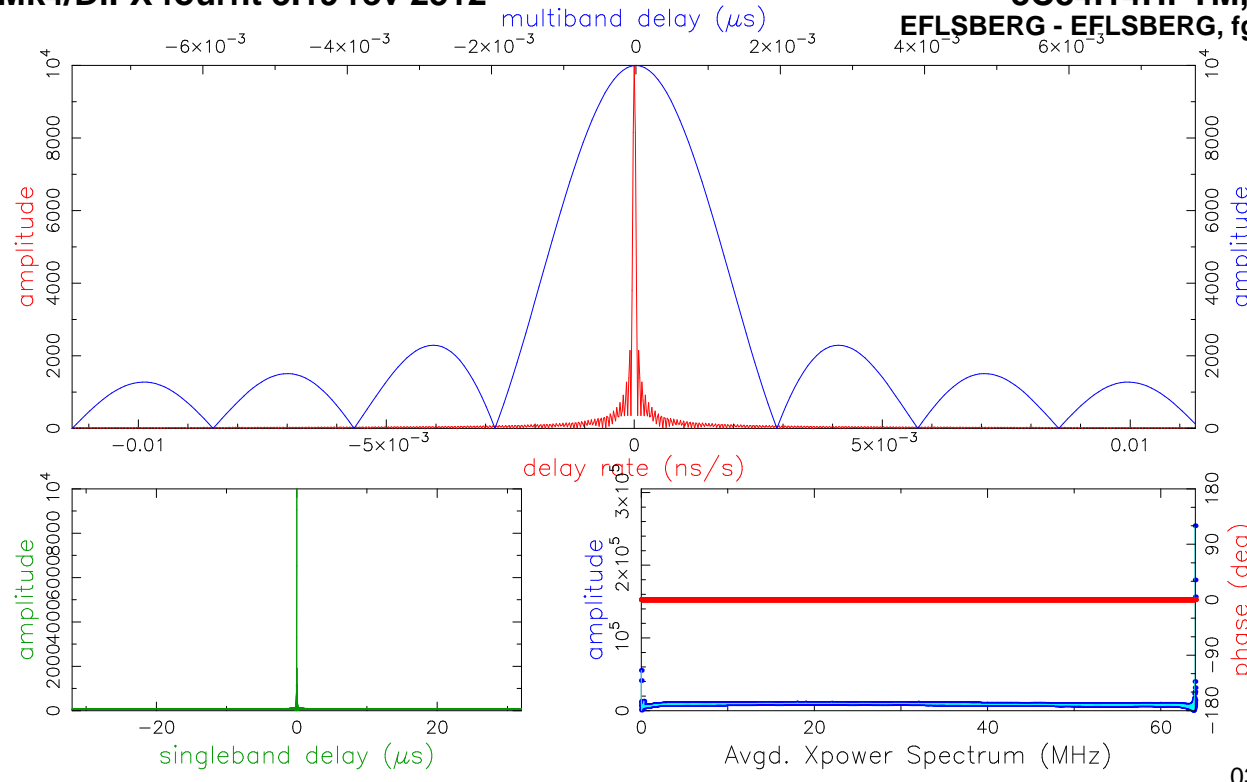


Mk4/DiFX fourfit 3.19 rev 2512

3C84.14HPTM, No0002, BB  
EFLSBERG - EFLSBERG, fgroup W, pol RR

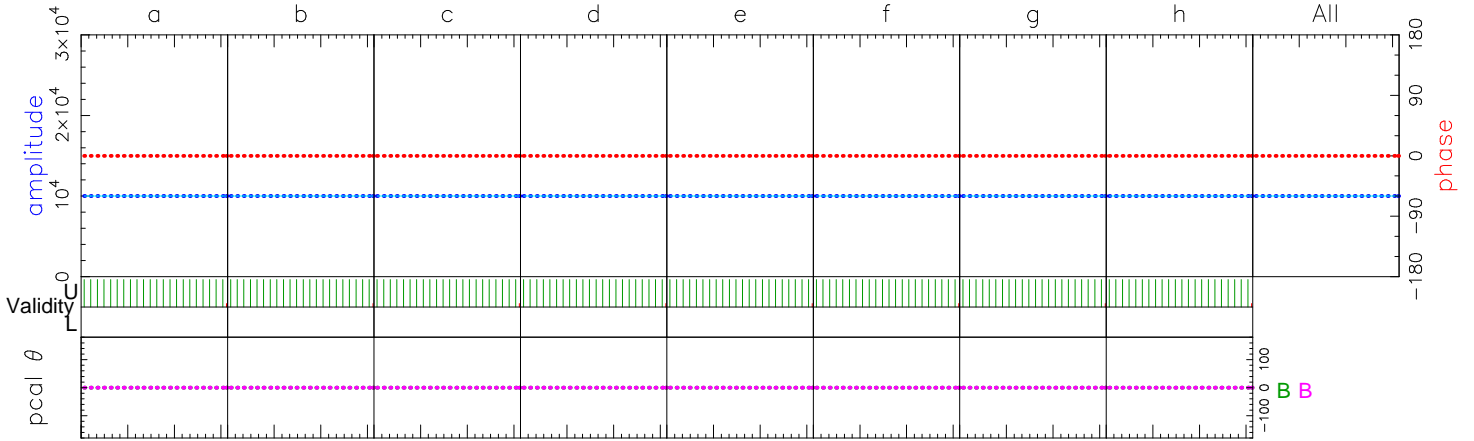


Fringe quality 9

SNR 368133.2  
Int time 181.224  
Amp 10000.000  
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. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195734  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

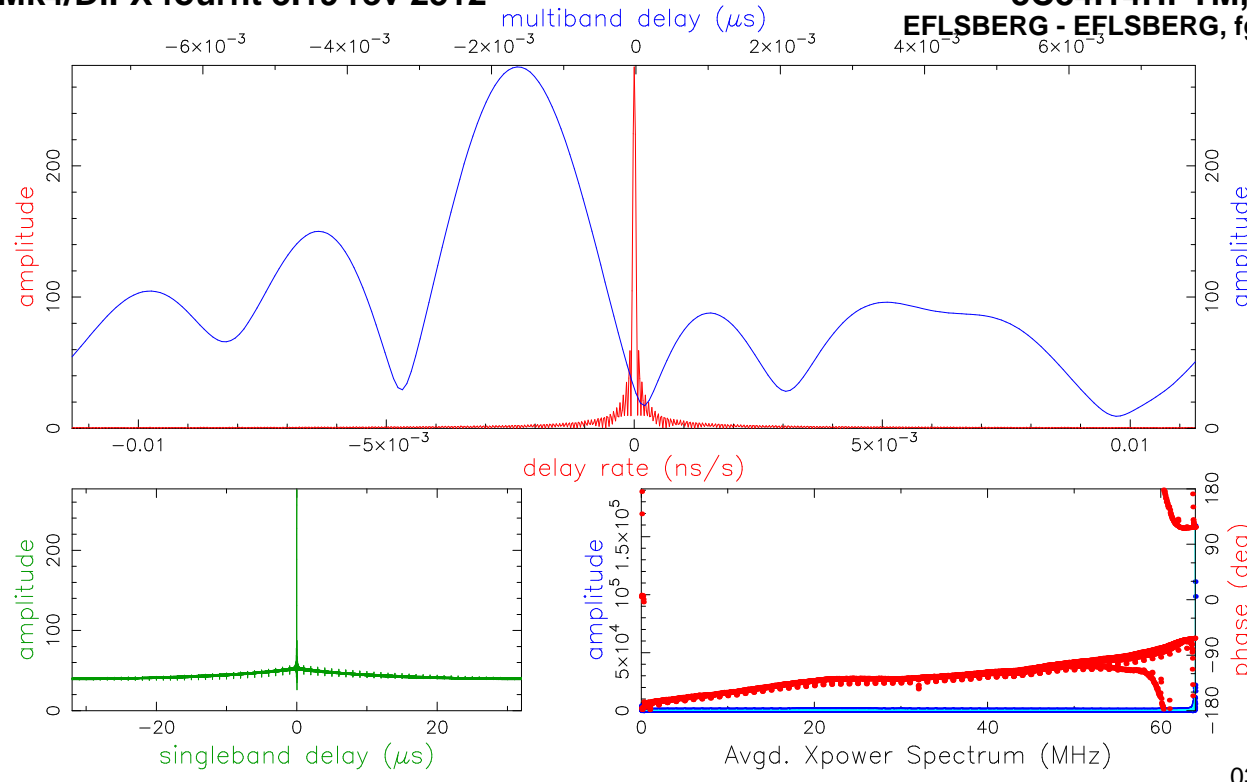
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.9E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08  
 Phase delay (usec) -1.44362824234E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.44363E-19 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.6E-14  
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 145.6 el 79.5 pa -28.5 B: az 145.6 el 79.5 pa -28.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BB..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BB.W.12.14HPTM

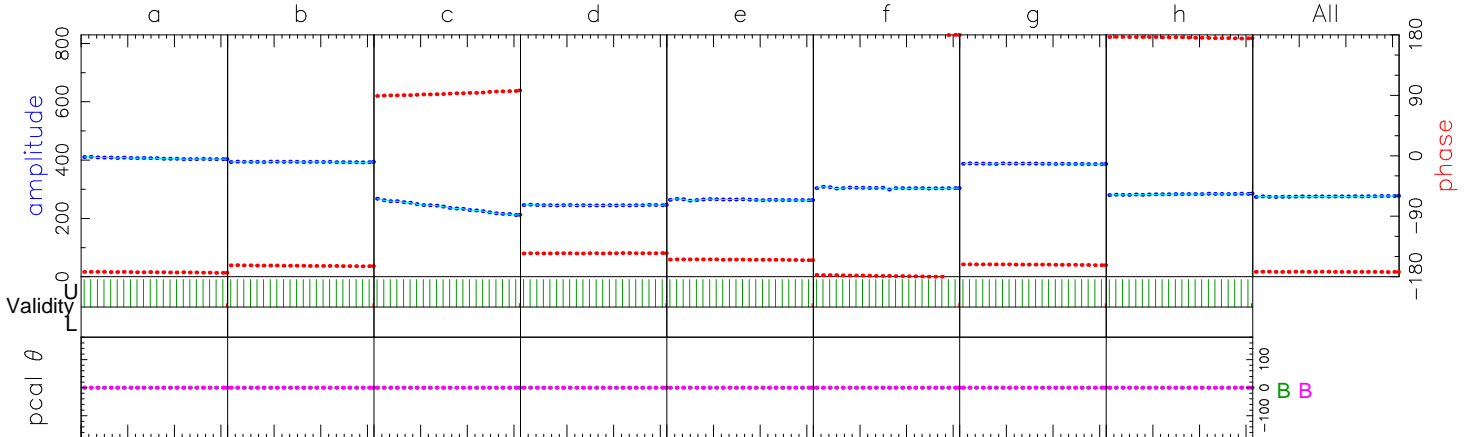
Mk4/DiFX fourfit 3.19 rev 2512

3C84.14HPTM, No0002, BB  
EFLSBERG - EFLSBERG, fgroup W, pol LR



Fringe quality 6  
SNR 10181.9  
Int time 181.224  
Amp 276.581  
Phase -172.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.005004  
MBD -0.001660  
Fringe rate (Hz) 0.000025  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build 2020:114:192618  
2020:114:195817  
2020:014:135814  
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

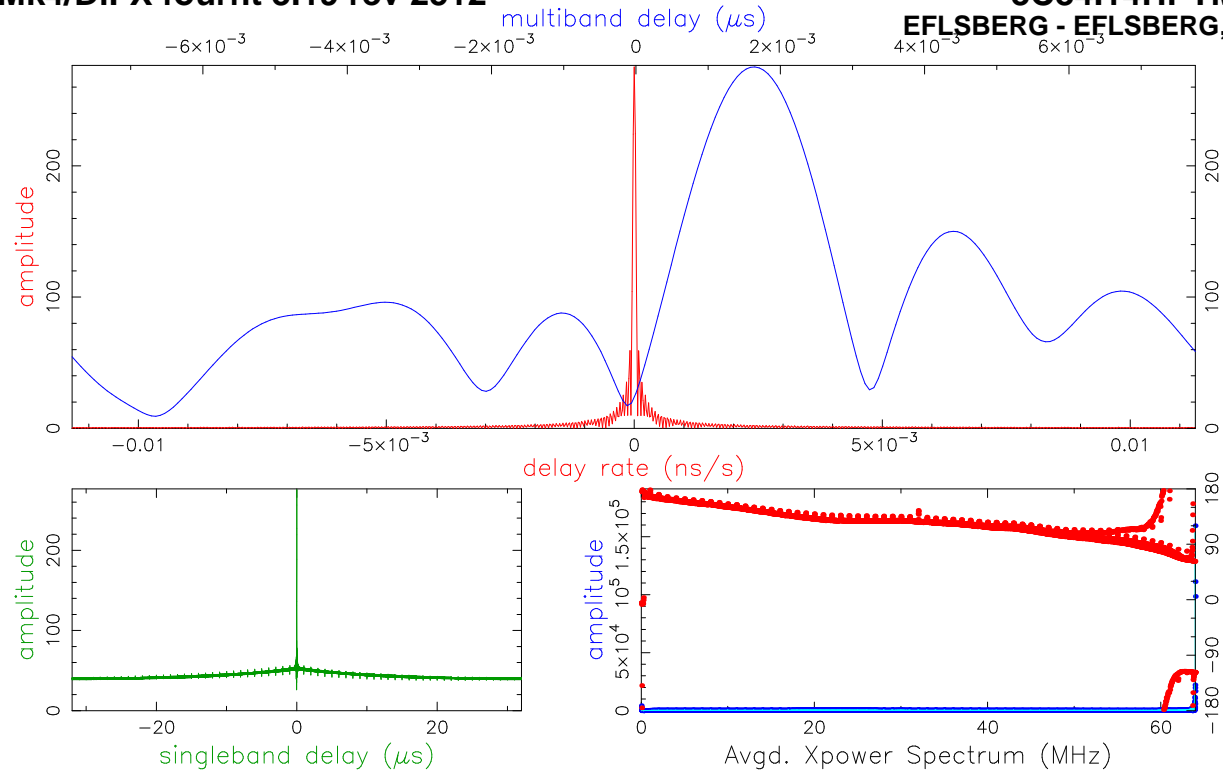


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-173.3	-163.6	92.3	-145.1	-154.6	-178.8	-162.0	176.0	Phase	-172.7
	406.1	393.7	238.2	245.3	264.1	304.2	387.5	282.9	Ampl.	315.3
	8192.8	8192.5	8189.0	8193.4	8191.8	8192.3	8192.4	8194.4	Sbd box	8191.7
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	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	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -1.65965625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.65966E-03 +/- 1.1E-07  
Sband delay (usec) -5.00375000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -5.00375E-03 +/- 8.5E-07  
Phase delay (usec) -5.56861277553E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.56861E-06 +/- 3.6E-10  
Delay rate (us/s) 2.84840163073E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 2.84840E-10 +/- 3.5E-12  
Total phase (deg) -172.7 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -172.7 +/- 0.0

RMS Theor. Amplitude 276.581 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 0.1 0.0 Search (1024X32) 271.441 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
amp/seg (%) 0.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
ph/frq (deg) 41.8 0.0 Inc. seg. avg. 275.404 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
amp/frq (%) 27.5 0.0 Inc. frq. avg. 315.269 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 145.6 el 79.5 pa -28.5 B: az 145.6 el 79.5 pa -28.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BB..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BB.W.22.14HPTM

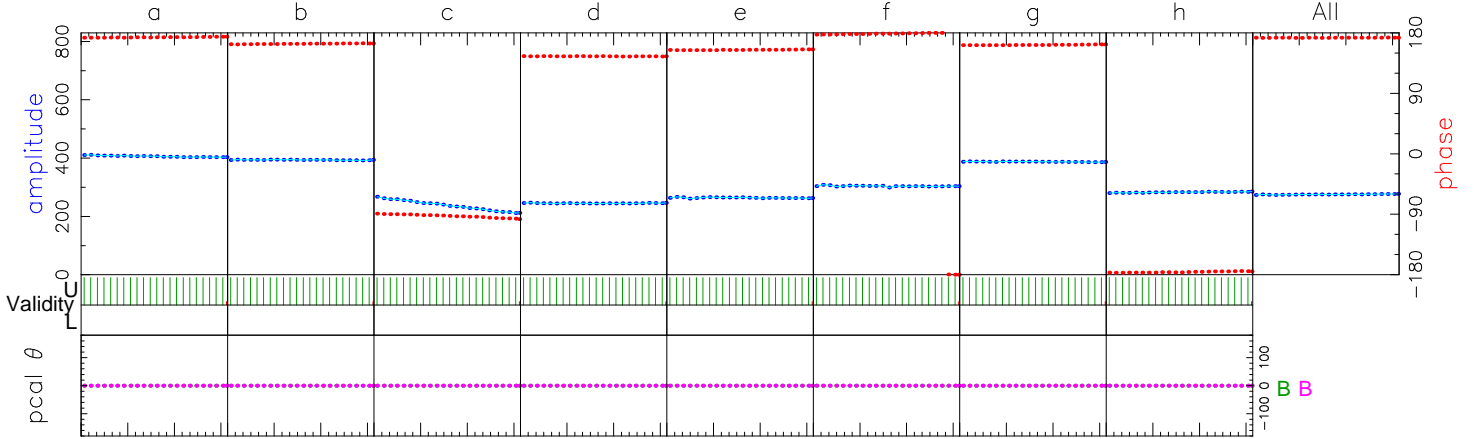


Fringe quality 6

SNR 10181.9  
Int time 181.224  
Amp 276.581  
Phase 172.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.005004  
MBD 0.001660  
Fringe rate (Hz)  
-0.000025  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195859  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



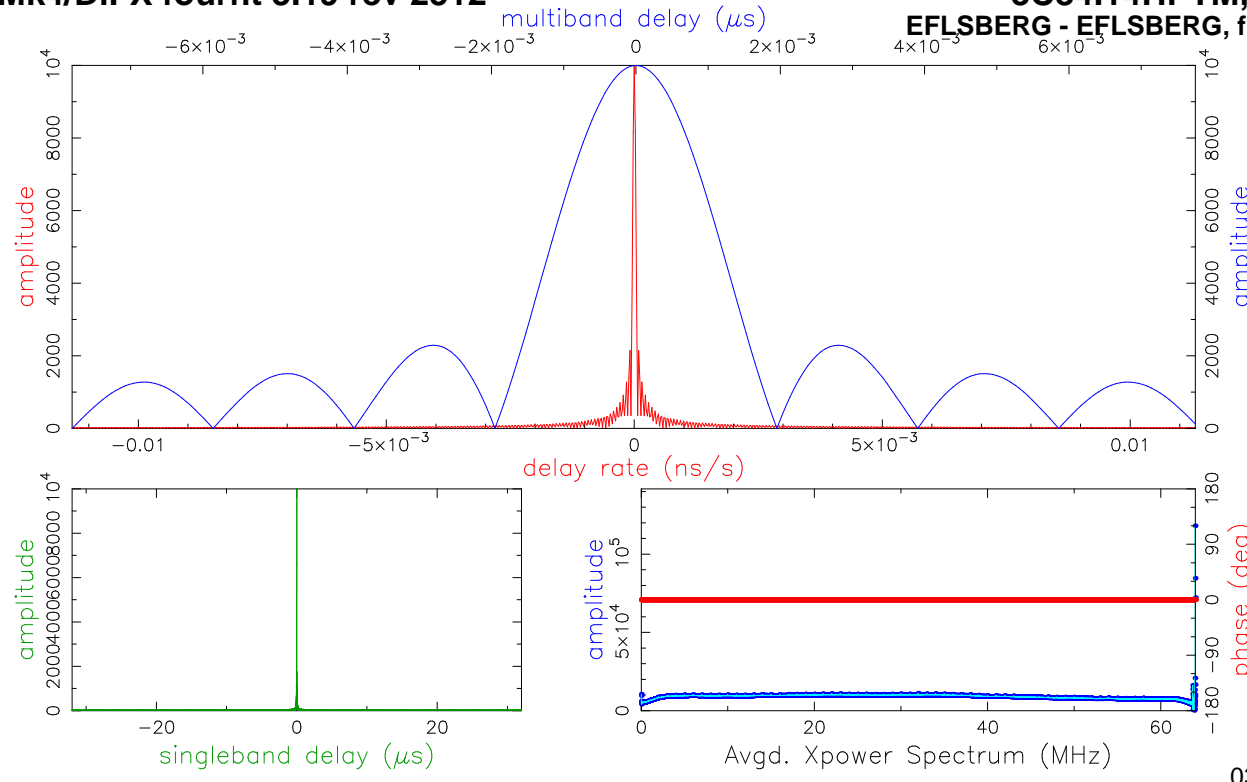
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	173.3	163.6	-92.3	145.1	154.6	178.8	162.0	-176.0	Phase	172.7
B	406.1	393.7	238.2	245.3	264.1	304.2	387.5	282.9	Ampl.	315.3
B	8193.2	8193.5	8197.0	8192.6	8194.2	8193.7	8193.6	8191.6	Sbd box	8194.3
B	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:B	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	
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.65965625000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.65966E-03	+/-	1.1E-07
Sband delay (usec)	5.00375000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	5.00375E-03	+/-	8.5E-07
Phase delay (usec)	5.56861277555E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.56861E-06	+/-	3.6E-10
Delay rate (us/s)	-2.84840163073E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-2.84840E-10	+/-	3.5E-12
Total phase (deg)	172.7	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	172.7	+/-	0.0

ph/seg (deg)	0.1	0.0	Amplitude	276.581 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.6	0.0	Search (1024X32)	271.441	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	41.8	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.5	0.0	Inc. seg. avg.	275.404	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	315.269	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 145.6 el 79.5 pa -28.5      B: az 145.6 el 79.5 pa -28.5      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/f201a/FRINGE/1234/No0002/BB..14HPTM    Output file: /Exps/f201a/FRINGE/1234/No0002/BB.W.28.14HPTM

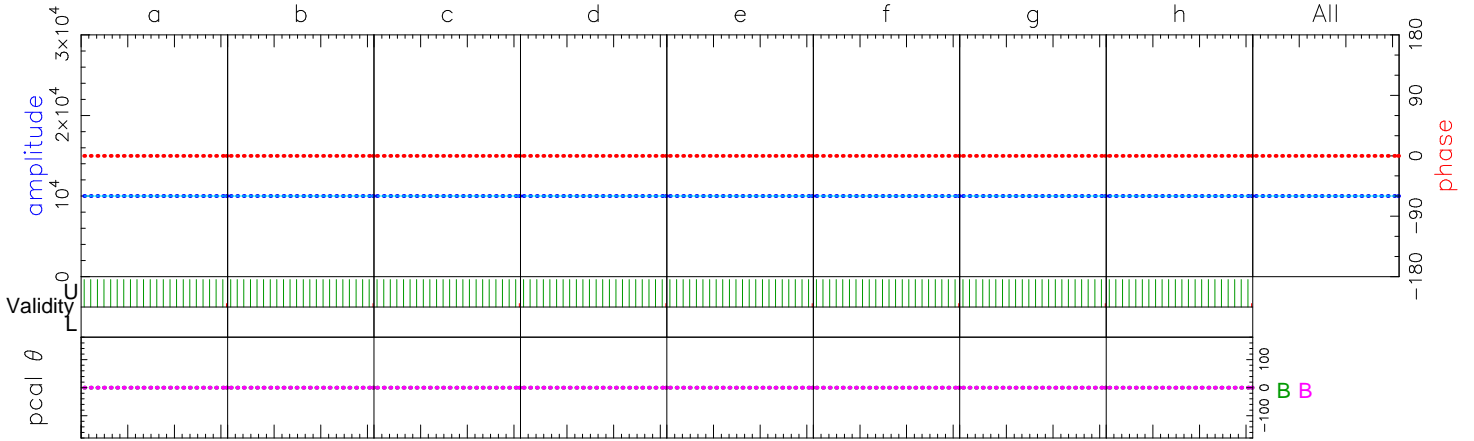


Fringe quality 9

SNR 368133.2  
Int time 181.224  
Amp 10000.000  
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. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195652  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



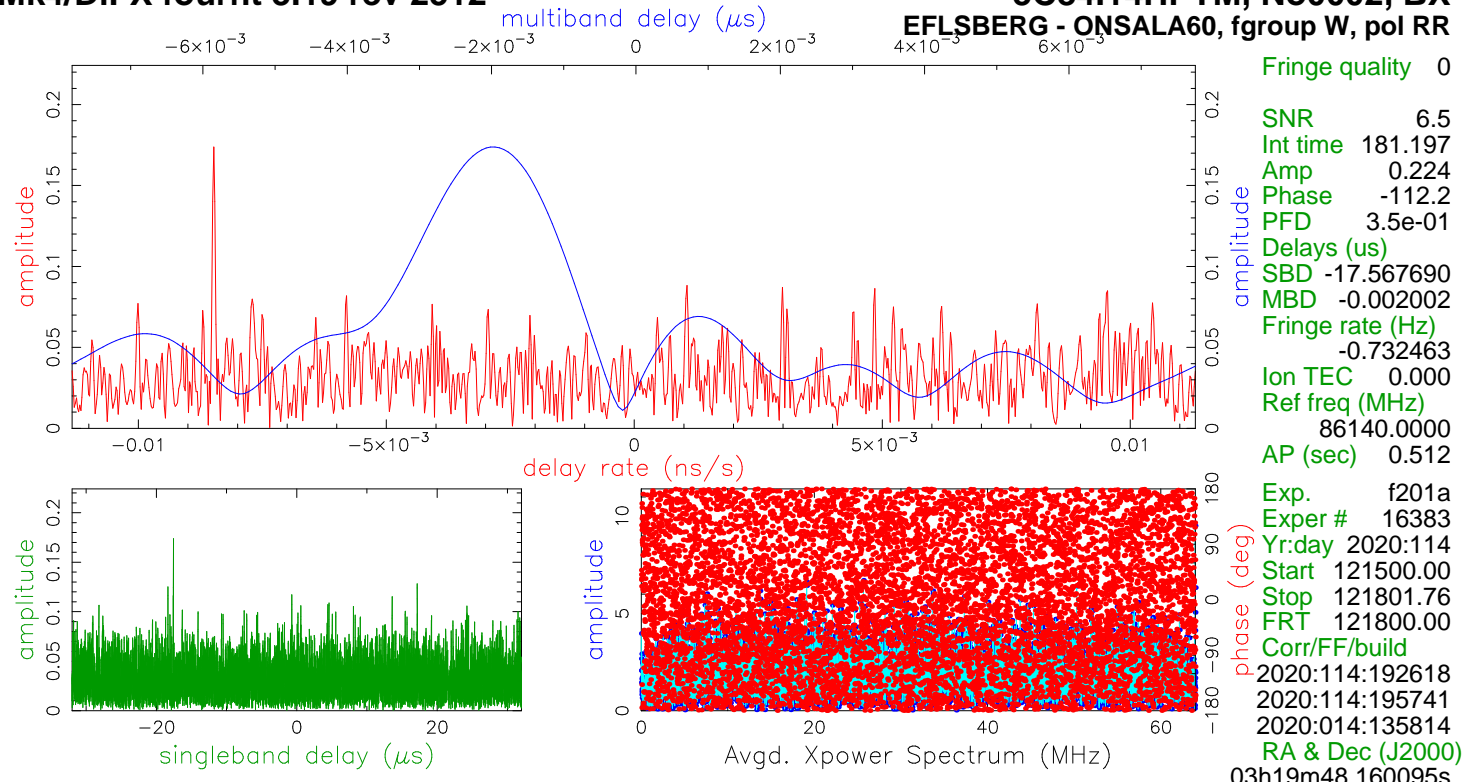
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.9E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08  
 Phase delay (usec) 5.61516704807E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.61517E-20 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.6E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

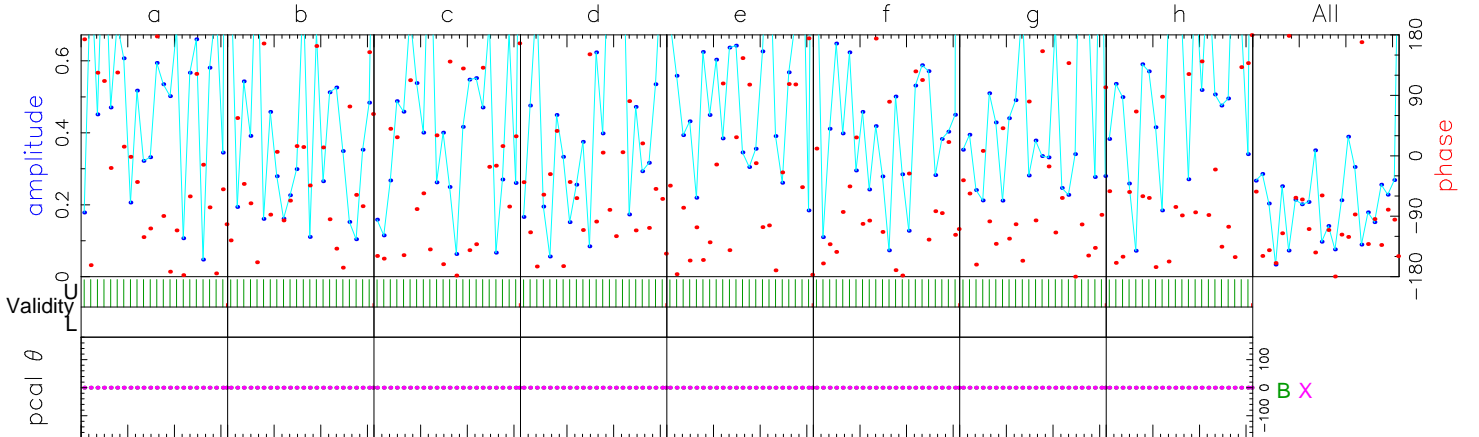
B: az 145.6 el 79.5 pa -28.5 B: az 145.6 el 79.5 pa -28.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BB..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BB.W.3.14HPTM





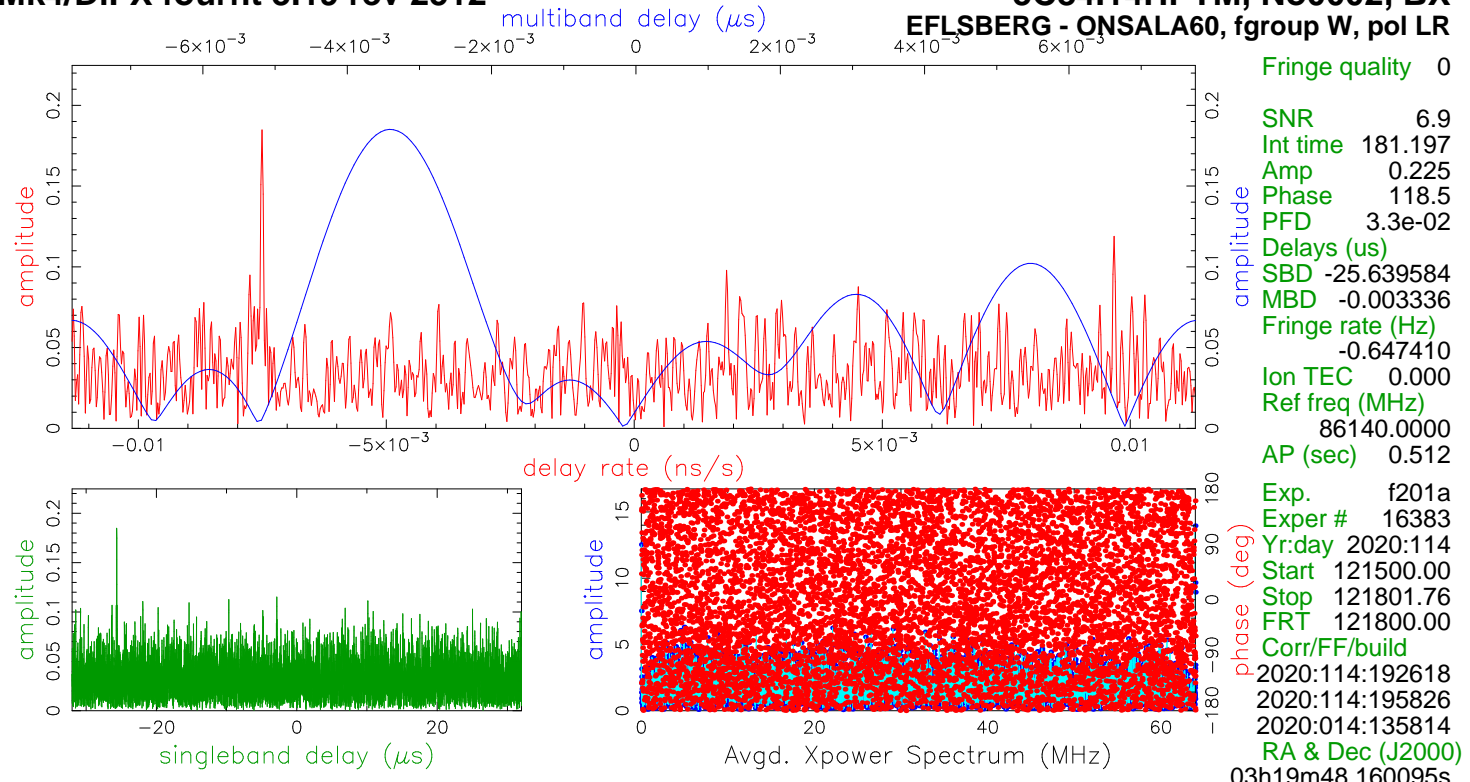
Fringe quality 0  
SNR 6.5  
Int time 181.197  
Amp 0.224  
Phase -112.2  
PFD 3.5e-01  
Delays (us)  
SBD -17.567690  
MBD -0.002002  
Fringe rate (Hz)  
-0.732463  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195741  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



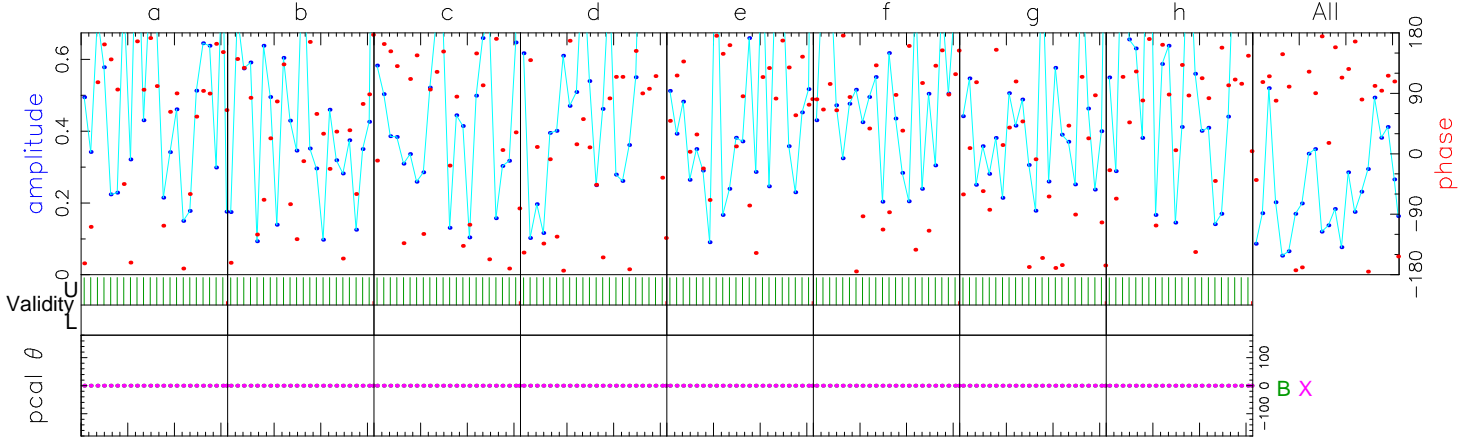
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-149.3	-105.0	-131.1	-78.6	-115.8	-112.3	-111.8	-120.5	Phase	-112.2
	0.2	0.2	0.1	0.3	0.2	0.2	0.4	0.4	Ampl.	0.2
	7702.1	1711.5	12588.2	2104.2	9925.9	14072.1	5458.7	538.2	Sbd box	3695.7
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.34602881406E+02		Apriori delay (usec)		4.52167382932E+02		Resid mbdelay (usec)		-2.00153E-03	+/- 1.7E-04
Sband delay (usec)	4.34599693432E+02		Apriori clock (usec)		-2.6770786E+01		Resid sbdelay (usec)		-1.75677E+01	+/- 1.3E-03
Phase delay (usec)	4.52167379313E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-3.61940E-06	+/- 5.7E-07
Delay rate (us/s)	6.84763366443E-02		Apriori rate (us/s)		6.84848398118E-02		Resid rate (us/s)		-8.50317E-06	+/- 5.4E-09
Total phase (deg)	19.4		Apriori accel (us/s/s)		-7.83713339716E-06		Resid phase (deg)		-112.2	+/- 17.7

RMS Theor. Amplitude 0.224 +/- 0.035  
 ph/seg (deg) 39.9 42.5 Search (1024X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.6 74.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 22.3 25.0 Inc. seg. avg. 0.208 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.4 43.7 Inc. frq. avg. 0.214 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 145.6 el 79.5 pa -28.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) -536.714 -1009.300 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BX.W.16.14HPTM



Fringe quality 0  
SNR 6.9  
Int time 181.197  
Amp 0.225  
Phase 118.5  
PFD 3.3e-02  
Delays (us)  
SBD -25.639584  
MBD -0.003336  
Fringe rate (Hz)  
-0.647410  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195826  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



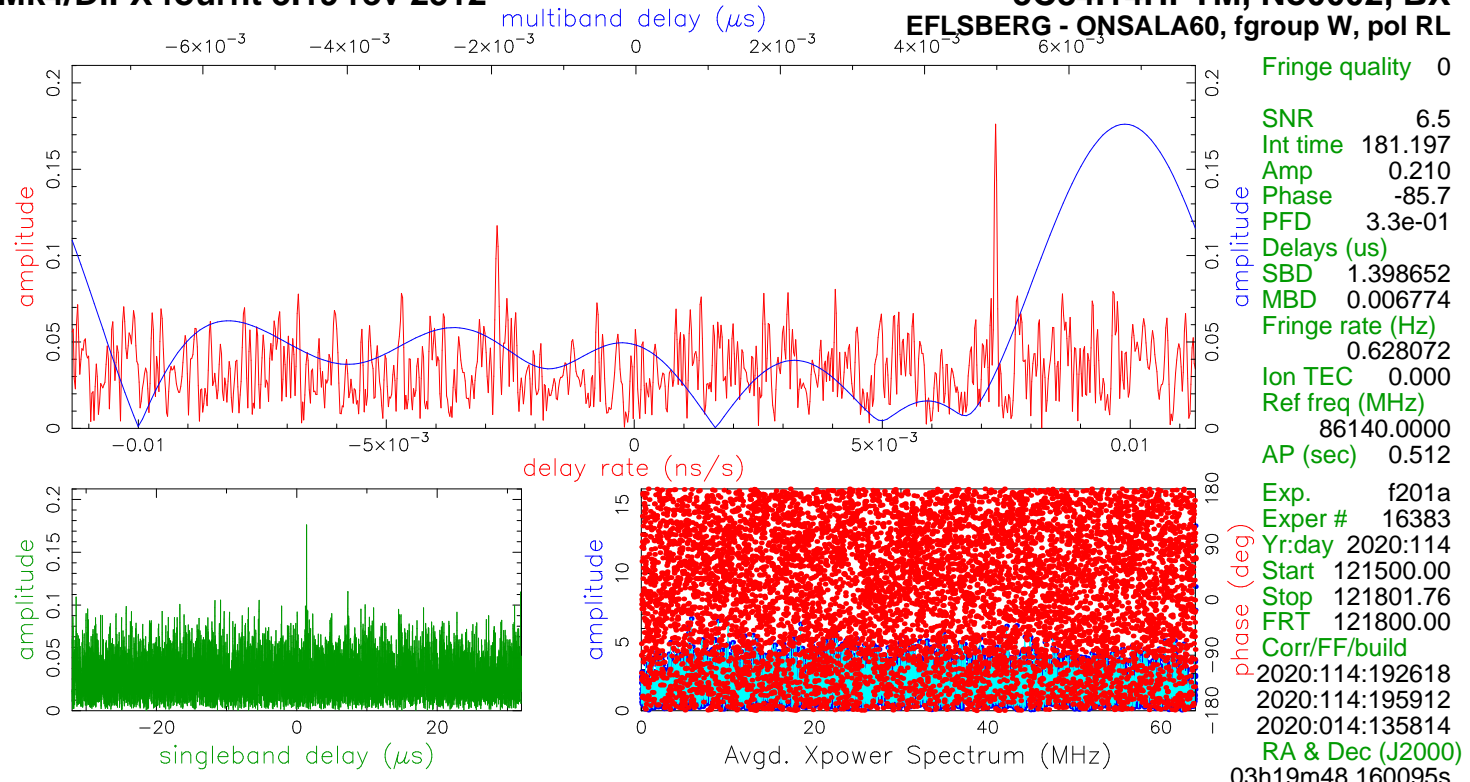
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	134.2	69.4	140.0	104.4	114.0	121.6	114.5	114.8	Phase	118.5
	0.3	0.1	0.2	0.2	0.3	0.3	0.0	0.4	Ampl.	0.2
	79.3	222.5	1664.7	10232.6	910.3	11903.8	3645.4	1629.4	Sbd box	1629.3
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.26523421942E+02		Apriori delay (usec)		4.52167382932E+02		Resid mbdelay (usec)		-3.33599E-03	+/- 1.6E-04
Sband delay (usec)	4.26527798432E+02		Apriori clock (usec)		-2.6770786E+01		Resid sbdelay (usec)		-2.56396E+01	+/- 1.3E-03
Phase delay (usec)	4.52167386754E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		3.82244E-06	+/- 5.4E-07
Delay rate (us/s)	6.84773240264E-02		Apriori rate (us/s)		6.84848398118E-02		Resid rate (us/s)		-7.51579E-06	+/- 5.1E-09
Total phase (deg)	250.2		Apriori accel (us/s/s)		-7.83713339716E-06		Resid phase (deg)		118.5	+/- 16.7

	RMS	Theor.	Amplitude	0.225 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.7	40.1	Search (1024X32)	0.176	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	75.4	69.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	23.7	23.6	Inc. seg. avg.	0.229	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	50.1	41.3	Inc. frq. avg.	0.214	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite
						ion window (TEC) 0.00 0.00

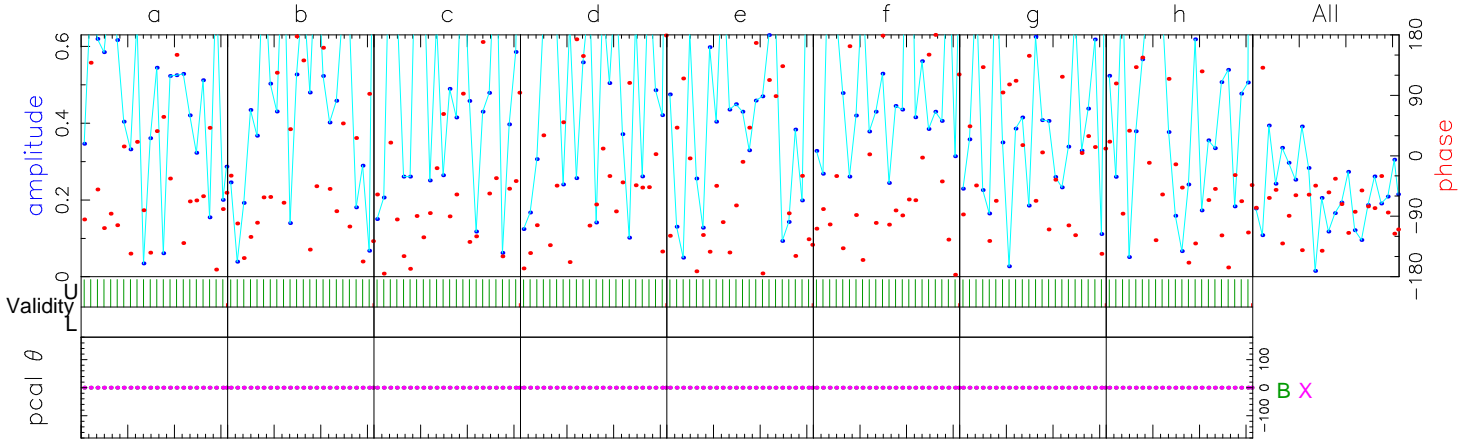
B: az 145.6 el 79.5 pa -28.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) -536.714 -1009.300 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BX.W.25.14HPTM

Mk4/DiFX fourfit 3.19 rev 2512

3C84.14HPTM, No0002, BX  
EFLSBERG - ONSALA60, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

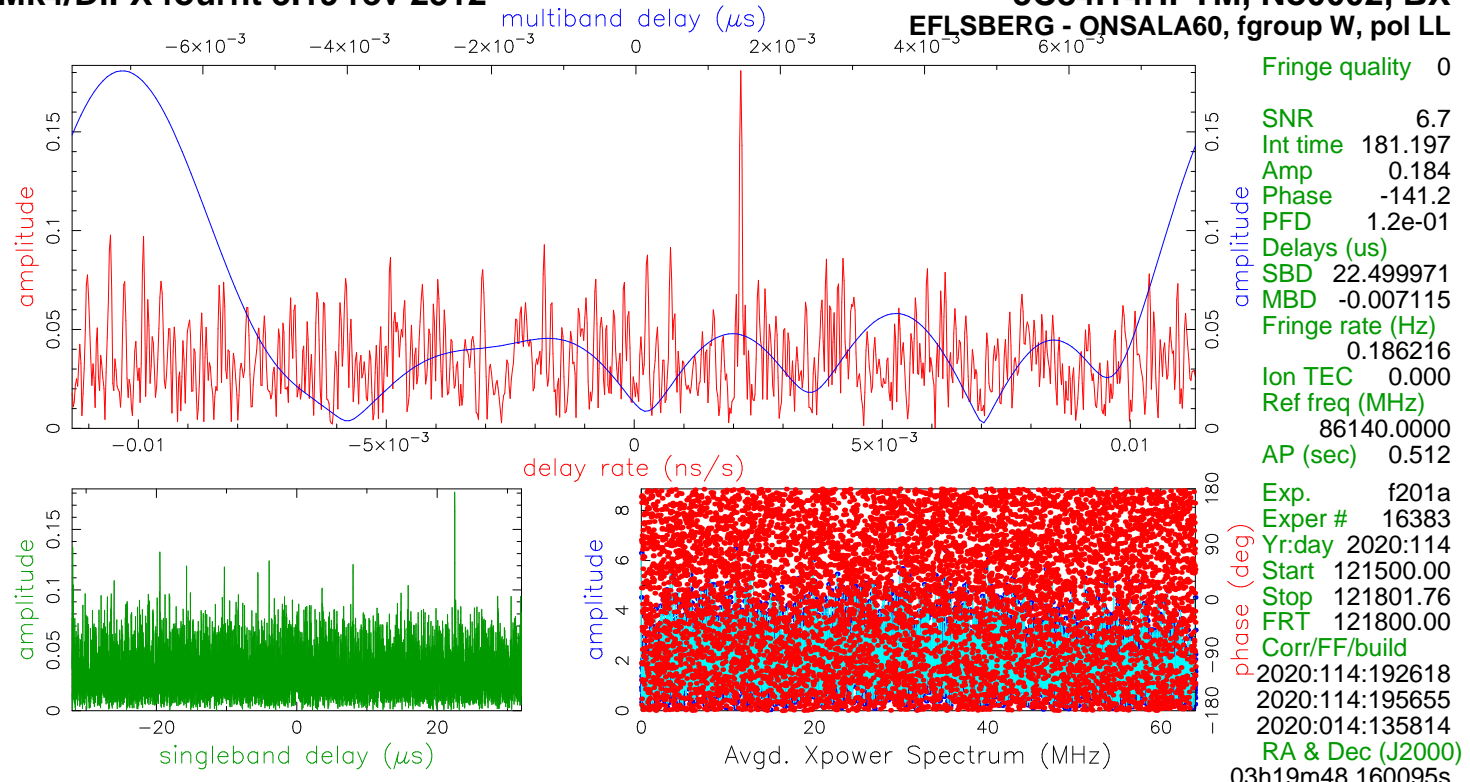


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-89.0	-94.9	-68.9	-69.4	-124.9	-99.7	-35.6	-94.7	Phase	-85.7
	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	Ampl.	0.2
	12940.7	11944.7	10798.3	7672.6	5970.8	11934.9	10447.0	11300.2	Sbd box	8551.1
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.53564781717E+02		Apriori delay (usec)		4.52167382932E+02		Resid mbdelay (usec)		6.77378E-03	+/- 1.7E-04
Sband delay (usec)	4.53566034682E+02		Apriori clock (usec)		-2.6770786E+01		Resid sbdelay (usec)		1.39865E+00	+/- 1.3E-03
Phase delay (usec)	4.52167380167E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-2.76486E-06	+/- 5.7E-07
Delay rate (us/s)	6.84921311092E-02		Apriori rate (us/s)		6.84848398118E-02		Resid rate (us/s)		7.29130E-06	+/- 5.4E-09
Total phase (deg)	45.9		Apriori accel (us/s/s)		-7.83713339716E-06		Resid phase (deg)		-85.7	+/- 17.7

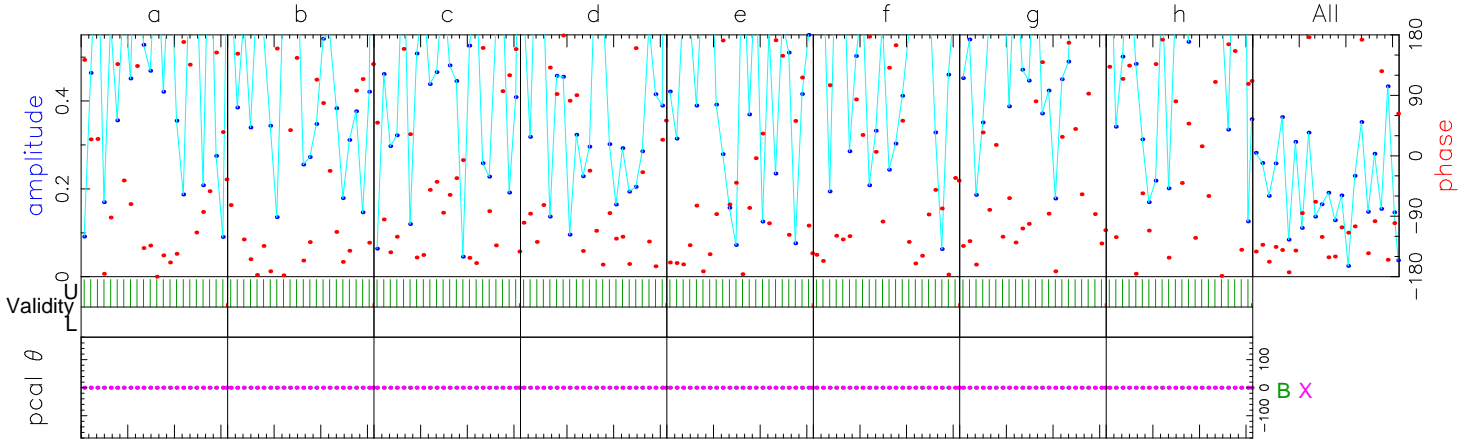
	RMS	Theor.	Amplitude	0.210 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
ph/seg (deg)	44.4	42.4	Search (1024X32)	0.171	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	58.5	73.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.8	25.0	Inc. seg. avg.	0.205	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	30.7	43.6	Inc. frq. avg.	0.207	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite			

B: az 145.6 el 79.5 pa -28.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) -536.714 -1009.300 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BX.W.33.14HPTM



Amp. and Phase vs. time for each freq., 23 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-140.7	-170.8	-133.5	-124.2	-141.0	-129.4	-98.1	-179.2	Phase	-141.2
	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	Ampl.	0.2
	4728.8	15406.2	14500.1	2961.9	5321.5	12984.8	94.6	5950.8	Sbd box	13953.0
U/L	355/0	355/0	355/0	355/0	355/0	355/0	355/0	355/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.74660267906E+02		Apriori delay (usec)		4.52167382932E+02		Resid mbdelay (usec)		-7.11503E-03	+/- 1.6E-04
Sband delay (usec)	4.74667353682E+02		Apriori clock (usec)		-2.6770786E+01		Resid sbdelay (usec)		2.25000E+01	+/- 1.3E-03
Phase delay (usec)	4.52167378378E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-4.55446E-06	+/- 5.6E-07
Delay rate (us/s)	6.84870015914E-02		Apriori rate (us/s)		6.84848398118E-02		Resid rate (us/s)		2.16178E-06	+/- 5.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.83713339716E-06		Resid phase (deg)		-141.2	+/- 17.2

	RMS	Theor.	Amplitude	0.184 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	38.7	41.3	Search (1024X32)	0.172	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000	
amp/seg (%)	58.5	72.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	27.9	24.3	Inc. seg. avg.	0.173	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	21.1	42.5	Inc. frq. avg.	0.183	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite	ion window (TEC) 0.00 0.00

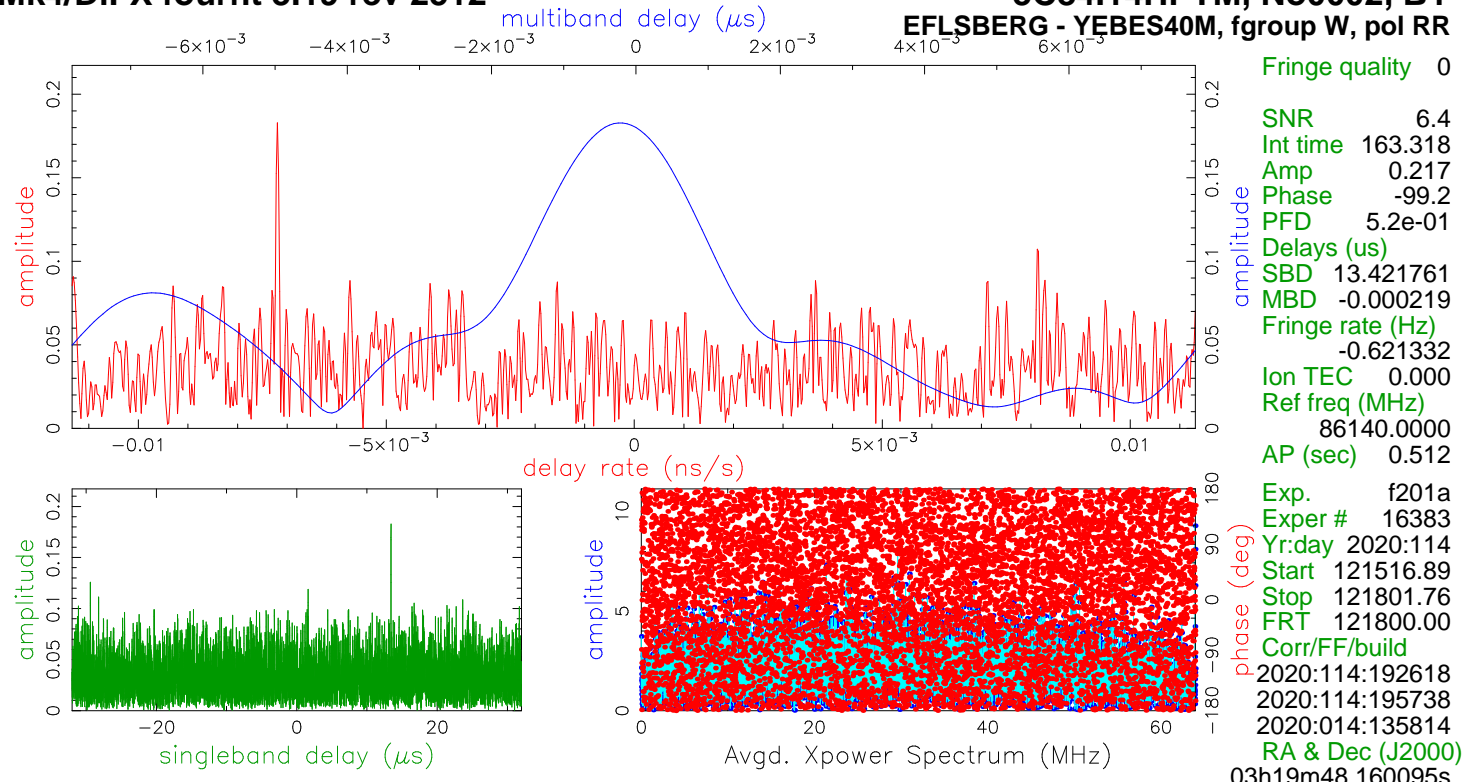
B: az 145.6 el 79.5 pa -28.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) -536.714 -1009.300 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BX.W.7.14HPTM



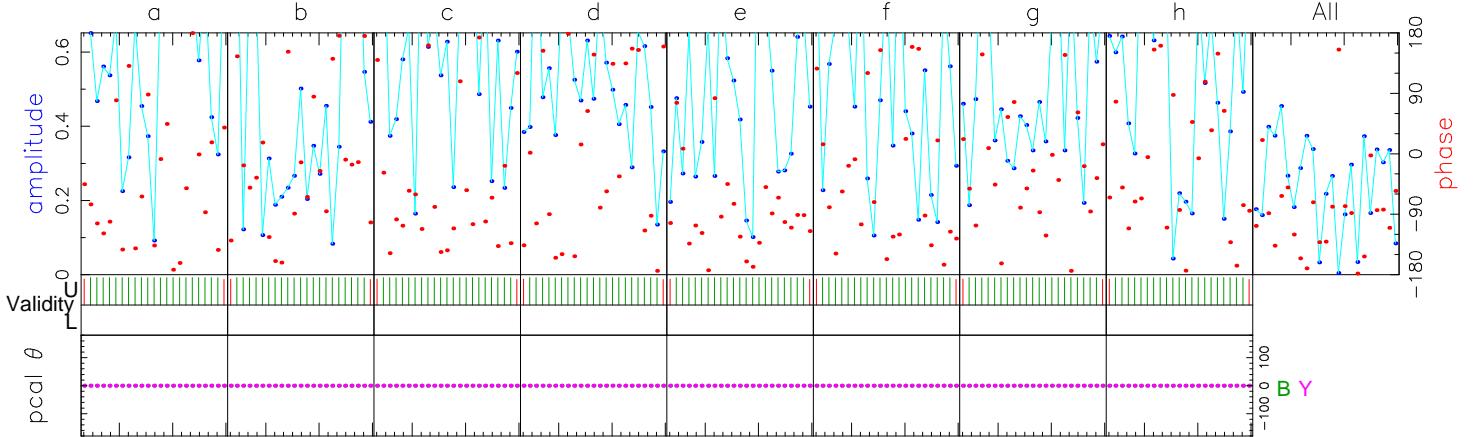
Mk4/DiFX fourfit 3.19 rev 2512

3C84.14HPTM, No0002, BY  
EFLSBERG - YEBES40M, fgroup W, pol RR



Fringe quality 0  
SNR 6.4  
Int time 163.318  
Amp 0.217  
Phase -99.2  
PFD 5.2e-01  
Delays (us)  
SBD 13.421761  
MBD -0.000219  
Fringe rate (Hz)  
-0.621332  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121516.89  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195738  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

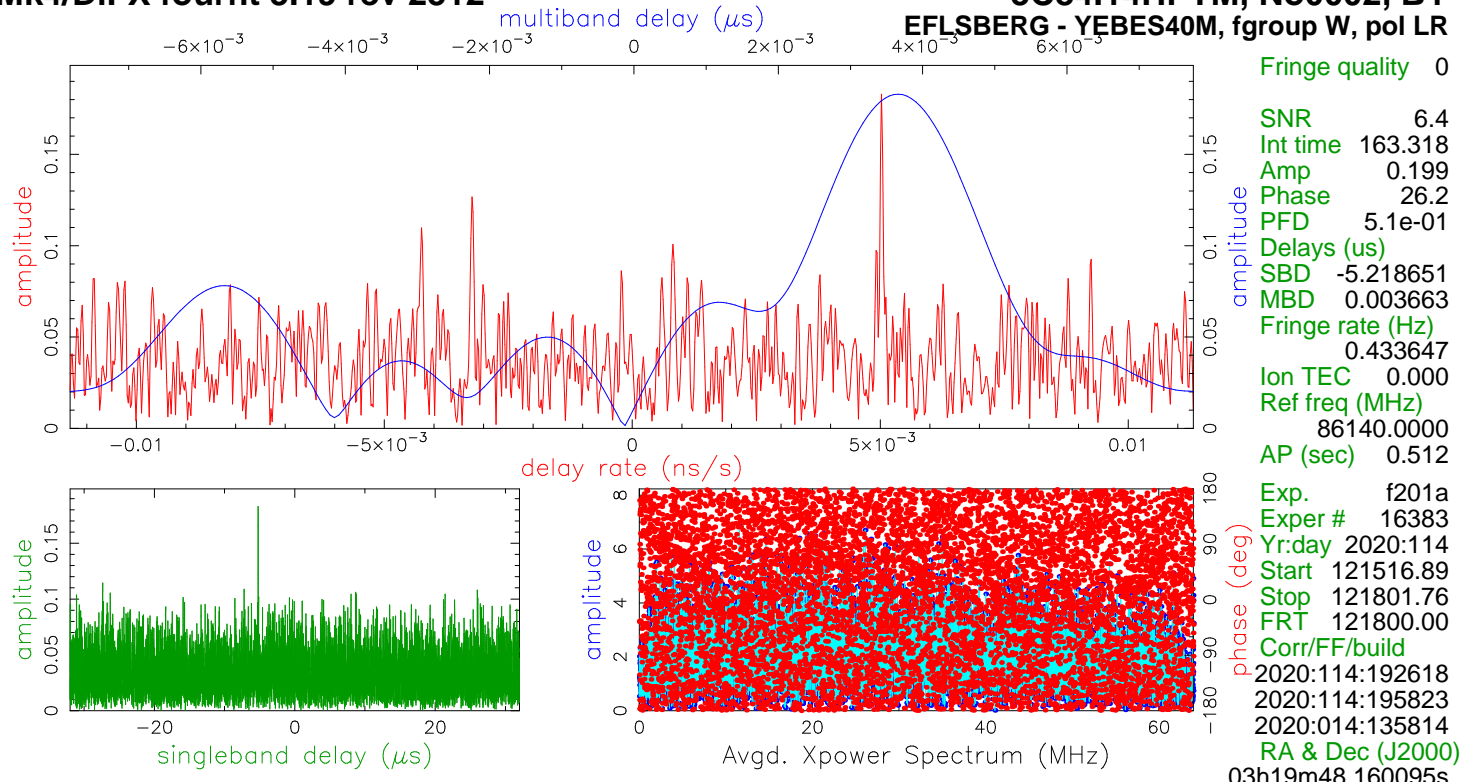
Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



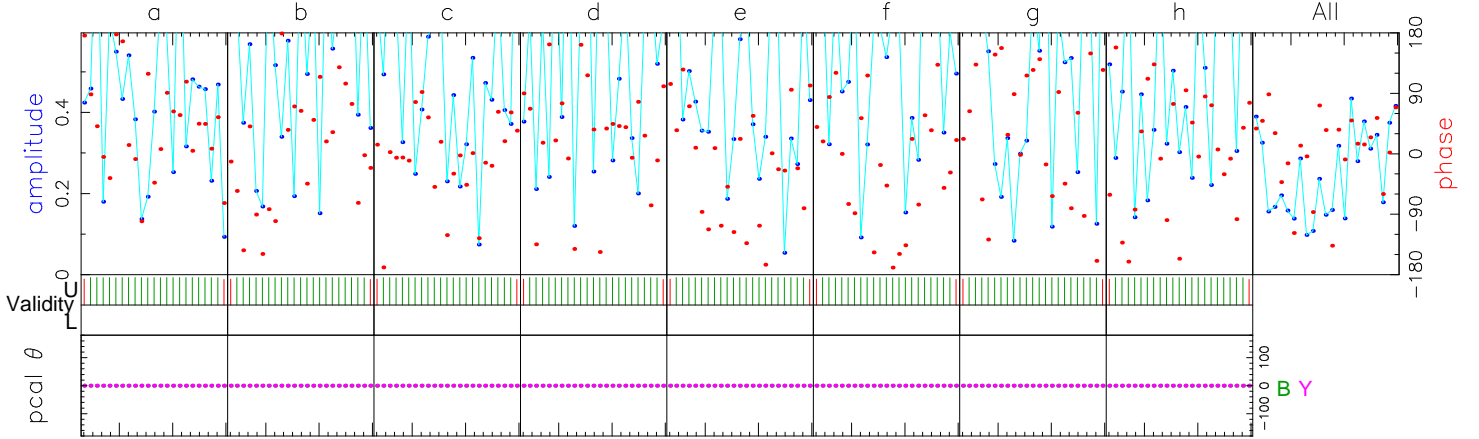
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-83.0	-53.9	-114.8	-144.1	-101.7	-121.5	-41.1	-89.3	Phase	-99.2
	0.2	0.2	0.4	0.2	0.4	0.3	0.2	0.1	Ampl.	0.2
	11870.1	9089.2	12442.8	8148.1	128.5	15255.9	5680.4	3668.2	Sbd box	11629.0
U/L	322/0	322/0	322/0	322/0	322/0	322/0	322/0	322/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	2.06419719070E+02		Apriori delay (usec)		1.92998062796E+02		Resid mbdelay (usec)		-2.18726E-04	+/- 1.7E-04
Sband delay (usec)	2.06419823546E+02		Apriori clock (usec)		1.9305468E+00		Resid sbdelay (usec)		1.34218E+01	+/- 1.3E-03
Phase delay (usec)	1.92998059596E+02		Apriori clockrate (us/s)		-4.2000000E-07		Resid phdelay (usec)		-3.19977E-06	+/- 5.8E-07
Delay rate (us/s)	-1.67571414241E-01		Apriori rate (us/s)		-1.67564201186E-01		Resid rate (us/s)		-7.21305E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		8.13497639056E-06		Resid phase (deg)		-99.2	+/- 17.9

	RMS	Theor.	Amplitude	0.217 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.0	43.0	Search (1024X32)	0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
amp/seg (%)	75.9	75.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	37.7	25.4	Inc. seg. avg.	0.228	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.5	44.3	Inc. frq. avg.	0.228	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite
						ion window (TEC) 0.00 0.00

B: az 145.6 el 79.5 pa -28.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1295.079 1364.403 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BY.W.14.14HPTM



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



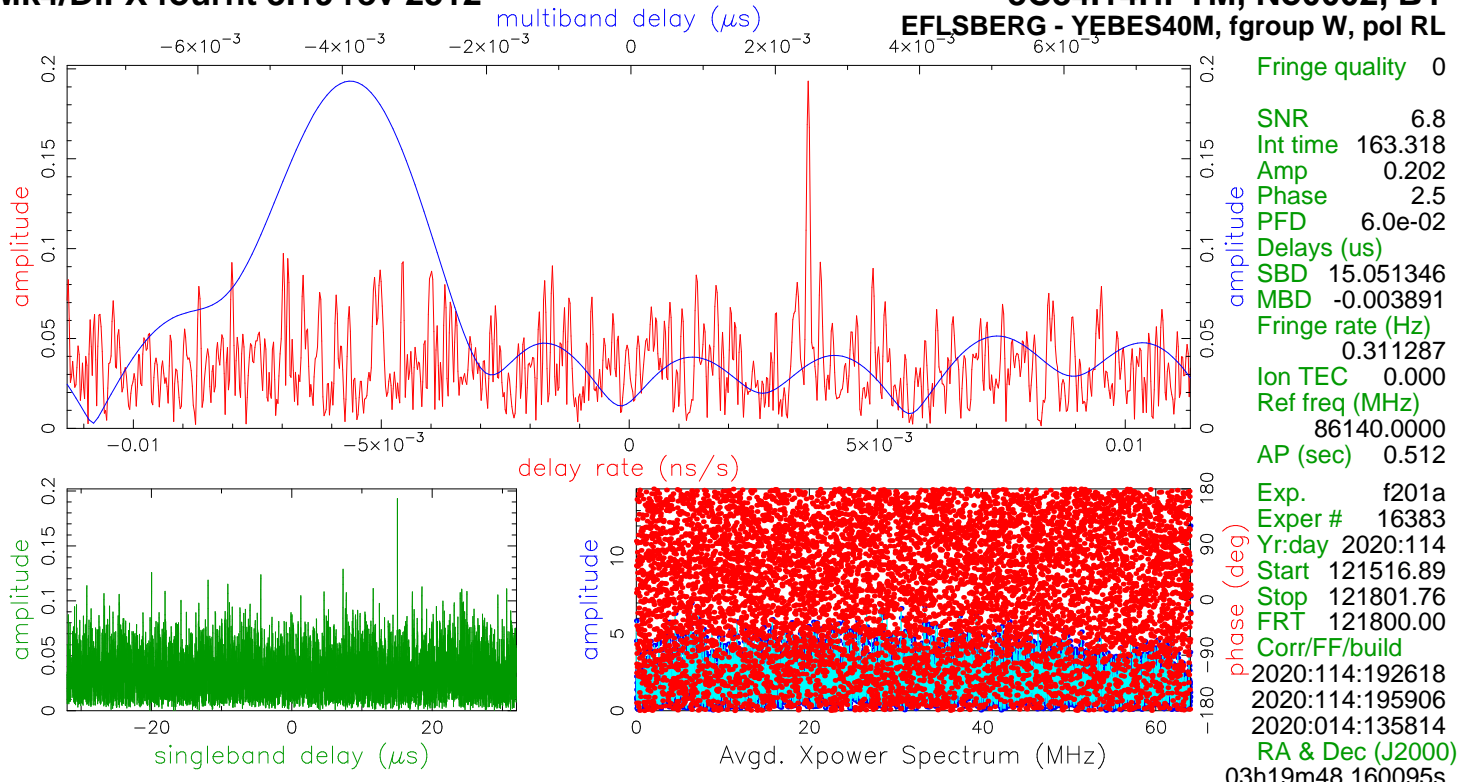
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	42.9	18.7	10.4	45.1	-0.6	16.0	97.9	16.3	Phase	26.2
	0.3	0.2	0.4	0.3	0.1	0.2	0.1	0.2	Ampl.	0.2
	543.3	13245.8	12012.3	9404.6	6162.7	16357.1	9406.1	3174.7	Sbd box	6857.0
U/L	322/0	322/0	322/0	322/0	322/0	322/0	322/0	322/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.87782976230E+02	Apriori delay (usec)	1.92998062796E+02	Resid mbdelay (usec)	3.66343E-03	+/-	1.7E-04
Sband delay (usec)	1.87779412046E+02	Apriori clock (usec)	1.9305468E+00	Resid sbdelay (usec)	-5.21865E+00	+/-	1.3E-03
Phase delay (usec)	1.92998063642E+02	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	8.45416E-07	+/-	5.8E-07
Delay rate (us/s)	-1.67559166977E-01	Apriori rate (us/s)	-1.67564201186E-01	Resid rate (us/s)	5.03421E-06	+/-	6.1E-09
Total phase (deg)	72.8	Apriori accel (us/s/s)	8.13497639056E-06	Resid phase (deg)	26.2	+/-	17.9

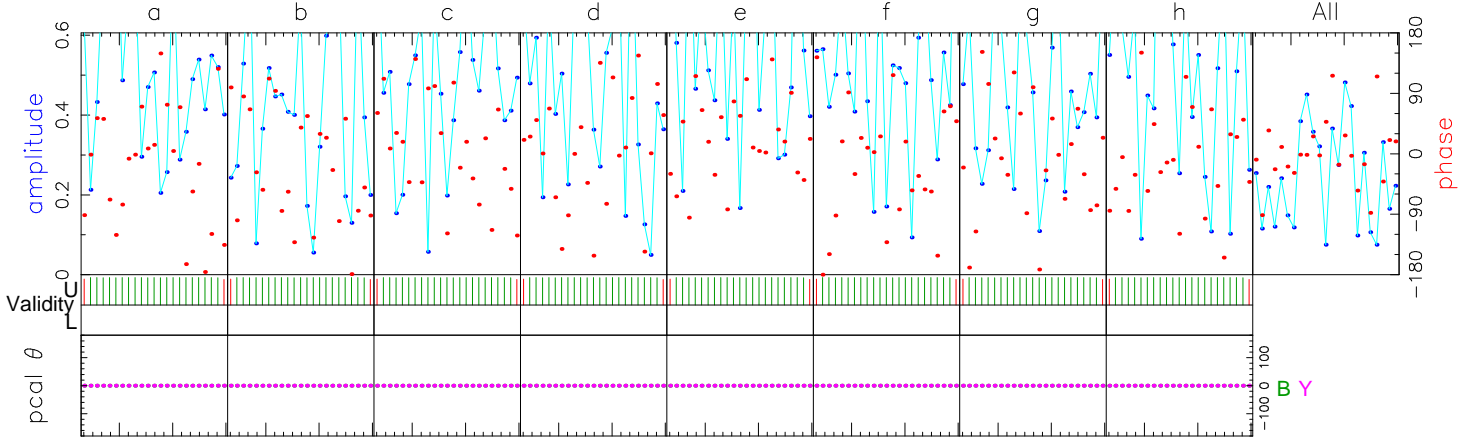
ph/seg (deg)	61.6	Theor.	43.0	Amplitude	0.199 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.9	Search (1024X32)	0.177	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	34.1	Inc. seg. avg.	0.211	Inc. frq. avg.	0.196	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	44.8	Inc. frq. avg.	0.196			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	
						nlags:	8192 t_cohere infinite			

B: az 145.6 el 79.5 pa -28.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1295.079 1364.403 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BY.W.24.14HPTM



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.4	-10.1	7.3	34.4	16.1	14.2	3.5	-20.5	Phase	2.5
	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	13834.2	15655.1	3979.0	10732.0	8194.9	12585.2	14757.9	10470.7	Sbd box	12046.1
U/L	322/0	322/0	322/0	322/0	322/0	322/0	322/0	322/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.08056671768E+02	Apriori delay (usec)	1.92998062796E+02	Resid mbdelay (usec)	-3.89103E-03	+/-	1.6E-04
Sband delay (usec)	2.08049408796E+02	Apriori clock (usec)	1.9305468E+00	Resid sbdelay (usec)	1.50513E+01	+/-	1.3E-03
Phase delay (usec)	1.92998062878E+02	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	8.14494E-08	+/-	5.5E-07
Delay rate (us/s)	-1.67560587457E-01	Apriori rate (us/s)	-1.67564201186E-01	Resid rate (us/s)	3.61373E-06	+/-	5.7E-09
Total phase (deg)	49.1	Apriori accel (us/s/s)	8.13497639056E-06	Resid phase (deg)	2.5	+/-	16.9

ph/seg (deg)	49.3	Theor.	40.6	Amplitude	0.202 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	70.1		70.9	Search (1024X32)	0.191	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000
ph/frq (deg)	22.6		24.0	Interp.	0.000	Bits/sample:	2x2	mb window (us)	-0.008 0.008
amp/frq (%)	29.5		41.8	Inc. seg. avg.	0.205	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.197	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00
						nlags:	8192 t_cohere infinite		

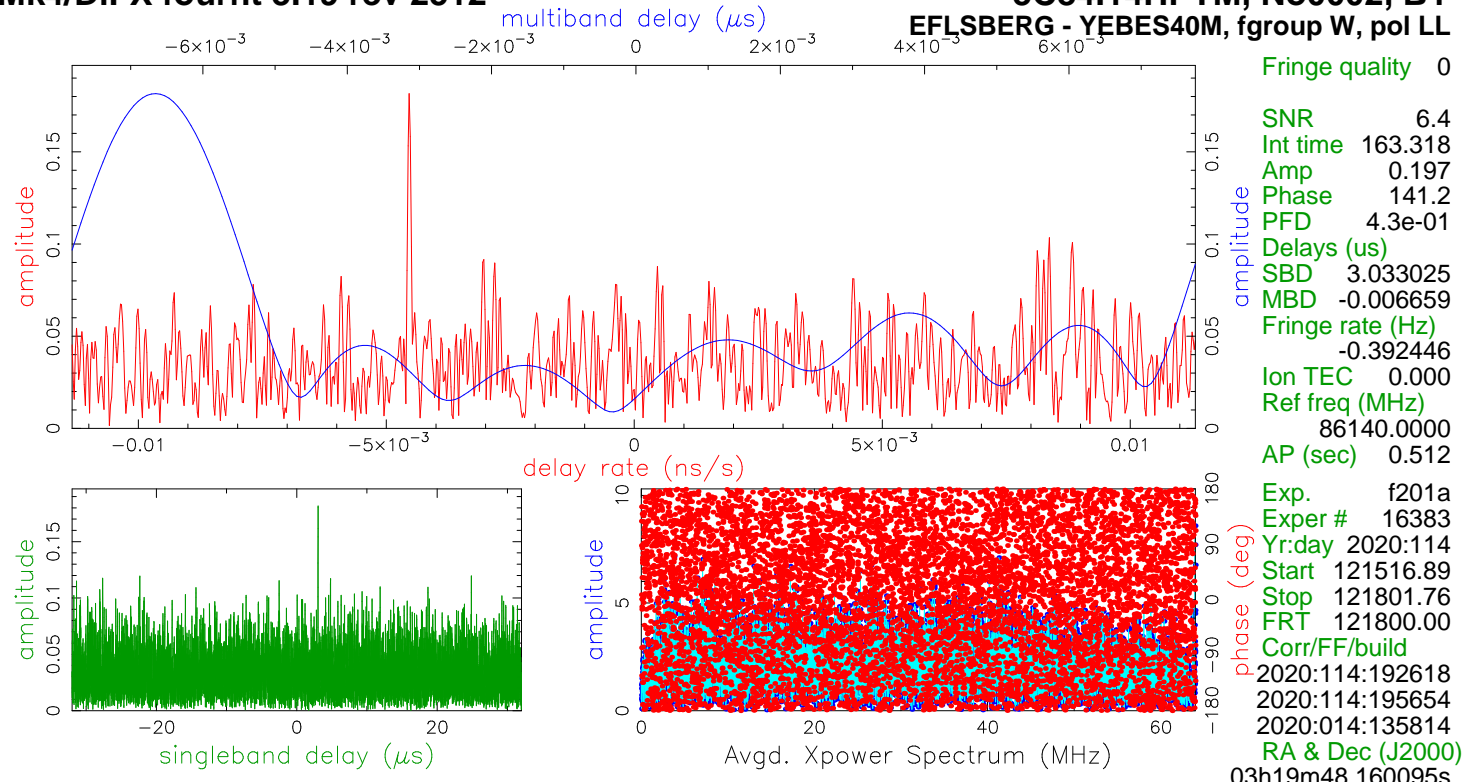
B: az 145.6 el 79.5 pa -28.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1295.079 1364.403 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BY.W.30.14HPTM



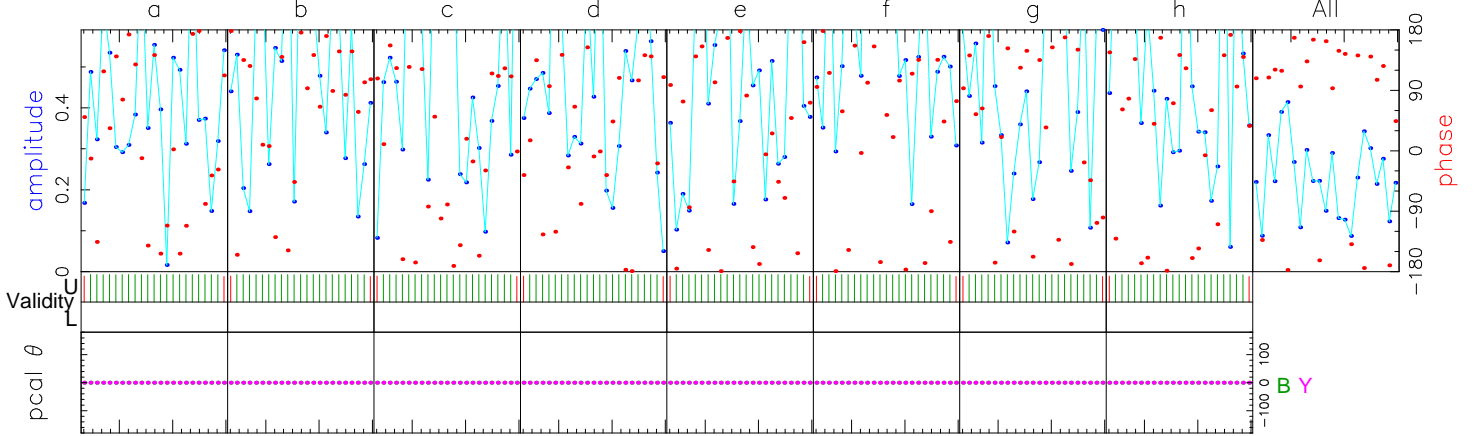
Mk4/DiFX fourfit 3.19 rev 2512

3C84.14HPTM, No0002, BY  
EFLSBERG - YEBES40M, fgroup W, pol LL



Fringe quality 0  
SNR 6.4  
Int time 163.318  
Amp 0.197  
Phase 141.2  
PFD 4.3e-01  
Delays (us)  
SBD 3.033025  
MBD -0.006659  
Fringe rate (Hz)  
-0.392446  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121516.89  
Stop 121801.76  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195654  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

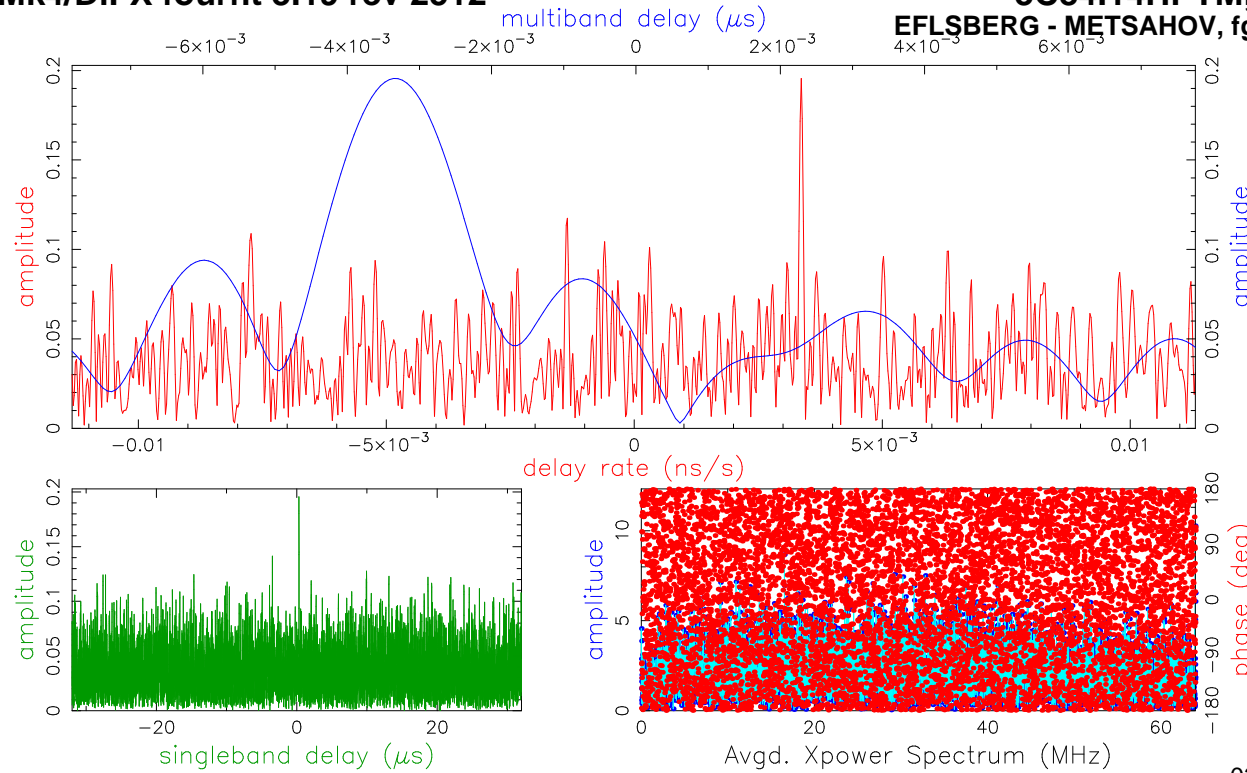


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	154.2	136.0	134.2	142.9	152.4	130.9	160.8	135.4	Phase	141.2
	0.1	0.3	0.1	0.1	0.2	0.3	0.2	0.3	Ampl.	0.2
	8771.6	6213.0	8407.8	7370.3	2810.4	14899.6	10148.0	6345.9	Sbd box	8969.5
U/L	322/0	322/0	322/0	322/0	322/0	322/0	322/0	322/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.96038278772E+02	Apriori delay (usec)	1.92998062796E+02	Resid mbdelay (usec)	-6.65902E-03	+/-	1.7E-04
Sband delay (usec)	1.96031087296E+02	Apriori clock (usec)	1.9305468E+00	Resid sbdelay (usec)	3.03302E+00	+/-	1.3E-03
Phase delay (usec)	1.92998067349E+02	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	4.55288E-06	+/-	5.7E-07
Delay rate (us/s)	-1.67568757100E-01	Apriori rate (us/s)	-1.67564201186E-01	Resid rate (us/s)	-4.55591E-06	+/-	6.0E-09
Total phase (deg)	187.7	Apriori accel (us/s/s)	8.13497639056E-06	Resid phase (deg)	141.2	+/-	17.8

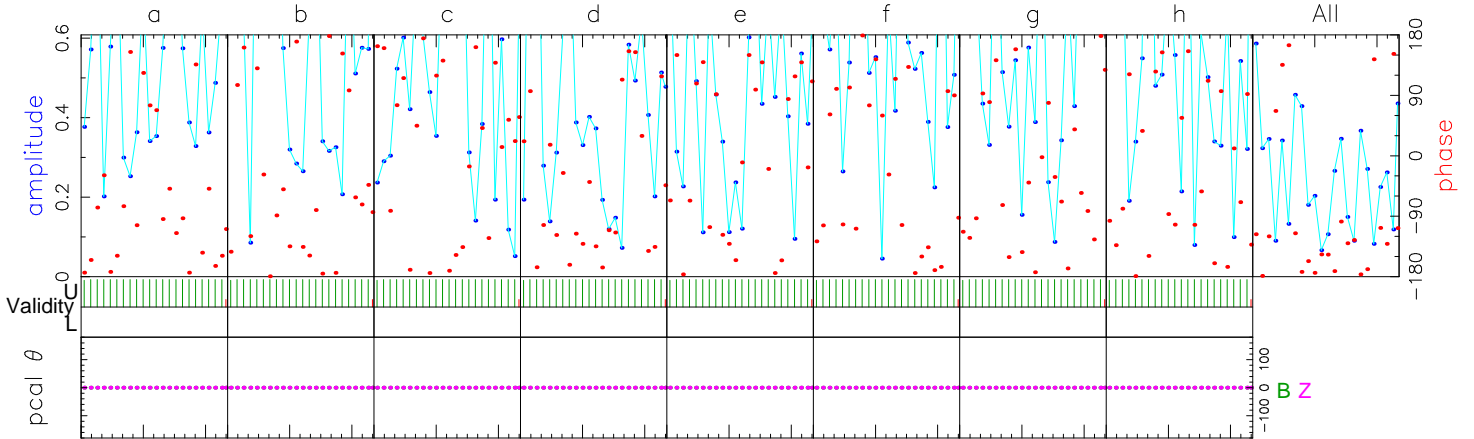
ph/seg (deg)	43.1	Theor.	42.7	Amplitude	0.197 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	55.8		42.7	Search (1024X32)	0.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000
ph/frq (deg)	12.2		42.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	40.7		44.0	Inc. seg. avg.	0.192	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	0.180	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 145.6 el 79.5 pa -28.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1295.079 1364.403 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BY.W.6.14HPTM



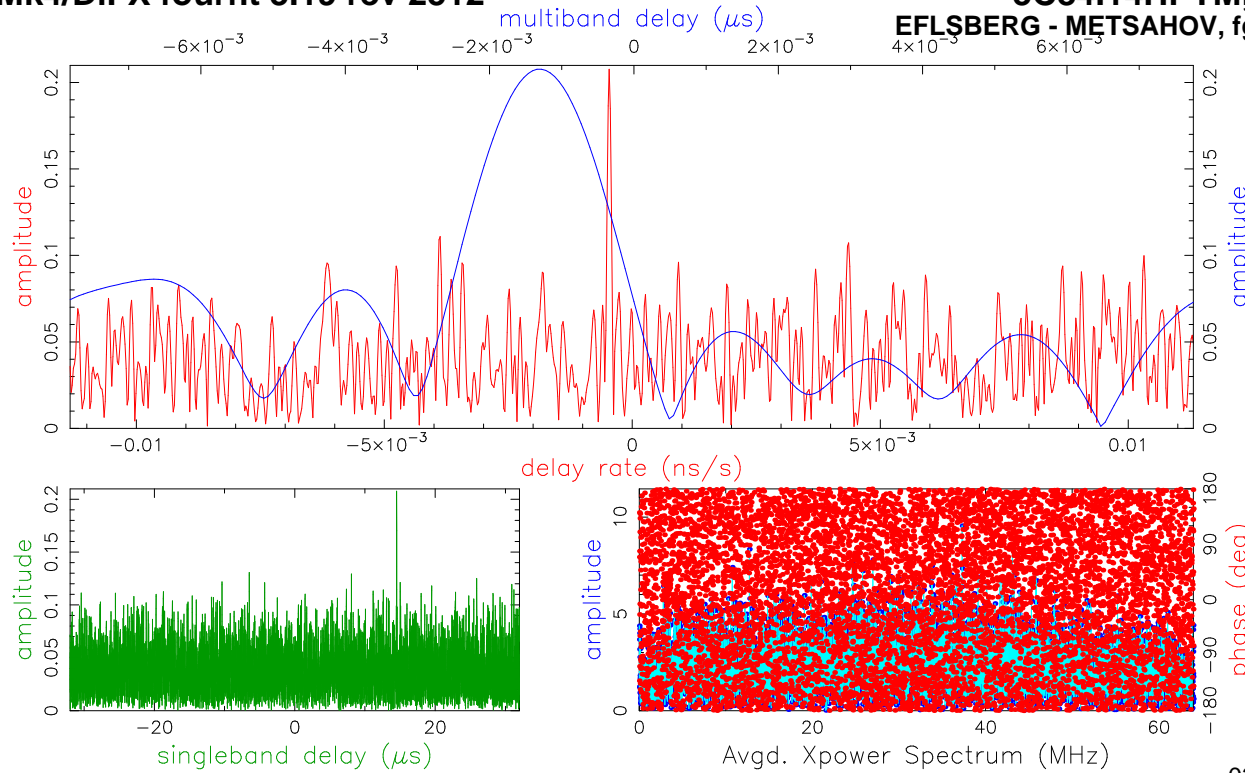
Fringe quality 0  
SNR 6.2  
Int time 136.478  
Amp 0.203  
Phase -149.9  
PFD 8.3e-01  
Delays (us)  
SBD 0.312653  
MBD -0.003333  
Fringe rate (Hz) 0.289546  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121717.21  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195735  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



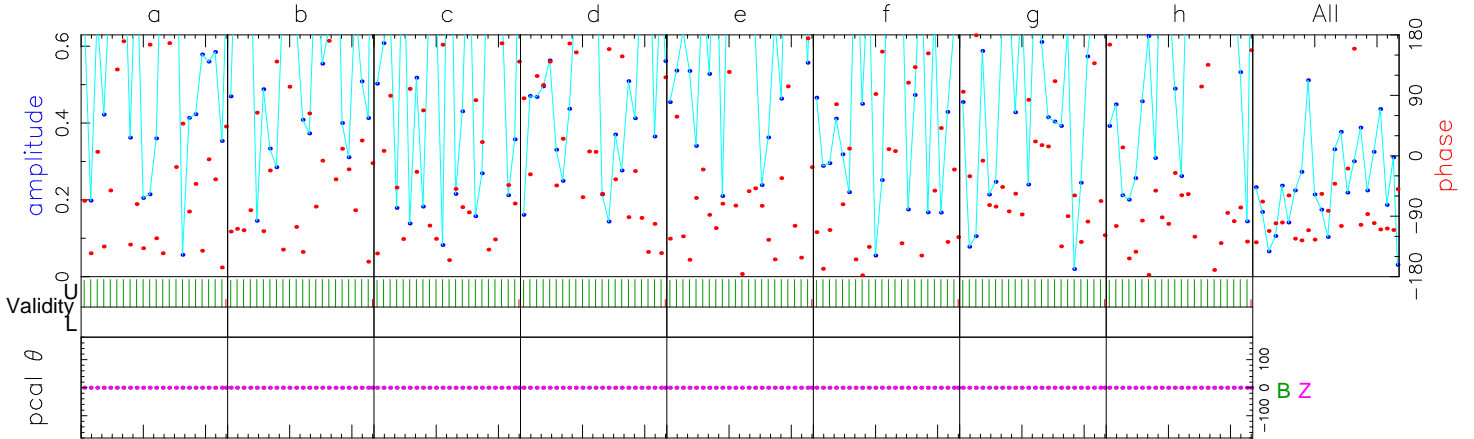
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-130.0	-135.8	170.2	-168.2	174.3	-163.1	-121.3	-140.8	Phase	-149.9
	0.3	0.2	0.2	0.2	0.1	0.3	0.2	0.3	Ampl.	0.2
	8369.0	14350.0	16247.9	10261.2	6723.2	1409.6	12791.4	5664.7	Sbd box	8273.0
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	9.34843843945E+02		Apriori delay (usec)		9.34534676584E+02		Resid mbdelay (usec)		-3.33264E-03	+/- 1.7E-04
Sband delay (usec)	9.34847329334E+02		Apriori clock (usec)		1.3992766E+01		Resid sbdelay (usec)		3.12653E-01	+/- 1.4E-03
Phase delay (usec)	9.34534671749E+02		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		-4.83519E-06	+/- 5.9E-07
Delay rate (us/s)	1.95188762537E-01		Apriori rate (us/s)		1.95185401194E-01		Resid rate (us/s)		3.36134E-06	+/- 7.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.21019415186E-05		Resid phase (deg)		-149.9	+/- 18.3

ph/seg (deg) 47.0 44.0 Search (1024X32) 0.194 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.7 76.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 28.5 25.9 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.8 45.3 Inc. frq. avg. 0.199 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 145.6 el 79.5 pa -28.5 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) -1513.605 -1466.716 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BZ.W.13.14HPTM



Fringe quality 0  
SNR 6.7  
Int time 136.478  
Amp 0.210  
Phase -101.5  
PFD 9.2e-02  
Delays (us)  
SBD 14.509259  
MBD -0.001278  
Fringe rate (Hz)  
-0.040247  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121717.21  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195817  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec

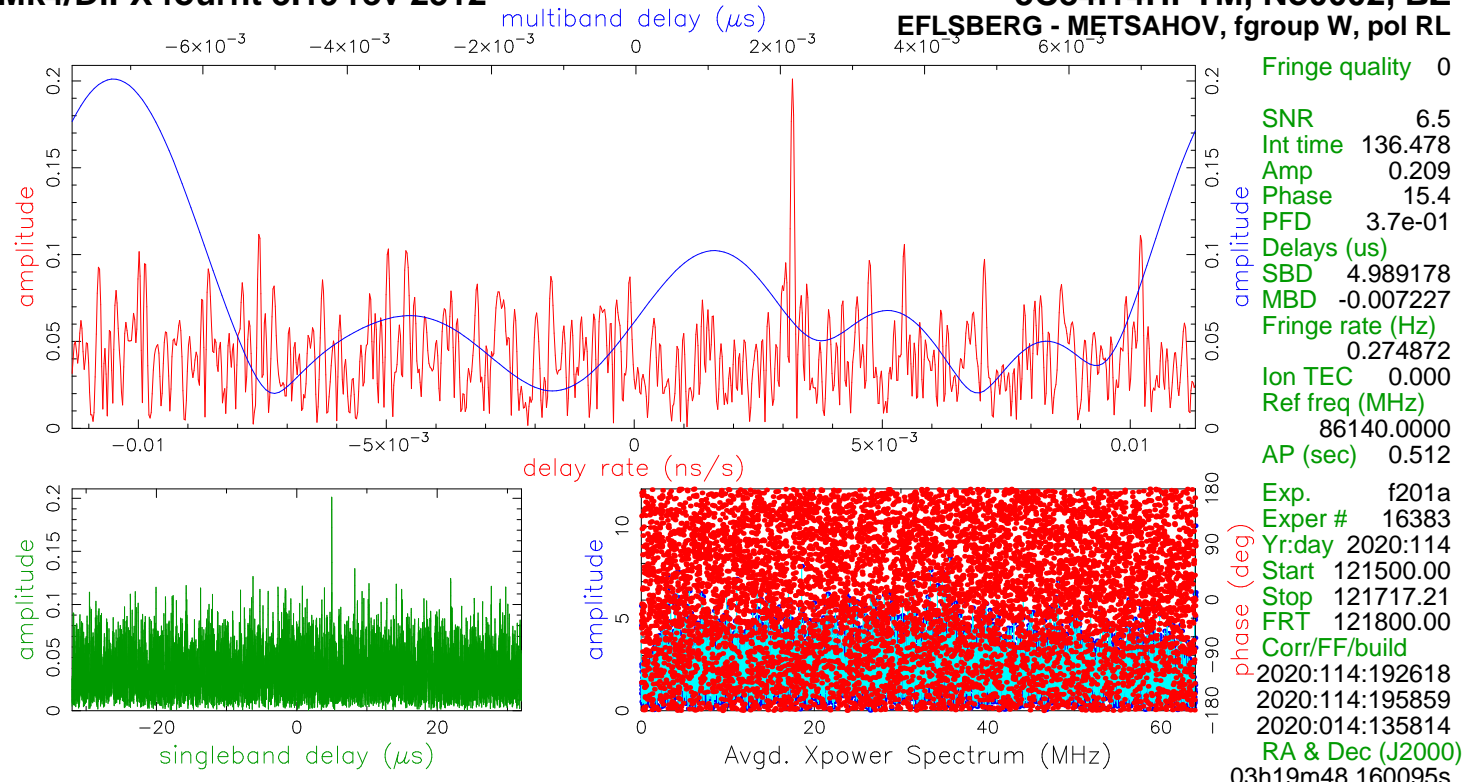


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-98.8	-84.3	-118.4	-91.5	-114.5	-118.4	-57.7	-112.5	Phase	-101.5
	0.2	0.3	0.2	0.1	0.3	0.1	0.2	0.3	Ampl.	0.2
	3369.7	6425.7	6416.9	274.4	13461.4	5727.0	33.6	3364.5	Sbd box	11907.4
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

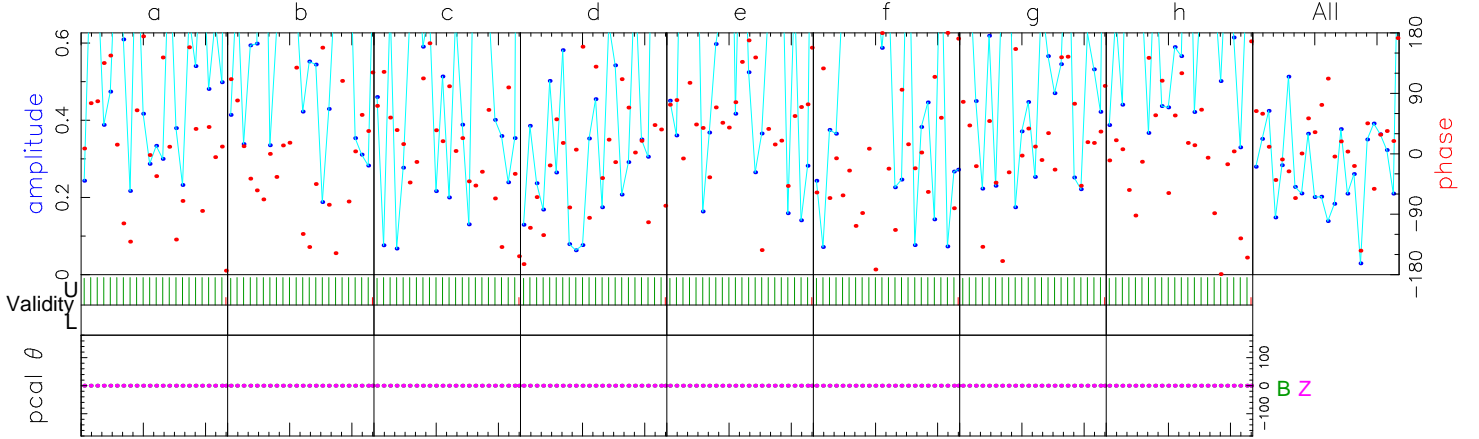
Group delay (usec)(sbd)	9.49049023848E+02	Apriori delay (usec)	9.34534676584E+02	Resid mbdelay (usec)	-1.27774E-03	+/-	1.6E-04
Sband delay (usec)	9.49043935834E+02	Apriori clock (usec)	1.3992766E+01	Resid sbdelay (usec)	1.45093E+01	+/-	1.3E-03
Phase delay (usec)	9.34534673310E+02	Apriori clockrate (us/s)	-2.1600000E-07	Resid phdelay (usec)	-3.27382E-06	+/-	5.5E-07
Delay rate (us/s)	1.95184933971E-01	Apriori rate (us/s)	1.95185401194E-01	Resid rate (us/s)	-4.67223E-07	+/-	7.0E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.21019415186E-05	Resid phase (deg)	-101.5	+/-	17.1

ph/seg (deg)	RMS 36.2	Theor. 41.0	Amplitude Search (1024X32)	0.210 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	56.6	71.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	23.0	24.2	Inc. seg. avg.	0.199	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.1	42.2	Inc. frq. avg.	0.202	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 145.6 el 79.5 pa -28.5 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) -1513.605 -1466.716 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BZ.W.23.14HPTM



Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



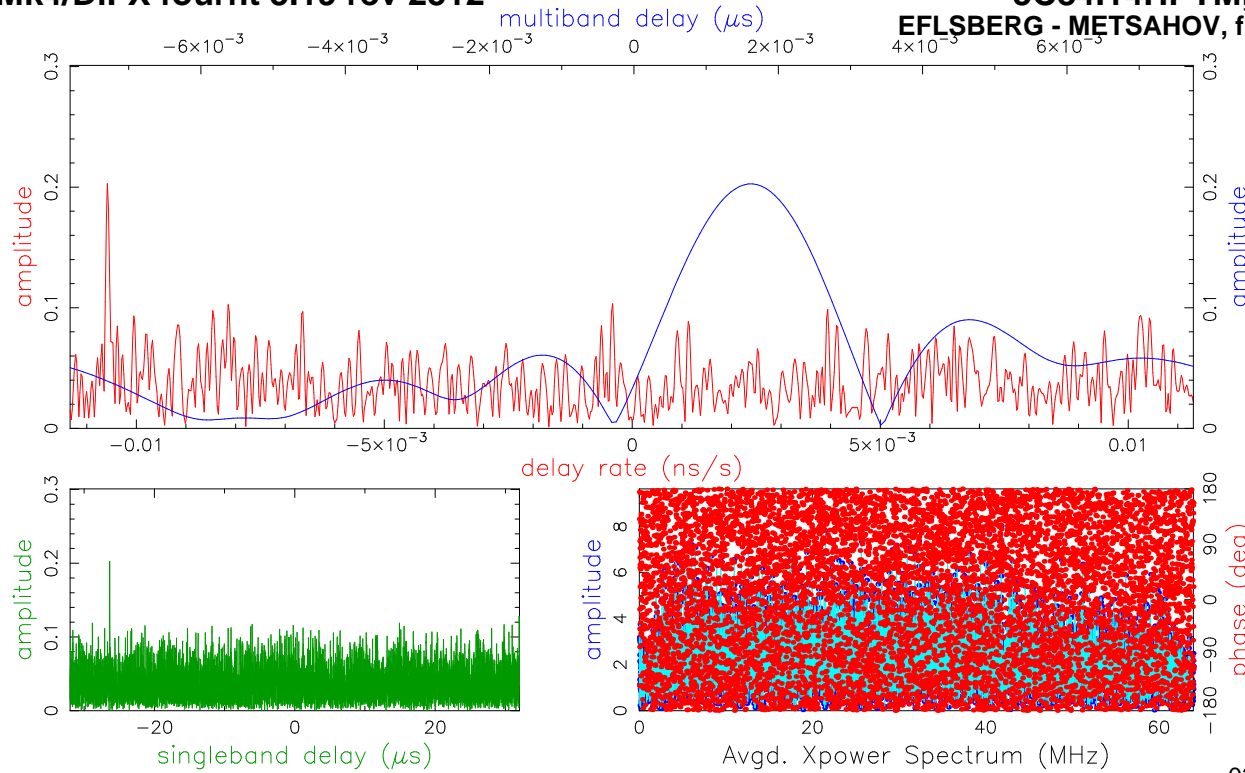
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	39.0	-29.7	7.1	12.9	53.4	-35.5	34.5	-0.3	Phase	15.4
	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.3	Ampl.	0.2
	7457.8	4304.9	7395.5	11003.1	9468.7	15039.0	16351.5	5088.9	Sbd box	9470.2
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)		9.39527449574E+02		Apriori delay (usec)		9.34534676584E+02		Resid mbdelay (usec)	-7.22701E-03	+/- 1.7E-04
Sband delay (usec)		9.39523854334E+02		Apriori clock (usec)		1.3992766E+01		Resid sbdelay (usec)	4.98918E+00	+/- 1.3E-03
Phase delay (usec)		9.34534677081E+02		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)	4.97592E-07	+/- 5.7E-07
Delay rate (us/s)		1.95188592189E-01		Apriori rate (us/s)		1.95185401194E-01		Resid rate (us/s)	3.19099E-06	+/- 7.2E-09
Total phase (deg)			30.2	Apriori accel (us/s/s)		-1.21019415186E-05		Resid phase (deg)	15.4	+/- 17.7

	RMS	Theor.	Amplitude	0.209 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	56.2	42.5	Search (1024X32)	0.200	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -32.000 32.000	
amp/seg (%)	72.4	74.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	34.9	25.1	Inc. seg. avg.	0.228	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	38.8	43.8	Inc. frq. avg.	0.219	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite	ion window (TEC) 0.00 0.00

B: az 145.6 el 79.5 pa -28.5    Z: az 201.9 el 70.5 pa 15.9    u,v (fr/asec) -1513.605 -1466.716    simultaneous interpolator

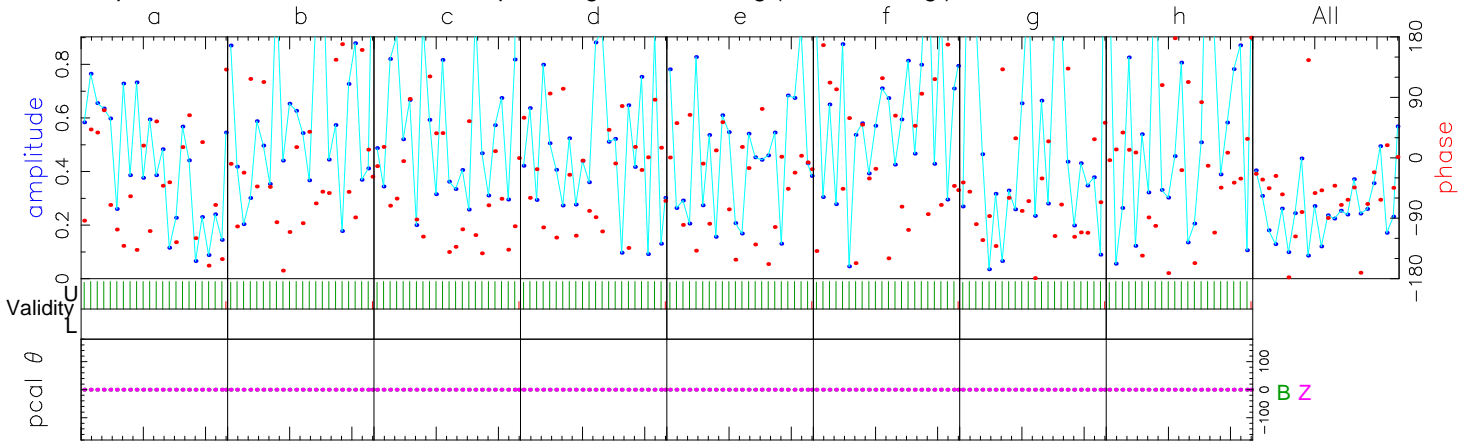
Control file: cf\_1234\_gmva    Input file: /Exps/f201a/FRINGE/1234/No0002/BZ..14HPTM    Output file: /Exps/f201a/FRINGE/1234/No0002/BZ.W.29.14HPTM





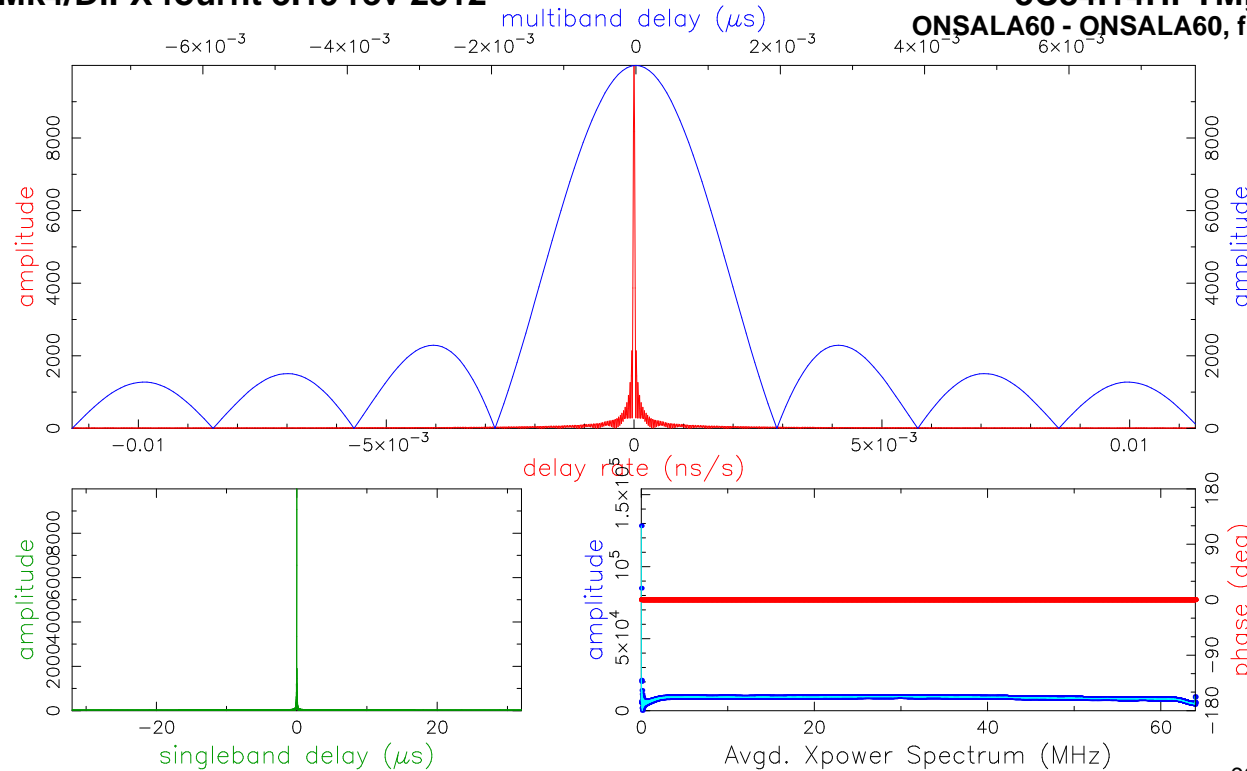
Fringe quality 0  
SNR 6.5  
Int time 136.478  
Amp 0.301  
Phase -55.1  
PFD 2.9e-01  
Delays (us)  
SBD -26.360466  
MBD 0.001619  
Fringe rate (Hz)  
-0.913695  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121500.00  
Stop 121717.21  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195652  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.4	-62.6	-62.9	-43.0	-35.5	-84.3	-73.1	-35.2	Phase	-55.1
	0.2	0.4	0.3	0.3	0.3	0.2	0.5	0.4	Ampl.	0.3
	14228.6	1572.4	1031.8	14264.1	13617.1	5595.6	1443.5	13165.8	Sbd box	1444.7
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Z	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	9.08176920429E+02		Apriori delay (usec)		9.34534676584E+02		Resid mbdelay (usec)		1.61885E-03	+/- 1.7E-04
Sband delay (usec)	9.08174210584E+02		Apriori clock (usec)		1.3992766E+01		Resid sbdelay (usec)		-2.63605E+01	+/- 1.3E-03
Phase delay (usec)	9.34534674807E+02		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		-1.77648E-06	+/- 5.7E-07
Delay rate (us/s)	1.95174794103E-01		Apriori rate (us/s)		1.95185401194E-01		Resid rate (us/s)		-1.06071E-05	+/- 7.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.21019415186E-05		Resid phase (deg)		-55.1	+/- 17.6

ph/seg (deg) 56.3 42.2 Search (1024X32) 0.201 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 60.9 73.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 20.4 24.9 Inc. seg. avg. 0.302 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.1 43.5 Inc. frq. avg. 0.285 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 145.6 el 79.5 pa -28.5 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) -1513.605 -1466.716 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/BZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/BZ.W.5.14HPTM

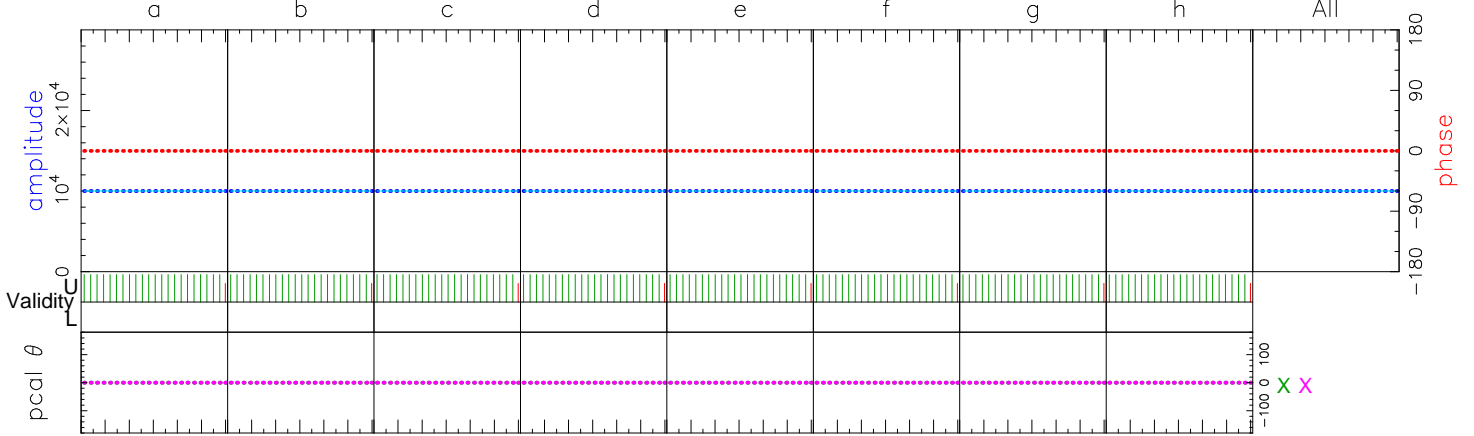


Fringe quality 9

SNR 518768.4  
 Int time 359.875  
 Amp 9999.999  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195742  
 2020:014:135814  
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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

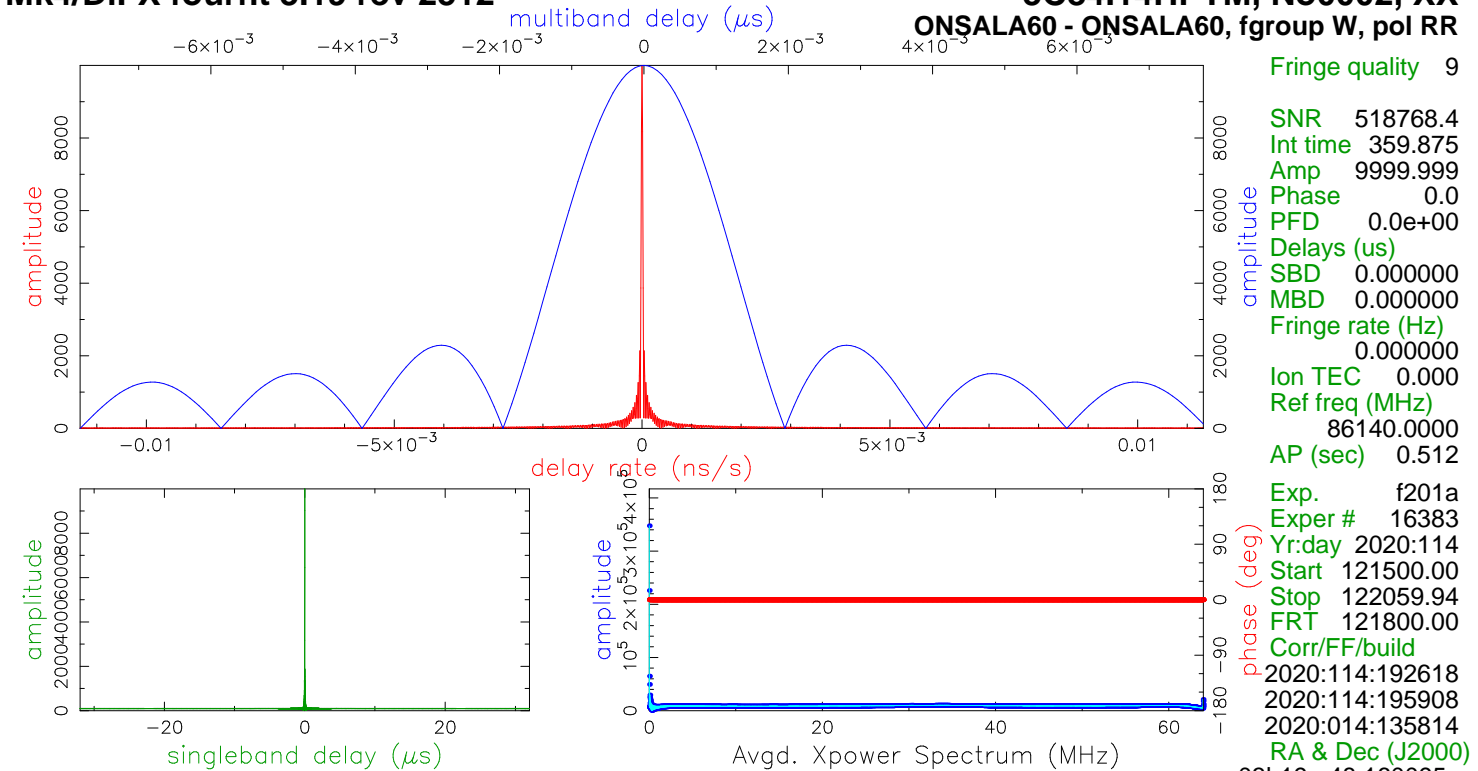


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	Sbd box	8193.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

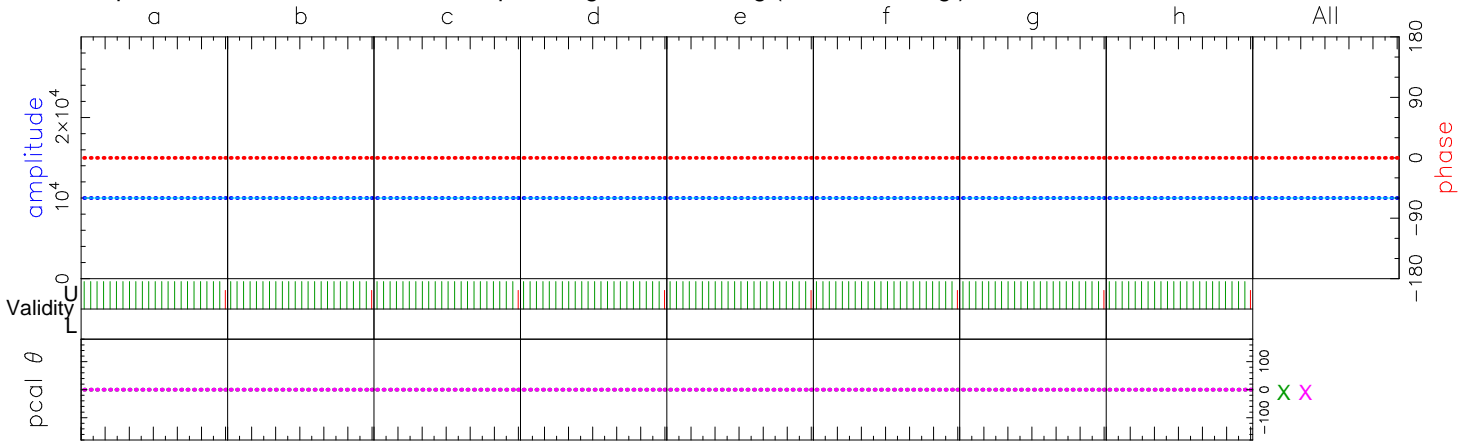
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.1E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.7E-08  
 Phase delay (usec) 7.40159454350E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 7.40159E-20 +/- 7.1E-12  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 3.4E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 172.2 el 74.1 pa -4.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XX.W.17.14HPTM



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

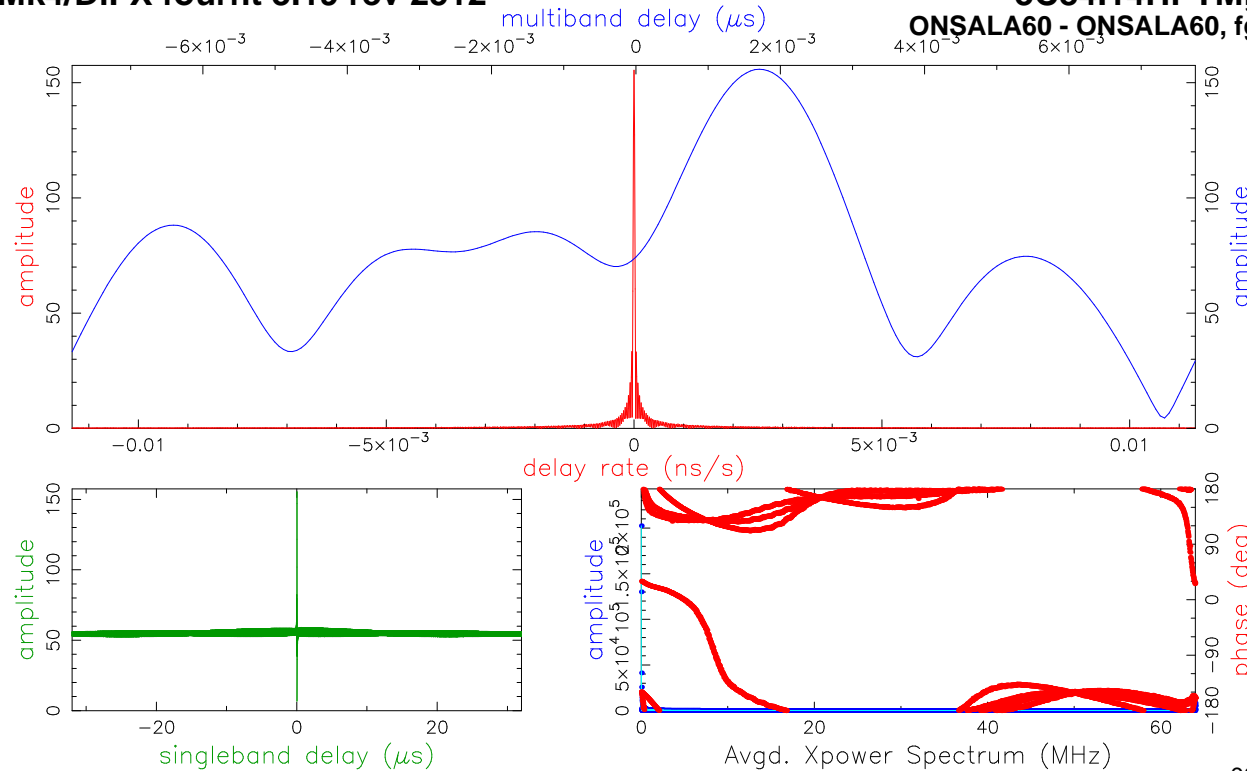


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	8193.0	Sbd box	8193.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	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	+/-	2.1E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	7.80527552628E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	7.80528E-20	+/-	7.1E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.4E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

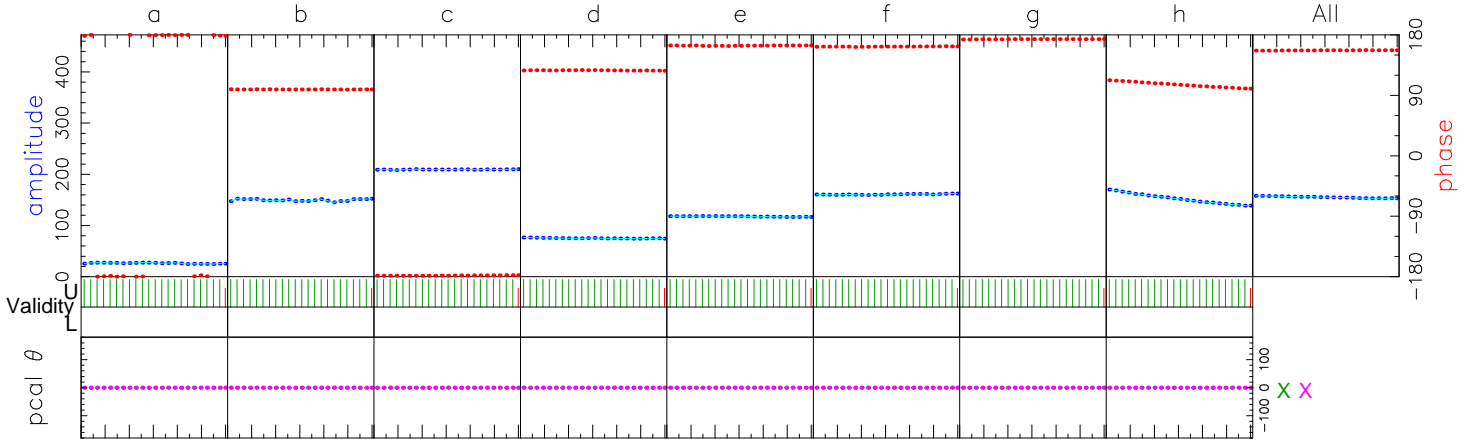
ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.999	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	0.0	0.0	0.0	Inc. frq. avg.	9999.999	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 8192 t_cohere infinite	dr window (ns/s)	-0.011 0.011
X: az 172.2 el 74.1 pa -4.5		X: az 172.2 el 74.1 pa -4.5		u,v (fr/asec)	0.000 0.000						ion window (TEC)	0.00 0.00





Fringe quality 5  
 SNR 8170.3  
 Int time 359.875  
 Amp 157.495  
 Phase 156.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.030062  
 MBD 0.001622  
 Fringe rate (Hz) 0.000001  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. f201a  
 Yr:day 16383  
 Start 2020:114  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:200037  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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

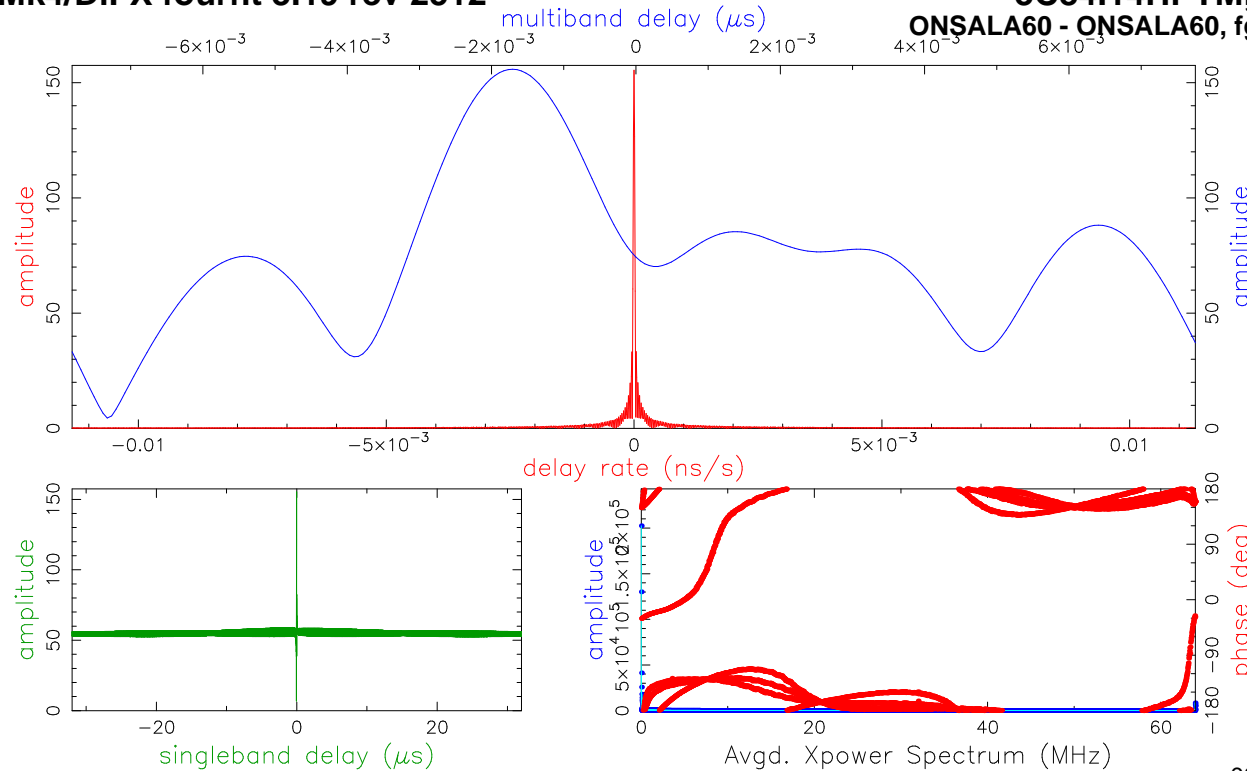


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-180.0	98.8	-178.1	127.1	163.9	162.5	173.5	106.1	Phase	156.8
	26.4	149.8	209.4	75.3	117.8	160.9	533.8	152.2	Ampl.	178.2
	8198.8	8202.8	8201.3	8201.2	8202.8	8200.7	8200.0	8201.6	Sbd box	8200.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 3.28722187500E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.62222E-03 +/- 1.3E-07  
 Sband delay (usec) 3.00620000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 3.00620E-02 +/- 1.1E-06  
 Phase delay (usec) 5.05723709353E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.05724E-06 +/- 4.5E-10  
 Delay rate (us/s) 9.91980667418E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 9.91981E-12 +/- 2.2E-12  
 Total phase (deg) 156.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 156.8 +/- 0.0

RMS Theor. Amplitude 157.495 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.0 Search (2048X32) 153.088 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 1.7 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 37.3 0.0 Inc. seg. avg. 155.441 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 92.5 0.0 Inc. frq. avg. 178.207 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 172.2 el 74.1 pa -4.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XX.W.35.14HPTM

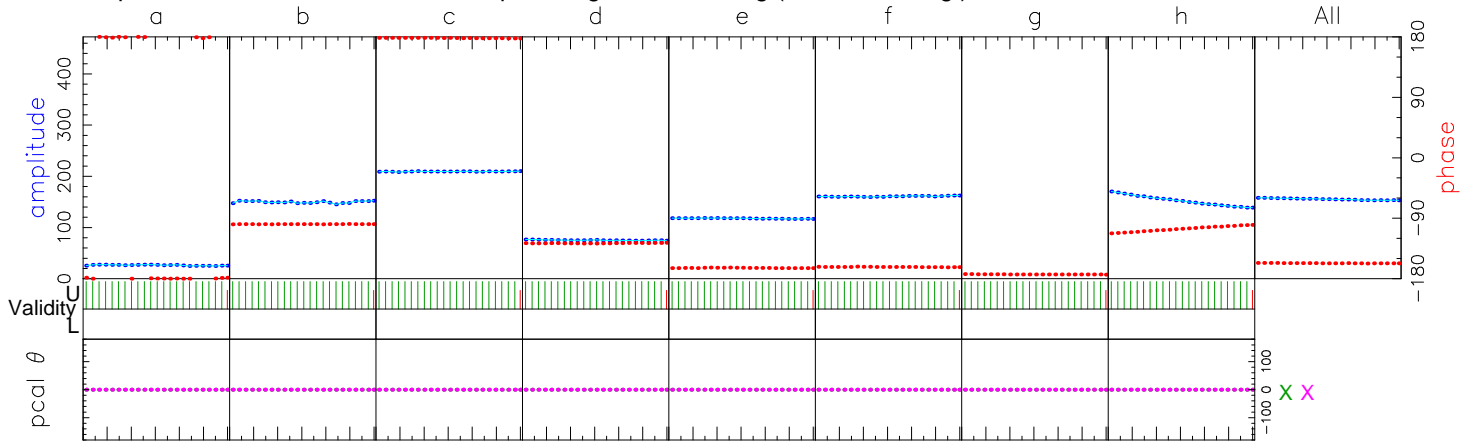


Fringe quality 5

SNR 8170.3  
 Int time 359.875  
 Amp 157.495  
 Phase -156.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.030062  
 MBD -0.001622  
 Fringe rate (Hz)  
 -0.000001  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:200206  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

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

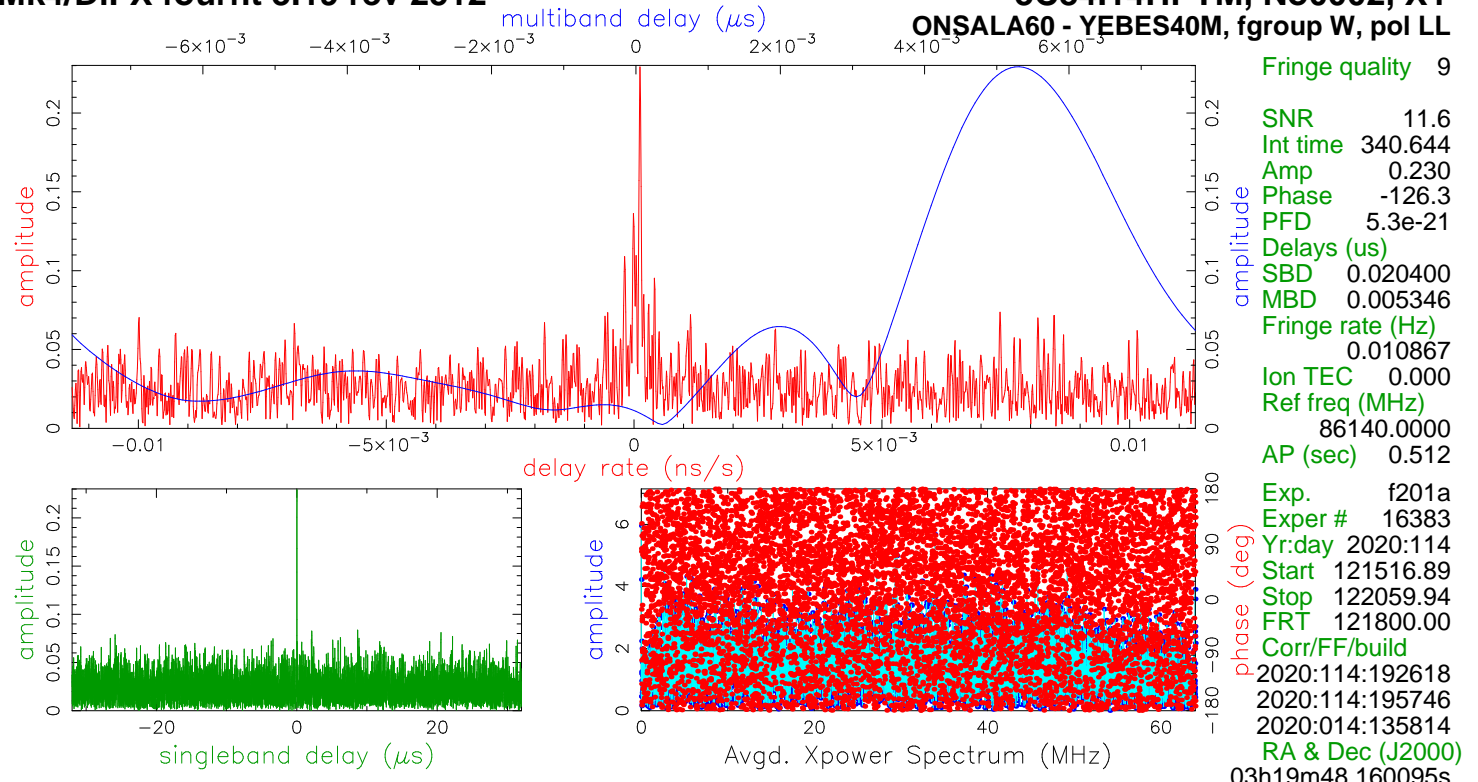


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	180.0	-98.8	178.1	-127.1	-163.9	-162.5	-173.5	-106.1	Phase	-156.8
	26.4	149.8	209.4	75.3	117.8	160.9	533.8	152.2	Ampl.	178.2
	8187.2	8183.2	8184.7	8184.8	8183.2	8185.3	8186.0	8184.4	Sbd box	8185.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

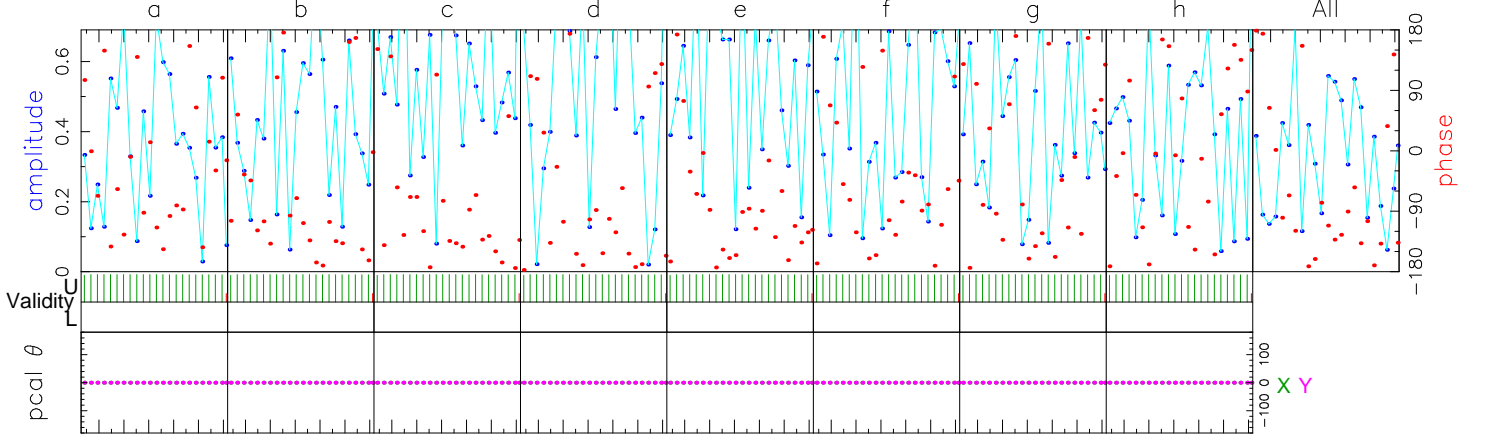
Group delay (usec)(sbd) -3.28722187500E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.62222E-03 +/- 1.3E-07  
 Sband delay (usec) -3.00620000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -3.00620E-02 +/- 1.1E-06  
 Phase delay (usec) -5.05723709351E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.05724E-06 +/- 4.5E-10  
 Delay rate (us/s) -9.91980667418E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -9.91981E-12 +/- 2.2E-12  
 Total phase (deg) -156.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -156.8 +/- 0.0

RMS Theor. Amplitude 157.495 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.0 Search (2048X32) 153.088 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 1.7 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 37.3 0.0 Inc. seg. avg. 155.441 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 92.5 0.0 Inc. frq. avg. 178.207 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 172.2 el 74.1 pa -4.5 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XX.W.38.14HPTM



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

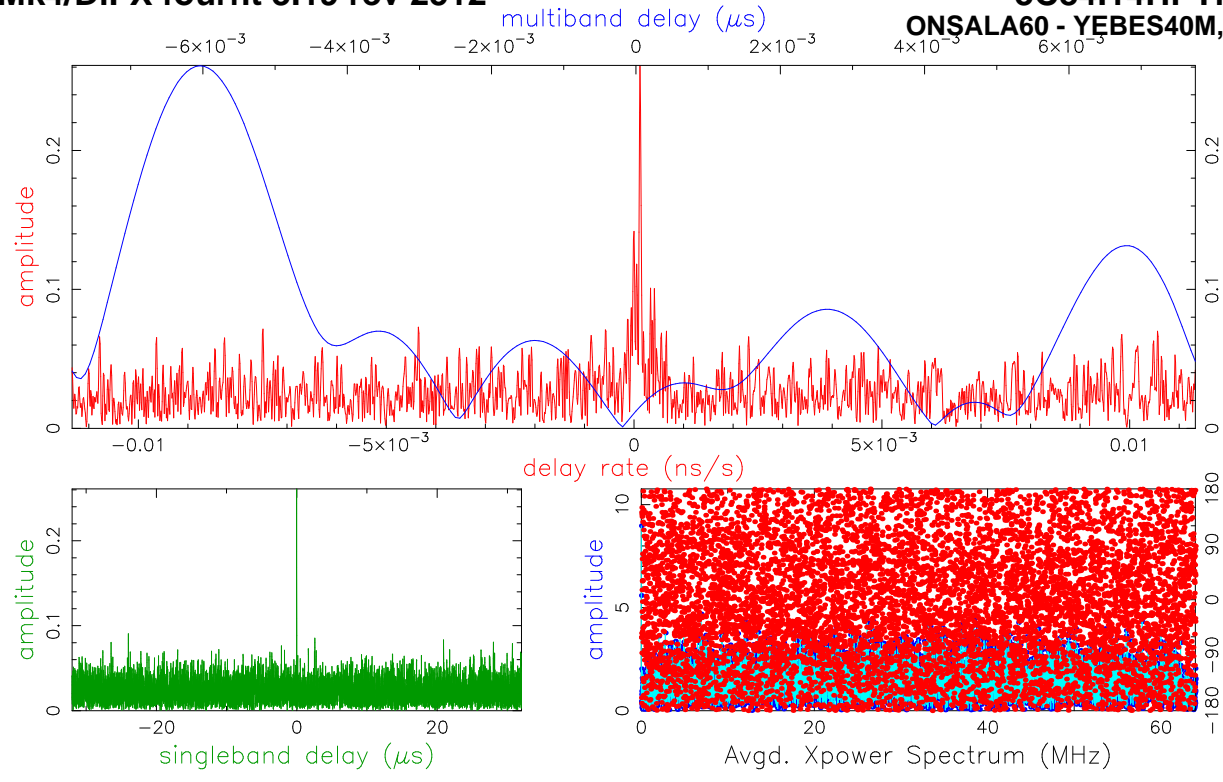


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.2	-140.4	-130.1	-137.5	-111.2	-98.0	-146.1	-164.3	Phase	-126.3
	0.1	0.3	0.4	0.3	0.3	0.2	0.2	0.1	Ampl.	0.2
	9461.9	8198.9	8197.7	8198.2	8198.4	10819.2	1661.9	1022.4	Sbd box	8198.2
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.59148349585E+02	Apriori delay (usec)	-2.59169320136E+02	Resid mbdelay (usec)	5.34555E-03	+/-	9.3E-05
Sband delay (usec)	-2.59148920386E+02	Apriori clock (usec)	2.8701332E+01	Resid sbdelay (usec)	2.03997E-02	+/-	7.4E-04
Phase delay (usec)	-2.59169324209E+02	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-4.07308E-06	+/-	3.2E-07
Delay rate (us/s)	-2.36048914838E-01	Apriori rate (us/s)	-2.36049040998E-01	Resid rate (us/s)	1.26160E-07	+/-	1.6E-09
Total phase (deg)	-211.4	Apriori accel (us/s/s)	1.59721097877E-05	Resid phase (deg)	-126.3	+/-	9.9

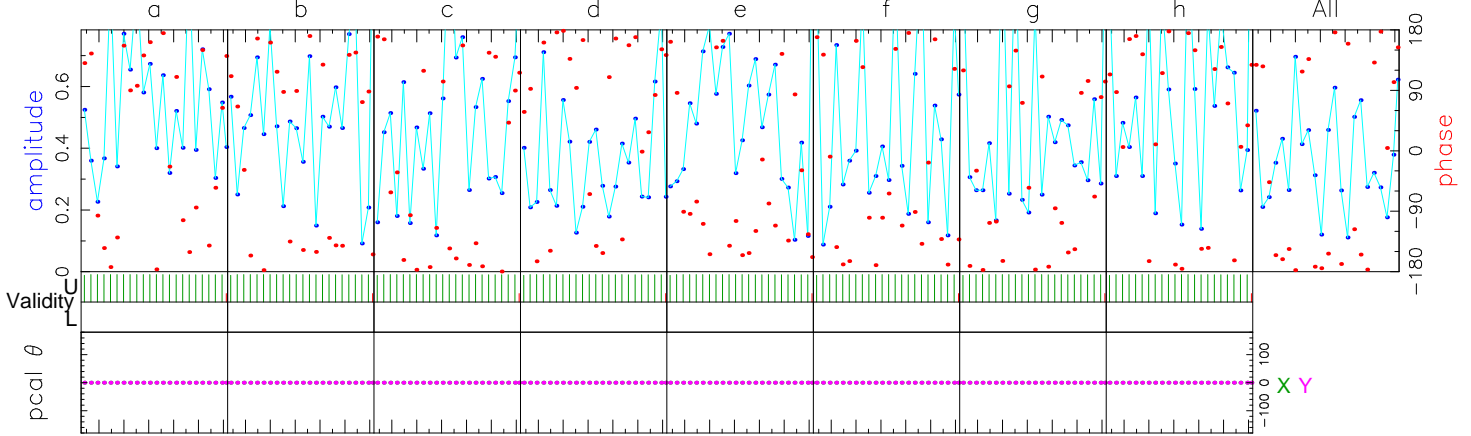
ph/seg (deg)	70.8	Theor.	23.7	Search (2048X32)	0.225	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	86.4		41.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	26.0		14.0	Inc. seg. avg.	0.306	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.3		24.3	Inc. frq. avg.	0.235	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 172.2 el 74.1 pa -4.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1831.793 2373.703 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XY.W.18.14HPTM



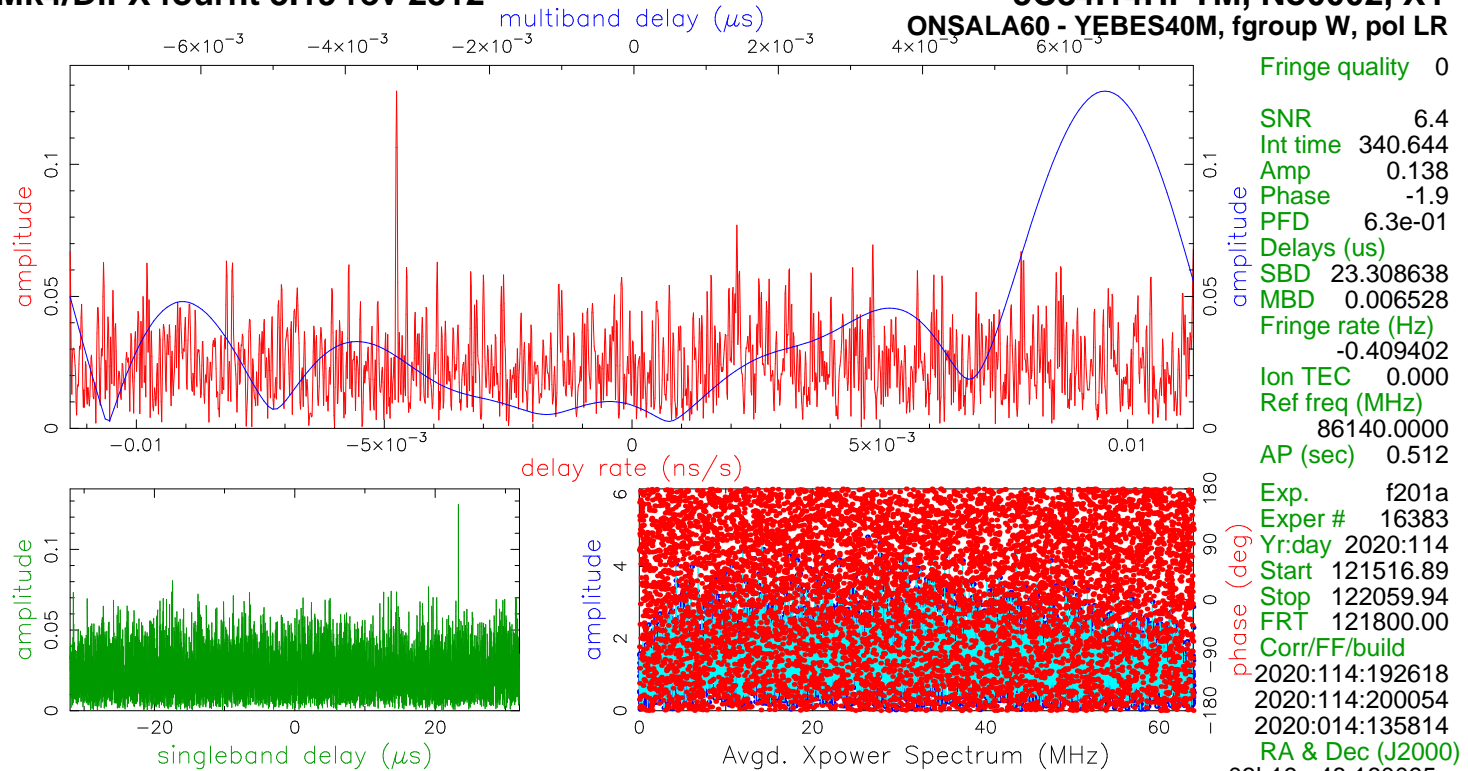
Fringe quality 9  
 SNR 13.2  
 Int time 340.644  
 Amp 0.261  
 Phase 176.1  
 PFD 2.0e-29  
 Delays (us)  
 SBD -0.020036  
 MBD -0.006059  
 Fringe rate (Hz) 0.010603  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121516.89  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build 2020:114:192618  
 2020:114:195921  
 2020:014:135814  
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



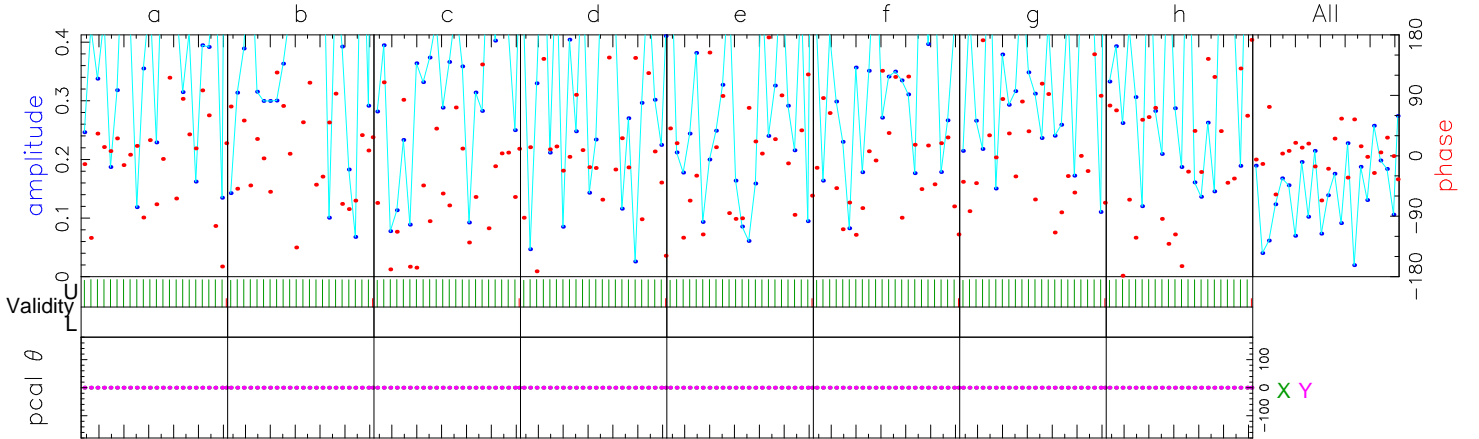
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.59191004147E+02				-2.59169320136E+02				-6.05901E-03	+/- 8.2E-05
Sband delay (usec)	-2.59189355886E+02				2.8701332E+01				-2.00357E-02	+/- 6.5E-04
Phase delay (usec)	-2.59169314458E+02				3.0800002E-07				5.67757E-06	+/- 2.8E-07
Delay rate (us/s)	-2.36048917912E-01				-2.36049040998E-01				1.23086E-07	+/- 1.4E-09
Total phase (deg)			90.9		1.59721097877E-05				176.1	+/- 8.7
ph/seg (deg)	58.3	20.8								
amp/seg (%)	70.9	36.4								
ph/frq (deg)	26.5	12.3								
amp/frq (%)	19.0	21.5								

RMS Theor. Amplitude 0.261 +/- 0.020  
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00  
 X: az 172.2 el 74.1 pa -4.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1831.793 2373.703 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XY.W.34.14HPTM



Fringe quality 0  
SNR 6.4  
Int time 340.644  
Amp 0.138  
Phase -1.9  
PFD 6.3e-01  
Delays (us)  
SBD 23.308638  
MBD 0.006528  
Fringe rate (Hz)  
-0.409402  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121516.89  
Stop 122059.94  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:200054  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



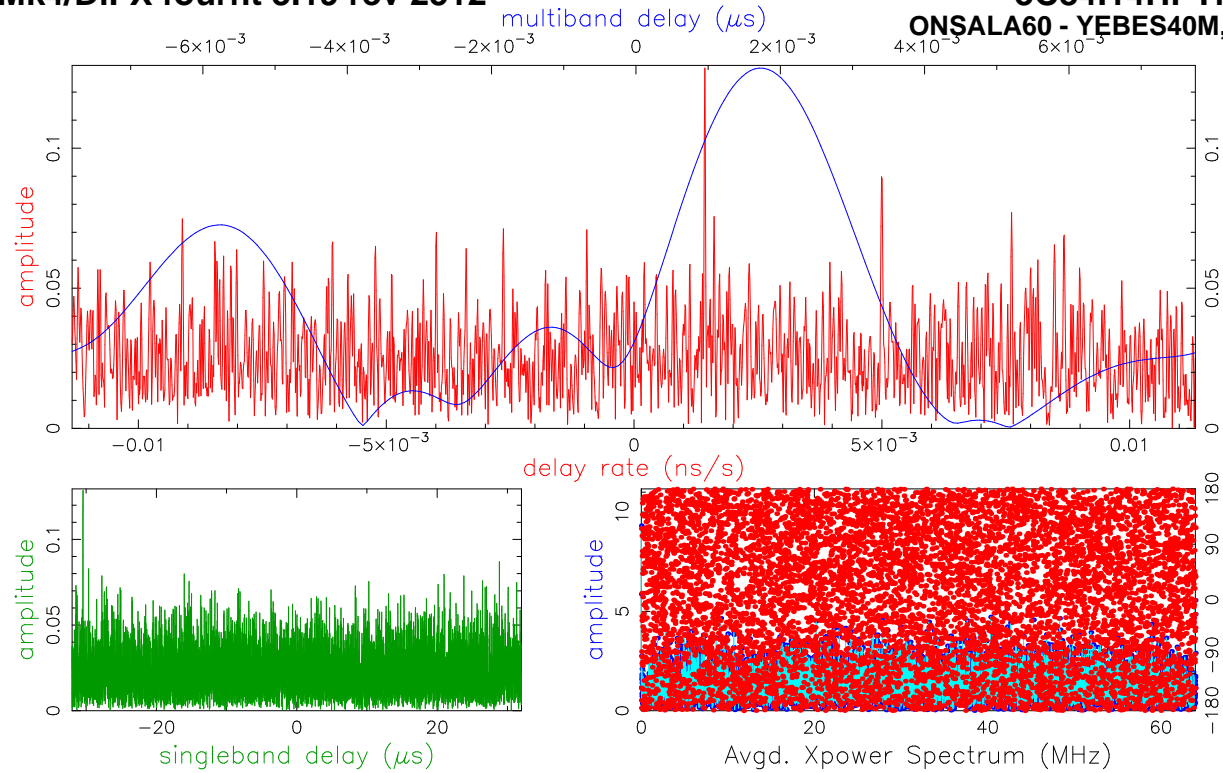
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	4.1	7.2	-30.3	-5.2	5.9	-19.5	1.9	20.2	Phase	-1.9
	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	13385.3	4633.1	5229.7	14537.6	13518.9	2929.7	13745.5	4661.7	Sbd box	14160.0
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.35865916653E+02	Apriori delay (usec)	-2.59169320136E+02	Resid mbdelay (usec)	6.52848E-03	+/-	1.7E-04
Sband delay (usec)	-2.35860682386E+02	Apriori clock (usec)	2.8701332E+01	Resid sbdelay (usec)	2.33086E+01	+/-	1.3E-03
Phase delay (usec)	-2.59169320196E+02	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-5.98367E-08	+/-	5.7E-07
Delay rate (us/s)	-2.36053793751E-01	Apriori rate (us/s)	-2.36049040998E-01	Resid rate (us/s)	-4.75275E-06	+/-	2.9E-09
Total phase (deg)	-87.0	Apriori accel (us/s/s)	1.59721097877E-05	Resid phase (deg)	-1.9	+/-	17.8

ph/seg (deg)	33.3	Theor.	42.6	Amplitude	0.138 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	52.0		74.4	Search (2048X32)	0.125	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	17.4		25.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.0		43.9	Inc. seg. avg.	0.121	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.129	Data rate (Mb/s):	2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00

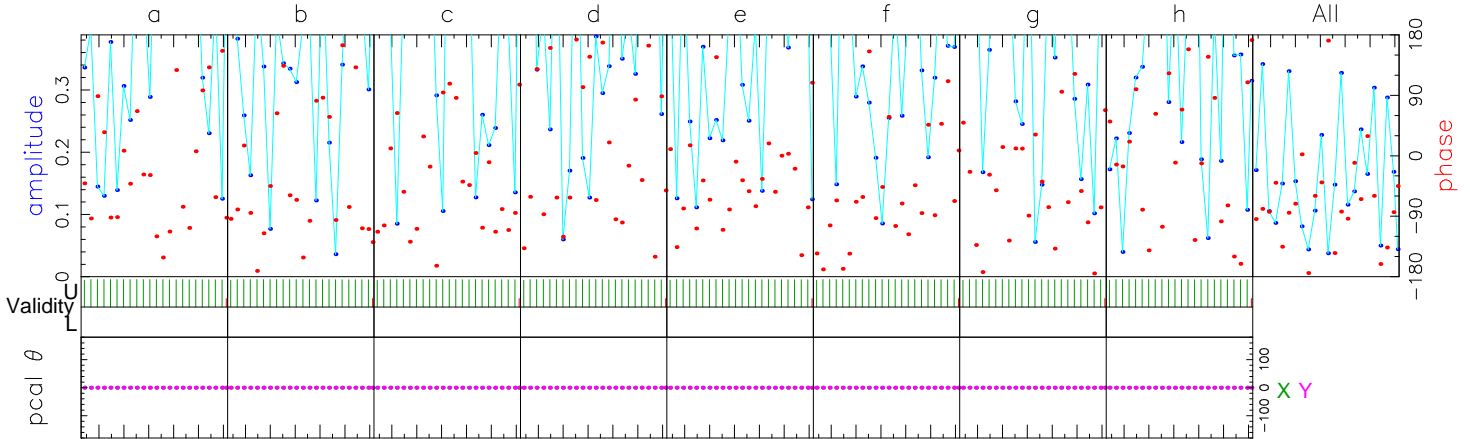
X: az 172.2 el 74.1 pa -4.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1831.793 2373.703 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XY.W.37.14HPTM





Fringe quality 0  
SNR 6.5  
Int time 340.644  
Amp 0.130  
Phase -78.9  
PFD 5.2e-01  
Delays (us)  
SBD -30.452740  
MBD 0.001728  
Fringe rate (Hz)  
0.122996  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121516.89  
Stop 122059.94  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:200226  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec

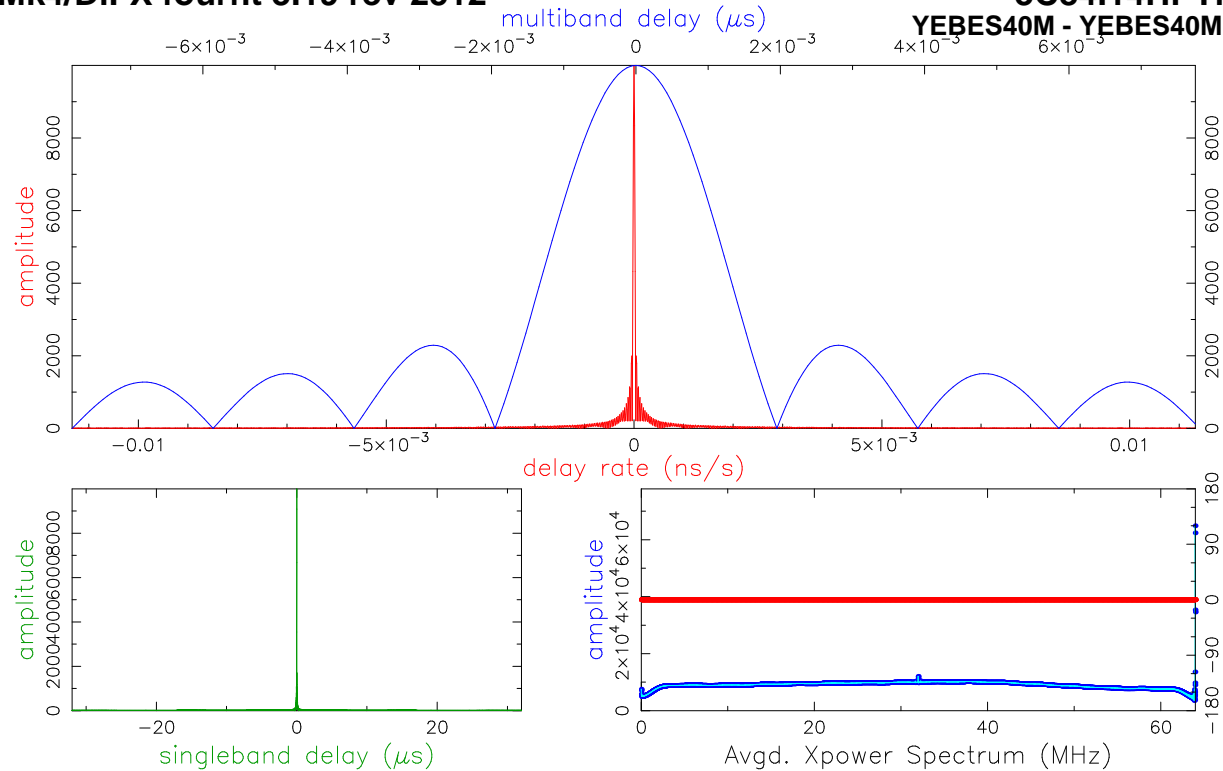


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.9	-116.3	-61.0	-108.5	-40.4	-106.5	-59.7	-115.7	Phase	-78.9
	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	16108.8	14001.0	12129.4	13871.5	7713.0	12414.6	10818.8	16013.8	Sbd box	397.1
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.89620716652E+02	Apriori delay (usec)	-2.59169320136E+02	Resid mbdelay (usec)	1.72848E-03	+/-	1.7E-04
Sband delay (usec)	-2.89622059636E+02	Apriori clock (usec)	2.8701332E+01	Resid sbdelay (usec)	-3.04527E+01	+/-	1.3E-03
Phase delay (usec)	-2.59169322680E+02	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-2.54401E-06	+/-	5.7E-07
Delay rate (us/s)	-2.36047613132E-01	Apriori rate (us/s)	-2.36049040998E-01	Resid rate (us/s)	1.42787E-06	+/-	2.9E-09
Total phase (deg)	-164.0	Apriori accel (us/s/s)	1.59721097877E-05	Resid phase (deg)	-78.9	+/-	17.6

ph/seg (deg)	54.7	Theor.	42.3	Search (2048X32)	0.128	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-32.000	32.000
amp/seg (%)	80.3		73.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	33.3		24.9	Inc. seg. avg.	0.134	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.0		43.5	Inc. frq. avg.	0.135	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 172.2 el 74.1 pa -4.5 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 1831.793 2373.703 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/XY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/XY.W.40.14HPTM

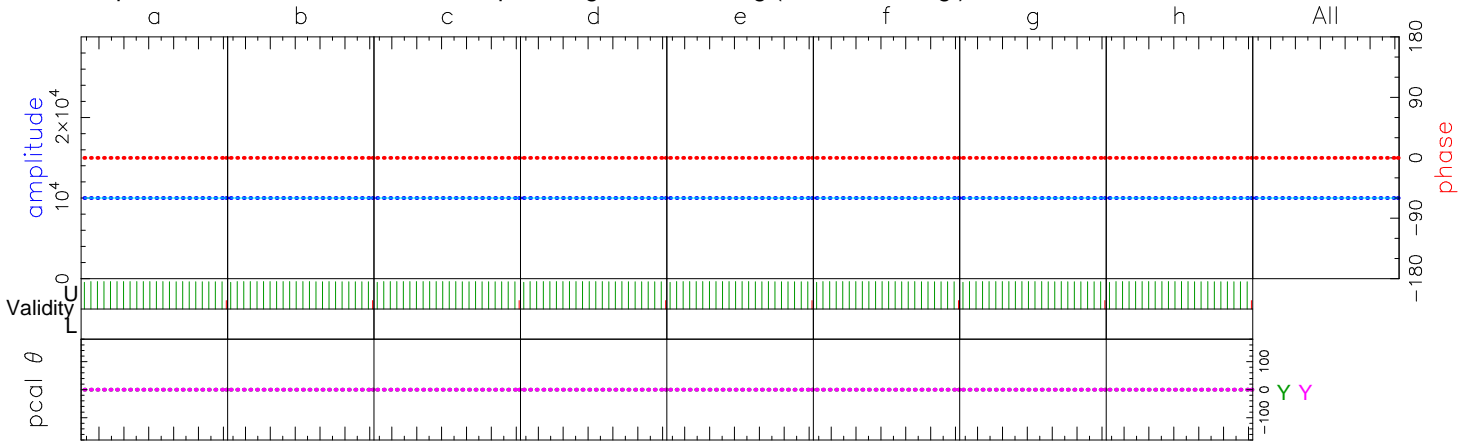


Fringe quality 9

SNR 504716.7  
 Int time 340.644  
 Amp 9999.989  
 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. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121516.89  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build 2020:114:192618  
 2020:114:195740  
 2020:014:135814  
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

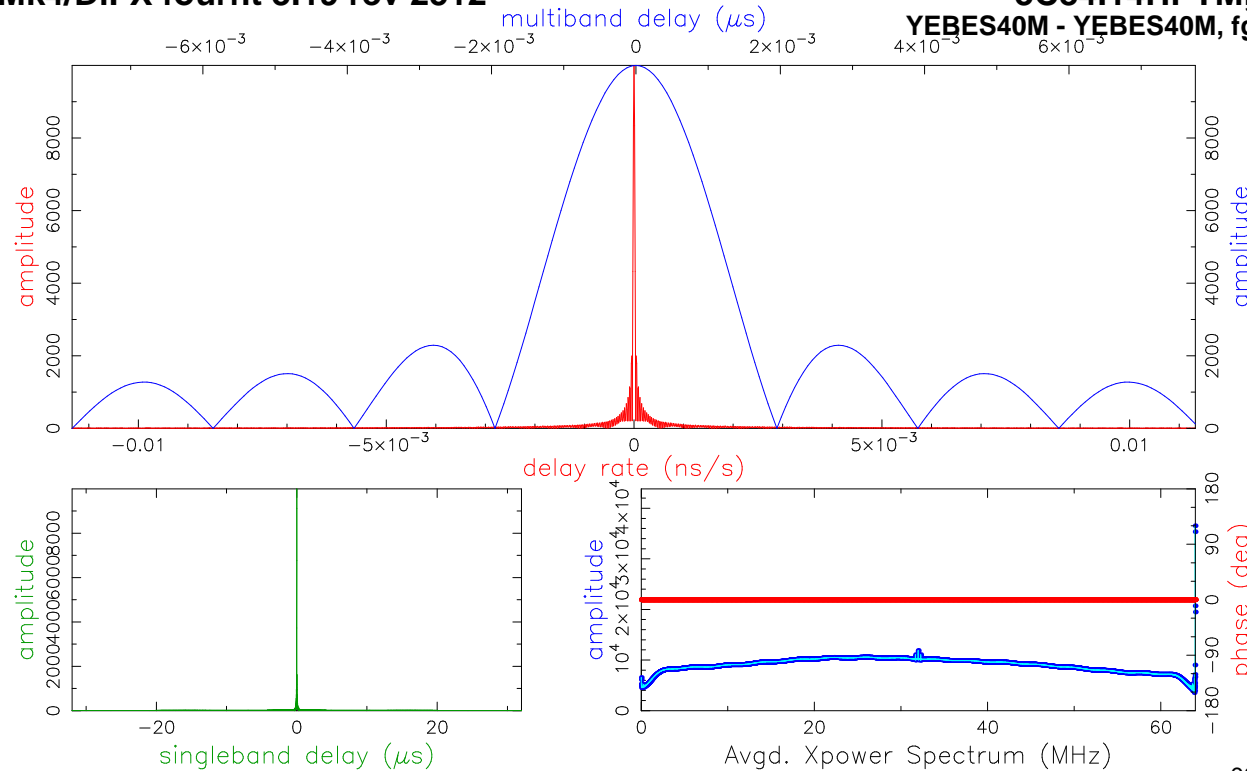
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.2E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	2.08817900271E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.08818E-20	+/-	7.3E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.989 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.989	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	9999.989	Data rate (Mb/s):	2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00

Y: az 79.7 el 76.5 pa -88.3      Y: az 79.7 el 76.5 pa -88.3      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/f201a/FRINGE/1234/No0002/YY..14HPTM    Output file: /Exps/f201a/FRINGE/1234/No0002/YY.W.15.14HPTM



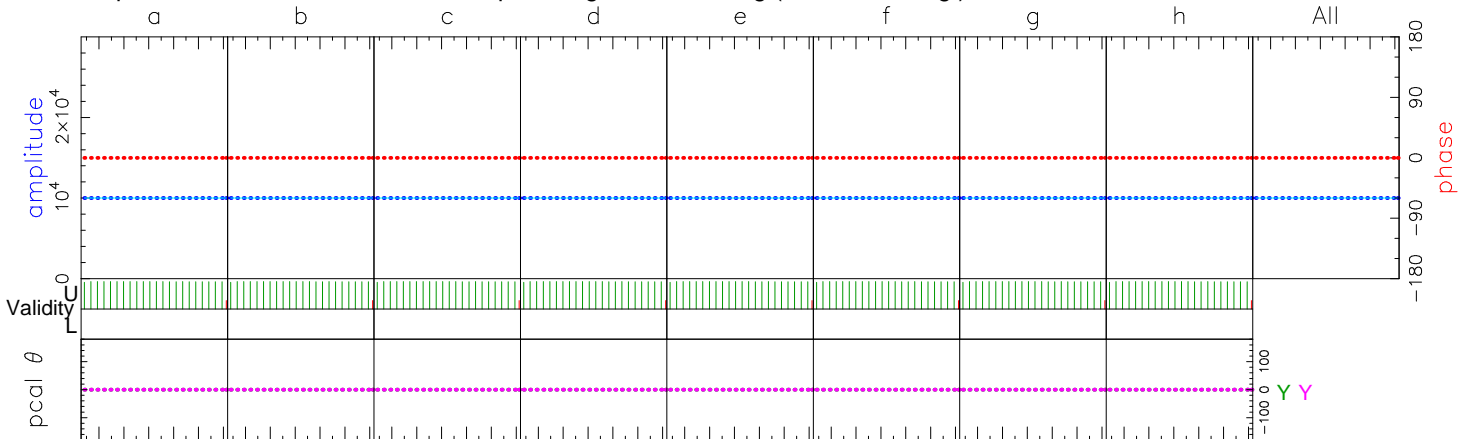


Fringe quality 9

SNR 504716.7  
 Int time 340.644  
 Amp 9999.989  
 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. f201a  
 Yr:day 16383  
 Start 2020:114:192618  
 Stop 2020:114:195911  
 FRT 121800.00  
 Corr/FF/build 2020:014:135814  
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

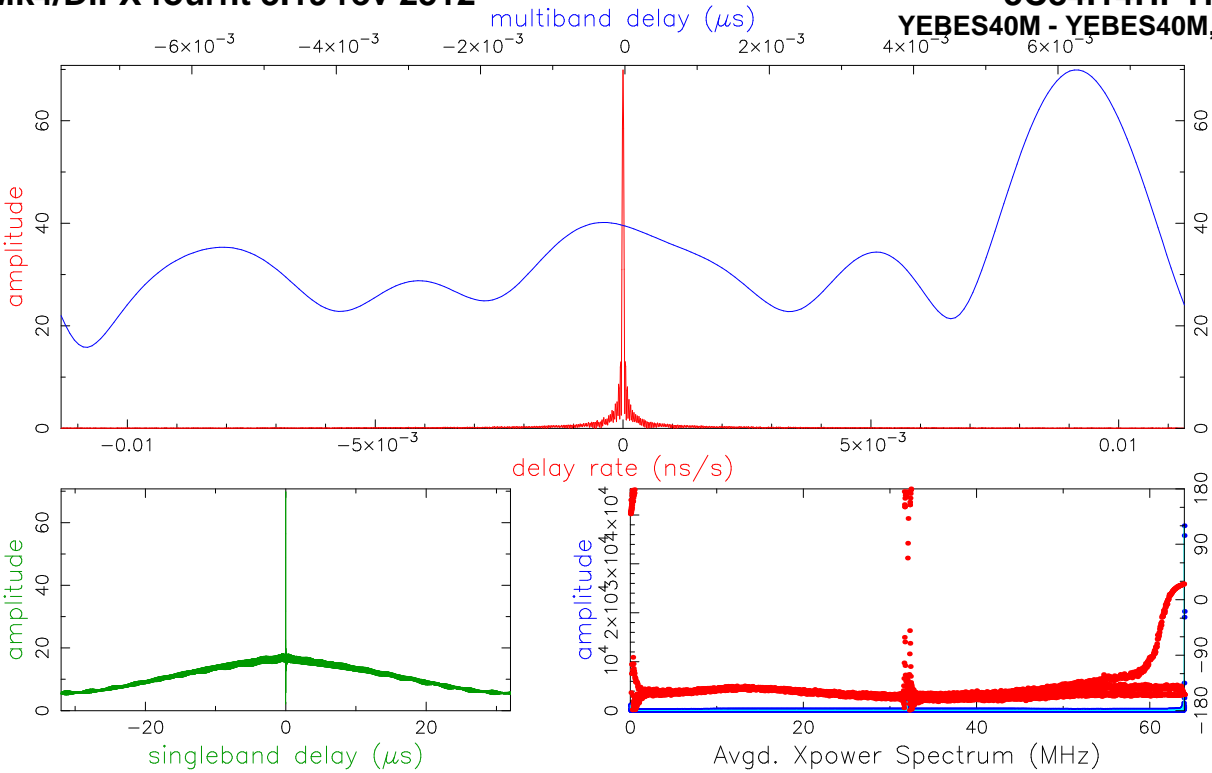
Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	8193.0	8193.0
Y	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.2E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.7E-08
Phase delay (usec)	2.00584638291E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.00585E-20	+/-	7.3E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

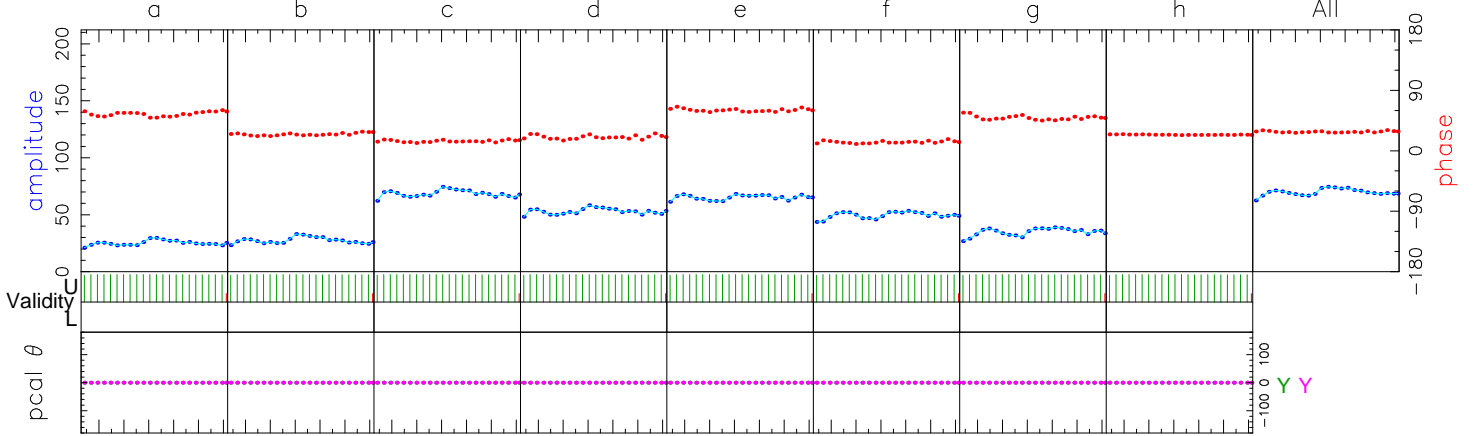
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.988 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.989 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Y: az 79.7 el 76.5 pa -88.3 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/YY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/YY.W.32.14HPTM simultaneous interpolator



Fringe quality 6

SNR 3572.1  
 Int time 340.644  
 Amp 70.774  
 Phase 28.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.009082  
 MBD 0.006294  
 Fringe rate (Hz)  
 -0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121516.89  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:200042  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-9.33131250000E-03				0.00000000000E+00			Resid mbdelay (usec)	6.29369E-03 +/- 3.0E-07
Sband delay (usec)		-9.08200000000E-03				0.0000000E+00			Resid sbdelay (usec)	-9.08200E-03 +/- 2.4E-06
Phase delay (usec)		9.11283517691E-07				0.0000000E+00			Resid phdelay (usec)	9.11284E-07 +/- 1.0E-09
Delay rate (us/s)		-5.66846095667E-12				0.00000000000E+00			Resid rate (us/s)	-5.66846E-12 +/- 5.2E-12
Total phase (deg)			28.3			0.00000000000E+00			Resid phase (deg)	28.3 +/- 0.0

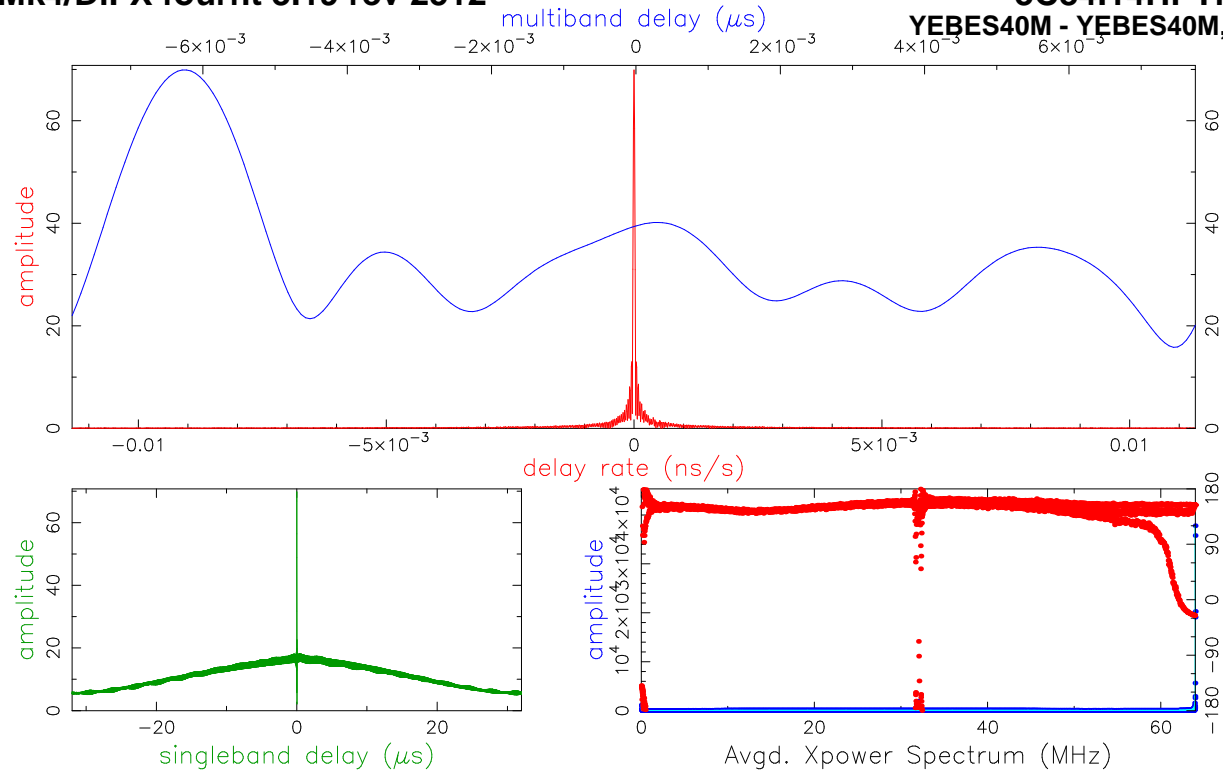
ph/seg (deg) 1.1 0.1  
 amp/seg (%) 4.2 0.1  
 ph/frq (deg) 21.1 0.0  
 amp/frq (%) 99.7 0.1

RMS Theor. Amplitude 70.774 +/- 0.020  
 Search (2048X32) 69.654  
 Interp. 0.000  
 Inc. seg. avg. 69.876  
 Inc. frq. avg. 72.363

Group delay (usec)(sbd) -9.33131250000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 6.29369E-03 +/- 3.0E-07  
 Sband delay (usec) -9.08200000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -9.08200E-03 +/- 2.4E-06  
 Phase delay (usec) 9.11283517691E-07 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 9.11284E-07 +/- 1.0E-09  
 Delay rate (us/s) -5.66846095667E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -5.66846E-12 +/- 5.2E-12  
 Total phase (deg) 28.3 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 28.3 +/- 0.0

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

Y: az 79.7 el 76.5 pa -88.3 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/YY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/YY.W.36.14HPTM

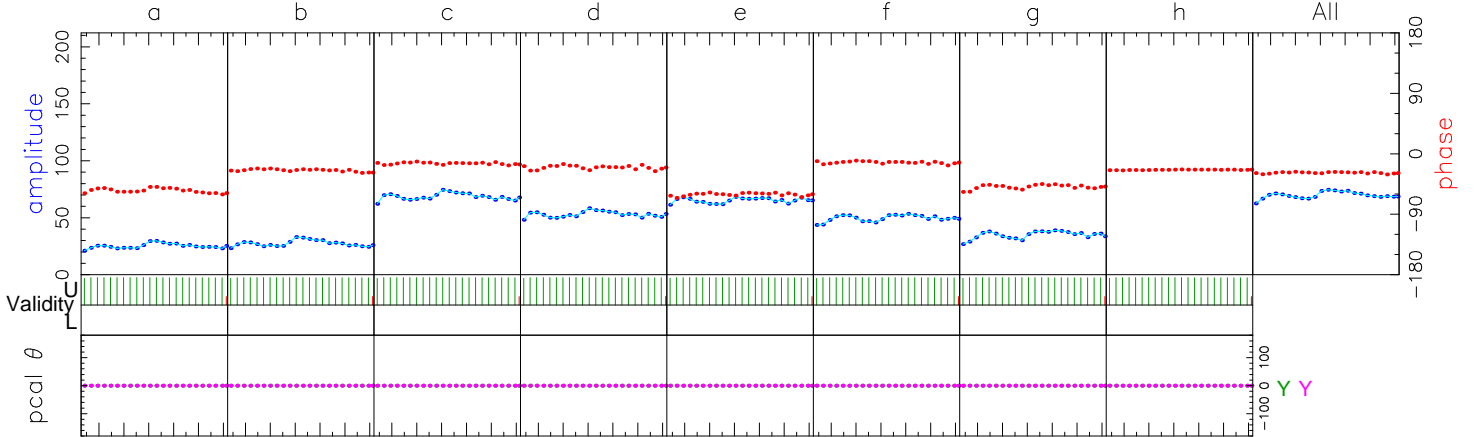


Fringe quality 6

SNR 3572.1  
 Int time 340.644  
 Amp 70.774  
 Phase -28.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.009082  
 MBD -0.006294  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121516.89  
 Stop 122059.94  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:200209  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

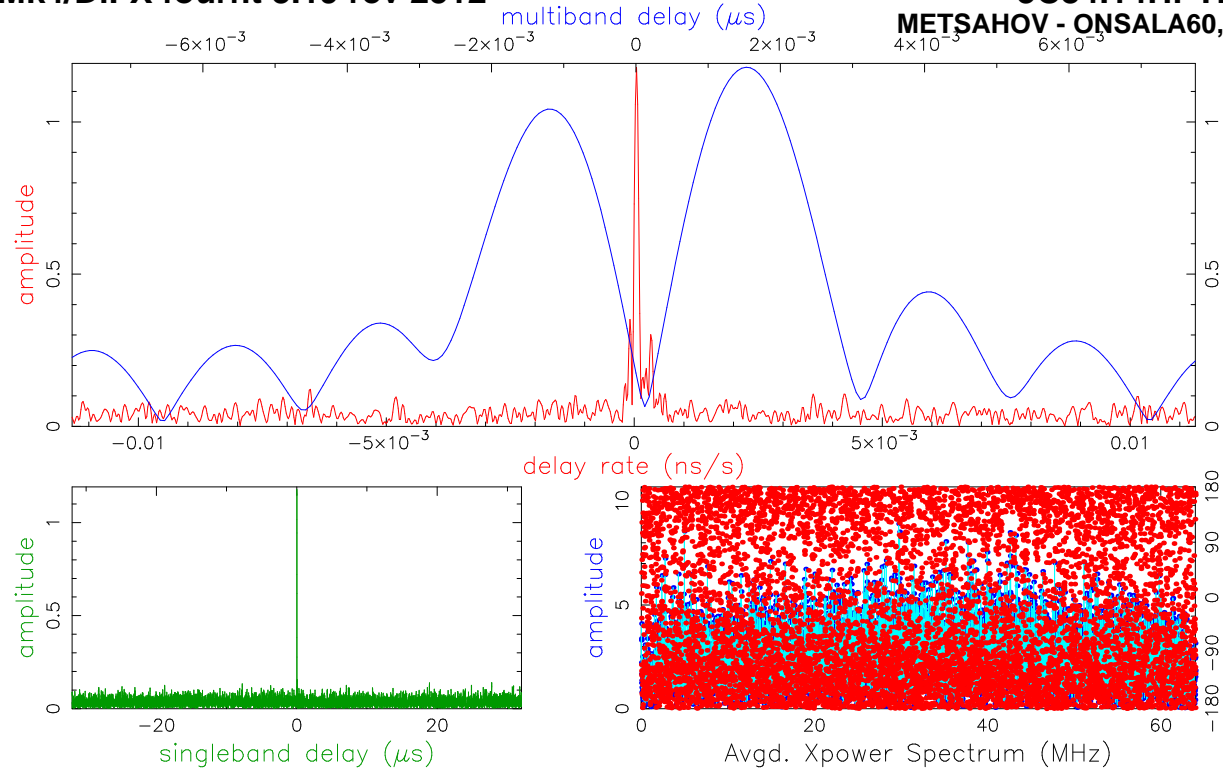
Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.4	-24.5	-14.3	-20.4	-60.5	-12.9	-48.9	-23.9	Phase	-28.3
	25.2	27.6	68.6	53.0	65.2	49.6	34.9	254.7	Ampl.	72.4
	8196.4	8196.1	8195.2	8194.6	8195.2	8198.1	8194.1	8195.5	Sbd box	8195.3
U/L	670/0	670/0	670/0	670/0	670/0	670/0	670/0	670/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	9.33131250000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-6.29369E-03	+/-	3.0E-07
Sband delay (usec)	9.08200000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	9.08200E-03	+/-	2.4E-06
Phase delay (usec)	-9.11283517863E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-9.11284E-07	+/-	1.0E-09
Delay rate (us/s)	5.66846095667E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	5.66846E-12	+/-	5.2E-12
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-28.3	+/-	0.0

ph/seg (deg) 1.1 0.1 Theor. Amplitude 70.774 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 4.2 0.1 Search (2048X32) 69.654 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 21.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 99.7 0.1 Inc. seg. avg. 69.876 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Y: az 79.7 el 76.5 pa -88.3 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 0.000 0.000 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

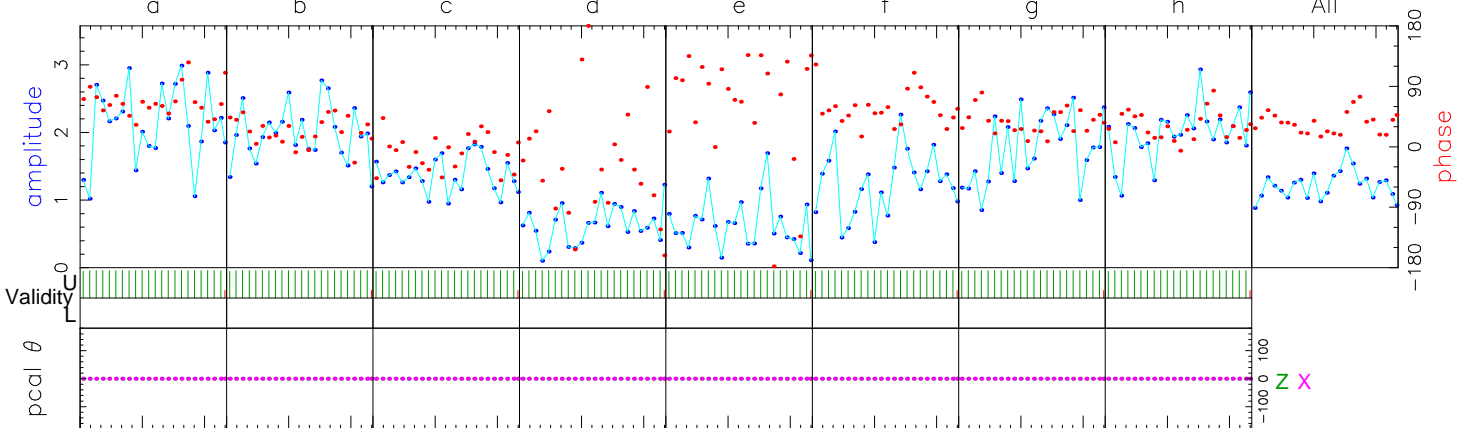


Fringe quality 5

SNR 38.1  
 Int time 136.478  
 Amp 1.192  
 Phase 36.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.017053  
 MBD 0.001559  
 Fringe rate (Hz) 0.002984  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195734  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

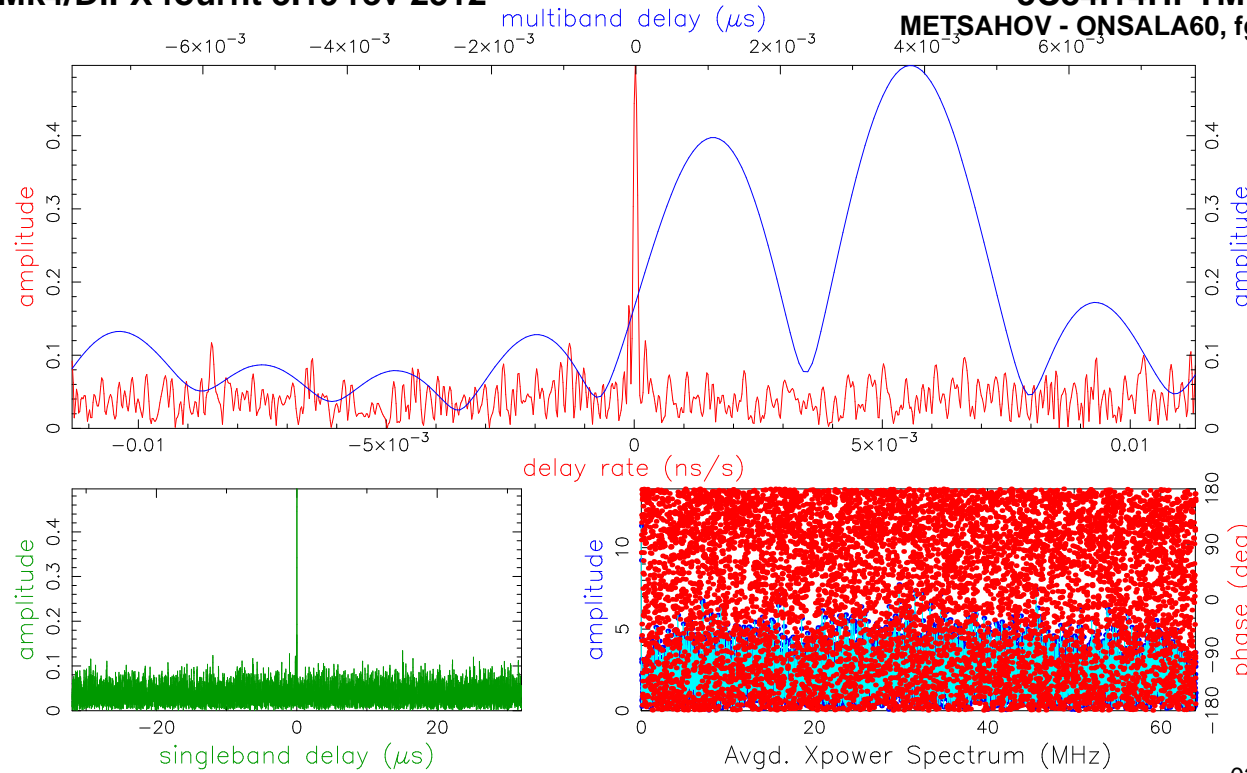
Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

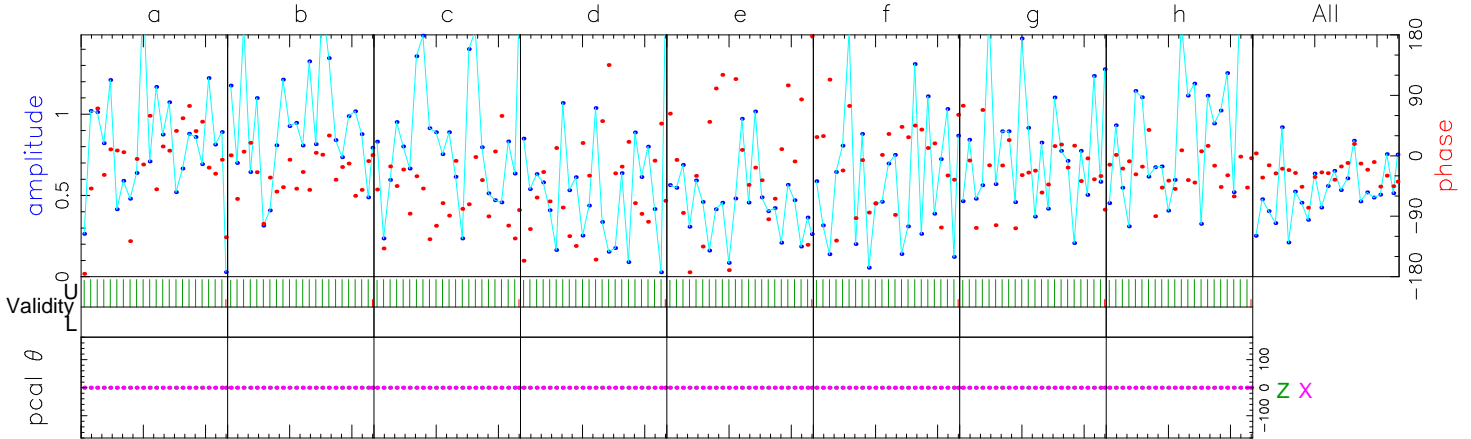
Group delay (usec)(sbd) -4.82350109348E+02 Apriori delay (usec) -4.82367293652E+02 Resid mbdelay (usec) 1.55930E-03 +/- 2.8E-05  
 Sband delay (usec) -4.82350240902E+02 Apriori clock (usec) -4.0763554E+01 Resid sbdelay (usec) 1.70527E-02 +/- 2.3E-04  
 Phase delay (usec) -4.82367292484E+02 Apriori clockrate (us/s) -5.1200000E-07 Resid phdelay (usec) 1.16747E-06 +/- 9.7E-08  
 Delay rate (us/s) -1.26700526742E-01 Apriori rate (us/s) -1.26700561382E-01 Resid rate (us/s) 3.46400E-08 +/- 1.2E-09  
 Total phase (deg) -206.9 Apriori accel (us/s/s) 4.26480812147E-06 Resid phase (deg) 36.2 +/- 3.0

ph/seg (deg) 15.9 7.2 Search (1024X32) 1.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 17.0 12.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 44.6 4.3 Inc. seg. avg. 1.219 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.9 7.4 Inc. frq. avg. 1.319 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 201.9 el 70.5 pa 15.9 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 976.891 457.416 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZX.W.11.14HPTM



Fringe quality 7  
 SNR 15.9  
 Int time 136.478  
 Amp 0.496  
 Phase -24.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.019717  
 MBD 0.003808  
 Fringe rate (Hz) 0.002726  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195816  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

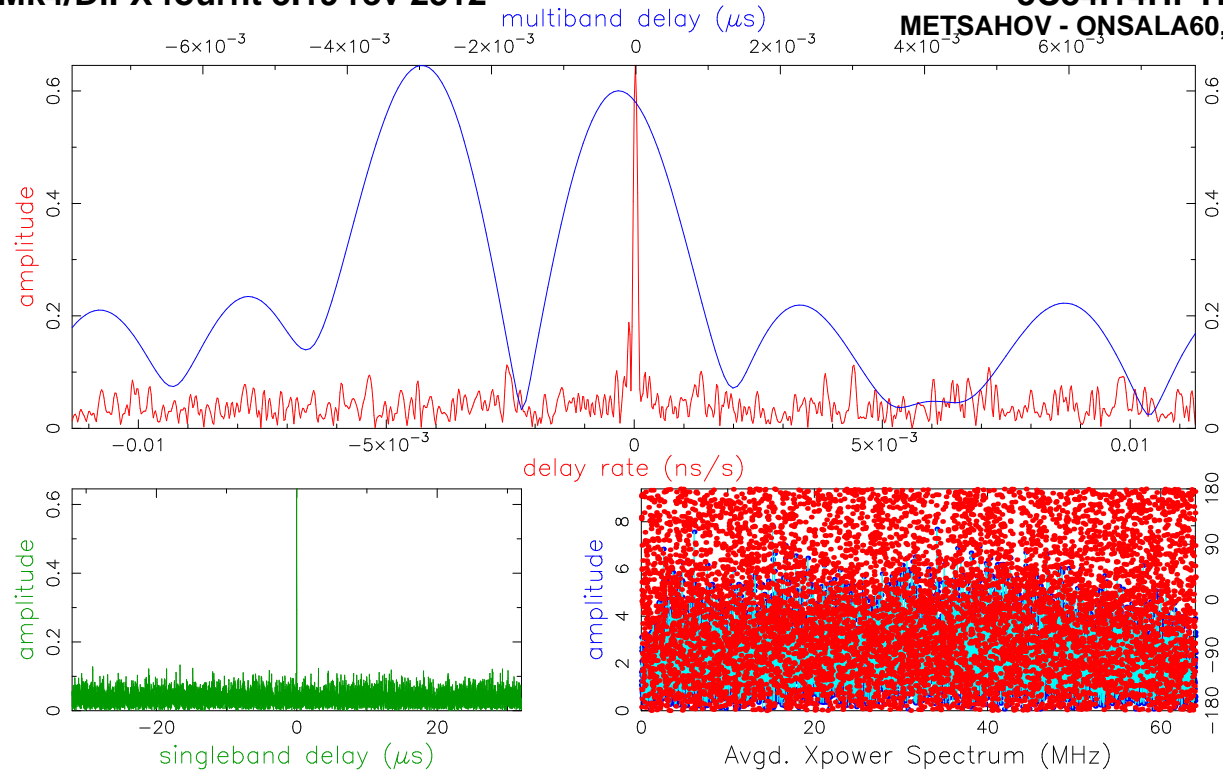
Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0			
Z	1000	1000	1000	1000	1000	1000	1000	1000			
X	1000	1000	1000	1000	1000	1000	1000	1000			
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
Z	1000	1000	1000	1000	1000	1000	1000	1000			
X	1000	1000	1000	1000	1000	1000	1000	1000			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-4.82347860172E+02				-4.82367293652E+02				3.80848E-03	+/- 6.8E-05	
Sband delay (usec)	-4.82347576152E+02				-4.0763554E+01				1.97175E-02	+/- 5.4E-04	
Phase delay (usec)	-4.82367294425E+02				-5.1200000E-07				-7.72888E-07	+/- 2.3E-07	
Delay rate (us/s)	-1.26700529731E-01				-1.26700561382E-01				3.16513E-08	+/- 2.9E-09	
Total phase (deg)			-267.0		4.26480812147E-06				-24.0	+/- 7.2	
	RMS	Theor.	Amplitude	0.496 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-32.000	32.000
ph/seg (deg)	18.8	17.3	Search (1024X32)	0.484	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				mb window (us)	-0.008	0.008
amp/seg (%)	34.4	30.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled			dr window (ns/s)	-0.011	0.011
ph/frq (deg)	31.9	10.2	Inc. seg. avg.	0.499	Sample rate(MISamp/s): 128				ion window (TEC)	0.00	0.00
amp/frq (%)	48.2	17.8	Inc. frq. avg.	0.534	Data rate(Mb/s): 2048	nlags: 8192 t_cohere infinite					

Z: az 201.9 el 70.5 pa 15.9 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 976.891 457.416 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZX.W.21.14HPTM



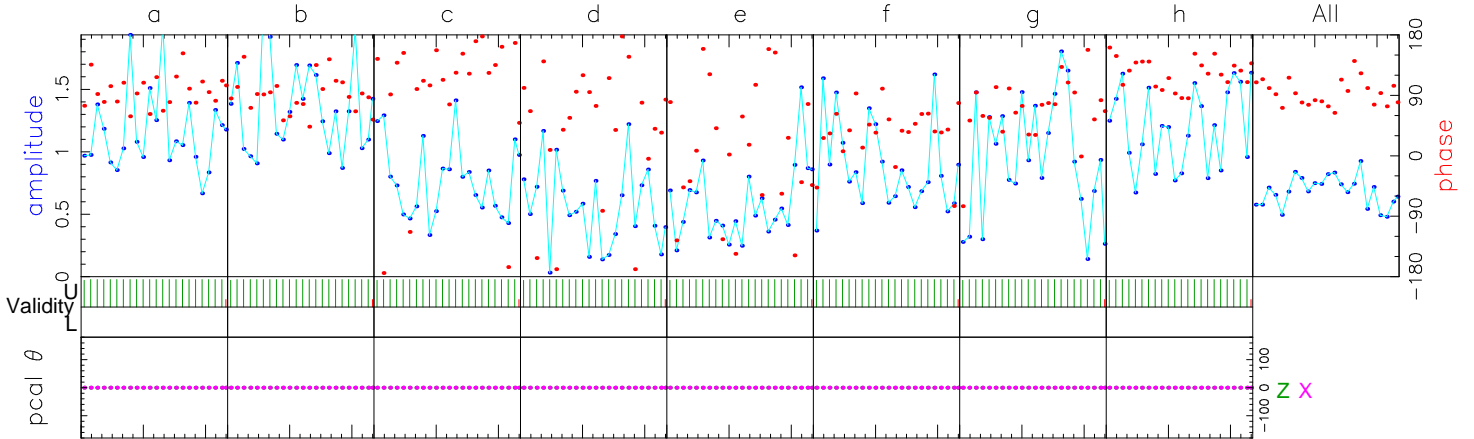


Fringe quality 7

SNR 20.6  
 Int time 136.478  
 Amp 0.645  
 Phase 94.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.019570  
 MBD -0.002969  
 Fringe rate (Hz) 0.002671  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195858  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



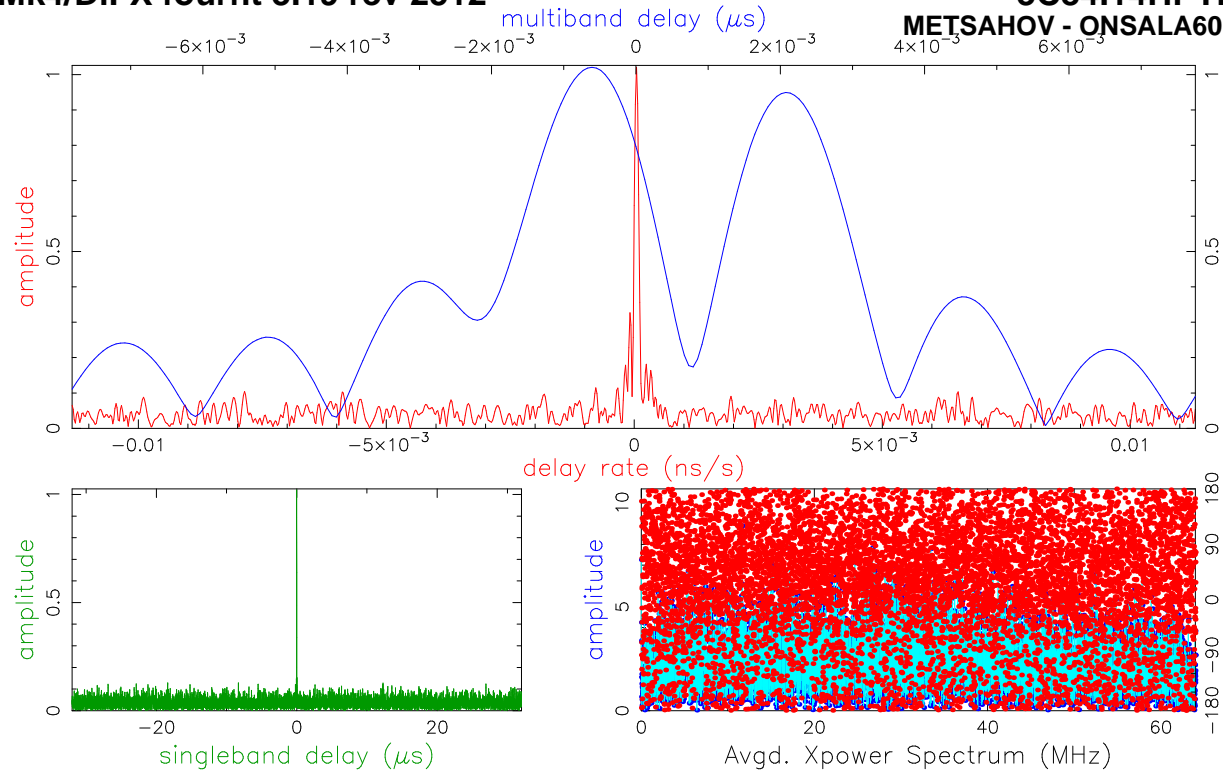
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	92.7	89.8	138.0	109.5	-3.9	39.6	75.9	125.1	Phase	94.1
	1.1	1.2	0.6	0.3	0.1	0.8	0.8	1.1	Ampl.	0.7
	8188.7	8187.9	8188.4	12117.3	3940.6	8187.9	8188.9	8188.3	Sbd box	8188.0
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.82385887172E+02		Apriori delay (usec)		-4.82367293652E+02		Resid mbdelay (usec)		-2.96852E-03	+/- 5.3E-05
Sband delay (usec)	-4.82386864152E+02		Apriori clock (usec)		-4.0763554E+01		Resid sbdelay (usec)		-1.95705E-02	+/- 4.2E-04
Phase delay (usec)	-4.82367290618E+02		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		3.03325E-06	+/- 1.8E-07
Delay rate (us/s)	-1.26700530377E-01		Apriori rate (us/s)		-1.26700561382E-01		Resid rate (us/s)		3.10051E-08	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		4.26480812147E-06		Resid phase (deg)		94.1	+/- 5.6

RMS Theor. Amplitude 0.645 +/- 0.031  
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

ph/seg (deg) 19.2 13.3 Search (1024X32) 0.634  
 amp/seg (%) 19.4 23.3 Interp. 0.000  
 ph/frq (deg) 51.7 7.9 Inc. seg. avg. 0.667  
 amp/frq (%) 59.6 13.7 Inc. frq. avg. 0.741

Z: az 201.9 el 70.5 pa 15.9 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 976.891 457.416 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZX.W.27.14HPTM

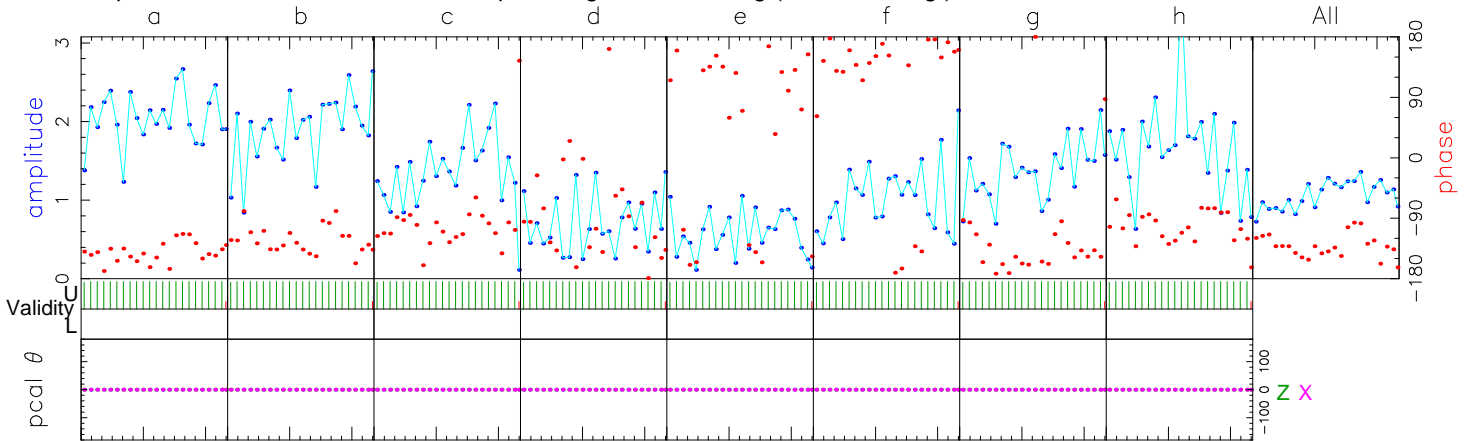


Fringe quality 5

SNR 32.8  
 Int time 136.478  
 Amp 1.026  
 Phase -130.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.016609  
 MBD -0.000629  
 Fringe rate (Hz)  
 0.002992  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195652  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

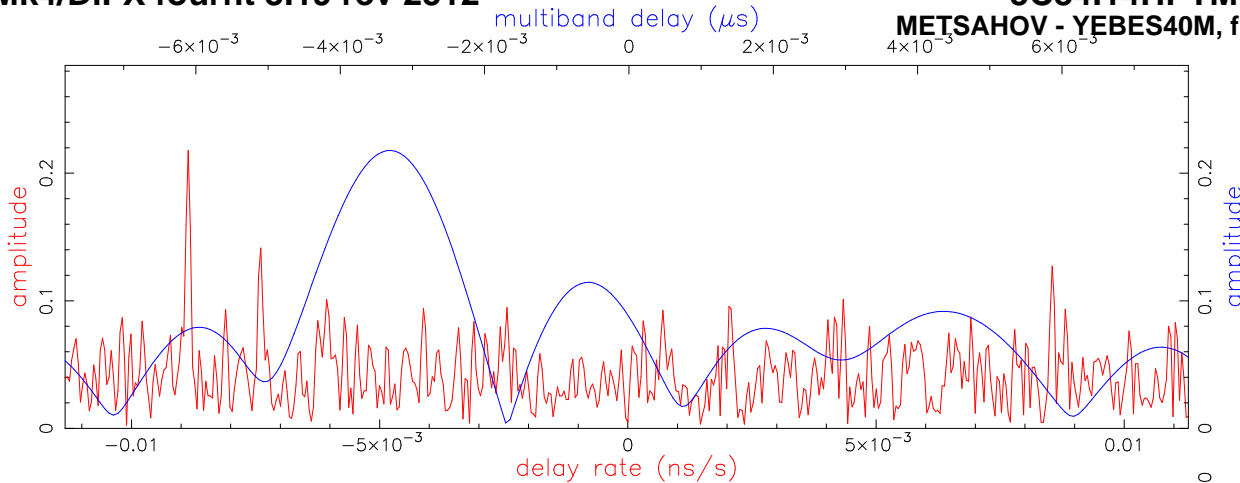
Group delay (usec)(sbd)	-4.82383547567E+02	Apriori delay (usec)		-4.82367293652E+02	Resid mbdelay (usec)		-6.28915E-04	+/-	3.3E-05	
Sband delay (usec)	-4.82383902402E+02	Apriori clock (usec)		-4.0763554E+01	Resid sbdelay (usec)		-1.66088E-02	+/-	2.6E-04	
Phase delay (usec)	-4.82367297843E+02	Apriori clockrate (us/s)		-5.1200000E-07	Resid phdelay (usec)		-4.19168E-06	+/-	1.1E-07	
Delay rate (us/s)	-1.26700526650E-01	Apriori rate (us/s)		-1.26700561382E-01	Resid rate (us/s)		3.47321E-08	+/-	1.4E-09	
Total phase (deg)		-13.0	Apriori accel (us/s/s)		4.26480812147E-06	Resid phase (deg)		-130.0	+/-	3.5

ph/seg (deg) 16.5 8.4 Search (1024X32) 1.026 +/- 0.031 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 17.0 14.6 Interp. 0.000 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 ph/frq (deg) 52.6 4.9 Inc. seg. avg. 1.057 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 56.0 8.6 Inc. frq. avg. 1.190 Sample rate(MISamp/s): 128 Data rate (Mb/s): 2048 nlags: 8192 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 201.9 el 70.5 pa 15.9 X: az 172.2 el 74.1 pa -4.5 u,v (fr/asec) 976.891 457.416 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZX..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZX.W.4.14HPTM

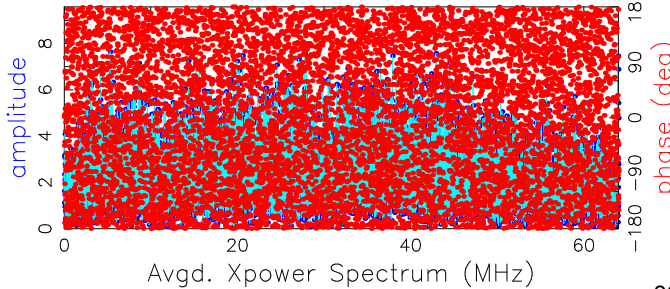
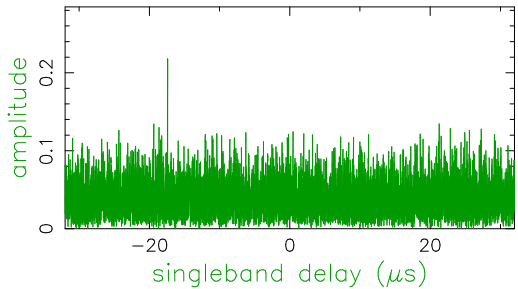


Mk4/DiFX fourfit 3.19 rev 2512

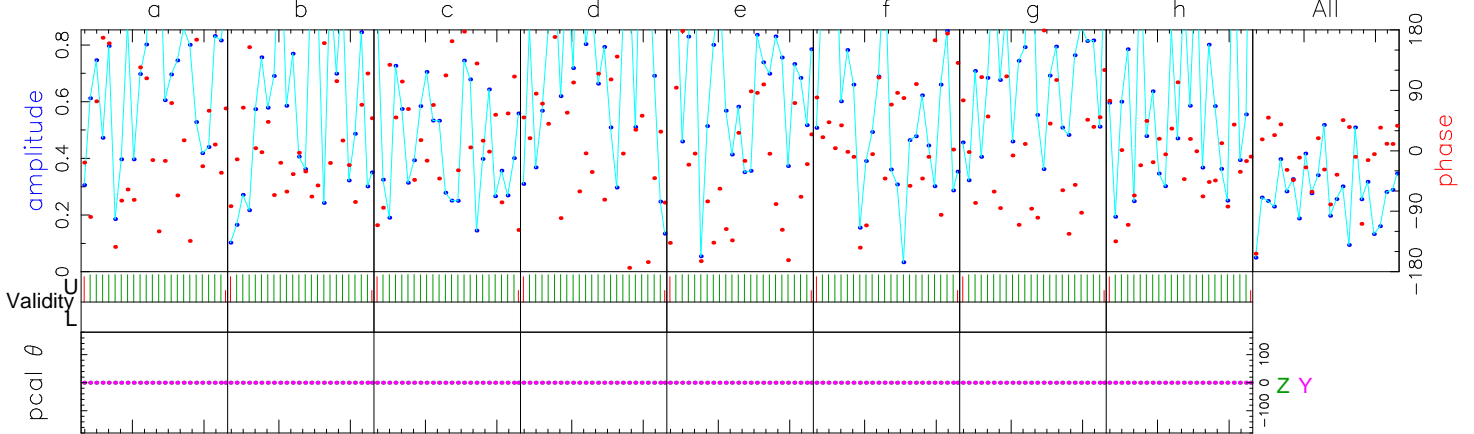
3C84.14HPTM, No0002, ZY  
METSALHOV - YEBES40M, fgroup W, pol LL



Fringe quality 0  
SNR 6.5  
Int time 118.882  
Amp 0.285  
Phase -6.3  
PFD 1.7e-01  
Delays (us)  
SBD -17.398479  
MBD -0.003315  
Fringe rate (Hz)  
-0.765676  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. f201a  
Exper # 16383  
Yr:day 2020:114  
Start 121516.89  
Stop 121717.21  
FRT 121800.00  
Corr/FF/build  
2020:114:192618  
2020:114:195634  
2020:014:135814  
RA & Dec (J2000)  
03h19m48.160095s  
+41°30'42.104042"



Amp. and Phase vs. time for each freq., 24 segs, 10 APs / seg (5.12 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	235/0	235/0	235/0	235/0	235/0	235/0	235/0	235/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

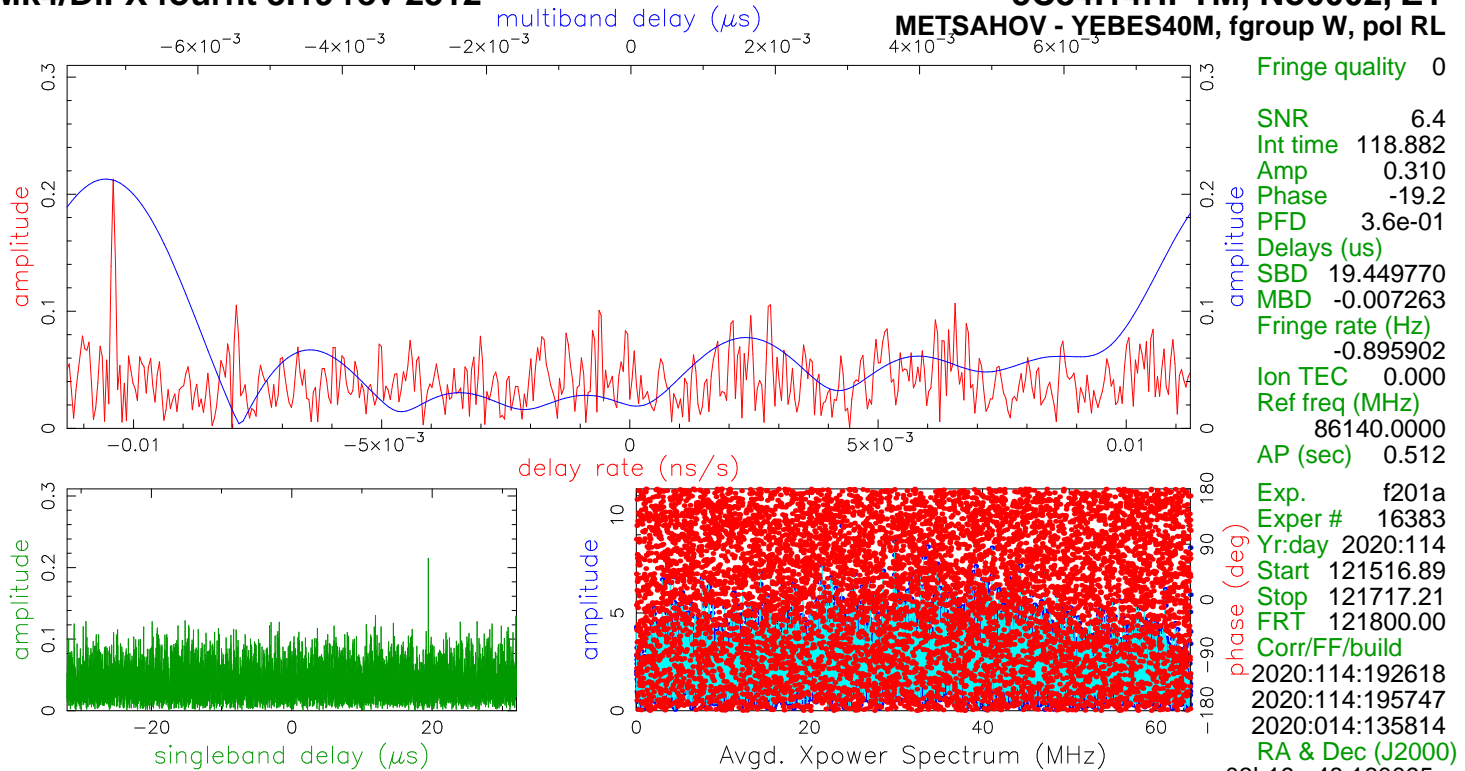
Group delay (usec)(sbd)	-7.58930553402E+02	Apriori delay (usec)	-7.41536613788E+02	Resid mbdelay (usec)	-3.31461E-03	+/-	1.7E-04
Sband delay (usec)	-7.58935093038E+02	Apriori clock (usec)	-1.2062220E+01	Resid sbdelay (usec)	-1.73985E+01	+/-	1.3E-03
Phase delay (usec)	-7.41536613991E+02	Apriori clockrate (us/s)	-2.0400000E-07	Resid phdelay (usec)	-2.03436E-07	+/-	5.7E-07
Delay rate (us/s)	-3.62758491119E-01	Apriori rate (us/s)	-3.62749602380E-01	Resid rate (us/s)	-8.88874E-06	+/-	8.2E-09
Total phase (deg)		Apriori accel (us/s/s)	2.02369179092E-05	Resid phase (deg)	-6.3	+/-	17.6

ph/seg (deg)	49.5	Theor.	43.2	Amplitude	0.285 +/- 0.044	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	58.1	Search (512X32)	0.210	Search	0.210	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	28.3	Inc. seg. avg.	0.282	Inc. seg. avg.	0.282	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.4	Inc. frq. avg.	0.278	Inc. frq. avg.	0.278	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00

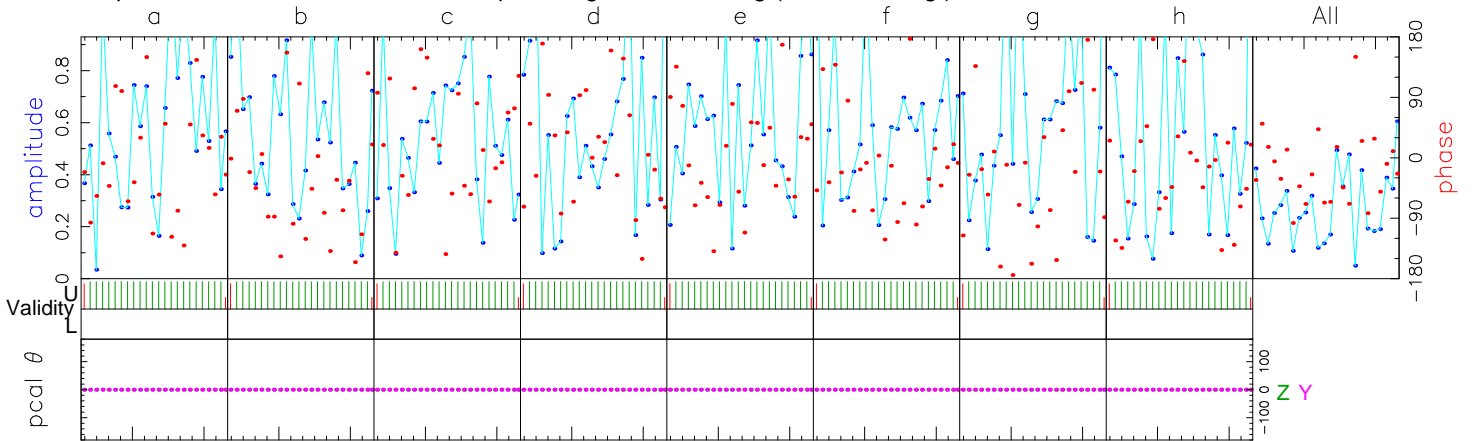
Z: az 201.9 el 70.5 pa 15.9 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 2808.684 2831.119 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZY.W.1.14HPTM

Mk4/DiFX fourfit 3.19 rev 2512

3C84.14HPTM, No0002, ZY  
 METSAHOV - YEYES40M, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 24 segs, 10 APs / seg (5.12 sec / seg.), time ticks 10 sec



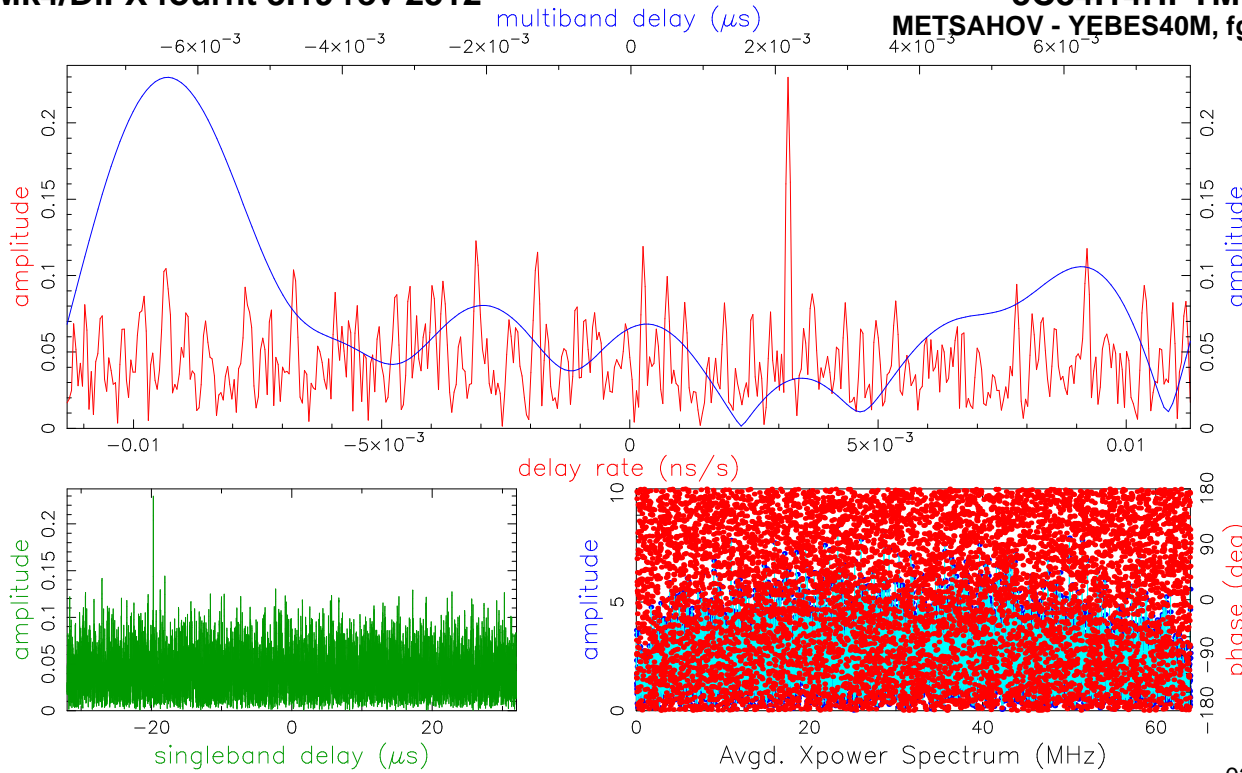
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-31.2	-46.6	3.8	9.1	5.4	-40.5	-34.2	-20.4	Phase	-19.2
	0.3	0.3	0.3	0.3	0.4	0.5	0.2	0.4	Ampl.	0.3
	13250.6	1460.9	1448.8	3429.3	760.3	14336.2	13777.1	14982.8	Sbd box	13172.1
U/L	235/0	235/0	235/0	235/0	235/0	235/0	235/0	235/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-7.22090751537E+02	Apriori delay (usec)	-7.41536613788E+02	Resid mbdelay (usec)	-7.26275E-03	+/-	1.7E-04
Sband delay (usec)	-7.22086844288E+02	Apriori clock (usec)	-1.2062220E+01	Resid sbdelay (usec)	1.94498E+01	+/-	1.4E-03
Phase delay (usec)	-7.41536614407E+02	Apriori clockrate (us/s)	-2.0400000E-07	Resid phdelay (usec)	-6.19878E-07	+/-	5.8E-07
Delay rate (us/s)	-3.62760002909E-01	Apriori rate (us/s)	-3.62749602380E-01	Resid rate (us/s)	-1.04005E-05	+/-	8.4E-09
Total phase (deg)	-347.4	Apriori accel (us/s/s)	2.02369179092E-05	Resid phase (deg)	-19.2	+/-	18.0

ph/seg (deg)	54.0	Theor.	44.1	Amplitude	0.310 +/- 0.049	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.0		77.0	Search (512X32)	0.204	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-32.000 32.000	
ph/frq (deg)	24.2		25.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.6		44.5	Inc. seg. avg.	0.304	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.301	Data rate (Mb/s):	2048	nlags: 8192 t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 201.9 el 70.5 pa 15.9      Y: az 79.7 el 76.5 pa -88.3      u, v (fr/asec) 2808.684 2831.119      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/f201a/FRINGE/1234/No0002/ZY..14HPTM    Output file: /Exps/f201a/FRINGE/1234/No0002/ZY.W.19.14HPTM



Fringe quality 0

SNR 6.9

Int time 118.882

Amp 0.238

Phase -177.0

PFD 1.7e-02

Delays (us)

SBD -19.722895

MBD -0.006425

Fringe rate (Hz)

0.276154

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. f201a

Exper # 16383

Yr:day 2020:114

Start 121516.89

Stop 121717.21

FRT 121800.00

Corr/FF/build

2020:114:192618

2020:114:195658

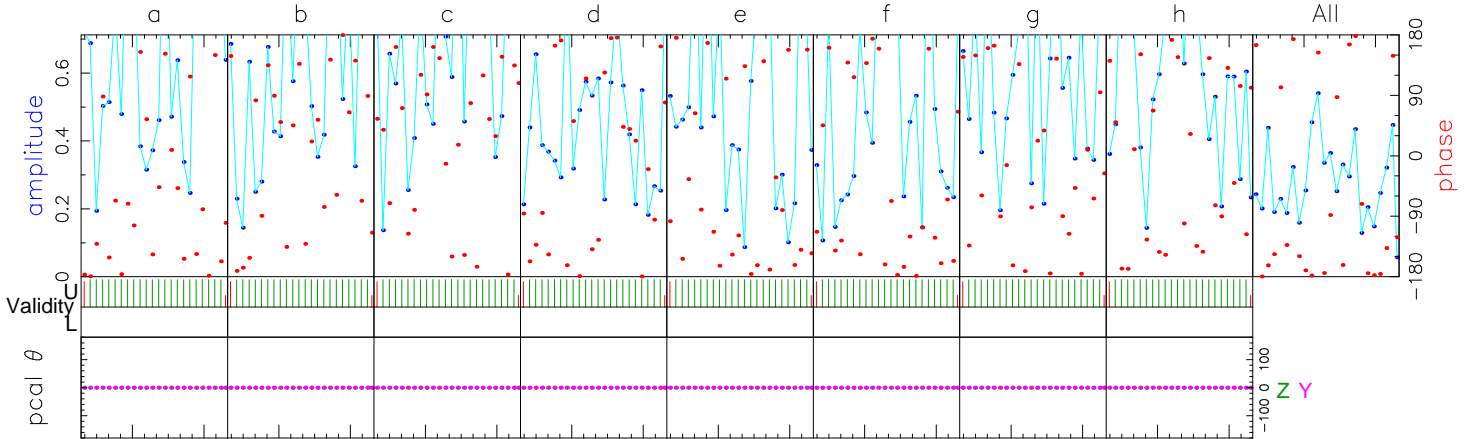
2020:014:135814

RA & Dec (J2000)

03h19m48.160095s

+41°30'42.104042"

Amp. and Phase vs. time for each freq., 24 segs, 10 APs / seg (5.12 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-147.8	164.0	115.9	-174.2	-164.6	-168.7	176.9	-171.1	Phase	-177.0
	0.4	0.1	0.3	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
	14371.2	5057.2	7729.6	2717.2	7786.0	7183.2	15109.8	96.7	Sbd box	3143.9
U/L	235/0	235/0	235/0	235/0	235/0	235/0	235/0	235/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.61261788670E+02					-7.41536613788E+02			Resid mbdelay (usec)	-6.42488E-03 +/- 1.6E-04
Sband delay (usec)	-7.61259507538E+02					-1.2062220E+01			Resid sbdelay (usec)	-1.97229E+01 +/- 1.3E-03
Phase delay (usec)	-7.41536619495E+02					-2.0400000E-07			Resid phdelay (usec)	-5.70740E-06 +/- 5.4E-07
Delay rate (us/s)	-3.62746396511E-01					-3.62749602380E-01			Resid rate (us/s)	3.20587E-06 +/- 7.8E-09
Total phase (deg)			-145.2			2.02369179092E-05			Resid phase (deg)	-177.0 +/- 16.7

RMS Theor. Amplitude 0.238 +/- 0.035

ph/seg (deg) 43.7 41.0 Search (512X32) 0.213

amp/seg (%) 55.6 71.5 Interp. 0.000

ph/frq (deg) 31.7 23.6 Inc. seg. avg. 0.238

amp/frq (%) 32.7 41.3 Inc. frq. avg. 0.247

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000

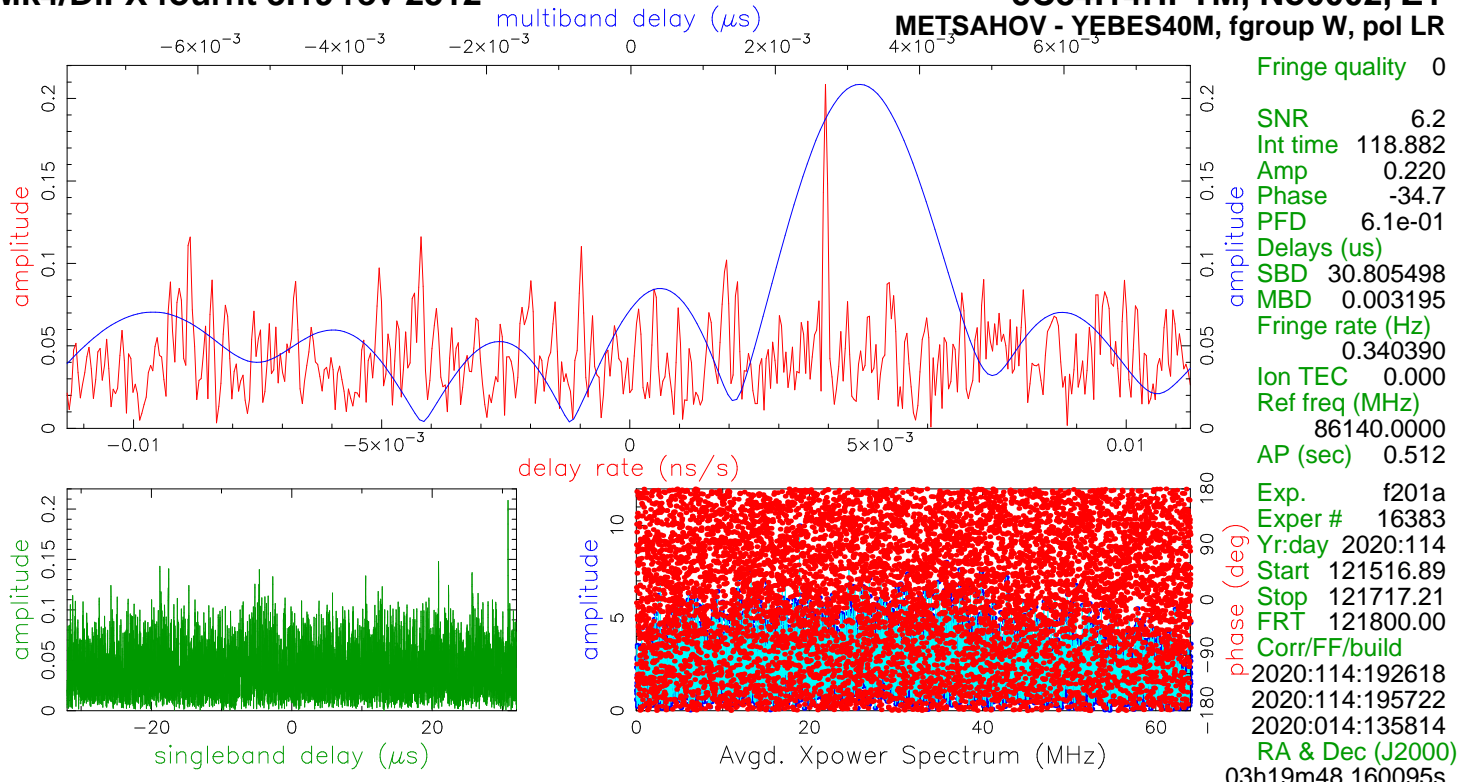
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

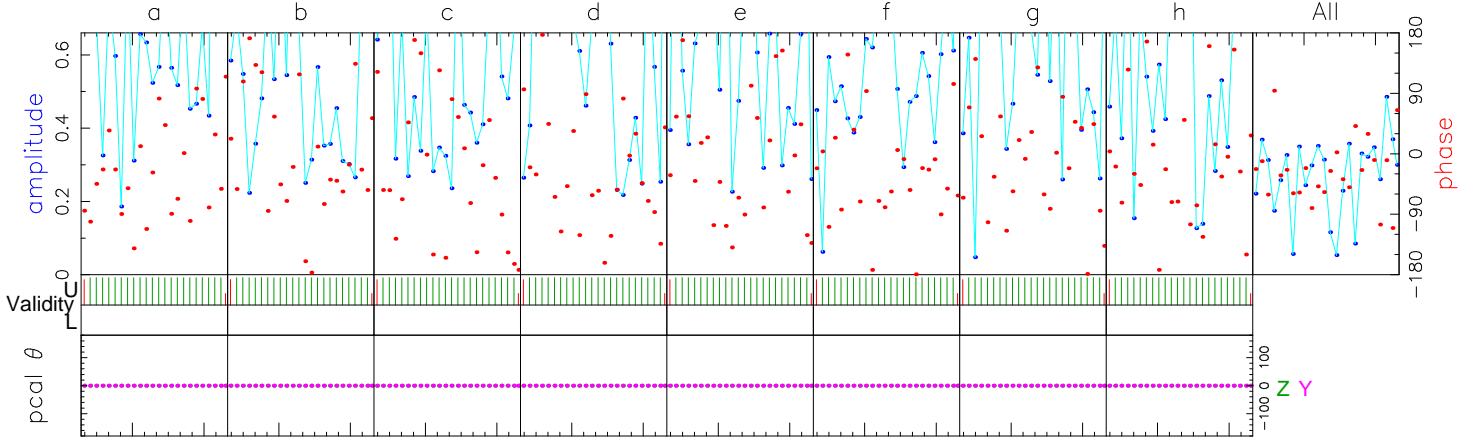
Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 201.9 el 70.5 pa 15.9 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 2808.684 2831.119 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZY.W.8.14HPTM



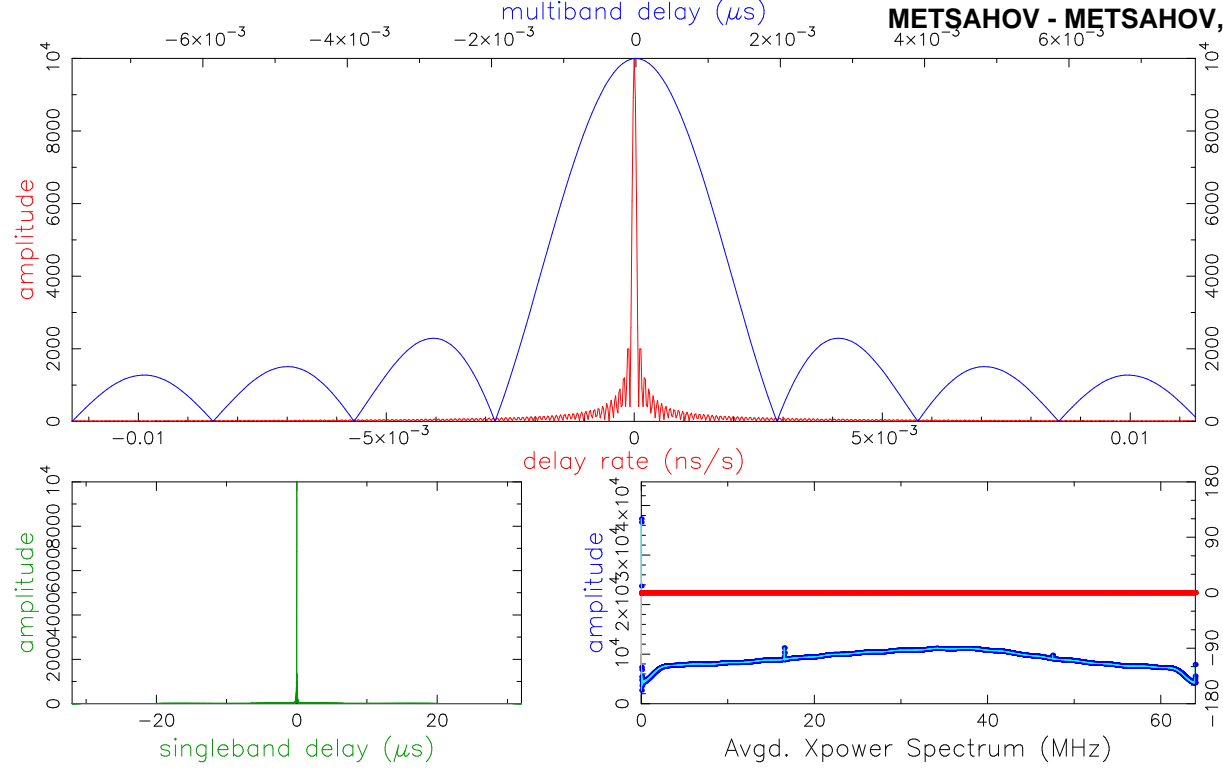
Amp. and Phase vs. time for each freq., 24 segs, 10 APs / seg (5.12 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-22.5	-25.1	-56.6	-59.9	-22.4	-51.9	-5.7	-54.6	Phase	-34.7	
	0.3	0.2	0.1	0.3	0.1	0.3	0.3	0.2	Ampl.	0.2	
	4762.9	15013.5	13504.6	12865.8	9669.7	1198.5	8807.1	117.8	Sbd box	16079.2	
U/L	235/0	235/0	235/0	235/0	235/0	235/0	235/0	235/0	APs used		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec)(sbd)	-7.10736543415E+02		Apriori delay (usec)		-7.41536613788E+02		Resid mbdelay (usec)		3.19537E-03	+/- 1.7E-04	
Sband delay (usec)	-7.10731116288E+02		Apriori clock (usec)		-1.2062220E+01		Resid sbdelay (usec)		3.08055E+01	+/- 1.4E-03	
Phase delay (usec)	-7.41536614907E+02		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		-1.11975E-06	+/- 5.9E-07	
Delay rate (us/s)	-3.62745650794E-01		Apriori rate (us/s)		-3.62749602380E-01		Resid rate (us/s)		3.95159E-06	+/- 8.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.02369179092E-05		Resid phase (deg)		-34.7	+/- 18.4	
	RMS	Theor.	Amplitude	0.220 +/- 0.035		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	46.2	45.0	Search (512X32)	0.201		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-32.000	32.000	
amp/seg (%)	59.6	78.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	22.5	26.0	Inc. seg. avg.	0.218		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.9	45.3	Inc. frq. avg.	0.212		Data rate(Mb/s): 2048		nlags: 8192 t_cohere infinite	ion window (TEC)	0.00	0.00

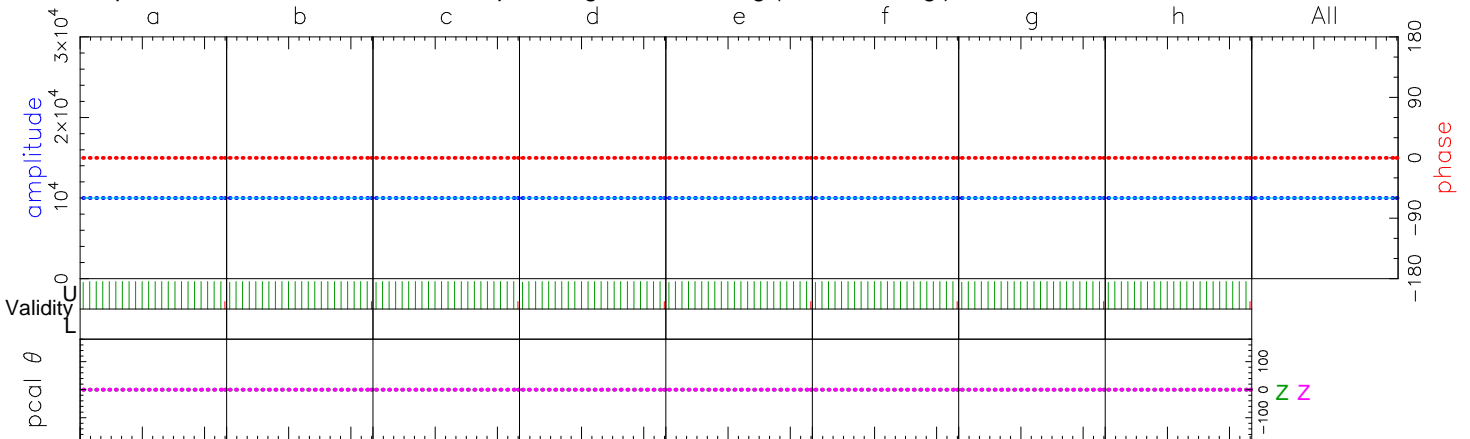
Z: az 201.9 el 70.5 pa 15.9 Y: az 79.7 el 76.5 pa -88.3 u,v (fr/asec) 2808.684 2831.119 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZY..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZY.W.9.14HPTM



Fringe quality 9  
 SNR 319469.6  
 Int time 136.478  
 Amp 10000.000  
 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. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195733  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



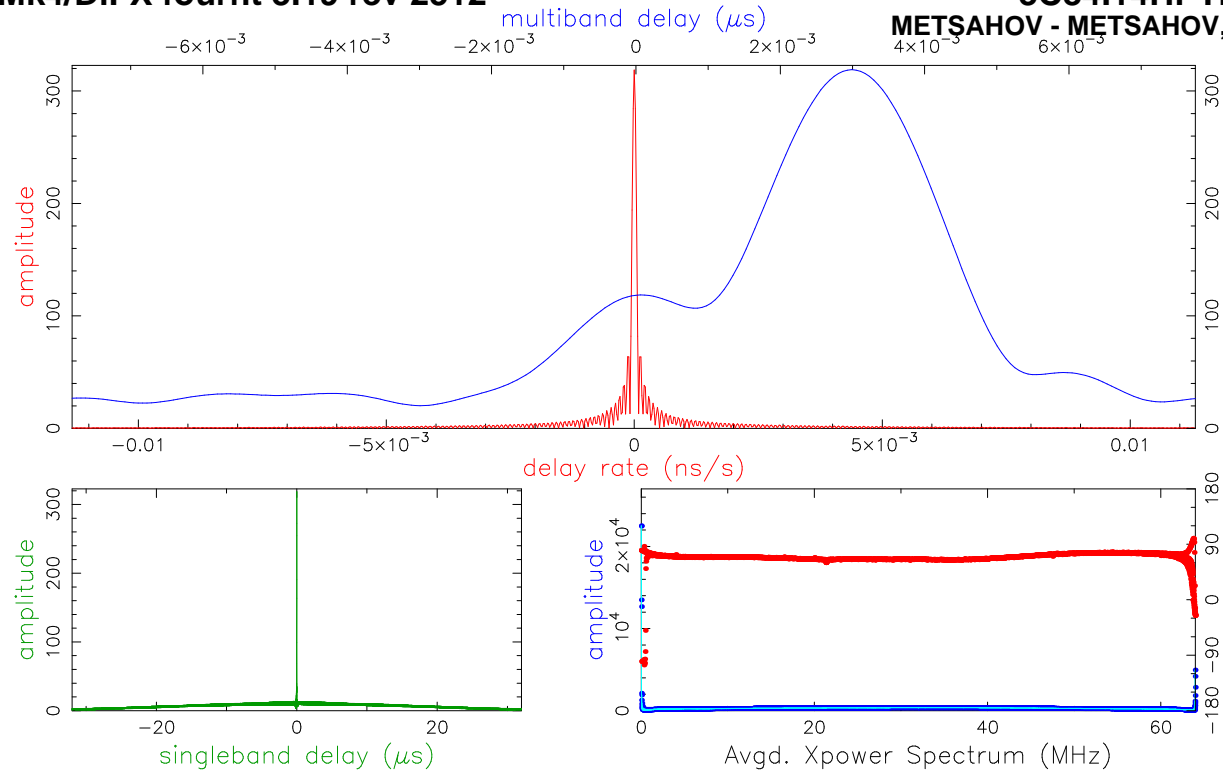
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.4E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.7E-08  
 Phase delay (usec) 3.85628243447E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.85628E-20 +/- 1.2E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 1.5E-13  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 201.9 el 70.5 pa 15.9 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZZ.W.10.14HPTM



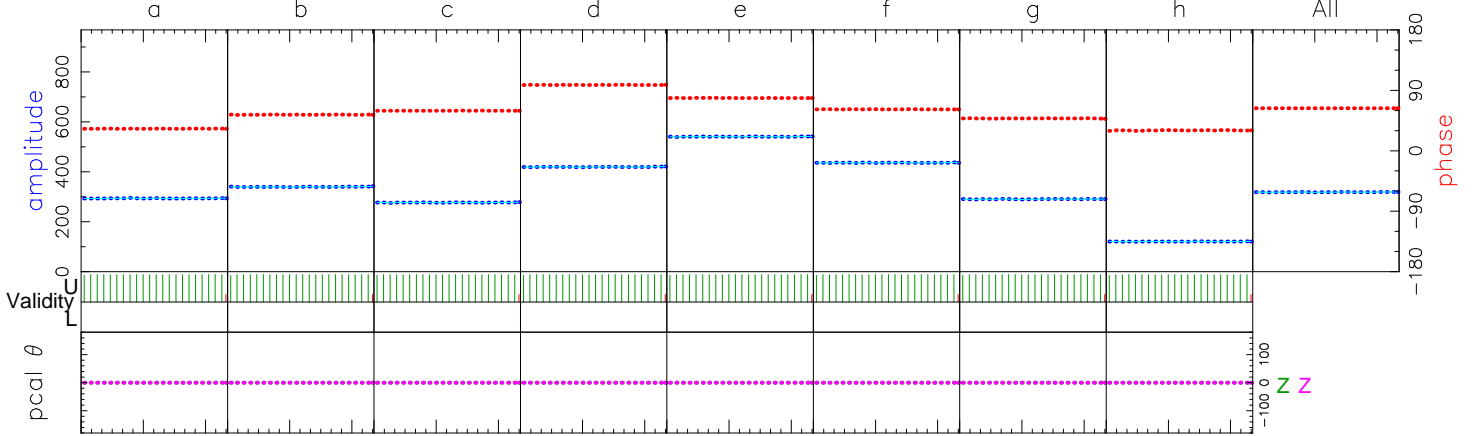


Fringe quality 6

SNR 10312.6  
 Int time 136.478  
 Amp 322.803  
 Phase 63.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.002403  
 MBD 0.002940  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195814  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec

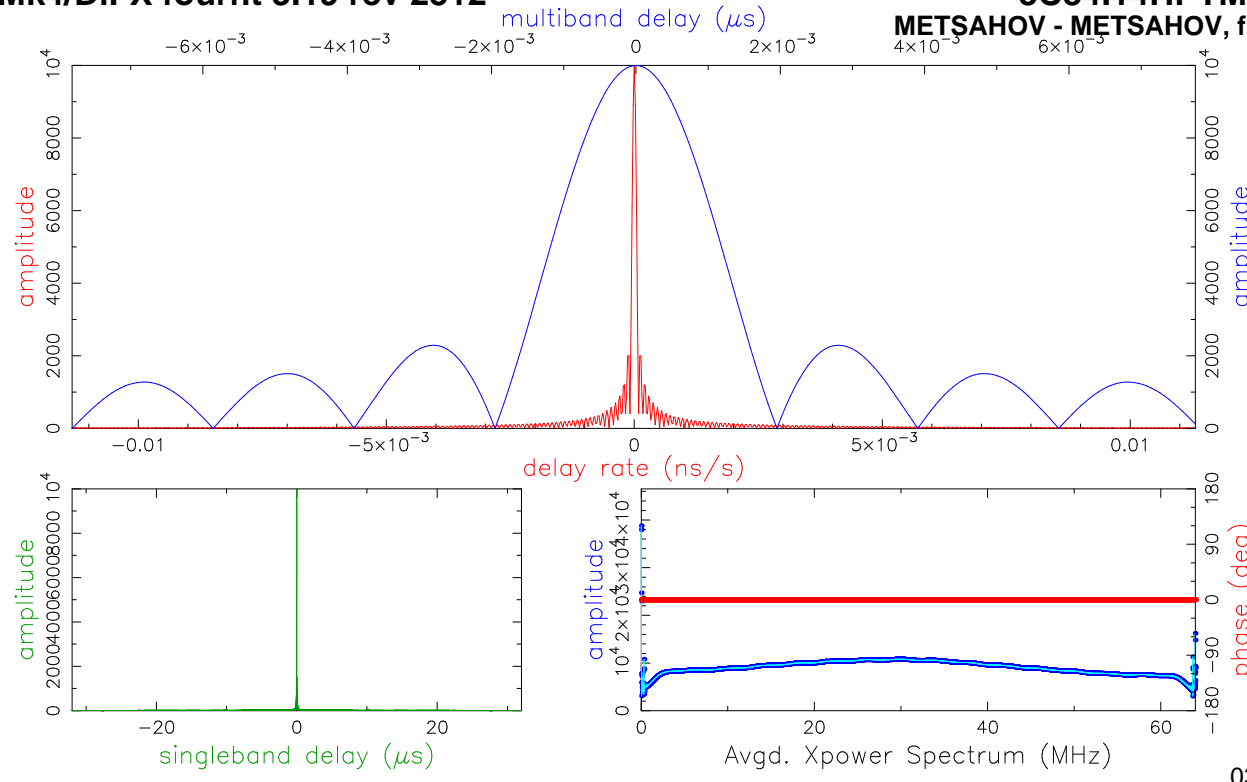


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	32.9	53.7	59.6	98.0	78.5	61.7	48.1	30.3	Phase	63.4
	293.8	339.9	277.1	419.6	540.7	436.3	290.7	121.0	Ampl.	339.9
	8193.9	8193.8	8194.3	8193.9	8193.4	8193.2	8193.2	8192.7	Sbd box	8193.6
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.93968750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.93969E-03	+/- 1.1E-07
Sband delay (usec)	2.40275000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		2.40275E-03	+/- 8.4E-07
Phase delay (usec)	2.04385201137E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.04385E-06	+/- 3.6E-10
Delay rate (us/s)	0.00000000000E+00		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		0.00000E+00	+/- 4.5E-12
Total phase (deg)	63.4		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		63.4	+/- 0.0

RMS Theor. Amplitude 322.803 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 318.603 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 1.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 25.2 0.0 Inc. seg. avg. 318.715 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 37.1 0.0 Inc. frq. avg. 339.886 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

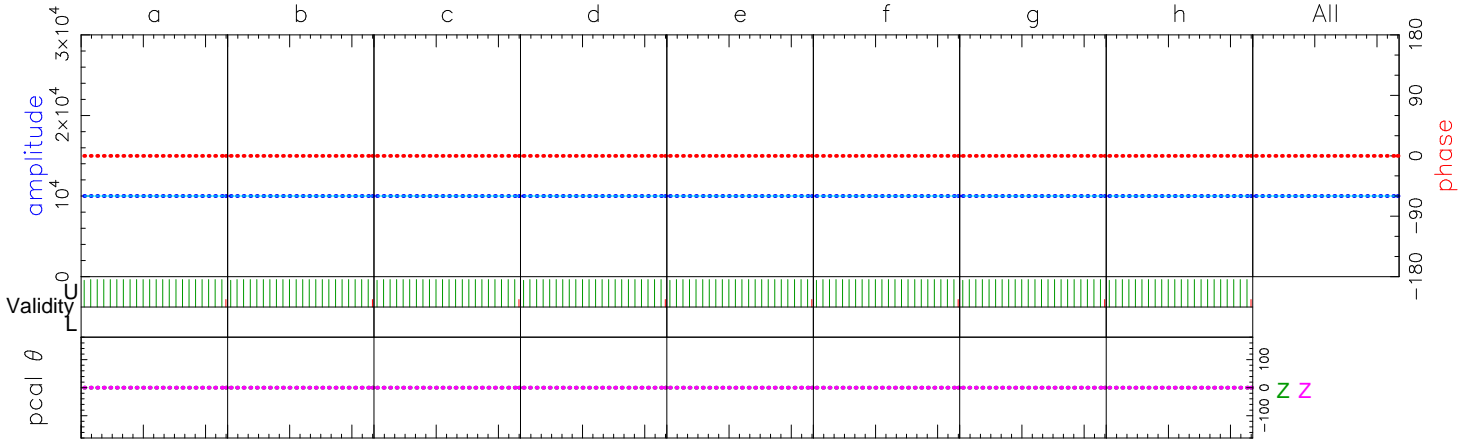
Z: az 201.9 el 70.5 pa 15.9 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZZ.W.20.14HPTM



Fringe quality 9  
 SNR 319469.6  
 Int time 136.478  
 Amp 10000.000  
 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. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195651  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec

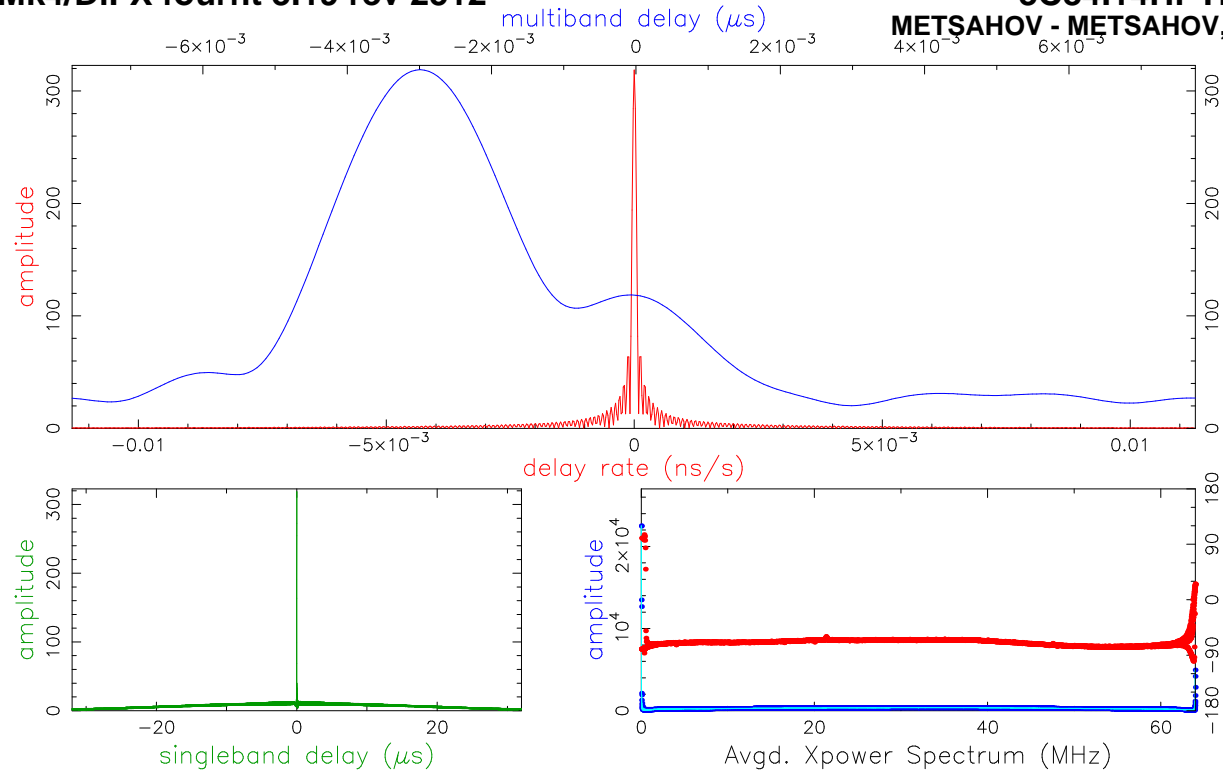


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.4E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.7E-08  
 Phase delay (usec) -1.19631018125E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.19631E-19 +/- 1.2E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 1.5E-13  
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 201.9 el 70.5 pa 15.9 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZZ.W.2.14HPTM

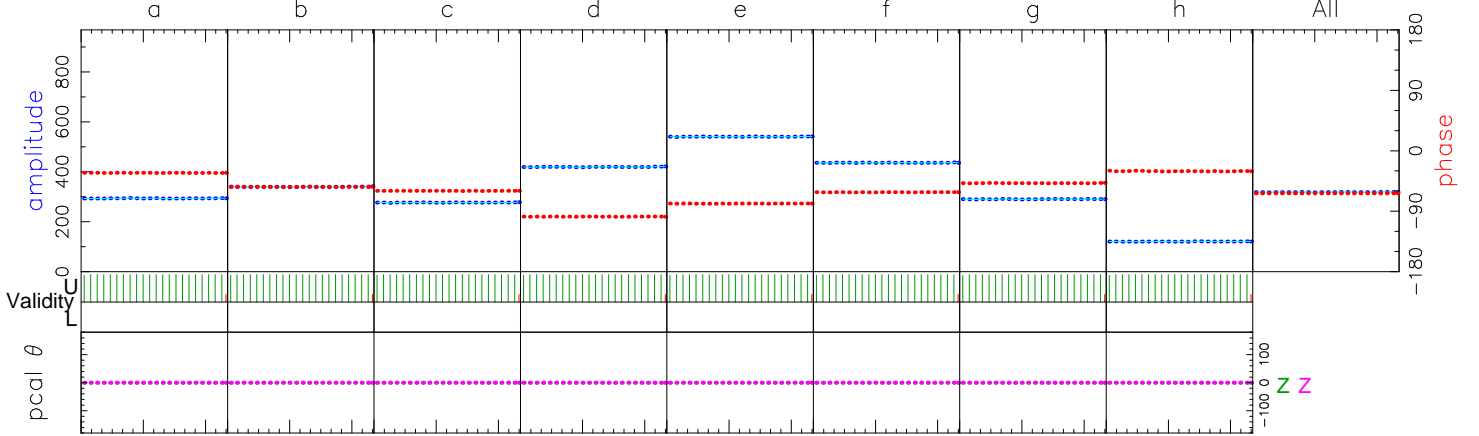


Fringe quality 6

SNR 10312.6  
 Int time 136.478  
 Amp 322.803  
 Phase -63.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.002403  
 MBD -0.002940  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. f201a  
 Exper # 16383  
 Yr:day 2020:114  
 Start 121500.00  
 Stop 121717.21  
 FRT 121800.00  
 Corr/FF/build  
 2020:114:192618  
 2020:114:195855  
 2020:014:135814  
 RA & Dec (J2000)  
 03h19m48.160095s  
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-32.9	-53.7	-59.6	-98.0	-78.5	-61.7	-48.1	-30.3	Phase	-63.4
	293.8	339.9	277.1	419.6	540.7	436.3	290.7	121.0	Ampl.	339.9
	8192.1	8192.2	8191.7	8192.1	8192.6	8192.8	8192.8	8193.3	Sbd box	8192.4
U/L	268/0	268/0	268/0	268/0	268/0	268/0	268/0	268/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -2.93968750000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -2.93969E-03 +/- 1.1E-07  
 Sband delay (usec) -2.40275000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.40275E-03 +/- 8.4E-07  
 Phase delay (usec) -2.04385201141E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.04385E-06 +/- 3.6E-10  
 Delay rate (us/s) 0.00000000000E+00 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 4.5E-12  
 Total phase (deg) -63.4 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -63.4 +/- 0.0

RMS Theor. Amplitude 322.803 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 318.603 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -32.000 32.000  
 amp/seg (%) 1.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 25.2 0.0 Inc. seg. avg. 318.715 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 37.1 0.0 Inc. frq. avg. 339.886 Data rate(Mb/s): 2048 nlags: 8192 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 201.9 el 70.5 pa 15.9 Z: az 201.9 el 70.5 pa 15.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/f201a/FRINGE/1234/No0002/ZZ..14HPTM Output file: /Exps/f201a/FRINGE/1234/No0002/ZZ.W.26.14HPTM