

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

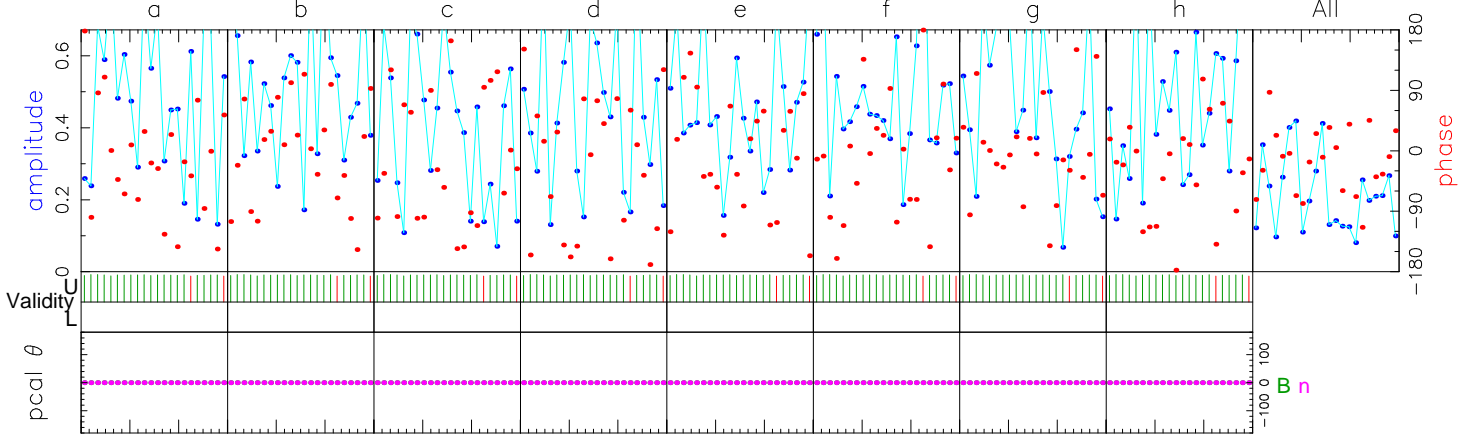
2020:014:135814

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

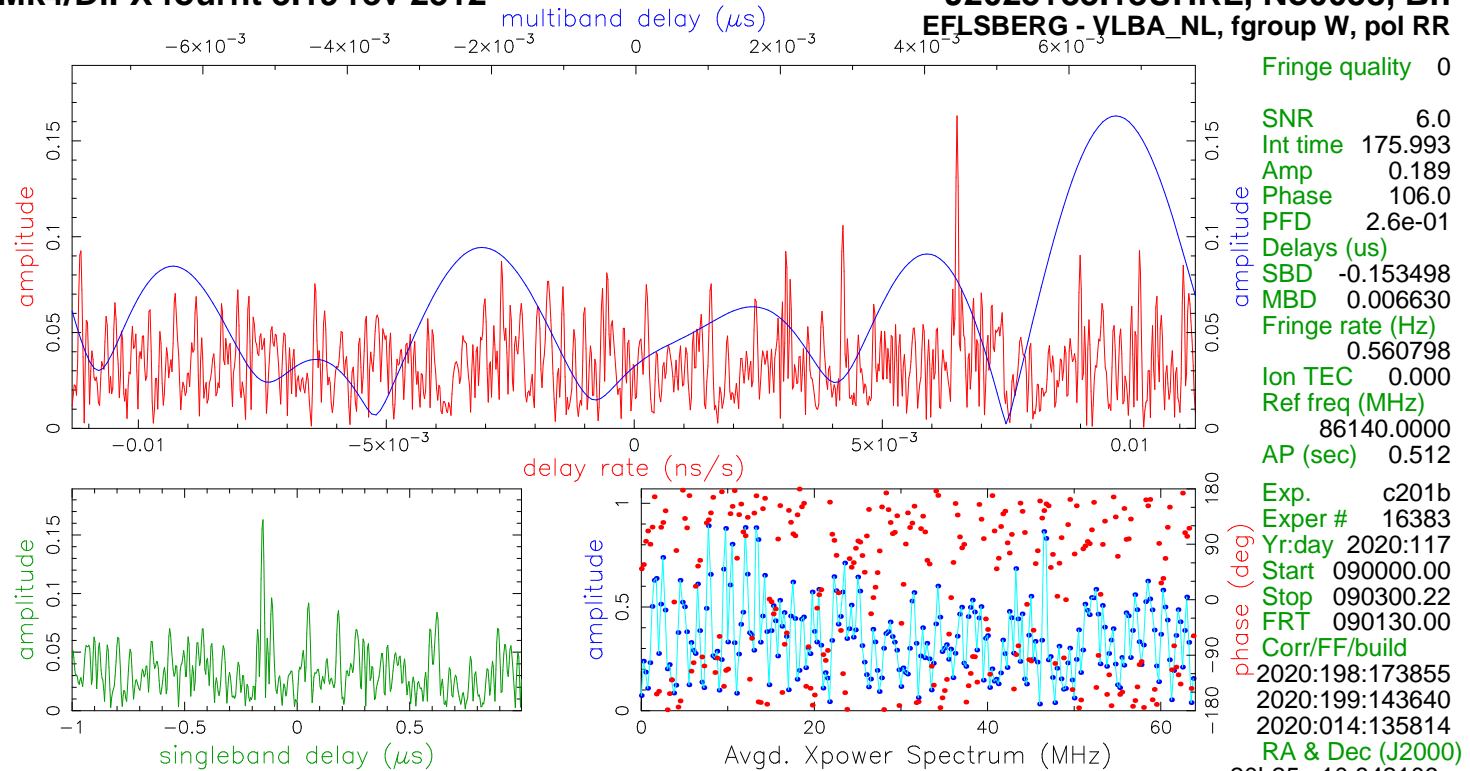
ph/seg (deg) 48.1 46.3 Amplitude 0.224 +/- 0.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 73.9 80.9 Search (1024X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

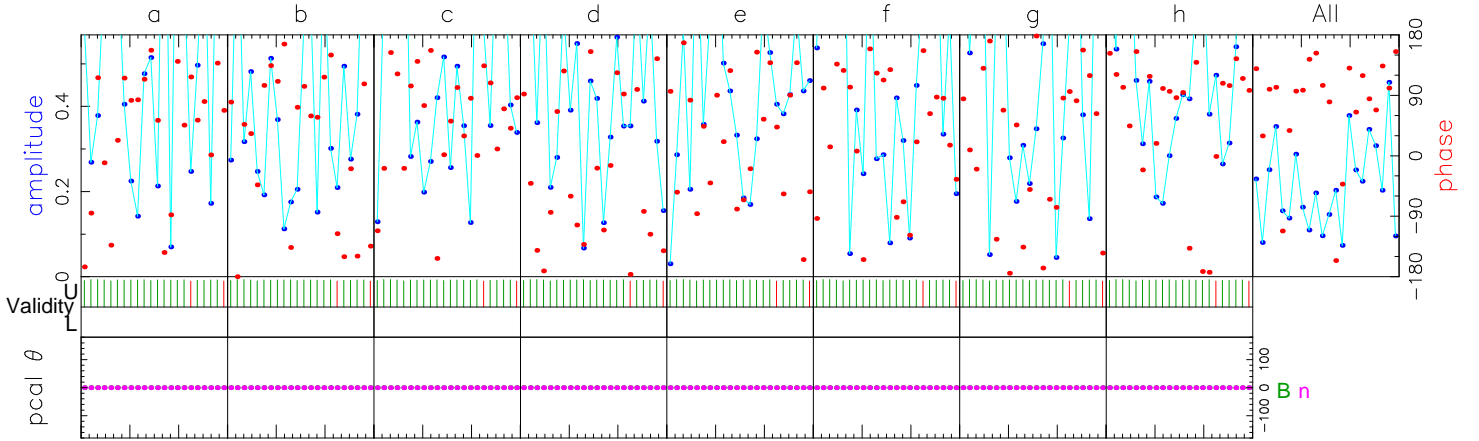
ph/frq (deg) 34.8 27.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 45.3 48.8 Inc. seg. avg. 0.227 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



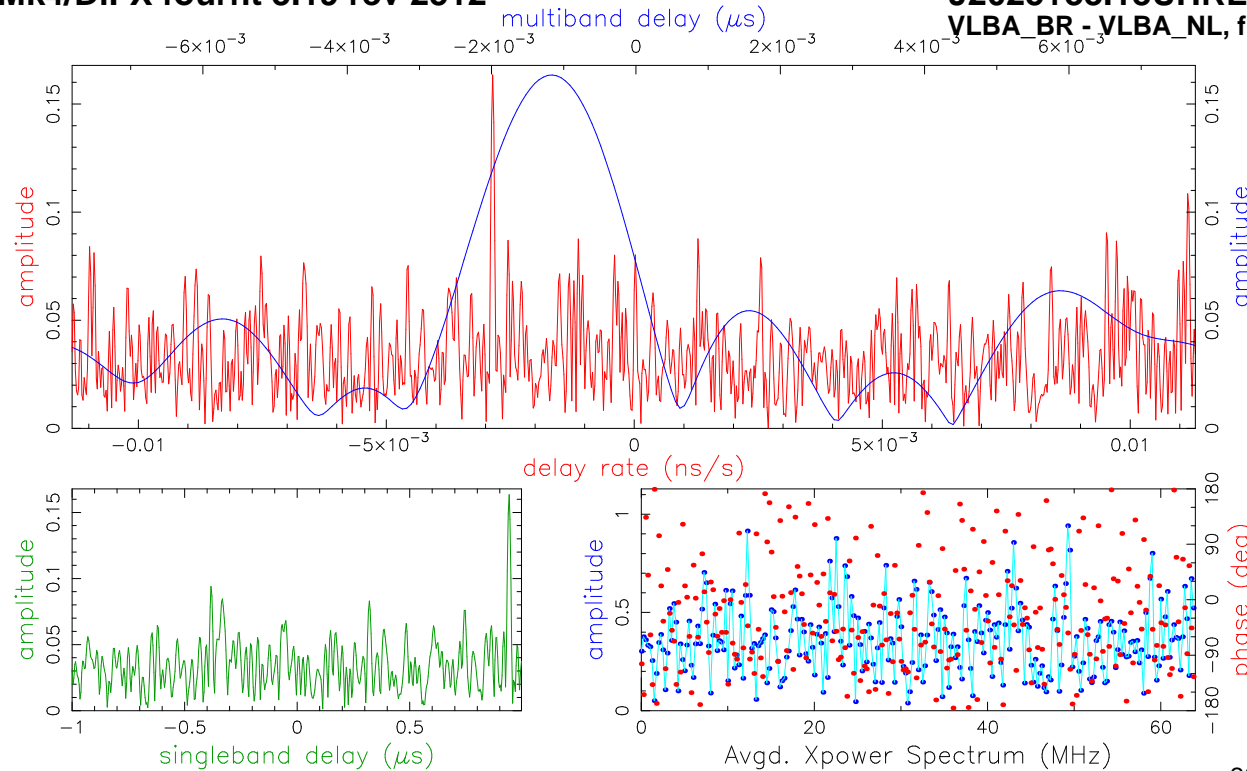
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	113.8	124.1	60.8	-173.5	70.9	98.7	103.2	115.6	Phase	106.0
	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.4	Ampl.	0.2
	305.0	68.7	86.2	455.2	20.9	436.3	452.8	218.9	Sbd box	217.7
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	
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

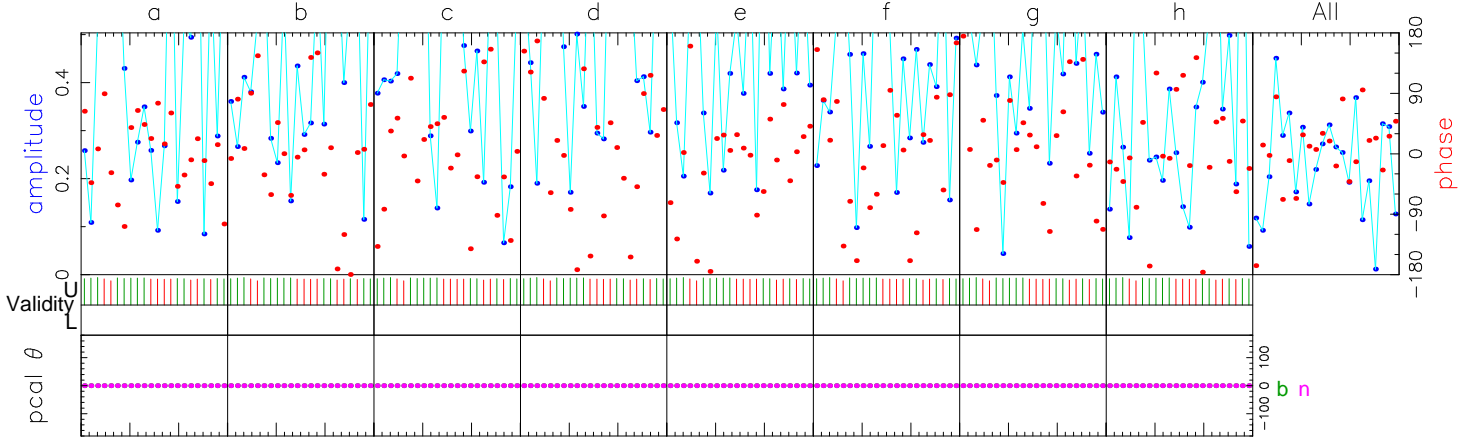
	RMS	Theor.	Amplitude	0.189 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	58.3	45.0	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	69.9	78.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	41.4	27.1	Inc. seg. avg.	0.190	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	53.6	47.3	Inc. frq. avg.	0.190	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.43.18UHRL



Fringe quality 0  
SNR 5.9  
Int time 171.792  
Amp 0.168  
Phase 10.4  
PFD 4.4e-01  
Delays (us)  
SBD 0.941148  
MBD -0.001179  
Fringe rate (Hz)  
-0.246991  
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		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

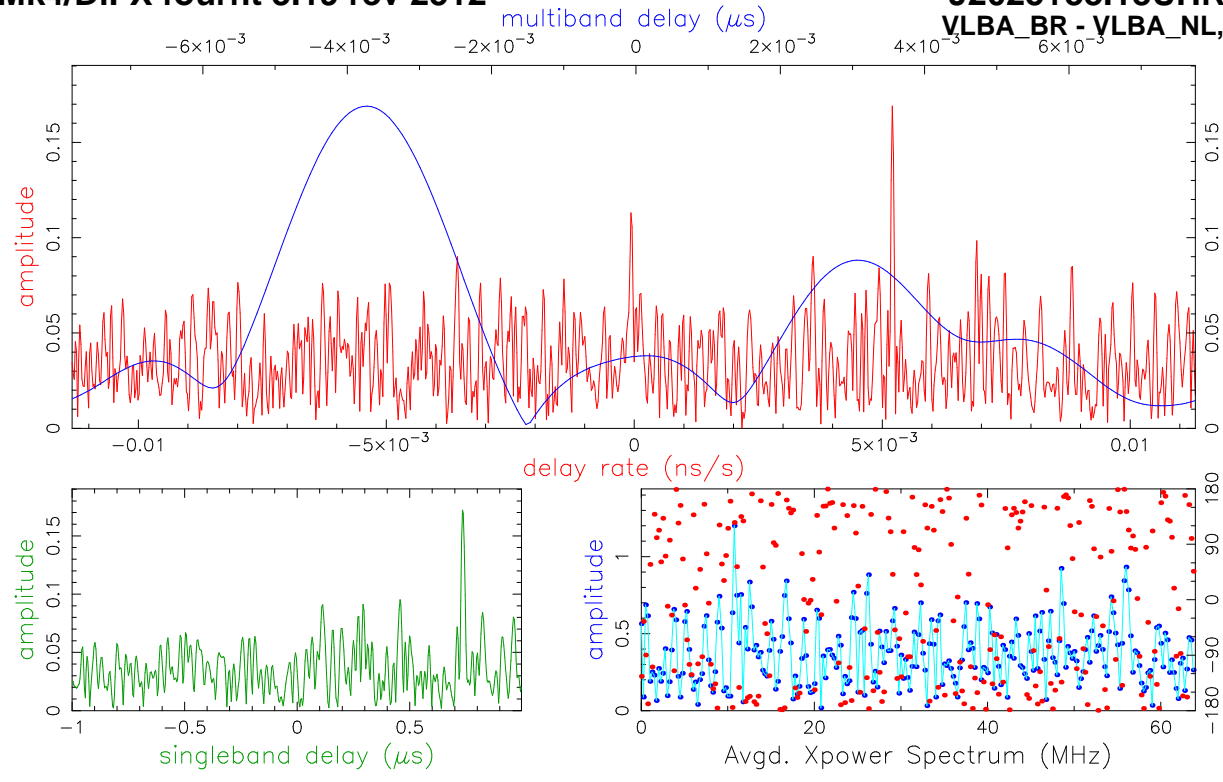
Group delay (usec)(sbd)	-5.10129485192E+03	Apriori delay (usec)	-5.10223117314E+03	Resid mbdelay (usec)	-1.17878E-03	+/-	1.9E-04
Sband delay (usec)	-5.10129002564E+03	Apriori clock (usec)	-3.3698826E+01	Resid sbdelay (usec)	9.41148E-01	+/-	1.5E-03
Phase delay (usec)	-5.10223117281E+03	Apriori clockrate (us/s)	-3.7599999E-07	Resid phdelay (usec)	3.35201E-07	+/-	6.3E-07
Delay rate (us/s)	1.22281445956E-01	Apriori rate (us/s)	1.22284313276E-01	Resid rate (us/s)	-2.86732E-06	+/-	6.1E-09
Total phase (deg)	-81.3	Apriori accel (us/s/s)	3.18820657673E-05	Resid phase (deg)	10.4	+/-	19.6

ph/seg (deg)	56.0	Theor.	45.9	Amplitude	0.168 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	74.7		80.0	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	21.0		27.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	31.7		48.3	Inc. seg. avg.	0.179	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.157	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 74.4 el 33.0 pa -50.7 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -818.657 2258.288 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.46.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, bn  
VLBA\_BR - VLBA\_NL, fgroup W, pol RR

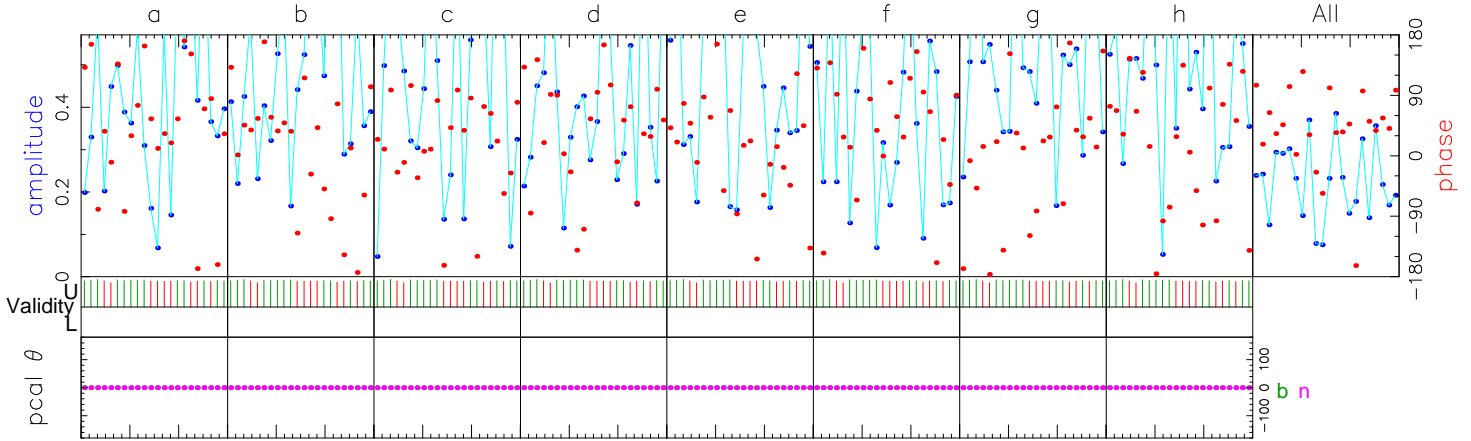


Fringe quality 0

SNR 6.2  
Int time 171.791  
Amp 0.190  
Phase 55.1  
PFD 5.6e-02  
Delays (us)  
SBD 0.735905  
MBD -0.003726  
Fringe rate (Hz)  
0.449692  
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
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-5.10150052396E+03	Apriori delay (usec)	-5.10223117314E+03	Resid mbdelay (usec)	-3.72581E-03	+/-	1.7E-04
Sband delay (usec)	-5.10149526864E+03	Apriori clock (usec)	-3.3698826E+01	Resid sbdelay (usec)	7.35905E-01	+/-	1.4E-03
Phase delay (usec)	-5.10223117137E+03	Apriori clockrate (us/s)	-3.7599999E-07	Resid phdelay (usec)	1.77700E-06	+/-	5.9E-07
Delay rate (us/s)	1.22289533755E-01	Apriori rate (us/s)	1.22284313276E-01	Resid rate (us/s)	5.22048E-06	+/-	5.7E-09
Total phase (deg)		Apriori accel (us/s/s)	3.18820657673E-05	Resid phase (deg)	55.1	+/-	18.4

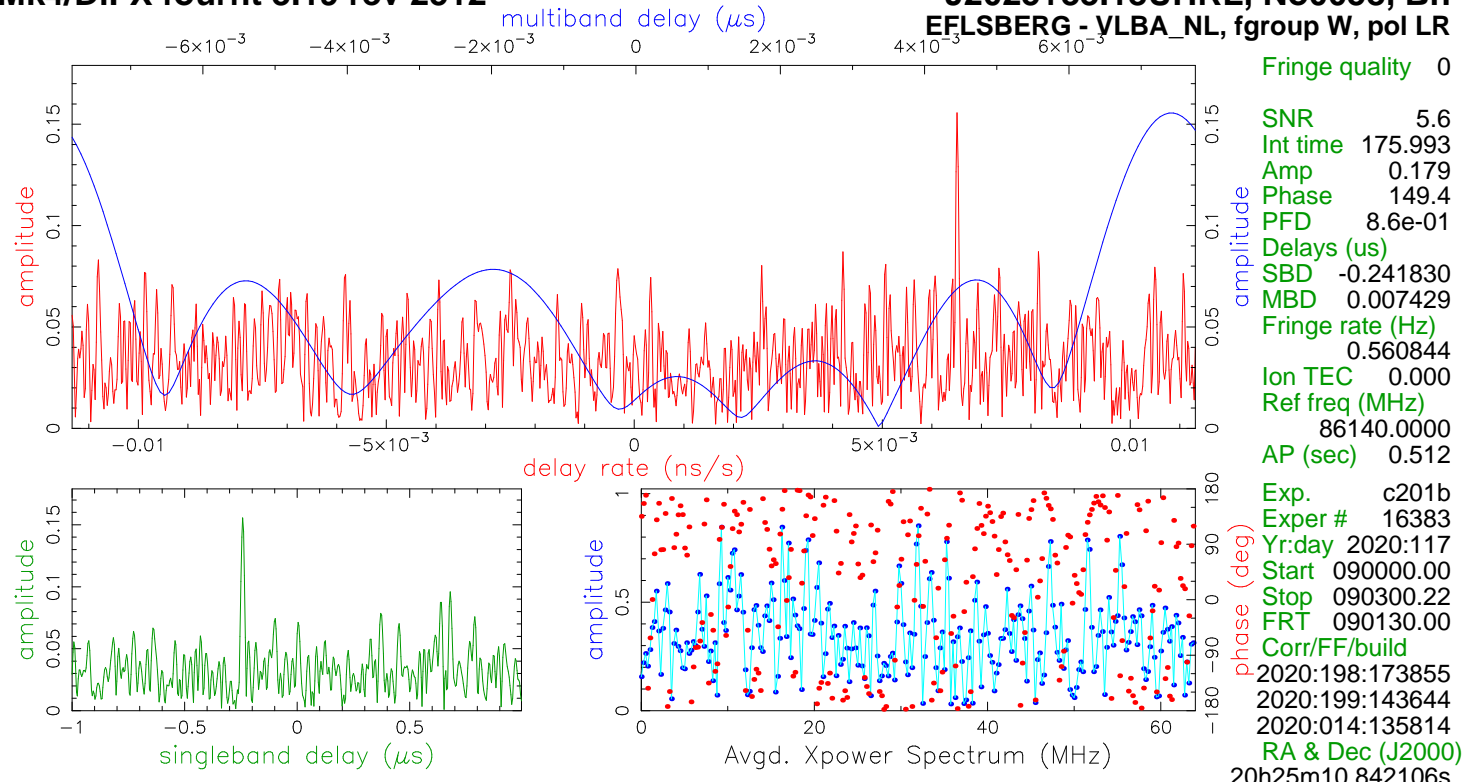
ph/seg (deg)	52.8	Theor.	43.0	Amplitude	0.190 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	58.4	Search (1024X32)	0.165	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	35.1	Inc. seg. avg.	0.192	Inc. frq. avg.	0.193	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	22.7	Inc. frq. avg.	0.193			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 74.4 el 33.0 pa -50.7 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -818.657 2258.288 simultaneous interpolator

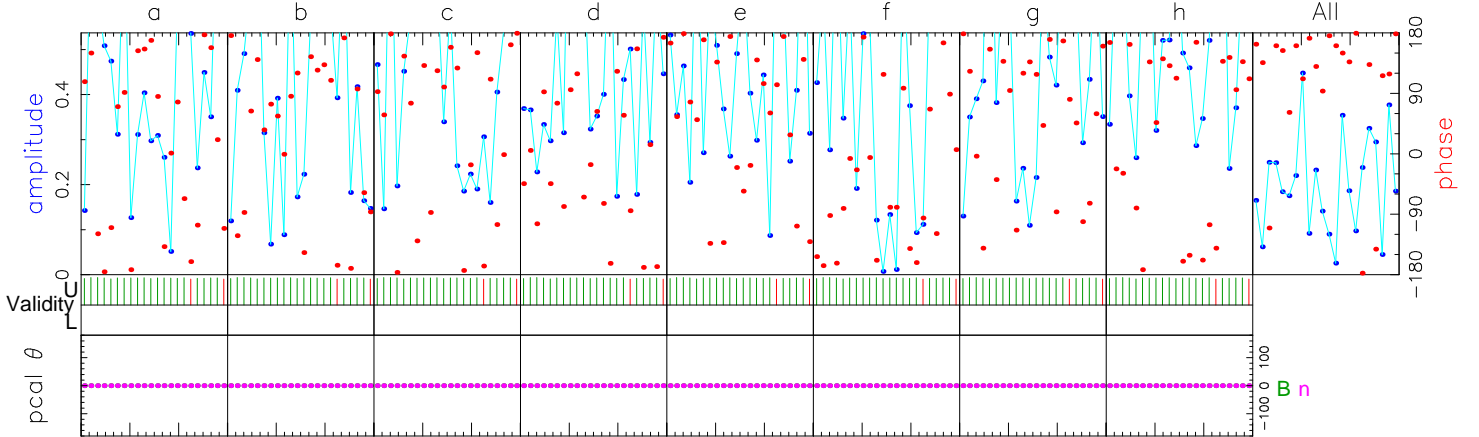
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/bn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/bn.W.53.18UHRL

Mk4/DiFX fourfit 3.19 rev 2512

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



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
171.8	129.4	157.0	139.9	144.2	-153.0	121.6	156.5	156.5	Phase	149.4
0.2	0.3	0.3	0.1	0.2	0.1	0.2	0.3	0.3	Ampl.	0.2
38.8	87.9	193.9	456.9	87.0	420.0	244.3	194.8	194.8	Sbd box	195.1
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	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.78974405288E+02		Apriori delay (usec)	-4.78731833854E+02		Resid mbdelay (usec)	7.42857E-03	+/-	1.9E-04	
Sband delay (usec)	-4.78973664354E+02		Apriori clock (usec)	-1.9241022E+01		Resid sbdelay (usec)	-2.41830E-01	+/-	1.5E-03	
Phase delay (usec)	-4.78731829037E+02		Apriori clockrate (us/s)	-5.339998E-07		Resid phdelay (usec)	4.81682E-06	+/-	6.5E-07	
Delay rate (us/s)	-1.34901850749E+00		Apriori rate (us/s)	-1.34902501834E+00		Resid rate (us/s)	6.51084E-06	+/-	6.3E-09	
Total phase (deg)		88.8	Apriori accel (us/s/s)	9.08561870106E-06		Resid phase (deg)	149.4	+/-	20.3	

	RMS	Theor.	Amplitude	0.179 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	39.8	47.6	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	76.3	83.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.5	28.7	Inc. seg. avg.	0.172	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	50.9	50.1	Inc. frq. avg.	0.169	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

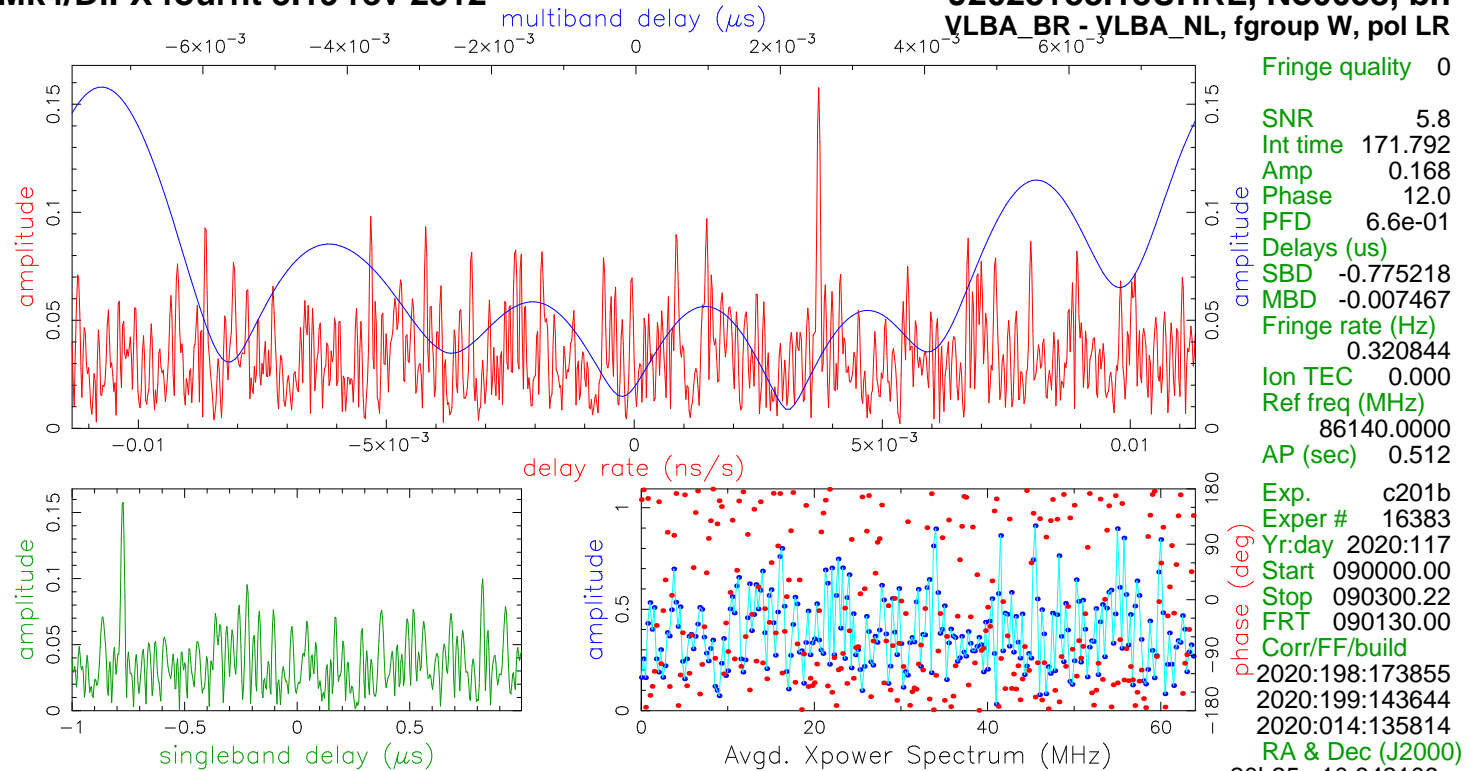
B: az 264.9 el 50.1 pa 49.5      n: az 85.8 el 51.6 pa -63.4      u,v (fr/asec) 9301.953 1205.791      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0058/Bn..18UHRL    Output file: /Exps/c201b/v1/1234/No0058/Bn.W.57.18UHRL



Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, bn  
VLBA\_BR - VLBA\_NL, fgroup W, pol LR



Fringe quality 0

SNR 5.8

Int time 171.792

Amp 0.168

Phase 12.0

PFD 6.6e-01

Delays (us)

SBD -0.775218

MBD -0.007467

Fringe rate (Hz) 0.320844

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

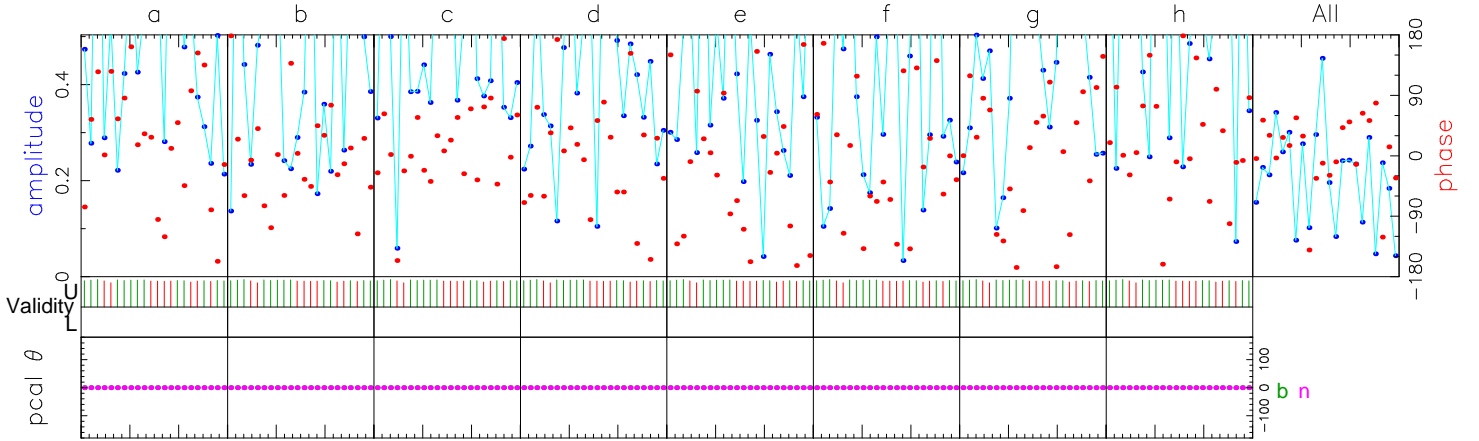
2020:014:135814

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)	-5.10300426480E+03									
Sband delay (usec)	-5.10300639114E+03									
Phase delay (usec)	-5.10223117276E+03									
Delay rate (us/s)	1.22288037953E-01									
Total phase (deg)			-79.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
sb window (us)	-1.000									1.000
mb window (us)	-0.008									0.008
dr window (ns/s)	-0.011									0.011
ion window (TEC)	0.00									0.00

ph/seg (deg) 54.1 46.7 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

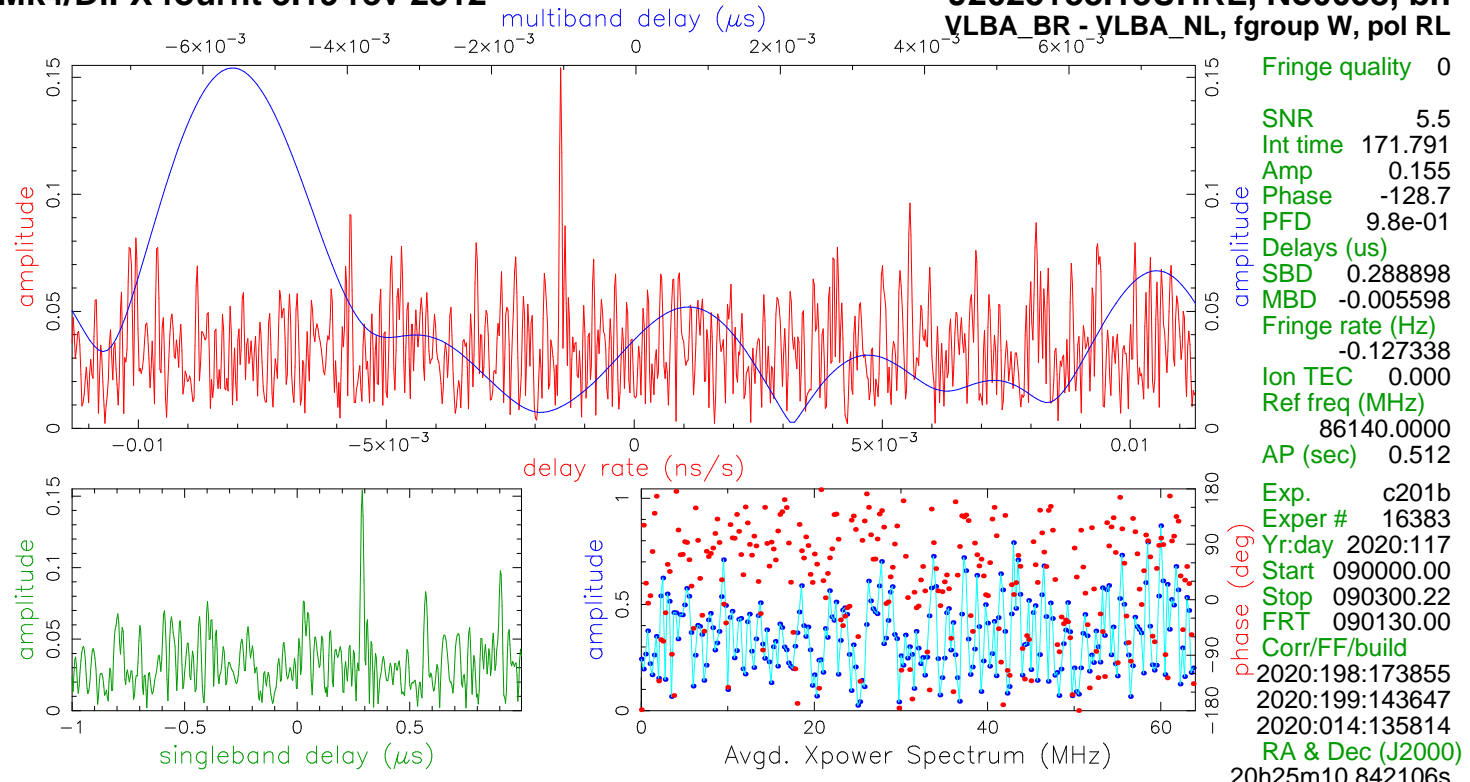
amp/seg (%) 69.8 81.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 49.8 28.1 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

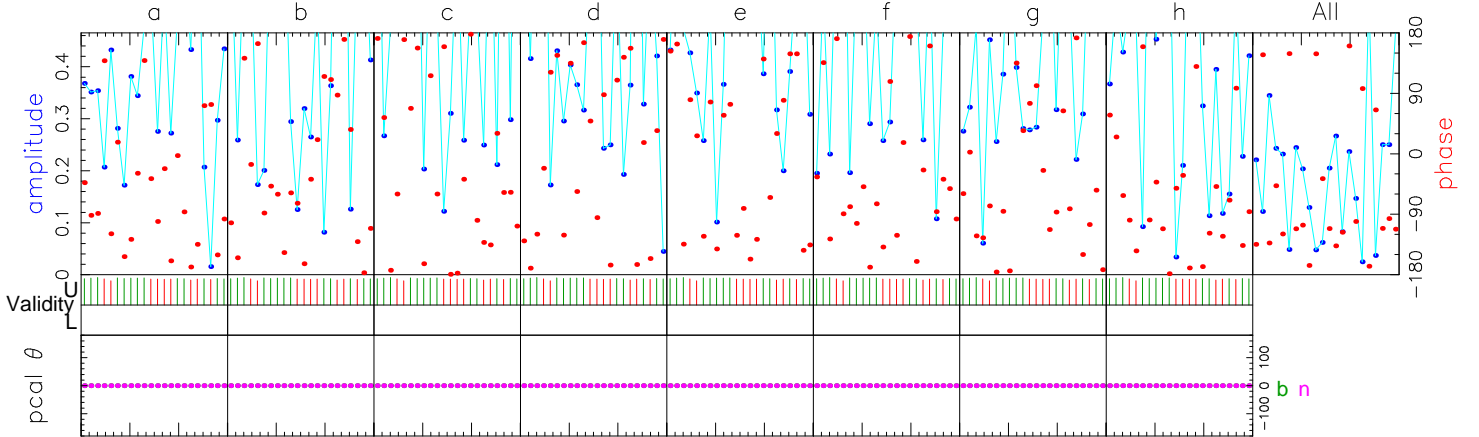
amp/frq (%) 67.4 49.1 Inc. frq. avg. 0.174 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

b: az 74.4 el 33.0 pa -50.7 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -818.657 2258.288 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.61.18UHRL



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

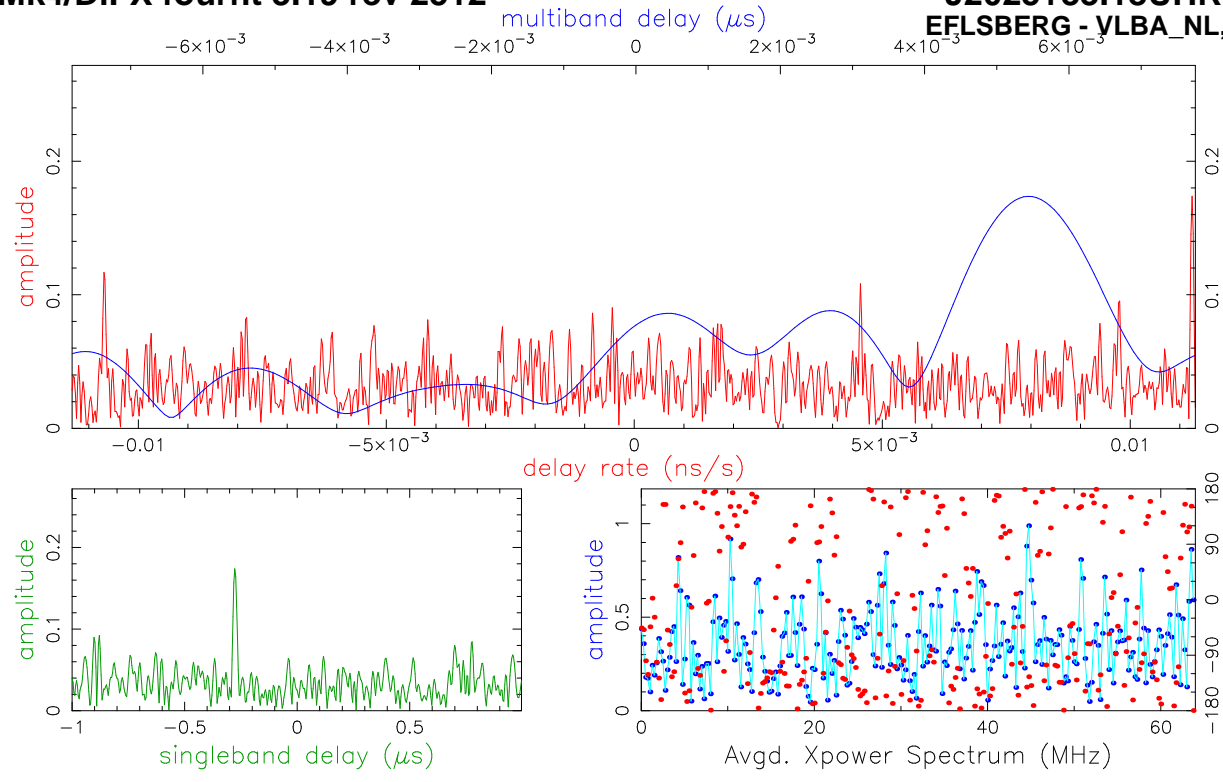


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.6	-136.9	-137.2	-158.2	-174.2	-112.5	-105.7	-121.9	Phase	-128.7
	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	328.8	107.0	67.2	401.3	214.7	334.9	118.1	104.0	Sbd box	331.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.10193989641E+03		Apriori delay (usec)		-5.10223117314E+03		Resid mbdelay (usec)		-5.59826E-03	+/- 2.0E-04
Sband delay (usec)	-5.10194227464E+03		Apriori clock (usec)		-3.3698826E+01		Resid sbdelay (usec)		2.88898E-01	+/- 1.6E-03
Phase delay (usec)	-5.10223117729E+03		Apriori clockrate (us/s)		-3.7599999E-07		Resid phdelay (usec)		-4.15012E-06	+/- 6.7E-07
Delay rate (us/s)	1.22282835010E-01		Apriori rate (us/s)		1.22284313276E-01		Resid rate (us/s)		-1.47827E-06	+/- 6.4E-09
Total phase (deg)			Apriori accel (us/s/s)		3.18820657673E-05		Resid phase (deg)		-128.7	+/- 20.8

	RMS	Theor.	Amplitude	0.155 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	65.0	48.7	Search (1024X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	90.1	85.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.1	29.4	Inc. seg. avg.	0.148	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	24.3	51.2	Inc. frq. avg.	0.151	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 74.4 el 33.0 pa -50.7 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -818.657 2258.288 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.70.18UHRL

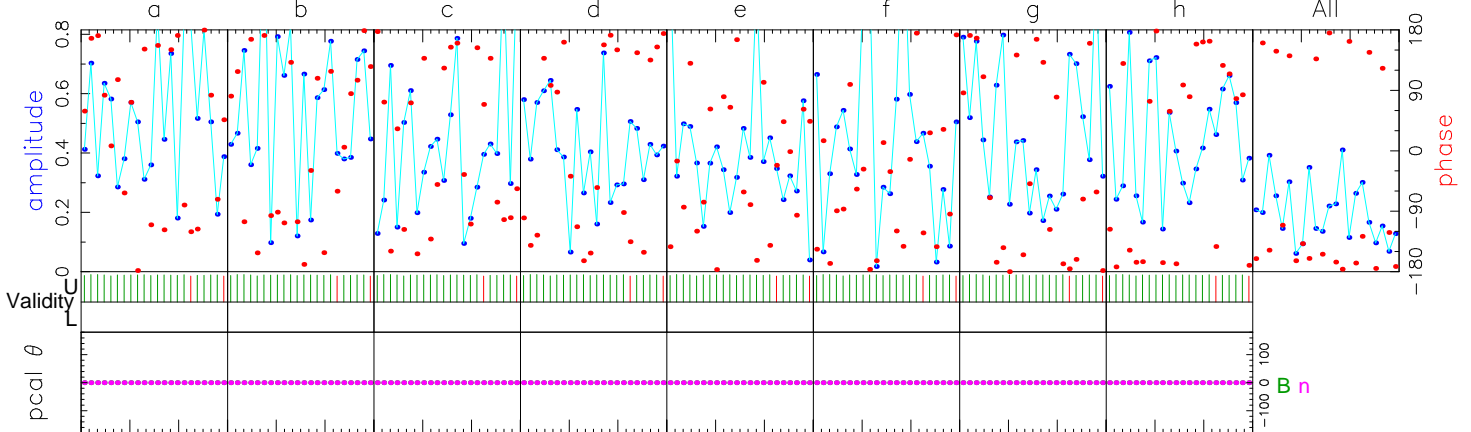


Fringe quality 0

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"

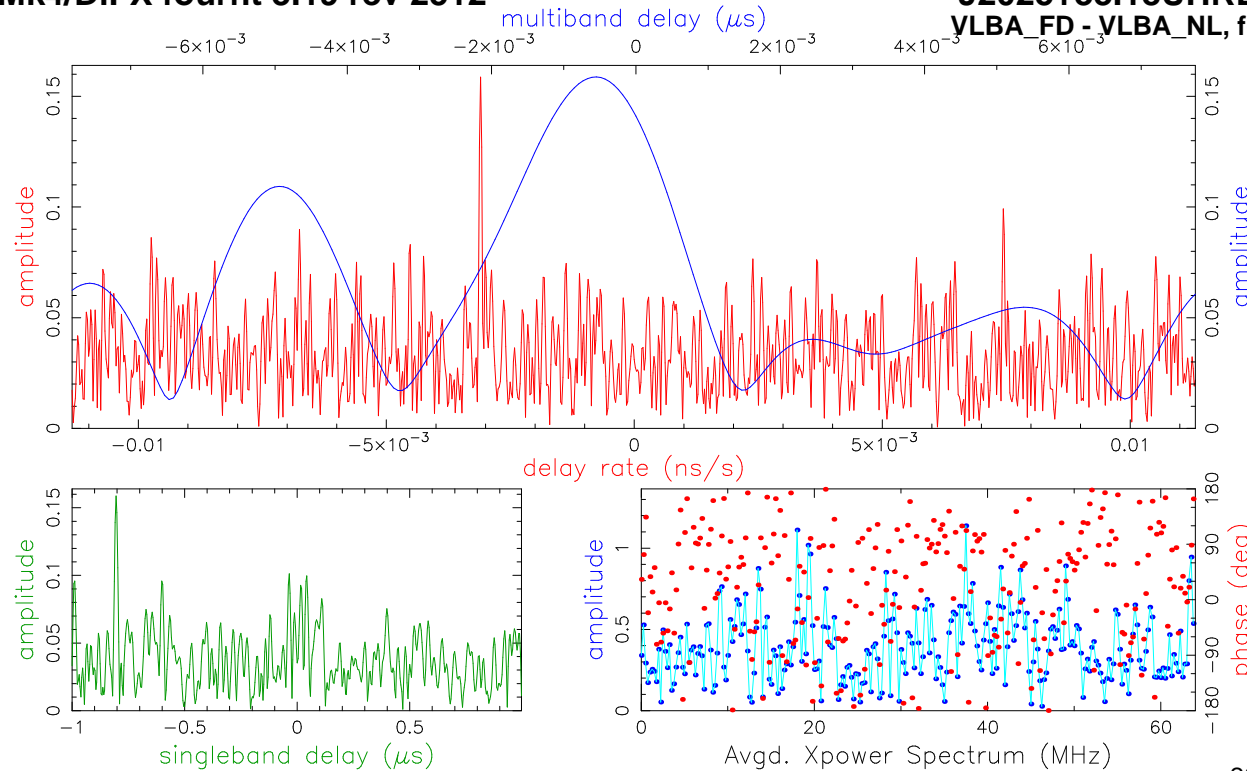
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	172.5	168.7	-146.0	-178.0	-139.2	-116.1	-170.8	151.5	Phase	-174.5
	0.3	0.4	0.2	0.4	0.1	0.3	0.4	0.4	Ampl.	0.3
	504.3	360.3	511.7	187.4	445.0	365.6	186.7	185.8	Sbd box	186.1
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	
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.79007638395E+02		Apriori delay (usec)		-4.78731833854E+02		Resid mbdelay (usec)		5.44546E-03	+/- 1.7E-04
Sband delay (usec)	-4.79008670604E+02		Apriori clock (usec)		-1.9241022E+01		Resid sbdelay (usec)		-2.76837E-01	+/- 1.4E-03
Phase delay (usec)	-4.78731839481E+02		Apriori clockrate (us/s)		-5.3399998E-07		Resid phdelay (usec)		-5.62735E-06	+/- 5.9E-07
Delay rate (us/s)	-1.34901374579E+00		Apriori rate (us/s)		-1.34902501834E+00		Resid rate (us/s)		1.12725E-05	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		9.08561870106E-06		Resid phase (deg)		-174.5	+/- 18.2

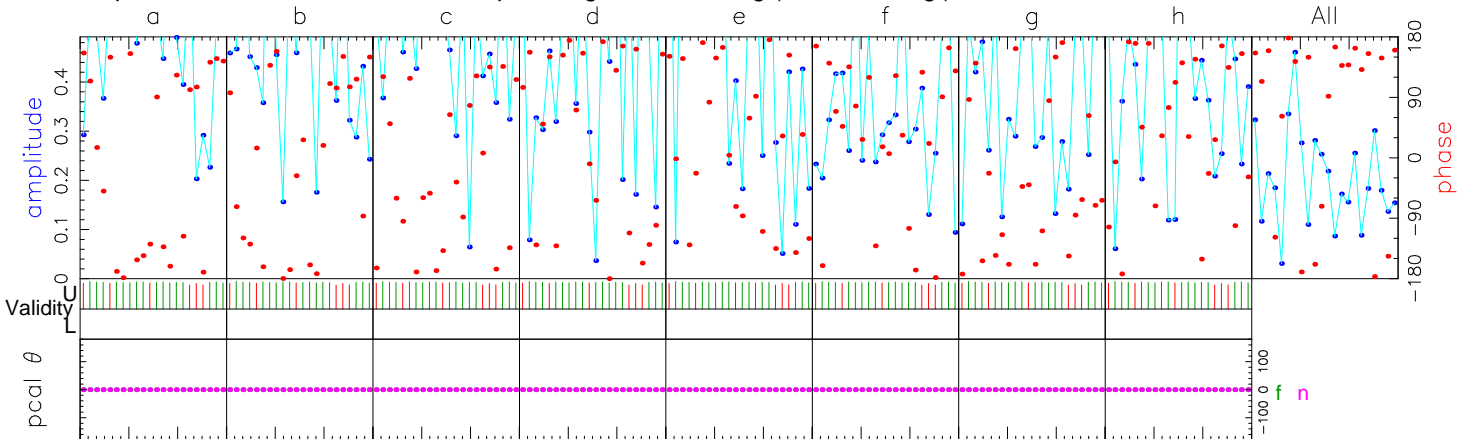
ph/seg (deg) 33.4 42.6 Search (1024X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 59.5 74.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.4 25.7 Inc. seg. avg. 0.248 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.1 44.8 Inc. frq. avg. 0.277 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.73.18UHRL





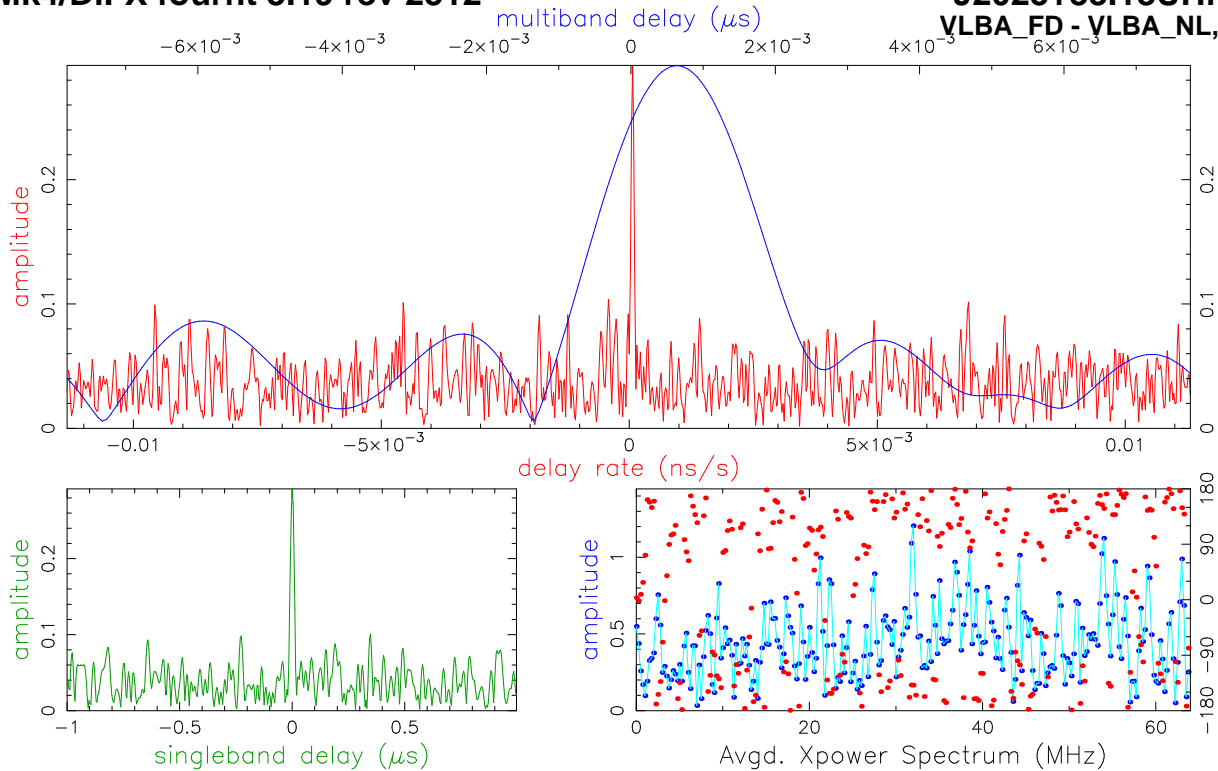
Fringe quality 0  
SNR 5.7  
Int time 172.542  
Amp 0.164  
Phase 165.7  
PFD 7.5e-01  
Delays (us)  
SBD -0.804209  
MBD -0.000525  
Fringe rate (Hz)  
-0.267634  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
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
Group delay (usec)(sbd)	169.9	158.7	-161.4	168.7	152.5	102.5	-106.8	168.4	Phase	165.7
Sband delay (usec)	0.4	0.2	0.1	0.3	0.2	0.2	0.1	0.1	Ampl.	0.2
Phase delay (usec)	51.1	32.4	63.7	50.5	124.1	364.7	177.6	180.0	Sbd box	51.1
Delay rate (us/s)	U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
	f 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	n 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	f 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	n 1000	1000	1000	1000	1000	1000	1000	1000		
	f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
	n W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Apriori delay (usec)									Resid mbdelay (usec)	-5.24513E-04 +/- 1.9E-04
Apriori clock (usec)									Resid sbdelay (usec)	-8.04209E-01 +/- 1.5E-03
Apriori clockrate (us/s)									Resid phdelay (usec)	5.34279E-06 +/- 6.5E-07
Apriori rate (us/s)									Resid rate (us/s)	-3.10697E-06 +/- 6.2E-09
Apriori accel (us/s/s)									Resid phase (deg)	165.7 +/- 20.1

ph/seg (deg) 46.8 47.1 Search (1024X32) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.7 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 46.5 28.4 Inc. seg. avg. 0.158 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 58.3 49.5 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  
 f: az 69.5 el 39.4 pa -75.8 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -1719.352 -779.291 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/fn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/fn.W.56.18UHRL

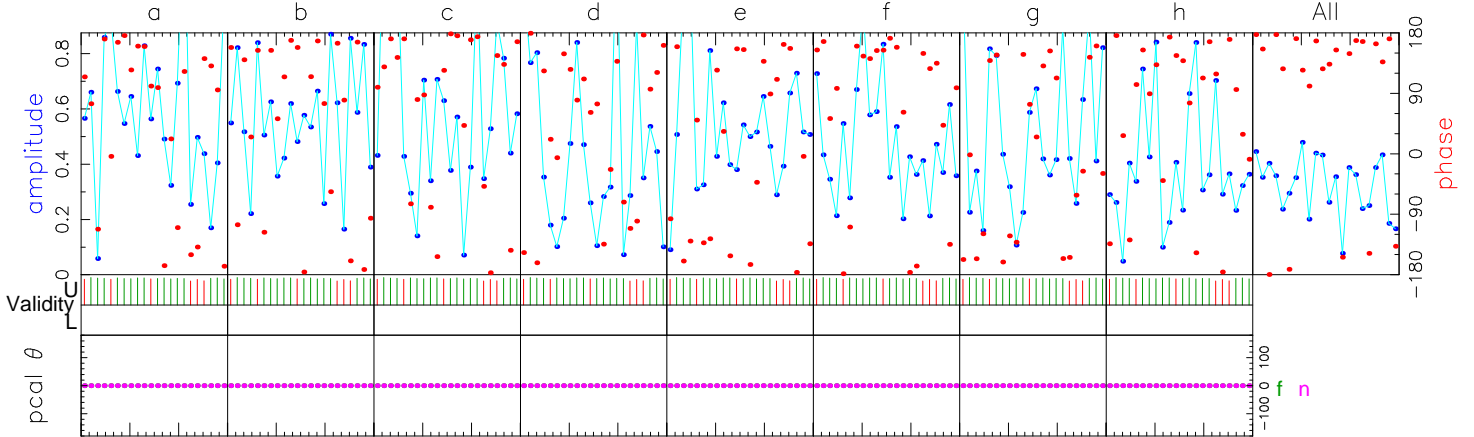


Fringe quality 9

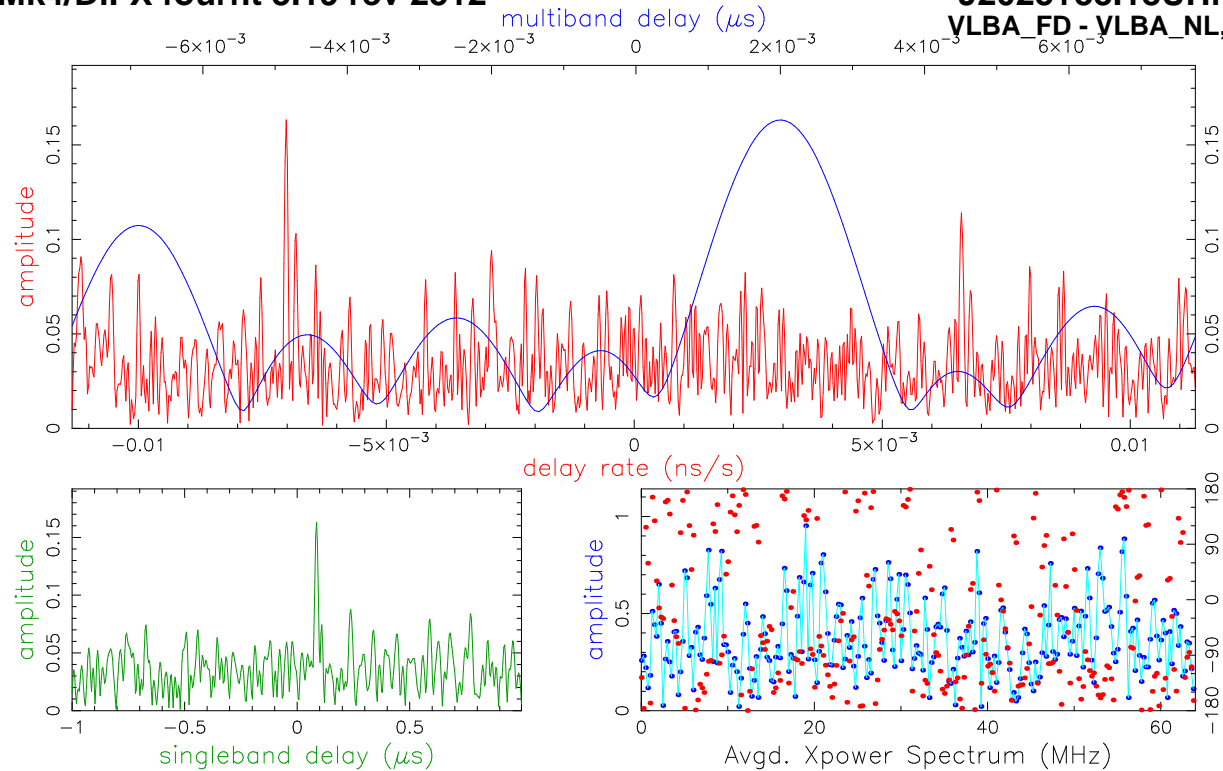
SNR 10.5  
Int time 172.542  
Amp 0.292  
Phase 159.4  
PFD 2.3e-17  
Delays (us)  
SBD 0.000354  
MBD 0.000645  
Fringe rate (Hz)  
0.006415  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

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

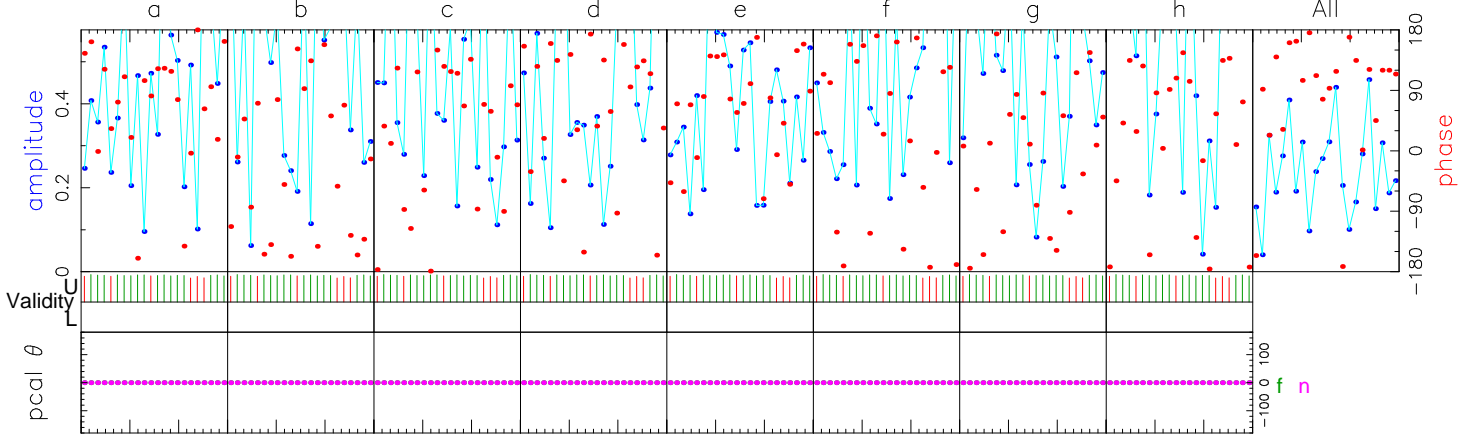


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.17314558463E+03									
Sband delay (usec)	-3.17314587625E+03									
Phase delay (usec)	-3.17314622461E+03									
Delay rate (us/s)	2.49965292403E-01									
Total phase (deg)			76.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude	0.292 +/- 0.028									
Search (1024X32)	0.283									
Interp.	0.000									
Inc. seg. avg.	0.294									
Inc. frq. avg.	0.288									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
f: az 69.5 el 39.4 pa -75.8										
n: az 85.8 el 51.6 pa -63.4										
u,v (fr/asec)	-1719.352	-779.291								
Control file: cf_1234_gmva										
Input file: /Exps/c201b/v1/1234/No0058/fn..18UHRL										
Output file: /Exps/c201b/v1/1234/No0058/fn.W.71.18UHRL										



Fringe quality 0  
SNR 5.9  
Int time 172.542  
Amp 0.192  
Phase 113.0  
PFD 4.4e-01  
Delays (us)  
SBD 0.085787  
MBD 0.001991  
Fringe rate (Hz) -0.604654  
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  
2020:199:143649  
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



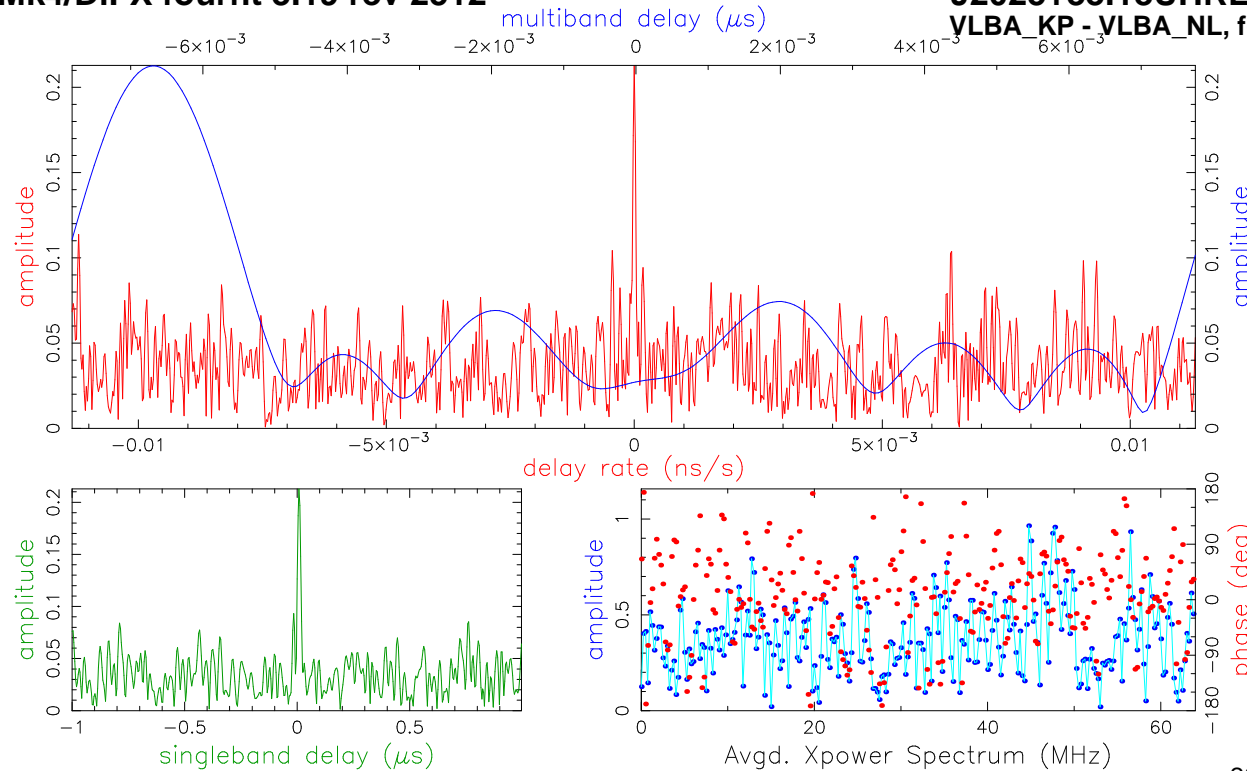
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.17306611405E+03	Apriori delay (usec)	-3.17314622975E+03	Resid mbdelay (usec)	1.99070E-03	+/-	1.9E-04
Sband delay (usec)	-3.17306044275E+03	Apriori clock (usec)	-2.8390610E+01	Resid sbdelay (usec)	8.57870E-02	+/-	1.5E-03
Phase delay (usec)	-3.17314622610E+03	Apriori clockrate (us/s)	-2.2499998E-07	Resid phdelay (usec)	3.64482E-06	+/-	6.3E-07
Delay rate (us/s)	2.49958198495E-01	Apriori rate (us/s)	2.49965217930E-01	Resid rate (us/s)	-7.01944E-06	+/-	6.1E-09
Total phase (deg)		Apriori accel (us/s/s)	6.91103430919E-06	Resid phase (deg)	113.0	+/-	19.6

ph/seg (deg)	52.1	Theor.	45.9	Amplitude	0.192 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.4		80.0	Search (1024X32)	0.159	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.0		27.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.6		48.3	Inc. seg. avg.	0.215	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.184	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 69.5 el 39.4 pa -75.8 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -1719.352 -779.291 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/fn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/fn.W.79.18UHRL



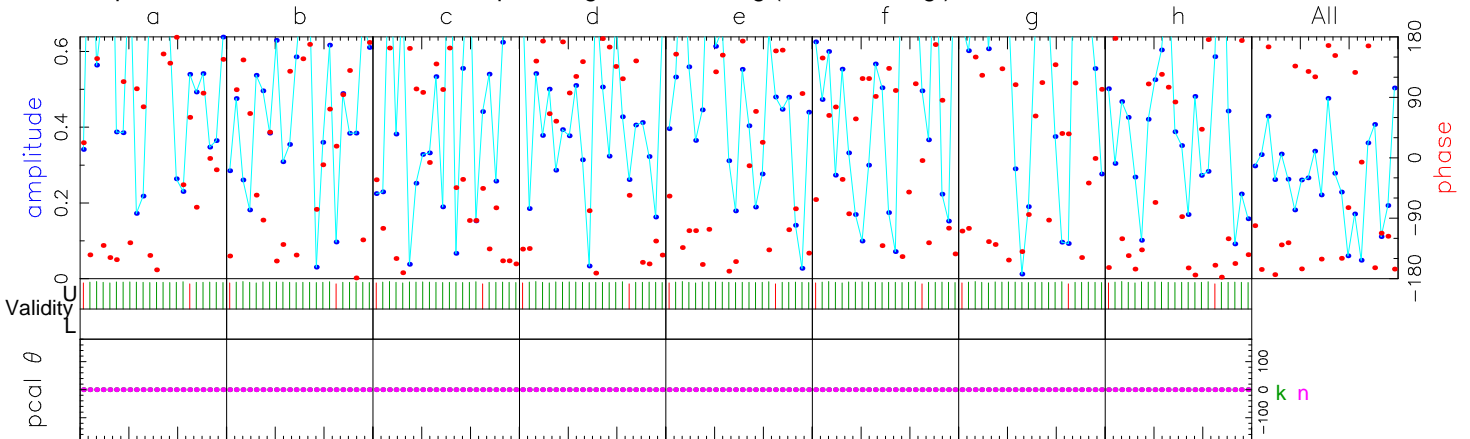


Fringe quality 9

SNR 7.7  
Int time 174.854  
Amp 0.213  
Phase -173.6  
PFD 2.3e-06  
Delays (us)  
SBD 0.008257  
MBD -0.006677  
Fringe rate (Hz) 0.000766  
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  
2020:199:143657  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

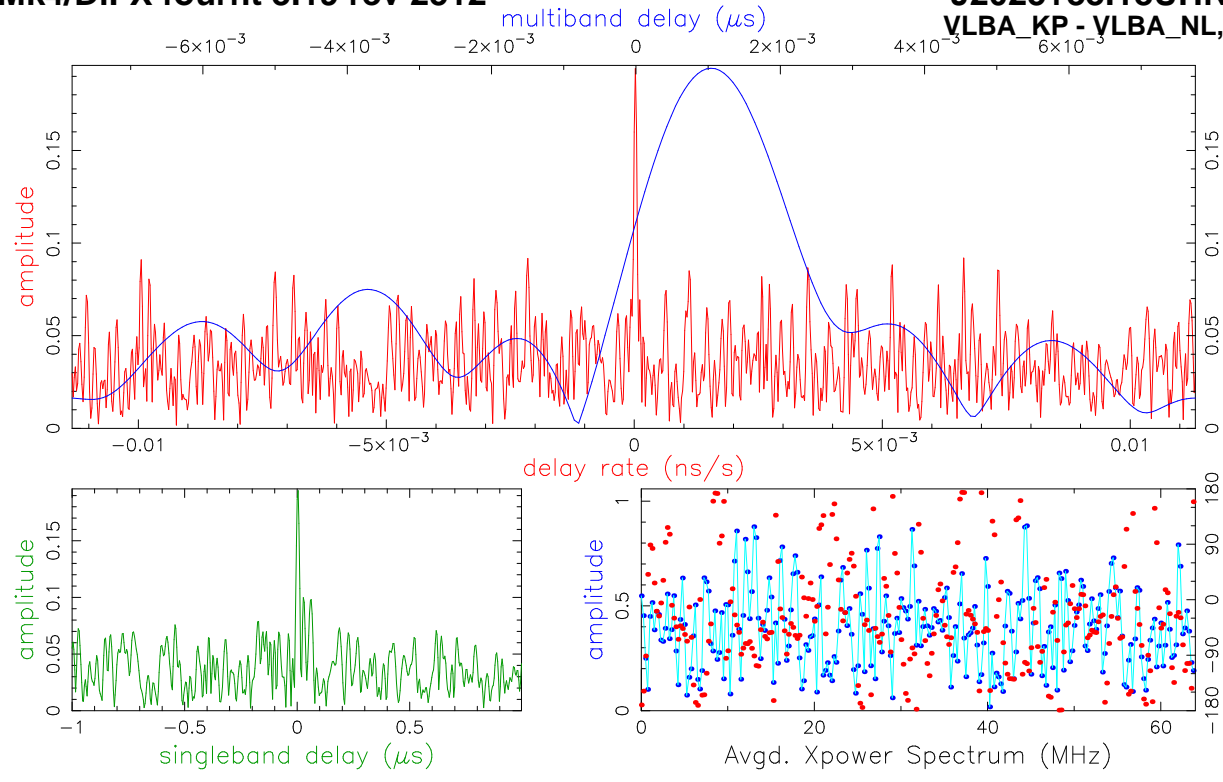
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-171.6	168.8	-154.7	165.2	-150.7	-178.2	-179.7	-176.8	Phase	-173.6
	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.2	Ampl.	0.2
	2.7	18.9	160.1	511.6	259.6	320.0	462.4	319.8	Sbd box	259.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	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)	-4.85598603589E+03		Apriori delay (usec)		-4.85599498361E+03		Resid mbdelay (usec)		-6.67728E-03	+/- 1.4E-04
Sband delay (usec)	-4.85598672661E+03		Apriori clock (usec)		-3.2635166E+01		Resid sbdelay (usec)		8.25700E-03	+/- 1.1E-03
Phase delay (usec)	-4.85599498921E+03		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		-5.59667E-06	+/- 4.8E-07
Delay rate (us/s)	3.00698843320E-01		Apriori rate (us/s)		3.00698834421E-01		Resid rate (us/s)		8.89807E-09	+/- 4.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.70732014089E-05		Resid phase (deg)		-173.6	+/- 14.9

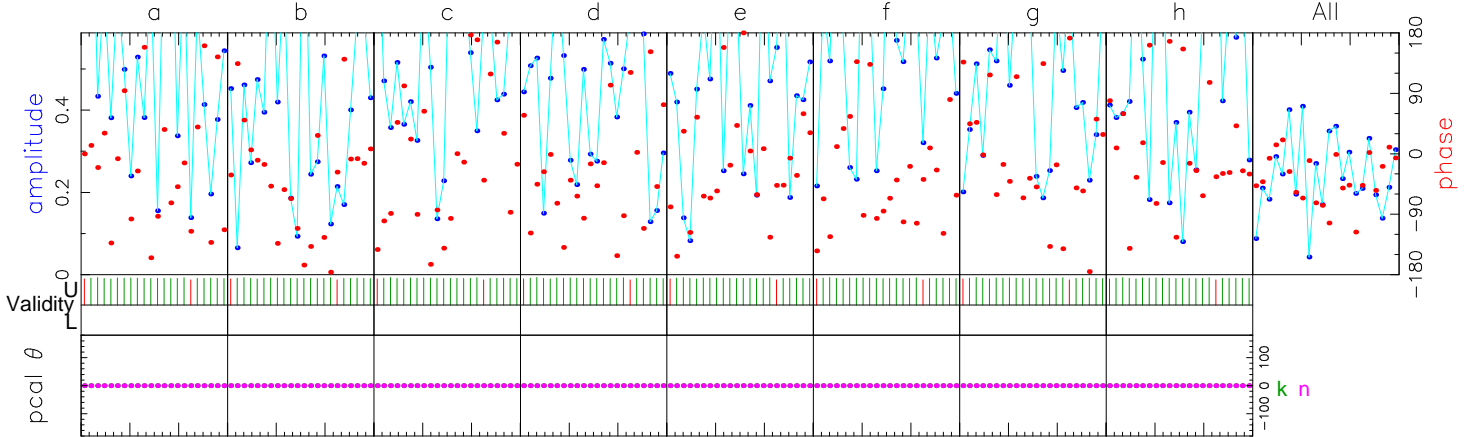
ph/seg (deg) 56.5 34.9 Amplitude 0.213 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.2 60.9 Search (1024X32) 0.203 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.9 21.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 27.8 36.7 Inc. seg. avg. 0.231 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 k: az 68.2 el 33.7 pa -71.5 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -2061.361 -98.386 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/kn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/kn.W.112.18UHRL simultaneous interpolator





Fringe quality 0  
SNR 7.1  
Int time 174.854  
Amp 0.196  
Phase -35.7  
PFD 2.1e-04  
Delays (us)  
SBD 0.002758  
MBD 0.001008  
Fringe rate (Hz) 0.002077  
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  
2020:199:143702  
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



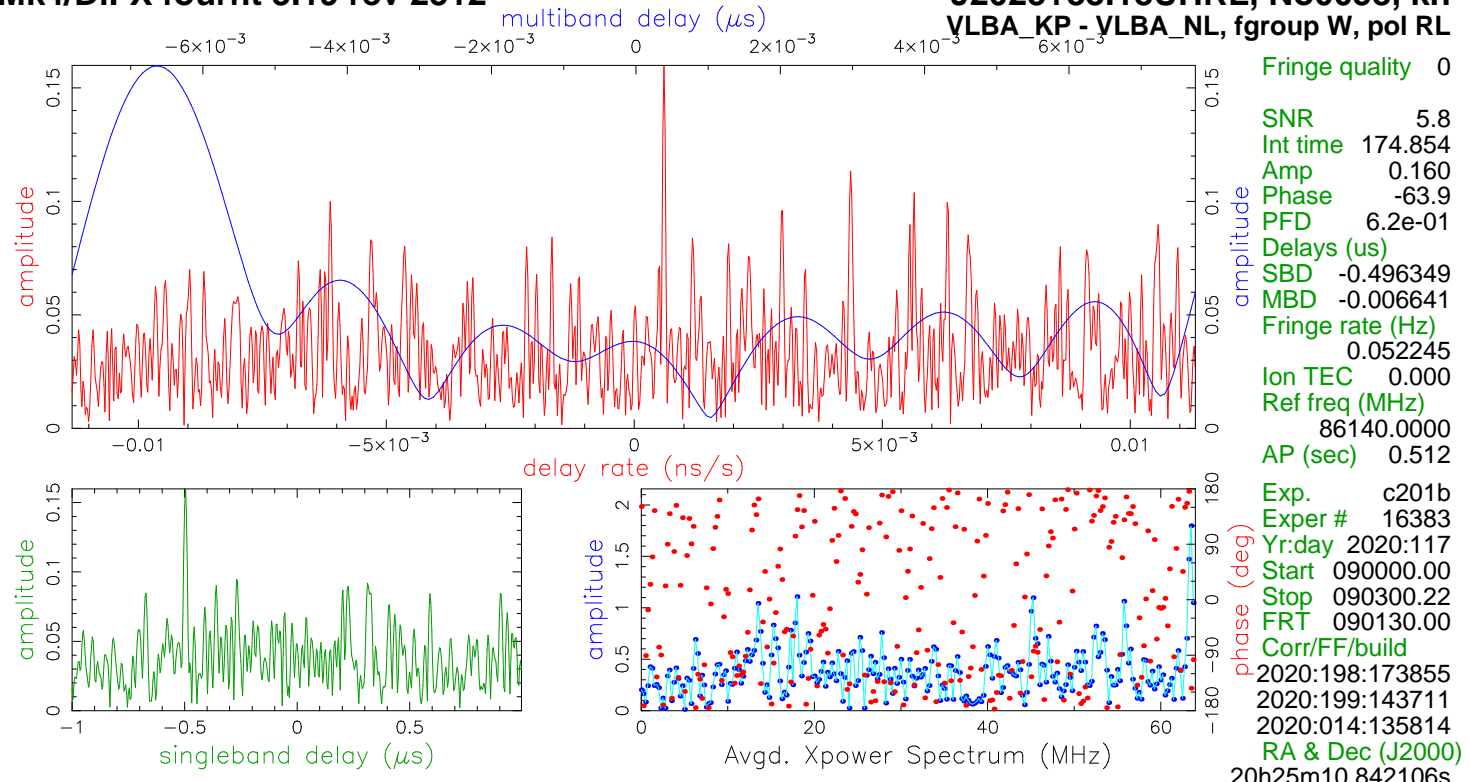
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.85599397553E+03				-4.85599498361E+03				1.00808E-03	+/- 1.5E-04
Sband delay (usec)	-4.85599222536E+03				-3.2635166E+01				2.75825E-03	+/- 1.2E-03
Phase delay (usec)	-4.85599498476E+03				-3.2859999E-07				-1.14976E-06	+/- 5.2E-07
Delay rate (us/s)	3.00698858529E-01				3.00698834421E-01				2.41080E-08	+/- 5.0E-09
Total phase (deg)			-355.5		1.70732014089E-05				-35.7	+/- 16.2
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
ph/seg (deg)	36.7	37.9			0.193					
amp/seg (%)	53.0	66.2			0.000					
ph/frq (deg)	21.5	22.9			0.199					
amp/frq (%)	33.6	39.9			0.188					
Search (1024X32)										
Inc. seg. avg.										
Inc. frq. avg.										
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

k: az 68.2 el 33.7 pa -71.5      n: az 85.8 el 51.6 pa -63.4      u,v (fr/asec) -2061.361 -98.386      simultaneous interpolator  
Control file: cf\_1234\_gmva    Input file: /Exps/c201b/v1/1234/No0058/kn.18UHRL    Output file: /Exps/c201b/v1/1234/No0058/kn.W.143.18UHRL

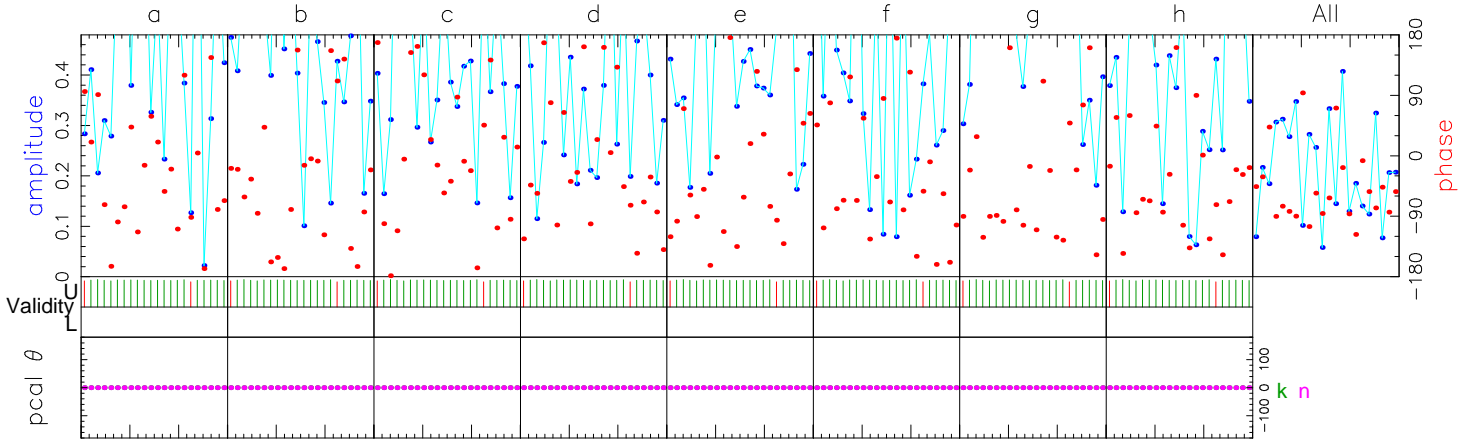


Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, kn  
VLBA\_KP - VLBA\_NL, fgroup W, pol RL



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

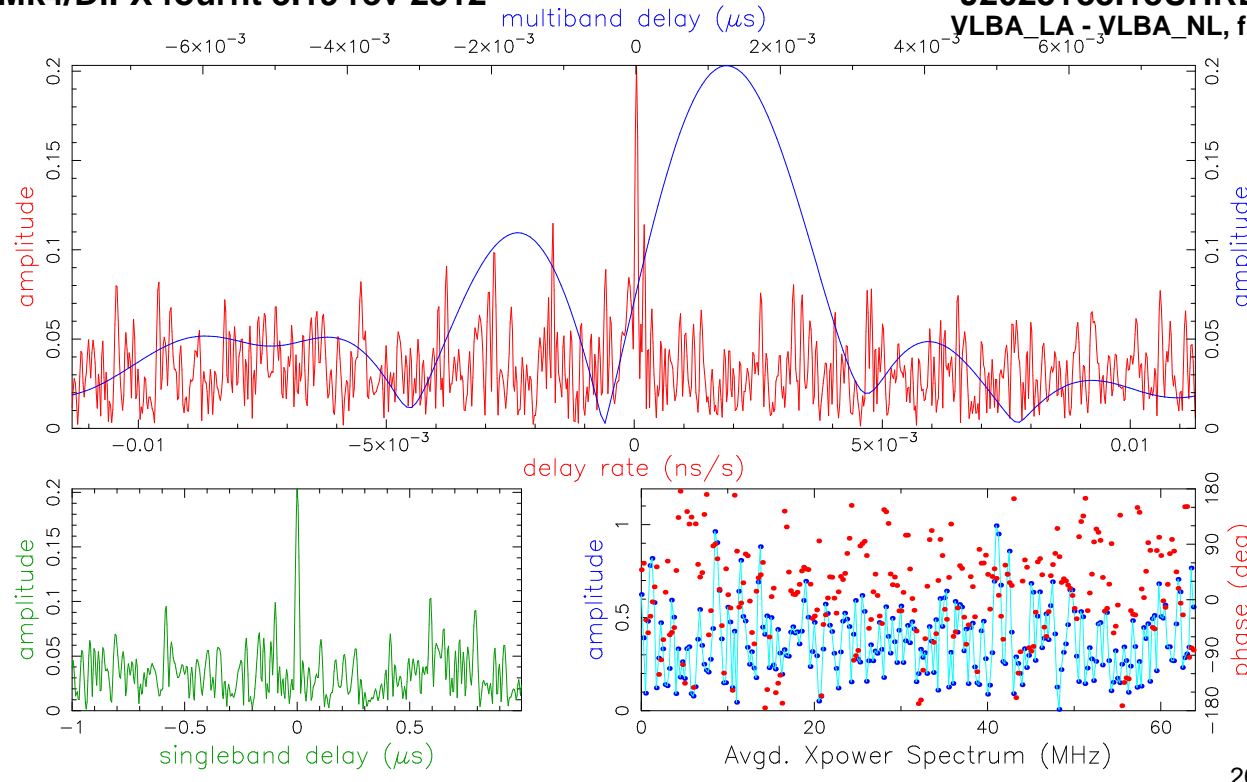


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-4.8564859958E+03									
Sband delay (usec)	-4.85649133236E+03									
Phase delay (usec)	-4.85599498567E+03									
Delay rate (us/s)	3.00699440937E-01									
Total phase (deg)			-23.7							
Apriori delay (usec)					-4.85599498361E+03					
Apriori clock (usec)					-3.2635166E+01					
Apriori clockrate (us/s)					-3.2859999E-07					
Apriori rate (us/s)					3.00698834421E-01					
Apriori accel (us/s/s)					1.70732014089E-05					
Resid mbdelay (usec)									-6.64097E-03	+/- 1.9E-04
Resid sbdelay (usec)									-4.96349E-01	+/- 1.5E-03
Resid phdelay (usec)									-2.05961E-06	+/- 6.4E-07
Resid rate (us/s)									6.06515E-07	+/- 6.1E-09
Resid phase (deg)									-63.9	+/- 19.8

	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)	56.5	46.5	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.1	81.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	22.8	28.1	Inc. seg. avg.	0.161	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	37.9	49.0	Inc. frq. avg.	0.150	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

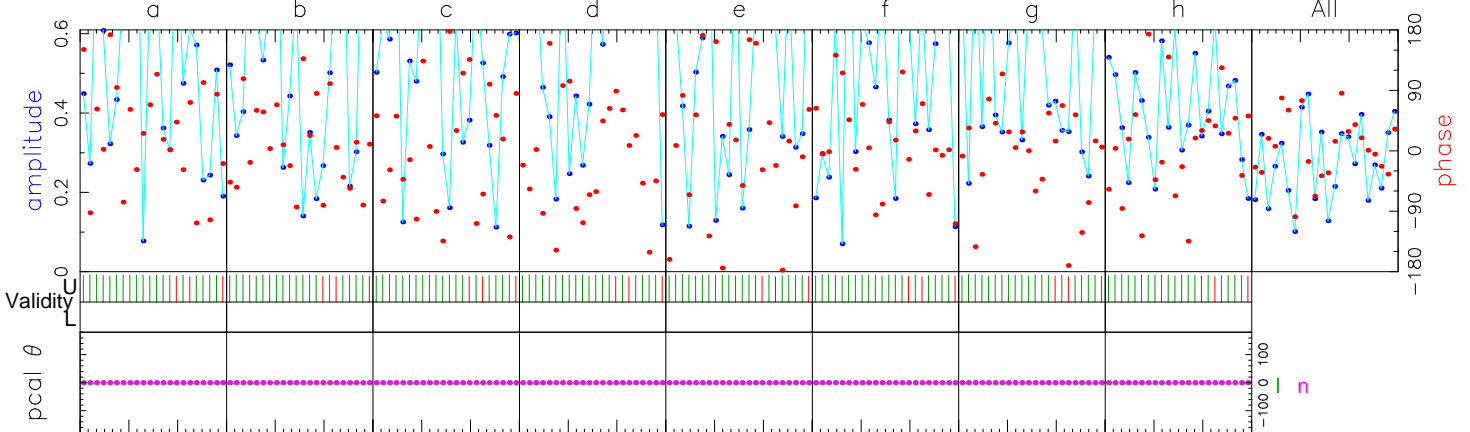
k: az 68.2 el 33.7 pa -71.5      n: az 85.8 el 51.6 pa -63.4      u,v (fr/asec) -2061.361 -98.386      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0058/kn..18UHRL      Output file: /Exps/c201b/v1/1234/No0058/kn.W.199.18UHRL



Fringe quality 9  
 SNR 7.3  
 Int time 174.712  
 Amp 0.203  
 Phase 10.3  
 PFD 3.2e-05  
 Delays (us)  
 SBD 0.000356  
 MBD 0.001272  
 Fringe rate (Hz) 0.003550  
 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  
 2020:199:143656  
 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

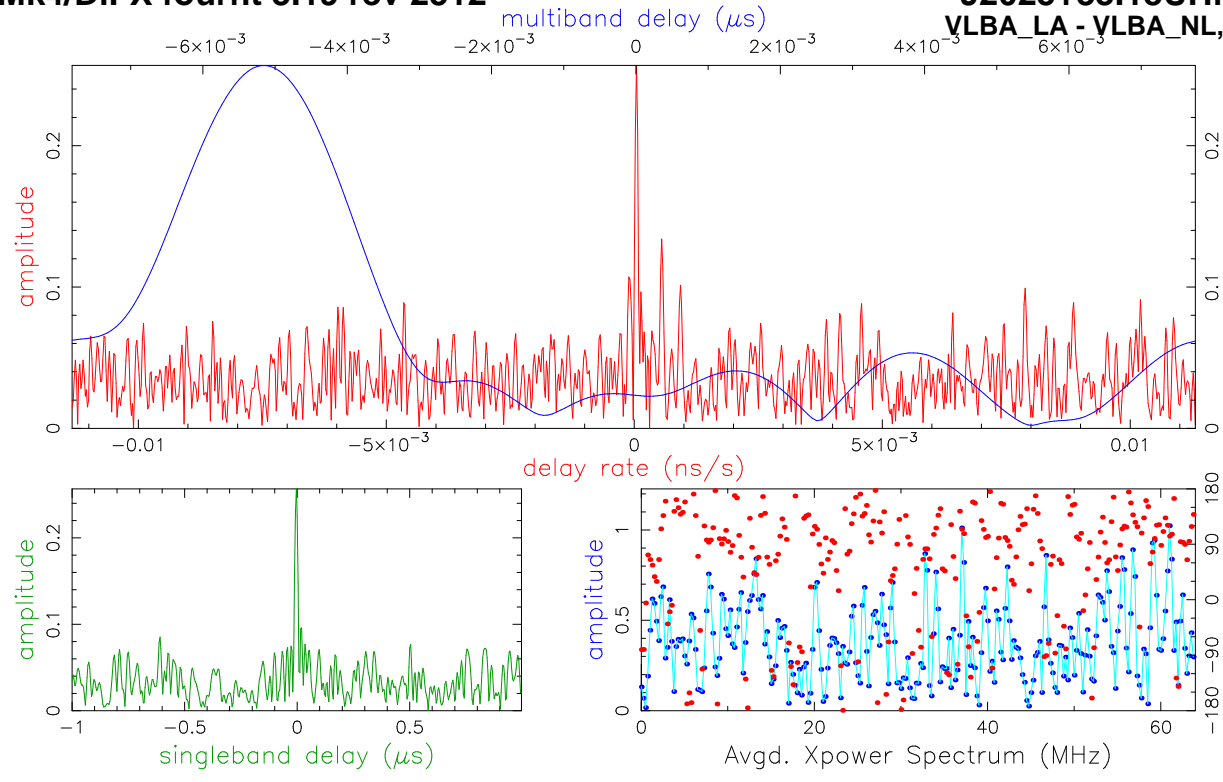


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	-3.23155050677E+03	Apriori delay (usec)	-3.23155177905E+03	Resid mbdelay (usec)	1.27229E-03	+/-	1.5E-04
Sband delay (usec)	-3.23155142305E+03	Apriori clock (usec)	-3.5997139E+01	Resid sbdelay (usec)	3.56000E-04	+/-	1.2E-03
Phase delay (usec)	-3.23155177872E+03	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	3.33582E-07	+/-	5.0E-07
Delay rate (us/s)	2.15370320849E-01	Apriori rate (us/s)	2.15370279639E-01	Resid rate (us/s)	4.12097E-08	+/-	4.8E-09
Total phase (deg)	-78.8	Apriori accel (us/s/s)	1.18866935474E-05	Resid phase (deg)	10.3	+/-	15.6

ph/seg (deg)	46.8	Theor.	36.6	Amplitude	0.203 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	60.4		63.8	Search (1024X32)	0.198	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	20.2		22.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	38.2		38.5	Inc. seg. avg.	0.230	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.196	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 72.7 el 39.2 pa -68.9      n: az 85.8 el 51.6 pa -63.4      u,v (fr/asec) -1476.432 33.209      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c201b/v1/1234/No0058/In..18UHRL      Output file: /Exps/c201b/v1/1234/No0058/In.W.105.18UHRL

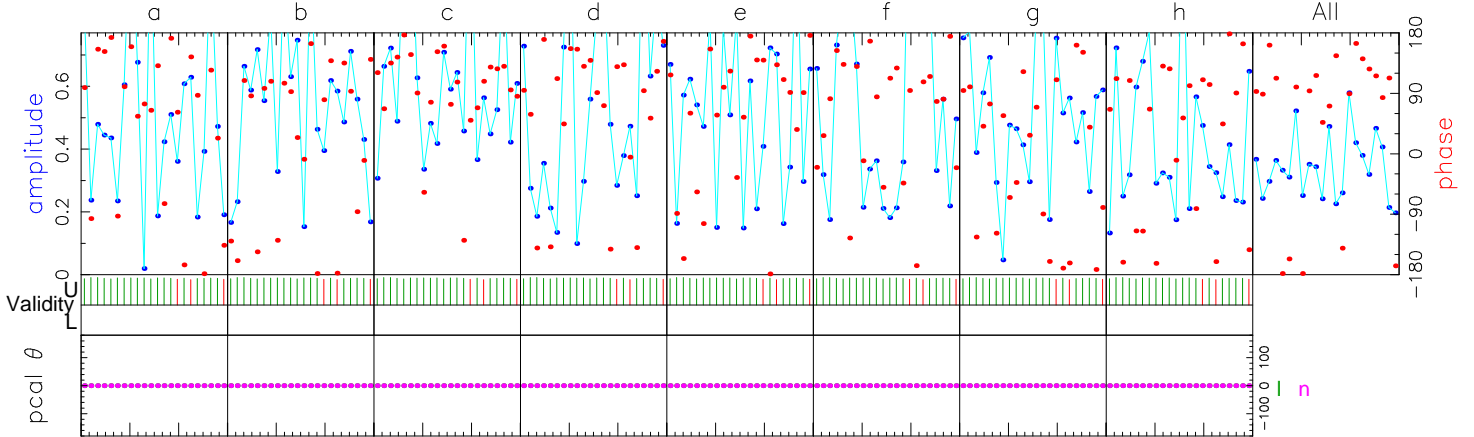


Fringe quality 9

SNR 9.3  
 Int time 174.713  
 Amp 0.257  
 Phase 121.4  
 PFD 3.3e-12  
 Delays (us)  
 SBD -0.004015  
 MBD -0.005156  
 Fringe rate (Hz) 0.003084  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

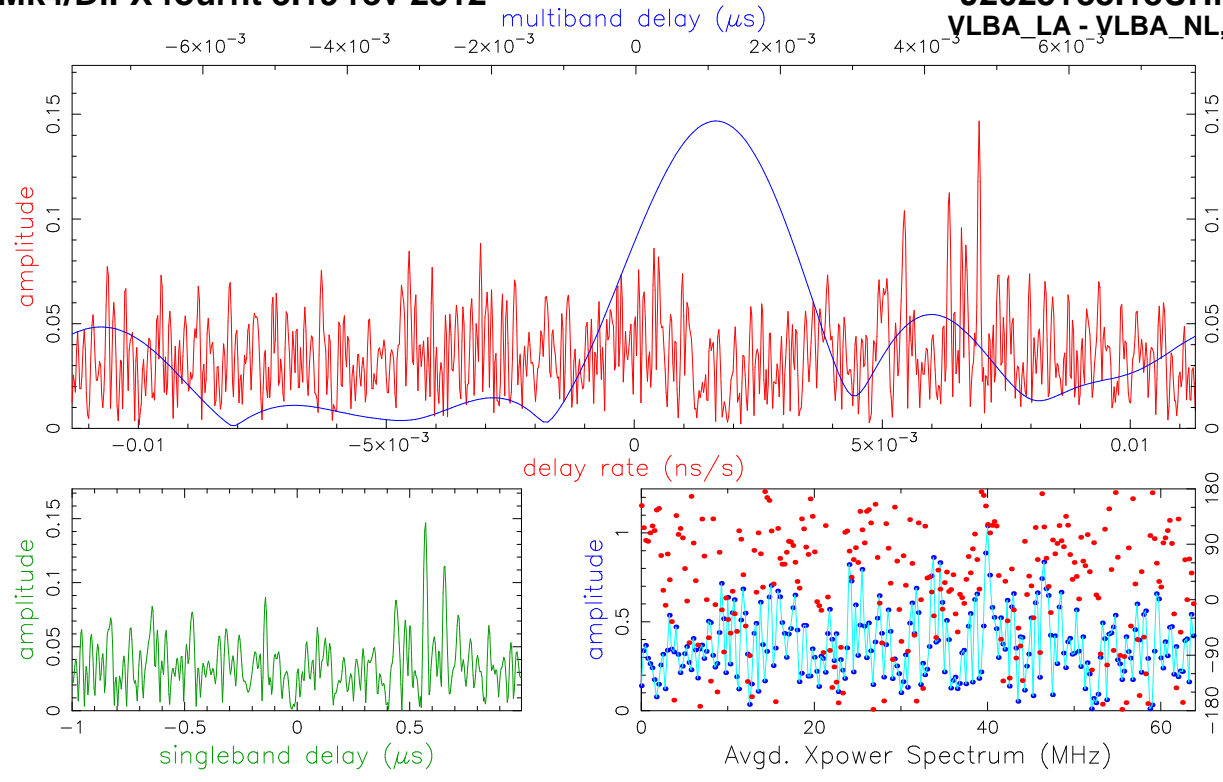
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143700  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

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



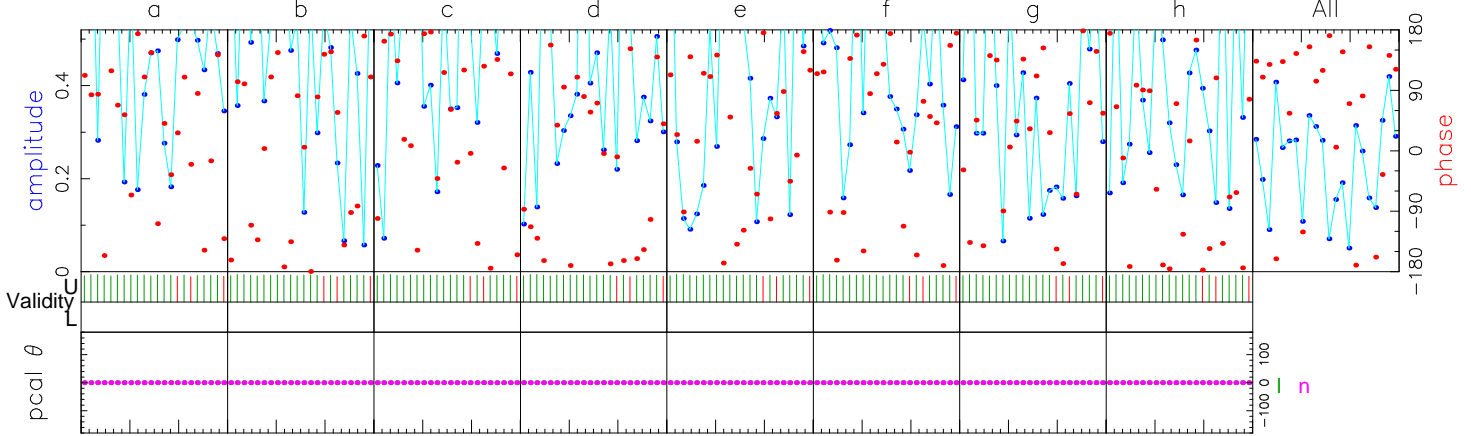
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-3.23155693536E+03			-3.23155177905E+03				-5.15631E-03	+/- 1.2E-04
Sband delay (usec)		-3.23155579405E+03			-3.5997139E+01				-4.01500E-03	+/- 9.3E-04
Phase delay (usec)		-3.23155177514E+03			-4.8500001E-07				3.91618E-06	+/- 4.0E-07
Delay rate (us/s)		2.15370315445E-01			2.15370279639E-01				3.58063E-08	+/- 3.8E-09
Total phase (deg)			32.3		1.18866935474E-05				121.4	+/- 12.3
	RMS	Theor.	Amplitude	0.257 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	46.3	29.0	Search (1024X32)	0.246	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	51.7	50.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	7.5	17.5	Inc. seg. avg.	0.305	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	40.3	30.5	Inc. frq. avg.	0.247	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00





Fringe quality 0  
 SNR 5.3  
 Int time 174.712  
 Amp 0.173  
 Phase 136.5  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.569306  
 MBD 0.001084  
 Fringe rate (Hz) 0.600440  
 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

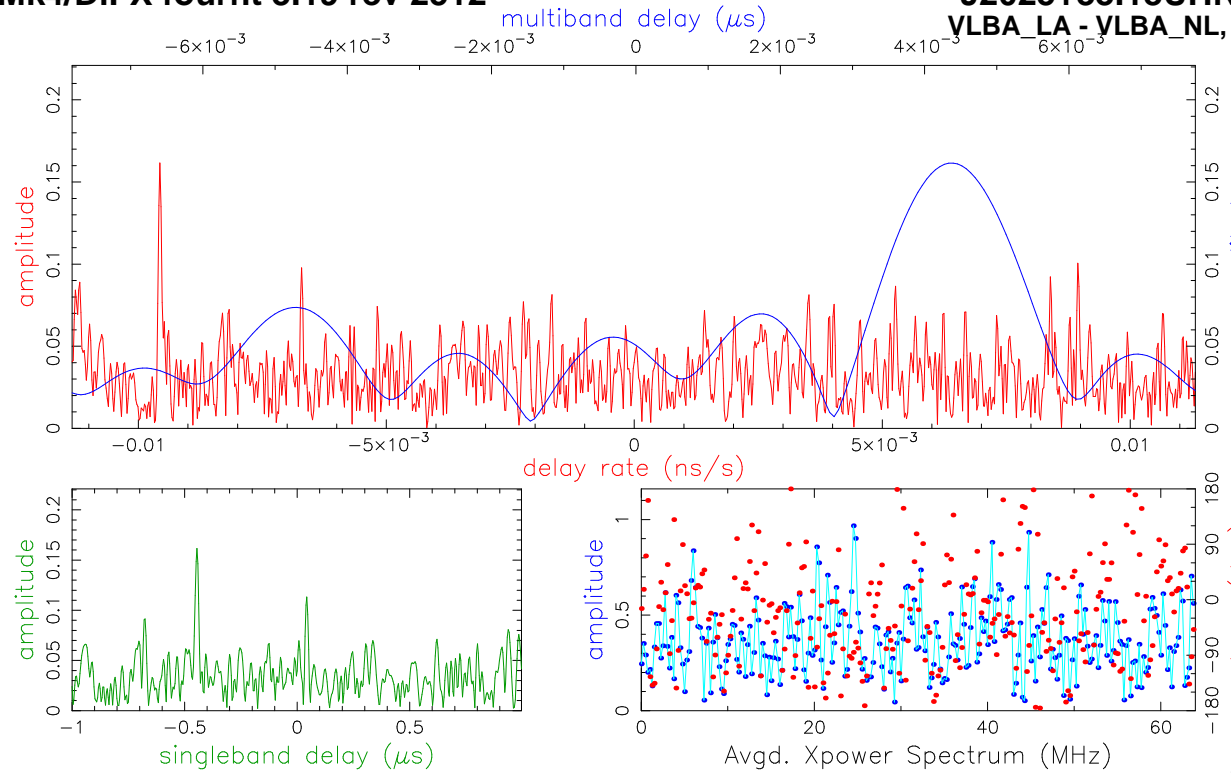


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.23098819485E+03	Apriori delay (usec)	-3.23155177905E+03	Resid mbdelay (usec)	1.08420E-03	+/-	2.0E-04
Sband delay (usec)	-3.23098247330E+03	Apriori clock (usec)	-3.5997139E+01	Resid sbdelay (usec)	5.69306E-01	+/-	1.6E-03
Phase delay (usec)	-3.23155177465E+03	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	4.40324E-06	+/-	6.9E-07
Delay rate (us/s)	2.15377250154E-01	Apriori rate (us/s)	2.15370279639E-01	Resid rate (us/s)	6.97051E-06	+/-	6.7E-09
Total phase (deg)	47.4	Apriori accel (us/s/s)	1.18866935474E-05	Resid phase (deg)	136.5	+/-	21.5

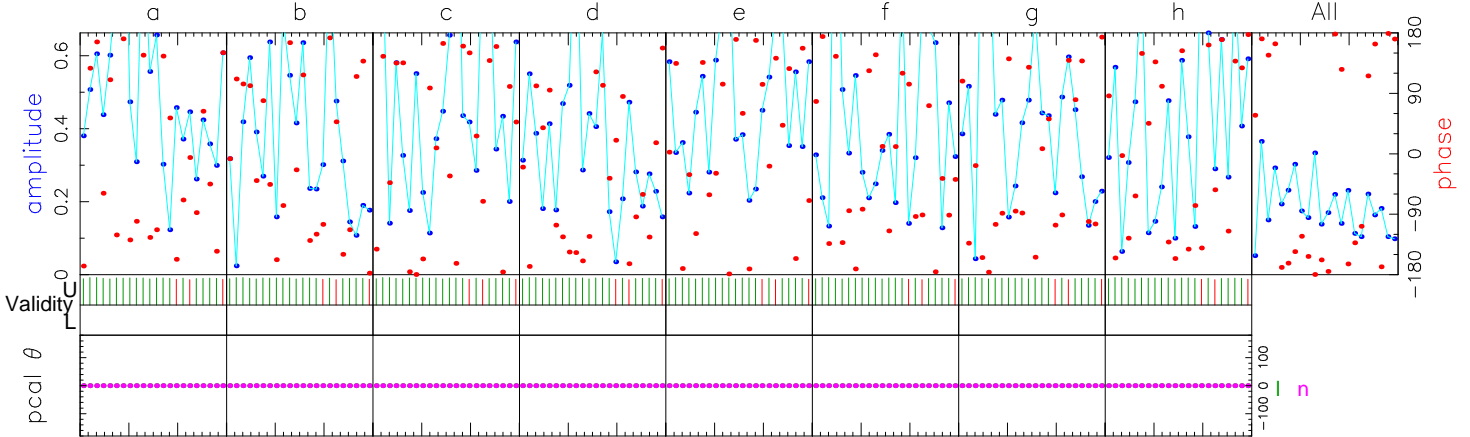
ph/seg (deg)	63.0	Theor.	50.4	Amplitude	0.173 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	92.3	Search (1024X32)	0.145	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.6	Inc. seg. avg.	0.201	Inc. frq. avg.	0.159	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.8	Inc. frq. avg.	0.159			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

l: az 72.7 el 39.2 pa -68.9 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) -1476.432 33.209 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/In..18UHRL Output file: /Exps/c201b/v1/1234/No0058/In.W.151.18UHRL



Fringe quality 0  
 SNR 5.8  
 Int time 174.713  
 Amp 0.221  
 Phase -176.8  
 PFD 4.8e-01  
 Delays (us)  
 SBD -0.445421  
 MBD 0.004366  
 Fringe rate (Hz) -0.825401  
 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  
 2020:199:143705  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

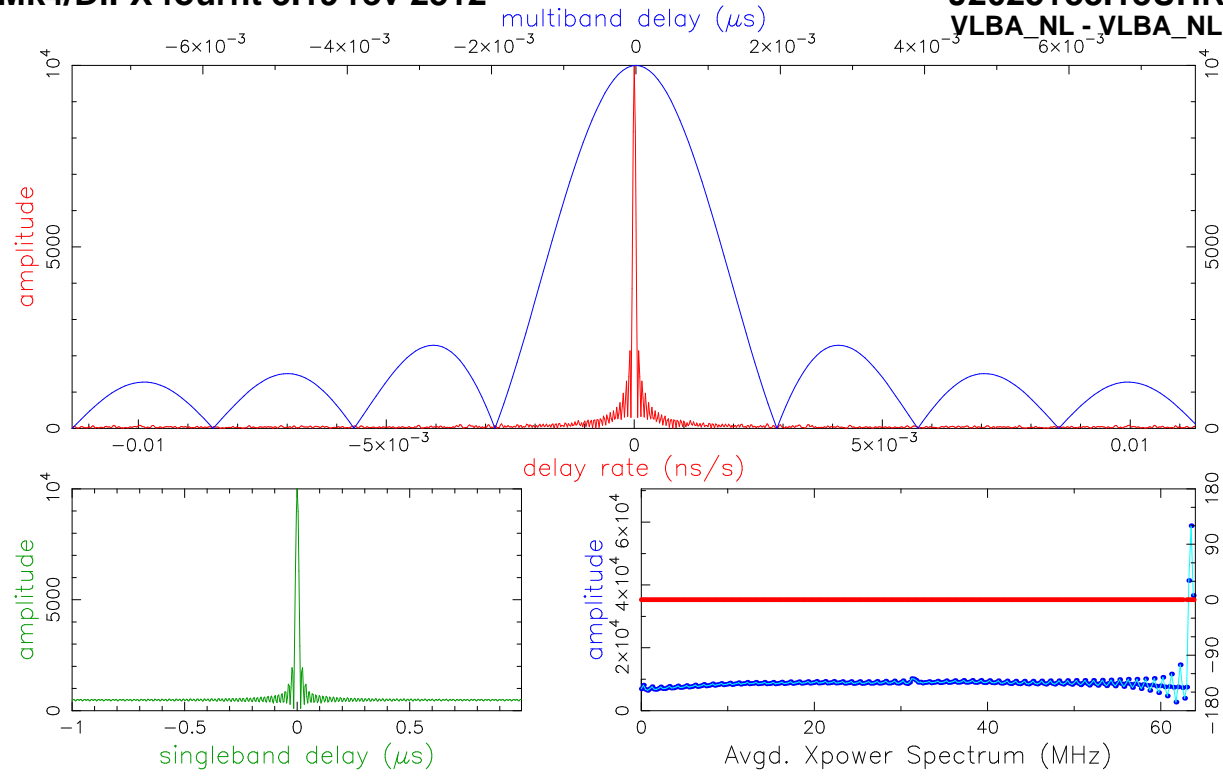
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	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		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.23200053790E+03	Apriori delay (usec)	-3.23155177905E+03	Resid mbdelay (usec)	4.36616E-03	+/-	1.9E-04
Sband delay (usec)	-3.23199720005E+03	Apriori clock (usec)	-3.5997139E+01	Resid sbdelay (usec)	-4.45421E-01	+/-	1.5E-03
Phase delay (usec)	-3.23155178476E+03	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	-5.70275E-06	+/-	6.3E-07
Delay rate (us/s)	2.15360697550E-01	Apriori rate (us/s)	2.15370279639E-01	Resid rate (us/s)	-9.58209E-06	+/-	6.1E-09
Total phase (deg)	-266.0	Apriori accel (us/s/s)	1.18866935474E-05	Resid phase (deg)	-176.8	+/-	19.6

ph/seg (deg)	41.5	Theor.	46.0	Amplitude	0.221 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	51.8	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	21.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	42.8	Inc. seg. avg.	0.195	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	0.206	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

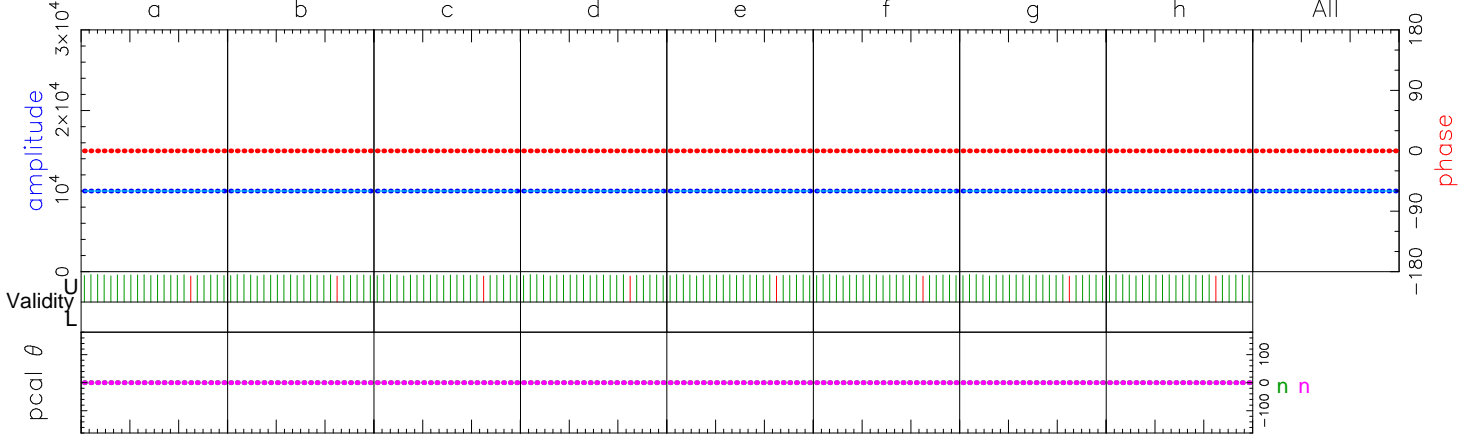


Fringe quality 9

SNR 362986.3  
Int time 176.191  
Amp 10000.005  
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  
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

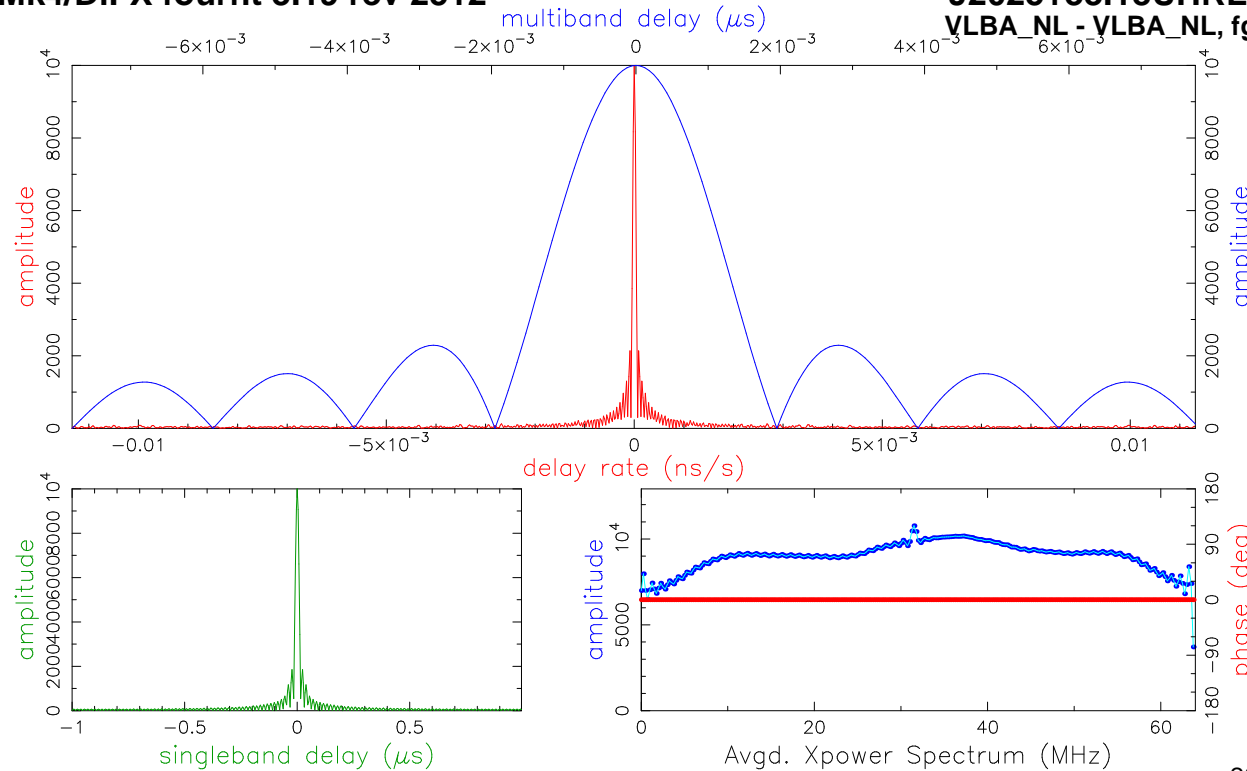


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000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

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08  
 Phase delay (usec) 1.13181174979E-18 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.13181E-18 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.8E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.005 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.005 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. 10000.005 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 85.8 el 51.6 pa -63.4 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nn.W.120.18UHRL

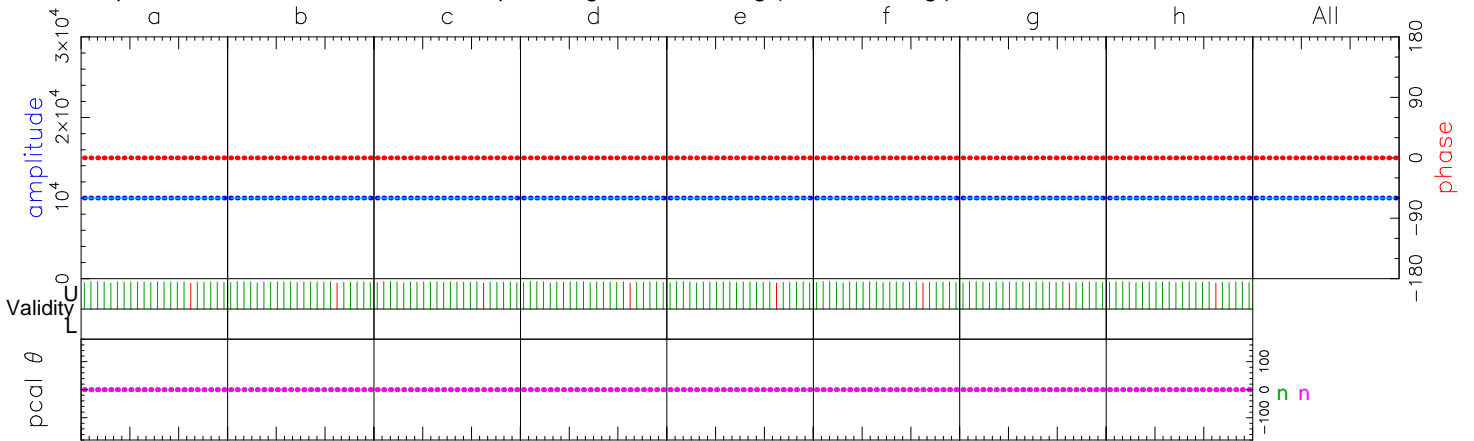


Fringe quality 9

SNR 362986.4  
Int time 176.192  
Amp 10000.000  
Phase -0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
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., 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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 3.0E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 2.4E-08
Phase delay (usec)	-2.06360053341E-20	-2.06360053341E-20	-2.06360053341E-20	-2.06360053341E-20	-2.06360053341E-20	-2.06360053341E-20	-2.06360053341E-20	-2.06360053341E-20	-2.06360E-20	+/- 1.0E-11
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 9.8E-14
Total phase (deg)			-0.0						-0.0	+/- 0.0

ph/seg (deg) 0.0 0.0  
amp/seg (%) 0.0 0.0  
ph/frq (deg) 0.0 0.0  
amp/frq (%) 0.0 0.0

n: az 85.8 el 51.6 pa -63.4  
Control file: cf\_1234\_gmva

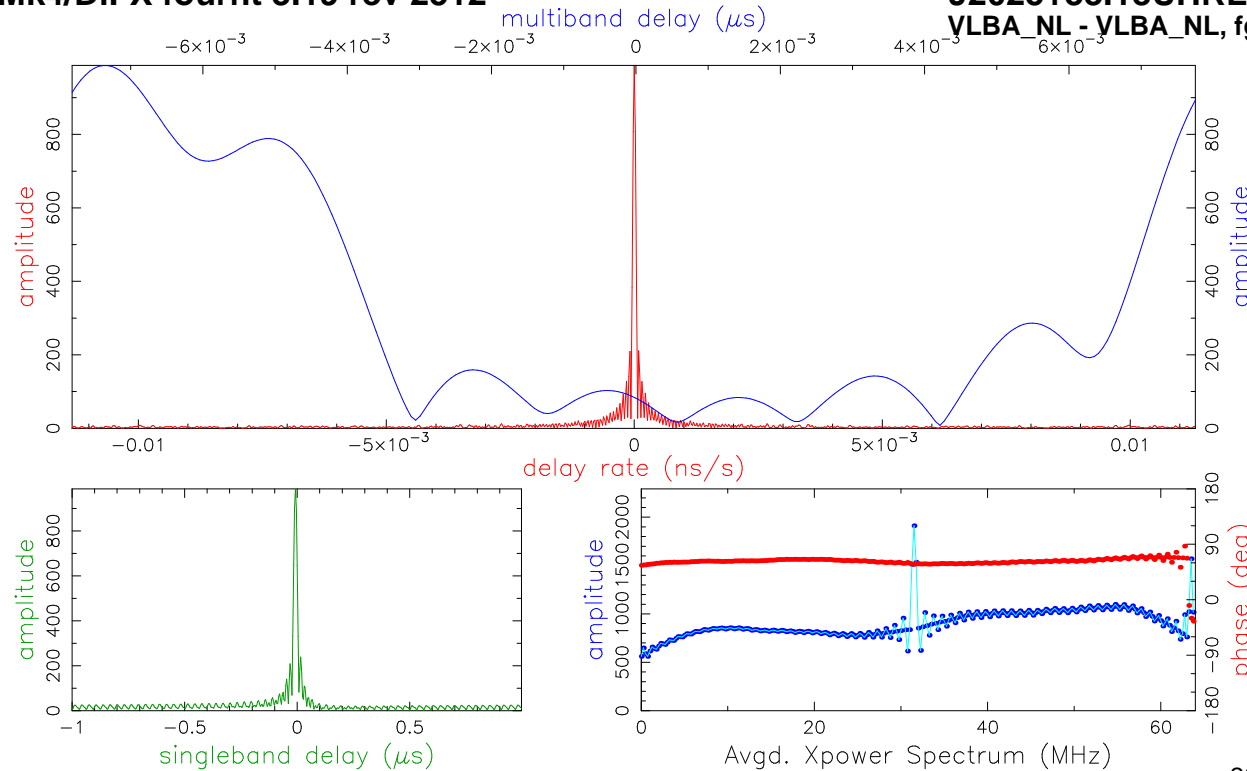
n: az 85.8 el 51.6 pa -63.4  
Input file: /Exps/c201b/v1/1234/No0058/nn..18UHRL

u,v (fr/asec) 0.000 0.000  
Output file: /Exps/c201b/v1/1234/No0058/nn.W.130.18UHRL

simultaneous interpolator

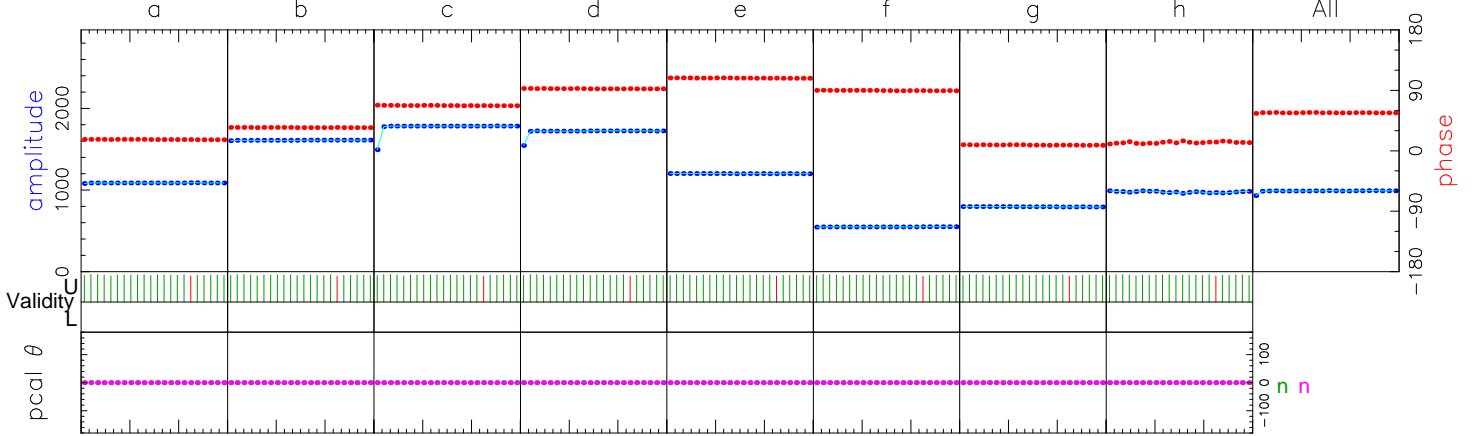
Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 5  
SNR 35854.6  
Int time 176.191  
Amp 987.769  
Phase 56.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.007825  
MBD -0.007355  
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  
2020:199:143703  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

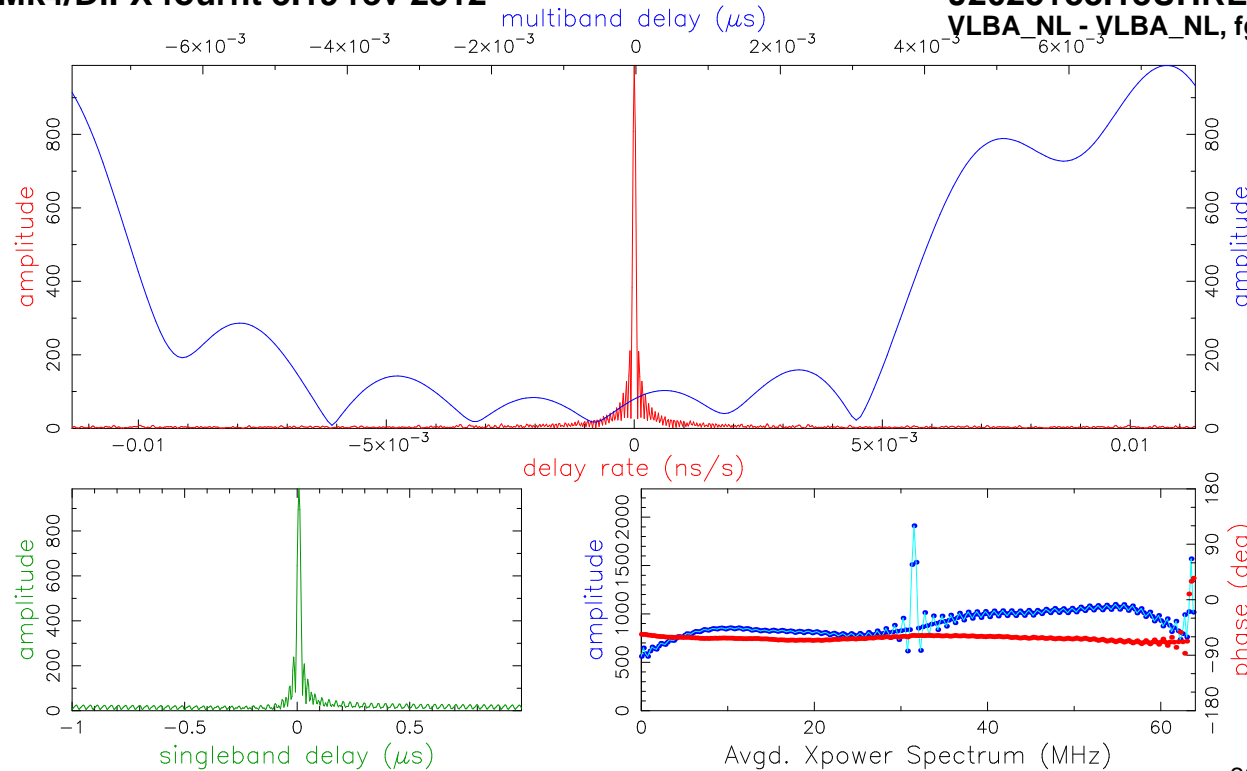
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-7.35528125000E-03			0.00000000000E+00				Resid mbdelay (usec)	-7.35528E-03 +/- 3.0E-08
Sband delay (usec)		-7.82525000000E-03			0.0000000E+00				Resid sbdelay (usec)	-7.82525E-03 +/- 2.4E-07
Phase delay (usec)		1.82473477548E-06			0.0000000E+00				Resid phdelay (usec)	1.82473E-06 +/- 1.0E-10
Delay rate (us/s)		5.24332638492E-11			0.00000000000E+00				Resid rate (us/s)	5.24333E-11 +/- 9.9E-13
Total phase (deg)			56.6		0.00000000000E+00				Resid phase (deg)	56.6 +/- 0.0
ph/seg (deg)	0.3	0.0			987.769 +/- 0.028				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	1.2	0.0			987.450				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	43.7	0.0			0.000				Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	48.2	0.0			987.778				Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
					1213.777				Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
									nlags: 256	t_cohere infinite
n: az 85.8 el 51.6 pa -63.4										ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva										simultaneous interpolator

Input file: /Exps/c201b/v1/1234/No0058/nn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nn.W.149.18UHRL



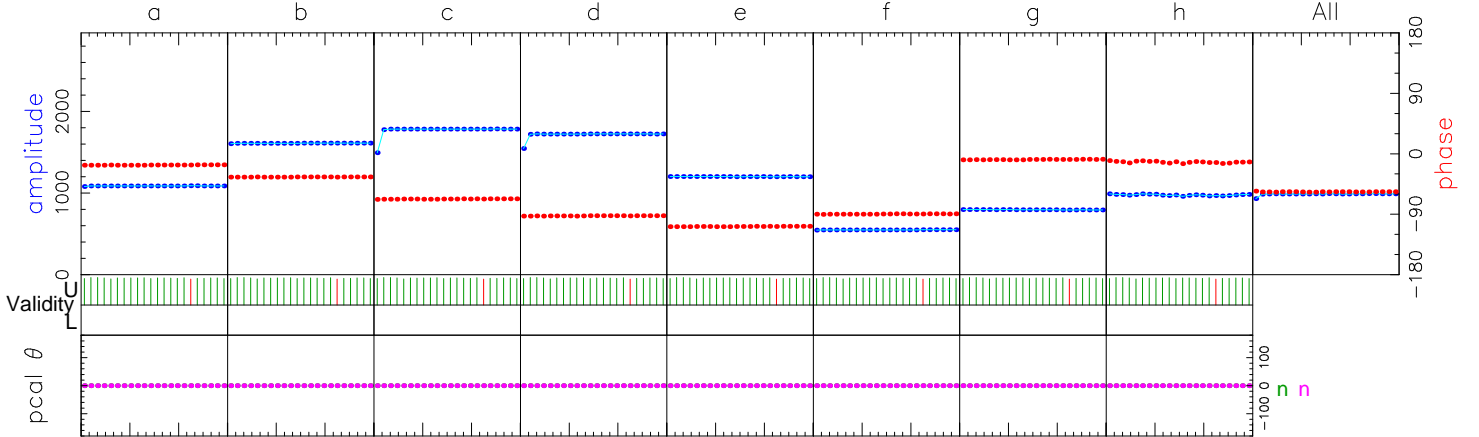


Fringe quality 5

SNR 35854.6  
Int time 176.192  
Amp 987.767  
Phase -56.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.007825  
MBD 0.007355  
Fringe rate (Hz) -0.000005  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

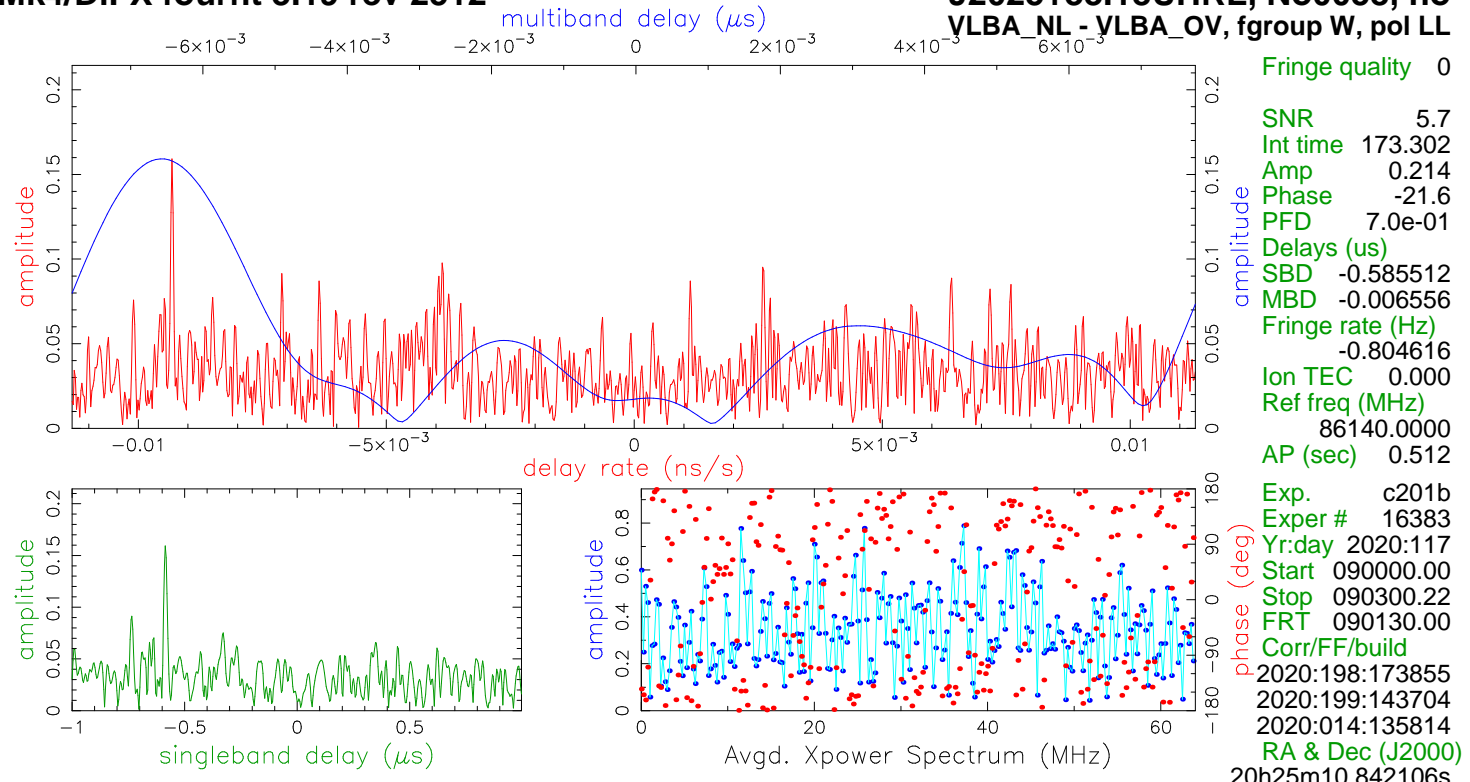
Exp. c201b  
Exper # 16383  
Yr:day 2020:117  
Start 090000.00  
Stop 090300.22  
FRT 090130.00  
Corr/FF/build  
2020:198:173855  
2020:199:143706  
2020:014:135814  
RA & Dec (J2000)  
20h25m10.842106s  
+33°43'00.214364"

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

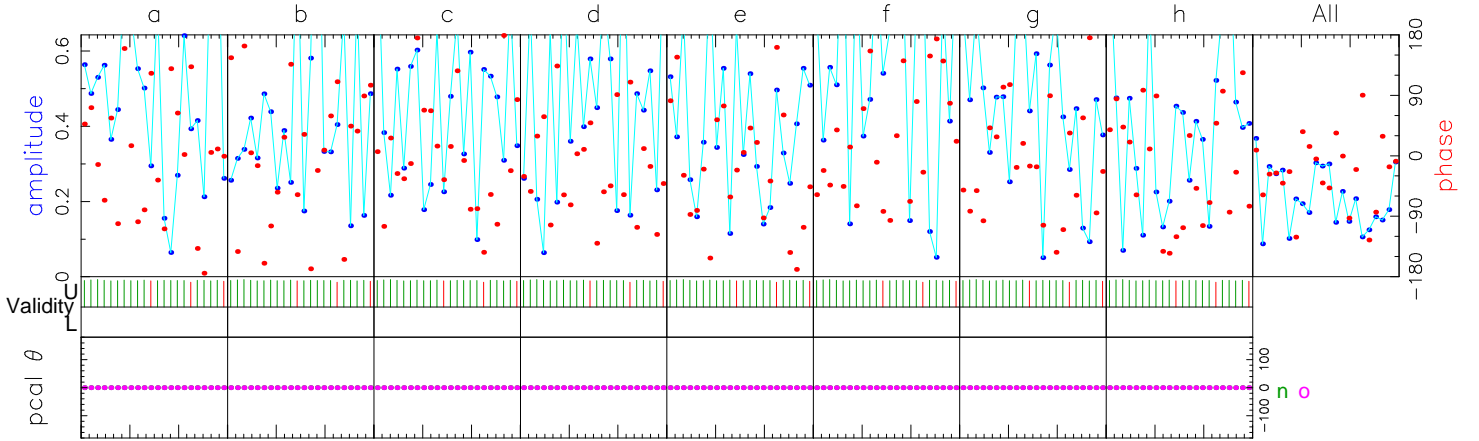


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-16.8	-34.6	-67.3	-92.3	-108.2	-89.7	-8.6	-12.4	Phase	-56.6
	1087.8	1610.7	1770.8	1716.2	1201.8	549.4	796.4	977.1	Ampl.	1213.8
	258.2	258.7	258.7	258.7	258.5	259.8	258.8	259.3	Sbd box	259.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.35528125000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		7.35528E-03	+/- 3.0E-08
Sband delay (usec)	7.82525000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		7.82525E-03	+/- 2.4E-07
Phase delay (usec)	-1.82473477550E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.82473E-06	+/- 1.0E-10
Delay rate (us/s)	-5.24332638492E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.24333E-11	+/- 9.9E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-56.6	+/- 0.0

ph/seg (deg) 0.3 0.0 Search (1024X32) 987.767 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 1.2 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) 43.7 0.0 Inc. seg. avg. 987.777 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 48.2 0.0 Inc. frq. avg. 1213.775 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
n: az 85.8 el 51.6 pa -63.4 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nn.W.165.18UHRL

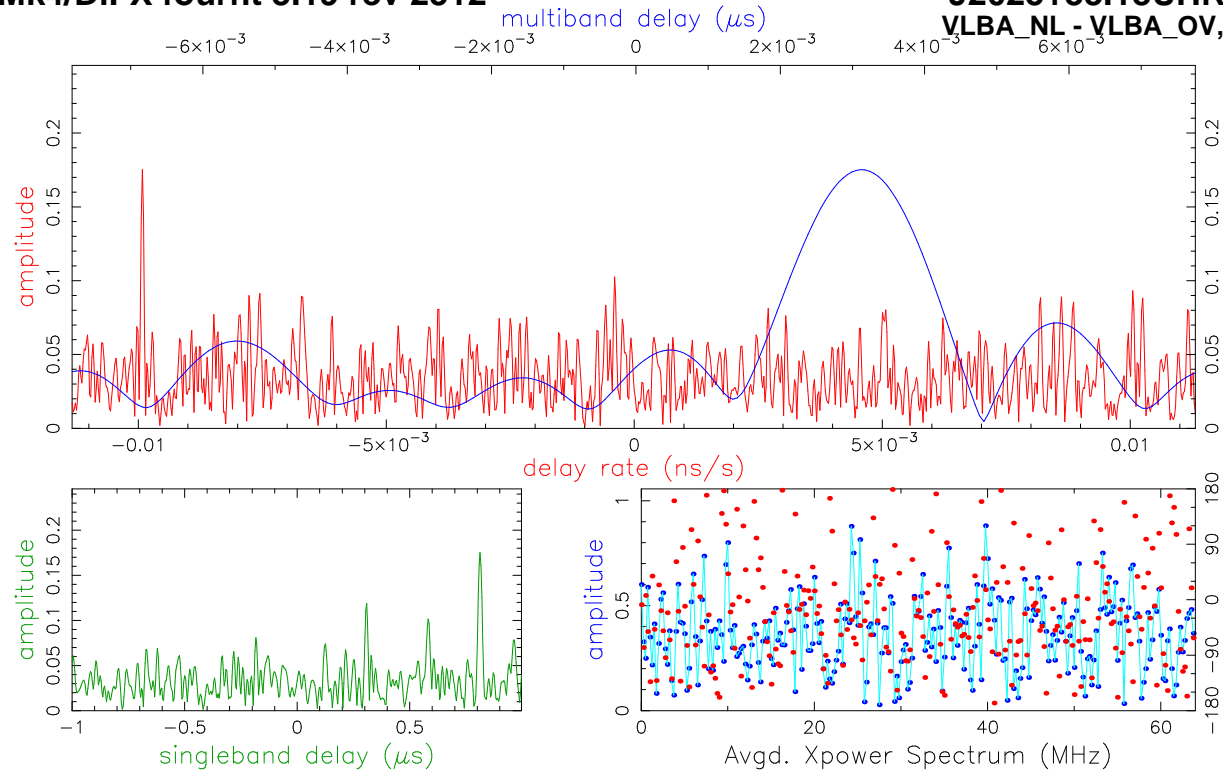


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-3.9	-8.3	-23.0	-43.7	-19.2	-7.3	-29.9	-6.1	Phase	-21.6
	0.2	0.1	0.2	0.4	0.1	0.3	0.3	0.2	Ampl.	0.2
	147.6	419.7	421.6	106.8	413.0	325.8	81.0	487.5	Sbd box	107.1
U/L	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	5.84152292990E+03		Apriori delay (usec)	5.84210761113E+03	Resid mbdelay (usec)	-6.55623E-03	+/-	1.9E-04		
Sband delay (usec)	5.84152209913E+03		Apriori clock (usec)	1.2200686E+01	Resid sbdelay (usec)	-5.85512E-01	+/-	1.5E-03		
Phase delay (usec)	5.84210761044E+03		Apriori clockrate (us/s)	1.3299997E-07	Resid phdelay (usec)	-6.96306E-07	+/-	6.4E-07		
Delay rate (us/s)	-2.76805428962E-01		Apriori rate (us/s)	-2.76796088163E-01	Resid rate (us/s)	-9.34080E-06	+/-	6.2E-09		
Total phase (deg)		202.7	Apriori accel (us/s/s)	-2.71716504466E-05	Resid phase (deg)	-21.6	+/-	20.0		

	RMS	Theor.	Amplitude	0.214 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	50.6	46.8	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	58.9	81.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	15.8	28.2	Inc. seg. avg.	0.212	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	49.1	49.3	Inc. frq. avg.	0.198	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

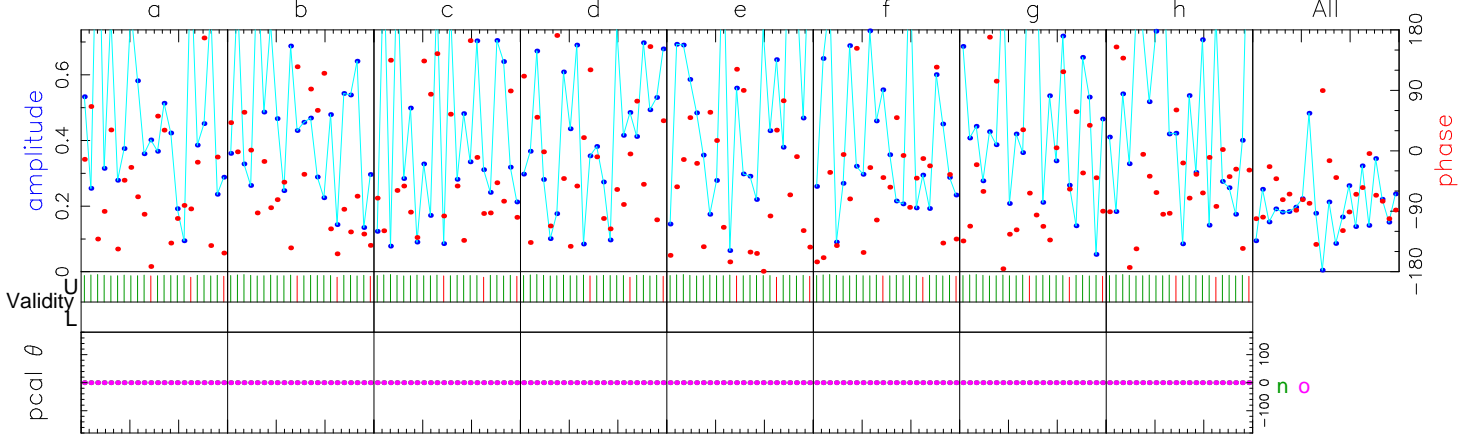


Fringe quality 0

SNR 6.3  
 Int time 173.302  
 Amp 0.246  
 Phase -72.9  
 PFD 3.8e-02  
 Delays (us)  
 SBD 0.812371  
 MBD 0.003123  
 Fringe rate (Hz) -0.855946  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

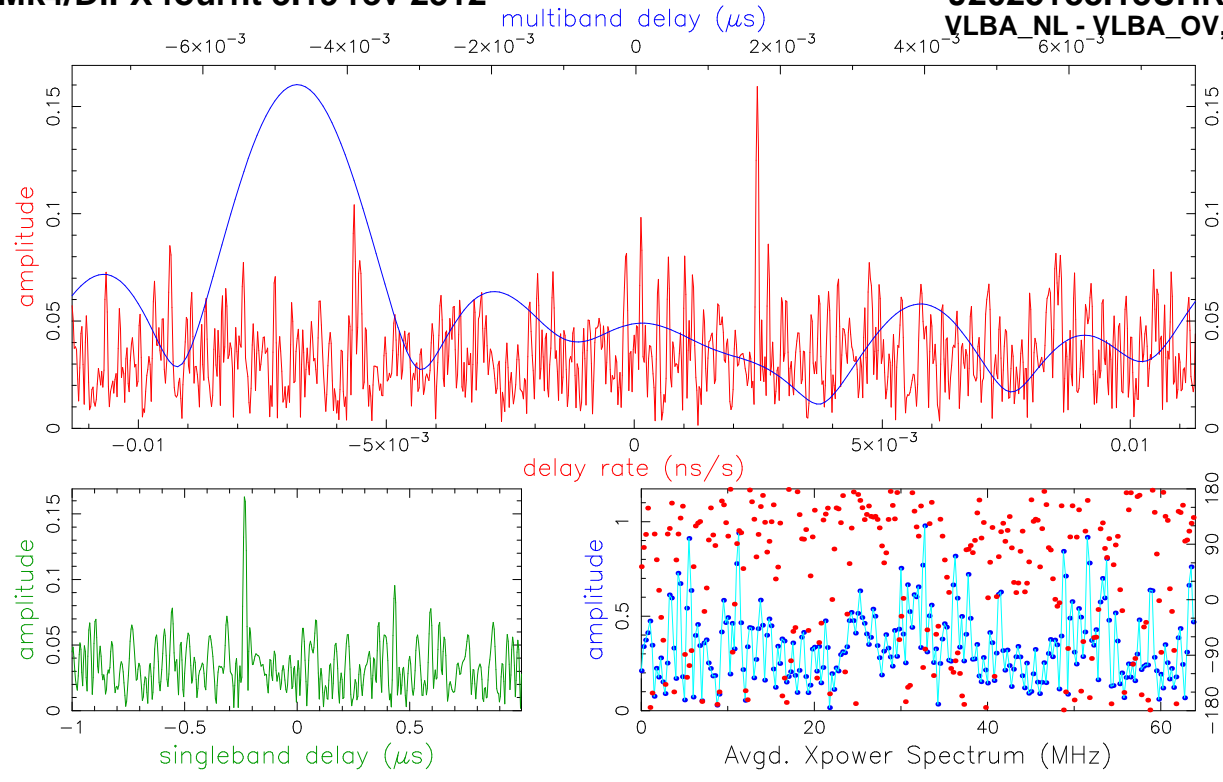
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143707  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

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
	-80.5	-70.3	-82.1	-39.8	-73.5	-71.7	-95.1	-66.7	Phase	-72.9
	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.4	Ampl.	0.2
	245.4	418.6	423.2	187.6	444.6	360.7	155.1	424.3	Sbd box	465.0
U/L	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	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)	5.84292323372E+03		Apriori delay (usec)		5.84210761113E+03		Resid mbdelay (usec)		3.12258E-03	+/- 1.7E-04
Sband delay (usec)	5.84291998238E+03		Apriori clock (usec)		1.2200686E+01		Resid sbdelay (usec)		8.12371E-01	+/- 1.4E-03
Phase delay (usec)	5.84210760878E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-2.35000E-06	+/- 5.9E-07
Delay rate (us/s)	-2.76806024846E-01		Apriori rate (us/s)		-2.76796088163E-01		Resid rate (us/s)		-9.93668E-06	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.71716504466E-05		Resid phase (deg)		-72.9	+/- 18.2

ph/seg (deg) 47.2 42.6 Search (1024X32) 0.170 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.4 74.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 17.2 25.7 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.6 44.8 Inc. frq. avg. 0.230 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 o: az 68.8 el 30.5 pa -63.2 u,v (fr/asec) 1888.438 -988.407 simultaneous interpolator

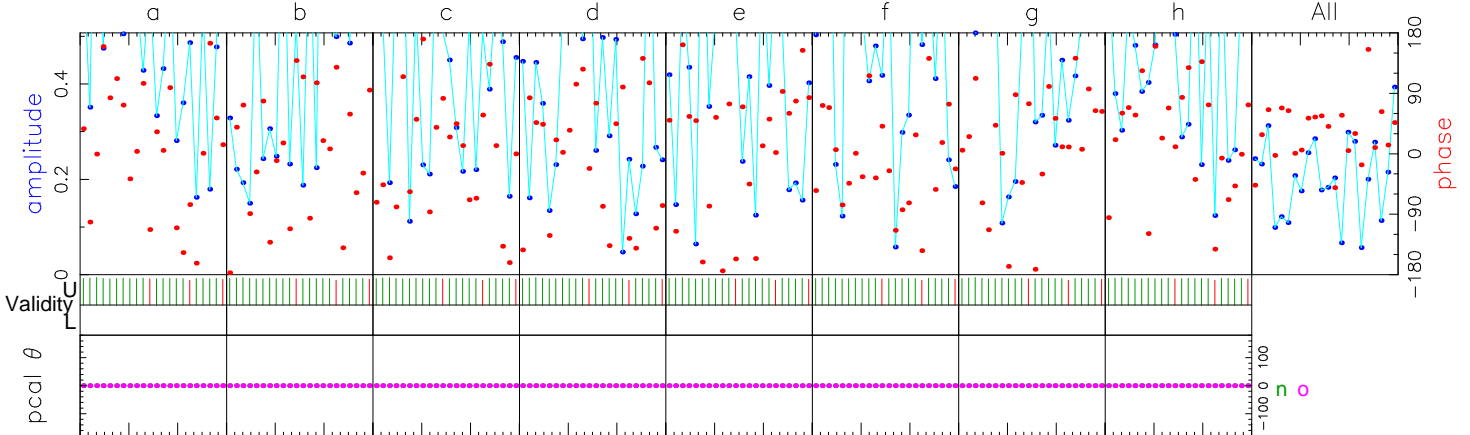


Fringe quality 0

SNR 6.0  
 Int time 173.301  
 Amp 0.169  
 Phase 30.3  
 PFD 2.6e-01  
 Delays (us)  
 SBD -0.232820  
 MBD -0.004800  
 Fringe rate (Hz) 0.213021  
 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  
 2020:199:143709  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

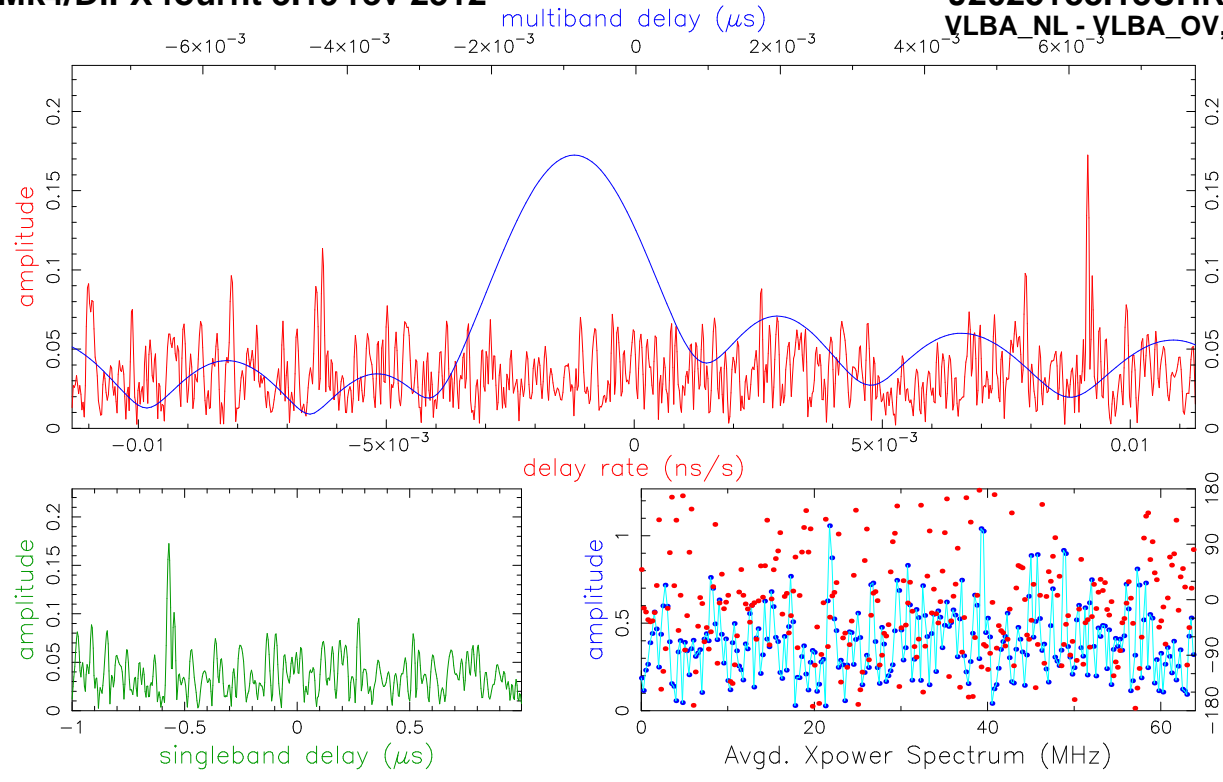
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

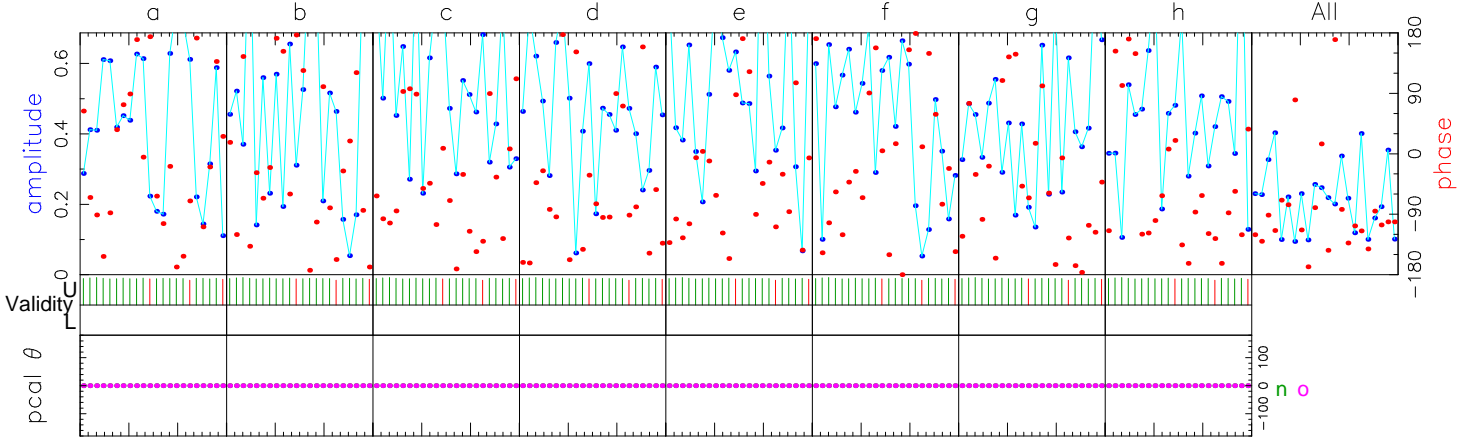
Group delay (usec)(sbd)	5.84186843654E+03	Apriori delay (usec)	5.84210761113E+03	Resid mbdelay (usec)	-4.79960E-03	+/-	1.8E-04
Sband delay (usec)	5.84187479088E+03	Apriori clock (usec)	1.2200686E+01	Resid sbdelay (usec)	-2.32820E-01	+/-	1.4E-03
Phase delay (usec)	5.84210761211E+03	Apriori clockrate (us/s)	1.3299997E-07	Resid phdelay (usec)	9.75488E-07	+/-	6.2E-07
Delay rate (us/s)	-2.76793615199E-01	Apriori rate (us/s)	-2.76796088163E-01	Resid rate (us/s)	2.47296E-06	+/-	5.9E-09
Total phase (deg)	254.6	Apriori accel (us/s/s)	-2.71716504466E-05	Resid phase (deg)	30.3	+/-	19.2

ph/seg (deg)	43.7	Theor.	45.0	Amplitude	0.169 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	56.0	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)	31.4	Inc. seg. avg.	0.160	Inc. seg. avg.	0.160	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	35.3	Inc. frq. avg.	0.161	Inc. frq. avg.	0.161	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 256	t_cohere infinite



Fringe quality 0  
 SNR 6.2  
 Int time 173.302  
 Amp 0.229  
 Phase -107.2  
 PFD 7.0e-02  
 Delays (us)  
 SBD -0.570304  
 MBD -0.000854  
 Fringe rate (Hz) 0.788178  
 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  
 2020:199:143712  
 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
	-117.9	-133.2	-80.8	-109.3	-75.6	-113.2	-120.1	-117.1	Phase	-107.2
	0.1	0.3	0.3	0.3	0.3	0.1	0.2	0.4	Ampl.	0.2
	161.1	289.0	433.5	91.6	165.1	119.9	351.0	111.1	Sbd box	111.0
U/L	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.84154425711E+03		Apriori delay (usec)		5.84210761113E+03		Resid mbdelay (usec)		-8.54026E-04	+/- 1.7E-04
Sband delay (usec)	5.84153730688E+03		Apriori clock (usec)		1.2200686E+01		Resid sbdelay (usec)		-5.70304E-01	+/- 1.4E-03
Phase delay (usec)	5.84210760768E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-3.45715E-06	+/- 6.0E-07
Delay rate (us/s)	-2.76786938203E-01		Apriori rate (us/s)		-2.76796088163E-01		Resid rate (us/s)		9.14996E-06	+/- 5.7E-09
Total phase (deg)	117.1		Apriori accel (us/s/s)		-2.71716504466E-05		Resid phase (deg)		-107.2	+/- 18.5

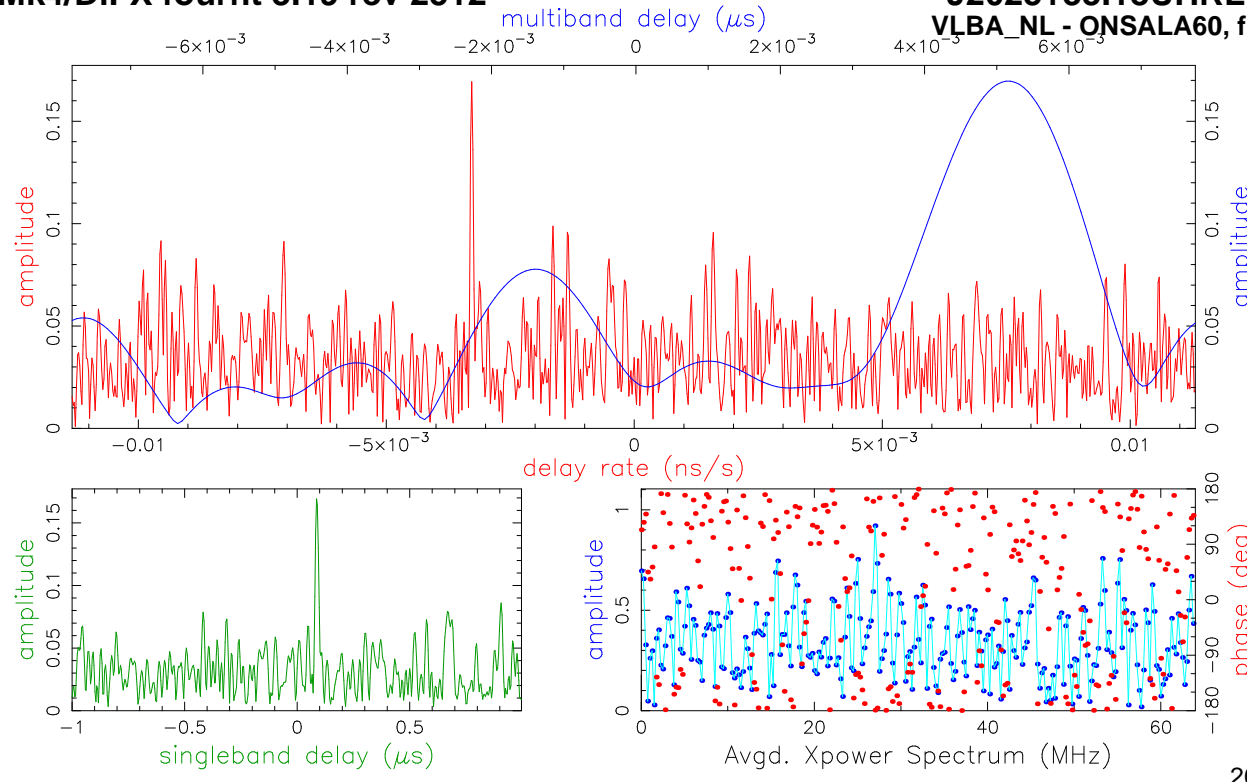
ph/seg (deg) 54.0 43.3 Search (1024X32) 0.167 Pcdl mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 61.6 75.6 Interp. 0.000 Pcdl rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.6 26.1 Inc. seg. avg. 0.227 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.6 45.6 Inc. frq. avg. 0.221 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 o: az 68.8 el 30.5 pa -63.2 u,v (fr/asec) 1888.438 -988.407 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/no..18UHRL Output file: /Exps/c201b/v1/1234/No0058/no.W.202.18UHRL



Mk4/DiFX fourfit 3.19 rev 2512

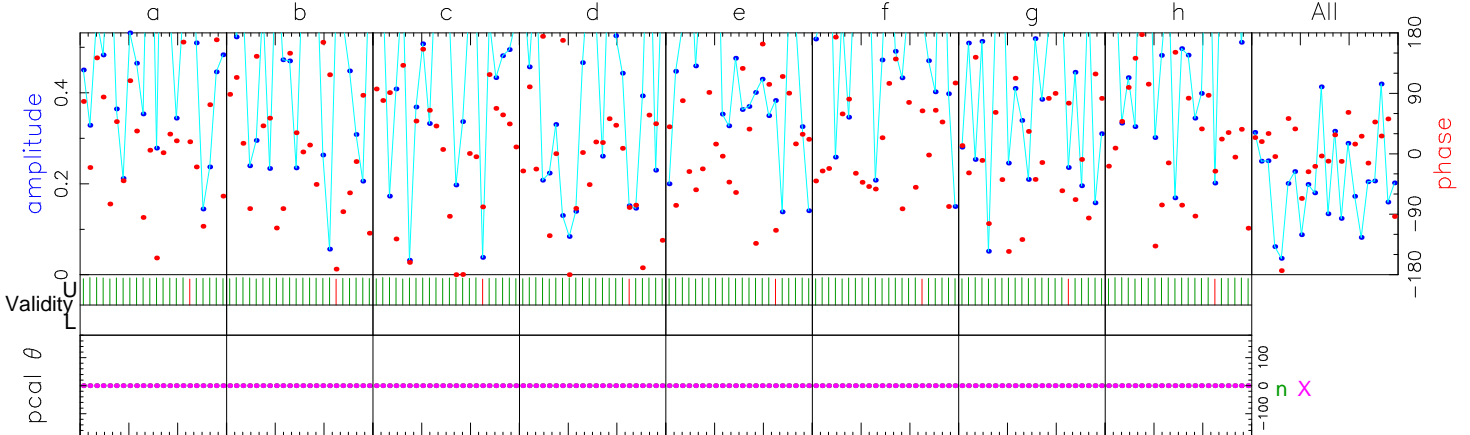
J2025+33.18UHRL, No0058, nX

VLBA\_NL - ONSALA60, fgroup W, pol LL



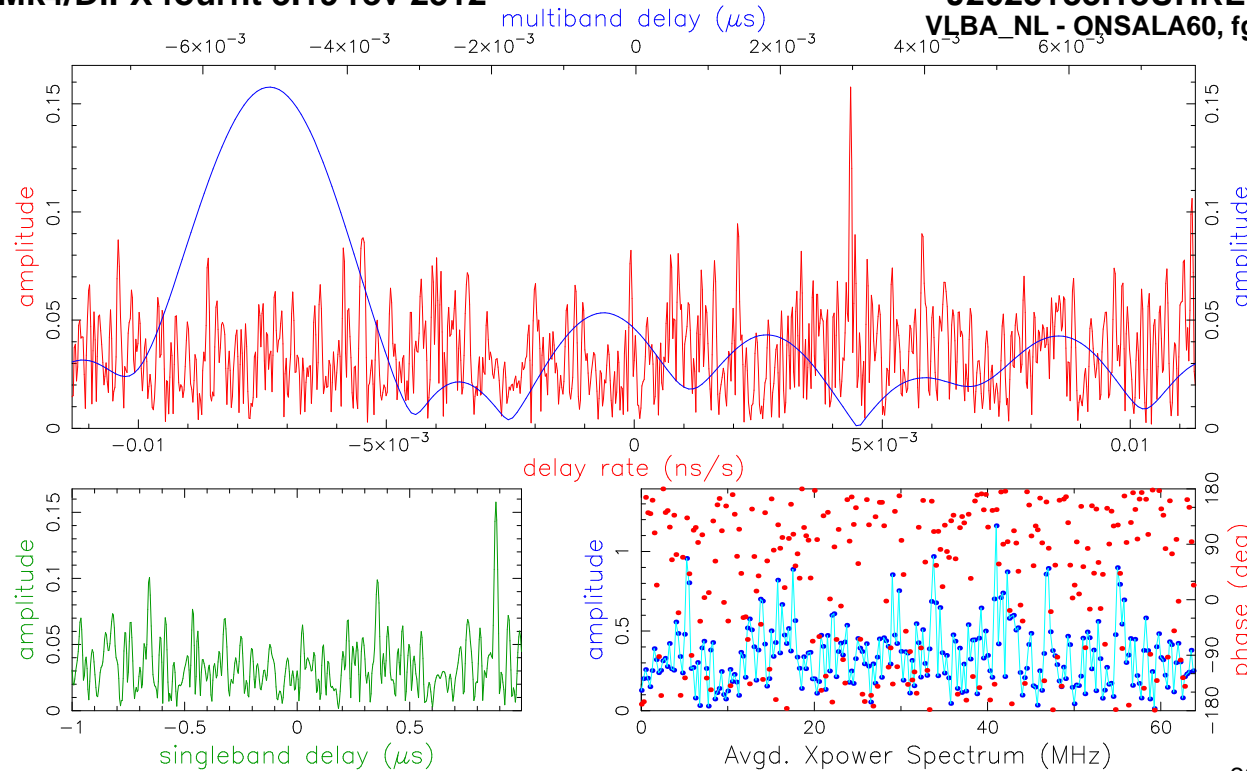
Fringe quality 0  
 SNR 6.2  
 Int time 176.145  
 Amp 0.177  
 Phase 15.9  
 PFD 6.6e-02  
 Delays (us)  
 SBD 0.087274  
 MBD 0.005230  
 Fringe rate (Hz) -0.282146  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143702  
 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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.37809892055E+03				1.37801556571E+03			5.22984E-03	+/- 1.7E-04
Sband delay (usec)		1.37810283921E+03				-8.4752541E+00			8.72735E-02	+/- 1.4E-03
Phase delay (usec)		1.37801556622E+03				-1.9400004E-07			5.12172E-07	+/- 5.9E-07
Delay rate (us/s)		1.28922918374E+00				1.28923245917E+00			-3.27544E-06	+/- 5.7E-09
Total phase (deg)			314.7						15.9	+/- 18.4
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

n: az 85.8 el 51.6 pa -63.4 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) -8897.669 -2220.112 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nX.W.144.18UHRL

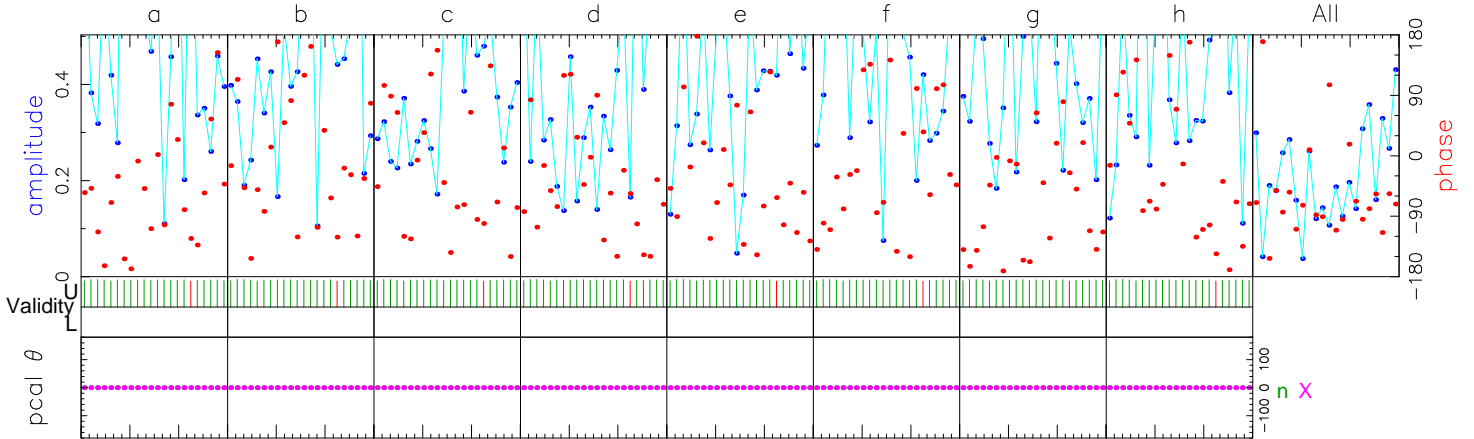


Fringe quality 0

SNR 5.7  
 Int time 176.145  
 Amp 0.168  
 Phase -76.1  
 PFD 7.2e-01  
 Delays (us)  
 SBD 0.882906  
 MBD -0.005074  
 Fringe rate (Hz)  
 0.375546  
 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  
 2020:199:143708  
 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



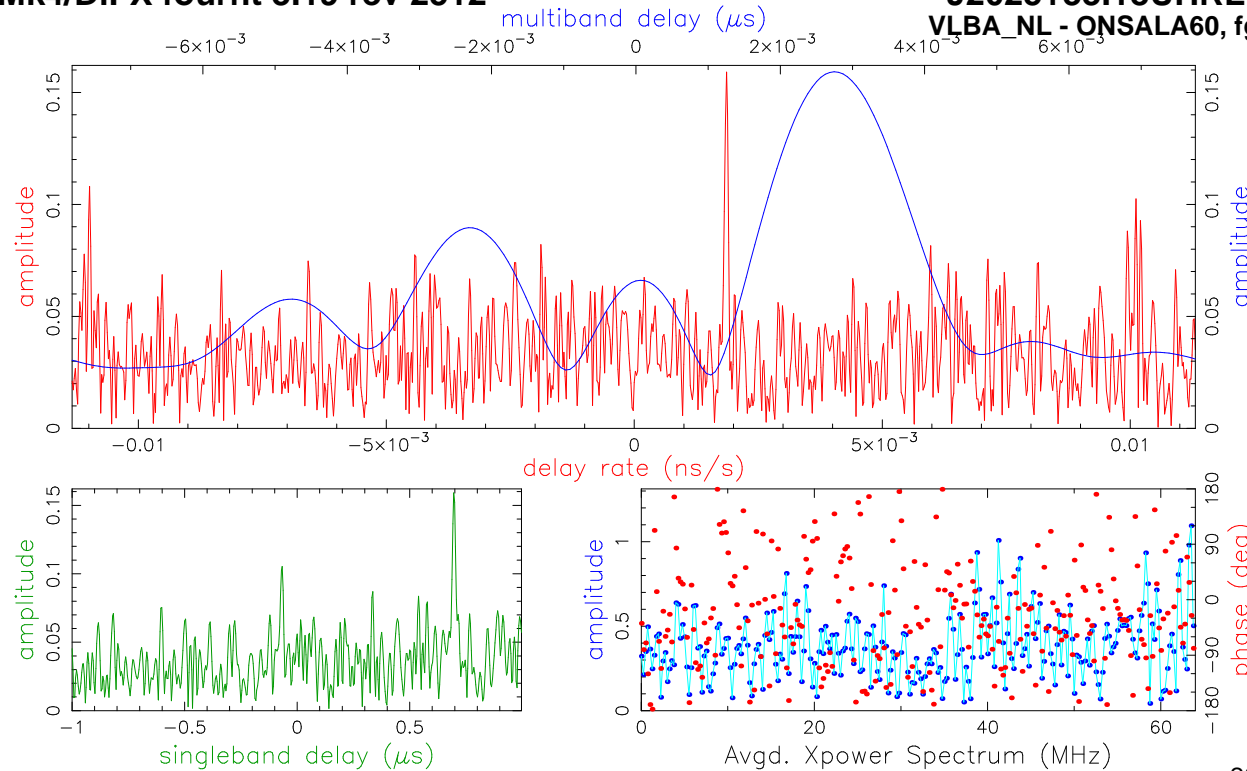
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-84.8	-49.8	-84.3	-73.9	-72.6	-60.8	-85.6	-80.9		-76.1
	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	106.0	37.8	86.5	394.2	50.5	34.5	325.7	400.0	Sbd box	483.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.37890111693E+03		Apriori delay (usec)		1.37801556571E+03		Resid mbdelay (usec)		-5.07378E-03	+/- 1.9E-04
Sband delay (usec)	1.37889847171E+03		Apriori clock (usec)		-8.4752541E+00		Resid sbdelay (usec)		8.82906E-01	+/- 1.5E-03
Phase delay (usec)	1.37801556325E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-2.45473E-06	+/- 6.5E-07
Delay rate (us/s)	1.28923681889E+00		Apriori rate (us/s)		1.28923245917E+00		Resid rate (us/s)		4.35972E-06	+/- 6.2E-09
Total phase (deg)	222.7		Apriori accel (us/s/s)		-1.84467147141E-05		Resid phase (deg)		-76.1	+/- 20.0

ph/seg (deg) 58.1 46.9 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.3 81.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 14.1 28.3 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 31.6 49.4 Inc. frq. avg. 0.152 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) -8897.669 -2220.112 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

J2025+33.18UHRL, No0058, nX

VLBA\_NL - ONSALA60, fgroup W, pol LR

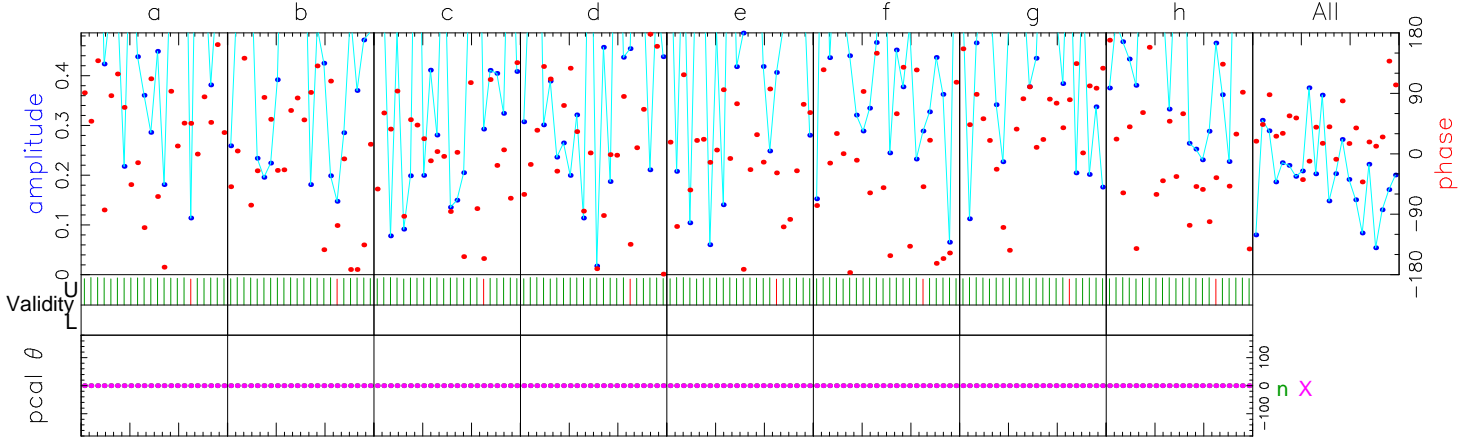


Fringe quality 0

SNR 5.8  
 Int time 176.145  
 Amp 0.162  
 Phase 34.2  
 PFD 5.3e-01  
 Delays (us)  
 SBD 0.696395  
 MBD 0.002793  
 Fringe rate (Hz) 0.159914  
 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  
 2020:199:143710  
 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

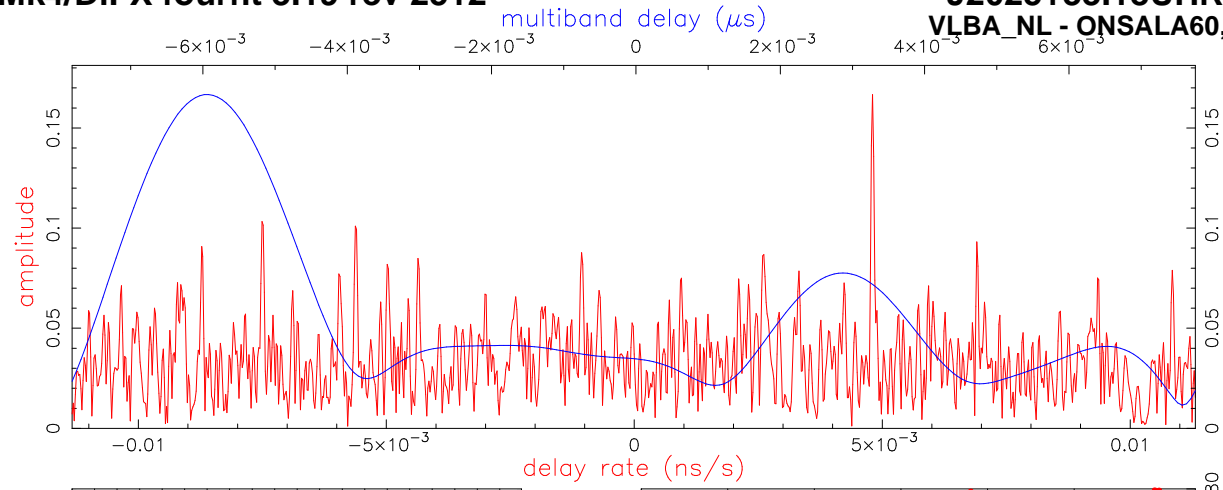


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.37870585907E+03				1.37801556571E+03			2.79336E-03	+/- 1.9E-04
Sband delay (usec)		1.37871196021E+03				-8.4752541E+00			6.96395E-01	+/- 1.5E-03
Phase delay (usec)		1.37801556681E+03				-1.9400004E-07			1.10198E-06	+/- 6.4E-07
Delay rate (us/s)		1.28923431561E+00				1.28923245917E+00			1.85644E-06	+/- 6.1E-09
Total phase (deg)			333.0						34.2	+/- 19.7
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

	RMS	Theor.	Amplitude	0.162 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	41.6	46.2	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	57.3	80.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.6	27.9	Inc. seg. avg.	0.156	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	48.4	48.6	Inc. frq. avg.	0.160	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 85.8 el 51.6 pa -63.4 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) -8897.669 -2220.112 simultaneous interpolator

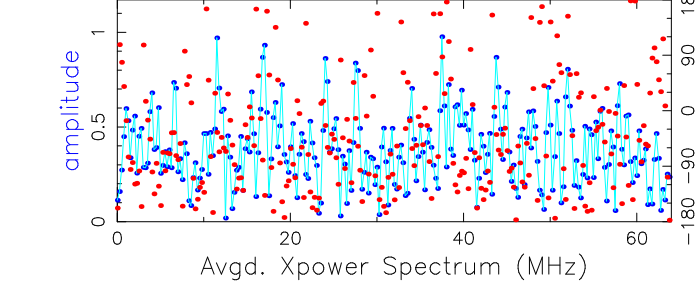
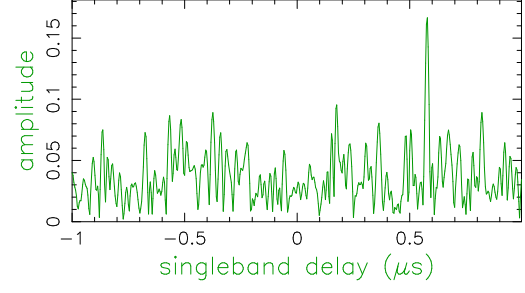
Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nX.W.189.18UHRL



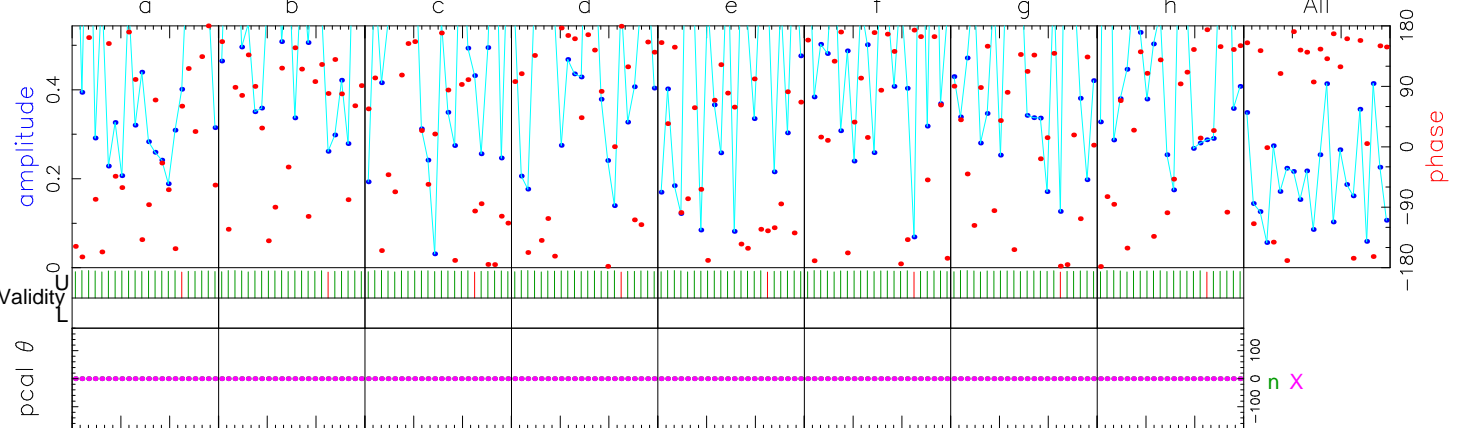
Fringe quality 0

SNR 6.1  
 Int time 176.145  
 Amp 0.181  
 Phase 159.0  
 PFD 1.3e-01  
 Delays (us)  
 SBD 0.576901  
 MBD -0.005970  
 Fringe rate (Hz)  
 0.413767  
 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  
 2020:199:143712  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

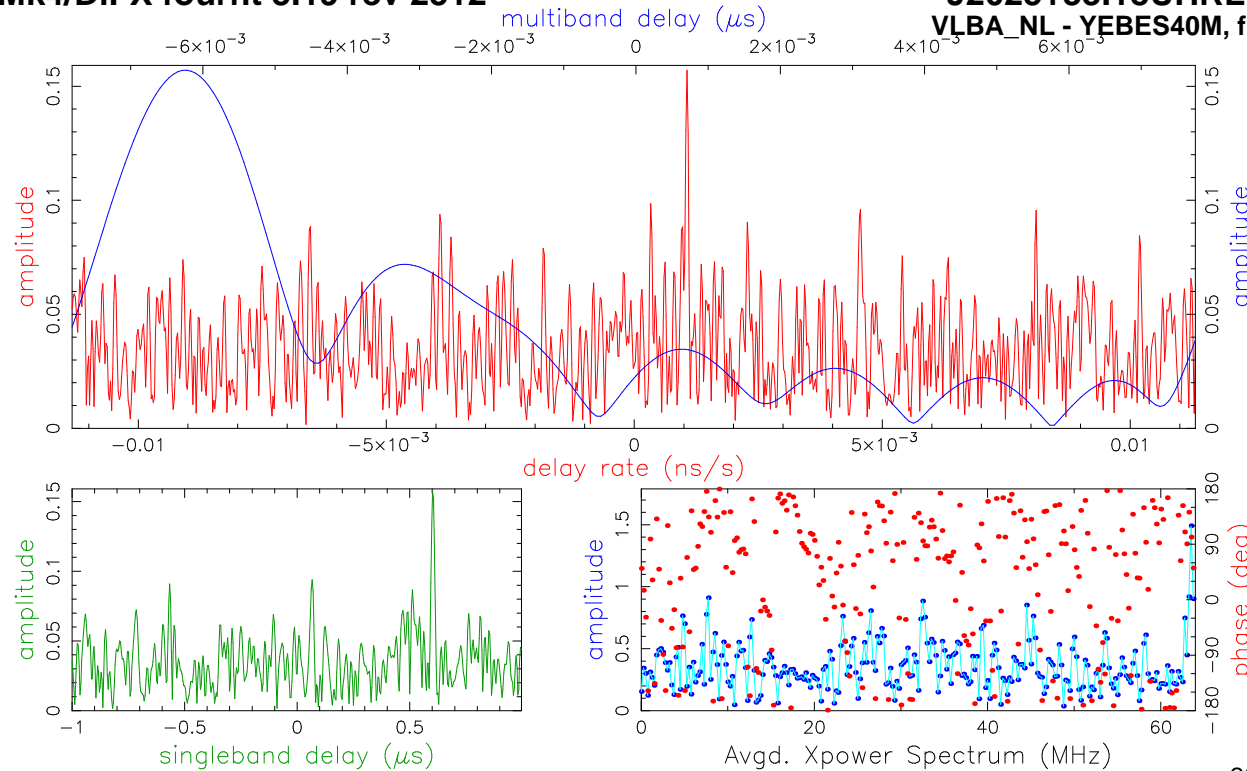


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.37858772086E+03			1.37801556571E+03				Resid mbdelay (usec)	-5.96985E-03 +/- 1.8E-04
Sband delay (usec)		1.37859246721E+03			-8.4752541E+00				Resid sbdelay (usec)	5.76901E-01 +/- 1.4E-03
Phase delay (usec)		1.37801557084E+03			-1.9400004E-07				Resid phdelay (usec)	5.12701E-06 +/- 6.1E-07
Delay rate (us/s)		1.28923726259E+00			1.28923245917E+00				Resid rate (us/s)	4.80342E-06 +/- 5.8E-09
Total phase (deg)			97.8		-1.84467147141E-05				Resid phase (deg)	159.0 +/- 18.8

ph/seg (deg) 58.2 44.0 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.8 76.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 30.2 26.6 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 42.8 46.3 Inc. frq. avg. 0.177 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 X: az 261.7 el 46.4 pa 39.8 u,v (fr/asec) -8897.669 -2220.112 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nX..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nX.W.200.18UHRL simultaneous interpolator

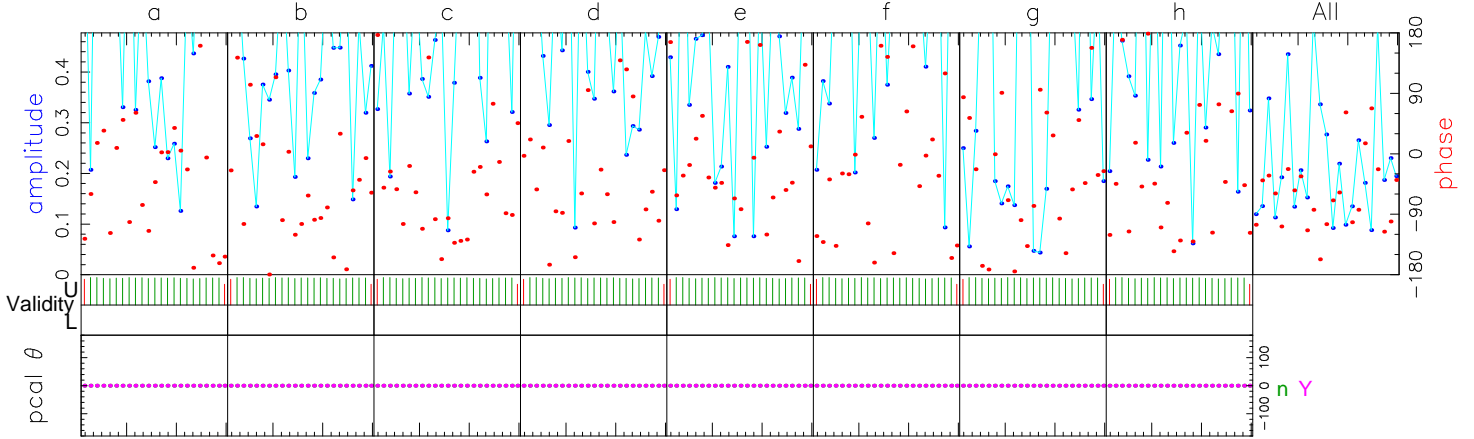


Fringe quality 0

SNR 5.7  
Int time 170.798  
Amp 0.159  
Phase -65.1  
PFD 8.3e-01  
Delays (us)  
SBD 0.602835  
MBD -0.006262  
Fringe rate (Hz) 0.092321  
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  
2020:199:143704  
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
	-64.9	-83.1	-67.4	-45.5	-46.3	-84.2	-96.0	-48.6	Phase	-65.1
	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	21.0	312.5	410.4	115.9	236.8	311.9	457.6	279.0	Sbd box	411.3
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.14497097196E+03		Apriori delay (usec)		-1.14557408499E+03		Resid mbdelay (usec)		-6.26196E-03	+/- 1.9E-04
Sband delay (usec)	-1.14497124949E+03		Apriori clock (usec)		2.0318016E+01		Resid sbdelay (usec)		6.02835E-01	+/- 1.5E-03
Phase delay (usec)	-1.14557408709E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-2.09943E-06	+/- 6.5E-07
Delay rate (us/s)	1.35345774470E+00		Apriori rate (us/s)		1.35345667295E+00		Resid rate (us/s)		1.07175E-06	+/- 6.5E-09
Total phase (deg)			Apriori accel (us/s/s)		7.22315048600E-06		Resid phase (deg)		-65.1	+/- 20.2

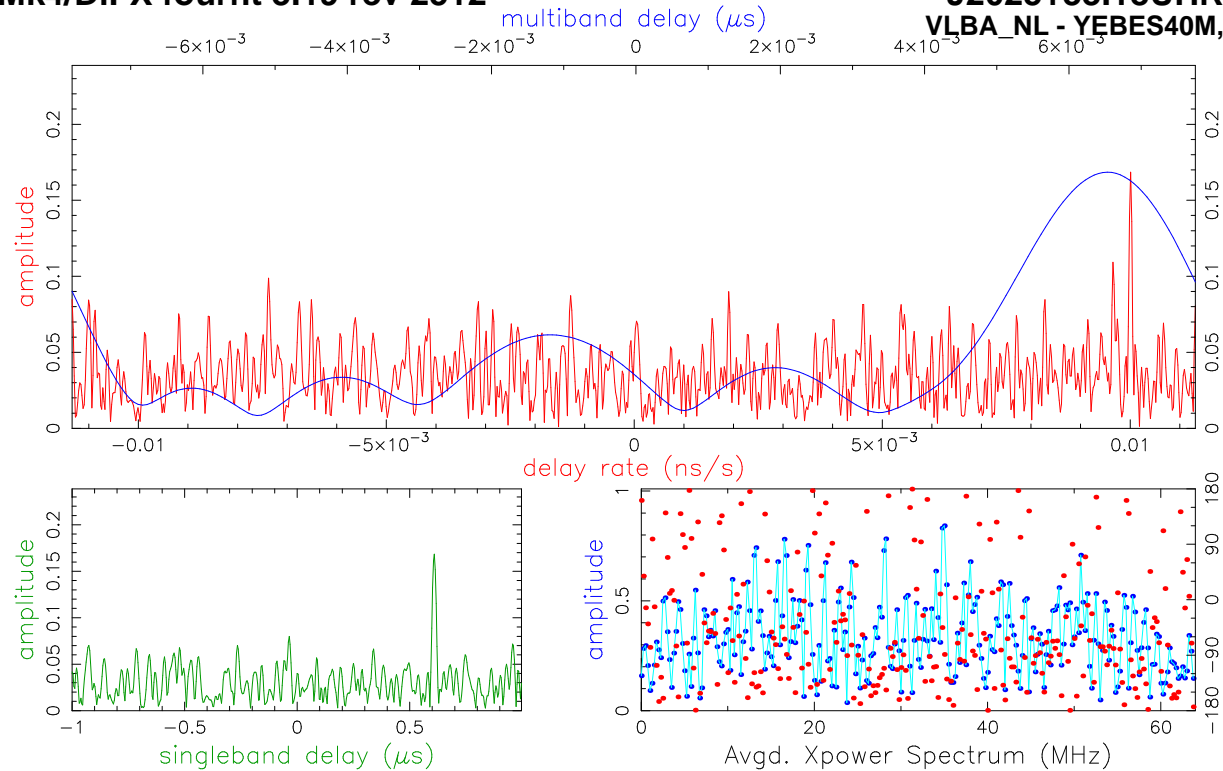
ph/seg (deg) 54.9 48.5 Search (1024X32) 0.152 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 87.5 84.6 Interp. 0.000 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.1 28.6 Inc. seg. avg. 0.166 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 31.9 49.9 Inc. frq. avg. 0.147 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 85.8 el 51.6 pa -63.4 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -9319.176 551.075 simultaneous interpolator



Mk4/DiFX fourfit 3.19 rev 2512

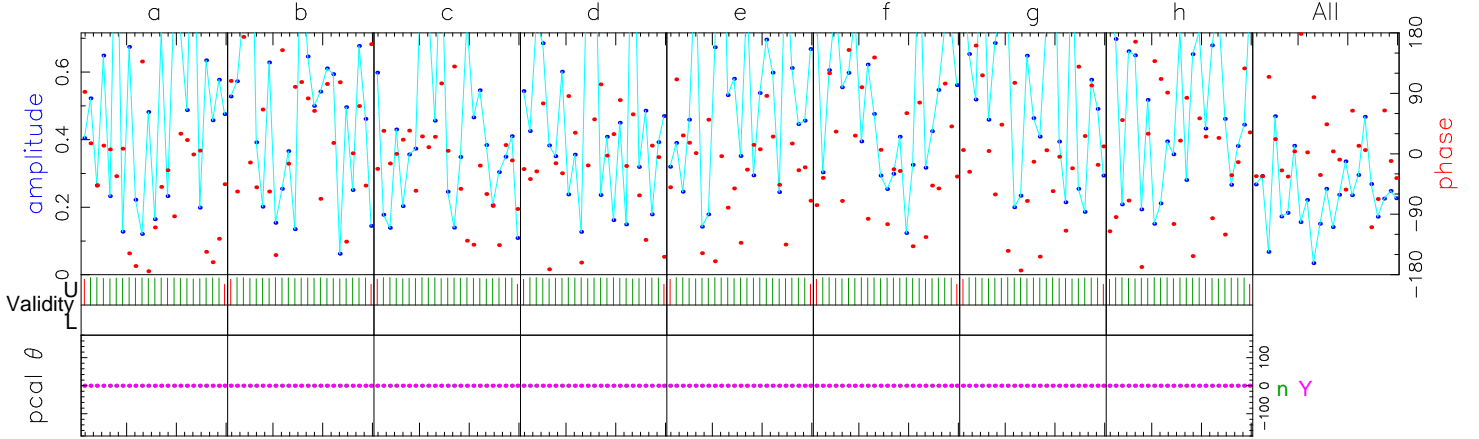
J2025+33.18UHRL, No0058, nY

VLBA\_NL - YEBES40M, fgroup W, pol RR



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

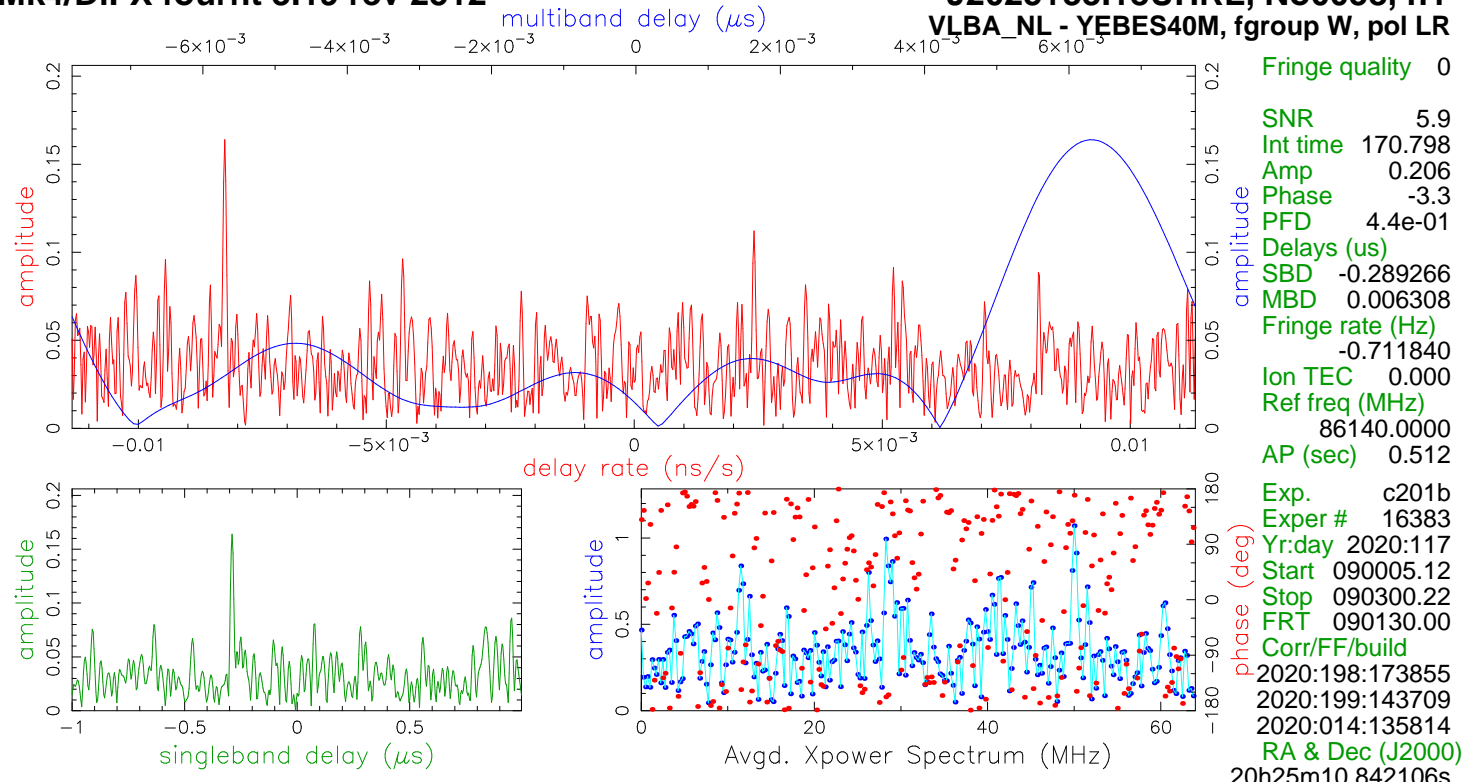
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



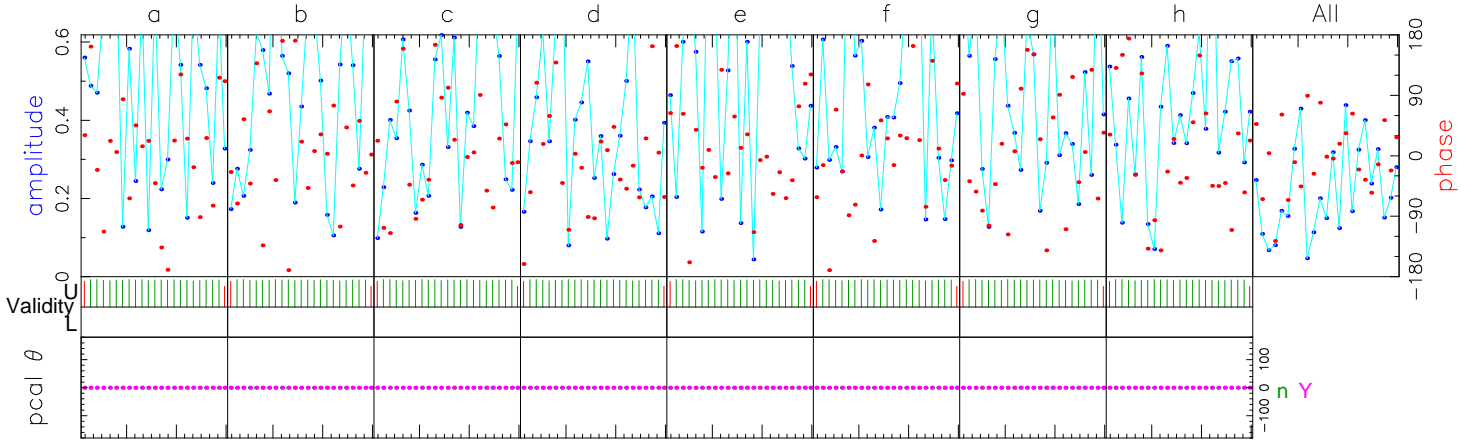
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.1	33.3	-6.1	14.1	-17.7	11.1	-14.3	-15.5	Phase	-6.2
	0.3	0.2	0.3	0.4	0.4	0.2	0.3	0.1	Ampl.	0.2
	88.3	147.7	415.2	459.4	412.3	61.7	460.8	290.9	Sbd box	412.8
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs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

	RMS	Theor.	Amplitude	0.239 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	62.6	45.5	Search (1024X32)	0.165	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	74.6	79.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	25.1	26.8	Inc. seg. avg.	0.256	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.3	46.8	Inc. frq. avg.	0.229	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 85.8 el 51.6 pa -63.4 Y: az 271.1 el 57.5 pa 66.0 u,v (fr/asec) -9319.176 551.075 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/nY..18UHRL Output file: /Exps/c201b/v1/1234/No0058/nY.W.167.18UHRL

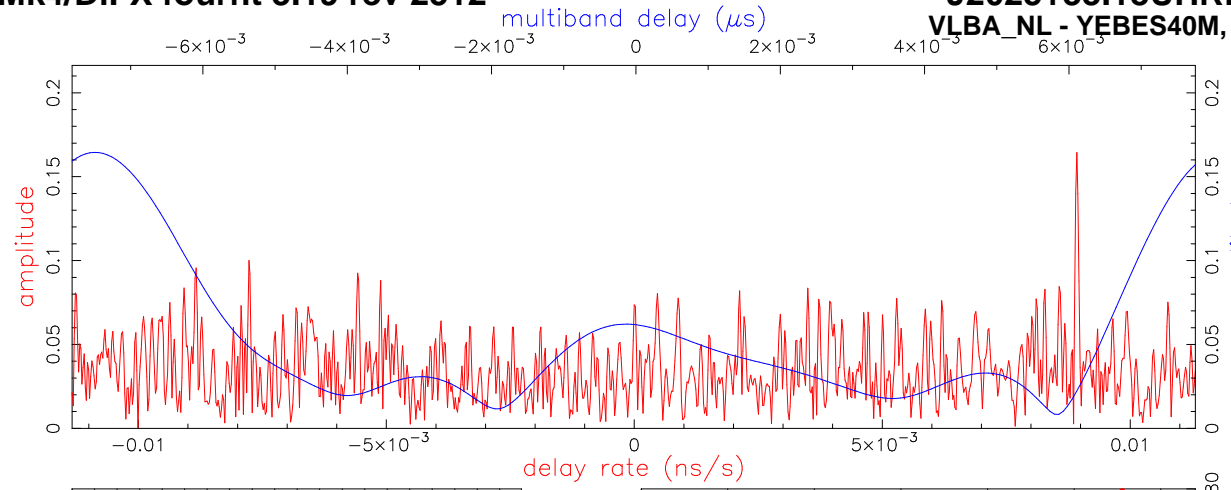


Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

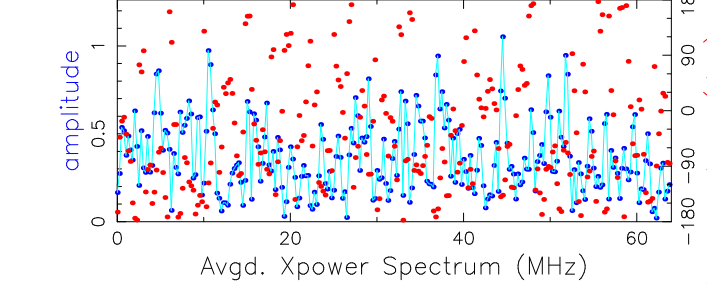
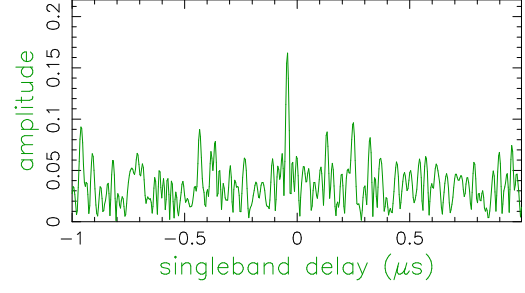


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
2.3	-14.0	6.4	-18.3	5.2	2.5	-0.3	-12.5	-12.5	Phase	-3.3
0.2	0.2	0.1	0.2	0.4	0.2	0.1	0.1	0.1	Ampl.	0.2
500.5	442.9	30.3	275.2	182.3	24.0	376.1	178.3	178.3	Sbd box	182.9
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0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

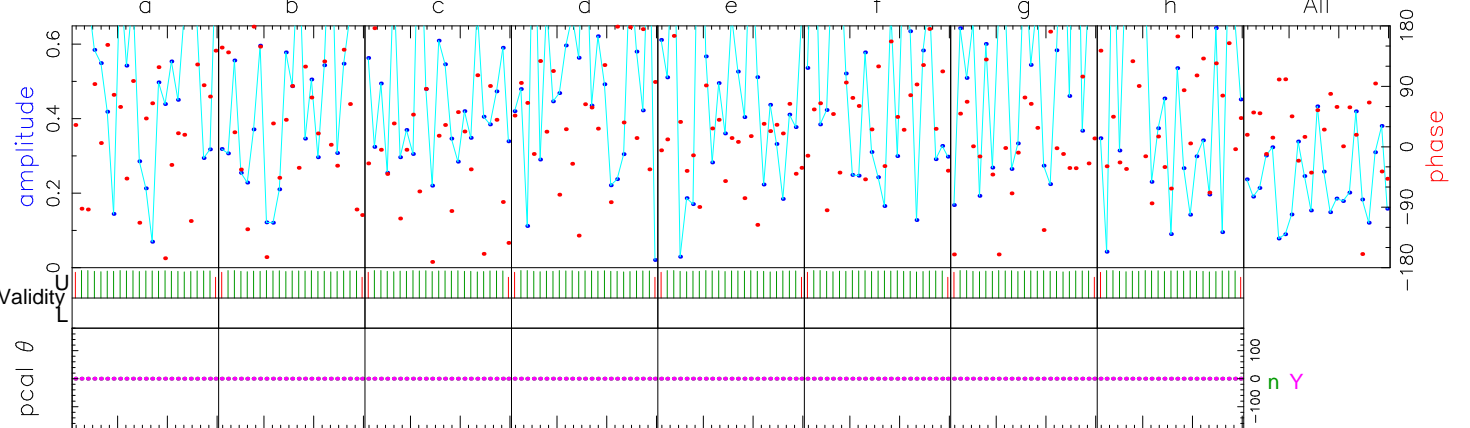
	RMS	Theor.	Amplitude	0.206 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.0	46.9	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	77.6	81.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	10.5	27.7	Inc. seg. avg.	0.207	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	35.1	48.3	Inc. frq. avg.	0.187	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			
n: az 85.8 el 51.6 pa -63.4			Y: az 271.1 el 57.5 pa 66.0		u,v (fr/asec) -9319.176 551.075				simultaneous interpolator



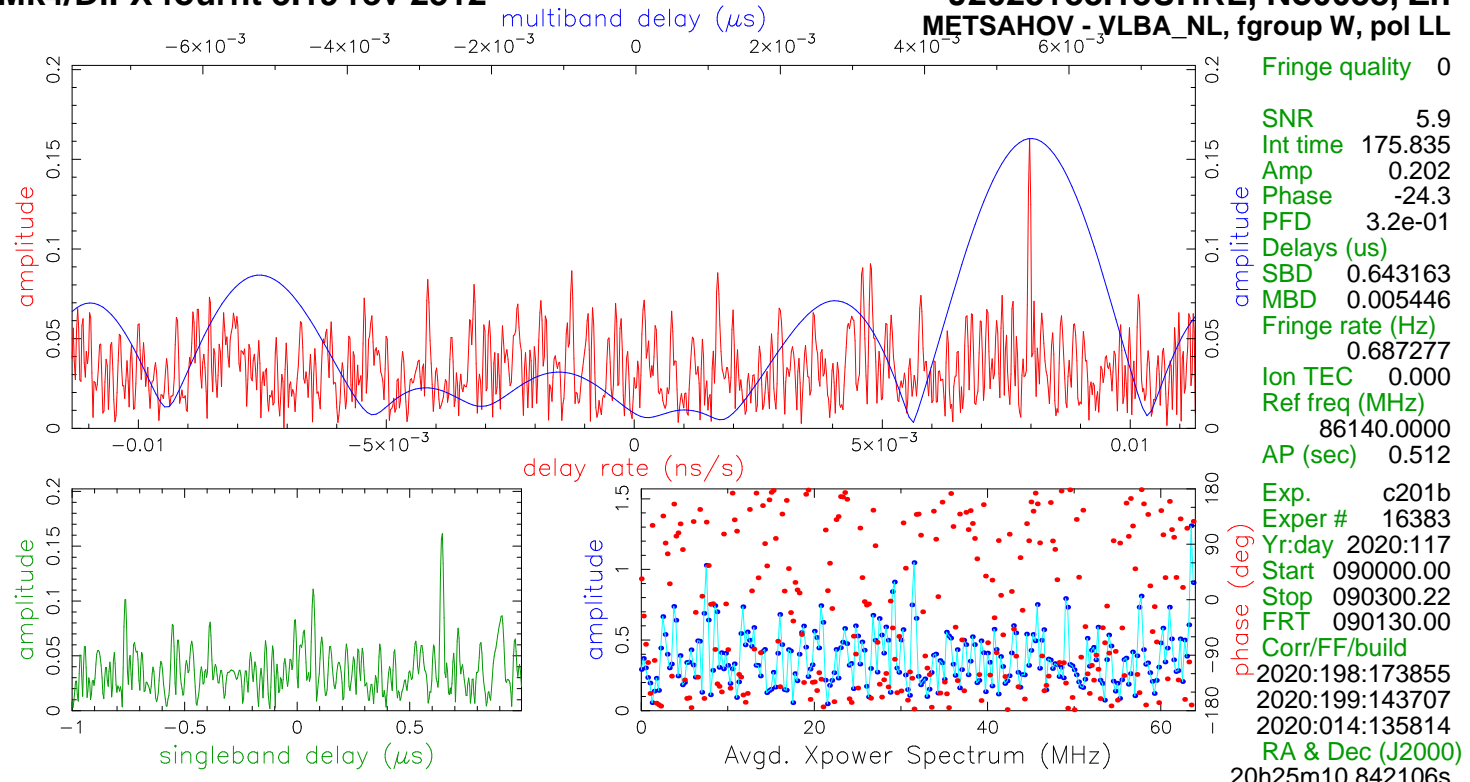
Fringe quality 0  
 SNR 5.9  
 Int time 170.798  
 Amp 0.216  
 Phase 26.0  
 PFD 3.6e-01  
 Delays (us)  
 SBD -0.043800  
 MBD 0.008089  
 Fringe rate (Hz) 0.769276  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090005.12 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



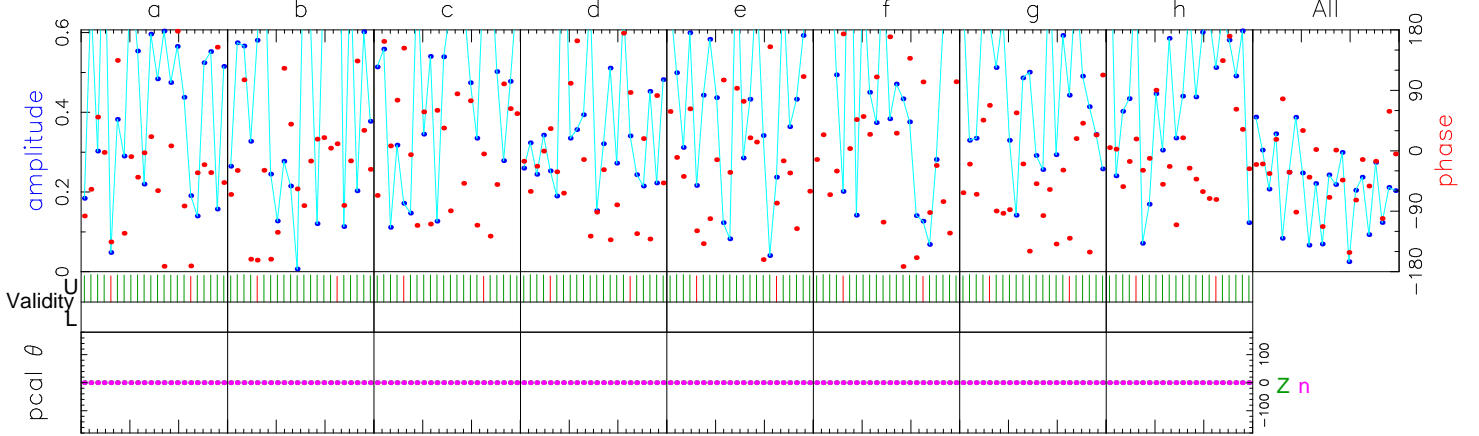
Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		-1.14561287052E+03			-1.14557408499E+03				8.08947E-03	+/- 1.8E-04
Sband delay (usec)		-1.14561788524E+03			2.0318016E+01				-4.38002E-02	+/- 1.5E-03
Phase delay (usec)		-1.14557408416E+03			1.1399998E-07				8.36965E-07	+/- 6.3E-07
Delay rate (us/s)		1.35346560348E+00			1.35345667295E+00				8.93053E-06	+/- 6.2E-09
Total phase (deg)			-219.3		7.22315048600E-06				26.0	+/- 19.4
ph/seg (deg)	RMS 56.1	Theor. 46.5	Amplitude 56.1	0.216 +/- 0.037	Search (1024X32) 0.161	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us) -1.000	1.000	
amp/seg (%)	71.5	81.2	Interp. 71.5	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us) -0.008	0.008		
ph/frq (deg)	27.2	27.4	Inc. seg. avg. 27.2	0.227	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011	0.011		
amp/frq (%)	44.2	47.9	Inc. frq. avg. 44.2	0.210	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00	0.00	
n: az 85.8 el 51.6 pa -63.4	Y: az 271.1 el 57.5 pa 66.0		u,v (fr/asec) -9319.176 551.075				simultaneous interpolator			



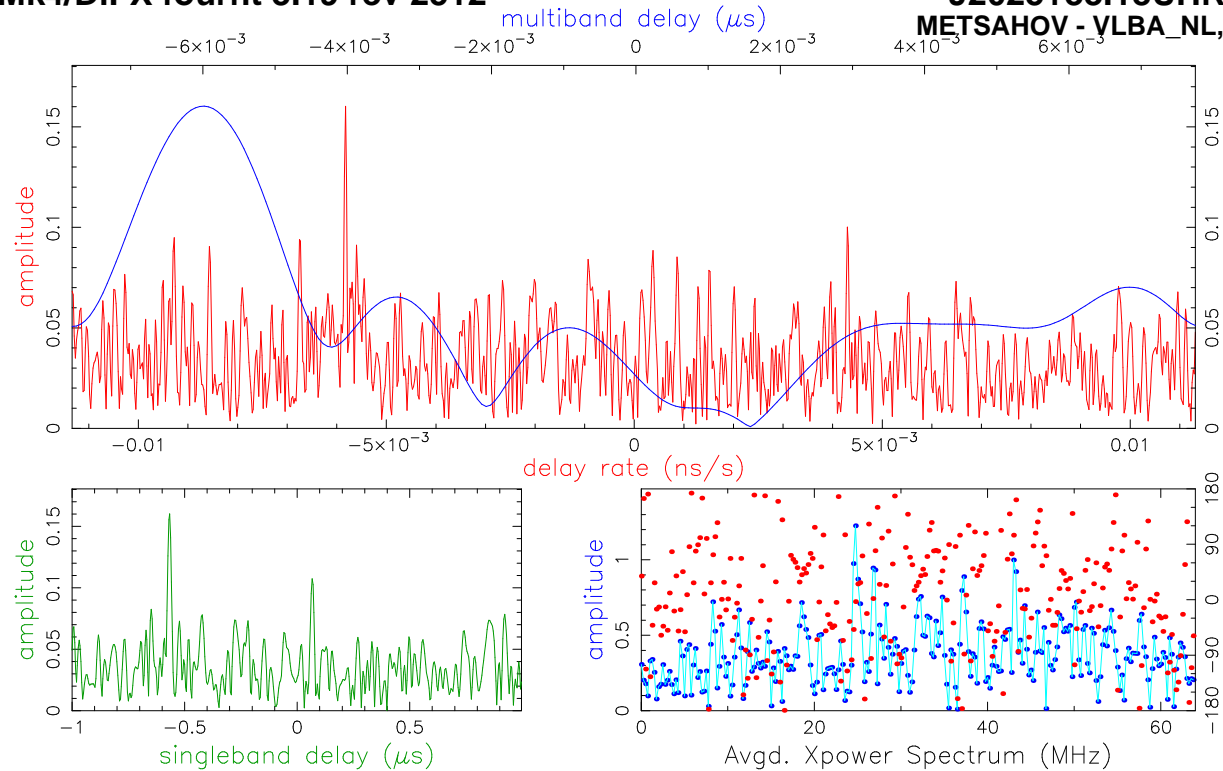
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-34.9	-10.6	-20.5	-72.6	0.5	-9.5	-43.8	-13.9	Phase	-24.3
	0.3	0.3	0.1	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2
	378.4	422.0	171.8	249.0	157.6	465.3	315.8	421.8	Sbd box	421.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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)	-3.22345871629E+03		Apriori delay (usec)		-3.22410478723E+03		Resid mbdelay (usec)		5.44594E-03	+/- 1.8E-04
Sband delay (usec)	-3.22346162398E+03		Apriori clock (usec)		-3.2408676E+01		Resid sbdelay (usec)		6.43163E-01	+/- 1.5E-03
Phase delay (usec)	-3.22410478801E+03		Apriori clockrate (us/s)		-3.1799997E-07		Resid phdelay (usec)		-7.84037E-07	+/- 6.2E-07
Delay rate (us/s)	-1.31011126838E+00		Apriori rate (us/s)		-1.31011924698E+00		Resid rate (us/s)		7.97860E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.96514104862E-05		Resid phase (deg)		-24.3	+/- 19.3

	RMS	Theor.	Amplitude	0.202 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.9	45.3	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	68.3	79.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	25.7	27.3	Inc. seg. avg.	0.202	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.5	47.7	Inc. frq. avg.	0.191	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

Z: az 270.2 el 39.7 pa 36.7 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 9049.903 2996.403 simultaneous interpolator

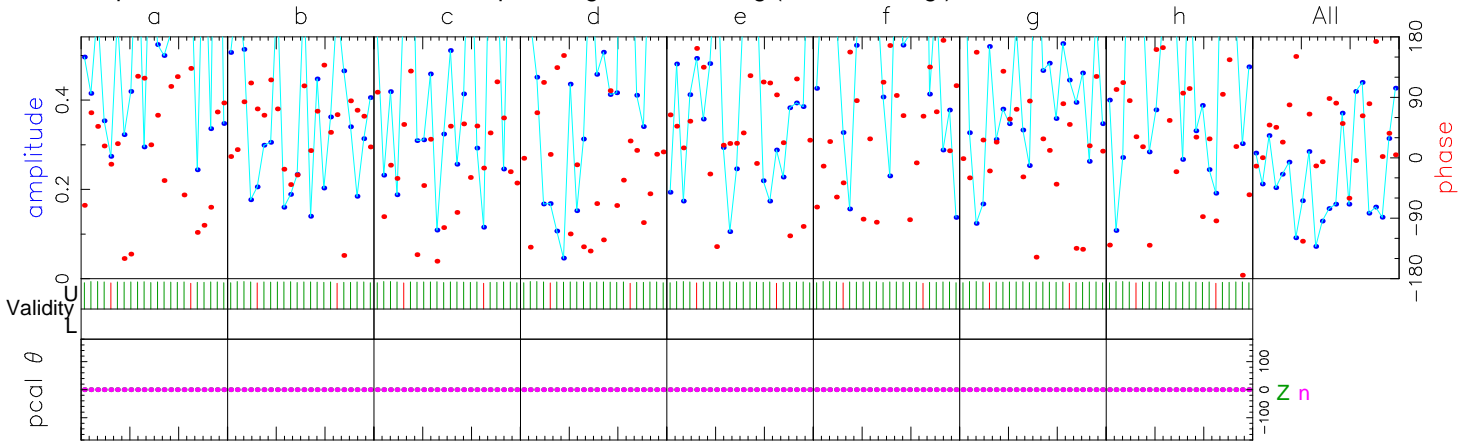


Fringe quality 0

SNR 5.9  
 Int time 175.835  
 Amp 0.181  
 Phase 34.9  
 PFD 4.5e-01  
 Delays (us)  
 SBD -0.567639  
 MBD -0.006029  
 Fringe rate (Hz)  
 -0.503309  
 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  
 2020:199:143710  
 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



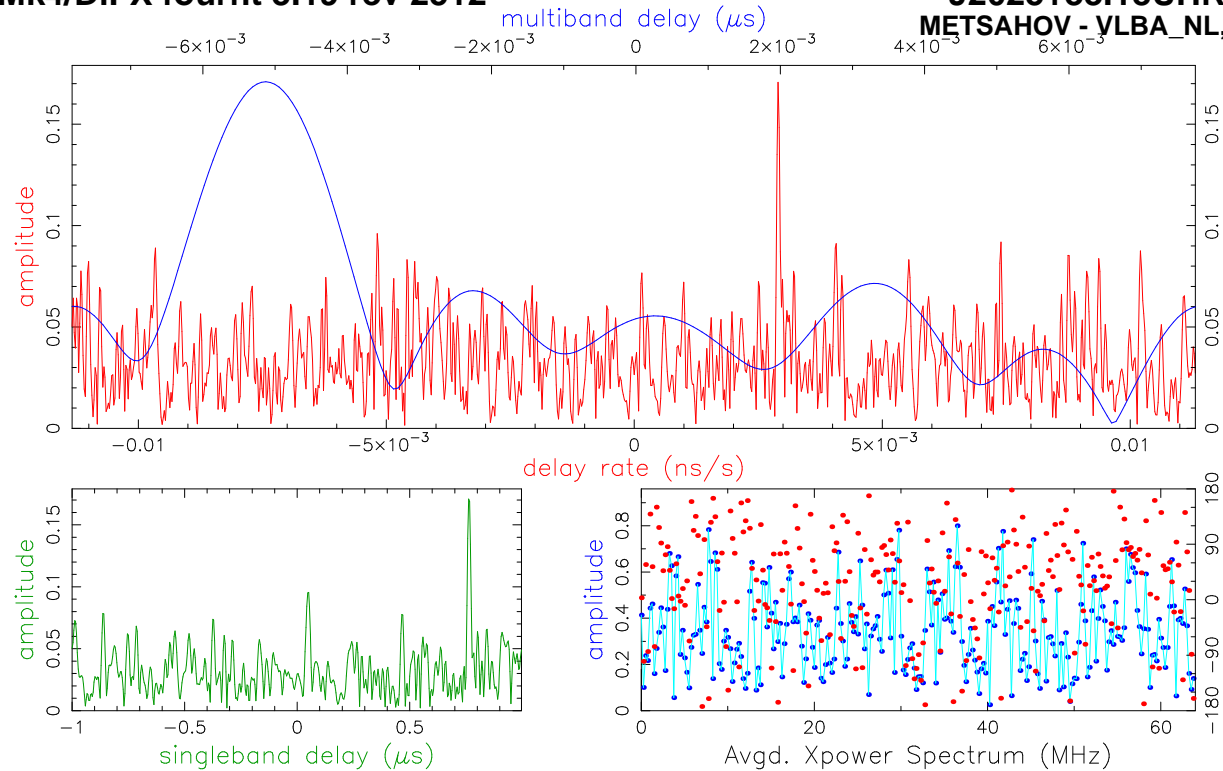
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-3.22467331602E+03			-3.22410478723E+03				-6.02880E-03	+/- 1.9E-04
Sband delay (usec)		-3.22467242648E+03			-3.2408676E+01				-5.67639E-01	+/- 1.5E-03
Phase delay (usec)		-3.22410478610E+03			-3.1799997E-07				1.12401E-06	+/- 6.3E-07
Delay rate (us/s)		-1.31012508989E+00			-1.31011924698E+00				-5.84292E-06	+/- 6.1E-09
Total phase (deg)			-98.9		2.96514104862E-05				34.9	+/- 19.6
	RMS	Theor.	Amplitude	0.181 +/- 0.031						
ph/seg (deg)	63.6	45.9	Search (1024X32)	0.158						
amp/seg (%)	80.1	80.1	Interp.	0.000						
ph/frq (deg)	36.1	27.7	Inc. seg. avg.	0.199						
amp/frq (%)	27.8	48.3	Inc. frq. avg.	0.189						
Z: az 270.2 el 39.7 pa 36.7			n: az 85.8 el 51.6 pa -63.4							
					u,v (fr/asec) 9049.903 2996.403					

Group delay (usec)(sbd) -3.22467331602E+03 Apriori delay (usec) -3.22410478723E+03 Resid mbdelay (usec) -6.02880E-03 +/- 1.9E-04  
 Sband delay (usec) -3.22467242648E+03 Apriori clock (usec) -3.2408676E+01 Resid sbdelay (usec) -5.67639E-01 +/- 1.5E-03  
 Phase delay (usec) -3.22410478610E+03 Apriori clockrate (us/s) -3.1799997E-07 Resid phdelay (usec) 1.12401E-06 +/- 6.3E-07  
 Delay rate (us/s) -1.31012508989E+00 Apriori rate (us/s) -1.31011924698E+00 Resid rate (us/s) -5.84292E-06 +/- 6.1E-09  
 Total phase (deg) -98.9 Apriori accel (us/s/s) 2.96514104862E-05 Resid phase (deg) 34.9 +/- 19.6

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

Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Zn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Zn.W.192.18UHRL simultaneous interpolator



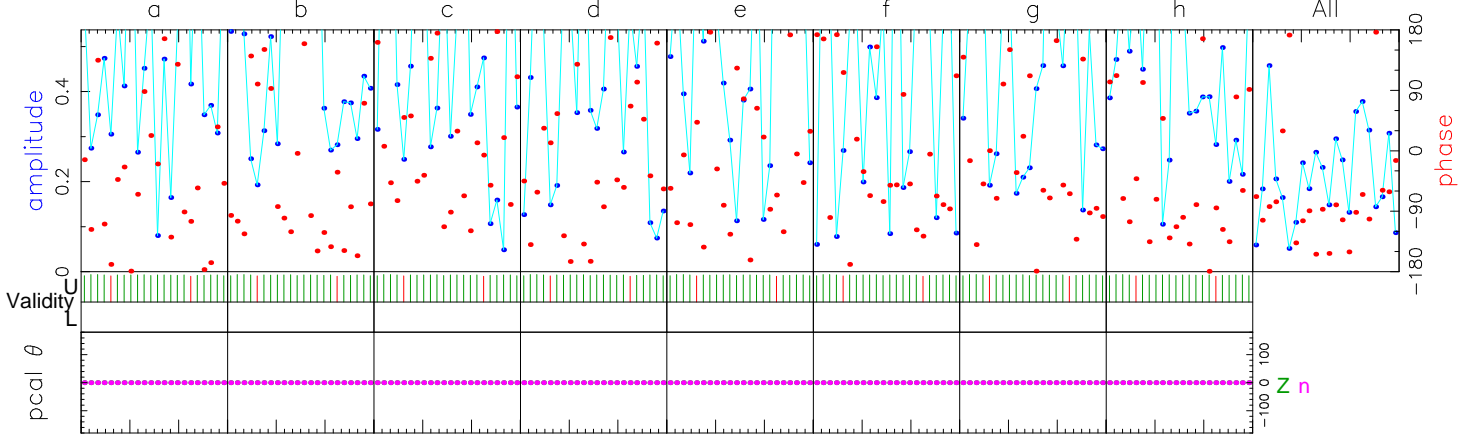


Fringe quality 0

SNR 6.3  
 Int time 175.835  
 Amp 0.179  
 Phase -92.9  
 PFD 3.6e-02  
 Delays (us)  
 SBD 0.763444  
 MBD -0.005076  
 Fringe rate (Hz)  
 0.251036  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

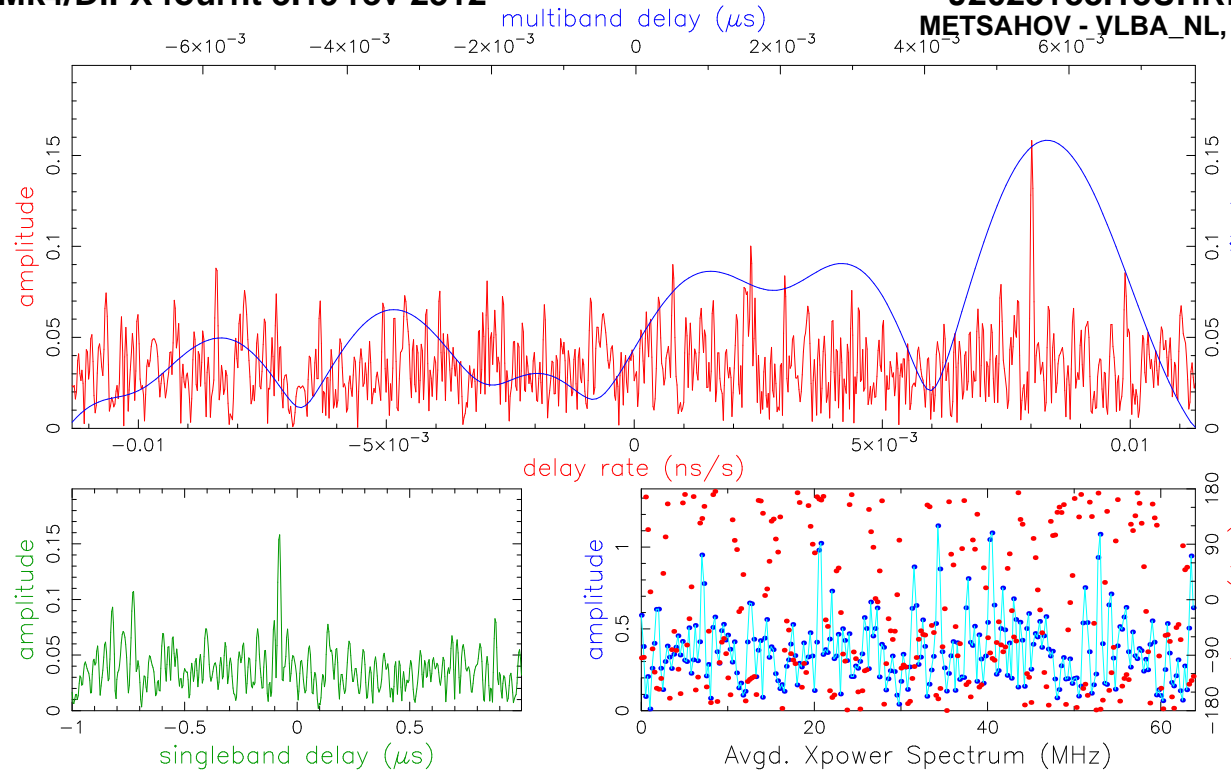
Exp. c201b  
 Exper # 16383  
 Yr:day 2020:117  
 Start 090000.00  
 Stop 090300.22  
 FRT 090130.00  
 Corr/FF/build  
 2020:198:173855  
 2020:199:143713  
 2020:014:135814  
 RA & Dec (J2000)  
 20h25m10.842106s  
 +33°43'00.214364"

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



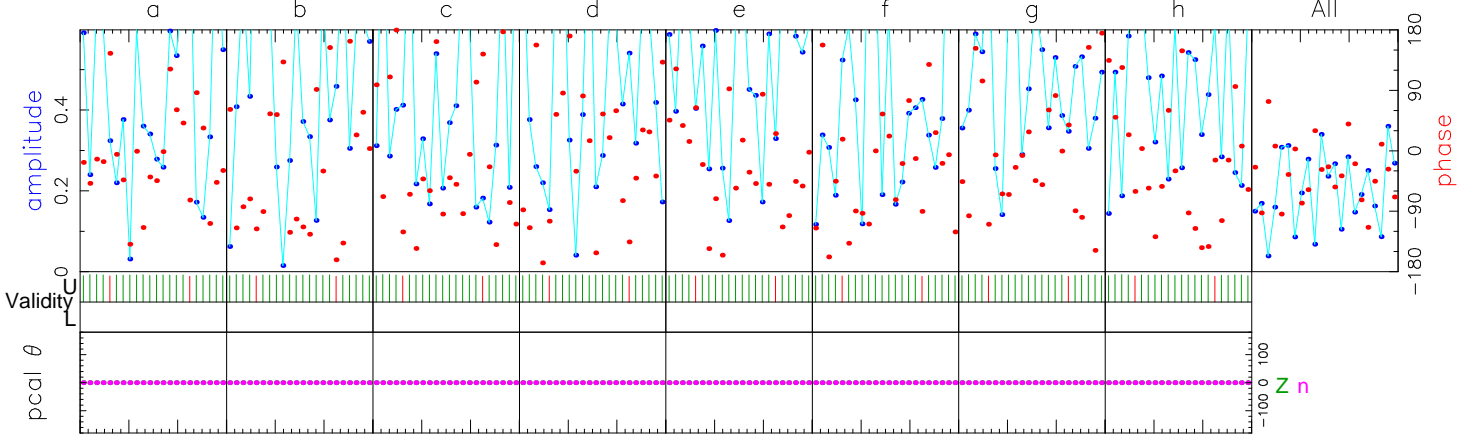
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.9	-126.6	-45.0	-113.3	-75.5	-90.9	-93.9	-114.0	Phase	-92.9
	0.2	0.3	0.3	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	4.6	452.6	452.9	295.7	268.8	50.9	29.4	490.6	Sbd box	452.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.22334423852E+03		Apriori delay (usec)		-3.22410478723E+03		Resid mbdelay (usec)		-5.07629E-03	+/- 1.7E-04
Sband delay (usec)	-3.22334134373E+03		Apriori clock (usec)		-3.2408676E+01		Resid sbdelay (usec)		7.63444E-01	+/- 1.4E-03
Phase delay (usec)	-3.22410479022E+03		Apriori clockrate (us/s)		-3.1799997E-07		Resid phdelay (usec)		-2.99556E-06	+/- 5.8E-07
Delay rate (us/s)	-1.31011633270E+00		Apriori rate (us/s)		-1.31011924698E+00		Resid rate (us/s)		2.91428E-06	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.96514104862E-05		Resid phase (deg)		-92.9	+/- 18.1

ph/seg (deg) 50.0 42.5 Search (1024X32) 0.168 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.0 74.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 27.7 25.7 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.6 44.8 Inc. frq. avg. 0.178 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 270.2 el 39.7 pa 36.7 n: az 85.8 el 51.6 pa -63.4 u,v (fr/asec) 9049.903 2996.403 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201b/v1/1234/No0058/Zn..18UHRL Output file: /Exps/c201b/v1/1234/No0058/Zn.W.209.18UHRL



Fringe quality 0  
 SNR 5.8  
 Int time 175.835  
 Amp 0.199  
 Phase -42.8  
 PFD 5.0e-01  
 Delays (us)  
 SBD -0.079593  
 MBD 0.005656  
 Fringe rate (Hz) 0.692075  
 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  
 2020:199:143715  
 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
	-20.1	-91.2	-97.7	26.2	-23.8	-42.2	-53.3	-43.4	Phase	-42.8
	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	102.5	203.5	68.9	164.8	237.2	152.8	101.4	474.2	Sbd box	236.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.22417725664E+03	Apriori delay (usec)	-3.22410478723E+03	Resid mbdelay (usec)	5.65559E-03	+/-	1.9E-04
Sband delay (usec)	-3.22418438048E+03	Apriori clock (usec)	-3.2408676E+01	Resid sbdelay (usec)	-7.95932E-02	+/-	1.5E-03
Phase delay (usec)	-3.22410478861E+03	Apriori clockrate (us/s)	-3.1799997E-07	Resid phdelay (usec)	-1.37918E-06	+/-	6.3E-07
Delay rate (us/s)	-1.31011121268E+00	Apriori rate (us/s)	-1.31011924698E+00	Resid rate (us/s)	8.03430E-06	+/-	6.1E-09
Total phase (deg)	-176.6	Apriori accel (us/s/s)	2.96514104862E-05	Resid phase (deg)	-42.8	+/-	19.7

ph/seg (deg)	46.9	Theor.	46.1	Search (1024X32)	0.156	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.5		80.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	43.0		27.8	Inc. seg. avg.	0.190	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.0		48.5	Inc. frq. avg.	0.213	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00