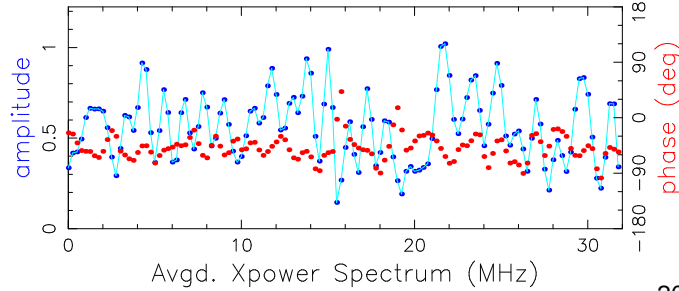
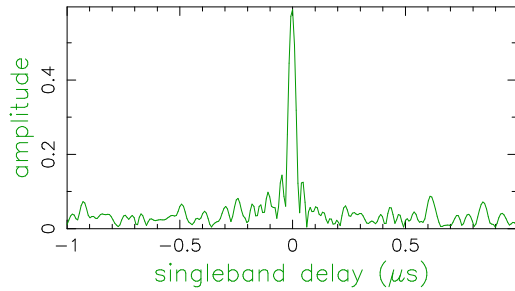


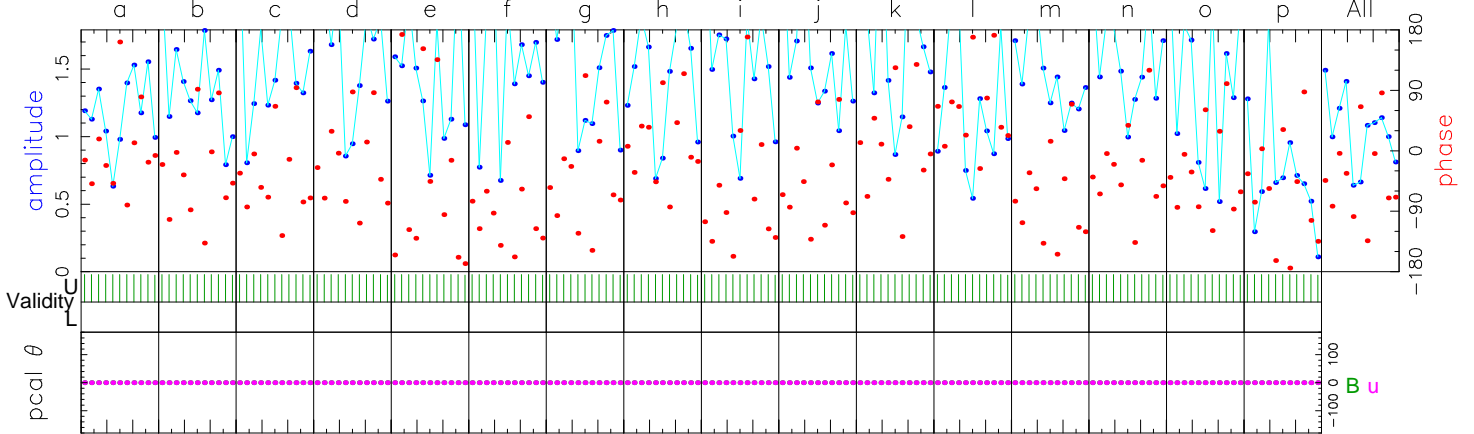
Fringe quality 5

SNR 21.9
Int time 179.778
Amp 0.597
Phase -41.9
PFD 0.0e+00
Delays (us)
SBD -0.002710
MBD -0.004016
Fringe rate (Hz)
-0.018317
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043720
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

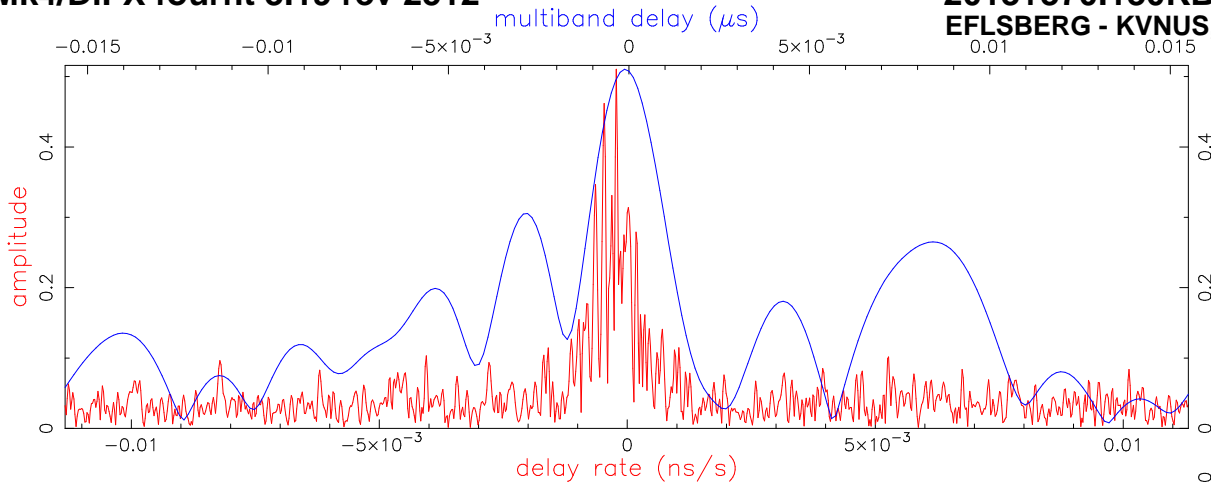
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-12.5	-36.4	-44.6	-21.0	-154.0	-82.0	-40.7	17.0	-101.1	-58.2	6.6	49.3	-79.5	-34.5	-49.6	-54.0		Phase	-41.9
	0.7	0.6	0.9	0.9	0.9	1.0	0.8	0.8	0.9	1.0	1.0	0.9	0.8	1.0	0.8	0.3		Ampl.	0.8
	128.0	127.9	128.7	128.9	129.1	129.0	128.8	128.9	128.8	129.4	129.3	129.5	128.9	128.8	128.4	128.1		Sbd box	128.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	2.28278583021E+03			Apriori delay (usec)			2.28278984636E+03			Resid mbdelay (usec)			-4.01615E-03			+/- 4.9E-05			
Sband delay (usec)	2.28278713636E+03			Apriori clock (usec)			8.2928257E+00			Resid sbdelay (usec)			-2.71000E-03			+/- 7.9E-04			
Phase delay (usec)	2.28278984501E+03			Apriori clockrate (us/s)			-5.9999998E-07			Resid phdelay (usec)			-1.35083E-06			+/- 1.7E-07			
Delay rate (us/s)	1.57421358796E+00			Apriori rate (us/s)			1.57421380060E+00			Resid rate (us/s)			-2.12642E-07			+/- 1.6E-09			
Total phase (deg)	89.6			Apriori accel (us/s/s)			9.28960566430E-07			Resid phase (deg)			-41.9			+/- 5.2			

ph/seg (deg) 64.5 8.7 Theor. Amplitude 0.597 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 87.6 15.2 Search (1024X64) 0.563 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.1 10.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.6 18.3 Inc. seg. avg. 1.039 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.823 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

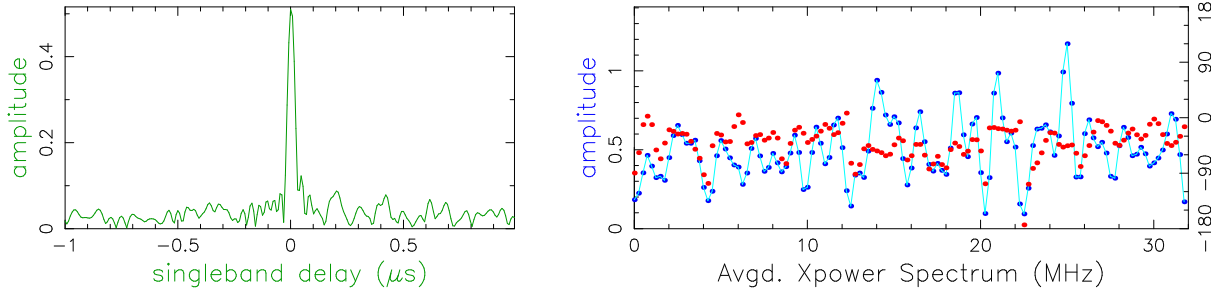
B: az 84.9 el 47.2 pa -52.7 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) -11322.629 1467.515 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Bu..130KBL Output file: /Exps/c192c/v2/1234/No0011/Bu.W.36.130KBL



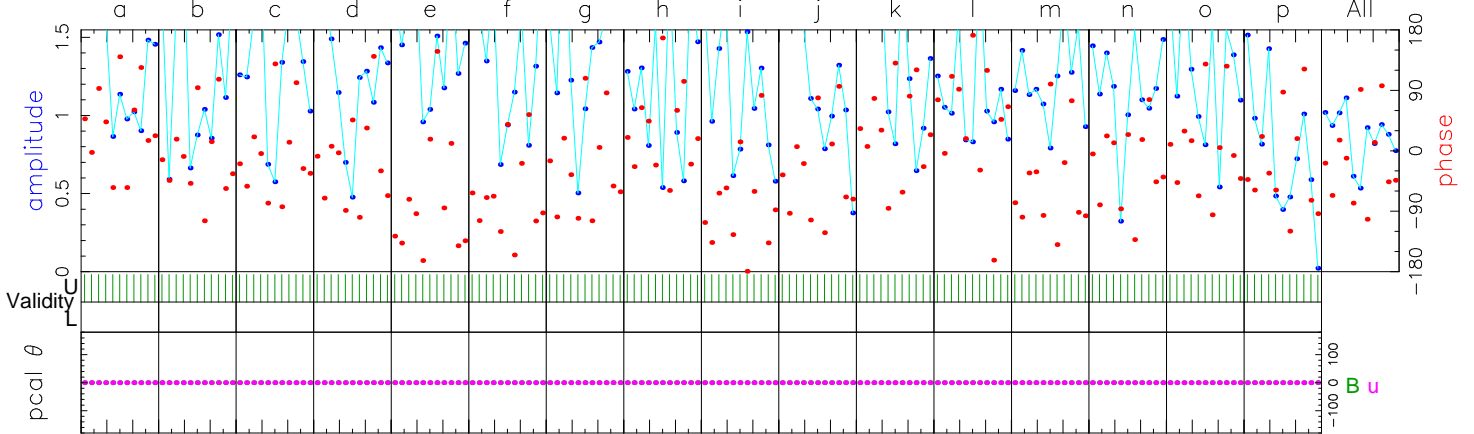
Fringe quality 7

SNR 18.9
Int time 179.778
Amp 0.516
Phase -22.2
PFD 0.0e+00
Delays (us)
SBD 0.002610
MBD -0.000091
Fringe rate (Hz)
-0.018301
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043723
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"



Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	39.5	-10.4	-10.9	-28.6	-110.1	-75.4	-24.3	5.3	-94.8	-32.6	24.7	65.6	-67.8	-15.1	-5.5	-30.1		Phase	-22.2
	0.8	0.8	0.8	0.8	0.8	0.9	0.7	0.8	0.6	0.6	0.8	0.5	0.7	0.7	0.6	0.4		Ampl.	0.7
	128.1	128.7	129.4	129.4	130.5	129.6	129.5	129.7	129.9	130.3	129.8	129.1	129.6	128.9	128.5	129.3		Sbd box	129.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	2.28278975555E+03		Apriori delay (usec)		2.28278984636E+03		Resid mbdelay (usec)		-9.08090E-05		+/-		5.7E-05						
Sband delay (usec)	2.28279245686E+03		Apriori clock (usec)		8.2928257E+00		Resid sbdelay (usec)		2.61050E-03		+/-		9.1E-04						
Phase delay (usec)	2.28278984564E+03		Apriori clockrate (us/s)		-5.9999998E-07		Resid phdelay (usec)		-7.16849E-07		+/-		2.0E-07						
Delay rate (us/s)	1.57421358814E+00		Apriori rate (us/s)		1.57421380060E+00		Resid rate (us/s)		-2.12458E-07		+/-		1.9E-09						
Total phase (deg)	109.3		Apriori accel (us/s/s)		9.28960566430E-07		Resid phase (deg)		-22.2		+/-		6.1						

RMS Theor. Amplitude 0.516 +/- 0.027
 ph/seg (deg) 62.0 10.0 Search (1024X64) 0.485
 amp/seg (%) 75.9 17.5 Interp. 0.000
 ph/frq (deg) 48.7 12.1 Inc. seg. avg. 0.857
 amp/frq (%) 43.2 21.1 Inc. frq. avg. 0.685

Group delay (usec)(sbd) 2.28278975555E+03 Apriori delay (usec) 2.28278984636E+03 Resid mbdelay (usec) -9.08090E-05 +/- 5.7E-05
 Sband delay (usec) 2.28279245686E+03 Apriori clock (usec) 8.2928257E+00 Resid sbdelay (usec) 2.61050E-03 +/- 9.1E-04
 Phase delay (usec) 2.28278984564E+03 Apriori clockrate (us/s) -5.9999998E-07 Resid phdelay (usec) -7.16849E-07 +/- 2.0E-07
 Delay rate (us/s) 1.57421358814E+00 Apriori rate (us/s) 1.57421380060E+00 Resid rate (us/s) -2.12458E-07 +/- 1.9E-09
 Total phase (deg) 109.3 Apriori accel (us/s/s) 9.28960566430E-07 Resid phase (deg) -22.2 +/- 6.1

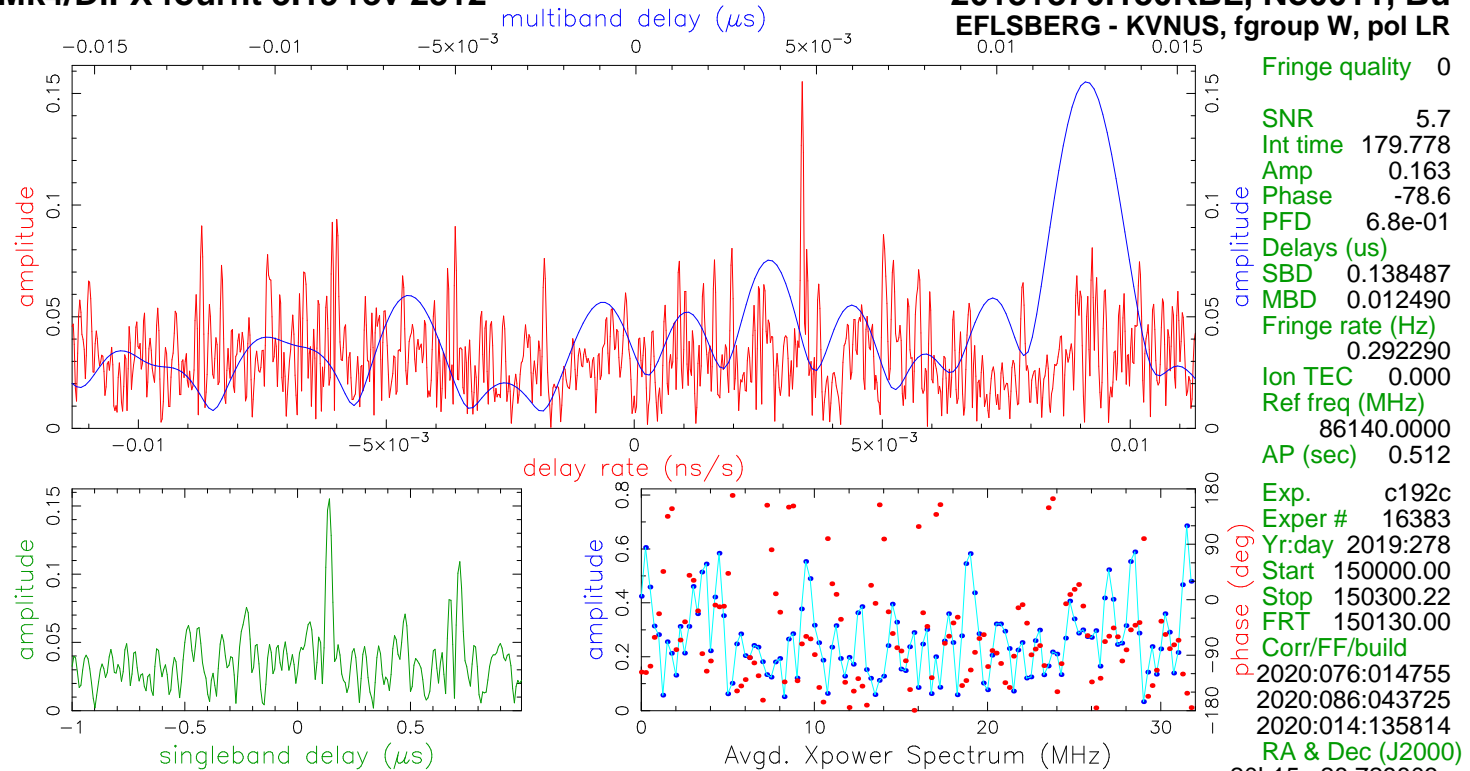
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 84.9 el 47.2 pa -52.7 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) -11322.629 1467.515 simultaneous interpolator

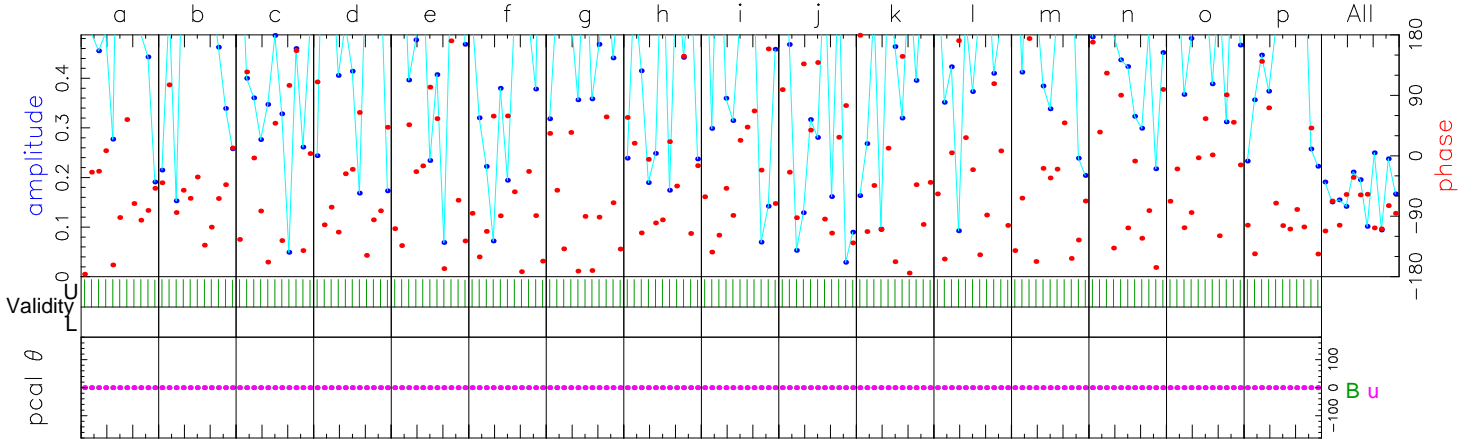
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Bu..130KBL Output file: /Exps/c192c/v2/1234/No0011/Bu.W.62.130KBL

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, Bu
EFLSBERG - KVNUS, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

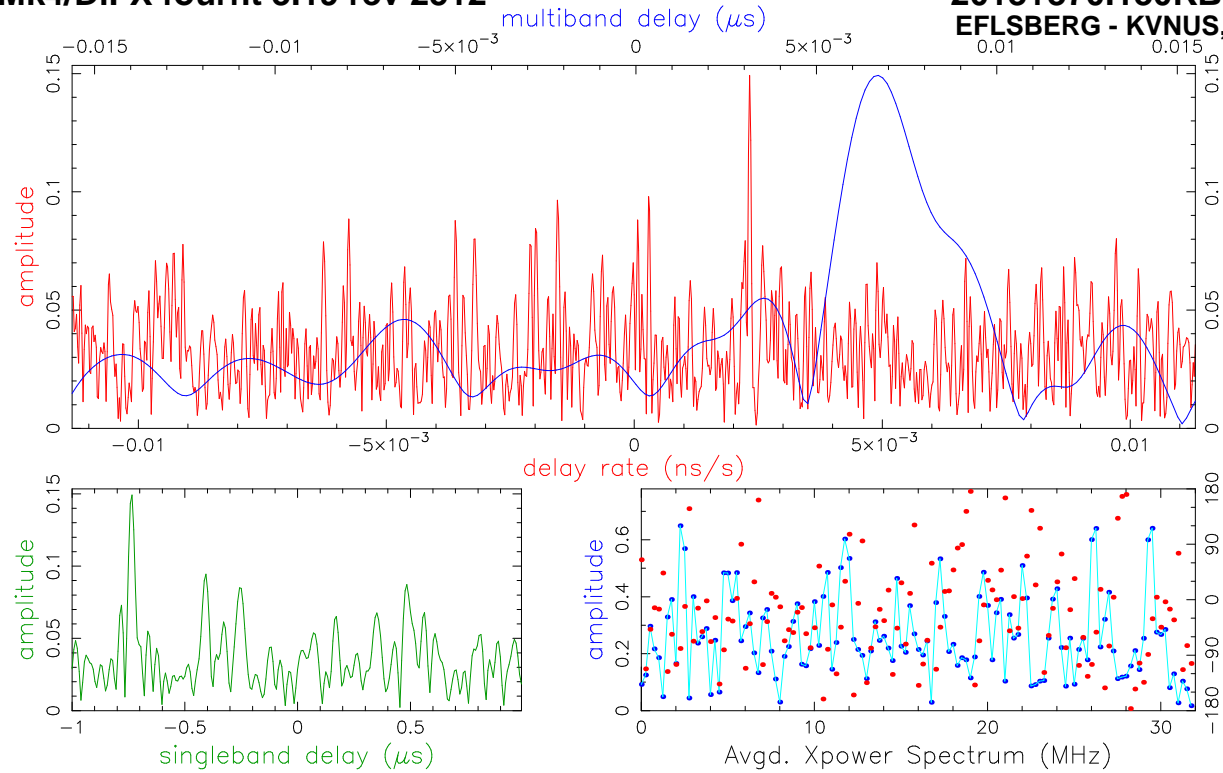


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-62.5	-62.7	-139.3	-86.2	-81.4	-110.7	-93.0	-65.7	-51.9	34.4	-92.1	-60.0	-116.6	152.4	-16.6	-105.6	Phase	-78.6
	0.3	0.3	0.1	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.3	0.3	Ampl.	0.2
	123.0	148.5	1.4	221.0	107.3	239.9	122.2	177.2	83.0	70.7	15.4	51.0	216.3	209.3	37.5	146.2	Sbd box	146.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	2.28292733627E+03			Apriori delay (usec)			2.28278984636E+03			Resid mbdelay (usec)			1.24899E-02			+/- 1.9E-04		
Sband delay (usec)	2.28292833286E+03			Apriori clock (usec)			8.2928257E+00			Resid sbdelay (usec)			1.38487E-01			+/- 3.0E-03		
Phase delay (usec)	2.28278984382E+03			Apriori clockrate (us/s)			-5.9999998E-07			Resid phdelay (usec)			-2.53499E-06			+/- 6.4E-07		
Delay rate (us/s)	1.57421719380E+00			Apriori rate (us/s)			1.57421380060E+00			Resid rate (us/s)			3.39320E-06			+/- 6.2E-09		
Total phase (deg)	52.9			Apriori accel (us/s/s)			9.28960566430E-07			Resid phase (deg)			-78.6			+/- 20.0		

	RMS	Theor.	Amplitude	0.163 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	25.4	33.1	Search (1024X64)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	32.4	57.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	55.0	39.9	Inc. seg. avg.	0.153	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.9	69.6	Inc. frq. avg.	0.158	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

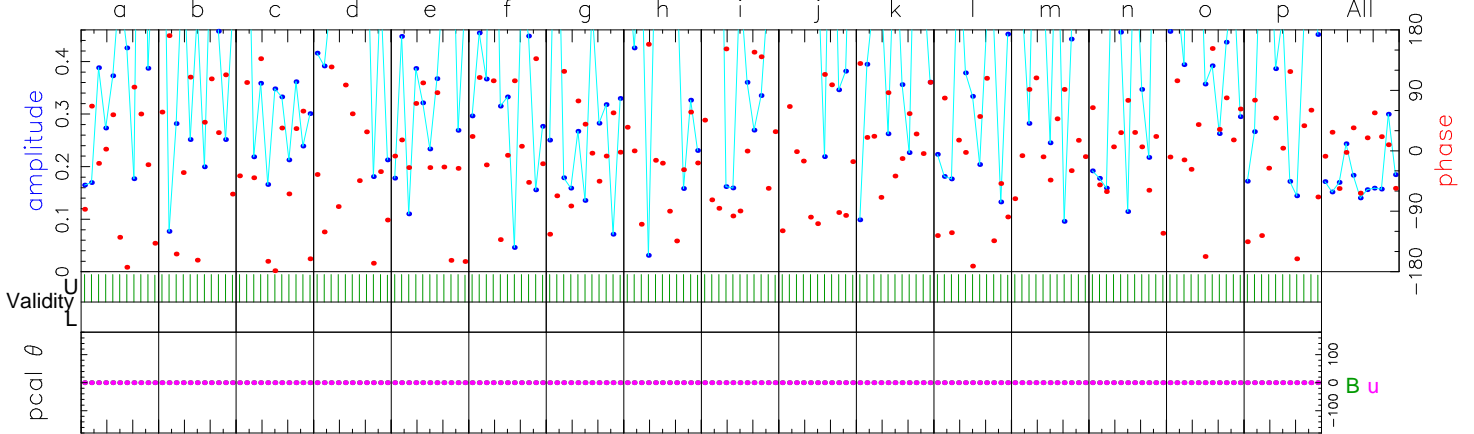
B: az 84.9 el 47.2 pa -52.7 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) -11322.629 1467.515 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/Bu..130KBL Output file: /Exps/c192c/v2/1234/No0011/Bu.W.74.130KBL



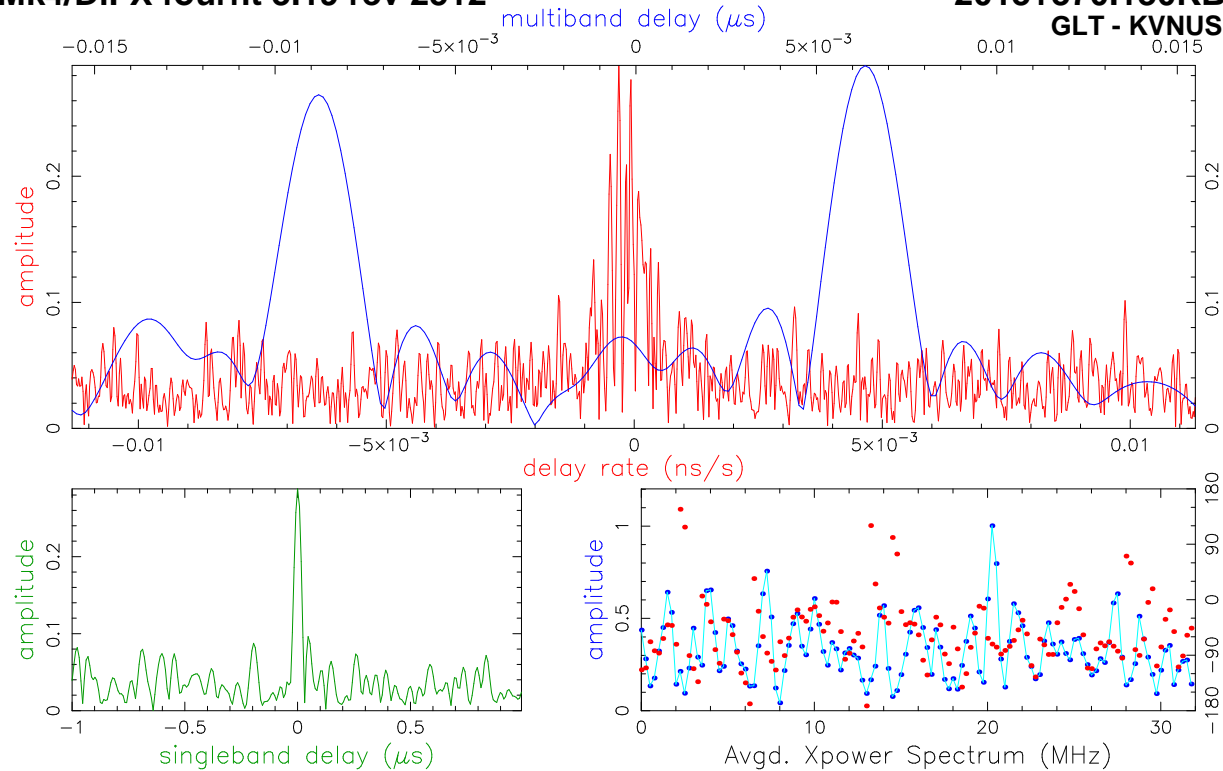
Fringe quality 0
SNR 5.5
Int time 179.778
Amp 0.153
Phase 0.4
PFD 9.8e-01
Delays (us)
SBD -0.736844
MBD 0.006715
Fringe rate (Hz) 0.200230
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043727
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)		2.28204656170E+03																
Sband delay (usec)		2.28205300186E+03																
Phase delay (usec)		2.28278984637E+03																
Delay rate (us/s)		1.57421612507E+00																
Total phase (deg)				131.9														
ph/seg (deg)	RMS	Theor.	Amplitude	0.153 +/- 0.028														
amp/seg (%)	38.5	34.4	Search (1024X64)	0.147														
ph/frq (deg)	36.9	60.0	Interp.	0.000														
amp/frq (%)	40.7	41.4	Inc. seg. avg.	0.158														
	61.1	72.3	Inc. frq. avg.	0.142														
B: az 84.9 el 47.2 pa -52.7			u: az 292.1 el 39.3 pa 71.1															
Control file: cf_1234_gmva			Input file: /Exps/c192c/v2/1234/No0011/Bu..130KBL															
			Output file: /Exps/c192c/v2/1234/No0011/Bu.W.85.130KBL															

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
simultaneous interpolator

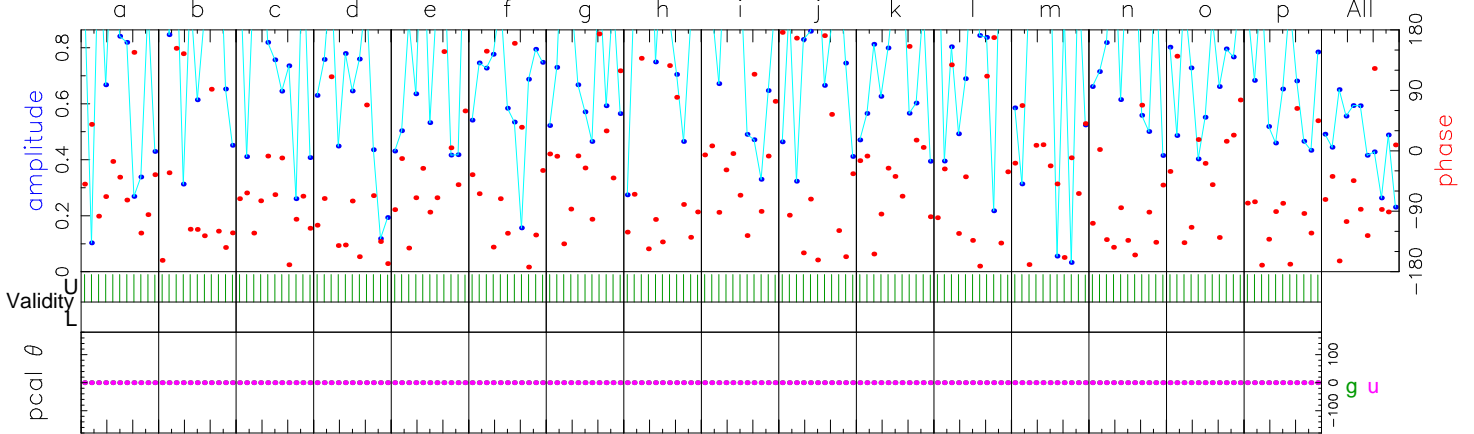


Fringe quality 9

SNR 10.6
Int time 179.837
Amp 0.288
Phase -91.2
PFD 1.0e-17
Delays (us)
SBD 0.000662
MBD 0.006359
Fringe rate (Hz)
-0.027359
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

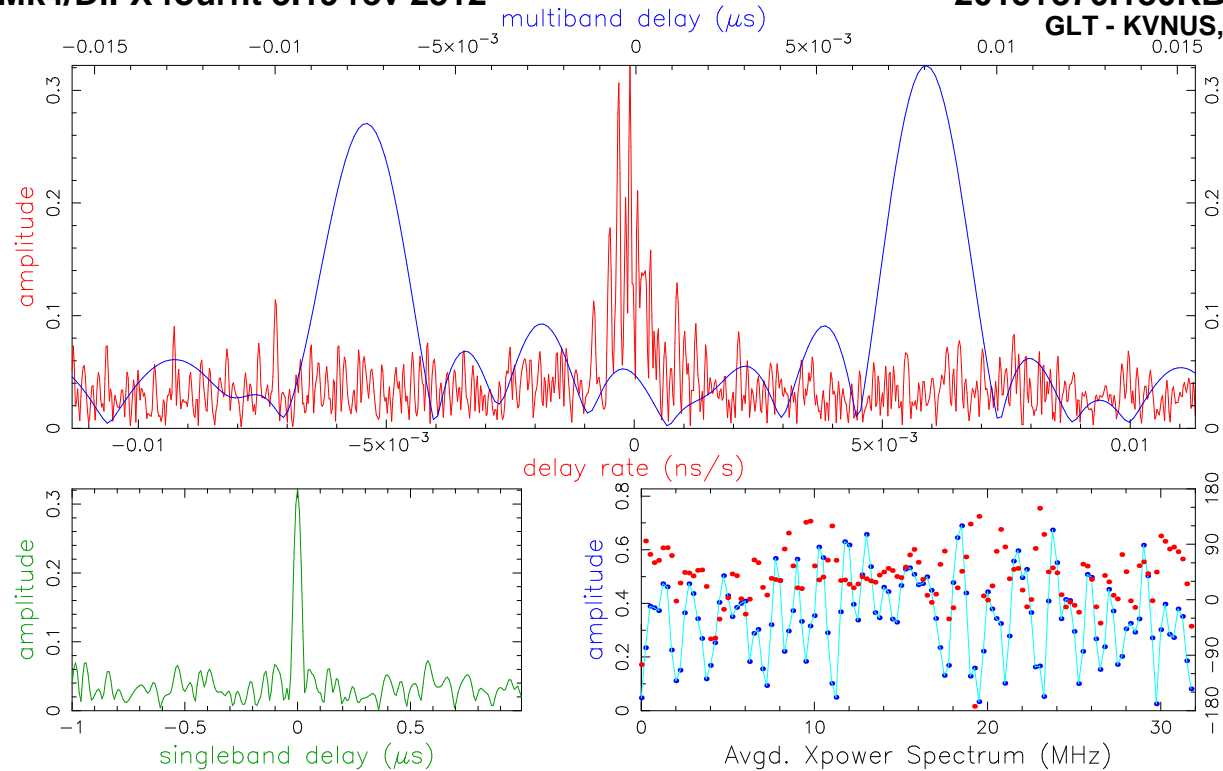
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043719
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-63.4	-144.1	-75.7	-134.1	-50.1	-112.3	-63.0	-134.5	-20.5	-138.4	-44.9	-126.4	-25.1	-123.0	-31.4	-111.1		Phase	-91.2				
	0.6	0.5	0.6	0.2	0.3	0.3	0.3	0.5	0.5	0.4	0.4	0.4	0.3	0.5	0.2	0.3		Ampl.	0.4				
	129.0	128.7	128.7	145.9	45.7	169.8	201.9	129.6	128.3	129.4	64.9	194.0	214.0	128.9	254.2	167.6		Sbd box	129.1				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
g:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-3.61325043477E+03															Apriori delay (usec)	-3.61325679420E+03	Resid mbdelay (usec)	6.35943E-03	+/-	1.0E-04
Sband delay (usec)			-3.61325613170E+03															Apriori clock (usec)	-7.2120943E+00	Resid sbdelay (usec)	6.62500E-04	+/-	1.6E-03
Phase delay (usec)			-3.61325679714E+03															Apriori clockrate (us/s)	-3.2499998E-07	Resid phdelay (usec)	-2.94250E-06	+/-	3.5E-07
Delay rate (us/s)			1.11821846377E+00															Apriori rate (us/s)	1.11821878138E+00	Resid rate (us/s)	-3.17610E-07	+/-	3.4E-09
Total phase (deg)																		Apriori accel (us/s/s)	4.59465932236E-05	Resid phase (deg)	-91.2	+/-	10.9

ph/seg (deg) 62.8 18.0 Theor. Amplitude 0.288 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.7 31.4 Search (1024X64) 0.282 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.6 21.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.5 37.9 Inc. seg. avg. 0.447 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 40.4 el 27.4 pa -11.0 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) -8005.073 5556.637 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/gu..130KBL Output file: /Exps/c192c/v2/1234/No0011/gu.W.27.130KBL simultaneous interpolator

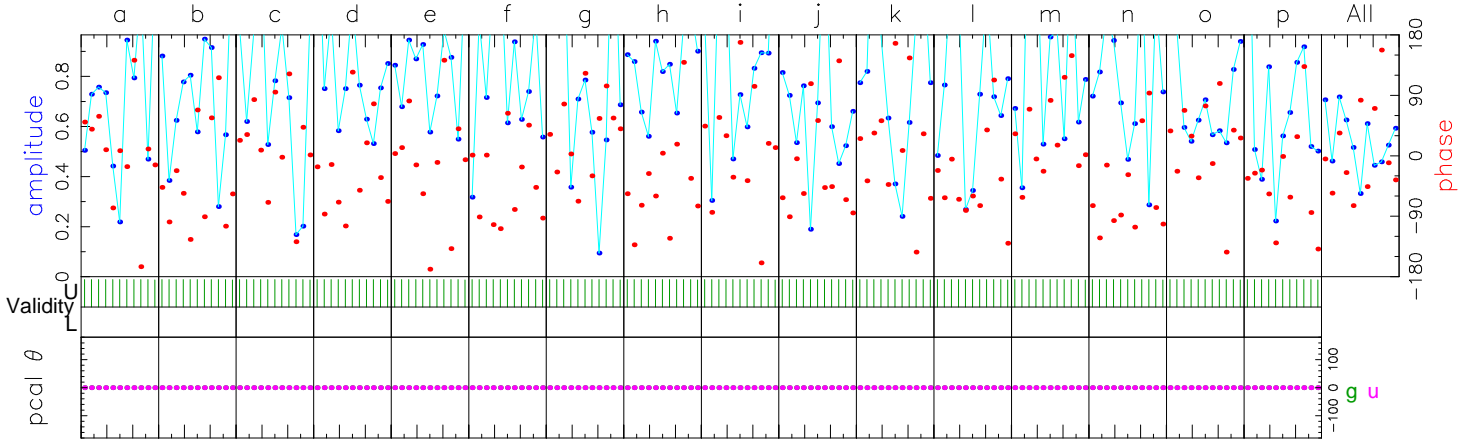


Fringe quality 9

SNR 11.8
Int time 179.841
Amp 0.322
Phase -12.3
PFD 8.4e-24
Delays (us)
SBD -0.000694
MBD 0.008040
Fringe rate (Hz)
-0.007413
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

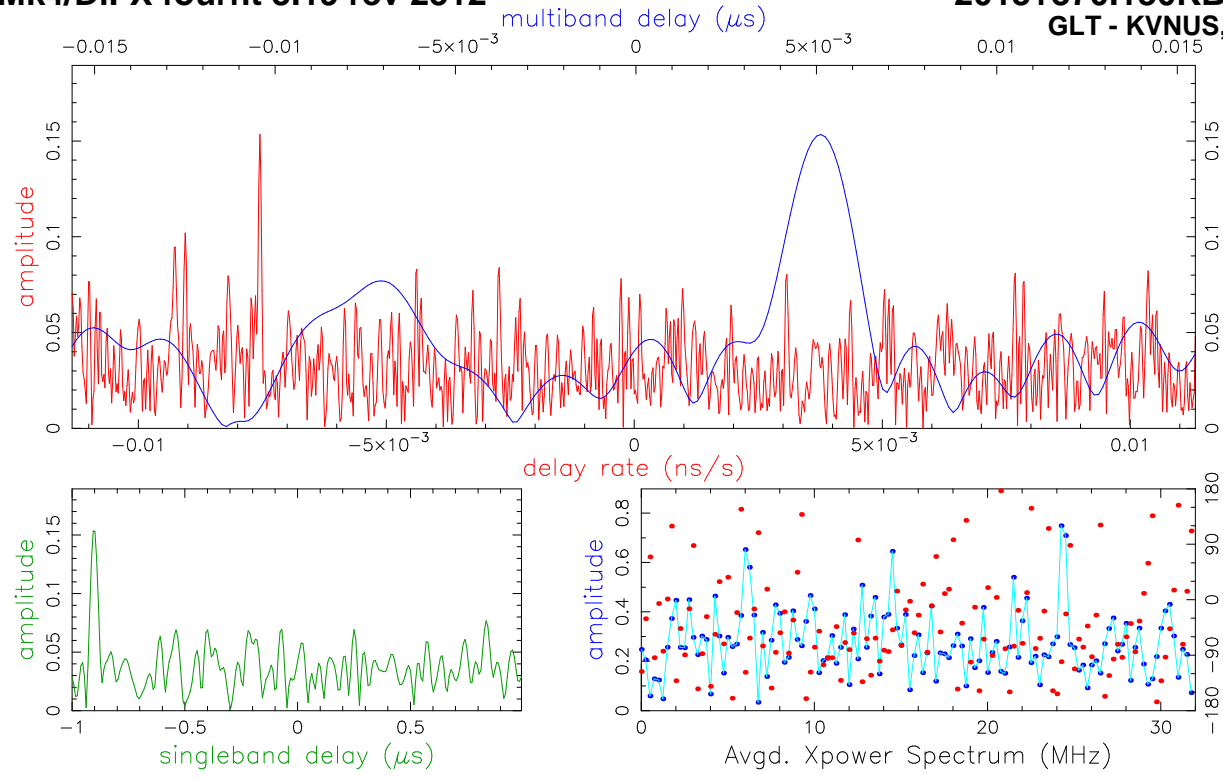
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043723
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)			-3.61324875433E+03															
Sband delay (usec)			-3.61325748820E+03															
Phase delay (usec)			-3.61325679459E+03															
Delay rate (us/s)			1.11821869533E+00															
Total phase (deg)																		
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

ph/seg (deg) 70.3 16.1 Search (1024X64) 0.314 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.6 28.1 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.3 19.4 Inc. seg. avg. 0.524 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.6 33.9 Inc. frq. avg. 0.406 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 40.4 el 27.4 pa -11.0 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) -8005.073 5556.637 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/gu..130KBL Output file: /Exps/c192c/v2/1234/No0011/gu.W.60.130KBL

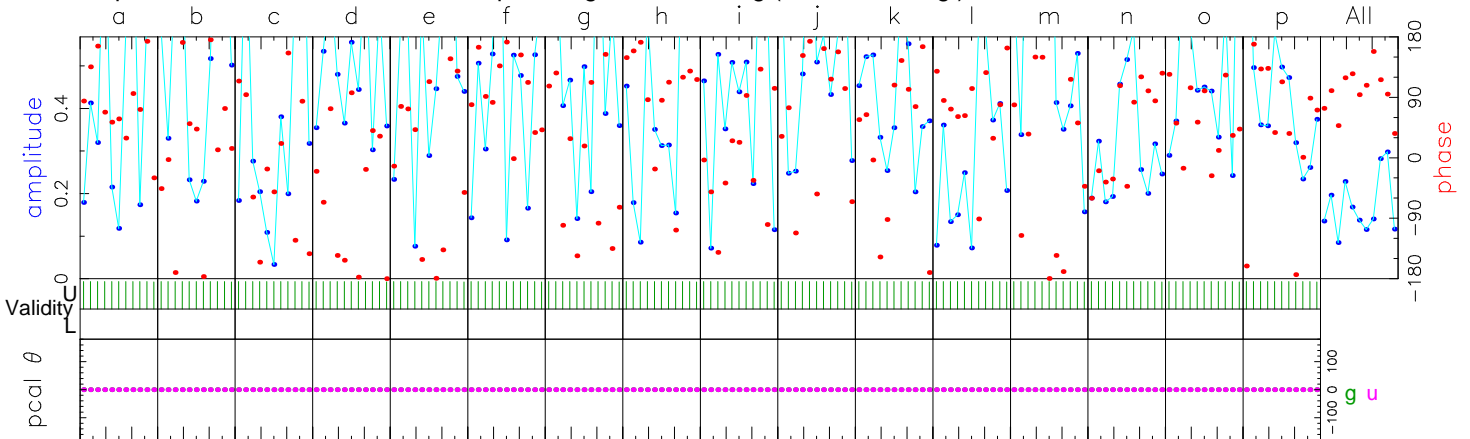


Fringe quality 0

SNR 5.7
Int time 179.837
Amp 0.189
Phase 102.9
PFD 6.9e-01
Delays (us)
SBD -0.902412
MBD 0.005120
Fringe rate (Hz)
-0.652264
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043725
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

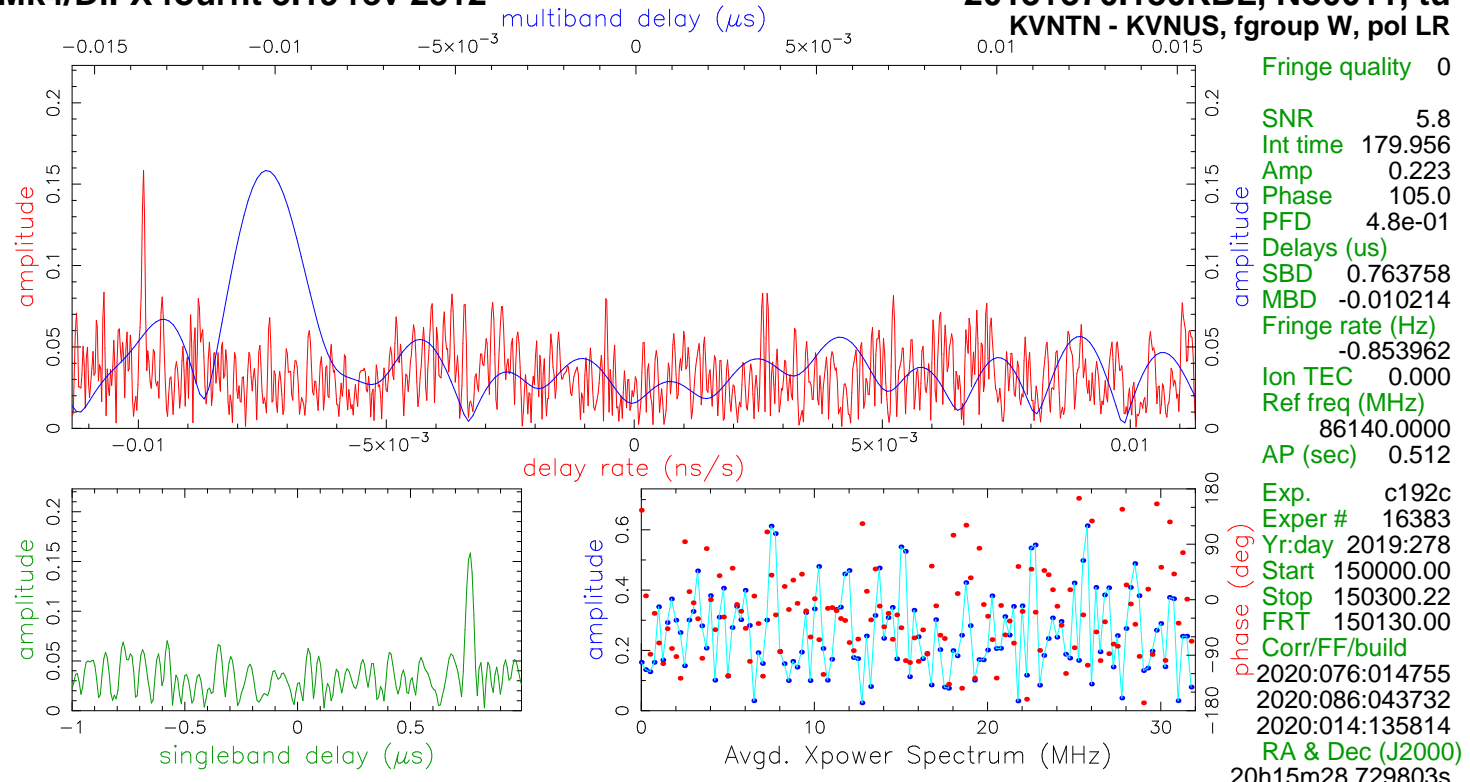


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
81.6	65.3	107.8	33.8	147.5	96.7	-174.4	116.0	20.7	139.5	111.2	88.3	135.7	56.1	53.0	125.0		Phase	102.9
0.3	0.1	0.1	0.1	0.3	0.3	0.1	0.4	0.1	0.3	0.2	0.2	0.3	0.1	0.4	0.3		Ampl.	0.2
118.0	145.7	223.8	227.2	137.2	195.1	101.2	61.1	242.8	102.0	104.4	60.0	124.0	172.8	12.2	142.0		Sbd box	13.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
g:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
g:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks

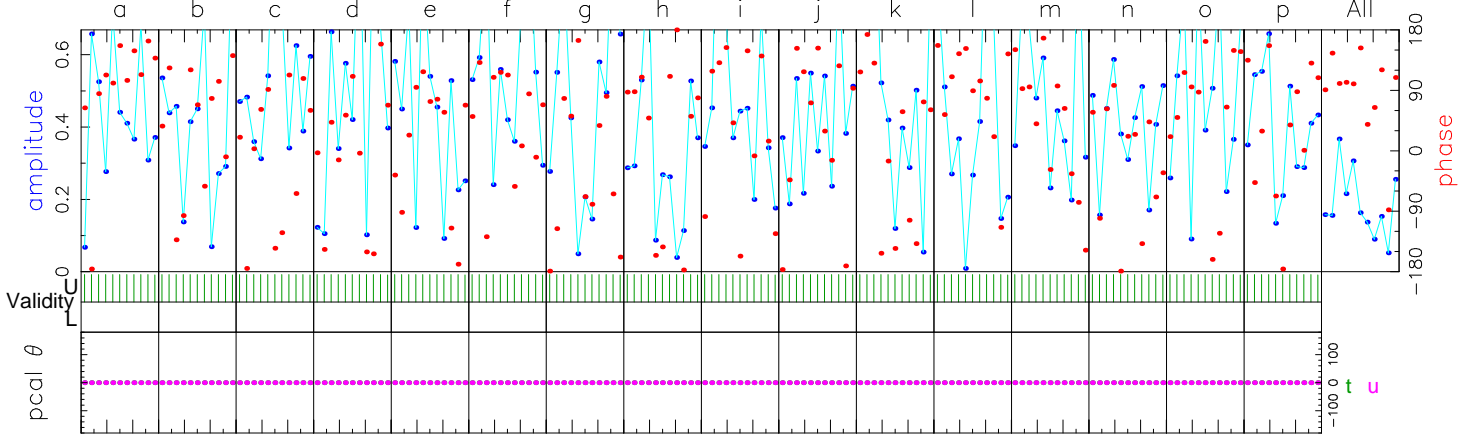
Group delay (usec)(sbd) -3.61415792405E+03 Apriori delay (usec) -3.61325679420E+03 Resid mbdelay (usec) 5.12014E-03 +/- 1.9E-04
 Sband delay (usec) -3.61415920570E+03 Apriori clock (usec) -7.2120943E+00 Resid sbdelay (usec) -9.02412E-01 +/- 3.0E-03
 Phase delay (usec) -3.61325679088E+03 Apriori clockrate (us/s) -3.2499998E-07 Resid phdelay (usec) 3.31909E-06 +/- 6.4E-07
 Delay rate (us/s) 1.11821120925E+00 Apriori rate (us/s) 1.11821878138E+00 Resid rate (us/s) -7.57214E-06 +/- 6.2E-09
 Total phase (deg) 12.2 Apriori accel (us/s/s) 4.59465932236E-05 Resid phase (deg) 102.9 +/- 20.0

RMS Theor. Amplitude 0.189 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 33.7 33.1 Search (1024X64) 0.152 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 44.0 57.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 46.5 39.9 Inc. seg. avg. 0.180 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 59.7 69.7 Inc. frq. avg. 0.184 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 40.4 el 27.4 pa -11.0 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) -8005.073 5556.637 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/gu..130KBL Output file: /Exps/c192c/v2/1234/No0011/gu.W.73.130KBL

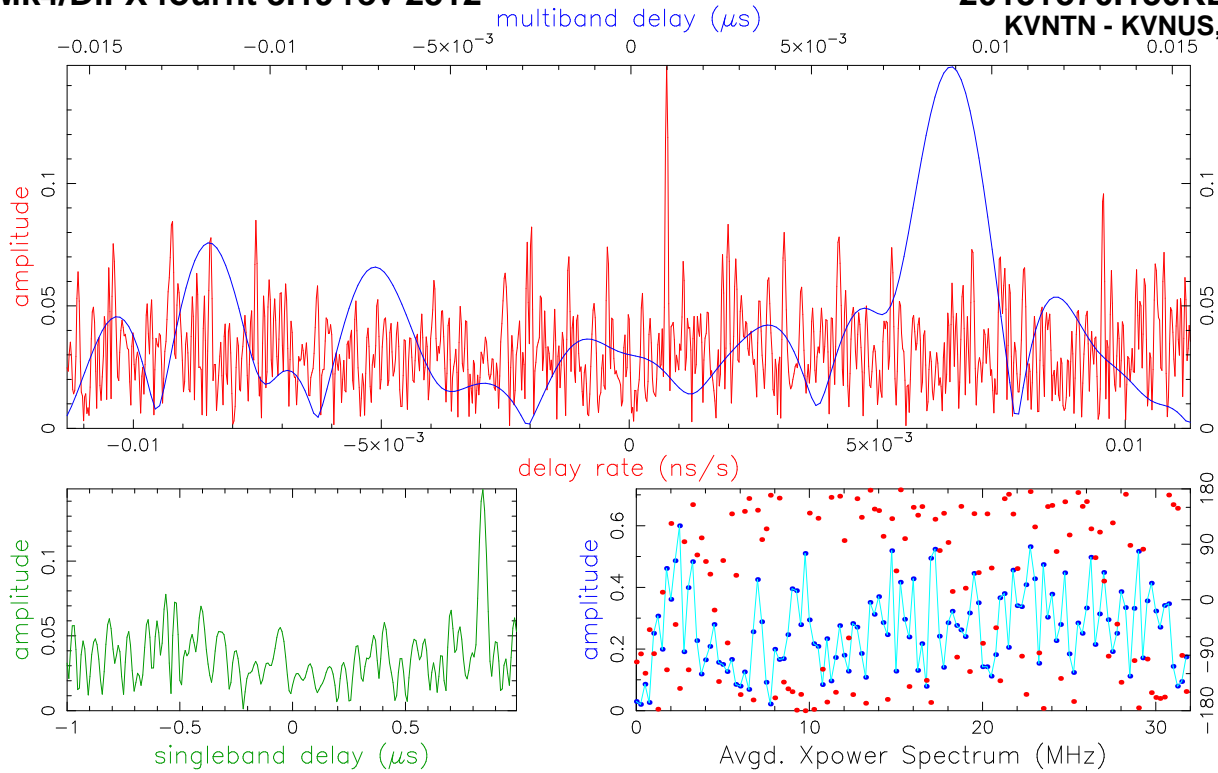


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	226.8
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
Group delay (usec)(sbd)	3.80822850192E+02			Apriori delay (usec)			3.80051814310E+02			Resid mbdelay (usec)			-1.02141E-02			+/- 1.8E-04			
Sband delay (usec)	3.80815572810E+02			Apriori clock (usec)			1.9262941E+01			Resid sbdelay (usec)			7.63758E-01			+/- 3.0E-03			
Phase delay (usec)	3.80051817696E+02			Apriori clockrate (us/s)			-1.9999998E-07			Resid phdelay (usec)			3.38553E-06			+/- 6.3E-07			
Delay rate (us/s)	-2.08151911318E-03			Apriori rate (us/s)			-2.07160546387E-03			Resid rate (us/s)			-9.91365E-06			+/- 6.1E-09			
Total phase (deg)	207.5			Apriori accel (us/s/s)			-4.13375856215E-06			Resid phase (deg)			105.0			+/- 19.6			

ph/seg (deg) 59.1 32.5 Search (1024X64) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.1 56.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.3 39.2 Inc. seg. avg. 0.225 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 57.9 68.5 Inc. frq. avg. 0.208 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 293.0 el 40.6 pa 75.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 11.332 -475.771 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tu...130KBL Output file: /Exps/c192c/v2/1234/No0011/tu.W.122.130KBL

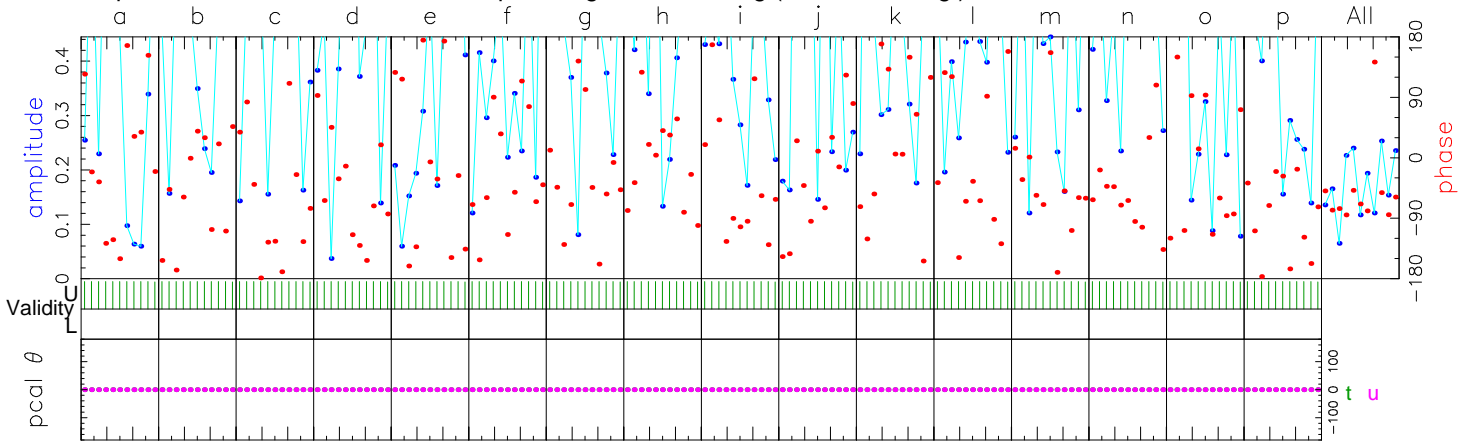


Fringe quality 0

SNR 5.4
Int time 179.956
Amp 0.148
Phase -68.6
PFD 1.0e+00
Delays (us)
SBD 0.842562
MBD 0.008857
Fringe rate (Hz) 0.064781
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043734
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

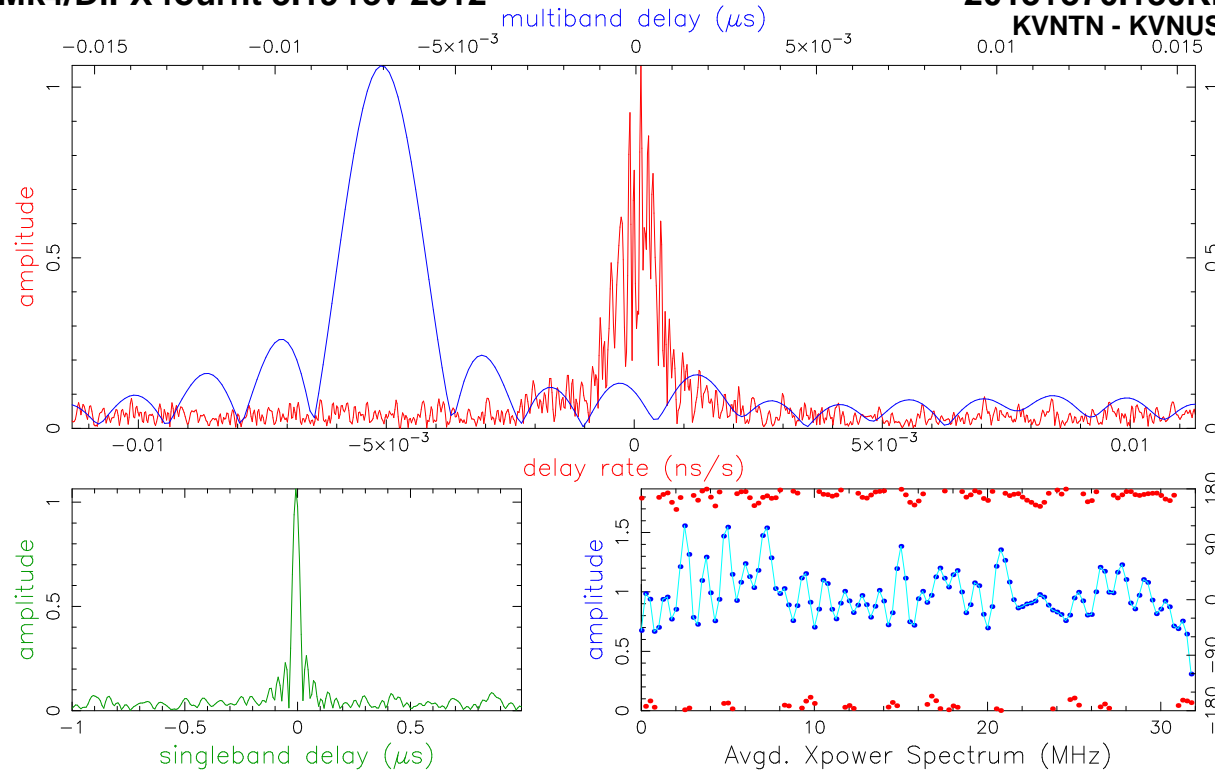


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd) 3.80904421280E+02 Apriori delay (usec) 3.80051814310E+02 Resid mbdelay (usec) 8.85697E-03 +/- 2.0E-04
 Sband delay (usec) 3.80894376810E+02 Apriori clock (usec) 1.9262941E+01 Resid sbdelay (usec) 8.42562E-01 +/- 3.2E-03
 Phase delay (usec) 3.80051812100E+02 Apriori clockrate (us/s) -1.9999998E-07 Resid phdelay (usec) -2.21056E-06 +/- 6.8E-07
 Delay rate (us/s) -2.07085342207E-03 Apriori rate (us/s) -2.07160546387E-03 Resid rate (us/s) 7.52042E-07 +/- 6.5E-09
 Total phase (deg) 33.9 Apriori accel (us/s/s) -4.13375856215E-06 Resid phase (deg) -68.6 +/- 21.1

ph/seg (deg) 46.8 35.0 Theor. Amplitude 0.148 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.0 61.1 Search (1024X64) 0.147 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.5 42.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 54.5 73.7 Inc. seg. avg. 0.146 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.141 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 293.0 el 40.6 pa 75.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 11.332 -475.771 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tu...130KBL Output file: /Exps/c192c/v2/1234/No0011/tu.W.138.130KBL

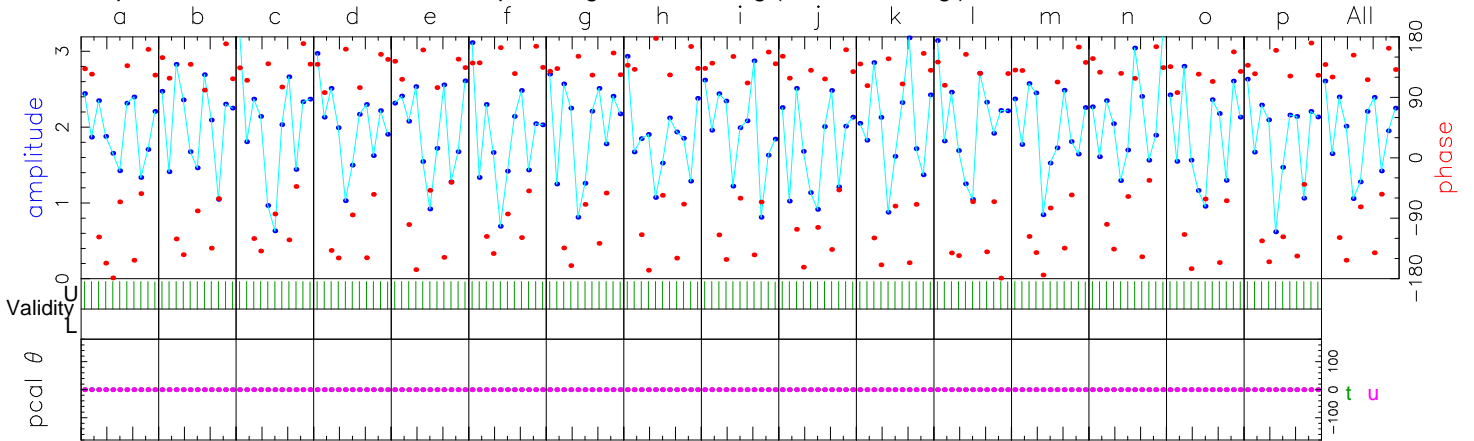


Fringe quality 5

SNR 39.0
Int time 179.956
Amp 1.064
Phase 175.3
PFD 0.0e+00
Delays (us)
SBD -0.007009
MBD -0.007042
Fringe rate (Hz) 0.011499
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043729
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



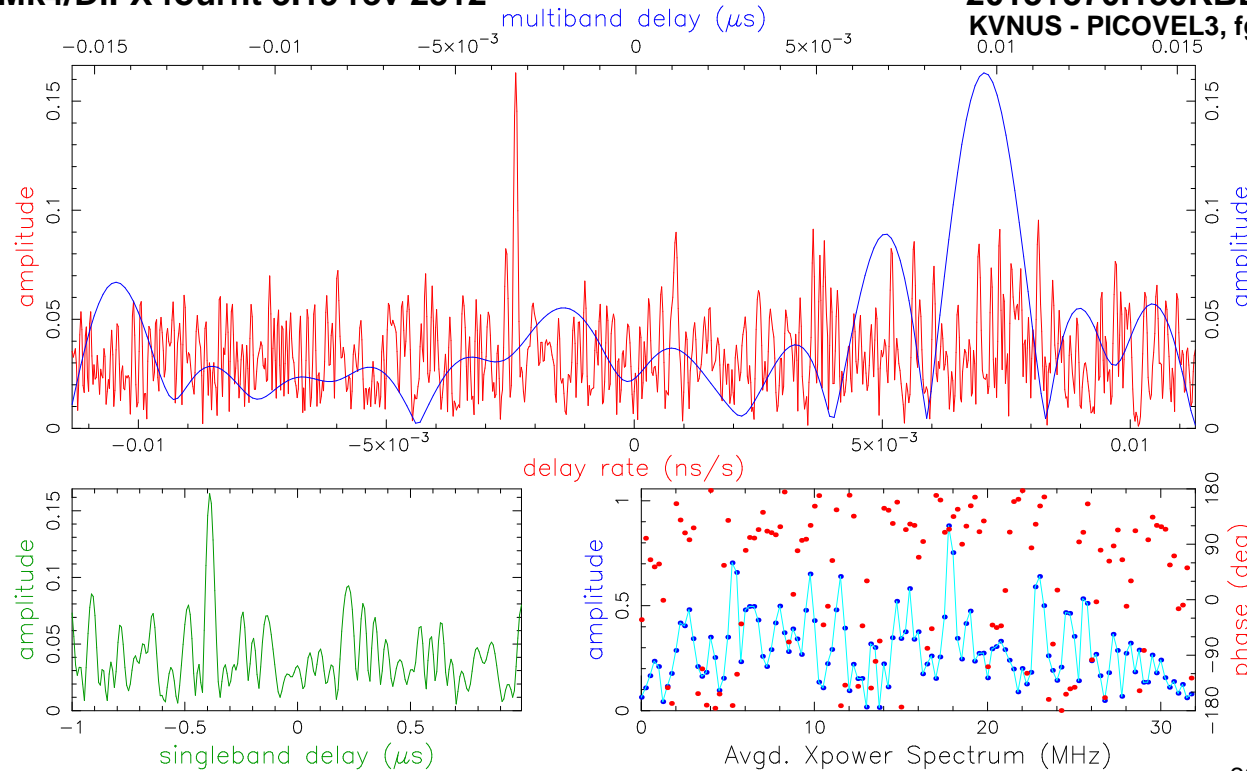
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tu	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

Group delay (usec)(sbd) 3.80044772171E+02 Apriori delay (usec) 3.80051814310E+02 Resid mbdelay (usec) -7.04214E-03 +/- 2.8E-05
 Sband delay (usec) 3.80044805310E+02 Apriori clock (usec) 1.9262941E+01 Resid sbdelay (usec) -7.00900E-03 +/- 4.4E-04
 Phase delay (usec) 3.80051819964E+02 Apriori clockrate (us/s) -1.9999998E-07 Resid phdelay (usec) 5.65348E-06 +/- 9.5E-08
 Delay rate (us/s) -2.07147197445E-03 Apriori rate (us/s) -2.07160546387E-03 Resid rate (us/s) 1.33489E-07 +/- 9.1E-10
 Total phase (deg) 277.8 Apriori accel (us/s/s) -4.13375856215E-06 Resid phase (deg) 175.3 +/- 2.9

RMS Theor. Amplitude 1.064 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 65.6 4.9 Search (1024X64) 1.039 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 93.3 8.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 6.8 5.9 Inc. seg. avg. 1.923 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 5.6 10.3 Inc. frq. avg. 1.063 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

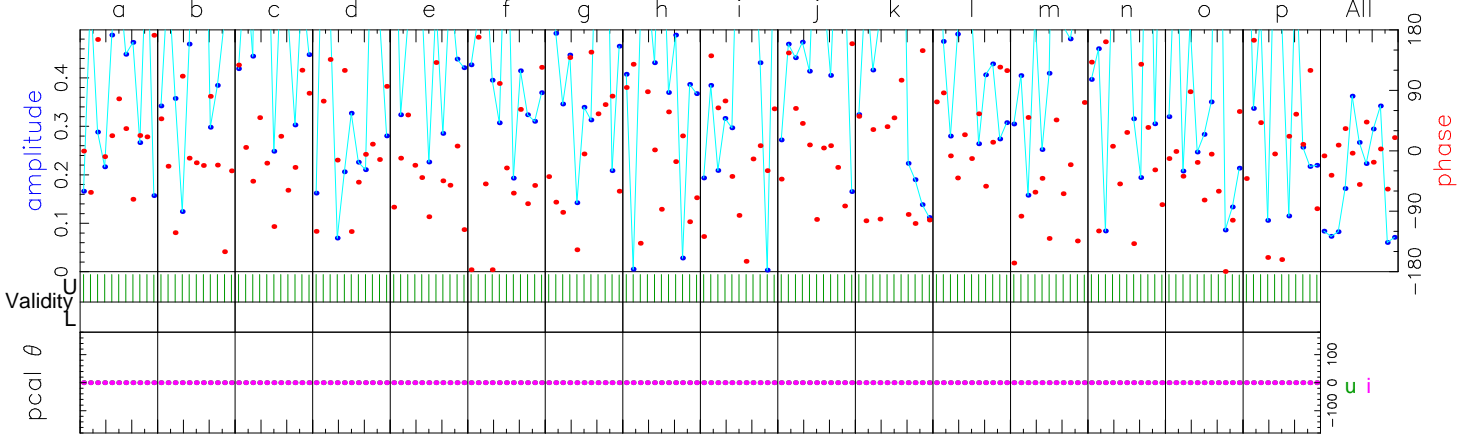
t: az 293.0 el 40.6 pa 75.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 11.332 -475.771 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/tu...130KBL Output file: /Exps/c192c/v2/1234/No0011/tu.W.97.130KBL



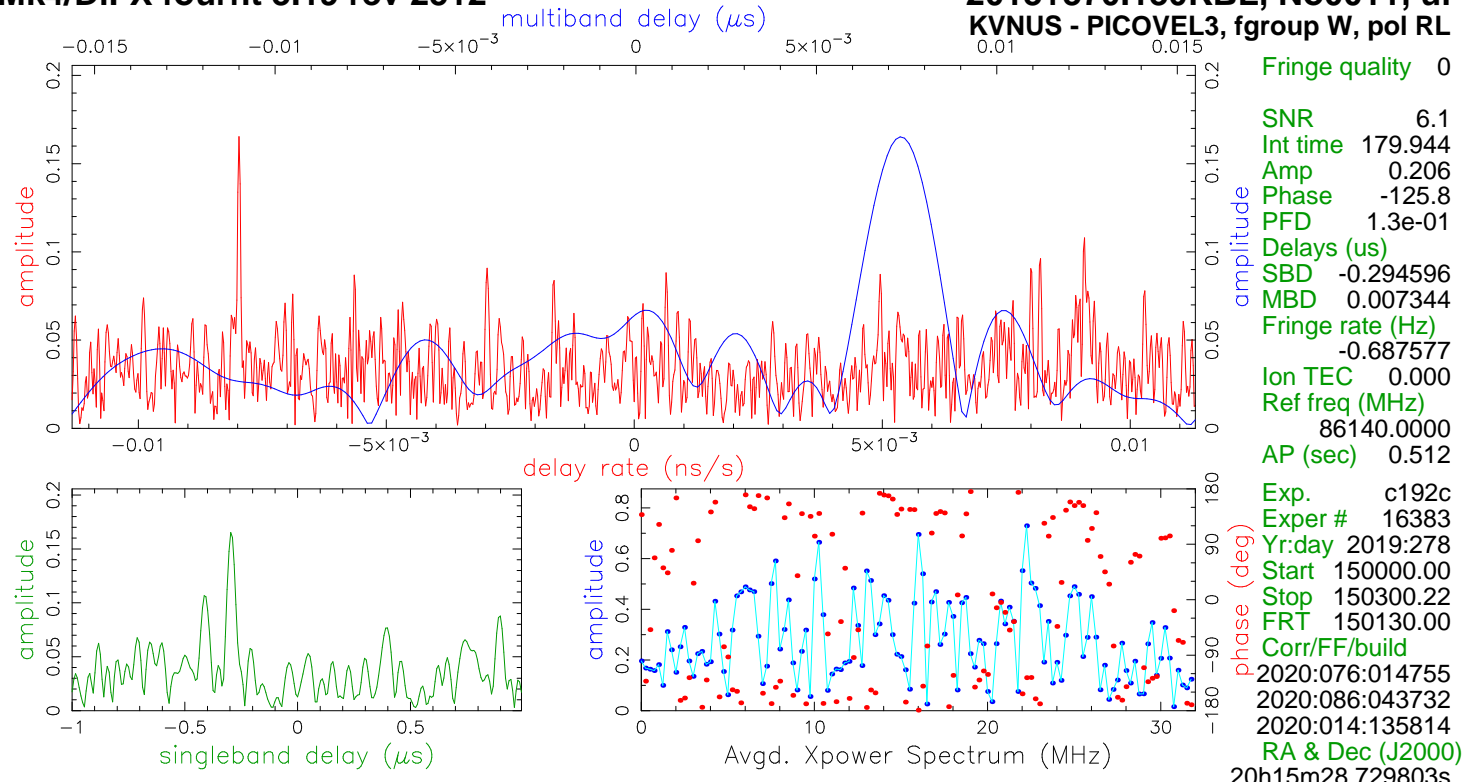
Fringe quality 0
SNR 6.0
Int time 179.944
Amp 0.166
Phase -3.9
PFD 2.3e-01
Delays (us)
SBD -0.389181
MBD 0.009678
Fringe rate (Hz)
-0.205754
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043730
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

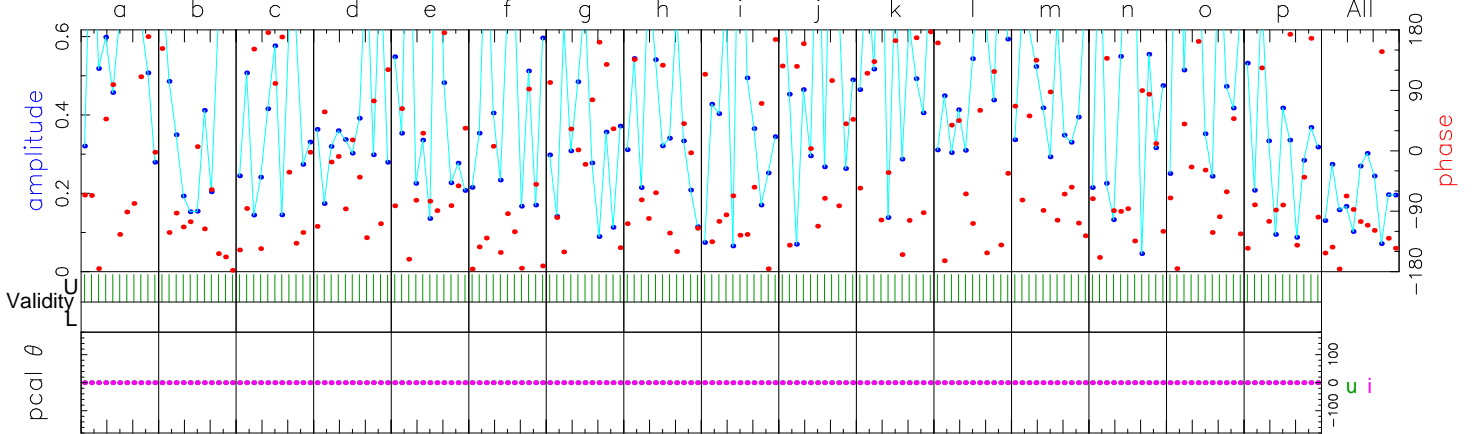


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
ui	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)	6.00344172030E+02			Apriori delay (usec)			6.00740743642E+02			Resid mbdelay (usec)			9.67839E-03			+/-	1.8E-04	
Sband delay (usec)	6.00351563142E+02			Apriori clock (usec)			9.0516987E+00			Resid sbdelay (usec)			-3.89181E-01			+/-	2.9E-03	
Phase delay (usec)	6.00740743515E+02			Apriori clockrate (us/s)			7.5299998E-07			Resid phdelay (usec)			-1.26432E-07			+/-	6.2E-07	
Delay rate (us/s)	-1.82417392954E+00			Apriori rate (us/s)			-1.82417154094E+00			Resid rate (us/s)			-2.38860E-06			+/-	5.9E-09	
Total phase (deg)	232.7			Apriori accel (us/s/s)			-4.62426437311E-06			Resid phase (deg)			-3.9			+/-	19.1	
ph/seg (deg)	RMS	Theor.	Amplitude		0.166 +/- 0.028		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000		
amp/seg (%)	30.9	31.7	Search (1024X64)		0.160		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.016	0.016				
ph/frq (deg)	69.9	55.3	Interp.		0.000		Bits/sample: 2x2		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.011	0.011				
amp/frq (%)	35.4	38.2	Inc. seg. avg.		0.163		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00	0.00				
	54.3	66.7	Inc. frq. avg.		0.154		Data rate(Mb/s): 2048		nlags: 128		ion window (TEC)		0.00	0.00				

u: az 292.1 el 39.3 pa 71.1 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 13120.502 -506.328 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ui..130KBL Output file: /Exps/c192c/v2/1234/No0011/ui.W.110.130KBL

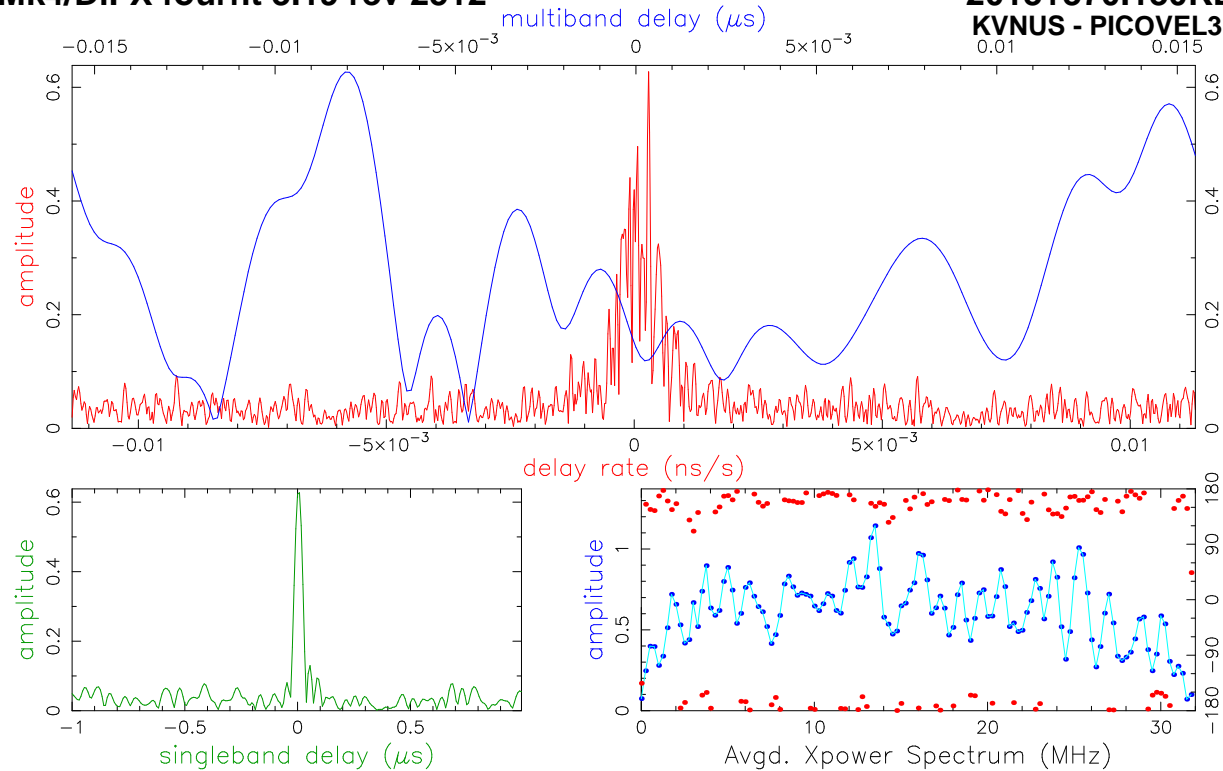


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-102.7	-150.2	-130.1	-77.0	-102.5	-134.2	31.5	-117.9	-121.8	165.3	-157.9	-151.3	-88.9	-120.2	-103.2	-140.0	Phase	-125.8
	0.2	0.5	0.2	0.2	0.3	0.3	0.0	0.2	0.4	0.1	0.4	0.1	0.2	0.3	0.2	0.2	Ampl.	0.2
	67.8	91.8	243.8	201.6	173.5	41.0	164.7	135.4	81.9	252.3	97.1	2.4	28.3	182.7	11.6	154.0	Sbd box	91.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
ui	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ui	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Tracks	
Group delay (usec)(sbd)	6.00435587987E+02			Apriori delay (usec)			6.00740743642E+02			Resid mbdelay (usec)			7.34434E-03			+/- 1.8E-04		
Sband delay (usec)	6.00446147142E+02			Apriori clock (usec)			9.0516987E+00			Resid sbdelay (usec)			-2.94596E-01			+/- 2.8E-03		
Phase delay (usec)	6.00740739584E+02			Apriori clockrate (us/s)			7.5299998E-07			Resid phdelay (usec)			-4.05793E-06			+/- 6.1E-07		
Delay rate (us/s)	-1.82417952303E+00			Apriori rate (us/s)			-1.82417154094E+00			Resid rate (us/s)			-7.98209E-06			+/- 5.8E-09		
Total phase (deg)	110.8			Apriori accel (us/s/s)			-4.62426437311E-06			Resid phase (deg)			-125.8			+/- 18.8		

ph/seg (deg) RMS Theor. Amplitude 0.206 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.5 54.4 Search (1024X64) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.8 37.6 Inc. seg. avg. 0.207 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.6 65.6 Inc. frq. avg. 0.191 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 13120.502 -506.328 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/ui..130KBL Output file: /Exps/c192c/v2/1234/No0011/ui.W.124.130KBL simultaneous interpolator

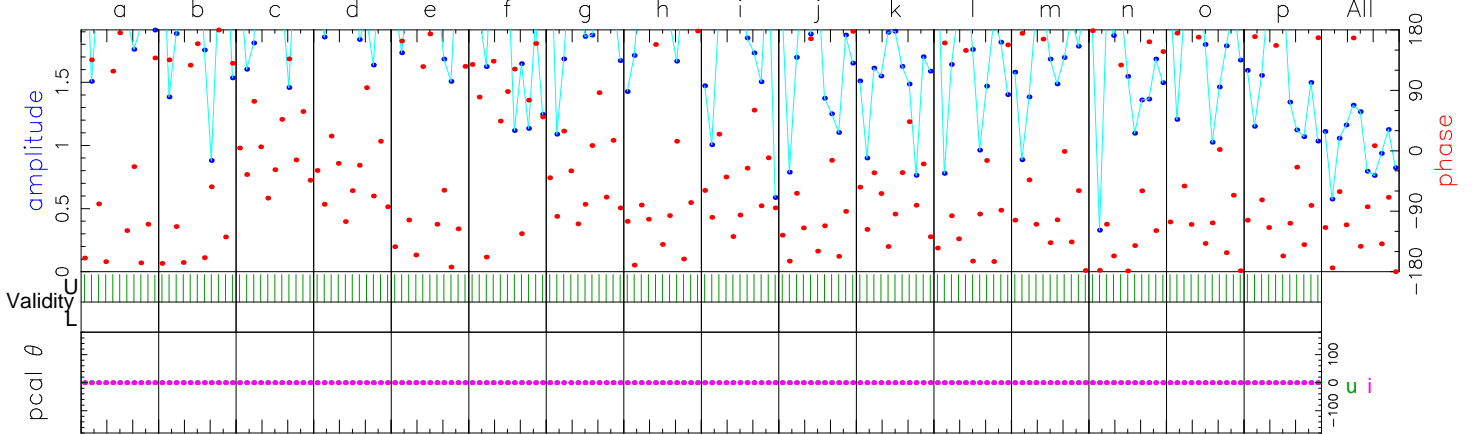


Fringe quality 5

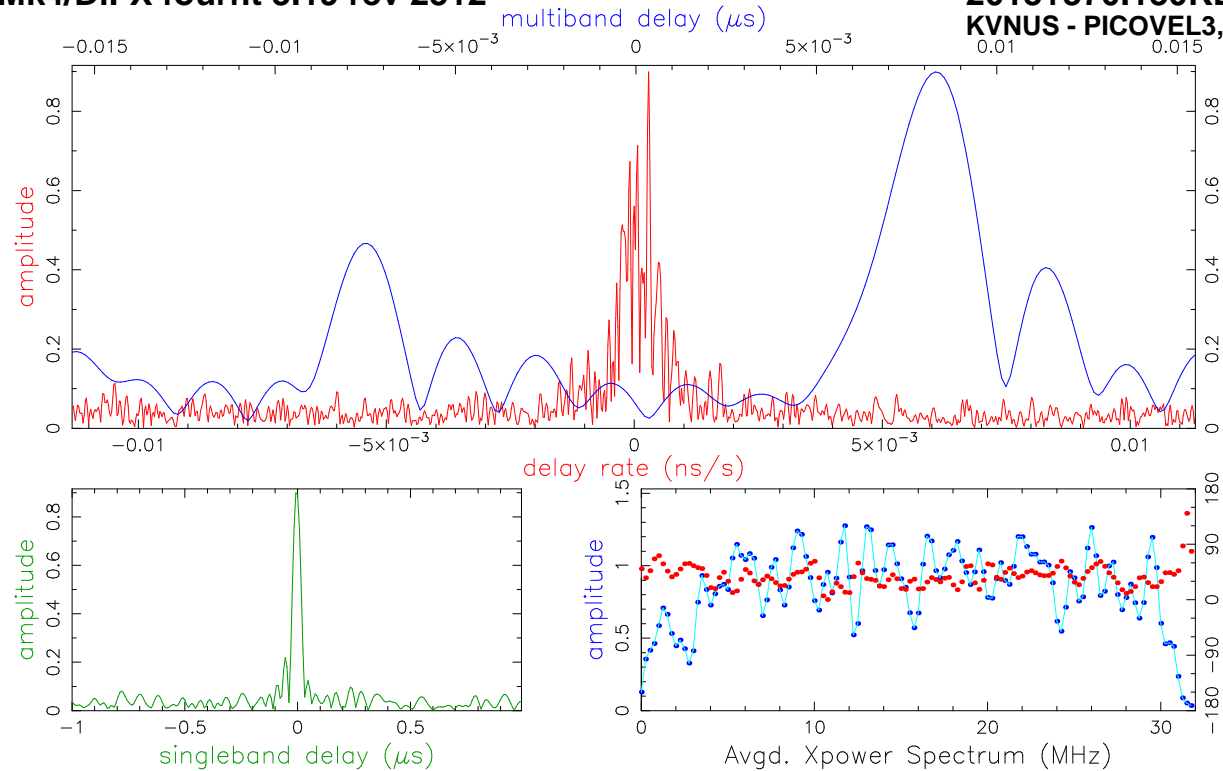
SNR 23.4
Int time 179.944
Amp 0.638
Phase -120.2
PFD 0.0e+00
Delays (us)
SBD 0.004244
MBD -0.008013
Fringe rate (Hz) 0.024861
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043727
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-160.0	-177.2	2.9	-36.1	-156.4	113.8	-39.4	-127.3	-46.6	-128.1	-67.2	-145.7	-120.1	-164.3	-121.1	-128.5	Phase	-120.2
	1.3	1.6	1.4	1.5	1.3	1.2	1.2	1.4	1.0	1.2	1.0	1.1	1.0	1.0	1.1	1.0	Ampl.	1.2
	130.2	129.6	129.5	129.4	129.1	129.1	129.0	128.9	128.8	129.1	128.9	128.8	128.8	128.9	129.4	129.4	Sbd box	129.5
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	6.00732730600E+02			Apriori delay (usec)			6.00740743642E+02			Resid mbdelay (usec)			-8.01304E-03			+/- 4.6E-05		
Sband delay (usec)	6.00744987642E+02			Apriori clock (usec)			9.0516987E+00			Resid sbdelay (usec)			4.24400E-03			+/- 7.4E-04		
Phase delay (usec)	6.00740739767E+02			Apriori clockrate (us/s)			7.5299998E-07			Resid phdelay (usec)			-3.87505E-06			+/- 1.6E-07		
Delay rate (us/s)	-1.82417125233E+00			Apriori rate (us/s)			-1.82417154094E+00			Resid rate (us/s)			2.88608E-07			+/- 1.5E-09		
Total phase (deg)	116.5			Apriori accel (us/s/s)			-4.62426437311E-06			Resid phase (deg)			-120.2			+/- 4.9		
ph/seg (deg)	RMS	Theor.	Amplitude		0.638 +/- 0.027		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5								
amp/seg (%)	57.5	8.1	Search (1024X64)		0.612		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000					
ph/frq (deg)	65.8	14.2	Interp.		0.000		Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
amp/frq (%)	66.4	9.8	Inc. seg. avg.		0.985		Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011					
	93.3	17.1	Inc. frq. avg.		1.187		Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00			

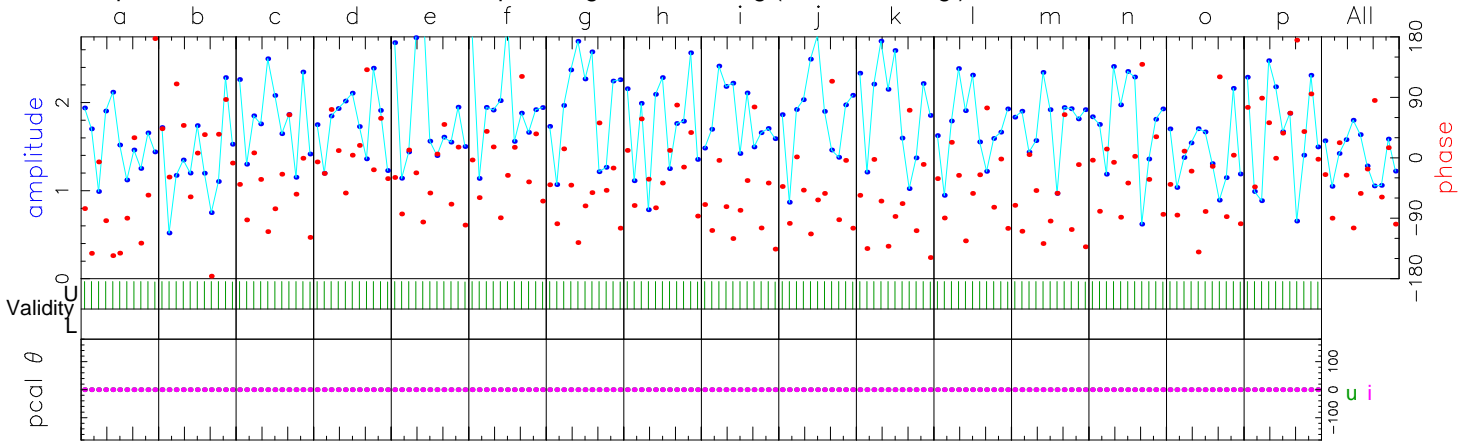


Fringe quality 4

SNR 33.6
Int time 179.944
Amp 0.916
Phase -36.8
PFD 0.0e+00
Delays (us)
SBD -0.004208
MBD 0.008322
Fringe rate (Hz) 0.024912
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

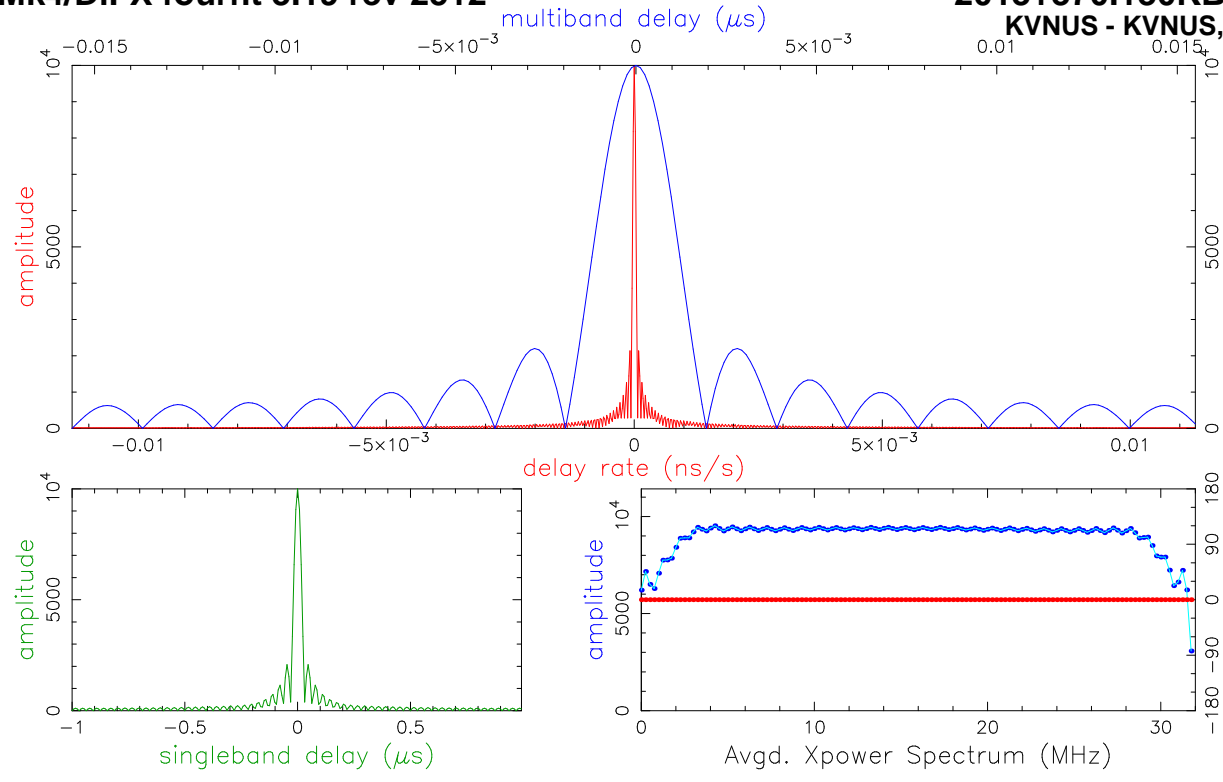
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043728
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-106.5	37.1	-43.9	7.7	-36.4	-9.3	-54.6	-4.8	-70.9	-60.6	-73.9	-43.7	-78.3	-27.5	-48.4	49.3		Phase -36.8
	0.9	0.8	1.2	1.3	1.3	1.3	1.4	1.1	1.2	1.3	1.2	1.1	1.0	1.3	0.8	1.2		Ampl. 1.1
	130.1	129.6	128.7	128.8	128.3	128.6	128.4	128.2	128.3	128.1	128.7	128.8	129.0	129.0	129.7	128.6		Sbd box 128.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
u:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
u:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)	6.00749065787E+02			Apriori delay (usec)			6.00740743642E+02			Resid mbdelay (usec)			8.32215E-03			+/-	3.2E-05	
Sband delay (usec)	6.00736535642E+02			Apriori clock (usec)			9.0516987E+00			Resid sbdelay (usec)			-4.20800E-03			+/-	5.1E-04	
Phase delay (usec)	6.00740742455E+02			Apriori clockrate (us/s)			7.5299998E-07			Resid phdelay (usec)			-1.18689E-06			+/-	1.1E-07	
Delay rate (us/s)	-1.82417125174E+00			Apriori rate (us/s)			-1.82417154094E+00			Resid rate (us/s)			2.89202E-07			+/-	1.1E-09	
Total phase (deg)	199.8			Apriori accel (us/s/s)			-4.62426437311E-06			Resid phase (deg)			-36.8			+/-	3.4	

ph/seg (deg) 55.4 5.7 Search (1024X64) 0.916 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.6 9.9 Interp. 0.897 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.9 6.8 Inc. seg. avg. 1.381 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.7 11.9 Inc. frq. avg. 1.138 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 i: az 67.5 el 36.7 pa -68.0 u,v (fr/asec) 13120.502 -506.328 ion window (TEC) 0.00 0.00 simultaneous interpolator

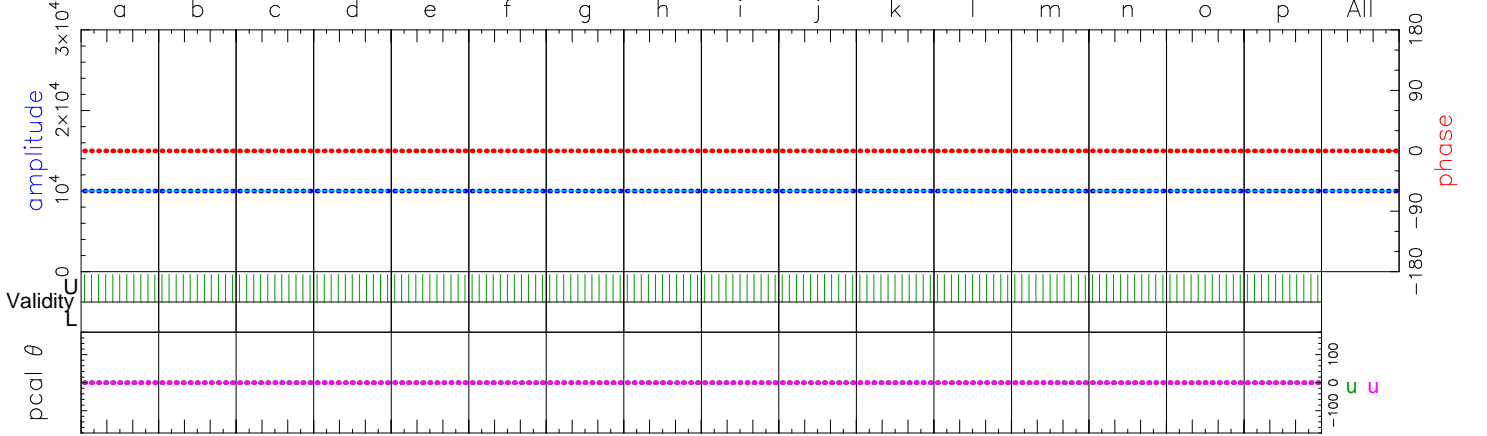


Fringe quality 9

SNR 366843.8
Int time 179.956
Amp 10000.001
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

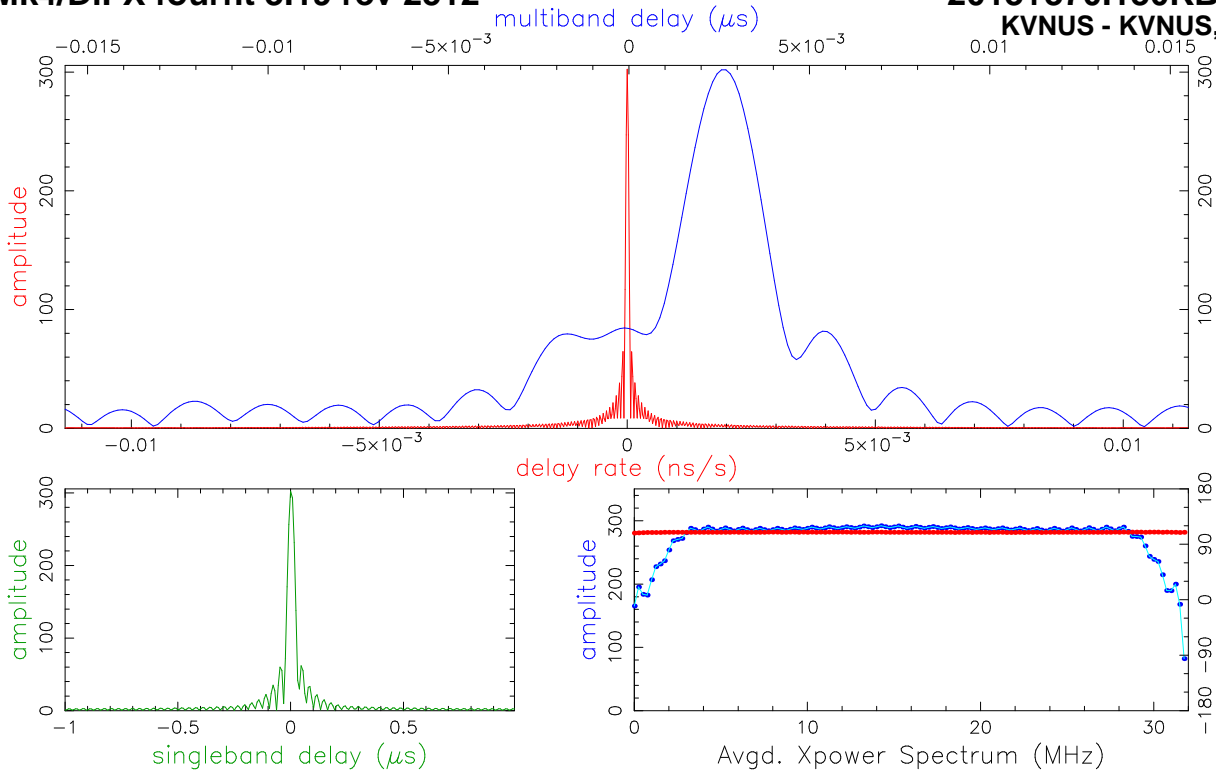
Exp. c192c
Yr:day 16383
Start 2019:278
Stop 2019:278
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043729
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	Phase	-0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
u:u 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
u:u 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
u W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
u W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00		+/- 2.9E-09						
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00		+/- 4.7E-08						
Phase delay (usec)	-2.20670597461E-20		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.20671E-20		+/- 1.0E-11						
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00		+/- 9.7E-14						
Total phase (deg)	-0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		-0.0		+/- 0.0						

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X64) 10000.001 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) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uu..130KBL Output file: /Exps/c192c/v2/1234/No0011/uu.W.100.130KBL simultaneous interpolator

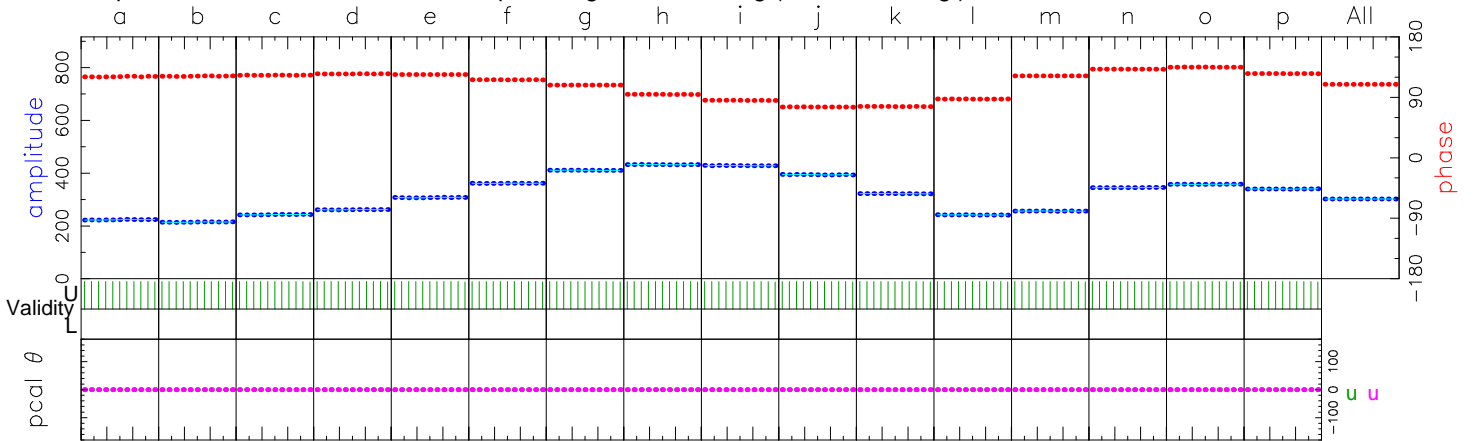


Fringe quality 7

SNR 11210.7
Int time 179.956
Amp 305.598
Phase 109.2
PFD 0.0e+00
Delays (us)
SBD 0.002622
MBD 0.002629
Fringe rate (Hz) 0.000003
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043731
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

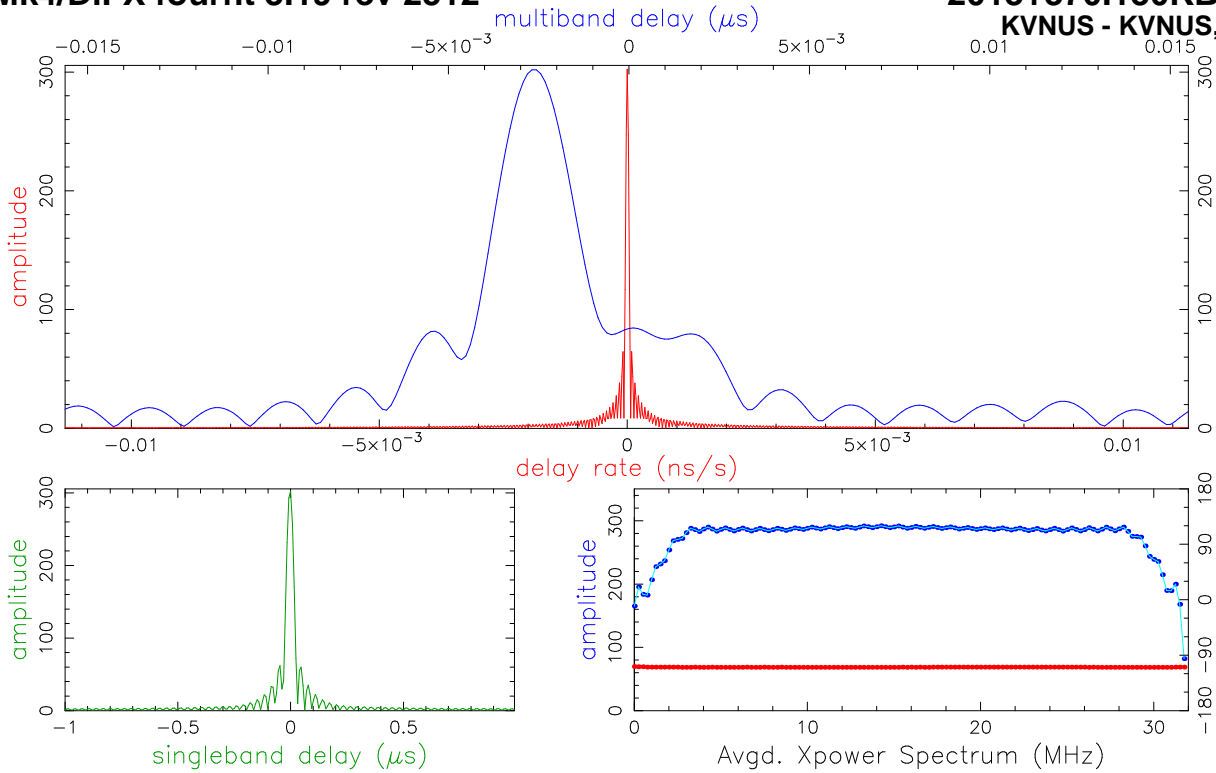


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
120.8	121.4	122.9	124.8	123.9	116.0	108.1	94.3	85.5	75.6	76.3	87.4	121.9	131.8	134.8	125.2	Phase	109.2
223.7	214.7	242.8	261.8	307.6	361.6	411.1	432.5	428.7	394.2	322.4	241.9	256.5	345.4	358.0	340.2	Ampl.	321.4
129.3	129.3	129.3	129.4	129.2	129.3	129.2	129.2	129.2	129.3	129.4	129.6	129.6	129.4	129.3	129.2	Sbd box	129.3
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
u:u 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
u:u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
u W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
u W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Group delay (usec)(sbd) 2.62900000000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.62900E-03 +/- 9.6E-08																	
Sband delay (usec) 2.62200000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 2.62200E-03 +/- 1.5E-06																	
Phase delay (usec) 3.52262508589E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.52263E-06 +/- 3.3E-10																	
Delay rate (us/s) 3.11765352617E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 3.11765E-11 +/- 3.2E-12																	
Total phase (deg) 109.2 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 109.2 +/- 0.0																	

ph/seg (deg) 0.0 0.0 Search (1024X64) 298.414 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.1 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.8 0.0 Inc. seg. avg. 302.352 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 24.1 0.0 Inc. frq. avg. 321.443 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uu..130KBL Output file: /Exps/c192c/v2/1234/No0011/uu.W.114.130KBL

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uu
KVNUS - KVNUS, fgroup W, pol RL

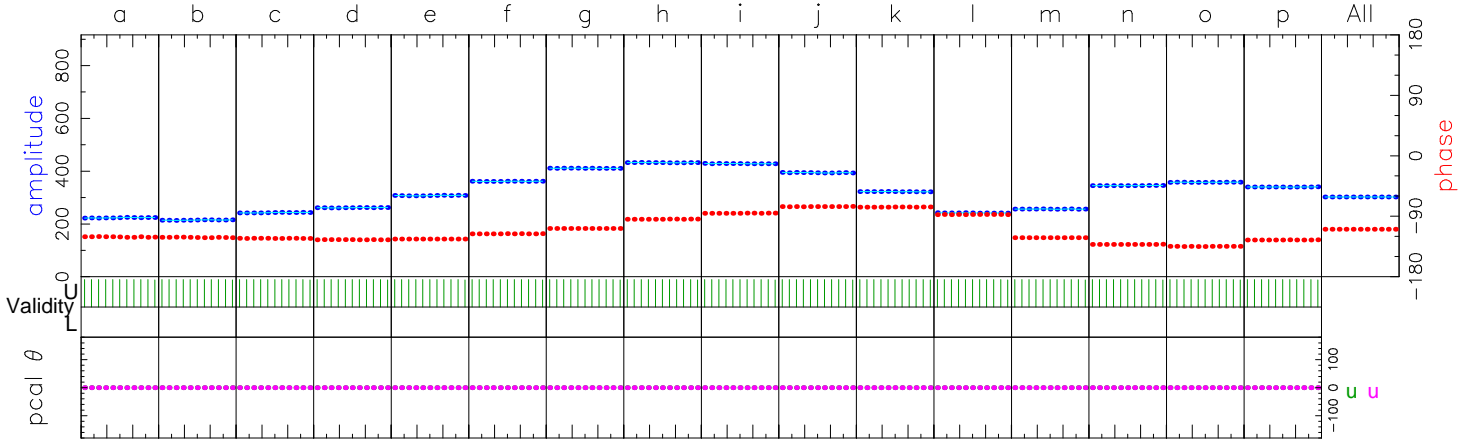


Fringe quality 7

SNR 11210.7
Int time 179.956
Amp 305.598
Phase -109.2
PFD 0.0e+00
Delays (us)
SBD -0.002622
MBD -0.002629
Fringe rate (Hz)
-0.000003
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

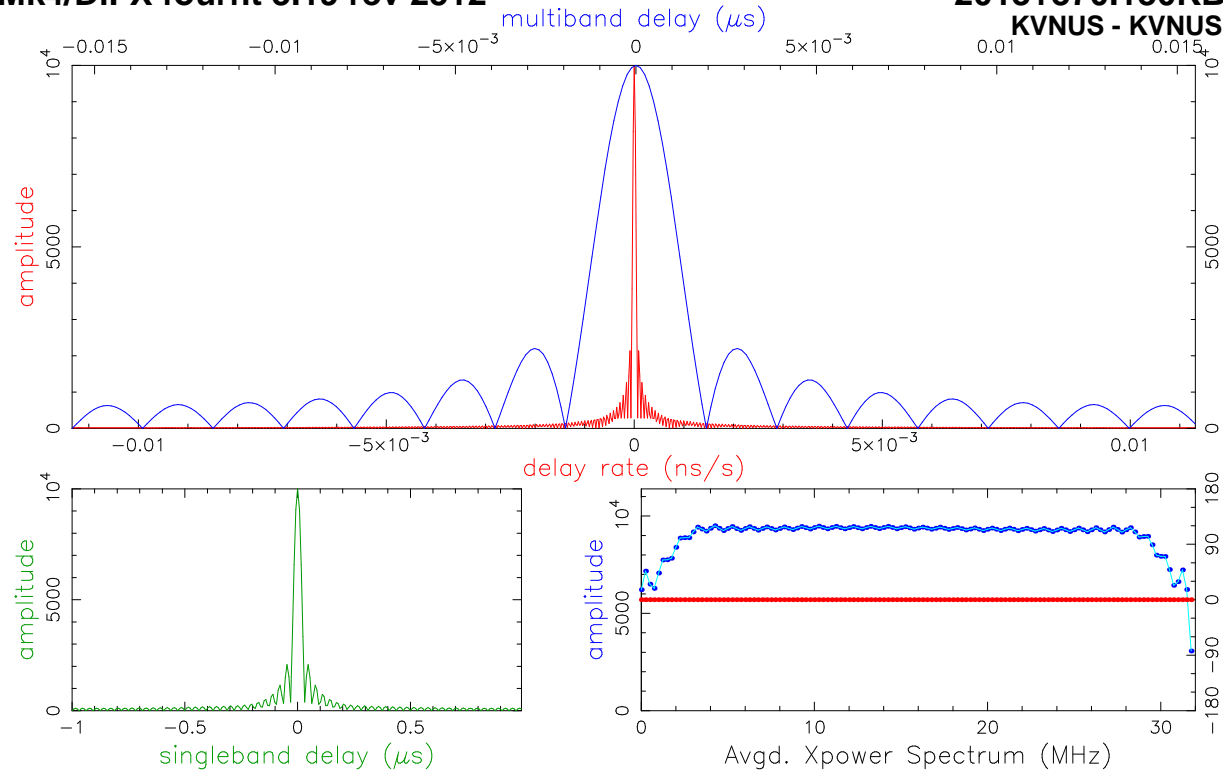
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043734
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-120.8	-121.4	-122.9	-124.8	-123.9	-116.0	-108.1	-94.3	-85.5	-75.6	-76.3	-87.4	-121.9	-131.8	-134.8	-125.2	Phase	-109.2
	223.7	214.7	242.8	261.8	307.6	361.6	411.1	432.5	428.7	394.2	322.4	241.9	256.5	345.4	358.0	340.2	Ampl.	321.4
	128.7	128.7	128.7	128.6	128.8	128.7	128.8	128.8	128.8	128.7	128.6	128.4	128.4	128.6	128.7	128.8	Sbd box	128.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			-2.62900000000E-03					Apriori delay (usec)	0.00000000000E+00				Resid mbdelay (usec)	-2.62900E-03			+/-	9.6E-08
Sband delay (usec)			-2.62200000000E-03					Apriori clock (usec)	0.0000000E+00				Resid sbdelay (usec)	-2.62200E-03			+/-	1.5E-06
Phase delay (usec)			-3.52262508590E-06					Apriori clockrate (us/s)	0.0000000E+00				Resid phdelay (usec)	-3.52263E-06			+/-	3.3E-10
Delay rate (us/s)			-3.11765352617E-11					Apriori rate (us/s)	0.00000000000E+00				Resid rate (us/s)	-3.11765E-11			+/-	3.2E-12
Total phase (deg)								Apriori accel (us/s/s)	0.00000000000E+00				Resid phase (deg)	-109.2			+/-	0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 305.598 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.1 0.0 Search (1024X64) 298.414 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 24.1 0.0 Inc. seg. avg. 302.352 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 0.000 0.000 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uu..130KBL Output file: /Exps/c192c/v2/1234/No0011/uu.W.137.130KBL simultaneous interpolator

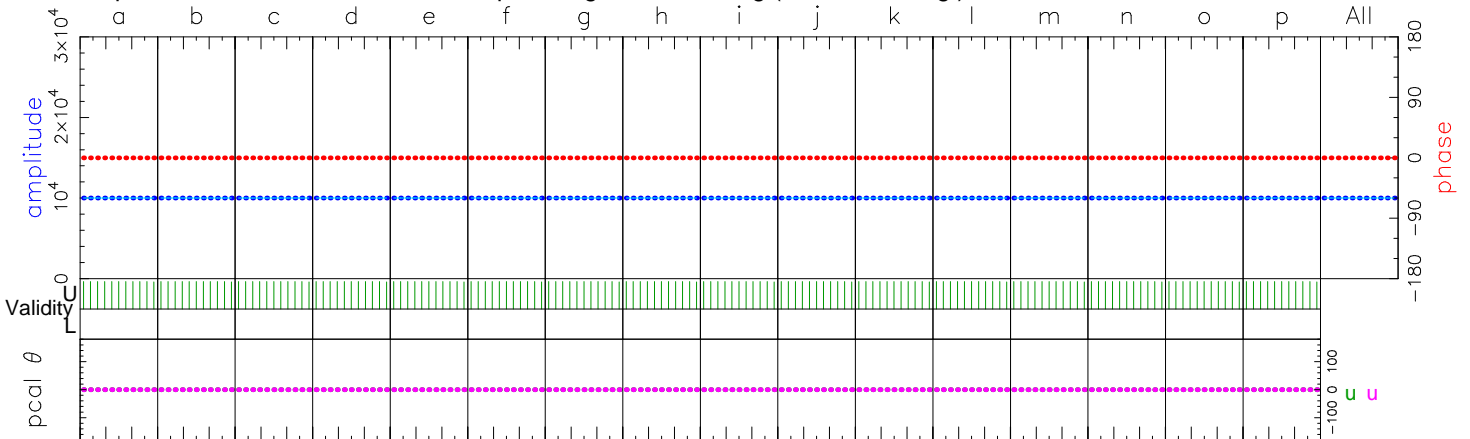


Fringe quality 9

SNR 366843.8
Int time 179.956
Amp 10000.001
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Yr:day 16383
Start 2019:278
Stop 2019:278
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043727
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	-0.0	Phase	-0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
UL 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
u:u 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
u:u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
u W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
u W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

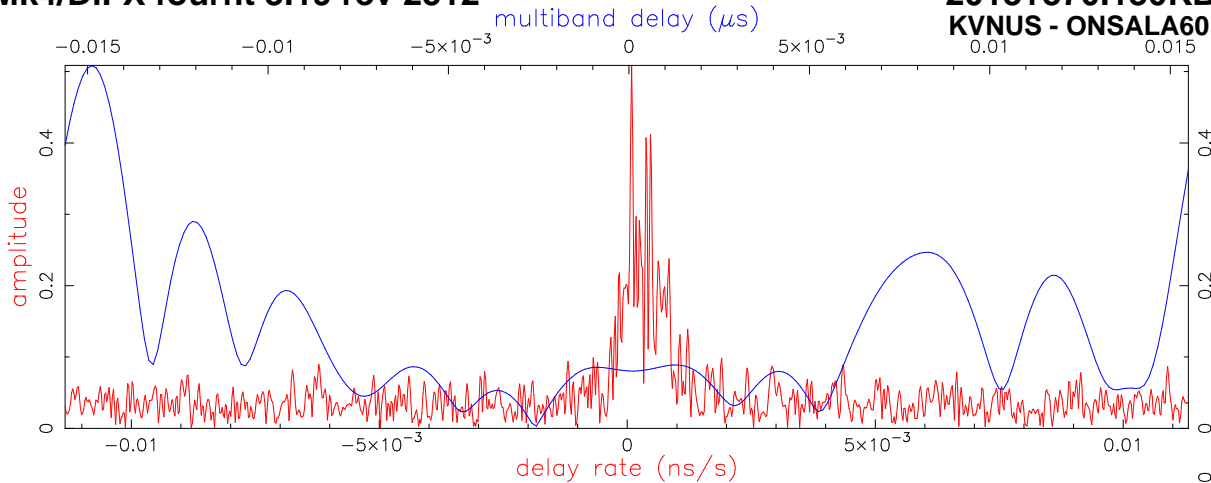
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.7E-08
 Phase delay (usec) -1.19975702498E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.19976E-20 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.001 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 292.1 el 39.3 pa 71.1 u: az 292.1 el 39.3 pa 71.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uu..130KBL Output file: /Exps/c192c/v2/1234/No0011/uu.W.82.130KBL

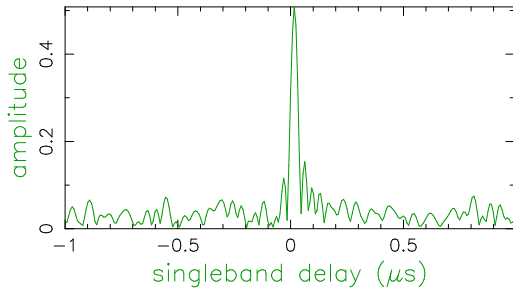
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uX
KVNU - ONSALA60, fgroup W, pol RR

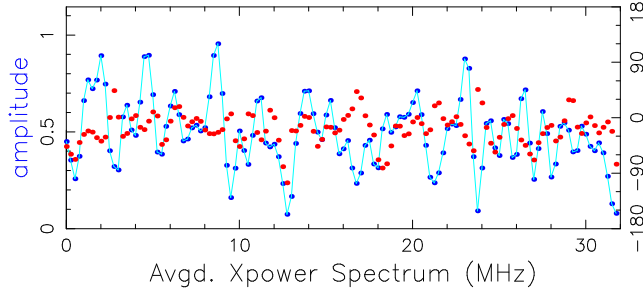


Fringe quality 7

SNR 18.7
Int time 179.778
Amp 0.509
Phase 161.1
PFD 0.0e+00
Delays (us)
SBD 0.016340
MBD -0.014874
Fringe rate (Hz)
0.007688
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

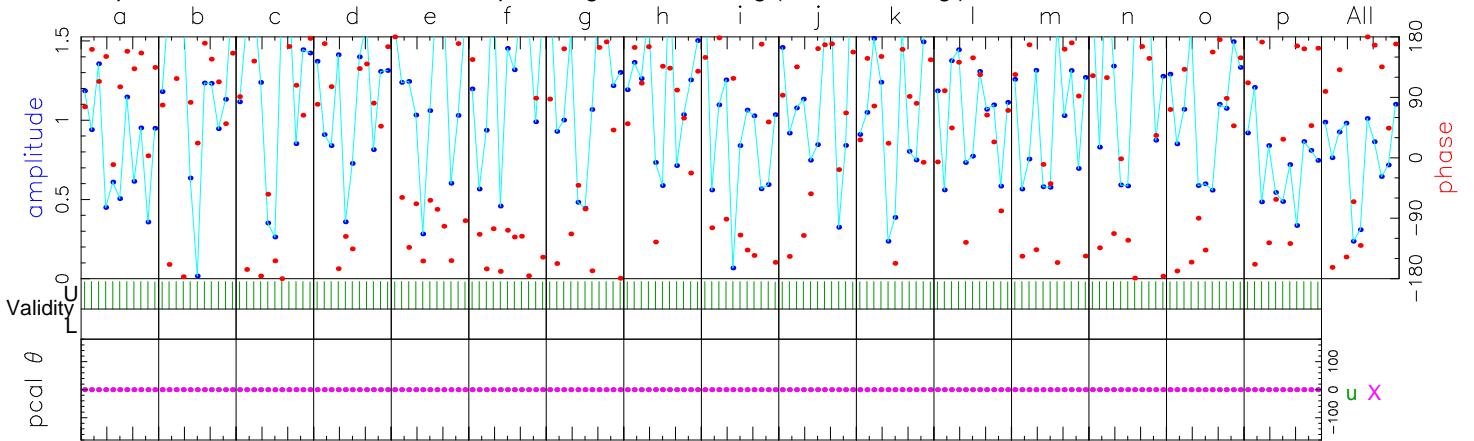


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043729
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
U/L	125.4	140.6	156.3	135.3	-106.8	-142.0	172.1	123.5	-156.6	160.4	113.5	78.1	-174.7	161.7	144.8	177.9	Phase	161.1				
u	0.6	0.9	0.9	0.7	0.9	0.9	0.6	0.7	0.6	0.7	0.6	0.5	0.6	0.8	0.5	0.3	Ampl.	0.7				
X	131.4	131.2	130.9	130.7	130.7	130.7	130.9	130.5	130.3	131.1	130.4	130.3	131.1	131.4	130.4	132.8	Sbd box	131.1				
u/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.99231383055E+03														Apriori delay (usec)	-2.99233020659E+03	Resid mbdelay (usec)	-1.48740E-02	+/-	5.8E-05
Sband delay (usec)			-2.99231386659E+03														Apriori clock (usec)	-2.3883551E+01	Resid sbdelay (usec)	1.63400E-02	+/-	9.2E-04
Phase delay (usec)			-2.99233020139E+03														Apriori clockrate (us/s)	-1.2800004E-07	Resid phdelay (usec)	5.19588E-06	+/-	2.0E-07
Delay rate (us/s)			-1.43948962157E+00														Apriori rate (us/s)	-1.43948971082E+00	Resid rate (us/s)	8.92542E-08	+/-	1.9E-09
Total phase (deg)																	Apriori accel (us/s/s)	-2.06360344387E-06	Resid phase (deg)	161.1	+/-	6.1

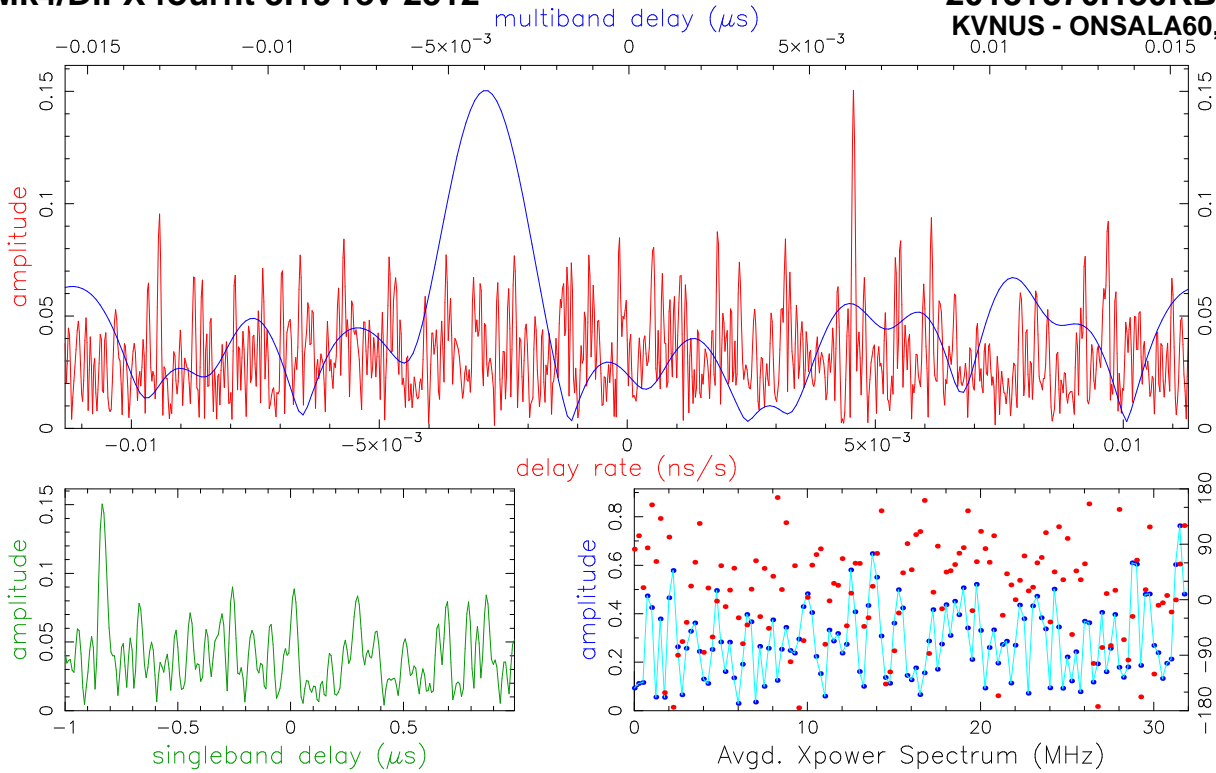
RMS Theor. Amplitude 0.509 +/- 0.027
 ph/seg (deg) 64.8 10.2 Search (1024X64) 0.494
 amp/seg (%) 74.8 17.8 Interp. 0.000
 ph/frq (deg) 44.5 12.3 Inc. seg. avg. 0.764
 amp/frq (%) 44.5 21.4 Inc. frq. avg. 0.654
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 292.1 el 39.3 pa 71.1 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 10351.507 -2027.879 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uX..130KBL Output file: /Exps/c192c/v2/1234/No0011/uX.W.103.130KBL

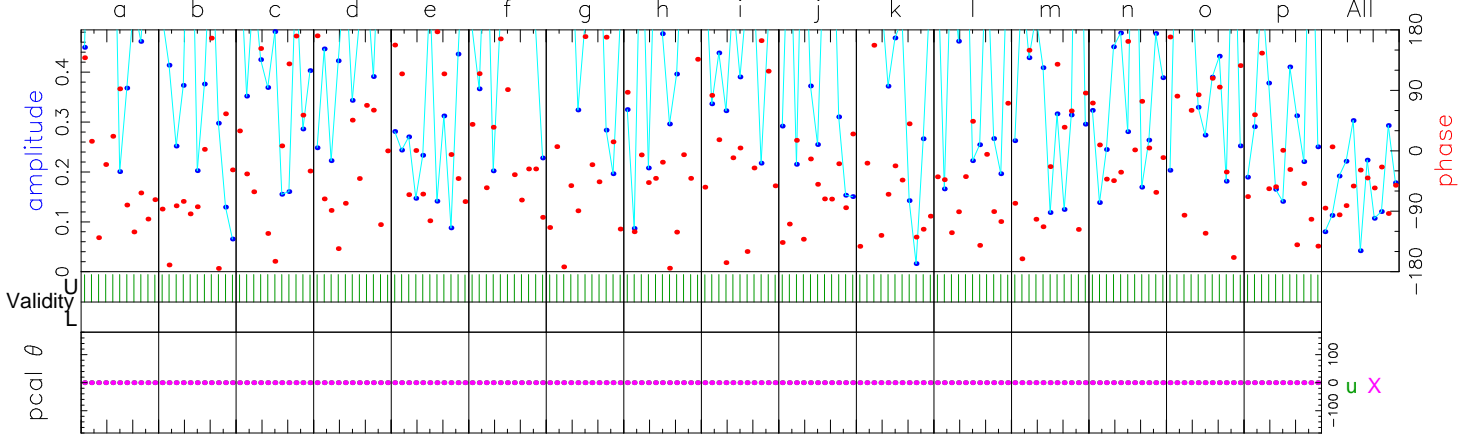
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uX
KVNU5 - ONSALA60, fgroup W, pol LR



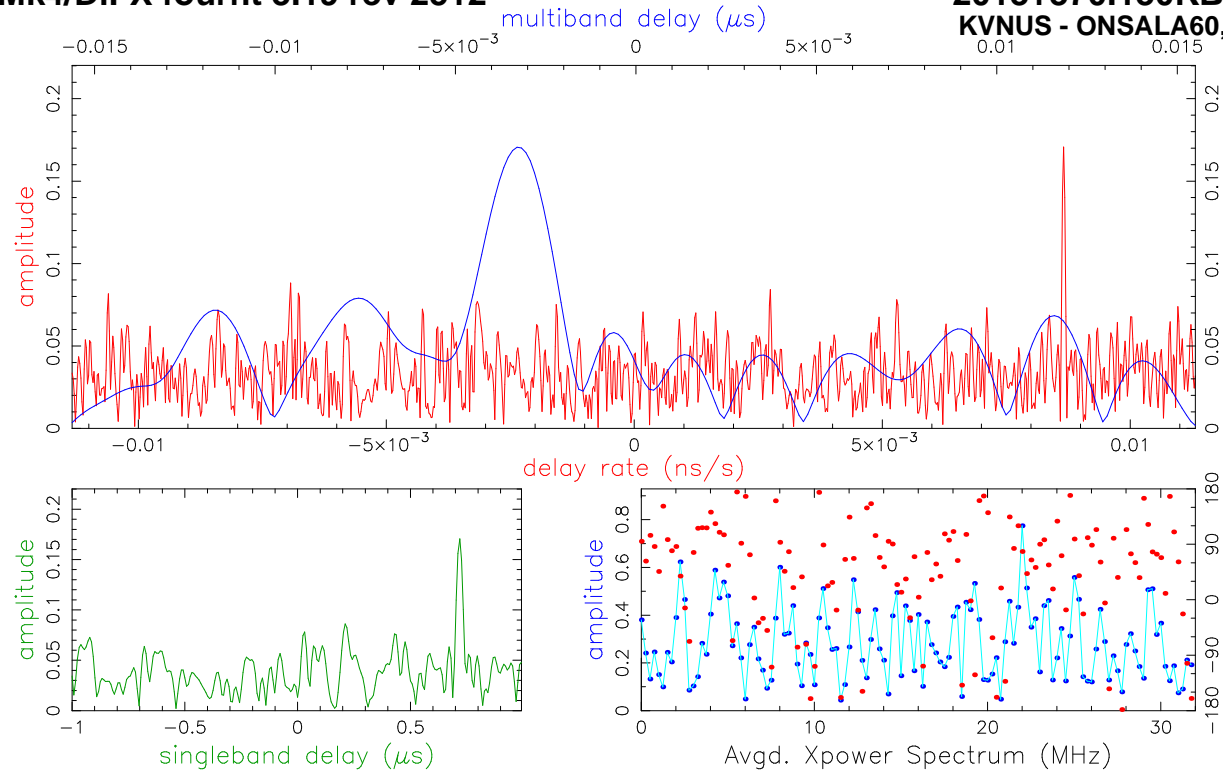
Fringe quality 0
SNR 5.5
Int time 179.778
Amp 0.162
Phase -61.4
PFD 9.7e-01
Delays (us)
SBD -0.834235
MBD -0.003963
Fringe rate (Hz) 0.392576
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043733
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-52.0	-109.5	-79.8	-45.1	-82.1	-24.9	-74.7	-25.1	-27.3	-79.3	-83.5	-48.8	-138.3	-12.5	123.0	-85.9		Phase -61.4	
	0.3	0.2	0.0	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2		Ampl. 0.2	
	194.0	25.4	58.9	234.6	71.1	34.7	24.1	119.0	30.5	23.7	4.9	156.4	221.0	91.7	58.6	152.0		Sbd box 22.2	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																			Tracks
Group delay (usec)(sbd)			-2.99317791949E+03																Apriori delay (usec) -2.99233020659E+03
Sband delay (usec)			-2.99316444159E+03																Apriori clock (usec) -2.3883551E+01
Phase delay (usec)			-2.99233020857E+03																Apriori clockrate (us/s) -1.2800004E-07
Delay rate (us/s)			-1.43948515340E+00																Apriori rate (us/s) -1.43948971082E+00
Total phase (deg)					-59.8														Apriori accel (us/s/s) -2.06360344387E-06
																			Resid mbdelay (usec) -3.96290E-03
																			Resid sbdelay (usec) -8.34235E-01
																			Resid phdelay (usec) -1.98079E-06
																			Resid rate (us/s) 4.55742E-06
																			Resid phase (deg) -61.4
																			+/- 1.9E-04
																			+/- 3.1E-03
																			+/- 6.7E-07
																			+/- 6.4E-09
																			+/- 20.7
ph/seg (deg)	RMS	Theor.																	Pcal mode: MANUAL, MANUAL
amp/seg (%)	31.3	34.3																	PC period (AP's) 5, 5
ph/frq (deg)	58.6	41.4																	Pcal rate: 0.000E+00, 0.000E+00 (us/s)
amp/frq (%)	55.1	72.2																	Sb window (us) -1.000 1.000
																			Bits/sample: 2x2
																			SampCntNorm: enabled
																			mb window (us) -0.016 0.016
																			Sample rate(MSamp/s): 64
																			dr window (ns/s) -0.011 0.011
																			Data rate(Mb/s): 2048
																			nlags: 128
																			t_cohere infinite
																			ion window (TEC) 0.00 0.00
u: az 292.1 el 39.3 pa 71.1																			
X: az 96.8 el 50.1 pa -42.1																			
u,v (fr/asec) 10351.507 -2027.879																			
Control file: cf_1234_gmva																			
Input file: /Exps/c192c/v2/1234/No0011/uX..130KBL																			
Output file: /Exps/c192c/v2/1234/No0011/uX.W.126.130KBL																			

simultaneous interpolator

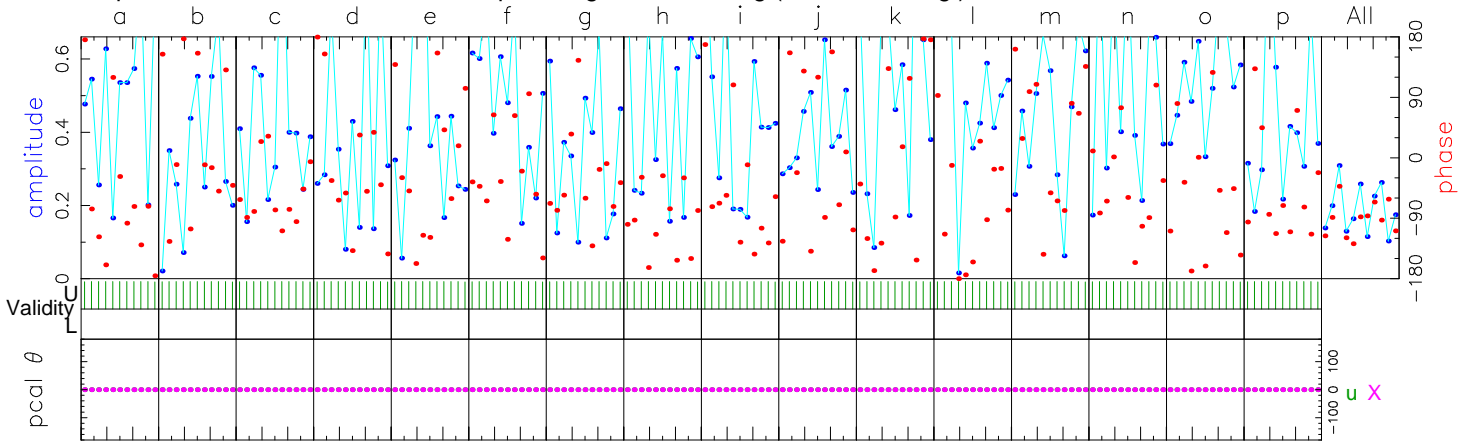


Fringe quality 0

SNR 6.3
Int time 179.778
Amp 0.220
Phase -87.0
PFD 5.0e-02
Delays (us)
SBD 0.717948
MBD -0.003270
Fringe rate (Hz) 0.747817
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043735
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

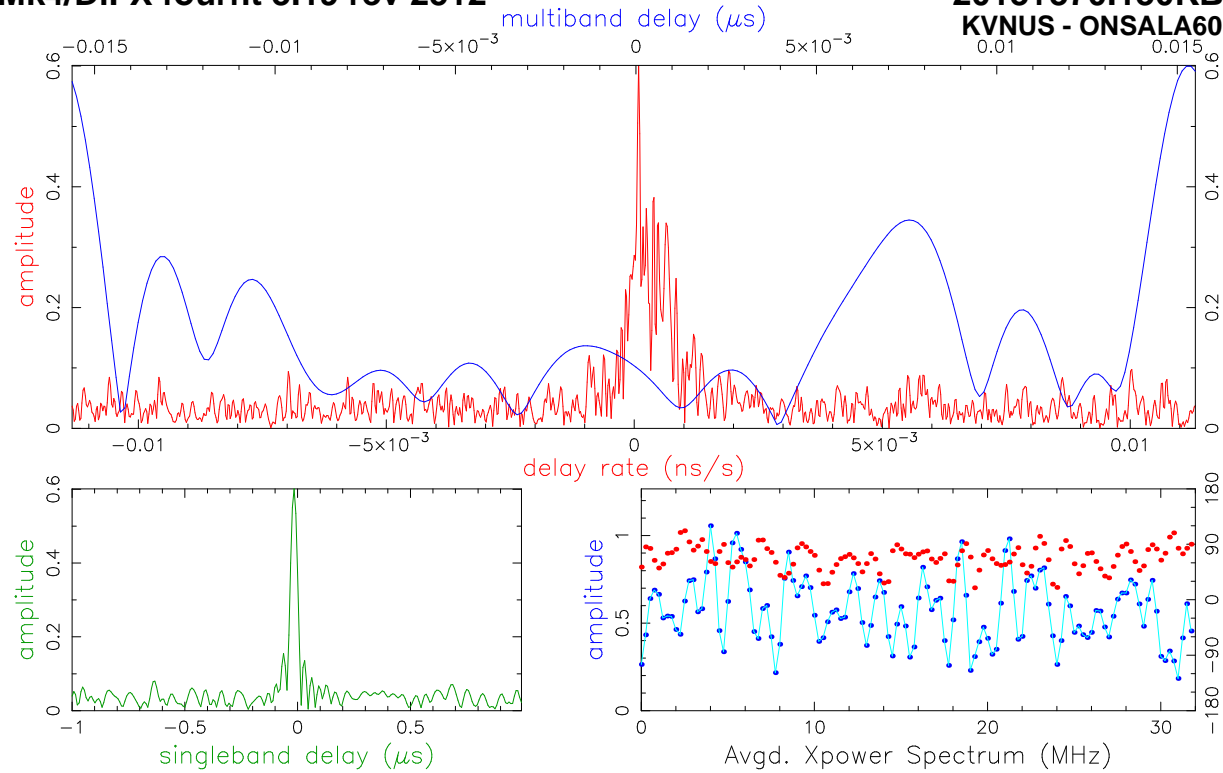


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-120.9	-64.3	-66.7	-61.7	-128.6	-35.8	-49.5	-105.5	-105.9	-123.1	-147.2	-60.6	96.5	-54.2	-85.9	-87.4	Phase	-87.0				
	0.4	0.2	0.4	0.3	0.2	0.3	0.3	0.4	0.3	0.1	0.3	0.2	0.2	0.3	0.2	0.3	Ampl.	0.2				
	223.5	17.8	72.6	10.2	199.2	18.0	132.3	221.6	238.6	110.9	138.0	88.7	67.7	121.1	133.0	185.1	Sbd box	220.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.99161472675E+03														Apriori delay (usec)	-2.99233020659E+03	Resid mbdelay (usec)	-3.27016E-03	+/-	1.7E-04
Sband delay (usec)			-2.99161225859E+03														Apriori clock (usec)	-2.3883551E+01	Resid sbdelay (usec)	7.17948E-01	+/-	2.8E-03
Phase delay (usec)			-2.99233020939E+03														Apriori clockrate (us/s)	-1.2800004E-07	Resid phdelay (usec)	-2.80422E-06	+/-	5.9E-07
Delay rate (us/s)			-1.43948102941E+00														Apriori rate (us/s)	-1.43948971082E+00	Resid rate (us/s)	8.68142E-06	+/-	5.7E-09
Total phase (deg)																	Apriori accel (us/s/s)	-2.06360344387E-06	Resid phase (deg)	-87.0	+/-	18.3

	RMS	Theor.	Amplitude	0.220 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	25.5	30.3	Search (1024X64)	0.168	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	39.4	53.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	58.0	36.6	Inc. seg. avg.	0.214	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	47.5	63.9	Inc. frq. avg.	0.234	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

u: az 292.1 el 39.3 pa 71.1 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 10351.507 -2027.879 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uX..130KBL Output file: /Exps/c192c/v2/1234/No0011/uX.W.145.130KBL

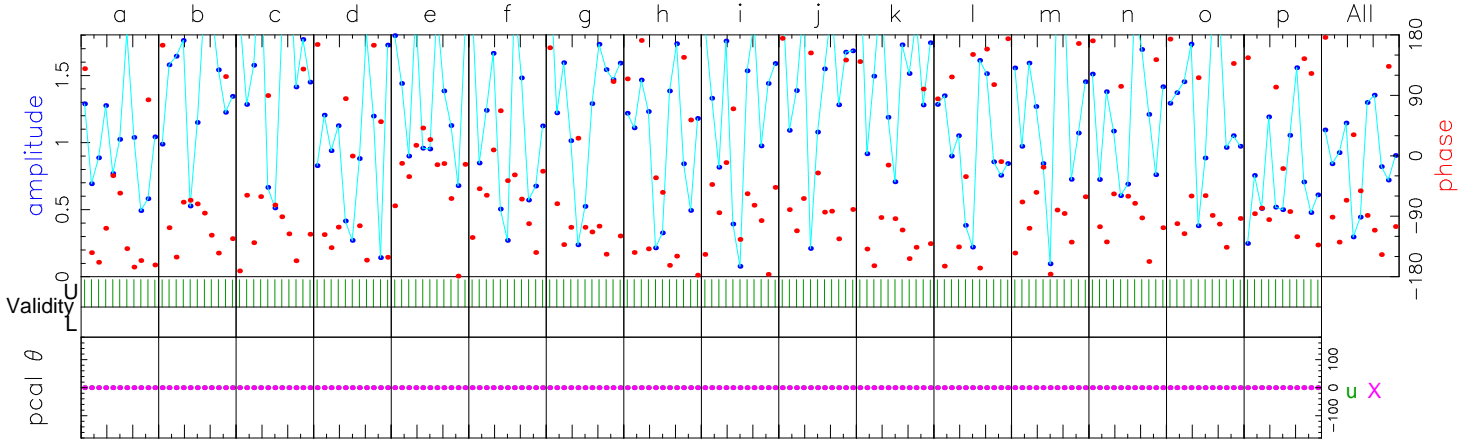


Fringe quality 5

SNR 22.0
Int time 179.778
Amp 0.601
Phase -112.8
PFD 0.0e+00
Delays (us)
SBD -0.016129
MBD 0.015313
Fringe rate (Hz)
0.007562
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043726
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-144.7	-116.4	-118.9	-147.1	-15.4	-52.4	-134.8	-172.5	-74.6	-102.1	-140.1	161.4	-91.3	-113.7	-107.5	-113.0	Phase	-112.8				
	0.6	1.0	1.0	0.7	1.0	0.8	0.9	0.7	0.8	0.9	0.9	0.5	1.0	0.7	0.9	0.4	Ampl.	0.8				
	128.6	126.8	127.1	126.3	126.9	126.3	126.3	126.6	126.4	126.2	126.5	125.8	127.0	127.5	127.2	126.1	Sbd box	126.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-2.99234614361E+03														Apriori delay (usec)	-2.99233020659E+03	Resid mbdelay (usec)	1.53130E-02	+/-	4.9E-05
Sband delay (usec)			-2.99234633509E+03														Apriori clock (usec)	-2.3883551E+01	Resid sbdelay (usec)	-1.61285E-02	+/-	7.8E-04
Phase delay (usec)			-2.99233021022E+03														Apriori clockrate (us/s)	-1.2800004E-07	Resid phdelay (usec)	-3.63591E-06	+/-	1.7E-07
Delay rate (us/s)			-1.43948962303E+00														Apriori rate (us/s)	-1.43948971082E+00	Resid rate (us/s)	8.77931E-08	+/-	1.6E-09
Total phase (deg)																	Apriori accel (us/s/s)	-2.06360344387E-06	Resid phase (deg)	-112.8	+/-	5.2

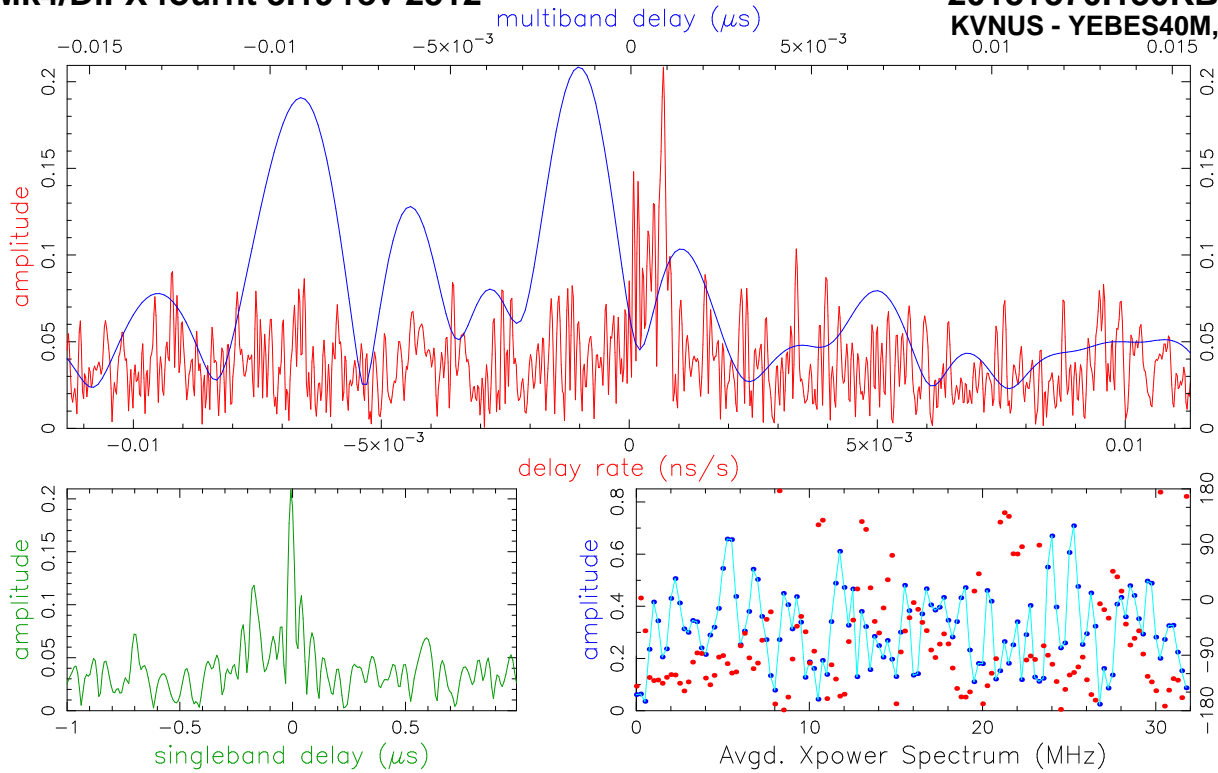
ph/seg (deg) 65.6 8.6 Theor. Amplitude 0.601 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.5 15.0 Search (1024X64) 0.592 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.0 10.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.0 18.1 Inc. seg. avg. 0.885 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.777 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 292.1 el 39.3 pa 71.1 X: az 96.8 el 50.1 pa -42.1 u,v (fr/asec) 10351.507 -2027.879 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uX..130KBL Output file: /Exps/c192c/v2/1234/No0011/uX.W.81.130KBL

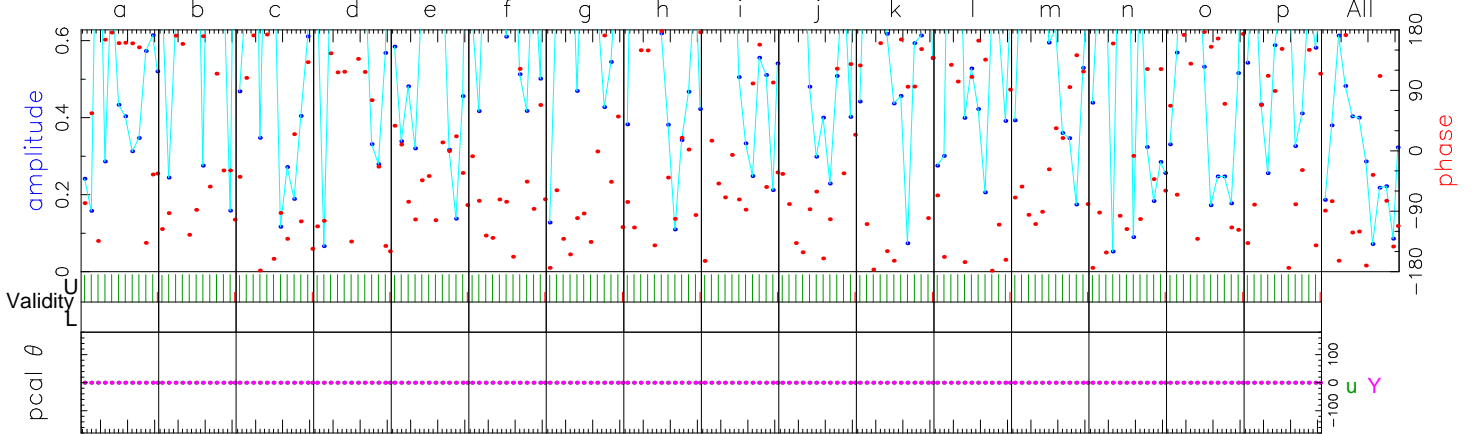
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uY
KVNU - YEBES40M, fgroup W, pol RR



Fringe quality 9
SNR 7.3
Int time 162.348
Amp 0.209
Phase -137.2
PFD 5.0e-05
Delays (us)
SBD -0.006547
MBD -0.001428
Fringe rate (Hz) 0.060077
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150016.89
Stop 150259.71
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043729
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec

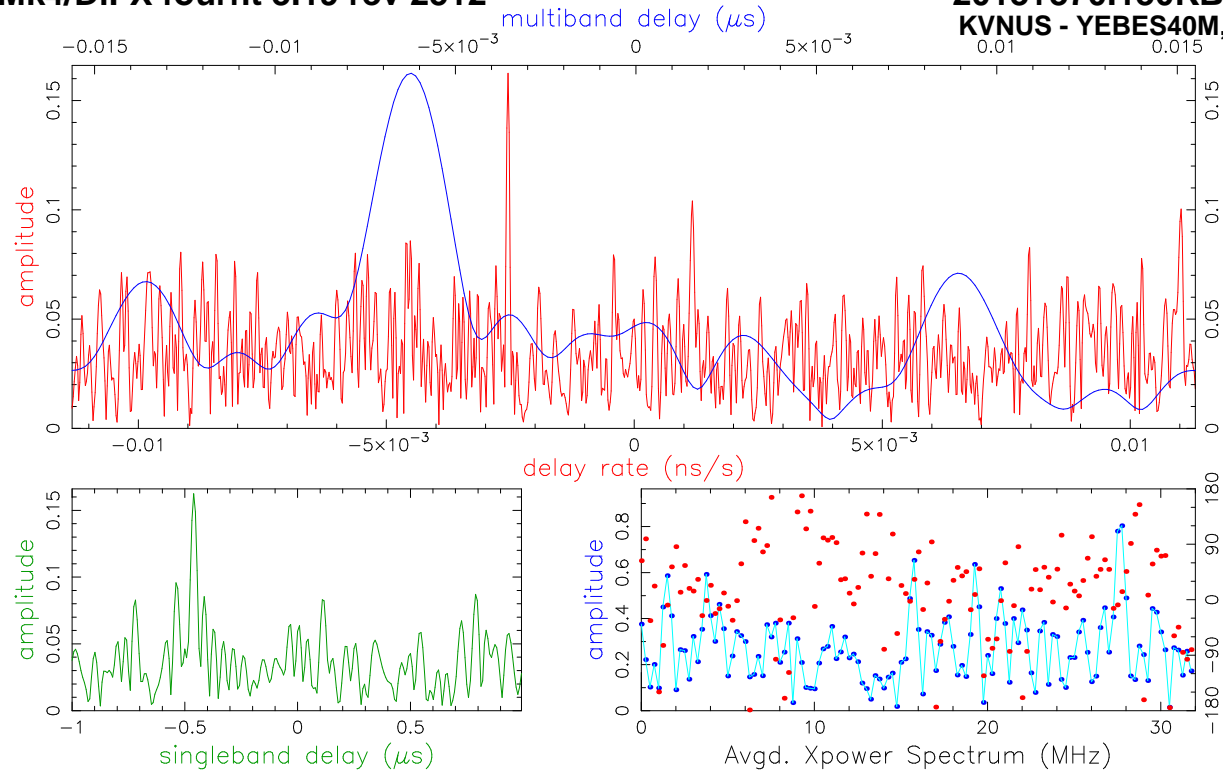


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-158.3	-124.4	179.7	152.1	-35.5	-95.6	-102.0	-143.3	-40.6	-99.0	-175.2	148.9	-72.9	-118.0	-172.7	-180.0	Phase	-137.2	
	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.4	0.3	0.2	Ampl.	0.3	
	170.2	128.2	127.7	127.1	129.5	252.7	122.4	66.4	163.5	203.5	127.8	128.1	173.6	128.7	90.0	179.0	Sbd box	128.2	
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp		
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
Group delay (usec)(sbd)		1.64999718897E+02								1.65001147206E+02							Resid mbdelay (usec)	-1.42831E-03	+/- 1.5E-04
Sband delay (usec)		1.64994600206E+02								-1.1619759E+00							Resid sbdelay (usec)	-6.54700E-03	+/- 2.4E-03
Phase delay (usec)		1.65001142781E+02								1.7999998E-07							Resid phdelay (usec)	-4.42471E-06	+/- 5.1E-07
Delay rate (us/s)		-1.77880130284E+00								-1.77880200027E+00							Resid rate (us/s)	6.97433E-07	+/- 5.4E-09
Total phase (deg)				158.1						-5.56160368838E-06							Resid phase (deg)	-137.2	+/- 15.7

ph/seg (deg) 57.9 27.2 Search (1024X64) 0.203 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 88.4 47.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 57.4 31.5 Inc. seg. avg. 0.275 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 70.5 54.9 Inc. frq. avg. 0.296 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
u: az 292.1 el 39.3 pa 71.1 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 12792.730 -890.905 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uY..130KBL Output file: /Exps/c192c/v2/1234/No0011/uY.W.102.130KBL

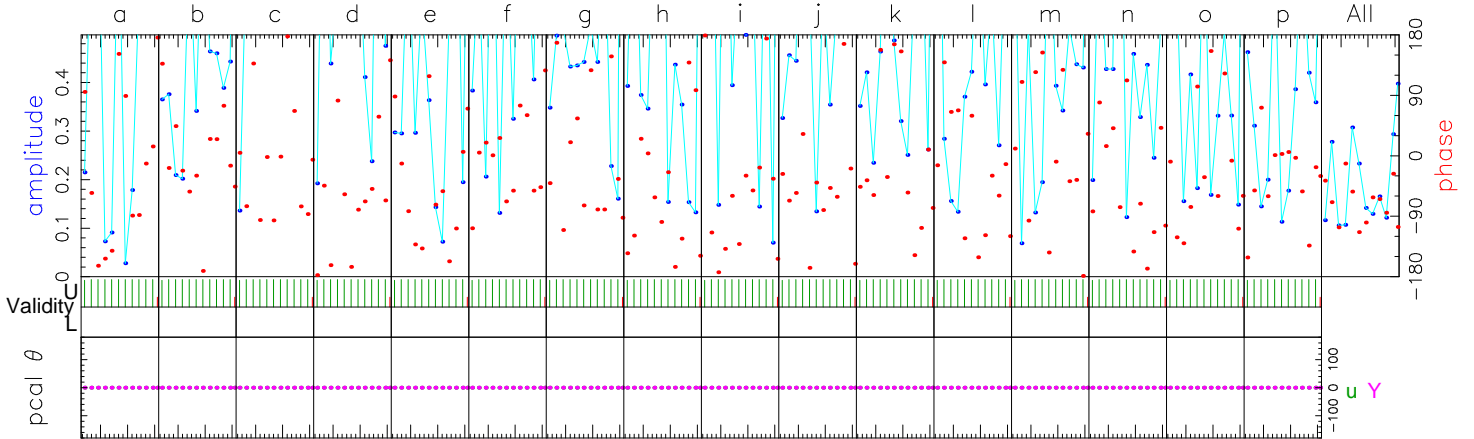
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uY
KVNU5 - YEBES40M, fgroup W, pol LR



Fringe quality 0
SNR 5.7
Int time 162.348
Amp 0.166
Phase -67.7
PFD 8.3e-01
Delays (us)
SBD -0.460102
MBD -0.006252
Fringe rate (Hz)
-0.219545
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150016.89
Stop 150259.71
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043731
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec

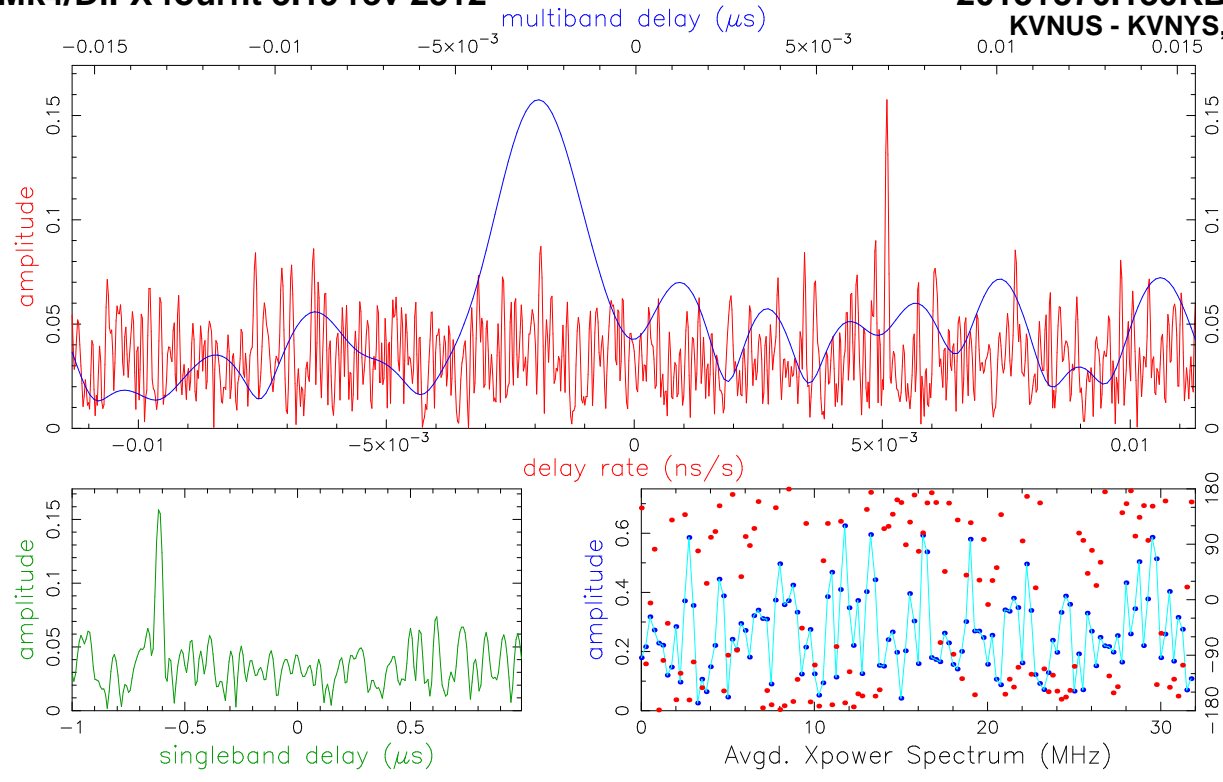


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-93.1	-10.3	-60.1	-55.7	-114.2	-7.9	-84.8	-103.6	-126.7	-56.0	-88.9	-47.9	-57.6	-57.6	-53.6	-38.2		Phase -67.7	
	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.1	0.1	0.2	0.2		Ampl. 0.2	
	143.8	73.7	36.2	172.3	182.5	243.6	168.9	188.9	69.3	187.1	48.2	255.7	36.4	84.1	227.0	117.0		Sbd box 70.1	
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																			Tracks
Group delay (usec)(sbd)		1.64526145551E+02								1.65001147206E+02									Resid mbdelay (usec) -6.25166E-03 +/- 1.9E-04
Sband delay (usec)		1.64541045206E+02								-1.1619759E+00									Resid sbdelay (usec) -4.60102E-01 +/- 3.0E-03
Phase delay (usec)		1.65001145024E+02								1.7999998E-07									Resid phdelay (usec) -2.18200E-06 +/- 6.5E-07
Delay rate (us/s)		-1.77880454898E+00								-1.77880200027E+00									Resid rate (us/s) -2.54870E-06 +/- 6.9E-09
Total phase (deg)				227.6						-5.56160368838E-06									Resid phase (deg) -67.7 +/- 20.2

ph/seg (deg) RMS Theor. Amplitude 0.166 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 31.7 35.0 Search (1024X64) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 54.0 61.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 35.1 40.4 Inc. seg. avg. 0.162 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 54.1 70.6 Inc. frq. avg. 0.165 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 u: az 292.1 el 39.3 pa 71.1 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 12792.730 -890.905 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uY..130KBL Output file: /Exps/c192c/v2/1234/No0011/uY.W.115.130KBL

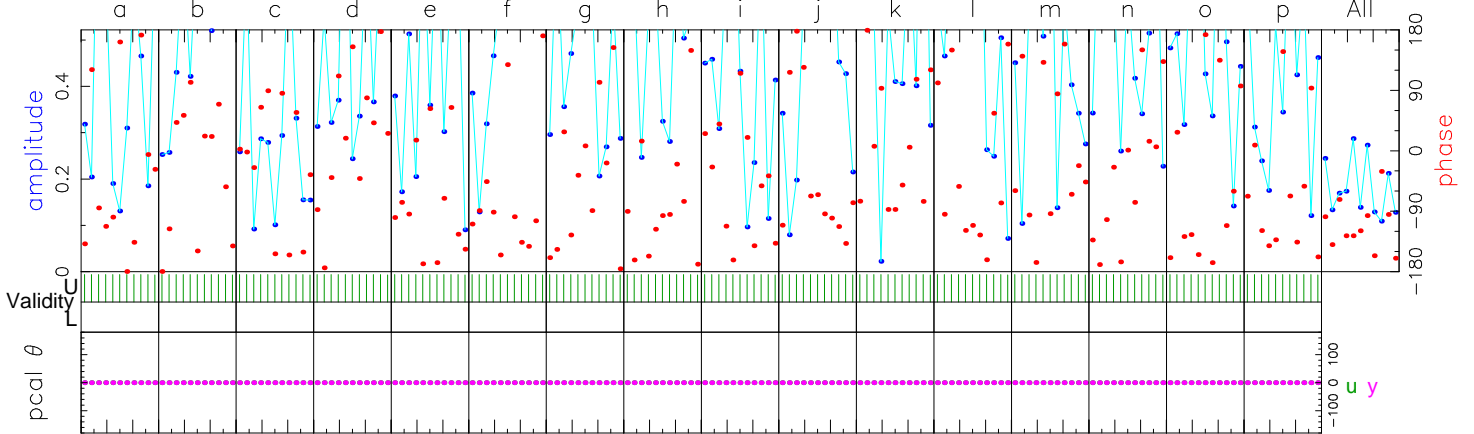
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uy
KVNUS - KVNYS, fgroup W, pol LR



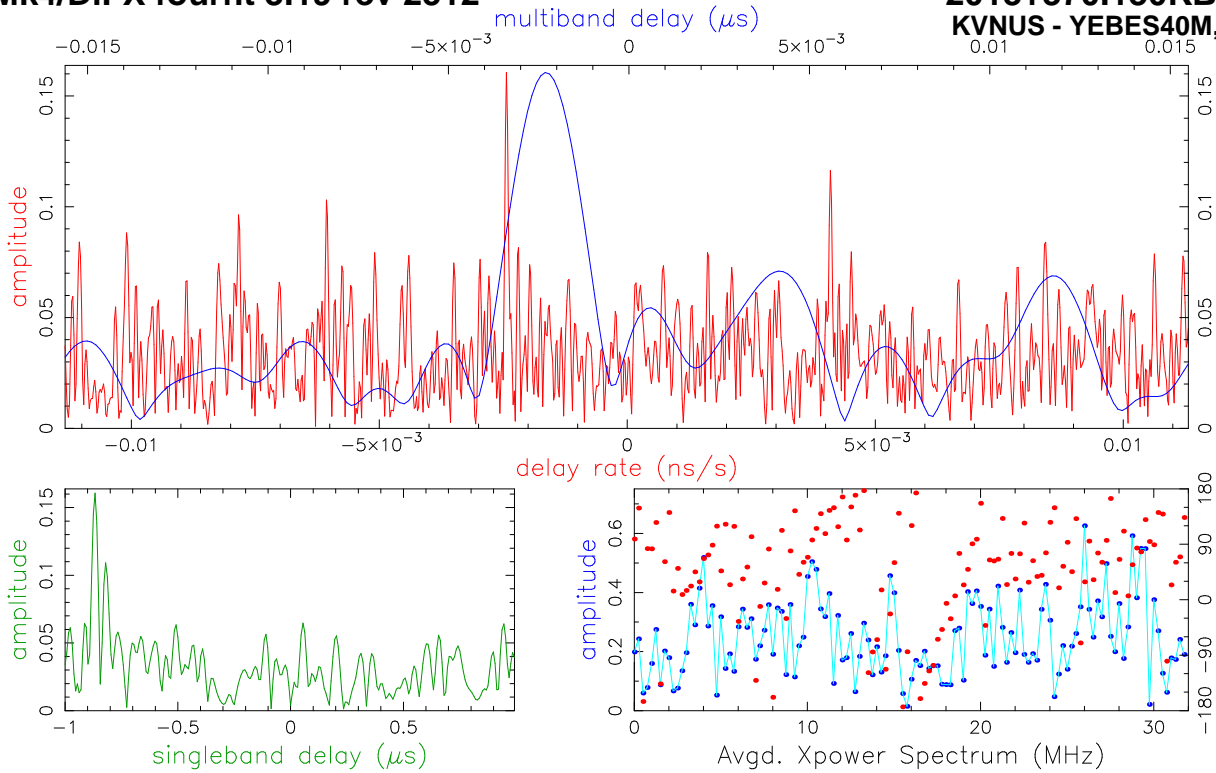
Fringe quality 0
SNR 5.9
Int time 179.956
Amp 0.174
Phase -110.9
PFD 4.4e-01
Delays (us)
SBD -0.614100
MBD -0.002688
Fringe rate (Hz) 0.439832
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043733
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



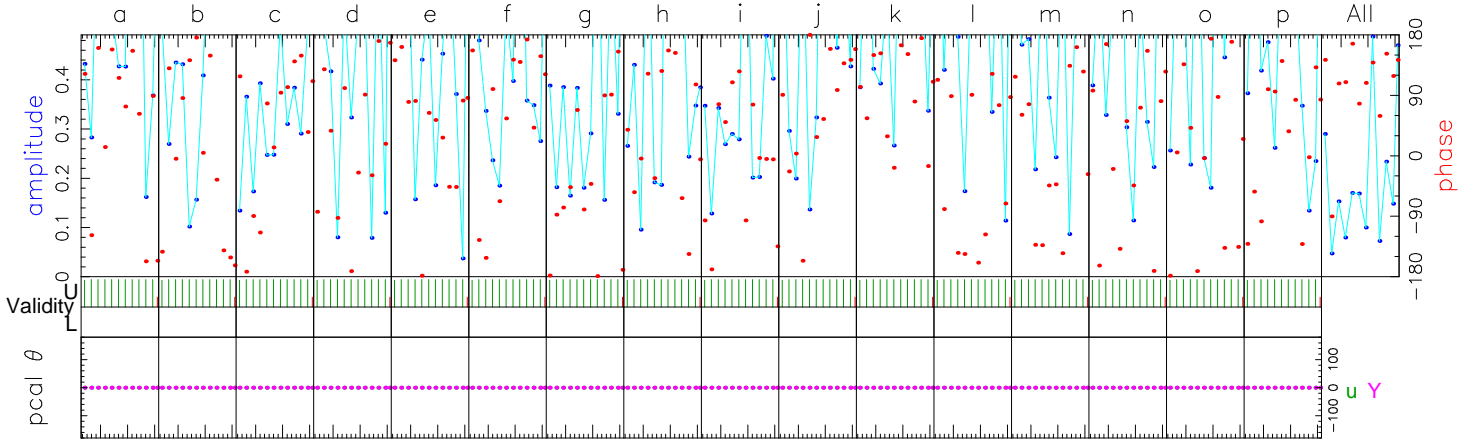
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-114.0	38.4	43.8	55.3	-133.7	-135.4	-110.0	-116.0	-92.5	-95.2	-63.3	-126.4	-119.5	-58.6	-166.5	-98.2	Phase	-110.9				
	0.3	0.1	0.1	0.2	0.2	0.4	0.1	0.3	0.1	0.4	0.3	0.3	0.2	0.2	0.3	0.3	Ampl.	0.2				
	111.4	122.7	207.9	11.1	98.4	50.5	108.1	123.1	141.0	49.0	94.0	2.8	101.3	251.2	238.5	159.2	Sbd box	50.4				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase					
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
Group delay (usec)(sbd)			-7.16837361657E+02														Apriori delay (usec)	-7.16209673657E+02	Resid mbdelay (usec)	-2.68800E-03	+/-	1.8E-04
Sband delay (usec)			-7.16823773657E+02														Apriori clock (usec)	-2.0722914E+01	Resid sbdelay (usec)	-6.14100E-01	+/-	2.9E-03
Phase delay (usec)			-7.16209677232E+02														Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-3.57463E-06	+/-	6.3E-07
Delay rate (us/s)			-4.10140437367E-02														Apriori rate (us/s)	-4.10191497446E-02	Resid rate (us/s)	5.10601E-06	+/-	6.1E-09
Total phase (deg)					-214.8												Apriori accel (us/s/s)	1.76581372054E-06	Resid phase (deg)	-110.9	+/-	19.5

ph/seg (deg) RMS 36.1 Theor. 32.4 Amplitude 0.174 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 40.0 56.6 Search (1024X64) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 77.5 39.1 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 68.2 68.2 Inc. frq. avg. 0.189 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
u: az 292.1 el 39.3 pa 71.1 y: az 289.7 el 41.8 pa 69.5 u,v (fr/asec) 296.071 -95.876 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uy..130KBL Output file: /Exps/c192c/v2/1234/No0011/uy.W.130.130KBL



Fringe quality 0
SNR 5.6
Int time 162.348
Amp 0.164
Phase 131.2
PFD 9.3e-01
Delays (us)
SBD -0.867833
MBD -0.002296
Fringe rate (Hz)
-0.209488
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150016.89
Stop 150259.71
FRT 150130.00
Corr/FF/build
2020:076:014755
2020:086:043735
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec

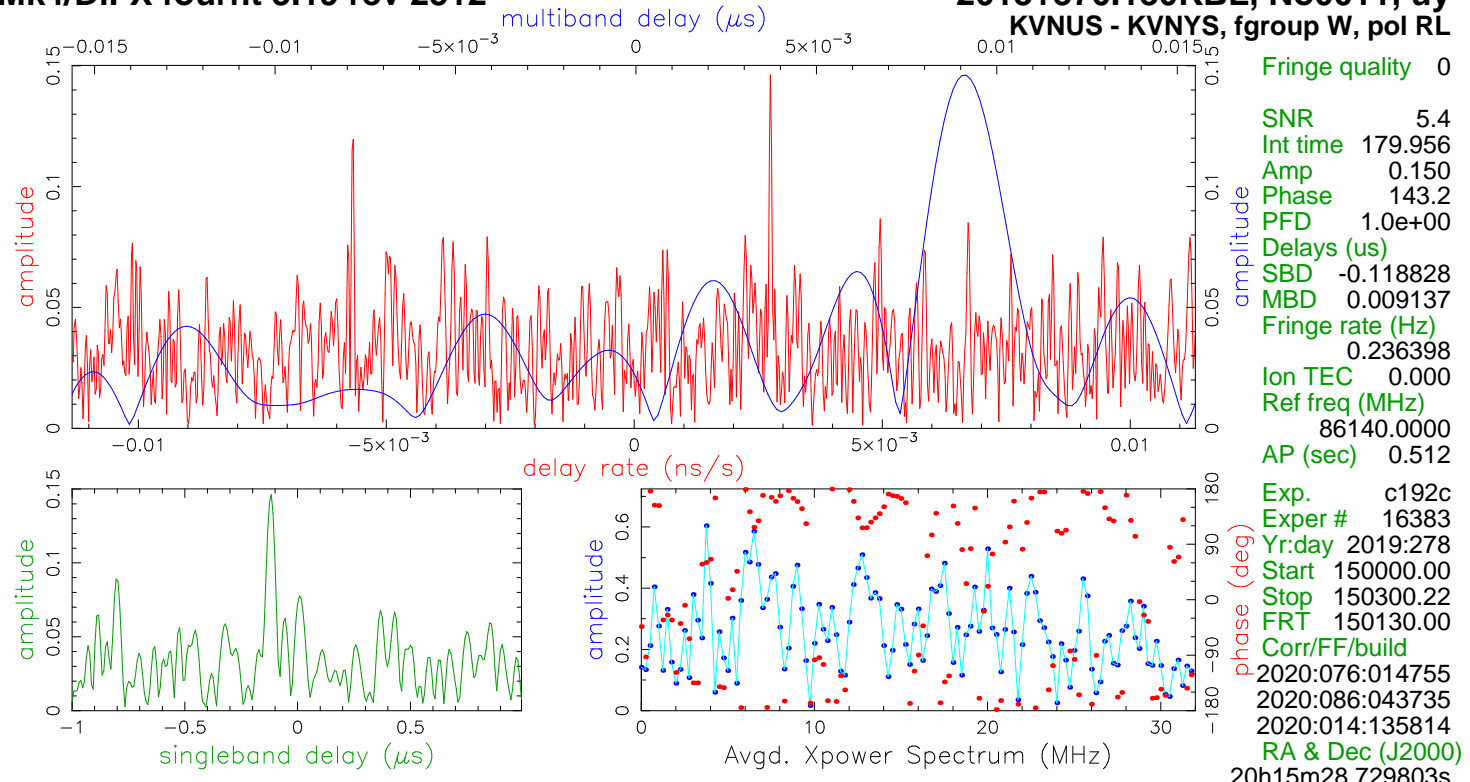


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	120.2	-159.5	111.1	130.7	95.3	143.9	170.6	148.3	-43.6	117.5	114.0	132.8	158.8	127.0	152.3	96.0	Phase	131.2
	0.3	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.3	0.3	0.2	0.1	0.2	0.2	0.1	Ampl.	0.1
	87.7	237.8	108.5	253.4	170.2	166.8	65.6	48.4	21.0	19.8	211.7	164.3	204.4	156.3	253.2	193.4	Sbd box	17.9
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 1.64123851616E+02 Apriori delay (usec) 1.65001147206E+02 Resid mbdelay (usec) -2.29559E-03 +/- 1.9E-04
 Sband delay (usec) 1.64133314206E+02 Apriori clock (usec) -1.1619759E+00 Resid sbdelay (usec) -8.67833E-01 +/- 3.1E-03
 Phase delay (usec) 1.65001151436E+02 Apriori clockrate (us/s) 1.7999998E-07 Resid phdelay (usec) 4.22982E-06 +/- 6.6E-07
 Delay rate (us/s) -1.77880443222E+00 Apriori rate (us/s) -1.77880200027E+00 Resid rate (us/s) -2.43195E-06 +/- 7.0E-09
 Total phase (deg) 66.5 Apriori accel (us/s/s) -5.56160368838E-06 Resid phase (deg) 131.2 +/- 20.5

RMS Theor. Amplitude 0.164 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.3 35.4 Search (1024X64) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 81.3 61.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 54.9 40.9 Inc. seg. avg. 0.159 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 54.5 71.4 Inc. frq. avg. 0.149 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 292.1 el 39.3 pa 71.1 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 12792.730 -890.905 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uY..130KBL Output file: /Exps/c192c/v2/1234/No0011/uY.W.143.130KBL



Fringe quality 0

SNR 5.4

Int time 179.956

Amp 0.150

Phase 143.2

PFD 1.0e+00

Delays (us)

SBD -0.118828

MBD 0.009137

Fringe rate (Hz)

0.236398

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 150000.00

Stop 150300.22

FRT 150130.00

Corr/FF/build

2020:076:014755

2020:086:043735

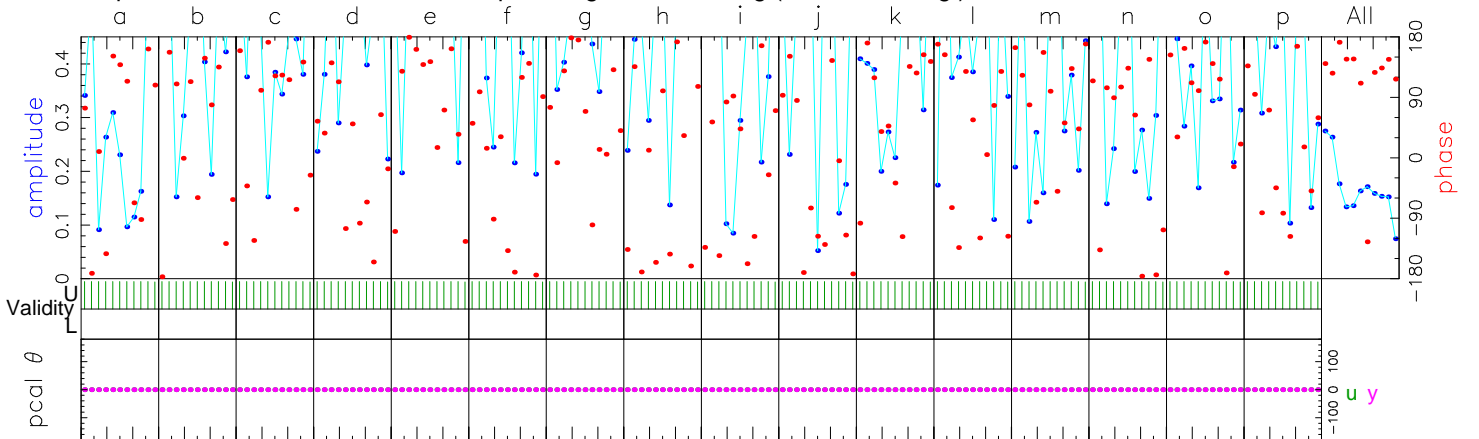
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
151.5	175.8	165.9	70.0	160.8	102.4	87.8	146.5	-173.1	-179.8	149.8	162.9	113.7	156.1	140.0	77.7		Phase	143.2						
0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.3	0.1		Ampl.	0.1						
182.6	171.8	131.4	84.8	116.4	111.9	16.2	87.6	21.3	29.0	47.9	105.9	147.4	63.6	59.7	120.5		Sbd box	113.8						
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used						
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs						
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase						
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC						
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp						
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids						
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks						
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids						
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks						
Group delay (usec)(sbd)			-7.16325536345E+02															Apriori delay (usec)	-7.16209673657E+02	Resid mbdelay (usec)	9.13731E-03	+/-	2.0E-04	
Sband delay (usec)			-7.16328501657E+02																Apriori clock (usec)	-2.0722914E+01	Resid sbdelay (usec)	-1.18828E-01	+/-	3.2E-03
Phase delay (usec)			-7.16209669041E+02																Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	4.61672E-06	+/-	6.9E-07
Delay rate (us/s)			-4.10164054032E-02																Apriori rate (us/s)	-4.10191497446E-02	Resid rate (us/s)	2.74434E-06	+/-	6.6E-09
Total phase (deg)				39.2															Apriori accel (us/s/s)	1.76581372054E-06	Resid phase (deg)	143.2	+/-	21.3

ph/seg (deg) 32.6 35.3 Search (1024X64) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

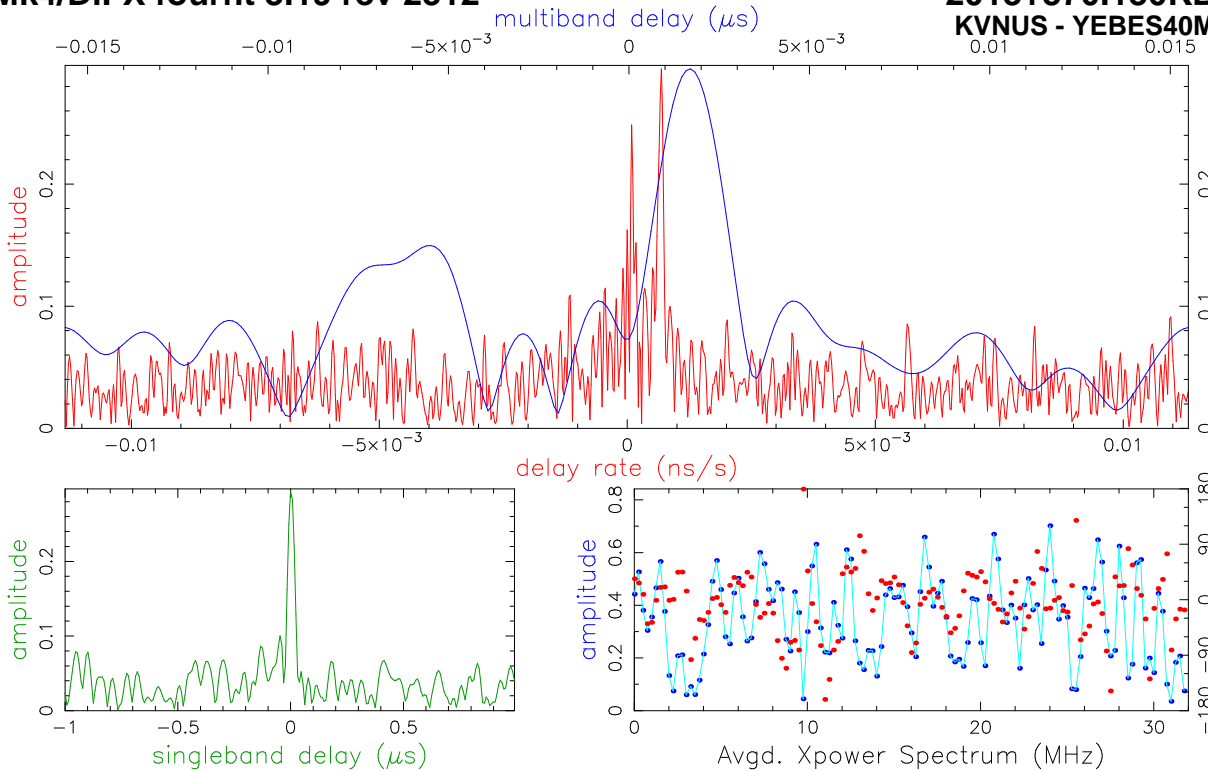
amp/seg (%) 39.9 61.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 38.8 42.6 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 49.6 74.4 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

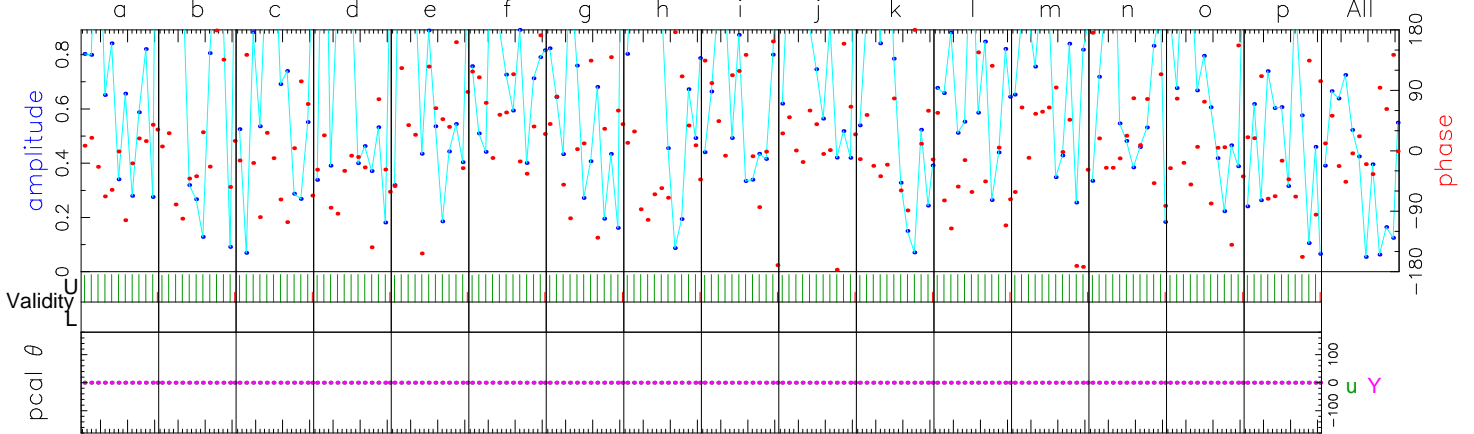
u: az 292.1 el 39.3 pa 71.1 y: az 289.7 el 41.8 pa 69.5 u,v (fr/asec) 296.071 -95.876 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uy..130KBL Output file: /Exps/c192c/v2/1234/No0011/uy.W.147.130KBL



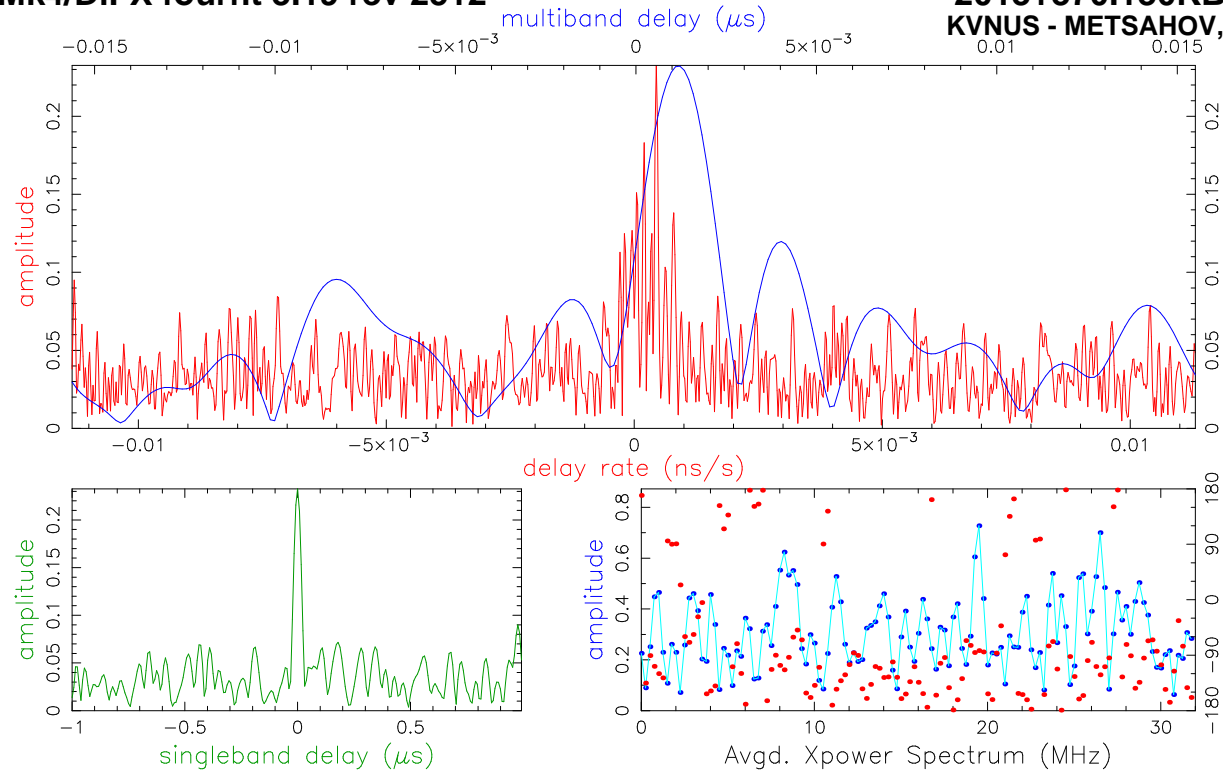
Fringe quality 9
SNR 10.3
Int time 162.348
Amp 0.297
Phase -0.2
PFD 1.0e-16
Delays (us)
SBD 0.002196
MBD 0.001704
Fringe rate (Hz) 0.059656
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Yr:day 2019:278
Start 150016.89
Stop 150259.71
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043727
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 28 APs / seg (14.34 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All			
	-12.5	-38.7	-20.5	-21.1	79.5	47.9	18.7	-39.3	89.5	24.8	-3.2	-63.4	44.3	4.8	-14.9	-56.7		Phase			
	0.6	0.2	0.4	0.5	0.4	0.4	0.1	0.5	0.2	0.6	0.5	0.4	0.4	0.4	0.4	0.3		Ampl.			
	129.9	10.1	13.1	128.7	129.7	129.7	124.9	128.3	132.0	128.7	129.0	82.8	19.0	130.3	16.2	127.6		Sbd box			
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used			
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs			
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase			
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC			
u:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp			
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids			
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks			
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks			
Group delay (usec)(sbd)			1.65002850960E+02						1.65001147206E+02									Resid mbdelay (usec)	1.70375E-03	+/-	1.0E-04
Sband delay (usec)			1.65003343206E+02						-1.1619759E+00									Resid sbdelay (usec)	2.19600E-03	+/-	1.7E-03
Phase delay (usec)			1.65001147200E+02						1.7999998E-07									Resid phdelay (usec)	-6.10080E-09	+/-	3.6E-07
Delay rate (us/s)			-1.77880130773E+00						-1.77880200027E+00									Resid rate (us/s)	6.92543E-07	+/-	3.8E-09
Total phase (deg)				295.1					-5.56160368838E-06									Resid phase (deg)	-0.2	+/-	11.1

ph/seg (deg) RMS Theor. Amplitude 0.297 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.1 33.5 Search (1024X64) 0.288 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.1 22.2 Inc. seg. avg. 0.365 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.5 38.7 Inc. frq. avg. 0.356 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 Y: az 70.1 el 38.2 pa -64.0 u,v (fr/asec) 12792.730 -890.905 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uY..130KBL Output file: /Exps/c192c/v2/1234/No0011/uY.W.87.130KBL

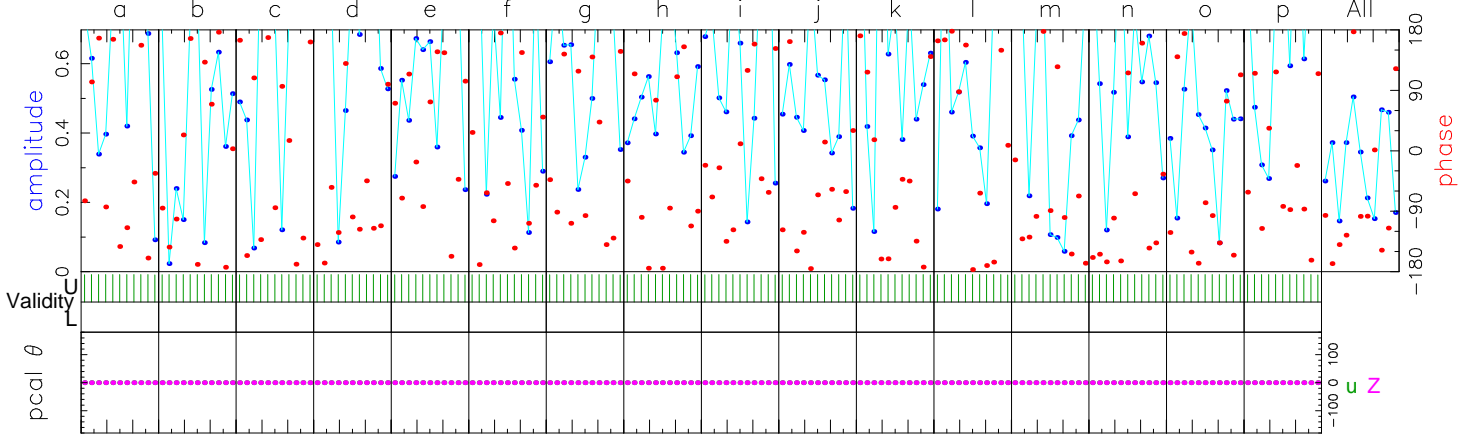


Fringe quality 9

SNR 8.5
Int time 179.730
Amp 0.233
Phase -135.7
PFD 2.8e-09
Delays (us)
SBD -0.000663
MBD 0.001171
Fringe rate (Hz) 0.037370
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

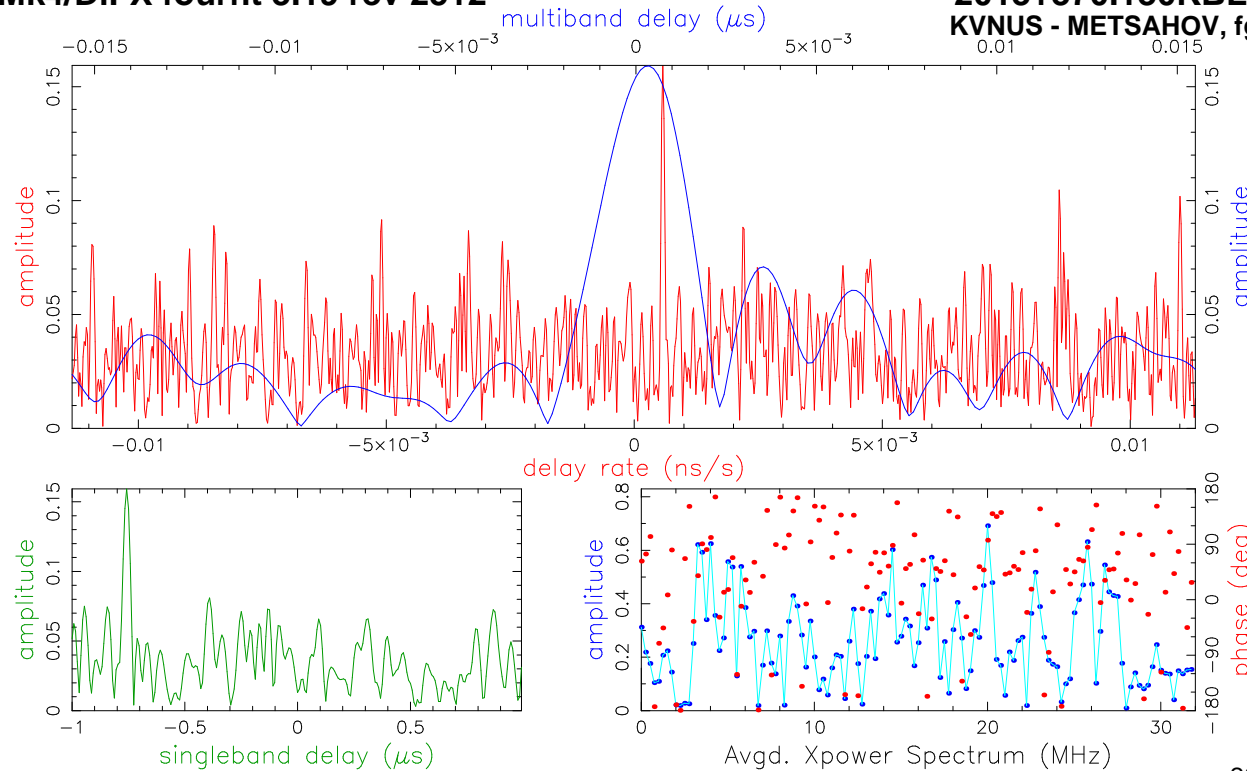
Exp. c192c
Exper # 16383
Yr:day 2019:278
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build 2020:076:014755
2020:086:043733
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



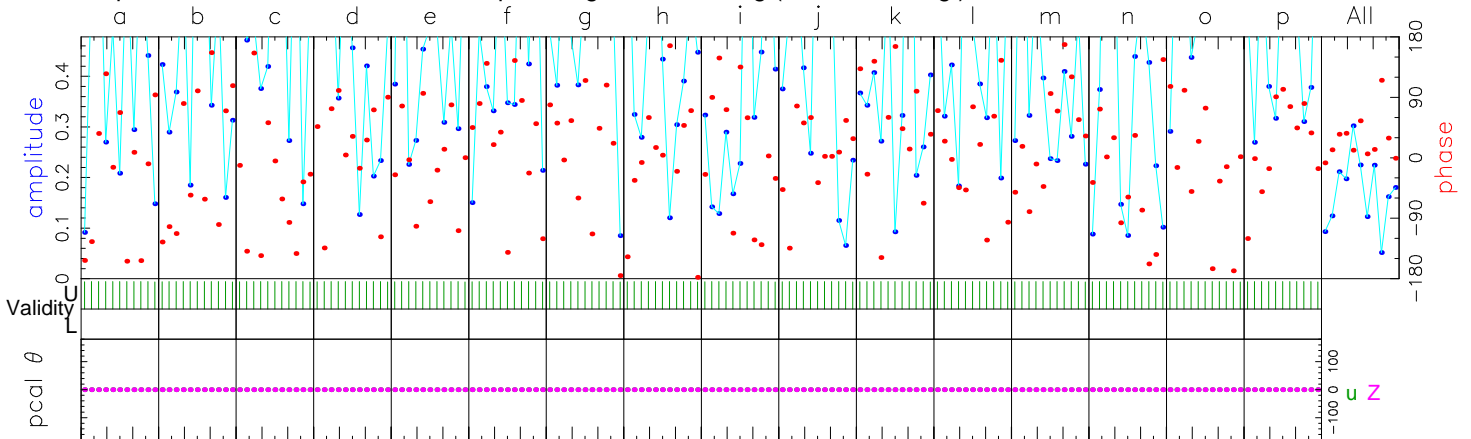
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-143.2	-169.5	-159.5	-120.6	-139.2	-90.9	-134.3	-145.9	-61.9	-106.0	-155.4	162.5	-126.3	-146.0	-162.6	-90.1	Phase	-135.7				
	0.3	0.2	0.4	0.5	0.0	0.2	0.2	0.2	0.4	0.2	0.4	0.3	0.3	0.4	0.2	0.2	Ampl.	0.3				
	222.2	68.3	129.2	128.2	101.0	104.0	16.8	182.6	128.2	44.4	127.9	127.7	137.5	128.8	143.9	101.5	Sbd box	128.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.18563170578E+03														Apriori delay (usec)	-4.18563287718E+03	Resid mbdelay (usec)	1.17140E-03	+/-	1.3E-04
Sband delay (usec)			-4.18563354068E+03														Apriori clock (usec)	8.3304033E+00	Resid sbdelay (usec)	-6.63500E-04	+/-	2.0E-03
Phase delay (usec)			-4.18563288156E+03														Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-4.37434E-06	+/-	4.3E-07
Delay rate (us/s)			-1.30615856908E+00														Apriori rate (us/s)	-1.30615900290E+00	Resid rate (us/s)	4.33824E-07	+/-	4.2E-09
Total phase (deg)																	Apriori accel (us/s/s)	2.70517219807E-06	Resid phase (deg)	-135.7	+/-	13.4

ph/seg (deg) 58.4 22.3 Search (1024X64) 0.222 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.1 38.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.5 26.9 Inc. seg. avg. 0.293 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.6 46.9 Inc. frq. avg. 0.251 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.125.130KBL



Fringe quality 0
 SNR 5.8
 Int time 179.730
 Amp 0.159
 Phase 22.9
 PFD 4.9e-01
 Delays (us)
 SBD -0.757819
 MBD 0.000327
 Fringe rate (Hz) 0.049130
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:278
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2020:076:014755
 2020:086:043735
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

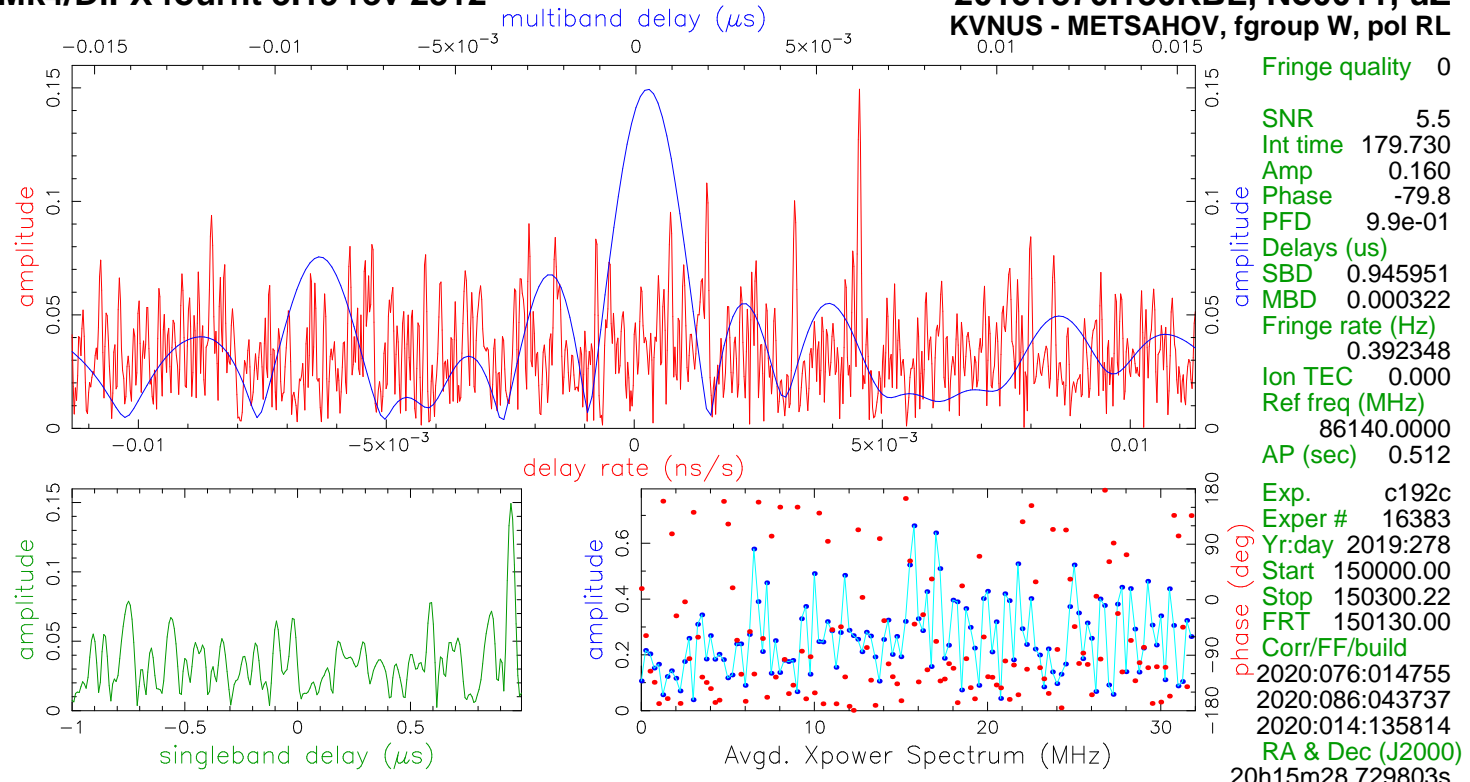


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-49.3	-157.8	-54.7	48.5	18.6	66.8	52.3	27.0	19.3	4.0	42.6	11.6	19.5	-1.3	16.6	30.1		Phase	22.9				
	0.0	0.0	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2		Ampl.	0.2				
	171.5	78.4	193.2	136.3	236.0	30.0	68.7	54.7	246.4	31.5	50.2	238.9	238.5	117.6	164.1	60.1		Sbd box	32.0				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
Group delay (usec)(sbd)			-4.18638255023E+03															Apriori delay (usec)	-4.18563287718E+03	Resid mbdelay (usec)	3.26947E-04	+/-	1.8E-04
Sband delay (usec)			-4.18639069618E+03															Apriori clock (usec)	8.3304033E+00	Resid sbdelay (usec)	-7.57819E-01	+/-	3.0E-03
Phase delay (usec)			-4.18563287644E+03															Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	7.39253E-07	+/-	6.3E-07
Delay rate (us/s)			-1.30615843256E+00															Apriori rate (us/s)	-1.30615900290E+00	Resid rate (us/s)	5.70345E-07	+/-	6.1E-09
Total phase (deg)				8.4														Apriori accel (us/s/s)	2.70517219807E-06	Resid phase (deg)	22.9	+/-	19.6

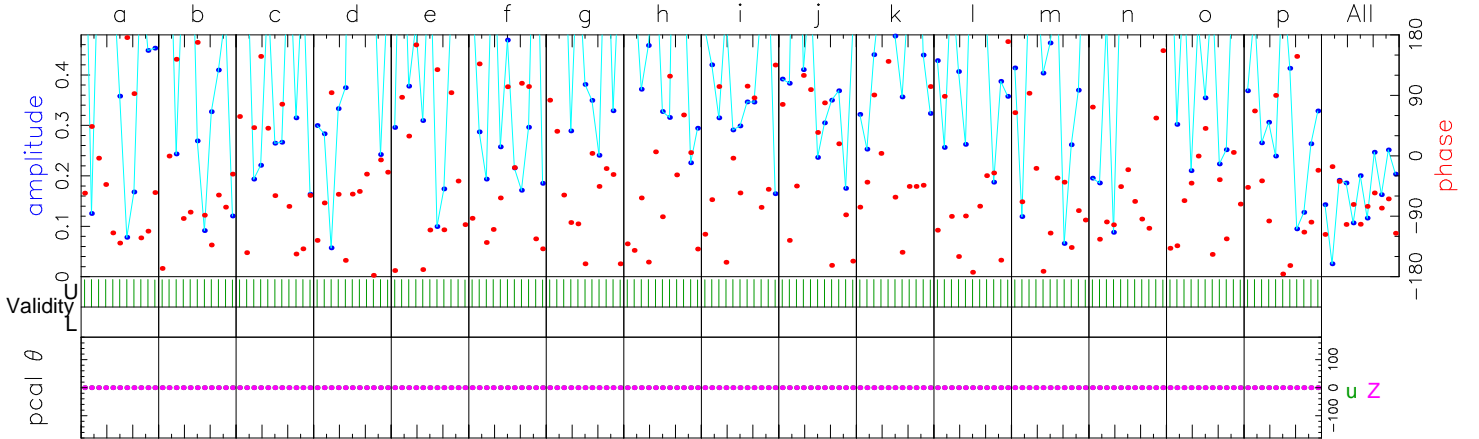
ph/seg (deg) 33.1 32.6 Search (1024X64) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.3 56.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.8 39.3 Inc. seg. avg. 0.149 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 46.2 68.5 Inc. frq. avg. 0.153 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.141.130KBL

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130KBL, No0011, uZ
KVNU - METSAHOV, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec

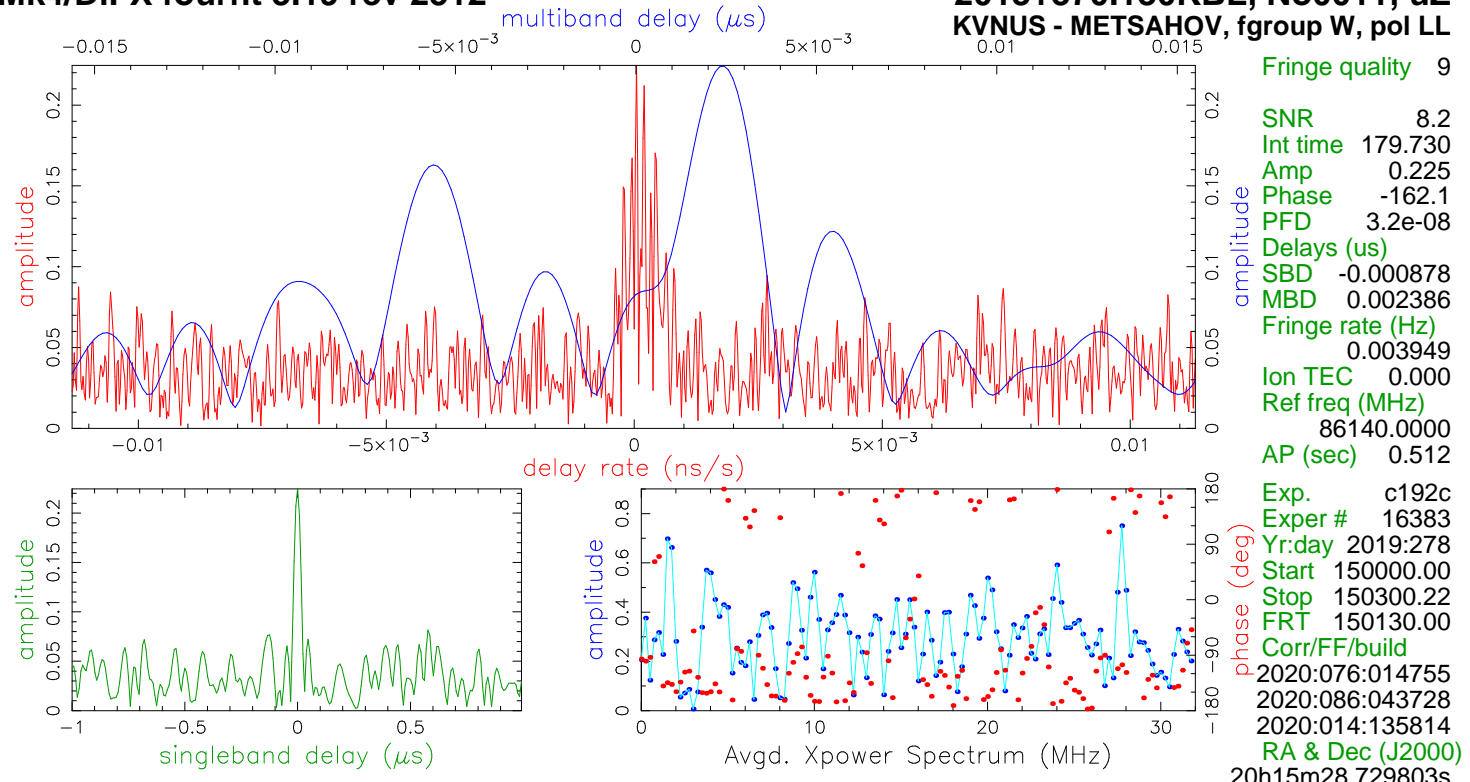


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-74.9	-90.2	-103.3	-62.8	-176.6	-127.9	-44.5	-68.9	-79.4	65.5	-39.0	-112.5	-70.8	-83.3	-71.7	-111.3		Phase	-79.8				
	0.3	0.3	0.1	0.3	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.3	0.2	0.2	0.3	0.1		Ampl.	0.1				
	46.7	93.2	135.2	249.1	38.4	162.8	204.1	236.2	174.1	156.0	33.2	206.2	66.4	3.1	166.6	10.8		Sbd box	250.1				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-4.18469505567E+03															Apriori delay (usec)	-4.18563287718E+03	Resid mbdelay (usec)	3.21509E-04	+/-	2.0E-04
Sband delay (usec)			-4.18468692668E+03															Apriori clock (usec)	8.3304033E+00	Resid sbdelay (usec)	9.45951E-01	+/-	3.1E-03
Phase delay (usec)			-4.18563287975E+03															Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-2.57269E-06	+/-	6.7E-07
Delay rate (us/s)			-1.30615444813E+00															Apriori rate (us/s)	-1.30615900290E+00	Resid rate (us/s)	4.55477E-06	+/-	6.5E-09
Total phase (deg)					-94.3													Apriori accel (us/s/s)	2.70517219807E-06	Resid phase (deg)	-79.8	+/-	20.9

ph/seg (deg) RMS Theor. Amplitude 0.160 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.6 34.7 Search (1024X64) 0.146 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.7 60.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.8 41.8 Inc. seg. avg. 0.151 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 58.2 73.0 Inc. frq. avg. 0.145 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.158.130KBL



Fringe quality 9

SNR 8.2

Int time 179.730

Amp 0.225

Phase -162.1

PFD 3.2e-08

Delays (us)

SBD -0.000878

MBD 0.002386

Fringe rate (Hz) 0.003949

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:278

Start 150000.00

Stop 150300.22

FRT 150130.00

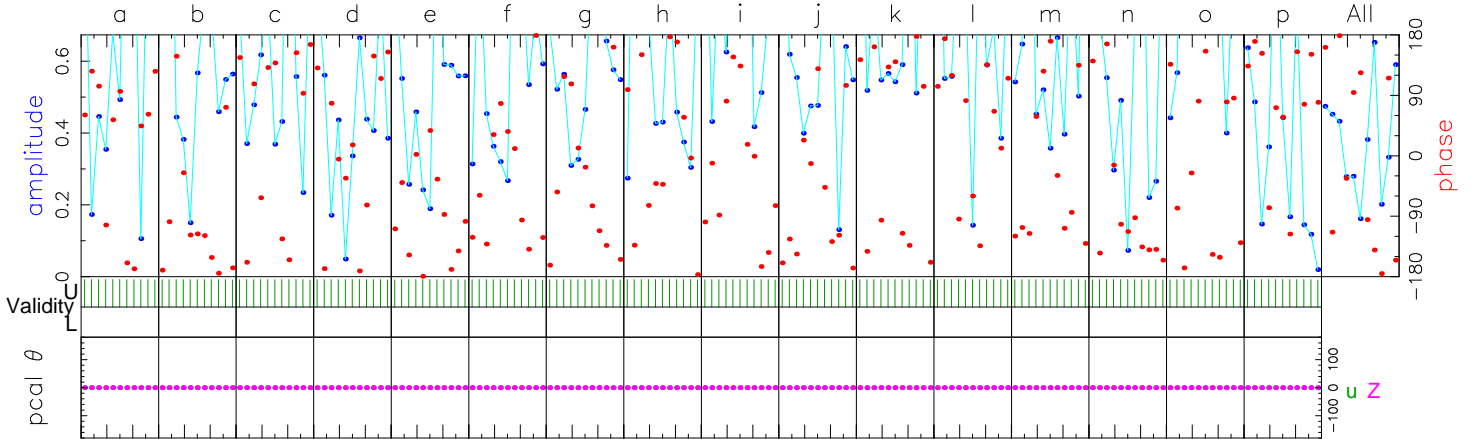
Corr/FF/build 2020:076:014755

2020:086:043728

2020:014:135814

RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	118.1	-136.5	171.8	144.5	-88.3	-81.1	-125.0	-165.6	-95.6	-141.3	177.4	122.0	-119.7	-143.2	-169.3	121.0	Phase	-162.1				
	0.3	0.4	0.4	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.6	0.3	0.4	0.4	0.4	0.2	Ampl.	0.3				
	130.7	128.7	129.2	23.4	17.5	246.7	176.6	113.5	255.5	83.4	129.3	74.6	128.4	128.4	128.5	107.4	Sbd box	128.9				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-4.18563049083E+03														Apriori delay (usec)	-4.18563287718E+03	Resid mbdelay (usec)	2.38635E-03	+/-	1.3E-04
Sband delay (usec)			-4.18563375518E+03														Apriori clock (usec)	8.3304033E-07	Resid sbdelay (usec)	-8.78000E-04	+/-	2.1E-03
Phase delay (usec)			-4.18563288241E+03														Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-5.22870E-06	+/-	4.5E-07
Delay rate (us/s)			-1.30615895706E+00														Apriori rate (us/s)	-1.30615900290E+00	Resid rate (us/s)	4.58394E-08	+/-	4.3E-09
Total phase (deg)																	Apriori accel (us/s/s)	2.70517219807E-06	Resid phase (deg)	-162.1	+/-	13.9

ph/seg (deg) 66.7 23.1 Amplitude 0.225 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 96.9 40.3 Search (1024X64) 0.224 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 55.5 27.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 64.8 48.6 Inc. seg. avg. 0.356 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

u: az 292.1 el 39.3 pa 71.1 Z: az 113.3 el 55.6 pa -34.9 u,v (fr/asec) 9395.502 -1917.946 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0011/uZ..130KBL Output file: /Exps/c192c/v2/1234/No0011/uZ.W.91.130KBL simultaneous interpolator