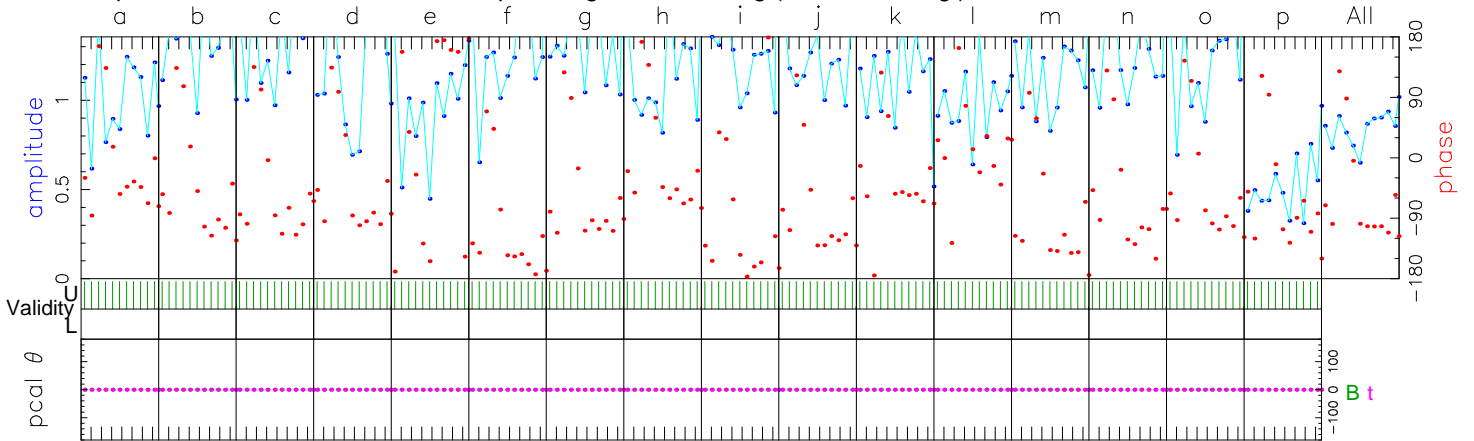


Fringe quality 5

SNR 25.3
Int time 419.791
Amp 0.452
Phase -91.8
PFD 0.0e+00
Delays (us)
SBD -0.005520
MBD -0.007207
Fringe rate (Hz)
-0.023130
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

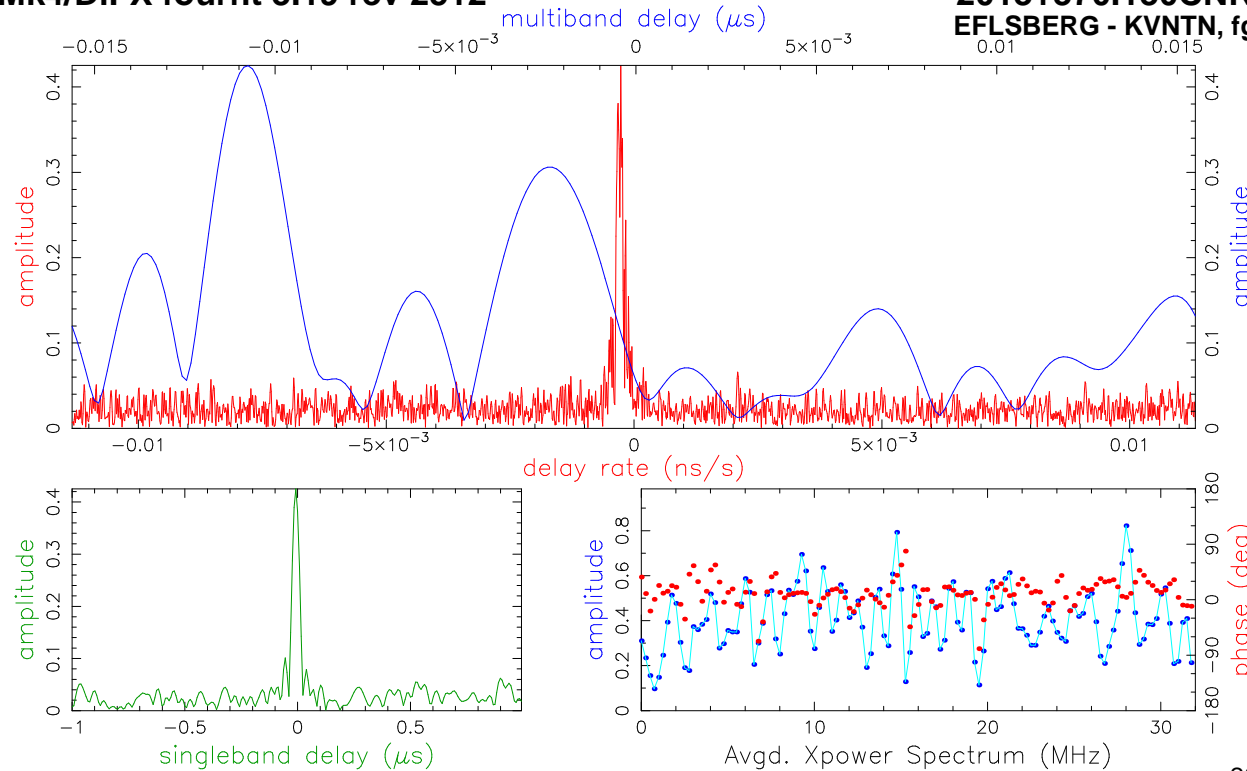
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085642
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	
	-39.4	-79.9	-92.7	-84.2	-176.2	-143.6	-92.9	-46.4	-144.6	-100.1	-41.9	7.9	-120.9	-106.4	-88.1	-92.4		Phase	-91.8
	0.5	0.6	0.7	0.5	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.5	0.7	0.3		Ampl.	0.6
	128.1	128.0	128.0	128.9	128.3	128.7	128.5	128.6	128.5	128.5	128.8	128.6	128.2	128.9	128.1	128.9		Sbd box	128.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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		PC amp	
t	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	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	7.36790037398E+03			Apriori delay (usec)			7.36790758137E+03			Resid mbdelay (usec)			-7.20739E-03			+/- 4.3E-05			
Sband delay (usec)	7.36790206137E+03			Apriori clock (usec)			-1.0903046E+01			Resid sbdelay (usec)			-5.52000E-03			+/- 6.8E-04			
Phase delay (usec)	7.36790757840E+03			Apriori clockrate (us/s)			-3.9999999E-07			Resid phdelay (usec)			-2.96160E-06			+/- 1.5E-07			
Delay rate (us/s)	1.54311194594E+00			Apriori rate (us/s)			1.54311221445E+00			Resid rate (us/s)			-2.68512E-07			+/- 6.0E-10			
Total phase (deg)	-70.7			Apriori accel (us/s/s)			-2.39977781363E-05			Resid phase (deg)			-91.8			+/- 4.5			

ph/seg (deg) 74.8 7.8 Search (2048X64) 0.430 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 87.1 13.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.2 9.1 Inc. seg. avg. 0.828 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 40.6 15.8 Inc. frq. avg. 0.592 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 95.8 el 56.2 pa -52.5 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -11136.981 265.779 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/Bt..130CNK Output file: /Exps/c192b/v2/1234/No0078/Bt.W.12.130CNK simultaneous interpolator

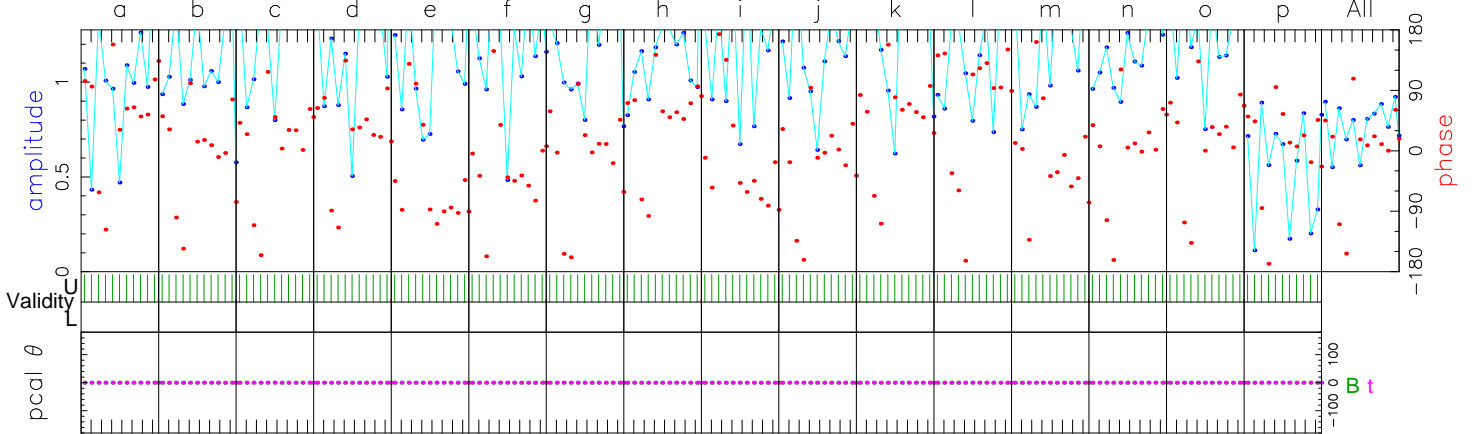


Fringe quality 5

SNR 23.8
Int time 419.791
Amp 0.425
Phase 25.4
PFD 0.0e+00
Delays (us)
SBD -0.008254
MBD -0.010771
Fringe rate (Hz)
-0.023122
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085650
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

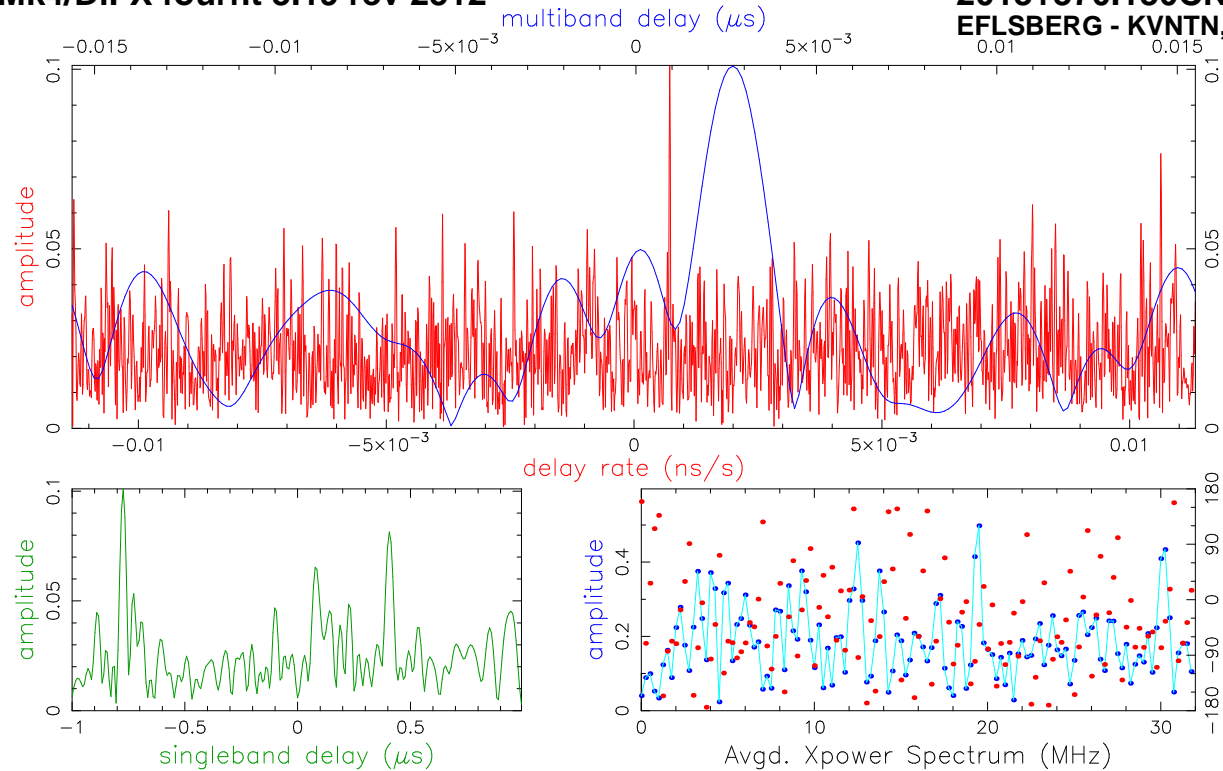


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	79.0	20.0	36.6	46.1	-83.8	-31.2	19.5	65.0	-44.3	4.5	66.4	129.8	-10.1	18.1	44.4	31.9		Phase	25.4
B	0.5	0.6	0.7	0.7	0.5	0.6	0.7	0.7	0.6	0.6	0.8	0.6	0.8	0.7	0.6	0.3		Ampl.	0.6
t	127.3	127.0	128.0	127.8	128.1	128.5	128.1	128.2	128.6	128.7	128.2	128.2	128.7	128.2	127.4	127.3		Sbd box	127.9
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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	
B	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	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	7.36789681079E+03			Apriori delay (usec)			7.36790758137E+03			Resid mbdelay (usec)			-1.07706E-02			+/- 4.5E-05			
Sband delay (usec)	7.36789932737E+03			Apriori clock (usec)			-1.0903046E+01			Resid sbdelay (usec)			-8.25400E-03			+/- 7.2E-04			
Phase delay (usec)	7.36790758219E+03			Apriori clockrate (us/s)			-3.9999999E-07			Resid phdelay (usec)			8.20625E-07			+/- 1.6E-07			
Delay rate (us/s)	1.54311194603E+00			Apriori rate (us/s)			1.54311221445E+00			Resid rate (us/s)			-2.68421E-07			+/- 6.4E-10			
Total phase (deg)	46.6			Apriori accel (us/s/s)			-2.39977781363E-05			Resid phase (deg)			25.4			+/- 4.8			

ph/seg (deg) RMS Theor. Amplitude 0.425 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.3 8.3 Search (2048X64) 0.412 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 88.1 14.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.3 9.6 Inc. seg. avg. 0.772 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 51.1 16.8 Inc. frq. avg. 0.599 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 95.8 el 56.2 pa -52.5 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -11136.981 265.779 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/Bt..130CNK Output file: /Exps/c192b/v2/1234/No0078/Bt.W.38.130CNK

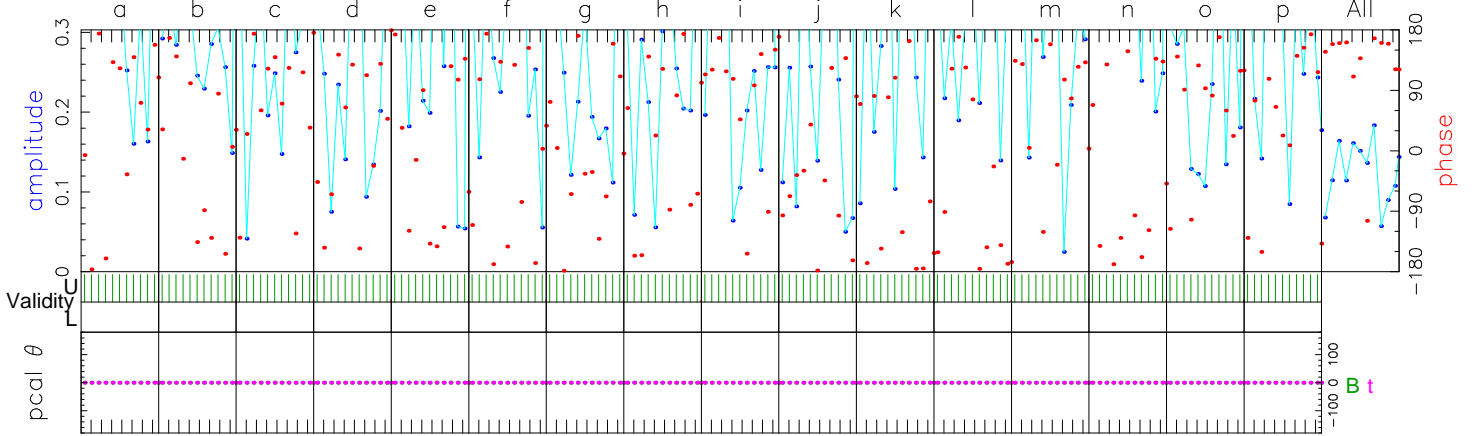


Fringe quality 0

SNR 5.7
Int time 419.791
Amp 0.101
Phase 154.3
PFD 9.8e-01
Delays (us)
SBD -0.773914
MBD 0.002673
Fringe rate (Hz) 0.062211
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

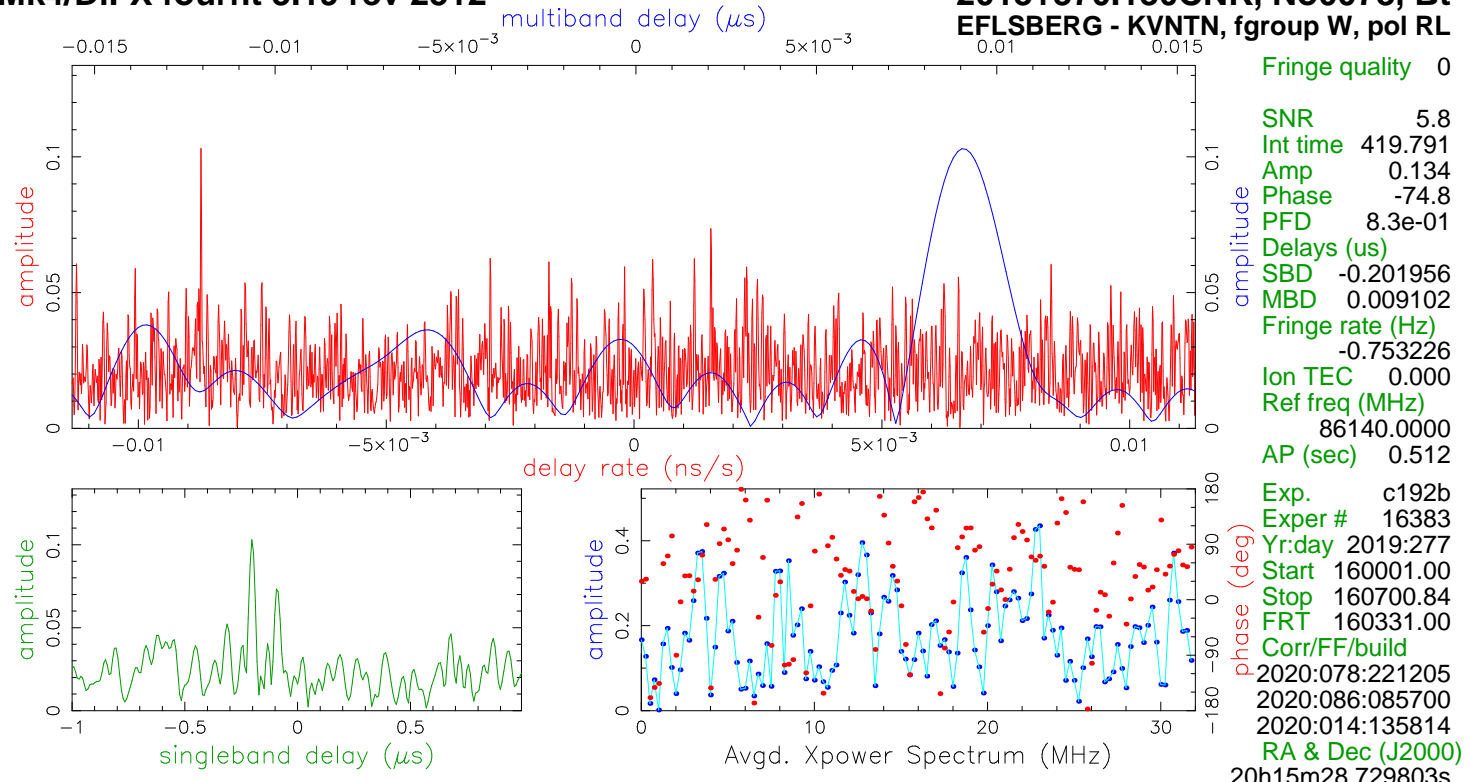
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085655
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

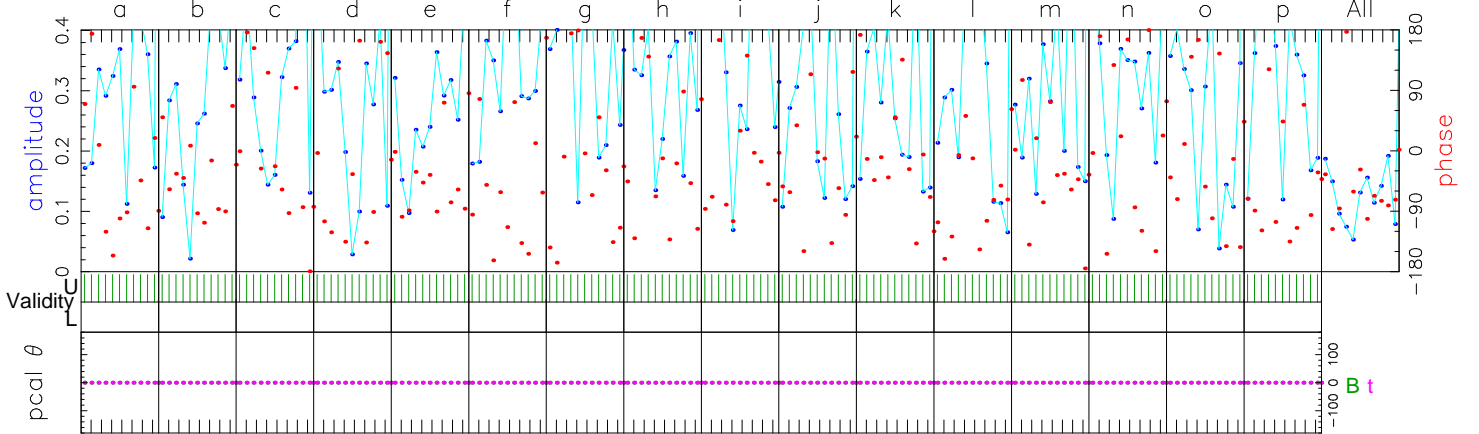


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	147.0	142.7	127.6	139.6	178.6	-163.2	79.8	-158.6	136.2	-35.6	-176.4	-176.5	134.9	-173.1	121.4	122.2	Phase	154.3
B	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.2	0.0	0.1	0.1	0.2	0.2	0.1	0.2	Ampl.	0.1
t	37.2	236.8	176.7	250.4	172.6	218.7	58.3	108.5	204.7	132.8	132.7	13.6	182.5	31.4	79.7	252.6	Sbd box	29.9
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)	7.36712900452E+03			Apriori delay (usec)			7.36790758137E+03			Resid mbdelay (usec)			2.67316E-03			+/-	1.9E-04	
Sband delay (usec)	7.36713366737E+03			Apriori clock (usec)			-1.0903046E+01			Resid sbdelay (usec)			-7.73914E-01			+/-	3.0E-03	
Phase delay (usec)	7.36790758634E+03			Apriori clockrate (us/s)			-3.9999999E-07			Resid phdelay (usec)			4.97495E-06			+/-	6.5E-07	
Delay rate (us/s)	1.54311293665E+00			Apriori rate (us/s)			1.54311221445E+00			Resid rate (us/s)			7.22203E-07			+/-	2.7E-09	
Total phase (deg)	175.5			Apriori accel (us/s/s)			-2.39977781363E-05			Resid phase (deg)			154.3			+/-	20.3	

ph/seg (deg) 35.6 35.1 Search (2048X64) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 44.1 61.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.2 40.5 Inc. seg. avg. 0.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 63.9 70.7 Inc. frq. avg. 0.099 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 95.8 el 56.2 pa -52.5 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -11136.981 265.779 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/Bt..130CNK Output file: /Exps/c192b/v2/1234/No0078/Bt.W.53.130CNK



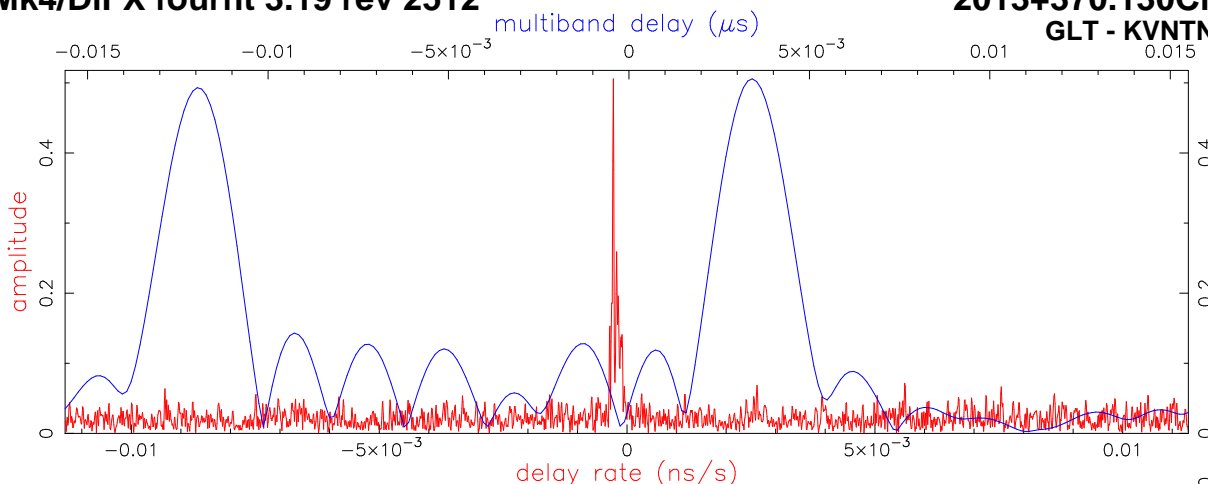
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



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	
-92.0	-48.2	-93.0	-134.8	-55.7	-92.3	-92.6	-83.0	-49.5	-96.4	-44.3	-85.7	-44.4	-135.9	-75.5	-112.9	Phase	-74.8	
0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.0	0.1	0.2	Ampl.	0.1	
250.9	157.4	201.7	184.2	52.7	4.7	45.3	125.2	112.0	209.9	13.1	217.3	50.0	177.0	51.1	210.1	Sbd box	103.1	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
B:t	0:0	0:0	0:0	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	PC amp		
t	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	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

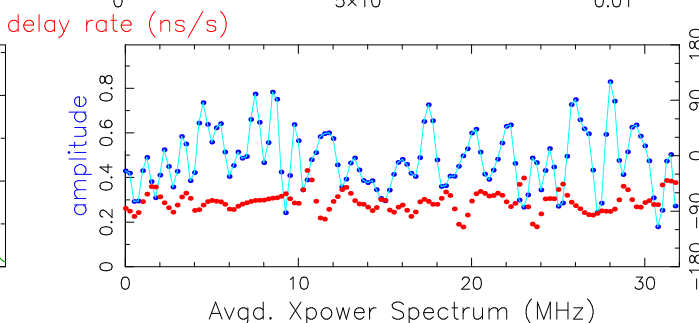
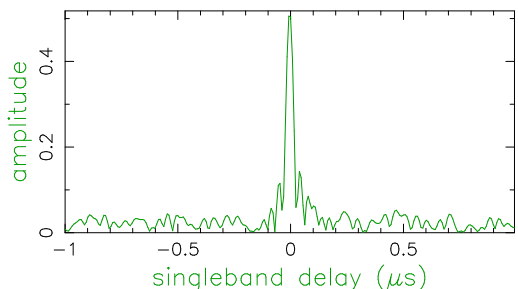
Group delay (usec)(sbd)	7.36769793317E+03	Apriori delay (usec)	7.36790758137E+03	Resid mbdelay (usec)	9.10181E-03	+/-	1.9E-04
Sband delay (usec)	7.36770562537E+03	Apriori clock (usec)	-1.0903046E+01	Resid sbdelay (usec)	-2.01956E-01	+/-	3.0E-03
Phase delay (usec)	7.36790757895E+03	Apriori clockrate (us/s)	-3.9999999E-07	Resid phdelay (usec)	-2.41362E-06	+/-	6.4E-07
Delay rate (us/s)	1.54310347024E+00	Apriori rate (us/s)	1.54311221445E+00	Resid rate (us/s)	-8.74421E-06	+/-	2.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.39977781363E-05	Resid phase (deg)	-74.8	+/-	19.8

ph/seg (deg)	41.2	Theor.	34.3	Amplitude	0.134 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	53.7		59.9	Search (2048X64)	0.100	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.9		39.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
amp/frq (%)	44.8		69.1	Inc. seg. avg.	0.140	Sample rate(MISamp/s):	64	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.121	Data rate(Mb/s):	2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00



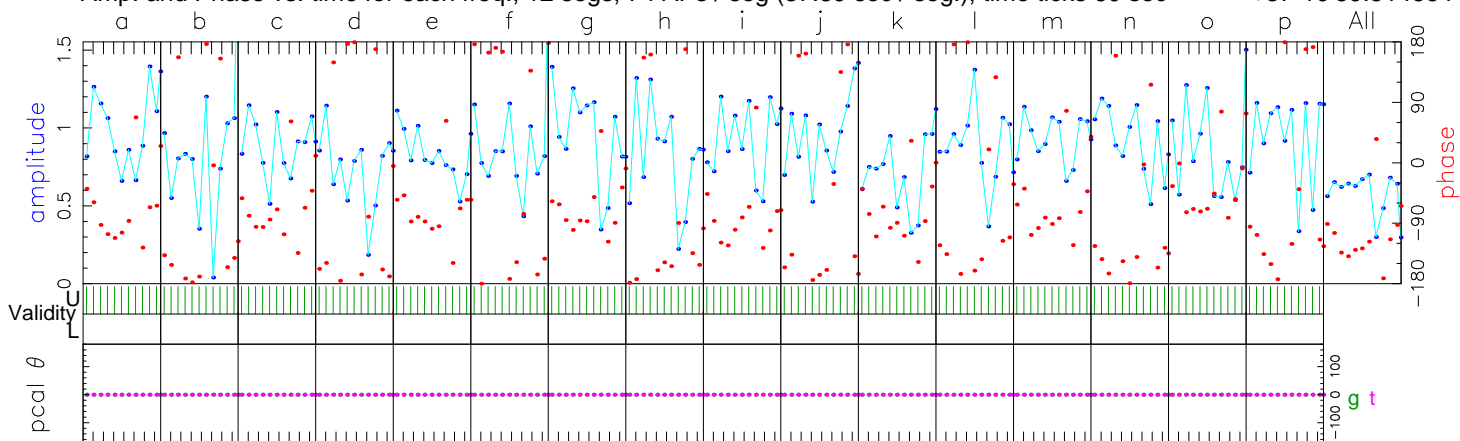
Fringe quality 7

SNR 29.0
 Int time 419.578
 Amp 0.518
 Phase -119.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.004041
 MBD 0.003415
 Fringe rate (Hz)
 -0.024065
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085642
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

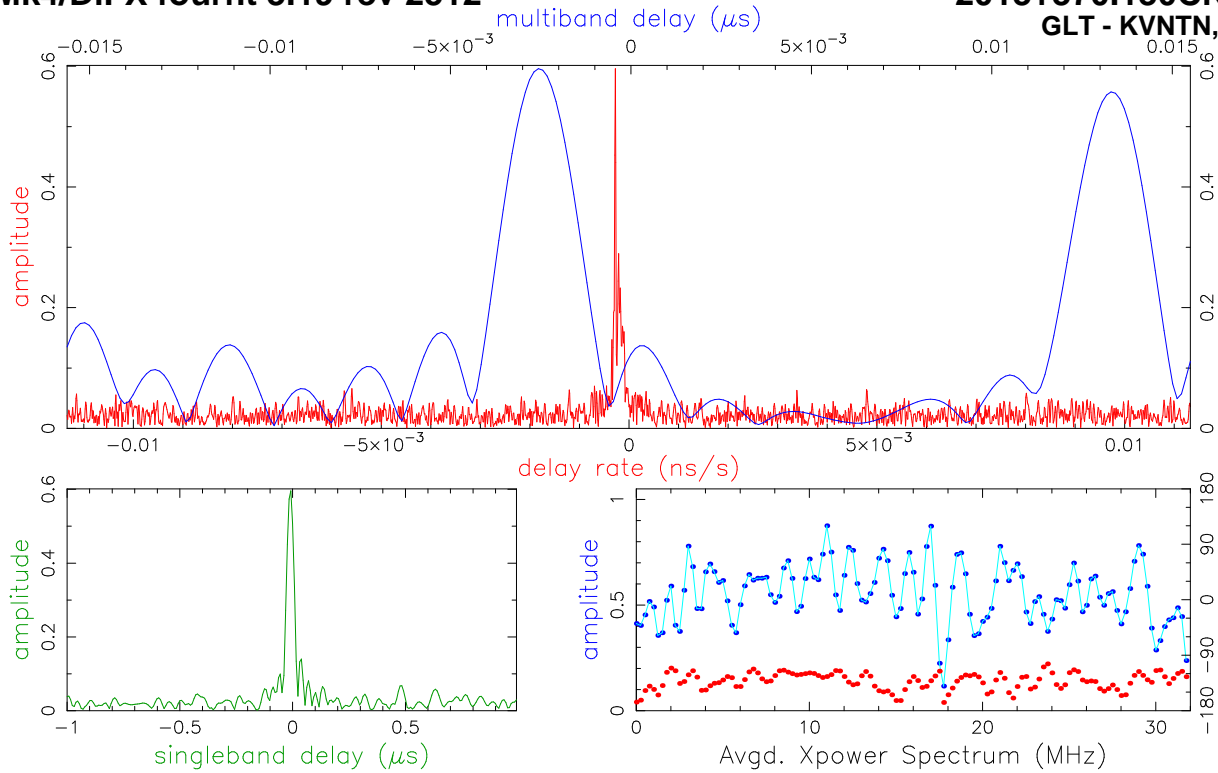


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
-80.4	-167.6	-77.2	-169.4	-75.5	-177.9	-73.5	-166.4	-90.9	-168.9	-78.0	-151.4	-75.7	-154.3	-51.5	-141.7	Phase	-119.2
0.8	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	Ampl.	0.7
128.5	128.5	128.3	128.4	128.4	128.4	128.5	128.4	128.6	128.1	128.7	128.7	128.3	128.8	128.8	128.4	Sbd box	128.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:t	0:0	0:0	0:0	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:t	0:0	0:0	0:0	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	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks

Group delay (usec)(sbd) 1.71631438618E+02 Apriori delay (usec) 1.71628023984E+02 Resid mbdelay (usec) 3.41463E-03 +/- 3.7E-05
 Sband delay (usec) 1.71623983484E+02 Apriori clock (usec) -2.6428703E+01 Resid sbdelay (usec) -4.04050E-03 +/- 5.9E-04
 Phase delay (usec) 1.71628020138E+02 Apriori clockrate (us/s) -1.2500000E-07 Resid phdelay (usec) -3.84526E-06 +/- 1.3E-07
 Delay rate (us/s) 1.25696903641E+00 Apriori rate (us/s) 1.25696931577E+00 Resid rate (us/s) -2.79367E-07 +/- 5.3E-10
 Total phase (deg) 235.7 Apriori accel (us/s/s) 2.79336851827E-05 Resid phase (deg) -119.2 +/- 4.0

ph/seg (deg) RMS Theor. Amplitude 0.518 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.5 6.8 Search (2048X64) 0.493 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.6 11.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 47.8 7.9 Inc. seg. avg. 0.593 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 38.5 13.8 Inc. frq. avg. 0.701 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 52.8 el 29.8 pa -13.6 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -8991.240 4763.643 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gt..130CNK Output file: /Exps/c192b/v2/1234/No0078/gt.W.11.130CNK

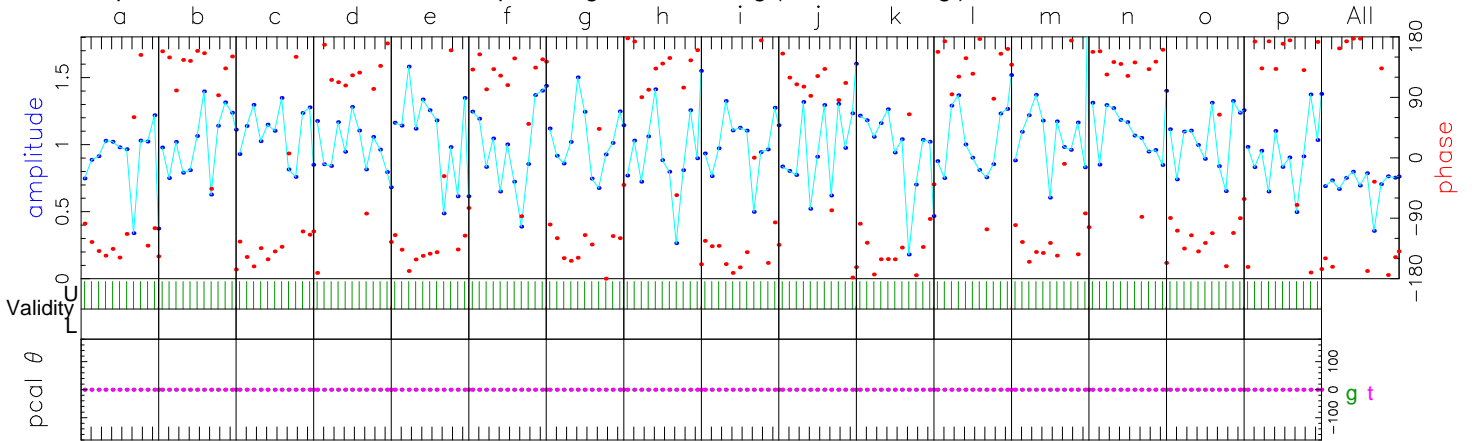


Fringe quality 7

SNR 33.7
Int time 419.546
Amp 0.601
Phase -174.9
PFD 0.0e+00
Delays (us)
SBD -0.010167
MBD -0.002537
Fringe rate (Hz)
-0.023993
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085649
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

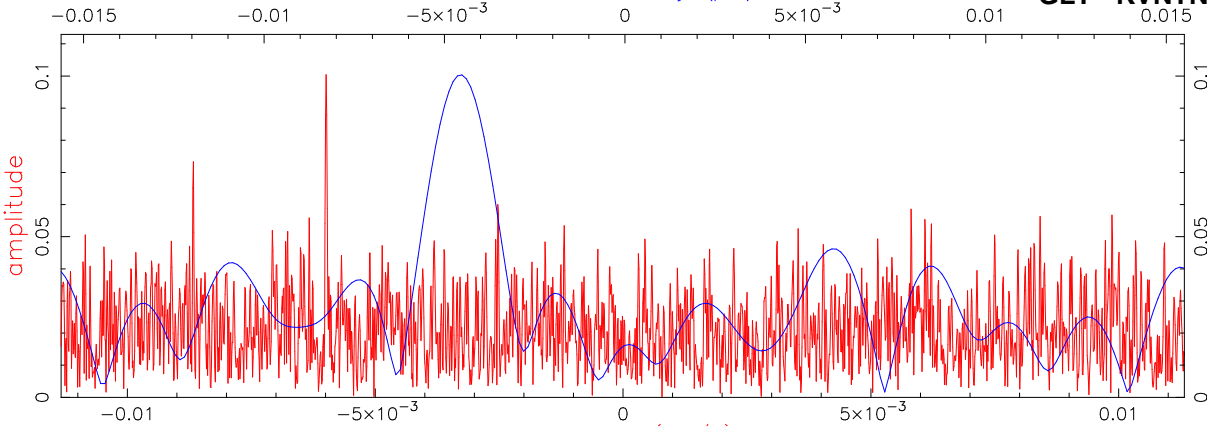


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	-134.4	140.0	-136.2	137.0	-142.1	128.9	-131.1	139.2	-143.9	124.1	-137.3	143.2	-131.6	146.4	-115.8	168.3	168.3	Phase	-174.9	
	0.8	0.8	0.9	0.8	1.0	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.9	0.8	0.8	0.8	Ampl.	0.8	
	127.9	127.7	128.0	127.4	127.7	127.8	127.9	127.3	127.4	127.7	127.7	127.7	127.4	127.8	127.9	127.9	127.9	Sbd box	127.7	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used		
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
g:t	0:0	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	0:0	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		
g	1000	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		Chan ids		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks		
																		Chan ids		
																		Tracks		
Group delay (usec)(sbd)			1.71625486493E+02							1.71628023984E+02								Resid mbdelay (usec)	-2.53749E-03	+/- 3.2E-05
Sband delay (usec)			1.71617856984E+02							-2.6428703E+01								Resid sbdelay (usec)	-1.01670E-02	+/- 5.1E-04
Phase delay (usec)			1.71628018343E+02							-1.2500000E-07								Resid phdelay (usec)	-5.64063E-06	+/- 1.1E-07
Delay rate (us/s)			1.25696903724E+00							1.25696931577E+00								Resid rate (us/s)	-2.78533E-07	+/- 4.5E-10
Total phase (deg)				180.0						2.79336851827E-05								Resid phase (deg)	-174.9	+/- 3.4

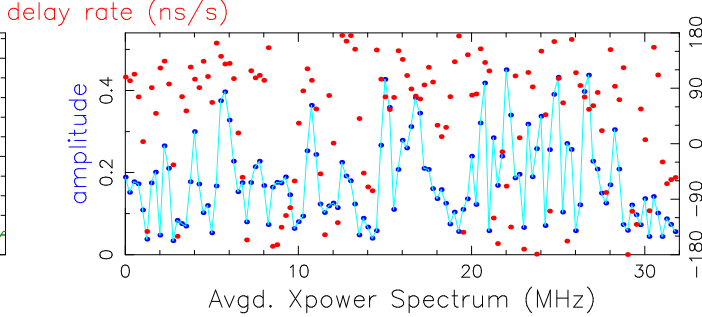
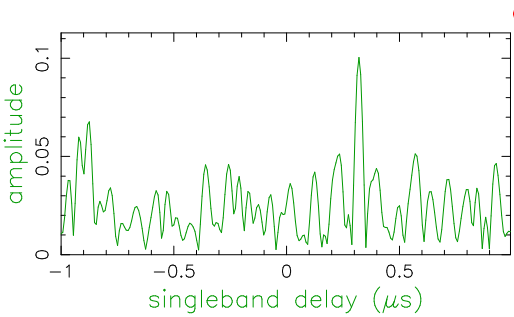
ph/seg (deg) 47.1 5.9 Search (2048X64) 0.586 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 25.4 10.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.8 6.8 Inc. seg. avg. 0.698 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 37.5 11.9 Inc. frq. avg. 0.814 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 52.8 el 29.8 pa -13.6 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -8991.240 4763.643 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gt..130CNK Output file: /Exps/c192b/v2/1234/No0078/gt.W.35.130CNK

multiband delay (μ s)

Fringe quality 0

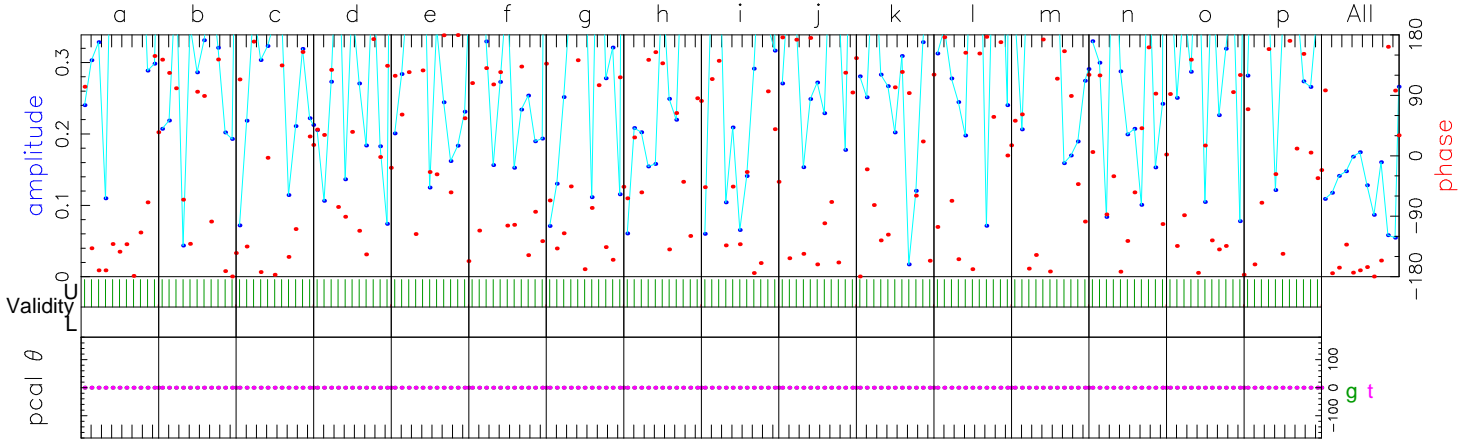


SNR 5.6
Int time 419.578
Amp 0.113
Phase -174.5
PFD 9.9e-01
Delays (us)
SBD 0.320389
MBD -0.004551
Fringe rate (Hz)
-0.516853
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085655
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

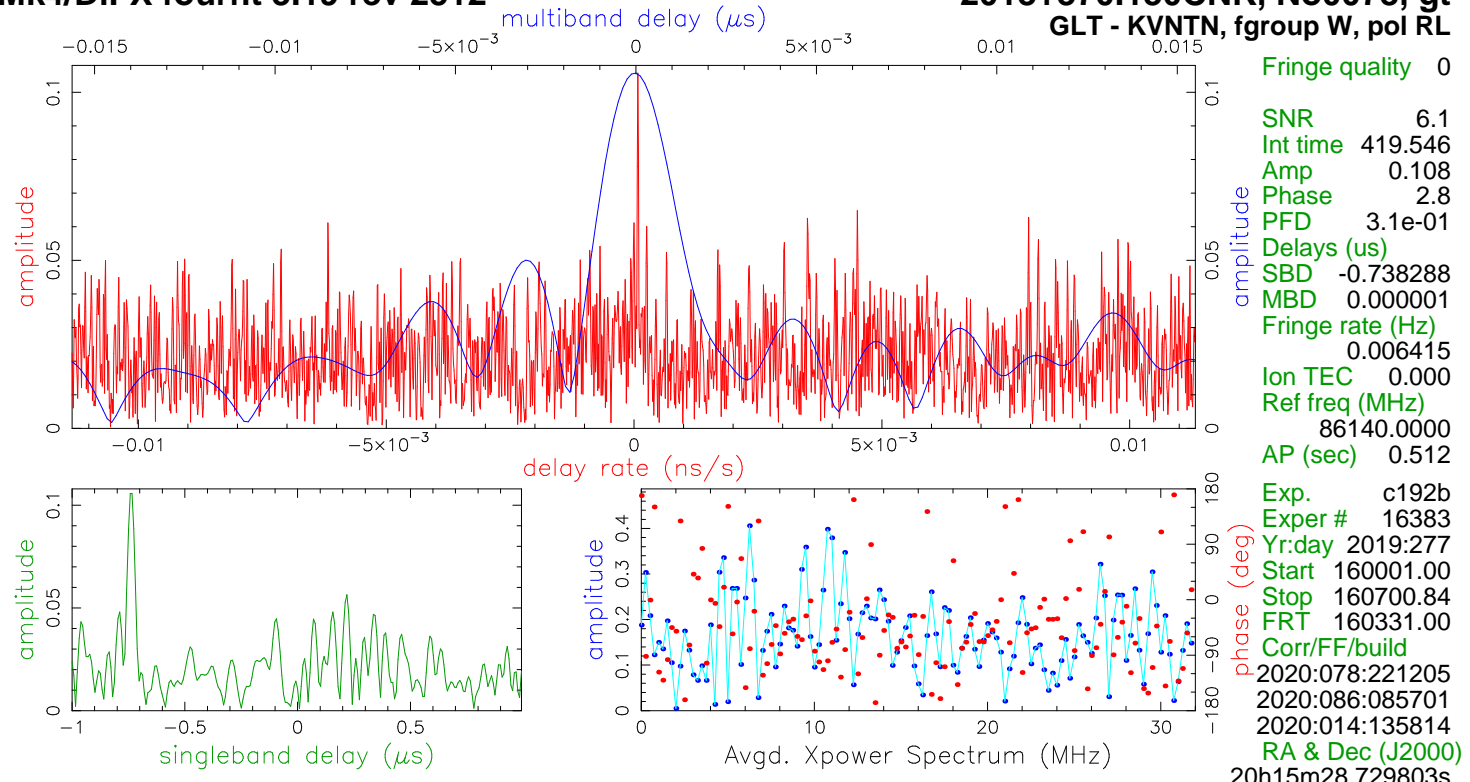


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-146.5	150.1	173.4	-87.6	124.1	-169.4	-165.7	121.4	142.9	-172.2	-130.0	175.4	170.3	-82.8	-172.4	-134.0	Phase	-174.5
	0.3	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.2	0.2	0.0	0.2	0.1	Ampl.	0.1
	169.9	158.3	210.0	198.5	247.1	224.7	242.3	88.8	36.5	236.2	16.4	41.9	156.6	98.3	190.5	130.6	Sbd box	170.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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	PC amp	
g	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	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		1.71935972801E+02				Apriori delay (usec)		1.71628023984E+02				Resid mbdelay (usec)		-4.55118E-03			+/-	1.9E-04
Sband delay (usec)		1.71948412984E+02				Apriori clock (usec)		-2.6428703E+01				Resid sbdelay (usec)		3.20389E-01			+/-	3.1E-03
Phase delay (usec)		1.71628018355E+02				Apriori clockrate (us/s)		-1.2500000E-07				Resid phdelay (usec)		-5.62852E-06			+/-	6.6E-07
Delay rate (us/s)		1.25696331562E+00				Apriori rate (us/s)		1.25696931577E+00				Resid rate (us/s)		-6.00015E-06			+/-	2.7E-09
Total phase (deg)			180.4			Apriori accel (us/s/s)		2.79336851827E-05				Resid phase (deg)		-174.5			+/-	20.4

	RMS	Theor.	Amplitude	0.113 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	42.9	35.3	Search (2048X64)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.3	61.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	47.8	40.8	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	71.2	71.1	Inc. frq. avg.	0.103	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

g: az 52.8 el 29.8 pa -13.6 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -8991.240 4763.643 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gt..130CNK Output file: /Exps/c192b/v2/1234/No0078/gt.W.55.130CNK



Fringe quality 0

SNR 6.1

Int time 419.546

Amp 0.108

Phase 2.8

PFD 3.1e-01

Delays (us)

SBD -0.738288

MBD 0.000001

Fringe rate (Hz)

0.006415

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192b

Exper # 16383

Yr:day 2019:277

Start 160001.00

Stop 160700.84

FRT 160331.00

Corr/FF/build

2020:078:221205

2020:086:085701

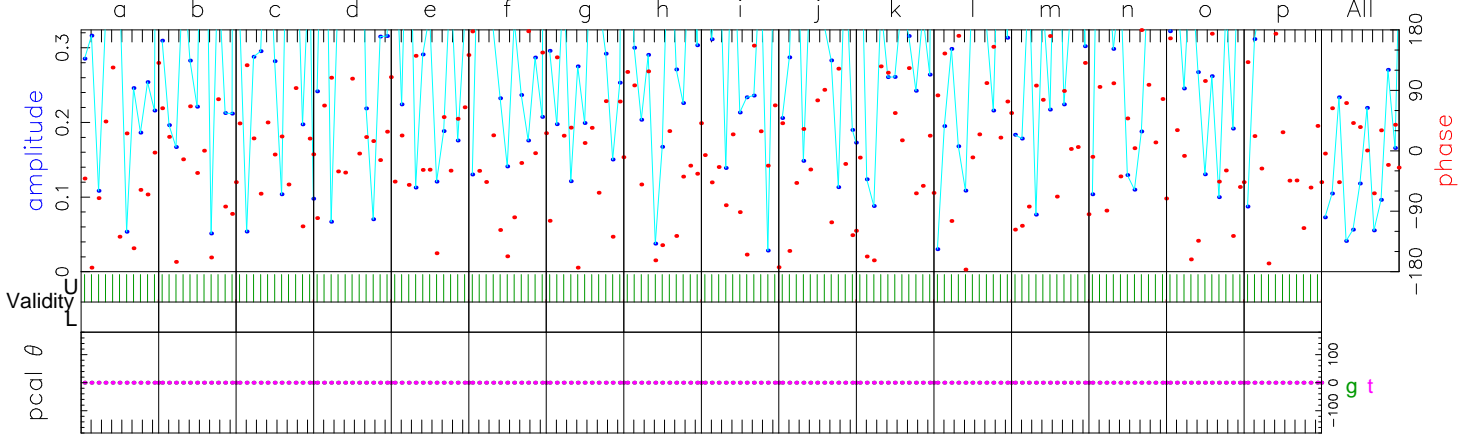
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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					
	-103.0	6.8	11.1	21.1	-17.0	-48.0	25.6	27.1	0.6	-0.5	27.0	47.2	-20.6	48.1	-87.9	-32.8		Phase	2.8				
	0.0	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2		Ampl.	0.1				
	244.1	44.6	115.4	34.8	134.3	177.9	27.0	168.0	214.4	198.8	226.1	241.7	245.7	138.8	139.2	109.5		Sbd box	34.5				
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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		PC amp					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			1.70878024582E+02															Apriori delay (usec)	1.71628023984E+02	Resid mbdelay (usec)	5.98593E-07	+/-	1.8E-04
Sband delay (usec)			1.70889735984E+02															Apriori clock (usec)	-2.6428703E+01	Resid sbdelay (usec)	-7.38288E-01	+/-	2.8E-03
Phase delay (usec)			1.71628024075E+02															Apriori clockrate (us/s)	-1.2500000E-07	Resid phdelay (usec)	9.13105E-08	+/-	6.1E-07
Delay rate (us/s)			1.25696939024E+00															Apriori rate (us/s)	1.25696931577E+00	Resid rate (us/s)	7.44666E-08	+/-	2.5E-09
Total phase (deg)				357.8														Apriori accel (us/s/s)	2.79336851827E-05	Resid phase (deg)	2.8	+/-	18.9

ph/seg (deg) 42.9 32.8 Search (2048X64) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

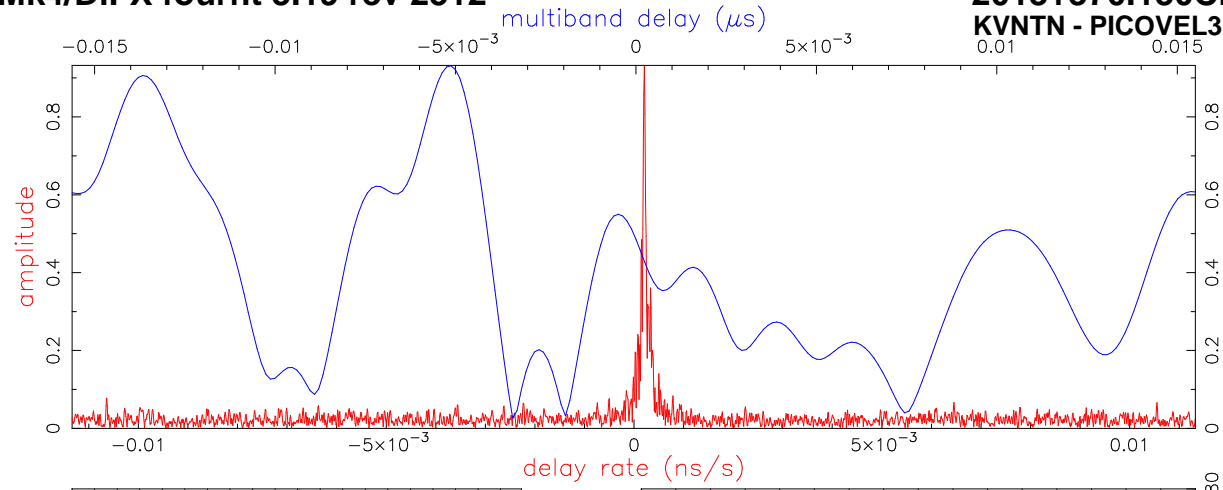
amp/seg (%) 76.4 57.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 46.6 37.9 Inc. seg. avg. 0.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

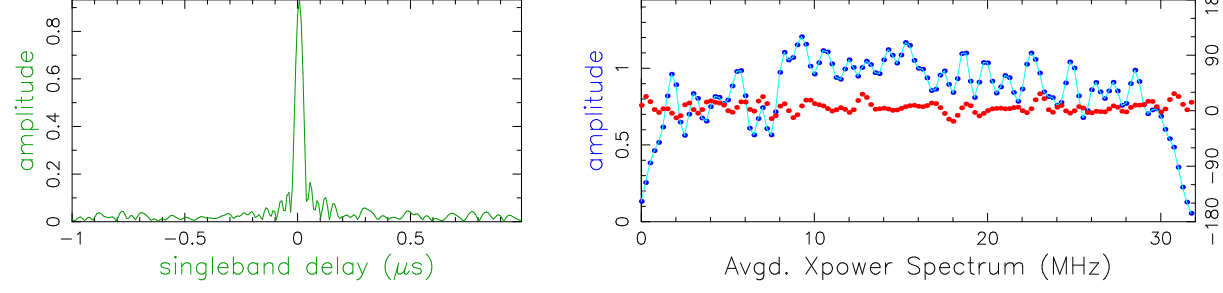
amp/frq (%) 47.9 66.1 Inc. frq. avg. 0.104 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

g: az 52.8 el 29.8 pa -13.6 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) -8991.240 4763.643 ion window (TEC) 0.00 0.00 simultaneous interpolator

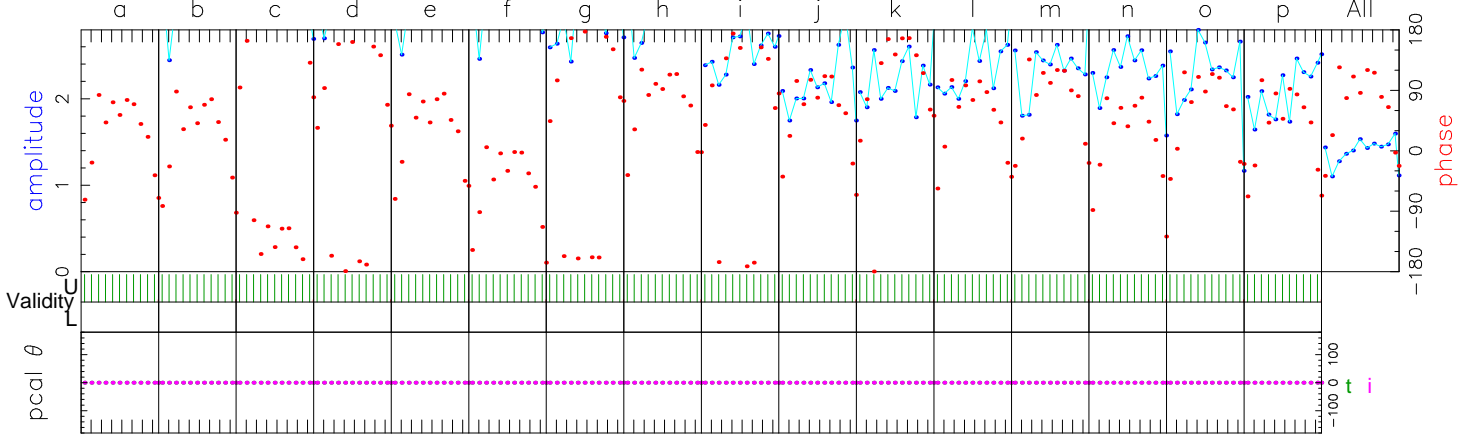
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gt..130CNK Output file: /Exps/c192b/v2/1234/No0078/gt.W.74.130CNK



Fringe quality 1
SNR 52.2
Int time 419.801
Amp 0.932
Phase 76.0
PFD 0.0e+00
Delays (us)
SBD 0.007157
MBD -0.005162
Fringe rate (Hz)
0.017996
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085644
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"



Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

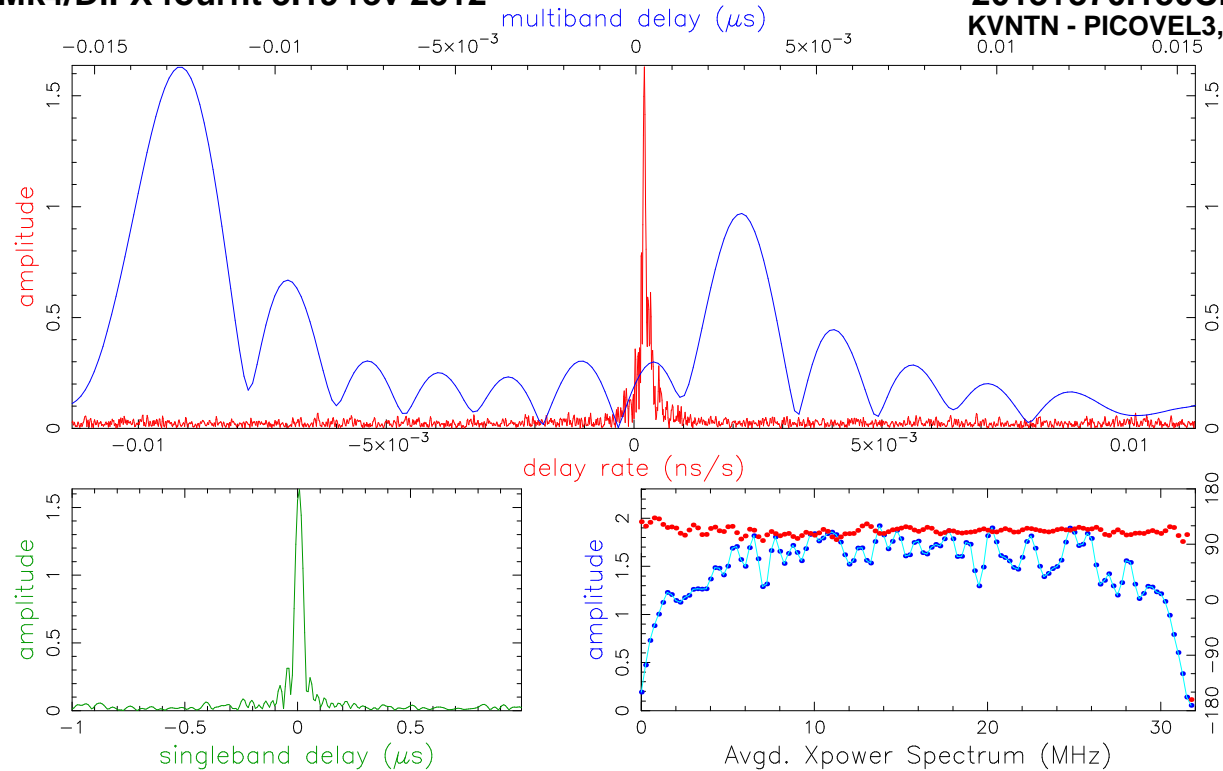


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
35.0	33.0	-149.6	153.1	40.0	-39.1	165.1	76.1	145.2	66.3	133.2	58.8	83.5	34.6	70.0	47.2		Phase	76.0	
2.2	2.1	2.3	2.0	2.1	2.2	2.0	2.2	1.7	1.5	1.5	1.6	1.6	1.6	1.5	1.3		Ampl.	1.8	
130.6	130.2	129.8	129.5	129.4	129.3	129.4	129.3	129.4	129.3	129.3	129.4	129.7	129.5	130.2	129.8		Sbd box	129.9	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
t	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	
ti	0:0	0:0	0:0	0:0	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	
ti	0:0	0:0	0:0	0:0	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		PC amp	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
t	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	

Group delay (usec)(sbd) -5.36848682498E+03 Apriori delay (usec) -5.36848166272E+03 Resid mbdelay (usec) -5.16225E-03 +/- 2.1E-05
 Sband delay (usec) -5.36847450572E+03 Apriori clock (usec) 2.8238920E+01 Resid sbdelay (usec) 7.15700E-03 +/- 3.3E-04
 Phase delay (usec) -5.36848166027E+03 Apriori clockrate (us/s) 5.5299997E-07 Resid phdelay (usec) 2.44926E-06 +/- 7.1E-08
 Delay rate (us/s) -1.79778177943E+00 Apriori rate (us/s) -1.79778198835E+00 Resid rate (us/s) 2.08919E-07 +/- 2.9E-10
 Total phase (deg) -77.7 Apriori accel (us/s/s) 2.50035868754E-05 Resid phase (deg) 76.0 +/- 2.2

RMS Theor. Amplitude 0.932 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.0 3.8 Search (2048X64) 0.910 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 53.2 6.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 66.1 4.4 Inc. seg. avg. 1.408 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 104.1 7.7 Inc. frq. avg. 1.840 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 297.2 el 30.0 pa 69.0 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 12972.991 966.179 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ti..130CNK Output file: /Exps/c192b/v2/1234/No0078/ti.W.19.130CNK

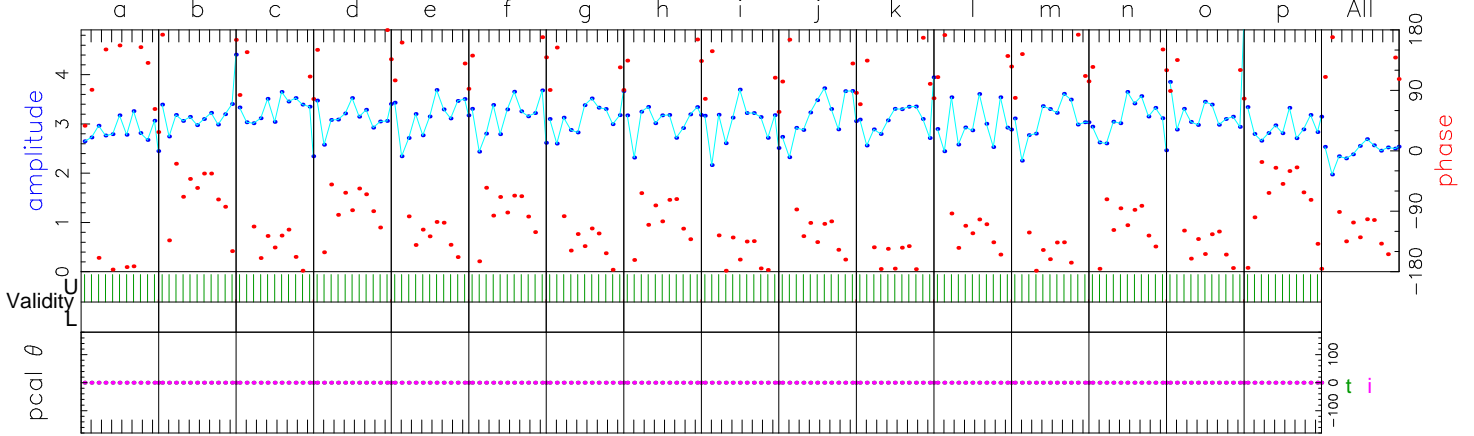


Fringe quality 2

SNR 91.7
Int time 419.801
Amp 1.637
Phase -140.4
PFD 0.0e+00
Delays (us)
SBD 0.006146
MBD -0.012638
Fringe rate (Hz) 0.018043
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

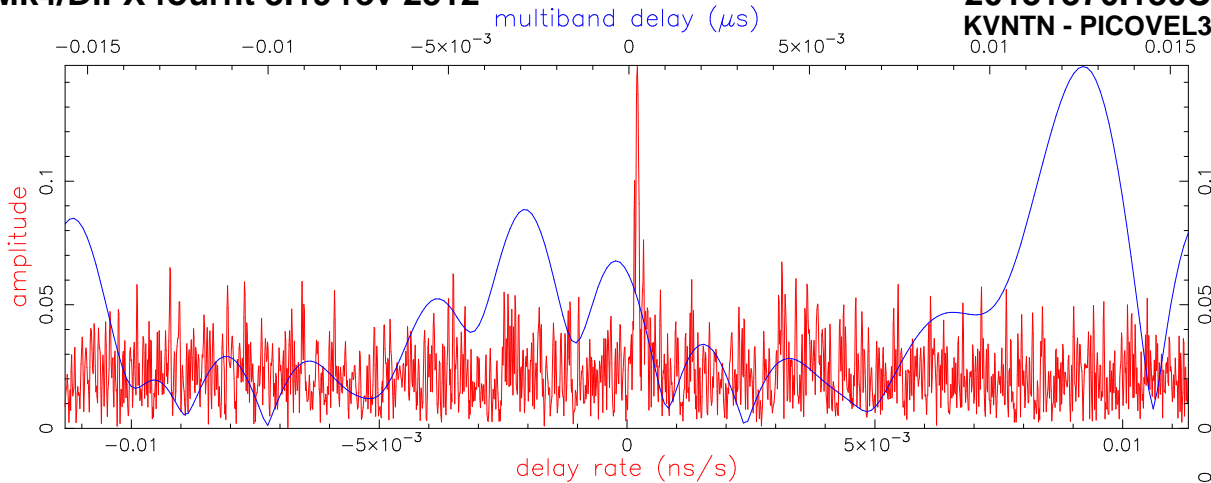
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085649
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



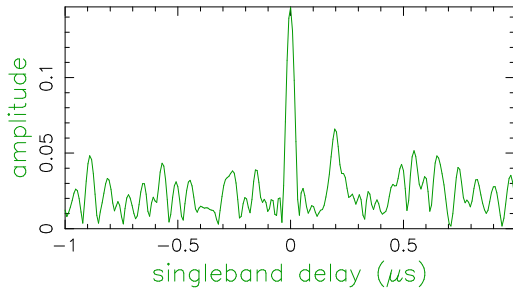
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	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		
ti	0:0	0:0	0:0	0:0	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		
i	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		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-5.36846305032E+03																
Sband delay (usec)		-5.36847551672E+03																
Phase delay (usec)		-5.36848166725E+03																
Delay rate (us/s)		-1.79778177888E+00																
Total phase (deg)					-294.0													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
Pcal mode: MANUAL, MANUAL																		
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MISamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 51.2 2.2 Search (2048X64) 1.618 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 50.3 3.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 41.6 2.5 Inc. seg. avg. 2.439 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 25.6 4.4 Inc. frq. avg. 2.049 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
t: az 297.2 el 30.0 pa 69.0 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 12972.991 966.179 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ti..130CNK Output file: /Exps/c192b/v2/1234/No0078/ti.W.34.130CNK

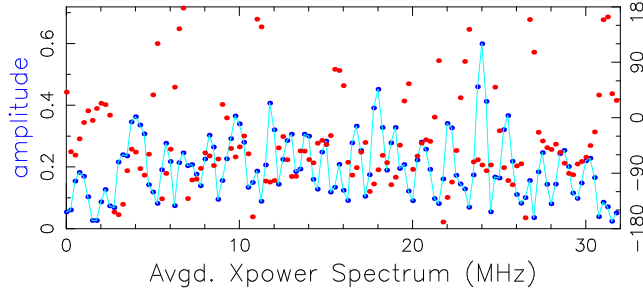


Fringe quality 9

SNR 8.2
Int time 419.801
Amp 0.147
Phase -151.1
PFD 6.8e-08
Delays (us)
SBD -0.001506
MBD 0.012563
Fringe rate (Hz)
0.017865
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

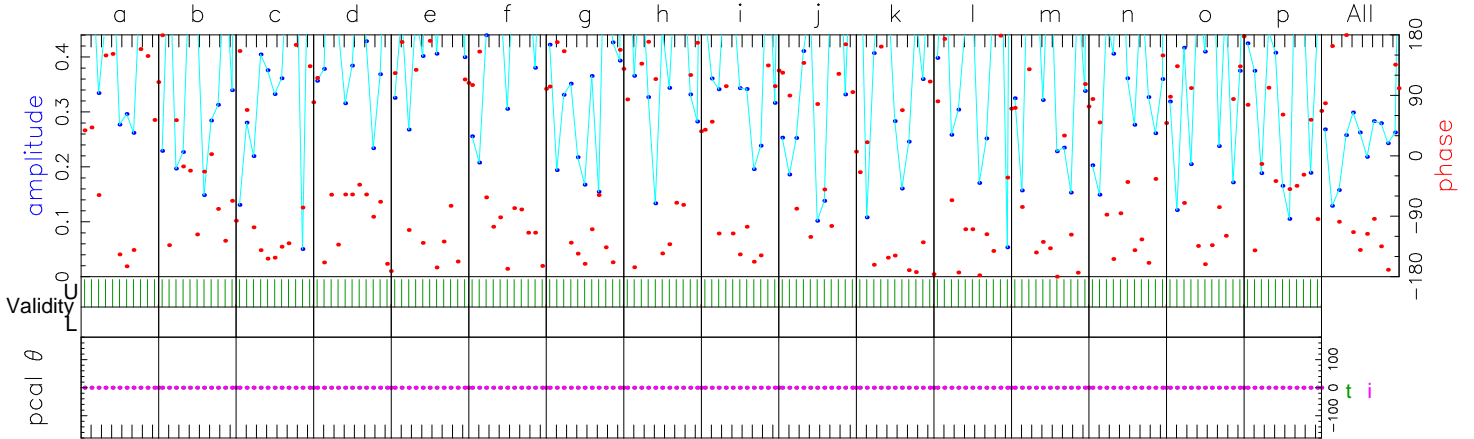


delay rate (ns/s)



Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085654
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

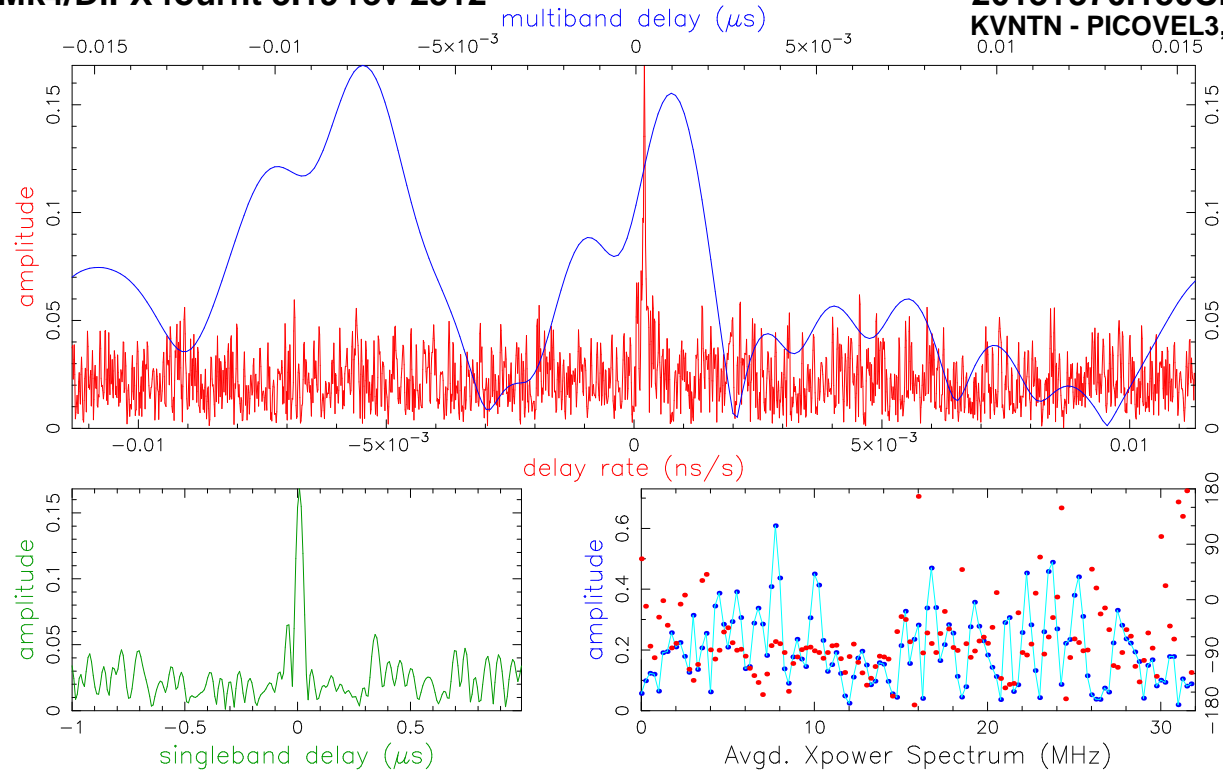


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	117.6	-82.6	-171.5	-90.1	-169.4	-113.8	-162.9	-175.9	159.2	148.1	-172.8	-153.9	179.7	-111.2	-148.4	-22.8		Phase	-151.1				
t	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1		Ampl.	0.2				
i	130.0	128.4	129.8	129.5	129.5	129.8	222.7	141.9	177.1	76.2	26.4	129.1	92.2	253.8	185.1	196.3		Sbd box	128.8				
t	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used					
ti	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
ti	0:0	0:0	0:0	0:0	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					
t	0:0	0:0	0:0	0:0	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		PC amp					
i	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					
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-5.36846909885E+03															Apriori delay (usec)	-5.36848166272E+03	Resid mbdelay (usec)	1.25629E-02	+/-	1.3E-04
Sband delay (usec)			-5.36848316822E+03															Apriori clock (usec)	2.8238920E+01	Resid sbdelay (usec)	-1.50550E-03	+/-	2.1E-03
Phase delay (usec)			-5.36848166759E+03															Apriori clockrate (us/s)	5.5299997E-07	Resid phdelay (usec)	-4.87211E-06	+/-	4.5E-07
Delay rate (us/s)			-1.79778178095E+00															Apriori rate (us/s)	-1.79778198835E+00	Resid rate (us/s)	2.07396E-07	+/-	1.9E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.50035868754E-05	Resid phase (deg)	-151.1	+/-	13.9

ph/seg (deg) 56.8 24.1 Search (2048X64) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.0 42.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.8 27.9 Inc. seg. avg. 0.225 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.6 48.6 Inc. frq. avg. 0.187 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 12972.991 966.179 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ti..130CNK Output file: /Exps/c192b/v2/1234/No0078/ti.W.51.130CNK

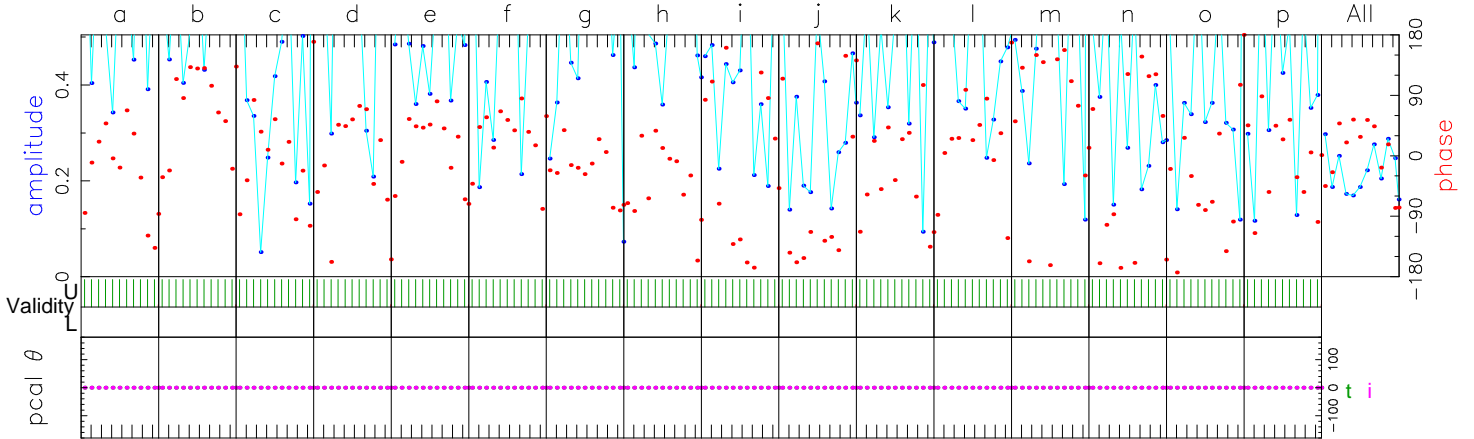
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, ti
KVNTN - PICOVEL3, fgroup W, pol RL



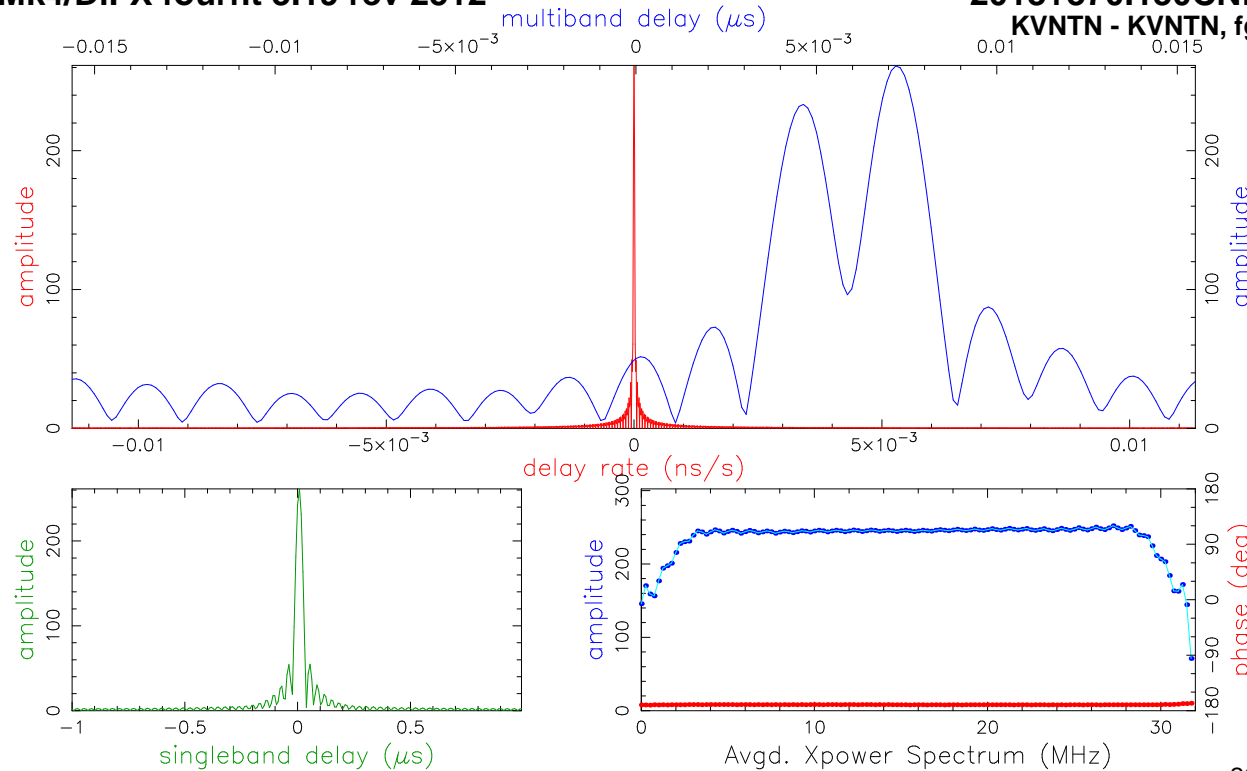
Fringe quality 9
SNR 9.4
Int time 419.801
Amp 0.168
Phase 9.9
PFD 1.7e-12
Delays (us)
SBD 0.007819
MBD -0.007563
Fringe rate (Hz) 0.018436
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Yr:day 16383
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085701
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



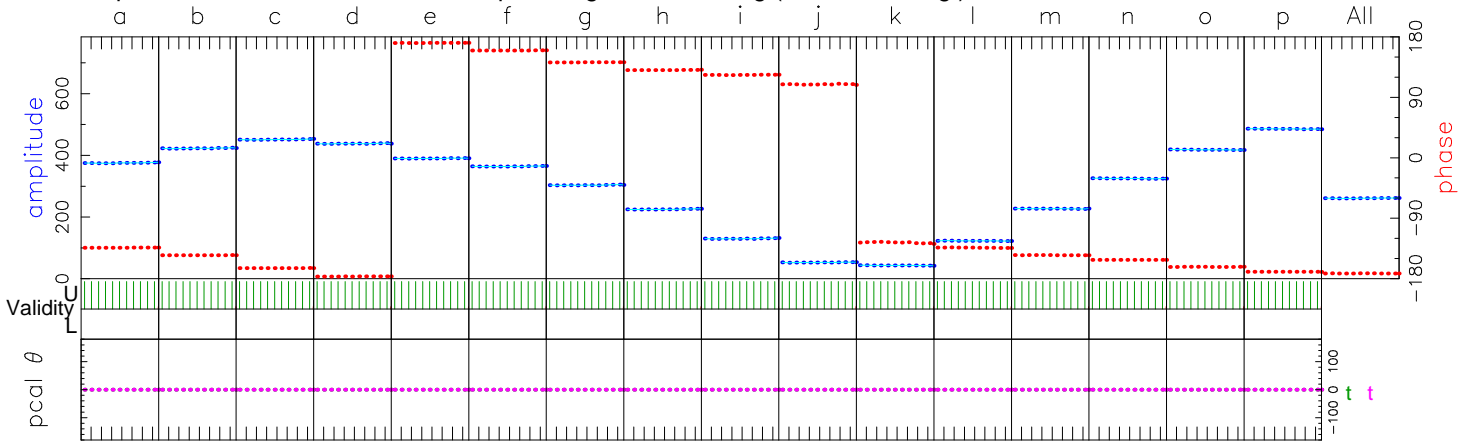
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
t	1000	1000	1000	1000	1000	1000	1000	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				
ti	0:0	0:0	0:0	0:0	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				
i	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		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks		
Group delay (usec)(sbd)		-5.36848922545E+03																		
Sband delay (usec)		-5.36847384372E+03																		
Phase delay (usec)		-5.36848166240E+03																		
Delay rate (us/s)		-1.79778177432E+00																		
Total phase (deg)					-143.7															
Apriori delay (usec)																				
Apriori clock (usec)																				
Apriori clockrate (us/s)																				
Apriori rate (us/s)																				
Apriori accel (us/s/s)																				
Resid mbdelay (usec)																				
Resid sbdelay (usec)																				
Resid phdelay (usec)																				
Resid rate (us/s)																				
Resid phase (deg)																				
Pcal mode: MANUAL, MANUAL																				
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																				
Bits/sample: 2x2																				
Sample rate(MISamp/s): 64																				
Data rate(Mb/s): 2048																				
nlags: 128																				
t_cohere infinite																				
ion window (TEC)																				
sb window (us)																				
mb window (us)																				
dr window (ns/s)																				
simultaneous interpolator																				

t: az 297.2 el 30.0 pa 69.0 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 12972.991 966.179 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ti..130CNK Output file: /Exps/c192b/v2/1234/No0078/ti.W.75.130CNK



Fringe quality 5
 SNR 14650.3
 Int time 419.817
 Amp 261.468
 Phase -172.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.006934
 MBD 0.007230
 Fringe rate (Hz)
 -0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085716
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

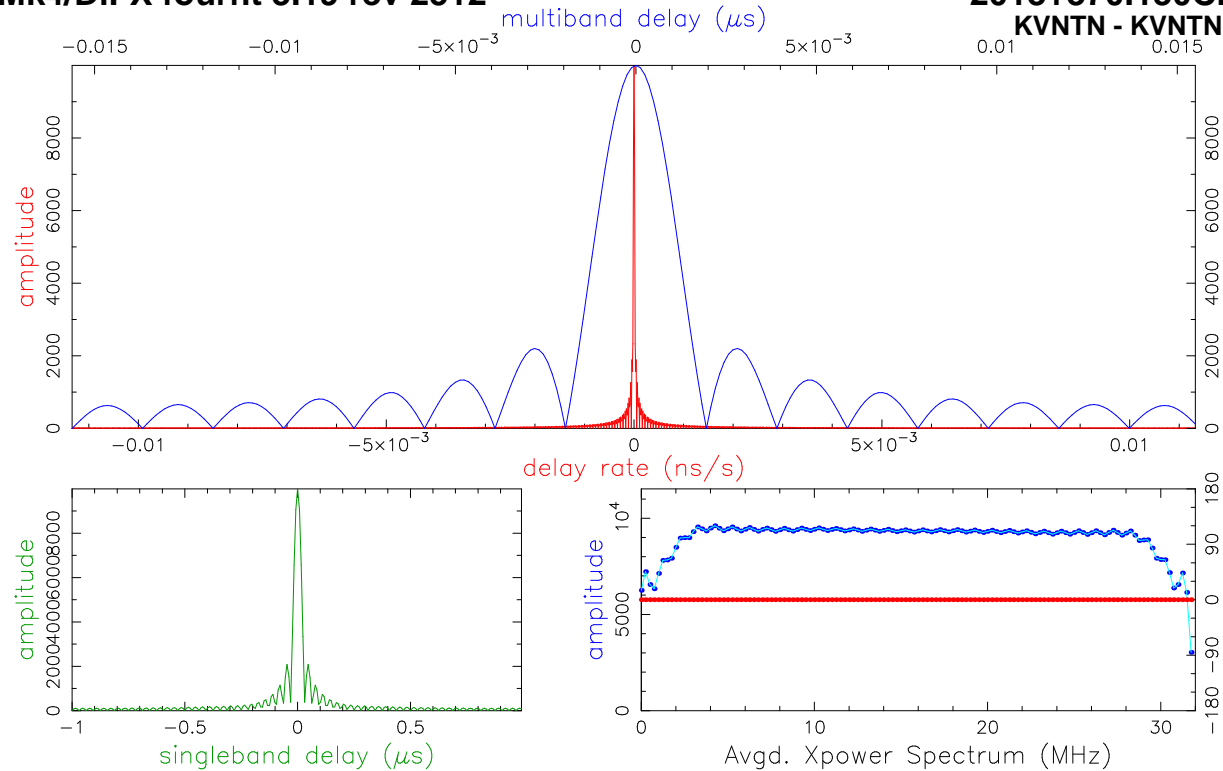
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	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
	-133.8	-145.0	-164.1	-176.6	170.9	159.6	142.0	130.4	123.3	109.3	-126.1	-133.7	-144.9	-151.9	-162.3	-169.6	Phase	-172.0
	375.5	422.9	451.3	438.3	390.2	364.4	303.6	225.3	130.0	52.9	43.2	123.0	227.1	325.0	418.2	485.8	Ampl.	298.5
	129.9	129.7	129.7	129.8	129.8	129.8	129.8	129.9	129.7	129.9	130.0	129.8	129.9	129.8	129.8	129.9	Sbd box	129.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:t	0:0	0:0	0:0	0:0	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	
t:t	0:0	0:0	0:0	0:0	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	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 7.23046875000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 7.23047E-03 +/- 7.4E-08
 Sband delay (usec) 6.93350000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 6.93350E-03 +/- 1.2E-06
 Phase delay (usec) -5.54686391518E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.54686E-06 +/- 2.5E-10
 Delay rate (us/s) -4.25134571751E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -4.25135E-12 +/- 1.0E-12
 Total phase (deg) -172.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -172.0 +/- 0.0

RMS Theor. Amplitude 261.468 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 259.801 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 41.4 0.0 Inc. seg. avg. 261.157 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.1 0.0 Inc. frq. avg. 298.540 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 t: az 297.2 el 30.0 pa 69.0 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

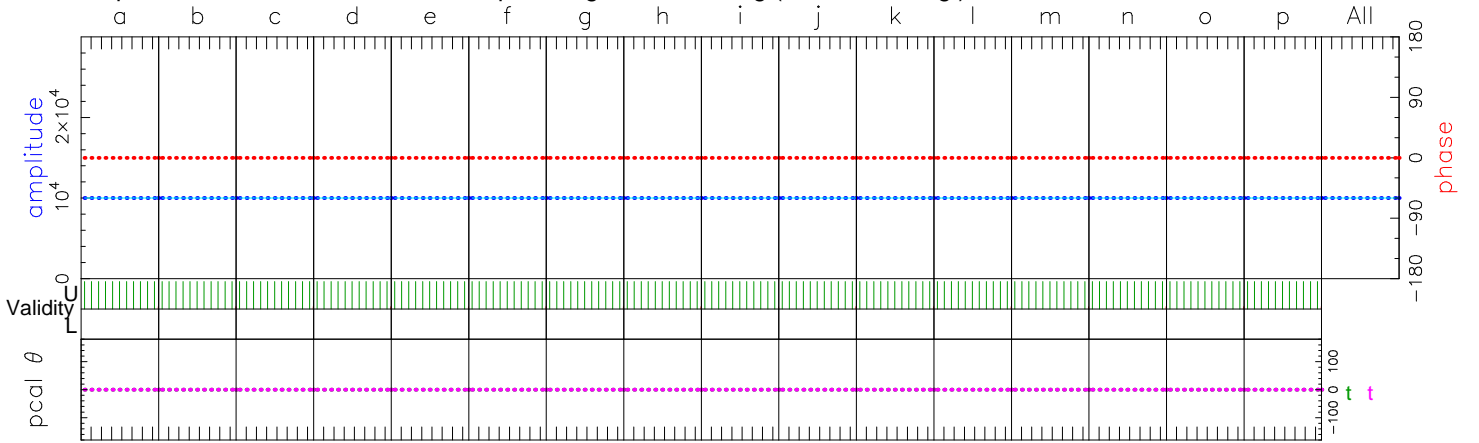


Fringe quality 9

SNR 560308.9
 Int time 419.817
 Amp 9999.998
 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. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085658
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
t:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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		
t	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		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		

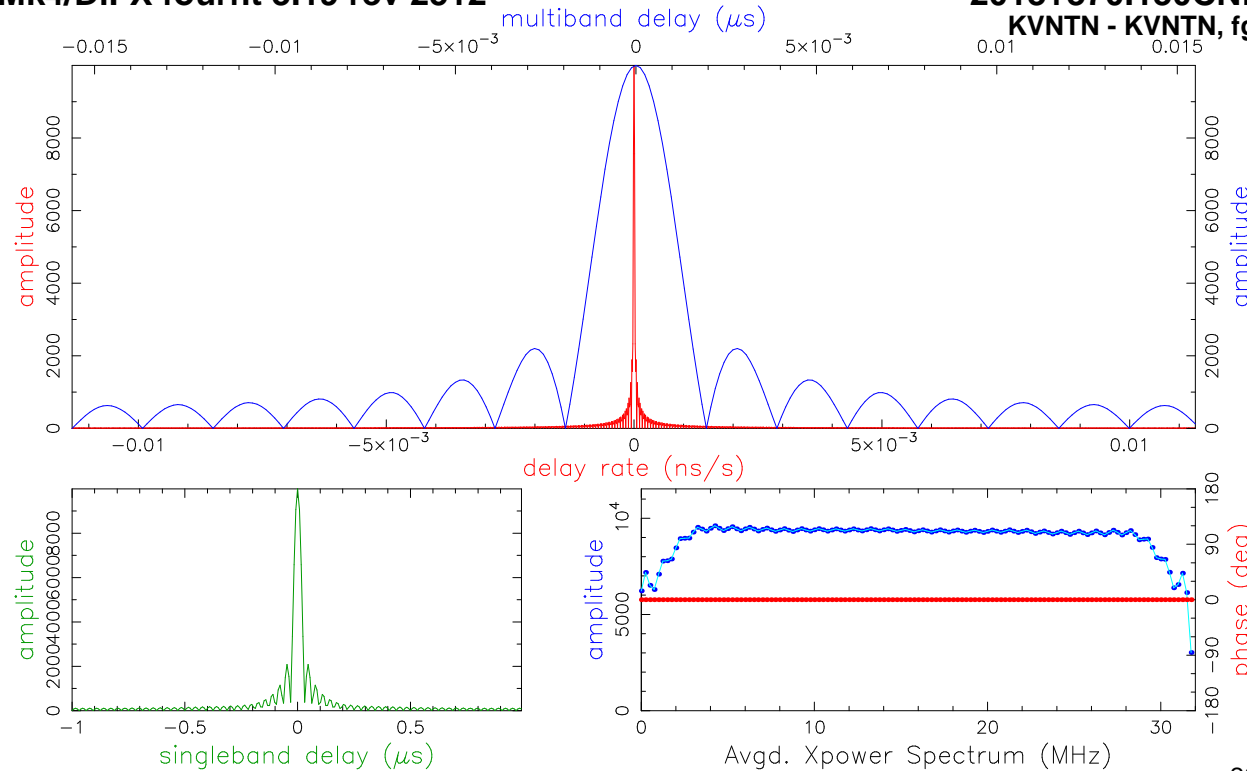
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) 3.31271307668E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.31271E-20 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.998 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. 9999.998 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 297.2 el 30.0 pa 69.0 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

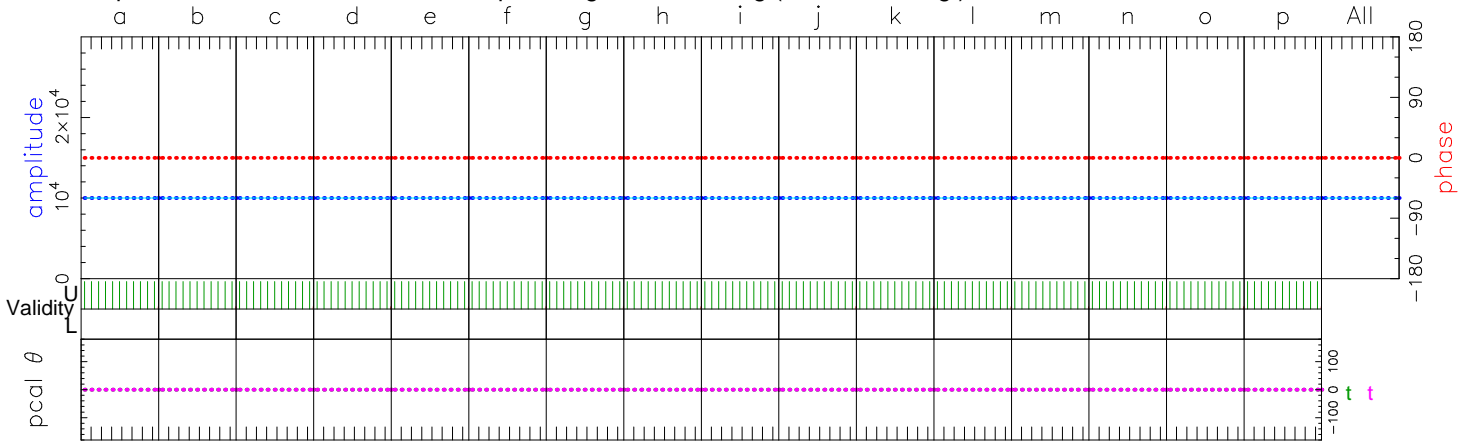
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, tt
KVNTN - KVNTN, fgroup W, pol RR



Fringe quality 9
SNR 560308.9
Int time 419.817
Amp 9999.998
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. c192b
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085703
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

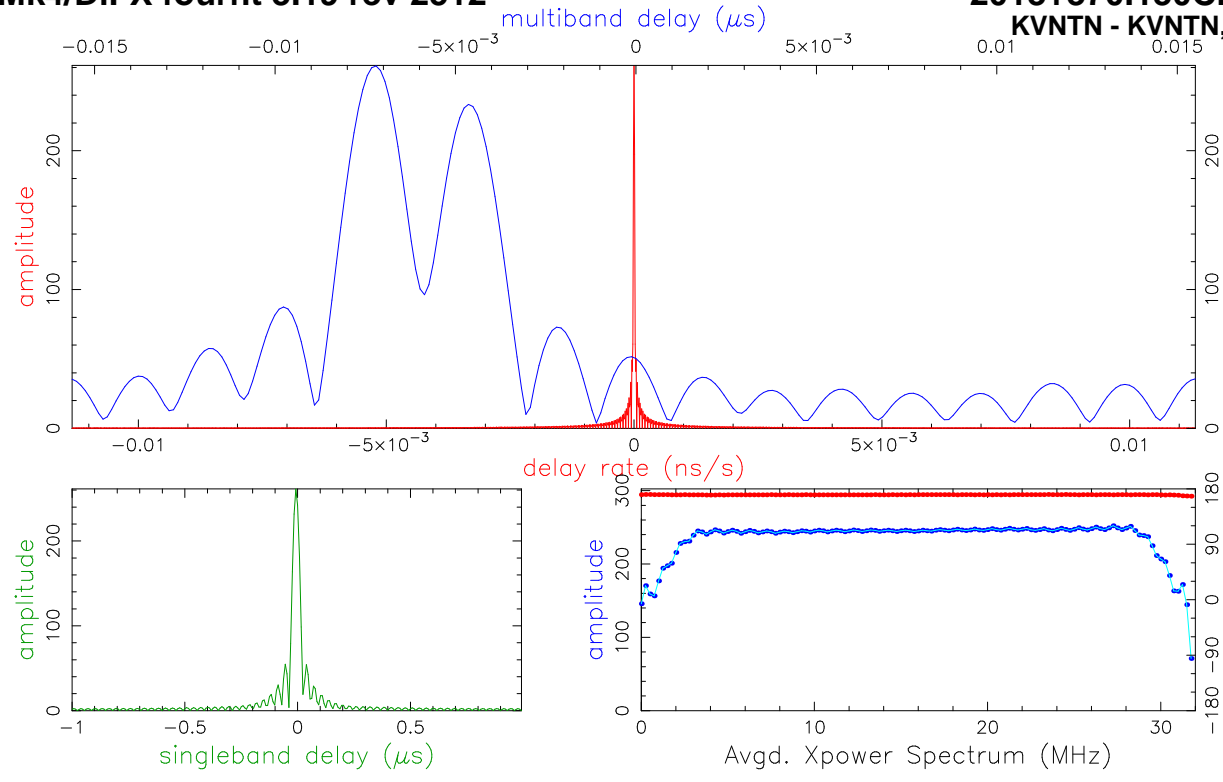


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
t:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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		
t	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		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 3.1E-08
 Phase delay (usec) 3.98466669183E-21 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.98467E-21 +/- 6.6E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

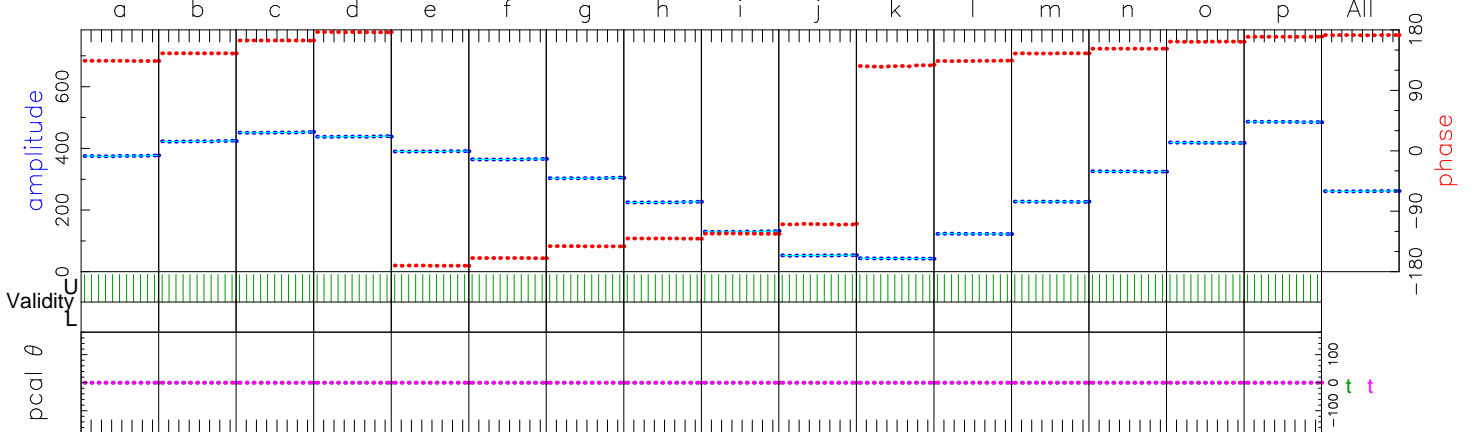
RMS Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 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. 9999.998 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 t: az 297.2 el 30.0 pa 69.0 t: az 297.2 el 30.0 pa 69.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tt..130CNK Output file: /Exps/c192b/v2/1234/No0078/tt.W.79.130CNK



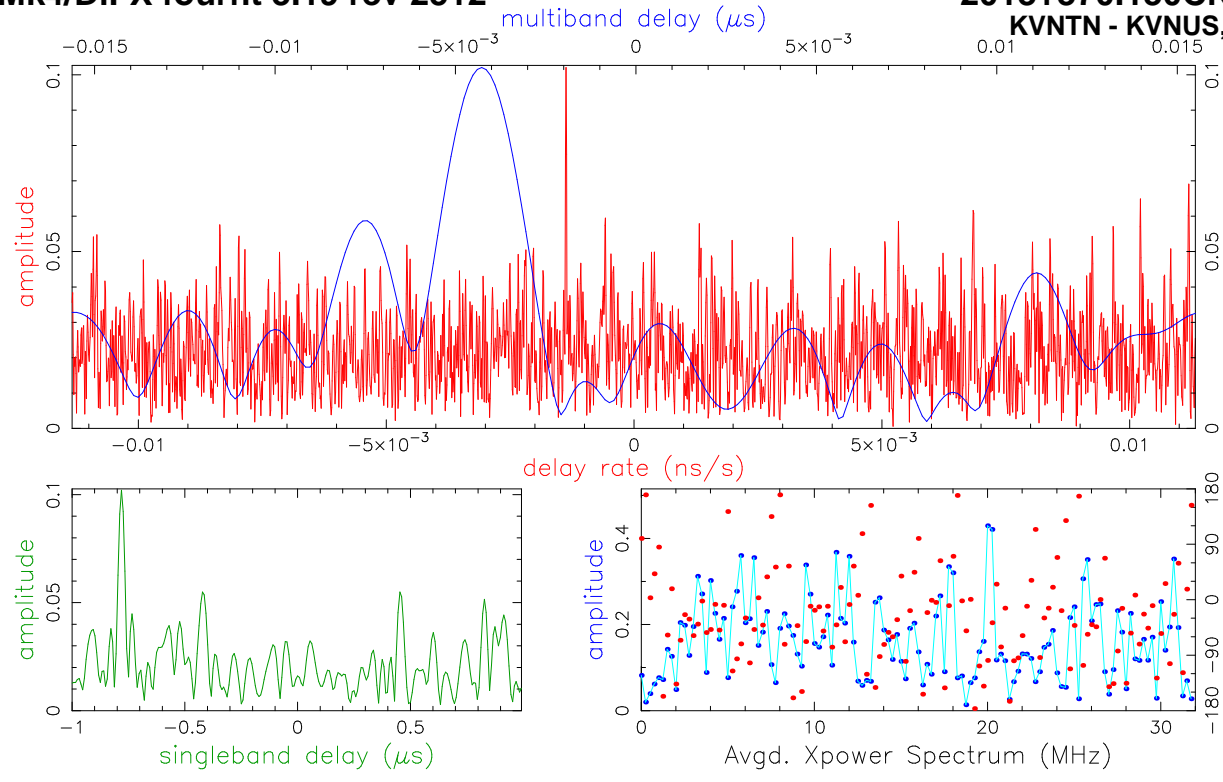
Fringe quality 5
 SNR 14650.3
 Int time 419.817
 Amp 261.468
 Phase 172.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.006934
 MBD -0.007230
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085709
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
t:t	0:0	0:0	0:0	0:0	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:t	0:0	0:0	0:0	0:0	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			
t	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		Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Group delay (usec)(sbd)			-7.23046875000E-03																
Sband delay (usec)			-6.93350000000E-03																
Phase delay (usec)			5.54686391514E-06																
Delay rate (us/s)			4.25134571751E-12																
Total phase (deg)					172.0														
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			

ph/seg (deg) 0.0 0.0 Theor. Amplitude 261.468 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.2 0.0 Search (2048X64) 259.801 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.1 0.0 Inc. seg. avg. 261.157 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 t: az 297.2 el 30.0 pa 69.0 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/c192b/v2/1234/No0078/tt..130CNK Output file: /Exps/c192b/v2/1234/No0078/tt.W.95.130CNK simultaneous interpolator

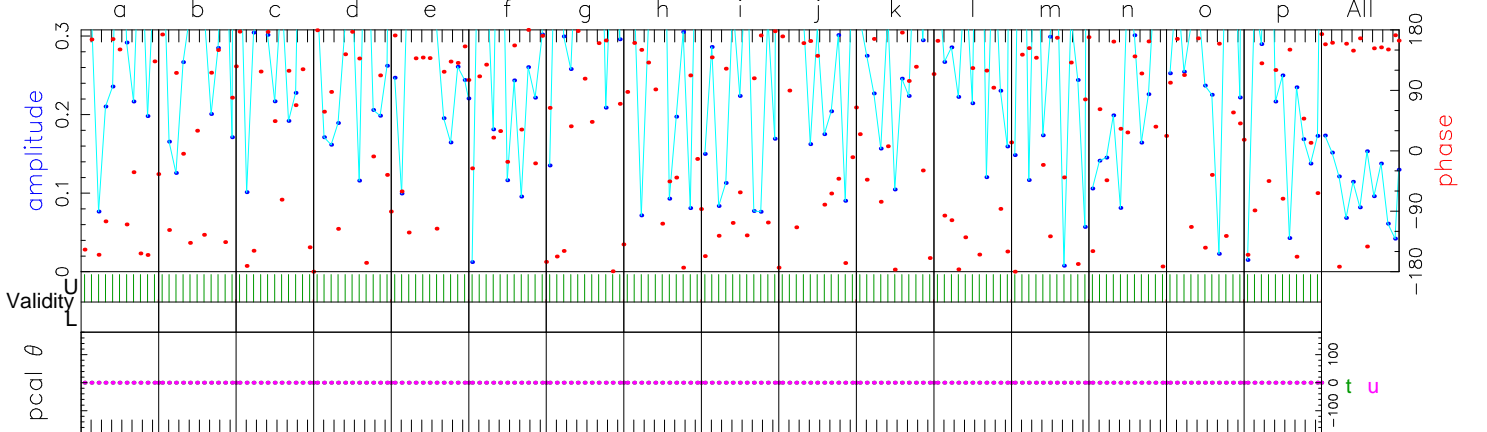


Fringe quality 0

SNR 5.7
Int time 419.817
Amp 0.103
Phase 167.2
PFD 9.3e-01
Delays (us)
SBD -0.781025
MBD -0.004277
Fringe rate (Hz)
-0.118367
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085711
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

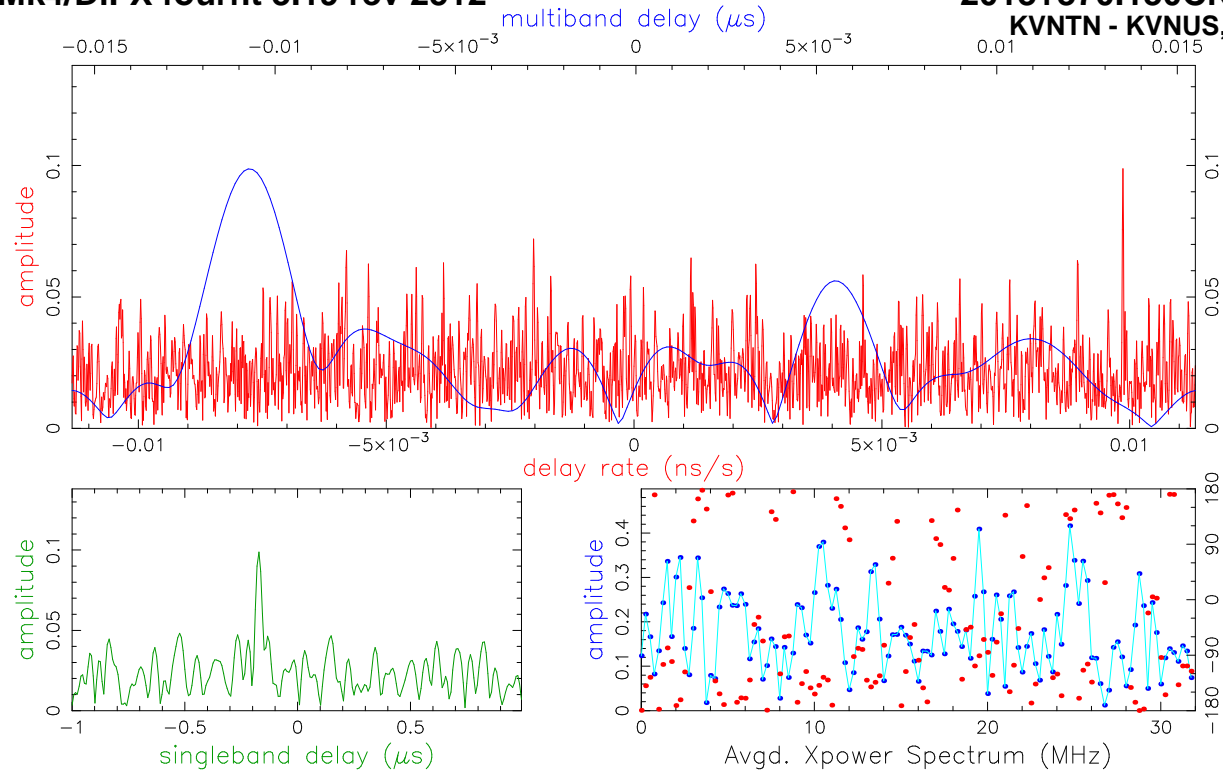
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	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
	-169.4	-177.9	155.7	169.2	159.4	94.1	155.0	129.2	-140.9	-167.4	148.8	-161.4	157.7	98.1	157.0	-69.3	Phase	167.2
	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	153.5	62.4	10.7	81.1	250.6	206.3	29.5	93.8	10.1	42.3	87.8	21.1	75.6	102.0	195.2	179.5	Sbd box	29.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	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	
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	Mani PC	
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	PC amp	
t	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	
t	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	
Group delay (usec)(sbd)	3.47166960284E+02			Apriori delay (usec)			3.47952486852E+02			Resid mbdelay (usec)			-4.27657E-03			+/-	1.9E-04	
Sband delay (usec)	3.47171461852E+02			Apriori clock (usec)			1.9273479E+01			Resid sbdelay (usec)			-7.81025E-01			+/-	3.0E-03	
Phase delay (usec)	3.47952492245E+02			Apriori clockrate (us/s)			-1.9999998E-07			Resid phdelay (usec)			5.39267E-06			+/-	6.5E-07	
Delay rate (us/s)	-1.62582911298E-02			Apriori rate (us/s)			-1.62569170106E-02			Resid rate (us/s)			-1.37412E-06			+/-	2.7E-09	
Total phase (deg)	245.5			Apriori accel (us/s/s)			-3.96299782620E-06			Resid phase (deg)			167.2			+/-	20.0	
ph/seg (deg)	RMS	Theor.	Amplitude	0.103 +/- 0.018			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5								
amp/seg (%)	19.3	34.7	Search (2048X64)	0.101			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)			-1.000 1.000					
ph/frq (deg)	40.4	60.6	Interp.	0.000			Bits/sample: 2x2			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
amp/frq (%)	48.4	40.1	Inc. seg. avg.	0.093			Sample rate(MISamp/s): 64			Data rate(Mb/s): 2048			dr window (ns/s)		-0.011 0.011			
	64.1	70.0	Inc. frq. avg.	0.101			nlags: 128			t_cohere infinite			ion window (TEC)		0.00 0.00			

t: az 297.2 el 30.0 pa 69.0 u: az 297.1 el 28.9 pa 65.2 u,v (fr/asec) 110.058 -466.771 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tu...130CNK Output file: /Exps/c192b/v2/1234/No0078/tu.W.102.130CNK

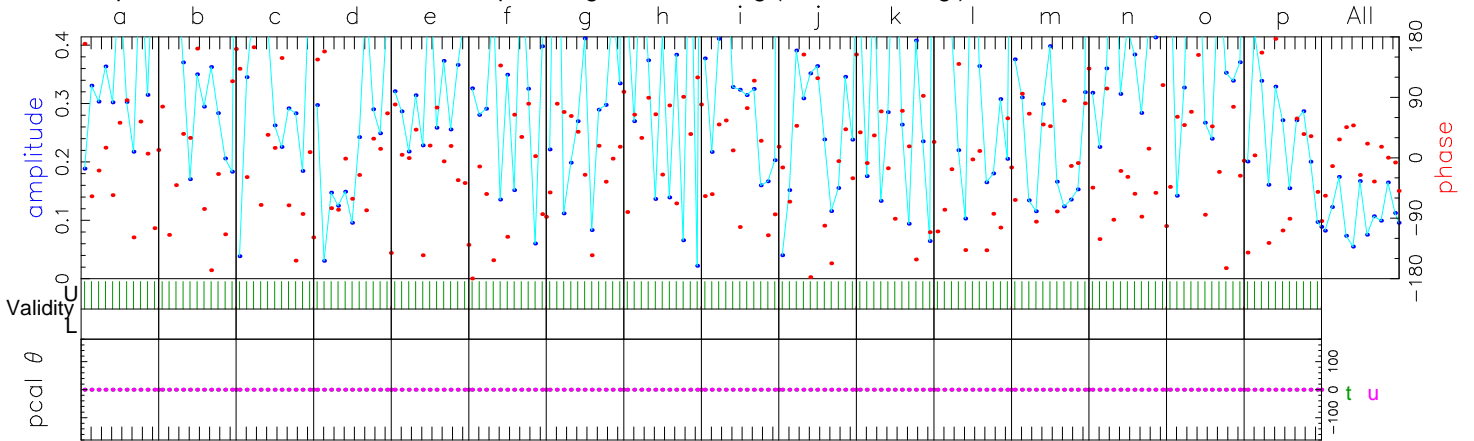


Fringe quality 0

SNR 5.5
Int time 419.817
Amp 0.138
Phase -1.0
PFD 1.0e+00
Delays (us)
SBD -0.172621
MBD -0.010706
Fringe rate (Hz) 0.850689
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085717
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec

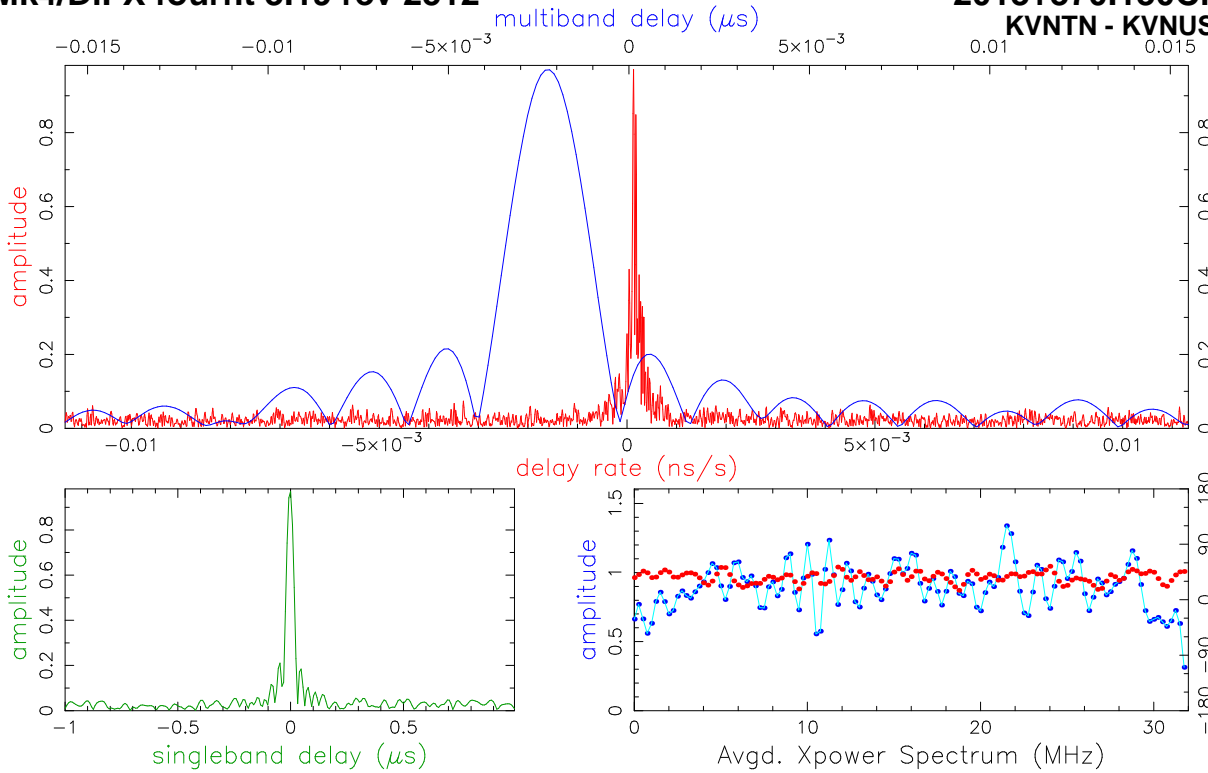


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-2.7	-55.3	-39.6	-11.5	8.4	-75.5	24.6	21.8	17.0	91.5	8.8	-51.4	39.9	-48.1	29.1	-53.0		Phase	-1.0				
	0.2	0.1	0.1	0.1	0.3	0.1	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.2	0.0		Ampl.	0.1				
	110.4	152.2	238.2	221.0	52.9	160.5	169.0	64.1	154.7	78.9	218.8	30.5	244.5	138.4	173.6	227.1		Sbd box	106.9				
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used					
t	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					
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		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		Mani PC					
t	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					
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					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			3.47785530808E+02															Apriori delay (usec)	3.47952486852E+02	Resid mbdelay (usec)	-1.07060E-02	+/-	1.9E-04
Sband delay (usec)			3.47779866352E+02															Apriori clock (usec)	1.9273479E+01	Resid sbdelay (usec)	-1.72621E-01	+/-	3.1E-03
Phase delay (usec)			3.47952486818E+02															Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	-3.38127E-08	+/-	6.7E-07
Delay rate (us/s)			-1.62470413548E-02															Apriori rate (us/s)	-1.62569170106E-02	Resid rate (us/s)	9.87566E-06	+/-	2.8E-09
Total phase (deg)				77.2														Apriori accel (us/s/s)	-3.96299782620E-06	Resid phase (deg)	-1.0	+/-	20.7

ph/seg (deg) RMS Theor. Amplitude 0.138 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.1 35.8 Search (2048X64) 0.097 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.9 62.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 46.6 41.4 Inc. seg. avg. 0.131 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 68.3 72.2 Inc. frq. avg. 0.132 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

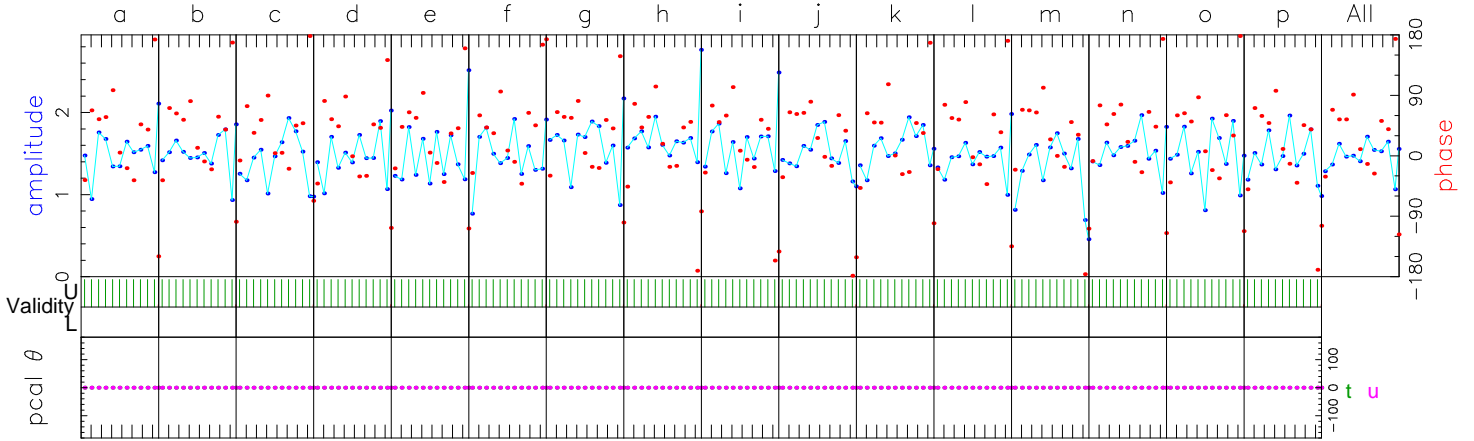
t: az 297.2 el 30.0 pa 69.0 u: az 297.1 el 28.9 pa 65.2 u,v (fr/asec) 110.058 -466.771 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tu...130CNK Output file: /Exps/c192b/v2/1234/No0078/tu.W.122.130CNK



Fringe quality 5
SNR 55.0
Int time 419.817
Amp 0.982
Phase 34.1
PFD 0.0e+00
Delays (us)
SBD -0.002650
MBD -0.002247
Fringe rate (Hz) 0.011259
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085700
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

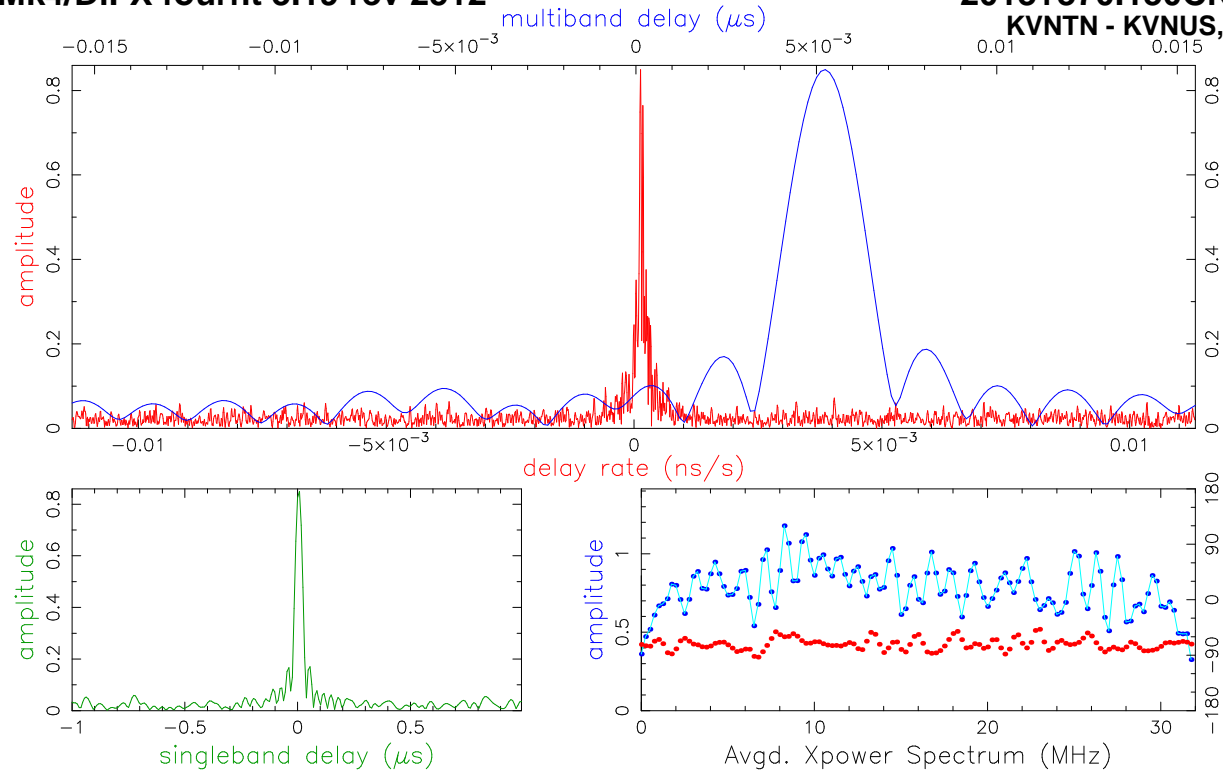
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	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
	31.4	37.5	31.1	29.9	34.3	36.9	30.9	37.2	38.7	38.3	27.8	33.7	39.2	36.3	29.7	31.1	Phase	34.1
	0.9	1.0	1.0	0.9	0.9	1.0	1.1	1.0	1.0	1.0	0.9	0.9	1.0	1.1	0.9	0.9	Ampl.	1.0
	128.9	128.5	128.6	128.5	128.6	128.8	128.7	128.6	129.0	128.5	128.8	128.7	128.6	128.7	128.3	128.9	Sbd box	128.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	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	
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	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	ManI PC	
t	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	
t	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) 3.47950239999E+02 Apriori delay (usec) 3.47952486852E+02 Resid mbdelay (usec) -2.24685E-03 +/- 2.0E-05
 Sband delay (usec) 3.47949836852E+02 Apriori clock (usec) 1.9273479E+01 Resid sbdelay (usec) -2.65000E-03 +/- 3.1E-04
 Phase delay (usec) 3.47952487951E+02 Apriori clockrate (us/s) -1.9999998E-07 Resid phdelay (usec) 1.09854E-06 +/- 6.7E-08
 Delay rate (us/s) -1.62567863051E-02 Apriori rate (us/s) -1.62569170106E-02 Resid rate (us/s) 1.30706E-07 +/- 2.8E-10
 Total phase (deg) 112.3 Apriori accel (us/s/s) -3.96299782620E-06 Resid phase (deg) 34.1 +/- 2.1

RMS Theor. Amplitude 0.982 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.3 3.6 Search (2048X64) 0.950 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 52.2 6.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 3.9 4.2 Inc. seg. avg. 1.461 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 6.5 7.3 Inc. frq. avg. 0.970 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 t: az 297.2 el 30.0 pa 69.0 u: az 297.1 el 28.9 pa 65.2 u,v (fr/asec) 110.058 -466.771 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tu...130CNK Output file: /Exps/c192b/v2/1234/No0078/tu.W.73.130CNK

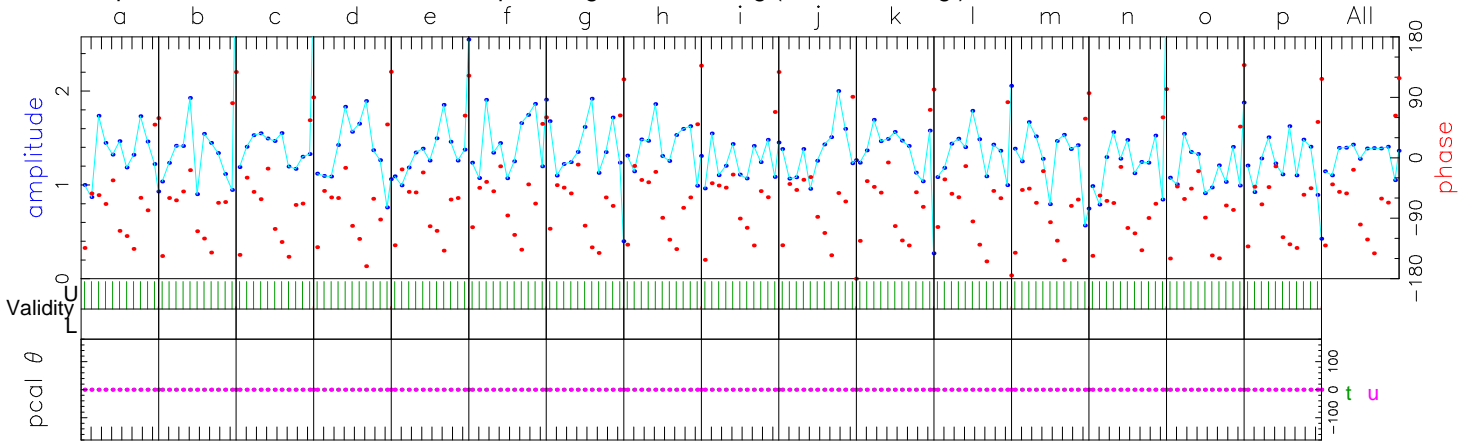


Fringe quality 5

SNR 48.2
Int time 419.817
Amp 0.859
Phase -72.5
PFD 0.0e+00
Delays (us)
SBD 0.005056
MBD 0.005230
Fringe rate (Hz) 0.011344
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085706
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



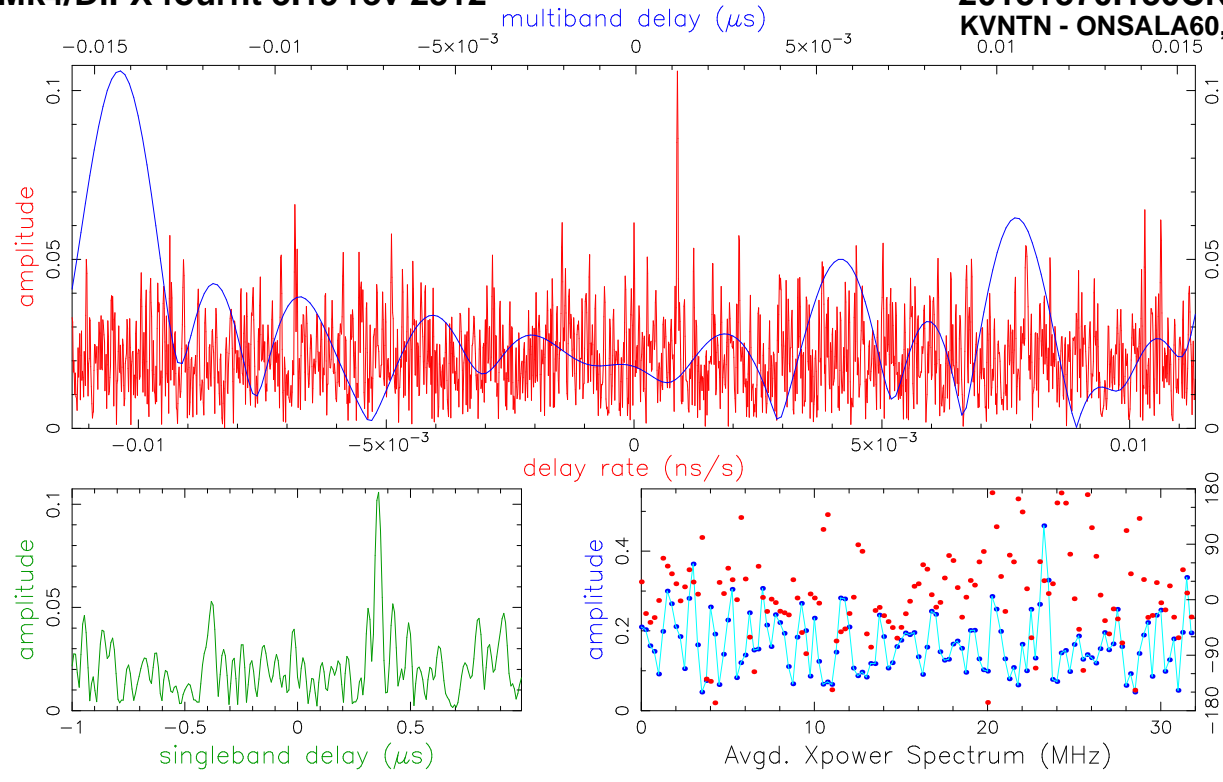
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	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	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)	3.47957716499E+02	Apriori delay (usec)	3.47952486852E+02	Resid mbdelay (usec)	5.22965E-03	+/-	2.2E-05
Sband delay (usec)	3.47957543352E+02	Apriori clock (usec)	1.9273479E+01	Resid sbdelay (usec)	5.05650E-03	+/-	3.6E-04
Phase delay (usec)	3.47952484513E+02	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	-2.33858E-06	+/-	7.7E-08
Delay rate (us/s)	-1.62567853145E-02	Apriori rate (us/s)	-1.62569170106E-02	Resid rate (us/s)	1.31696E-07	+/-	3.2E-10
Total phase (deg)	5.8	Apriori accel (us/s/s)	-3.96299782620E-06	Resid phase (deg)	-72.5	+/-	2.4

ph/seg (deg)	57.8	RMS	4.1	Theor.	4.1	Amplitude	0.859 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	54.4	Search (2048X64)	0.835	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	6.9	Inc. seg. avg.	1.304	Inc. frq. avg.	0.852	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	7.7	Inc. frq. avg.	0.852	Sample rate (MSamp/s):	64	Data rate (Mb/s):	2048	nlags:	128	t_cohere	infinite

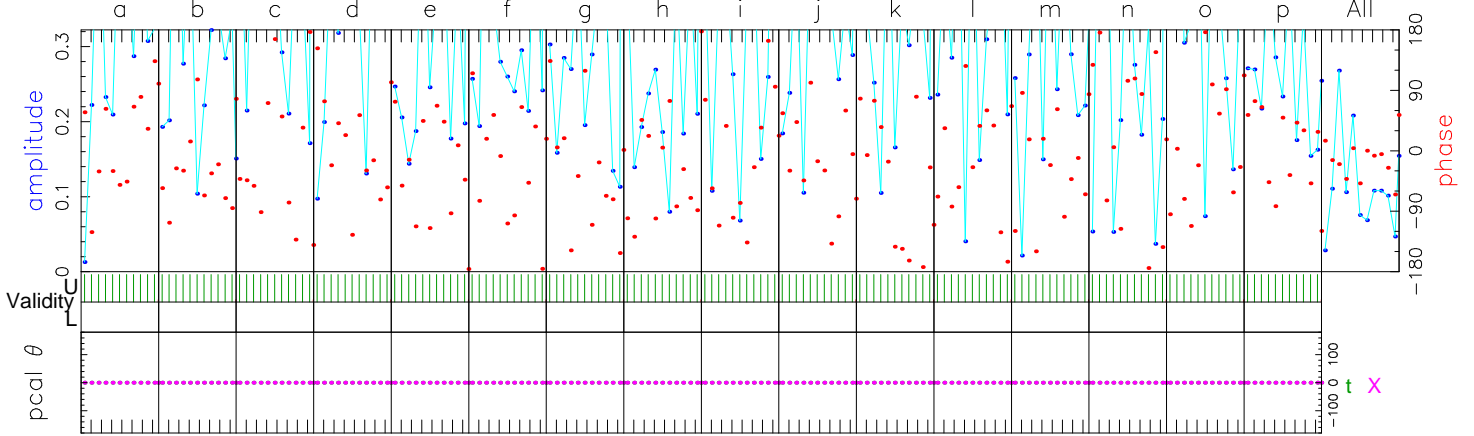
t: az 297.2 el 30.0 pa 69.0 u: az 297.1 el 28.9 pa 65.2 u,v (fr/asec) 110.058 -466.771 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tu...130CNK Output file: /Exps/c192b/v2/1234/No0078/tu.W.82.130CNK



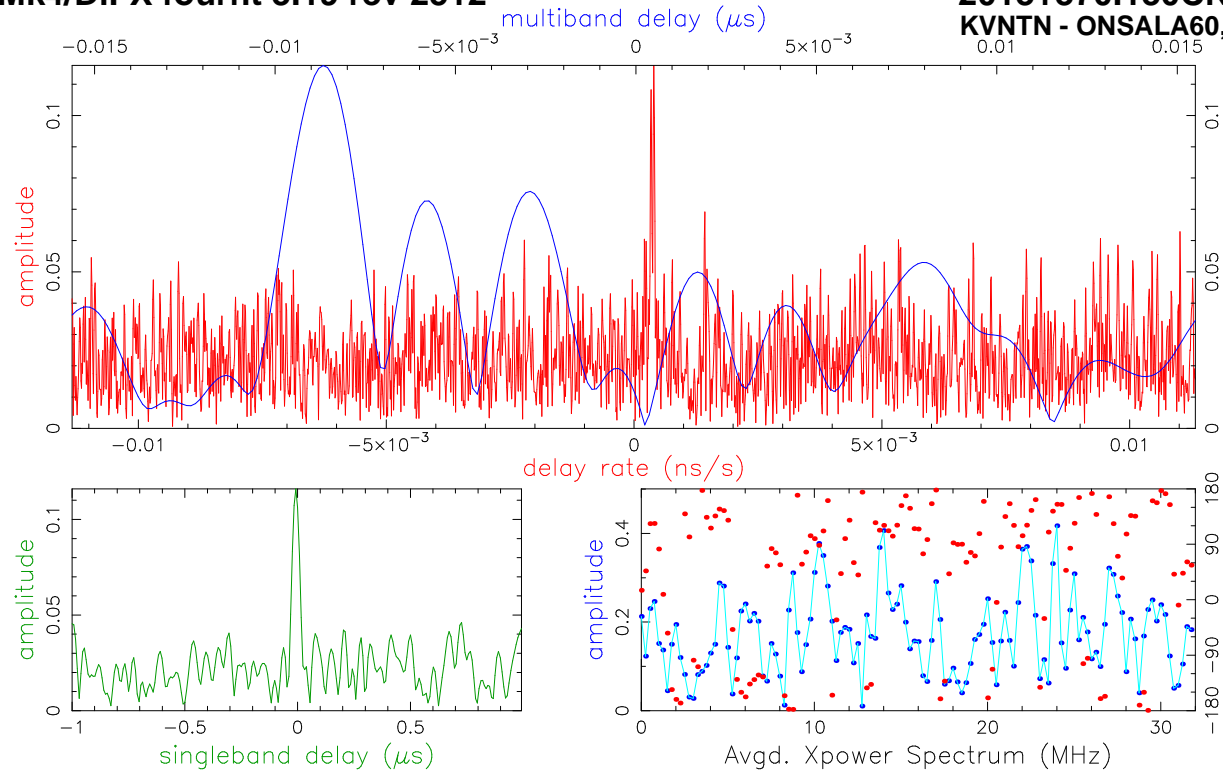
Fringe quality 0
 SNR 6.0
 Int time 419.791
 Amp 0.107
 Phase -16.0
 PFD 3.9e-01
 Delays (us)
 SBD 0.356696
 MBD -0.014343
 Fringe rate (Hz)
 0.075882
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085715
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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
5.8	-37.7	-46.9	-10.8	16.1	16.4	-48.7	-67.0	46.4	4.0	45.2	-26.6	-53.2	171.6	-11.2	8.6	Phase	-16.0	
0.1	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.0	0.1	0.0	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1	
32.7	175.4	75.9	255.0	134.0	18.1	35.9	172.6	90.9	31.6	219.9	171.8	159.8	39.9	56.0	44.2	Sbd box	174.7	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	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	
t: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	
t: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	
t	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	
t	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-7.61939522783E+03			Apriori delay (usec)			-7.61975588500E+03			Resid mbdelay (usec)			-1.43428E-02			+/- 1.8E-04		
Sband delay (usec)	-7.61939918850E+03			Apriori clock (usec)			-4.6304932E+00			Resid sbdelay (usec)			3.56696E-01			+/- 2.9E-03		
Phase delay (usec)	-7.61975588552E+03			Apriori clockrate (us/s)			-3.2800002E-07			Resid phdelay (usec)			-5.14852E-07			+/- 6.2E-07		
Delay rate (us/s)	-1.41662626925E+00			Apriori rate (us/s)			-1.41662715016E+00			Resid rate (us/s)			8.80910E-07			+/- 2.5E-09		
Total phase (deg)	-352.3			Apriori accel (us/s/s)			2.04296810594E-05			Resid phase (deg)			-16.0			+/- 19.1		

ph/seg (deg) 24.1 33.1 Search (2048X64) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.8 57.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.3 38.2 Inc. seg. avg. 0.096 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.8 66.6 Inc. frq. avg. 0.110 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 10220.286 -966.938 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tX..130CNK Output file: /Exps/c192b/v2/1234/No0078/tX.W.116.130CNK simultaneous interpolator

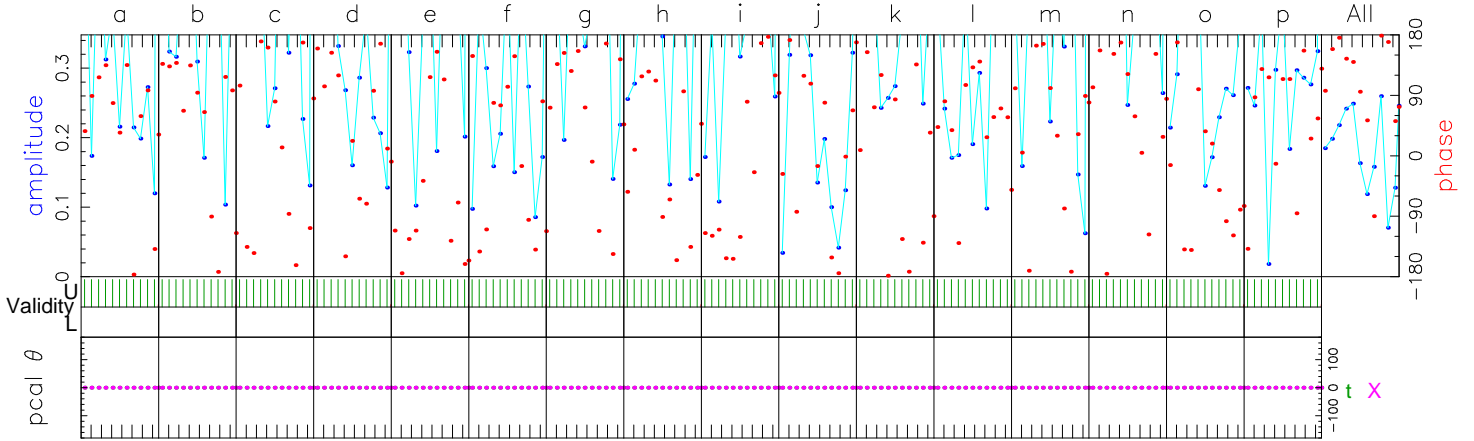


Fringe quality 0

SNR 6.5
Int time 419.791
Amp 0.116
Phase 140.8
PFD 2.3e-02
Delays (us)
SBD -0.008051
MBD -0.008659
Fringe rate (Hz)
0.033983
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

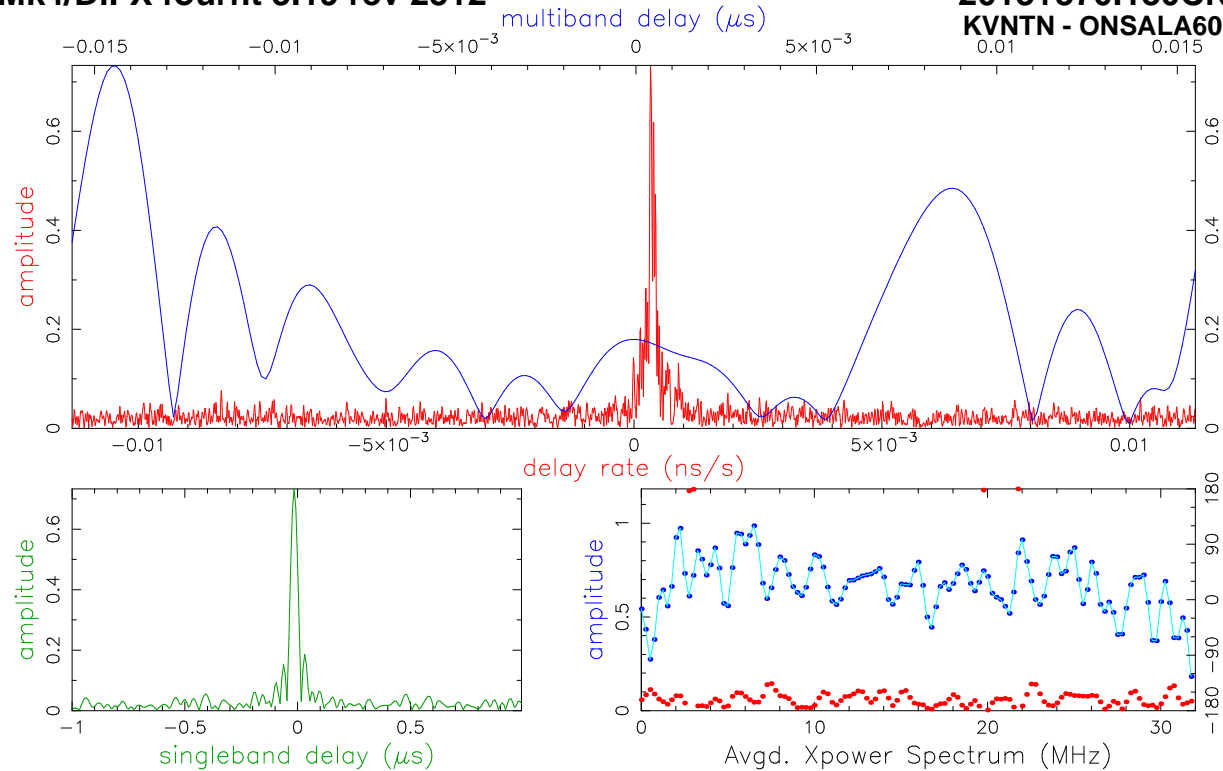
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085720
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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				
93.6	130.6	167.3	150.5	-148.0	164.6	128.0	110.2	-163.2	116.4	135.8	73.3	145.8	143.3	-115.3	103.4	103.4	Phase	140.8				
0.2	0.2	0.1	0.2	0.2	0.0	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1				
124.6	128.2	126.1	119.0	131.7	87.2	129.1	227.2	18.9	47.7	146.6	126.7	173.7	128.3	46.3	104.0	104.0	Sbd box	128.0				
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used					
t	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					
t: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					
t	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	Chan ids					
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
																	Tracks					
Group delay (usec)(sbd)		-7.61976454375E+03															Apriori delay (usec)	-7.61975588500E+03	Resid mbdelay (usec)	-8.65875E-03	+/-	1.7E-04
Sband delay (usec)		-7.61976393650E+03															Apriori clock (usec)	-4.6304932E+00	Resid sbdelay (usec)	-8.05150E-03	+/-	2.7E-03
Phase delay (usec)		-7.61975588046E+03															Apriori clockrate (us/s)	-3.2800002E-07	Resid phdelay (usec)	4.54103E-06	+/-	5.7E-07
Delay rate (us/s)		-1.41662675565E+00															Apriori rate (us/s)	-1.41662715016E+00	Resid rate (us/s)	3.94509E-07	+/-	2.3E-09
Total phase (deg)					-195.5												Apriori accel (us/s/s)	2.04296810594E-05	Resid phase (deg)	140.8	+/-	17.6

ph/seg (deg) RMS 60.6 Theor. 30.6 Amplitude 0.116 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.0 53.3 Search (2048X64) 0.113 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.6 35.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 67.9 61.6 Inc. seg. avg. 0.159 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 10220.286 -966.938 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tX..130CNK Output file: /Exps/c192b/v2/1234/No0078/tX.W.133.130CNK simultaneous interpolator

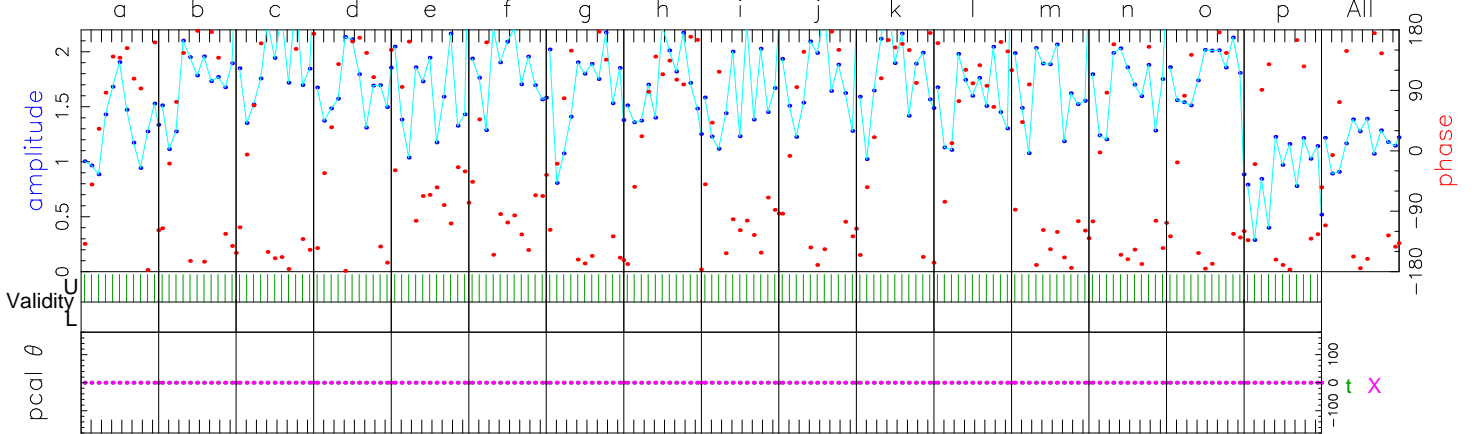


Fringe quality 1

SNR 41.1
Int time 419.791
Amp 0.733
Phase -167.6
PFD 0.0e+00
Delays (us)
SBD -0.015344
MBD -0.014455
Fringe rate (Hz) 0.028603
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

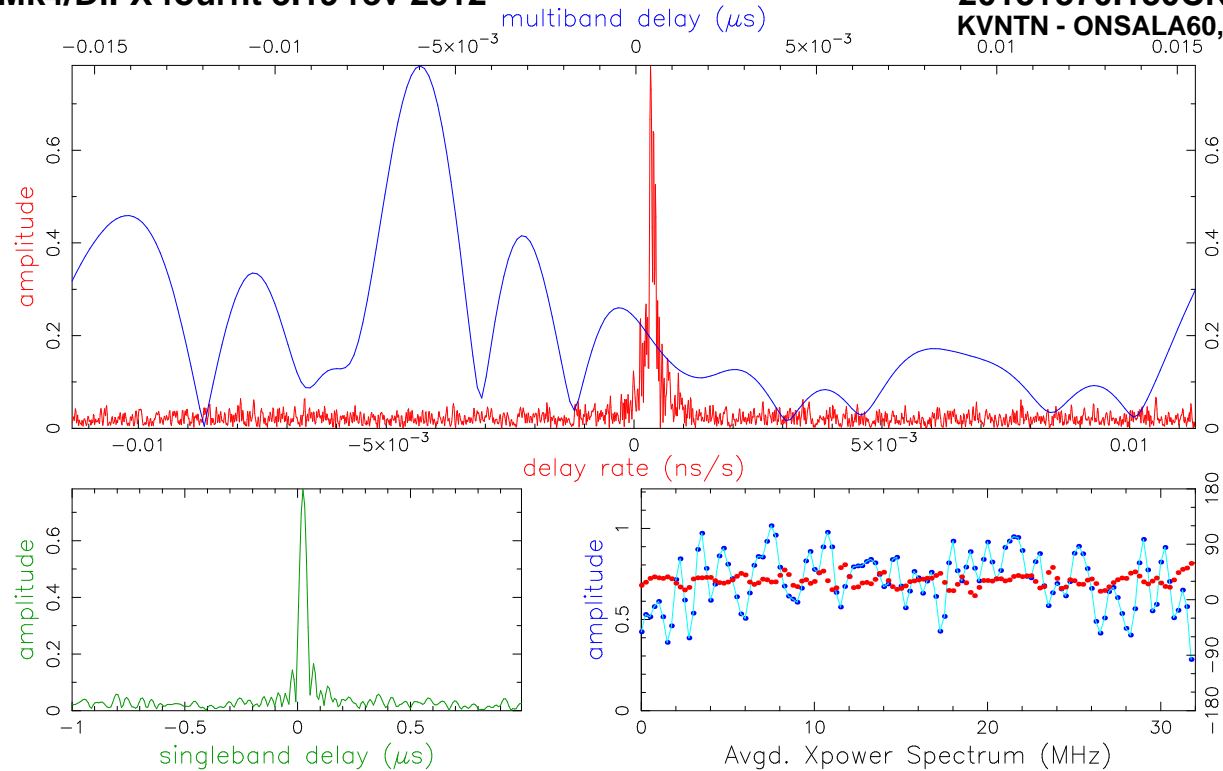
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085704
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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				
	137.7	-171.9	-164.6	167.5	-67.1	-103.2	-169.5	124.6	-107.8	-155.3	154.8	109.6	-135.5	-159.2	-166.2	-173.9	Phase	-167.6				
	0.8	1.1	1.2	1.0	1.0	1.1	1.2	1.1	1.0	1.0	1.1	1.0	1.1	1.1	1.1	0.6	Ampl.	1.0				
	128.6	127.3	127.1	126.5	127.0	126.8	126.3	126.6	126.9	126.8	126.6	126.5	126.8	126.9	127.0	126.6	Sbd box	127.0				
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used					
t	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					
t: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					
t: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 amp					
X	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					
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids					
Group delay (usec)(sbd)			-7.61977034025E+03														Apriori delay (usec)	-7.61975588500E+03	Resid mbdelay (usec)	-1.44552E-02	+/-	2.6E-05
Sband delay (usec)			-7.61977122950E+03														Apriori clock (usec)	-4.6304932E+00	Resid sbdelay (usec)	-1.53445E-02	+/-	4.2E-04
Phase delay (usec)			-7.61975589041E+03														Apriori clockrate (us/s)	-3.2800002E-07	Resid phdelay (usec)	-5.40350E-06	+/-	9.0E-08
Delay rate (us/s)			-1.41662681811E+00														Apriori rate (us/s)	-1.41662715016E+00	Resid rate (us/s)	3.32052E-07	+/-	3.7E-10
Total phase (deg)																	Apriori accel (us/s/s)	2.04296810594E-05	Resid phase (deg)	-167.6	+/-	2.8

ph/seg (deg) 67.6 4.8 Theor. Amplitude 0.733 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.1 8.4 Search (2048X64) 0.718 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.5 5.6 Inc. seg. avg. 1.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.6 9.7 Inc. frq. avg. 1.029 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 10220.286 -966.938 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tX...130CNK Output file: /Exps/c192b/v2/1234/No0078/tX.W.80.130CNK

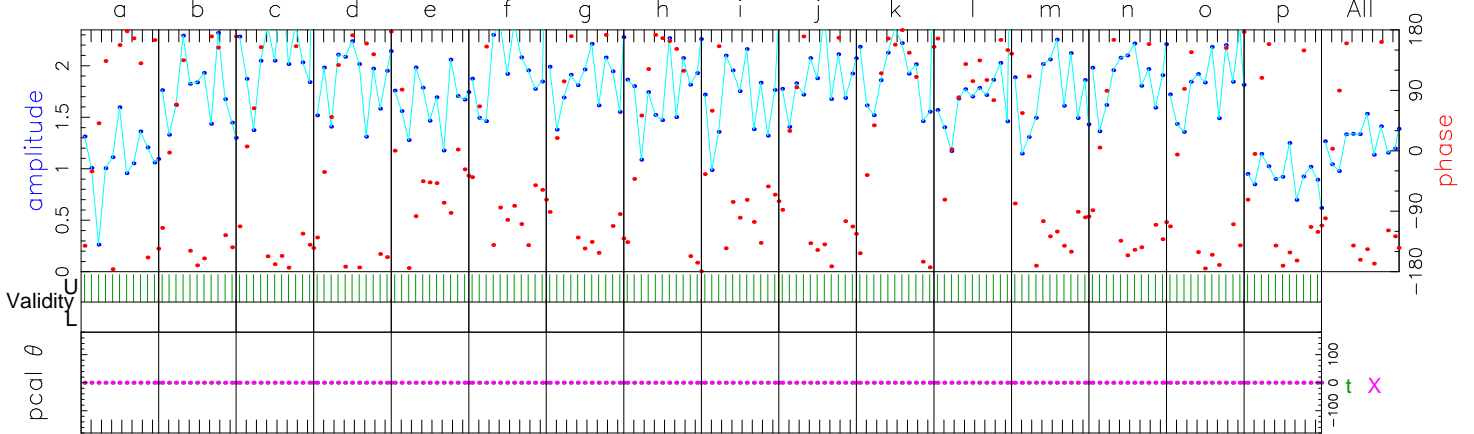


Fringe quality 1

SNR 43.9
Int time 419.791
Amp 0.783
Phase -154.8
PFD 0.0e+00
Delays (us)
SBD 0.024316
MBD -0.005978
Fringe rate (Hz)
0.028603
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

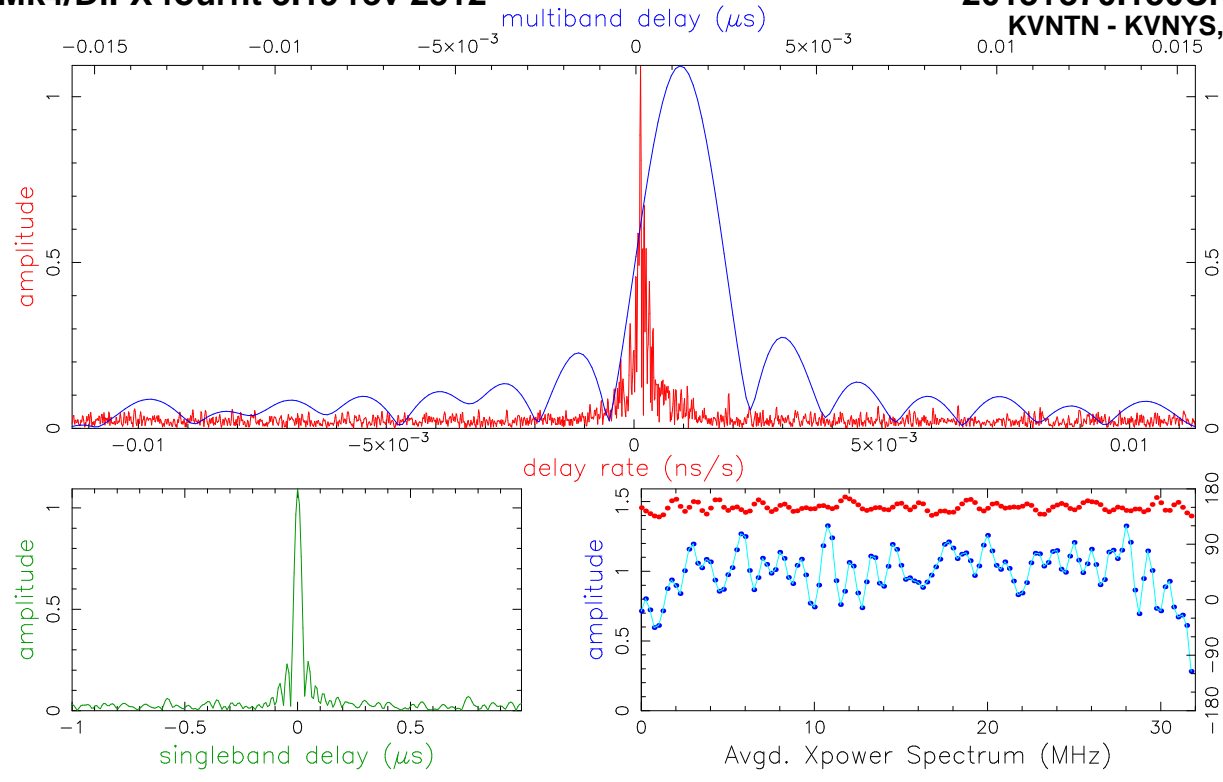
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085710
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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					
	171.8	-173.1	-162.1	177.3	-49.1	-93.8	-142.0	168.3	-91.8	-148.9	159.4	120.6	-123.5	-148.0	-162.4	-156.2		Phase -154.8					
	0.8	1.0	1.3	1.1	1.0	1.2	1.1	1.1	1.1	1.1	1.2	1.0	1.2	1.2	1.2	0.5		Ampl. 1.1					
	131.6	132.5	131.8	131.9	131.8	131.8	131.6	131.8	131.7	131.7	131.6	131.8	131.9	132.3	132.1	133.1		Sbd box 132.1					
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used					
t	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					
t: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					
t: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					
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
t	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)			-7.61973061290E+03															Apriori delay (usec)	-7.61975588500E+03	Resid mbdelay (usec)	-5.97790E-03	+/-	2.5E-05
Sband delay (usec)			-7.61973156950E+03															Apriori clock (usec)	-4.6304932E+00	Resid sbdelay (usec)	2.43155E-02	+/-	3.9E-04
Phase delay (usec)			-7.61975589000E+03															Apriori clockrate (us/s)	-3.2800002E-07	Resid phdelay (usec)	-4.99286E-06	+/-	8.4E-08
Delay rate (us/s)			-1.41662681811E+00															Apriori rate (us/s)	-1.41662715016E+00	Resid rate (us/s)	3.32053E-07	+/-	3.5E-10
Total phase (deg)																		Apriori accel (us/s/s)	2.04296810594E-05	Resid phase (deg)	-154.8	+/-	2.6

ph/seg (deg) 65.6 4.5 Theor. Amplitude 0.783 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.9 7.9 Search (2048X64) 0.757 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.6 5.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 43.1 9.1 Inc. seg. avg. 1.246 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 10220.286 -966.938 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tX..130CNK Output file: /Exps/c192b/v2/1234/No0078/tX.W.99.130CNK simultaneous interpolator

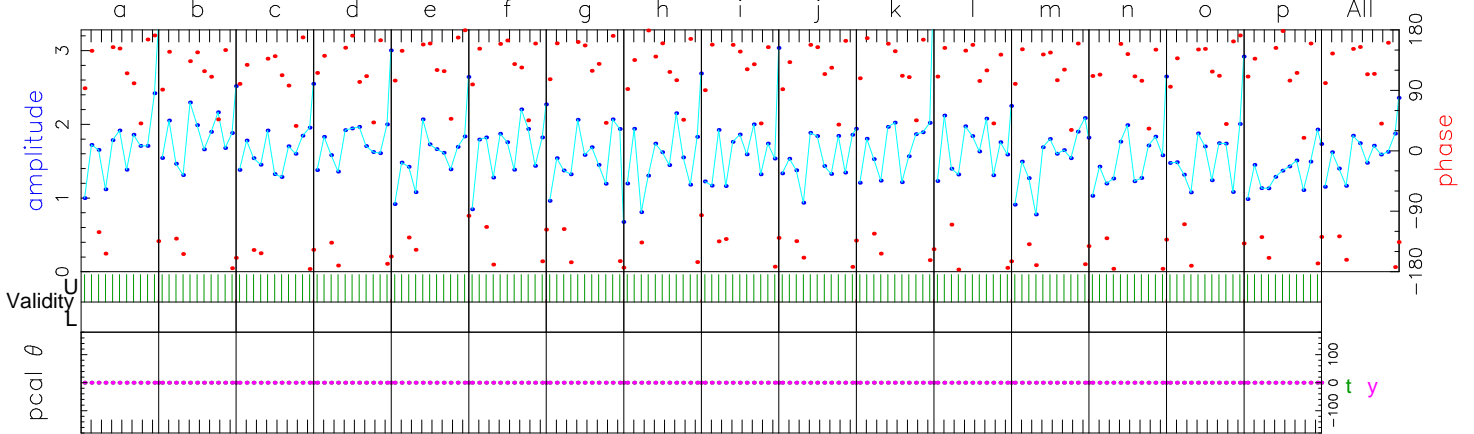


Fringe quality 5

SNR 61.3
Int time 419.817
Amp 1.094
Phase 148.4
PFD 0.0e+00
Delays (us)
SBD 0.000957
MBD 0.001233
Fringe rate (Hz) 0.011749
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

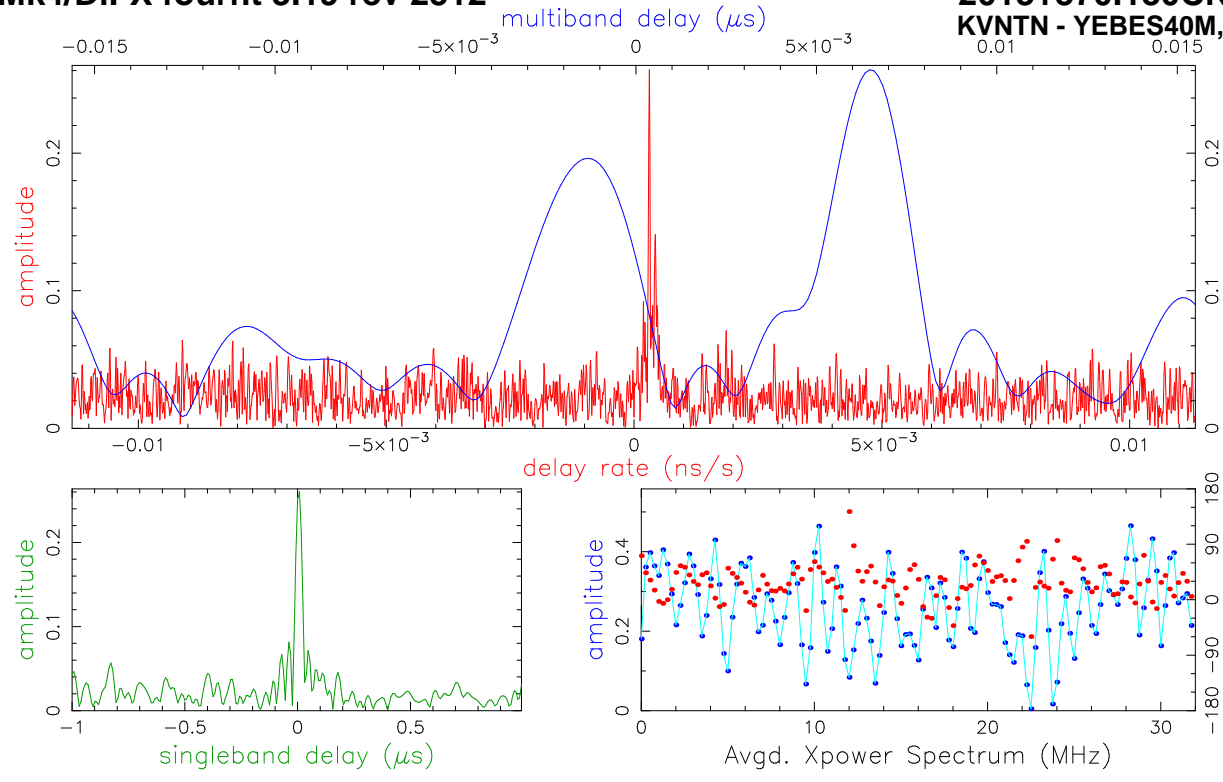
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085711
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	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		
y	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		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)	-4.99040580860E+02			Apriori delay (usec)			-4.99041813538E+02			Resid mbdelay (usec)			1.23268E-03			+/- 1.8E-05		
Sband delay (usec)	-4.99040857038E+02			Apriori clock (usec)			-1.4782391E+00			Resid sbdelay (usec)			9.56500E-04			+/- 2.8E-04		
Phase delay (usec)	-4.99041808752E+02			Apriori clockrate (us/s)			1.0000001E-07			Resid phdelay (usec)			4.78589E-06			+/- 6.0E-08		
Delay rate (us/s)	-4.98705596022E-02			Apriori rate (us/s)			-4.98706959974E-02			Resid rate (us/s)			1.36395E-07			+/- 2.5E-10		
Total phase (deg)	-146.1			Apriori accel (us/s/s)			-1.50194209262E-06			Resid phase (deg)			148.4			+/- 1.9		

ph/seg (deg) 50.3 3.2 Search (2048X64) 1.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.8 5.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.7 3.7 Inc. seg. avg. 1.568 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 7.7 6.5 Inc. frq. avg. 1.097 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 y: az 295.1 el 31.5 pa 64.1 u,v (fr/asec) 355.491 -522.118 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ty..130CNK Output file: /Exps/c192b/v2/1234/No0078/ty.W.101.130CNK

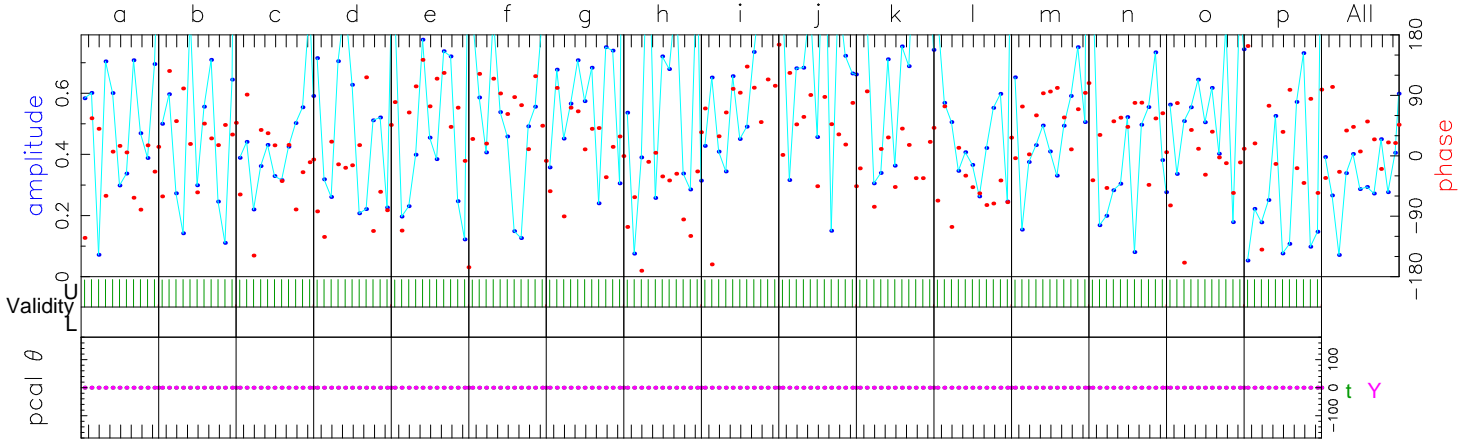


Fringe quality 9

SNR 14.5
Int time 402.146
Amp 0.264
Phase 19.9
PFD 1.4e-38
Delays (us)
SBD 0.005300
MBD 0.006486
Fringe rate (Hz) 0.027018
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

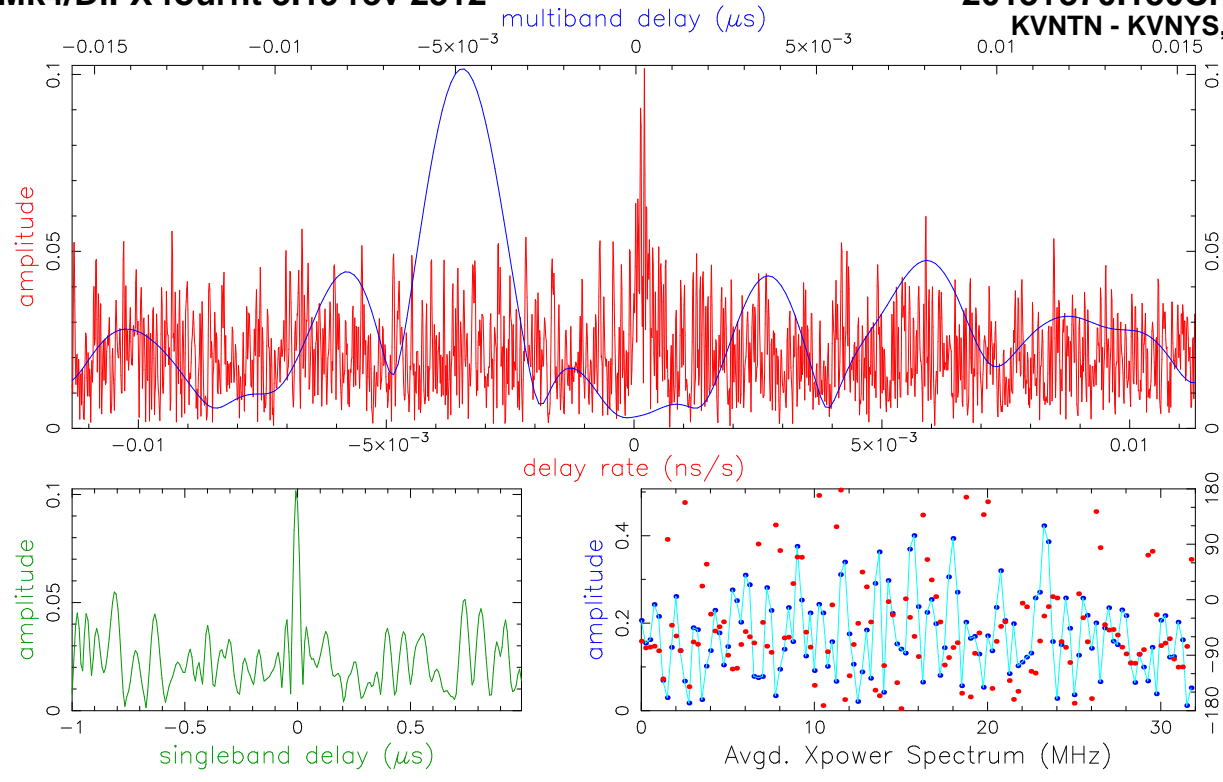
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160017.89
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085714
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 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					
	-27.1	30.4	-7.2	-40.9	95.0	67.3	25.5	-38.4	98.2	51.6	1.6	-49.4	59.1	24.0	-3.9	-10.1		Phase 19.9					
	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.3	0.4	0.3	0.4	0.2		Ampl. 0.4					
	130.3	130.1	129.9	129.0	130.1	129.7	129.1	129.4	129.6	129.6	129.5	128.9	129.4	129.1	129.9	118.7		Sbd box 129.7					
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		APs used					
t	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 freqs					
t: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 phase					
t: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					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
t	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					
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-5.65341409099E+03															Apriori delay (usec)	-5.65342057721E+03	Resid mbdelay (usec)	6.48622E-03	+/-	7.5E-05
Sband delay (usec)			-5.65341527671E+03															Apriori clock (usec)	1.8065620E+01	Resid sbdelay (usec)	5.30050E-03	+/-	1.2E-03
Phase delay (usec)			-5.65342057657E+03															Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	6.42421E-07	+/-	2.6E-07
Delay rate (us/s)			-1.75710099145E+00															Apriori rate (us/s)	-1.75710130510E+00	Resid rate (us/s)	3.13658E-07	+/-	1.1E-09
Total phase (deg)					-167.7													Apriori accel (us/s/s)	2.32645868780E-05	Resid phase (deg)	19.9	+/-	7.9

ph/seg (deg) 37.0 13.7 Search (2048X64) 0.252 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 43.2 24.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 48.8 15.9 Inc. seg. avg. 0.307 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 54.2 27.7 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
t: az 297.2 el 30.0 pa 69.0 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 12676.865 535.102 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tY...130CNK Output file: /Exps/c192b/v2/1234/No0078/tY.W.112.130CNK

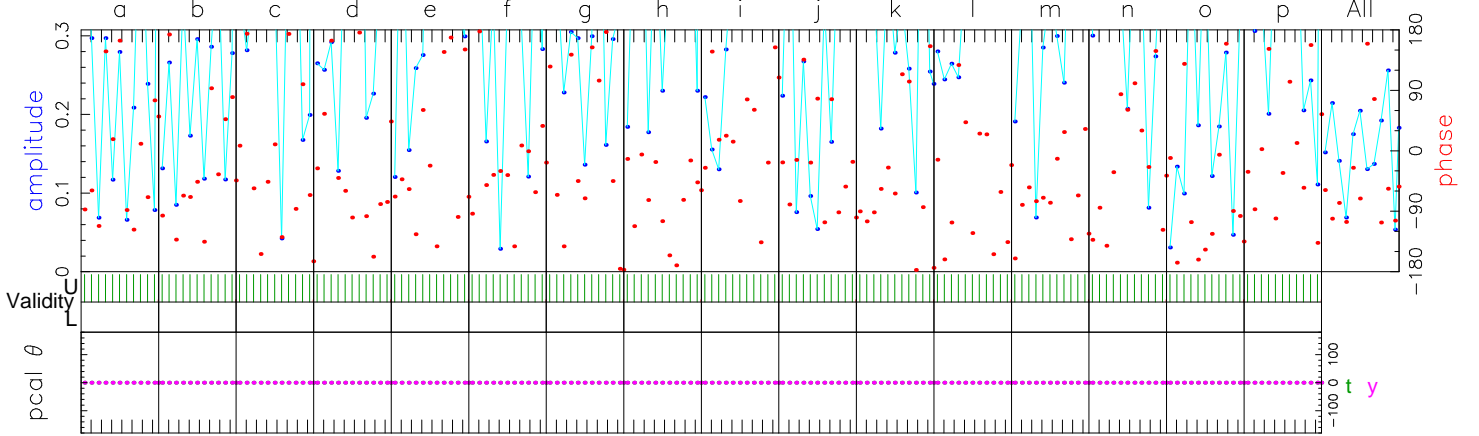


Fringe quality 0

SNR 5.7
Int time 419.817
Amp 0.103
Phase -76.3
PFD 9.0e-01
Delays (us)
SBD -0.005672
MBD -0.004827
Fringe rate (Hz)
0.018118
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085717
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

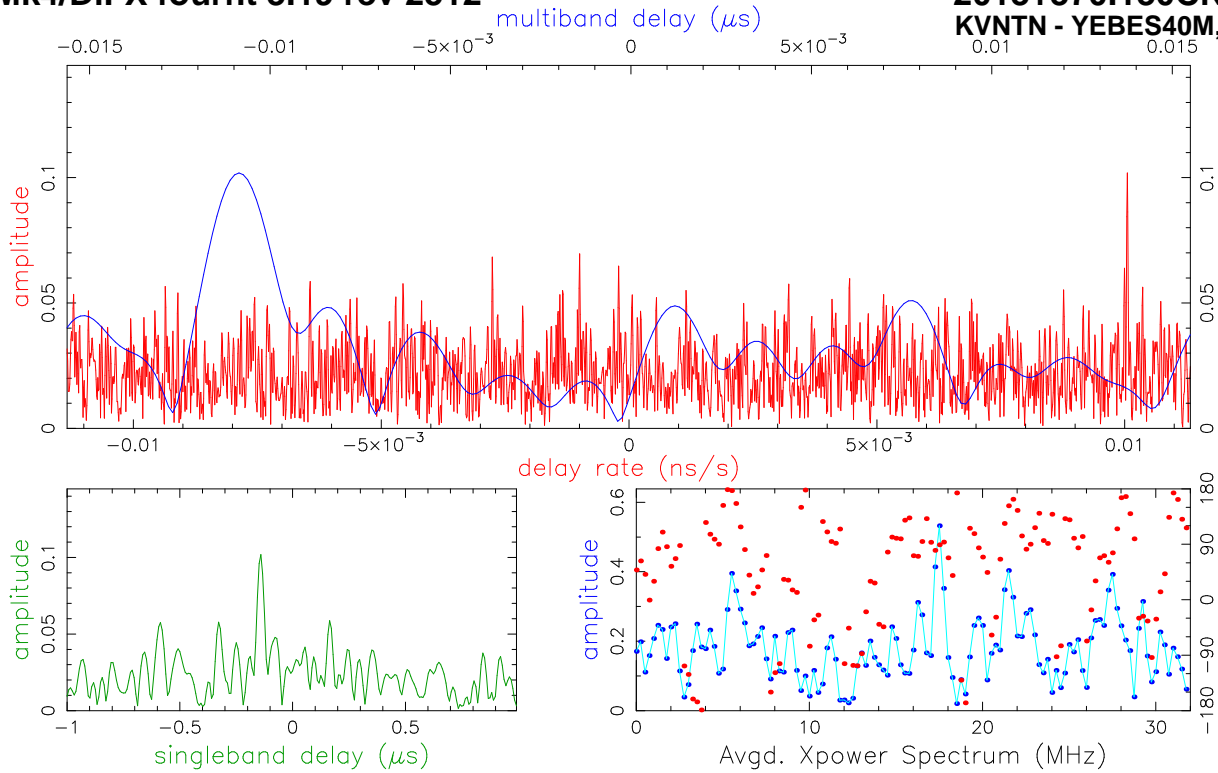
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	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
	-68.1	-50.1	-85.7	-103.0	-100.9	-56.7	170.4	-63.5	18.0	-60.2	-90.4	-79.0	-59.8	-120.0	-133.4	-33.3	Phase	-76.3
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	224.2	194.4	130.5	147.6	222.5	255.6	51.7	128.6	121.3	164.3	165.3	13.7	208.7	4.2	76.4	206.2	Sbd box	128.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	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 freqs	
ty	0:0	0:0	0:0	0:0	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	
ty	0:0	0:0	0:0	0:0	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	
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
y	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	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			-4.99046640511E+02					Apriori delay (usec)									-4.82697E-03	+/- 1.9E-04
Sband delay (usec)			-4.99047485538E+02					Apriori clock (usec)									-5.67200E-03	+/- 3.0E-03
Phase delay (usec)			-4.99041815998E+02					Apriori clockrate (us/s)									-2.46062E-06	+/- 6.4E-07
Delay rate (us/s)			-4.98704856663E-02					Apriori rate (us/s)									2.10331E-07	+/- 2.7E-09
Total phase (deg)								Apriori accel (us/s/s)									-76.3	+/- 19.9
ph/seg (deg)		RMS	Theor.					Amplitude									0.103 +/- 0.018	
amp/seg (%)		64.1	34.5					Search (2048X64)									0.101	
ph/frq (deg)		77.4	60.3					Interp.									0.000	
amp/frq (%)		48.0	39.9					Inc. seg. avg.									0.133	
		55.0	69.6					Inc. frq. avg.									0.103	
t: az 297.2 el 30.0 pa 69.0								y: az 295.1 el 31.5 pa 64.1									u,v (fr/asec) 355.491 -522.118	
Control file: cf_1234_gmva								Input file: /Exps/c192b/v2/1234/No0078/ty..130CNK									Output file: /Exps/c192b/v2/1234/No0078/ty.W.121.130CNK	

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

simultaneous interpolator

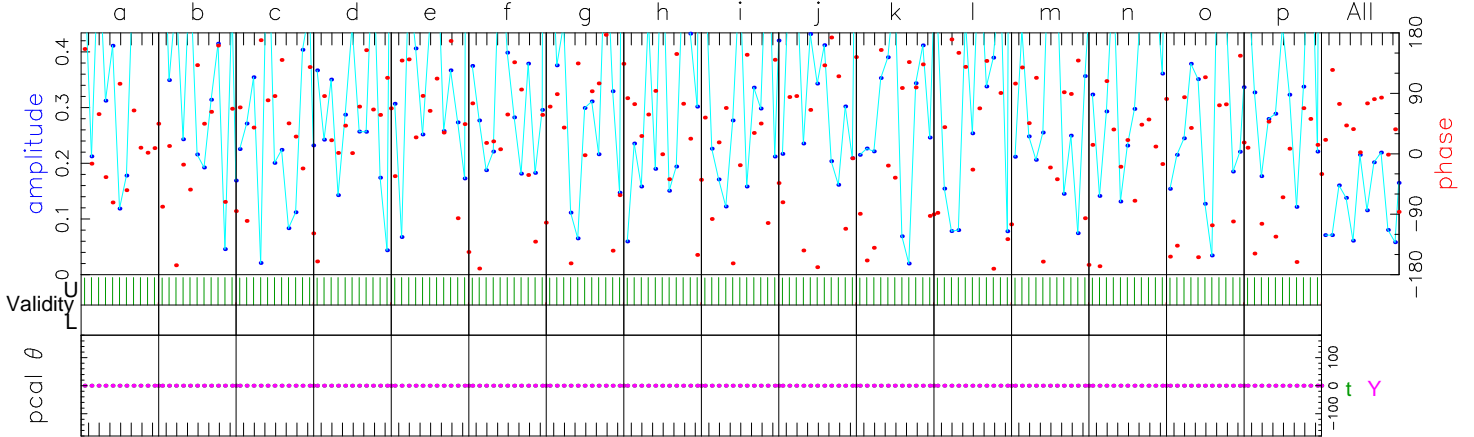


Fringe quality 0

SNR 5.6
Int time 402.146
Amp 0.145
Phase 54.9
PFD 9.9e-01
Delays (us)
SBD -0.142044
MBD -0.010872
Fringe rate (Hz) 0.867160
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

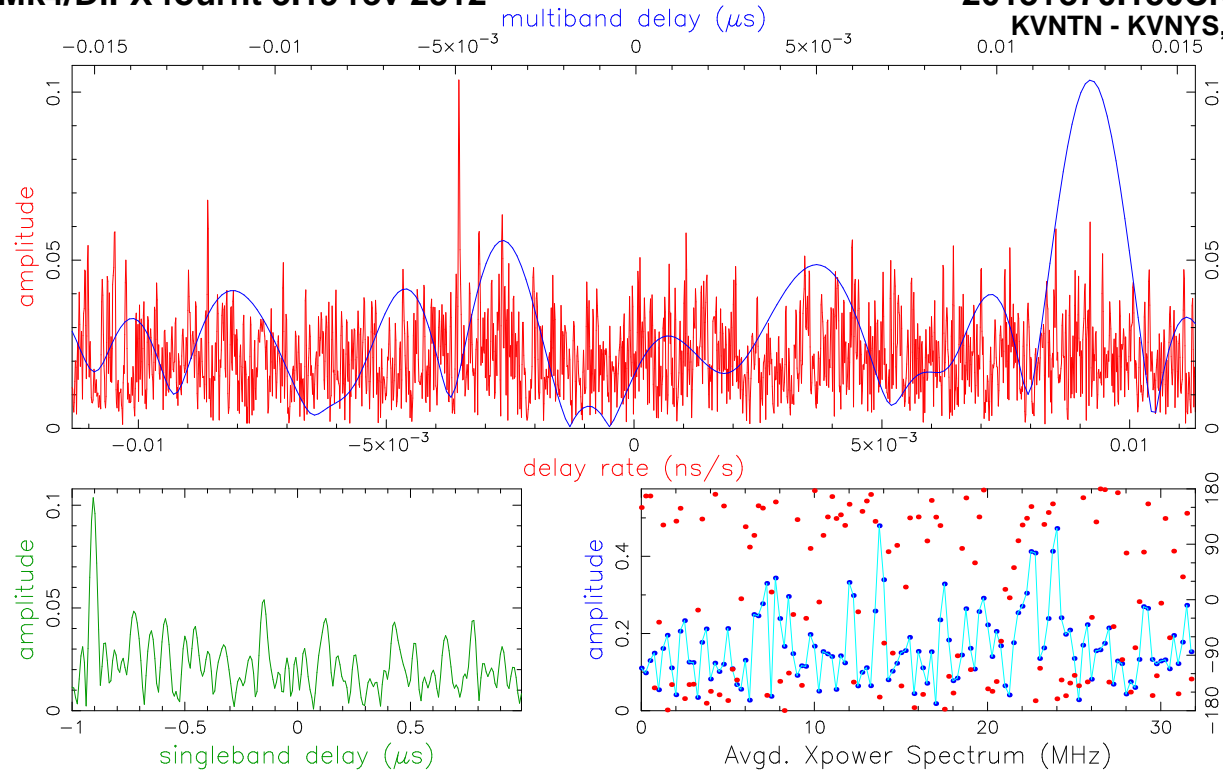
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160017.89
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085721
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec



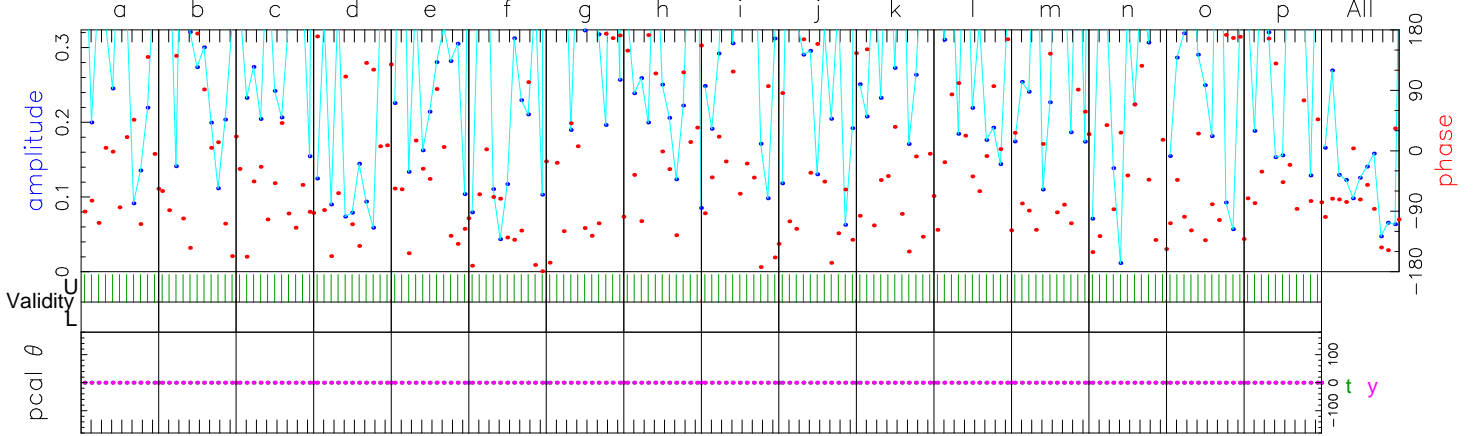
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
20.8	-17.1	72.1	57.7	91.5	40.5	97.6	45.8	6.1	117.8	-134.6	119.3	38.3	27.4	97.7	5.9	Phase	54.9	
0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.0	0.1	0.1	0.4	0.2	0.2	Ampl.	0.1	
159.9	117.3	197.5	122.4	185.8	79.5	240.7	222.9	126.5	102.5	22.1	136.9	64.8	111.7	99.1	129.9	Sbd box	110.8	
UL	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	APs used	
t	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 freqs	
t: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 phase	
t: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	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	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	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-5.65355644926E+03			Apriori delay (usec)			-5.65342057721E+03			Resid mbdelay (usec)			-1.08720E-02			+/- 1.9E-04		
Sband delay (usec)	-5.65356262121E+03			Apriori clock (usec)			1.8065620E+01			Resid sbdelay (usec)			-1.42044E-01			+/- 3.1E-03		
Phase delay (usec)	-5.65342057544E+03			Apriori clockrate (us/s)			-2.0000006E-08			Resid phdelay (usec)			1.77026E-06			+/- 6.6E-07		
Delay rate (us/s)	-1.75709123823E+00			Apriori rate (us/s)			-1.75710130510E+00			Resid rate (us/s)			1.00669E-05			+/- 2.8E-09		
Total phase (deg)	-132.7			Apriori accel (us/s/s)			2.32645868780E-05			Resid phase (deg)			54.9			+/- 20.4		

ph/seg (deg) 38.9 35.4 Search (2048X64) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.2 61.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 62.6 40.9 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 66.5 71.4 Inc. frq. avg. 0.150 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 12676.865 535.102 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tY...130CNK Output file: /Exps/c192b/v2/1234/No0078/tY.W.134.130CNK



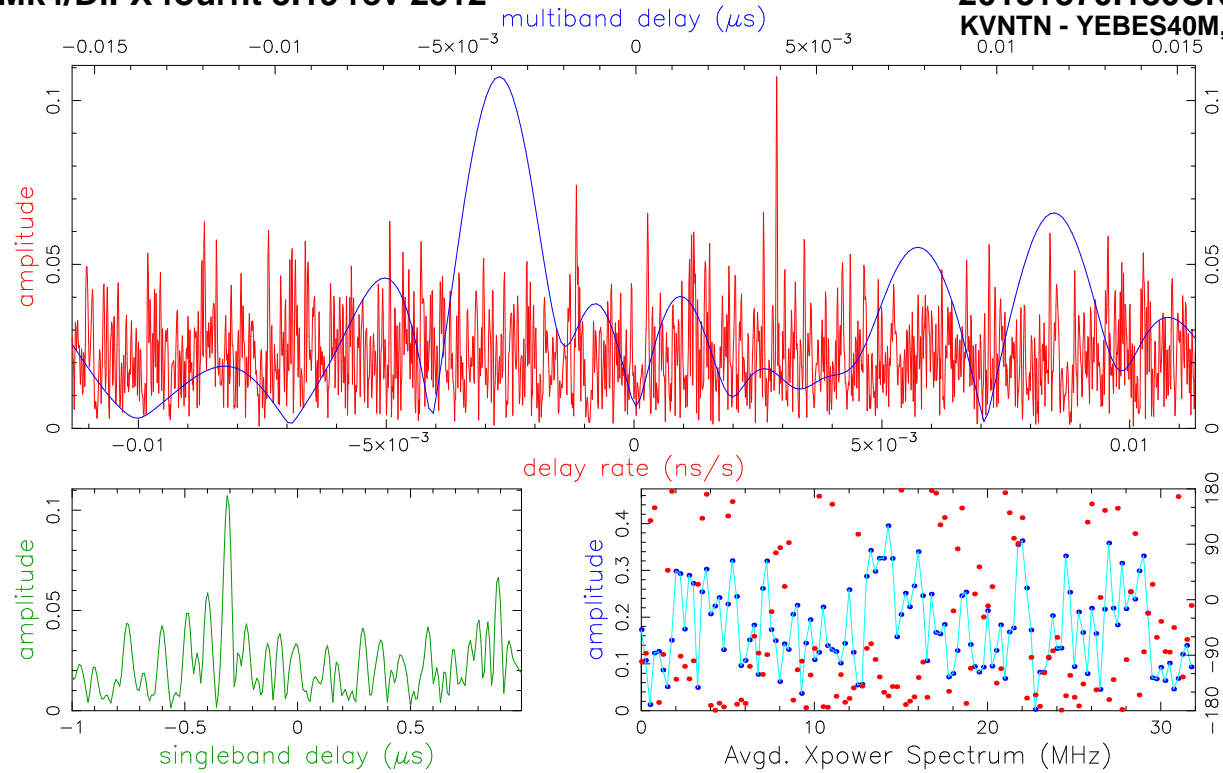
Fringe quality 0
SNR 5.8
Int time 419.817
Amp 0.108
Phase -73.9
PFD 7.9e-01
Delays (us)
SBD -0.905491
MBD 0.012605
Fringe rate (Hz)
-0.305048
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085723
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



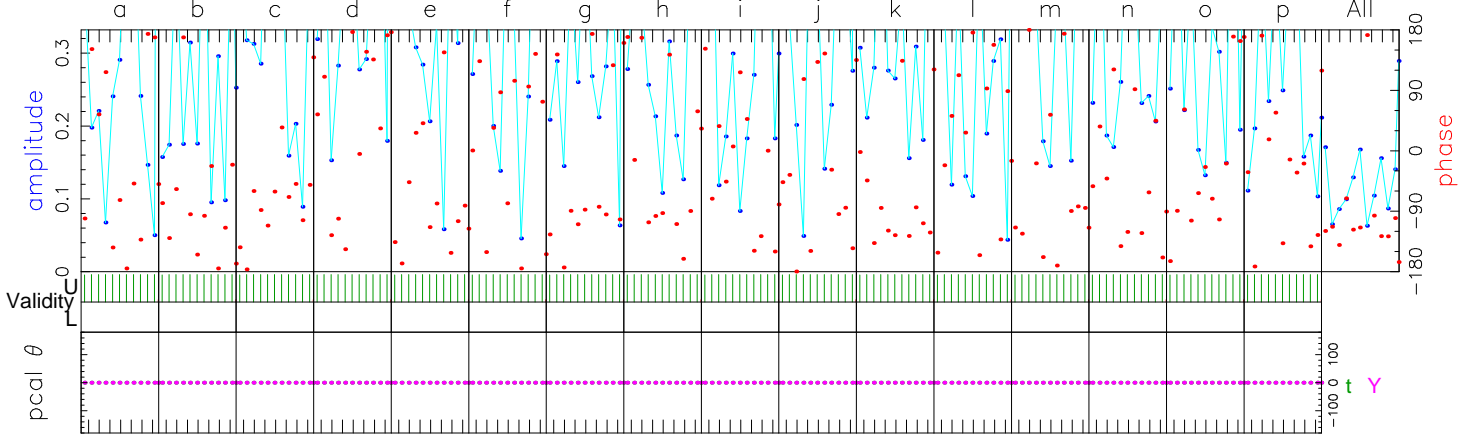
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
ty	0:0	0:0	0:0	0:0	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: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			
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000			
t	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	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)			-4.99935458179E+02																
Sband delay (usec)			-4.99947305038E+02																
Phase delay (usec)			-4.99041815920E+02																
Delay rate (us/s)			-4.98742373011E-02																
Total phase (deg)					-8.4														
Apriori delay (usec)																			
Apriori clock (usec)																			
Apriori clockrate (us/s)																			
Apriori rate (us/s)																			
Apriori accel (us/s/s)																			
Resid mbdelay (usec)																			
Resid sbdelay (usec)																			
Resid phdelay (usec)																			
Resid rate (us/s)																			
Resid phase (deg)																			
PCal mode:																			
PCal rate:																			
Bits/sample:																			
Sample rate(MSamp/s):																			
Data rate(Mb/s):																			
nlags:																			
t_cohere																			
ion window (TEC)																			

ph/seg (deg) 51.4 34.2 Search (2048X64) 0.101 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 65.3 59.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 50.1 39.5 Inc. seg. avg. 0.113 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 56.3 68.9 Inc. frq. avg. 0.113 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 297.2 el 30.0 pa 69.0 y: az 295.1 el 31.5 pa 64.1 u,v (fr/asec) 355.491 -522.118 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ty..130CNK Output file: /Exps/c192b/v2/1234/No0078/ty.W.142.130CNK



Fringe quality 0
SNR 5.9
Int time 402.146
Amp 0.111
Phase -117.0
PFD 5.8e-01
Delays (us)
SBD -0.310573
MBD -0.003773
Fringe rate (Hz)
0.247985
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160017.89
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085726
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 sec

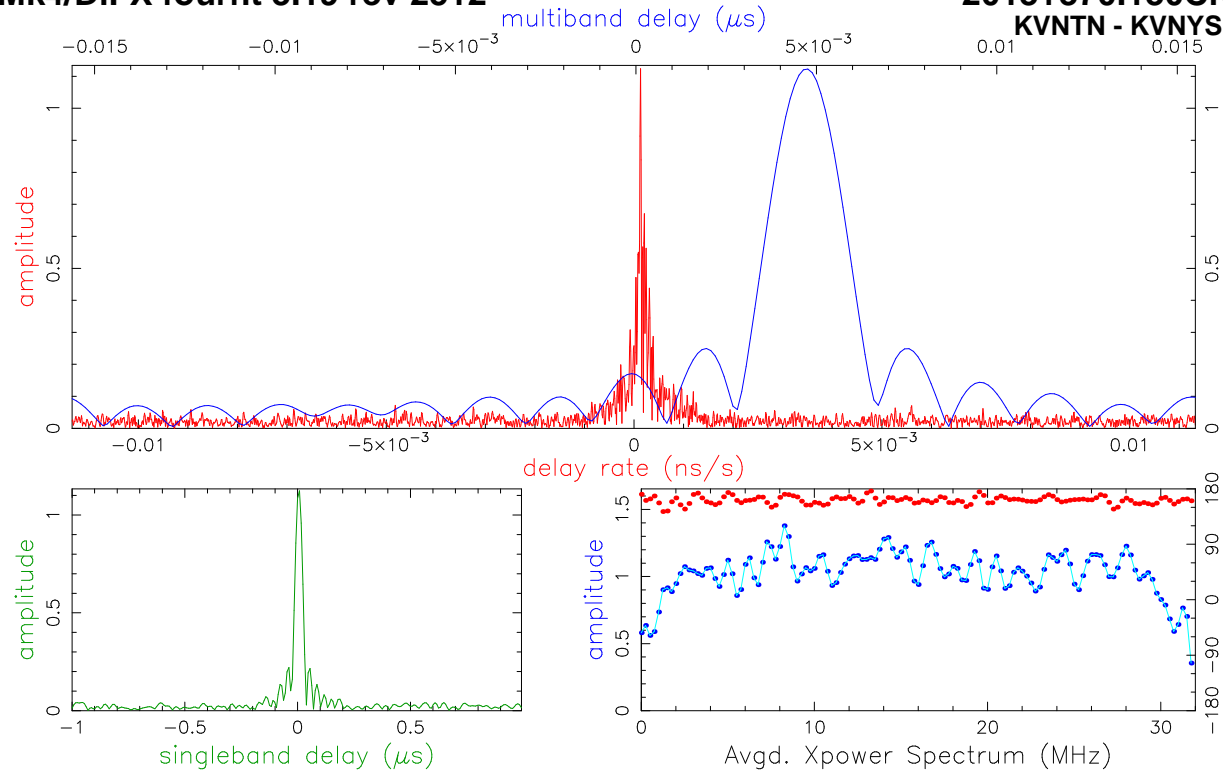


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-122.2	-90.8	-84.5	139.8	-101.8	122.4	-130.8	-127.5	-78.4	-110.3	-108.5	179.6	-118.9	-103.4	-117.4	-33.6	Phase	-117.0
	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.3	0.0	0.2	0.1	Ampl.	0.1
	190.9	6.1	74.9	232.9	239.8	147.2	42.5	85.0	117.1	168.8	215.6	46.2	88.5	16.6	134.3	145.5	Sbd box	89.2
U/L	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	APs used	
t	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	
t: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	
t: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	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	

Group delay (usec)(sbd)	-5.65373684982E+03	Apriori delay (usec)	-5.65342057721E+03	Resid mbdelay (usec)	-3.77260E-03	+/-	1.8E-04
Sband delay (usec)	-5.65373115071E+03	Apriori clock (usec)	1.8065620E+01	Resid sbdelay (usec)	-3.10573E-01	+/-	2.9E-03
Phase delay (usec)	-5.65342058099E+03	Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	-3.77242E-06	+/-	6.3E-07
Delay rate (us/s)	-1.75709842625E+00	Apriori rate (us/s)	-1.75710130510E+00	Resid rate (us/s)	2.87885E-06	+/-	2.7E-09
Total phase (deg)	-304.6	Apriori accel (us/s/s)	2.32645868780E-05	Resid phase (deg)	-117.0	+/-	19.4

ph/seg (deg)	28.3	Theor.	33.6	Amplitude	0.111 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	38.4	Search (2048X64)	0.106	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	53.6	Inc. seg. avg.	0.102	Inc. frq. avg.	0.118	Bits/sample: 2x2	mb window (us) -0.016 0.016
amp/frq (%)	63.3	Inc. frq. avg.	0.118			Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 128	t_cohere infinite

t: az 297.2 el 30.0 pa 69.0 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 12676.865 535.102 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tY..130CNK Output file: /Exps/c192b/v2/1234/No0078/tY.W.155.130CNK

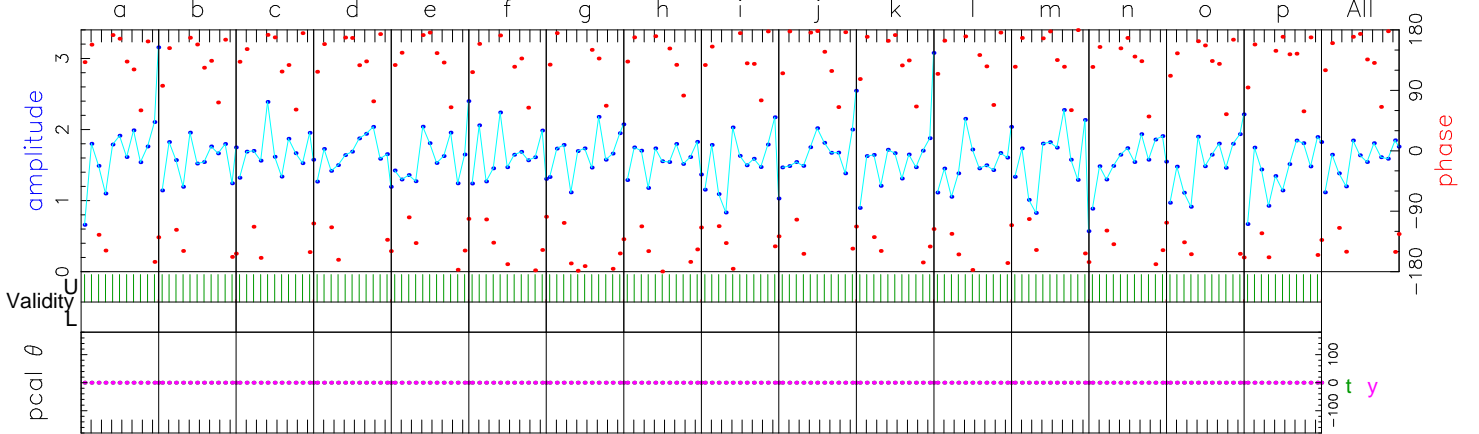


Fringe quality 5

SNR 63.5
Int time 419.817
Amp 1.134
Phase 165.5
PFD 0.0e+00
Delays (us)
SBD 0.005346
MBD 0.004717
Fringe rate (Hz) 0.011730
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

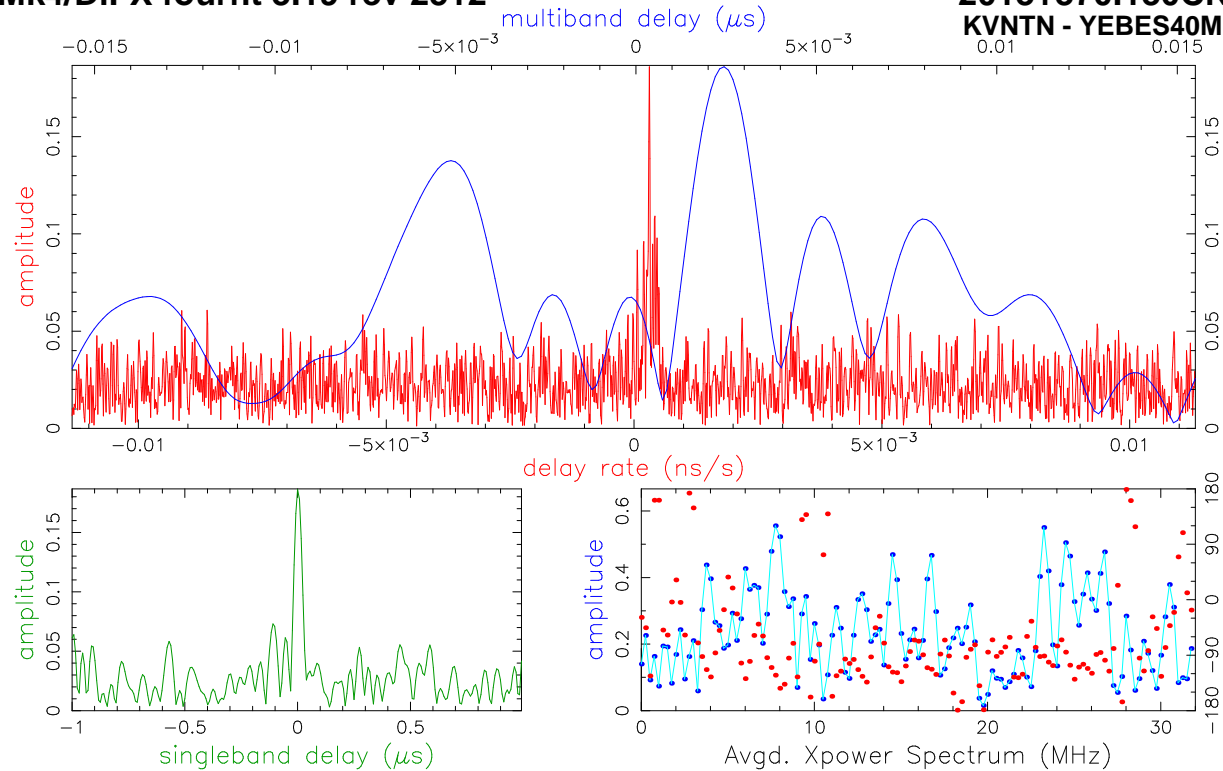
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085705
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



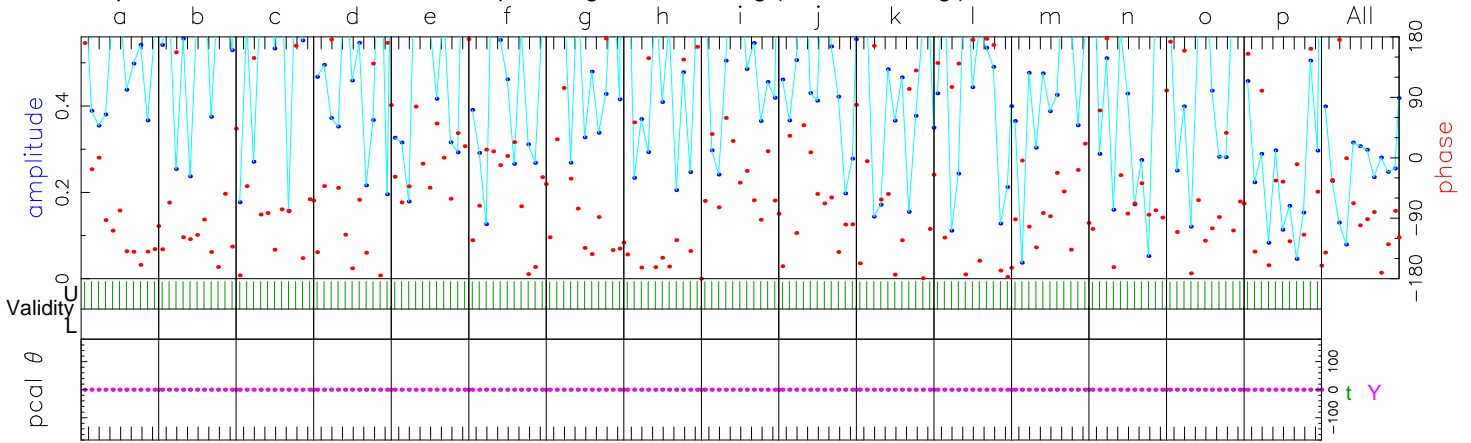
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
162.3	156.4	164.7	159.8	165.8	169.3	173.7	173.3	168.2	170.1	171.6	165.1	161.5	168.0	156.3	161.4	161.4	Phase	165.5
1.2	1.1	1.2	1.2	1.0	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	Ampl.	1.1
129.7	129.7	129.8	129.7	129.5	129.7	129.6	129.7	129.7	129.8	129.7	129.7	129.7	129.7	129.6	129.7	129.7	Sbd box	129.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	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 freqs	
ty	0:0	0:0	0:0	0:0	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	
ty	0:0	0:0	0:0	0:0	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	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-4.99037096672E+02			Apriori delay (usec)			-4.99041813538E+02			Resid mbdelay (usec)			4.71687E-03			+/- 1.7E-05		
Sband delay (usec)	-4.99036468038E+02			Apriori clock (usec)			-1.4782391E+00			Resid sbdelay (usec)			5.34550E-03			+/- 2.7E-04		
Phase delay (usec)	-4.99041808201E+02			Apriori clockrate (us/s)			1.0000001E-07			Resid phdelay (usec)			5.33690E-06			+/- 5.8E-08		
Delay rate (us/s)	-4.98705598219E-02			Apriori rate (us/s)			-4.98706959974E-02			Resid rate (us/s)			1.36176E-07			+/- 2.4E-10		
Total phase (deg)	-129.0			Apriori accel (us/s/s)			-1.50194209262E-06			Resid phase (deg)			165.5			+/- 1.8		

ph/seg (deg) 47.6 3.1 Amplitude 1.134 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 43.4 5.5 Search (2048X64) 1.080 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.7 3.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 4.8 6.3 Inc. seg. avg. 1.566 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 y: az 295.1 el 31.5 pa 64.1 u,v (fr/asec) 355.491 -522.118 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ty..130CNK Output file: /Exps/c192b/v2/1234/No0078/ty.W.81.130CNK simultaneous interpolator



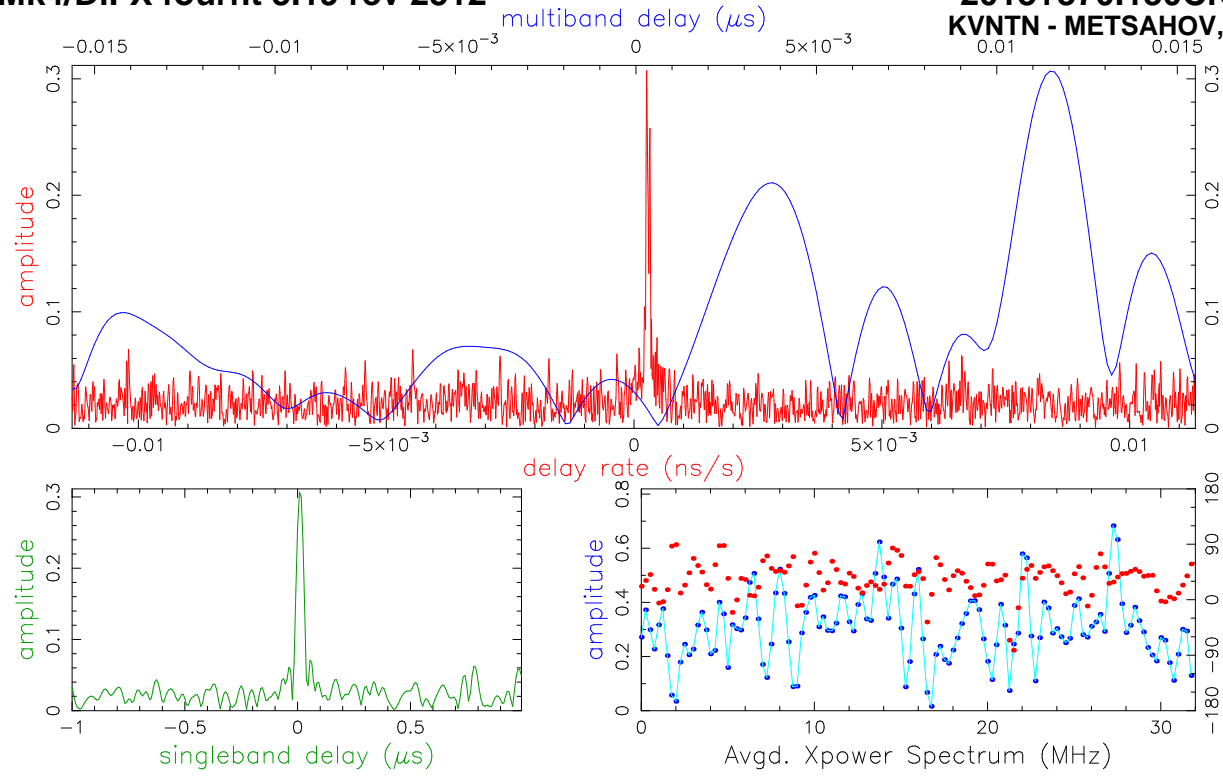
Fringe quality 9
SNR 10.2
Int time 402.146
Amp 0.187
Phase -103.3
PFD 6.0e-16
Delays (us)
SBD 0.001648
MBD 0.002443
Fringe rate (Hz) 0.027215
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160017.89
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085708
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 71 APs / seg (36.35 sec / seg.), time ticks 60 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					
	-122.2	-113.6	-100.5	-136.5	4.6	-31.2	-124.0	-169.0	-25.5	-60.0	-134.0	-175.3	-70.9	-86.6	-111.1	-159.7		Phase -103.3					
	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.4	0.4	0.2	0.2	0.4	0.3	0.3	0.3	0.1		Ampl. 0.3					
	129.9	129.2	128.4	128.0	129.0	127.8	129.9	128.7	129.1	121.7	43.7	128.6	20.7	173.7	128.8	142.6		Sbd box 129.2					
UL	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0	787/0		APs used					
t	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 freqs					
t: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 phase					
t: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					
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-5.65341813377E+03															Apriori delay (usec)	-5.65342057721E+03	Resid mbdelay (usec)	2.44345E-03	+/-	1.1E-04
Sband delay (usec)			-5.65341892871E+03															Apriori clock (usec)	1.8065620E+01	Resid sbdelay (usec)	1.64850E-03	+/-	1.7E-03
Phase delay (usec)			-5.65342058054E+03															Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	-3.32990E-06	+/-	3.6E-07
Delay rate (us/s)			-1.75710098917E+00															Apriori rate (us/s)	-1.75710130510E+00	Resid rate (us/s)	3.15934E-07	+/-	1.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.32645868780E-05	Resid phase (deg)	-103.3	+/-	11.2

ph/seg (deg) 53.1 19.4
amp/seg (%) 57.8 33.8
ph/frq (deg) 54.6 22.4
amp/frq (%) 70.7 39.1
RMS Theor. Amplitude 0.187 +/- 0.018
Search (2048X64) 0.173
Interp. 0.000
Inc. seg. avg. 0.240
Inc. frq. avg. 0.268
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 64
Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite
sb window (us) -1.000 1.000
mb window (us) -0.016 0.016
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00
t: az 297.2 el 30.0 pa 69.0 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 12676.865 535.102 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tY..130CNK Output file: /Exps/c192b/v2/1234/No0078/tY.W.90.130CNK

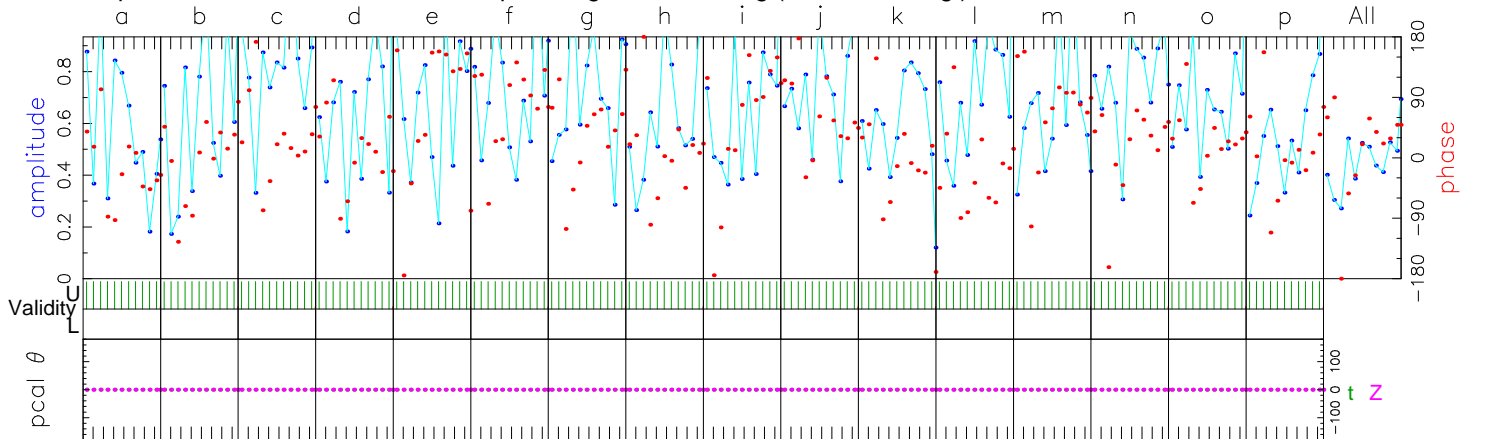


Fringe quality 7

SNR 17.4
Int time 419.346
Amp 0.311
Phase 31.1
PFD 0.0e+00
Delays (us)
SBD 0.010885
MBD 0.011527
Fringe rate (Hz) 0.022196
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085713
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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
	-3.5	13.5	16.0	11.7	137.4	85.7	39.2	-4.7	111.3	63.3	-1.7	-36.6	90.7	38.5	18.3	-2.2		Phase 31.1
	0.3	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.5	0.4	0.6	0.5	0.3		Ampl. 0.4
	130.1	130.7	130.6	130.4	129.9	129.9	129.7	129.8	129.7	130.3	129.6	130.1	129.5	130.0	130.7	131.0		Sbd box 130.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used
t	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
t: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
t: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
t	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
t	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

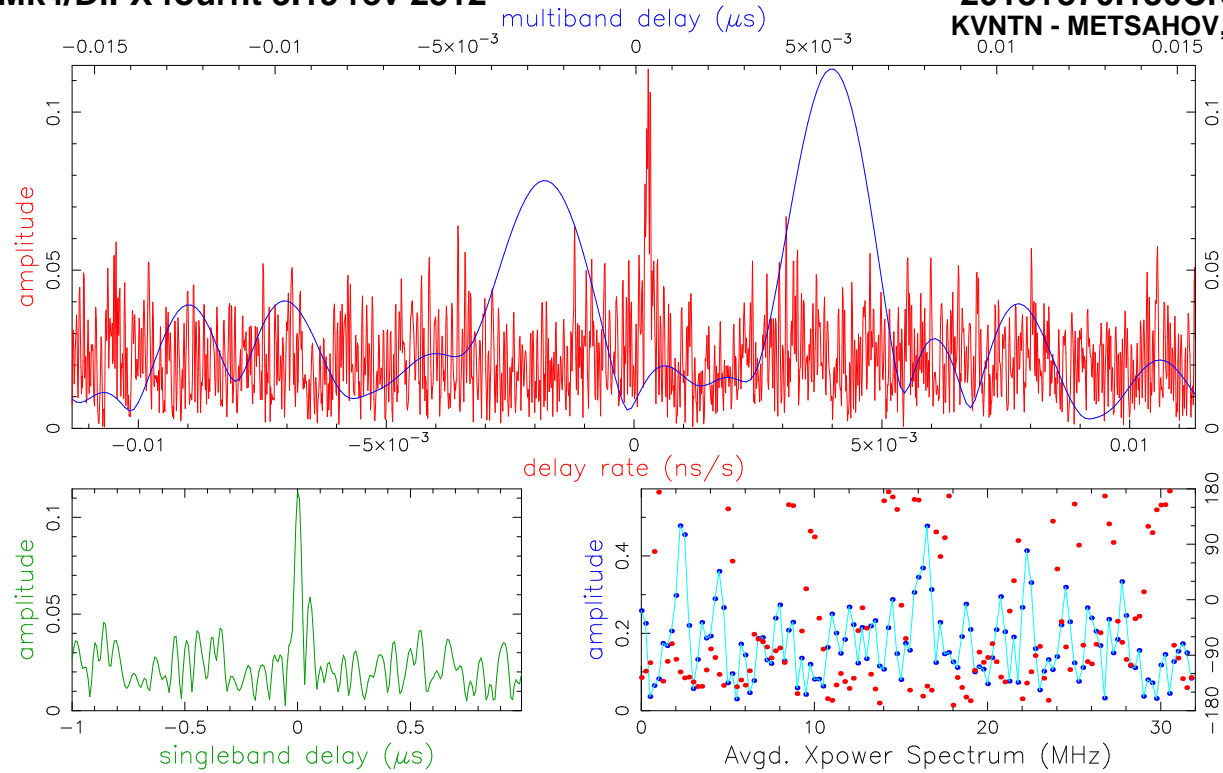
Group delay (usec)(sbd) -8.32460241502E+03 Apriori delay (usec) -8.32461394199E+03 Resid mbdelay (usec) 1.15270E-02 +/- 6.2E-05
 Sband delay (usec) -8.32460305749E+03 Apriori clock (usec) 2.7544157E+01 Resid sbdelay (usec) 1.08845E-02 +/- 9.9E-04
 Phase delay (usec) -8.32461394099E+03 Apriori clockrate (us/s) 1.8370719E-07 Resid phdelay (usec) 1.00284E-06 +/- 2.1E-07
 Delay rate (us/s) -1.27113733660E+00 Apriori rate (us/s) -1.27113759427E+00 Resid rate (us/s) 2.57675E-07 +/- 8.7E-10
 Total phase (deg) -315.6 Apriori accel (us/s/s) 2.26009607062E-05 Resid phase (deg) 31.1 +/- 6.6

RMS Theor. Amplitude 0.311 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.7 11.4 Search (2048X64) 0.291 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 50.3 19.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 50.5 13.1 Inc. seg. avg. 0.431 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 43.4 22.9 Inc. frq. avg. 0.413 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

t: az 297.2 el 30.0 pa 69.0 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9176.838 -1006.043 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/tZ.W.104.130CNK

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, tZ
KVNTN - METSAHOV, fgroup W, pol LR

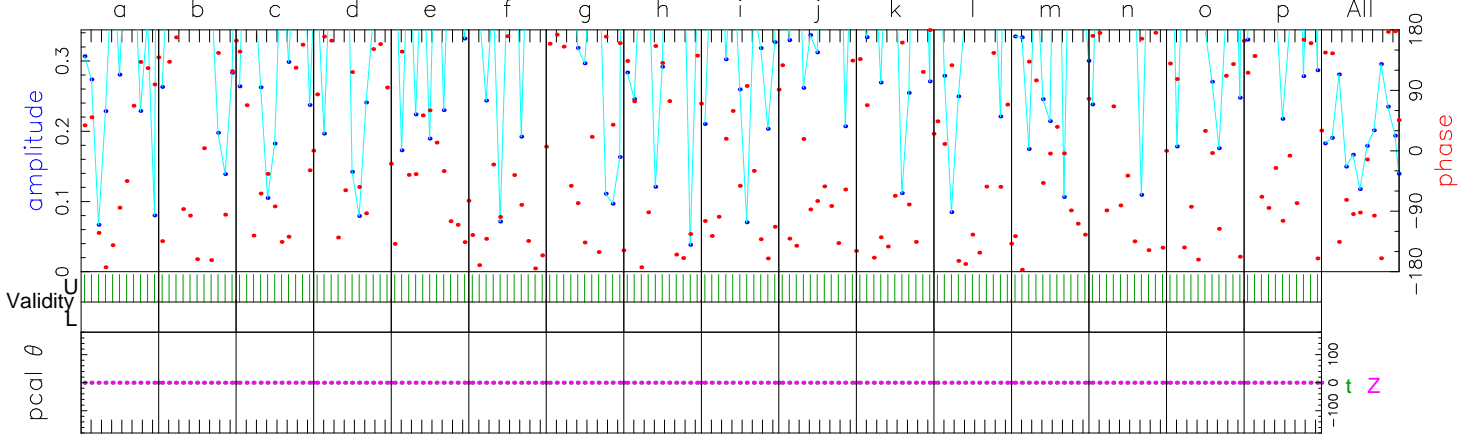


Fringe quality 0

SNR 6.4
Int time 419.346
Amp 0.115
Phase -144.7
PFD 3.6e-02
Delays (us)
SBD 0.002520
MBD 0.005368
Fringe rate (Hz) 0.024905
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

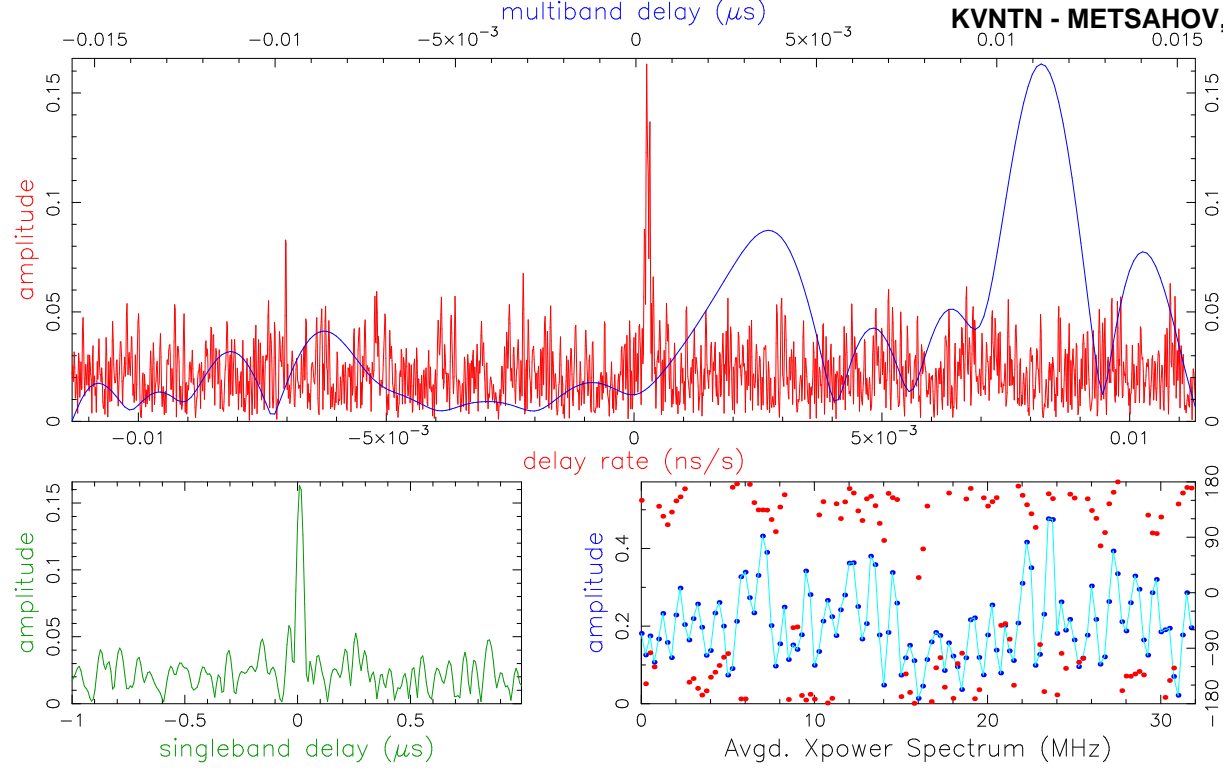
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085718
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	-160.8	-168.1	-176.8	-70.1	-127.0	-152.5	159.4	-88.6	-114.6	-160.3	163.7	-89.0	-136.3	160.9	-122.3	Phase	-144.7				
14.4	244.6	2.3	58.9	5.9	129.6	9.4	193.5	232.5	129.3	64.4	52.8	204.0	128.7	101.0	235.3	Ampl.	0.1					
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Sbd box	129.3				
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	APs used					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
t: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					
t: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					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
t	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					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-8.32460857418E+03														Apriori delay (usec)	-8.32461394199E+03	Resid mbdelay (usec)	5.36781E-03	+/-	1.7E-04
Sband delay (usec)			-8.32461142199E+03														Apriori clock (usec)	2.7544157E+01	Resid sbdelay (usec)	2.52000E-03	+/-	2.7E-03
Phase delay (usec)			-8.32461394666E+03														Apriori clockrate (us/s)	1.8370719E-07	Resid phdelay (usec)	-4.66546E-06	+/-	5.8E-07
Delay rate (us/s)			-1.27113730515E+00														Apriori rate (us/s)	-1.27113759427E+00	Resid rate (us/s)	2.89126E-07	+/-	2.4E-09
Total phase (deg)																	Apriori accel (us/s/s)	2.26009607062E-05	Resid phase (deg)	-144.7	+/-	17.8

ph/seg (deg) 64.0 30.9 Search (2048X64) 0.112 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 85.6 53.9 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.0 35.7 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.5 62.3 Inc. frq. avg. 0.124 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9176.838 -1006.043 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/tZ.W.123.130CNK

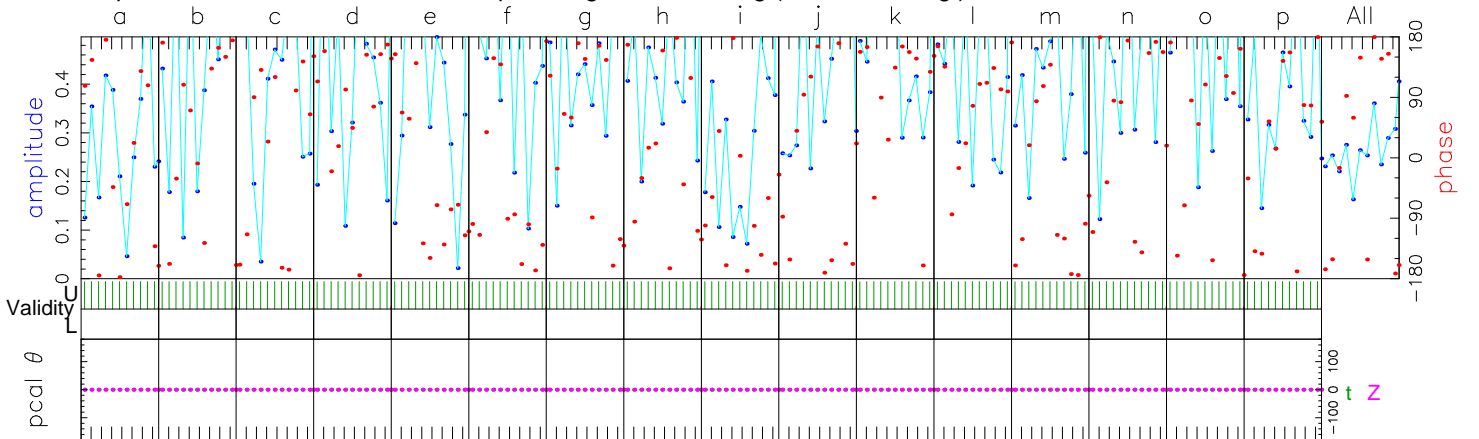


Fringe quality 9

SNR 9.3
 Int time 419.346
 Amp 0.166
 Phase 167.4
 PFD 6.4e-12
 Delays (us)
 SBD 0.010882
 MBD 0.011273
 Fringe rate (Hz)
 0.022342
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

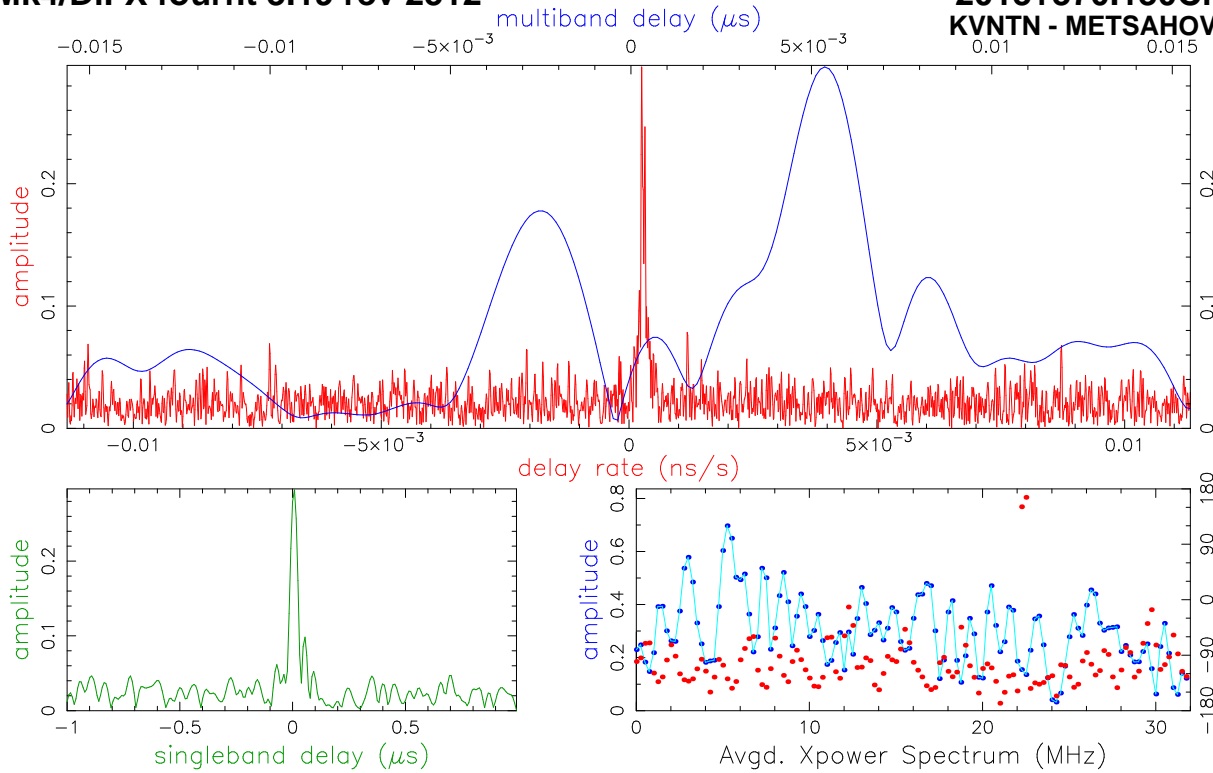
Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085723
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	130.4				
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	0.2				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	1.6E-09				
t: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	0:0	Mani PC	12.3				
t: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	0:0	PC amp	1.6E-09				
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
t	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					
Group delay (usec)(sbd)			-8.32460266914E+03															Apriori delay (usec)	-8.32461394199E+03	Resid mbdelay (usec)	1.12728E-02	+/-	1.2E-04
Sband delay (usec)			-8.32460305949E+03															Apriori clock (usec)	2.7544157E+01	Resid sbdelay (usec)	1.08825E-02	+/-	1.9E-03
Phase delay (usec)			-8.32461393659E+03															Apriori clockrate (us/s)	1.8370719E-07	Resid phdelay (usec)	5.39968E-06	+/-	4.0E-07
Delay rate (us/s)			-1.27113733490E+00															Apriori rate (us/s)	-1.27113759427E+00	Resid rate (us/s)	2.59368E-07	+/-	1.6E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.26009607062E-05	Resid phase (deg)	167.4	+/-	12.3

ph/seg (deg) 70.1 21.4 Search (2048X64) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.7 37.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.1 24.7 Inc. seg. avg. 0.244 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 38.6 43.1 Inc. frq. avg. 0.181 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 297.2 el 30.0 pa 69.0 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9176.838 -1006.043 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/tZ.W.140.130CNK

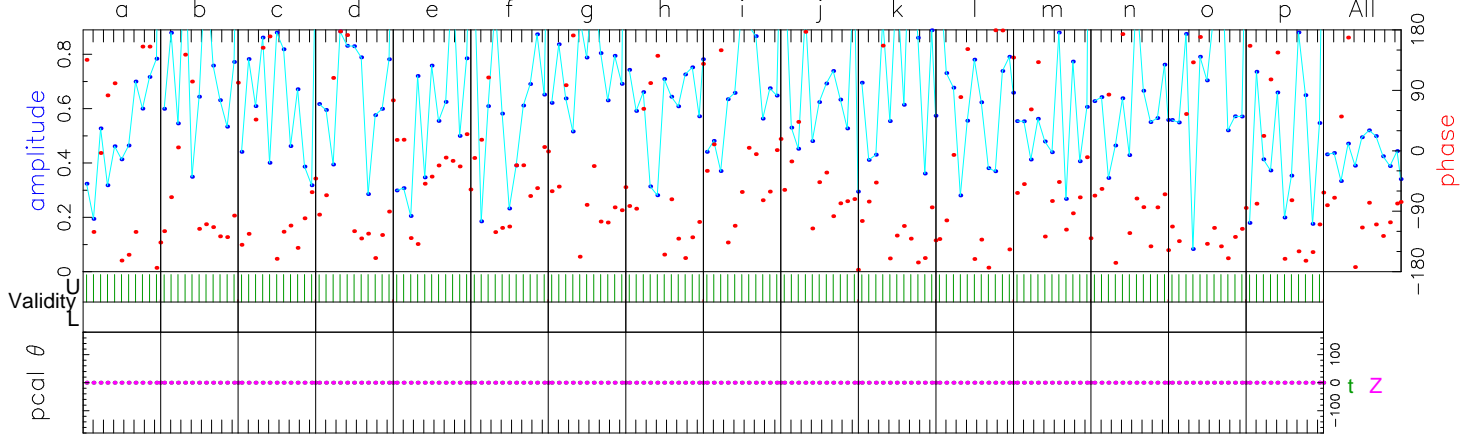


Fringe quality 9

SNR 16.6
Int time 419.346
Amp 0.297
Phase -106.8
PFD 0.0e+00
Delays (us)
SBD 0.006173
MBD 0.005369
Fringe rate (Hz) 0.022165
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085707
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 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	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
t: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		
t: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		
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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		Chan ids
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks

Group delay (usec)(sbd)	-8.32460857324E+03	Apriori delay (usec)	-8.32461394199E+03	Resid mbdelay (usec)	5.36875E-03	+/-	6.5E-05
Sband delay (usec)	-8.32460776949E+03	Apriori clock (usec)	2.7544157E+01	Resid sbdelay (usec)	6.17250E-03	+/-	1.0E-03
Phase delay (usec)	-8.32461394543E+03	Apriori clockrate (us/s)	1.8370719E-07	Resid phdelay (usec)	-3.44266E-06	+/-	2.2E-07
Delay rate (us/s)	-1.27113733696E+00	Apriori rate (us/s)	-1.27113759427E+00	Resid rate (us/s)	2.57312E-07	+/-	9.2E-10
Total phase (deg)	-93.5	Apriori accel (us/s/s)	2.26009607062E-05	Resid phase (deg)	-106.8	+/-	6.9

ph/seg (deg) RMS 60.6 Theor. 11.9 Amplitude 0.297 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 51.2 20.8 Search (2048X64) 0.288 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 47.7 13.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 43.6 24.1 Inc. seg. avg. 0.430 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
t: az 297.2 el 30.0 pa 69.0 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9176.838 -1006.043 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/tZ...130CNK Output file: /Exps/c192b/v2/1234/No0078/tZ.W.83.130CNK simultaneous interpolator