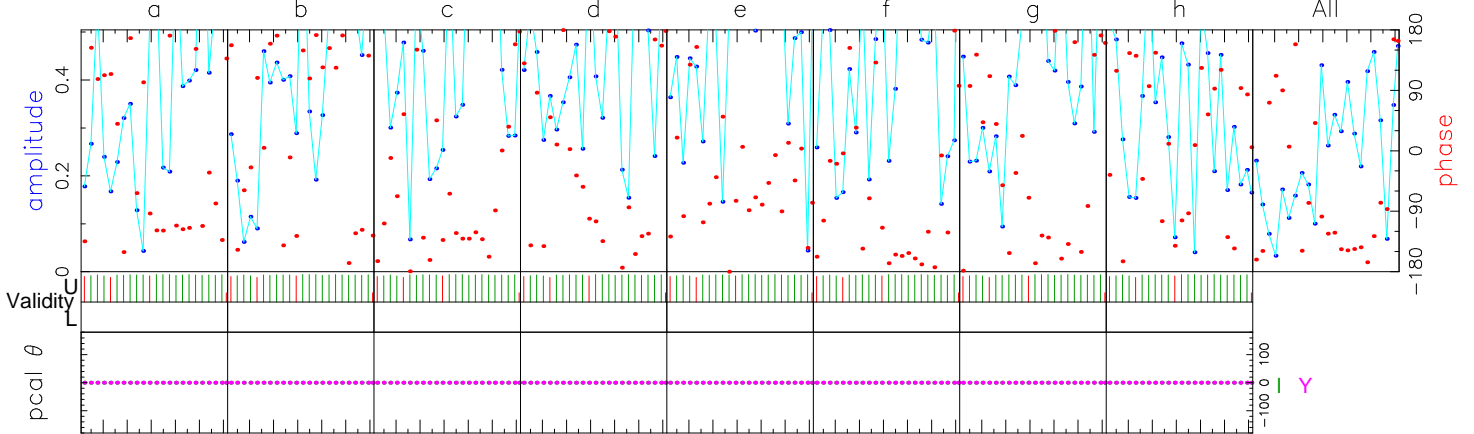
ph/seg (deg) 54.0 47.4 Search (2048X32) 0.112 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 59.9 82.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 17.5 27.9 Inc. seg. avg. 0.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 18.3 48.8 Inc. frq. avg. 0.106 Sample rate(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





Fringe quality 9  
SNR 8.6  
Int time 345.581  
Amp 0.168  
Phase -141.3  
PFD 4.4e-09  
Delays (us)  
SBD 0.006750  
MBD 0.000483  
Fringe rate (Hz) 0.007524  
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

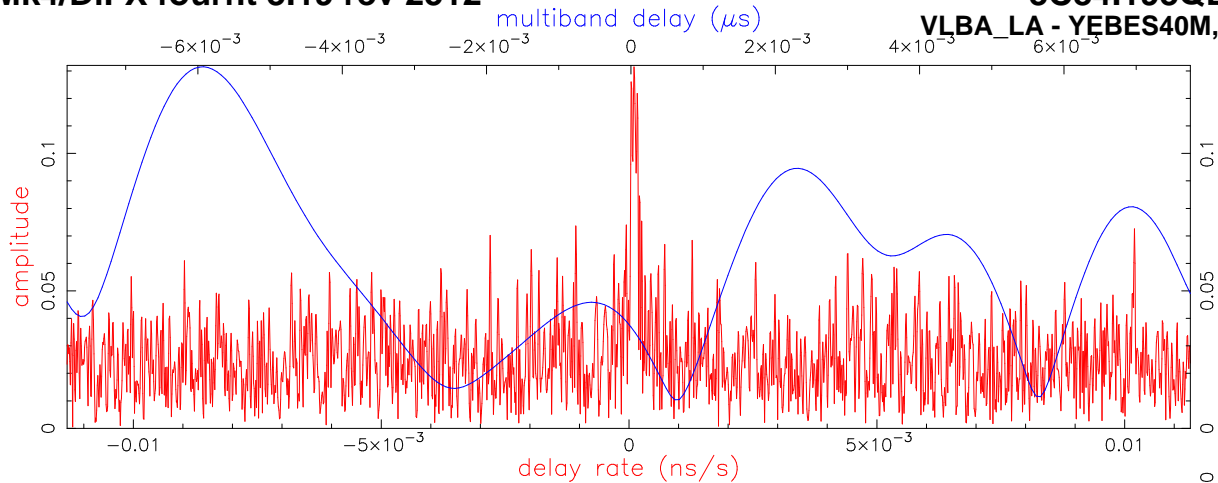


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-135.1	172.2	-123.8	-150.3	-60.1	-151.2	-153.7	133.1	Phase	-141.3
	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.1	Ampl.	0.2
	259.0	258.3	258.0	258.5	258.4	258.6	257.4	106.0	Sbd box	258.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.09119433965E+03	Apriori delay (usec)	1.09119385668E+03	Resid mbdelay (usec)	4.82966E-04	+/-	1.3E-04
Sband delay (usec)	1.09120060618E+03	Apriori clock (usec)	-1.5718672E+01	Resid sbdelay (usec)	6.74950E-03	+/-	1.0E-03
Phase delay (usec)	1.09119385212E+03	Apriori clockrate (us/s)	-3.7100000E-07	Resid phdelay (usec)	-4.55516E-06	+/-	4.3E-07
Delay rate (us/s)	1.42374502681E+00	Apriori rate (us/s)	1.42374493946E+00	Resid rate (us/s)	8.73411E-08	+/-	2.1E-09
Total phase (deg)	151.9	Apriori accel (us/s/s)	-1.07588907563E-05	Resid phase (deg)	-141.3	+/-	13.4

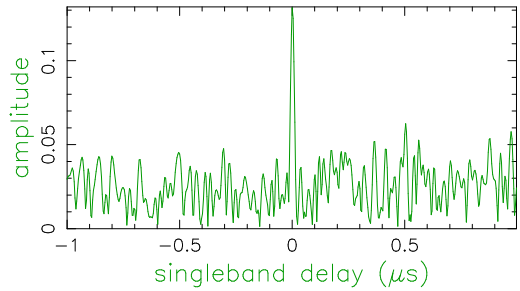
ph/seg (deg)	RMS 74.7	Theor. 32.1	Amplitude Search (2048X32)	0.168 +/- 0.020	0.167	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	86.3	56.1	Interp.	0.000	0.167	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	52.9	18.9	Inc. seg. avg.	0.209	0.209	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	46.1	33.1	Inc. frq. avg.	0.205	0.205	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	
						nlags: 256	t_cohere infinite	

I: az 66.2 el 52.6 pa -83.2 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10912.798 -1106.924 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/IY..193QBF Output file: /Exps/c201d/v1/1234/No0057/IY.W.166.193QBF

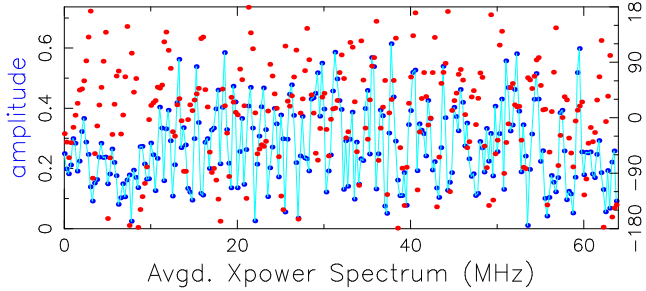


Fringe quality 0

SNR 6.7  
 Int time 345.582  
 Amp 0.132  
 Phase 102.4  
 PFD 5.6e-03  
 Delays (us)  
 SBD 0.000842  
 MBD -0.005908  
 Fringe rate (Hz)  
 0.008964  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

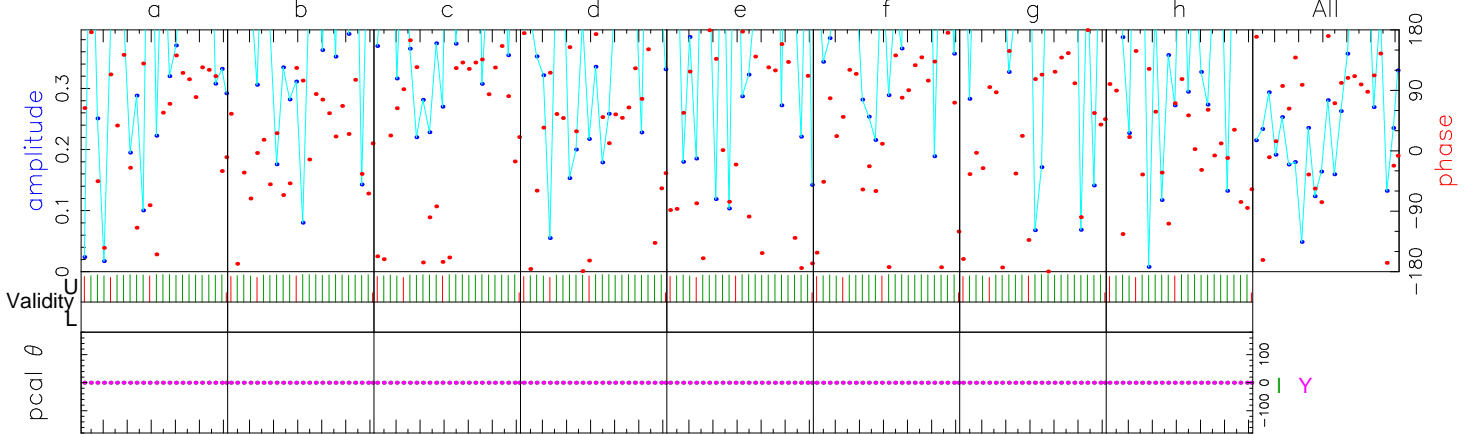


delay rate (ns/s)



Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122521  
 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



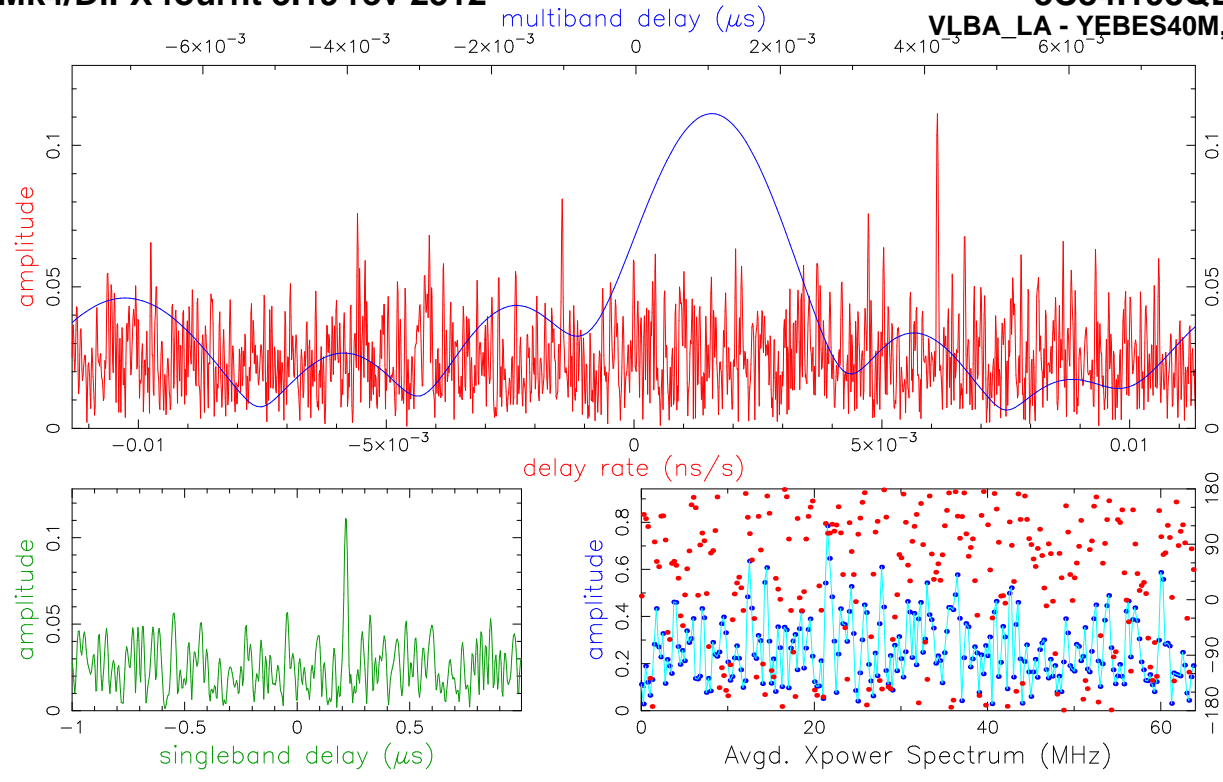
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.09118794886E+03	Apriori delay (usec)	1.09119385668E+03	Resid mbdelay (usec)	-5.90782E-03	+/-	1.6E-04
Sband delay (usec)	1.09119469868E+03	Apriori clock (usec)	-1.5718672E+01	Resid sbdelay (usec)	8.42000E-04	+/-	1.3E-03
Phase delay (usec)	1.09119385998E+03	Apriori clockrate (us/s)	-3.7100000E-07	Resid phdelay (usec)	3.30351E-06	+/-	5.5E-07
Delay rate (us/s)	1.42374504353E+00	Apriori rate (us/s)	1.42374493946E+00	Resid rate (us/s)	1.04066E-07	+/-	2.7E-09
Total phase (deg)	35.6	Apriori accel (us/s/s)	-1.07588907563E-05	Resid phase (deg)	102.4	+/-	17.1

ph/seg (deg)	81.4	Theor.	40.9	Amplitude	0.132 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	143.0	Search (2048X32)	0.130	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	55.2	Inc. seg. avg.	0.213	Inc. frq. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	53.0	Inc. frq. avg.	0.172	u,v (fr/asec)	-10912.798 -1106.924	Sample rate (MSamp/s):	128	nlags:	256	dr window (ns/s)	-0.011 0.011
						Data rate (Mb/s):	2048	t_cohere	infinite	ion window (TEC)	0.00 0.00

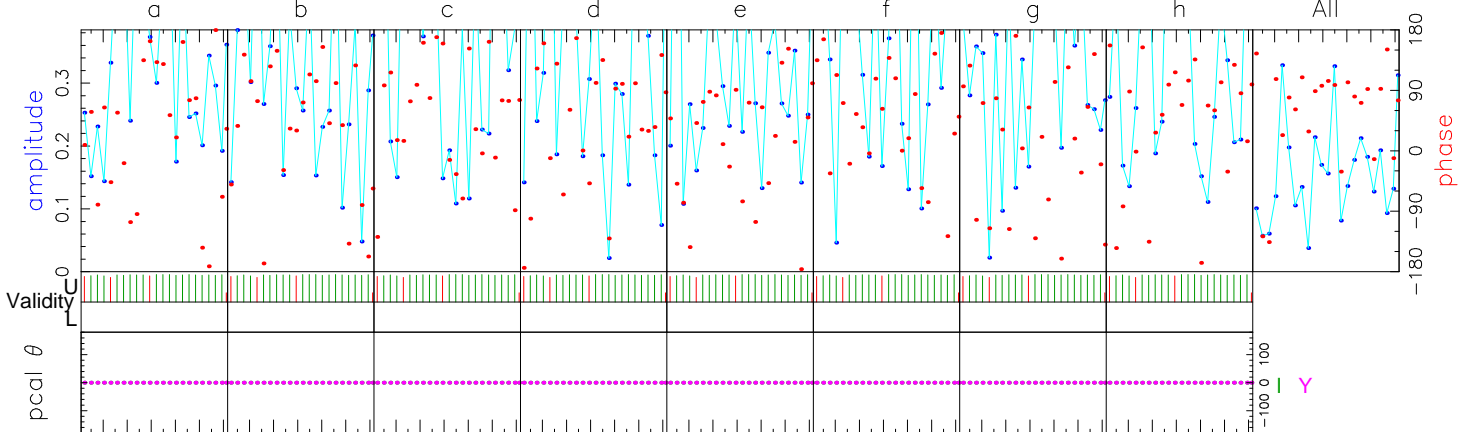
I: az 66.2 el 52.6 pa -83.2 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10912.798 -1106.924 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/IY..193QBF Output file: /Exps/c201d/v1/1234/No0057/IY.W.182.193QBF





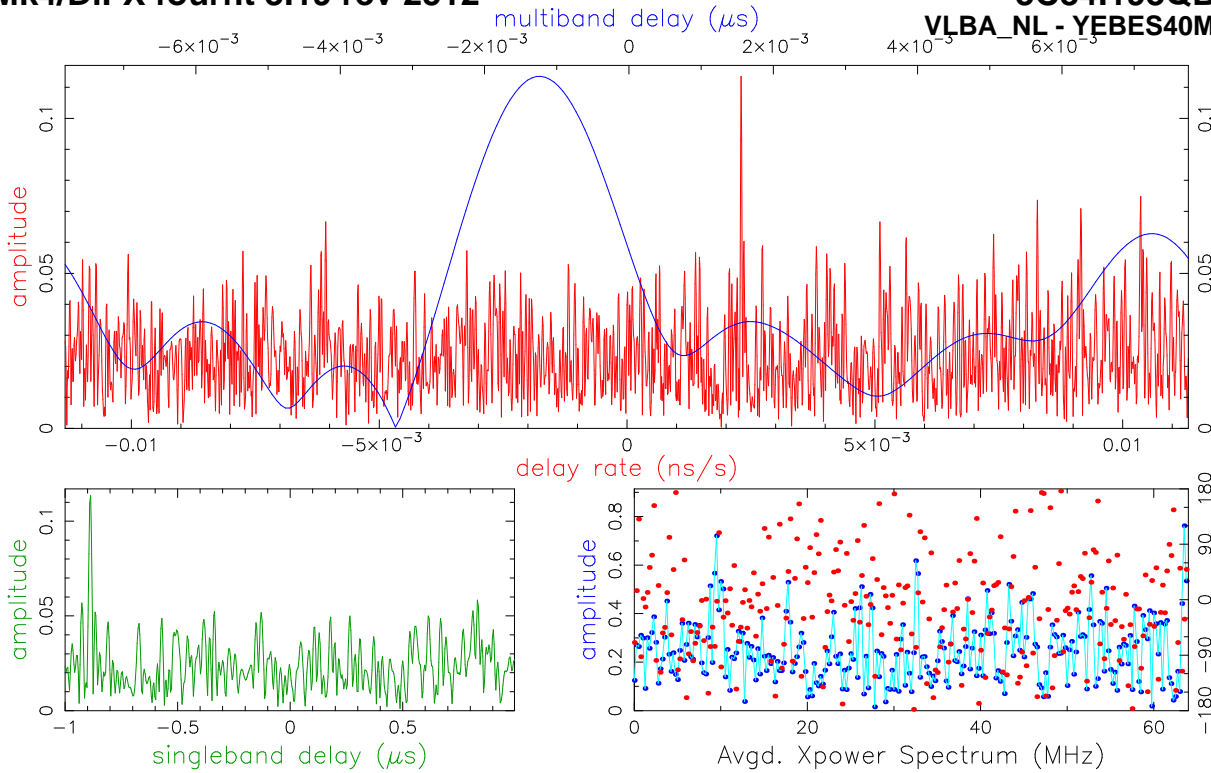
Fringe quality 0  
 SNR 5.8  
 Int time 345.582  
 Amp 0.128  
 Phase 80.8  
 PFD 8.7e-01  
 Delays (us)  
 SBD 0.216690  
 MBD 0.001087  
 Fringe rate (Hz)  
 0.528440  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122530  
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.09141369373E+03				1.09119385668E+03			1.08705E-03	+/- 1.9E-04
Sband delay (usec)		1.09141054643E+03				-1.5718672E+01			2.16690E-01	+/- 1.5E-03
Phase delay (usec)		1.09119385929E+03				-3.7100000E-07			2.60705E-06	+/- 6.4E-07
Delay rate (us/s)		1.42375107413E+00				1.42374493946E+00			6.13466E-06	+/- 3.1E-09
Total phase (deg)			14.0			-1.07588907563E-05			80.8	+/- 19.9
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				
PC period (AP's)						5, 5				
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 64.1 47.7 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.9 83.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 27.3 28.1 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.7 49.1 Inc. frq. avg. 0.122 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 66.2 el 52.6 pa -83.2 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -10912.798 -1106.924 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/IY..193QBF Output file: /Exps/c201d/v1/1234/No0057/IY.W.223.193QBF

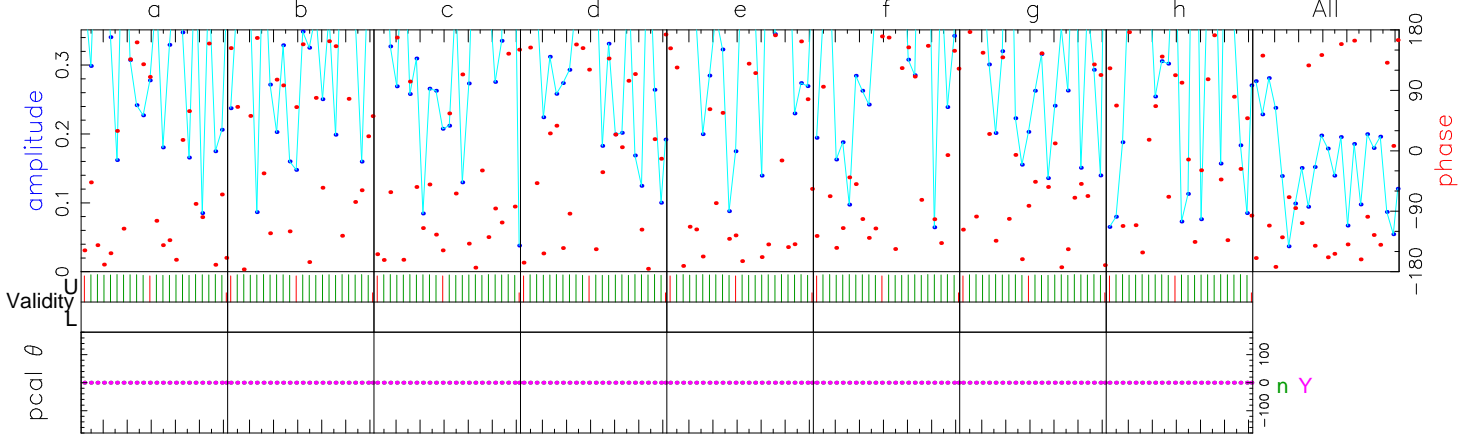


Fringe quality 0

SNR 5.9  
Int time 348.130  
Amp 0.117  
Phase -156.6  
PFD 6.6e-01  
Delays (us)  
SBD -0.888058  
MBD -0.001257  
Fringe rate (Hz) 0.198654  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

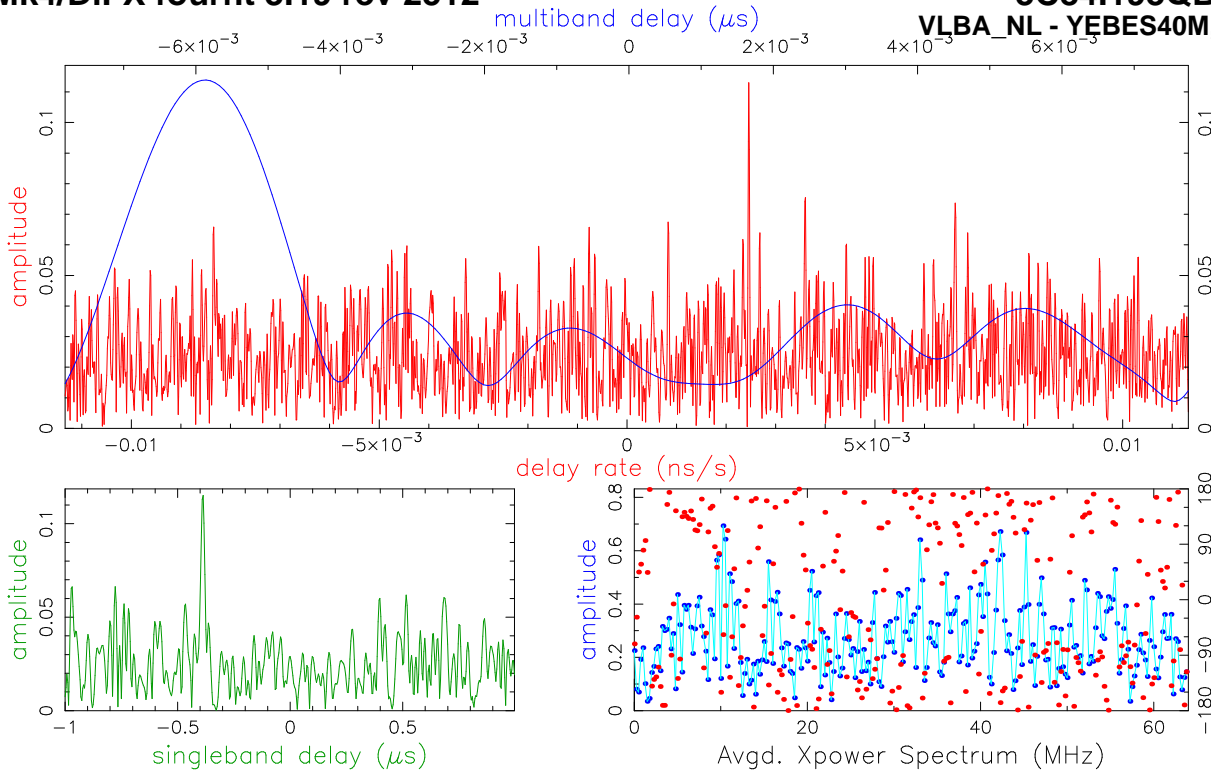
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122519  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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



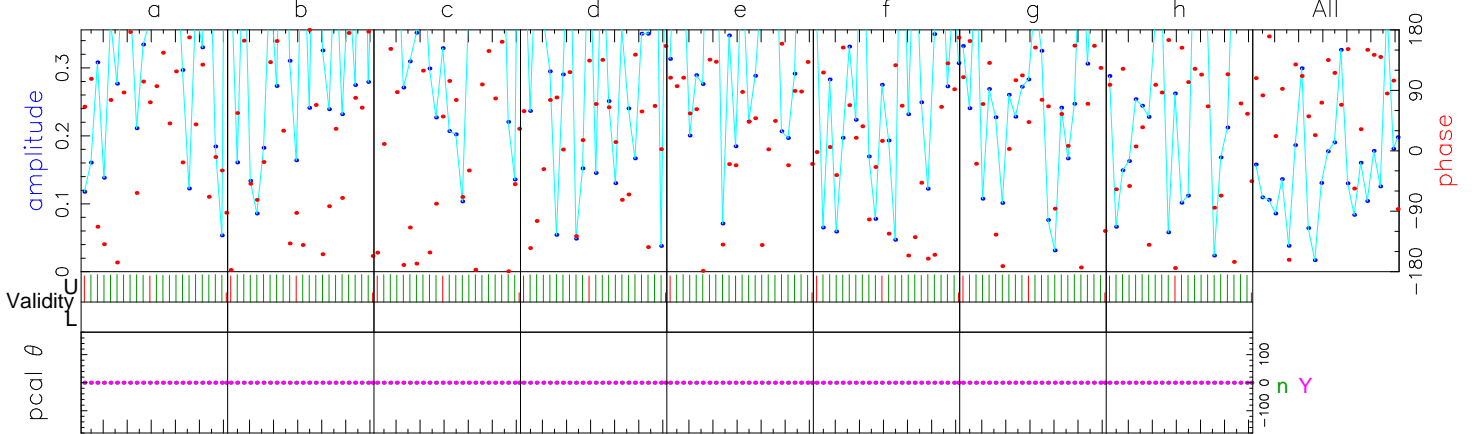
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-146.5	123.7	-132.3	158.2	-168.1	-158.7	-121.1	-171.0	Phase	-156.6
	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	119.7	307.1	30.6	60.8	28.6	223.4	158.1	153.3	Sbd box	29.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	3.50616636215E+03		Apriori delay (usec)		3.50705824440E+03		Resid mbdelay (usec)		-1.25725E-03	+/- 1.8E-04
Sband delay (usec)	3.50617018615E+03		Apriori clock (usec)		2.0337093E+01		Resid sbdelay (usec)		-8.88058E-01	+/- 1.5E-03
Phase delay (usec)	3.50705823935E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-5.04878E-06	+/- 6.3E-07
Delay rate (us/s)	1.19793673995E+00		Apriori rate (us/s)		1.19793443378E+00		Resid rate (us/s)		2.30617E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.73187911250E-05		Resid phase (deg)		-156.6	+/- 19.5

ph/seg (deg) 57.2 46.8 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 68.6 81.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 42.2 27.6 Inc. seg. avg. 0.120 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.8 48.2 Inc. frq. avg. 0.117 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 79.2 el 65.3 pa -78.1 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -9193.124 -1036.372 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/nY..193QBF Output file: /Exps/c201d/v1/1234/No0057/nY.W.172.193QBF



Fringe quality 0  
SNR 5.9  
Int time 348.129  
Amp 0.119  
Phase 103.6  
PFD 5.2e-01  
Delays (us)  
SBD -0.388169  
MBD -0.005737  
Fringe rate (Hz) 0.211636  
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  
2020:204:122523  
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

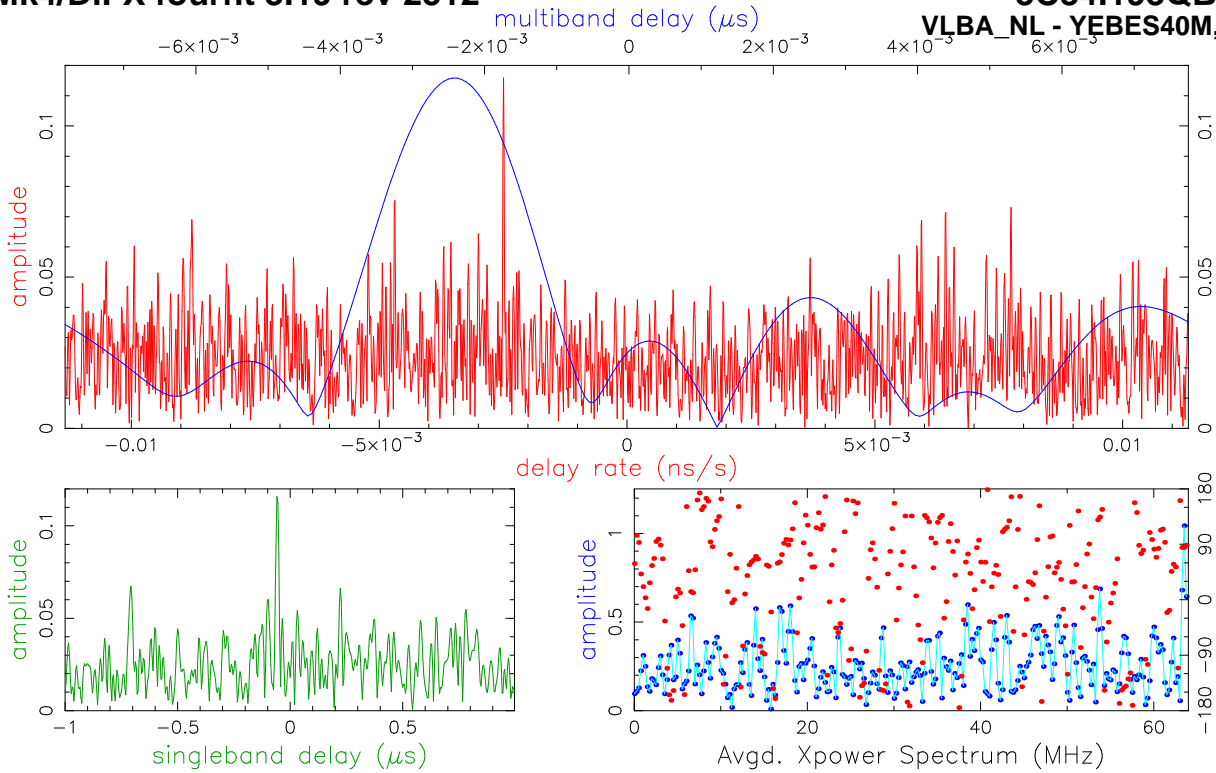


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		3.50667750731E+03				3.50705824440E+03			Resid mbdelay (usec)	-5.73709E-03 +/- 1.8E-04
Sband delay (usec)		3.50667007590E+03				2.0337093E+01			Resid sbdelay (usec)	-3.88169E-01 +/- 1.5E-03
Phase delay (usec)		3.50705824774E+03				1.1399998E-07			Resid phdelay (usec)	3.34145E-06 +/- 6.2E-07
Delay rate (us/s)		1.19793689066E+00				1.19793443378E+00			Resid rate (us/s)	2.45688E-06 +/- 3.0E-09
Total phase (deg)			165.8			-1.73187911250E-05			Resid phase (deg)	103.6 +/- 19.3
RMS	60.6	46.3								
ph/seg (deg)	60.6	46.3								
amp/seg (%)	82.2	80.8								
ph/frq (deg)	28.8	27.3								
amp/frq (%)	36.2	47.6								
n: az 79.2 el 65.3 pa -78.1										
Y: az 290.3 el 49.0 pa 72.6										
u,v (fr/asec)										
Control file: cf_1234_gmva										
Input file: /Exps/c201d/v1/1234/No0057/nY..193QBF										
Output file: /Exps/c201d/v1/1234/No0057/nY.W.190.193QBF										

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Pcal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2 SampCntNorm: enabled  
Sample rate(MISamp/s): 128  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite  
sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00  
simultaneous interpolator

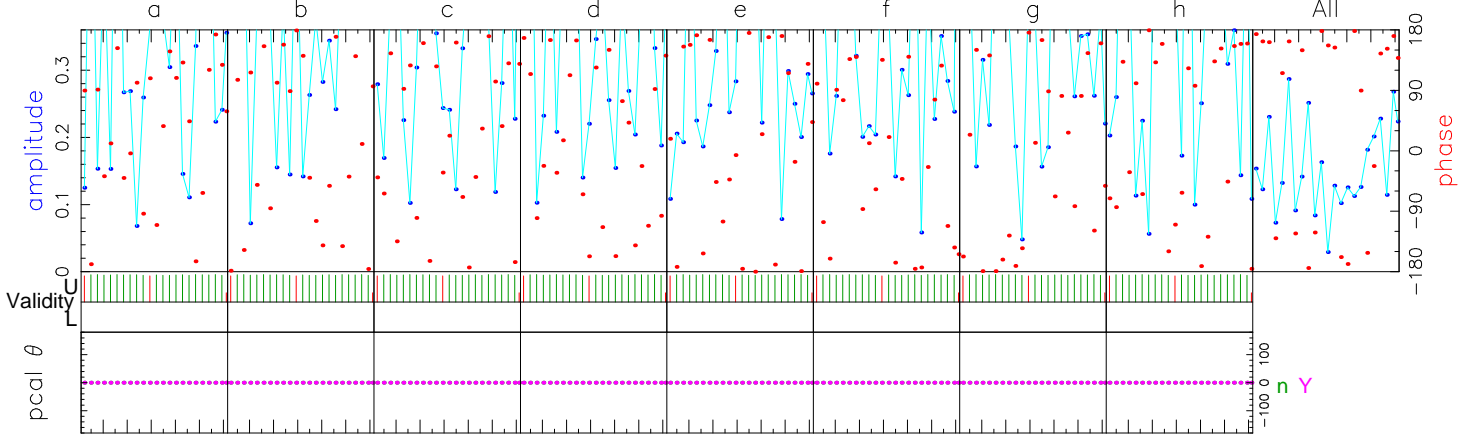
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, nY  
VLBA\_NL - YEYES40M, fgroup W, pol LR



Fringe quality 0  
SNR 6.0  
Int time 348.130  
Amp 0.120  
Phase 170.4  
PFD 4.0e-01  
Delays (us)  
SBD -0.057137  
MBD -0.002416  
Fringe rate (Hz)  
-0.215218  
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  
2020:204:122527  
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

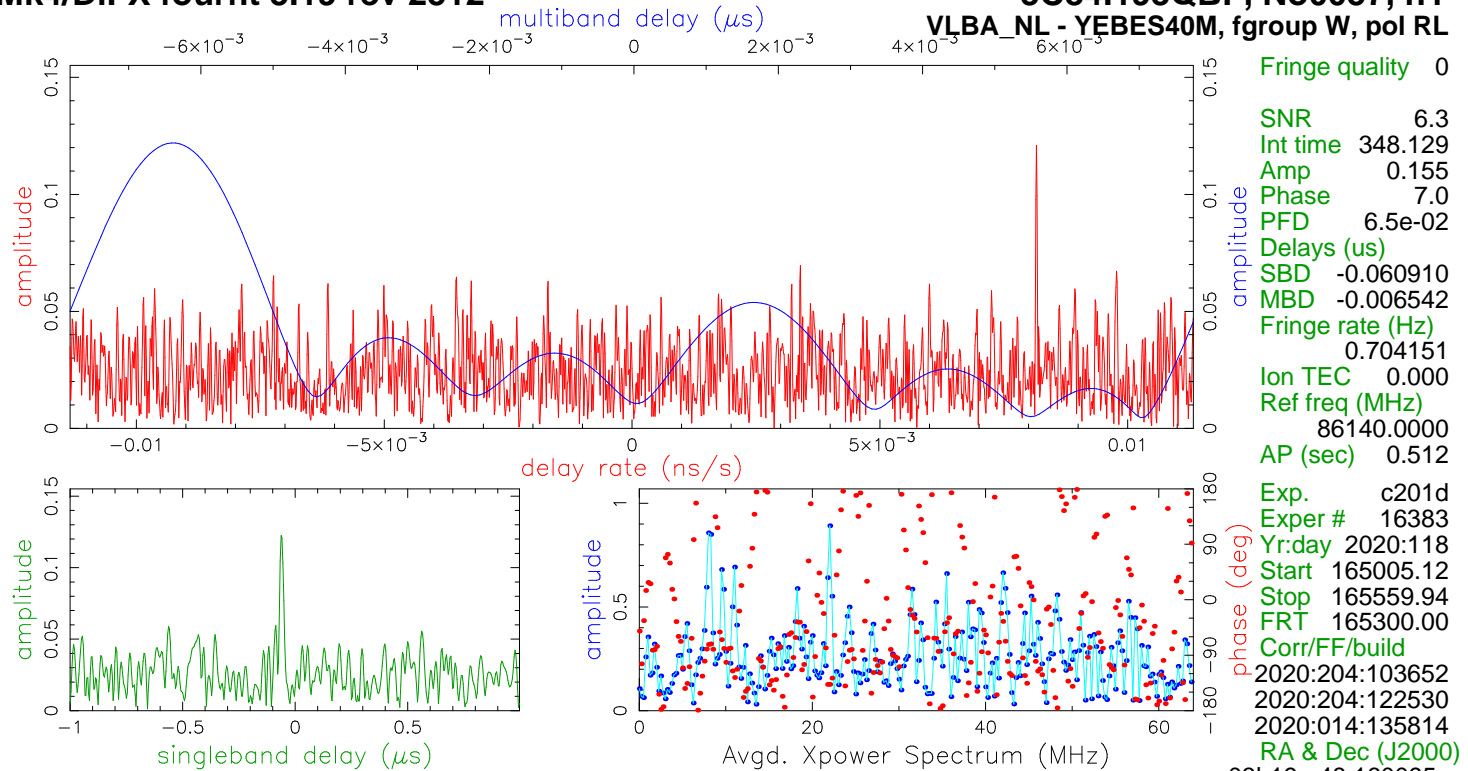


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
145.8	-164.2	167.2	152.9	-178.3	144.5	-179.1	170.0	170.0	Phase	170.4
0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
222.6	236.2	107.1	1.6	458.5	379.8	100.5	242.8	242.8	Sbd box	242.4
U/L 693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
n W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Tracks	
Group delay (usec)(sbd)	3.50699332860E+03		Apriori delay (usec)	3.50705824440E+03	Resid mbdelay (usec)	-2.41580E-03	+/-	1.8E-04		
Sband delay (usec)	3.50700110765E+03		Apriori clock (usec)	2.0337093E+01	Resid sbdelay (usec)	-5.71368E-02	+/-	1.4E-03		
Phase delay (usec)	3.50705824990E+03		Apriori clockrate (us/s)	1.1399998E-07	Resid phdelay (usec)	5.49530E-06	+/-	6.2E-07		
Delay rate (us/s)	1.19793193531E+00		Apriori rate (us/s)	1.19793443378E+00	Resid rate (us/s)	-2.49847E-06	+/-	3.0E-09		
Total phase (deg)		232.6	Apriori accel (us/s/s)	-1.73187911250E-05	Resid phase (deg)	170.4	+/-	19.1		

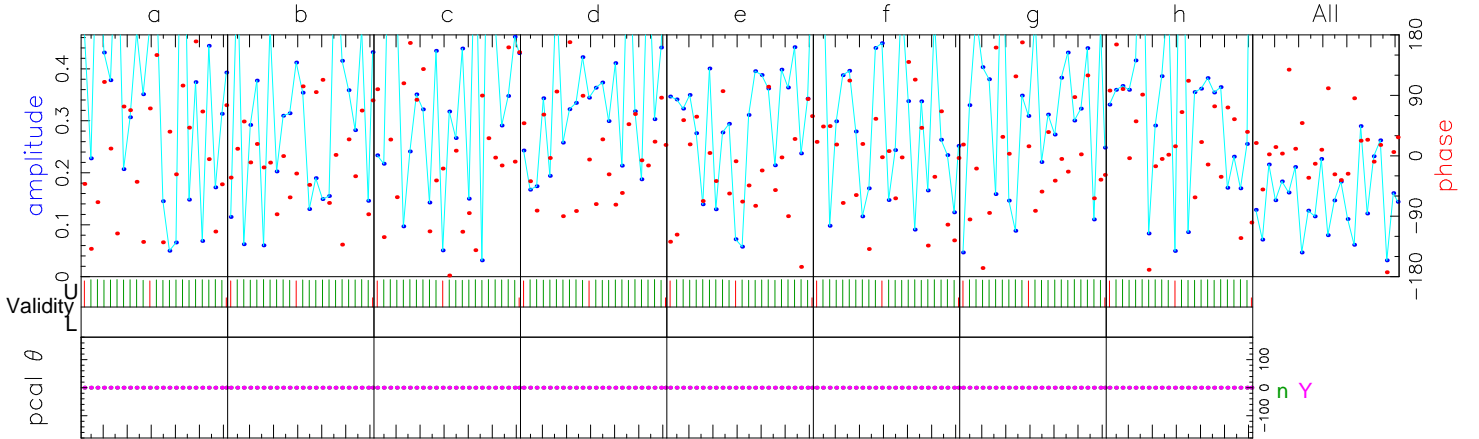
ph/seg (deg) 49.9 45.8 Search (2048X32) 0.113 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 63.8 79.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 20.3 27.0 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 30.7 47.1 Inc. frq. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
n: az 79.2 el 65.3 pa -78.1 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -9193.124 -1036.372 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/nY..193QBF Output file: /Exps/c201d/v1/1234/No0057/nY.W.207.193QBF

Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, nY  
VLBA\_NL - YEYES40M, fgroup W, pol RL



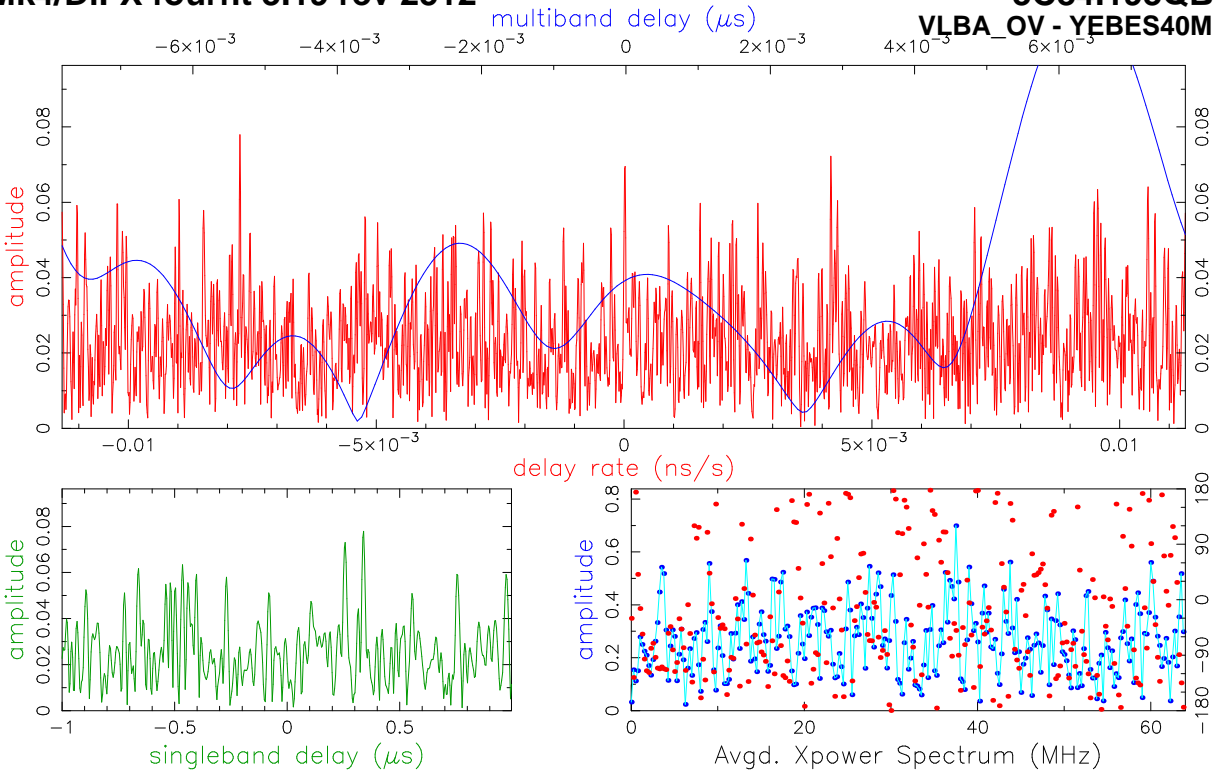
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		3.50700482715E+03				3.50705824440E+03			Resid mbdelay (usec)	-6.54226E-03 +/- 1.7E-04
Sband delay (usec)		3.50699733465E+03				2.0337093E+01			Resid sbdelay (usec)	-6.09098E-02 +/- 1.4E-03
Phase delay (usec)		3.50705824463E+03				1.1399998E-07			Resid phdelay (usec)	2.25724E-07 +/- 5.8E-07
Delay rate (us/s)		1.19794260827E+00				1.19793443378E+00			Resid rate (us/s)	8.17450E-06 +/- 2.9E-09
Total phase (deg)			69.2			-1.73187911250E-05			Resid phase (deg)	7.0 +/- 18.1

	RMS	Theor.	Amplitude	0.155 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.0	43.4	Search (2048X32)	0.118	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	58.9	75.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	20.2	25.6	Inc. seg. avg.	0.146	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
amp/frq (%)	42.7	44.7	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
n: az 79.2 el 65.3 pa -78.1			Y: az 290.3 el 49.0 pa 72.6		u,v (fr/asec) -9193.124 -1036.372	ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva			Input file: /Exps/c201d/v1/1234/No0057/nY..193QBF		Output file: /Exps/c201d/v1/1234/No0057/nY.W.225.193QBF	simultaneous interpolator



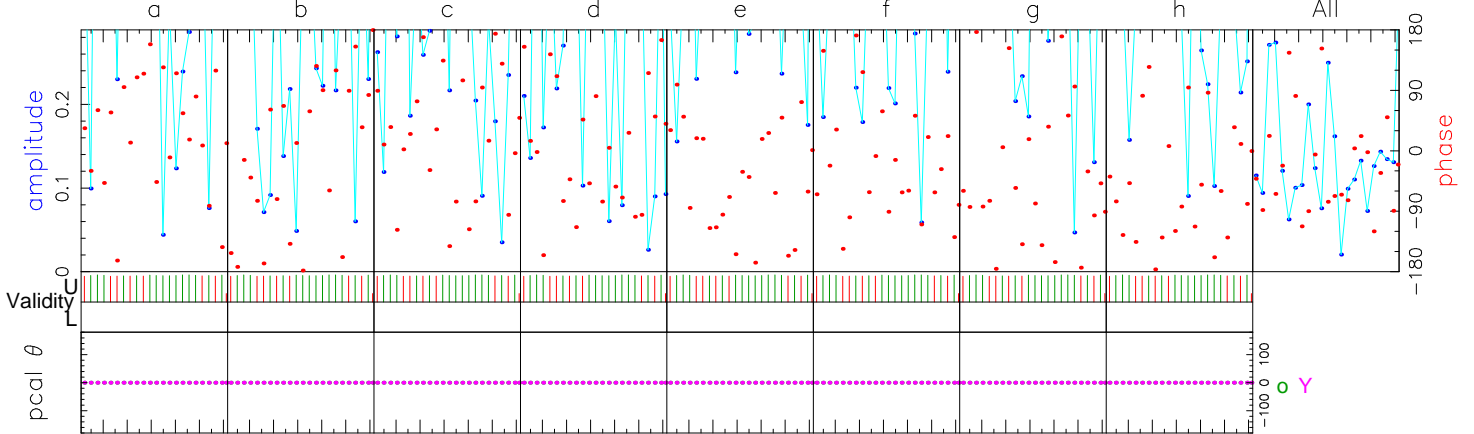


Fringe quality 0

SNR 4.0  
Int time 340.105  
Amp 0.096  
Phase -43.5  
PFD 1.0e+00  
Delays (us)  
SBD 0.338537  
MBD -0.008301  
Fringe rate (Hz)  
-0.668595  
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  
2020:204:122521  
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

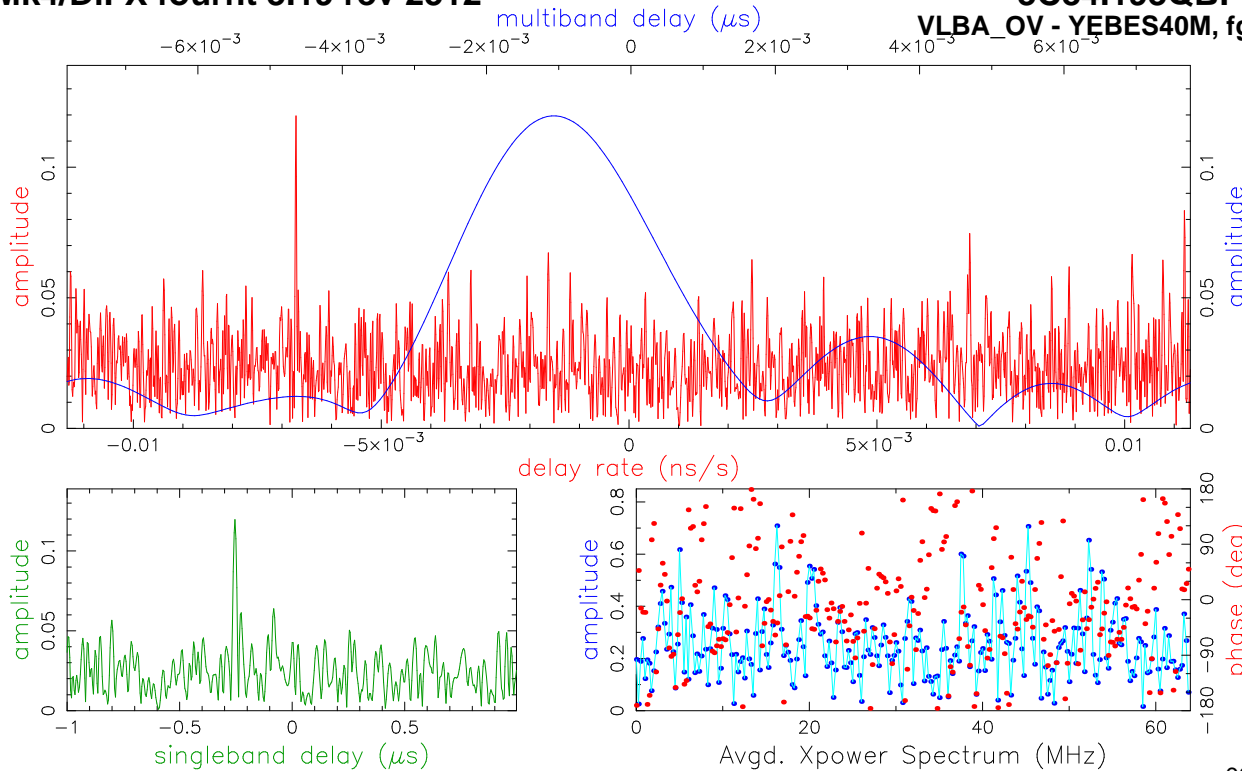


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	58.3	-140.2	18.7	-54.7	-49.9	-46.2	-97.7	-83.5	Phase	-43.5
	0.2	0.0	0.1	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
	454.4	125.1	296.3	168.0	10.4	26.9	326.5	476.2	Sbd box	343.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.90580593822E+02		Apriori delay (usec)		-8.90916043041E+02		Resid mbdelay (usec)		-8.30078E-03	+/- 2.7E-04
Sband delay (usec)	-8.90577506541E+02		Apriori clock (usec)		8.1211519E+00		Resid sbdelay (usec)		3.38537E-01	+/- 2.2E-03
Phase delay (usec)	-8.90916044443E+02		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		-1.40270E-06	+/- 9.3E-07
Delay rate (us/s)	1.52712174272E+00		Apriori rate (us/s)		1.52712950445E+00		Resid rate (us/s)		-7.76172E-06	+/- 4.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.43207965697E-06		Resid phase (deg)		-43.5	+/- 28.8

ph/seg (deg) 71.9 69.1 Search (2048X32) 0.115 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 110.8 120.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 68.7 40.8 Inc. seg. avg. 0.096 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 88.1 71.2 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 o: az 65.0 el 44.4 pa -74.6 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11689.476 -117.052 ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/oY..193QBF Output file: /Exps/c201d/v1/1234/No0057/oY.W.178.193QBF

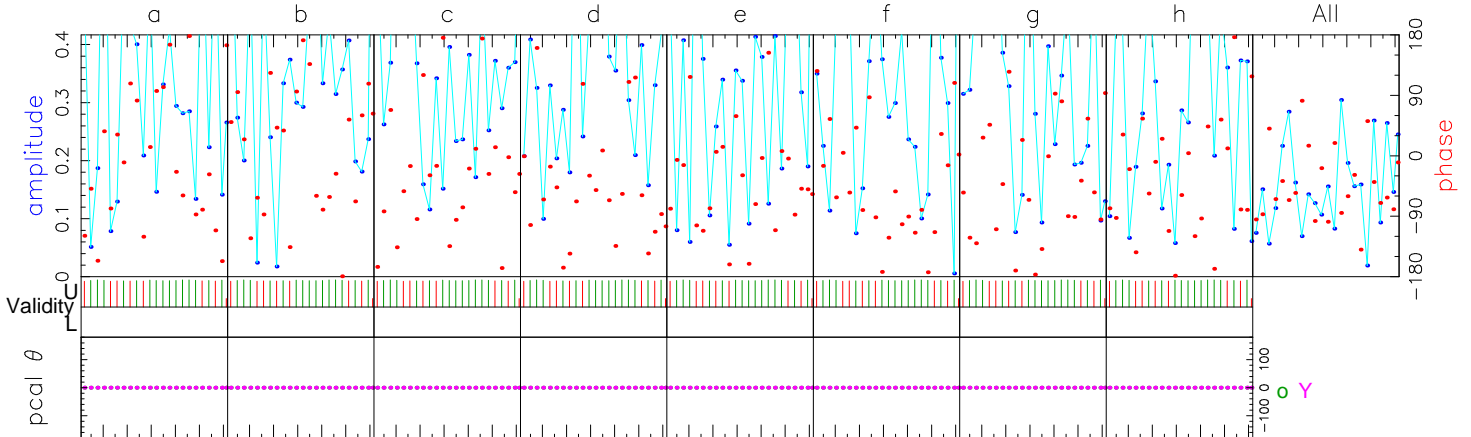
Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, oY  
VLBA\_OV - YEBES40M, fgroup W, pol RR



Fringe quality 0  
SNR 6.0  
Int time 340.106  
Amp 0.139  
Phase -58.7  
PFD 3.4e-01  
Delays (us)  
SBD -0.254220  
MBD -0.001074  
Fringe rate (Hz)  
-0.579394  
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  
2020:204:122524  
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

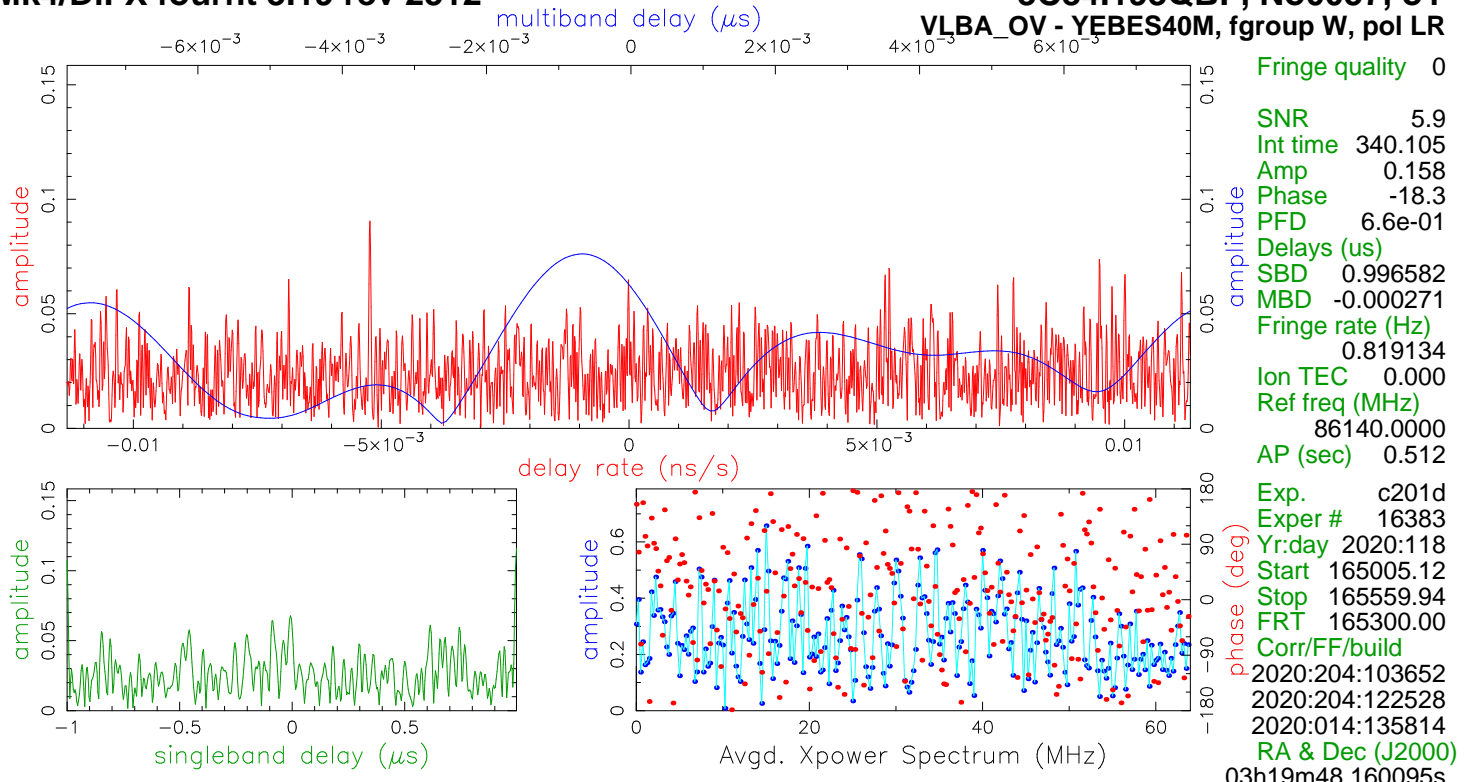


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.0	13.9	-74.7	-67.3	-53.7	-62.4	-62.9	-47.6	Phase	-58.7
	0.1	0.0	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	416.8	237.2	416.4	191.9	191.6	26.3	249.9	37.6	Sbd box	191.9
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

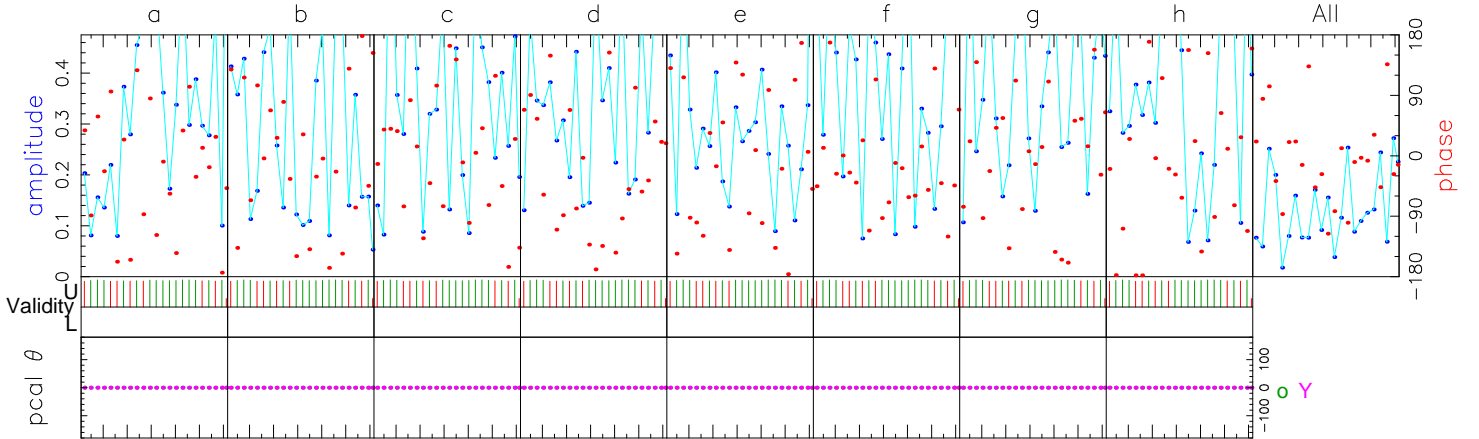
Group delay (usec)(sbd) -8.91167116674E+02 Apriori delay (usec) -8.90916043041E+02 Resid mbdelay (usec) -1.07363E-03 +/- 1.8E-04  
Sband delay (usec) -8.91170262791E+02 Apriori clock (usec) 8.1211519E+00 Resid sbdelay (usec) -2.54220E-01 +/- 1.4E-03  
Phase delay (usec) -8.90916044933E+02 Apriori clockrate (us/s) -1.8999993E-08 Resid phdelay (usec) -1.89265E-06 +/- 6.1E-07  
Delay rate (us/s) 1.52712277826E+00 Apriori rate (us/s) 1.52712950445E+00 Resid rate (us/s) -6.72619E-06 +/- 3.0E-09  
Total phase (deg) -39.8 Apriori accel (us/s/s) 1.43207965697E-06 Resid phase (deg) -58.7 +/- 19.0

RMS Theor. Amplitude 0.139 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 56.2 45.5 Search (2048X32) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 69.4 79.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
ph/frq (deg) 32.2 26.8 Inc. seg. avg. 0.136 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
amp/frq (%) 47.8 46.9 Inc. frq. avg. 0.129 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

o: az 65.0 el 44.4 pa -74.6 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11689.476 -117.052 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/oY..193QBF Output file: /Exps/c201d/v1/1234/No0057/oY.W.195.193QBF



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

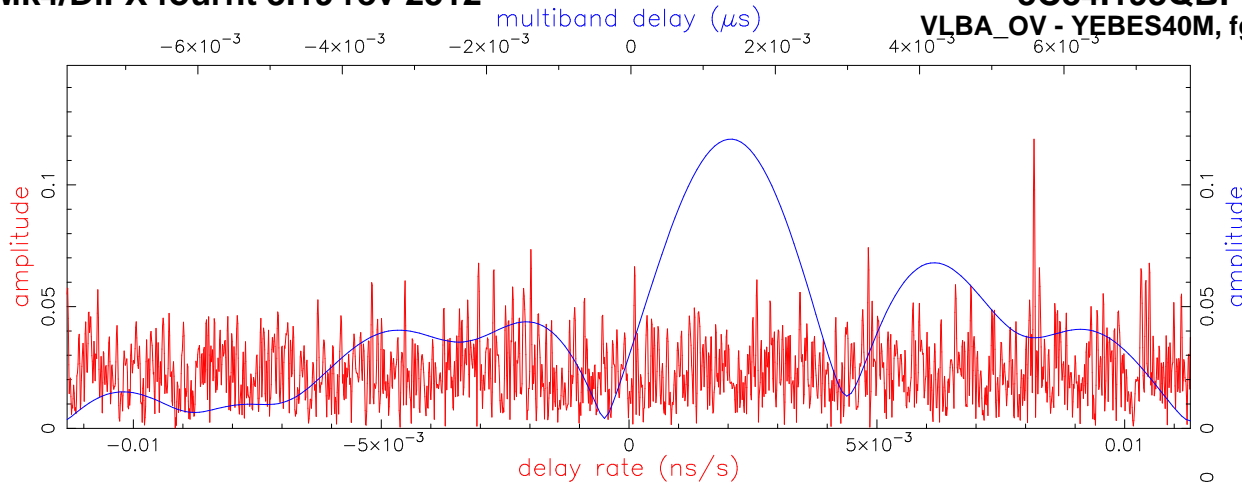


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-8.89916314493E+02									
Sband delay (usec)	-8.89919461166E+02									
Phase delay (usec)	-8.90916043632E+02									
Delay rate (us/s)	1.52713901378E+00									
Total phase (deg)			-359.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

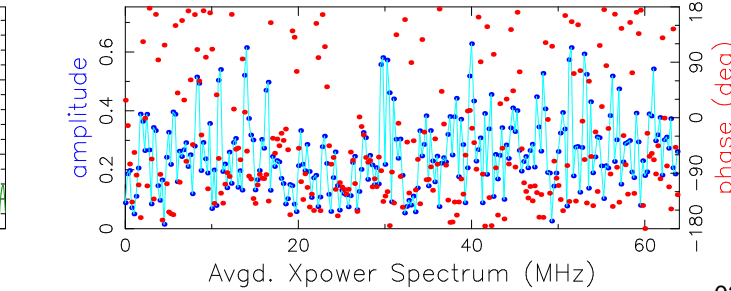
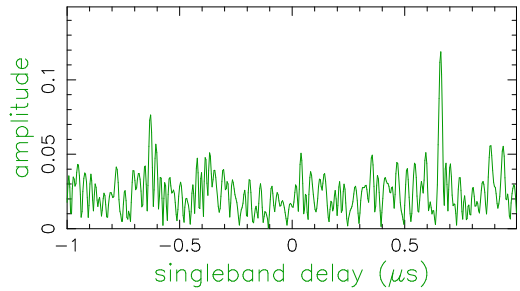
	RMS	Theor.	Amplitude	0.158 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	69.4	46.8	Search (2048X32)	0.115	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	64.2	81.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	59.1	27.6	Inc. seg. avg.	0.135	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	56.2	48.2	Inc. frq. avg.	0.106	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

o: az 65.0 el 44.4 pa -74.6 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11689.476 -117.052 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/oY..193QBF Output file: /Exps/c201d/v1/1234/No0057/oY.W.214.193QBF

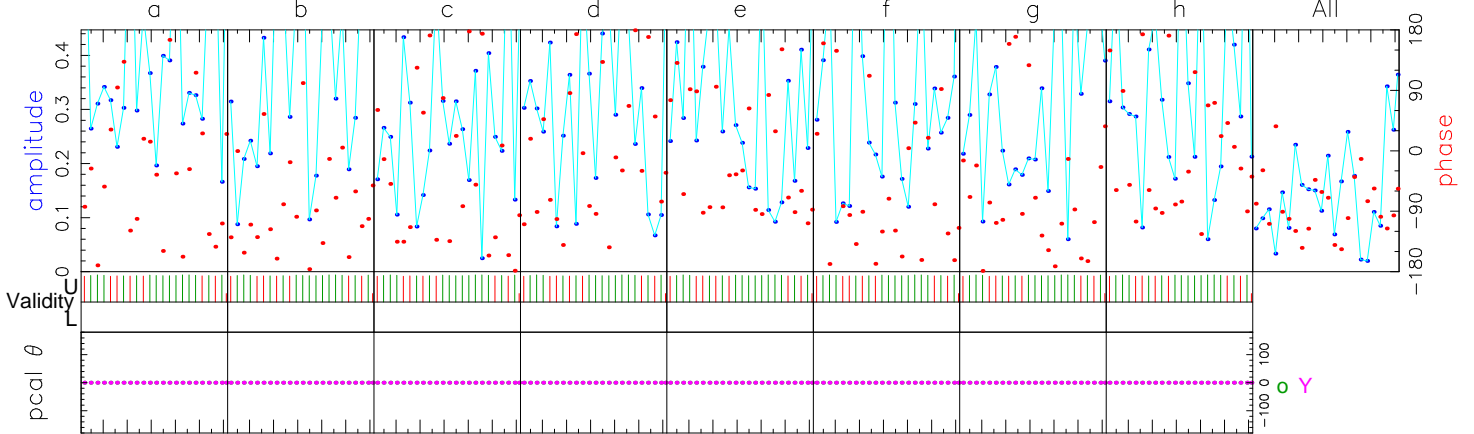


Fringe quality 0  
SNR 6.0  
Int time 340.106  
Amp 0.149  
Phase -92.7  
PFD 3.9e-01  
Delays (us)  
SBD 0.659494  
MBD 0.001358  
Fringe rate (Hz) 0.705075  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build 2020:204:103652  
2020:204:122532  
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

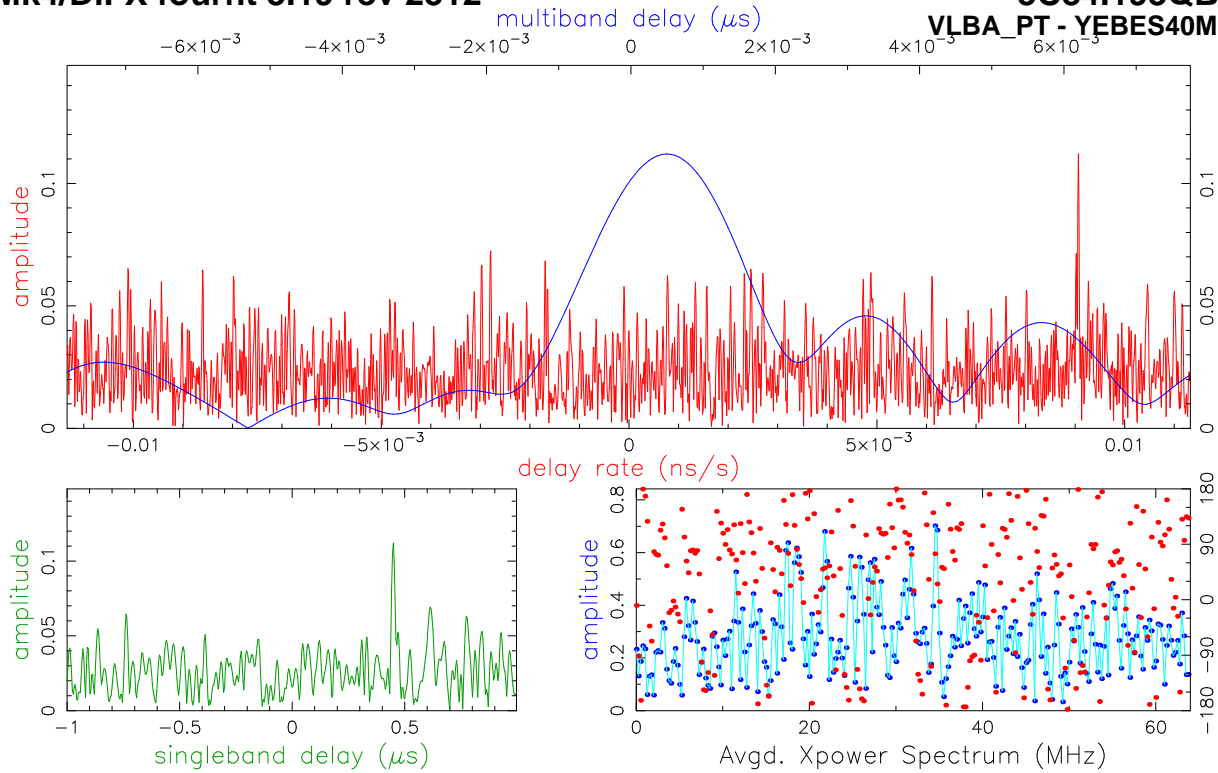


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-8.90258434645E+02	Apriori delay (usec)	-8.90916043041E+02	Resid mbdelay (usec)	1.35840E-03	+/-	1.8E-04
Sband delay (usec)	-8.90256549541E+02	Apriori clock (usec)	8.1211519E+00	Resid sbdelay (usec)	6.59494E-01	+/-	1.4E-03
Phase delay (usec)	-8.90916046031E+02	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	-2.99023E-06	+/-	6.2E-07
Delay rate (us/s)	1.52713768967E+00	Apriori rate (us/s)	1.52712950445E+00	Resid rate (us/s)	8.18523E-06	+/-	3.0E-09
Total phase (deg)	-73.8	Apriori accel (us/s/s)	1.43207965697E-06	Resid phase (deg)	-92.7	+/-	19.1

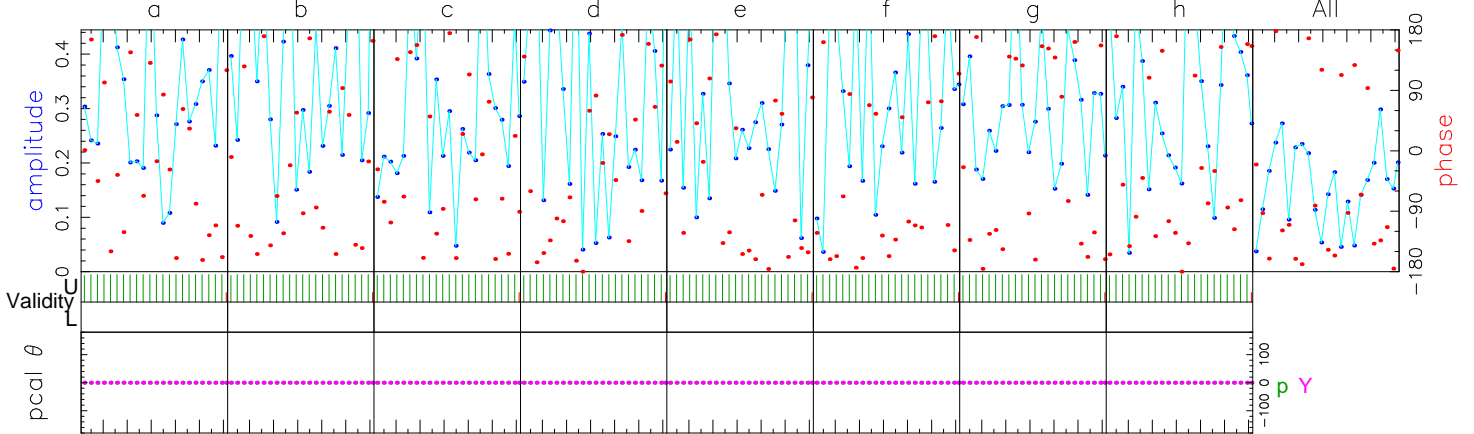
ph/seg (deg)	45.7	Theor.	45.7	Amplitude	0.149 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.5		79.8	Search (2048X32)	0.115	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	34.0		27.0	Inc. seg. avg.	0.137	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.5		47.1	Inc. frq. avg.	0.150	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

o: az 65.0 el 44.4 pa -74.6 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11689.476 -117.052 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/oY..193QBF Output file: /Exps/c201d/v1/1234/No0057/oY.W.231.193QBF



Fringe quality 0  
SNR 5.8  
Int time 353.381  
Amp 0.148  
Phase -148.8  
PFD 8.7e-01  
Delays (us)  
SBD 0.448874  
MBD 0.000484  
Fringe rate (Hz) 0.781841  
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  
2020:204:122520  
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

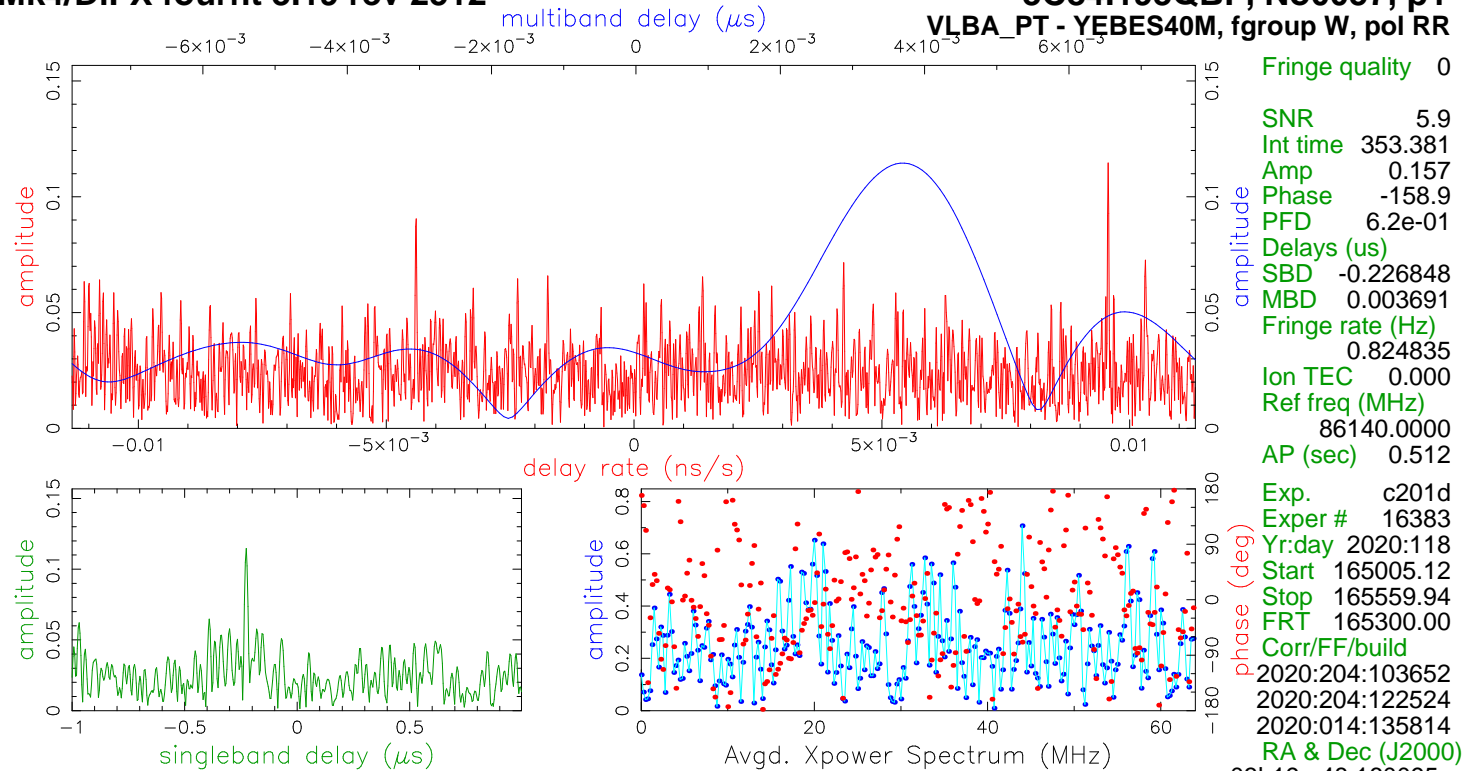


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.5	-136.2	-134.6	-145.0	-152.9	-153.9	-172.9	-123.6	Phase	-148.8
	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.1
	157.3	92.9	52.6	487.2	177.8	339.3	372.2	114.9	Sbd box	371.9
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

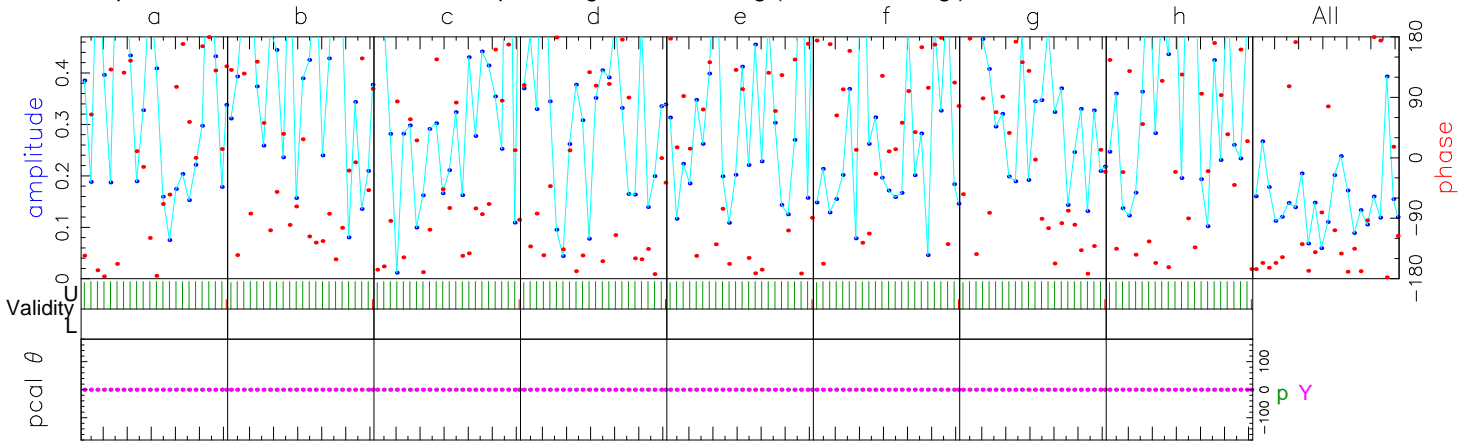
Group delay (usec)(sbd) 6.56318723099E+02 Apriori delay (usec) 6.55865114387E+02 Resid mbdelay (usec) 4.83712E-04 +/- 1.9E-04  
Sband delay (usec) 6.56313988387E+02 Apriori clock (usec) 5.3129168E+00 Resid sbdelay (usec) 4.48874E-01 +/- 1.5E-03  
Phase delay (usec) 6.55865109590E+02 Apriori clockrate (us/s) -1.6000005E-08 Resid phdelay (usec) -4.79735E-06 +/- 6.4E-07  
Delay rate (us/s) 1.45729800755E+00 Apriori rate (us/s) 1.45728893114E+00 Resid rate (us/s) 9.07640E-06 +/- 3.1E-09  
Total phase (deg) 194.4 Apriori accel (us/s/s) -9.90626793929E-06 Resid phase (deg) -148.8 +/- 19.9

RMS Theor. Amplitude 0.148 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 60.8 47.7 Search (2048X32) 0.110 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 76.6 83.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
ph/frq (deg) 18.2 28.1 Inc. seg. avg. 0.156 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
amp/frq (%) 39.2 49.1 Inc. frq. avg. 0.138 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

p: az 64.2 el 50.6 pa -84.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11168.289 -1185.084 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/pY..193QBF Output file: /Exps/c201d/v1/1234/No0057/pY.W.177.193QBF

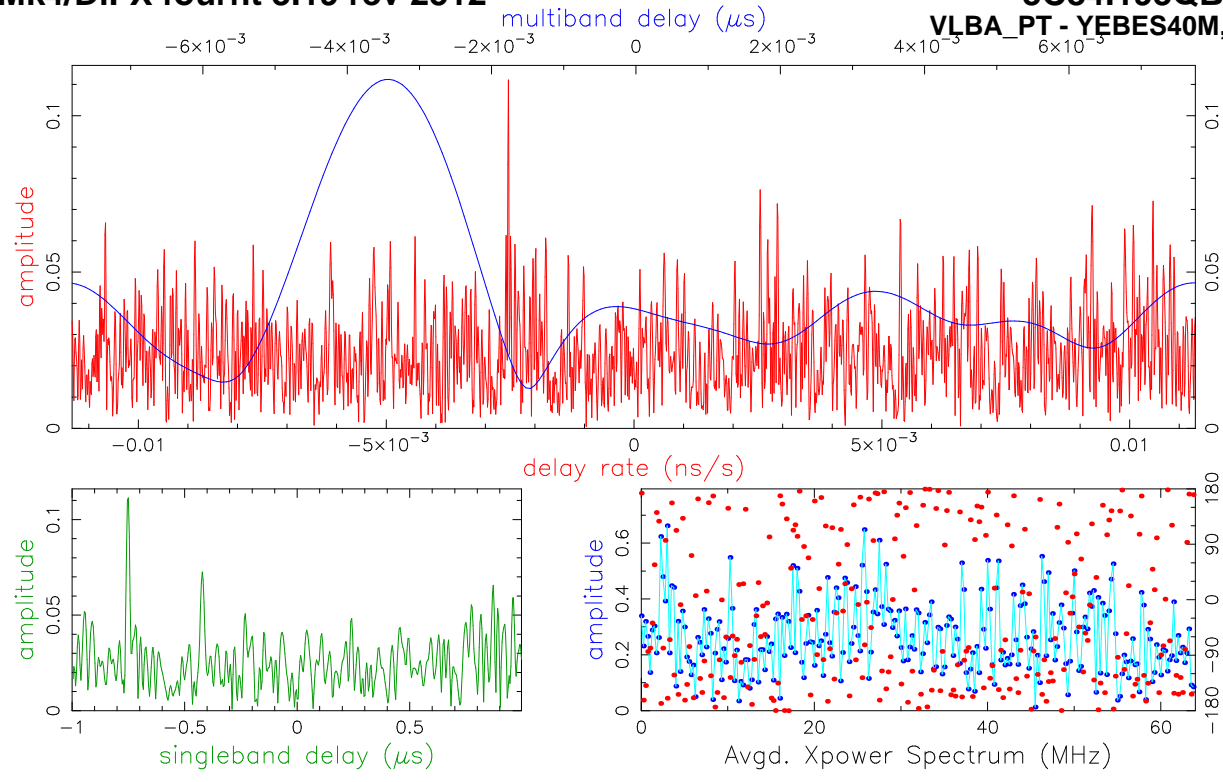


Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
172.5	-110.7	-149.2	-153.4	168.0	169.8	-123.5	-153.2		Phase	-158.9
0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1		Ampl.	0.2
54.1	24.8	211.2	329.0	70.0	205.8	437.2	317.4		Sbd box	198.9
U/L 693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		APs used	
p 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
p:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
p:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
p 1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000			
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.55634430379E+02		Apriori delay (usec)	6.55865114387E+02	Resid mbdelay (usec)	3.69099E-03	+/-	1.8E-04		
Sband delay (usec)	6.55638266137E+02		Apriori clock (usec)	5.3129168E+00	Resid sbdelay (usec)	-2.26848E-01	+/-	1.5E-03		
Phase delay (usec)	6.55865109263E+02		Apriori clockrate (us/s)	-1.6000005E-08	Resid phdelay (usec)	-5.12381E-06	+/-	6.3E-07		
Delay rate (us/s)	1.45729850666E+00		Apriori rate (us/s)	1.45728893114E+00	Resid rate (us/s)	9.57552E-06	+/-	3.1E-09		
Total phase (deg)		184.3	Apriori accel (us/s/s)	-9.90626793929E-06	Resid phase (deg)	-158.9	+/-	19.4		

	RMS	Theor.	Amplitude	0.157 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.5	46.6	Search (2048X32)	0.113	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	72.5	81.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	33.2	27.5	Inc. seg. avg.	0.162	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	37.1	48.0	Inc. frq. avg.	0.162	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

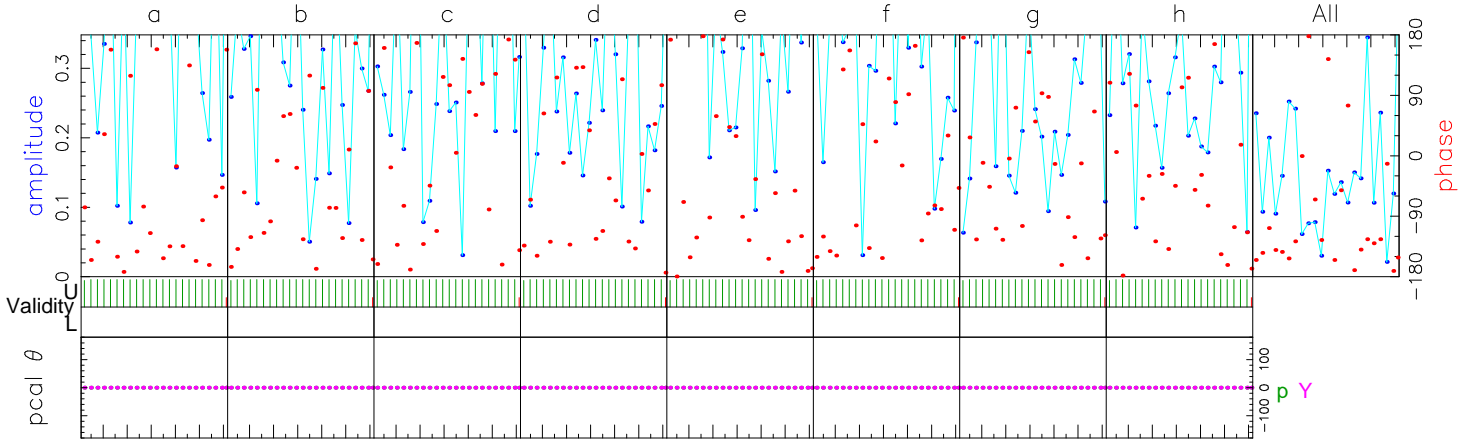


Fringe quality 0

SNR 5.8  
Int time 353.381  
Amp 0.116  
Phase -139.3  
PFD 7.2e-01  
Delays (us)  
SBD -0.751754  
MBD -0.003512  
Fringe rate (Hz)  
-0.218684  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

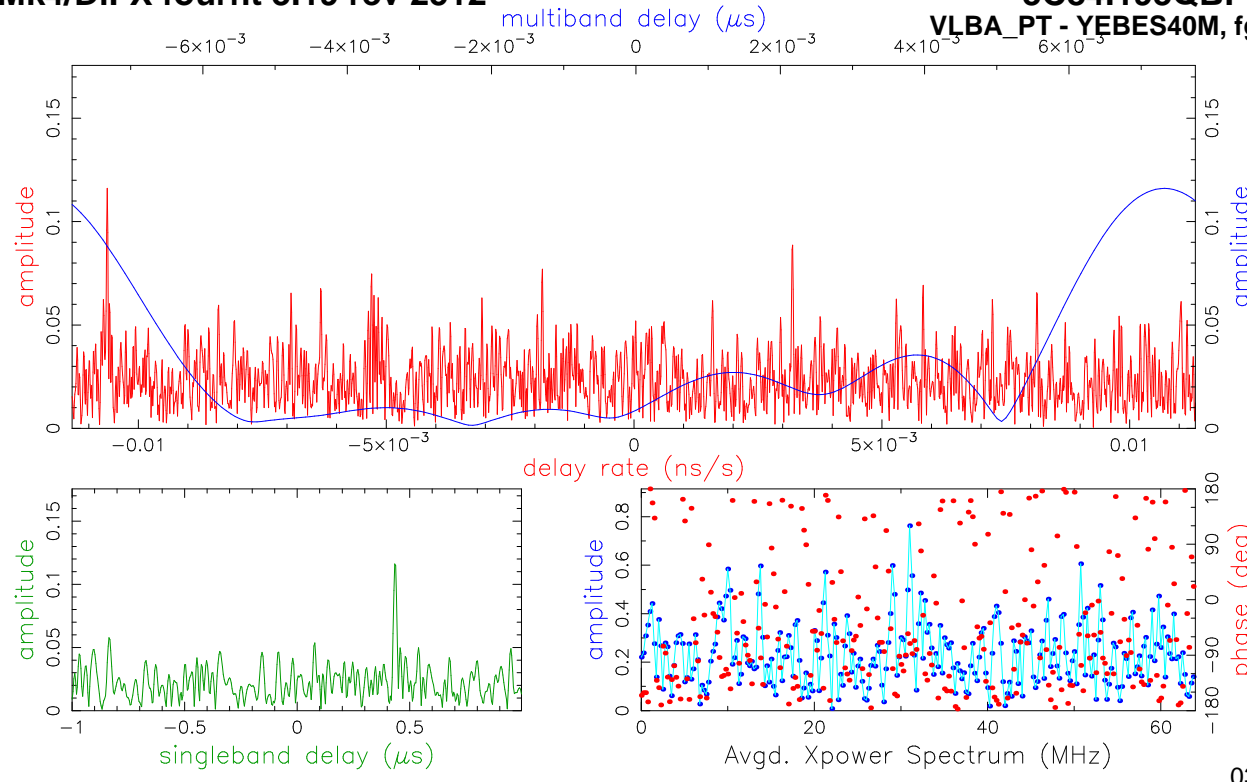
Exp. c201d  
Yr:day 16383  
Start 2020:118  
Stop 2020:118  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122528  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



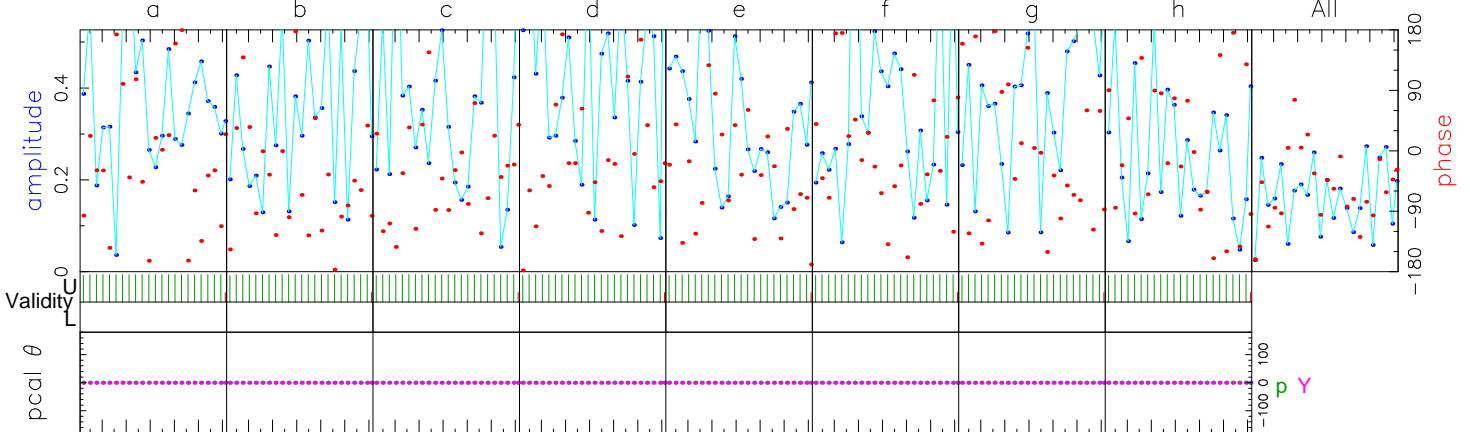
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-139.3	-105.9	171.1	-118.2	-144.5	-152.5	-88.7	-119.5	Phase	-139.3
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	63.8	3.4	441.1	339.8	64.9	278.3	330.7	484.9	Sbd box	64.6
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	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)	6.55111602349E+02		Apriori delay (usec)		6.55865114387E+02		Resid mbdelay (usec)		-3.51204E-03	+/- 1.9E-04
Sband delay (usec)	6.55113360887E+02		Apriori clock (usec)		5.3129168E+00		Resid sbdelay (usec)		-7.51754E-01	+/- 1.5E-03
Phase delay (usec)	6.55865109895E+02		Apriori clockrate (us/s)		-1.6000005E-08		Resid phdelay (usec)		-4.49183E-06	+/- 6.3E-07
Delay rate (us/s)	1.45728639244E+00		Apriori rate (us/s)		1.45728893114E+00		Resid rate (us/s)		-2.53870E-06	+/- 3.1E-09
Total phase (deg)	203.9		Apriori accel (us/s/s)		-9.90626793929E-06		Resid phase (deg)		-139.3	+/- 19.6

ph/seg (deg) 60.7 47.0 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.9 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.6 27.7 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 52.2 48.4 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  
 p: az 64.2 el 50.6 pa -84.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11168.289 -1185.084 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/pY...193QBF Output file: /Exps/c201d/v1/1234/No0057/pY.W.216.193QBF



Fringe quality 0  
SNR 6.1  
Int time 353.381  
Amp 0.176  
Phase -50.1  
PFD 2.6e-01  
Delays (us)  
SBD 0.435345  
MBD -0.008292  
Fringe rate (Hz)  
-0.917258  
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  
2020:204:122532  
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



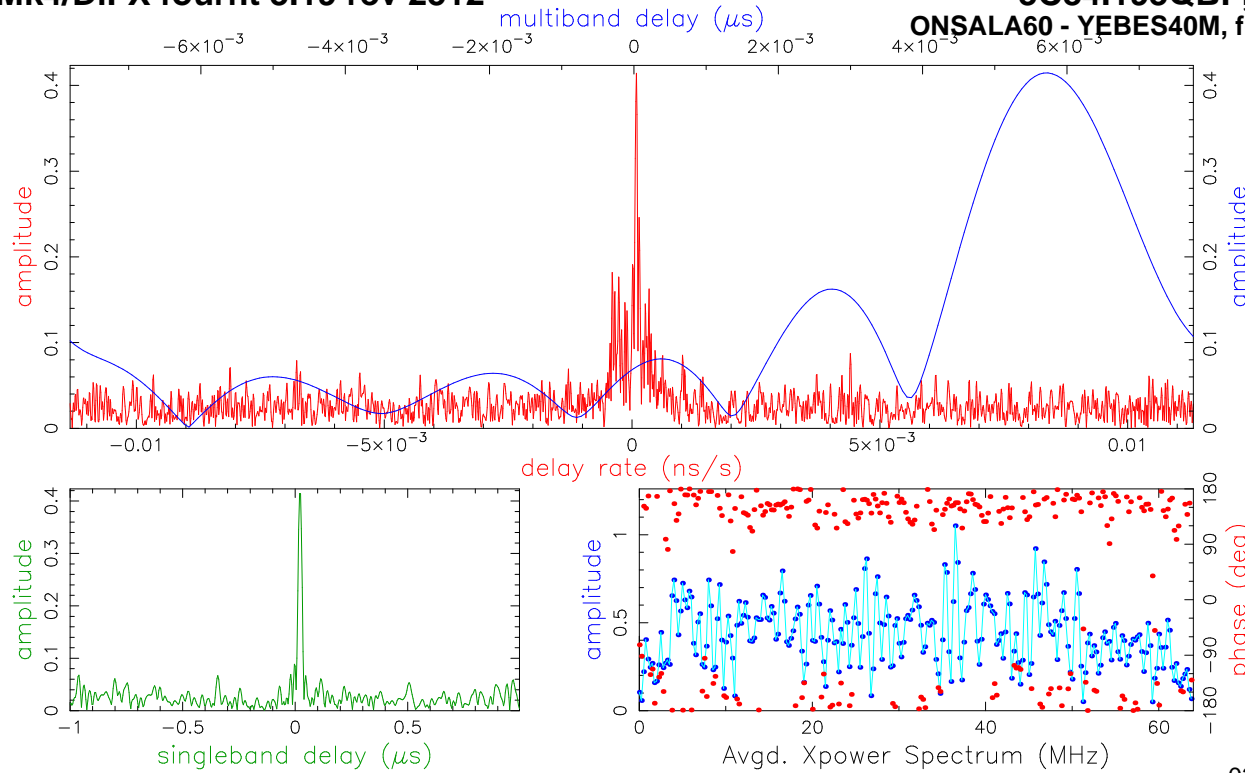
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.1	-54.9	-53.3	-58.7	-36.4	-28.4	-81.2	-58.4	Phase	-50.1
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	Ampl.	0.2
	120.9	47.9	170.5	217.0	1.8	134.0	338.5	321.3	Sbd box	368.4
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 6.56294322481E+02 Apriori delay (usec) 6.55865114387E+02 Resid mbdelay (usec) -8.29191E-03 +/- 1.8E-04  
 Sband delay (usec) 6.56300459137E+02 Apriori clock (usec) 5.3129168E+00 Resid sbdelay (usec) 4.35345E-01 +/- 1.4E-03  
 Phase delay (usec) 6.55865112773E+02 Apriori clockrate (us/s) -1.6000005E-08 Resid phdelay (usec) -1.61414E-06 +/- 6.1E-07  
 Delay rate (us/s) 1.45727828268E+00 Apriori rate (us/s) 1.45728893114E+00 Resid rate (us/s) -1.06485E-05 +/- 3.0E-09  
 Total phase (deg) 293.1 Apriori accel (us/s/s) -9.90626793929E-06 Resid phase (deg) -50.1 +/- 18.8

RMS Theor. Amplitude 0.176 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 53.0 45.1 Search (2048X32) 0.114 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 71.4 78.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 17.6 26.6 Inc. seg. avg. 0.184 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 41.0 46.4 Inc. frq. avg. 0.161 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

p: az 64.2 el 50.6 pa -84.3 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -11168.289 -1185.084 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/pY..193QBF Output file: /Exps/c201d/v1/1234/No0057/pY.W.233.193QBF



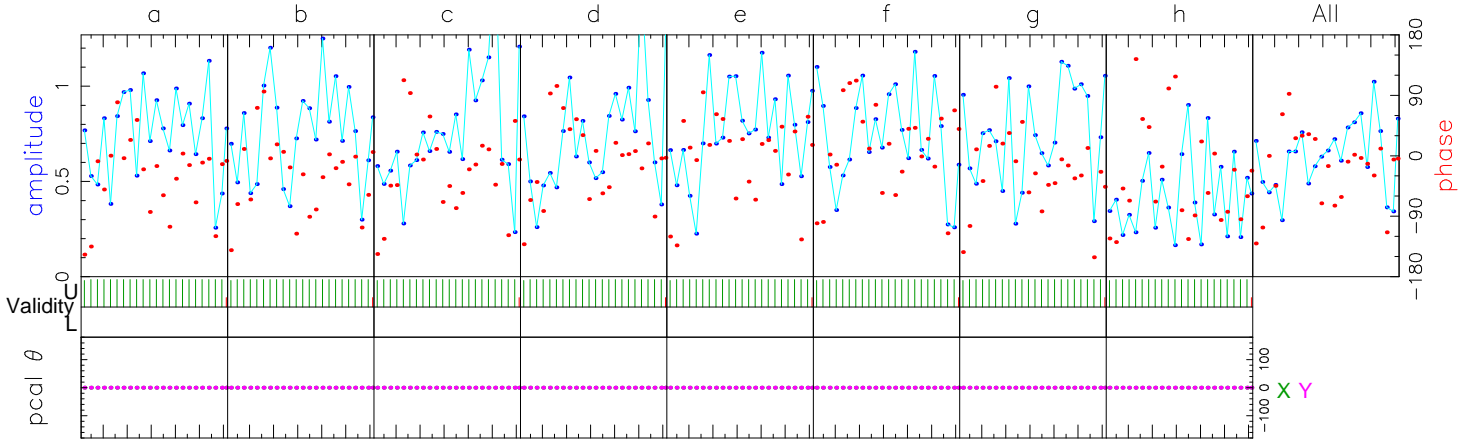


Fringe quality 8

SNR 21.8  
Int time 354.046  
Amp 0.423  
Phase -14.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.021468  
MBD 0.005669  
Fringe rate (Hz)  
0.007497  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

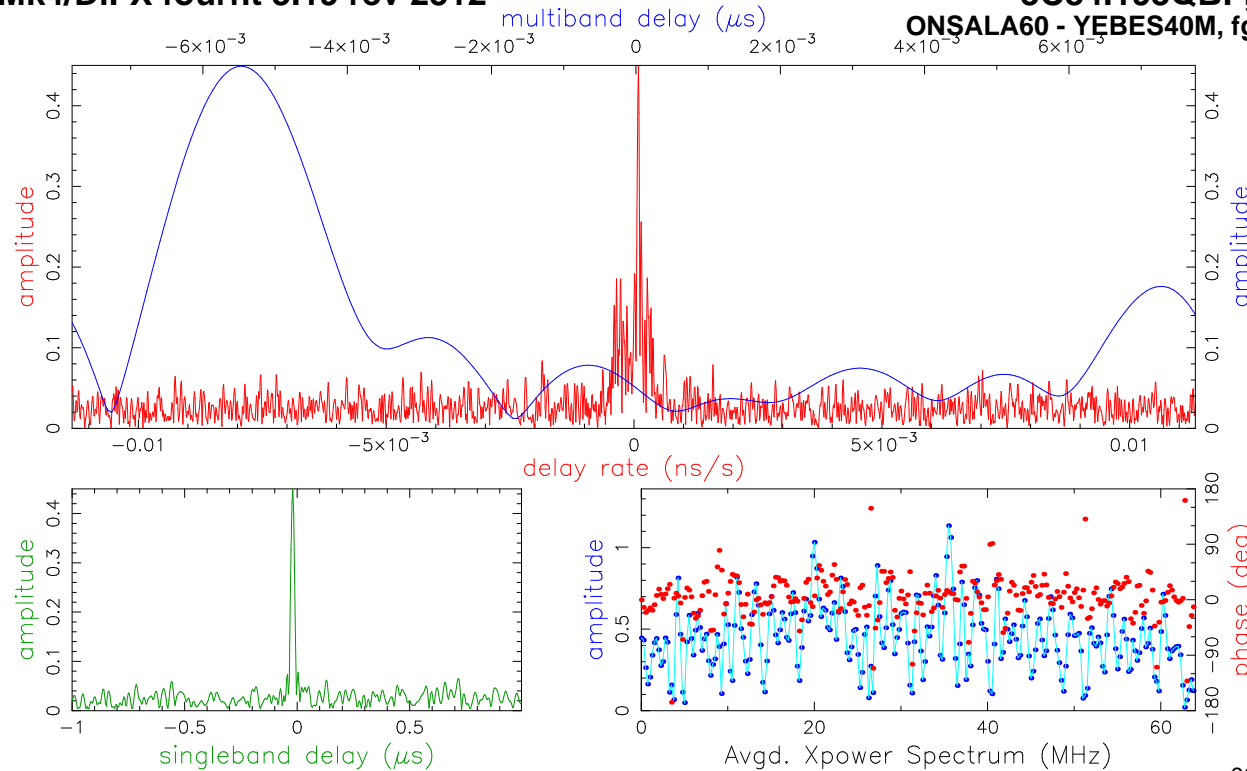
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122525  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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
	-23.6	-26.0	-23.9	-1.7	10.7	14.8	-21.6	-59.4		-14.1
	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.2		0.4
	262.6	262.8	262.1	262.7	262.3	261.9	262.7	260.6	Sbd box	262.5
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.23314491748E+03					-1.23316621167E+03			Resid mbdelay (usec)	5.66918E-03 +/- 5.0E-05
Sband delay (usec)	-1.23314474392E+03					2.8836597E+01			Resid sbdelay (usec)	2.14678E-02 +/- 4.0E-04
Phase delay (usec)	-1.23316621212E+03					3.0800002E-07			Resid phdelay (usec)	-4.55345E-07 +/- 1.7E-07
Delay rate (us/s)	1.39845390066E-01					1.39845303034E-01			Resid rate (us/s)	8.70321E-08 +/- 8.3E-10
Total phase (deg)		-184.4				2.11520945029E-05			Resid phase (deg)	-14.1 +/- 5.3

ph/seg (deg) 55.0 12.6 Search (2048X32) 0.409 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 63.6 22.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.9 7.4 Inc. seg. avg. 0.612 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 22.3 13.0 Inc. frq. avg. 0.435 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 X: az 281.6 el 44.0 pa 44.9 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1046.911 2759.553 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/XY..193QBF Output file: /Exps/c201d/v1/1234/No0057/XY.W.197.193QBF simultaneous interpolator

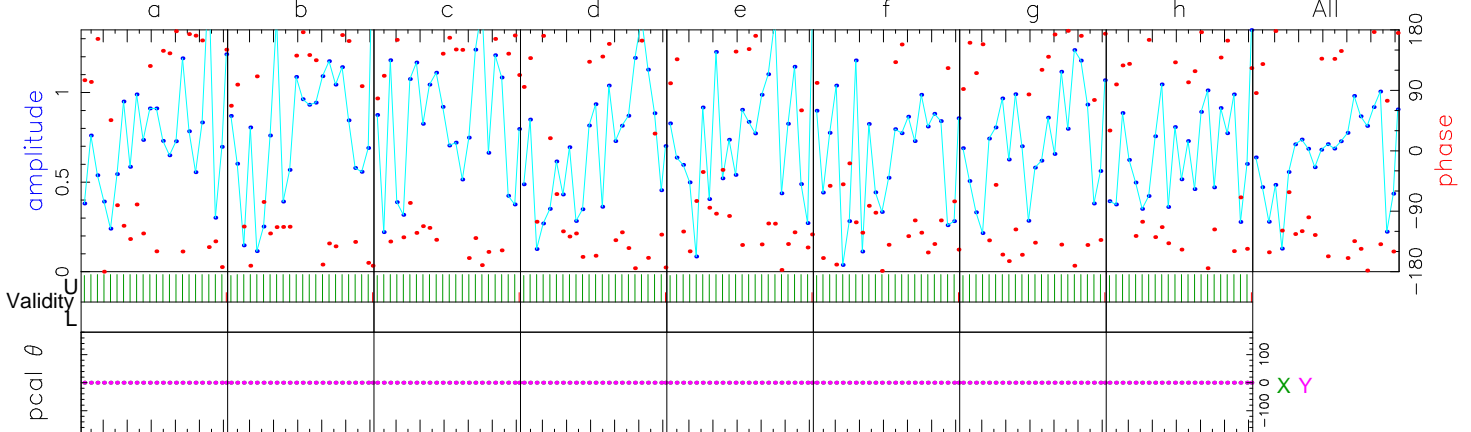


Fringe quality 9

SNR 23.2  
Int time 354.046  
Amp 0.450  
Phase -161.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.020150  
MBD -0.005490  
Fringe rate (Hz) 0.007649  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

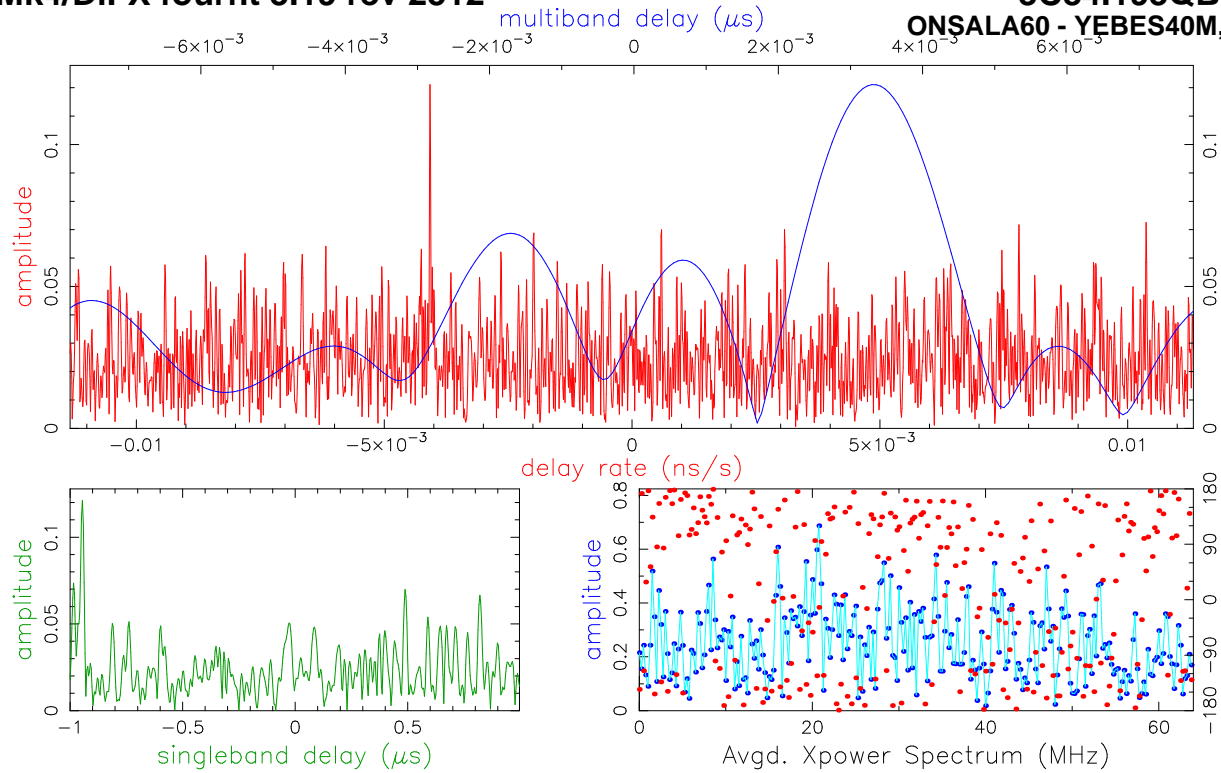
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122528  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

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



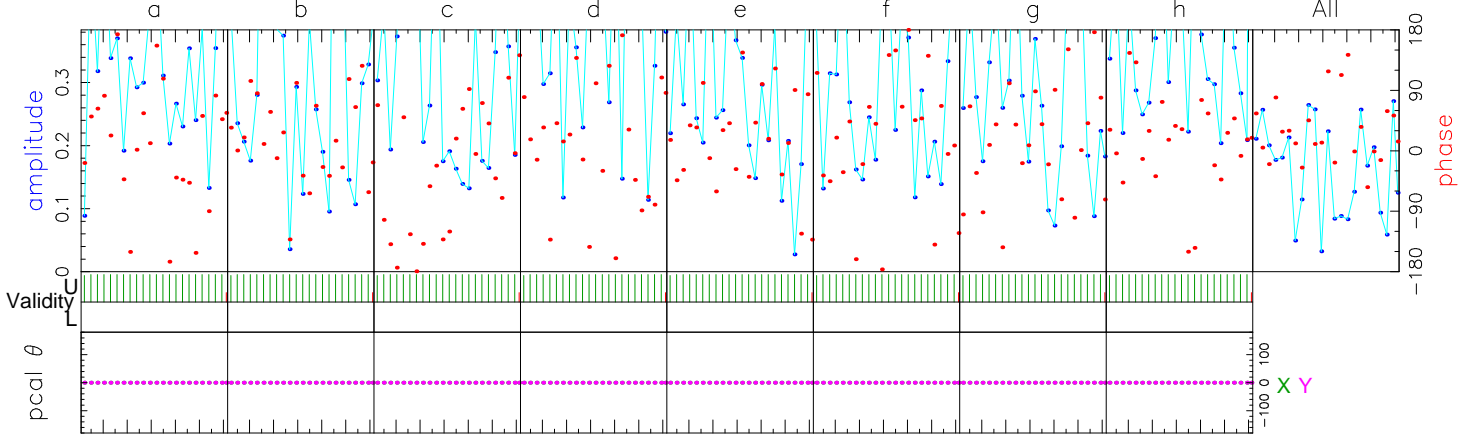
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.0	-174.0	-158.6	-168.7	-131.2	-134.0	-169.6	177.3	Phase	-161.6
	0.5	0.5	0.6	0.4	0.4	0.4	0.5	0.4	Ampl.	0.5
	251.7	251.5	251.9	251.7	252.1	251.7	251.6	250.9	Sbd box	251.8
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.23318732686E+03		Apriori delay (usec)		-1.23316621167E+03		Resid mbdelay (usec)		-5.49019E-03	+/- 4.7E-05
Sband delay (usec)	-1.23318636217E+03		Apriori clock (usec)		2.8836597E+01		Resid sbdelay (usec)		-2.01505E-02	+/- 3.7E-04
Phase delay (usec)	-1.23316621688E+03		Apriori clockrate (us/s)		3.0800002E-07		Resid phdelay (usec)		-5.21201E-06	+/- 1.6E-07
Delay rate (us/s)	1.39845391826E-01		Apriori rate (us/s)		1.39845303034E-01		Resid rate (us/s)		8.87922E-08	+/- 7.8E-10
Total phase (deg)			Apriori accel (us/s/s)		2.11520945029E-05		Resid phase (deg)		-161.6	+/- 4.9

ph/seg (deg) 54.3 11.9 Search (2048X32) 0.445 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.6 20.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 20.2 7.0 Inc. seg. avg. 0.632 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 14.6 12.2 Inc. frq. avg. 0.465 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 X: az 281.6 el 44.0 pa 44.9 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1046.911 2759.553 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/XY..193QBF Output file: /Exps/c201d/v1/1234/No0057/XY.W.217.193QBF



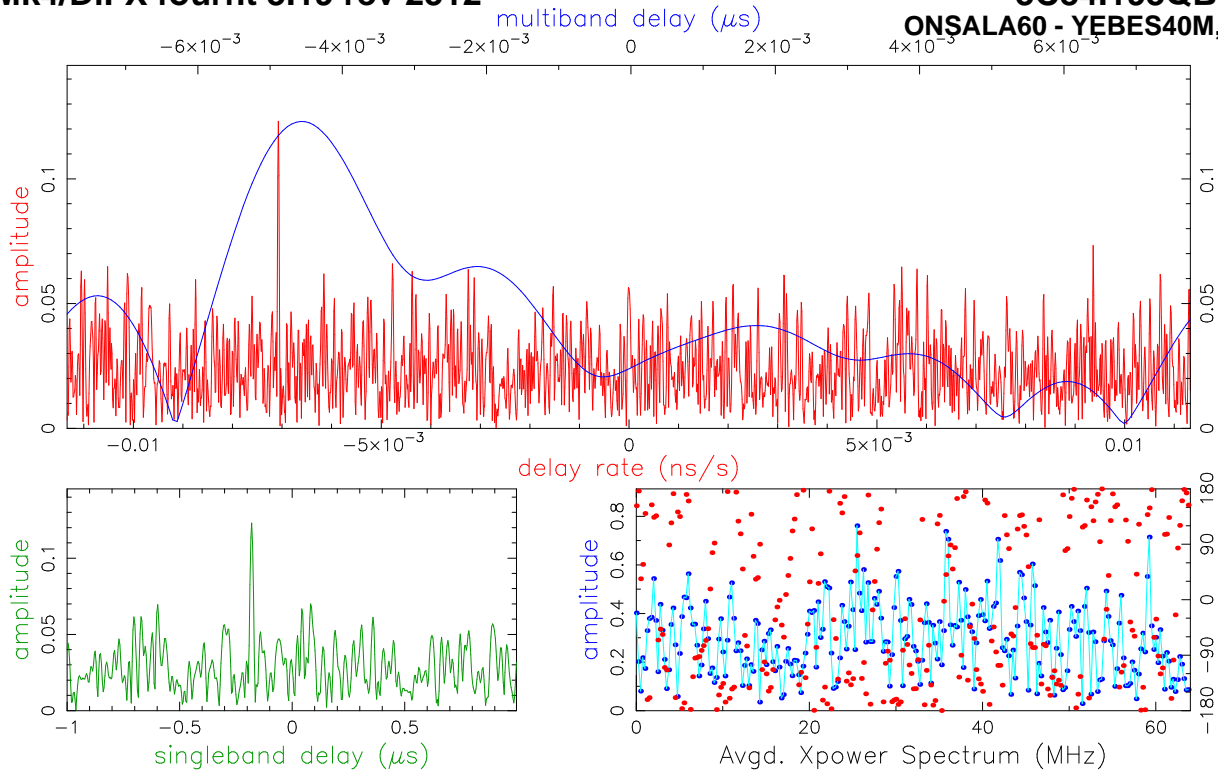
Fringe quality 0  
SNR 6.2  
Int time 354.046  
Amp 0.128  
Phase 27.6  
PFD 1.1e-01  
Delays (us)  
SBD -0.945557  
MBD 0.003319  
Fringe rate (Hz)  
-0.351676  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201d  
Exper # 16383  
Yr:day 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122532  
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



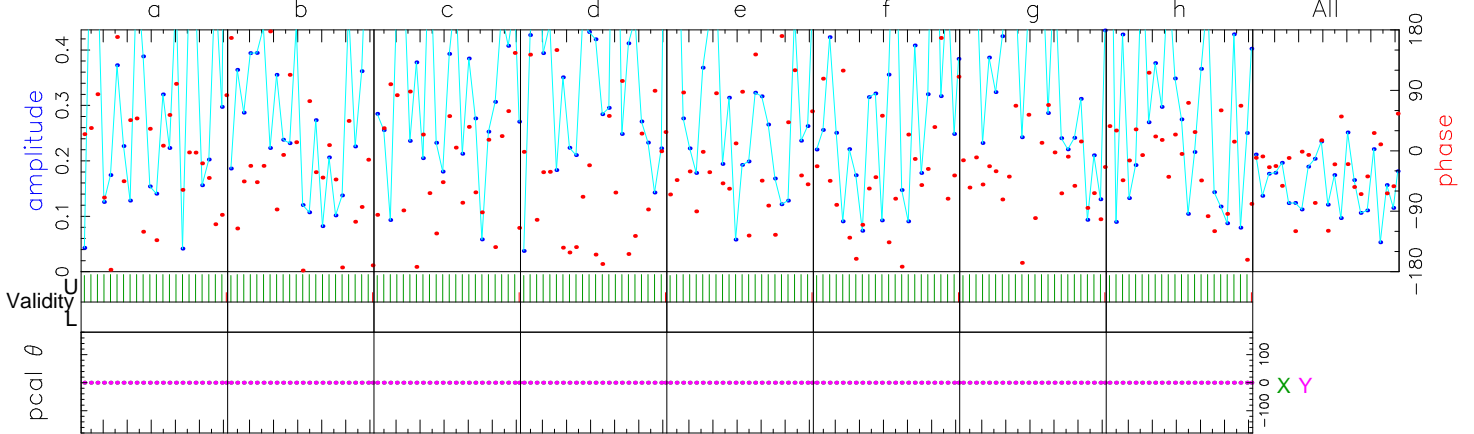
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
Group delay (usec)(sbd)	-1.23411601780E+03									
Sband delay (usec)	-1.23411176842E+03									
Phase delay (usec)	-1.23316621078E+03									
Delay rate (us/s)	1.39841220424E-01									
Total phase (deg)			-142.7							
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)										
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 θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
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 θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
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)										

ph/seg (deg) 48.6 44.1 Search (2048X32) 0.118 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 71.5 76.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 38.3 26.0 Inc. seg. avg. 0.133 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 46.2 45.4 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  
X: az 281.6 el 44.0 pa 44.9 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1046.911 2759.553 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/XY..193QBF Output file: /Exps/c201d/v1/1234/No0057/XY.W.234.193QBF



Fringe quality 0  
SNR 6.3  
Int time 354.046  
Amp 0.145  
Phase -25.7  
PFD 6.1e-02  
Delays (us)  
SBD -0.180126  
MBD -0.004561  
Fringe rate (Hz)  
-0.610496  
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  
2020:204:122536  
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
	21.9	-35.7	-1.9	-88.5	-28.5	-48.1	-24.2	-2.0	Phase	-25.7
	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.2	Ampl.	0.2
	426.7	154.5	183.9	126.4	86.9	90.7	211.7	219.7	Sbd box	210.9
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

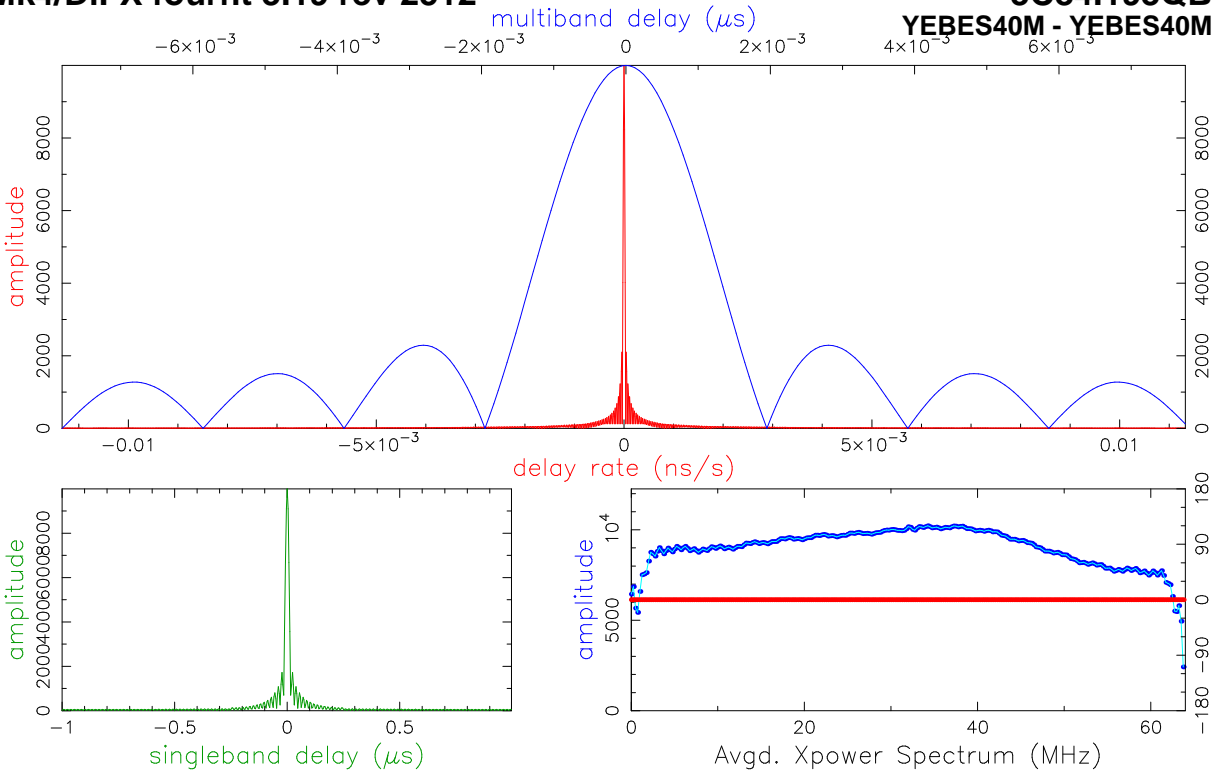
Group delay (usec)(sbd)	-1.23334264763E+03	Apriori delay (usec)	-1.23316621167E+03	Resid mbdelay (usec)	-4.56097E-03	+/-	1.7E-04
Sband delay (usec)	-1.23334633767E+03	Apriori clock (usec)	0.121	Resid sbdelay (usec)	-1.80126E-01	+/-	1.4E-03
Phase delay (usec)	-1.23316621250E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-8.29223E-07	+/-	5.8E-07
Delay rate (us/s)	1.39838215779E-01	Apriori rate (us/s)	1.39845303034E-01	Resid rate (us/s)	-7.08725E-06	+/-	2.8E-09
Total phase (deg)	-196.0	Apriori accel (us/s/s)	2.11520945029E-05	Resid phase (deg)	-25.7	+/-	18.1

ph/seg (deg)	42.9	Theor.	43.4	Amplitude	0.145 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	49.0	Search (2048X32)	0.121	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	36.4	Inc. seg. avg.	0.145	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	44.0	Inc. frq. avg.	0.150	Sample rate (MSamp/s):	128	ion window (TEC)	0.00	0.00	

X: az 281.6 el 44.0 pa 44.9 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1046.911 2759.553 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/XY..193QBF Output file: /Exps/c201d/v1/1234/No0057/XY.W.243.193QBF

Mk4/DiFX fourfit 3.19 rev 2512

3C84.193QBF, No0057, YY  
YEBES40M - YEBES40M, fgroup W, pol LL

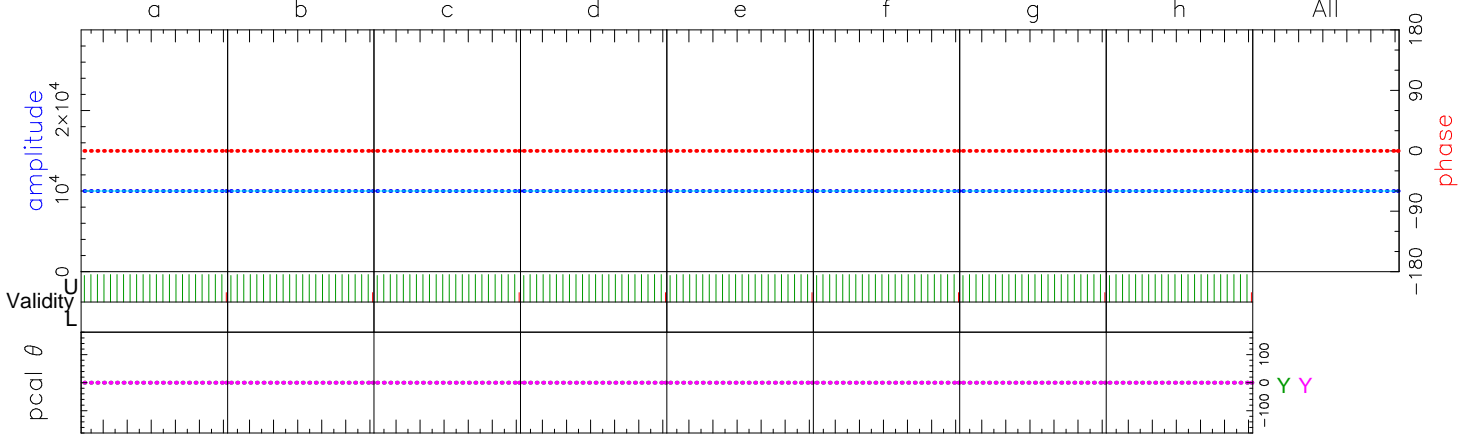


Fringe quality 9

SNR 514549.8  
Int time 354.046  
Amp 9999.999  
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 2020:118  
Start 165005.12  
Stop 165559.94  
FRT 165300.00  
Corr/FF/build  
2020:204:103652  
2020:204:122526  
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



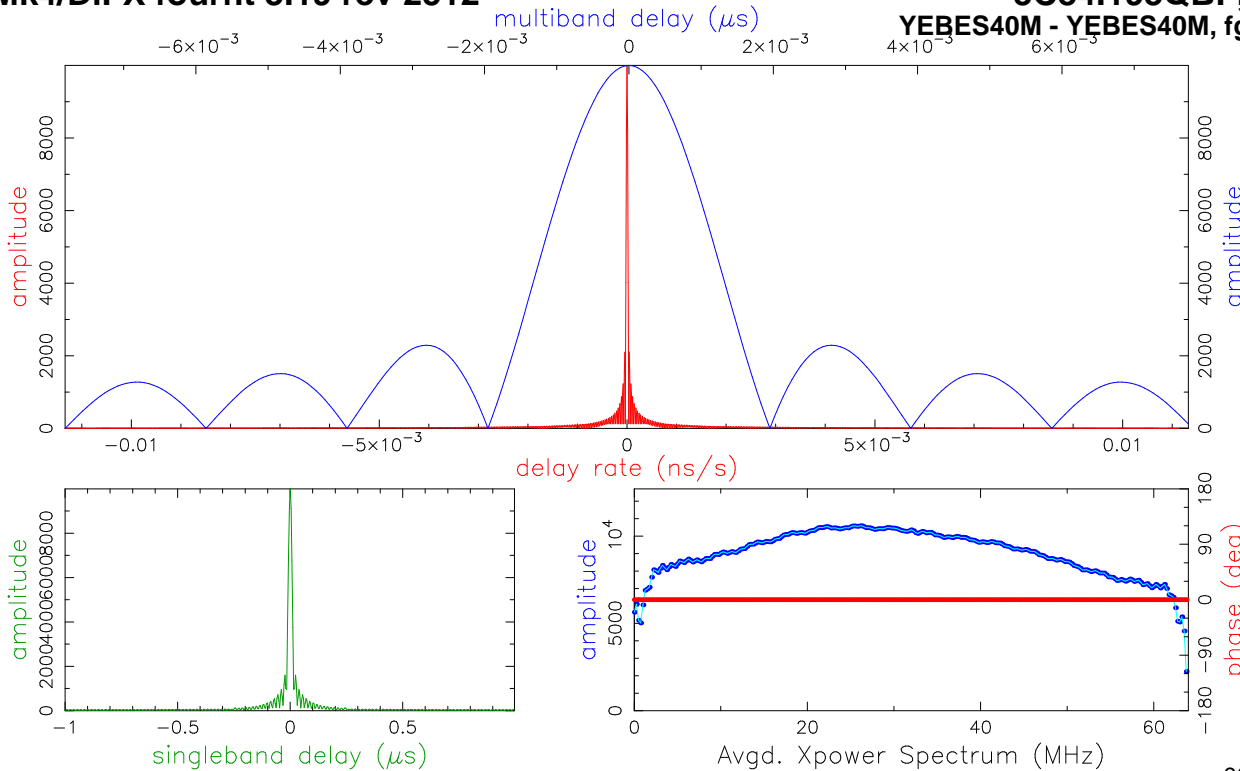
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	10000.0	10000.0
Y	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	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)	-3.16173531473E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.16174E-20	+/-	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	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0		0.0		0.0	Search (2048X32)	9999.999	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	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	9999.999	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Y: az 290.3 el 49.0 pa 72.6      Y: az 290.3 el 49.0 pa 72.6      u,v (vr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201d/v1/1234/No0057/YY..193QBF    Output file: /Exps/c201d/v1/1234/No0057/YY.W.205.193QBF

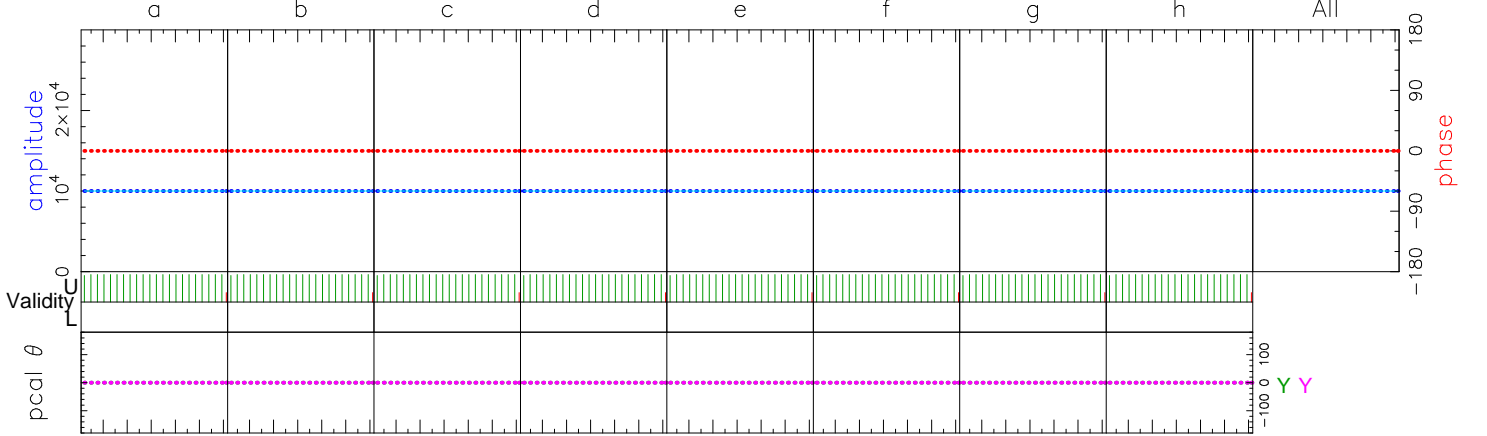


Fringe quality 9

SNR 514549.8  
 Int time 354.046  
 Amp 9999.999  
 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 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122530  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

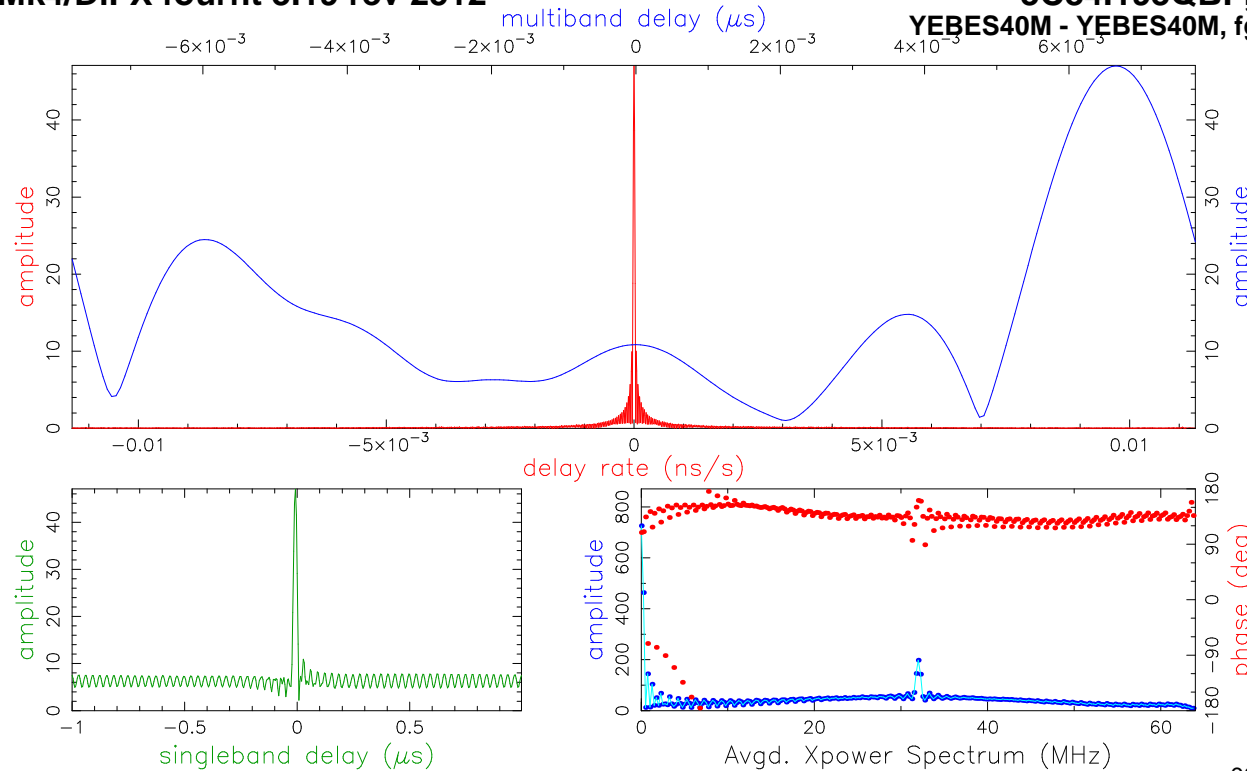
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	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)	-2.65724275599E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.65724E-20	+/-	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	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.999	Interp.	0.000	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	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. frq. avg.	9999.999	u, v (fr/asec)	0.000 0.000	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
								Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00		

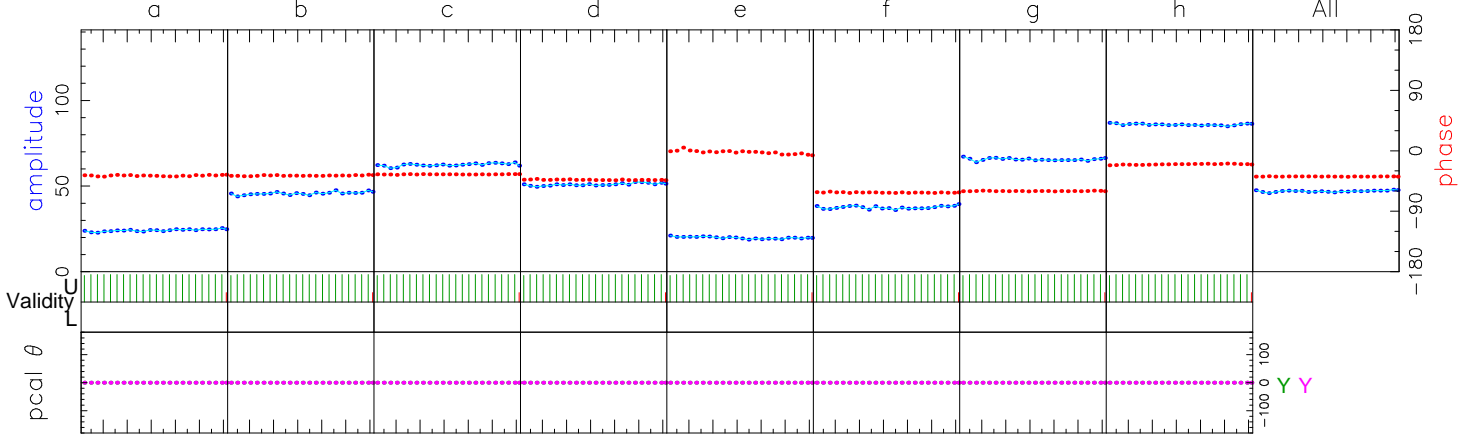


Fringe quality 6

SNR 2422.9  
 Int time 354.046  
 Amp 47.087  
 Phase -38.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.008345  
 MBD 0.006643  
 Fringe rate (Hz)  
 -0.000018  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

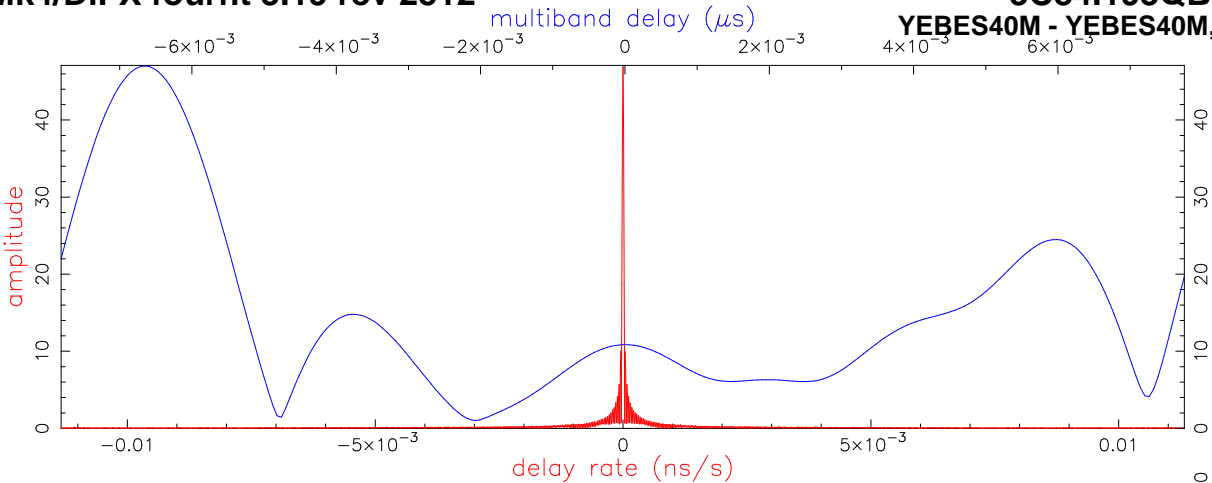
Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122534  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



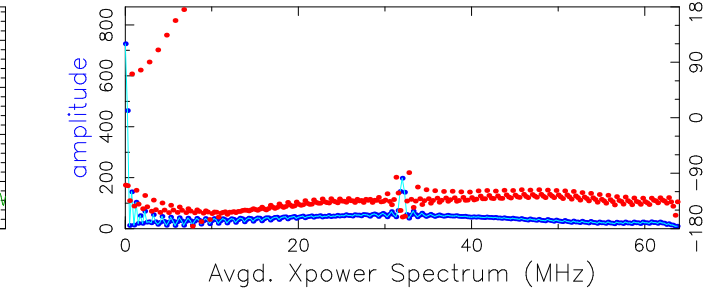
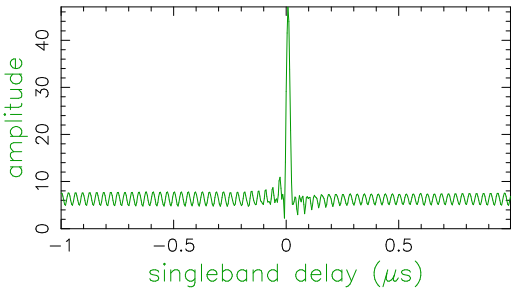
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.0	-36.9	-35.1	-43.2	-2.0	-62.1	-59.9	-20.1	Phase	-38.3
	24.2	45.8	62.5	51.0	19.9	37.5	65.6	85.9	Ampl.	49.0
	255.5	254.2	255.0	254.9	255.1	252.5	248.8	253.4	Sbd box	254.9
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.98243750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		6.64256E-03	+/- 4.5E-07
Sband delay (usec)	-8.34500000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-8.34500E-03	+/- 3.6E-06
Phase delay (usec)	-1.23477602289E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.23478E-06	+/- 1.5E-09
Delay rate (us/s)	-2.11150170636E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-2.11150E-10	+/- 7.4E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-38.3	+/- 0.0

RMS Theor. Amplitude 47.087 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.1 Search (2048X32) 46.287 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.0 0.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 21.3 0.1 Inc. seg. avg. 47.005 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 44.2 0.1 Inc. frq. avg. 49.035 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00



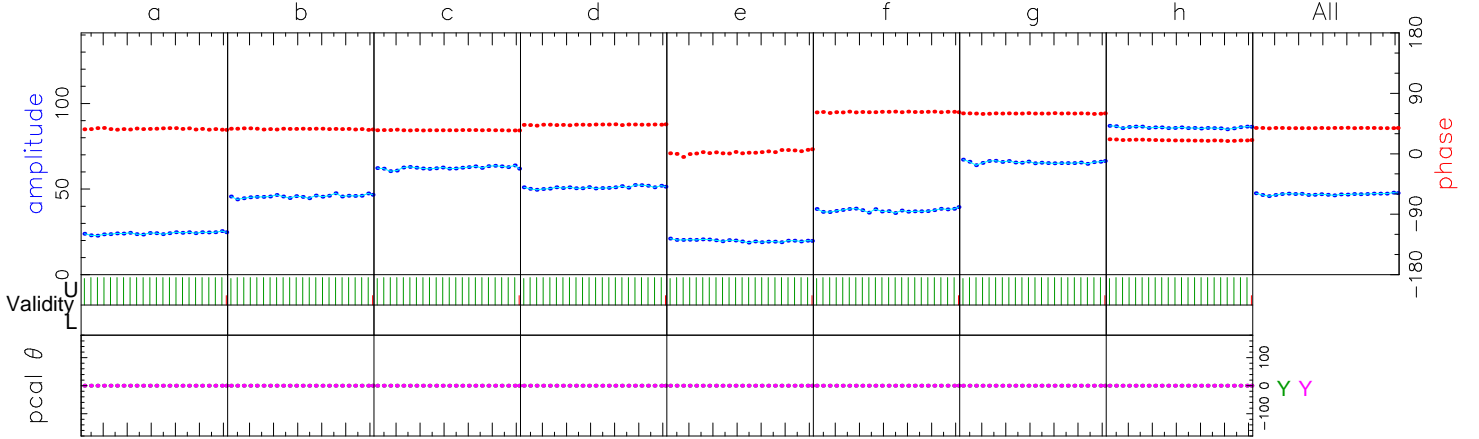
Fringe quality 6

SNR 2422.9  
 Int time 354.046  
 Amp 47.087  
 Phase 38.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.008345  
 MBD -0.006643  
 Fringe rate (Hz)  
 0.000018  
 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  
 2020:204:122537  
 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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

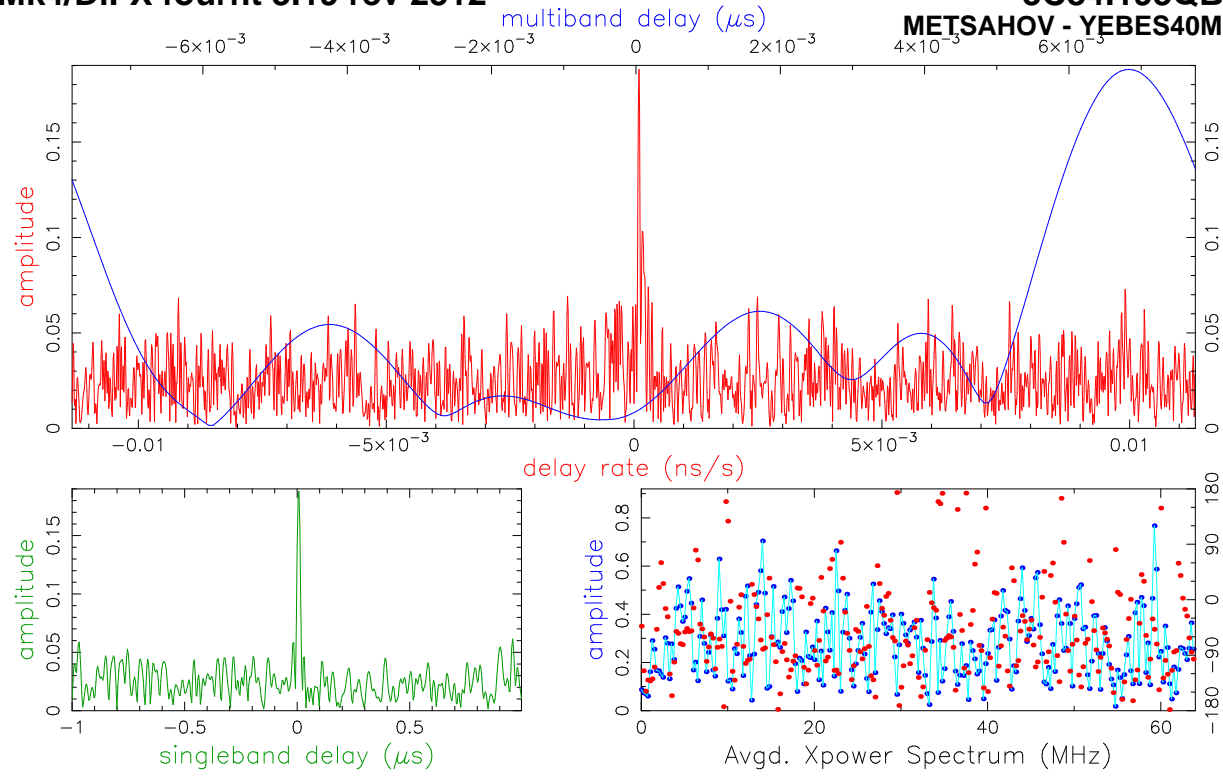
Group delay (usec)(sbd)	8.98243750000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-6.64256E-03	+/-	4.5E-07
Sband delay (usec)	8.34500000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	8.34500E-03	+/-	3.6E-06
Phase delay (usec)	1.23477602272E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.23478E-06	+/-	1.5E-09
Delay rate (us/s)	2.11150170636E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	2.11150E-10	+/-	7.4E-12
Total phase (deg)	38.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	38.3	+/-	0.0

ph/seg (deg)	0.2	Theor.	Amplitude	47.087 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	1.0	0.1	Search (2048X32)	46.287	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	21.3	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.2	0.1	Inc. seg. avg.	47.005	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	49.035	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Y: az 290.3 el 49.0 pa 72.6 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

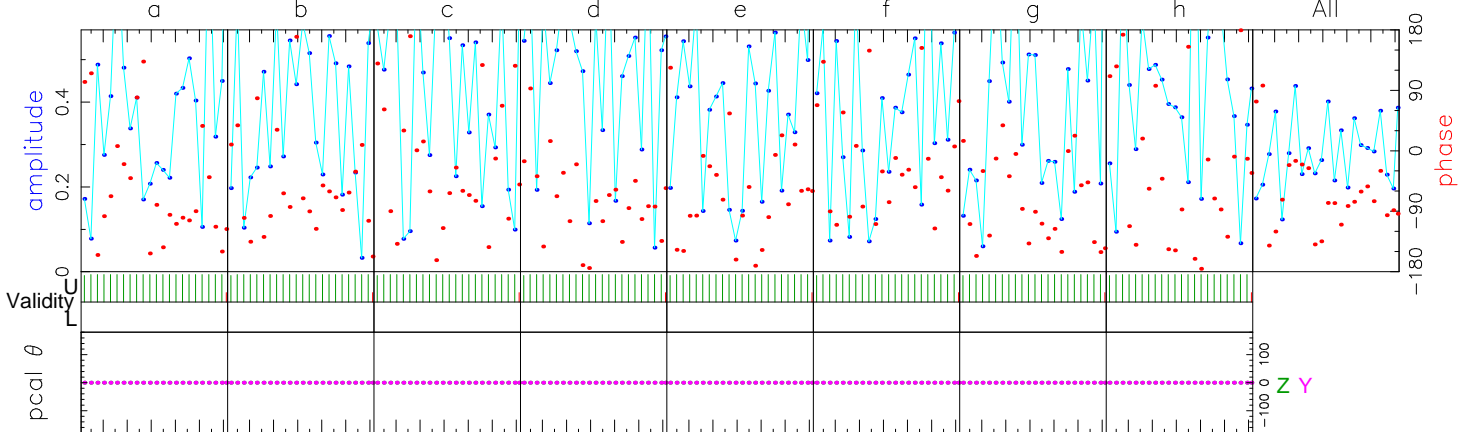
Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/YY..193QBF Output file: /Exps/c201d/v1/1234/No0057/YY.W.249.193QBF





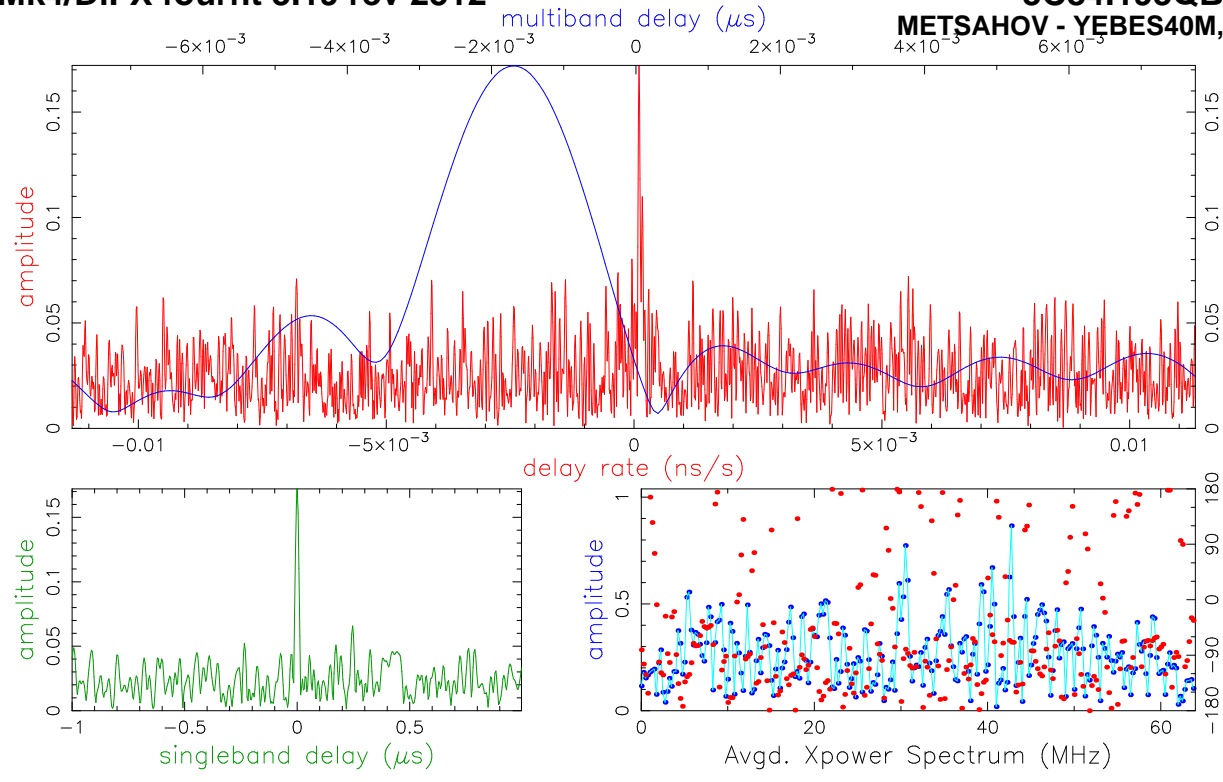
Fringe quality 9  
 SNR 9.8  
 Int time 353.754  
 Amp 0.190  
 Phase -72.1  
 PFD  $5.9 \times 10^{-14}$   
 Delays (us)  
 SBD 0.006506  
 MBD 0.006802  
 Fringe rate (Hz) 0.008874  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build 2020:204:103652  
 2020:204:122536  
 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



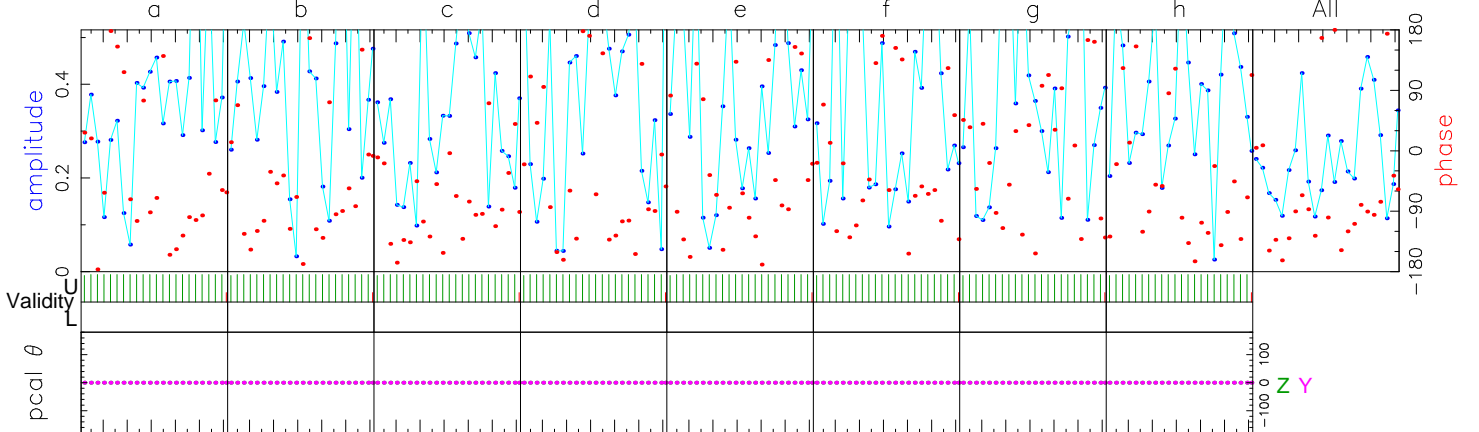
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-83.5	-73.2	-71.2	-76.9	-73.0	-26.0	-70.4	-105.0	Phase	-72.1
	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	258.9	258.9	389.9	258.8	166.1	258.0	259.2	179.9	Sbd box	258.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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)	-2.81027781602E+03		Apriori delay (usec)		-2.81028461776E+03		Resid mbdelay (usec)		6.80174E-03	+/- 1.1E-04
Sband delay (usec)	-2.81027811176E+03		Apriori clock (usec)		-1.2106056E+01		Resid sbdelay (usec)		6.50600E-03	+/- 8.8E-04
Phase delay (usec)	-2.81028462008E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		-2.32601E-06	+/- 3.8E-07
Delay rate (us/s)	1.58443474055E-01		Apriori rate (us/s)		1.58443371037E-01		Resid rate (us/s)		1.03019E-07	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		3.12372999447E-05		Resid phase (deg)		-72.1	+/- 11.7

ph/seg (deg) 59.9 28.1 Search (2048X32) 0.187 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.3 49.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 23.7 16.6 Inc. seg. avg. 0.248 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 22.7 28.9 Inc. frq. avg. 0.191 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 288.5 el 38.5 pa 39.1 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1177.140 3632.975 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/ZY..193QBF Output file: /Exps/c201d/v1/1234/No0057/ZY.W.244.193QBF simultaneous interpolator



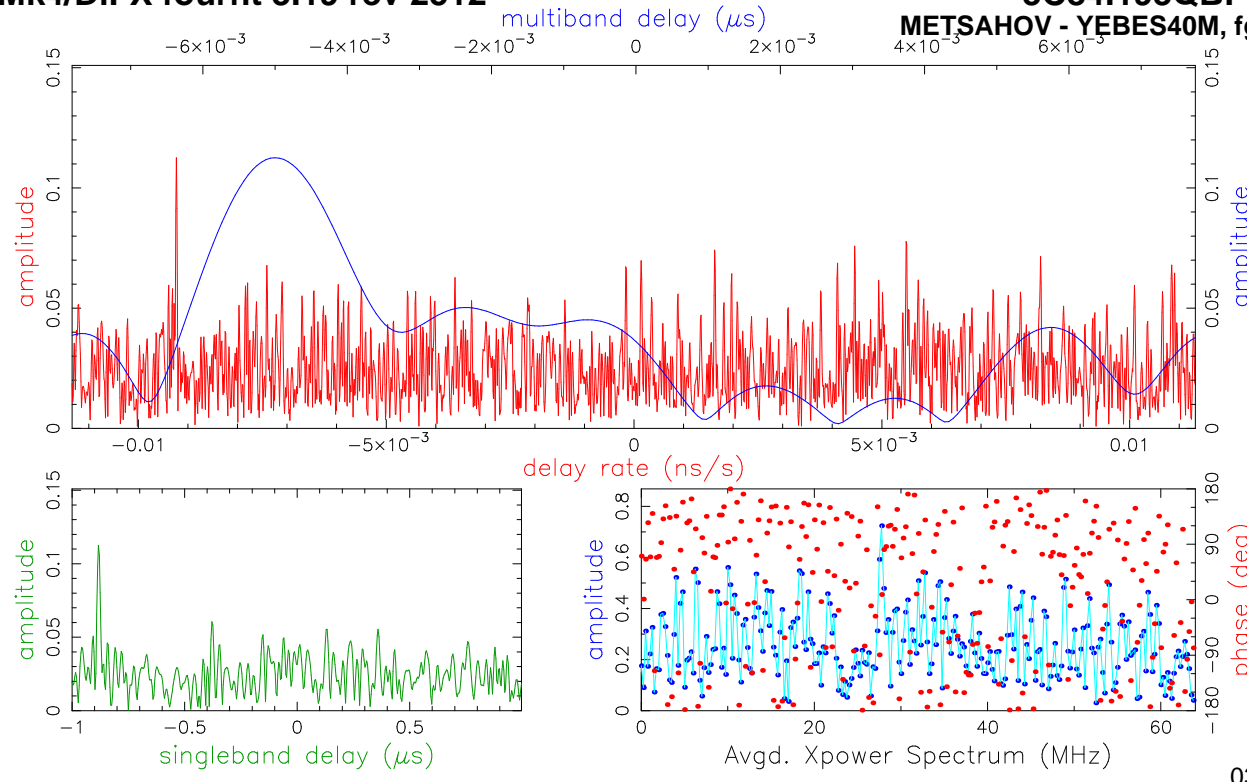
Fringe quality 9  
 SNR 8.9  
 Int time 353.754  
 Amp 0.172  
 Phase -98.4  
 PFD 3.2e-10  
 Delays (us)  
 SBD -0.000494  
 MBD -0.001709  
 Fringe rate (Hz) 0.008343  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122539  
 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
	-99.7	-92.8	-91.4	-115.3	-121.1	-91.7	-66.7	-101.5	Phase	-98.4
	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	358.9	256.1	256.0	478.2	400.0	257.1	362.8	257.9	Sbd box	256.9
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.81028632686E+03		Apriori delay (usec)		-2.81028461776E+03		Resid mbdelay (usec)		-1.70910E-03	+/- 1.2E-04
Sband delay (usec)	-2.81028511176E+03		Apriori clock (usec)		-1.2106056E+01		Resid sbdelay (usec)		-4.94000E-04	+/- 9.7E-04
Phase delay (usec)	-2.81028462093E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		-3.17338E-06	+/- 4.2E-07
Delay rate (us/s)	1.58443467894E-01		Apriori rate (us/s)		1.58443371037E-01		Resid rate (us/s)		9.68570E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		3.12372999447E-05		Resid phase (deg)		-98.4	+/- 12.9

ph/seg (deg) 53.5 31.0 Search (2048X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.6 54.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 18.0 18.3 Inc. seg. avg. 0.212 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 23.9 31.9 Inc. frq. avg. 0.168 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 288.5 el 38.5 pa 39.1 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1177.140 3632.975 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/ZY..193QBF Output file: /Exps/c201d/v1/1234/No0057/ZY.W.251.193QBF simultaneous interpolator

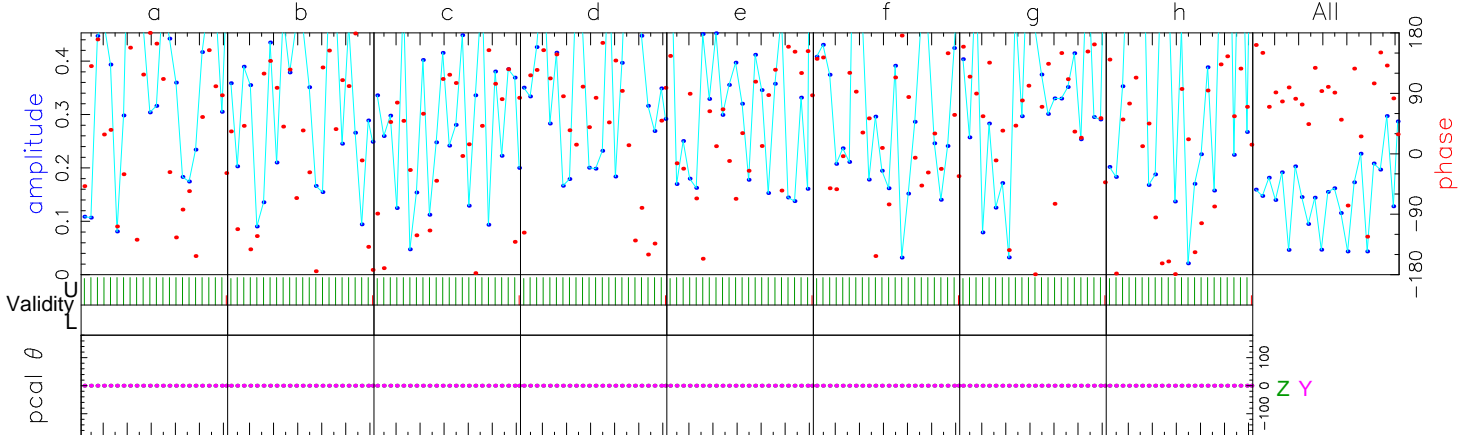


Fringe quality 0

SNR 5.8  
 Int time 353.754  
 Amp 0.151  
 Phase 97.3  
 PFD 7.9e-01  
 Delays (us)  
 SBD -0.882101  
 MBD -0.004984  
 Fringe rate (Hz)  
 -0.796467  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

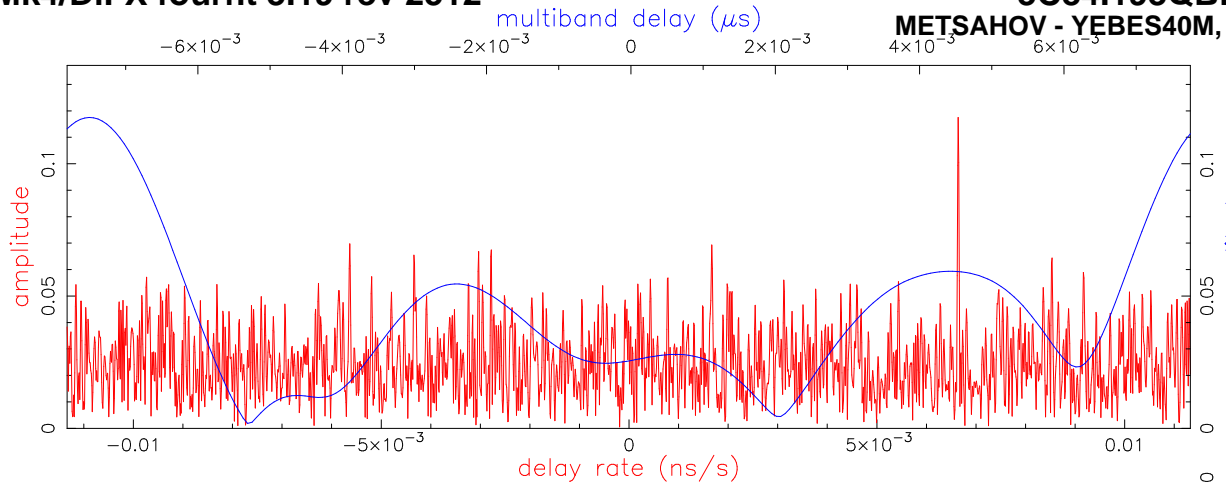
Exp. c201d  
 Exper # 16383  
 Yr:day 2020:118  
 Start 165005.12  
 Stop 165559.94  
 FRT 165300.00  
 Corr/FF/build  
 2020:204:103652  
 2020:204:122543  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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



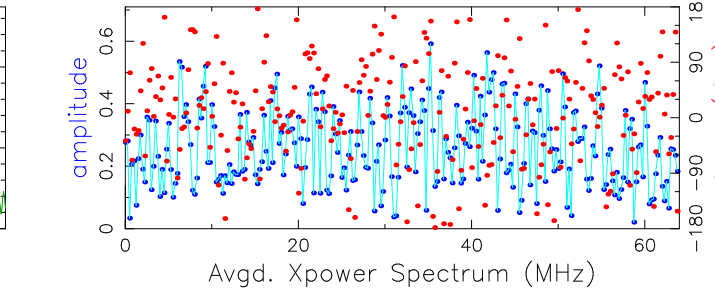
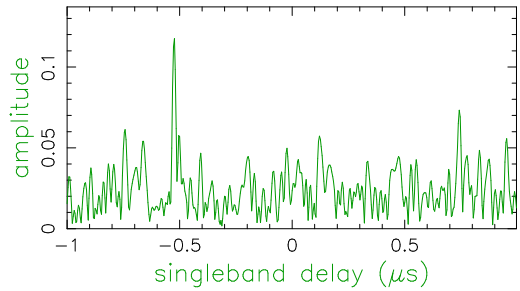
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	135.4	94.7	81.4	104.9	64.5	44.6	101.7	118.4	Phase	97.3
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	Ampl.	0.1
	259.2	498.8	492.9	327.2	269.4	429.7	30.4	33.0	Sbd box	31.2
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.81116460188E+03		Apriori delay (usec)		-2.81028461776E+03		Resid mbdelay (usec)		-4.98412E-03	+/- 1.9E-04
Sband delay (usec)	-2.81116671826E+03		Apriori clock (usec)		-1.2106056E+01		Resid sbdelay (usec)		-8.82101E-01	+/- 1.5E-03
Phase delay (usec)	-2.81028461462E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		3.13914E-06	+/- 6.4E-07
Delay rate (us/s)	1.58434124839E-01		Apriori rate (us/s)		1.58443371037E-01		Resid rate (us/s)		-9.24620E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		3.12372999447E-05		Resid phase (deg)		97.3	+/- 19.7

ph/seg (deg) 58.6 47.3 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.3 82.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 31.8 27.9 Inc. seg. avg. 0.149 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.2 48.7 Inc. frq. avg. 0.149 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 288.5 el 38.5 pa 39.1 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1177.140 3632.975 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/ZY..193QBF Output file: /Exps/c201d/v1/1234/No0057/ZY.W.258.193QBF



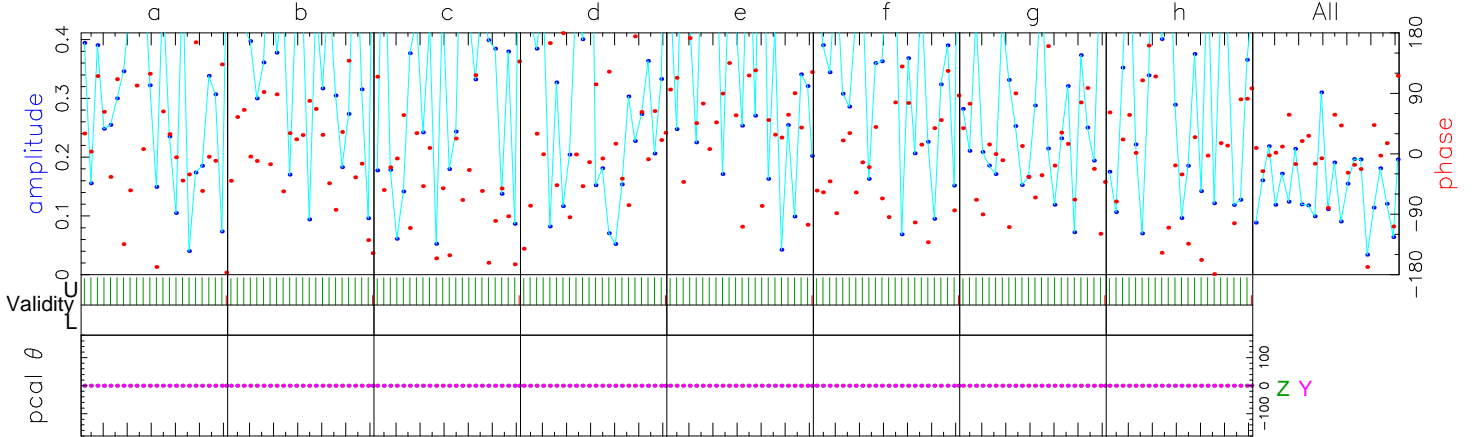
Fringe quality 0

SNR 6.1  
 Int time 353.754  
 Amp 0.137  
 Phase 1.1  
 PFD 2.4e-01  
 Delays (us)  
 SBD -0.524591  
 MBD 0.008106  
 Fringe rate (Hz)  
 0.572621  
 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  
 2020:204:122546  
 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
	31.7	9.0	-55.0	-17.6	59.6	-18.1	-17.4	39.5	Phase	1.1
	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	449.0	123.4	86.8	41.3	381.6	62.4	374.4	431.8	Sbd box	122.7
U/L	693/0	693/0	693/0	693/0	693/0	693/0	693/0	693/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.81080776154E+03	Apriori delay (usec)	-2.81028461776E+03	Resid mbdelay (usec)	8.10622E-03	+/-	1.8E-04
Sband delay (usec)	-2.81080920876E+03	Apriori clock (usec)	-1.2106056E+01	Resid sbdelay (usec)	-5.24591E-01	+/-	1.4E-03
Phase delay (usec)	-2.81028461772E+03	Apriori clockrate (us/s)	-2.0400000E-07	Resid phdelay (usec)	3.54632E-08	+/-	6.1E-07
Delay rate (us/s)	1.58450018597E-01	Apriori rate (us/s)	1.58443371037E-01	Resid rate (us/s)	6.64756E-06	+/-	3.0E-09
Total phase (deg)	-349.4	Apriori accel (us/s/s)	3.12372999447E-05	Resid phase (deg)	1.1	+/-	18.8

ph/seg (deg)	54.4	Theor.	45.0	Amplitude	0.137 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	55.7		78.6	Search (2048X32)	0.112	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.0		26.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.3		46.4	Inc. seg. avg.	0.129	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.148	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 288.5 el 38.5 pa 39.1 Y: az 290.3 el 49.0 pa 72.6 u,v (fr/asec) -1177.140 3632.975 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201d/v1/1234/No0057/ZY..193QBF Output file: /Exps/c201d/v1/1234/No0057/ZY.W.264.193QBF