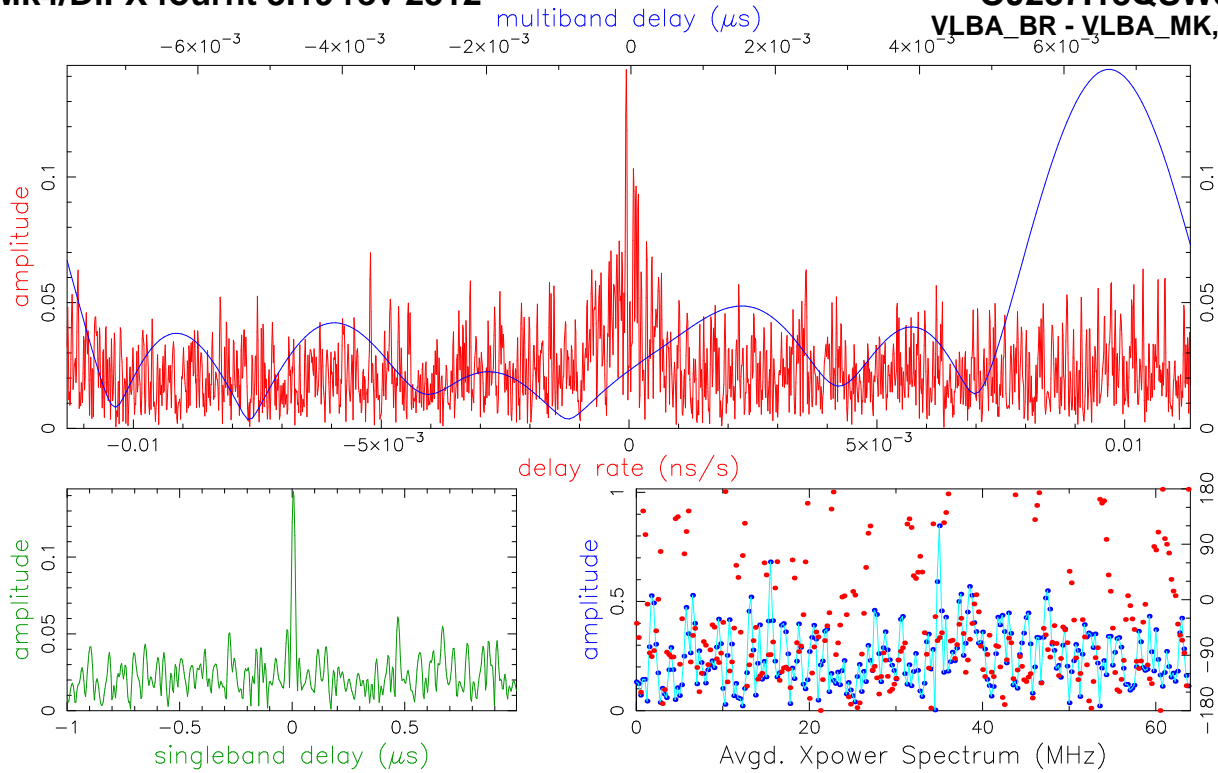


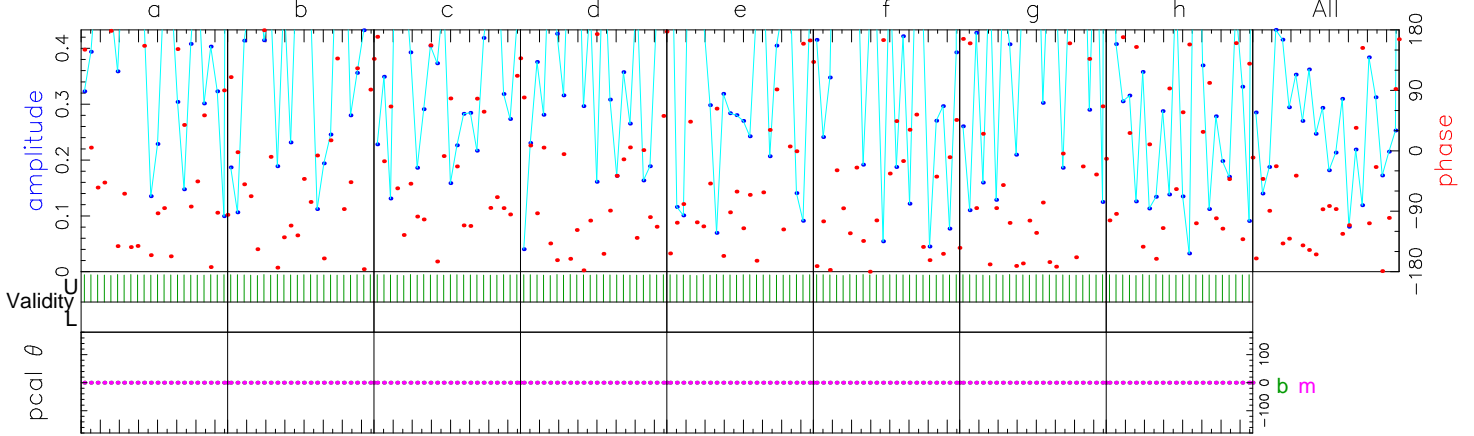
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, bm
VLBA_BR - VLBA_MK, fgroup W, pol RR



Fringe quality 9
SNR 8.2
Int time 433.151
Amp 0.144
Phase -106.3
PFD 7.3e-08
Delays (us)
SBD 0.005346
MBD 0.006666
Fringe rate (Hz)
-0.004426
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140931
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

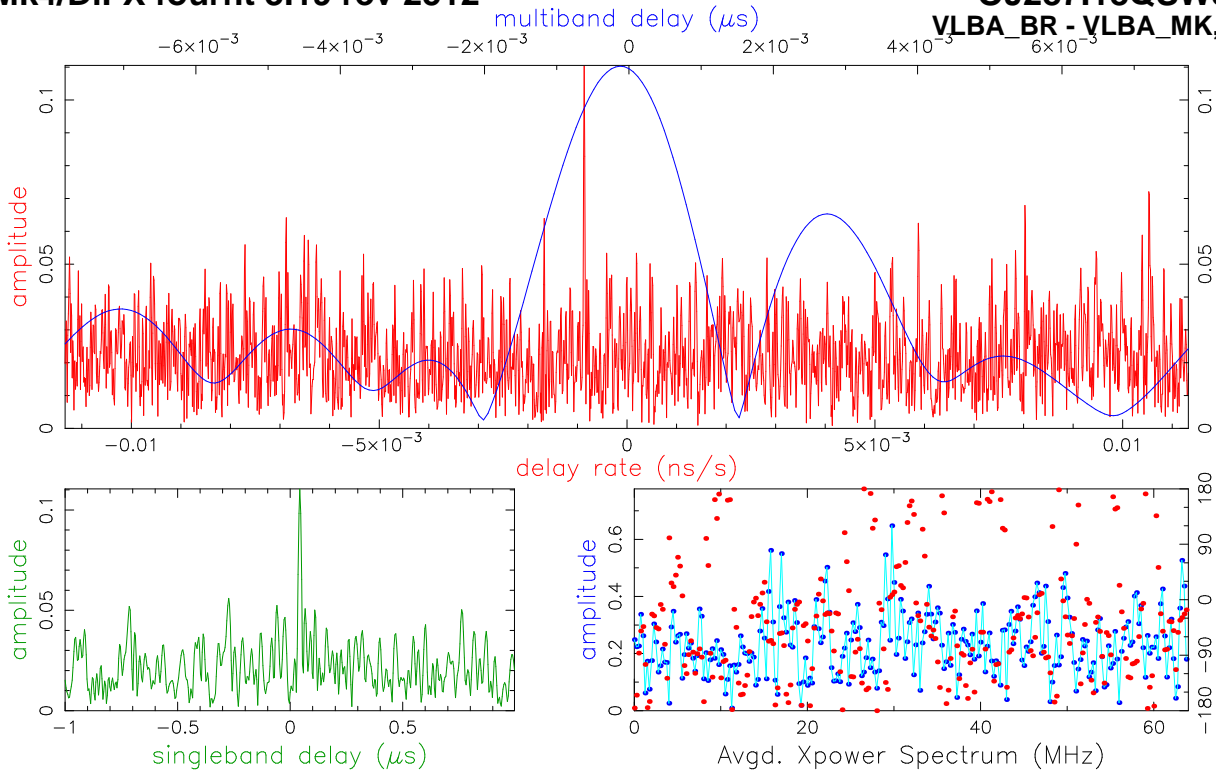
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-109.9	-115.0	-79.2	-113.8	-104.5	-71.5	-125.8	-112.3	Phase	-106.3
	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	258.1	115.1	414.2	259.4	441.7	418.4	256.7	69.8	Sbd box	258.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.00780342067E+04		Apriori delay (usec)		1.00780275411E+04		Resid mbdelay (usec)		6.66552E-03	+/- 1.3E-04
Sband delay (usec)	1.00780328876E+04		Apriori clock (usec)		-9.5112419E+00		Resid sbdelay (usec)		5.34650E-03	+/- 1.0E-03
Phase delay (usec)	1.00780275377E+04		Apriori clockrate (us/s)		-5.3299997E-07		Resid phdelay (usec)		-3.42677E-06	+/- 4.5E-07
Delay rate (us/s)	-6.26156444677E-01		Apriori rate (us/s)		-6.26156393297E-01		Resid rate (us/s)		-5.13803E-08	+/- 1.8E-09
Total phase (deg)	35.3		Apriori accel (us/s/s)		-3.79688296065E-05		Resid phase (deg)		-106.3	+/- 13.9

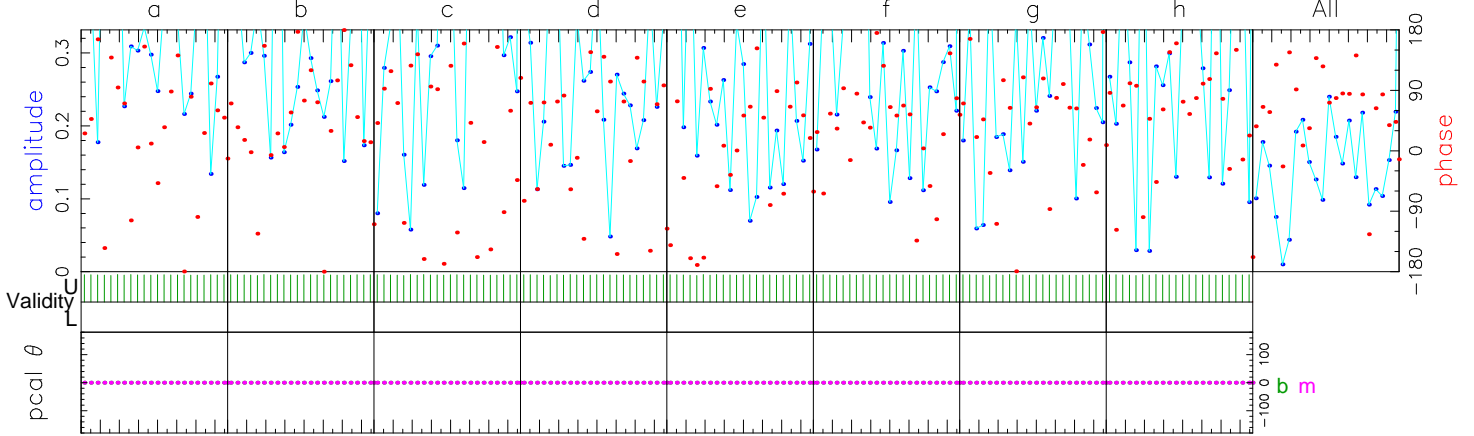
ph/seg (deg) 66.0 33.4 Amplitude 0.144 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 106.7 58.4 Search (2048X32) 0.138 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 19.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 21.6 34.4 Inc. seg. avg. 0.224 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 b: az 106.4 el 40.7 pa -43.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3748.407 2266.421 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/bm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/bm.W.22.18QSW8



Fringe quality 0
SNR 6.3
Int time 433.153
Amp 0.111
Phase 72.9
PFD 8.9e-02
Delays (us)
SBD 0.042989
MBD -0.000119
Fringe rate (Hz)
-0.074723
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140935
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

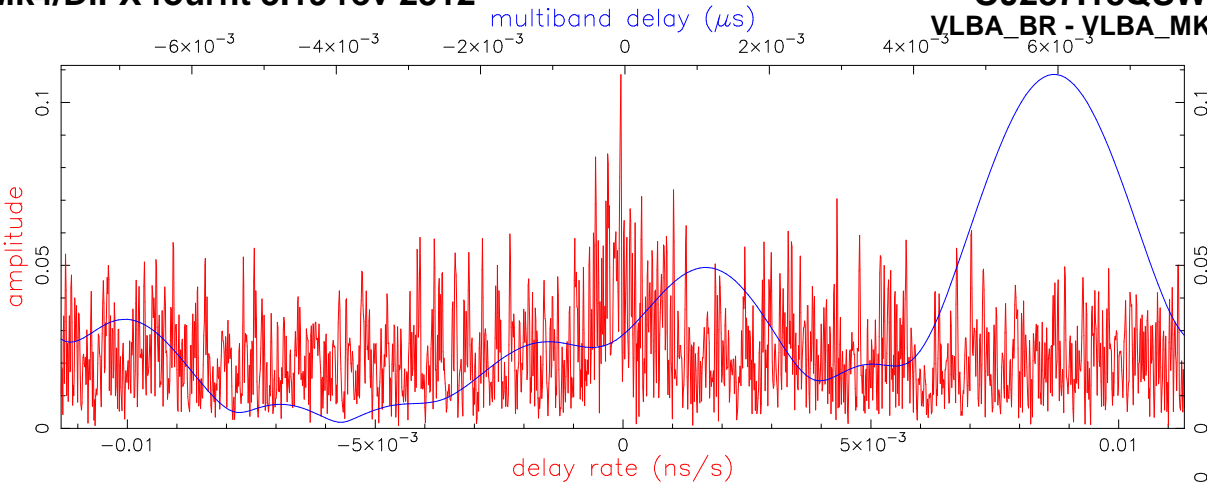
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



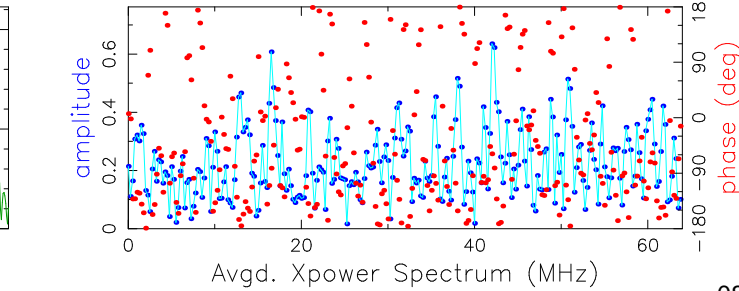
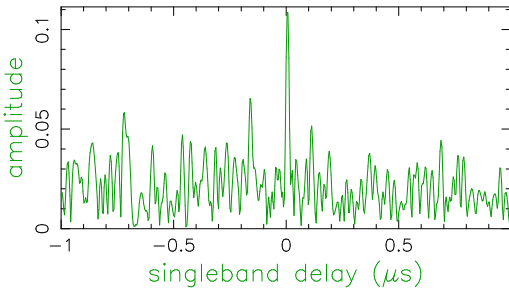
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	68.7	58.5	130.3	71.8	56.1	50.5	70.1	87.8	Phase	72.9
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	275.6	267.0	295.9	96.8	437.7	108.3	210.7	72.4	Sbd box	268.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.00780742973E+04		Apriori delay (usec)		1.00780275411E+04		Resid mbdelay (usec)		-1.18823E-04	+/- 1.7E-04
Sband delay (usec)	1.00780705299E+04		Apriori clock (usec)		-9.5112419E+00		Resid sbdelay (usec)		4.29888E-02	+/- 1.4E-03
Phase delay (usec)	1.00780275435E+04		Apriori clockrate (us/s)		-5.3299997E-07		Resid phdelay (usec)		2.34994E-06	+/- 5.9E-07
Delay rate (us/s)	-6.26157260753E-01		Apriori rate (us/s)		-6.26156393297E-01		Resid rate (us/s)		-8.67456E-07	+/- 2.3E-09
Total phase (deg)	214.4		Apriori accel (us/s/s)		-3.79688296065E-05		Resid phase (deg)		72.9	+/- 18.3

	RMS	Theor.	Amplitude	0.111 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.0	43.8	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	63.6	76.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	27.5	25.8	Inc. seg. avg.	0.111	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	29.8	45.1	Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

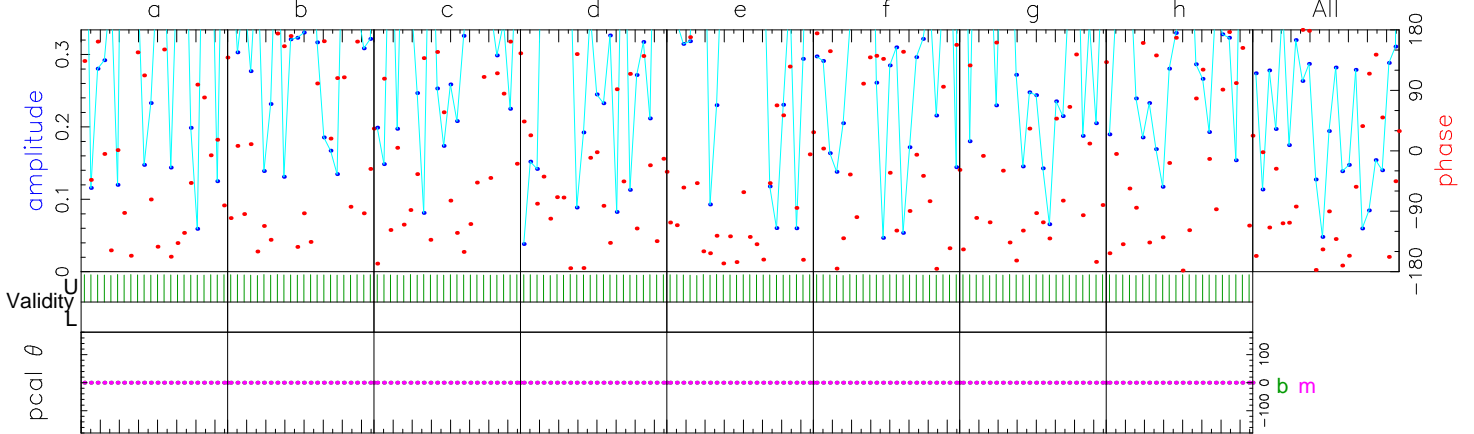
b: az 106.4 el 40.7 pa -43.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3748.407 2266.421 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/bm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/bm.W.40.18QSW8



Fringe quality 0
SNR 6.3
Int time 433.151
Amp 0.111
Phase -121.8
PFD 6.1e-02
Delays (us)
SBD 0.005819
MBD 0.005994
Fringe rate (Hz)
-0.003725
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140926
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.4	-140.2	-105.0	-78.5	-124.7	-155.6	-110.5	-153.7	Phase	-121.8
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	214.4	480.4	87.7	350.8	257.7	80.9	417.7	139.3	Sbd box	258.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

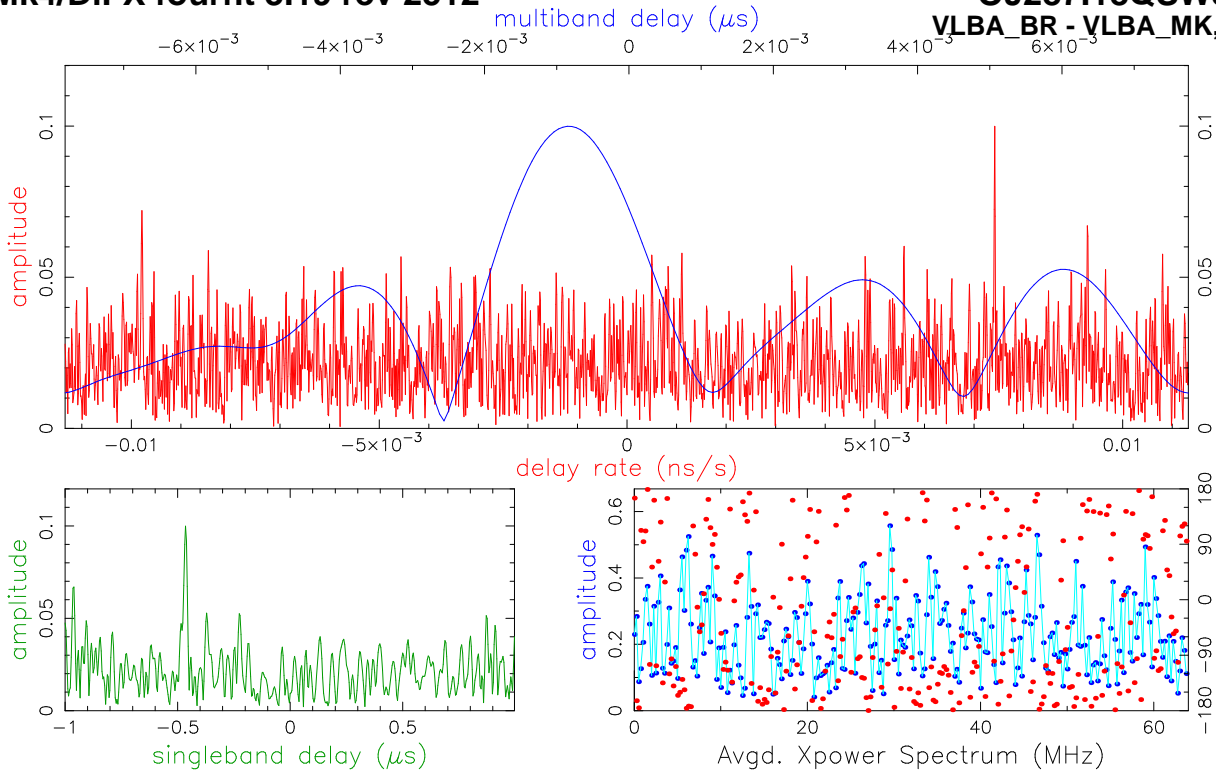
Group delay (usec)(sbd)	1.00780335356E+04	Apriori delay (usec)	1.00780275411E+04	Resid mbdelay (usec)	5.99446E-03	+/-	1.7E-04
Sband delay (usec)	1.0078033596E+04	Apriori clock (usec)	-9.5112419E+00	Resid sbdelay (usec)	5.81850E-03	+/-	1.4E-03
Phase delay (usec)	1.00780275372E+04	Apriori clockrate (us/s)	-5.3299997E-07	Resid phdelay (usec)	-3.92659E-06	+/-	5.8E-07
Delay rate (us/s)	-6.26156436543E-01	Apriori rate (us/s)	-6.26156393297E-01	Resid rate (us/s)	-4.32461E-08	+/-	2.3E-09
Total phase (deg)	19.8	Apriori accel (us/s/s)	-3.79688296065E-05	Resid phase (deg)	-121.8	+/-	18.1

ph/seg (deg)	RMS 77.7	Theor. 43.4	Amplitude Search (2048X32)	0.111 +/- 0.018	0.108	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	120.6	75.7	Interp.	0.000	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.0	25.6	Inc. seg. avg.	0.161	0.108	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.2	44.6	Inc. frq. avg.	0.108	0.108	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

b: az 106.4 el 40.7 pa -43.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3748.407 2266.421 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/bm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/bm.W.5.18QSW8

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, bm
VLBA_BR - VLBA_MK, fgroup W, pol RL

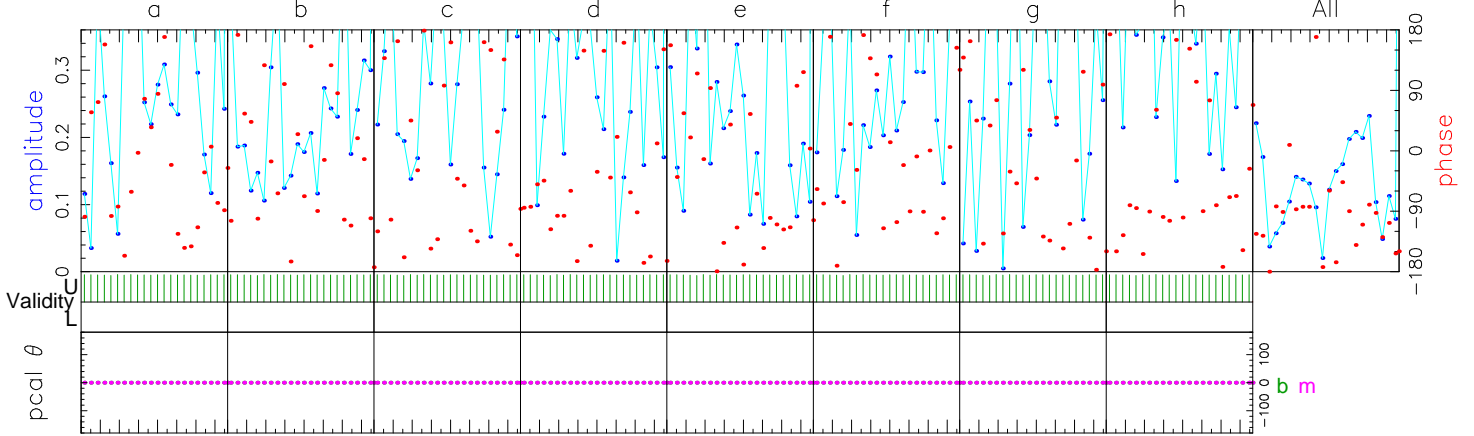


Fringe quality 0

SNR 5.7
Int time 433.149
Amp 0.120
Phase -104.5
PFD 9.6e-01
Delays (us)
SBD -0.464604
MBD -0.000820
Fringe rate (Hz) 0.640014
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140940
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

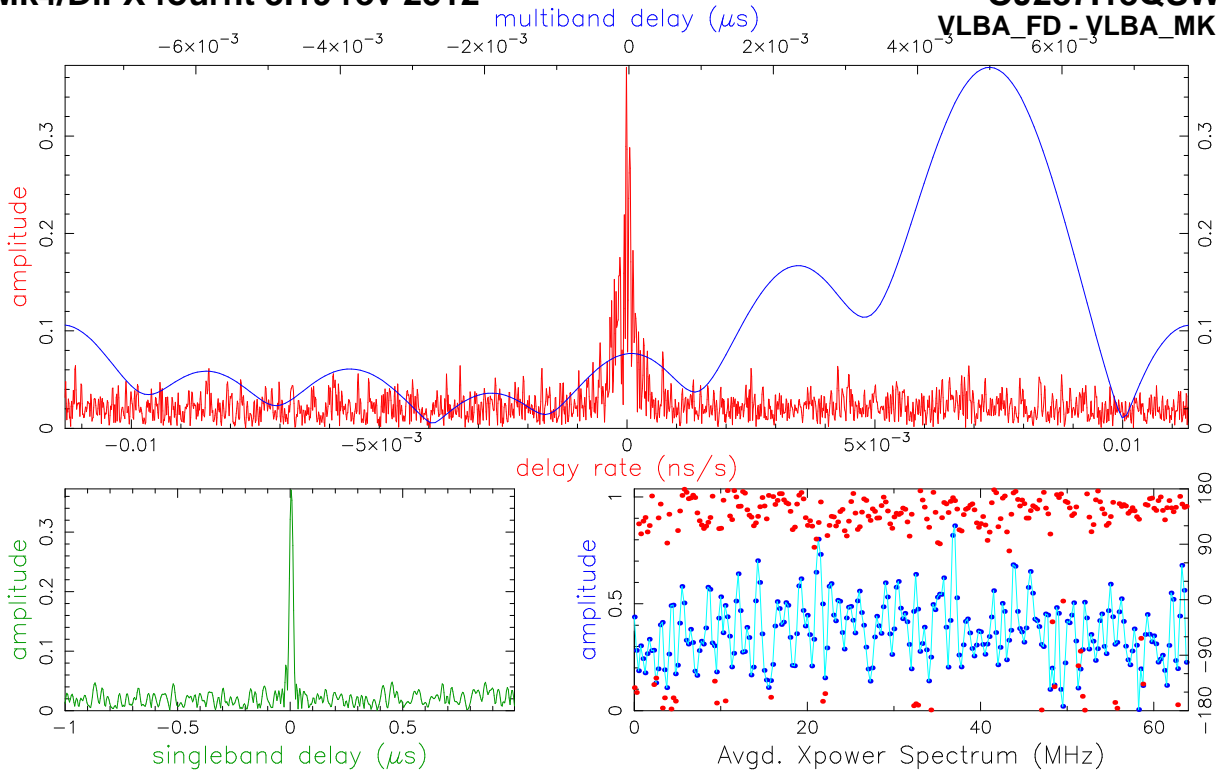


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.9	-69.2	-144.1	-98.2	-97.7	-68.1	-83.1	-114.7	Phase	-104.5
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.3	Ampl.	0.1
	178.0	219.2	261.3	137.6	68.4	208.7	20.5	138.4	Sbd box	138.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 1.00775579715E+04 Apriori delay (usec) 1.00780275411E+04 Resid mbdelay (usec) -8.19601E-04 +/- 1.9E-04
 Sband delay (usec) 1.00775629371E+04 Apriori clock (usec) -9.5112419E+00 Resid sbdelay (usec) -4.64604E-01 +/- 1.5E-03
 Phase delay (usec) 1.00780275378E+04 Apriori clockrate (us/s) -5.3299997E-07 Resid phdelay (usec) -3.36865E-06 +/- 6.5E-07
 Delay rate (us/s) -6.26148963372E-01 Apriori rate (us/s) -6.26156393297E-01 Resid rate (us/s) 7.42992E-06 +/- 2.6E-09
 Total phase (deg) 37.1 Apriori accel (us/s/s) -3.79688296065E-05 Resid phase (deg) -104.5 +/- 20.1

RMS Theor. Amplitude 0.120 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 46.6 48.3 Search (2048X32) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 73.2 84.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 28.5 28.5 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.6 49.7 Inc. frq. avg. 0.116 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 106.4 el 40.7 pa -43.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3748.407 2266.421 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/bm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/bm.W.61.18QSW8

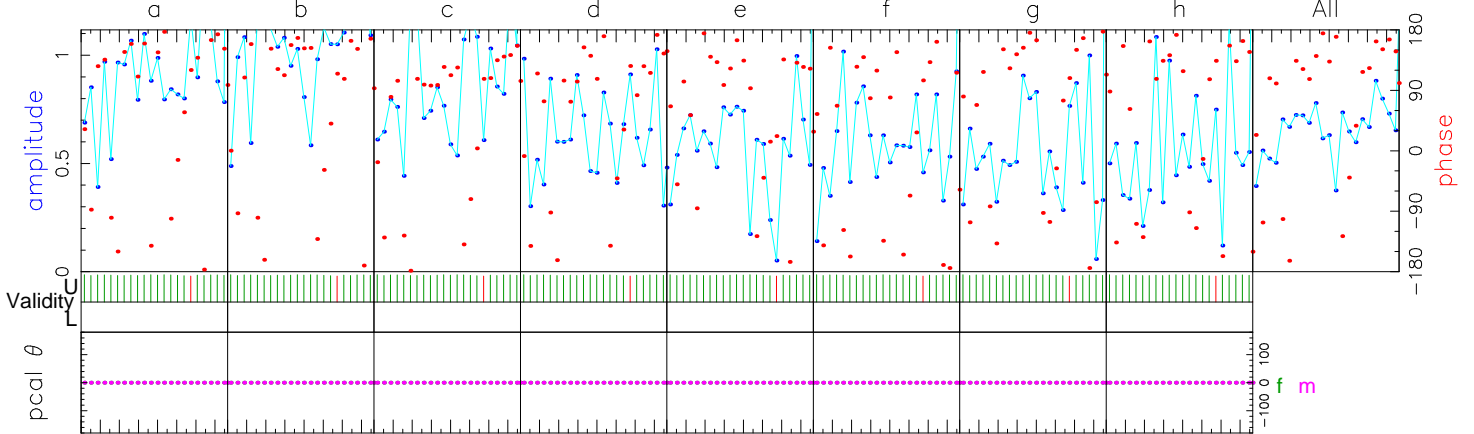


Fringe quality 9

SNR 21.1
Int time 428.574
Amp 0.373
Phase 147.9
PFD 0.0e+00
Delays (us)
SBD 0.004860
MBD 0.005016
Fringe rate (Hz)
-0.001109
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140928
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

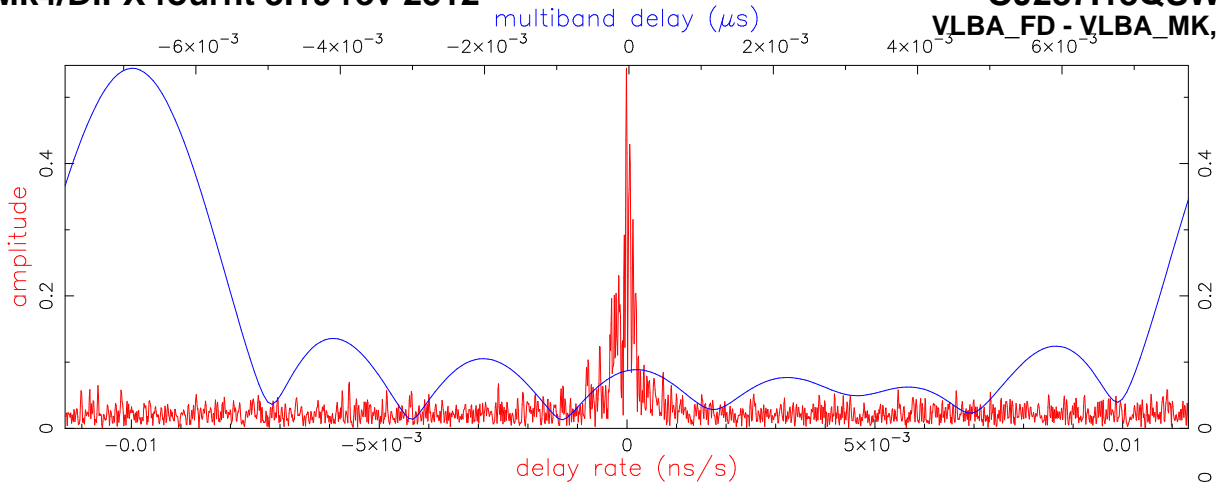


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.40097604551E+04				1.40097554387E+04				5.01635E-03	+/- 5.1E-05
Sband delay (usec)	1.40097602982E+04				-4.2083082E+00				4.85950E-03	+/- 4.1E-04
Phase delay (usec)	1.40097554435E+04				-3.8199999E-07				4.76821E-06	+/- 1.8E-07
Delay rate (us/s)	-6.68952723992E-01				-6.68952711112E-01				-1.28802E-08	+/- 6.9E-10
Total phase (deg)			324.6		-6.79297241207E-05				147.9	+/- 5.4
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
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) 67.4 13.0
amp/seg (%) 81.4 22.7
ph/frq (deg) 16.3 7.7
amp/frq (%) 29.9 13.4

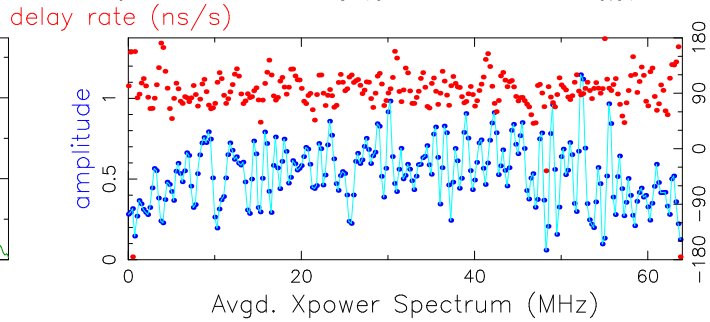
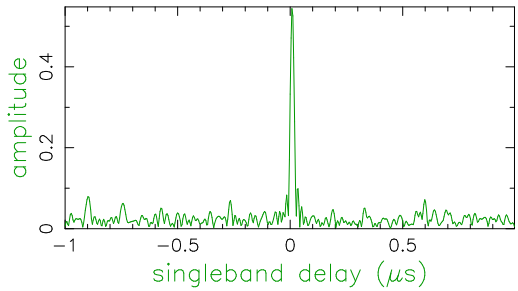
f: az 100.2 el 56.8 pa -64.2
m: az 72.1 el 9.8 pa -72.7
u,v (fr/asec) 3962.447 -549.558

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/fm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/fm.W.12.18QSW8 simultaneous interpolator



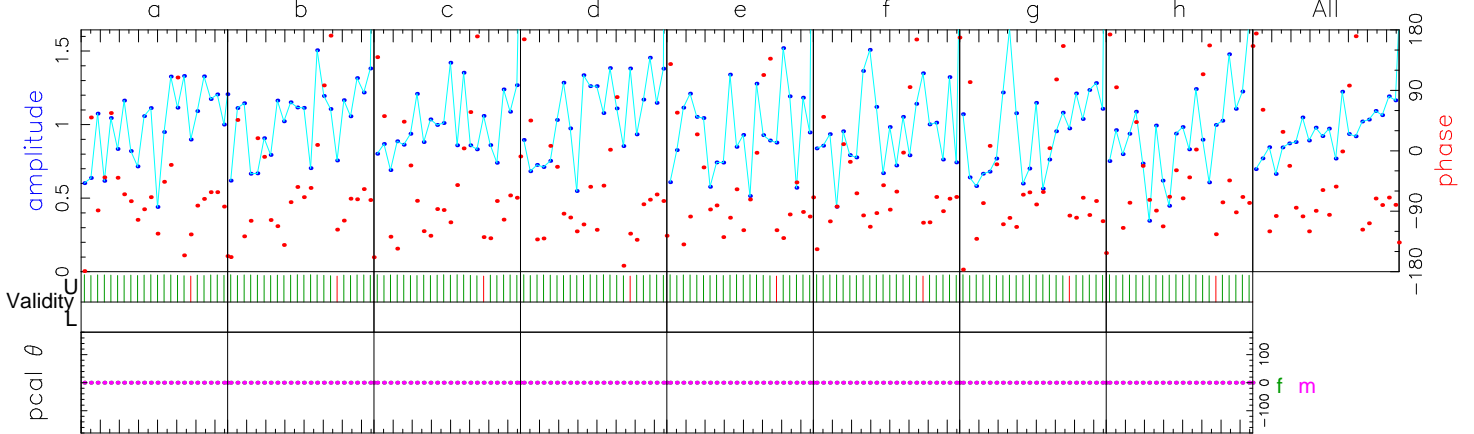
Fringe quality 7

SNR 31.0
Int time 428.575
Amp 0.548
Phase -82.0
PFD 0.0e+00
Delays (us)
SBD 0.009012
MBD -0.006856
Fringe rate (Hz)
-0.001055
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



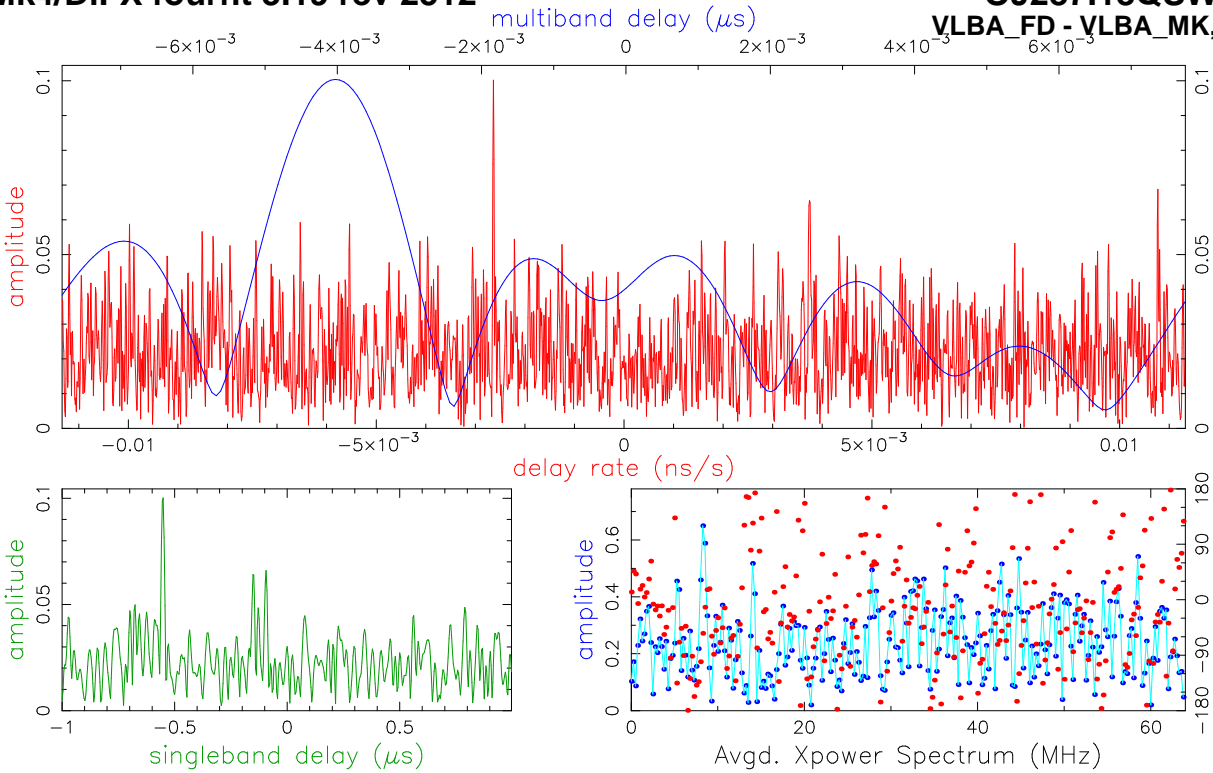
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140933
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	-72.3	-77.7	-87.7	-85.4	-91.8	-81.2	-93.0	-67.2	Phase	-82.0
	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.5	Ampl.	0.5
	259.6	259.2	259.3	259.6	258.7	259.3	259.6	259.4	Sbd box	259.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.40097642078E+04		Apriori delay (usec)		1.40097554387E+04		Resid mbdelay (usec)		-6.85590E-03	+/- 3.5E-05
Sband delay (usec)	1.40097644512E+04		Apriori clock (usec)		-4.2083082E+00		Resid sbdelay (usec)		9.01250E-03	+/- 2.8E-04
Phase delay (usec)	1.40097554361E+04		Apriori clockrate (us/s)		-3.8199999E-07		Resid phdelay (usec)		-2.64411E-06	+/- 1.2E-07
Delay rate (us/s)	-6.68952723354E-01		Apriori rate (us/s)		-6.68952711112E-01		Resid rate (us/s)		-1.22425E-08	+/- 4.7E-10
Total phase (deg)			Apriori accel (us/s/s)		-6.79297241207E-05		Resid phase (deg)		-82.0	+/- 3.7

ph/seg (deg) 68.6 8.9 Theor. Amplitude 0.548 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.7 15.5 Search (2048X32) 0.542 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.0 5.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.1 9.1 Inc. seg. avg. 0.936 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 100.2 el 56.8 pa -64.2 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3962.447 -549.558 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/fm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/fm.W.32.18QSW8 simultaneous interpolator

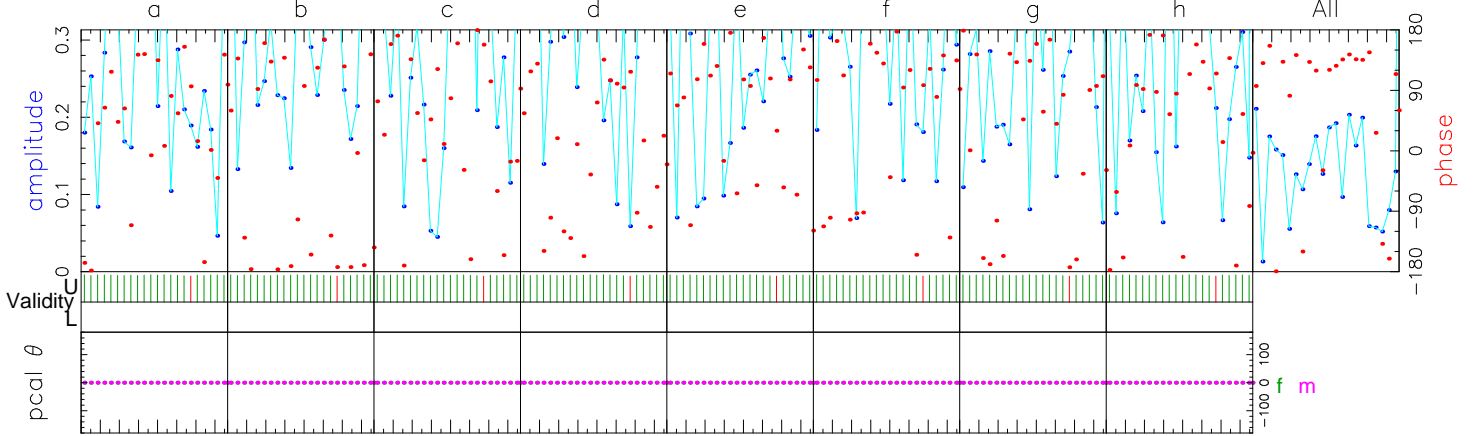


Fringe quality 0

SNR 5.8
Int time 428.575
Amp 0.104
Phase 135.1
PFD 8.4e-01
Delays (us)
SBD -0.552464
MBD -0.004087
Fringe rate (Hz)
-0.227122
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140938
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

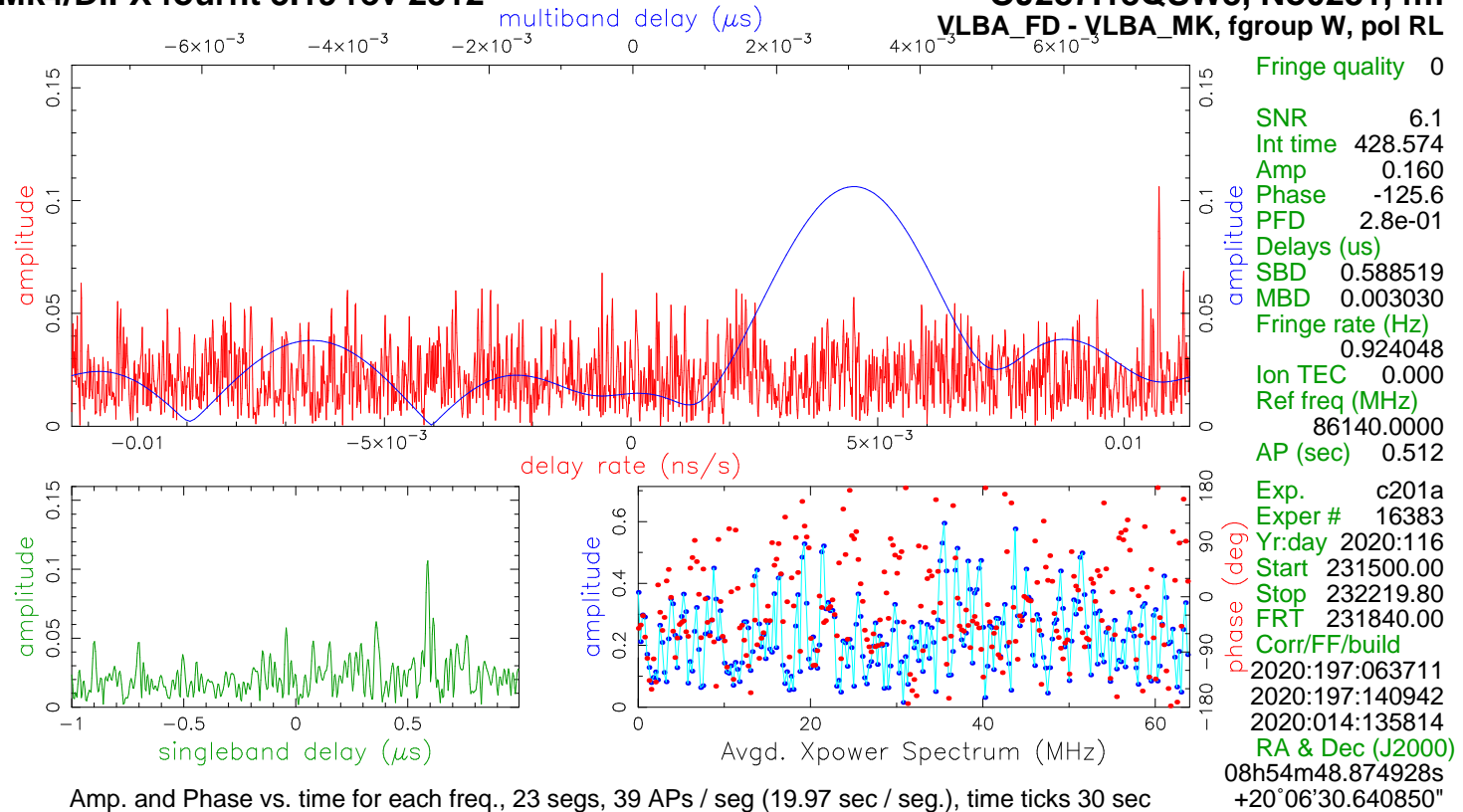


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
95.1	164.2	124.0	32.3	104.0	169.9	136.0	130.9	130.9	Phase	135.1
0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
232.8	116.1	425.0	200.7	244.9	367.9	77.4	114.6	114.6	Sbd box	115.6
U/L 859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000	1000	1000	1000	1000	1000		
f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
m W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Tracks	
Group delay (usec)(sbd)	1.40092044769E+04		Apriori delay (usec)	1.40097554387E+04	Resid mbdelay (usec)	-4.08686E-03	+/-	1.9E-04		
Sband delay (usec)	1.40092029750E+04		Apriori clock (usec)	-4.2083082E+00	Resid sbdelay (usec)	-5.52464E-01	+/-	1.5E-03		
Phase delay (usec)	1.40097554431E+04		Apriori clockrate (us/s)	-3.8199999E-07	Resid phdelay (usec)	4.35678E-06	+/-	6.4E-07		
Delay rate (us/s)	-6.6895534777E-01		Apriori rate (us/s)	-6.68952711112E-01	Resid rate (us/s)	-2.63667E-06	+/-	2.5E-09		
Total phase (deg)		311.8	Apriori accel (us/s/s)	-6.79297241207E-05	Resid phase (deg)	135.1	+/-	19.8		

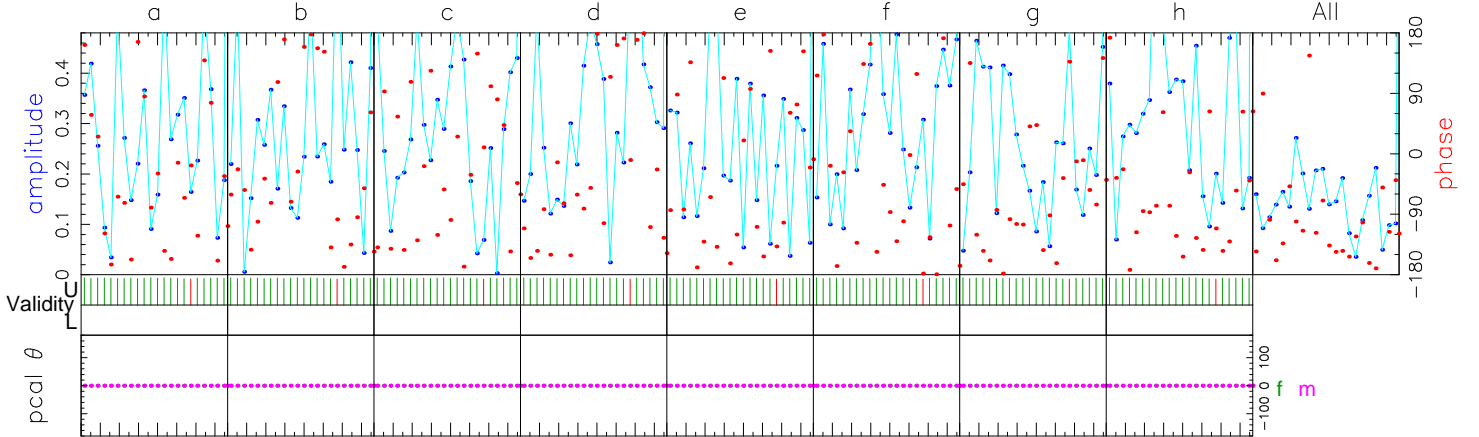
ph/seg (deg) 54.2 47.5 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.7 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.6 28.0 Inc. seg. avg. 0.099 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.5 48.9 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 100.2 el 56.8 pa -64.2 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3962.447 -549.558 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/fm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/fm.W.53.18QSW8

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, fm
VLBA_FD - VLBA_MK, fgroup W, pol RL



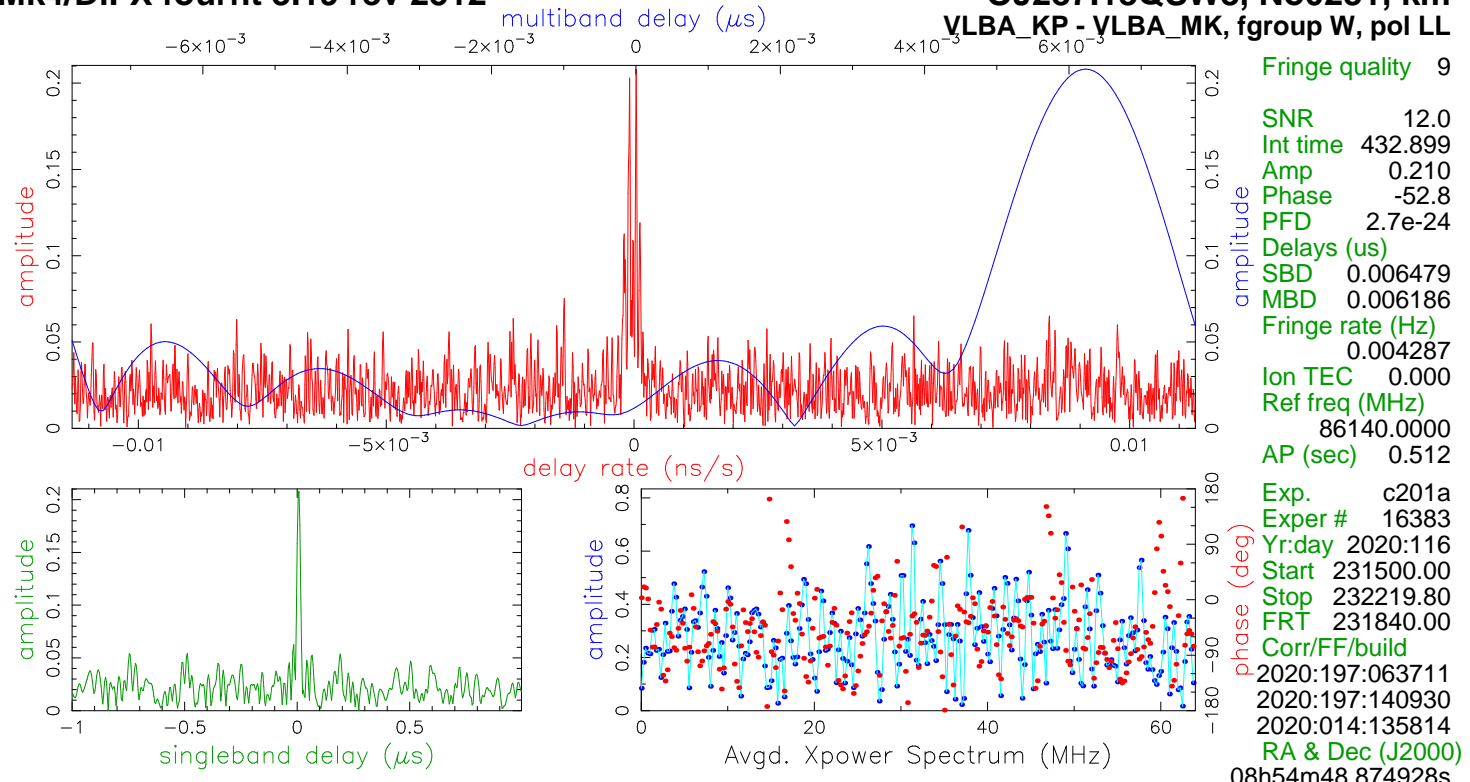
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



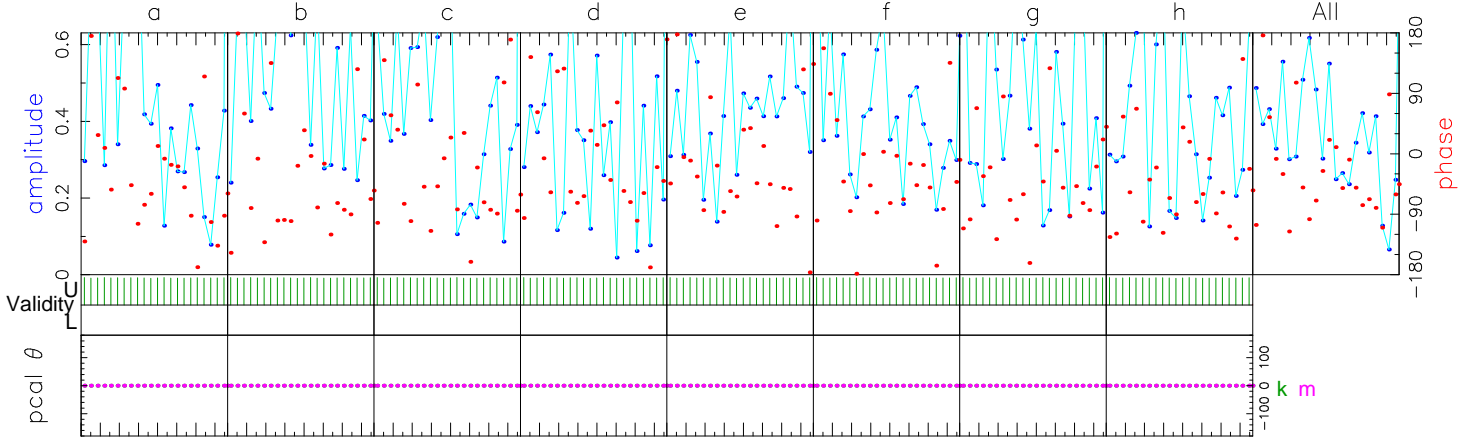
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.8	-123.2	-110.5	-122.9	-147.6	-147.6	-135.3	-99.3	Phase	-125.6
	0.0	0.2	0.1	0.2	0.1	0.2	0.2	0.3	Ampl.	0.1
	446.6	400.2	433.6	27.2	119.5	459.8	211.4	413.8	Sbd box	407.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.40103365932E+04		Apriori delay (usec)	1.40097554387E+04	Resid mbdelay (usec)	3.02951E-03	+/-	1.8E-04		
Sband delay (usec)	1.40103439580E+04		Apriori clock (usec)	-4.2083082E+00	Resid sbdelay (usec)	5.88519E-01	+/-	1.4E-03		
Phase delay (usec)	1.40097554347E+04		Apriori clockrate (us/s)	-3.8199999E-07	Resid phdelay (usec)	-4.05084E-06	+/-	6.1E-07		
Delay rate (us/s)	-6.68941983837E-01		Apriori rate (us/s)	-6.68952711112E-01	Resid rate (us/s)	1.07273E-05	+/-	2.4E-09		
Total phase (deg)		51.1	Apriori accel (us/s/s)	-6.79297241207E-05	Resid phase (deg)	-125.6	+/-	18.9		

	RMS	Theor.	Amplitude	0.160 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.9	45.2	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	65.9	78.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	18.5	26.7	Inc. seg. avg.	0.164	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	44.5	46.6	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
f: az 100.2 el 56.8 pa -64.2			m: az 72.1 el 9.8 pa -72.7		u,v (fr/asec) 3962.447 -549.558	simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/fm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/fm.W.72.18QSW8



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

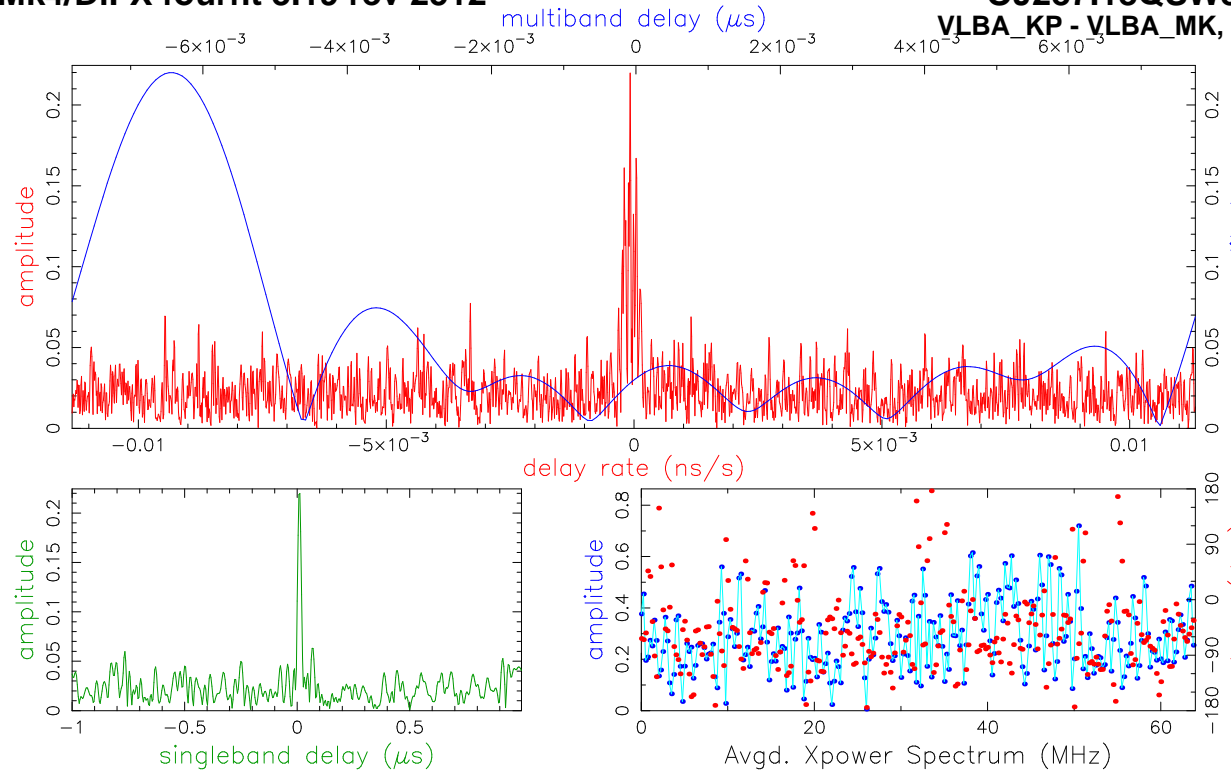


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-60.6	-67.7	-50.9	-42.2	-41.3	-42.9	-59.1	-56.5	Phase	-52.8
	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	258.6	258.8	403.9	258.4	258.2	258.8	258.3	259.1	Sbd box	258.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.25634224544E+04		Apriori delay (usec)		1.25634162680E+04		Resid mbdelay (usec)		6.18641E-03	+/- 9.1E-05
Sband delay (usec)	1.25634227467E+04		Apriori clock (usec)		-8.4492407E+00		Resid sbdelay (usec)		6.47875E-03	+/- 7.2E-04
Phase delay (usec)	1.25634162663E+04		Apriori clockrate (us/s)		-4.8560000E-07		Resid phdelay (usec)		-1.70112E-06	+/- 3.1E-07
Delay rate (us/s)	-5.47561013182E-01		Apriori rate (us/s)		-5.47561062945E-01		Resid rate (us/s)		4.97627E-08	+/- 1.2E-09
Total phase (deg)	63.8		Apriori accel (us/s/s)		-5.94997050880E-05		Resid phase (deg)		-52.8	+/- 9.6

	RMS	Theor.	Amplitude	0.210 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	68.1	23.0	Search (2048X32)	0.196	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	97.4	40.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	10.7	13.5	Inc. seg. avg.	0.335	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.1	23.6	Inc. frq. avg.	0.205	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

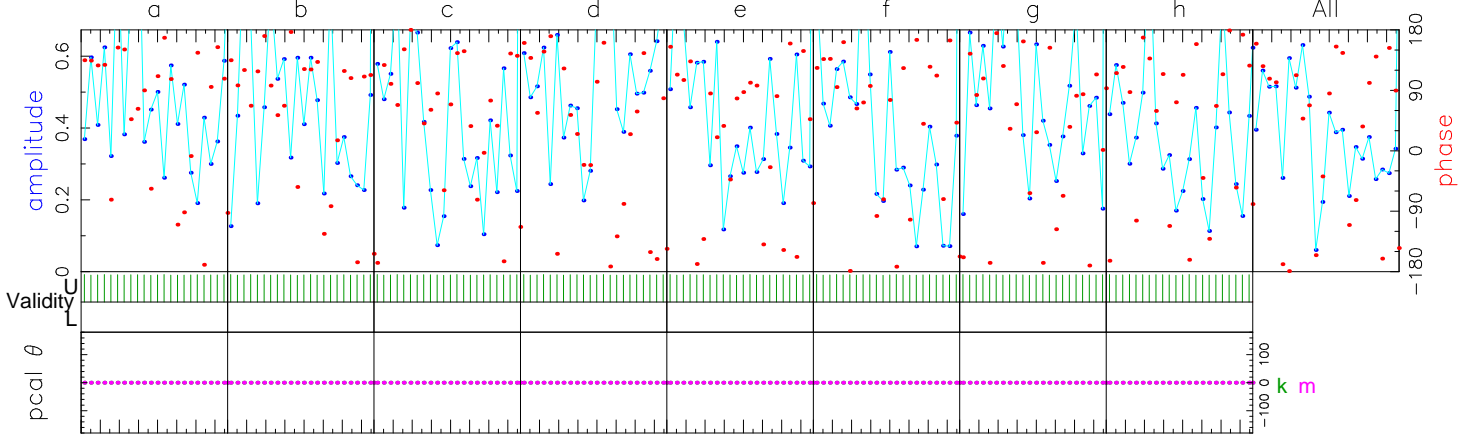
k: az 96.7 el 50.1 pa -63.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3236.294 -139.987 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/km..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/km.W.19.18QSW8



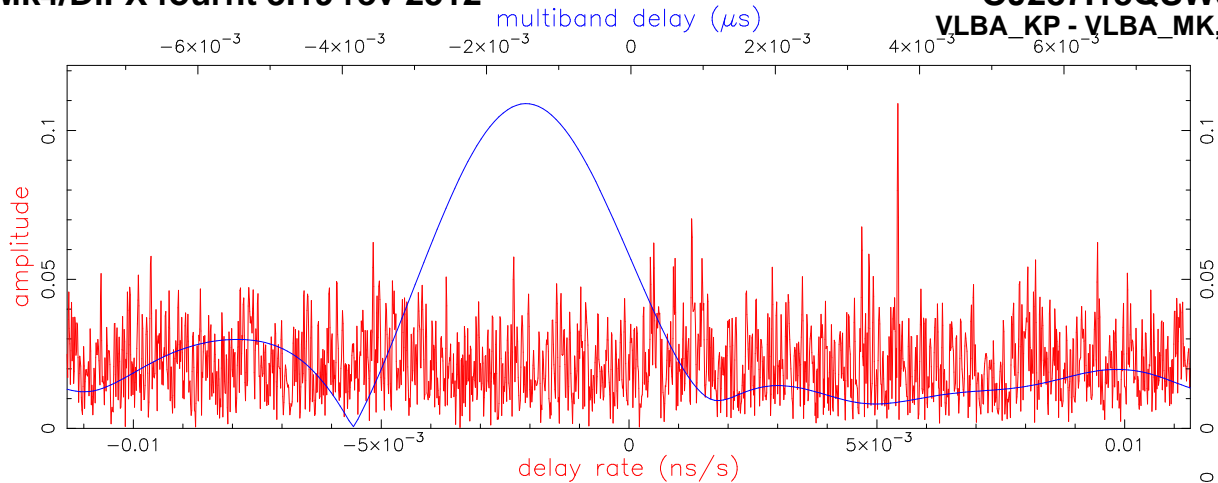
Fringe quality 9
SNR 12.8
Int time 432.899
Amp 0.224
Phase 120.6
PFD 1.3e-28
Delays (us)
SBD 0.009869
MBD -0.006494
Fringe rate (Hz) -0.006813
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140935
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



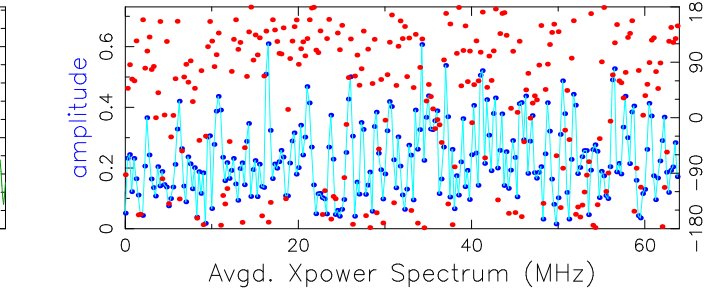
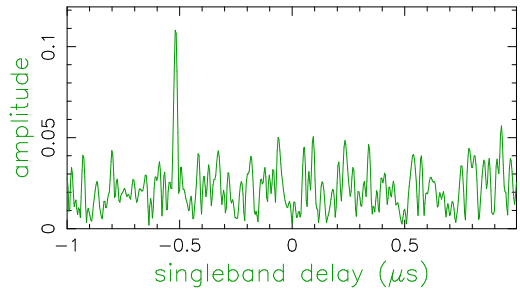
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	119.7	109.8	115.0	139.4	123.2	111.9	110.1	139.3	Phase	120.6
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	259.0	259.8	258.0	259.3	91.7	260.3	260.2	259.7	Sbd box	259.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.25634253994E+04		Apriori delay (usec)		1.25634162680E+04		Resid mbdelay (usec)		-6.49353E-03	+/- 8.5E-05
Sband delay (usec)	1.25634261372E+04		Apriori clock (usec)		-8.4492407E+00		Resid sbdelay (usec)		9.86925E-03	+/- 6.7E-04
Phase delay (usec)	1.25634162719E+04		Apriori clockrate (us/s)		-4.8560000E-07		Resid phdelay (usec)		3.88994E-06	+/- 2.9E-07
Delay rate (us/s)	-5.47561142035E-01		Apriori rate (us/s)		-5.47561062945E-01		Resid rate (us/s)		-7.90906E-08	+/- 1.1E-09
Total phase (deg)	237.2		Apriori accel (us/s/s)		-5.94997050880E-05		Resid phase (deg)		120.6	+/- 9.0

ph/seg (deg) 72.0 21.5 Search (2048X32) 0.217 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 94.4 37.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 13.2 12.7 Inc. seg. avg. 0.356 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 9.5 22.1 Inc. frq. avg. 0.219 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 96.7 el 50.1 pa -63.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3236.294 -139.987 simultaneous interpolator



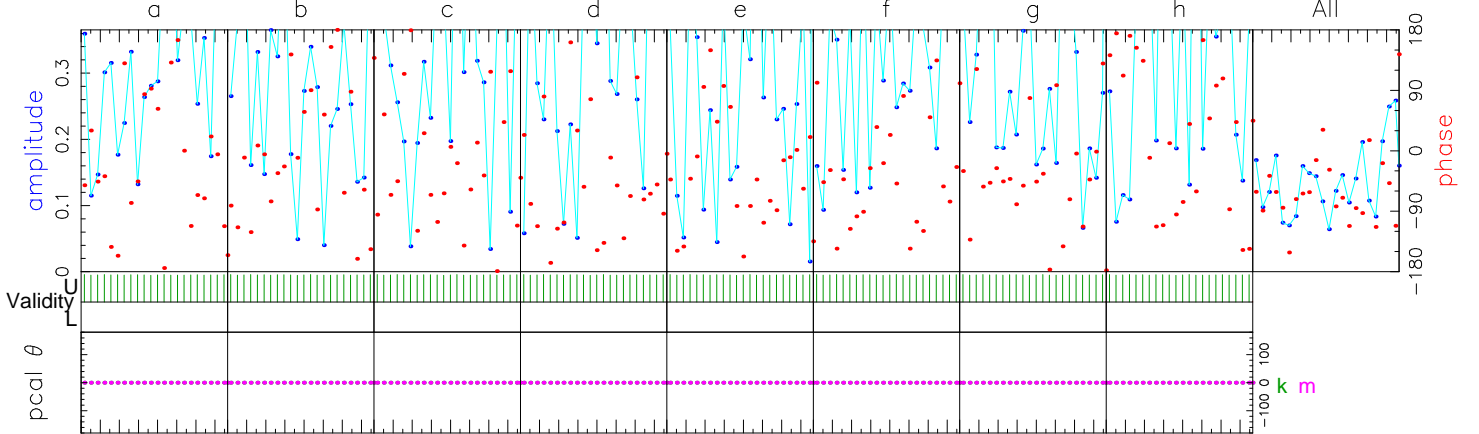
Fringe quality 0

SNR 6.3
Int time 432.901
Amp 0.122
Phase -64.9
PFD 7.9e-02
Delays (us)
SBD -0.517909
MBD -0.001488
Fringe rate (Hz)
0.467760
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140939
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

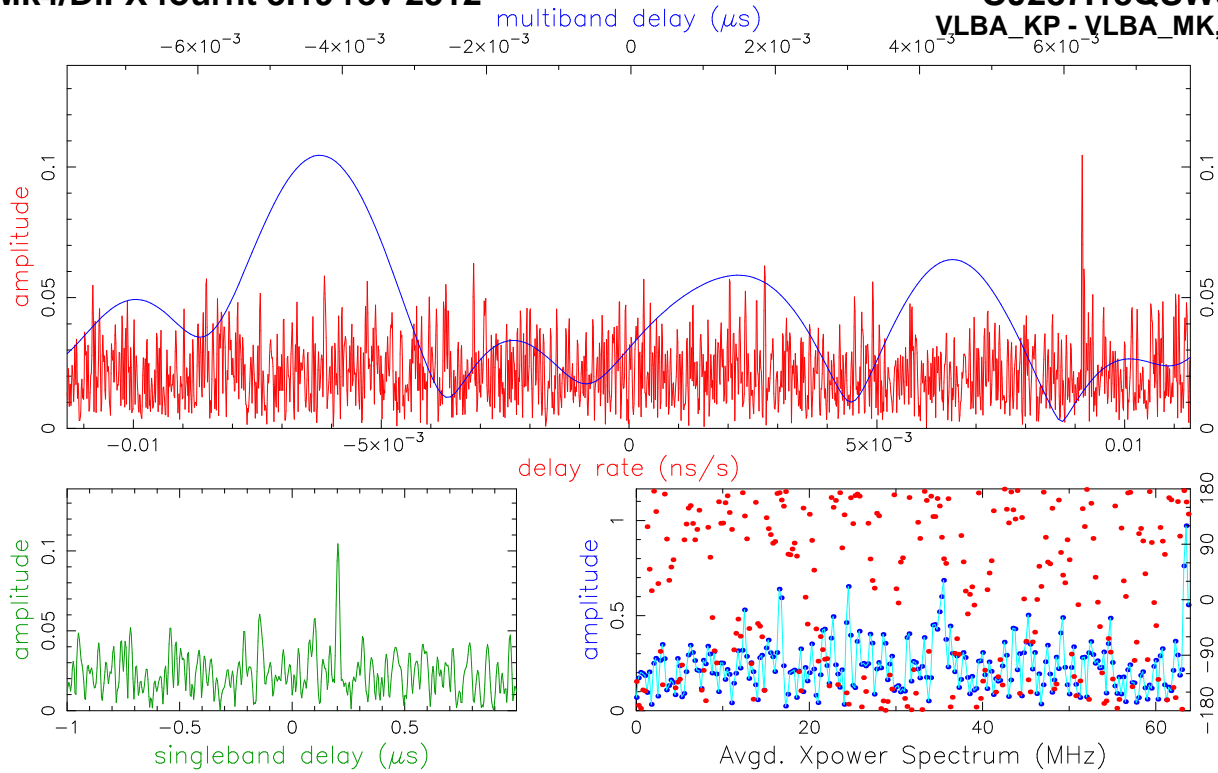


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-82.0	-57.5	-52.1	-93.7	-54.2	-55.0	-54.1	-100.4	Phase	-64.9
	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.0	Ampl.	0.1
	34.4	327.1	140.0	123.5	140.6	130.7	26.3	440.9	Sbd box	124.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 1.25628991554E+04 Apriori delay (usec) 1.25634162680E+04 Resid mbdelay (usec) -1.48754E-03 +/- 1.7E-04
 Sband delay (usec) 1.25628983587E+04 Apriori clock (usec) -8.4492407E+00 Resid sbdelay (usec) -5.17909E-01 +/- 1.4E-03
 Phase delay (usec) 1.25634162659E+04 Apriori clockrate (us/s) -4.8560000E-07 Resid phdelay (usec) -2.09126E-06 +/- 5.9E-07
 Delay rate (us/s) -5.47555632718E-01 Apriori rate (us/s) -5.47561062945E-01 Resid rate (us/s) 5.43023E-06 +/- 2.3E-09
 Total phase (deg) 51.7 Apriori accel (us/s/s) -5.94997050880E-05 Resid phase (deg) -64.9 +/- 18.2

RMS Theor. Amplitude 0.122 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 42.7 43.6 Search (2048X32) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 53.8 76.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 22.1 25.7 Inc. seg. avg. 0.117 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 40.4 44.9 Inc. frq. avg. 0.114 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 96.7 el 50.1 pa -63.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3236.294 -139.987 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/km..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/km.W.60.18QSW8

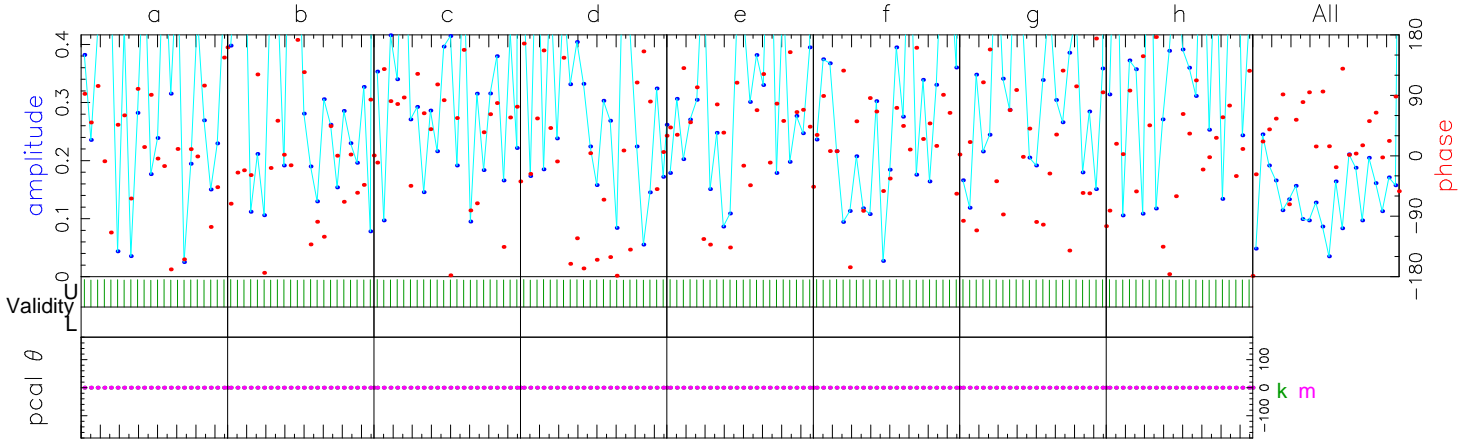


Fringe quality 0

SNR 5.9
Int time 432.898
Amp 0.139
Phase 35.0
PFD 5.0e-01
Delays (us)
SBD 0.203180
MBD -0.004311
Fringe rate (Hz) 0.788731
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140943
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

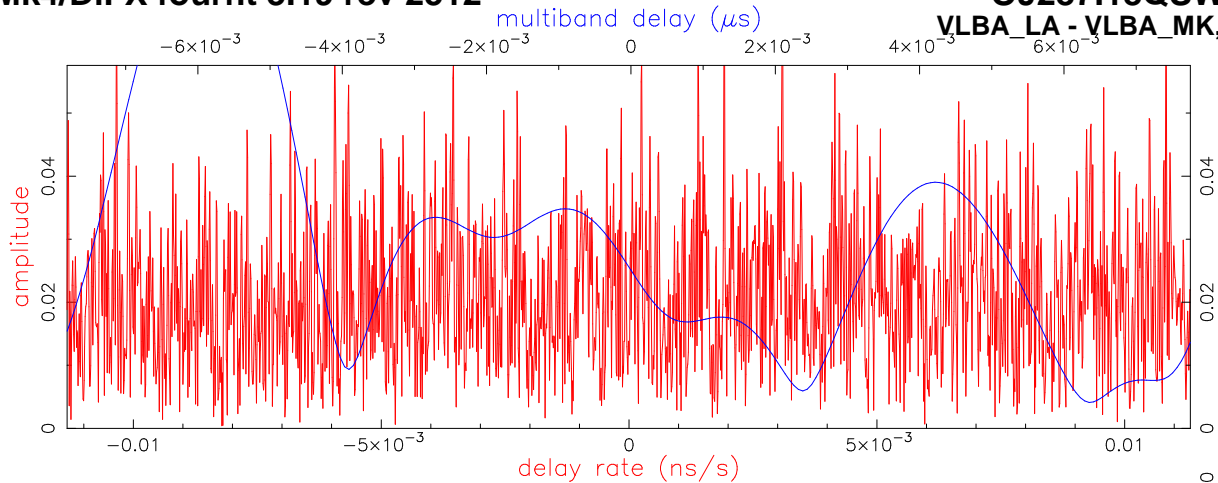


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	32.9	-24.4	78.6	151.6	51.9	42.7	-0.8	20.5	Phase	35.0
	0.2	0.2	0.2	0.0	0.2	0.3	0.1	0.2	Ampl.	0.1
	404.7	433.6	310.4	139.7	18.7	308.7	345.3	129.3	Sbd box	309.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.25636150818E+04		Apriori delay (usec)		1.25634162680E+04		Resid mbdelay (usec)		-4.31114E-03	+/- 1.8E-04
Sband delay (usec)	1.25636194477E+04		Apriori clock (usec)		-8.4492407E+00		Resid sbdelay (usec)		2.03180E-01	+/- 1.4E-03
Phase delay (usec)	1.25634162691E+04		Apriori clockrate (us/s)		-4.8560000E-07		Resid phdelay (usec)		1.12816E-06	+/- 6.2E-07
Delay rate (us/s)	-5.47551906561E-01		Apriori rate (us/s)		-5.47561062945E-01		Resid rate (us/s)		9.15638E-06	+/- 2.4E-09
Total phase (deg)	151.5		Apriori accel (us/s/s)		-5.94997050880E-05		Resid phase (deg)		35.0	+/- 19.3

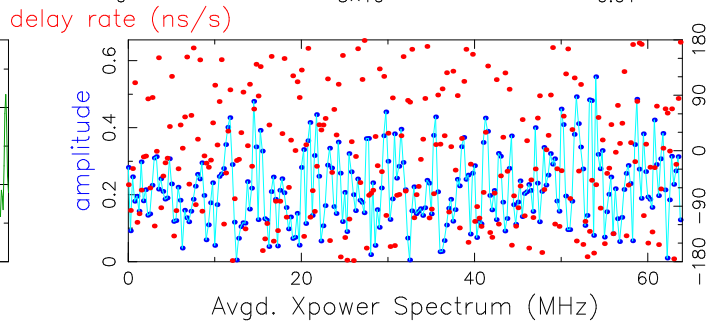
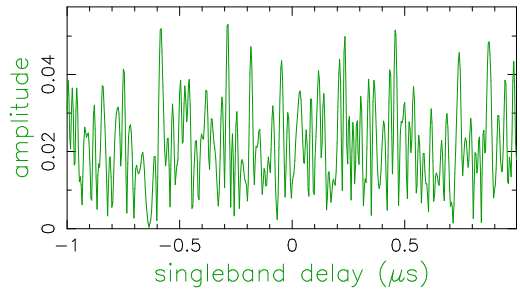
	RMS	Theor.	Amplitude	0.139 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.4	46.2	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	64.2	80.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	59.0	27.3	Inc. seg. avg.	0.140	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	59.5	47.6	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 96.7 el 50.1 pa -63.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3236.294 -139.987 simultaneous interpolator

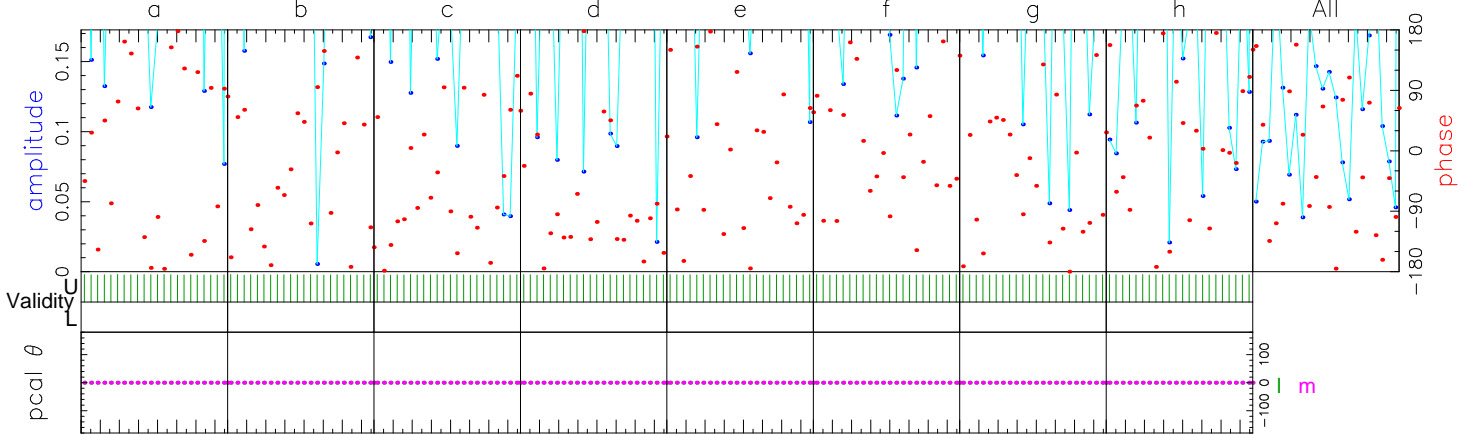
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/km..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/km.W.78.18QSW8



Fringe quality 0
SNR 2.2
Int time 434.960
Amp 0.058
Phase -103.2
PFD 1.0e+00
Delays (us)
SBD -0.995329
MBD 0.008301
Fringe rate (Hz) 0.921435
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140953
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

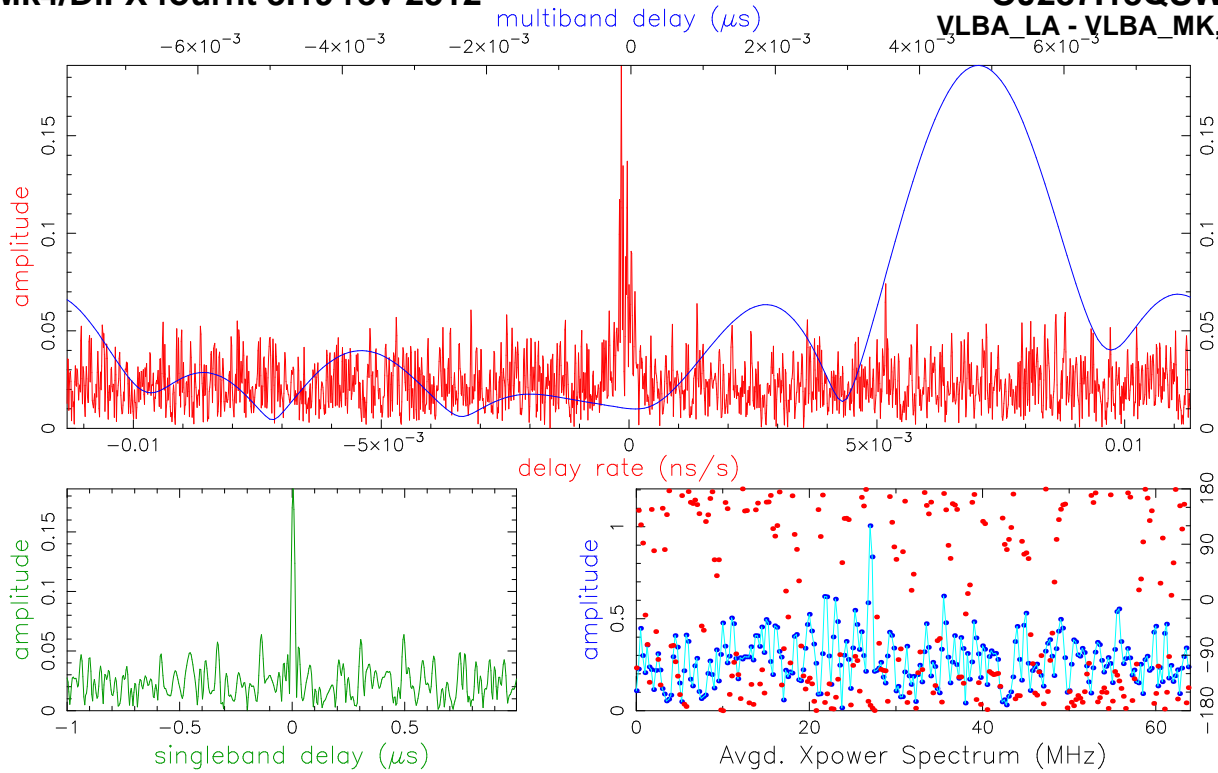


Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



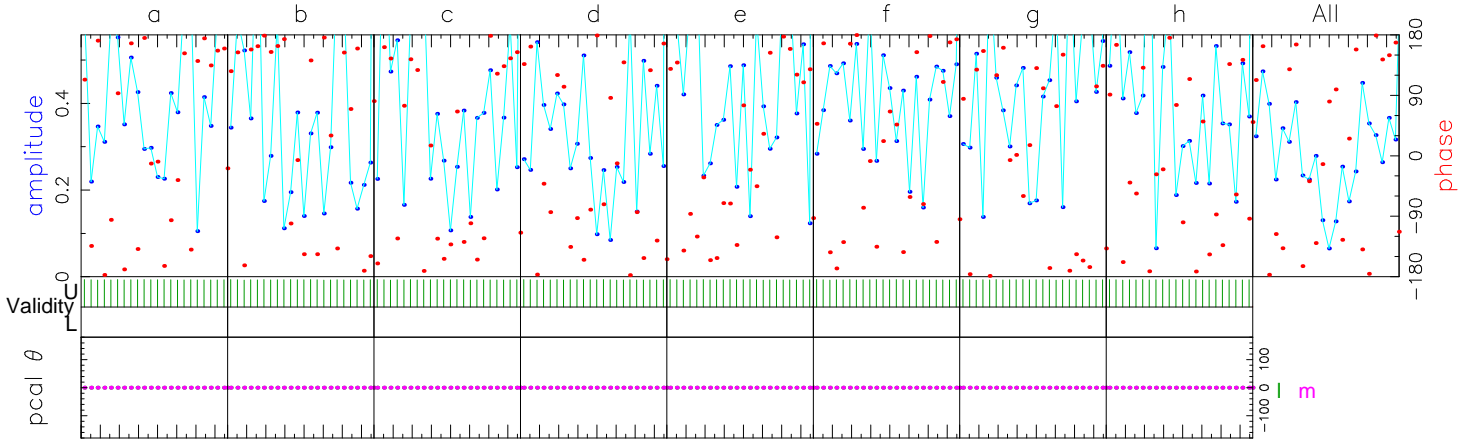
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.33605971347E+04				1.33615888340E+04			8.30078E-03	+/- 4.9E-04
Sband delay (usec)		1.33605935050E+04				-1.1805744E+01			-9.95329E-01	+/- 3.9E-03
Phase delay (usec)		1.33615888306E+04				-6.4200002E-07			-3.32768E-06	+/- 1.7E-06
Delay rate (us/s)		-6.69682371955E-01				-6.69693068896E-01			1.06969E-05	+/- 6.6E-09
Total phase (deg)			-46.5			-6.16244178079E-05			-103.2	+/- 51.9
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 100.5 124.5 Search (2048X32) 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 263.6 217.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 99.1 73.4 Inc. seg. avg. 0.053 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 182.3 128.2 Inc. frq. avg. 0.076 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 105.6 el 53.8 pa -56.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3976.492 255.518 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/lm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/lm.W.114.18QSW8



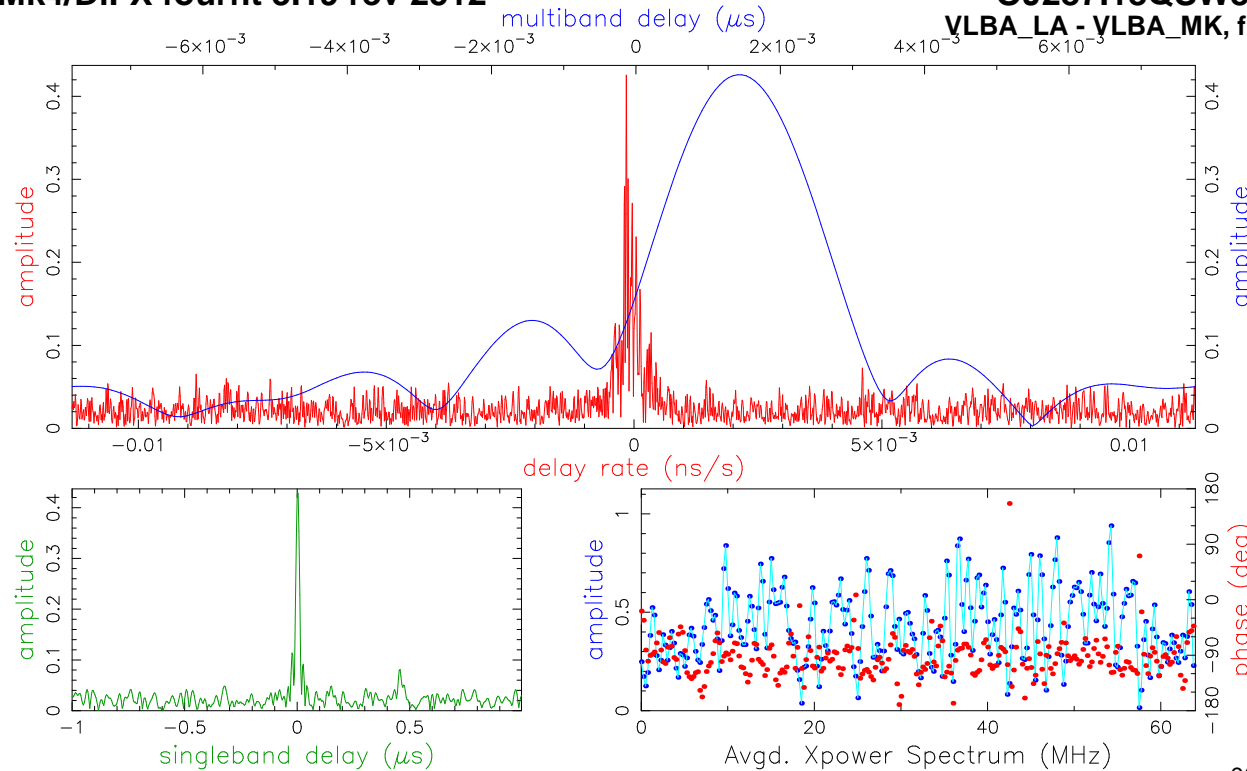
Fringe quality 9
SNR 10.6
Int time 434.958
Amp 0.186
Phase 178.4
PFD 1.2e-17
Delays (us)
SBD 0.003819
MBD 0.004811
Fringe rate (Hz)
-0.013615
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140957
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	178.4	170.7	173.8	-160.6	-163.4	-173.9	154.3	-171.0	Phase	178.4
	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.1	Ampl.	0.2
	257.8	258.0	257.7	170.7	259.5	28.2	258.2	344.2	Sbd box	258.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.33615936445E+04		Apriori delay (usec)		1.33615888340E+04		Resid mbdelay (usec)		4.81053E-03	+/- 1.0E-04
Sband delay (usec)	1.33615926527E+04		Apriori clock (usec)		-1.1805744E+01		Resid sbdelay (usec)		3.81875E-03	+/- 8.1E-04
Phase delay (usec)	1.33615888397E+04		Apriori clockrate (us/s)		-6.4200002E-07		Resid phdelay (usec)		5.75379E-06	+/- 3.5E-07
Delay rate (us/s)	-6.69693226956E-01		Apriori rate (us/s)		-6.69693068896E-01		Resid rate (us/s)		-1.58059E-07	+/- 1.4E-09
Total phase (deg)	235.2		Apriori accel (us/s/s)		-6.16244178079E-05		Resid phase (deg)		178.4	+/- 10.8

ph/seg (deg) 71.5 25.9 Amplitude 0.186 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.1 45.2 Interp. 0.179 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 16.4 15.3 Search (2048X32) 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.5 26.7 Inc. seg. avg. 0.259 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 l: az 105.6 el 53.8 pa -56.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3976.492 255.518 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/Im..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/Im.W.131.18QSW8 simultaneous interpolator

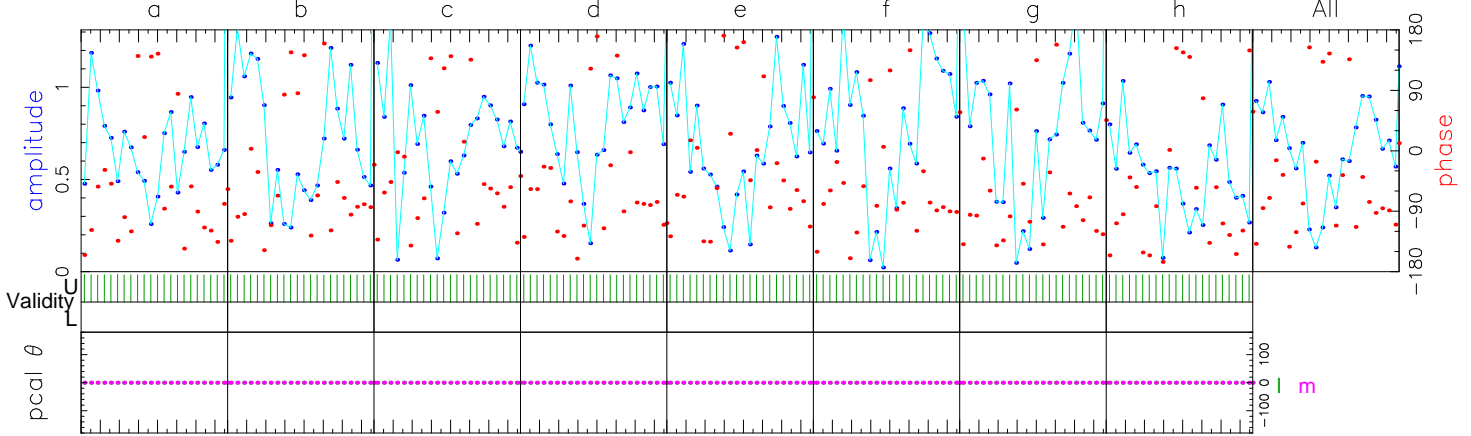


Fringe quality 7

SNR 24.9
Int time 434.958
Amp 0.437
Phase -88.7
PFD 0.0e+00
Delays (us)
SBD 0.002087
MBD 0.001495
Fringe rate (Hz)
-0.013622
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140945
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



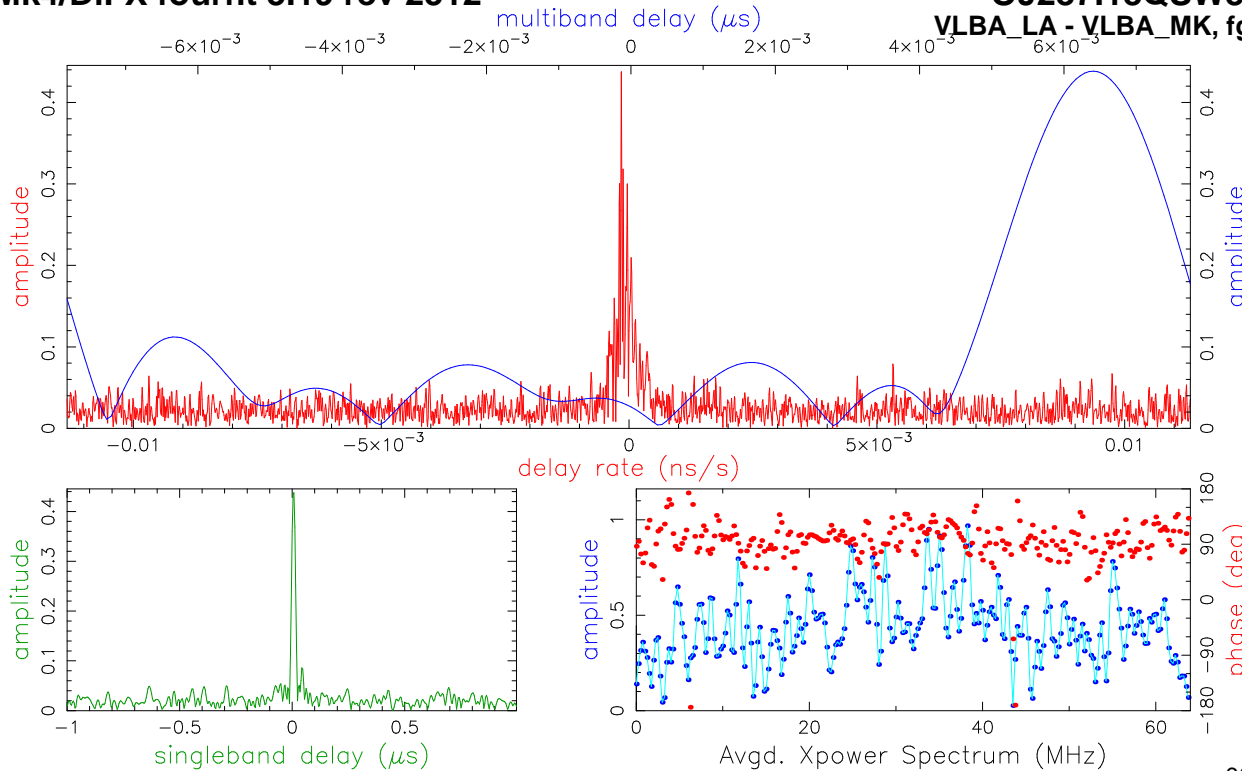
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.33615903292E+04	Apriori delay (usec)	1.33615888340E+04	Resid mbdelay (usec)	1.49528E-03	+/-	4.4E-05
Sband delay (usec)	1.33615909215E+04	Apriori clock (usec)	-1.1805744E+01	Resid sbdelay (usec)	2.08750E-03	+/-	3.5E-04
Phase delay (usec)	1.33615888311E+04	Apriori clockrate (us/s)	-6.4200002E-07	Resid phdelay (usec)	-2.86171E-06	+/-	1.5E-07
Delay rate (us/s)	-6.69693227030E-01	Apriori rate (us/s)	-6.69693068896E-01	Resid rate (us/s)	-1.58134E-07	+/-	5.8E-10
Total phase (deg)	-32.0	Apriori accel (us/s/s)	-6.16244178079E-05	Resid phase (deg)	-88.7	+/-	4.6

ph/seg (deg)	65.7	Theor.	11.0	Amplitude	0.437 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	74.6	Search (2048X32)	0.410	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	14.7	Inc. seg. avg.	0.645	Inc. frq. avg.	0.431	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	19.7	Inc. frq. avg.	0.431			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

l: az 105.6 el 53.8 pa -56.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3976.492 255.518 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/Im..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/Im.W.83.18QSW8

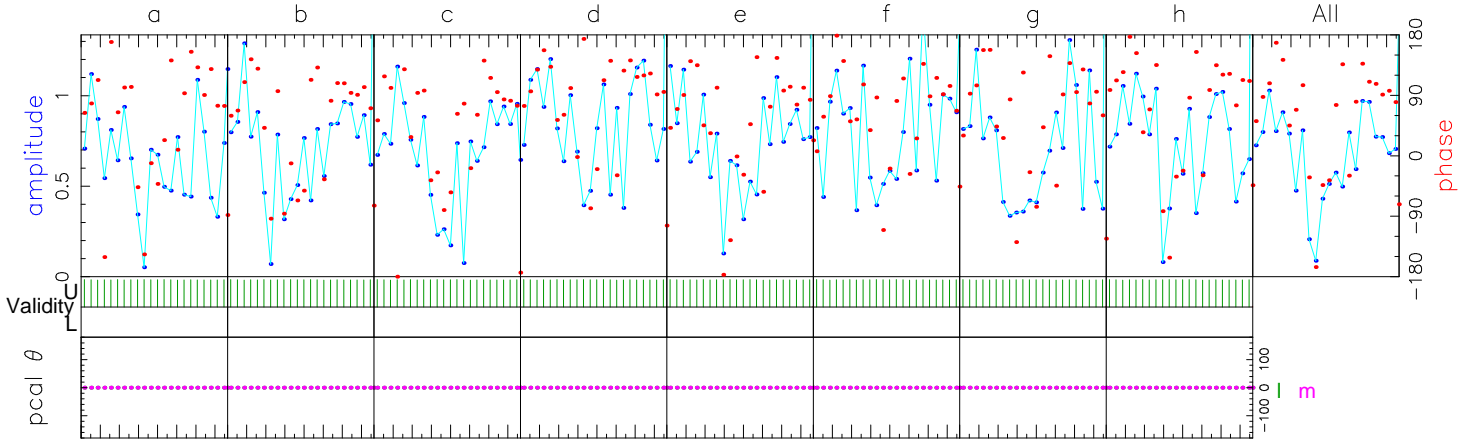


Fringe quality 7

SNR 25.4
Int time 434.960
Amp 0.445
Phase 93.8
PFD 0.0e+00
Delays (us)
SBD 0.006050
MBD 0.006342
Fringe rate (Hz) -0.013717
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140949
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

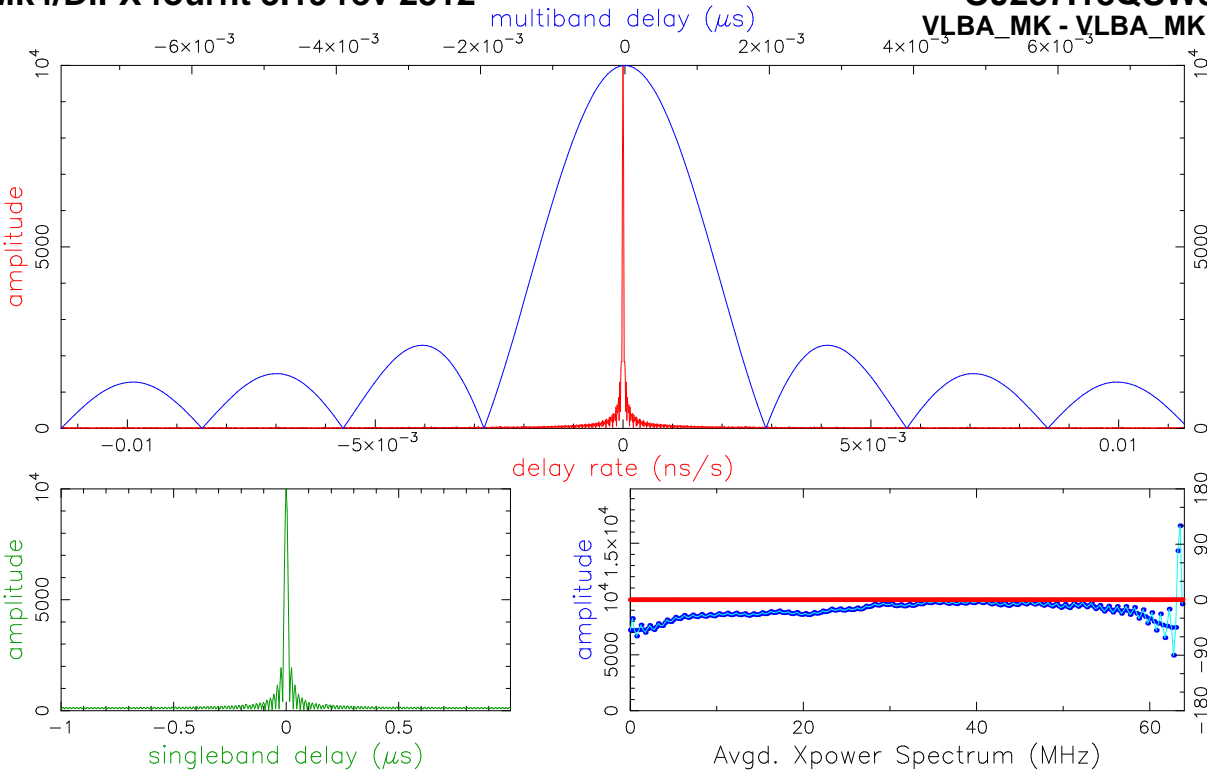


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	90.1	91.4	89.0	105.5	82.0	86.1	93.9	109.9	Phase	93.8
	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	Ampl.	0.4
	258.5	258.2	258.8	258.5	258.5	258.8	258.8	258.7	Sbd box	258.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.33615951757E+04		Apriori delay (usec)		1.33615888340E+04		Resid mbdelay (usec)		6.34178E-03	+/- 4.3E-05
Sband delay (usec)	1.33615948837E+04		Apriori clock (usec)		-1.1805744E+01		Resid sbdelay (usec)		6.04975E-03	+/- 3.4E-04
Phase delay (usec)	1.33615888370E+04		Apriori clockrate (us/s)		-6.4200002E-07		Resid phdelay (usec)		3.02544E-06	+/- 1.5E-07
Delay rate (us/s)	-6.69693228143E-01		Apriori rate (us/s)		-6.69693068896E-01		Resid rate (us/s)		-1.59246E-07	+/- 5.7E-10
Total phase (deg)	150.6		Apriori accel (us/s/s)		-6.16244178079E-05		Resid phase (deg)		93.8	+/- 4.5

ph/seg (deg) 65.9 10.8 Search (2048X32) 0.407 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.1 18.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.3 6.4 Inc. seg. avg. 0.667 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.1 11.1 Inc. frq. avg. 0.441 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 105.6 el 53.8 pa -56.0 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 3976.492 255.518 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mm
VLBA_MK - VLBA_MK, fgroup W, pol RR

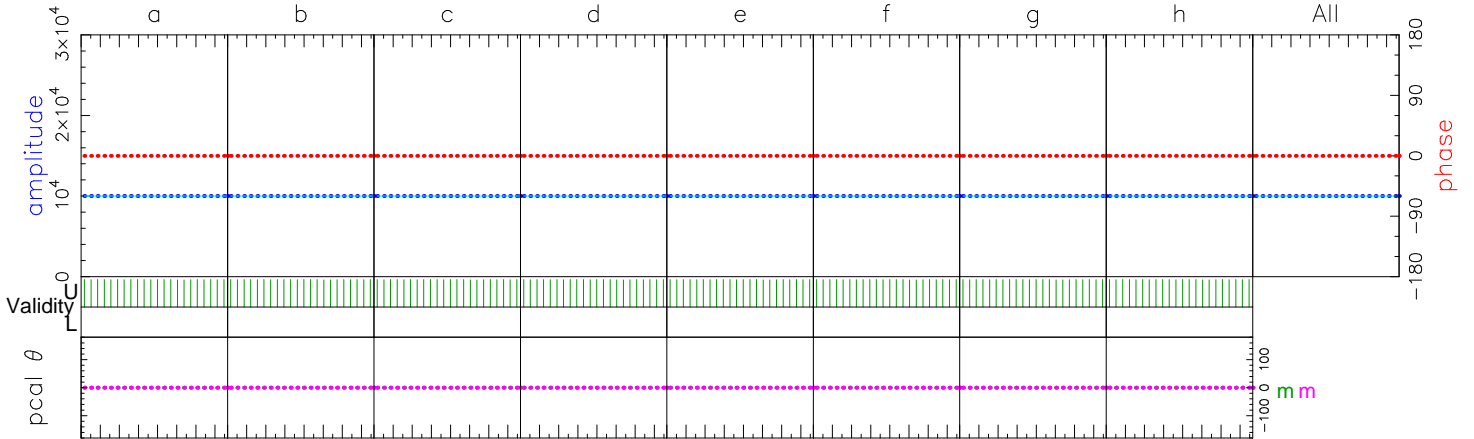


Fringe quality 9

SNR 572126.8
Int time 437.711
Amp 10000.018
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. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140950
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	-0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	-4.90953106149E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.90953E-20	+/-	6.5E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.5E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

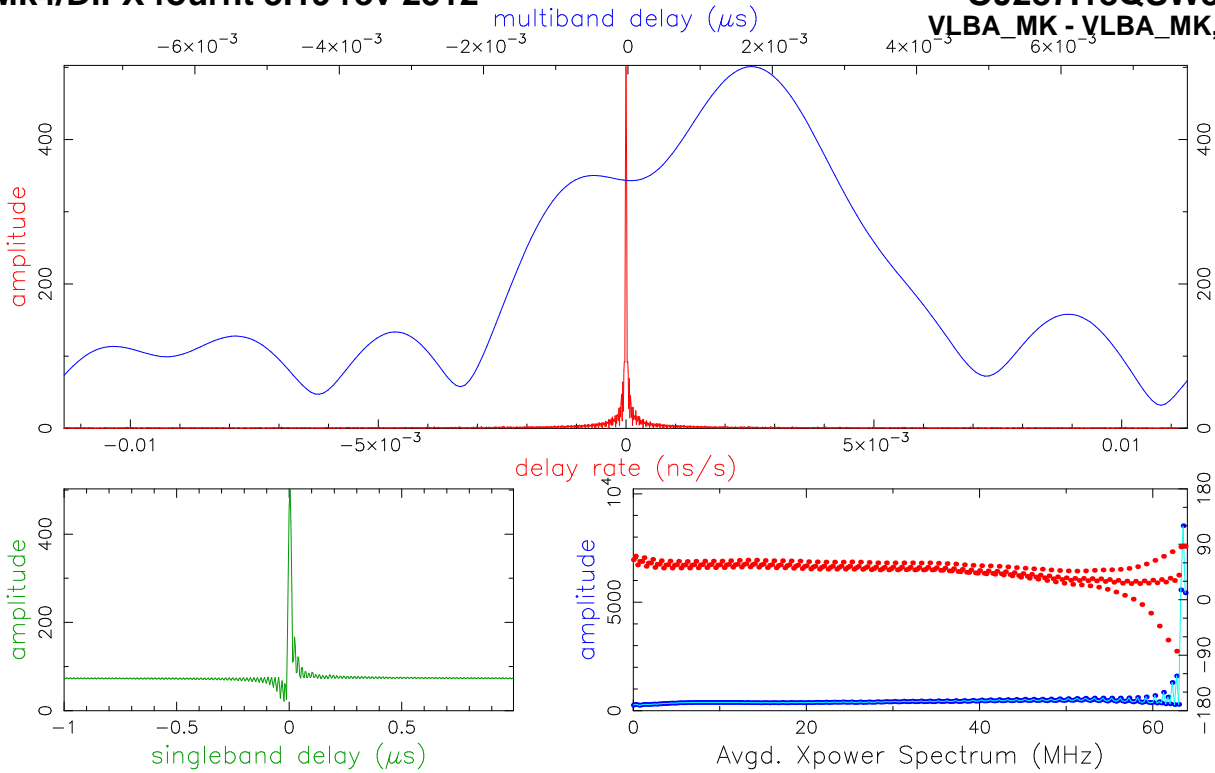
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	10000.018 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	10000.018	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	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.	10000.018	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 72.1 el 9.8 pa -72.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mm.W.102.18QSW8

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mm
VLBA_MK - VLBA_MK, fgroup W, pol LR

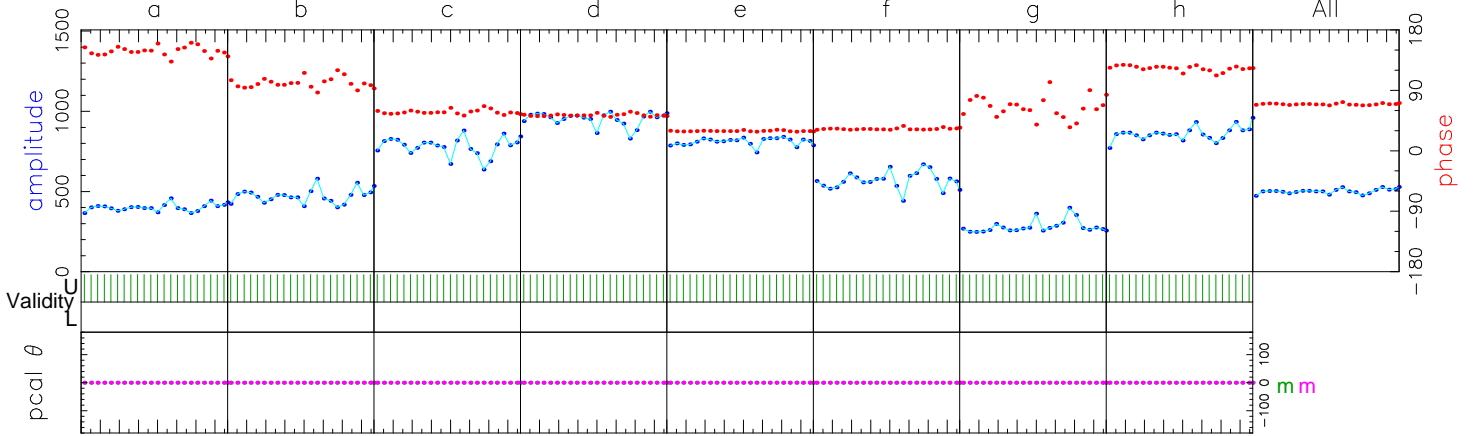


Fringe quality 5

SNR 28762.1
Int time 437.710
Amp 502.724
Phase 69.3
PFD 0.0e+00
Delays (us)
SBD 0.003230
MBD 0.001720
Fringe rate (Hz) 0.000005
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140954
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



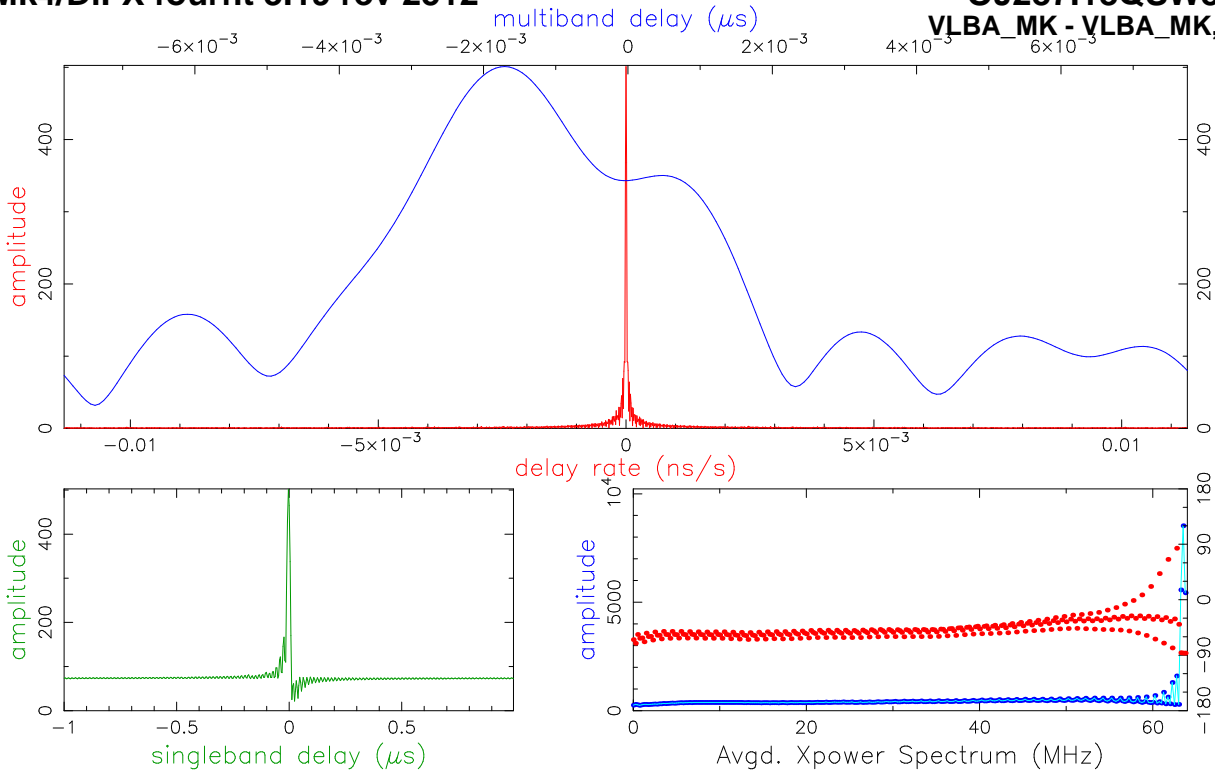
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	148.3	100.5	57.5	53.1	29.5	32.4	62.3	122.8	Phase	69.3
m	397.6	466.5	778.6	950.1	811.5	570.8	271.6	855.9	Ampl.	637.8
m	256.5	256.4	257.1	257.4	257.1	257.5	258.7	257.0	Sbd box	257.8
m	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.71978125000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.71978E-03	+/-	3.8E-08
Sband delay (usec)	3.23025000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.23025E-03	+/-	3.0E-07
Phase delay (usec)	2.23462851975E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.23463E-06	+/-	1.3E-10
Delay rate (us/s)	5.59760519472E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	5.59761E-11	+/-	5.1E-13
Total phase (deg)	69.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	69.3	+/-	0.0

ph/seg (deg)	1.1	RMS	Theor.	Amplitude	502.724 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	2.7	1.1	0.0	Search (2048X32)	492.620	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	47.4	2.7	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	52.9	47.4	0.0	Inc. seg. avg.	501.124	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
		52.9	0.0	Inc. frq. avg.	637.813	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 72.1 el 9.8 pa -72.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mm.W.118.18QSW8

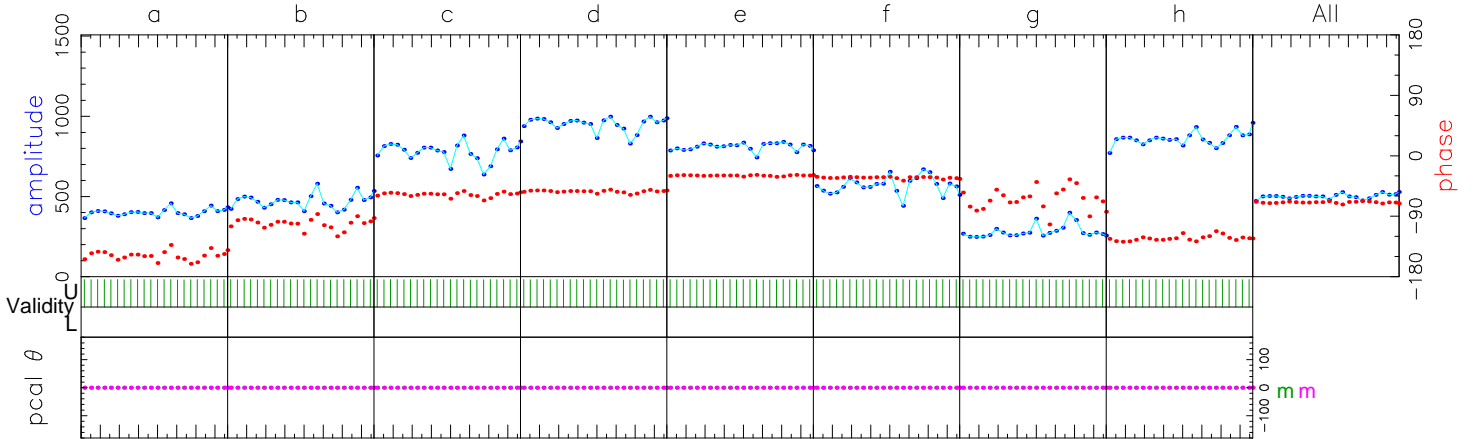


Fringe quality 5

SNR 28762.1
Int time 437.711
Amp 502.723
Phase -69.3
PFD 0.0e+00
Delays (us)
SBD -0.003230
MBD -0.001720
Fringe rate (Hz)
-0.000005
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

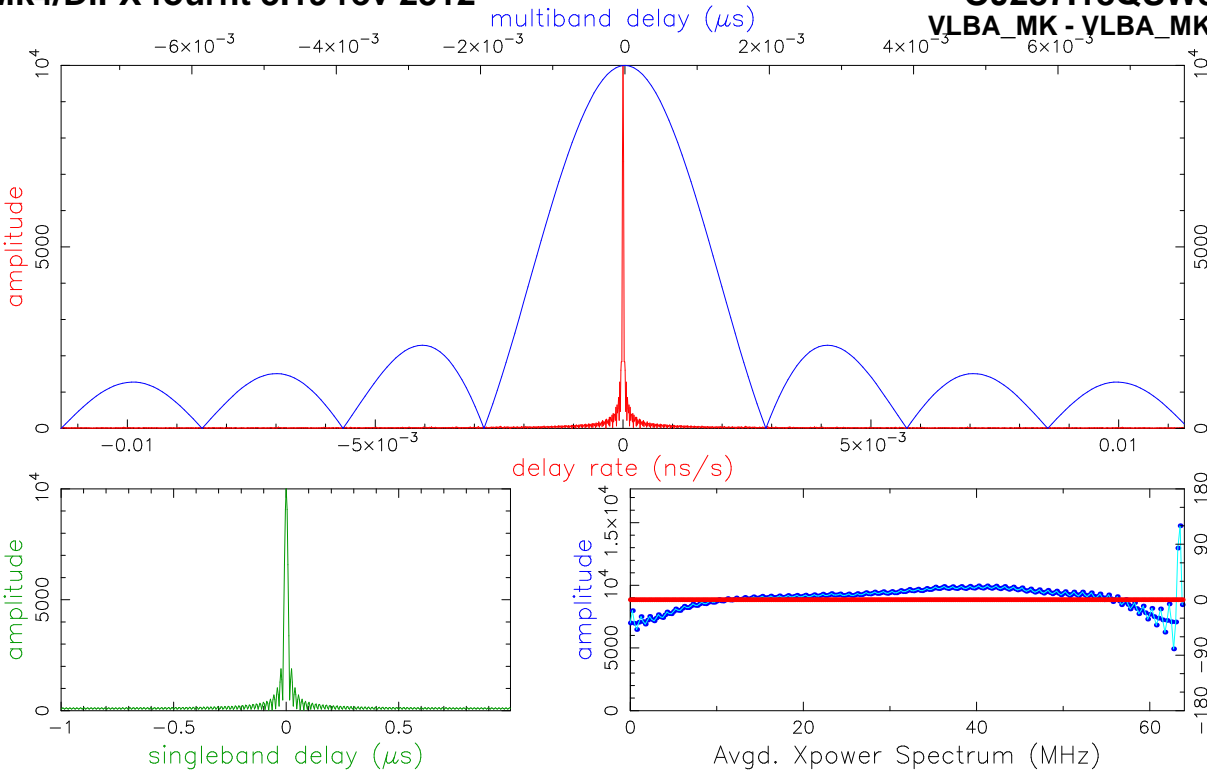
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140957
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	-148.3	-100.5	-57.5	-53.1	-29.5	-32.4	-62.3	-122.8	Phase	-69.3
	397.6	466.5	778.6	950.1	811.5	570.8	271.6	855.9	Ampl.	637.8
	257.5	257.6	256.9	256.6	256.9	256.5	255.3	257.0	Sbd box	256.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.71978125000E-03		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		-1.71978E-03	+/- 3.8E-08
Sband delay (usec)	-3.2302500000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.23025E-03	+/- 3.0E-07
Phase delay (usec)	-2.23462851965E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.23463E-06	+/- 1.3E-10
Delay rate (us/s)	-5.59760519472E-11		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		-5.59761E-11	+/- 5.1E-13
Total phase (deg)			Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		-69.3	+/- 0.0

ph/seg (deg) 1.1 0.0 Search (2048X32) 502.723 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.7 0.0 Interp. 492.619 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.4 0.0 Inc. seg. avg. 501.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.9 0.0 Inc. frq. avg. 637.812 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 72.1 el 9.8 pa -72.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mm.W.134.18QSW8

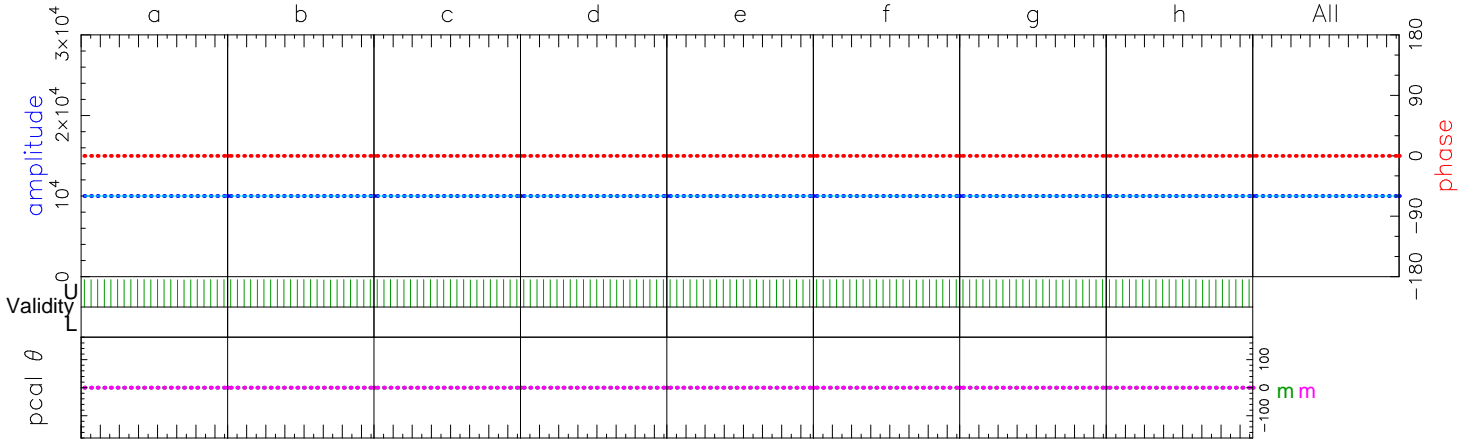


Fringe quality 9

SNR 572126.4
Int time 437.710
Amp 10000.021
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. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140946
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

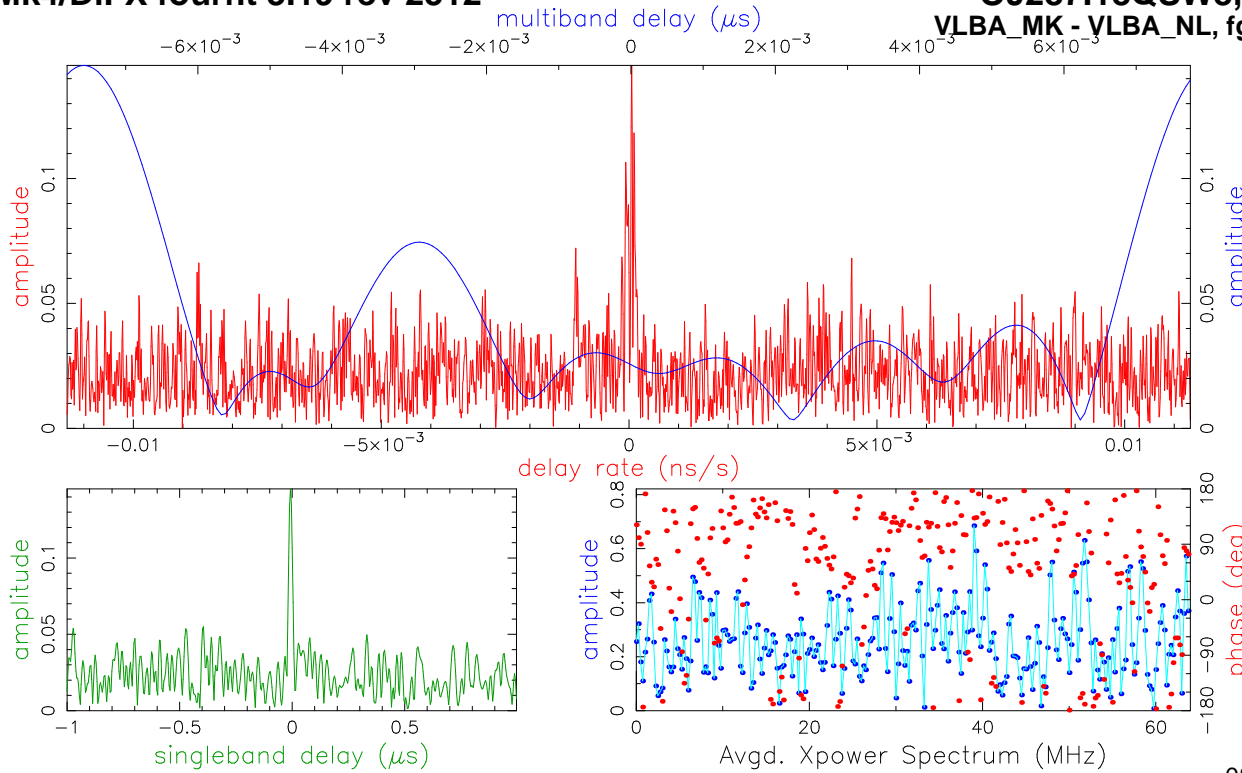
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	0.00000000000E+00	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.00000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	3.28137631951E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.28138E-20	+/-	6.5E-12
Delay rate (us/s)	0.00000000000E+00	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.021 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.021 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 72.1 el 9.8 pa -72.7 m: az 72.1 el 9.8 pa -72.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mm..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mm.W.86.18QSW8

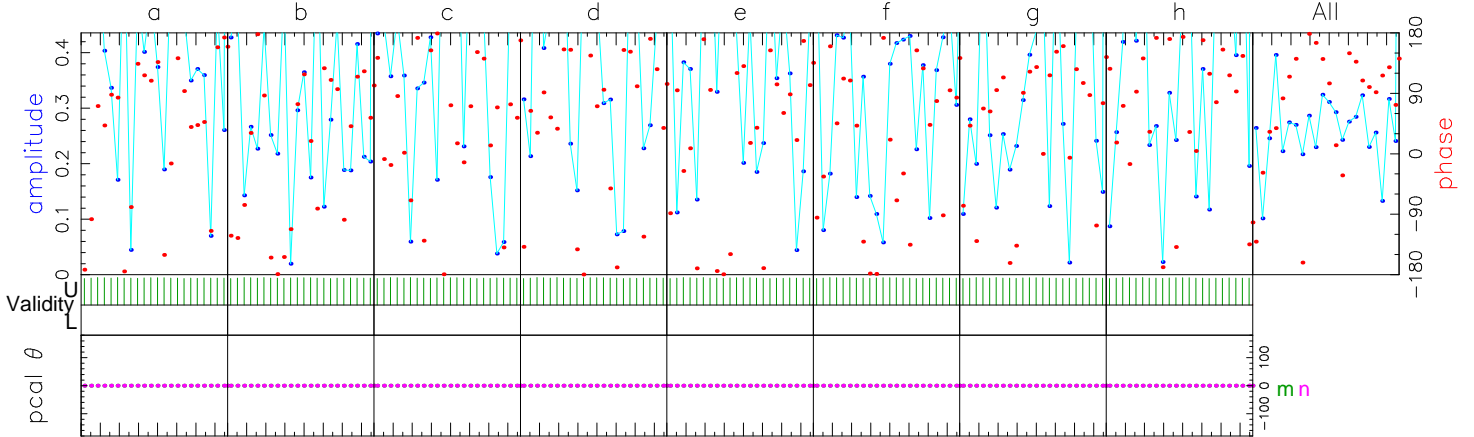


Fringe quality 9

SNR 8.3
Int time 431.224
Amp 0.145
Phase 112.3
PFD 5.5e-08
Delays (us)
SBD -0.007673
MBD -0.007575
Fringe rate (Hz) 0.004525
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140950
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

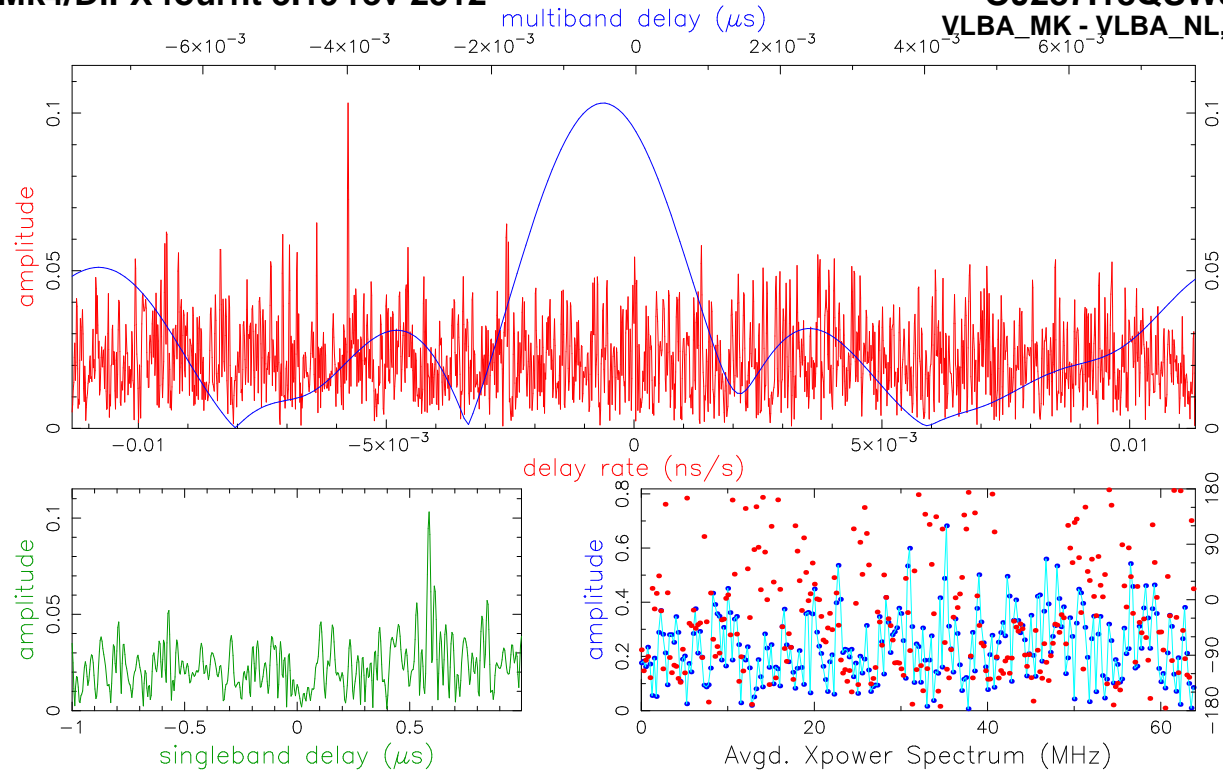


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	114.7	147.4	87.4	105.7	127.6	111.8	108.1	115.2	Phase	112.3
	0.2	0.1	0.2	0.2	0.2	0.0	0.2	0.2	Ampl.	0.1
	374.6	125.8	253.2	255.3	230.7	343.6	78.4	256.1	Sbd box	255.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.47683418736E+04		Apriori delay (usec)		-1.47683342989E+04		Resid mbdelay (usec)		-7.57477E-03	+/- 1.3E-04
Sband delay (usec)	-1.47683419721E+04		Apriori clock (usec)		-2.4174435E+01		Resid sbdelay (usec)		-7.67325E-03	+/- 1.0E-03
Phase delay (usec)	-1.47683342953E+04		Apriori clockrate (us/s)		1.5700001E-07		Resid phdelay (usec)		3.62156E-06	+/- 4.5E-07
Delay rate (us/s)	9.69657919467E-01		Apriori rate (us/s)		9.69657866935E-01		Resid rate (us/s)		5.25318E-08	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		6.57679221944E-05		Resid phase (deg)		112.3	+/- 13.9

ph/seg (deg) 66.5 33.3 Search (2048X32) 0.140 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 94.9 58.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 19.0 19.6 Inc. seg. avg. 0.225 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.9 34.3 Inc. frq. avg. 0.142 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 72.1 el 9.8 pa -72.7 n: az 131.7 el 61.0 pa -35.8 u,v (fr/asec) -5796.937 -804.425 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mn..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mn.W.103.18QSW8

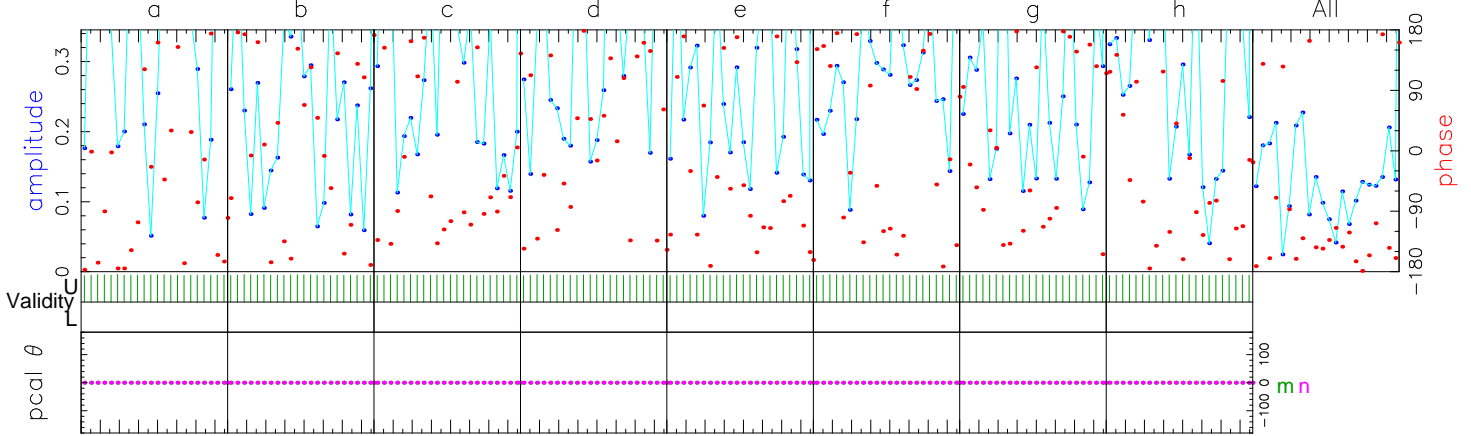
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mn
VLBA_MK - VLBA_NL, fgroup W, pol LR



Fringe quality 0
SNR 5.9
Int time 431.224
Amp 0.115
Phase -150.0
PFD 6.9e-01
Delays (us)
SBD 0.585700
MBD -0.000467
Fringe rate (Hz)
-0.497718
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140954
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

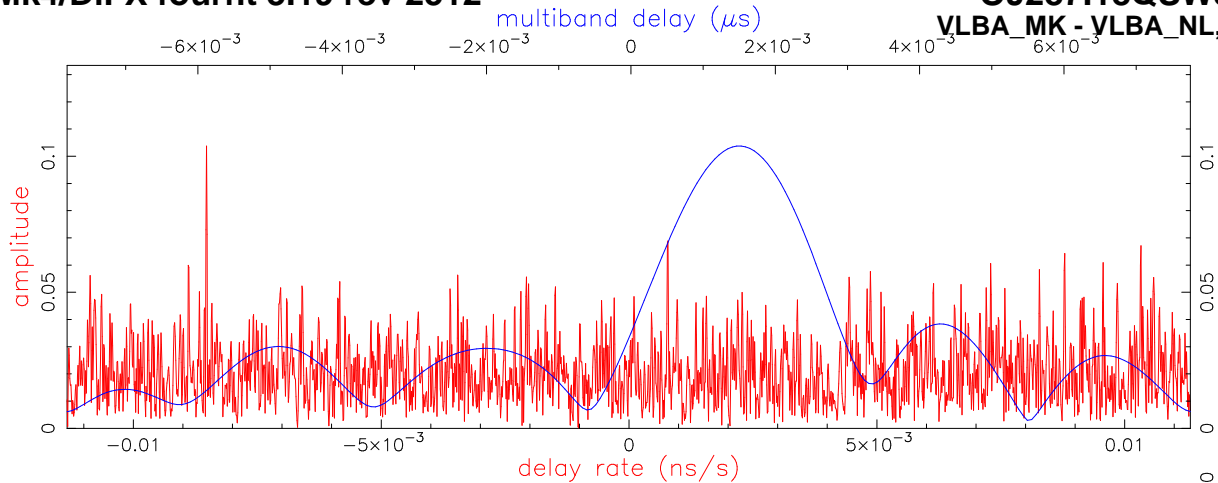


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-134.2	176.4	-125.9	152.1	-125.8	-164.7	-144.0	-141.3	Phase	-150.0
	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	328.9	76.4	157.7	395.4	16.2	328.4	504.0	185.9	Sbd box	406.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -1.47677410159E+04 Apriori delay (usec) -1.47683342989E+04 Resid mbdelay (usec) -4.67001E-04 +/- 1.9E-04
 Sband delay (usec) -1.47677485986E+04 Apriori clock (usec) -2.4174435E+01 Resid sbdelay (usec) 5.85700E-01 +/- 1.5E-03
 Phase delay (usec) -1.47683343037E+04 Apriori clockrate (us/s) 1.5700001E-07 Resid phdelay (usec) -4.83699E-06 +/- 6.3E-07
 Delay rate (us/s) 9.69652088924E-01 Apriori rate (us/s) 9.69657866935E-01 Resid rate (us/s) -5.77801E-06 +/- 2.5E-09
 Total phase (deg) -331.9 Apriori accel (us/s/s) 6.57679221944E-05 Resid phase (deg) -150.0 +/- 19.5

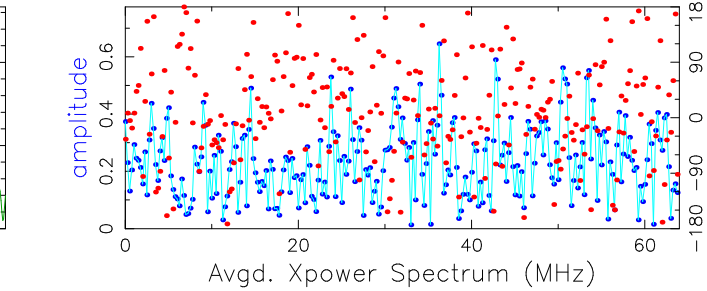
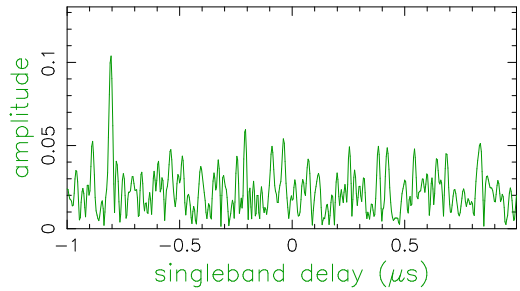
RMS Theor. Amplitude 0.115 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.4 46.9 Search (2048X32) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 62.0 81.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 32.2 27.6 Inc. seg. avg. 0.108 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.3 48.2 Inc. frq. avg. 0.114 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 72.1 el 9.8 pa -72.7 n: az 131.7 el 61.0 pa -35.8 u,v (fr/asec) -5796.937 -804.425 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mn..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mn.W.119.18QSW8



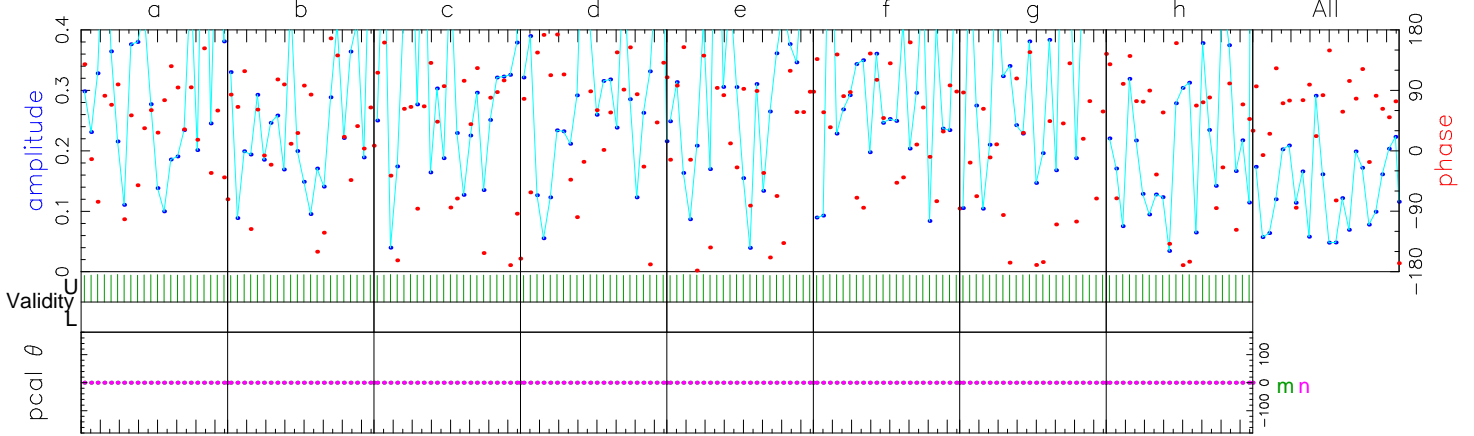
Fringe quality 0

SNR 5.9
Int time 431.224
Amp 0.133
Phase 69.1
PFD 5.4e-01
Delays (us)
SBD -0.805706
MBD 0.001485
Fringe rate (Hz)
-0.735509
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140958
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	60.6	56.2	98.2	75.7	86.3	51.5	35.4	101.6	Phase	69.1
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	32.9	415.7	275.2	44.0	202.6	312.8	468.3	254.4	Sbd box	50.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

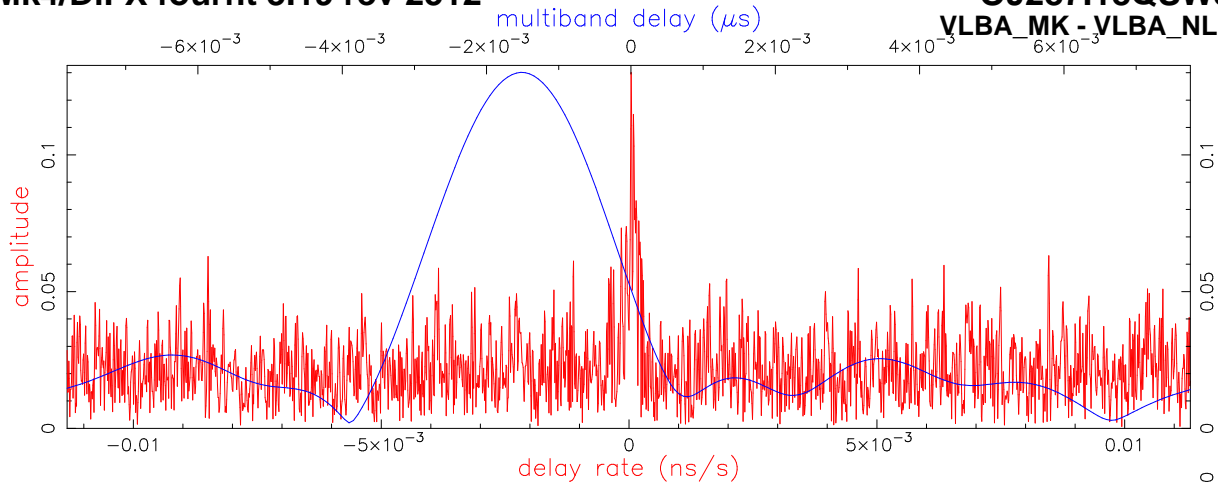
Group delay (usec)(sbd) -1.47691453134E+04 Apriori delay (usec) -1.47683342989E+04 Resid mbdelay (usec) 1.48544E-03 +/- 1.8E-04
 Sband delay (usec) -1.47691400046E+04 Apriori clock (usec) -2.4174435E+01 Resid sbdelay (usec) -8.05706E-01 +/- 1.5E-03
 Phase delay (usec) -1.47683342966E+04 Apriori clockrate (us/s) 1.5700001E-07 Resid phdelay (usec) 2.22736E-06 +/- 6.2E-07
 Delay rate (us/s) 9.69649328402E-01 Apriori rate (us/s) 9.69657866935E-01 Resid rate (us/s) -8.53853E-06 +/- 2.5E-09
 Total phase (deg) -112.8 Apriori accel (us/s/s) 6.57679221944E-05 Resid phase (deg) 69.1 +/- 19.3

RMS Theor. Amplitude 0.133 +/- 0.023 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 59.4 46.4 Search (2048X32) 0.100 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 71.5 80.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.6 27.3 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.6 47.7 Inc. frq. avg. 0.127 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 72.1 el 9.8 pa -72.7 n: az 131.7 el 61.0 pa -35.8 u,v (fr/asec) -5796.937 -804.425 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mn..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mn.W.137.18QSW8

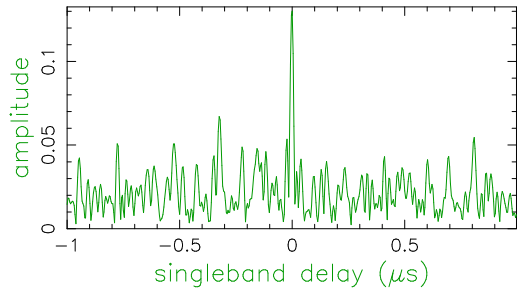
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mn
VLBA_MK - VLBA_NL, fgroup W, pol LL

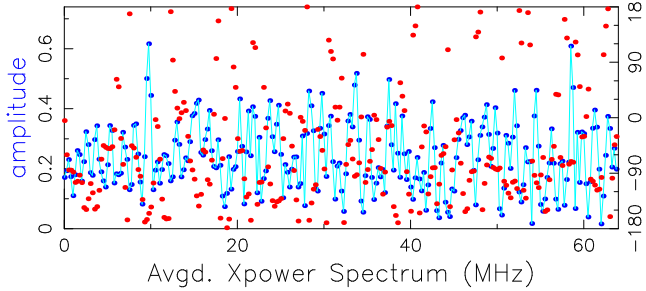


Fringe quality 9

SNR 7.5
Int time 431.224
Amp 0.133
Phase -95.8
PFD 1.6e-05
Delays (us)
SBD -0.001643
MBD -0.001551
Fringe rate (Hz)
0.004153
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

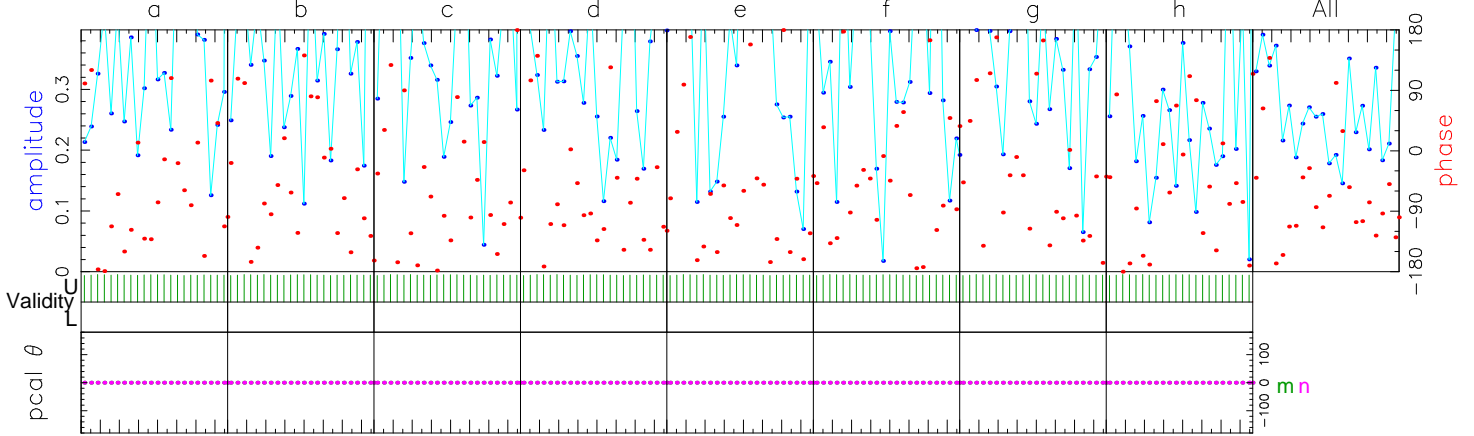


delay rate (ns/s)



Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140947
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	-93.5	-95.4	-109.4	-92.7	-102.3	-95.2	-94.0	-78.5	Phase	-95.8
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	465.1	346.2	148.2	256.7	256.9	319.2	232.3	429.1	Sbd box	256.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.47683358500E+04	Apriori delay (usec)	-1.47683342989E+04	Resid mbdelay (usec)	-1.55108E-03	+/-	1.4E-04
Sband delay (usec)	-1.47683359416E+04	Apriori clock (usec)	-2.4174435E+01	Resid sbdelay (usec)	-1.64275E-03	+/-	1.1E-03
Phase delay (usec)	-1.47683343020E+04	Apriori clockrate (us/s)	1.5700001E-07	Resid phdelay (usec)	-3.09053E-06	+/-	4.9E-07
Delay rate (us/s)	9.69657915150E-01	Apriori rate (us/s)	9.69657866935E-01	Resid rate (us/s)	4.82145E-08	+/-	1.9E-09
Total phase (deg)	-277.7	Apriori accel (us/s/s)	6.57679221944E-05	Resid phase (deg)	-95.8	+/-	15.2

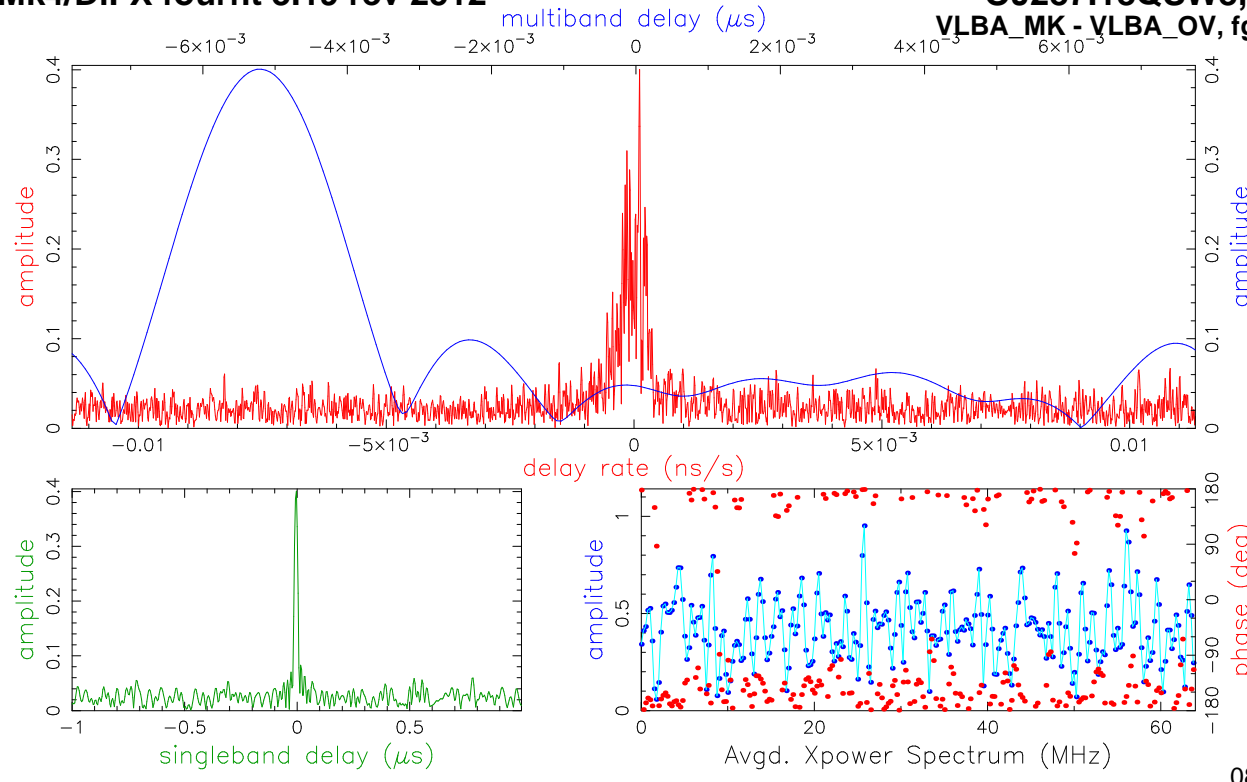
ph/seg (deg)	71.2	Theor.	36.5	Amplitude	0.133 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	119.8	Search (2048X32)	0.127	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	9.5	Interp.	0.000	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	33.2	Inc. seg. avg.	0.223	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	0.122	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

m: az 72.1 el 9.8 pa -72.7 n: az 131.7 el 61.0 pa -35.8 u,v (fr/asec) -5796.937 -804.425 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mn..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mn.W.88.18QSW8

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mo
VLBA_MK - VLBA_OV, fgroup W, pol RR

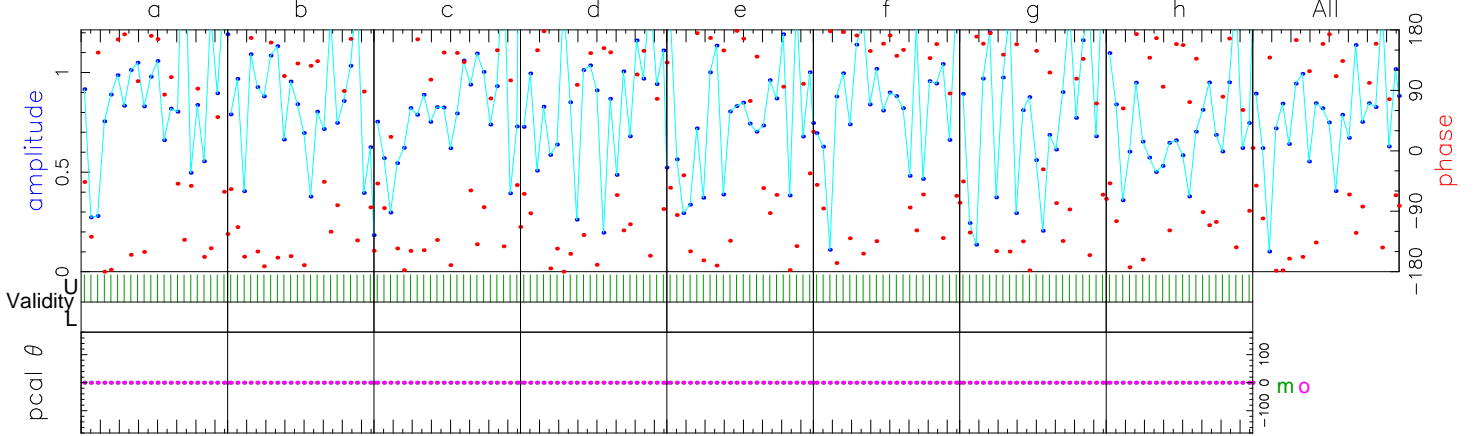


Fringe quality 9

SNR 23.1
Int time 434.629
Amp 0.405
Phase -162.0
PFD 0.0e+00
Delays (us)
SBD -0.005187
MBD -0.005252
Fringe rate (Hz) 0.009971
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

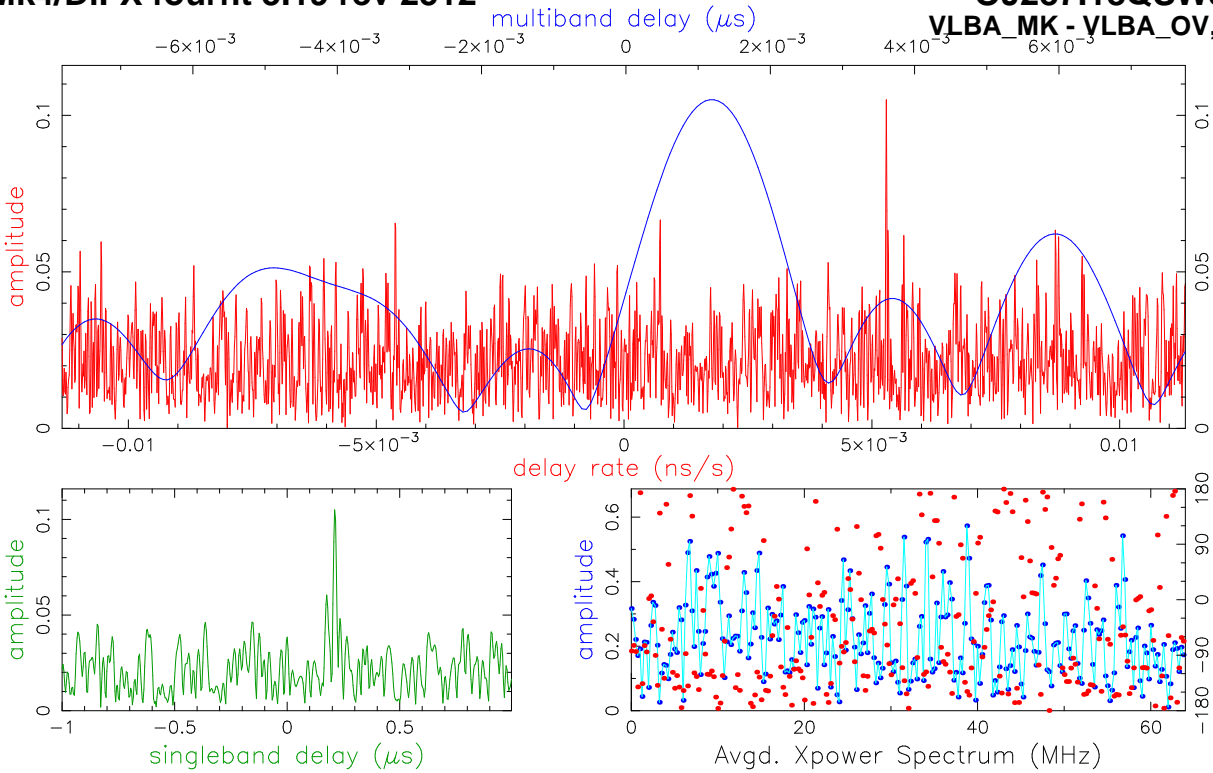
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140951
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	-169.5	-163.7	-159.2	-164.4	-152.3	-161.4	-161.4	-160.2	Phase	-162.0
	0.4	0.5	0.4	0.5	0.3	0.5	0.4	0.3	Ampl.	0.4
	256.2	256.1	255.1	255.8	256.0	255.8	255.5	254.5	Sbd box	255.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.10462520950E+04		Apriori delay (usec)		-1.10462468426E+04		Resid mbdelay (usec)		-5.25245E-03	+/- 4.7E-05
Sband delay (usec)	-1.10462520301E+04		Apriori clock (usec)		-1.1978399E+01		Resid sbdelay (usec)		-5.18750E-03	+/- 3.7E-04
Phase delay (usec)	-1.10462468478E+04		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		-5.22303E-06	+/- 1.6E-07
Delay rate (us/s)	5.02175790922E-01		Apriori rate (us/s)		5.02175675165E-01		Resid rate (us/s)		1.15757E-07	+/- 6.3E-10
Total phase (deg)			Apriori accel (us/s/s)		4.83994253719E-05		Resid phase (deg)		-162.0	+/- 5.0

ph/seg (deg) 65.5 11.9 Search (2048X32) 0.381 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 110.6 20.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 5.3 7.0 Inc. seg. avg. 0.763 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 19.5 12.3 Inc. frq. avg. 0.399 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 72.1 el 9.8 pa -72.7 o: az 97.8 el 44.0 pa -57.0 u,v (fr/asec) -2977.149 -809.356 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mo..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mo.W.107.18QSW8

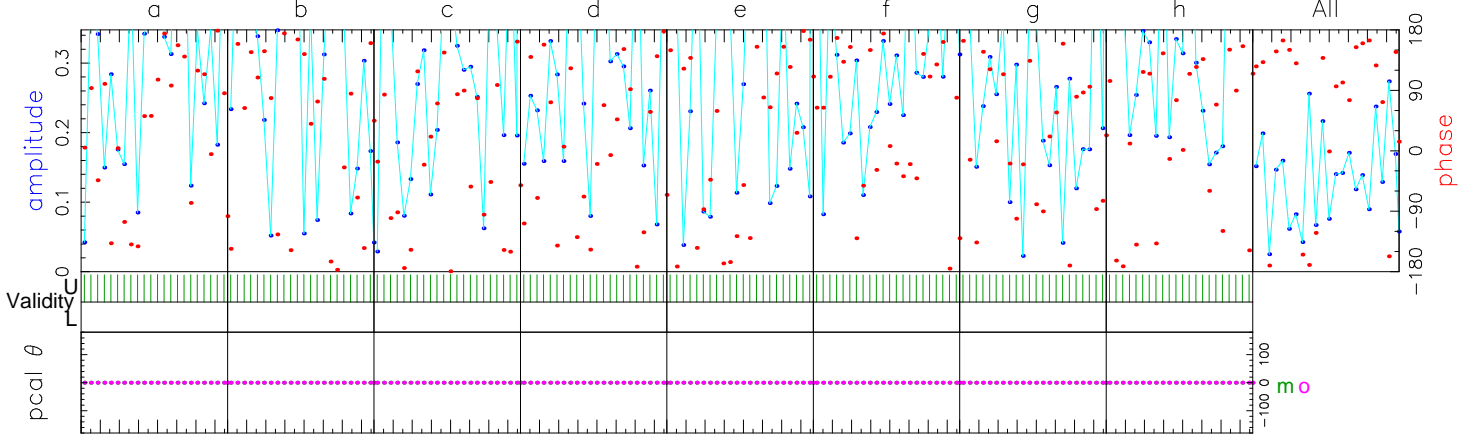


Fringe quality 0

SNR 6.0
Int time 434.628
Amp 0.116
Phase 143.6
PFD 3.4e-01
Delays (us)
SBD 0.211979
MBD 0.001211
Fringe rate (Hz)
0.456922
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140955
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	117.2	166.8	138.2	140.9	165.7	112.8	-179.2	135.9	Phase	143.6
	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	25.4	310.9	495.8	94.1	311.5	241.3	494.0	311.6	Sbd box	311.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.10460425063E+04	Apriori delay (usec)	-1.10462468426E+04	Resid mbdelay (usec)	1.21126E-03	+/-	1.8E-04
Sband delay (usec)	-1.10460348636E+04	Apriori clock (usec)	-1.1978399E+01	Resid sbdelay (usec)	2.11979E-01	+/-	1.4E-03
Phase delay (usec)	-1.10462468379E+04	Apriori clockrate (us/s)	2.8999998E-07	Resid phdelay (usec)	4.62925E-06	+/-	6.1E-07
Delay rate (us/s)	5.02180979581E-01	Apriori rate (us/s)	5.02175675165E-01	Resid rate (us/s)	5.30442E-06	+/-	2.4E-09
Total phase (deg)	137.0	Apriori accel (us/s/s)	4.83994253719E-05	Resid phase (deg)	143.6	+/-	19.0

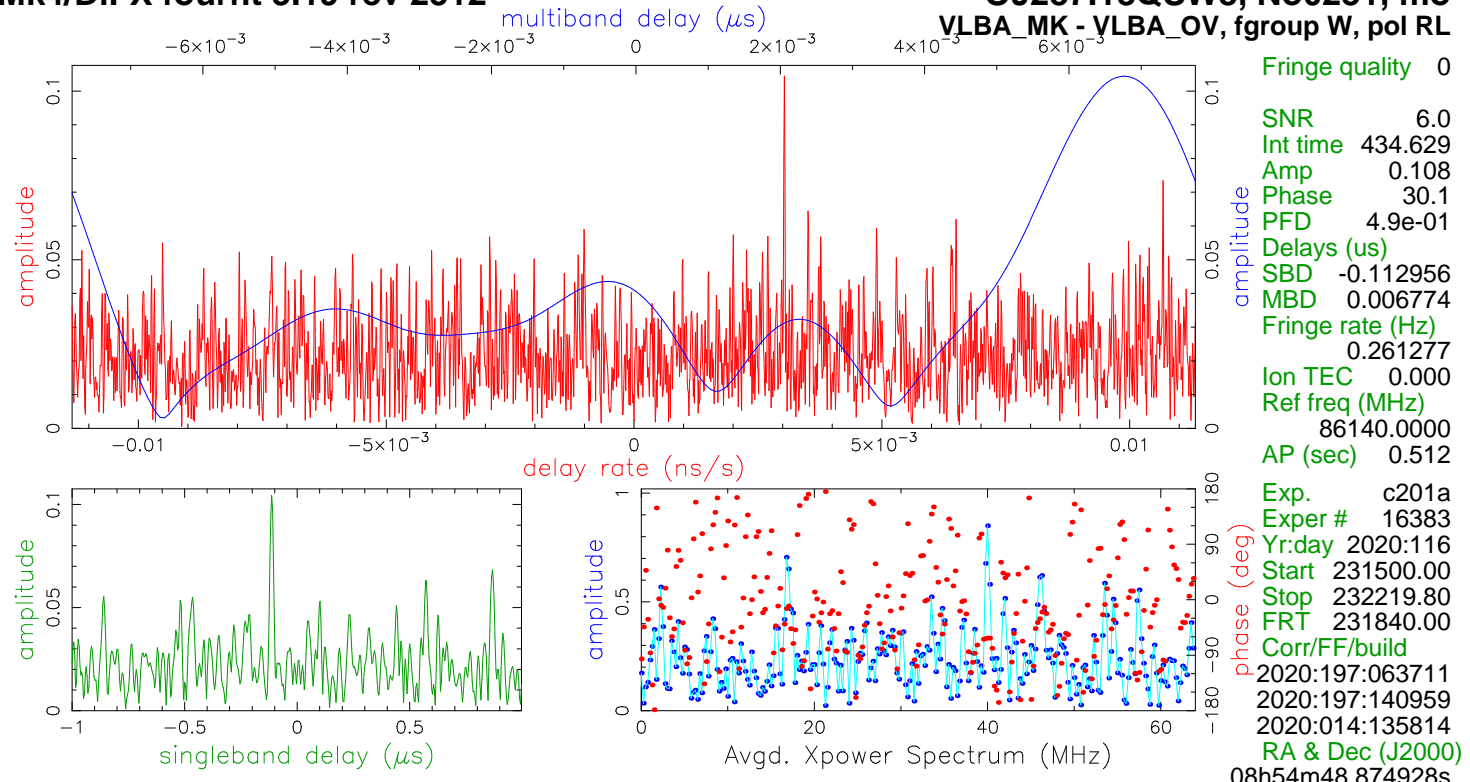
	RMS	Theor.	Amplitude	0.116 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.3	45.6	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.9	79.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.3	26.9	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	60.4	46.9	Inc. frq. avg.	0.111	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 72.1 el 9.8 pa -72.7 o: az 97.8 el 44.0 pa -57.0 u,v (fr/asec) -2977.149 -809.356 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mo..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mo.W.123.18QSW8

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mo
VLBA_MK - VLBA_OV, fgroup W, pol RL



Fringe quality 0

SNR 6.0

Int time 434.629

Amp 0.108

Phase 30.1

PFD 4.9e-01

Delays (us)

SBD -0.112956

MBD 0.006774

Fringe rate (Hz)

0.261277

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201a

Exper # 16383

Yr:day 2020:116

Start 231500.00

Stop 232219.80

FRT 231840.00

Corr/FF/build

2020:197:063711

2020:197:140959

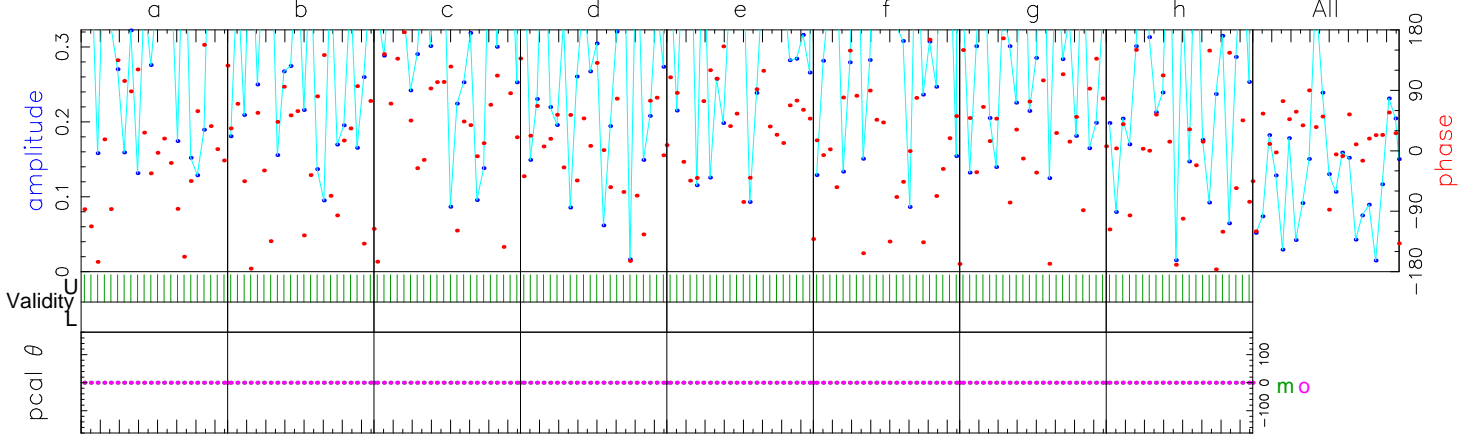
2020:014:135814

RA & Dec (J2000)

08h54m48.874928s

+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



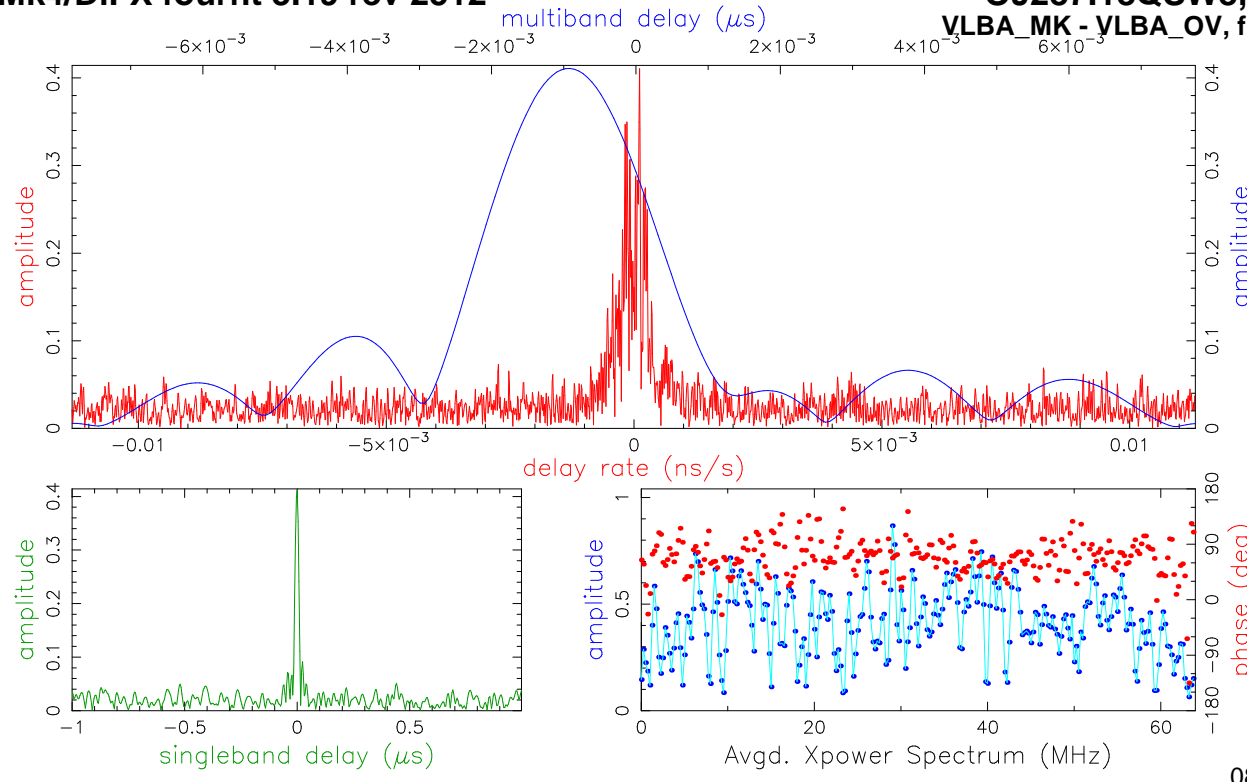
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-10.1	28.8	88.7	3.6	48.5	19.6	48.4	-10.3		30.1
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1		0.1
	47.0	440.7	225.5	175.2	227.5	36.1	319.2	314.1		228.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
m	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-1.10463650688E+04	Apriori delay (usec)	-1.10462468426E+04	Resid mbdelay (usec)	6.77375E-03	+/-	1.8E-04
Sband delay (usec)	-1.10463597981E+04	Apriori clock (usec)	-1.1978399E+01	Resid sbdelay (usec)	-1.12956E-01	+/-	1.4E-03
Phase delay (usec)	-1.10462468416E+04	Apriori clockrate (us/s)	2.8999998E-07	Resid phdelay (usec)	9.70788E-07	+/-	6.2E-07
Delay rate (us/s)	5.02178708333E-01	Apriori rate (us/s)	5.02175675165E-01	Resid rate (us/s)	3.03317E-06	+/-	2.4E-09
Total phase (deg)		Apriori accel (us/s/s)	4.83994253719E-05	Resid phase (deg)	30.1	+/-	19.2

	RMS	Theor.	Amplitude	0.108 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	49.1	46.1	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	82.0	80.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.9	27.2	Inc. seg. avg.	0.101	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.4	47.5	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 72.1 el 9.8 pa -72.7 o: az 97.8 el 44.0 pa -57.0 u,v (fr/asec) -2977.149 -809.356 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mo..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mo.W.139.18QSW8

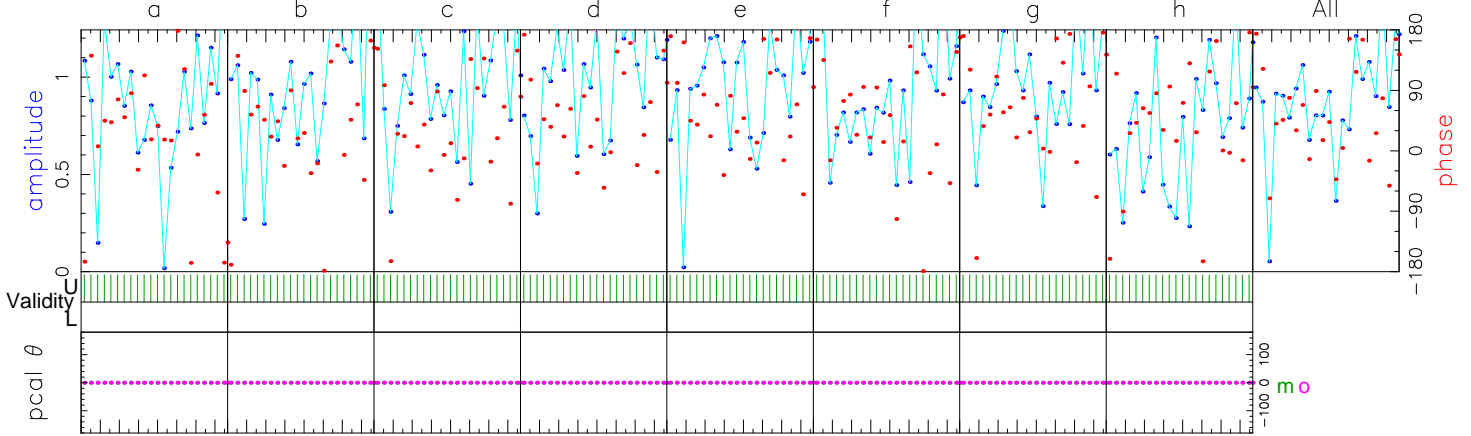


Fringe quality 9

SNR 23.6
Int time 434.627
Amp 0.414
Phase 66.2
PFD 0.0e+00
Delays (us)
SBD -0.001236
MBD -0.000971
Fringe rate (Hz) 0.009832
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140947
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.10462478135E+04	Apriori delay (usec)	-1.10462468426E+04	Resid mbdelay (usec)	-9.70890E-04	+/-	4.6E-05
Sband delay (usec)	-1.10462480783E+04	Apriori clock (usec)	-1.1978399E+01	Resid sbdelay (usec)	-1.23575E-03	+/-	3.6E-04
Phase delay (usec)	-1.10462468404E+04	Apriori clockrate (us/s)	2.8999998E-07	Resid phdelay (usec)	2.13389E-06	+/-	1.6E-07
Delay rate (us/s)	5.02175789309E-01	Apriori rate (us/s)	5.02175675165E-01	Resid rate (us/s)	1.14144E-07	+/-	6.2E-10
Total phase (deg)	59.6	Apriori accel (us/s/s)	4.83994253719E-05	Resid phase (deg)	66.2	+/-	4.9

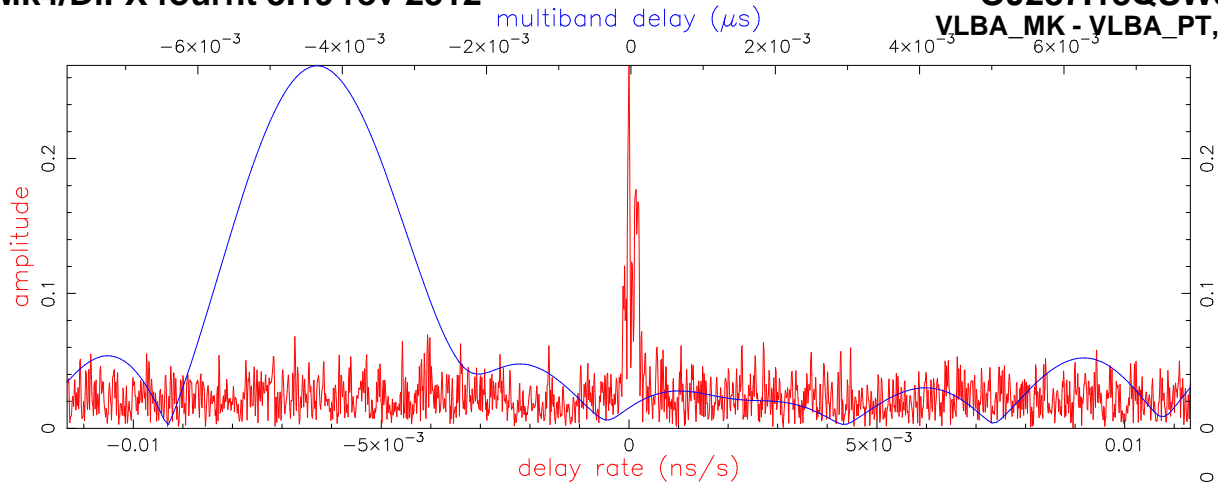
ph/seg (deg)	72.7	RMS	11.6	Theor.	11.6	Amplitude	0.414 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	130.9	Search (2048X32)	0.403	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	12.2	Inc. seg. avg.	0.861	Inc. frq. avg.	0.415	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	14.7	Inc. frq. avg.	0.415	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 72.1 el 9.8 pa -72.7 o: az 97.8 el 44.0 pa -57.0 u,v (fr/asec) -2977.149 -809.356 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mo..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mo.W.91.18QSW8

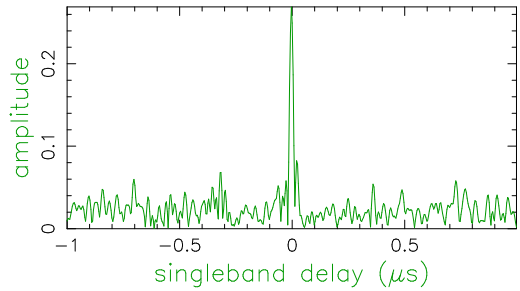
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mp
VLBA_MK - VLBA_PT, fgroup W, pol RR

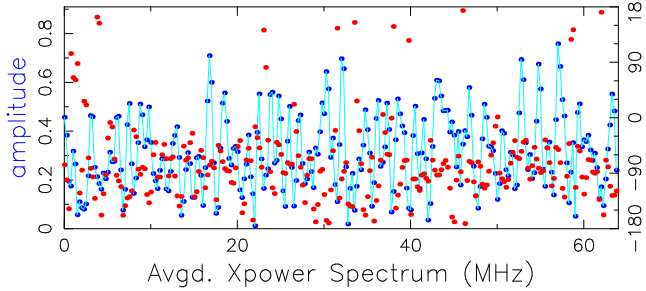


Fringe quality 9

SNR 15.4
Int time 436.859
Amp 0.269
Phase -78.6
PFD 1.4e-44
Delays (us)
SBD -0.003462
MBD -0.004340
Fringe rate (Hz) 0.000101
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

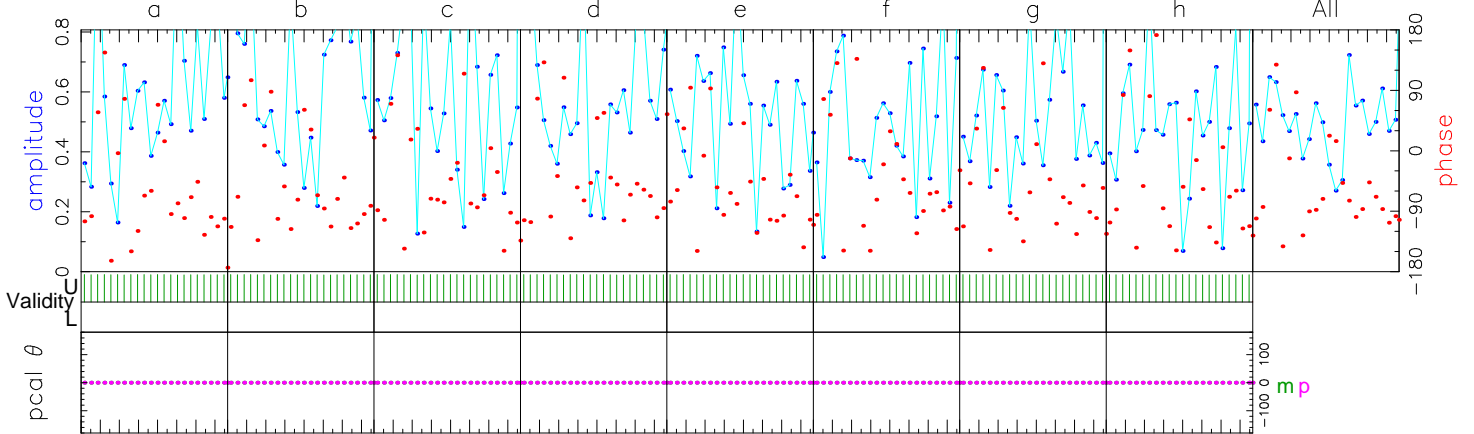


delay rate (ns/s)



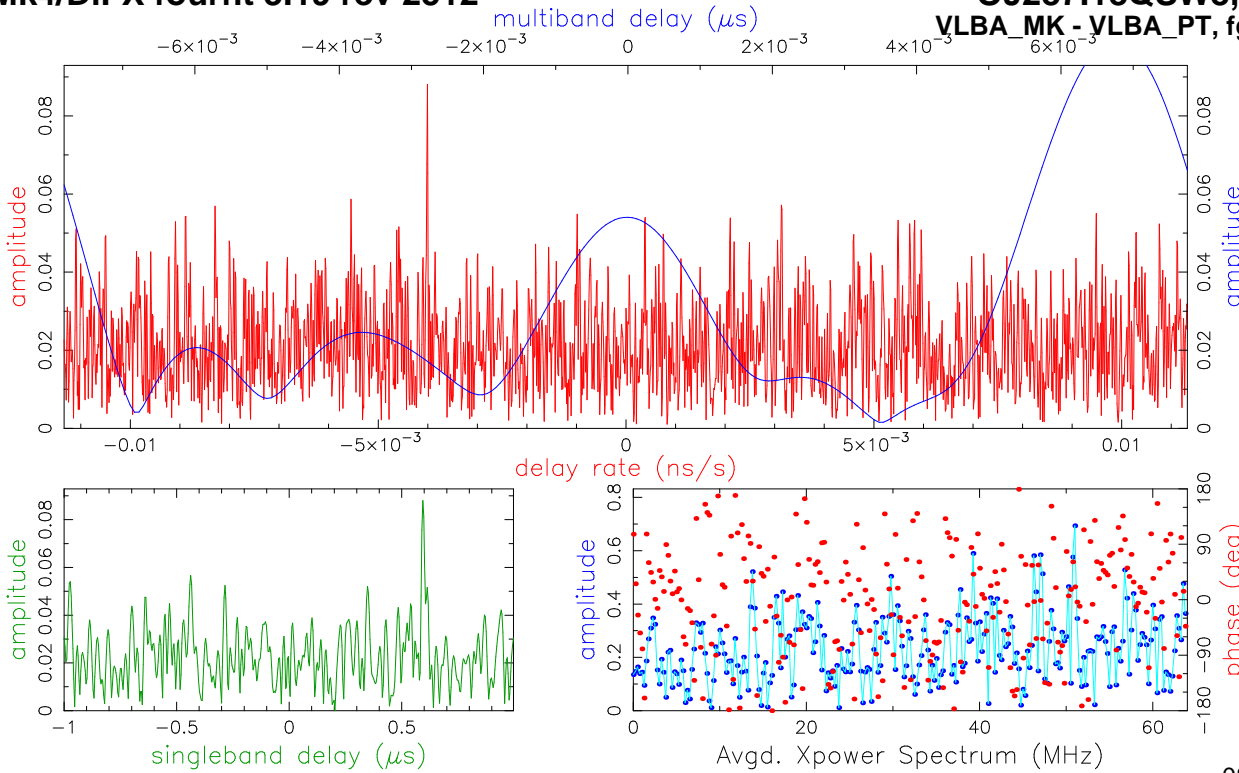
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140951
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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
	-85.3	-83.2	-74.5	-73.3	-70.5	-76.6	-71.8	-104.3	Phase	-78.6
	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	Ampl.	0.3
	256.2	256.2	256.2	256.3	255.7	256.1	256.1	255.1	Sbd box	256.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.31422901956E+04		Apriori delay (usec)		-1.31422858553E+04		Resid mbdelay (usec)		-4.34028E-03	+/- 7.1E-05
Sband delay (usec)	-1.31422893173E+04		Apriori clock (usec)		-9.1707039E+00		Resid sbdelay (usec)		-3.46200E-03	+/- 5.6E-04
Phase delay (usec)	-1.31422858578E+04		Apriori clockrate (us/s)		2.8711340E-07		Resid phdelay (usec)		-2.53469E-06	+/- 2.4E-07
Delay rate (us/s)	6.25533877935E-01		Apriori rate (us/s)		6.25533876765E-01		Resid rate (us/s)		1.17054E-09	+/- 9.5E-10
Total phase (deg)			Apriori accel (us/s/s)		6.11591234375E-05		Resid phase (deg)		-78.6	+/- 7.5

ph/seg (deg) 68.9 17.9 Search (2048X32) 0.268 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 95.0 31.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.1 10.5 Inc. seg. avg. 0.477 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.3 18.4 Inc. frq. avg. 0.268 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 72.1 el 9.8 pa -72.7 p: az 102.1 el 52.6 pa -59.1 u,v (fr/asec) -3708.371 -95.315 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mp..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mp.W.105.18QSW8

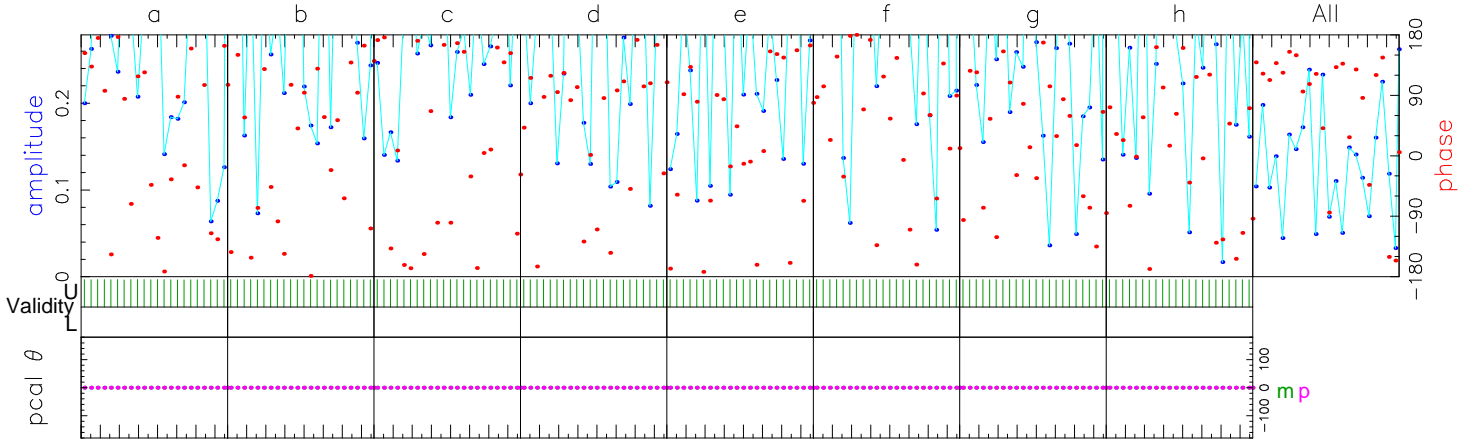


Fringe quality 0

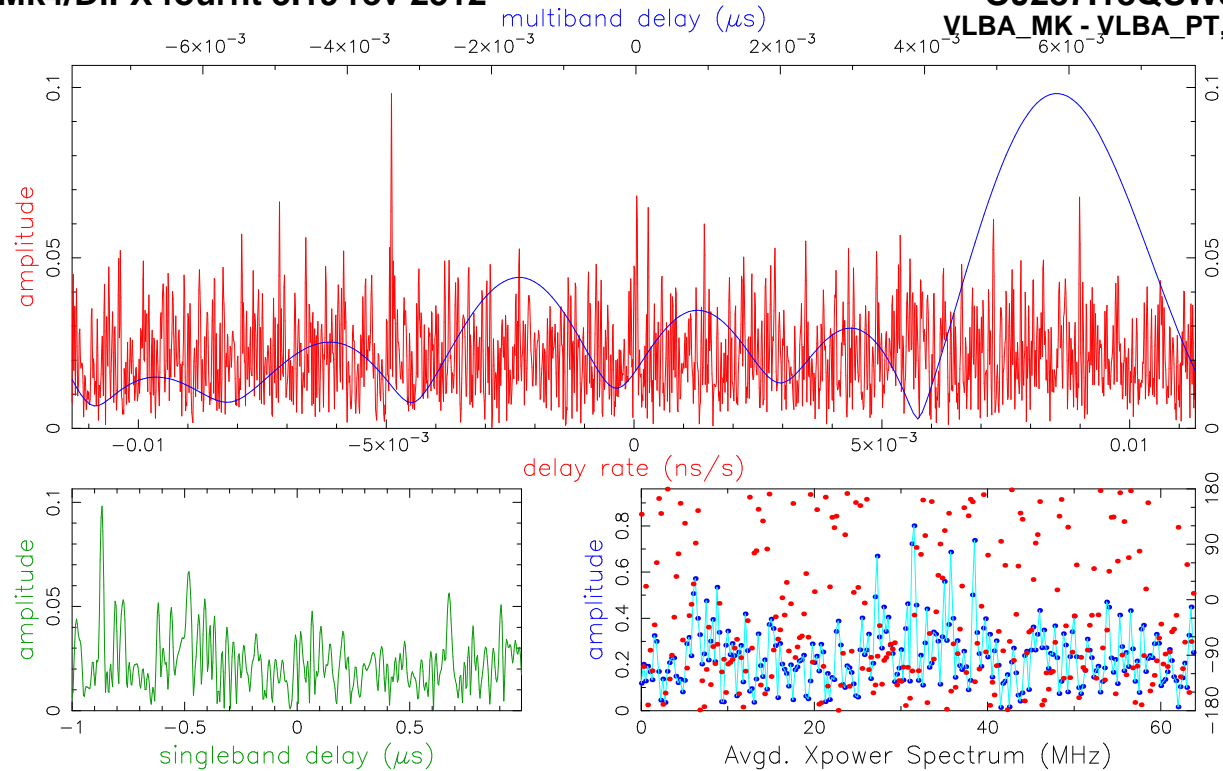
SNR 5.0
Int time 436.857
Amp 0.093
Phase 119.6
PFD 1.0e+00
Delays (us)
SBD 0.594270
MBD -0.008301
Fringe rate (Hz)
-0.346007
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140955
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

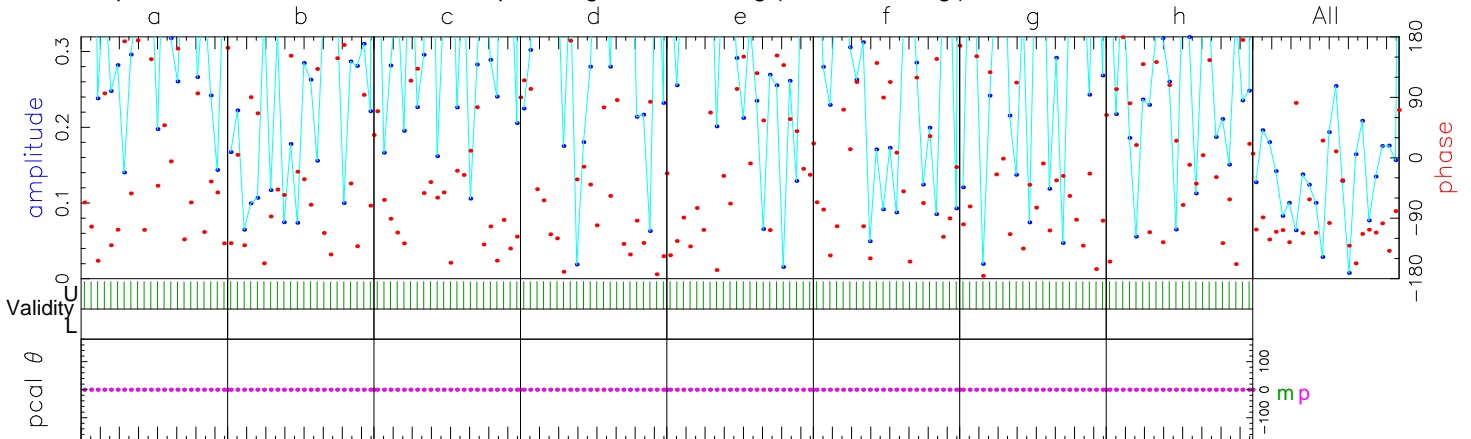


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.31416847811E+04				-1.31422858553E+04				-8.30078E-03	+/- 2.2E-04
Sband delay (usec)	-1.31416915858E+04				-9.1707039E+00				5.94270E-01	+/- 1.7E-03
Phase delay (usec)	-1.31422858515E+04				2.8711340E-07				3.85731E-06	+/- 7.3E-07
Delay rate (us/s)	6.25529859972E-01				6.25533876765E-01				-4.01679E-06	+/- 2.9E-09
Total phase (deg)			-88.0		6.11591234375E-05				119.6	+/- 22.7
ph/seg (deg)	62.9	54.5								
amp/seg (%)	82.5	95.1								
ph/frq (deg)	45.2	32.1								
amp/frq (%)	50.8	56.1								
m: az 72.1 el 9.8 pa -72.7										
p: az 102.1 el 52.6 pa -59.1										
u,v (fr/asec)					-3708.371					
Control file: cf_1234_gmva										
Input file: /Exps/c201a/v1/1234/No0231/mp..18QSW8										
Output file: /Exps/c201a/v1/1234/No0231/mp.W.122.18QSW8										



Fringe quality 0
SNR 5.6
Int time 436.859
Amp 0.106
Phase -99.3
PFD 9.9e-01
Delays (us)
SBD -0.867914
MBD 0.005789
Fringe rate (Hz)
-0.422321
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140958
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

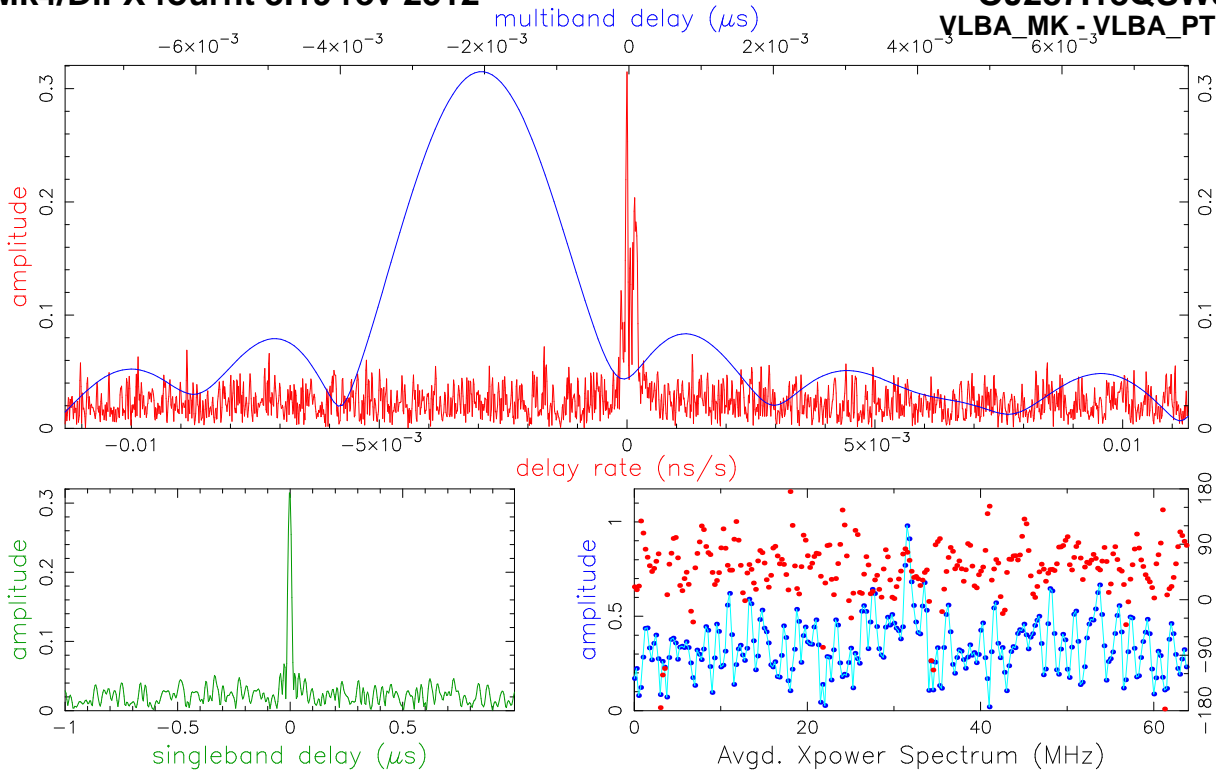


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-104.3	-110.9	-89.0	-120.6	-74.2	-98.0	-77.7	-164.4	Phase	-99.3
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	154.2	308.3	114.9	50.6	435.8	507.3	33.4	30.5	Sbd box	34.8
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.31431550661E+04		Apriori delay (usec)		-1.31422858553E+04		Resid mbdelay (usec)		5.78919E-03	+/- 1.9E-04
Sband delay (usec)	-1.31431537698E+04		Apriori clock (usec)		-9.1707039E+00		Resid sbdelay (usec)		-8.67914E-01	+/- 1.5E-03
Phase delay (usec)	-1.31422858585E+04		Apriori clockrate (us/s)		2.8711340E-07		Resid phdelay (usec)		-3.20167E-06	+/- 6.6E-07
Delay rate (us/s)	6.25528974041E-01		Apriori rate (us/s)		6.25533876765E-01		Resid rate (us/s)		-4.90272E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		6.11591234375E-05		Resid phase (deg)		-99.3	+/- 20.4

ph/seg (deg) 58.1 48.8 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.8 85.2 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 28.8 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 39.0 50.3 Inc. frq. avg. 0.102 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 72.1 el 9.8 pa -72.7 p: az 102.1 el 52.6 pa -59.1 u,v (fr/asec) -3708.371 -95.315 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mp..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mp.W.138.18QSW8

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18QSW8, No0231, mp
VLBA_MK - VLBA_PT, fgroup W, pol LL

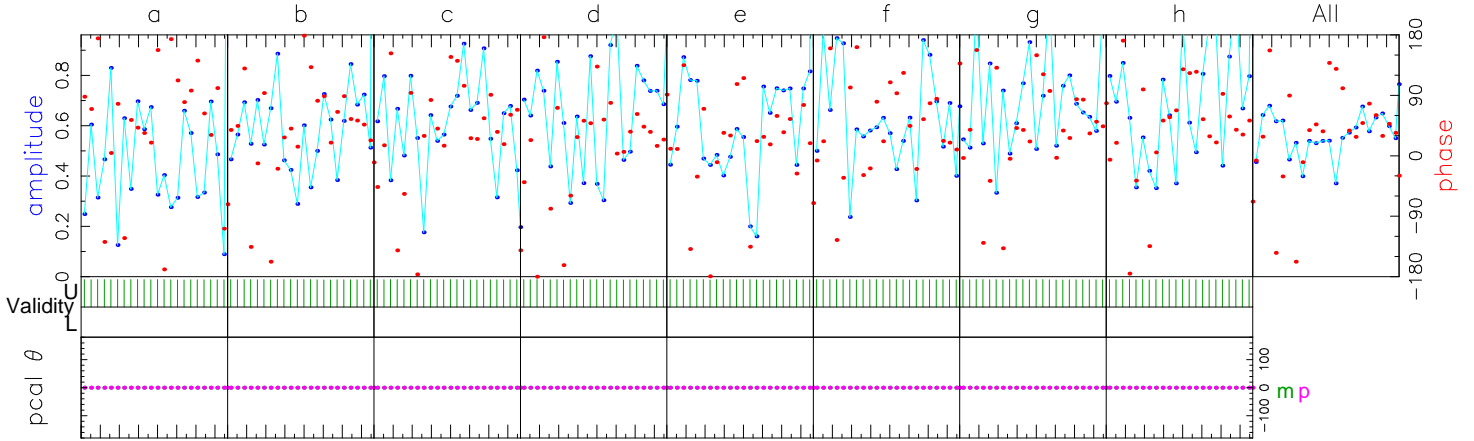


Fringe quality 9

SNR 18.3
Int time 436.858
Amp 0.321
Phase 53.7
PFD 0.0e+00
Delays (us)
SBD -0.002166
MBD -0.001993
Fringe rate (Hz)
-0.000094
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:116
Start 231500.00
Stop 232219.80
FRT 231840.00
Corr/FF/build
2020:197:063711
2020:197:140947
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 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	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0						
m	1000	1000	1000	1000	1000	1000	1000	1000	APs used					
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
p	1000	1000	1000	1000	1000	1000	1000	1000						
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids					
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks					
									Tracks					
Group delay (usec)(sbd)	-1.31422878486E+04								Apriori delay (usec)	-1.3142285853E+04	Resid mbdelay (usec)	-1.99331E-03	+/-	5.9E-05
Sband delay (usec)	-1.31422880208E+04								Apriori clock (usec)	-9.1707039E-07	Resid sbdelay (usec)	-2.16550E-03	+/-	4.7E-04
Phase delay (usec)	-1.31422858536E+04								Apriori clockrate (us/s)	2.8711340E-07	Resid phdelay (usec)	1.73172E-06	+/-	2.0E-07
Delay rate (us/s)	6.25533875676E-01								Apriori rate (us/s)	6.25533876765E-01	Resid rate (us/s)	-1.08905E-09	+/-	7.9E-10
Total phase (deg)			-153.9						Apriori accel (us/s/s)	6.11591234375E-05	Resid phase (deg)	53.7	+/-	6.3

ph/seg (deg) 65.3 15.0
amp/seg (%) 79.2 26.2
ph/frq (deg) 12.1 8.8
amp/frq (%) 17.7 15.4

RMS Theor. Amplitude 0.321 +/- 0.017
Search (2048X32) 0.313
Interp. 0.000
Inc. seg. avg. 0.543
Inc. frq. avg. 0.316

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

m: az 72.1 el 9.8 pa -72.7 p: az 102.1 el 52.6 pa -59.1 u,v (fr/asec) -3708.371 -95.315 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0231/mp..18QSW8 Output file: /Exps/c201a/v1/1234/No0231/mp.W.89.18QSW8