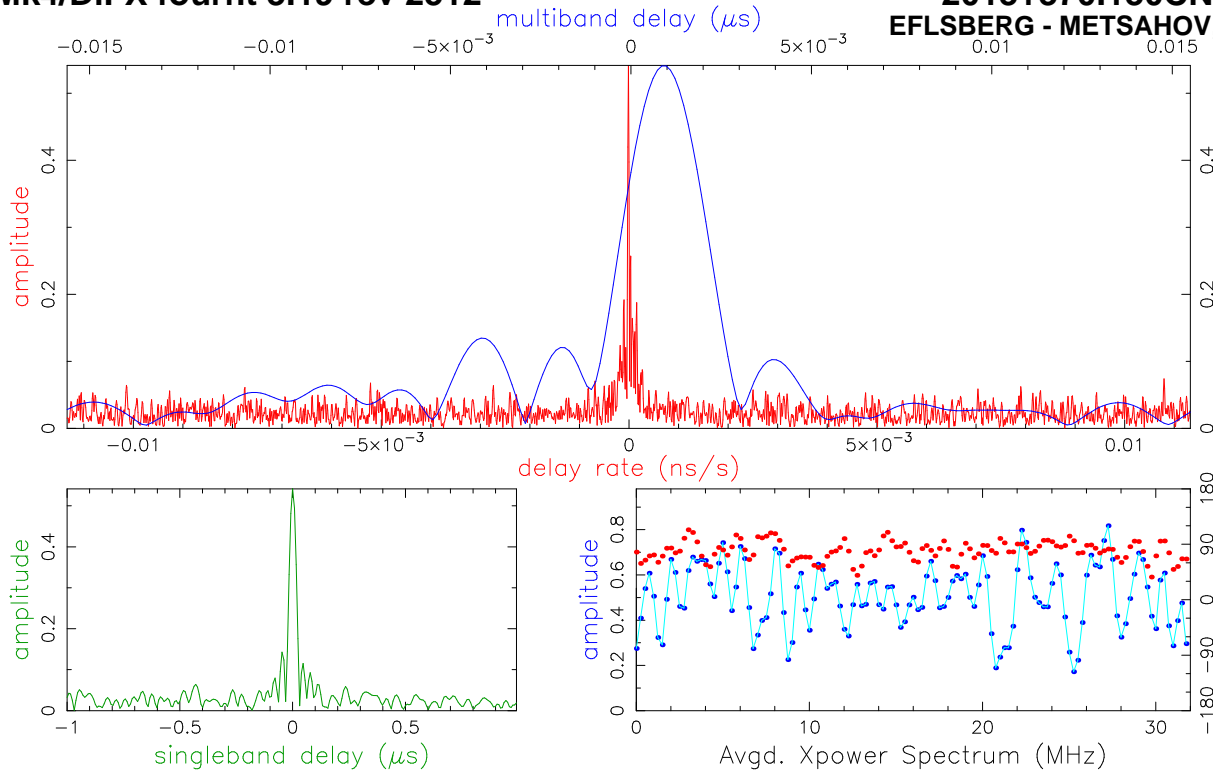


Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, BZ
EFLSBERG - METSAHOV, fgroup W, pol RR

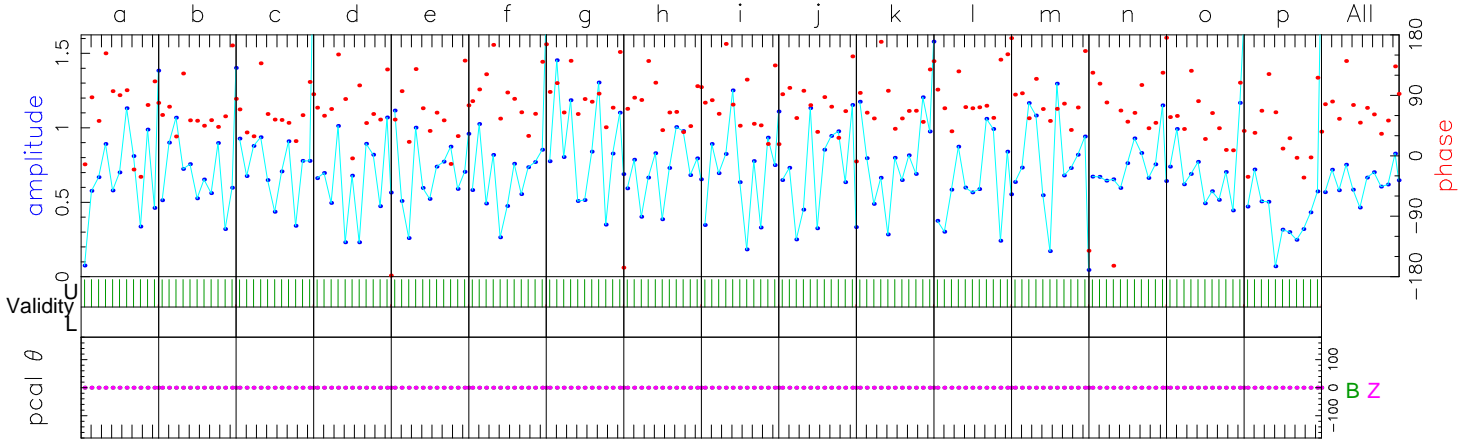


Fringe quality 8

SNR 30.3
Int time 419.366
Amp 0.542
Phase 77.4
PFD 0.0e+00
Delays (us)
SBD 0.000467
MBD 0.000919
Fringe rate (Hz) -0.001190
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
2020:086:085647
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		APs used		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase		
B: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		
B	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				
B	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)		-9.56705441197E+02					Apriori delay (usec)					-9.56706360625E+02					Resid mbdelay (usec)		9.19428E-04 +/- 3.6E-05	
Sband delay (usec)		-9.56705893625E+02					Apriori clock (usec)					1.6641111E+01					Resid sbdelay (usec)		4.67000E-04 +/- 5.7E-04	
Phase delay (usec)		-9.56706358130E+02					Apriori clockrate (us/s)					-2.1629280E-07					Resid phdelay (usec)		2.49485E-06 +/- 1.2E-07	
Delay rate (us/s)		2.71974606369E-01					Apriori rate (us/s)					2.71974620179E-01					Resid rate (us/s)		-1.38105E-08 +/- 5.0E-10	
Total phase (deg)		-248.2					Apriori accel (us/s/s)					-1.39681743016E-06					Resid phase (deg)		77.4 +/- 3.8	

ph/seg (deg) 32.1 6.5
amp/seg (%) 26.0 11.4
ph/frq (deg) 16.0 7.6
amp/frq (%) 19.7 13.2

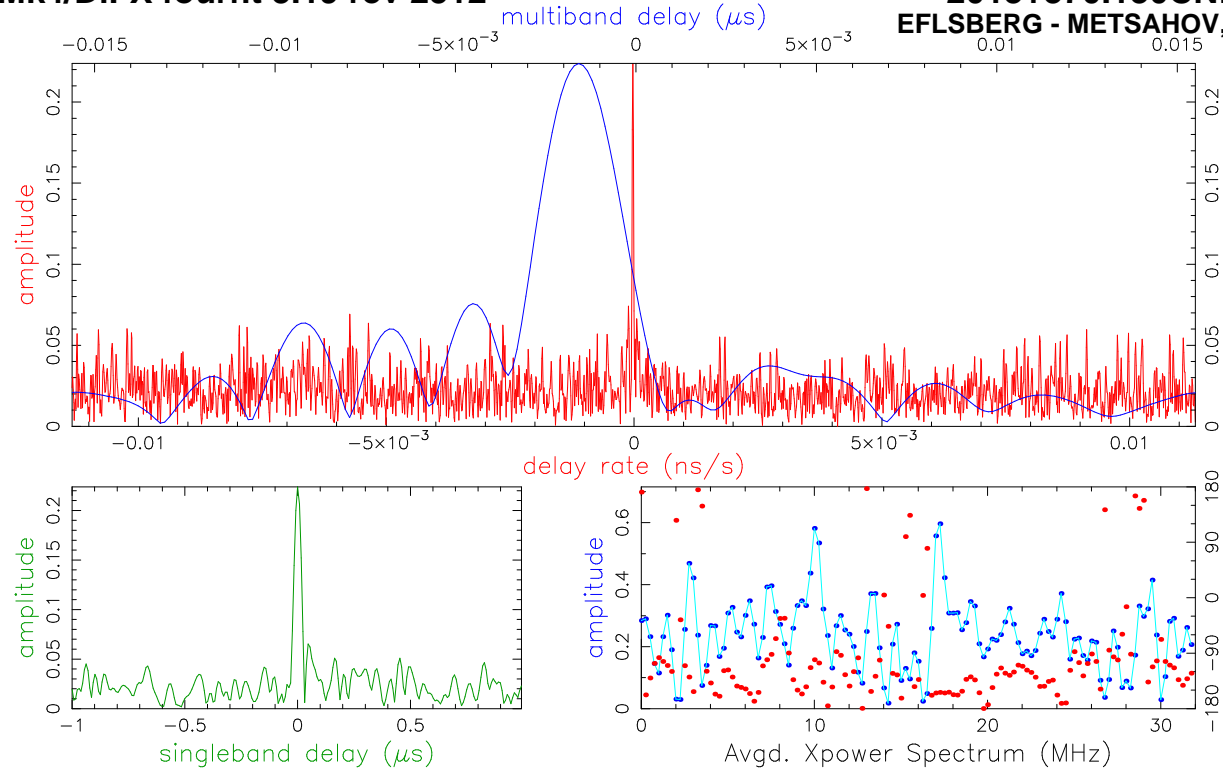
RMS Theor. Amplitude 0.542 +/- 0.018
Search (2048X64) 0.531
Interp. 0.000
Inc. seg. avg. 0.640
Inc. frq. avg. 0.551

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

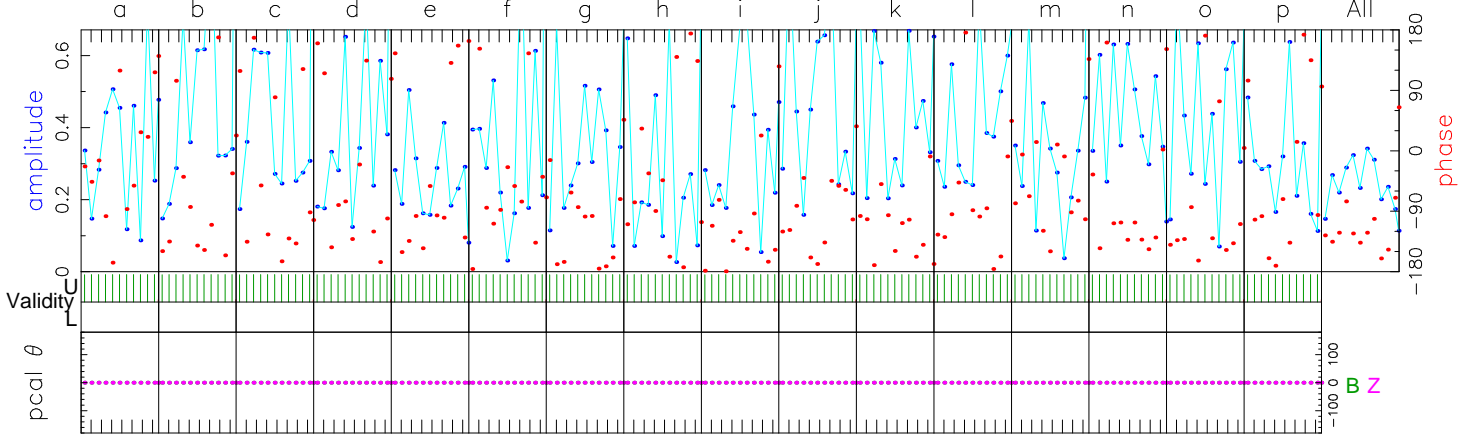
B: az 95.8 el 56.2 pa -52.5 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) -1960.143 -740.265 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/BZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/BZ.W.26.130CNK



Fringe quality 9
SNR 12.5
Int time 419.366
Amp 0.224
Phase -119.8
PFD 2.5e-27
Delays (us)
SBD 0.000708
MBD -0.001576
Fringe rate (Hz)
-0.001541
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
2020:086:085652
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

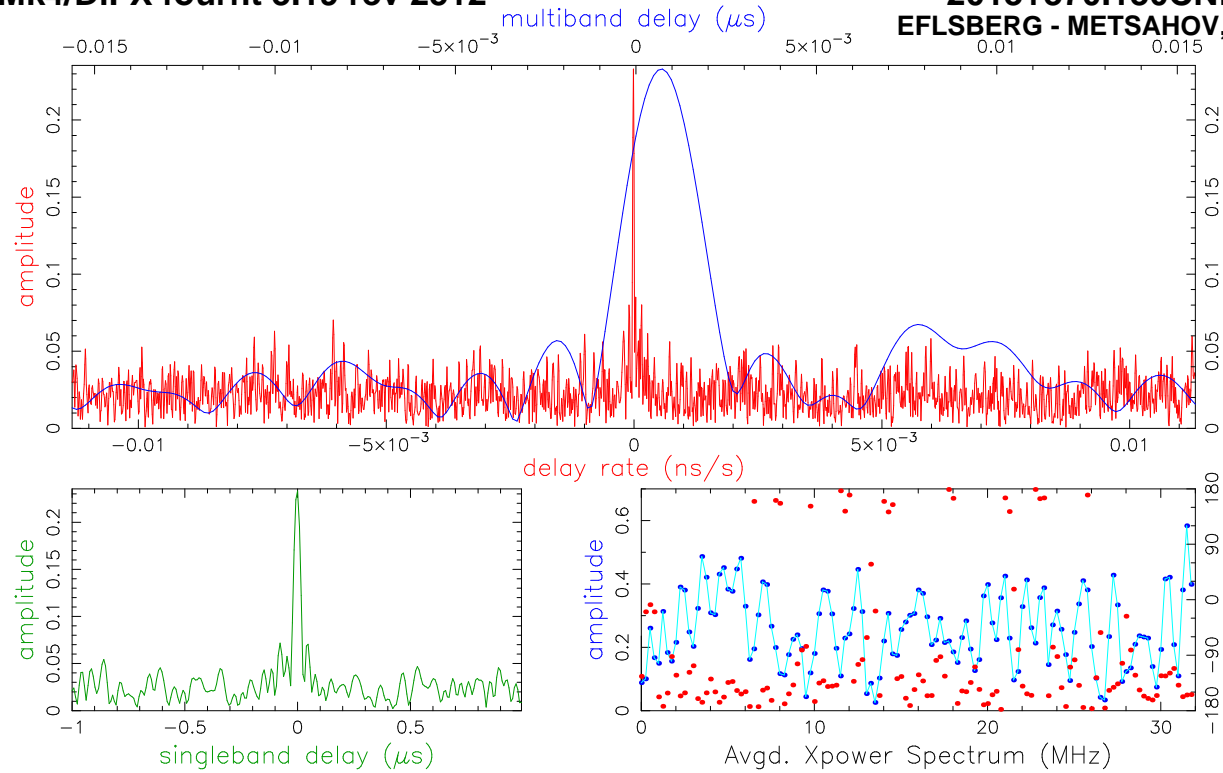
Amp. and Phase vs. time for each freq., 12 segs, 74 APs / seg (37.89 sec / seg.), time ticks 60 sec



	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				
	-25.3	-116.4	-138.9	-139.8	-133.6	-109.8	-127.7	-124.2	-134.4	-105.3	-112.9	-103.5	-81.2	-119.8	-138.2	-147.4	Phase	-119.8				
	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.1	Ampl.	0.2				
	19.0	128.8	129.1	131.7	22.9	128.8	127.8	51.7	128.8	129.5	128.9	129.2	129.3	129.0	128.5	160.0	Sbd box	129.1				
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					
B	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					
B: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					
B: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					
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000						
B	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)			-9.56707936425E+02														Apriori delay (usec)	-9.56706360625E+02	Resid mbdelay (usec)	-1.57580E-03	+/-	8.6E-05
Sband delay (usec)			-9.56705652625E+02														Apriori clock (usec)	1.6641111E+01	Resid sbdelay (usec)	7.08000E-04	+/-	1.4E-03
Phase delay (usec)			-9.56706364487E+02														Apriori clockrate (us/s)	-2.1629280E-07	Resid phdelay (usec)	-3.86247E-06	+/-	2.9E-07
Delay rate (us/s)			2.71974602295E-01														Apriori rate (us/s)	2.71974620179E-01	Resid rate (us/s)	-1.78847E-08	+/-	1.2E-09
Total phase (deg)					-85.3												Apriori accel (us/s/s)	-1.39681743016E-06	Resid phase (deg)	-119.8	+/-	9.1

ph/seg (deg) RMS Theor. Amplitude 0.224 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 30.5 15.8 Search (2048X64) 0.216 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.4 27.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.9 18.3 Inc. seg. avg. 0.239 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 34.6 31.9 Inc. frq. avg. 0.227 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 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) -1960.143 -740.265 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/BZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/BZ.W.43.130CNK

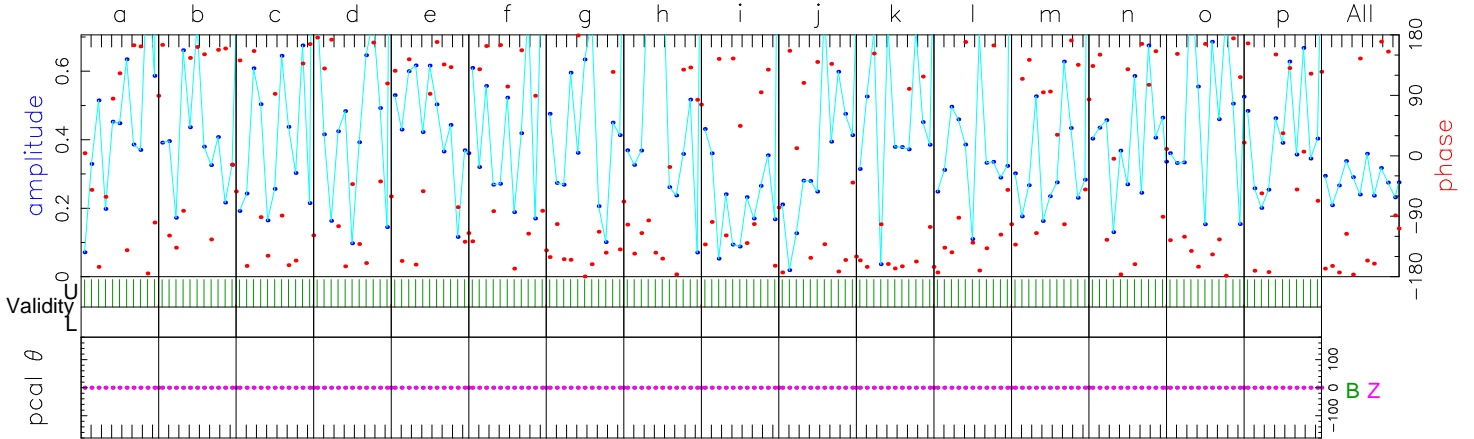


Fringe quality 9

SNR 13.2
Int time 419.366
Amp 0.235
Phase -165.7
PFD 6.0e-31
Delays (us)
SBD -0.002392
MBD 0.000701
Fringe rate (Hz)
-0.001386
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

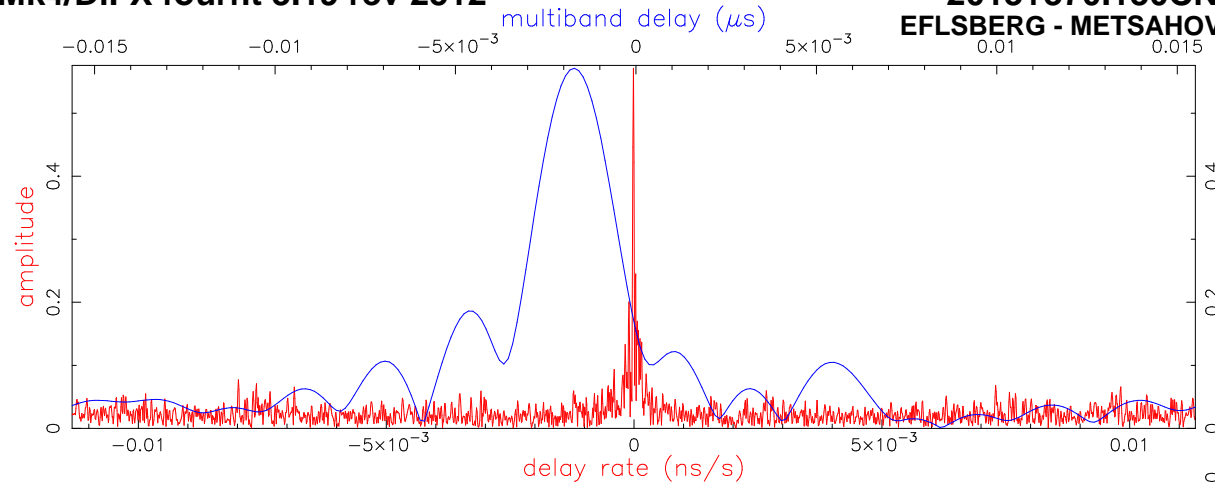


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-170.6	-167.8	-167.8	-163.3	161.4	-153.3	-159.8	-144.0	-146.2	-165.0	-175.9	-143.5	-162.8	168.5	-158.4	132.6		Phase -165.7					
	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.3	0.1	0.2	0.4	0.3	0.1	0.2	0.4	0.1		Ampl. 0.2					
	128.6	202.7	129.2	129.1	129.2	129.0	129.5	127.9	186.5	128.2	129.0	128.9	152.7	128.8	128.5	38.6		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					
B	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					
B: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					
B: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					
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					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-9.56705659894E+02															Apriori delay (usec)	-9.56706360625E+02	Resid mbdelay (usec)	7.00731E-04	+/-	8.2E-05
Sband delay (usec)			-9.56708753125E+02															Apriori clock (usec)	1.6641111E+01	Resid sbdelay (usec)	-2.39250E-03	+/-	1.3E-03
Phase delay (usec)			-9.56706365968E+02															Apriori clockrate (us/s)	-2.1629280E-07	Resid phdelay (usec)	-5.34342E-06	+/-	2.8E-07
Delay rate (us/s)			2.71974604091E-01															Apriori rate (us/s)	2.71974620179E-01	Resid rate (us/s)	-1.60885E-08	+/-	1.2E-09
Total phase (deg)																		Apriori accel (us/s/s)	-1.39681743016E-06	Resid phase (deg)	-165.7	+/-	8.7

ph/seg (deg) RMS Theor. Amplitude 0.235 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.0 15.1 Search (2048X64) 0.217 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.3 26.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 22.8 17.4 Inc. seg. avg. 0.269 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 38.1 30.3 Inc. frq. avg. 0.233 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

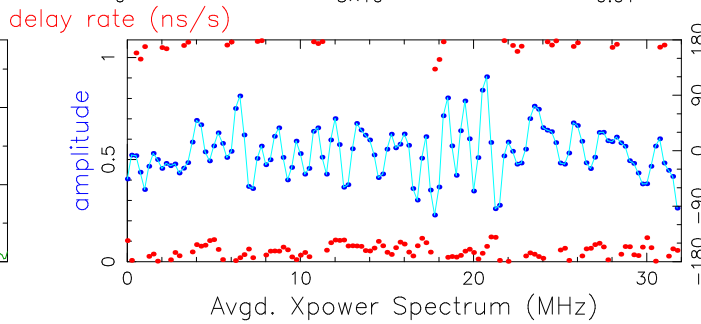
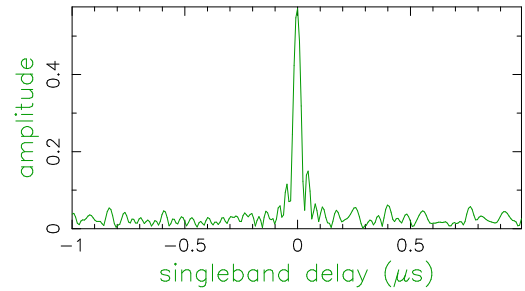
B: az 95.8 el 56.2 pa -52.5 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) -1960.143 -740.265 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/BZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/BZ.W.61.130CNK

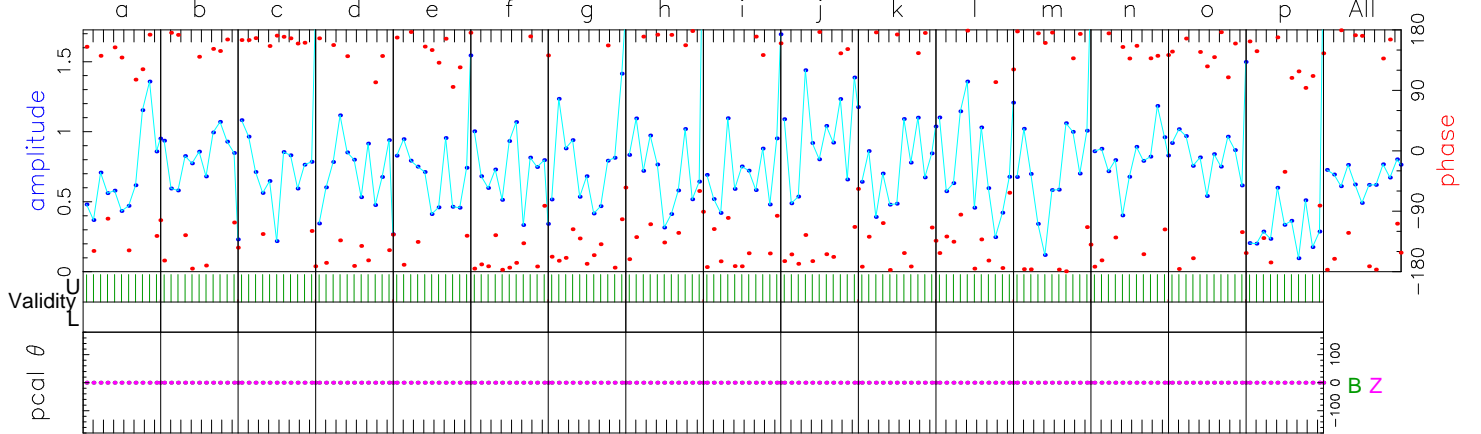


Fringe quality 8

SNR 32.2
Int time 419.366
Amp 0.576
Phase -171.2
PFD 0.0e+00
Delays (us)
SBD -0.002210
MBD -0.001739
Fringe rate (Hz) -0.001231
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
2020:086:085641
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

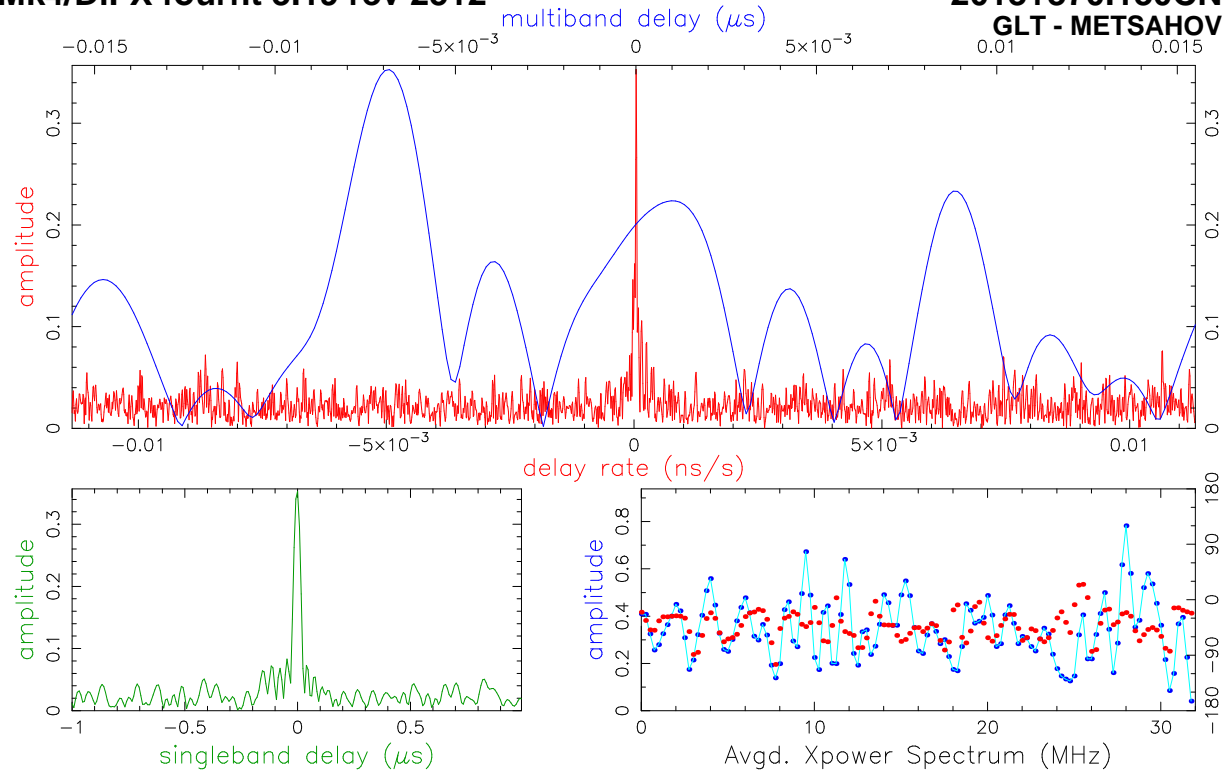


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
167.4	179.9	175.2	-176.7	172.3	-162.1	-148.0	-152.0	-153.1	-159.5	-161.7	-143.5	-177.6	178.4	161.4	152.3	Phase	-171.2	
0.5	0.7	0.7	0.6	0.6	0.7	0.7	0.5	0.5	0.8	0.6	0.6	0.6	0.7	0.7	0.1	Ampl.	0.6	
129.4	128.9	129.0	128.8	128.7	128.8	128.6	129.0	129.0	128.3	128.6	128.7	128.3	128.7	128.5	126.0	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	APs used		
B	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	PC phase		
B: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	ManI PC		
B: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	PC amp		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks		
Z	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) -9.56708099322E+02 Apriori delay (usec) -9.56706360625E+02 Resid mbdelay (usec) -1.73870E-03 +/- 3.3E-05
Sband delay (usec) -9.56708570625E+02 Apriori clock (usec) 1.6641111E+01 Resid sbdelay (usec) -2.21000E-03 +/- 5.3E-04
Phase delay (usec) -9.56706366146E+02 Apriori clockrate (us/s) -2.1629280E-07 Resid phdelay (usec) -5.52107E-06 +/- 1.1E-07
Delay rate (us/s) 2.71974605884E-01 Apriori rate (us/s) 2.71974620179E-01 Resid rate (us/s) -1.42951E-08 +/- 4.7E-10
Total phase (deg) -136.7 Apriori accel (us/s/s) -1.39681743016E-06 Resid phase (deg) -171.2 +/- 3.6

RMS Theor. Amplitude 0.576 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 30.7 6.2 Search (2048X64) 0.546 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 22.6 10.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg) 19.9 7.1 Inc. seg. avg. 0.669 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
amp/frq (%) 24.2 12.4 Inc. frq. avg. 0.593 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 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) -1960.143 -740.265 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/BZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/BZ.W.7.130CNK

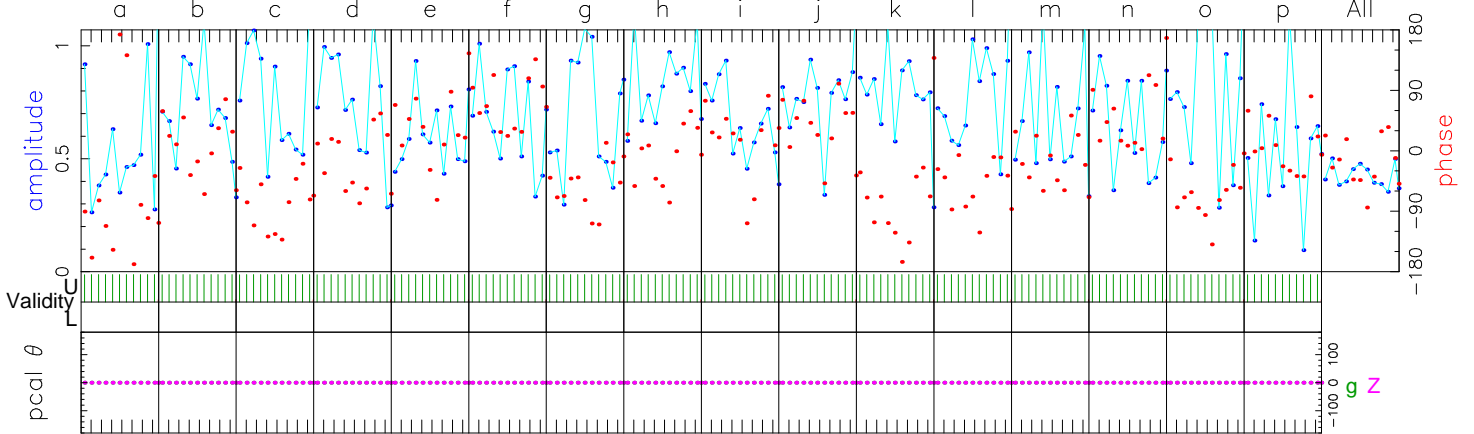


Fringe quality 8

SNR 20.0
Int time 419.141
Amp 0.357
Phase -16.0
PFD 0.0e+00
Delays (us)
SBD -0.002574
MBD -0.006860
Fringe rate (Hz) 0.003660
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

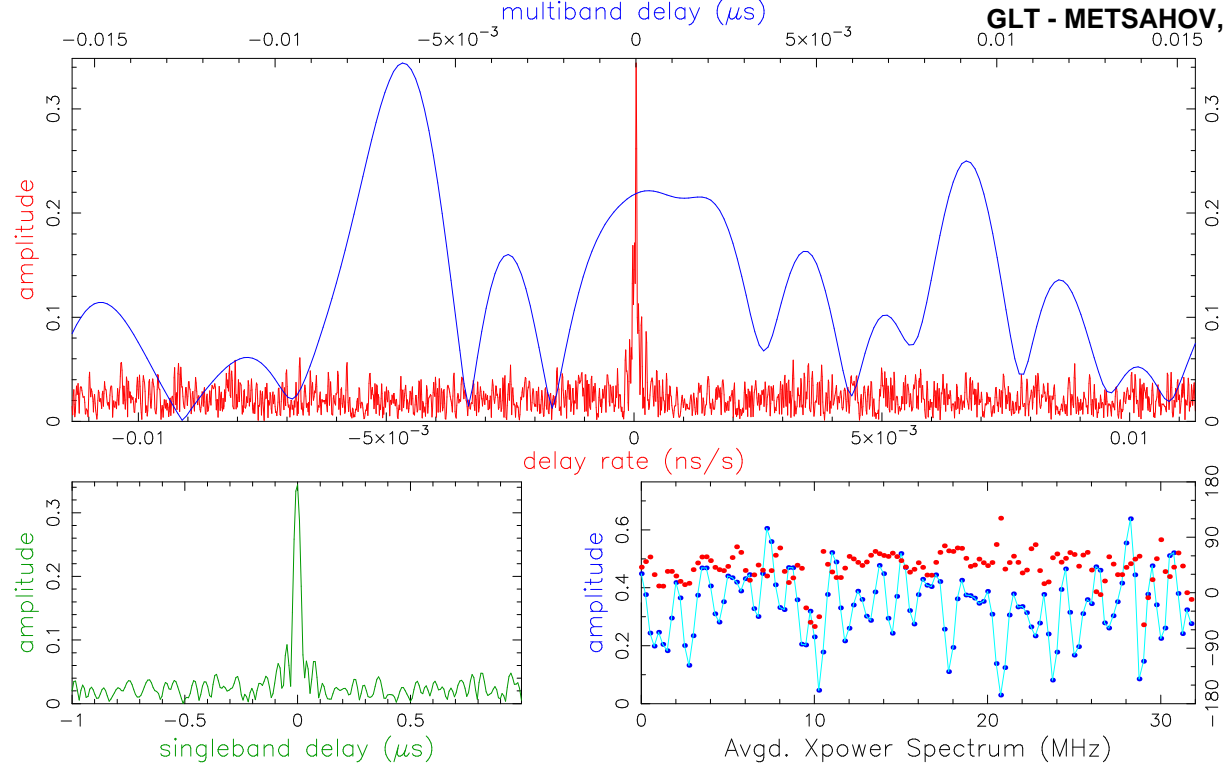
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085643
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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				
	-117.6	10.9	-78.3	-4.2	32.6	65.5	-58.1	-5.7	29.9	47.5	-86.4	-48.6	-19.5	34.1	-74.2	6.1	Phase	-16.0				
	0.4	0.5	0.6	0.6	0.4	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.7	0.4	Ampl.	0.5				
	132.1	129.2	129.1	128.5	128.6	128.2	128.4	128.1	129.3	128.8	128.8	128.7	128.4	128.6	129.1	128.4	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					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
g: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					
g: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					
g	1000	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					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-8.15299277831E+03														Apriori delay (usec)	-8.15298591801E+03	Resid mbdelay (usec)	-6.86031E-03	+/-	5.4E-05
Sband delay (usec)			-8.15298849201E+03														Apriori clock (usec)	1.1154556E+08	Resid sbdelay (usec)	-2.57400E-03	+/-	8.6E-04
Phase delay (usec)			-8.15298591852E+03														Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-5.16638E-07	+/-	1.8E-07
Delay rate (us/s)			-1.41682360125E-02														Apriori rate (us/s)	-1.41682784983E-02	Resid rate (us/s)	4.24858E-08	+/-	7.6E-10
Total phase (deg)					-7.8												Apriori accel (us/s/s)	5.05346458889E-05	Resid phase (deg)	-16.0	+/-	5.7

ph/seg (deg) RMS Theor. Amplitude 0.357 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.7 9.9 Search (2048X64) 0.350 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.1 17.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 56.4 11.5 Inc. seg. avg. 0.422 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 52.8 el 29.8 pa -13.6 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 185.598 3757.600 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/gZ.W.18.130CNK simultaneous interpolator

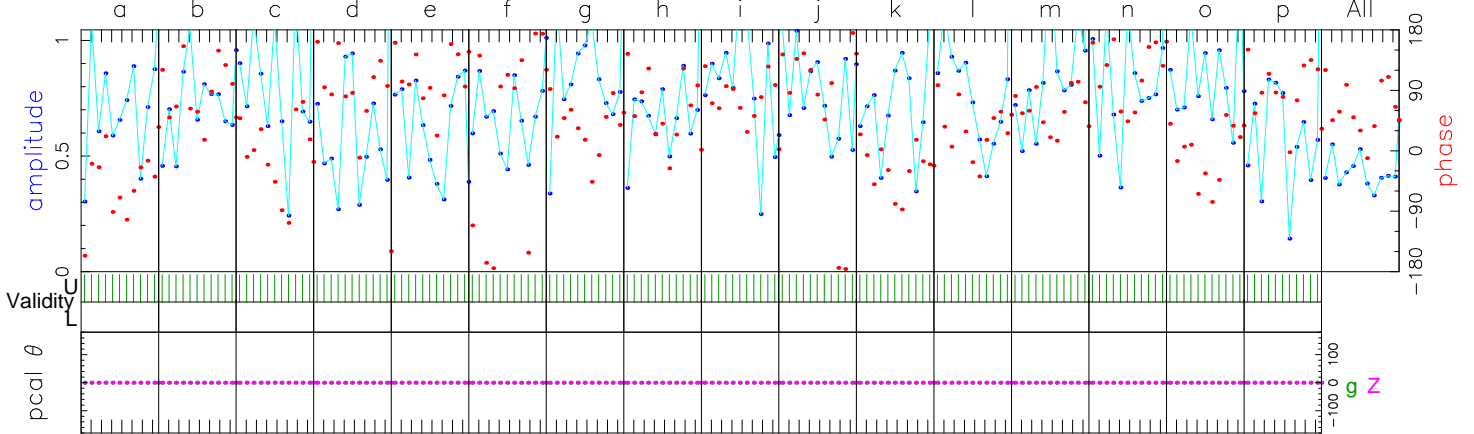


Fringe quality 8

SNR 19.5
Int time 419.108
Amp 0.349
Phase 63.9
PFD 0.0e+00
Delays (us)
SBD -0.002783
MBD -0.006468
Fringe rate (Hz) 0.003795
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

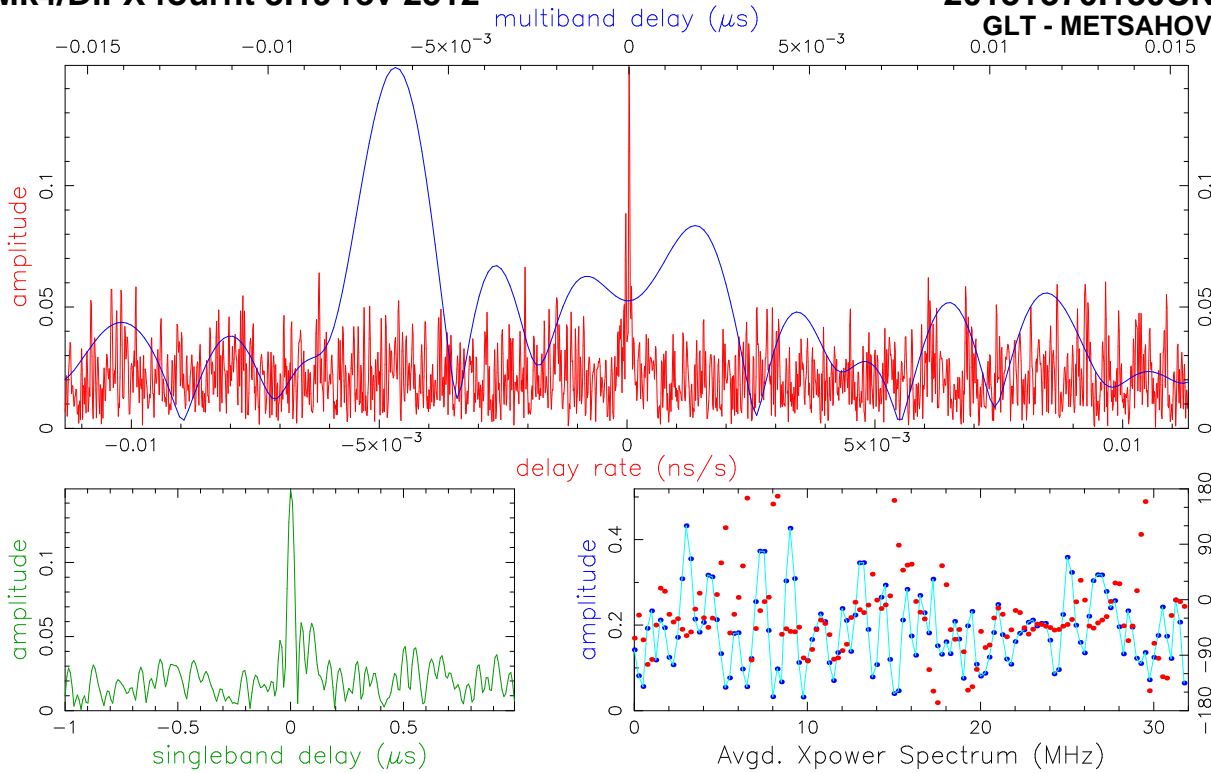
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085648
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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					
	-41.8	88.5	9.6	101.8	116.8	157.7	30.3	69.6	78.7	129.5	-30.6	34.6	61.0	118.8	-2.8	97.1		Phase 63.9					
	0.5	0.5	0.5	0.4	0.5	0.5	0.7	0.5	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.5		Ampl. 0.6					
	129.3	129.5	129.1	128.3	129.1	129.0	128.5	128.8	128.8	128.4	128.9	128.9	128.7	129.2	128.7	129.1		Sbd box 128.6					
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					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g: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					
g: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					
g	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					
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)			-8.15299238587E+03															Apriori delay (usec)	-8.15298591801E+03	Resid mbdelay (usec)	-6.46787E-03	+/-	5.5E-05
Sband delay (usec)			-8.15298870151E+03															Apriori clock (usec)	1.1154556E+08	Resid sbdelay (usec)	-2.78350E-03	+/-	8.8E-04
Phase delay (usec)			-8.15298591595E+03															Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	2.06079E-06	+/-	1.9E-07
Delay rate (us/s)			-1.41682344388E-02															Apriori rate (us/s)	-1.41682784983E-02	Resid rate (us/s)	4.40595E-08	+/-	7.8E-10
Total phase (deg)					-287.9													Apriori accel (us/s/s)	5.05346458889E-05	Resid phase (deg)	63.9	+/-	5.9

ph/seg (deg) 38.2 Theor. 10.2 Amplitude 0.349 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.4 17.8 Search (2048X64) 0.342 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 60.8 11.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 70.1 20.5 Inc. seg. avg. 0.422 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 52.8 el 29.8 pa -13.6 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 185.598 3757.600 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/gZ.W.31.130CNK simultaneous interpolator

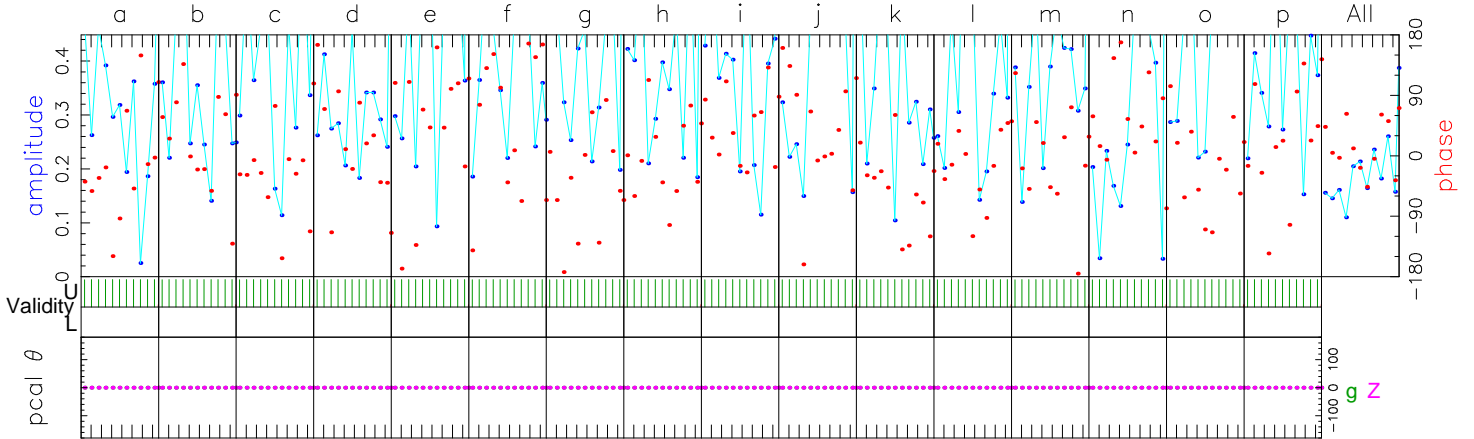


Fringe quality 9

SNR 8.4
Int time 419.141
Amp 0.150
Phase 12.0
PFD 2.0e-08
Delays (us)
SBD 0.001804
MBD -0.006466
Fringe rate (Hz) 0.004061
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

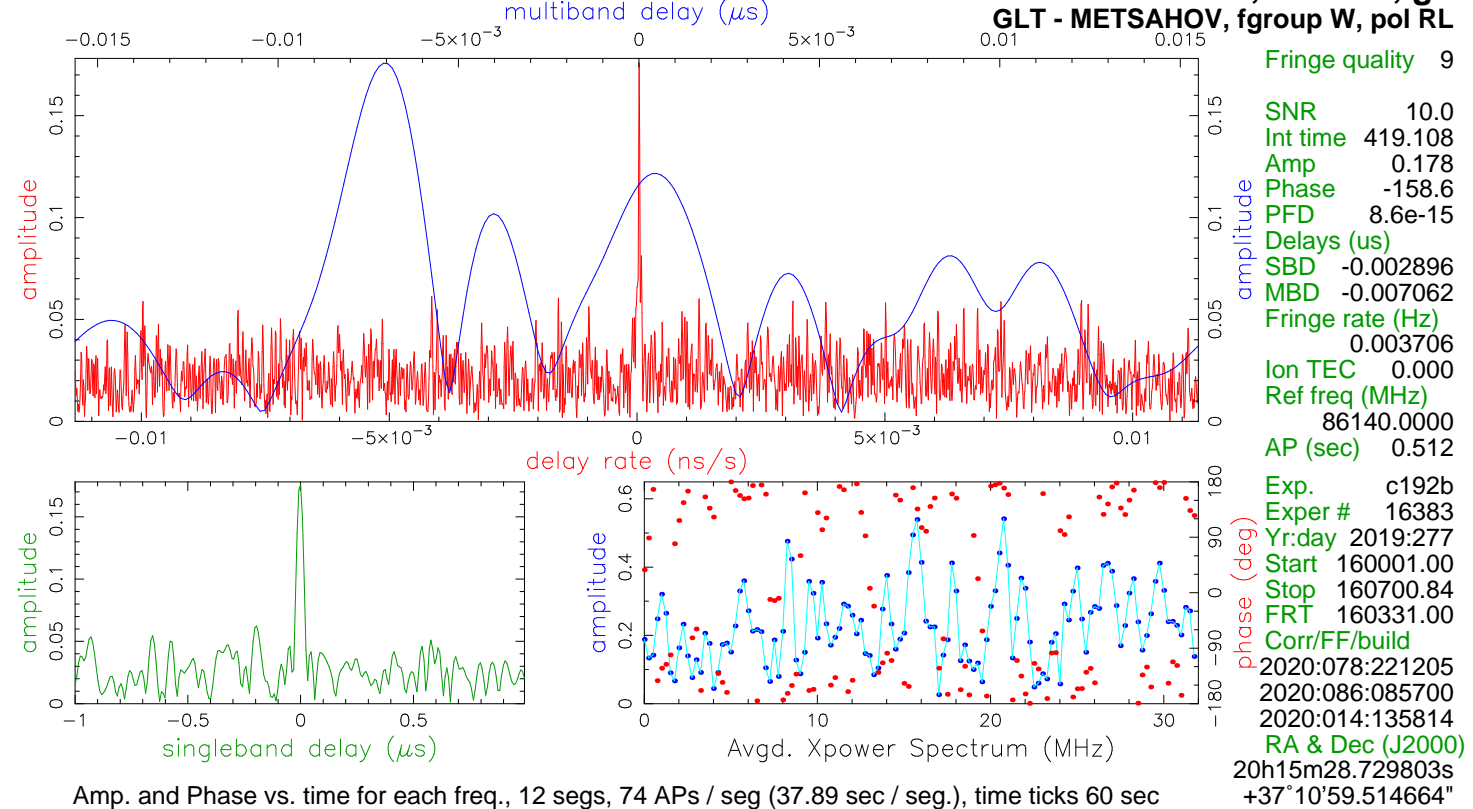


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-38.0	62.1	-26.8	16.8	82.2	140.0	-25.0	-8.8	34.3	47.3	-52.8	-2.3	9.7	46.9	-12.1	29.9	Phase	12.0
	0.2	0.2	0.3	0.1	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2
	128.2	95.3	129.2	101.2	128.2	220.5	33.4	128.2	128.2	128.8	68.0	129.4	130.0	82.2	129.3	196.0	Sbd box	129.2
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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g: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	
g	1000	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	
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)			-8.15299238387E+03					Apriori delay (usec)			-8.15298591801E+03			Resid mbdelay (usec)			-6.46587E-03	+/- 1.3E-04
Sband delay (usec)			-8.15298411401E+03					Apriori clock (usec)			1.1154556E+00			Resid sbdelay (usec)			1.80400E-03	+/- 2.1E-03
Phase delay (usec)			-8.15298591762E+03					Apriori clockrate (us/s)			5.8707190E-08			Resid phdelay (usec)			3.86928E-07	+/- 4.4E-07
Delay rate (us/s)			-1.41682313580E-02					Apriori rate (us/s)			-1.41682784983E-02			Resid rate (us/s)			4.71403E-08	+/- 1.8E-09
Total phase (deg)					-339.8			Apriori accel (us/s/s)			5.05346458889E-05			Resid phase (deg)			12.0	+/- 13.7

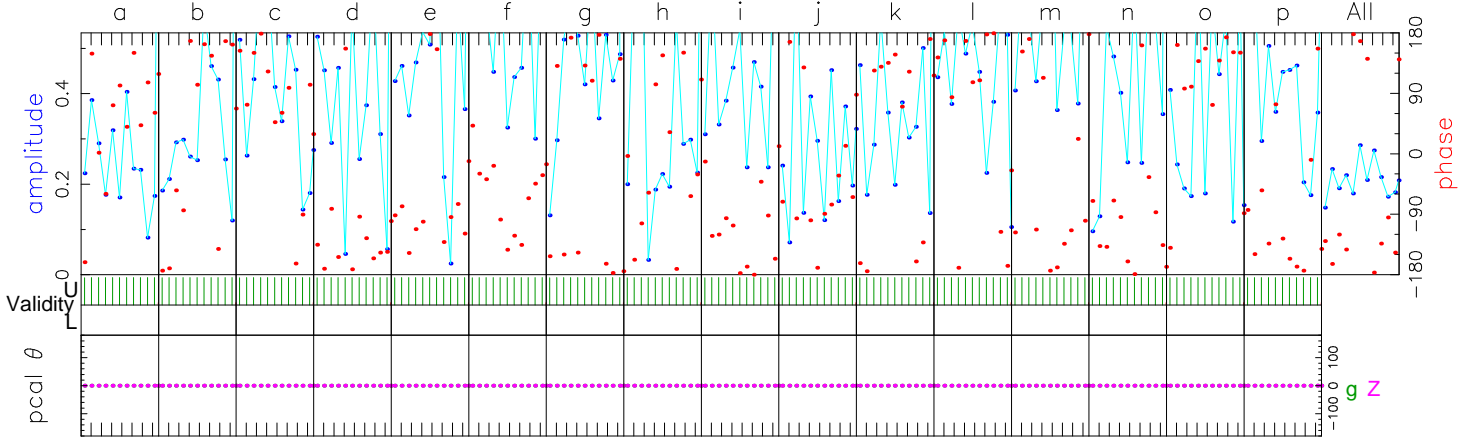
ph/seg (deg) 36.7 Theor. 23.7 Amplitude 0.150 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.4 41.4 Search (2048X64) 0.145 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.0 27.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 49.7 47.8 Inc. seg. avg. 0.168 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 52.8 el 29.8 pa -13.6 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 185.598 3757.600 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/gZ.W.52.130CNK simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, gZ
GLT - METSAHOV, fgroup W, pol RL



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



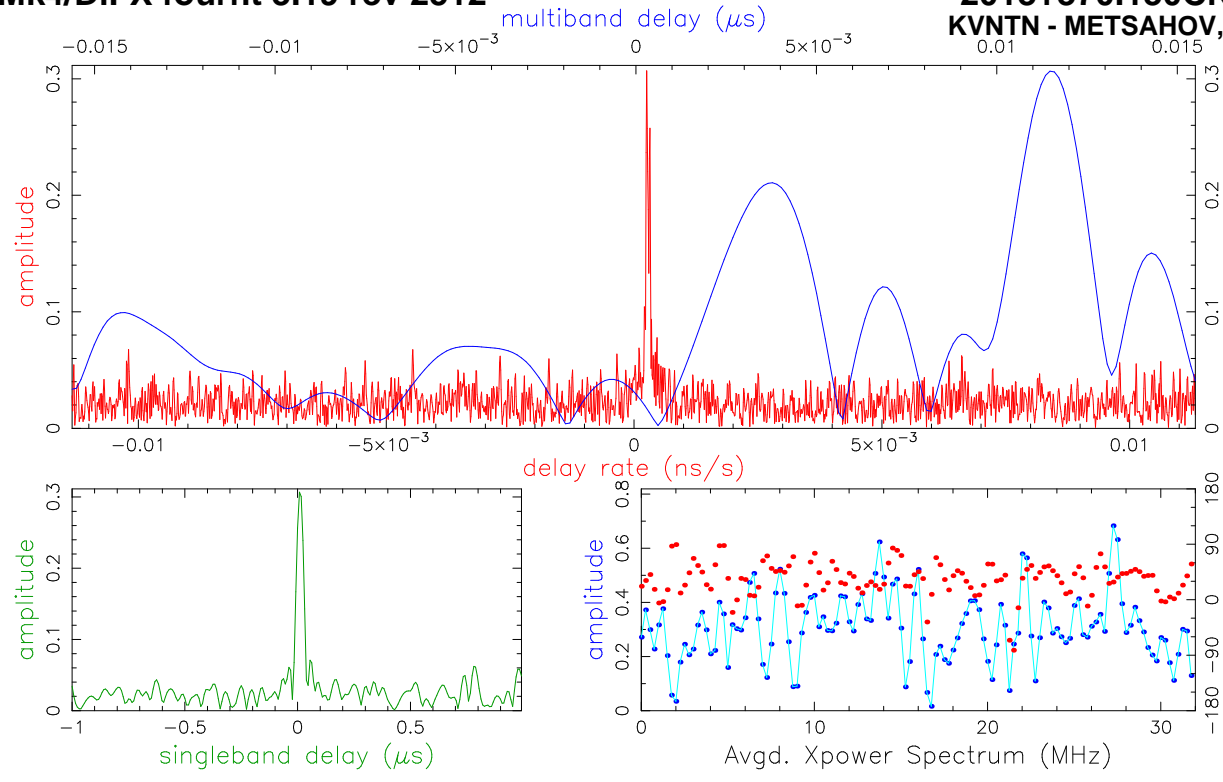
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	81.2	177.9	129.5	-144.4	-122.9	-55.2	169.3	-141.1	-127.1	-84.4	154.8	163.6	-154.6	-116.5	142.9	-139.5	Phase	-158.6
	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.1	0.3	0.2	0.2	0.3	0.4	0.3	0.3	0.2	Ampl.	0.3
	124.8	58.8	129.8	128.2	128.6	129.0	129.6	91.1	128.9	127.2	37.3	128.9	128.5	129.2	128.9	128.2	Sbd box	128.6
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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g: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	
g: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	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	-8.15299297984E+03	Apriori delay (usec)	-8.15298591801E+03	Resid mbdelay (usec)	-7.06184E-03	+/-	1.1E-04
Sband delay (usec)	-8.15298881351E+03	Apriori clock (usec)	1.1154556E+00	Resid sbdelay (usec)	-2.89550E-03	+/-	1.7E-03
Phase delay (usec)	-8.15298592312E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-5.11490E-06	+/-	3.7E-07
Delay rate (us/s)	-1.41682354705E-02	Apriori rate (us/s)	-1.41682784983E-02	Resid rate (us/s)	4.30279E-08	+/-	1.5E-09
Total phase (deg)	-150.4	Apriori accel (us/s/s)	5.05346458889E-05	Resid phase (deg)	-158.6	+/-	11.5

ph/seg (deg)	RMS 34.7	Theor. 19.9	Amplitude Search (2048X64)	0.178 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	28.9	34.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	59.4	23.0	Inc. seg. avg.	0.198	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016	
amp/frq (%)	68.1	40.1	Inc. frq. avg.	0.251	Sample rate(MISamp/s): 64		dr window (ns/s)	-0.011	0.011	
					Data rate(Mb/s): 2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00	0.00

g: az 52.8 el 29.8 pa -13.6 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 185.598 3757.600 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/gZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/gZ.W.70.130CNK

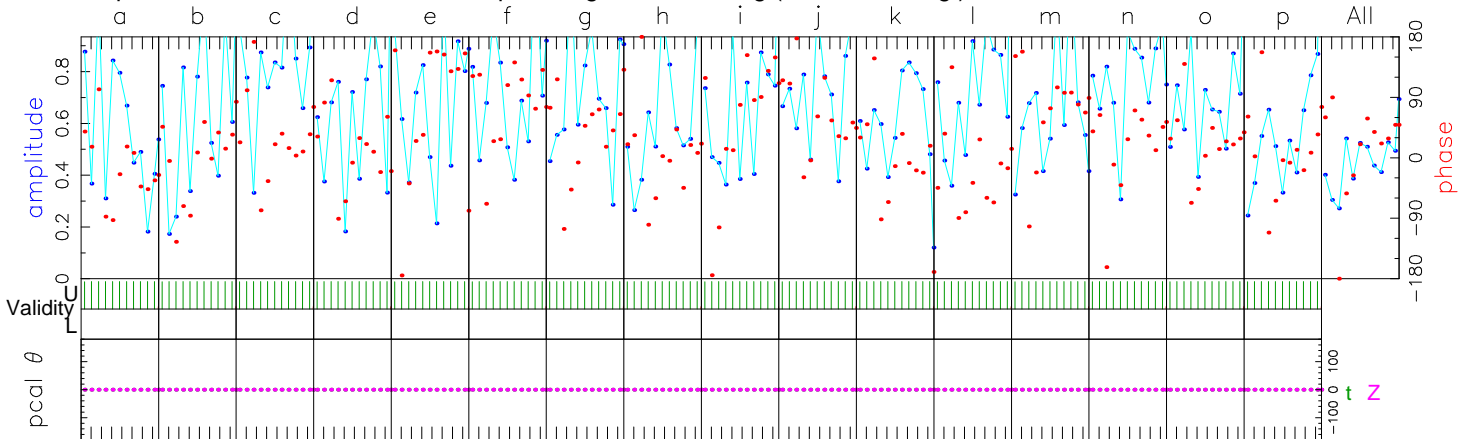


Fringe quality 7

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

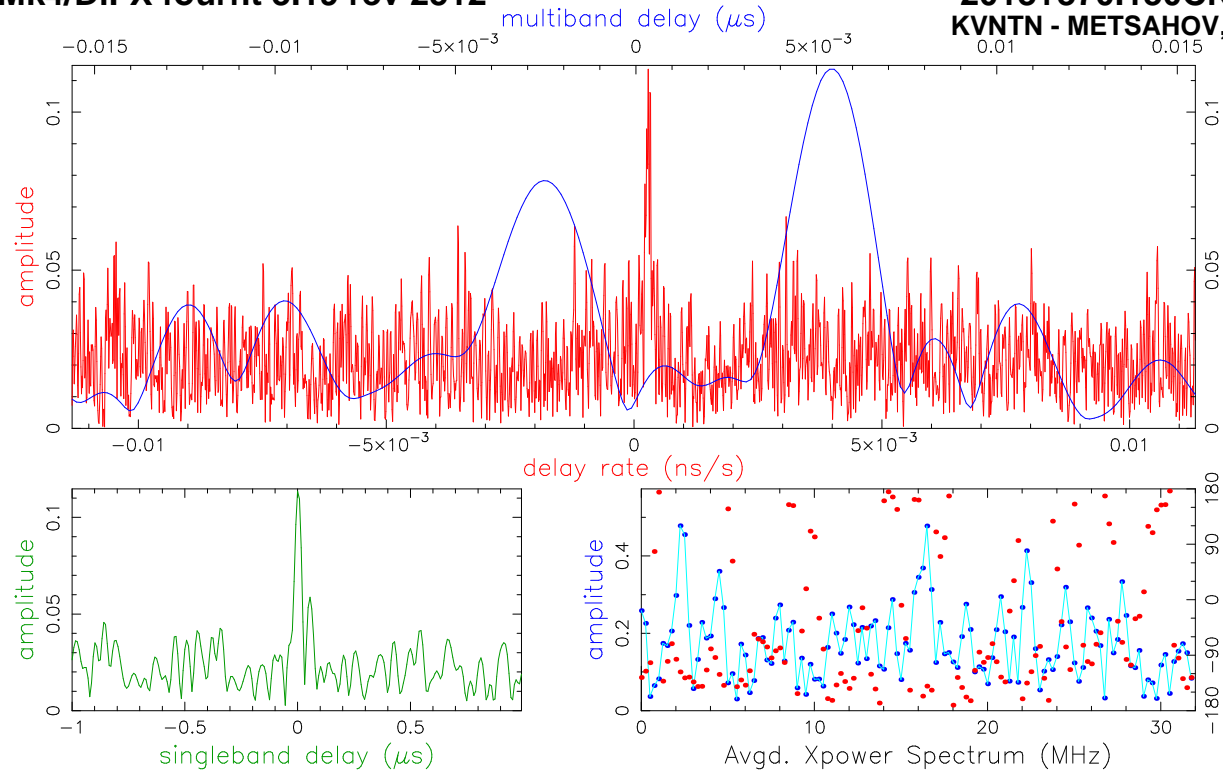


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-3.5	13.5	16.0	11.7	137.4	85.7	39.2	-4.7	111.3	63.3	-1.7	-36.6	90.7	38.5	18.3	-2.2		Phase	31.1
	0.3	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.4	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

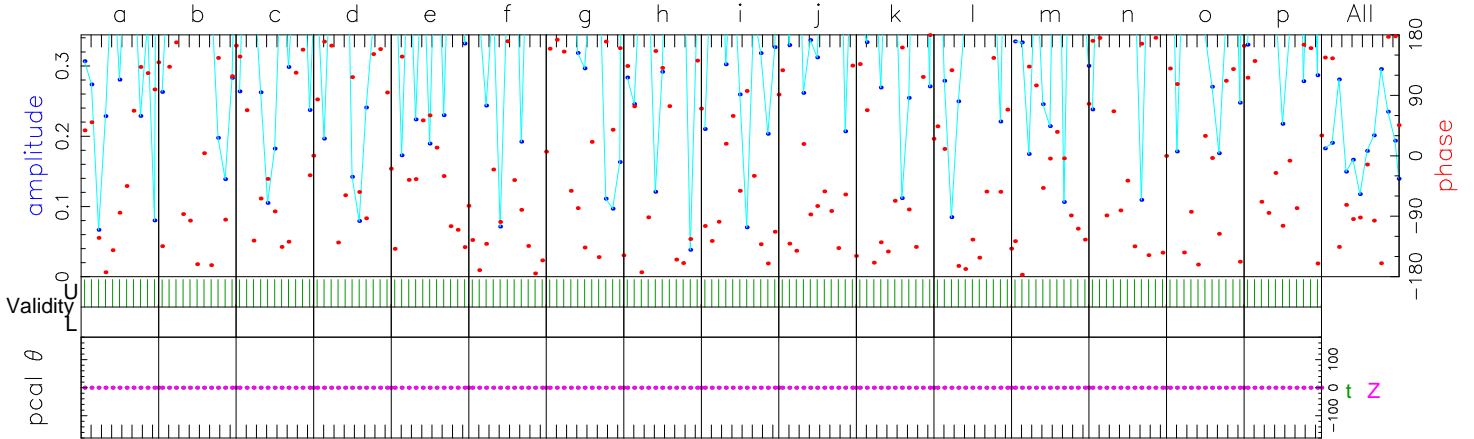
RMS Theor. Amplitude 0.311 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.7 11.4 Search (2048X64) 0.291 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 50.3 19.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 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



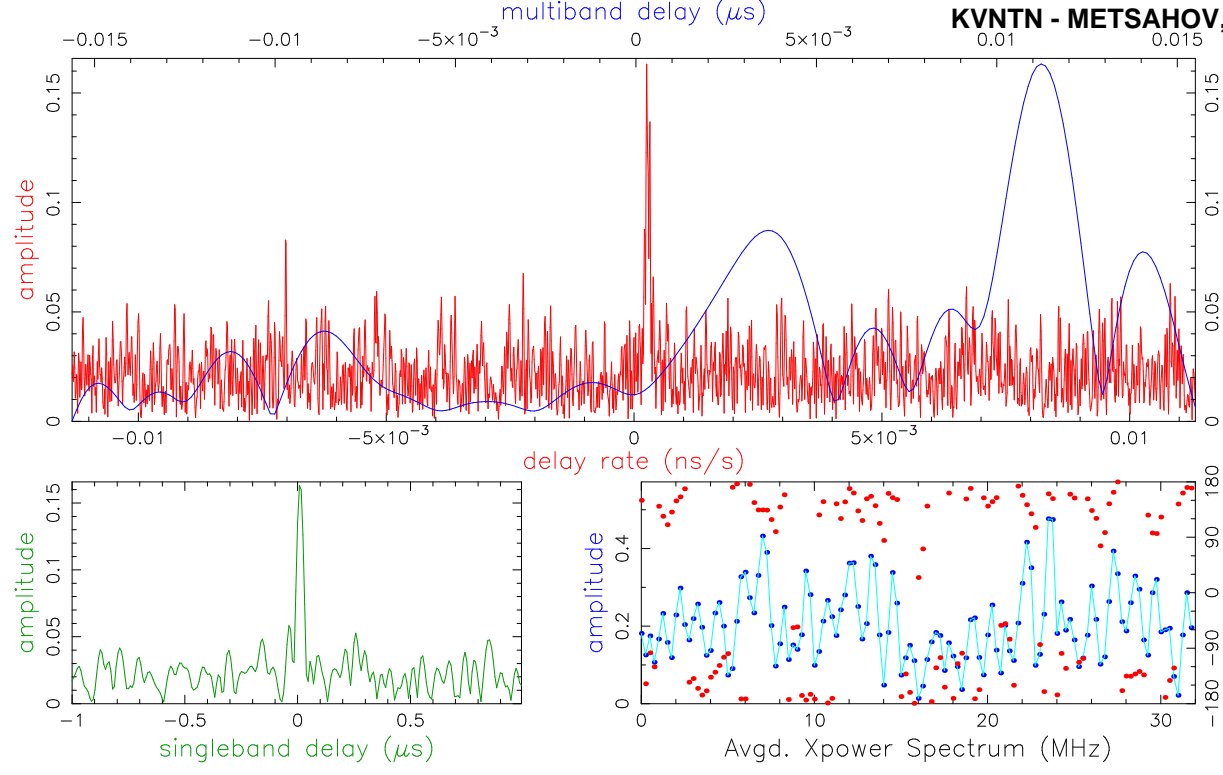
Fringe quality 0
SNR 6.4
Int time 419.346
Amp 0.115
Phase -144.7
PFD 3.6e-02
Delays (us)
SBD 0.002520
MBD 0.005368
Fringe rate (Hz) 0.024905
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
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	100.0	-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				
0.0	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.3	0.2	0.1	Ampl.	0.1				
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	Sbd box	129.3					
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					
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	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

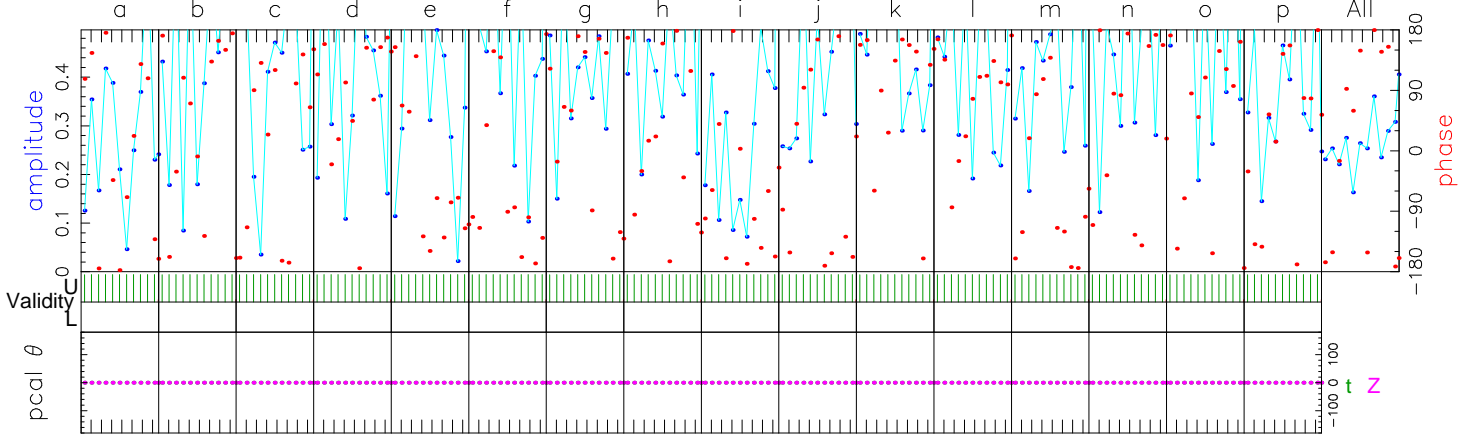


Fringe quality 9

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

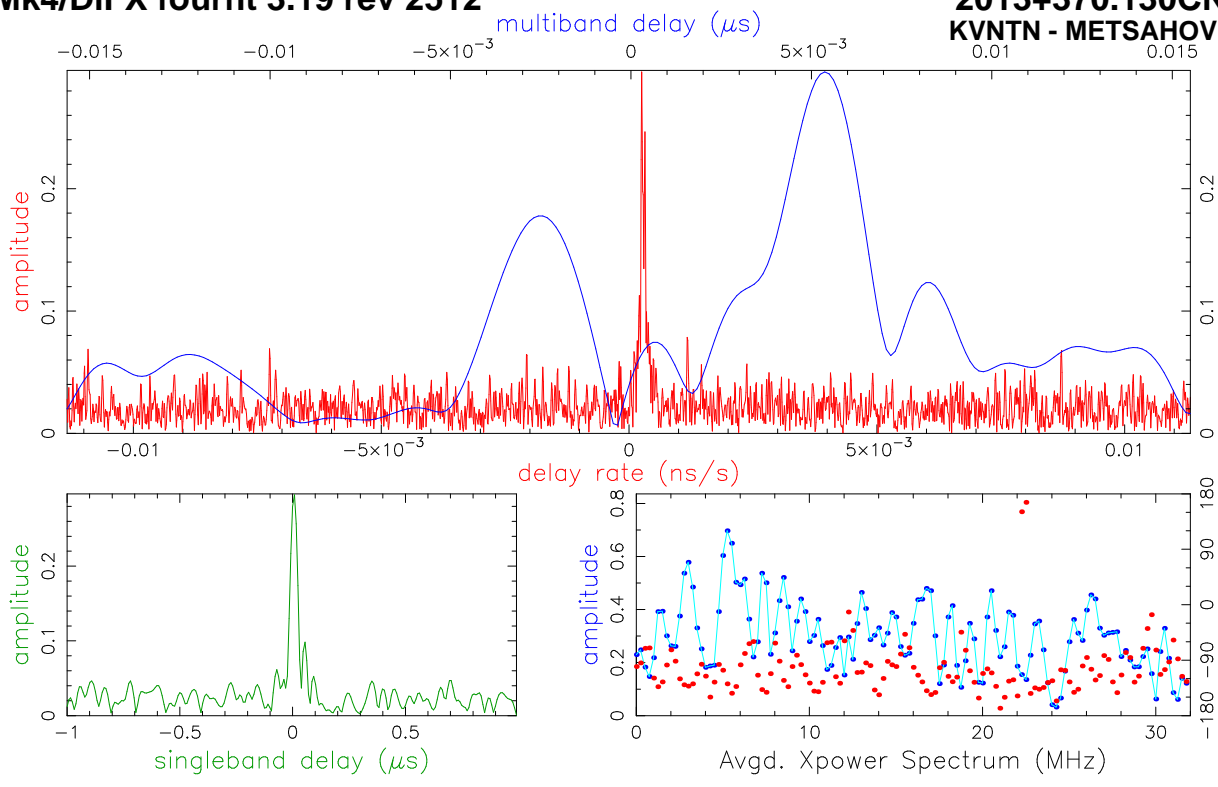
Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085723
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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		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 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:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
t	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks					
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Group delay (usec)(sbd)			-8.32460266914E+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

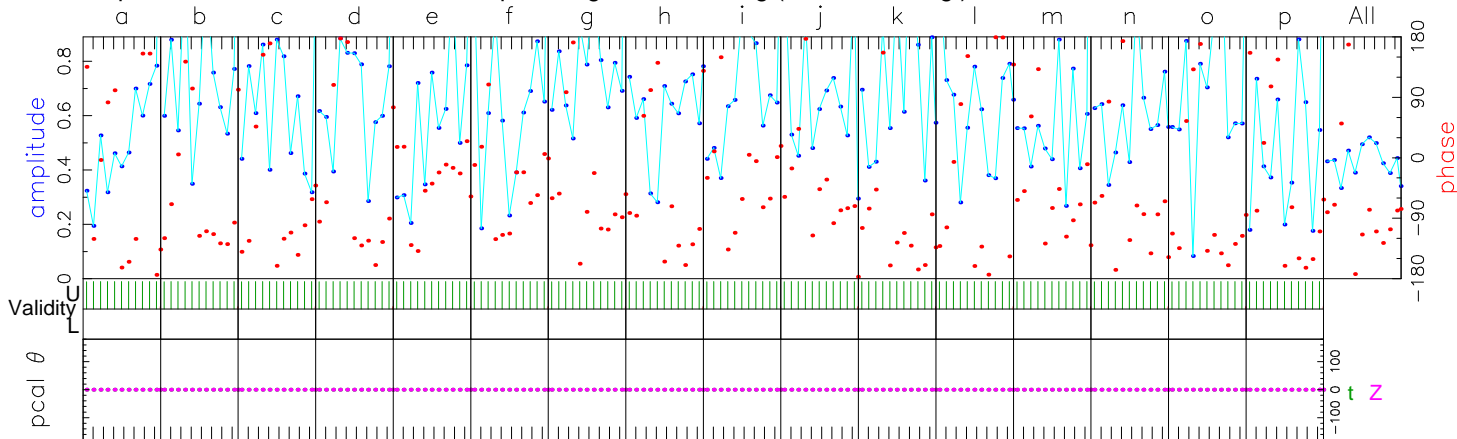


Fringe quality 9

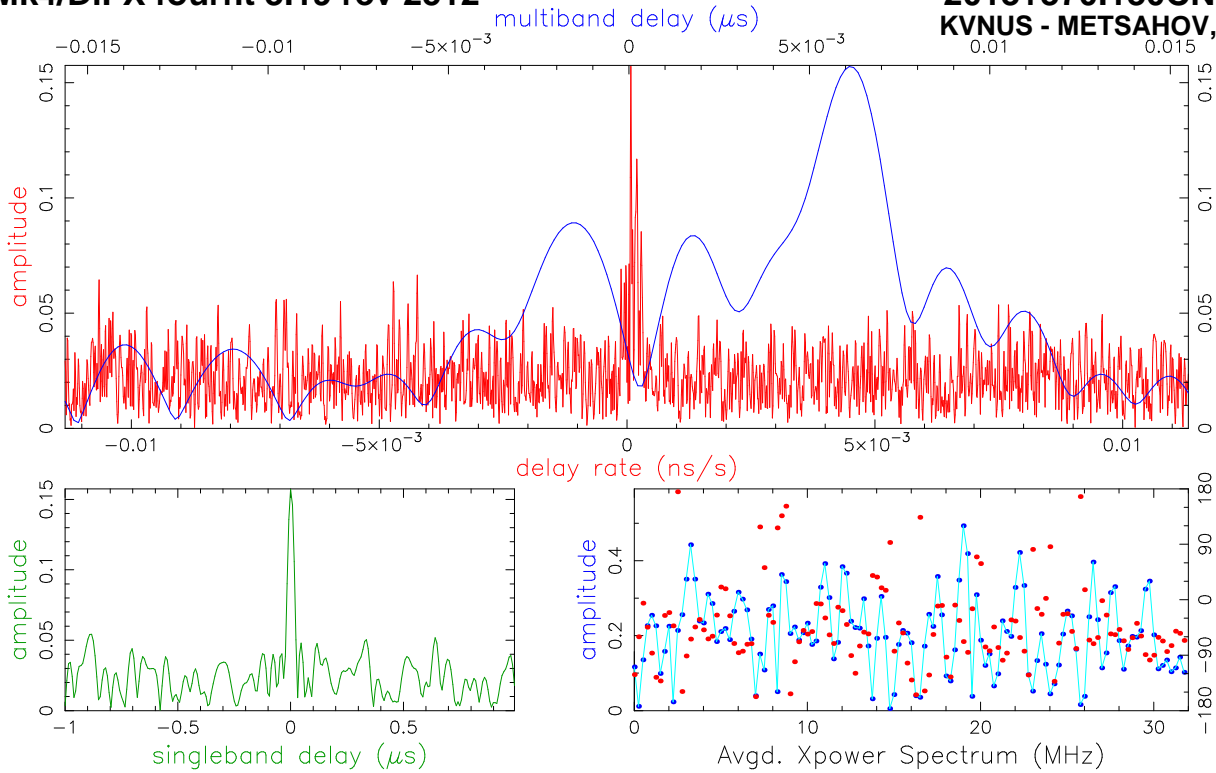
SNR 16.6
 Int time 419.346
 Amp 0.297
 Phase -106.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.006173
 MBD 0.005369
 Fringe rate (Hz)
 0.022165
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

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		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)			-8.32460857324E+03															
Sband delay (usec)			-8.32460776949E+03															
Phase delay (usec)			-8.32461394543E+03															
Delay rate (us/s)			-1.27113733696E+00															
Total phase (deg)					-93.5													
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																	
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																		

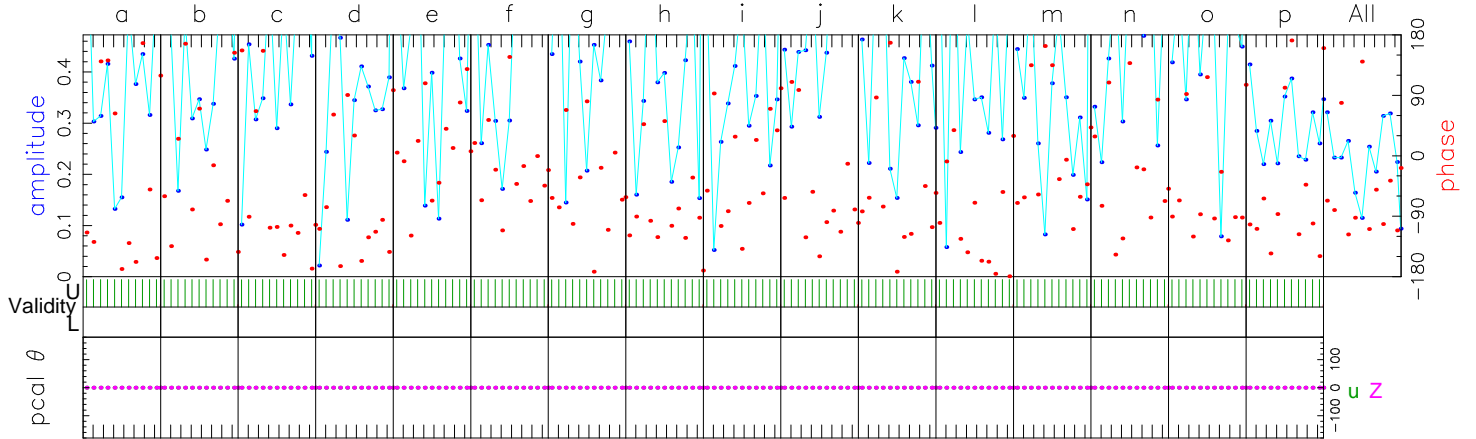


Fringe quality 9

SNR 8.8
 Int time 419.369
 Amp 0.158
 Phase -84.7
 PFD 4.3e-10
 Delays (us)
 SBD 0.001291
 MBD 0.006132
 Fringe rate (Hz)
 0.006941
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

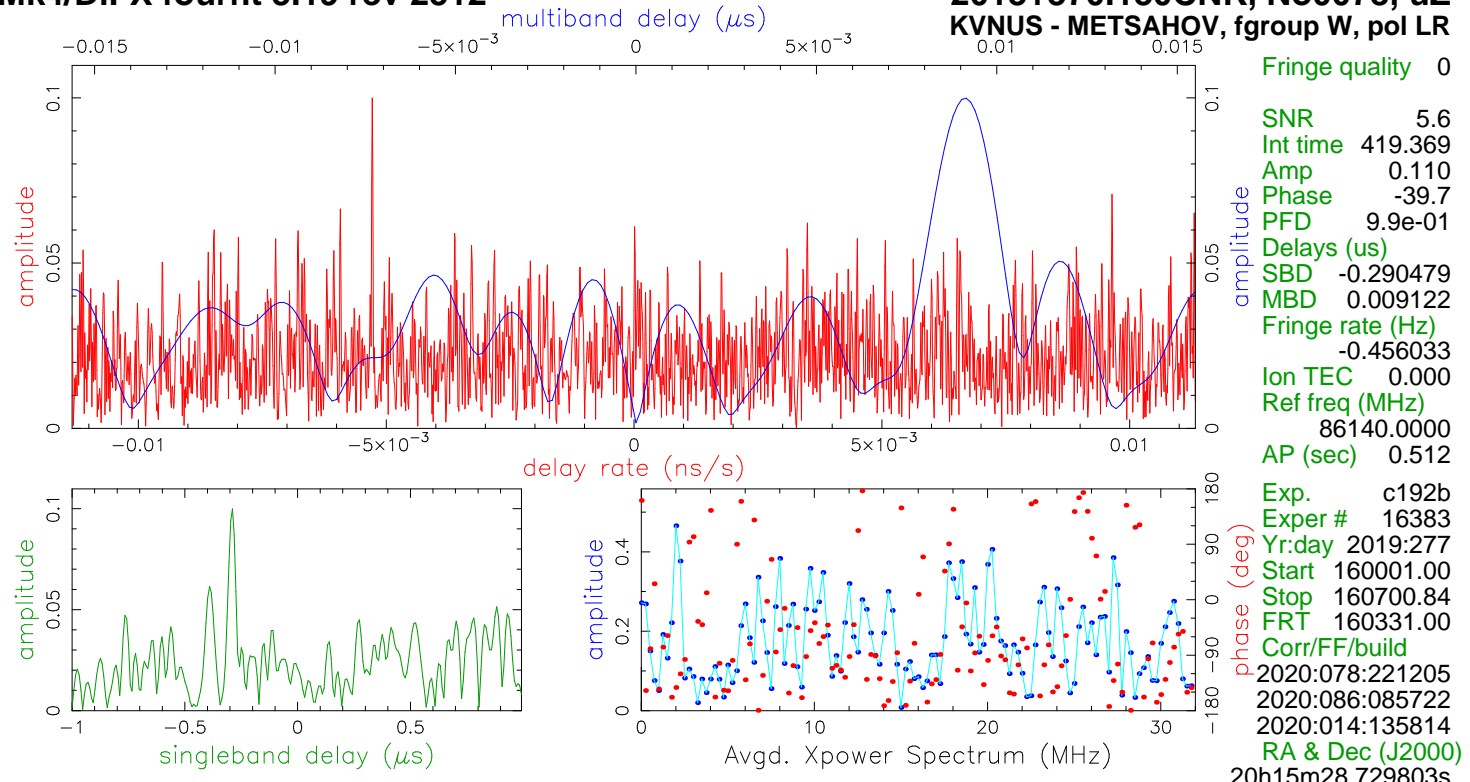
Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085716
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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					
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					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000							
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)		-8.67256029659E+03																Apriori delay (usec)	-8.67256642884E+03	Resid mbdelay (usec)	6.13225E-03	+/-	1.2E-04
Sband delay (usec)		-8.67256513834E+03																Apriori clock (usec)	8.2706785E+07	Resid sbdelay (usec)	1.29050E-03	+/-	2.0E-03
Phase delay (usec)		-8.67256643157E+03																Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-2.73207E-06	+/-	4.2E-07
Delay rate (us/s)		-1.25488059668E+00																Apriori rate (us/s)	-1.25488067726E+00	Resid rate (us/s)	8.05758E-08	+/-	1.7E-09
Total phase (deg)																		Apriori accel (us/s/s)	2.65639585324E-05	Resid phase (deg)	-84.7	+/-	13.0

ph/seg (deg) 68.4 22.5 Amplitude 0.158 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.7 39.3 Search (2048X64) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.1 26.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 60.6 45.3 Inc. seg. avg. 0.222 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 u: az 297.1 el 28.9 pa 65.2 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9066.780 -539.272 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator



Fringe quality 0

SNR 5.6

Int time 419.369

Amp 0.110

Phase -39.7

PFD 9.9e-01

Delays (us)

SBD -0.290479

MBD 0.009122

Fringe rate (Hz)

-0.456033

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

2020:086:085722

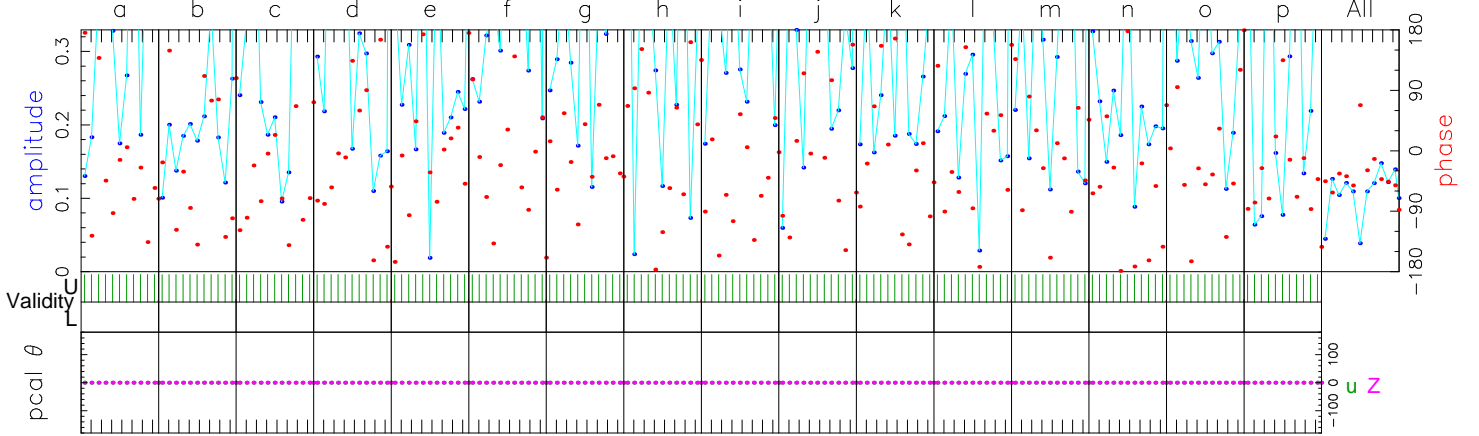
2020:014:135814

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					
	-77.9	168.8	-47.9	-27.7	-80.9	-16.2	0.6	63.4	-64.6	-84.9	-63.7	6.4	-21.7	-101.6	-21.5	-59.6		Phase -39.7					
	0.2	0.0	0.2	0.1	0.1	0.2	0.3	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.3		Ampl. 0.1					
	130.5	105.1	242.1	110.0	218.1	157.3	92.1	31.3	151.0	150.7	202.1	166.2	225.9	206.2	180.4	92.5		Sbd box 91.8					
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					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-8.67286980653E+03															Apriori delay (usec)	-8.67256642884E+03	Resid mbdelay (usec)	9.12231E-03	+/-	1.9E-04
Sband delay (usec)			-8.67285690784E+03															Apriori clock (usec)	8.2706785E+00	Resid sbdelay (usec)	-2.90479E-01	+/-	3.1E-03
Phase delay (usec)			-8.67256643012E+03															Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	-1.28125E-06	+/-	6.6E-07
Delay rate (us/s)			-1.25488597135E+00															Apriori rate (us/s)	-1.25488067726E+00	Resid rate (us/s)	-5.29409E-06	+/-	2.7E-09
Total phase (deg)					-104.7													Apriori accel (us/s/s)	2.65639585324E-05	Resid phase (deg)	-39.7	+/-	20.4

ph/seg (deg) 35.0 35.4 Search (2048X64) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

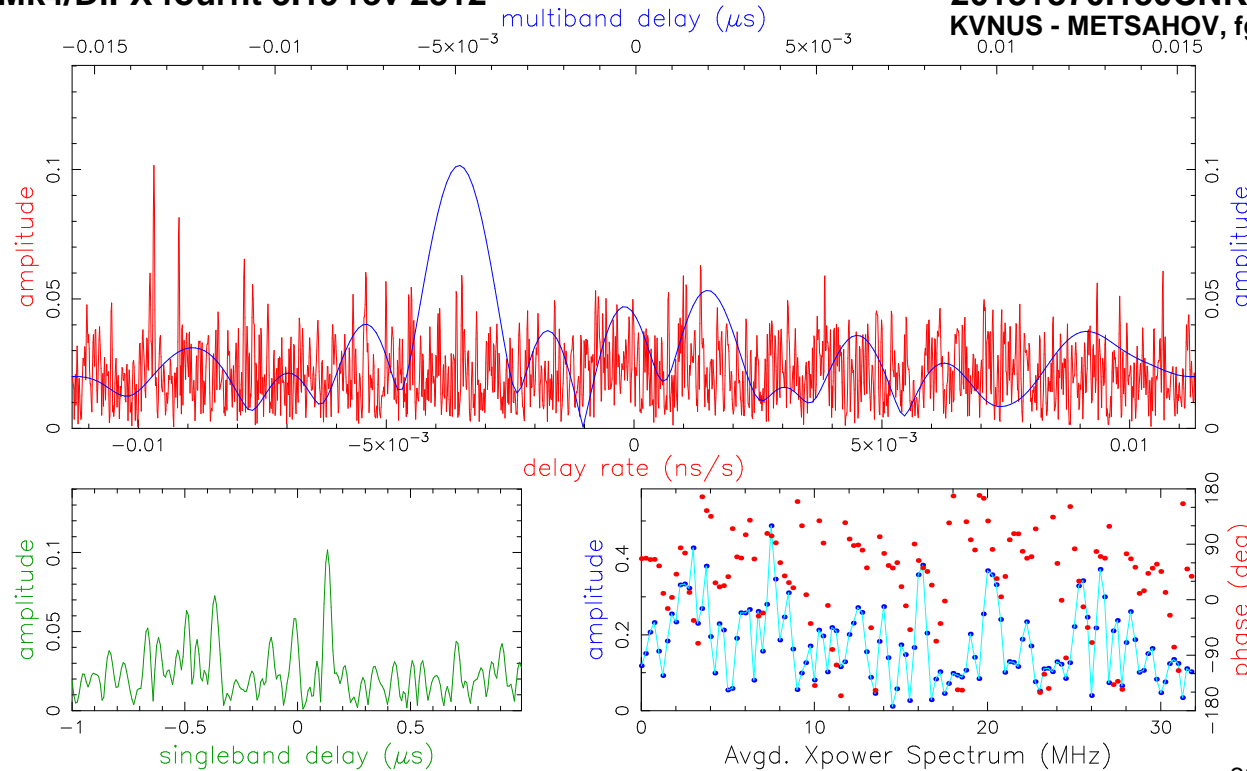
amp/seg (%) 33.9 61.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 59.4 40.8 Inc. seg. avg. 0.099 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 75.6 71.3 Inc. frq. avg. 0.108 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

u: az 297.1 el 28.9 pa 65.2 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9066.780 -539.272 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/uZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/uZ.W.139.130CNK

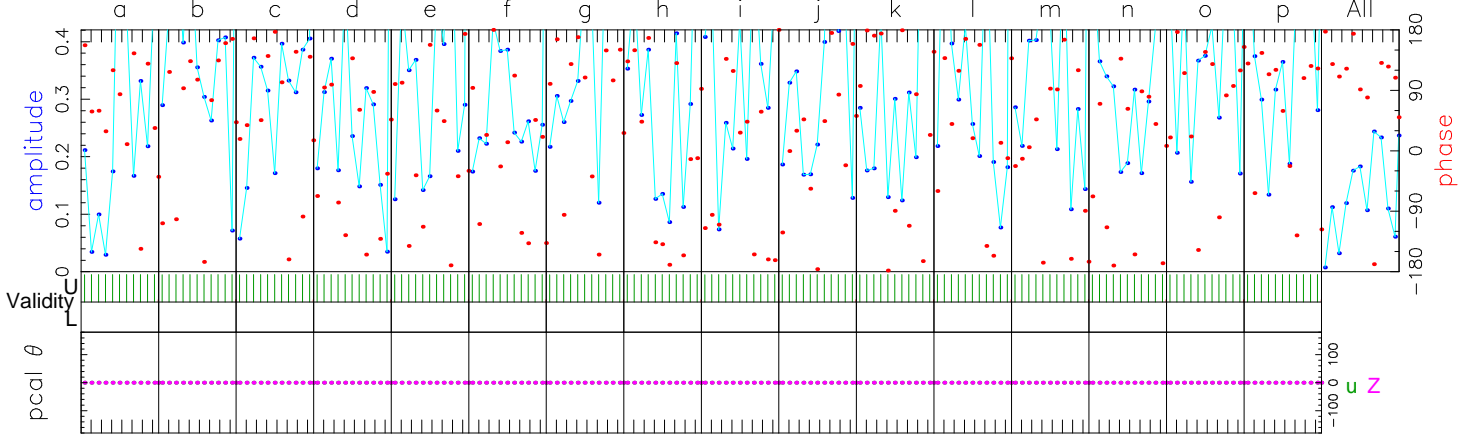


Fringe quality 0

SNR 5.7
Int time 419.369
Amp 0.140
Phase 133.5
PFD 9.5e-01
Delays (us)
SBD 0.132042
MBD -0.004905
Fringe rate (Hz)
-0.835237
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

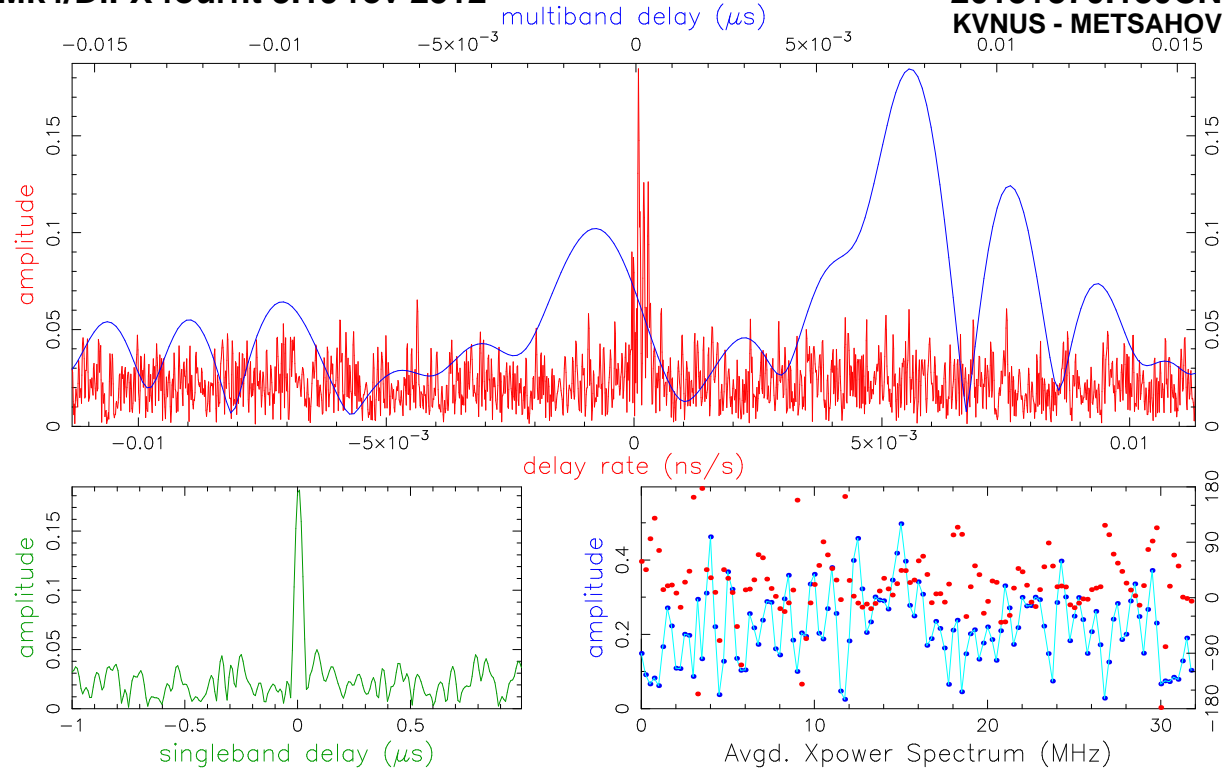
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085727
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



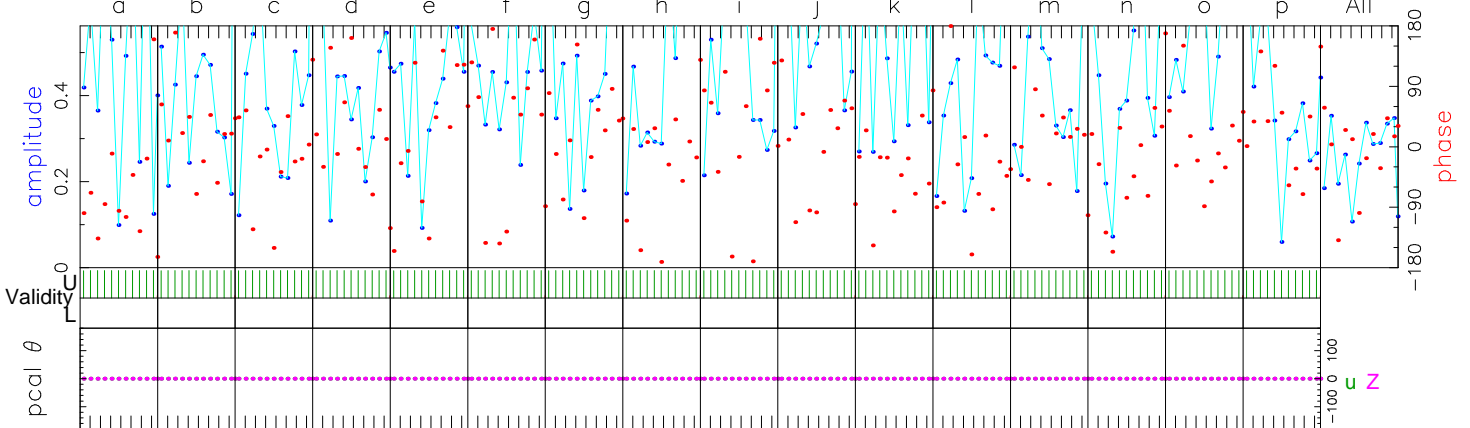
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
79.3	143.0	141.1	155.3	133.2	0.3	135.7	124.2	-159.8	63.7	-178.9	149.6	106.5	149.7	114.0	126.0	126.0	Phase	133.5
0.2	0.3	0.2	0.1	0.1	0.0	0.3	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.3	0.3	0.3	Ampl.	0.1
128.0	125.9	129.1	239.6	219.7	113.1	144.9	232.6	223.1	129.4	170.0	55.8	141.0	43.6	82.3	81.2	81.2	Sbd box	145.9
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	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	-8.67244633396E+03			Apriori delay (usec)			-8.67256642884E+03			Resid mbdelay (usec)			-4.90511E-03			+/- 1.9E-04		
Sband delay (usec)	-8.67243438684E+03			Apriori clock (usec)			8.2706785E+00			Resid sbdelay (usec)			1.32042E-01			+/- 3.0E-03		
Phase delay (usec)	-8.67256642454E+03			Apriori clockrate (us/s)			3.8370717E-07			Resid phdelay (usec)			4.30527E-06			+/- 6.5E-07		
Delay rate (us/s)	-1.25489037353E+00			Apriori rate (us/s)			-1.25488067726E+00			Resid rate (us/s)			-9.69627E-06			+/- 2.7E-09		
Total phase (deg)	68.5			Apriori accel (us/s/s)			2.65639585324E-05			Resid phase (deg)			133.5			+/- 20.1		

ph/seg (deg) RMS Theor. Amplitude 0.140 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.5 60.8 Search (2048X64) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.8 40.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 62.7 70.2 Inc. seg. avg. 0.148 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 u: az 297.1 el 28.9 pa 65.2 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9066.780 -539.272 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/uZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/uZ.W.158.130CNK simultaneous interpolator



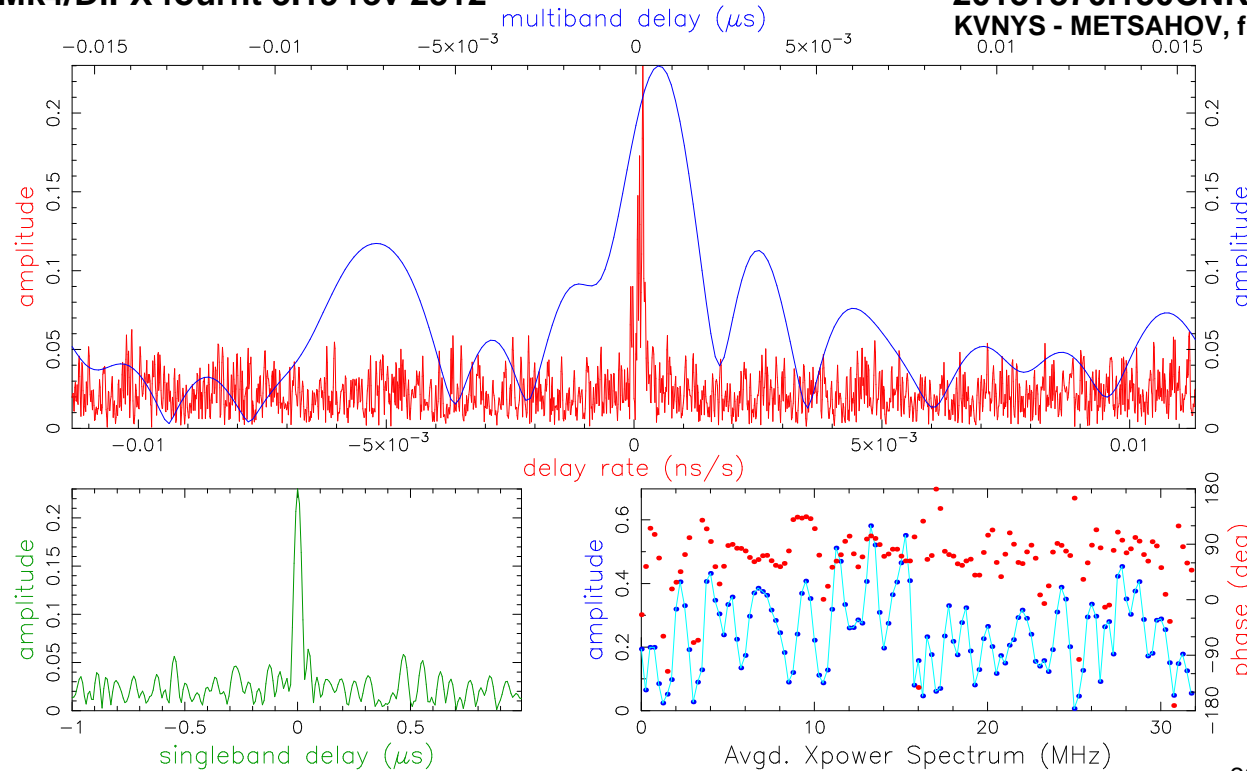
Fringe quality 9
SNR 10.5
Int time 419.369
Amp 0.187
Phase 3.1
PFD 4.0e-17
Delays (us)
SBD 0.004438
MBD 0.007585
Fringe rate (Hz) 0.007174
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build 2020:078:221205
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					
	-67.0	15.8	-13.1	9.1	103.3	121.2	48.7	-11.5	101.3	25.3	-20.8	-54.6	23.5	-7.7	-9.5	17.5		Phase	3.1				
	0.4	0.2	0.2	0.3	0.1	0.2	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.4	0.2		Ampl.	0.2				
	129.8	131.1	14.7	128.9	153.0	129.3	129.0	130.2	227.0	129.6	129.7	129.3	129.7	129.4	130.0	116.5		Sbd box	129.6				
UL	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					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase					
u:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC					
u	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-8.67255884342E+03															Apriori delay (usec)	-8.67256642884E+03	Resid mbdelay (usec)	7.58542E-03	+/-	1.0E-04
Sband delay (usec)			-8.67256199084E+03															Apriori clock (usec)	8.2706785E+00	Resid sbdelay (usec)	4.43800E-03	+/-	1.6E-03
Phase delay (usec)			-8.67256642874E+03															Apriori clockrate (us/s)	3.8370717E-07	Resid phdelay (usec)	9.84359E-08	+/-	3.5E-07
Delay rate (us/s)			-1.25488059398E+00															Apriori rate (us/s)	-1.25488067726E+00	Resid rate (us/s)	8.32817E-08	+/-	1.5E-09
Total phase (deg)					-61.9													Apriori accel (us/s/s)	2.65639585324E-05	Resid phase (deg)	3.1	+/-	10.9

ph/seg (deg) 58.3 18.9 Search (2048X64) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.6 33.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.7 21.8 Inc. seg. avg. 0.253 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.7 38.1 Inc. frq. avg. 0.245 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 297.1 el 28.9 pa 65.2 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 9066.780 -539.272 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/uZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/uZ.W.96.130CNK

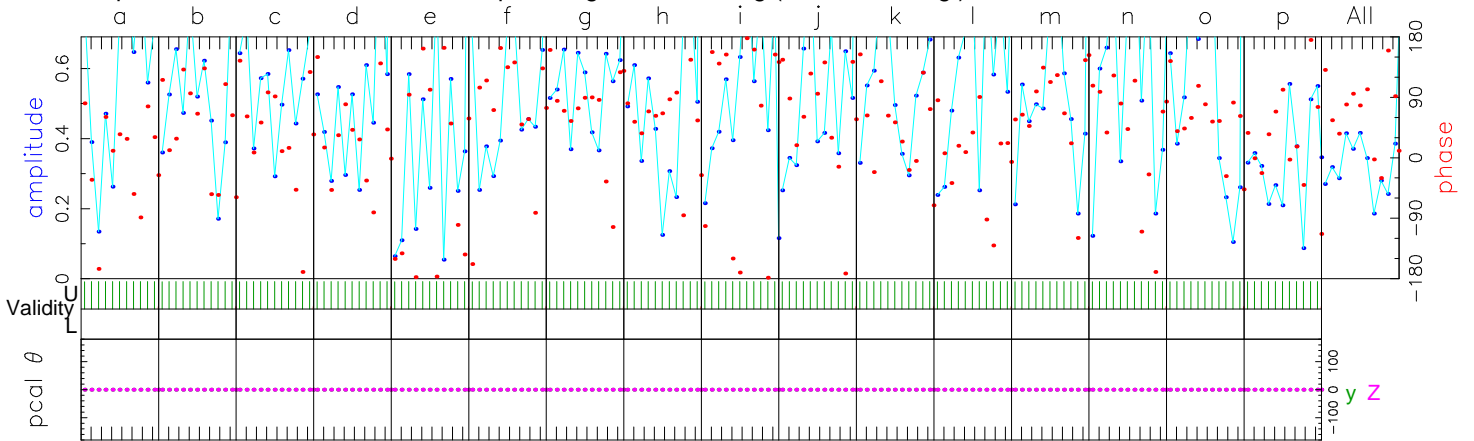


Fringe quality 9

SNR 12.9
Int time 419.369
Amp 0.230
Phase 77.7
PFD 2.7e-29
Delays (us)
SBD 0.000852
MBD 0.000644
Fringe rate (Hz) 0.015416
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

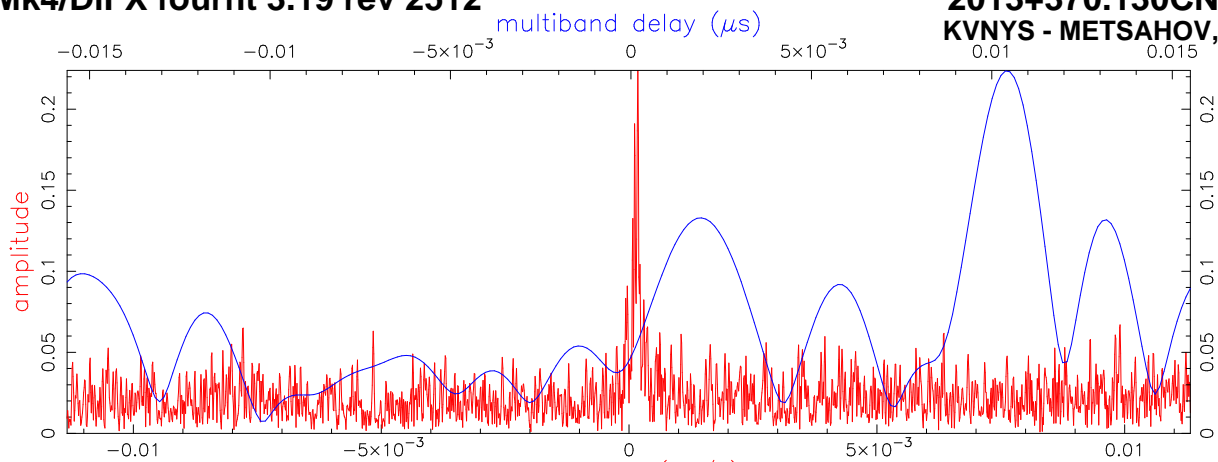
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085725
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



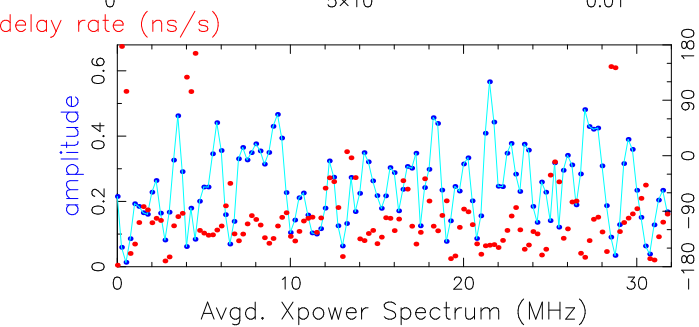
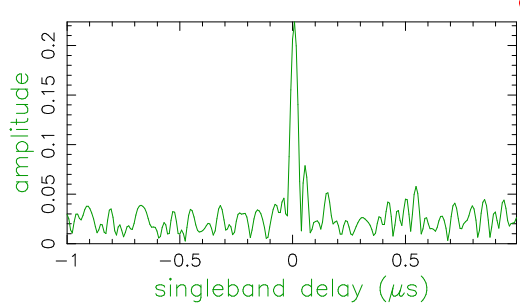
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	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	1000	1000	1000	PC freqs
y: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	0:0	0:0	PC phase
y: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	0:0	0:0	Mani PC
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL					Chan ids
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL					Tracks
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL					Chan ids
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL					Tracks
Group delay (usec)(sbd)	-7.82557148464E+03			Apriori delay (usec)			-7.82557212845E+03			Resid mbdelay (usec)			6.43810E-04			+/-	8.4E-05			
Sband delay (usec)	-7.82557127645E+03			Apriori clock (usec)			2.9022396E+01			Resid sbdelay (usec)			8.52000E-04			+/-	1.3E-03			
Phase delay (usec)	-7.82557212595E+03			Apriori clockrate (us/s)			8.3707184E-08			Resid phdelay (usec)			2.50630E-06			+/-	2.9E-07			
Delay rate (us/s)	-1.22126671931E+00			Apriori rate (us/s)			-1.22126689827E+00			Resid rate (us/s)			1.78968E-07			+/-	1.2E-09			
Total phase (deg)	25.5			Apriori accel (us/s/s)			2.41029027988E-05			Resid phase (deg)			77.7			+/-	8.9			

ph/seg (deg) 53.1 15.4 Search (2048X64) 0.226 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.3 26.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.1 17.8 Inc. seg. avg. 0.311 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.2 31.0 Inc. frq. avg. 0.290 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 295.1 el 31.5 pa 64.1 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 8821.347 -483.925 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/yZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/yZ.W.150.130CNK



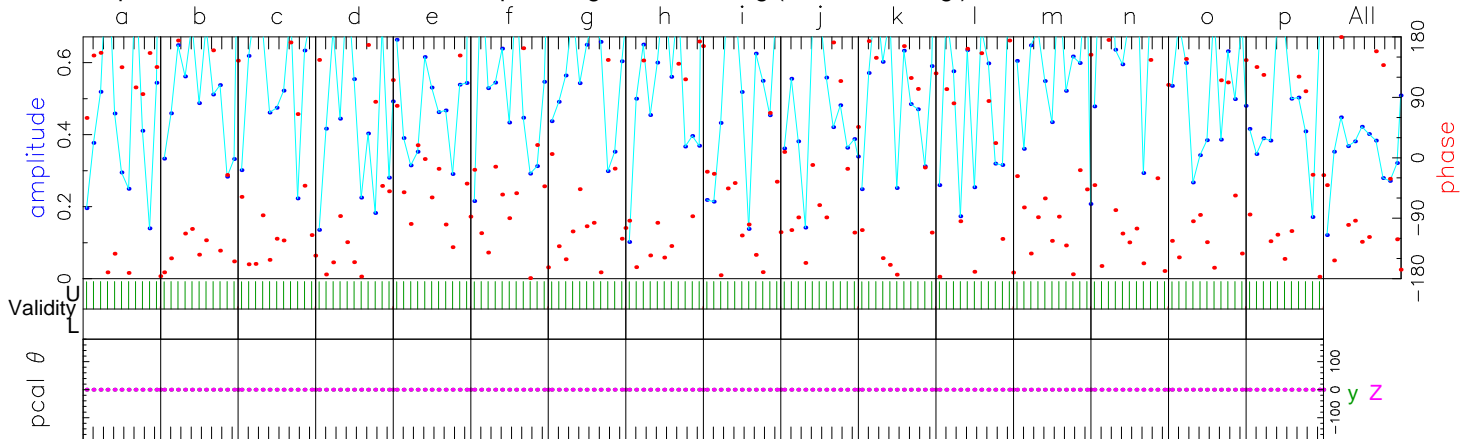
Fringe quality 9

SNR 12.5
Int time 419.369
Amp 0.224
Phase -134.2
PFD 2.5e-27
Delays (us)
SBD 0.007209
MBD 0.010421
Fringe rate (Hz) 0.015488
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



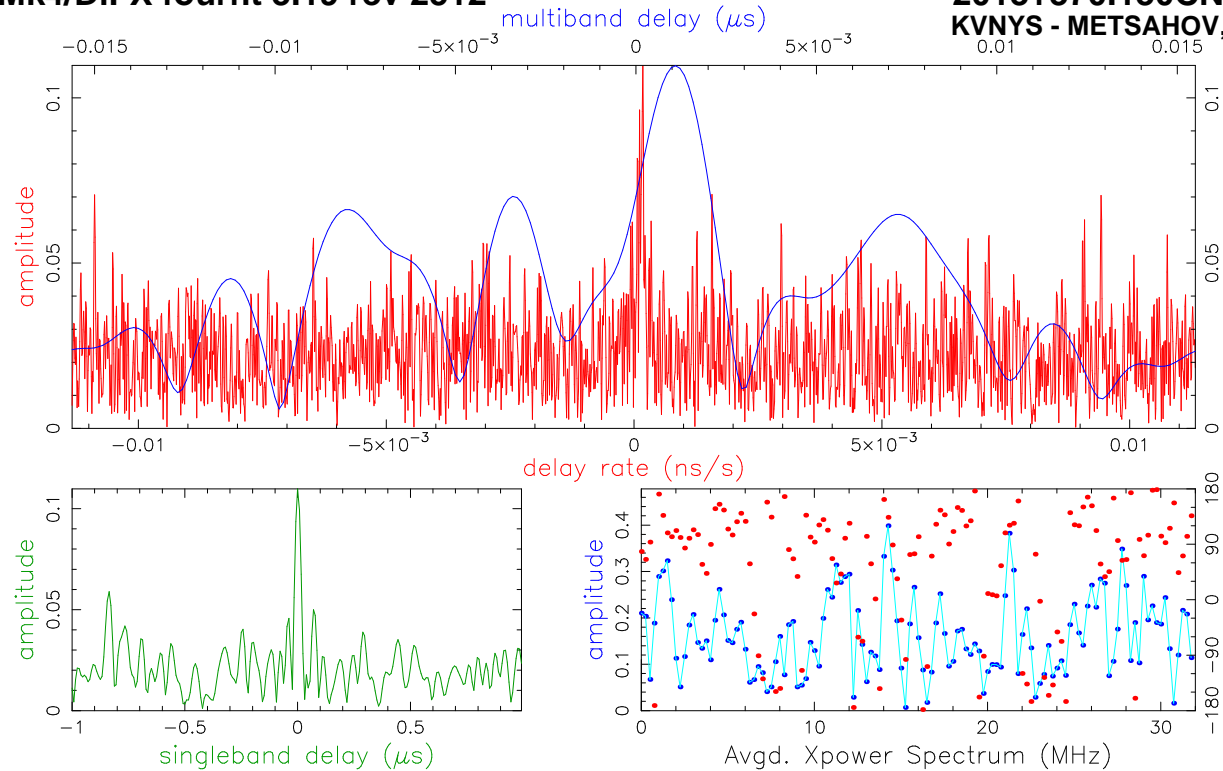
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085729
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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														
149.6	-142.7	-127.2	-135.3	-39.4	-76.2	-110.4	-164.0	-75.7	-74.6	177.8	141.4	-85.2	-134.2	-153.6	-159.4	Phase	-134.2														
0.3	0.4	0.4	0.3	0.2	0.3	0.4	0.4	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.2	Ampl.	0.3														
130.2	130.4	130.3	128.8	128.8	130.1	128.3	129.6	129.6	198.9	129.7	130.1	129.7	130.7	130.7	130.3	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	APs used															
y	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	PC freqs															
y: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	PC phase															
y: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	ManI PC															
z	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																
y	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)		-7.82556170702E+03					Apriori delay (usec)					-7.82557212845E+03					Resid mbdelay (usec)					1.04214E-02					+/- 8.6E-05				
Sband delay (usec)		-7.82556491895E+03					Apriori clock (usec)					2.9022396E+01					Resid sbdelay (usec)					7.20950E-03					+/- 1.4E-03				
Phase delay (usec)		-7.82557213278E+03					Apriori clockrate (us/s)					8.3707184E-08					Resid phdelay (usec)					-4.32667E-06					+/- 2.9E-07				
Delay rate (us/s)		-1.22126671847E+00					Apriori rate (us/s)					-1.22126689827E+00					Resid rate (us/s)					1.79804E-07					+/- 1.2E-09				
Total phase (deg)		-186.3					Apriori accel (us/s/s)					2.41029027988E-05					Resid phase (deg)					-134.2					+/- 9.1				
ph/seg (deg)	RMS	Theor.	Amplitude			0.224 +/- 0.018			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			sb window (us)			-1.000 1.000													
amp/seg (%)	58.1	15.8	Search (2048X64)			0.218			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			SampCntNorm: enabled			mb window (us)			-0.016 0.016													
ph/frq (deg)	65.8	27.6	Interp.			0.000			Bits/sample: 2x2			Sample rate(MISamp/s): 64			dr window (ns/s)			-0.011 0.011													
amp/frq (%)	53.1	18.3	Inc. seg. avg.			0.330			Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)			0.00 0.00													
	52.3	31.9	Inc. frq. avg.			0.301																									

y: az 295.1 el 31.5 pa 64.1 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 8821.347 -483.925 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/yZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/yZ.W.161.130CNK

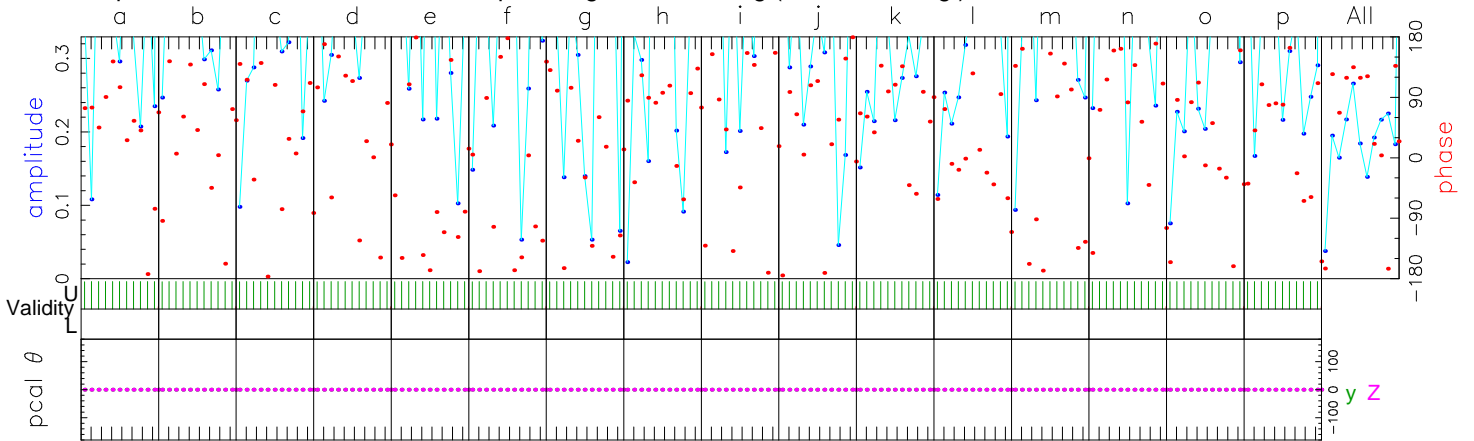


Fringe quality 0

SNR 6.1
Int time 419.369
Amp 0.110
Phase 111.9
PFD 1.9e-01
Delays (us)
SBD 0.000813
MBD 0.001111
Fringe rate (Hz) 0.015314
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
2020:086:085732
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	
73.8	67.7	105.4	113.8	-137.3	-156.4	89.4	94.0	149.8	119.5	82.2	4.5	165.4	119.1	48.6	57.9		Phase	111.9	
0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.1		Ampl.	0.1	
241.9	193.5	33.9	89.7	128.7	139.3	40.2	128.9	129.3	194.3	5.2	187.0	129.4	129.2	218.7	253.5		Sbd box	129.1	
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
y: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	
y:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL			Tracks	
z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR			Chan ids
																			Tracks

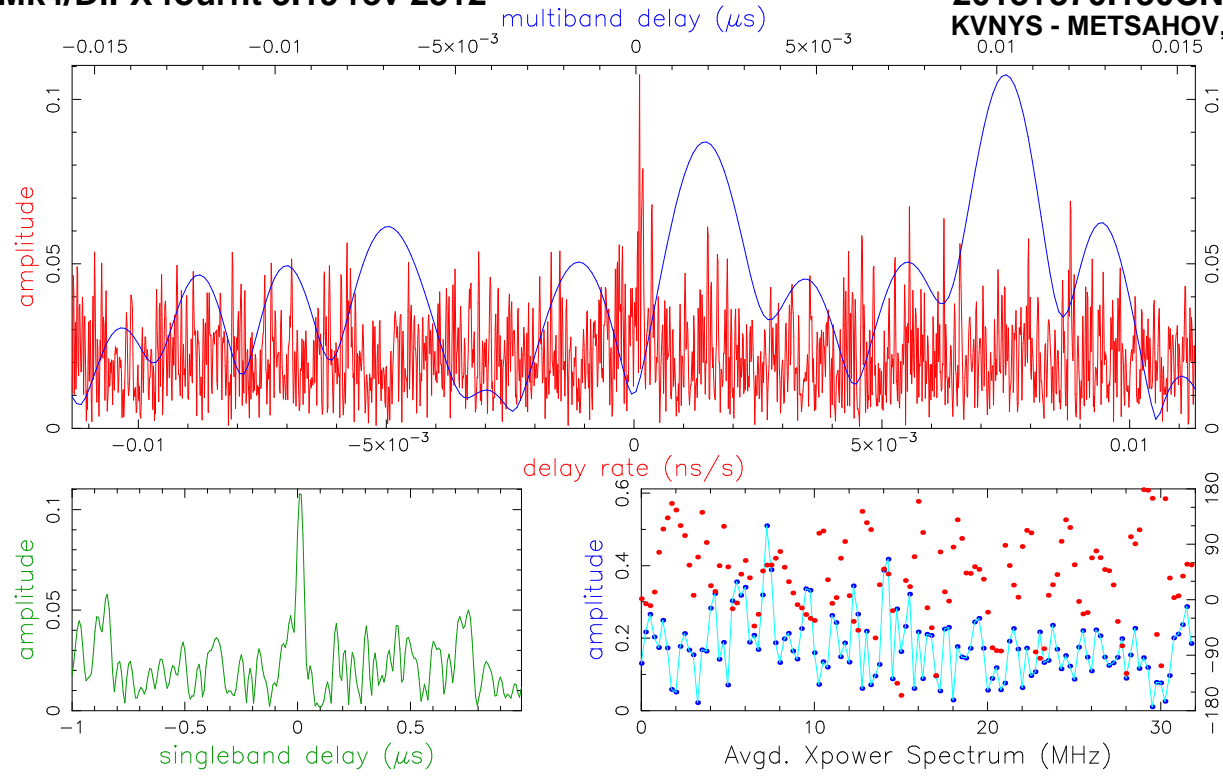
Group delay (usec)(sbd) -7.82557101764E+03 Apriori delay (usec) -7.82557212845E+03 Resid mbdelay (usec) 1.11081E-03 +/- 1.8E-04
 Sband delay (usec) -7.82557131595E+03 Apriori clock (usec) 2.9022396E+01 Resid sbdelay (usec) 8.12500E-04 +/- 2.8E-03
 Phase delay (usec) -7.82557212485E+03 Apriori clockrate (us/s) 8.3707184E-08 Resid phdelay (usec) 3.60693E-06 +/- 6.0E-07
 Delay rate (us/s) -1.22126672050E+00 Apriori rate (us/s) -1.22126689827E+00 Resid rate (us/s) 1.77778E-07 +/- 2.5E-09
 Total phase (deg) 59.7 Apriori accel (us/s/s) 2.41029027988E-05 Resid phase (deg) 111.9 +/- 18.6

RMS Theor. Amplitude 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.6 32.3 Search (2048X64) 0.109 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 90.0 56.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 59.0 37.3 Inc. seg. avg. 0.161 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 79.6 65.0 Inc. frq. avg. 0.145 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 295.1 el 31.5 pa 64.1 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 8821.347 -483.925 simultaneous interpolator

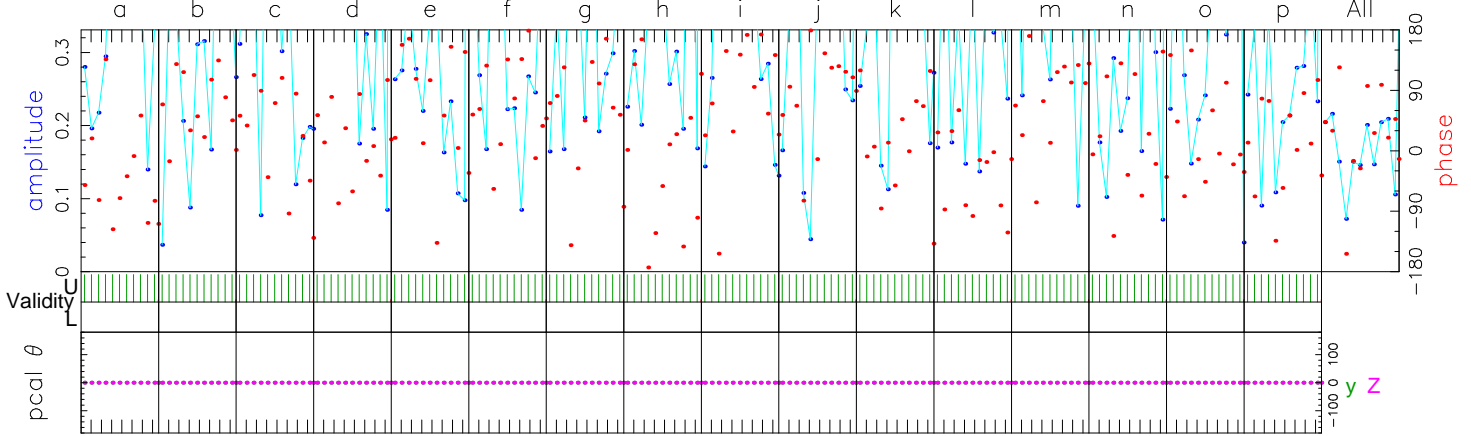
Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, yZ
KVNS - METSAHOV, fgroup W, pol RL



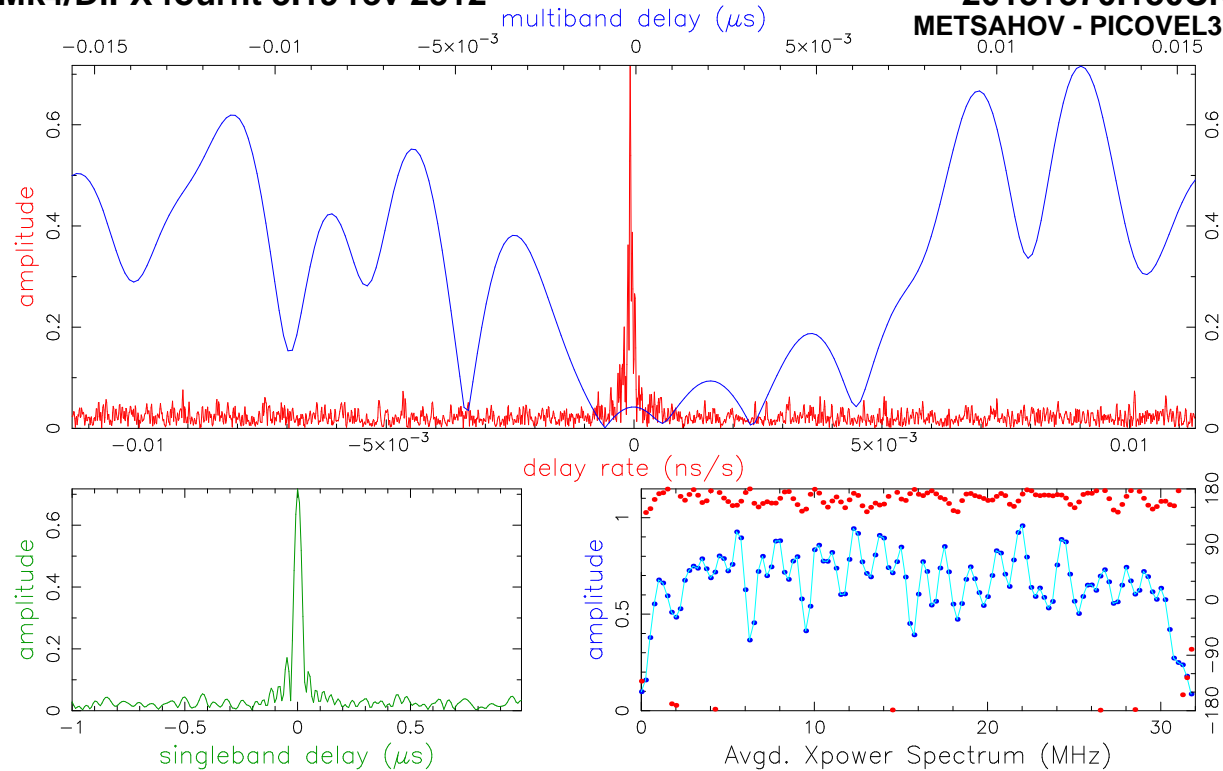
Fringe quality 0
SNR 6.2
Int time 419.369
Amp 0.110
Phase 45.2
PFD 1.6e-01
Delays (us)
SBD 0.011579
MBD 0.010226
Fringe rate (Hz) 0.009938
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160001.00
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085736
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				
	-53.8	76.3	36.3	9.9	123.6	35.3	99.4	38.2	133.1	99.2	19.1	-45.0	102.7	24.6	9.9	24.4	Phase	45.2				
	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.0	0.2	0.2	0.2	0.2	0.3	0.1	0.3	0.1	Ampl.	0.1				
	49.0	132.3	57.2	129.6	128.5	206.2	225.5	19.4	129.7	131.0	131.2	83.6	130.7	39.2	129.5	194.0	Sbd box	130.5				
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					
y	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					
y: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					
y: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					
y	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					
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-7.82556190283E+03														Apriori delay (usec)	-7.82557212845E+03	Resid mbdelay (usec)	1.02256E-02	+/-	1.7E-04
Sband delay (usec)			-7.82556054995E+03														Apriori clock (usec)	2.9022396E+01	Resid sbdelay (usec)	1.15785E-02	+/-	2.8E-03
Phase delay (usec)			-7.82557212700E+03														Apriori clockrate (us/s)	8.3707184E-08	Resid phdelay (usec)	1.45775E-06	+/-	6.0E-07
Delay rate (us/s)			-1.22126678290E+00														Apriori rate (us/s)	-1.22126689827E+00	Resid rate (us/s)	1.15374E-07	+/-	2.5E-09
Total phase (deg)					-7.0												Apriori accel (us/s/s)	2.41029027988E-05	Resid phase (deg)	45.2	+/-	18.5

ph/seg (deg) 65.8 32.1 Search (2048X64) 0.110 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.0 56.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.4 37.1 Inc. seg. avg. 0.143 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 80.0 64.7 Inc. frq. avg. 0.145 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 295.1 el 31.5 pa 64.1 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 8821.347 -483.925 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/yZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/yZ.W.170.130CNK

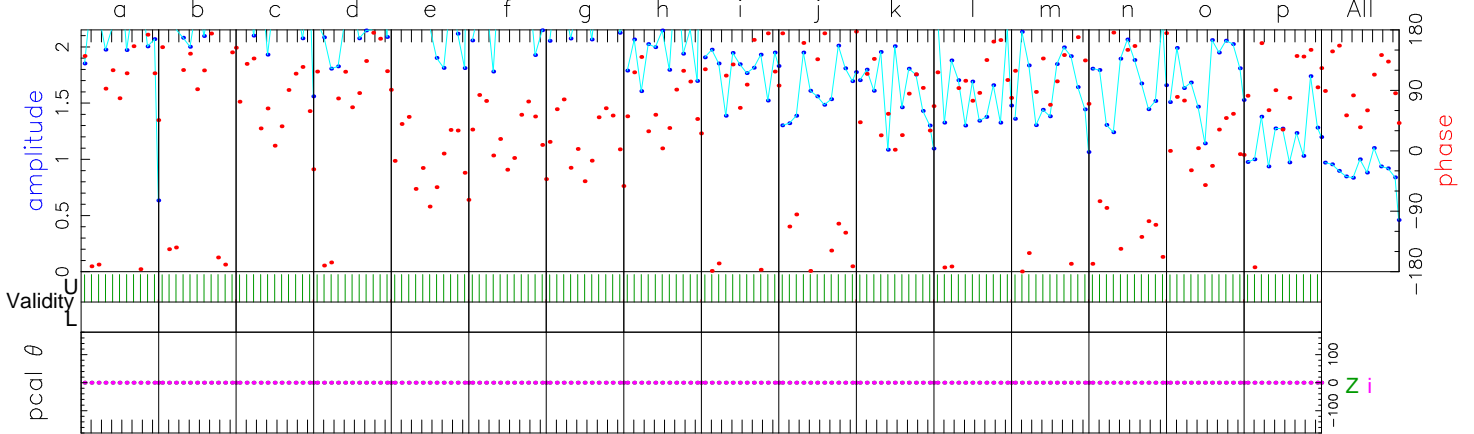


Fringe quality 2

SNR 40.2
 Int time 419.369
 Amp 0.717
 Phase 100.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001164
 MBD 0.012338
 Fringe rate (Hz)
 -0.006524
 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
 2020:086:085724
 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



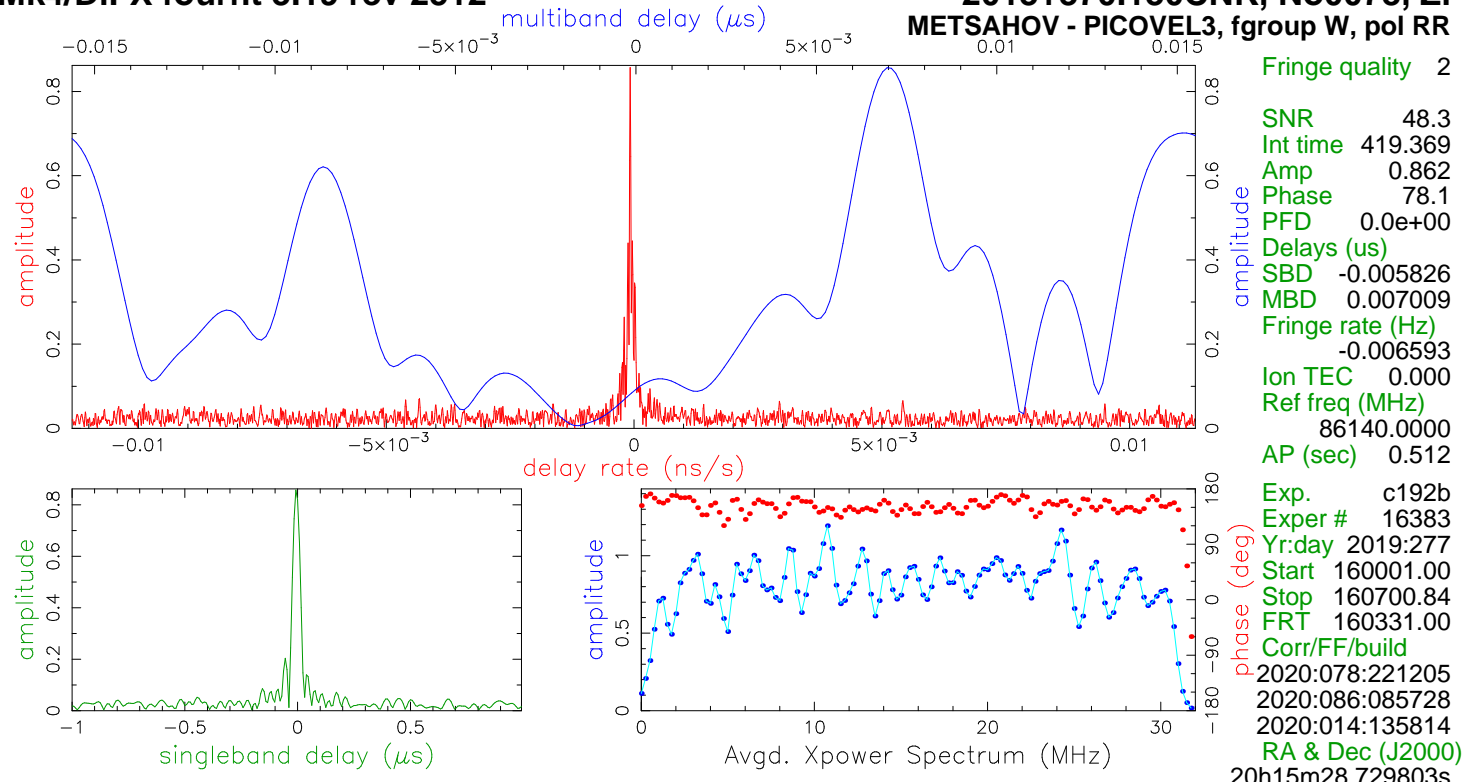
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	100.5
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1.5
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	129.1
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
Z	1000	1000	1000	1000	1000	1000	1000	1000	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	1000	
Z	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) 2.95614461711E+03 Apriori delay (usec) 2.95613227927E+03 Resid mbdelay (usec) 1.23378E-02 +/- 2.7E-05
 Sband delay (usec) 2.95613344327E+03 Apriori clock (usec) 6.9476193E-01 Resid sbdelay (usec) 1.16400E-03 +/- 4.3E-04
 Phase delay (usec) 2.95613228251E+03 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) 3.24040E-06 +/- 9.2E-08
 Delay rate (us/s) -5.26644469811E-01 Apriori rate (us/s) -5.26644394077E-01 Resid rate (us/s) -7.57342E-08 +/- 3.8E-10
 Total phase (deg) 293.5 Apriori accel (us/s/s) 2.40262616922E-06 Resid phase (deg) 100.5 +/- 2.9

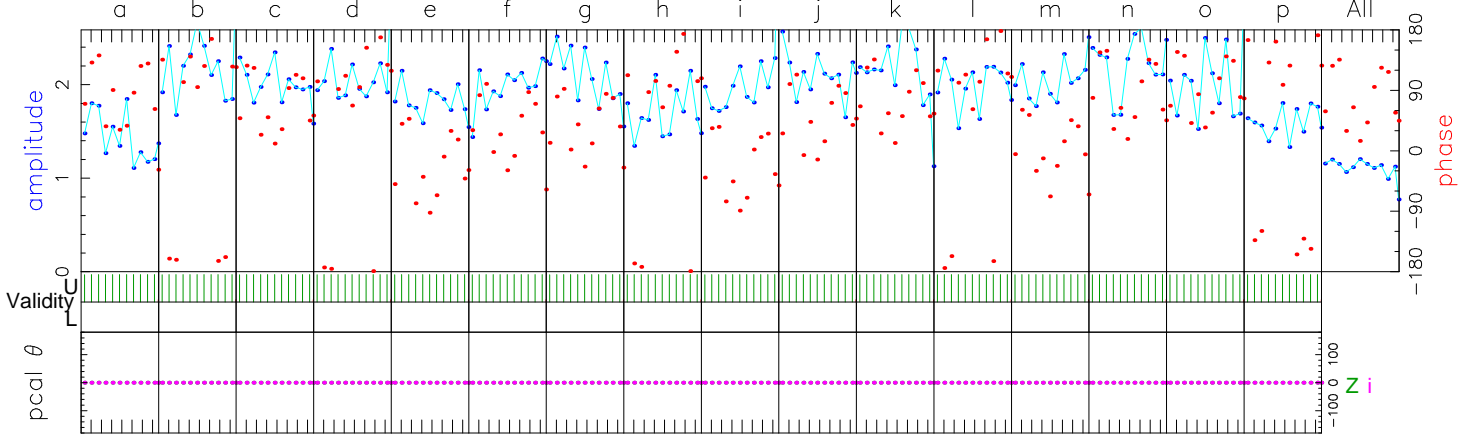
ph/seg (deg) RMS Theor. Amplitude 0.717 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.7 4.9 Search (2048X64) 0.703 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.0 8.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 68.6 5.7 Inc. seg. avg. 0.919 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 112.4 10.0 Inc. frq. avg. 1.465 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 3796.153 1972.223 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/Zi..130CNK Output file: /Exps/c192b/v2/1234/No0078/Zi.W.145.130CNK



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

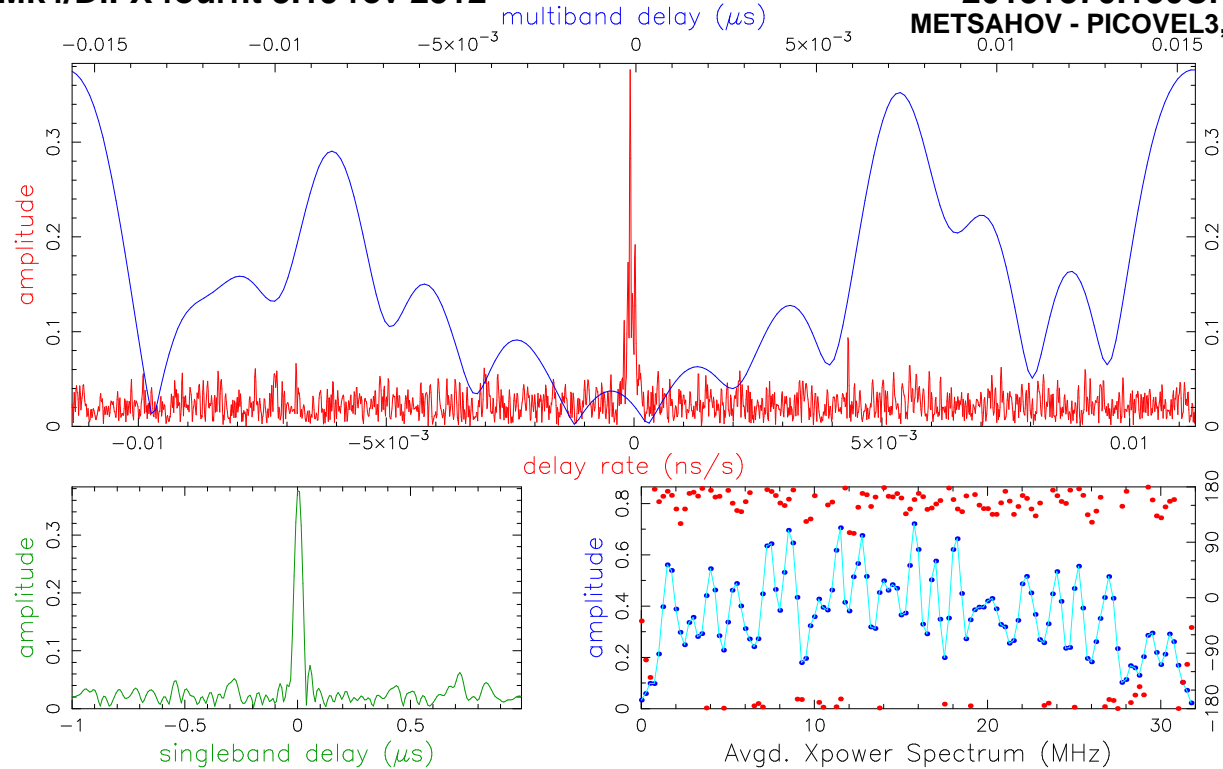


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Zi	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	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		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		2.95613928845E+03																
Sband delay (usec)		2.95612645327E+03																
Phase delay (usec)		2.95613228179E+03																
Delay rate (us/s)		-5.26644470614E-01																
Total phase (deg)					271.1													
ph/seg (deg)	RMS	Theor.																
amp/seg (%)	40.7	4.1																
ph/frq (deg)	31.5	7.2																
amp/frq (%)	63.0	4.7																
	74.2	8.3																
Z: az 131.6 el 61.5 pa -27.8																		
i: az 72.5 el 47.3 pa -73.2																		
u,v (fr/asec) 3796.153 1972.223																		
Control file: cf_1234_gmva																		
Input file: /Exps/c192b/v2/1234/No0078/Zi..130CNK																		
Output file: /Exps/c192b/v2/1234/No0078/Zi.W.160.130CNK																		

Apriori delay (usec) 2.95613227927E+03 Resid mbdelay (usec) 7.00918E-03 +/- 2.2E-05
 Apriori clock (usec) 6.9476193E-01 Resid sbdelay (usec) -5.82600E-03 +/- 3.6E-04
 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) 2.51706E-06 +/- 7.7E-08
 Apriori rate (us/s) -5.26644394077E-01 Resid rate (us/s) -7.65377E-08 +/- 3.2E-10
 Apriori accel (us/s/s) 2.40262616922E-06 Resid phase (deg) 78.1 +/- 2.4

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

simultaneous interpolator

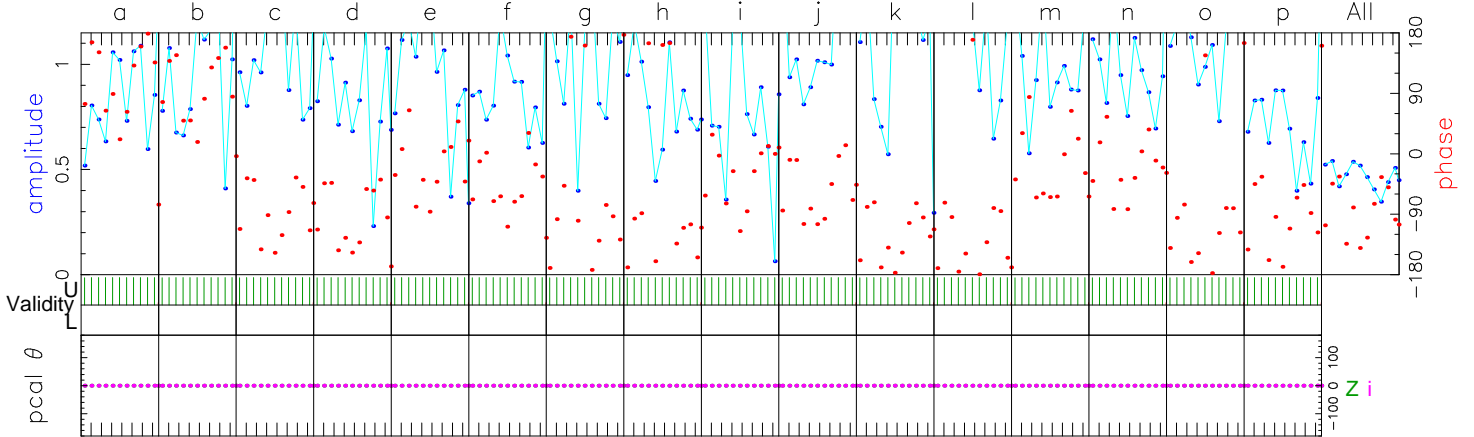


Fringe quality 6

SNR 21.5
 Int time 419.369
 Amp 0.383
 Phase -86.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003697
 MBD -0.015782
 Fringe rate (Hz)
 -0.006650
 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
 2020:086:085733
 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

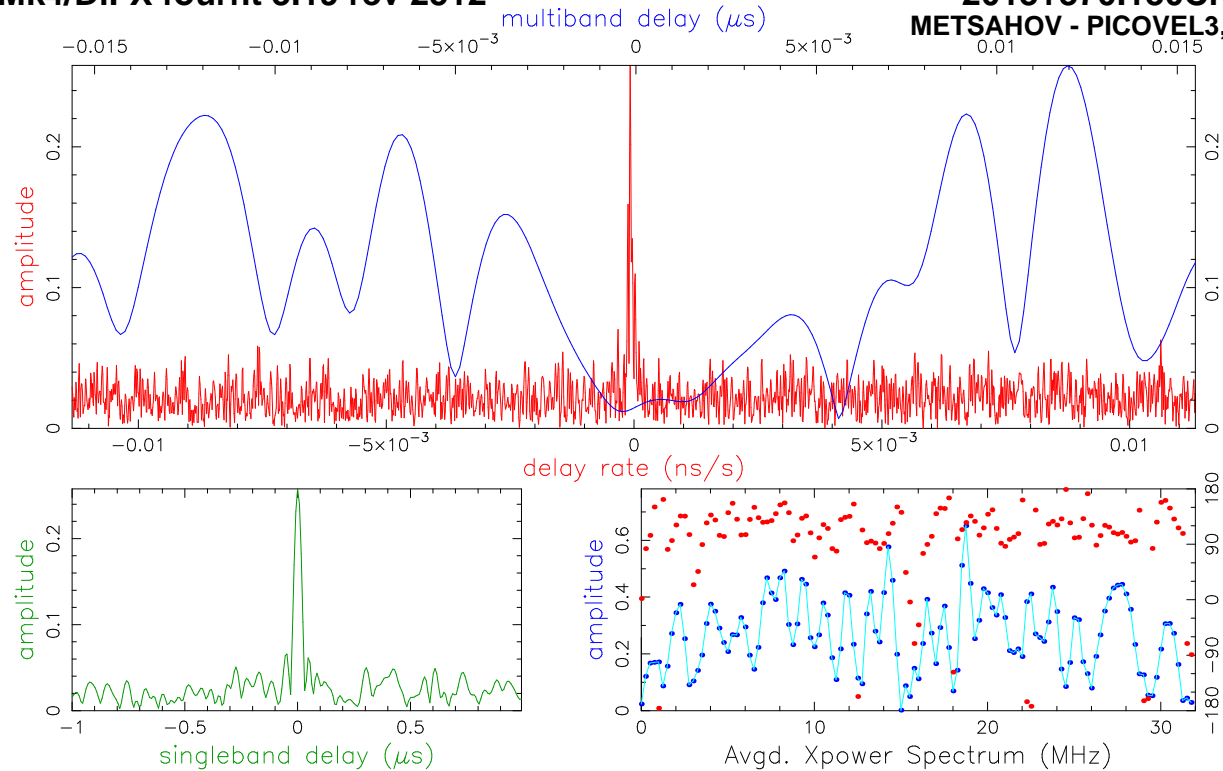


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	115.8	96.7	-91.9	-87.3	-22.9	-50.2	-137.6	-142.2	-37.7	-52.9	-120.3	-138.8	-22.0	-21.9	-123.9	-99.6		Phase	-86.0
	0.5	0.7	0.8	0.6	0.7	0.7	0.7	0.6	0.9	0.9	0.8	0.7	0.7	0.7	0.8	0.5		Ampl.	0.7
	127.5	128.9	128.6	128.9	129.2	128.6	128.7	129.5	129.0	129.3	129.3	128.9	128.9	129.2	129.1	129.9		Sbd box	129.5
UL	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
Z:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
Z	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			
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	2.95614774711E+03			Apriori delay (usec)			2.95613227927E+03			Resid mbdelay (usec)			-1.57822E-02			+/- 5.0E-05			
Sband delay (usec)	2.95613597627E+03			Apriori clock (usec)			6.9476193E-01			Resid sbdelay (usec)			3.69700E-03			+/- 8.0E-04			
Phase delay (usec)	2.95613227649E+03			Apriori clockrate (us/s)			3.6929281E-07			Resid phdelay (usec)			-2.77449E-06			+/- 1.7E-07			
Delay rate (us/s)	-5.26644471273E-01			Apriori rate (us/s)			-5.26644394077E-01			Resid rate (us/s)			-7.71966E-08			+/- 7.1E-10			
Total phase (deg)	107.0			Apriori accel (us/s/s)			2.40262616922E-06			Resid phase (deg)			-86.0			+/- 5.3			

ph/seg (deg) RMS Theor. Amplitude 0.383 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.9 9.2 Search (2048X64) 0.374 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.6 16.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 77.8 10.7 Inc. seg. avg. 0.465 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 89.0 18.6 Inc. frq. avg. 0.692 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 3796.153 1972.223 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/Zi..130CNK Output file: /Exps/c192b/v2/1234/No0078/Zi.W.166.130CNK

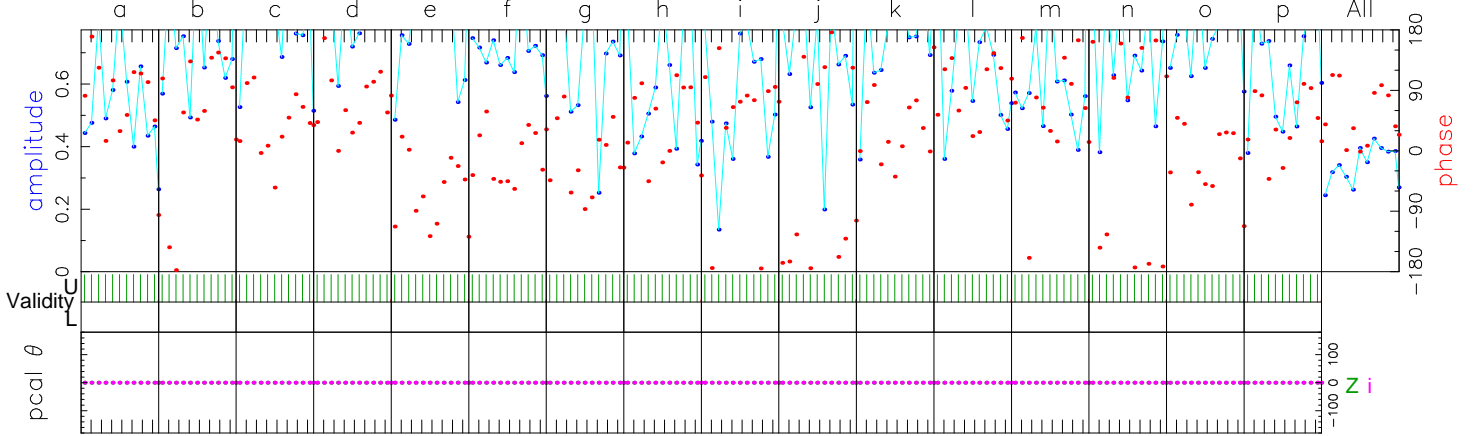


Fringe quality 9

SNR 14.4
 Int time 419.369
 Amp 0.258
 Phase 56.8
 PFD 1.8e-38
 Delays (us)
 SBD 0.000759
 MBD 0.011976
 Fringe rate (Hz)
 -0.006460
 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
 2020:086:085737
 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



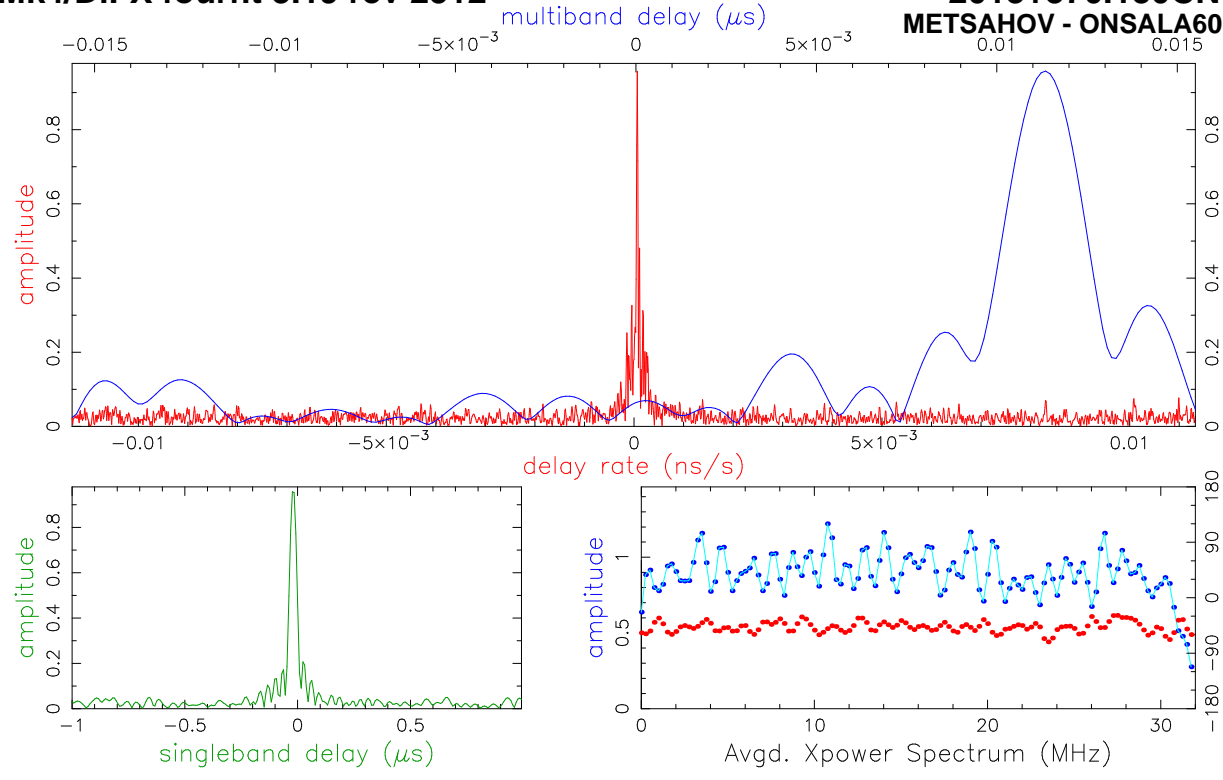
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	85.2	117.3	44.2	81.0	-59.2	-8.1	-13.2	47.2	96.5	179.3	29.0	83.9	84.1	171.7	-4.8	53.8	Phase	56.8
	0.4	0.5	0.6	0.7	0.6	0.6	0.4	0.4	0.4	0.5	0.6	0.5	0.3	0.5	0.6	0.5	Ampl.	0.5
	128.9	129.0	128.8	128.8	128.9	129.3	129.2	129.7	128.4	129.4	129.0	129.5	130.1	129.1	129.7	129.0	Sbd box	129.1
UL	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	
Z	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	
Zi	0:0	0:0	0:0	0:0	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	
Zi	0:0	0:0	0:0	0:0	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	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z	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) 2.95614425504E+03 Apriori delay (usec) 2.95613227927E+03 Resid mbdelay (usec) 1.19758E-02 +/- 7.5E-05
 Sband delay (usec) 2.95613303777E+03 Apriori clock (usec) 6.9476193E-01 Resid sbdelay (usec) 7.58500E-04 +/- 1.2E-03
 Phase delay (usec) 2.95613228110E+03 Apriori clockrate (us/s) 3.6929281E-07 Resid phdelay (usec) 1.83086E-06 +/- 2.6E-07
 Delay rate (us/s) -5.26644469075E-01 Apriori rate (us/s) -5.26644394077E-01 Resid rate (us/s) -7.49987E-08 +/- 1.1E-09
 Total phase (deg) 249.8 Apriori accel (us/s/s) 2.40262616922E-06 Resid phase (deg) 56.8 +/- 7.9

RMS Theor. Amplitude 0.258 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 42.1 13.7 Search (2048X64) 0.247 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 40.4 24.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 67.5 15.9 Inc. seg. avg. 0.336 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 100.2 27.7 Inc. frq. avg. 0.482 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 i: az 72.5 el 47.3 pa -73.2 u,v (fr/asec) 3796.153 1972.223 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/Zi..130CNK Output file: /Exps/c192b/v2/1234/No0078/Zi.W.172.130CNK

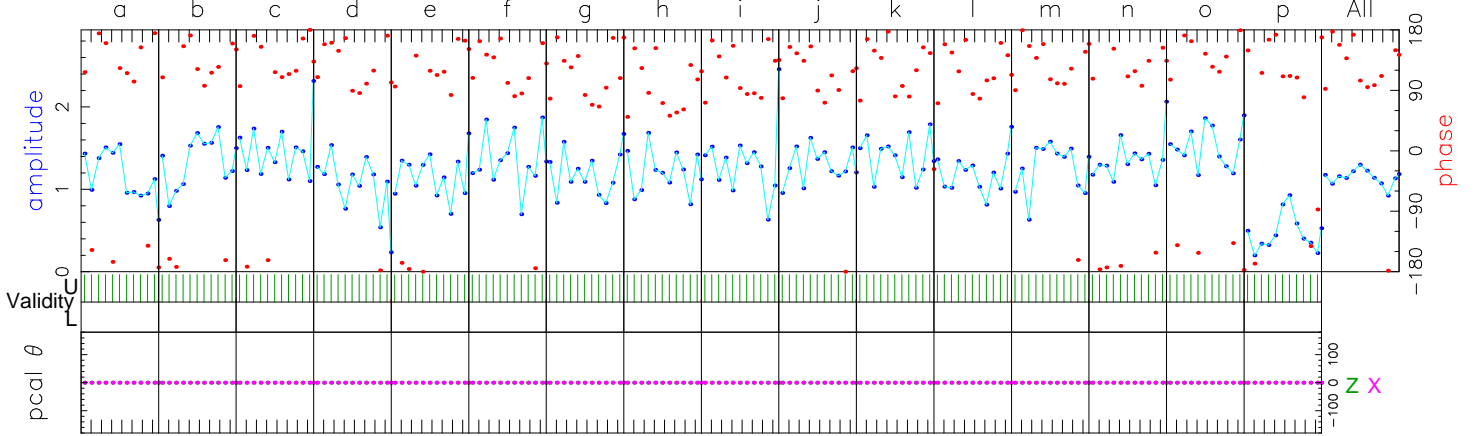


Fringe quality 6

SNR 54.8
 Int time 419.364
 Amp 0.979
 Phase 132.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.019714
 MBD 0.011369
 Fringe rate (Hz) 0.005773
 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
 2020:086:085728
 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
157.9	142.3	145.3	132.5	146.9	132.6	111.5	89.4	111.8	121.9	126.2	120.9	132.9	148.1	160.1	132.6	132.6	Phase	132.6
1.0	1.1	1.2	0.9	0.9	1.1	1.0	1.0	1.1	1.1	1.1	1.0	1.1	1.1	1.2	0.3	0.3	Ampl.	1.0
126.2	126.5	126.4	126.1	126.3	126.7	126.1	126.3	126.4	126.6	126.4	126.3	126.9	126.9	126.4	128.5	128.5	Sbd box	126.5
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	
Z	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	
Z: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	
Z: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	
Z	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	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

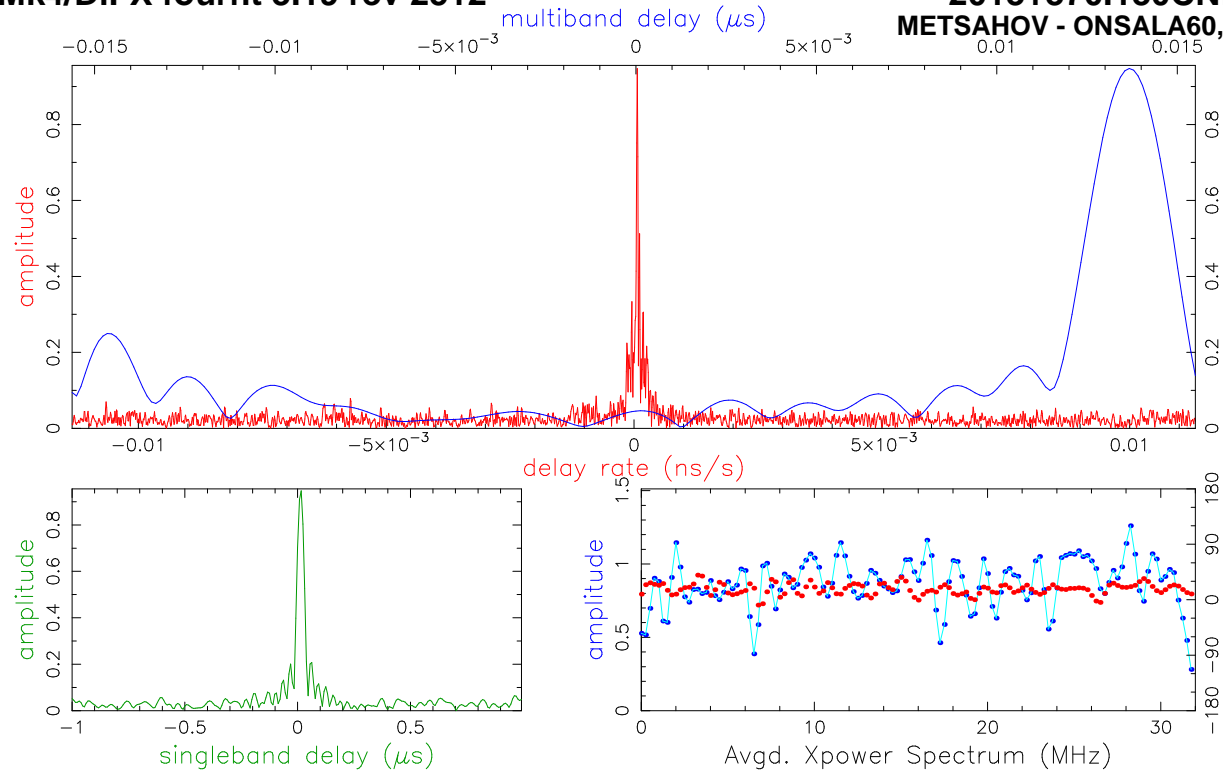
Group delay (usec)(sbd) 7.04838176482E+02 Apriori delay (usec) 7.04858056987E+02 Resid mbdelay (usec) 1.13695E-02 +/- 2.0E-05
 Sband delay (usec) 7.04838343487E+02 Apriori clock (usec) -3.2174652E+01 Resid sbdelay (usec) -1.97135E-02 +/- 3.1E-04
 Phase delay (usec) 7.04858061263E+02 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) 4.27618E-06 +/- 6.7E-08
 Delay rate (us/s) -1.45489488864E-01 Apriori rate (us/s) -1.45489555888E-01 Resid rate (us/s) 6.70239E-08 +/- 2.8E-10
 Total phase (deg) 143.0 Apriori accel (us/s/s) -2.17127964680E-06 Resid phase (deg) 132.6 +/- 2.1

RMS Theor. Amplitude 0.979 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 33.5 3.6 Search (2048X64) 0.952 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 19.3 6.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 19.1 4.2 Inc. seg. avg. 1.140 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 19.6 7.3 Inc. frq. avg. 1.004 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 1043.448 39.106 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZX..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZX.W.159.130CNK

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130CNK, No0078, ZX
 METSAHOV - ONSALA60, fgroup W, pol RR

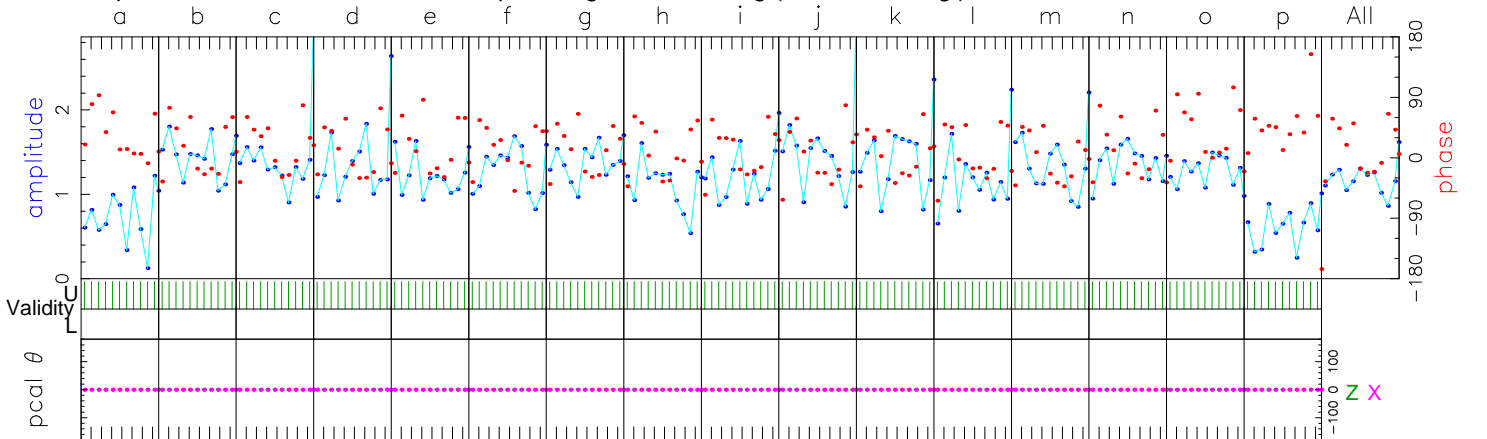


Fringe quality 5

SNR 53.5
 Int time 419.364
 Amp 0.956
 Phase 15.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.013321
 MBD 0.013671
 Fringe rate (Hz) 0.005766
 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
 2020:086:085732
 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



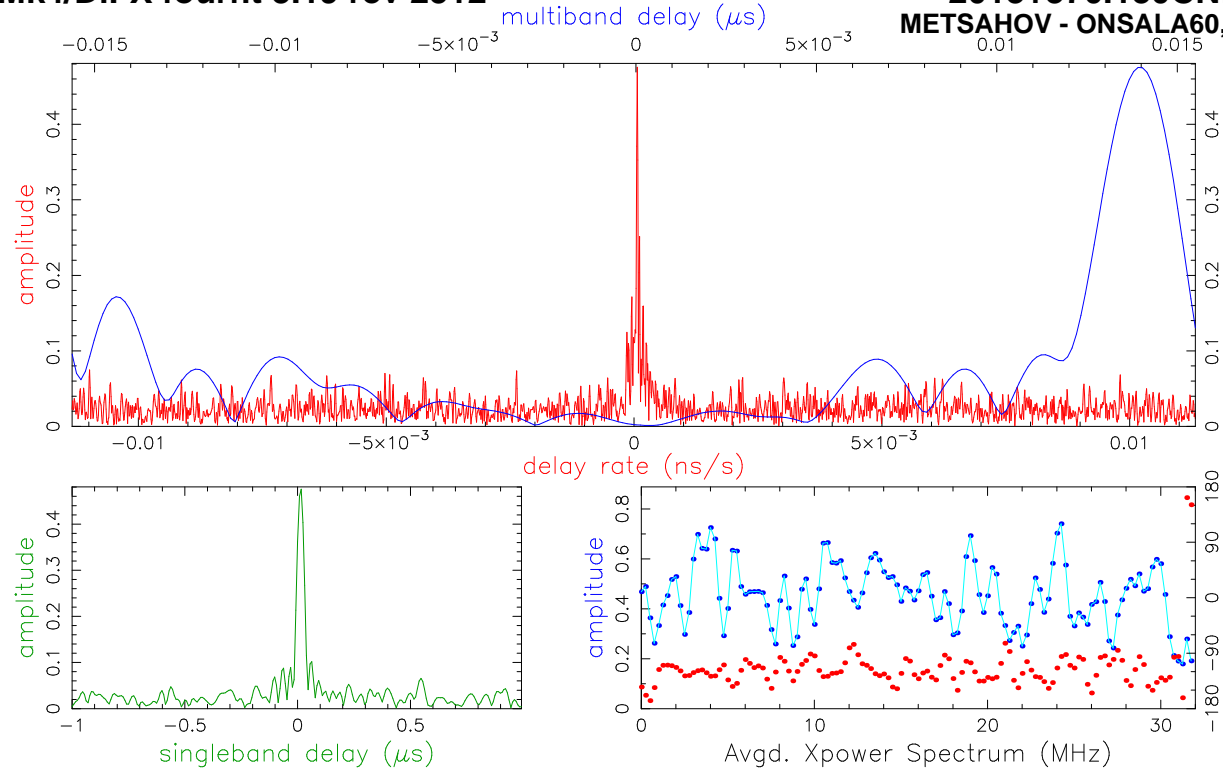
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	130.7
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1.0
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1.0
Z: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	0:0	PC phase	1.0
Z: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	0:0	ManI PC	1.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1.0
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1.0
Z	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	

Group delay (usec)(sbd) 7.04871728139E+02 Apriori delay (usec) 7.04858056987E+02 Resid mbdelay (usec) 1.36712E-02 +/- 2.0E-05
 Sband delay (usec) 7.04871377487E+02 Apriori clock (usec) -3.2174652E+01 Resid sbdelay (usec) 1.33205E-02 +/- 3.2E-04
 Phase delay (usec) 7.04858057472E+02 Apriori clockrate (us/s) -5.1170721E-07 Resid phdelay (usec) 4.84668E-07 +/- 6.9E-08
 Delay rate (us/s) -1.45489488946E-01 Apriori rate (us/s) -1.45489555888E-01 Resid rate (us/s) 6.69417E-08 +/- 2.8E-10
 Total phase (deg) 25.4 Apriori accel (us/s/s) -2.17127964680E-06 Resid phase (deg) 15.0 +/- 2.1

RMS Theor. Amplitude 0.956 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 35.4 3.7 Search (2048X64) 0.944 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 25.2 6.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 15.4 4.3 Inc. seg. avg. 1.153 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 19.3 7.5 Inc. frq. avg. 0.968 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 1043.448 39.106 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZX..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZX.W.164.130CNK

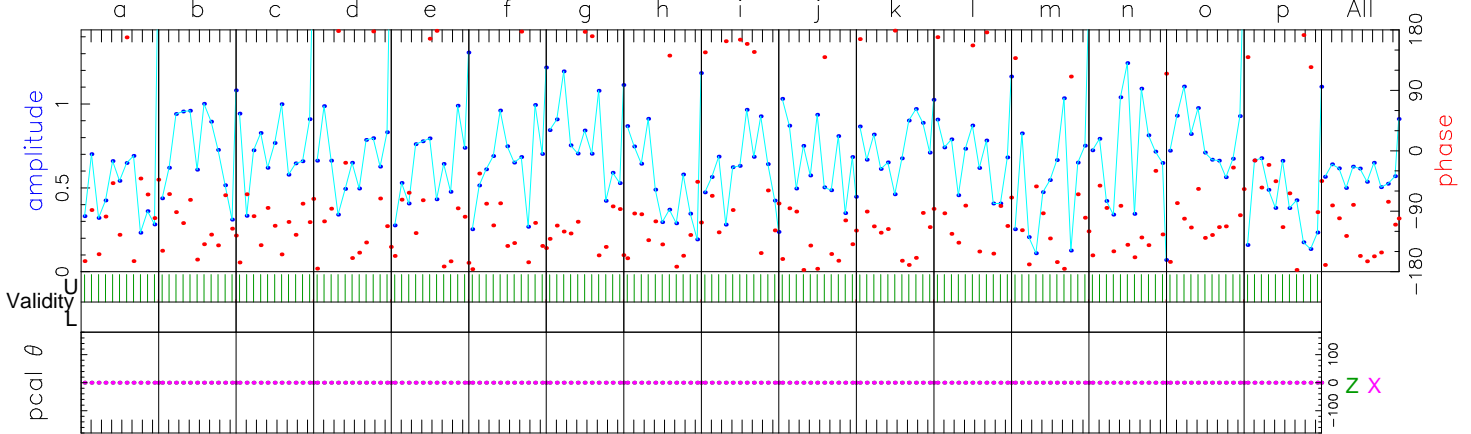


Fringe quality 8

SNR 26.9
 Int time 419.364
 Amp 0.481
 Phase -124.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.013044
 MBD 0.013949
 Fringe rate (Hz) 0.005770
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

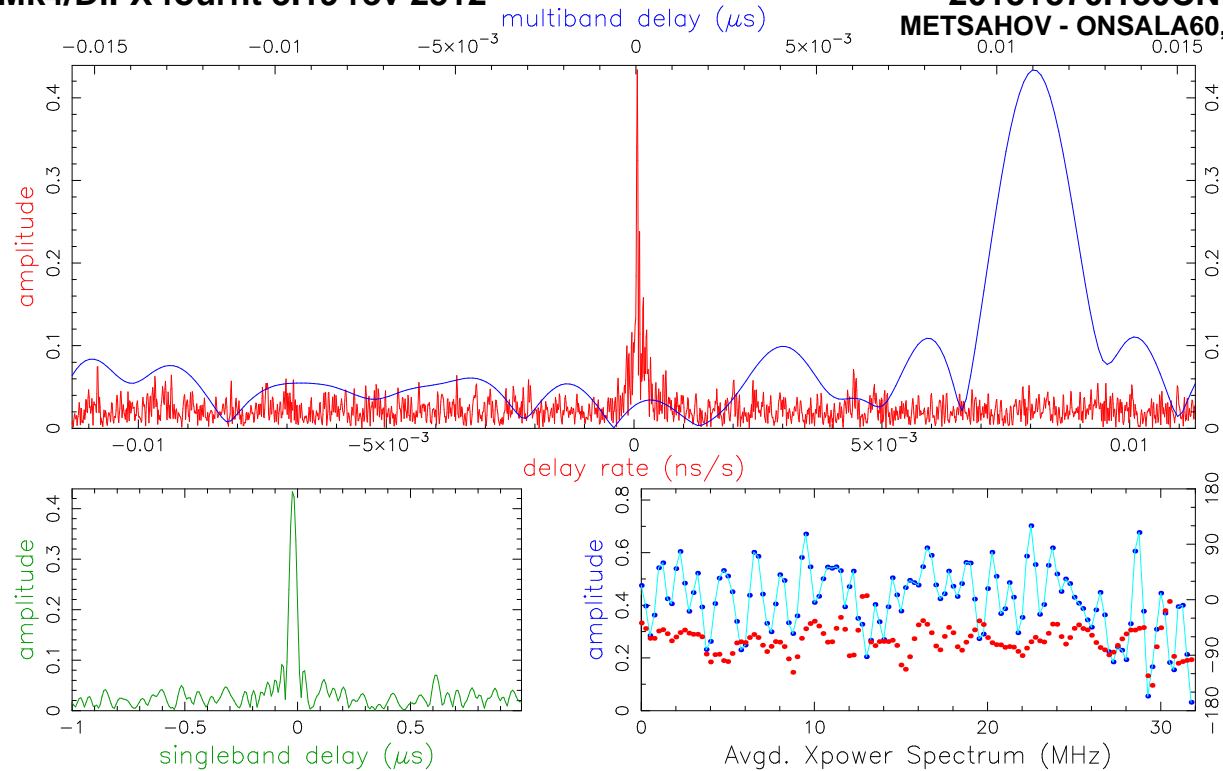
Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085736
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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
	-113.8	-111.4	-117.1	-128.6	-121.5	-119.0	-131.7	-130.8	-152.0	-149.4	-137.2	-140.5	-130.9	-114.6	-99.6	-67.1	Phase	-124.2
	0.3	0.6	0.6	0.5	0.4	0.5	0.7	0.4	0.4	0.6	0.6	0.5	0.4	0.6	0.7	0.2	Ampl.	0.5
	130.0	130.6	130.5	131.1	131.1	130.6	130.5	131.1	130.4	130.5	130.9	131.0	130.1	130.9	130.4	130.0	Sbd box	130.7
UL	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	
Z	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	
Z: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	
Z: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	
Z	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	
Z	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)	7.04872006482E+02			Apriori delay (usec)			7.04858056987E+02			Resid mbdelay (usec)			1.39495E-02			+/- 4.0E-05		
Sband delay (usec)	7.04871101487E+02			Apriori clock (usec)			-3.2174652E+01			Resid sbdelay (usec)			1.30445E-02			+/- 6.4E-04		
Phase delay (usec)	7.04858052981E+02			Apriori clockrate (us/s)			-5.1170721E-07			Resid phdelay (usec)			-4.00652E-06			+/- 1.4E-07		
Delay rate (us/s)	-1.45489488901E-01			Apriori rate (us/s)			-1.45489555888E-01			Resid rate (us/s)			6.69863E-08			+/- 5.7E-10		
Total phase (deg)	-113.9			Apriori accel (us/s/s)			-2.17127964680E-06			Resid phase (deg)			-124.2			+/- 4.3		

ph/seg (deg) 34.9 7.4 Search (2048X64) 0.466 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 24.0 12.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.2 8.5 Inc. seg. avg. 0.575 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 27.2 14.9 Inc. frq. avg. 0.491 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 131.6 el 61.5 pa -27.8 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 1043.448 39.106 ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZX..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZX.W.169.130CNK

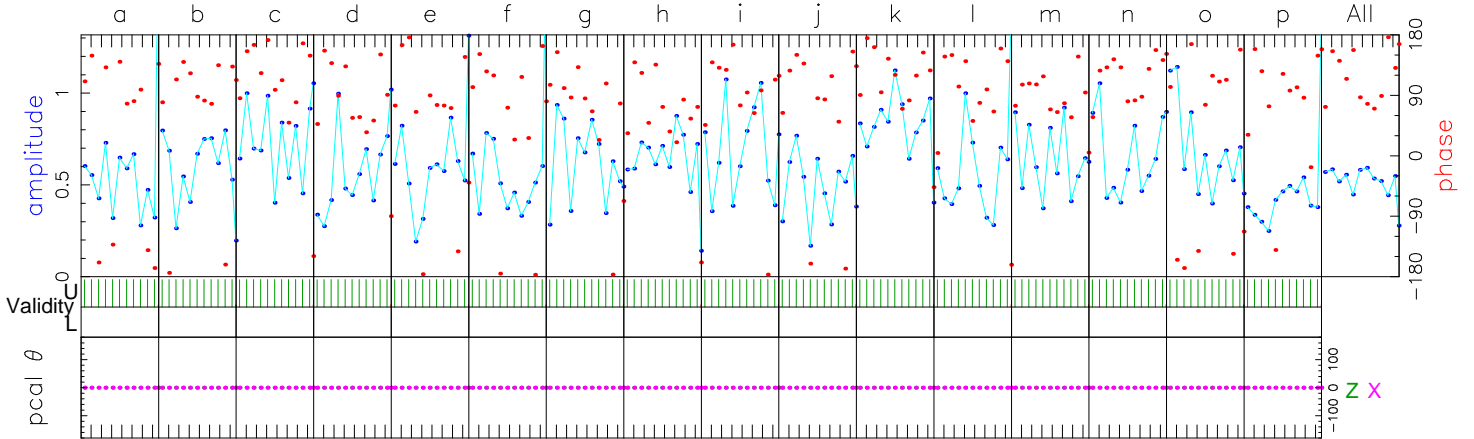


Fringe quality 8

SNR 24.6
 Int time 419.364
 Amp 0.439
 Phase 113.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.020590
 MBD 0.011048
 Fringe rate (Hz) 0.005792
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

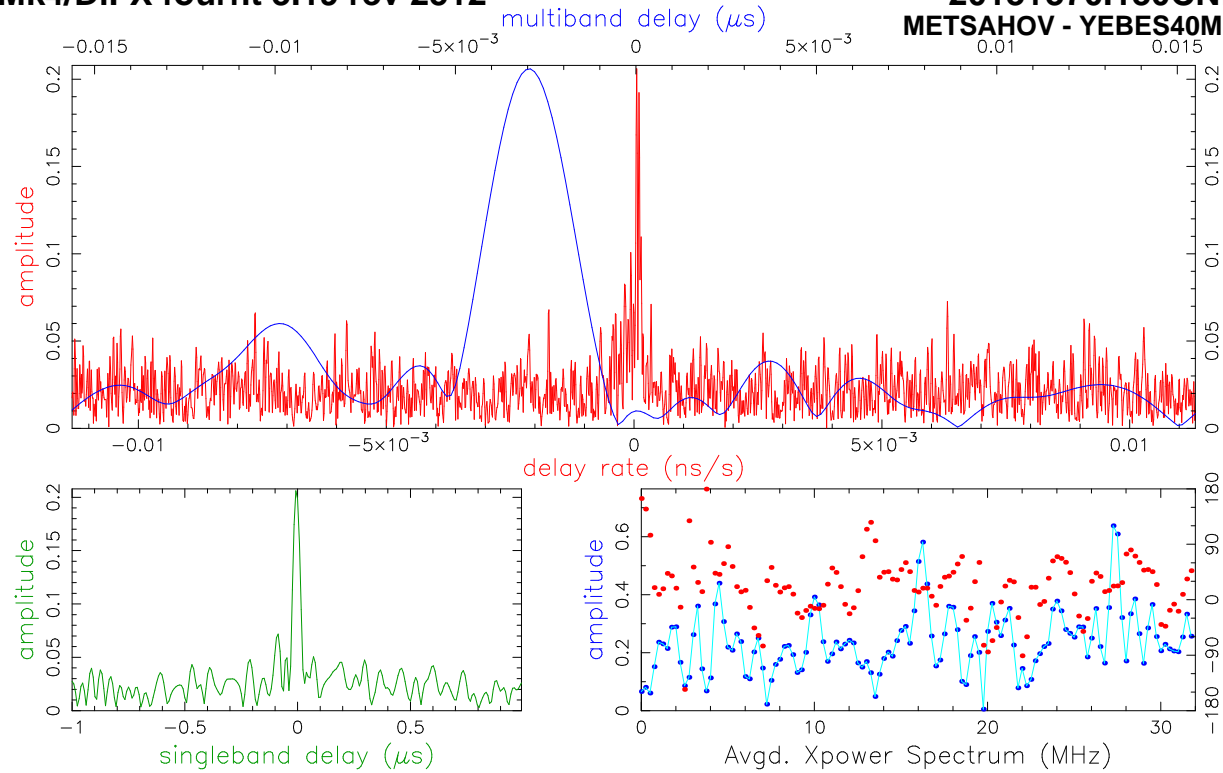
Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160001.00
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085739
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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
UL	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	113.0	113.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	113.0	113.0
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	113.0	113.0
Z: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	113.0	113.0
Z: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	113.0	113.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	113.0	113.0
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	113.0	113.0
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	7.04837855357E+02			Apriori delay (usec)			7.04858056987E+02			Resid mbdelay (usec)			1.10484E-02			+/-	4.4E-05	
Sband delay (usec)	7.04837466987E+02			Apriori clock (usec)			-3.2174652E+01			Resid sbdelay (usec)			-2.05900E-02			+/-	7.0E-04	
Phase delay (usec)	7.04858060632E+02			Apriori clockrate (us/s)			-5.1170721E-07			Resid phdelay (usec)			3.64522E-06			+/-	1.5E-07	
Delay rate (us/s)	-1.45489488646E-01			Apriori rate (us/s)			-1.45489555888E-01			Resid rate (us/s)			6.72414E-08			+/-	6.2E-10	
Total phase (deg)	123.4			Apriori accel (us/s/s)			-2.17127964680E-06			Resid phase (deg)			113.0			+/-	4.7	

ph/seg (deg) 37.0 8.1 Search (2048X64) 0.425 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 24.9 14.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.1 9.3 Inc. seg. avg. 0.529 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 26.9 16.3 Inc. frq. avg. 0.453 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 131.6 el 61.5 pa -27.8 X: az 111.2 el 57.4 pa -38.7 u,v (fr/asec) 1043.448 39.106 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZX..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZX.W.174.130CNK simultaneous interpolator

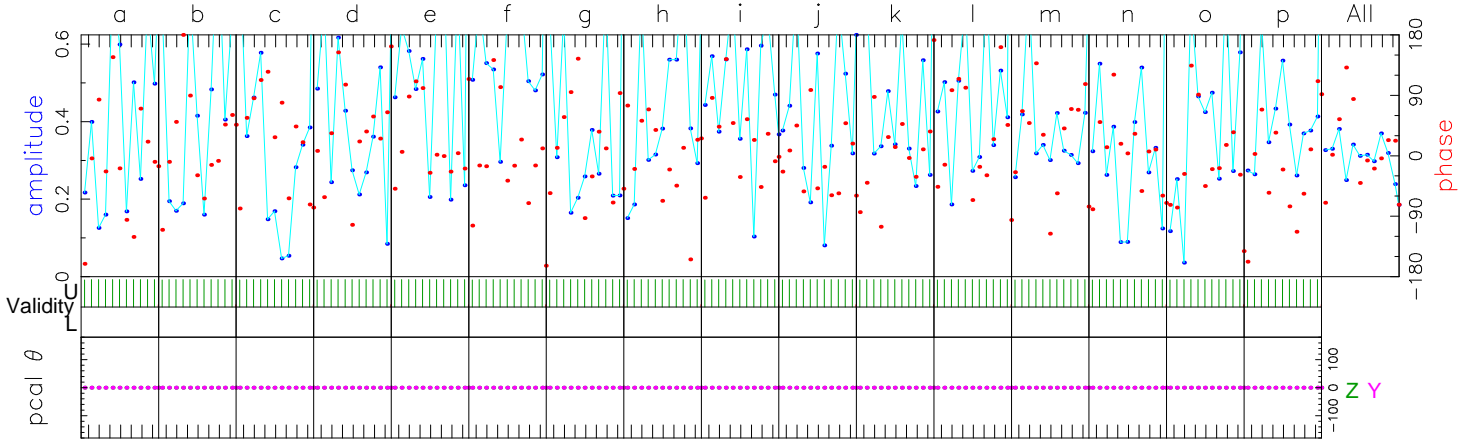


Fringe quality 9

SNR 11.4
 Int time 401.888
 Amp 0.208
 Phase 9.7
 PFD 2.1e-21
 Delays (us)
 SBD -0.005402
 MBD -0.002949
 Fringe rate (Hz) 0.004731
 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
 2020:086:085729
 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



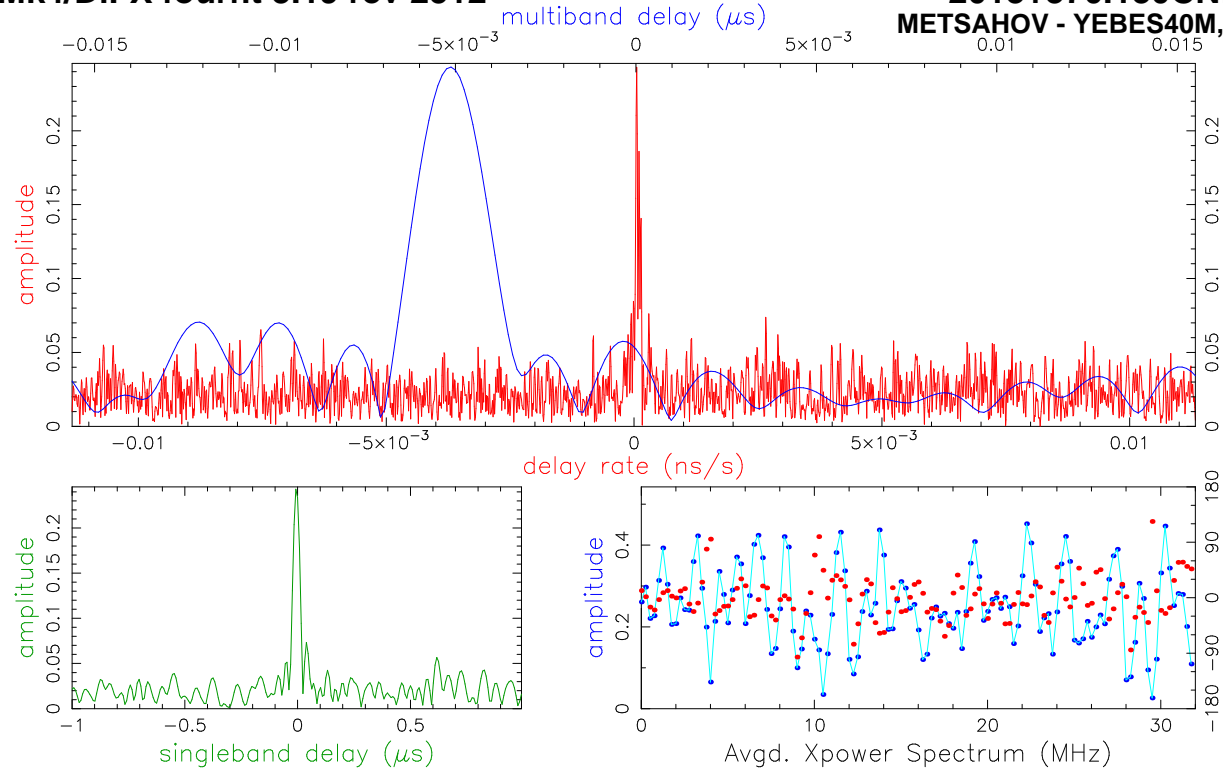
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-0.3	14.5	29.6	32.3	19.5	-16.0	3.8	6.8	28.8	-8.4	-4.0	22.9	50.9	5.8	3.4	-2.7		Phase	9.7
	0.1	0.2	0.1	0.1	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2		Ampl.	0.2
	154.6	129.6	82.9	214.9	128.1	128.0	201.9	127.3	128.5	129.1	128.7	160.9	63.0	127.1	234.5	66.9		Sbd box	128.3
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	
Z	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	
Z: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	
Z: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	
Z	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	
Z	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	

Group delay (usec)(sbd) 2.67119041558E+03 Apriori delay (usec) 2.67119336478E+03 Resid mbdelay (usec) -2.94920E-03 +/- 9.5E-05
 Sband delay (usec) 2.67118796228E+03 Apriori clock (usec) -9.4785376E+00 Resid sbdelay (usec) -5.40250E-03 +/- 1.5E-03
 Phase delay (usec) 2.67119336509E+03 Apriori clockrate (us/s) -2.0370720E-07 Resid phdelay (usec) 3.11902E-07 +/- 3.2E-07
 Delay rate (us/s) -4.85963655906E-01 Apriori rate (us/s) -4.85963710834E-01 Resid rate (us/s) 5.49274E-08 +/- 1.4E-09
 Total phase (deg) 168.7 Apriori accel (us/s/s) 6.63626171822E-07 Resid phase (deg) 9.7 +/- 10.1

RMS Theor. Amplitude 0.208 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 55.0 17.4 Search (2048X64) 0.205 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 55.6 30.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 18.5 20.1 Inc. seg. avg. 0.301 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 35.5 35.1 Inc. frq. avg. 0.203 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 3500.027 1541.145 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZY..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZY.W.163.130CNK

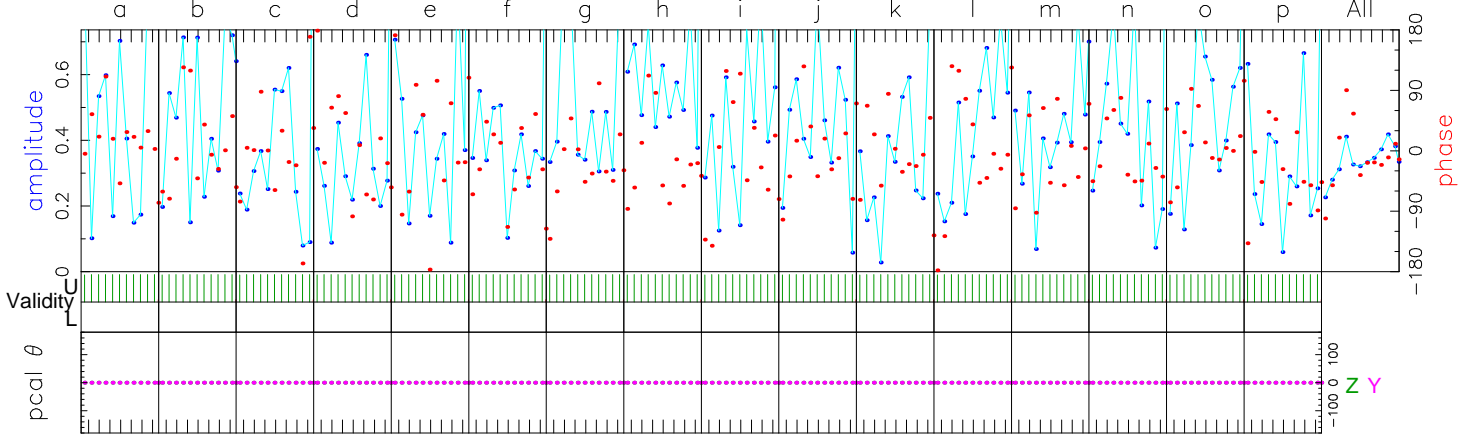


Fringe quality 9

SNR 13.5
 Int time 401.888
 Amp 0.246
 Phase -4.1
 PFD 1.5×10^{-32}
 Delays (us)
 SBD -0.005358
 MBD -0.005116
 Fringe rate (Hz) 0.004639
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

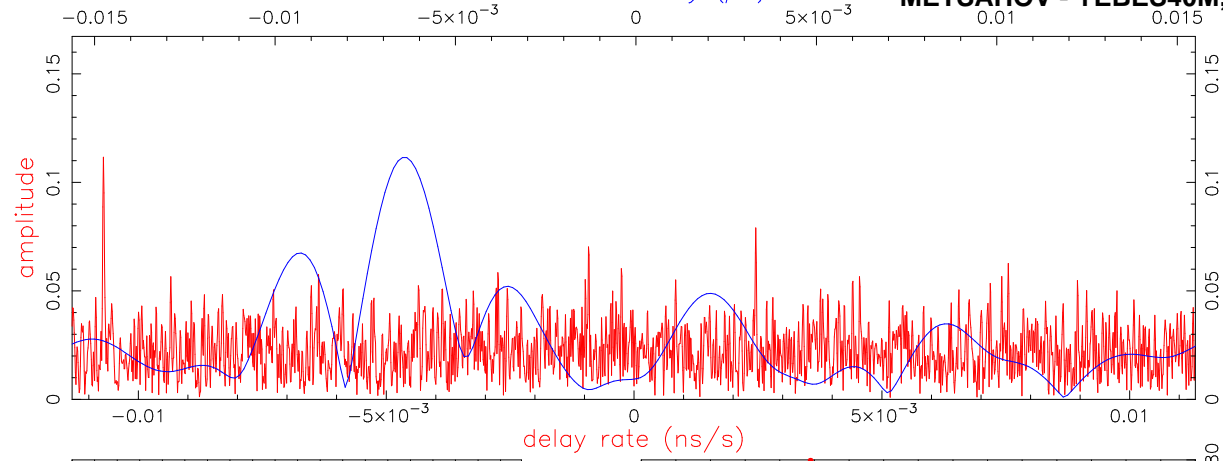
Exp. c192b
 Exper # 16383
 Yr:day 2019:277
 Start 160017.89
 Stop 160700.84
 FRT 160331.00
 Corr/FF/build
 2020:078:221205
 2020:086:085733
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

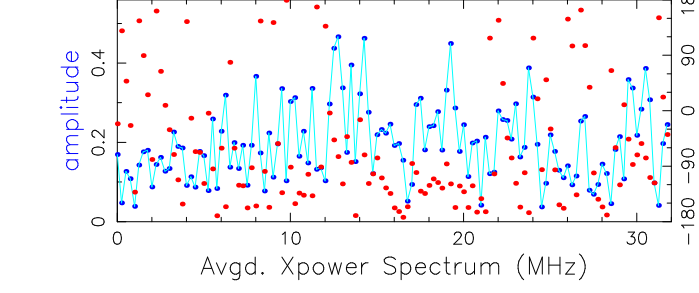
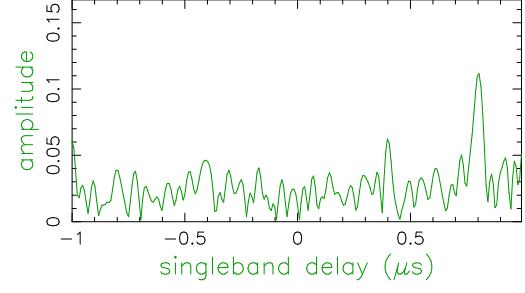


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All						
	13.3	-0.6	-5.6	-18.8	10.7	-5.0	-3.7	-30.3	-14.2	-3.0	5.1	-8.7	-9.8	5.5	13.6	-37.2	Phase	-4.1						
	0.4	0.3	0.2	0.1	0.1	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.2	Ampl.	0.2						
	128.9	128.9	91.8	48.4	229.1	231.9	128.3	127.8	236.6	128.1	128.8	161.0	188.0	127.8	128.8	104.8	Sbd box	128.3						
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							
Z	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							
Z: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							
Z: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							
Z	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								
Z	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)			2.67118824892E+03														Apriori delay (usec)	2.67119336478E+03	Resid mbdelay (usec)	-5.11586E-03	+/-	8.0E-05		
Sband delay (usec)			2.67118800728E+03														Apriori clock (usec)	-9.4785376E+00	Resid sbdelay (usec)	-5.35750E-03	+/-	1.3E-03		
Phase delay (usec)			2.67119336464E+03														Apriori clockrate (us/s)	-2.0370720E-07	Resid phdelay (usec)	-1.32110E-07	+/-	2.7E-07		
Delay rate (us/s)			-4.85963656984E-01														Apriori rate (us/s)	-4.85963710834E-01	Resid rate (us/s)	5.38497E-08	+/-	1.2E-09		
Total phase (deg)				155.0													Apriori accel (us/s/s)	6.63626171822E-07	Resid phase (deg)	-4.1	+/-	8.5		
ph/seg (deg)		RMS	Theor.														Amplitude	0.246 +/- 0.018	Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5		
amp/seg (%)		48.8	14.7														Search (2048X64)	0.237	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000	
ph/frq (deg)		44.0	25.7														Interp.	0.000	Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.016 0.016
amp/frq (%)		15.1	17.0														Inc. seg. avg.	0.328	Sample rate(MISamp/s): 64			dr window (ns/s)	-0.011 0.011	
		34.8	29.7														Inc. frq. avg.	0.239	Data rate(Mb/s): 2048			ion window (TEC)	0.00 0.00	
Z: az 131.6 el 61.5 pa -27.8																	u,v (fr/asec)	3500.027 1541.145	nlags: 128			t_cohere infinite		
Y: az 76.3 el 48.4 pa -68.3																	simultaneous interpolator							

multiband delay (μ s)

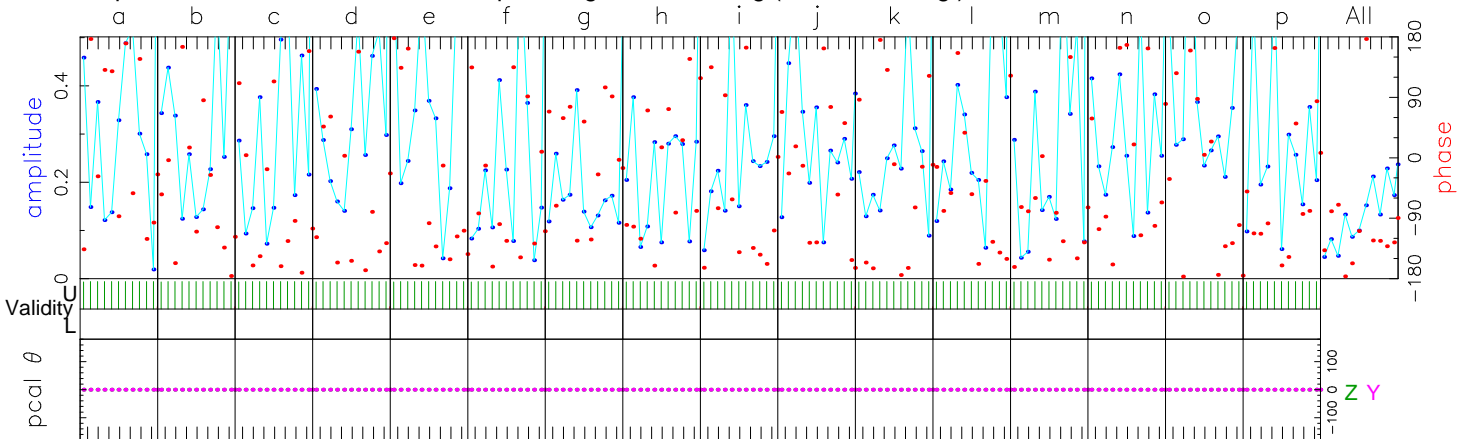


Fringe quality 0
SNR 6.2
Int time 401.888
Amp 0.167
Phase -133.0
PFD 1.8e-01
Delays (us)
SBD 0.802121
MBD -0.006427
Fringe rate (Hz)
-0.923135
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192b
Exper # 16383
Yr:day 2019:277
Start 160017.89
Stop 160700.84
FRT 160331.00
Corr/FF/build
2020:078:221205
2020:086:085737
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"



Avgd. Xpower Spectrum (MHz)

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

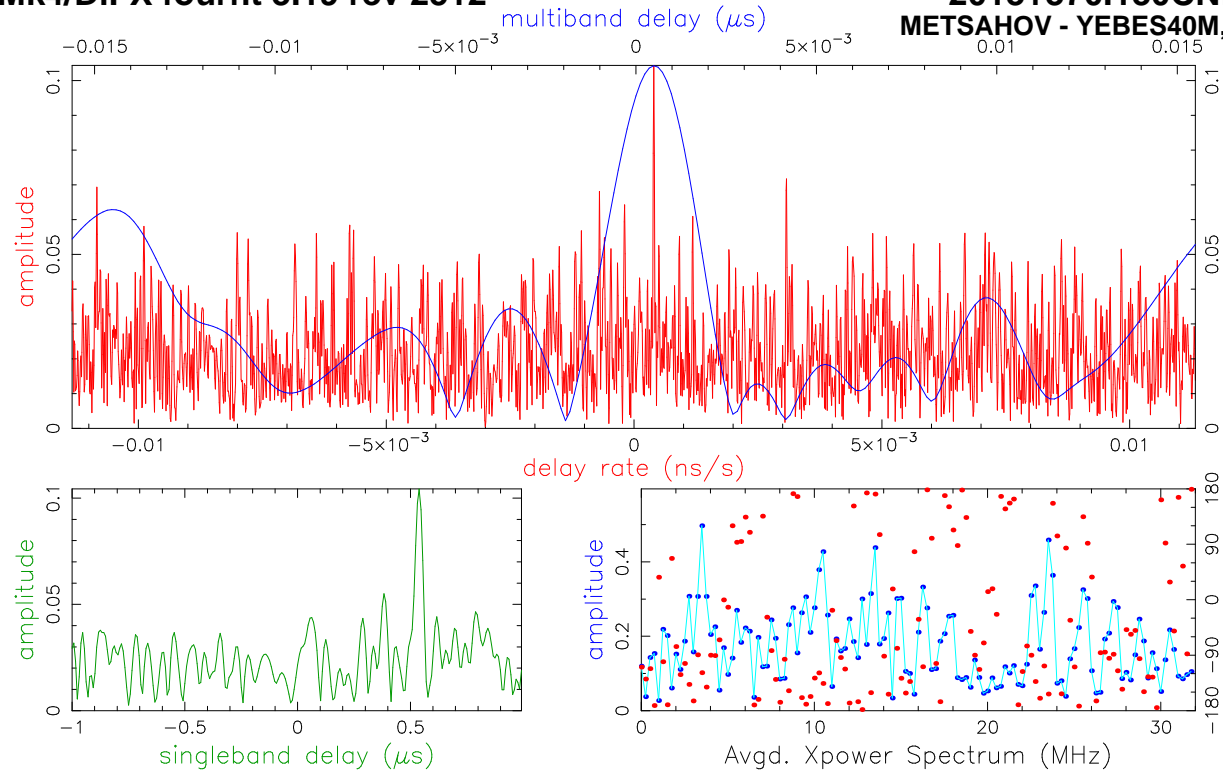


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-126.6	-107.1	-157.8	-140.7	-145.1	-132.2	22.3	-87.7	-126.4	-9.3	-164.2	-128.9	-126.7	-136.0	-165.3	-127.1	Phase	-133.0
	0.2	0.2	0.3	0.2	0.5	0.1	0.0	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	237.6	76.7	230.2	143.0	232.2	109.9	193.0	60.3	170.8	112.1	121.8	125.0	143.0	91.0	216.0	73.9	Sbd box	231.7
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	
Z	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	
Z: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	
Z: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	
Z	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	
Z	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) 2.67199943819E+03 Apriori delay (usec) 2.67119336478E+03 Resid mbdelay (usec) -6.42658E-03 +/- 1.8E-04
 Sband delay (usec) 2.67199548528E+03 Apriori clock (usec) -9.4785376E+00 Resid sbdelay (usec) 8.02121E-01 +/- 2.8E-03
 Phase delay (usec) 2.67119336049E+03 Apriori clockrate (us/s) -2.0370720E-07 Resid phdelay (usec) -4.28827E-06 +/- 6.0E-07
 Delay rate (us/s) -4.85974427521E-01 Apriori rate (us/s) -4.85963710834E-01 Resid rate (us/s) -1.07167E-05 +/- 2.6E-09
 Total phase (deg) 26.1 Apriori accel (us/s/s) 6.63626171822E-07 Resid phase (deg) -133.0 +/- 18.6

RMS Theor. Amplitude 0.167 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 34.0 32.3 Search (2048X64) 0.110 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 54.5 56.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 56.8 37.3 Inc. seg. avg. 0.164 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 59.0 65.0 Inc. frq. avg. 0.161 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 3500.027 1541.145 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZY..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZY.W.173.130CNK

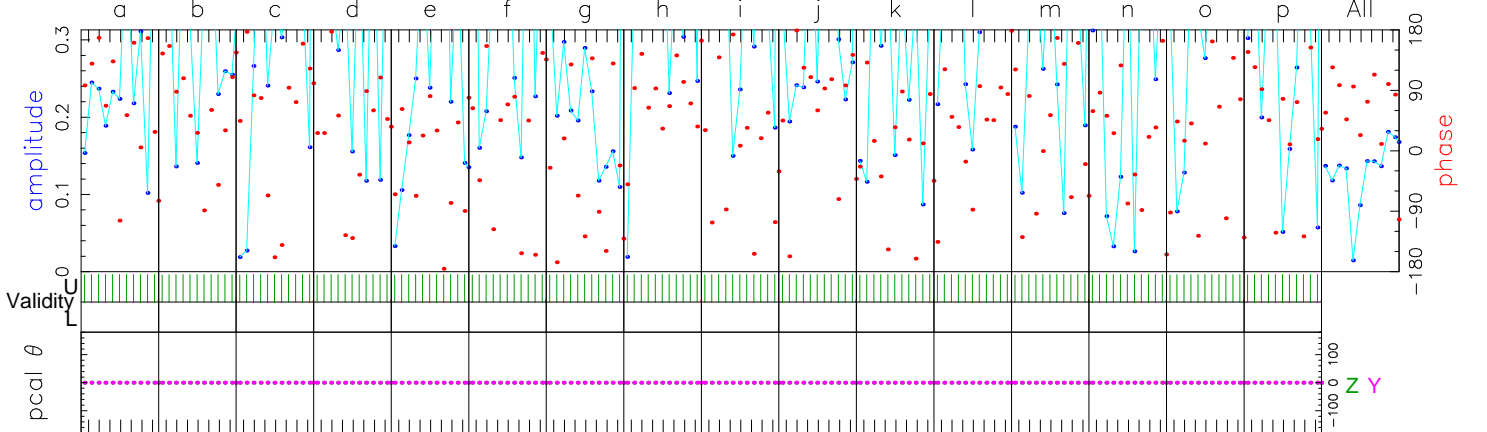


Fringe quality 0

SNR 5.7
 Int time 401.888
 Amp 0.104
 Phase 76.7
 PFD 9.3e-01
 Delays (us)
 SBD 0.538417
 MBD 0.000497
 Fringe rate (Hz)
 0.034276
 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
 2020:086:085740
 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



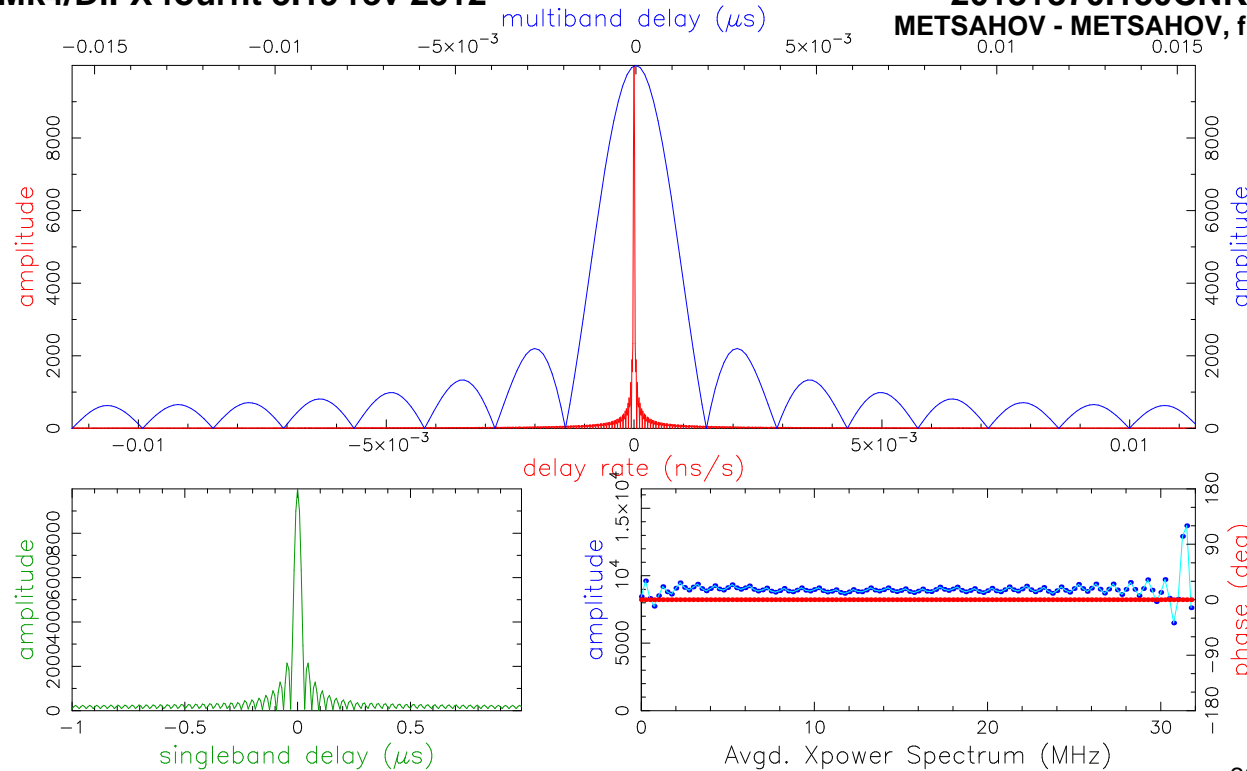
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77.4	92.5	112.2	40.3	26.7	79.7	-113.6	85.0	2.4	105.0	38.1	66.6	-16.2	36.0	88.3	131.7	131.7	Phase	76.7
0.1	0.1	0.2	0.2	0.1	0.2	0.0	0.3	0.1	0.2	0.1	0.3	0.0	0.1	0.0	0.1	0.1	Ampl.	0.1
43.2	178.0	142.0	102.9	71.2	113.4	118.5	198.7	115.1	197.3	118.7	124.1	91.5	55.0	12.9	234.8	234.8	Sbd box	197.9
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	
Z	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	
Z: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	
Z: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	
Z	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	
Z	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	
																	Chan ids	
																	Tracks	

Group delay (usec)(sbd) 2.67172511176E+03 Apriori delay (usec) 2.67119336478E+03 Resid mbdelay (usec) 4.96987E-04 +/- 1.9E-04
 Sband delay (usec) 2.67173178178E+03 Apriori clock (usec) -9.4785376E+00 Resid sbdelay (usec) 5.38417E-01 +/- 3.0E-03
 Phase delay (usec) 2.67119336725E+03 Apriori clockrate (us/s) -2.0370720E-07 Resid phdelay (usec) 2.47328E-06 +/- 6.5E-07
 Delay rate (us/s) -4.85963312921E-01 Apriori rate (us/s) -4.85963710834E-01 Resid rate (us/s) 3.97912E-07 +/- 2.8E-09
 Total phase (deg) 235.8 Apriori accel (us/s/s) 6.63626171822E-07 Resid phase (deg) 76.7 +/- 20.0

RMS Theor. Amplitude 0.104 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 38.3 34.7 Search (2048X64) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 47.1 60.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 63.0 40.1 Inc. seg. avg. 0.108 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 81.1 70.0 Inc. frq. avg. 0.102 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 Y: az 76.3 el 48.4 pa -68.3 u,v (fr/asec) 3500.027 1541.145 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZY..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZY.W.176.130CNK

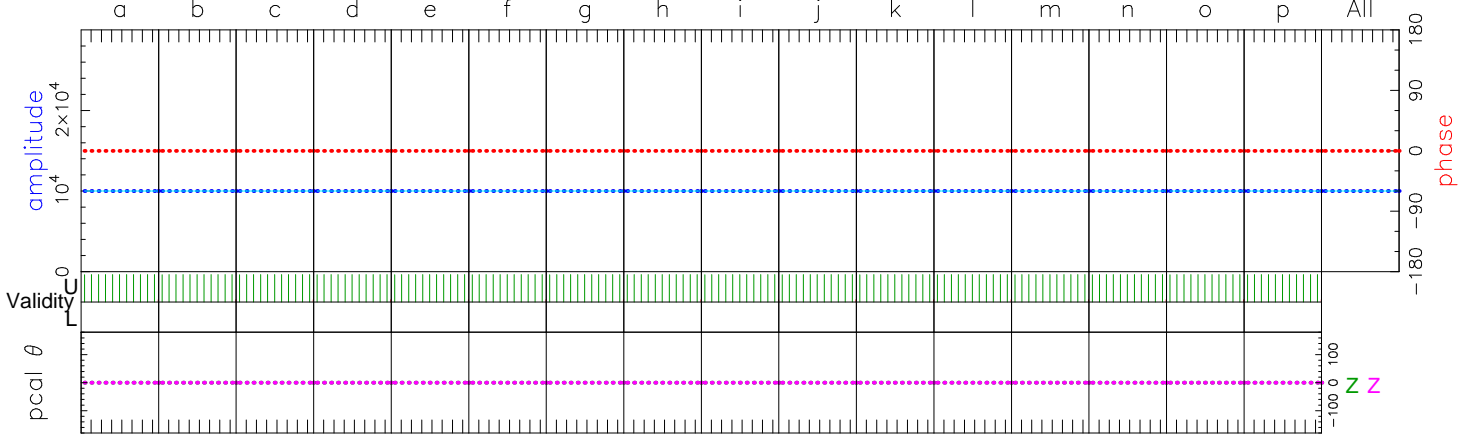


Fringe quality 9

SNR 560009.1
 Int time 419.369
 Amp 9999.985
 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
 2020:086:085729
 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



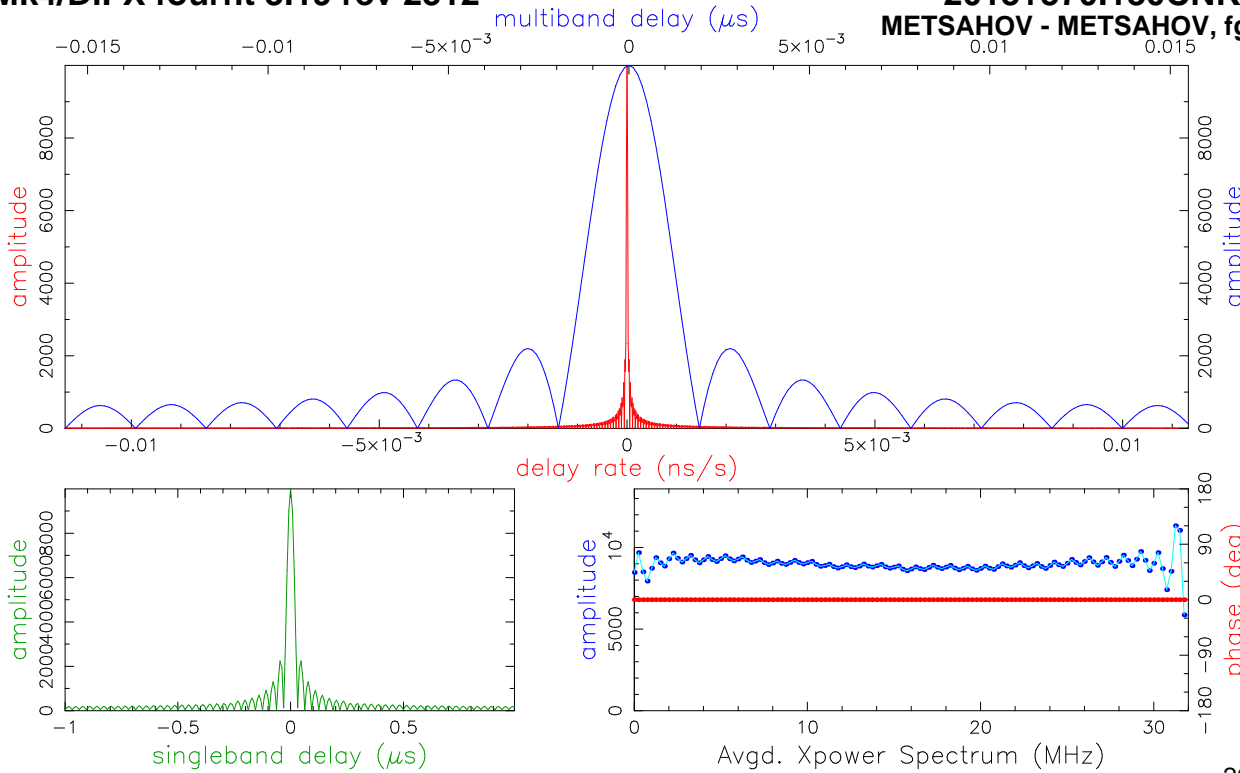
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	0.0		Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0		Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0		Sbd box	129.0
UL	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
Z: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:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
Z	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) 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) 1.32985101303E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.32985E-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 9999.984 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X64) 9999.984 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. 9999.984 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

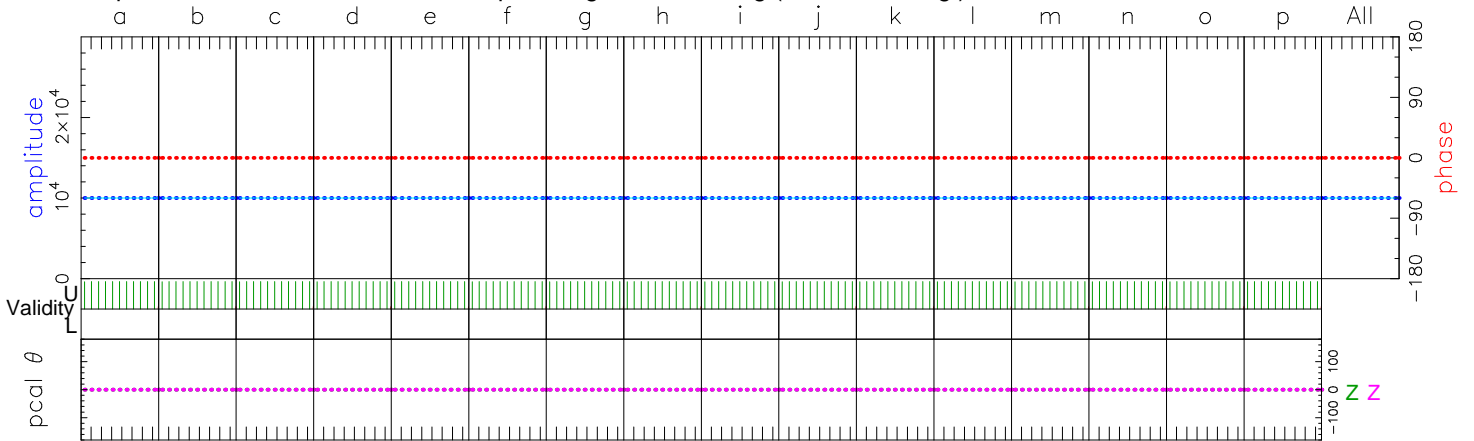
Z: az 131.6 el 61.5 pa -27.8 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZZ.W.162.130CNK



Fringe quality 9
 SNR 560009.1
 Int time 419.369
 Amp 9999.985
 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 16383
 Start 2019:277
 Stop 2019:277
 FRT 160001.00
 Corr/FF/build
 2020:078:221205
 2020:086:085733
 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

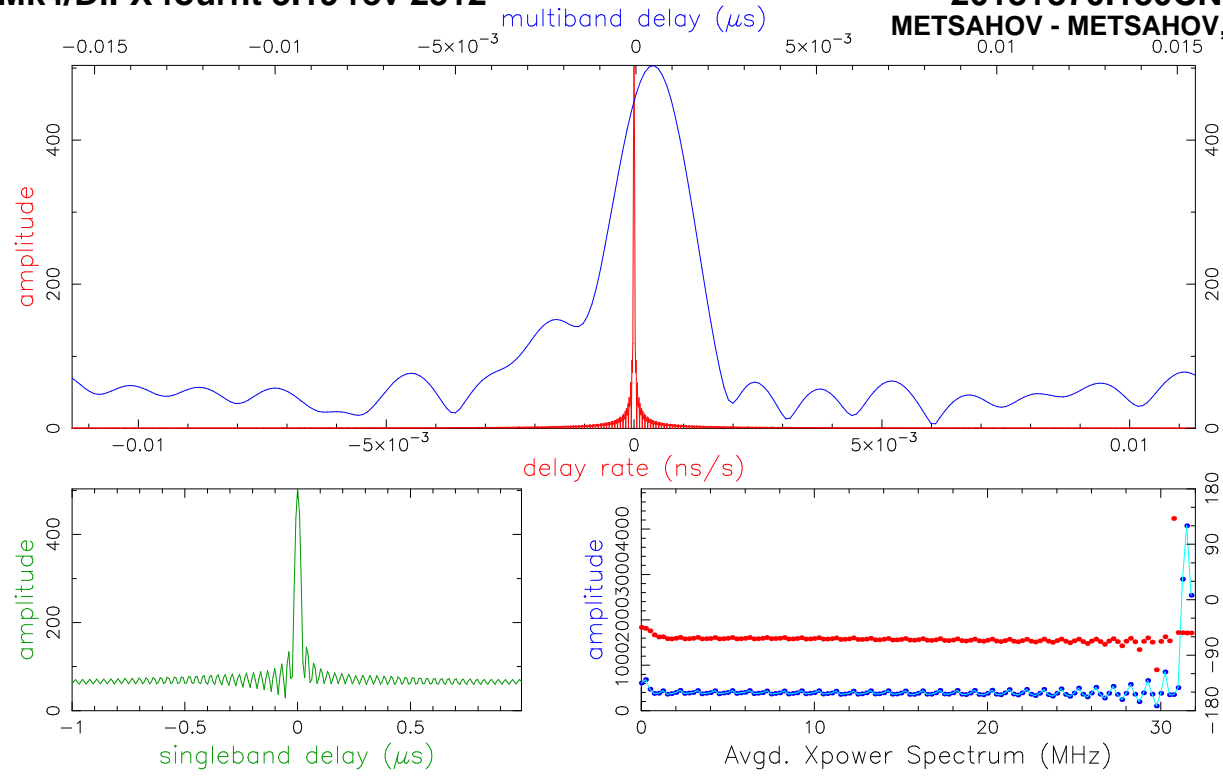


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
0.0	-0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.0	Phase	0.0	
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0	
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0	
U/L	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		
Z	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	PC phase		
Z: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	ManI PC		
Z: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	PC amp		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks		
Z	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)	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)	8.11001179311E-21		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		8.11001E-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							

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.984 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X64) 9999.984 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 131.6 el 61.5 pa -27.8 Z: az 131.6 el 61.5 pa -27.8 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/ZZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZZ.W.167.130CNK simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

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

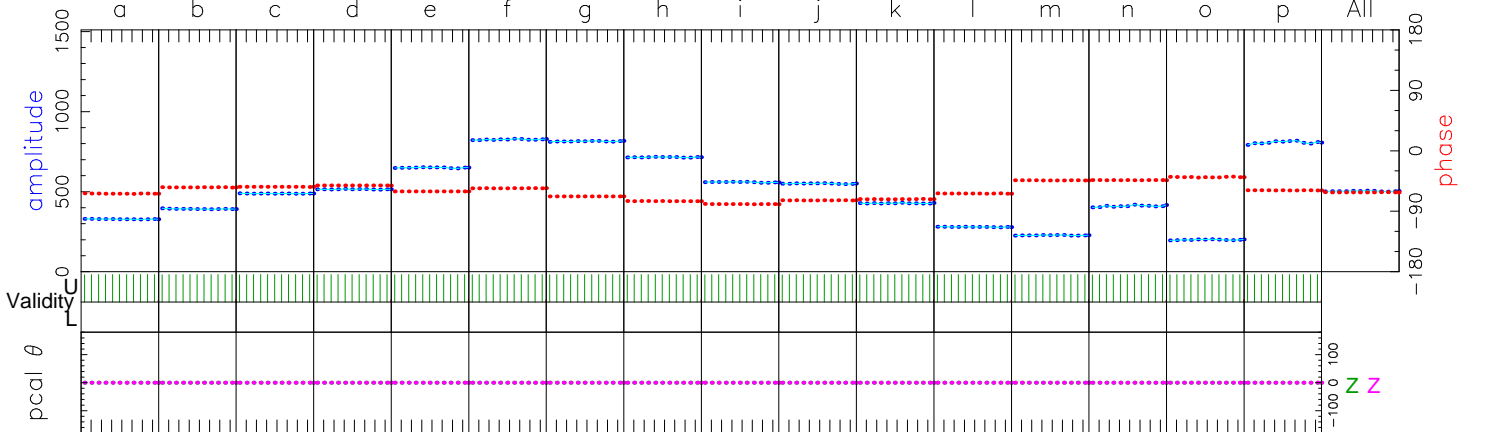


Fringe quality 7

SNR 28204.8
 Int time 419.369
 Amp 503.648
 Phase -61.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000496
 MBD 0.000459
 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
 2020:086:085736
 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



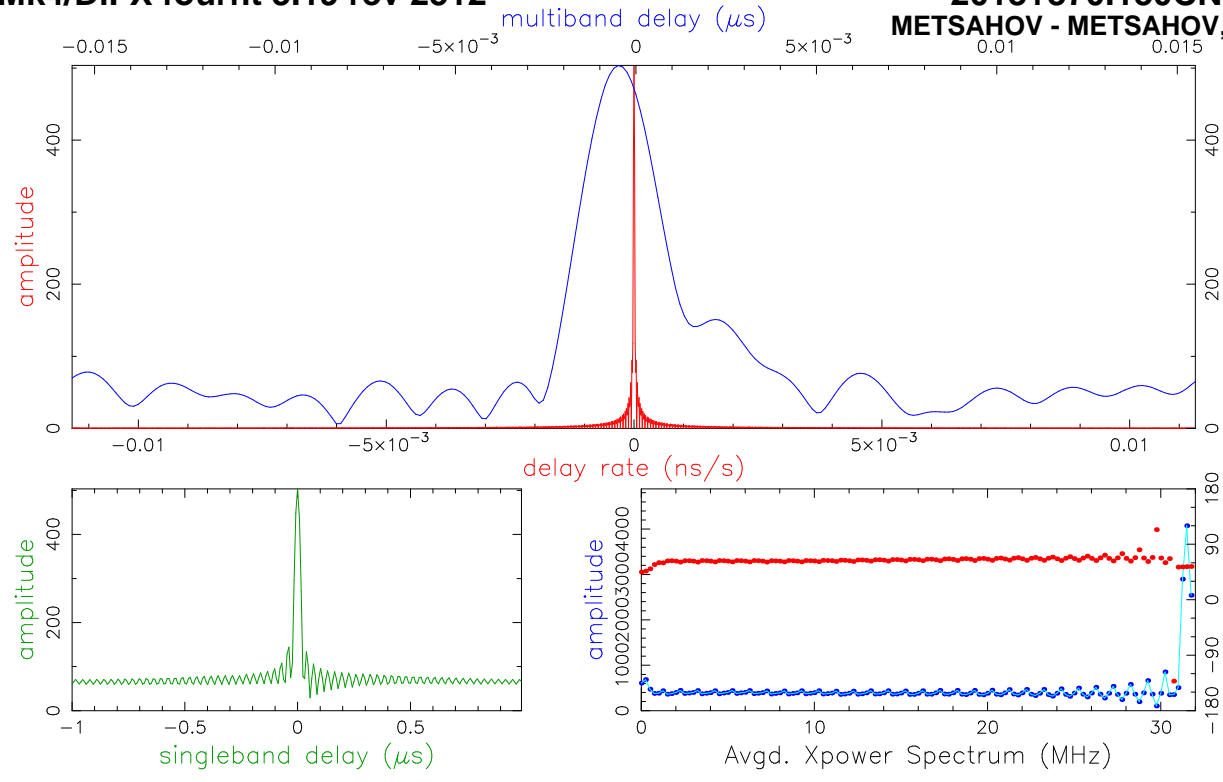
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-63.8	-54.4	-53.6	-51.6	-60.5	-55.8	-67.9	-74.9	-79.3	-73.7	-72.0	-63.6	-44.1	-43.7	-39.2	-58.8	Phase	-61.8
	328.7	392.4	488.3	515.1	649.8	825.5	814.5	715.4	559.6	550.3	427.8	279.8	227.6	409.6	199.4	807.3	Ampl.	511.9
	128.1	129.8	128.9	129.0	129.0	129.5	128.9	128.9	129.0	129.5	128.7	128.8	129.1	129.0	129.2	128.5	Sbd box	129.1
UL	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	
Z	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	
Z: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	
Z: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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	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	
Z	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) 4.59343750000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 4.59344E-04 +/- 3.8E-08
 Sband delay (usec) 4.96000000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 4.96000E-04 +/- 6.1E-07
 Phase delay (usec) -1.99229538287E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.99230E-06 +/- 1.3E-10
 Delay rate (us/s) -2.12567285875E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -2.12567E-12 +/- 5.4E-13
 Total phase (deg) -61.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -61.8 +/- 0.0

RMS Theor. Amplitude 503.648 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X64) 503.327 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.3 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 12.5 0.0 Inc. seg. avg. 503.394 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 39.7 0.0 Inc. frq. avg. 511.943 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZZ.W.171.130CNK

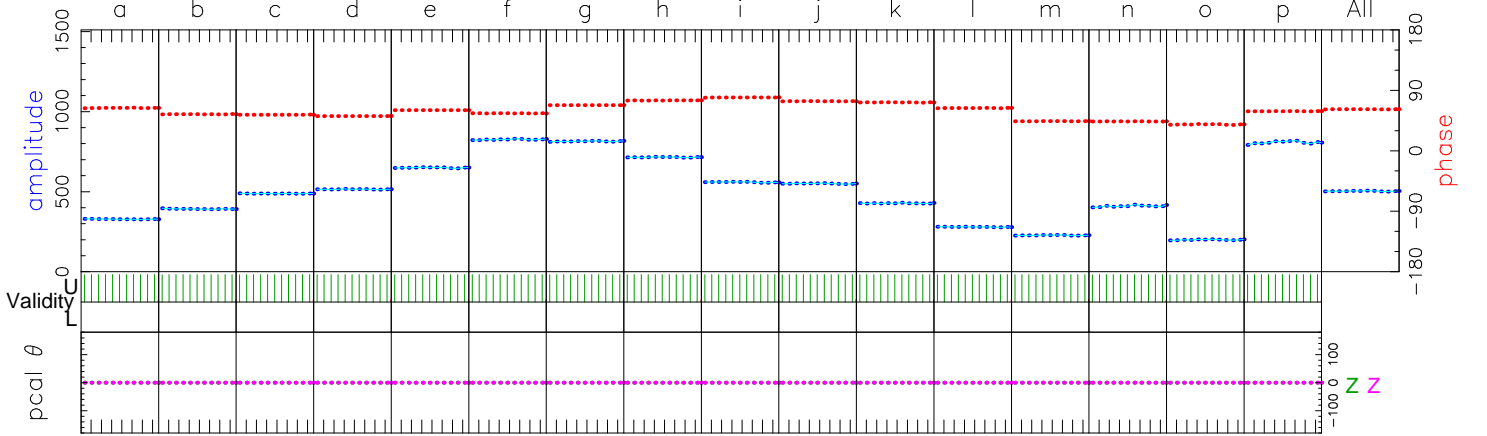


Fringe quality 7

SNR 28204.8
 Int time 419.369
 Amp 503.648
 Phase 61.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000496
 MBD -0.000459
 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
 2020:086:085740
 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
	63.8	54.4	53.6	51.6	60.5	55.8	67.9	74.9	79.3	73.7	72.0	63.6	44.1	43.7	39.2	58.8	Phase	61.8
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	129.9	128.2	129.1	129.0	129.0	128.5	129.1	129.1	129.0	128.5	129.3	129.2	128.9	129.0	128.8	129.5	Sbd box	128.9
UL	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	
Z	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	
Z: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	
Z: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	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Z	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	

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 Sband delay (usec) -4.96000000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -4.96000E-04 +/- 6.1E-07
 Phase delay (usec) 1.99229538290E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 1.99230E-06 +/- 1.3E-10
 Delay rate (us/s) 2.12567285875E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 2.12567E-12 +/- 5.4E-13
 Total phase (deg) 61.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 61.8 +/- 0.0

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 amp/frq (%) 39.7 0.0 Inc. frq. avg. 511.943 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 131.6 el 61.5 pa -27.8 Z: az 131.6 el 61.5 pa -27.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192b/v2/1234/No0078/ZZ..130CNK Output file: /Exps/c192b/v2/1234/No0078/ZZ.W.175.130CNK