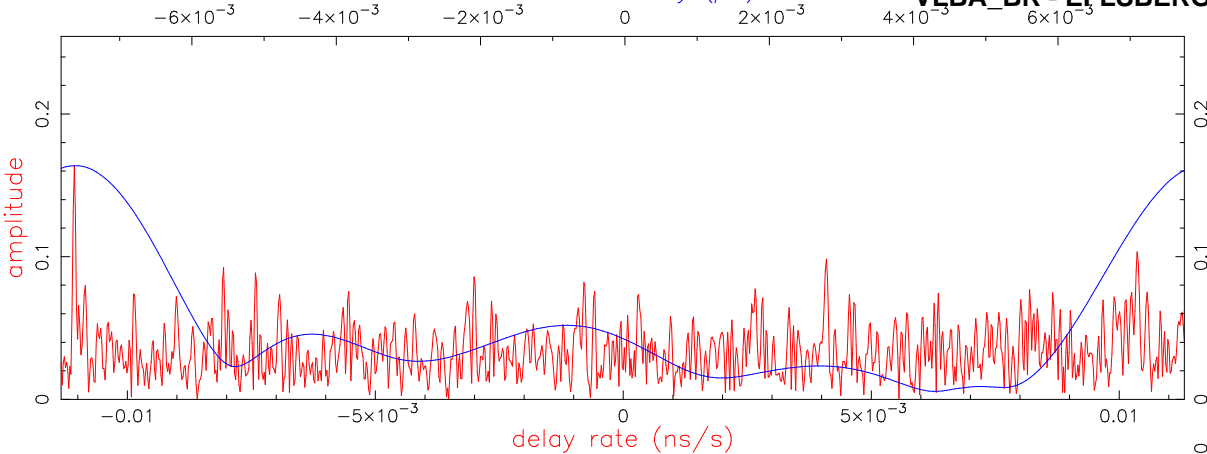
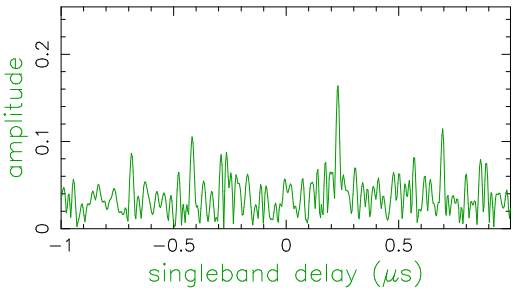


multiband delay ( $\mu\text{s}$ )

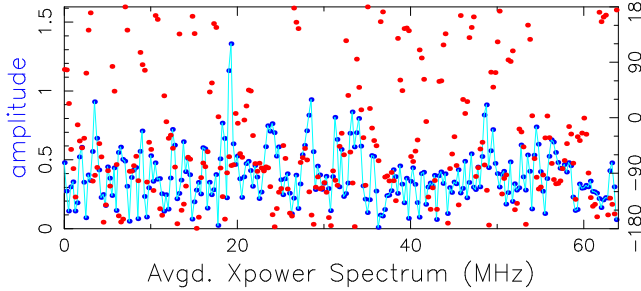


Fringe quality 0

SNR 6.0  
 Int time 174.934  
 Amp 0.254  
 Phase 115.5  
 PFD 2.5e-01  
 Delays (us)  
 SBD 0.229198  
 MBD -0.007667  
 Fringe rate (Hz)  
 -0.955867  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

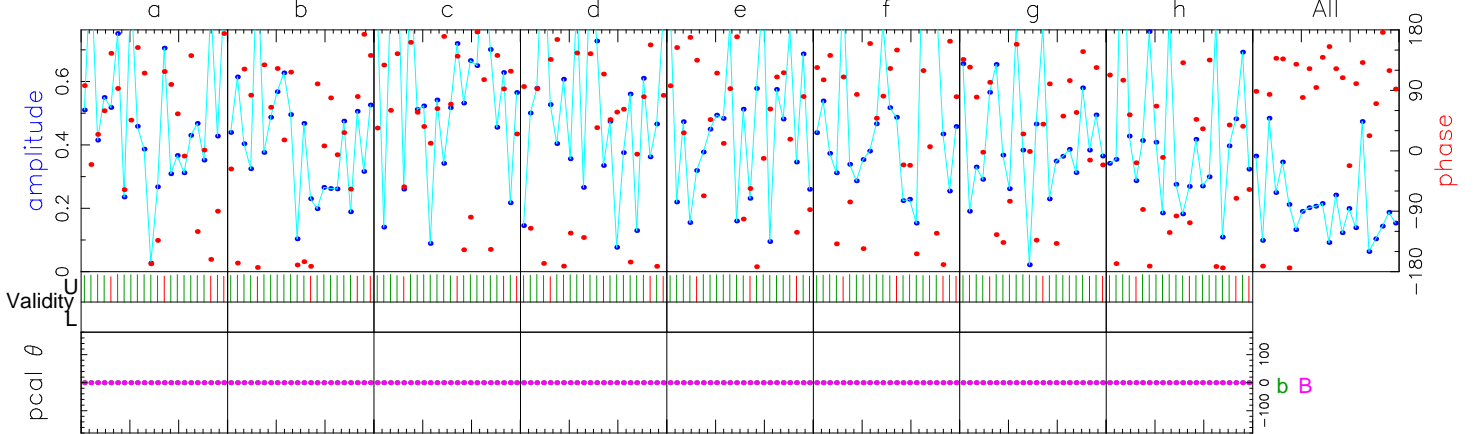


delay rate (ns/s)



Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143628  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



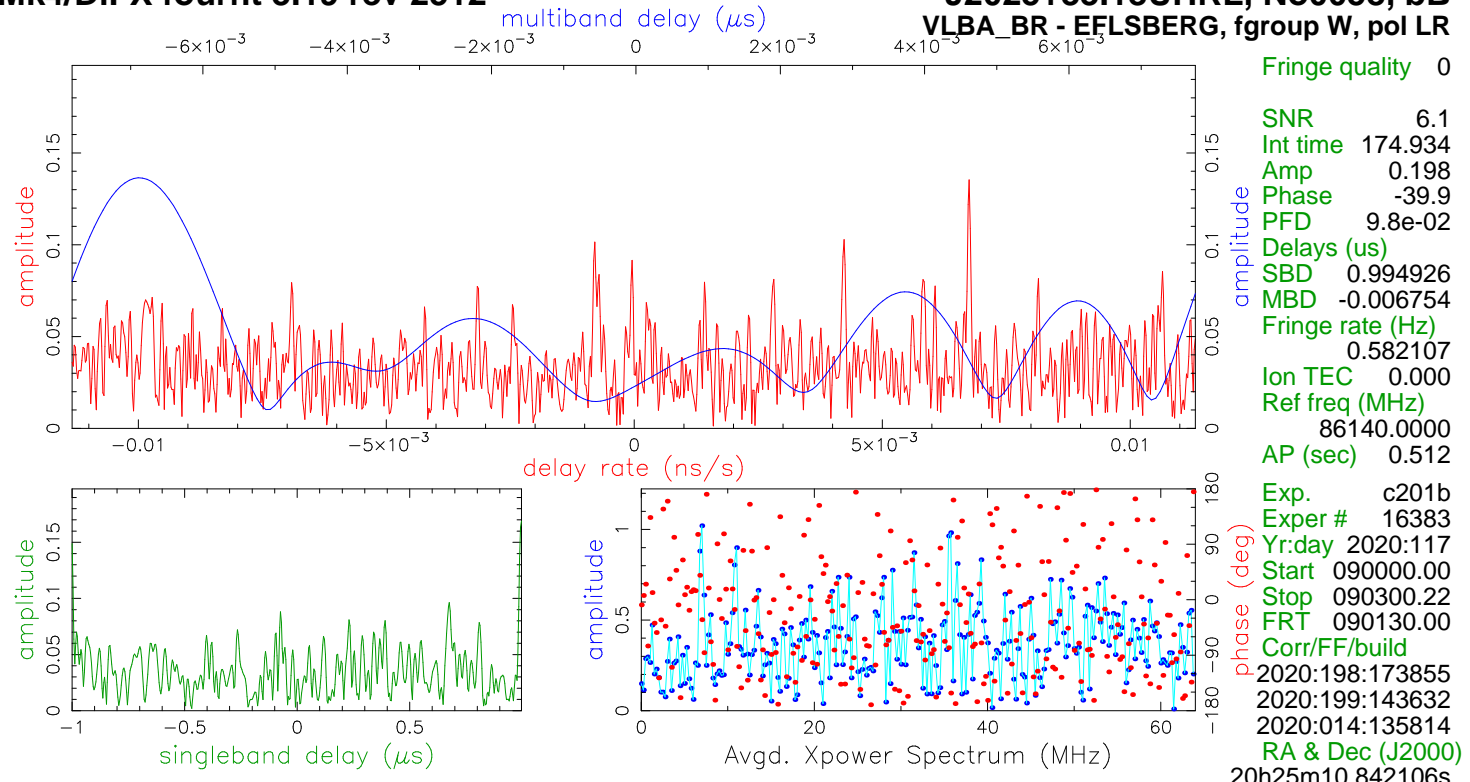
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.62327263091E+03	Apriori delay (usec)	-4.62349933929E+03	Resid mbdelay (usec)	-7.66663E-03	+/-	1.8E-04
Sband delay (usec)	-4.62327014104E+03	Apriori clock (usec)	-1.4457802E+01	Resid sbdelay (usec)	2.29198E-01	+/-	1.4E-03
Phase delay (usec)	-4.62349933557E+03	Apriori clockrate (us/s)	1.5800000E-07	Resid phdelay (usec)	3.72389E-06	+/-	6.2E-07
Delay rate (us/s)	1.47129823494E+00	Apriori rate (us/s)	1.47130933161E+00	Resid rate (us/s)	-1.10967E-05	+/-	5.9E-09
Total phase (deg)		Apriori accel (us/s/s)	2.27964470662E-05	Resid phase (deg)	115.5	+/-	19.2

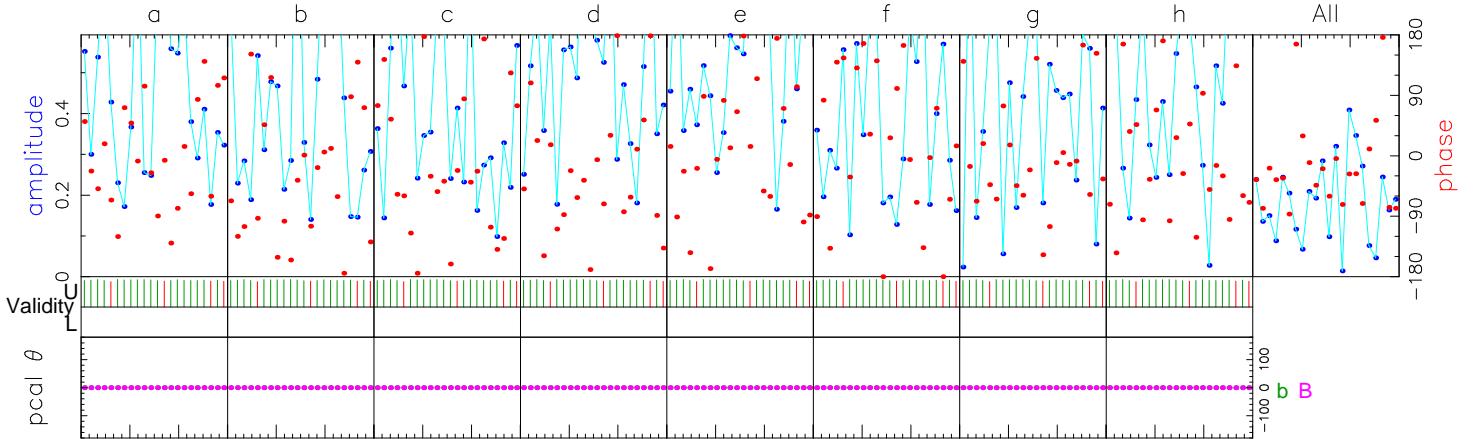
ph/seg (deg)	48.6	Theor.	44.9	Amplitude	0.254 +/- 0.043	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	73.1		78.4	Search (1024X32)	0.160	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	21.9		27.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	40.9		47.3	Inc. seg. avg.	0.248	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.239	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      B: az 264.9 el 50.1 pa 49.5      u,v (fr/asec) -10120.610 1052.497      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0058/bB..18UHRL      Output file: /Exps/c201b/v1/1234/No0058/bB.W.1.18UHRL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-11.9	-50.4	-55.0	-44.0	-23.2	155.2	-33.6	-59.9	Phase	-39.9
	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.2	Ampl.	0.2
	433.2	53.0	494.6	270.1	258.9	448.4	42.7	241.9	Sbd box	511.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

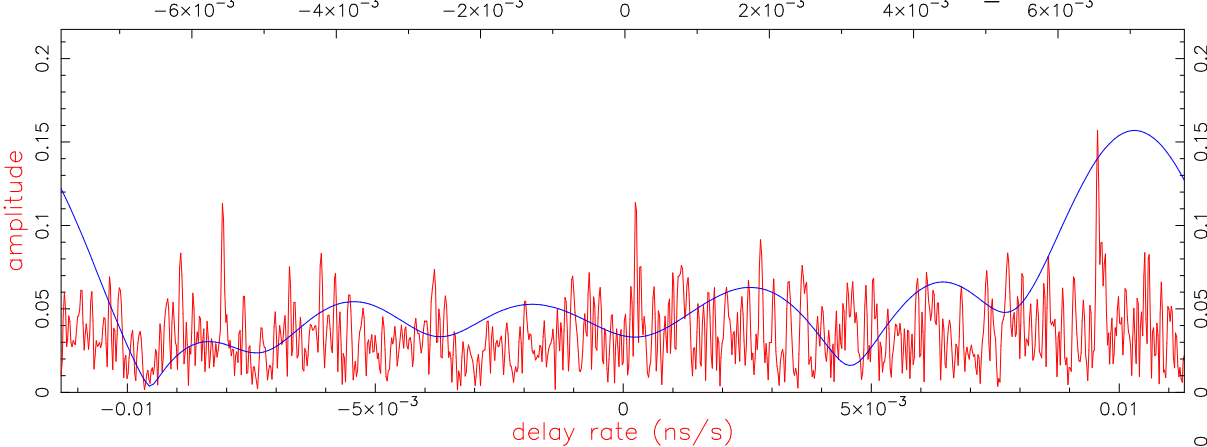
Group delay (usec)(sbd)	-4.62250609299E+03	Apriori delay (usec)	-4.62349933929E+03	Resid mbdelay (usec)	-6.75370E-03	+/-	1.8E-04
Sband delay (usec)	-4.62250441304E+03	Apriori clock (usec)	-1.4457802E+01	Resid sbdelay (usec)	9.94926E-01	+/-	1.4E-03
Phase delay (usec)	-4.62349934058E+03	Apriori clockrate (us/s)	1.5800000E-07	Resid phdelay (usec)	-1.28562E-06	+/-	6.0E-07
Delay rate (us/s)	1.47131608930E+00	Apriori rate (us/s)	1.47130933161E+00	Resid rate (us/s)	6.75769E-06	+/-	5.8E-09
Total phase (deg)	-71.0	Apriori accel (us/s/s)	2.27964470662E-05	Resid phase (deg)	-39.9	+/-	18.6

ph/seg (deg)	57.5	Theor.	43.7	Amplitude	0.198 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	59.9		76.3	Search (1024X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	69.6		26.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.5		46.0	Inc. seg. avg.	0.168	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.167	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 74.4 el 33.0 pa -50.7      B: az 264.9 el 50.1 pa 49.5      u,v (fr/asec) -10120.610 1052.497      simultaneous interpolator

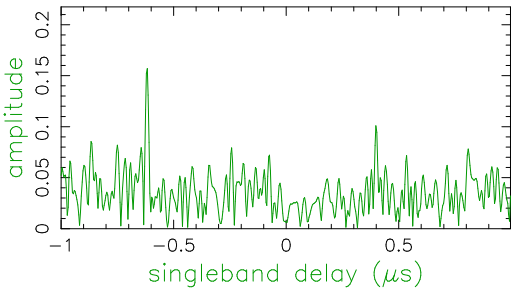
Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0058/bB..18UHRL      Output file: /Exps/c201b/v1/1234/No0058/bB.W.12.18UHRL

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

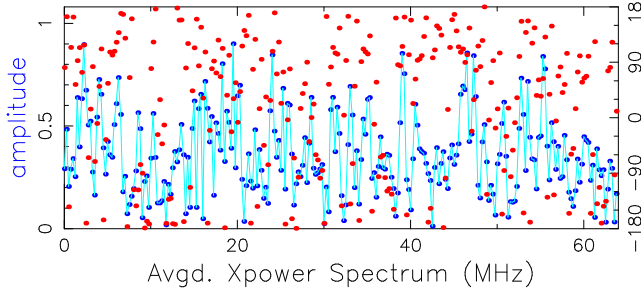


Fringe quality 0

SNR 5.7  
 Int time 174.933  
 Amp 0.218  
 Phase 104.8  
 PFD 6.8e-01  
 Delays (us)  
 SBD -0.618551  
 MBD 0.007051  
 Fringe rate (Hz)  
 0.826134  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

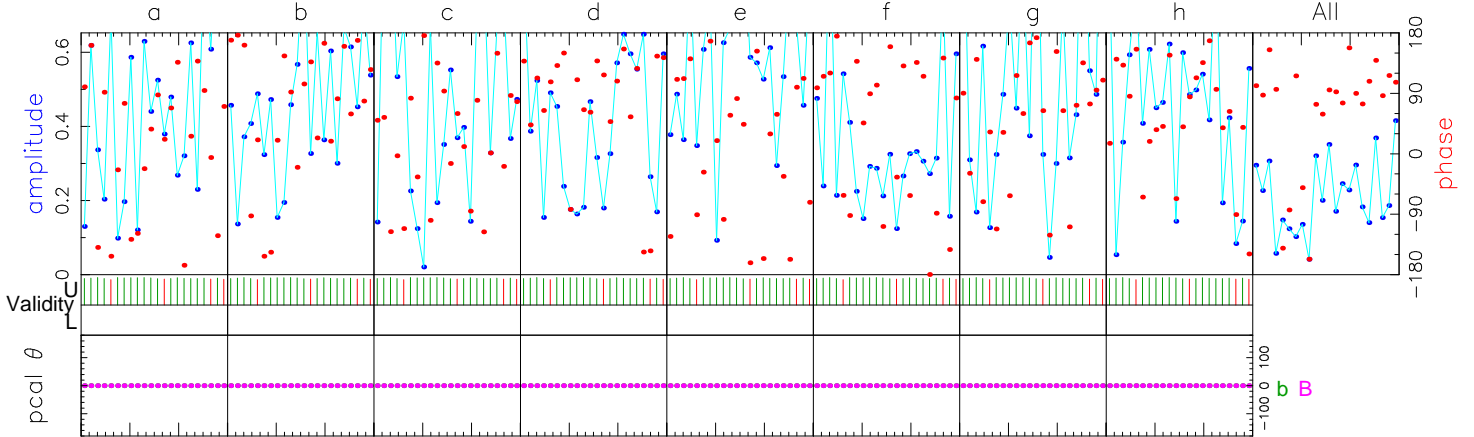


delay rate (ns/s)



Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143634  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	88.8	106.9	10.1	120.5	123.1	134.2	102.5	86.5	Phase	104.8
	0.1	0.3	0.1	0.4	0.2	0.2	0.3	0.3	Ampl.	0.2
	75.5	205.9	258.0	189.4	466.9	89.3	98.7	169.0	Sbd box	98.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.62411728795E+03		Apriori delay (usec)		-4.62349933929E+03		Resid mbdelay (usec)		7.05134E-03	+/- 1.9E-04
Sband delay (usec)	-4.62411789079E+03		Apriori clock (usec)		-1.4457802E+01		Resid sbdelay (usec)		-6.18551E-01	+/- 1.5E-03
Phase delay (usec)	-4.62349933591E+03		Apriori clockrate (us/s)		1.5800000E-07		Resid phdelay (usec)		3.38092E-06	+/- 6.4E-07
Delay rate (us/s)	1.47131892221E+00		Apriori rate (us/s)		1.47130933161E+00		Resid rate (us/s)		9.59060E-06	+/- 6.2E-09
Total phase (deg)	73.7		Apriori accel (us/s/s)		2.27964470662E-05		Resid phase (deg)		104.8	+/- 19.9

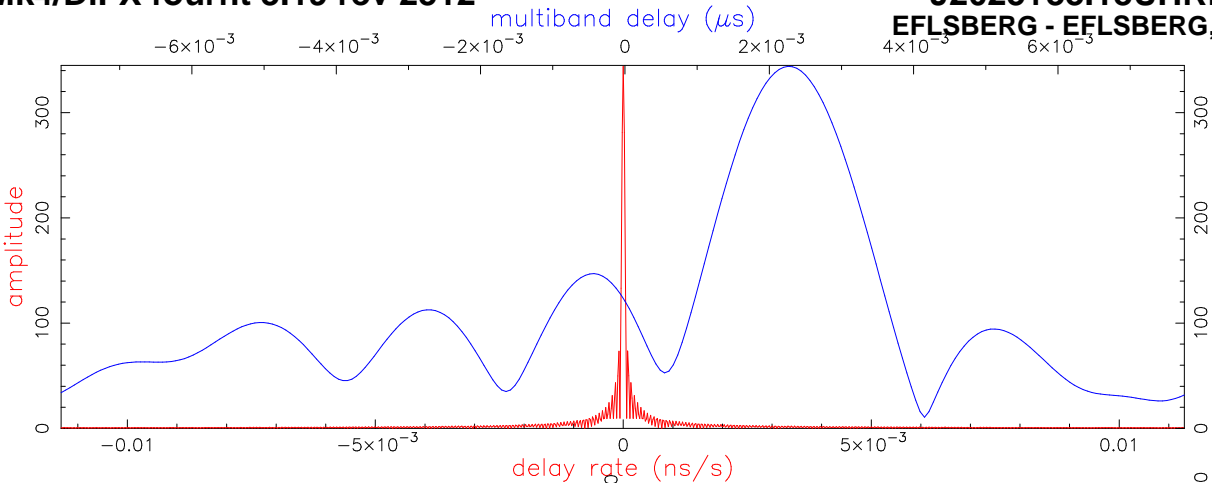
	RMS	Theor.	Amplitude	0.218 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	64.1	46.8	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.2	81.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	42.9	28.2	Inc. seg. avg.	0.219	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	43.6	49.2	Inc. frq. avg.	0.213	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 74.4 el 33.0 pa -50.7 B: az 264.9 el 50.1 pa 49.5 u,v (fr/asec) -10120.610 1052.497 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/bB..18UHRL Output file: /Exps/c201b/v1/1234/No0058/bB.W.19.18UHRL

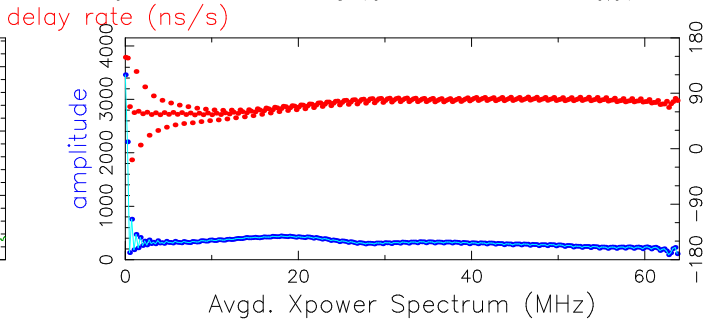
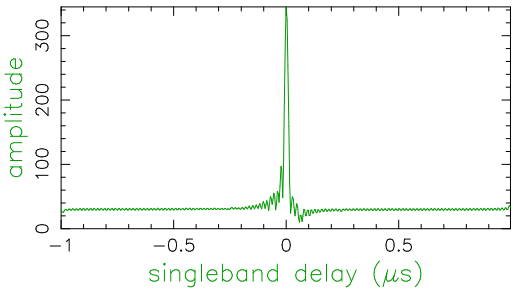
Mk4/DiFX fourfit 3.19 rev 2512

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



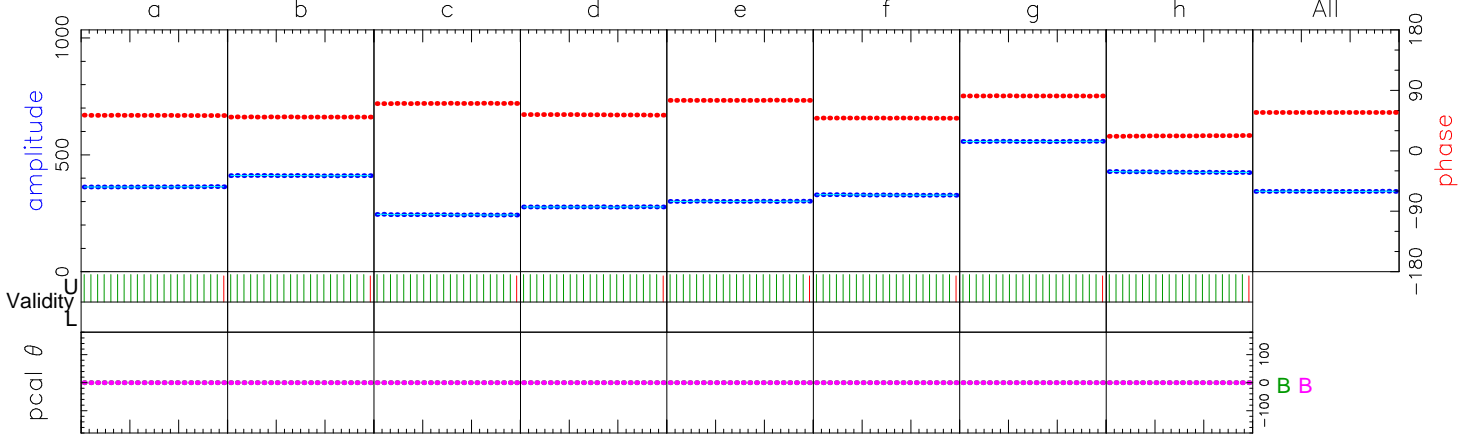
Fringe quality 7

SNR 12646.8  
Int time 179.778  
Amp 344.918  
Phase 57.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000675  
MBD 0.002296  
Fringe rate (Hz) 0.000005  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143634  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

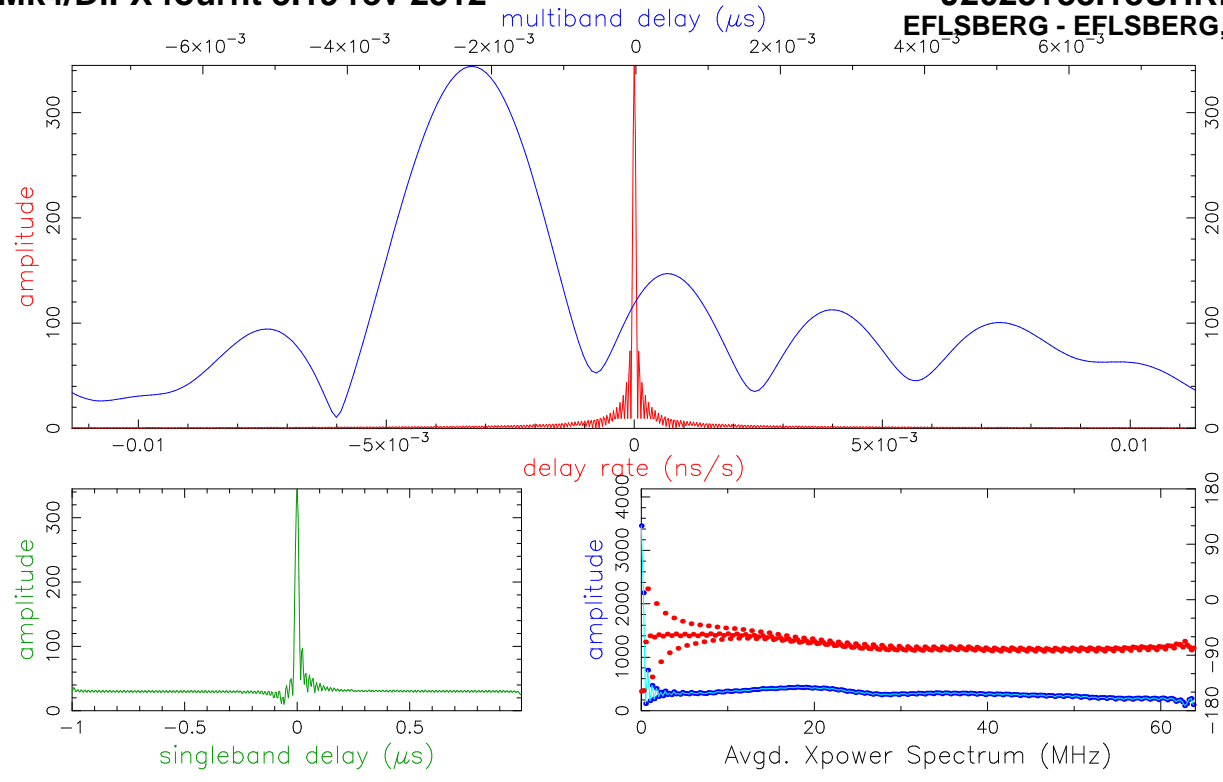


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.29625000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.29625E-03	+/- 8.6E-08
Sband delay (usec)	6.74750000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		6.74750E-04	+/- 6.8E-07
Phase delay (usec)	1.83688908247E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		1.83689E-06	+/- 2.9E-10
Delay rate (us/s)	6.37701857626E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		6.37702E-11	+/- 2.8E-12
Total phase (deg)	57.0		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		57.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Search (1024X32) 339.494 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 0.3 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 20.3 0.0 Inc. seg. avg. 343.965 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 27.8 0.0 Inc. frq. avg. 363.516 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 264.9 el 50.1 pa 49.5 B: az 264.9 el 50.1 pa 49.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BB..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BB.W.20.18UHRL

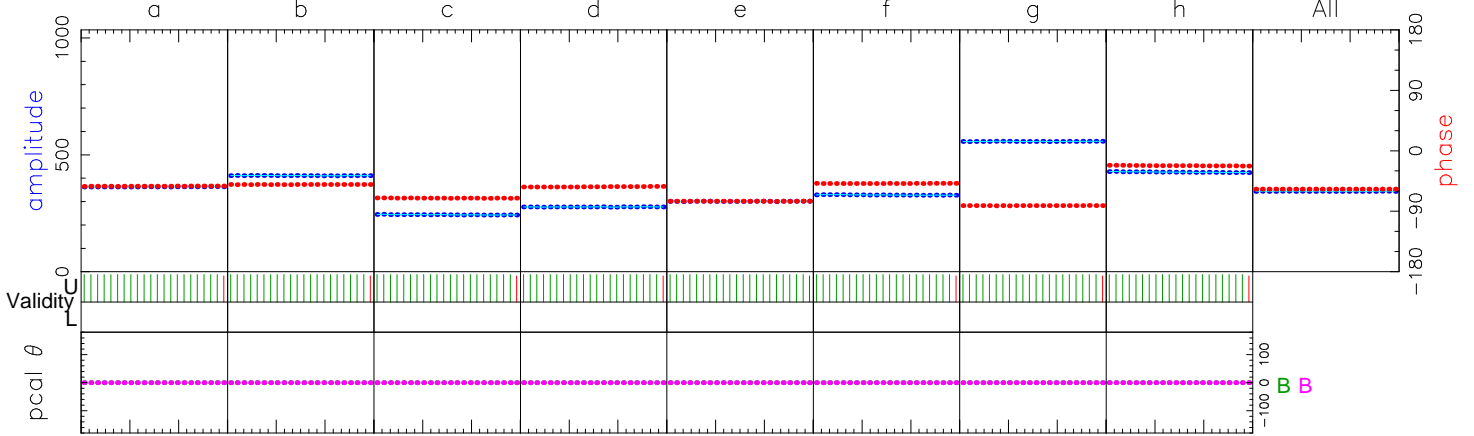
Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BB  
EFLSBERG - EFLSBERG, fgroup W, pol RL



Fringe quality 7  
SNR 12646.8  
Int time 179.778  
Amp 344.918  
Phase -57.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.000675  
MBD -0.002296  
Fringe rate (Hz)  
-0.000005  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143636  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

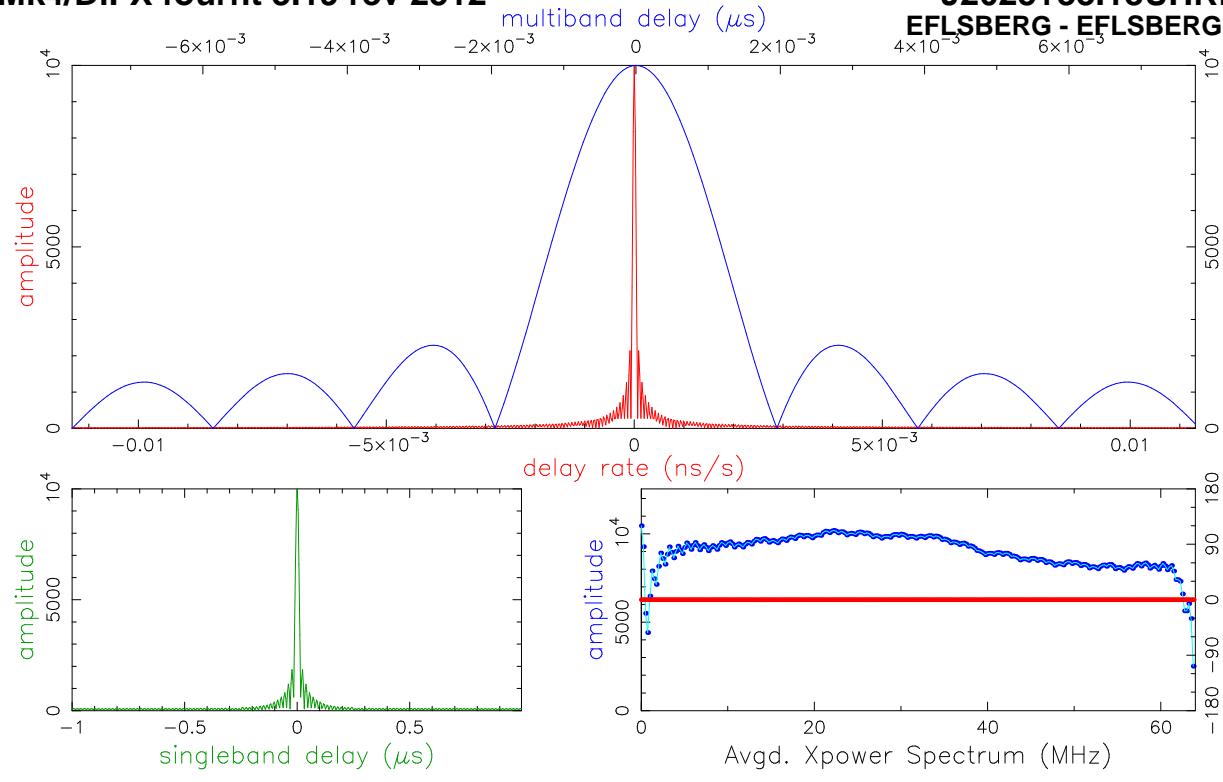


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-52.7	-50.2	-70.4	-53.5	-75.1	-48.6	-81.6	-22.2	Phase	-57.0
	363.0	411.0	243.7	277.1	301.3	328.4	557.5	426.0	Ampl.	363.5
	256.3	256.6	256.7	256.0	256.9	256.8	257.7	257.2	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.29625000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.29625E-03	+/- 8.6E-08
Sband delay (usec)	-6.74750000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-6.74750E-04	+/- 6.8E-07
Phase delay (usec)	-1.83688908250E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.83689E-06	+/- 2.9E-10
Delay rate (us/s)	-6.37701857626E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-6.37702E-11	+/- 2.8E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-57.0	+/- 0.0

RMS Theor. Amplitude 344.918 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 339.494 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 20.3 0.0 Inc. seg. avg. 343.965 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 27.8 0.0 Inc. frq. avg. 363.516 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 B: az 264.9 el 50.1 pa 49.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BB..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BB.W.26.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BB  
EFLSBERG - EFLSBERG, fgroup W, pol LL

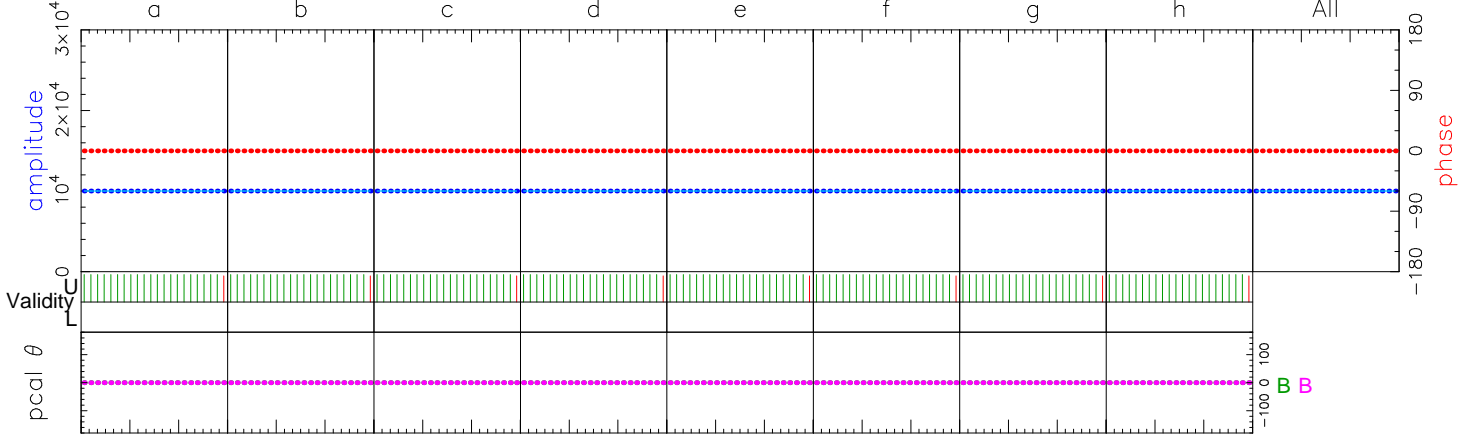


Fringe quality 9

SNR 366662.0  
Int time 179.778  
Amp 10000.001  
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 090000.00  
2020:198:173855  
2020:199:143629  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08  
 Phase delay (usec) 1.28834129085E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.28834E-19 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 RMS 0.0 Theor. 0.0 Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 Intp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

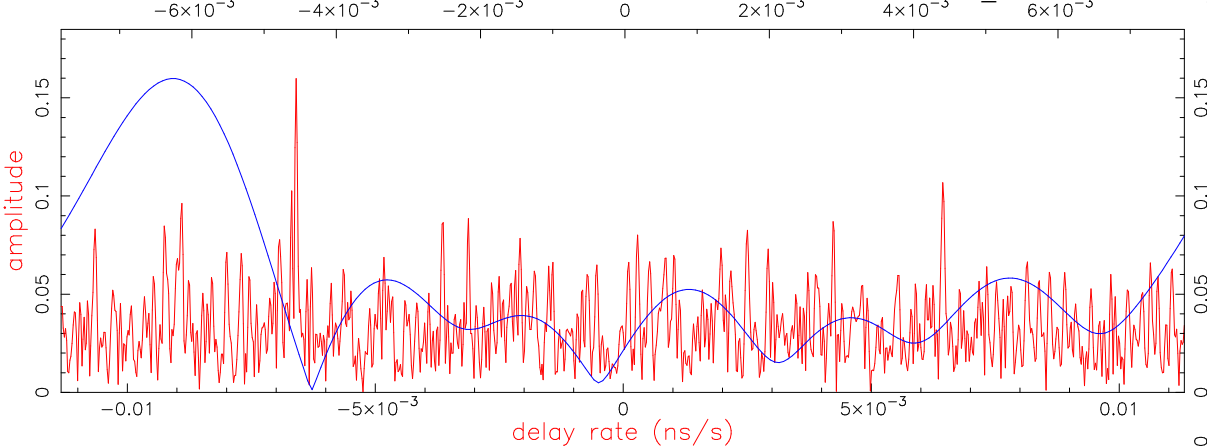
B: az 264.9 el 50.1 pa 49.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BB..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BB.W.3.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, bB

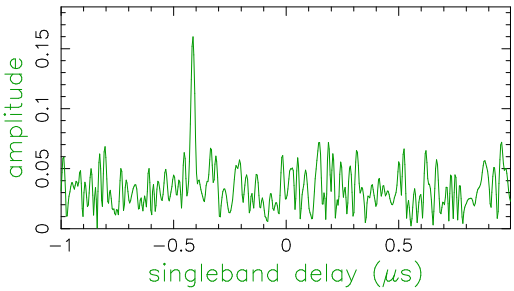
VLBA\_BR - EFLSBERG, fgroup W, pol RR

multiband delay ( $\mu$ s)

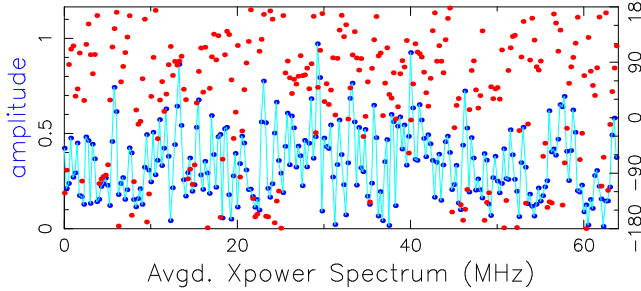


Fringe quality 0

SNR 5.8  
 Int time 174.933  
 Amp 0.185  
 Phase 73.4  
 PFD 5.8e-01  
 Delays (us)  
 SBD -0.414703  
 MBD -0.006252  
 Fringe rate (Hz)  
 -0.568556  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

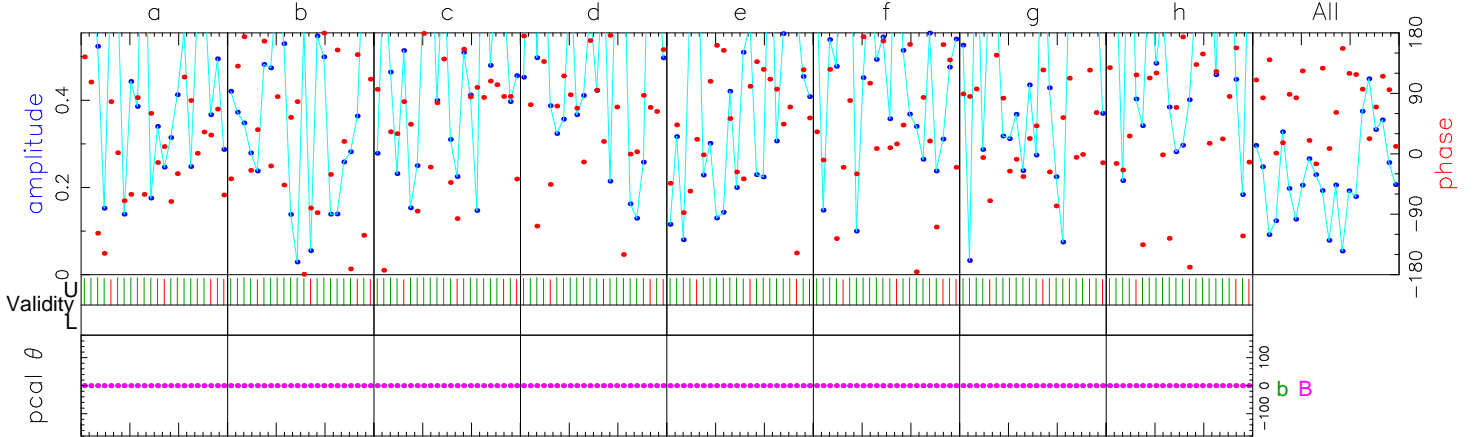


delay rate (ns/s)



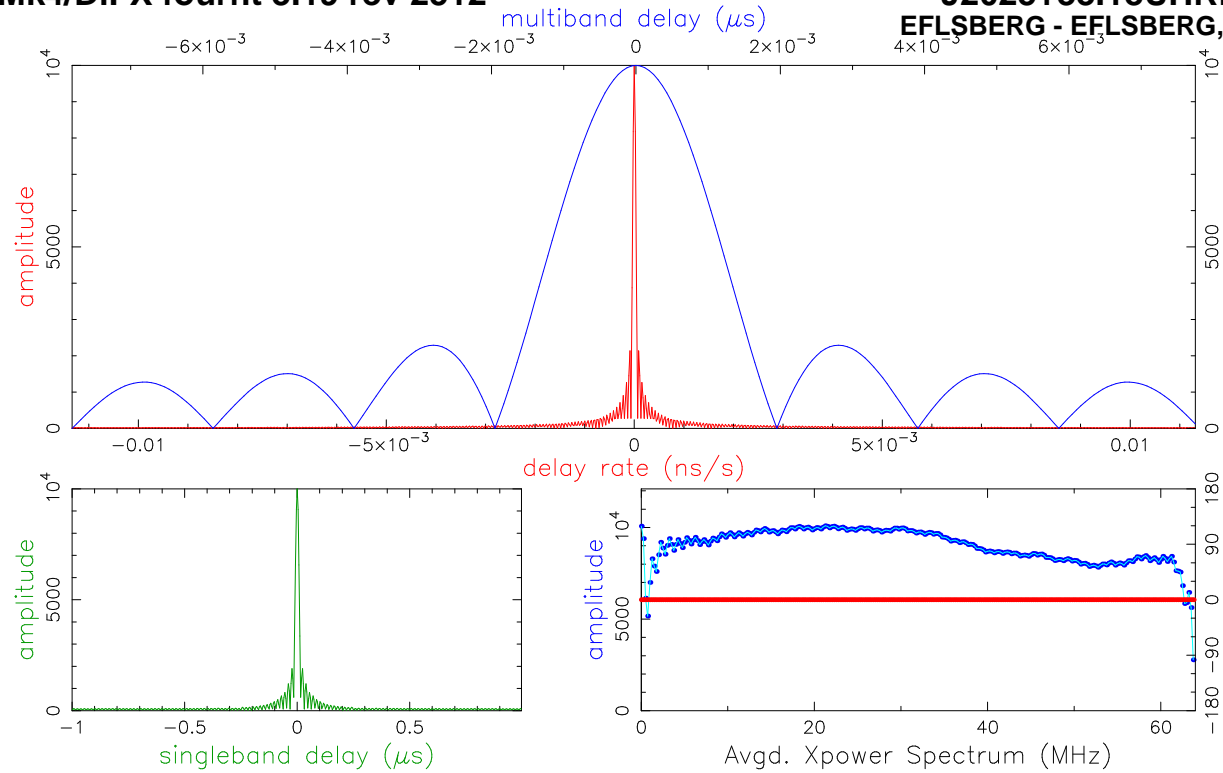
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143630  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.62391184109E+03		Apriori delay (usec)		-4.62349933929E+03		Resid mbdelay (usec)		-6.25180E-03	+/- 1.9E-04
Sband delay (usec)	-4.62391404204E+03		Apriori clock (usec)		-1.4457802E+01		Resid sbdelay (usec)		-4.14703E-01	+/- 1.5E-03
Phase delay (usec)	-4.62349933692E+03		Apriori clockrate (us/s)		1.5800000E-07		Resid phdelay (usec)		2.36768E-06	+/- 6.4E-07
Delay rate (us/s)	1.47130273124E+00		Apriori rate (us/s)		1.47130933161E+00		Resid rate (us/s)		-6.60038E-06	+/- 6.1E-09
Total phase (deg)			42.3		2.27964470662E-05		Resid phase (deg)		73.4	+/- 19.8

ph/seg (deg) 50.2 46.4 Amplitude 0.185 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.1 81.0 Search (1024X32) 0.156 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.1 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.1 48.8 Inc. seg. avg. 0.197 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 b: az 74.4 el 33.0 pa -50.7 B: az 264.9 el 50.1 pa 49.5 u,v (fr/asec) -10120.610 1052.497 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/bB..18UHRL Output file: /Exps/c201b/v1/1234/No0058/bB.W.6.18UHRL simultaneous interpolator

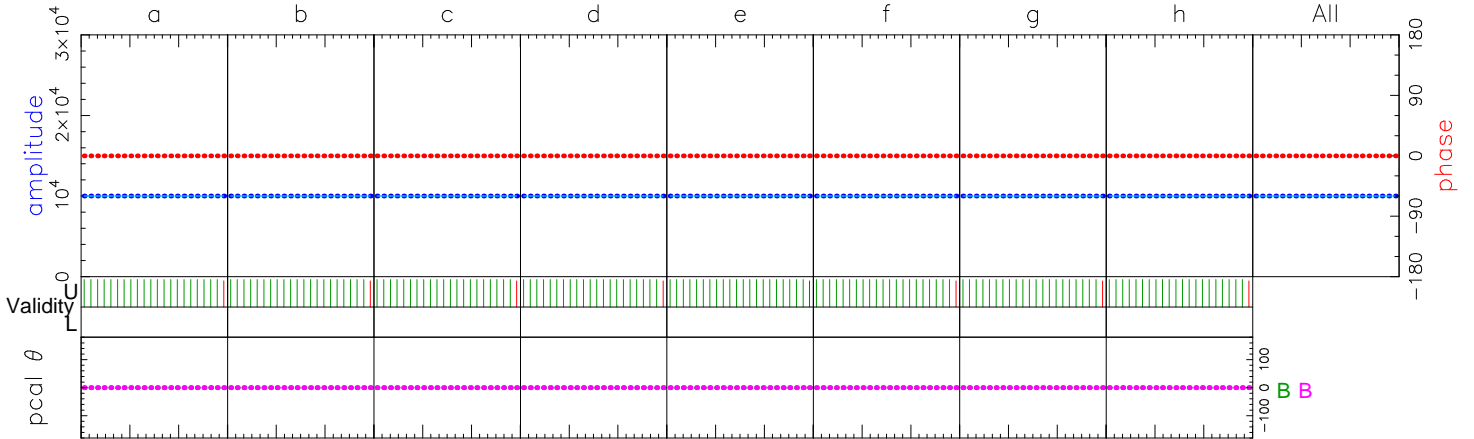


Fringe quality 9

SNR 366662.0  
Int time 179.778  
Amp 10000.001  
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 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143631  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

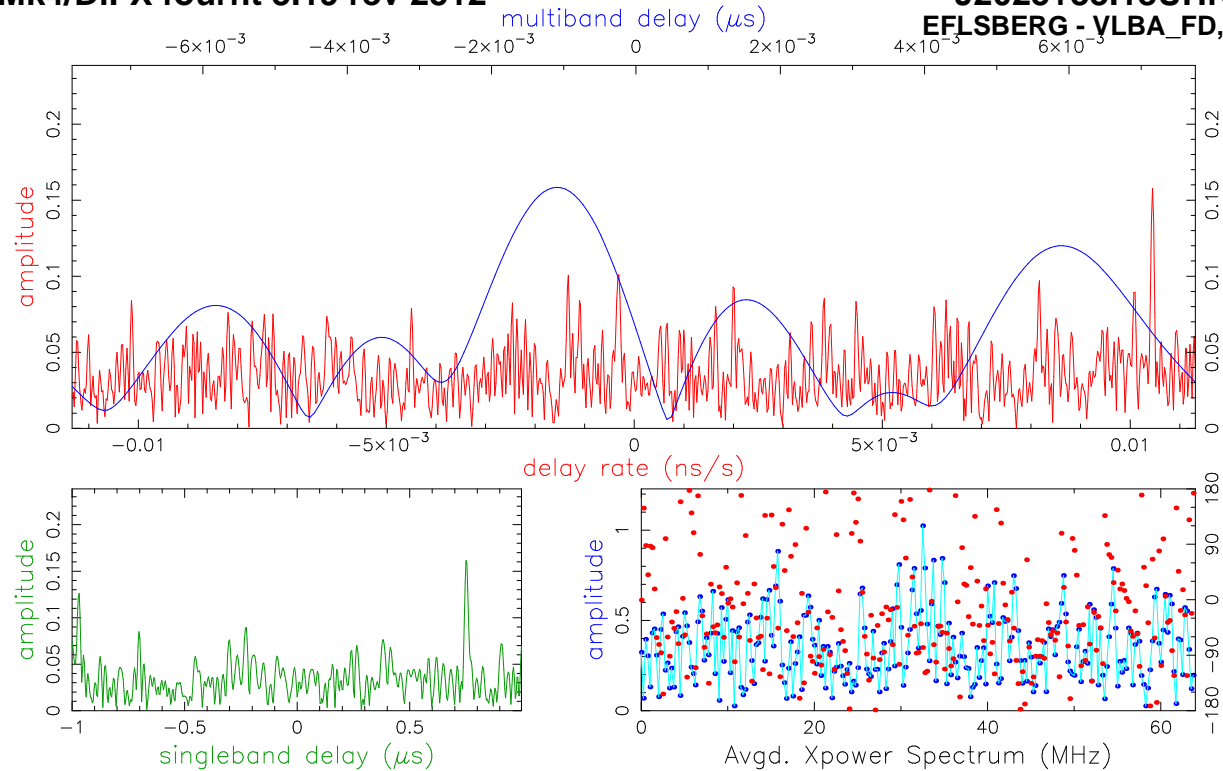


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	Ampl.	10000.0
B	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
B	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Tracks	

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 +/- 2.3E-08  
 Phase delay (usec) -1.31506604940E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.31507E-19 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14  
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

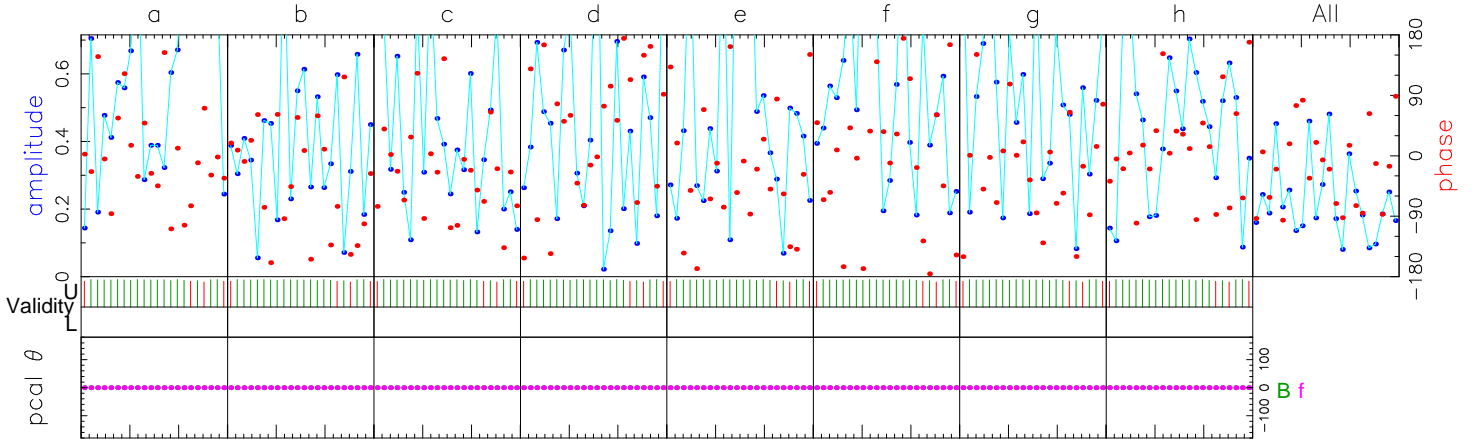
RMS Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00





Fringe quality 0  
 SNR 5.9  
 Int time 175.794  
 Amp 0.239  
 Phase -21.9  
 PFD 3.4e-01  
 Delays (us)  
 SBD 0.751403  
 MBD -0.001179  
 Fringe rate (Hz)  
 0.902157  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143631  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

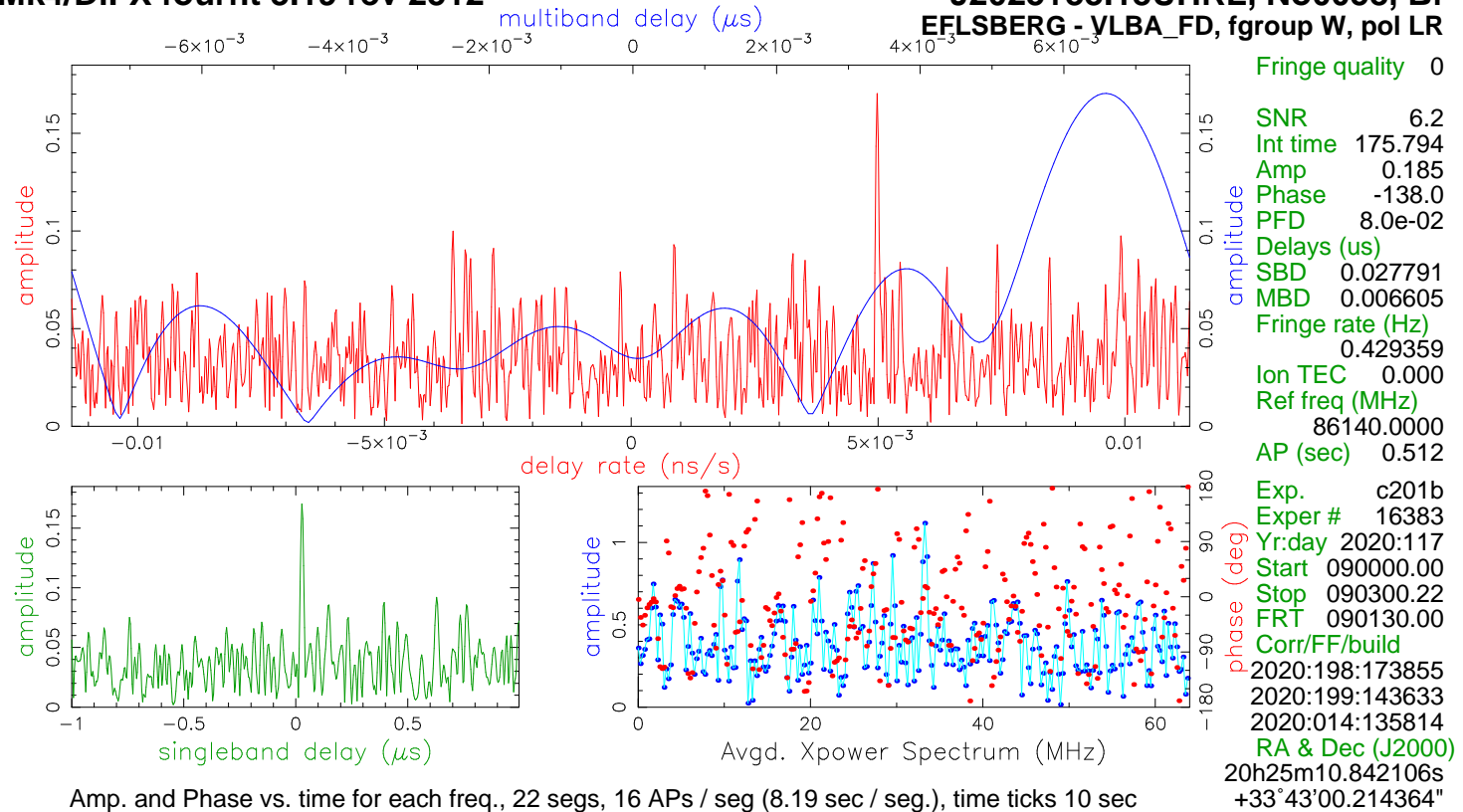
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



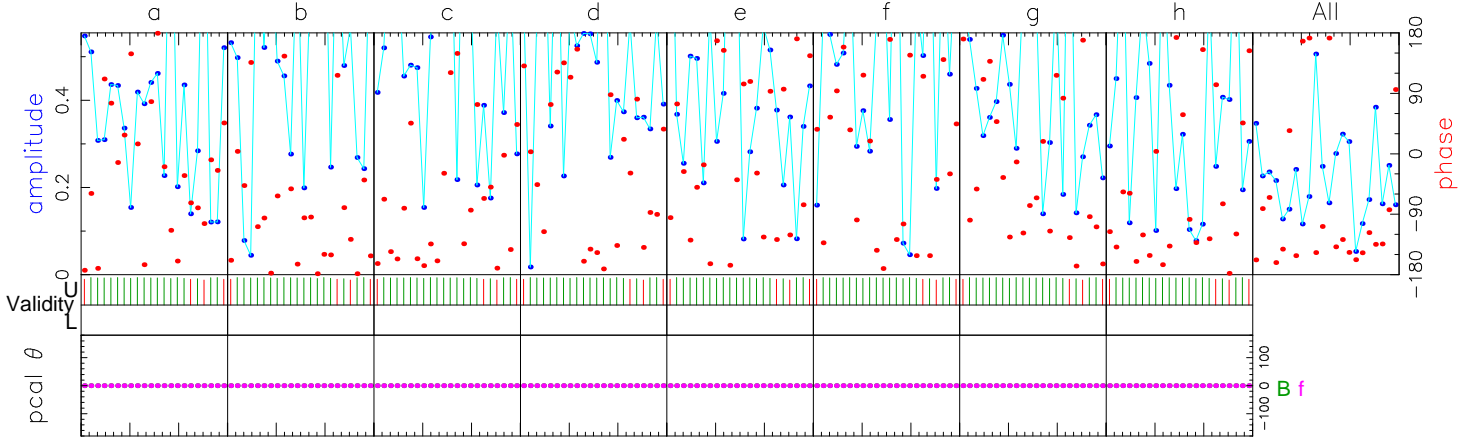
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-19.8	-47.6	-24.5	74.4	-59.4	88.2	-27.7	3.1	Phase	-21.9
	0.5	0.2	0.3	0.2	0.4	0.1	0.3	0.3	Ampl.	0.3
	449.2	267.9	451.5	221.9	449.7	270.6	9.2	56.0	Sbd box	449.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.69516321725E+03		Apriori delay (usec)		2.69441439590E+03		Resid mbdelay (usec)		-1.17864E-03	+/- 1.8E-04
Sband delay (usec)	2.69516579865E+03		Apriori clock (usec)		9.1495876E+00		Resid sbdelay (usec)		7.51403E-01	+/- 1.5E-03
Phase delay (usec)	2.69441439519E+03		Apriori clockrate (us/s)		-3.0900000E-07		Resid phdelay (usec)		-7.06166E-07	+/- 6.2E-07
Delay rate (us/s)	-1.59897976311E+00		Apriori rate (us/s)		-1.59899023627E+00		Resid rate (us/s)		1.04732E-05	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.17458439186E-06		Resid phase (deg)		-21.9	+/- 19.4

RMS Theor. Amplitude 0.239 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 58.6 45.4 Search (1024X32) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 80.9 79.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 63.4 27.4 Inc. seg. avg. 0.256 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 55.3 47.8 Inc. frq. avg. 0.252 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 f: az 69.5 el 39.4 pa -75.8 u,v (fr/asec) 11021.305 1985.082 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bf..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bf.W.11.18UHRL

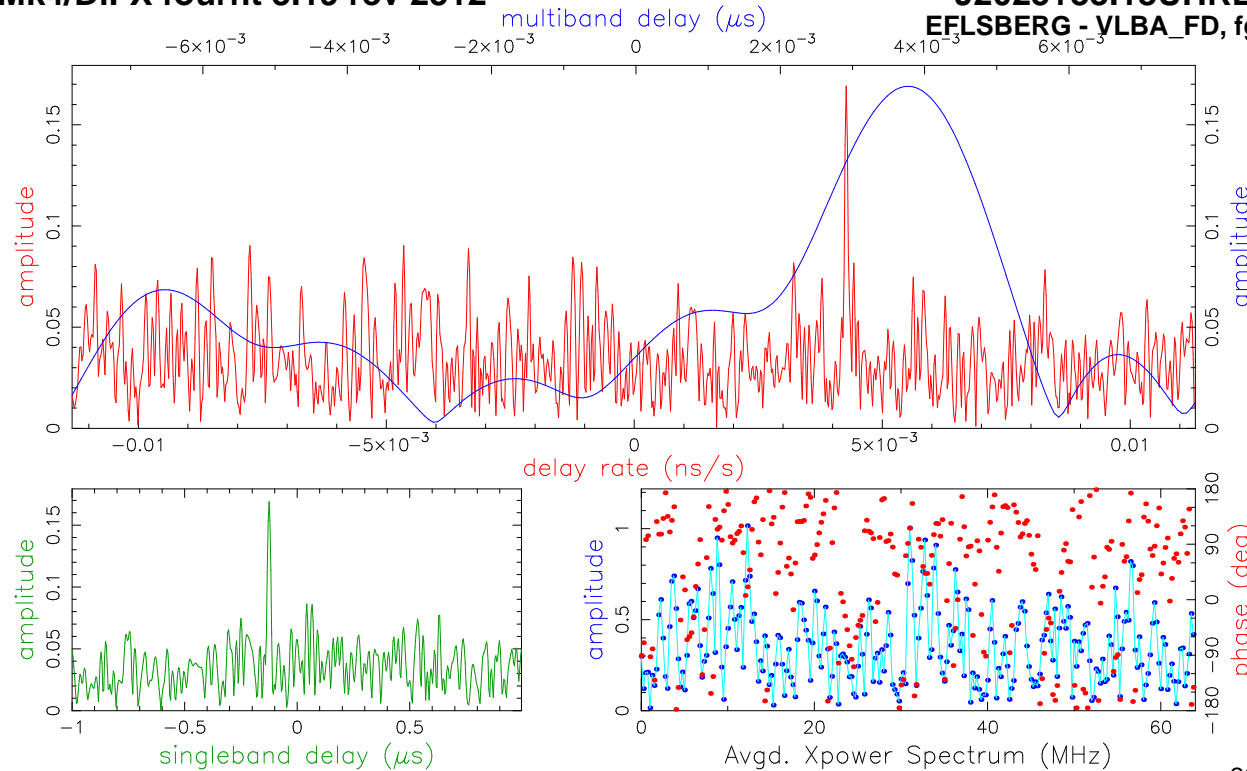


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-86.3	-138.1	-133.9	-173.1	-127.3	173.7	-112.0	-132.8	Phase	-138.0
	0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2
	309.8	264.6	262.3	355.2	240.7	351.2	341.9	200.5	Sbd box	264.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.69443662635E+03		Apriori delay (usec)	2.69441439590E+03	Resid mbdelay (usec)	6.60545E-03	+/-	1.8E-04		
Sband delay (usec)	2.69444218715E+03		Apriori clock (usec)	9.1495876E+00	Resid sbdelay (usec)	2.77913E-02	+/-	1.4E-03		
Phase delay (usec)	2.69441439145E+03		Apriori clockrate (us/s)	-3.0900000E-07	Resid phdelay (usec)	-4.44870E-06	+/-	6.0E-07		
Delay rate (us/s)	-1.59898525183E+00		Apriori rate (us/s)	-1.59899023627E+00	Resid rate (us/s)	4.98444E-06	+/-	5.7E-09		
Total phase (deg)		-115.5	Apriori accel (us/s/s)	2.17458439186E-06	Resid phase (deg)	-138.0	+/-	18.5		

ph/seg (deg) 55.9 43.5 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.3 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) 34.3 26.2 Inc. seg. avg. 0.190 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.9 45.7 Inc. frq. avg. 0.183 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 264.9 el 50.1 pa 49.5 f: az 69.5 el 39.4 pa -75.8 u,v (fr/asec) 11021.305 1985.082 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bf..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bf.W.17.18UHRL

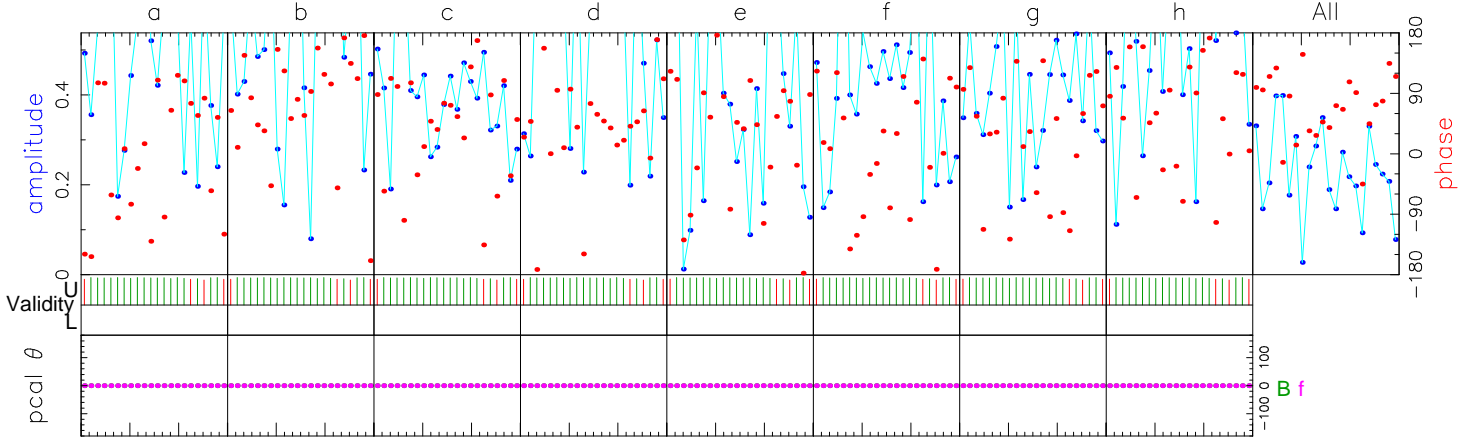


Fringe quality 0

SNR 6.1  
Int time 175.796  
Amp 0.179  
Phase 67.0  
PFD 1.1e-01  
Delays (us)  
SBD -0.124945  
MBD 0.003773  
Fringe rate (Hz)  
0.367974  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

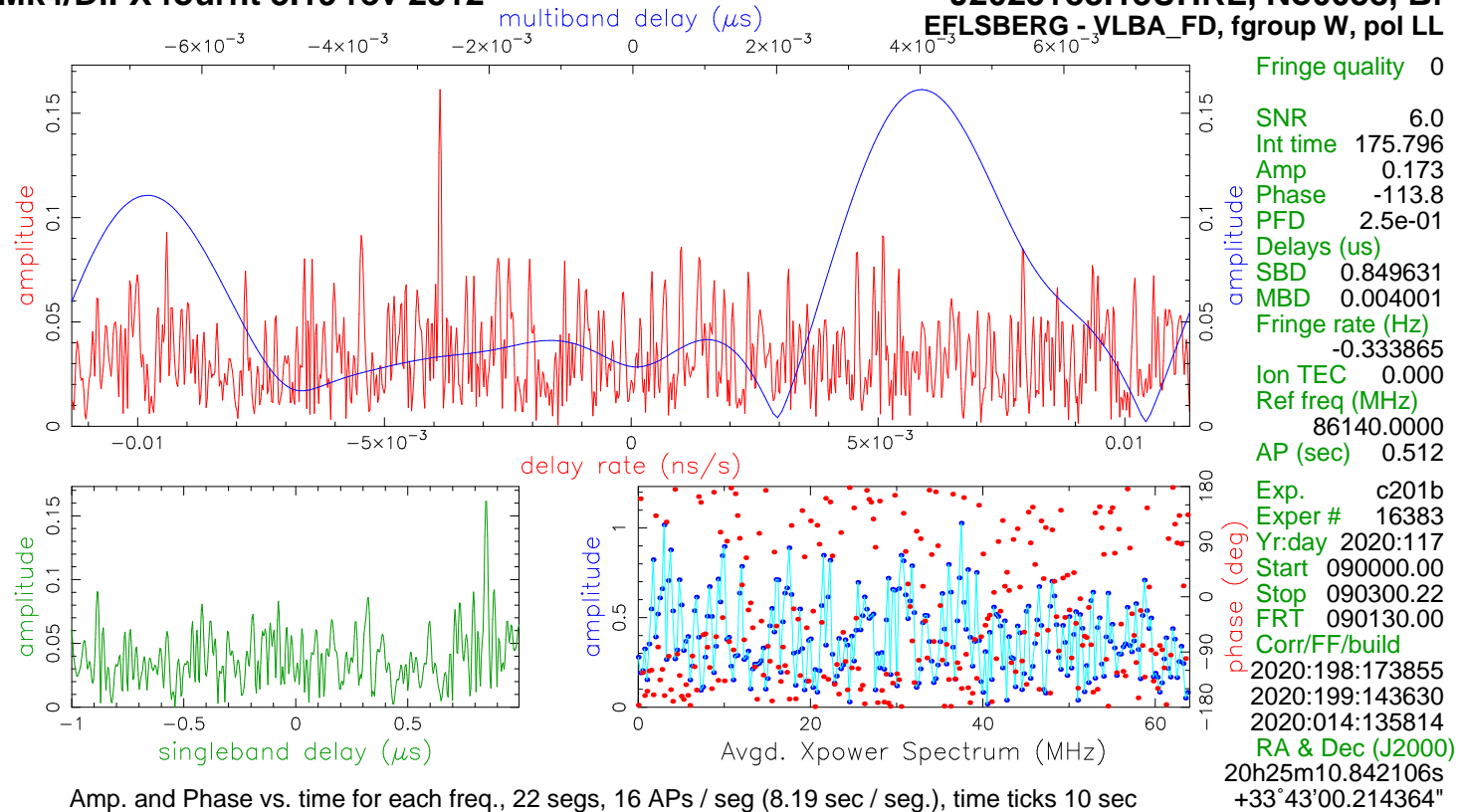
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143637  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

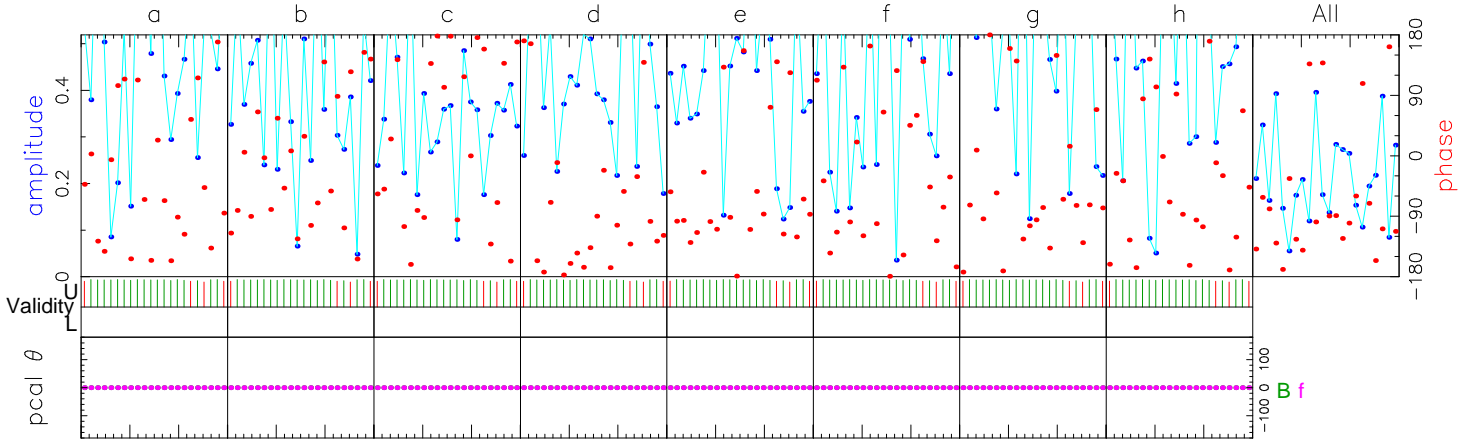


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	37.2	93.6	67.0	54.3	59.7	27.7	73.9	89.7	Phase	67.0
	0.1	0.3	0.2	0.4	0.2	0.1	0.2	0.2	Ampl.	0.2
	378.2	225.2	59.4	225.8	501.9	220.1	102.2	95.6	Sbd box	225.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.69429316920E+03		Apriori delay (usec)		2.69441439590E+03		Resid mbdelay (usec)		3.77330E-03	+/- 1.8E-04
Sband delay (usec)	2.69428945065E+03		Apriori clock (usec)		9.1495876E+00		Resid sbdelay (usec)		-1.24945E-01	+/- 1.4E-03
Phase delay (usec)	2.69441439806E+03		Apriori clockrate (us/s)		-3.0900000E-07		Resid phdelay (usec)		2.16118E-06	+/- 6.0E-07
Delay rate (us/s)	-1.59898596445E+00		Apriori rate (us/s)		-1.59899023627E+00		Resid rate (us/s)		4.27181E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.17458439186E-06		Resid phase (deg)		67.0	+/- 18.7

ph/seg (deg) 47.5 43.8 Amplitude 0.179 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.7 76.5 Search (1024X32) 0.167 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.6 26.4 Inc. seg. avg. 0.189 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 48.1 46.1 Inc. frq. avg. 0.173 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 264.9 el 50.1 pa 49.5 f: az 69.5 el 39.4 pa -75.8 u,v (fr/asec) 11021.305 1985.082 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bf..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bf.W.28.18UHRL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-98.9	-57.6	-172.6	-136.8	-103.8	169.9	-110.8	-97.0	Phase	-113.8
	0.1	0.1	0.1	0.3	0.3	0.1	0.3	0.2	Ampl.	0.2
	158.0	230.3	402.6	474.0	475.3	459.7	474.4	475.9	Sbd box	474.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.69526214699E+03		Apriori delay (usec)	2.69441439590E+03	Resid mbdelay (usec)	4.00109E-03	+/-	1.8E-04		
Sband delay (usec)	2.69526402665E+03		Apriori clock (usec)	9.1495876E+00	Resid sbdelay (usec)	8.49631E-01	+/-	1.4E-03		
Phase delay (usec)	2.69441439222E+03		Apriori clockrate (us/s)	-3.0900000E-07	Resid phdelay (usec)	-3.67131E-06	+/-	6.2E-07		
Delay rate (us/s)	-1.59899411210E+00		Apriori rate (us/s)	-1.59899023627E+00	Resid rate (us/s)	-3.87584E-06	+/-	5.9E-09		
Total phase (deg)		-91.4	Apriori accel (us/s/s)	2.17458439186E-06	Resid phase (deg)	-113.8	+/-	19.2		

ph/seg (deg) 57.6 45.0 Search (1024X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

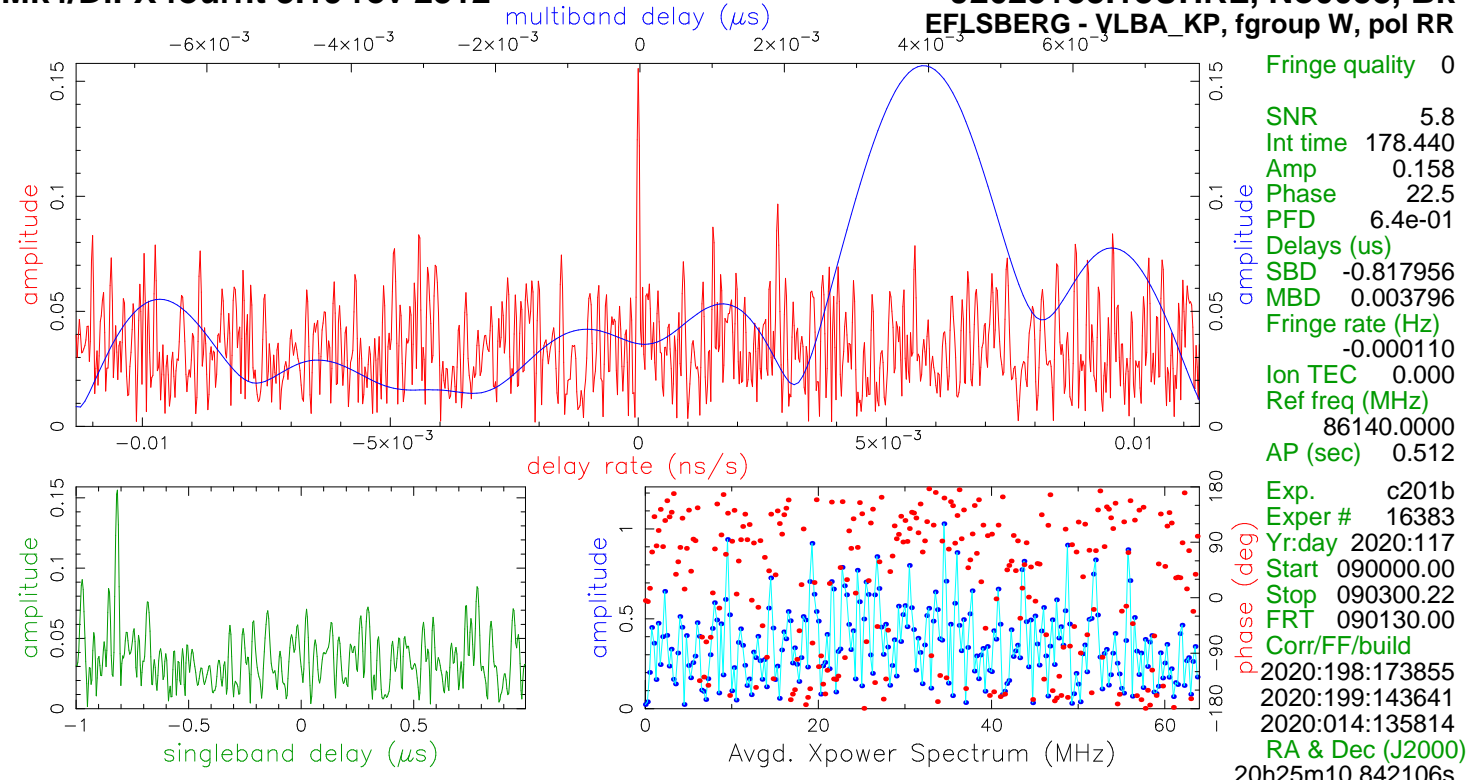
amp/seg (%) 66.8 78.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 47.6 27.1 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

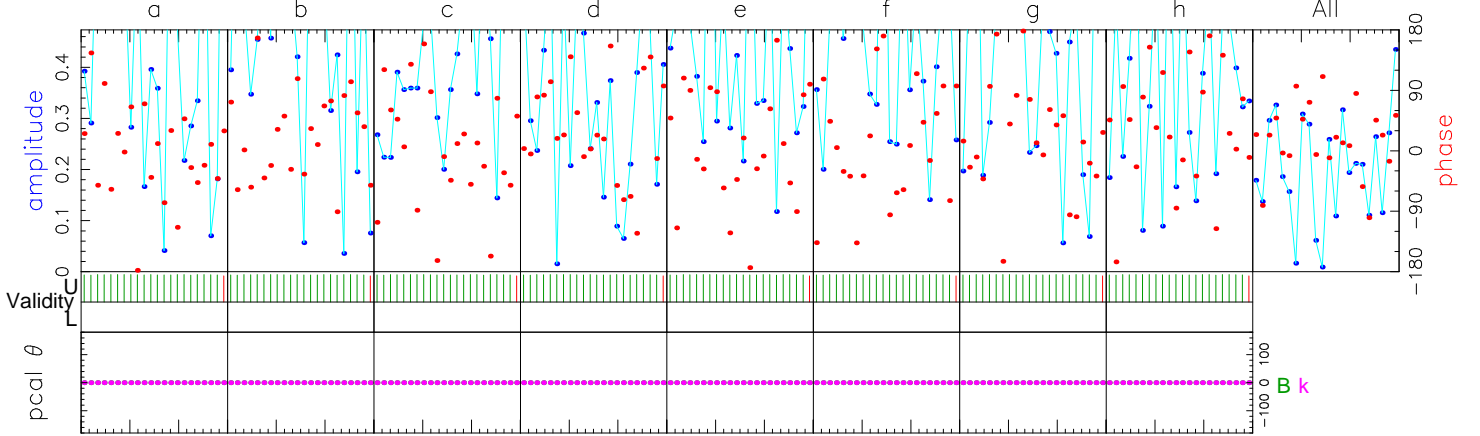
amp/frq (%) 54.2 47.3 Inc. frq. avg. 0.176 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

B: az 264.9 el 50.1 pa 49.5 f: az 69.5 el 39.4 pa -75.8 u,v (fr/asec) 11021.305 1985.082 simultaneous interpolator

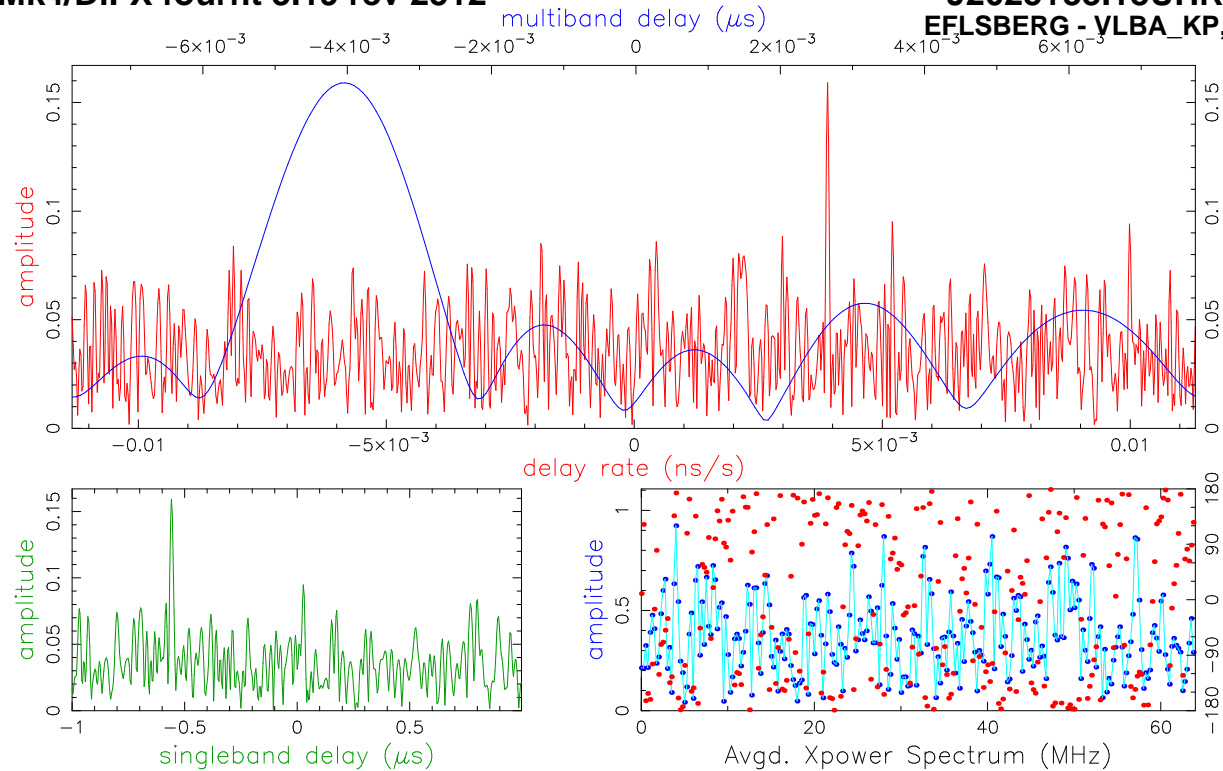
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bf..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bf.W.5.18UHRL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

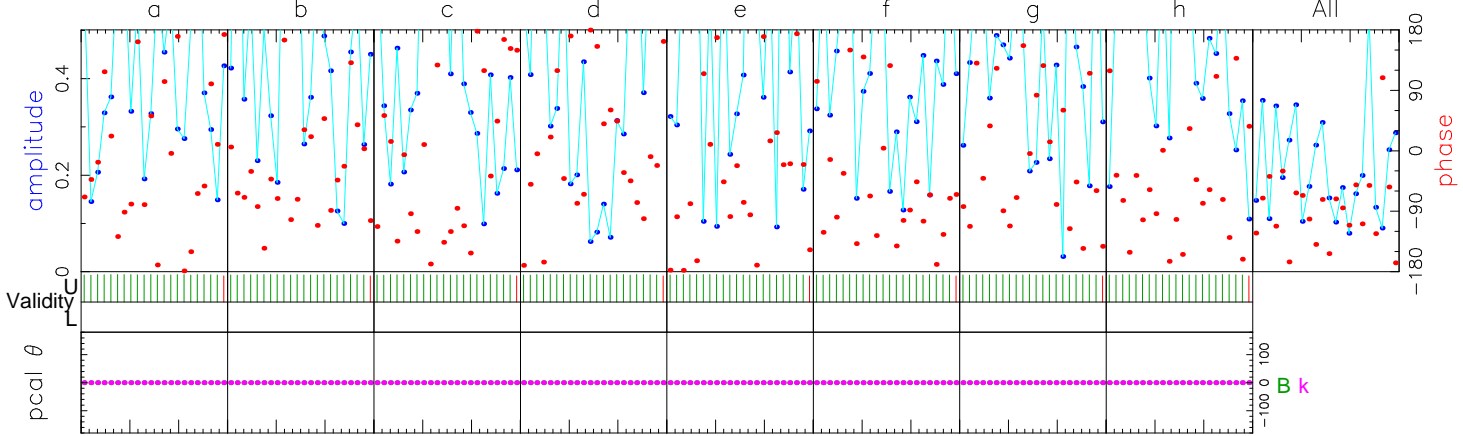


86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
4.5	22.8	-0.5	60.1	51.3	-11.4	15.7	42.0	Phase	22.5
0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
218.5	46.8	173.4	368.0	436.4	174.5	81.6	265.3	Sbd box	47.6
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks
									Tracks
Group delay (usec)(sbd)	4.37643882054E+03		Apriori delay (usec)	4.37726314976E+03	Resid mbdelay (usec)	3.79578E-03	+/-	1.9E-04	
Sband delay (usec)	4.37644519401E+03		Apriori clock (usec)	1.3394143E+01	Resid sbdelay (usec)	-8.17956E-01	+/-	1.5E-03	
Phase delay (usec)	4.37726315048E+03		Apriori clockrate (us/s)	-2.0540000E-07	Resid phdelay (usec)	7.25817E-07	+/-	6.4E-07	
Delay rate (us/s)	-1.64972385404E+00		Apriori rate (us/s)	-1.64972385276E+00	Resid rate (us/s)	-1.27966E-09	+/-	6.2E-09	
Total phase (deg)		281.8	Apriori accel (us/s/s)	-7.98758270781E-06	Resid phase (deg)	22.5	+/-	19.9	
RMS	Theor.	Amplitude	0.158 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
51.8	46.6	Search (1024X32)	0.157	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
72.5	81.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
27.9	28.1	Inc. seg. avg.	0.152	Sample rate (MSamp/s):	128		dr window (ns/s)	-0.011 0.011	
37.9	49.1	Inc. frq. avg.	0.149	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	k: az 68.2 el 33.7 pa -71.5	u, v (fr/asec)	11363.314 1304.178	simultaneous interpolator					
Control file: cf_1234_gmva Input file: /Exps/c201b/v1/1234/No0058/Bk..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bk.W.45.18UHRL									



Fringe quality 0  
SNR 5.8  
Int time 178.440  
Amp 0.167  
Phase -90.0  
PFD 5.4e-01  
Delays (us)  
SBD -0.558370  
MBD -0.004037  
Fringe rate (Hz) 0.335472  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
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., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

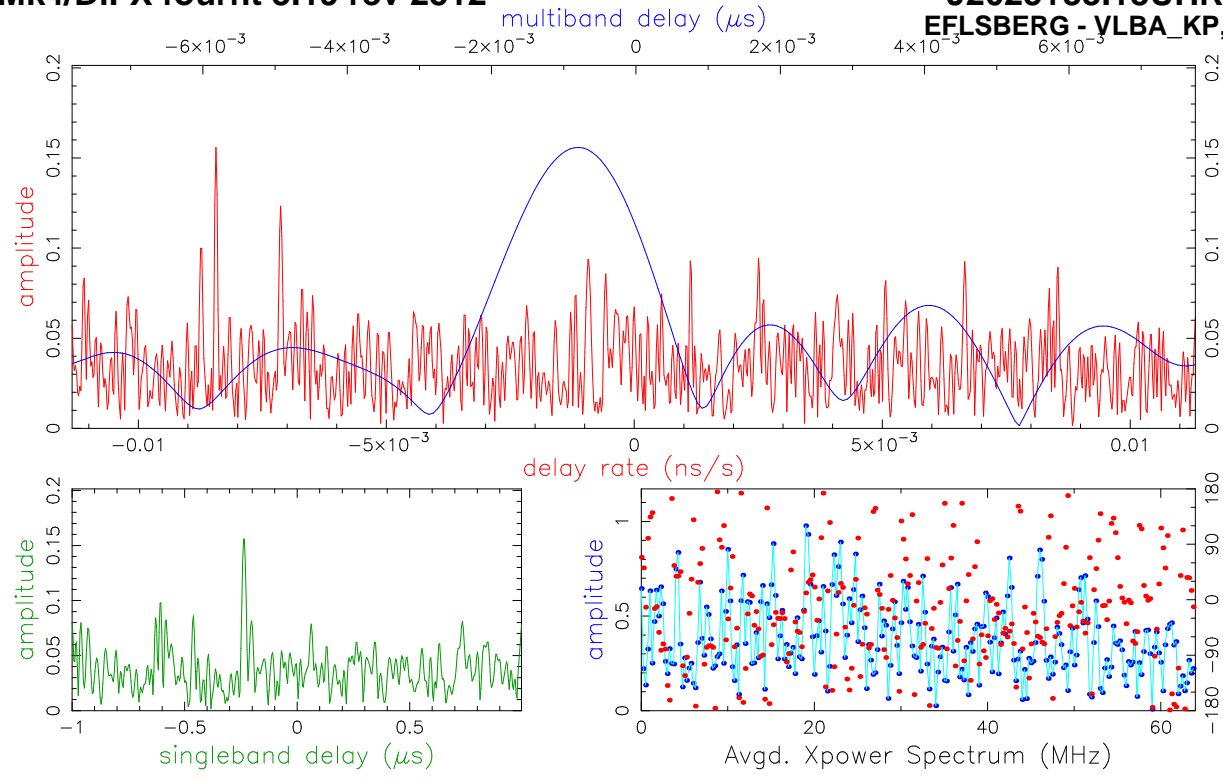


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-109.8	-65.8	-128.7	-56.1	-89.7	-100.4	-98.8	-84.8	Phase	-90.0
	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.3	Ampl.	0.2
	72.6	23.5	57.9	197.8	461.0	489.1	302.5	113.4	Sbd box	114.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	4.37671223812E+03	Apriori delay (usec)	4.37726314976E+03	Resid mbdelay (usec)	-4.03664E-03	+/-	1.9E-04
Sband delay (usec)	4.37670477926E+03	Apriori clock (usec)	1.3394143E+01	Resid sbdelay (usec)	-5.58370E-01	+/-	1.5E-03
Phase delay (usec)	4.37726314686E+03	Apriori clockrate (us/s)	-2.0540000E-07	Resid phdelay (usec)	-2.90337E-06	+/-	6.4E-07
Delay rate (us/s)	-1.64971995826E+00	Apriori rate (us/s)	-1.64972385276E+00	Resid rate (us/s)	3.89449E-06	+/-	6.1E-09
Total phase (deg)	169.2	Apriori accel (us/s/s)	-7.98758270781E-06	Resid phase (deg)	-90.0	+/-	19.7

ph/seg (deg)	52.4	Theor.	46.2	Amplitude	0.167 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	78.3		80.7	Search (1024X32)	0.157	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.3		27.9	Inc. seg. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.7		48.7	Inc. frq. avg.	0.160	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	

B: az 264.9 el 50.1 pa 49.5 k: az 68.2 el 33.7 pa -71.5 u,v (fr/asec) 11363.314 1304.178 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bk..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bk.W.62.18UHRL

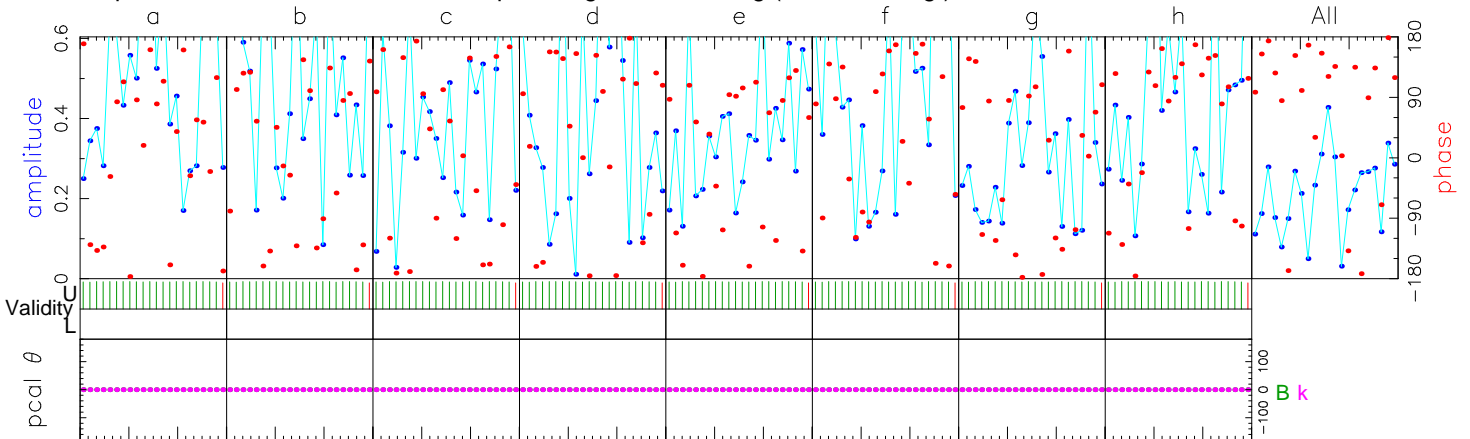


Fringe quality 0

SNR 5.8  
Int time 178.440  
Amp 0.201  
Phase 140.7  
PFD 5.8e-01  
Delays (us)  
SBD -0.236382  
MBD -0.000783  
Fringe rate (Hz)  
-0.727111  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143648  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

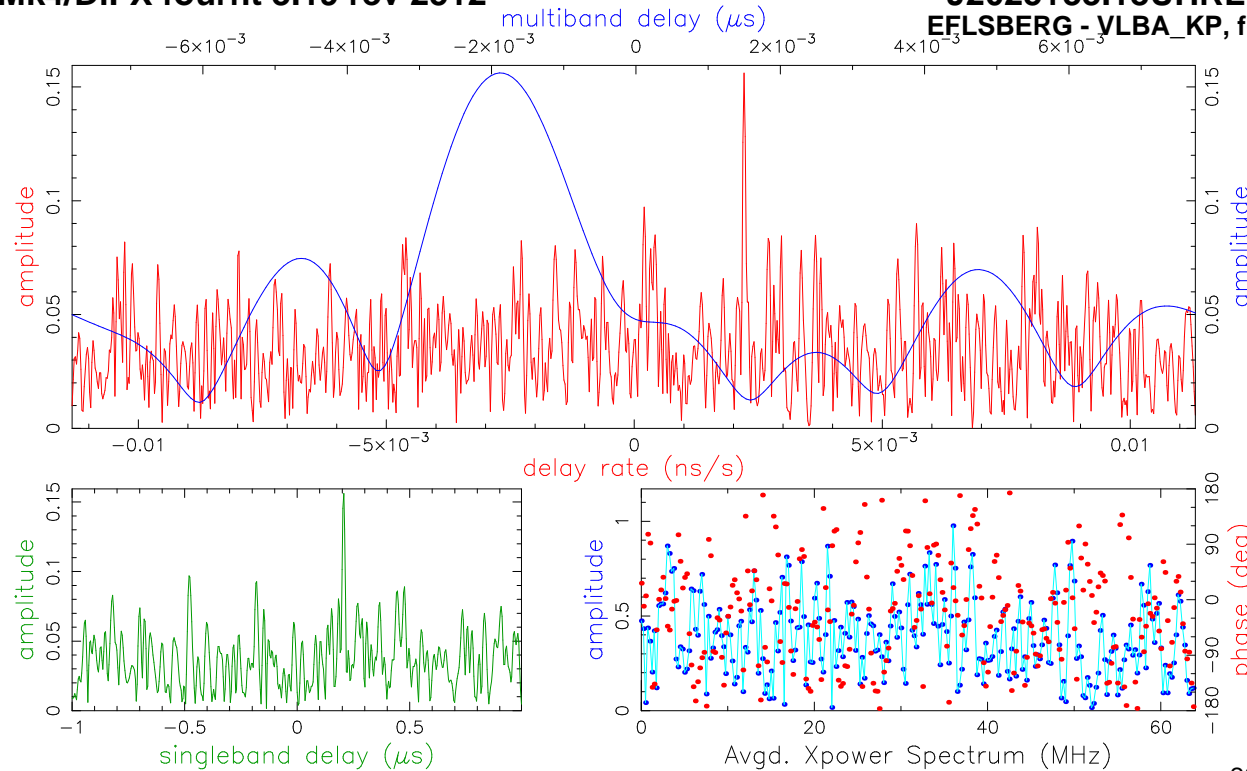


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
99.6	166.5	178.0	126.5	138.0	152.0	126.2	134.9	134.9	Phase	140.7
0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.3	0.3	Ampl.	0.2
16.0	471.5	89.5	439.0	126.0	63.7	181.1	196.2	196.2	Sbd box	196.5
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k 0:0	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	1000	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.37702799147E+03		Apriori delay (usec)	4.37726314976E+03	Resid mbdelay (usec)	-7.83292E-04	+/-	1.9E-04		
Sband delay (usec)	4.37702676776E+03		Apriori clock (usec)	1.3394143E+01	Resid sbdelay (usec)	-2.36382E-01	+/-	1.5E-03		
Phase delay (usec)	4.37726315430E+03		Apriori clockrate (us/s)	-2.0540000E-07	Resid phdelay (usec)	4.53847E-06	+/-	6.4E-07		
Delay rate (us/s)	-1.64973229379E+00		Apriori rate (us/s)	-1.64972385276E+00	Resid rate (us/s)	-8.44104E-06	+/-	6.1E-09		
Total phase (deg)		40.0	Apriori accel (us/s/s)	-7.98758270781E-06	Resid phase (deg)	140.7	+/-	19.8		

ph/seg (deg) 60.0 46.4 Amplitude 0.201 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.2 81.0 Search (1024X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.8 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.4 48.8 Inc. seg. avg. 0.205 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.192 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 k: az 68.2 el 33.7 pa -71.5 u,v (fr/asec) 11363.314 1304.178 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bk..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bk.W.78.18UHRL

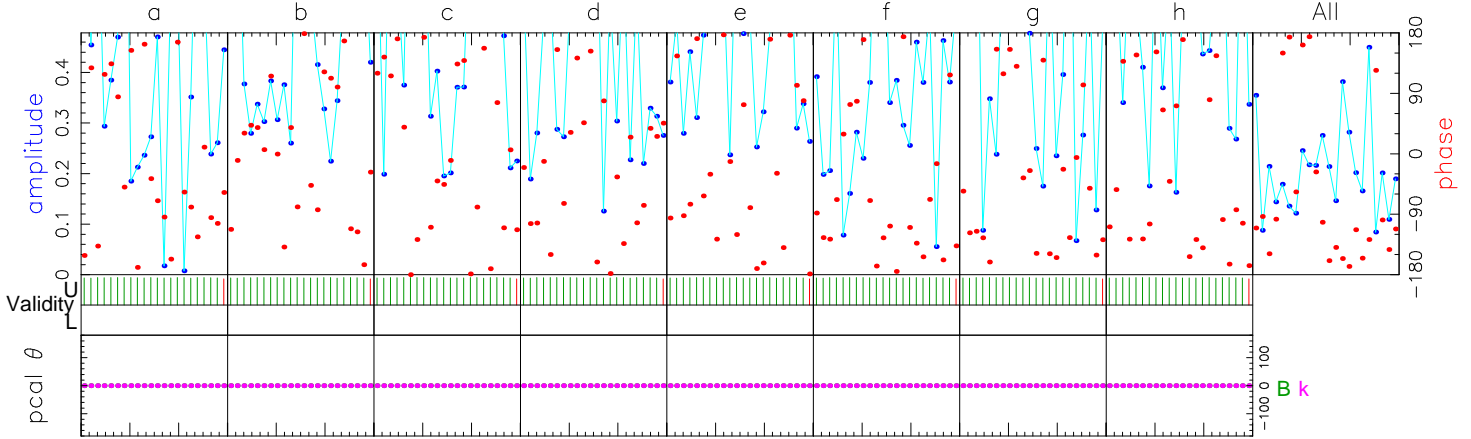


Fringe quality 0

SNR 5.7  
Int time 178.440  
Amp 0.159  
Phase -137.8  
PFD 7.0e-01  
Delays (us)  
SBD 0.206185  
MBD -0.001908  
Fringe rate (Hz)  
0.190228  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143630  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

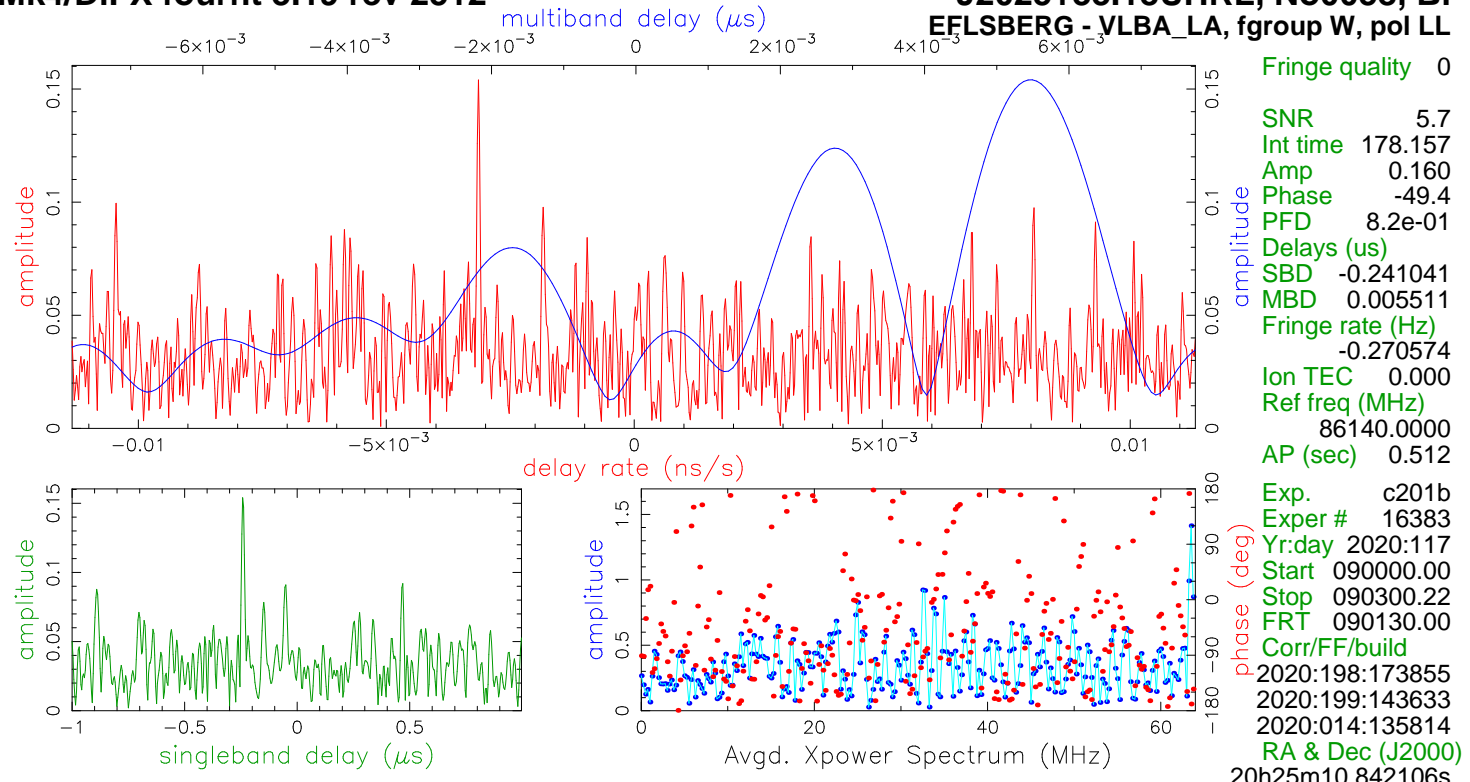
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



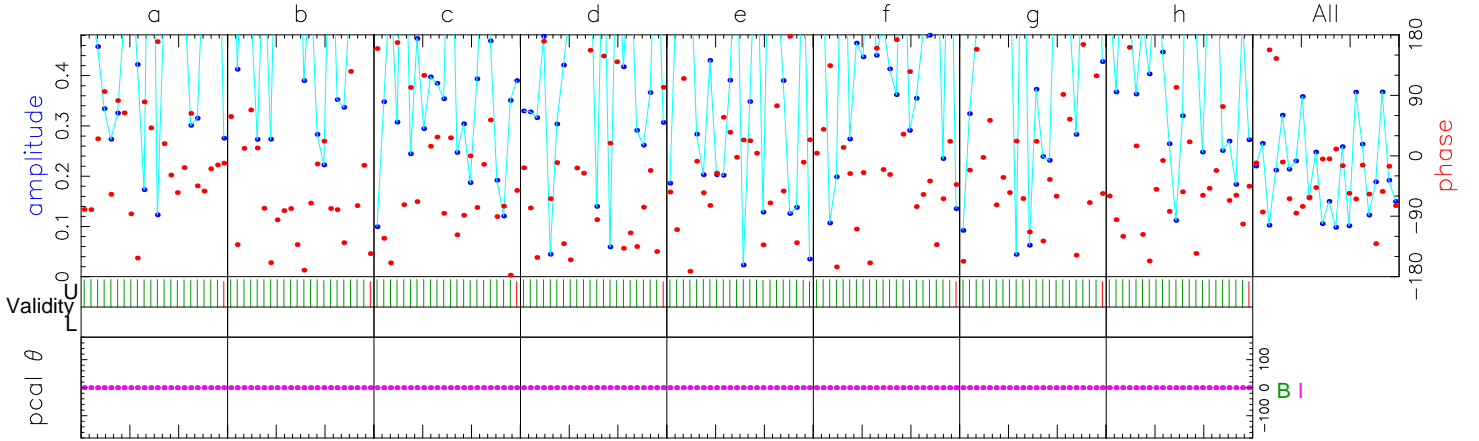
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.2	-88.0	173.6	-130.1	-137.5	-132.4	-119.1	-142.3	Phase	-137.8
	0.2	0.1	0.2	0.0	0.2	0.2	0.2	0.3	Ampl.	0.2
	378.0	151.3	271.0	455.1	440.6	133.1	154.2	434.2	Sbd box	309.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.37746436669E+03		Apriori delay (usec)		4.37726314976E+03		Resid mbdelay (usec)		-1.90807E-03	+/- 1.9E-04
Sband delay (usec)	4.37746933451E+03		Apriori clock (usec)		1.3394143E+01		Resid sbdelay (usec)		2.06185E-01	+/- 1.5E-03
Phase delay (usec)	4.37726314532E+03		Apriori clockrate (us/s)		-2.0540000E-07		Resid phdelay (usec)		-4.44364E-06	+/- 6.4E-07
Delay rate (us/s)	-1.64972164440E+00		Apriori rate (us/s)		-1.64972385276E+00		Resid rate (us/s)		2.20836E-06	+/- 6.2E-09
Total phase (deg)	121.5		Apriori accel (us/s/s)		-7.98758270781E-06		Resid phase (deg)		-137.8	+/- 20.0

ph/seg (deg) 49.0 46.9 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.5 81.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 30.0 28.3 Inc. seg. avg. 0.160 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.6 49.3 Inc. frq. avg. 0.155 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 264.9 el 50.1 pa 49.5 k: az 68.2 el 33.7 pa -71.5 u,v (fr/asec) 11363.314 1304.178 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bk..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bk.W.8.18UHRL





Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

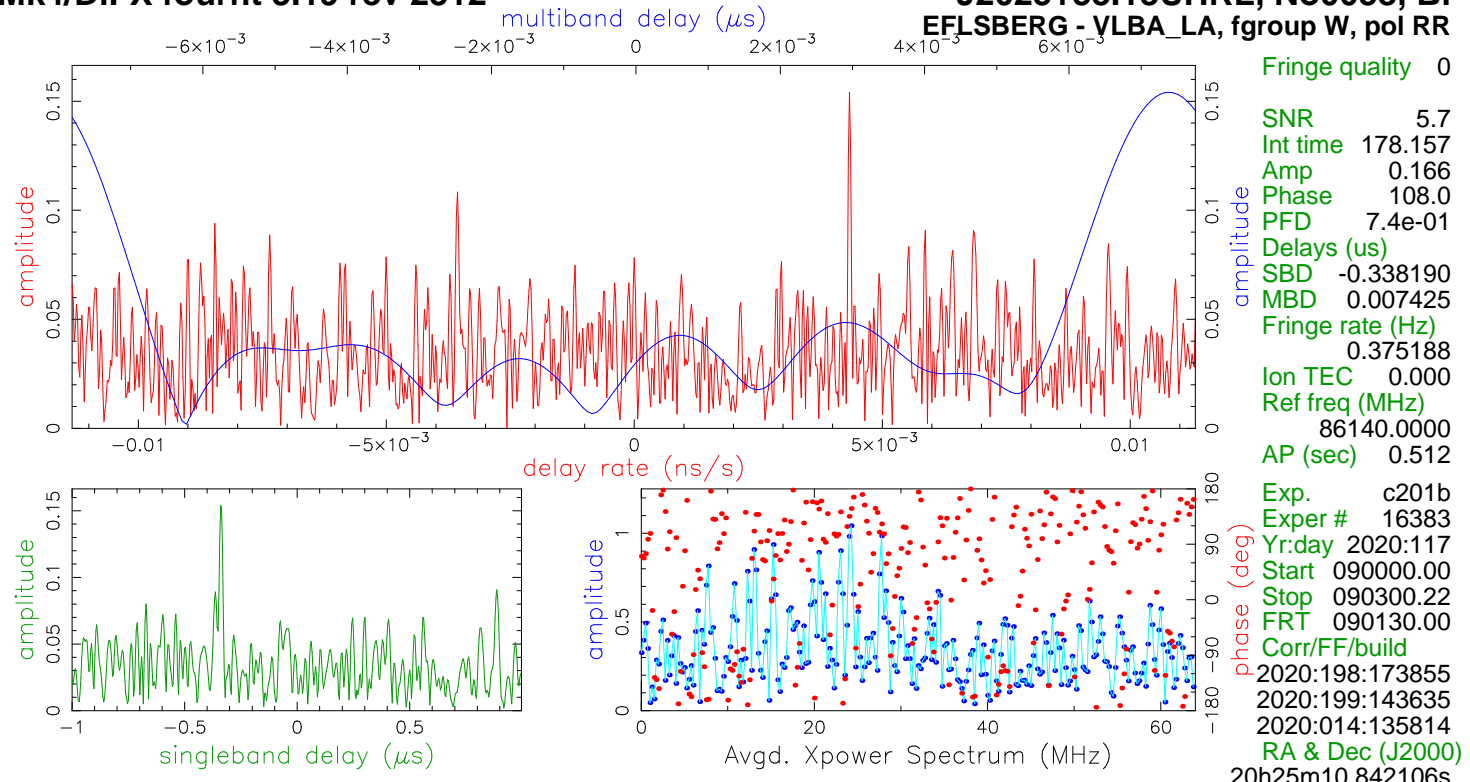


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-14.9	-78.6	-52.3	-139.8	-20.5	-24.1	-39.7	-61.6	Phase	-49.4
	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	330.0	337.2	164.0	388.3	26.0	443.8	139.7	472.4	Sbd box	195.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.75257545643E+03		Apriori delay (usec)	2.75281994520E+03	Resid mbdelay (usec)	5.51123E-03	+/-	1.9E-04		
Sband delay (usec)	2.75257890395E+03		Apriori clock (usec)	1.6756115E+01	Resid sbdelay (usec)	-2.41041E-01	+/-	1.5E-03		
Phase delay (usec)	2.75281994361E+03		Apriori clockrate (us/s)	-4.8999999E-08	Resid phdelay (usec)	-1.59245E-06	+/-	6.5E-07		
Delay rate (us/s)	-1.56439843907E+00		Apriori rate (us/s)	-1.56439529797E+00	Resid rate (us/s)	-3.14109E-06	+/-	6.3E-09		
Total phase (deg)		-20.8	Apriori accel (us/s/s)	-2.80107484638E-06	Resid phase (deg)	-49.4	+/-	20.2		

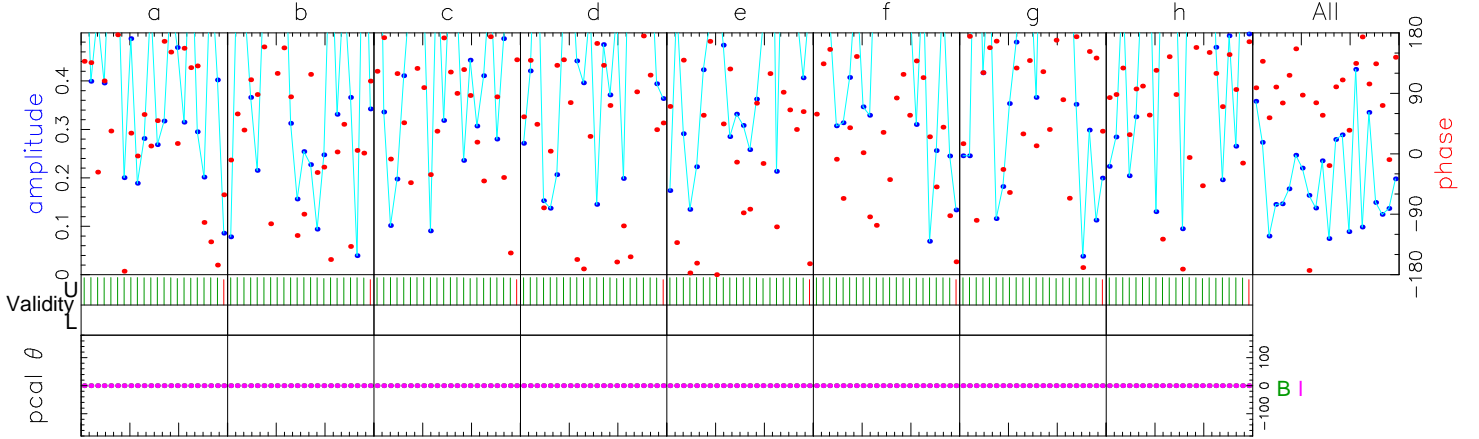
	RMS	Theor.	Amplitude	0.160 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.0	47.4	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	66.4	82.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.6	28.6	Inc. seg. avg.	0.165	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	40.3	49.9	Inc. frq. avg.	0.174	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 264.9 el 50.1 pa 49.5 I: az 72.7 el 39.2 pa -68.9 u,v (fr/asec) 10778.385 1172.583 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BI..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BI.W.16.18UHRL



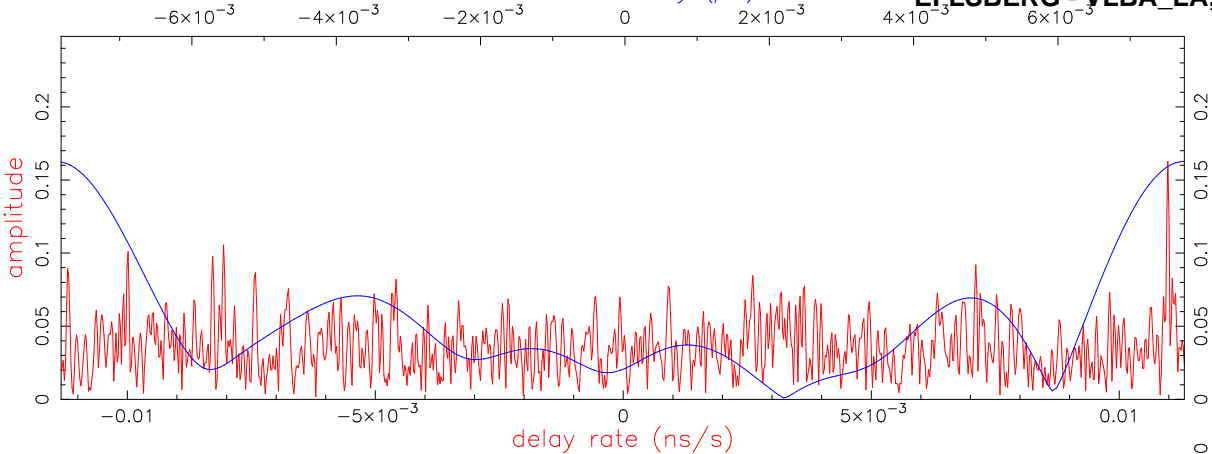
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
118.0	100.1	109.0	118.1	103.2	66.6	121.3	111.0	111.0	Phase	108.0
0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.2
298.8	483.7	296.5	136.8	347.0	248.6	503.0	198.8	198.8	Sbd box	170.4
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I 0:0	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	1000	PC amp	
I 1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.75248361976E+03		Apriori delay (usec)	2.75281994520E+03	Resid mbdelay (usec)	7.42456E-03	+/-	1.9E-04		
Sband delay (usec)	2.75248175545E+03		Apriori clock (usec)	1.6756115E+01	Resid sbdelay (usec)	-3.38190E-01	+/-	1.5E-03		
Phase delay (usec)	2.75281994868E+03		Apriori clockrate (us/s)	-4.8999999E-08	Resid phdelay (usec)	3.48413E-06	+/-	6.5E-07		
Delay rate (us/s)	-1.56439094241E+00		Apriori rate (us/s)	-1.56439529797E+00	Resid rate (us/s)	4.35556E-06	+/-	6.2E-09		
Total phase (deg)		136.6	Apriori accel (us/s/s)	-2.80107484638E-06	Resid phase (deg)	108.0	+/-	20.1		

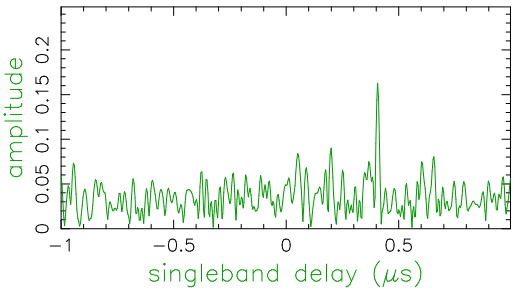
	RMS	Theor.	Amplitude	0.166 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	52.5	47.0	Search (1024X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	65.9	82.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	19.1	28.4	Inc. seg. avg.	0.159	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	31.7	49.5	Inc. frq. avg.	0.151	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

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

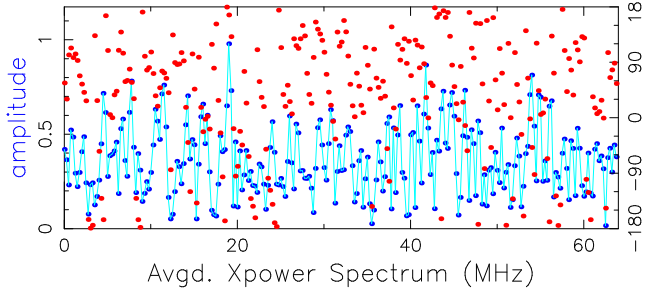


Fringe quality 0

SNR 5.9  
Int time 178.157  
Amp 0.248  
Phase -11.0  
PFD 3.1e-01  
Delays (us)  
SBD 0.406363  
MBD 0.007749  
Fringe rate (Hz) 0.947678  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

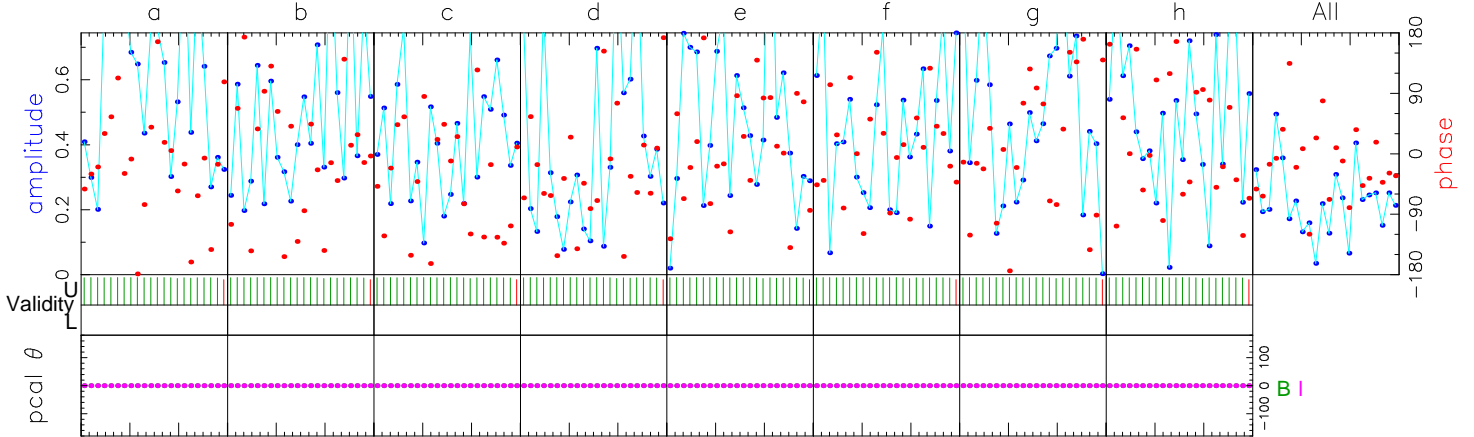


delay rate (ns/s)



Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143637  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

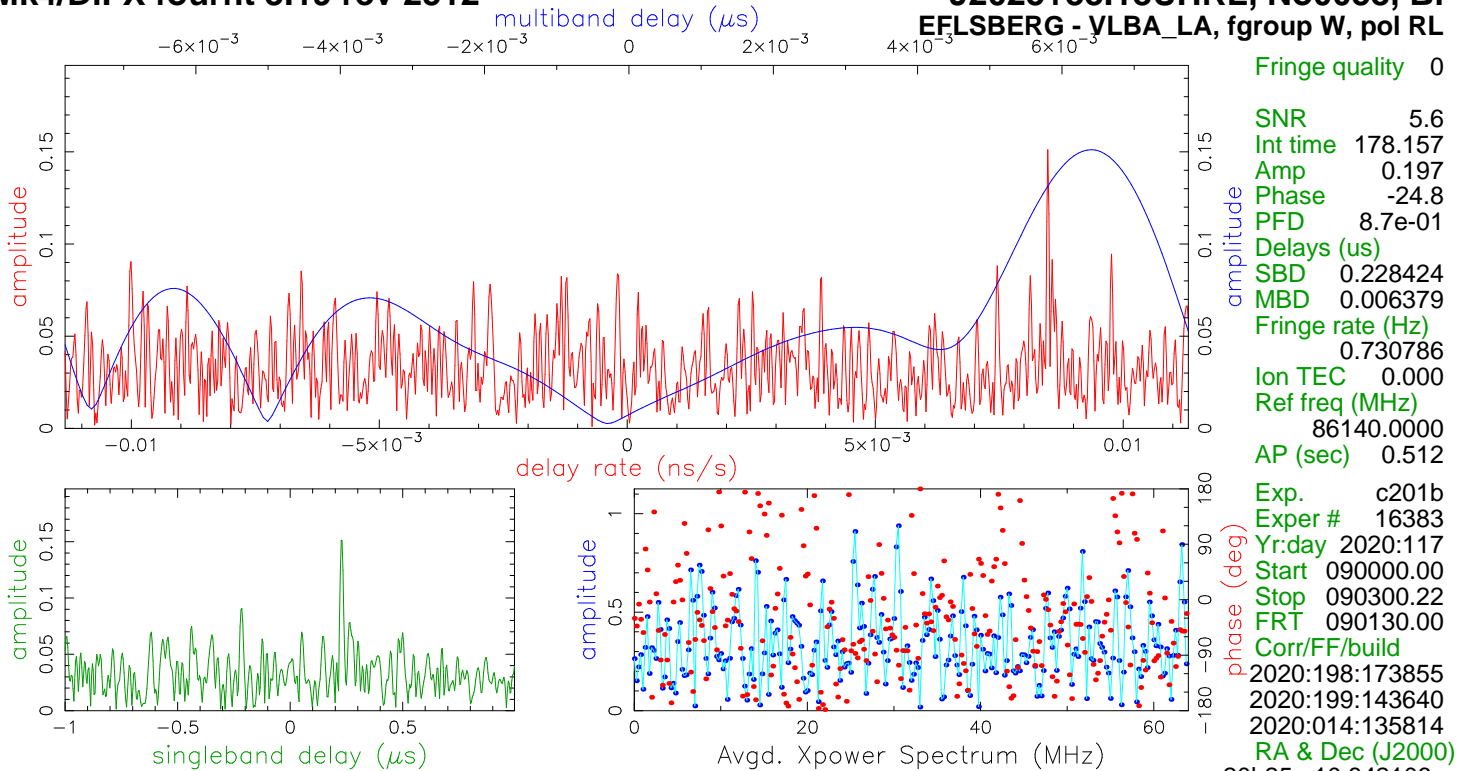


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-5.0	4.0	-62.7	-45.0	13.3	2.2	3.5	-33.1	Phase	-11.0
	0.4	0.3	0.2	0.3	0.3	0.4	0.1	0.2	Ampl.	0.2
	359.1	121.4	237.0	359.3	362.6	180.9	500.4	295.3	Sbd box	361.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.75323394398E+03	Apriori delay (usec)	2.75281994520E+03	Resid mbdelay (usec)	7.74878E-03	+/-	1.8E-04
Sband delay (usec)	2.75322630820E+03	Apriori clock (usec)	1.6756115E+01	Resid sbdelay (usec)	4.06363E-01	+/-	1.5E-03
Phase delay (usec)	2.75281994484E+03	Apriori clockrate (us/s)	-4.8999999E-08	Resid phdelay (usec)	-3.56196E-07	+/-	6.2E-07
Delay rate (us/s)	-1.56438429638E+00	Apriori rate (us/s)	-1.56439529797E+00	Resid rate (us/s)	1.10016E-05	+/-	6.0E-09
Total phase (deg)	17.6	Apriori accel (us/s/s)	-2.80107484638E-06	Resid phase (deg)	-11.0	+/-	19.3

ph/seg (deg)	RMS 54.3	Theor. 45.3	Amplitude 0.248 +/- 0.042	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.2	79.0	Search (1024X32) 0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.4	27.3	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.3	47.6	Inc. seg. avg. 0.265	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.244	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

B: az 264.9 el 50.1 pa 49.5 I: az 72.7 el 39.2 pa -68.9 u,v (fr/asec) 10778.385 1172.583 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BI..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BI.W.29.18UHRL



Fringe quality 0

SNR 5.6

Int time 178.157

Amp 0.197

Phase -24.8

PFD 8.7e-01

Delays (us)

SBD 0.228424

MBD 0.006379

Fringe rate (Hz) 0.730786

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 090000.00

Stop 090300.22

FRT 090130.00

Corr/FF/build

2020:198:173855

2020:199:143640

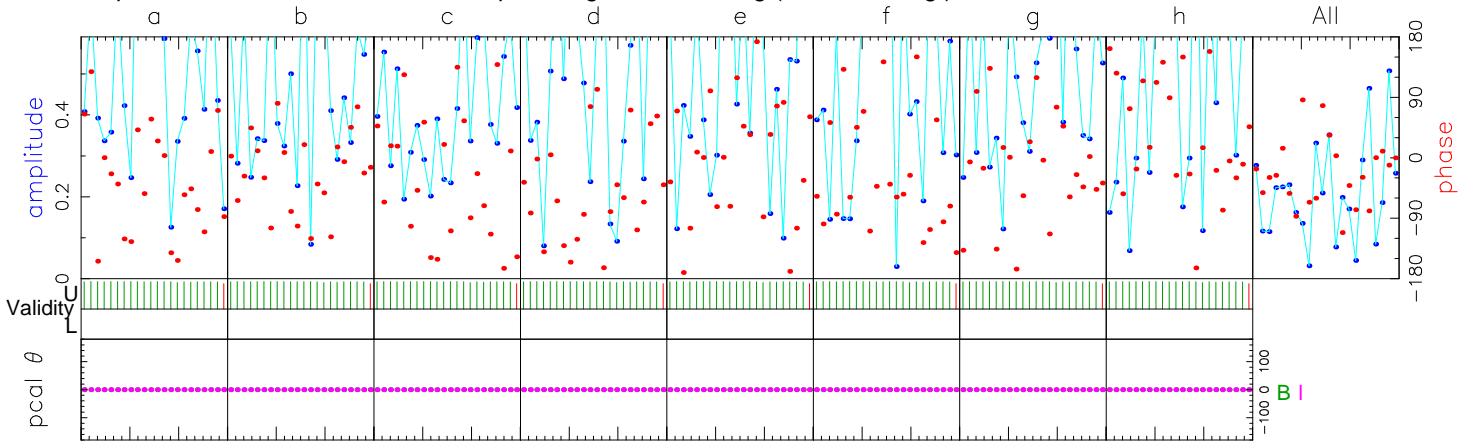
2020:014:135814

RA & Dec (J2000)

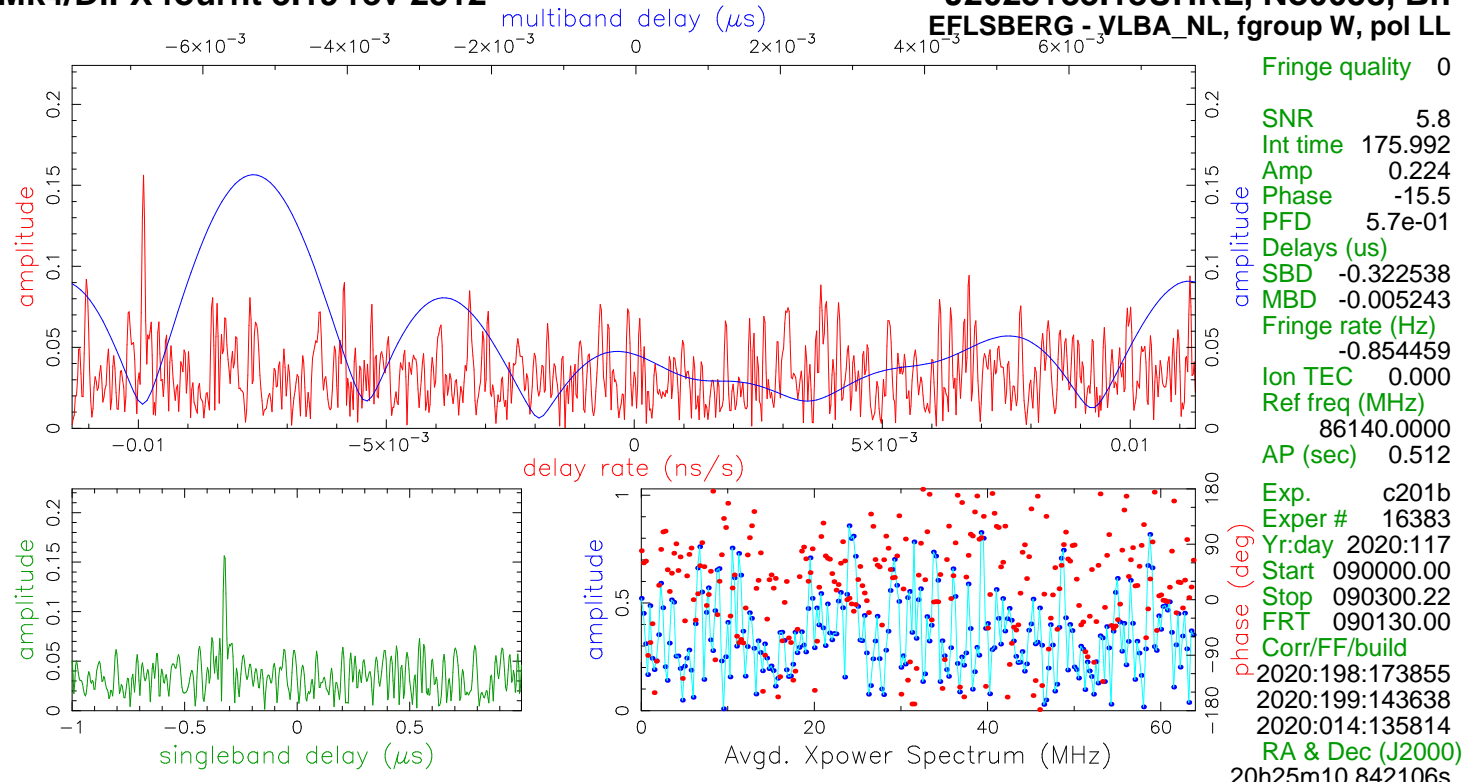
20h25m10.842106s

+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-11.7	-20.1	-40.2	-65.7	-9.2	-68.9	-16.0	55.7	Phase	-24.8		
	0.3	0.4	0.1	0.2	0.2	0.2	0.3	0.1	Ampl.	0.2		
	53.8	315.4	250.7	324.6	294.1	231.7	200.7	323.4	Sbd box	315.5		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
B:I	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			
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec)(sbd)	2.75304507443E+03		Apriori delay (usec)		2.75281994520E+03		Resid mbdelay (usec)		6.37923E-03	+/- 1.9E-04		
Sband delay (usec)	2.75304836945E+03		Apriori clock (usec)		1.6756115E+01		Resid sbdelay (usec)		2.28424E-01	+/- 1.5E-03		
Phase delay (usec)	2.75281994440E+03		Apriori clockrate (us/s)		-4.8999999E-08		Resid phdelay (usec)		-7.98189E-07	+/- 6.5E-07		
Delay rate (us/s)	-1.56438681427E+00		Apriori rate (us/s)		-1.56439529797E+00		Resid rate (us/s)		8.48370E-06	+/- 6.3E-09		
Total phase (deg)			Apriori accel (us/s/s)		-2.80107484638E-06		Resid phase (deg)		-24.8	+/- 20.3		
	RMS	Theor.	Amplitude	0.197 +/- 0.035		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	49.2	47.6	Search (1024X32)	0.146		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	86.8	83.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	42.5	28.7	Inc. seg. avg.	0.201		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	47.4	50.1	Inc. frq. avg.	0.194		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00



Fringe quality 0

SNR 5.8

Int time 175.992

Amp 0.224

Phase -15.5

PFD 5.7e-01

Delays (us)

SBD -0.322538

MBD -0.005243

Fringe rate (Hz)

-0.854459

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201b

Exper # 16383

Yr:day 2020:117

Start 090000.00

Stop 090300.22

FRT 090130.00

Corr/FF/build

2020:198:173855

2020:199:143638

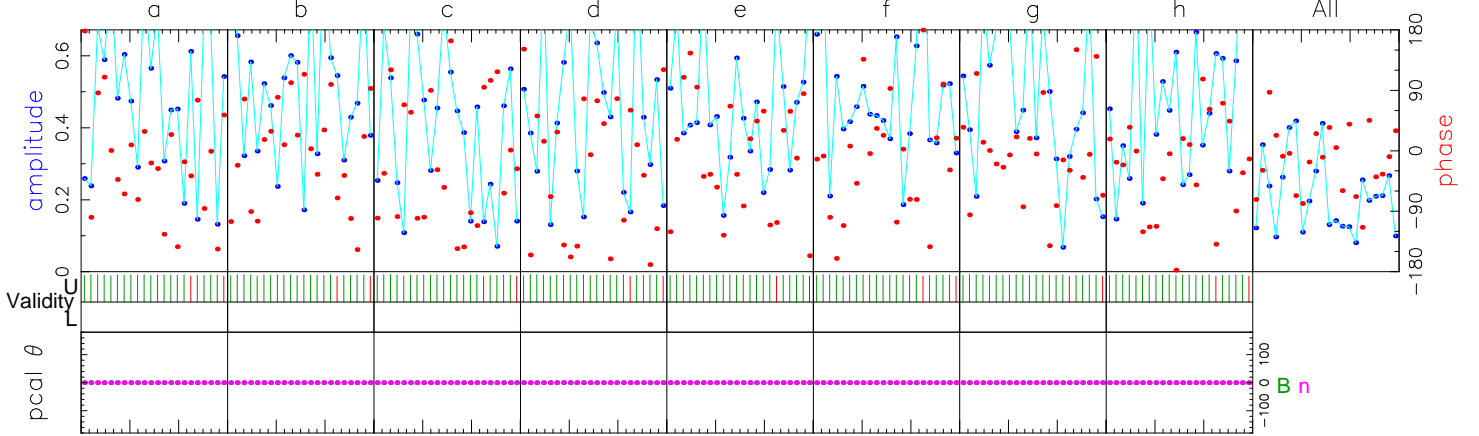
2020:014:135814

RA & Dec (J2000)

20h25m10.842106s

+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

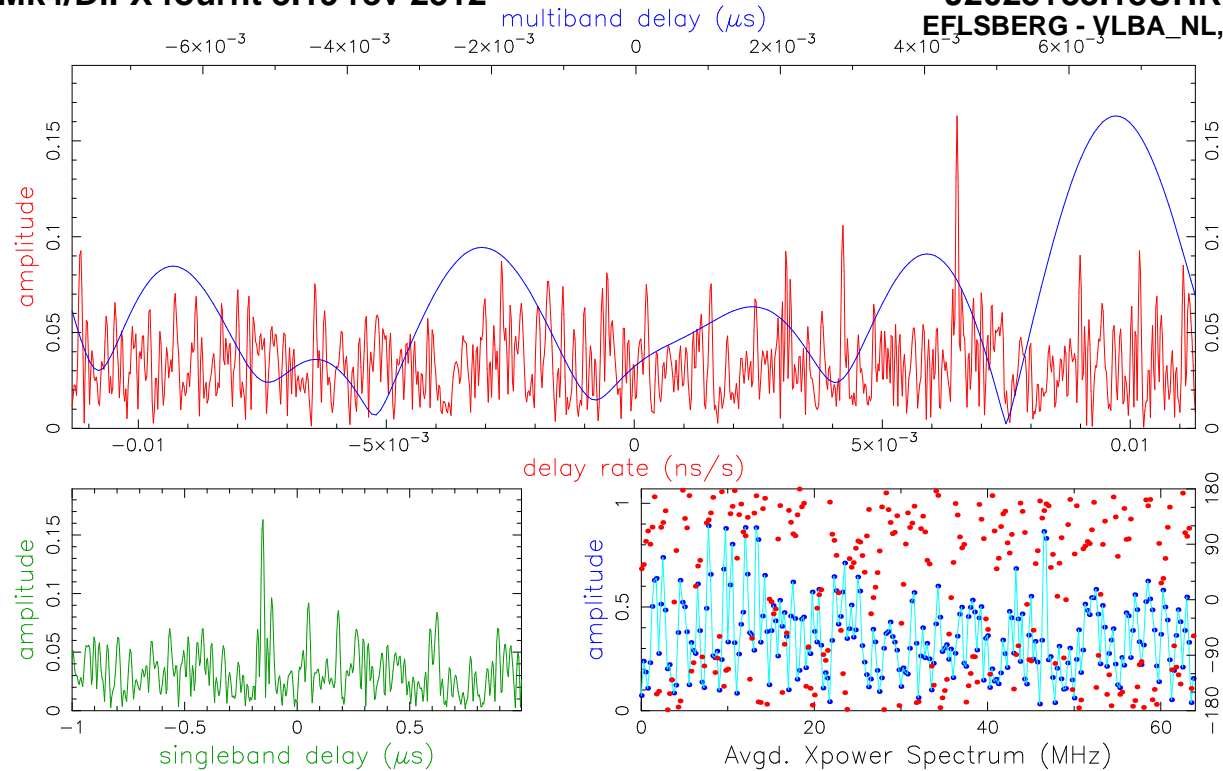


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-12.9	3.7	-73.0	39.4	-13.1	-33.9	-7.0	-27.4	Phase	-15.5
	0.3	0.3	0.2	0.1	0.2	0.2	0.4	0.3	Ampl.	0.2
	235.5	175.3	35.1	371.1	153.6	368.5	174.6	170.5	Sbd box	174.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.79049576722E+02		Apriori delay (usec)		-4.78731833854E+02		Resid mbdelay (usec)		-5.24287E-03	+/- 1.9E-04
Sband delay (usec)	-4.79054372354E+02		Apriori clock (usec)		-1.9241022E+01		Resid sbdelay (usec)		-3.22538E-01	+/- 1.5E-03
Phase delay (usec)	-4.78731834354E+02		Apriori clockrate (us/s)		-5.339998E-07		Resid phdelay (usec)		-5.00127E-07	+/- 6.4E-07
Delay rate (us/s)	-1.34903493776E+00		Apriori rate (us/s)		-1.34902501834E+00		Resid rate (us/s)		-9.91943E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		9.08561870106E-06		Resid phase (deg)		-15.5	+/- 19.8

	RMS	Theor.	Amplitude	0.224 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	48.1	46.3	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	73.9	80.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.8	27.9	Inc. seg. avg.	0.227	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	45.3	48.8	Inc. frq. avg.	0.211	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

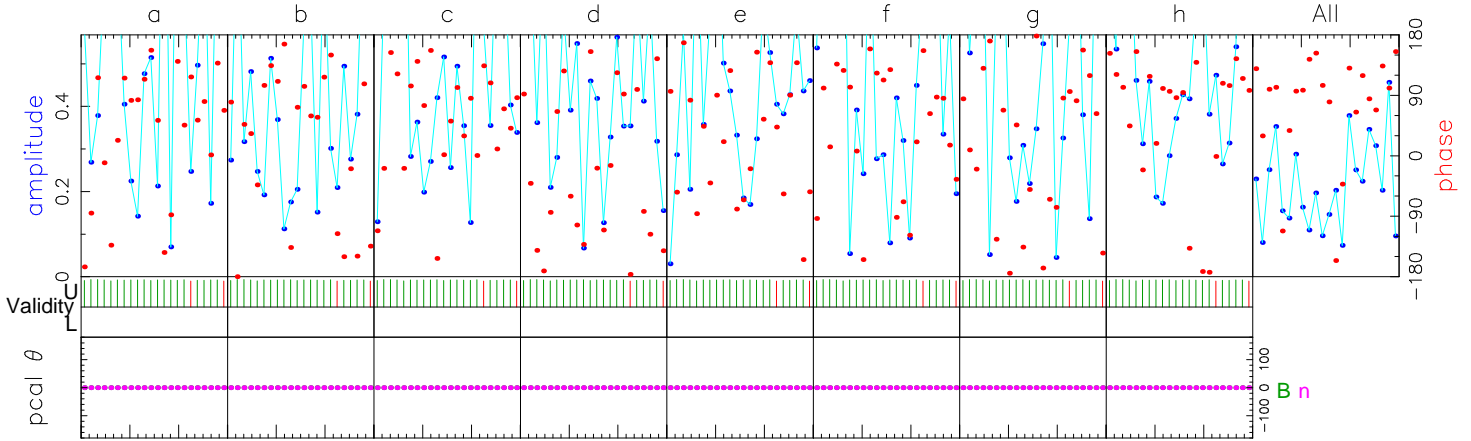
B: az 264.9 el 50.1 pa 49.5 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 9301.953 1205.791 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bn.W.34.18UHRL



Fringe quality 0  
SNR 6.0  
Int time 175.993  
Amp 0.189  
Phase 106.0  
PFD 2.6e-01  
Delays (us)  
SBD -0.153498  
MBD 0.006630  
Fringe rate (Hz) 0.560798  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143640  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

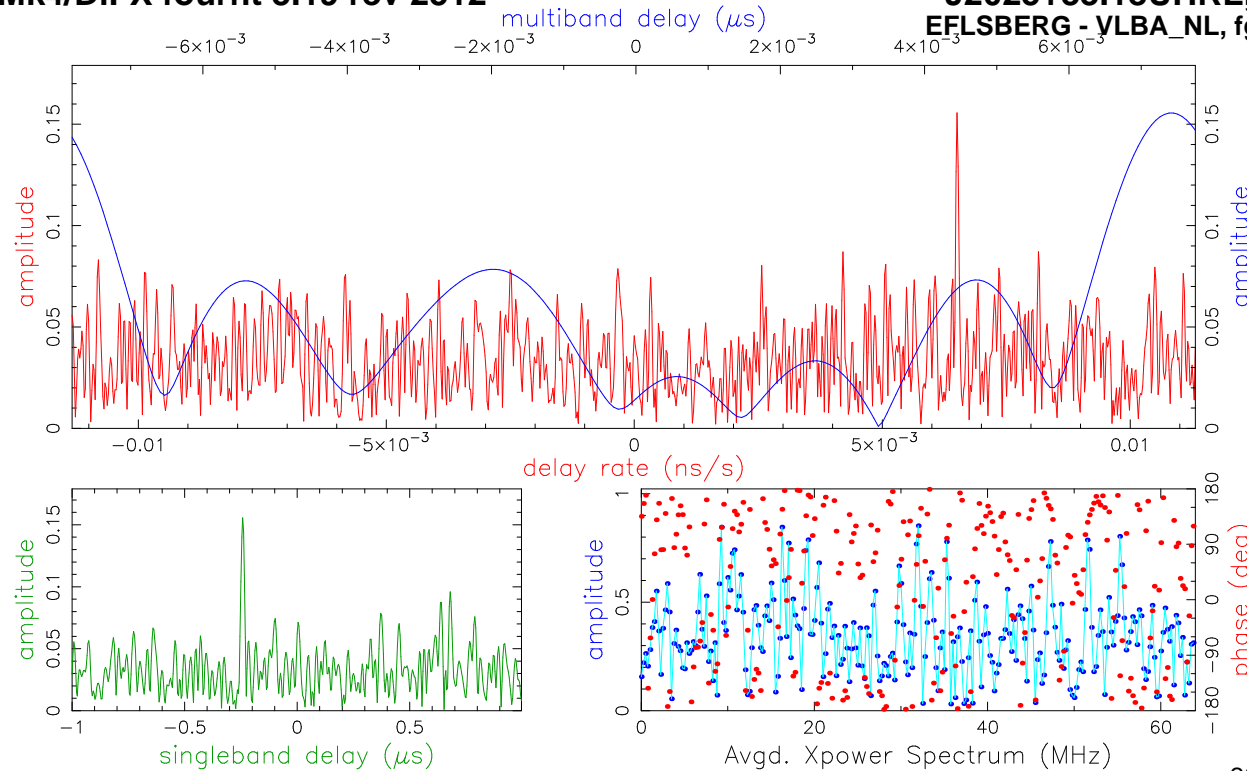


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	113.8	124.1	60.8	-173.5	70.9	98.7	103.2	115.6	Phase	106.0
B	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.4	Ampl.	0.2
n	305.0	68.7	86.2	455.2	20.9	436.3	452.8	218.9	Sbd box	217.7
B	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.78881454257E+02		Apriori delay (usec)		-4.78731833854E+02		Resid mbdelay (usec)		6.62960E-03	+/- 1.8E-04
Sband delay (usec)	-4.78885332104E+02		Apriori clock (usec)		-1.9241022E+01		Resid sbdelay (usec)		-1.53498E-01	+/- 1.4E-03
Phase delay (usec)	-4.78731830435E+02		Apriori clockrate (us/s)		-5.339998E-07		Resid phdelay (usec)		3.41907E-06	+/- 6.2E-07
Delay rate (us/s)	-1.34901850802E+00		Apriori rate (us/s)		-1.34902501834E+00		Resid rate (us/s)		6.51031E-06	+/- 5.9E-09
Total phase (deg)	45.5		Apriori accel (us/s/s)		9.08561870106E-06		Resid phase (deg)		106.0	+/- 19.2

ph/seg (deg) 58.3 45.0 Amplitude 0.189 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 69.9 78.5 Search (1024X32) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 41.4 27.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.6 47.3 Inc. seg. avg. 0.190 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 264.9 el 50.1 pa 49.5 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 9301.953 1205.791 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bn.W.43.18UHRL

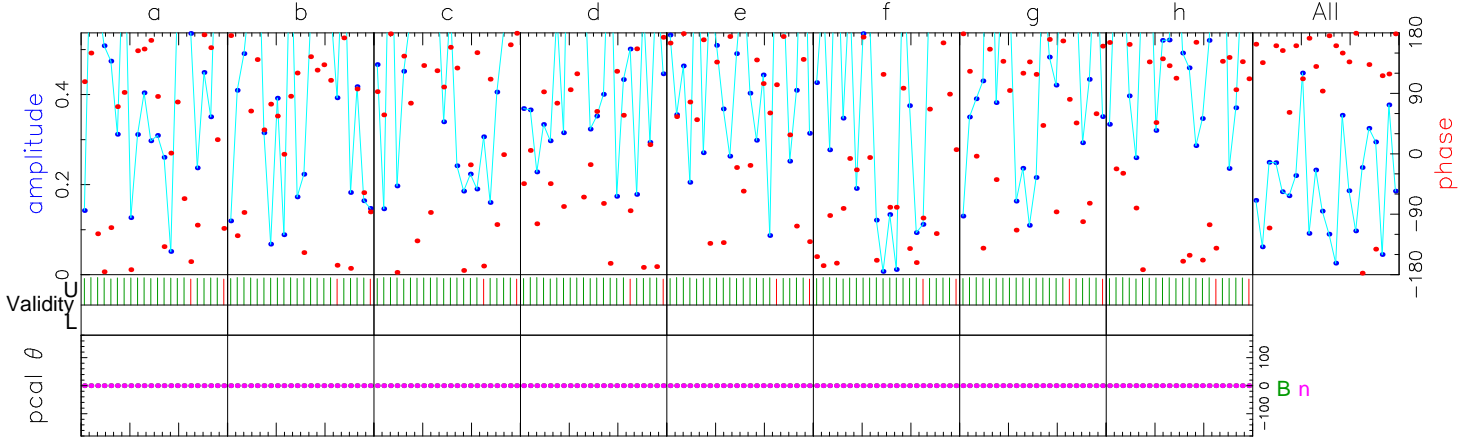
Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, Bn  
EFLSBERG - VLBA\_NL, fgroup W, pol LR



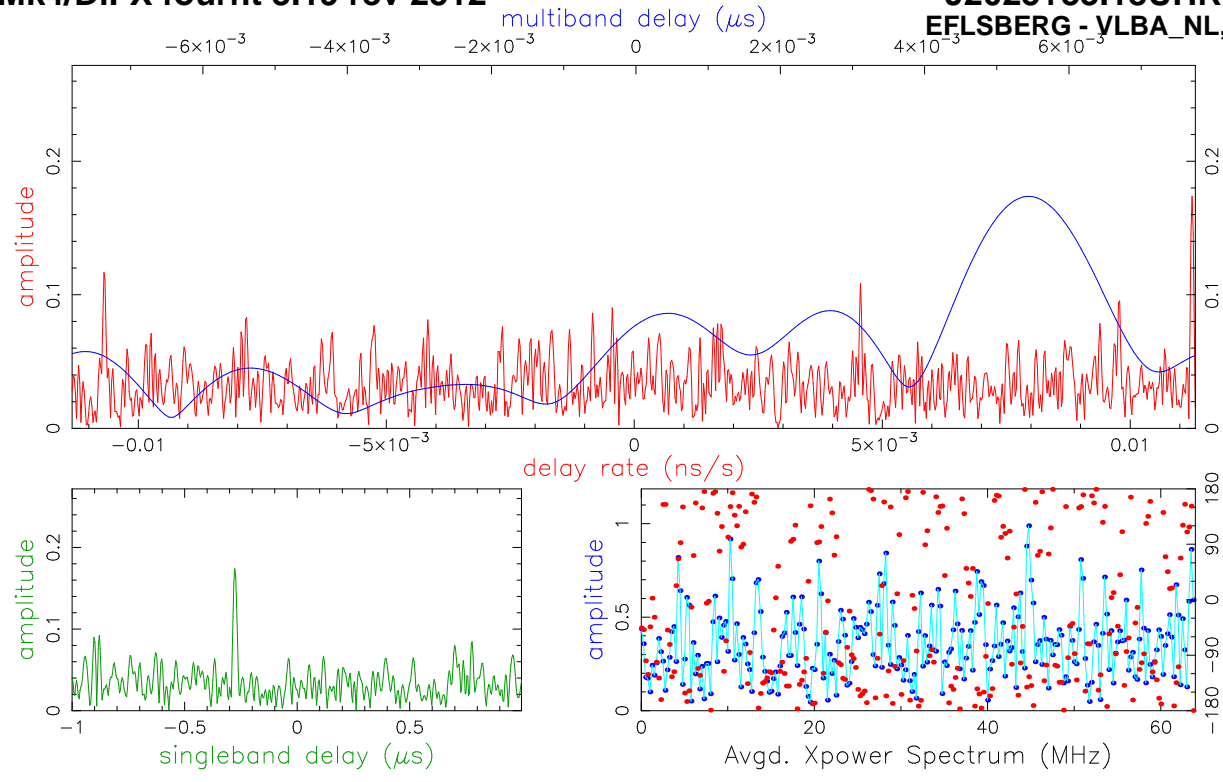
Fringe quality 0  
SNR 5.6  
Int time 175.993  
Amp 0.179  
Phase 149.4  
PFD 8.6e-01  
Delays (us)  
SBD -0.241830  
MBD 0.007429  
Fringe rate (Hz) 0.560844  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143644  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



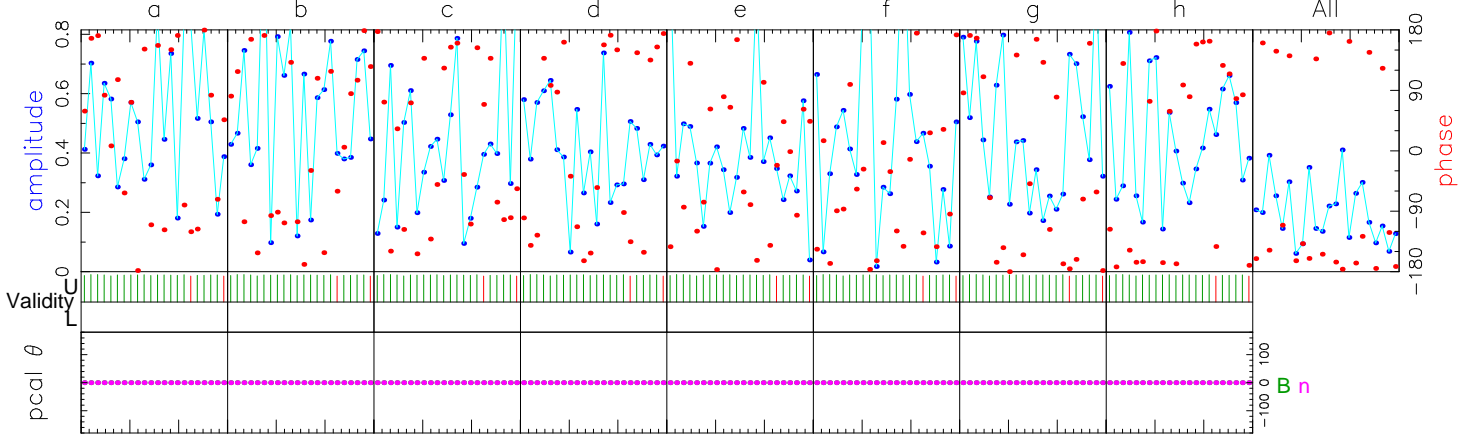
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.78974405288E+02					-4.78731833854E+02			7.42857E-03	+/- 1.9E-04
Sband delay (usec)	-4.78973664354E+02					-1.9241022E+01			-2.41830E-01	+/- 1.5E-03
Phase delay (usec)	-4.78731829037E+02					-5.339998E-07			4.81682E-06	+/- 6.5E-07
Delay rate (us/s)	-1.34901850749E+00					-1.34902501834E+00			6.51084E-06	+/- 6.3E-09
Total phase (deg)			88.8			9.08561870106E-06			149.4	+/- 20.3
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

ph/seg (deg) 39.8 47.6 Search (1024X32) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 76.3 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 29.5 28.7 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 50.9 50.1 Inc. frq. avg. 0.169 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 264.9 el 50.1 pa 49.5 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 9301.953 1205.791 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bn.W.57.18UHRL



Fringe quality 0  
SNR 6.3  
Int time 175.992  
Amp 0.272  
Phase -174.5  
PFD 3.7e-02  
Delays (us)  
SBD -0.276837  
MBD 0.005445  
Fringe rate (Hz) 0.971017  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143647  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

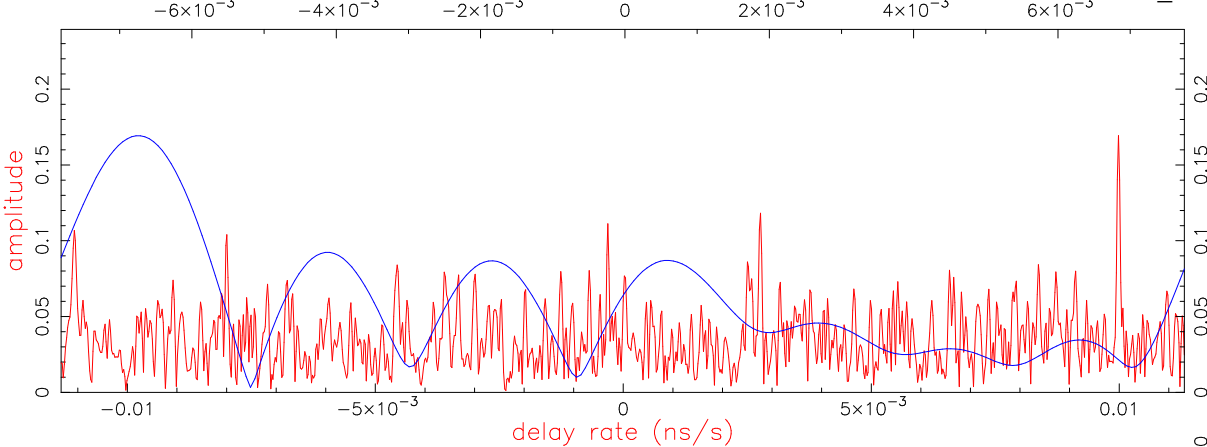
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.79007638395E+02									
Sband delay (usec)	-4.79008670604E+02									
Phase delay (usec)	-4.78731839481E+02									
Delay rate (us/s)	-1.34901374579E+00									
Total phase (deg)			-235.1							
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)										
pcal θ										
pcal mode										
PC period (AP's)										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.272 +/- 0.043										
0.172										
0.000										
0.248										
0.277										
5.44546E-03										
-2.76837E-01										
-5.62735E-06										
1.12725E-05										
-174.5										
+/- 1.7E-04										
+/- 1.4E-03										
+/- 5.9E-07										
+/- 5.6E-09										
+/- 18.2										
ph/seg (deg)	33.4	42.6								
amp/seg (%)	59.5	74.3								
ph/frq (deg)	34.4	25.7								
amp/frq (%)	39.1	44.8								
B: az 264.9 el 50.1 pa 49.5										
n: az 85.8 el 51.6 pa -63.4										
u,v (fr/asec) 9301.953 1205.791										
simultaneous interpolator										

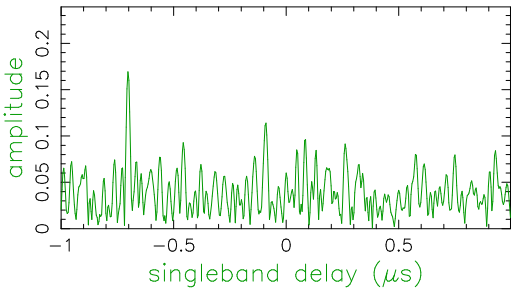


multiband delay ( $\mu$ s)

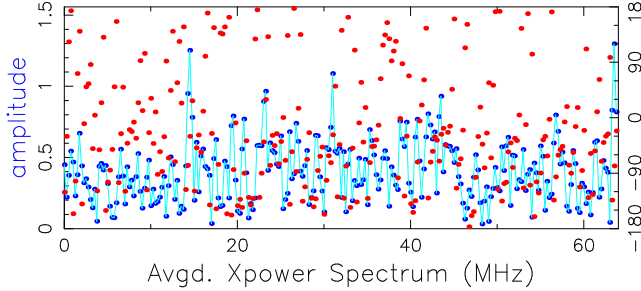


Fringe quality 0

SNR 6.2  
Int time 176.888  
Amp 0.239  
Phase -162.0  
PFD 8.6e-02  
Delays (us)  
SBD -0.702475  
MBD -0.006743  
Fringe rate (Hz)  
0.862276  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

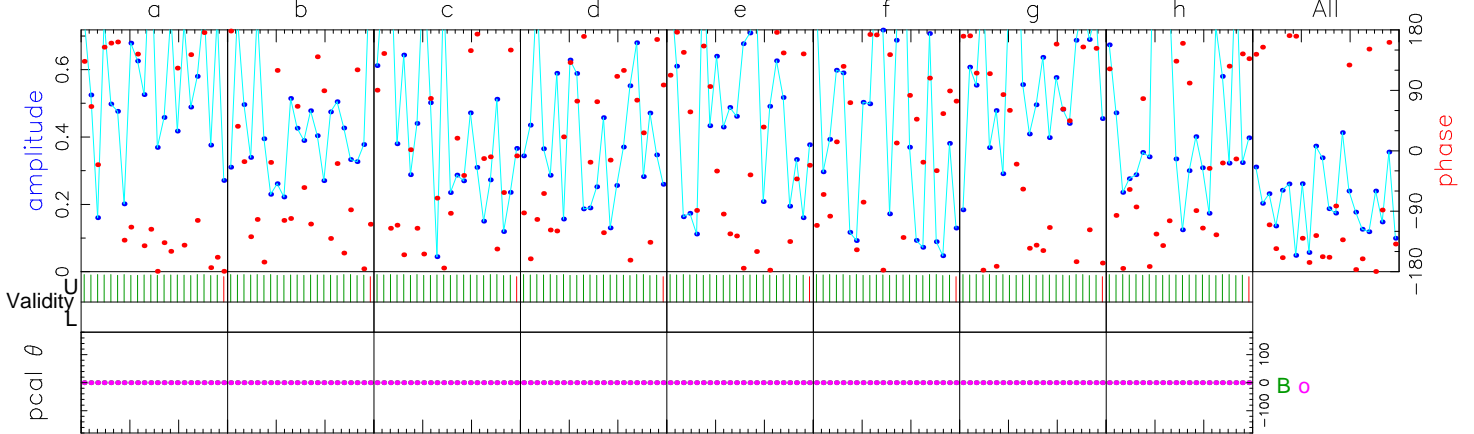


delay rate (ns/s)



Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143635  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

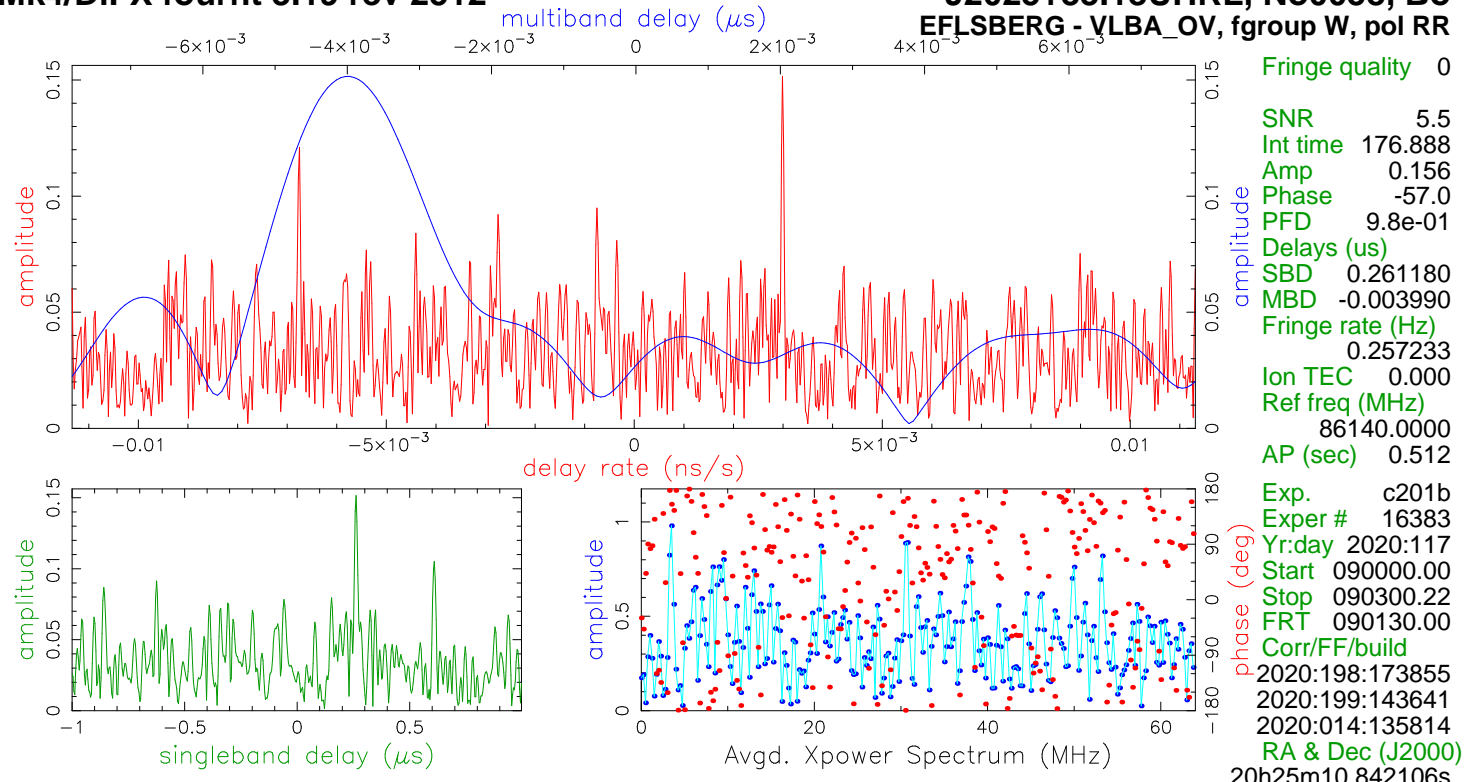


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-170.6	-111.4	-159.7	-170.5	-171.6	-174.3	173.3	-128.4	Phase	-162.0
	0.5	0.2	0.2	0.1	0.2	0.1	0.3	0.3	Ampl.	0.2
	76.9	105.5	231.9	42.9	399.4	159.5	268.7	17.3	Sbd box	77.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.362665902925E+03		Apriori delay (usec)		5.36337577728E+03		Resid mbdelay (usec)		-6.74303E-03	+/- 1.8E-04
Sband delay (usec)	5.36267330228E+03		Apriori clock (usec)		-7.0403366E+00		Resid sbdelay (usec)		-7.02475E-01	+/- 1.4E-03
Phase delay (usec)	5.36337577206E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-5.22480E-06	+/- 6.0E-07
Delay rate (us/s)	-1.62581109633E+00		Apriori rate (us/s)		-1.62582110650E+00		Resid rate (us/s)		1.00102E-05	+/- 5.8E-09
Total phase (deg)	1.8		Apriori accel (us/s/s)		-1.80860317455E-05		Resid phase (deg)		-162.0	+/- 18.6

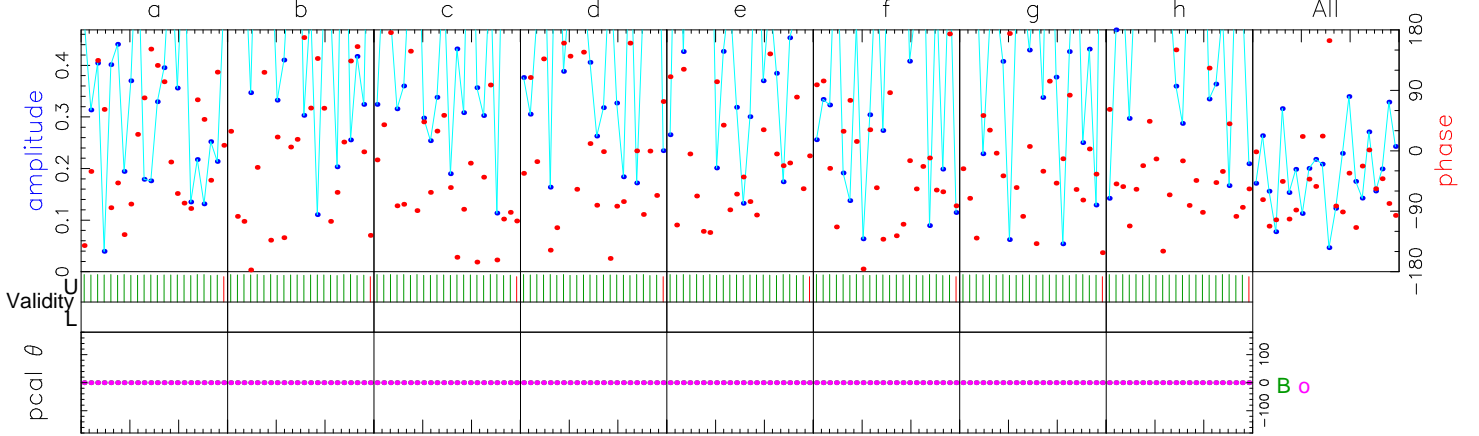
ph/seg (deg) 39.3 43.5 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.0 76.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.0 26.3 Inc. seg. avg. 0.236 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.4 45.8 Inc. frq. avg. 0.234 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 264.9 el 50.1 pa 49.5 o: az 68.8 el 30.5 pa -63.2 u,v (fr/asec) 11190.391 217.384 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, Bo  
EFLSBERG - VLBA\_OV, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

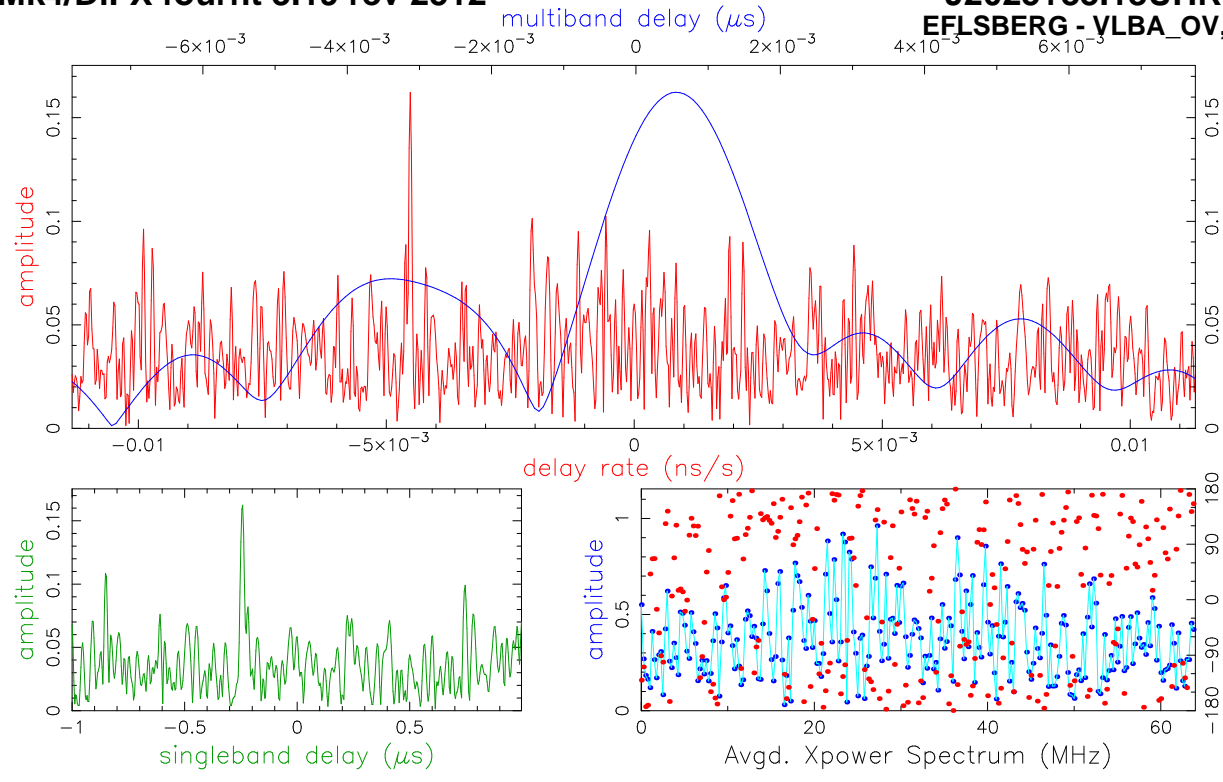


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-32.7	-37.8	-73.6	-90.6	-62.6	-59.8	-48.7	-52.9	Phase	-57.0
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.3	Ampl.	0.1
	110.5	409.9	155.7	403.8	82.7	190.9	135.4	323.8	Sbd box	323.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.36363741183E+03		Apriori delay (usec)		5.36337577728E+03		Resid mbdelay (usec)		-3.99045E-03	+/- 2.0E-04
Sband delay (usec)	5.36363695753E+03		Apriori clock (usec)		-7.0403366E+00		Resid sbdelay (usec)		2.61180E-01	+/- 1.6E-03
Phase delay (usec)	5.36337577544E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-1.83674E-06	+/- 6.7E-07
Delay rate (us/s)	-1.62581812028E+00		Apriori rate (us/s)		-1.62582110650E+00		Resid rate (us/s)		2.98622E-06	+/- 6.4E-09
Total phase (deg)	106.8		Apriori accel (us/s/s)		-1.80860317455E-05		Resid phase (deg)		-57.0	+/- 20.7

	RMS	Theor.	Amplitude	0.156 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	50.4	48.7	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	57.7	84.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	20.4	29.3	Inc. seg. avg.	0.149	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.5	51.2	Inc. frq. avg.	0.142	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

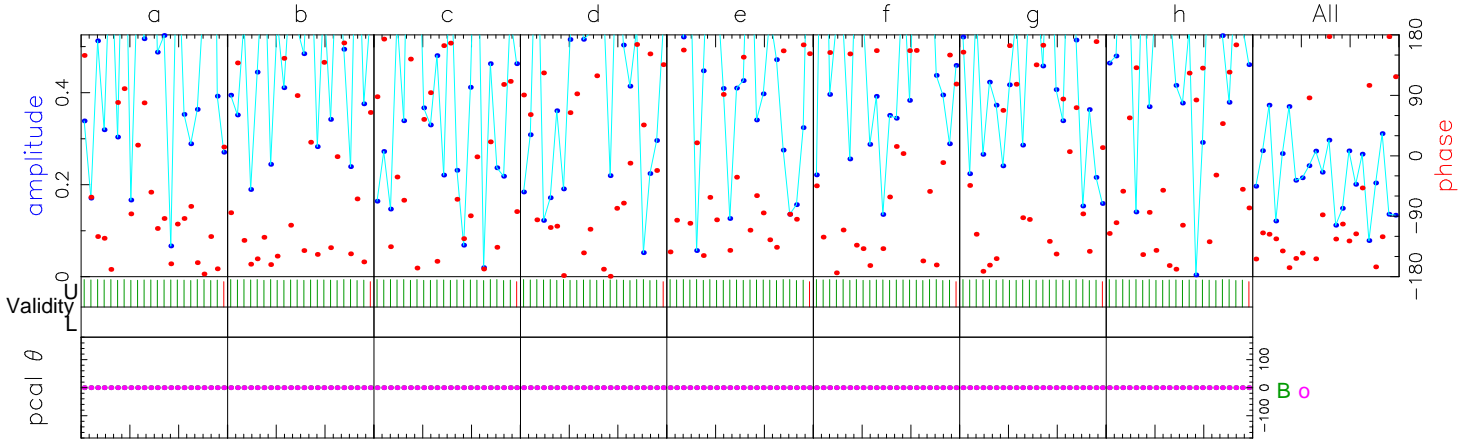
B: az 264.9 el 50.1 pa 49.5 o: az 68.8 el 30.5 pa -63.2 u,v (fr/asec) 11190.391 217.384 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bo..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bo.W.47.18UHRL



Fringe quality 0  
SNR 6.0  
Int time 176.888  
Amp 0.175  
Phase -139.7  
PFD 2.7e-01  
Delays (us)  
SBD -0.243637  
MBD 0.000570  
Fringe rate (Hz)  
-0.388877  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143643  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

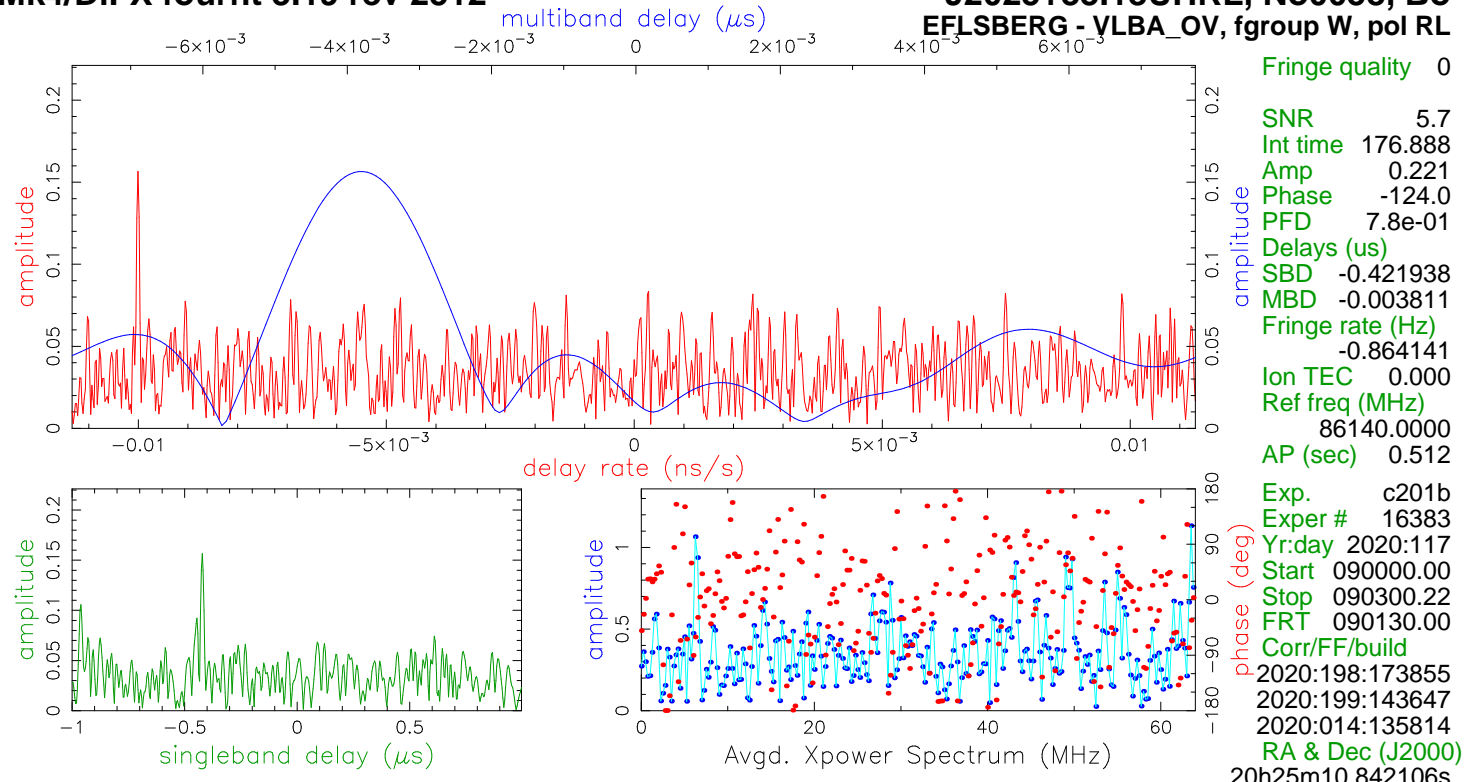


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.9	-143.8	174.6	-163.5	-125.5	-147.0	-170.4	-112.0	Phase	-139.7
	0.2	0.2	0.1	0.1	0.3	0.3	0.2	0.2	Ampl.	0.2
	428.9	200.5	292.6	156.9	141.9	315.2	468.1	313.9	Sbd box	194.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

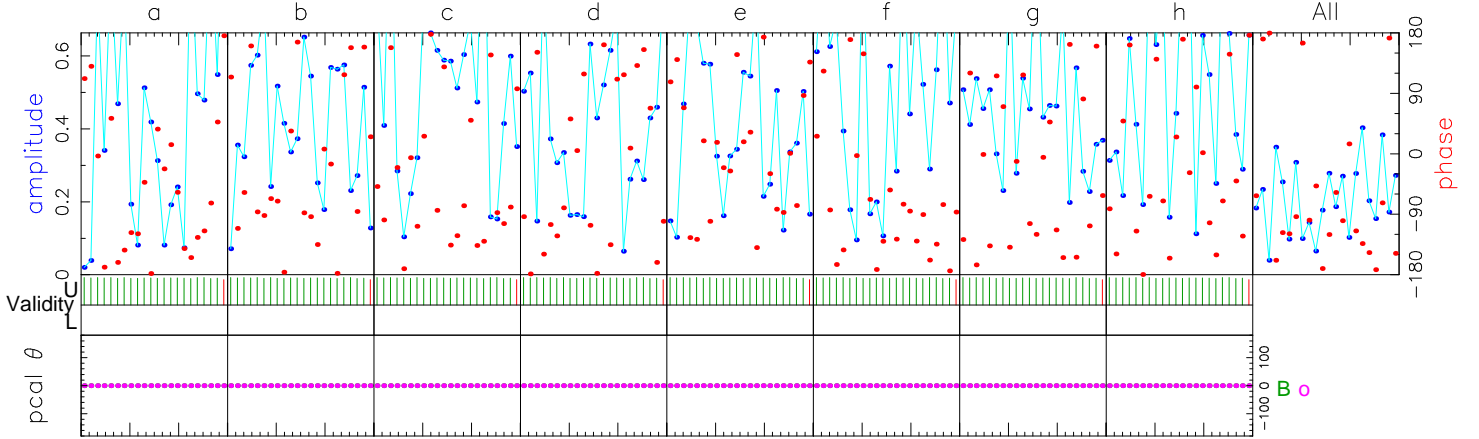
Group delay (usec)(sbd) 5.36312634687E+03 Apriori delay (usec) 5.36337577728E+03 Resid mbdelay (usec) 5.69590E-04 +/- 1.8E-04  
Sband delay (usec) 5.36313214003E+03 Apriori clock (usec) -7.0403366E+00 Resid sbdelay (usec) -2.43637E-01 +/- 1.4E-03  
Phase delay (usec) 5.36337577278E+03 Apriori clockrate (us/s) -4.0100001E-07 Resid phdelay (usec) -4.50346E-06 +/- 6.2E-07  
Delay rate (us/s) -1.62582562097E+00 Apriori rate (us/s) -1.62582110650E+00 Resid rate (us/s) -4.51447E-06 +/- 6.0E-09  
Total phase (deg) 24.1 Apriori accel (us/s/s) -1.80860317455E-05 Resid phase (deg) -139.7 +/- 19.2

RMS Theor. Amplitude 0.175 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 53.1 45.0 Search (1024X32) 0.161 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 60.3 78.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
ph/frq (deg) 28.8 27.2 Inc. seg. avg. 0.183 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
amp/frq (%) 39.3 47.4 Inc. frq. avg. 0.167 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 o: az 68.8 el 30.5 pa -63.2 u,v (fr/asec) 11190.391 217.384 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bo..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bo.W.54.18UHRL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.7	-117.0	-117.8	-155.3	-57.2	-119.4	-145.6	-109.3	Phase	-124.0
	0.2	0.2	0.3	0.3	0.1	0.4	0.3	0.2	Ampl.	0.2
	371.2	31.7	74.3	140.1	73.9	150.2	400.3	509.7	Sbd box	149.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.36295009157E+03		Apriori delay (usec)		5.36337577228E+03		Resid mbdelay (usec)		-3.81071E-03	+/- 1.9E-04
Sband delay (usec)	5.36295383953E+03		Apriori clock (usec)		-7.0403366E-07		Resid sbdelay (usec)		-4.21938E-01	+/- 1.5E-03
Phase delay (usec)	5.36337577328E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-3.99739E-06	+/- 6.5E-07
Delay rate (us/s)	-1.62583113832E+00		Apriori rate (us/s)		-1.62582110650E+00		Resid rate (us/s)		-1.00318E-05	+/- 6.2E-09
Total phase (deg)	39.8		Apriori accel (us/s/s)		-1.80860317455E-05		Resid phase (deg)		-124.0	+/- 20.1

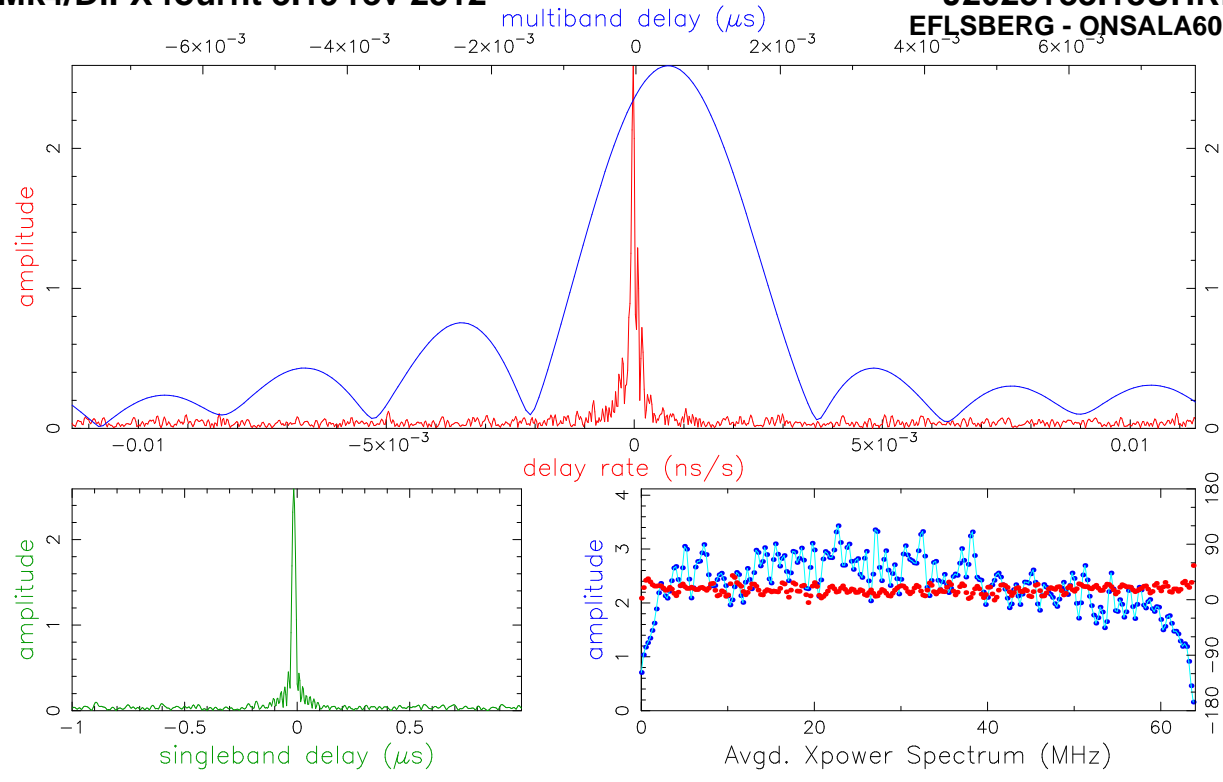
	RMS	Theor.	Amplitude	0.221 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.1	47.2	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.9	82.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	32.2	28.5	Inc. seg. avg.	0.223	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	34.0	49.7	Inc. frq. avg.	0.212	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 264.9 el 50.1 pa 49.5 o: az 68.8 el 30.5 pa -63.2 u,v (fr/asec) 11190.391 217.384 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Bo..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Bo.W.74.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BX  
EFLSBERG - ONSALA60, fgroup W, pol LL

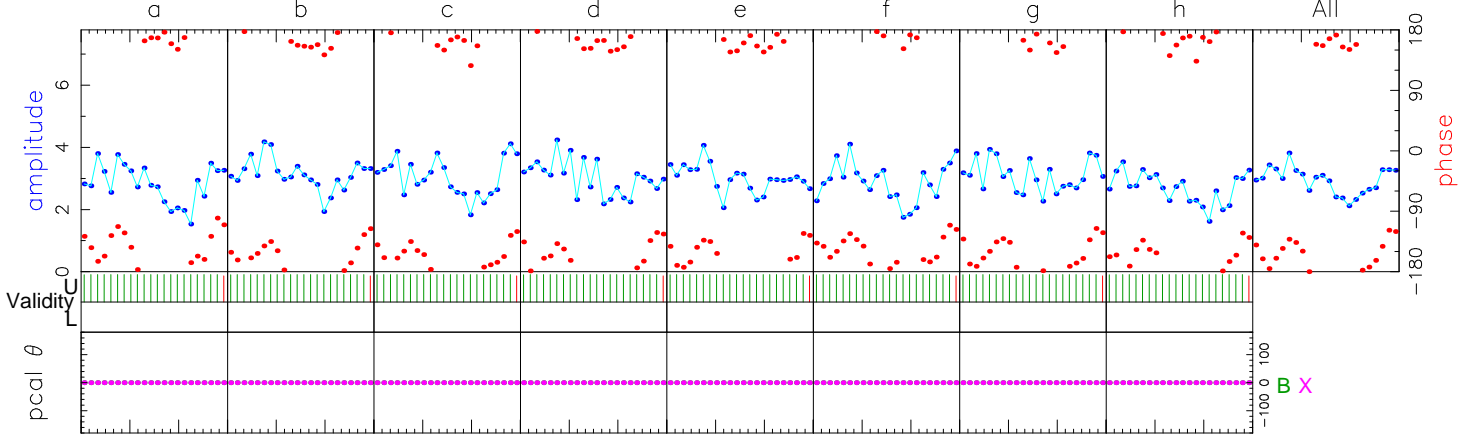


Fringe quality 6

SNR 95.1  
Int time 179.738  
Amp 2.593  
Phase -164.5  
PFD 0.0e+00  
Delays (us)  
SBD -0.015218  
MBD 0.000457  
Fringe rate (Hz)  
-0.001629  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

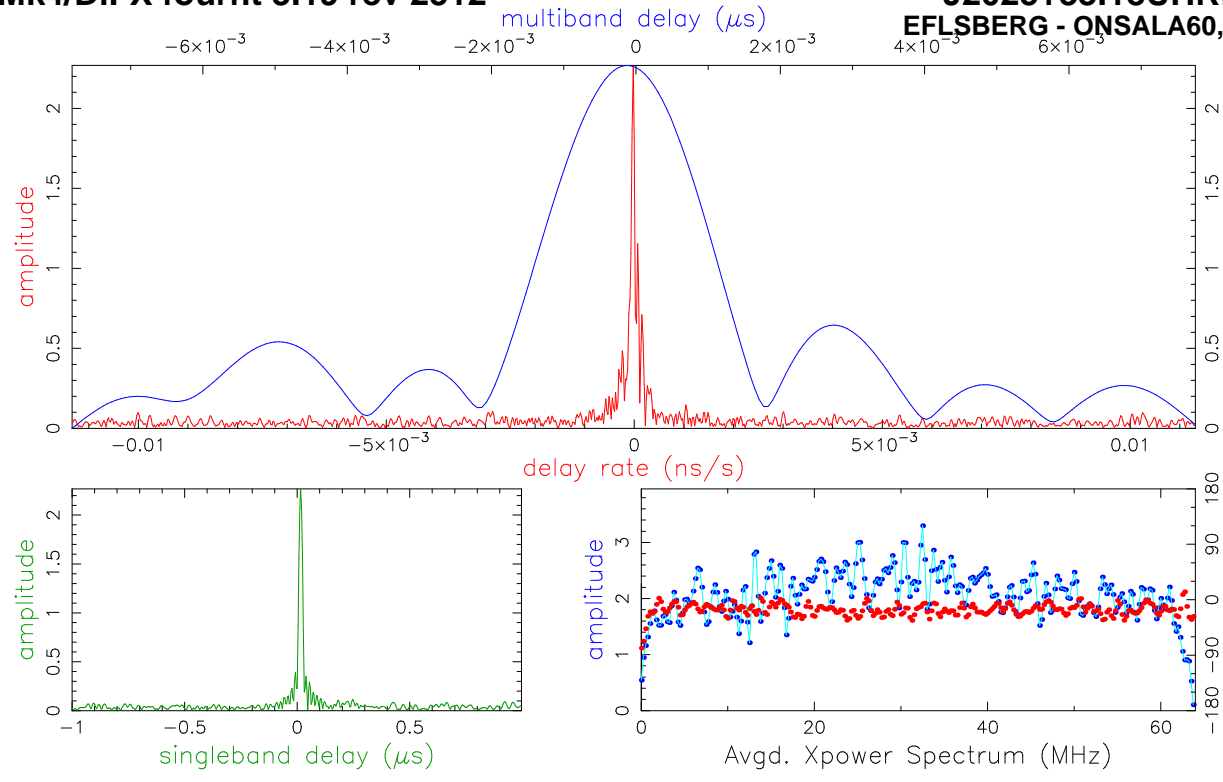
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143639  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	8.99268564305E+02		Apriori delay (usec)		8.99283731854E+02		Resid mbdelay (usec)		4.57450E-04	+/- 1.1E-05
Sband delay (usec)	8.99268514104E+02		Apriori clock (usec)		-2.7716276E+01		Resid sbdelay (usec)		-1.52178E-02	+/- 9.1E-05
Phase delay (usec)	8.99283726551E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-5.30313E-06	+/- 3.9E-08
Delay rate (us/s)	-5.97925780776E-02		Apriori rate (us/s)		-5.97925591648E-02		Resid rate (us/s)		-1.89128E-08	+/- 3.7E-10
Total phase (deg)	73.8		Apriori accel (us/s/s)		-9.36109601306E-06		Resid phase (deg)		-164.5	+/- 1.2

ph/seg (deg) 28.3 2.8 Search (1024X32) 2.577 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 20.6 4.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 8.3 1.7 Inc. seg. avg. 2.928 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 5.0 3.0 Inc. frq. avg. 2.609 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 264.9 el 50.1 pa 49.5 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) 404.284 -1014.320 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BX.W.36.18UHRL

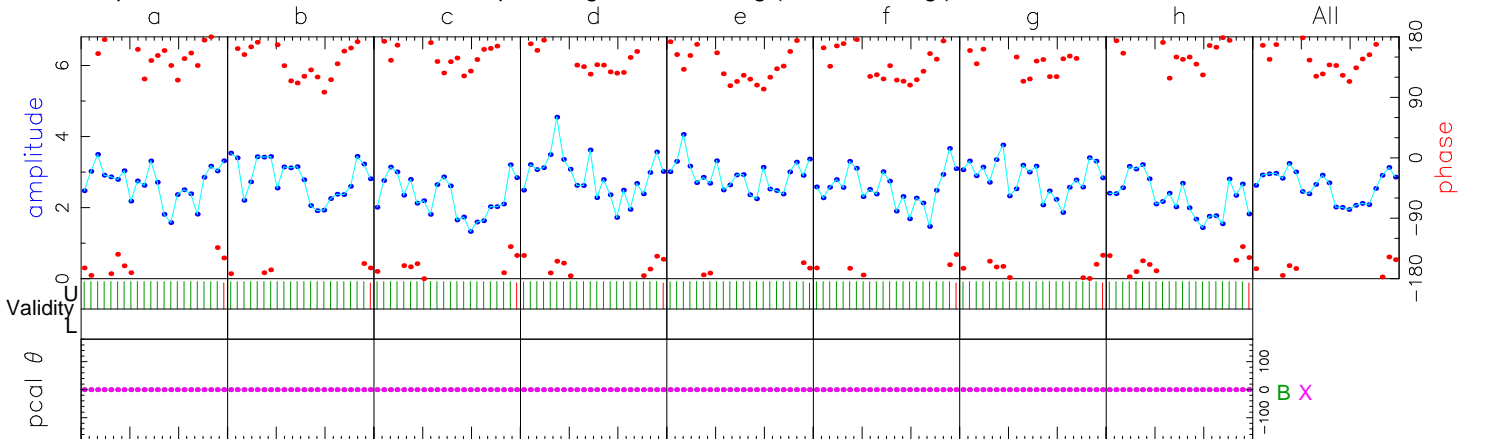


Fringe quality 6

SNR 83.2  
Int time 179.738  
Amp 2.269  
Phase 163.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.015512  
MBD -0.000122  
Fringe rate (Hz)  
-0.001695  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143642  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

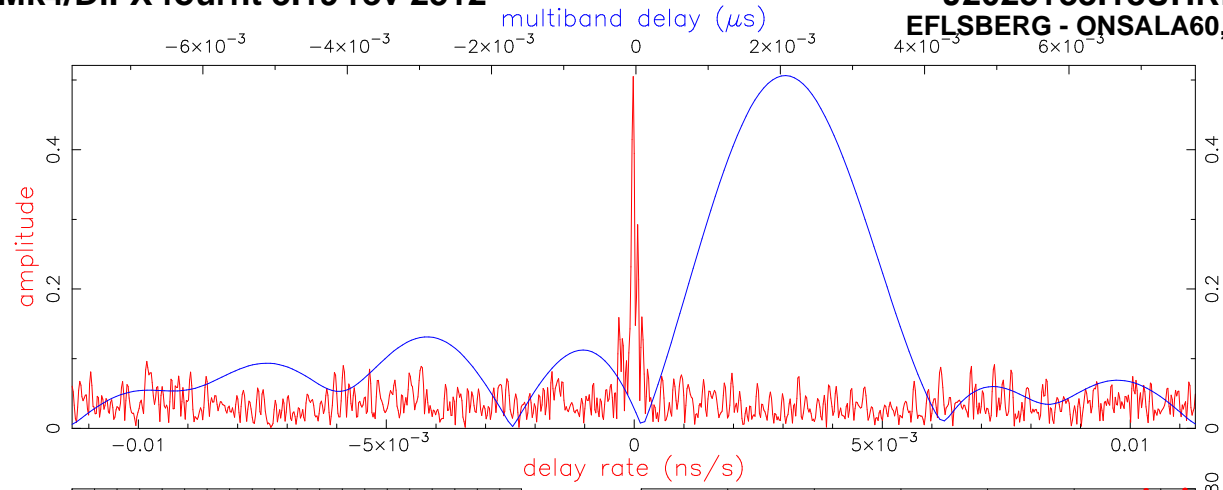


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	171.5	156.9	170.4	170.1	147.5	156.2	164.3	177.7	Phase	163.9
	2.3	2.4	2.0	2.5	2.5	2.1	2.5	2.0	Ampl.	2.3
	260.1	260.9	261.3	260.8	261.0	261.3	261.4	260.5	Sbd box	261.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	8.99299234523E+02	Apriori delay (usec)	8.99283731854E+02	Resid mbdelay (usec)	-1.22331E-04	+/-	1.3E-05
Sband delay (usec)	8.99299244354E+02	Apriori clock (usec)	-2.7716276E+01	Resid sbdelay (usec)	1.55125E-02	+/-	1.0E-04
Phase delay (usec)	8.99283737141E+02	Apriori clockrate (us/s)	-7.2800002E-07	Resid phdelay (usec)	5.28629E-06	+/-	4.4E-08
Delay rate (us/s)	-5.97925788457E-02	Apriori rate (us/s)	-5.97925591648E-02	Resid rate (us/s)	-1.96809E-08	+/-	4.3E-10
Total phase (deg)	42.2	Apriori accel (us/s/s)	-9.36109601306E-06	Resid phase (deg)	163.9	+/-	1.4

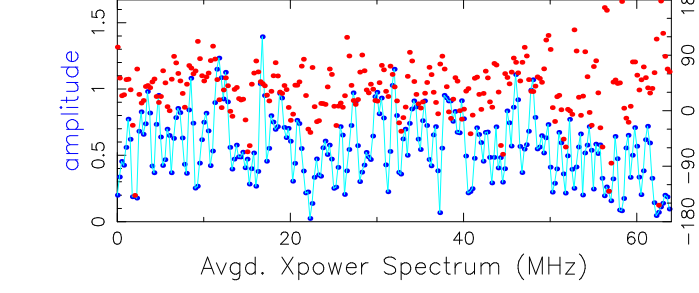
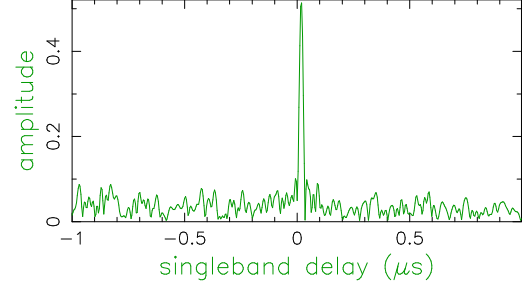
ph/seg (deg) 29.7 3.2 Search (1024X32) 2.249 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 23.1 5.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 10.9 1.9 Inc. seg. avg. 2.602 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 8.6 3.4 Inc. frq. avg. 2.298 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 264.9 el 50.1 pa 49.5 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) 404.284 -1014.320 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BX.W.50.18UHRL



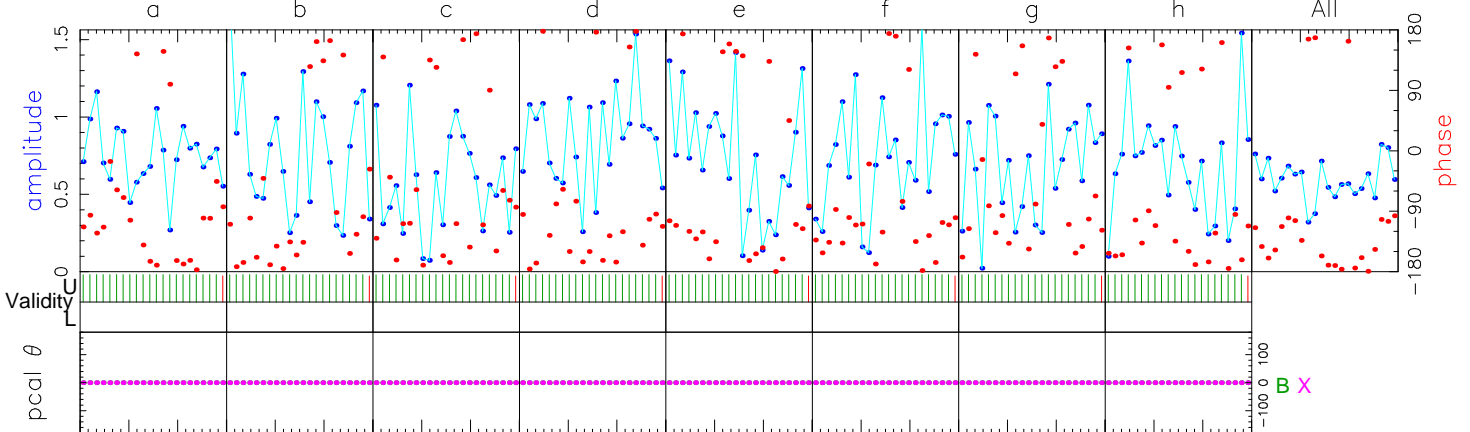
Fringe quality 9

SNR 19.1  
Int time 179.738  
Amp 0.521  
Phase -142.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.017963  
MBD 0.002155  
Fringe rate (Hz)  
-0.001660  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
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"

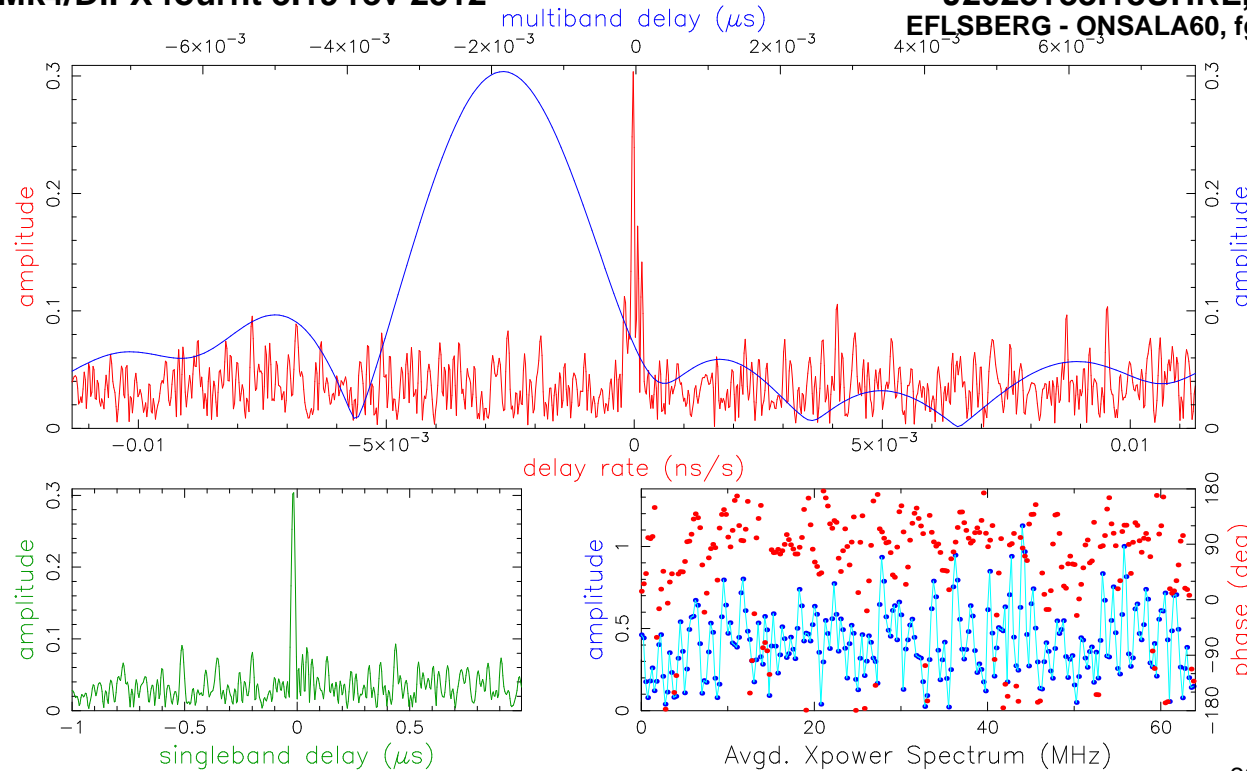


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-126.4	-149.2	-134.0	-144.5	-149.7	-136.4	-136.3	-160.0	Phase	-142.6
	0.5	0.6	0.3	0.7	0.5	0.6	0.4	0.5	Ampl.	0.5
	261.3	261.5	262.4	261.3	261.5	261.1	261.9	262.2	Sbd box	261.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.99301511430E+02		Apriori delay (usec)		8.99283731854E+02		Resid mbdelay (usec)		2.15458E-03	+/- 5.7E-05
Sband delay (usec)	8.99301694354E+02		Apriori clock (usec)		-2.7716276E+01		Resid sbdelay (usec)		1.79625E-02	+/- 4.5E-04
Phase delay (usec)	8.99283727255E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-4.59889E-06	+/- 1.9E-07
Delay rate (us/s)	-5.97925784390E-02		Apriori rate (us/s)		-5.97925591648E-02		Resid rate (us/s)		-1.92742E-08	+/- 1.9E-09
Total phase (deg)	95.7		Apriori accel (us/s/s)		-9.36109601306E-06		Resid phase (deg)		-142.6	+/- 6.0

ph/seg (deg) 33.0 14.1 Search (1024X32) 0.502 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 27.9 24.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 11.6 8.5 Inc. seg. avg. 0.579 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 18.5 14.8 Inc. frq. avg. 0.507 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 264.9 el 50.1 pa 49.5 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) 404.284 -1014.320 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BX.W.69.18UHRL

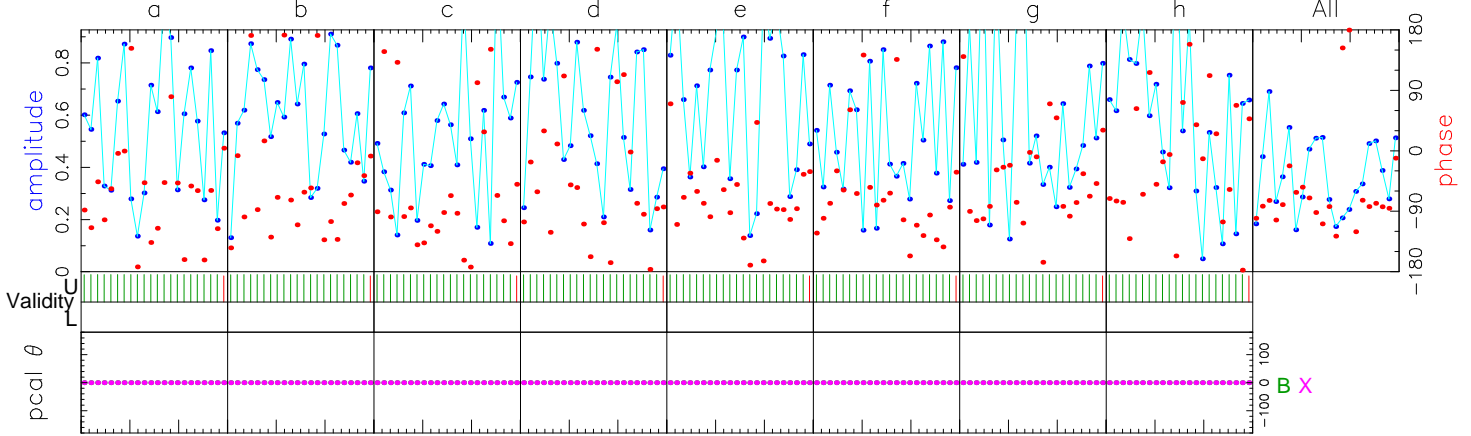


Fringe quality 9

SNR 11.3  
Int time 179.738  
Amp 0.309  
Phase -80.4  
PFD 2.2e-21  
Delays (us)  
SBD -0.017425  
MBD -0.001890  
Fringe rate (Hz)  
-0.001512  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
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., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



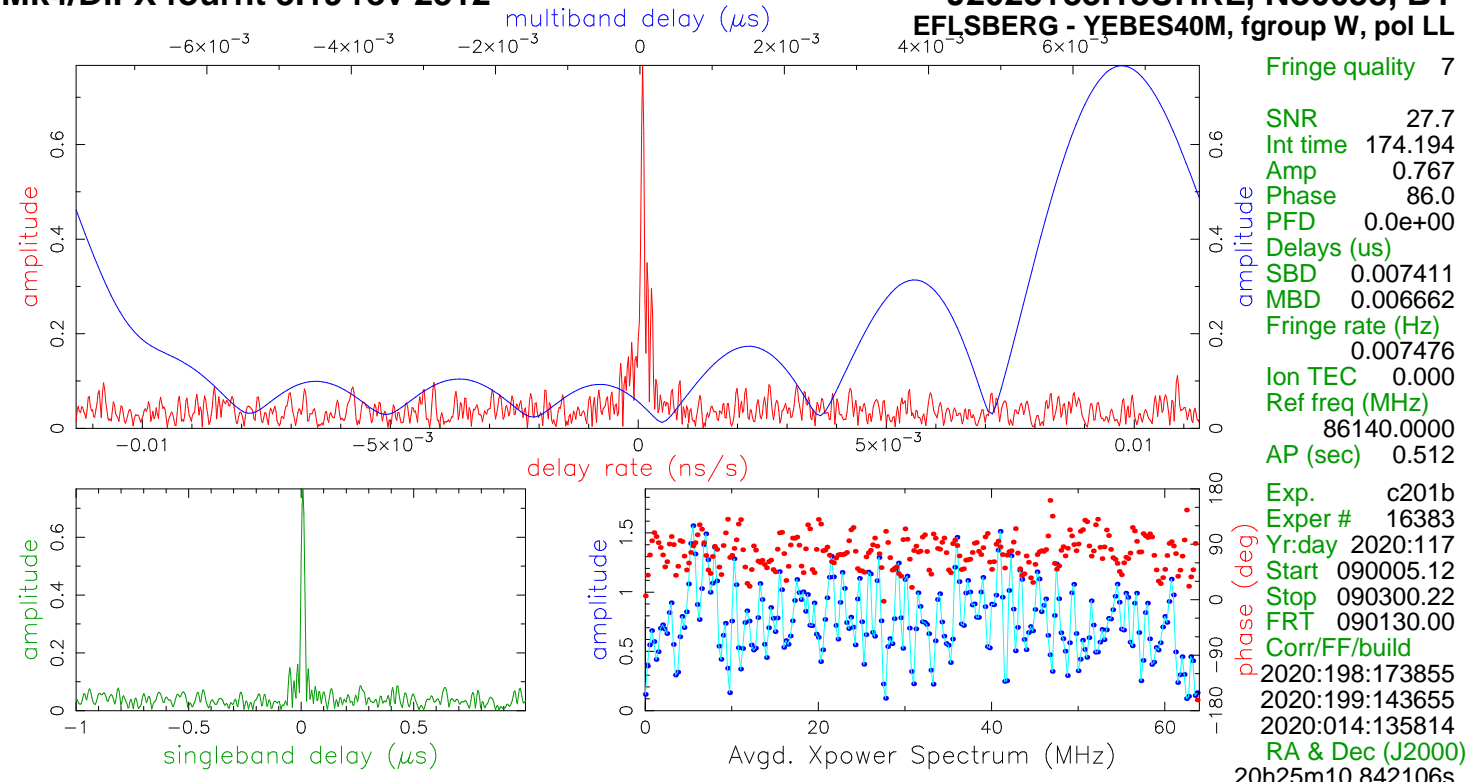
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-63.7	-86.3	-105.3	-78.9	-76.2	-88.3	-65.7	-78.6	Phase	-80.4
	0.3	0.4	0.3	0.2	0.5	0.3	0.4	0.1	Ampl.	0.3
	251.3	252.0	251.7	275.0	253.3	253.5	253.0	34.0	Sbd box	252.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	8.99266216711E+02		Apriori delay (usec)		8.99283731854E+02		Resid mbdelay (usec)		-1.89014E-03	+/- 9.6E-05
Sband delay (usec)	8.99266306604E+02		Apriori clock (usec)		-2.7716276E+01		Resid sbdelay (usec)		-1.74253E-02	+/- 7.6E-04
Phase delay (usec)	8.99283729260E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-2.59414E-06	+/- 3.3E-07
Delay rate (us/s)	-5.97925767214E-02		Apriori rate (us/s)		-5.97925591648E-02		Resid rate (us/s)		-1.75566E-08	+/- 3.1E-09
Total phase (deg)	157.9		Apriori accel (us/s/s)		-9.36109601306E-06		Resid phase (deg)		-80.4	+/- 10.1

	RMS	Theor.	Amplitude	0.309 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.2	23.7	Search (1024X32)	0.300	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	50.2	41.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	14.3	14.3	Inc. seg. avg.	0.341	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	33.4	25.0	Inc. frq. avg.	0.302	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 264.9 el 50.1 pa 49.5 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) 404.284 -1014.320 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BX.W.84.18UHRL





Fringe quality 7

SNR 27.7

Int time 174.194

Amp 0.767

Phase 86.0

PFD 0.0e+00

Delays (us)

SBD 0.007411

MBD 0.006662

Fringe rate (Hz)

0.007476

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

2020:199:143655

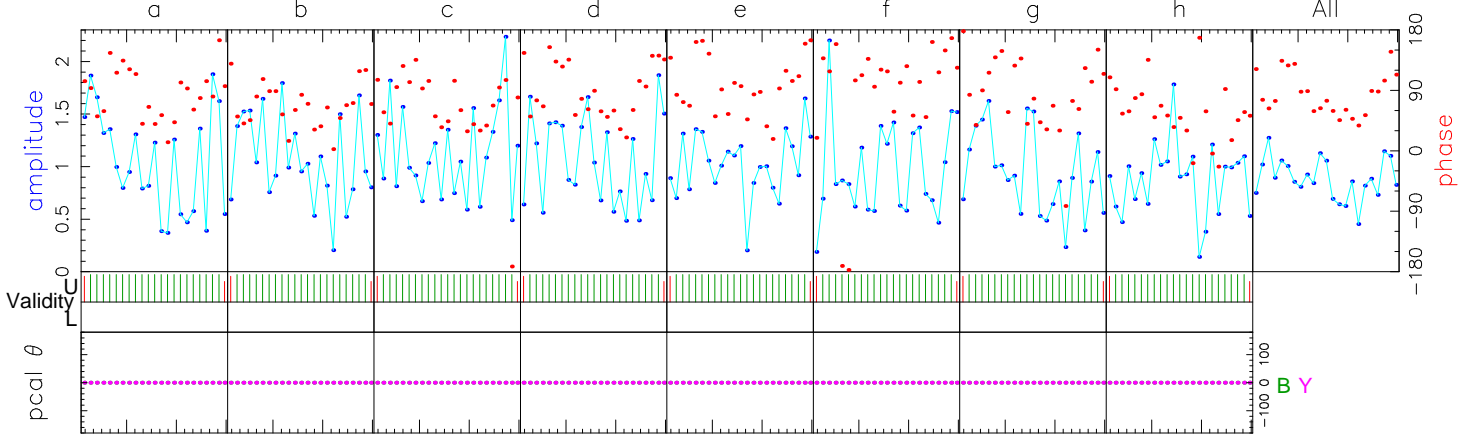
2020:014:135814

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
	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	0.7	0.8	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

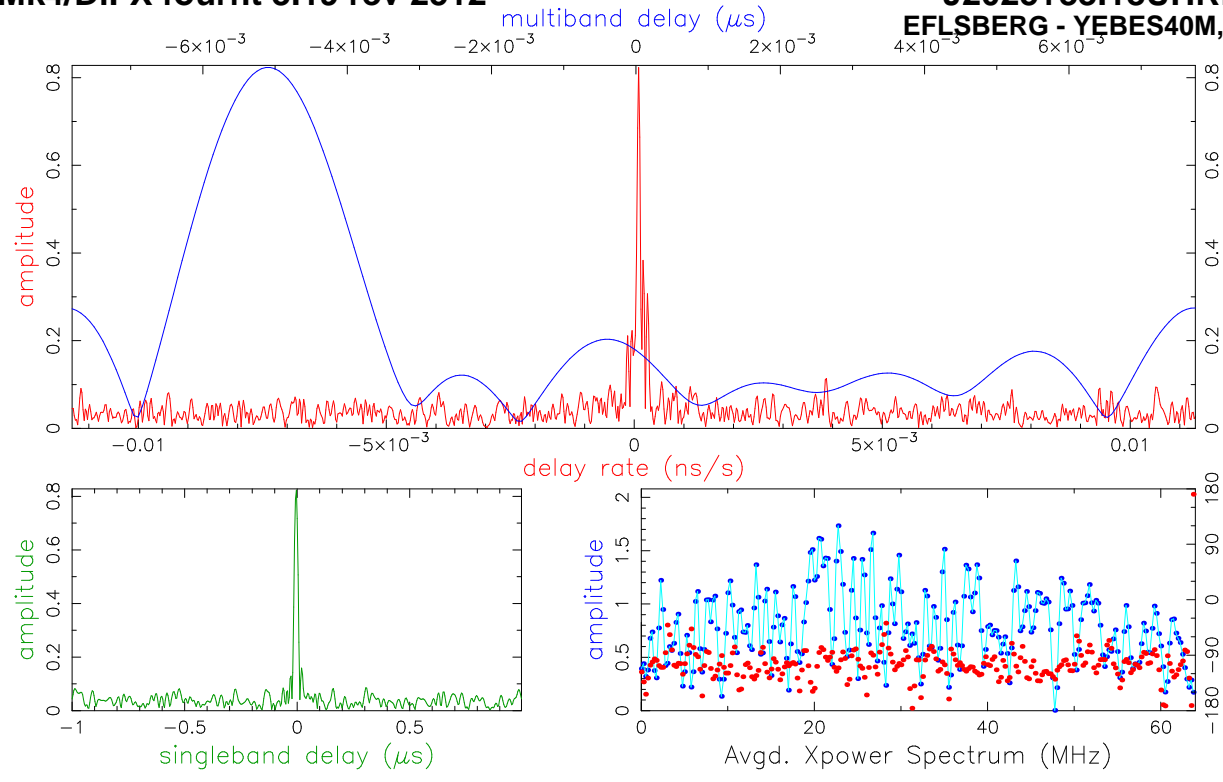
ph/seg (deg)	31.0	RMS	31.0	Theor.	9.9	Amplitude	0.767 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	29.4	Search (1024X32)	0.756	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	sb window (us)	-1.000	1.000	
ph/frq (deg)	23.0	Inc. seg. avg.	0.875	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	11.9	Inc. frq. avg.	0.808	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	dr window (ns/s)	-0.011	0.011	
						nlags:	256	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

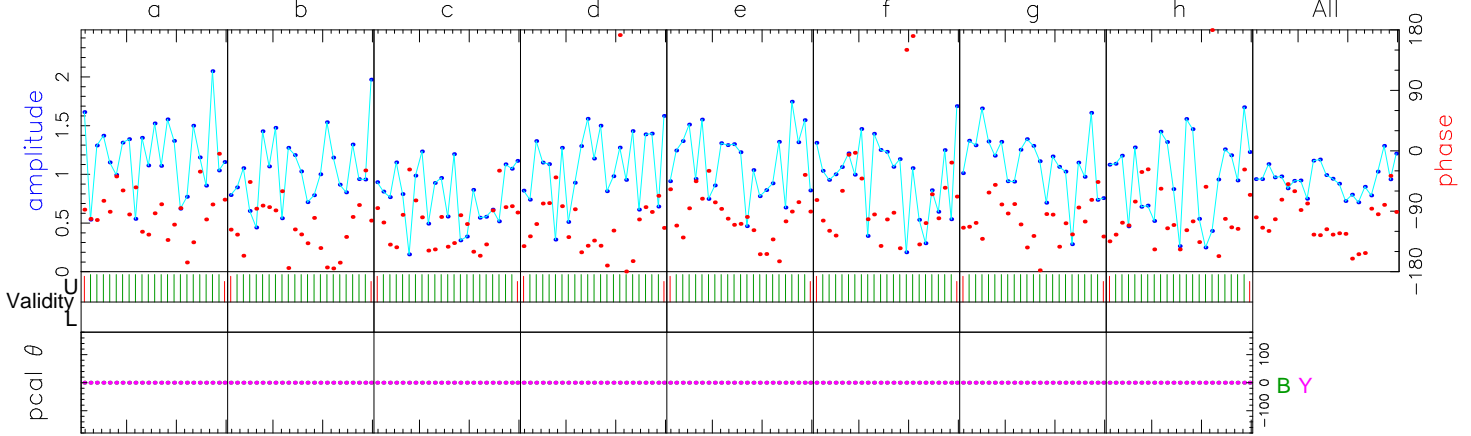
Mk4/DiFX fourfit 3.19 rev 2512

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	

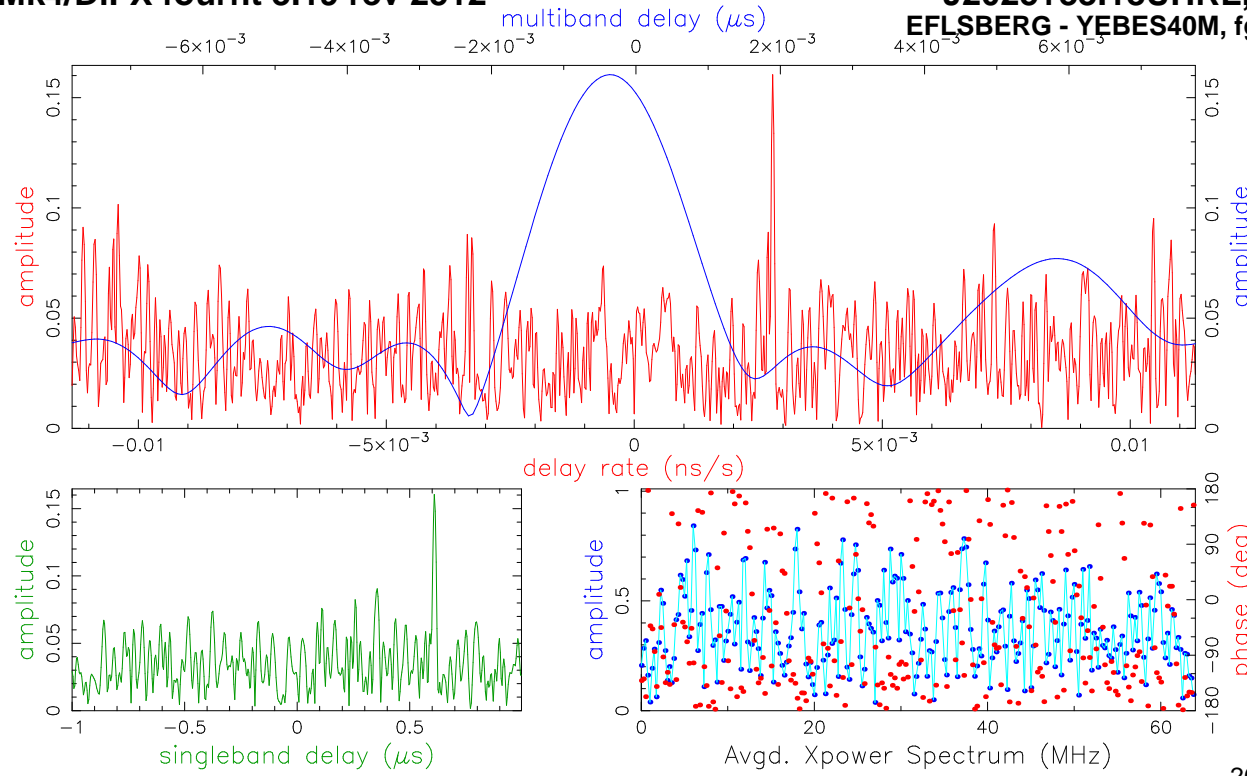
Group delay (usec)(sbd) -1.62431104741E+03 Apriori delay (usec) -1.62430591885E+03 Resid mbdelay (usec) -5.12857E-03 +/- 3.6E-05  
 Sband delay (usec) -1.62431085010E+03 Apriori clock (usec) 1.0769939E+00 Resid sbdelay (usec) -4.93125E-03 +/- 2.9E-04  
 Phase delay (usec) -1.62430592217E+03 Apriori clockrate (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

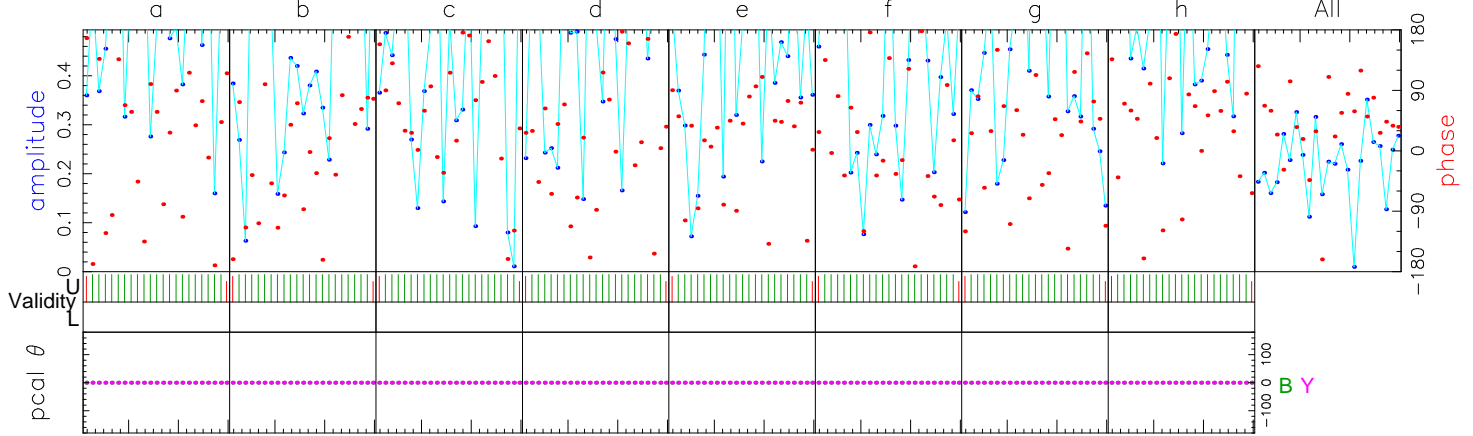
Mk4/DiFX fourfit 3.19 rev 2512

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

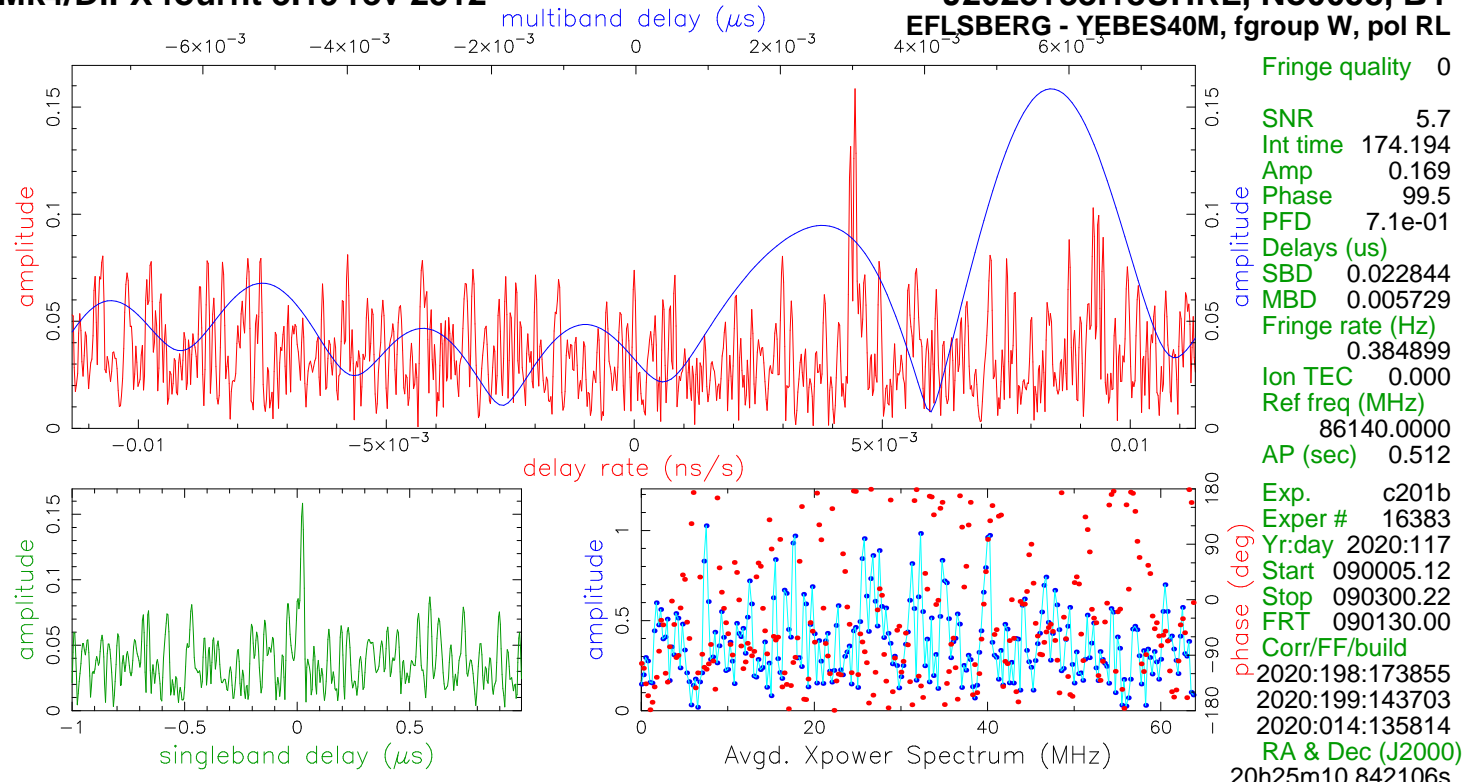


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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		

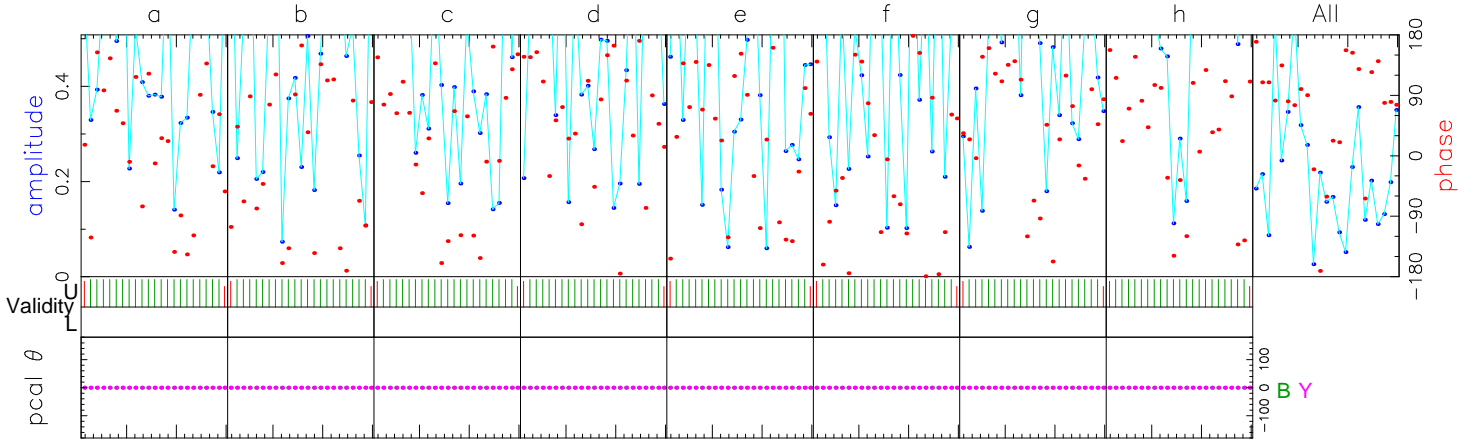
Group delay (usec)(sbd) -1.62369688928E+03 Apriori delay (usec) -1.62430591885E+03 Resid mbdelay (usec) -3.45435E-04 +/- 1.9E-04  
 Sband delay (usec) -1.62369617735E+03 Apriori clock (usec) 1.0769939E+00 Resid sbdelay (usec) 6.09742E-01 +/- 1.5E-03  
 Phase delay (usec) -1.62430591719E+03 Apriori clockrate (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

RMS 51.3 Theor. 47.4 Amplitude 0.165 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 51.3 47.4 Search (1024X32) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 59.1 82.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 24.9 28.0 Inc. seg. avg. 0.168 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 48.1 48.8 Inc. frq. avg. 0.156 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.139.18UHRL



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



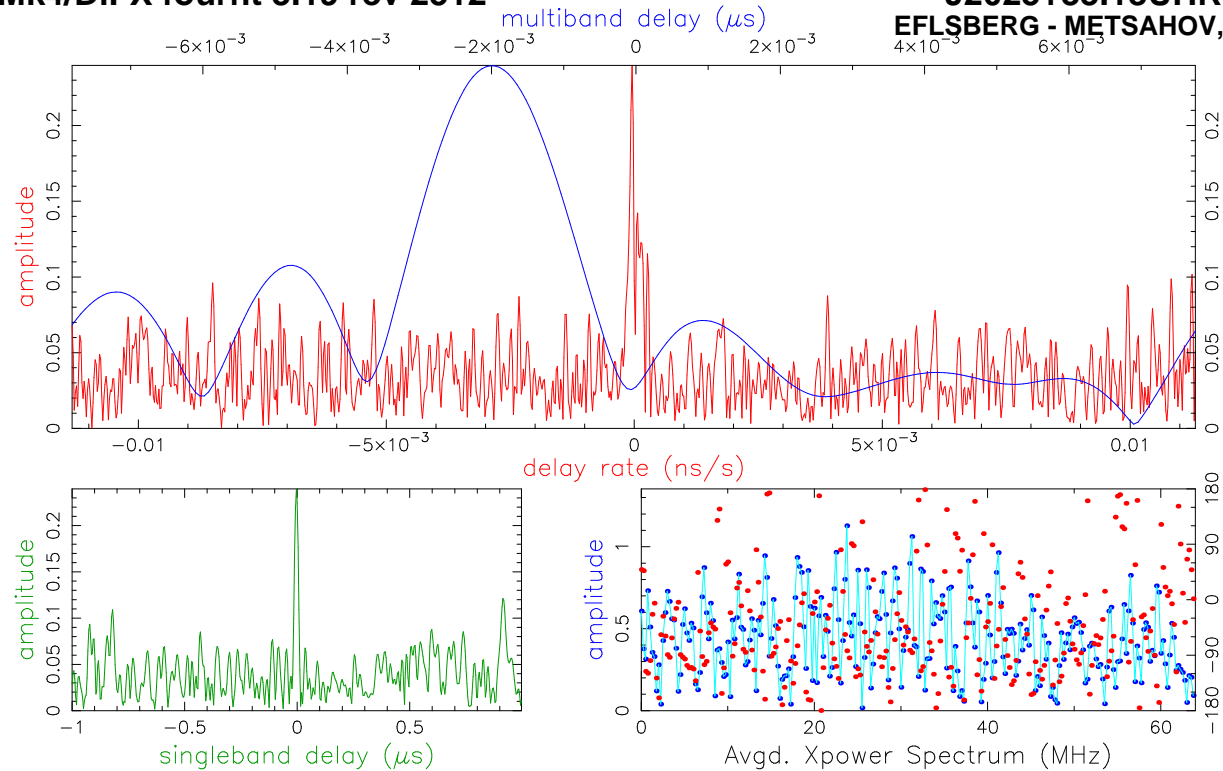
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
66.1	120.5	95.8	82.3	111.8	-177.9	116.8	83.1	83.1	Phase	99.5
0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.4	0.4	Ampl.	0.2
247.7	82.4	306.3	438.0	83.0	35.0	445.4	262.7	262.7	Sbd box	262.8
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0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

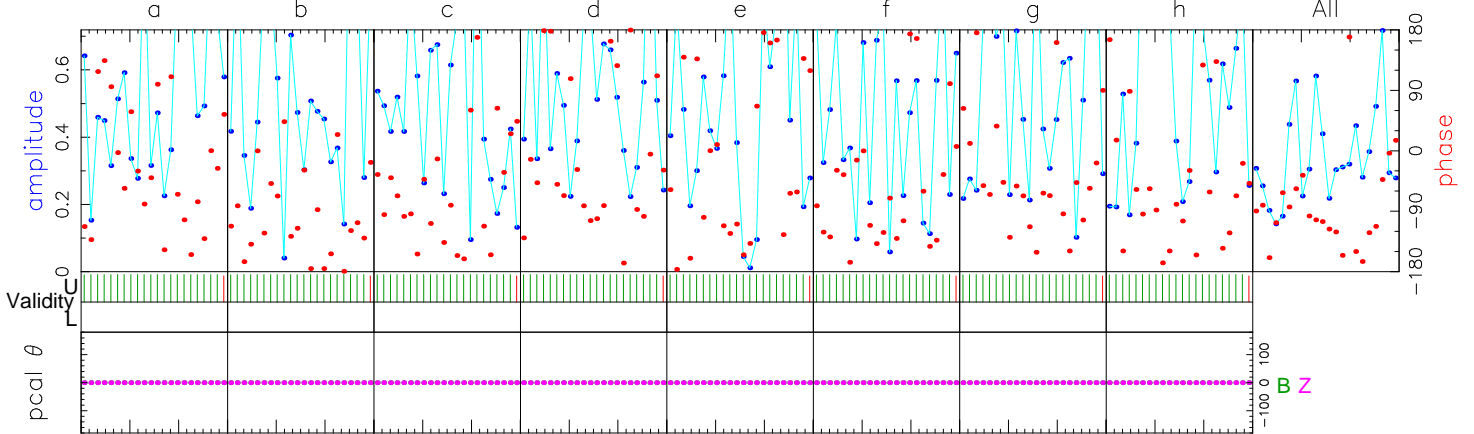


Fringe quality 9

SNR 8.8  
Int time 179.494  
Amp 0.240  
Phase -96.8  
PFD 3.0e-10  
Delays (us)  
SBD -0.003510  
MBD -0.001981  
Fringe rate (Hz)  
-0.004771  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143658  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



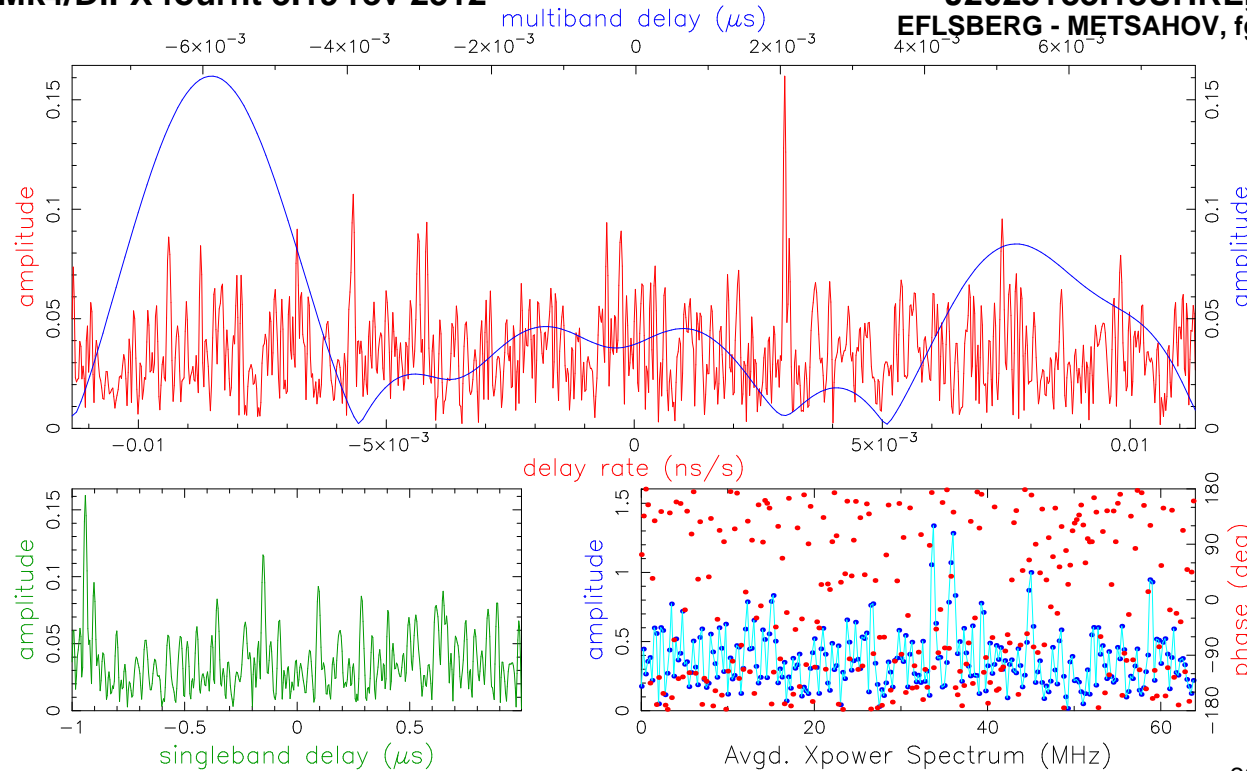
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-64.1	-100.3	-105.6	-91.2	-139.8	-96.0	-68.2	-102.4	Phase	-96.8
	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
	485.9	255.8	489.7	435.0	444.9	409.6	254.9	254.9	Sbd box	256.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.74537097225E+03		Apriori delay (usec)		2.74537295337E+03		Resid mbdelay (usec)		-1.98112E-03	+/- 1.2E-04
Sband delay (usec)	2.74536944387E+03		Apriori clock (usec)		1.3167654E+01		Resid sbdelay (usec)		-3.50950E-03	+/- 9.8E-04
Phase delay (usec)	2.74537295025E+03		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		-3.12009E-06	+/- 4.2E-07
Delay rate (us/s)	-3.89058267423E-02		Apriori rate (us/s)		-3.89057713572E-02		Resid rate (us/s)		-5.53851E-08	+/- 4.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.05657917851E-05		Resid phase (deg)		-96.8	+/- 13.0

ph/seg (deg) 50.6 30.6 Amplitude 0.240 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.8 53.4 Search (1024X32) 0.231 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.4 18.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.2 32.2 Inc. seg. avg. 0.302 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.244 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 Z: az 270.2 el 39.7 pa 36.7 u,v (fr/asec) 252.050 -1790.612 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BZ..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BZ.W.123.18UHRL

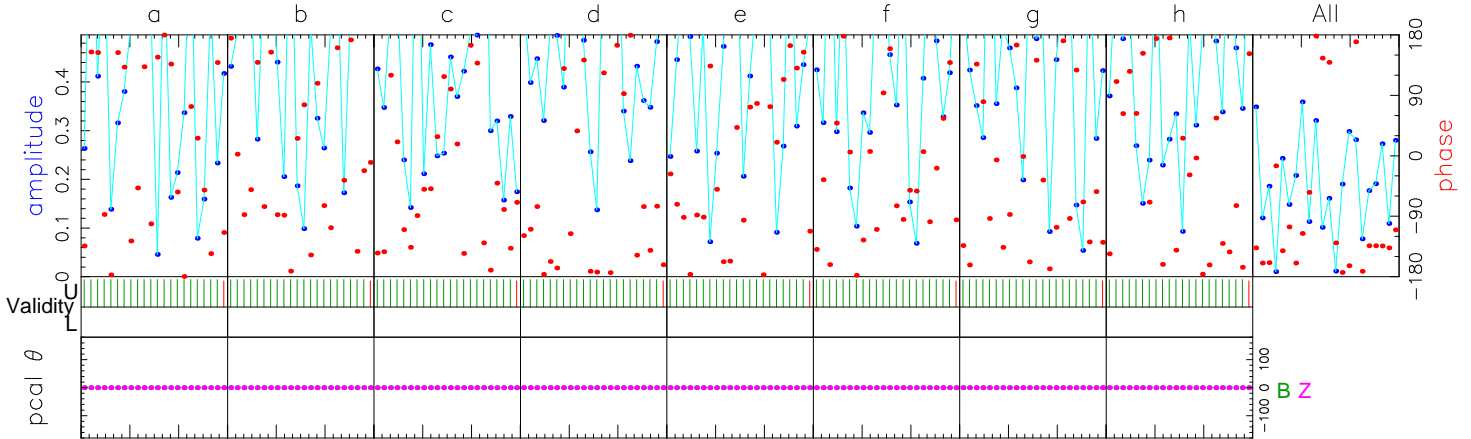
Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BZ  
EFLSBERG - METSAHOV, fgroup W, pol LR



Fringe quality 0  
 SNR 5.9  
 Int time 179.494  
 Amp 0.166  
 Phase -149.0  
 PFD 3.9e-01  
 Delays (us)  
 SBD -0.941188  
 MBD -0.005874  
 Fringe rate (Hz) 0.261418  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 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., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



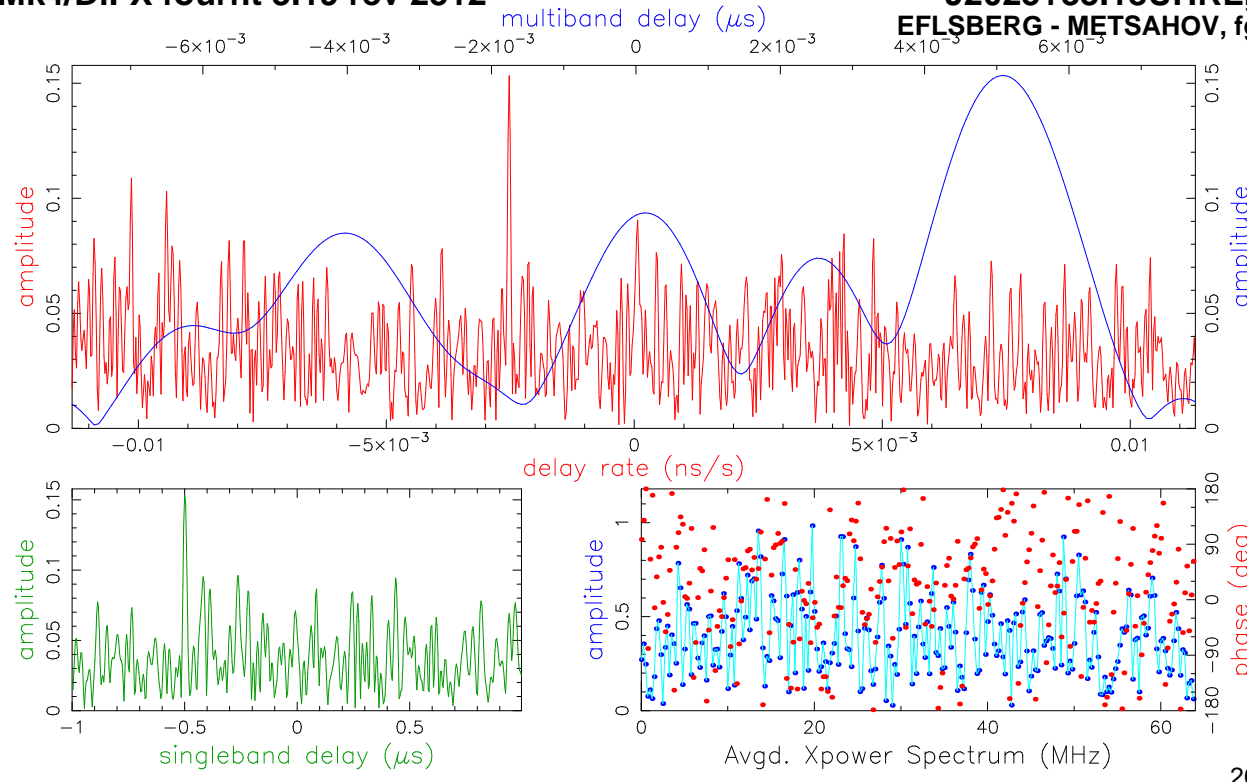
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-171.5	-113.9	-130.6	-163.5	-170.6	-113.4	-128.4	179.2	Phase	-149.0
	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.2	Ampl.	0.2
	508.6	459.7	472.5	16.7	426.4	247.7	501.2	2.0	Sbd box	16.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.74442957955E+03		Apriori delay (usec)		2.74537295337E+03		Resid mbdelay (usec)		-5.87382E-03	+/- 1.8E-04
Sband delay (usec)	2.74443176512E+03		Apriori clock (usec)		1.3167654E+01		Resid sbdelay (usec)		-9.41188E-01	+/- 1.5E-03
Phase delay (usec)	2.74537294857E+03		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		-4.80484E-06	+/- 6.3E-07
Delay rate (us/s)	-3.89027365482E-02		Apriori rate (us/s)		-3.89057713572E-02		Resid rate (us/s)		3.03481E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.05657917851E-05		Resid phase (deg)		-149.0	+/- 19.4

ph/seg (deg) 46.1 45.6 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.1 79.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 30.2 27.5 Inc. seg. avg. 0.150 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.7 48.0 Inc. frq. avg. 0.164 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 264.9 el 50.1 pa 49.5 Z: az 270.2 el 39.7 pa 36.7 u,v (fr/asec) 252.050 -1790.612 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BZ..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BZ.W.135.18UHRL

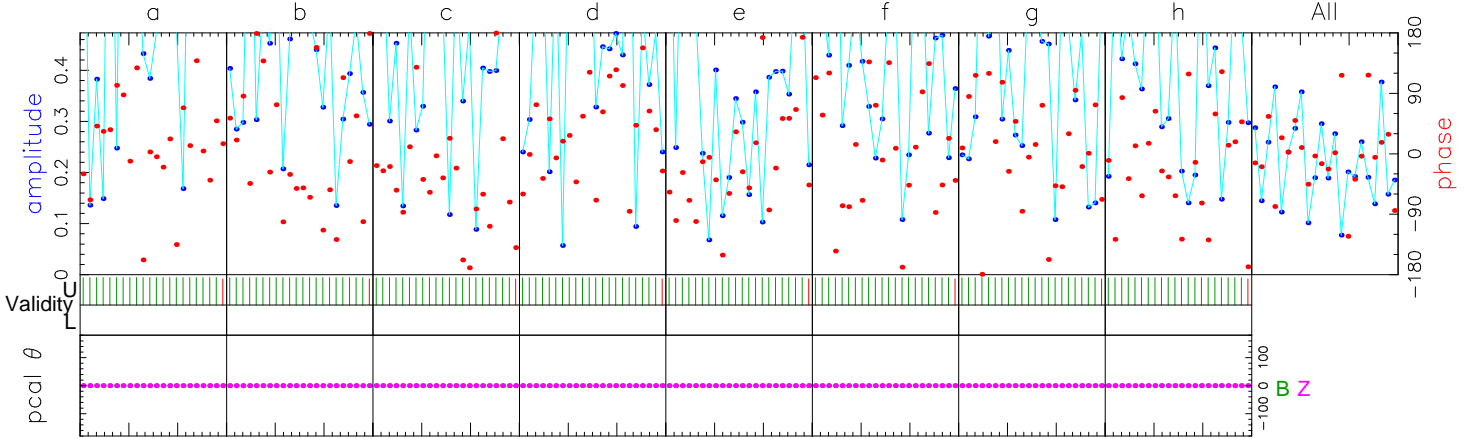
Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, BZ  
EFLSBERG - METSAHOV, fgroup W, pol RL



Fringe quality 0  
SNR 5.7  
Int time 179.494  
Amp 0.158  
Phase -3.6  
PFD 8.4e-01  
Delays (us)  
SBD -0.498807  
MBD 0.005118  
Fringe rate (Hz)  
-0.217641  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143703  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

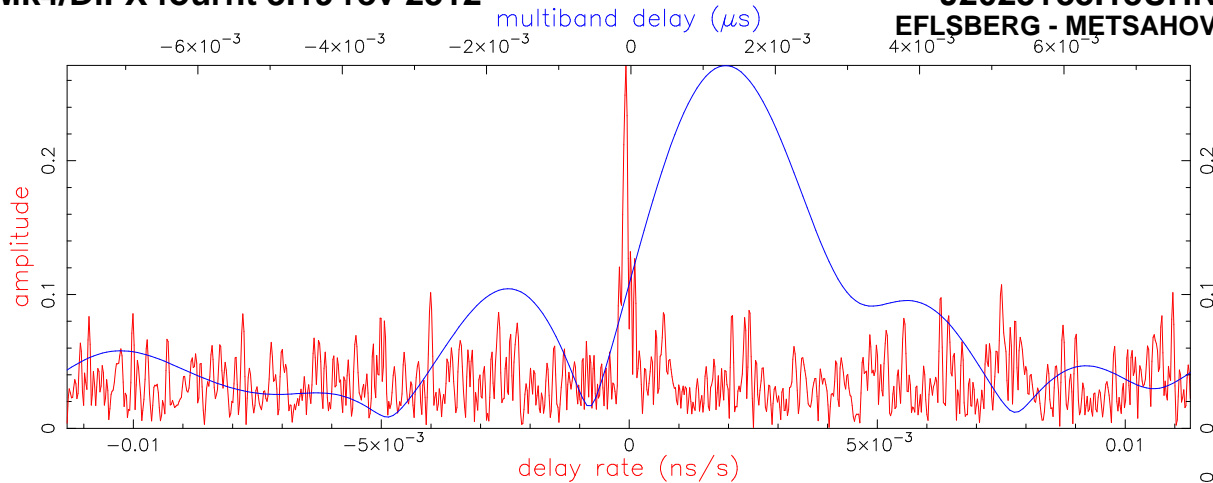
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



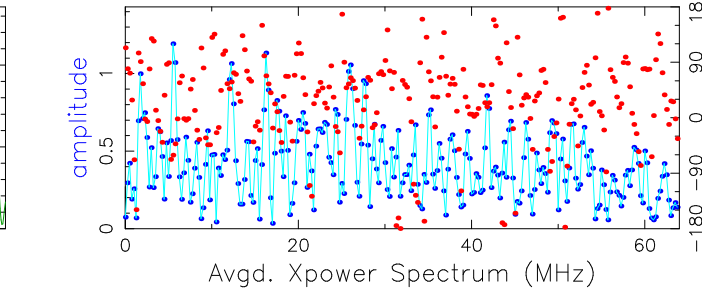
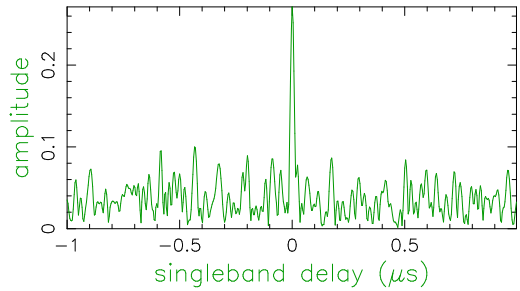
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	24.5	-31.6	-50.5	37.8	-35.4	25.4	21.5	-11.9	Phase	-3.6
	0.3	0.1	0.3	0.2	0.2	0.1	0.1	0.2	Ampl.	0.2
	129.5	465.5	331.0	500.0	248.5	457.9	311.3	220.0	Sbd box	129.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.74487807099E+03		Apriori delay (usec)		2.74537295337E+03		Resid mbdelay (usec)		5.11762E-03	+/- 1.9E-04
Sband delay (usec)	2.74487414587E+03		Apriori clock (usec)		1.3167654E+01		Resid sbdelay (usec)		-4.98807E-01	+/- 1.5E-03
Phase delay (usec)	2.74537295326E+03		Apriori clockrate (us/s)		-2.1600000E-07		Resid phdelay (usec)		-1.16054E-07	+/- 6.5E-07
Delay rate (us/s)	-3.89082979503E-02		Apriori rate (us/s)		-3.89057713572E-02		Resid rate (us/s)		-2.52659E-06	+/- 6.3E-09
Total phase (deg)	69.7		Apriori accel (us/s/s)		-2.05657917851E-05		Resid phase (deg)		-3.6	+/- 20.2

	RMS	Theor.	Amplitude	0.158 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	55.5	47.5	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	69.5	82.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	36.6	28.6	Inc. seg. avg.	0.169	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	48.7	49.9	Inc. frq. avg.	0.165	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

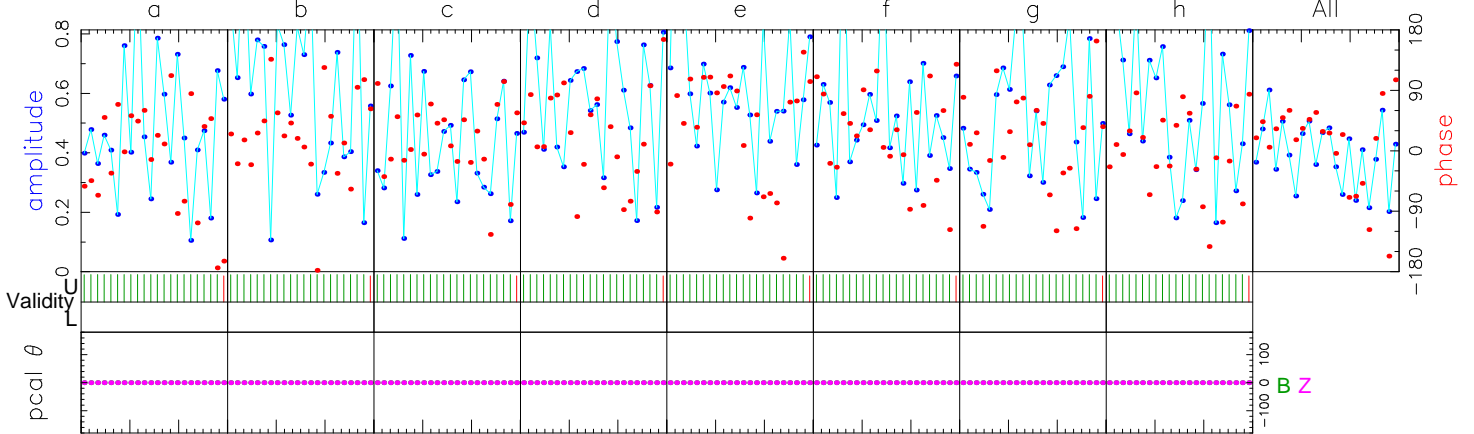
B: az 264.9 el 50.1 pa 49.5      Z: az 270.2 el 39.7 pa 36.7      u,v (fr/asec) 252.050 -1790.612      simultaneous interpolator  
Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0058/BZ..18UHRL    Output file: /Exps/c201b/v1/1234/No0058/BZ.W.148.18UHRL



Fringe quality 9  
SNR 9.9  
Int time 179.494  
Amp 0.271  
Phase 27.8  
PFD 6.0e-15  
Delays (us)  
SBD 0.000316  
MBD 0.001316  
Fringe rate (Hz) -0.004940  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143641  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.74537426897E+03	Apriori delay (usec)	2.74537295337E+03	Resid mbdelay (usec)	1.31560E-03	+/-	1.1E-04
Sband delay (usec)	2.74537326962E+03	Apriori clock (usec)	1.3167654E+01	Resid sbdelay (usec)	3.16250E-04	+/-	8.7E-04
Phase delay (usec)	2.74537295427E+03	Apriori clockrate (us/s)	-2.1600000E-07	Resid phdelay (usec)	8.97208E-07	+/-	3.7E-07
Delay rate (us/s)	-3.89058287092E-02	Apriori rate (us/s)	-3.89057713572E-02	Resid rate (us/s)	-5.73521E-08	+/-	3.6E-09
Total phase (deg)	101.1	Apriori accel (us/s/s)	-2.05657917851E-05	Resid phase (deg)	27.8	+/-	11.5

ph/seg (deg)	64.0	Theor.	27.0	Amplitude	0.271 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	61.2	Search (1024X32)	0.264	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.4	Inc. seg. avg.	0.357	Inc. frq. avg.	0.279	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.8	Inc. frq. avg.	0.279			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	

B: az 264.9 el 50.1 pa 49.5 Z: az 270.2 el 39.7 pa 36.7 u,v (fr/asec) 252.050 -1790.612 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/BZ..18UHRL Output file: /Exps/c201b/v1/1234/No0058/BZ.W.48.18UHRL