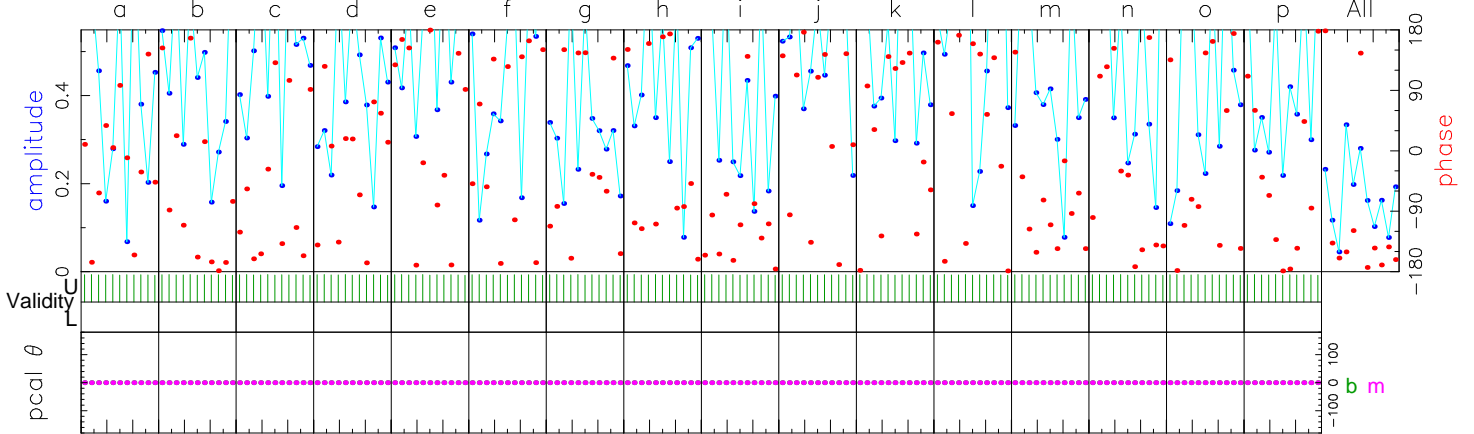


Fringe quality 0
SNR 5.8
Int time 177.863
Amp 0.183
Phase -163.5
PFD 6.7e-01
Delays (us)
SBD 0.839900
MBD 0.013557
Fringe rate (Hz) 0.580160
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054807
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

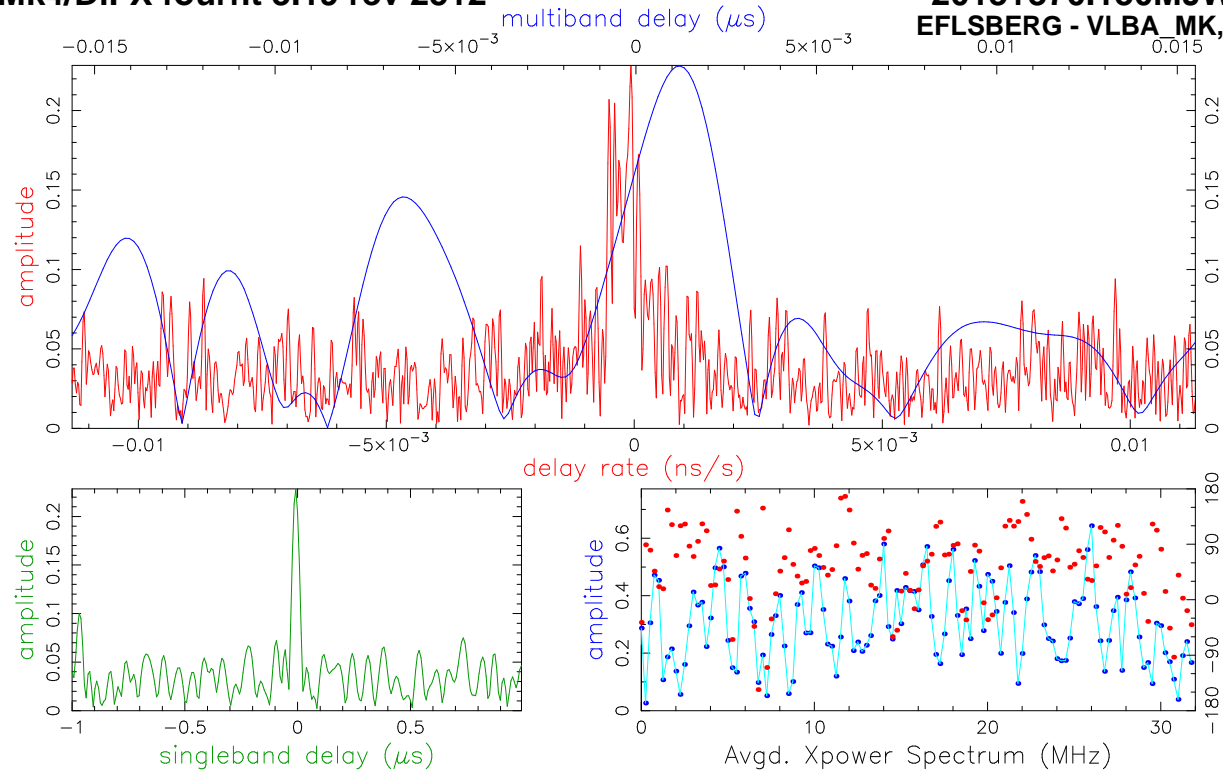
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-34.9	-135.9	-174.6	3.9	159.1	179.2	-147.1	-145.6	-130.9	152.4	143.0	171.2	-103.1	-159.3	-149.6	-175.5	Phase	-163.5
	0.1	0.2	0.3	0.1	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1	Ampl.	0.2
	156.3	86.2	5.7	171.9	88.3	194.9	196.4	247.1	162.2	68.9	28.2	43.3	236.0	49.6	119.7	183.1	Sbd box	236.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
m	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)	8.30093895305E+03			Apriori delay (usec)			8.30011289618E+03			Resid mbdelay (usec)			1.35569E-02			+/- 1.9E-04		
Sband delay (usec)	8.30095279668E+03			Apriori clock (usec)			-3.2208405E+00			Resid sbdelay (usec)			8.39900E-01			+/- 3.0E-03		
Phase delay (usec)	8.30011289091E+03			Apriori clockrate (us/s)			-2.3370279E-07			Resid phdelay (usec)			-5.27107E-06			+/- 6.4E-07		
Delay rate (us/s)	-6.52000721990E-01			Apriori rate (us/s)			-6.52007457071E-01			Resid rate (us/s)			6.73508E-06			+/- 6.2E-09		
Total phase (deg)	152.2			Apriori accel (us/s/s)			-1.64700089098E-05			Resid phase (deg)			-163.5			+/- 19.9		

	RMS	Theor.	Amplitude	0.183 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	24.7	33.0	Search (1024X64)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	53.4	57.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg)	64.5	39.9	Inc. seg. avg.	0.172	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	53.9	69.6	Inc. frq. avg.	0.188	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 106.2 el 66.1 pa -53.5 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 4684.040 1847.915 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/bm..130MJW Output file: /Exps/c192c/v2/1234/No0075/bm.W.12.130MJW

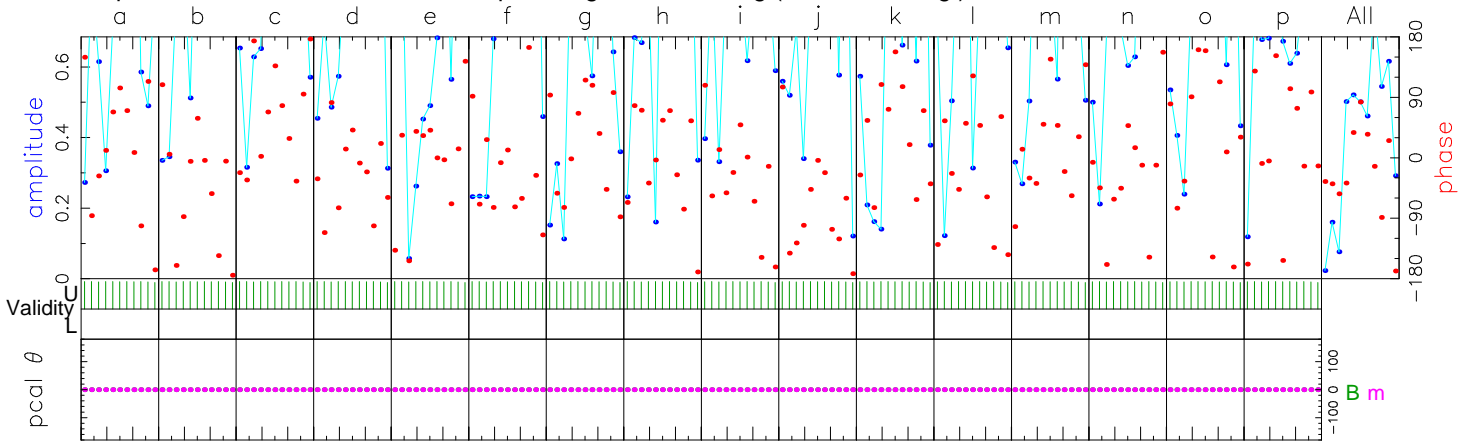


Fringe quality 9

SNR 8.3
Int time 178.502
Amp 0.228
Phase 2.0
PFD 1.2e-08
Delays (us)
SBD -0.008767
MBD 0.001190
Fringe rate (Hz)
-0.005058
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054810
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

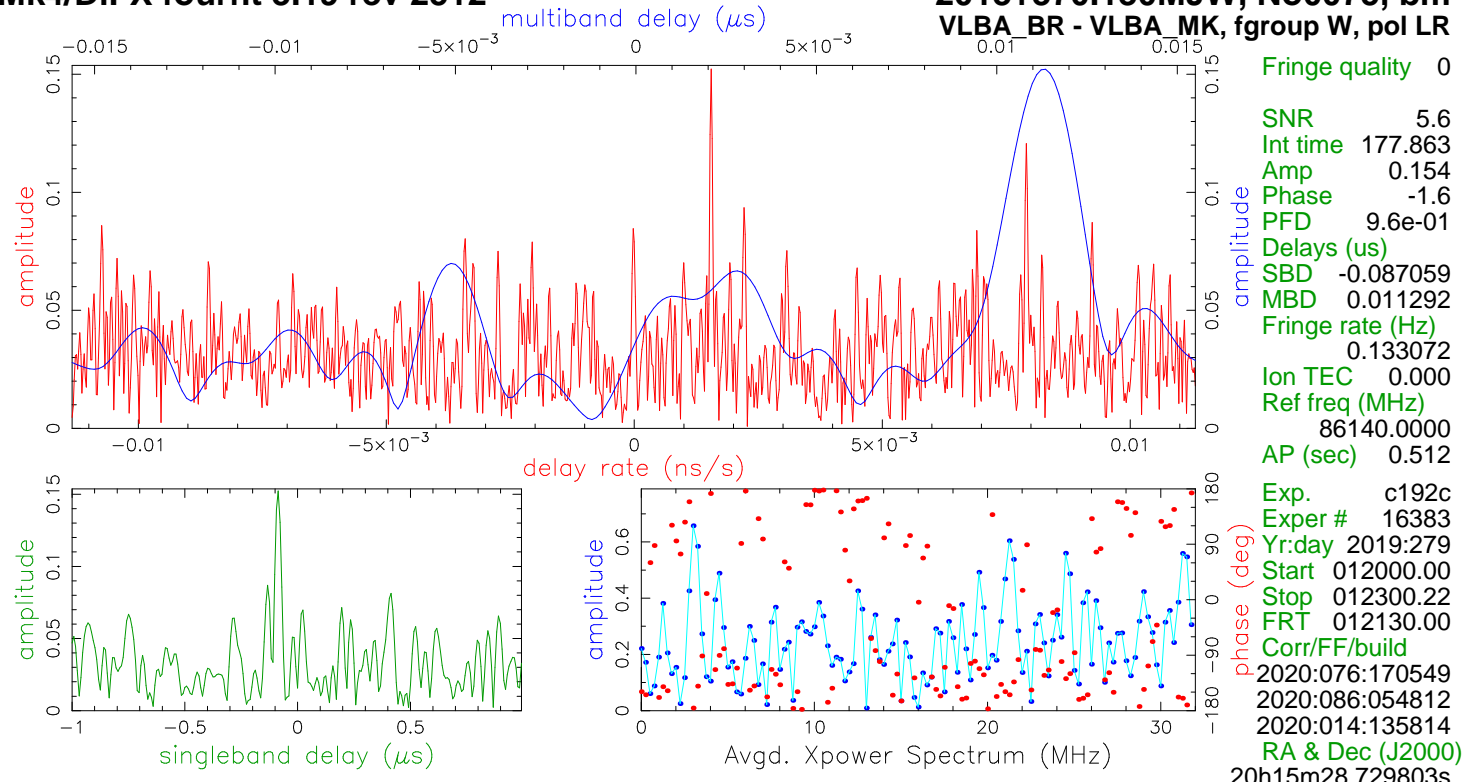


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	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
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		-2.67436052830E+03																
Sband delay (usec)		-2.67437048499E+03																
Phase delay (usec)		-2.67436171843E+03																
Delay rate (us/s)		-1.83138133847E+00																
Total phase (deg)					-153.1													
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																
PC period (AP's)	5	5																
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																

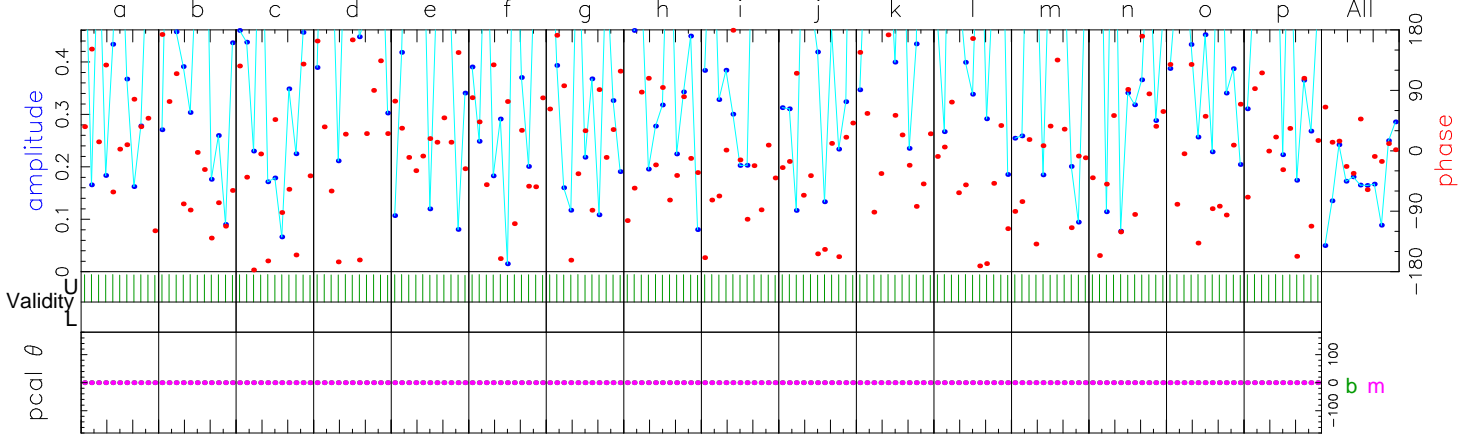
RMS Theor. Amplitude 0.228 +/- 0.027
 ph/seg (deg) 70.0 22.8 Search (1024X64) 0.223
 amp/seg (%) 127.6 39.7 Interp. 0.000
 ph/frq (deg) 57.1 27.5 Inc. seg. avg. 0.379
 amp/frq (%) 62.3 47.9 Inc. frq. avg. 0.304

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(MSamp/s): 64
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite

B: az 300.3 el 23.8 pa 43.5 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 13215.258 5592.320
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/Bm..130MJW Output file: /Exps/c192c/v2/1234/No0075/Bm.W.38.130MJW simultaneous interpolator



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

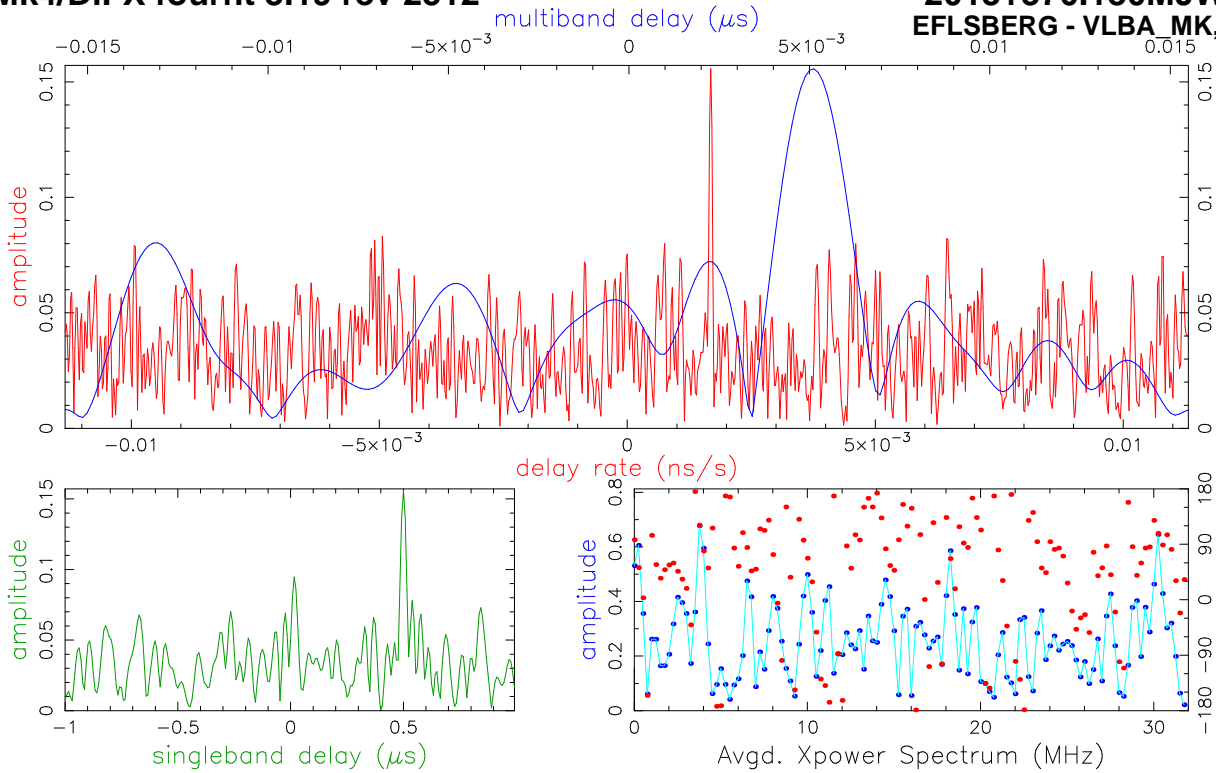


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
17.9	-24.3	-25.6	84.2	4.8	-36.8	20.5	-29.5	-46.2	-16.0	-9.6	2.8	3.0	73.7	-48.1	36.1		Phase	-1.6
0.3	0.2	0.1	0.2	0.4	0.1	0.1	0.1	0.4	0.2	0.2	0.1	0.2	0.1	0.1	0.2		Ampl.	0.1
180.2	153.4	250.6	154.4	118.0	107.5	77.0	167.6	118.6	177.0	153.7	57.8	12.5	77.5	145.9	121.0		Sbd box	117.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
m	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	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.30003043800E+03			Apriori delay (usec)			8.30011289618E+03			Resid mbdelay (usec)			1.12918E-02			+/- 1.9E-04		
Sband delay (usec)	8.30002583718E+03			Apriori clock (usec)			-3.2208405E+00			Resid sbdelay (usec)			-8.70590E-02			+/- 3.1E-03		
Phase delay (usec)	8.30011289613E+03			Apriori clockrate (us/s)			-2.3370279E-07			Resid phdelay (usec)			-5.20853E-08			+/- 6.6E-07		
Delay rate (us/s)	-6.52005912233E-01			Apriori rate (us/s)			-6.52007457071E-01			Resid rate (us/s)			1.54484E-06			+/- 6.4E-09		
Total phase (deg)	314.1			Apriori accel (us/s/s)			-1.64700089098E-05			Resid phase (deg)			-1.6			+/- 20.6		

	RMS	Theor.	Amplitude	0.154 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	33.6	34.1	Search (1024X64)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	44.8	59.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	40.5	41.2	Inc. seg. avg.	0.148	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011
amp/frq (%)	59.7	71.9	Inc. frq. avg.	0.148	Data rate(Mb/s): 2048	nlags: 128	ion window (TEC)	0.00	0.00

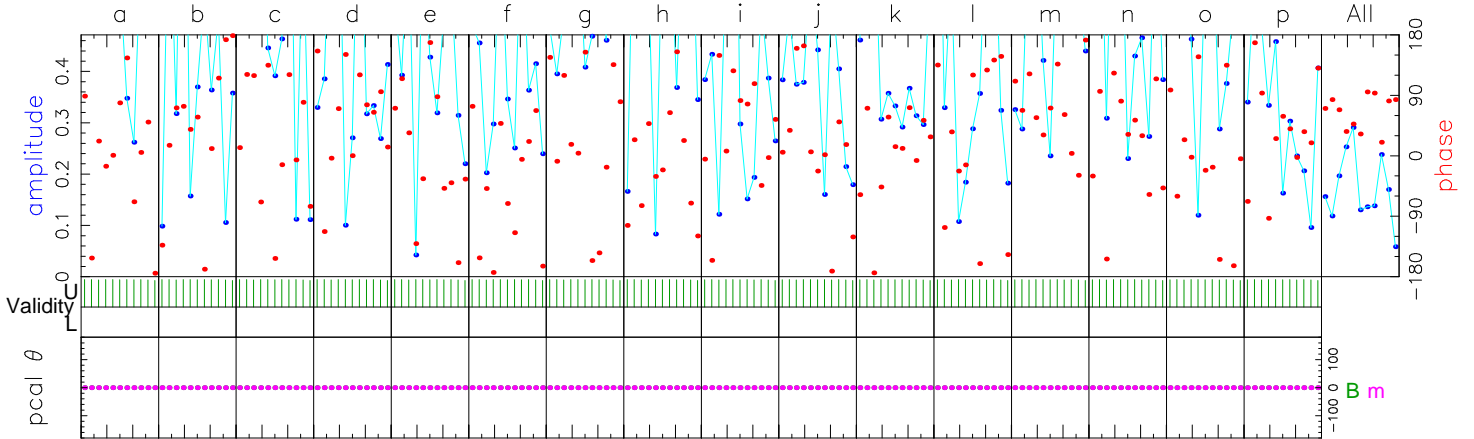
b: az 106.2 el 66.1 pa -53.5 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 4684.040 1847.915 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/bm..130MJW Output file: /Exps/c192c/v2/1234/No0075/bm.W.56.130MJW

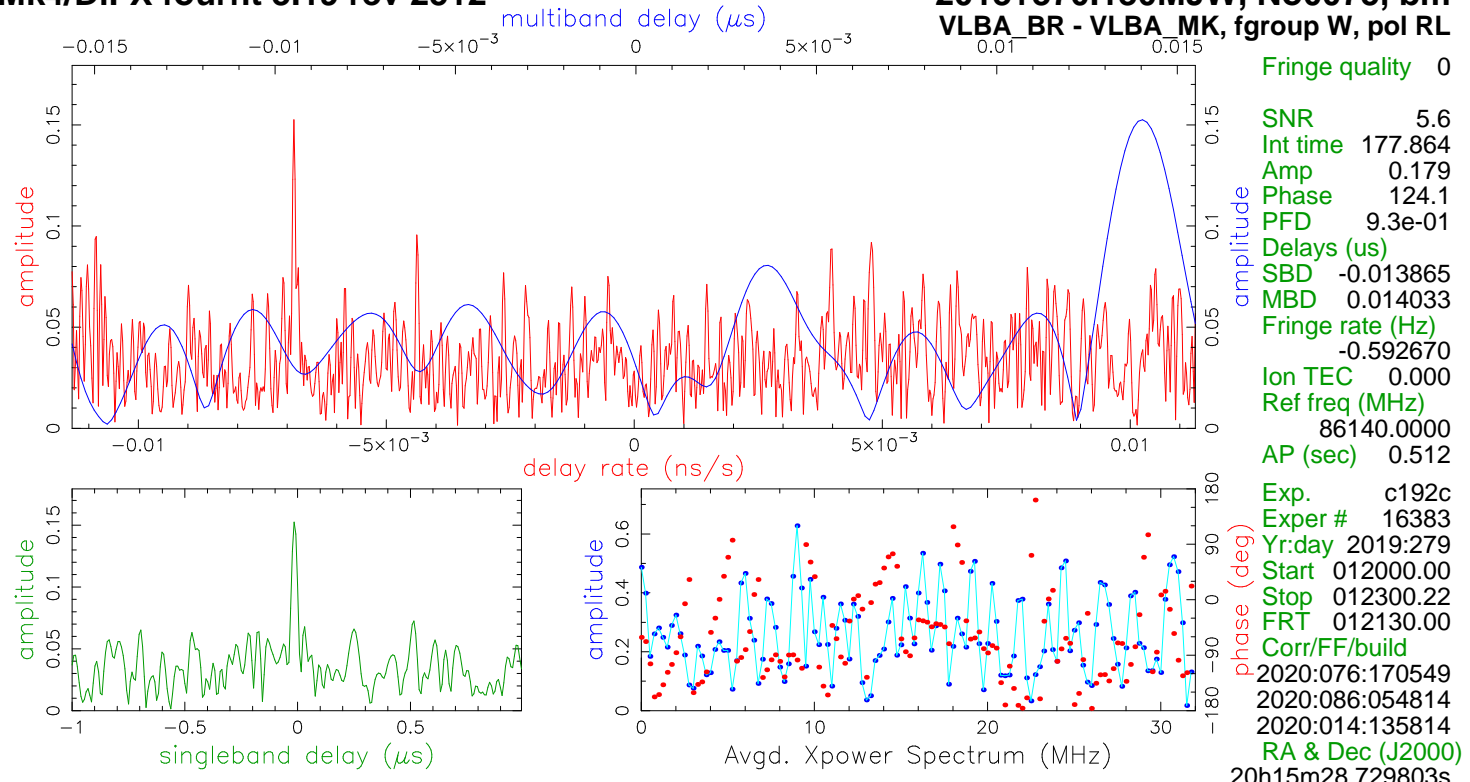


Fringe quality 0
SNR 5.7
Int time 178.502
Amp 0.157
Phase 58.8
PFD 7.9e-01
Delays (us)
SBD 0.500131
MBD 0.005101
Fringe rate (Hz) 0.145758
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054812
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

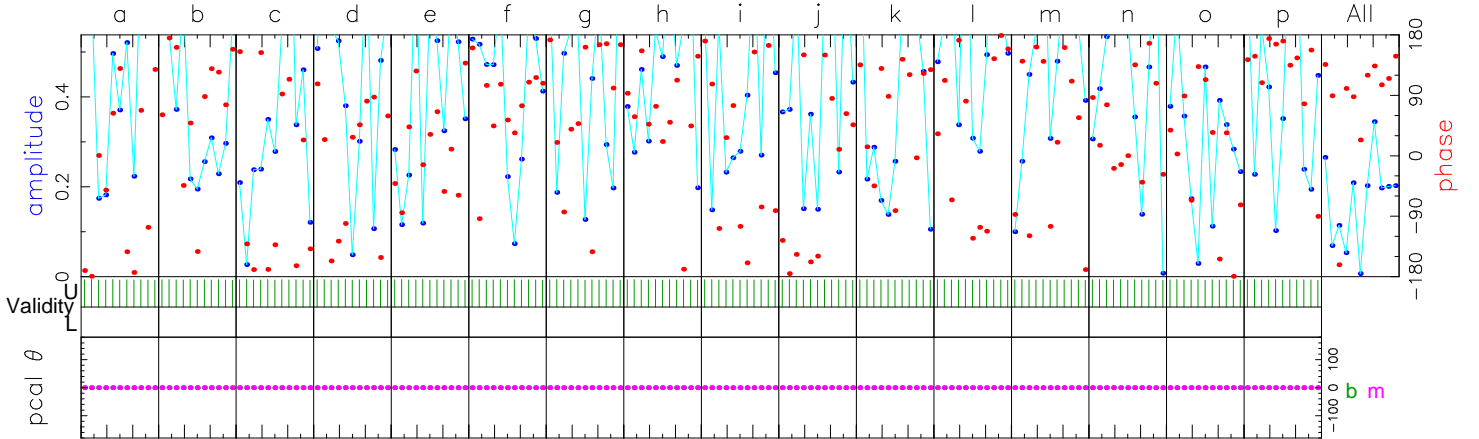
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All																		
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	86.6	58.8																		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86.6	58.8																		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86.6	58.8																		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	86.6	58.8																		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	86.6	58.8																		
B	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86.6	58.8																		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	86.6	58.8																		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids																			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks																			
Group delay (usec)(sbd)		-2.67385661700E+03					Apriori delay (usec)					-2.67436171849E+03					Resid mbdelay (usec)					5.10149E-03					+/- 1.9E-04									
Sband delay (usec)		-2.67386158749E+03					Apriori clock (usec)					1.4201283E+01					Resid sbdelay (usec)					5.00131E-01					+/- 3.0E-03									
Phase delay (usec)		-2.67436171660E+03					Apriori clockrate (us/s)					-1.9130770E-07					Resid phdelay (usec)					1.89526E-06					+/- 6.5E-07									
Delay rate (us/s)		-1.83137958765E+00					Apriori rate (us/s)					-1.83138127976E+00					Resid rate (us/s)					1.69210E-06					+/- 6.2E-09									
Total phase (deg)		-96.3					Apriori accel (us/s/s)					4.38429498896E-05					Resid phase (deg)					58.8					+/- 20.1									
ph/seg (deg)		RMS 25.8					Theor. 33.4					Amplitude 0.157 +/- 0.028					Pcal mode: MANUAL, MANUAL					PC period (AP's) 5, 5														
amp/seg (%)		42.7					58.3					Search (1024X64) 0.150					Pcal rate: 0.000E+00, 0.000E+00 (us/s)					sb window (us) -1.000 1.000														
ph/frq (deg)		41.2					40.3					Interp. 0.000					Bits/sample: 2x2					SampCntNorm: enabled					mb window (us) -0.016 0.016									
amp/frq (%)		49.3					70.3					Inc. seg. avg. 0.148					Sample rate(MSamp/s): 64					Data rate(Mb/s): 2048					nlags: 128 t_cohere infinite					dr window (ns/s) -0.011 0.011				
B: az 300.3 el 23.8 pa 43.5		m: az 57.7 el 31.4 pa -87.9					u,v (fr/asec) 13215.258 5592.320															ion window (TEC) 0.00 0.00					simultaneous interpolator									
Control file: cf_1234_gmva		Input file: /Exps/c192c/v2/1234/No0075/Bm..130MJW					Output file: /Exps/c192c/v2/1234/No0075/Bm.W.57.130MJW																													



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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	161.6	121.9	140.1	93.7	27.6	105.1	155.9	79.5	-167.9	135.6	113.4	155.7	143.6	49.0	52.5	146.6	Phase	124.1
	0.3	0.2	0.2	0.1	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.1	0.4	Ampl.	0.2
	68.7	236.0	75.1	13.2	146.6	160.6	79.9	145.3	112.1	105.5	48.3	65.2	102.2	61.3	163.9	126.3	Sbd box	127.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b:m	0:0	0:0	0:0	0:0	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	
m	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	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	8.30009567968E+03			Apriori delay (usec)			8.30011289618E+03			Resid mbdelay (usec)			1.40335E-02			+/- 1.9E-04		
Sband delay (usec)	8.30009903068E+03			Apriori clock (usec)			-3.2208405E+00			Resid sbdelay (usec)			-1.38655E-02			+/- 3.1E-03		
Phase delay (usec)	8.30011290018E+03			Apriori clockrate (us/s)			-2.3370279E-07			Resid phdelay (usec)			4.00213E-06			+/- 6.6E-07		
Delay rate (us/s)	-6.52014337384E-01			Apriori rate (us/s)			-6.52007457071E-01			Resid rate (us/s)			-6.88031E-06			+/- 6.3E-09		
Total phase (deg)	79.8			Apriori accel (us/s/s)			-1.64700089098E-05			Resid phase (deg)			124.1			+/- 20.5		

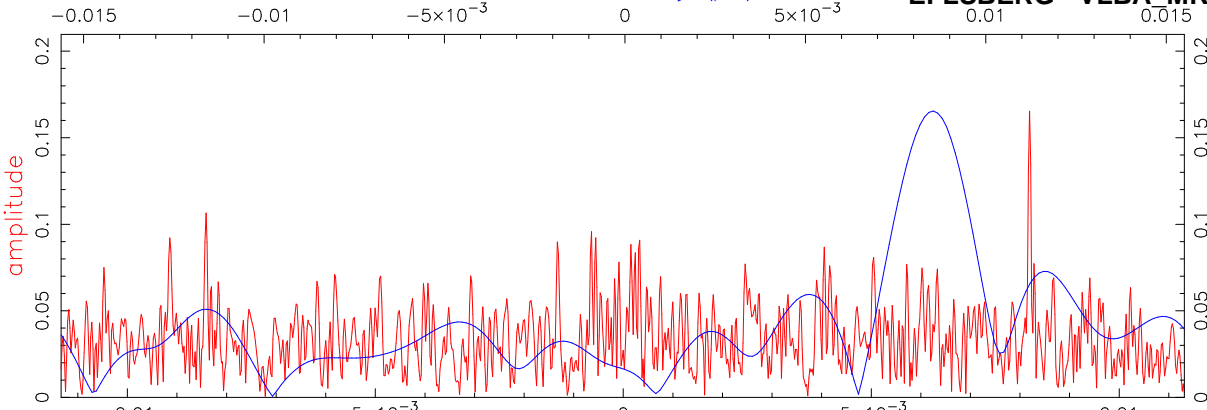
	RMS	Theor.	Amplitude	0.179 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	42.5	34.0	Search (1024X64)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016 0.016
amp/seg (%)	62.5	59.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	48.4	41.0	Inc. seg. avg.	0.169	Sample rate(MSamp/s): 64		ion window (TEC)	0.00 0.00
amp/frq (%)	52.2	71.5	Inc. frq. avg.	0.189	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite		

b: az 106.2 el 66.1 pa -53.5 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 4684.040 1847.915 simultaneous interpolator

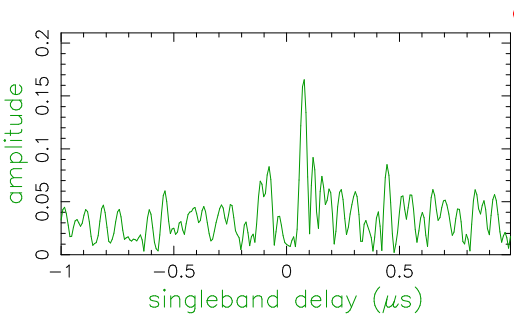
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/bm..130MJW Output file: /Exps/c192c/v2/1234/No0075/bm.W.73.130MJW

multiband delay (μ s)

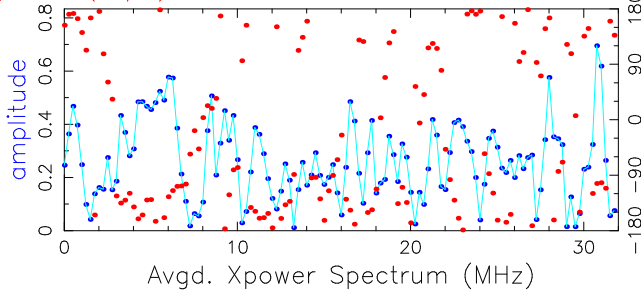
Fringe quality 0



SNR 6.1
Int time 178.502
Amp 0.210
Phase -127.4
PFD 1.2e-01
Delays (us)
SBD 0.075631
MBD 0.008504
Fringe rate (Hz)
0.707225
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

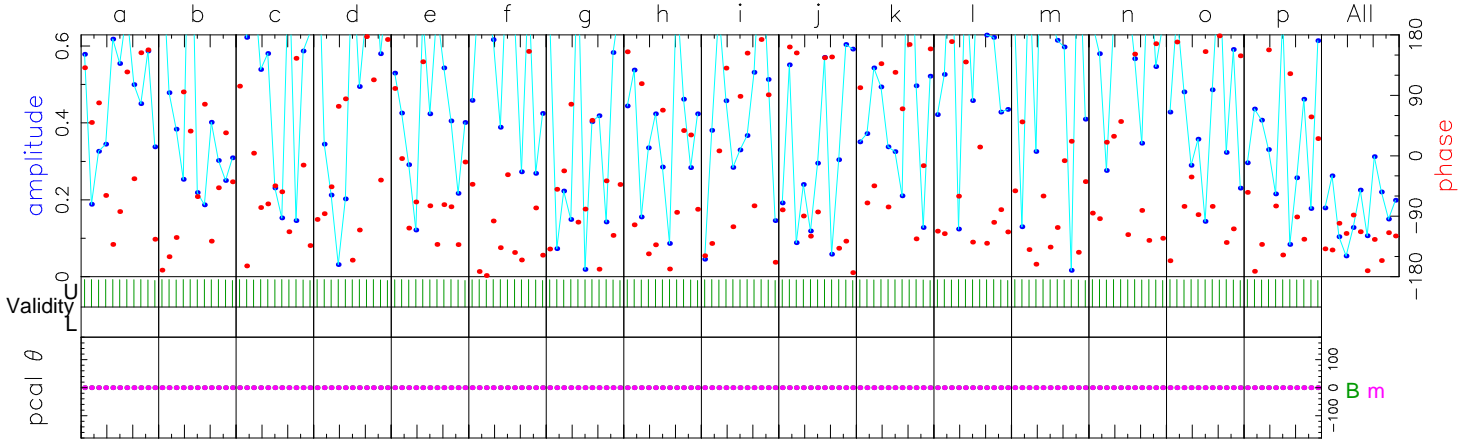


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054814
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



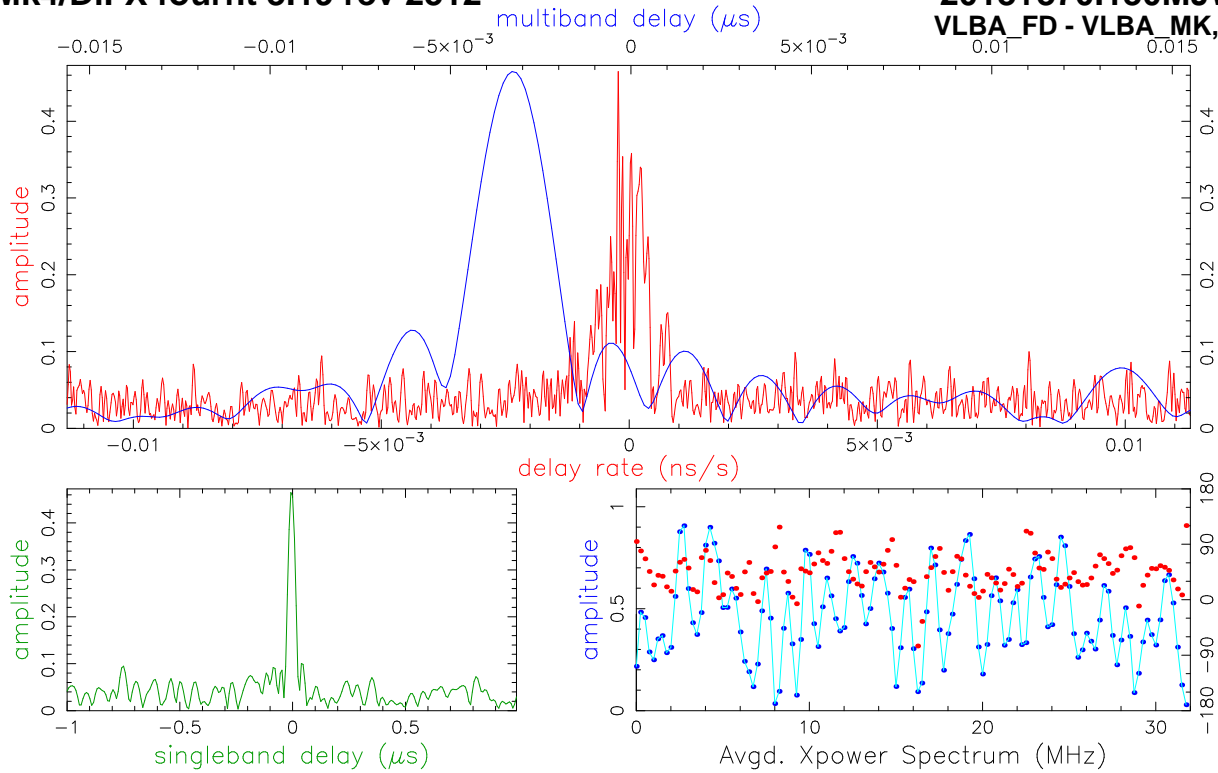
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000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

Group delay (usec)(sbd)	-2.67429071470E+03	Apriori delay (usec)	-2.67436171849E+03	Resid mbdelay (usec)	8.50379E-03	+/-	1.8E-04
Sband delay (usec)	-2.67428608799E+03	Apriori clock (usec)	1.4201283E+01	Resid sbdelay (usec)	7.56305E-02	+/-	2.8E-03
Phase delay (usec)	-2.67436172260E+03	Apriori clockrate (us/s)	-1.9130770E-07	Resid phdelay (usec)	-4.10864E-06	+/-	6.0E-07
Delay rate (us/s)	-1.83137306958E+00	Apriori rate (us/s)	-1.83138127976E+00	Resid rate (us/s)	8.21018E-06	+/-	5.8E-09
Total phase (deg)	-282.5	Apriori accel (us/s/s)	4.38429498896E-05	Resid phase (deg)	-127.4	+/-	18.7

ph/seg (deg)	23.1	Theor.	31.1	Amplitude	0.210 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	44.1		54.3	Search (1024X64)	0.163	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	37.6		37.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016	
amp/frq (%)	51.6		65.4	Inc. seg. avg.	0.193	Sample rate(MSamp/s):	64	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.198	Data rate(Mb/s):	2048	nlags: 128	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 300.3 el 23.8 pa 43.5 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 13215.258 5592.320 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/Bm..130MJW Output file: /Exps/c192c/v2/1234/No0075/Bm.W.74.130MJW

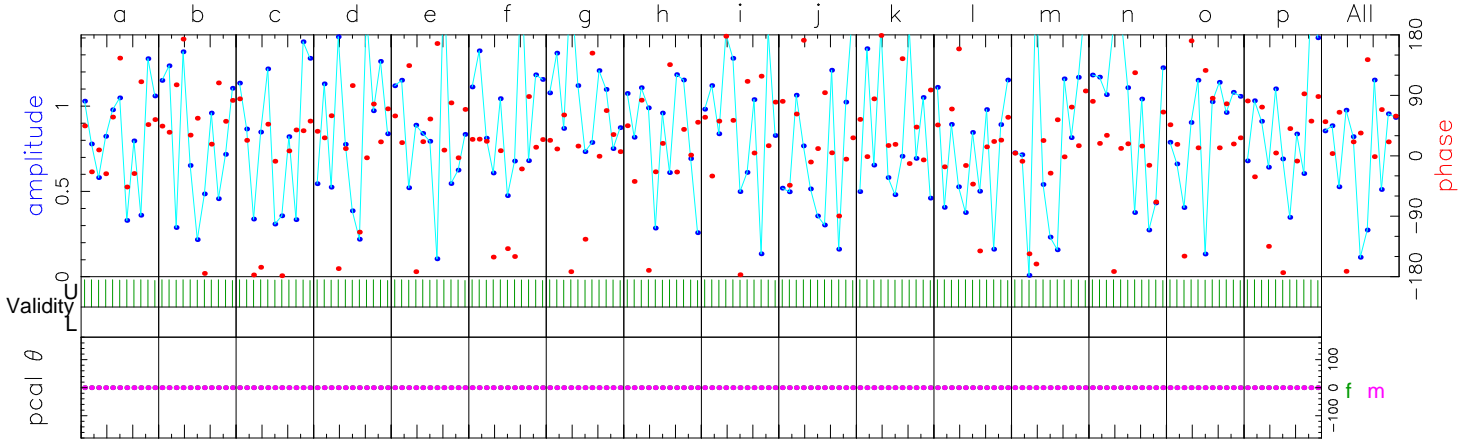


Fringe quality 7

SNR 17.2
Int time 177.323
Amp 0.473
Phase 37.9
PFD 0.0e+00
Delays (us)
SBD -0.004554
MBD -0.003243
Fringe rate (Hz)
-0.019092
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

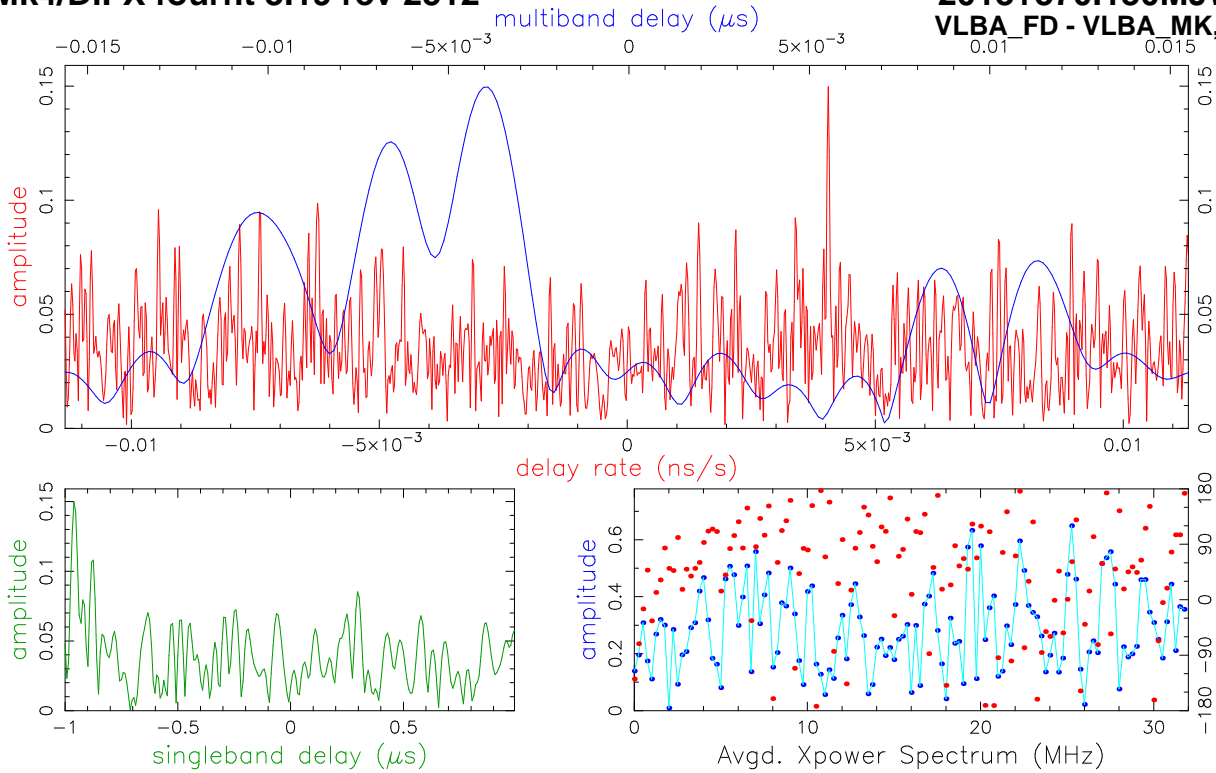
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054820
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	32.9	67.1	50.6	39.4	43.3	11.6	33.5	28.6	51.1	23.7	32.4	29.5	37.3	36.3	43.0	49.4		Phase	37.9				
	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.6	0.5	0.5		Ampl.	0.5				
	128.5	128.7	129.1	128.2	128.4	128.3	128.4	128.7	128.5	128.7	128.4	127.2	128.9	128.2	128.3	127.5		Sbd box	128.4				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
f:m	0:0	0:0	0:0	0:0	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					
f:m	0:0	0:0	0:0	0:0	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					
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			9.57521487420E+03															Apriori delay (usec)	9.57521811769E+03	Resid mbdelay (usec)	-3.24350E-03	+/-	6.3E-05
Sband delay (usec)			9.57521356369E+03															Apriori clock (usec)	-2.1244853E+00	Resid sbdelay (usec)	-4.55400E-03	+/-	1.0E-03
Phase delay (usec)			9.57521811892E+03															Apriori clockrate (us/s)	-8.2257206E-08	Resid phdelay (usec)	1.22302E-06	+/-	2.1E-07
Delay rate (us/s)			-8.08666546552E-01															Apriori rate (us/s)	-8.08666324917E-01	Resid rate (us/s)	-2.21635E-07	+/-	2.1E-09
Total phase (deg)				274.8														Apriori accel (us/s/s)	-3.92931160572E-05	Resid phase (deg)	37.9	+/-	6.7

ph/seg (deg) 59.9 11.0 Search (1024X64) 0.457 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.9 19.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.4 13.3 Inc. seg. avg. 0.715 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 13.8 23.2 Inc. frq. avg. 0.464 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 55.9 el 77.0 pa -115.7 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5790.662 -1179.381 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/fm..130MJW Output file: /Exps/c192c/v2/1234/No0075/fm.W.111.130MJW

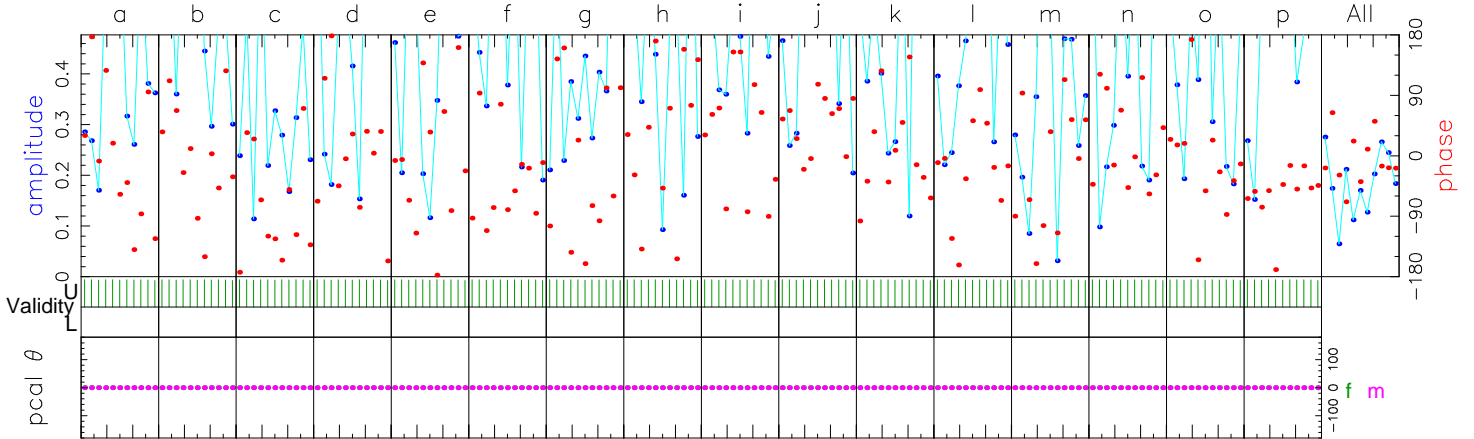


Fringe quality 0

SNR 5.5
Int time 177.323
Amp 0.159
Phase -8.5
PFD 9.9e-01
Delays (us)
SBD -0.958909
MBD -0.003939
Fringe rate (Hz) 0.350420
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

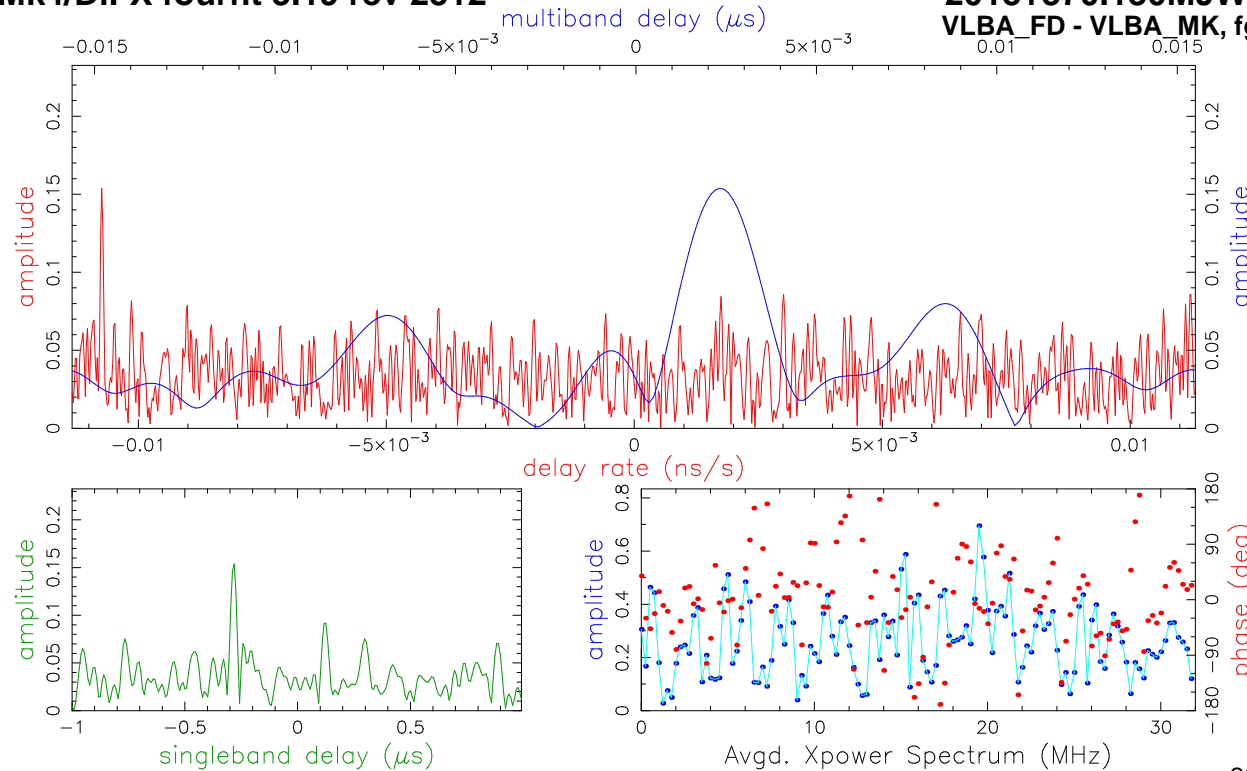
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054823
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-40.7	6.6	-89.0	-3.1	-57.4	-52.2	-154.2	78.1	68.6	45.3	-15.7	8.7	28.9	3.9	-26.4	-49.9		Phase	-8.5
	0.1	0.2	0.1	0.3	0.1	0.3	0.1	0.2	0.2	0.4	0.3	0.2	0.1	0.3	0.3	0.5		Ampl.	0.2
	35.2	115.1	80.8	23.7	75.6	204.2	209.6	156.4	86.8	5.6	4.3	229.2	255.1	185.0	1.5	6.2		Sbd box	6.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
f:m	0:0	0:0	0:0	0:0	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	
f:m	0:0	0:0	0:0	0:0	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	9.57424542858E+03			Apriori delay (usec)			9.57521811769E+03			Resid mbdelay (usec)			-3.93911E-03			+/- 2.0E-04			
Sband delay (usec)	9.57425920869E+03			Apriori clock (usec)			-2.1244853E+00			Resid sbdelay (usec)			-9.58909E-01			+/- 3.1E-03			
Phase delay (usec)	9.57521811742E+03			Apriori clockrate (us/s)			-8.2257206E-08			Resid phdelay (usec)			-2.74241E-07			+/- 6.7E-07			
Delay rate (us/s)	-8.08662256883E-01			Apriori rate (us/s)			-8.08666324917E-01			Resid rate (us/s)			4.06803E-06			+/- 6.5E-09			
Total phase (deg)	228.4			Apriori accel (us/s/s)			-3.92931160572E-05			Resid phase (deg)			-8.5			+/- 20.9			

ph/seg (deg) 37.3 34.6 Search (1024X64) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.2 60.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 61.8 41.7 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 81.0 72.8 Inc. frq. avg. 0.176 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 55.9 el 77.0 pa -115.7 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5790.662 -1179.381 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/fm..130MJW Output file: /Exps/c192c/v2/1234/No0075/fm.W.132.130MJW

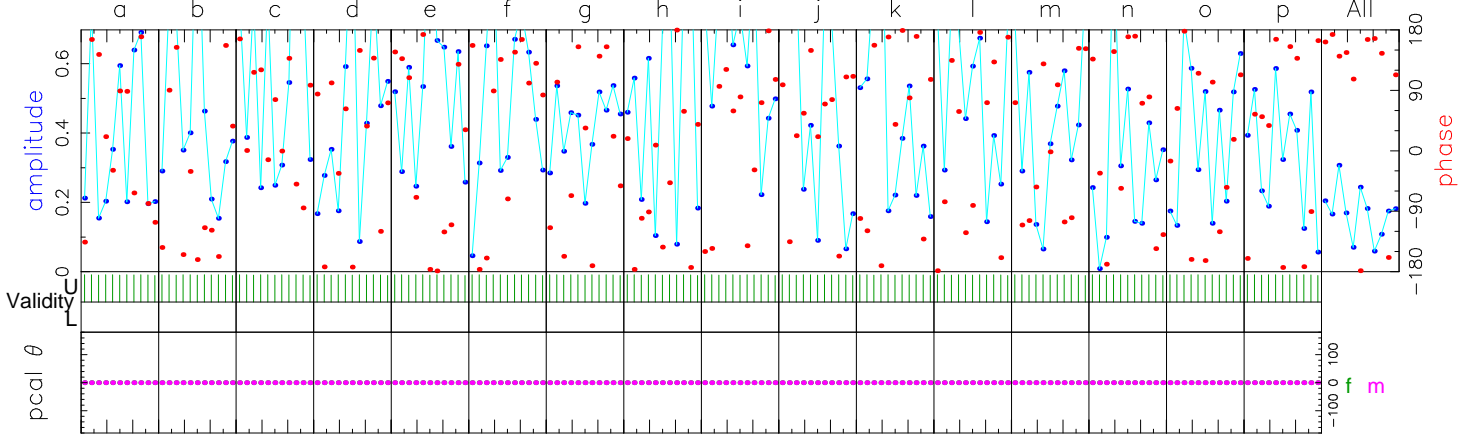


Fringe quality 0

SNR 5.7
Int time 177.324
Amp 0.233
Phase 157.2
PFD 8.4e-01
Delays (us)
SBD -0.283640
MBD 0.002316
Fringe rate (Hz)
-0.926423
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054825
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

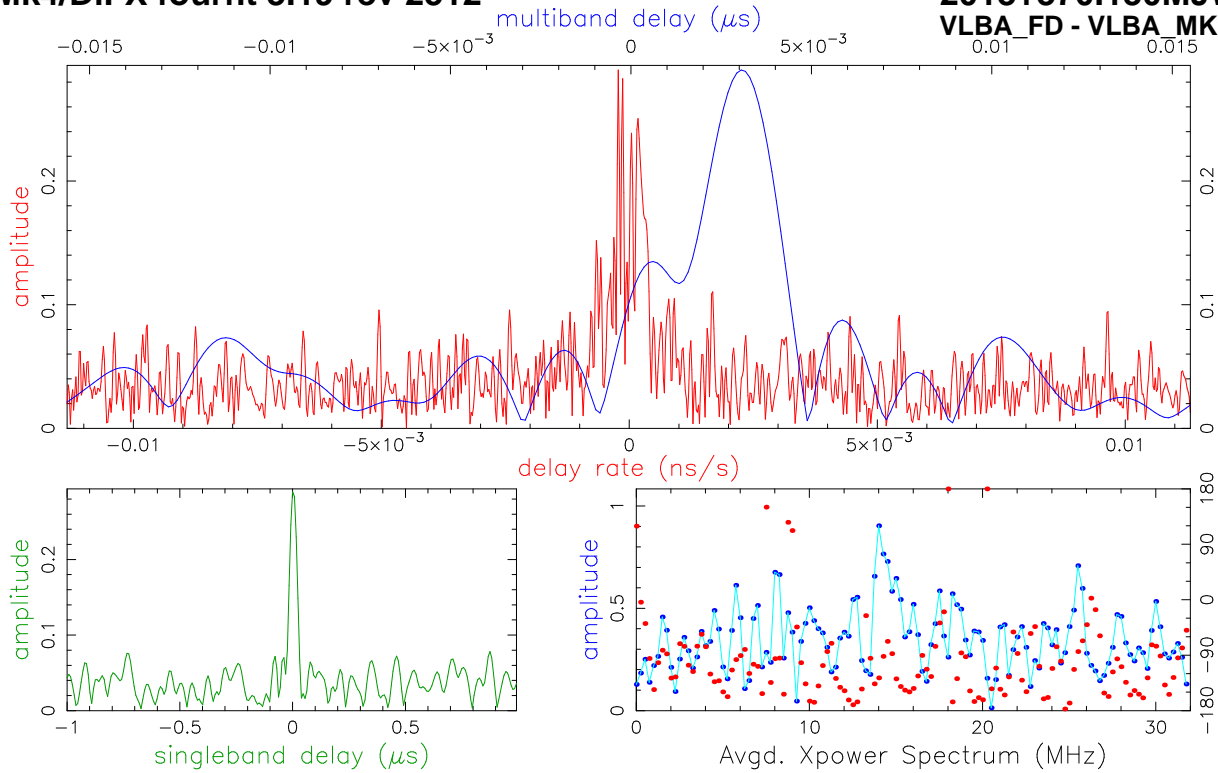


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
180.0	-177.7	-10.8	128.1	172.0	137.8	162.5	-115.3	122.3	89.5	-175.1	171.6	-178.5	160.4	168.4	157.4	Phase	157.2	
0.1	0.3	0.1	0.3	0.5	0.5	0.1	0.2	0.3	0.4	0.4	0.4	0.1	0.3	0.2	0.2	Ampl.	0.2	
224.1	218.6	105.8	129.6	14.4	93.4	12.7	180.9	81.8	25.6	91.9	72.2	240.1	255.1	124.8	124.8	Sbd box	92.7	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	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	
f:m	0:0	0:0	0:0	0:0	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 9.57493918409E+03 Apriori delay (usec) 9.57521811769E+03 Resid mbdelay (usec) 2.31640E-03 +/- 1.9E-04
 Sband delay (usec) 9.57493447769E+03 Apriori clock (usec) -2.1244853E+00 Resid sbdelay (usec) -2.83640E-01 +/- 3.0E-03
 Phase delay (usec) 9.57521812276E+03 Apriori clockrate (us/s) -8.2257206E-08 Resid phdelay (usec) 5.06902E-06 +/- 6.5E-07
 Delay rate (us/s) -8.08677079766E-01 Apriori rate (us/s) -8.08666324917E-01 Resid rate (us/s) -1.07548E-05 +/- 6.3E-09
 Total phase (deg) 34.1 Apriori accel (us/s/s) -3.92931160572E-05 Resid phase (deg) 157.2 +/- 20.2

RMS Theor. Amplitude 0.233 +/- 0.041 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 27.0 33.5 Search (1024X64) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.0 58.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 57.3 40.5 Inc. seg. avg. 0.217 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 59.6 70.6 Inc. frq. avg. 0.230 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 55.9 el 77.0 pa -115.7 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5790.662 -1179.381 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/fm..130MJW Output file: /Exps/c192c/v2/1234/No0075/fm.W.153.130MJW

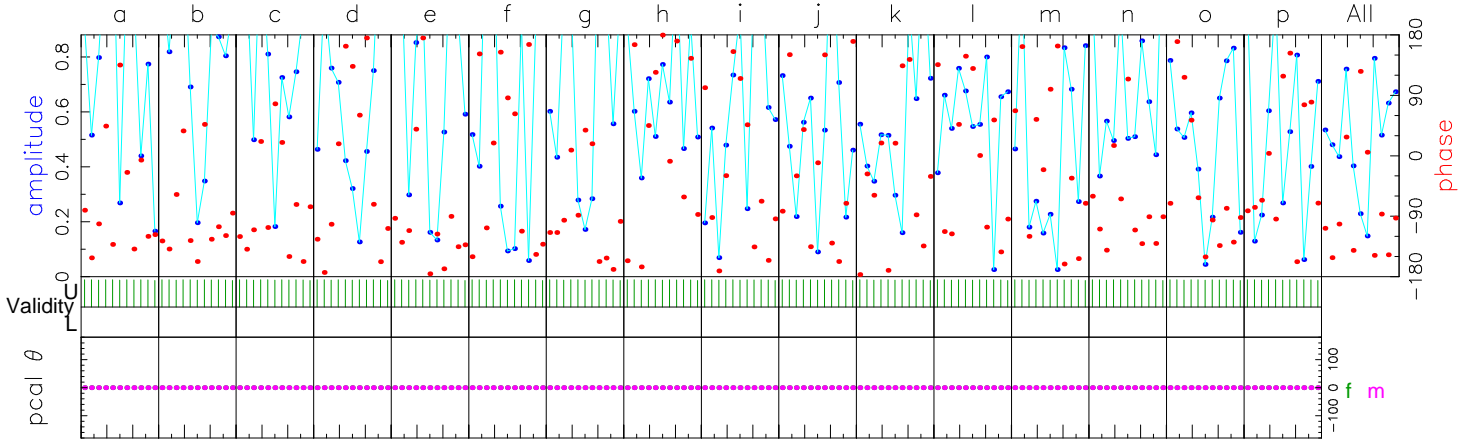


Fringe quality 9

SNR 10.7
Int time 177.324
Amp 0.294
Phase -118.3
PFD 2.6e-18
Delays (us)
SBD 0.002902
MBD 0.003099
Fringe rate (Hz) -0.019322
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054818
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

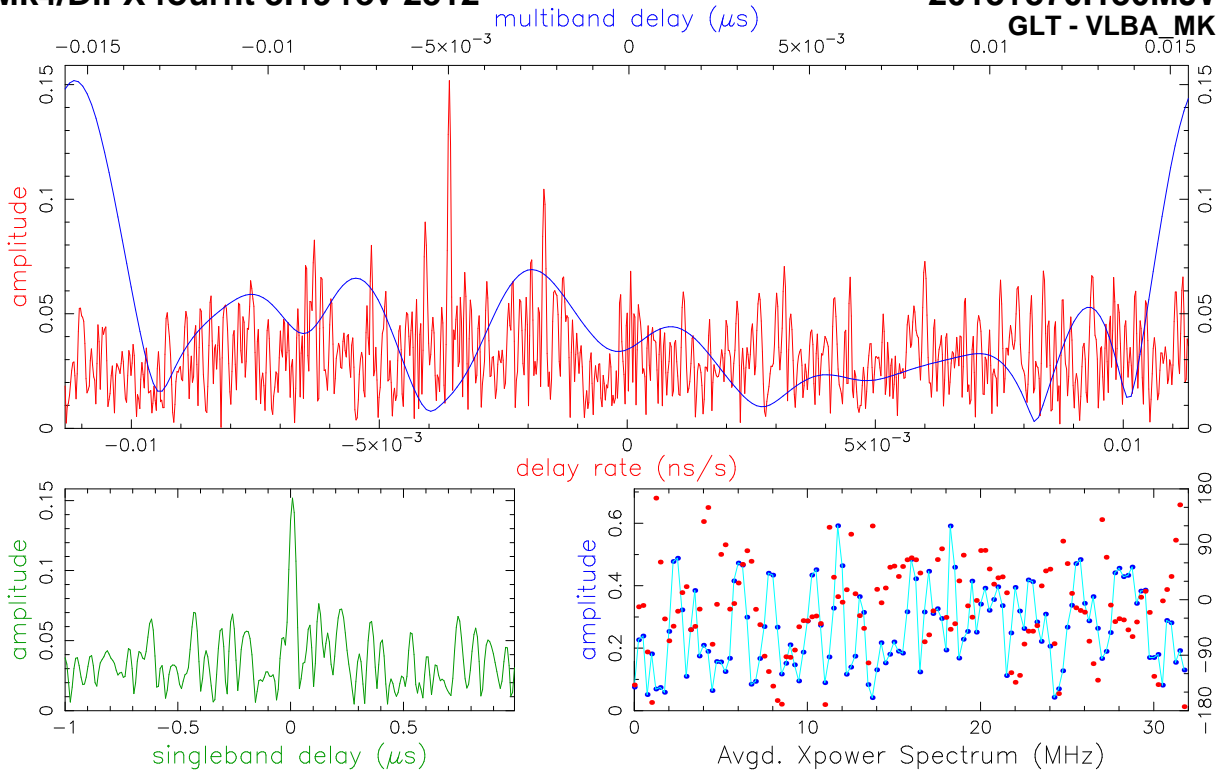
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-96.7	-101.0	-98.0	-139.6	-124.3	-125.6	-116.0	174.0	-128.9	-141.8	-120.3	-137.4	-150.4	-93.9	-109.0	-95.5		Phase -118.3
	0.4	0.5	0.5	0.4	0.5	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.1	0.5	0.2	0.2		Ampl. 0.3
	128.3	129.4	129.1	129.9	128.9	130.9	49.4	52.6	250.4	131.1	228.8	235.2	188.2	128.9	254.9	34.3		Sbd box 129.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
f:m	0:0	0:0	0:0	0:0	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
f:m	0:0	0:0	0:0	0:0	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
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)	9.57522121701E+03			Apriori delay (usec)			9.57521811769E+03			Resid mbdelay (usec)			3.09932E-03			+/- 1.0E-04		
Sband delay (usec)	9.57522101969E+03			Apriori clock (usec)			-2.1244853E+08			Resid sbdelay (usec)			2.90200E-03			+/- 1.6E-03		
Phase delay (usec)	9.57521811388E+03			Apriori clockrate (us/s)			-8.2257206E-08			Resid phdelay (usec)			-3.81530E-06			+/- 3.5E-07		
Delay rate (us/s)	-8.08666549226E-01			Apriori rate (us/s)			-8.08666324917E-01			Resid rate (us/s)			-2.24310E-07			+/- 3.3E-09		
Total phase (deg)	118.6			Apriori accel (us/s/s)			-3.92931160572E-05			Resid phase (deg)			-118.3			+/- 10.7		
ph/seg (deg)	RMS	Theor.	Amplitude		0.294 +/- 0.027		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			sb window (us)		-1.000 1.000			
amp/seg (%)	71.1	17.8	Search (1024X64)		0.285		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			SampCntNorm: enabled			mb window (us)		-0.016 0.016			
ph/frq (deg)	98.7	31.0	Interp.		0.000		Bits/sample: 2x2			Sample rate(MSamp/s): 64			dr window (ns/s)		-0.011 0.011			
amp/frq (%)	26.1	21.4	Inc. seg. avg.		0.486		Data rate(Mb/s): 2048			nlags: 128 t_cohere infinite			ion window (TEC)		0.00 0.00			
	42.6	37.4	Inc. frq. avg.		0.295													

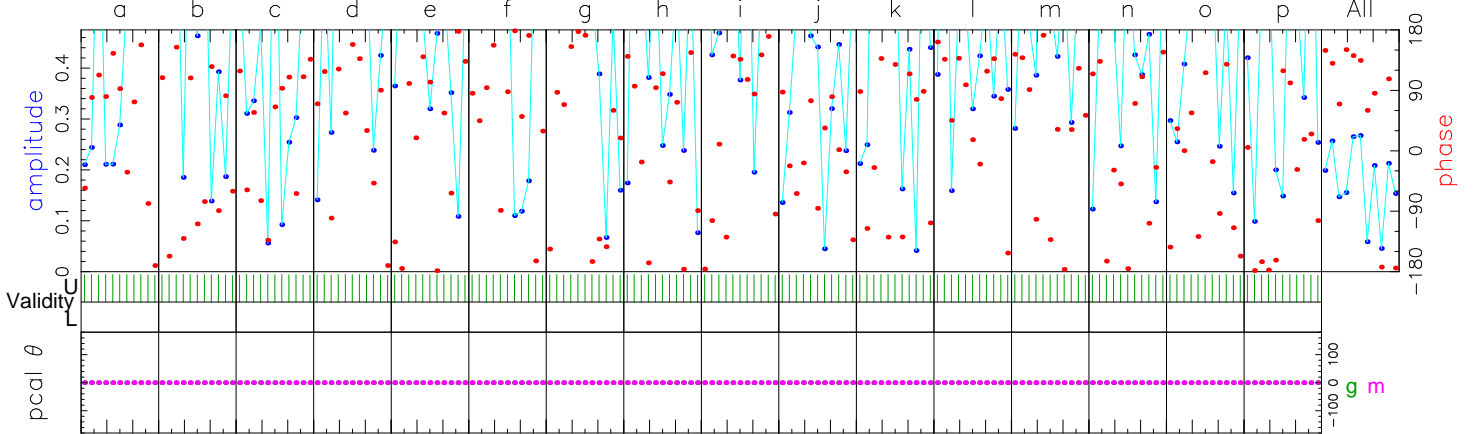
f: az 55.9 el 77.0 pa -115.7 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5790.662 -1179.381 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/fm..130MJW Output file: /Exps/c192c/v2/1234/No0075/fm.W.96.130MJW



Fringe quality 0
 SNR 5.6
 Int time 178.686
 Amp 0.158
 Phase 128.2
 PFD 9.7e-01
 Delays (us)
 SBD 0.008704
 MBD -0.015352
 Fringe rate (Hz)
 -0.308901
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build
 2020:076:170549
 2020:086:054827
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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

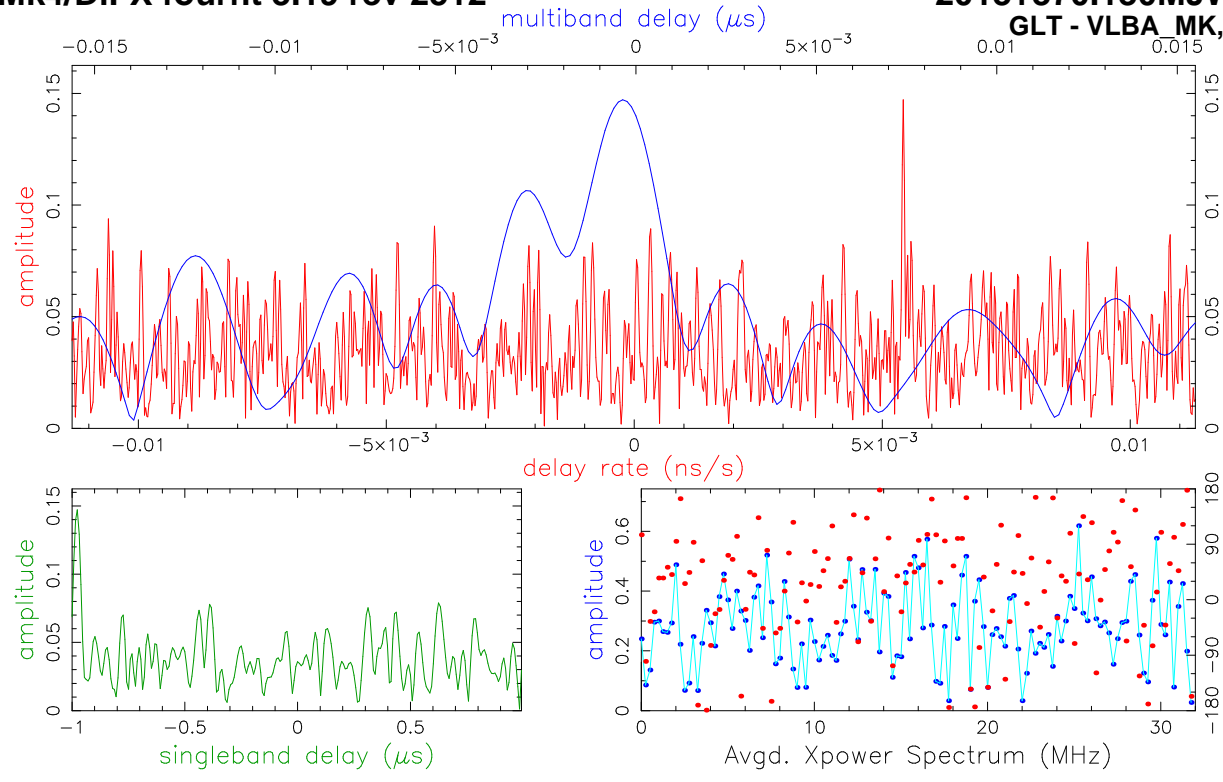


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	131.5	-163.4	93.9	113.2	127.0	97.8	158.9	103.0	166.1	-26.6	131.0	117.5	133.2	162.3	134.3	65.3	Phase	128.2
	0.1	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.1	0.3	0.3	0.1	0.0	0.1	Ampl.	0.2
	2.1	4.4	85.6	131.4	155.1	112.5	245.8	145.2	130.9	99.8	96.3	131.1	175.2	55.2	151.8	22.0	Sbd box	130.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	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	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) 4.99393121772E+03 Apriori delay (usec) 4.99391531942E+03 Resid mbdelay (usec) -1.53517E-02 +/- 1.9E-04
 Sband delay (usec) 4.99392402342E+03 Apriori clock (usec) -1.2934062E+00 Resid sbdelay (usec) 8.70400E-03 +/- 3.1E-03
 Phase delay (usec) 4.99391532355E+03 Apriori clockrate (us/s) 8.3692290E-08 Resid phdelay (usec) 4.13507E-06 +/- 6.7E-07
 Delay rate (us/s) -1.15994353069E+00 Apriori rate (us/s) -1.15993994465E+00 Resid rate (us/s) -3.58604E-06 +/- 6.4E-09
 Total phase (deg) 349.5 Apriori accel (us/s/s) 1.67327046119E-05 Resid phase (deg) 128.2 +/- 20.6

RMS Theor. Amplitude 0.158 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 40.7 34.2 Search (1024X64) 0.150 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.2 59.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 53.0 41.3 Inc. seg. avg. 0.159 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.0 72.0 Inc. frq. avg. 0.161 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 206.9 el 49.5 pa 7.4 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 8366.702 5421.746 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/gm..130MJW Output file: /Exps/c192c/v2/1234/No0075/gm.W.163.130MJW

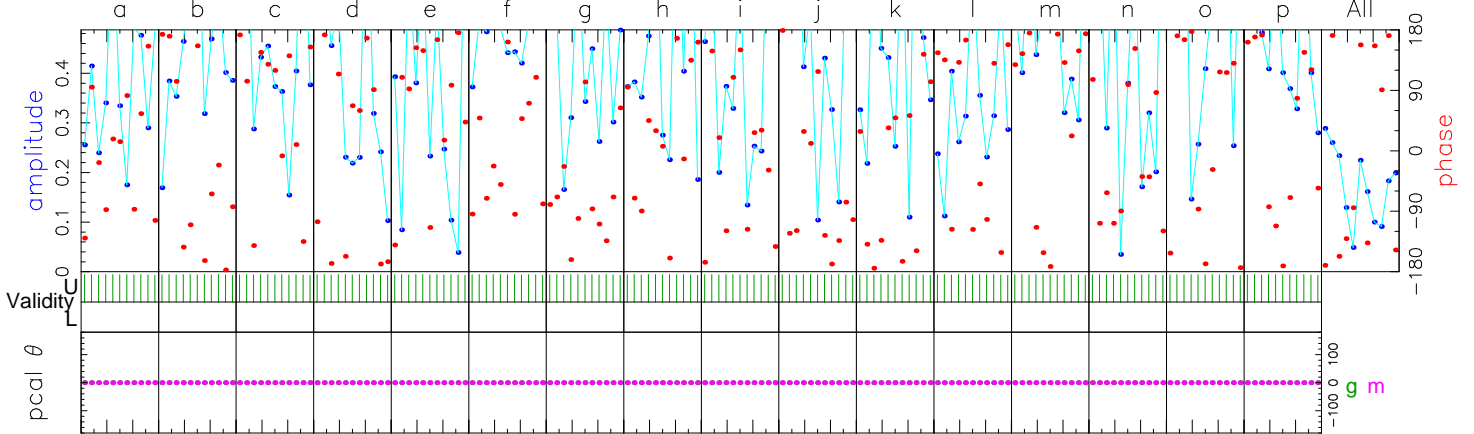


Fringe quality 0

SNR 5.4
Int time 178.663
Amp 0.163
Phase -172.2
PFD 1.0e+00
Delays (us)
SBD -0.978172
MBD -0.000341
Fringe rate (Hz) 0.467310
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build 2020:076:170549
2020:086:054829
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

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

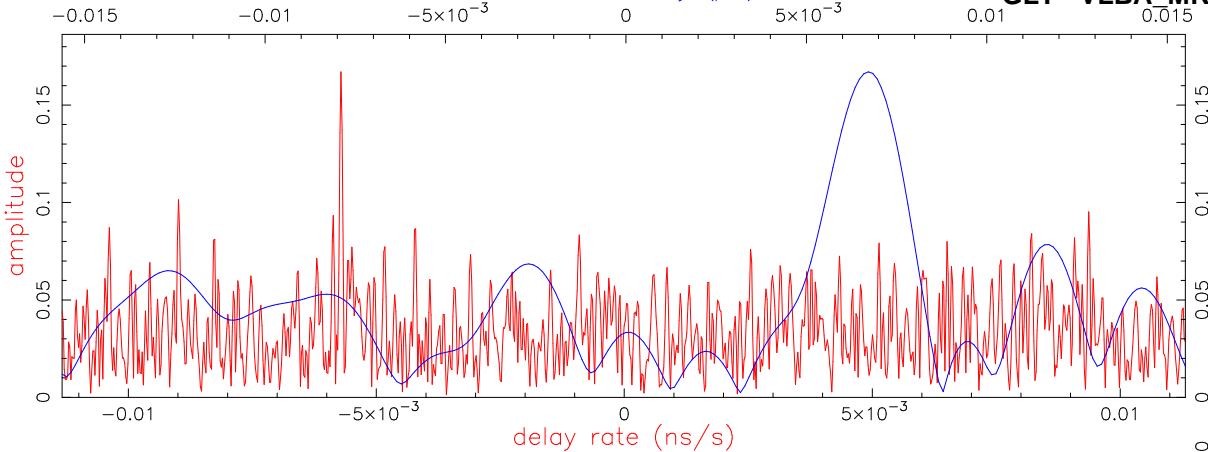


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-9.6	-147.3	149.2	171.1	125.3	-14.7	-93.7	87.4	-176.4	-118.4	179.6	-157.0	171.9	-128.9	168.2	-179.0		Phase -172.2
	0.1	0.2	0.2	0.3	0.2	0.1	0.3	0.1	0.1	0.3	0.2	0.2	0.5	0.2	0.5	0.3		Ampl. 0.2
	191.1	143.2	93.1	247.3	1.4	200.3	118.3	42.2	70.0	3.6	73.2	63.0	4.0	148.1	3.4	59.9		Sbd box 3.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
m	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
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
																		Chan ids
																		Tracks
Group delay (usec)(sbd)		4.99294622833E+03								4.99391531942E+03								Resid mbdelay (usec) -3.41086E-04 +/- 2.0E-04
Sband delay (usec)		4.99293714692E+03								-1.2934062E+00								Resid sbdelay (usec) -9.78172E-01 +/- 3.2E-03
Phase delay (usec)		4.99391531386E+03								8.3692290E-08								Resid phdelay (usec) -5.55452E-06 +/- 6.8E-07
Delay rate (us/s)		-1.15993451965E+00								-1.15993994465E+00								Resid rate (us/s) 5.42500E-06 +/- 6.6E-09
Total phase (deg)				49.1						1.67327046119E-05								Resid phase (deg) -172.2 +/- 21.2

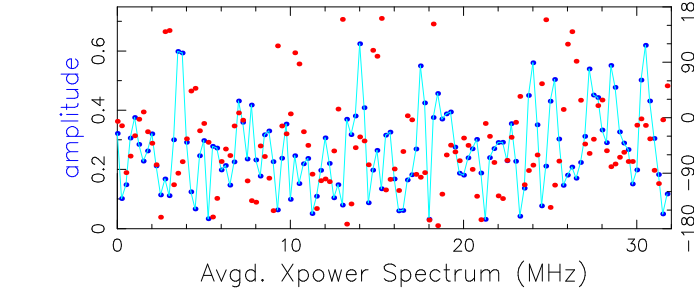
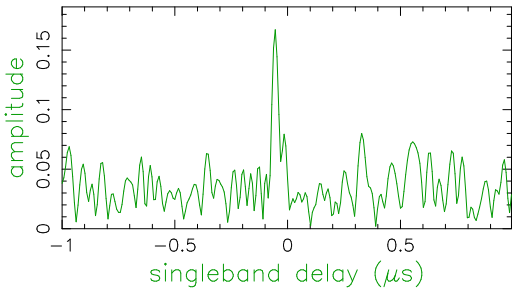
ph/seg (deg) 46.2 35.2 Amplitude 0.163 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.4 61.4 Search (1024X64) 0.145 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 75.4 42.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 78.6 74.1 Inc. seg. avg. 0.162 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 g: az 206.9 el 49.5 pa 7.4 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 8366.702 5421.746 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/gm..130MJW Output file: /Exps/c192c/v2/1234/No0075/gm.W.179.130MJW simultaneous interpolator

multiband delay (μ s)

Fringe quality 0

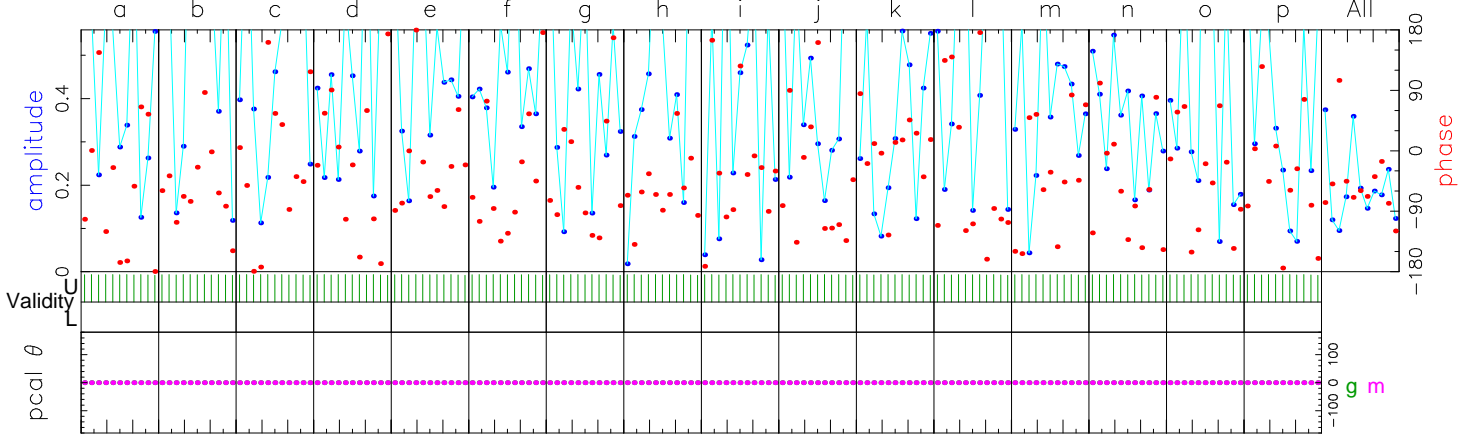


SNR 6.1
 Int time 178.685
 Amp 0.186
 Phase -62.4
 PFD 1.2e-01
 Delays (us)
 SBD -0.055543
 MBD 0.006714
 Fringe rate (Hz)
 -0.493374
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build
 2020:076:170549
 2020:086:054833
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-88.5	-49.0	-33.7	122.3	-51.4	-99.0	-79.9	-56.1	-78.4	-98.9	8.8	-126.4	-70.6	-92.3	-16.5	-64.3	Phase	-62.4
	0.2	0.4	0.2	0.0	0.3	0.2	0.2	0.4	0.2	0.2	0.3	0.3	0.1	0.1	0.3	0.1	Ampl.	0.2
	129.7	122.0	241.7	133.5	55.5	5.0	156.0	227.7	55.3	160.1	165.0	89.5	104.0	10.8	195.0	220.6	Sbd box	121.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	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	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)		4.99385953306E+03				Apriori delay (usec)		4.99391531942E+03				Resid mbdelay (usec)		6.71364E-03			+/-	1.8E-04
Sband delay (usec)		4.99385977642E+03				Apriori clock (usec)		-1.2934062E+00				Resid sbdelay (usec)		-5.55430E-02			+/-	2.8E-03
Phase delay (usec)		4.99391531741E+03				Apriori clockrate (us/s)		8.3692290E-08				Resid phdelay (usec)		-2.01369E-06			+/-	6.0E-07
Delay rate (us/s)		-1.15994567224E+00				Apriori rate (us/s)		-1.15993994465E+00				Resid rate (us/s)		-5.72759E-06			+/-	5.8E-09
Total phase (deg)				158.9		Apriori accel (us/s/s)		1.67327046119E-05				Resid phase (deg)		-62.4			+/-	18.7

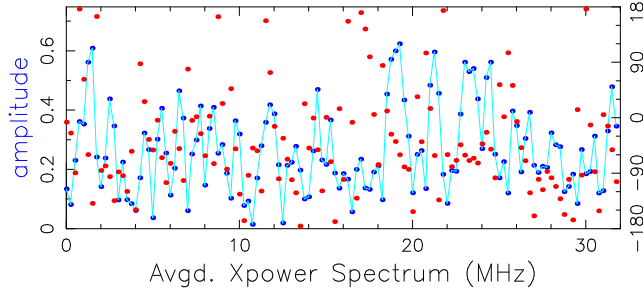
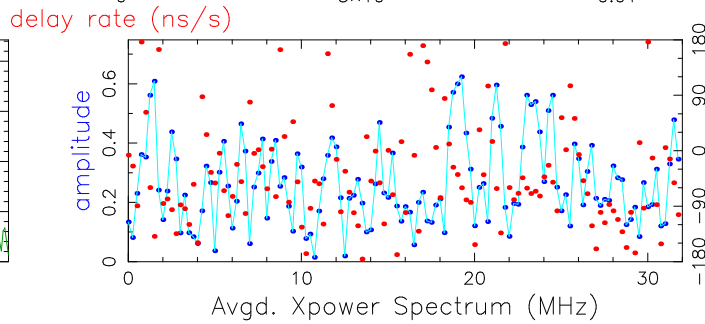
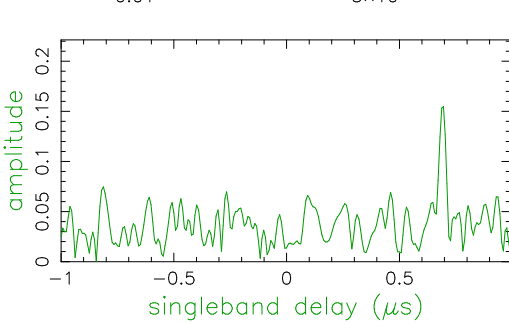
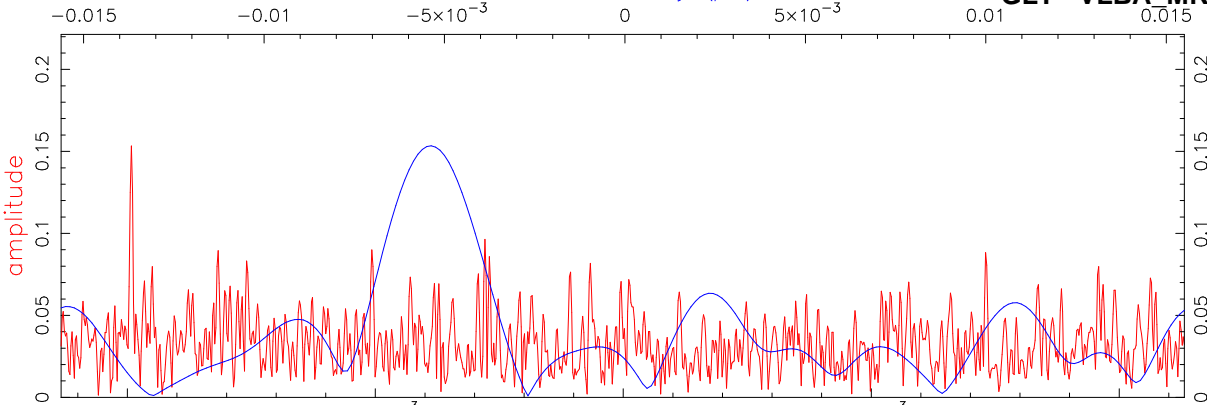
	RMS	Theor.	Amplitude	0.186 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	56.2	31.1	Search (1024X64)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	55.7	54.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg)	58.6	37.5	Inc. seg. avg.	0.193	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	63.4	65.4	Inc. frq. avg.	0.189	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
g: az 206.9 el 49.5 pa 7.4			m: az 57.7 el 31.4 pa -87.9		u,v (fr/asec) 8366.702 5421.746	simultaneous interpolator

multiband delay (μ s)

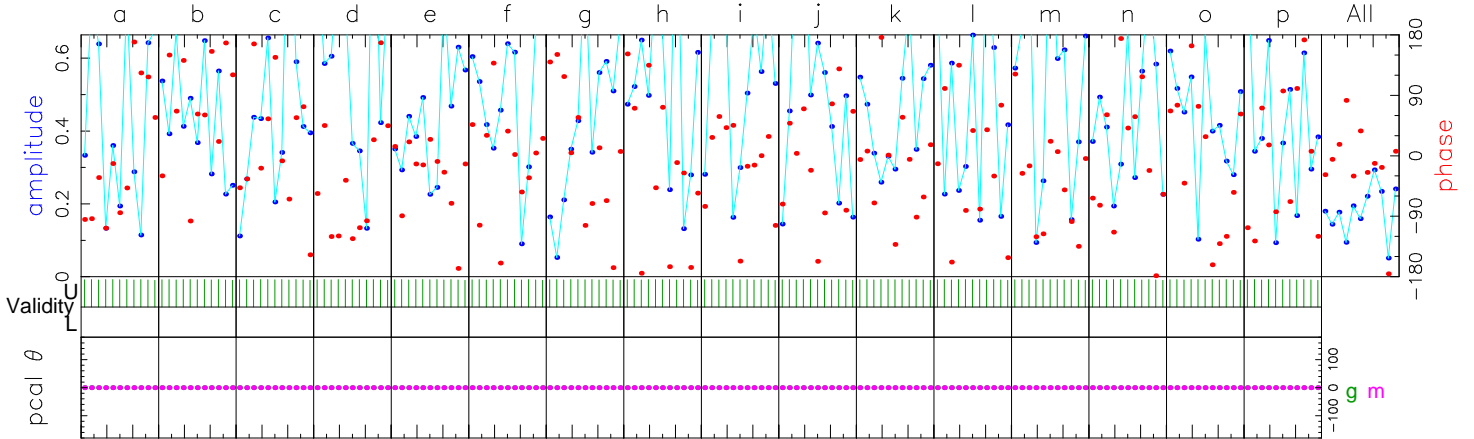
Fringe quality 0

SNR 5.8
 Int time 178.663
 Amp 0.221
 Phase -5.1
 PFD 6.2e-01
 Delays (us)
 SBD 0.691796
 MBD -0.005432
 Fringe rate (Hz)
 -0.854916
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build
 2020:076:170549
 2020:086:054835
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"



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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-48.1	76.5	-2.6	-44.8	-23.1	15.5	-38.5	13.9	13.0	15.2	-15.4	7.0	-14.4	4.4	65.5	-96.7		Phase	-5.1				
	0.2	0.2	0.2	0.3	0.4	0.4	0.2	0.1	0.5	0.2	0.4	0.2	0.4	0.1	0.1	0.1		Ampl.	0.2				
	169.8	50.1	165.0	162.3	9.6	51.4	100.8	5.5	217.7	204.4	95.2	182.1	50.4	78.3	149.7	48.5		Sbd box	217.5				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
g	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		PC freqs					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
g:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC					
g	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
m	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					
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
																		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			4.99459738718E+03															Apriori delay (usec)	4.99391531942E+03	Resid mbdelay (usec)	-5.43224E-03	+/-	1.9E-04
Sband delay (usec)			4.99460711492E+03															Apriori clock (usec)	-1.2934062E+00	Resid sbdelay (usec)	6.91796E-01	+/-	3.0E-03
Phase delay (usec)			4.99391531925E+03															Apriori clockrate (us/s)	8.3692290E-08	Resid phdelay (usec)	-1.66002E-07	+/-	6.4E-07
Delay rate (us/s)			-1.15994986938E+00															Apriori rate (us/s)	-1.15993994465E+00	Resid rate (us/s)	-9.92473E-06	+/-	6.2E-09
Total phase (deg)					216.2													Apriori accel (us/s/s)	1.67327046119E-05	Resid phase (deg)	-5.1	+/-	19.9

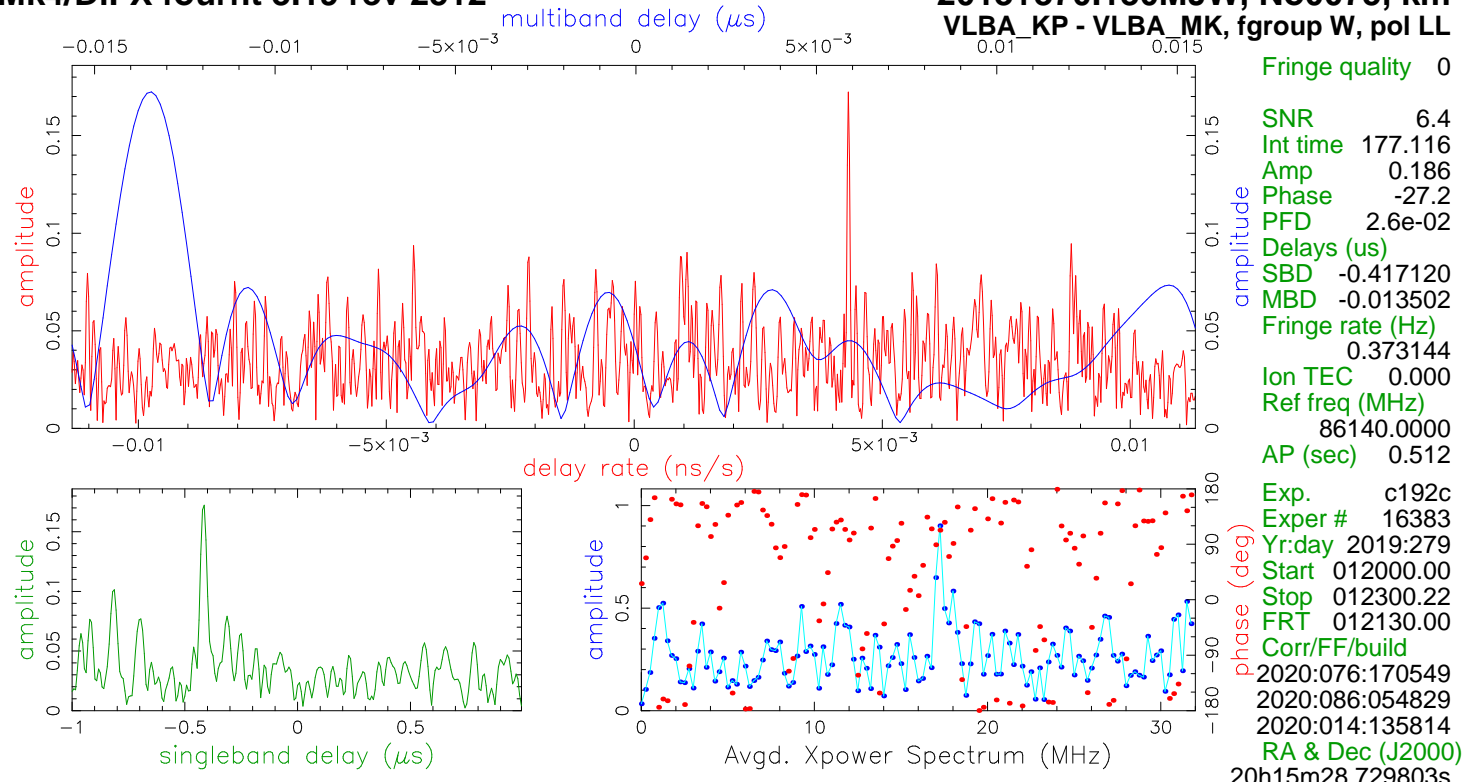
	RMS	Theor.	Amplitude	0.221 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.8	32.9	Search (1024X64)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	43.9	57.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.016 0.016
ph/frq (deg)	43.8	39.7	Inc. seg. avg.	0.218	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	60.0	69.3	Inc. frq. avg.	0.206	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 128	t_cohere infinite

g: az 206.9 el 49.5 pa 7.4 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 8366.702 5421.746 simultaneous interpolator

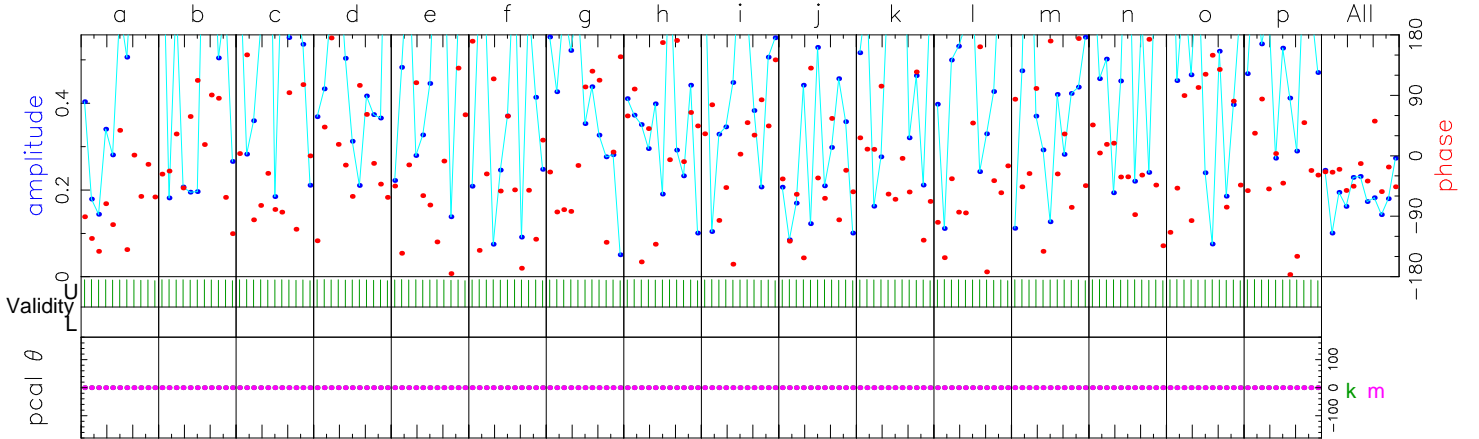
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/gm..130MJW Output file: /Exps/c192c/v2/1234/No0075/gm.W.226.130MJW

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MJW, No0075, km
VLBA_KP - VLBA_MK, fgroup W, pol LL



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

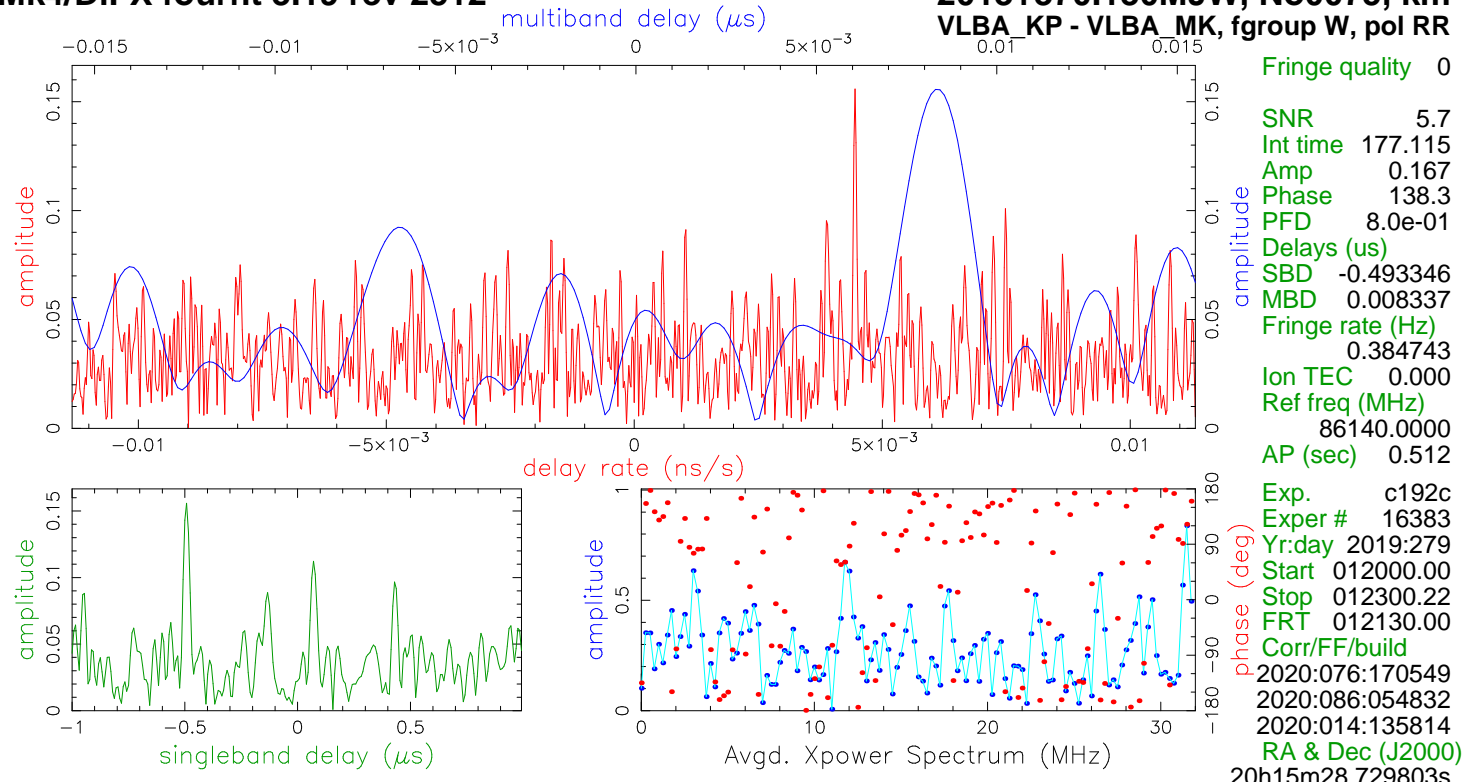


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
	-51.0	18.0	-45.5	-21.1	-51.1	-64.1	-49.4	58.6	36.1	-59.3	-24.3	-51.6	-39.7	-23.6	163.5	-6.2		Phase	-27.2				
	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.0	0.3		Ampl.	0.2				
	78.0	80.2	73.7	29.8	45.2	189.2	127.7	161.9	159.7	55.9	1.6	233.2	211.4	75.0	5.1	70.6		Sbd box	75.6				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
k:m	0:0	0:0	0:0	0:0	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					
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			9.06730651723E+03															Apriori delay (usec)	9.06772626875E+03	Resid mbdelay (usec)	-1.35015E-02	+/-	1.7E-04
Sband delay (usec)			9.06730914875E+03															Apriori clock (usec)	-2.9986310E+00	Resid sbdelay (usec)	-4.17120E-01	+/-	2.7E-03
Phase delay (usec)			9.06772626787E+03															Apriori clockrate (us/s)	-1.8588669E-07	Resid phdelay (usec)	-8.78528E-07	+/-	5.8E-07
Delay rate (us/s)			-6.77882395984E-01															Apriori rate (us/s)	-6.77886727816E-01	Resid rate (us/s)	4.33183E-06	+/-	5.6E-09
Total phase (deg)				257.3														Apriori accel (us/s/s)	-3.52532723473E-05	Resid phase (deg)	-27.2	+/-	18.0

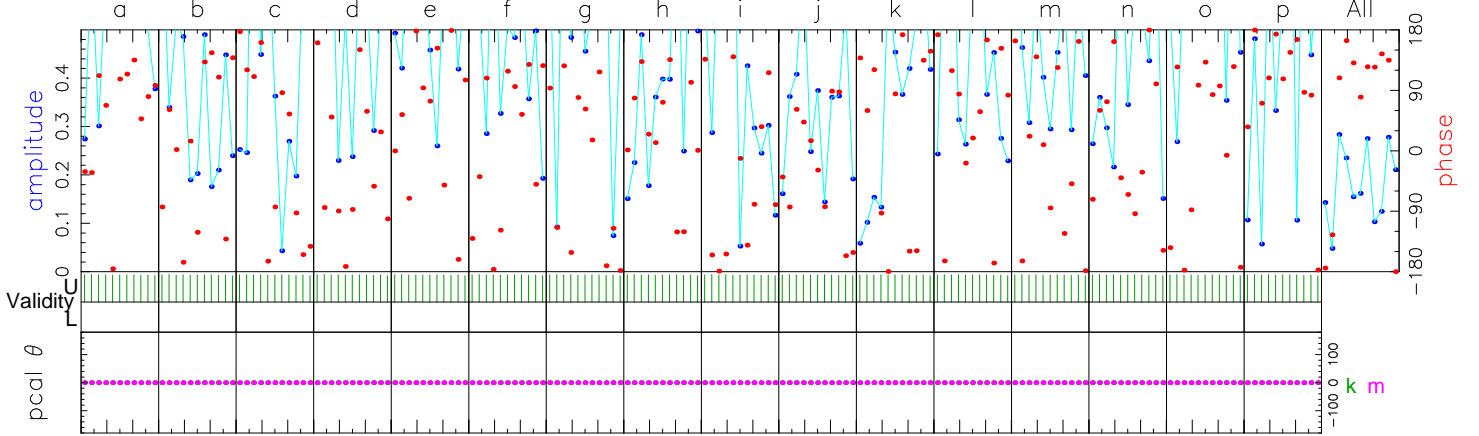
	RMS	Theor.	Amplitude	0.186 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	28.1	29.8	Search (1024X64)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	28.7	52.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg)	58.3	36.0	Inc. seg. avg.	0.180	Sample rate(MISamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	50.2	62.8	Inc. frq. avg.	0.181	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 67.3 el 71.8 pa -100.3 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 4853.073 -793.542 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/km..130MJW Output file: /Exps/c192c/v2/1234/No0075/km.W.178.130MJW

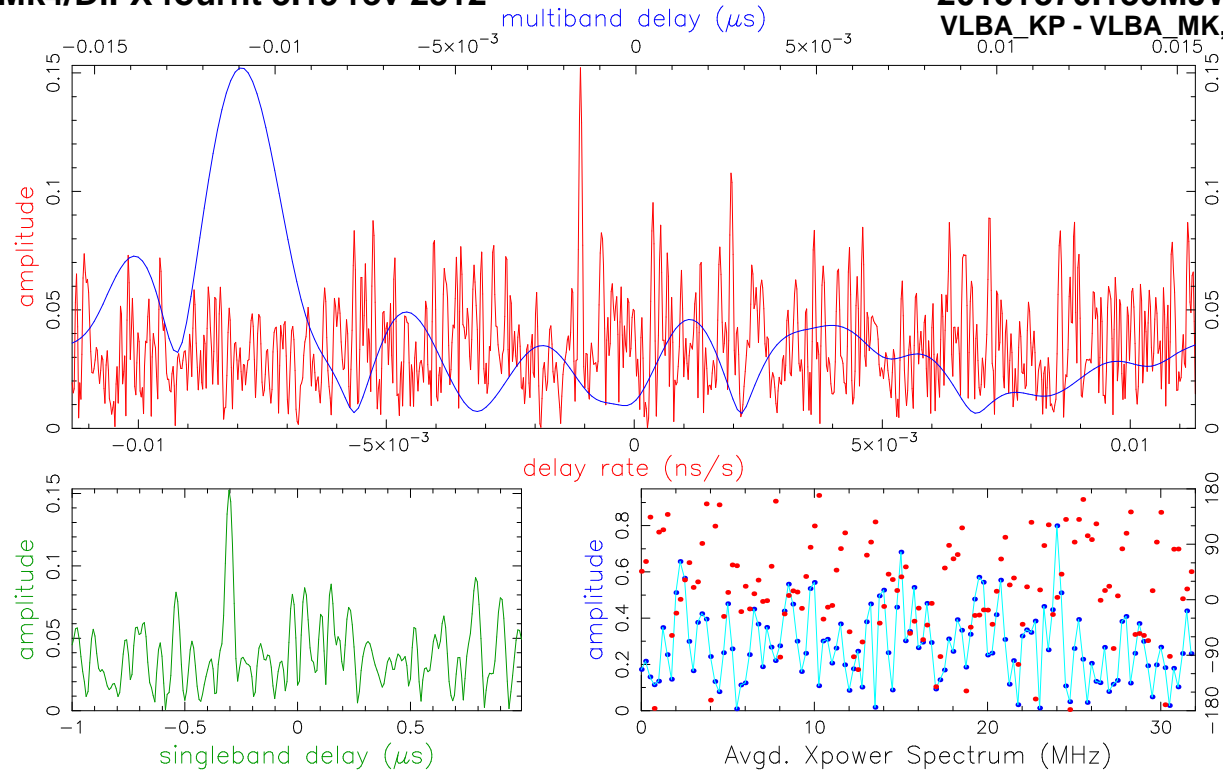


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	93.6	-165.1	175.9	-123.4	135.0	146.9	121.7	90.1	174.8	31.6	162.7	120.9	173.1	-42.1	130.0	127.9	Phase	138.3	
	0.3	0.1	0.3	0.1	0.1	0.1	0.3	0.1	0.3	0.1	0.3	0.2	0.3	0.1	0.4	0.4	Ampl.	0.2	
	135.8	2.2	221.5	12.4	38.6	63.4	146.9	142.7	92.3	86.1	45.7	9.4	137.3	236.7	65.9	235.0	Sbd box	65.9	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
k:m	0:0	0:0	0:0	0:0	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		
k:m	0:0	0:0	0:0	0:0	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		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks		
																	Chan ids		
																	Tracks		
Group delay (usec)(sbd)		9.06723460606E+03								9.06772626875E+03							Resid mbdelay (usec)	8.33731E-03	+/- 1.9E-04
Sband delay (usec)		9.06723292275E+03								-2.9986310E+00							Resid sbdelay (usec)	-4.93346E-01	+/- 3.0E-03
Phase delay (usec)		9.06772627321E+03								-1.8588669E-07							Resid phdelay (usec)	4.46026E-06	+/- 6.5E-07
Delay rate (us/s)		-6.77882261327E-01								-6.77886727816E-01							Resid rate (us/s)	4.46649E-06	+/- 6.2E-09
Total phase (deg)					62.8					-3.52532723473E-05							Resid phase (deg)	138.3	+/- 20.2

ph/seg (deg) RMS Theor. Amplitude 0.167 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 41.5 33.4 Search (1024X64) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.2 58.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 68.8 40.3 Inc. seg. avg. 0.167 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 75.1 70.4 Inc. frq. avg. 0.170 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 k: az 67.3 el 71.8 pa -100.3 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 4853.073 -793.542 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/km..130MJW Output file: /Exps/c192c/v2/1234/No0075/km.W.196.130MJW

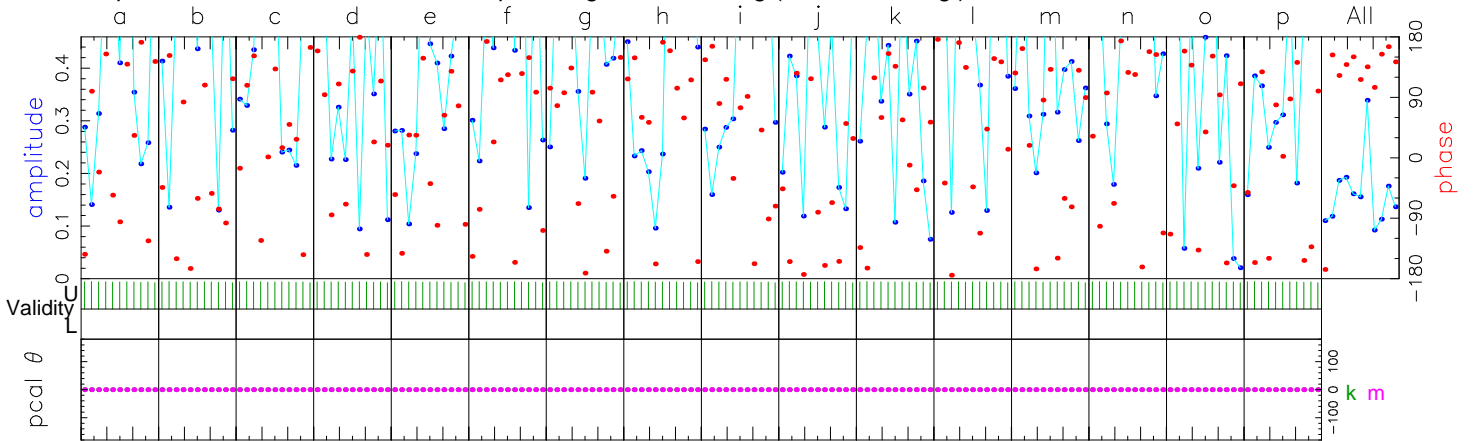


Fringe quality 0

SNR 5.6
Int time 177.115
Amp 0.153
Phase 141.7
PFD 9.7e-01
Delays (us)
SBD -0.303272
MBD -0.010926
Fringe rate (Hz)
-0.093823
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054834
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		9.06743409273E+03																
Sband delay (usec)		9.06742299675E+03																
Phase delay (usec)		9.06772627332E+03																
Delay rate (us/s)		-6.77887817011E-01																
Total phase (deg)			66.2															
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
PCal period (AP's) 5, 5																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
nlags: 128																		
t_cohere infinite																		

ph/seg (deg) 23.5 34.2
amp/seg (%) 42.8 59.7
ph/frq (deg) 34.9 41.3
amp/frq (%) 60.6 72.0

RMS Theor. Amplitude 0.153 +/- 0.028
Search (1024X64) 0.149
Interp. 0.000
Inc. seg. avg. 0.138
Inc. frq. avg. 0.136

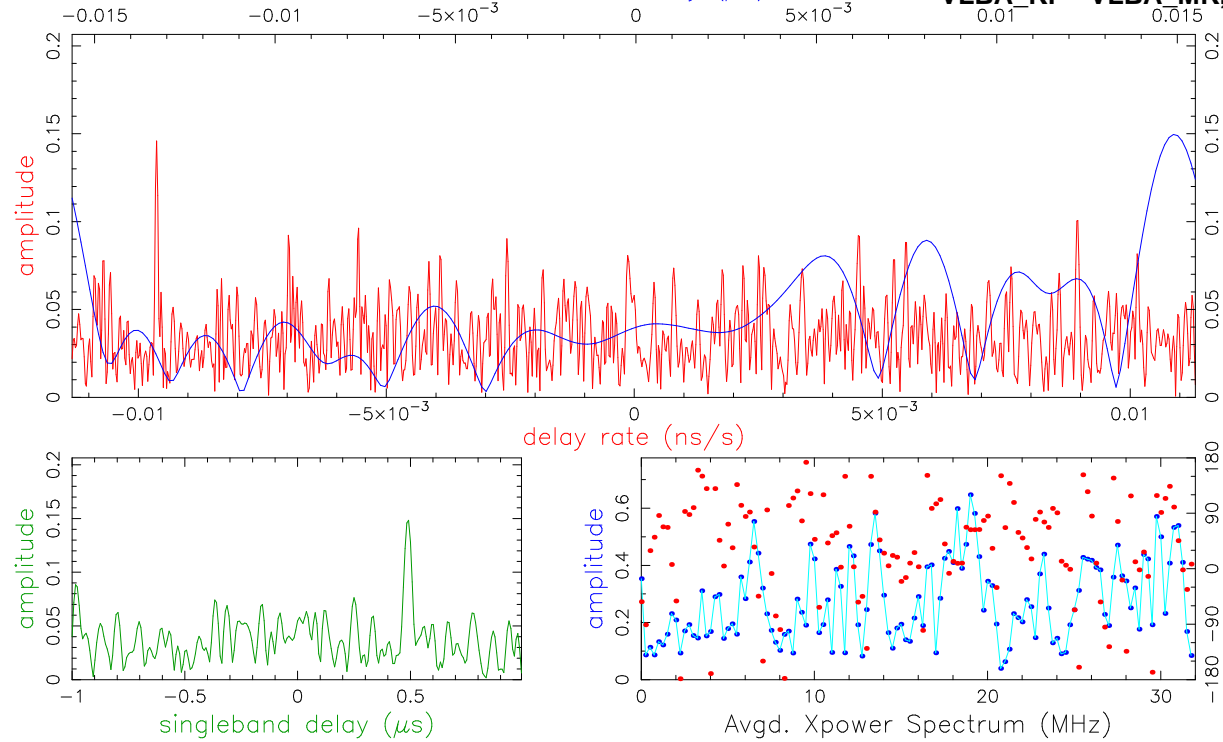
PCal mode: MANUAL, MANUAL
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2
Sample rate(MSamp/s): 64
Data rate(Mb/s): 2048

PC period (AP's) 5, 5
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

k: az 67.3 el 71.8 pa -100.3
m: az 57.7 el 31.4 pa -87.9
u,v (fr/asec) 4853.073 -793.542

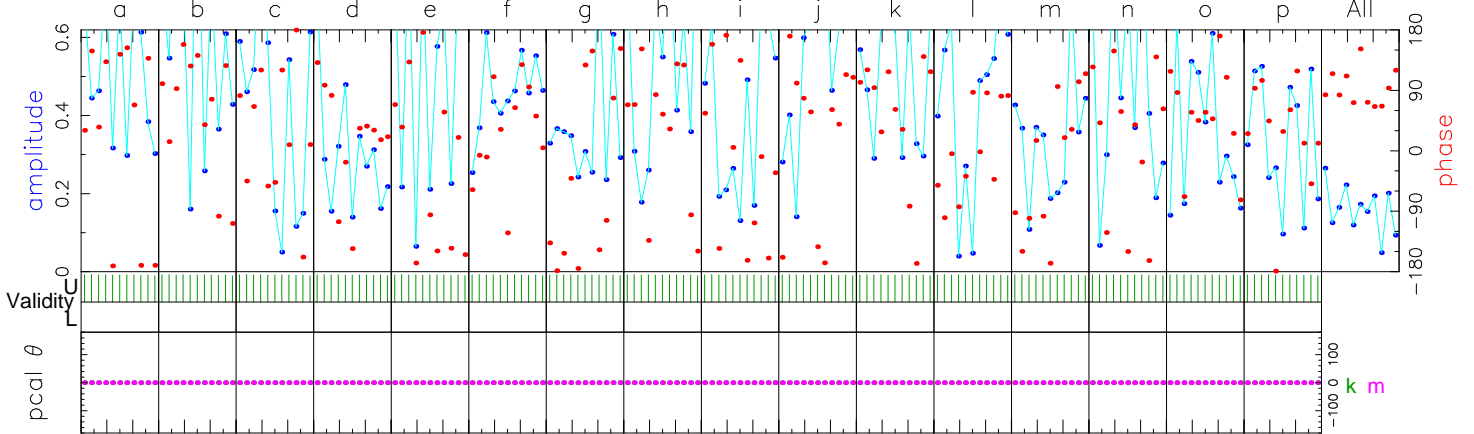
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/km..130MJW Output file: /Exps/c192c/v2/1234/No0075/km.W.213.130MJW simultaneous interpolator

multiband delay (μ s)



Fringe quality 0
SNR 5.5
Int time 177.116
Amp 0.207
Phase 93.9
PFD 1.0e+00
Delays (us)
SBD 0.489161
MBD -0.016113
Fringe rate (Hz)
-0.831756
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054835
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

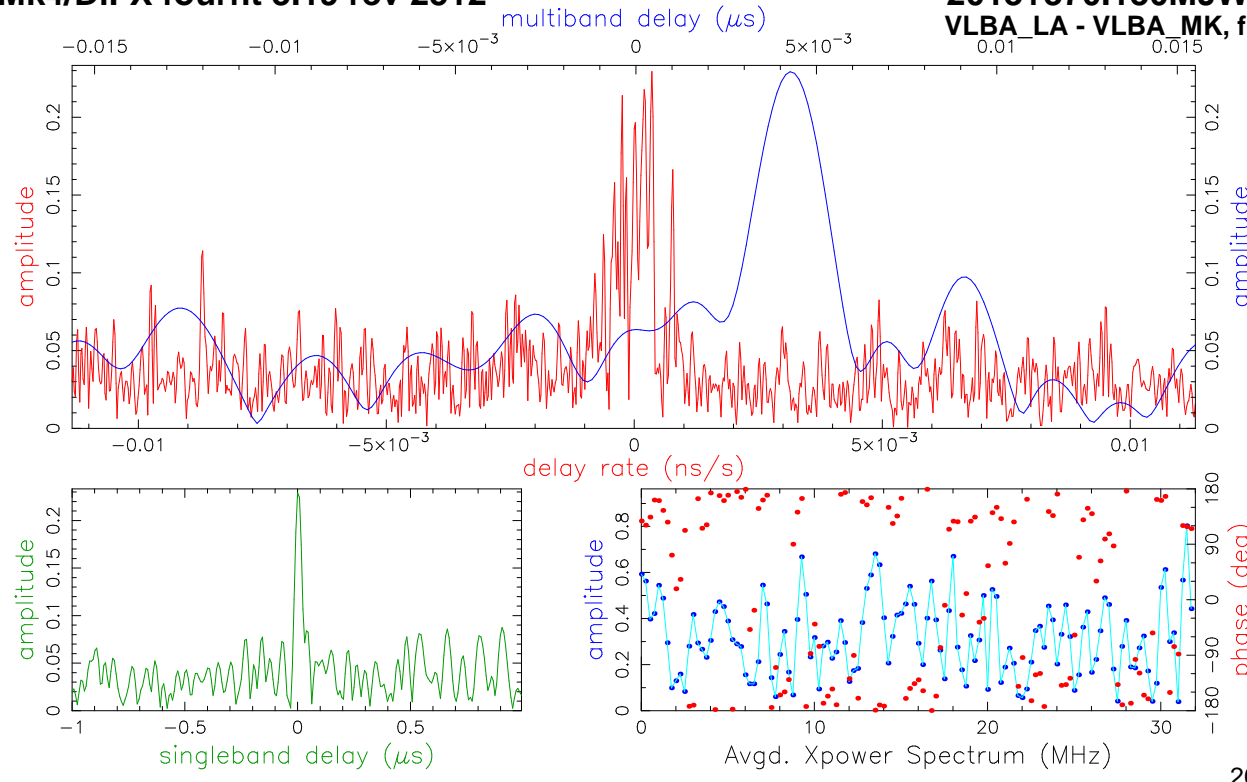


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	191.6
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	0.2
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	0.2
k:m	0:0	0:0	0:0	0:0	0:0	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	0.2
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	0.2
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	0.2
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	0.2
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	0.2

Group delay (usec)(sbd) 9.06821015547E+03 Apriori delay (usec) 9.06772626875E+03 Resid mbdelay (usec) -1.61133E-02 +/- 2.0E-04
 Sband delay (usec) 9.06821542925E+03 Apriori clock (usec) -2.9986310E+00 Resid sbdelay (usec) 4.89161E-01 +/- 3.2E-03
 Phase delay (usec) 9.06772627178E+03 Apriori clockrate (us/s) -1.8588669E-07 Resid phdelay (usec) 3.02809E-06 +/- 6.8E-07
 Delay rate (us/s) -6.77896383683E-01 Apriori rate (us/s) -6.77886727816E-01 Resid rate (us/s) -9.65587E-06 +/- 6.5E-09
 Total phase (deg) 18.4 Apriori accel (us/s/s) -3.52532723473E-05 Resid phase (deg) 93.9 +/- 21.0

RMS Theor. Amplitude 0.207 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 26.0 34.8 Search (1024X64) 0.147 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 39.5 60.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 55.6 41.9 Inc. seg. avg. 0.187 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.5 73.2 Inc. frq. avg. 0.215 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 67.3 el 71.8 pa -100.3 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 4853.073 -793.542 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/km..130MJW Output file: /Exps/c192c/v2/1234/No0075/km.W.229.130MJW

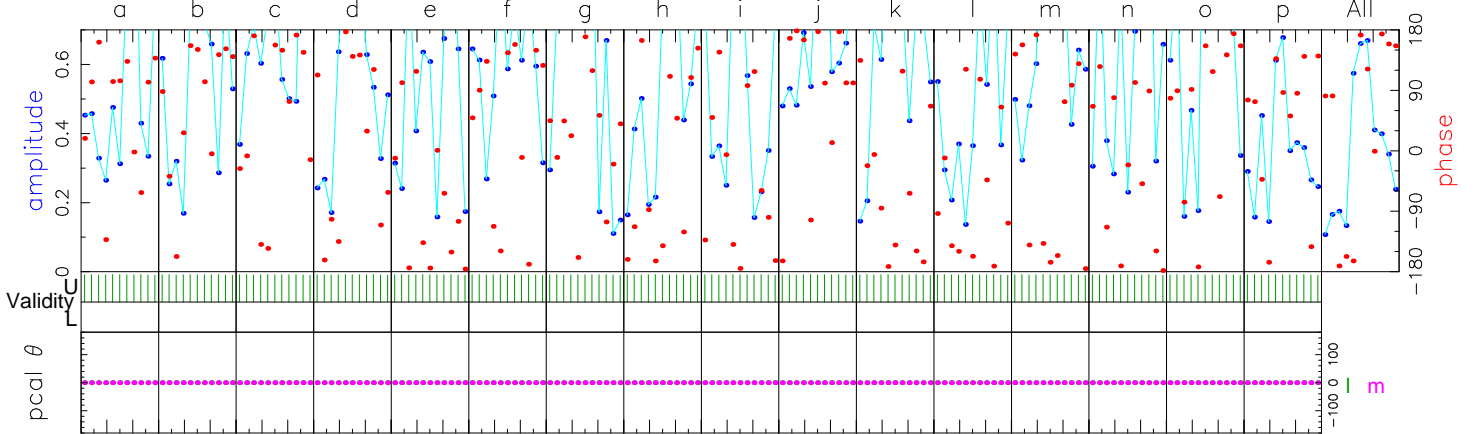


Fringe quality 9

SNR 8.5
Int time 178.407
Amp 0.233
Phase 157.9
PFD 2.9e-09
Delays (us)
SBD 0.003109
MBD 0.004287
Fringe rate (Hz) 0.029787
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054838
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



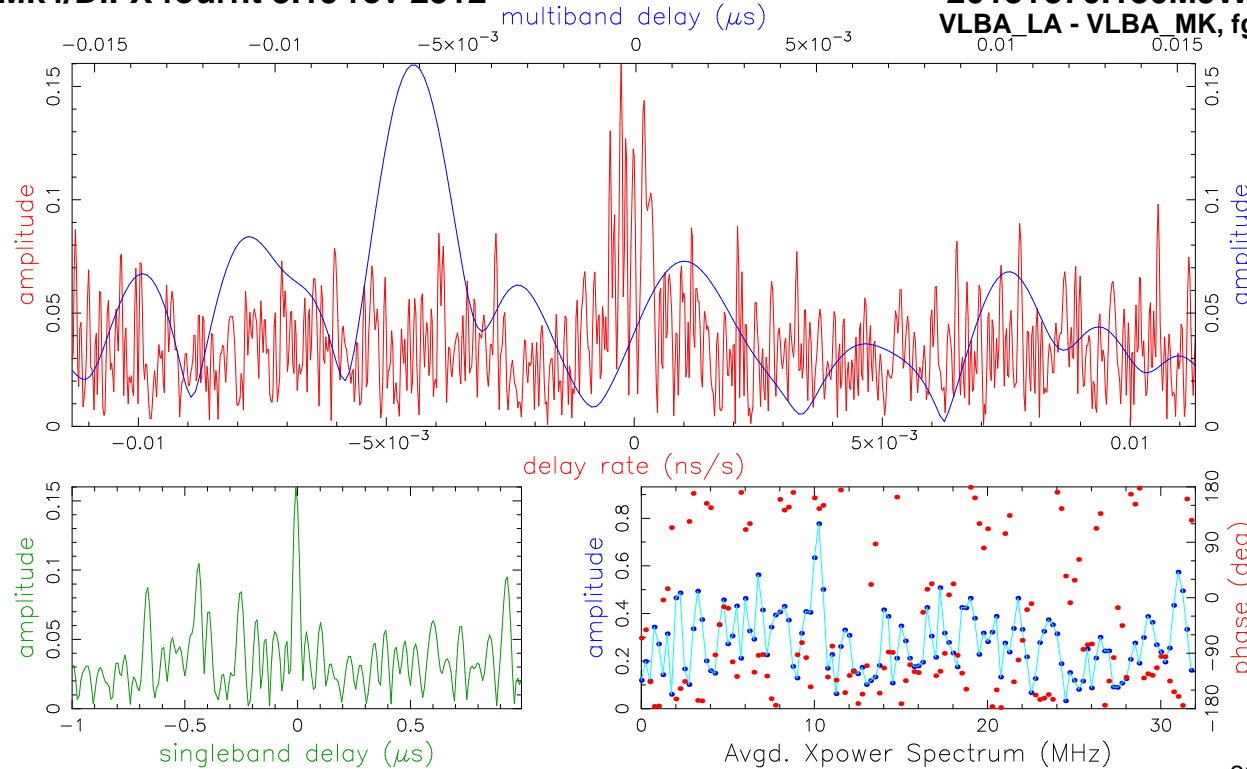
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
Group delay (usec)(sbd)	9.59416257377E+03			Apriori delay (usec)			9.59415828695E+03			Resid mbdelay (usec)			4.28683E-03			+/-	1.3E-04	
Sband delay (usec)	9.59416139545E+03			Apriori clock (usec)			-3.3679166E+00			Resid sbdelay (usec)			3.10850E-03			+/-	2.0E-03	
Phase delay (usec)	9.59415829204E+03			Apriori clockrate (us/s)			-3.4277971E-07			Resid phdelay (usec)			5.09149E-06			+/-	4.3E-07	
Delay rate (us/s)	-7.83425085506E-01			Apriori rate (us/s)			-7.83425431302E-01			Resid rate (us/s)			3.45796E-07			+/-	4.2E-09	
Total phase (deg)	99.4			Apriori accel (us/s/s)			-3.42777004836E-05			Resid phase (deg)			157.9			+/-	13.4	

RMS Theor. Amplitude 0.233 +/- 0.027
 ph/seg (deg) 62.5 22.3 Search (1024X64) 0.223
 amp/seg (%) 99.6 38.9 Interp. 0.000
 ph/frq (deg) 41.6 26.9 Inc. seg. avg. 0.328
 amp/frq (%) 46.1 46.9 Inc. frq. avg. 0.249

Group delay (usec)(sbd) 9.59416257377E+03 Apriori delay (usec) 9.59415828695E+03 Resid mbdelay (usec) 4.28683E-03 +/- 1.3E-04
 Sband delay (usec) 9.59416139545E+03 Apriori clock (usec) -3.3679166E+00 Resid sbdelay (usec) 3.10850E-03 +/- 2.0E-03
 Phase delay (usec) 9.59415829204E+03 Apriori clockrate (us/s) -3.4277971E-07 Resid phdelay (usec) 5.09149E-06 +/- 4.3E-07
 Delay rate (us/s) -7.83425085506E-01 Apriori rate (us/s) -7.83425431302E-01 Resid rate (us/s) 3.45796E-07 +/- 4.2E-09
 Total phase (deg) 99.4 Apriori accel (us/s/s) -3.42777004836E-05 Resid phase (deg) 157.9 +/- 13.4

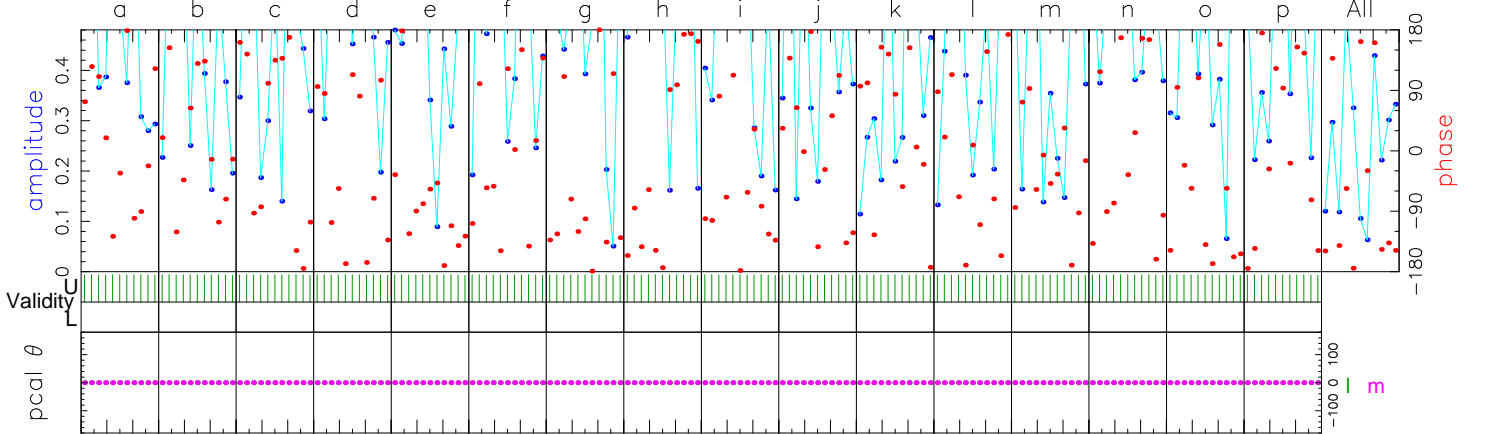
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window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

l: az 78.7 el 77.2 pa -91.8 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5613.882 -349.666 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/lm..130MJW Output file: /Exps/c192c/v2/1234/No0075/lm.W.242.130MJW



Fringe quality 0
SNR 5.8
Int time 178.406
Amp 0.160
Phase -154.2
PFD 4.7e-01
Delays (us)
SBD -0.006535
MBD -0.006144
Fringe rate (Hz)
-0.022955
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054841
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

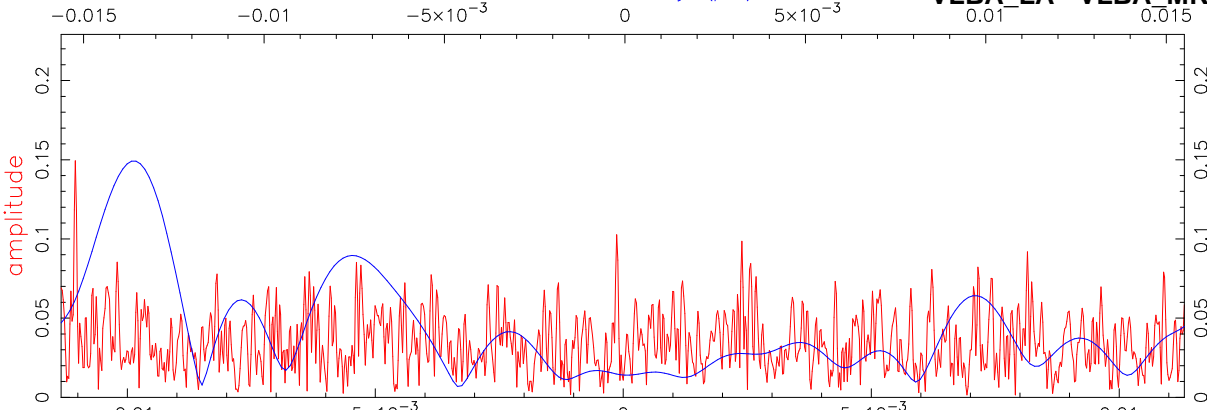


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-173.1	-137.7	178.0	-178.8	-110.0	-178.4	-141.4	-161.2	-112.8	74.8	143.0	-177.5	-64.1	-130.6	-145.1	155.6		Phase	-154.2
	0.1	0.1	0.3	0.2	0.4	0.1	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3		Ampl.	0.2
	152.6	75.0	126.8	92.8	127.9	107.1	127.7	142.8	98.9	7.7	38.1	225.0	61.6	74.4	212.1	22.7		Sbd box	128.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
l:m	0:0	0:0	0:0	0:0	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	
l:m	0:0	0:0	0:0	0:0	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	
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
																		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	9.59415214332E+03			Apriori delay (usec)			9.59415828695E+03			Resid mbdelay (usec)			-6.14363E-03			+/- 1.8E-04			
Sband delay (usec)	9.59415175145E+03			Apriori clock (usec)			-3.3679166E+00			Resid sbdelay (usec)			-6.53550E-03			+/- 2.9E-03			
Phase delay (usec)	9.59415828197E+03			Apriori clockrate (us/s)			-3.4277971E-07			Resid phdelay (usec)			-4.97332E-06			+/- 6.3E-07			
Delay rate (us/s)	-7.83425697785E-01			Apriori rate (us/s)			-7.83425431302E-01			Resid rate (us/s)			-2.66483E-07			+/- 6.1E-09			
Total phase (deg)	147.3			Apriori accel (us/s/s)			-3.42777004836E-05			Resid phase (deg)			-154.2			+/- 19.6			

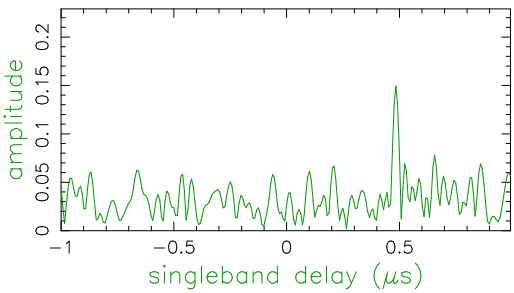
ph/seg (deg) 56.2 32.5 Search (1024X64) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 107.1 56.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 53.0 39.2 Inc. seg. avg. 0.223 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 72.4 68.4 Inc. frq. avg. 0.167 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
l: az 78.7 el 77.2 pa -91.8 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5613.882 -349.666 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/lm..130MJW Output file: /Exps/c192c/v2/1234/No0075/lm.W.262.130MJW

multiband delay (μ s)

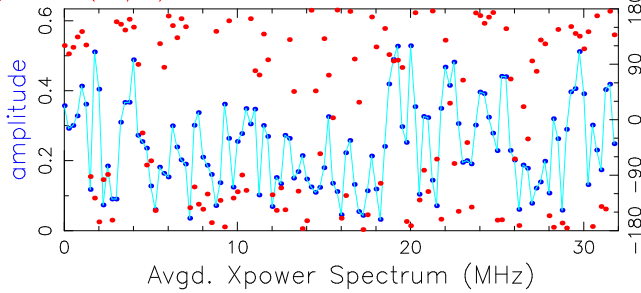
Fringe quality 0



SNR 5.5
Int time 178.406
Amp 0.229
Phase 155.1
PFD 1.0e+00
Delays (us)
SBD 0.484547
MBD -0.013609
Fringe rate (Hz)
-0.953423
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

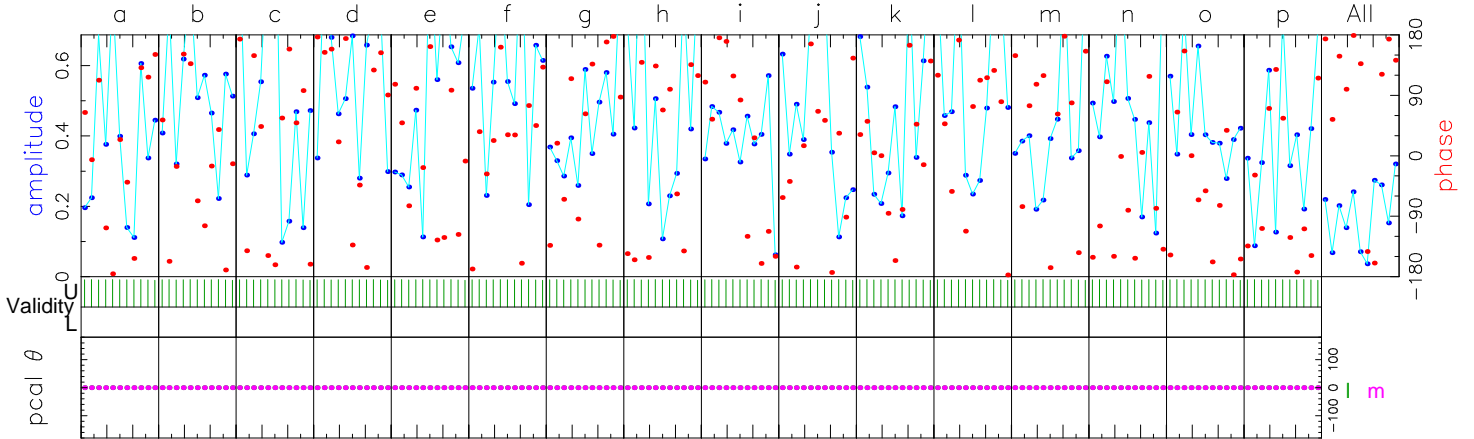


delay rate (ns/s)



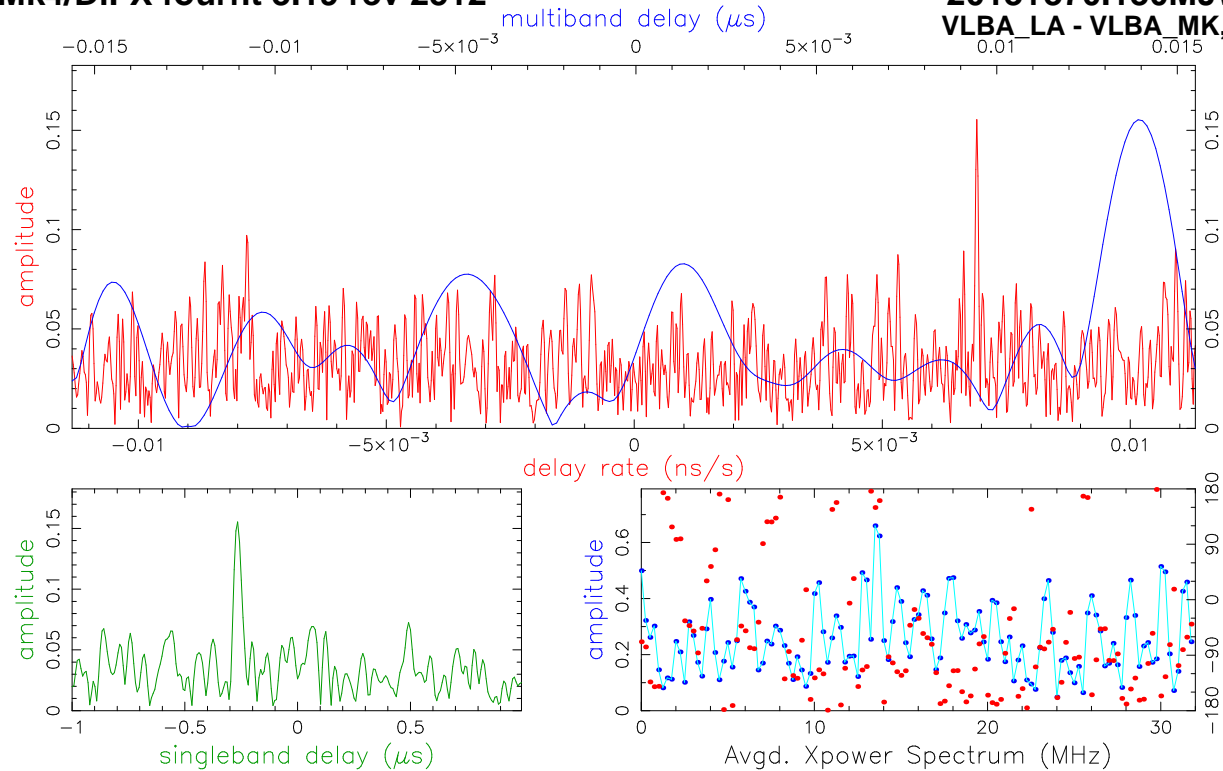
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054843
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		9.59464467762E+03																
Sband delay (usec)		9.59464283445E+03																
Phase delay (usec)		9.59415829195E+03																
Delay rate (us/s)		-7.83436499602E-01																
Total phase (deg)			96.6															
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)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
simultaneous interpolator																		

ph/seg (deg) 45.0 34.8 Search (1024X64) 0.147 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.5 60.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.6 42.0 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.1 73.4 Inc. frq. avg. 0.225 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 78.7 el 77.2 pa -91.8 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 5613.882 -349.666 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/c192c/v2/1234/No0075/lm..130MJW Output file: /Exps/c192c/v2/1234/No0075/lm.W.281.130MJW

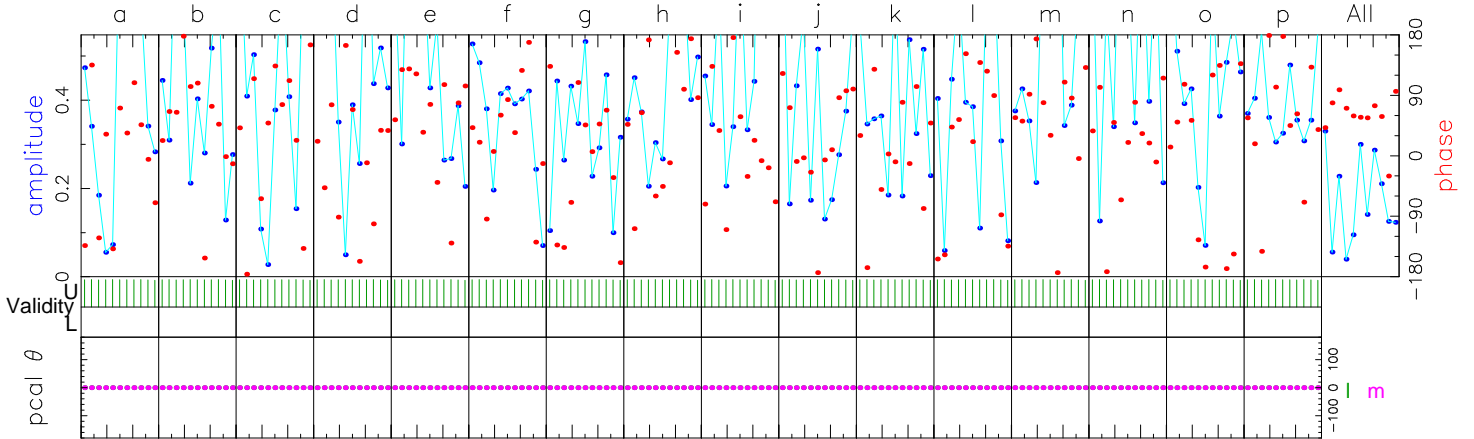


Fringe quality 0

SNR 5.7
Int time 178.407
Amp 0.183
Phase 61.7
PFD 7.8e-01
Delays (us)
SBD -0.267333
MBD 0.013959
Fringe rate (Hz) 0.595128
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054845
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



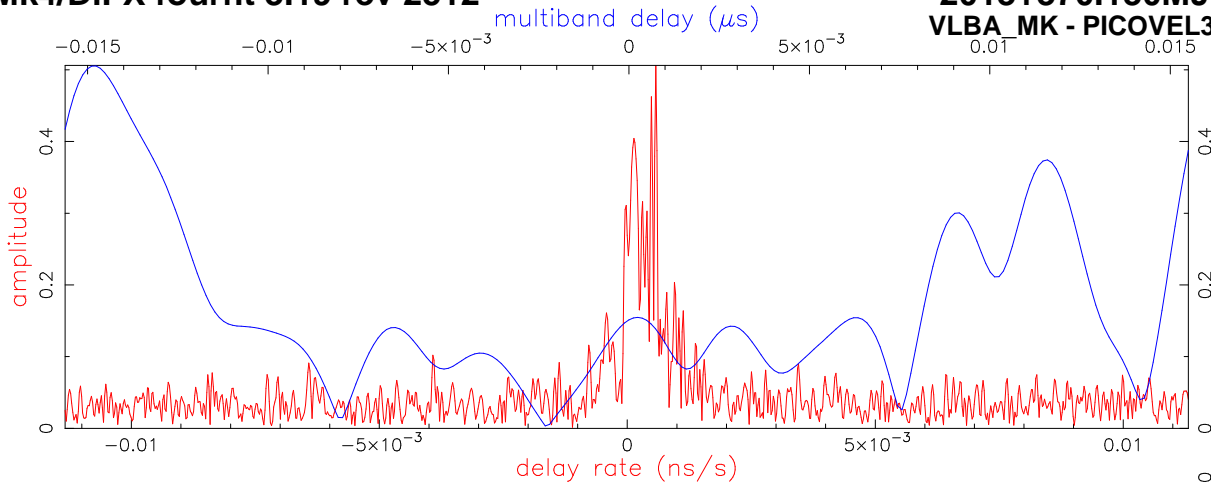
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
Group delay (usec)(sbd)		9.59389099566E+03																
Sband delay (usec)		9.59389095395E+03																
Phase delay (usec)		9.59415828894E+03																
Delay rate (us/s)		-7.83418522458E-01																
Total phase (deg)					3.3													
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(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128																		
t_cohere infinite																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 32.8 33.4
amp/seg (%) 62.8 58.2
ph/frq (deg) 40.5 40.2
amp/frq (%) 59.1 70.2

l: az 78.7 el 77.2 pa -91.8
m: az 57.7 el 31.4 pa -87.9
u,v (fr/asec) 5613.882 -349.666

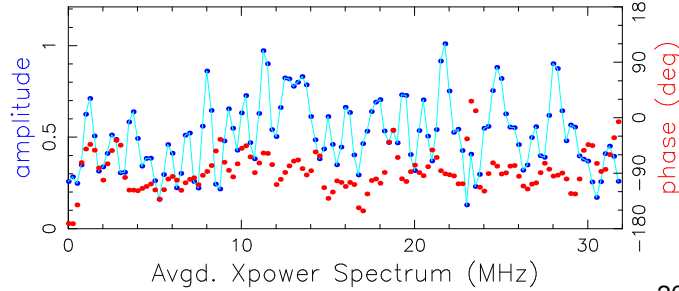
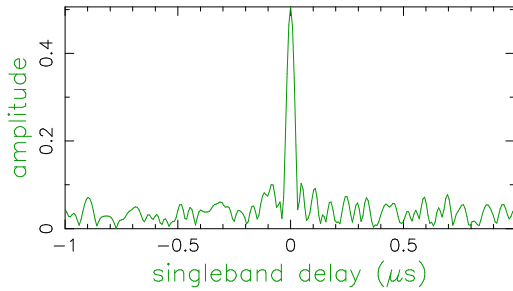
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/lm..130MJW Output file: /Exps/c192c/v2/1234/No0075/lm.W.299.130MJW

simultaneous interpolator



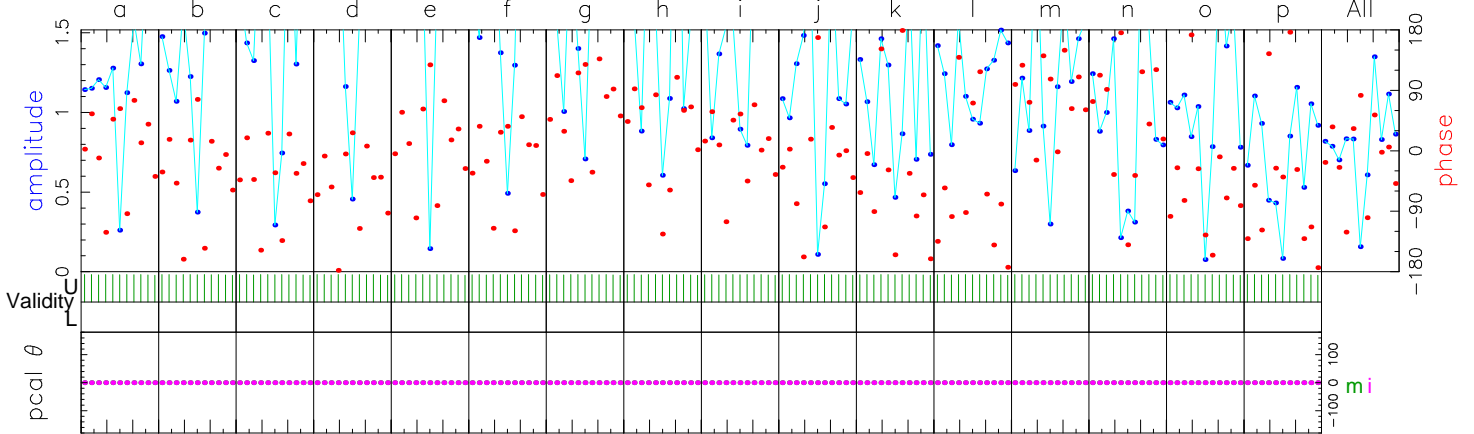
Fringe quality 7

SNR 18.5
Int time 178.706
Amp 0.506
Phase -2.7
PFD 0.0e+00
Delays (us)
SBD -0.000147
MBD -0.014828
Fringe rate (Hz)
0.049163
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054839
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

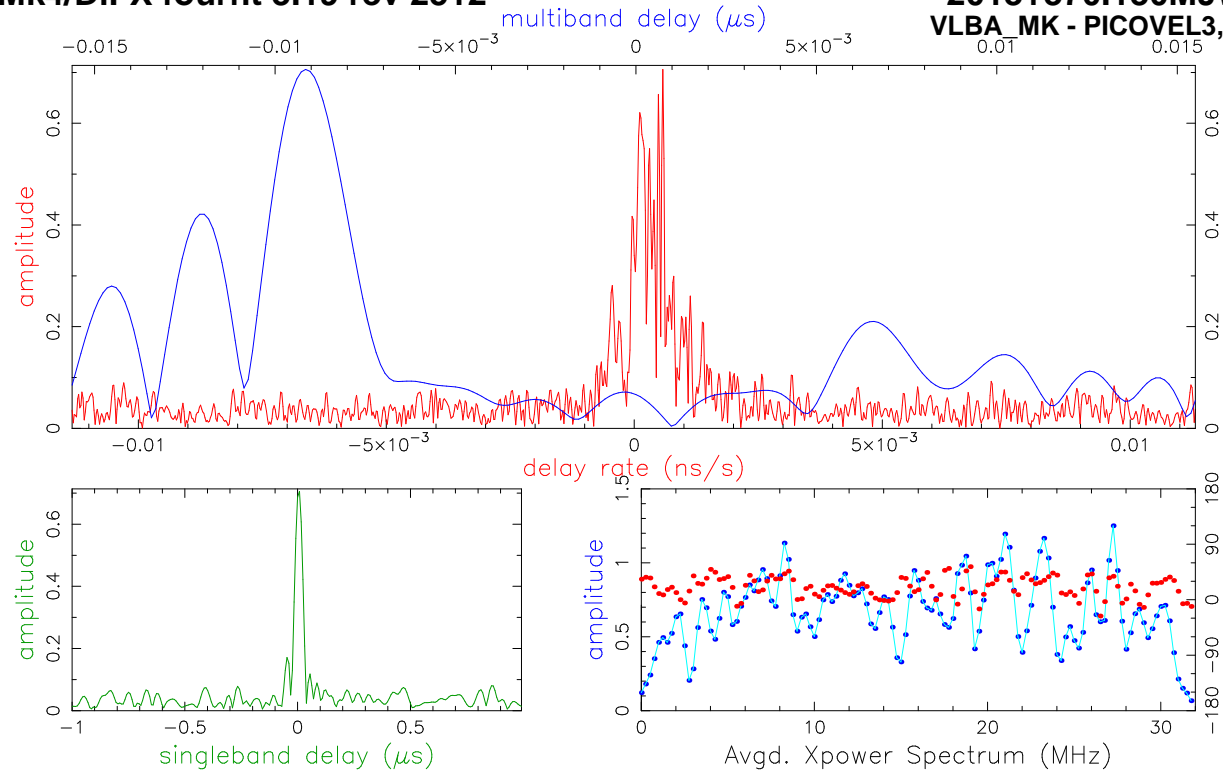
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	11.7	-19.8	-27.5	-49.1	18.2	-10.9	77.3	55.8	15.1	-15.9	-72.2	-125.1	79.9	75.9	-55.4	-110.9	Phase	-2.7
m	0.8	1.0	1.0	1.1	1.1	1.1	0.9	0.9	1.0	0.7	0.6	0.5	0.7	0.5	0.7	0.4	Ampl.	0.8
i	128.1	128.5	128.8	128.9	128.7	128.7	129.3	129.0	129.0	127.9	128.4	129.1	128.0	128.3	128.5	130.6	Sbd box	129.0
m	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
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	
m	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		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
																	Chan ids	
																	Tracks	
Group delay (usec)(sbd)	2.80535688982E+03			Apriori delay (usec)			2.80537171772E+03			Resid mbdelay (usec)			-1.48279E-02			+/- 5.8E-05		
Sband delay (usec)	2.80537157072E+03			Apriori clock (usec)			3.1489320E+00			Resid sbdelay (usec)			-1.47000E-04			+/- 9.3E-04		
Phase delay (usec)	2.80537171763E+03			Apriori clockrate (us/s)			3.4430770E-07			Resid phdelay (usec)			-8.74734E-08			+/- 2.0E-07		
Delay rate (us/s)	2.03762180110E+00			Apriori rate (us/s)			2.03762123037E+00			Resid rate (us/s)			5.70733E-07			+/- 1.9E-09		
Total phase (deg)	272.4			Apriori accel (us/s/s)			-3.29016486200E-05			Resid phase (deg)			-2.7			+/- 6.2		

	RMS	Theor.	Amplitude	0.506 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	59.9	10.3	Search (1024X64)	0.492	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	81.7	17.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg)	66.2	12.4	Inc. seg. avg.	0.797	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	73.7	21.6	Inc. frq. avg.	0.791	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

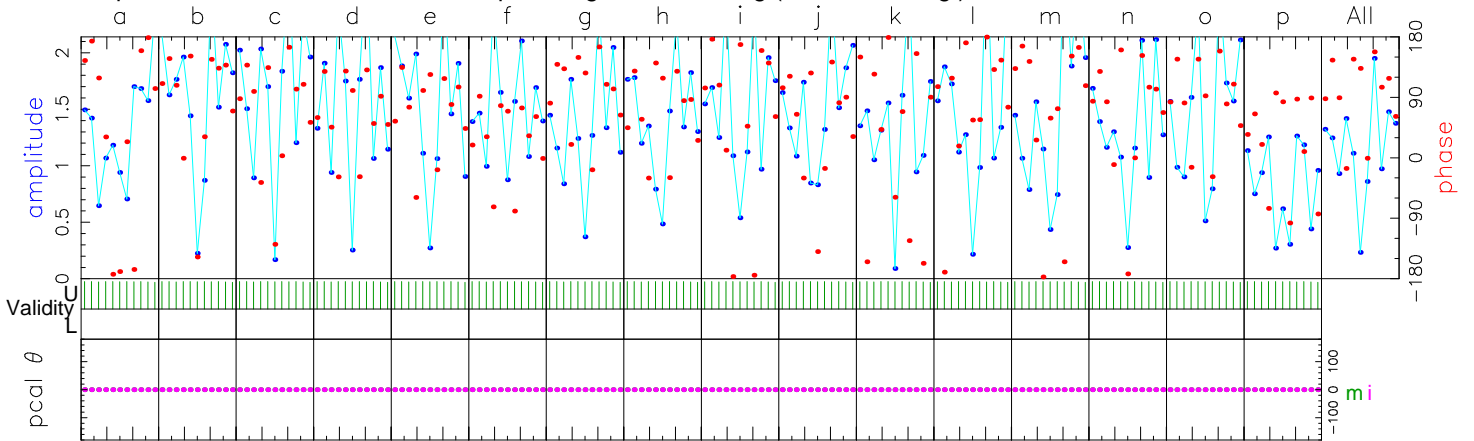
m: az 57.7 el 31.4 pa -87.9 i: az 299.9 el 23.5 pa 60.5 u,v (fr/asec) -14688.494 -3737.619 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mi..130MJW Output file: /Exps/c192c/v2/1234/No0075/mi.W.248.130MJW



Fringe quality 6

SNR 26.1
Int time 178.706
Amp 0.714
Phase 104.4
PFD 0.0e+00
Delays (us)
SBD 0.005125
MBD -0.009159
Fringe rate (Hz) 0.049386
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054842
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

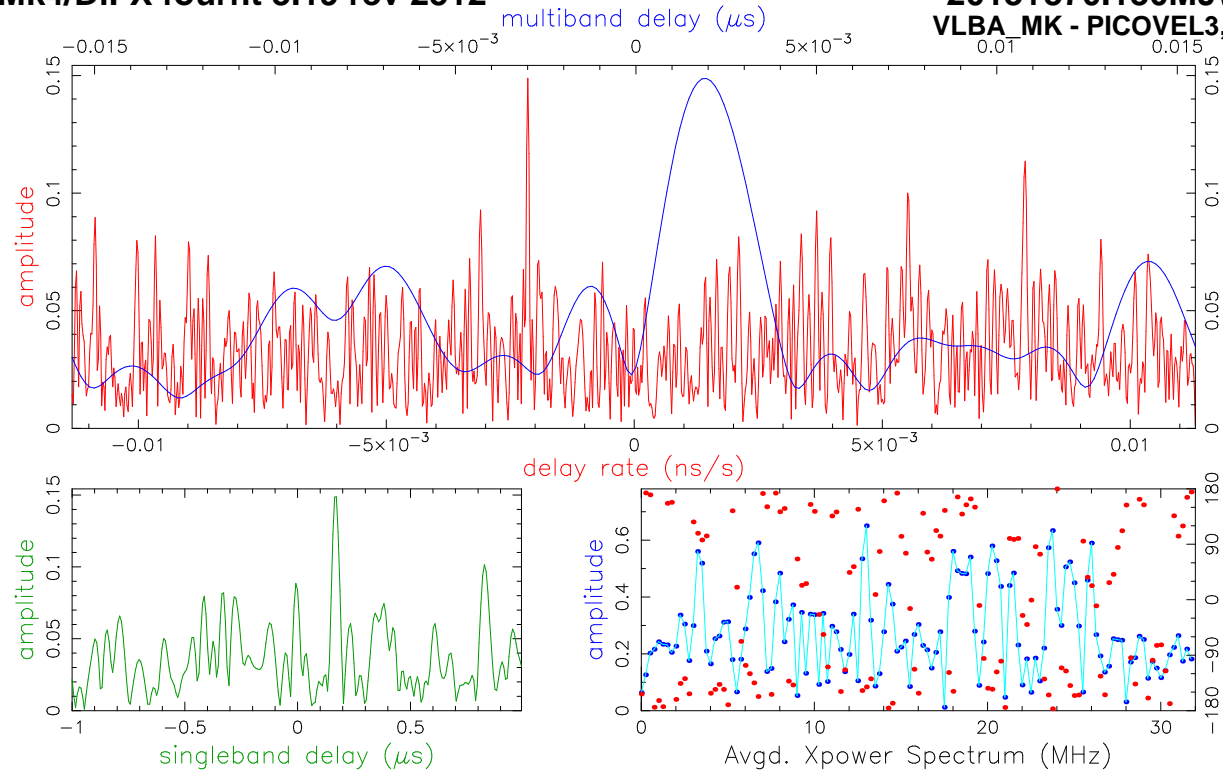
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
U/L	152.4	116.5	99.3	76.1	83.3	34.2	104.9	75.0	124.7	84.0	156.5	128.4	149.0	99.1	99.0	27.3	Phase	104.4		
m	0.9	1.1	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.6	1.0	1.0	0.8	0.9	0.4	Ampl.	0.8		
i	129.2	129.5	129.6	130.2	129.0	129.5	129.6	129.8	129.5	129.3	129.3	129.3	129.2	129.0	129.6	128.1	Sbd box	129.7		
m	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase			
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			
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks			
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids			
Group delay (usec)(sbd)		2.80536255832E+03					Apriori delay (usec)					2.80537171772E+03					Resid mbdelay (usec)		-9.15940E-03 +/- 4.1E-05	
Sband delay (usec)		2.80537684222E+03					Apriori clock (usec)					3.1489320E-07					Resid sbdelay (usec)		5.12450E-03 +/- 6.6E-04	
Phase delay (usec)		2.80537172108E+03					Apriori clockrate (us/s)					3.4430770E-07					Resid phdelay (usec)		3.36768E-06 +/- 1.4E-07	
Delay rate (us/s)		2.03762180369E+00					Apriori rate (us/s)					2.03762123037E+00					Resid rate (us/s)		5.73322E-07 +/- 1.4E-09	
Total phase (deg)		19.5					Apriori accel (us/s/s)					-3.29016486200E-05					Resid phase (deg)		104.4 +/- 4.4	

	RMS	Theor.	Amplitude	0.714 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	56.6	7.3	Search (1024X64)	0.696	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016 0.016
amp/seg (%)	86.9	12.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	39.3	8.8	Inc. seg. avg.	1.164	Sample rate(MSamp/s): 64		ion window (TEC)	0.00 0.00
amp/frq (%)	28.8	15.3	Inc. frq. avg.	0.832	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite		

m: az 57.7 el 31.4 pa -87.9 i: az 299.9 el 23.5 pa 60.5 u,v (fr/asec) -14688.494 -3737.619 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mi..130MJW Output file: /Exps/c192c/v2/1234/No0075/mi.W.266.130MJW

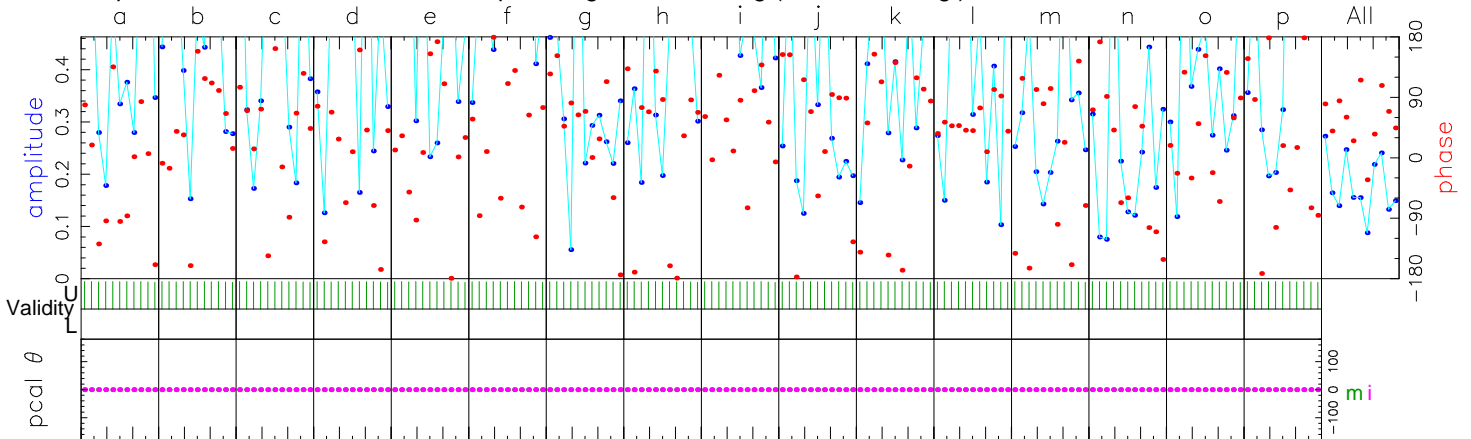


Fringe quality 0

SNR 5.6
Int time 178.706
Amp 0.154
Phase 64.1
PFD 9.6e-01
Delays (us)
SBD 0.168040
MBD 0.001878
Fringe rate (Hz)
-0.184556
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054844
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

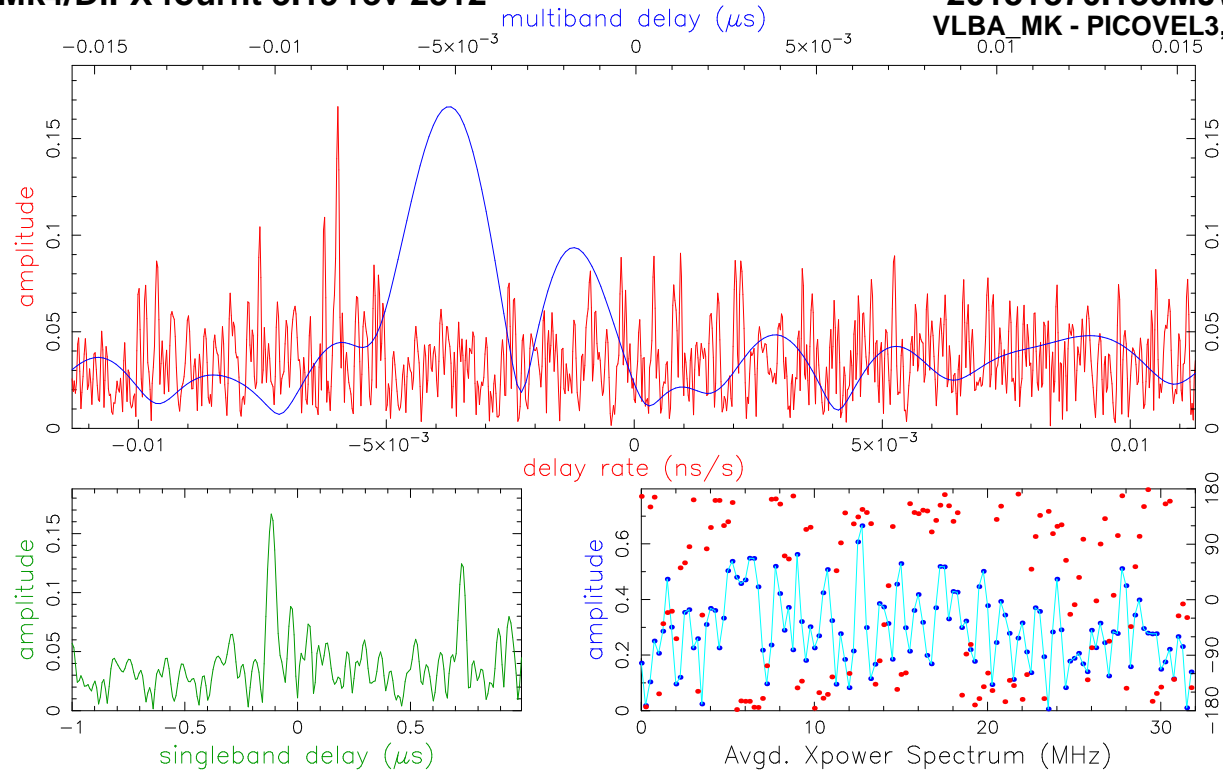


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
m	1000	1000	1000	1000	1000	1000	1000	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
m: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
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
i	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
																		Tracks
Group delay (usec)(sbd)	2.80552984578E+03			Apriori delay (usec)			2.80537171772E+03			Resid mbdelay (usec)			1.87806E-03			+/-	1.9E-04	
Sband delay (usec)	2.80553975722E+03			Apriori clock (usec)			3.1489320E+00			Resid sbdelay (usec)			1.68040E-01			+/-	3.1E-03	
Phase delay (usec)	2.80537171978E+03			Apriori clockrate (us/s)			3.4430770E-07			Resid phdelay (usec)			2.06701E-06			+/-	6.6E-07	
Delay rate (us/s)	2.03761908786E+00			Apriori rate (us/s)			2.03762123037E+00			Resid rate (us/s)			-2.14251E-06			+/-	6.4E-09	
Total phase (deg)	339.2			Apriori accel (us/s/s)			-3.29016486200E-05			Resid phase (deg)			64.1			+/-	20.6	

ph/seg (deg) 40.5 34.2 Search (1024X64) 0.154 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 40.1 59.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 53.8 41.2 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 65.1 72.0 Inc. frq. avg. 0.158 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 57.7 el 31.4 pa -87.9 i: az 299.9 el 23.5 pa 60.5 u,v (fr/asec) -14688.494 -3737.619 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mi..130MJW Output file: /Exps/c192c/v2/1234/No0075/mi.W.284.130MJW

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MJW, No0075, mi
VLBA_MK - PICOVEL3, fgroup W, pol RL

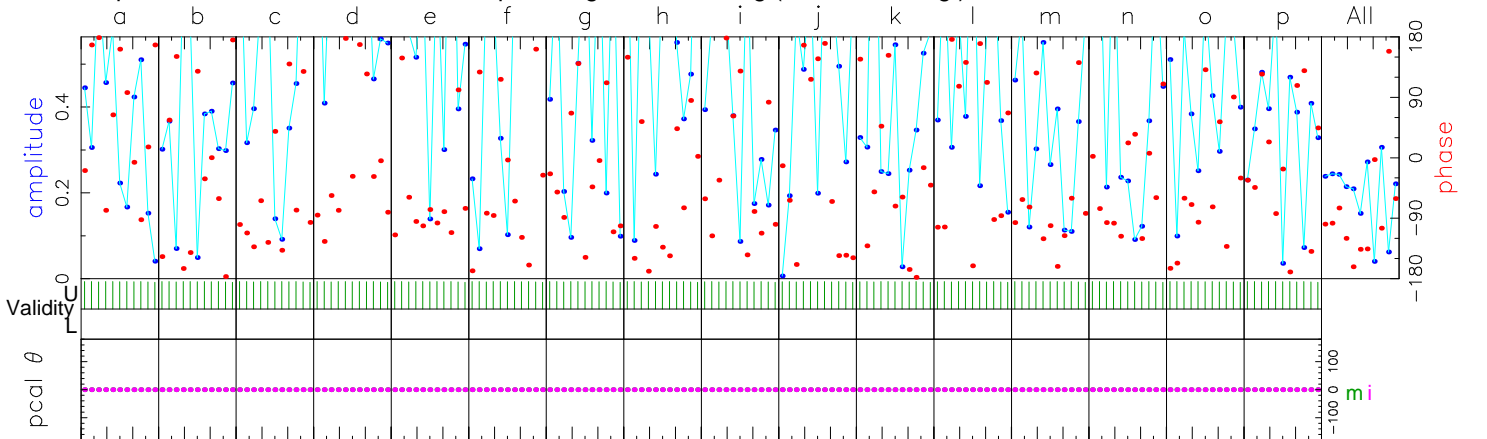


Fringe quality 0

SNR 6.1
Int time 178.706
Amp 0.188
Phase -109.3
PFD 1.2e-01
Delays (us)
SBD -0.115355
MBD -0.005210
Fringe rate (Hz)
-0.514800
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054846
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

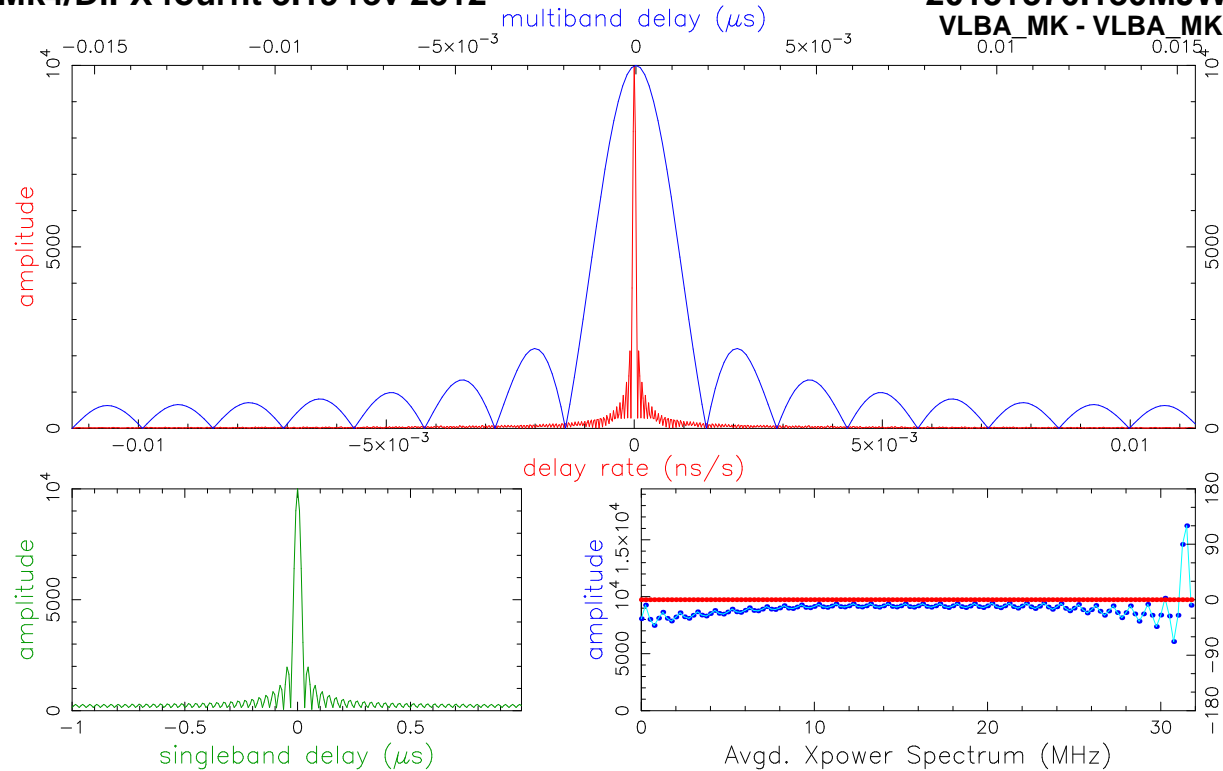


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-80.0	-145.9	-117.4	-85.5	-103.8	-107.3	-76.8	172.4	-105.6	-166.1	-66.8	-156.8	-109.5	-56.8	-111.4	-105.3		Phase	-109.3
	0.0	0.1	0.3	0.3	0.5	0.3	0.2	0.1	0.2	0.3	0.2	0.3	0.2	0.3	0.1	0.0		Ampl.	0.2
	132.9	174.9	114.1	153.2	113.9	24.9	242.6	134.2	124.4	75.5	43.0	56.3	34.3	101.4	21.9	169.1		Sbd box	114.2
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
m	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	
m: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	
m	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			
m	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) 2.80524150781E+03 Apriori delay (usec) 2.80537171772E+03 Resid mbdelay (usec) -5.20991E-03 +/- 1.8E-04
 Sband delay (usec) 2.80525636272E+03 Apriori clock (usec) 3.1489320E+00 Resid sbdelay (usec) -1.15355E-01 +/- 2.8E-03
 Phase delay (usec) 2.80537171419E+03 Apriori clockrate (us/s) 3.4430770E-07 Resid phdelay (usec) -3.52447E-06 +/- 6.0E-07
 Delay rate (us/s) 2.03761525405E+00 Apriori rate (us/s) 2.03762123037E+00 Resid rate (us/s) -5.97632E-06 +/- 5.8E-09
 Total phase (deg) 165.8 Apriori accel (us/s/s) -3.29016486200E-05 Resid phase (deg) -109.3 +/- 18.8

RMS Theor. Amplitude 0.188 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 50.4 31.1 Search (1024X64) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.5 54.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 37.9 37.5 Inc. seg. avg. 0.197 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 65.7 65.5 Inc. frq. avg. 0.183 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 i: az 299.9 el 23.5 pa 60.5 u,v (fr/asec) -14688.494 -3737.619 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mi..130MJW Output file: /Exps/c192c/v2/1234/No0075/mi.W.307.130MJW

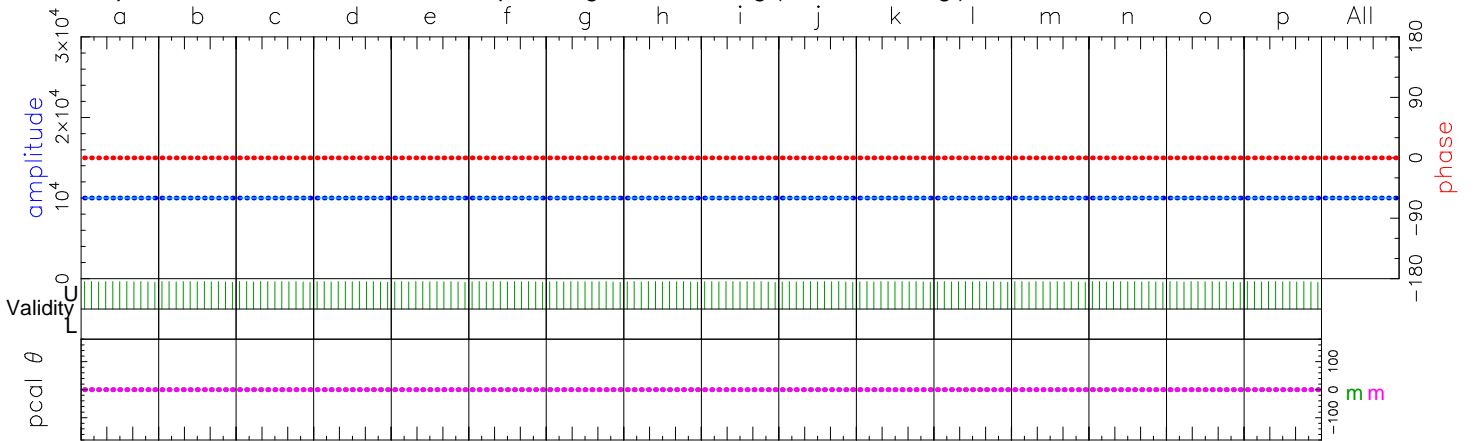


Fringe quality 9

SNR 365567.7
Int time 178.706
Amp 10000.008
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054839
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

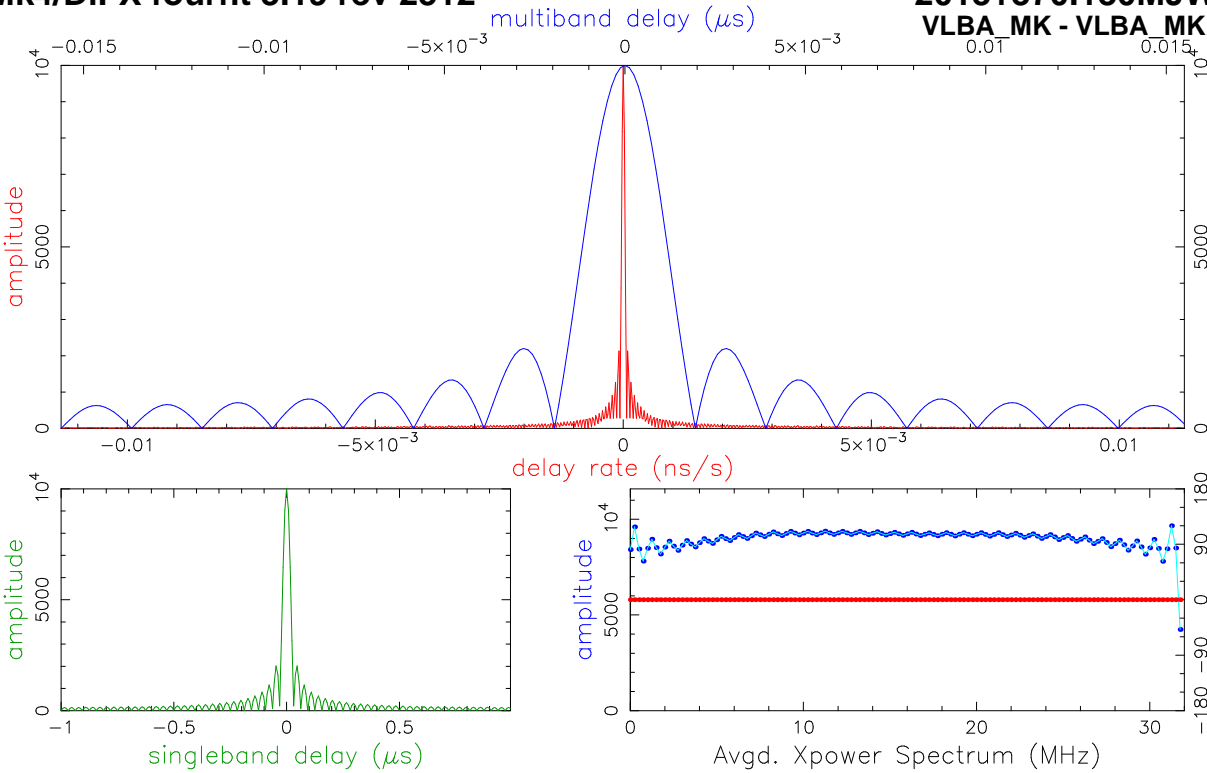


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000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

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.7E-08
 Phase delay (usec) -1.41103953882E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.41104E-20 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.009 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 10000.009 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.009 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mm..130MJW Output file: /Exps/c192c/v2/1234/No0075/mm.W.247.130MJW

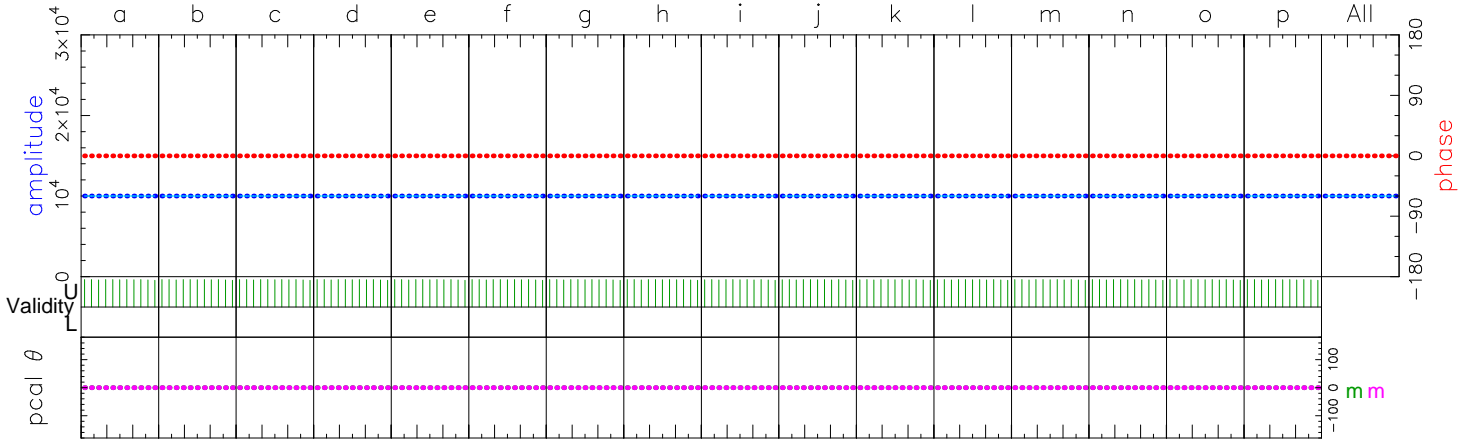


Fringe quality 9

SNR 365567.3
Int time 178.706
Amp 10000.013
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Yr:day 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054841
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



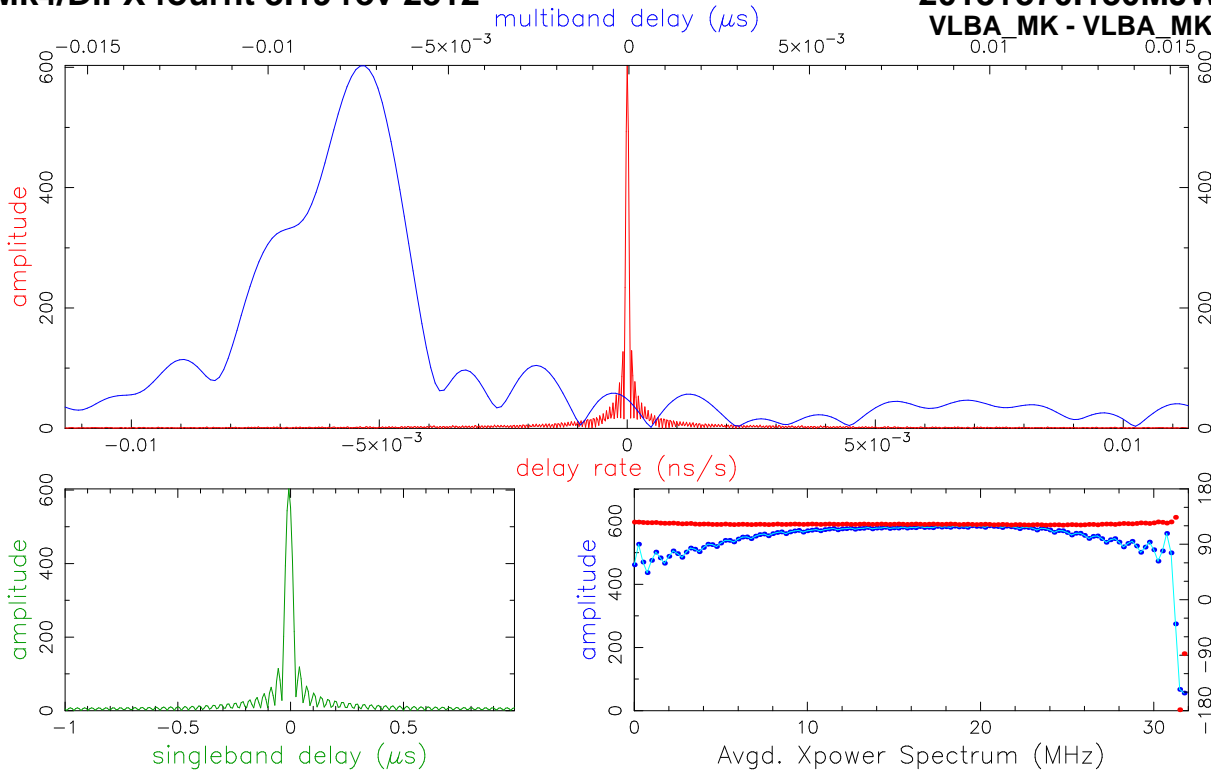
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids
m	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 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.7E-08
 Phase delay (usec) -2.61482122925E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.61482E-20 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) -0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) -0.0 +/- 0.0

RMS Theor. Amplitude 10000.013 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X64) 10000.014 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.014 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mm..130MJW Output file: /Exps/c192c/v2/1234/No0075/mm.W.264.130MJW

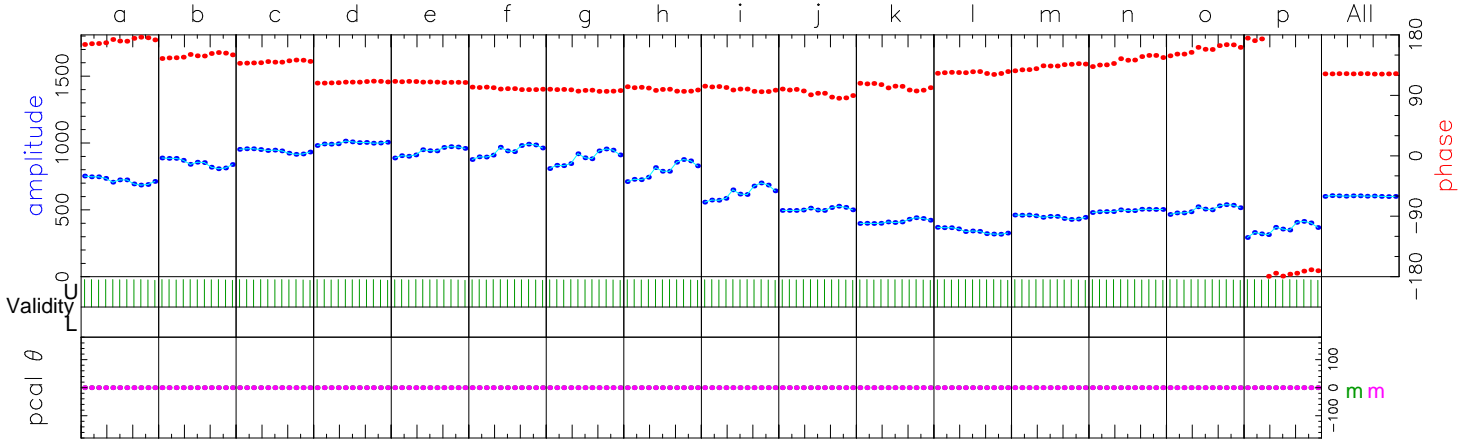


Fringe quality 6

SNR 22046.2
Int time 178.706
Amp 603.068
Phase 122.0
PFD 0.0e+00
Delays (us)
SBD -0.007515
MBD -0.007379
Fringe rate (Hz)
-0.000020
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

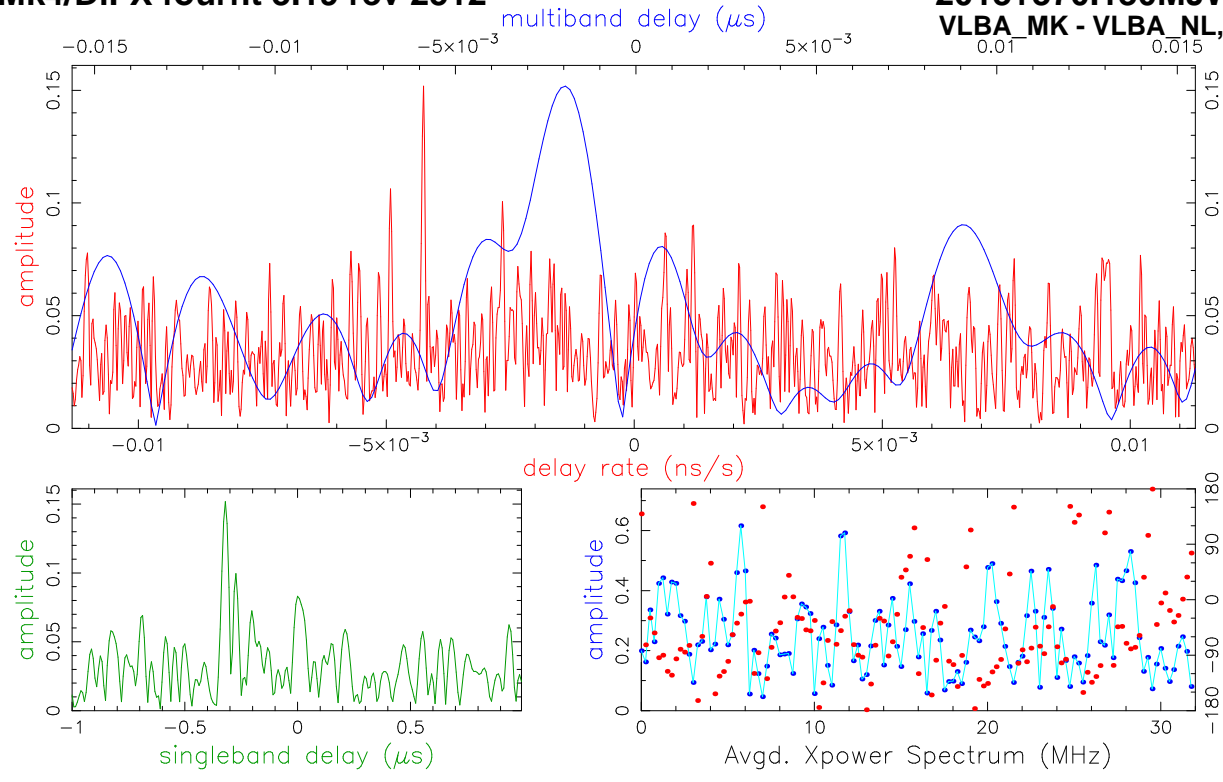
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054844
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



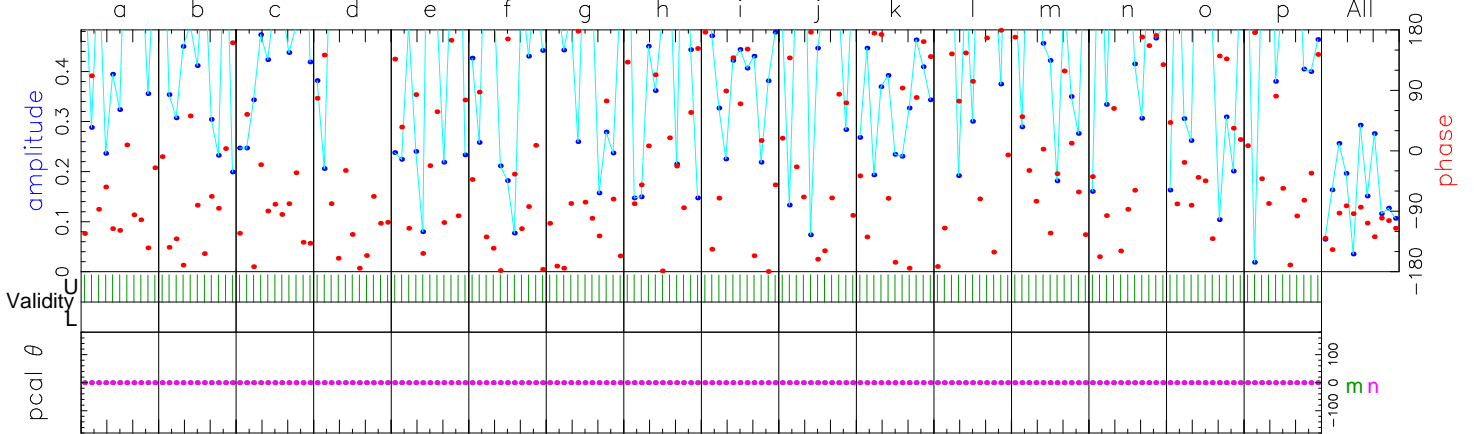
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase					
m:m	0:0	0:0	0:0	0:0	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					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids					
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks					
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids					
																		Tracks					
Group delay (usec)(sbd)			-7.37918750000E-03															Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-7.37919E-03	+/-	4.9E-08
Sband delay (usec)			-7.51450000000E-03															Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-7.51450E-03	+/-	7.8E-07
Phase delay (usec)			3.93358041499E-06															Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.93358E-06	+/-	1.7E-10
Delay rate (us/s)			-2.36658244941E-10															Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-2.36658E-10	+/-	1.6E-12
Total phase (deg)																		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	122.0	+/-	0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 603.068 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.4 0.0 Search (1024X64) 602.260 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.5 0.0 Inc. seg. avg. 602.990 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 m: az 57.7 el 31.4 pa -87.9 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 0.000 0.000 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/c192c/v2/1234/No0075/mm..130MJW Output file: /Exps/c192c/v2/1234/No0075/mm.W.283.130MJW simultaneous interpolator



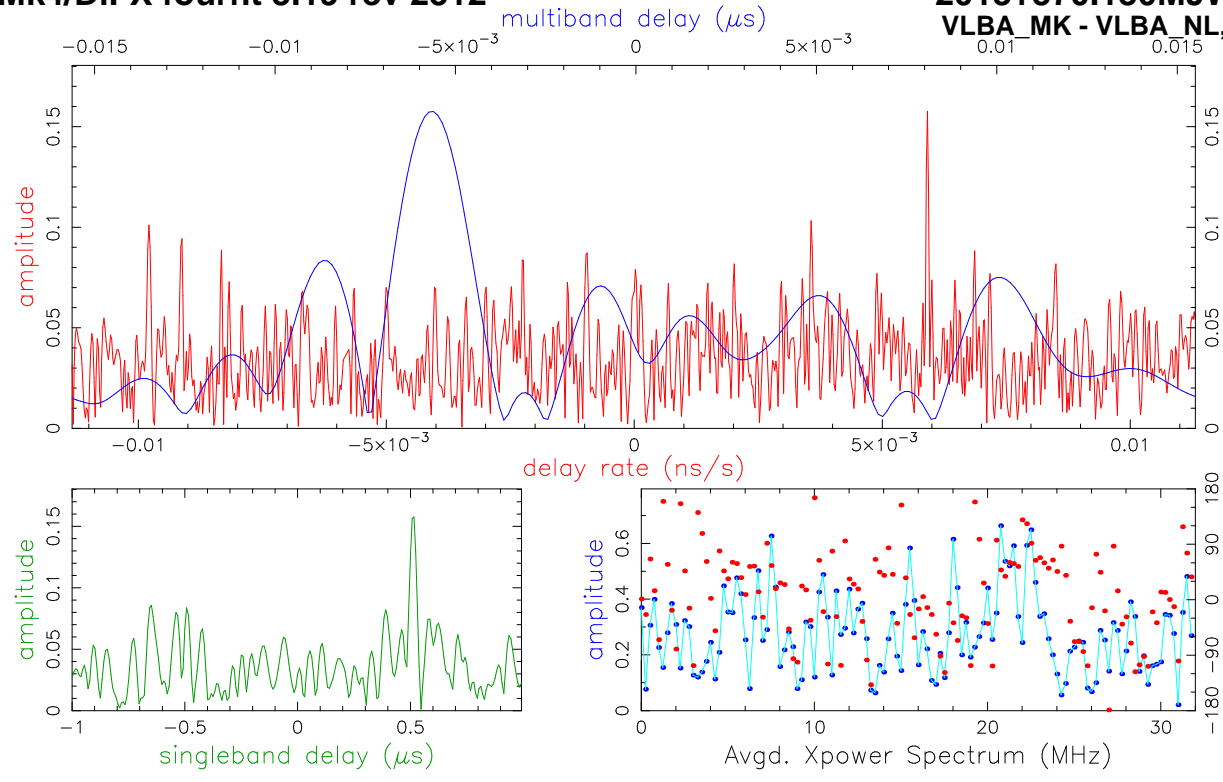
Fringe quality 0
SNR 5.5
Int time 177.263
Amp 0.161
Phase -105.4
PFD 9.8e-01
Delays (us)
SBD -0.320300
MBD -0.001972
Fringe rate (Hz)
-0.367077
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054842
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All		
	-85.2	-74.2	-95.6	-117.9	-58.2	-118.5	-120.1	58.6	176.2	-70.3	176.2	-167.4	-66.0	-163.3	-45.1	-71.1	Phase	-105.4		
	0.3	0.1	0.3	0.4	0.1	0.2	0.4	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2		
	43.7	249.3	249.2	86.8	159.0	199.9	170.0	129.5	2.0	200.1	70.9	131.2	33.2	152.9	93.7	69.3	Sbd box	88.0		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
m:n	0:0	0:0	0:0	0:0	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			
m:n	0:0	0:0	0:0	0:0	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			
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids			
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks			
																	Chan ids			
																	Tracks			
Group delay (usec)(sbd)	-1.00561624724E+04				Apriori delay (usec)				-1.00558480004E+04				Resid mbdelay (usec)				-1.97194E-03 +/- 2.0E-04			
Sband delay (usec)	-1.00561683009E+04				Apriori clock (usec)				-2.3941492E+01				Resid sbdelay (usec)				-3.20300E-01 +/- 3.1E-03			
Phase delay (usec)	-1.00558480038E+04				Apriori clockrate (us/s)				-1.4291580E-07				Resid phdelay (usec)				-3.39962E-06 +/- 6.7E-07			
Delay rate (us/s)	1.03822794442E+00				Apriori rate (us/s)				1.03823220583E+00				Resid rate (us/s)				-4.26140E-06 +/- 6.4E-09			
Total phase (deg)					-17.5				Apriori accel (us/s/s)				3.10290092937E-05				Resid phase (deg)		-105.4 +/- 20.7	

ph/seg (deg) 19.8 34.4 Search (1024X64) 0.146 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.8 60.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 64.5 41.4 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 69.4 72.3 Inc. frq. avg. 0.175 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 57.7 el 31.4 pa -87.9 n: az 168.0 el 85.4 pa -10.4 u,v (fr/asec) -7450.706 -407.599 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mn..130MJW Output file: /Exps/c192c/v2/1234/No0075/mn.W.267.130MJW simultaneous interpolator

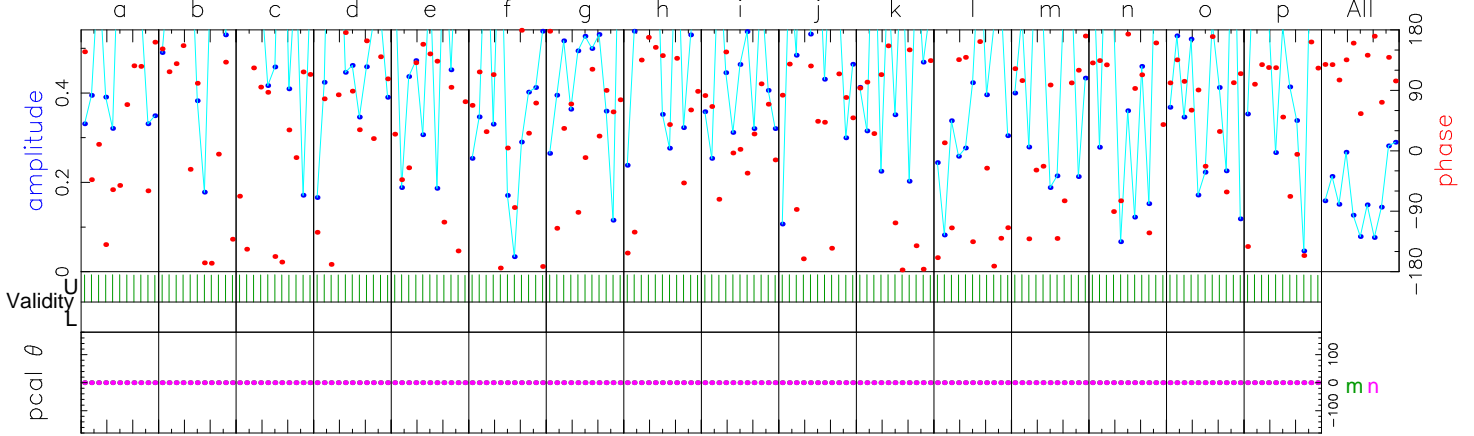


Fringe quality 0

SNR 5.9
Int time 177.264
Amp 0.180
Phase 123.9
PFD 4.5e-01
Delays (us)
SBD 0.512015
MBD -0.005692
Fringe rate (Hz) 0.510201
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

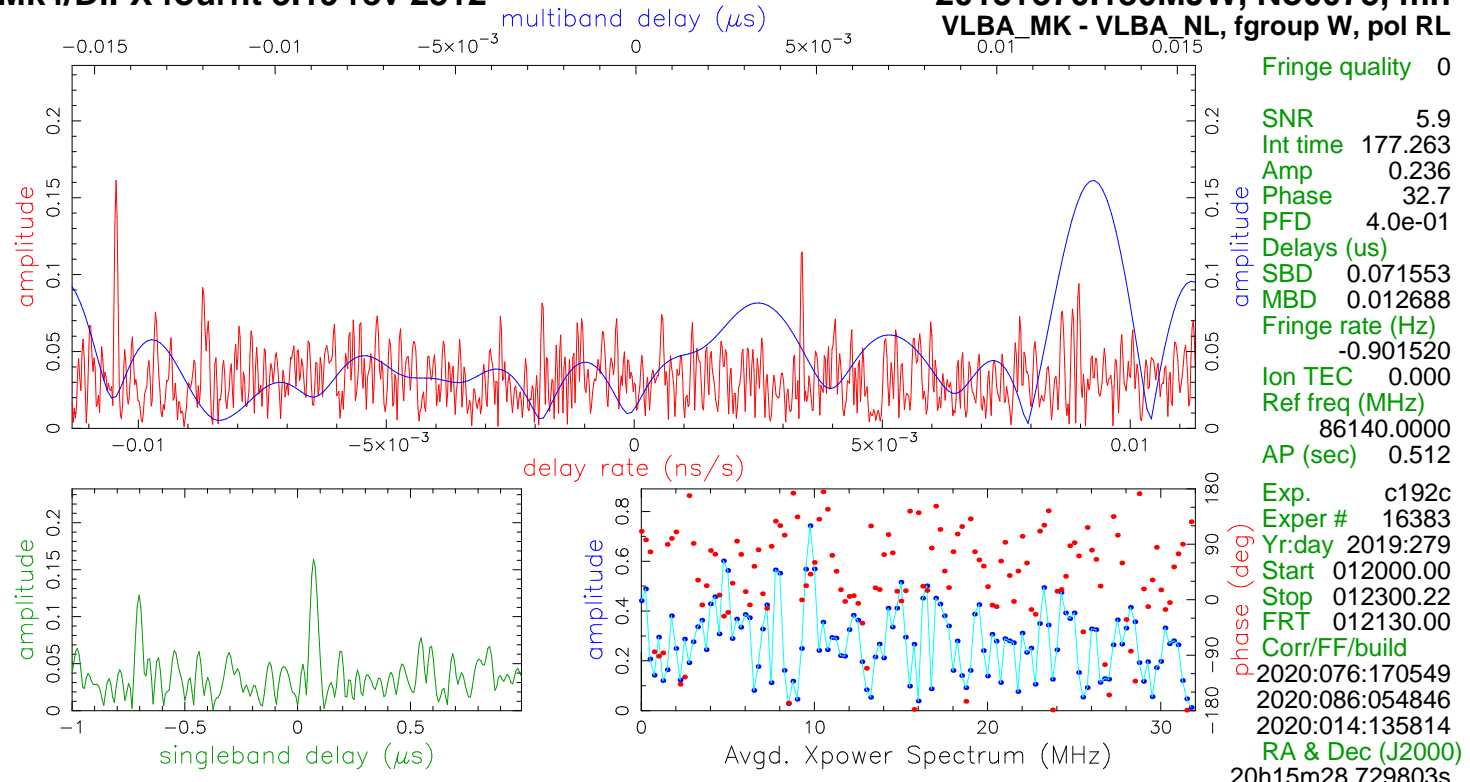
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054843
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

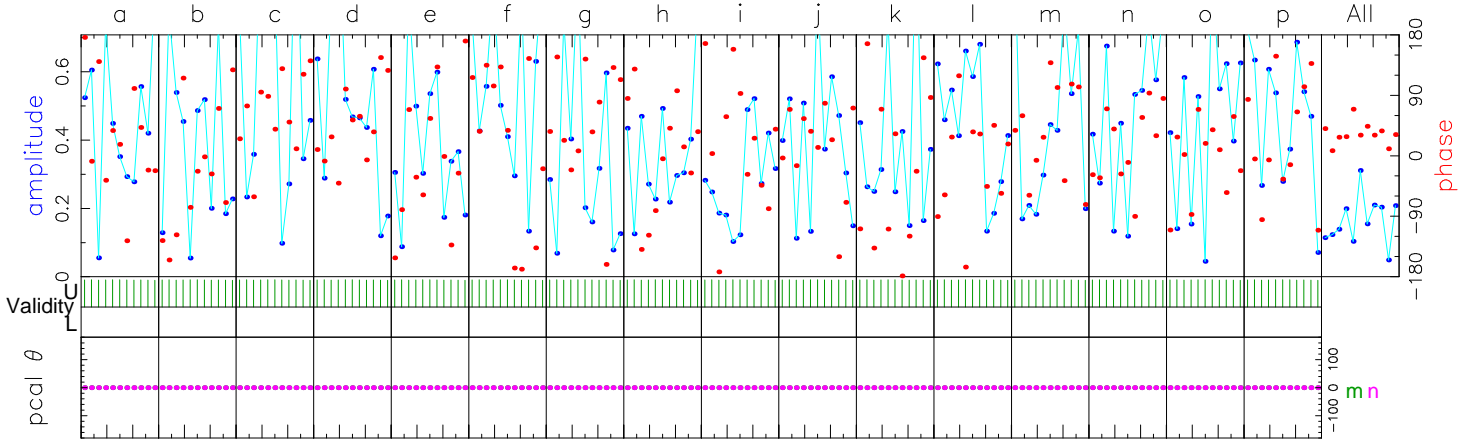


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-1.00553224429E+04																
Sband delay (usec)		-1.00553359859E+04																
Phase delay (usec)		-1.00558479964E+04																
Delay rate (us/s)		1.03823812876E+00																
Total phase (deg)					-148.2													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
PCal mode: MANUAL, MANUAL																		
PCal rate: 0.000E+00, 0.000E+00 (us/s)																		
SampCntNorm: enabled																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
nlags: 128 t_cohere infinite																		
ion window (TEC)																		
simultaneous interpolator																		

ph/seg (deg) 33.5 32.4 Search (1024X64) 0.150 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.1 56.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.4 39.1 Inc. seg. avg. 0.170 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 53.1 68.3 Inc. frq. avg. 0.184 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 m: az 57.7 el 31.4 pa -87.9 n: az 168.0 el 85.4 pa -10.4 u,v (fr/asec) -7450.706 -407.599 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mn..130MJW Output file: /Exps/c192c/v2/1234/No0075/mn.W.282.130MJW



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



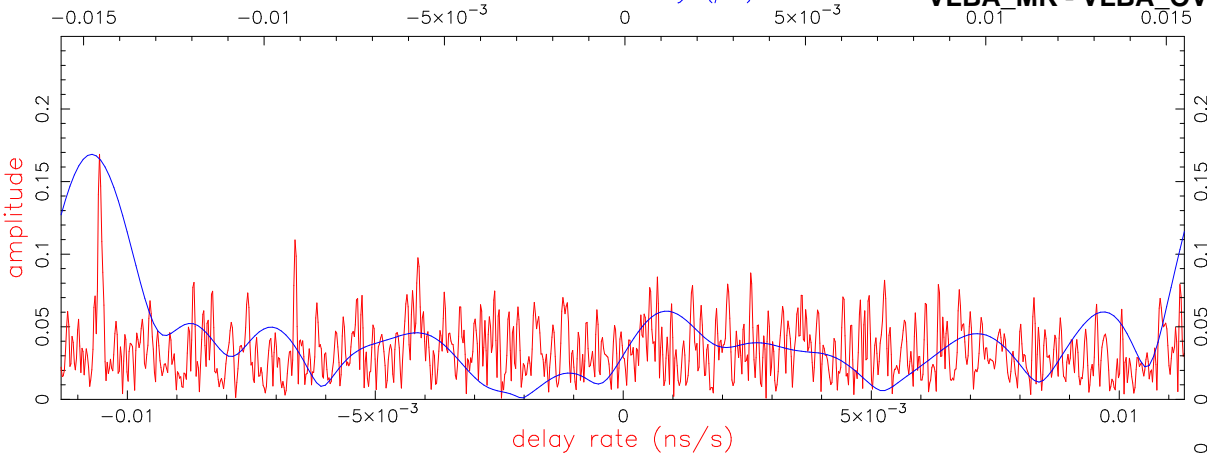
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-2.8	-52.5	58.7	22.9	39.7	127.1	33.0	20.2	-1.4	30.5	-100.7	2.4	55.1	39.7	5.5	55.4	Phase	32.7				
	0.4	0.0	0.6	0.5	0.1	0.3	0.2	0.2	0.2	0.4	0.1	0.2	0.3	0.4	0.4	0.3	Ampl.	0.2				
	7.3	251.8	138.5	139.2	242.6	227.4	89.2	127.0	44.9	49.7	255.1	90.5	99.6	176.6	137.6	91.6	Sbd box	138.2				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
m:n	0:0	0:0	0:0	0:0	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					
m:n	0:0	0:0	0:0	0:0	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					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
n	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids					
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks					
																	Tracks					
Group delay (usec)(sbd)			-1.00557728128E+04														Apriori delay (usec)	-1.00558480004E+04	Resid mbdelay (usec)	1.26876E-02	+/-	1.8E-04
Sband delay (usec)			-1.00557764479E+04														Apriori clock (usec)	-2.3941492E+01	Resid sbdelay (usec)	7.15525E-02	+/-	2.9E-03
Phase delay (usec)			-1.00558479994E+04														Apriori clockrate (us/s)	-1.4291580E-07	Resid phdelay (usec)	1.05509E-06	+/-	6.3E-07
Delay rate (us/s)			1.03822174008E+00														Apriori rate (us/s)	1.03823220583E+00	Resid rate (us/s)	-1.04658E-05	+/-	6.0E-09
Total phase (deg)																	Apriori accel (us/s/s)	3.10290092937E-05	Resid phase (deg)	32.7	+/-	19.5

	RMS	Theor.	Amplitude	0.236 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	15.8	32.3	Search (1024X64)	0.156	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	41.8	56.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.016 0.016
ph/frq (deg)	53.5	38.9	Inc. seg. avg.	0.208	Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
amp/frq (%)	66.2	68.0	Inc. frq. avg.	0.236	Data rate(Mb/s): 2048	nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 n: az 168.0 el 85.4 pa -10.4 u,v (fr/asec) -7450.706 -407.599 simultaneous interpolator

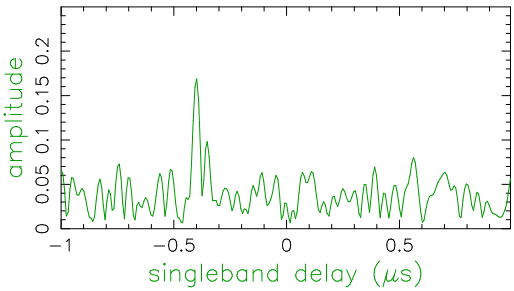
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mn..130MJW Output file: /Exps/c192c/v2/1234/No0075/mn.W.301.130MJW

multiband delay (μ s)

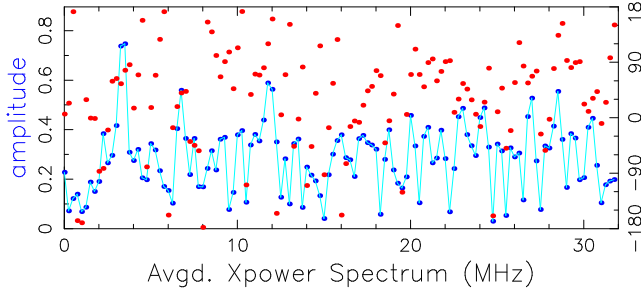


Fringe quality 0

SNR 6.2
Int time 177.009
Amp 0.250
Phase -5.8
PFD 8.8e-02
Delays (us)
SBD -0.400075
MBD -0.014781
Fringe rate (Hz)
-0.911685
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

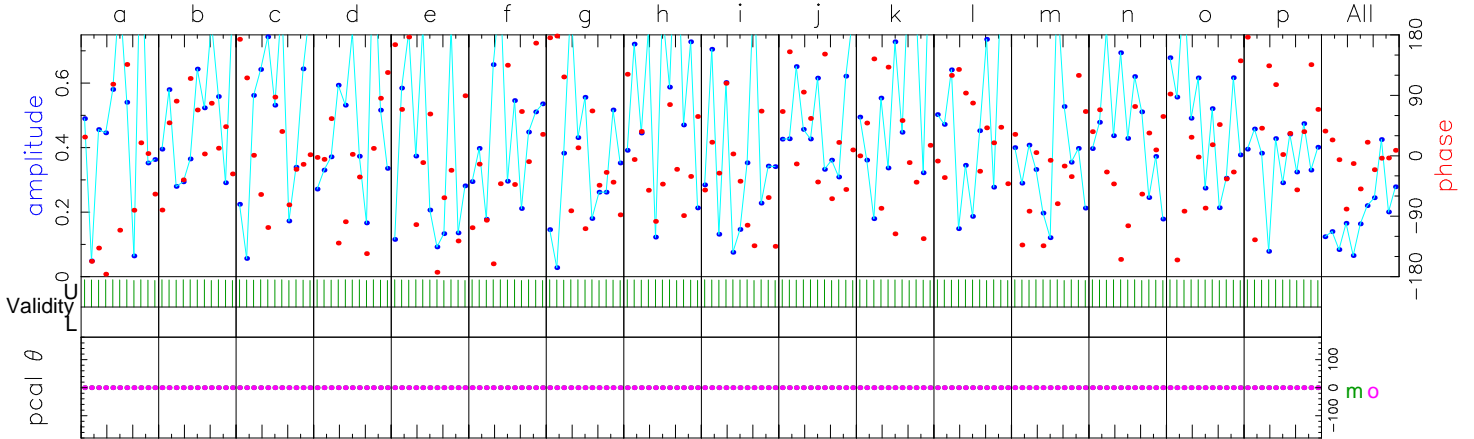


delay rate (ns/s)

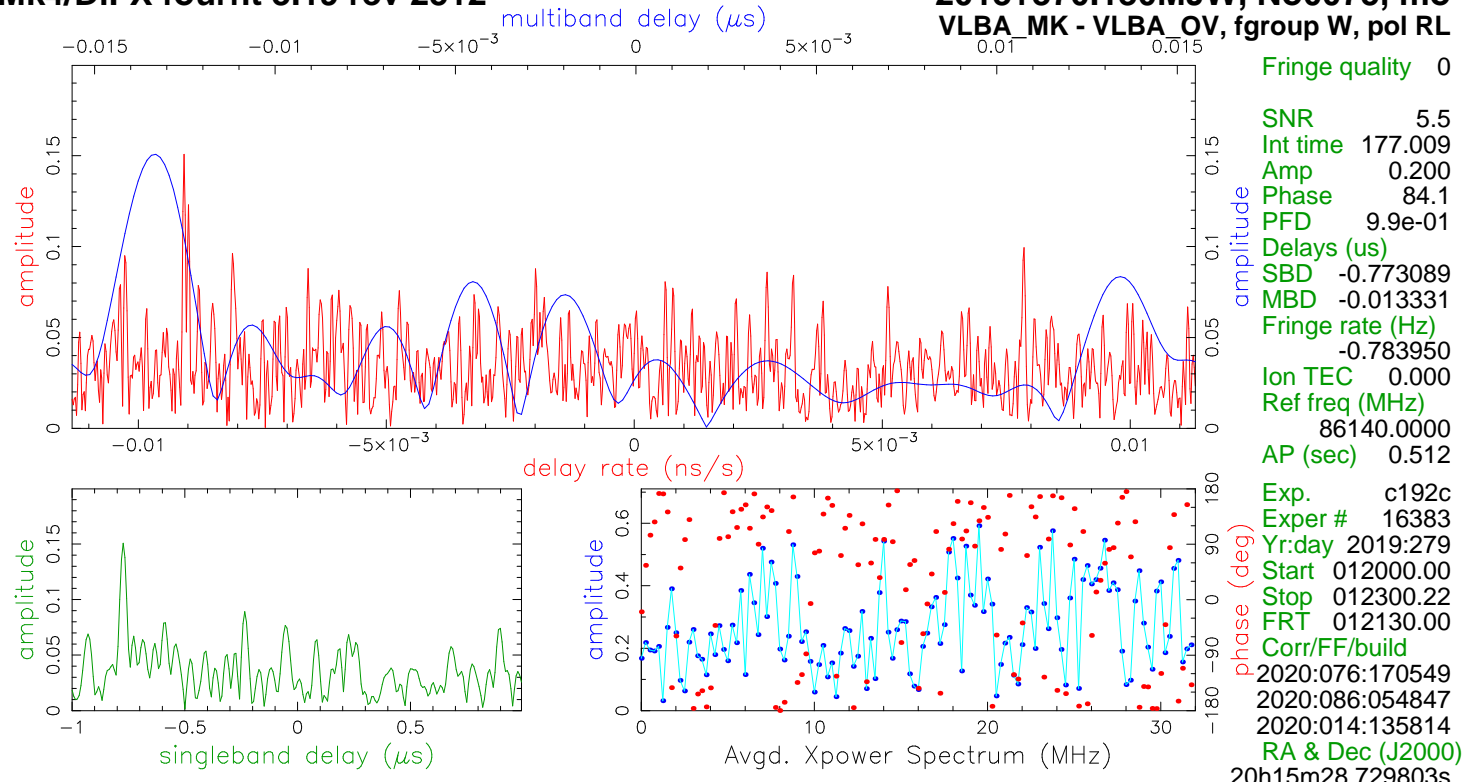


Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054845
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

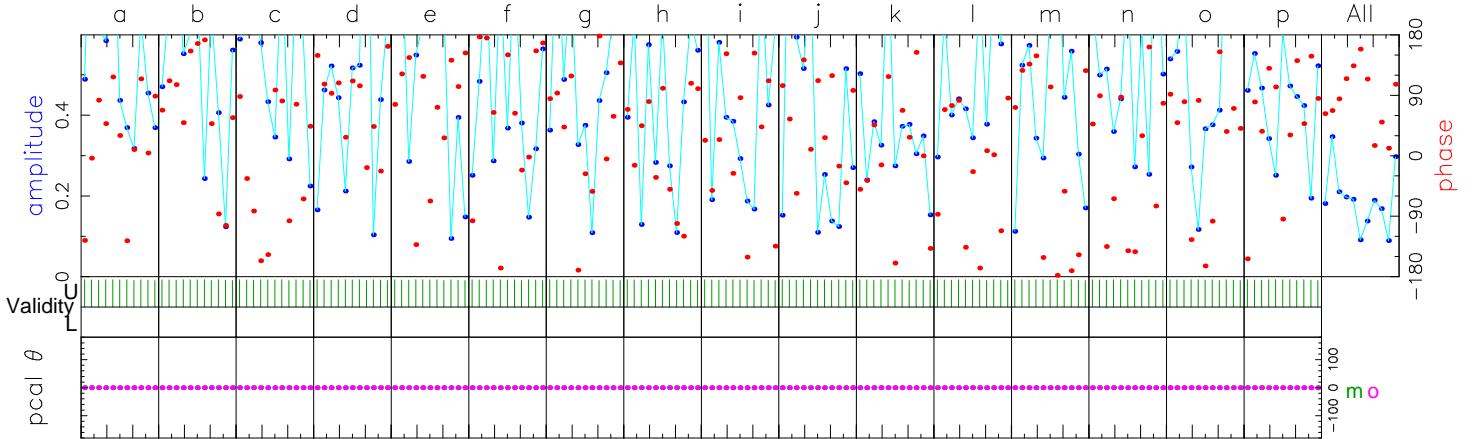
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	
Group delay (usec)(sbd)		-8.58767274267E+03																
Sband delay (usec)		-8.58768303578E+03																
Phase delay (usec)		-8.58728296147E+03																
Delay rate (us/s)		5.96421847357E-01																
Total phase (deg)					-108.4													
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		
Pcal mode: MANUAL, MANUAL																		
Pcal rate: 0.000E+00, 0.000E+00 (us/s)																		
Bits/sample: 2x2																		
Sample rate(MSamp/s): 64																		
Data rate(Mb/s): 2048																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
pcal mode: MANUAL, MANUAL																		
PC period (AP's) 5, 5																		
Search (1024X64)																		
Interp.																		
Inc. seg. avg.																		
Inc. frq. avg.																		
0.250 +/- 0.041																		
0.165																		
0.000																		
0.247																		
0.236																		
PC period (AP's) 5, 5																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		
-1.000 1.000																		
-0.016 0.016																		
-0.011 0.011																		
0.00 0.00																		
simultaneous interpolator																		

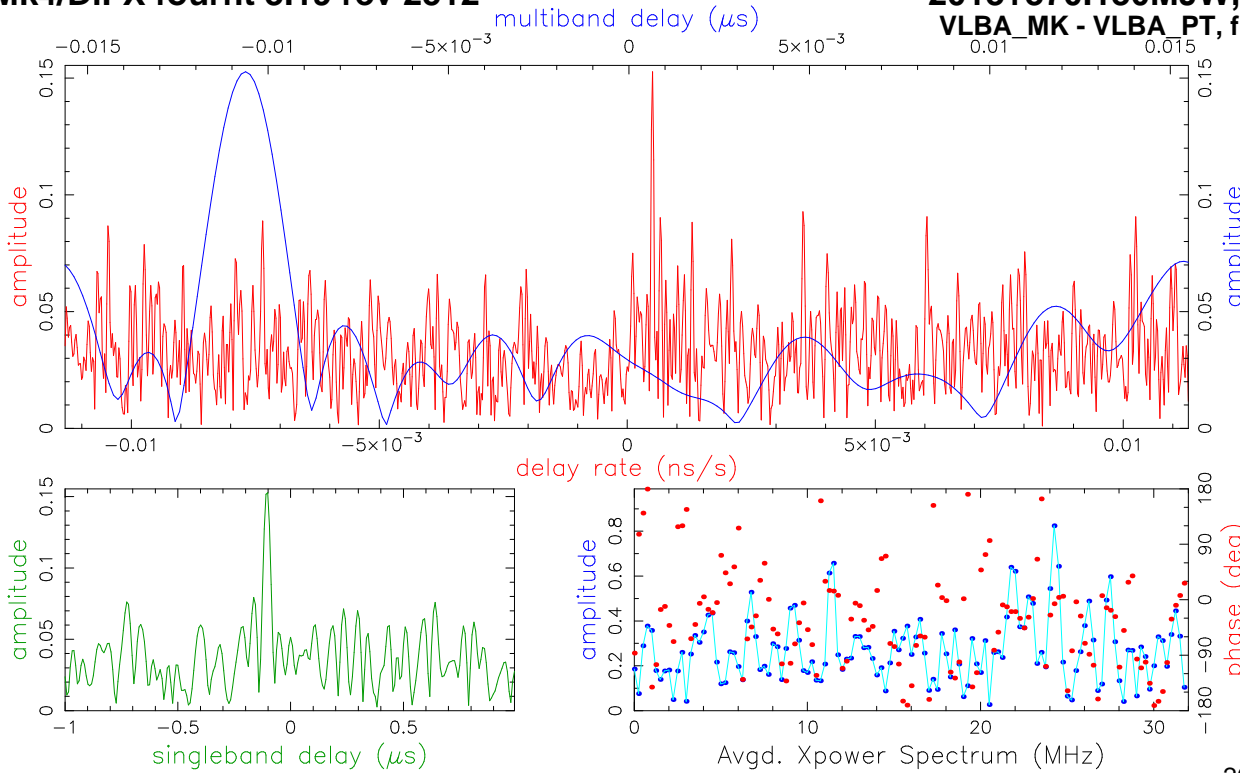


Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



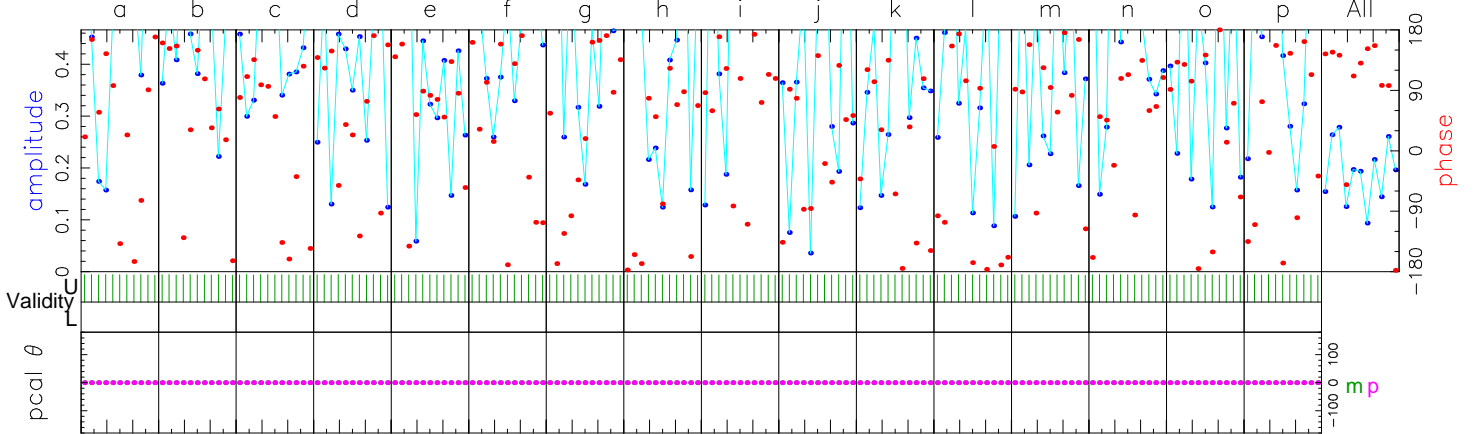
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	59.2	103.1	37.8	80.3	97.3	156.6	90.7	68.1	45.0	32.6	43.1	51.7	159.1	8.2	70.2	91.1	Phase	84.1
	0.3	0.4	0.1	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.1	0.1	0.4	0.0	0.4	0.2	Ampl.	0.2
	167.2	31.3	244.2	216.2	121.1	11.9	161.3	22.9	124.8	161.5	188.9	104.0	140.3	7.1	177.0	153.3	Sbd box	30.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m:o	0:0	0:0	0:0	0:0	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	
m:m	0:0	0:0	0:0	0:0	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Group delay (usec)(sbd)	-8.58804629260E+03			Apriori delay (usec)			-8.58728296128E+03			Resid mbdelay (usec)			-1.33313E-02			+/- 2.0E-04		
Sband delay (usec)	-8.58805604978E+03			Apriori clock (usec)			-1.4071649E+01			Resid sbdelay (usec)			-7.73089E-01			+/- 3.1E-03		
Phase delay (usec)	-8.58728295857E+03			Apriori clockrate (us/s)			-9.6732924E-09			Resid phdelay (usec)			2.71315E-06			+/- 6.7E-07		
Delay rate (us/s)	5.96423330236E-01			Apriori rate (us/s)			5.96432431116E-01			Resid rate (us/s)			-9.10088E-06			+/- 6.5E-09		
Total phase (deg)	-18.5			Apriori accel (us/s/s)			2.74406755450E-05			Resid phase (deg)			84.1			+/- 20.9		

ph/seg (deg) 44.9 34.6 Search (1024X64) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 55.5 60.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 44.3 41.8 Inc. seg. avg. 0.214 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 61.1 72.9 Inc. frq. avg. 0.197 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 57.7 el 31.4 pa -87.9 o: az 81.4 el 67.9 pa -81.3 u,v (fr/asec) -4273.986 -210.192 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mo..130MJW Output file: /Exps/c192c/v2/1234/No0075/mo.W.310.130MJW



Fringe quality 0
SNR 5.7
Int time 178.491
Amp 0.155
Phase 136.0
PFD 8.2e-01
Delays (us)
SBD -0.105137
MBD -0.010627
Fringe rate (Hz) 0.044184
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build 2020:076:170549
2020:086:054840
2020:014:135814
RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"

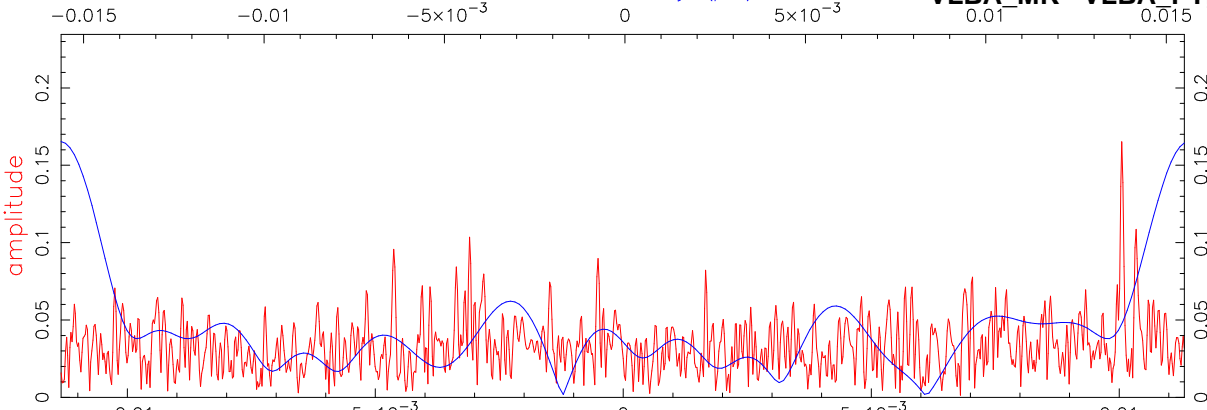
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	115.5				
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	0.1				
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	136.0				
m:p	0:0	0:0	0:0	0:0	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	0.1				
m:p	0:0	0:0	0:0	0:0	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	115.5				
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks					
Group delay (usec)(sbd)		-9.44856200478E+03															Apriori delay (usec)	-9.44845762795E+03	Resid mbdelay (usec)	-1.06268E-02	+/-	1.9E-04
Sband delay (usec)		-9.44856276495E+03															Apriori clock (usec)	-9.3878040E+00	Resid sbdelay (usec)	-1.05137E-01	+/-	3.0E-03
Phase delay (usec)		-9.44845762356E+03															Apriori clockrate (us/s)	-2.1257888E-07	Resid phdelay (usec)	4.38431E-06	+/-	6.5E-07
Delay rate (us/s)		7.46507022833E-01															Apriori rate (us/s)	7.46506509900E-01	Resid rate (us/s)	5.12933E-07	+/-	6.3E-09
Total phase (deg)					110.2												Apriori accel (us/s/s)	3.48706236361E-05	Resid phase (deg)	136.0	+/-	20.2

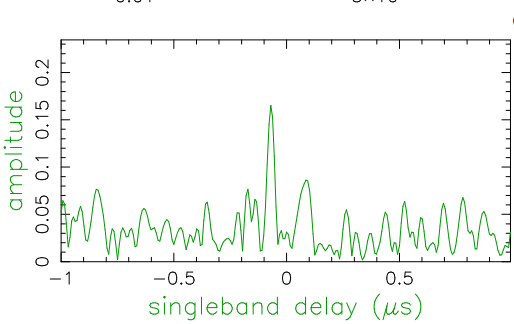
ph/seg (deg) 58.0 33.5 Search (1024X64) 0.152 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 44.0 58.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 39.8 40.4 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 44.0 70.5 Inc. frq. avg. 0.142 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 57.7 el 31.4 pa -87.9 p: az 73.3 el 75.3 pa -95.7 u,v (fr/asec) -5347.530 531.778 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mp..130MJW Output file: /Exps/c192c/v2/1234/No0075/mp.W.257.130MJW

multiband delay (μ s)

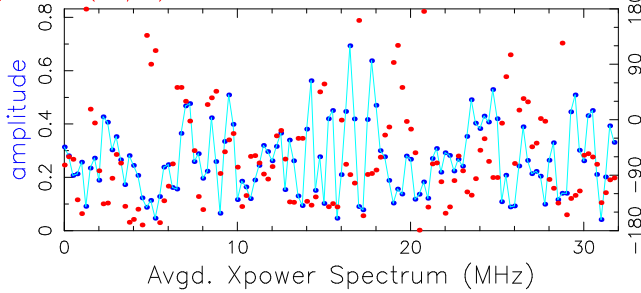


Fringe quality 0

SNR 6.0
Int time 178.490
Amp 0.235
Phase 149.7
PFD 1.8e-01
Delays (us)
SBD -0.069347
MBD 0.015634
Fringe rate (Hz)
0.867796
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

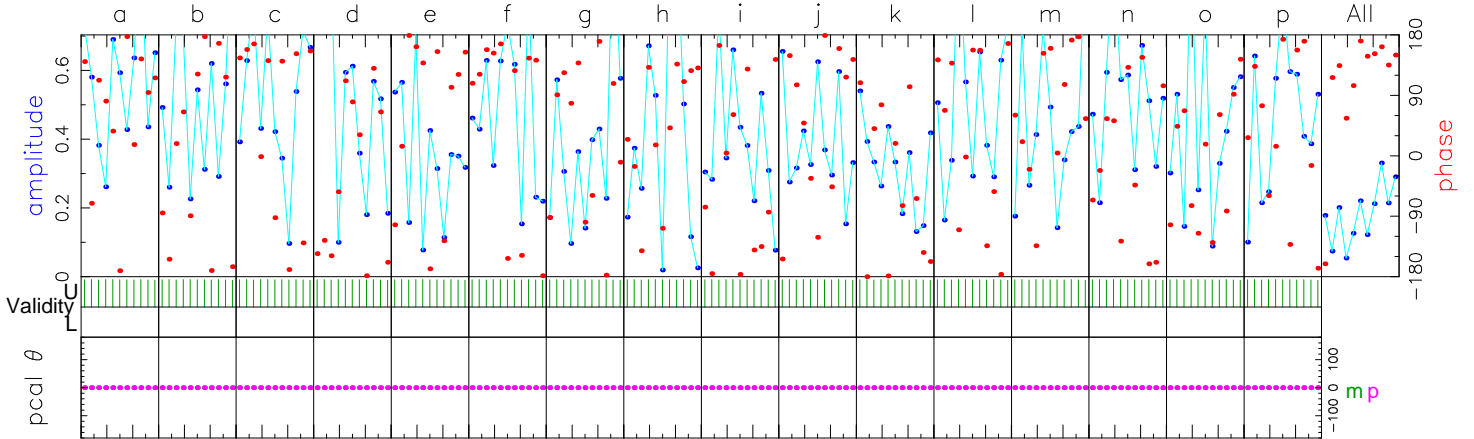


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054843
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	118.4	159.5	167.1	176.0	160.4	153.5	114.0	87.6	-179.7	176.9	133.4	-173.8	111.5	121.3	-3.7	168.5	Phase	149.7
m	0.4	0.3	0.5	0.3	0.2	0.6	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.3	Ampl.	0.2
p	242.1	187.4	120.1	124.9	34.5	119.7	59.8	218.8	216.6	2.4	145.3	220.1	39.0	227.4	24.4	108.1	Sbd box	120.1
m:p	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m:p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	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	
m:p	0:0	0:0	0:0	0:0	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks	

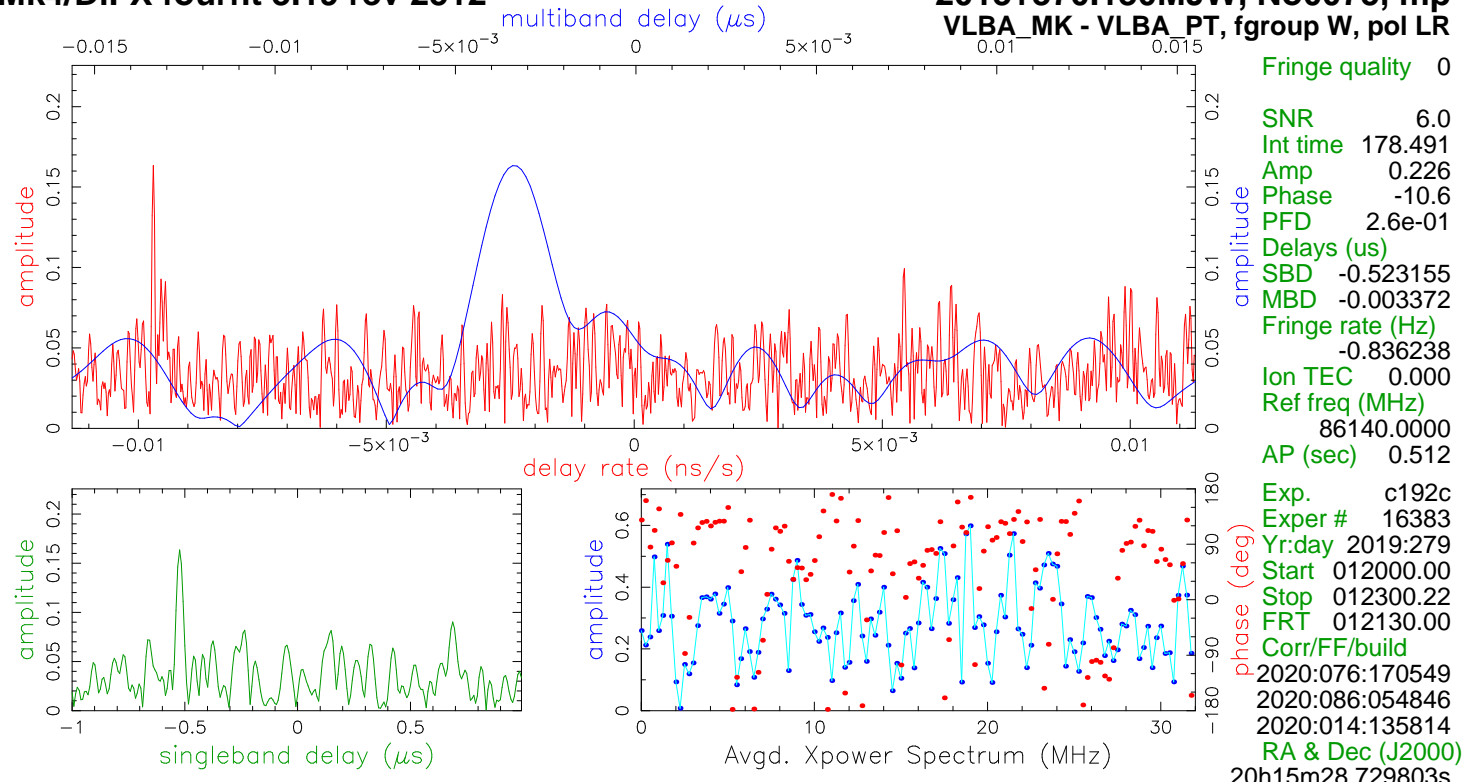
Group delay (usec)(sbd) -9.44853574389E+03 Apriori delay (usec) -9.44845762795E+03 Resid mbdelay (usec) 1.56341E-02 +/- 1.8E-04
 Sband delay (usec) -9.44852697495E+03 Apriori clock (usec) -9.3878040E+00 Resid sbdelay (usec) -6.93470E-02 +/- 2.8E-03
 Phase delay (usec) -9.44845762312E+03 Apriori clockrate (us/s) -2.1257888E-07 Resid phdelay (usec) 4.82640E-06 +/- 6.1E-07
 Delay rate (us/s) 7.46516584153E-01 Apriori rate (us/s) 7.46506509900E-01 Resid rate (us/s) 1.00743E-05 +/- 5.9E-09
 Total phase (deg) 123.9 Apriori accel (us/s/s) 3.48706236361E-05 Resid phase (deg) 149.7 +/- 19.0

ph/seg (deg) RMS 37.5 Theor. 31.4 Amplitude 0.235 +/- 0.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.3 54.9 Search (1024X64) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.2 37.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 55.5 66.2 Inc. seg. avg. 0.227 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 p: az 73.3 el 75.3 pa -95.7 u,v (fr/asec) -5347.530 531.778 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mp..130MJW Output file: /Exps/c192c/v2/1234/No0075/mp.W.280.130MJW

Mk4/DiFX fourfit 3.19 rev 2512

2013+370.130MJW, No0075, mp
VLBA_MK - VLBA_PT, fgroup W, pol LR



Fringe quality 0

SNR 6.0

Int time 178.491

Amp 0.226

Phase -10.6

PFD 2.6e-01

Delays (us)

SBD -0.523155

MBD -0.003372

Fringe rate (Hz)

-0.836238

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192c

Exper # 16383

Yr:day 2019:279

Start 012000.00

Stop 012300.22

FRT 012130.00

Corr/FF/build

2020:076:170549

2020:086:054846

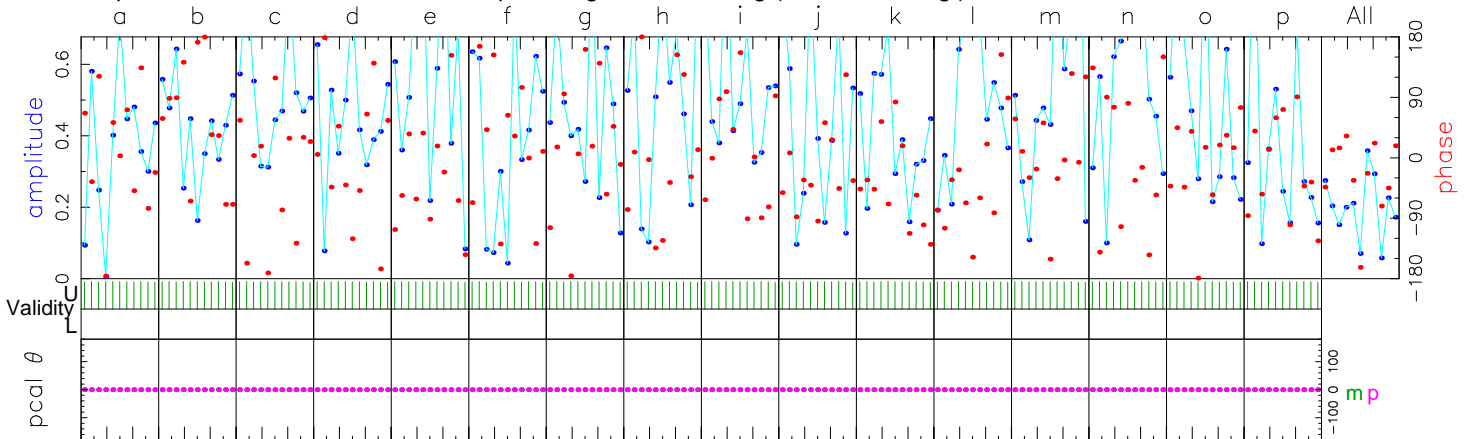
2020:014:135814

RA & Dec (J2000)

20h15m28.729803s

+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Chan ids
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks
Group delay (usec)(sbd)		-9.44899224991E+03																
Sband delay (usec)		-9.44898078295E+03																
Phase delay (usec)		-9.44845762829E+03																
Delay rate (us/s)		7.46496802003E-01																
Total phase (deg)																		
Apriori delay (usec)																		
Apriori clock (usec)																		
Apriori clockrate (us/s)																		
Apriori rate (us/s)																		
Apriori accel (us/s/s)																		
Resid mbdelay (usec)																		
Resid sbdelay (usec)																		
Resid phdelay (usec)																		
Resid rate (us/s)																		
Resid phase (deg)																		

ph/seg (deg) 56.3 31.8 Search (1024X64) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 57.3 55.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 36.1 38.4 Inc. seg. avg. 0.241 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

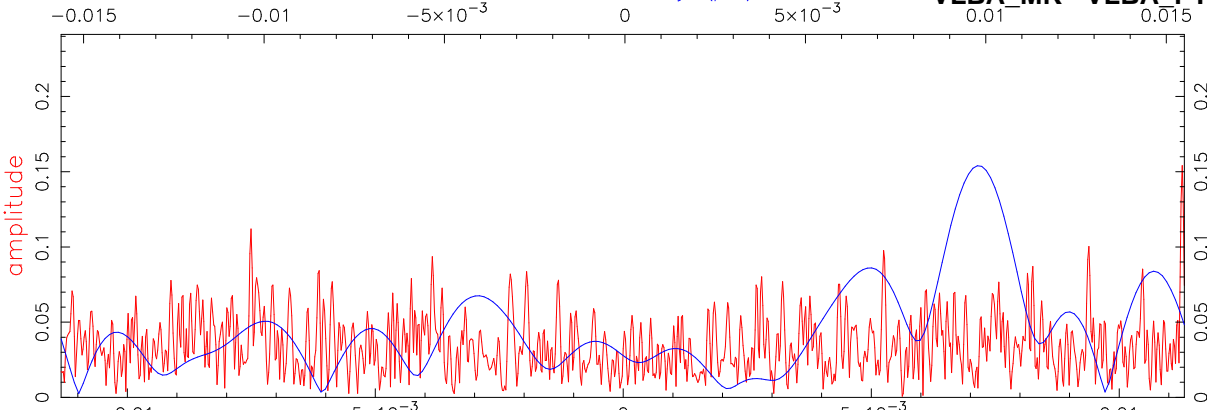
amp/frq (%) 62.8 67.0 Inc. frq. avg. 0.217 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

m: az 57.7 el 31.4 pa -87.9 p: az 73.3 el 75.3 pa -95.7 u,v (fr/asec) -5347.530 531.778 ion window (TEC) 0.00 0.00 simultaneous interpolator

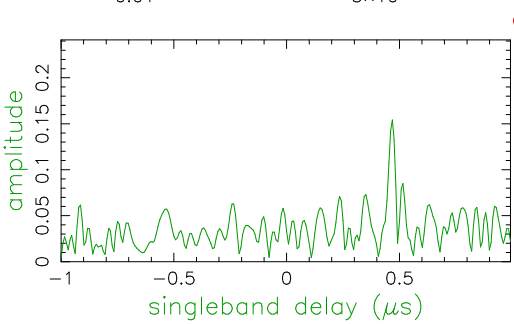
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mp..130MJW Output file: /Exps/c192c/v2/1234/No0075/mp.W.302.130MJW

multiband delay (μ s)

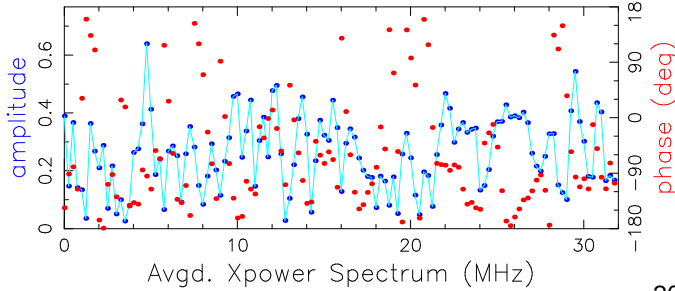
Fringe quality 0



SNR 5.6
Int time 178.490
Amp 0.241
Phase 15.2
PFD 8.8e-01
Delays (us)
SBD 0.467743
MBD 0.009785
Fringe rate (Hz) 0.971952
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

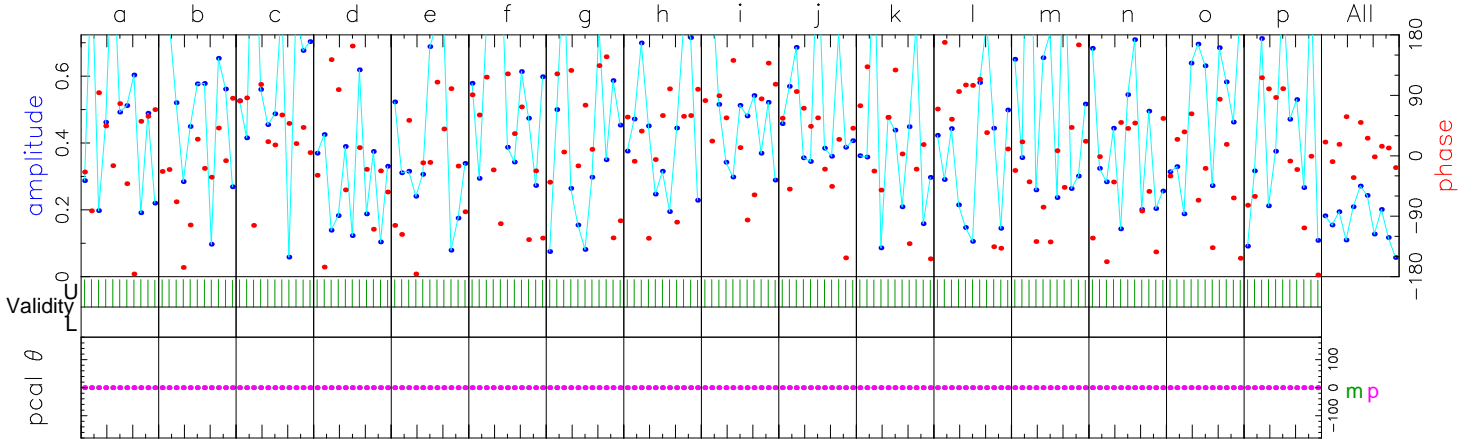


delay rate (ns/s)



Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054848
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

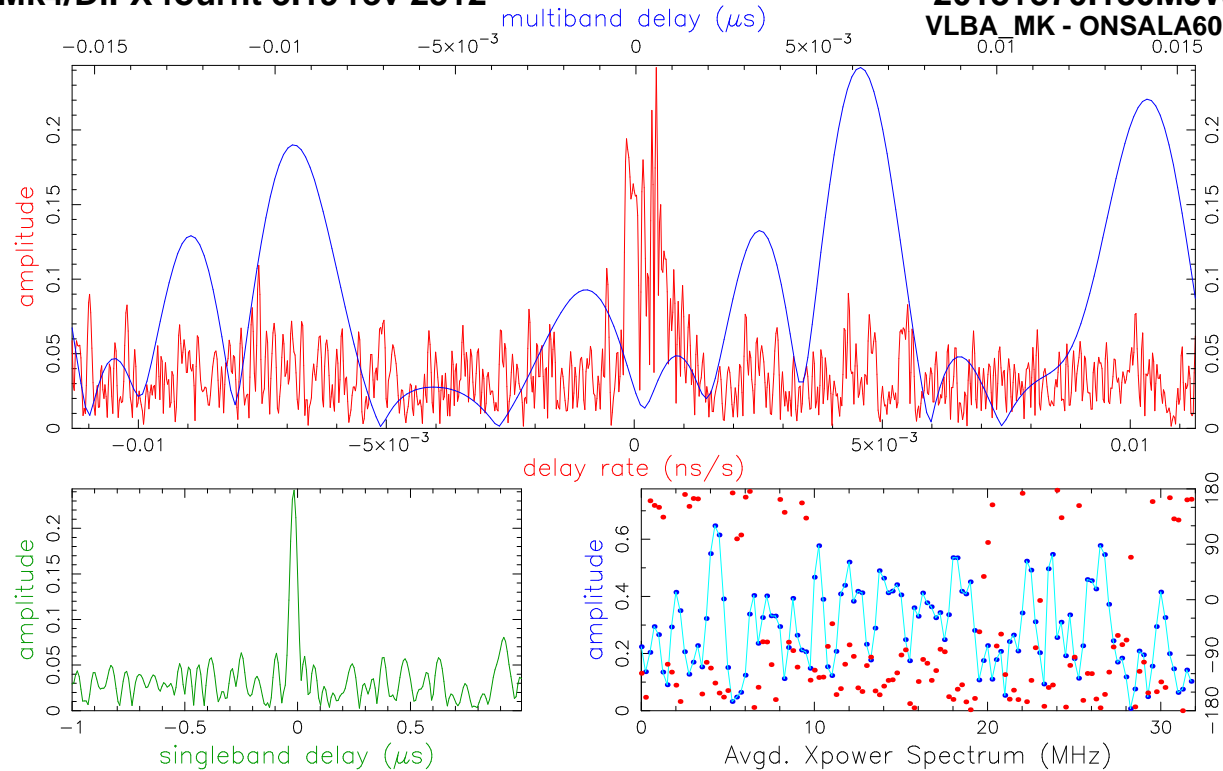
Amp. and Phase vs. time for each freq., 11 segs, 32 APs / seg (16.38 sec / seg.), time ticks 30 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All					
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	188.9					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs						
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase						
m:p	0:0	0:0	0:0	0:0	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						
m:p	0:0	0:0	0:0	0:0	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						
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids						
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Tracks						
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids						
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks						
Group delay (usec)(sbd)		-9.44797909307E+03															Apriori delay (usec)	-9.44845762795E+03	Resid mbdelay (usec)	9.78488E-03	+/-	1.9E-04	
Sband delay (usec)		-9.44798988445E+03																Apriori clock (usec)	-9.3878040E+00	Resid sbdelay (usec)	4.67743E-01	+/-	3.1E-03
Phase delay (usec)		-9.44845762746E+03																Apriori clockrate (us/s)	-2.1257888E-07	Resid phdelay (usec)	4.89910E-07	+/-	6.6E-07
Delay rate (us/s)		7.46517793300E-01																Apriori rate (us/s)	7.46506509900E-01	Resid rate (us/s)	1.12834E-05	+/-	6.3E-09
Total phase (deg)					-10.6													Apriori accel (us/s/s)	3.48706236361E-05	Resid phase (deg)	15.2	+/-	20.3

RMS Theor. Amplitude 0.241 +/- 0.043 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 25.9 33.7 Search (1024X64) 0.149 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 40.3 58.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 43.4 40.6 Inc. seg. avg. 0.227 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 67.9 70.9 Inc. frq. avg. 0.241 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 p: az 73.3 el 75.3 pa -95.7 u,v (fr/asec) -5347.530 531.778 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mp..130MJW Output file: /Exps/c192c/v2/1234/No0075/mp.W.315.130MJW

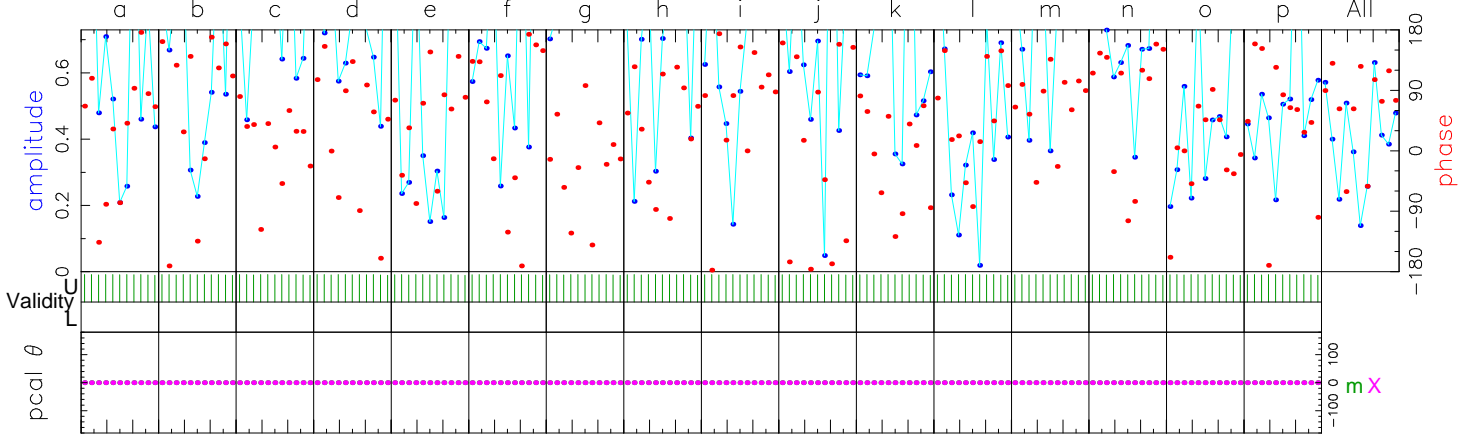


Fringe quality 9

SNR 8.9
Int time 178.704
Amp 0.243
Phase 85.3
PFD 1.2e-10
Delays (us)
SBD -0.017577
MBD 0.006203
Fringe rate (Hz) 0.038831
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

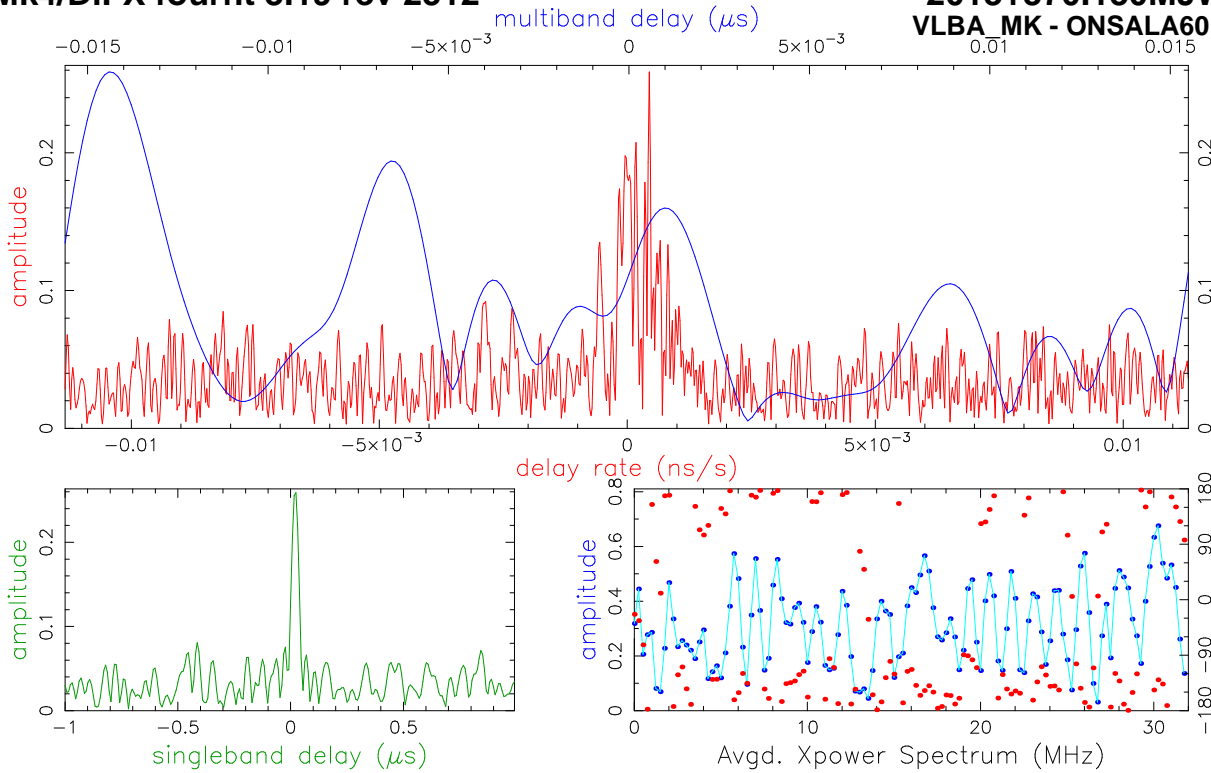
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054840
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m: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		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	2.32572072639E+03			Apriori delay (usec)			2.32574577368E+03			Resid mbdelay (usec)			6.20271E-03			+/-	1.2E-04	
Sband delay (usec)	2.32572819718E+03			Apriori clock (usec)			-2.9819094E+01			Resid sbdelay (usec)			-1.75765E-02			+/-	1.9E-03	
Phase delay (usec)	2.32574577643E+03			Apriori clockrate (us/s)			-5.3669233E-07			Resid phdelay (usec)			2.75008E-06			+/-	4.2E-07	
Delay rate (us/s)	1.70238864276E+00			Apriori rate (us/s)			1.70238819197E+00			Resid rate (us/s)			4.50791E-07			+/-	4.0E-09	
Total phase (deg)	65.3			Apriori accel (us/s/s)			-4.68970641193E-05			Resid phase (deg)			85.3			+/-	12.9	

ph/seg (deg) 65.4 21.4 Search (1024X64) 0.227 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 86.2 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) 55.6 25.8 Inc. seg. avg. 0.371 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 75.8 45.0 Inc. frq. avg. 0.359 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 57.7 el 31.4 pa -87.9 X: az 301.1 el 24.7 pa 34.3 u,v (fr/asec) -12290.479 -6278.522 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mX..130MJW Output file: /Exps/c192c/v2/1234/No0075/mX.W.252.130MJW simultaneous interpolator

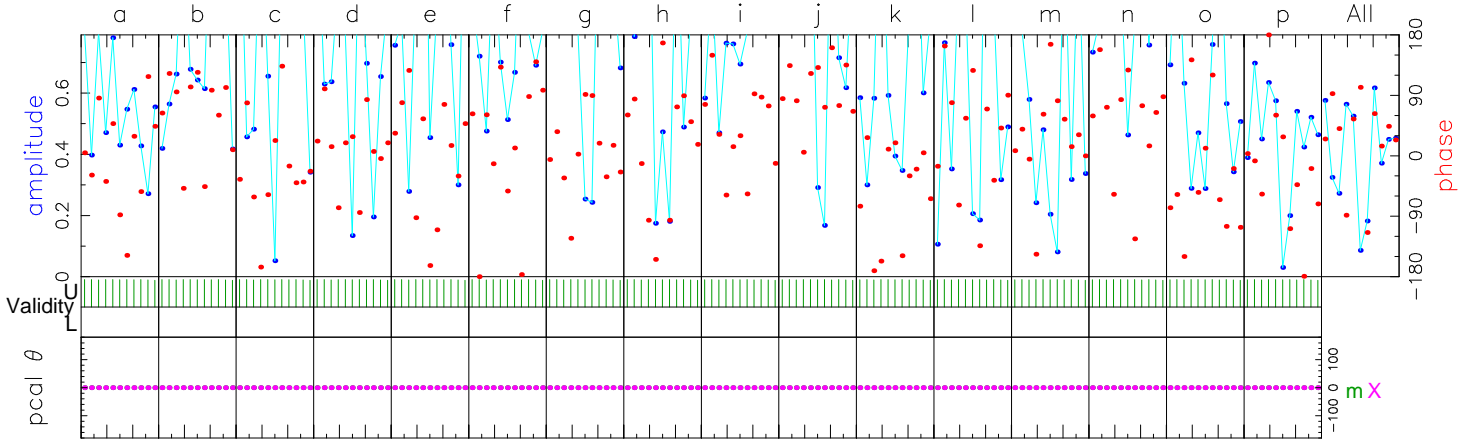


Fringe quality 9

SNR 9.6
Int time 178.703
Amp 0.263
Phase 35.6
PFD 1.3e-13
Delays (us)
SBD 0.020019
MBD -0.014347
Fringe rate (Hz) 0.038986
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054842
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



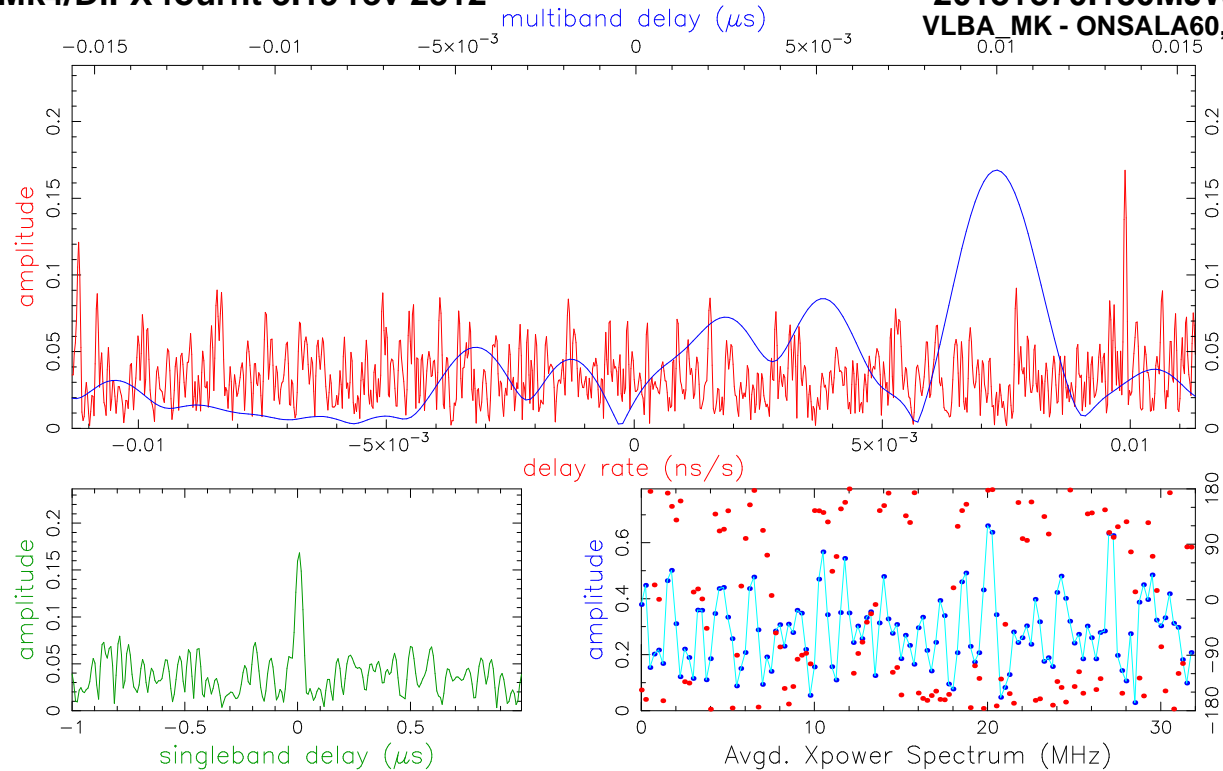
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	16.4	76.3	-40.9	5.0	47.2	95.7	-1.3	44.9	48.8	103.3	-50.8	53.7	31.0	72.8	-78.7	-35.2		Phase 35.6
	0.3	0.5	0.3	0.4	0.4	0.3	0.6	0.4	0.4	0.7	0.3	0.2	0.5	0.5	0.4	0.2		Ampl. 0.4
	251.8	23.1	136.1	131.9	132.5	114.9	131.9	130.5	130.8	131.7	184.2	211.0	133.0	131.8	171.5	195.6		Sbd box 131.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
m	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) 2.32576267664E+03 Apriori delay (usec) 2.32574577368E+03 Resid mbdelay (usec) -1.43470E-02 +/- 1.1E-04
 Sband delay (usec) 2.32576579318E+03 Apriori clock (usec) -2.9819094E+01 Resid sbdelay (usec) 2.00195E-02 +/- 1.8E-03
 Phase delay (usec) 2.32574577482E+03 Apriori clockrate (us/s) -5.3669233E-07 Resid phdelay (usec) 1.14722E-06 +/- 3.8E-07
 Delay rate (us/s) 1.70238864455E+00 Apriori rate (us/s) 1.70238819197E+00 Resid rate (us/s) 4.52584E-07 +/- 3.7E-09
 Total phase (deg) 15.6 Apriori accel (us/s/s) -4.68970641193E-05 Resid phase (deg) 35.6 +/- 11.9

RMS Theor. Amplitude 0.263 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 65.7 19.7 Search (1024X64) 0.241 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 81.4 34.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 57.3 23.8 Inc. seg. avg. 0.379 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 71.0 41.6 Inc. frq. avg. 0.363 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

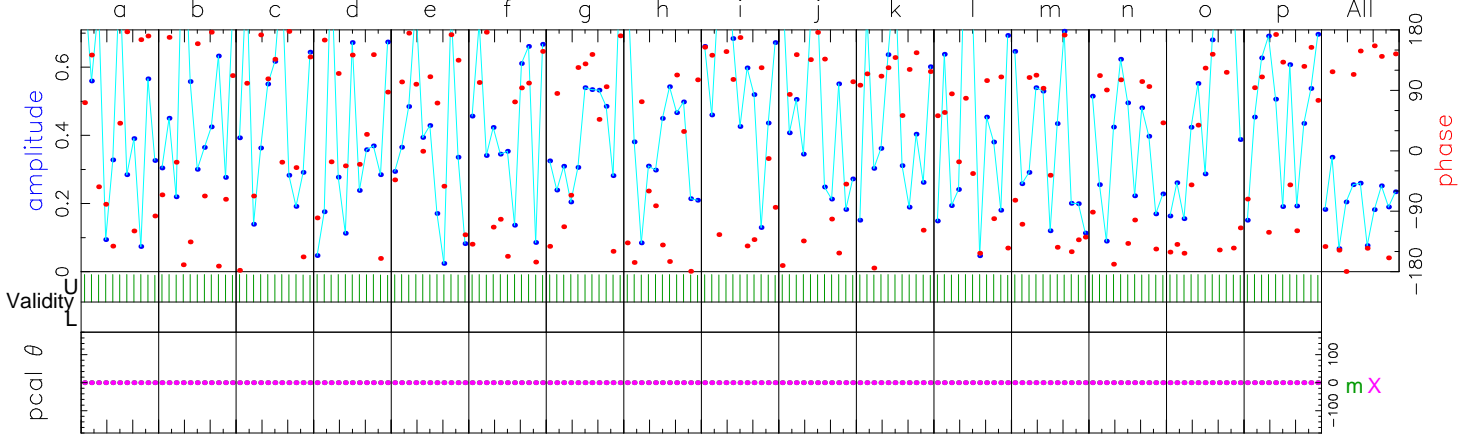
m: az 57.7 el 31.4 pa -87.9 X: az 301.1 el 24.7 pa 34.3 u,v (fr/asec) -12290.479 -6278.522 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mX..130MJW Output file: /Exps/c192c/v2/1234/No0075/mX.W.271.130MJW



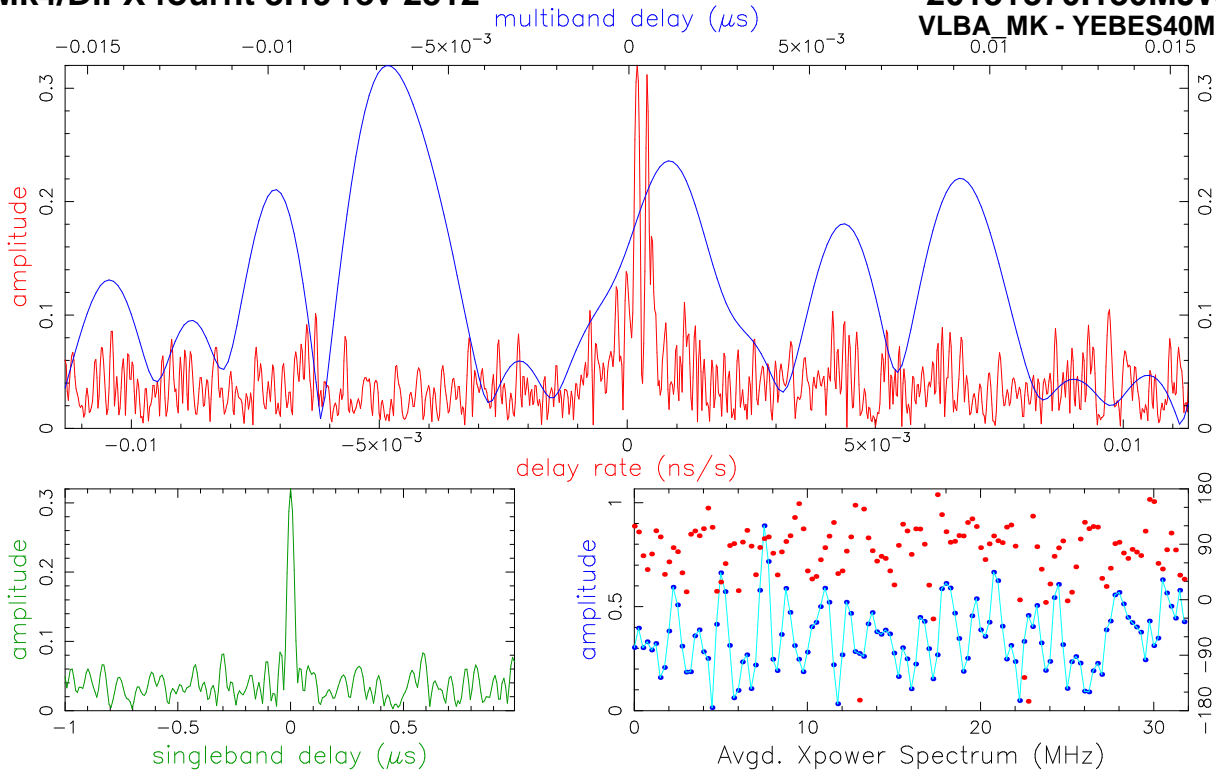
Fringe quality 0
SNR 6.2
Int time 178.704
Amp 0.237
Phase 155.0
PFD 8.6e-02
Delays (us)
SBD 0.006316
MBD 0.009964
Fringe rate (Hz) 0.854631
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012000.00
Stop 012300.22
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054844
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	150.6	-166.3	131.1	81.8	124.1	149.1	144.5	-156.1	-175.6	168.1	127.1	59.1	-175.3	150.4	-173.9	142.4	Phase	155.0
	0.1	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.4	0.4	0.5	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	179.8	20.0	46.4	49.3	57.8	104.2	42.4	174.6	98.2	180.4	129.5	106.1	122.9	251.5	31.4	54.5	Sbd box	129.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
m: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	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Chan ids	
																	Tracks	
Group delay (usec)(sbd)			2.32575573761E+03					Apriori delay (usec)	2.32574577368E+03				Resid mbdelay (usec)	9.96393E-03			+/-	1.7E-04
Sband delay (usec)			2.32575209018E+03					Apriori clock (usec)	-2.9819094E+01				Resid sbdelay (usec)	6.31650E-03			+/-	2.8E-03
Phase delay (usec)			2.32574577868E+03					Apriori clockrate (us/s)	-5.3669233E-07				Resid phdelay (usec)	4.99807E-06			+/-	6.0E-07
Delay rate (us/s)			1.70239811338E+00					Apriori rate (us/s)	1.70238819197E+00				Resid rate (us/s)	9.92142E-06			+/-	5.8E-09
Total phase (deg)				135.0				Apriori accel (us/s/s)	-4.68970641193E-05				Resid phase (deg)	155.0			+/-	18.6

ph/seg (deg) 39.3 30.8
amp/seg (%) 49.3 53.7
ph/frq (deg) 41.4 37.1
amp/frq (%) 52.1 64.8
RMS Theor. Amplitude 0.237 +/- 0.038
Search (1024X64) 0.165
Interp. 0.000
Inc. seg. avg. 0.250
Inc. frq. avg. 0.233
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(MSamp/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
m: az 57.7 el 31.4 pa -87.9 X: az 301.1 el 24.7 pa 34.3 u,v (fr/asec) -12290.479 -6278.522 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mX..130MJW Output file: /Exps/c192c/v2/1234/No0075/mX.W.287.130MJW

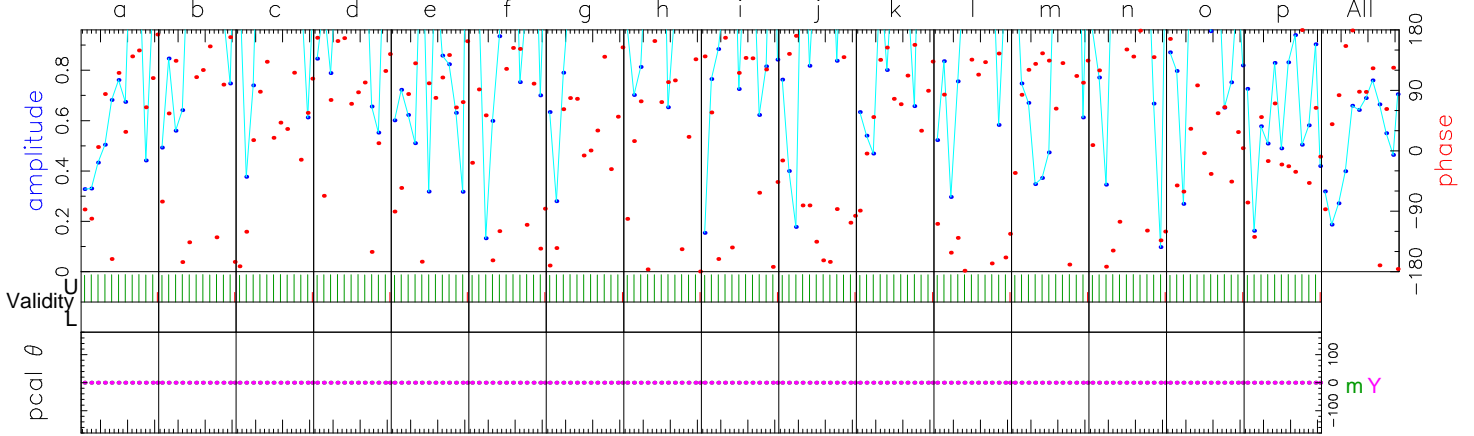


Fringe quality 9

SNR 11.1
Int time 161.083
Amp 0.320
Phase 125.2
PFD 2.6e-20
Delays (us)
SBD -0.000018
MBD -0.006683
Fringe rate (Hz)
0.017034
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012016.90
Stop 012259.71
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054841
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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

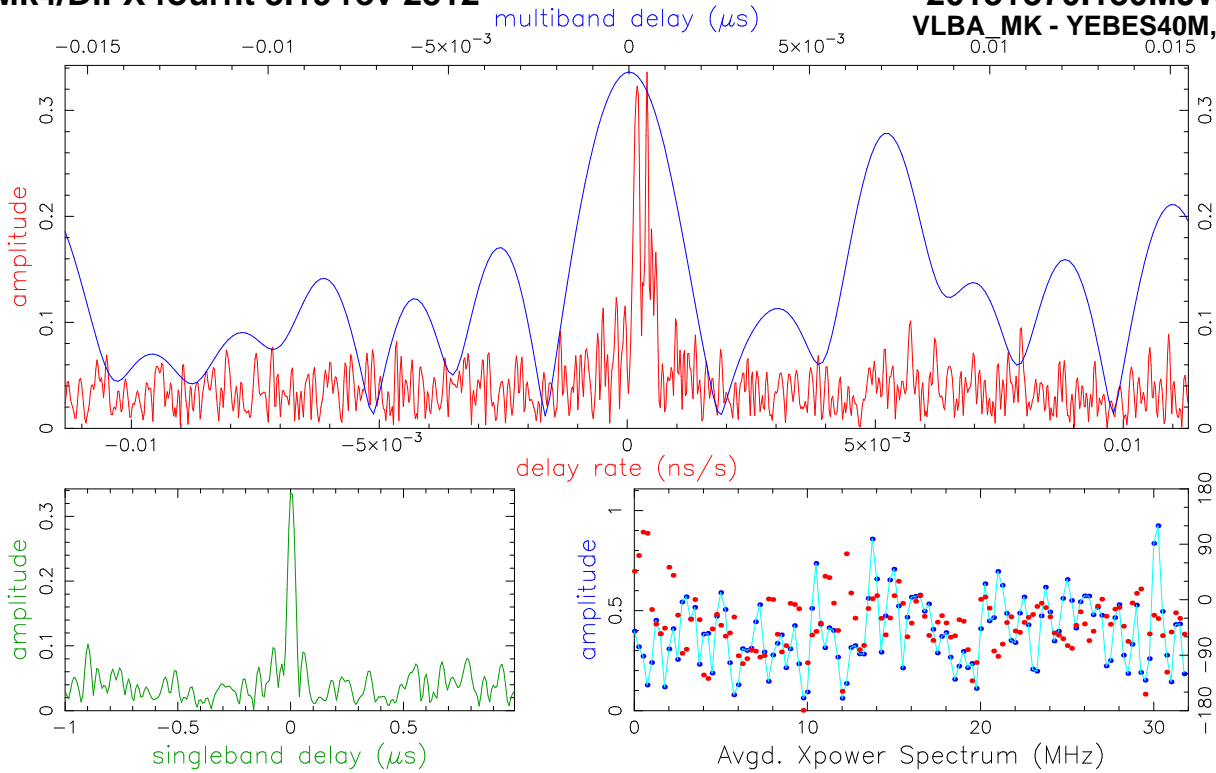


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
UL	129.3	157.4	62.2	119.3	125.7	151.6	53.2	116.6	165.8	-130.5	87.8	168.0	113.0	-170.4	21.8	-5.4	Phase	125.2
m	0.4	0.6	0.6	0.6	0.4	0.4	0.6	0.5	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.3	Ampl.	0.5
Y	127.6	129.1	129.8	128.9	130.6	128.1	128.1	129.1	129.3	129.6	129.2	128.7	128.6	129.2	128.3	125.4	Sbd box	129.0
m	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0:0	0:0	0:0	0:0	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	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
m	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	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Chan ids	

Group delay (usec)(sbd) 2.29177207868E+03 Apriori delay (usec) 2.29177876176E+03 Resid mbdelay (usec) -6.68308E-03 +/- 9.7E-05
 Sband delay (usec) 2.29177874376E+03 Apriori clock (usec) -7.0860577E+00 Resid sbdelay (usec) -1.80000E-05 +/- 1.6E-03
 Phase delay (usec) 2.29177876579E+03 Apriori clockrate (us/s) -2.2869228E-07 Resid phdelay (usec) 4.03825E-06 +/- 3.3E-07
 Delay rate (us/s) 1.99101448753E+00 Apriori rate (us/s) 1.99101428978E+00 Resid rate (us/s) 1.97749E-07 +/- 3.5E-09
 Total phase (deg) 318.8 Apriori accel (us/s/s) -3.34251390752E-05 Resid phase (deg) 125.2 +/- 10.3

RMS Theor. Amplitude 0.320 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 64.0 17.9 Search (1024X64) 0.318 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 83.9 31.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 64.8 20.6 Inc. seg. avg. 0.492 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 79.7 36.0 Inc. frq. avg. 0.518 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 57.7 el 31.4 pa -87.9 Y: az 298.7 el 25.0 pa 57.1 u,v (fr/asec) -14354.212 -4101.390 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mY..130MJW Output file: /Exps/c192c/v2/1234/No0075/mY.W.259.130MJW

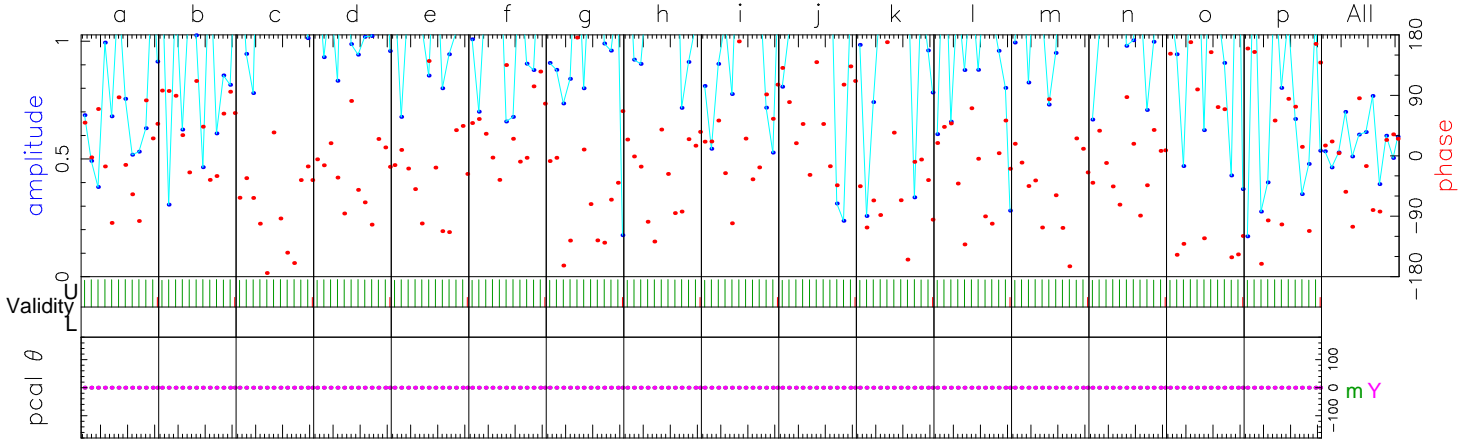


Fringe quality 9

SNR 11.9
Int time 161.082
Amp 0.342
Phase -12.6
PFD 3.7e-24
Delays (us)
SBD 0.003566
MBD -0.000041
Fringe rate (Hz) 0.034731
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

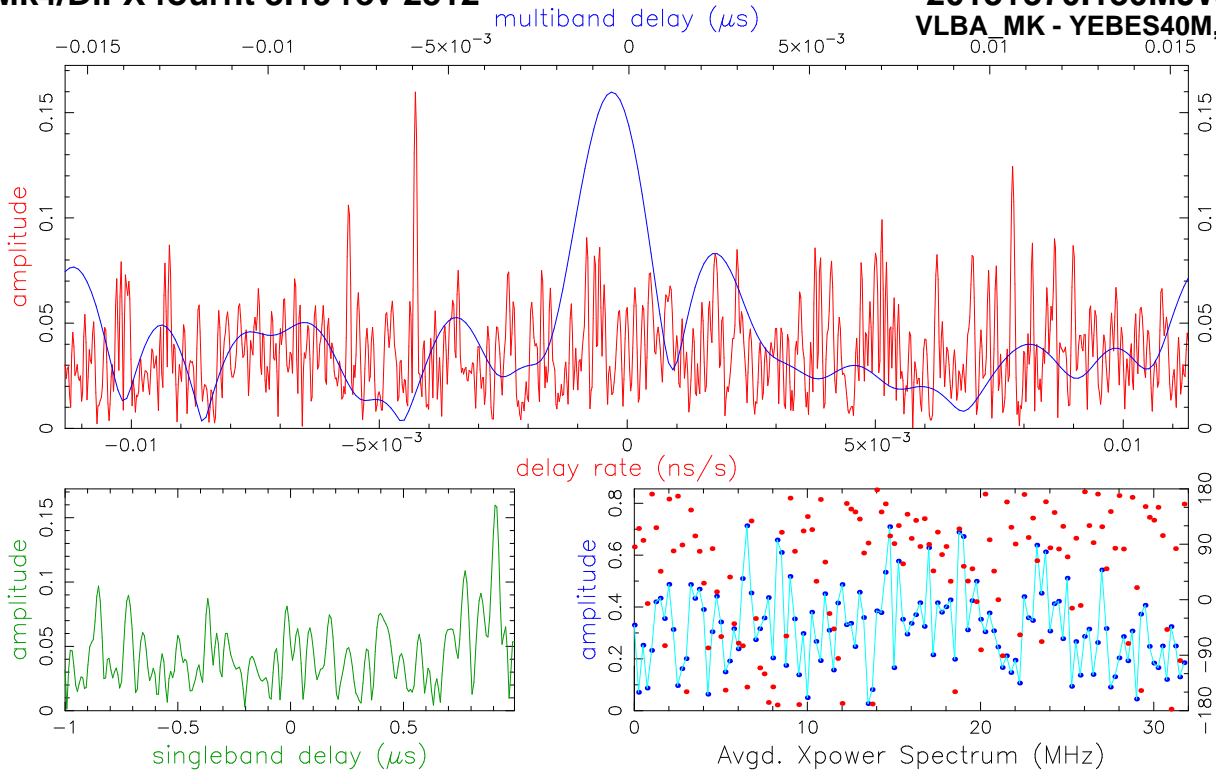
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012016.90
Stop 012259.71
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054842
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



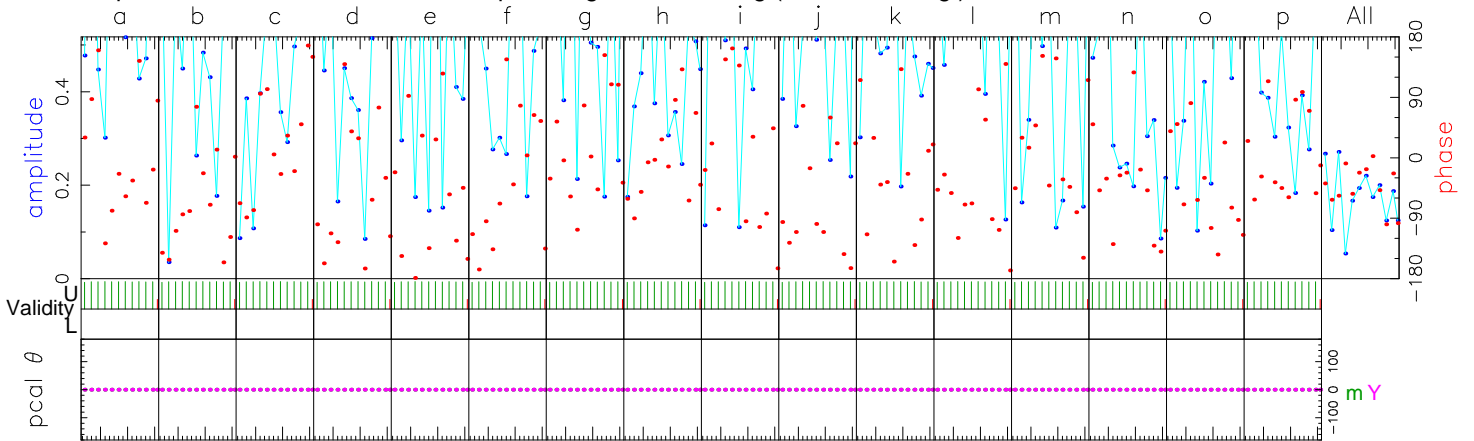
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	17.7	52.8	-80.9	-20.5	-24.0	35.1	-92.3	-24.7	12.7	57.2	-63.1	-2.9	-29.4	-14.1	161.2	131.5	Phase	-12.6
m	0.4	0.5	0.7	0.8	0.6	0.6	0.5	0.7	0.5	0.5	0.5	0.4	0.6	0.8	0.6	0.3	Ampl.	0.5
Y	129.7	129.1	129.6	129.6	129.7	129.2	129.9	129.7	129.4	129.6	130.1	130.6	129.8	129.3	129.2	125.7	Sbd box	129.5
m	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m: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	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	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	
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)	2.29177872063E+03			Apriori delay (usec)			2.29177876176E+03			Resid mbdelay (usec)			-4.11217E-05			+/-	9.1E-05	
Sband delay (usec)	2.29178232726E+03			Apriori clock (usec)			-7.0860577E+00			Resid sbdelay (usec)			3.56550E-03			+/-	1.5E-03	
Phase delay (usec)	2.29177876135E+03			Apriori clockrate (us/s)			-2.2869228E-07			Resid phdelay (usec)			-4.05691E-07			+/-	3.1E-07	
Delay rate (us/s)	1.99101469298E+00			Apriori rate (us/s)			1.99101428978E+00			Resid rate (us/s)			4.03195E-07			+/-	3.3E-09	
Total phase (deg)	181.0			Apriori accel (us/s/s)			-3.34251390752E-05			Resid phase (deg)			-12.6			+/-	9.6	

ph/seg (deg) 56.0 16.7 Search (1024X64) 0.332 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.7 29.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 74.7 19.3 Inc. seg. avg. 0.543 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 79.3 33.7 Inc. frq. avg. 0.544 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 57.7 el 31.4 pa -87.9 Y: az 298.7 el 25.0 pa 57.1 u,v (fr/asec) -14354.212 -4101.390 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mY..130MJW Output file: /Exps/c192c/v2/1234/No0075/mY.W.274.130MJW



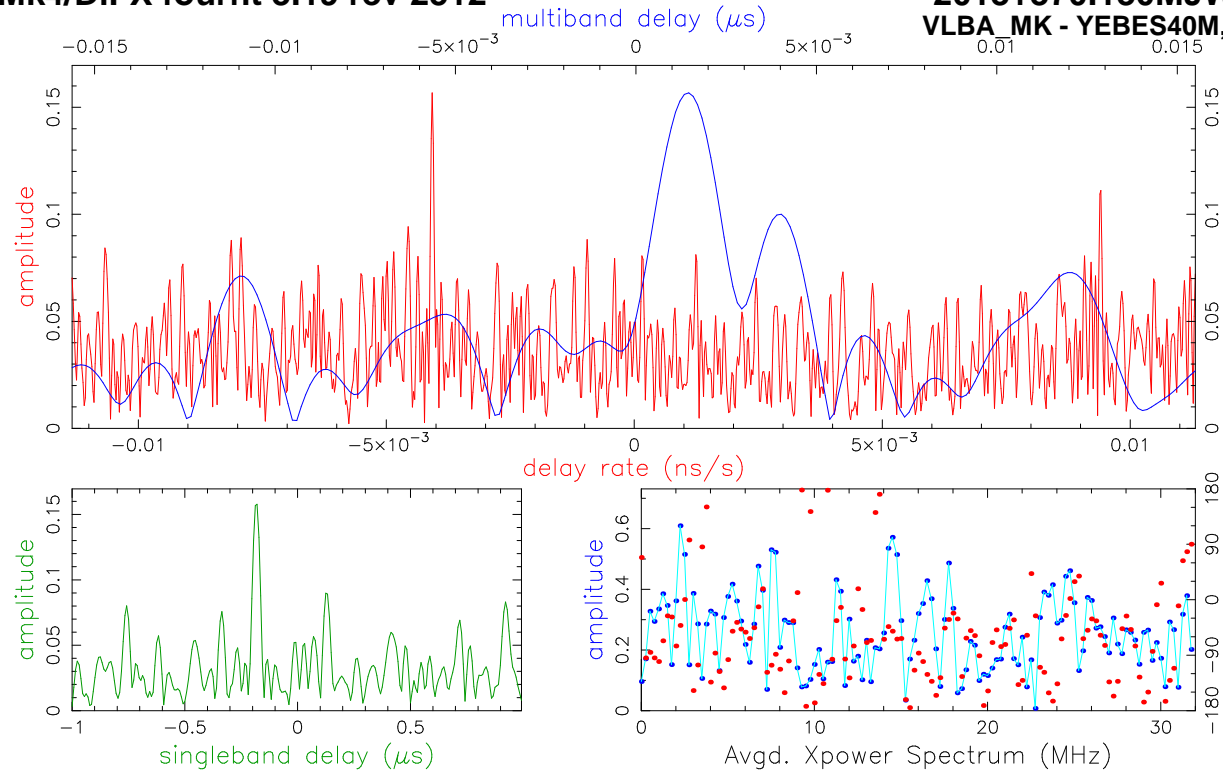
Fringe quality 0
SNR 5.6
Int time 161.083
Amp 0.172
Phase -39.1
PFD 8.7e-01
Delays (us)
SBD 0.909781
MBD -0.000492
Fringe rate (Hz)
-0.369579
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012016.90
Stop 012259.71
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054845
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-20.3	-95.4	45.1	-75.9	-3.2	-79.4	12.2	-6.0	-51.9	-82.2	-69.7	-71.7	-26.4	-36.2	-41.9	-13.9		Phase	-39.1
	0.2	0.3	0.1	0.2	0.2	0.1	0.3	0.3	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.3		Ampl.	0.2
	206.2	81.0	149.4	37.3	139.9	71.5	132.8	147.8	159.7	229.2	37.7	246.2	116.6	118.9	143.8	18.9		Sbd box	245.5
UL	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
m: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	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Chan ids	
																		Tracks	
Group delay (usec)(sbd)	2.29268451992E+03		Apriori delay (usec)		2.29177876176E+03		Resid mbdelay (usec)		-4.91834E-04		+/-		1.9E-04						
Sband delay (usec)	2.29268854226E+03		Apriori clock (usec)		-7.0860577E+00		Resid sbdelay (usec)		9.09781E-01		+/-		3.1E-03						
Phase delay (usec)	2.29177876049E+03		Apriori clockrate (us/s)		-2.2869228E-07		Resid phdelay (usec)		-1.26191E-06		+/-		6.6E-07						
Delay rate (us/s)	1.99100999934E+00		Apriori rate (us/s)		1.99101428978E+00		Resid rate (us/s)		-4.29044E-06		+/-		7.0E-09						
Total phase (deg)	154.4		Apriori accel (us/s/s)		-3.34251390752E-05		Resid phase (deg)		-39.1		+/-		20.3						

RMS Theor. Amplitude 0.172 +/- 0.031
ph/seg (deg) 29.0 35.2 Search (1024X64) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 39.3 61.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 40.9 40.6 Inc. seg. avg. 0.158 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 48.5 70.9 Inc. frq. avg. 0.169 Sample rate(MISamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 57.7 el 31.4 pa -87.9 Y: az 298.7 el 25.0 pa 57.1 u,v (fr/asec) -14354.212 -4101.390 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mY..130MJW Output file: /Exps/c192c/v2/1234/No0075/mY.W.295.130MJW simultaneous interpolator

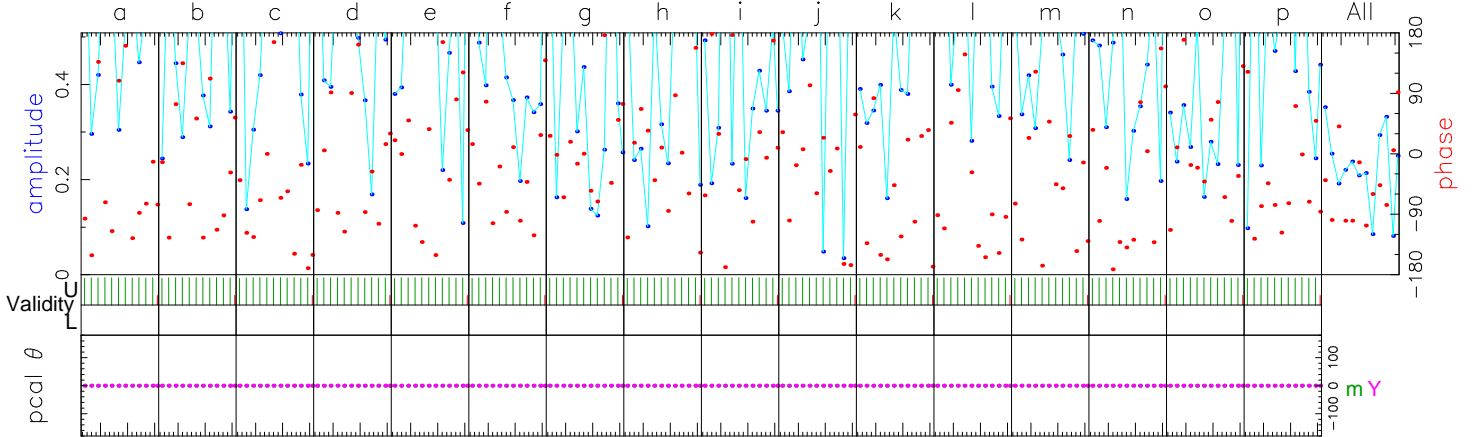


Fringe quality 0

SNR 5.6
Int time 161.082
Amp 0.170
Phase -61.7
PFD 9.5e-01
Delays (us)
SBD -0.183287
MBD 0.001426
Fringe rate (Hz)
-0.350570
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192c
Exper # 16383
Yr:day 2019:279
Start 012016.90
Stop 012259.71
FRT 012130.00
Corr/FF/build
2020:076:170549
2020:086:054847
2020:014:135814
RA & Dec (J2000)
20h15m28.729803s
+37°10'59.514664"

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



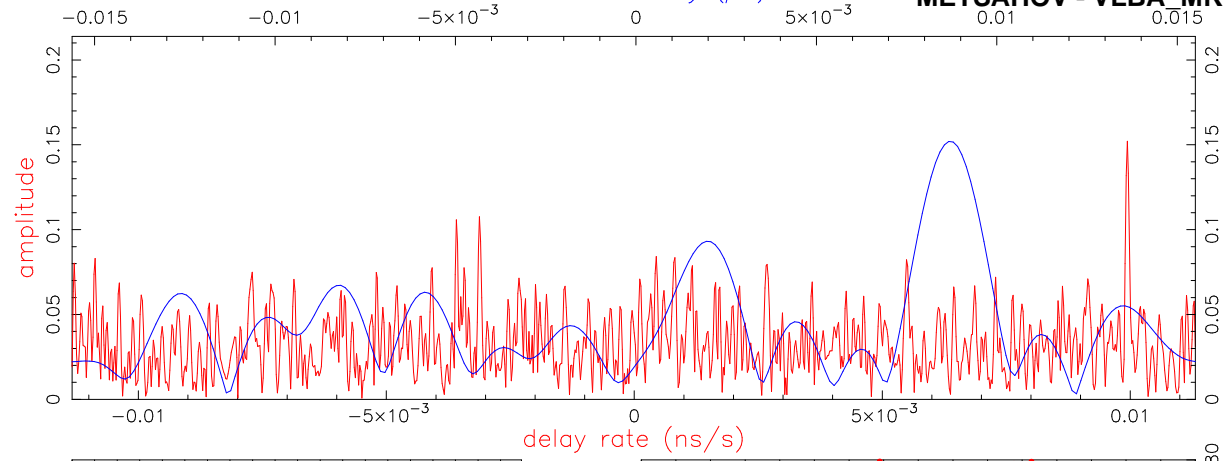
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All	
	-99.6	-90.7	-76.0	-77.0	20.0	-38.1	-9.5	-22.4	-97.3	-15.5	-39.3	-128.8	-60.6	-131.2	-59.0	-66.2		Phase	-61.7
	0.3	0.2	0.3	0.2	0.1	0.3	0.3	0.2	0.1	0.3	0.1	0.3	0.2	0.1	0.2	0.3		Ampl.	0.2
	106.1	228.3	224.0	221.4	68.0	40.1	71.9	163.9	33.5	21.2	207.8	121.0	4.2	184.7	53.9	83.0		Sbd box	105.5
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0		APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		PC phase	
m: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	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Tracks	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		Tracks	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL		Tracks	
Group delay (usec)(sbd)	2.29159268730E+03		Apriori delay (usec)		2.29177876176E+03		Resid mbdelay (usec)		1.42555E-03		+/-		1.9E-04						
Sband delay (usec)	2.29159547526E+03		Apriori clock (usec)		-7.0860577E+00		Resid sbdelay (usec)		-1.83287E-01		+/-		3.1E-03						
Phase delay (usec)	2.29177875977E+03		Apriori clockrate (us/s)		-2.2869228E-07		Resid phdelay (usec)		-1.98880E-06		+/-		6.6E-07						
Delay rate (us/s)	1.99101022001E+00		Apriori rate (us/s)		1.99101428978E+00		Resid rate (us/s)		-4.06977E-06		+/-		7.0E-09						
Total phase (deg)	131.9		Apriori accel (us/s/s)		-3.34251390752E-05		Resid phase (deg)		-61.7		+/-		20.5						

ph/seg (deg) RMS Theor. Amplitude 0.170 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.7 35.6 Search (1024X64) 0.152 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 64.5 62.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 44.3 41.1 Inc. seg. avg. 0.199 Sample rate(MISamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 54.9 71.7 Inc. frq. avg. 0.170 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

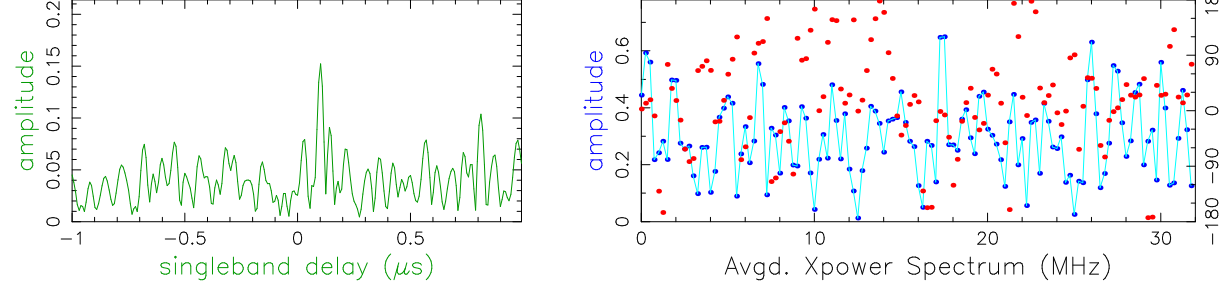
m: az 57.7 el 31.4 pa -87.9 Y: az 298.7 el 25.0 pa 57.1 u,v (fr/asec) -14354.212 -4101.390 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/mY..130MJW Output file: /Exps/c192c/v2/1234/No0075/mY.W.311.130MJW

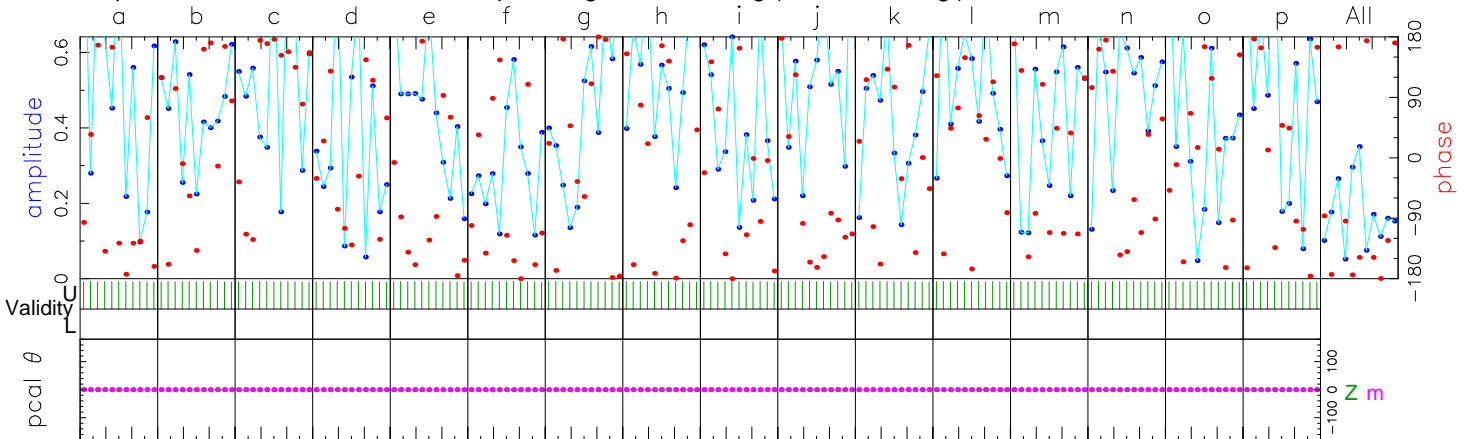
multiband delay (μ s)



Fringe quality 0
 SNR 5.6
 Int time 178.400
 Amp 0.214
 Phase -162.1
 PFD 9.6e-01
 Delays (us)
 SBD 0.101299
 MBD 0.008706
 Fringe rate (Hz) 0.858267
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build 2020:076:170549
 2020:086:054853
 2020:014:135814
 RA & Dec (J2000) 20h15m28.729803s +37°10'59.514664"



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



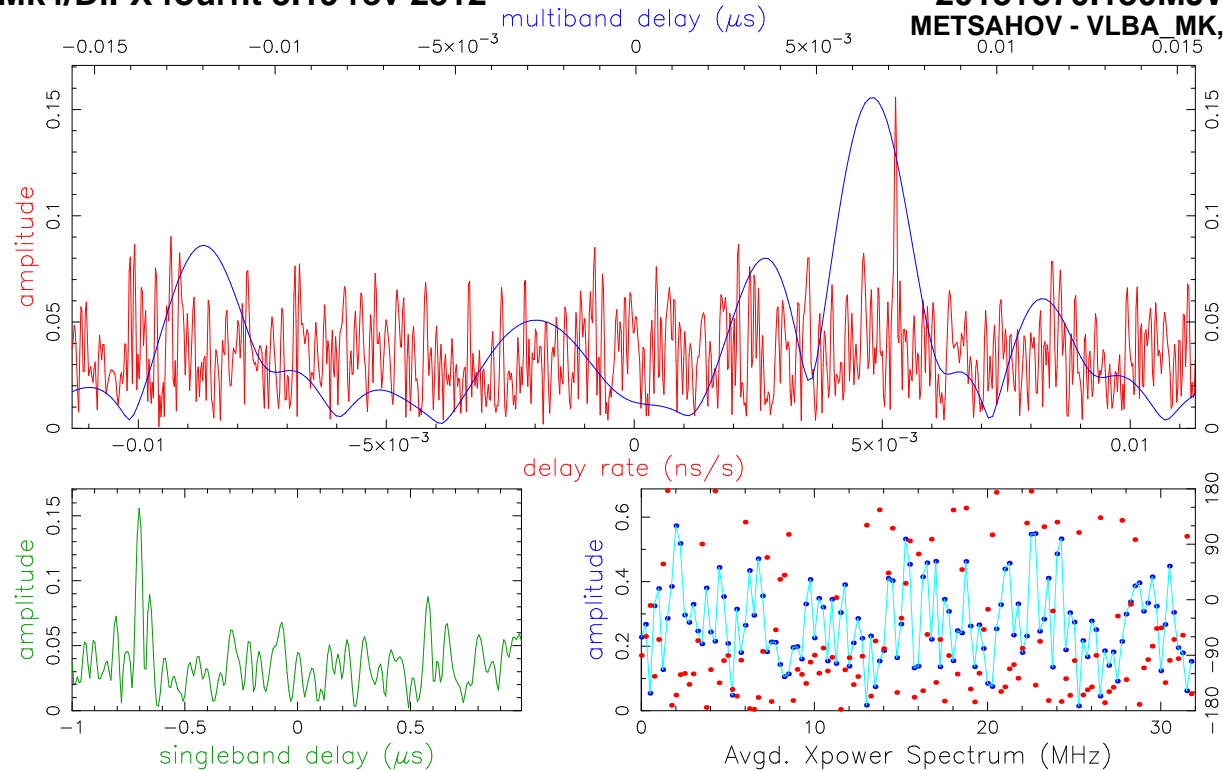
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
	-145.1	138.4	174.4	-58.4	-127.6	-156.3	175.4	162.7	-125.2	-138.1	-176.8	105.5	-162.3	-148.8	-143.3	-163.1	Phase	-162.1
	0.5	0.2	0.5	0.1	0.3	0.2	0.3	0.2	0.1	0.5	0.1	0.2	0.2	0.3	0.1	0.4	Ampl.	0.2
	141.0	71.8	109.2	65.5	218.6	133.8	53.2	24.9	171.0	142.3	233.0	200.1	155.7	128.9	51.8	163.3	Sbd box	142.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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	
m	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	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd)	-3.60516948258E+03	Apriori delay (usec)	-3.60527193852E+03	Resid mbdelay (usec)	8.70594E-03	+/-	1.9E-04
Sband delay (usec)	-3.60517064002E+03	Apriori clock (usec)	-2.4138997E+08	Resid sbdelay (usec)	1.01299E-01	+/-	3.1E-03
Phase delay (usec)	-3.60527194375E+03	Apriori clockrate (us/s)	2.4985100E-08	Resid phdelay (usec)	-5.22701E-06	+/-	6.6E-07
Delay rate (us/s)	-1.60832437636E+00	Apriori rate (us/s)	-1.60833433999E+00	Resid rate (us/s)	9.96363E-06	+/-	6.4E-09
Total phase (deg)	-84.4	Apriori accel (us/s/s)	5.52774391687E-05	Resid phase (deg)	-162.1	+/-	20.6

ph/seg (deg)	37.2	Theor.	34.2	Amplitude	0.214 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	60.8	Search (1024X64)	0.151	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	45.8	Inc. seg. avg.	0.208	Inc. frq. avg.	0.208	Bits/sample: 2x2	mb window (us) -0.016 0.016
amp/frq (%)	66.8	Inc. frq. avg.	0.208			Sample rate(MSamp/s): 64	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

Z: az 309.2 el 21.1 pa 29.0 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 11620.481 6963.544 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/Zm..130MJW Output file: /Exps/c192c/v2/1234/No0075/Zm.W.352.130MJW

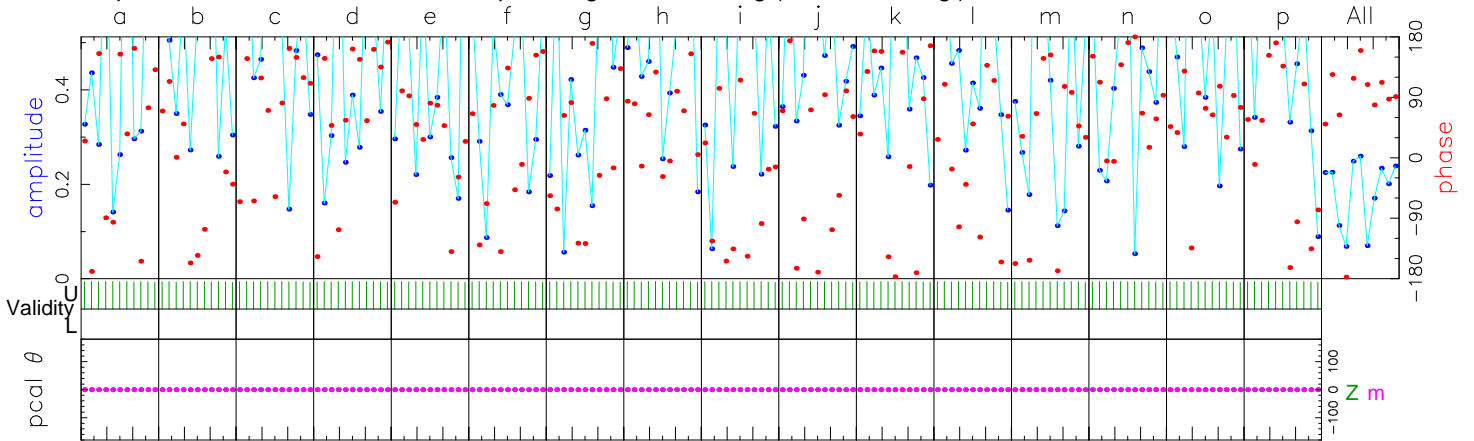


Fringe quality 0

SNR 5.7
 Int time 178.399
 Amp 0.171
 Phase 104.8
 PFD 7.8e-01
 Delays (us)
 SBD -0.702183
 MBD 0.006535
 Fringe rate (Hz) 0.454078
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

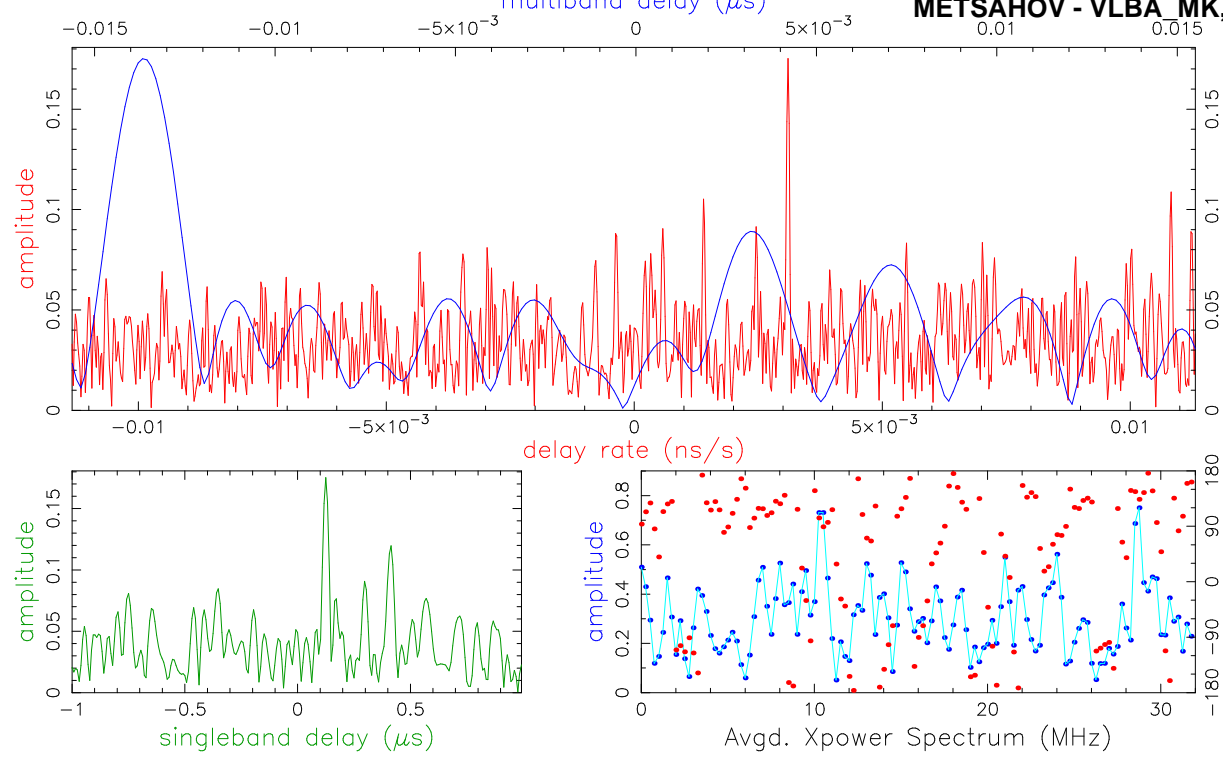
Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build
 2020:076:170549
 2020:086:054855
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
Z:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
m	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		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR		
Group delay (usec)(sbd)		-3.60598415389E+03																
Sband delay (usec)		-3.60597412152E+03																
Phase delay (usec)		-3.60527193514E+03																
Delay rate (us/s)		-1.60832906859E+00																
Total phase (deg)					-177.5													
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:																		
Pcal rate:																		
Bits/sample:																		
Sample rate(MSamp/s):																		
Data rate(Mb/s):																		
nlags:																		
t_cohere																		
ion window (TEC)																		
sb window (us)																		
mb window (us)																		
dr window (ns/s)																		
ion window (TEC)																		

ph/seg (deg) 37.5 33.4 Search (1024X64) 0.171 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.8 58.2 Interp. 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.0 40.2 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 59.8 70.2 Inc. frq. avg. 0.162 Sample rate(MSamp/s): 64 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 309.2 el 21.1 pa 29.0 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 11620.481 6963.544 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/Zm..130MJW Output file: /Exps/c192c/v2/1234/No0075/Zm.W.368.130MJW

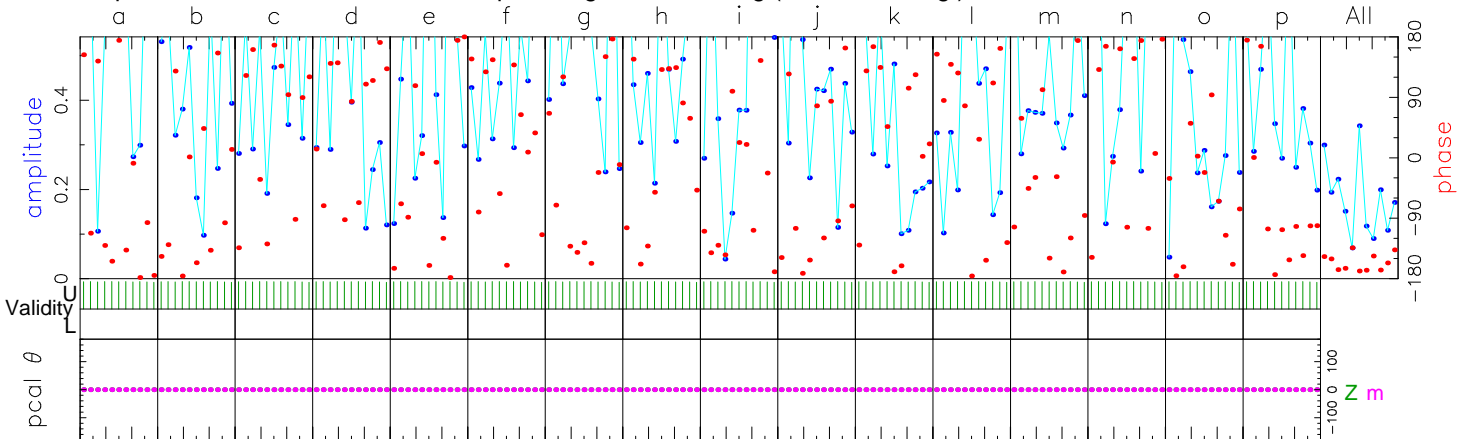


Fringe quality 0

SNR 6.4
 Int time 178.399
 Amp 0.181
 Phase -157.1
 PFD 2.1e-02
 Delays (us)
 SBD 0.125107
 MBD -0.013636
 Fringe rate (Hz)
 0.267183
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

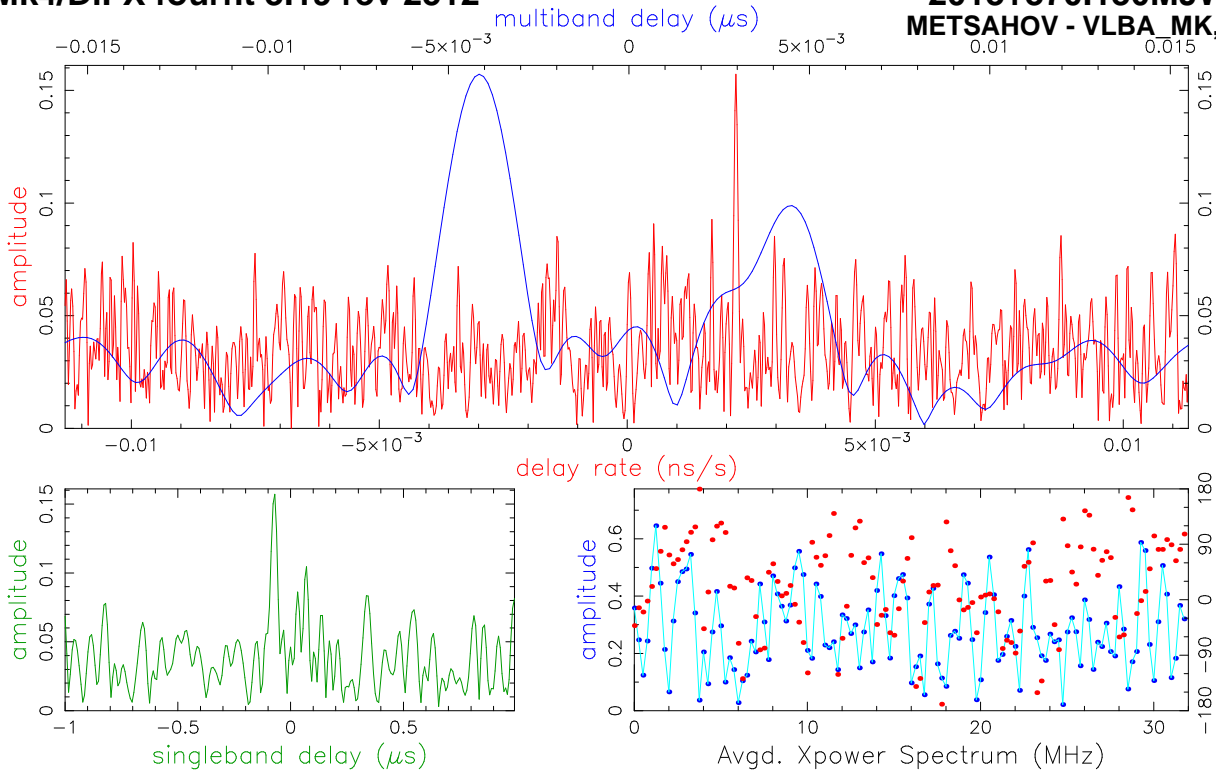
Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build
 2020:076:170549
 2020:086:054857
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All				
	-147.0	-131.7	149.8	-145.9	-149.7	117.5	-142.1	156.0	-117.4	-152.0	149.6	149.9	-113.9	-170.1	-147.4	-139.8	Phase	-157.1				
	0.4	0.2	0.2	0.1	0.3	0.1	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.1	0.3	Ampl.	0.2				
	144.9	181.0	117.6	241.1	243.0	244.2	143.4	38.2	178.6	35.7	45.5	183.1	182.0	84.9	184.3	163.3	Sbd box	145.0				
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used					
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
Z:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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					
m	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					
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	Tracks					
																	Chan ids					
																	Tracks					
Group delay (usec)(sbd)			-3.60516057498E+03														Apriori delay (usec)	-3.60527193852E+03	Resid mbdelay (usec)	-1.36365E-02	+/-	1.7E-04
Sband delay (usec)			-3.60514683102E+03														Apriori clock (usec)	-2.4138997E+08	Resid sbdelay (usec)	1.25107E-01	+/-	2.7E-03
Phase delay (usec)			-3.60527194359E+03														Apriori clockrate (us/s)	2.4985100E-08	Resid phdelay (usec)	-5.06737E-06	+/-	5.8E-07
Delay rate (us/s)			-1.60833123826E+00														Apriori rate (us/s)	-1.60833433999E+00	Resid rate (us/s)	3.10173E-06	+/-	5.5E-09
Total phase (deg)					-79.4												Apriori accel (us/s/s)	5.52774391687E-05	Resid phase (deg)	-157.1	+/-	17.9

ph/seg (deg) 12.4 29.7 Amplitude 0.181 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.7 51.8 Search (1024X64) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.6 35.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.6 62.5 Inc. seg. avg. 0.163 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 Z: az 309.2 el 21.1 pa 29.0 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 11620.481 6963.544 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/Zm..130MJW Output file: /Exps/c192c/v2/1234/No0075/Zm.W.387.130MJW simultaneous interpolator

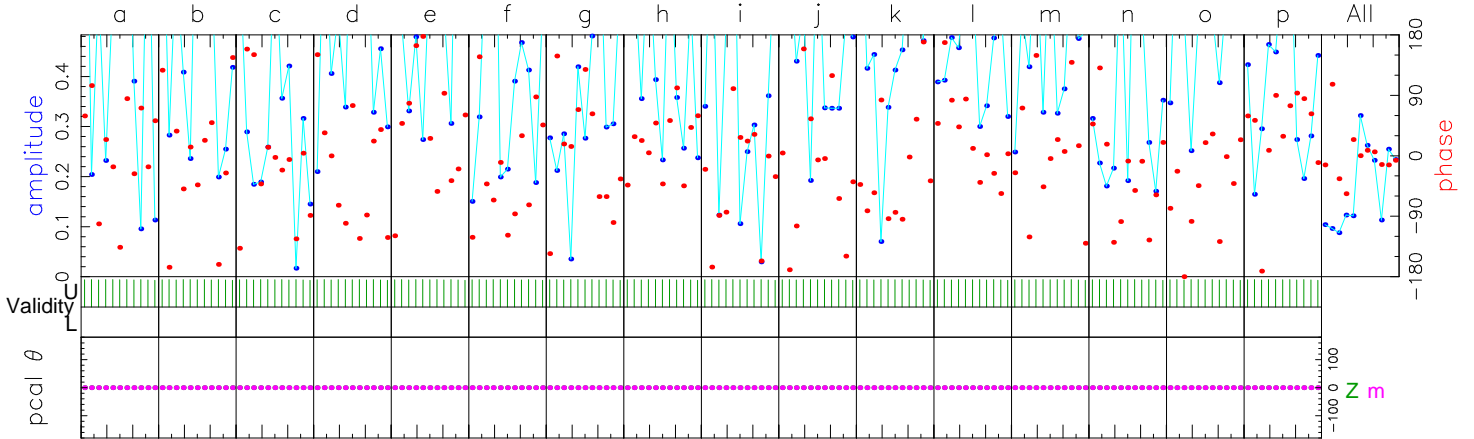


Fringe quality 0

SNR 5.8
 Int time 178.400
 Amp 0.161
 Phase -2.8
 PFD 5.8e-01
 Delays (us)
 SBD -0.072579
 MBD -0.004146
 Fringe rate (Hz)
 0.189042
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192c
 Exper # 16383
 Yr:day 2019:279
 Start 012000.00
 Stop 012300.22
 FRT 012130.00
 Corr/FF/build
 2020:076:170549
 2020:086:054859
 2020:014:135814
 RA & Dec (J2000)
 20h15m28.729803s
 +37°10'59.514664"

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



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	86268.00	86300.00	86332.00	86364.00	86396.00	86428.00	86460.00	86492.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	119.7
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	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:m	0:0	0:0	0:0	0:0	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	
m	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	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	Tracks	

Group delay (usec)(sbd) -3.60533858423E+03 Apriori delay (usec) -3.60527193852E+03 Resid mbdelay (usec) -4.14571E-03 +/- 1.9E-04
 Sband delay (usec) -3.60534451752E+03 Apriori clock (usec) -2.4138997E+00 Resid sbdelay (usec) -7.25790E-02 +/- 3.0E-03
 Phase delay (usec) -3.60527193861E+03 Apriori clockrate (us/s) 2.4985100E-08 Resid phdelay (usec) -8.87892E-08 +/- 6.4E-07
 Delay rate (us/s) -1.60833214540E+00 Apriori rate (us/s) -1.60833433999E+00 Resid rate (us/s) 2.19459E-06 +/- 6.1E-09
 Total phase (deg) -285.0 Apriori accel (us/s/s) 5.52774391687E-05 Resid phase (deg) -2.8 +/- 19.8

RMS Theor. Amplitude 0.161 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.5 32.8 Search (1024X64) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 51.8 57.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 35.9 39.6 Inc. seg. avg. 0.155 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 55.1 69.0 Inc. frq. avg. 0.156 Data rate(Mb/s): 2048 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 309.2 el 21.1 pa 29.0 m: az 57.7 el 31.4 pa -87.9 u,v (fr/asec) 11620.481 6963.544 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192c/v2/1234/No0075/Zm..130MJW Output file: /Exps/c192c/v2/1234/No0075/Zm.W.395.130MJW