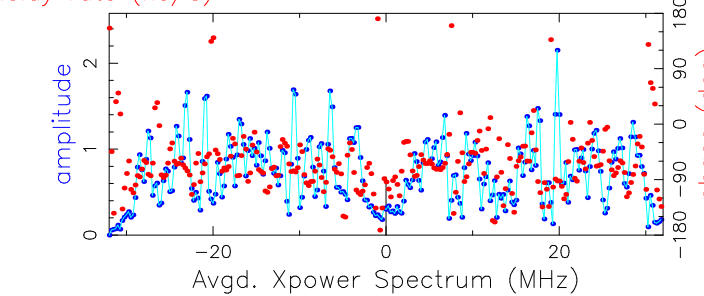
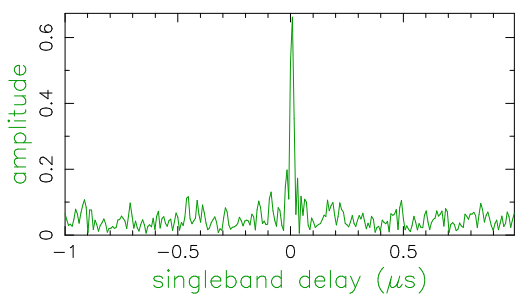
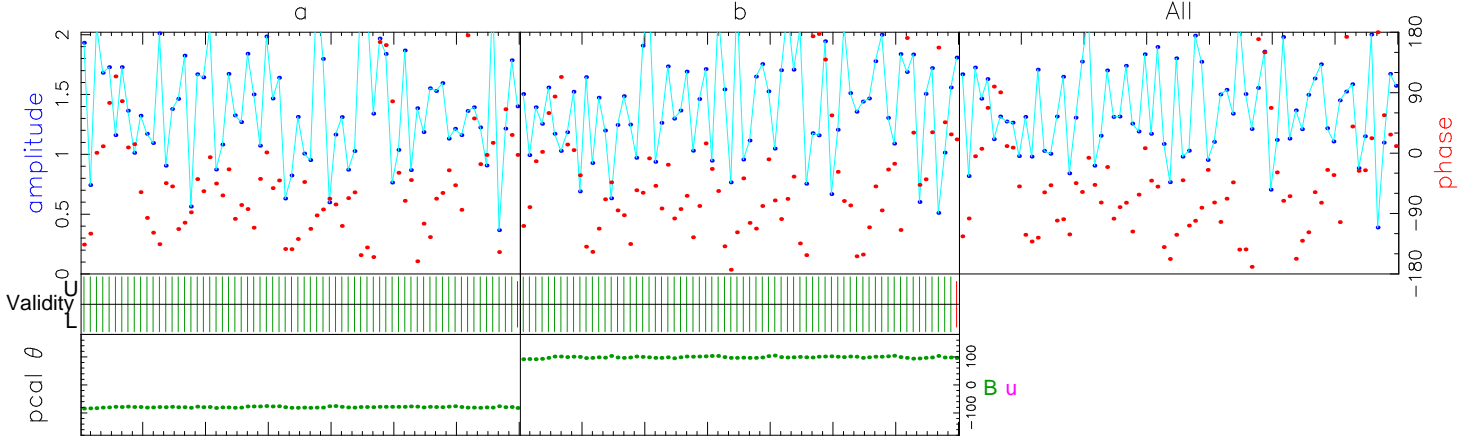


Fringe quality 9  
 SNR 18.9  
 Int time 418.917  
 Amp 0.674  
 Phase -68.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.006135  
 MBD 0.006503  
 Fringe rate (Hz)  
 -0.002373  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



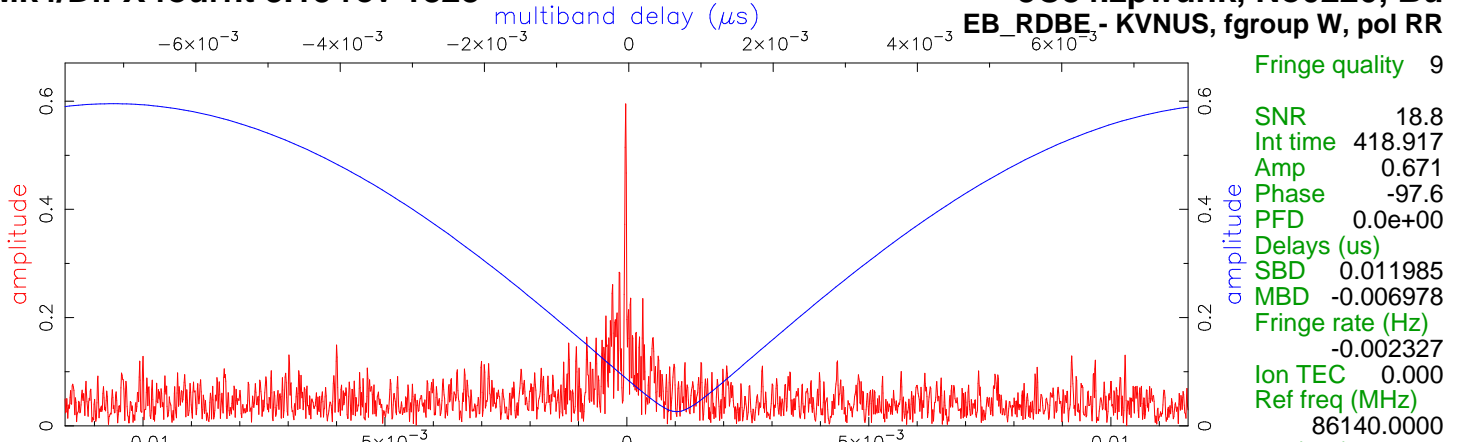
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145904  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	-68.8	0.6	129.7	U/L 838/838	B -1000	u 0	B:u 0:0	B:u 0:0	B 1000	u 1000	B W00UL,W00LL	u W00UL,W00LL	Group delay (usec)(sbd)	1.41139312770E+04	Apriori delay (usec)	1.41139247739E+04	Resid mbdelay (usec)	6.50314E-03	+/- 2.6E-04
86220.00	-68.6	0.7	129.9	U/L 838/838	B -1000	u 0	B:u 0:0	B:u 0:0	B 1000	u 1000	B W02UL,W02LL	u W01UL,W01LL	Sband delay (usec)	1.41139309089E+04	Apriori clock (usec)	2.0487045E+01	Resid sbdelay (usec)	6.13500E-03	+/- 4.6E-04
													Phase delay (usec)	1.41139247717E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.21520E-06	+/- 9.8E-08
													Delay rate (us/s)	1.22352258293E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-2.75525E-08	+/- 8.1E-10
													Total phase (deg)	-60.5	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-68.7	+/- 3.0

ph/seg (deg) 68.6 25.4 Search (2048X8) 0.636 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 117.3 44.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 4.3 Inc. seg. avg. 1.249 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 3.3 7.5 Inc. frq. avg. 0.660 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 B: az 108.8 el 71.1 pa -53.4 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.141.zpwuhk simultaneous interpolator



Fringe quality 9

SNR 18.8

Int time 418.917

Amp 0.671

Phase -97.6

PFD 0.0e+00

Delays (us)

SBD 0.011985

MBD -0.006978

Fringe rate (Hz)

-0.002327

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:089

Start 124501.00

Stop 125200.00

FRT 124830.00

Corr/FF/build

2017:206:154629

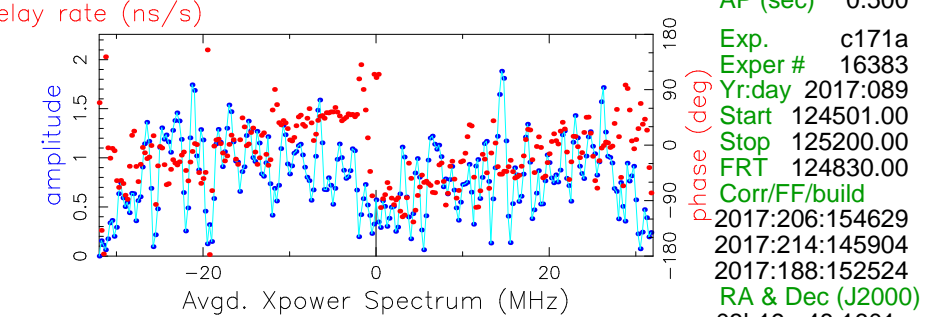
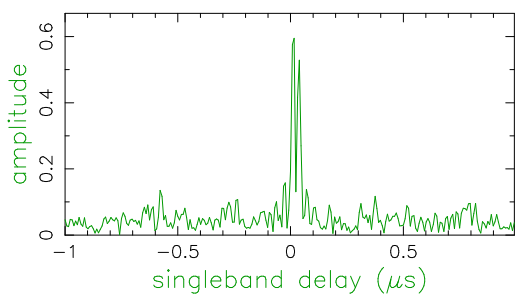
2017:214:145904

2017:188:152524

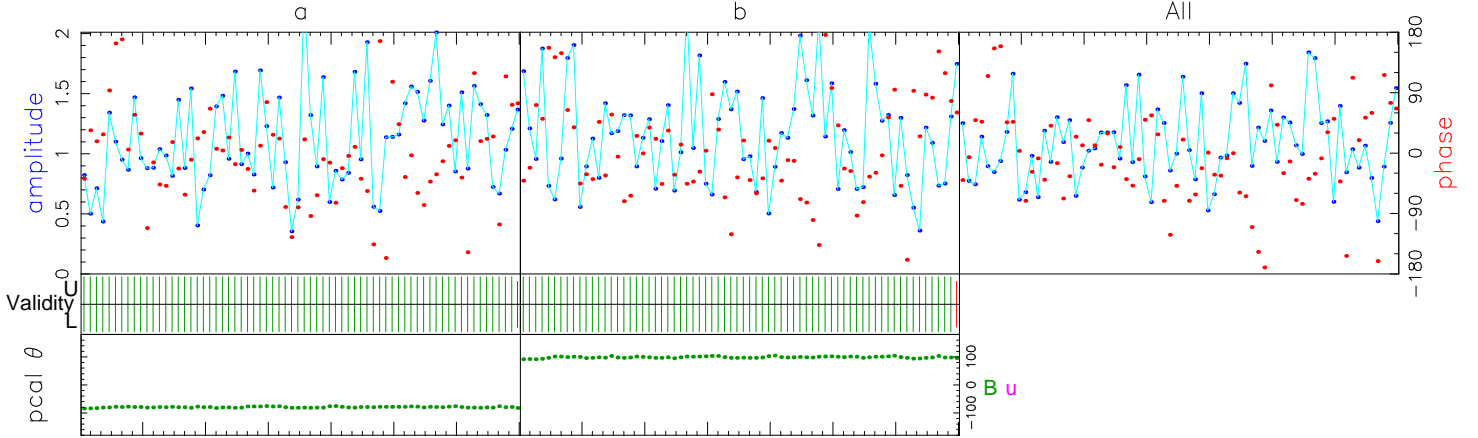
RA & Dec (J2000)

03h19m48.1601s

+41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	86220.00	Freq (MHz)	All	
-5.7	-9.6	-9.6	Phase	-7.6	
0.6	0.6	0.6	Ampl.	0.6	
130.5	130.5	130.5	Sbd box	130.5	
U/L 838/838	838/838	838/838	APs used		
B -1000	-1000	-1000	PC freqs		
u 0	0	0	PC freqs		
B:u 0:0	0:0	0:0	PC phase		
B:u 0:0	0:0	0:0	Manl PC		
B 1000	1000	1000	PC amp		
u 1000	1000	1000			
B W00UR,W00LR	W02UR,W02LR	W02UR,W02LR	Chan ids		
u W00UR,W00LR	W01UR,W01LR	W01UR,W01LR	Tracks		
			Chan ids		
			Tracks		
Group delay (usec)(sbd)	1.41139334206E+04	Apriori delay (usec)	1.41139247739E+04	Resid mbdelay (usec)	-6.97825E-03 +/- 2.7E-04
Sband delay (usec)	1.41139367589E+04	Apriori clock (usec)	2.0487045E+01	Resid sbdelay (usec)	1.19850E-02 +/- 4.6E-04
Phase delay (usec)	1.41139247736E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.44940E-07 +/- 9.8E-08
Delay rate (us/s)	1.22352258347E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-2.70127E-08 +/- 8.1E-10
Total phase (deg)	-89.4	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-97.6 +/- 3.1

ph/seg (deg) 68.6 25.5 Theor. Amplitude 0.671 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

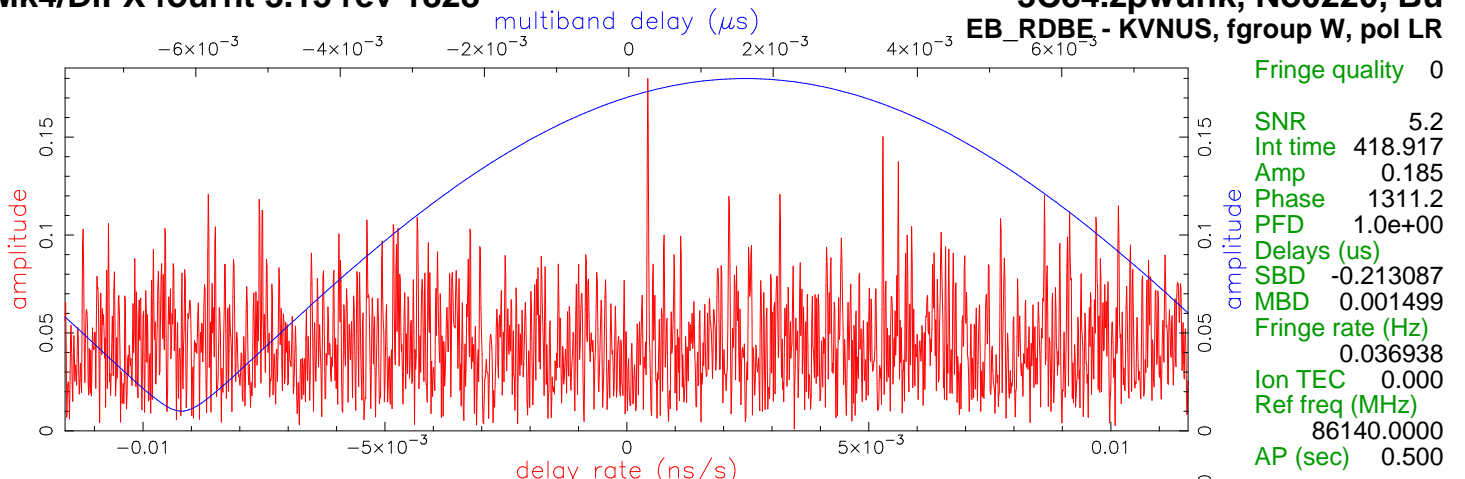
amp/seg (%) 78.3 44.6 Search (2048X8) 0.565 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 4.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

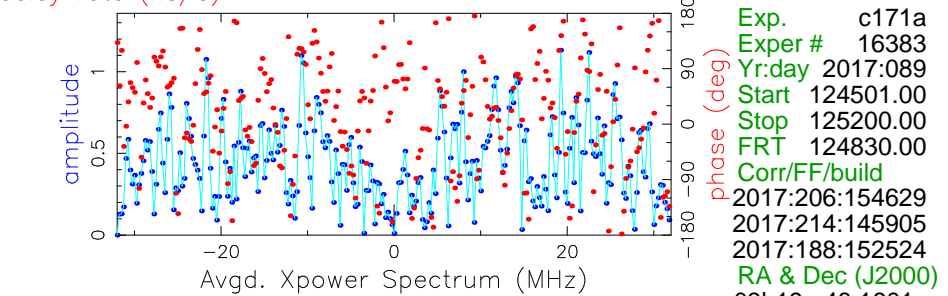
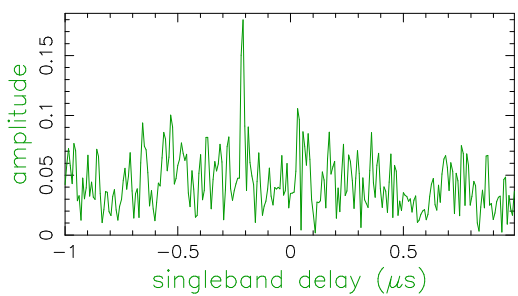
amp/frq (%) 11.9 7.5 Inc. seg. avg. 0.989 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

B: az 108.8 el 71.1 pa -53.4 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

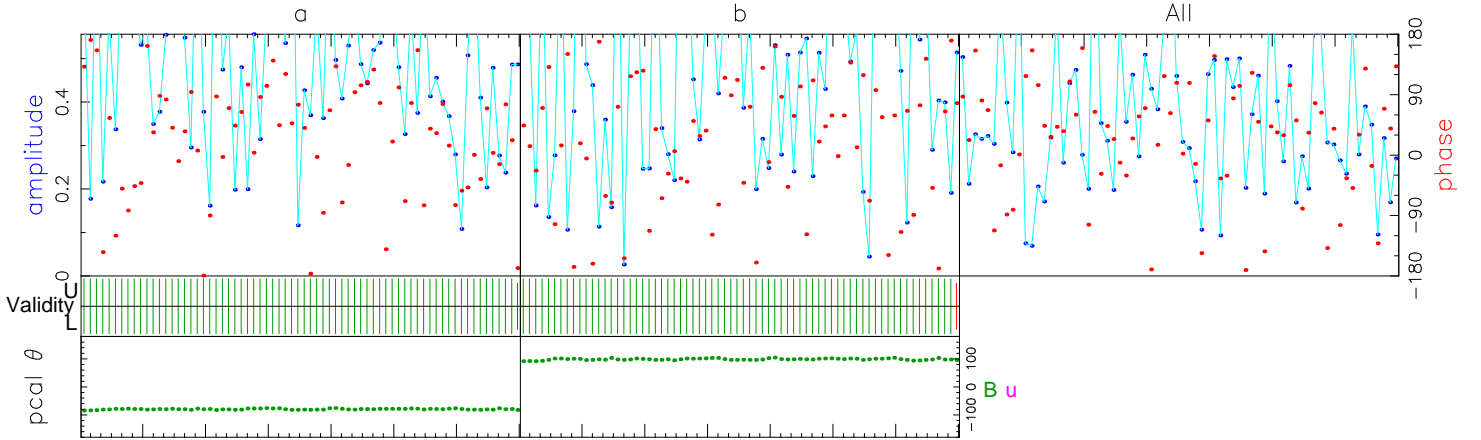
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.142.zpwuhk simultaneous interpolator



Fringe quality 0  
 SNR 5.2  
 Int time 418.917  
 Amp 0.185  
 Phase 1311.2  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.213087  
 MBD 0.001499  
 Fringe rate (Hz) 0.036938  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145905  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

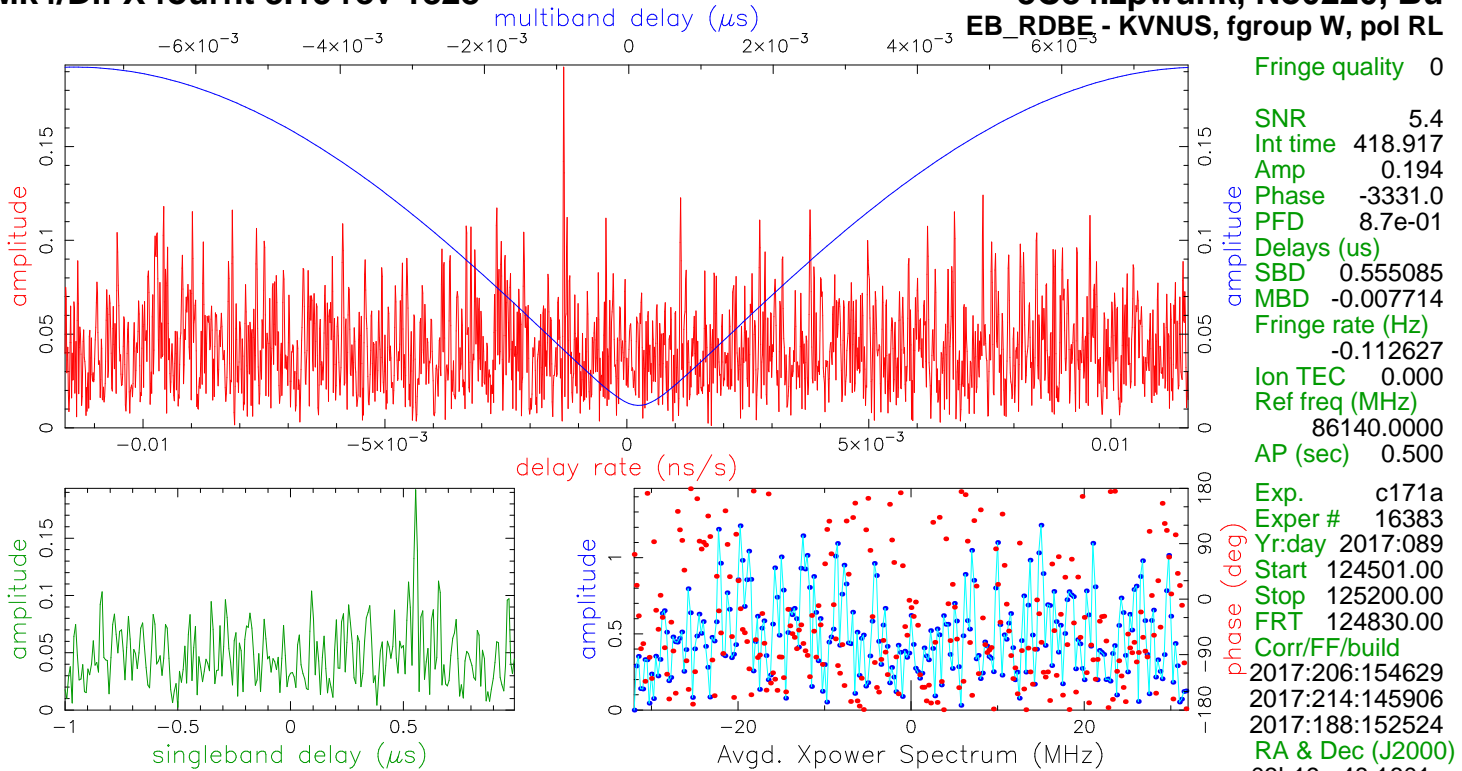


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

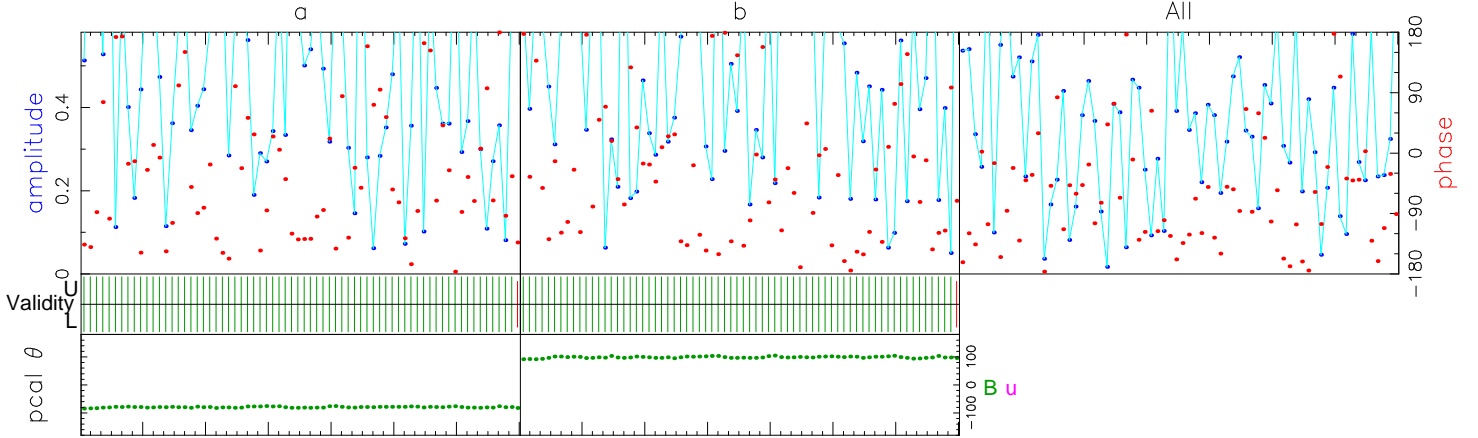


86156.00			86220.00			Freq (MHz)	All
49.9			52.5			Phase	51.2
0.2			0.2			Ampl.	0.2
101.6			101.9			Sbd box	101.7
U/L 838/838			838/838			APs used	
B -1000			-1000			PC freqs	
u 0			0			PC freqs	
B:u 0:0			0:0			PC phase	
B:u 0:0			0:0			Manl PC	
B 1000			1000			PC amp	
u 1000			1000				
B W00UL,W00LL			W02UL,W02LL			Chan ids	
u W00UR,W00LR			W01UR,W01LR			Tracks	
						Chan ids	
						Tracks	
Group delay (usec)(sbd)	1.41137075229E+04		Apriori delay (usec)	1.41139247739E+04		Resid mbdelay (usec)	1.49906E-03 +/- 9.6E-04
Sband delay (usec)	1.41137116864E+04		Apriori clock (usec)	2.0487045E+01		Resid sbdelay (usec)	-2.13087E-01 +/- 1.7E-03
Phase delay (usec)	1.41139247755E+04		Apriori clockrate (us/s)	-3.9395310E-07		Resid phdelay (usec)	1.64960E-06 +/- 3.6E-07
Delay rate (us/s)	1.22352303929E+00		Apriori rate (us/s)	1.22352261049E+00		Resid rate (us/s)	4.28809E-07 +/- 2.9E-09
Total phase (deg)	1319.4		Apriori accel (us/s/s)	-6.06632942619E-05		Resid phase (deg)	1311.2 +/- 11.1

ph/seg (deg)	RMS 79.9	Theor. 92.5	Amplitude 0.185 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	140.8	161.4	Search (2048X8) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	0.0	15.6	Inc. seg. avg. 0.161	Bits/sample: 2x2	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.012	0.012		
amp/frq (%)	6.1	27.3	Inc. frq. avg. 0.174	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00	
B: az 108.8 el 71.1 pa -53.4		u: az 309.1 el 17.4 pa 57.2	u,v (fr/asec) -9485.221 -2854.748							simultaneous interpolator
Control file: ../cf_1234	Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk	Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.143.zpwuhk								



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

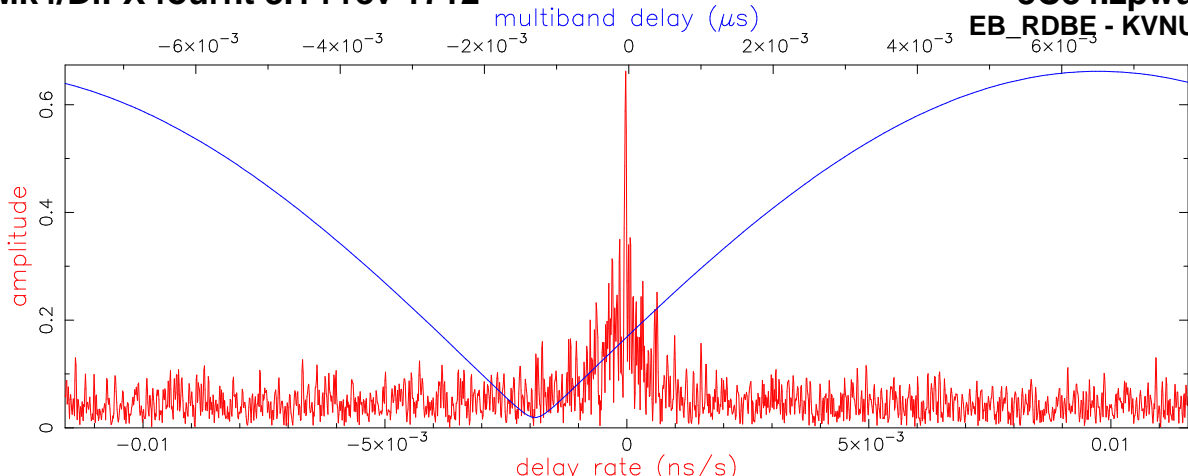


86156.00		86220.00		Freq (MHz)	All
-91.4		-90.6		Phase	-91.0
0.2		0.2		Ampl.	0.2
200.3		199.8		Sbd box	200.1
U/L 838/838		838/838		APs used	
B -1000		-1000		PC freqs	
u 0		0		PC freqs	
B:u 0:0		0:0		PC phase	
B:u 0:0		0:0		Manl PC	
B 1000		1000		PC amp	
u 1000		1000			
B W00UR,W00LR		W02UR,W02LR		Chan ids	
u W00UL,W00LL		W01UL,W01LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.41144795601E+04	Apriori delay (usec)	1.41139247739E+04	Resid mbdelay (usec)	-7.71375E-03 +/- 9.2E-04
Sband delay (usec)	1.41144798589E+04	Apriori clock (usec)	2.0487045E+01	Resid sbdelay (usec)	5.55085E-01 +/- 1.6E-03
Phase delay (usec)	1.41139247710E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.93338E-06 +/- 3.4E-07
Delay rate (us/s)	1.22352130300E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-1.30749E-06 +/- 2.8E-09
Total phase (deg)	-3322.8	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-3331.0 +/- 10.6

ph/seg (deg)	RMS 71.8	Theor. 89.0	Amplitude Search (2048X8)	0.194 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	128.4	155.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	15.0	Inc. seg. avg.	0.161	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.2	26.2	Inc. frq. avg.	0.187	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

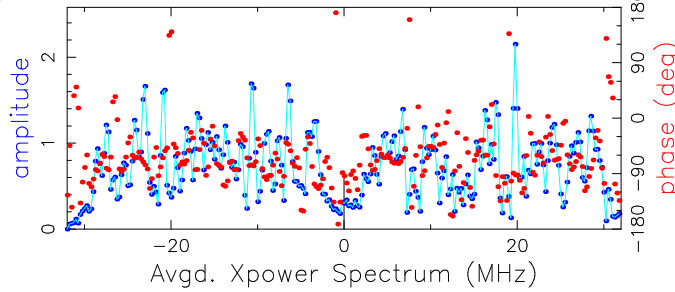
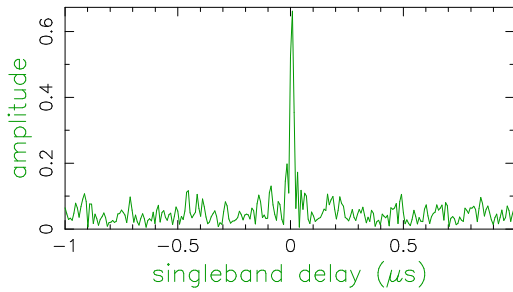
B: az 108.8 el 71.1 pa -53.4 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.144.zpwuhk



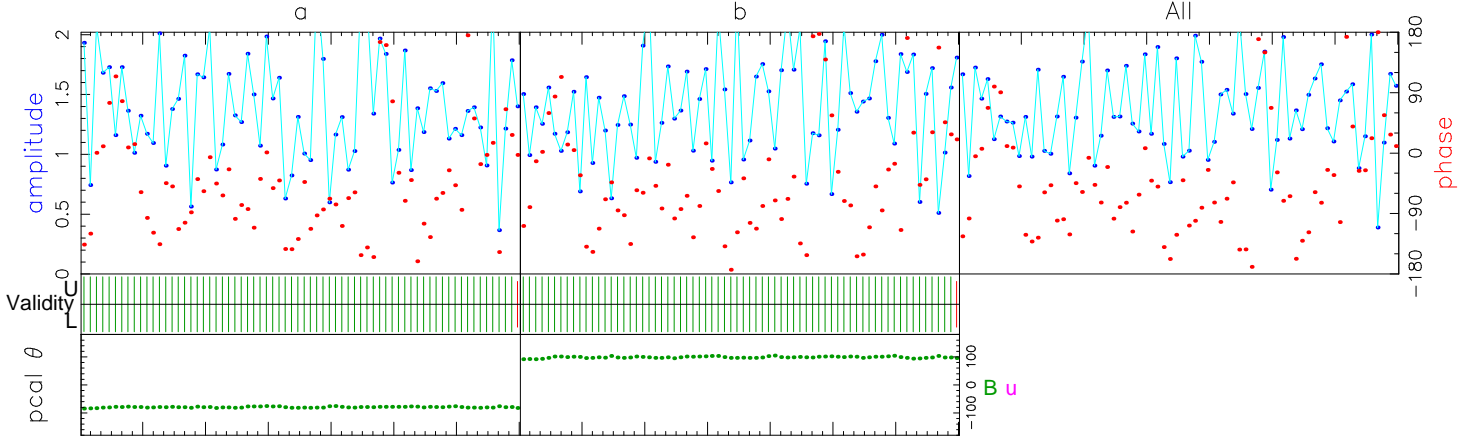
Fringe quality 9

SNR 18.9  
 Int time 418.917  
 Amp 0.674  
 Phase -68.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.006135  
 MBD 0.006503  
 Fringe rate (Hz)  
 -0.002373  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111516  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

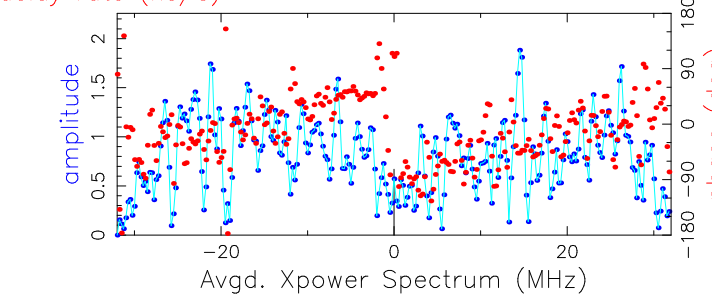
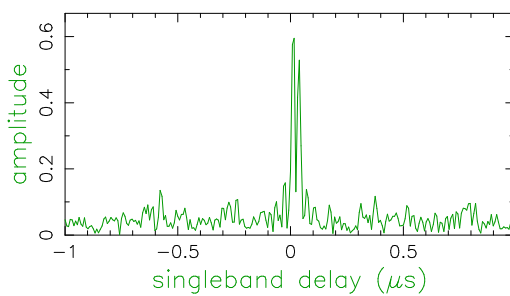
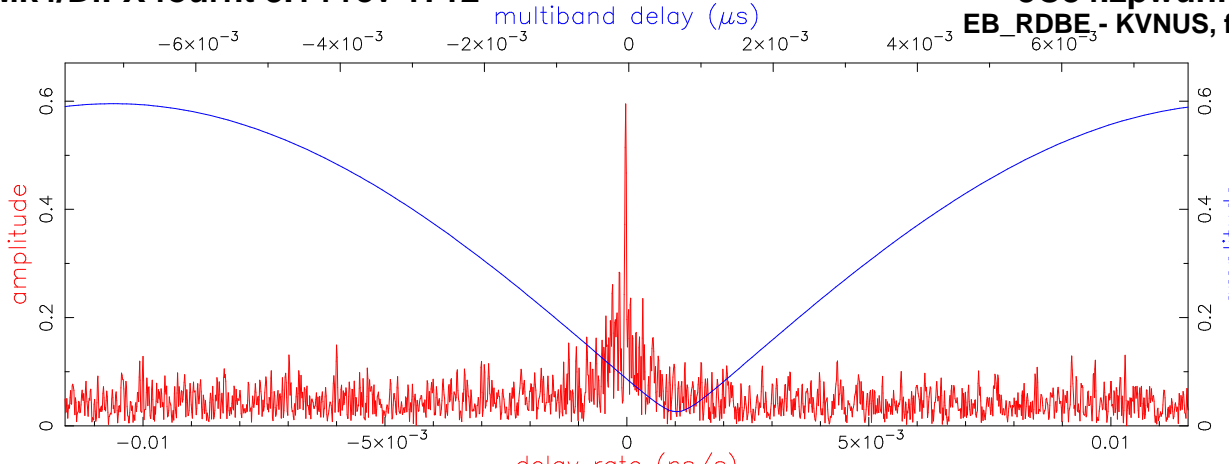


86156.00	86220.00	Freq (MHz)	All				
-68.8	-68.6	Phase	-68.7				
0.6	0.7	Ampl.	0.7				
129.7	129.9	Sbd box	129.8				
U/L 838/838	838/838	APs used					
B -1000	-1000	PC freqs					
u 0	0	PC freqs					
B:u 0:0	0:0	PC phase					
B:u 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
u 1000	1000						
B W00UL,W00LL	W02UL,W02LL	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.41139312770E+04	Apriori delay (usec)	1.41139247739E+04	Resid mbdelay (usec)	6.50314E-03	+/-	2.6E-04
Sband delay (usec)	1.41139309089E+04	Apriori clock (usec)	2.0487045E+01	Resid sbdelay (usec)	6.13500E-03	+/-	4.6E-04
Phase delay (usec)	1.41139247717E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.21520E-06	+/-	9.8E-08
Delay rate (us/s)	1.22352258293E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-2.75525E-08	+/-	8.1E-10
Total phase (deg)	-60.5	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-68.7	+/-	3.0

ph/seg (deg)	68.6	RMS	25.4	Theor.	25.4	Amplitude	0.674 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	117.3	Search (2048X8)	0.636	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	0.0	Inc. seg. avg.	1.249	Inc. frq. avg.	0.660	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
amp/frq (%)	3.3	u, v (fr/asec)	-9485.221 -2854.748	ion window (TEC)	0.00	Sample rate (MSamp/s):	64	dr window (ns/s)	-0.012	0.012		

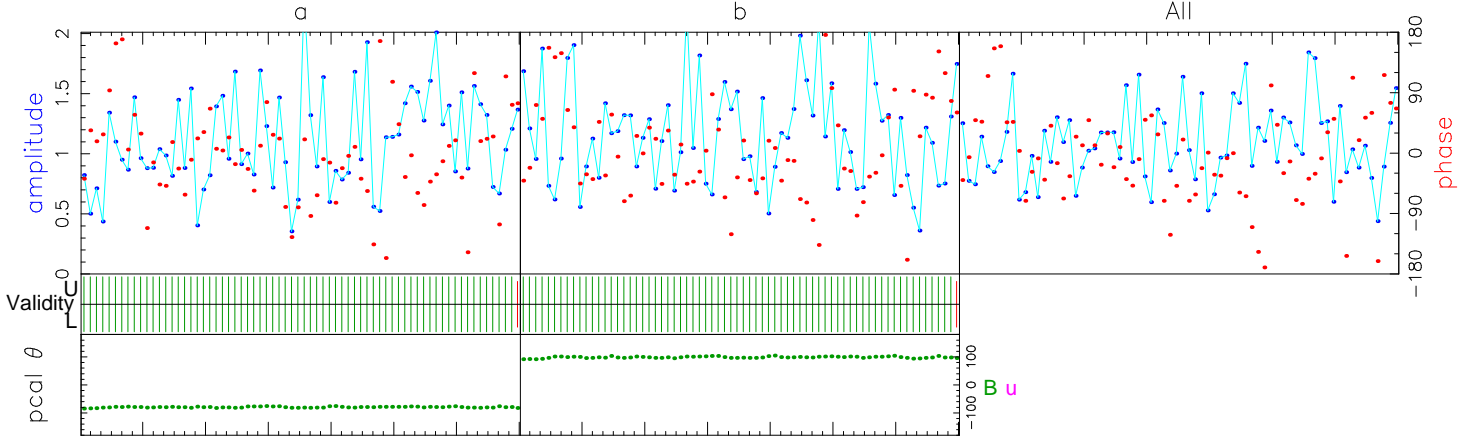
B: az 108.8 el 71.1 pa -53.4 u: az 309.1 el 17.4 pa 57.2 u, v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.29.zpwuhk



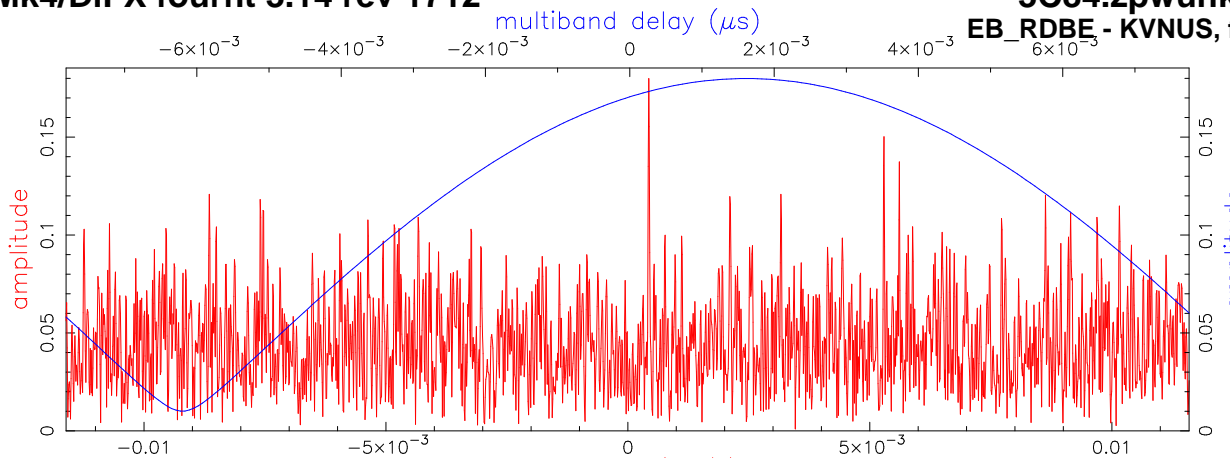
Fringe quality 9
SNR 18.8
Int time 418.917
Amp 0.671
Phase -97.6
PFD 0.0e+00
Delays (us)
SBD 0.011985
MBD -0.006978
Fringe rate (Hz) -0.002327
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.500
Exp. c171a
Exper # 16383
Yr:day 2017:089
Start 124501.00
Stop 125200.00
FRT 124830.00
Corr/FF/build 2017:206:154629
2017:208:111517
2017:170:130423
RA & Dec (J2000) 03h19m48.1601s +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



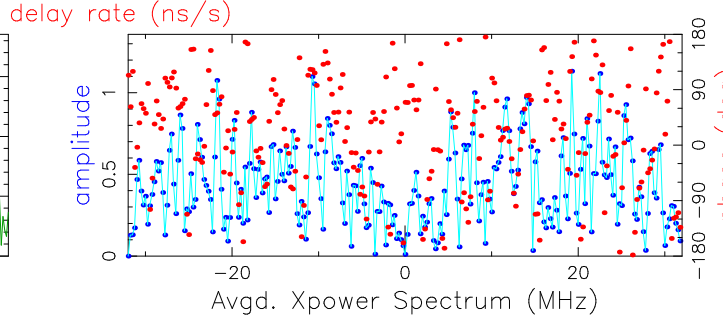
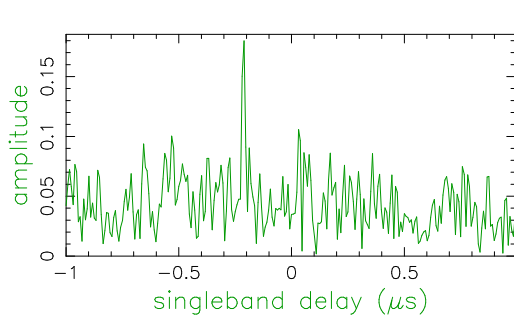
Summary table with 3 columns: Frequency-related parameters (e.g., 86156.00, 86220.00), Bandwidth/Integration parameters (e.g., 838/838), and General Observing parameters (e.g., Freq (MHz), Phase, Apriori delay).

Group delay (usec)(sbd) 1.41139334206E+04 Apriori delay (usec) 1.41139247739E+04 Resid mbdelay (usec) -6.97825E-03 +/- 2.7E-04
Sband delay (usec) 1.41139367589E+04 Apriori clock (usec) 2.0487045E+01 Resid sbdelay (usec) 1.19850E-02 +/- 4.6E-04
Phase delay (usec) 1.41139247736E+04 Apriori clockrate (us/s) -3.9395310E-07 Resid phdelay (usec) -2.44940E-07 +/- 9.8E-08
Delay rate (us/s) 1.22352258347E+00 Apriori rate (us/s) 1.22352261049E+00 Resid rate (us/s) -2.70127E-08 +/- 8.1E-10
Total phase (deg) -89.4 Apriori accel (us/s/s) -6.06632942619E-05 Resid phase (deg) -97.6 +/- 3.1



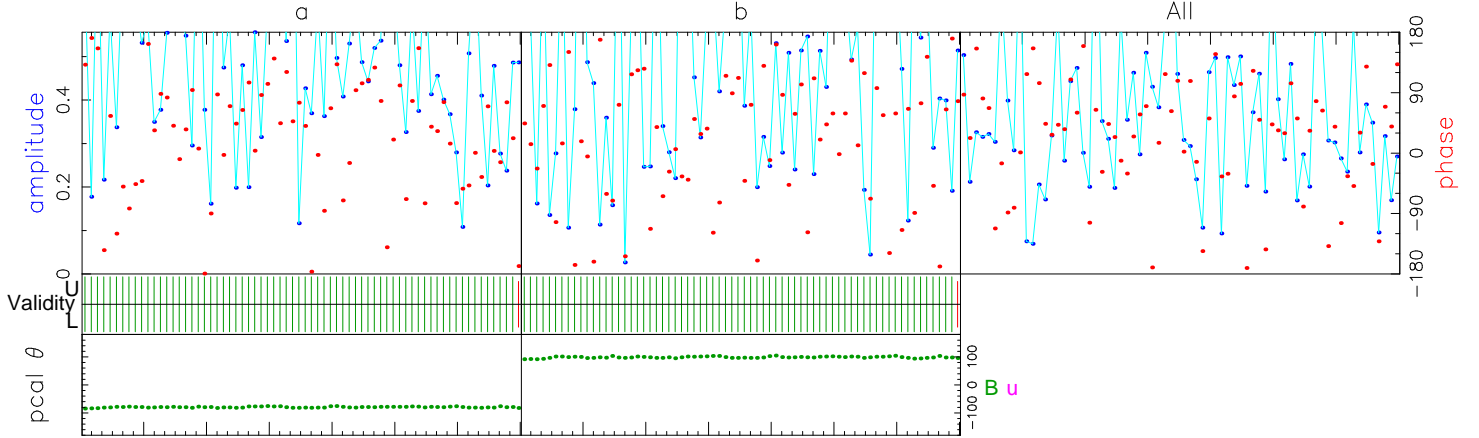
Fringe quality 0

SNR 5.2  
 Int time 418.917  
 Amp 0.185  
 Phase 1311.2  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.213087  
 MBD 0.001499  
 Fringe rate (Hz)  
 0.036938  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111517  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

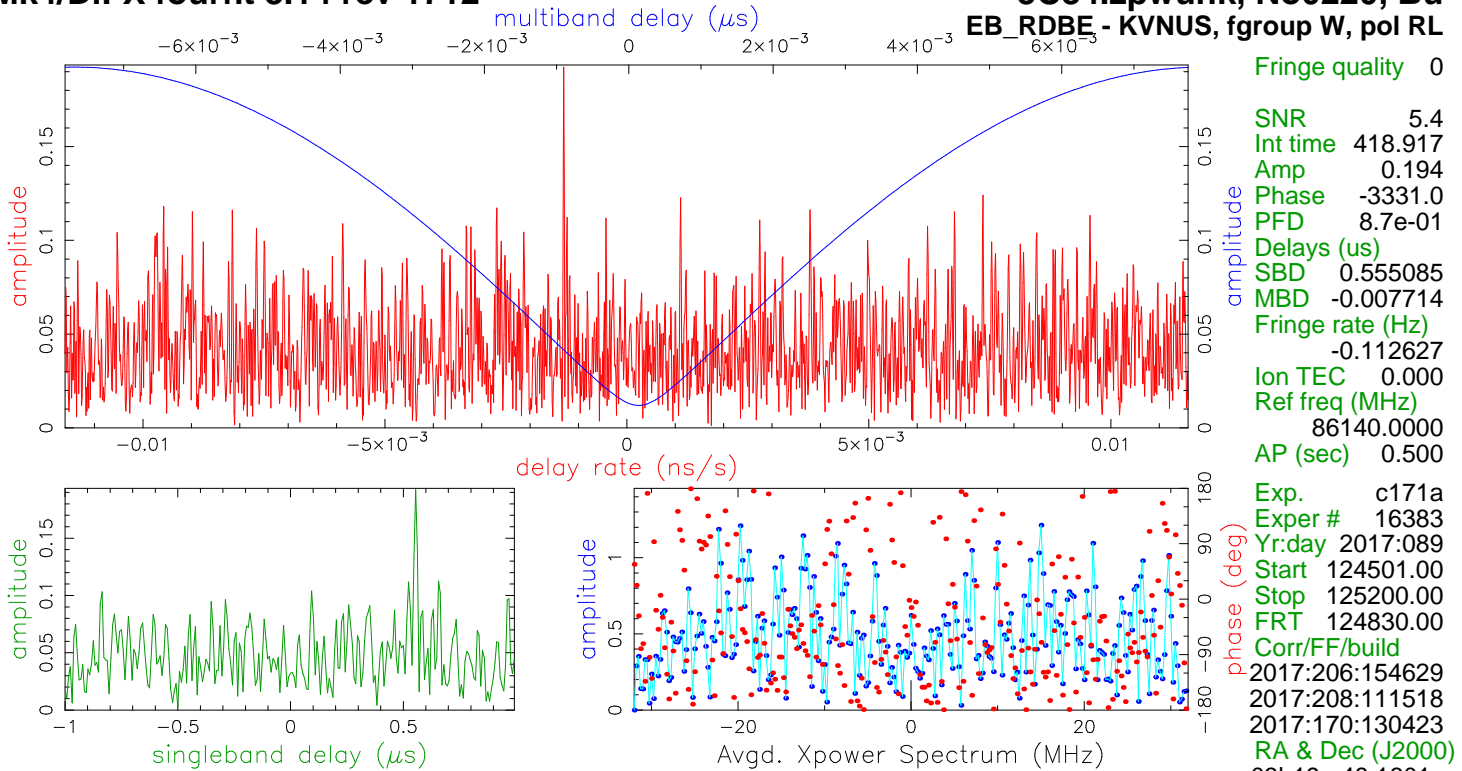


86156.00	86220.00	Freq (MHz)	All				
49.9	52.5	Phase	51.2				
0.2	0.2	Ampl.	0.2				
101.6	101.9	Sbd box	101.7				
U/L 838/838	838/838	APs used					
B -1000	-1000	PC freqs					
u 0	0	PC freqs					
B:u 0:0	0:0	PC phase					
B:u 0:0	0:0	Manl PC					
B 1000	1000	PC amp					
u 1000	1000						
B W00UL,W00LL	W02UL,W02LL	Chan ids					
u W00UR,W00LR	W01UR,W01LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.41137075229E+04	Apriori delay (usec)	1.41139247739E+04	Resid mbdelay (usec)	1.49906E-03	+/-	9.6E-04
Sband delay (usec)	1.41137116864E+04	Apriori clock (usec)	2.0487045E+01	Resid sbdelay (usec)	-2.13087E-01	+/-	1.7E-03
Phase delay (usec)	1.41139247755E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	1.64960E-06	+/-	3.6E-07
Delay rate (us/s)	1.22352303929E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	4.28809E-07	+/-	2.9E-09
Total phase (deg)	1319.4	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	1311.2	+/-	11.1

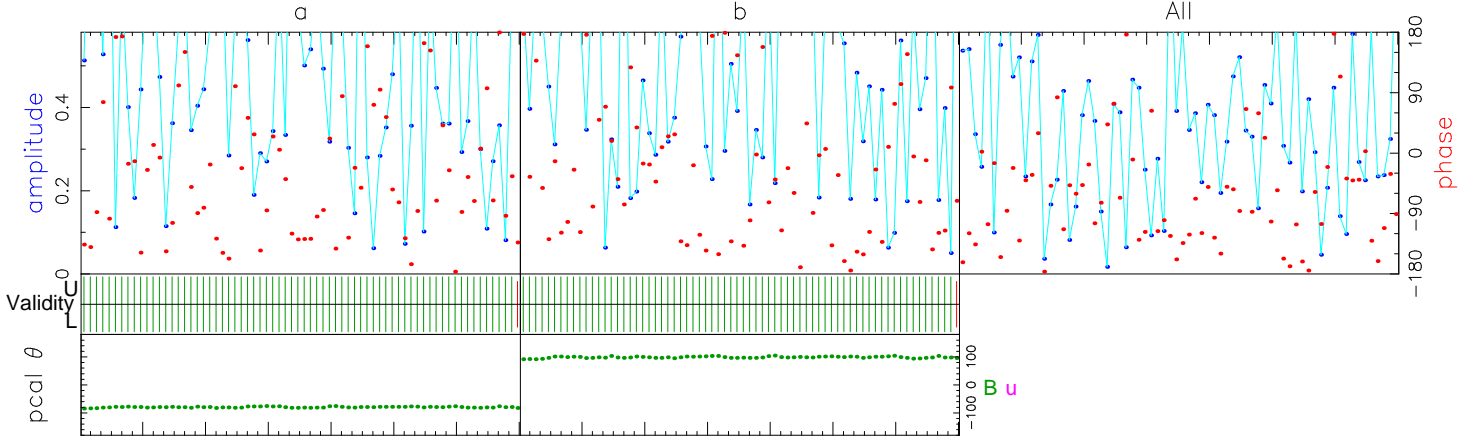
ph/seg (deg)	RMS 79.9	Theor. 92.5	Amplitude 0.185 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	140.8	161.4	Search (2048X8) 0.179	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	15.6	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.1	27.3	Inc. seg. avg. 0.161	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.174	Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

B: az 108.8 el 71.1 pa -53.4 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.31.zpwuhk



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



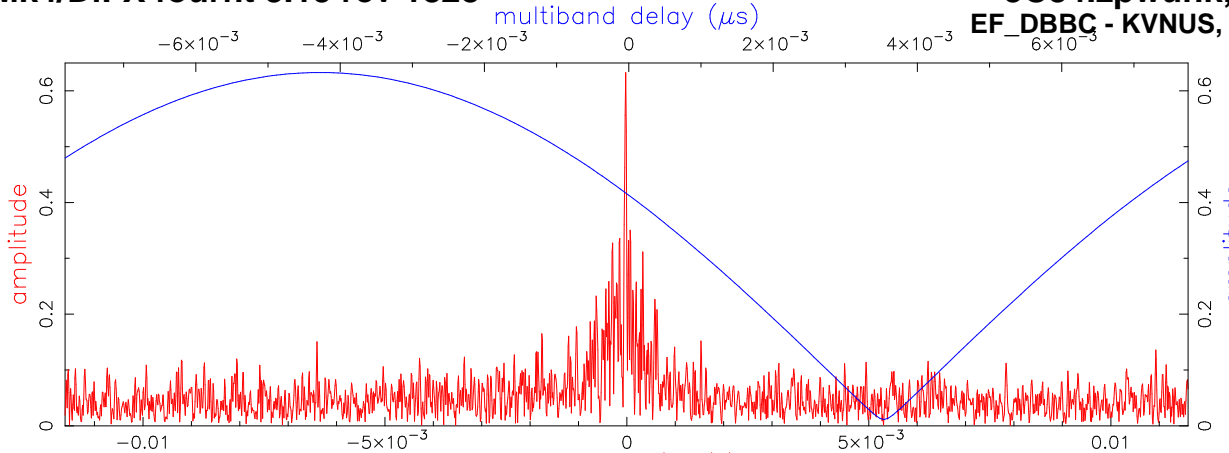
86156.00		86220.00		Freq (MHz)	All
-91.4		-90.6		Phase	-91.0
0.2		0.2		Ampl.	0.2
200.3		199.8		Sbd box	200.1
U/L 838/838		838/838		APs used	
B -1000		-1000		PC freqs	
u 0		0		PC freqs	
B:u 0:0		0:0		PC phase	
B:u 0:0		0:0		ManI PC	
B 1000		1000		PC amp	
u 1000		1000			
B W00UR,W00LR		W02UR,W02LR		Chan ids	
u W00UL,W00LL		W01UL,W01LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.41144795601E+04	Apriori delay (usec)	1.41139247739E+04	Resid mbdelay (usec)	-7.71375E-03 +/- 9.2E-04
Sband delay (usec)	1.41144798589E+04	Apriori clock (usec)	2.0487045E+01	Resid sbdelay (usec)	5.55085E-01 +/- 1.6E-03
Phase delay (usec)	1.41139247710E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.93338E-06 +/- 3.4E-07
Delay rate (us/s)	1.22352130300E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-1.30749E-06 +/- 2.8E-09
Total phase (deg)	-3322.8	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-3331.0 +/- 10.6

ph/seg (deg)	RMS 71.8	Theor. 89.0	Amplitude Search (2048X8) 0.194 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	128.4	155.3	Interp. 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	15.0	Inc. seg. avg. 0.161	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.2	26.2	Inc. frq. avg. 0.187	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
				Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

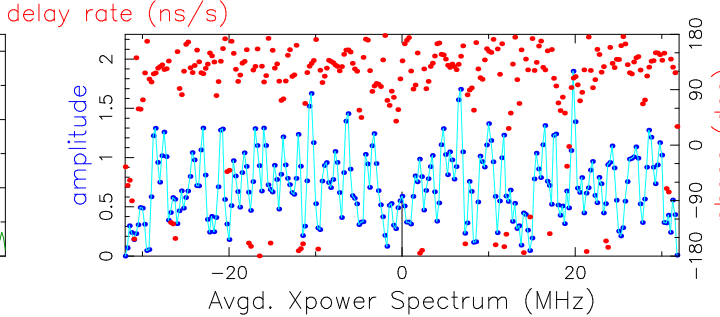
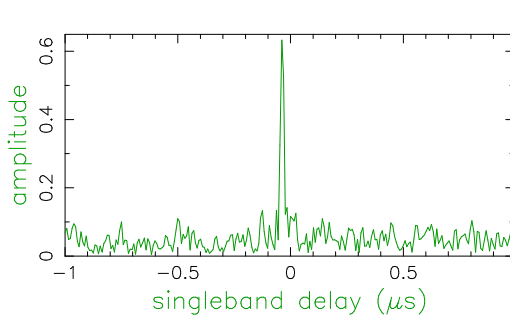
B: az 108.8 el 71.1 pa -53.4 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Bu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Bu.W.32.zpwuhk

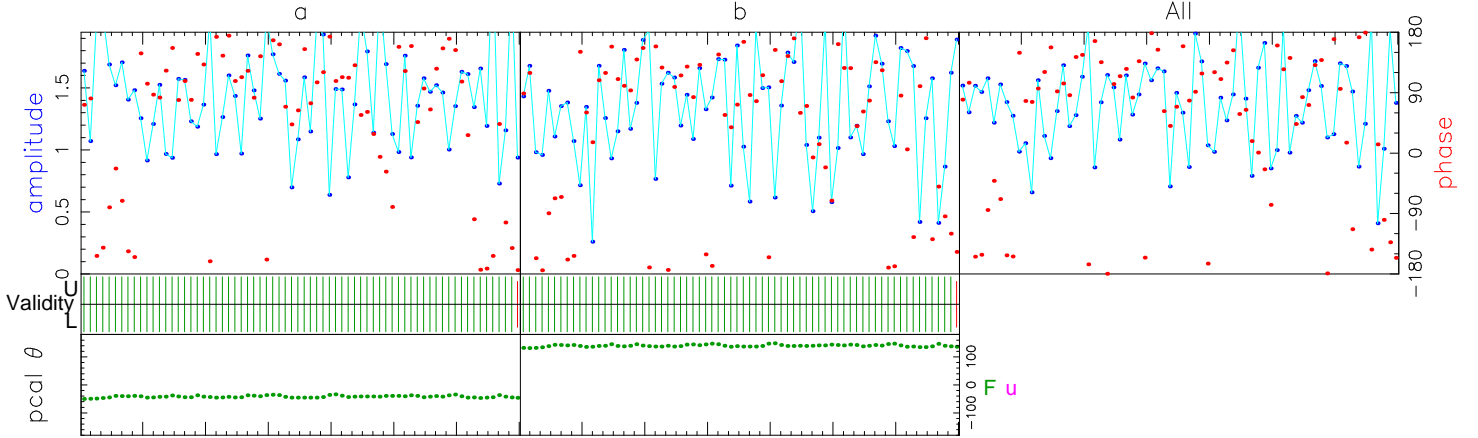




Fringe quality 9  
SNR 18.2  
Int time 418.994  
Amp 0.650  
Phase 312.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.036977  
MBD -0.004306  
Fringe rate (Hz)  
-0.002338  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:214:145909  
2017:188:152524  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

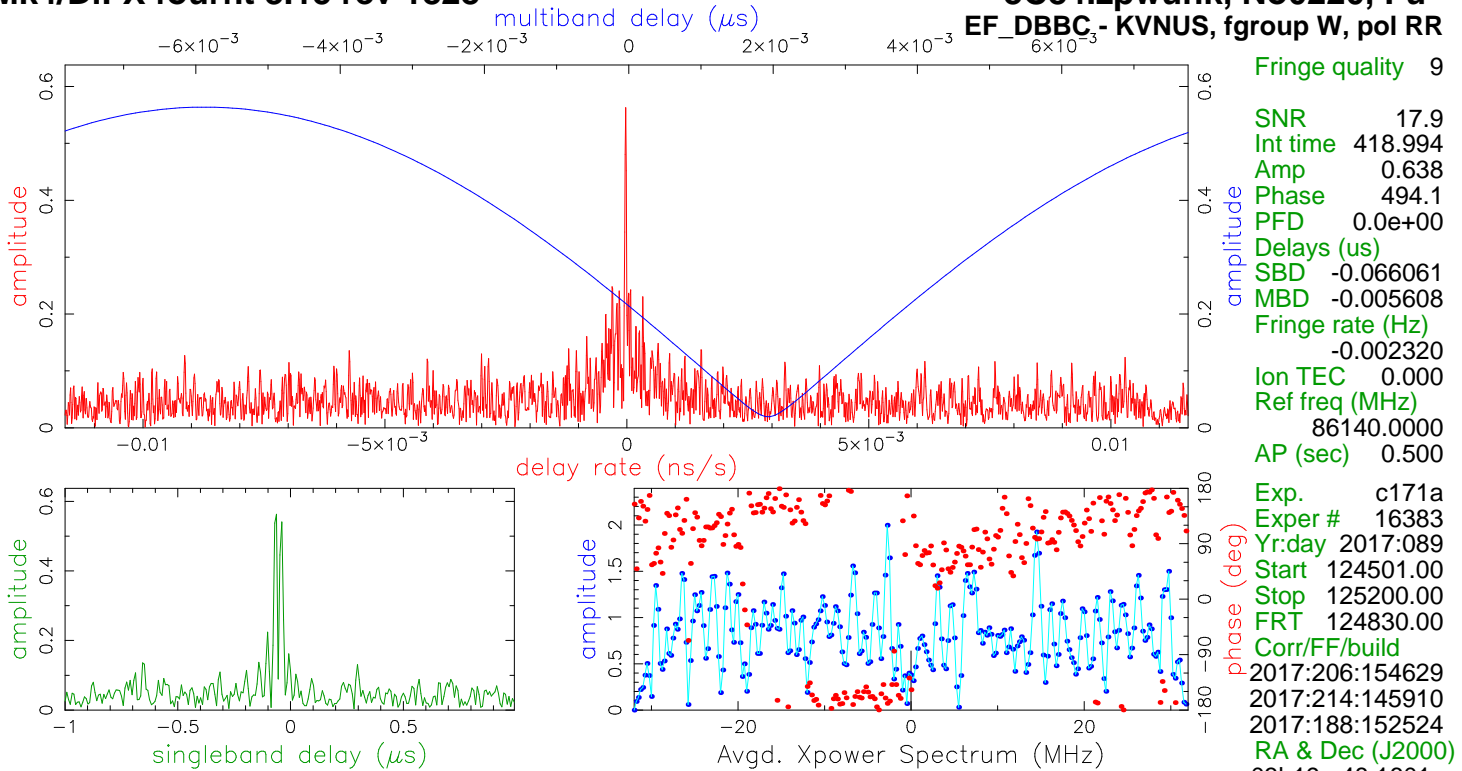


	86156.00	86220.00	Freq (MHz)	All
U/L	838/838	838/838		
F	-1000	-1000	Phase	132.3
u	0	0	Ampl.	0.6
F:u	0:0	0:0	Sbd box	124.3
F:u	0:0	0:0	APs used	
F	1000	1000	PC freqs	
u	1000	1000	PC freqs	
F	W00UL,W00LL	W02UL,W02LL	PC phase	
u	W00UL,W00LL	W01UL,W01LL	Mani PC	
			PC amp	
			Chan ids	
			Tracks	
			Chan ids	
			Tracks	

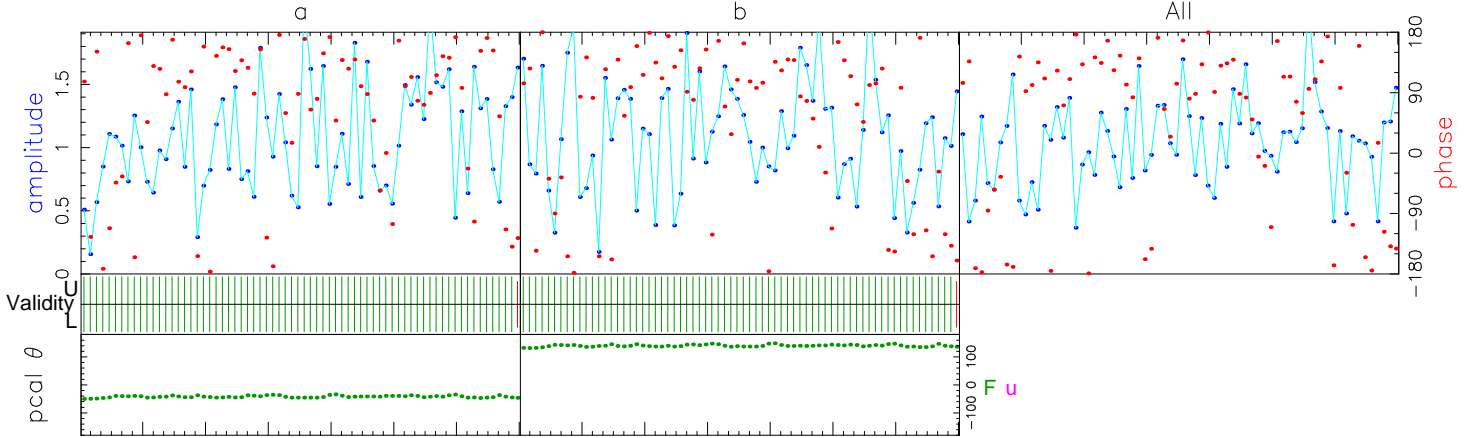
Group delay (usec)(sbd)	1.41134492179E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-4.30598E-03	+/-	2.7E-04
Sband delay (usec)	1.41134477969E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	-3.69770E-02	+/-	4.7E-04
Phase delay (usec)	1.41134847782E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	4.26601E-06	+/-	1.0E-07
Delay rate (us/s)	1.22352258334E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-2.71433E-08	+/-	8.4E-10
Total phase (deg)	464.5	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	312.3	+/-	3.2

ph/seg (deg)	70.9	Theor.	26.4	Amplitude	0.650 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	123.0	Search (2048X8)	0.618	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	Inc. seg. avg.	1.234	Inc. frq. avg.	0.631	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008 0.008
amp/frq (%)	3.1	Inc. frq. avg.	0.631			Sample rate(MSamp/s):	64	dr window (ns/s)	-0.012 0.012		
						Data rate(Mb/s):	512	ion window (TEC)	0.00 0.00		

F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.149.zpwuhk



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
137.1		130.8		Phase	134.1
0.6		0.5		Ampl.	0.6
120.5		120.6		Sbd box	120.5
U/L 838/838		838/838		APs used	
F -1000		-1000		PC freqs	
u 0		0		PC freqs	
F:u 0:0		0:0		PC phase	
F:u 0:0		0:0		Manl PC	
F 1000		1000		PC amp	
u 1000		1000			
F W00UR,W00LR		W02UR,W02LR		Chan ids	
u W00UR,W00LR		W01UR,W01LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.41134166662E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-5.60773E-03 +/- 2.8E-04
Sband delay (usec)	1.41134187124E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	-6.60615E-02 +/- 4.8E-04
Phase delay (usec)	1.41134847782E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	4.32354E-06 +/- 1.0E-07
Delay rate (us/s)	1.22352258355E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-2.69336E-08 +/- 8.6E-10
Total phase (deg)	646.3	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	494.1 +/- 3.2

ph/seg (deg) 68.5 26.9 Theor. Amplitude 0.638 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

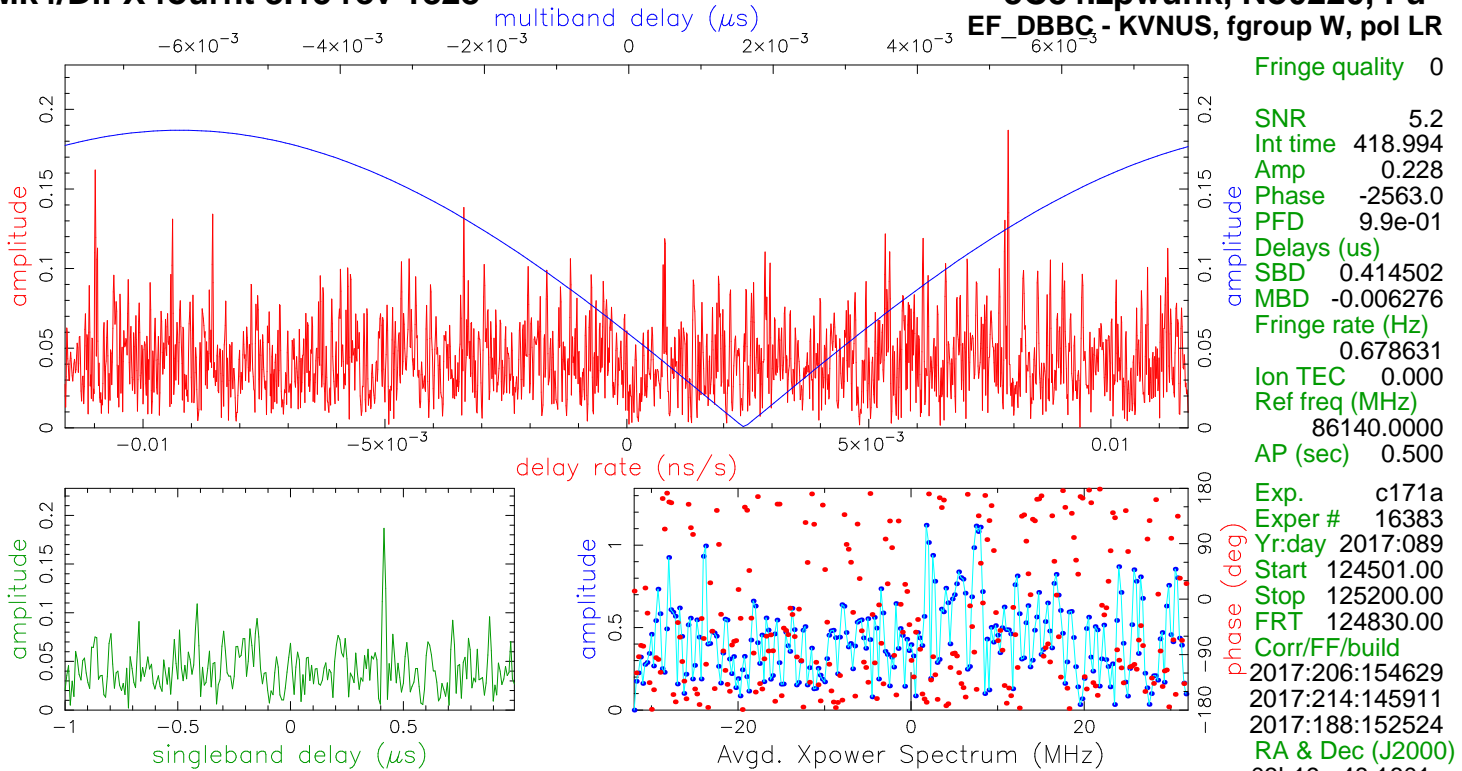
amp/seg (%) 82.8 46.9 Search (2048X8) 0.546 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 4.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

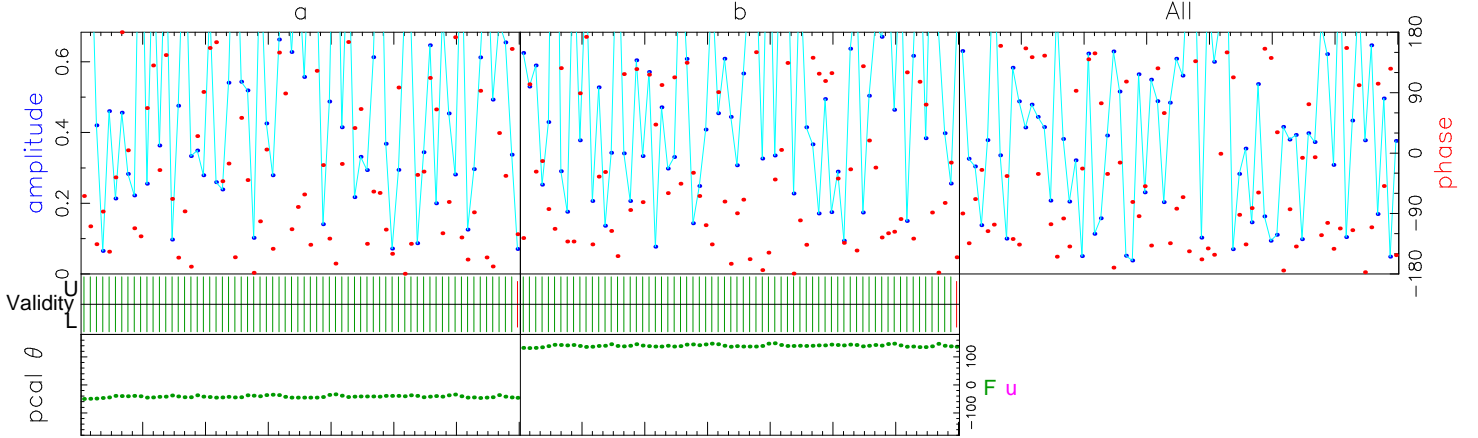
amp/frq (%) 12.0 7.9 Inc. seg. avg. 0.934 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.150.zpwuhk simultaneous interpolator



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



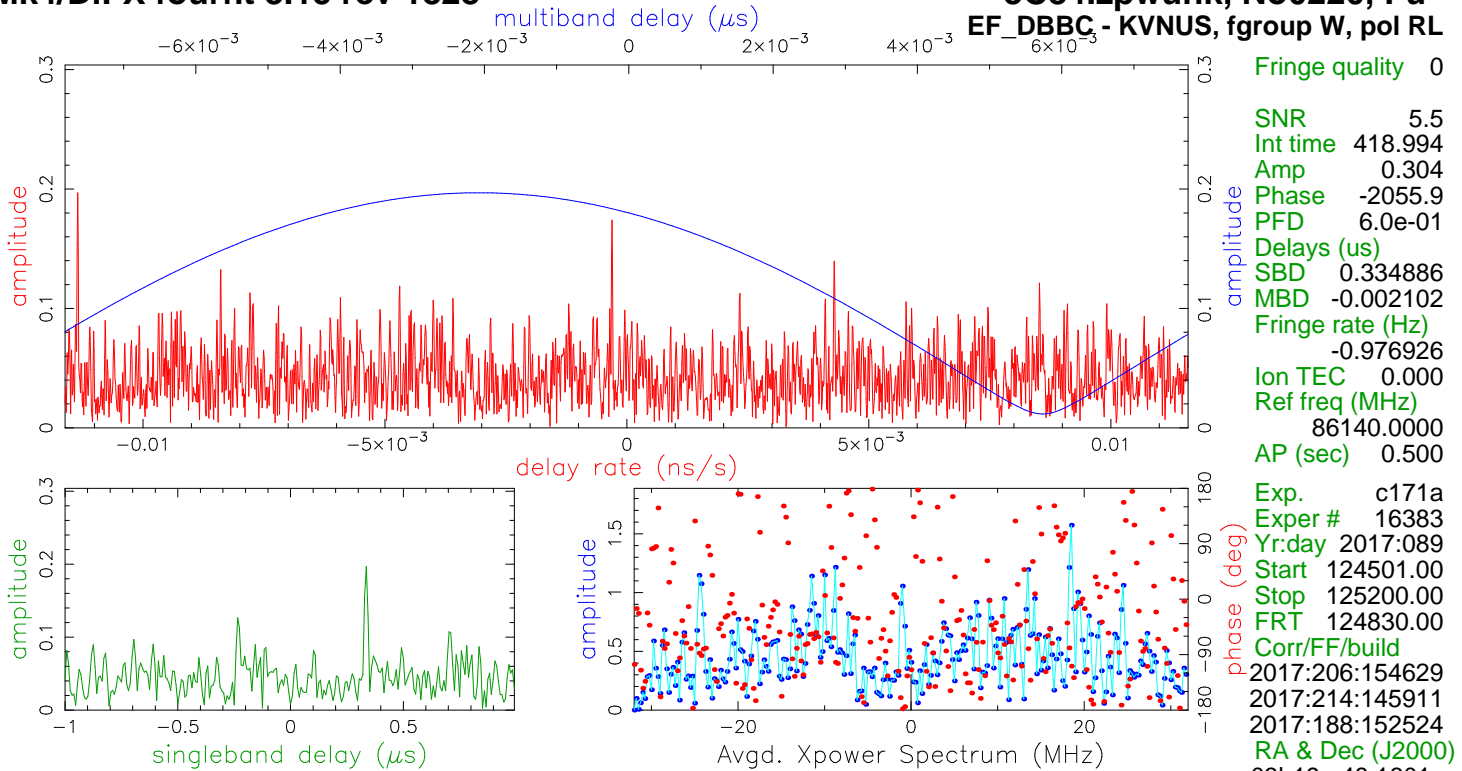
86156.00	86220.00	Freq (MHz)	All
-133.7	-132.3	Phase	-133.0
0.2	0.2	Ampl.	0.2
182.2	181.9	Sbd box	182.1
U/L 838/838	838/838	APs used	
F -1000	-1000	PC freqs	
u 0	0	PC freqs	
F:u 0:0	0:0	PC phase	
F:u 0:0	0:0	Manl PC	
F 1000	1000	PC amp	
u 1000	1000		
F W00UL,W00LL	W02UL,W02LL	Chan ids	
u W00UR,W00LR	W01UR,W01LR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	1.41139003724E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-6.27648E-03	+/-	9.5E-04
Sband delay (usec)	1.41138992759E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	4.14502E-01	+/-	1.6E-03
Phase delay (usec)	1.41134847696E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-4.28964E-06	+/-	3.5E-07
Delay rate (us/s)	1.22353048872E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	7.87823E-06	+/-	2.9E-09
Total phase (deg)	-2410.8	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-2563.0	+/-	10.9

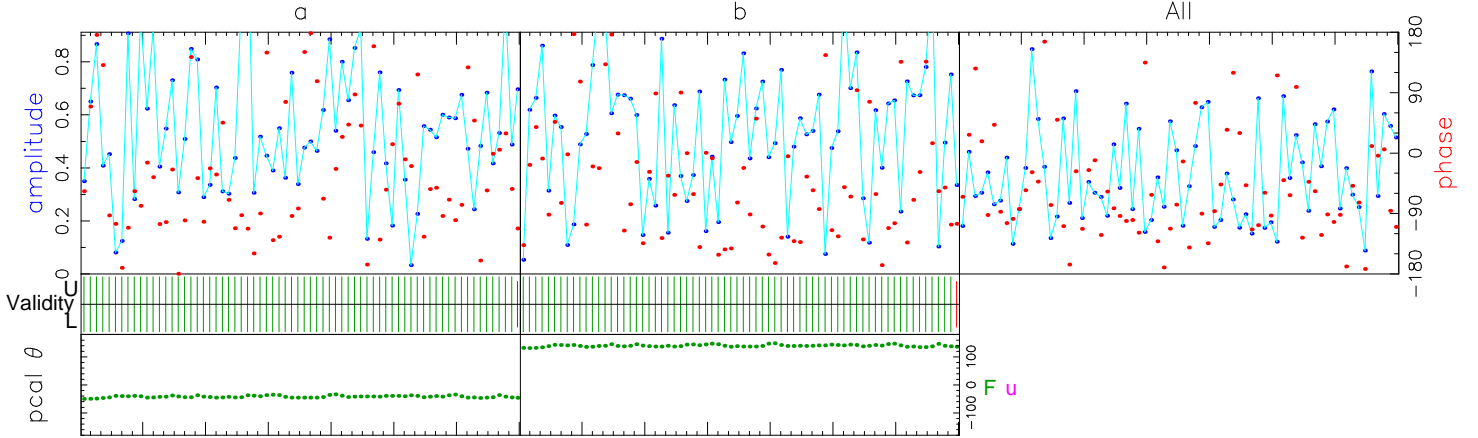
ph/seg (deg)	RMS 79.6	Theor. 91.5	Amplitude 0.228 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	178.1	159.8	Search (2048X8) 0.183	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	15.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	0.4	27.0	Inc. seg. avg. 0.221	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.220	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite		

F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.151.zpwuhk

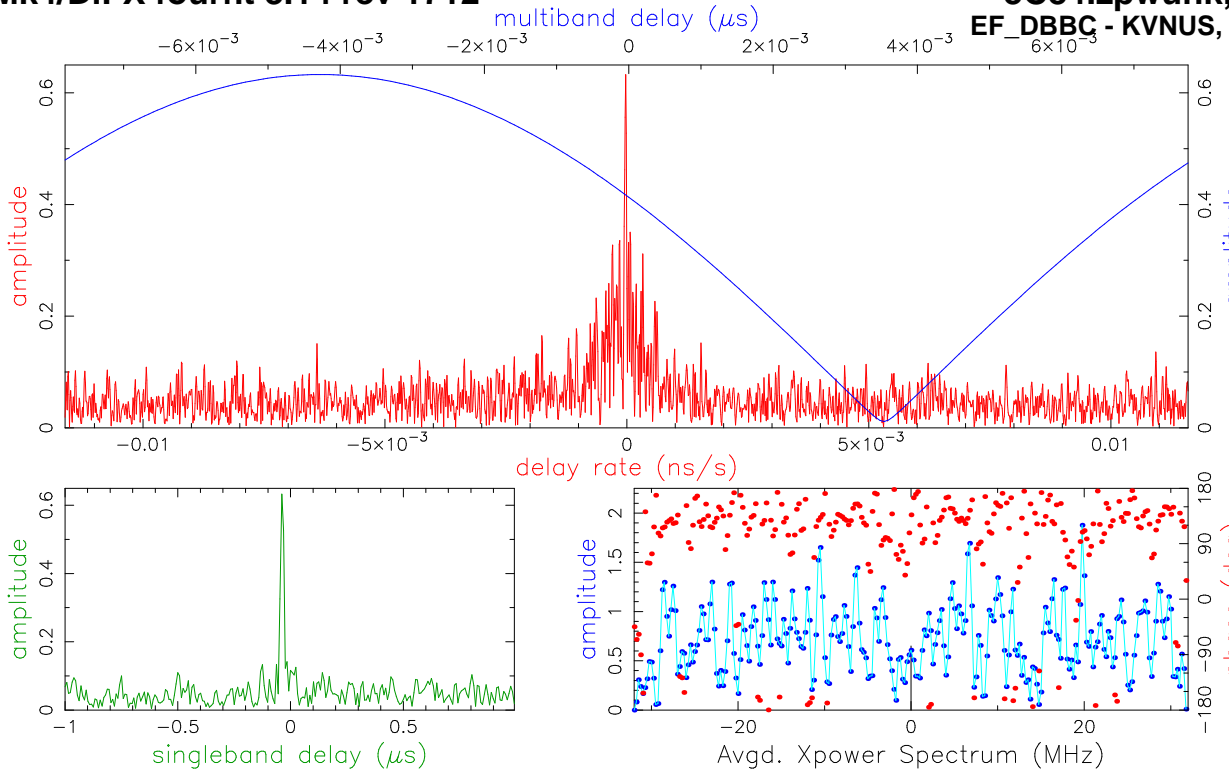


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-76.2	-75.7	Phase	-75.9				
0.3	0.3	Ampl.	0.3				
171.6	172.1	Sbd box	171.9				
U/L 838/838	838/838	APs used					
F -1000	-1000	PC freqs					
u 0	0	PC freqs					
F:u 0:0	0:0	PC phase					
F:u 0:0	0:0	Manl PC					
F 1000	1000	PC amp					
u 1000	1000						
F W00UR,W00LR	W02UR,W02LR	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.41138264222E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-2.10171E-03	+/-	9.0E-04
Sband delay (usec)	1.41138196604E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	3.34886E-01	+/-	1.6E-03
Phase delay (usec)	1.41134847714E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.44907E-06	+/-	3.3E-07
Delay rate (us/s)	1.22351126934E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-1.13411E-05	+/-	2.8E-09
Total phase (deg)	-1903.7	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-2055.9	+/-	10.3

RMS Theor. Amplitude 0.304 +/- 0.055 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 70.9 86.5 Search (2048X8) 0.185 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 126.9 151.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 14.6 Inc. seg. avg. 0.268 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 5.9 25.5 Inc. frq. avg. 0.293 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.152.zpwuhk

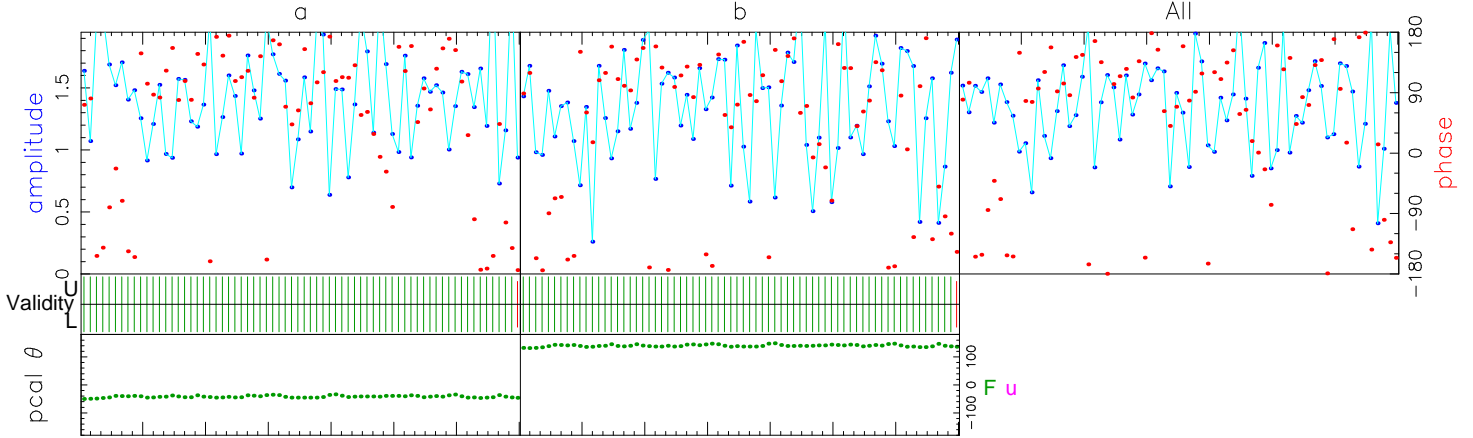


Fringe quality 9

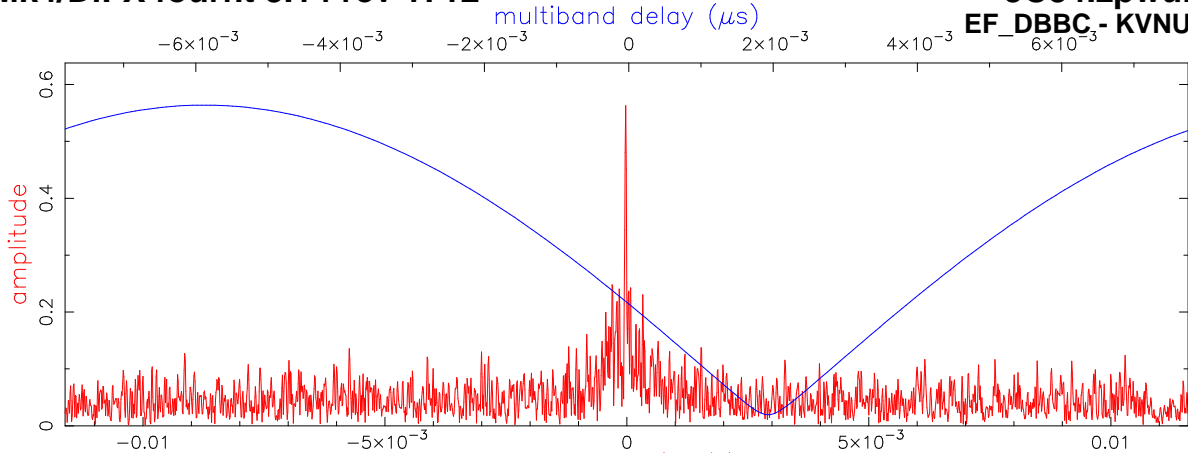
SNR 18.2  
Int time 418.994  
Amp 0.650  
Phase 312.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.036977  
MBD -0.004306  
Fringe rate (Hz)  
-0.002338  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:208:111521  
2017:170:130423  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



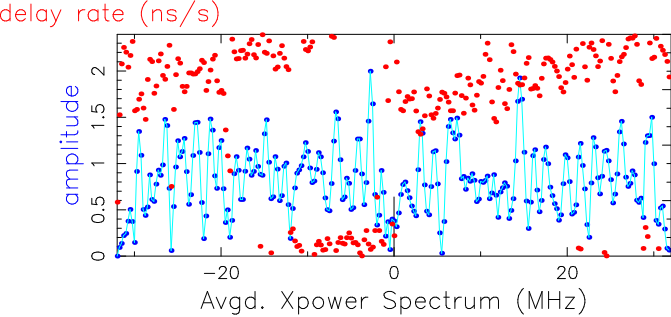
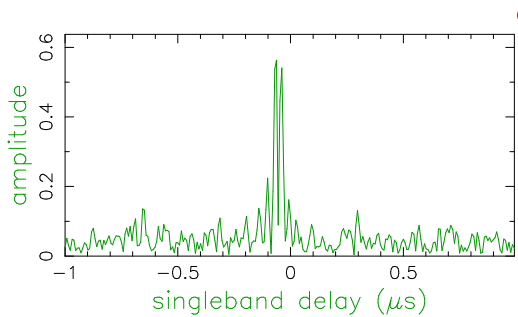
86156.00		86220.00		Freq (MHz)		All		
U/L	838/838	838/838	838/838	Phase	132.3	132.3		
F	-1000	-1000	-1000	Ampl.	0.6	0.6		
u	0	0	0	Sbd box	124.4	124.4		
F:u	0:0	0:0	0:0	APs used				
F:u	0:0	0:0	0:0	PC freqs				
F	1000	1000	1000	PC phase				
u	1000	1000	1000	Manl PC				
F	W00UL,W00LL	W02UL,W02LL	W02UL,W02LL	PC amp				
u	W00UL,W00LL	W01UL,W01LL	W01UL,W01LL	Chan ids				
Group delay (usec)(sbd)	1.41134492179E+04	Apriori delay (usec)	1.41134847739E+04	Tracks				
Sband delay (usec)	1.41134477969E+04	Apriori clock (usec)	2.0047045E+01	Chan ids				
Phase delay (usec)	1.41134847782E+04	Apriori clockrate (us/s)	-3.9395310E-07	Tracks				
Delay rate (us/s)	1.22352258334E+00	Apriori rate (us/s)	1.22352261049E+00	Chan ids				
Total phase (deg)	464.5	Apriori accel (us/s/s)	-6.06632942619E-05	Tracks				
RMS	70.9	Search (2048X8)	0.618	Resid mbdelay (usec)	-4.30598E-03	+/- 2.7E-04		
ph/seg (deg)	70.9	Interp.	0.000	Resid sbdelay (usec)	-3.69770E-02	+/- 4.7E-04		
amp/seg (%)	123.0	Inc. seg. avg.	1.234	Resid phdelay (usec)	4.26601E-06	+/- 1.0E-07		
ph/frq (deg)	0.0	Inc. frq. avg.	0.631	Resid rate (us/s)	-2.71433E-08	+/- 8.4E-10		
amp/frq (%)	3.1			Resid phase (deg)	312.3	+/- 3.2		
F: az 108.8 el 71.1 pa -52.8	u: az 309.1 el 17.4 pa 57.2	u,v (fr/asec)	-9485.221 -2854.748	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
Control file: cf_1234	Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk	Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.37.zpwuhk		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(MSamp/s): 64	nlags: 128	t_cohere infinite	dr window (ns/s)	-0.012 0.012
				Data rate(Mb/s): 512	ion window (TEC)	0.00 0.00	simultaneous interpolator	



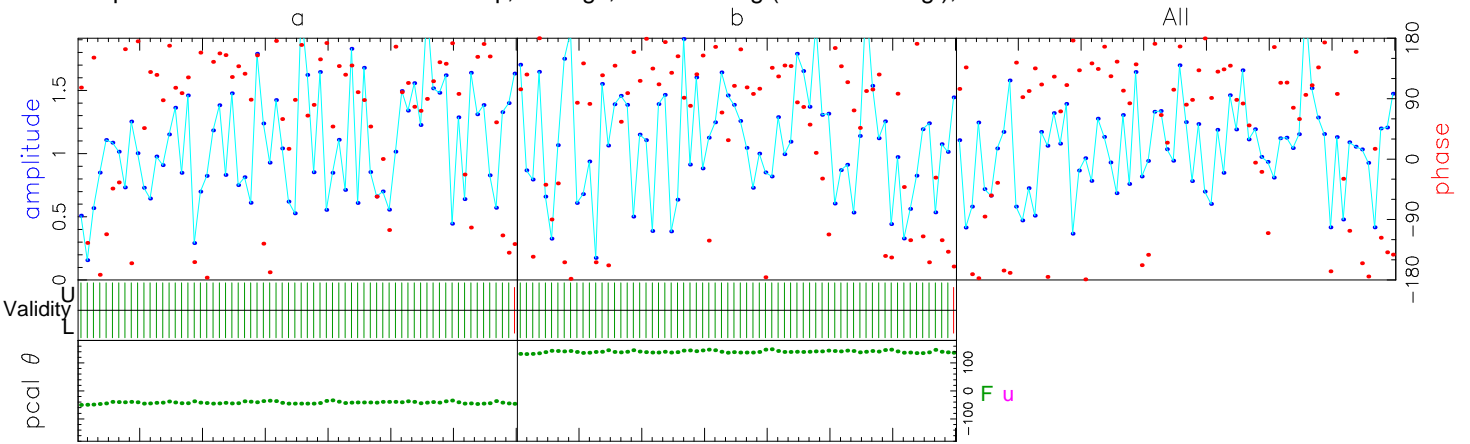
Fringe quality 9

SNR 17.9  
 Int time 418.994  
 Amp 0.638  
 Phase 494.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.066061  
 MBD -0.005608  
 Fringe rate (Hz)  
 -0.002320  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111521  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

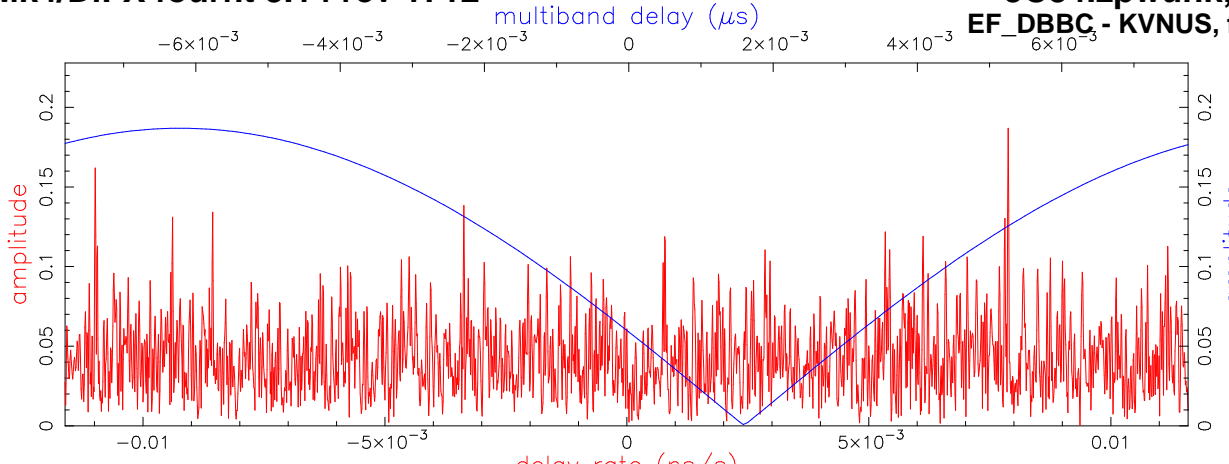


86156.00	86220.00	Freq (MHz)	All				
137.1	130.8	Phase	134.1				
0.6	0.5	Ampl.	0.6				
120.5	120.6	Sbd box	120.5				
U/L 838/838	838/838	APs used					
F -1000	-1000	PC freqs					
u 0	0	PC freqs					
F:u 0:0	0:0	PC phase					
F:u 0:0	0:0	Manl PC					
F 1000	1000	PC amp					
u 1000	1000						
F W00UR,W00LR	W02UR,W02LR	Chan ids					
u W00UR,W00LR	W01UR,W01LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.41134166662E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-5.60773E-03	+/-	2.8E-04
Sband delay (usec)	1.41134187124E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	-6.60615E-02	+/-	4.8E-04
Phase delay (usec)	1.41134847782E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	4.32354E-06	+/-	1.0E-07
Delay rate (us/s)	1.22352258355E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-2.69336E-08	+/-	8.6E-10
Total phase (deg)	646.3	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	494.1	+/-	3.2

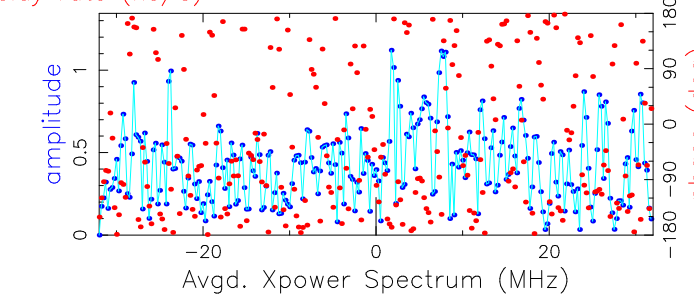
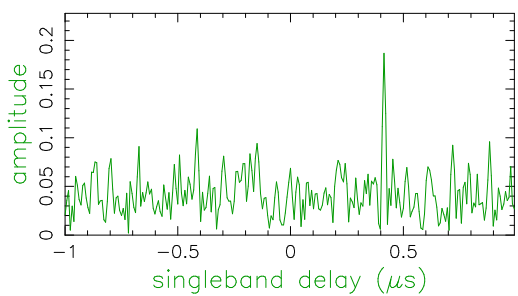
ph/seg (deg)	RMS 68.5	Theor. 26.9	Amplitude 0.638 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	82.8	46.9	Search (2048X8) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	4.5	Interp. 0.934	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	12.0	7.9	Inc. seg. avg. 0.562	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
				Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

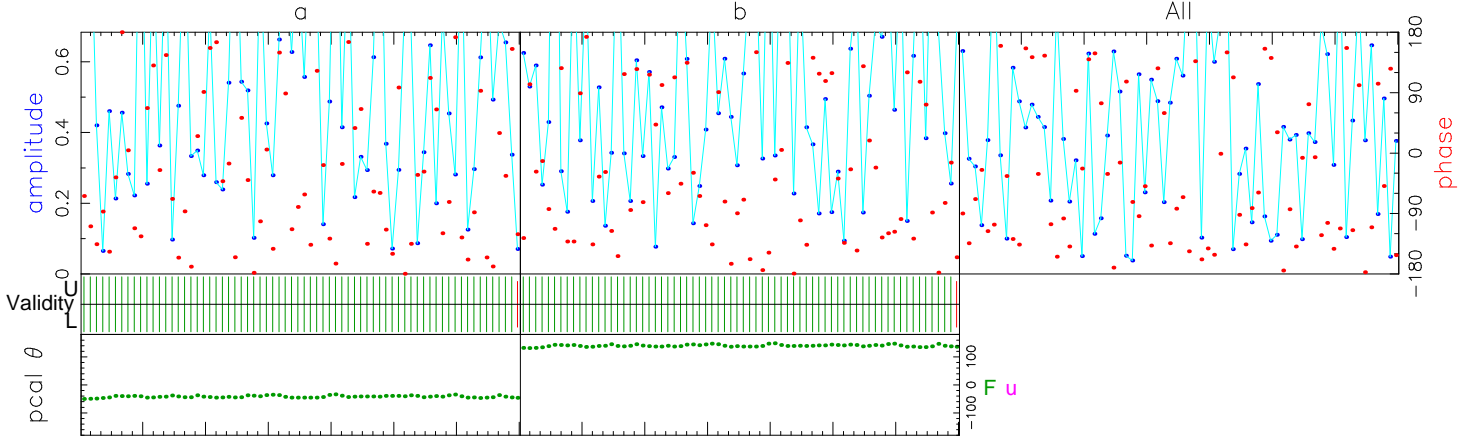
Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.38.zpwuhk



Fringe quality 0  
 SNR 5.2  
 Int time 418.994  
 Amp 0.228  
 Phase -2563.0  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.414502  
 MBD -0.006276  
 Fringe rate (Hz)  
 0.678631  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111522  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

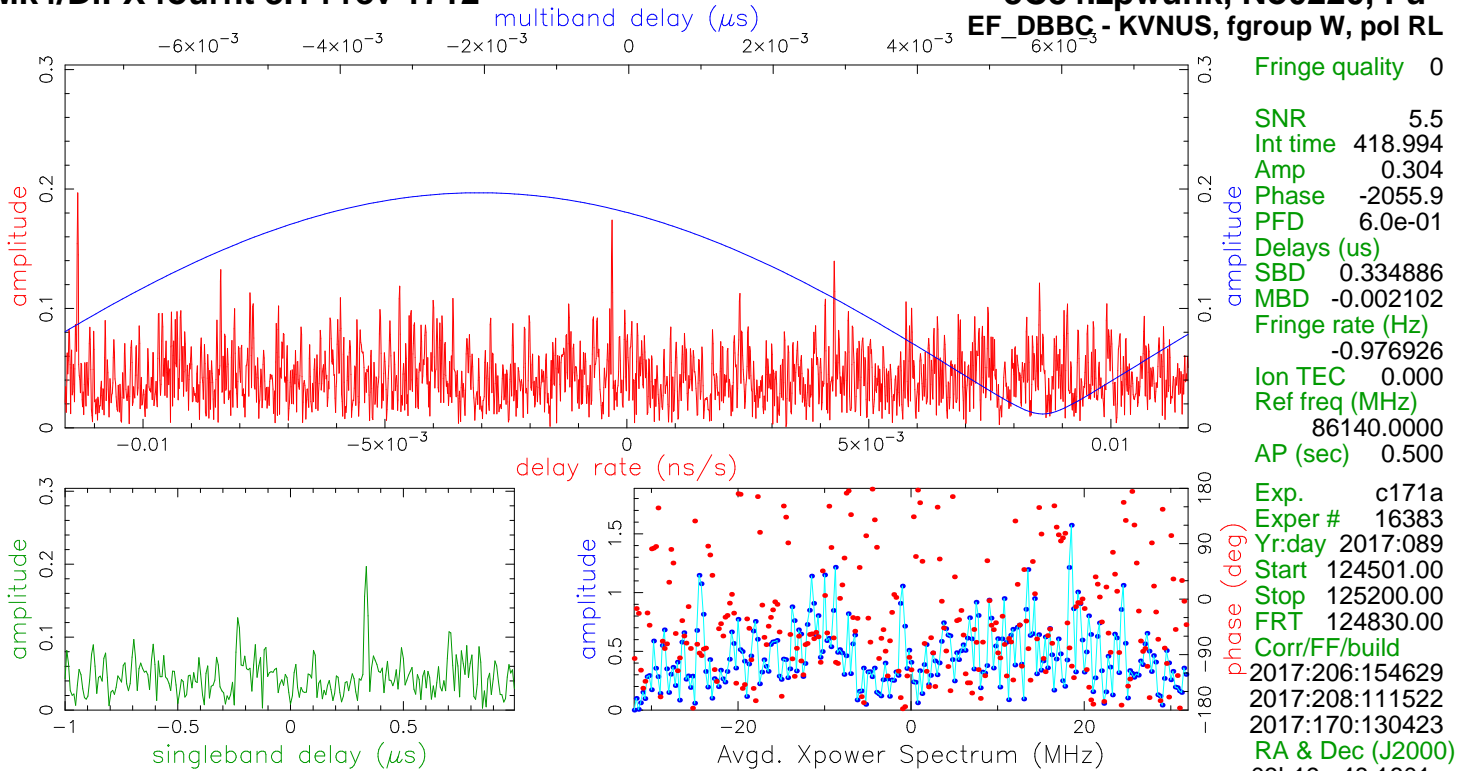


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

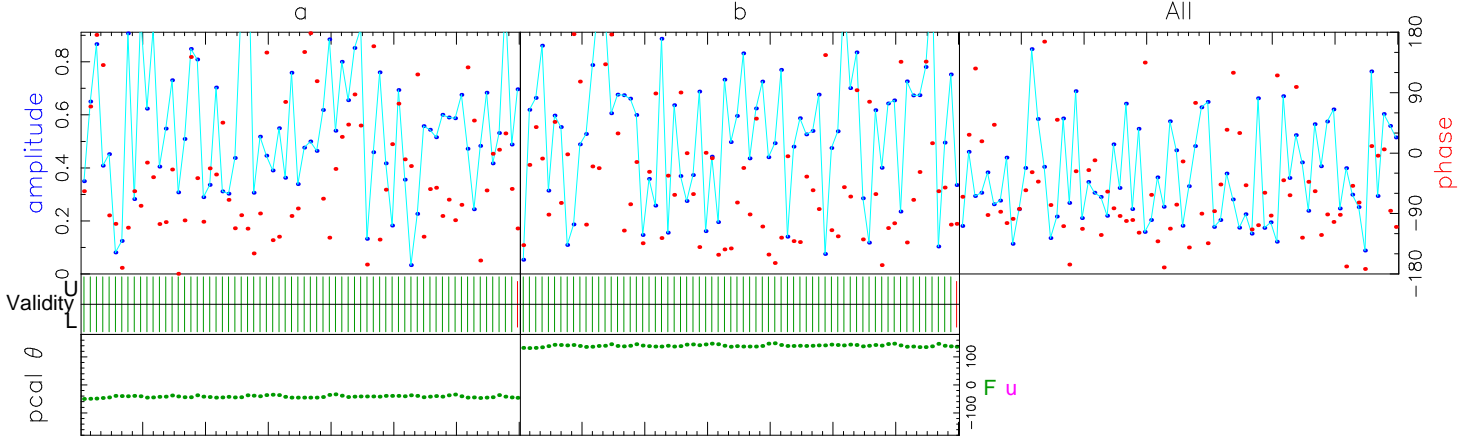


86156.00		86220.00		Freq (MHz)	All
-133.7		-132.3		Phase	-133.0
0.2		0.2		Ampl.	0.2
182.2		181.9		Sbd box	182.1
U/L 838/838		838/838		APs used	
F -1000		-1000		PC freqs	
u 0		0		PC freqs	
F:u 0:0		0:0		PC phase	
F:u 0:0		0:0		Manl PC	
F 1000		1000		PC amp	
u 1000		1000			
F W00UL,W00LL		W02UL,W02LL		Chan ids	
u W00UR,W00LR		W01UR,W01LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.41139003724E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-6.27648E-03 +/- 9.5E-04
Sband delay (usec)	1.41138992759E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	4.14502E-01 +/- 1.6E-03
Phase delay (usec)	1.41134847696E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-4.28964E-06 +/- 3.5E-07
Delay rate (us/s)	1.22353048872E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	7.87823E-06 +/- 2.9E-09
Total phase (deg)	-2410.8	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-2563.0 +/- 10.9

ph/seg (deg) 79.6 91.5 Search (2048X8) 0.183 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 178.1 159.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 15.5 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.4 27.0 Inc. frq. avg. 0.220 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.39.zpwuhk simultaneous interpolator



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



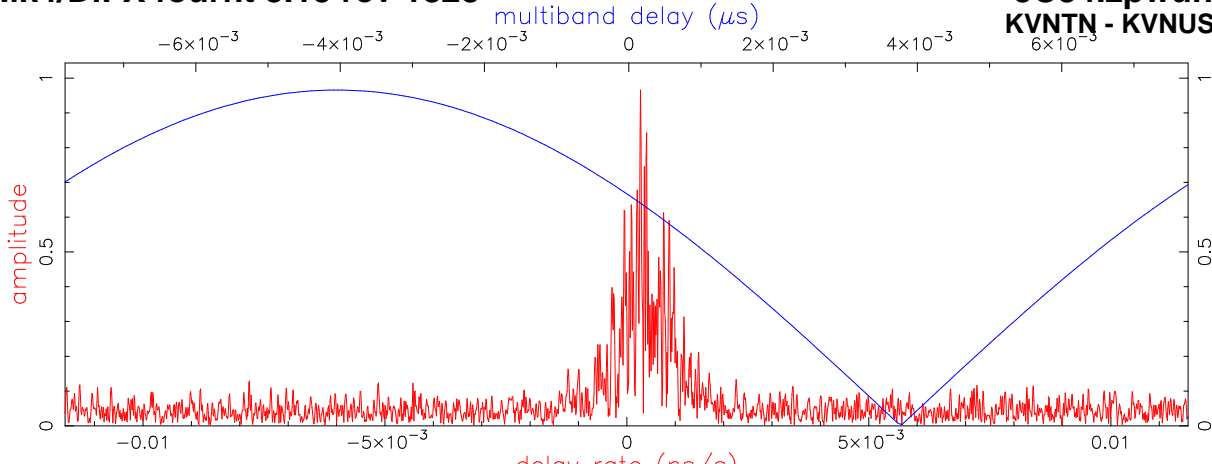
86156.00		86220.00		Freq (MHz)	All
-76.2		-75.7		Phase	-75.9
0.3		0.3		Ampl.	0.3
171.6		172.1		Sbd box	171.9
U/L 838/838		838/838		APs used	
F -1000		-1000		PC freqs	
u 0		0		PC freqs	
F:u 0:0		0:0		PC phase	
F:u 0:0		0:0		Manl PC	
F 1000		1000		PC amp	
u 1000		1000			
F W00UR,W00LR		W02UR,W02LR		Chan ids	
u W00UL,W00LL		W01UL,W01LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	1.41138264222E+04	Apriori delay (usec)	1.41134847739E+04	Resid mbdelay (usec)	-2.10171E-03 +/- 9.0E-04
Sband delay (usec)	1.41138196604E+04	Apriori clock (usec)	2.0047045E+01	Resid sbdelay (usec)	3.34886E-01 +/- 1.6E-03
Phase delay (usec)	1.41134847714E+04	Apriori clockrate (us/s)	-3.9395310E-07	Resid phdelay (usec)	-2.44907E-06 +/- 3.3E-07
Delay rate (us/s)	1.22351126934E+00	Apriori rate (us/s)	1.22352261049E+00	Resid rate (us/s)	-1.13411E-05 +/- 2.8E-09
Total phase (deg)	-1903.7	Apriori accel (us/s/s)	-6.06632942619E-05	Resid phase (deg)	-2055.9 +/- 10.3

ph/seg (deg)	RMS 70.9	Theor. 86.5	Amplitude Search (2048X8)	0.304 +/- 0.055	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	126.9	151.0	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)	0.0	14.6	Inc. seg. avg.	0.268	Bits/sample: 2x2	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.012	0.012
amp/frq (%)	5.9	25.5	Inc. frq. avg.	0.293	Data rate(Mb/s): 512	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

F: az 108.8 el 71.1 pa -52.8 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) -9485.221 -2854.748 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/Fu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/Fu.W.40.zpwuhk

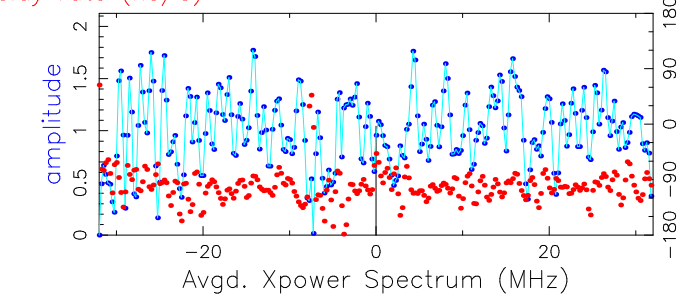
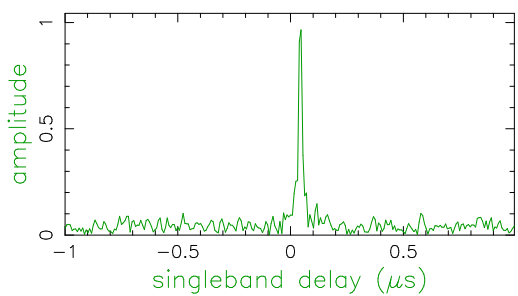




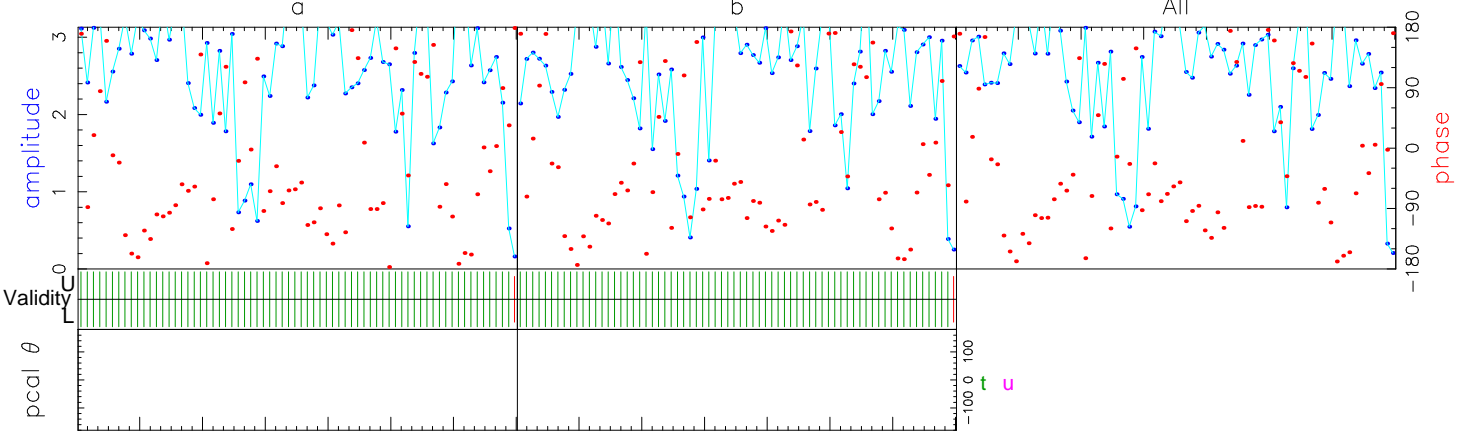
Fringe quality 9

SNR 29.2  
 Int time 418.994  
 Amp 1.044  
 Phase -373.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.043492  
 MBD -0.004037  
 Fringe rate (Hz)  
 0.024376  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145912  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

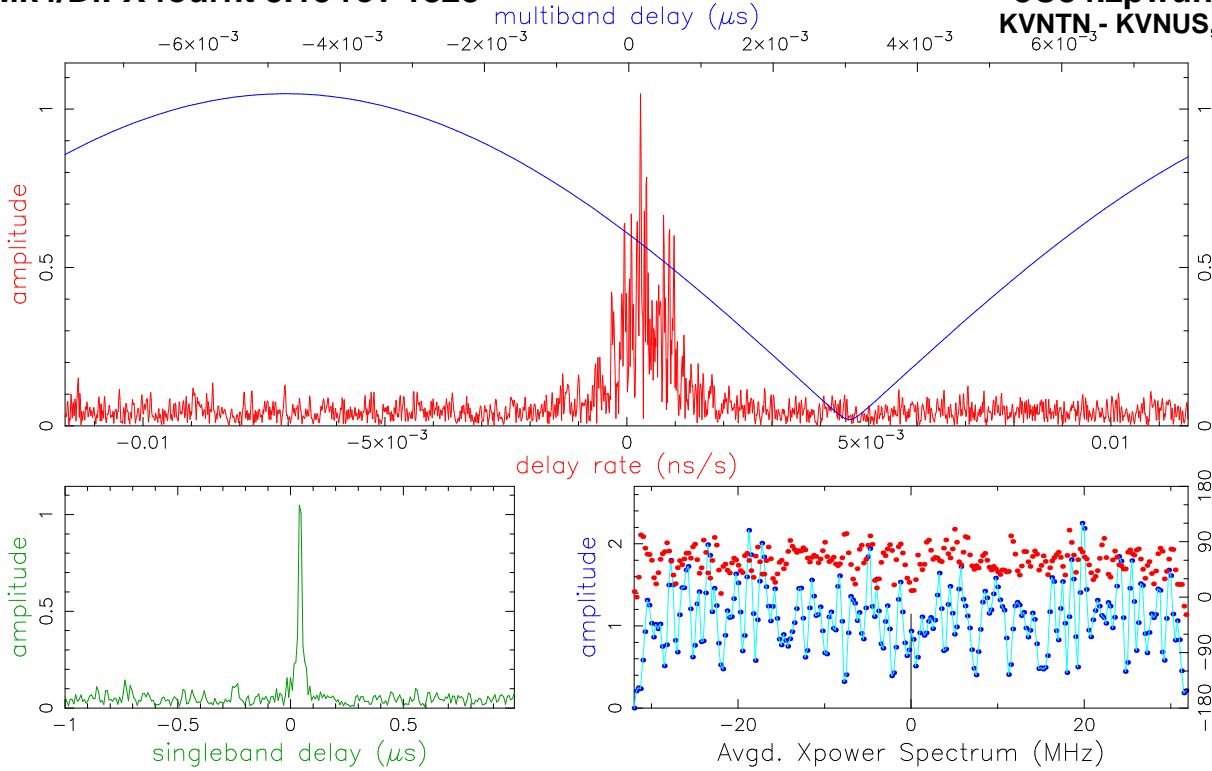


86156.00	86220.00	Freq (MHz)	All				
-103.1	-103.3	Phase	-103.2				
1.0	1.0	Ampl.	1.0				
134.6	134.6	Sbd box	134.6				
U/L 838/838	838/838	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
tu 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W00UL,W00LL	W01UL,W01LL	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.27062874205E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	-4.03671E-03	+/-	1.7E-04
Sband delay (usec)	1.27063528416E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	4.34925E-02	+/-	3.0E-04
Phase delay (usec)	1.27020032588E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	-3.32753E-06	+/-	6.3E-08
Delay rate (us/s)	-3.19134714485E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	2.82985E-07	+/-	5.2E-10
Total phase (deg)	-51.4	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	-373.2	+/-	2.0

ph/seg (deg)	80.2	Theor.	16.4	Amplitude	1.044 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	161.3	Search (2048X8)	0.962	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	2.437	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	7.4	Inc. frq. avg.	0.965	Inc. frq. avg.	0.965	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate(Mb/s):	512	dr window (ns/s)	-0.012 0.012
						nlags:	128	t_cohere	infinite
						ion window (TEC)	0.00	0.00	0.00

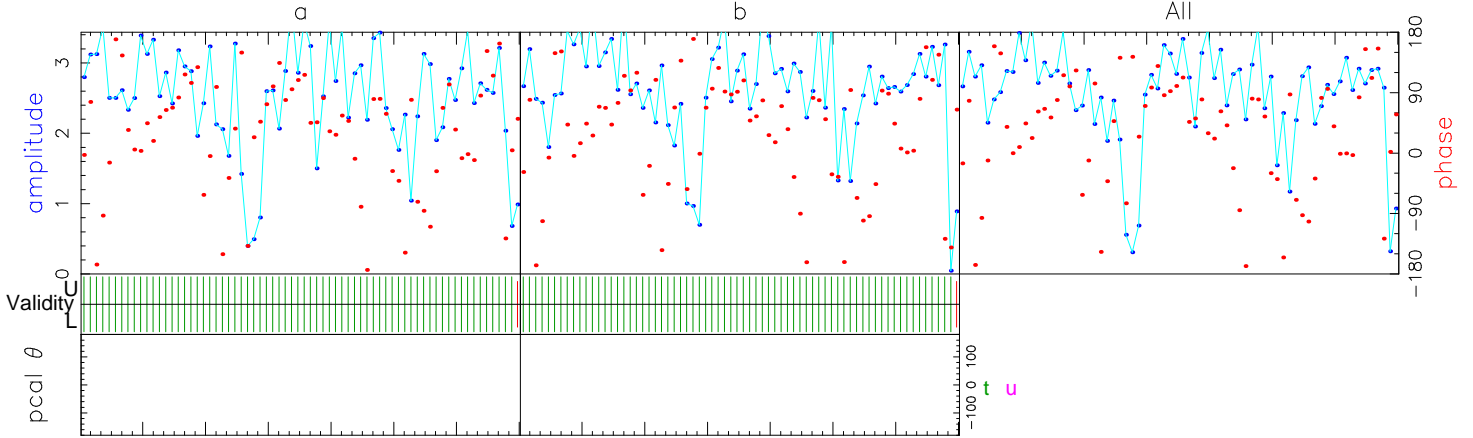
t: az 308.5 el 17.8 pa 60.9 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 238.580 -434.757 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/tu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/tu.W.153.zpwuhk



Fringe quality 9  
 SNR 32.1  
 Int time 418.994  
 Amp 1.146  
 Phase -210.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.042638  
 MBD -0.004924  
 Fringe rate (Hz) 0.024474  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145913  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

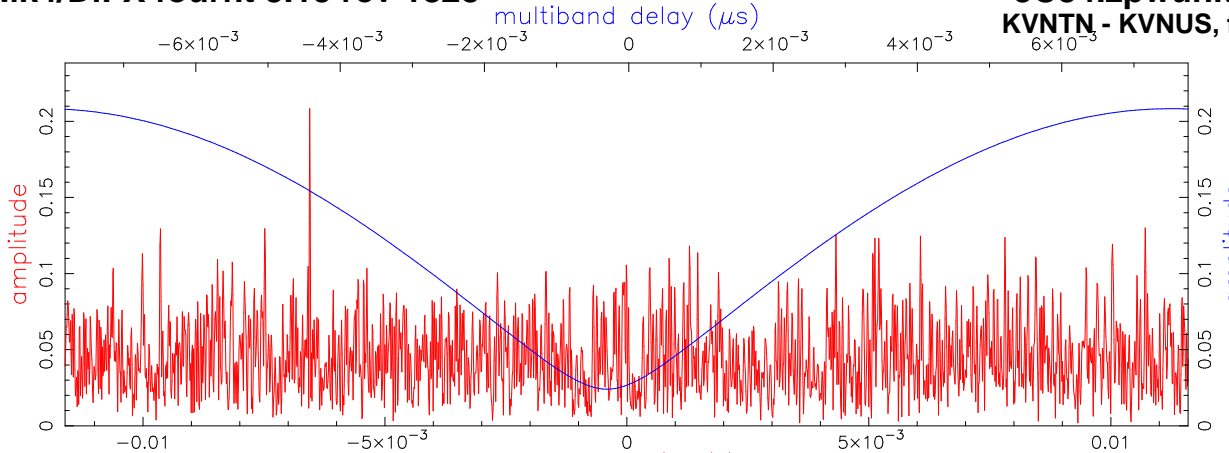
Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All			
57.7	61.6	Phase	59.7			
1.0	1.1	Ampl.	1.0			
134.5	134.4	Sbd box	134.5			
U/L 838/838	838/838	APs used				
t 0	0	PC freqs				
u 0	0	PC freqs				
tu 0:0	0:0	PC phase				
tu 0:0	0:0	Manl PC				
t 1000	1000	PC amp				
u 1000	1000					
t W00UR,W00LR	W01UR,W01LR	Chan ids				
u W00UR,W00LR	W01UR,W01LR	Tracks				
		Chan ids				
		Tracks				
Group delay (usec)(sbd)	1.27061986830E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	-4.92409E-03	+/- 1.6E-04
Sband delay (usec)	1.27062673916E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	4.26380E-02	+/- 2.7E-04
Phase delay (usec)	1.27020037842E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	1.92595E-06	+/- 5.8E-08
Delay rate (us/s)	-3.19134703115E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	2.84122E-07	+/- 4.8E-10
Total phase (deg)	-248.5	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	-210.3	+/- 1.8

ph/seg (deg)	77.8	Theor.	15.0	Amplitude	1.146 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	137.8	Search (2048X8)	1.028	Search	1.028	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	2.475	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	8.6	Inc. frq. avg.	1.048	Inc. frq. avg.	1.048	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
						Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
						nlags: 128	t_cohere infinite
							ion window (TEC) 0.00 0.00

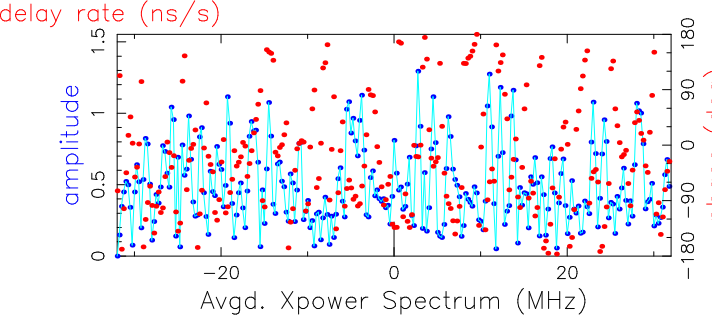
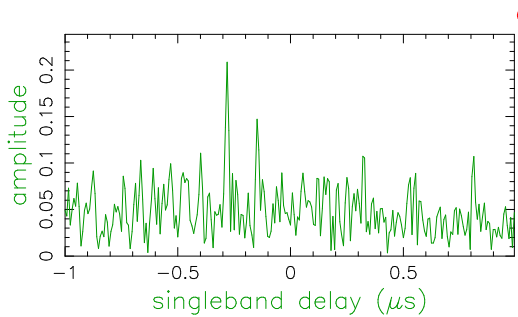
t: az 308.5 el 17.8 pa 60.9 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 238.580 -434.757 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/tu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/tu.W.154.zpwuhk



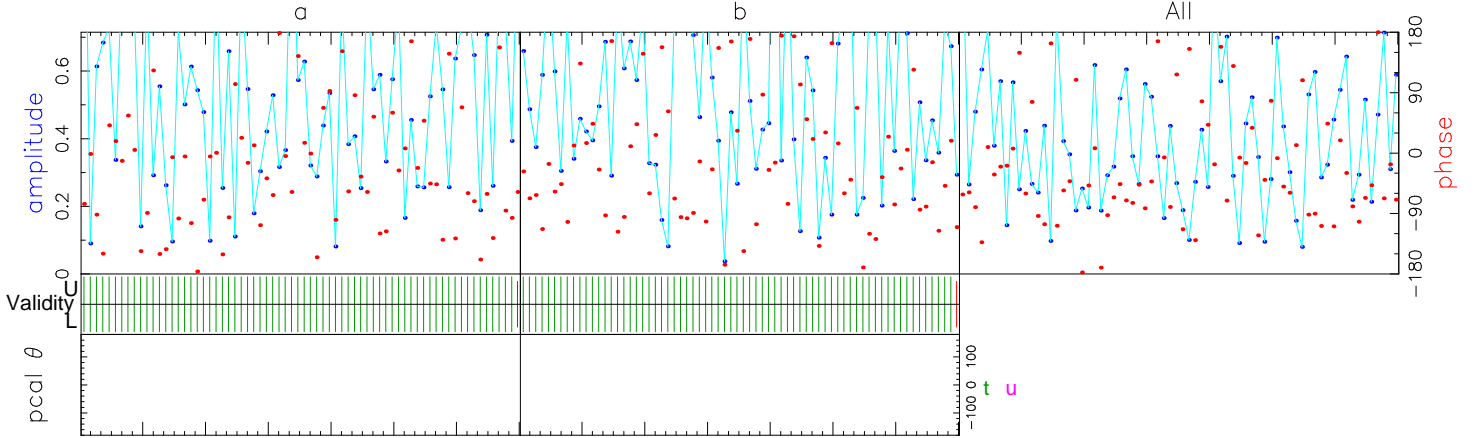
Fringe quality 0

SNR 5.8  
Int time 418.994  
Amp 0.238  
Phase 1474.4  
PFD 1.6e-01  
Delays (us)  
SBD -0.281194  
MBD -0.008109  
Fringe rate (Hz)  
-0.564423  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:214:145914  
2017:188:152524  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

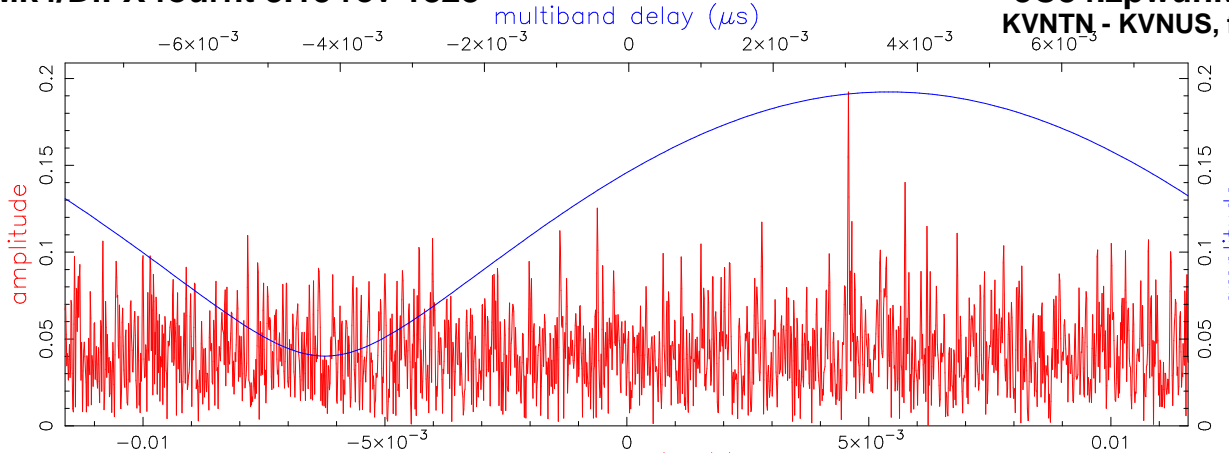


86156.00	86220.00	Freq (MHz)	All				
-55.6	-55.7	Phase	-55.6				
0.2	0.3	Ampl.	0.2				
92.8	93.1	Sbd box	93.0				
U/L 838/838	838/838	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
t:u 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W00UL,W00LL	W01UL,W01LL	Chan ids					
u W00UR,W00LR	W01UR,W01LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.26746301656E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	-8.10926E-03	+/-	8.5E-04
Sband delay (usec)	1.26738841916E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	-2.81194E-01	+/-	1.5E-03
Phase delay (usec)	1.27020034122E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	-1.79421E-06	+/-	3.2E-07
Delay rate (us/s)	-3.19203068226E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	-6.55239E-06	+/-	2.6E-09
Total phase (deg)	1796.1	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	1474.4	+/-	9.8

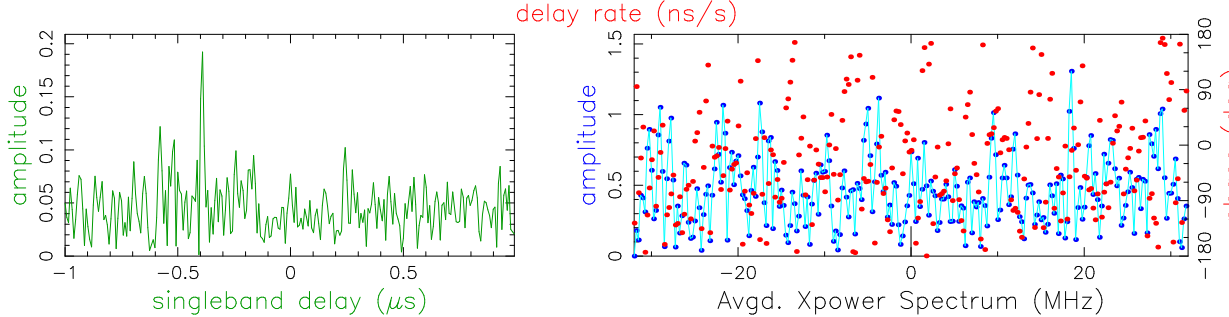
ph/seg (deg)	RMS 78.1	Theor. 82.2	Amplitude 0.238 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	132.8	143.5	Search (2048X8) 0.202	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	13.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	11.6	24.3	Inc. seg. avg. 0.225	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.232	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite		

t: az 308.5 el 17.8 pa 60.9      u: az 309.1 el 17.4 pa 57.2      u,v (fr/asec) 238.580 -434.757      simultaneous interpolator

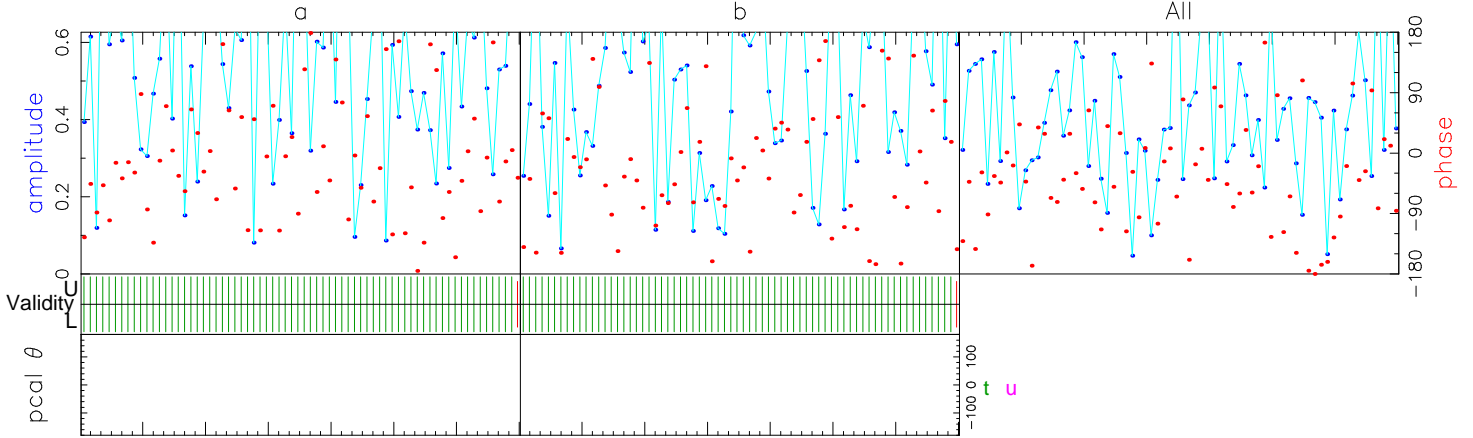
Control file: ../cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/tu..zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/tu.W.155.zpwuhk



Fringe quality 0  
 SNR 5.5  
 Int time 418.994  
 Amp 0.209  
 Phase 2208.1  
 PFD 7.1e-01  
 Delays (us)  
 SBD -0.392304  
 MBD 0.003575  
 Fringe rate (Hz)  
 0.394047  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145914  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"



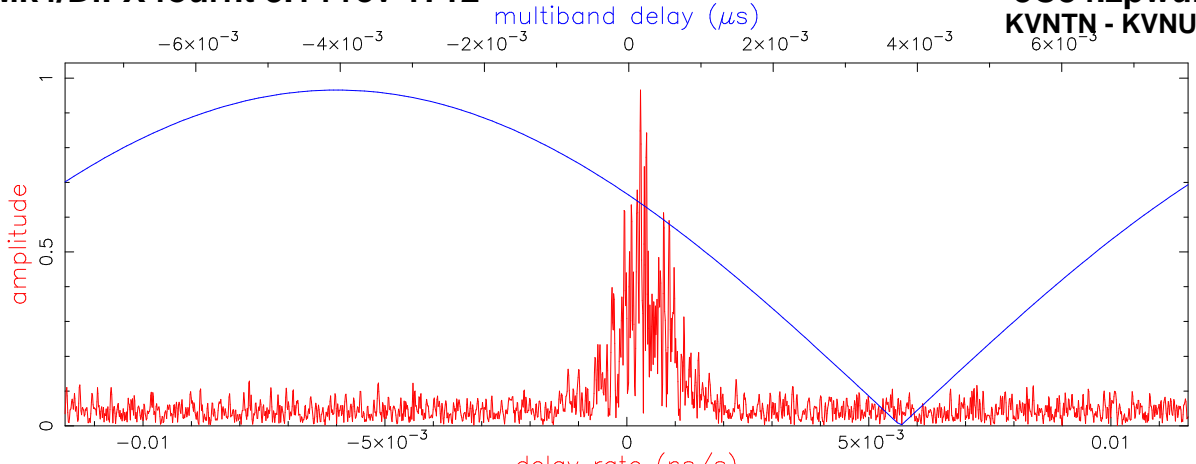
Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-42.1	-41.5	Phase	-41.9				
0.2	0.2	Ampl.	0.2				
78.9	153.0	Sbd box	78.8				
U/L 838/838	838/838	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
tu 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W00UR,W00LR	W01UR,W01LR	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.26632985649E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	3.57473E-03	+/-	9.1E-04
Sband delay (usec)	1.26627731916E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	-3.92304E-01	+/-	1.6E-03
Phase delay (usec)	1.27020034565E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	-1.35091E-06	+/-	3.4E-07
Delay rate (us/s)	-3.19091799427E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	4.57449E-06	+/-	2.8E-09
Total phase (deg)	2529.9	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	2208.1	+/-	10.5

ph/seg (deg)	RMS 78.3	Theor. 87.5	Amplitude 0.209 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	153.3	152.6	Search (2048X8) 0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	14.8	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	20.6	25.8	Inc. seg. avg. 0.207	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.198	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite		

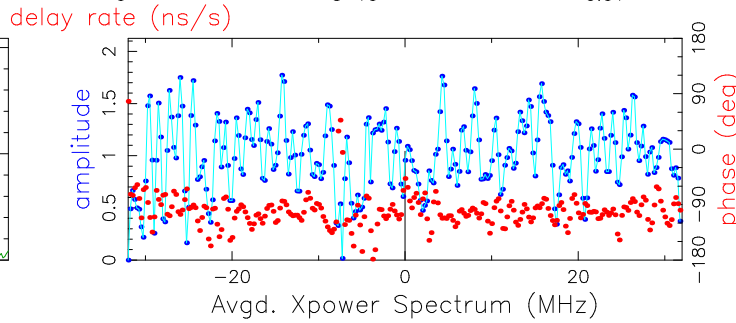
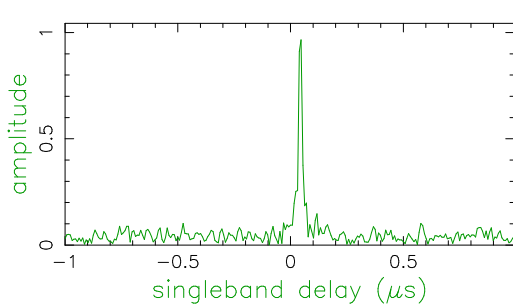
t: az 308.5 el 17.8 pa 60.9    u: az 309.1 el 17.4 pa 57.2    u,v (fr/asec) 238.580 -434.757    simultaneous interpolator  
 Control file: ../cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/tu..zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/tu.W.156.zpwuhk



Fringe quality 9

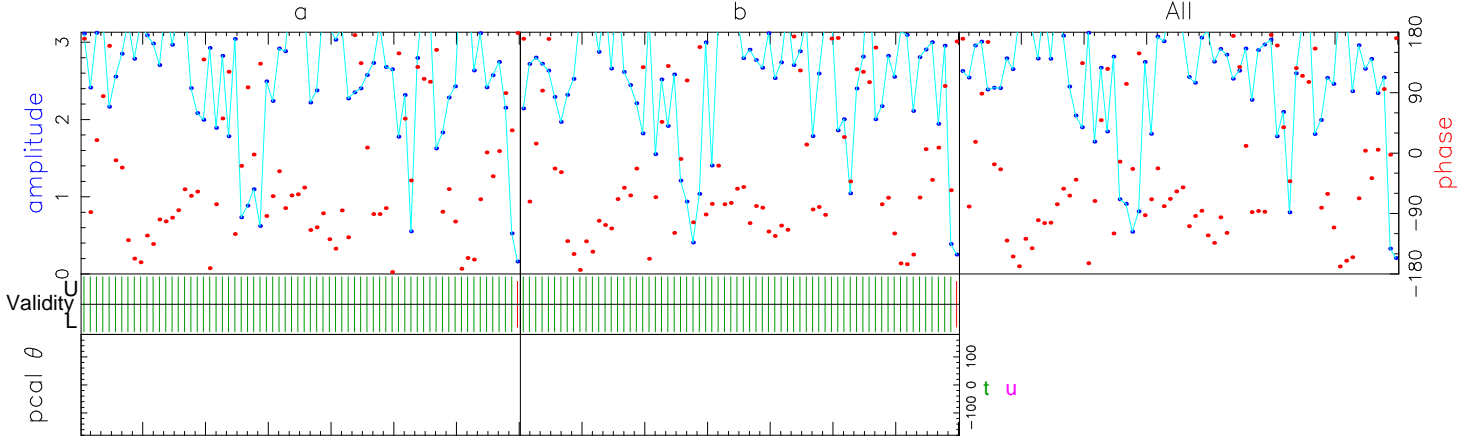
SNR 29.2  
Int time 418.994  
Amp 1.044  
Phase -373.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.043492  
MBD -0.004037  
Fringe rate (Hz)  
0.024376  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:208:111523  
2017:170:130423  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

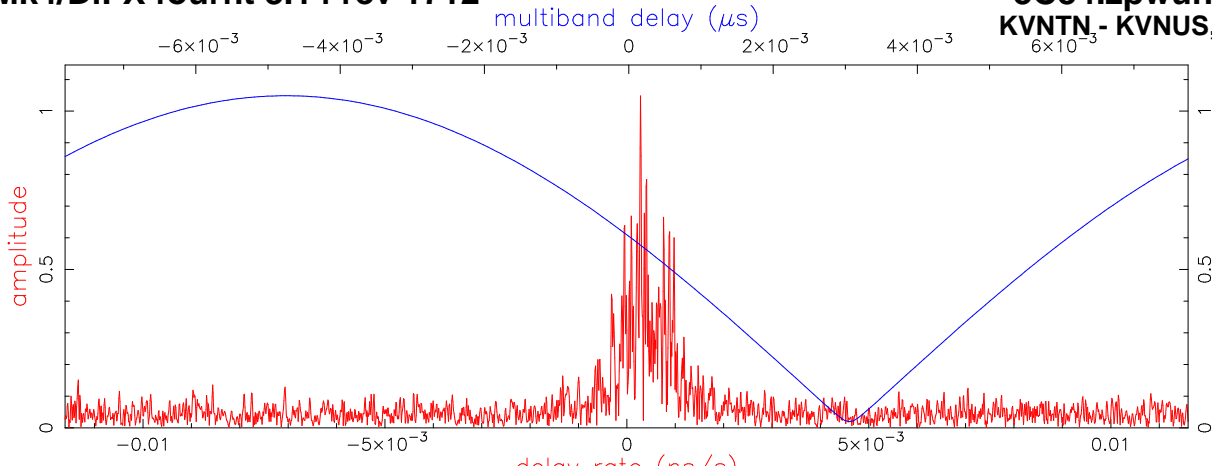


86156.00	86220.00	Freq (MHz)	All				
-103.1	-103.3	Phase	-103.2				
1.0	1.0	Ampl.	1.0				
134.6	134.6	Sbd box	134.6				
U/L 838/838	838/838	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
tu 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W00UL,W00LL	W01UL,W01LL	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.27062874205E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	-4.03671E-03	+/-	1.7E-04
Sband delay (usec)	1.27063528416E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	4.34925E-02	+/-	3.0E-04
Phase delay (usec)	1.27020032588E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	-3.32753E-06	+/-	6.3E-08
Delay rate (us/s)	-3.19134714485E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	2.82985E-07	+/-	5.2E-10
Total phase (deg)	-51.4	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	-373.2	+/-	2.0

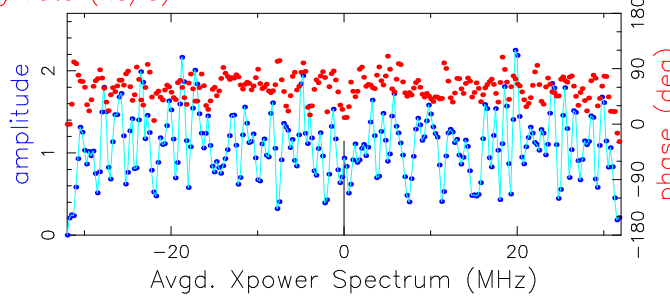
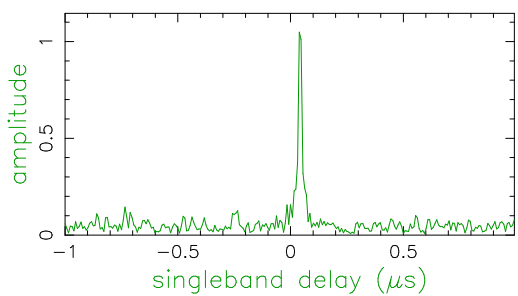
ph/seg (deg)	80.2	Theor.	16.4	Amplitude	1.044 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	161.3	Search (2048X8)	0.962	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Inc. seg. avg.	2.437	Inc. frq. avg.	0.965	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	7.4	Inc. frq. avg.	0.965			Sample rate(MSamp/s):	64	dr window (ns/s)	-0.012 0.012
						Data rate(Mb/s):	512	ion window (TEC)	0.00 0.00

t: az 308.5 el 17.8 pa 60.9      u: az 309.1 el 17.4 pa 57.2      u,v (fr/asec) 238.580 -434.757      simultaneous interpolator

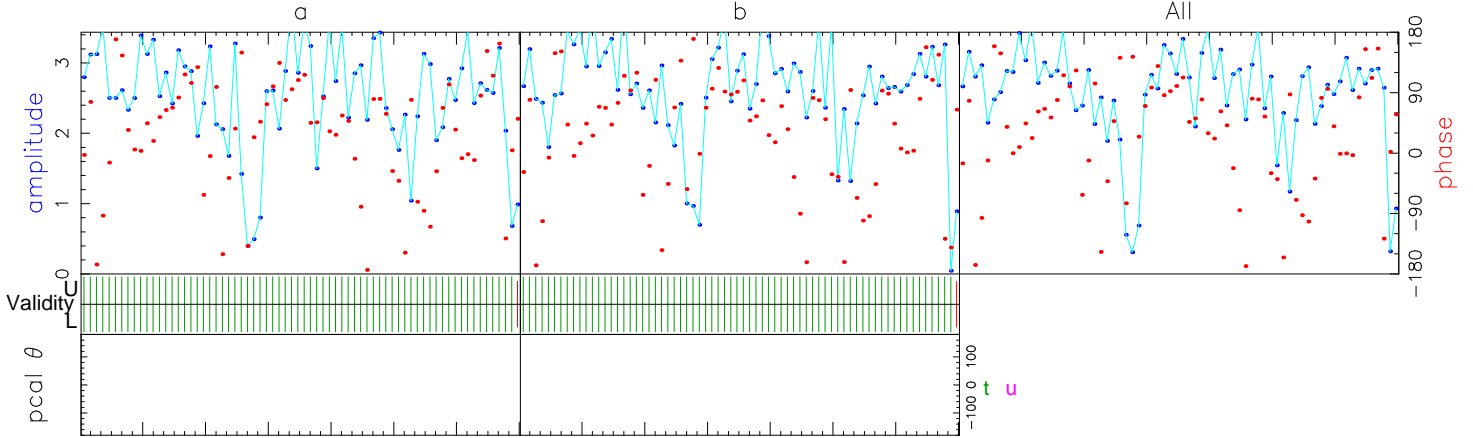
Control file: cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/tu..zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/tu.W.41.zpwuhk



Fringe quality 9  
SNR 32.1  
Int time 418.994  
Amp 1.146  
Phase -210.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.042638  
MBD -0.004924  
Fringe rate (Hz) 0.024474  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:208:111523  
2017:170:130423  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"

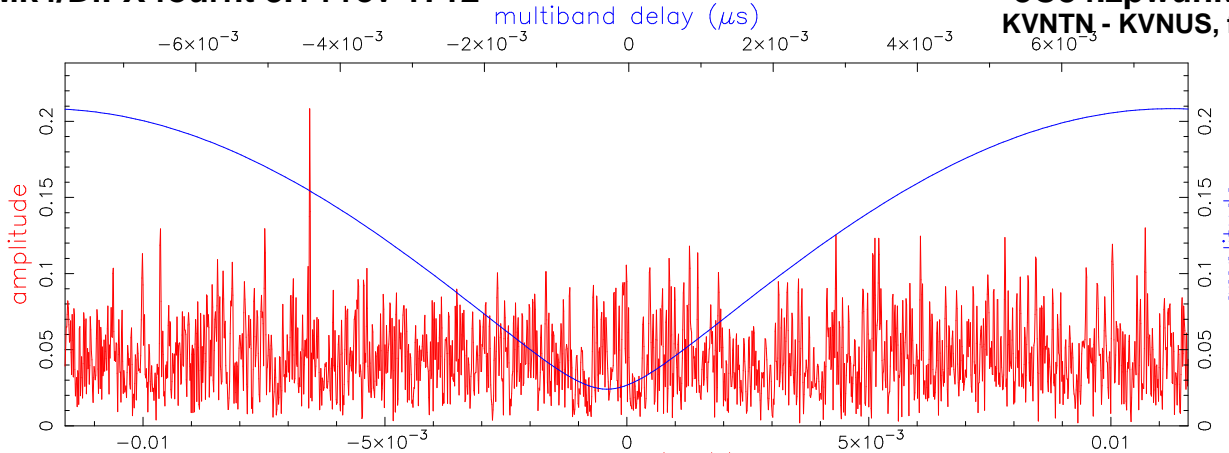


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)		All			
57.7	61.6	Phase		59.7			
1.0	1.1	Ampl.		1.0			
134.5	134.4	Sbd box		134.5			
U/L 838/838	838/838	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
tu 0:0	0:0	PC phase					
tu 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000	Chan ids					
t W00UR,W00LR	W01UR,W01LR	Tracks					
u W00UR,W00LR	W01UR,W01LR	Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.27061986830E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	-4.92409E-03	+/-	1.6E-04
Sband delay (usec)	1.27062673916E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	4.26380E-02	+/-	2.7E-04
Phase delay (usec)	1.27020037842E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	1.92595E-06	+/-	5.8E-08
Delay rate (us/s)	-3.19134703115E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	2.84122E-07	+/-	4.8E-10
Total phase (deg)	-248.5	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	-210.3	+/-	1.8

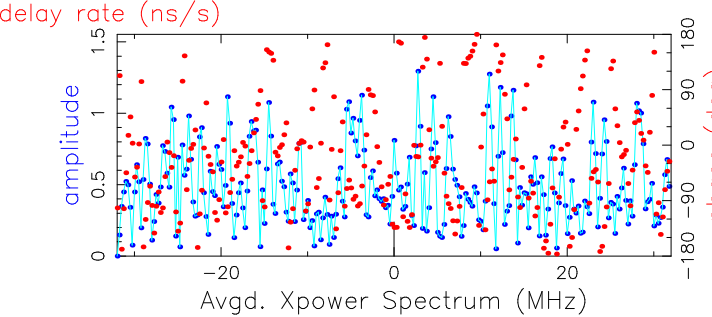
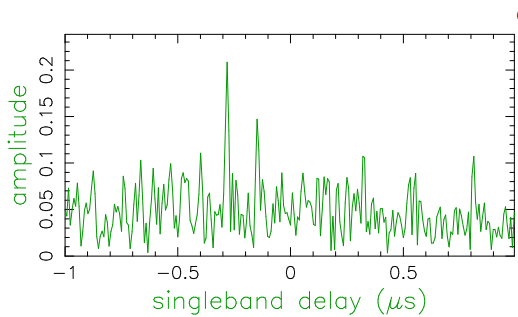
ph/seg (deg) 77.8 15.0 Theor. Amplitude 1.146 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 137.8 26.1 Search (2048X8) 1.028 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 2.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 8.6 4.4 Inc. seg. avg. 2.475 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 t: az 308.5 el 17.8 pa 60.9 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 238.580 -434.757 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/tu..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/tu.W.42.zpwuhk simultaneous interpolator



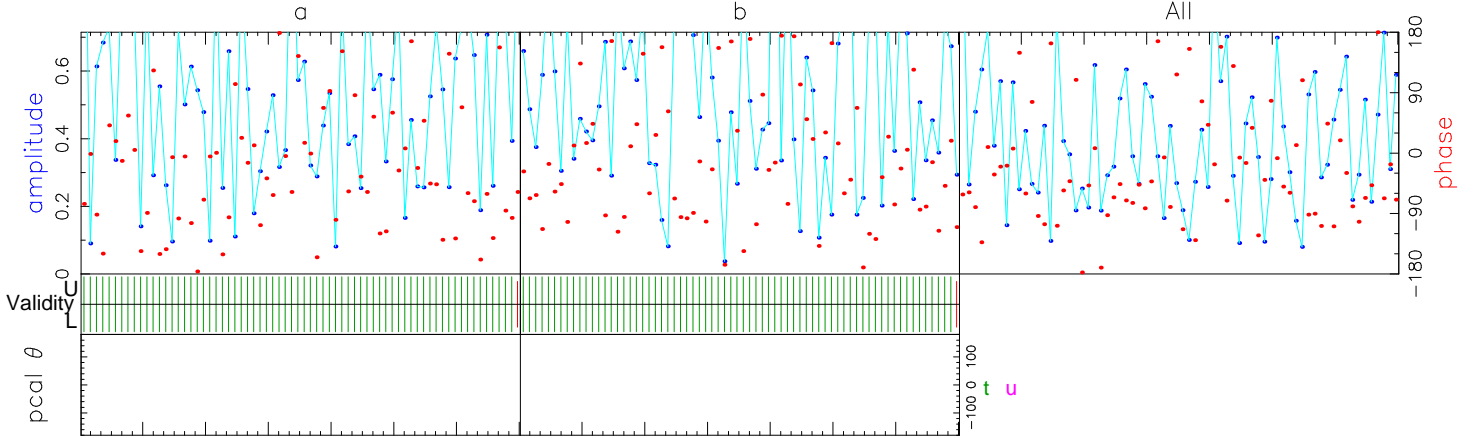
Fringe quality 0

SNR 5.8  
Int time 418.994  
Amp 0.238  
Phase 1474.4  
PFD 1.6e-01  
Delays (us)  
SBD -0.281194  
MBD -0.008109  
Fringe rate (Hz)  
-0.564423  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:208:111524  
2017:170:130423  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

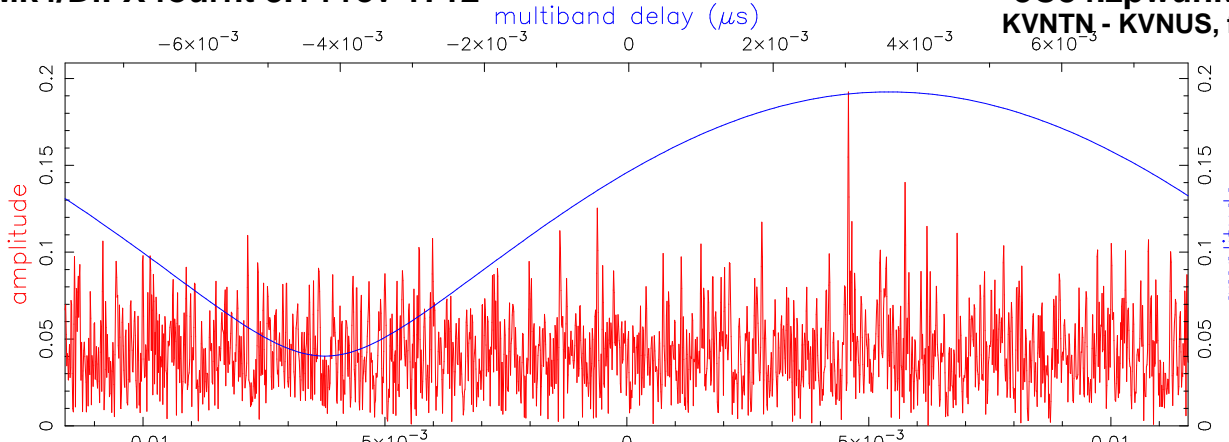


86156.00	86220.00	Freq (MHz)	All				
-55.6	-55.7	Phase	-55.6				
0.2	0.3	Ampl.	0.2				
92.8	93.1	Sbd box	93.0				
U/L 838/838	838/838	APs used					
t 0	0	PC freqs					
u 0	0	PC freqs					
t:u 0:0	0:0	PC phase					
t:u 0:0	0:0	Manl PC					
t 1000	1000	PC amp					
u 1000	1000						
t W00UL,W00LL	W01UL,W01LL	Chan ids					
u W00UR,W00LR	W01UR,W01LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	1.26746301656E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	-8.10926E-03	+/-	8.5E-04
Sband delay (usec)	1.26738841916E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	-2.81194E-01	+/-	1.5E-03
Phase delay (usec)	1.27020034122E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	-1.79421E-06	+/-	3.2E-07
Delay rate (us/s)	-3.19203068226E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	-6.55239E-06	+/-	2.6E-09
Total phase (deg)	1796.1	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	1474.4	+/-	9.8

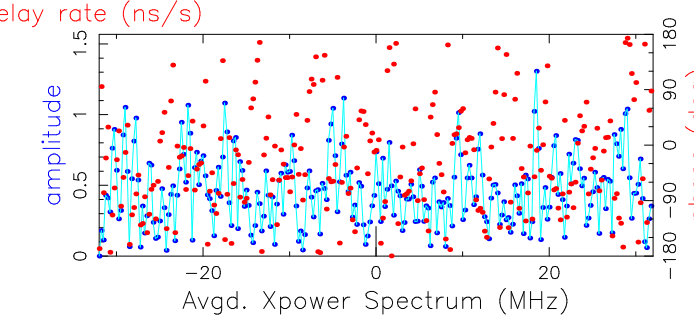
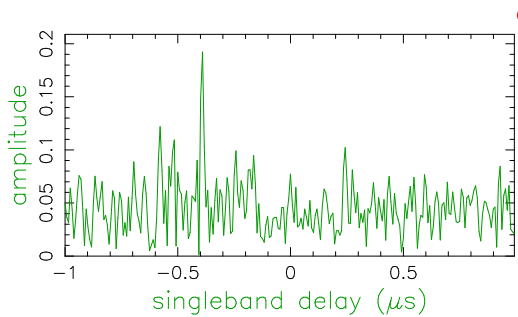
ph/seg (deg)	RMS 78.1	Theor. 82.2	Amplitude 0.238 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	132.8	143.5	Search (2048X8) 0.202	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	13.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	11.6	24.3	Inc. seg. avg. 0.225	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.232	Data rate(Mb/s): 512	nlags: 128	t_cohere infinite		

t: az 308.5 el 17.8 pa 60.9      u: az 309.1 el 17.4 pa 57.2      u,v (fr/asec) 238.580 -434.757      simultaneous interpolator

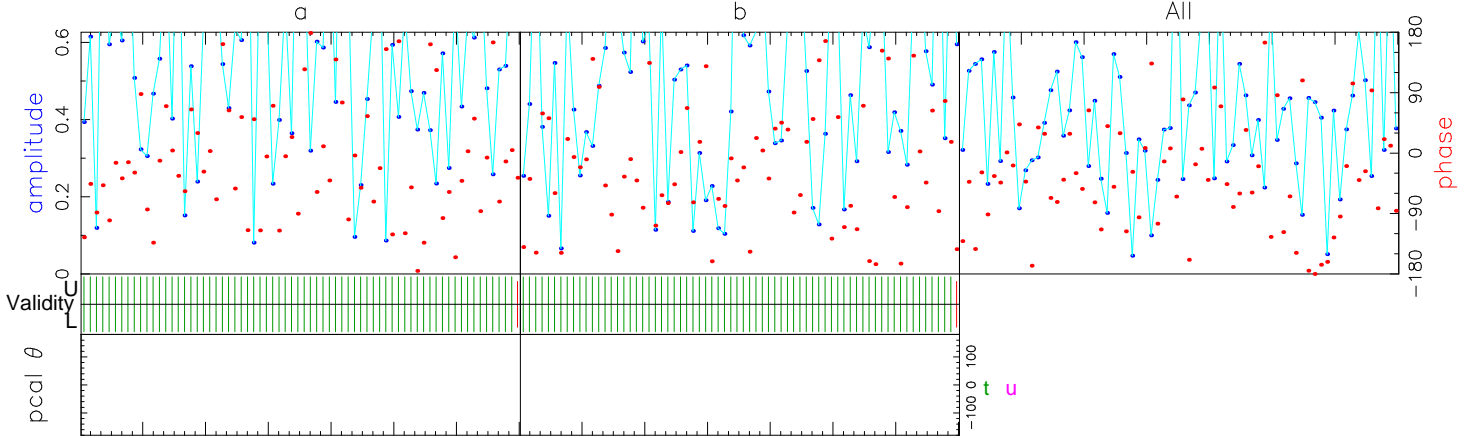
Control file: cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/tu.zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/tu.W.43.zpwuhk



Fringe quality 0  
SNR 5.5  
Int time 418.994  
Amp 0.209  
Phase 2208.1  
PFD 7.1e-01  
Delays (us)  
SBD -0.392304  
MBD 0.003575  
Fringe rate (Hz) 0.394047  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124501.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:208:111524  
2017:170:130423  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



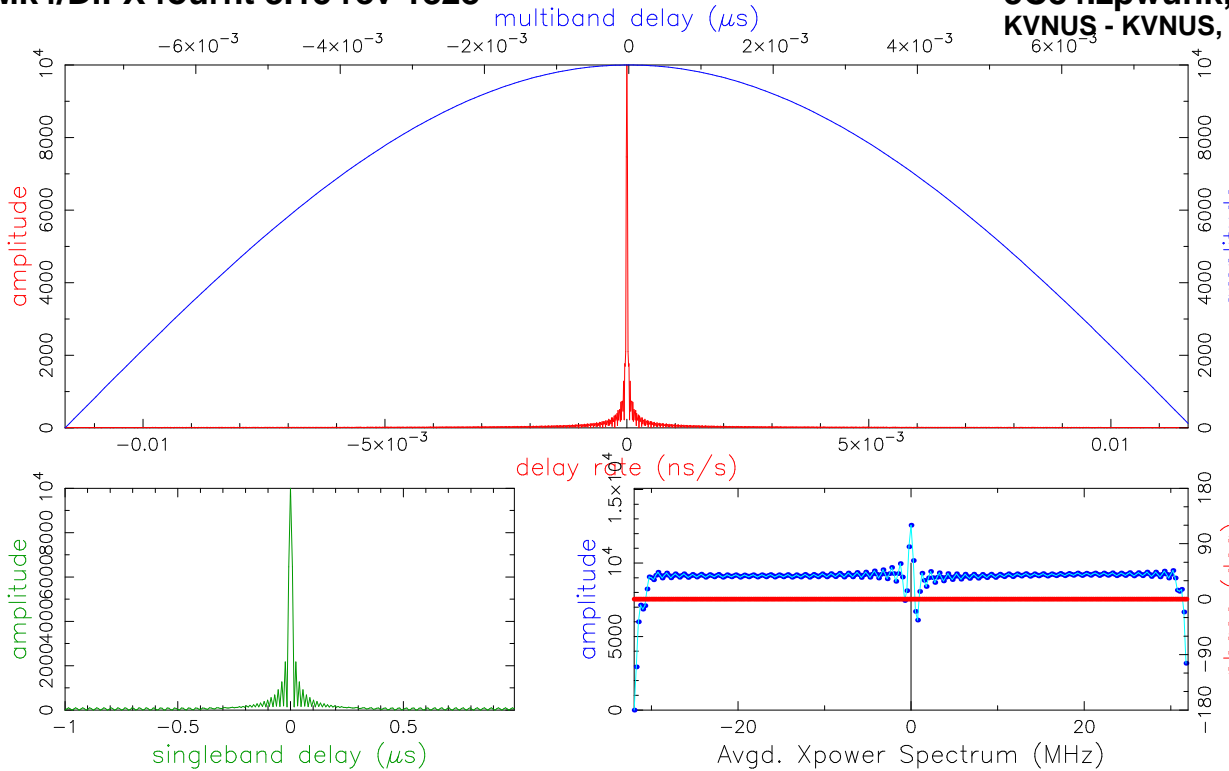
86156.00		86220.00		Freq (MHz)		All
-42.1		-41.5		Phase		-41.9
0.2		0.2		Ampl.		0.2
78.9		153.0		Sbd box		78.8
U/L 838/838		838/838		APs used		
t 0		0		PC freqs		
u 0		0		PC freqs		
tu 0:0		0:0		PC phase		
tu 0:0		0:0		Manl PC		
t 1000		1000		PC amp		
u 1000		1000				
t W00UR,W00LR		W01UR,W01LR		Chan ids		
u W00UL,W00LL		W01UL,W01LL		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	1.26632985649E+02	Apriori delay (usec)	1.27020035916E+02	Resid mbdelay (usec)	3.57473E-03	+/- 9.1E-04
Sband delay (usec)	1.26627731916E+02	Apriori clock (usec)	-1.9200263E+00	Resid sbdelay (usec)	-3.92304E-01	+/- 1.6E-03
Phase delay (usec)	1.27020034565E+02	Apriori clockrate (us/s)	-6.4644698E-07	Resid phdelay (usec)	-1.35091E-06	+/- 3.4E-07
Delay rate (us/s)	-3.19091799427E-02	Apriori rate (us/s)	-3.19137544333E-02	Resid rate (us/s)	4.57449E-06	+/- 2.8E-09
Total phase (deg)	2529.9	Apriori accel (us/s/s)	-3.11419395846E-06	Resid phase (deg)	2208.1	+/- 10.5

	RMS	Theor.	Amplitude	0.209 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	78.3	87.5	Search (2048X8)	0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	153.3	152.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	0.0	14.8	Inc. seg. avg.	0.207	Sample rate(MSamp/s): 64	dr window (ns/s) -0.012 0.012
amp/frq (%)	20.6	25.8	Inc. frq. avg.	0.198	Data rate(Mb/s): 512	nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 308.5 el 17.8 pa 60.9 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 238.580 -434.757 simultaneous interpolator

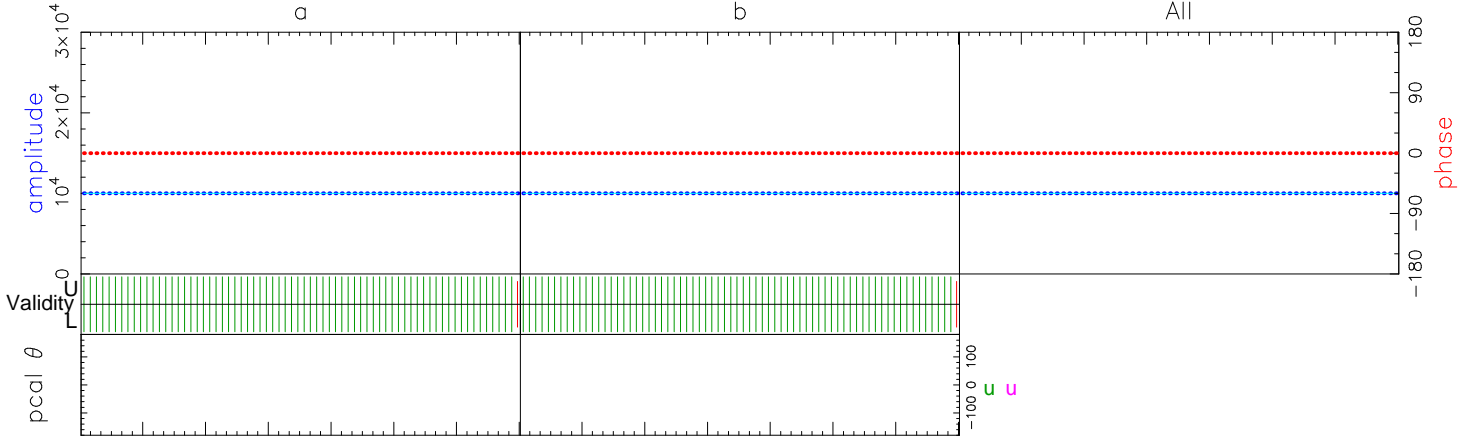
Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/tu.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/tu.W.44.zpwuhk





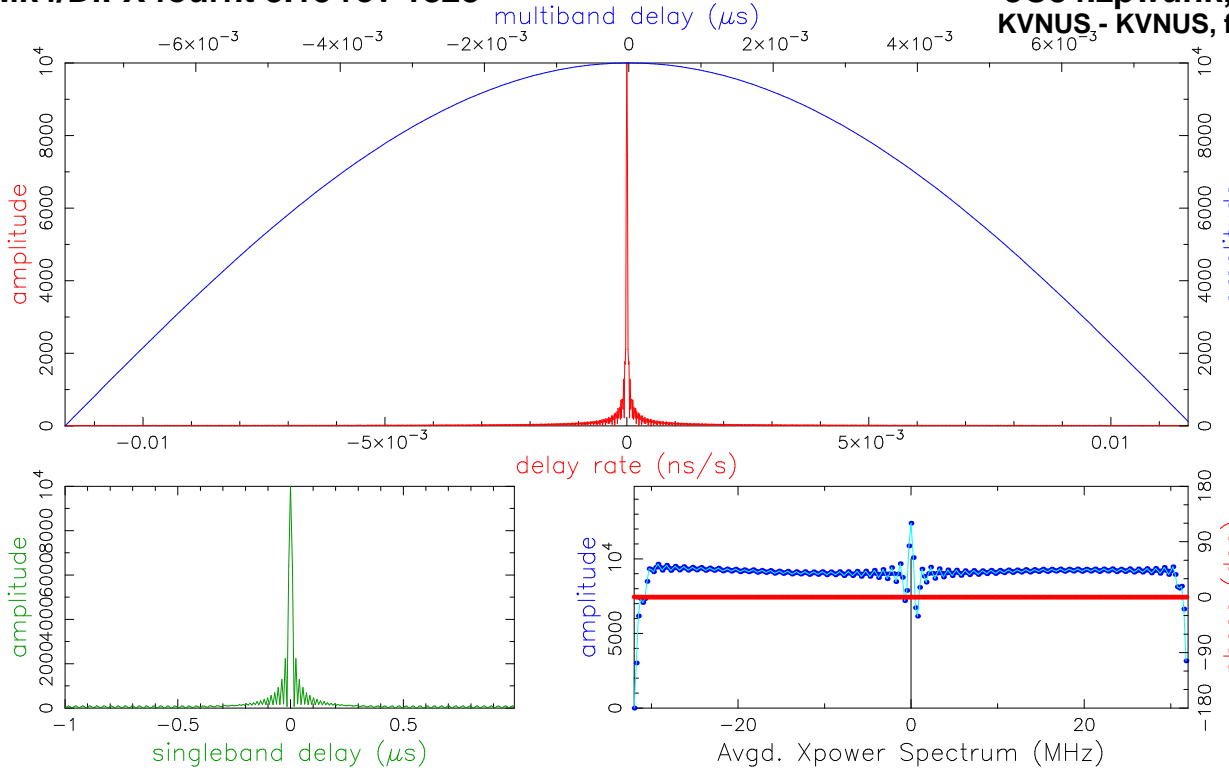
Fringe quality 9  
 SNR 279879.7  
 Int time 418.994  
 Amp 10000.000  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145923  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



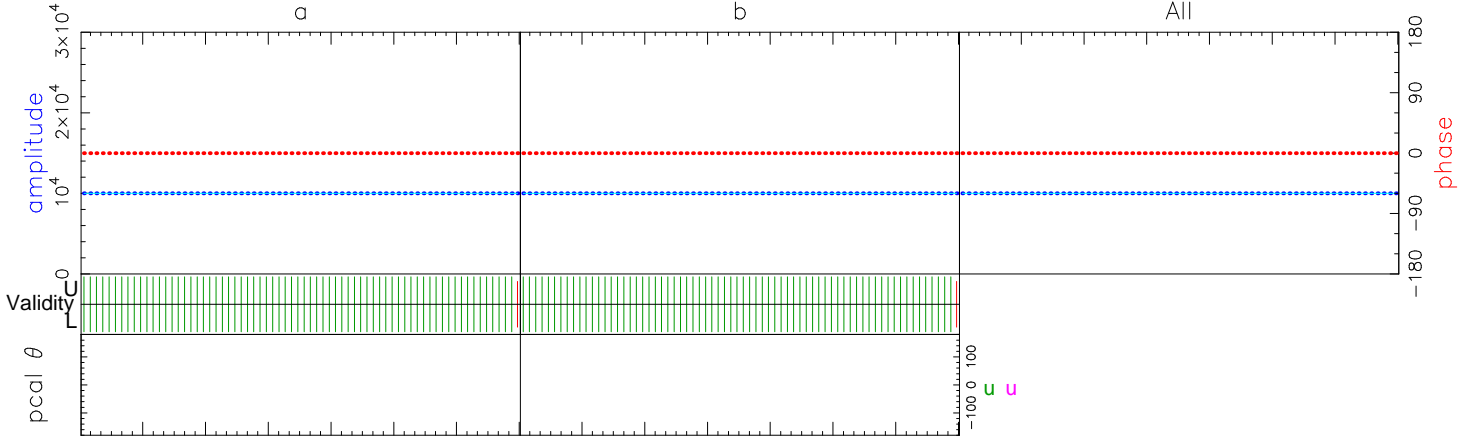
86156.00		86220.00		Freq (MHz)		All
0.0	0.0	0.0	0.0	Phase		0.0
10000.0	10000.0	10000.0	10000.0	Ampl.		10000.0
129.0	129.0	129.0	129.0	Sbd box		129.0
U/L 838/838	838/838	838/838	838/838	APs used		
u 0	0	0	0	PC freqs		
u 0	0	0	0	PC freqs		
u:u 0:0	0:0	0:0	0:0	PC phase		
u:u 0:0	0:0	0:0	0:0	Manl PC		
u 1000	1000	1000	1000	PC amp		
u 1000	1000	1000	1000			
u W00UL,W00LL	W01UL,W01LL			Chan ids		
u W00UL,W00LL	W01UL,W01LL			Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/- 1.8E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/- 3.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/- 5.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X8) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.012 0.012  
 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 u: az 309.1 el 17.4 pa 57.2 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uu.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uu.W.169.zpwuhk



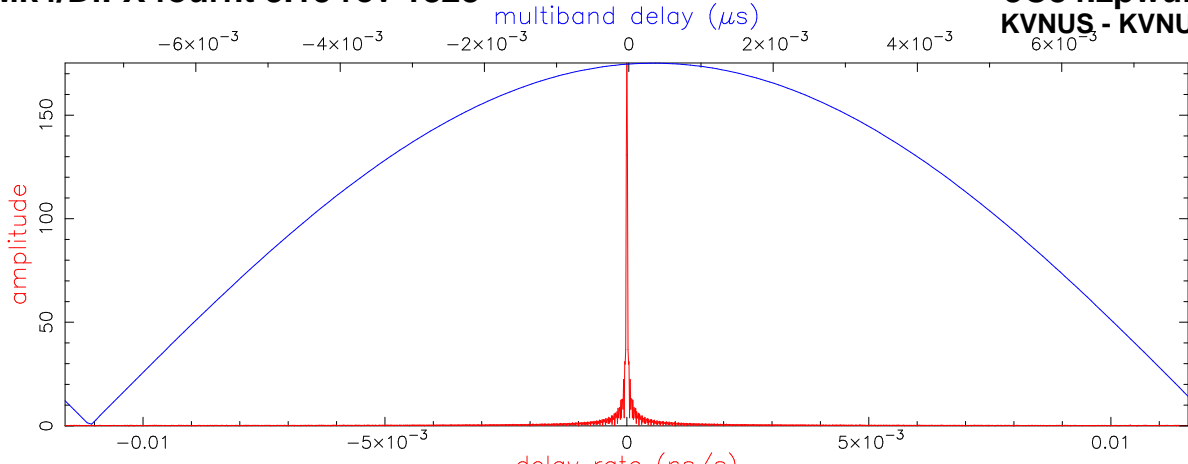
Fringe quality 9  
 SNR 279879.7  
 Int time 418.994  
 Amp 10000.000  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145924  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All
0.0	0.0	Phase	0.0
10000.0	10000.0	Ampl.	10000.0
129.0	129.0	Sbd box	129.0
U/L 838/838	838/838	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W00UR,W00LR	W01UR,W01LR	Chan ids	
u W00UR,W00LR	W01UR,W01LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00
		Resid mbdelay (usec)	0.00000E+00 +/- 1.8E-08
		Resid sbdelay (usec)	0.00000E+00 +/- 3.1E-08
		Resid phdelay (usec)	0.00000E+00 +/- 6.6E-12
		Resid rate (us/s)	0.00000E+00 +/- 5.5E-14
		Resid phase (deg)	0.0 +/- 0.0

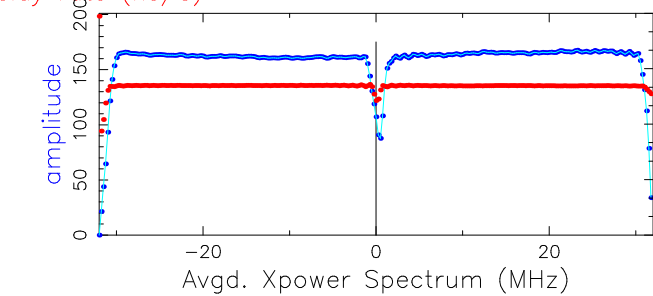
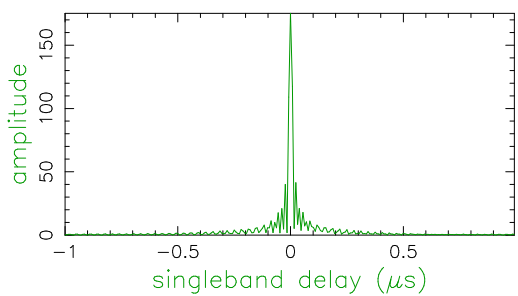
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X8) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.012 0.012  
 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00



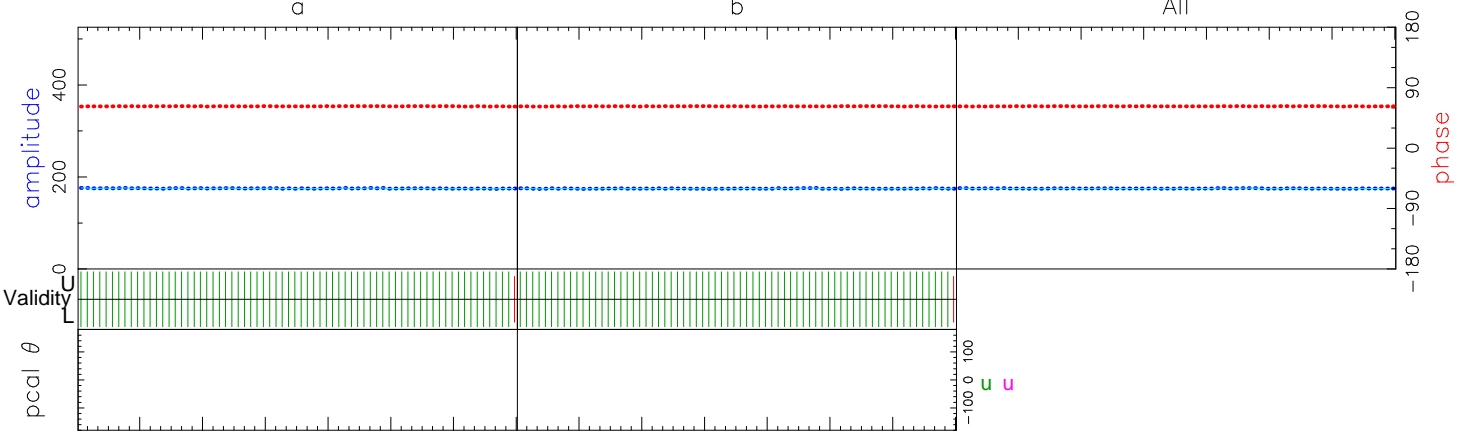
Fringe quality 9

SNR 4903.9  
 Int time 418.994  
 Amp 175.215  
 Phase 62.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000313  
 MBD 0.000347  
 Fringe rate (Hz)  
 0.000008  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145924  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



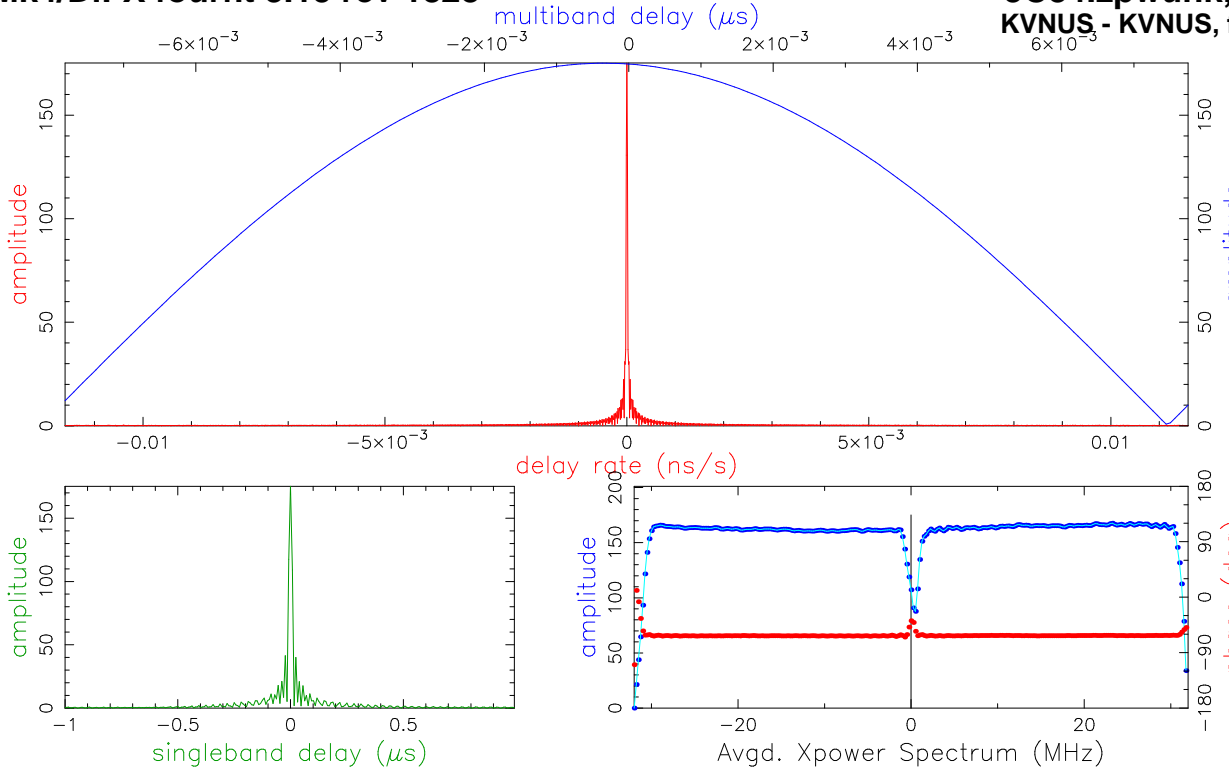
86156.00	86220.00	Freq (MHz)	All
62.2	62.2	Phase	62.2
175.3	174.9	Ampl.	175.1
129.1	129.0	Sbd box	129.0
U/L 838/838	838/838	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W00UL,W00LL	W01UL,W01LL	Chan ids	
u W00UR,W00LR	W01UR,W01LR	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	3.47375000000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	3.47375E-04	+/-	1.0E-06
Sband delay (usec)	3.13000000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	3.13000E-04	+/-	1.8E-06
Phase delay (usec)	2.00643088630E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.00643E-06	+/-	3.8E-10
Delay rate (us/s)	9.64998839099E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	9.64999E-11	+/-	3.1E-12
Total phase (deg)	62.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	62.2	+/-	0.0

ph/seg (deg)	0.1	Theor.	0.1	Amplitude	175.215 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.2		0.2	Search (2048X8)	174.681	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.1		0.0	Inc. seg. avg.	175.106	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	175.106	Data rate(Mb/s):	512	dr window (ns/s)	-0.012 0.012
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

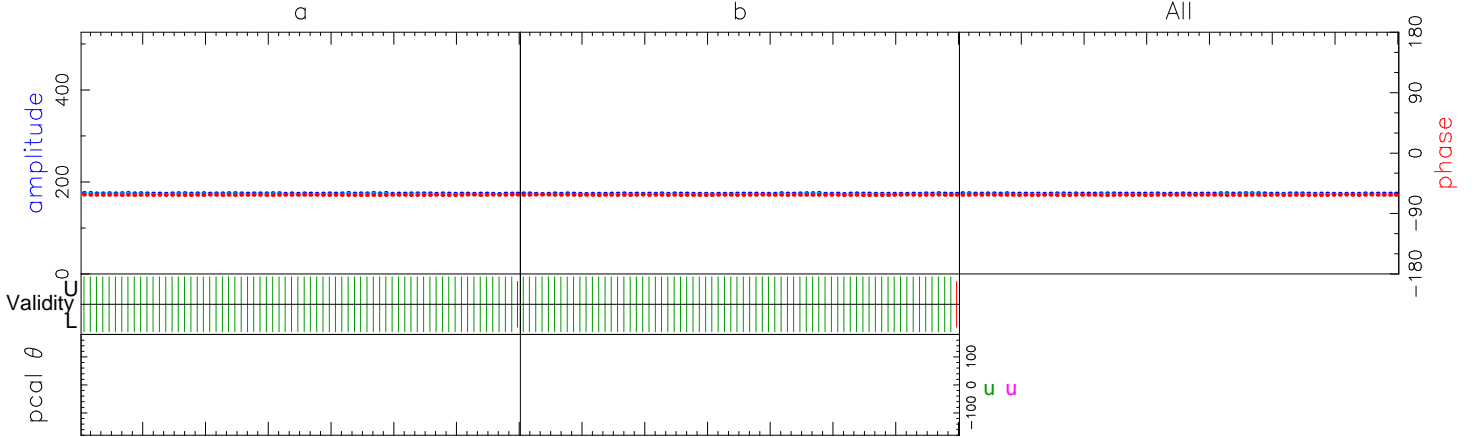
u: az 309.1 el 17.4 pa 57.2      u: az 309.1 el 17.4 pa 57.2      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: ../cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/uu.zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/uu.W.171.zpwuhk



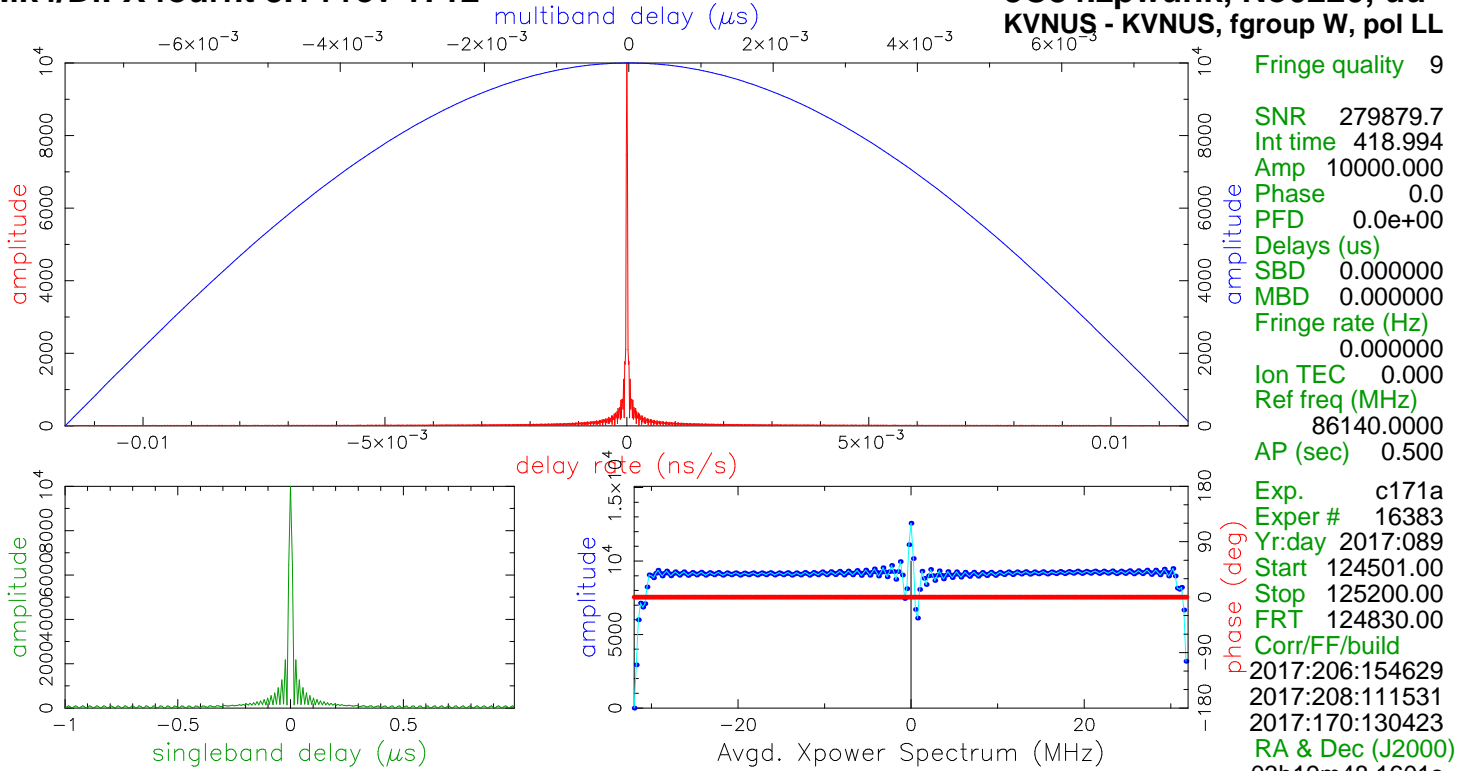
Fringe quality 9  
 SNR 4903.9  
 Int time 418.994  
 Amp 175.215  
 Phase -62.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000313  
 MBD -0.000347  
 Fringe rate (Hz)  
 -0.000008  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145925  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

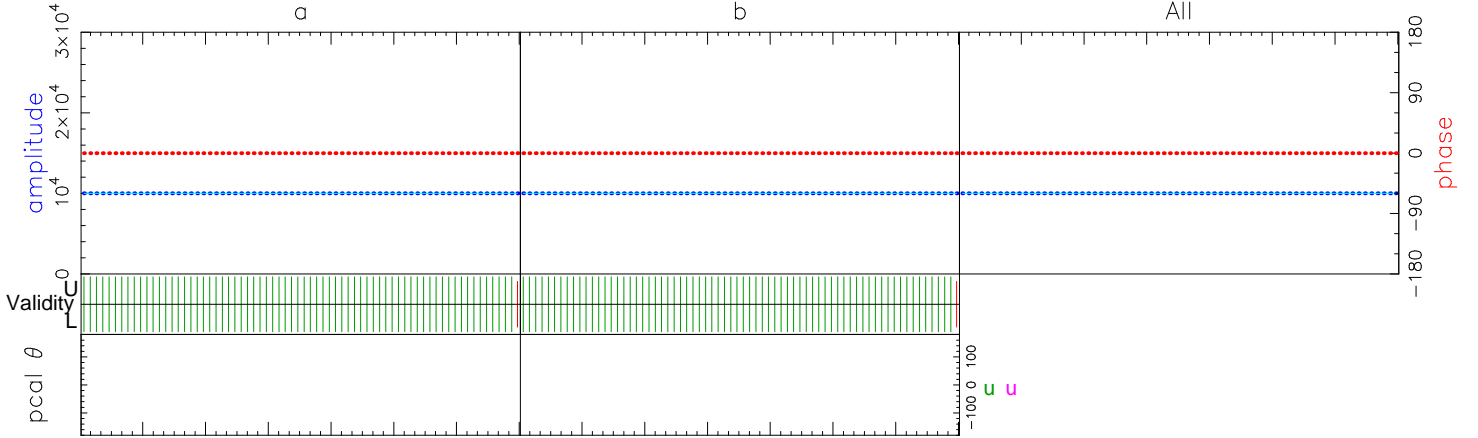


86156.00	86220.00	Freq (MHz)	All				
-62.2	-62.2	Phase	-62.2				
175.3	174.9	Ampl.	175.1				
128.9	129.0	Sbd box	129.0				
U/L 838/838	838/838	APs used					
u 0	0	PC freqs					
u 0	0	PC freqs					
u:u 0:0	0:0	PC phase					
u:u 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
u 1000	1000						
u W00UR,W00LR	W01UR,W01LR	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.47375000000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.47375E-04	+/-	1.0E-06
Sband delay (usec)	-3.13000000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-3.13000E-04	+/-	1.8E-06
Phase delay (usec)	-2.00643088638E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.00643E-06	+/-	3.8E-10
Delay rate (us/s)	-9.64998839099E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-9.64999E-11	+/-	3.1E-12
Total phase (deg)	-62.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-62.2	+/-	0.0

ph/seg (deg) 0.1 0.1 Theor. Amplitude 175.215 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.2 0.2 Search (2048X8) 174.681 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.1 0.0 Inc. seg. avg. 175.106 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uu.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uu.W.172.zpwuhk simultaneous interpolator

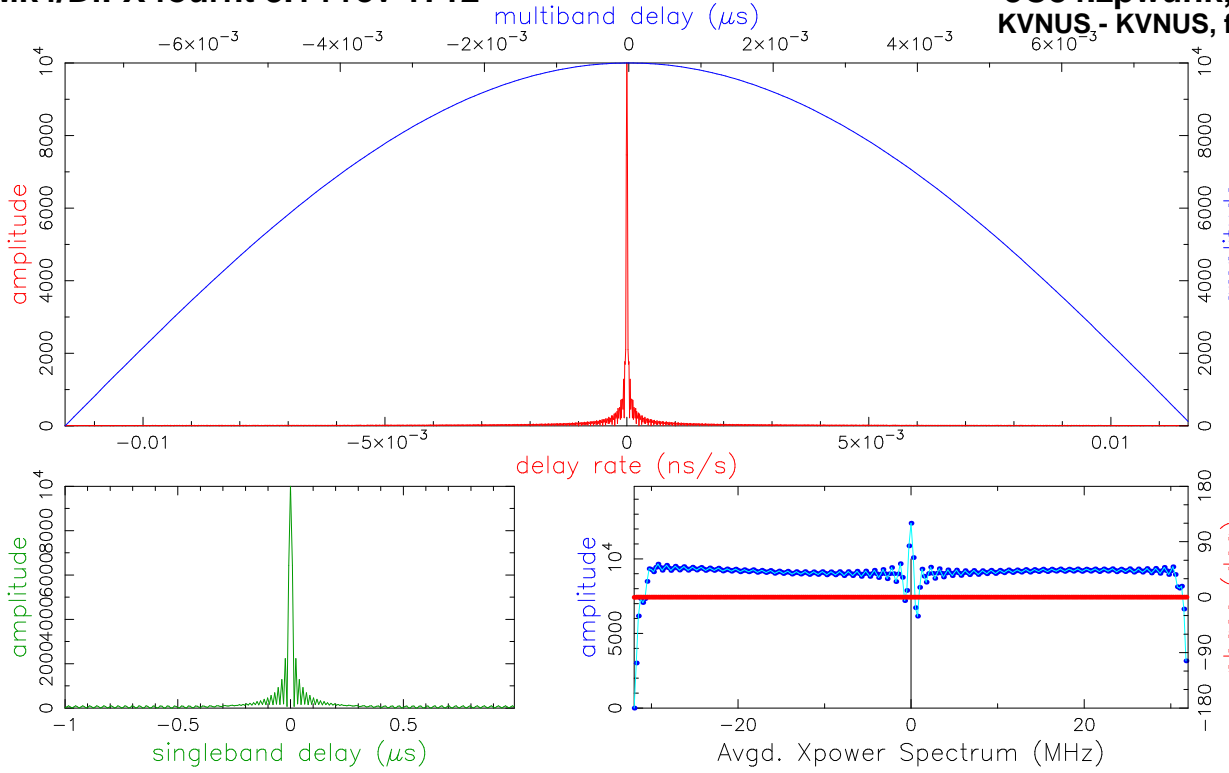


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



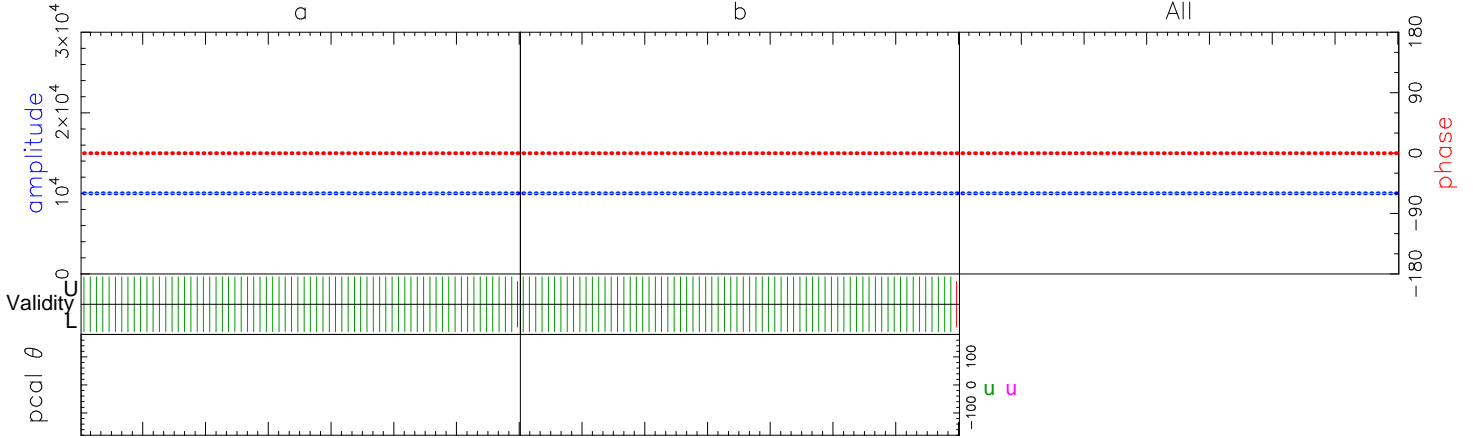
86156.00	86220.00	Freq (MHz)	All				
0.0	0.0	Phase	0.0				
10000.0	10000.0	Ampl.	10000.0				
129.0	129.0	Sbd box	129.0				
U/L 838/838	838/838	APs used					
u 0	0	PC freqs					
u 0	0	PC freqs					
u:u 0:0	0:0	PC phase					
u:u 0:0	0:0	Mani PC					
u 1000	1000	PC amp					
u 1000	1000						
u W00UL,W00LL	W01UL,W01LL	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.8E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	3.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	5.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0		0.0		0.0	Search (2048X8)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0		0.0		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	64		dr window (ns/s)	-0.012 0.012	
						Inc. frq. avg.	10000.000	Data rate(Mb/s):	512	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00



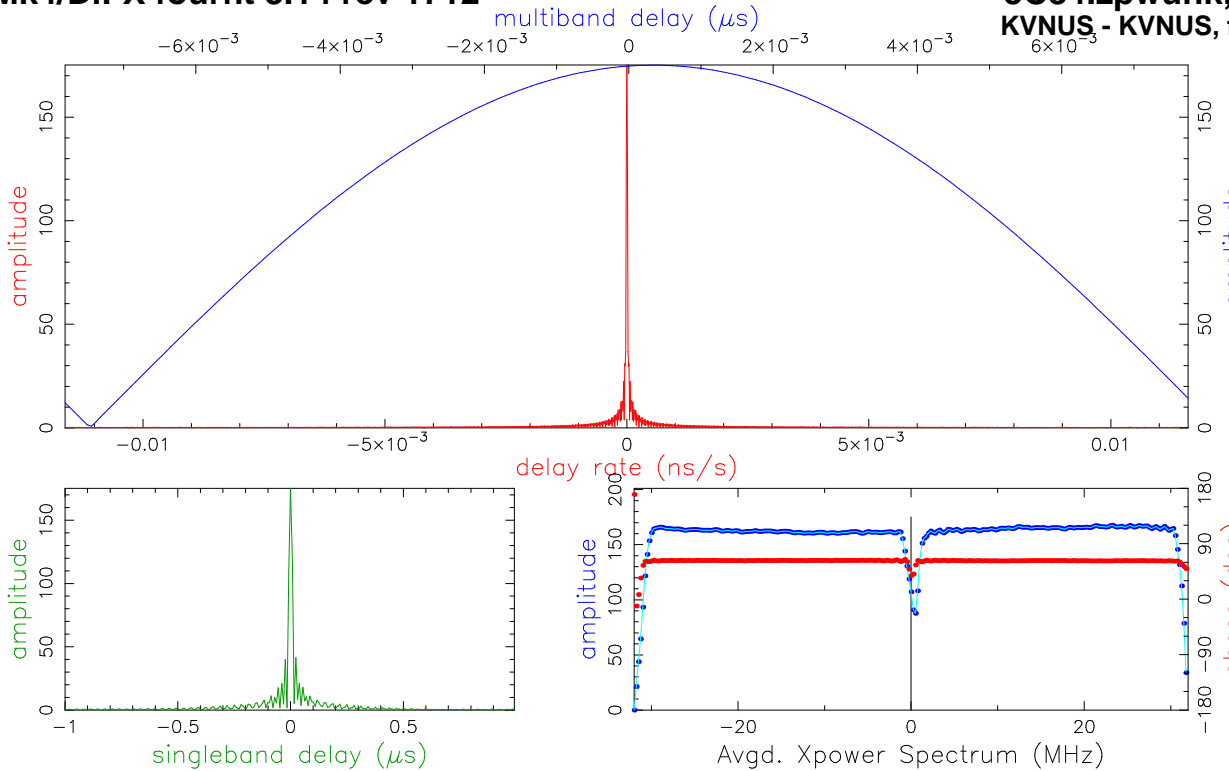
Fringe quality 9  
 SNR 279879.7  
 Int time 418.994  
 Amp 10000.000  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111532  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



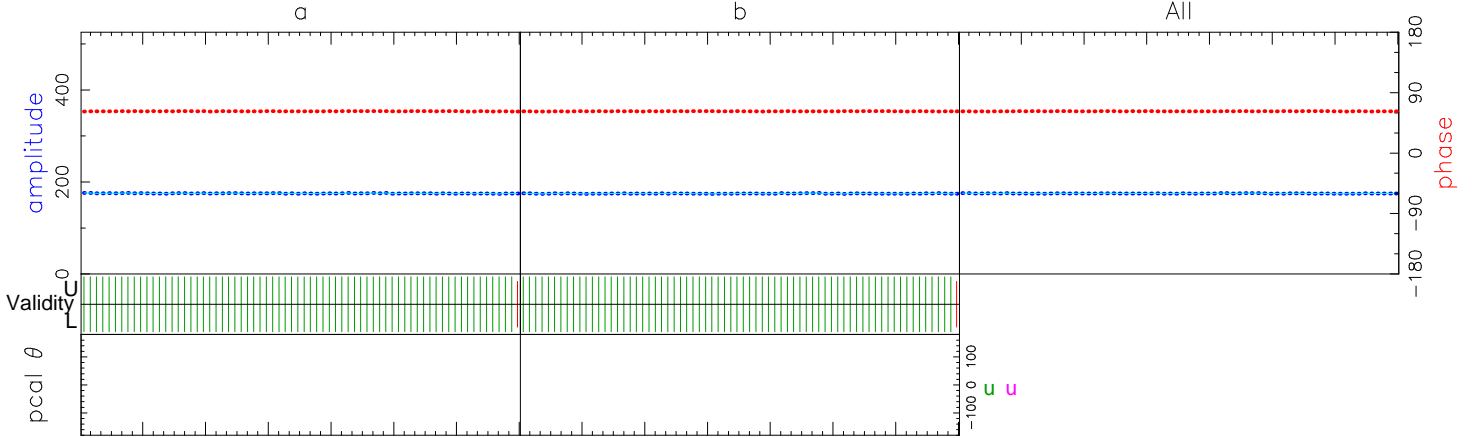
86156.00		86220.00		Freq (MHz)		All
U/L	838/838	838/838		86156.00	86220.00	10000.0
u	0	0		0.0	0.0	0.0
u	0	0		10000.0	10000.0	10000.0
u:u	0:0	0:0		129.0	129.0	129.0
u:u	0:0	0:0		0.0	0.0	0.0
u	1000	1000		0.0000000000E+00	0.0000000000E+00	0.0000000000E+00
u	1000	1000		0.0000000000E+00	0.0000000000E+00	0.0000000000E+00
u	W00UR,W00LR	W01UR,W01LR		0.0000000000E+00	0.0000000000E+00	0.0000000000E+00
u	W00UR,W00LR	W01UR,W01LR		0.0000000000E+00	0.0000000000E+00	0.0000000000E+00
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/- 1.8E-08
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/- 3.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/- 5.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.000 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X8) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.012 0.012  
 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00



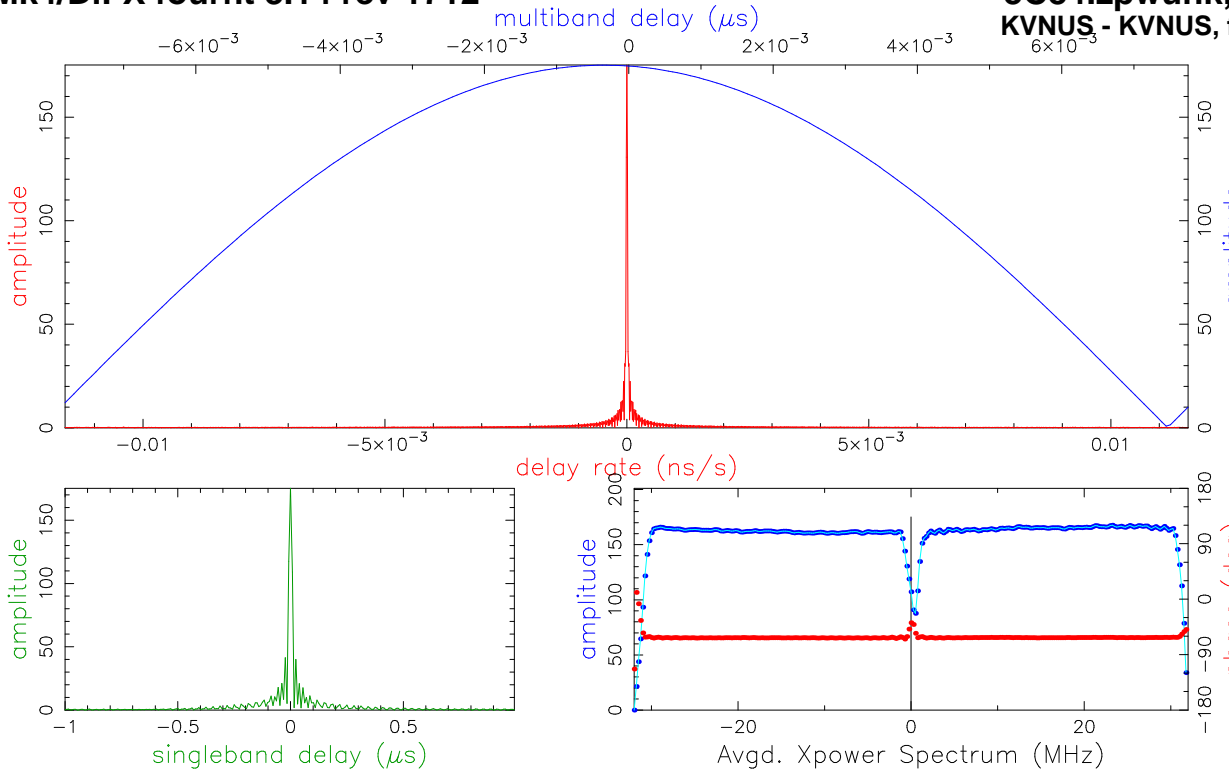
Fringe quality 9  
 SNR 4903.9  
 Int time 418.994  
 Amp 175.215  
 Phase 62.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000313  
 MBD 0.000347  
 Fringe rate (Hz)  
 0.000008  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111532  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



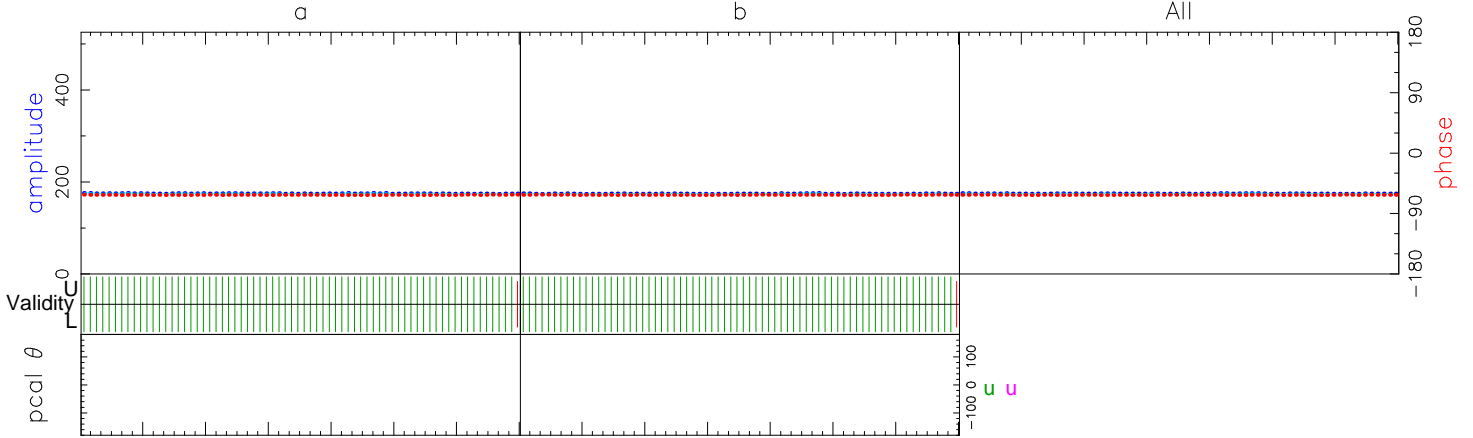
86156.00	86220.00	Freq (MHz)	All
62.2	62.2	Phase	62.2
175.3	174.9	Ampl.	175.1
129.1	129.0	Sbd box	129.0
U/L 838/838	838/838	APs used	
u 0	0	PC freqs	
u 0	0	PC freqs	
u:u 0:0	0:0	PC phase	
u:u 0:0	0:0	Manl PC	
u 1000	1000	PC amp	
u 1000	1000		
u W00UL,W00LL	W01UL,W01LL	Chan ids	
u W00UR,W00LR	W01UR,W01LR	Tracks	
		Chan ids	
		Tracks	
Group delay (usec)(sbd)	3.47375000000E-04	Apriori delay (usec)	0.00000000000E+00
Sband delay (usec)	3.13000000000E-04	Apriori clock (usec)	0.0000000E+00
Phase delay (usec)	2.00643088630E-06	Apriori clockrate (us/s)	0.0000000E+00
Delay rate (us/s)	9.64998839099E-11	Apriori rate (us/s)	0.00000000000E+00
Total phase (deg)	62.2	Apriori accel (us/s/s)	0.00000000000E+00
		Resid mbdelay (usec)	3.47375E-04 +/- 1.0E-06
		Resid sbdelay (usec)	3.13000E-04 +/- 1.8E-06
		Resid phdelay (usec)	2.00643E-06 +/- 3.8E-10
		Resid rate (us/s)	9.64999E-11 +/- 3.1E-12
		Resid phase (deg)	62.2 +/- 0.0

ph/seg (deg) 0.1 0.1 Theor. Amplitude 175.215 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.2 0.2 Search (2048X8) 174.681 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.1 0.0 Inc. seg. avg. 175.106 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uu.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uu.W.59.zpwuhk simultaneous interpolator



Fringe quality 9  
 SNR 4903.9  
 Int time 418.994  
 Amp 175.215  
 Phase -62.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000313  
 MBD -0.000347  
 Fringe rate (Hz)  
 -0.000008  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111533  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

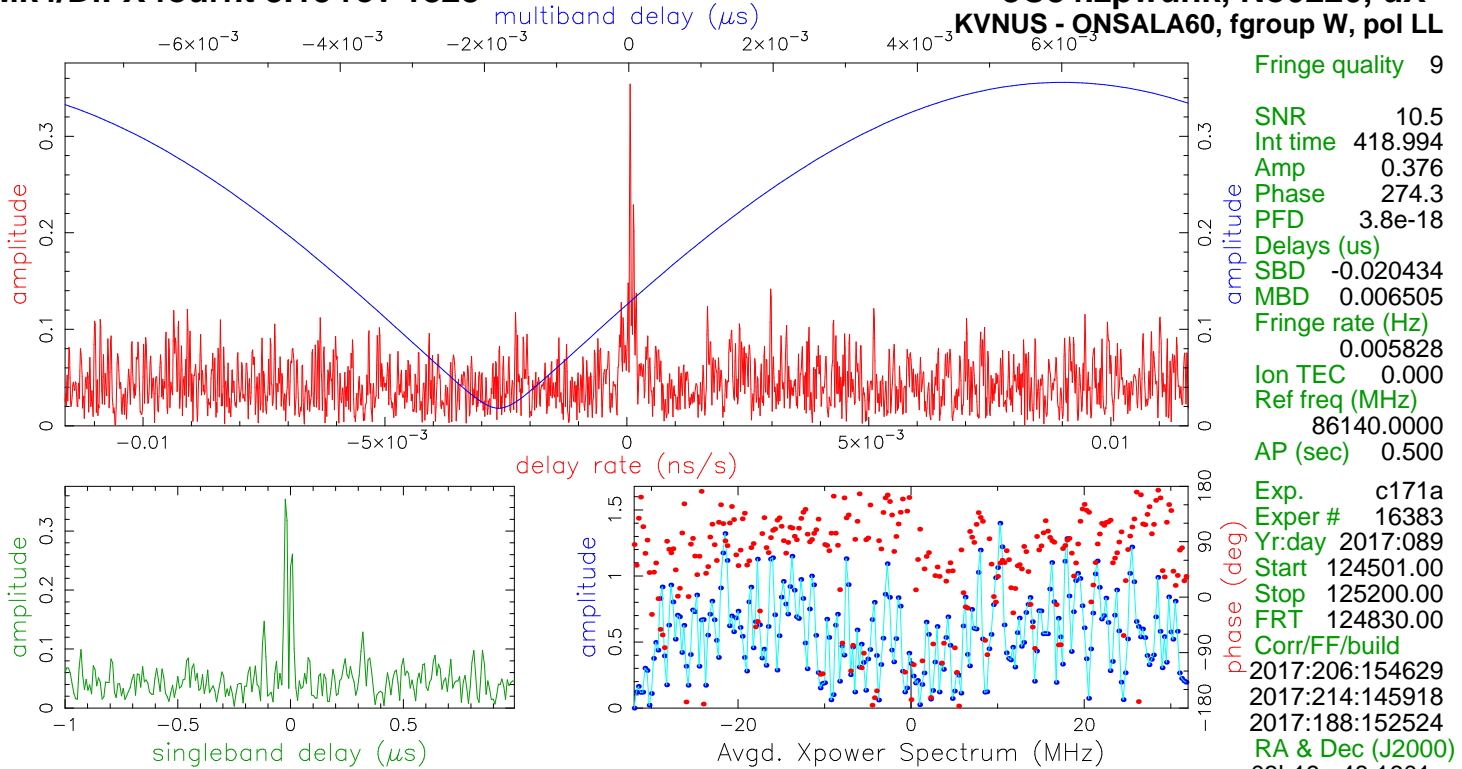
Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
-62.2	-62.2	Phase	-62.2				
175.3	174.9	Ampl.	175.1				
128.9	129.0	Sbd box	129.0				
U/L 838/838	838/838	APs used					
u 0	0	PC freqs					
u 0	0	PC freqs					
u:u 0:0	0:0	PC phase					
u:u 0:0	0:0	Mani PC					
u 1000	1000	PC amp					
u 1000	1000						
u W00UR,W00LR	W01UR,W01LR	Chan ids					
u W00UL,W00LL	W01UL,W01LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-3.47375000000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-3.47375E-04	+/-	1.0E-06
Sband delay (usec)	-3.13000000000E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-3.13000E-04	+/-	1.8E-06
Phase delay (usec)	-2.00643088638E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.00643E-06	+/-	3.8E-10
Delay rate (us/s)	-9.64998839099E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-9.64999E-11	+/-	3.1E-12
Total phase (deg)	-62.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-62.2	+/-	0.0

ph/seg (deg) 0.1 0.1 Theor. Amplitude 175.215 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.2 0.2 Search (2048X8) 174.681 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.1 0.0 Inc. seg. avg. 175.106 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 u: az 309.1 el 17.4 pa 57.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00  
 simultaneous interpolator





Fringe quality 9

SNR 10.5

Int time 418.994

Amp 0.376

Phase 274.3

PFD 3.8e-18

Delays (us)

SBD -0.020434

MBD 0.006505

Fringe rate (Hz) 0.005828

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:089

Start 124501.00

Stop 125200.00

FRT 124830.00

Corr/FF/build

2017:206:154629

2017:214:145918

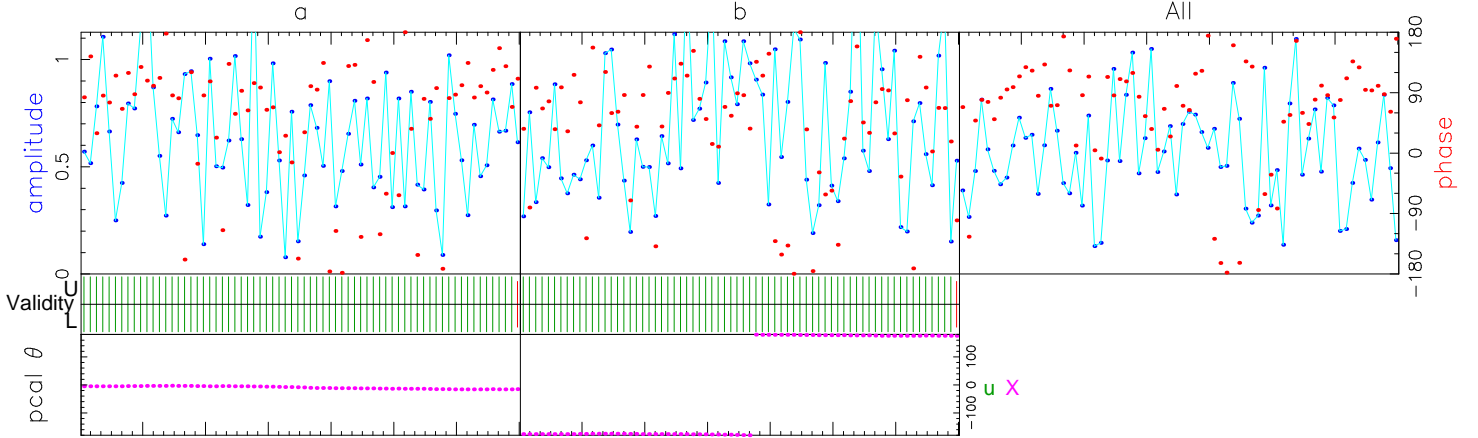
2017:188:152524

RA & Dec (J2000)

03h19m48.1601s

+41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00				86220.00		Freq (MHz)	All
99.8				88.3		Phase	94.3
0.4				0.3		Ampl.	0.4
126.6				126.1		Sbd box	126.4
U/L 838/838				838/838		APs used	
u 0				0		PC freqs	
X -1000				-1000		PC freqs	
u:X 0:0				0:0		PC phase	
u:X 0:0				0:0		Manl PC	
u 1000				1000		PC amp	
X 1000				1000			
u W00UL,W00LL				W01UL,W01LL		Chan ids	
X W00UL,W00LL				W02UL,W02LL		Tracks	
						Chan ids	
						Tracks	
Group delay (usec)(sbd)	-1.39293864827E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	6.50545E-03	+/-	4.7E-04
Sband delay (usec)	-1.39293821717E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	-2.04335E-02	+/-	8.2E-04
Phase delay (usec)	-1.39293617352E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	3.04210E-06	+/-	1.8E-07
Delay rate (us/s)	-1.12771419728E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	6.76617E-08	+/-	1.5E-09
Total phase (deg)	228.2	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	274.3	+/-	5.4

ph/seg (deg) 62.8 45.6 Search (2048X8) 0.356 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

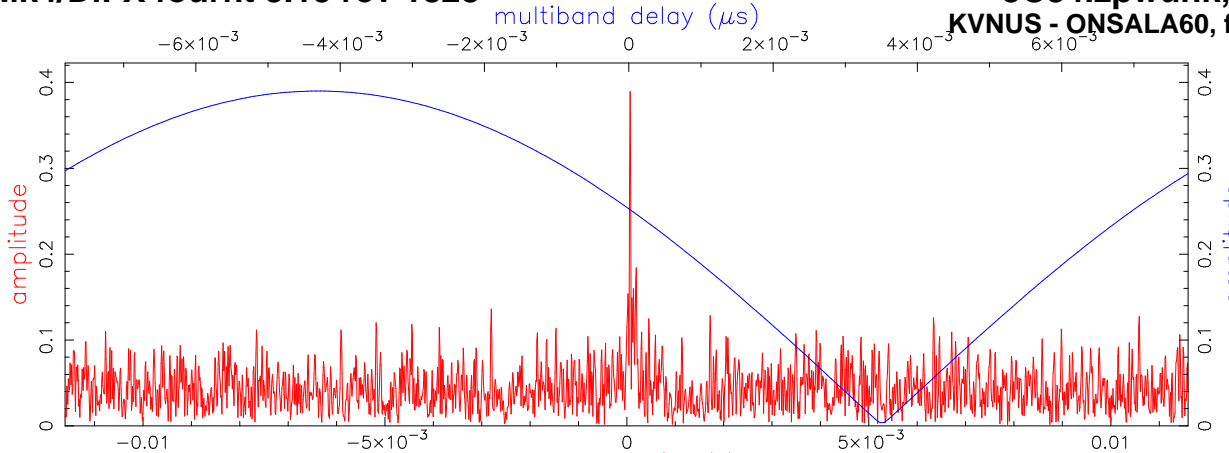
amp/seg (%) 79.1 79.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 7.7 Inc. seg. avg. 0.430 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 7.2 13.4 Inc. frq. avg. 0.353 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 ion window (TEC) 0.00 0.00

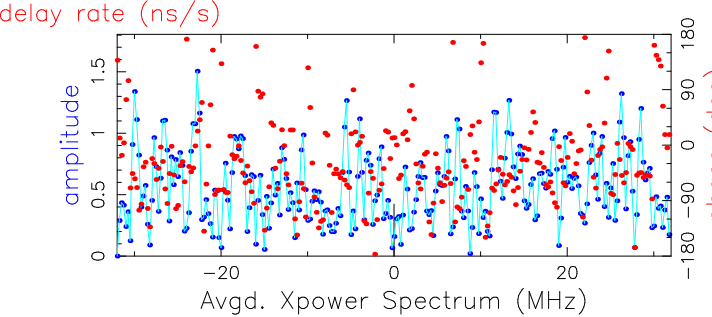
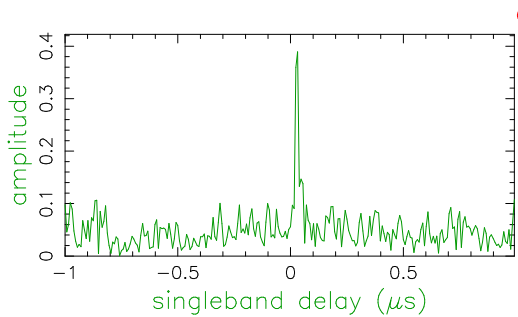
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.161.zpwuhk simultaneous interpolator



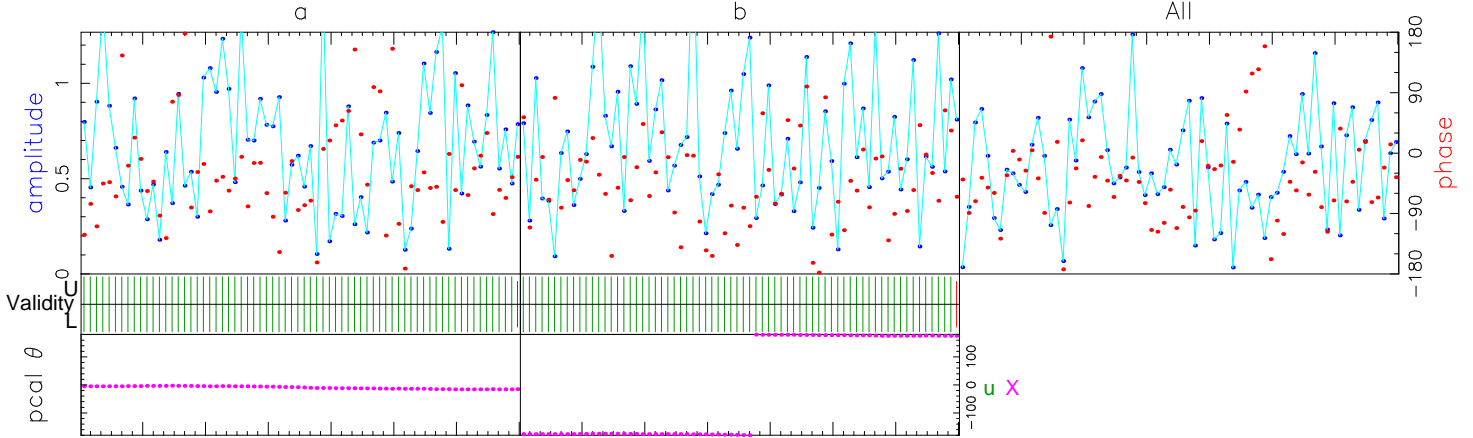
Fringe quality 9

SNR 11.8  
 Int time 418.994  
 Amp 0.423  
 Phase -223.0  
 PFD 1.7e-24  
 Delays (us)  
 SBD 0.027979  
 MBD -0.004612  
 Fringe rate (Hz) 0.005895  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build 2017:206:154629  
 2017:214:145918  
 2017:188:152524  
 RA & Dec (J2000) 03h19m48.1601s  
 +41°30'42.104"

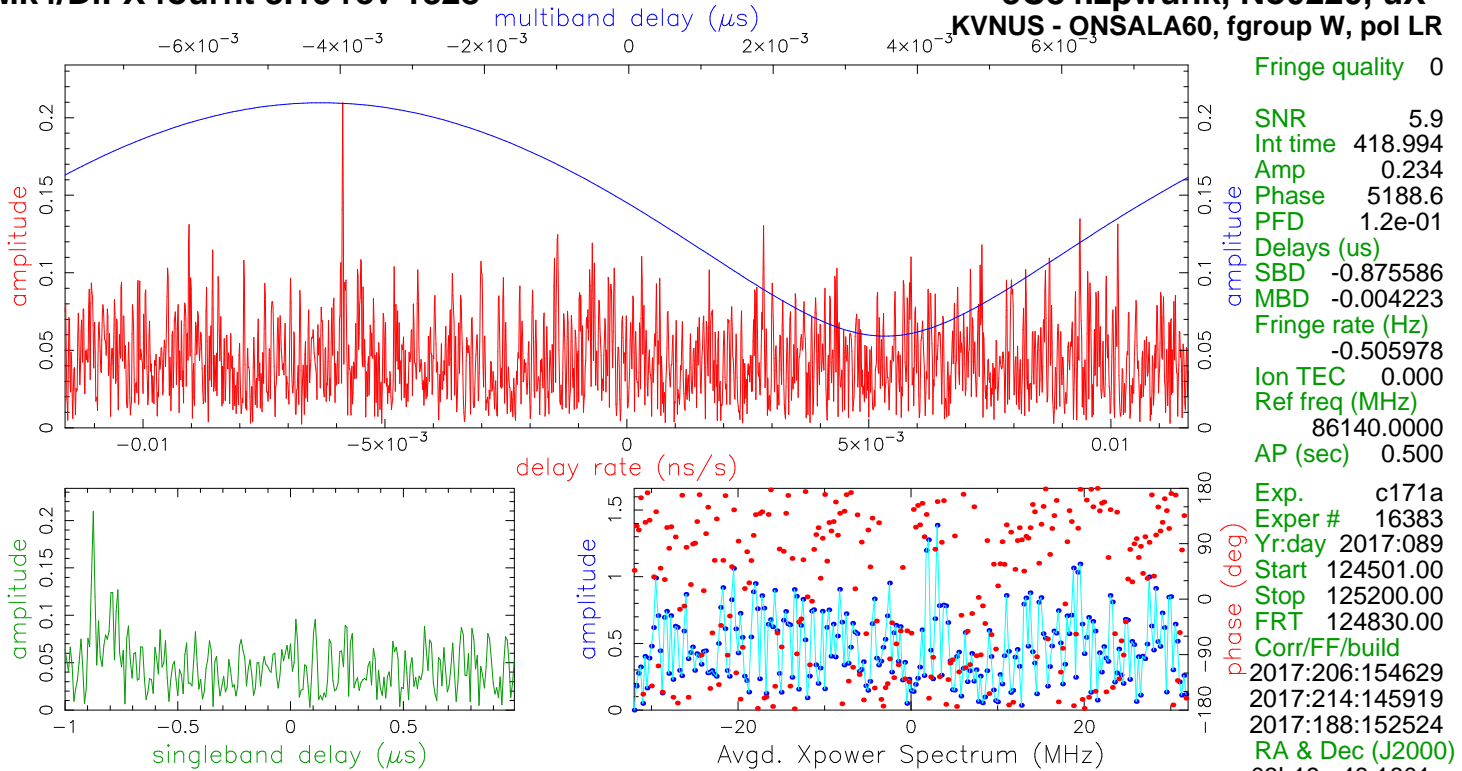


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

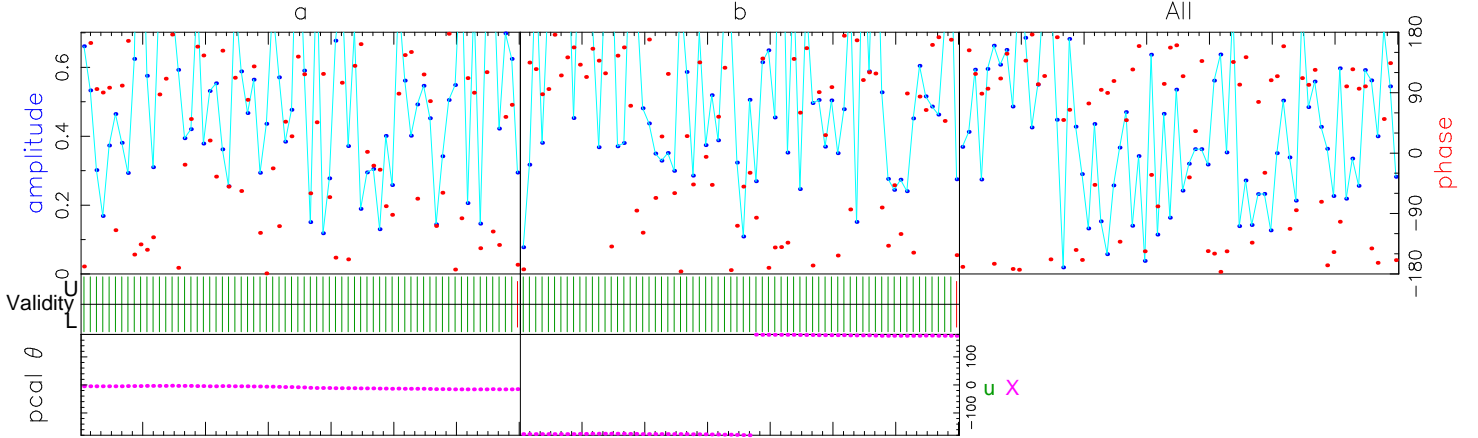


86156.00	86220.00	Freq (MHz)	All			
-46.6	-39.5	Phase	-43.0			
0.4	0.4	Ampl.	0.4			
132.6	132.6	Sbd box	132.6			
U/L 838/838	838/838	APs used				
u 0	0	PC freqs				
X -1000	-1000	PC freqs				
u:X 0:0	0:0	PC phase				
u:X 0:0	0:0	Manl PC				
u 1000	1000	PC amp				
X 1000	1000					
u W00UR,W00LR	W01UR,W01LR	Chan ids				
X W00UR,W00LR	W02UR,W02LR	Tracks				
		Chan ids				
		Tracks				
Group delay (usec)(sbd)	-1.39293351001E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	-4.61193E-03	+/- 4.2E-04
Sband delay (usec)	-1.39293337597E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	2.79785E-02	+/- 7.3E-04
Phase delay (usec)	-1.39293617396E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	-1.38775E-06	+/- 1.6E-07
Delay rate (us/s)	-1.12771419651E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	6.84351E-08	+/- 1.3E-09
Total phase (deg)	-269.2	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	-223.0	+/- 4.8

ph/seg (deg) 61.6 40.5 Theor. Amplitude 0.423 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 72.5 70.7 Search (2048X8) 0.388 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 6.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 7.8 12.0 Inc. seg. avg. 0.456 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.162.zpwuhk simultaneous interpolator



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

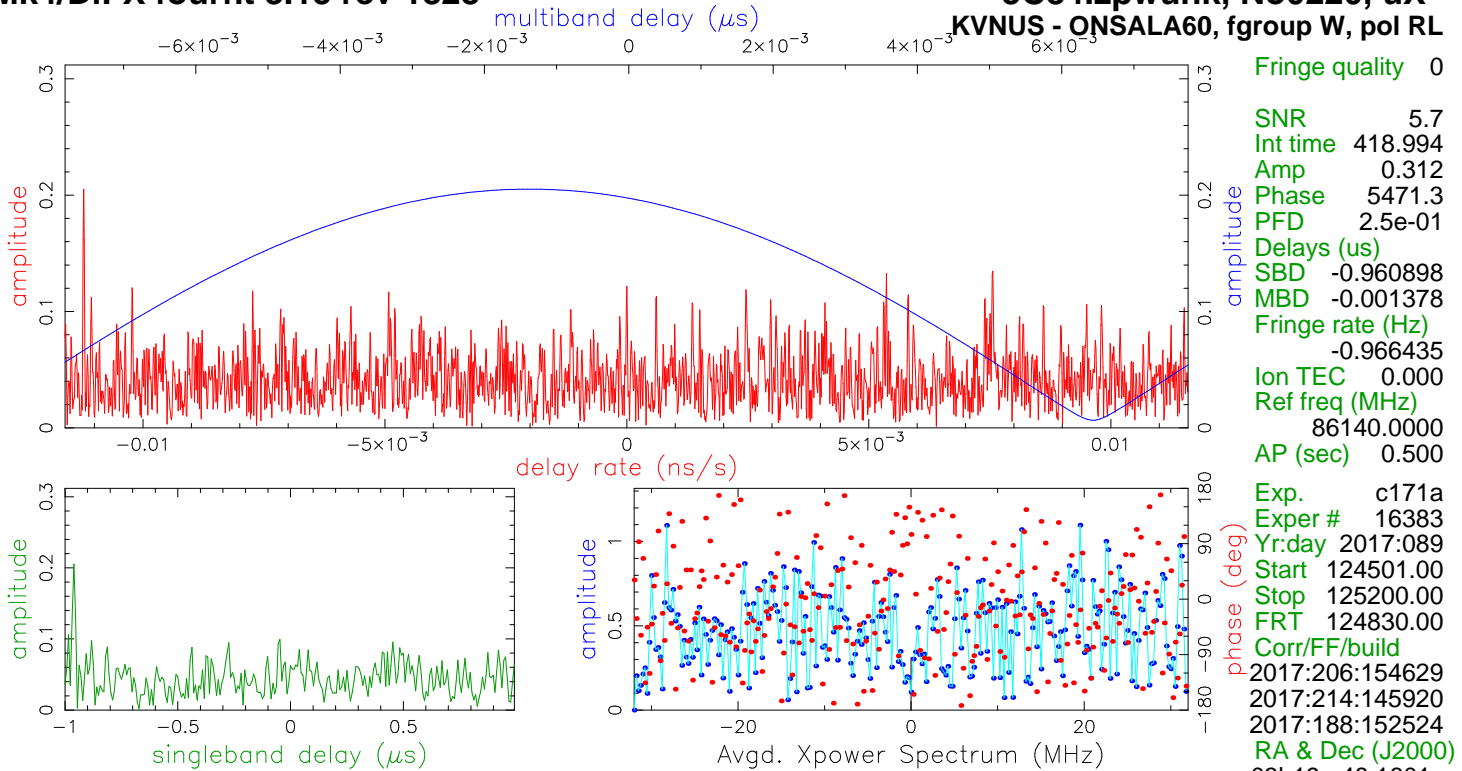


86156.00		86220.00		Freq (MHz)	All
149.1		148.3		Phase	148.6
0.2		0.3		Ampl.	0.2
27.3		16.8		Sbd box	16.9
U/L 838/838		838/838		APs used	
u 0		0		PC freqs	
X -1000		-1000		PC freqs	
u:X 0:0		0:0		PC phase	
u:X 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
X 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
X W00UR,W00LR		W02UR,W02LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.39302409610E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	-4.22276E-03 +/- 8.5E-04
Sband delay (usec)	-1.39302373242E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	-8.75586E-01 +/- 1.5E-03
Phase delay (usec)	-1.39293617334E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	4.79078E-06 +/- 3.1E-07
Delay rate (us/s)	-1.12772013884E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	-5.87390E-06 +/- 2.6E-09
Total phase (deg)	5142.4	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	5188.6 +/- 9.7

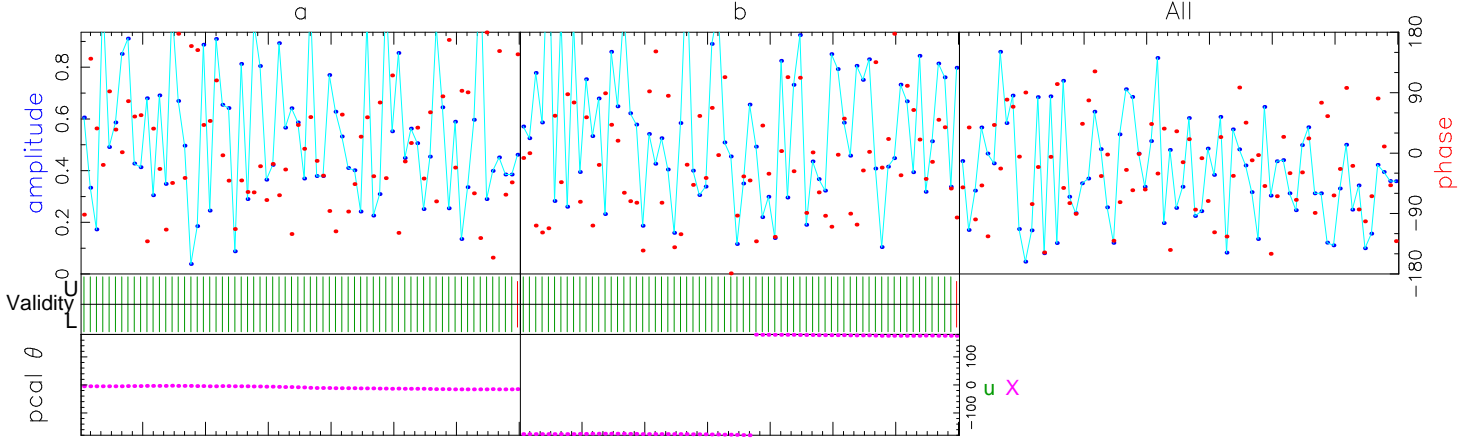
ph/seg (deg)	RMS 72.1	Theor. 81.5	Amplitude Search (2048X8)	0.234 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	137.7	142.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	13.8	Inc. seg. avg.	0.228	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	28.1	24.0	Inc. frq. avg.	0.227	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.163.zpwuhk

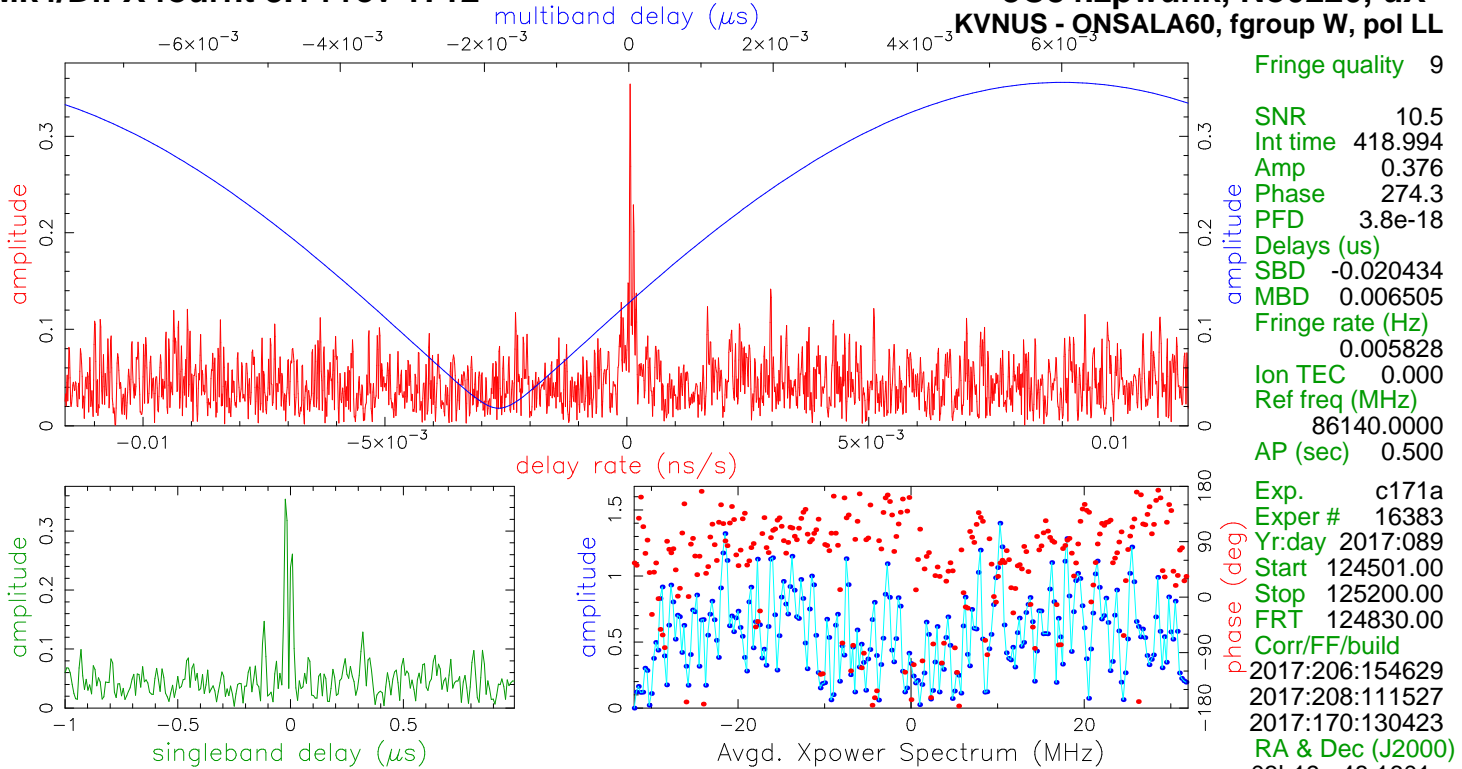


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

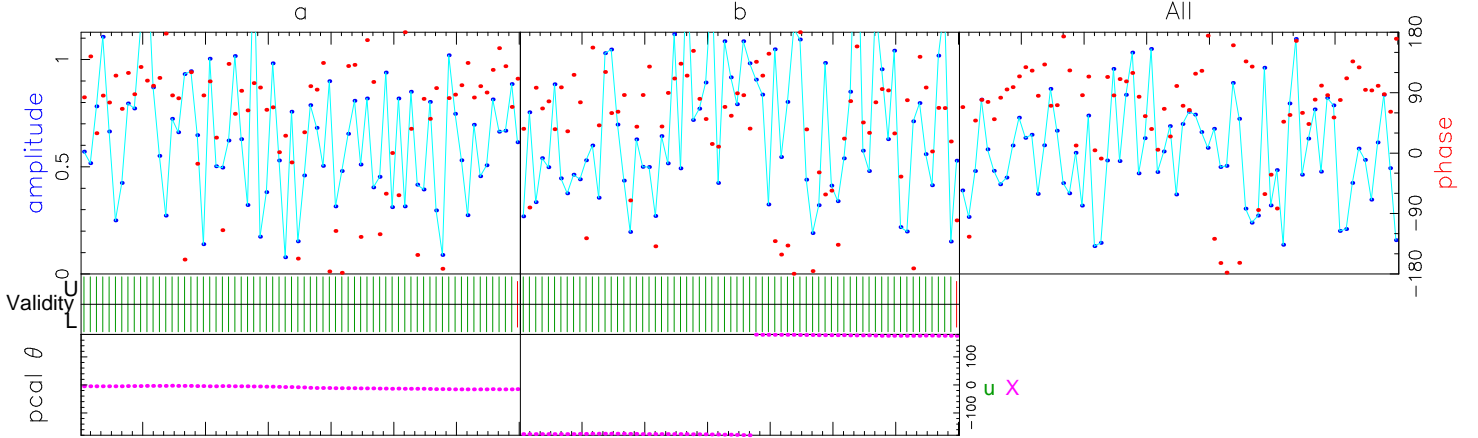


86156.00		86220.00		Freq (MHz)	All
-18.7		-18.7		Phase	-18.7
0.3		0.3		Ampl.	0.3
6.1		5.9		Sbd box	6.0
U/L 838/838		838/838		APs used	
u 0		0		PC freqs	
X -1000		-1000		PC freqs	
u:X 0:0		0:0		PC phase	
u:X 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
X 1000		1000			
u W00UR,W00LR		W01UR,W01LR		Chan ids	
X W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.39303162416E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	-1.37842E-03 +/- 8.7E-04
Sband delay (usec)	-1.39303226362E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	-9.60898E-01 +/- 1.5E-03
Phase delay (usec)	-1.39293617388E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	-6.03501E-07 +/- 3.2E-07
Delay rate (us/s)	-1.12772548430E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	-1.12194E-05 +/- 2.7E-09
Total phase (deg)	5425.1	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	5471.3 +/- 10.0

ph/seg (deg) 68.0 83.5 Search (2048X8) 0.194 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 131.6 145.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 14.1 Inc. seg. avg. 0.289 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 3.1 24.6 Inc. frq. avg. 0.303 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.164.zpwuhk simultaneous interpolator



Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

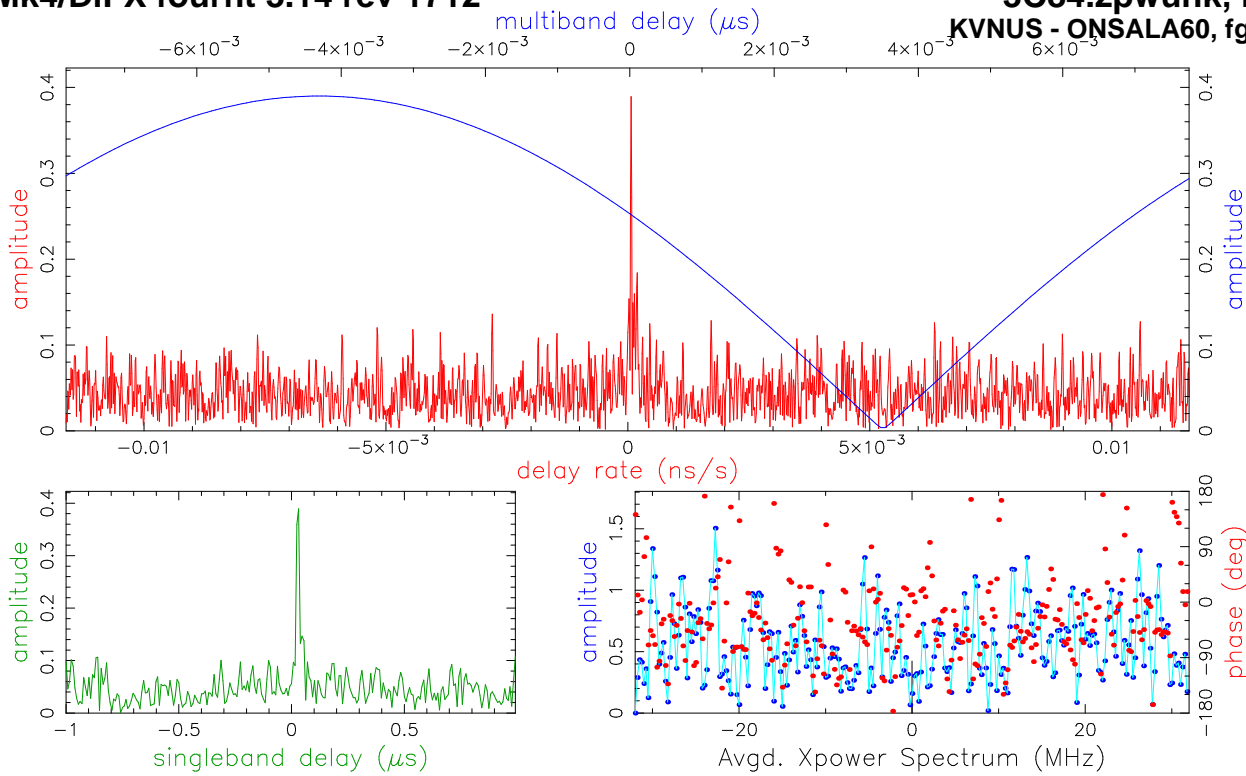


86156.00		86220.00		Freq (MHz)	All
99.8		88.3		Phase	94.3
0.4		0.3		Ampl.	0.4
126.6		126.1		Sbd box	126.4
U/L 838/838		838/838		APs used	
u 0		0		PC freqs	
X -1000		-1000		PC freqs	
u:X 0:0		0:0		PC phase	
u:X 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
X 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
X W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.39293864827E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	6.50545E-03 +/- 4.7E-04
Sband delay (usec)	-1.39293821717E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	-2.04335E-02 +/- 8.2E-04
Phase delay (usec)	-1.39293617352E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	3.04210E-06 +/- 1.8E-07
Delay rate (us/s)	-1.12771419728E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	6.76617E-08 +/- 1.5E-09
Total phase (deg)	228.2	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	274.3 +/- 5.4

ph/seg (deg)	62.8	Theor.	45.6	Amplitude	0.376 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	79.1		79.5	Search (2048X8)	0.356	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0		7.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	7.2		13.4	Inc. seg. avg.	0.430	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
				Inc. frq. avg.	0.353	Data rate(Mb/s):	512	dr window (ns/s)	-0.012 0.012
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

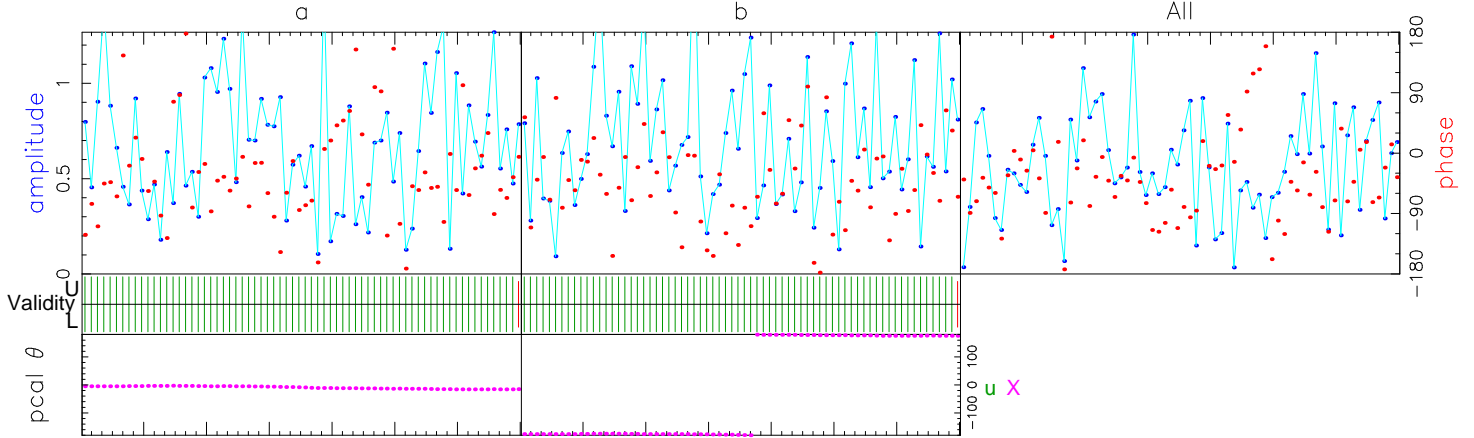
u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.49.zpwuhk



Fringe quality 9  
 SNR 11.8  
 Int time 418.994  
 Amp 0.423  
 Phase -223.0  
 PFD 1.7e-24  
 Delays (us)  
 SBD 0.027979  
 MBD -0.004612  
 Fringe rate (Hz) 0.005895  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111528  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

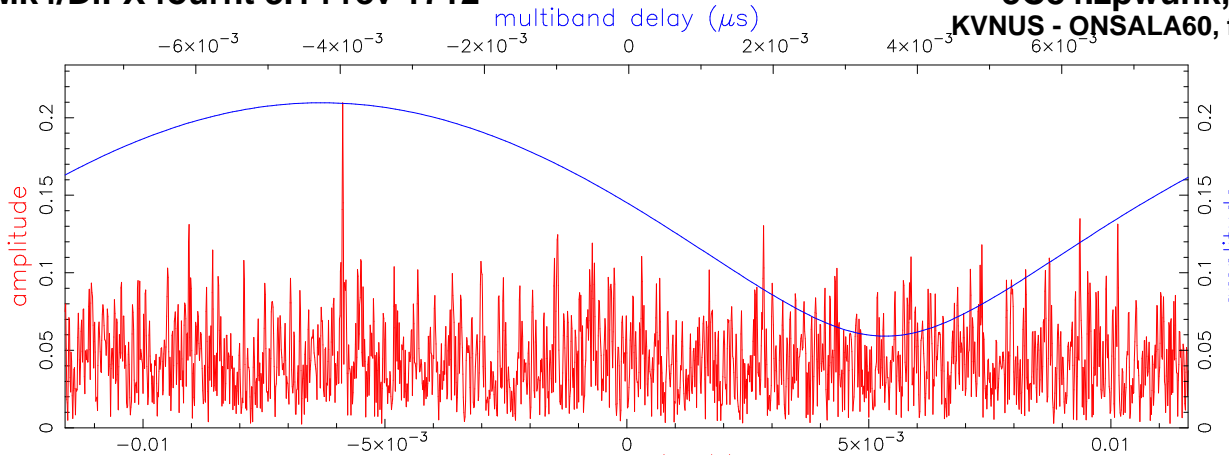


86156.00	86220.00	Freq (MHz)	All				
-46.6	-39.5	Phase	-43.0				
0.4	0.4	Ampl.	0.4				
132.6	132.6	Sbd box	132.6				
U/L 838/838	838/838	APs used					
u 0	0	PC freqs					
X -1000	-1000	PC freqs					
u:X 0:0	0:0	PC phase					
u:X 0:0	0:0	ManI PC					
u 1000	1000	PC amp					
X 1000	1000						
u W00UR,W00LR	W01UR,W01LR	Chan ids					
X W00UR,W00LR	W02UR,W02LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.39293351001E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	-4.61193E-03	+/-	4.2E-04
Sband delay (usec)	-1.39293337597E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	2.79785E-02	+/-	7.3E-04
Phase delay (usec)	-1.39293617396E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	-1.38775E-06	+/-	1.6E-07
Delay rate (us/s)	-1.12771419651E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	6.84351E-08	+/-	1.3E-09
Total phase (deg)	-269.2	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	-223.0	+/-	4.8

ph/seg (deg)	RMS 61.6	Theor. 40.5	Amplitude Search (2048X8)	0.423 +/- 0.036	0.388	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	72.5	70.7	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	6.8	Inc. seg. avg.	0.456	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	7.8	12.0	Inc. frq. avg.	0.387	0.000	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
						Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
						nlags: 128	t_cohere infinite
							ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 simultaneous interpolator

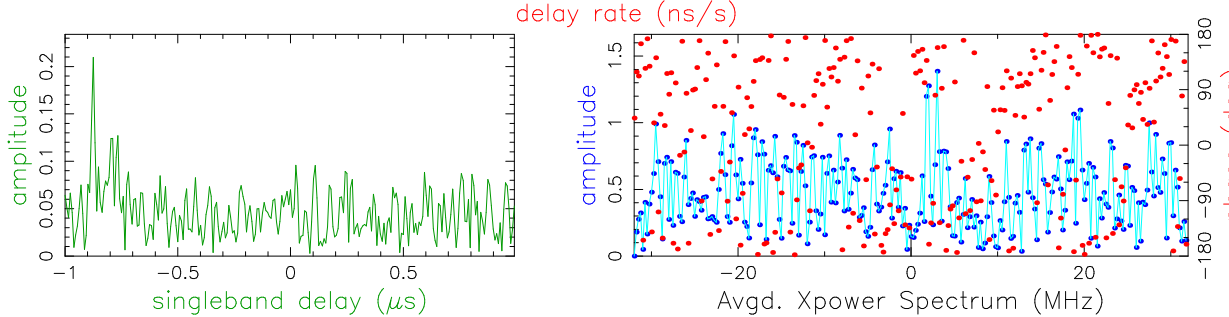
Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.50.zpwuhk



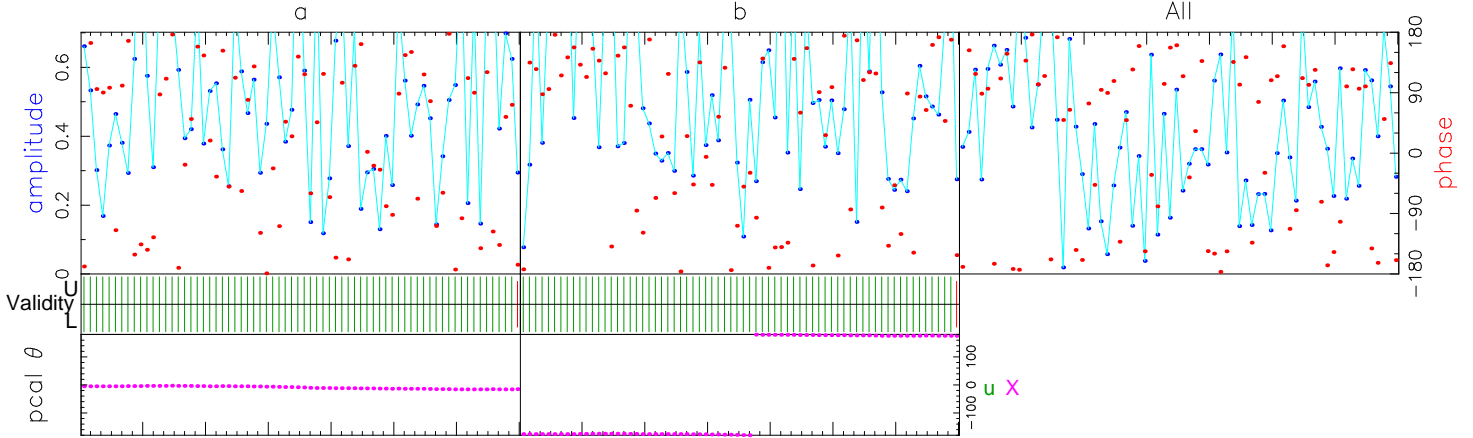
Fringe quality 0

SNR 5.9  
 Int time 418.994  
 Amp 0.234  
 Phase 5188.6  
 PFD 1.2e-01  
 Delays (us)  
 SBD -0.875586  
 MBD -0.004223  
 Fringe rate (Hz)  
 -0.505978  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124501.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111528  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

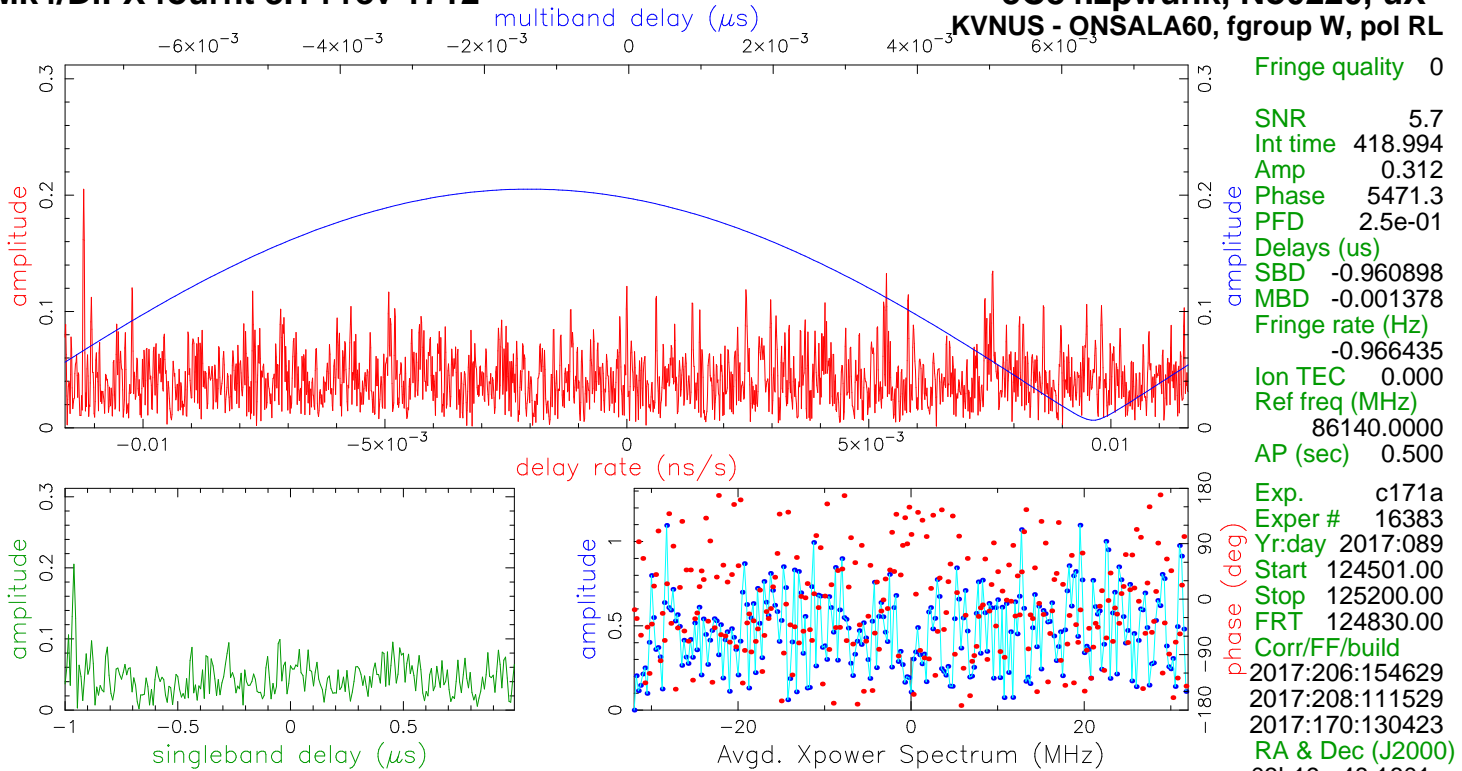


Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00	86220.00	Freq (MHz)	All				
149.1	148.3	Phase	148.6				
0.2	0.3	Ampl.	0.2				
27.3	16.8	Sbd box	16.9				
U/L 838/838	838/838	APs used					
u 0	0	PC freqs					
X -1000	-1000	PC freqs					
u:X 0:0	0:0	PC phase					
u:X 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
X 1000	1000						
u W00UL,W00LL	W01UL,W01LL	Chan ids					
X W00UR,W00LR	W02UR,W02LR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.39302409610E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	-4.22276E-03	+/-	8.5E-04
Sband delay (usec)	-1.39302373242E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	-8.75586E-01	+/-	1.5E-03
Phase delay (usec)	-1.39293617334E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	4.79078E-06	+/-	3.1E-07
Delay rate (us/s)	-1.12772013884E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	-5.87390E-06	+/-	2.6E-09
Total phase (deg)	5142.4	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	5188.6	+/-	9.7

ph/seg (deg) 72.1 81.5 Search (2048X8) 0.204 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 137.7 142.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 13.8 Inc. seg. avg. 0.228 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 28.1 24.0 Inc. frq. avg. 0.227 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.51.zpwuhk simultaneous interpolator



Fringe quality 0

SNR 5.7

Int time 418.994

Amp 0.312

Phase 5471.3

PFD 2.5e-01

Delays (us)

SBD -0.960898

MBD -0.001378

Fringe rate (Hz)

-0.966435

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:089

Start 124501.00

Stop 125200.00

FRT 124830.00

Corr/FF/build

2017:206:154629

2017:208:111529

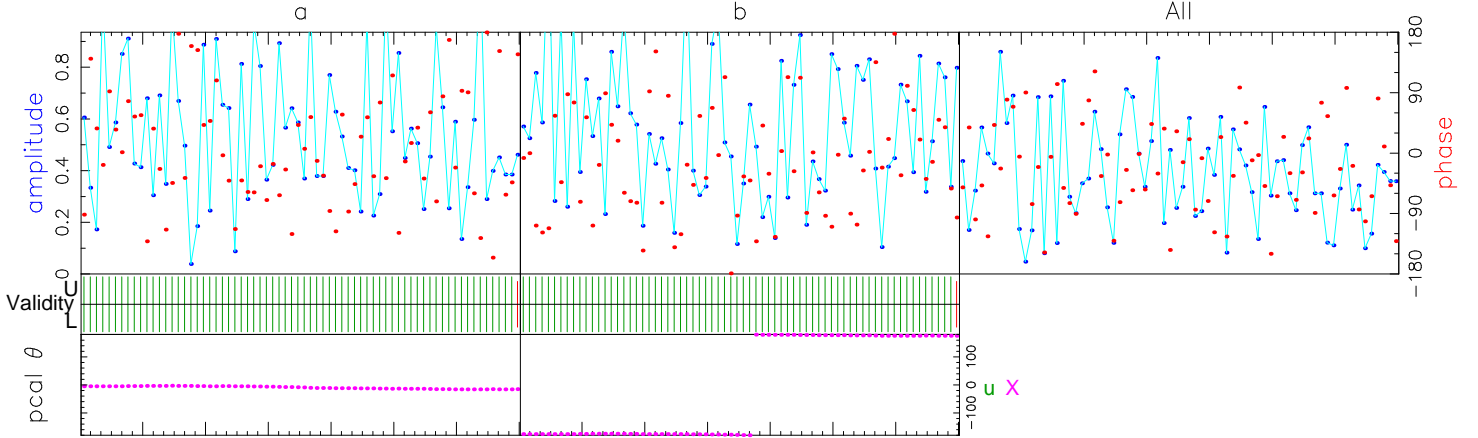
2017:170:130423

RA & Dec (J2000)

03h19m48.1601s

+41°30'42.104"

Amp. and Phase vs. time for each freq., 70 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
-18.7		-18.7		Phase	-18.7
0.3		0.3		Ampl.	0.3
6.1		5.9		Sbd box	6.0
U/L 838/838		838/838		APs used	
u 0		0		PC freqs	
X -1000		-1000		PC freqs	
u:X 0:0		0:0		PC phase	
u:X 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
X 1000		1000			
u W00UR,W00LR		W01UR,W01LR		Chan ids	
X W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.39303162416E+04	Apriori delay (usec)	-1.39293617382E+04	Resid mbdelay (usec)	-1.37842E-03 +/- 8.7E-04
Sband delay (usec)	-1.39303226362E+04	Apriori clock (usec)	5.9349985E+00	Resid sbdelay (usec)	-9.60898E-01 +/- 1.5E-03
Phase delay (usec)	-1.39293617388E+04	Apriori clockrate (us/s)	5.5143092E-08	Resid phdelay (usec)	-6.03501E-07 +/- 3.2E-07
Delay rate (us/s)	-1.12772548430E+00	Apriori rate (us/s)	-1.12771426494E+00	Resid rate (us/s)	-1.12194E-05 +/- 2.7E-09
Total phase (deg)	5425.1	Apriori accel (us/s/s)	5.45331213216E-05	Resid phase (deg)	5471.3 +/- 10.0

ph/seg (deg) 68.0 83.5 Search (2048X8) 0.194 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 131.6 145.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

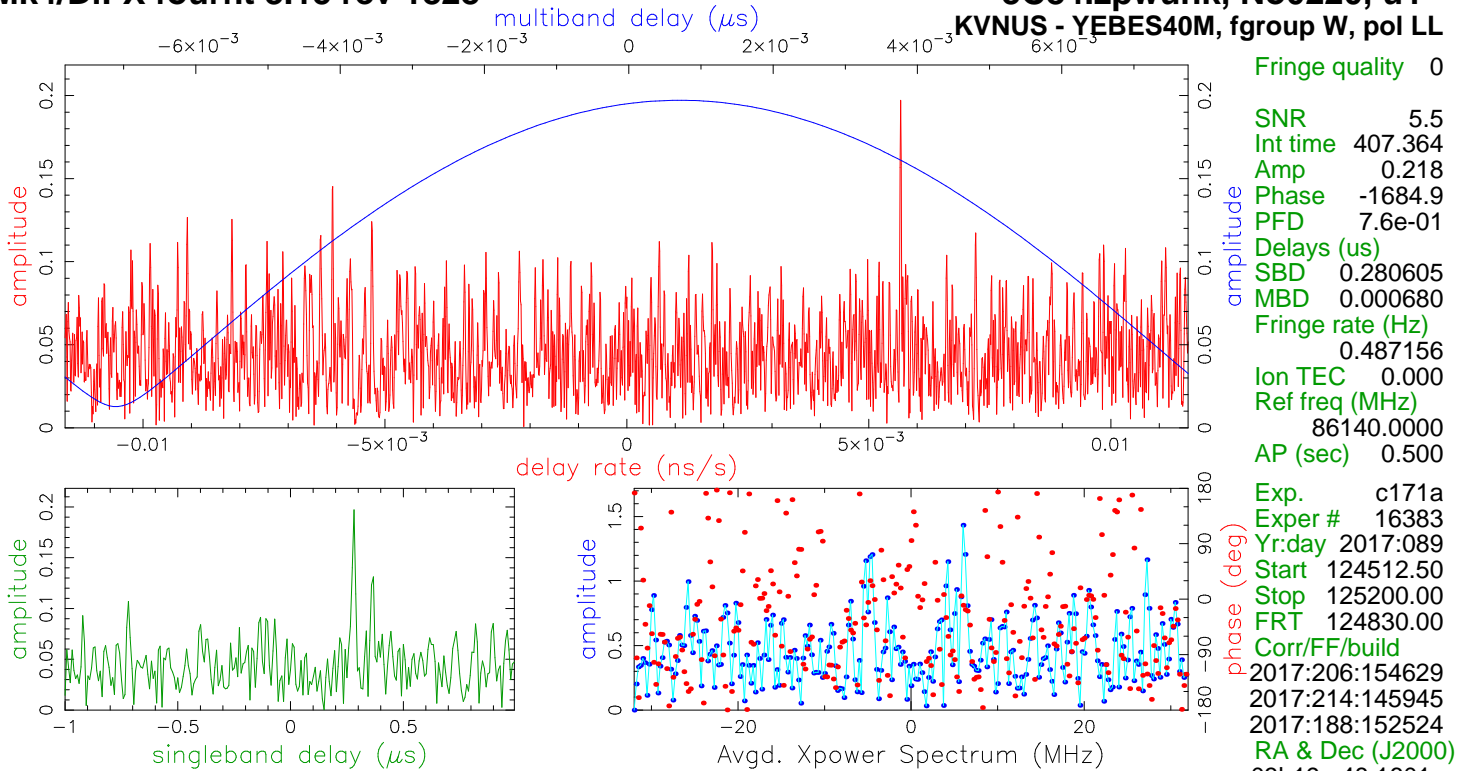
ph/frq (deg) 0.0 14.1 Inc. seg. avg. 0.289 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 3.1 24.6 Inc. frq. avg. 0.303 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

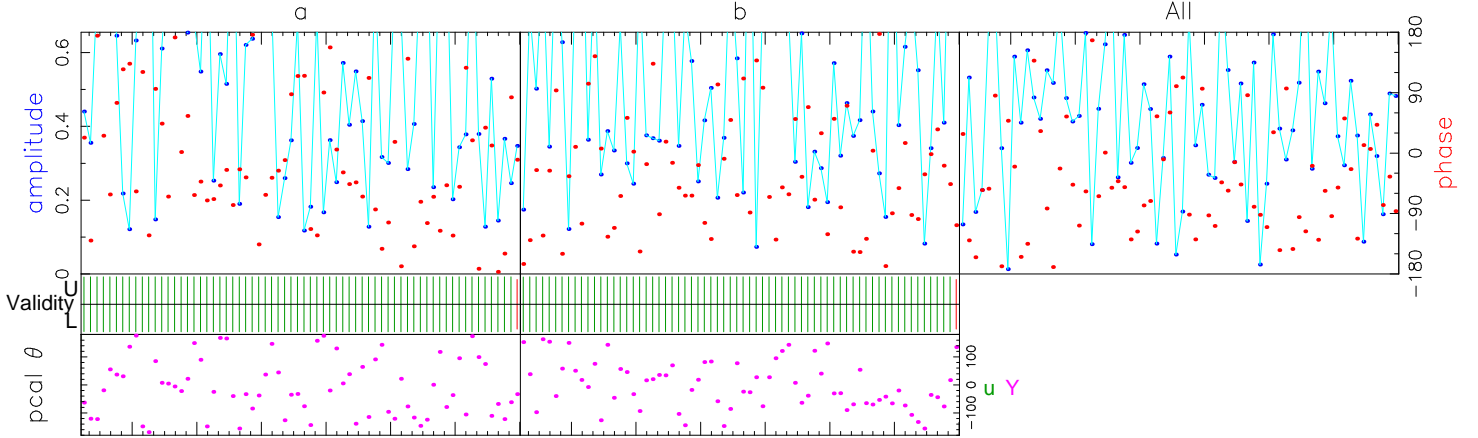
u: az 309.1 el 17.4 pa 57.2 X: az 134.0 el 70.0 pa -30.1 u,v (fr/asec) 8740.739 1967.736 ion window (TEC) 0.00 0.00

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uX.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uX.W.52.zpwuhk simultaneous interpolator



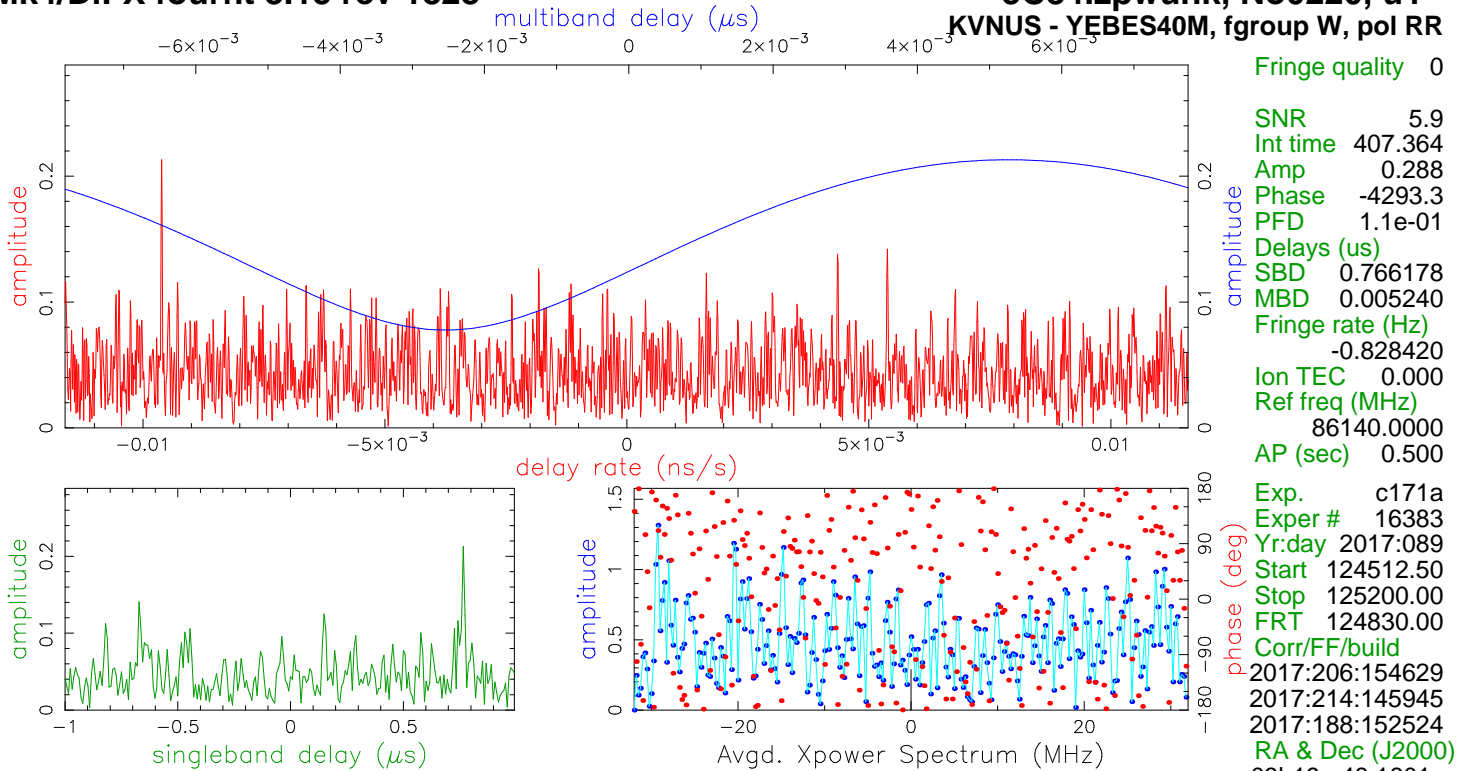


Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

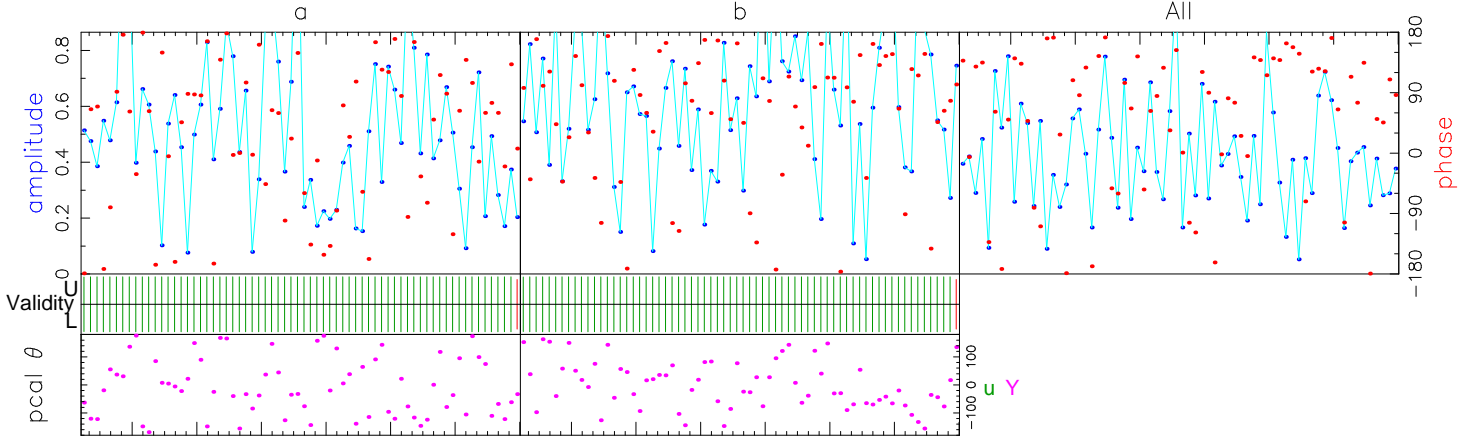


86156.00		86220.00		Freq (MHz)	All
-65.2		-64.6		Phase	-64.9
0.2		0.2		Ampl.	0.2
165.0		164.8		Sbd box	164.9
U/L 815/815		815/815		APs used	
u 0		0		PC freqs	
Y -1000		-1000		PC freqs	
u:Y 0:0		0:0		PC phase	
u:Y 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Y 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
Y W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.31949224788E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	6.80493E-04 +/- 9.1E-04
Sband delay (usec)	-1.31949238043E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	2.80605E-01 +/- 1.6E-03
Phase delay (usec)	-1.31952044114E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	-2.09253E-06 +/- 3.4E-07
Delay rate (us/s)	-1.41561399814E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	5.65540E-06 +/- 2.9E-09
Total phase (deg)	-1978.3	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-1684.9 +/- 10.5

ph/seg (deg)	RMS 79.6	Theor. 86.6	Amplitude 0.218 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	155.9	151.1	Search (2048X8) 0.193	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	14.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	6.5	25.9	Inc. seg. avg. 0.219	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.211	Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
				nlags: 128	t_cohere infinite
u: az 309.1 el 17.4 pa 57.2		Y: az 76.3 el 64.3 pa -81.0	u,v (fr/asec) 10962.782 3954.389		ion window (TEC) 0.00 0.00
Control file: ../cf_1234		Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk			simultaneous interpolator
					Output file: /Exps/c171a/gmva/1234/No0220/uY.W.185.zpwuhk



Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

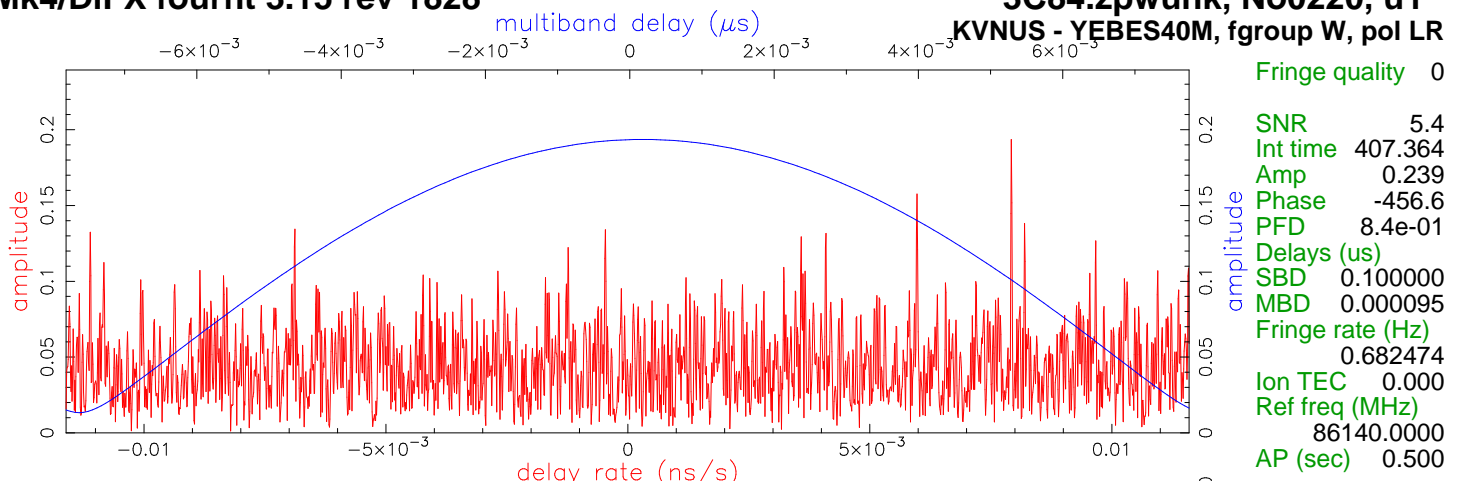


86156.00		86220.00		Freq (MHz)		All
116.2		117.0		Phase		116.7
0.2		0.4		Ampl.		0.3
224.2		227.1		Sbd box		227.1
U/L 815/815		815/815		APs used		
u 0		0		PC freqs		
Y -1000		-1000		PC freqs		
u:Y 0:0		0:0		PC phase		
u:Y 0:0		0:0		Manl PC		
u 1000		1000		PC amp		
Y 1000		1000				
u W00UR,W00LR		W01UR,W01LR		Chan ids		
Y W00UR,W00LR		W02UR,W02LR		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	-1.31944335446E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	5.23970E-03	+/- 8.4E-04
Sband delay (usec)	-1.31944382313E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	7.66178E-01	+/- 1.5E-03
Phase delay (usec)	-1.31952044055E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	3.76455E-06	+/- 3.1E-07
Delay rate (us/s)	-1.41562927067E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	-9.61713E-06	+/- 2.7E-09
Total phase (deg)	-4586.6	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-4293.3	+/- 9.7

ph/seg (deg)	RMS 76.6	Theor. 80.1	Amplitude 0.288 +/- 0.049	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	136.0	139.9	Search (2048X8) 0.203	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	13.7	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	36.4	24.0	Inc. seg. avg. 0.291	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
			Inc. frq. avg. 0.280	Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
				nlags: 128	t_cohere infinite
					ion window (TEC) 0.00 0.00

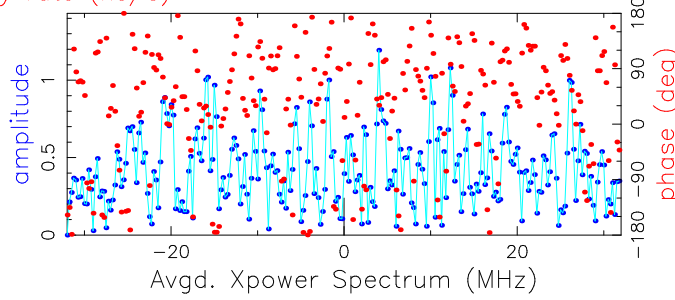
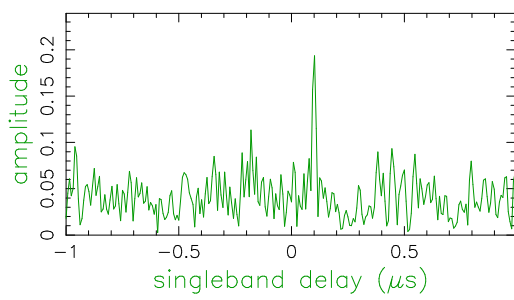
u: az 309.1 el 17.4 pa 57.2 Y: az 76.3 el 64.3 pa -81.0 u,v (fr/asec) 10962.782 3954.389 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uY.W.186.zpwuhk



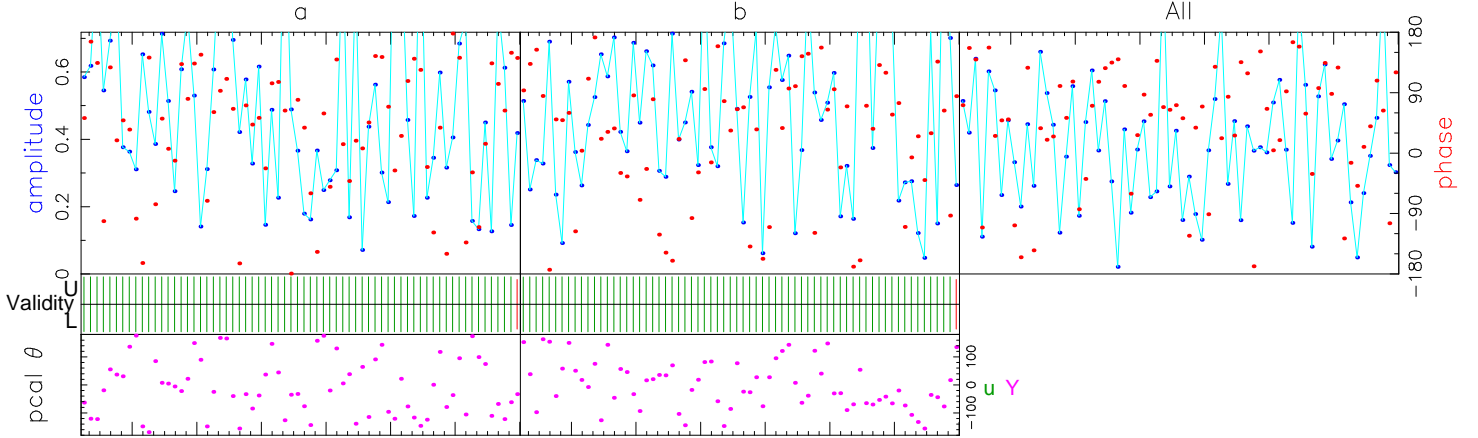
Fringe quality 0

SNR 5.4  
 Int time 407.364  
 Amp 0.239  
 Phase -456.6  
 PFD 8.4e-01  
 Delays (us)  
 SBD 0.100000  
 MBD 0.000095  
 Fringe rate (Hz) 0.682474  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500



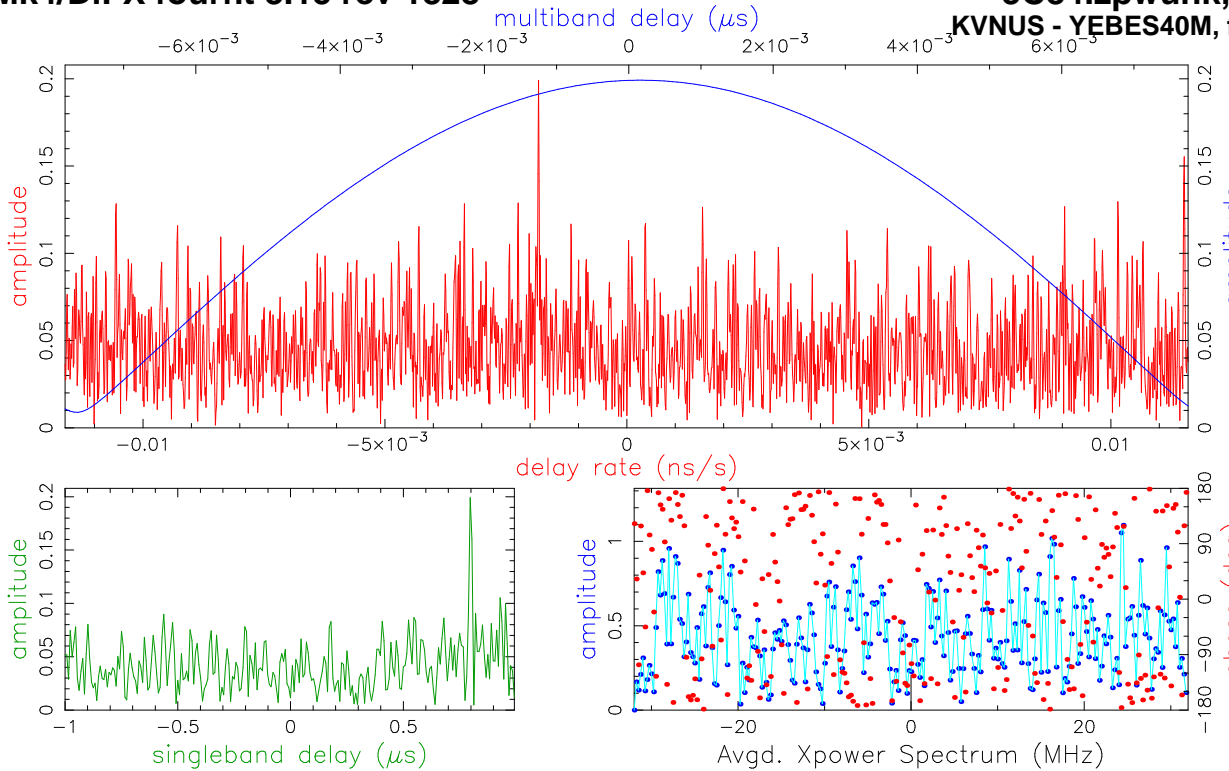
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124512.50  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145946  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec



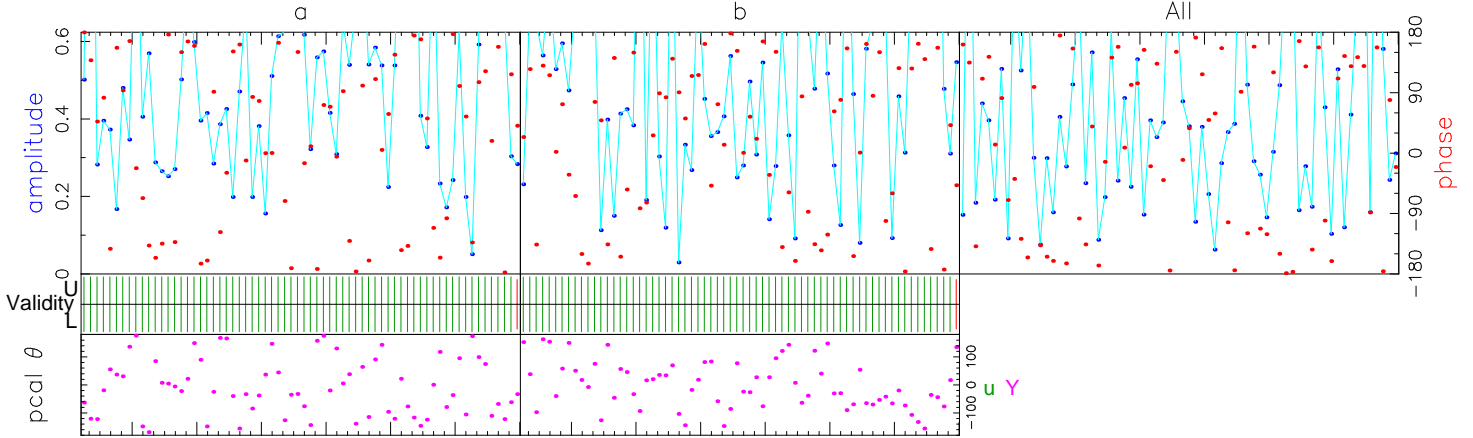
86156.00	86220.00	86156.00	86220.00	86156.00	86220.00	86156.00	86220.00	86156.00	86220.00	86156.00	86220.00
82.4	84.4	82.4	84.4	82.4	84.4	82.4	84.4	82.4	84.4	82.4	84.4
0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2
142.0	141.6	142.0	141.6	142.0	141.6	142.0	141.6	142.0	141.6	142.0	141.6
U/L 815/815	815/815	U/L 815/815	815/815	U/L 815/815	815/815	U/L 815/815	815/815	U/L 815/815	815/815	U/L 815/815	815/815
u 0	0	u 0	0	u 0	0	u 0	0	u 0	0	u 0	0
Y -1000	-1000	Y -1000	-1000	Y -1000	-1000	Y -1000	-1000	Y -1000	-1000	Y -1000	-1000
u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0
u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0	u:Y 0:0	0:0
u 1000	1000	u 1000	1000	u 1000	1000	u 1000	1000	u 1000	1000	u 1000	1000
Y 1000	1000	Y 1000	1000	Y 1000	1000	Y 1000	1000	Y 1000	1000	Y 1000	1000
u W00UL,W00LL	W01UL,W01LL	u W00UL,W00LL	W01UL,W01LL	u W00UL,W00LL	W01UL,W01LL	u W00UL,W00LL	W01UL,W01LL	u W00UL,W00LL	W01UL,W01LL	u W00UL,W00LL	W01UL,W01LL
Y W00UR,W00LR	W02UR,W02LR	Y W00UR,W00LR	W02UR,W02LR	Y W00UR,W00LR	W02UR,W02LR	Y W00UR,W00LR	W02UR,W02LR	Y W00UR,W00LR	W02UR,W02LR	Y W00UR,W00LR	W02UR,W02LR
Group delay (usec)(sbd)	-1.31951105638E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	9.54844E-05	+	-/ 9.2E-04				
Sband delay (usec)	-1.31951044098E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	9.99995E-02	+	-/ 1.6E-03				
Phase delay (usec)	-1.31952044066E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	2.68793E-06	+	-/ 3.4E-07				
Delay rate (us/s)	-1.41561173069E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	7.92285E-06	+	-/ 2.9E-09				
Total phase (deg)	-750.0	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-456.6	+	-/ 10.6				

ph/seg (deg) 78.4 87.3 Search (2048X8) 0.189 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 139.7 152.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 15.0 Inc. seg. avg. 0.220 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 6.9 26.1 Inc. frq. avg. 0.229 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 Y: az 76.3 el 64.3 pa -81.0 u,v (fr/asec) 10962.782 3954.389 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uY..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uY.W.187.zpwuhk



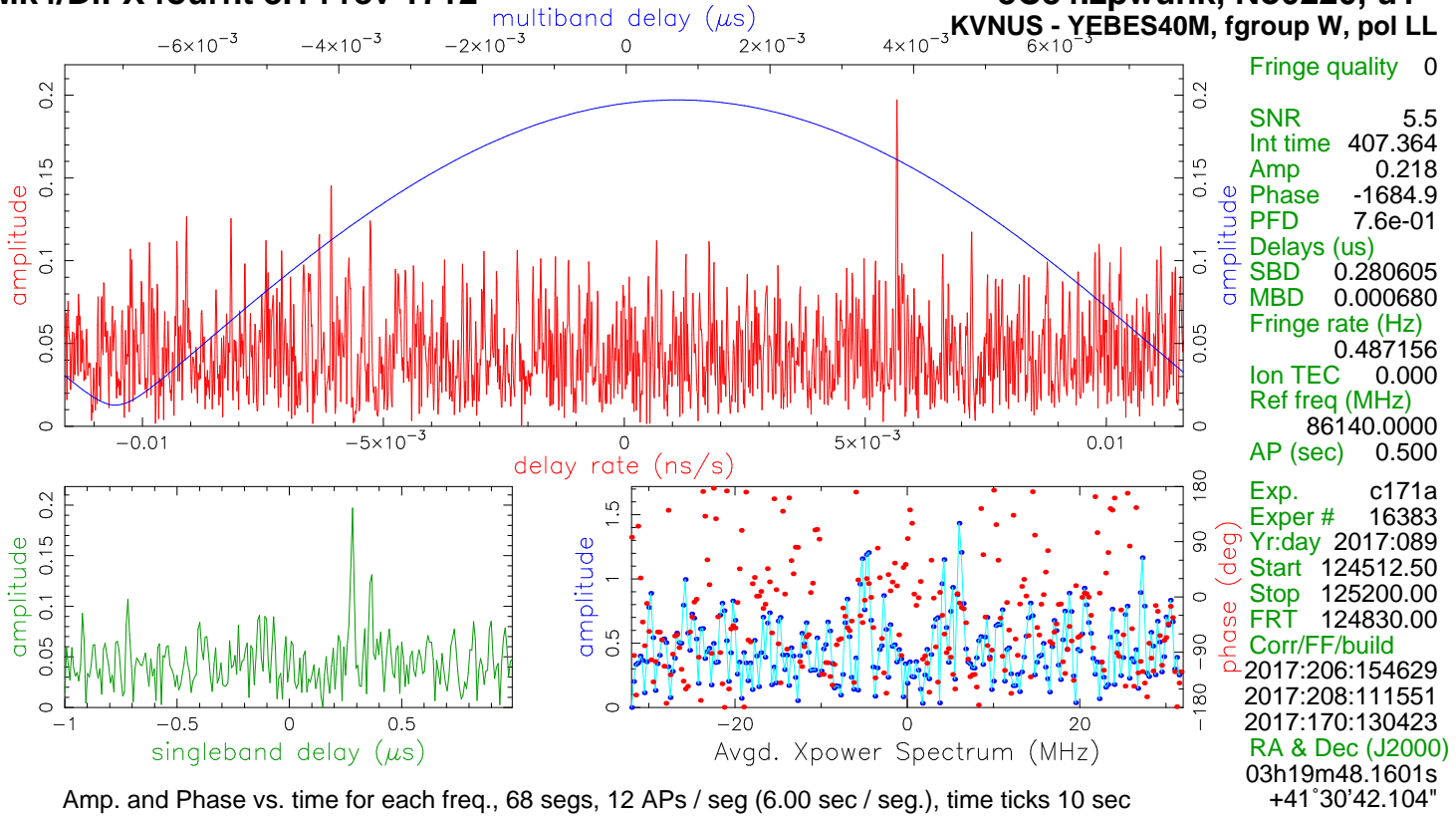
Fringe quality 0  
 SNR 5.7  
 Int time 407.364  
 Amp 0.208  
 Phase -4432.7  
 PFD 3.4e-01  
 Delays (us)  
 SBD 0.799033  
 MBD 0.000007  
 Fringe rate (Hz)  
 -0.157436  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124512.50  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:145947  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

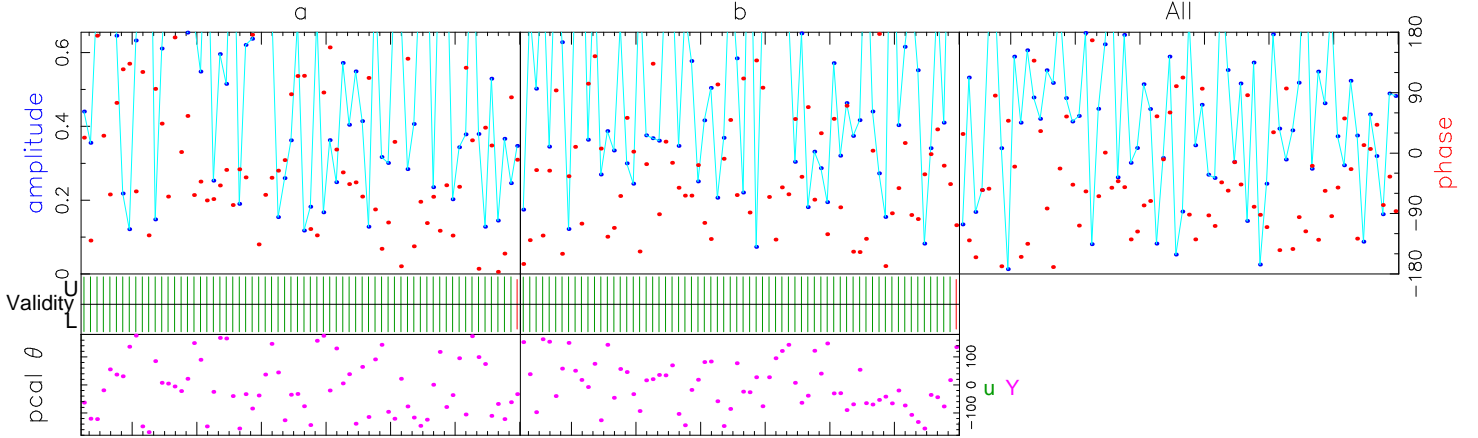


86156.00		86220.00		Freq (MHz)	All
155.6		159.1		Phase	157.3
0.2		0.2		Ampl.	0.2
231.3		251.0		Sbd box	231.3
U/L 815/815		815/815		APs used	
u 0		0		PC freqs	
Y -1000		-1000		PC freqs	
u:Y 0:0		0:0		PC phase	
u:Y 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Y 1000		1000			
u W00UR,W00LR		W01UR,W01LR		Chan ids	
Y W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.31944075274E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	6.84552E-06 +/- 8.8E-04
Sband delay (usec)	-1.31944053763E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	7.99033E-01 +/- 1.5E-03
Phase delay (usec)	-1.31952044042E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	5.07114E-06 +/- 3.3E-07
Delay rate (us/s)	-1.41562148122E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	-1.82768E-06 +/- 2.8E-09
Total phase (deg)	-4726.1	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-4432.7 +/- 10.1

ph/seg (deg) 79.0 83.2 Search (2048X8) 0.192 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 175.1 145.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 14.3 Inc. seg. avg. 0.210 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 5.4 24.9 Inc. frq. avg. 0.195 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 Y: az 76.3 el 64.3 pa -81.0 u,v (fr/asec) 10962.782 3954.389 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uY.W.188.zpwuhk simultaneous interpolator



Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

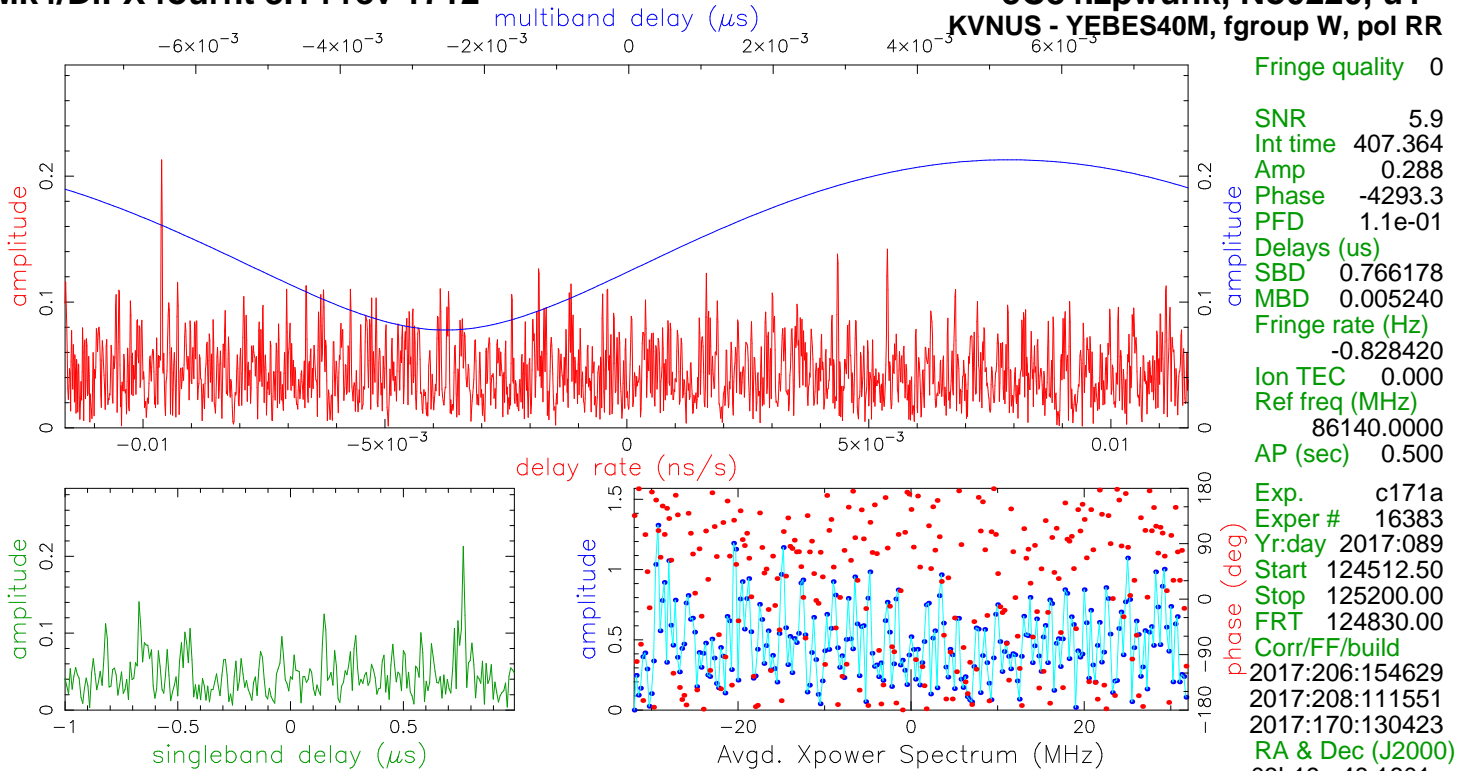


86156.00		86220.00		Freq (MHz)	All
-65.2		-64.6		Phase	-64.9
0.2		0.2		Ampl.	0.2
165.0		164.8		Sbd box	164.9
U/L 815/815		815/815		APs used	
u 0		0		PC freqs	
Y -1000		-1000		PC freqs	
u:Y 0:0		0:0		PC phase	
u:Y 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Y 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
Y W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.31949224788E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	6.80493E-04 +/- 9.1E-04
Sband delay (usec)	-1.31949238043E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	2.80605E-01 +/- 1.6E-03
Phase delay (usec)	-1.31952044114E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	-2.09253E-06 +/- 3.4E-07
Delay rate (us/s)	-1.41561399814E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	5.65540E-06 +/- 2.9E-09
Total phase (deg)	-1978.3	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-1684.9 +/- 10.5

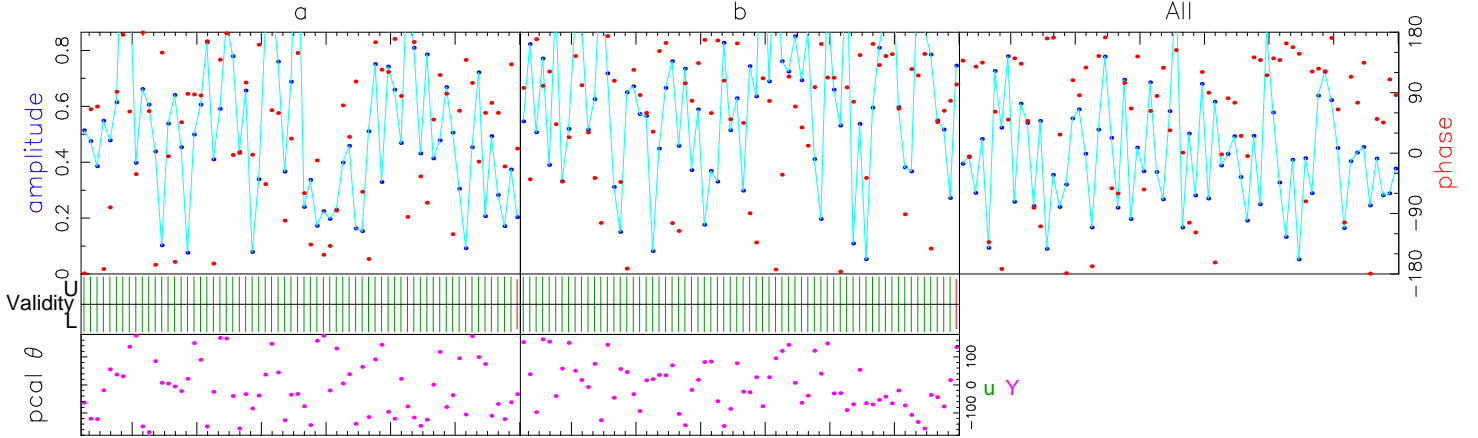
ph/seg (deg)	RMS 79.6	Theor. 86.6	Amplitude Search (2048X8)	0.218 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	155.9	151.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	0.0	14.9	Inc. seg. avg.	0.219	Bits/sample: 2x2	Sample rate(MSamp/s): 64	dr window (ns/s)	-0.012	0.012
amp/frq (%)	6.5	25.9	Inc. frq. avg.	0.211	Data rate(Mb/s): 512	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

u: az 309.1 el 17.4 pa 57.2 Y: az 76.3 el 64.3 pa -81.0 u,v (fr/asec) 10962.782 3954.389 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uY.W.73.zpwuhk



Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

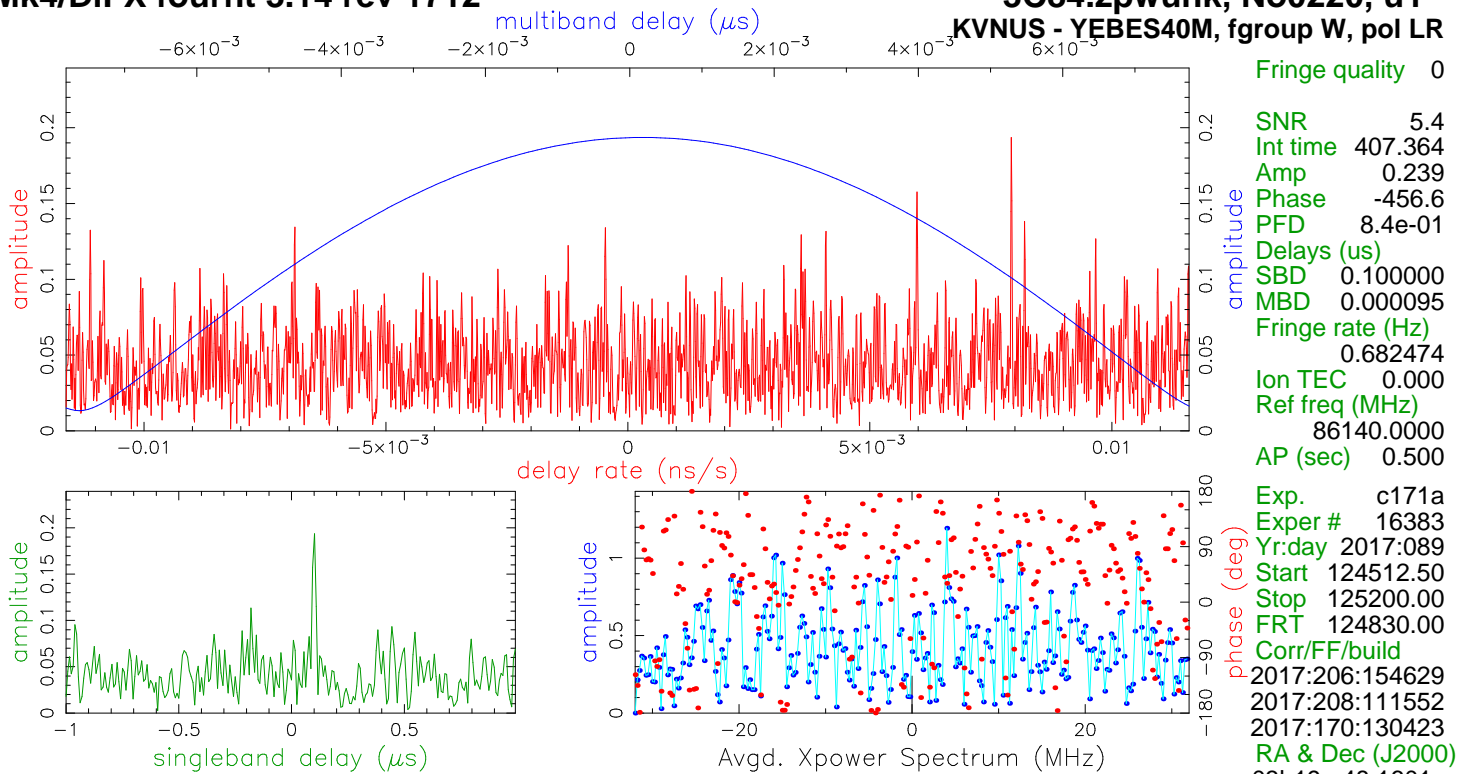


86156.00		86220.00		Freq (MHz)		All
116.2		117.0		Phase		116.7
0.2		0.4		Ampl.		0.3
224.2		227.1		Sbd box		227.1
U/L 815/815		815/815		APs used		
u 0		0		PC freqs		
Y -1000		-1000		PC freqs		
u:Y 0:0		0:0		PC phase		
u:Y 0:0		0:0		ManI PC		
u 1000		1000		PC amp		
Y 1000		1000				
u W00UR,W00LR		W01UR,W01LR		Chan ids		
Y W00UR,W00LR		W02UR,W02LR		Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	-1.31944335446E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	5.23970E-03	+/- 8.4E-04
Sband delay (usec)	-1.31944382313E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	7.66178E-01	+/- 1.5E-03
Phase delay (usec)	-1.31952044055E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	3.76455E-06	+/- 3.1E-07
Delay rate (us/s)	-1.41562927067E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	-9.61713E-06	+/- 2.7E-09
Total phase (deg)	-4586.6	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-4293.3	+/- 9.7

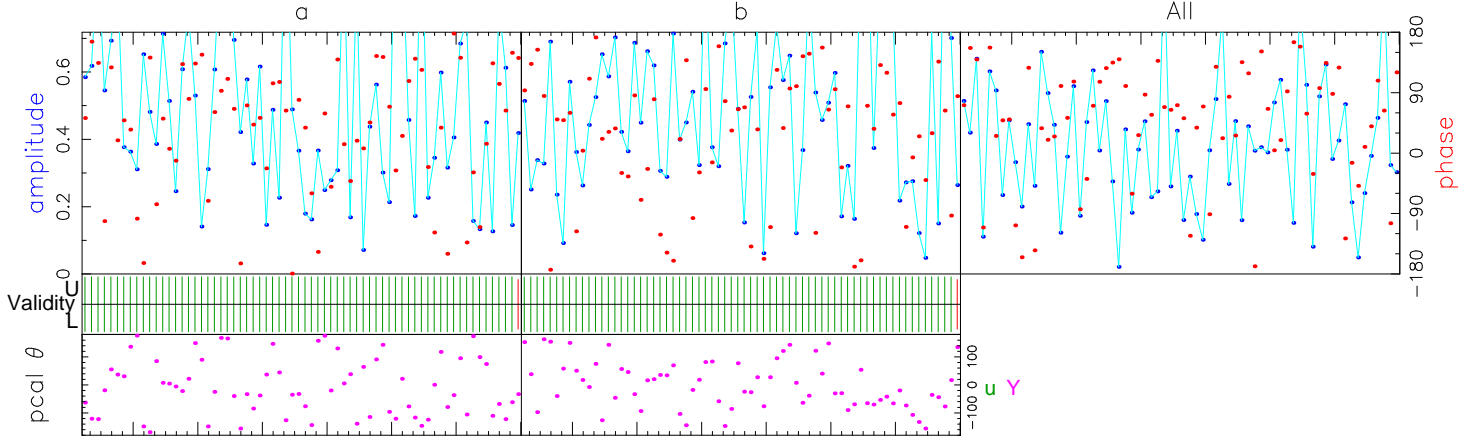
ph/seg (deg)	RMS 76.6	Theor. 80.1	Amplitude Search (2048X8)	0.288 +/- 0.049	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	136.0	139.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	13.7	Inc. seg. avg.	0.291	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	36.4	24.0	Inc. frq. avg.	0.280	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2 Y: az 76.3 el 64.3 pa -81.0 u,v (fr/asec) 10962.782 3954.389 simultaneous interpolator

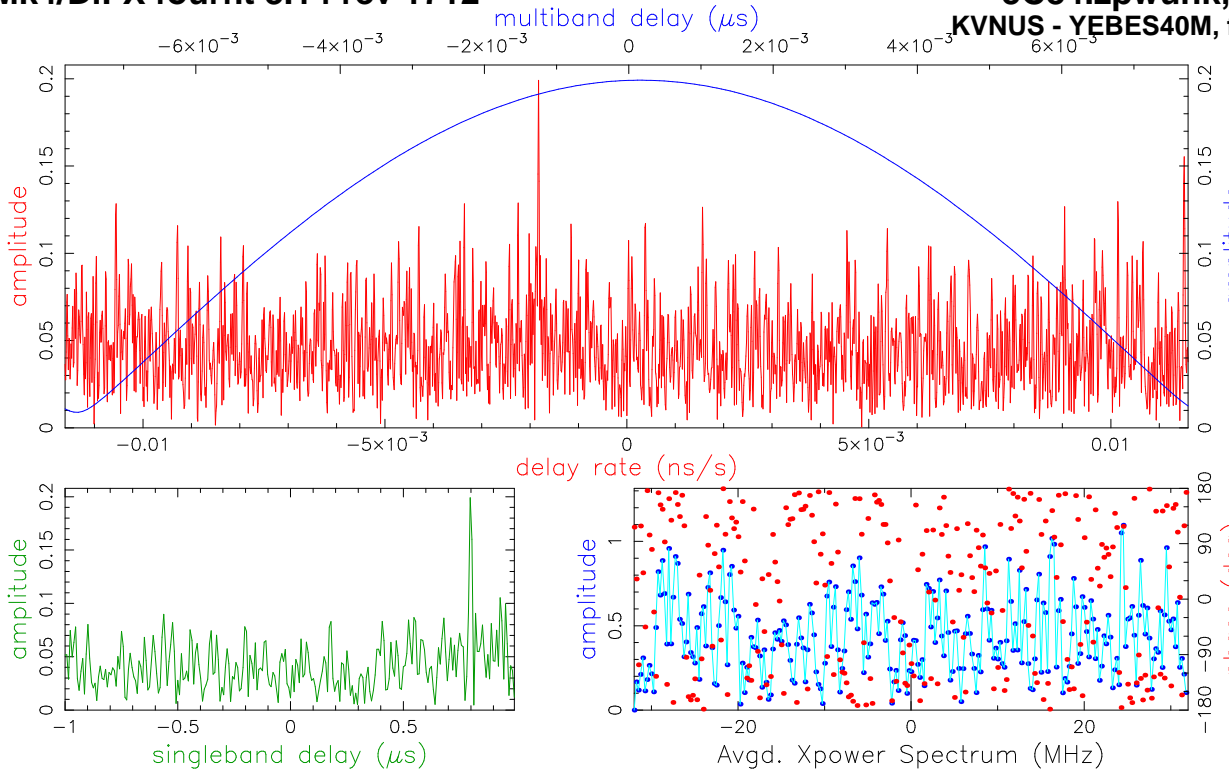
Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uY.W.74.zpwuhk



Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

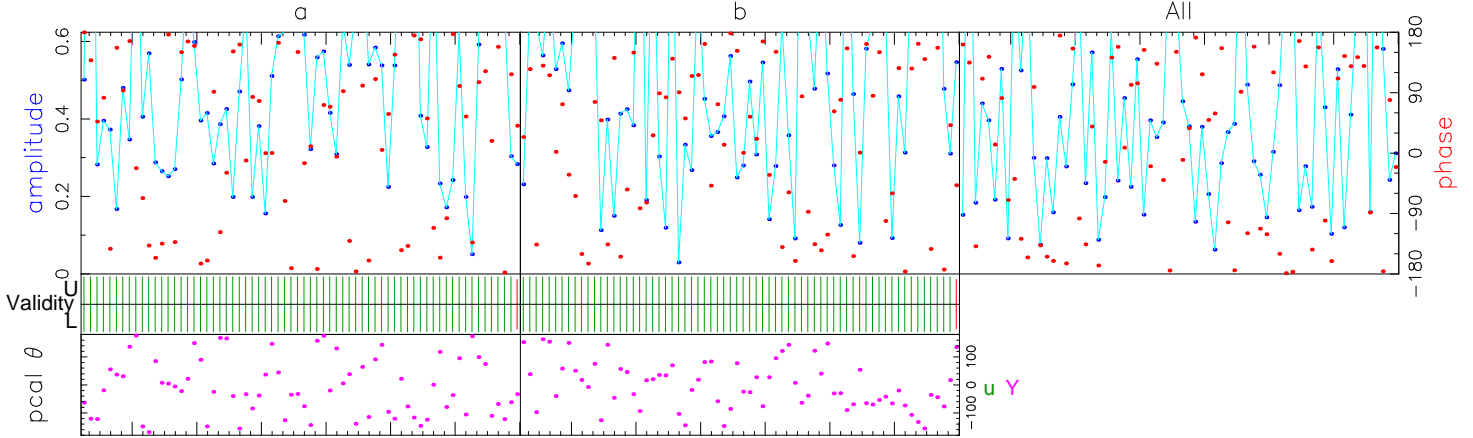


86156.00	86220.00	Freq (MHz)	All						
82.4	84.4	Phase	83.4						
0.3	0.2	Ampl.	0.2						
142.0	141.6	Sbd box	141.8						
U/L 815/815	815/815	APs used							
u 0	0	PC freqs							
Y -1000	-1000	PC freqs							
u:Y 0:0	0:0	PC phase							
u:Y 0:0	0:0	ManI PC							
u 1000	1000	PC amp							
Y 1000	1000								
u W00UL,W00LL	W01UL,W01LL	Chan ids							
Y W00UR,W00LR	W02UR,W02LR	Tracks							
		Chan ids							
		Tracks							
Group delay (usec)(sbd)	-1.31951105638E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	9.54844E-05	+/-	9.2E-04		
Sband delay (usec)	-1.31951044098E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	9.99995E-02	+/-	1.6E-03		
Phase delay (usec)	-1.31952044066E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	2.68793E-06	+/-	3.4E-07		
Delay rate (us/s)	-1.41561173069E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	7.92285E-06	+/-	2.9E-09		
Total phase (deg)	-750.0	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-456.6	+/-	10.6		
RMS	78.4	Theor.	87.3	Amplitude	0.239 +/- 0.044				
ph/seg (deg)	78.4	Search (2048X8)	0.189	Apriori mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	139.7	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	Inc. seg. avg.	0.220	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	6.9	Inc. frq. avg.	0.229	Sample rate(MSamp/s):	64	Data rate(Mb/s):	512	dr window (ns/s)	-0.012 0.012
u: az 309.1 el 17.4 pa 57.2	Y: az 76.3 el 64.3 pa -81.0	u,v (fr/asec)	10962.782 3954.389	nlags:	128	t_cohere	infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234	Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk	Output file: /Exps/c171a/gmva/1234/No0220/uY.W.75.zpwuhk							simultaneous interpolator



Fringe quality 0  
 SNR 5.7  
 Int time 407.364  
 Amp 0.208  
 Phase -4432.7  
 PFD 3.4e-01  
 Delays (us)  
 SBD 0.799033  
 MBD 0.000007  
 Fringe rate (Hz)  
 -0.157436  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124512.50  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111552  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 68 segs, 12 APs / seg (6.00 sec / seg.), time ticks 10 sec

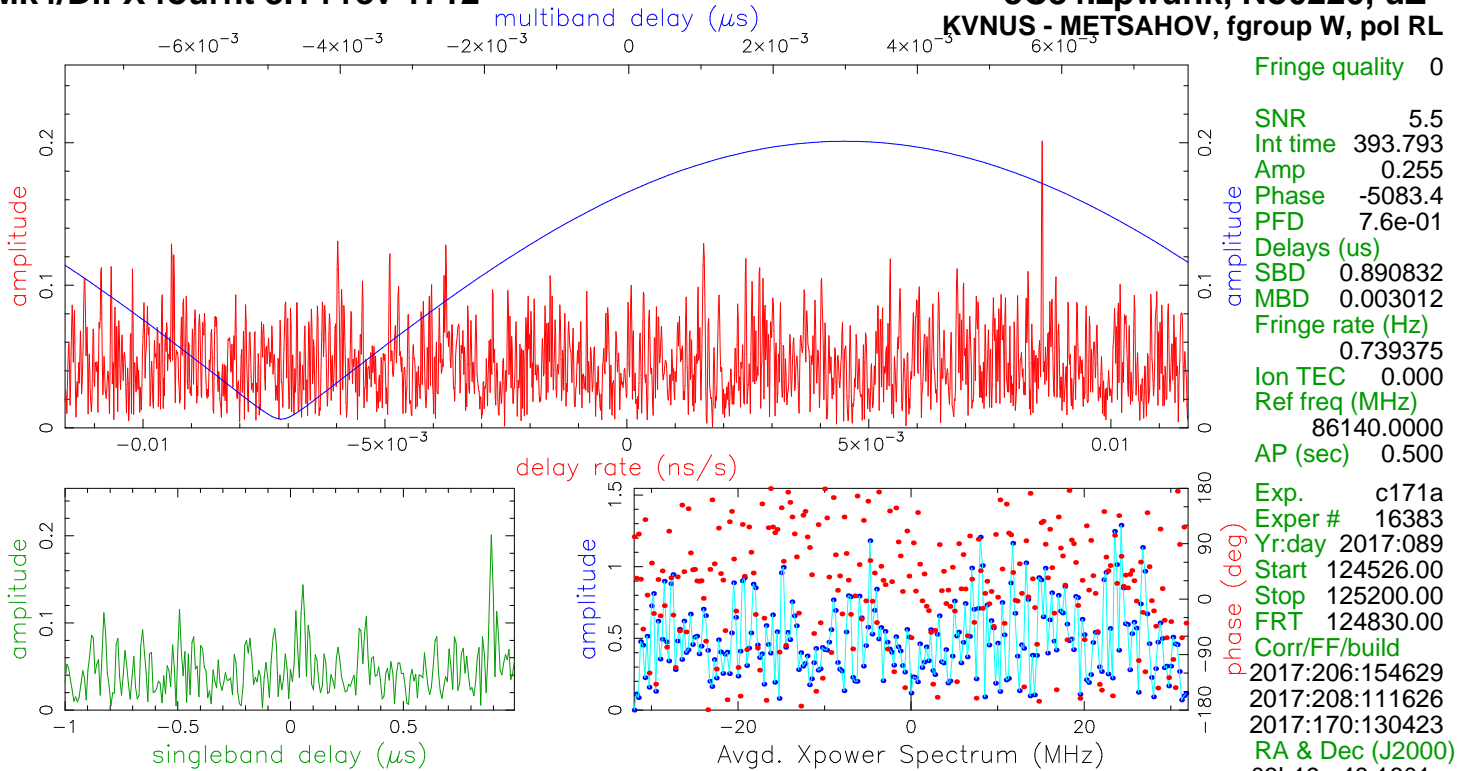


86156.00	86220.00	Freq (MHz)	All				
155.6	159.1	Phase	157.3				
0.2	0.2	Ampl.	0.2				
231.3	251.0	Sbd box	231.3				
U/L 815/815	815/815	APs used					
u 0	0	PC freqs					
Y -1000	-1000	PC freqs					
u:Y 0:0	0:0	PC phase					
u:Y 0:0	0:0	Manl PC					
Y 1000	1000	PC amp					
Y 1000	1000						
u W00UR,W00LR	W01UR,W01LR	Chan ids					
Y W00UL,W00LL	W02UL,W02LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.31944075274E+04	Apriori delay (usec)	-1.31952044093E+04	Resid mbdelay (usec)	6.84552E-06	+/-	8.8E-04
Sband delay (usec)	-1.31944053763E+04	Apriori clock (usec)	4.5155792E+00	Resid sbdelay (usec)	7.99033E-01	+/-	1.5E-03
Phase delay (usec)	-1.31952044042E+04	Apriori clockrate (us/s)	-9.2446992E-08	Resid phdelay (usec)	5.07114E-06	+/-	3.3E-07
Delay rate (us/s)	-1.41562148122E+00	Apriori rate (us/s)	-1.41561965354E+00	Resid rate (us/s)	-1.82768E-06	+/-	2.8E-09
Total phase (deg)	-4726.1	Apriori accel (us/s/s)	6.50599953656E-05	Resid phase (deg)	-4432.7	+/-	10.1

ph/seg (deg)	79.0	Theor.	83.2	Amplitude	0.208 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	175.1	Search (2048X8)	0.192	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	5.4	Inc. seg. avg.	0.210	Inc. seg. avg.	0.210	Sample rate(MSamp/s):	64	mb window (us)	-0.008 0.008
		Inc. frq. avg.	0.195	Inc. frq. avg.	0.195	Data rate(Mb/s):	512	dr window (ns/s)	-0.012 0.012
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

u: az 309.1 el 17.4 pa 57.2 Y: az 76.3 el 64.3 pa -81.0 u,v (fr/asec) 10962.782 3954.389 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uY...zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uY.W.76.zpwuhk



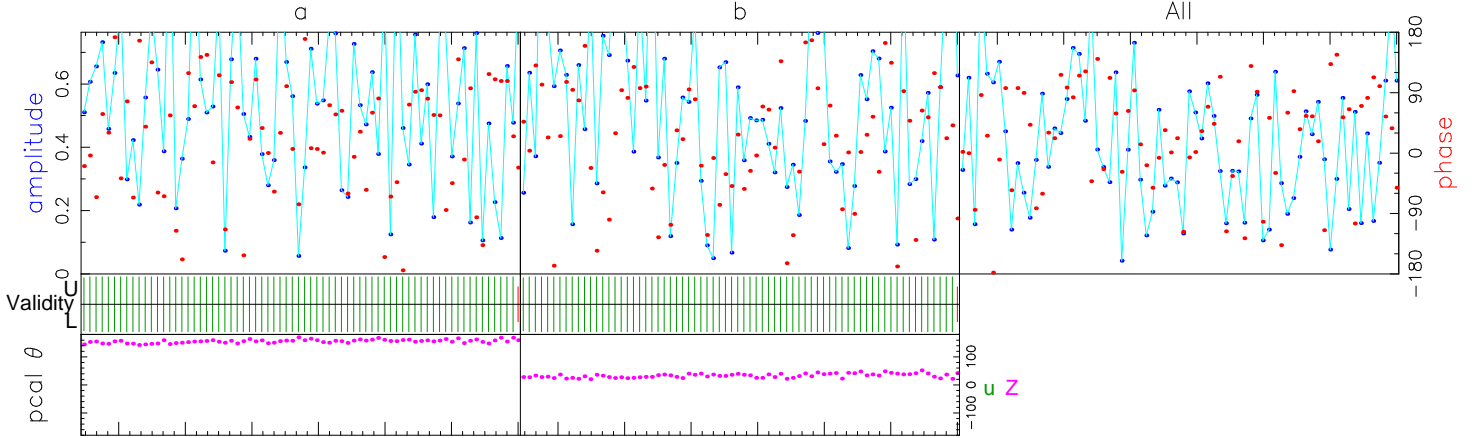


Fringe quality 0

SNR 5.5  
 Int time 393.793  
 Amp 0.255  
 Phase -5083.4  
 PFD 7.6e-01  
 Delays (us)  
 SBD 0.890832  
 MBD 0.003012  
 Fringe rate (Hz)  
 0.739375  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

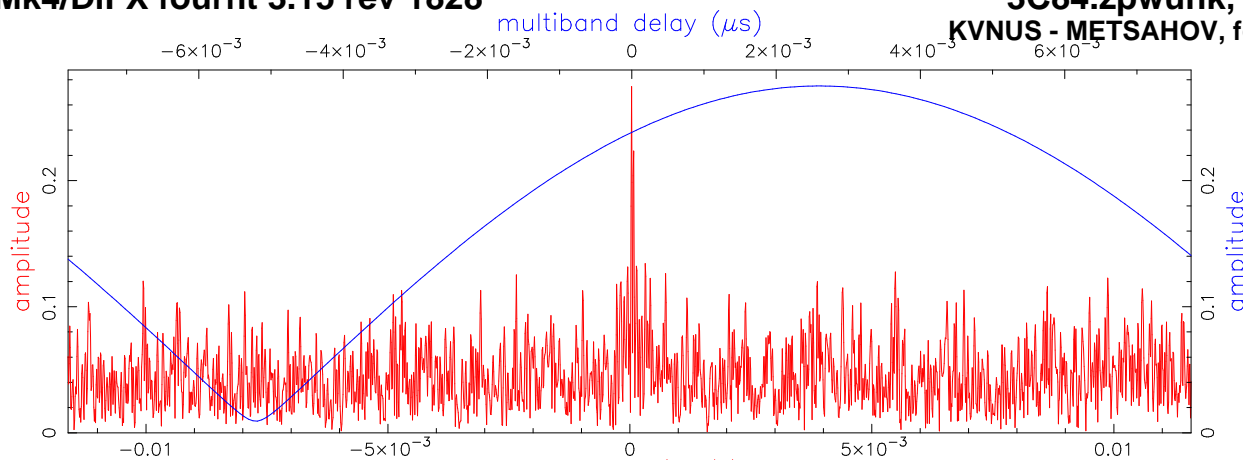
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124526.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:208:111626  
 2017:170:130423  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec



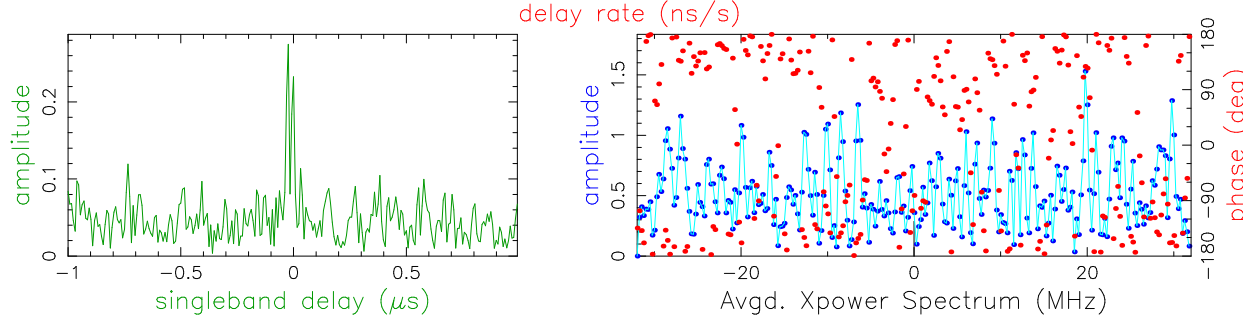
86156.00	86220.00	Freq (MHz)	All				
46.8	46.5	Phase	46.6				
0.2	0.3	Ampl.	0.2				
242.9	243.1	Sbd box	243.0				
U/L 788/788	788/788	APs used					
u 0	0	PC freqs					
Z -1000	-1000	PC freqs					
u:Z 0:0	0:0	PC phase					
u:Z 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
Z 1000	1000						
u W00UR,W00LR	W01UR,W01LR	Chan ids					
Z W00UL,W00LL	W02UL,W02LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.40029556253E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	3.01158E-03	+/-	9.1E-04
Sband delay (usec)	-1.40029584294E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	8.90832E-01	+/-	1.6E-03
Phase delay (usec)	-1.40038492603E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	1.50360E-06	+/-	3.4E-07
Delay rate (us/s)	-9.89685832867E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	8.58342E-06	+/-	3.0E-09
Total phase (deg)	-5233.1	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	-5083.4	+/-	10.5

ph/seg (deg) 76.5 89.1 Search (2048X8) 0.197 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 144.8 155.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 14.9 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 3.0 25.9 Inc. frq. avg. 0.246 Data rate(Mb/s): 64 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 u: az 309.1 el 17.4 pa 57.2 Z: az 164.4 el 70.9 pa -10.2 u,v (fr/asec) 7681.636 1704.705 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uZ.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.100.zpwuhk simultaneous interpolator



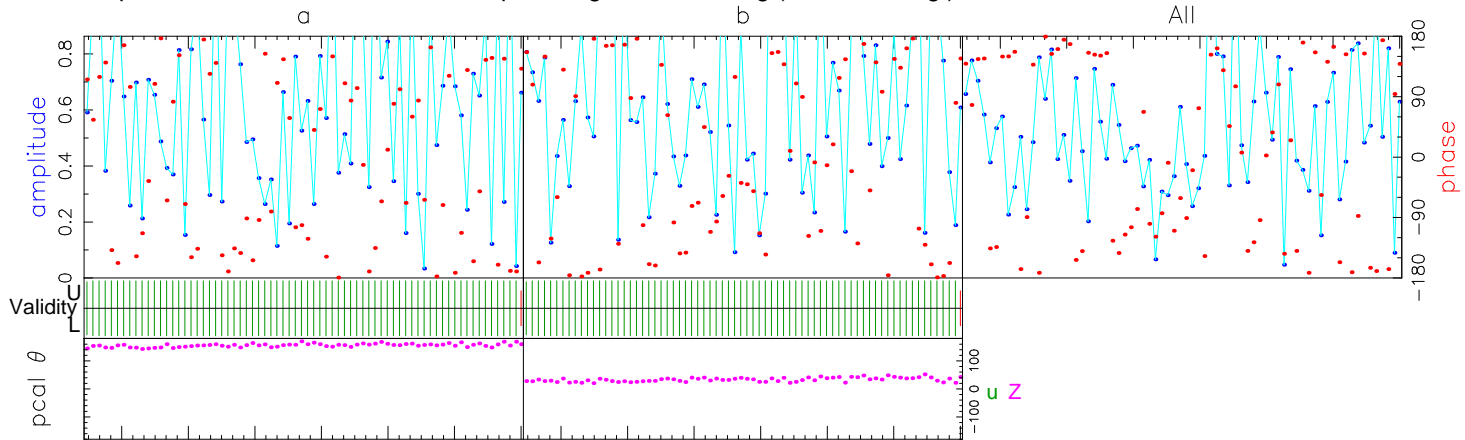
Fringe quality 9

SNR 7.8  
 Int time 393.793  
 Amp 0.288  
 Phase 357.0  
 PFD 2.4e-07  
 Delays (us)  
 SBD -0.025602  
 MBD 0.002320  
 Fringe rate (Hz)  
 0.002658  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



Exp. c171a  
 Exper # 16383  
 Yr:day 2017:089  
 Start 124526.00  
 Stop 125200.00  
 FRT 124830.00  
 Corr/FF/build  
 2017:206:154629  
 2017:214:150024  
 2017:188:152524  
 RA & Dec (J2000)  
 03h19m48.1601s  
 +41°30'42.104"

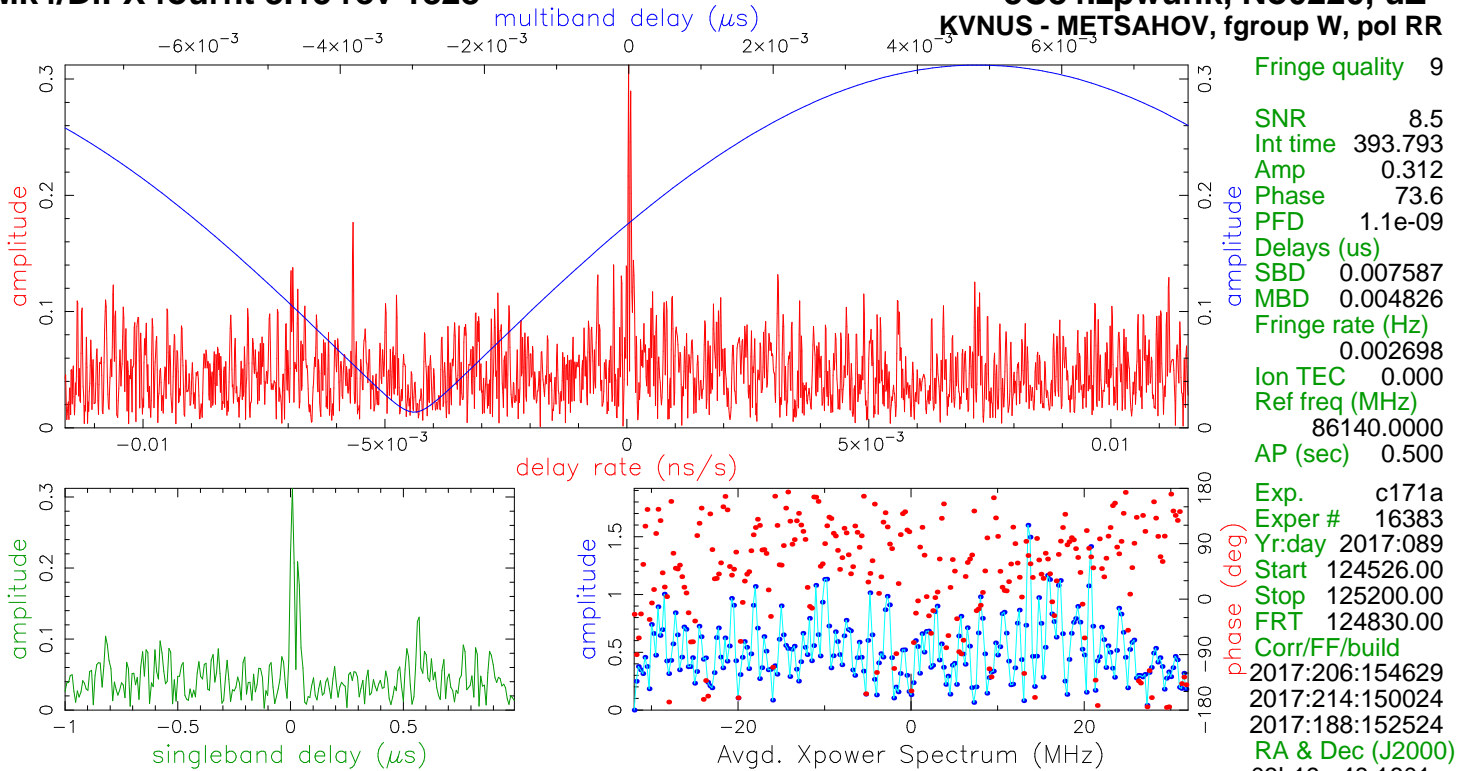
Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec



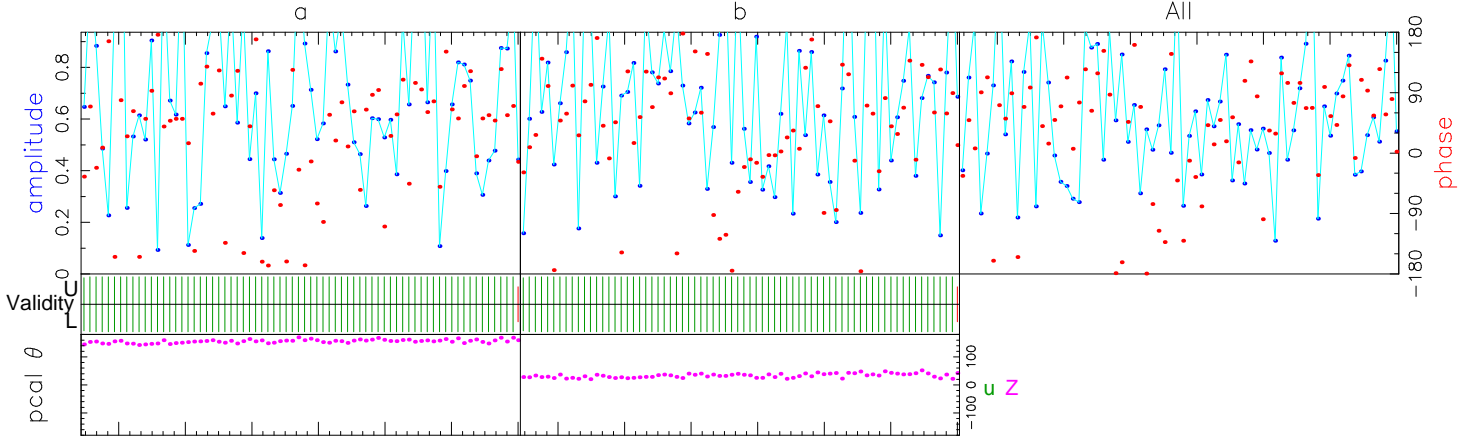
86156.00		86220.00		Freq (MHz)	All
173.7		-179.8		Phase	177.0
0.3		0.3		Ampl.	0.3
125.8		128.7		Sbd box	125.7
U/L 788/788		788/788		APs used	
u 0		0		PC freqs	
Z -1000		-1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
Z W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.40038781921E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	2.31975E-03 +/- 6.4E-04
Sband delay (usec)	-1.40038748634E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	-2.56015E-02 +/- 1.1E-03
Phase delay (usec)	-1.40038492561E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	5.70897E-06 +/- 2.4E-07
Delay rate (us/s)	-9.89694385423E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	3.08589E-08 +/- 2.1E-09
Total phase (deg)	207.3	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	357.0 +/- 7.3

ph/seg (deg) RMS Theor. Amplitude 0.288 +/- 0.037 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.0 62.3 Search (2048X8) 0.269 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 123.6 108.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 10.4 Inc. seg. avg. 0.336 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 5.5 18.1 Inc. frq. avg. 0.271 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2 Z: az 164.4 el 70.9 pa -10.2 u,v (fr/asec) 7681.636 1704.705 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uZ..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.209.zpwuhk



Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec

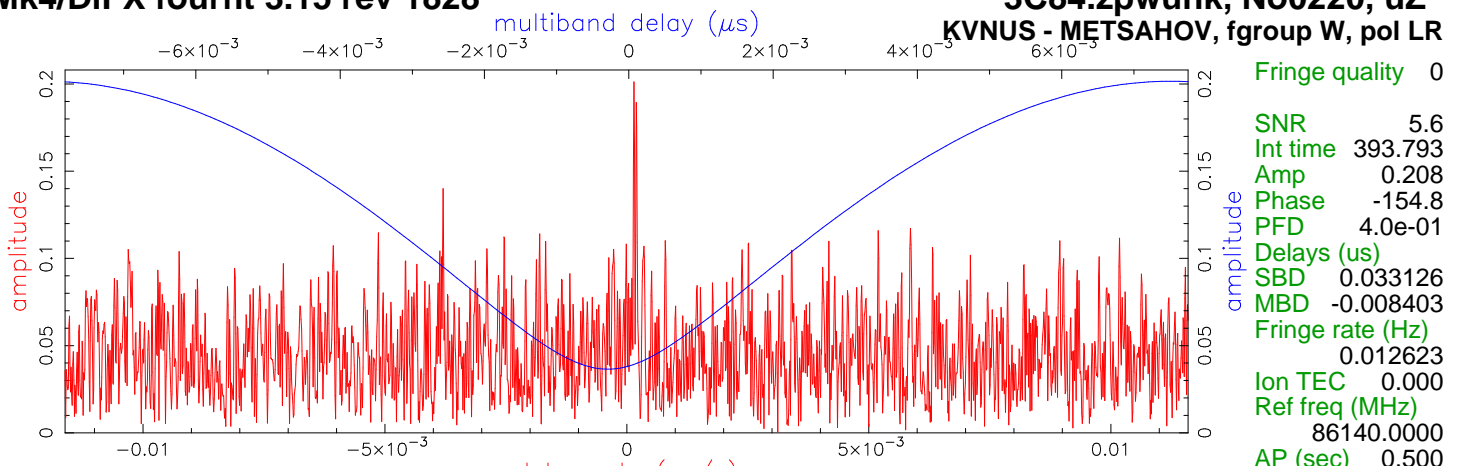


86156.00		86220.00		Freq (MHz)	All
73.5		73.8		Phase	73.6
0.3		0.3		Ampl.	0.3
130.0		129.9		Sbd box	130.0
U/L 788/788		788/788		APs used	
u 0		0		PC freqs	
Z -1000		-1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		ManI PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W00UR,W00LR		W01UR,W01LR		Chan ids	
Z W00UR,W00LR		W02UR,W02LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.40038444360E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	4.82587E-03 +/- 5.9E-04
Sband delay (usec)	-1.40038416754E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	7.58650E-03 +/- 1.0E-03
Phase delay (usec)	-1.40038492595E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	2.37400E-06 +/- 2.2E-07
Delay rate (us/s)	-9.89694384957E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	3.13247E-08 +/- 1.9E-09
Total phase (deg)	-76.1	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	73.6 +/- 6.8

ph/seg (deg)	RMS 73.1	Theor. 57.4	Amplitude Search (2048X8)	0.312 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	129.1	100.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	9.6	Inc. seg. avg.	0.412	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.3	16.7	Inc. frq. avg.	0.308	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2      Z: az 164.4 el 70.9 pa -10.2      u,v (fr/asec) 7681.636 1704.705      simultaneous interpolator

Control file: ../cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/uZ..zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.210.zpwuhk



Fringe quality 0

SNR 5.6

Int time 393.793

Amp 0.208

Phase -154.8

PFD 4.0e-01

Delays ( $\mu s$ )

SBD 0.033126

MBD -0.008403

Fringe rate (Hz) 0.012623

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:089

Start 124526.00

Stop 125200.00

FRT 124830.00

Corr/FF/build

2017:206:154629

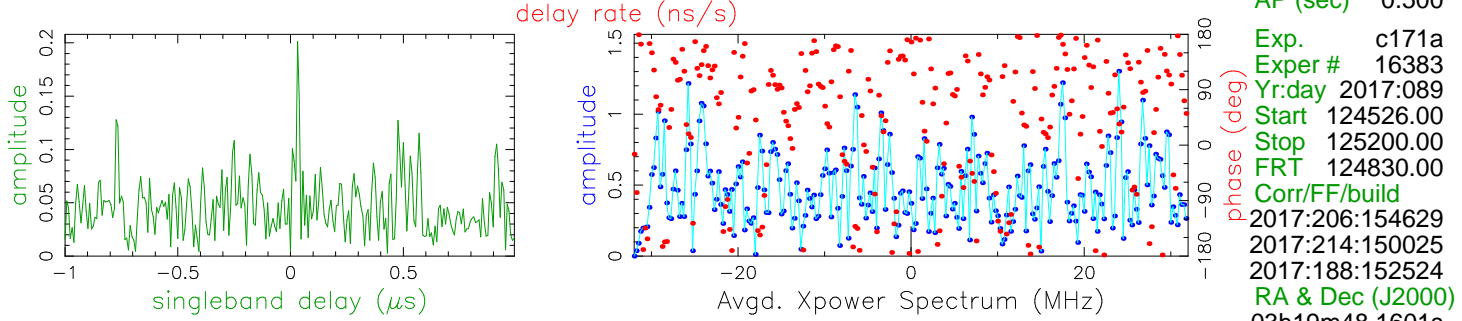
2017:214:150025

2017:188:152524

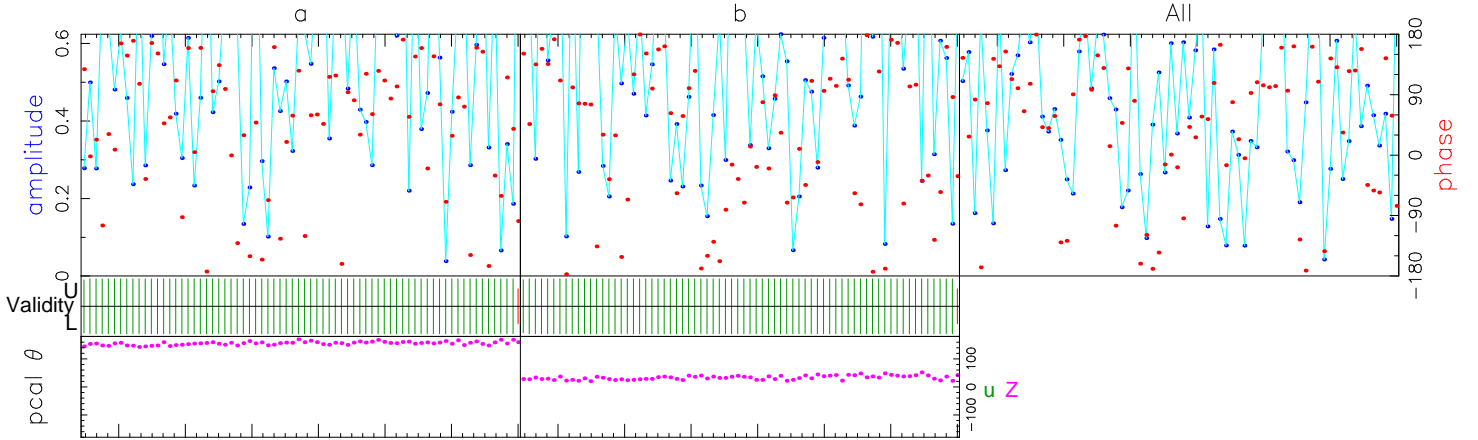
RA & Dec (J2000)

03h19m48.1601s

+41°30'42.104"



Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec



86156.00		86220.00		86156.00		86220.00
112.3		119.2		112.3		119.2
0.2		0.2		0.2		0.2
133.0		31.0		133.0		31.0
U/L 788/788		788/788		U/L 788/788		788/788
u 0		0		u 0		0
Z -1000		-1000		Z -1000		-1000
u:Z 0:0		0:0		u:Z 0:0		0:0
u:Z 0:0		0:0		u:Z 0:0		0:0
u 1000		1000		u 1000		1000
Z 1000		1000		Z 1000		1000
u W00UL,W00LL		W01UL,W01LL		u W00UL,W00LL		W01UL,W01LL
Z W00UR,W00LR		W02UR,W02LR		Z W00UR,W00LR		W02UR,W02LR
Group delay (usec)(sbd)	-1.40038107895E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	-8.40267E-03	+/- 8.8E-04
Sband delay (usec)	-1.40038161359E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	3.31260E-02	+/- 1.5E-03
Phase delay (usec)	-1.40038492581E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	3.71337E-06	+/- 3.3E-07
Delay rate (us/s)	-9.89694269745E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	1.46537E-07	+/- 2.9E-09
Total phase (deg)	-304.6	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	-154.8	+/- 10.2

ph/seg (deg) 78.2 86.1 Search (2048X8) 0.202 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

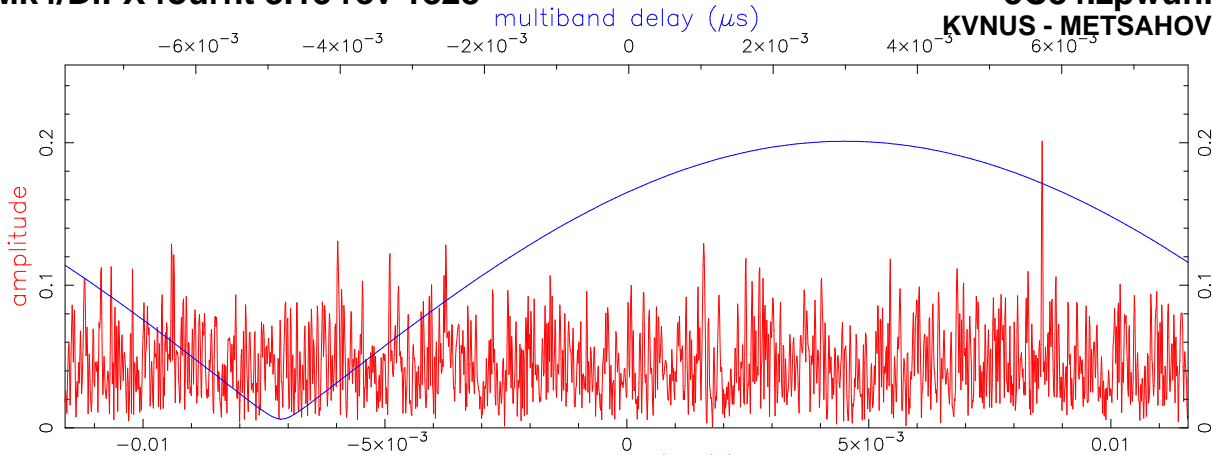
amp/seg (%) 158.7 150.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 14.4 Inc. seg. avg. 0.211 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 17.8 25.1 Inc. frq. avg. 0.195 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

u: az 309.1 el 17.4 pa 57.2 Z: az 164.4 el 70.9 pa -10.2 u,v (fr/asec) 7681.636 1704.705 simultaneous interpolator

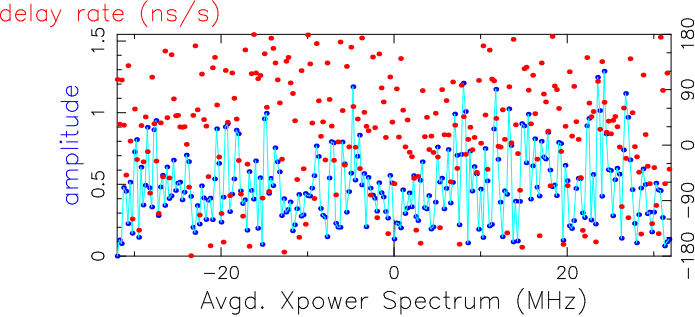
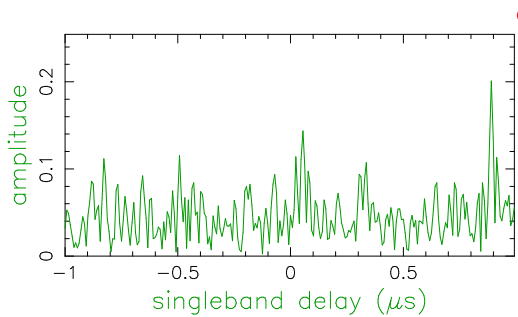
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uZ..zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.211.zpwuhk



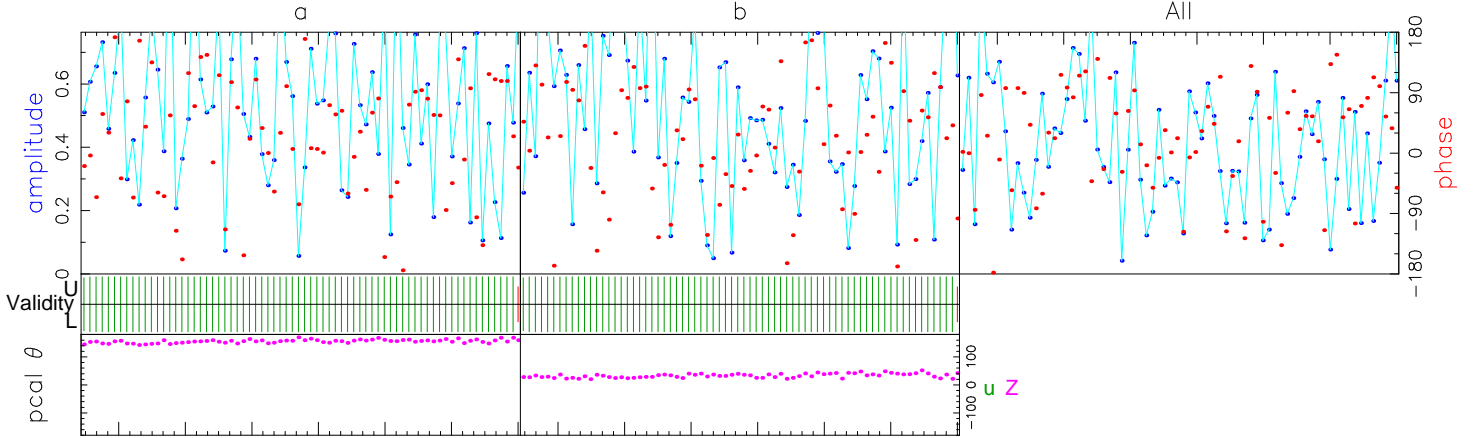
Fringe quality 0

SNR 5.5  
Int time 393.793  
Amp 0.255  
Phase -5083.4  
PFD 7.6e-01  
Delays (us)  
SBD 0.890832  
MBD 0.003012  
Fringe rate (Hz)  
0.739375  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:089  
Start 124526.00  
Stop 125200.00  
FRT 124830.00  
Corr/FF/build  
2017:206:154629  
2017:214:150026  
2017:188:152524  
RA & Dec (J2000)  
03h19m48.1601s  
+41°30'42.104"

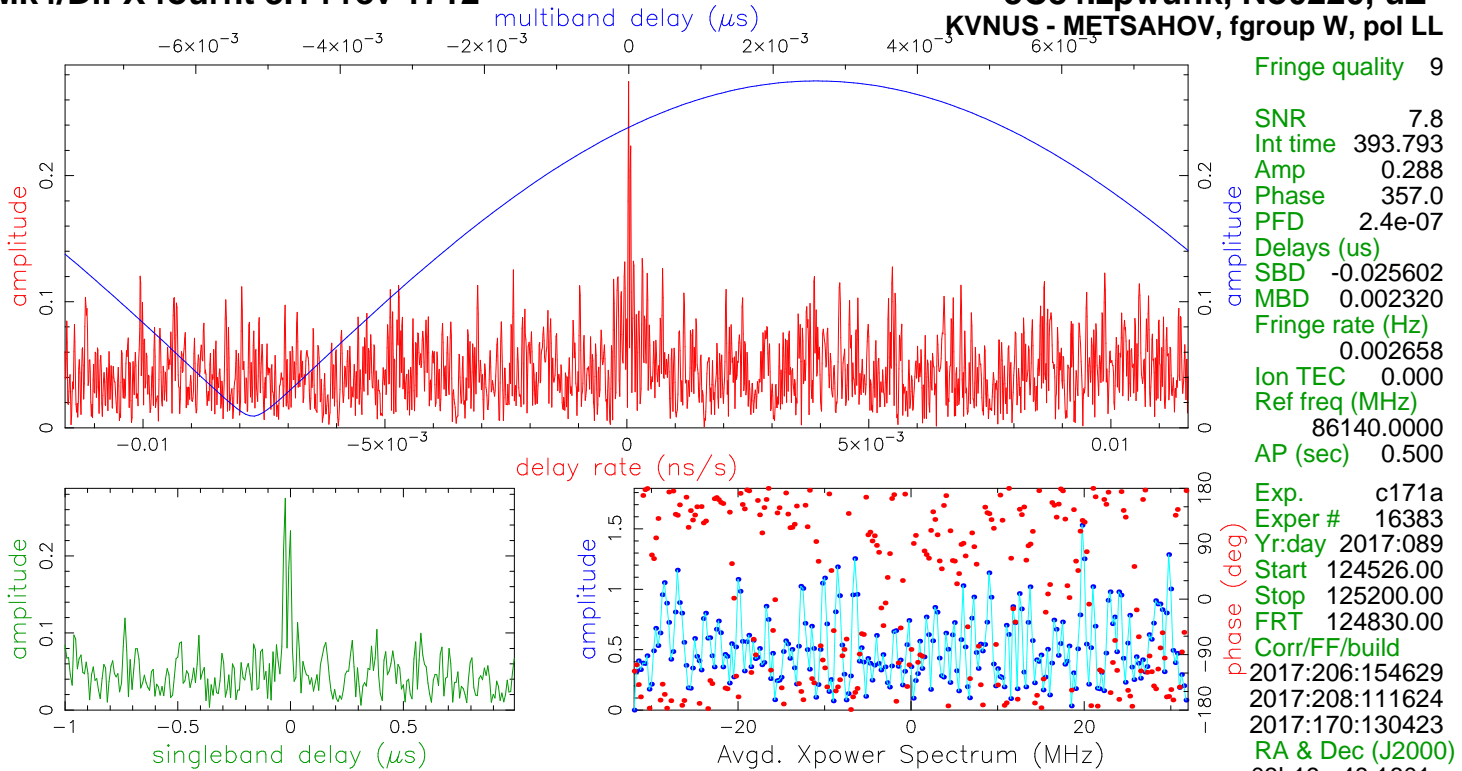


Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec

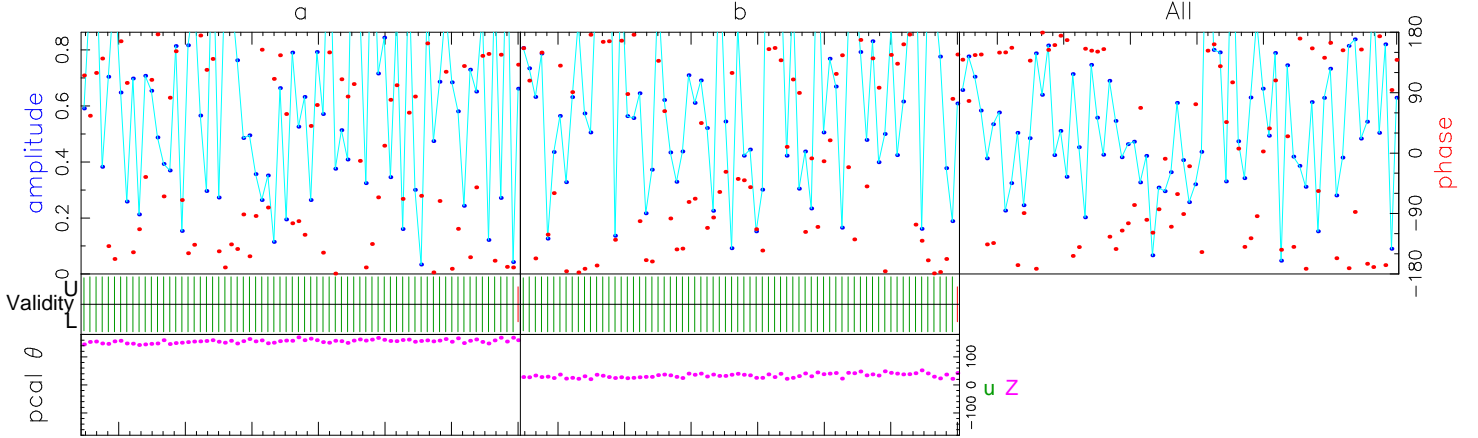


86156.00	86220.00	Freq (MHz)	All				
46.8	46.5	Phase	46.6				
0.2	0.3	Ampl.	0.2				
242.9	243.1	Sbd box	243.0				
U/L 788/788	788/788	APs used					
u 0	0	PC freqs					
Z -1000	-1000	PC freqs					
u:Z 0:0	0:0	PC phase					
u:Z 0:0	0:0	Manl PC					
u 1000	1000	PC amp					
Z 1000	1000						
u W00UR,W00LR	W01UR,W01LR	Chan ids					
Z W00UL,W00LL	W02UL,W02LL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	-1.40029556253E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	3.01158E-03	+/-	9.1E-04
Sband delay (usec)	-1.40029584294E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	8.90832E-01	+/-	1.6E-03
Phase delay (usec)	-1.40038492603E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	1.50360E-06	+/-	3.4E-07
Delay rate (us/s)	-9.89685832867E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	8.58342E-06	+/-	3.0E-09
Total phase (deg)	-5233.1	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	-5083.4	+/-	10.5

ph/seg (deg) 76.5 89.1 Search (2048X8) 0.197 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 144.8 155.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 0.0 14.9 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 3.0 25.9 Inc. frq. avg. 0.246 Sample rate(MSamp/s): 64 Data rate(Mb/s): 512 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
u: az 309.1 el 17.4 pa 57.2 Z: az 164.4 el 70.9 pa -10.2 u,v (fr/asec) 7681.636 1704.705 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0220/uZ.zpwuhk Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.212.zpwuhk



Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec

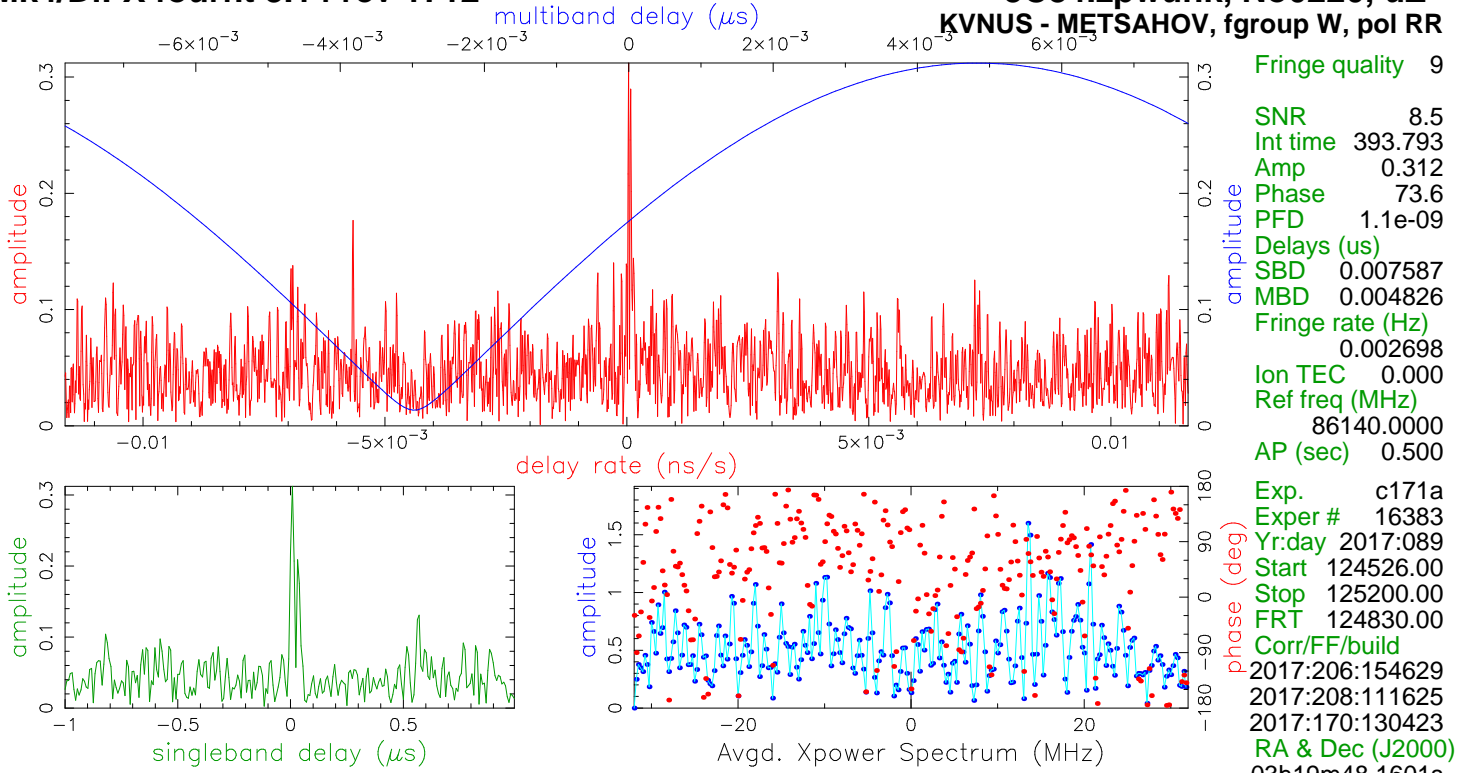


86156.00		86220.00		Freq (MHz)	All
173.7		-179.8		Phase	177.0
0.3		0.3		Ampl.	0.3
125.8		128.7		Sbd box	125.7
U/L 788/788		788/788		APs used	
u 0		0		PC freqs	
Z -1000		-1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
Z W00UL,W00LL		W02UL,W02LL		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.40038781921E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	2.31975E-03 +/- 6.4E-04
Sband delay (usec)	-1.40038748634E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	-2.56015E-02 +/- 1.1E-03
Phase delay (usec)	-1.40038492561E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	5.70897E-06 +/- 2.4E-07
Delay rate (us/s)	-9.89694385423E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	3.08589E-08 +/- 2.1E-09
Total phase (deg)	207.3	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	357.0 +/- 7.3

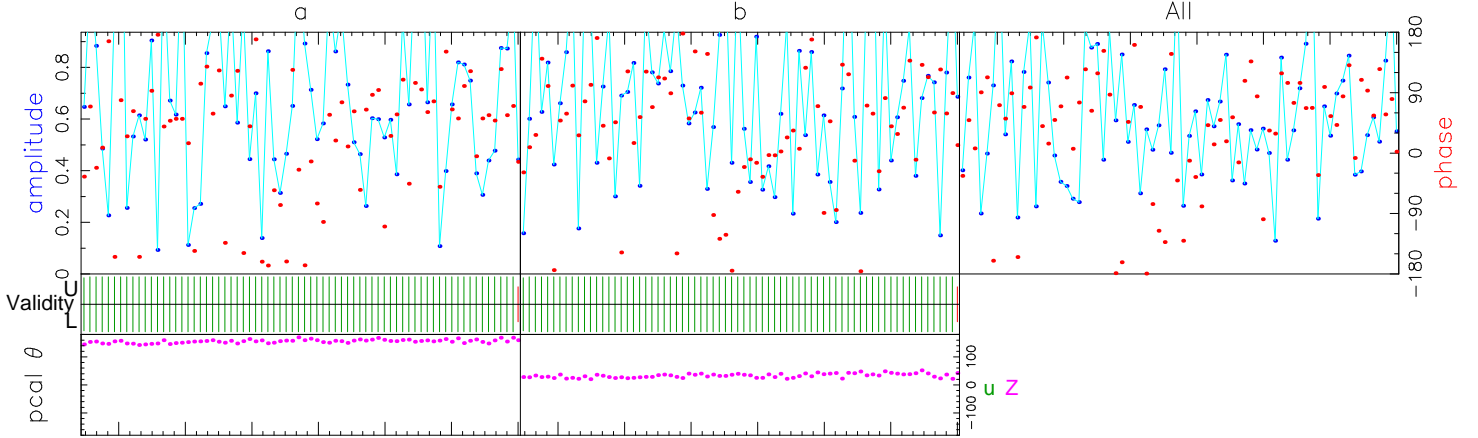
ph/seg (deg)	RMS 73.0	Theor. 62.3	Amplitude Search (2048X8) 0.269	0.288 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	123.6	108.7	Interp. 0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	10.4	Inc. seg. avg. 0.336	0.336	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	5.5	18.1	Inc. frq. avg. 0.271	0.271	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2      Z: az 164.4 el 70.9 pa -10.2      u,v (fr/asec) 7681.636 1704.705      simultaneous interpolator

Control file: cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/uZ.zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.97.zpwuhk



Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec

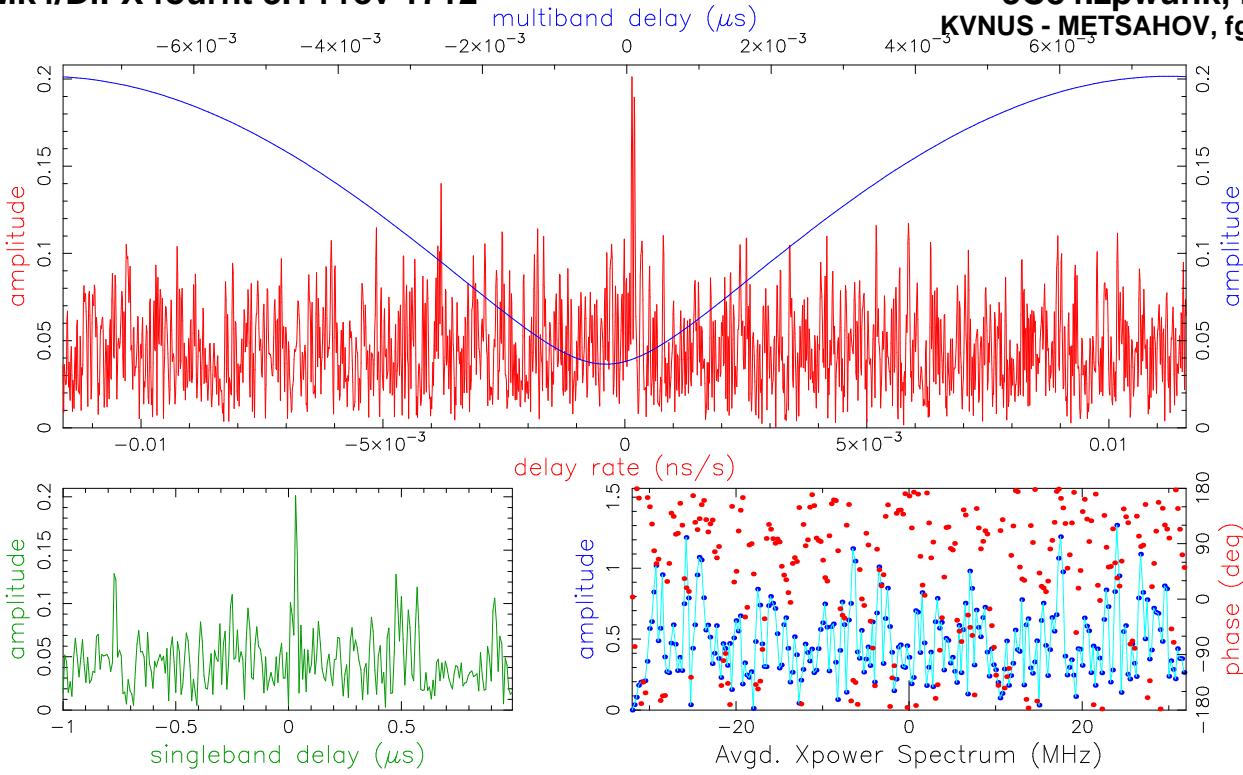


86156.00		86220.00		Freq (MHz)	All
73.5		73.8		Phase	73.6
0.3		0.3		Ampl.	0.3
130.0		129.9		Sbd box	130.0
U/L 788/788		788/788		APs used	
u 0		0		PC freqs	
Z -1000		-1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		Manl PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W00UR,W00LR		W01UR,W01LR		Chan ids	
Z W00UR,W00LR		W02UR,W02LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.40038444360E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	4.82587E-03 +/- 5.9E-04
Sband delay (usec)	-1.40038416754E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	7.58650E-03 +/- 1.0E-03
Phase delay (usec)	-1.40038492595E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	2.37400E-06 +/- 2.2E-07
Delay rate (us/s)	-9.89694384957E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	3.13247E-08 +/- 1.9E-09
Total phase (deg)	-76.1	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	73.6 +/- 6.8

ph/seg (deg)	RMS 73.1	Theor. 57.4	Amplitude Search (2048X8) 0.312 +/- 0.037	0.300	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	129.1	100.2	Interp. 0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	0.0	9.6	Inc. seg. avg. 0.412	0.412	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	4.3	16.7	Inc. frq. avg. 0.308	0.308	Sample rate(MSamp/s): 64	mb window (us) -0.008 0.008
					Data rate(Mb/s): 512	dr window (ns/s) -0.012 0.012
					nlags: 128	t_cohere infinite
						ion window (TEC) 0.00 0.00

u: az 309.1 el 17.4 pa 57.2      Z: az 164.4 el 70.9 pa -10.2      u,v (fr/asec) 7681.636 1704.705      simultaneous interpolator

Control file: cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/uZ.zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.98.zpwuhk



Fringe quality 0

SNR 5.6

Int time 393.793

Amp 0.208

Phase -154.8

PFD 4.0e-01

Delays (us)

SBD 0.033126

MBD -0.008403

Fringe rate (Hz)

0.012623

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:089

Start 124526.00

Stop 125200.00

FRT 124830.00

Corr/FF/build

2017:206:154629

2017:208:111626

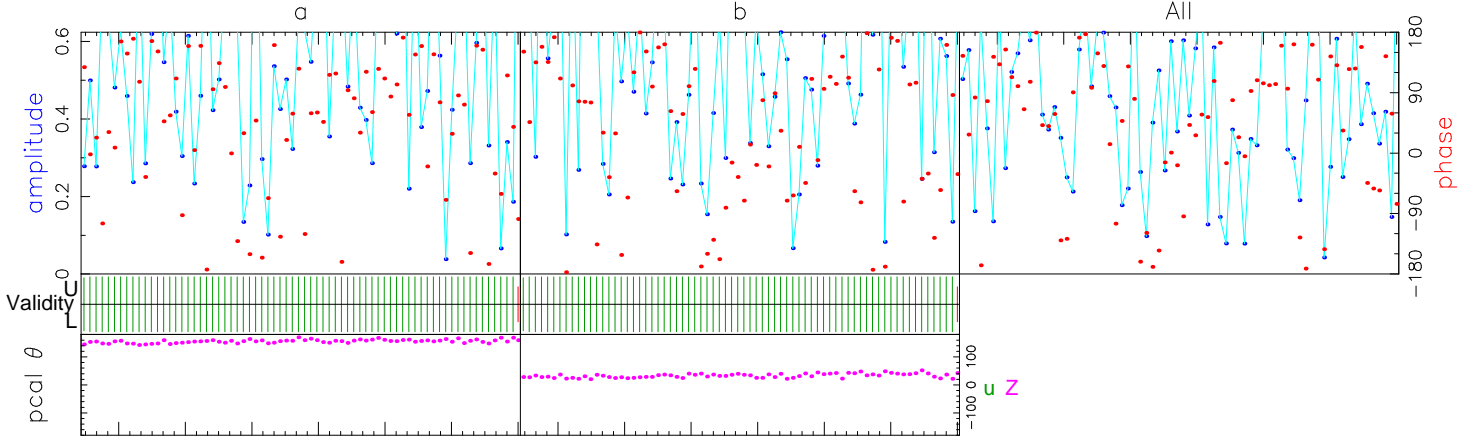
2017:170:130423

RA & Dec (J2000)

03h19m48.1601s

+41°30'42.104"

Amp. and Phase vs. time for each freq., 72 segs, 11 APs / seg (5.50 sec / seg.), time ticks 10 sec



86156.00		86220.00		Freq (MHz)	All
112.3		119.2		Phase	115.2
0.2		0.2		Ampl.	0.2
133.0		31.0		Sbd box	133.2
U/L 788/788		788/788		APs used	
u 0		0		PC freqs	
Z -1000		-1000		PC freqs	
u:Z 0:0		0:0		PC phase	
u:Z 0:0		0:0		ManI PC	
u 1000		1000		PC amp	
Z 1000		1000			
u W00UL,W00LL		W01UL,W01LL		Chan ids	
Z W00UR,W00LR		W02UR,W02LR		Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-1.40038107895E+04	Apriori delay (usec)	-1.40038492619E+04	Resid mbdelay (usec)	-8.40267E-03 +/- 8.8E-04
Sband delay (usec)	-1.40038161359E+04	Apriori clock (usec)	7.2602258E+00	Resid sbdelay (usec)	3.31260E-02 +/- 1.5E-03
Phase delay (usec)	-1.40038492581E+04	Apriori clockrate (us/s)	3.3844645E-07	Resid phdelay (usec)	3.71337E-06 +/- 3.3E-07
Delay rate (us/s)	-9.89694269745E-01	Apriori rate (us/s)	-9.89694416282E-01	Resid rate (us/s)	1.46537E-07 +/- 2.9E-09
Total phase (deg)	-304.6	Apriori accel (us/s/s)	5.30200770926E-05	Resid phase (deg)	-154.8 +/- 10.2

ph/seg (deg)	78.2	Theor.	86.1	Amplitude	0.208 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	158.7	Search (2048X8)	0.202	Search (2048X8)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.211	Inc. seg. avg.	0.211	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	17.8	Inc. frq. avg.	0.195	Inc. frq. avg.	0.195	Sample rate (MSamp/s):	64	mb window (us)	-0.008 0.008
						Data rate (Mb/s):	512	dr window (ns/s)	-0.012 0.012
						nlags:	128	ion window (TEC)	0.00 0.00

u: az 309.1 el 17.4 pa 57.2    Z: az 164.4 el 70.9 pa -10.2    u,v (fr/asec) 7681.636 1704.705    simultaneous interpolator

Control file: cf\_1234    Input file: /Exps/c171a/gmva/1234/No0220/uZ..zpwuhk    Output file: /Exps/c171a/gmva/1234/No0220/uZ.W.99.zpwuhk