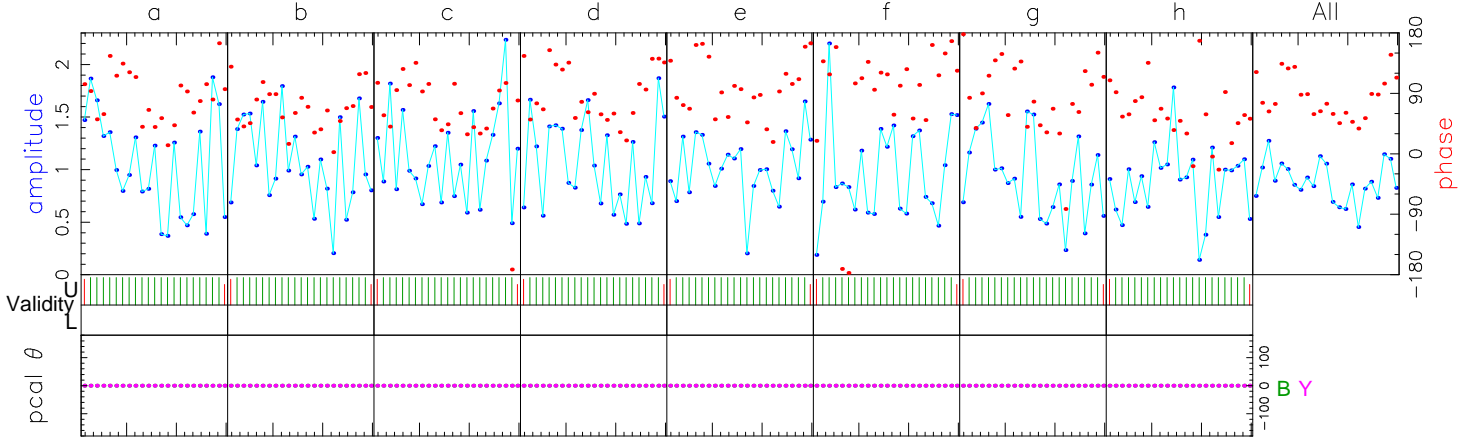


Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



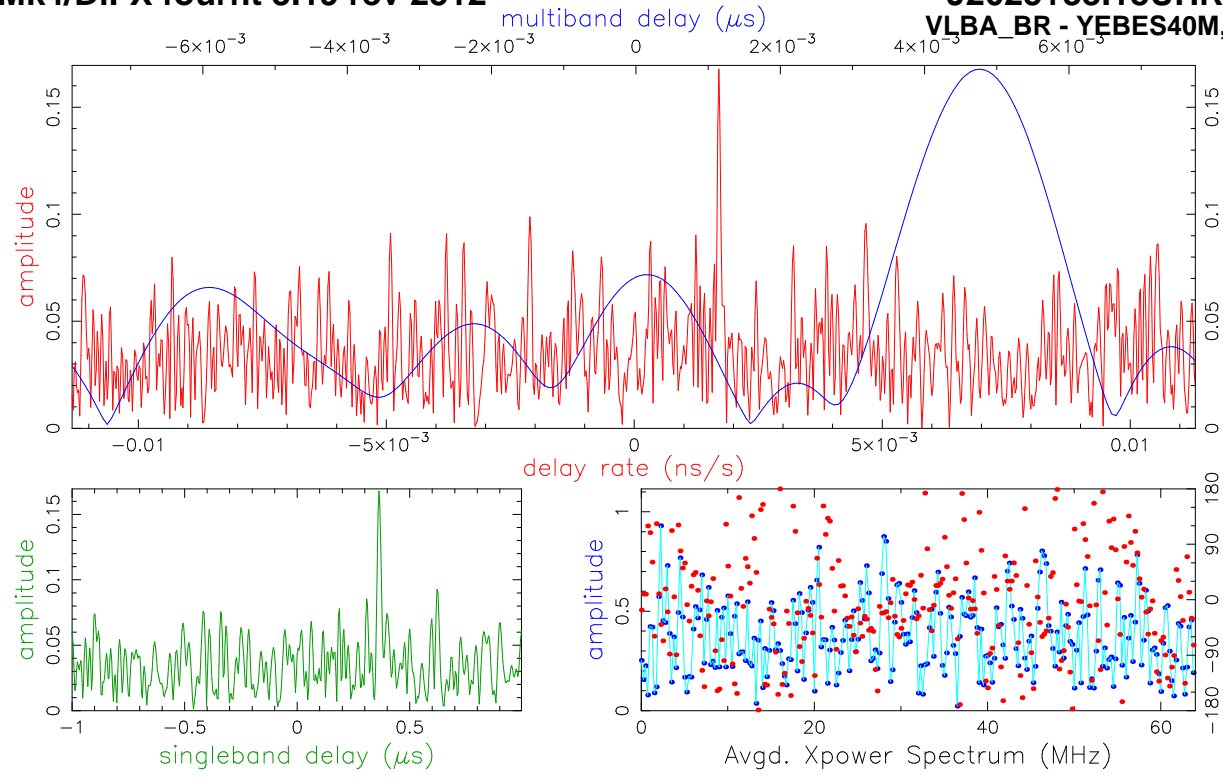
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	88.3	68.3	77.2	92.3	104.4	120.1	88.5	50.9	Phase	86.0
	0.8	0.9	0.9	0.8	0.8	0.8	0.7	0.7	Ampl.	0.8
	259.0	258.7	259.1	258.9	258.8	258.5	258.8	258.0	Sbd box	258.9
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs 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)	-1.62429925670E+03	Apriori delay (usec)	-1.62430591885E+03	Resid mbdelay (usec)	6.66215E-03	+/-	3.9E-05
Sband delay (usec)	-1.62429850810E+03	Apriori clock (usec)	1.0769939E+00	Resid sbdelay (usec)	7.41075E-03	+/-	3.1E-04
Phase delay (usec)	-1.62430591607E+03	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	2.77299E-06	+/-	1.3E-07
Delay rate (us/s)	4.43174140484E-03	Apriori rate (us/s)	4.43165461362E-03	Resid rate (us/s)	8.67912E-08	+/-	1.3E-09
Total phase (deg)	-219.8	Apriori accel (us/s/s)	1.63087691871E-05	Resid phase (deg)	86.0	+/-	4.1

ph/seg (deg)	31.0	Theor.	9.9	Amplitude	0.767 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	29.4	Search (1024X32)	0.756	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	23.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	11.9	Inc. seg. avg.	0.875	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.808	Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	

B: az 264.9 el 50.1 pa 49.5 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -17.223 1756.866 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BY.W.103.18UHRL

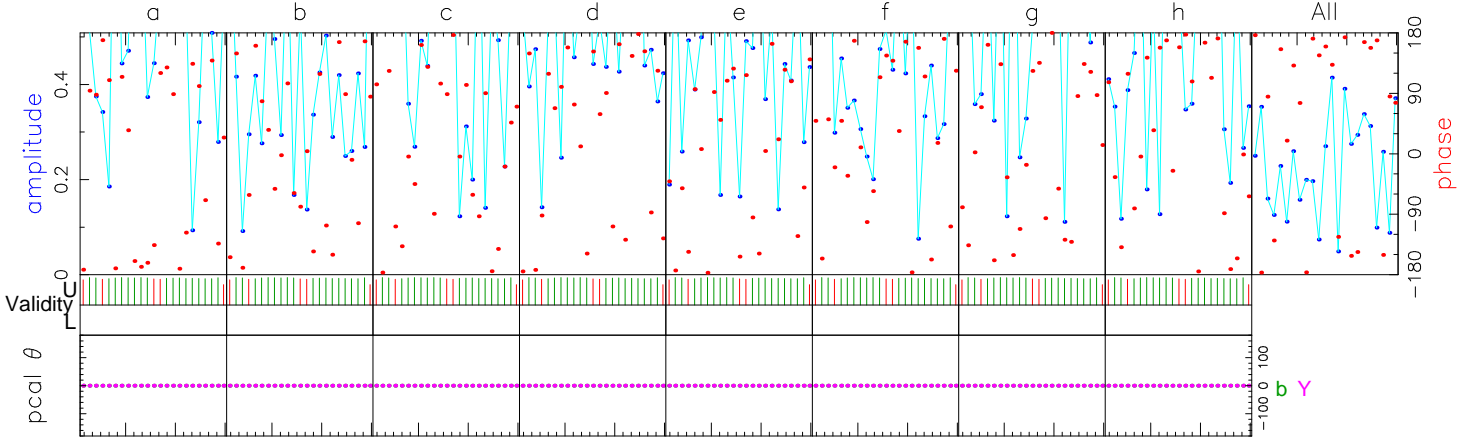


Fringe quality 0

SNR 6.0  
 Int time 169.724  
 Amp 0.170  
 Phase 162.2  
 PFD 2.4e-01  
 Delays (us)  
 SBD 0.363805  
 MBD 0.004776  
 Fringe rate (Hz)  
 0.146151  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143657  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.24744110704E+03	Apriori delay (usec)	-6.24780525814E+03	Resid mbdelay (usec)	4.77609E-03	+/-	1.8E-04
Sband delay (usec)	-6.24744145339E+03	Apriori clock (usec)	-1.3380808E+01	Resid sbdelay (usec)	3.63805E-01	+/-	1.4E-03
Phase delay (usec)	-6.24780525291E+03	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	5.23153E-06	+/-	6.2E-07
Delay rate (us/s)	1.47574268290E+00	Apriori rate (us/s)	1.47574098623E+00	Resid rate (us/s)	1.69667E-06	+/-	6.1E-09
Total phase (deg)	-174.7	Apriori accel (us/s/s)	3.91052162533E-05	Resid phase (deg)	162.2	+/-	19.1

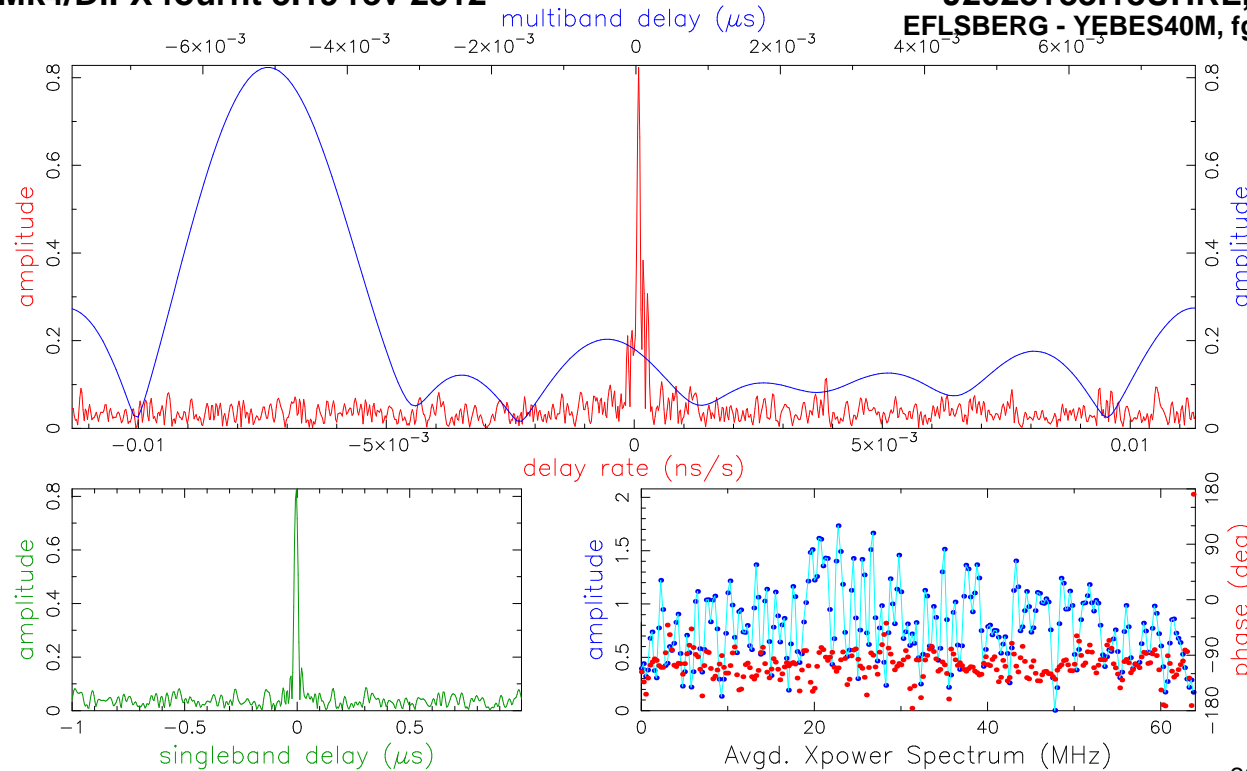
ph/seg (deg)	54.2	Theor.	45.9	Amplitude	0.170 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	71.8	Search (1024X32)	0.162	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	17.4	Inc. seg. avg.	0.174	Inc. frq. avg.	0.156	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	43.0	Inc. frq. avg.	0.156			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

b: az 74.4 el 33.0 pa -50.7 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -10137.832 2809.363 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/bY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/bY.W.116.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BY  
EFLSBERG - YEBES40M, fgroup W, pol RR

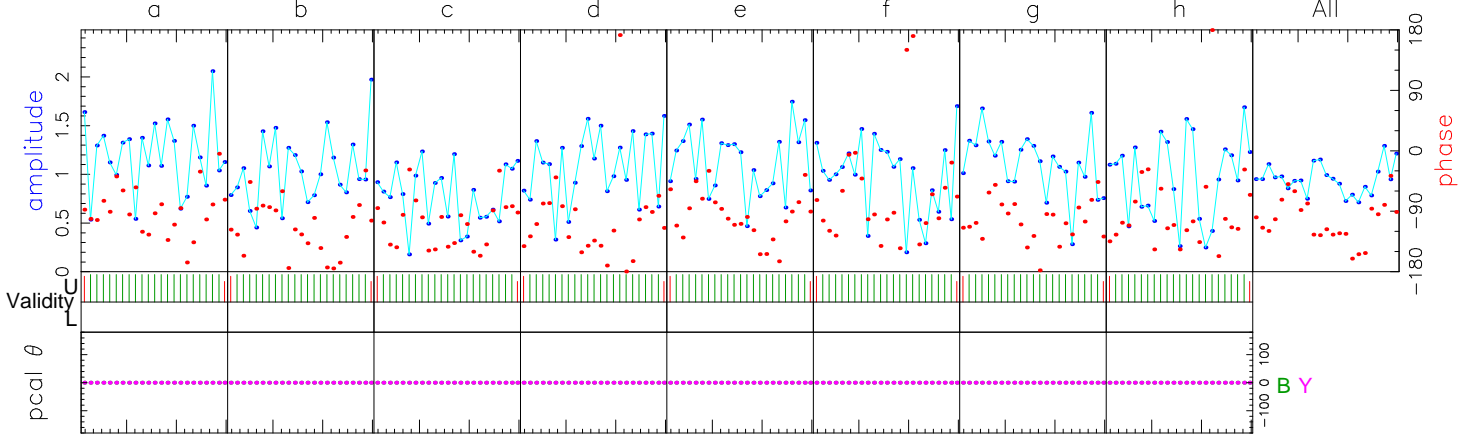


Fringe quality 7

SNR 29.9  
Int time 174.194  
Amp 0.828  
Phase -103.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.004931  
MBD -0.005129  
Fringe rate (Hz) 0.007105  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090005.12  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143659  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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
	-90.8	-116.8	-110.2	-121.3	-95.9	-87.3	-103.5	-99.9	Phase	-103.1
	1.0	0.8	0.7	0.9	0.9	0.7	1.0	0.8	Ampl.	0.8
	255.4	255.3	256.1	255.9	255.6	255.7	255.6	254.8	Sbd box	255.7
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

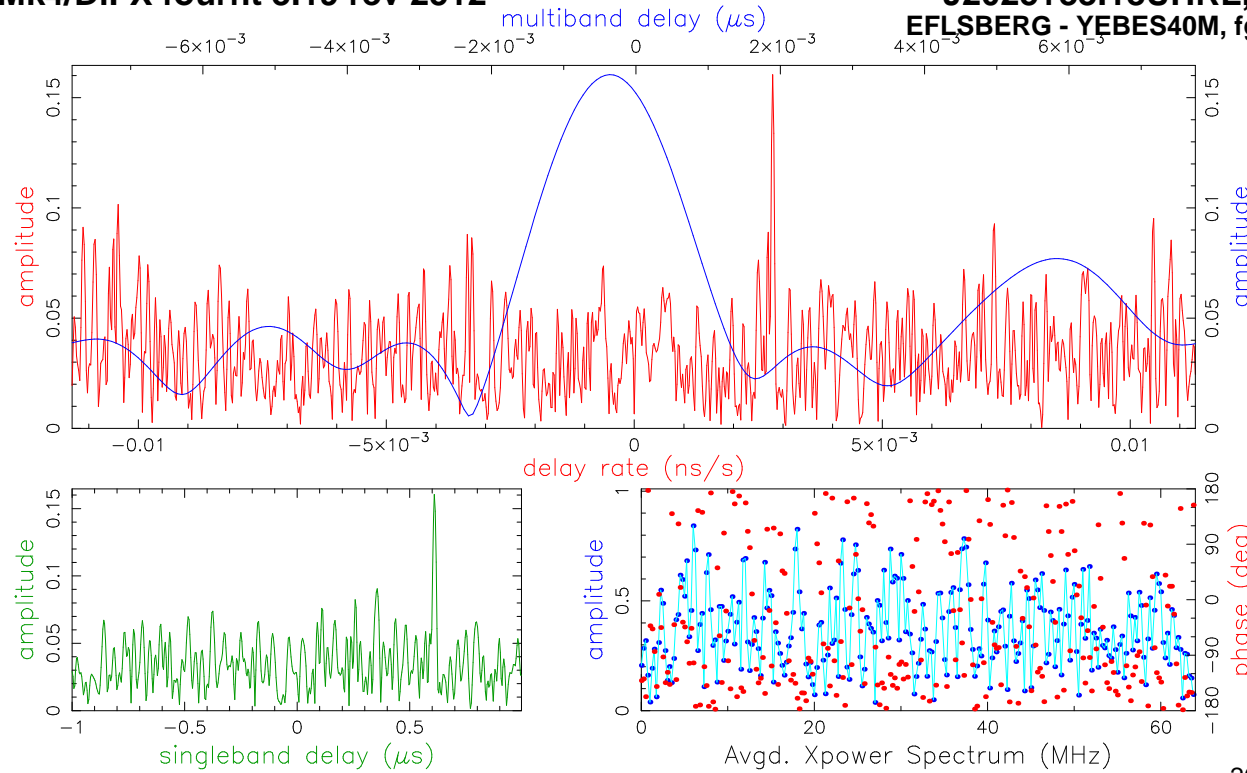
Group delay (usec)(sbd) -1.62431104741E+03 Apriori delay (usec) -1.62430591885E+03 Resid mbdelay (usec) -5.12857E-03 +/- 3.6E-05  
 Sband delay (usec) -1.62431085010E+03 Apriori clock (usec) 1.0769939E+00 Resid sbdelay (usec) -4.93125E-03 +/- 2.9E-04  
 Phase delay (usec) -1.62430592217E+03 Apriori clockrate (us/s) -4.2000000E-07 Resid phdelay (usec) -3.32315E-06 +/- 1.2E-07  
 Delay rate (us/s) 4.43173709965E-03 Apriori rate (us/s) 4.43165461362E-03 Resid rate (us/s) 8.24860E-08 +/- 1.2E-09  
 Total phase (deg) -48.9 Apriori accel (us/s/s) 1.63087691871E-05 Resid phase (deg) -103.1 +/- 3.8

RMS Theor. Amplitude 0.828 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 31.8 9.2 Search (1024X32) 0.793 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 23.3 16.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 13.1 5.4 Inc. seg. avg. 0.939 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 14.3 9.5 Inc. frq. avg. 0.835 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

B: az 264.9 el 50.1 pa 49.5 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -17.223 1756.866 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BY.W.127.18UHRL

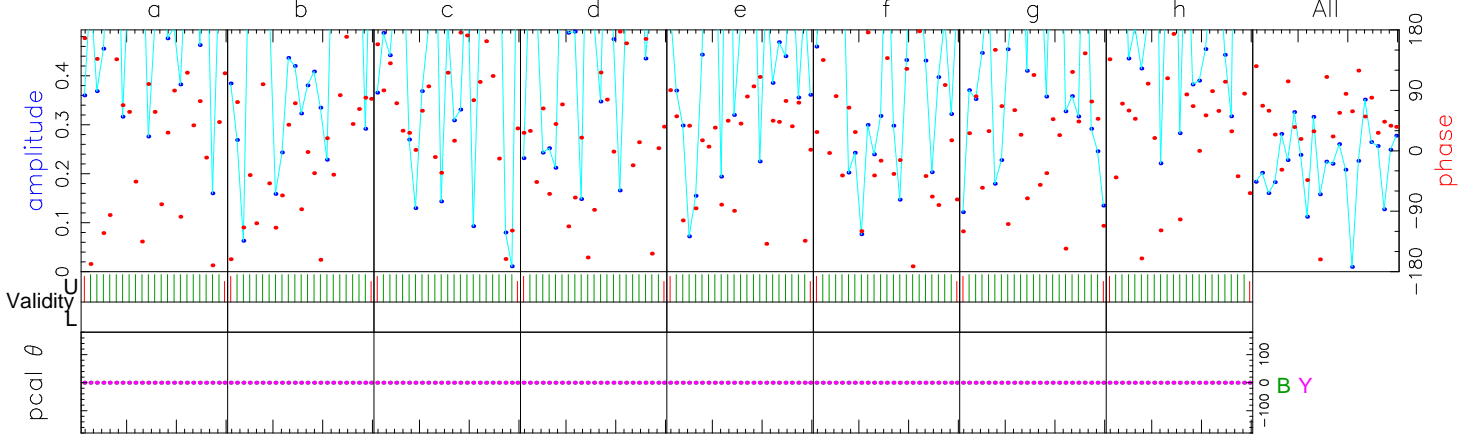
Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BY  
EFLSBERG - YEYES40M, fgroup W, pol LR



Fringe quality 0  
 SNR 5.8  
 Int time 174.194  
 Amp 0.165  
 Phase 51.4  
 PFD 5.7e-01  
 Delays (us)  
 SBD 0.609742  
 MBD -0.000345  
 Fringe rate (Hz)  
 0.240259  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143701  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

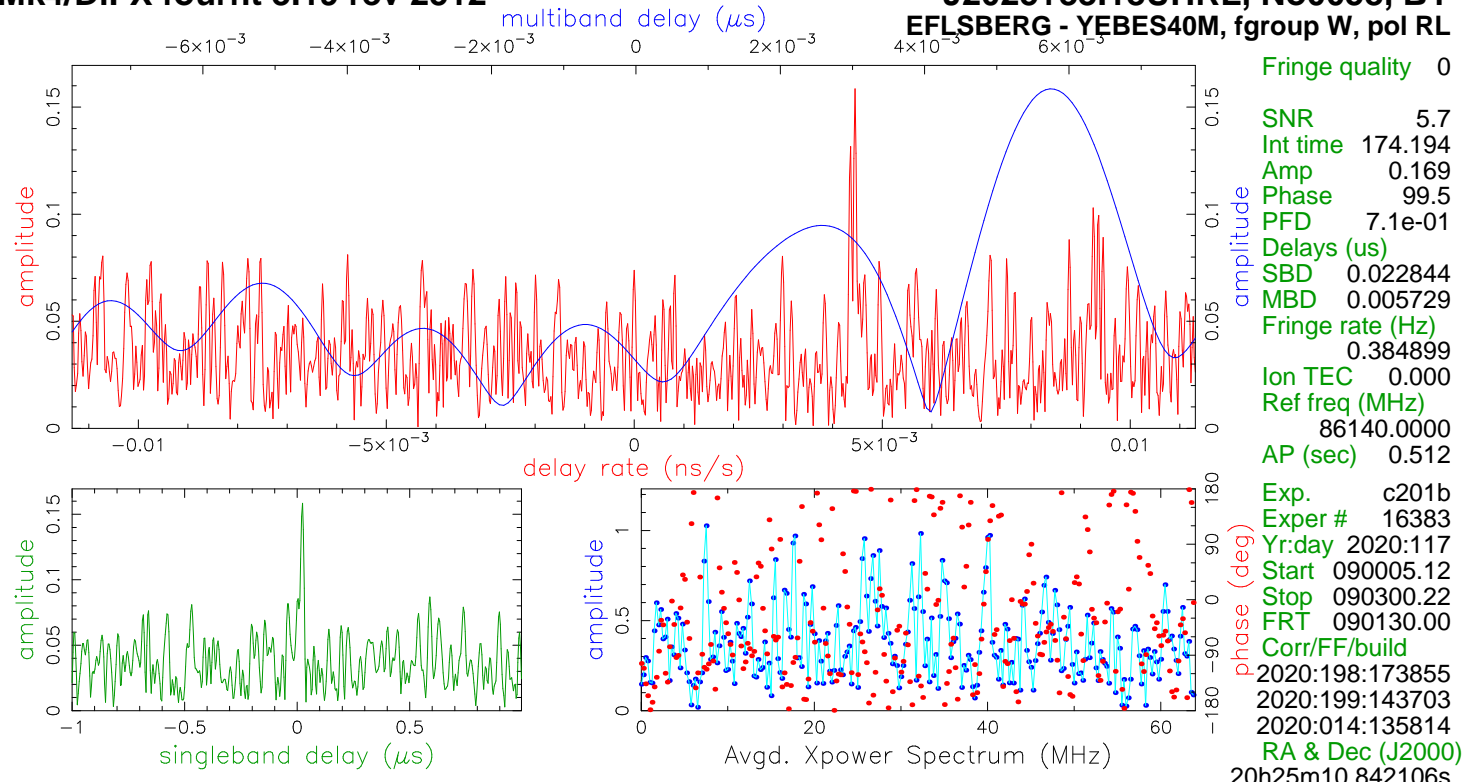


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

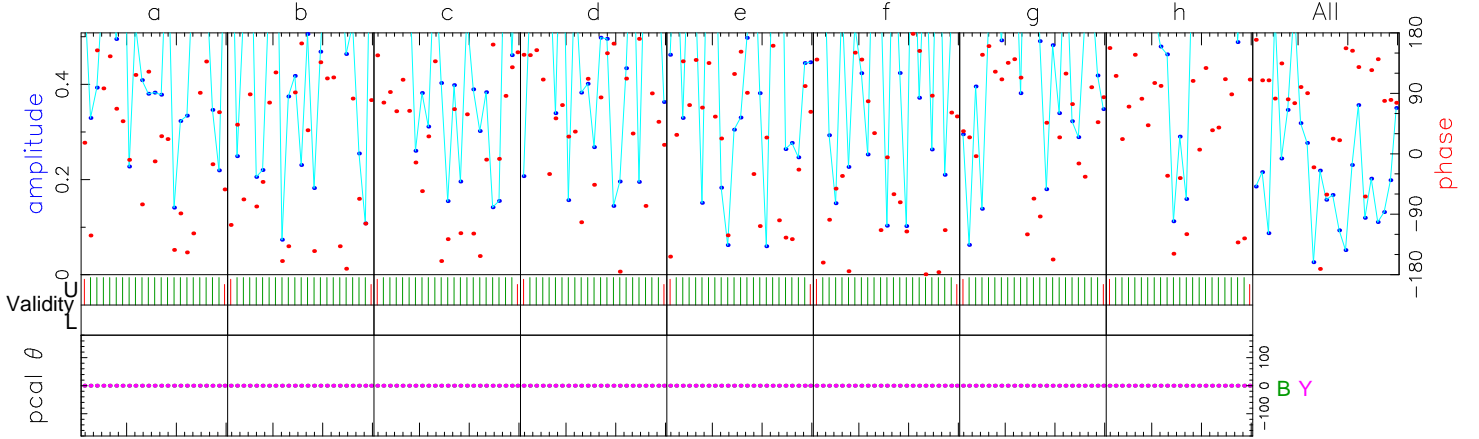
Group delay (usec)(sbd)	-1.62369688928E+03	Apriori delay (usec)	-1.62430591885E+03	Resid mbdelay (usec)	-3.45435E-04	+/-	1.9E-04
Sband delay (usec)	-1.62369617735E+03	Apriori clock (usec)	1.0769939E+00	Resid sbdelay (usec)	6.09742E-01	+/-	1.5E-03
Phase delay (usec)	-1.62430591719E+03	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	1.65688E-06	+/-	6.4E-07
Delay rate (us/s)	4.43444377700E-03	Apriori rate (us/s)	4.43165461362E-03	Resid rate (us/s)	2.78916E-06	+/-	6.3E-09
Total phase (deg)	-254.4	Apriori accel (us/s/s)	1.63087691871E-05	Resid phase (deg)	51.4	+/-	19.8

ph/seg (deg)	51.3	Theor.	47.4	Amplitude	0.165 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	59.1		82.7	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.9		28.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.1		48.8	Inc. seg. avg.	0.168	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.156	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

B: az 264.9 el 50.1 pa 49.5 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -17.223 1756.866 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BY.W.139.18UHRL



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



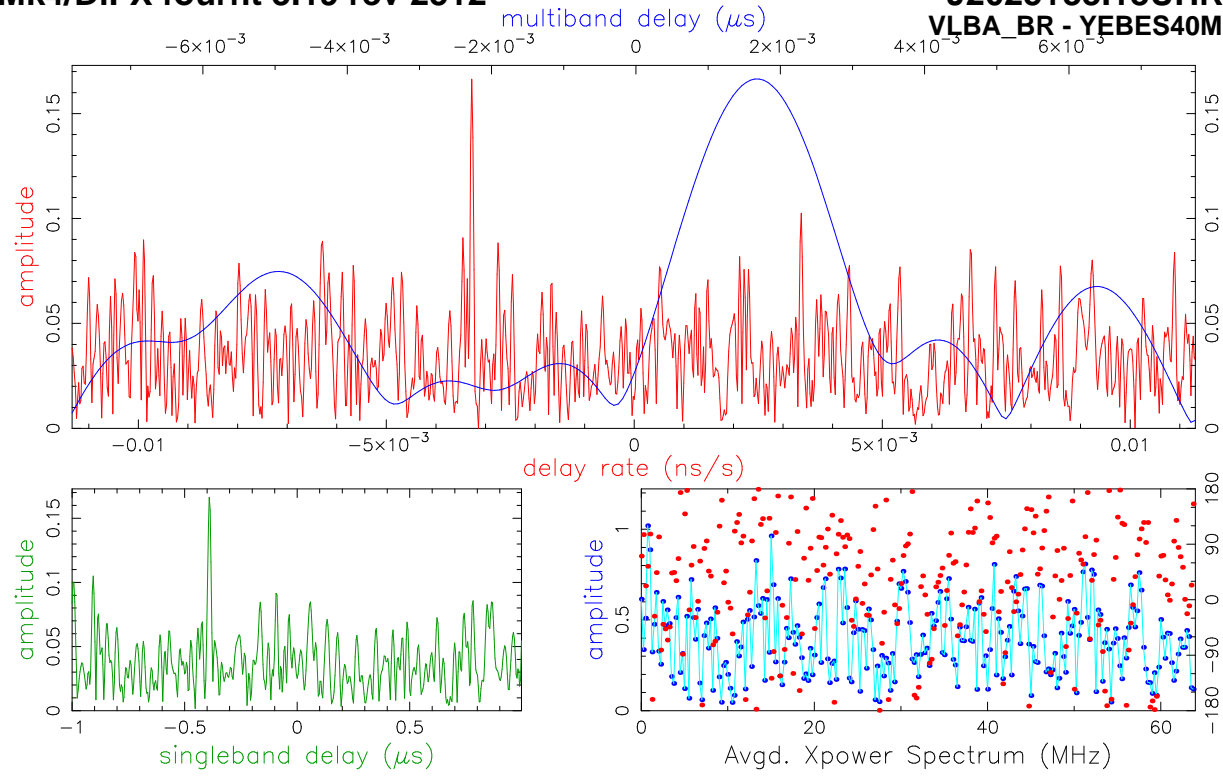
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
66.1	120.5	95.8	82.3	111.8	-177.9	116.8	83.1	83.1	Phase	99.5
0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.4	0.4	Ampl.	0.2
247.7	82.4	306.3	438.0	83.0	35.0	445.4	262.7	262.7	Sbd box	262.8
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.62428456484E+03	Apriori delay (usec)	-1.62430591885E+03	Resid mbdelay (usec)	5.72900E-03	+/-	1.9E-04
Sband delay (usec)	-1.62428307485E+03	Apriori clock (usec)	1.0769939E+00	Resid sbdelay (usec)	2.28440E-02	+/-	1.5E-03
Phase delay (usec)	-1.62430591564E+03	Apriori clockrate (us/s)	-4.2000000E-07	Resid phdelay (usec)	3.20959E-06	+/-	6.4E-07
Delay rate (us/s)	4.43612290835E-03	Apriori rate (us/s)	4.43165461362E-03	Resid rate (us/s)	4.46829E-06	+/-	6.4E-09
Total phase (deg)	-206.3	Apriori accel (us/s/s)	1.63087691871E-05	Resid phase (deg)	99.5	+/-	20.0

ph/seg (deg)	68.0	Theor.	47.9	Amplitude	0.169 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	96.1	Search (1024X32)	0.156	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	39.6	Inc. seg. avg.	0.178	Inc. seg. avg.	0.178	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	52.0	Inc. frq. avg.	0.171	Inc. frq. avg.	0.171	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

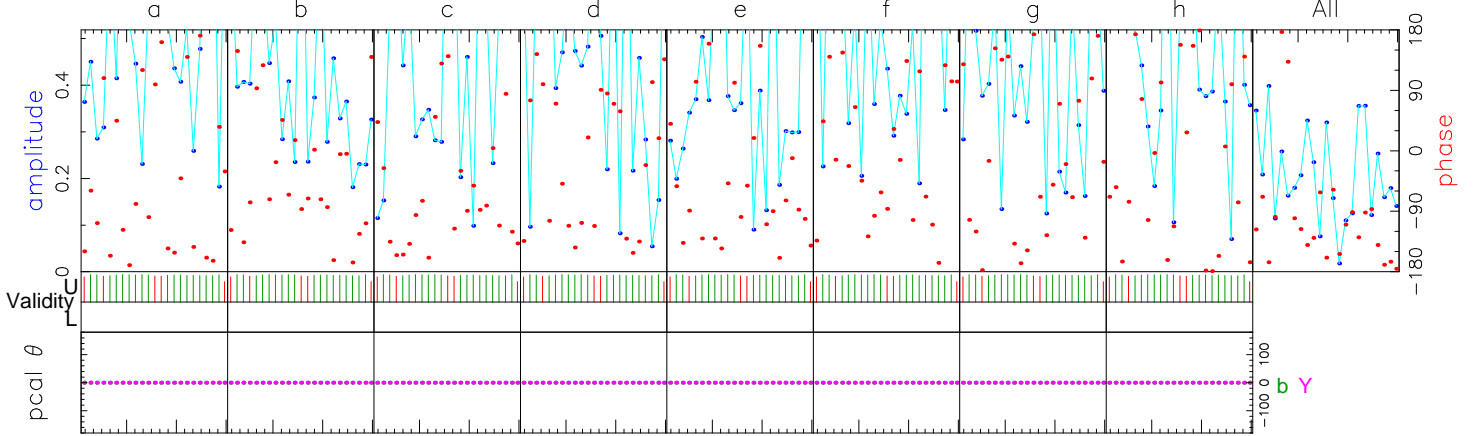
B: az 264.9 el 50.1 pa 49.5 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -17.223 1756.866 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BY.W.152.18UHRL



Fringe quality 0  
 SNR 6.0  
 Int time 169.725  
 Amp 0.173  
 Phase -130.6  
 PFD 2.9e-01  
 Delays (us)  
 SBD -0.389804  
 MBD 0.001729  
 Fringe rate (Hz)  
 -0.282210  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143645  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



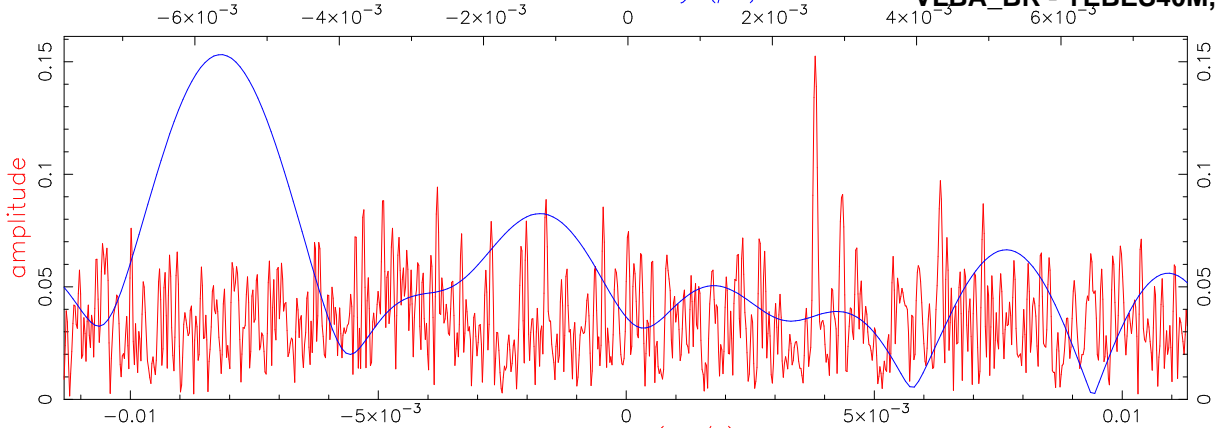
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-152.3	-82.6	-127.2	-147.9	-110.5	-122.1	-145.8	-147.0	Phase	-130.6
	0.3	0.1	0.3	0.1	0.3	0.1	0.1	0.2	Ampl.	0.2
	495.2	250.0	250.0	342.6	325.6	24.6	170.0	24.2	Sbd box	157.2
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	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	
γ	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.24819415371E+03	Apriori delay (usec)	-6.24780525814E+03	Resid mbdelay (usec)	1.72943E-03	+/-	1.8E-04
Sband delay (usec)	-6.24819506239E+03	Apriori clock (usec)	-1.3380808E+01	Resid sbdelay (usec)	-3.89804E-01	+/-	1.4E-03
Phase delay (usec)	-6.24780526235E+03	Apriori clockrate (us/s)	-2.6200000E-07	Resid phdelay (usec)	-4.21168E-06	+/-	6.2E-07
Delay rate (us/s)	1.47573771004E+00	Apriori rate (us/s)	1.47574098623E+00	Resid rate (us/s)	-3.27618E-06	+/-	6.1E-09
Total phase (deg)	-107.5	Apriori accel (us/s/s)	3.91052162533E-05	Resid phase (deg)	-130.6	+/-	19.3

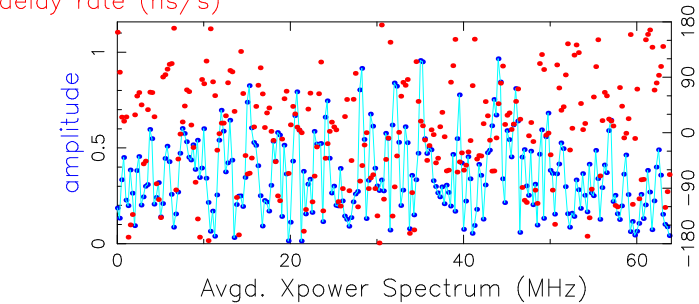
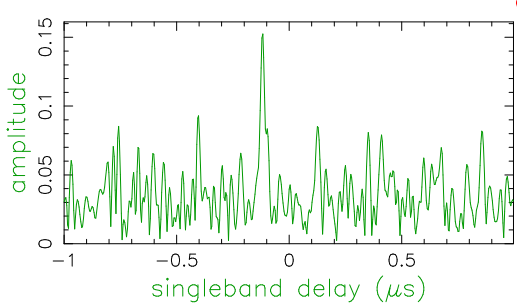
ph/seg (deg)	42.4	Theor.	46.2	Amplitude	0.173 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.0		80.6	Search (1024X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	26.0		27.2	Inc. seg. avg.	0.164	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	35.4		47.5	Inc. frq. avg.	0.166	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 74.4 el 33.0 pa -50.7 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -10137.832 2809.363 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/bY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/bY.W.64.18UHRL

multiband delay ( $\mu$ s)

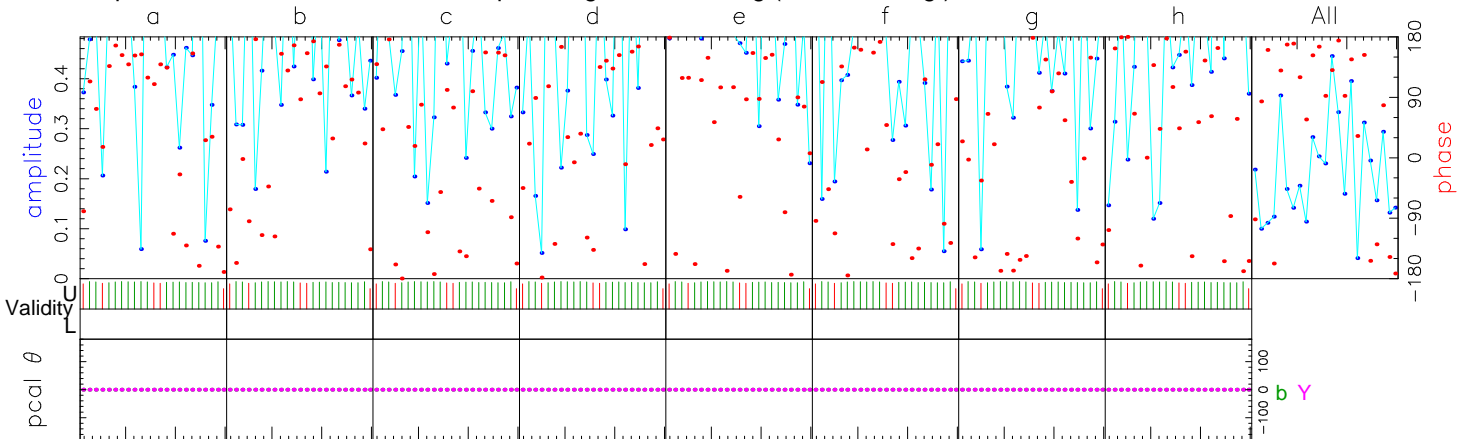


Fringe quality 0  
 SNR 5.5  
 Int time 169.724  
 Amp 0.161  
 Phase 148.8  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.118589  
 MBD -0.005743  
 Fringe rate (Hz) 0.329430  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143652  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

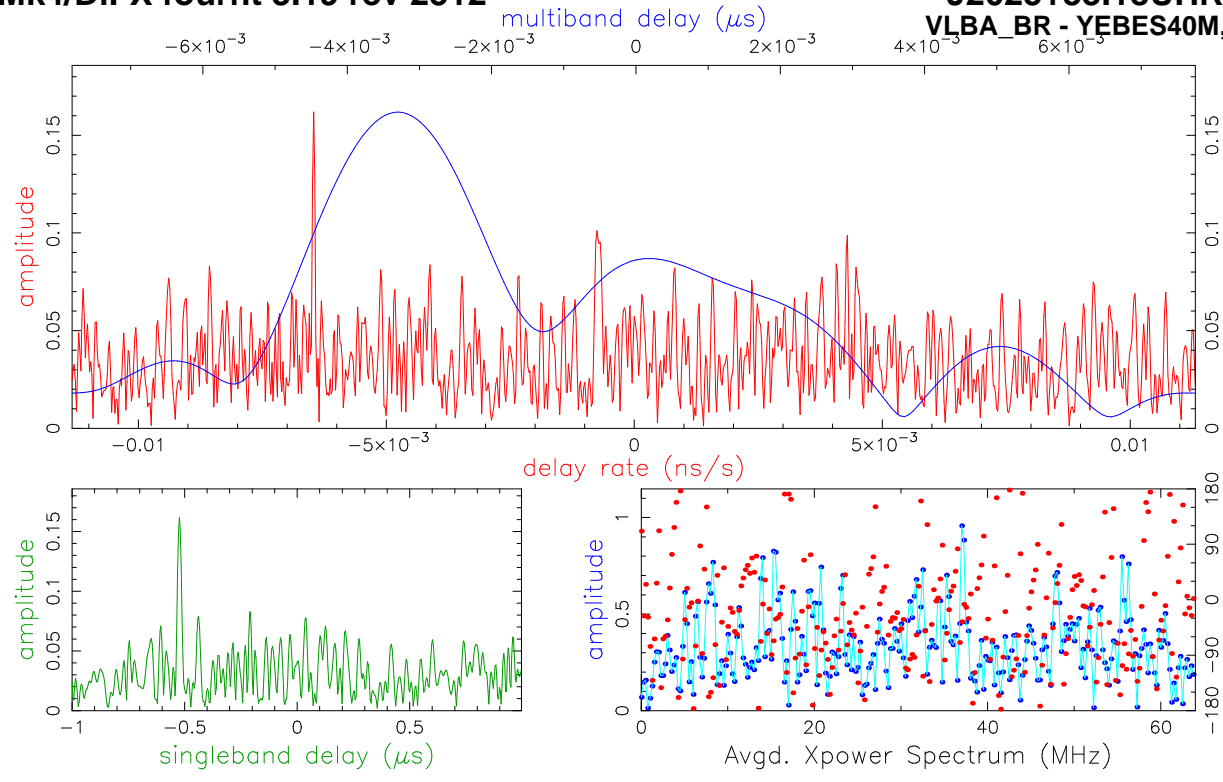


Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
Y	1000	1000	1000	1000	1000	1000	1000	1000			
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
Y	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-6.24792037569E+03					-6.24780525814E+03			Resid mbdelay (usec)	-5.74255E-03	+/- 2.0E-04
Sband delay (usec)	-6.24792384764E+03					-1.3380808E+01			Resid sbdelay (usec)	-1.18589E-01	+/- 1.6E-03
Phase delay (usec)	-6.24780525334E+03					-2.6200000E-07			Resid phdelay (usec)	4.79898E-06	+/- 6.7E-07
Delay rate (us/s)	1.47574481058E+00					1.47574098623E+00			Resid rate (us/s)	3.82435E-06	+/- 6.7E-09
Total phase (deg)		-188.1				3.91052162533E-05			Resid phase (deg)	148.8	+/- 20.9
ph/seg (deg)	56.5	50.1				0.161 +/- 0.029			Pcal mode: MANUAL, MANUAL		
amp/seg (%)	77.9	87.5				0.000			Pcal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	34.3	29.6				0.164			SampCntNorm: enabled		
amp/frq (%)	53.0	51.6				0.154			Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
b: az 74.4 el 33.0 pa -50.7									ion window (TEC)	0.00	0.00
Y: az 271.1 el 57.5 pa 66.0											
u,v (fr/asec) -10137.832 2809.363											
Control file: cf_1234_gmva											
Input file: /Exps/c201b/v1/1234/No0058/bY..18UHRL											
Output file: /Exps/c201b/v1/1234/No0058/bY.W.92.18UHRL											

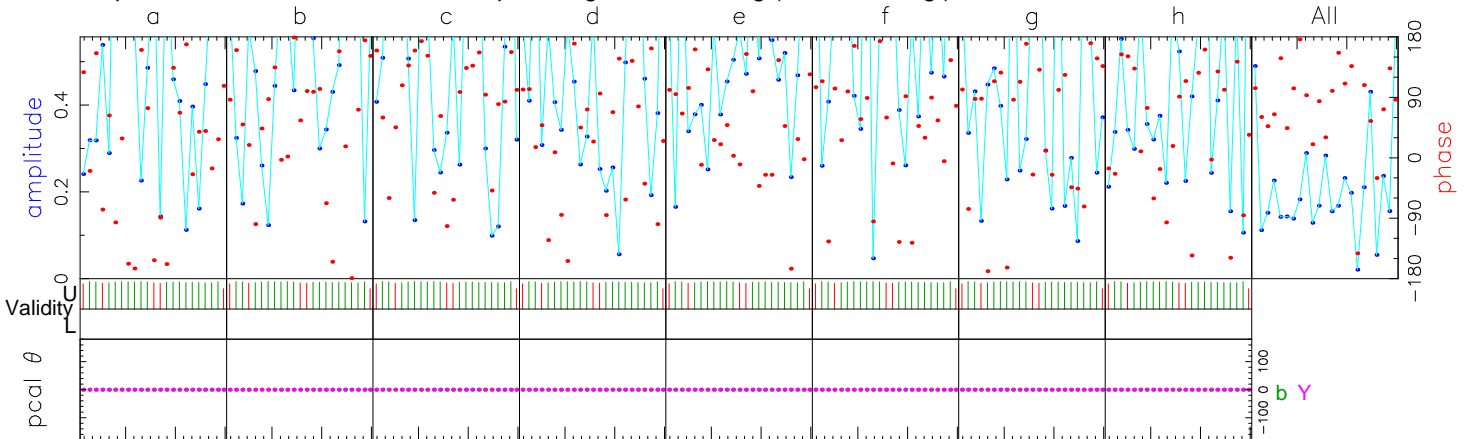


Fringe quality 0

SNR 5.8  
 Int time 169.725  
 Amp 0.186  
 Phase 88.9  
 PFD 6.3e-01  
 Delays (us)  
 SBD -0.523290  
 MBD -0.003300  
 Fringe rate (Hz)  
 -0.557115  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143654  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

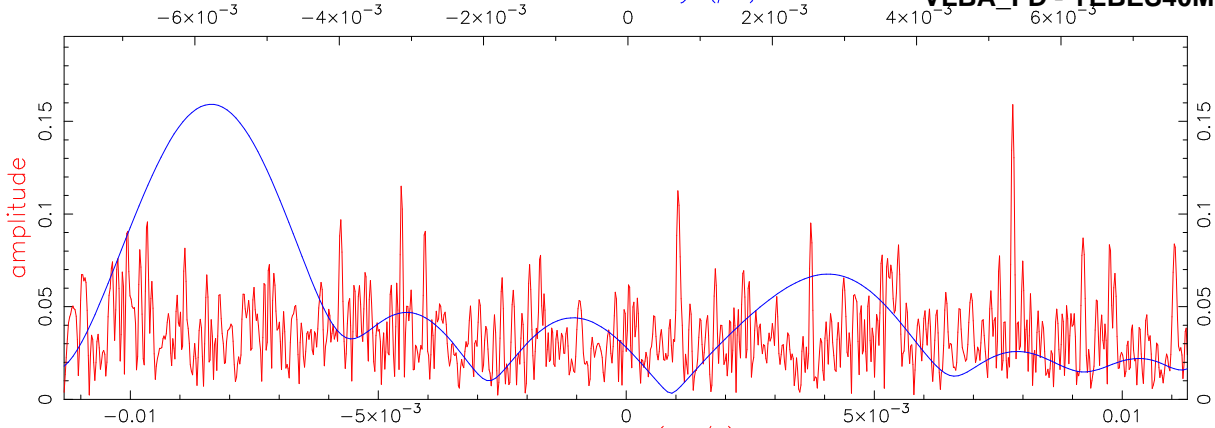


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-6.24832418359E+03									
Sband delay (usec)	-6.24832854814E+03									
Phase delay (usec)	-6.24780525527E+03									
Delay rate (us/s)	1.47573451867E+00									
Total phase (deg)			-248.0							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 54.1 47.6 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 79.7 83.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 37.3 28.1 Inc. seg. avg. 0.177 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.8 49.0 Inc. frq. avg. 0.191 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 b: az 74.4 el 33.0 pa -50.7 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -10137.832 2809.363 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/bY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/bY.W.99.18UHRL



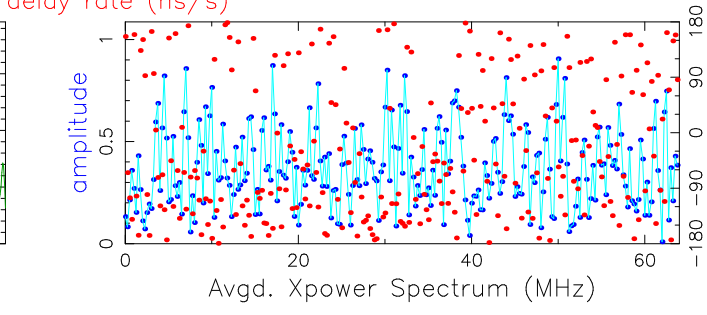
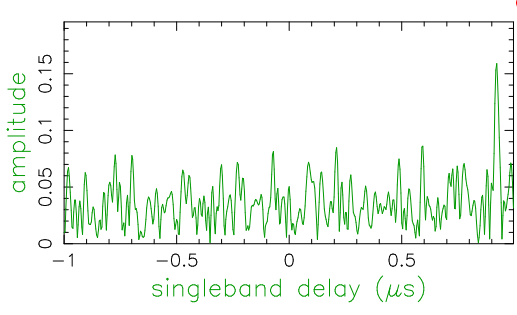
multiband delay ( $\mu\text{s}$ )



Fringe quality 0

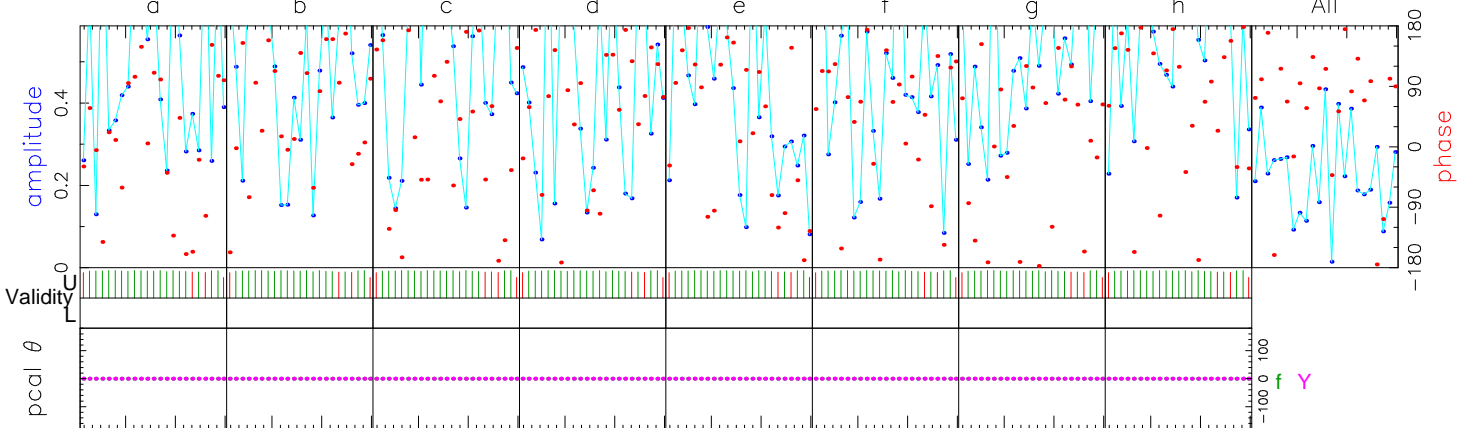
SNR 5.7  
 Int time 170.674  
 Amp 0.196  
 Phase 107.7  
 PFD 7.6e-01  
 Delays (us)  
 SBD 0.920888  
 MBD -0.005821  
 Fringe rate (Hz) 0.672784  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143644  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



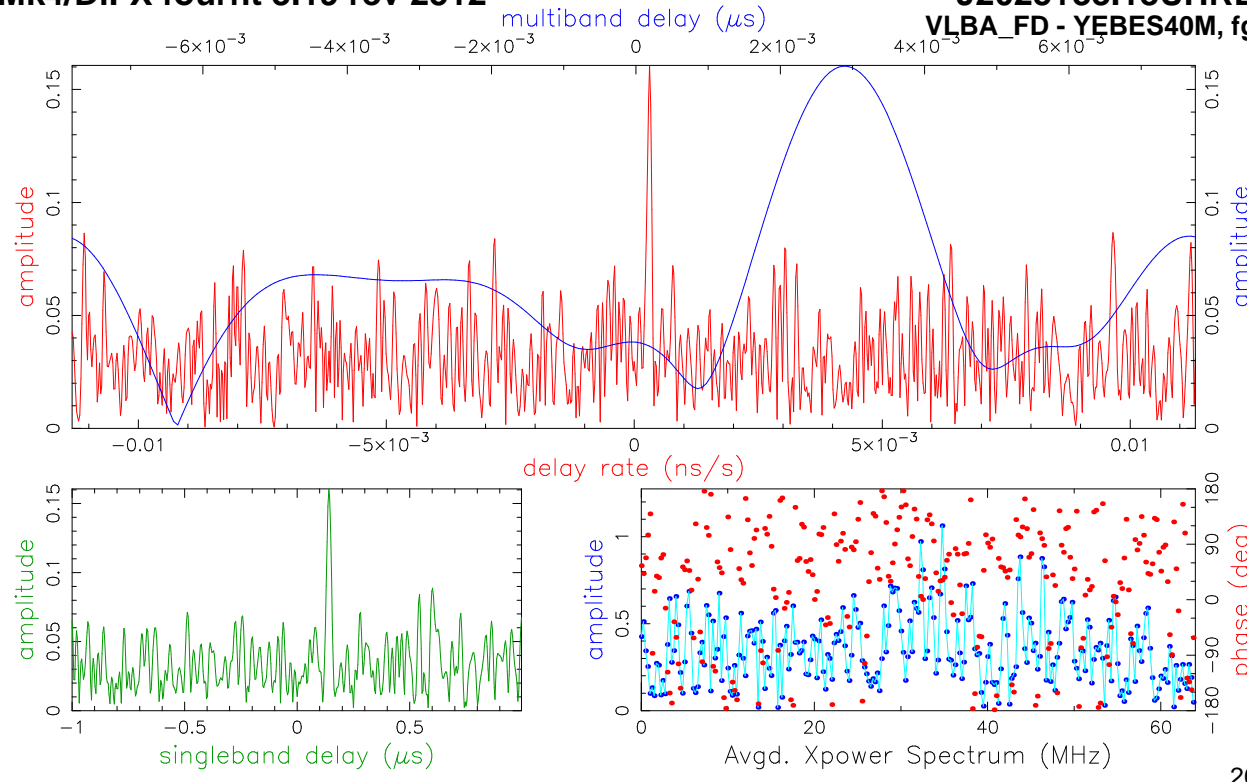
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.31780426036E+03	Apriori delay (usec)	-4.31872031474E+03	Resid mbdelay (usec)	-5.82062E-03	+/-	1.9E-04
Sband delay (usec)	-4.31779942624E+03	Apriori clock (usec)	-8.0725937E+00	Resid sbdelay (usec)	9.20888E-01	+/-	1.5E-03
Phase delay (usec)	-4.31872031127E+03	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	3.47148E-06	+/-	6.5E-07
Delay rate (us/s)	1.60342970124E+00	Apriori rate (us/s)	1.60342189088E+00	Resid rate (us/s)	7.81036E-06	+/-	6.4E-09
Total phase (deg)	-220.6	Apriori accel (us/s/s)	1.41341847952E-05	Resid phase (deg)	107.7	+/-	20.1

ph/seg (deg)	64.5	Theor.	48.1	Amplitude	0.196 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	78.9		84.0	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.2		28.4	Inc. seg. avg.	0.206	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.2		49.5	Inc. frq. avg.	0.182	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 69.5 el 39.4 pa -75.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11038.527 -228.216 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/fY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/fY.W.60.18UHRL

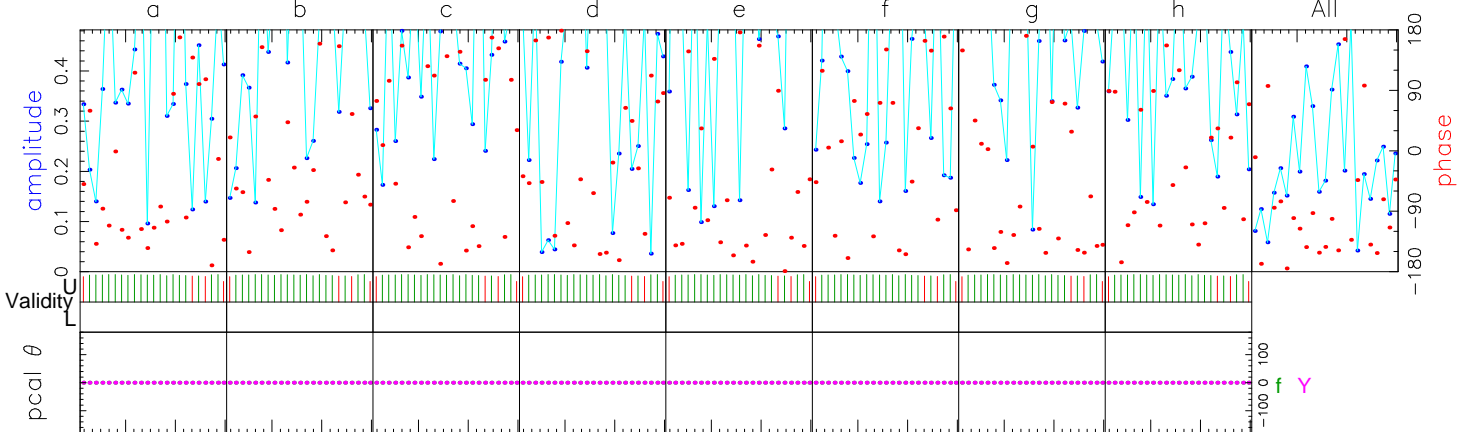


Fringe quality 0

SNR 5.7  
 Int time 170.674  
 Amp 0.161  
 Phase -123.8  
 PFD 7.0e-01  
 Delays (us)  
 SBD 0.141375  
 MBD 0.002922  
 Fringe rate (Hz)  
 0.027069  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143646  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

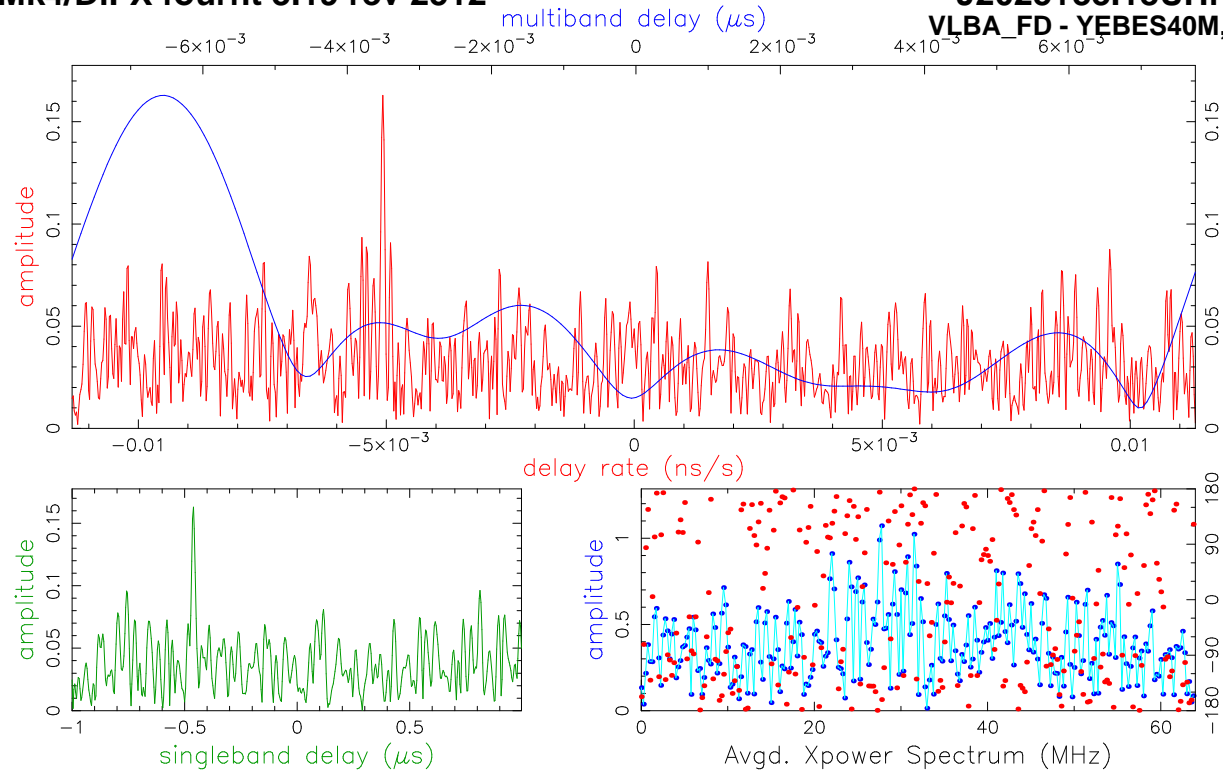


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.6	-85.5	171.5	-124.4	-123.0	-119.0	-128.8	-107.9	Phase	-123.8
	0.2	0.2	0.2	0.1	0.4	0.0	0.2	0.1	Ampl.	0.2
	329.5	295.0	412.3	138.8	293.7	396.9	40.9	266.8	Sbd box	293.2
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -4.318576795E+03 Apriori delay (usec) -4.31872031474E+03 Resid mbdelay (usec) 2.92180E-03 +/- 1.9E-04  
 Sband delay (usec) -4.31857893924E+03 Apriori clock (usec) -8.0725937E+00 Resid sbdelay (usec) 1.41375E-01 +/- 1.5E-03  
 Phase delay (usec) -4.31872031874E+03 Apriori clockrate (us/s) -1.1100000E-07 Resid phdelay (usec) -3.99293E-06 +/- 6.4E-07  
 Delay rate (us/s) 1.60342220513E+00 Apriori rate (us/s) 1.60342189088E+00 Resid rate (us/s) 3.14250E-07 +/- 6.4E-09  
 Total phase (deg) -92.1 Apriori accel (us/s/s) 1.41341847952E-05 Resid phase (deg) -123.8 +/- 20.0

RMS Theor. Amplitude 0.161 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 60.7 47.9 Search (1024X32) 0.159 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 83.7 83.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 31.6 28.2 Inc. seg. avg. 0.164 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 59.1 49.3 Inc. frq. avg. 0.163 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

f: az 69.5 el 39.4 pa -75.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11038.527 -228.216 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/fY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/fY.W.68.18UHRL

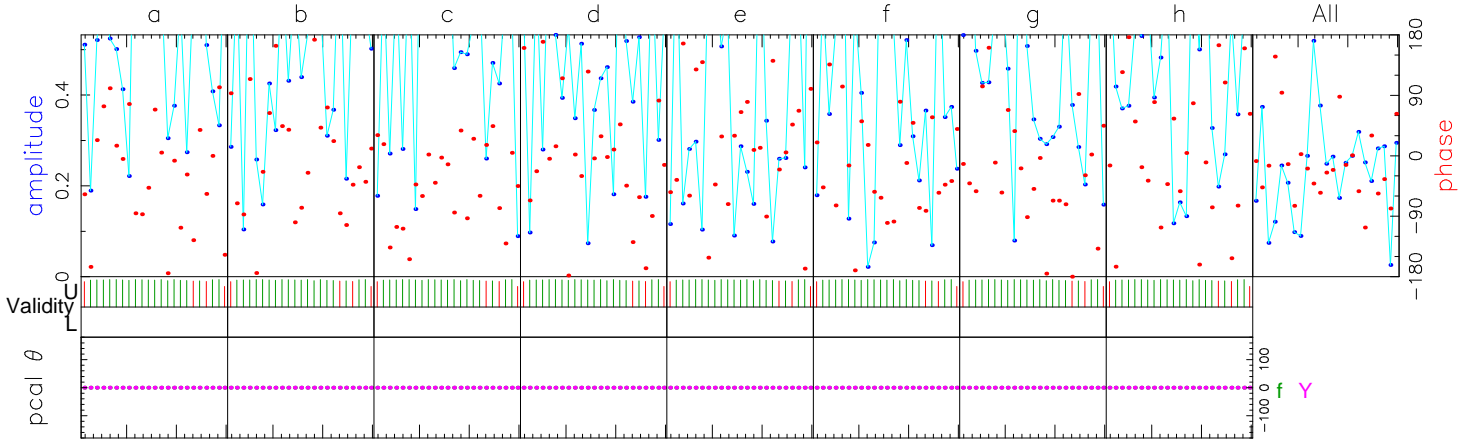


Fringe quality 0

SNR 5.8  
 Int time 170.674  
 Amp 0.178  
 Phase -25.0  
 PFD 5.0e-01  
 Delays (us)  
 SBD -0.461575  
 MBD -0.006554  
 Fringe rate (Hz)  
 -0.437580  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

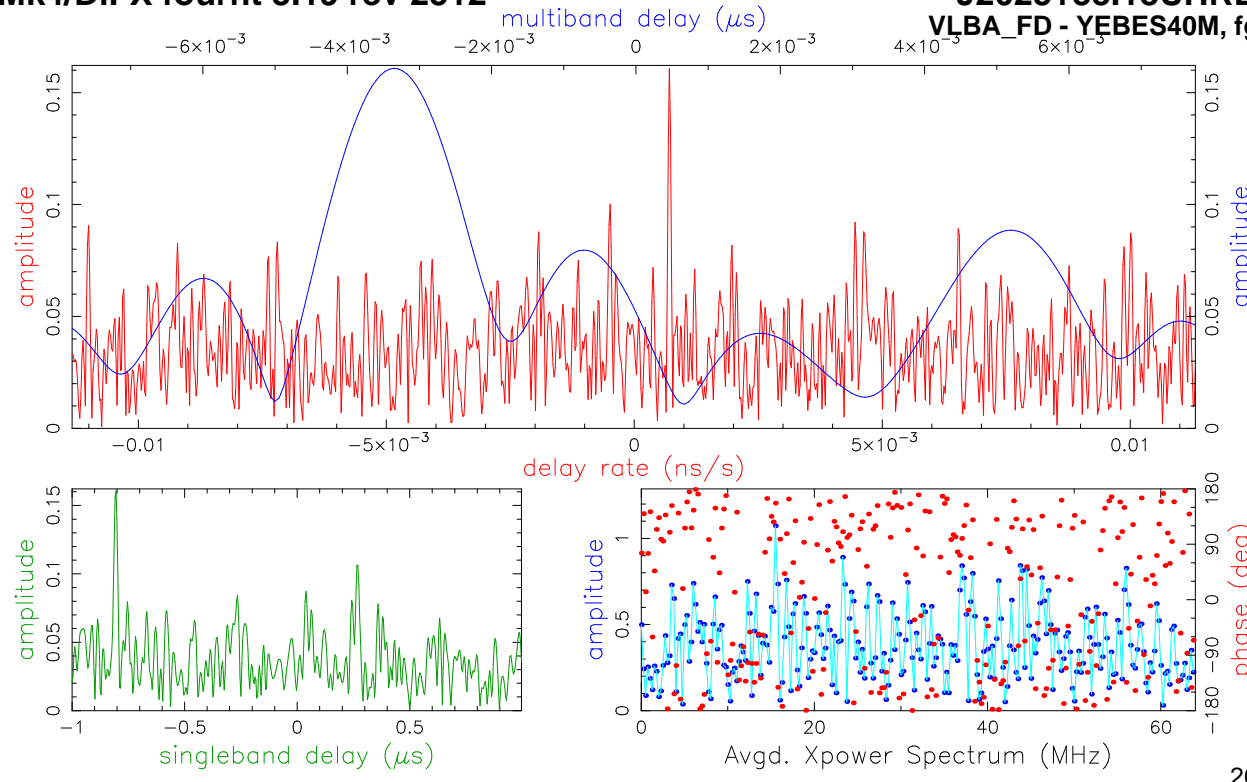
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143650  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



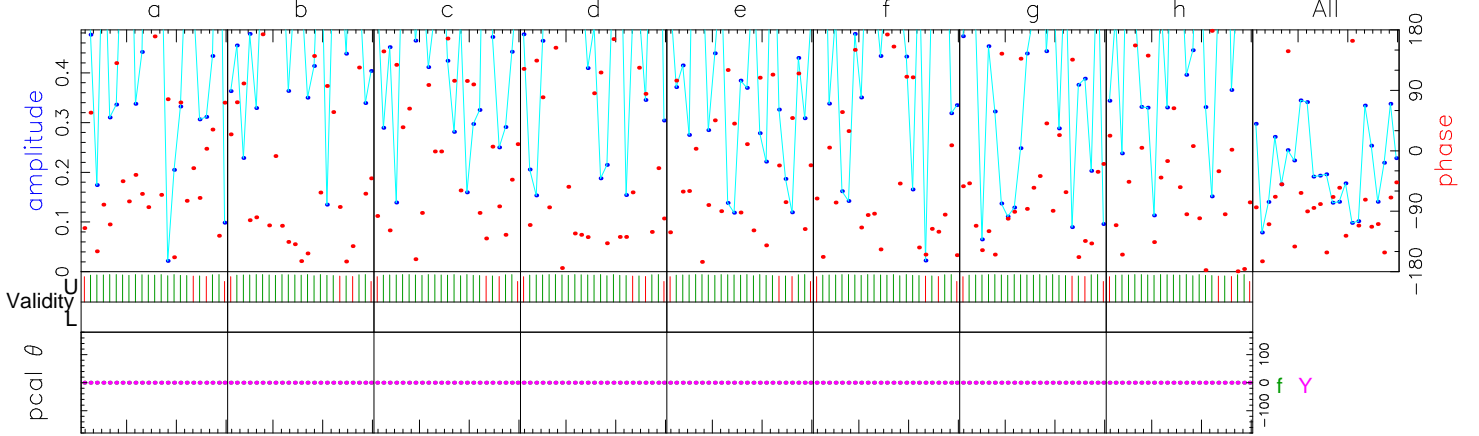
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-27.1	-14.1	-40.0	-10.8	16.2	-46.9	-39.9	9.8	Phase	-25.0
	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.1	Ampl.	0.2
	93.0	450.1	139.7	88.8	497.5	399.5	418.1	177.3	Sbd box	138.8
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.31917999346E+03		Apriori delay (usec)		-4.31872031474E+03		Resid mbdelay (usec)		-6.55372E-03	+/- 1.9E-04
Sband delay (usec)	-4.31918188949E+03		Apriori clock (usec)		-8.0725937E+00		Resid sbdelay (usec)		-4.61575E-01	+/- 1.5E-03
Phase delay (usec)	-4.31872031555E+03		Apriori clockrate (us/s)		-1.1100000E-07		Resid phdelay (usec)		-8.07792E-07	+/- 6.3E-07
Delay rate (us/s)	1.60341681101E+00		Apriori rate (us/s)		1.60342189088E+00		Resid rate (us/s)		-5.07987E-06	+/- 6.3E-09
Total phase (deg)			Apriori accel (us/s/s)		1.41341847952E-05		Resid phase (deg)		-25.0	+/- 19.6

ph/seg (deg) 60.4 47.1 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.2 82.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.3 27.8 Inc. seg. avg. 0.191 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.4 48.5 Inc. frq. avg. 0.168 Data rate (Mbit/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 69.5 el 39.4 pa -75.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11038.527 -228.216 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/fY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/fY.W.85.18UHRL



Fringe quality 0  
 SNR 5.8  
 Int time 170.674  
 Amp 0.162  
 Phase -95.4  
 PFD 6.0e-01  
 Delays (us)  
 SBD -0.805892  
 MBD -0.003394  
 Fringe rate (Hz)  
 0.060377  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143654  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

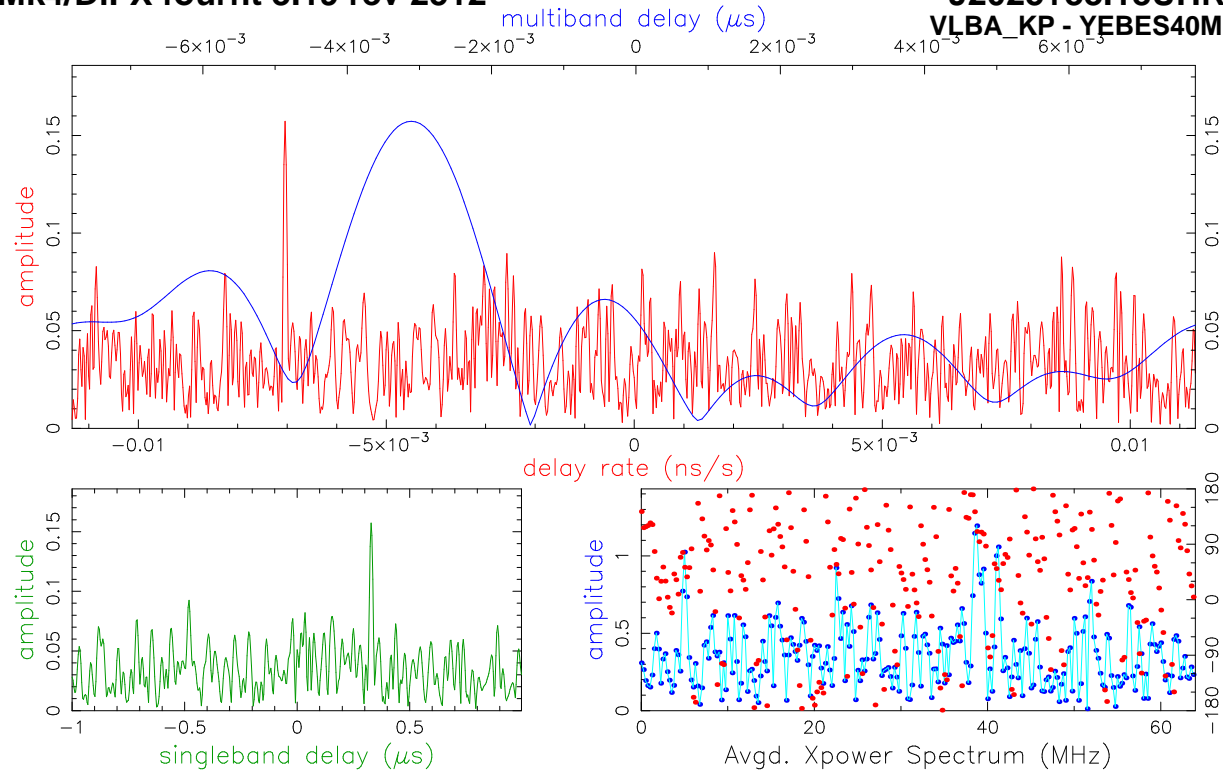


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-77.2	-127.4	-52.8	-132.9	-64.2	-121.0	-74.0	-77.3	Phase	-95.4
	0.3	0.2	0.1	0.2	0.1	0.3	0.2	0.2	Ampl.	0.2
	49.7	507.4	451.0	20.4	116.8	49.4	242.2	363.5	Sbd box	50.7
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.31952058381E+03	Apriori delay (usec)	-4.31872031474E+03	Resid mbdelay (usec)	-3.39407E-03	+/-	1.9E-04
Sband delay (usec)	-4.31952620699E+03	Apriori clock (usec)	-8.0725937E+00	Resid sbdelay (usec)	-8.05892E-01	+/-	1.5E-03
Phase delay (usec)	-4.31872031782E+03	Apriori clockrate (us/s)	-1.1100000E-07	Resid phdelay (usec)	-3.07496E-06	+/-	6.4E-07
Delay rate (us/s)	1.60342259179E+00	Apriori rate (us/s)	1.60342189088E+00	Resid rate (us/s)	7.00914E-07	+/-	6.3E-09
Total phase (deg)	-63.6	Apriori accel (us/s/s)	1.41341847952E-05	Resid phase (deg)	-95.4	+/-	19.8

	RMS	Theor.	Amplitude	0.162 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	46.4	47.5	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	58.1	82.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	34.1	28.0	Inc. seg. avg.	0.158	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	45.8	48.9	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00

f: az 69.5 el 39.4 pa -75.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11038.527 -228.216 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/fY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/fY.W.97.18UHRL

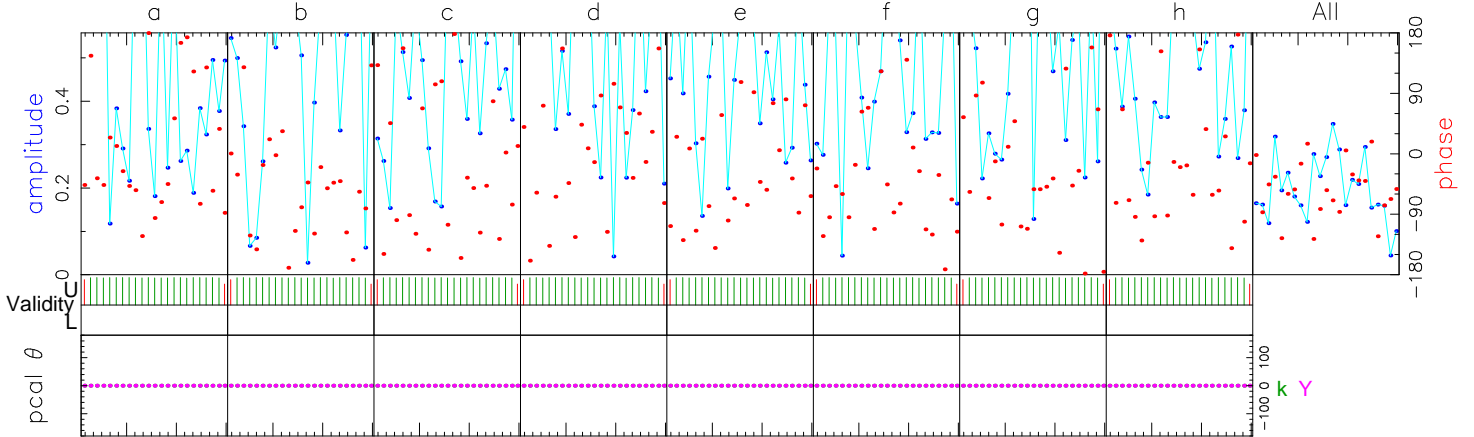


Fringe quality 0

SNR 5.7  
 Int time 173.026  
 Amp 0.186  
 Phase -56.8  
 PFD 8.3e-01  
 Delays (us)  
 SBD 0.328734  
 MBD -0.003097  
 Fringe rate (Hz)  
 -0.607965  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143700  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



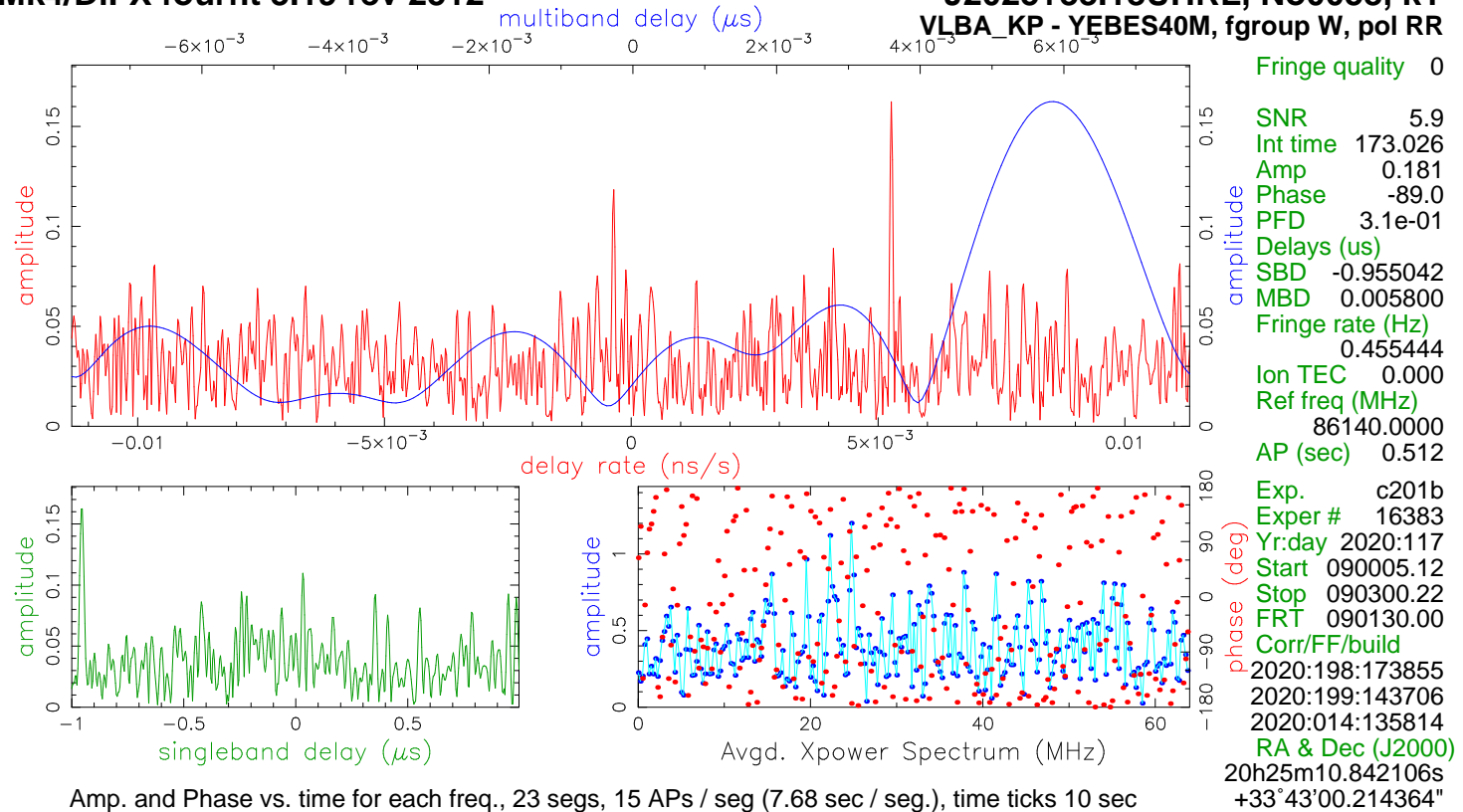
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.00124404069E+03	Apriori delay (usec)	-6.00156906861E+03	Resid mbdelay (usec)	-3.09708E-03	+/-	1.9E-04
Sband delay (usec)	-6.00124033511E+03	Apriori clock (usec)	-1.2317149E+01	Resid sbdelay (usec)	3.28734E-01	+/-	1.5E-03
Phase delay (usec)	-6.00156907044E+03	Apriori clockrate (us/s)	-2.1460000E-07	Resid phdelay (usec)	-1.83186E-06	+/-	6.5E-07
Delay rate (us/s)	1.65414844950E+00	Apriori rate (us/s)	1.65415550737E+00	Resid rate (us/s)	-7.05787E-06	+/-	6.4E-09
Total phase (deg)		Apriori accel (us/s/s)	2.42963518949E-05	Resid phase (deg)	-56.8	+/-	20.2

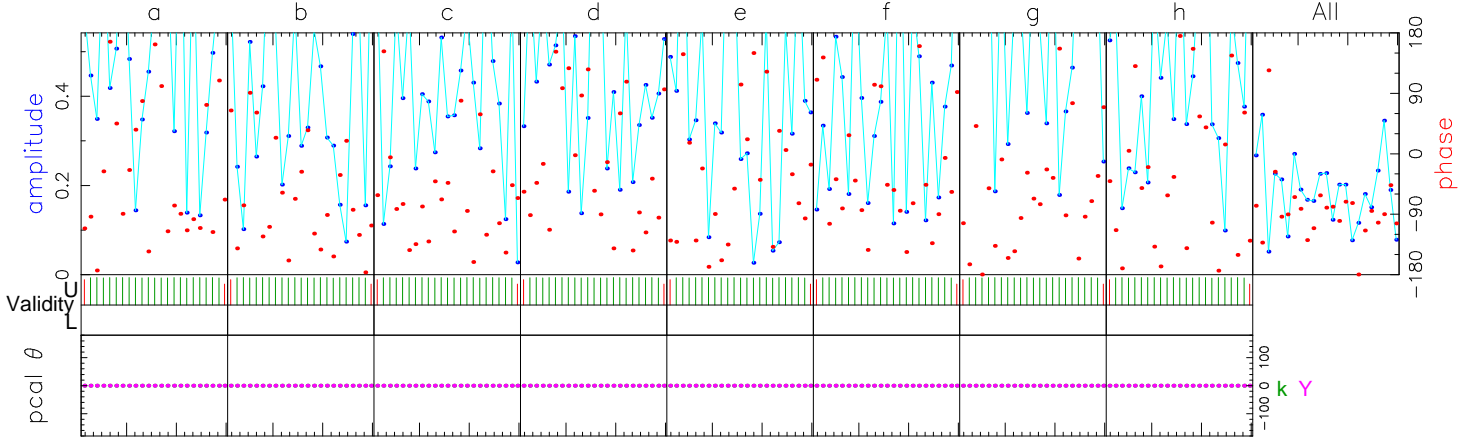
ph/seg (deg)	41.0	Theor.	48.5	Amplitude	0.186 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	53.5		84.6	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	35.8		28.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.3		49.9	Inc. seg. avg.	0.173	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.181	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 68.2 el 33.7 pa -71.5      Y: az 271.1 el 57.5 pa 66.0      u,v (fr/asec) -11380.536 452.688      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0058/kY..18UHRL      Output file: /Exps/c201b/v1/1234/No0058/kY.W.131.18UHRL



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



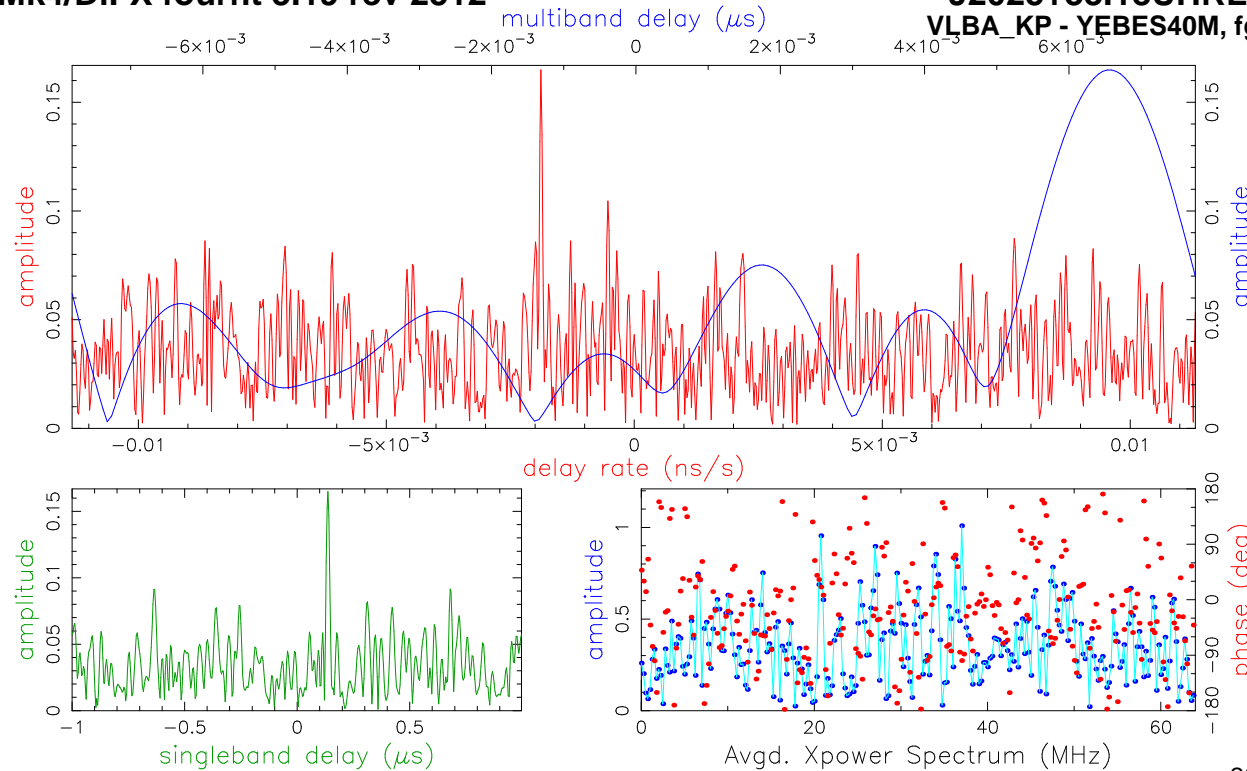
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.1	-97.3	-85.5	-72.1	-90.8	-68.8	-80.4	-136.6	Phase	-89.0
	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.1	Ampl.	0.2
	272.2	274.1	12.9	330.6	217.0	113.9	12.3	108.9	Sbd box	12.5
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.00251639371E+03		Apriori delay (usec)	-6.00156906861E+03	Resid mbdelay (usec)	5.79990E-03	+/-	1.8E-04		
Sband delay (usec)	-6.00252411111E+03		Apriori clock (usec)	-1.2317149E+01	Resid sbdelay (usec)	-9.55042E-01	+/-	1.5E-03		
Phase delay (usec)	-6.00156907147E+03		Apriori clockrate (us/s)	-2.1460000E-07	Resid phdelay (usec)	-2.86864E-06	+/-	6.2E-07		
Delay rate (us/s)	1.65416079462E+00		Apriori rate (us/s)	1.65415550737E+00	Resid rate (us/s)	5.28725E-06	+/-	6.2E-09		
Total phase (deg)		-294.0	Apriori accel (us/s/s)	2.42963518949E-05	Resid phase (deg)	-89.0	+/-	19.3		

	RMS	Theor.	Amplitude	0.181 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	43.4	46.3	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	49.4	80.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.5	27.3	Inc. seg. avg.	0.157	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	37.3	47.7	Inc. frq. avg.	0.167	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

Mk4/DiFX fourfit 3.19 rev 2512

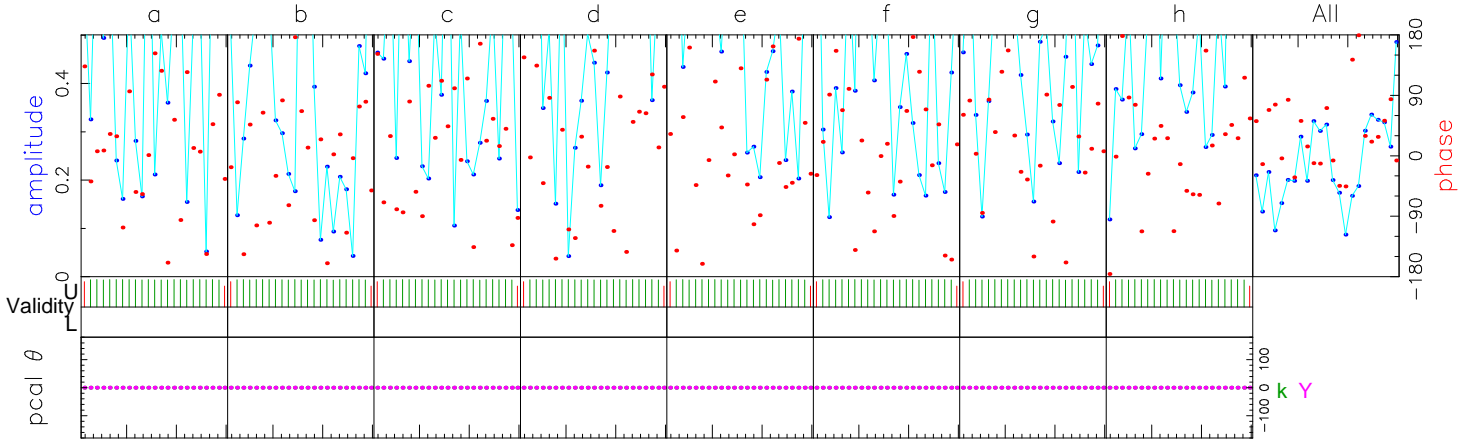
J2025+33.18UHRL, No0058, kY

VLBA\_KP - YEBES40M, fgroup W, pol LR



Fringe quality 0  
 SNR 5.9  
 Int time 173.026  
 Amp 0.167  
 Phase 27.9  
 PFD 3.1e-01  
 Delays (us)  
 SBD 0.136312  
 MBD 0.006556  
 Fringe rate (Hz)  
 -0.162998  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143708  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



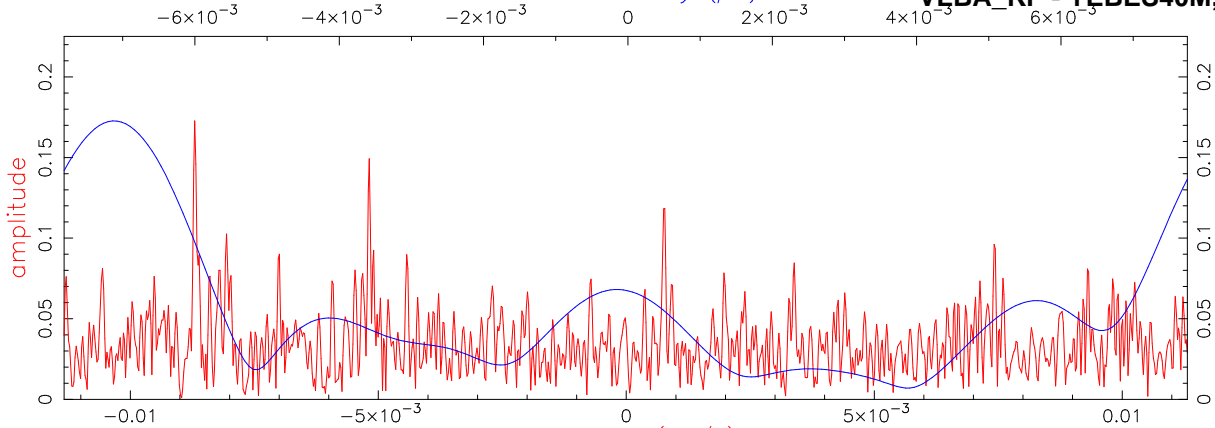
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-6.00143751306E+03	Apriori delay (usec)	-6.00156906861E+03	Resid mbdelay (usec)	6.55554E-03	+/-	1.8E-04
Sband delay (usec)	-6.00143275711E+03	Apriori clock (usec)	-1.2317149E+01	Resid sbdelay (usec)	1.36312E-01	+/-	1.5E-03
Phase delay (usec)	-6.00156906771E+03	Apriori clockrate (us/s)	-2.1460000E-07	Resid phdelay (usec)	8.98670E-07	+/-	6.2E-07
Delay rate (us/s)	1.65415361512E+00	Apriori rate (us/s)	1.65415550737E+00	Resid rate (us/s)	-1.89225E-06	+/-	6.2E-09
Total phase (deg)		Apriori accel (us/s/s)	2.42963518949E-05	Resid phase (deg)	27.9	+/-	19.3

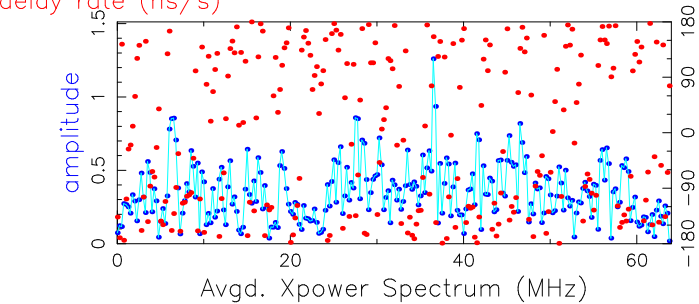
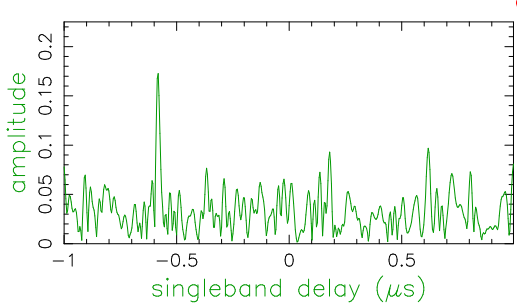
ph/seg (deg)	RMS 56.3	Theor. 46.3	Amplitude Search (1024X32)	0.167 +/- 0.028	0.156	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.6	80.8	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	25.6	27.3	Inc. seg. avg.	0.180	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	24.9	47.6	Inc. frq. avg.	0.162	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00	

k: az 68.2 el 33.7 pa -71.5 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11380.536 452.688 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/kY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/kY.W.175.18UHRL

multiband delay ( $\mu\text{s}$ )

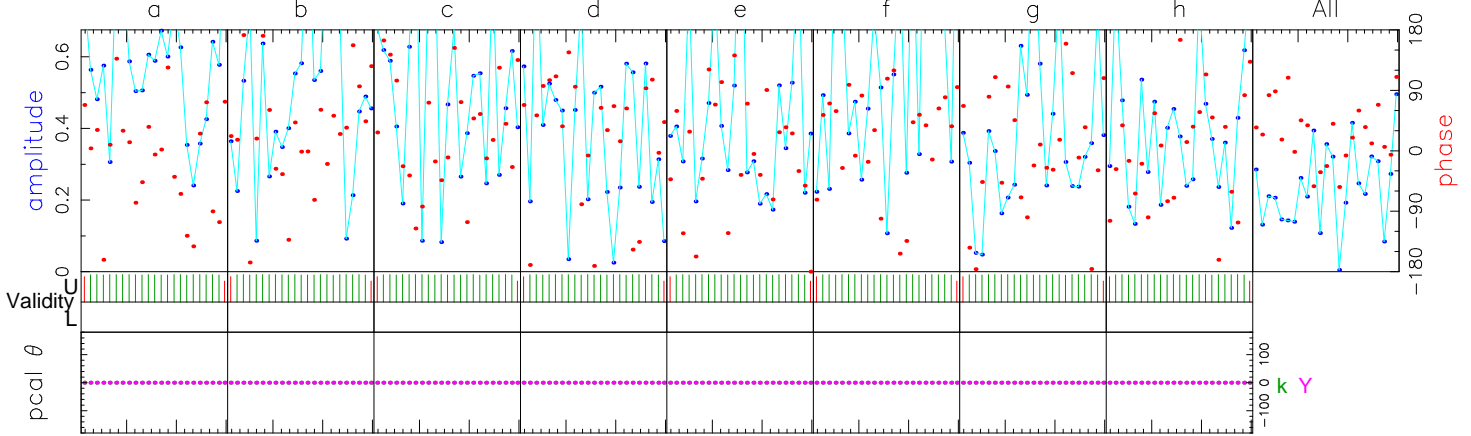


Fringe quality 0  
 SNR 6.3  
 Int time 173.026  
 Amp 0.225  
 Phase 29.8  
 PFD 4.7e-02  
 Delays (us)  
 SBD -0.583350  
 MBD -0.007151  
 Fringe rate (Hz)  
 -0.750068  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143710  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

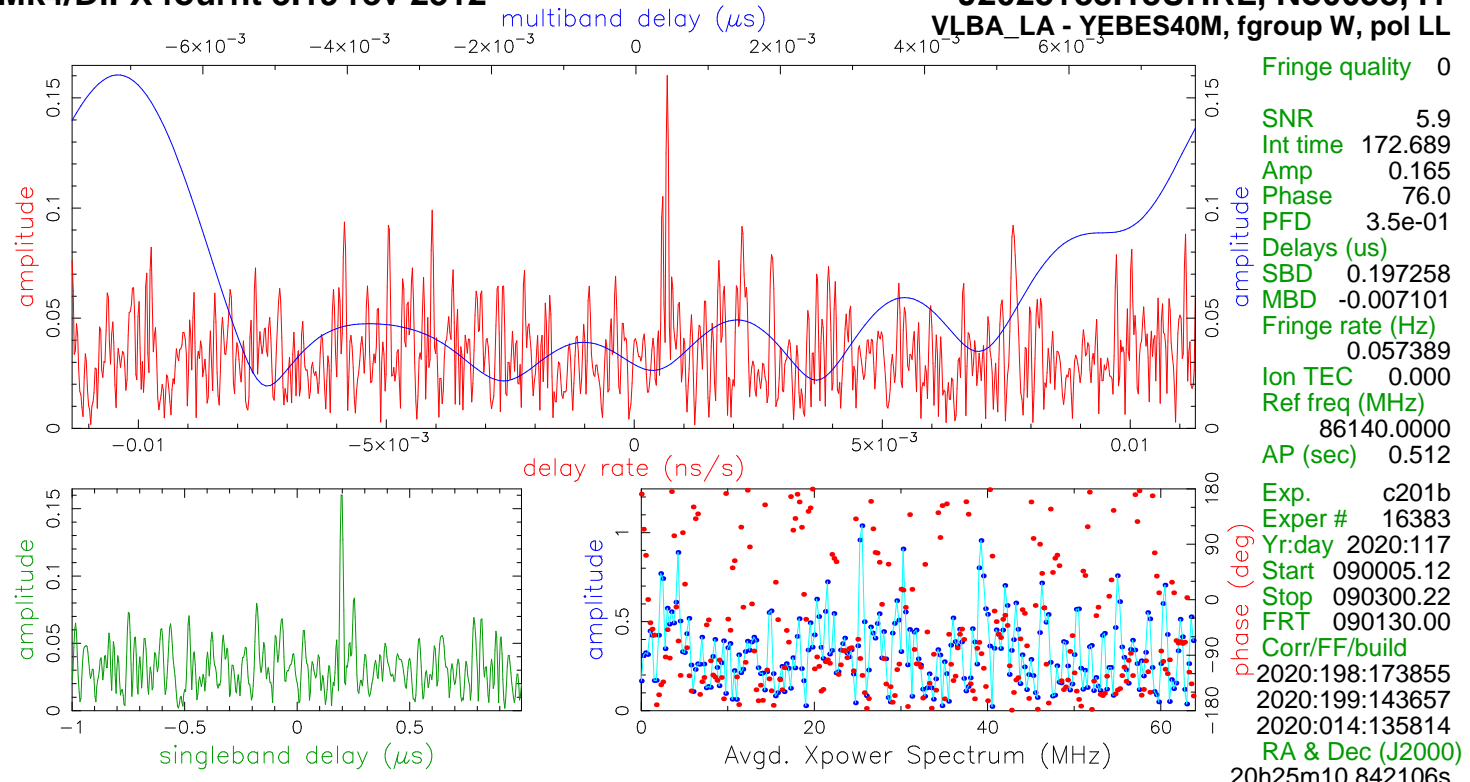
Group delay (usec)(sbd)	-6.00215434438E+03	Apriori delay (usec)	-6.00156906861E+03	Resid mbdelay (usec)	-7.15077E-03	+/-	1.7E-04
Sband delay (usec)	-6.00215241836E+03	Apriori clock (usec)	-1.2317149E+01	Resid sbdelay (usec)	-5.83350E-01	+/-	1.4E-03
Phase delay (usec)	-6.00156906764E+03	Apriori clockrate (us/s)	-2.1460000E-07	Resid phdelay (usec)	9.60850E-07	+/-	5.9E-07
Delay rate (us/s)	1.65414679982E+00	Apriori rate (us/s)	1.65415550737E+00	Resid rate (us/s)	-8.70755E-06	+/-	5.8E-09
Total phase (deg)		Apriori accel (us/s/s)	2.42963518949E-05	Resid phase (deg)	29.8	+/-	18.3

ph/seg (deg)	44.7	Theor.	43.8	Amplitude	0.225 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	72.7	Search (1024X32)	0.170	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	26.3	Inc. seg. avg.	0.235	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.0	Inc. frq. avg.	0.219	Sample rate(MISamp/s): 128		nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

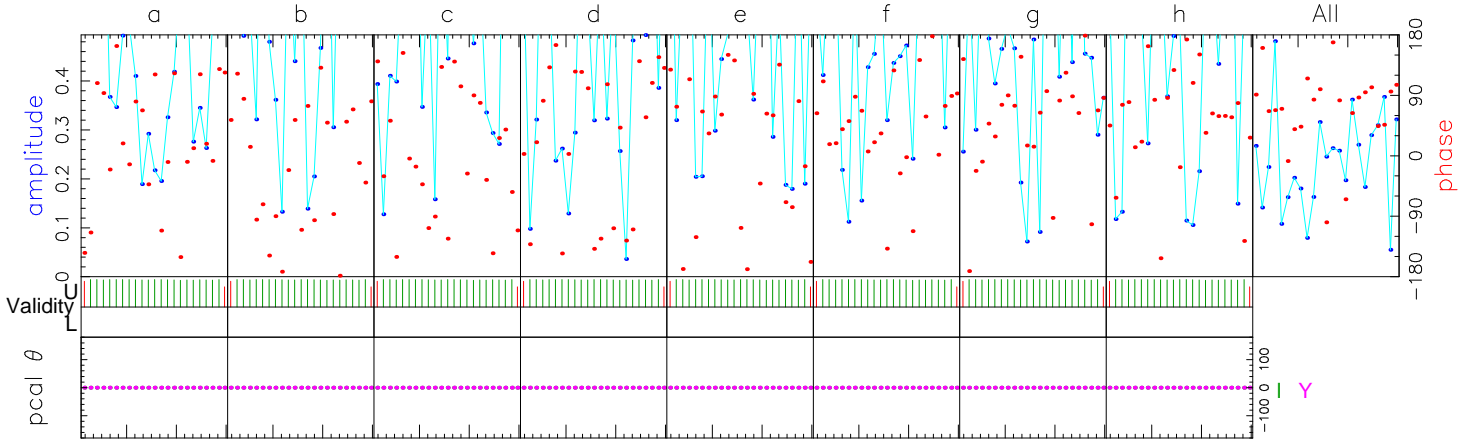
k: az 68.2 el 33.7 pa -71.5 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11380.536 452.688 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/kY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/kY.W.188.18UHRL





Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

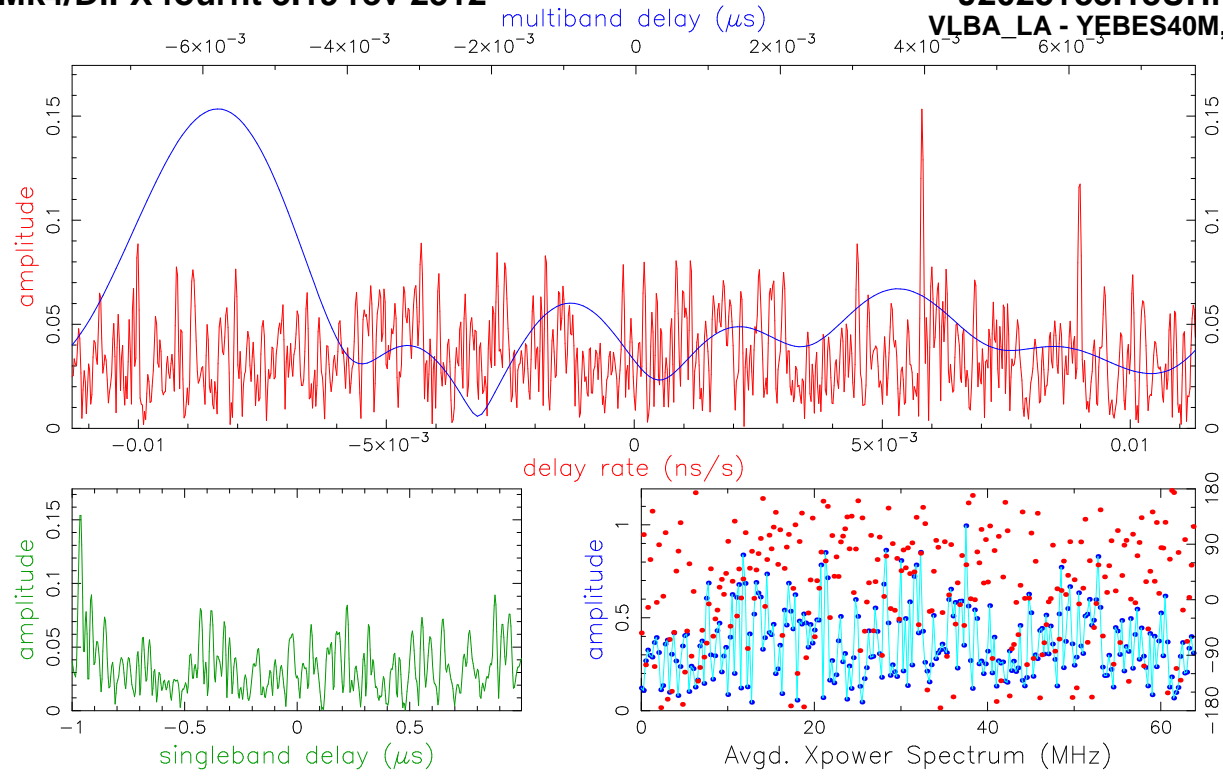
Group delay (usec)(sbd)	-4.37692983964E+03	Apriori delay (usec)	-4.37712586405E+03	Resid mbdelay (usec)	-7.10060E-03	+/-	1.8E-04
Sband delay (usec)	-4.37692860655E+03	Apriori clock (usec)	-1.5679122E+01	Resid sbdelay (usec)	1.97258E-01	+/-	1.5E-03
Phase delay (usec)	-4.37712586159E+03	Apriori clockrate (us/s)	-3.7100000E-07	Resid phdelay (usec)	2.45205E-06	+/-	6.3E-07
Delay rate (us/s)	1.56882761882E+00	Apriori rate (us/s)	1.56882695259E+00	Resid rate (us/s)	6.66233E-07	+/-	6.2E-09
Total phase (deg)	-258.4	Apriori accel (us/s/s)	1.91098440334E-05	Resid phase (deg)	76.0	+/-	19.4

ph/seg (deg)	60.4	Theor.	46.5	Amplitude	0.165 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	73.5		81.1	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	39.1		27.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	48.4		47.8	Inc. seg. avg.	0.177	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.166	Data rate(Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 72.7 el 39.2 pa -68.9 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -10795.607 584.283 simultaneous interpolator

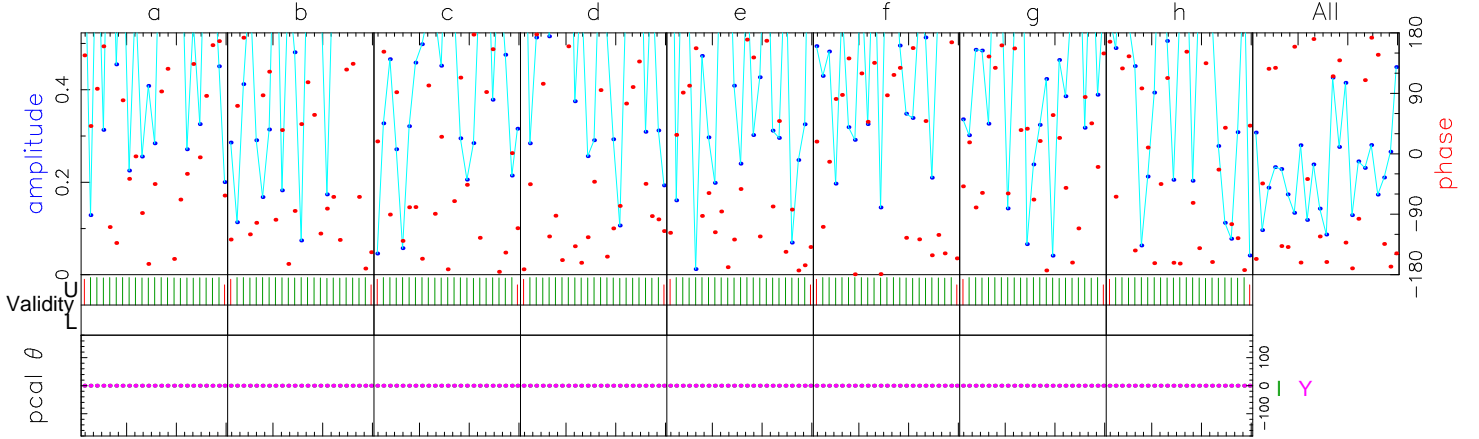
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/IY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/IY.W.113.18UHRL





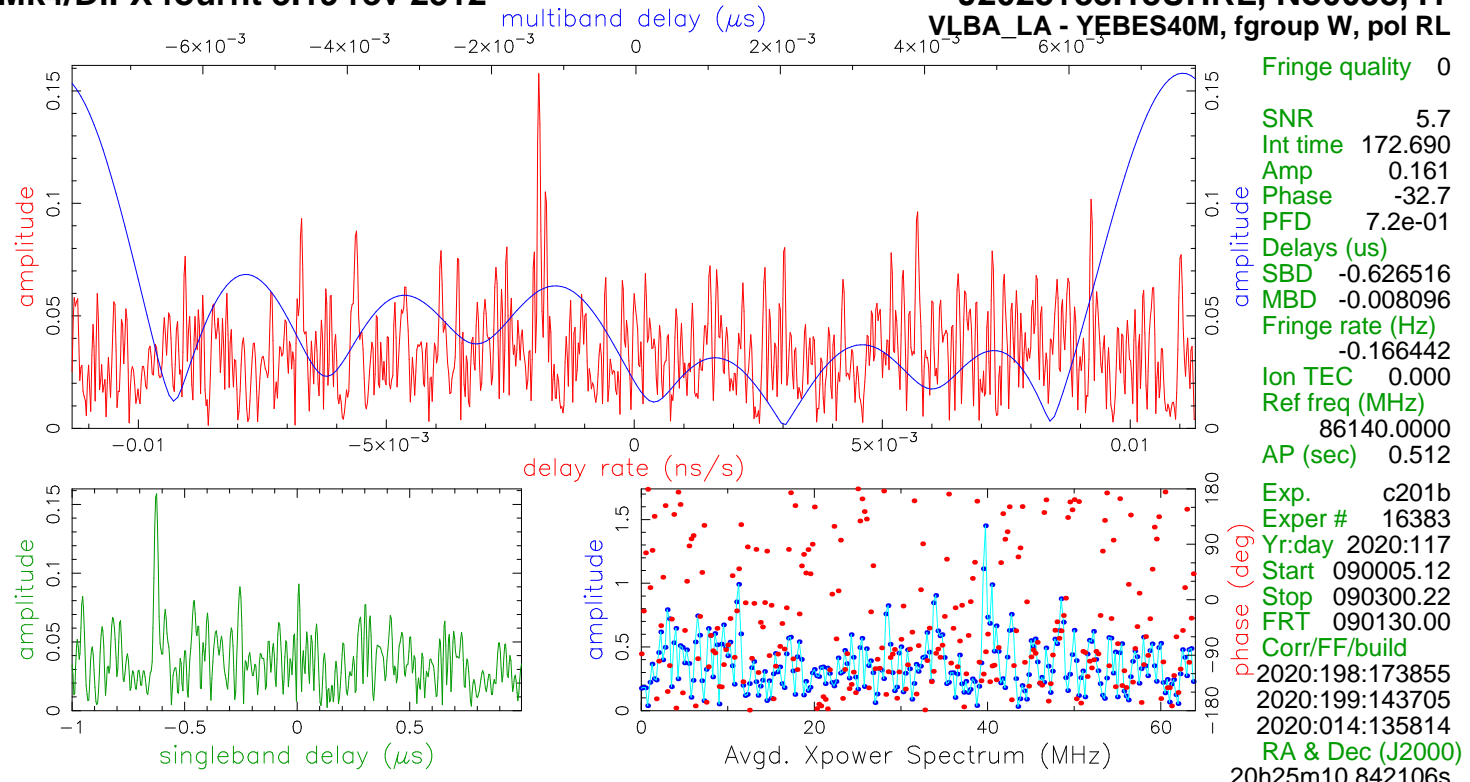
Fringe quality 0  
 SNR 5.6  
 Int time 172.689  
 Amp 0.174  
 Phase -173.8  
 PFD 9.1e-01  
 Delays (us)  
 SBD -0.962872  
 MBD -0.005737  
 Fringe rate (Hz)  
 0.499813  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143702  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

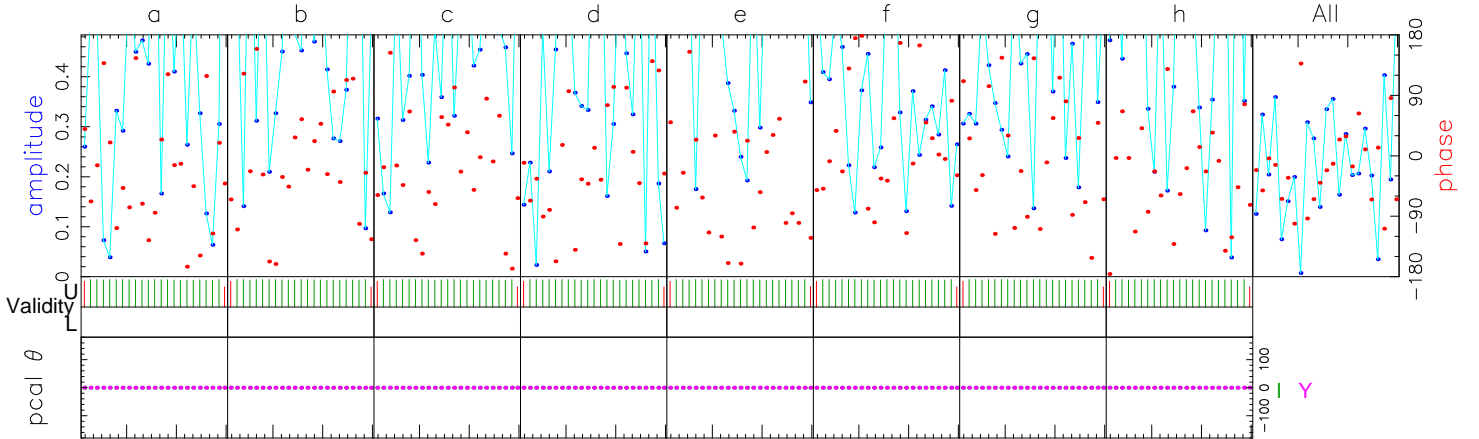


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.37808472652E+03	-4.37808873580E+03	-4.37712586965E+03	1.56883275492E+00						
Sband delay (usec)										
Phase delay (usec)										
Delay rate (us/s)										
Total phase (deg)										
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude	0.174 +/- 0.031									
Search (1024X32)	0.151									
Interp.	0.000									
Inc. seg. avg.	0.187									
Inc. frq. avg.	0.173									
PCal period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256 t_cohere infinite										
simultaneous interpolator										

I: az 72.7 el 39.2 pa -68.9 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -10795.607 584.283  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/IY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/IY.W.145.18UHRL

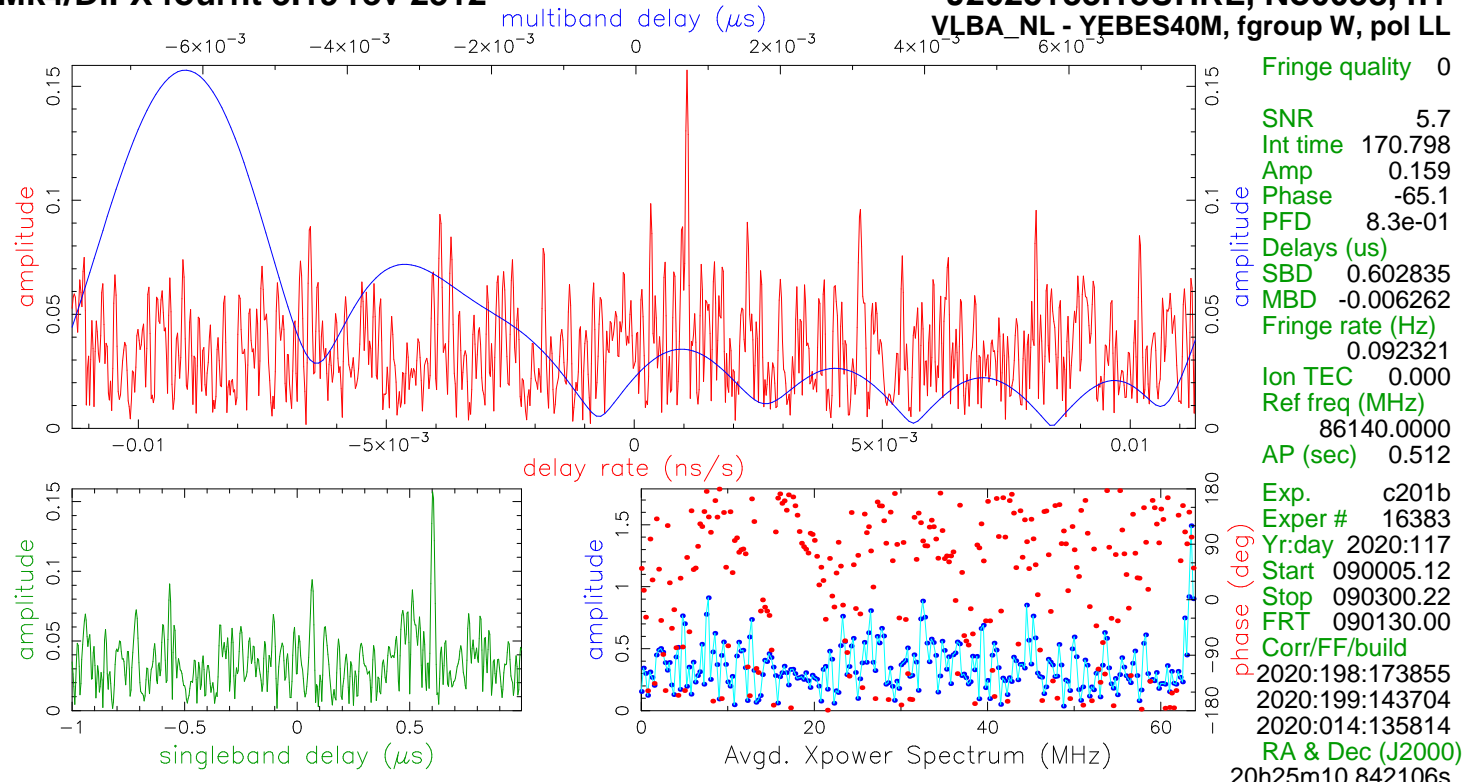


Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

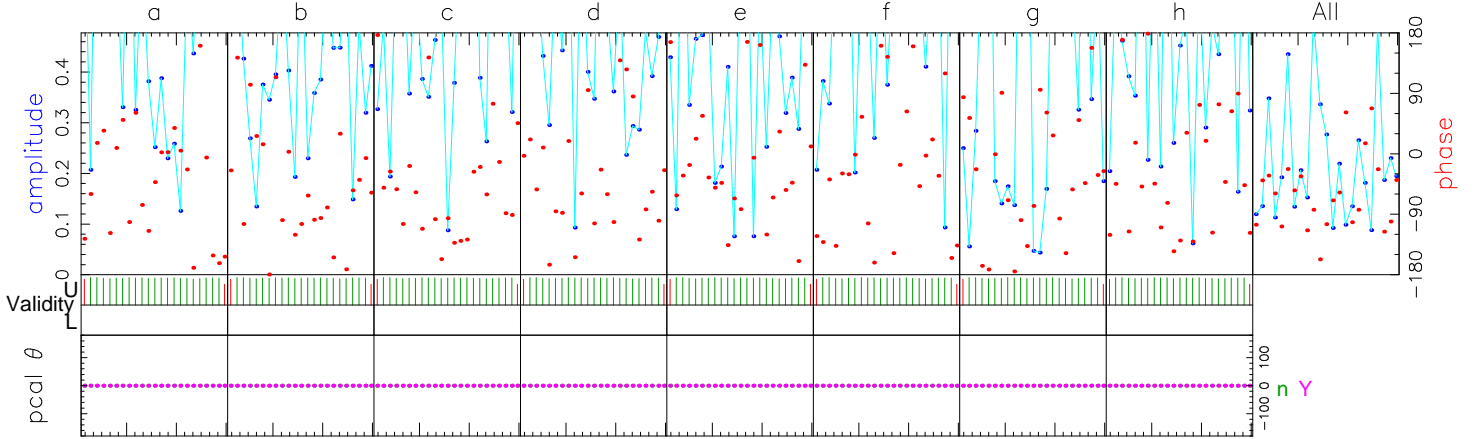


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-56.8	-24.8	-10.7	-19.8	-61.7	-9.0	-56.2	-28.6	Phase	-32.7
	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.3	Ampl.	0.2
	21.6	35.2	238.7	181.9	330.0	118.9	345.8	95.9	Sbd box	96.6
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	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)	-4.37775895955E+03		Apriori delay (usec)	-4.37712586405E+03	Resid mbdelay (usec)	-8.09550E-03	+/-	1.9E-04		
Sband delay (usec)	-4.37775237980E+03		Apriori clock (usec)	-1.5679122E+01	Resid sbdelay (usec)	-6.26516E-01	+/-	1.5E-03		
Phase delay (usec)	-4.37712586510E+03		Apriori clockrate (us/s)	-3.7100000E-07	Resid phdelay (usec)	-1.05507E-06	+/-	6.5E-07		
Delay rate (us/s)	1.56882502036E+00		Apriori rate (us/s)	1.56882695259E+00	Resid rate (us/s)	-1.93223E-06	+/-	6.4E-09		
Total phase (deg)		-7.1	Apriori accel (us/s/s)	1.91098440334E-05	Resid phase (deg)	-32.7	+/-	20.0		

	RMS	Theor.	Amplitude	0.161 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	60.7	48.0	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	87.1	83.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.3	28.3	Inc. seg. avg.	0.174	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	32.0	49.4	Inc. frq. avg.	0.151	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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
	-64.9	-83.1	-67.4	-45.5	-46.3	-84.2	-96.0	-48.6	Phase	-65.1
	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	21.0	312.5	410.4	115.9	236.8	311.9	457.6	279.0	Sbd box	411.3
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.14497097196E+03	Apriori delay (usec)	-1.14557408499E+03	Resid mbdelay (usec)	-6.26196E-03	+/-	1.9E-04
Sband delay (usec)	-1.14497124949E+03	Apriori clock (usec)	2.0318016E+01	Resid sbdelay (usec)	6.02835E-01	+/-	1.5E-03
Phase delay (usec)	-1.14557408709E+03	Apriori clockrate (us/s)	1.1399998E-07	Resid phdelay (usec)	-2.09943E-06	+/-	6.5E-07
Delay rate (us/s)	1.353456774470E+00	Apriori rate (us/s)	1.35345667295E+00	Resid rate (us/s)	1.07175E-06	+/-	6.5E-09
Total phase (deg)	-310.4	Apriori accel (us/s/s)	7.22315048600E-06	Resid phase (deg)	-65.1	+/-	20.2

ph/seg (deg)	54.9	Theor.	48.5	Amplitude	0.159 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	87.5		84.6	Search (1024X32)	0.152	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	21.1		28.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.9		49.9	Inc. seg. avg.	0.166	Sample rate(MISamp/s):	128		dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.147	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

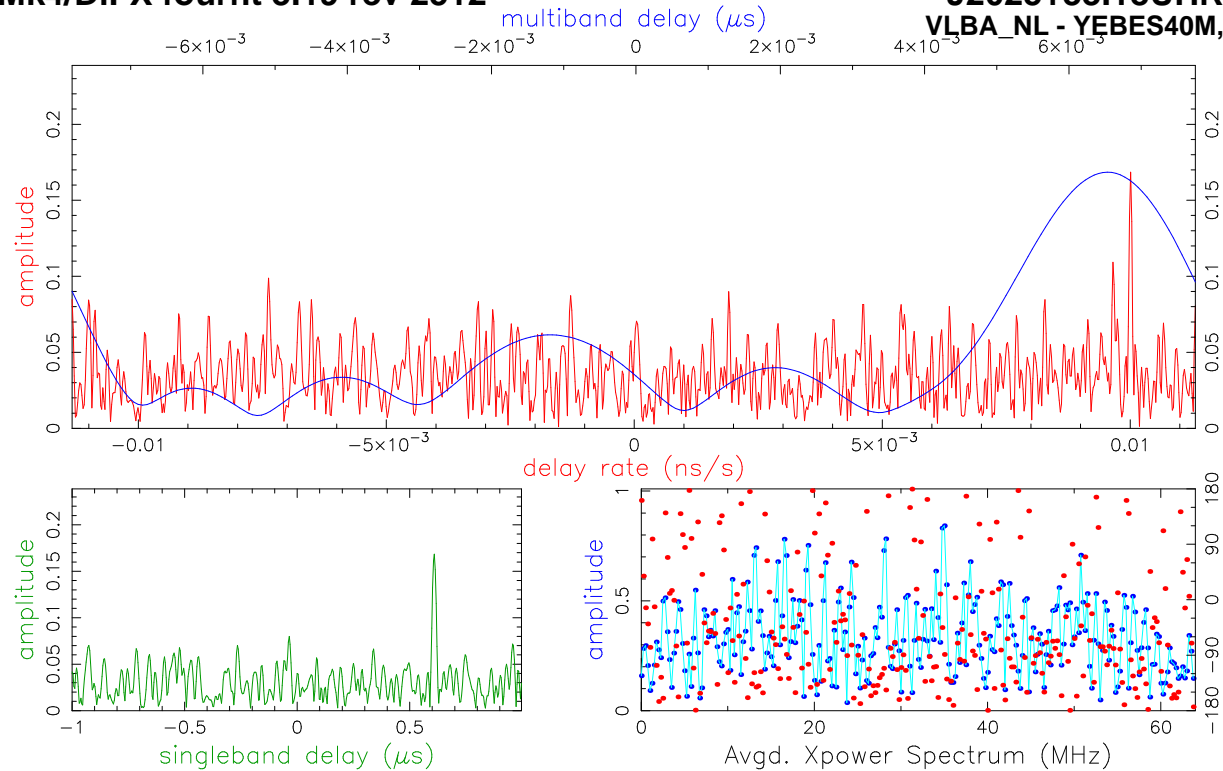
n: az 85.8 el 51.6 pa -63.4 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -9319.176 551.075 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nY.W.156.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

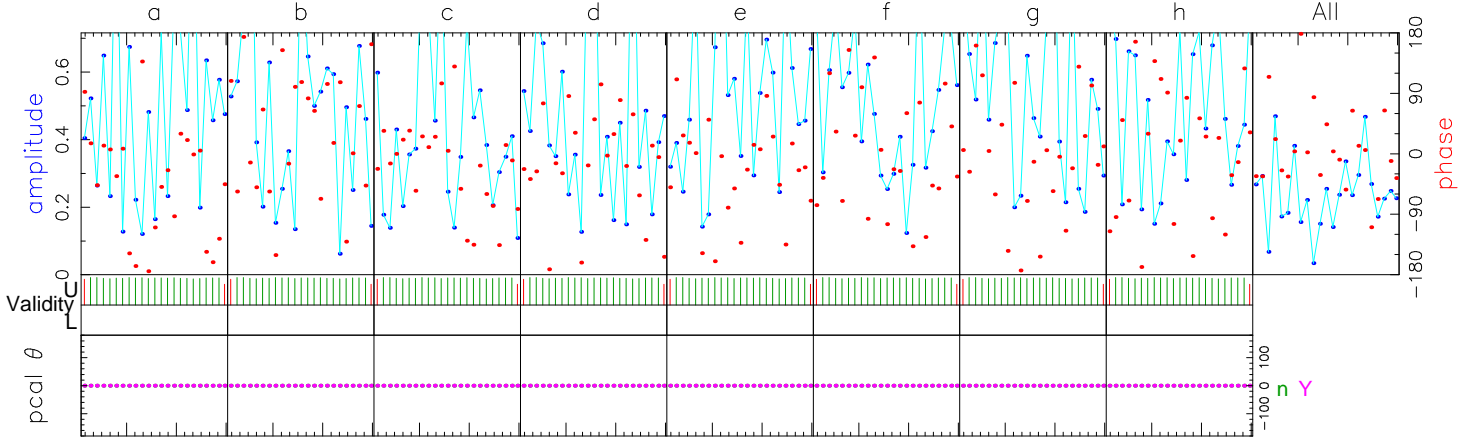
J2025+33.18UHRL, No0058, nY

VLBA\_NL - YEBES40M, fgroup W, pol RR



Fringe quality 0  
 SNR 6.0  
 Int time 170.798  
 Amp 0.239  
 Phase -6.2  
 PFD 1.8e-01  
 Delays (us)  
 SBD 0.608565  
 MBD 0.006509  
 Fringe rate (Hz) 0.863930  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143706  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

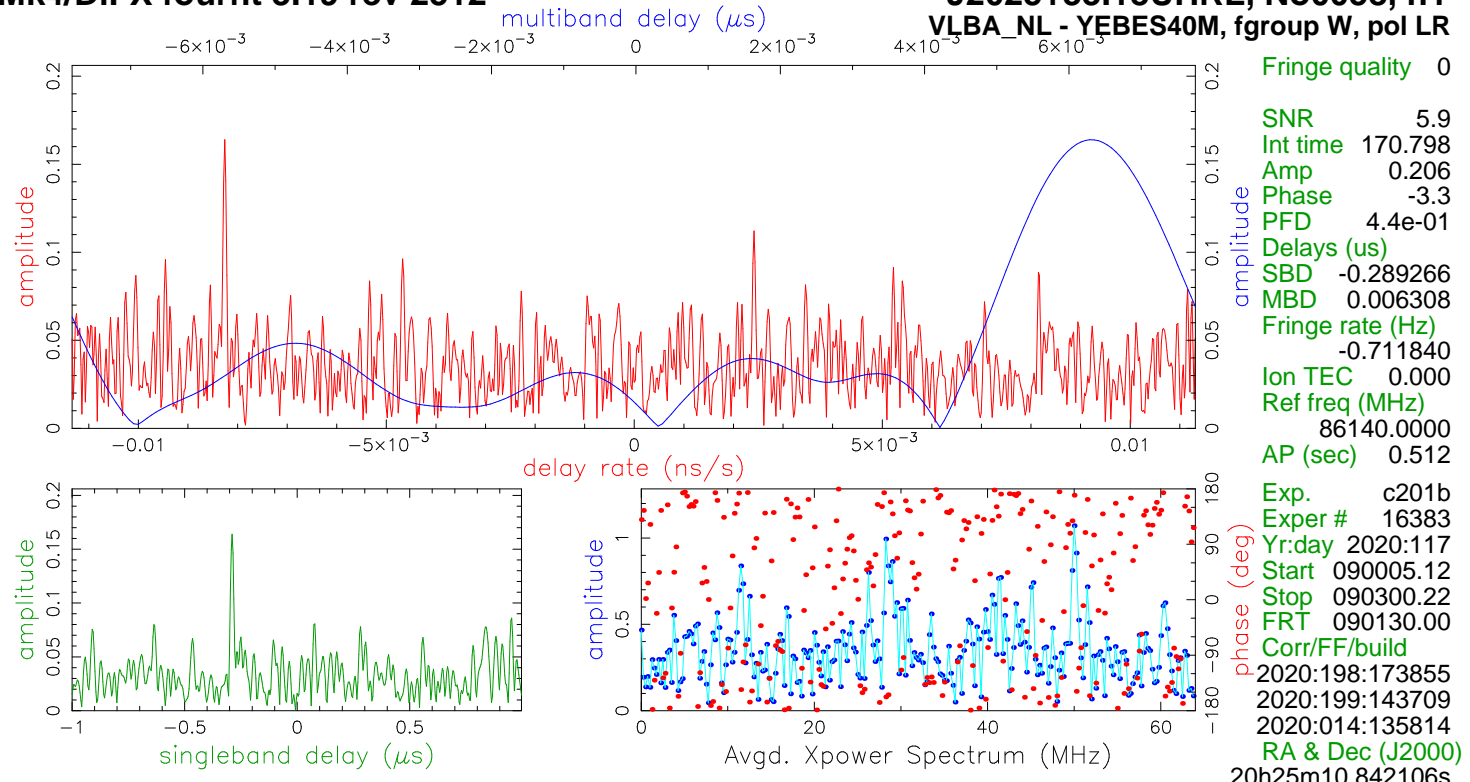
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



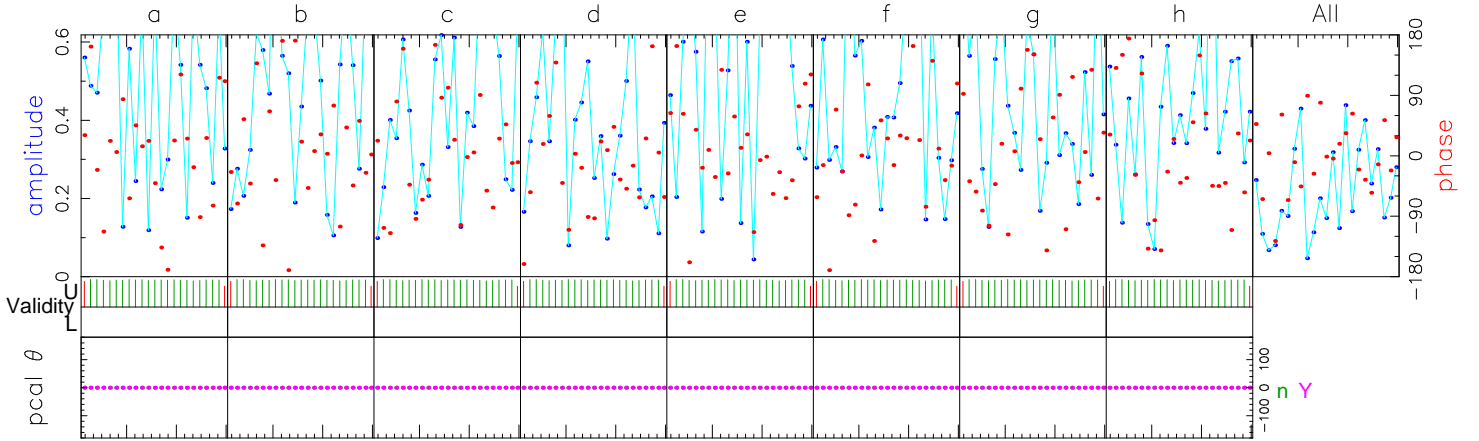
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.1	33.3	-6.1	14.1	-17.7	11.1	-14.3	-15.5	Phase	-6.2
	0.3	0.2	0.3	0.4	0.4	0.2	0.3	0.1	Ampl.	0.2
	88.3	147.7	415.2	459.4	412.3	61.7	460.8	290.9	Sbd box	412.8
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.14495820120E+03		Apriori delay (usec)		-1.14557408499E+03		Resid mbdelay (usec)		6.50879E-03	+/- 1.8E-04
Sband delay (usec)	-1.14496551999E+03		Apriori clock (usec)		2.0318016E+01		Resid sbdelay (usec)		6.08565E-01	+/- 1.4E-03
Phase delay (usec)	-1.14557408519E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-1.99113E-07	+/- 6.1E-07
Delay rate (us/s)	1.35346670232E+00		Apriori rate (us/s)		1.35345667295E+00		Resid rate (us/s)		1.00294E-05	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		7.22315048600E-06		Resid phase (deg)		-6.2	+/- 19.0

ph/seg (deg) 62.6 45.5 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.6 79.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.1 26.8 Inc. seg. avg. 0.256 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.3 46.8 Inc. frq. avg. 0.229 Data rate (Mbit/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -9319.176 551.075 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nY.W.167.18UHRL



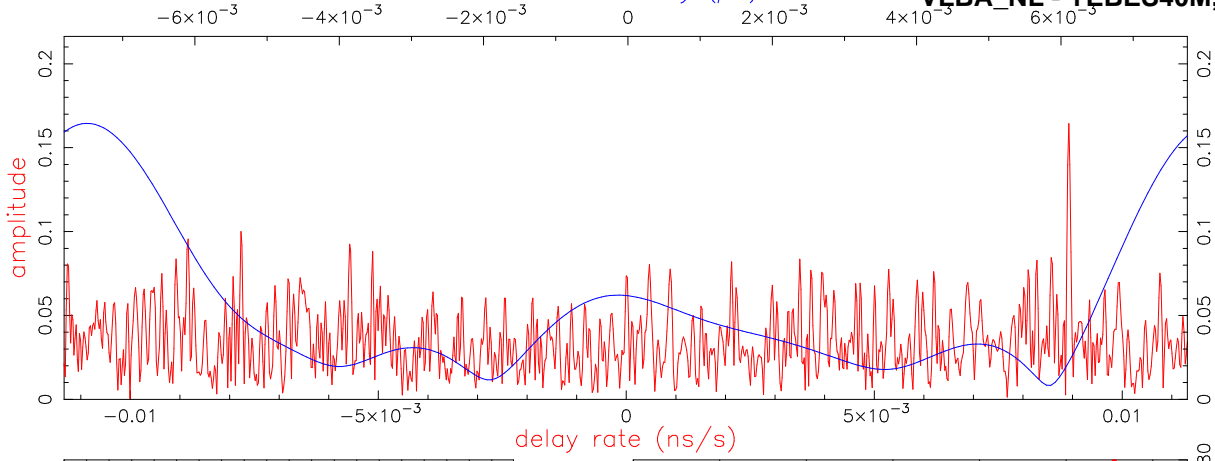
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



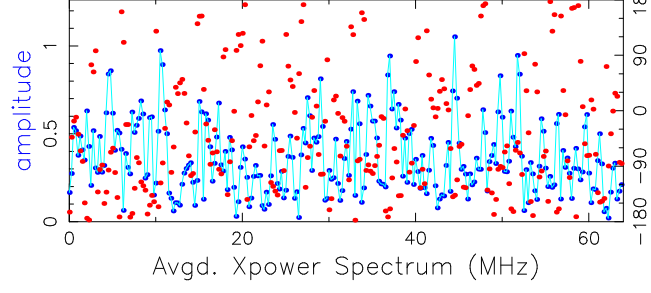
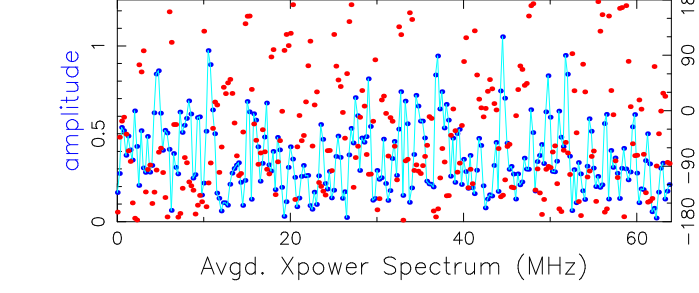
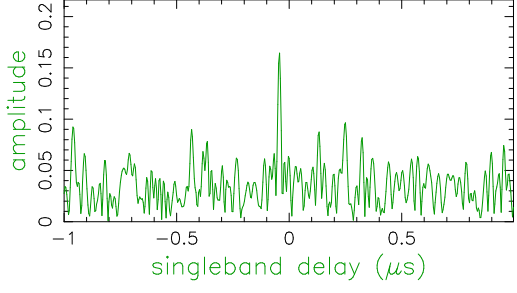
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
2.3	-14.0	6.4	-18.3	5.2	2.5	-0.3	-12.5	-12.5	Phase	-3.3
0.2	0.2	0.1	0.2	0.4	0.2	0.1	0.1	0.1	Ampl.	0.2
500.5	442.9	30.3	275.2	182.3	24.0	376.1	178.3	178.3	Sbd box	182.9
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.14586465235E+03		Apriori delay (usec)	-1.14557408499E+03		Resid mbdelay (usec)	6.30764E-03	+/-	1.9E-04	
Sband delay (usec)	-1.14586335124E+03		Apriori clock (usec)	2.0318016E+01		Resid sbdelay (usec)	-2.89266E-01	+/-	1.5E-03	
Phase delay (usec)	-1.14557408510E+03		Apriori clockrate (us/s)	1.1399998E-07		Resid phdelay (usec)	-1.06486E-07	+/-	6.3E-07	
Delay rate (us/s)	1.35344840920E+00		Apriori rate (us/s)	1.35345667295E+00		Resid rate (us/s)	-8.26375E-06	+/-	6.2E-09	
Total phase (deg)		-248.6	Apriori accel (us/s/s)	7.22315048600E-06		Resid phase (deg)	-3.3	+/-	19.6	

	RMS	Theor.	Amplitude	0.206 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.0	46.9	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	77.6	81.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	10.5	27.7	Inc. seg. avg.	0.207	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	35.1	48.3	Inc. frq. avg.	0.187	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

multiband delay ( $\mu$ s)

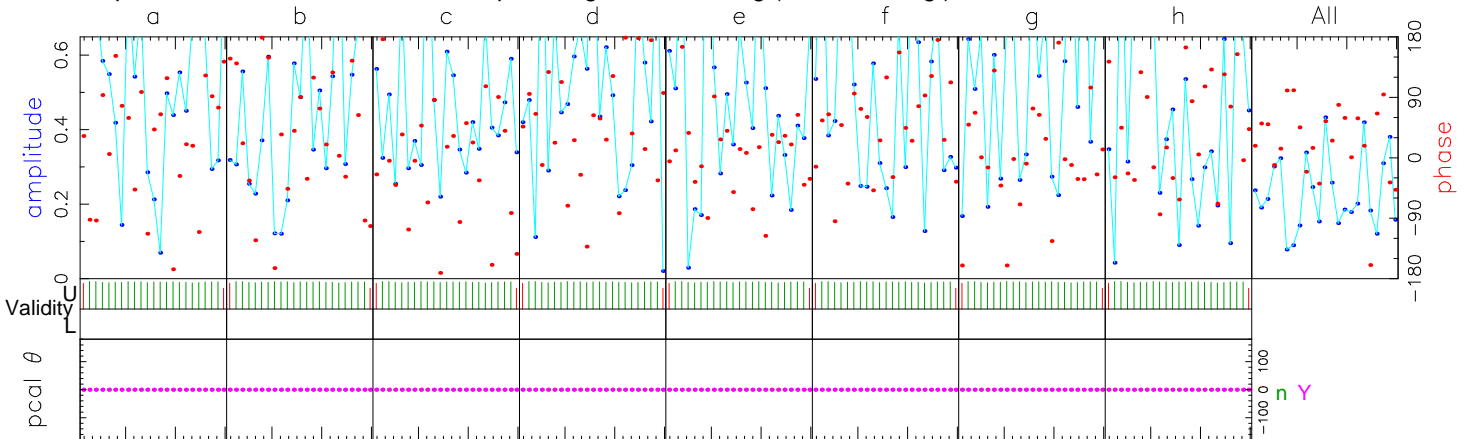


Fringe quality 0  
 SNR 5.9  
 Int time 170.798  
 Amp 0.216  
 Phase 26.0  
 PFD 3.6e-01  
 Delays (us)  
 SBD -0.043800  
 MBD 0.008089  
 Fringe rate (Hz) 0.769276  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143711  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"



Avgd. Xpower Spectrum (MHz)

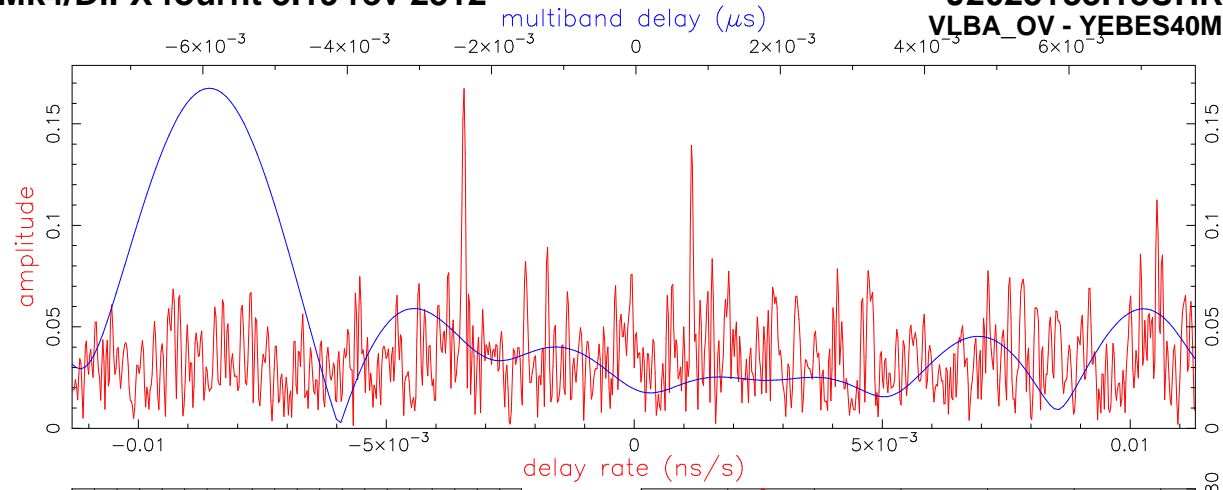
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	51.5	44.5	2.9	31.7	-3.0	52.4	9.2	58.6	Phase	26.0
	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.2	Ampl.	0.2
	11.1	481.1	158.5	92.0	377.7	247.2	199.9	320.2	Sbd box	245.8
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.14561287052E+03		Apriori delay (usec)		-1.14557408499E+03		Resid mbdelay (usec)		8.08947E-03	+/- 1.8E-04
Sband delay (usec)	-1.14561788524E+03		Apriori clock (usec)		2.0318016E+01		Resid sbdelay (usec)		-4.38002E-02	+/- 1.5E-03
Phase delay (usec)	-1.14557408416E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		8.36965E-07	+/- 6.3E-07
Delay rate (us/s)	1.35346560348E+00		Apriori rate (us/s)		1.35345667295E+00		Resid rate (us/s)		8.93053E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		7.22315048600E-06		Resid phase (deg)		26.0	+/- 19.4

ph/seg (deg) 56.1 46.5 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.5 81.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 27.2 27.4 Inc. seg. avg. 0.227 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.2 47.9 Inc. frq. avg. 0.210 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -9319.176 551.075 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nY.W.194.18UHRL

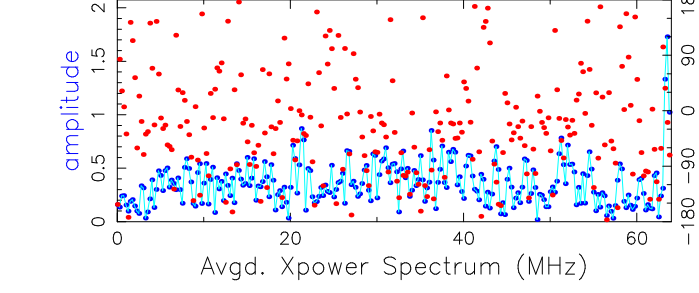
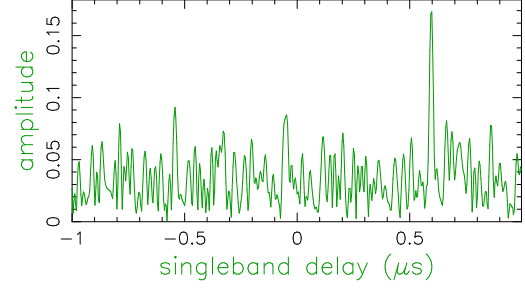




Fringe quality 0

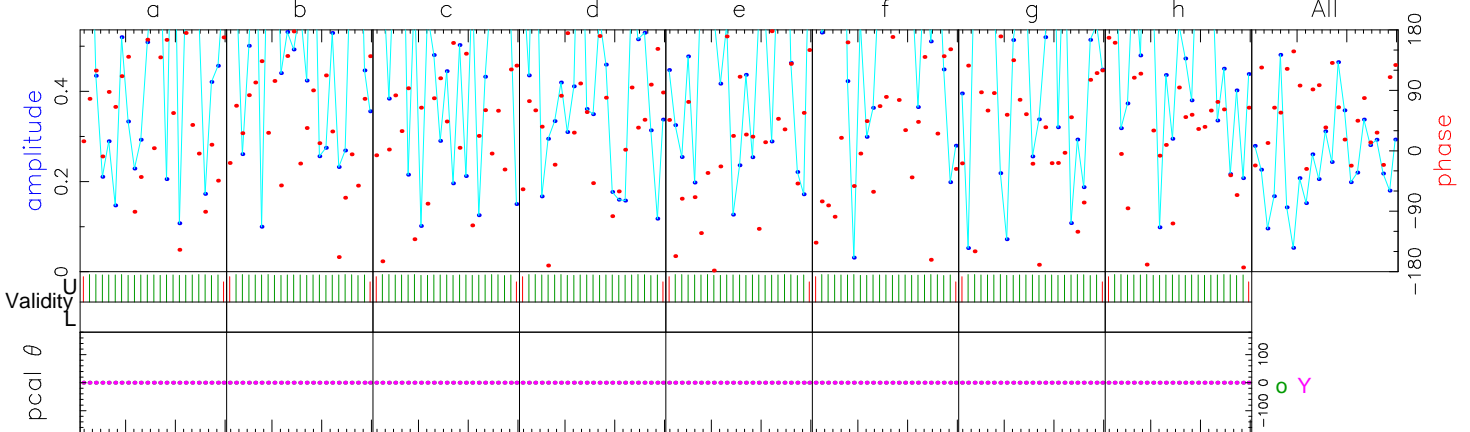
SNR 6.2  
 Int time 171.415  
 Amp 0.179  
 Phase 56.5  
 PFD 9.2e-02  
 Delays (us)  
 SBD 0.595939  
 MBD -0.005963  
 Fringe rate (Hz)  
 -0.296806  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143705  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



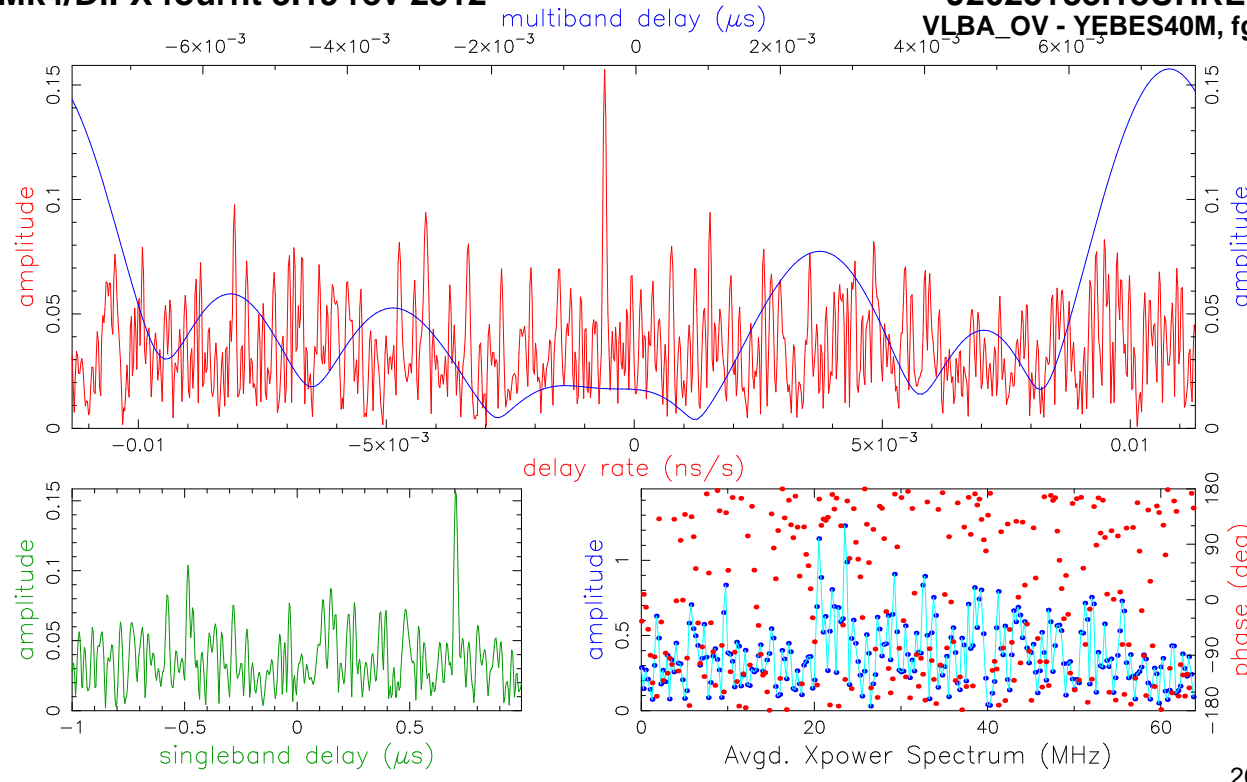
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.98707828406E+03	Apriori delay (usec)	-6.98768169613E+03	Resid mbdelay (usec)	-5.96293E-03	+/-	1.8E-04
Sband delay (usec)	-6.98708575738E+03	Apriori clock (usec)	8.1173306E+08	Resid sbdelay (usec)	5.95939E-01	+/-	1.4E-03
Phase delay (usec)	-6.98768169430E+03	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	1.82317E-06	+/-	6.0E-07
Delay rate (us/s)	1.63024931549E+00	Apriori rate (us/s)	1.63025276111E+00	Resid rate (us/s)	-3.44562E-06	+/-	5.9E-09
Total phase (deg)	-53.1	Apriori accel (us/s/s)	3.43948009326E-05	Resid phase (deg)	56.5	+/-	18.6

ph/seg (deg)	54.1	Theor.	44.6	Amplitude	0.179 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	72.7	Search (1024X32)	0.164	Search	0.164	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	18.0	Inc. seg. avg.	0.196	Inc. seg. avg.	0.196	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	27.9	Inc. frq. avg.	0.163	Inc. frq. avg.	0.163	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

o: az 68.8 el 30.5 pa -63.2 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11207.614 1539.481 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/oY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/oY.W.159.18UHRL

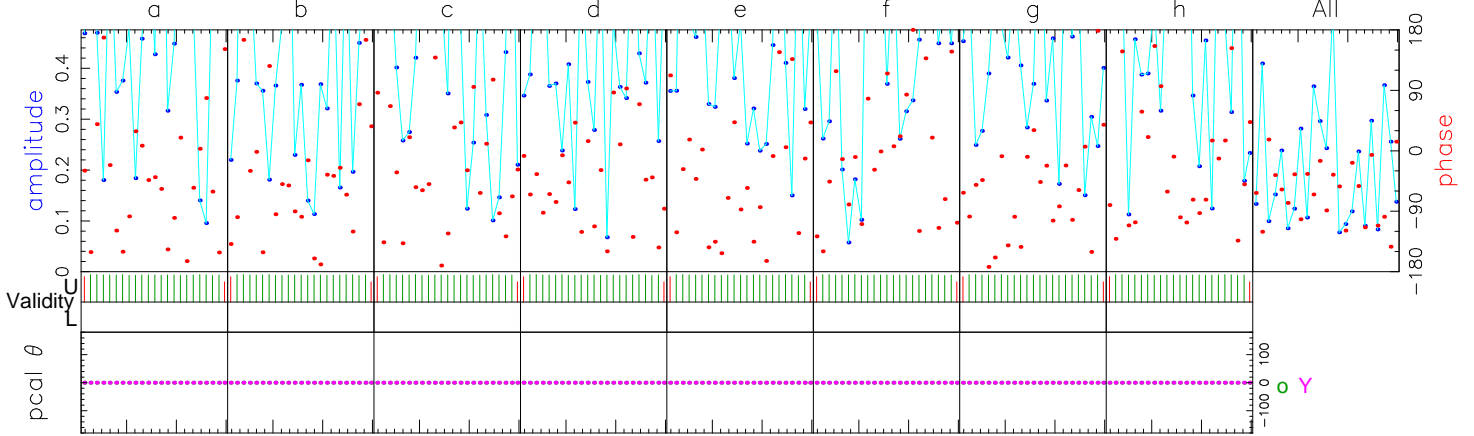


Fringe quality 0

SNR 5.7  
 Int time 171.415  
 Amp 0.159  
 Phase -64.4  
 PFD 8.3e-01  
 Delays (us)  
 SBD 0.704532  
 MBD 0.007439  
 Fringe rate (Hz)  
 -0.051458  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

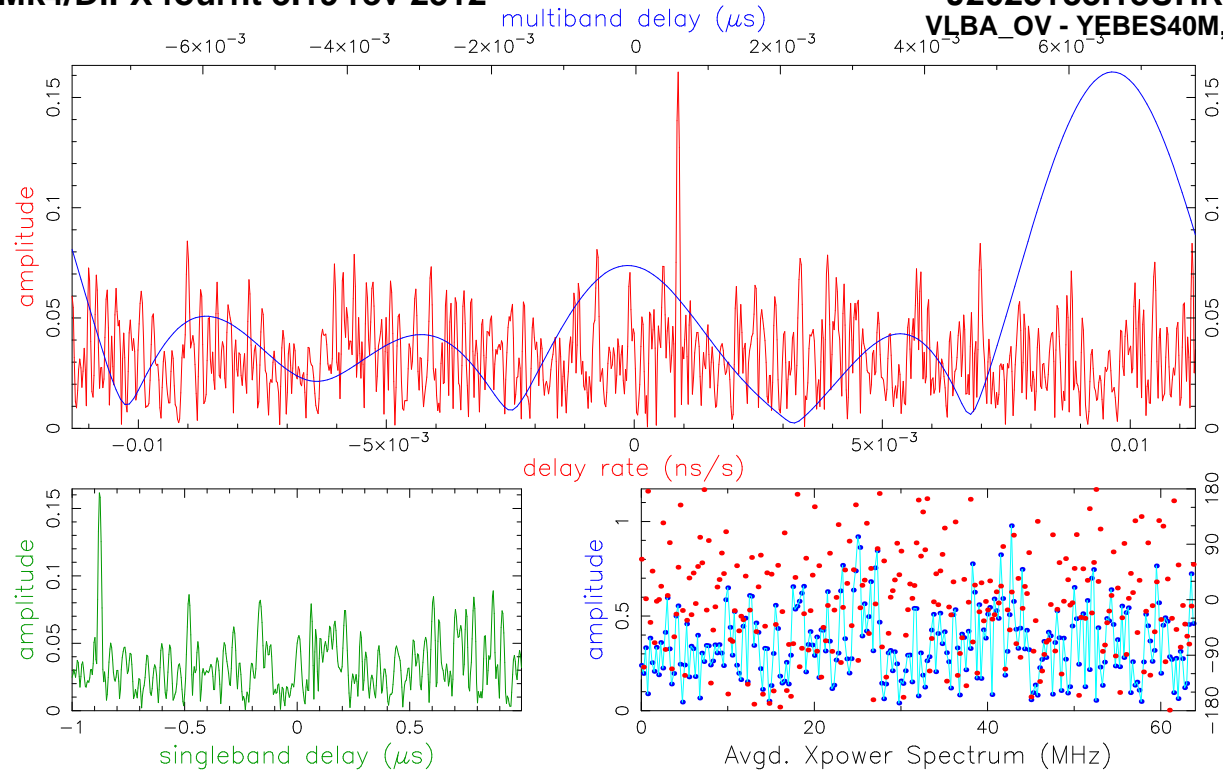
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143707  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



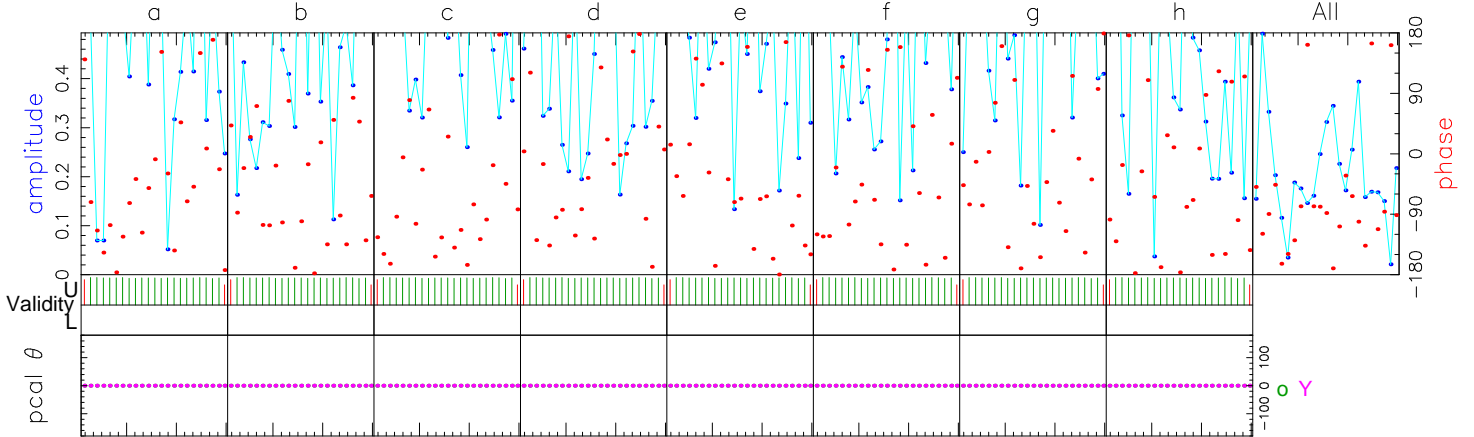
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-73.2	-77.5	-35.8	-53.0	-61.2	5.2	-74.6	-82.4	Phase	-64.4
	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	403.7	254.3	454.3	78.7	112.7	261.3	173.0	138.2	Sbd box	437.4
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.98697113259E+03		Apriori delay (usec)		-6.98768169613E+03		Resid mbdelay (usec)		7.43853E-03	+/- 1.9E-04
Sband delay (usec)	-6.98697716388E+03		Apriori clock (usec)		8.1173306E+00		Resid sbdelay (usec)		7.04532E-01	+/- 1.5E-03
Phase delay (usec)	-6.98768169821E+03		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		-2.07804E-06	+/- 6.5E-07
Delay rate (us/s)	1.63025216373E+00		Apriori rate (us/s)		1.63025276111E+00		Resid rate (us/s)		-5.97381E-07	+/- 6.4E-09
Total phase (deg)			Apriori accel (us/s/s)		3.43948009326E-05		Resid phase (deg)		-64.4	+/- 20.2

ph/seg (deg) 43.6 48.5 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 82.9 84.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.9 28.6 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.4 49.9 Inc. frq. avg. 0.148 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 o: az 68.8 el 30.5 pa -63.2 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11207.614 1539.481 simultaneous interpolator



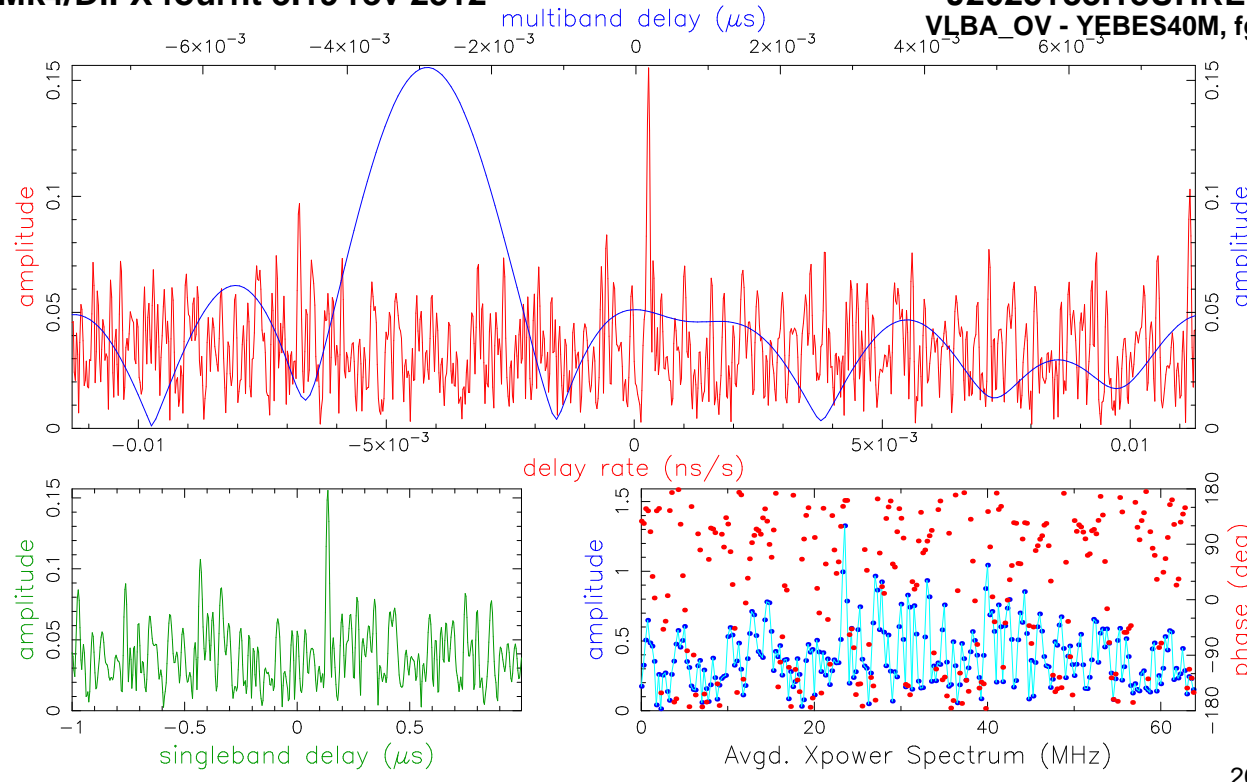
Fringe quality 0  
 SNR 5.9  
 Int time 171.415  
 Amp 0.165  
 Phase -103.5  
 PFD 4.1e-01  
 Delays (us)  
 SBD -0.877345  
 MBD 0.006644  
 Fringe rate (Hz)  
 0.077029  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143708  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



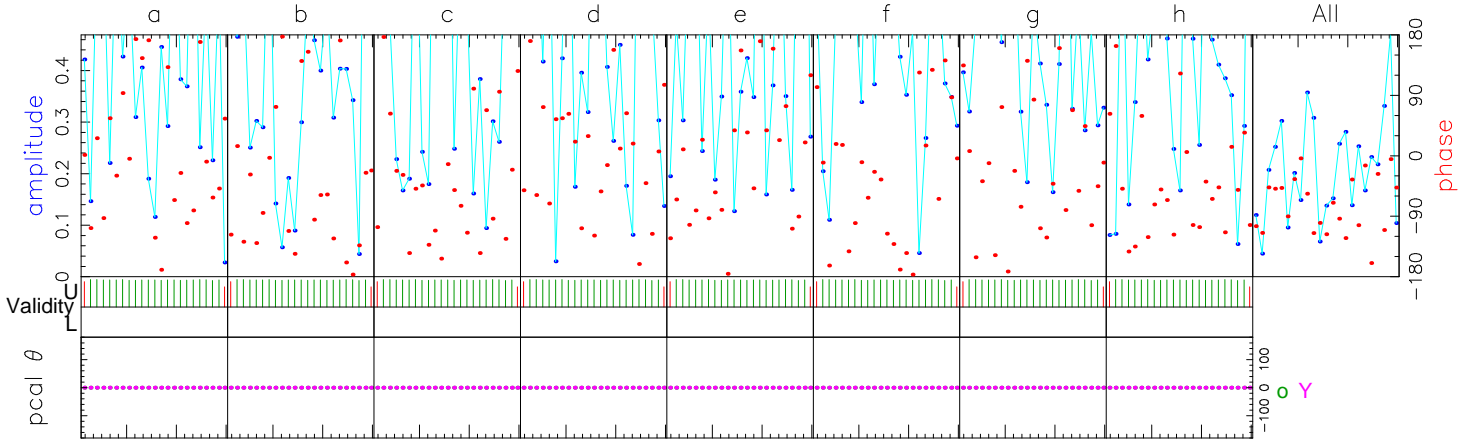
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-106.5	-75.4	-108.4	-103.0	-104.8	-128.4	-69.3	-123.5	Phase	-103.5
	0.2	0.1	0.3	0.1	0.2	0.2	0.1	0.1	Ampl.	0.2
	498.0	114.4	33.2	52.9	416.7	72.9	189.2	294.4	Sbd box	32.4
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-6.98856567718E+03		Apriori delay (usec)		-6.98768169613E+03		Resid mbdelay (usec)		6.64395E-03	+/- 1.8E-04
Sband delay (usec)	-6.98855904138E+03		Apriori clock (usec)		8.1173306E+08		Resid sbdelay (usec)		-8.77345E-01	+/- 1.5E-03
Phase delay (usec)	-6.98768169947E+03		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		-3.33790E-06	+/- 6.3E-07
Delay rate (us/s)	1.63025365534E+00		Apriori rate (us/s)		1.63025276111E+00		Resid rate (us/s)		8.94227E-07	+/- 6.2E-09
Total phase (deg)	-213.1		Apriori accel (us/s/s)		3.43948009326E-05		Resid phase (deg)		-103.5	+/- 19.5

ph/seg (deg) 48.9 46.8 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.0 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.4 27.6 Inc. seg. avg. 0.158 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.5 48.1 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 o: az 68.8 el 30.5 pa -63.2 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11207.614 1539.481 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/oY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/oY.W.179.18UHRL



Fringe quality 0  
 SNR 5.6  
 Int time 171.415  
 Amp 0.156  
 Phase -69.1  
 PFD 9.3e-01  
 Delays (us)  
 SBD 0.135684  
 MBD -0.002944  
 Fringe rate (Hz)  
 0.023973  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143710  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

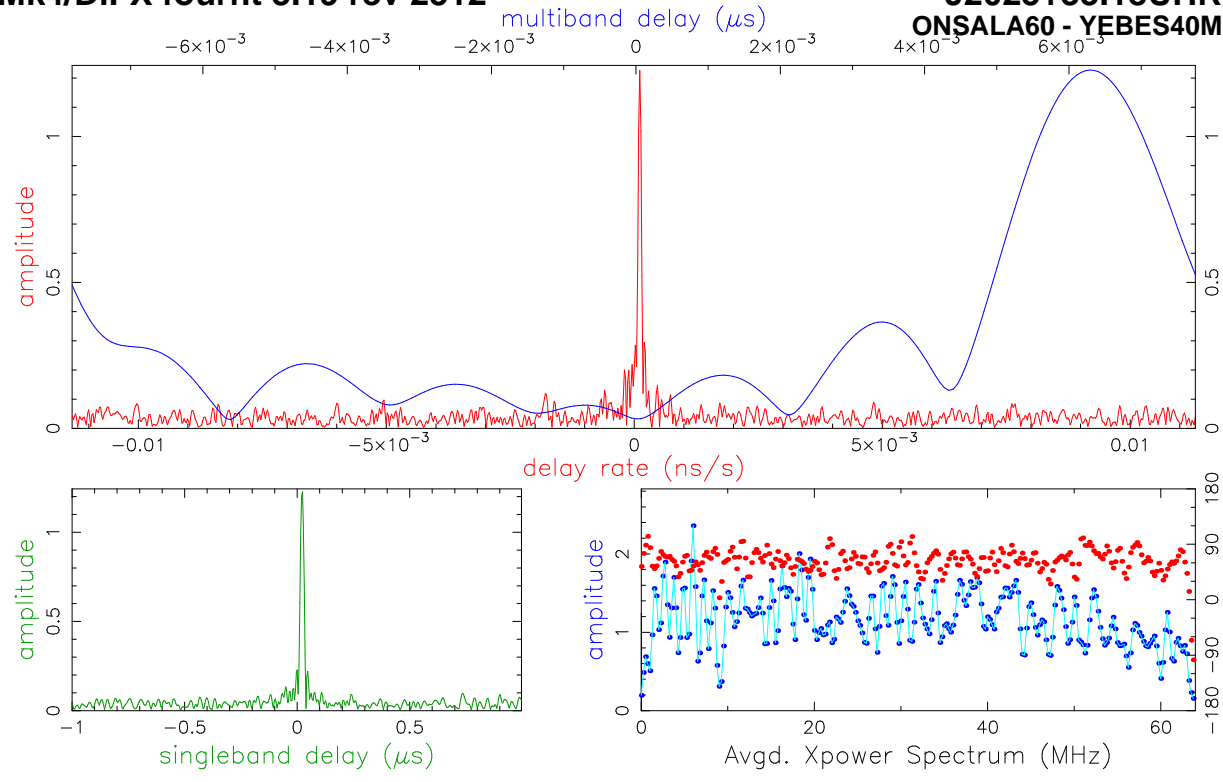


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-51.0	-82.8	-92.1	-53.5	-67.1	-80.8	-71.7	-58.5	Phase	-69.1
	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3	Ampl.	0.1
	431.6	449.9	471.5	67.7	224.3	111.6	96.5	293.1	Sbd box	291.7
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.98754401527E+03	Apriori delay (usec)	-6.98768169613E+03	Resid mbdelay (usec)	-2.94414E-03	+/-	1.9E-04
Sband delay (usec)	-6.98754601213E+03	Apriori clock (usec)	8.1173306E+00	Resid sbdelay (usec)	1.35684E-01	+/-	1.5E-03
Phase delay (usec)	-6.98768169836E+03	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	-2.22853E-06	+/-	6.6E-07
Delay rate (us/s)	1.63025303942E+00	Apriori rate (us/s)	1.63025276111E+00	Resid rate (us/s)	2.78306E-07	+/-	6.5E-09
Total phase (deg)	-178.7	Apriori accel (us/s/s)	3.43948009326E-05	Resid phase (deg)	-69.1	+/-	20.5

ph/seg (deg)	42.5	Theor.	49.1	Amplitude	0.156 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	73.7	Search (1024X32)	0.150	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	16.1	Inc. seg. avg.	0.155	Inc. frq. avg.	0.142	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	34.5	Inc. frq. avg.	0.142			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

o: az 68.8 el 30.5 pa -63.2 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -11207.614 1539.481 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/oY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/oY.W.190.18UHRL

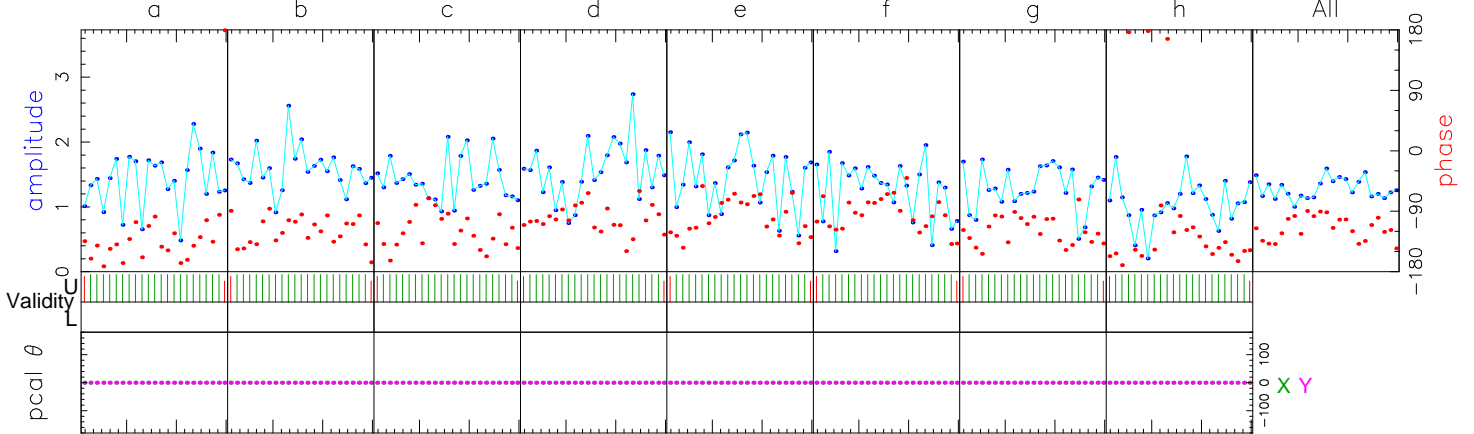


Fringe quality 8

SNR 44.9  
Int time 174.300  
Amp 1.244  
Phase -114.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.021923  
MBD 0.006250  
Fringe rate (Hz)  
0.008619  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090005.12  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143708  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

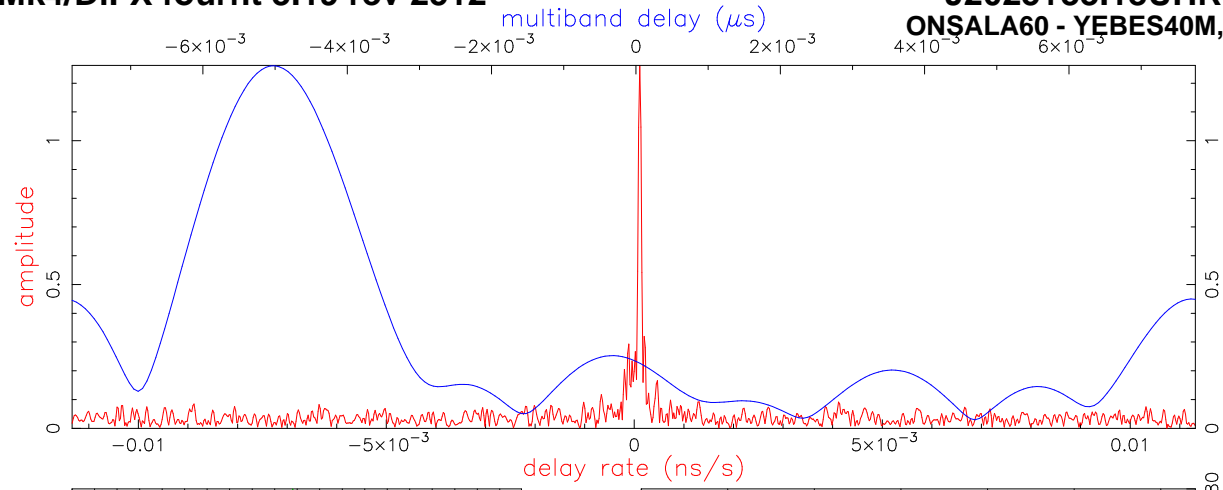
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-135.4	-117.5	-119.5	-102.6	-95.3	-91.8	-120.0	-142.7	Phase	-114.7
	1.3	1.5	1.3	1.5	1.3	1.2	1.2	0.9	Ampl.	1.3
	263.0	262.9	262.5	262.9	262.6	262.2	262.2	261.2	Sbd box	262.6
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.52356777583E+03								Resid mbdelay (usec)	6.24987E-03 +/- 2.4E-05
Sband delay (usec)	-2.52356772820E+03								Resid sbdelay (usec)	2.19225E-02 +/- 1.9E-04
Phase delay (usec)	-2.52358965440E+03								Resid phdelay (usec)	-3.69807E-06 +/- 8.2E-08
Delay rate (us/s)	6.42243138310E-02								Resid rate (us/s)	1.00053E-07 +/- 8.1E-10
Total phase (deg)		-298.8							Resid phase (deg)	-114.7 +/- 2.6
	RMS	Theor.	Amplitude	1.244 +/- 0.028					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	16.9	6.1	Search (1024X32)	1.174					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	12.5	10.7	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	19.7	3.6	Inc. seg. avg.	1.275					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	13.3	6.3	Inc. frq. avg.	1.275					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite
X: az 261.7 el 46.4 pa 39.8										simultaneous interpolator
Y: az 271.1 el 57.5 pa 66.0										
u,v (fr/asec) -421.507 2771.186										
Control file: cf_1234_gmva	Input file: /Exps/c201b/v1/1234/No0058/XY..18UHRL								Output file: /Exps/c201b/v1/1234/No0058/XY.W.174.18UHRL	

Mk4/DiFX fourfit 3.19 rev 2512

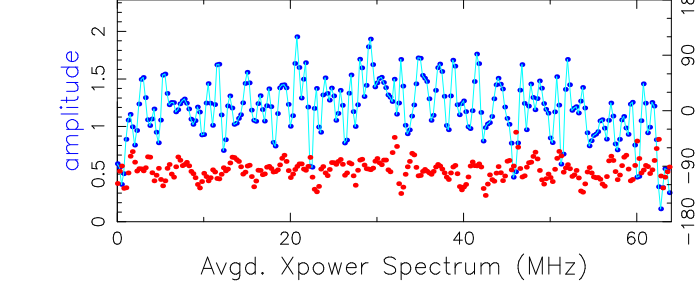
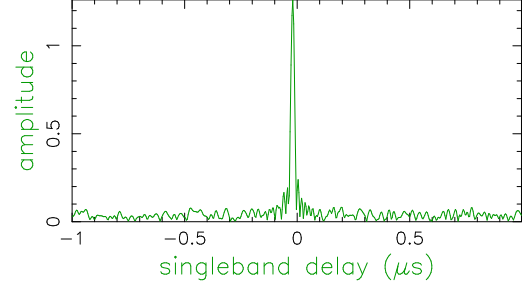
J2025+33.18UHRL, No0058, XY  
ONŞALA60 - YEŞES40M, fgroup W, pol RR



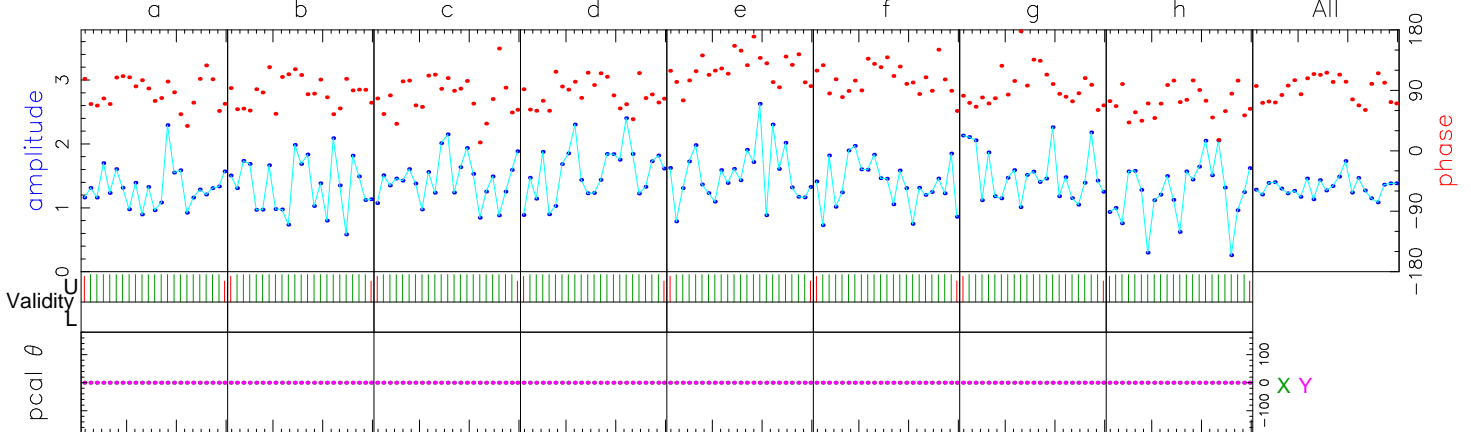
Fringe quality 8

SNR 45.6  
Int time 174.300  
Amp 1.262  
Phase 92.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.019952  
MBD -0.005038  
Fringe rate (Hz) 0.008656  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090005.12  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143711  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"



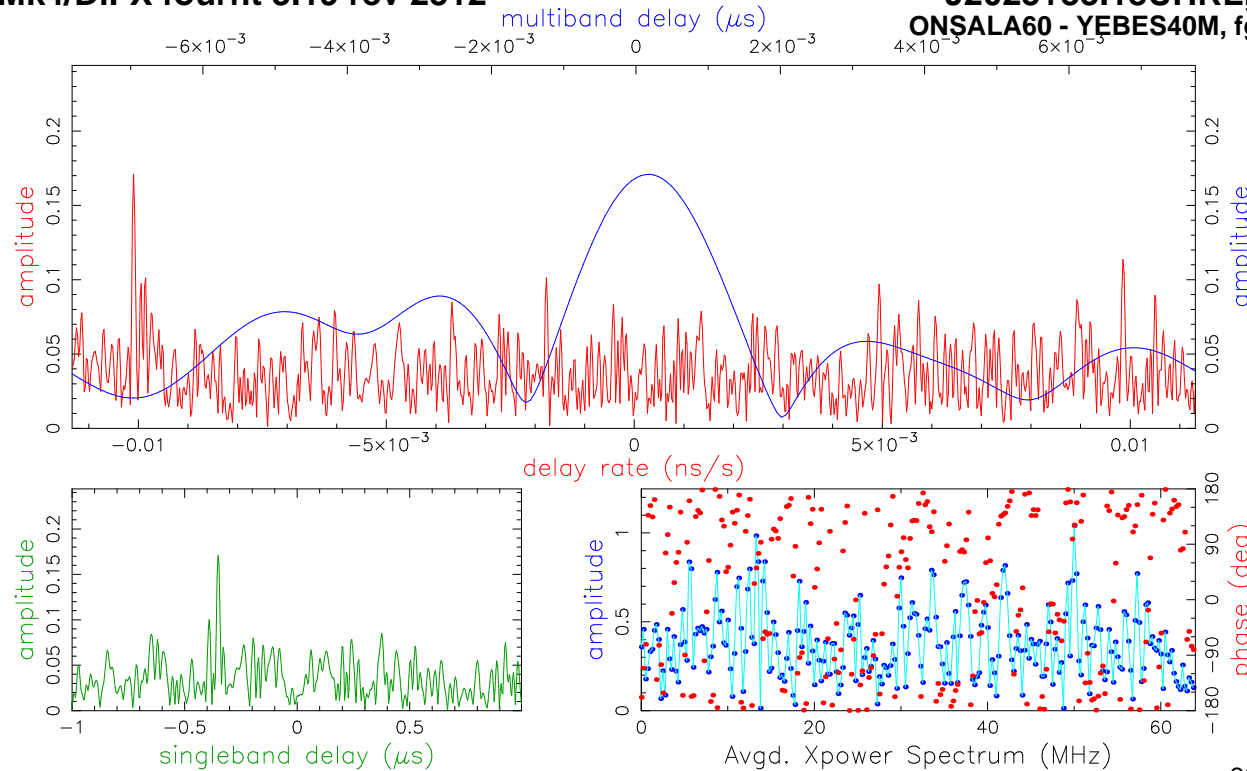
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
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	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-2.52361031333E+03								Resid mbdelay (usec)	-5.03763E-03 +/- 2.4E-05
Sband delay (usec)	-2.52360960245E+03								Resid sbdelay (usec)	-1.99517E-02 +/- 1.9E-04
Phase delay (usec)	-2.52358964773E+03								Resid phdelay (usec)	2.97190E-06 +/- 8.1E-08
Delay rate (us/s)	6.42243142646E-02								Resid rate (us/s)	1.00486E-07 +/- 8.0E-10
Total phase (deg)			-91.9						Resid phase (deg)	92.2 +/- 2.5
	RMS	Theor.	Amplitude	1.262 +/- 0.028					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	17.8	6.0	Search (1024X32)	1.201					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	12.2	10.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	18.2	3.6	Inc. seg. avg.	1.317					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	9.0	6.2	Inc. frq. avg.	1.307					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 261.7 el 46.4 pa 39.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -421.507 2771.186 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/XY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/XY.W.193.18UHRL

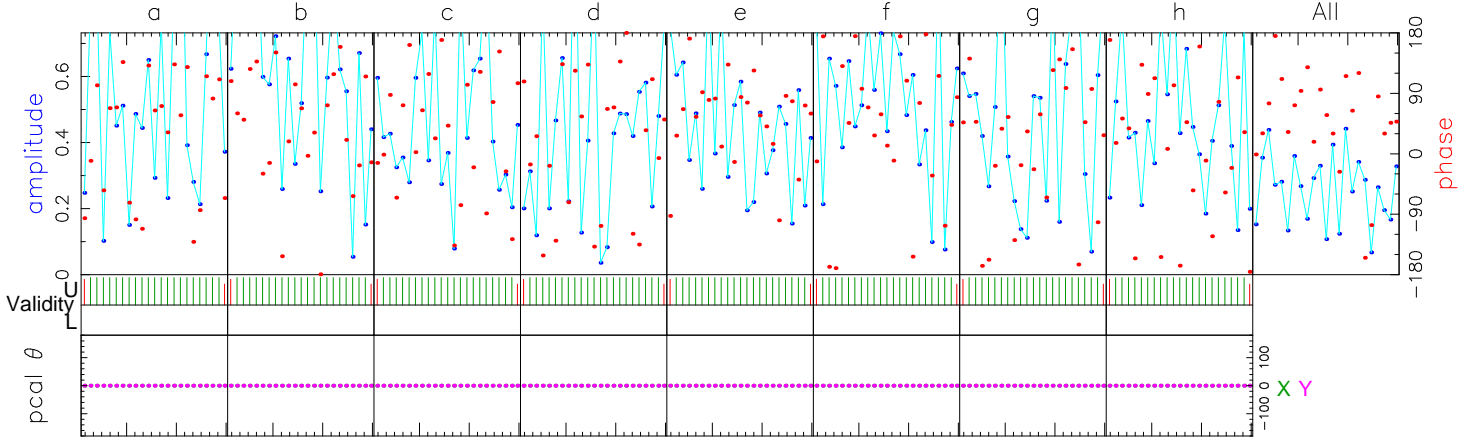


Fringe quality 0

SNR 6.2  
Int time 174.300  
Amp 0.244  
Phase 75.3  
PFD 7.2e-02  
Delays (us)  
SBD -0.350701  
MBD 0.000190  
Fringe rate (Hz)  
-0.871262  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090005.12  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143713  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



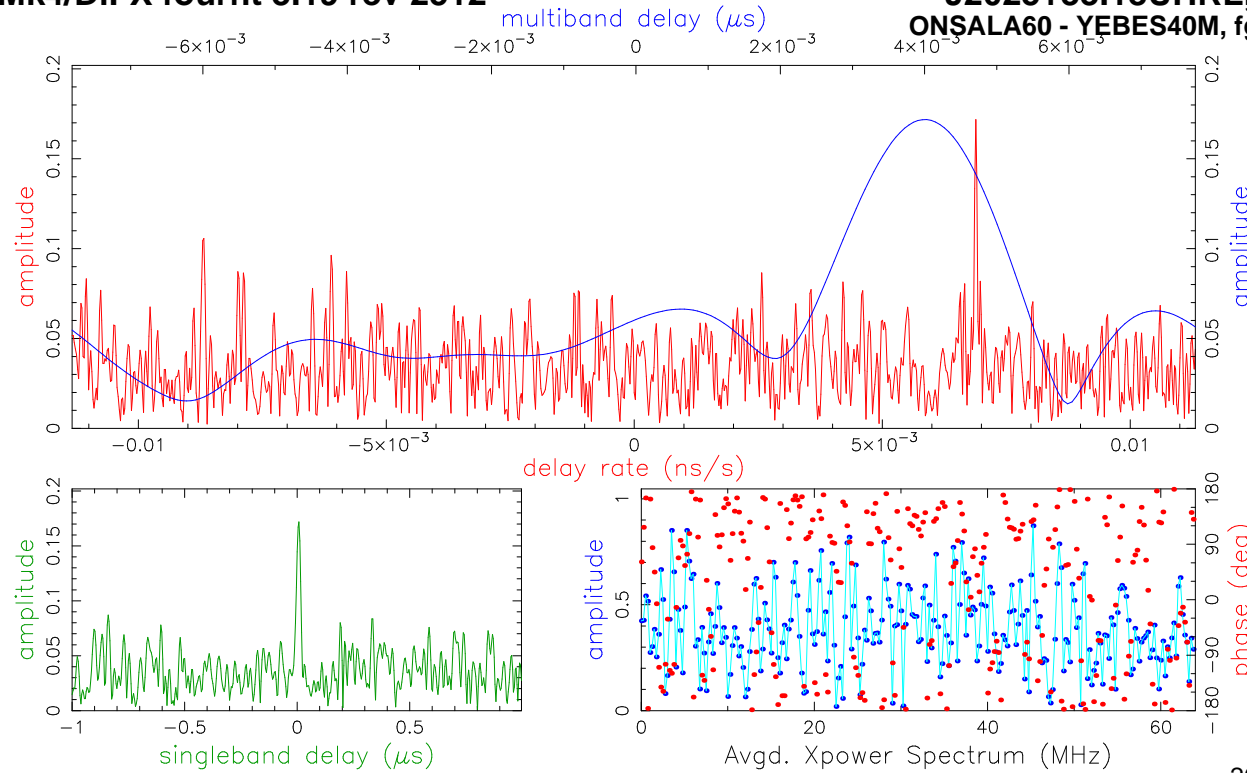
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-2.52393321080E+03	Apriori delay (usec)	-2.52358965070E+03	Resid mbdelay (usec)	1.89901E-04	+/-	1.8E-04
Sband delay (usec)	-2.52394035170E+03	Apriori clock (usec)	2.8793270E+01	Resid sbdelay (usec)	-3.50701E-01	+/-	1.4E-03
Phase delay (usec)	-2.52358964827E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-2.42672E-06	+/-	6.0E-07
Delay rate (us/s)	6.42140992899E-02	Apriori rate (us/s)	6.42242137784E-02	Resid rate (us/s)	-1.01145E-05	+/-	5.9E-09
Total phase (deg)	-108.8	Apriori accel (us/s/s)	2.56698652001E-05	Resid phase (deg)	75.3	+/-	18.5

ph/seg (deg)	65.2	Theor.	44.3	Amplitude	0.244 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	80.0		77.3	Search (1024X32)	0.168	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	40.3		26.1	Inc. seg. avg.	0.286	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	43.1		45.6	Inc. frq. avg.	0.250	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

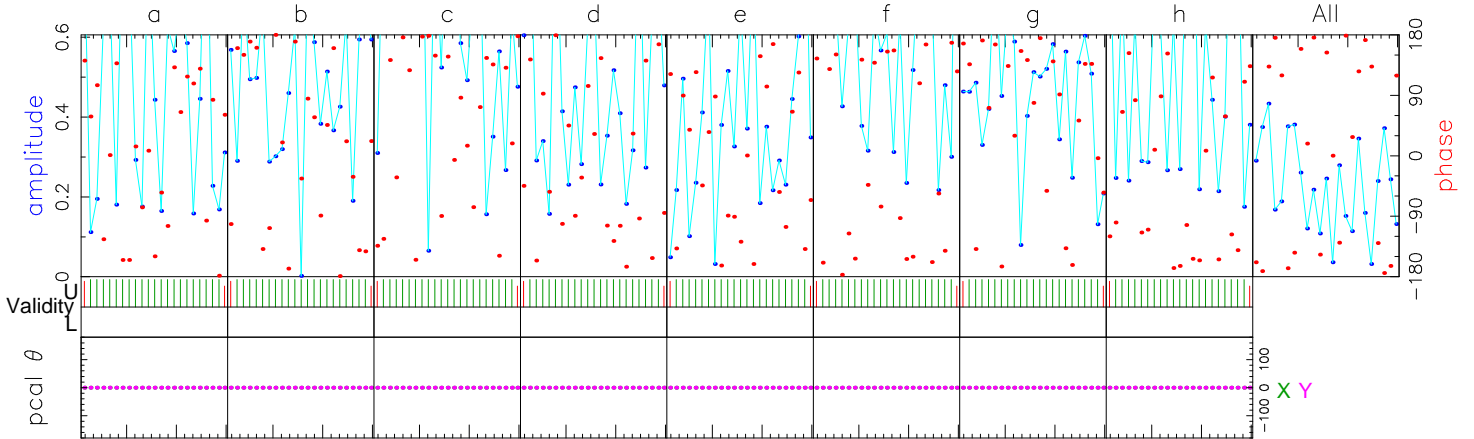
X: az 261.7 el 46.4 pa 39.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -421.507 2771.186 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/XY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/XY.W.206.18UHRL



Fringe quality 0  
SNR 6.2  
Int time 174.300  
Amp 0.202  
Phase 177.1  
PFD 5.9e-02  
Delays (us)  
SBD 0.006728  
MBD 0.004013  
Fringe rate (Hz) 0.593369  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090005.12  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143715  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

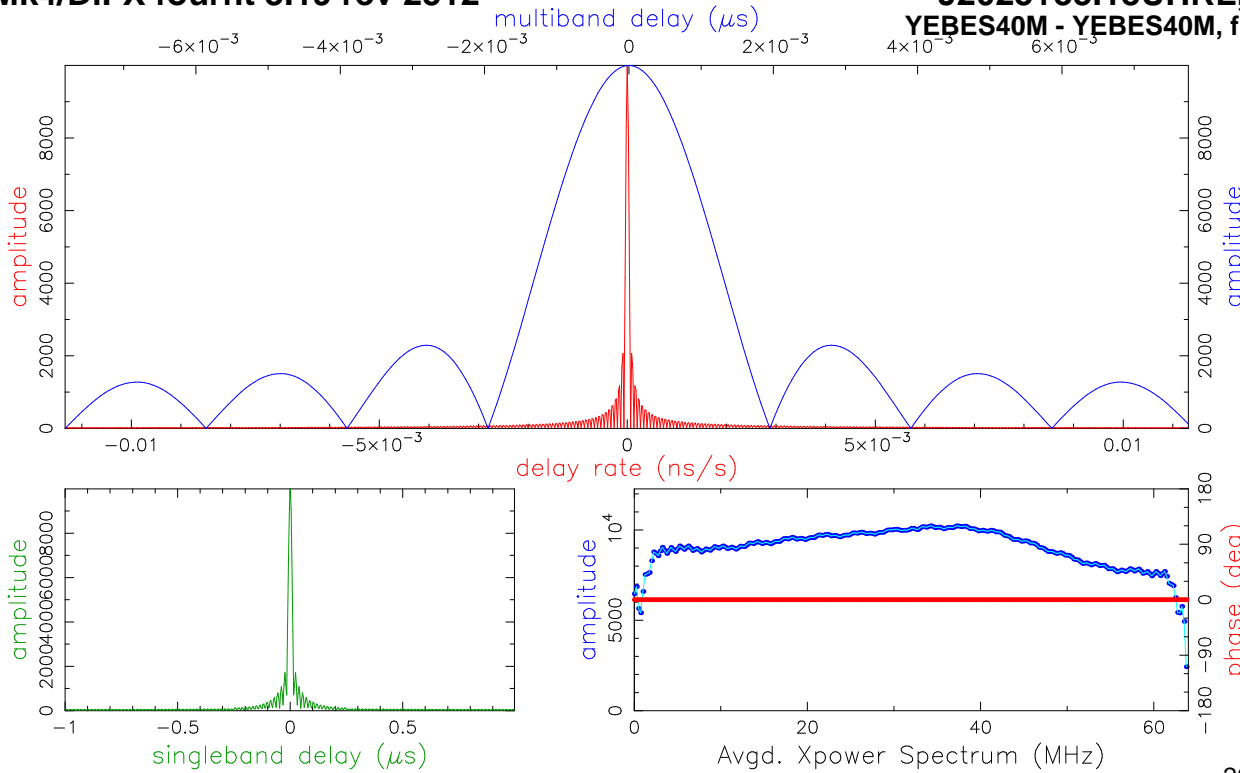


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	175.2	173.3	165.4	-148.8	-151.6	176.5	144.2	-159.3	Phase	177.1
	0.1	0.2	0.2	0.2	0.1	0.5	0.3	0.2	Ampl.	0.2
	308.9	94.8	103.4	261.9	480.1	258.4	258.1	202.9	Sbd box	258.7
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.52358563761E+03	Apriori delay (usec)	-2.52358965070E+03	Resid mbdelay (usec)	4.01309E-03	+/-	1.7E-04
Sband delay (usec)	-2.52358292245E+03	Apriori clock (usec)	2.8793270E+01	Resid sbdelay (usec)	6.72825E-03	+/-	1.4E-03
Phase delay (usec)	-2.52358964499E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	5.71035E-06	+/-	5.9E-07
Delay rate (us/s)	6.42311022070E-02	Apriori rate (us/s)	6.42242137784E-02	Resid rate (us/s)	6.88843E-06	+/-	5.9E-09
Total phase (deg)	-7.0	Apriori accel (us/s/s)	2.56698652001E-05	Resid phase (deg)	177.1	+/-	18.4

ph/seg (deg) 67.0 44.1 Search (1024X32) 0.170 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.3 76.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.6 26.0 Inc. seg. avg. 0.208 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.3 45.4 Inc. frq. avg. 0.195 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 X: az 261.7 el 46.4 pa 39.8 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -421.507 2771.186 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/XY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/XY.W.215.18UHRL



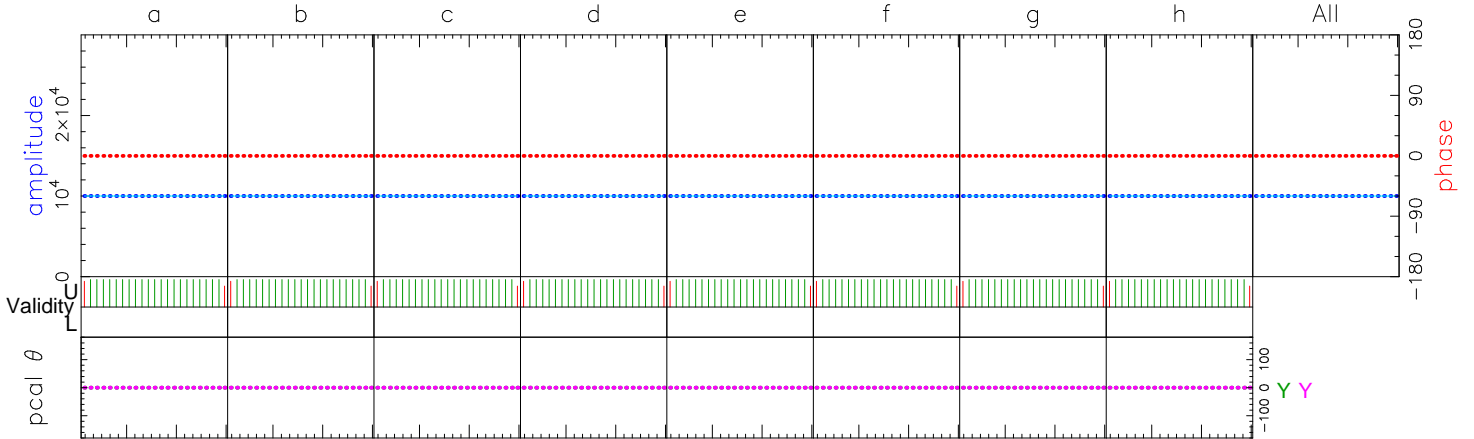


Fringe quality 9

SNR 361032.7  
Int time 174.300  
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. c201b  
Yr:day 16383  
Start 2020:117  
Stop 2020:117  
FRT 090005.12  
2020:198:173855  
2020:199:143707  
2020:014:135814  
RA & Dec (J2000) 20h25m10.842106s +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



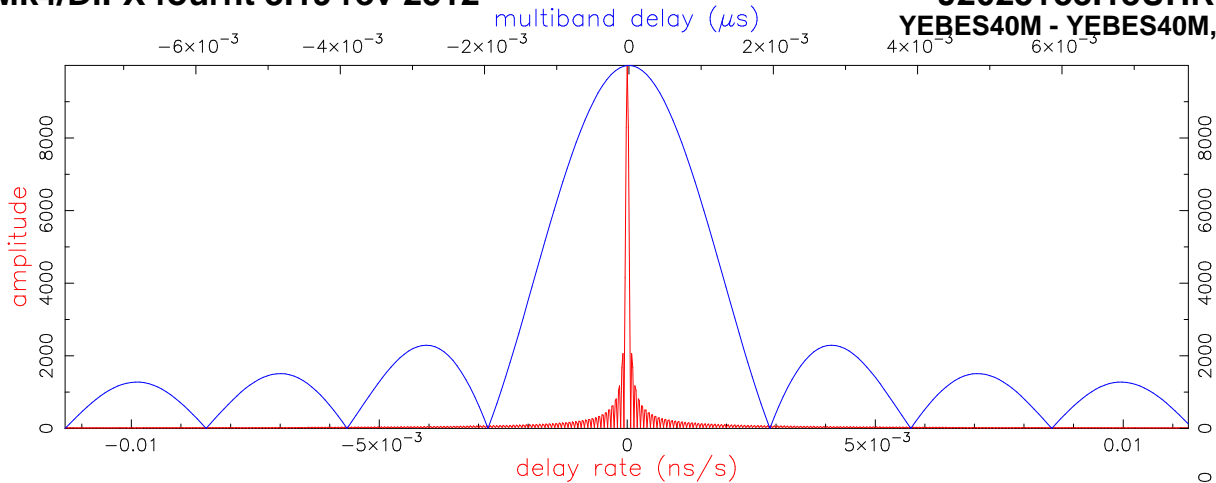
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	10000.0	10000.0
Y	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.4E-08
Phase delay (usec)	-2.49223588910E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.49224E-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	+/-	1.0E-13
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

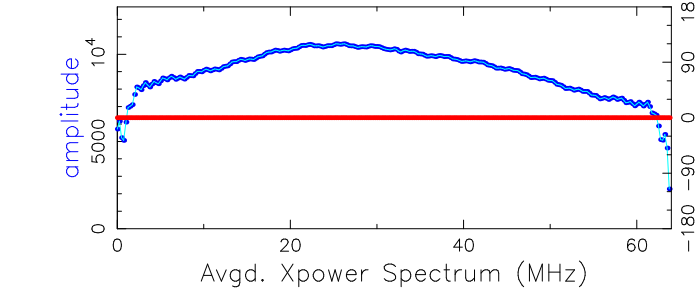
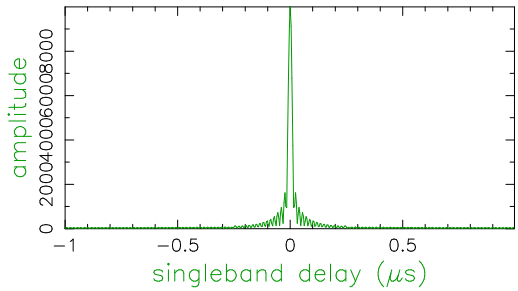
ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.999	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. frq. avg.	9999.999	u,v (fr/asec)	0.000 0.000	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Y: az 271.1 el 57.5 pa 66.0	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	simultaneous interpolator	

Mk4/DiFX fourfit 3.19 rev 2512

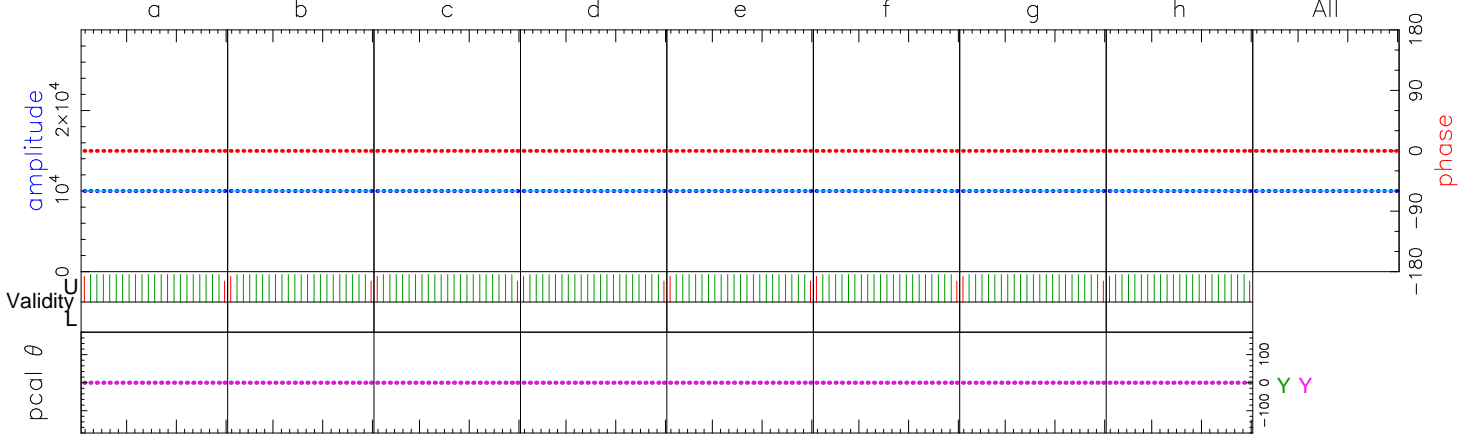
J2025+33.18UHRL, No0058, YY  
YEBES40M - YEBES40M, fgroup W, pol RR



Fringe quality 9  
SNR 361032.7  
Int time 174.300  
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. c201b  
Yr:day 16383  
Start 2020:117  
Stop 2020:117  
FRT 090005.12  
2020:198:173855  
2020:199:143709  
2020:014:135814  
RA & Dec (J2000) 20h25m10.842106s +33°43'00.214364"



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

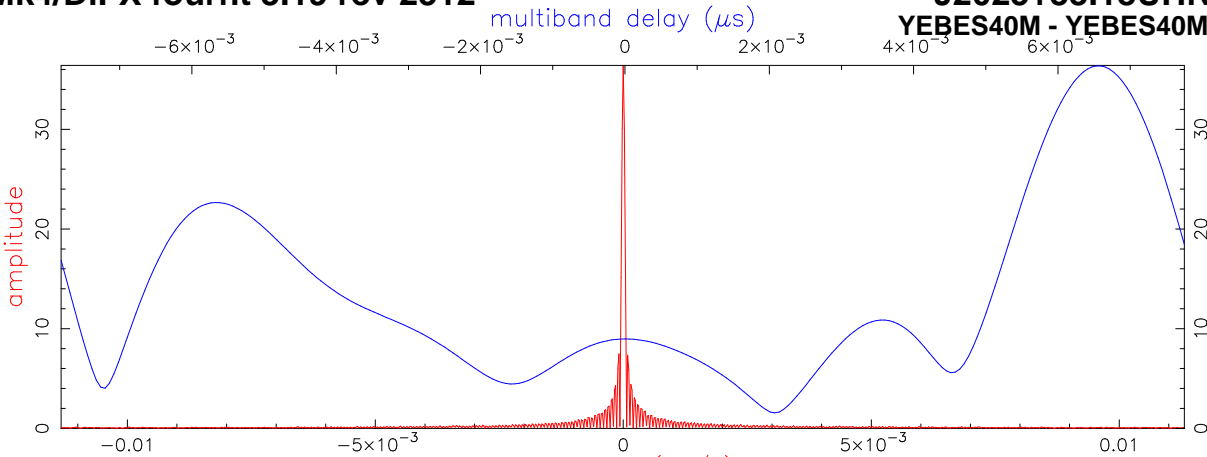


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	10000.0	10000.0
Y	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.4E-08
Phase delay (usec)	8.46859716960E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	8.46860E-20	+/-	1.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	1.0E-13
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

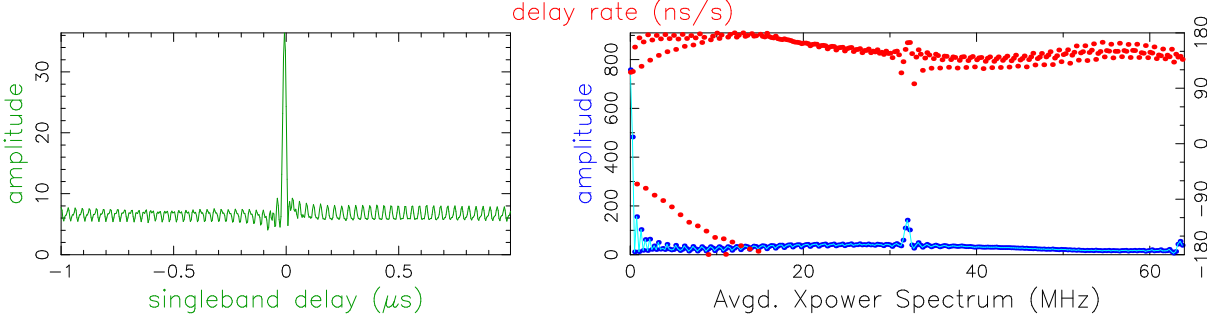
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/YY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/YY.W.180.18UHRL



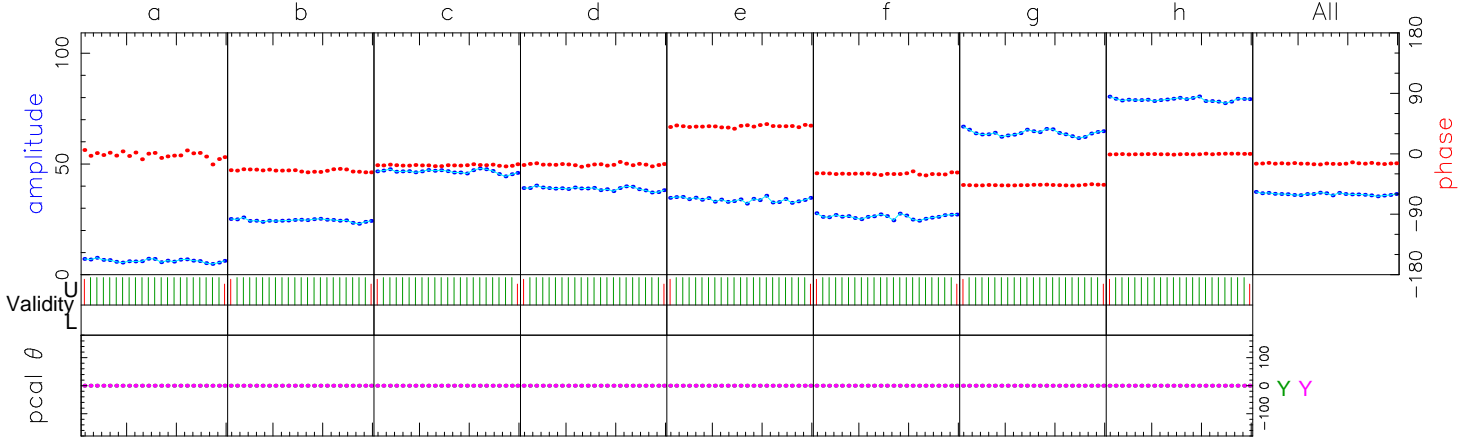
Fringe quality 5

SNR 1314.7  
 Int time 174.300  
 Amp 36.414  
 Phase -14.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.007418  
 MBD 0.006569  
 Fringe rate (Hz)  
 -0.000012  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



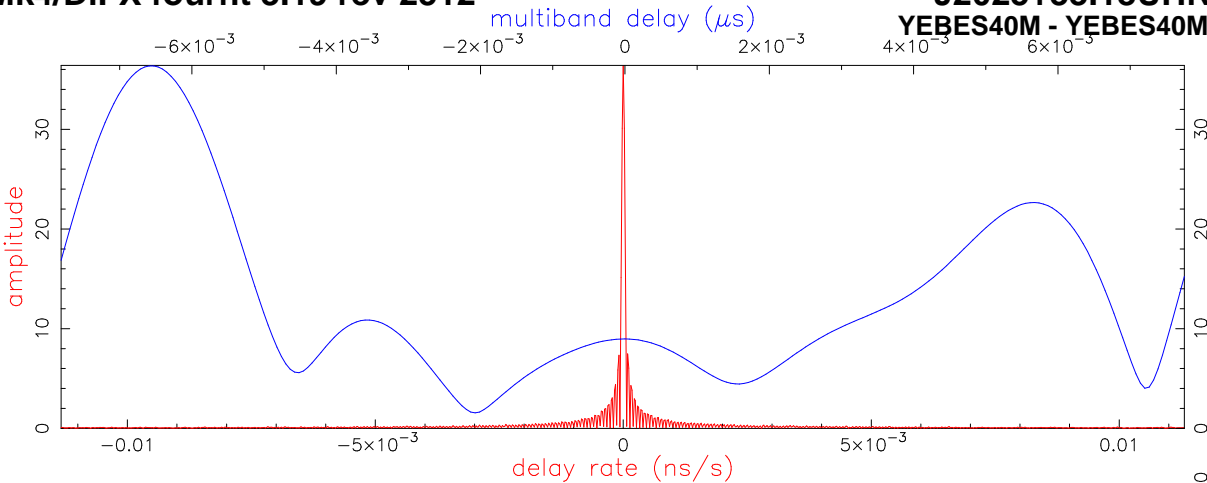
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143712  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



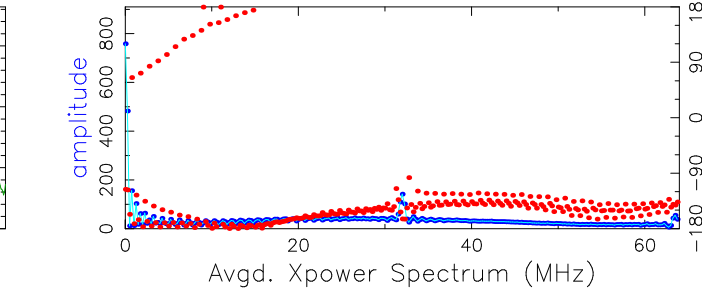
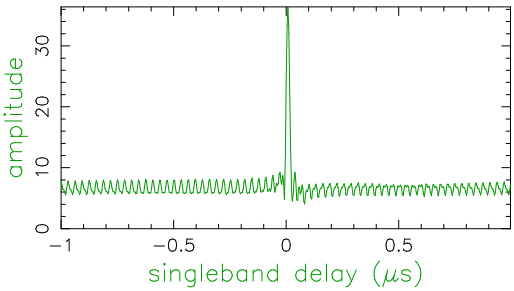
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-1.6	-25.0	-17.2	-16.1	41.0	-29.7	-46.6	-0.5	Phase	-14.5
	6.3	24.5	46.6	38.8	33.8	26.2	64.0	79.1	Ampl.	39.9
	255.4	254.2	255.0	255.3	254.7	251.7	248.8	253.4	Sbd box	255.1
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	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	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)	-9.05637500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		6.56863E-03	+/- 8.3E-07
Sband delay (usec)	-7.41825000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-7.41825E-03	+/- 6.6E-06
Phase delay (usec)	-4.68799968853E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.68800E-07	+/- 2.8E-09
Delay rate (us/s)	-1.44545754395E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.44546E-10	+/- 2.8E-11
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-14.5	+/- 0.1

ph/seg (deg) 0.7 0.2      Amplitude 36.414 +/- 0.028      Pcal mode: MANUAL, MANUAL      PC period (AP's) 5, 5  
 amp/seg (%) 1.3 0.4      Search (1024X32) 35.736      Pcal rate: 0.000E+00, 0.000E+00 (us/s)      sb window (us) -1.000 1.000  
 ph/frq (deg) 28.3 0.1      Interp. 0.000      Bits/sample: 2x2      SampCntNorm: enabled      mb window (us) -0.008 0.008  
 amp/frq (%) 60.2 0.2      Inc. seg. avg. 36.379      Sample rate(MISamp/s): 128      dr window (ns/s) -0.011 0.011  
 Y: az 271.1 el 57.5 pa 66.0      Y: az 271.1 el 57.5 pa 66.0      u,v (fr/asec) 0.000 0.000      Data rate(Mb/s): 2048      nlags: 256      t\_cohere infinite      ion window (TEC) 0.00 0.00  
 simultaneous interpolator



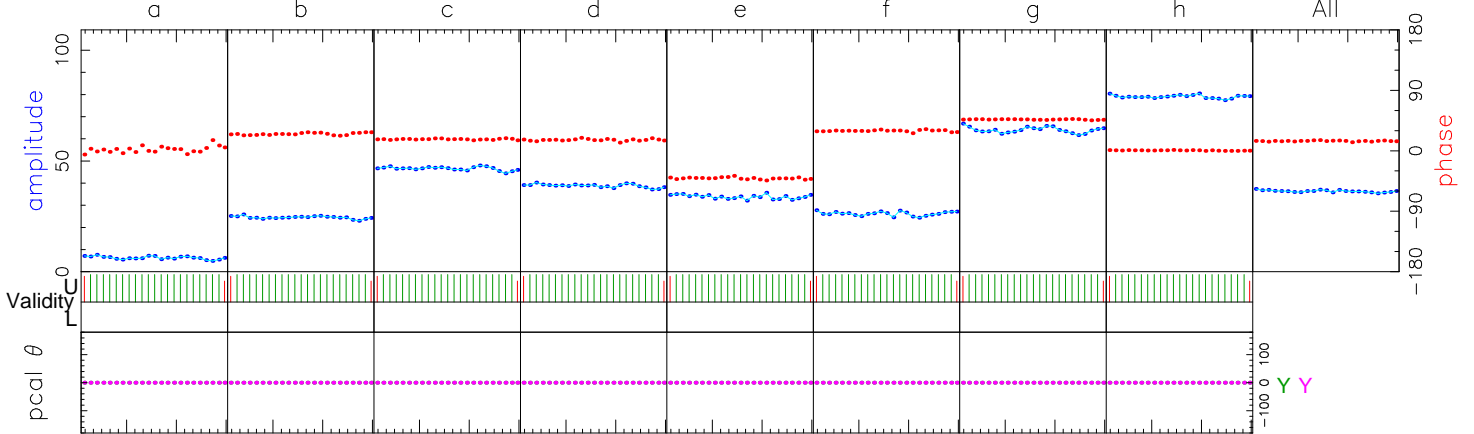
Fringe quality 5

SNR 1314.7  
 Int time 174.300  
 Amp 36.414  
 Phase 14.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.007418  
 MBD -0.006569  
 Fringe rate (Hz)  
 0.000012  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



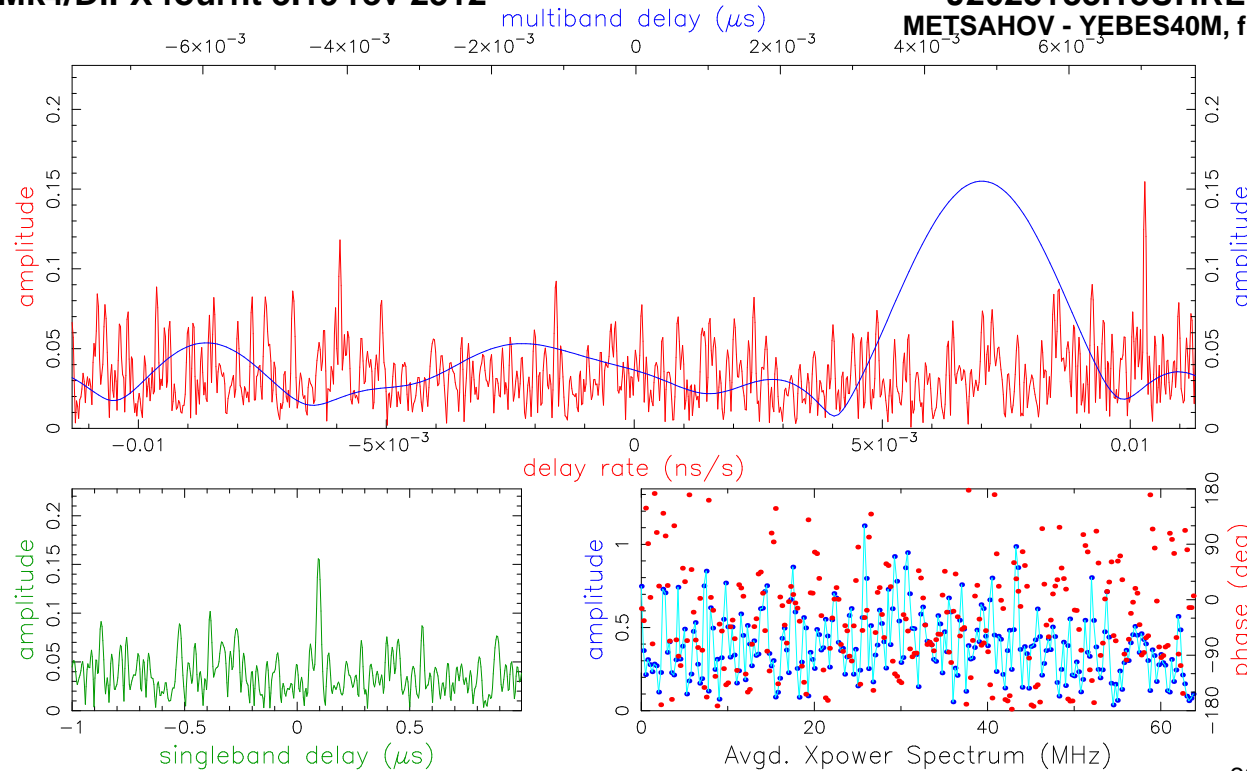
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143714  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



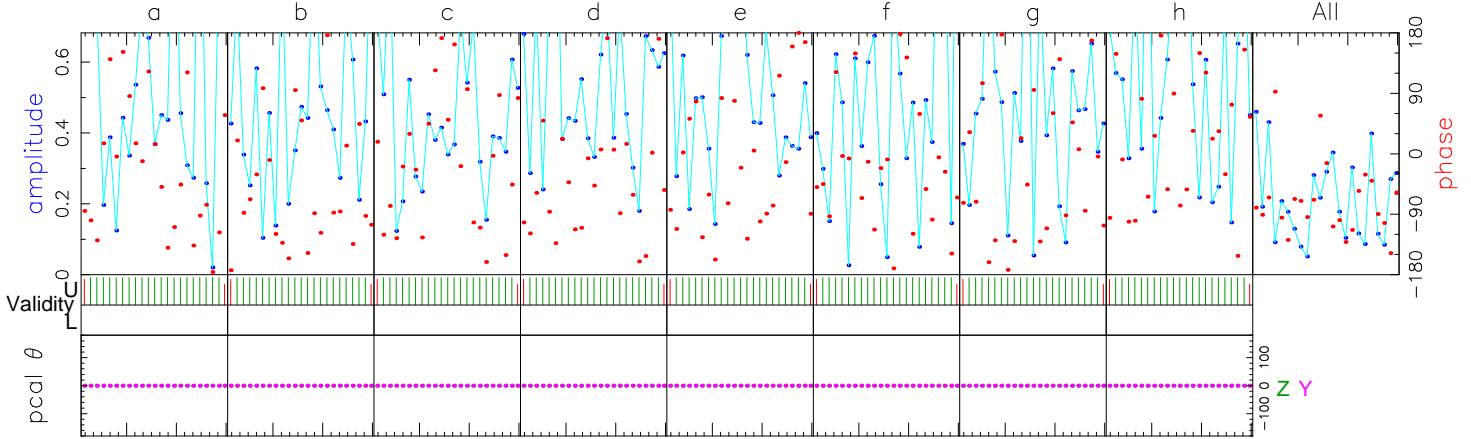
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	9.05637500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-6.56863E-03	+/- 8.3E-07
Sband delay (usec)	7.41825000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		7.41825E-03	+/- 6.6E-06
Phase delay (usec)	4.68799968312E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.68800E-07	+/- 2.8E-09
Delay rate (us/s)	1.44545754395E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.44546E-10	+/- 2.8E-11
Total phase (deg)	14.5		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		14.5	+/- 0.1

ph/seg (deg) 0.7 0.2      Amplitude 36.414 +/- 0.028      Pcal mode: MANUAL, MANUAL      PC period (AP's) 5, 5  
 amp/seg (%) 1.3 0.4      Search (1024X32) 35.736      Pcal rate: 0.000E+00, 0.000E+00 (us/s)      sb window (us) -1.000 1.000  
 ph/frq (deg) 28.3 0.1      Interp. 0.000      Bits/sample: 2x2      SampCntNorm: enabled      mb window (us) -0.008 0.008  
 amp/frq (%) 60.2 0.2      Inc. seg. avg. 36.379      Sample rate(MISamp/s): 128      dr window (ns/s) -0.011 0.011  
 Y: az 271.1 el 57.5 pa 66.0      Y: az 271.1 el 57.5 pa 66.0      u,v (fr/asec) 0.000 0.000      Data rate(Mb/s): 2048      nlags: 256      t\_cohere infinite      ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0058/YY..18UHRL      Output file: /Exps/c201b/v1/1234/No0058/YY.W.212.18UHRL      simultaneous interpolator



Fringe quality 0  
 SNR 5.7  
 Int time 174.077  
 Amp 0.228  
 Phase -78.6  
 PFD 7.9e-01  
 Delays (us)  
 SBD 0.095481  
 MBD 0.004710  
 Fringe rate (Hz) 0.887499  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143710  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

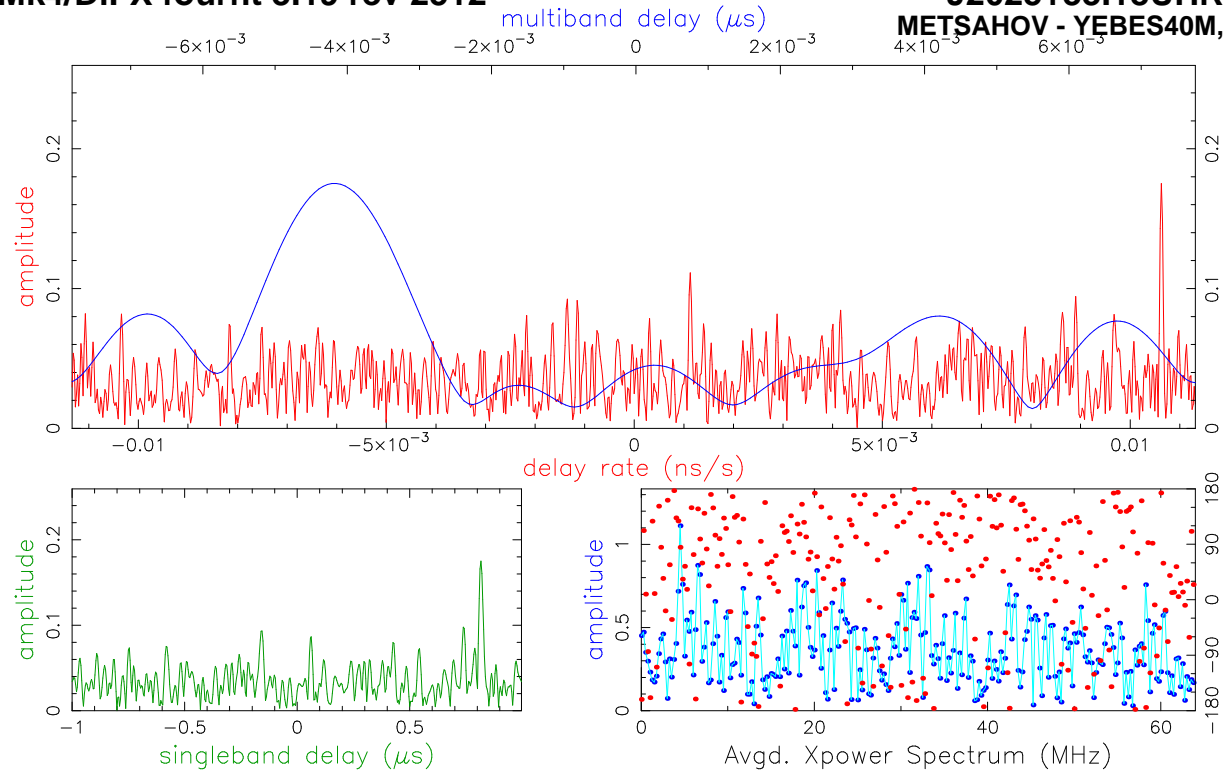


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.6	-88.6	-26.3	-82.3	-68.2	-65.0	-104.8	-63.8	Phase	-78.6
	0.3	0.3	0.1	0.4	0.2	0.3	0.2	0.2	Ampl.	0.2
	390.6	121.0	359.2	88.1	61.6	175.1	254.6	411.4	Sbd box	281.4
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -4.36958041204E+03 Apriori delay (usec) -4.36967887222E+03 Resid mbdelay (usec) 4.71018E-03 +/- 1.9E-04  
 Sband delay (usec) -4.36958339172E+03 Apriori clock (usec) -1.2090660E+01 Resid sbdelay (usec) 9.54805E-02 +/- 1.5E-03  
 Phase delay (usec) -4.36967887476E+03 Apriori clockrate (us/s) -2.0400000E-07 Resid phdelay (usec) -2.53601E-06 +/- 6.5E-07  
 Delay rate (us/s) 4.33477289597E-02 Apriori rate (us/s) 4.33374259708E-02 Resid rate (us/s) 1.03030E-05 +/- 6.4E-09  
 Total phase (deg) -97.7 Apriori accel (us/s/s) 3.68745609722E-05 Resid phase (deg) -78.6 +/- 20.1

RMS Theor. Amplitude 0.228 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 55.8 48.3 Search (1024X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 81.9 84.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 26.6 28.5 Inc. seg. avg. 0.225 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 35.2 49.7 Inc. frq. avg. 0.209 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 270.2 el 39.7 pa 36.7 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -269.273 3547.477 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/ZY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/ZY.W.191.18UHRL

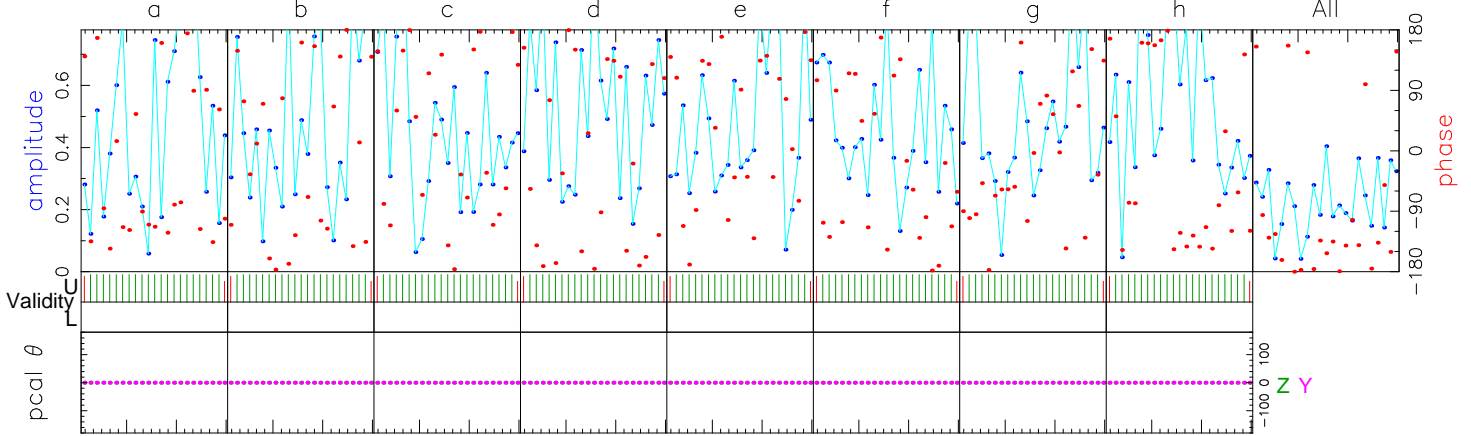


Fringe quality 0

SNR 6.3  
 Int time 174.077  
 Amp 0.260  
 Phase -158.7  
 PFD 3.3e-02  
 Delays (us)  
 SBD 0.815845  
 MBD -0.004201  
 Fringe rate (Hz)  
 0.915956  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143714  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

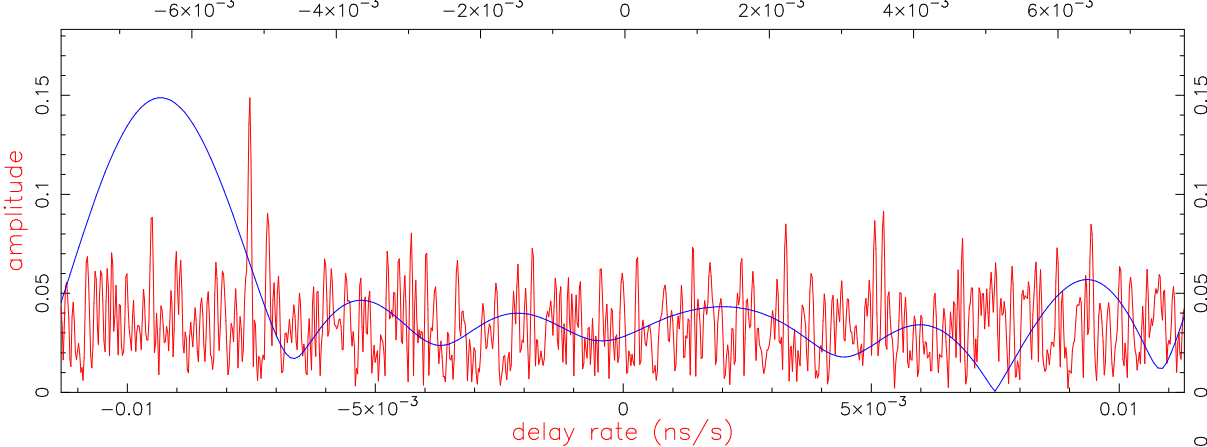


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.6	-170.5	-168.6	-169.7	159.3	-152.9	-116.7	-151.5	Phase	-158.7
	0.3	0.3	0.2	0.4	0.2	0.2	0.1	0.5	Ampl.	0.3
	443.8	243.6	293.6	465.7	152.0	506.7	18.0	465.3	Sbd box	465.9
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	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)	-4.36887057355E+03		Apriori delay (usec)		-4.36967887222E+03		Resid mbdelay (usec)		-4.20134E-03	+/- 1.7E-04
Sband delay (usec)	-4.36886302722E+03		Apriori clock (usec)		-1.2090660E+01		Resid sbdelay (usec)		8.15845E-01	+/- 1.4E-03
Phase delay (usec)	-4.36967887734E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		-5.11764E-06	+/- 5.8E-07
Delay rate (us/s)	4.33480593077E-02		Apriori rate (us/s)		4.33374259708E-02		Resid rate (us/s)		1.06333E-05	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		3.68745609722E-05		Resid phase (deg)		-158.7	+/- 18.1

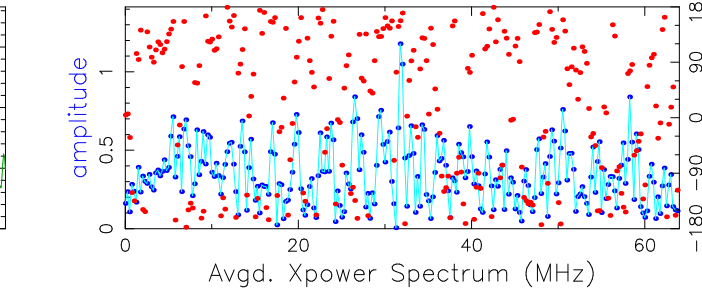
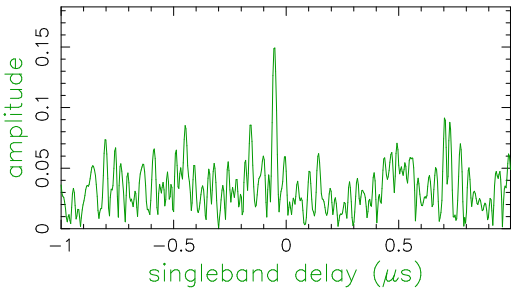
ph/seg (deg) 44.4 43.4 Search (1024X32) 0.168 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.1 75.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.5 25.6 Inc. seg. avg. 0.262 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.1 44.7 Inc. frq. avg. 0.252 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 270.2 el 39.7 pa 36.7 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -269.273 3547.477 simultaneous interpolator

multiband delay ( $\mu$ s)

Fringe quality 0

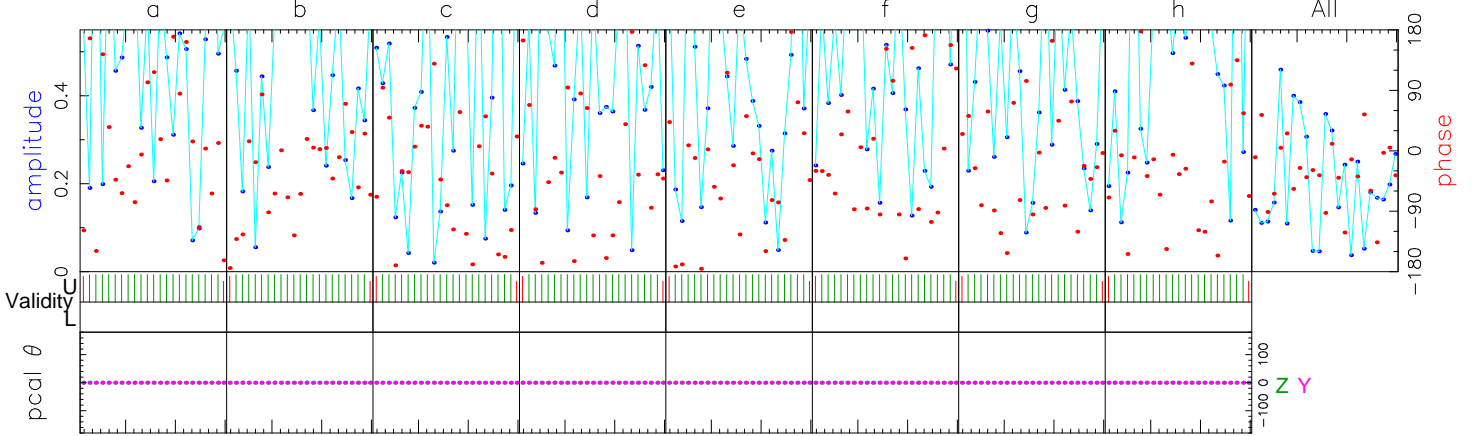


SNR 5.5  
Int time 174.077  
Amp 0.183  
Phase -35.4  
PFD 9.9e-01  
Delays (us)  
SBD -0.052636  
MBD -0.006380  
Fringe rate (Hz)  
-0.649997  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090005.12  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143715  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

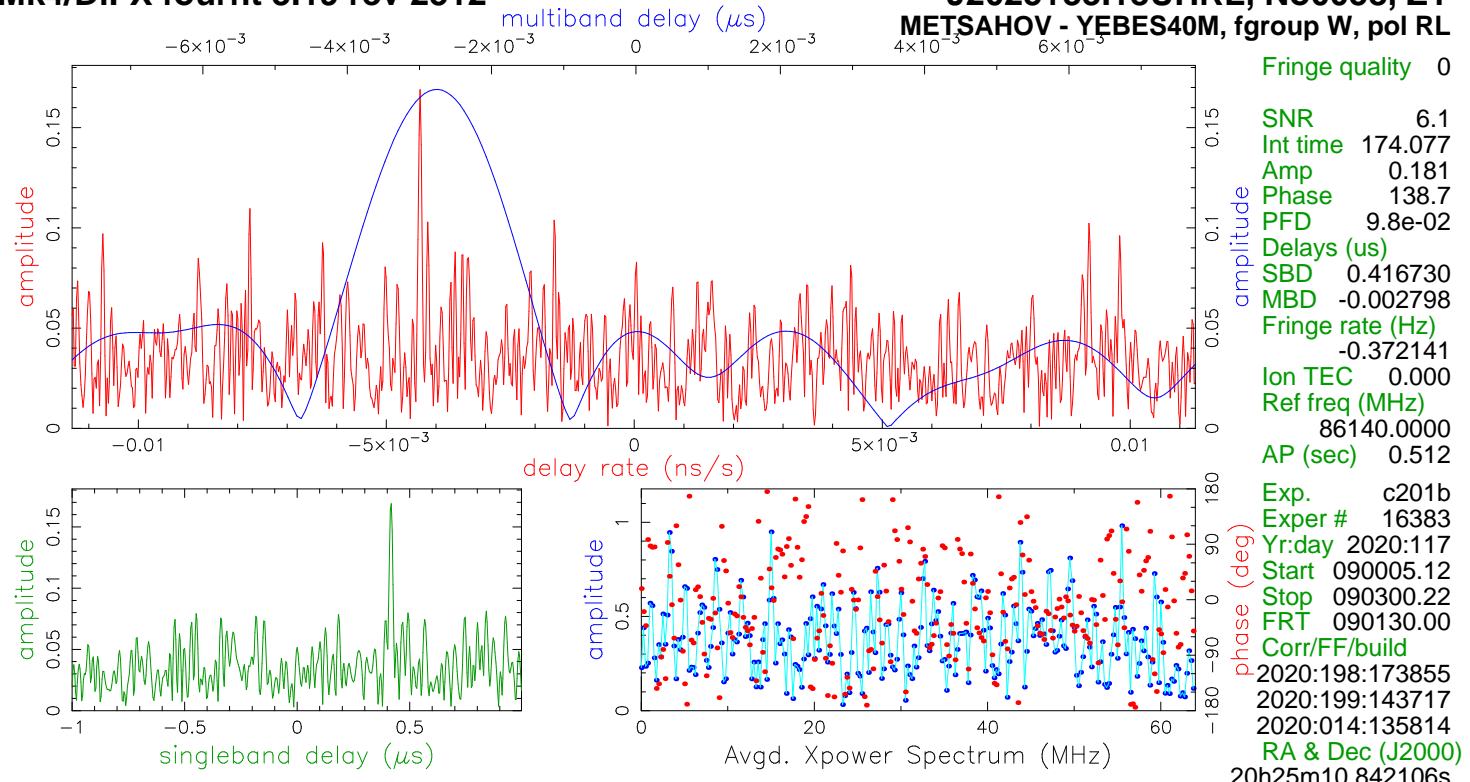
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



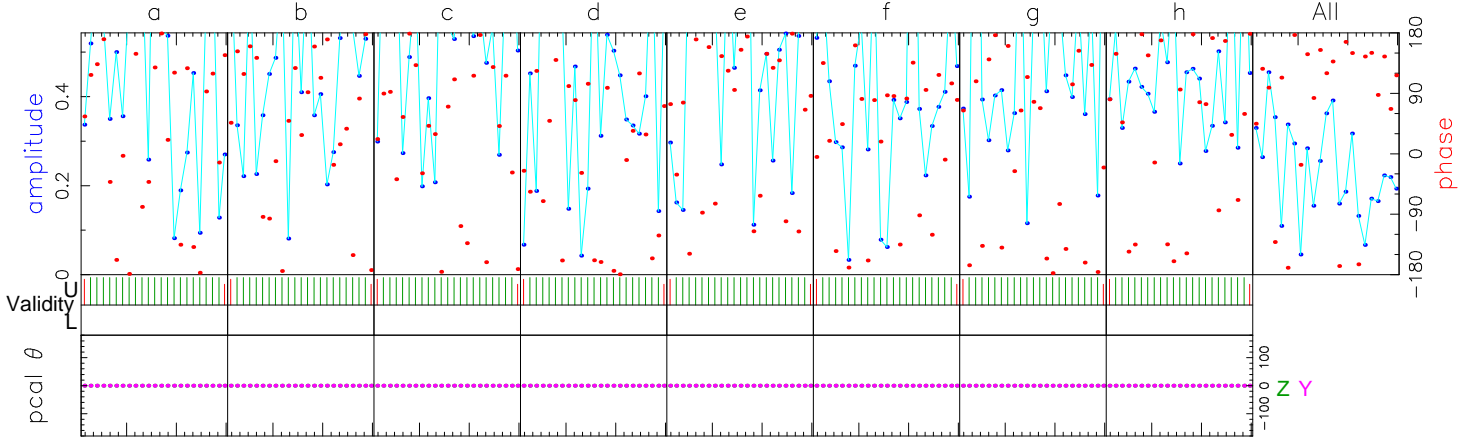
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All			
Group delay (usec)(sbd)	-44.3	-36.8	-5.9	-55.0	-8.1	-46.6	-18.5	-62.1		-35.4			
Sband delay (usec)	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.2		0.2			
Phase delay (usec)	143.7	407.6	362.0	375.8	335.5	281.9	507.4	295.5		243.5			
Delay rate (us/s)	U/L 342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0					
	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	0:0					
Z:Y 0:0	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	1000					
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
Group delay (usec)	-4.36973212730E+03				-4.36967887222E+03				Resid mbdelay (usec)	-6.38008E-03	+/- 2.0E-04		
Sband delay (usec)	-4.36973150822E+03				-1.2090660E+01				Resid sbdelay (usec)	-5.26360E-02	+/- 1.6E-03		
Phase delay (usec)	-4.36967887336E+03				-2.0400000E-07				Resid phdelay (usec)	-1.14229E-06	+/- 6.8E-07		
Delay rate (us/s)	4.33298801524E-02				4.33374259708E-02				Resid rate (us/s)	-7.54582E-06	+/- 6.7E-09		
Total phase (deg)		-54.5			3.68745609722E-05				Resid phase (deg)	-35.4	+/- 20.9		
RMS	48.4	50.2			0.183 +/- 0.033				Pcal mode: MANUAL, MANUAL				
ph/seg (deg)	48.4	50.2			0.150				Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)	86.2	87.7			0.000				Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	23.1	29.6			0.177				Sample rate(MSamp/s): 128		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	29.6	51.7			0.168				Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 270.2 el 39.7 pa 36.7 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -269.273 3547.477 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/ZY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/ZY.W.219.18UHRL



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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
	145.5	123.0	123.9	149.8	167.0	106.5	134.3	159.4	Phase	138.7
	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	257.1	449.2	260.9	3.2	404.2	175.7	472.2	401.5	Sbd box	363.7
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.36925979551E+03		Apriori delay (usec)		-4.36967887222E+03		Resid mbdelay (usec)		-2.79829E-03	+/- 1.8E-04
Sband delay (usec)	-4.36926214222E+03		Apriori clock (usec)		-1.2090660E+01		Resid sbdelay (usec)		4.16730E-01	+/- 1.4E-03
Phase delay (usec)	-4.36967886775E+03		Apriori clockrate (us/s)		-2.0400000E-07		Resid phdelay (usec)		4.47186E-06	+/- 6.0E-07
Delay rate (us/s)	4.33331057816E-02		Apriori rate (us/s)		4.33374259708E-02		Resid rate (us/s)		-4.32019E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		3.68745609722E-05		Resid phase (deg)		138.7	+/- 18.6

	RMS	Theor.	Amplitude	0.181 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	54.0	44.7	Search (1024X32)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	73.4	78.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	22.1	26.4	Inc. seg. avg.	0.194	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	20.8	46.0	Inc. frq. avg.	0.172	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		